



**Engineered Systems Associates  
Mechanical Engineers**

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PROPERTY # 503-9002

HYAC REPLACEMENT FOR:  
**LDS SHOSHONE 1st WARD**  
SHOSHONE, IDAHO

CONTROLS

PROJECT:



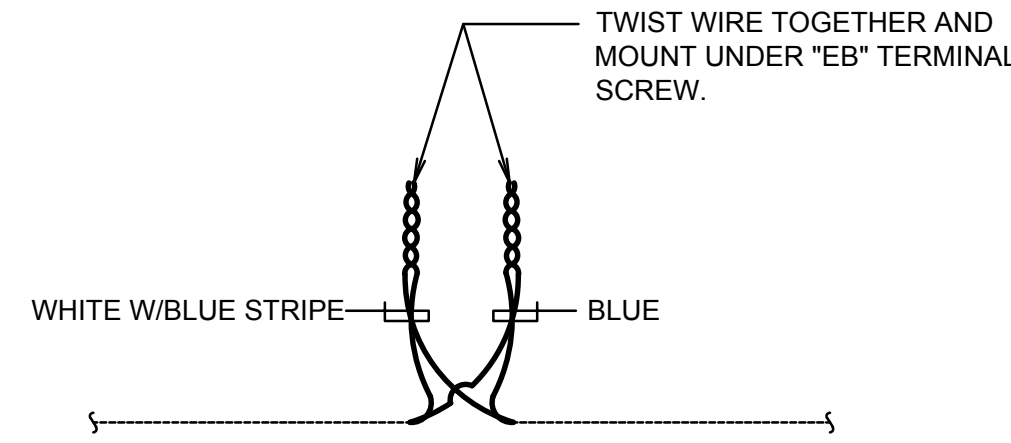
DRWN. BY: TCD	CKD. BY: DCS
JOB NO. 22096	DATE 06/27/22

