



ADDENDUM NOTICE

The People's Health Center – Medical Office Building

2340 E. 10th Street, Indianapolis, IN. 46201

Addendum E and Addendum F have been issued for the above referenced project. These addenda can be viewed at our office or on our website. All contractors are required to note receipt of all addenda on their proposals and incorporate any changes into their bid amounts as necessary.

TO: Contractors
FROM: Mike Ralstin
DATE: November 5, 2009
BID DATE: Monday, November 9, 2009 by 4:00pm

The construction documents for the above referenced projects are out to bid. The project includes the construction of a new +/- 28,000sf new medical office building with site improvements.

Brandt Construction, Inc. (BCI) will be accepting bids on all of the following scopes: structure demolition; site clearing; earth moving; erosion control; hot-mix asphalt paving; concrete paving; plantings and seeding; site utilities; cast-in-place concrete; concrete unit masonry; structural steel framing; steel joist framing; steel decking; cold-formed metal framing; metal fabrications; metal stairs; decorative metal railings; rough carpentry; sheathing; interior architectural woodwork; resin panels; cold fluid applied waterproofing; thermal insulation; fluid applied membrane air barriers; siding; sheet metal flashing and trim; roof accessories; thermoplastic membrane roofing; joint sealants; HM doors & frames; flush wood doors; access doors and frames; aluminum-framed entrances & storefronts; glazed aluminum curtain walls; glazing; plastic glazing; door hardware; louvers and vents; non-structural steel framing; gypsum board; tiling; acoustical panel ceilings; wood flooring; concrete stain and finishing; resilient base & accessories; resilient sheet flooring; tile carpeting; wall coverings; interior painting; high performance coatings; toilet compartments; wall and door protection; toilet, bath, and laundry accessories; fire extinguishers; hydraulic elevator; fire sprinkler system; plumbing; HVAC; electrical; communications; and electronic safety & security.

OTHER: This project does have a wage scale and is tax exempt.

ALTERNATES: There are (2) Alternates. See Spec Section 012300 of Bidding Documents.

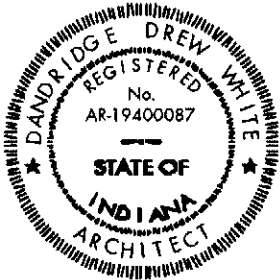
DOCUMENTS: Construction Documents are available through Reprographics or can be examined/ copied at our corporate office. They can also be viewed or downloaded off of our website at www.brandtconstruction.com under "Bidding Opportunities. The login name is "subcontractor" and the password is "brandt". This Invitation to Bid, along with any future addenda and/or other important project information will be posted to this website. Please contact Staci Woodyard at our office for additional information, if needed, on bidding documents.



General Contractor Construction Manager
330 East St. Joseph Street Indianapolis, Indiana 46202 (317) 638-3300
FAX (317) 633-6671

PROJECT: Peoples Health Center **AXIS PROJECT NUMBER:** 29016
 DATE: November 4, 2009 **BY:** Eric J Anderson, AIA LEED AP

This addendum is issued in accordance with the provisions of the "General Conditions of the Contract for Construction," Article 1, "Contract Documents" and becomes a part of the Contract Documents as provided therein. This addendum includes:



Drew White

GENERAL ITEMS/CLARRIFICATIONS:

1. **CMU COLORS:**
 - a. COLOR #1 IS KNIGHT GOLD
 - b. COLOR #2 IS LIGHT BROWN

2. **SILL CLARIFICATIONS:**
 - a. THERE ARE NO CAST STONE SILLS IN THE PROJECT.

3. **SKAO1 CLARRIFICATION - WELD PLATES FOR SECOND FLOOR RAILING:**
 - a. THE 5/8" WELD PLATE FOR THE ATTACHMENT OF THE SECOND FLOOR RAILING TO THE STEEL SLAB EDGE DOES NOT NEED TO BE CONTINUOUS. THE WELD PLATE CAN BE THE SAME SIZE AS THE RAILING ATTACHMENT.

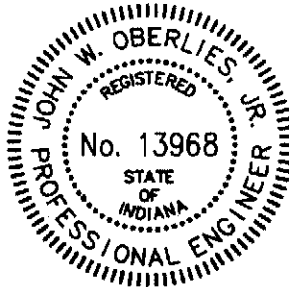
OTHER ADDENDUMS

1. PLEASE SEE ATTACHED MEP ADDENDUM

END OF ADDENDUM D

PROJECT: Peoples Health Center **AXIS PROJECT NUMBER:** 29016
DATE: November 4, 2009 **BY:** John W. Oberlies, Jr., PE

This addendum is issued in accordance with the provisions of the "General Conditions of the Contract for Construction," Article 1, "Contract Documents" and becomes a part of the Contract Documents as provided therein. This addendum includes:



A handwritten signature in black ink that reads "John W. Oberlies, Jr."

