

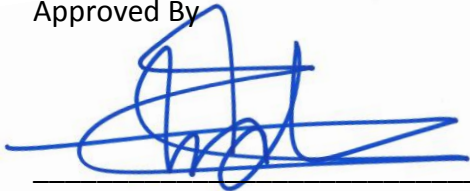
**ADDENDUM #5**

**C19010 – Cerone Division Emergency Generator Replacement**

**ISSUE DATE: JULY 17, 2019**

Notice is hereby given that the following revisions, additions, and modifications are hereby incorporated into the Invitation for Bids (“IFB”).

Approved By



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Ehab Azab  
Construction Contracts Administrator

Approved for Release:



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Daren Gee, P.E.  
Construction Contracts Administration Manager

THIS ADDENDUM CONTAINS 7 PAGES INCLUDING ATTACHMENT

## **VOLUME 1 – SECTION 6 SPECIAL CONDITIONS**

1. **DELETE** the first paragraph of **Section 6.11.2 Power Interruptions and Shutdowns** and **REPLACE** it with the following:

“General Requirements: Unscheduled power interruption shutdowns are not permitted. All power interruption shutdowns require at least a 14 calendar day advance written notification to and approval by VTA. Power interruption shutdowns must occur only on Saturdays and Sundays, and must not exceed a 12 hour duration, starting no earlier than 6:00AM and ending no later than 6:00PM on any day. During power interruption shutdowns, Contractor must provide temporary power to select circuits and equipment located in Buildings B, E, and K, using one (1) Contractor-furnished 100kW mobile generator set, Caterpillar XQ100 or equal, complete with extension cords and fittings to connect to the select circuits and equipment. The select circuits and equipment located in Buildings B, E, and K are as follows:

1. Building B (Bus Operations): Servers and networking equipment, computers, phones, copiers, radios, and light fixtures for VTA dispatch operations staff.
2. Building E (Minor Maintenance): Parts system server, one shop air compressor, and one set of mobile bus lifts.
3. Building K (Maintenance Shop): Voice recording system for network phone system.”

## **VOLUME 2 – TECHNICAL SPECIFICATIONS**

### **Section 23 12 00 - Fueling System**

2. **DELETE** Part 3.04 Installation – Electrical, and **REPLACE** it with the following:

“3.04 INSTALLATION - FUELING SYSTEM ELECTRICAL

- 1 All fueling system electrical cable, wiring, and conduit must be installed in accordance with methods required for installation in a Class 1, Division 2 location . Refer to Contract Drawings, Sh. FE-2.0, General Notes.
  - 2 Refer to Contract Drawings, Sh. FE-2.0 for locations that require Contractor to provide intrinsically safe barriers.”
3. **ADD** the following subsection (e) to Part 3.10 Commissioning, Paragraph C (Functional Performance Testing), sub-paragraph 1:

“e. Fuel tank pressure test.”

### **Section 26 05 19 - 600 Volt or Less Wire and Cable**

4. **DELETE** Paragraph B of Part 1.02 Related Sections and **REPLACE** with “NOT USED”.
5. **ADD** the following Paragraph H to Part 3.02 Installation:

“H. All fueling system electrical cable, wiring, and conduit must be installed in accordance with methods required for installation in a Class 1, Division 2 location. Refer to Contract Drawings, Sh. FE-2.0, General Notes.”

### **Section 26 05 26 - Grounding**

6. **DELETE** Paragraph A of Part 1.02 Related Sections and **REPLACE** with “NOT USED”.

### **Section 26 08 00 - Acceptance Testing**

7. **DELETE** Paragraph A(5) of Part 1.03 Applicable Publications, and **REPLACE** it with the following:  
“5. International Electrical Testing Association - NETA, Acceptance Testing Specifications (ATS).”
8. **DELETE** Paragraph A(3) of Part 1.05 General Requirements.
9. **DELETE** Sub-paragraphs 1, 2, and 3 of Part 3.01 Testing, Paragraph A, and **REPLACE** it with the following:
  - “1. Perform tests in accordance with NETA ATS for electrical power equipment and systems, Section 7 “Inspection and Test Procedures”.
  2. Refer to each Division 26 Technical Specifications section for additional testing requirements.
  3. Refer to Contract Drawings, Sh. E-4.4, for thermographic survey requirements. Perform infrared thermographic survey in accordance with NETA ATS, Section 9 “Thermographic Survey”.”

