PALM BEACH COUNTY
BOARD OF COUNTY COMMISSIONERS
AGENDA ITEM SUMMARY

Meeting Date:	**September 1, 2015**	**Consent [X]** **Public Hearing [ ]**	**Regular [ ]**
Department:	**Water Utilities Department**		

I. EXECUTIVE BRIEF

Motion and Title: Staff recommends motion to approve: Work Authorization No. 2 for Western Region Waste Water Treatment Facility (WRWWTF) Power Improvements Phase 1 Project (Project) with Globaltech, Inc. in the amount of $598,998.02.

Summary: On March 10, 2015, Board of County Commissioners (BCC) approved the Optimization and Improvements Design-Build Contract (R2015-0315) with Globaltech, Inc. Work Authorization No. 2 provides for furnishing and installing a new 500kW diesel generator and procuring long lead electrical equipment. The Project provides for necessary improvements for increasing the safety, reliability and electrical code compliance of the WRWWTF. 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 Work Authorization includes 95.74% overall SBE participation. The cumulative SBE participation, including this Work Authorization is 96.57% overall. Globaltech, Inc. is a Palm Beach County company. This project is included in the FY15 Capital Improvement Plan adopted by the BCC. (WUD Project no. 14-050) District 6 (MRE)

Background and Justification: The current emergency back-up power at WRWWTF cannot power all the electrical loads connected to the main switchboard (MSB) in Generator Building #1, and the emergency generator and MSB are past their reliable life span. The Project goals are to replace all electrical equipment that are past their reliable life span, upsize the generator to power all loads connected to the MSB thus improving facility reliability, and replace all wiring that isn't in compliance with the National Electric Code. The Work Authorization No. 2 will cover the design, procurement of all long lead electrical equipment and installation of new generator in Phase 1. The second phase will be completed through a work supplement issued at a later date and this phase will include modifications to the electrical room, installation and start up of all electrical equipment, and PLC programming. Globaltech, Inc. will provide builders risk insurance prior to commencement of construction.

Attachments:

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

Recommended By: Jim Stiles — 8-13-15
Department Director — **Date**

Approved By: — 8-25-15
Assistant County Administrator — **Date**

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2015	2016	2017	2018	2019
Capital Expenditures	$598,998	0	0	0	0
External Revenues	0	0	0	0	0
Program Income (County)	0	0	0	0	0
In-Kind Match County	0	0	0	0	0
CCRT Funds	0				
NET FISCAL IMPACT	$598,998	0	0	0	0
# ADDITIONAL FTE POSITIONS (Cumulative)	0	0	0	0	0

Budget Account No.: **Fund** 4011 **Dept** 721 **Unit** W026 **Object** 6545

Is Item Included in Current Budget? Yes X No ____

Reporting Category **N/A**

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

One (1) time expenditure from user fees, connection fees, and balance brought forward.

C. Department Fiscal Review: Debra M West

III. REVIEW COMMENTS

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

8/14 8/17 OFMB

8/20/15 Contract Development and Control

B. Legal Sufficiency:

8/24/15 Assistant County Attorney

C. Other Department Review:

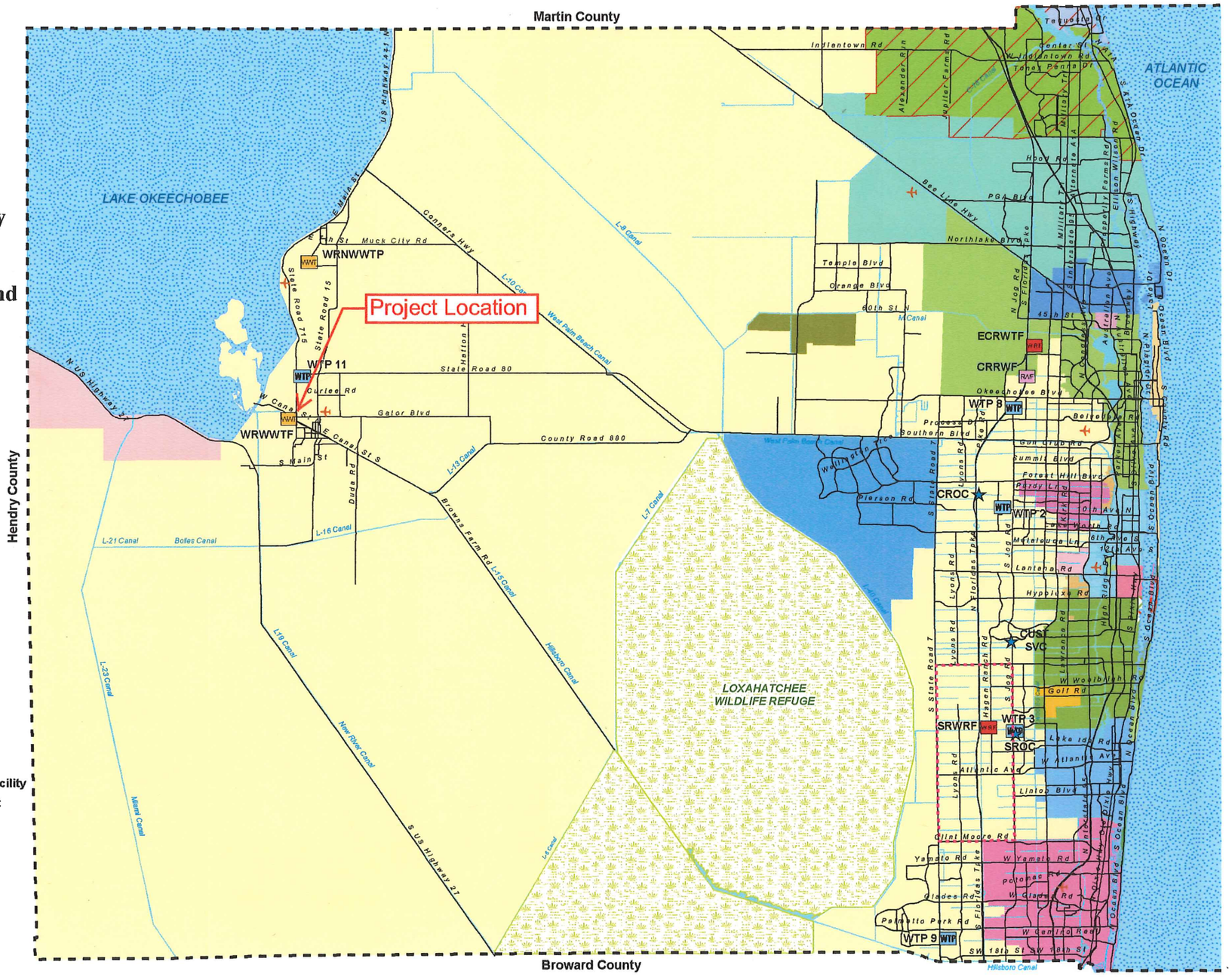
Department Director

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

ATTACHMENT - I

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

Attachment 1



Legend

- Administration
- Water Treatment Plant
- Reclamation Facility
- Wastewater Reclamation Facility
- Wastewater Treatment Plant
- Mandatory Reclaimed SA
- Palm Beach County Limits
- P.B.C.W.U.D. Service Area

NOT TO SCALE

WUD 14-050: Western Region Waste Water Treatment Facility (WRWWTF) Power Improvements Phase 1 (WA-02)

WORK AUTHORIZATION NO. 02

Palm Beach County Water Utilities Department
Optimization and Improvements Design-Build Contract

Project No.: WUD 14-050
District: 6
Budget Line Item No.: 4011-721-W026-6545
Project Title: Western Region Waste Water Treatment Facility (WRWWTF) Power Improvements Phase 1

THIS AUTHORIZATION No. 02 to the Contract for Optimization and Improvements Design-Build Services dated March 10, 2015 (R 2015-0315), by and between Palm Beach County and the Design-Build Entity identified herein, is for the Design/Build Services of this Work Authorization. The Design-Build Entity provides for 75% SBE participation overall. This Work Authorization includes **95.74** % overall participation. The cumulative proposed SBE participation, including this authorization is **96.57** % overall. Additional authorizations will be utilized to meet or exceed the stated overall participation goal.

1. Design-Build Entity: Globaltech, Inc.

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

3. Description of Services (Scope of Work) to be provided by the Design-Build Entity:

   See **ATTACHMENT - A.**

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

   See **ATTACHMENT - G.**

5. Design-Build Entity shall begin work promptly or deliver ordered materials within the following calendar days from the receipt of Building Permit and Notice to Proceed with construction:

   Substantial Completion **330** Calendar Days
   Final Construction Completion **360** Calendar Days
   Liquidated damages will apply as follows:
   $ 1,000 per day past substantial completion date.
   $ 500 per day past final completion date.
   (For Liquidated Damages Rates see **ATTACHMENT - B**)

6. The compensation to be paid to the Design-Build Entity for providing the requested services in accordance with the Guaranteed Maximum Price is $ **598,998.02**

7. EXCEPT AS HEREBY AMENDED, CHANGED OR MODIFIED, all other terms, conditions and obligations of the Contract dated March 10, 2015 remain in full force and effect.

WORK AUTHORIZATION NO. 02

Project No.: WUD 14-050

Project Title: Western Region Waste Water Treatment Facility (WRWWTF) Power Improvements Phase 1

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

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

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

ATTEST:

Signed: _____

Typed Name: _____
Deputy Clerk

Palm Beach County,
Board of County Commissioners

Signed: _____
Shelley Vana, Mayor

_____
Date

Approved as to Form and Legal Sufficiency

Signed: _____

Typed Name: _____
County Attorney

CONTRACTOR: Globaltech, Inc.

ATTEST:
Rebecca Thomas
Witness

_____
(Signature)

Rebecca Thomas, Accounting Manager
(Name and Title)

David A. Schuman, P.E. / Secretary
(Name and Title)

(CORPORATE SEAL)

July 20, 2015
Date

Globaltech
A DESIGN - BUILD COMPANY

Engineers · Contractors
6001 Broken Sound Pkwy NW, Suite 610
Boca Raton, Florida 33487
Phone: (561) 997-6433; Fax: (561) 997-5811
EB0007225 · CGC1507203

July 27, 2015

Maurice Tobon, P.E.
Director of Engineering
Palm Beach County Water Utilities Department
8100 Forest Hill Boulevard
West Palm Beach, FL 33413

Subject: 2015 Design-Build Contract – Contract Authorization

Dear Mr. Tobon:

This letter is to certify that David Schuman, Globaltech's Corporate Secretary, is authorized to sign agreements or contracts with Palm Beach County on the behalf of Globaltech, Inc. There is no dollar limit attached to his authorization signature.

Please contact us should you have questions regarding this issue.

Regards,

Troy L. Lyn, P.E.
Vice President

CC: Paul Gandy/Globaltech

LIST OF ATTACHMENTS

WORK AUTHORIZATION NO. 02

Palm Beach County Water Utilities Department
Optimization and Improvements Design-Build Contract

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

ATTACHMENT - A

WORK AUTHORIZATION NO. 02

Palm Beach County Water Utilities Department

Optimization and Improvements Design-Build Contract

SCOPE OF WORK
FOR

Western Region Waste Water Treatment Facility (WRWWTF)
Power Improvements Phase 1

INTRODUCTION

Palm Beach County (County) entered into an agreement entitled Optimization and Improvements Design-Build Contract Project No. WUD 14-071 (CONTRACT) with Globaltech, Inc. (Design-Build Entity) to provide design-build services for various general activities on the Optimization and Improvements Design-Build Contract dated March 10, 2015, (R 2015-0315). This Work Authorization will be performed under that CONTRACT.

To meet the County's funding schedule, the work associated with this project will be divided into two phases. Work items designated as being in Phase 1 will be performed under this Work Authorization. Work items designated as being in Phase 2 will be performed under a future Work Supplement.

The work associated with Phase 1 of this project include the following tasks at the Western Region Wastewater Treatment Facility (WRWWTF):

- Installation of auger-cast type pilings to support new generator slab southeast of existing generator building and construction of new reinforced concrete generator slab.

- Furnish and install new 500 kW diesel generator with 4512 gal sub-base fuel tank, and aluminum walk around enclosure with applicable wind load ratings.

- Furnish new Main Switchboard (MSB), Automatic Transfer Switch (ATS), electrical equipment, instrumentation and mini-split air conditioner. Installation of these items will be performed under a future Phase 2 of this project.

The work associated with this project but will be performed under a future Phase 2 include the following tasks:

- Removal of existing 300 kW diesel generator and above ground fuel tank, Phase 2.

- Removal of louvers and vents from existing generator building, enclosing and sealing all openings in exterior wall and roof with appropriate insulation and/or material. Seal and insulate gaps between walls and ceiling, and install mini-split air conditioner.

- Installation of the new Main Switchboard (MSB) and Automatic Transfer Switch (ATS) connecting FP&L, new Generator, and existing equipment.

- Programming, including remote generator status monitoring on existing Plant SCADA system.

- Installation of new cabling and conduit to connect new Generator to new ATS

- Removal of existing 350 MCM wiring to aerator blower starter cabinets. Installation of new three phase wiring to individual aerator blower starter cabinets.

SCOPE OF SERVICES

Design-Build Entity shall perform the Scope of Services described in the ***Design Build Criteria for Western Region Waste Water Treatment Facility (WRWWTF) Power Improvements*** (PBCWUD, July 2015).

In an effort show how pricing was developed while integrating the new requirements of the County, the Design-Build Entity has provided a single line diagram as the design concept. The title of this single line diagram is "**SINGLE LINE DIAGRAM – BELLE GLADE WWTF – ALTERNATIVE POWER IMPROVEMENTS – 06-15-2015**" and is located in the Design-Build Criteria Report.

The below scope of work represents the overall modifications needed to achieve the more recent needs of the County.

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

> Furnish and install new generator, electrical equipment, and other modifications to improve Utility Service No. 1.

The following is the scope of services for this Work Authorization (Phase 1):

Task 1 – Administrative and Engineering Services

1. Meet with the County to review project scope.
2. Develop subcontracts with structural, geotechnical and electrical engineers, utility locator, and electrical contractor and other entities as may be required.
3. Utilize a geotechnical subcontractor, perform soil borings and develop a support pile design. This proposal is based on using auger-cast piles.
4. Prepare a preliminary (60%) design.
5. Submit five (5) half-size copies of the 60% design to the County. Meet with the County to review the design.
6. Incorporate the County comments and proceed to final design stage in accordance with the PBCWUD Water Utilities Minimum Design and Construction

Standards, Engineering Design-Manual and security requirement.

7. Submit, DERM, FDEP/Palm Beach County Health Department and building department permit applications.
8. Prepare detailed construction schedule to include as a minimum; engineering and permitting services, site mobilization, detailed construction activities, scheduled shutdowns and durations, equipment/material delivery times, testing, startup and commissioning.
9. Prepare submittals (or confirmation of compliance with County design standards), administer and track submittal process.
10. Schedule meetings, inspections, and testing with County staff.
11. Provide Engineer's site visits during construction to confirm construction is being performed in conformance with the Design Drawings and Specifications.
12. Prepare Record Drawings.

Task 2 – Construction Services

1. Installation of a new 500 kW diesel generator:
    a. New auger-cast pilings will be installed south-west of the Generator No. 1 Building for the new generator pad
    b. A new reinforced concrete pad will be formed and poured to support the new diesel generator, tank, and housing.
    c. Furnish and install a new 500 kW diesel generator with sub-base fuel tank.
        i. Generator fuel tank will have a capacity of 4512 gallons, or capacity to supply 50% rated standby power for 10 days at a usage rate of 18.8 gph.
        ii. Generator will have an aluminum enclosure attached which provides enough room to walk around and perform maintenance on the generator.
    d. Furnish and install new generator battery charger.
    e. Provide necessary grounding system around new generator, generator pad, and electrical room.

2. Furnish (for Phase 2 installation) equipment for modifications to existing Generator No. 1 building:
    a. A new 3.0 ton mini-split A/C unit for Phase 2 installation on the exterior of the building with floor mounted compressor unit and wall mounted interior fan/evaporator.
    b. Lightning protection system for Generator No. 1 Building and new generator enclosure

3. Temporary Power for equipment:
    a. During transition when temporary power is required to run equipment, Design-Build Entity will facilitate the connection of temporary power to equipment. Temporary power will be provided by the County via mobile generators. The Design-Build Entity will coordinate with Plant, County, and relevant personnel when temporary power will be needed.

4. Furnish new switchboard (MSB-1), automatic transfer switch, and other electrical equipment (for Phase 2 installation):
    a. Furnish new switchboard with integrally bussed automatic transfer switch for Phase 2 installation in Generator No. 1 Building. Switchboard to have

layout and breaker sizes as shown in **SINGLE LINE DIAGRAM – BELLE GLADE WWTF – ALTERNATIVE POWER IMPROVEMENTS – 06-15-2015.**

b. Furnish new 50 kVA transformer, 200A lighting panel, and SS disconnect(s) for A/C.
c. Furnish new 200A generator receptacle and male cord cap for centrifuge generator plug.
d. Furnish new 200A SS disconnect for centrifuge generator receptacle.

5. Furnish (for Phase 2 installation) conduit and cabling system:
   a. From Generator No. 1 Building to Manhole #5, one (1) 2" PVC conduit for Fiber Optic (FO) cable.
   b. 6-pair FO cable from Generator No. 1 Building to PLC cabinet at MCC 1 in Main Operations Building.
   c. Four inch (4") PVC conduit between new 500 kW generator and new MSB-1
   d. Two (2) sets of 4-wire 500 MCM wiring between new 500 kW generator and ATS located at new MSB-1
   e. New conduit, wiring, and junction box, to connect existing wiring feeding equipment, and new MSB-1 equipment breakers. Actual wire size and connections are conditional on the state of existing wiring, actual MSB-1 breakers to be installed, and all in accordance with NEC.
   f. New #3/0 wiring to from new MSB to each digester blower starter cabinet.
   g. New stainless steel NEMA 4X junction box to marshal new wiring to digester blowers.
   h. Furnish and install conduit and cabling to new centrifuge, receptacle and disconnect.
   i. Furnish and install conduit and cabling to Generator No. 1 Building lighting, new A/C, and ancillary loads.
   j. Furnish and install new feeders from the new MSB-1 to the FPL vault

6. Furnish (for Phase 2 installation) control equipment:
   a. Furnish Micrologix 1400 based PLC, I/O, power supply, and media converter in UL 508 panel for interface between Plant SCADA and generator, ATS, and switchboard.
   b. Furnish a room temperature monitor for remote Generator No. 1 Building temperature status on plant SCADA.

Permits and Fees

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

SALVAGED MATERIALS

1. Scrap metal to be disposed of by the Design-Build Entity.

2. Non-metal waste such as concrete, PVC, fiberglass etc., to be hauled and legally disposed by Design-Build Entity.

ASSUMPTIONS

1. County will make available all existing record drawings as may be required to coordinate and complete this scope of services.
2. County will review all submittals and provide comments within one calendar week and notify Design-Build Entity of status.
3. **SINGLE LINE DIAGRAM – BELLE GLADE WWTF – ALTERNATIVE POWER IMPROVEMENTS – 06-15-2015** is provided merely as a reference for how pricing was developed. This is not to be referenced as an engineered drawing, and is subject to change.
4. Unless otherwise noted, existing wiring, conduits, and duct bank are assumed to be in good condition. Time and material associated with remediation of damaged wiring, conduits, or duct bank which may impede work are out of scope.
5. Other than new feeders, no modifications to the FPL transformer vault area are included.
6. Unless specifically stated, relocation of any existing utilities is out of scope.
7. No remediation for any petroleum contamination is required.
8. Liquidated damages may be assessed at a rate of $1,000 per day up to Substantial completion and $500 per day from Substantial Completion until Final Completion.
9. County shall provide:
    - IP Addresses where required
    - Modbus register addresses where required

COMPENSATION

Compensation for this Work Authorization shall not exceed the Guaranteed Maximum Price of **$598,998.02** in accordance with the unit prices established in the Contract for construction services dated March 10, 2015, as approved by the Board of County Commissioners.

SBE/M-WBE PARTICIPATION

As described in the Contract (R 2015-0315), SBE/M-WBE participation is included in ATTACHMENT F under this Authorization. The attached Schedule 1 defines the SBE/M-WBE applied to this Authorization/Contract and Schedule 2 establishes the SBE/M-WBE contribution from each subcontractor (Letter of Intent to perform as an SBE/M-WBE).

ATTACHMENT - B

WORK AUTHORIZATION NO. 02

Palm Beach County Water Utilities Department
Optimization and Improvements Design-Build Contract

Rates for Liquidated Damages

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

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

ATTACHMENT - C

NIELSON, ROSENHAUS & ASSOCIATES
A NIELSON HOOVER GROUP COMPANY

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

July 22, 2015

Globaltech, Inc.
6001 Broken Sound Pkwy, Suite 610
Boca Raton, FL 33487

RE: Palm Beach County, as Obligee
Project: Western Region Waste Water Treatment Facility (WRWWTF)Power Improvements
Phase 1
Bond No. SU1129888

Dear Ladies and Gentlemen:

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

Executed Contract with Date: X

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

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

Thank you for your cooperation.

Sincerely,

Brett Rosenhaus,
FL Resident Agent

8401 Lake Worth Road
Suite 2-231
Lake Worth, FL 33467
P: 561.713.1453
F: 561.713.1455
www.nielsonbonds.com

NIELSON, ROSENHAUS & ASSOCIATES
A NIELSON HOOVER GROUP COMPANY

July 22, 2015

Globaltech, Inc.
6001 Broken Sound Parkway NW
Suite 610
Boca Raton, Fl 33487

Project: Western Region Waste Water Treatment Facility (WRWWTF) Power Improvements Phase 1

The attached bond we have executed for you is known as a Public Construction Bond. **IT NEEDS TO BE SIGNED AND SEALED.**

Since October 1, 1988 the Public Works Bonding Law requires that the recording of performance and payment bonds be filed at the local courthouses where the public construction is being performed. Any such bond written pursuant to Section 255.05 Florida Statute must be recorded by the contractor and should be filed before the commencement of the work.

Nielson, Rosenhaus & Associates

Builders Notice Corp.
708 S. Andrews Avenue
P O Box 457
Ft. Lauderdale FL 33302
Ph: (800) 432-1959

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

8401 Lake Worth Road
Suite 2-231
Lake Worth, FL 33467
P: 561.713.1453
F: 561.713.1455
www.nielsonbonds.com

FRONT PAGE OF
PUBLIC PAYMENT BOND
Florida Statute 255.05

Attached to and part of BOND NO. SU1129888
In Compliance with Florida Statutes Chapter 255.05 (1) (a), Public Work. All other Bond page(s) are deemed subsequent to this page regardless of any number (s) that may be pre-printed thereon.

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

SURETY: Arch Insurance Company
300 Plaza Three
Jersey City, NJ 07311
201-743-4000

AGENT: Nielson, Rosenhaus & Associates
8401 Lake Worth Road, Suite 2-231
Lake Worth, FL 33467
561-713-1453

OBLIGEE: Palm Beach County
8100 Forest Hill Boulevard
West Palm Beach, FL 33413
561-493-6000

PROJECT: Western Region Waste Water Treatment Facility (WRWWTF) Power Improvements Phase 1

ATTACHMENT - C

PUBLIC CONSTRUCTION BOND

BOND NUMBER:	SU1129888
BOND AMOUNT:	$598,998.02
CONTRACT AMOUNT:	$598,998.02
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:	Arch Insurance Company
SURETY'S ADDRESS:	300 Plaza Three Jersey City, NJ 07311
OWNER'S NAME:	Palm Beach County
OWNER'S ADDRESS:	8100 Forest Hill Boulevard West Palm Beach, FL 33413
OWNER'S PHONE:	(561) 493-6000
DESCRIPTION OF WORK:	Replacement of Western Region Waste Water Treatment Facility's (WRWWTF) generator, including connection to SCADA system with PLC programming along with other building improvements.
COUNTY'S PROJECT No:	WUD 14-050, WA-2
PROJECT LOCATION:	PBCWUD WRWWTF, 2055 West Canal Street South, Belle Glade, FL 33430 (PCN 00-37-43-19-00-000-3060)
LEGAL DESCRIPTION:	PCN 00-37-43-19-00-000-3060

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 $598,998.02

Five hundred ninety eight thousand nine hundred ninety eight dollars and two cents.

