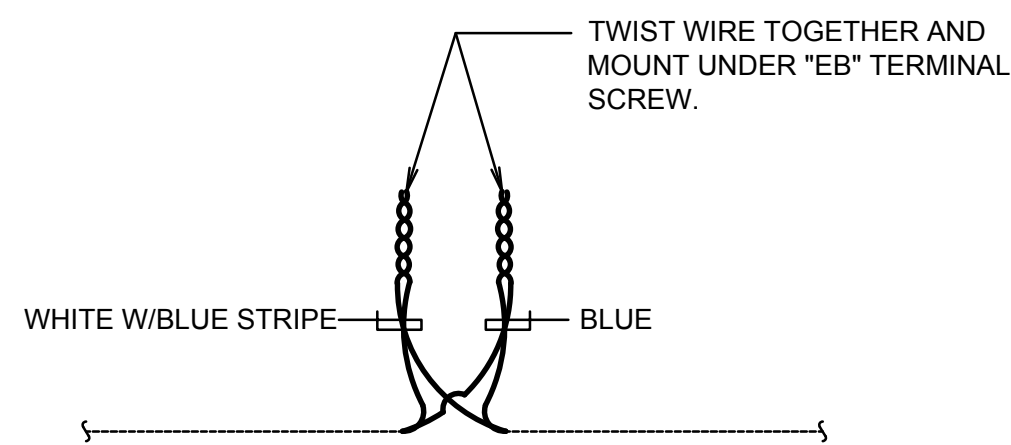


**LEGEND:**

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

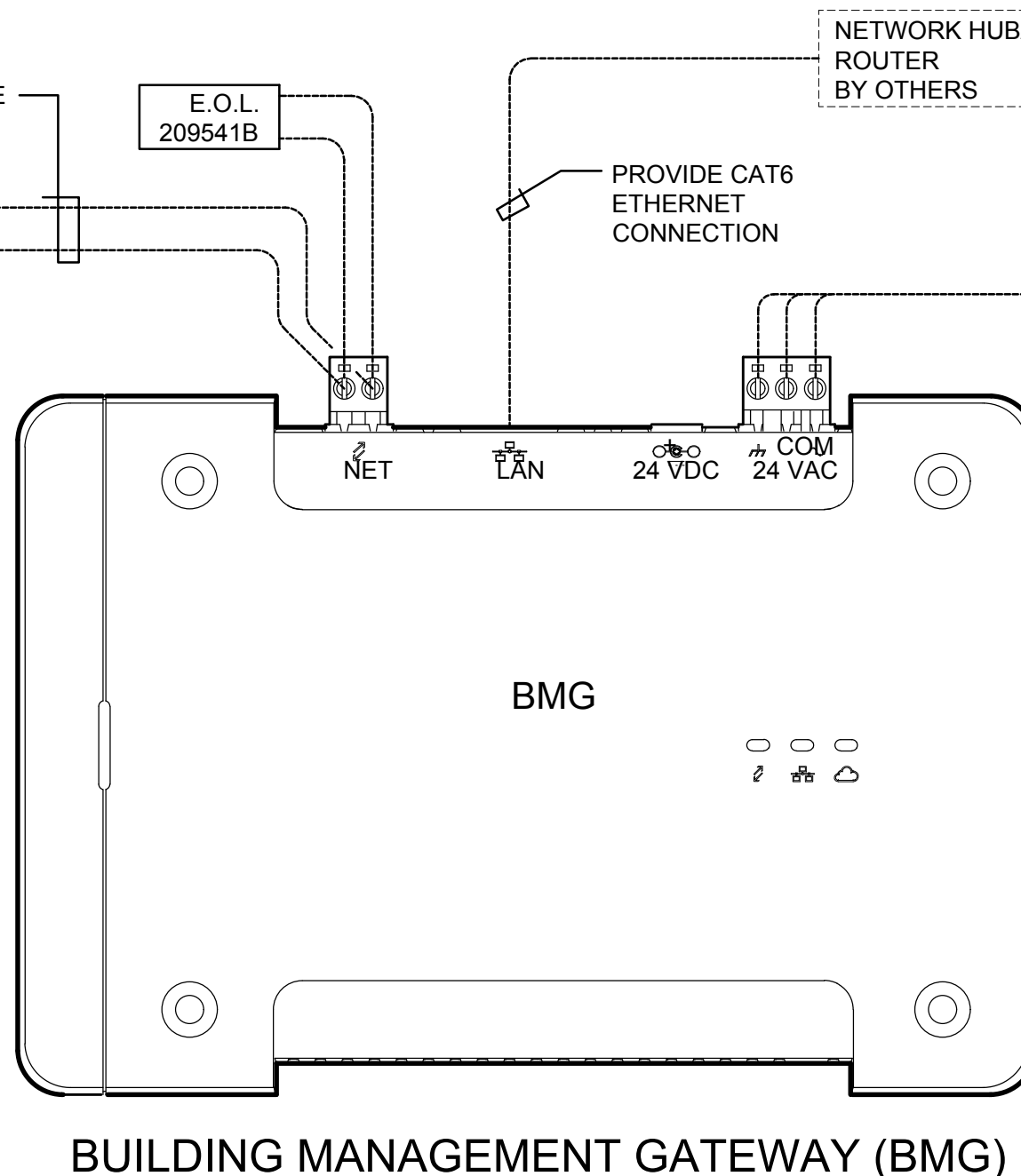