### **Section 26 32 13 - Engine Generator**

10. **ADD** the following Paragraph I to Part 2.07 Engine Generator Control Module:  
“I. Generator and annunciator must be TCP/IP capable.”
11. **DELETE** Part 2.10 Stair System Access, and **REPLACE** it with the following:  
“A Product Features:
  1. Custom Layout: Refer to Contract Drawings for layout and dimensions.
  2. Comply with California OSHA regulations for industrial metal stairs.
  3. Comply with Aluminum Association “Specifications and Guidelines for Aluminum Structures”.
  4. Material: Mill finish aluminum extrusions and sheet.
  5. Decking: Slip resistant perforated extruded aluminum self-mating deck.
  6. Fasteners: 304 stainless steel.
  7. Weight Capacity: 100lbs per square foot live load; 300lbs per square foot dead load.
  8. Platform Guardrail Height: 42”
  9. Step Guardrail/Handrail Height: 36”.
  10. Platform and Stair Mid-rail: Install at a height midway between the top edge of guardrail and the walking surface.
  11. Stair Riser: Open back, maximum riser height: 9.5”
  12. Stair Tread Depth: Minimum 9.5”
  13. All surfaces, members and their welded joints must be smooth and free from sharp or jagged edges.  
B Acceptable Manufacturers:
  1. Sapa Extrusion, LLC, REDD Team.
  2. Upside Innovations.
  3. Or equal.”
12. **ADD** the following sentence at the end of Paragraph B of Part 2.12 Finishes:  
“Do not paint generator access platform and stair system.”
13. **DELETE** Paragraph F of Part 3.05 Identification and **REPLACE** with “NOT USED”.

14. **DELETE** the second to last sentence of Paragraph A of Part 3.06 Commissioning, and **REPLACE** it with the following:

“Complete start-up under test mode only after approval is granted by HMCD to place product in the tank and to operate the generator.”

15. **CHANGE** Delete “3-hour” in Sub-paragraph 3(a) of Part 3.06 Commissioning, Paragraph B and **REPLACE** WITH “4-hour”.

16. **DELETE** Paragraph C of Part 3.06 Commissioning, and **REPLACE** it with the following:

“C. Provide sufficient fuel for testing and leave the generator sub-base fuel tank full at the completion of testing. Provide all lubricants as recommended by the engine manufacturer.”

17. **DELETE** the first sentence of Paragraph L Part 3.06 Commissioning, and **REPLACE** it with the following:

“Perform full load test utilizing portable load bank furnished by Contractor.”

### **Section 26 36 23 – Transfer Switches**

18. **DELETE** Paragraph C of Part 3.03 Identification and **REPLACE** with “NOT USED”.

### **Section 31 23 16 – Structural Excavation / Earthwork**

19. **ADD** the following language to the end of Paragraph I of Part 3.02 Excavating:

“Correct over-excavated areas and load-bearing surfaces that are disturbed, in accordance with Technical Specifications Section 31 23 23 - Structural Fill”

### **Section 31 23 23 – Structural Fill**

20. **DELETE** Paragraph A of Part 2.01 Fill Materials, and **REPLACE** it with the following:

“A. Engineered Fill: Non-expansive, free of organic and deleterious materials, consisting of relatively granular materials having a minimum R-value of 10, and a plasticity index not exceeding 20. On-site upper soil may be used as engineered fill, provided the soil meets the immediately aforementioned criteria.”

### **General**

21. **CHANGE** footers of the following Sections to match corresponding section name and number.

- Section 01 10 00 – Summary,
- Section 01 73 00 – Execution,
- Section 03 10 00 – Concrete Forming and Accessories, and
- Section 26 05 00 – Common Work Results for Electrical.

