Indian River County Purchasing Division purchasing@ircgov.com



ADDENDUM NO. 3

Issue Date: July 07, 2020

Project Name: Moorhen Marsh Low Energy Aquatic Plant System

Bid Number: 2020030

Bid Opening Date: July 14, 2020

This addendum is being released to modify bid documents and to answer questions received to date. Please be advised that no further questions will be answered for this bid as the deadline for questions has passed.

The information and documents contained in this addendum are hereby incorporated in the invitation to bid. This addendum must be acknowledged where indicated on the bid form, or the bid will be declared non-responsive.

QUESTIONS AND ANSWERS:

 Question regarding Luminaire Schedule on E5 Top right of the page gives pole description as direct burial concrete. The part number in the luminaire schedule is for an aluminum pole. Please advise.

Response: The pole shall be concrete. The note in the Luminaire Schedule on Sheet E5 (attached) has been revised to state: "MOUNTED ON UTILITIES STRUCTURES INC. POLE # USI17TI-6636. 12 FT ABOVE & 5 FT BELOW."

2. Section 02235. In the landscape specs 3.25 & 3.26, the notes in the drawing L2 regarding the "PURPLE" color code planting for Wetland Polishing Marsh, it mentions using 2" plugs for the aquatic plant, duck potato. When other aquatic plants (pickerelweed, bulrush & club rush) in 3.22 & 3.23 were specified as being bare root. Can we use the bare root for the duck potato also.

Response: For bidding purposes use 2" plugs for duck potato.

3. Section 02235-2. Sect 1.4 it mentions not using glyphosate, which is very commonly used for maintenance of nuisance exotics, is prohibited. Can we verify that using glyphosate is prohibited or get permission to use it?

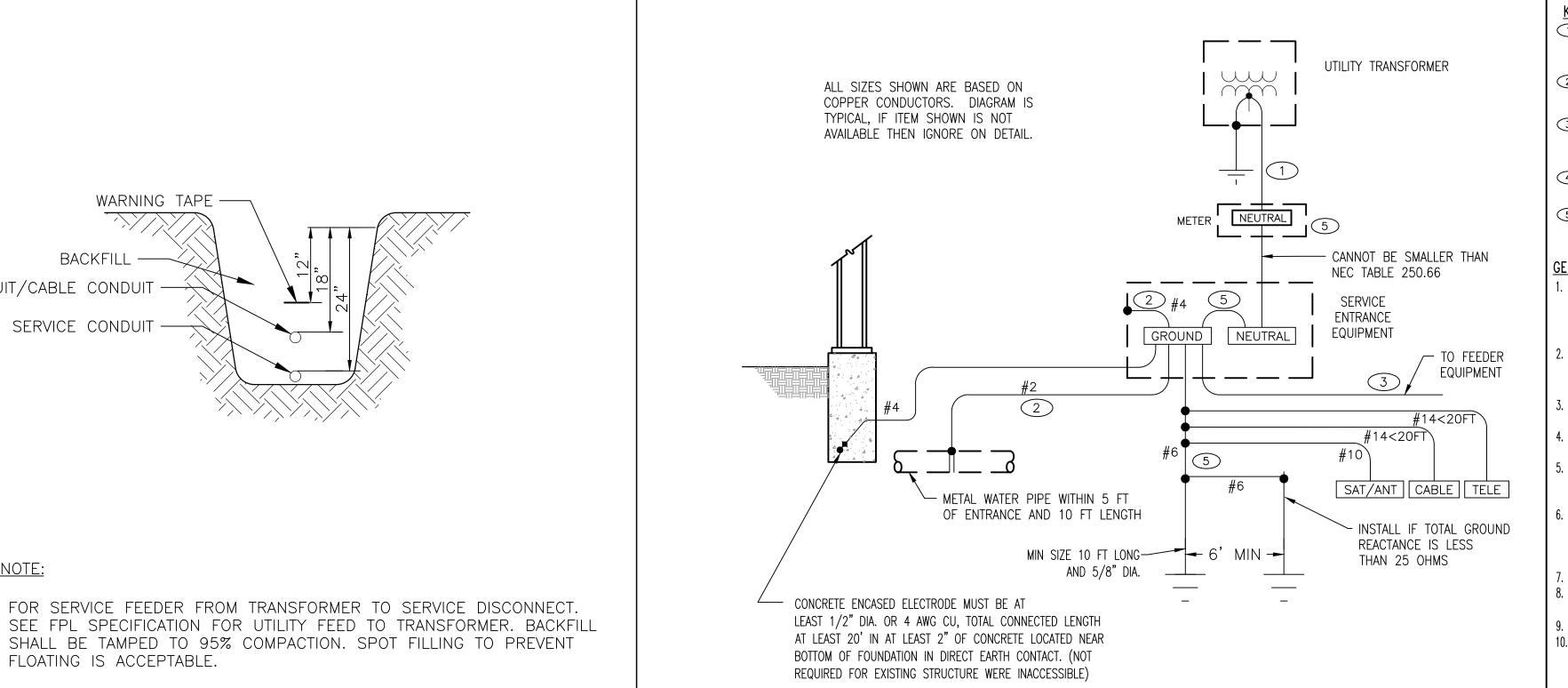
Response: Under no circumstance is glyphosate or any product containing glyphosate allowed to be used on County projects or County property.

