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ADDENDUM # 2

Project: **NEWBERRY MUSEUM** with bids previously due not later than 3:00 PM, January 25, 2018 but as of this addendum with a **revised bid date of January 30, 3:00 PM**.

Date of this addendum: January 18, 2018

All items contained in this addendum have the full force of the other project drawings and specifications and, in fact, offer overriding additions and corrections to previously-issued documents.

Please acknowledge receipt of this addendum on the bid proposal form itself at bid submittal time.

As a matter of information, Addendum #3 is projected to come out on 1/22 25 /18. Also, as a matter of information, the following are general contracting firms, of whom the Architect is aware, which may be bidding this project. This is likely not a complete list, and if a general contractor is not on this list yet wants to be known, he/she is invited to contact the architect, Michael Kohn at Michael@MichaelKohnArchitect.com and the construction manager, Barry Evans at bevans@ccorpusa.com:

- · Jon Scot, GC
- JW Spratlin & Son
- MAR Construction
- Pyramid Construction
- Savannah Construction & Preservation
- Triangle Construction

SPECIFICATIONS

- 1. SECTION 00-1113 ADVERTISEMENT FOR BIDS
 - a. Paragraph 1.05.C Revise bid due date to read "Tuesday, January 30, 2018." The time remains at 3:00 PM.
- 2. SECTION 00-3100 AVAILABLE PROJECT INFORMATION
 - a. Add a new paragraph 1.01.F re: **two soil borings** at elevator walls (Addndm2.Exh A).
 - b. Add a new paragraph 1.01.G re: recent **buried tank removal** near the elevator (**Addndm2.Exh B**).

SECTION 00-4100 — BID FORM

a. Delete E.4.ALTERNATE NO. 4 in its entirety, as the four lights are now to be included in the Base Bid. See reference to Electrical drawing sheet E1.1 below. A subsequent addendum in the coming days may develop a new Alternate #4 in some other form.

4. SECTION 01-2300 — ALTERNATES

a. Delete paragraph 105.D in its entirety, as the four lights are now to be included in the Base Bid. See reference to Electrical drawing sheet E1.1 below.
 A subsequent addendum in the coming days may develop a new Alternate #4 in some other form.

5. SECTION 10-2113.19 — PLASTIC TOILET COMPARTMENTS

a. This section was added to the project specification in Addendum #1. Now add #6 under the approved MANUFACTURERS, 2.01.A: "Scranton Products, as distributed by Randy Abercrombie of New South Specialties."

6. SECTION 23-0010 - GENERAL PROVISIONS - HVAC

- a. To paragraph 1.19 MANUFACTURERS add the following:
 - Split System Heat Pump Units w/ HGR: a) ... The Trane Company ", and Addison."
 - VRV Ductless Split System Heat Pumps: a) ... The Trane Company ", and LG Electronics."
 - 3. Split System Heat Pumps: a) ...The Trane Company ", and LG Electronics."

7. SECTION 23-0500, Part 2 - PRODUCTS - Add a new SECTION 2.27

2.27 VRV SPLIT SYSTEM HEAT PUMP UNITS:

- a. Provide Daikin variable refrigerant volume split system heat pump unit(s) or approved equal (see Section 23-0010) of the type, arrangement, size, and indicated capacities and characteristics. The outdoor unit is a direct expansion (DX), air-cooled heat pump, multi-zone air-conditioning system with variable speed inverter driven compressors using R-410A refrigerant. Operation of the system shall permit either cooling or heating of all of the indoor units.
- The units shall be tested by a Nationally Recognized Testing Laboratory (NRTL), in accordance with ANSI/UL 1995 – Heating and Cooling Equipment and bear the Listed Mark. The outdoor unit will be factory charged with R410A.
- c. The outdoor unit shall be factory-assembled and pre-wired with all necessary electronic and refrigerant controls. The refrigeration circuit of the condensing unit shall consist of Daikin scroll compressors, motors, fans, condenser coil, electronic expansion valves, solenoid valves, 4-way valve, distribution headers, capillaries, filters, shut off valves, oil separators, service ports and refrigerant accumulator. The system will automatically restart operation after a power failure and will not cause any settings to be lost, thus eliminating the need for