## **VOLUME 3 – CONTRACT DRAWINGS/PLANS**

### **Sheet 8 – Drawing No. S-0.0**

22. **DELETE** from PROJECT DATA the words “GEOTECHNICAL REPORT BY PARIKH CONSULTANTS, INC DATED JANUARY 21, 2010.”

**Sheet 16 - Drawing No. E-3.0**

23. **DELETE** Keyed Note 3 and **REPLACE** with “NOT USED”.
24. **DELETE** the words “PVC SCHEDULE 80” from Keyed Note 8 and **REPLACE** with “PVC COATED GRS.”
25. **DELETE** all Keyed Note 3 references.

**Sheet 17 - Drawing No. E-3.1**

26. **DELETE** Keyed Note 6 in its entirety, and **REPLACE** with the following:

“PROVIDE (N) CONDUIT AND RS485 COMMUNICATION CABLE FROM THE (N) ANN-1 PANEL TO (E) FIBER OPTIC ENTRY POINT LOCATED IN BUILDING “F”. FROM THE (E) FIBER OPTIC ENTRY POINT, PROVIDE (N) FIBER THROUGH (E) CONDUIT TO THE (N) PANEL ANN-2 LOCATED IN SECURITY BUILDING “H”. REFER TO SH. E-2.1, KEYED NOTE 7.”

**Sheet 23 - Drawing No. E-4.4**

27. **DELETE** the words “PER SHEET E-3.2” from Note 5 and Note 10 of the Sequence of Construction notes.

**Sheet 25 - Drawing No. E-5.1**

28. **DELETE** Keyed Note 5 in its entirety, and **REPLACE** with the following:

“GENSET PAD LAYOUT AND DIMENSIONS ARE BASED ON THE CATERPILLAR MODEL C18 ACERT 600KW/750KVA AND SUB-BASE FUEL TANK BY FIDELITY MANUFACTURING. GENSET AND SUB-BASE FUEL TANK MUST BE FURNISHED AS A COMPLETE PACKAGE FROM THE GENERATOR MANUFACTURER.”

29. **DELETE** the words “PROVIDED BY GENERATOR SUPPLIER” from Keyed Note 6.
30. **DELETE** the word “TZ” from Keyed Note 7 and **REPLACE** with “TZ-SS”.

