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**Tower Project Name:** WVNCC HVAC Controls and Repairs  
**Tower Project Number:** 2020103  
Client: WV Community & Technical College System  
Prepared By: Tom Valerio  
Date:

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**Addendum Number:** 1

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## CLARIFICATIONS MADE DURING PRE-BID MEETING

- 1) All questions shall be submitted electronically to Tom Valerio at [tvalerio@estower.com](mailto:tvalerio@estower.com).
- 2) The final day to submit questions is August 26, 2021.
- 3) Bids will be received in hard copy format only. Submit sealed bids to the Community and Technical College System of WV, 1018 Kanawha Boulevard, East, Charleston, WV 25301 on or before 9/2/2021 at 3:00 PM.
- 4) Nameplate Data for RTU-4 and RTU-6 serving the New Martinsville Campus indicates the following data:
  - a) RTU-4 is a Carrier Model 48PGFC08 with two R410A refrigeration circuits holding 11.75 lbs. each.
  - b) RTU-6 is a Carrier Model 48P2D030600003GT1N with two R410-A refrigeration circuits holding 15.4 and 14.8 lbs. respectively.
- 5) Covid Protocols: The following statements represent present Covid Protocols being instituted by the College. The College reserves the right to change these protocols at any time without notice.
  - a) Masks shall be worn by all personnel entering or occupying any College building.
  - b) Beginning September 2, 2021, all personnel must present proof of Covid Vaccination or submit to regular testing for Covid infection.

## SPECIFICATIONS

### Item No. 1.01

#### SECTION 012300 Alternates

Article 3.1 Schedule of Alternates, Paragraph D. Alternate No. 1.4: Replace B&O Building VAV Terminal Unit Controllers and HW Control Valves, Article D.1 Base Bid:

DELETE the Base Bid description in its entirety and replace with the following:

1. Base Bid: Retain VAV terminal unit controllers, *thermostats* and hot water control valves as they exist today. Program each controller, actuator and control valve to meet the operating sequence specified in section. 230993.01 "B&O Building - Sequence of Operations for HVAC Control", article 3.7 Variable Air Volume (VAV) Terminal Boxes with Hot Water Reheat Coils. Test functionality, and submit report identifying instances which require replacement in order to meet the specified sequence. *Note: The*

*existing thermostats are not equipped with CO<sub>2</sub> sensors, and no wall mounted CO<sub>2</sub> sensors are present. Accordingly, operating sequences related to CO<sub>2</sub> sensors would not apply.*

**Item No. 1.02**

## SECTION 012300 Alternates

Article 3.1 Schedule of Alternates, Paragraph D. Alternate No. 1.4: Replace B&O Building VAV Terminal Unit Controllers and HW Control Valves, Article D.2 Alternate:

DELETE article D.2.a in its entirety and replace it with the following:

- a. Replace each existing VAV terminal unit programmable controller and damper actuator serving the B&O Building including thermostat, hot water control valve, hot water control valve actuator, strainer, calibrated orifice balancing valve, and service shut-off valves. *Furnish and install CO<sub>2</sub> sensors to serve VAV terminal unit zones where indicated on the drawings.*

**Item No. 1.03**

## SECTION 012300 Alternates

Article 3.1 Schedule of Alternates, Paragraph G. Alternate No. 2.2: Replace Education Center VAV Terminal Unit Controllers and HW Control Valves Article G.1 Base Bid:

DELETE the Base Bid description in its entirety and replace with the following:

1. Base Bid: Retain VAV terminal unit controllers, *thermostats* and hot water control valves as they exist today. Program each controller, actuator and control valve to meet the operating sequence specified in section. 230993.01 "B&O Building - Sequence of Operations for HVAC Control", article 3.7 Variable Air Volume (VAV) Terminal Boxes with Hot Water Reheat Coils. Test functionality, and submit report identifying instances which require replacement in order to meet the specified sequence. *Note: The existing thermostats are not equipped with CO<sub>2</sub> sensors, and no wall mounted CO<sub>2</sub> sensors are present. Accordingly, operating sequences related to CO<sub>2</sub> sensors would not apply.*

**Item No. 1.04**

## SECTION 012300 Alternates

Article 3.1 Schedule of Alternates, Paragraph G. Alternate No. 2.2: Replace Education Center VAV Terminal Unit Controllers and HW Control Valves, Article G.2 Alternate:

DELETE article G.2.a in its entirety and replace it with the following:

- a. Replace each existing VAV terminal unit programmable controller and damper actuator serving the B&O Building including thermostat, hot water control valve, hot water control valve actuator, strainer, calibrated orifice balancing valve, and service shut-off valves. *Furnish and install CO<sub>2</sub> sensors to serve VAV terminal unit zones where indicated on the drawings.*

**Item No. 1.05**

## SECTION 230900 AUTOMATIC TEMPERATURE CONTROL FOR HVAC

Article 1.2 Summary, Paragraph G: DELETE paragraph G in its entirety. Paragraph G requires the BAS to be UL864 listed for smoke control and life safety / fire alarm use, which is not required for this project.