- 4. Section 02235-2. Sect 1.4, all trees that are NOT removed due to the work, you want left alone or cut, treated but not pulled from the canopy. Is this correct?
 Response: All vines in trees that are to remain shall be dealt with as specified in paragraph 1.4.C. They are not to be pulled from the tree canopy because doing so may damage tree branches.
- 5. We are bidding the Moorhen Marsh project and would like to see if we can request the CAD or 3D BIM model from the design team. We use these models as reference to complete preconstruction services and takeoffs.

Response: At this time the information is not available. It may be made available to the selected contractor upon award of the project.

Attachments:

Revised Sheet E5 – Electrical Equipment Schedules and Details



ENTRANCE GROUNDING SYSTEM DETAIL

KEYED NOTES

- 1 NSTALL GROUNDED (NEUTRAL) CONDUCTOR WITHOUT EGC. NEUTRAL CONDUCTOR CANNOT BE SMALLER THAN NEC TABLE 250.66. SEE ELECTRICAL ONE-LINE FOR SIZE.
- ② IINSTALL BONDING JUMPER THAT IS SIZED BASED ON NEC TABLE 250.66 USING THE SERVICE OR SEPARATELY-DERIVED SYSTEM PHASE CONDUCTOR SIZE.
- 3 INSTALL EQUIPMENT GROUNDING CONDUCTOR SIZED BASED ON NEC TABLE 250.122 USING THE FEEDER OVER CURRENT DEVICE SIZE. IF THE FEEDER SUPPLIES A SEPARATE STRUCTURE THEN DRIVE
- AN ADDITIONAL GROUND ROD AT STRUCTURE AND GROUND TO PANEL, BUT ISOLATE NEUTRAL, 4 INSTALL GROUNDING ELECTRODE CONDUCTOR THAT IS SIZED BASED ON NEC TABLE 250.66 USING THE SEPARATELY DERIVED SYSTEM PHASE CONDUCTOR SIZE.
- 5 GROUND ROD CAN BE CONNECTED TO NEUTRAL OF METER INSTEAD OF SE GROUND. MIN SIZE SHALL BE 5/8" X 10'

GENERAL NOTES

SWITCH SCHEDULE

NOTE 1

DECORA TYPE, SPECIFICATION

GRADE, RATED 20 AMPS.