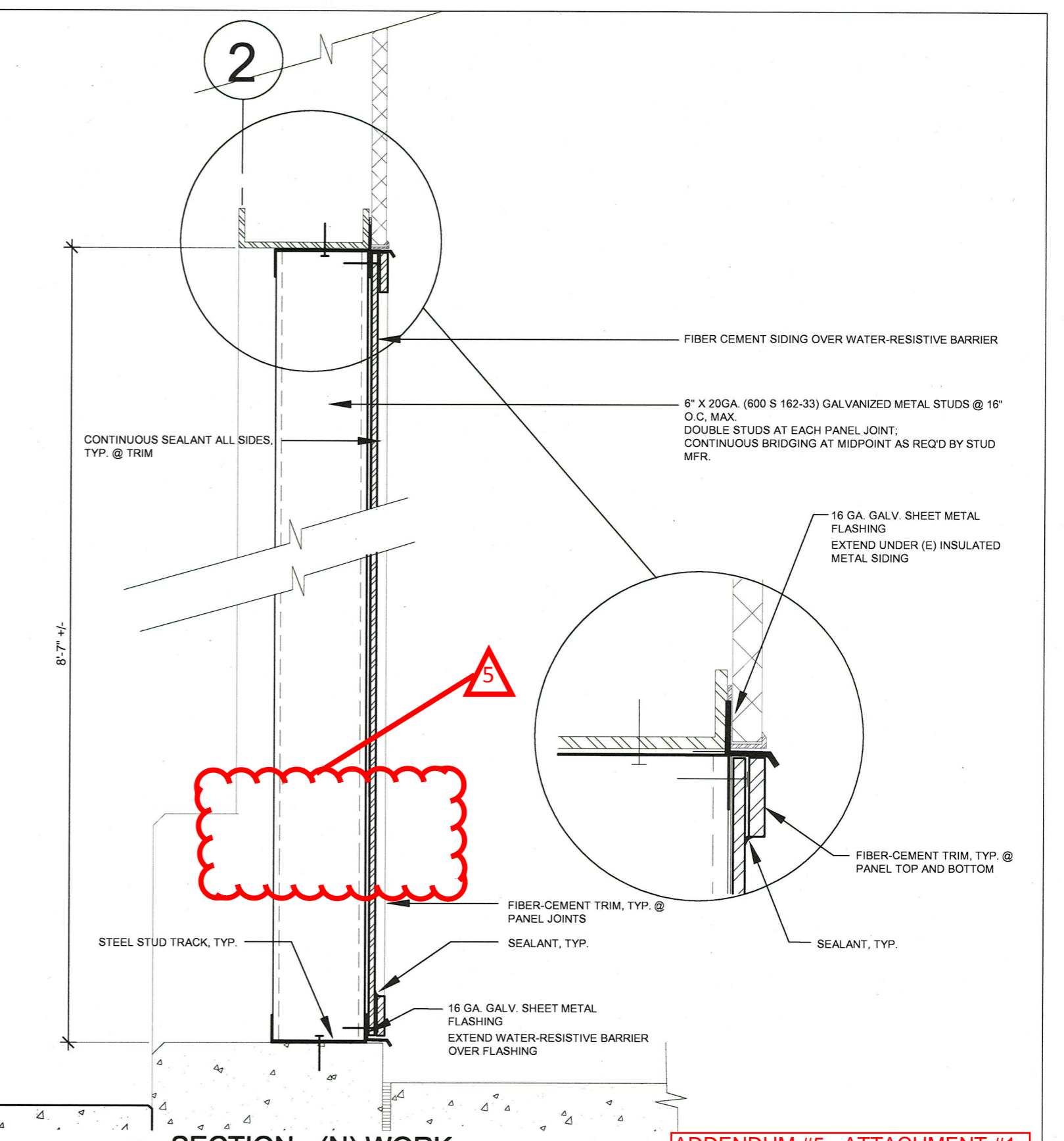
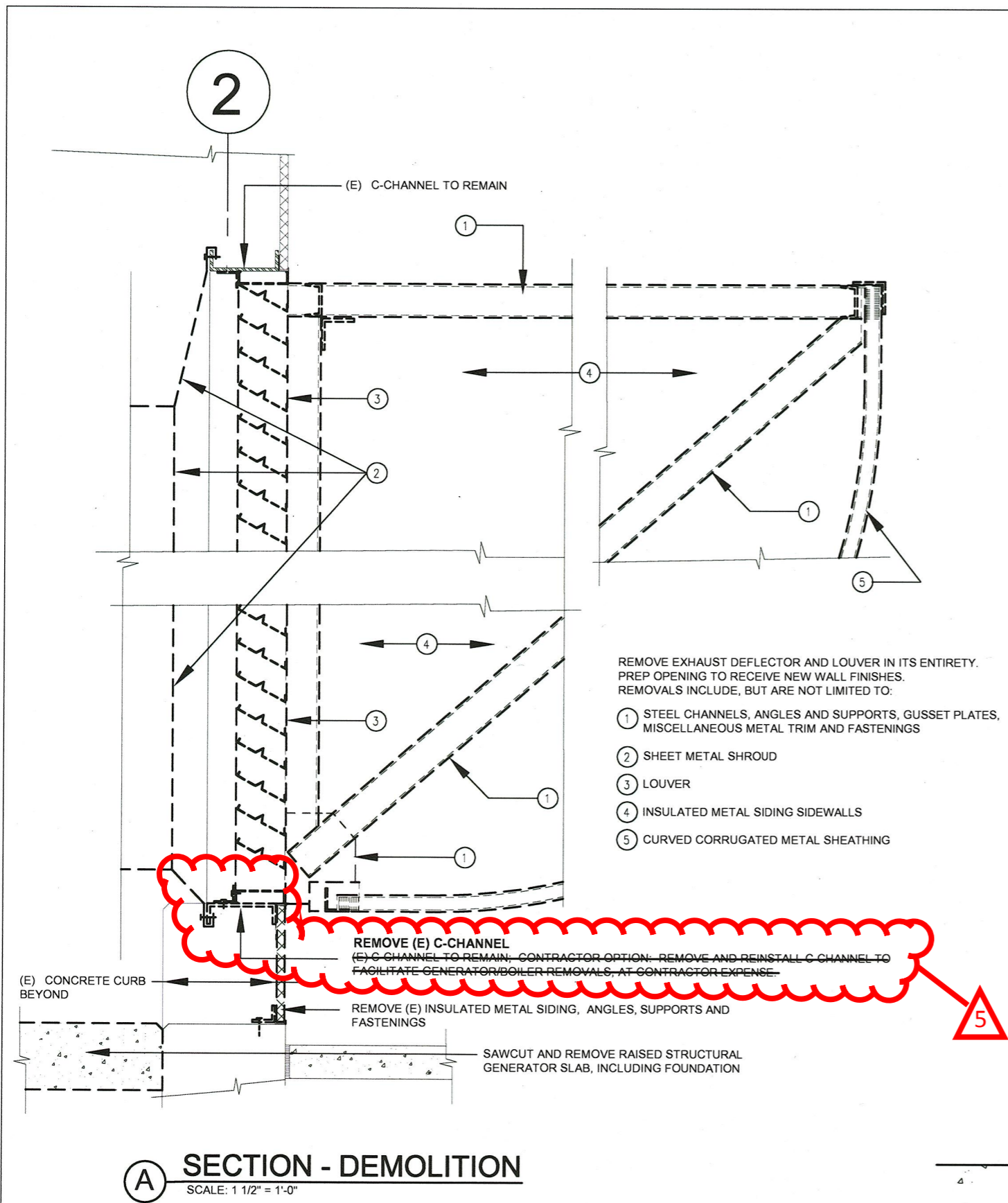
**Sheet 27 - Drawing No. FE-2.0**

