Financial Management Department
Purchasing Division
1112 Manatee Ave W Suite 803
Bradenton, FL 34205
Phone: (941) 749-3014
www.mymanatee.org

February 12, 2016

TO: All Interested Bidders

SUBJECT: Invitation for Bids #16-0435CD
Water Treatment Plant- Biological Treatment Unit

ADDENDUM #3

Bidders are hereby notified that this Addendum shall be acknowledged on page Bid Form-1 of the Bid Form and made a part of the above named bidding and contract documents. Bids submitted without acknowledgment of the Addendum will be considered incomplete.

The following items are issued to add to, modify, and clarify the bid and contract documents. These items shall have the same force and effect as the original bidding and contract documents, and cost involved shall be included in the bid prices. Bids to be submitted on the specified bid date, shall conform to the additions and revisions listed herein.

1. **CLARIFICATION** of Article b on page 4 of the Revised Section D, Insurance and Bonding Requirements, that was issued in Addendum #1:

   The required Builders Risk Insurance shall be in full force and effect without interruption from the date of commencement of the Work throughout the duration of the Project and will end at the Project's completion. All other required insurance shall be in full force and effect without interruption from the date of commencement of the Work throughout the duration of the Project and shall remain in effect for at least two (2) years after the completion of the Project.

2. **ADD** Section 16265, Untinterruptible Power Supply, to the Technical Specifications (pages 1 thru 6) that are attached to this Addendum #3.
3. **ADD** Section 16611, Single Phase Untinterruptible Power Supply for Egress Lighting, to the Technical Specifications (pages 1 thru 4) that are attached to this Addendum #3.
4. **DELETE** Article 3.07 Verticle Turbine Pump Data Sheet that is in Section 11206 of the Technical Specifications, and **INSERT** REVISED Article 3.07 Verticle Turbine Pump Data Sheet that is attached to this Addendum #3.
5. Please see attached sign-in sheet from the non-mandatory informationl conference held on January 22, 2016.
6. Please see attached guard logs for the mandatory site vists held on January 22nd and February 2, 2016.

7. **Please see attached Clarification of Engineer's Changes and responses to questions asked by potential bidders.**

The deadline for questions and clarifications established in Article A.06 of the bidding documents has passed, and no further questions or requests for clarifications will be accepted.

END OF ADDENDUM #3

Bids will be received at Manatee County Purchasing, 1112 Manatee Avenue West, Bradenton, Florida 34205 until **Friday, February 19, 2016 at 3:00 PM.**

Sincerely,

Melissa M. Wendel, CPPO
Purchasing Official

McKIM&CREED

ENGINEERS

SURVEYORS

PLANNERS

To All Bidders,

Subject: Invitation for Bid #16-0435CD
Water Treatment Plant – Biological Treatment Unit
Manatee County Project No.: 6085870

Addendum No. 3 **February 11, 2016**

The following items are issued to modify and clarify the bid and contract documents. These items shall have the same force and effect as the original bidding and contract documents, and all costs involved shall be included in the bid prices. Bids to be submitted on the specified bid date shall conform to the additions and revisions listed herein.

PART I – PERTAINING TO THE DRAWINGS

Drawings M-0.3 and M-0.4 – DELETE references to "Dismantling Joint" and Replace with "Coupling Adapter".

Drawing S-3.1 – Remove Note No. 9 and replace with "STUCCO ALL EXTERIOR MASONRY WALLS OF THE ELECTRICAL AND STORAGE ROOMS".

Drawing S-6.1 – Change Scale to ¼" = 1'-0".

Drawing M-2.1; for detail 60" x 90" Triplex Grinder Pump Station - remove all references to 60" diameter and replace with 48" diameter.

Drawing E-1.5; Note 1. – Remove "200A" and replace with "20A".

PART II – PERTAINING TO THE SPECIFICATIONS
The following Specifications have been added as part of this Addendum No. 3:

1365 Hamlet Avenue

Clearwater, FL 33756

727.442.7196

Fax 727.461.3827

www.mckimcreed.com

Specification 11206 – DELETE Section 2.01, M and replace with "Pump Driver: Pumps shall be 460V 3phase 60Hz driven by vertical solid-shaft electric motor with a flanged adjustable spacer to allow easy removal of the packing without removal of the motor. Motors shall be provided with non-reverse ratchets. Drive motors shall be suitable for installation in a corrosive atmosphere at the locations shown without additional protection. The motor horsepower shall be

non-overloading for all conditions of head and flow. Motors shall be premium efficiency NEMA B motors. Motors shall be rated for inverter duty with insulated bearings and meet all the requirements of Section 16150 - Motors.