DRAWING ITEMS:

1. **SHEET P-101**
 - a. Add Plan Note #7. Change plan tags at condensate lines to #7. See attached sheet P-101.
 - b. Add condensate piping to (5) units and (2) drops from above. See attached sheet P-101.
2. **SHEET M-201 & M202**
 - a. Add factory installed condensate pumps in fan coil units (FCU) ST01-1 & ST02-01, pipe condensate drains according to "P" series drawings
 - b. All condensate pumps shall be hidden and not visible from the occupied space. Coordinate condensate locations with Architect and Engineer PRIOR to installation.

END OF ADDENDUM E

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes control equipment for HVAC systems and components, including control components for terminal heating and cooling units not supplied with factory-wired controls.

1.2 SUBMITTALS

- A. Product Data: For each control device indicated.
- B. Shop Drawings:
 - 1. Schematic flow diagrams.
 - 2. Power, signal, and control wiring diagrams.
 - 3. Details of control panel faces.
 - 4. Damper schedule.
 - 5. Valve schedule.
 - 6. DDC System Hardware: Wiring diagrams, schematic floor plans, and schematic control diagrams.
 - 7. Control System Software: Schematic diagrams, written descriptions, and points list.
- C. Software and firmware operational documentation.
- D. Field quality-control test reports.
- E. Operation and maintenance data.

1.3 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers specified.

2.2 CONTROL SYSTEM

- A. Manufacturers:
1. Andover Controls by Havel Bros.
 2. Automated Logic Corporation by J&T Systems
 3. Honeywell by the Indianapolis Branch Office of Honeywell
 4. Invensys by Precision Controls, Inc.
 5. Siemens Building Technologies by the Indianapolis Branch Office of Siemens
 6. Staefa Control Systems by Thomas L. Grantham Co.
 7. TAC Vista by Total Access Controlsor
 8. Other Preapproved Equal.
- B. Control system shall consist of sensors, indicators, actuators, final control elements, interface equipment, other apparatus, accessories, and software connected to distributed controllers operating in multiuser, multitasking environment on token-passing network and programmed to control mechanical systems. A web enabled interface allows interaction with the network via dynamic color graphics with each mechanical system, building floor plan, and control device depicted by point-and-click graphics.

2.3 DDC EQUIPMENT

- A. Power Supplies: Transformers with Class 2 current-limiting type or overcurrent protection; limit connected loads to 80 percent of rated capacity. DC power supply shall match output current and voltage requirements and be full-wave rectifier type with the following:
1. Output ripple of 5.0 mV maximum peak to peak.
 2. Combined 1 percent line and load regulation with 100-mic.sec. response time for 50 percent load changes.
 3. Built-in overvoltage and overcurrent protection and be able to withstand 150 percent overload for at least 3 seconds without failure.
- B. Power Line Filtering: Internal or external transient voltage and surge suppression for workstations or controllers with the following:
1. Minimum dielectric strength of 1000 V.
 2. Maximum response time of 10 nanoseconds.
 3. Minimum transverse-mode noise attenuation of 65 dB.
 4. Minimum common-mode noise attenuation of 150 dB at 40 to 100 Hz.

2.4 UNITARY CONTROLLERS

- A. Unitized, capable of stand-alone operation with sufficient memory to support its operating system, database, and programming requirements, and with sufficient I/O capacity for the application.
1. Configuration: Local keypad and display; diagnostic LEDs for power, communication, and processor; wiring termination to terminal strip or card connected with ribbon cable; memory with bios; and 72-hour battery backup.

2. Operating System: Manage I/O communication to allow distributed controllers to share real and virtual object information and allow central monitoring and alarms. Perform scheduling with real-time clock. Perform automatic system diagnostics; monitor system and report failures.
3. Enclosure: Dustproof rated for operation at 32 to 120 deg F.

2.5 STATUS SENSORS

- A. Status Inputs for Fans: Differential-pressure switch with pilot-duty rating and with adjustable range of 0- to 5-inch wg.
- B. Status Inputs for Electric Motors: Comply with ISA 50.00.01, current-sensing fixed- or split-core transformers with self-powered transmitter, adjustable and suitable for 175 percent of rated motor current.

2.6 CONTROL CABLE

- A. Electronic and fiber-optic cables for control wiring are specified in Division 27 Section "Communications Horizontal Cabling."