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

WHEREAS,

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

Project Name: Western Region Waste Water Treatment Facility (WRWWTF)
Power Improvements Phase 1
Project No.: WUD 14-050
Project Description: Replacement of WRWWTF's generator, including connection to SCADA system with PLC programming along with other building improvements.
Project Location: PBCWUD WRWWTF, 2055 West Canal Street South, Belle Glade, FL 33430 (PCN 00-37-43-19-00-000-3060)

in accordance with Design Criteria Drawings and Specifications prepared by:

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

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

THE CONDITION OF THIS BOND is that if Principal:

1. Performs the contract dated _____, 20____, between Principal and County for the design and construction of WUD 14-050, the contract being made a part of this bond by reference, at the times and in the manner prescribed in the contract; and

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

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

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

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

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

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

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

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

Rebecca Thomas
Witness

Rebecca Thomas
Print name

Globaltech, Inc.
Principal (Seal)

Print name Bernard P. Gandy

President
Title

Witness

Jackie Haynes
Print name

Arch Insurance Company
Surety (Seal)

Print name Brett Rosenhaus

Attorney in fact
Title

AIC 0000147097

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON BLUE BACKGROUND.

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated. Not valid for Mortgage, Note, Loan, Letter of Credit, Bank Deposit, Currency Rate, Interest Rate or Residential Value Guarantees.

POWER OF ATTORNEY

Know All Persons By These Presents:

That the Arch Insurance Company, a corporation organized and existing under the laws of the State of Missouri, having its principal administrative office in Jersey City, New Jersey (hereinafter referred to as the "Company") does hereby appoint:

Arthur Lawrence Colley, Audria R. Ward, Brett Rosenhaus, Charles D. Nielson, Charles J. Nielson, David R. Hoover, Edward T. Ward, F. Danny Gann, John R. Neu, Kevin Wojtowicz and Laura D. Mosholder of Miami Lakes, FL 33016 (EACH)

its true and lawful Attorney(s)in-Fact, to make, execute, seal, and deliver from the date of issuance of this power for and on its behalf as surety, and as its act and deed:

Any and all bonds, undertakings, recognizances and other surety obligations, in the penal sum not exceeding Ninety Million Dollars ($90,000,000.00).

This authority does not permit the same obligation to be split into two or more bonds In order to bring each such bond within the dollar limit of authority as set forth herein.

The execution of such bonds, undertakings, recognizances and other surety obligations in pursuance of these presents shall be as binding upon the said Company as fully and amply to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at its principal administrative office in Jersey City, New Jersey.

This Power of Attorney is executed by authority of resolutions adopted by unanimous consent of the Board of Directors of the Company on September 15, 2011, true and accurate copies of which are hereinafter set forth and are hereby certified to by the undersigned Secretary as being in full force and effect:

"VOTED, That the Chairman of the Board, the President, or the Executive Vice President, or any Senior Vice President, of the Surety Business Division, or their appointees designated in writing and filed with the Secretary, or the Secretary shall have the power and authority to appoint agents and attorneys-in-fact, and to authorize them subject to the limitations set forth in their respective powers of attorney, to execute on behalf of the Company, and attach the seal of the Company thereto, bonds, undertakings, recognizances and other surety obligations obligatory in the nature thereof, and any such officers of the Company may appoint agents for acceptance of process."

This Power of Attorney is signed, sealed and certified by facsimile under and by authority of the following resolution adopted by the unanimous consent of the Board of Directors of the Company on September 15, 2011:

VOTED, That the signature of the Chairman of the Board, the President, or the Executive Vice President, or any Senior Vice President, of the Surety Business Division, or their appointees designated in writing and filed with the Secretary, and the signature of the Secretary, the seal of the Company, and certifications by the Secretary, may be affixed by facsimile on any power of attorney or bond executed pursuant to the resolution adopted by the Board of Directors on September 15, 2011, and any such power so executed, sealed and certified with respect to any bond or undertaking to which it is attached, shall continue to be valid and binding upon the Company.

In Testimony Whereof, the Company has caused this instrument to be signed and its corporate seal to be affixed by their authorized officers, this 13th day of March, 2015.

Attested and Certified

Arch Insurance Company

Patrick K. Nails, Secretary

David M. Finkelstein, Executive Vice President

STATE OF PENNSYLVANIA SS

COUNTY OF PHILADELPHIA SS

I, Helen Szafran, a Notary Public, do hereby certify that Patrick K. Nails and David M. Finkelstein personally known to me to be the same persons whose names are respectively as Secretary and Executive Vice President of the Arch Insurance Company, a Corporation organized and existing under the laws of the State of Missouri, subscribed to the foregoing instrument, appeared before me this day in person and severally acknowledged that they being thereunto duly authorized signed, sealed with the corporate seal and delivered the said instrument as the free and voluntary act of said corporation and as their own free and voluntary acts for the uses and purposes therein set forth.

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
HELEN SZAFRAN, Notary Public
City of Philadelphia, Phila. County
My Commission Expires October 3, 2017

Helen Szafran, Notary Public
My commission expires 10/03/2017

CERTIFICATION

I, Patrick K. Nails, Secretary of the Arch Insurance Company, do hereby certify that the attached Power of Attorney dated March 13, 2015 on behalf of the person(s) as listed above is a true and correct copy and that the same has been in full force and effect since the date thereof and is in full force and effect on the date of this certificate; and I do further certify that the said David M. Finkelstein, who executed the Power of Attorney as Executive Vice President, was on the date of execution of the attached Power of Attorney the duly elected Executive Vice President of the Arch Insurance Company.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the Arch Insurance Company on this _____day of _____, 20_____.

Patrick K. Nails, Secretary

This Power of Attorney limits the acts of those named therein to the bonds and undertakings specifically named therein and they have no authority to bind the Company except in the manner and to the extent herein stated.

PLEASE SEND ALL CLAIM INQUIRIES RELATING TO THIS BOND TO THE FOLLOWING ADDRESS:

Arch Insurance – Surety Division
3 Parkway, Suite 1500
Philadelphia, PA 19102

ATTACHMENT - D

FORM OF GUARANTEE

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

We the undersigned hereby guarantee that the **Western Region Waste Water Treatment Facility (WRWWTF) Power Improvements Phase 1, (WUD 14-050, WA-2)** project located in Palm Beach County, Florida, which we have constructed and bonded, has been done in accordance with the plans and specifications; that the work constructed will fulfill the requirements of the guaranties included in the Contract Documents. We agree to repair or replace any or all of our work, together with any work of others which may be damaged in so doing, that may prove to be defective in the workmanship or materials within a period of one year from the date of Substantial Completion of all of the above named work by the County of Palm Beach, State of Florida, without any expense whatsoever to said County of Palm Beach, ordinary wear and tear and unusual abuse or neglect excepted by the County. When correction work is started, it shall be carried through to completion.

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

DATED: _____
(notice of completion filing date)

SEAL AND NOTARIAL ACKNOWLEDGMENT OF SURETY

Globaltech, Inc. (Seal)
(Contractor)

By: _____ Bernard P. Gandy
(Signature) (Printed Name)

Arch Insurance Company (Seal)
(Surety)

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

ATTACHMENT - E

WORK AUTHORIZATION COST SCHEDULE

ATTACHMENT - E

WA-2: Western Region Waste Water Treatment Facility (WRWWTF) Power Improvements Phase I

Engineering Fee Summary

Task	Task Description	E6 $77.33	E5 $65.24	E4 $57.37	E3 $42.97	Tech III $32.99	OS $35.43	Total Labor	*Sub-Consultant Services	Sub-Consultant
1	**Project Coordination**									
	Project Management/Coordination	2	6		24		8			
	Meet w/ staff to review project/collect info		8		16					
	Prepare design/construction schedule		4		4					
	Subtotal Task 1	**2**	**18**	**0**	**44**	**0**	**8**	**$ 3,503.10**	**$ -**	
2	**Permitting**									
	PBC DERM - prepare and submit letter		2	2	2					
	FL DEP - prepare and submit permit			2	2					
	Prepare Construction application				2					
	PBC Building - Civil/Mechanical/Elec				2					
	FPL fees coordination permits				8					
	Subtotal Task 2	**0**	**2**	**4**	**16**	**0**	**0**	**$ 1,047.48**	**0**	
3	**60% Design**									
	Project Management/Coordination				8		8			
	Mechanical Design (4 sheets)		8	8	20	20				
	Structural Design		2			2			$ 1,500.00	Worcester
	Electrical/I&C Design (6 sheets)		2		40	40			$ 2,000.00	ADS
	Specifications			8	8					
	Update schedule			4	2					
	Prepare construction estimate		2		8					
	Meet with staff and review				8					
	Subtotal Task 3	**0**	**14**	**20**	**94**	**62**	**8**	**$ 8,428.76**	**$ 3,500.00**	
5	**100% Design**									
	Project Management/Coordination				8		4			
	Mechanical Design		12			12				
	Structural Design		1			1			$ 2,500.00	Worcester
	Electrical/I&C Design				16	16			$ 3,000.00	ADS
	Specifications									
	Update schedule				4					
	Update construction estimate		1	1						
	QC/QA		2							
	Subtotal Task 5	**0**	**16**	**1**	**28**	**29**	**4**	**$ 3,402.80**	**$ 5,500.00**	
6	**SDC**									
	Project Management/Coordination				32		8			
	Site Visits		16		64					
	Submittals		2		12		2			
	RFIs		2		8					
	Record Drawings		2		20	20				
	Permit Closeout		2		4					
	Subtotal Task 6	**0**	**24**	**0**	**140**	**20**	**10**	**$ 8,595.66**	**$ -**	
	Labor Hours	2	74	25	322	111	30			
	Labor Costs	$154.66	$4,827.76	$1,434.25	$13,836.34	$3,661.89	$1,062.90			
	Labor Multiplier	3.00	3.00	3.00	3.00	3.00	3.00	3.00		
	Labor Total	$463.98	$14,483.28	$4,302.75	$41,509.02	$10,985.67	$3,188.70	**$74,933.40**		
	Subconsultant Total								$ 9,000.00	
	TOTAL ENGINEERING FEE								$ 83,933.40	

Globaltech
A DESIGN - BUILD COMPANY

Takeoff Worksheet

07/21/15

PBC Water Utilities Department
150486 PBC WRWWTF Power Imp. Phase 1

Description	Quote/Vendor	Unit	Quantity	Cost	Ext. Cost	Tax (%)	Markup*	Ext. Price
1 General Conditions								
Temporary Facilities								
Trailer Pick up/Delivery		Ea	1	200.00	200.00	6.00	1.1500	243.80
Container Rental		Ea	3	125.00	375.00	6.00	1.1500	457.13
Sanitary		Month	3	120.00	360.00	6.00	1.1500	438.84
Job Site Office Supplies		LOT	1	100.00	100.00	6.00	1.1500	121.90
Waste Hauling		LOT	2	600.00	1,200.00	6.00	1.1500	1,462.80
General Conditions								
Submittal Labor		HR	32	71.08	2,274.56		1.2992	2,955.11
Progress Meeting		HR	20	71.08	1,421.60		1.2992	1,846.94
Scheduling Labor		HR	20	71.08	1,421.60		1.2992	1,846.94
Construction PM		HR	100	71.08	7,108.00		1.2992	9,234.71
Construction Superintendent		HR	80	62.13	4,970.40		1.2992	6,457.54
Safety		HR	8	71.08	568.64		1.2992	738.78
Building Permits		HR	20	71.08	1,421.60		1.2992	1,846.94
				Bid Item Totals:	**21,421.40**			**27,651.43**
2 Site Work								
Mobilization		LOT	1	2,028.56				
Construction PM		HR	8	71.08	568.64		1.2992	738.78
Construction Superintendent		HR	8	62.13	497.04		1.2992	645.75
3 Man Crew		CR-D	1	962.88	962.88		1.2992	1,250.97
Soil Boring & Testing		LOT	1	5,500.00	5,500.00		1.1000	6,050.00

Description	Quote/Vendor	Unit	Quantity	Cost	Ext. Cost	Tax (%)	Markup*	Ext. Price
				Bid Item Totals:	**7,528.56**			**8,685.50**
3 Concrete								
Generator Pad								
Prep Area for Generator Pad		CR-D	2	962.88	1,925.76		1.2992	2,501.95
Concrete Piles		LOT	1	15,000.00	15,000.00	6.00	1.1000	17,490.00
Form & Materials		LOT	1	1,681.91	1,681.91	6.00	1.1500	2,050.24
Cast In Place Concrete		LOT	50	175.00	8,750.00	6.00	1.1500	10,666.25
Concrete Pump		LOT	1	700.00	700.00	6.00	1.1500	853.30
Testing Services		LOT	1	1,000.00	1,000.00		1.1000	1,100.00
3 Man Crew		CR-D	5	962.88	4,814.40		1.2992	6,254.87
Construction PM		HR	8	71.08	568.64		1.2992	738.78
Patch & Repair		CR-D	2	962.88	1,925.76		1.2992	2,501.95
				Bid Item Totals:	**36,366.47**			**44,157.34**
5 Metals								
Misc Metals & Fasteners		LOT	1	1,000.00	1,000.00	6.00	1.1500	1,219.00
				Bid Item Totals:	**1,000.00**			**1,219.00**
11 Equipment								
Cummins 500KW Generator		LOT	1	155,644.88	155,644.88	6.00	1.1500	189,731.11
HVAC		EA	1	5,400.00	5,400.00	6.00	1.1500	6,582.60
				Bid Item Totals:	**161,044.88**			**196,313.71**
13 I&C								
Generator Interface Panel		LOT	1	17,000.00	17,000.00	6.00	1.1500	20,723.00
				Bid Item Totals:	**17,000.00**			**20,723.00**

Description	Quote/Vendor	Unit	Quantity	Cost	Ext. Cost	Tax (%)	Markup*	Ext. Price
15 Mechanical								
Generator Installation								
Set and Install Generator		CR-D	4	1,614.24	6,456.96		1.2992	8,388.88
				Bid Item Totals:	**6,456.96**			**8,388.88**
16 Electrical								
Electrical Sub		LOT	1	138,000.00	138,000.00		1.1000	151,800.00
Construction PM (I&C)		HR	24	71.08	1,705.92		1.2992	2,216.33
Trenching, Backfilling, and Compaction		CR-D	8	962.88	7,703.04		1.2992	10,007.79
				Bid Item Totals:	**147,408.96**			**164,024.12**
18 Rental Equipment								
Crane		DAY	1	1,500.00	1,500.00	6.00	1.1500	1,828.50
Fork Lift		WEEK	4	2,475.00	9,900.00	6.00	1.1500	12,068.10
Fuel		LOT	50	5.00	250.00	6.00	1.1500	304.75
Backhoe		WEEK	4	1,200.00	4,800.00	6.00	1.1500	5,851.20
Equipment Fuel		LOT	50	5.00	250.00	6.00	1.1500	304.75
5,000 psi pressure washer		WEEK	1	575.01	575.01	6.00	1.1500	700.94
Compactor 5000-7000LB		WEEK	3	750.00	2,250.00	6.00	1.1500	2,742.75
Equipment Fuel		LOT	40	5.00	200.00	6.00	1.1500	243.80
				Bid Item Totals:	**19,725.01**			**24,044.79**
50 Engineering								
Engineering		LOT	1	24,977.80	24,977.80		3.0000	74,933.40
Electrical Engineer		LOT	1	5,000.00	5,000.00		1.0000	5,000.00
Structural Engineer		LOT	1	4,000.00	4,000.00		1.0000	4,000.00
				Bid Item Totals:	**33,977.80**			**83,933.40**
60 Bond & Certification								
Bonds & Certifications		LOT	1	11,977.04	11,977.04		1.1500	13,773.60
Builders Risk Insurance		LOT	1	5,289.78	5,289.78		1.1500	6,083.25

Description	Quote/Vendor	Unit	Quantity	Cost	Ext. Cost	Tax (%)	Markup*	Ext. Price
				Bid Item Totals:	17,266.82			19,856.85
				Grand Totals:	469,196.86			598,998.02

Note: CR-D=8Hrs
**Contract Markups Per Master Agreement:*
Materials = 1.15, Subcontractors = 1.1, Labor at Burden = 1.2992

ATTACHMENT - F

SBE SCHEDULE 1 & 2

ATTACHMENT - F

SCHEDULE 1

LIST OF PROPOSED SBE-M/WBE PRIME/SUBCONTRACTORS

PROJECT NAME: Western Region Waste Water Treatment Facility (WRWWTF) Power Improvements Phase 1

PROJECT No: WUD 14-050

NAME OF PRIME BIDDER: Globaltech, Inc.

ADDRESS: 6001 Broken Sound Parkway NW, Suite 610

CONTACT PERSON: Bernard P. Gandy, President

PHONE NO.: 561-997-6433 FAX NO.: 561-997-5811

BID OPENING DATE: N/A

DEPARTMENT: N/A

PLEASE IDENTIFY ALL APPLICABLE CATEGORIES

Name, Address and Telephone Number of Minority Contractor	(Check one or both Categories) Minority Business	Small Business	Dollar Amount Black	Hispanic	Women	Caucasian	Other (Please Specify)
Globaltech, Inc., (561) 997-6433 6001 Broken Sound Parkway NW, Suite 610, Boca Raton, FL 33487	☐	☑	$ -	$ -	$ -	$ 430,498.02	$ -
Energy Efficient Electric, Inc. 1600 Mercer Avenue, Suite 6 West Palm Beach, FL 33401 (561) 655-7211	☐	☑	$ -	$ -	$ -	$ 138,000.00	$ -
ADS Engineering, PLLC 4400 N. Federal Highway, Suite 18 Boca Raton, FL 33431 (954) 415-7378	☐	☑	$ -	$ -	$ -	$ 5,000.00	$ -
	☐	☑	$ -	$ -	$ -	$ -	$ -
	☐	☑	$ -	$ -	$ -	$ -	$ -
	☐	☑	$ -	$ -	$ -	$ -	$ -
PRIME CONTRACTOR TO COMPLETE:		TOTAL	$ -	$ -	$ -	$ 573,498.02	$ -

BID PRICE: $ 598,998.02 Total Value of SBE Participation: $ 573,498.02

NOTE:

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

ATTACHMENT - F

SCHEDULE 2

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

PROJECT NO. WUD 14-050

PROJECT NAME Western Region Waste Water Treatment Facility (WRWWTF) Power Improvements Phase 1

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

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

Small Business Enterprise XX Minority Business Enterprise _____

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

Date of Palm Beach County Certification: November 24, 2012

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

Line Item/Lot No.	Item Description	Qty / Units	Unit Price	Total Price
1	Engineering	1	N/A	$ 74,933.40
2	Mechanical Construction	1	N/A	$ 335,707.77
3	Bonds & Certifications	1	N/A	$ 19,856.85

at the following price:
$430,498.02 (Four hundred thirty thousand four hundred ninety eight dollars and two cents
(Subcontractor's quote)

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

If undersigned intends to sub-subcontract any portion of this subcontract to a non-certified SBE subcontractor, the amount of any such subcontract must be stated: NONE.

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

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

By: _____
(Signature)

David A. Schuman, Corporate Secretary
(Print name/title of person executing on behalf of SBE-M/WBE Subcontractor)

Date: July 21, 2015

ATTACHMENT - F

SCHEDULE 2

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

PROJECT NO. WUD 14-050 PROJECT NAME WRWWTF Power Improvements Phase 1

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

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

Small Business Enterprise XX Minority Business Enterprise _____

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

Date of Palm Beach County Certification: November 15, 2013

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

Line Item/Lot No.	Item Description	Qty / Units	Unit Price	Total Price
1	Electrical Engineering Design	1	N/A	$ 5,000.00

at the following price:

$5,000.00 (Five thousand dollars and no cents)
(Subcontractor's quote)

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

If undersigned intends to sub-subcontract any portion of this subcontract to a non-certified SBE subcontractor, the amount of any such subcontract must be stated: NONE.

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

ADS Engineering, PLLC
(Print Name of SBE-M/WBE Subcontractor)

By: _____
(Signature)

Alexander Stojanovic / President
(Print name/title of person executing on behalf of SBE-M/WBE Subcontractor)

Date: July 15, 2015

ATTACHMENT - F

SCHEDULE 2

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

PROJECT NO. WUD 14-050 PROJECT NAME WRWWTF Power Improvements Phase 1

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

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

Small Business Enterprise XX Minority Business Enterprise ____

Black ____ Hispanic ____ Women ____ Caucasian XX Other (Please Specify) ____

Date of Palm Beach County Certification: September 4, 2012

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

Line Item/Lot No.	Item Description	Qty / Units	Unit Price	Total Price
1	Electrical Subcontracting	1	N/A	$ 138,000.00

at the following price:

$138,000.00 (One hundred thirty-eight thousand dollars and no cents
(Subcontractor's quote)

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

If undersigned intends to sub-subcontract any portion of this subcontract to a non-certified SBE subcontractor, the amount of any such subcontract must be stated: NONE.

