THE CITY OF WALTHAM MASSACHUSETTS

# PURCHASING DEPARTMENT Veterans Memorial Ice Rink, Mechanical Upgrades

## ADDENDUM NO.2

Oct. 16 2017

# CHANGES, CORRECTIONS AND CLARIFICATIONS

The attention of bidders submitting proposals for the above subject project is called to the following addendum to the specifications. The items set forth herein, whether of omission, addition, substitution or clarification are all to be included in and form a part of the proposal submitted.

THE NUMBER OF THIS ADDENDUM (NO. 2) MUST BE ACKNOWLEDGED IN SECTION 00 10 10-1 (B) Form for General Bid and SECTION 00 10 20-1 B Form for Sub Bid.

## **ITEM 1: ANSWERS TOP POSED QUESTIONS**

- 1.) In the drawings it states the dehumidifiers are to remain, then on page 70 it states they are to be removed? Please clarify.
  - a) For the base project, the dehumidifiers are to remain as is. If, and only IF, Alternate #1 (Air conditioning the rink space) is accepted the 4 existing electric dehumidifiers are to be dismantled and moved (with frames) to a location designated by the owner.
- 2.) In the H-1 Drawing there is no refrigeration piping, no condensate piping, where does the pipe go? Keeping in mind this work takes place ONLY if Alternate #1 is accepted.
  - a) The pipe sets from the AHU are to travel along the bottom chord of a roof truss, down the exterior wall and penetrate the exterior wall at the proper location for connection to the pad mounted condenser. Condensate may drain onto the concrete pad. Cutting/patching for the pipe set chase is to be by the General Contractor.
- 3.) For the base bid what is the exact scope of work for the HVAC sub?
  - a. Base bid HVAC work as follows: Sheets 8 and 9
    - Furnish and install (including all crane work, rigging etc.) the Desiccant Humidifier. Reminder, an alternate manufacturer may be used provide unit is of equal or better performance. If an alternate unit is approved, HVAC contractor to provide GC with bolting pattern so that roof dunnage may be modified as required.

- Furnish and install all plain and insulated interior and exterior ductwork per plan. Weather proofing of exterior duct by HVAC contractor\_
- **DEHUMIDIFIER DUCTORK Galvanized** spiral ductwork shall be provided for the dehumidifier process air in the rink exposed area as reflected on the project plans. The first 50' of duct from the wall where the dehumidifier is placed shall not have any vents. Beyond 50' and to the end of the ductwork, opening shall be provided at regular intervals at the 3:00 and 9:00 position on the duct for a horizontal discharge in each direction. The openings shall be sized and placed at regular intervals to provide a low velocity throw for the minimum turbulence possible in the space.
- Remove existing translucent fiberglass panels (Kalwall) at locations of duct penetrations. Infill around duct with either insulated galvanized sheet metal OR insulated metal panel. Retain and re-use aluminum stop frames and provide a weathertight seal.
- Furnish and install (including low voltage wiring) humidistat and RAM air quality package for detection of CO, Co2 and NO2 gasses. Ram sensor and humidistat to be installed in rink on an exterior wall at top of glass height. NOTE: there is a contradiction between plans and specs for humidistat control location. It is to be installed in the chiller room. Humidity sensor to be interlocked with and activate Dehumidifier. RAM unit to be interlocked with and activate ventilation fans (existing) in South gable end.
- o Balance the system within the rink so that equal flow is emanated from each grille.
- Power wiring, roof dunnage, roof repair, gas piping
- 4.) In the specs the alternate section page 71 section D concrete work/earth work and E carpentry/roofing/painting, do the HVAC sub own this?
  - a) No. All this work is by General Contractor.
- 5.) In the specs on page 71 Section B paragraph #5 says insulate ductwork per code, can you please clarify?
  - a) Exterior ductwork to be insulated (and weather proofed) to code. Interior spiral duct may be uninsulated.
- 6.) Does the HVAC sub own the dehumidifier system and duct associated with it?
  - a) See answer to Question #3.
- 7.) Does the HVAC sub own their own penetrations?
  - a) Only the removal and infill where dehumidification supply and return penetrate the exterior wall.
- 8.) Is the roof under warranty?
  - a) No
- 9.) Who owns the drain lines for the AHU's? Where do they go? If they go through the wall do we bring them down to the ground or do we end them at the wall penetration?
  - a) See answer to Question #2

10.) Who owns excavation and backfill?