- reprogramming. The unit shall incorporate an auto-charging feature and a refrigerant charge check function.
- d. The following safety devices shall be included on the condensing unit: high pressure switch, control circuit fuses, crankcase heaters, fusible plug, high pressure switch, overload relay, inverter overload protector, thermal protectors for compressor and fan motors, over current protection for the inverter and antirecycling timers. To ensure the liquid refrigerant does not flash when supplying to the various indoor units, the circuit shall be provided with a sub-cooling feature. Oil recovery cycle shall be automatic occurring 2 hours after start of operation and then every 8 hours of operation. The outdoor unit shall be capable of heating operation at 0°F dry bulb ambient temperature without additional low ambient controls or an auxiliary heat source. The system shall continue to provide heat to the indoor units while in the defrost mode.
- The outdoor unit shall be completely weatherproof and corrosion resistant. The
 unit shall be constructed from rust-proofed mild steel panels coated with a baked
 enamel finish.
- f. The condensing unit shall consist of one or more propeller type, direct-drive 350 or 750 W fan motors that have multiple speed operation via a DC (digitally commutating) inverter. The fan motor shall have inherent protection and permanently lubricated bearings and be mounted.
- g. The condenser coil shall be manufactured from copper tubes expanded into aluminum fins to form a mechanical bond. The heat exchanger coil shall be of a waffle louver fin and rifled bore tube design to ensure high efficiency performance. The fins shall be coated with an anti-corrosion hydrophilic blue coating as standard from factory with a salt spray test rating of 1000hr per ASTM test standards. The outdoor coil shall have three-circuit heat exchanger design eliminating the need for a drain pan heater. The lower part of the coil shall be used for inverter cooling and be on or off during heating operation enhancing the defrost operation. An alternate manufacturer must provide a drain pan heater to enable adequate defrosting of the unit in defrost operation. The condensing unit shall be factory equipped with condenser coil guards on all sides.
- h. The Daikin inverter scroll compressors shall be variable speed (PVM inverter) controlled which is capable of changing the speed to follow the variations in total cooling and heating load as determined by the suction gas pressure as measured in the condensing unit. In addition, samplings of evaporator and condenser temperatures shall be made so that the high/low pressures detected are read every 20 seconds and calculated. With each reading, the compressor capacity (INV frequency or STD ON/OFF) shall be controlled to eliminate deviation from target value. The capacity control range shall be as low as 10% to 100%. Each compressor shall be equipped with a crankcase heater, high pressure safety switch, and internal thermal overload protector. The compressor shall be spring mounted to avoid the transmission of vibration.

i. Each indoor unit or group of indoor units shall be able to provide set temperature independently via a local wired controller. The wired remote controller shall have the following features:

OPERATION	Start/Stop
	Operation Mode
	Temperature Setting
!	60°F – 90°F Set Point Range
	Fan Speed
ŧ	Airflow Direction
MONITORING	Status
	Malfunction Flashing
	Malfunction Content
	Filter Sign
	Operation Mode
	Temperature Setting
	Permit/Prohibit Selection
	Fan Speed
	Airflow Direction
SCHEDULING	ON/OFF Timer
CONTROL MANAGEMENT	Field Setting Mode
	Group Setting
	Auto Re-Start

- (cont'd) Provide complete system of air conditioning units and accessories as scheduled on the drawings. All units shall carry a one (1) year parts and labor warranty and a ten (10) year compressor warranty.
- 8. SECTION 23-0500, Part 2 PRODUCTS Add a new SECTION 2.28