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

Energy Efficient Electric, Inc.
(Print Name of SBE-M/WBE Subcontractor)

By: _____
(Signature)

Rene Viau / Vice Prsident
(Print name/title of person executing on behalf of SBE-M/WBE Subcontractor)

Date: July 15, 2015

ATTACHMENT - G

AUTHORIZATION STATUS REPORT
July 20, 2015

SUMMARY AND STATUS OF AUTHORIZATIONS

Auth. No.	Description	Status	Project Total Amount	Date Approved	WUD No. Assigned	Globaltech Project No.
	CONSULTANT SERVICE AUTHORIZATIONS					
			$0.00			
			$0.00			
			$0.00			
			$0.00			
			$0.00			
			$0.00			
			$0.00			
			$0.00			
			$0.00			
			$0.00			
	Total CSAs		$0.00			
	WORK AUTHORIZATIONS					
WA-1	WTP 11 Degasifier Cleaning System	Approved	$1,051,189.81	04/21/15	WUD 14-073	
WA-2	Western Region Waste Water Treatment Facility (WRWWTF) Power Improvements Phase 1	Pending	$598,998.02		WUD 14-050	
	Total WAs		$1,650,187.83			
	Total CSAs + WAs		**$1,650,187.83**			

ATTACHMENT - H

AUTHORIZATION STATUS REPORT
OPTIMIZATION AND IMPROVEMENTS DESIGN-BUILD CONTRACT

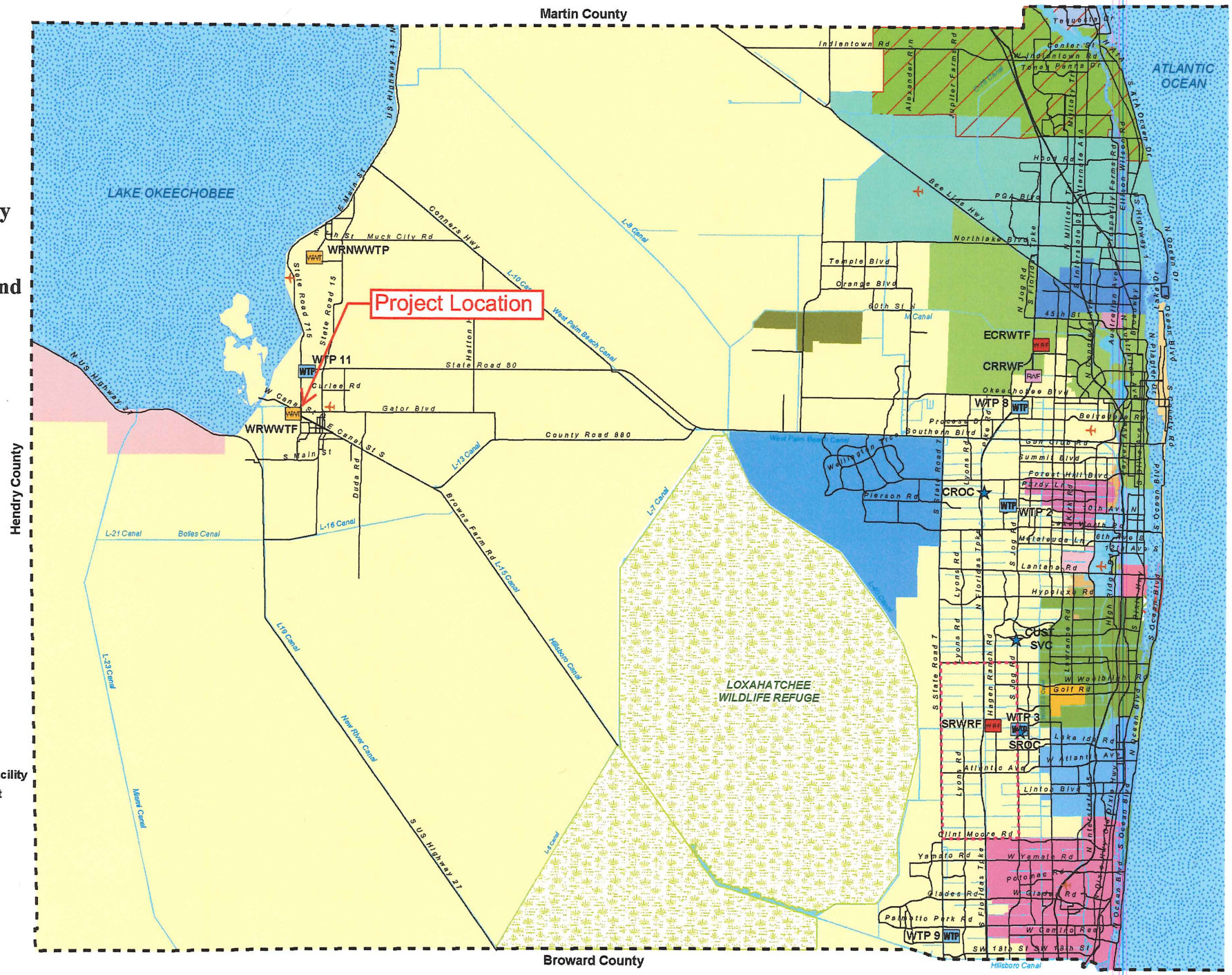
SUMMARY of SBE/MWBE TRACKING

WUD 14-050: Western Region Waste Water Treatment Facility (WRWWTF) Power Improvements Phase 1

	Total
Current Proposal	
Value of Consultant Service Authorization	$0.00
Value of Work Authorization	$598,998.02
Value of CSA and WA	$598,998.02
Value of SBE Minority Letter of Intent	$573,498.02
Actual Percentages	95.74%
Signed / Approved Authorizations	
Total Value of Approved Consultant Service Authorization	$0.00
Total Value of Approved Work Authorization	$1,051,189.81
Total Value of CSAs and WAs	$1,051,189.81
Total Value of SBE Signed Subcontracts	$1,020,112.81
Actual Percentages	97.04%
Signed Authorizations Plus Current Proposal	
Total Value of Approved CSAs Plus Current CSA Proposal	$0.00
Total Value of Approved WAs Plus Current WA Proposal	$1,650,187.83
Total Value of Approved and Proposed CSAs and WAs	$1,650,187.83
Total Value of SBE Subcontracts and Letters of Intent	$1,593,610.83
Actual Percentages	96.57%
GOAL	75%

ATTACHMENT - I

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



Legend

- Administration
- Water Treatment Plant
- Reclamation Facility
- Wastewater Reclamation Facility
- Wastewater Treatment Plant
- Mandatory Reclaimed SA
- Palm Beach County Limits
- P.B.C.W.U.D. Service Area

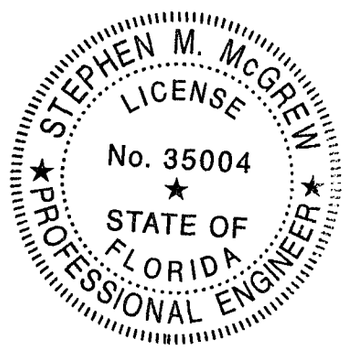
NOT TO SCALE

WUD 14-050: Western Region Waste Water Treatment Facility (WRWWTF) Power Improvements Phase 1 (WA-02)

ATTACHMENT - J

Design-Build Criteria Report

Design Build Criteria
Western Region Waste Water Treatment Facility (WRWWTF) Power Improvements
GL04 – Project No. WUD 14-050



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

7/20/2015

Design Build Criteria
WRWWTF Power Improvements
GL04 – Project No. WUD 14-050

Part 1 General

1.1 Summary of Work

A. **Project Background:** The proposed work to be performed by the Design-Build Entity generally includes furnishing all labor, equipment, materials, tools, supervision, and services required to design, construct, test, and startup the proposed work.

The Western Region Waste Water Treatment Facility (WRWWTF) is an activated sludge treatment plant with a permitted capacity of 6.5 mgd. The process facilities include a headworks with bar screens and grit separators, two oxidation ditch aeration tanks, four secondary clarifiers (two circular and two rectangular), two sludge thickeners, one aerobic digester, four roto screens and one 20" self cleaning strainer for effluent polishing and a deep injection well system for effluent disposal, with percolation ponds available for backup disposal.

The electrical distribution system at the WRWWTF consists of two utility FPL services. Utility Service No. 1 is located in the north-east corner of the plant and Utility Service No. 2 is located in the middle-west of the plant.

Utility Service No. 1 is connected to a 750kVA FPL transformer. The 750kVA FPL transformer is located in the existing FPL vault. The step-down transformer is connected to the main switchboard (MSB-1) located in Generator Building No. 1. MSB-1 consists of one 800A rated main breaker, one 600A rated generator breaker, one 800A rated automatic transfer switch (ATS) MSB-1 powers Digester Blowers 1 and 2, Oxidation Ditch No.1 aerators 1 and 2, Chlorine facility and Polymer building. The main breaker and emergency breakers are electrically interlocked through an ATS control scheme to prevent from closing both breakers at the same time.

Appendix A is a study completed by Hillers Electrical Engineering, Inc. on 1/22/15 for the necessary alternative power improvements for Utility Service No. 1. The following recommendation was made:

Emergency back-up power for MSB-1 is provided by a 300-kW (375kVA) generator rated at 480V, 3-phase. With the current set up the existing generator cannot power all loads connected to MSB-1. The generator was installed in 1982. MSB-1 and the 300-kW generator are well past their reliable life span for electrical equipment and it is recommended to be replaced.

Project will include the design and build of a new stand alone 500kW generator system with fuel tank, batteries and hurricane resistant aluminum enclosure. Generator will have a reinforced concrete slab and permanent maintenance access. Current generator and main switchboard will be removed and recycled from Generator Building #1. Generator Building #1 will be upgraded to an air conditioned building to extend the life of the new main switchboard. Refer to 1.1F for complete scope of works for this design build project.

The project will be split into two phases. The first phase will include furnishing and installation of the stand alone 500kW generator with fuel tank and enclosure. This phase will also include procurement of all long lead electrical equipment. The second phase will consist of installation and start-up of electrical equipment, PLC programming and Generator Building #1 modifications.

Additional information can be found in the Hillers Electrical Engineering Technical Memorandum (Appendix A).

B. **Legal description of the site:** S/D OF 36-43-36 BY ST SURVEY WLY 351.74 FT OF LT 3, N 1/2 OF LT 5 & PT OF N 1/2 OF LT 6 IN OR23848P268. Property Control No. 04-36-43-36-01-003-0010. Site address is 2055 West Canal Street South, Belle Glade, FL 33430.

C. **Survey information concerning the site:** Survey of the property was completed on 12/11/09 and is located in Appendix B.

D. **Interior space requirements:** N/A

E. **Material quality standards:** Adhere to Palm Beach County Water Utility Department (PBCWUD) Minimum Design Standards approved material list.

F. **Schematic layouts and conceptual Design Criteria of the project:**

The proposed work to be performed by the Design-Build Entity generally includes furnishing all labor, equipment (unless specified Owner Furnished in Scope of Works), materials, tools, supervision, and services required to design, construct, test, and startup improvements to the Belle Glade Waste Water Treatment Facility. Include PLC programming necessary for new generator and main switchboard. Connect generator to SCADA and provide I/O list with proposal.

Palm Beach County Water Utility Department requires the following items on the SCADA system:

i. Generator HOA(Hand-Off-Auto)/Ready
ii. Generator Running
iii. Oil Pressure
iv. Coolant Temperature
v. Line Power from FPL (volts and amps each leg)
vi. Generator power (volts and amps each leg)
vii. Charging System Volts
viii. Fuel Level gallons
ix. Generator Hours
x. Day Tank Level (if included)

All design documents including wind load calculations using ASCE 7-10, current Florida Building Code and all local codes for generator with tank and enclosure and also for generator building envelope shall be signed and sealed by a Florida registered Professional Engineer. Provide Florida Product approval for all doors, windows and louvers meeting required wind load pressures and impact.

The following items are included in this scope of services:

Standalone 500kW Generator with minimum a 4,500 Gallon Sub-base Fuel Tank:

i. Complete necessary investigations to locate underground utilities for selection of new generator location and new underground cable system. As described in section 1.7 - Underground Utilities.

ii. Select and recommend location options for standalone generator with sub-base fuel tank.
iii. Complete necessary soil investigations to determine slab and foundation design for slab on grade that generator will be secured on as described in section 3.1 - Plant Site/Civil Requirements.
iv. Excavate and remove unused material necessary to install generator slab.
v. Construct reinforced concrete foundation and slab as per approved design. (Assume pile system for Design Build pricing).
vi. Purchase standalone 500kW diesel Generator with a minimum 4,500 gallon sub-base fuel tank. The new generator will have a sub-base fuel tank that will provide back-up power for 10 days when loaded to 50% capacity. Generator must satisfy all EPA and local legislation regulations for emission.
vii. Generator shall have aluminum hurricane resistant walk-in enclosure that will protect the generator from the elements. Generator shall have screens and other means of protection to prevent rodents from entering into and/or damaging the standalone generator and its electrical and fuel systems.
viii. Generator will need permanent access to regularly maintenance areas. All handrails and toe rails shall adhere to current safety codes for fall protection (OSHA 29 CFR 1910.21 to 1910.27, ASTM E894-88, ASTM E935-00, ASTM E985-00 and ANSI/ASSE A1264.1-2007) .
ix. Provide permanent lighting for generator maintenance.
x. Provide grounding system.
xi. Provide necessary lightning protection system.
xii. Complete necessary start-up, testing and commissioning for new generator to ensure proper operation. This requirement is detailed further in section 2.1 - Starting and Placing Equipment in Operation, 2.2 - Minimum Start-Up Requirements, 2.3 - Equipment Startup and Performance Testing and 2.4 - Instruction of Operations and Maintenance Personnel.
xiii. Design Build Entity will supply all necessary fuel for Generator through testing and start up. Prior to handover the Design Build Entity will fill the Generator's tank.

Generator Building #1:

i. Remove and recycle existing louvers on the east of the building, and remove and dispose of wall vents located on south and west side of the building. This requirement is detailed further in section 3.2 - Demolitions and Equipment Removal.
ii. Remove and recycle 300kW generator, MSB-1 and above ground fuel tank along with all miscellaneous pipes and parts associated with the 300kW generator. This requirement is detailed further in section 3.2 - Demolitions and Equipment Removal.
iii. Seal all penetrations in the roof. Ensure the roof is watertight.
iv. Design connections, furnish and install CMU block where previous louvers and wall vents were demolished and dowel rebar into existing wall and floor.
v. Enclose all abandoned penetrations in exterior wall.
vi. Provide necessary insulation for roof openings to FPL vault as well as sealing/insulating connection between roof and walls in generator #1 building.
vii. All building works will comply with current fire rating standards and codes.
viii. Clean and fill all open expansion joints inside Generator Building #1 with suitable material.

ix. Fill all holes from now removed bolted down equipment.
x. Furnish and install new Main Switchboard and install equipment curb. Refer to Appendix C, for Single Line Diagram of new main switchboard proposed configuration. The Design Build Entity is responsible for confirming electrical configuration that best suits the plants requirements.
xi. Provide connections for new Main Switchboard to FPL Vault, new 500kW generator, Digester Blower 1 & 2, Oxidation Ditch #1 Aerator 1 & 2, Chlorine Facility, HVAC and Polymer Building. See Appendix C, Single Line Diagram for all connections to MSB-1. This item will require coordination with Florida Power and Light.
xii. Furnish and install new PLC for Generator Building #1.
xiii. Provide costs for optional shutdown/transfer of equipment. Palm Beach County will provide temporary generators for shutdown/transfer of equipment. Assume everything must be powered but this may change dependent on shutdown/transfer schedule. This requirement is detailed further in sections 1.8 - Maintenance of Operations and 1.9 - Plant Shutdowns.
xiv. Furnish and install new A/C air handling units to provide a temperature controlled environment to maximize life of new switchboard (Trane or approved equal).
xv. Design, install and connect new A/C air handling units to Generator Building #1. AHUs shall not be roof mounted and must be constructed with durable and weatherproof material. The AHUs shall also be fastened to a structure or ground so they are secure in the event of a hurricane.
xvi. Supply, install and connect room temperature monitor. Room temperature shall be added to the SCADA system.
xvii. Paint interior and exterior of building with approved paint (Use plant standard paint and colors).
xviii. Complete necessary testing and conditioning of new Main Switchboard-1 and A/C air handling units to ensure proper operation. This requirement is detailed further in section 2.1 - Starting and Placing Equipment in Operation, 2.2 - Minimum Start-Up Requirements, 2.3 - Equipment Startup and Performance Testing and 2.4 - Instruction of Operations and Maintenance Personnel.

Underground Cabling System

i. Excavate trench for new cabling system. All spoil piles not used for backfill will need to be removed and hauled off site.
ii. Install new cable system connecting the new MSB-1 to the new 500kW generator.
iii. Cable system shall include all necessary connections including but not limited to circuits for battery charger, condensation heater, jacket heater, control/signal wiring to start/stop generator and necessary AWG conductors.
iv. Excavate trench for new fiber optic cables from Generator Building #1 to Vault #5 located next to Sludge Thickeners 1 & 2.
v. Install fiber optics from Generator Building #1 to MCC Building #1.
vi. Remove existing wires from existing conduit running from MSB-1 to Digester Blowers junction box.
vii. Install new code compliant wiring in existing conduit from MSB-1 to Digester Blowers junction box.

viii. Remove existing junction box at Digester Blower and replace with a properly sized junction box.

G. **Cost or budget estimates:** $700,000.00

H. **Design and construction schedules:**

i) Substantial Construction Completion 330 Calendar Days after receipt of executed Work Authorization and notice to proceed with construction.

ii) Final Construction Completion 30 Calendar Days after Substantial Construction Completion.

iii) Liquidated damages for design and construction will apply as follows:
$1,000 per day past substantial completion date.
$500 per day past final completion date.

iv) The following items must be complete (at a minimum) to achieve substantial completion:
   a. All existing systems in place and operating as intended.
   b. Commissioning and Testing of all new equipment completed.
   c. Paintings of interior and exterior of Generator Building #1 complete.
   d. O&M Manuals have been delivered to the County and equipment training is completed.
   e. PLC programming work complete (PBC WUD will perform HMI SCADA Screen on IFIX).
   f. Punch List created with forecasted completion dates for each item.

I. **Site development requirements:** Once the generator location is determined then a site plan must be provided to the the City of Belle Glade.

J. **Provisions for utilities:** Refer to Sections 1.3 Utilities and 1.7 Underground Utilities for Design-Build Entity requirements.

K. **Stormwater retention and disposal:** Provide siltation barriers for all existing storm drainage catch basins impacted by construction activities.

L. **Parking requirements:** Only current County security badge holders can park inside the plant gate. Do not disrupt traffic flow for chemical deliveries. Project material deliveries shall be between 7:00 AM to 3:00 PM Monday through Friday excluding public holidays.

M. **Other:** A shutdown plan, developed in conjunction with the OWNER must be prepared by the Design-Build Entity for any planned plant or process shutdowns.

1.2 Permits and Fees

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

1.3 Utility Services

The Design-Build Entity 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-Build Entity 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 pipe and utilities are of critical importance in the installation or connection of proposed work, the Design-Build Entity 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-Build Entity shall employ a land surveyor registered in the State of Florida. The Design-Build Entity shall locate and protect survey control and reference points. The Design-Build Entity shall be responsible to establish elevations, lines, and levels, utilizing recognized engineering survey practices. The Design-Build Entity shall provide all labor, instruments and stakes, templates, and other materials necessary for marking and maintaining all lines and grades. The Design-Build Entity 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 and will reference geodetic datum NAD83.

1.6 Work Area

The Design-Build Entity shall confine his activities to the site(s) designated by Owner for the work or staging areas for materials storage. All debris, materials, pipe, 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-Build Entity shall be responsible for determining these regulations and shall bear all costs or retain any profit associated with disposal of these items.

The Design-Build Entity shall protect their work. When required to complete the work, the Design-Build Entity shall maintain of suitable lighting to maintain a safe working environment. Work performed outside of the established working hours requires the permission from the owner. The Design-Build Entity shall also comply with all laws or ordinances covering the protection of such work and the safety measures to be employed therein. The Design-Build Entity 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, and proper protection. The Design-Build Entity is responsible for the security of their work, equipment, and material at all times.

1.7 Underground Utilities

All water pipes, storm drains, force mains, gas or other pipe, 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-Build Entity shall obtain permission from the Owner, or shall make suitable arrangements for their disconnection by the Owner. The Design-Build Entity 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-Build Entity. The Design-Build Entity 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-Build Entity.

The Design-Build Entity shall notify "SUNSHINE STATE" at 1 (800)-432 4770 at least forty-eight (48) hours prior to performing any excavating activities. Evidence of such notice shall be furnished to the Owner prior to excavating. Design-Build Entity is responsible for all utility locates within the project site and will provide an 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), General Electrical Design Requirements, Palm Beach County Wellfield Protection Ordinance, 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-Build Entity's activities or any partial plant shutdowns shall minimize disruption to the treatment facilities and conveyance. The Design-Build Entity 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-Build Entity to perform the proposed work, the Design-Build Entity 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-Build Entity's need for any system or partial system shutdown. Additional notice may be required for certain shutdowns.

1.10 Project Coordination

Design-Build Entity 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-Build Entity 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-Build Entity shall not be responsible for damage done by other contractors on site who are not under the Design-Build Entity's jurisdiction except where such loss or damage is caused by the negligence of Design-Build Entity. Design-Build Entity shall also coordinate his work with the work of others to assure compliance with schedules.

Design-Build Entity 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-Build Entity shall provide and maintain representative of his organization at the site at all time during performance of the work who may be reached at any time while work is in progress.

1.11 Project CPM Schedule

Design-Build Entity must prepare and maintain a project schedule using Primavera P6 software and the Critical Path Method (CPM) of scheduling. The following outlines the minimal schedule requirements. The schedule must be updated each month at a minimum and will be reviewed by the County to determine design and construction progress.

1.11.1 Design Schedules

The Program Management Team will specify detailed scheduling requirements to each design consultant through the professional services agreement, requiring that:

- A detailed P6 design schedule be created and routinely updated
- That at a minimum, milestones be depicted for:
    - Notice-to-proceed
    - 60 percent submittal
    - 100 percent submittal
- An estimate of the construction duration and staging be developed
- Linkages to other work packages be clearly indicated

1.11.2 Construction Schedules

The basics of the construction schedule submittals are outlined below.

Baseline Requirement: The Construction Schedule will use P6, the Critical Path Method, and shall reflect how the Contractor will build the project. The schedule should show the duration of each activity so that the Project Manager can accurately monitor the progress of the work. Schedule activities must be consistent with work items listed in the Schedule of Values and be cost-loaded such that schedule updates provide an independent check on the amounts shown in the Contractor's monthly progress payment request.

Additionally, the schedule will address the logic of construction activities, including any work constraints due to:

- Operational or permit requirements
- Special requirements of the technical specifications
- Standard construction practices
- Safety of the work place
- Manpower loading and availability
- Key Resource or Materials quantity loading

Initial Construction Schedule Submittals: The Contractor will be required to submit two schedule documents at the pre-construction conference. These are:

- The Contractor's plan of operation for the initial 30-day period of the contract
- An initial draft of the P6 Baseline CPM schedule

The Project Manager and the Contractor will meet to review and discuss the 30-day plan of operation and Baseline CPM schedule shortly after submittal to the Project Manager. The Project Managers review and comment on the schedules will be limited to conformance with the sequencing and milestone requirements in the Contract Documents. The Contractor will be required to make corrections to the schedules necessary to comply with the requirements and adjust the schedules to incorporate any missing information requested by the Project Manager.
Key elements of the schedule reviews will include:

- Production rates for reasonableness
- Appropriate level of detail
- Satisfaction of contractual constraints
- Accurately reflecting submittals, procurements, training and start-up tasks
- Conforms with approved schedule of values
- Complies with industry scheduling practices
- Schedule risk and critical path discussion

The plan of operation depicts accomplishment of the Contractor early execution activities (mobilization, permit acquisition, submittals necessary for early material and equipment procurement, submittals necessary for long lead equipment procurement, CPM submittals, initial site work and other submittals and activities required in the first 30 days).

Contractors Construction Schedule: The P6 Baseline schedule will be included in all subsequent schedule updates and will be the basis for measuring progress and performance. Schedule updates and other reporting requirements will be detailed in the schedule specifications. The construction schedule will provide information on major construction milestones and allow for quantity tracking. Related interface activities pertinent to facilities start-up and commissioning will also be shown. The associated Schedule of Values will delineate information related to quantity unit rate reporting, labor wage rates, bulk materials pricing and other costing/pricing information as requested. Specific schedules (e.g., 90 days to Completion, 4-week look-ahead) will be specified per project needs.

The Project Manager's review of the schedule is to ensure basic compliance with requirements and reasonableness of plan, and does not constitute an approval of the approach or direction relative to means and methods of construction.

The Contractor's Progress Schedule, at a minimum, shall identify significant interim milestones that relate to the Projects Summary schedule, in addition to:

- Notice-to-Proceed
- Mobilization
- Substantial Completion
- Final Completion
- Start Up/Commissioning

1.11.3 Schedule Updates

On a regular basis, and not less than monthly, summary schedules should be updated to track and monitor progress of activities, completion of contract deliverables, interim milestone achievement, start and completion dates, and other related aspects of scheduling. Additionally, any approved changes to the scope of work will be reflected in the schedules.

Progress is monitored by comparing monthly work accomplished against both the baseline plan, and the progress of work from the prior month. Starting with the first month of status updating, progress for all projects will be measured against the baseline for start and finish dates, scheduled progress and cash flow, along with analysis for changes in logic and activities durations.

