FAYDA ENGINEERING & ENERGY SOLUTIONS, LLC

ADDENDUM NO. 2
CAMPBELL COTTAGE #C3 & C5
GAS CONVERSION AT THE STOCKLEY CENTER
OMB/DFM CONTRACT NO. MC3511000029
DATE OF ISSUE: July 21, 2016

1.0 This Addendum, Addendum No. 2, shall be made part of the Project Manual and Drawings dated July 4, 2016 for the Campbell Cottage #C3 & #C5 Gas Conversion at the Stockley Center. Bid Date and time remain unchanged 2:00 p.m. local time on Thursday, July 28, 2016,

2.0 Any provision in any of the Contract Documents which may be in conflict or be inconsistent with the contents of this Addendum shall be void to the extent of such conflicts or inconsistency.

3.0 Changes to Specifications

3.1 SECTION 26 22 00 - LOW-VOLTAGE TRANSFORMERS
Add the attached section in its entirety.

4.0 Changes to Drawings:

4.1 There are no changes to the Drawings.

5.0 Questions/Clarifications

5.1 Project Summary 010000 Section 1.03B states that there is asbestos in each building, can there be a drawing issued to show where the asbestos is being removed?
Reply:
Refer to the complete Asbestos report in Appendix A of the project manual.

5.2 Project Summary 010000, Section 1.05B states both buildings are to be completed before issuing a substantial completion date. How does this effect the guarantees? Please clarify.
Reply:
Specification Section 01 00 00 Article 1.05B identifies when the Certificate of Substantial Completion will be issued. Section 00 81 13-Article 13.6 identifies the commencement date of the warranty.

5.3 Specifications section 011200 Coordination of Trades, states temporary partitions, will this be required? If so, where? Please clarify.
Reply:
Temporary partitions are expected in Cottage C5 to prevent dust and debris from encroaching on the occupants outside of the area of work designated as NIC on the drawings. Cottage C3 will not require temporary partitions since the entire building will be unoccupied during construction.

5.4 Will an office trailer be required?
Reply:
Yes, in accordance with Specification 01 50 00- Article 1.04.

6.0 Substitution Requests

6.1 Gear package by Eaton: Eaton is not an approved equal.

A. Submission omitted all substitution documentation for the three (3) Power System Studies that are required to be provided by the switchgear manufacturer per 26 05 70-1.02.

801 W. Newport Pike, Wilmington, DE 19804
Tel.: 302-999-1060 • Fax: 302-999-1053
www.FaydaEES.com

6.2 A. Lighting package by Penn Lighting: Lighting Package is not an approved equal. Package was submitted after the deadline for substitutions.

6.3 A. Lighting fixture Type D by Lithonia Lighting: Lighting Fixture Model # OLW14 is an approved equal

6.4 A. HVAC package by American Standard: The following American Standard products are approved:

1. Outdoor Condensing Unit: 4A7A6049J-SUB-1A-EN
2. Indoor Cooling Coil: 4TXC-DS-SUB-1
3. Programmable Thermostat: 11-HD02D11-3
4. Outdoor Condensing Unit: 12-1376-1C-EN
5. Gas fired furnace: TUH1B060-H-SUB-1C
6. Gas Fired Furnace: TUH1C100-H-SUB-1C

End of Addendum #2

EF/ef
15-1179 Addendum #2 7.21.16

CC: All Registered Plan Holders

SECTION 26 22 00 - LOW-VOLTAGE TRANSFORMERS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes: Distribution dry-type transformers rated 600 V and less.

1.3 ACTION SUBMITTALS

A. Shop Drawings: For each type of product.

1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type and size of transformer.
2. Include rated nameplate data, capacities, weights, dimensions, minimum clearances, installed devices and features, and performance for each type and size of transformer.

1.4 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For transformers to include in emergency, operation, and maintenance manuals.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Temporary Heating: Apply temporary heat according to manufacturer's written instructions within the enclosure of each ventilated-type unit, throughout periods during which equipment is not energized and when transformer is not in a space that is continuously under normal control of temperature and humidity.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Standard of Design & Construction is Square D or pre-approved equal.

B. Source Limitations: Obtain each transformer type from single source from single manufacturer.

2.2 GENERAL TRANSFORMER REQUIREMENTS

A. Description: Factory-assembled and -tested, air-cooled units for 60-Hz service.

B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

C. Transformers Rated 15 kVA and Larger: Comply with 2016 DOE Minimum energy-efficiency levels as verified by testing according to NEMA TP 2.

D. Cores: Electrical grade, non-aging silicon steel with high permeability and low hysteresis losses.

E. Coils: Continuous windings without splices except for taps.

1. Internal Coil Connections: Brazed or pressure type.
2. Coil Material: Aluminum

F. Encapsulation: Transformers smaller than 30 kVA shall have core and coils completely resin encapsulated.

G. Shipping Restraints: Paint or otherwise color code bolts, wedges, blocks, and other restraints that are to be removed after installation and before energizing. Use fluorescent colors that are easily identifiable inside the transformer enclosure.

2.3 DISTRIBUTION TRANSFORMERS

A. Comply with NFPA 70, and list and label as complying with UL 1561.

B. Cores: One leg per phase.

C. Enclosure: Ventilated.

1. NEMA 250, Core and coil shall be encapsulated within resin compound, sealing out moisture and air.

D. Transformer Enclosure Finish: Comply with NEMA 250.

1. Finish Color: Gray

E. Taps for Transformers 25 kVA and Larger: Two 2.5 percent taps above and two 2.5 percent taps below normal full capacity.

F. Insulation Class, 30 kVA and Larger: 220 deg C, UL-component-recognized insulation system with a maximum of 115-deg C rise above 40-deg C ambient temperature.

G. Low-Sound-Level Requirements: Maximum sound levels when factory tested according to IEEE C57.12.91, as follows:
   1. 30 to 50 kVA: -45dBA

2.4 IDENTIFICATION DEVICES

A. Nameplates: Engraved, laminated-plastic or metal nameplate for each distribution transformer, mounted with corrosion-resistant screws. Nameplates and label products are specified in Section 26 05 53 "Identification for Electrical Systems."

2.5 SOURCE QUALITY CONTROL

A. Test and inspect transformers according to IEEE C57.12.01 and IEEE C57.12.91.

1. Resistance measurements of all windings at the rated voltage connections and at all tap connections.
2. Ratio tests at the rated voltage connections and at all tap connections.
3. Phase relation and polarity tests at the rated voltage connections.
4. No load losses, and excitation current and rated voltage at the rated voltage connections.
5. Impedance and load losses at rated current and rated frequency at the rated voltage connections.
6. Applied and induced tensile tests.
7. Regulation and efficiency at rated load and voltage.
8. Insulation Resistance Tests:

   a. High-voltage to ground.
   b. Low-voltage to ground.
   c. High-voltage to low-voltage.

9. Temperature tests.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine conditions for compliance with enclosure- and ambient-temperature requirements for each transformer.

B. Verify that field measurements are as needed to maintain working clearances required by NFPA 70 and manufacturer's written instructions.

C. Examine walls, floors, roofs, and concrete bases for suitable mounting conditions where transformers will be installed.

D. Verify that ground connections are in place and requirements in Section 260526 "Grounding and Bonding for Electrical Systems" have been met. Maximum ground resistance shall be 5 ohms at location of transformer.

E. Environment: Enclosures shall be rated for the environment in which they are located. Covers for NEMA 250, Type 4X enclosures shall not cause accessibility problems.

F. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Install transformers level and plumb on a concrete base with vibration-dampening supports.

B. Construct concrete bases according to Section 033000 "Cast-in-Place Concrete" and anchor floor-mounted transformers according to manufacturer's written instructions

1. Coordinate size and location of concrete bases with actual transformer provided. Cast anchor-bolt inserts into bases. Concrete, reinforcement, and formwork requirements are specified with concrete.

C. Secure transformer to concrete base according to manufacturer's written instructions.

D. Secure covers to enclosure and tighten all bolts to manufacturer-recommended torques to reduce noise generation.

E. Remove shipping bolts, blocking, and wedges.

3.3 CONNECTIONS

A. Ground equipment according to Section 260526 "Grounding and Bonding for Electrical Systems."

B. Connect wiring according to Section 260519 "Low-Voltage Electrical Power Conductors and Cables."

C. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A-486B.

D. Provide flexible connections at all conduit and conductor terminations and supports to eliminate sound and vibration transmission to the building structure.

3.4 FIELD QUALITY CONTROL

A. Tests and Inspections:

1. Perform each visual and mechanical inspection and electrical test stated in NETA ATS for dry-type, air-cooled, low-voltage transformers. Certify compliance with test parameters.

B. Remove and replace units that do not pass tests or inspections and retest as specified above.

3.5 CLEANING

A. Vacuum dirt and debris; do not use compressed air to assist in cleaning.

END OF SECTION 26 22 00