#### a) General Contractor

- 11.) Should the condensate pipe be PVC or Copper type L? If you choose copper type L we would need to insulate the condensate, we will need a thickness and type of insulation.
  - a) PVC if code allows.
- 12.) Can we work on the ice rink?
  - a) Yes.
- 13.) Is there a weight restriction?
  - a) Scissors and boom lift OK. Lull OK. Large Forklifts to be avoided. NOTE: The ice will be removed and chiller shut down prior to construction start.
- 14.) Who owns page 12 of 12 for the drawings?
  - a) Refrigeration contractor/GC
- 15.) In the H-1 drawing what do the HVAC subs own?
  - a) H-1 drawing pertains to Alternate #1 only. This plan WILL NOT BE Used if Alternate #1 is not accepted by owner.
- 16.) Is the HVAC sub responsible for the demolition of the 4 dehumidifiers for alternate #1.
  - a) No that will be by General Contractor.
- 17.)Please clarify the scope of work for the base bid See item #3. and the alternate for the HVAC sub. See below
  - a. HVAC SCOPE for Alternate #1 as follows:
  - b. Furnish, install (including rigging)AHUs onto platforms by others
  - c. Furnish, install (including rigging) Condensers onto concrete pads by others.
  - d. Complete pipe sets and condensate drains from/to AHUs and Condensers.
  - e. Ductwork as shown in sizes shown
  - f. Roof top MUA gooseneck and associated curb. Curb to have a V shaped uphill wedge to separate sliding snow out and around duct. Provide stabilization as required.
  - g. Thermostat wiring to managers office. Thermostats to be wall mounted near each AHU.
  - h. Roof opening, framing and repair, power wiring, carpentry (platform construction), by others.
- 18.) Who owns the platform for the Dehumidifier?
  - a) General Contractor.
- 19.) Who owns dumpsters?
  - a) General Contractor
- 20.) Are Cad/Coordination Drawings required?
  - a) Not by owner, but GC may need them for preparation for required close-out documents.
- 21.) Is a Bid Bond required? What percentage?
  - a) Yes, 5%
- 22.) Roughly how high are the AHU in the rink?
  - a) 18'
- 23.) Is there any seismic requirements?
  - a) You mean to stabilize duct? No.

- 24.) At the walkthrough you mentioned HVAC is responsible for the Curbs, what curbs are required? (Are we talking about the dehumidification unit, if so we need a specified type of curb spring loaded or seismic?)
  - a) The dehumidifier sits on steel dunnage and does not require a curb. The 4 roof make-up air goosenecks (if alternate #1 is accepted) will require curbs. See item 15.
- 25.) What type of duct sox is required? (there are different grades )
  - a) NOTE: THERE IS NO FABRIC DUCT SOCK. ALL DEHUMIDIFIER INTERIOR DUCTWORK IS SPIRAL DUCT. 24" DIAMETER MINIMUM FOR INITIAL RUN. MAY BE REDUCED IN DIAMETER AS FEASIBLE.
- 26.) What is the thickness and type of insulation to the outside duct of the dehumidifier?

a) 1"

27.) Is the Return grill for the AHU a 36 X 36 or a 30 X 30? The schematic shows a 30 x 30 and the plans show a 36 x 36?

a) 36 x 36 IS CORRECT.

- 28.)On control wiring for the project do we need to put everything in conduit?
  - a) Yes, where exposed to view or abuse or as required by code.
- 29) Are filed HVAC and Electrical bids to be furnished with DCAMM Certification in these sub-bid categories and the General Bids must be submitted with DCAMM Certification in General Bidding Construction.

a) Yes

- 30) What are the MBE/WBE percent to carry in this project?
  - a. 10.4% for all construction projects
- 31) Is the contractor allowed to procure all equipment and submit payment requests prior to 4/15/18 provided all equipment is stored in an insured warehouse and a transfer of title and ownership is supplied?

a. Yes

- 32) Please confirm that all applicable electrical, plumbing and building permits will be filed with the City of Waltham but the fees for these permits are waived
  - a. Confirmed

<mark>End of Addendum</mark> 2