## **GENERAL SCOPE OF WORK**

## 1.1 DESCRIPTION

## A. The contractor shall:

- a. Measure existing supply CFM, return CFM if applicable, outside air CFM and static pressure (external and total) on each unit prior to removal of existing units. Readings shall be recorded for balancing of new units upon installation.
- b. Be responsible for receipt, storage and delivery of owner-procured equipment.
- c. Be responsible for means and methods of any disassembly of units as required to facilitate access into installation location.
- d. Measure existing flow rate on each unit (chilled water units) prior to removal of existing unit. Readings shall be recorded for balancing of new units upon installation.
- e. Remove associated condensing units for DX systems and install new units unless otherwise noted. Provide new refrigerant piping and install all new owner furnished appurtenances. Field verify exact locations and routing.
- f. Evacuate refrigerant (DX systems) and remove existing units or unit sections and associated piping, equipment and material not retained for new installation.
- g. Dispose of old units and all material per industry standards after removal. (Note: Owner has right of first refusal on all equipment and/or material).
- h. Remove all existing conduit/wiring and control devices that will not be needed for new equipment. Maintain electrical circuitry for reconnection to new units unless upsizing is required.
- i. Confirm and verify all field measurements, voltages and accessories of existing units prior to installation. If discrepancies exist notify Owner immediately.
- j. Confirm and verify means and methods for removal of existing units

- and installation of new units in existing locations.
- k. Install new owner provided units in proper location, confirm all installations with Owner. Contractor shall transition the ductwork to attach to the new unit connection point, provide with flexible canvas connection(s) and set unit in place.
- I. Install new owner furnished control valves. All control work by others.
- m. Check existing electrical power feeds and existing electrical breakers for proper sizing and change out as needed and per code.
- n. Install and test all designated field installed accessories onto units per Manufacturers Installation Manuals.
- o. Reconnect existing Fire Alarm system to new smoke detectors where applicable and test.
- p. Install new phase monitors to protect the new 3 phase equipment.
- q. Provide new ductwork with liner or duct wrap to match existing.
- r. Check each unit for proper operation.
- s. Balance new units to CFM readings and static pressure settings taken prior to removal. Confirm with Owner prior to commencing work to confirm readings and finals adjustments. If existing outside air is currently set at 0% notify Owner and set unit up at a minimum of 10%.
- t. Provide training to Missouri Western maintenance staff to assure proper operation and maintenance of new systems.
- u. Refer to detailed individual unit information for additional specific requirements.
- v. Modify existing filter racks on built-up units as necessary to accommodate MERV-13 filters.
- w. Modify existing ductwork as necessary for reconnection to new units.
- B. The contractor shall ensure all work shall meet all city, state, and national codes and standards.

- C. This is a complete turn-key project with the selected Contractor to complete all work, including, but not limited to, all hoisting, disposal, roofing, sheet metal, insulation, electrical, and piping, inclusive of all material and labor.
- D. All units shall be set level on present curbs/rails. Unit shall be strategically positioned such that the new supply, return and outside air openings connections to the existing openings are as such to obtain minimal air resistance.
- E. Contractor shall furnish all the necessary labor, material, equipment and tools to ensure a complete and operations system(s).