31. **ADD** the words “SCALE: 1/8” = 1’-0” under the Generator Fueling Electrical Plan heading.
32. **DELETE** the words “1” = 20” from the North Arrow.

**Sheet 30 - Drawing No. FS-6.0**

33. **ADD** General Note (2) to read:  
“2. A/R = AS REQUIRED.”
34. **DELETE** the following sheets, and **REPLACE** it with **Attachment #1** hereto.
  - Sheet 6 – Drawing No. A-4.1
  - Sheet 15 – Drawing No. E-2.1

Note: There is no missing sheet#18. Sheet #18 Drawing No. E3.2 intentionally does not exist in the Contract documents



ADDENDUM #5 - ATTACHMENT #1  
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NO.	DATE	REVISIONS
1	7-17-19	ADDENDUM #5
		ISSUED FOR BID



DESIGNED	JO	CHECKED	JO
DRAWN	JO	CADD FILE NAME	



APPROVED	
CADD FILE DATE	SCALE AS SHOWN
PLOT DATE	BOARD APPROVAL DATE

CERONE DIVISION EMERGENCY GENERATOR REPLACEMENT DETAILS			SHEET OF 33 DRAWING NO. A-4.1 REVISION
SAP NO.	CONTRACT NO. C19010	FILE LOCATION	

**GENERAL NOTES**

1. ALL (N)EQUIPMENT SHALL BE UL LISTED OR UTILITY GRADE AND APPROVED BY VTA. THE AHJ HAS FINAL JURISDICTIONAL AUTHORITY ON CODE APPLICATION AND COMPLIANCE.
2. ALL GENSET WIRING AND GROUNDING METHODS SHALL CONFORM TO THE MANUFACTURER'S WRITTEN RECOMMENDED PRACTICES.
3. EXPOSED NON-CURRENT CARRYING METAL PARTS OF EQUIPMENT AND ENCLOSURES SHALL BE GROUNDED IN ACCORDANCE WITH NEC 250.134 AND 250.136(A).
4. ALL BREAKERS AND DISCONNECT SWITCHES ARE CLOSED UNDER NORMAL OPERATING CONDITIONS UNLESS OTHERWISE NOTED.
5. DISTANCES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ACTUAL DISTANCES IN FIELD.
6. ALL ELECTRICAL TERMINATIONS SHALL BE PERFORMED USING THE PRESCRIBED MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS, INCLUDING ANY TORQUING VALUES IDENTIFIED THEREIN. WHERE TORQUE VALUES ARE NOT SPECIFIED, REFER TO UL STANDARDS 486A AND 486B. FINAL TORQUING SHALL BE OBSERVED BY VTA WITH DOCUMENTATION PROVIDED BY CONTRACTOR INDICATING THE TORQUE VALUE ATTAINED DURING INSTALLATION.