Part 2 Acceptance Test Requirements

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

2.1 Starting and Placing Equipment in Operation

Design-Build Entity shall initially start-up and place all installed equipment into successful operation according to manufacturer's written instructions and as instructed by manufacturer's field representative. Design-Build Entity 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.

Owner shall provide sufficient personnel to assist Design-Build Entity in the start-up, but the prime responsibility for proper mechanical operation shall belong to Design-Build Entity. 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. The Design-Build Entity shall perform the following engine generator pre-start up checklist in accordance with manufacturer guidelines: Generator set equipment installation/mounting, engine oil level, engine coolant system level, engine radiator shroud installation, day tank fuel level (if applicable), fuel system installation, mechanical and electrical connections, battery installation, battery voltage, battery charger operations and installation, engine sensors and controls, all equipment interface interconnects, interface wiring with new main switchboard, remote annunciation/communication interface wiring, exhaust system installation and connections and all other fluids. Checklist is not limited to items listed above, others shall be performed as required by manufacturer.

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

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

D. System start-up and operational testing procedures shall not be limited to those specified herein. Others shall be performed as required to prove that the system functions and performs as described and required by this criteria package.

2.3. Equipment Startup and Performance Testing

The Design-Build Entity shall be responsible for performance testing during startup of all mechanical, electrical 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. Documentation of the results of all equipment and system tests must be submitted to the Owner. Provide calibration tags for all equipment certifying the date of calibration.

2.4. Instruction of Operations and Maintenance Personnel

Training shall be provided prior to turning over the operation of the new generator, main switchboard and A/C units to the owner. 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-Build Entity 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. 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 has been provided and, equipment has been started and placed into operation, equipment and system startup and performance testing has been completed. The Design-Build Entity shall provide written documentation and checklists outlining important training items, and provide spreadsheets needed to document new processes for input by operators.

Part 3 Technical Requirements

3.1. Plant Site / Civil Requirements

The Design-Build Entity shall be responsible for becoming completely familiar with the site conditions in connection with developing the final site plan including all site investigations. If analysis of subsurface conditions, geotechnical conditions, and soil borings are required to complete the work, it shall be the responsibility of the Design-Build Entity to perform this work.

3.2 Demolitions and Equipment Removal

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

Design-Build Entity shall carry out operations so as to avoid interference with Owner's operations and work in the existing facilities. Design-Build Entity 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-Build Entity shall erect and maintain barriers, lights, sidewalk

sheds, and other necessary protective devices. The Design-Build Entity is responsible for repairing damage to the Owner's property or facilities, caused by the Design-Build Entity's activities

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-Build Entity with the same or matching materials as the existing adjacent surface. Adjacent structures, facilities, and improvements impacted by 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.

All materials and equipment removed from existing work shall become the property of Design-Build Entity, 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-Build Entity so as not to be damaged, and shall be cleaned and stored in a protected location specified by the Owner. Design-Build Entity 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.

Remove and recycle 300kW generator, MSB-1 and above ground fuel tank along with all miscellaneous pipes and parts associated with the 300kW generator:

a. Remove existing 300 KW generator with muffler, transfer switchgear and recycle. Remove and dispose of exhaust piping. Remove and dispose of existing of all electrical conduit and wiring associated with generator. Non-metal waste such as insulation, concrete, PVC, fiberglass etc to be hauled and legally disposed by Design-Build Entity.
b. Remove and legally dispose of existing fuel tank and all associated fuel piping between fuel tank and generator in accordance with FAC 62-762 including closure reporting.
    i. Remove remaining diesel fuel and all accumulated sludge from diesel tank.
    ii. Disconnect piping, and remove and legally dispose of diesel tank.

3.3 Trenching, Excavation and Backfill

The Design Build Entity will adhere to all OSHA and PBC regulations when excavating for cabling system and generator pad.

All remaining spoil piles shall be removed from site.

3.4 Cast-In-Place Concrete

Where required for wall penetrations, pipe supports, and other repair or replacements required to complete the work, the Design-Build Entity 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 and Coating

Design-Build Entity shall provide all labor, materials, tools, equipment, and incidentals as required to furnish and apply coating systems for surface preparation and coating of all new and existing surfaces identified as part of the work. Manufacturer's recommendations including surface preparation, cure times, application thickness, application method, applicability of selected paintings and coatings for their intended use, etc. must be strictly followed. Mechanical and process items to be coated are defined previously under Section 1.1 F.

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 Pipe Requirements

The Design-Build Entity is responsible for the final sizing and selection of all pipe, supports, and associated materials. The Design-Build Entity shall conform to the Palm Beach County Water Utilities Manual of Minimum Design and Construction Standards.

At a minimum, the following information shall be submitted to the Owner for review and approval prior to installation:

- Detailed drawings and manufacturers data for pipe, fittings, gaskets, new supports, bolt kits, couplings, and all other pertinent materials required to complete the work.;
- Certificates of compliance with applicable referenced standards and any provisions for pipe, joints, fittings, coatings, linings, sleeves, gaskets, harnessing, and all other appurtenances;
- Field pressure testing.

Materials shall be delivered to the site to ensure uninterrupted progress of the work. Pipe, fittings, and associated other materials 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 damage to the packaging or materials. If such damage is found, damaged materials shall be rejected and immediately removed from the site. If in the process of manufacture, transportation, storage or handling, any pipe, fittings, or associated other materials are damaged, such material shall be rejected and replaced at the Design-Build Entity's expense.

Pipe interiors shall be kept completely free from dirt and foreign matter. All pipe shall be installed in strict accordance with the manufacturer's instructions and recommendations. When pipe must be cut to fit in the field, the work shall be performed utilizing tools and equipment specifically designed for cutting the pipe, so as to avoid damage to the pipe and to leave a smooth end. Improperly cut and/or fitted pipe will be rejected and replaced at the Design-Build Entity's expense.

Part 4 Electrical Requirements

4.1 Basic Requirements

Design-Build Entity shall design and provide all labor, materials, equipment, and incidentals to complete the electrical work. All systems shall be properly grounded. New Generator shall have lightning protection as outlined previously.

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
Materials, equipment, and incidentals in areas identified as corrosive shall meet NEC and NEMA requirements for corrosive locations. Conduit systems shall be Aluminum and enclosures shall meet NEMA 4X requirements. Conduits shall be terminated at enclosures with watertight hubs. Independent supports shall be Aluminum.

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-Build Entity to act as guidance in fulfilling the operational intent of the conceptual documents. It shall be the Design-Build Entity'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-Build Entity shall not relieve Design-Build Entity of their contractual responsibility to provide complete and successfully operating systems.

4.6 Raceway Systems

Design-Build Entity shall furnish and install conduit and fittings to form complete, coordinated, and grounded raceway systems. Design-Build Entity 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.

4.7 Electrical 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.

Test generator under load for 24 hours without failure or shutdown.

Part 5 Instrumentation and Control Requirements

5.1 General

Design-Build Entity 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-Build Entity 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 of generator, main switchboard and A/C units. Design-Build Entity 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-Build Entity 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-Build Entity shall furnish Owner an installation inspection report for the power improvements at Belle Glade Waste Water Treatment Facility certifying that all equipment has been installed correctly and is operating properly. The report shall be signed by authorized representatives of both Design-Build Entity 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-Build Entity, 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.

Appendix A - Hillers Electrical Engineering Technical Memorandum

FINAL TECHNICAL MEMORANDUM

PROJECT: Belle Glade WWTP Alternative Power Improvements

SUBJECT: Generator Building No.1 Electrical Gear

DATE: January 21, 2015

1.0 Existing Electrical Distribution Systems

The electrical distribution system at the Belle Glade WWTF consists of two utility FPL services. Utility Service No. 1 is located in the north-east corner of the plant. Utility Service No.2 is located in the middle-west of the plant.

1.1 Existing Utility Service No.1

Utility Service No. 1 is connected to a 750kVA FPL transformer. The 750kVA FPL transformer is located in the existing FPL vault. The step-down transformer is connected to the main switchboard (MSB-1) located in Generator Building No. 1. Main Switchboard No.1 (MSB-1) consists of one 800A rated main breaker, one 600A rated generator breaker, one 800A rated automatic transfer switch (ATS). MSB-1 powers Digester Blowers 1 and 2, Oxidation Ditch No.1 aerators 1 and 2, Chlorine facility and Polymer building. The main breaker and emergency breakers are electrically interlocked through an ATS control scheme to prevent from closing both breakers at the same time.

Emergency back-up power for MSB-1 is provided by a 300-kW (375kVA) generator rated at 480V, 3-phase. With the current set up the existing generator cannot power all loads connected to MSB-1. The generator was installed in 1982. MSB-1 and the 300-kW generator are well past their reliable life span for electrical equipment and it is recommended to be replaced.

1.2 Existing Utility Service No.2

Utility Service No.2 consists of two feeders derived from the same FPL distribution point. Each feeder is connected to an individual 1000kVA outdoor pad mounted FPL transformer to step-down the utility power to 480V, 3-phase, 60-Hz system. The step-down transformers are feeding the existing main switchboard No.2 (MSB-2) located at generator building No.2. One feeder is connected to the Main Breaker No.1 and another feeder is connected to Main Breaker No.2. The existing main switchboard (MSB-2) consists of two main breakers and two emergency breakers, rated 1600A. One main breaker and emergency breaker pair is connected to one bus and the other remaining pair is connected to another bus. Each set of main and generator breakers are electrically interlocked thru an automatic transfer switch (ATS) control scheme and cannot close both breakers at the same time. The two 1600A rated buses in the MSB-2 are isolated and there is no tie breaker to connect them together. If one pair of main and generator breakers is out of service at the same time, the electrical loads connected to

the associated bus will be without electricity. The outdoor switchboard Main-Tie-Main (MTM) located outside the existing MCC room was installed in 2012 to give Main-Tie-Main arrangement for the down-stream of the switchboard No.2 (MSB-2). The existing switchboard MTM is powering the existing switchboard SWBD-IWA on one side and SWBD-IWB on the other side. Although the switchboard MTM has no improvements on the switchboard MSB-2, the electrical loads associated either SWBD-IWA or SWBD-IWB can be powered from one side of switchboard MTM by closing the Tie Breaker and opening one of the desired Main Breaker. The existing generator No.2 is 1500kW (1875kVA) rated at 480V, 3-phase system and is in very good condition.

Although there are some deficiency in the existing electrical distribution system No.2/ MSB-2, this technical memorandum is mainly focus on the improvement of the existing electrical distribution system at Generator Building No.1. Some deficiencies of the switchboard MSB-2 is not having a tie breaker, no available space to add additional feeder breakers, no replacement breaker due to discontinued from the manufacturer, etc.

2.0 Replacement Options for Electrical Distribution System at Generator Building No.1

There are three options for improving the electrical distribution system at Generator Building No.1.

Option one is to replace existing MSB-1 with a new distribution panelboard (DP panel) installed at the existing Generator Building No.1 and re-feed all of the existing electrical loads at new panelboard from Utility Service No. 2 with redundant power from existing Main Switchboard 2 (MSB-2) and eliminate Utility Service No. 1 and existing 300kW generator.

Option two is to replace the existing MSB-1 and connect the emergency power from the existing 1500-kW generator located at Generator Building No.2 to the new MSB-1 and eliminate the existing 300-kW generator. A new 800A breaker will be added at the 1500-kW generator and new conduits/cables will be installed to MSB-1.

Option three is to replace existing MSB-1 and replace the existing 300-kW generator with a new 500-kW generator in a non-walk-in weatherproof enclosure with a sub-base fuel tank.

This technical memorandum summarizes the results of the evaluation performed by HEE and addresses the elements identified above; as well as, recommendations for the most feasible approach to provide reliable power for the equipment powered from Generator Building No.1.

2.1 Option 1 – Re-feed Generator Building No.1 from Utility No.2 & Eliminate 300kW Generator

Re-feeding Generator Building No.1 from Utility No.2 service with redundant power from existing MSB-2 will require a new 800 amp panelboard, a new 800 amp double throw safety switch, two new 800 amp enclosed circuit breakers installed at

Generator Building No.2 (see Figure 3) and a cable and conduit system from the existing MCC Building. See figure 1, Plant Site Plan for building locations and proposed conduit and cable routing. The existing loads currently powered form existing MSB-1 are shown in figure 2. The conduit and cable required between the two buildings would consist of four 5 sets of 4-500-kcmil AWG conductors from each new 800 amp enclosed circuit breaker and 1-2" conduit with control/signal wiring to start/stop the existing 1500-kW generator in the event of a Utility power outage at Utility No.1 service. Currently the existing 1500-kW (1875 kVA) generator is running at approximately 59.5% of its rated capacity. The additional load from Generator Building No.1 would increase the load on the generator to 79.5%. The estimated cost of Option 1 is shown in Table 1.

Due to the lack of tie breaker at the existing switchboard MSB-2, redundant power feeders are recommended. If only one feeder is designed and the main breaker and generator breaker pair associated with that feeder are out of service, the electrical system at the Generator Building No.1 will be without available power during that period.

2.2 Option 2 – Replace MSB-1 and Eliminate Existing 300-kW Gen

Replacing MSB-1 and eliminating the existing 300-kW generator will involve adding a new 800 amp circuit breaker to the existing 1500kW generator located at Generator Building No.2 for back-up power. A conduit and cable system between the new MSB-1 and the existing 1500-kW generator would be installed consisting of 5 sets of 4-500-kcmil AWG and control/signal wiring to start/stop the existing 1500-kW generator in the event of an Utility power outage at Utility No.1 service. A new enclosed 800 amp circuit breaker for a local means of disconnect as required by the national electrical code (N.E.C.) would be installed at Generator Building No.1. See figure 1, Plant Site Plan for building locations and proposed conduit and cable routing. The estimated cost for Option 2 is shown in Table 2.

2.3 Option 3 – Replace MSB-1 and Replace Existing 300-kW Gen

Replacing existing switchboard MSB-1 and the existing 300-kw generator with a new switchboard and a new outdoor 500-kW generator will require the removal of an existing underground diesel fuel storage tank (currently not used) and installing a new conduit and cable system between the new MSB-1 and the new generator. The new conduit and cable system will consist of 2 sets of 4-500-kcmil AWG conductors, 3-120v circuits for the generator battery charger, condensation heater, jacket heater and control/signal wiring to start/stop the generator. The new generator will be housed in a non-walk-in enclosure with a 2000 gallon sub-base fuel tank to provide back-up power for 3 days when loaded to 75% of the generators capacity. Removing the generator and filling in the existing louvers on the building with CBS block would allow Generator Building No.1 to be modified in order to install two 3 ton air conditioning units (to be verified during the design phase) which will greatly extend the life of the new switchboard. These modifications would involve connecting the existing loads (see figure 2) to temporary generators

for a period of time during the replacement of the existing switchboard and generator. The estimated cost for Option 3 is shown in Table 3.

3.0 Preliminary Cost Estimate

A preliminary cost opinion for improving the electrical distribution system at Generator Building No.1. is presented below. The cost estimate is an order of magnitude estimate based on published cost literature, past contractor bids and previous experience. The accuracy of this type of cost estimate typically ranges from +50 to -30 percent. All costs are rounded to the nearest dollar and presented in present-day dollars as defined by the Association for the Advancement of Cost Engineering International (AACEI).

Table 1 – Option 1 Cost Estimate

Description	Quantity	Unit	Unit Price	Total
4" PVC Conduit	9000	LF	$21.00	$189,000
2" PVC Conduit	900	LF	$8.90	$8,010
500kcmil AWG Conductors	36000	LF	$14.65	$527,400
#4/0 AWG Bare Copper	900	LF	$5.72	$5,148
#12 AWG Conductors	5400	LF	$1.20	$6,480
48" Manhole	3	EA	$5,700.00	$17,100
New MSB-1	1	EA	$40,000.00	$40,000
New 800A Generator Breaker	1	EA	$8,500.00	$8,500
New 800A Double Throw Switch	1	EA	$6,500.00	$6,500
Concrete	144	CY	$125.00	$18,000
New 800A Panelboard	1	EA	$12,500.00	$12,500
Miscellaneous Electrical	1	LS	$6,500.00	$6,500
			Subtotal	$845,138
			Contractor O&P (20%)	$169,028
			Subtotal	$1,014,166
			25% Contingency	$253,541
			15% Engineering	$152,125
			Total	$1,419,831.84

Table 2 – Option 2 Cost Estimate

Description	Quantity	Unit	Unit Price	Total
4" PVC Conduit	4500	LF	$21.00	$94,500
2" PVC Conduit	900	LF	$8.90	$8,010
500kcmil AWG Conductors	18000	LF	$14.65	$263,700
#4/0 AWG Bare Copper	900	LF	$5.72	$5,148
#12 AWG Conductors	5400	LF	$1.20	$6,480
48" Manhole	3	EA	$5,700.00	$17,100
New MSB-1	1	EA	$40,000.00	$40,000
New 800A Generator Breaker	1	EA	$8,500.00	$8,500
New 800A Enclosed Circuit Breaker	1	EA	$6,500.00	$6,500

Concrete	75	CY	$125.00	$9,375
New 800A Panelboard	1	EA	$12,500.00	$12,500
Miscellaneous Electrical	1	LS	$6,500.00	$6,500
			Subtotal	$478,313
			Contractor O&P (20%)	$95,663
			Subtotal	$573,976
			25% Contingency	$143,494
			15% Engineering	$86,096
			Total	$803,565.84

Table 3 – Option 3 Cost Estimate

Description	**Quantity**	**Unit**	**Unit Price**	**Total**
4" PVC Conduit	160	LF	$21.00	$3,360
1" PVC Conduit	100	LF	$8.90	$890
500kcmil AWG Conductors	640	LF	$14.65	$9,376
#4/0 AWG Bare Copper	900	LF	$5.72	$5,148
#12 AWG Conductors	1500	LF	$1.20	$1,800
New MSB-1	1	EA	$40,000.00	$40,000
New 500-kW Generator* w/2000gal sub-base fuel tank in a weatherproof Enclosure	1	EA	$175,000.00	$175,000
3-Ton A/C w/AHU	2	EA	$6,500.00	$13,000
Concrete Generator Foundation (14'L x 8'W x 3'D)	13	CY	$125.00	$1,625
Existing Underground** Fuel Tank Removal	1	EA	$10,000.00	$10,000
Louver Mods at Gen. Bldg. No.1	1	LOT	$6,500.00	$6,500
Miscellaneous Electrical	1	LS	$6,500.00	$6,500
			Subtotal	$273,199
			Contractor O&P (20%)	$54,640
			Subtotal	$327,839
			25% Contingency	$81,960
			15% Engineering	$49,176
			Total	$458,974.32

* - cost of generator is based on Kohler if Caterpillar is desired the cost will be $225,000.
** - additional funds ($5,000) added to cost for de-mucking if required.

4.0 Conclusions and Recommendations

Installing a copper connection between existing Generator Building No.1 and existing Electrical Building and Generator Building No.2 for redundant power to the

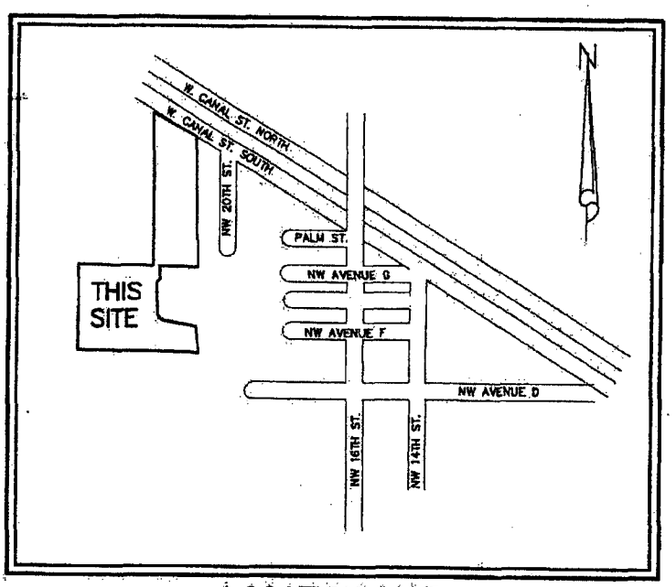
loads powered form existing MSB-1 would be the most desirable solution. The impact to the plant during installation would be substantial. Installing an electrical duct bank between the electrical buildings would involve digging a trench approximately 24 inches wide and a minimum 42 inches deep through the existing plant at the risk of hitting existing buried electrical lines and or existing buried process piping. Due to the extensive existing underground obstacles, the trench would require hand digging the entire route. This is very labor intensive and time consuming.

Replacing both the existing switchboard, MSB-1 and the 300-kW generator with a new 500-kw generator with a sub-base fuel tank in a weatherproof enclosure would be less intrusive to the plant during installation. A further savings could be made by using County portable generators for powering the existing equipment during replacement of the existing switchboard.

Several options were investigated to replace/re-feed the electrical distribution equipment at existing Generator Building No.1. As shown in the cost estimate, Option 1 and Option 2 both include installing a duct bank through the plant for power to existing Generator Building No.1. The option to re-feed loads from existing MCC-1 and MCC-2 were considered. The existing electric room at the Operations Building has existing code violations with respect to clear working distance in front of electrical equipment with only 38 inches in front of MCC-1 and 40 inches in front of MCC-2; NEC requires a minimum of 42 inches in front of MCC-1 and 48 inches in front of MCC-2. Also the option to re-feed Generator Building No.1 from existing switchboards IWA and IWB located in the MCC Building were considered. Switchboards IWA and IWB, being of a later model of switchboard the available space in the existing switchboards will not accommodate the addition of 800-amp circuit breakers. The largest size breaker that can be installed in existing IWA and IWB is a 600-amp, compact design circuit breaker which is not large enough to power the loads at Generator Building No.1. Hillers recommends Option 3, as it is less intrusive to plant operations while provide reliable power for plant operations.

Appendix B - Western Region Waste Water Treatment Facility Survey

SKETCH & DESCRIPTION



LOCATION MAP
NOT TO SCALE

SURVEYOR'S NOTES:

1. BEARINGS DEPICTED HEREON ARE BASED UPON THE NORTH LINE OF LOT 5 ACCORDING TO THE TRUSTEES OF THE INTERNAL IMPROVEMENT FUND UNRECORDED SUBDIVISION OF SECTION 36, TOWNSHIP 43 SOUTH, RANGE 36 EAST, PALM BEACH COUNTY, FLORIDA, DATED DECEMBER 1, 1916, SAID NORTH LINE HAVING A BEARING OF SOUTH 88°56'01" EAST, BASED UPON THE NORTH AMERICAN DATUM OF 1983, ON THE 1990 ADJUSTMENT FOR THE FLORIDA TRANSVERSE MERCATOR–EAST ZONE.
2. THIS INSTRUMENT NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
3. THE UNDERSIGNED MAKES NO REPRESENTATIONS OR GUARANTEES AS TO THE INFORMATION REFLECTED HEREON PERTAINING TO EASEMENTS, RIGHTS OF WAY, SETBACK LINES, AGREEMENTS AND OTHER MATTERS, AND FURTHER, THIS INSTRUMENT IS NOT INTENDED TO REFLECT OR SET FORTH ALL SUCH MATTERS. SUCH INFORMATION SHOULD BE OBTAINED AND CONFIRMED BY OTHERS THROUGH APPROPRIATE TITLE VERIFICATION. LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR RIGHTS OF WAY AND/OR EASEMENTS OF RECORD.
4. THE LICENSED BUSINESS NUMBER FOR DENNIS J. LEAVY & ASSOCIATES INC. IS LB #6599, THE CERTIFYING SURVEYORS LICENSE NUMBER IS LS #5888.
5. THIS IS NOT A SURVEY.