SHEET:  
**ME-6**  
OF: 6

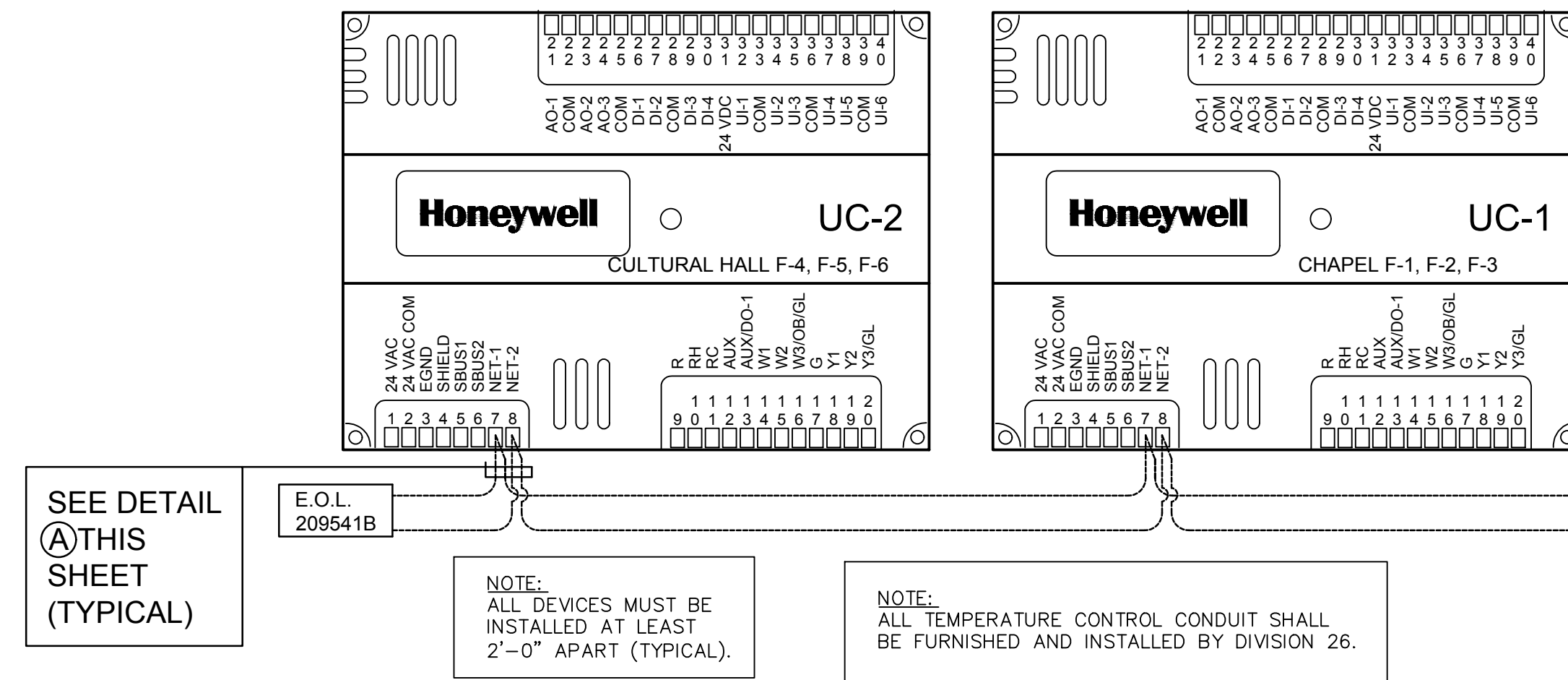
**LEGEND:**

- DIVISION 26 OR FACTORY PRE-WIRED
- \_\_\_\_\_ DIVISION 23 WIRING

NOTES:  
FOR NOTES THIS SHEET



**E-BUS CONNECTION DETAIL** (A)  
NO SCALE

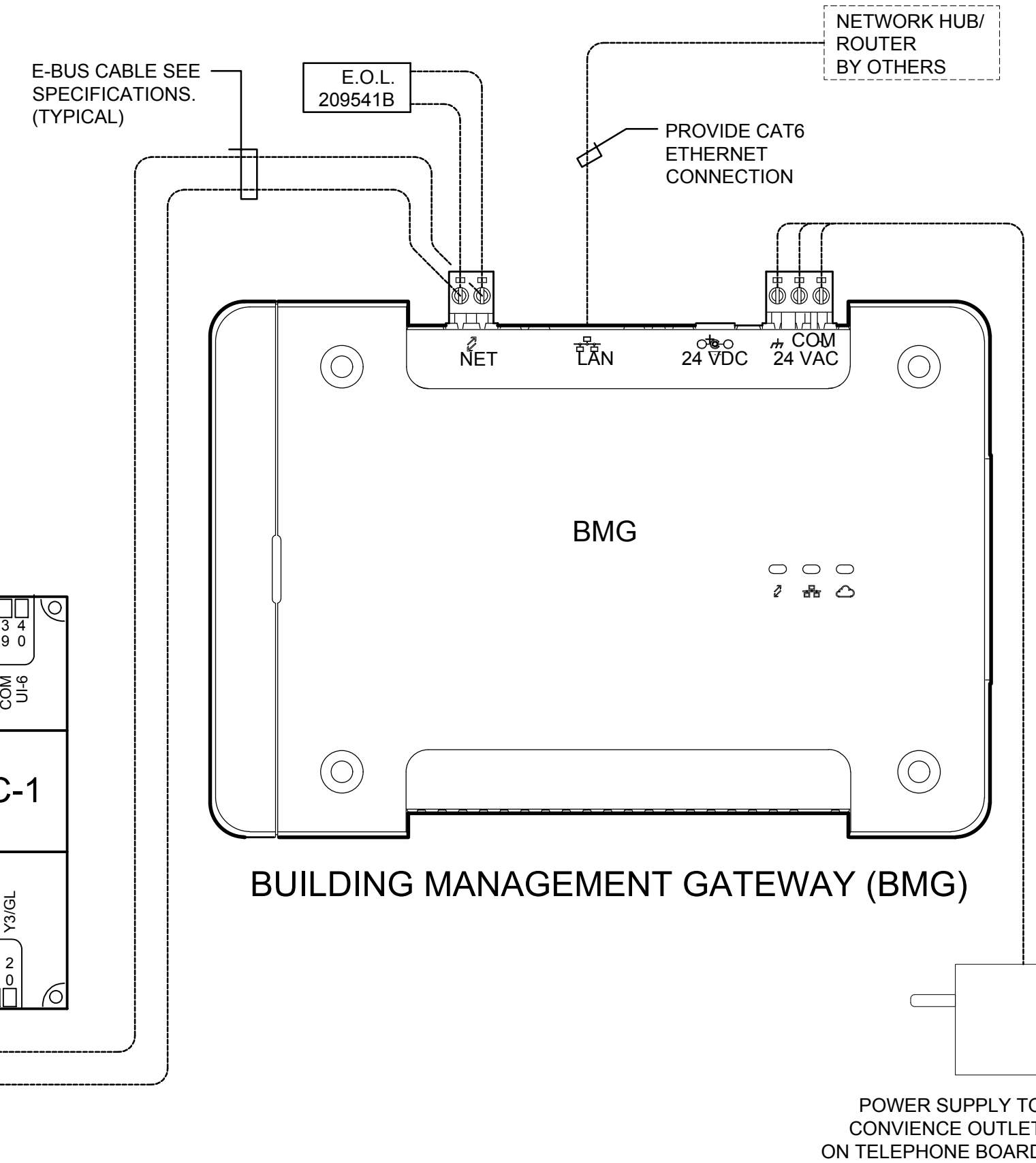


SEE DETAIL (A) THIS SHEET (TYPICAL)

E.O.L. 209541B

NOTE: ALL DEVICES MUST BE INSTALLED AT LEAST 2'-0" APART (TYPICAL).

NOTE: ALL TEMPERATURE CONTROL CONDUIT SHALL BE FURNISHED AND INSTALLED BY DIVISION 26.