**KEYED NOTES**

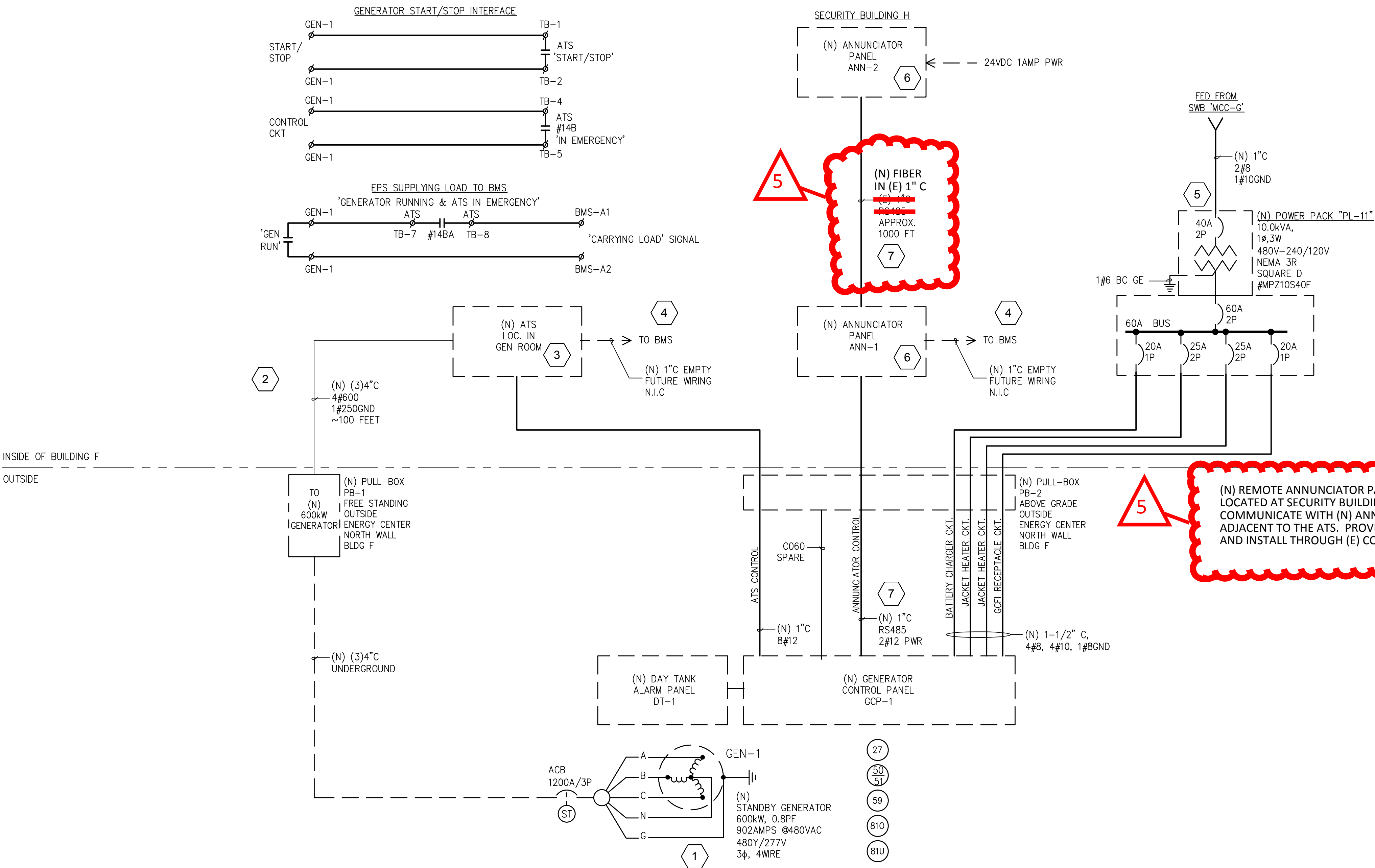
- 1 GENERATOR NEUTRAL SHALL NOT BE GROUNDED AT THE GENERATOR LOCATION. MAIN SERVICE NEUTRAL GROUND SHALL BE THE ONLY GROUND 250.30(A)(1).
- 2 REFER TO SHEET E-3.0 FOR DEMOLITION NOTES AND DETAILS.
- 3 (N) 3-POLE DELAYED-TRANSITION ATS PROVIDE A BREAK-BEFORE-MAKE SWITCHING ACTION. PROVIDE AUXILIARY CONTACTS FOR INTERFACE WITH GENERATOR AND BMS AS REQUIRED.
- 4 PROVIDE AND INSTALL (N)1" C (EMPTY) CONDUIT FROM ATS AND (1)1" C (EMPTY) CONDUIT RUN FROM ANN-1 TO BMS. COORDINATE LOCATION OF BMS WITH VTA.
- 5 PROVIDE POWER PACK TO SUPPLY GENERATOR AUXILIARY LOADS. SEE PANEL SCHEDULE ON SHEET E-4.1.
- 6 INTERCEPT EXISTING CONDUIT TO SECURITY BUILDING AND INSTALL DATA NETWORK CABLE BETWEEN ANN-1 AND ANN-2. PROVIDE 24VDC 1AMP UNINTERRUPTIBLE POWER SUPPLY FOR ANN-2. COORDINATE SAFETY INDICATOR FUNCTIONS WITH VTA AND

