



To: Tejas Desai	Date: 05/09/2022
Reference: Westlake School – USESC 1571 Lambert Mill Rd, Westfield, NJ	Quote #: 22-5922-1

Scope and Quotation

A.M.E., Inc, is pleased to provide a quotation on the above project.

- A. "Scope of Work and control devices included" is for the following systems
SCOPE OF WORK –

PACKAGE #3 – NEW OPEN PROTOCOL BMS SYSTEM

- **New Honeywell Tridium Niagara 4 BMS System**
 - Furnish new network controller – JACE 8000
 - Furnish 3-D Graphics Package
 - Furnish Owner Training

All that is needed to access the system in question is an Internet browser as the DDC system is Web / Internet based. This will in turn allow for access to the building from anywhere in the world, through your existing secure network.

DDC Controls provides super-fast functionality including custom scheduling, unlimited easy-to-use trending, 3-D graphic display, remote alarm management, Email / SMS Text Messaging on Critical Alarms, time management, archiving and enterprise level information management.

AME will program and install the front-end system. All custom graphics, programming, and accompanying features (alarming, trending, scheduling, archiving, and multi-site web access) can be programmed to automatically dispatch and notify via email or (SMS) text messaging through this new system.

1. **Qty (19) New Unit Ventilators UV-1 thru 19 / CU-1, 2, 3**
 - Furnish and Install DDC Controller
 - Furnish Fan Start / Stop and Status
 - Furnish and Install Space Temperature Sensor
 - Furnish and Wire HW Control Valve & Actuator
 - Tie-in Mfr. Provided Sensors & End-Devices via Terminal Strip
 - OA/RA Damper Actuator
 - Freezestat
 - Discharge Air Temperature Sensor
 - Fan Enable
 - VRF Communication Wiring
 - Install and Wire Mfr. Provided VRF Central Controller



- Map Available Points via VRV Mfr. Provided BACnet Interface

2. Qty (1) Hot Water System – 2 New Boilers, 2 Pumps

- Furnish and Install DDC Controller
- Furnish Boiler Enable, Status, Alarm
- Furnish and Install Hot Water Supply / Return Temperature Sensors
- Furnish and Install Outside Air Temperature Sensor
- Control Existing Boiler Room Control Valve
- Boiler Trim Wiring (Mfr. OA Sensor, Mfr. HWS Sensor, Interlock Between Boilers to Master Panel)
- Furnish Pump Start/Stop, Status
- Map Available Points via Boiler Mfr. Provided BACnet Interface

3. Qty (45) Existing Terminal Boxes

- Furnish and Install VAV DDC Controller
- Furnish and Install Space Temperature Sensor

4. Qty (8) New Rooftop Units

- Install and Wire Mfr. Provided Space Thermostat
- Install and Wire Mfr. Provided Sensors Shipped Loose w Unit
- BACnet Communication Wiring to Factory Controls
- *Map Available Points via Mfr. Provided BACnet Interface*

5. Qty (4) Existing Rooftop Units – GYM AREA

- BACnet Communication Wiring to Factory Controls
- *Map Available Points via Mfr. Provided BACnet Interface*

6. Qty (3) Existing Makeup Units

- Furnish and Install DDC Controller
- Furnish and Install Sensors and End-Devices for a fully functional unit

7. Qty (15) Existing Exhaust Fans

- Furnish Fan Start/Stop & Status

B. Clarifications and Inclusions considered:

1. All labor will be performed during normal business working hours (M to F, 7AM to 4PM).
2. The Division 23 BMS electrical work shall be performed in accordance with the following installation practices:
 - a. All new wiring in exposed or wiring in machine equipment rooms shall be in EMT conduit.



- b. All new wiring in exterior areas, or where exposed to the elements shall be installed with galvanized EMT or RGS conduit with appropriate fittings.
 - c. All unexposed low voltage wiring outside of the mechanical equipment rooms, where applicable, can be in plenum rated cable.
 - d. The fire stopping of the new BMS control wiring is included.
 - e. The Division 26 EC shall deliver a designated power source to within 5 feet of BMS control panels.
- c. Exceptions and Exclusions: The following items, unless specifically mentioned in the "Scope of Work and Equipment included" or the "Clarifications" sections of this document are excluded from this quotation.
1. All off-hours or overtime labor.
 2. All temporary heating or cooling.
 3. All equipment manufacturer integration/communication devices, setup and/or programming.
 4. The cost of material & setup of the third party communication devices.
 5. All water flow and/or air flow balancing and calibration.
 6. The installation of dampers, valves, wells, water flow meters and/or air flow stations.
 7. The installation of control valves, piping taps and thread-o-lets.
 8. All power wiring of mechanical equipment (RTU, VFD, Pumps, Boiler, UH, UV, FCU, etc.).
 9. EMT or RGS conduit (if specified) other than exterior areas and mechanical equipment rooms.
 10. All mechanical equipment (i.e. AHU, VAV, Pumps, VFDs, etc.).
 11. All air flow monitoring stations.
 12. All motor starters.
 13. All variable frequency drives.
 14. Any gas detection system or components.
 15. **All fire alarm system or components, smoke, combination fire/smoke dampers, smoke detectors and associated wiring.**
 16. Installation and maintenance of any high-speed internet connections.
 17. All control dampers.
 18. Any site excavation and/or trenching.
 19. All cutting, patching, and/or painting.
 20. Any core drilling of floors, walls and/or partitions.
 21. Any roof penetrations, pitch pockets required.
 22. All site cleanup back-up charges not produced by the work under this Scope of Work.
 23. Any checkout, repair, replacement, or warranty of existing controlled equipment.
 24. Any bid, performance, maintenance, or payment bonds.
 25. Any Taxes and/or Permit Fees (on applicable jobs)
 26. All project allowances



Base Price:\$328,000.00

**This price is valid for 60 days from the quoted date*

Thank you for the opportunity to quote this job. Should you have any questions, please feel free to call me direct.

Respectfully,

Eric Niedle

Eric Niedle

A.M.E., Inc.

Connected Buildings Made Smarter

Honeywell

Contractor of the Year
2018



Turn to the Experts

→ + 10% Contingency \$ 32,800
 Total Est Cost \$ 360,800