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Verify location of thermostats, receivers, remote controls, and other exposed control sensors with Drawings and room details before installation. Install devices 48 inches (1220 mm) above the floor.
- B. Provide a web-enabled Building Automation System based on LonWorks protocol, with a graphical user interface and features the include:
 1. Color Graphics page for each system room unit, heat recovery unit and make-up air unit.
 2. Initial operator navigation through building floor overviews.
 3. Set point adjustment.
 4. Time schedule adjustment.
 5. Trend graphing.
 6. User access via web browser.
 - a. No dedicated computer hardware/software required.
 - b. Password protected.
 7. Internet access capability.
 8. Status of exhaust fans.
- C. Integration of the VRF System into the Building Automation System.
 1. Installation, wiring and commissioning of LonWorks interface devices.

2. Integration of all system points via LonWorks communication protocol.
 - a. Full system access from any network PC.
 - b. Graphical representation of all major/critical points.
 3. Alarm notification per unit.
 4. Provide LonWorks interface devices.
 5. Coordinate with unit manufacturer.
- D. Integration of the Make-up Air Unit.
1. Monitor discharge air temperature control.
 2. Control dehumidification sequence.
 3. Add fan status and unit enable as control points to allow for time scheduling.
- E. Outdoor air temperature and humidity monitoring
- F. Provide 8 hours of on-site owner training and a one-year service warranty.
- G. Submit a one-year service agreement offer, directly to the Owner, prior to the end of warranty. This agreement is totally separate from the initial construction contract, and the Owner is not contractually bound to accept.

3.2 ELECTRICAL WIRING AND CONNECTION INSTALLATION

- A. Install raceways, boxes, and cabinets according to Division 26 Section "Raceway and Boxes for Electrical Systems."
- B. Install building wire and cable according to Division 26 Section "Low-Voltage Electrical Power Conductors and Cables."
- C. Install signal and communication cable according to Division 27 Section "Communications Horizontal Cabling."
 1. Conceal cable, except in mechanical rooms and areas where other conduit and piping are exposed.
 2. Install exposed cable in raceway.
 3. Install concealed cable in raceway.
 4. Bundle and harness multiconductor instrument cable in place of single cables where several cables follow a common path.
 5. Fasten flexible conductors, bridging cabinets and doors, along hinge side; protect against abrasion. Tie and support conductors.
 6. Number-code or color-code conductors for future identification and service of control system, except local individual room control cables.
 7. Install wire and cable with sufficient slack and flexible connections to allow for vibration of piping and equipment.
- D. Connect manual-reset limit controls independent of manual-control switch positions. Automatic duct heater resets may be connected in interlock circuit of power controllers.

- E. Connect hand-off-auto selector switches to override automatic interlock controls when switch is in hand position.

3.3 FIELD QUALITY CONTROL

- A. **Manufacturer's Field Service:** Engage a factory-authorized service representative to inspect, test, and adjust field-assembled components and equipment installation, including connections, and to assist in field testing. Report results in writing.
- B. Perform the following field tests and inspections and prepare test reports:
 - 1. **Operational Test:** After electrical circuitry has been energized, start units to confirm proper unit operation. Remove and replace malfunctioning units and retest.
 - 2. Test and adjust controls and safeties.
 - 3. Test calibration of controllers by disconnecting input sensors and stimulating operation with compatible signal generator.
 - 4. Test each point through its full operating range to verify that safety and operating control set points are as required.
 - 5. Test each control loop to verify stable mode of operation and compliance with sequence of operation. Adjust PID actions.
 - 6. Test each system for compliance with sequence of operation.
 - 7. Test software and hardware interlocks.
- C. **DDC Verification:**
 - 1. Verify that instruments are installed before calibration, testing, and loop or leak checks.
 - 2. Check instruments for proper location and accessibility.
 - 3. Check instrument installation for direction of flow, elevation, orientation, insertion depth, and other applicable considerations.
 - 4. Check instrument tubing for proper fittings, slope, material, and support.
 - 5. Check pressure instruments, piping slope, installation of valve manifold, and self-contained pressure regulators.
 - 6. Check temperature instruments and material and length of sensing elements.
 - 7. Check control valves. Verify that they are in correct direction.
 - 8. Check air-operated dampers. Verify that pressure gages are provided and that proper blade alignment, either parallel or opposed, has been provided.
 - 9. Check DDC system as follows:
 - a. Verify that DDC controller power supply is from emergency power supply, if applicable.
 - b. Verify that wires at control panels are tagged with their service designation and approved tagging system.
 - c. Verify that spare I/O capacity has been provided.
 - d. Verify that DDC controllers are protected from power supply surges.
- D. Replace damaged or malfunctioning controls and equipment and repeat testing procedures.

3.4 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain HVAC instrumentation and controls. Refer to Division 01 Section "Demonstration and Training."

END OF SECTION 230900