**ABBREVIATIONS**

- (ACB) ALTERNATOR CIRCUIT BREAKER
- (AHJ) AUTHORITY HAVING JURISDICTION
- (BMS) BUILDING MANAGEMENT SYSTEM
- (E) EXISTING
- (ER) EXISTING TO REMAIN
- (ERD) REMOVE EXISTING
- (F) FUTURE
- (N) NEW
- (R) RECONNECT EXISTING

**LEGEND:**

- (WHM) WATTHOUR METER
- (27) UNDERVOLTAGE
- (50/51) OVERCURRENT/TIME OVERCURRENT
- (59) OVERVOLTAGE
- (810) OVERFREQUENCY
- (81U) UNDERFREQUENCY



**7** (N) REMOTE ANNUNCIATOR PANEL ANN-2 LOCATED AT SECURITY BUILDING SHALL COMMUNICATE WITH ANN-1 LOCATED ADJACENT TO THE ATS, USING EXISTING FIBER CABLE. PROVIDE MEDIA CONVERTER (PERLE PSI-MOS-RS485W2/FO 850 E SERIAL TO FIBER CONVERTER OR EQUAL) AT EACH END AND USE JUMPER CABLES TO CONNECT (E) FIBERS.

ADDENDUM #5 - ATTACHMENT #1  
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			<p>APPROVED</p>	<p>CERONE DIVISION EMERGENCY GENERATOR REPLACEMENT GENERATOR SINGLE LINE</p>	<p>SHEET 15 OF 33 DRAWING NO. <b>E-21</b> REVISION</p>
	<p>DESIGNED RP      CHECKED LM</p> <p>DRAWN RP      CADD FILE NAME</p>	<p>CADD FILE DATE      SCALE NONE</p> <p>PLOT DATE      BOARD APPROVAL DATE</p>	<p>SAP NO.      CONTRACT NO. C19010      FILE LOCATION</p>		

NO.	DATE	REVISIONS
1	7-17-19	ADDENDUM #5 ISSUED FOR BID