Dennis J. Leavy & Associates, Inc.
Land Surveyors * Mappers
460 Business Park Way * Suite B
Royal Palm Beach, Florida 33411
Phone: 561 753–0650 Fax: 561 753–0290

SKETCH & DESCRIPTION
Palm Beach County Water Utilities Department

DRAWN: RRM	SCALE: N/A	DATE: 12/11/09
CHK: DAB	JOB#09–079–A–6	SHEET: 1 OF 5

DESCRIPTION:

A parcel of land being comprised of a portion of Lot 3, the North one-half (N 1/2) of Lot 5 and a portion of the North one-half (N 1/2) of Lot 6, according to the Trustees of The Internal Improvement Fund Unrecorded Subdivision of Section 36, Township 43 South, Range 36 East, Palm Beach County, Florida, dated: December 1, 1916. Being more particularly described as follows.

BEGINNING at the Northwest corner of said Lot 5; thence South 88°56'01" East (as a basis of bearings) along the North line of said Lot 5, a distance of 583.33 feet to the Southwest corner of said Lot 3; thence North 00°07'42" West along the West line of said Lot 3, a distance of 1,203.39 feet to a point being on the South Right-of-Way line of the South Florida Water Management District L-14 Canal (Hillsboro Canal); thence South 61°25'07" East along said South Right-of-Way, a distance of 380.95 feet; thence South 00°35'52" East, a distance of 530.03 feet; thence South 00°17'02" East, a distance of 210.53 feet; thence South 07°53'55" East, a distance of 94.00 feet to a point being on a line lying 351.74 feet East of and parallel with (as measured at right angles) the West line of said Lot 3; thence South 00°07'42" East along said parallel line, a distance of 194.06 feet to a point being on the North line of said Lot 6; thence North 88°56'01" West along said North line, a distance of 300.05 feet; thence South 01°03'59" West, a distance of 100.03 feet; thence South 42°36'27" West, a distance of 39.01 feet; thence South 02°23'33" East, a distance of 235.94 feet to the point of curvature of a circular curve to the left; thence southeasterly along the arc of said curve having a radius of 65.00 feet, a central angle of 78°39'02" and an arc length of 89.23 feet; thence South 81°02'35" East, a distance of 247.96 feet; thence South 07°06'47" East, a distance of 202.20 feet to a point being on the South line of the North one-half (N-1/2) of said Lot 6; thence North 88°56'24" West along said South line, a distance of 356.72 feet to the Southwest corner of the North one-half (N 1/2) of said Lot 6, also being the Southeast corner of the North one-half (N 1/2) of said Lot 5; thence continue North 88° 56'24" West along the South line of the North one-half (N 1/2) of said Lot 5, a distance of 586.83 feet to a point being on the West line of said Lot 5; thence North 00°10'34" East along said West line, a distance of 659.57 feet to the POINT OF BEGINNING.

Said lands situate, lying and being in Section 36, Township 43 South, Range 36 East, City of Belle Glade, Palm Beach County, Florida.

Containing 19.67 acres more or less.

Dennis J. Leavy & Associates, Inc.
Land Surveyors * Mappers
460 Business Park Way * Suite B
Royal Palm Beach, Florida 33411
Phone: 561 753-0650 Fax: 561 753-0290

DRAWN: RRM	SCALE: N/A	DATE: 12/11/09
CHK: DAB	JOB#09-079-A-6	SHEET: 2 OF 5

LINE TABLE		
LINE	DIRECTION	LENGTH
L1	N88°56'01"W	300.05'
L2	S01°03'59"W	100.03'
L3	S42°36'27"W	39.01'
L4	S02°23'33"E	235.94'
L5	S81°02'35"E	247.96'
L6	S07°06'47"E	202.20'

CURVE TABLE			
CURVE	RADIUS	CENTRAL ANGLE	ARC LENGTH
C1	65.00'	78°39'02"	89.23'

LEGEND:

R/W = RIGHT-OF-WAY
S.F.W.M.D. = SOUTH FLORIDA WATER MANAGEMENT DISTRICT
℄ = CENTERLINE
± = MORE OR LESS

NOTE:
THE SURVEY PREPARED BY K.C. MOCK & ASSOCIATES, REFERENCES 4336-36, WO 58-350, L-825, DATED: 8-13-58 WAS REFERENCED DURING THE PREPARATION OF THIS SKETCH AND DESCRIPTION.

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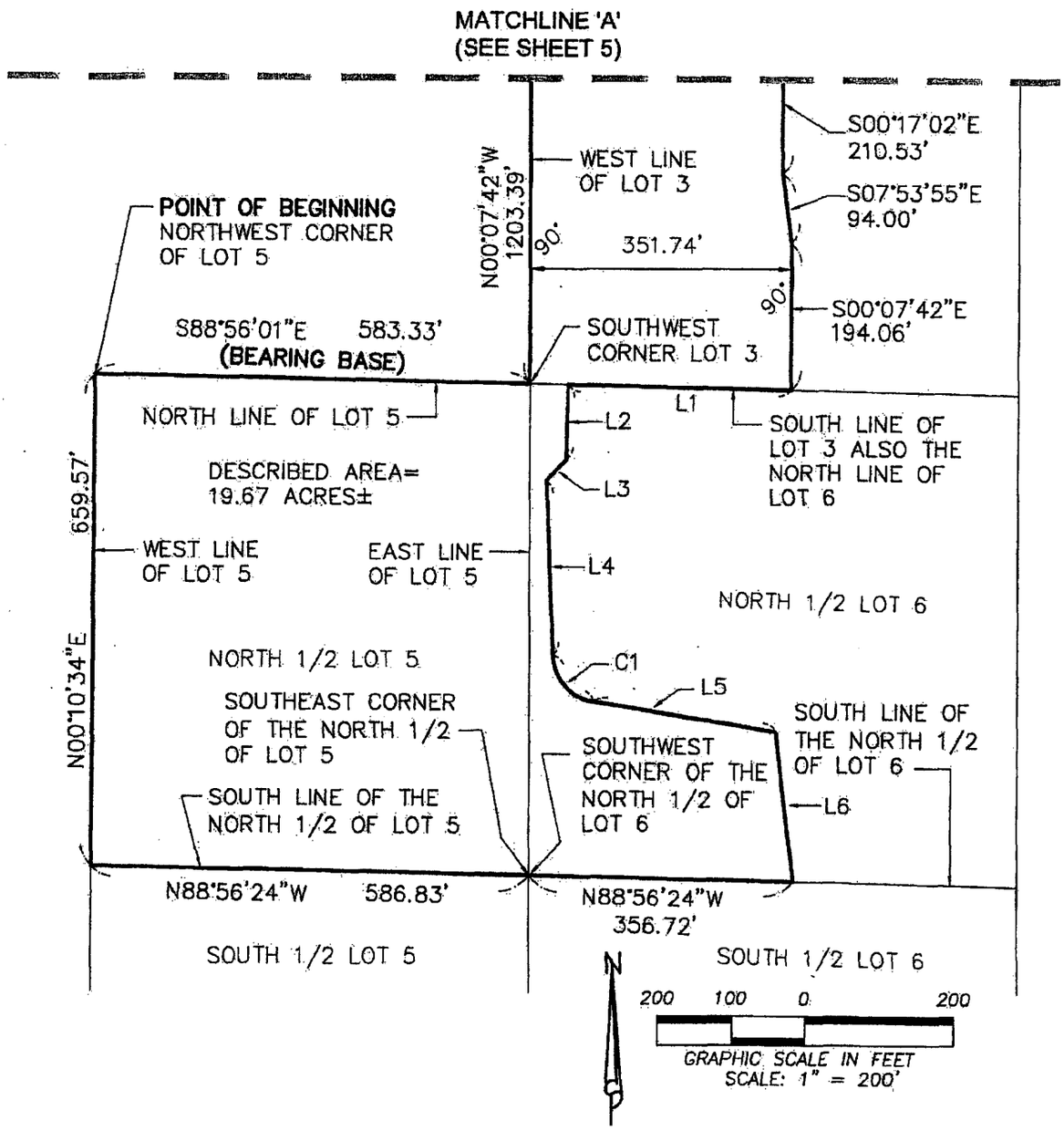
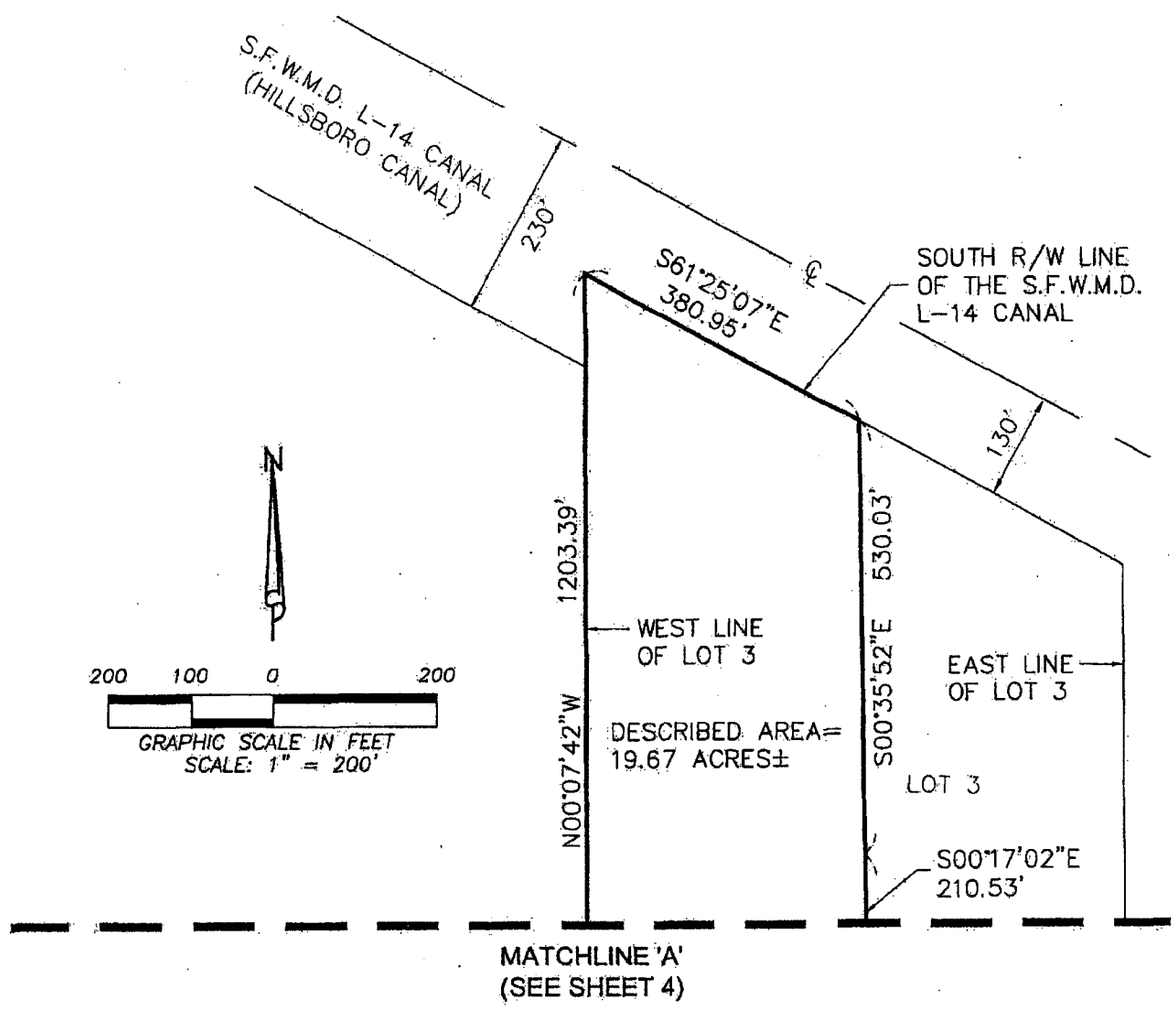
Royal Palm Beach, Florida 33411
Phone: 561 753-0650 Fax: 561 753-0290

DRAWN: RRM	SCALE: N/A	DATE: 12/11/09
CHK: DAB	JOB#09-079-A-6	SHEET: 3 OF 5



Dennis J. Leavy & Associates, Inc.
Land Surveyors * Mappers
460 Business Park Way * Suite B
Royal Palm Beach, Florida 33411
Phone: 561 753-0650 Fax: 561 753-0290

DRAWN: RRM	SCALE: 1" = 200'	DATE: 12/11/09
CHK: DAB	JOB# 09-079-A-6	SHEET: 4 OF 5



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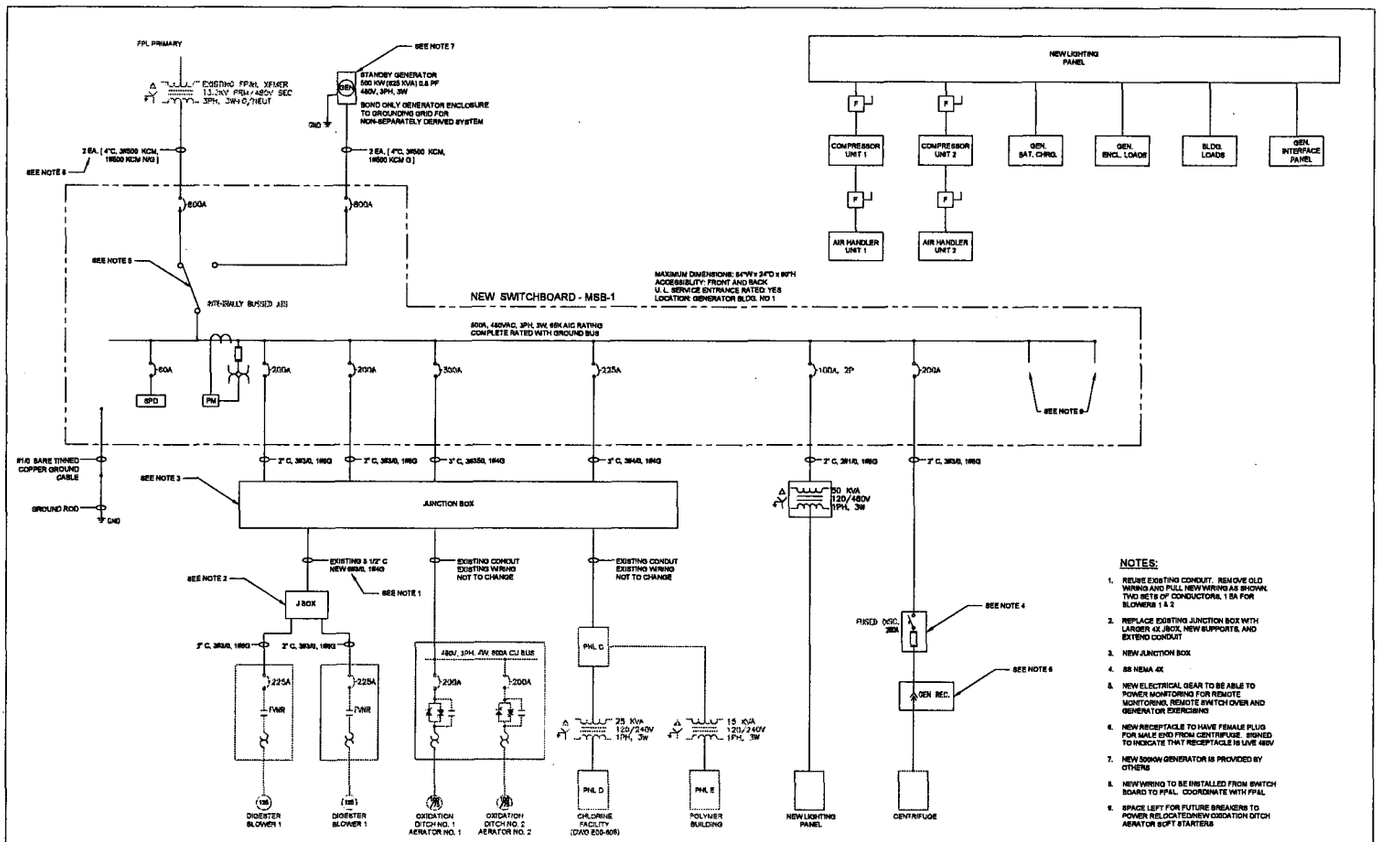
Phone: 561 753-0650 Fax: 561 753-0290

DRAWN: RRM	SCALE: 1" = 200'	DATE: 12/11/09
CHK: DAB	JOB#09-079-A-6	SHEET: 5 OF 5

Appendix C - Single Line Diagram - Belle Glade WWTF - Alternative Power Improvements - 6-15-2015



NOTES:

1. REUSE EXISTING CONDUIT. REMOVE OLD WIRING AND PULL NEW WIRING AS SHOWN. TWO SETS OF CONDUCTORS, 1 SA FOR BLOWERS 1 & 2
2. REPLACE EXISTING JUNCTION BOX WITH LARGER 4X JBOX, NEW SUPPORTS, AND EXTEND CONDUIT
3. NEW JUNCTION BOX
4. 60 NEMA 4X
5. NEW ELECTRICAL GEAR TO BE ABLE TO POWER MONITORING FOR REMOTE MONITORING, REMOTE SWITCH OVER AND GENERATOR EXERCISING
6. NEW RECEPTACLE TO HAVE FEMALE PLUG FOR MALE END FROM CENTRIFUGE. SIGNED TO INDICATE THAT RECEPTACLE IS LIVE 480V
7. NEW 500KW GENERATOR IS PROVIDED BY OTHERS
8. NEW WIRING TO BE INSTALLED FROM SWITCH BOARD TO FP&L. COORDINATE WITH FP&L
9. SPACE LEFT FOR FUTURE BREAKERS TO POWER RELOCATED/NEW OXIDATION DITCH AERATOR SOFT STARTERS

SINGLE LINE DIAGRAM - BELLE GLADE WWTF - ALTERNATIVE POWER IMPROVEMENTS - 06-15-2015

ATTACHMENT - K

Vendor Quotes

Electrical Subcontractor Quotes

Three subcontractors were approached to bid the electrical work for Western Region Waste Water Treatment Facility (WRWWTF) Power Improvements Project. The electrical subcontractors were requested to provide quotes based off completing work in Phase 1 and Phase 2 of the project. The following prices were received:

Electrical Subcontractor	Bid Amount	SBE Certified
Powerline of South Florida	$198,800.00	YES
Energy Efficient Electric	$195,500.00	YES
I2 Electric	$181,954.00	NO

Powerline was not selected because they had the highest bid. I2 Electric was the lowest bid, however Energy Efficient is a County certified SBE where I2 Electric is not. Globaltech Inc's contract grants a 10% pricing advantage to certified SBEs. Energy Efficient Electric was chosen as the most comprehensive and competitive bid to effectively complete the work required.

Energy Efficient has provided a supplemental scope and estimate which reflects the scope of work for Phase 1 and associated costs. This cost is carried in Globaltech Inc. Work Authorization No. 2 - WRWWTF Alternative Power Improvements Phase 1.

Energy Efficient Electric - Phase 1 $138,000.00

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

State License #EC 0001096

June 18, 2015

Electrical Scope of Work
Belle Glade Generator Replacement Phase 1

We are pleased to provide your firm with our scope and proposal for the necessary electrical work on the above referenced project. Our scope and proposal is based on phase 1 of original quote # 30983.

Included:

1. Furnish and install all gear per original quote.
2. Furnish and install all conduits from new generator to existing electrical building.
3. Furnish and install lightning protection and grounding for the generator and electrical building.
4. Furnish and install conduit from existing electrical building to existing main building PLC. Excavating and backfill by Globaltech.

Lump Sum **$138,000**

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

Thank You Very Kindly,

Rene Viau

Vice President

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

State License #EC 0001096

May 29, 2015

Revised Electrical Scope of Work
Belle Glade Generator Replacement

Quote # 30983

We are pleased to provide your firm with our scope and proposal for the necessary electrical work on the above referenced project. Our scope and proposal is based on a walk thru with Nico (Globaltech), Dave Dalton and Jose Pozo (PBC) and Adam Ward (MWH) and a final technical memorandum from PBC dated January 21, 2014 and new 1 line diagram.

Included:

1. Demo will consist of disconnecting existing generator for removal by others. Disconnect existing MSB-1 and remove with the assistance of Globaltech and their lifting equipment.
2. Electrically connect a temporary generator furnished by others at the electrical building, by the digester blowers, chlorine building PNL C and Oxidation ditch MCC-3. All cables furnished with generator.
3. Furnish and install a new MSB-1 per the new 1 line diagram.
4. Furnish and install a new 50 KVA transformer, 200 amp lighting panel, (4) disconnects for air conditioning, 200 amp generator receptacle, male cord cap and 200 amp SS disconnect for the centrifuge and a terminal junction box and power distribution blocks to tie in the new wires from MSB-1 to existing load wires under existing MSB-1.
5. Furnish and install new feeders from the new MSB-1 to the FPL vault, new MSB-1 to new generator and new MSB-1 to existing wires under the existing MSB-1.
6. Furnish and install conduit and 100 amp rated wires from new panel LP to a lighting panel in the generator enclosure. All loads from generator lighting panel prewired in enclosure.
7. Furnish and install new wire in the existing conduit from the new terminal junction box in the electrical room to the (2) existing digester blowers via a new junction box between the two blowers.
8. Assist with the installation of a new PLC and temperature monitor furnished by others. Programming by others.
9. Furnish and install up to 335 feet of 2" conduit from the new PLC to existing main building PLC with the assistance of a backhoe and operator furnished by Globaltech. Install up to 500 feet of fiber optic furnished by others. FO terminations by others.
10. Furnish and install lightning protection and grounding on existing generator building 1 and new generator enclosure.

Excluded:

1. Permit and FPL fees.
2. Concrete and asphalt cutting and patching.
3. Concrete pads.
4. Concrete encased ductbanks.
5. Trash disposal to an onsite dumpster.
6. Reuse existing lights and receptacles.

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

Lump Sum **$195,500**

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

Thank You Very Kindly,

Rene Viau

Vice President

ESTIMATE REV 2.0

561-270-3182
admin@i2-Solutions.com
1250 Wallace Dr. Suite H
Delray Beach, FL 33444

June 3, 2015

Customer:

Global Tech
6001 Broken Sound Pkwy NW #610
Boca Raton, Florida 33487

Contact: Mr. Nico Shaner

Project:

Belle Glade WWTP – Alternative Power Improvements (opt 3)

Scope:

As a member of **Global Tech's** project team i2 Solutions d/b/a i2 Electric will perform the following:

I. General Scope:

- Upgrade electrical switch gear in existing generator building 1 (which will become switch gear building) to accommodate new (outdoor installed) generator.
- Install a fiber optic link between switch gear building and main PLC cabinet
- Includes complete Eaton switch gear, transformer and lighting panel as well as 2 future soft starts with full speed by-pass up to 125HP (180 FLA) for future aerators, as specified to Global Tech engineer per his 1-Line_2015_05_14-Model.
- Addition items added June 3, 2015. Includes lightning protection and ground loop for electrical building (155 ft) and new generator (80 ft), building temperature monitor, electrical building temperature monitor and circuit in conduit (50 ft) and control circuit from ATS to RTU in conduit (50 ft).