**BUILDING MANAGEMENT GATEWAY (BMG)**

NOTES:

- THERMOSTAT CABLE- 4, 8 OR 12 CONDUCTOR- 18 AWG SOLID COPPER WIRE INSULATED WITH HIGH DENSITY POLYETHYLENE. CONDUCTORS PARALLEL. ENCLOSED IN BROWN PVC JACKET. (NO 22 AWG CABLE ALLOWED).
- IF COMPRESSOR UNITS HAVE THEIR OWN POWER SUPPLY IT MAY BE NECESSARY TO ADD ADDITIONAL RELAYS IN COMPRESSOR UNIT TO PROPERLY INTERFACE CONTROLS.
- USE WIRE NUT CONNECTORS FOR SPLICING CONDUCTORS IN SPECIFIED LOCATIONS. AND TYTON TYPE CRIMP CONNECTORS FOR TERMINAL CONNECTIONS. NO TERMINAL CONNECTORS REQUIRED AT THERMOSTAT OR SENSOR.
- DO NOT RUN ANY OTHER WIRING IN THIS CONDUIT EXCEPT THERMOSTAT CABLE.
- VERIFY THAT FAN UNIT FAN SPEED CONTROL WIRING IS SET TO MATCH SCHEDULE SHEET AND THAT FAN OPERATES AT COOLING SPEED ONLY.
- DO NOT SPLICE WIRE IN RUNS FROM SENSOR TO THERMOSTAT, THERMOSTAT TO FURNACE, AND THERMOSTAT TO DISCHARGE AIR SENSOR.
- PROVIDE CHASE NIPPLE WITH PLASTIC BUSHING WHEN ATTACHING J-BOX TO EQUIPMENT.
- PROVIDE CABLE-CLAMP SO THAT CABLES CANNOT BE PULLED OUT OF J-BOX.

**SYMBOLS**

- UC** UNITARY CONTROLLER (DIV 23), MOUNT MODULE IN ACCESSIBLE LOCATION ON OR NEAR ASSOCIATED FURNACE.
- RP-6** RELAY PANEL (DIV 23) MOUNT 5'-0" TO BOTTOM OF CABINET
- T** THERMOSTAT (LCBS) OUTLET (DIV 26)
- S** INDOOR AIR SENSOR OUTLET (DIV 26)
- BMG** BUILDING MANAGEMENT GATEWAY (DIV 23)
- OAS** GLOBAL OUTDOOR AIR SENSOR (DIV 23) TO BE INSTALLED ON THE NORTH SIDE OF THE BUILDING (OUT OF DIRECT SUNLIGHT) AND CONNECTED TO ANY ZONE.
- CO<sub>2</sub>** CO<sub>2</sub> SENSOR (DIV 23) INSTALL UPSTREAM OF RELIEF OR OUTSIDE AIR CONNECTON.
- CRO** COMBINATION RELAY AND THERMAL OVERLOAD DISCONNECT (W/20 AMP RIB RELAY 2401B)
- SD** DUCT SMOKE DETECTOR

NOTES:

- BOXES FOR THERMOSTAT (T) AND (S) OUTLETS SHALL BE 2'X4" WITH LONG DIMENSION VERTICAL. USE METAL BRACKET OF COVER PLATE ASSEMBLY TO MOUNT THERMOSTAT HORIZONTAL.
- CONDUIT TO BE 1/2" UNLESS NOTED OTHERWISE.
- TEMPERATURE CONTROL WIRING THAT IS NOT IN CONDUIT SHALL BE RUN PARALLEL AND PERPENDICULAR TO BUILDING CONSTRUCTION LINES. SEE SPECIFICATIONS FOR ACCEPTABLE FASTENING METHODS AND MAXIMUM ALLOWABLE SPACING BETWEEN FASTENERS.
- TEMPERATURE CONTROL WIRING THAT IS NOT IN CONDUIT SHALL BE LABELED. PROVIDE A LABEL AT ALL POINTS WHERE TEMPERATURE CONTROL WIRING ENTERS CONDUIT AND AT CONNECTIONS TO DEVICES.
- SEAL OPEN END OF CONDUIT AIR-TIGHT AROUND THERMOSTAT/SENSOR WIRE WITH SEALANT COMPOUND. SEE SPECS FOR APPROVED PRODUCT.
- SEAL ANNULAR SPACE BETWEEN CONDUIT AND OPENING IN FLOOR OR WALL WITH SEALANT COMPOUND. SEE SPECS FOR APPROVED PRODUCT.
- SEAL OPEN END OF CONDUIT AT J-BOX AIR-TIGHT AROUND THERMOSTAT/SENSOR WIRE. SEAL ALL AIR GAPS AROUND J-BOX TO ISOLATE J-BOX FROM WALL CAVITY. SEAL BACK OF THERMOSTAT AROUND WIRES. PACK J-BOX TIGHT WITH GLASS FIBER BAT INSULATION. USE SEALING COMPOUND SPECIFICALLY MADE FOR REFRIGERATION AND AIR-CONDITIONING APPLICATIONS. SEE SPECIFICATIONS FOR APPROVED PRODUCTS.
- ELECTRIC HEATER ZONE. CONNECT UC TO 20 AMP RELAY AND THEN TO THERMAL OVERLOAD. REFER TO WIRING DIAGRAM, SHEET T ME701.