2.28 VRV INDOOR UNITS

- a. Provide Daikin variable refrigerant volume indoor unit(s) or approved equal (see Section 23-0010) of the type, arrangement, size, and indicated capacities and characteristics.
- b. WALL MOUNTED UNIT (FXAQ): The indoor unit model FXAQ shall be a wall mounted fan coil unit, operable with refrigerant R-410A, equipped with an electronic expansion valve, for installation onto a wall within a conditioned space. The unit shall be completely factory assembled and tested. Included in the unit is

factory wiring, piping, electronic proportional expansion valve, control circuit board, fan motor thermal protector, flare connections, condensate drain pan, selfdiagnostics, auto-restart function, 3-minute fused time delay, and test run switch. The unit shall have an auto-swing louver which ensures efficient air distribution. which closes automatically when the unit stops. The remote controller shall be able to set five (5) steps of discharge angle. The front grille shall be easily removed for washing. The discharge angle shall automatically set at the same angle as the previous operation upon restart. The drain pipe can be fitted to from either left or right sides. The fan shall be a direct-drive cross-flow fan, statically and dynamically balanced impeller with high and low fan speeds available. The fan motor shall be thermally protected. Coils shall be of the direct expansion type constructed from copper tubes expanded into aluminum fins to form a mechanical bond. The coil shall be of a waffle louver fin and high heat exchange, rifled bore tube design to ensure highly efficient performance. The coil shall be a 2-row cross fin copper evaporator coil with 14 fpi design completely factory tested.

- c. 4-WAY CEILING CASSETTE UNIT 2'x2' (FXZQ): The indoor unit model FXZQ shall be a ceiling cassette fan coil unit, operable with R-410A refrigerant, equipped with an electronic expansion valve, for installation into the ceiling cavity equipped with an air panel grill. It shall be a four-way air distribution type, white, and impact resistant with a washable decoration panel. The supply air is distributed via motorized louvers which can be horizontally and vertically adjusted from 0° to 90°. The indoor unit shall be completely factory assembled and tested. Included in the unit is factory wiring, piping, electronic proportional expansion valve, control circuit board, fan motor thermal protector, flare connections. condensate drain pan, condensate drain pump, condensate safety shutoff and alarm, self-diagnostics, auto-restart function, 3-minute fused time delay, and test run switch. The 4-way supply air flow can be field modified to 3-way and 2-way airflow to accommodate various installation configurations including corner installations. Return air shall be through the concentric panel, which includes a resin net mold resistant filter. The indoor units shall be equipped with a condensate pan and condensate pump. The condensate pump provides up to 21" of lift and has a built in safety shutoff and alarm. The fan shall be direct-drive turbo fan type with statically and dynamically balanced impeller with high and low fan speeds available. The fan motor shall be thermally protected. The return air shall be filtered by means of a washable long-life filter with mildew proof resin. Coils shall be of the direct expansion type constructed from copper tubes expanded into aluminum fins to form a mechanical bond. The coil shall be of a waffle louver fin and high heat exchange, rifled bore tube design to ensure highly efficient performance. The coil shall be a 2-row cross fin copper evaporator coil with 17 FPI design completely factory tested.
- d. 4-WAY CEILING SUSPENDED CASSETTE UNIT (FXUQ): The indoor unit model FXUQ shall be a ceiling suspended cassette fan coil unit, operable with R-410A refrigerant, equipped with an electronic expansion valve, for installation onto a ceiling within a conditioned space. It shall be a four-way air distribution type,

fresh white, impact resistant with a washable panel. The supply air is distributed via motorized louvers which can be horizontally and vertically adjusted from 0° to 60°. The unit shall be completely factory assembled and tested. Included in the unit is factory wiring, piping, electronic proportional expansion valve, control circuit board, fan motor thermal protector, flare connections, condensate drain pan, condensate safety shutoff and alarm, self-diagnostics, auto-restart function. 3-minute fused time delay, and test run switch. The 4-way supply air flow can be field modified to 3-way and 2-way airflow to accommodate various installation configurations including corner installations. Return air shall be through the concentric panel, which includes a resin net mold resistant filter. The indoor units shall be equipped with a condensate pan and condensate pump. The condensate pump provides up to 23-5/8" of lift and has a built in safety shutoff and alarm. The fan shall be direct-drive turbo fan type with statically and dynamically balanced impeller with three fan speeds available. The fan motor shall be thermally protected. The return air shall be filtered by means of a washable long-life filter with mildew proof resin. Coils shall be of the direct expansion type constructed from copper tubes expanded into aluminum fins to form a mechanical bond. The coil shall be of a waffle louver fin and high heat exchange, rifled bore tube design to ensure highly efficient performance. The coil shall be a 3-row cross fin copper evaporator coil with 21 FPI design completely factory tested.

e. Provide complete system of air conditioning units and accessories as scheduled on the drawings. All units shall carry a one (1) year parts and labor warranty and a ten (10) year compressor warranty.