II. Detailed Scope – Upgrade electrical switch gear

- Demo and remove old switch gear.
- Provide and install Eaton 800 amp automatic transfer switch (ATS), main breaker and main distribution panel (MDP).
- Provide and install 50KVA 480v-120/240v transformer
- Provide and install Eaton 200 amp 42 circuit 120/240 indoor panel with twenty 20 amp single pole and two 30 amp 2 pole bolt-in breakers.
- i2 will provide and install conduit and all associated hubs, unions, seal offs, etc; wire; ground rods and connectors; pull boxes and junction boxes as required per one line drawing.
    i. Aluminum rigid conduit for above ground installation
    ii. PVC Conduit for below ground installation
    iii. Cable tray and raceway penetrations into switch gear within switch gear building.
    iv. Excavation and backfill for conduit runs as needed to install necessary conduits.
    v. Install new generator and switchgear grounding system, tie to existing system.
- i2 will wire and terminate electrical devices, panels, etc as required, Including:
    i. New generator conduits and cable.
    ii. Reconnection of FPL transformer feed to ATS
    iii. Reconnect old service cabinet and new switch gear.
- Power wiring to be megger tested to insure no damage to insulation following installation.
- Wiring to be labeled at each end.

- Master Electrician to assist with startup

III. Detailed Scope – Install fiber optic link

- Provide and install 2-inch pvc below grade conduit approximately 300 ft.
- Excavation and backfill for conduit run as needed to install conduit.
- Directional drill/bore approximately 20 feet under existing driveway
- Provide and install approximately 700 feet – 6 fiber multimode fiber.

IV. Additions per Shaner email of May 27, 2015

- Lightning Protection (see paragraph V below).
- Grounding – around the building and the generator enclosure. Building is approximately 155 ft perimeter – generator pad is approximately 80 ft perimeter. Bonding of the generator frame, and lightning protection.
- Room Temperature monitor for the interior of the switchboard building that will connect to the Local RTU and associated conduit and cable. Analog 4-20 output. (50 ft max)
- Conduit, wire and cable between the local RTU and the ATS (50 ft max). Assumes fourteen #14 wires for discrete signals, data cable for Modbus communication and associated conduit.

V. Lightning Protection for building and generator enclosure.

Scope of Proposal

- Price is based on utilizing class 1 aluminum lightning protection materials
- Proposal includes all labor, materials, shipping, and shop drawings unless noted below
- The lightning protection system will be installed per UL96A, LPI 175, and NFPA 780 lightning protection standards
- Price includes furnishing and installing a complete Lightning Protection System as specified
- Price includes furnishing and installing a ground counterpoise as specified

Exclusions

- All cutting and patching of concrete and/or asphalt is by others, if required
- Electrical Contractor to furnish and install approximately (50) of 1" PVC conduit
- Price is based on adhering directly to the roof membrane and does not include furnishing and installing any sacrificial roofing
- pads, pavers, membrane strips, etc. If required by the roofing manufacturer, approximately () are required
- Roofing contractor to furnish and install all flashing and sealing for all roof penetrations
- Surge Protection is excluded

VI. Clarifications

Excludes:

i. Estimate assumes that items such as design, drawings and specs, load calculations, O&M manual, and training, etc. are the responsibility of others and are specifically excluded.

Clarification:

i. Estimate based upon limited information available as of date of estimate.
ii. Unique customer specifications (if any) require review and integration into estimate.

Proposal based upon:

- 1 drawing received from Customer on May 15, 2015, labeled as; 1-Line_2015_05_14-Model
- Conversations with Global Tech engineer Nico Shaner
- Site visit

Pricing:

Labor, Materials, Equipment & Sales tax: **$ 181,954** (Note: price excludes performance bond)

FL Electrical Contractor # 13005565

Exceptions / Additional work:

Costs for Site Security and Insurance for materials provided and installed are excluded from pricing above. Please verify coverage for such installed items and for site security with your insurance provider.

Work and Items not specifically identified within the scope above are specifically excluded. Changes to the site are not included in the Scope outlined above and may result in additional costs as follows:

- Unless otherwise agreed by the parties in writing, any additions to the agreed scope will be delivered on a time and material basis. (@ $86.25 /hr assuming still mobilized on site)

Requirements of the Customer:

The customer will be responsible for the following and is specifically excluded from this proposal:

- Responsibilities of the contractor as outlined in the Plans and Specifications
- Contaminated soil disposal fees (if required)
- Primary permit (Electrical permit pulled by i2 if required)
- Assist with coordination with Authority Having Jurisdiction (AHJ)

Commercial Terms and Payment:

This proposal is valid for 30 days from the proposal date stated on the first page of this document or as set forth by the bid documents.

A Schedule of Values (SOV) shall be established and mutually agreed by the customer and i2 Electric. All billing shall be per the SOV.

Where a substantial variation from this Proposal is foreseen, both parties must agree in writing to the additional work and amend this Proposal accordingly. Services are provided on fixed fee basis and are billed as delivered.

i2 Electric will invoice Customer for all services and applicable charges, as contractor renders the services or Customer incurs the charges, as applicable. Customer will pay each invoice within thirty (30) days of the date of invoice. Invoices not paid within 30 days shall incur a finance charge of 1.5% interest per month on the outstanding balance due.

Warrantee:

i2 Electric will warrantee their labor for one year against any defects in workmanship or improper installation. Electrical component warrantees, such as provided by Eaton are as set forth by the manufacture of those devices.

Acceptance of Proposal:

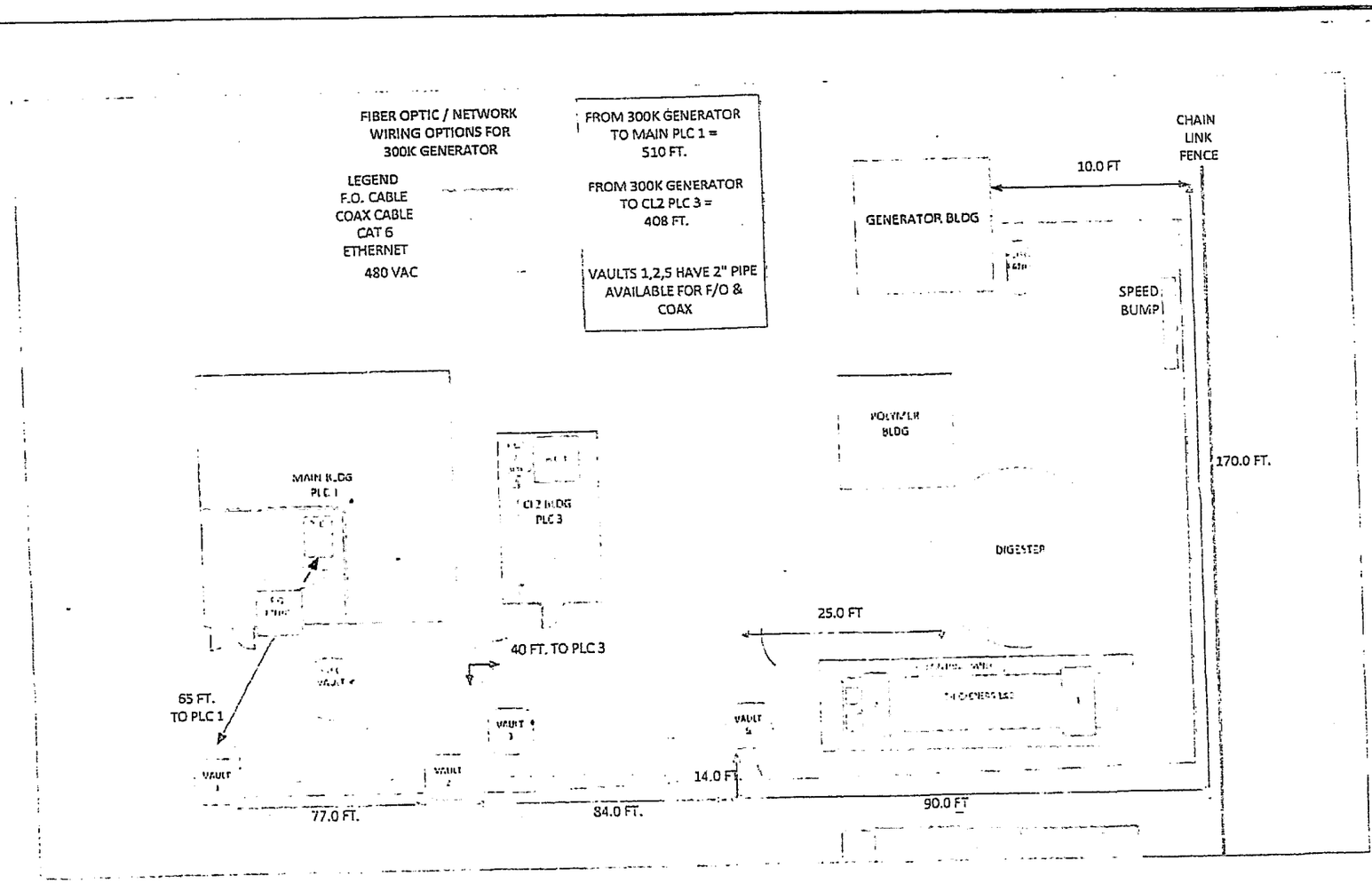
The above prices, specifications and conditions are satisfactory and are hereby accepted. i2 Electric is authorized to perform the work as specified. Payments will be made as outlined above.

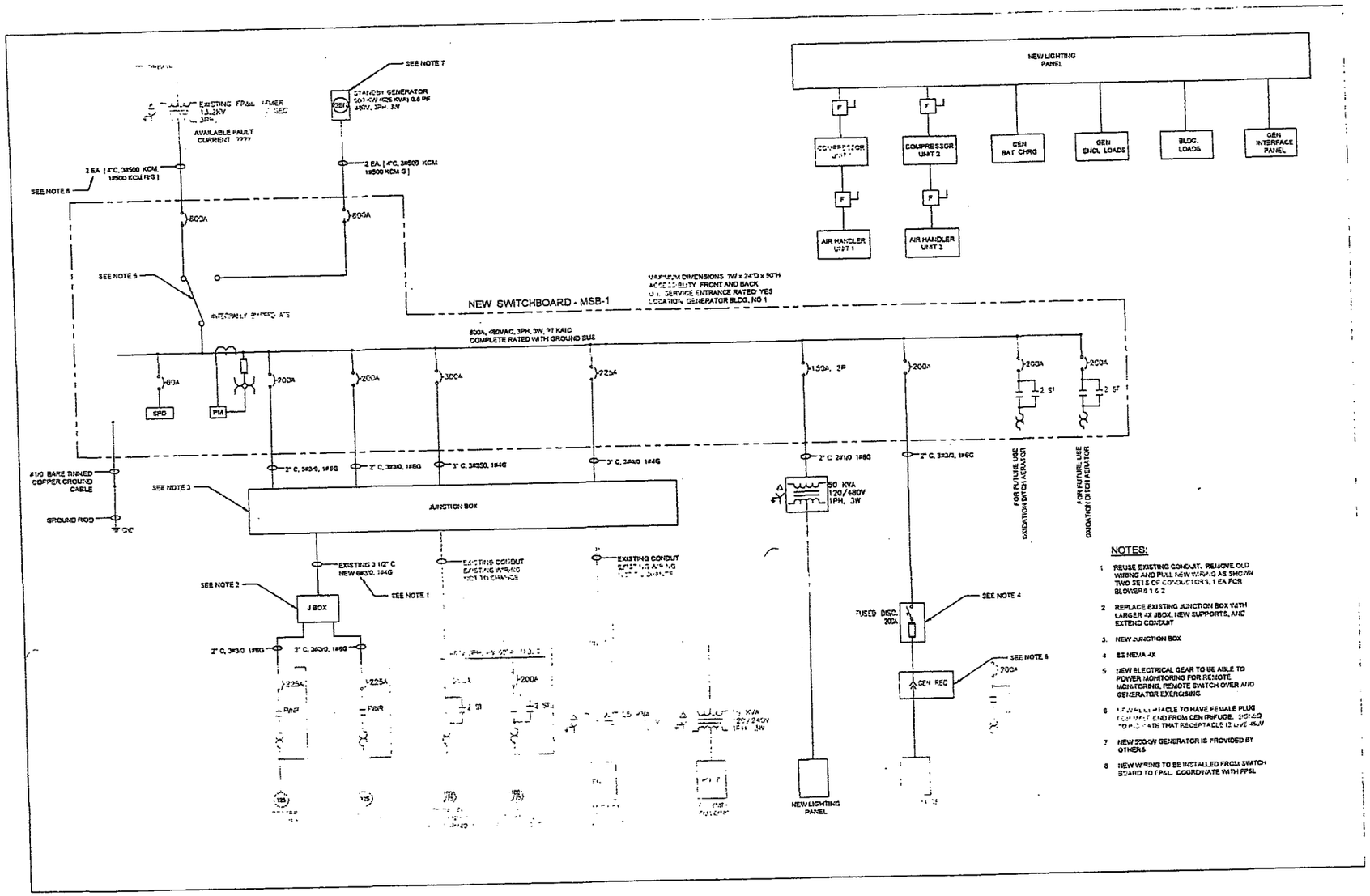
Accepted by: _____ _____

(Signature) (printed name and title)

Date of Acceptance: _____

FL Electrical Contractor # 13005565


FIBER OPTIC / NETWORK WIRING OPTIONS FOR 300K GENERATOR
LEGEND
F.O. CABLE
COAX CABLE
CAT 6
ETHERNET
480 VAC
FROM 300K GENERATOR TO MAIN PLC 1 = 510 FT.
FROM 300K GENERATOR TO CL2 PLC 3 = 408 FT.
VAULTS 1,2,5 HAVE 2" PIPE AVAILABLE FOR F/O & COAX
CHAIN LINK FENCE
10.0 FT
GENERATOR BLDG
SPEED BUMP
POLYMER BLDG
170.0 FT.
DIGESTER
MAIN BLDG PLC 1
CL2 BLDG PLC 3
40 FT. TO PLC 3
25.0 FT
65 FT. TO PLC 1
VAULT 1
VAULT 2
VAULT 3
VAULT 4
VAULT 5
14.0 FT.
77.0 FT.
84.0 FT.
90.0 FT



NOTES:

1. REUSE EXISTING CONDUIT. REMOVE OLD WIRING AND PULL NEW WIRING AS SHOWN TWO SETS OF CONDUCTORS, 1 EA FOR BLOWERS 1 & 2
2. REPLACE EXISTING JUNCTION BOX WITH LARGER 4X JBOX, NEW SUPPORTS, AND EXTEND CONDUIT
3. NEW JUNCTION BOX
4. 63 NEMA 4X
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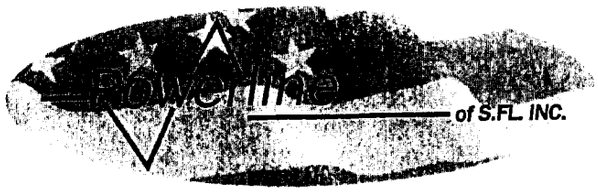
6. [illegible] RECEPTACLE TO HAVE FEMALE PLUG [illegible] END FROM CENTRIFUGE. [illegible] TO BE THAT RECEPTACLE IS LIVE 480V
7. NEW 500KW GENERATOR IS PROVIDED BY OTHERS
8. NEW WIRING TO BE INSTALLED FROM SWITCH BOARD TO FP&L. COORDINATE WITH FP&L



State Certificate # EC-13003753

Date: 8 July 15

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

Ref. Belle Glade WWTP Alternate Power Improvements WUD 14-050

We Purpose to provide a complete Electrical Installation per Provided Information, Plans & Specifications

Option #3

Temp. Power included for change over

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

Exceptions:
1. Motors/Pumps
2. PLC Programming
3. Generator Set

This Proposal subject to renegotiation after (90 Day Period)

Purposed Amount: ***$ 198800.00***
One Hundred Ninety Eight Thousand Eight Hundred Dollars

Thank you for the opportunity to provide this Proposal.

Sincerely

Thomas Laessig

President

Powerline of S.FL. INC.

State Certificate # EC-13003753

Generator Quotes

Three generator suppliers were approached to provide quotes for the new 500kW generator at Western Region Waste Water Treatment Facility (WRWWTF) Power Improvements Project Phase 1. The generator suppliers were requested to provide quotes for a 500kW generator with a 2,000 gallon sub-base fuel tank and aluminum walk-in enclosure. The following prices were received:

Generator Supplier	Quote Amount	Generator Manufacturer
Cummins Power South LLC.	$143,779.88	Cummins
TAW Power Systems, Inc.	$215,000.00	Kohler
Pantropic Power, Inc.	$162,525.00	Caterpillar (CAT)

Cummins Power South LLC was chosen as the most comprehensive and competitive quote. Cummins Power South LLC was later asked to provide pricing to upsize the sub-base fuel tank from 2,000 gallons to 4,500 gallons. In addition to the tank upsize Cummins Power South LLC was requested to price an enclosure that had a minimum wind loading of 190 MPH to satisfy the new building code.

Cummins Power South LLC. has provided a supplemental scope and estimate which reflects the requested changes to the original quote. The quote is as follows:

Cummins Power South LLC. $155,644.88

$155,644.88 includes $151,894.88 for generator, enclosure and fuel tank; $3,750.00 for additional engineering to satisfy wind loading requirement

Our energy working for you.™

Power Generation

Quotation

CUMMINS POWER SOUTH LLC
E-Mail: Tim.Alban@Cummins.com
3777 Interstate Park Road W.
West Palm Beach FL 33404 United States
Direct: 561-281-3638
April 16, 2015

Project Name: Belle Glade WWTP

Quotation: 2027000000119535

Thank you for your inquiry. We are pleased to quote as follows:

USD

Item	Description	Qty
	Diesel Genset: 60Hz-500/455kW 50Hz-440/400kW	
Install-US-Stat	U.S. EPA, Stationary Emergency Application	1
500DFEK	Genset-Diesel,60Hz,500kW-Standby Rating	1
A331-2	Duty Rating-Standby Power	1
L090-2	Listing-UL 2200	1
L170-2	EmissionCert,EPA,Tier 2,NSPS CI Stationary Emergency	1
R002-2	Voltage-277/480,3 Phase,Wye,4 Wire	1
B258-2	Alternator-60 Hz, 12 Lead, Extended Range,125/105C	1
H643-2	SET CONTROL-PCC 2100	1
H536-2	Display Language-English	1
H605-2	Display-Control,Graphical	1
K631-2	Relays-Genset Status, User Configured	1
KP60-2	Interface-CommunicationsNtwk,FTT-10	1
H606-2	Meters-AC Output,Analog	1
H609-2	Control Mounting-Left Facing	1
A292-2	Heater-Alternator, 120 Volt AC	1
KU94-2	CB or EB or TB-Right Only	1
KU14-2	CirBrkr-800A,Right,3P,600/415V,SS RMS,80%UL/IEC	1
KB72-2	CB or EB or TB-Bottom Entry, Right	1
C127-2	Separator-Fuel/Water	1
E074-2	Engine Cooling-Radiator, 50C Ambient	1
H389-2	Shutdown-Low Coolant Level	1
H556-2	Coolant Heater-208/240/480V, 40F Minimum Ambient Temp	1
D041-2	Engine Air Cleaner-Normal Duty	1
A298-2	Exhaust Connector-Slip On	1
L028-2	Genset warranty- Base, Standby 2 years / 400 hours, Prime Power 1 year /	1

	unlimited hours, Continuous Power 1 year / unlimited hours	
L050-2	Literature-English	1
A358-2	Packing-None	1
SPEC-M	Product Revision - M	1
CP01-2	Common Parts Listing	1
ST120SN3RSL, PILNCCB, PILNOCB W/CONTACT	E STOP BRK Glass NEMA 3 w/ contacts	1
Delivery Option 3	Factory Direct Shipment to Customer	1

1

Weather Resistant, Level 2 Sound Attenuated, Walk in, Aluminum Enclosure:

- Approximate Dimensions: 20' L x 11' W x 9' H (plus Fuel Tank)
- Enclosure Exterior to be of .090",5052-H32 Aluminum, Formed, Panel Construction, Pre-Painted Finish Standard Color White (Custom color extra)
- Air Intake: Sound Attenuated Intake Scoops with Punched Bird Screen
- Air Discharge: Sound Attenuated Discharge Hood with Gravity Dampers and Bird Screen
- 3" Sound Attenuating Fire Blanket in Walls, Doors, Hoods and Ceilings. Insulation Retained with .032" Perforated Aluminum Liner. Enclosure is Designed to Reduce Source SPL by 25 dB (A) @ 1M in a Free-Field Environment.
- (2) Lockable, Hinged Access Doors with Panic Bars and Corrosion Resistant Hardware
- Silencer Mounting Brackets, Supports, and Bands for *AMPS Provided,* Interior Mounted, Internally Insulated, Critical Grade Silencer
- AMPS Supplied Exhaust Flex Connector
- AMPS Provided Mitered Exhaust Outlet
- All Exterior Hardware to be Stainless Steel
- Extend oil, Coolant and Silencer drains to Enclosure Exterior
- Enclosure Suitable for 180 MPH Wind Loading

5,175-Gallon, UL 142, FDEP Sub Base Fuel Tank (EQ#

533): (4512 Usable Gallons)

- Approximate Dimensions: : 235"L x 138"W x 45"H
- ¼" Mild Steel Secondary Tank
- Rupture Basin with FDEP Approved Leak Detection Switch (Pneumercator LS600)
- Mechanical Fuel Level Gauge (Visible at Fill Point)
- Supply and Return Connections
- 2" Fill with Lockable Cap with FDEP Spill Containment
- Normal and Emergency Vent Fittings Installed Per UL-142
- Low Level Fuel Alarm Switch (Madison M-7000 EQ#682) Set @ 67% Remaining Capacity Wired to Fuel Alarm Console
- High Level Fuel Alarm Switch (Madison M-7000 EQ#682) Set @ 90% Tank Capacity Wired to Fuel Alarm Console
- Cable Stub Up Opening Under Circuit Breaker
- Generator Mounting Pads
- 2 Lifting Points per Side (4 Total) for Lifting Generator Set, Enclosure and Tank (Empty)
- Tank coated with Two Part Epoxy Primer and painted Gloss Black

Electrical Package:

Included

- Provide, Install and Wire (1) 100A, 120/240V 1 Phase MLO Load Center with Branch Circuit Breakers
- Provide, Install and Wire (3) 48" Dual Tube Fluorescent Light Fixtures with (2) 3-Way Switches Located by Entrance Doors.
- Provide, Install and Wire (3) DC Light Fixtures with (1) 60 Minute Timer Switches Located by Entrance Doors
- Provide, Install and Wire (2) 20A, 125V Duplex GFCI Receptacles Located by Entrance Doors
- Wire Customer Provided and Installed Jacket Water Heaters to Load Center
- Wire Customer Provided and Installed Generator Strip Heaters to Load Center
- Mount and Wire Customer Provided Battery Charger to Load Center and DC Output to Batteries
- All Electrical to be Run in EMT or Flexible Conduit to meet NFPA 70.

OSHA Compliant Stairs and

Walkways:

- (2) Set of OSHA Compliant Stairs with Railings and 48" Wide Walkway with Railings
- Railings to be Constructed of 1 ½" Schedule 40 Aluminum Tube
- Steps and Walkways Constructed of Extruded Aluminum
- Stainless Steel Leveling Pads
- Stairs Set to be Shipped Loose and Assembled on Site by Others

Submittals / O&M Manuals	1
Start - Up / Training	1
FOB AMPS	1

Quote based on PBC Design Build Criteria & Drawing(s)
Alternate 1

Grand Total $151,894.88

(check appropriate action):
RELEASE _____ Hold for Approval _____
Approval and terms acceptance

Customer Signature _____ Date _____

CUMMINS POWER SOUTH, LLC
POWER GENERATION

The following are the "Terms of Acceptance of Orders and Conditions of Sale." These terms also appear on the Acknowledgment of Sale form and are reproduced here. CUMMINS POWER SOUTH, LLC sales are limited to and made exclusively on these terms and CUMMINS POWER SOUTH, LLC's acceptance of any order is limited to the terms of the Seller and rejects any additional terms contained in any document that may be proposed by the Buyer

1. This Quotation is valid for 60 days * of the date quotation, Price shall remain firm provided our submittal drawings are approved and returned within 60 days after submission, and the ship date of the equipment is not extended by you or your customer beyond our published lead times . Delays or extension of the above lead times may necessitate escalation charges, on some or all equipment ordered.

