SAN RAFAEL CITY SCHOOLS 310 Nova Albion Way, San Rafael, CA 94903

ADDENDUM NO. 2 TO Bid No. #24-13

San Rafael High School Madrone HVAC Project Addendum Date: May 16th, 2024

THIS ADDENDUM PROVIDES FOR CLARIFICATIONS & ADDITIONAL INFORMATION:

1. <u>Information/Scope</u>

- Patching of sheetrock, painting and T-Bar ceiling will be performed by others.
- Measuring of existing air quantities before removal of fan coils and rebalancing upon completion of work.

2. Controls Amendment

HP-1 & 2

Modify the current radiant floor controls to accomplish the following:

- 1. Revise field control sequence to, under normal operation, stage the pump and operate the zone control valves so as to never experience a water flow rate, that drops below the recommended rate, whenever the EEV is open.
- 2. Add field controls to detect LG-Hydrokit heat exchanger temperature.
- 3. Add field controls to detect waterside pressure drop across the LG-Hydrokit heat exchanger. Using test and balance services, calibrate the pressure drop across the full range of acceptable water flow rates.
- 4. Add field control logic to, via physical interlock to the LG-outdoor compressor unit, perform a controlled shutdown of the refrigerant system when the following conditions exist:
 - i. The heat exchanger experiences a temperature below 40 degrees (adjustable).
 - ii. The heat exchanger experiences a low water flow (value to be specified by LG), when the Hydrokit EEV is open for any reason.
- 5. Add field control trend points to the Hydrokit temperature and flow.
- 6. Add field alarm points to heat exchanger temperature and flow. Points to be mappable to remote enunciation/text services for operator notification (text, address and setpoints to be adjustable) shall support

multiple simultaneous notification addresses. Provide/coordinate with District resources as needed to achieve this.

7. Field control system shutdown shall require manual reset.

Questions/Answers:

Question: It is our opinion that a chemical pot feeder should be added to both of the

radiant loops to facilitate the initial and subsequent introductions of glycol to the

radiant loop. Please advise.

Answer: HP-1 & HP-2 Add 2-gallon bypass feeder similar to: Vector EC-2TC 2-Gallon

Bypass Feeder, 3/4 Inch NPT Fittings, Domed Bottom, W/ Leg Set to underfloor hydronic

systems. Plumb with bypass and isolation valves. Secure to floor in accordance with

specifications.

[END OF ADDENDUM]

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