15 HVAC Scope of work. The work includes but is not limited to following:

I. Mobilization

a. The work includes the setting of a mobile office trailer and mobile storage trailer.

II. Stored material

- a. The work includes materials and equipment delivered to the site and stored on site. If this subcontractor needs to be reimbursed for materials and equipment purchase in advanced then that arrangement needs to be formalized prior to the execution of a subcontract.
- b. The sub will insure all material and equipment until the building C of O and acceptance of the owner/management company

III. Material handling

- a. The sub will take deliveries of all materials and equipment required to complete its' scope of work.
- b. The sub will provide all machinery such as forklifts or hand carts and manpower necessary to take delivery of materials and equipment
- c. All materials and equipment will be stored in dry storage trailers.
- d. No material or equipment will be stockpiled in apartment units until the units are ready for HVAC work to commence and then only the material and equipment necessary will be stored in the apartment units.
- e. The apartments are not to be used as a holding area for materials and equipment.

IV. Materials and equipment

a. The work will include all materials and equipment required for the completion of this scope of work.

V. HVAC work

- a. The work includes HVAC permits by this sub contractor
- b. The work includes delivering, handling and setting and installation of furnaces and air conditioning units, and all peripheral materials and equipment required at the project
- c. The work includes all sheet metal plenums and filter systems
- d. The work includes all main heating trunk lines
- e. The work includes all branch heat runs off of the main trunk lines
- f. The work includes all sheet metal boots and diffusers, dampers, fire dampers and diffusers required by code
- g. The work includes all fire caulking and fire collars and protective nail plates
- h. The work includes all furnace filters and two filter changes during construction
- i. The work includes the bathroom exhaust fans, fire stopping and venting
- j. The work includes venting of clothes dryer units and trim covers at exterior penetrations
- k. The work includes all low voltage wiring for the A/C and for the thermostat to include the thermostat and a temporary construction thermostat for winter construction use

- 1. The work includes the installation of the condensate drain line terminating in the floor drain in the furnace room
- m. The work includes the final connections of any fuel source this would include any gas connections, drip legs and valves required
- n. In natural gas applications the work includes all regulators valves and regulator vents required to fire the units
- o. In natural gas installations the work includes the fabrication of all sheet metal venting for the water heaters and furnaces
- p. In natural gas installations the work includes the fabrication of all fresh air and makeup air and combustion air that may be required by code. It is this sub contractors scope to perform work to the applicable code and to research local fresh air and combustion air requirements and perform work accordingly
- q. The work includes all transfer grilles required for fresh or combustion air circulation
- r. The work includes all caulking and fire caulking or fire collars required
- s. The work includes the final water connection to the furnaces when applicable. This shall include in and out piping and shut off valves ready to accept water piping by the plumber.
- t. The work includes all required roof top penetrations and weather guard flashings and collars for pipes. The flashings will be provided to the roofer on an as needed basis. This will include flashings for the water heater vents and for the dryer and bath fan vents.
- u. The work includes watertight vent pipe caps and storm collars and roofing boots at all vents that penetrate the rooftop.
- v. The work includes scheduling inspections with the local building department
- w. The work includes setting pads for HVAC equipment. The pads will be listed on the bid sheet as an alternate

VI. Cleaning

a. The work includes picking up debris and cleaning on a daily basis. If the work area is not cleaned it will be cleaned for you at your expense

VII. Protection of the work

All material and equipment will be securely stored in jobsite trailers.
Material will not be warehoused in apartment units of left unattended. All unused material and supplies will be returned to the storage trailer on a daily basis.

VIII. Safety

a. The work includes workmen on site who have been trained in OSHA safety requirements and who have the ability to recognize an unsafe act or condition and has the authority to stop work and make recommendation for improvements

IX. Closeout

a. The work includes as built drawings submitted as a condition to final payment. Showing duct routing in areas that will be covered over with board

X. Submittals

a. Six sets of original highlighted submittals will accompany the bid and the final approved submittal will be a part of the closeout package.

XI. Value Engineering

a. All value engineering is welcome. When bidding please list material or design value engineering suggestions as a voluntary alternate and show the savings in dollars