2. Delivery is F.O.B. Factory. Freight is prepaid and allowed to the first destination within the continental United States. Generators (smaller than 601 kW) are shipped in an enclosed truck. Open trucking deliveries are available at an additional cost. Larger units are shipped via flat bed truck.

3. Prices for generators, transfer switches, switchgear and loose accessories as required, will be invoiced at the time of shipment, or when ready for shipment. Should the buyer delay, defer or refuse delivery, additional handling and storage charges may be assessed in lieu of the above stated escalation charges.

4. The equipment supplied by this manufacturer is custom fabricated to order and is subject to cancellation charges.

Switchgear, Generators and all build to order equipment are subject to the following minimum charges assessed for cancellation of any order: 25% of total order price if cancellation is received in our office between the date of order entry and the date we receive written submittal drawing approval. 50% of total order price if cancellation is received in our office after we receive submittal drawing approval.
75% of total order price if cancellation is received in our office 60 or fewer days before the scheduled shipping date of the order. 85% of total order price if cancellation is received in our office after the equipment is assembled.
The exact dollar value of the cancellation charge will be determined after our costs due to the cancellation are determined. A written notice of cancellation is required. The Standard generator cancellation charges are 25% of the total order price after release of order from our factory.

5. Payment terms are net 30 days from date of invoice, subject to approval of our credit department at the time of the order. Non domestic orders (final delivery locations outside the U.S.) are subject to a deposit of 25% at the time of order. Balance shall be paid prior to shipment. Export order (delivery outside the US) may require a letter of credit drawn on a U.S. bank. Retainage shall be limited to10%. Payment of retainage is due at completion of start up or payable no later than 90 days from the original invoice.

6. Cummins Power South is not responsible for delays in delivery due to fire, strikes, accidents, Acts of Nature, war, explosion, flood, accidents or other causes beyond our control. Quoted shipping schedules are not guaranteed and subject to change without notice. In no case is Cummins Power South responsible for incidental or consequential damages. Cummins Power South does not accept liquidated damages as a part of third party contracts.

7. Each product offered in this quotation is accompanied by an expressed written manufacturer's warranty

and is the only warranty offered.

8. An order for the equipment covered by this quotation will be accepted on a hold for release basis. Your order will not be released and scheduled for production until written approval to proceed is received in our office.

9. The quotation offered here in is limited to the plans and specification sections listed on our quotation. No other sections shall apply. Additional requirements for administrative items may require additional cost.

10. Unless otherwise stated on our quotation, O&M manuals are limited to one set. Additional sets of O&M manuals are available at an additional cost. The manufacturer's standard format shall apply. Custom O&M manuals will be available at an additional charge.

11. Start up services, load bank testing, and owner training are not provided unless stated on our quotation. Start up services will not proceed until the buyer's account is current and in good standing.

12. Our standard quotation does not include off unit wiring, off unit plumbing, off loading, rigging, installation, exhaust insulation or fuel.

13. Notice to Florida Customers. Responsibility for testing of fuel tank(s) provided by any party, as required under FDEP (Florida Department of Environmental Protection) Chapters 62-761 and 62-762, is the responsibility of the installing Contractor and Generator Permit Applicant. Cummins Power South LLC is not responsible for damages or costs incurred by any party, when a fuel tank is filled before field testing required under FDEP or testing mandated by a Local Inspector of Authority under FBC, is performed.

14. Taxes unless otherwise stated are not included in our price.

15. All CPS work will be performed with high regard to safety and in compliance with all local and federal safety / environmental requirements. Safe access must be provided and maintained by the equipment owner to all equipment being started up by our personnel.

Cummins takes exception to any NETA testing. This testing shall be conducted by a certified third party company provided by others. Cummins recommends coordinating the testing process with our project management and service group to avoid any procedures that can potentially damage the generators. In addition, Cummins does not recommend repeated hi-pot testing of generator windings. Upon customer's request, Cummins can provide a list of the tests that are done during the manufacturing of the generator.

Exclusion for AHJ Requirements of Field Testing on Diesel Fuel Tanks.
The local AHJ may require the Generator Permit holder (Owner, Contractor / Installer or CM) to perform one or more field tests on fuel tanks holding combustible liquids. A detailed explanation of the field testing requirements for diesel fuel tanks is outlined in FDEP and NFPA-30, 2013. The purchaser, installer and owner should contact the local AHJ in regard to meeting all local requirements for field testing, before ordering diesel fuel storage equipment. Be advised, that Cummins is acting only as a supplier (Vendor) in the transaction represented by this Quotation, and does NOT make any allowances for coordinating the execution of field testing or, make allowances for payment of the same in the price as Quoted. By acceptance of this Quotation, the Purchaser hereby acknowledges this Exclusion.

Submitted by

Tim Alban , Power Generation Sales Manager

Tim.Alban@cummins.com
Fax: 561-840-7704

Adam Ward

From: Nico Shaner [NShaner@globaltechdb.com]
Sent: Friday, June 12, 2015 4:44 PM
To: Tim Alban
Subject: RE: 500 kw generator for PBC WWTF

Excellent. Thank you.

Regards,
--
Nico Shaner
Globaltech, Inc.
6001 Broken Sound Pkwy NW
Suite 610
Boca Raton, FL 33487
nshaner@globaltechdb.com
561-997-6433 - office
404-226-7645 - cell
www.globaltechdb.com

From: Tim Alban [mailto:tim.alban@cummins.com]
Sent: Friday, June 12, 2015 4:42 PM
To: Nico Shaner
Subject: RE: 500 kw generator for PBC WWTF

Nico,

The enclosure Mfg. states we can do 200MPH with PE certificates for $3750.00 Adder.

Industrial Power Generation Sales
Cummins Power South, LLC
E-Mail: Tim.Alban@Cummins.Com
3754 Interstate Park Way
Riviera Beach, FL 33404
Phone: (561) – 281 – 3638
Fax: (561) – 277 – 9186
www.cumminspowersouth.com

From: Nico Shaner [mailto:NShaner@globaltechdb.com]
Sent: Friday, June 12, 2015 1:22 PM
To: Tim Alban
Subject: RE: 500 kw generator for PBC WWTF

Thanks Tim.

Apologies, but It looks like new building code requirements might ask for 190 MPH ratings.

What would it cost to verify that the enclosure meets that criteria (if it does) or what would it cost to get one.

The county has apparently caught wind of a possible building code requirement change in the wind loading.

Thanks again.

Regards,
--
Nico Shaner
Globaltech, Inc.
6001 Broken Sound Pkwy NW
Suite 610
Boca Raton, FL 33487
nshaner@globaltechdb.com
561-997-6433 - office
404-226-7645 - cell
www.globaltechdb.com

From: Tim Alban [mailto:tim.alban@cummins.com]
Sent: Friday, June 12, 2015 9:46 AM
To: Nico Shaner
Subject: RE: 500 kw generator for PBC WWTF

Nico,

Here is the new quote with tank we spoke about. Note that enclosure was already rated 180MPH wind load. This new configuration does not change the footprint of the drawing you have depicting this unit. Tank is longer for extra capacity and matched length of the enclosure. Call me with any questions.

Industrial Power Generation Sales
Cummins Power South, LLC
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3754 Interstate Park Way
Riviera Beach, FL 33404
Phone: (561) – 281 – 3638
Fax: (561) – 277 – 9186
www.cumminspowersouth.com

From: Nico Shaner [mailto:NShaner@globaltechdb.com]
Sent: Thursday, June 11, 2015 11:50 AM
To: Tim Alban
Subject: 500 kw generator for PBC WWTF

Hi Tim.

Thanks for speaking with me this morning. Just a few questions for you.

What size fuel tank would we need to run at 50% load on the generator for 10 days? What would the new dimensions be and cost be with that tank?

The building code requirements may be changing, would it be possible to get an enclosure rated for 180mph wind loading with the new tank, and what would the additional cost be if any?

Any associated costs in putting a larger tank on the generator, stairs, railings, etc. please let us know. I am looking up the datasheet info right now to see if I can guestimate a tank size based on the consumption tables/curves.

Thanks.

Regards,
--
Nico Shaner
Globaltech, Inc.
6001 Broken Sound Pkwy NW
Suite 610
Boca Raton, FL 33487
nshaner@globaltechdb.com
561-997-6433 - office
404-226-7645 - cell
www.globaltechdb.com

Adam Ward

From: John Potts [John.Potts@tawinc.com]
Sent: Thursday, April 16, 2015 3:50 PM
To: Nico Shaner
Subject: RE: budgetary pricing

Hello Nico –
I apologize for the delay in getting back with you. Please find budgetary pricing listed below.

1) 500 kw generator standalone w/2000 gal subbase fuel tank
   Kohler 500REOZJB, Tier II Emergency Standby EPA Certified, Open Skid with 2000gal UL142 Sub Base Tank – Budget Price $150,000.00
2) 500 kw generator enclosed (walk-in) w/2000 gal sub base fuel tank
   Kohler 500REOZJB, Tier II Emergency Standby EPA Certified, Walk in Enclosure with 2000gal UL142 Sub Base Tank – Budget Price $215,000.00
3) ATS
   Kohler 2000A Open Transition, 3 pole, NEMA 1 ATS - $25,000.00
4) Day tank
   Simplex 150gal Outdoor day tank with Transfer Pumps - $9,500.00

Let me know if you have any additional questions.
Regards,
John

John Potts | Kohler Generators
TAW Power Systems, Inc.
1500 NW 15th Avenue | Pompano Beach, FL 33069
tel: 954-977-0202 x1704 | fax: 954-977-9249 | cell: 954-234-4226
John.Potts@tawinc.com | http://www.tawinc.com

Excellence in creating innovative solutions for the supply, control and use of energy

From: Nico Shaner [mailto:NShaner@globaltechdb.com]
Sent: Wednesday, April 15, 2015 8:37 AM
To: John Potts
Subject: RE: budgetary pricing

John,

Haven't heard back from you. I have pricing due in a couple days. If I don't hear back from you today, I'll assume you're not interested.

Thanks.

Regards,
--
Nico Shaner
Globaltech, Inc.
6001 Broken Sound Pkwy NW
Suite 610
Boca Raton, FL 33487
nshaner@globaltechdb.com

561-997-6433 - office
404-226-7645 - cell
www.globaltechdb.com

From: Nico Shaner
Sent: Monday, March 30, 2015 3:12 PM
To: 'john.potts@tawinc.com'
Subject: budgetary pricing

Hi John.

We spoke earlier about a generator replacement at Belle glade WWTP in palm beach county.

Attached are the design criteria and technical memorandum that was done by Hillers Engineering.

Please quote as separate line items:

1) 500 kw generator standalone w/2000 gal subbase fuel tank
2) 500 kw generator enclosed (walk-in) w/2000 gal sub base fuel tank
3) ATS
4) Day tank

Please call to discuss if necessary. I am looking for pricing in the next day or so if you can.

Thanks.

Our energy working for you.™

Power Generation

Quotation

CUMMINS POWER SOUTH LLC
E-Mail: Tim.Alban@Cummins.com
3777 Interstate Park Road W.
West Palm Beach FL 33404 United States
Direct: 561-281-3638
April 16, 2015

Project Name: Belle Glade WWTP

Quotation: 2027000000119535

Thank you for your inquiry. We are pleased to quote as follows:

USD

Item	Description	Qty
	Diesel Genset: 60Hz-500/455kW 50Hz-440/400kW	
Install-US-Stat	U.S. EPA, Stationary Emergency Application	1
500DFEK	Genset-Diesel,60Hz,500kW-Standby Rating	1
A331-2	Duty Rating-Standby Power	1
L090-2	Listing-UL 2200	1
L170-2	EmissionCert,EPA,Tier 2,NSPS CI Stationary Emergency	1
R002-2	Voltage-277/480,3 Phase,Wye,4 Wire	1
B258-2	Alternator-60 Hz, 12 Lead, Extended Range,125/105C	1
H643-2	SET CONTROL-PCC 2100	1
H536-2	Display Language-English	1
H605-2	Display-Control,Graphical	1
K631-2	Relays-Genset Status, User Configured	1
KP60-2	Interface-CommunicationsNtwk,FTT-10	1
H606-2	Meters-AC Output,Analog	1
H609-2	Control Mounting-Left Facing	1
A292-2	Heater-Alternator, 120 Volt AC	1
KU94-2	CB or EB or TB-Right Only	1
KU14-2	CirBrkr-800A,Right,3P,600/415V,SS RMS,80%UL/IEC	1
KB72-2	CB or EB or TB-Bottom Entry, Right	1
C127-2	Separator-Fuel/Water	1
E074-2	Engine Cooling-Radiator, 50C Ambient	1
H389-2	Shutdown-Low Coolant Level	1
H556-2	Coolant Heater-208/240/480V, 40F Minimum Ambient Temp	1
D041-2	Engine Air Cleaner-Normal Duty	1
A298-2	Exhaust Connector-Slip On	1
L028-2	Genset warranty- Base, Standby 2 years / 400 hours, Prime Power 1 year /	1

	unlimited hours, Continuous Power 1 year / unlimited hours	
L050-2	Literature-English	1
A358-2	Packing-None	1
SPEC-M	Product Revision - M	1
CP01-2	Common Parts Listing	1
ST120SN3RSL, PILNCCB, PILNOCB W/CONTACT	E STOP BRK Glass NEMA 3 w/ contacts	1
Delivery Option 3	Factory Direct Shipment to Customer	1

1

Weather Resistant, Level 2 Sound Attenuated, Walk in, Aluminum Enclosure:

- Approximate Dimensions: 20' L x 11' W x 9' H (plus Fuel Tank)
- Enclosure Exterior to be of .090",5052-H32 Aluminum, Formed, Panel Construction, Pre-Painted Finish Standard Color White (Custom color extra)
- Air Intake: Sound Attenuated Intake Scoops with Punched Bird Screen
- Air Discharge: Sound Attenuated Discharge Hood with Gravity Dampers and Bird Screen
- 3" Sound Attenuating Fire Blanket in Walls, Doors, Hoods and Ceilings. Insulation Retained with .032" Perforated Aluminum Liner. Enclosure is Designed to Reduce Source SPL by 25 dB (A) @ 1M in a Free-Field Environment.
- (2) Lockable, Hinged Access Doors with Panic Bars and Corrosion Resistant Hardware
- Silencer Mounting Brackets, Supports, and Bands for *AMPS Provided,* Interior Mounted, Internally Insulated, Critical Grade Silencer
- AMPS Supplied Exhaust Flex Connector
- AMPS Provided Mitered Exhaust Outlet
- All Exterior Hardware to be Stainless Steel
- Extend oil, Coolant and Silencer drains to Enclosure Exterior
- Enclosure Suitable for 180 MPH Wind Loading

2,000-Gallon, UL 142, FDEP Sub Base Fuel Tank (EQ#

533):

- Approximate Dimensions: 186"L x 108"W x 30"H
- ¼" Mild Steel Secondary Tank
- Rupture Basin with FDEP Approved Leak Detection Switch (Pneumercator LS600)
- Mechanical Fuel Level Gauge (Visible at Fill Point)
- Supply and Return Connections
- 2" Fill with Lockable Cap with FDEP Spill Containment
- Normal and Emergency Vent Fittings Installed Per UL-142
- Low Level Fuel Alarm Switch (Madison M-7000 EQ#682) Set @ 67% Remaining Capacity Wired to Fuel Alarm Console
- High Level Fuel Alarm Switch (Madison M-7000 EQ#682) Set @ 90% Tank Capacity Wired to Fuel Alarm Console
- Cable Stub Up Opening Under Circuit Breaker
- Generator Mounting Pads
- 2 Lifting Points per Side (4 Total) for Lifting Generator Set, Enclosure and Tank (Empty)
- Tank coated with Two Part Epoxy Primer and painted Gloss Black

Electrical Package:

Included

- Provide, Install and Wire (1) 100A, 120/240V 1 Phase MLO Load Center with Branch Circuit Breakers
- Provide, Install and Wire (3) 48" Dual Tube Fluorescent Light Fixtures with (2) 3-Way Switches Located by Entrance Doors.
- Provide, Install and Wire (3) DC Light Fixtures with (1) 60 Minute Timer Switches Located by Entrance Doors
- Provide, Install and Wire (2) 20A, 125V Duplex GFCI Receptacles Located by Entrance Doors
- Wire Customer Provided and Installed Jacket Water Heaters to Load Center
- Wire Customer Provided and Installed Generator Strip Heaters to Load Center
- Mount and Wire Customer Provided Battery Charger to Load Center and DC Output to Batteries
- All Electrical to be Run in EMT or Flexible Conduit to meet NFPA 70.

OSHA Compliant Stairs and

Walkways:

- (2) Set of OSHA Compliant Stairs with Railings and 48" Wide Walkway with Railings
- Railings to be Constructed of 1 ½" Schedule 40 Aluminum Tube
- Steps and Walkways Constructed of Extruded Aluminum
- Stainless Steel Leveling Pads
- Stairs Set to be Shipped Loose and Assembled on Site by Others

Submittals / O&M Manuals	1
Start - Up / Training	1
FOB AMPS	1

Quote based on PBC Design Build Criteria & Drawing(s)
Alternate 1

Grand Total $143,779.88

(check appropriate action):
RELEASE _____ Hold for Approval _____
Approval and terms acceptance

Customer Signature _____ Date _____

CUMMINS POWER SOUTH, LLC
POWER GENERATION

The following are the "Terms of Acceptance of Orders and Conditions of Sale." These terms also appear on the Acknowledgment of Sale form and are reproduced here. CUMMINS POWER SOUTH, LLC sales are limited to and made exclusively on these terms and CUMMINS POWER SOUTH, LLC's acceptance of any order is limited to the terms of the Seller and rejects any additional terms contained in any document that may be proposed by the Buyer

1. This Quotation is valid for 60 days * of the date quotation, Price shall remain firm provided our submittal drawings are approved and returned within 60 days after submission, and the ship date of the equipment is not extended by you or your customer beyond our published lead times . Delays or extension of the above lead times may necessitate escalation charges, on some or all equipment ordered.

2. Delivery is F.O.B. Factory. Freight is prepaid and allowed to the first destination within the continental United States. Generators (smaller than 601 kW) are shipped in an enclosed truck. Open trucking deliveries are available at an additional cost. Larger units are shipped via flat bed truck.

3. Prices for generators, transfer switches, switchgear and loose accessories as required, will be invoiced at the time of shipment, or when ready for shipment. Should the buyer delay, defer or refuse delivery, additional handling and storage charges may be assessed in lieu of the above stated escalation charges.

4. The equipment supplied by this manufacturer is custom fabricated to order and is subject to cancellation charges.

Switchgear, Generators and all build to order equipment are subject to the following minimum charges assessed for cancellation of any order: 25% of total order price if cancellation is received in our office between the date of order entry and the date we receive written submittal drawing approval. 50% of total order price if cancellation is received in our office after we receive submittal drawing approval.
75% of total order price if cancellation is received in our office 60 or fewer days before the scheduled shipping date of the order. 85% of total order price if cancellation is received in our office after the equipment is assembled.
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Submitted by

Tim Alban , Power Generation Sales Manager

Tim.Alban@cummins.com
Fax: 561-840-7704

Pantropic Power, Inc.
ONE SOURCE – ONE CALL – ONE SOLUTION™

www.pantropic.com

Robert Cosgrove - EPG Sales
8205 N.W. 58 St. Miami, Fl. 33166
P: 305.592.4944/ F: 305.477.1943

Date: 04-16-15

Reference: Belle Glade WWTF
Palm Beach, Florida

Quote#: 15RBTC0059-03

General Scope of Supply

Qty	I/L	Description	Cost
1	L	One (1) New Caterpillar Model C-15 **Diesel** Engine Generator set, **UL 2200 Listed**, rated @ 500kW Standby, 277/480VAC, 3 Phase, 60 Hz., 1800 rpm **Diesel** Engine Generator Set, with the following accessories: • UL-2200 Listed – UL Standard of Safety for stationary engine generator assemblies of 600 Volts or less Requirements – Generator with a temp rise of 125 C or less. – UL listed voltage regulator. – EMCP4.2 control panel. – Neutral ground connection • EPA Tier II Emission compliant unit – meets USA Environmental Protection Agency (EPA) Tier 2 and California Air Resources Board (CARB) Non-Road Emissions Certifications and USA Environmental Protection Agency (EPA) Tier 2 Emissions Certification for stationary use. (per NSPS rule) • Design Criteria – The generator set accepts 100% rated load in one step per NFPA 110 and meets ISO 8528-5 transient response • EPA Tier II Emission compliant unit • Isochronous electronic governor • Air Inlet – Air cleaner with filter restriction indicator – Combustion air inlet flow rate = 1405.5 cfm • Engine Auto-start Control Panel EMCP 4.2 (unit mounted) EMCP 4.2 controls including: – Run / Auto / Stop Control – Speed and voltage adjust	**$ 163,525.00**

		– Engine Cycle crank – 24 volt DC operation – Environmental sealed front face – Tex alarm / event description. – Lamp test pushbutton Digital indication for: – RPM – DC volts – Operating hours – Oil pressure (psi, kPa or bar) – Coolant temperature – Volts (L-L & L-N), frequency (Hz) – Amps (per phase & average) – ekW, kVA, kVAR, kW-hr, %kw, PF Warning / shutdown with common LED indication of: – Low Oil pressure – High coolant temperature – Over-speed – Emergency stop – Failure to start (over-crank) – Low coolant temperature – Low coolant level Programmable protective relaying functions: – Generator phase sequence – Over / under voltage (27/59) – Over / under frequency (81) – Reverse power (kW) (32) – Reverse reactive power (kVAr) (32RV) – Over-current (50 / 51) – Common Alarm – Generator running Communications: – Six digital inputs – Four relay outputs (form A) – Two relay outputs (form C) – Generator run relay	

		– Common alarm relay – Two digital outputs – Customer data link (Modbus RTU) – Accessory module data link – Serial annunciator module data link – Emergency stop pushbutton – Alarm horn with silencing pushbutton – Device Server: RS485/Modbus to Ethernet / Modbus TCP gateway optically isolated ports 2 Ethernet ports and Wi-Fi capable • Engine – Caterpillar model C-15, In-line 6 cylinder, 4-stroke-cycle water-cooled – Cylinder bore diameter = 5.4 inches – Piston stroke = 6.75 inches – Compression ratio = 16.1:1 – Total cylinder displacement = 927.56 cubic inches – Aspiration = ATAAC – Fuel system = MEUI – Governor type = ADEM control system – Heat rejected to the atmosphere from the engine = 5,346 Btu/min – Heat rejected to the jacket water 10,748 Btu/min – Heat rejected to the after-cooler = 6,824 Btu/min – Fuel consumption: – Full load = 36.6 gallons per hour – Three – quarters load = 28.0 gallons per hour – Half load = 23.3 gallons per hour • Permanent Magnet Excited Generator System – Line voltage = 480 volts – Phase voltage = 277 volts – Rated current = 751.8 amperes – Power factor = 0.8 – Frequency = 60 Hertz – 3 phase – 4 pole – Sync Speed = 1,800 RPM – Class H insulation – "WYE" connected – **2/3 thirds or 0.6667 coil pitch** – Permanent magnetic excitation system	