Specification 13070 – Add the following sentence to the end of Section 2.01, A., 1 - "GAC shall be manufactured via a reagglomeration process. GAC manufactured via a direct activation process shall not be acceptable".

PART III – QUESTIONS AND CLARIFICATIONS

CLARIFICATIONS:

QUESTIONS:

Question 1 Please provide the correct fiberglass basin size for the grinder pump station. Drawing M-2.1 shows a 60" diameter and the specification on page 11306-1 has 48" diameter.

Response 1 **For detail 60" x 90" Triplex Grinder Pump Station on Drawing M-2.1 - remove all references to 60" diameter and replace with 48".**

Question 2 Specification 02640, 2.04 Plug valves - Can Pratt Plug Valves be named as an approved manufacturer?

Response 2 **See item #1 of Addendum #2.**

Question 3 Will a bituminous coating be allowed for buried DI pipe in lieu of the coal tar enamel specified in section 02615?

Response 3 **A bituminous coating is acceptable.**

Question 4 There are multiple conflicts with existing utilities along the proposed forcemain route along with limited work space. Please confirm that directional drilled piping can be used to replace the direct bury pipe along extended sections of the pipeline. This will help to limit damage to private property (driveways, trees, etc.) but also reduce inconvenience for the residents.

Response 4 **Directionally drilled piping may be utilized along extended sections of the pipeline at no additional cost to the County. Extended sections will be evaluated on a case by case basis during construction. Any and all costs associated with extending the directionally drilled piping shall be included in the Contractor's Base Bid.**

Question 5 Please clarify if the contractor will be required to provide a posted security guard at side gates for regular equipment and material deliveries. Are there any other restrictions or requirements on the contractor and their personnel regarding access to the site?

Response 5 **The Contactor is not responsible for providing security guards. The Contractor and all subcontractors will be required to sign-in at the Water Treatment Plant Security gate at the main entrance along Waterline Road. Prior to each day, the Contractor(s) shall provide the County Security Guard(s) with a list of subcontractors, employees and delivery services expected to access the Site that day. Employees of organizations not on the list will be denied access.**

All individuals accessing the Site must have a Government Issued photo ID or other photo ID(s) provided either by the Contractor or their employer. These IDs will be used to confirm that they are authorized to access the Site.

Question 6 Please provide a specification for dismantling joints.

Response 6 **Flange coupling adapters shall be used in-lieu of dismantling joints and shall be Series 2100 Megaflange as manufactured by EBAA Iron or approved equal. Drilling patterns, materials of construction and pressure class shall match the piping which the adapters are connected to.**

Question 7 In the backwash clearwell on sheet S3.0 there is a note calling out "Fill Concrete," but this is not shown anywhere in the sections. Please give a detail (specifically the height and slope) of this area.

Response 7 **Refer to Drawing S-3.9 Section 9 for information on the Concrete Fill Section.**

Question 8 Plan sheet S-3.5 indicates aluminum gutters and downspouts, but there is not a quantity or detail of downspouts. Please provide elevations of the structure.

Response 8 **Roof plan on Drawing S-3.5 shows six downspouts on each side of the structure, one per column, 12 total. Downspouts are shown on filter sections 1, 2 and 3 on Drawing S-3.7.**

Question 9 Sheet S-6.1 has a scale of 3/16"=1'-0" noted, but this does not match the dimensions given. Is this drawing ¼"=1'-0" or are the dimensions wrong?

Response 9 **Sheet S-6.1 is drawn at ¼" = 1'-0". It is incorrectly labeled on the plan.**

Question 10 I notice on the Mechanical Drawings that there are Mark Numbers on most of the piping, fittings and valves. I cannot locate a table that provides descriptions for these mark numbers. Can you tell me where to find this in the documents?

Response 10 **Keynotes are shown on Drawing M-3.1.**

Question 11 The Stucco System is mentioned in Note 9 on Sheet S-3.1, but there are no sections in the structural drawings that provide a detail for the stucco system. There is also no detail or section showing the acoustical ceiling. Please provide a section of the Electrical Room and Storage Room showing the stucco system and acoustical ceiling.

