ADDENDUM # 2

DATE: FEBRUARY 24, 2020

TO CONTRACT DOCUMENTS ENTITLED:

SINCLAIR SCHOOL OF NURSING – CONSTRUCT NEW BUILDING
SINCLAIR SCHOOL OF NURSING – WATER LINE REPLACEMENT

UNIVERSITY OF MISSOURI

PROJECT NUMBERS: CP181391 & CP200511

ADVERTISEMENT DATE: January 30, 2020

PREPARED FOR: The Curators of the University of Missouri

CONSULTANT: International Architects Atelier, Inc.
912 Broadway Suite 300
Kansas City, Missouri 64105
Telephone: (816) 471-6522

Specifications for the above noted project and the work covered thereby are herein modified as follows, and except as set forth herein, otherwise remain unchanged and in full force and effect:

SPECIFICATION CHANGES:

1. Special Conditions – Paragraph 20.b

ADD: (4) BIM: Coordination drawings shall be developed and incorporated in a Building Information Model developed and established for the project.

   (i) The Building Information Model for the building shall be modeled and coordinated by the General Contractor with cooperation from all sub-contractors.

   (ii) BIM shall be used for coordination of building systems including Structural, Mechanical, Electrical, Plumbing, Fire Protection, and Lighting.

   (iii) Perform three-dimensional component conflict analysis as part of preparation of coordination drawings. Resolve component conflicts prior to submittal. Indicate where conflict resolution requires modification of design requirements by Architect.
2. Section 033000 – Cast-In-Place Concrete; Paragraph 1.6
ADD:

F. Sample Panel: Provide a 3’x3’ concrete sample panel with one half showing the form liner pattern and one half showing the sandblasting finish quality.

3. Section 057313 – Glazed Decorative Metal Railings; Paragraph 2.3.A.4
ADD:

d. Rinox.

4. Section 088000 – Glazing; Paragraph 2.12.D
REMOVE:
1. Non-Exposed Finished Edge, Typical: Flat Polished.
REPLACE WITH:
1. Non-Exposed Finished Edge, Typical: Flat Cut.

5. Section 096813 – Tile Carpeting; Paragraph 2.2.A
CLARIFICATION:
All carpet types shall be supplied with Standard “Affirma” backing.

6. Section 102113.19 – Solid Plastic Toilet Compartments; Paragraph 2.4.A
REMOVE:
4. Urinal Screens, 55 inches high by 18 inches, mounting height to match toilet partitions.
REPLACE WITH:
4. Urinal Screens, 55 inches high by 18 inches, mounting height to match toilet partitions.

7. Section 102113.19 – Solid Plastic Toilet Compartments; Paragraph 2.4.E
CLARIFICATION:
Height of wall bracket shall be as required for size of dividing panels and urinal screens.

8. Section 102226 – Operable Partitions; Paragraph 2.1.C
ADD: Kwik-Wall Series 3020 or 3030 with trimless astragals.

9. Section 230523: General Duty Valves for HVAC Piping
ADD:
2.1.A.2 Nexus Valve.

10. Section 232113: Hydronic Piping
ADD:
2.1.A.1 Nexus Valve.
ADD:
2.6.E.1 Nexus Valve.
REMOVE:
3.1.A “2-1/2”.
REPLACE WITH:
3.1.A “2”.
ADD:
3.1.A.1 Copper piping may be utilized.
REMOVE:
3.1.B “3”.
REPLACE WITH:
3.1.B “2-1/2”.
REMOVE:
3.2.A.1 “(up to 2-1/2)”. 
REPLACE WITH:
3.2.A.1 “(up to 2)”.
REMOVE:
3.2.A.1 “(3” and larger)”. 
REPLACE WITH:
3.2.A.1 “(2-1/2” and larger)”.

11. Section 232213: Steam & Condensate Heating Piping
REMOVE:
3.1.A “Class 300”.
REPLACE WITH:
3.1.A “Class 150”.

12. Section 232213: Metal Ducts
ADD: 1.2.1.6 Duct Liner
ADD: 2.4 DUCT LINER

A. Flexible Elastomeric Duct Liner: Preformed, cellular, closed-cell, sheet materials complying with ASTM C 534, Type II, Grade 1; and with NFPA 90A or NFPA 90B.

1. Acceptable Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   a. Aeroflex USA Inc.
   b. Armacell LLC.
   c. NOMACO Insulation.

2. Surface-Burning Characteristics: Maximum flame-spread index of 25 and maximum smoke-developed index of 50 when tested according to UL 723; certified by an NRTL.

