

# Pre-Bid Agenda Morris HVAC Improvements

- Circulate Attendance Sheet
- A/E to take Meeting Minutes

## FCO Checklist

- Bid Date, Time and Location
- Responsive Bidder Requirements (Bid Day Requirements)
  - DFWP Enrollment
  - Commitment to Participate in EDGE Business
  - Assistance Program Form
  - Bid Guarantee or Bond
- Other Requirements to Execute Contract
  - EEO Certificate
  - BWC Certificate
  - General Liability Insurance
  - Proof of Licensure for Electrical, HVAC and Plumbing  
Completed “Anti Terrorist Declaration Form”
- Miscellaneous
  - EDGE: GFE Form
  - Prevailing Wage Requirements
  - Certificate of Good Standing from Ohio
  - Secretary of State if Contractor is in Ohio

## PM Checklist

- Introduce design team and provide contact information
  - A/E Contact
    - Prater Engineering Associates
      - PH: 614-766-4896
      - Fax: 614-766-2354
      - Andrew Prater – [aprater@praterengr.com](mailto:aprater@praterengr.com) – Main contact
      - Brian Ogle – [bogle@praterengr.com](mailto:bogle@praterengr.com) – Secondary contact
      - George Campbell – [gcampbell@praterengr.com](mailto:gcampbell@praterengr.com) – Construction Administrator.

○ PM or A/E provide overview of project

1.02 General Construction Contract

- A. The HVAC Contractor is the Lead Contractor for this project.
- B. Provide drywall and stud soffit and chases to enclose all new ductwork in finished spaces as noted on the drawings.
- C. Remove and reinstall lay-in and plaster ceilings to allow installation of piping and ductwork.
- D. Install access doors in chases and ceilings to allow installation of ductwork and access to fire dampers and manual balancing dampers above drywall ceilings.
- E. Protect and clean the construction site as described in specification section 23 05 94 – Protection and Cleaning.
- F. Install Spray-On Foam thermal insulation (R-38) with ignition barrier in attic roof spaces between rafters and at all dormer locations.

1.03 HVAC Contract

- 1. Two (2) new DOAS units with energy recovery will be installed in the attic – one in the North wing and one in the South wing. Air will then be distributed to the common corridors in both wings on floors 1, 2 and 3 via a new supply air risers.
- 2. The restroom exhaust airflow will be increased to be above the code minimum. The existing fans will be replaced by the exhaust fans in the new DOAS units. The existing exhaust duct sizes are appropriate and will be reused to the extent possible. The existing exhaust fans cannot be taken out of service until the new DOAS units are on site and rigged into the attic. Existing exhaust ductwork can be removed as needed for rigging , but must be re-installed to keep the existing exhaust fans functional until the new DAS and exhaust system are ready to be installed. Scheduling for this work must be coordinated with the University.
- 3. Existing AHU-1 and AHU-2 serving the ground floor will be reused to supply ventilation air to the ground floor common areas and also will supply ventilation air to the center wing corridors. The airflow capacity of the units will be increased as much as possible within the capacity capability of the unit.
- 4. Siemens BAS controls will be provided for all new HVAC equipment.
- 5. Chilled and heating hot water piping will be extended from existing mains on the ground floor to the new DOAS units located in the attic.
- 6. Existing transfer grilles in Restroom doors will be reused to transfer air from the corridor into the restroom. There are also ceiling transfer grilles that will be reused. Since the door grilles existing, the transfer method will be grandfathered, since they met code when the building was built.