Response 11 **Drawing S-3.1 – Remove Note No. 9 and replace with "STUCCO ALL EXTERIOR MASONRY WALLS OF THE ELECTRICAL AND STORAGE ROOMS". The interior walls of the Electrical Room and Storage Room shall be masonry. Height of the acoustical will be field determined during construction.**

Question 12 Paragraph 1.02 A of section 01740 of the specifications states that the "warranty period shall commence on the date of construction substantial completion, and shall be three (3) years from date of substantial completion…" Is this three (3) year warranty for the full contract amount? Also, please confirm that a three (3) year warranty will be required as this may add substantial costs to the project.

Response 12 **The three (3) year warranty is Manatee County standard and applies to the entire project, except where a longer warranty period may be required. Refer to the Technical Specifications for additional requirements.**

Question 13 Page B-2 of the Invitation for Bid provides for liquidated damages of $5,696.00 per day or $176,576.00 per month. This appears to be excessive, we suggest decreasing this amount.

Response 13 **The liquidated damages amount listed is consistent with the estimated value of the project, therefore Manatee County will not be making any changes to the liquidated damages amount.**

Question 14 Please advise amount of partial payment for the Manatee County Building Permit that the General Contractor is responsible for.

Response 14 **See Addendum #2 – Part III – Clarifications – Item No. 2.**

Question 15 Where can the water used for startup testing be disposed of?

Response 15 **Startup water can generally be discharged to the existing stormwater ponds and will need to meet all applicable Best Management Practices; refer to General Notes on Drawing G-0.2 for additional information.**

Question 16 I cannot find a Door Schedule on the plans or specs. And, there does not seem to be a Door Hardware Specification?

Response 16 **All the required door information is provided in Details 9 and 10 and "Hardware Sets" Table, each of which are shown on Drawing S-0.5.**

Question 17 **Request to name Dittmer Architectural Aluminum as approved equal manufacturer for the Architectural Canopies.**

Response 17 **See item #1 of Addendum #2.**

Question 18 **Dwg E-1.3 and E-0.8 show MOV-115 and indicates the need for a disconnecting means for the power. On E-0.8 it is referred to as a "motor rated toggle switch, NEMA 4 enclosure"and on E-1.3 it's referred to as a "Valve Disconnect (typ.)". Do all the MOV's on this project require a disconnect even when not shown on Dwg's as needing these devices?**

Response 18 **All motorized valves shall have local disconnects.**

Question 19 **Who is intended to supply the RVSS's for the 250hp Backwash Blowers shown on E-0.8, the EC or the supplier?**

Response 19 **The intent is to have all motor controllers manufactured by the same manufacturer of the switchgear and MCC's.**

Question 20 **What is the Model and Manufacturer of Existing MCC-3 & 4 shown on Dwg E-0.8?**

Response 20 **General Electric 8000.**

Question 21 **What is the Model and Manufacturer of Existing Panels BW, MDP, DP and MPZ shown on Dwg E-0.8?**

Response 21 **Manufacturer of these panels is Square D.**

Question 22 **On Dwg E-1.5 note 1, please confirm that it is a typo that shows a 200A breaker to be provided in Panel BW.**

Response 22 **Breakers should be 20A. Drawing E-1.5; Note 1. – Remove "200A" and replace with "20A".**

Question 23 **Is there a Specification available for the UPS Systems called for on Dwg E-2.8?**

Response 23 **Specifications 16611 Single Phase Uninterruptible Power Supply for Egress Lighting and 16265 Uninterruptable Power Supply are attached to this Addendum.**

Sincerely,
MCKIM & CREED, INC.

Phillip J. Locke

Phillip J. Locke, P.E.
Senior Project Manager

SECTION 16265 UNINTERRUPTIBLE POWER SUPPLY

PART 1 - GENERAL

1.01 SCOPE

A. The Uninterruptible Power Supply section covers the furnishing of a complete on-line uninterruptible power supply (UPS) as indicated on the drawings. The UPS specified is shown on drawings.

B. The system shall convert incoming single phase 60 Hz, power into dc power, maintain and charge backup batteries and reconvert outgoing power into a sinusoidal single phase, 60 Hz, a/c power source. The UPS system shall consist of a rectifier, battery charger, batteries, inverter, integral static bypass switch, and maintenance bypass switch or transfer switch as required. The UPS system shall include all UPS power distribution terminals, circuit breakers, junction boxes, and connectors required for a complete and working system.

C. The UPS System shall be installed and wired as indicated on the Electrical Drawings.

D. Additional accessories and appurtenances shall be provided as specified herein to provide a complete and properly operating system.

E. Control System: The Instrumentation and Control System Section shall apply to all equipment furnished under the Uninterruptible Power Supply section.