DRAWINGS

- 1. Add the following Bulletin Drawings as changes to Civil Plans, sheets C2.0 & C3.0:
 - a. Addndm2.Exh S.17564-BDC001.pdf addresses the requirement to remove and replace a portion of the concrete driveway and curb at the College Street Driveway. Electrical utility routing is to cross below the driveway, and therefore new Heavy Duty Concrete pavement and concrete curb are to be installed as shown.
 - b. Addndm2.Exh T.17564-BDC002.pdf adds KEY NOTES numbers 11 and 12, as keyed on sheet C2.0 and refers to paving and curbing types.
- 2. Substitute the following revised architectural drawings with information on basement waterproofing:
 - a. Addndm2.Exh U.A5.2-180118.pdf showing waterproofing at infilled window wells
 - b. **Addndm2.Exh V.A5.3-180118.pdf** showing waterproofing of basement elevator shaft and footing.
- 3. Add the following Bulletin Drawings with information supplementary to the precast concrete stairs shown on sheets A1.1, A4.0, and A5.3:

- a. Addndm2.Exh W.BDA001.pdf and Addndm2.Exh X.BDA002.pdf showing exterior precast steps and stucco-covered CMU retaining walls.
- 4. Supplement Structural drawing S4.1 with helical reinforcing piers for the existing foundation near elevator:
 - a. Addndm2.Exh Y.BDS001.pdf showing helical piers in section.
 - b. Addndm2.Exh Z.BDS002.pdf containing notes about the helical piers.
- Electrical sheet E1.1: The four (4) Type Z4 light fixtures and circuiting originally designated as Add Alternate #4 shall be revised to include a note about the lights as follows: "TO BE INCLUDED AS PART OF BASE BID." This revision will eliminate Add Alternate #4.