**DRAWINGS****Item No. 1.06**

DRAWING H2.03 – Title Education Center Third Floor HVAC Plan

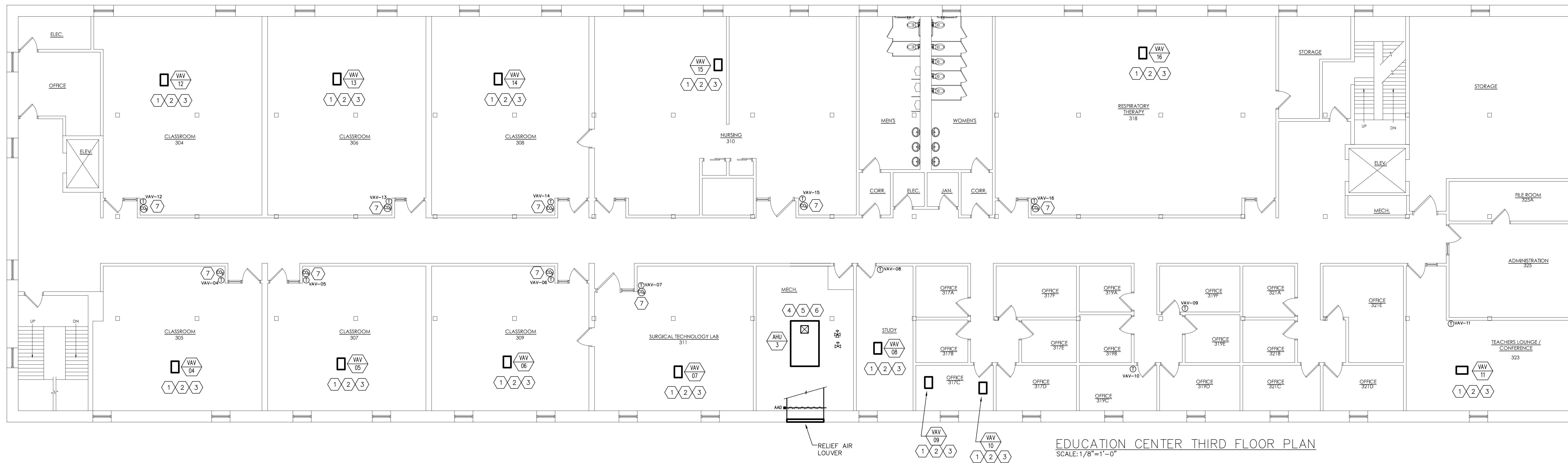
ADD the attached drawing to the document set.

**Item No. 1.07**

DRAWING H2.04 – Title Education Center Fourth Floor HVAC Plan

ADD the attached drawing to the document set.

**END OF ADDENDUM**



EDUCATION CENTER THIRD FLOOR PLAN  
SCALE: 1/8" = 1'-0"

**CODED NOTES: (THIS DRAWING)**

- ① Under Alternate H2.2: Replace existing VAV terminal unit programmable controller and damper actuator, thermostat, hot water control valve, hot water control valve actuator, strainer, calibrated orifice balancing valve, and service shut-off valves.
- ② Under Alternate H2.3: Furnish and install one duct mounted access door downstream of the hot water reheat coil. Professionally clean the VAV terminal unit and hot water reheat coil.
- ③ Remove ceiling tile needed to access the indicated scope of work. Store and protect ceiling tiles. Upon completion of the indicated scope of work, including start-up and functional testing, reinstall the ceiling tiles. Replace damaged ceiling tiles with equivalent ceiling tiles that match adjacent tiles.
- ④ Exiting Carrier AHU-3 with 3-way HW coil control valve, 2-way chilled water coil control valve, variable speed supply air fan, outdoor air intake damper, return air intake damper, relief air damper, and a return air smoke detector.
- ⑤ Furnish and install a new programmable controller, damper and control valve actuators, system static pressure sensor, and temperature sensors required to meet the applicable AHU operating sequence and points list specified in Section 230993 Sequence of Operations for HVAC Control.
- ⑥ Furnish and install Ebtron airflow measuring station to measure the outdoor air intake airflow.
- ⑦ Furnish and install CO2 sensor to enable sequence of operation specified in Section 230993.