F. Control System Loads: The UPS shall supply Control System and other loads as indicated on the drawings or herein.

1.02 GENERAL

A. Equipment furnished under the Uninterruptible Power Supply section shall be fabricated and assembled in full conformity with the drawings, specifications, engineering data, instructions, and recommendations of the equipment manufacturer, unless exceptions are noted by Engineer.

B. General Equipment Stipulations: The General Equipment Stipulations shall apply to all equipment and materials provided under this section. If requirements in this specification differ from those in the General Equipment Stipulations, the requirements specified herein shall take precedence.

C. Drawings: Supplementing this section, the drawings indicate locations and arrangement of enclosures and provide one-line diagrams or panelboard schedules regarding the connection and interaction with other equipment.

D. Nameplates: Each UPS shall be identified with a suitable engraved nameplate mounted on the top front. A nameplate shall also be provided for each of the external transfer switches. The nameplates shall be made of laminated black and white plastic. The lettering shall be bold, not less than 1/4 inch [6 mm]

square, engraved by cutting through the white outside layer so that the letters appear black.

1.03 SUBMITTALS

A. In addition to the Instrumentation and Control System section, all material and equipment documentation shall be submitted for review as specified in the Submittals section. Each sheet of descriptive literature submitted shall be clearly marked to identify the material or equipment as follows:
   1. Equipment and materials descriptive literature and drawings shall show the specification paragraph for which equipment applies.
   2. Sheets or drawings showing items not applicable to this system, or not requiring review, shall contain clear indication as to which section or sections require review.
   3. Functional line diagrams showing all major system components and external connection diagrams for all electrical equipment shall be submitted for review. A manufacturer's standard connection diagram or schematic showing more than one scheme of connection will not be accepted, unless it is clearly marked to show the intended connections.
   4. A report certifying that the UPS will provide the required backup time at the specified UPS loading and UPS ambient temperature. The report shall include anticipated continuous electrical load calculations, backup time calculations and shall indicate the battery end-voltage used in the analysis.
   5. Documentation showing the physical dimensions, weight, and wiring connection points of the UPS/battery system being provided.

1.04 DELIVERY, STORAGE, AND SHIPPING

A. Delivery, storage and shipping shall be as specified in the Instrumentation and Control System section.

1.05 WARRANTY

A. General Warranty: The special warranties specified in this Article shall not deprive OWNER of other rights or remedies OWNER may otherwise have under the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by CONTRACTOR under the Contract Documents.

B. Special Warranties: Furnish manufacturer's written two-year warranty from date of substantial completion against failure or faulty workmanship of each UPS. Services during the warranty period shall include repair or replacement, and all costs related to visits to site, as necessary to remedy defects.

PART 2 - PRODUCTS

2.01 GENERAL

A. All equipment, enclosures, and accessories shall be designed, assembled and connected in accordance with the requirements of these specifications and the drawings. Enclosures shall be NEMA Type 12.

B. Main UPS System Design Requirements: The UPS system(s) have the following estimated capacity and rated for the following voltages. The System Supplier is to confirm the required capacity and adjust accordingly. The UPS shall have an excess capacity of 25% of the estimated load. MOCP is powered from Main UPS system.

Tag number	UPS-__100__
Estimated Load Plus 25%	__6__ KVA
Input voltage at 60 Hz, +10 to -15 percent	120/208 single phase
Output voltage at 60 Hz single phase	120/208 split phase
Minimum Back up time required (minutes) at connected load.	_10___
Minimum UPS Size	_6__ KVA
N+X Redundancy	
Battery Modules	_2_ (battery strings)
Chassis Size	_12_ slot Floor Mounted

The UPS system(s) shall have the following ratings and features.

Capacity, peak (minimum)	150 percent of continuous power rating for 10 seconds.
Input Power Factor	0.95
Input Frequency	60 Hz (+/- 3 Hz)
Topology	True online, double conversion
Surge Suppression	IEEE/ANSI C62.41
Output On-Utility Voltage Regulation	+/- 3% of nominal
Output On-Battery Voltage Regulation	+/- 3% of nominal
Output Frequency Regulation	+/- 3 Hz online, +/- 1 Hz on battery
Output Efficiency	89 normal operation
Harmonic distortion (max)	5 percent.
Operating temperature-humidity	0 to 40°C; 50 to 90 percent relative humidity, non-condensing.
Battery Type	Sealed lead-acid maintenance free
Battery Recharge time (max)	<2 hours from complete discharge to 80% capacity
Relay Dry Contact Outputs	Low battery, on inverter, fault, and on bypass

Optional RS-232 Modbus Serial Link	Yes
Optional Internal Bypass Switch	Yes
Optional External Bypass Switch	As required per Section 2.5
Optional Automatic Transfer Switch	Not Used
Optional RS-232 Modbus Slave serial communications port	No Used
Installation	Freestanding

C. Acceptable Manufacturers: All systems supplied under this contract shall be of the same manufacturer. The UPS shall be as manufactured by Eaton-Powerware Corp., Model 9125 for any UPS under 3 KVA, or Powerware Model 9170+ for any UPS between 3 KVA and 18 KVA, or approved equal.

D. Terminal Blocks: Wiring for external circuits, including all alarm contacts, shall be brought to grouped terminal blocks located for convenient connection. Provisions shall include suitable marked terminal blocks for connection of No. 12 AWG control wiring, and for input/output power conductors as sized on the drawings. Terminal designations shall agree with manufacturer's wiring diagram.

2.02 BATTERY CHARGER/RECTIFIER AND BATTERIES

A. The battery charger and the rectifier shall have the following characteristics:

1. The rectifier shall convert the incoming ac power to dc power to energize the static inverter.
2. The battery charger shall supply a float current to the batteries to maintain them at a fully charged state while incoming power is being provided. The charging voltage shall be temperature-compensated over the entire operating temperature range to avoid overcharging or undercharging the batteries. The battery charger shall automatically apply an elevated voltage (equalization charge) to the batteries if and as required by the battery manufacturer.
3. The battery shall provide backup power for the UPS when incoming commercial power is not available. The battery cells shall be gell cell or sealed lead-acid type. The batteries shall be integral to the UPS unless additional external batteries are required to meet the time requirement. . Batteries shall have capacity to supply the dc power to the UPS while operating at full load for a period of not less than as required in Table 2-1.01 at 25 deg C. The battery shall have an expected life of 5 years and shall carry a one-year warranty.

2.03 STATIC INVERTER

A. The solid-state inverter shall employ solid state switches and other devices for converting direct current power to essentially sinusoidal alternating current power. The static inverter shall conform to the following characteristics and requirements.

1. Automatic Synchronization: During normal operation, the inverter shall provide power to critical loads. The utility electric system will act as an

alternate supply. Inverter equipment shall include stable solid-state devices designed to automatically maintain inverter output in phase with the utility electric system.

2. Overload, Short Circuit, and Load Loss: The inverter shall have input and output fuses and other equipment necessary to protect from overload, short circuit, and 100 percent loss of load. Current limiting features shall also be provided.
3. Loss of Supply Voltages: The inverter shall include protective devices to prevent damage resulting from excursion, loss, or restoration of its synchronization voltage and its dc input voltage and any inrush current occurrences associated with such conditions.

2.04 EXTERNAL AUTOMATIC TRANSFER SWITCH (NOT USED)

2.05 MAINTENANCE BYPASS SWITCH

A. Provide an external Make Before Break Switch (MBB) for rated load - Powerware Model external maintenance bypass switch or approved equal.

2.06 INPUT/OUTPUT CONNECTIONS

A. A hardwired terminal strip shall be provided for UPS input and UPS output wiring connections.

B. Modbus Communications - UPS shall be provided with Ethernet port to communicate status and diagnostics using Modbus/TCP protocol.

2.07 CONTROL, INDICATION AND ALARM

A. Controls, indicators and alarms shall be provided as a part of the UPS. Control buttons and LED indicators shall be provided on the UPS panel and shall be permanently labeled.

B. Controls: A UPS Self Test, and system "ON" and "OFF" buttons for battery and utility power shall be provided.

C. Indication: An LED display for percent UPS load capacity and percent remaining battery capacity shall be provided.
   1. LED indicators for inverter ready, frequency, battery voltage, overload, over temperature, and impending shutdown conditions shall be provided.
   2. LED indicators for normal mode, battery mode, and bypass mode shall be provided.

D. Remote Status and Alarms: The UPS shall have the following provisions for remote status and alarms.
   1. UPS Common Fault - Dry contact
   2. UPS 'On Battery' - Dry Contact
   3. UPS Low Battery - Dry contact
   4. UPS Bypassed - Dry Contact

PART 3 - EXECUTION

3.01 INSTALLATION REQUIREMENTS

A. Installation requirements are specified in the Instrumentation and Control System section and shall be coordinated with the Electrical section.

3.02 MANUFACTURERS FIELD SERVICES

A. A factory trained manufacturer's representative shall be provided for installation, startup and training services, as specified, to ensure that installation of the UPS complies with manufacturer's recommendations and requirements.

B. The representative shall make the following minimum visits:
   1. Installation assistance and checking completed installation; one four hour visit
   2. Startup services in presence of ENGINEER; one hour four visit
   3. Operation and Maintenance training services with OWNER and/or DESIGNATED OPERATING AGENT; one six hour visit

C. Manufacturer's representative shall test operate the system in the presence of the ENGINEER and verify that the equipment conforms to the specification requirements. Representative shall visit the site as often as necessary until all trouble is corrected and the equipment or system is entirely satisfactory.

D. All costs, including travel, lodging, meals and incidentals, shall be at no cost to the OWNER.

END OF SECTION

SECTION 16611 SINGLE-PHASE UNINTERRUPTIBLE POWER SUPPLY FOR EGRESS LIGHTING

PART 1 - GENERAL

1.01 SCOPE

A. CONTRACTOR shall provide all labor, materials, equipment and incidentals as shown, specified and required to furnish and install a UL-924 single-phase, three-wire, on-line, continuous duty uninterruptible power system (UPS). The UPS shall operate in conjunction with the plant electrical system to provide back-up power for emergency egress lighting and exit signs.

B. Modes of Operation: The UPS shall operate as an on-line system in the modes listed below:
   1. Normal: The inverter/battery charger shall operate in an on-line manner to continuously maintain a float charge on the batteries. Egress lighting supply shall be OFF. Exit sign supply shall always be ON.
   2. Emergency: Upon failure of the AC input source, the egress lighting supply shall be turned ON, through a separate contactor, and power shall be supplied to both egress lighting and exit signs through a hardwired panel.
   3. Recharge: Upon restoration of the AC input source prior to complete battery discharge, the contactor will disconnect the egress lighting, as normal lighting will be available, and the inverter/battery charger shall simultaneously recharge the battery and provide supply to exit signs.
   4. General Alarm: Upon load or UPS fault condition, the UPS shall alarm locally, through a pulsing sounder, flashing light and closure of a 120V, 5A dry contact.
   5. Test: A status light and test switch shall be provided.

1.02 QUALITY ASSURANCE

A. Reference Standards: Comply with the latest edition of the applicable provisions and recommendations of the following, except as otherwise shown or specified:
   1. Underwriters Laboratories standards for emergency egress lighting sources.

B. Manufacturer Qualifications: The manufacturer shall have a minimum of 10 years experience in design and manufacture of single-phase three-wire, UPS in this size category. The equipment offered shall have not less than 2 years of successful in-service experience, with names and phone numbers of 5 using organizations available upon request.

C. Standards:
   1. American National Standards Institute (ANSI C57.110).

2. Institute of Electrical and Electronic Engineers (IEEE 519-1992) (C62.41-1991).
3. National Electrical Manufacturers Association (NEMA PE-1).
4. National Electrical Code (NEC 2005, Article 700).
5. National Fire Protection Association (NFPA 101, 111).
6. Underwriters Laboratories (UL).
7. Federal Communications Commission (FCC Part 15, Sec. J, Class A).
8. Listed UL Standards UL 924, UL 924 Auxiliary Lighting and Power Equipment (UL924A), UL 1778, C-UL listing to CSA C22.2, No. 107.1-M01.

1.03 SUBMITTALS

A. Shop Drawings: Comply with Section 01331, Submittals, and the additional requirements below: Submit for approval the following:
   1 As-bid system bill of materials.
   2. Product catalog sheets with items not offered marked out.
   3. System single-line operation diagram.
   4. Installation information, including weights, dimensions and heat rejection at 100% and 50% full load operation, normal and emergency modes.
   5. Terminal connection locations for power and control.

B. Certified statement of guaranteed response of system to bolted fault on load terminals.

C. Operation and Maintenance Data: Submit Operations and Maintenance Manuals in accordance with Section 01781, Maintenance and Operating Instruction.

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Delivery of Materials:
   1. Refer to Section 01651, Transportation and Handling of Materials and Equipment.

B. Storage of Materials:
   2. Comply with Section 01661, Storage and Protection.

C. Handling of Materials:
   1. Comply with Section 01651, Transportation and Handling of Materials and Equipment.

1.05 WARRANTY

A. The UPS shall be warranted against defects in workmanship and materials for 2 years from start-up date. This warranty shall include all internal parts and batteries.

