Sud Associates, P.A.

**Consulting Engineers** 

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## **BROWN CREEK CORRECTIONAL INSTITUTION**

## AIR CONDITIONING INSTALLATION

## NORTH CAROLINA DEPARTMENT OF ADULT CORRECTION

## SCO ID# 23-25904-01A

# **ADDENDUM NUMBER 1**

# **NOVEMBER 22, 2023**

## **General and Contractual:**

1. All contractors submitting proposals shall incorporate the items in this Addendum and all other addenda into their proposals and acknowledge receipt of the Addenda on their bid proposal forms. This Addendum shall be incorporated in the Drawings and Specifications which are a part of the Contract Documents and shall supersede anything contained therein with which it may conflict.

### Mechanical:

1. The new 16 gauge metal duct/insulation cover shall have 1/2" flange to allow for securing to wall and ceiling. Utilize Hilti HDI-P drop in anchors or equal. Anchor to be 1/4" thread, 5/8" depth, using 3/8" masonry bit that allows a maximum 3/4" control depth. Submit to engineer for approval prior to use. Provide anchors on 2' center spacing to secure the metal cover.

### **Electrical:**

1. Specification Section 26 20 00 Fault Current Analysis and Coordination Study has been revised. Replace the previously issued specification section with the attached revised section.

## **DISTRIBUTION**:

Michael Gashaw NC Dept. of Adult Correction Bidders List

### SECTION 26 20 00 - FAULT CURRENT ANALYSIS AND COORDINATION STUDY

#### PART 1 - GENERAL

- 1.1 **PROJECT SCOPE** 
  - A. All newly proposed panelboards outlined in the contract drawings are mandated to possess field-applied arc flash labels in adherence to NEC 110.16 & NFPA 70E standards. The contractor is required to collaborate with the owner to acquire all extant and pertinent resources, encompassing but not restricted to arc flash studies, assessment reports, correspondences from local electric utilities, etc. These resources will facilitate an analysis aimed at furnishing all newly proposed panelboards with arc flash labeling that meets the minimal criteria of arc flash boundaries, nominal system voltages, incident energies, work distances, etc., within the confines of this project.

#### 1.2 SECTION INCLUDES

- A. Pre-Installation fault current analysis and coordination study report.
- B. Post-Installation fault current analysis and coordination study report.

#### 1.3 RELATED SECTIONS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Division 1 Specifications and other Division 26 Specification Section, apply to this Section.

#### 1.4 **REFERENCES**

- A. ANSI/NFPA 70 National Electrical Code.
- B. ANSI/NFPA 70E Standard for Electrical Safety in the Workplace.

#### 1.5 SUBMITTALS

3.

- A. Submit under provisions of Section 260010.
- B. Report shall be signed and sealed by an electrical engineer licensed in the state of North Carolina and at a minimum include the following:
  - 1. EXECUTIVE SUMMARY
  - 2. SCENARIOS CONSIDERED / NOT CONSIDERED
    - SHORT-CIRCUIT ANALYSIS WITH
      - a. ANALYSIS RESULTS
      - b. EQUIPMENT DUTY REPORT
  - 4. OVERCURRENT DEVICE COORDINATION ANALYSIS WITH
    - a. TCC RESULTS
    - b. TCC COORDINATION REPORT
  - 5. SINGLE-LINE DIAGRAM OUTPUT OF THE COMPUTER PROGRAM USED FOR ANALYSIS
  - 6. TIME COORDINATION GRAPHS AND SETTINGS OUTPUT USED FOR ANALYSIS
  - 7. UTILITY COMPANY LETTER INDICATING AVAILABLE FAULT CURRENT AT THE SERVICE POINT.
- C. Product Data:

- 1. Software brochure indicating the following:
  - a. Capability of Arc Flash analysis module to meet OSHA and NFPA70E standards and regulations with the ability to produce arc flash labels including hazard boundaries, levels and recommended personal protection equipment
  - b. Capability of Short Circuit Analysis module to verify protective device and equipment ratings for compliance with ANSI, NEC, NFPA 70E, and IEC 60909.
  - c. Capability of Coordination Study module to accurately ensure safety and reliability of the distribution system with comprehensive protective device coordination.

### PART 2 - PRODUCTS

- 2.1 MANUFACTURERS
  - A. EasyPower.
  - B. SKM.
  - C. Switchboard Manufacturer.

#### **PART 3 - EXECUTION**

3.1 Fault current ratings shown on the drawings are estimates and minimum ratings. Adjustments of equipment fault current ratings and mitigation measures required or chosen per this analysis are included at no additional cost to the owner.

END OF SECTION 26 20 00