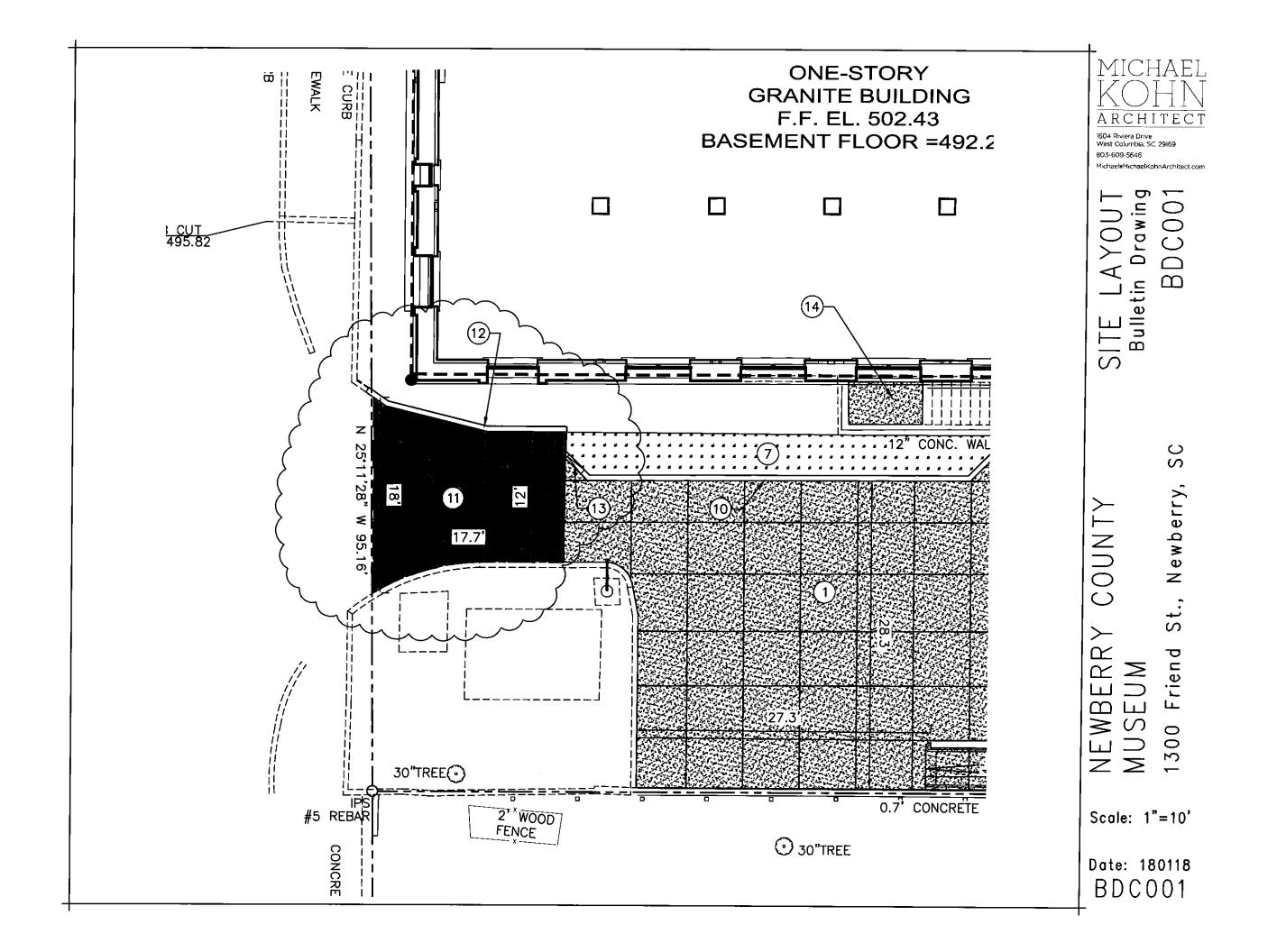
End of Addendum

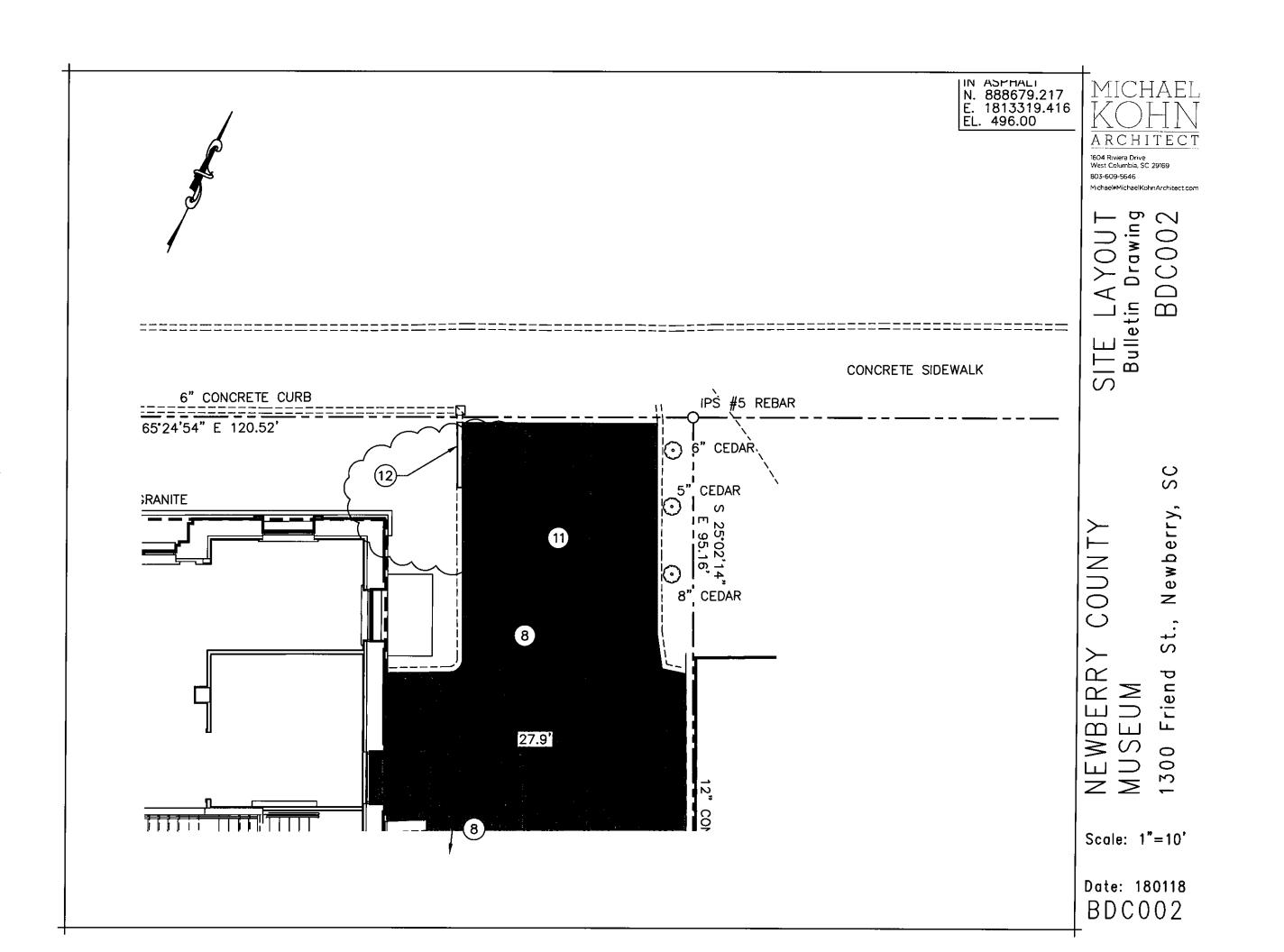
HELICAL SCREW PILES:

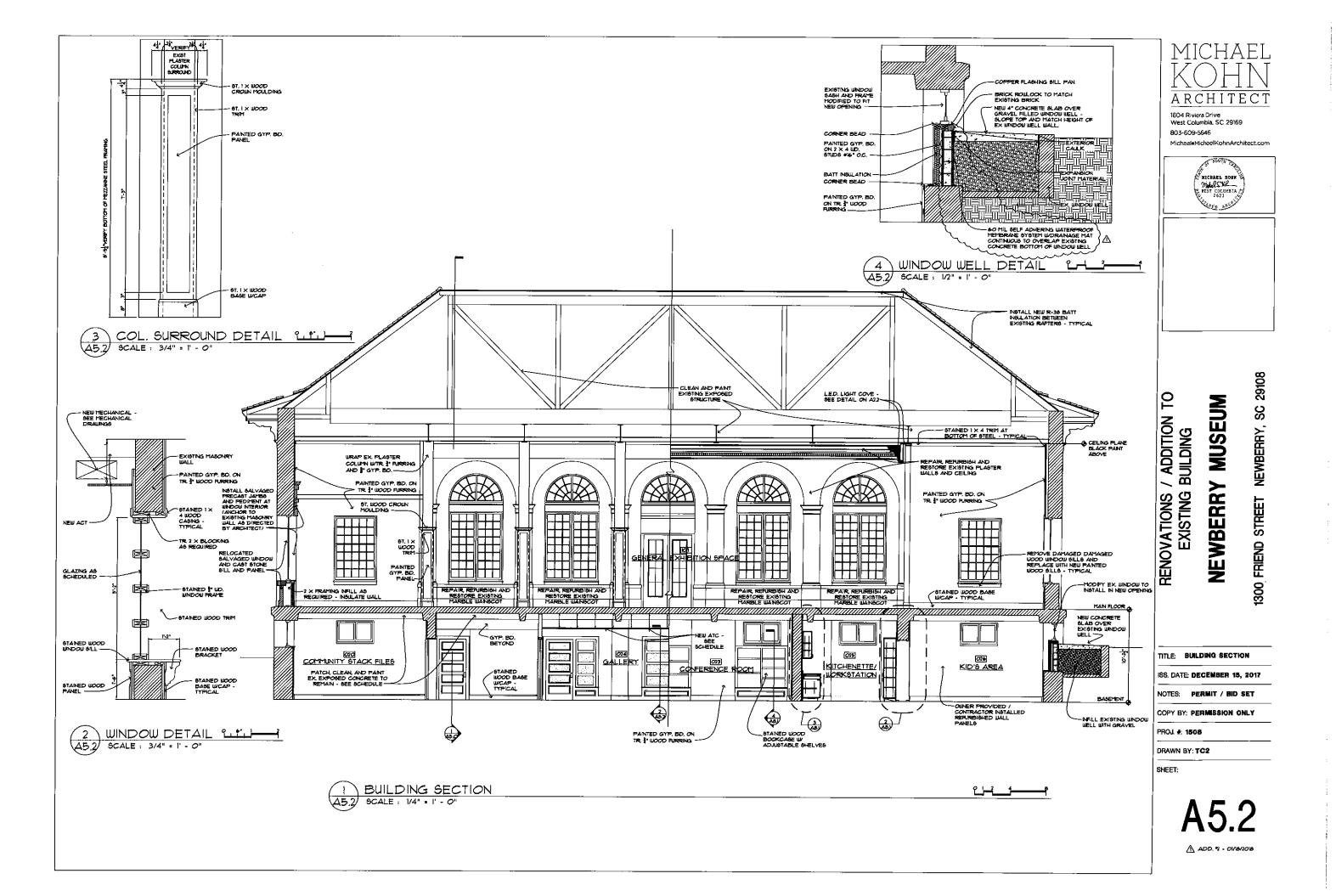
- 1. HELICAL PIERS SHAL BE AS MANUFACURED BY THE A. B. CHANCE CO., CENTRALIA, MO OR APPROVED EQUAL.
- 2. DESIGN, FABRICATION, AND INSTALLATION SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND SAFETY CODES IN EFFECT AT THE TIME OF INSTALLATION.
- 3. PIERS SHALL CONFORM TO AN OFFICIAL ICBO OR IAPMO EVALUATION REPORT.
- SUBMITTALS:

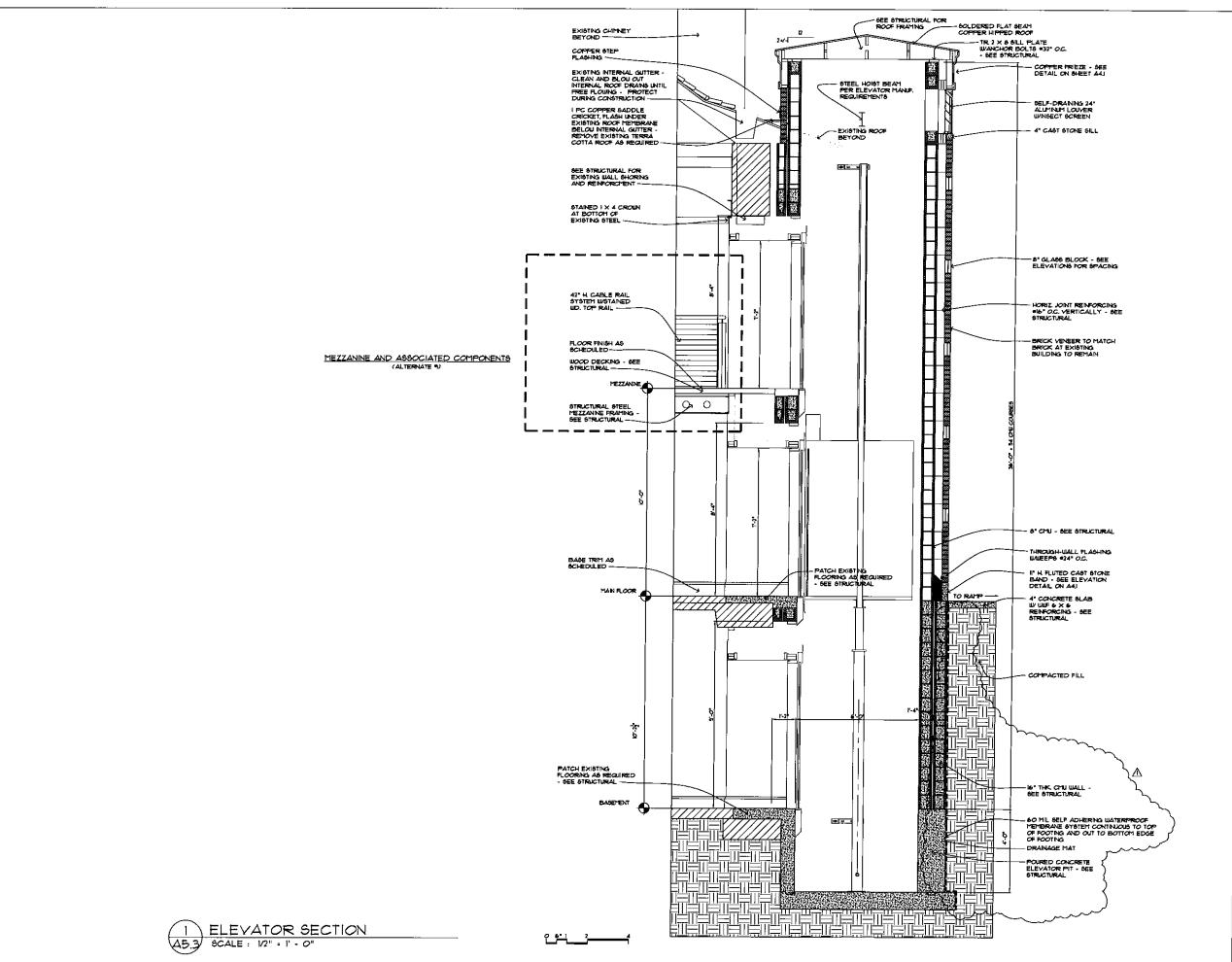
SHOP DRAWINGS SHOWING SIZE, TYPE, CONFIGURATION, LENGTH, CONNECTIONS TO THE STRUCTURE, INSTALLATION REQUIREMENTS, AND REQUIRED INSTALLATION TORQUE. PRODUCT DATA. ENGINEERING CALCULATIONS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROJECT STATE.