- EACH GROUNDING ELECTRODE SHOWN SHALL ONLY BE USED IF PRESENT AT EACH STRUCTURE/BUILDING SERVED. IF NONE ARE PART OF THE STRUCTURE/BUILDING THAN AT MINIMUM A GROUND ROD ELECTRODE SHALL BE INSTALLED. A METAL WATER PIPE SHALL NOT BE USED AS THE SOLE GROUNDING ELECTRODE SYSTEM (GES).
- BOND GAS PIPE ON THE BUILDING SIDE OF THE GAS METER THAT IS SIZED BASED ON THE OCPD SERVING THE STRUCTURE/BUILDING USING NEC TABLE 250.122 WITH A MINIMUM SIZE
- CONDUCTOR SIZES SHOWN ARE MINIMUM AND MAY BE LARGER THAN THE MINIMUM SIZES
- REQUIRED BY NEC. INSTALL GROUNDING CONNECTIONS TO BUILDING STRUCTURE AND WATER PIPES AT LOCATIONS
- THAT ARE VISIBLE AND ACCESSIBLE FOR INSPECTION, MAINTENANCE, AND TESTING. INSTALL AN INSULATED THROAT GROUNDING BUSHING ON EACH METALLIC SERVICE ENTRANCE CONDUIT. BOND TO GROUND BUS USING CONDUCTOR THAT IS SIZED BASED ON NEC TABLE
- 250.66 USING THE SERVICE PHASE CONDUCTOR SIZE. INSTALL AN INSULATED THROAT GROUNDING BUSHING ON EACH METALLIC FEEDER CONDUIT. BOND TO GROUND BUS USING CONDUCTOR THAT IS SIZED BASED ON NEC TABLE 250.122 USING THE FEEDER CIRCUIT OVER CURRENT DEVICE SIZE OR THE SEPARATELY DERIVED SYSTEM OVER CURRENT DEVICE SIZE.
- BOND HOT AND COLD WATER PIPING SYSTEMS. INSTALL LISTED IRREVERSIBLE COMPRESSION CONNECTOR WITH TAMPER PROOF HARDWARE OR INSTALL EXOTHERMIC WELD FOR CONNECTIONS.
- INSTALL 5/8" X 10' GROUND ROD. OTHER METAL PIPING OR EXPOSED STRUCTURAL METALS THAT ARE LIKELY TO BE ENERGIZED SHALL

BE BONDED TO THE SERVICE EQUIPMENT ENCLOSURE USING THE LARGEST GROUND WIRE.

SCALE: NONE

*NUMBER OF FIXTURES VARIES. CUT OFF FIXTURE DIRECT BURIAL CONCRETE POLE. CONTRACTOR SHALL PROVIDE CALCULATION FOR BURIAL DEPTH REQUIRED TO MEET FBC REQUIREMENTS FOR POLE WITH INSTALLED LUMINAIRES. - HANDHOLE WITH COVER AND GASKET. - BACKFILL WITH NEW CLEAN DRY FILL AND COMPACT TO A MINIMUM OF 95% OF MAX. DRY DENSITY AS DETERMINED BY MODIFIED PROCTOR. BACKFILL TO A POINT 2" ABOVE FINAL GRADE. ---- FINISHED GRADE BRANCH CIRCUIT CONDUITS AS INDICATED ON PLAN GROMMETED HOLE - TYPICAL AUGER HOLE A MINIMUM OF TWO DIAMETERS LARGER THAN POLE DIAMETER. UNDISTURBED EARTH COMPACT EARTH BELOW EACH POLE PRIOR TO INSTALLATION.

GENERAL DESCRIPTION:

1. DIRECT BURIAL CONCRETE POLE WITH HANDHOLE COVER. 2. PROVIDE SIGN AND SEALED SHOP DRAWING SIGNED BY A STRUCTURAL ENGINEER DEMONSTRATING POLE AND FIXTURE SUPPORT COMPLIES WITH FBC WIND LOAD REQUIREMENTS.

