



Air Handling Units Replacement South Campus Richardson Technical Complex
MECHANICAL/HVAC

PART 1 - GENERAL

1.1 INSTRUCTIONS TO BIDDERS:

- A. Prior to submitting bids for the project, visit the site to become familiar with existing conditions. Proposals for this work shall be based upon examination of the site and conditions thereon and/or therein. Proposals shall take into consideration existing conditions which may affect work covered by this specification. The project shall be restored to its original existing condition, with the exception of work under this contract, prior to final payment.

- B. Coordinate with the Owner or designated Owner's representative to learn of any hazardous condition or material that may exist at the site.

1.2 SCOPE OF WORK:

- A. The work covered by this specification shall include providing supervision, labor, supplies, materials (to include equipment), tools, services, documentation, tests & demonstrations, certificates, and dollar costs required to construct the complete scope of work as specified herein and as shown by and other relevant documents. Work shall include, but not be limited to:
 - 1. Necessary services and support work, including transportation, materials handling, inspecting, storage, guarding, scaffolding, hoisting, etc.
 - 2. Sales tax, permits, inspection fees, approvals, licenses, registrations, and certificates.
 - 3. Coordination, notifications, inspections, field surveys of the job site, and reports.
 - 4. Tests and demonstrations.
 - 5. Replacement of defective work if applicable.

B. General description of work:

Columbus Technical College is requesting to replacing seven (7) AHUs Air Handling units with Trane equipment in our south campus Richardson Technical complex. Once a pre-bid meeting time and location has been established the participants will have the opportunity to obtain any and all technical specifications IE BTUs as well as location access in order to provide an accurate quote for the bid. The awarded contractor is to provide all materials as necessary for proper installation. The awarded contractor will provide a dumpster for removal and disposal of old units and any piping, ductwork associated. Contractor will perform any/all electrical modifications required for proper electrical routing, providing startup of new AHUs verifying proper operation of each individual unit to include performing a water balance test as to insure that all units are performing at peak efficiency. Contractor will provide upon completion of the scope of work Eight (8) sets of quality filters for each of the specific replaced seven (7) units. Contractor will be provided access to the building @ 7:00 am on Thursdays, Fridays and weekends working the same schedule in successive weekends as necessary until the scope of work has been completed. working hours will be determined by the contractor and once determined the college will provide building access. The awarded contractor will not have building access Monday-Wednesday (Subject to change determined by the College) as classes are in session. A 90-day labor and one year parts warranty is to be included which will begin at the completion of this project unless noted otherwise.

Prices contained herein are for a complete job including demolition, of existing AHUs, installing seven (7) new units, all new necessary piping as required, furnish and install new ductwork as required, disconnect/reconnect controls that will integrate with current JCI energy management system, All electrical disconnect and reconnect as necessary, test and balance by a certified testing agency, insulation, hoisting and lifting of mechanical equipment labor, materials, and permits as applicable.

Payment terms are "Net 30 Days" unless otherwise noted herein. Upon 100% completion of the scope of work.

Provide seven (7) new Trane AHUs specific in size, for room location indicated (See attached document) including all materials required for installation.

- Demolition of existing units
- Clean area where existing AHU units were located prior to installation of new AHU units.
- Furnish and install seven (7) new AHU HVAC equipment.
- Furnish and install new piping as required.
- Furnish new ductwork as required.
- Disconnect/reconnect controls.
- Disconnect/reconnect electrical.
- Install new insulation.
- Hoisting and rigging of mechanical equipment for removal of old units and installation of new units.
- Prior to startup of the individual AHUs ensure that sediment screen in water lines has been cleaned or replaced.
- Test and balance by a certified testing agency and results provided to the owner.
- Dumpster to be provided and removed as necessary by awarded contractor for all old existing equipment, piping, duct work and associated items.
- Perform any necessary electrical modifications for proper electrical routing
- Perform water balance test to ensure that units are performing at peak efficiency
- Provide startup of new AHUs and verify proper operation.
- Provide attic stock eight (8) sets of Quality filters for each of the seven (7) units.
- Have all new equipment registered by serial number with manufacture to ensure warranty.

- C. Product information shall be submitted to the Owner for review for materials and equipment as listed below.
 - 1. Trane Heating and air conditioning AHU equipment.
- D. Submit Operating and Maintenance Manuals for new Trane equipment to the Owner at completion of the project.
- E. Instruct and provide the owner in operation and maintenance of the new equipment.
- F. Ensure that all seven (7) AHU units that are replaced are in electronic communication with current energy Management system METEYS controlled by Johnson controls and Are operating with in specified JCI parameters.
- G. Comply with applicable or necessary job safety provisions meeting any/all OSHA safety requirements. The Contractor shall be solely responsible for their adequacy, implementation and ensuring that all contracted employees meet or exceed all safety Requirements

- H. Leave systems or elements installed in proper working order, and replace work or material which develops defects, except from ordinary wear and tear, within one year from the date of final acceptance by the Owner, or as otherwise indicated in the Contract Warranty.
 - I. All materials shall be new and shall conform to standards where such have been established for the particular material. All UL listed equipment shall bear the UL label.
- 1.3 **SCHEDULING OF OUTAGES:**
- A. As AHU units being replaced are individual there should be no total campus power interruption only independent units.
- 1.4 **PRODUCT DELIVERY, STORAGE, HANDLING, AND PROTECTION:**
- A. Provide a dry, weather tight space for storing materials. Store packaged materials in original undamaged condition with manufacturer's labels and seals intact. Handle and store material in accordance with standards to prevent damage. Equipment and materials shall not be installed until such time as the environmental conditions of the job site are suitable. Replace any/all damaged materials.
- 1.5 **CLEANING**
- A. Remove oil, dirt, grease and foreign materials from all existing equipment Locations prior to installation of new equipment to provide a clean appearance. Touch up any equipment that is scratched or damaged. Work areas are to remain neat and clean
- 1.6 **DEMOLITION:**
- A. Disconnect, demolish, and remove work that is specified to be replaced as per Scope of work see **section 1.2 section B**
 - B. Remove demolished equipment from the Project site.
 - C. Dumpster to be provided by awarded contractor
- 1.7 **TESTING:**
- A. Perform water balance test to ensure that units are performing at peak efficiency
 - B. Provide startup of seven (7) AHUs verify proper operation.
 - C. Verify that all systems replaced are working with the current energy management System (METEYS) controlled by Johnson controls.
- 1.8 **PERMITS:**
- A. Obtain all permits and inspections required for the work involved and pay all charges incident thereto. Deliver to the owner all certificates of inspection if so Required.
- 1.9 **WARRANTY:**
- The contractor shall warrant to the owner that all work shall be free from defects and Will conform to the contract documents. This warranty shall extend not less than one (1) Year from the date the project has been 100% complete. A 90-day 100% labor

and one year parts warranty shall be included.