ISSUED FOR  
BIDS

REVISIONS

KEY PLAN

SCALE: 1/8" = 1'-0"  
DRAWN BY: MC  
CHECKED BY: TRV

DATE: 08/06/2021

EDUCATION  
CENTER  
THIRD FLOOR  
HVAC PLAN

**H2.3**

*James N. Kos*

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BIDS

REVISIONS

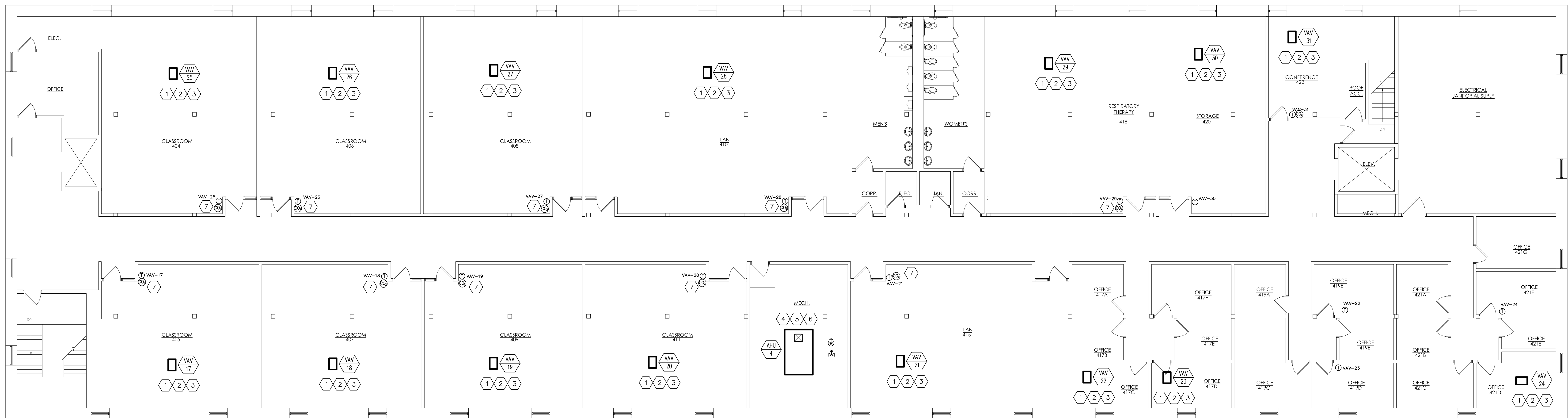
KEY PLAN

SCALE: 1/8" = 1'-0"  
DRAWN BY: MC  
CHECKED BY: TRV

DATE: 08/06/2021

EDUCATION  
CENTER  
FOURTH FLOOR  
HVAC PLAN

H2.4



EDUCATION CENTER FOURTH FLOOR PLAN  
SCALE: 1/8" = 1'-0"

CODED NOTES: (THIS DRAWING)

- ① Under Alternate H2.2: Replace existing VAV terminal unit programmable controller and damper actuator, thermostat, hot water control valve, hot water control valve actuator, strainer, calibrated orifice balancing valve, and service shut-off valves.
- ② Under Alternate H2.3: Furnish and install one duct mounted access door downstream of the hot water reheat coil. Professionally clean the VAV terminal unit and hot water reheat coil.
- ③ Remove ceiling tile needed to access the indicated scope of work. Store and protect ceiling tiles. Upon completion of the indicated scope of work, including start-up and functional testing, reinstall the ceiling tiles. Replace damaged ceiling tiles with equivalent ceiling tiles that match adjacent tiles.
- ④ Existing Carrier AHU-4 with 3-way HW coil control valve, 2-way chilled water coil control valve, variable speed supply air fan, outdoor air intake damper, return air intake damper, relief air damper, and a return air smoke detector.
- ⑤ Furnish and install a new programmable controller, damper and control valve actuators, system static pressure, and temperature sensors required to meet the applicable AHU operating sequence and points list specified in Section 230993 Sequence of Operations for HVAC Control.
- ⑥ Furnish and install Ebtron airflow measuring station to measure the outdoor air intake airflow.
- ⑦ Furnish and install CO2 sensor to enable sequence of operation specified in Section 230993.