CONNECT 1 #12 AWG INSULATED (TW GREEN) STRANDED CU BOND WIRE CONNECTING LUMINAIRE WITH GROUNDING LUG AT TOP AND BASE OF POLE THEN TO CIRCUIT EQUIPMENT GROUND CONDUCTOR. LIGHTING POLE WITHOUT GROUND ROD DETAIL

GENERAL SCHEDULE CALLOUTSYMBOLDESCRIPTION VOLTSAMPSKVACIRCUITWIRE CALLOUT NOTESDUPERON FLEXRAKE MOTOR BSP-1,3,5 FLEXRAKE 1/2 HP 3#12,#12G SUPPLY A LOCAL DISCONNECT. O U SUPPLIED WITH THREE WIRE-SHEATHED FM1 BADGER METER 0.22 0.03 P2-1 1#10,#10N,#10G M-SERIES M2000 CABLE WITH OVERALL CABLE DIAMETER OF 0.2-0.45 INCH. RUN FACTORY SUPPLIED REMOTE AMPLIFIER DATA CABLE TO DETECTOR IN 1" CONDUIT. INSTALL IN TYPE 316 STAINLESS STEEL ENCLOSURE WITH SNAP SWITCH AS DISCONNECT. SUPPLIED WITH THREE WIRE-SHEATHED FM2 0.03 P2-3 BADGER METER 0.22 1#10,#10N,#10G CABLE WITH OVERALL CABLE DIAMETER OF M-SERIES M2000 REMOTE AMPLIFIER 0.2-0.45 INCH. RUN FACTORY SUPPLIED DATA CABLE TO DETECTOR IN 1" CONDUIT. **S** INSTALL IN TYPE 316 STAINLESS STEEL ENCLOSURE WITH SNAP SWITCH AS DISCONNECT. FLYTE NP N-3171.095 480 25 HP 3/4"C,3#8,#10G PUMP 1 0 28.27 PCP-2,4,6FLYTE NP PUMP 2 64.02 60 HP PCP-8,10,12 1-1/2"C,3#1,#8G N-3301.185/095DAYTON 3YU69: 1/4 0.18 P2-3 1#10,#10N,#10G RUN POWER CORD TO TYPE 316 HP SUBMERSIBLE STAINLESS STEEL ENCLOSURE WITH SNAP SUMP PUMP, VERTICAL SWITCH AS DISCONNECT. SWITCH TYPE. POLYPROPYLENE BASE MATERIAL. SP DAYTON 3YU69: 1/4 0.18 P2-1 1#10,#10N,#10G RUN POWER CORD TO TYPE 316 HP SUBMERSIBLE STAINLESS STEEL ENCLOSURE WITH SNAP SUMP PUMP, VERTICAL SWITCH AS DISCONNECT. SWITCH TYPE, POLYPROPYLENE BASE MATERIAL. $\bigcap M$ 6.72 5 HP P1-10,123/4"C,2#6,#10G

SCALE: NONE

SEE COUNTY SPECS FOR EXACT DESCRIPTION AND REQUIREMENTS

WARNING TAPE -

FOR SERVICE FEEDER FROM TRANSFORMER TO SERVICE DISCONNECT.

SHALL BE TAMPED TO 95% COMPACTION. SPOT FILLING TO PREVENT

BACKFILL -

SERVICE CONDUIT -

FLOATING IS ACCEPTABLE.

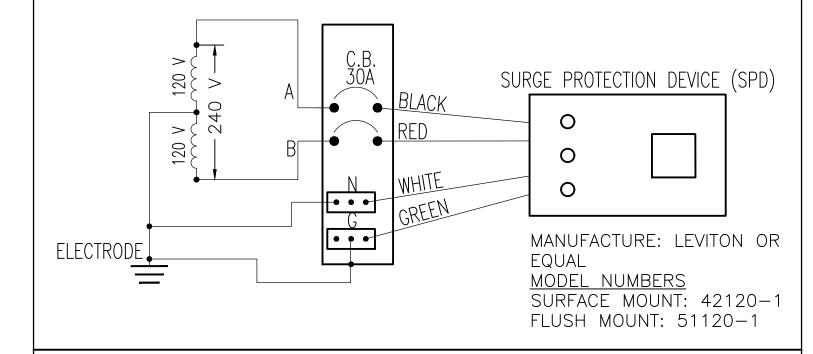
SCALE: NONE

TRENCHING DETAIL (TYPICAL)