B. Batteries shall be warranted by the manufacturer for 10 years on a pro-rata basis from start-up date.

PART 2 - PRODUCTS

2.01 MATERIALS

A. System Continuous Rating: 208Y120V, 1-phase AC, 60 Hz in, 208Y120V 60 Hz out, 3 KVA at greater than .8 power factor. Maximum THD: 3%. Output frequency: 60Hz ±5% under full range. Overload Rating: 105% continuous, 125% for 10 seconds. Voltage Regulation: ±2%. Battery Capacity: 90 minutes at rated load with alarming at least 3 minutes before failure.

B. UPS shall have internal bypass; automatic on overload or UPS failure.

C. UPS shall have separate "Make-Before-Break" maintenance bypass to isolate unit for maintenance or removal.

D. All materials comprising the UPS shall be new, of current manufacture, and shall not have been in prior service except as required during factory testing. The UPS shall contain no polyfluidated hydrocarbons.

E. Remote Alarm contacts rated 120 VAC, 5A, shall be provided for the following:
1. UPS ON.
2. Internal Bypass Operation.
3. Battery Operation.
4. Low Battery.
5. General Alarm.

F. Provide Modibus TCP/IP communication capabilities for UPS monitoring.

2.02 MANUFACTURER

A. The UPS shall be manufactured by one of the following:
1. Control Power Company.
2. Myers.
3. Mitsubishi.

2.03 SPARE PARTS

A. Comply with Section 01750, Spare Parts and Maintenance Materials.

PART 3 - EXECUTION

3.01 INSPECTION

A. CONTRACTOR shall examine the conditions under which the Work is to be installed and notify the ENGINEER in writing of conditions detrimental to the proper and timely completion of the Work. Do not proceed with the Work until unsatisfactory conditions have been corrected.

3.02 FIELD QUALITY CONTROL

A. CONTRACTOR shall demonstrate operation of unit to Owner, and as required by Authority Having Jurisdiction. Schedule the demonstration at least 10 days before planned date.

END OF SECTION

3.07 VERTICAL TURBINE PUMP DATA SHEET

Manufacturer & Model	Peerless
(Basis of Design)	Model 32 HXB-1
Quantity	2
Design Condition:	**High Flow**
Capacity - GPM	15,200
TDH - Feet	48
Design Condition:	**Low Flow**
Capacity - GPM	3,800
TDH - Feet	15
Max Speed - RPM	900
Type of Speed	Variable
Maximum Horsepower	300
Minimum Pump Efficiency*	80%
Max. Column Size - Inches	30
Max. Pump Discharge Size - Inches	24
Discharge Pipe Size - Inches	24
Barrel or Can Required	No
NPSH Required - Feet	17
Motor Voltage - Volts	460
Type of Motor Drive	Variable Frequency

* Pump shall have stated minimum efficiency at some point along the curve - it does not need to correspond with either of the design points.

ATTENDANCE RECORD

NON-MANDATORY

INFORMATION CONFERENCE

Title: **Water Treatment Plant- Biological Treatment Unit**

Location: Manatee County Public Works Complex, 1022 26th Avenue (Conference room A-B)

Date / Time: January 22, 2016 / 9:00 AM

IFB/RFP#: IFB# 16-0435CD

TELEPHONE/FAX	NAME / TITLE (PLEASE PRINT)	REPRESENTING
941-749-3048	Chris Daley, CPPO CPPB / Contract Specialist	Manatee County Purchasing
813-390-7120	DAVID BUSHOTA / Poole & Kent	Poole & Kent
786-479-4540	Vincent Laputo / Poole & Kent	
239-340-6900	Darrin Lindsay Project Manager	Layne Heavy Civil
239 898 3582	Robert Parker - PM	PWC Joint Venture LLC
813-425-1445	JUSTIN MCRAE - PCL CONSTRUCTION	PCL
941-722-0621	Greg Doan - TLC Diversified	TLC Diversified
813-951-1514	JEFF SMITH PRIMARY FLOW SIGNAL	VENTURI FLOWMETERS
813-514-0391	SAM BAKER SOUTHEASTERN Pump	SOUTHEASTERN PUMP
863-425-2698	Tim Kirkonicz - E.E.S. Leedy Electric	
941-792-8811	Mark Simpson - WATER DIVISION MGR.	MANATEE COUNTY
708 7450	Jeff STREITMATTER	MCPL
786-566 3985	KEITH HARRIS	NICHOLSON CONST. CO