3. Liner Adhesive: As recommended by insulation manufacturer and complying with NFPA 90A or NFPA 90B.
   a. For indoor application, use adhesive that has a VOC content of 50 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

B. Insulation Pins and Washers:

1. Cupped-Head, Capacitor-Discharge-Weld Pins: Copper- or zinc-coated steel pin, fully annealed for capacitor-discharge welding, 0.106-inch-diameter shank, length to suit depth of insulation indicated with integral 1-1/2-inch galvanized carbon-steel washer.

2. Insulation-Retaining Washers: Self-locking washers formed from 0.016-inch-thick galvanized steel; with beveled edge sized as required to hold insulation securely in place but not less than 1-1/1 inches in diameter.

C. Shop Application of Duct Liner: Comply with SMACNA’s “HVAC Duct Construction Standards – Metal and Flexible”, Figure 2-19, “Flexible Duct Liner Installation”.

D. Adhere a single layer of indicated thickness of duct liner with at least 90 percent adhesive coverage at liner contact surface area. Attaining indicated thickness with multiple layers of duct liner is prohibited.
1. Apply adhesive to transverse edges of liner facing upstream that do not receive metal nosing.
2. Butt transverse joints without gaps, and coat joint with adhesive.
3. Fold and compress liner in corners of rectangular ducts or cut and fit to ensure butted edge overlapping.
4. Do not apply liner in rectangular ducts with longitudinal joints, except at corners of ducts, unless duct size and dimensions of standard liner make longitudinal joints necessary.
5. Apply adhesive coating on longitudinal seams in ducts with air velocity of 2500 fpm.
6. Secure liner with mechanical fasteners 4 inches from corners and at intervals not exceeding 12 inches transversely; at 3 inches from transverse joints and at intervals not exceeding 18 inches longitudinally.
7. Secure transversely oriented liner edges facing the airstream with metal nosings that have either channel or “z” profiles or are integrally formed from duct wall. Fabricate edge facings at the following locations:
   a. Fan discharges.
   b. Intervals of lined duct preceding unlined duct.
   c. Upstream edges of transverse joints in ducts where air velocities are higher than 2500 fpm or where indicated.
8. Terminate ducts with buildouts attached to fire-damper sleeves, dampers, turning vane assemblies, or other devices. Fabricated buildouts (metal hat sections) or other buildout means are optional; when used, secure buildouts to duct walls with bolts, screws, rivets, or welds.

ADD: 3.11.G Liner:
1. Return Air Boots and Supply Grille Plenums: Type II, 1 inch thick.

13. Section 237315: Modular Custom Central-Station Air-Handling Units Metal Ducts
ADD: 2.1.A Engineered Air.
REMOVE: 2.3.K
REPLACE WITH: 2.3.K Each fan in the fanwall system shall be furnished with a motor brake. If the motor brake is not available a blank-off plate shall be provided.
REMOVE: 2.3.N
REPLACE WITH: 2.3.N Analog input will be provided by TCC to control the
fanwall array. Provide service disconnect with fuses or circuit breaker. Provide individual service disconnecting means for each fan.

**DRAWINGS CHANGES:**

1. **Drawing Sheet: C100 – Civil Site Demolition Plan**
   **CLARIFICATION:** The irrigation bypass work indicated with Keyed Note #16, shall include any and all materials and labor to maintain a continuously functioning irrigation system except during winter shut down. Damaged components shall be immediately replaced. Work on components which require removal or modification shall be scheduled and completed to provide continuous operation of the system. The scope is to include, but not limited to, new underground piping, fittings, valves, timers, electrical systems, heads, pumps, connections, etc. as required.

2. **Drawing Sheet: L304**
   **REMOVE:** Drawing L304
   **REPLACE WITH:** Attached Drawing L304, dated February 24, 2020.
   **CLARIFICATION:** The finish of the concrete wall shown in elevation V5 shows the formliner pattern and limits.

3. **Drawing Sheet: A530**
   **REMOVE:** Drawing A530
   **REPLACE WITH:** Attached Drawing A530, dated February 24, 2020.

4. **Drawing Sheets: P101 – P105**
   **ADD:** 2" sanitary waste piping from added floor drain.

5. **Drawing Sheets: P101 – P105**
   **ADD:** To General Note 2: “Piping located in chases and areas without ceilings do not need to be protected”.
   **ADD:** Air Compressor AC-01 and Compressed air piping from **Compressed Air Stor. S112E** routed to outlets in lab headwall units.
   **ADD:** 2" floor drain in **Compressed Air Stor. S112E** and associated 1 ½” Vent piping.