- 5. DESIGN OF HELICAL PIERS SHALL BE PERFORMED BY A LICENSED ENGINEER ENGAGED BY THE MANUFACTURER.
- HELICAL PIER DESIGN WILL CONSIDER THE DESIGN LOAD WITH A SAFETY FACTOR OF 2.0, SOIL PARAMETERS, AND THE INSTALLATION TORQUE VS. CAPACITY EQUATION PER THE MANUFACTURER'S RECOMMENDATIONS.
- 7. PIER CAPACITIES (SERVICE LOADS) ARE AS FOLLOWS: VERTICAL DOWNWARD: 10 TONS
- 8. THE HELICAL LEAD SECTIONS AND EXTENSION SECTIONS SHALL BE SOLID STEEL, SQUARE SHAFT, OR ROUND STEEL PIPE SHAFT WITH ONE OR MORE HELICAL BEARING PLATES WELDED TO THE SHAFT.
- 9. INSTALLATION EQUIPMENT SHALL BE CAPABLE OF DEVELOPING THE REQUIRED INSTALLATION TORQUE, AND SHALL BE CAPABLE OF POSITIONING THE PIER AT THE PROPER INSTALLATION LOCATION AND ANGLE.
- INSTALLATION TORQUE SHALL BE MONITORED THROUGHOUT THE INSTALLATION PROCESS, AND PIERS SHALL BE ISNTALLED TO THE MINIMUM TORQUE VALUE REQUIRED TO PROVIDE THE SPECIFIED LOAD CAPACITIES.









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29108

NEWBERRY, SC

STREET

1300 FRIEND

RENOVATIONS / ADDITION TO EXISTING BUILDING NEWBERRY MUSEUM

TITLE: ELEVATOR SECTION

ISS. DATE: **DECEMBER 15, 2017**

NOTES: PERMIT / BID SET

COPY BY: PERMISSION ONLY

PROJ. #: 1508

DRAWN BY: TC2

SHEET:

A5.3

ADD. 7 - OVEROUS