863-557-8799	Curtis Baenhill	B.L. Smith Electric
8636408531	Jeffrey James	Vogel Bros.
352.332.7953	Adam Brake	Osprey Constructors
727-224-2063	Sue Reseides	Nelson & Crabb
727-442-7196	Phil Locke	McKim & Creed
941-377-8555	Anthony Costuciore	Cardinal Contractors
904-268-2181	Mike Higginbotham	Ortega Ind. Contr.
727 845-7544	Robert Smith	Brandon Design Bld
4072571558	Scott Ferguson	ACIPCO
941-746-3020	Kirk Cameron	WTP / Manatee
941-746-3020	Katie Gilmore	WTP / Manatee

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U.S. SECURITY ASSOCIATES, INC.®

D.E.P. 0930-1000 (2-3)

VISITOR/EMPLOYEE REGISTER

1091- m.c.w.t.p
FACILITY

(1)

1-22-16
DATE

NAME	FIRM	NATURE OF BUSINESS	TIME IN	TIME OUT	GUARD
Jose	dedicated	Sludge	0255	0329	F13685
BOB+IAN	R.C.S ENG.	K.CAMERON	0738	1135	6W6G6
JOE, BERT, DARYL	MCO/HI-WAY	S-PILE	0741	0748	TA1954
REGGIE	WASTE-PRO	DUMPSTERS	0931	0934	N2229P
BUDDY	MCO/HI-WAY	B-PILE-HAUL	0940	0946	239233
ROGER KIMBERLY	D.E.P.	AMANDA/LAB	0944	1125	DEP06084
DAVID + VINCENT	POOLE+KENT	K.CAMERON	0949	1039	DPBT96
JUSTIN	PCL CONS.	" "	0950	1040	LZP340
BOB	P.W.C	" "	0951	1051	ED260B
ADAM	OSPREY	" "	0952	1052	DJEL43
MICHAEL	ORTEGA IND CONC.	" "	0953	1040	EITW91
KEITH	NICHOLSON	" "	0953	1037	C4CD97
JOSEPH	MCKIM & CREED	" "	0954	1040	6320HK
JEFF	VOGEL BROS	" "	0955	1055	6CV62C
CHRIS	MCO	" "	0956	1054	TC8207
JEFF	PRIMARY FLOW SIGNAL	" "	0958	1041	400REE
RICARDO & JEFF	MCO	" "	1000	1053	TA1888
PHILLIP	McKim+Creed	" "	1000	1052	J186IE

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260 276
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U.S. SECURITY ASSOCIATES, INC.®

356-9855 - KATIE

VISITOR/EMPLOYEE REGISTER

1091 - MCWTP
FACILITY

(1)

FEB 2, 2016
DATE

NAME	FIRM	NATURE OF BUSINESS	TIME IN	TIME OUT	GUARD	
LAURA	TRI BOND	CLEANING	0640	1208	594 IIK	—
JOHN KUNZ	MCO	INTERVIEW/CAMERON	0713	0839	J26SJT	
DERRICK	A.M.E.C. FOSTER	K. GILMORE / DAM	0754	1323	W'	—
JOSH	" "	" " / DAM	0808	1242	WEJIS	—
JAMES + DARYL	MCO/HI-WAY	SPILE/MOWERS	0823	1040	237281	—
MICHAEL SMITH	MAYMINE	INTERVIEW	0842	0941	359QST	
GABRIEL	ONIU - PAINT	K. GILMORE	0859	1048	MACAST	+—
MARK SIMPSON	MCO/DIV OF UTIL.	" "	0937	1110	N42ASV	+
JAIME, FRANCHESKA	INT.	INT.	0940	1034	CCSC12	
ERIC	WHARTON SMITH CONS.	K. GILMORE	0942	1048	DZLZ86	+—
WILLIAM	" "	" "	0950	1048	AFJJ60	+—
MATT	" "	" "	0951	1048	DXNQ78	+—
CHRIS	T.S.U	BLEACH	0953	1148	CADV60	
ANDRESSZ	P.C.L. CONST.	K. GILMORE	0959	1121	ERQRT4	+
JOE	PETTICOAT-SCHMITT	" "	1005	1121	CTB403	+
RYAN	MAYMANNE	INTERVIEW	1018	1145	BLR4USN	
RICARDO	FED-EX	DELIVERY	1028	1035	117726	
ERIC	A.M.E.C FOSTER	DAM	1101	1608	BNYF97	

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