CIRCUIT/CABLE CONDUIT

	SIMDUL
	\$

NOTE: ONLY USE A SPD DESIGNED FOR A 120/240 SINGLE PHASE OTHER VOLTAGE WILL CAUSE SPD TO FAIL AND NOT PROTECT



GENERAL SPD INSTALLATION NOTES:

- 1. LOCATE THE SPD UNIT AS CLOSE AS POSSIBLE TO THE ELECTRICAL PANEL SERVING THE LOADS TO BE PROTECTED TO MINIMIZE THE EFFECTS OF CONNECTION LEAD-LENGTH RESISTANCE AND INDUCTANCE.
- 2. LEADS FROM THE SPD UNIT MUST BE CONNECTED TO THE POWER MAINS THROUGH A DISCONNECT AND FUSING MEANS. EITHER DEDICATED 30-AMP BRANCH CIRCUIT BREAKERS (INDEPENDENT SINGLE-POLE PREFERRED), OR A FUSED 30-AMP DISCONNECT SWITCH MAY BE USED.
- 3. THE TOTAL CONNECTION LENGTH BETWEEN THE BRANCH POWER LINES AND SPD DEVICE SHOULD BE AS SHORT AS POSSIBLE (18"MAX). LEADS FROM THE SPD UNITS SHOULD BE BUNDLED TOGETHER AND SECURED WITH CABLE TIES WHEN POSSIBLE.
- 4. THE SUPPRESSOR'S BLACK WIRES MAY BE CONNECTED TO L1 OR L2 WITHOUT REGARD TO PHASE.
- 5. DO NOT CONNECT THE GREEN WIRE TO ISOLATED GROUND CONDUCTOR(S).

SPD WIRING	DETAIL	_	1	PHASE,	3-WIRE
SCALE: NONE					

SYMBOL	NEMA	VOLTS	FEATURES	NOTE 1	NOTE 2
Ф	5-15-2R	120V 1P 2W	GND	STANDARD WALL RECEPTACLE MOUNTED 48" AFF	
<u></u>	5-15/20R	120V 1P 2W	WP, GFI, GND	PEDESTAL RECEPTACLE	PEDOC POWER SOLUTIONS 1P24V S/ OUTLET BOX W/INTEGRAL BASE MOUNTED TO CONCRETE PAD.
Ф	5-15/20R	120V 1P 2W	GFI, GND	STANDARD WALL RECEPTACLE MOUNTED 18" AFF (WEATHER PROOF PER NEC, GFCI)	

LUMINAIRE SCHEDULE										
CALLOUT	SYMB0L	LAMP	DESCRIPTION	MOUNTING	MODEL	INPUT WATTS	VOLTS	NOTE 1		
A	\bigcirc	(1) 77W LED	LOW BAY PENDENT-TOP BAY LED	JBOX/HOOK /PIPE MOUNT	METALUX TBLED-LD1-8-W-UNV-L840-CD1-U	77	120V 1P 2W			
В	=	(1) 58W LED	WALL MOUNT LED LUMINAIRE W/PHOTOCELL	WALL	LUMARK XTOR6B-PC1	58	120V 1P 2W			
S1	•—	(1) 191W LED	LED SITE LUMINAIRE	POLE	MCGRAW EDISON GLEON-AF-03-LED-E1-5MQ-FINISH	191	120V 1P 2W	MOUNTED ON UTILITIES STRUCTURES INC. POLE # USI17TI-6636. 12 FT ABOVE & 5 FT BELOW.		

ШШ SEASURI GINE MEP Design C Nour J \approx Y Z S S TRIC, PMEN ULES LECTF QUIPN HEDU DETA \bigcirc APS PUMPING JG FL MARSH CREENING IONS BUIL - SCF MO(ECTRIC,

> ENGINEER CERTIFICATION ALBERT B JENKS JR. FL. REG. NO. 65050

> > 7/7/20

SHEET

PROJECT NO. TC19032

DATE: