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(Note: Addendum No. 1 & 2 was previously posted by Henderson County on the Henderson County Website under the RFP for this referenced Project)

This is Addendum No.3:

2019-2020 Mechanical HVAC Upgrades for Flat Rock & Rugby Middle Schools
 Henderson County Public Schools, Hendersonville, Henderson County, North Carolina
 Delta Engineering, Inc. Job No.: 19005 Date of this Addendum: February 13, 2020

To: HCPS FOR ALL BIDDERS From: Delta Engineering, Inc.

Owner: Henderson County for HCPS Date: February 13, 2020

For: Bidding on Referenced Job Total No./Addendum Pages: (4)

Ref Job: 2019-2020 Mechanical HVAC Upgrades - Flat Rock & Rugby Middle Schools
 Henderson County Public Schools, Hendersonville, Henderson County, North Carolina

For Immediate Publication on Henderson County NC Website RFP's.

NOTE: All Bidders shall acknowledge their receipt of this Addendum to be listed as Bidder's acknowledged receipt on his/her Standard Bid Form.

The following information and notations, specifications and data, sizes, etc. shall amend and shall be added to the specific requirements of the Bid Documents for the above referenced Project and shall become a part of the required work as a part of the whole work of the Bid Documents either by the below listed additions, deletions, change, clarifications and/or otherwise indicated and become applicable as for the Base Bid and Add Alternates .

1. FOR BOTH FLAT ROCK AND RUGBY SCHOOLS (Required on each school):

A. Written Questions to Delta Engineering, Inc., by written Email from H&M Industrial, Contractor, of Asheville, NC, per emails of Jan-22, 2020, 8:19am and 11:19am:

1. Could you please provide a spec for the 2x2 ceiling tiles.

Answer: Ceiling Tile, Width 24", Length 24", 5/8" Thickness, Mineral Fiber, PK 16.

Please confirm that "qualified bidders" are to hold a NC Unlimited General Contractors license. For reference, see instruction to bidders section 4) Qualified bidders page 21 of the project manual

Answer: Wherever the term "qualified bidder" is used in the Project manual or bidding requirements, this shall be interpreted as a North Carolina licensed Mechanical Contractor with unlimited license.

2. Also, for reference. State of NC requires General Contractors on projects over 1,000,000.00 to hold an unlimited license. **Answer: This shall be interpreted as a North Carolina licensed Mechanical Contractor with unlimited license who can and shall serve as the prime contractor.**
3. Could you clarify the scope of HVAC controls interface into the existing buildings BAS systems?
Answer: This scope of the HVAC interface shall be to provide all new HVAC controls as specified for the "Daikin" DDC Controls (i-Touch Manager system) to be installed under this project complete and to have the Mechanical Contractor to be responsible for installing the interface BACNET control connection of materials and all labor as the prime contractor to furnish and install the interface physical wiring connection to the Owner's existing BACNET compatible controller (I-Works).
4. Could you give the contact for the existing controls preferred vendor? Controls Specialist of Ashville, NC.
Answer: The preferred vendor is "Controls Specialties, Inc." of Ashville, NC, Mr. Byron Watkins. (828-230-6807

B. Written Questions to Delta Engineering, Inc., by written Email from H&M Industrial, Contractor, of Asheville, NC, per emails of Jan-23, 2020, 4:49pm:

1. We are supposed to provide alternate LED lighting package for this project, we have been provided with one 2X4 cat. #. In review of both schools I would note that there are several other fixtures scattered throughout these building in the areas highlighted to be changed to LED's.
Specific to types A/NL, B, C, D, E/NL, F, AA, L, P with no description in legends of LED numbers?
Answer: All 2'x4' fixtures for the alternate LED replacement bid are all of the same type. The Philips 516427 is the basis of design, which has specific characteristics; feel free to specify a similar part for your submittals. Philips does make a similar 2'x2' part# 516005 for comparison.
2. How are to address exit lights in corridors of shade areas? I would assume you want these to be replaced with new LED exits, but again the fixture legends do not provide cat. Numbers ?
Answer: Yes, the Emergency exit lights shall also be replaced. A basis of design would be a Morris 73331 exit sign (120-277V, 5hr battery backup).
3. In reference to item #1 above, there are lights powered 24/7 by separate circuit different from switched corridor lighting circuit. Are these fixtures just night lights or do they require emergency battery's?
Answer: Those lights are connected to the lighting critical power circuit. Include battery backups for these. Basis of design would be a Phillips 503441 pack (that integrates into the 516427 and 516005 kits)
4. We note that all of the classrooms are single switched. In replacing all of the fixtures with LED types as part of the alternate will single switching meet the intent of the North Carolina energy code?
Answer: The Owner has specifically required not to use dimming, occupancy sensors, etc. for this project.
5. Under base bid if notes that all ceiling grid and ACT tile are to be replaced, will owner be removing FA devices, receptacles and wifi, projectors, and PA speakers, and reinstalling which are not shown or addressed in drawings?
Answer: The Client will remove all of these items (for reuse or demo, per their discretion)
6. Flat Rock FR-E-4 We do not understand the note specific to the Alternate replacement of ACC-1 chiller located near icehouse which makes reference to replacing chiller main breaker with 250A? Normally a new chiller is provided with main breaker.
Answer: These notes were used for calculation and planning. We agree, the new chiller should come with a main breaker.