6. **Drawing Sheets: P600**
   **ADD:** Air compressor schedule.

7. **Drawing Sheet: E000**
   **REVISE:** Revise floor box schedule to include manufacturer and model as shown on revised drawing.
   **REVISE:** Revise communication symbols list to note cat6A cabling for all data outlets as shown on revised drawing.
   **REVISE:** Revise communication symbols list to note cat6a cabling to be provided by owner and contractor installed as shown on revised drawing.

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Advertisement Date: January 30, 2020
8. **Drawing Sheet: EP101**  
   **REVISE:** Add disconnect switch for air compressor motor as shown on revised drawing.  
   **ADD:** Add power connection and disconnect switch for Air Compressor.

9. **Drawing Sheet: E601**  
   **REVISE:** Revise panelboard schedule HP-N11 as shown on revised sheet.

10. **Drawing Sheet: CUS-101 – Site Utility Steam Plan; Key Notes**  
    **REMOVE:** Note #4  
    **REPLACE WITH:**  
    "4. Assume that existing 16" direct bury, steel casing pipe has an asbestos coating and that the 4" steam and 2" condensate carrier pipes have insulation containing asbestos. Owner will test all suspected asbestos materials during excavation process, and all confirmed asbestos materials shall be removed by Owner."

11. **Drawing Sheet: CUS-501 – Site Details – Steam, Earthwork, ID, Waterproofing**  
    **CLARIFICATION:** The waterproofing details shown on this Drawing are only required for the new sections of Steam Chase shown on Drawing CUS-101.

ATTACHMENTS: L304, A530, P100, P101, P600, E000, EP101, E600

END OF ADDENDUM # 2
CONSTRUCTION
EXISTING CONSTRUCTION

* TAG ALL MATERIALS WITH THEIR LOCATIONS AND SEQUENCING FOR RE-USE. REPAIR AND CLEAN ANY DAMAGED MATERIALS PRIOR TO BEING RE-SET.

MISSOURI STATE CERTIFICATE OF AUTHORITY #000582

NEW CONSTRUCTION

DIVISION 03
STRUCTURAL CONSULTANT
033000.B CAST-IN-PLACE CONCRETE WALL (RE: STRUCT.)

HGA
265600.A
STRUCTURAL CONSULTANT
057313.D CAST-IN-PLACE CONCRETE WALL (RE: STRUCT.)

W.L. CASSELL & ASSOCIATES
1600 BALTIMORE STREET
KANSAS CITY, MO 64108
PH: 816.842.837

DIVISION 04
CIVIL CONSULTANT
042000.A FACE BRICK (FBR-1)

DIVISION 05
MECHANICAL CONSULTANT - STEAM UTILITIES

DIVISION 06

SINCLAIR SCHOOL OF NURSING
CONSTRUCT NEW BUILDING
ISSUED FOR BID

DIVISION 07

DIVISION 08

DIVISION 09

MAJID AMIRAHMADI - ARCHITECT

ENLARGED SITE PLANS & DETAILS

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KEYNOTES

SOUTHEAST COURTYARD SECTION

SCALE: 3/4" = 1'-0"
NOTES:

1 PROVIDE WITH BACNET CARD FOR INTEGRATION TO BAS.

2 SET BOOSTER PUMP PACKAGE ON 4" CONCRETE CURB WITH NEOPRENE ISOLATORS.

MARK LOCATION MANUFACTURER MODEL GPM PUMP

FD-1 FLOOR DRAIN W/ RSD SIDE OUTLET

ERD EMERGENCY ROOF TRAP GUARD

HOT WATER CIRCULATING PUMP DETAIL

NICKEL BRONZE DOWNSPOUT NOZZLE WITH NO-HUB, PLAIN FINISH BODY, OUTLET TONGUE AND TURN DOWN OVER COLLARS, UNDERDECK CLAMP AND CAST IRON DOME AND DECKING CLAMP.

DRAINS (3/4 OR 1/2 GRATE). PROVIDE WITH PROSET TRAP GUARD INSERT.

INDEPENDENTLY RELIEF VALVE

TEMP./PRESSURE DRAIN SCHEDULE

DRAIN VALVE INDEPENDENT FROM PIPING SCHEDULED. SUPPORT

HC (GAL.)

PUMP MOTOR DATA MOTOR CONTROL DATA

HWC HOT WATER CIRC. PUMP.