7. Exhaust ducts in the attic will be rerouted to tie into the energy recovery module of the new DOAS units.
8. Fire and/or smoke dampers will be designed at all new floor and penetrations where required by the Ohio Building Code (OBC). Locations are indicated on the drawings.
9. New fan coil units will be provided for air space conditioning in the attic spaces as shown on the drawings.
10. The DOAS units and associated Variable Frequency Drives (VFD) have been pre-purchased by Miami University to mitigate long lead time issue and enable the units to be installed during summer semester 2022. The HVAC Contractor shall receive, install and assume warranty responsibility for these items.
11. Furnish and install ventilation air ductwork, insulation, fire dampers and air devices for the center wing of Morris Hall as shown on the drawings. The connection point to the new or existing ductwork is shown on the drawings.
12. Alternate H-2: Furnish and install a new supplemental steam to hot water heat exchanger in the basement mechanical room as shown on the drawings. If this alternate is accepted, the new and existing heat exchanger shall operate simultaneously in parallel. The existing steam control valve serving the existing heat exchanger shall be used to supply steam to the new heat exchanger. The HVAC contractor shall balance the water flow equally to each heat exchanger.
13. Air and water balance all new and existing (as noted) air devices, VAV boxes and fan coil units.
14. The HVAC Contractor shall be responsible for fully coordinating the new work with the existing conditions and shall be responsible for the minor relocation of any existing electrical wiring, sprinkler or HVAC piping that is required for installation of his equipment.
15. Include any minor details essential to successful operation and any other items specified or shown on the Drawings.
16. Core drill ductwork holes in floors to allow installation of ductwork.
17. Provide periodic and final cleaning of building. Provide protection of furniture, carpeting, floor finishes and wall finishes, etc.

#### 1.04 Electrical Subcontractor

- A. The Electrical Subcontractor will be a subcontractor to the prime contractor for this project.
- B. Install new power to the new DOAS units and pumps.

- C. Provide new duct smoke detectors for the new DOAS units and exhaust fans.
- D. Provide labor and materials necessary for the electrical connections, disconnecting means, etc. associated with the new HVAC equipment as shown on the drawings and revisions of wiring to allow installation of new chases and soffits.
- E. Coordinate with the temperature control contractor for conduit requirements and paths associated with the controls contract to insure a complete installation that meets or exceeds the Miami University standards.
- F. The Electrical Contractor shall work in conjunction with the HVAC Contractor to insure a complete installation of the new electrical system including final conduit locations, piping, ductwork, etc.
- G. Include any minor details essential to successful operation and any other items specified or shown on the Drawings.
- H. Furnish all labor, materials, tools, incidentals and details necessary to provide the complete electrical connections, ready to operate, including but not limited to the items listed under the Electrical Specification Indexes.
- I. Include temporary and final electrical work associated with ceiling removal and replacement.

#### 1.05 Temperature Control Subcontractor

- A. Furnish all labor, materials, tools, incidentals, and details necessary to provide temperature control system, revisions and additions ready to operate, including but not limited to the items listed under the Temperature Controls Specification Indexes. Temperature Control Contractor shall be a Subcontractor to the HVAC prime contractor.
  - B. Provide all control valves, temperature sensors, etc. to be installed by the HVAC contractor.
  - C. Include any minor details essential to successful operation and any other items specified or shown on the Drawings.
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- Review project schedule, milestone dates
    - Start of Construction May 16 2022
    - End of Construction July 29 2022
  - Review University restrictions on working hours such as quiet week.

- Review Parking Procedures
- Review Safety & Security Responsibility
  - Typically under General Contractor. Provide temporary barriers/signs, etc. to protect public
- Review Site Construction Requirements
  - Submit plan for approval showing fence placement, staging area, dumpster, trailers etc.
    - Review logistics plan. This contractor is responsible for the fence for the entire site.
  - Green area and trees inside fence must be maintained and protected
  - No storage under drip line of trees
  - No storage outside of construction fence.
- State Inspections
  - Each prime contractor obtains and schedules required inspections.
- Project Clean-Up
  - Per Contract Documents
- Salvage Materials
  - Nothing may be burned or sold on site
- Deliveries
  - Must be received at project site. MU will not accept deliveries for job sites.
- Review Procedure for Asking & Responding to Questions Prior to Bid
  - All questions must be in writing (fax or email)
  - All questions must go through the FCO or PM who will forward to A/E as necessary
- Conduct Group Site Tour
  - Individual tours may be scheduled as requested