**NOTES:**  
FOR NOTES THIS SHEET



**E-BUS CONNECTION DETAIL** (A)

NO SCALE

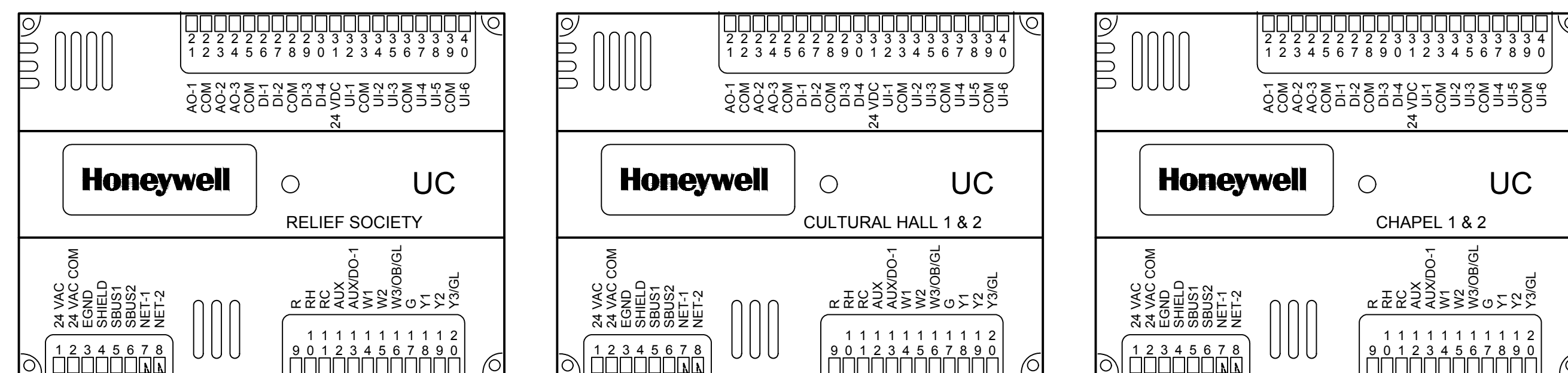
E-BUS CABLE SEE SPECIFICATIONS. (TYPICAL)