WADE 1100 SERIES AS NOTED ON DRWG'S

WADE MODEL 3100 AS NOTED ON DRWG'S

WADE MODEL 3000 AS NOTED ON DRWG'S

SWITCH (dB) VOLTS PHASE HZ

DETAIL OF ELEVATOR SUMP PUMP

CHECK VALVE

REMARKS

SEE DRAWING FOR PIT SIZE

AEWC-2 ACCESSIBLE

AEWC-1 ACCESSIBLE

DS-1 DOUBLE

IM-1 COUNTER ICE

S-1 HAND SINK 19"x18" 18 GAUGE NO. 302 STAINLESS STEEL SINGLE COMPARTMENT SINK WITH COVED CORNERS, TOP MOUNT, SATIN FINISH. UNDERSIDE FULLY SOUND DEADENED WITH ROLLED EDGES W/ SIDE DRAINBOARDS AND INTEGRAL BACKSPLASH. SINK TO HAVE FINISH, BACKSPLASH MOUNTED GOOSE NECK SPOUT WITH WRIST BLADE HANDLES.

SIPHON JET FLUSH ACTION, ELONGATED SIDES, 3/4" INLET SPUD, 2" OUTLET AND WALL CORNERS. BACKSPLASH MOUNTED FAUCET WITH WRIST BLADE HANDLES AND SWING LOWER UNIT PER ADA REQUIREMENTS & RE: ARCHITECTURAL DRAWINGS.

RECESSED STAINLESS STEEL WASHING MACHINE OUTLET BOX WITH 2" CENTER DRAIN AND 1.28 GPF SIPHON JET ACTION, ELONGATED BOWL, WALL MOUNTED. 1-½" TOP SPUD, DOOR AND HYDRANT, WITH DOUBLE CHECK BACKFLOW PREVENTER/VACUUM BREAKER ON SELF CONTAINED TWO STATION AIR COOLER BARRIER FREE ELECTRIC WATER COOLER, WATER SERVICE.

9. METER SHALL BE BADGER M2000 ELECTROMAGNETIC METER. LOCATED IN THE UPPER PORTION OF THE INSIDE DIAMETER OF THE FLOW TUBE.

ANGLE STOPS.

GRID STRAINER & 1-1/2" CP BRASS OFFSET TAILPIECE. DEARBORN NO. 710 VACUUM BREAKER AND STOPS. CARRIER BOLTED TO FLOOR EXPOSED SLOAN ECOS BATTERY POWERED FLUSHOMETER 8186.05 HIGH SLOAN ROYAL OPTIMA PLUS 8111 LOW CONSUMPTION BATTERY POWERED

INSULATE "P" TRAPS FROM DRAIN CONNECTION TO VERTICAL WASTE WITH ½" CHECK VALVES SHALL BE WATTS #600 SERIES "MAXI-FLO".

DEARBORN NO. 2712 KCW HOT AND COLD WATER COMPRESSION INLET SUPPLIES WITH STOPS CHICAGO FAUCET NO. 895-GN2FC-317-XK FAUCET, 4" CENTERS, NO. 317 4" CHECK VALVES FOR HOT AND COLD WATER INLET SUPPLIES. T&S BRASS B-0231 CP 12" SWING SINK FAUCET. STRAINER AND NEOPRENE STOPPER AND C.P. 1-1/2" BRASS BRANCH TAILPIECE

THREE 1-¼" 17 GAUGE "P" TRAPS, ONE FOR EACH BOWL AND BOTTLE FILLER.

SENSOR OPERATED FLUSH VALVE, QUIET OPERATING, WITH VACUUM BURY DEPTH TO BE 36". WOODFORD Y95 VALVE AT BUILDING INTERIOR AS SHOWN ON PLAN.

P-TRAP & ANGLE VALVE ASSEMBLY STOP. PROVIDE WITH TRUEBRO LAV GUARD 2 ADA-CONFORMING LAVATORY HEAD – SET CYCLE TIME TO 12 SECS. ELKAY NO. LK-18C.P. BRASS GRID WITH BATTERY BACK-UP POWER, 0.35 GPM MULTI-STREAM LAMINAR SPRAY TO BUILDING SERVICE

120V FEED SHALL BE 15A DEDICATED CIRCUIT FROM PANEL.

DO NOT SHARE CONDUIT PATHS WITH WIRES OTHER THAN SHOWN.

UNLESS OTHERWISE INDICATED, ALL CABLES AND WIRES INSTALLED BY CONTRACTOR. NO BOX INSTALLED BY CONTRACTOR.
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