		– UL 1446 recognized
		– Random wound
		– Single bearing
		– Four (4) pole
		– Twelve (12) leads
		– Two (2) wires be lead
		– Generator rated (kw): 500.0
		– Generator rated (kva): 625.0
		– Generator efficiency
		  – Full load = 94.4%
		  – Three quarters load = 94.4%
		  – Half load = 93.5%
		  – Quarter load = 91.0%
		– Voltage regulator
		  – Regulator sensing, true RMS 3-phase sensing
		– Low voltage extension box (used for customer low voltage power and engine control wiring entrance for ease of terminating)
		– Segregated low voltage (AC/DC) wiring panel
		– Anti-condensation space heaters 208 - 240 VAC, 600 watt
		– Generator set up for bottom conduit entry into generator housing
		– One (1) 800 amp frame / 600 amp trip, 3 pole, 100% rated, LSI trip unit, Thermal Magnetic Circuit Breaker with 24VDC shunt trip and auxiliary contacts
		
		• Starting System / Charging System
		– Two (2) lead acid engine starting batteries & cables
		  - Meets NFPA 110 Level 1starting requirements
		– Battery disconnect switch
		– Battery charger (shipped loose); 24VDC, 10 Amp output. 120 VAC, 1 Phase Input, wall mountable
		  - Dual rate charger with automatic switching from equalize to float. Includes high voltage, low voltage and AC failure alarm outputs, DCAmmeter and Voltmeter, NEMA 1 enclosure.
		  - For 110-120 VAC 60Hz Input. Regulated. Meets alarm requirements of NFPA 99 and NFPA 110. C-UL listed
		  - Meets NFPA 110 Level 1 (24 hour) Recharge Time Requirement
		– 24VDC electric starting motor
		– 45amp battery charging alternator
		– Jacket Water Heater , 240vac input, 1 phase
		
		• Engine Cooling system	

- Ambient radiator cooling capabilities of 51 degree C or 124 degrees Fahrenheit
- Air flow restriction (system) = 0.48 inches in water
- Air flow (max @ rated speed for radiator arrangement) = 27,828 cfm
- Engine coolant capacity with radiator = 13.3 gallons
- Engine coolant capacity = 5.5 gallons
- Radiator coolant capacity = 7.8 gallons
- Coolant drain line with valve terminated at edge of base
- Low water level switch mounted on radiator for shutdown of engine
- Fan and belt guards
- Coolant level sight gauge
- Caterpillar Extended life coolant

- Exhaust System
  - Dry exhaust manifold
  - Flanged faced outlets
  - Exhaust flange size (internal diameter) = 6.0 in
  - Exhaust stack gas temperature (engine out) = 942.1 degrees F
  - Exhaust gas flow rate = 3,842.2 cfm
  - Exhaust system backpressure (maximum allowable) = 40.2 in water

- Fuel System
  - Primary fuel filter with integral water separator
  - Secondary fuel filters
  - Fuel priming pump
  - Fuel pressure gauge
  - Fuel impervious flexible fuel lines
  - Fuel oil cooler

- Lube System
  - Lubricating oil and filter
  - Sump refill with filter = 15.9 gallons
  - Oil drain line with valve
  - Fumes disposal
  - Lube oil level indicator

- Emissions (Nominal)
  - NOx g/hp-hr = 5.74 g/hp-hr
  - CO g/hp-hr = 0.4 g/hp-hr
  - HC g/hp-hr = 0.01 g/hp-hr
  - PM g/hp-hr = 0.018 g/hp-hr

Pantropic Power, Inc.
ONE SOURCE – ONE CALL – ONE SOLUTION™

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		• Mounting System – Spring vibration isolator (to be placed between rails and sub-base tank) – Pad type isolators (to be placed between tank and concrete pad)	
1	L	• <u>Weather Resistant, **NON** Sound Attenuated Aluminum Enclosure:</u> HVHZ Enclosure Construction: – Weather protective, aluminum enclosure (skin tight design) – Aluminum modular panel design – Color: selected by owner (paint chip needed to match) – **<u>PE Certified to 181 MPH wind load</u>** – Florida Department of Business & professional Regulation Certification and Label – Florida Building Code Large Missile Impact Rated Enclosure (Florida Product Approval #12724, #12868, and #12871) Sound Attenuation: – Not applicable Airflow Through Enclosure – Intake: hooded intake with bird / rodent screen – Discharge: hooded discharge with gravity dampers and bird rodent screen – Designed to minimize water penetration into enclosure during heavy rainfall Enclosure Entrances: – Four (4) enclosure access doors with stainless steel hardware. (four (4) single access doors) – Reinforced door framing – Door drip guards Exhaust and Fluids: – **<u>Interior hospital grade silencer</u>** – Interior muffler mounting hardware – Stainless steel exhaust flex – Exhaust elbow and rain cap – Exhaust rain shield – Fumes disposals and engine drains piped to outside of enclosure	**Included**

Miami
8205 NW 58 Street
Miami, FL 33166
305.592.4944 tel
305.477.1943 fax

Fort Lauderdale
2501 State Road 84
Ft. Lauderdale, FL 33312
954.797.7972 tel
954.791.7719 fax

West Palm Beach
5460 Okeechobee Boulevard
West Palm Beach, FL 33417
561.640.0818 tel
561.640.7894 fax

Stuart
272 N. Flagler Avenue
Stuart, FL 34994
772.692.3442 tel
772.692.9757 fax

Fort Myers
2471 Rockfill Road
Fort Myers, FL 33916
239.337.4222 tel
239.337.4211 fax

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		Electrical Package: – Quantity three (3) D/C lights with one-hour wind up timer Enclosure dimensions: – Length = 298" – Width = 72" – Height = 108" – Weight = 2,785 lbs. – One (1) year warranty against material defects & workmanship the foregoing warranty is in lieu of and excludes all other Warranties, express or implied by operation of law or otherwise, Including, but not limited to, any implied warranties of Merchantability or fitness, both of which are expressly disclaimed. Buyer understands and agrees that all warranties implied by the Provisions of the uniform commercial code are excluded. Buyer's exclusive remedy and Phoenix Products' limit of liability for Any and all losses or damages resulting from nonconforming goods or tender, or from any other cause, shall be the contract price of the goods. Under no circumstances shall Phoenix Products be Responsible for any indirect, incidental or consequential damages or economic losses relating to any alleged defect in, or failure of, the goods or any component part of, or attachment to, thereof.	
1	L	• 2250-Gallon, UL-142 FDEP Sub-Base Fuel Tank: GSDW – 2250 – 2250 Gallons – 2054 gallons usable fuel – **73 hours of usable fuel at 75% load** Dimensions: – Length = 238" – Width = 72" – Height = 43" (includes 2" tall bottom channel) – Weight = 9,863 lbs. Construction: – 2250 gallons – UL-142 Listed generator sub-base tank – FDEP: EQ625 – 0.1875" Steel primary tank and 0.1875" steel secondary containment – Ships with vacuum in interstitial for on-site integrity verification	**Included**

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		Normal and Emergency Vents – 2" atmospheric vent with 12' above grade riser – 6" primary tank and 6" secondary tank emergency vents Fuel Level and Leal Sensors – High fuel, low fuel level, and interstitial switch (rupture basin) leak switches (wired to generator control panel for alarms) – Mechanical fuel level gauge, visible from fuel fill Internal Conduit Stub-up Area: Exterior Fill With Spill Containment – 7.5 gallons overfill / spill containment with hinged cover and padlockable – Spring – loaded drain valve to transfer spilled fuel to primary tank – Overfill prevention valve, shutoff at 95% full tank Exterior Finish – Industrial exterior grade enamel over primed surface – Finish color: Phoenix Products standard black satin	
1	L	• <u>Additional Items</u> – Three (3) bound copies of generator set submittals for review – Three (3) Sets of Operation and Maintenance Manuals – One (1) Nema 3R remote break-glass station (shipped loose) – Factory Certified test report at 0.8 pf	**Included**
1		• <u>Start –Up and Training</u> – Start-Up and Building Load Test of generator set by a factory trained technician during normal business hours of 8:00am to 5:00pm) – Resistive load – bank test on-site after start-up of unit is completed four (4) hour test at 100% load using utilizing a resistive load bank on-site after completed installation. (during normal business hours of 8:00am to 5:00pm) – Maintenance Personnel training during normal business hours of 8:00am to 5:00pm)	**Included**

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1	L	• Warranty – Two (2) year Caterpillar Factory Warranty	**Included**

Budgetary Price F.O.B. Miami (freight prepaid to jobsite).....$ 163,525.00 (sales tax not included)

Adder for Enclosure Certified to UL CCN # FTPP Program
(Classified for construction only Per UL 2200)

The Combination of this enclosure and UL Listed stationary engine generator assembly will require additional evaluation and / or testing per UL 2200. The electrical equipment systems covered under this category are intended for installation in accordance with ANSI / NFPA 70, "National Electrical Code". The authority having jurisdiction accepting the final inspection shall determine if tests are to be conducted since no testing for this combination of enclosure and engine generator assembly has been conducted nor Represented by UL.

..... $ 1,500.00 (sales tax not included)

Two (2) Free standing Stairs package:
- Hot dipped galvanized A36 steel construction
- 42" tall handrail (affixed on the side opposite of the fuel tank)
- One (1) stair set with 152" x 42" platform

..... $ 7,350.00 (sales tax not included)

Adder: Upgrade to walk-in Enclosure

..... $ 1,350.00 (sales tax not included)

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Adder: Increase tank to have a 6 day runtime @ 75% load

..... $ 5,250.00 (sales tax not included)

4-20MA Magnetostrictive Probe to provide fuel level to Scada

..... $ 1,560.00 (sales tax not included)

Fuel level monitor with 4-20MA output

- Provides digital fuel level display
- Low – low, low, high, high-high, and leak alarms

..... $ 6,000.00 (sales tax not included)

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March 30, 2015

Terracon

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

Attn: David Schuman
Phone: 561 997 6433
Email: dschuman@globaltechdb.com

Re: Proposal for Geotechnical Engineering Services
Belle Glade Wastewater Treatment Plant (WWTP) Generator Support
2055 W. Canal Street South
Belle Glade, Florida
Proposal No. PHD150113

Dear Mr. Schuman:

Terracon Consultants, Inc. (Terracon) appreciates the opportunity to submit this proposal to provide geotechnical engineering services for the above-referenced project. The purpose of the services will be to evaluate the subsurface conditions at the site and to provide geotechnical engineering recommendations related to the design and construction of the project. This proposal outlines our understanding of the project, and provides a scope of services and schedule for the work. Compensation for our services is also described herein.

A. PROJECT INFORMATION

We understand that a new generator concrete slab is planned at the Belle Glade WWTP. We assume the loads on the slab imposed by the generator will be relatively light.

B. SCOPE OF SERVICES

GEOTECHNICAL EVALUATION

The services for the Geotechnical Engineering Evaluation to be provided by Terracon are summarized in the following paragraphs.

Field Program – We propose the following field testing/exploration program to evaluate the subsurface conditions at the project site.

- Visit the project site, field mark boring locations, and contact the Sunshine Underground Utility Clearance network.

- Once underground utility clearance is obtained, mobilize a truck mounted drilling rig and drill two Standard Penetration Test (SPT) borings at (or near) the location of the proposed concrete slab. The borings will be drilled to 30 feet below grade using mud rotary methods. Samples of the subsurface materials will be obtained at frequent vertical intervals in accordance with procedures outlined in ASTM D 1586 (the Standard Penetration Test). Once the samples have been collected and classified in the field, they will be placed in appropriate sample containers for transport to our laboratory.

Subsurface conditions may be encountered which merit alterations of the field boring and/or sampling programs described herein. However, we will not perform additional scope or incur additional expense without your authorization.

Laboratory Testing – The samples obtained from the borings will be returned to our laboratory for visual classification by a geotechnical engineer. Limited laboratory testing (such as moisture content and organic content testing) will be performed as needed to aid in soils classification and assessment of the subsurface materials.

Geotechnical Engineering Analysis and Report – The results of our field work will be evaluated (by a professional geotechnical engineer licensed in the State of Florida) in light of the proposed construction. Based on the results of our evaluation, an engineering report will be prepared that details the results of the testing performed, provides logs of the borings, and geotechnical engineering criteria for design of the project. The report will include allowable axial compressive capacities for helical piles and augercast piles.

SCHEDULE

We can commence the work after receipt of authorization to proceed. This will begin with field marking the proposed boring locations and clearing the locations for buried utilities. Once the boring locations are cleared, we will mobilize to the site to begin the field work (within about one week of receiving the signed Agreement for Services). We expect the field exploration will require one day, if the weather conditions permit. We estimate the geotechnical report can be submitted within about two weeks after the field work is completed.

C. COMPENSATION

We propose to do the work for a fixed fee of ***$5,500.00***. This fee will not be exceeded without due cause and your prior written authorization. Should additional work be needed beyond the scope described herein, that work will be covered by supplemental agreement.

D. AUTHORIZATION

We understand that the work will be authorized with a Task Order issued under an existing Subcontract Agreement between Dunkelberger Engineering & Testing, A Terracon Company and Globaltech, Inc. dated November 12, 2014. The fee is valid for 90 days from the date of this proposal and is based on the assumption that all field services will be performed under safety Level D personal protective procedures. The fee is based on the assumptions and conditions provided at the time of this proposal.

We appreciate the opportunity to provide this proposal and look forward to working with you on this project. If you have any questions or comments regarding this proposal or require additional services, please give me a call.

Sincerely,
Terracon Consultants, Inc.

Jaime Velez, P.E.
Senior Project Engineer

Daniel J. Marieni, P.E.
Project Engineer

WORCESTER ENGINEERING, Inc.
STRUCTURAL ENGINEERING
e-mail jbw@jbw-engr.com

1500 South Mountain Road
Dillsburg, PA, 17019
717-432-9436 voice

Date: April 20, 2015
Project No. 2015-020

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

Attention: **Mr. David Schuman, PE**
Subject: **Fort Pierce Utility Authority**
Belle Glade WWTP Generator Replacement

Dear **Mr. Schuman:**

Thank you for considering Worcester Engineering, Inc. to provide structural engineering services for this project. I look forward to continuing our long relationship.

SCOPE OF PROFESSIONAL SERVICES:

Proposed Structure: Based on our conversations, we will be providing a design for a new generator slab to be constructed on pilings, filling and/or creating new wall penetrations in an existing structure, providing support for new HVAC equipment, and addressing fire ratings, as required to obtain a building permit.

Construction Documents: We propose a set of structural documents for your project to consist of our General Structural Notes as they pertain to this project, plans and details, as required to obtain a building permit. Globaltech will prepare a base plan and Worcester Engineering will provide the structural information.

Services During Construction: Review of submitted structural shop drawings and responses to written Requests for Information or Clarification will be provided in a timely manner. No site inspections or observations are included in this proposal, but may be provided if specifically requested in writing by Owner or Architect, to be billed hourly in accordance with the attached schedule. It is understood and expected that all submittals to Worcester Engineering shall come through the Architect.

COMPENSATION

Payment: For the above scope of services, we request a total fee of $4000 for structural engineering, consultation and drawings, payable upon completion of our Permit Drawings.

Reimbursable expenses such as plotting, printing and delivery services shall be billed in accordance with the enclosed schedule, or per vendors invoices. Plotting, printing and delivery for design coordination during Construction Document phase and Permitting shall not be reimbursable. All plots, printing and delivery required thereafter by any party shall be reimbursable per the attached schedule.

This proposal shall be valid for 90 calendar days from the submission date above. Stoppages in work in progress for more than 30 days at a time shall be cause for renegotiation of the Contract, with a minimum increase of 10% of the design fee.

Permits: It will be the Owner/ Developer's responsibility to pursue building permits and obtain all inspections as required by State or other jurisdiction. Failure of the Owner/Developer to pursue and obtain the building permit is not considered a justifiable cause for nonpayment of the design fees.

Invoices will be provided at the completion of milestones. Payment is due within 30 calendar days, and payments outstanding for more than 90 days may be assessed a finance charge of 1.5% on the unpaid balance.

Rates for 2015

Forensic Engineering	**$100.00/hour**	**Printing**	**$3.00/Sheet**
Engineering	**$85.00/hour**	**Plotting**	**$10.00/Sheet**
Drafting	**$50.00/hour**	**Mileage**	**$0.35/mile**
Office	**$40.00/hour**		

TERMS AND CONDITIONS

Worcester Engineering's Contract is with the architect of record, as signed below. Due to insurance requirements, this contract and its terms and conditions, or your firm's standard AIA contract form referencing this proposal, must be signed and returned to us before work can commence on this project. Engineers failure to enforce any portion of this proposal does not constitute a waiver of other rights hereunder.

Substitutions: Upon request by the Client, the Consultant shall evaluate and make recommendations regarding substitutions of materials, products or equipment proposed by the Client's consultants or contractors. The Consultant shall be compensated for these services, as well as any services required to modify and coordinate the construction documents prepared by the consultant with those of the client's consultants, as additional services. The Consultant also shall be entitled to an adjustment in schedule caused by this additional effort.

Job site: Neither the professional activities of the consultant, nor the presence of the consultant at a job site, shall relieve the General Contractor of its obligations, duties and responsibilities including, but not limited to, construction means, methods, sequence, techniques or procedures necessary for performing, superintending and coordinating the

Work in accordance with the contract documents and any health or safety precautions required by any regulatory agency.

Instruments of Service: All reports, drawings, specifications, computer files, field data, notes and other documents and instruments prepared by the Consultant as instruments of service shall remaining the property of the Consultant. The consultant shall retain all common law, statutory and other reserved rights.

Professional Liability: Worcester Engineering's professional liability shall be limited to the design fee for the project or $50,000.00 which ever is greater.

Termination: In the event of termination of this agreement by either party, the Client shall within fifteen (15) calendar days of termination pay the Consultant for services rendered and all reimbursable costs incurred by the Consultant up to the date of the termination, in accordance with the payment provisions of this Agreement. The Client may terminate this agreement for the Client's convenience and without cause upon giving the Consultant not less than seven (7) calendar days written notice. The Engineer may terminate the agreement with seven (7) calendar days written notice for any of the following reasons:

- Substantial failure of the other party to perform in accordance with the terms of this agreement and through no fault of the terminating party.
- Assignment of this agreement or transfer of the Project by either party to any other entity without the prior written consent of either party
- Suspension of the project or the Consultants services by the Client for more than ninety (90) calendar days, consecutive or in the aggregate.
- Material changes in the conditions under which this Agreement was entered into, the Scope of Services or the nature of the project, and failure of the parties to reach agreement on the compensation and schedule adjustments necessitated by such changes.

Acceptance: Return of this proposal, signed and dated, by fax or e-mail, shall serve as our authorization to proceed. In lieu of any other written and signed agreement, acceptance of engineering services, consultation, and / or structural drawings for this project shall be construed as acceptance of this proposal as the contract and be held binding. We look forward to working with you and your staff on this exciting project. If you have any questions, please do not hesitate to call.

Respectfully Submitted,

Joseph B. Worcester PE
President
FL Prof. Reg. No. 35308

_____

For Globaltech, Inc. Date

ADS Engineering

March 31, 2015

Dave Schuman
GlobalTech, INC
1075 Broken Sound Pkwy. NW, Suite 103
Boca Raton, FL 33487

Subject: Belle Glade WWTF Alternative Power Improvements QA/QC

Dear Dave:

Pursuant to your request, ADS Engineering, Inc. (ADS) is pleased to provide Globaltech (GT), Inc. a proposal for the QA/QC assistance for electrical design for the above referenced project, which is a design/build project. Our scope of work consists of the following:

- One site visits (8 hours)
- Assistance during electrical design
- The QA/QC for electrical drawings for above project
- Overseeing and providing the guidance for electrical engineer in record.

Our Total Lump Sum is 5,000.00

Note: We will check the submitted work and give our inputs to the best of our knowledge and information provided from GT. ADS Engineering is not responsible for signing and sealing the drawings nor has any other liability for this project.

Sincerely,
Alex Stojanovic

Bodax Foundations , Inc.

1101 NW 55TH Street
Ft. Lauderdale, Fl. 33309
Telephone 954-771-7888 Fax 954-771-8908

Auger Cast Piles - Helical Piles - Pin Piles

June 23, 2015

Globaltech, Inc.
1075 Broken Sound Boulevard, N.W. #103
Boca Raton, Florida 33487

Project: ***Belle Glade WWTP***
2055 West Canal Street South
Belle Glade

Contact: ***David Schuman***

Phone: ***561-997-6433***

Fax: ***561-997-5811***
dschuman@globaltechdb.com

_____ ***Specifications (please initial)***

- *We hereby submit specifications and estimates for the installation of **15 Auger Cast Piles**, as specified, at the above mentioned location*
- *Piles are to be **14 inch in diameter, 20 ft.** in length and reinforced with the following: 4 #5 w/ #3 ties @ 8" O.C. full*
- *Pile steel installed as straight bars, field bent by others*
- *Grout is to be 4000 PSI.*

_____ ***Site Conditions-necessary for mobilization (provided by others) (please initial)***

- *A firm, dry and level site for our equipment and concrete trucks*
- *Engineering layout; including pile locations and elevation calculations.*
- *Outlet supplying city water with a ¾" hose bib within 100 ft. of our drill rig*
- *Location, protection, removal or replacement of underground or overhead obstructions including utilities, buildings, lighting, sprinklers, etc.*
- *Protection, repair or replacement of adjacent structures and work sites including buildings, trees shrubs, lawns and driveways.*

_____ ***Included (please initial)***

- *One mobilization.*
- *Installation of piles, all labor and materials*
- ***Pile elevations will be dipped to the desired level if working grade is at +/- 6 inches from top of pile.***
- *Drilling refusal will be defined as less than one foot of penetration over a period of one minute (Deep Foundation Institute).*
- *Workers Compensation and General Liability Insurance.*

_____ ***Changes in Base Bid (please initial)***

- ***Additional piles require a re-bid or change order.***
- *Inspection and logging of piles, and certification by a Florida Registered Engineer.*
- *For each pile with grout in excess of 1.5 times the theoretical pile volume add $ 225.00 per yard.*
- *For piles longer than bid length add $28.88 per lineal foot.*
- *Standby time will be invoiced at $400.00 per hour.*
- ***For piles not installed during initial mobilization, deduct $303.00 each.***
- *Pile elevations in excess of +/- 6 inches from working grade, an additional per pile charge to cut or chip the pile will be incurred. This price excludes excavation, marking of cut-off point and removal of pile debris.*
- *Removal or hauling of grout spoils.*
- *Sonotube, casings or steel sleeves*

Base Bid Amount $15,000.00 ***Prepared by Rich Barnes -***
Predicated on mobile rig access and installation. Engineering certification is excluded, provided by others. Budget bid need pile plans.

Payments and Conditions

- ***Deposit payment of $1,082.00 for materials is required with signed contract.*** *Deposit is non-refundable.*
- ***No retainage will be withheld and*** *final payment is due upon completion. Payments not received within the terms described above shall accrue interest at 1.75% per month. (ANNUAL PERCENTAGE RATE IS 21%)*
- *Engineering logs are available 5 to 7 days after completion of pile installation.* ***Engineering Logs will only be released upon payment in full.***
- *All expenses incurred as a result of late payment or non-payment, including, lien fees ($400.00), reasonable attorney's fees and cost, shall be paid by the customer. Venue for all legal actions shall lie exclusively in Broward County, Florida.*
- *This proposal is subject to acceptance within 10 days and can be modified or voided thereafter at the option of Bodax Foundations, Inc.*
- *Facsimile of this contract shall be deemed a valid counterpart of the original.*

Authorized Signature: ***BUDGET ONLY***

Title: _____

Date: _____

Accepted by: ***BUDGET ONLY***

Title: _____

Date: _____

Please sign and initial and return by fax both sheets of the executed contract.
Once received in our office, we will proceed with scheduling.
Thank You.