7. Rugby RG-EL1 Alternate note calls for 300A breaker to be replaced in the MDP, but on riser drawing RG-E-2 calls for 250A breaker. There's error here please specify what is required?

Answer: Correct/Change CB-3 on RG-E-2 to 300A. Also, the DC-1A fed from this breaker will be replaced to the 300A disconnect/breaker that will be installed with the new chiller.

C. Written Questions to Delta Engineering, Inc., by written Email from H&M Industrial, Contractor, of Asheville, NC, per email of Jan-23, 2020, 4:40pm:

1. Is it acceptable for school classes to take place with ceiling systems and ductwork removed? (Lighting to be temporarily braced from structure)

Answer: The school operation will be standard during the Construction periods and if ceiling systems are removed during the construction period in and throughout the buildings within the Phased areas of Construction, it is permitted and any lighting fixtures remaining to be reused shall and will be allowed to be temporarily hung in place.

2. Does ceiling insulation on top of existing ceiling systems need to be put back in place when new ceiling grid is installed?

Answer: The existing removed ceiling insulation bats above the current ceilings will need to be removed, protected and stored to remain dry by the Contractor and shall be reused where possible and restored to be placed back on top of the ceiling areas where removed. Any damaged or ruined existing ceiling insulation bats shall be replaced with new ceiling insulation bats of equal size and performance and specification equal to that existing.

D. The following items listed below is given for clarification and reiterated directions to be included in the project documents:

(1) GPS units shall be provided on all the VRV indoor units and All indoor units ("IDU's") of the VRV systems must include field installed "GPS, Inc", Model GPS-FC24-AC Bipolar Ion Generators per the manufacturer's specified data sheet for the GPS model unit.

(2) The last indoor unit ("IDU") piping connections on any VRV indoor branch selector (BS") unit shown and required in any of the VRV systems for the project shall be connected to **the last set of connections** on the branch selector ("BS") so as not to create a "dead-end" refrigerant piping circuit for the VRV system refrigerant on any of the VRV systems specified.

(3) All VRV Indoor Unit Controllers shall be "Daikin Navigation Type" Controller units.

(4) For the Add Alternate New Air-Cooled Water Chiller Replacement on each school, change the specified listed electrical starter types for the new "Daikin" Chiller machine to have "Across The Line" type starters and not "Part Winding" type starters. Add to the new Chiller scheduled on the drawings the following items to be included as factory options with the new "Daikin-McQuay" Chiller; these shall be: High Ambient Control Panel with internal ventilating fan, Low Ambient Controls, Ground Fault Protection, Discharge – Liquid Line – Suction Isolation Valves, Condenser Coil Wire Grilles, Factory Installed Pre-Piped In-line Chilled Water Strainer, 5-Year Complete Parts, Refrigerant & Labor Warranty, and Factory "Daikin" Start-up By Factory Service Technicians, and "Daikin" Owner Training for the new Chiller machine.

2. FOR RUGBY MIDDLE SCHOOL VRV SYSTEM "CU-3":

"CU-3" system design layout shown on drawing "RG-M1U" shall be modified as follows:

- (a) Change the Piping & Wiring for this system which shall be changed to show "IDU-3-8" served from the above ceiling "BS-3-2" and not served from "BS-3-1".

(b) Delete on “CU-3” system to be modified as deleting “IDU-3-14” and this indoor unit shall be removed from the piping & wiring diagrams as it does not exist on the plans.

(c) On “CU-3” system and layout piping shown on drawing “RG-M1U”, the designed layout needs to be modified as follows:

(1) The “CU-3” unit on the roof and the first refrigerant piping branch down below the roof and above the indoor ceiling, coming down from the new “CU-3” condensing unit on the roof, shall be changed to move the above roof mounted “CU-3” unit location and the first refrigerant branch takeoff piping to a different location (*in a direction that is toward the right as shown on the design plan document, “RG-M1U”*) and this modified location is to be located at a distance down the corridor to be located at approximately 80-90-ft located just over corridor ceiling opposite the main entrance to the school. The location of the above ceiling “BS-3-“ also needs to be changed and moved to the right down the corridor opposite the room served by indoor unit “IDU-3-8”. These changes shall be a part of the required VRV systems Shop Drawings to be submitted to the Engineer after the Contract has been awarded and during the construction phase of the Project This shall be as required as redesigned for the system “CU-3” in the Daikin Xpress software and final design shop drawings submittals for the “CU-3” VRV System Report & CAD Drawings as part of the Shop Drawings submittal to the Engineer.

END OF ADDENDUM NO.3