**BUILDING MANAGEMENT GATEWAY (BMG)**

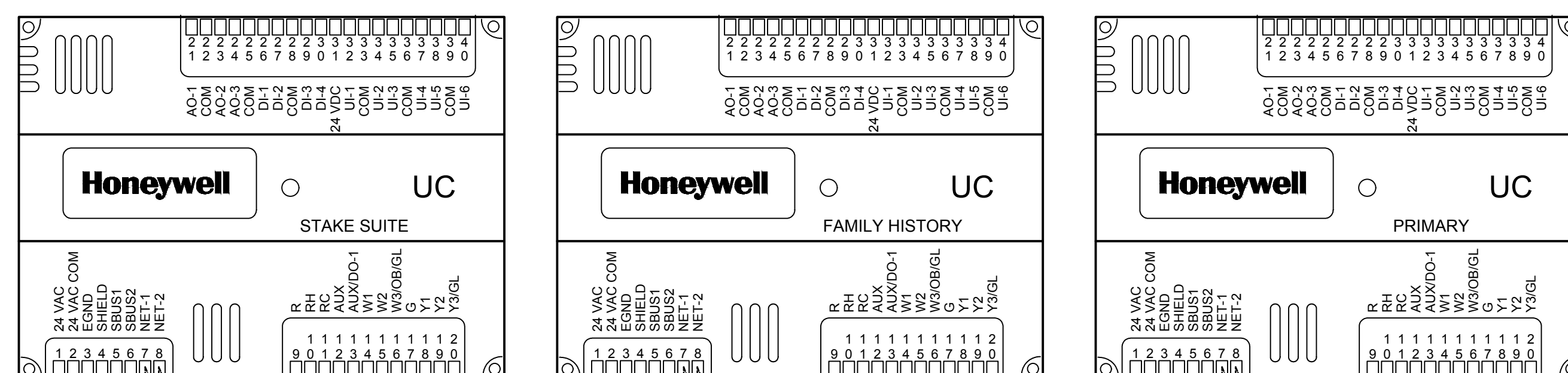
**NOTES:**

1. 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).
2. IF COMPRESSOR UNITS HAVE THEIR OWN POWER SUPPLY IT MAY BE NECESSARY TO ADD ADDITIONAL RELAYS IN COMPRESSOR UNIT TO PROPERLY INTERFACE CONTROLS.
3. 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.
4. DO NOT RUN ANY OTHER WIRING IN THIS CONDUIT EXCEPT THERMOSTAT CABLE.
5. VERIFY THAT FAN UNIT FAN SPEED CONTROL WIRING IS SET TO MATCH SCHEDULE SHEET AND THAT FAN OPERATES AT COOLING SPEED ONLY.
6. DO NOT SPLICE WIRE IN RUNS FROM SENSOR TO THERMOSTAT, THERMOSTAT TO FURNACE, AND THERMOSTAT TO DISCHARGE AIR SENSOR.
7. PROVIDE CHASE NIPPLE WITH PLASTIC BUSHING WHEN ATTACHING J-BOX TO EQUIPMENT.
8. PROVIDE CABLE-CLAMP SO THAT CABLES CANNOT BE PULLED OUT OF J-BOX.



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.



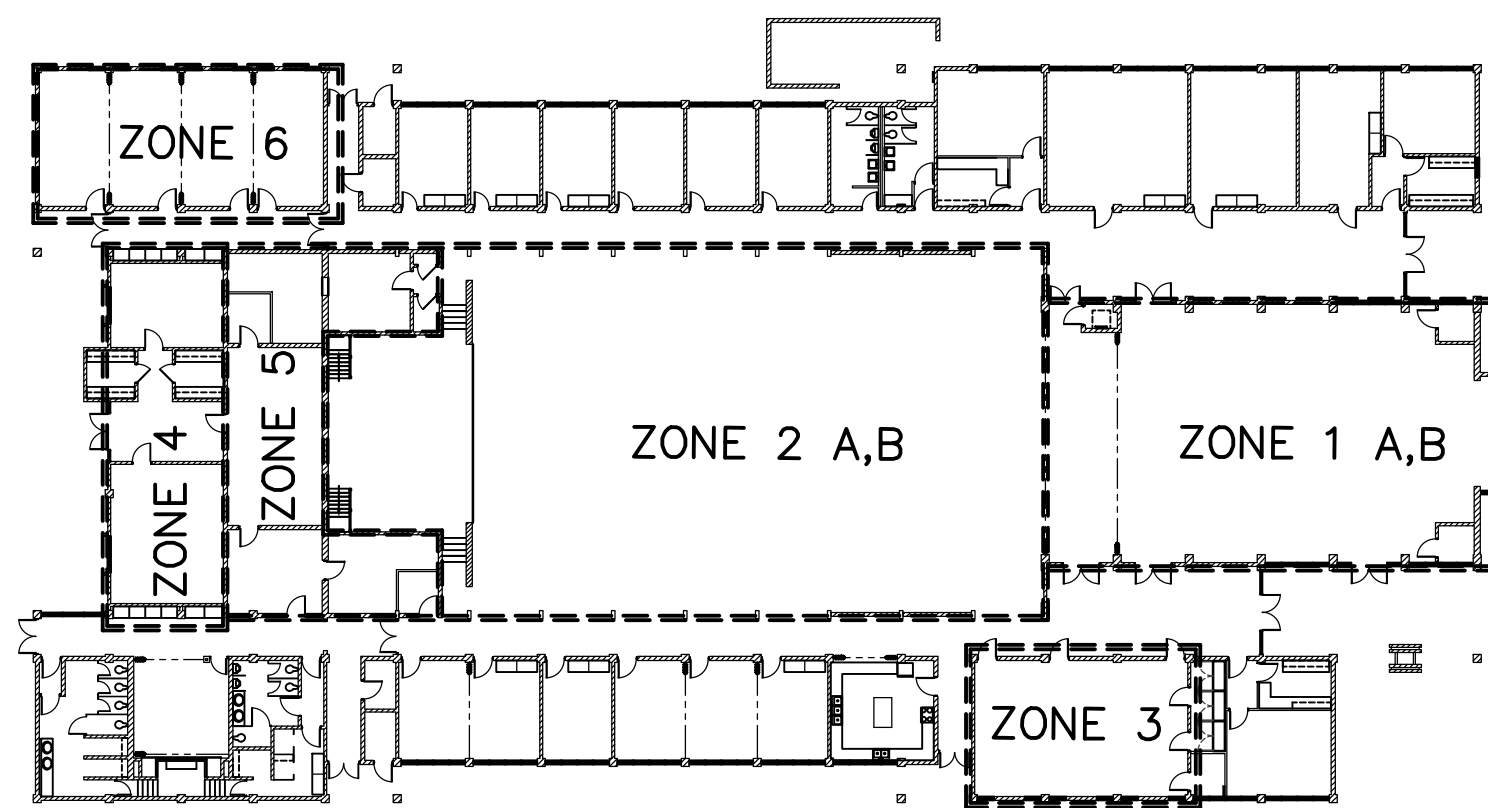
SEE DETAIL (A) THIS SHEET (TYPICAL)

**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 CONNECTION.
- CRO** COMBINATION RELAY AND THERMAL OVERLOAD DISCONNECT (W/20 AMP RIB RELAY 2401B)
- SD** DUCT SMOKE DETECTOR

**NOTES:**

1. 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.
2. CONDUIT TO BE 1/2" UNLESS NOTED OTHERWISE.
3. 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.
4. 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.
5. SEAL OPEN END OF CONDUIT AIR-TIGHT AROUND THERMOSTAT/SENSOR WIRE WITH SEALANT COMPOUND. SEE SPECS FOR APPROVED PRODUCT.
6. SEAL ANNULAR SPACE BETWEEN CONDUIT AND OPENING IN FLOOR OR WALL WITH SEALANT COMPOUND. SEE SPECS FOR APPROVED PRODUCT.
7. 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.
8. ELECTRIC HEATER ZONE. CONNECT UC TO 20 AMP RELAY AND THEN TO THERMAL OVERLOAD. REFER TO WIRING DIAGRAM, SHEET ME701.



**MAIN LEVEL NEW ZONE PLAN**

SCALE: 1/32" = 1'-0"

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Expiration date of license: 04/30/22  
This work was prepared by me or under my supervision. Construction of this project will be under my observation.  
**Dwayne C. Sudweeks**  
Professional Engineer  
License No. 11515  
Professional Engineer  
Professional Engineer

Project Name:  
**KALIHI RE-ROOF AND HVAC REFURBISHMENT**  
HONOLULU, HAWAII WEST STAKE  
TMK: 1-3-005:17  
1120 Kahlili St. (1723 Beckley St.) Honolulu, HI 96819

Owner:  
**THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS**

1	09-01-2021	BID SET	Description

Project Number: PCA-2013  
Plan Series: EXISTING  
Property Number: 500-0031-919010101

Sheet Title: CONTROLS

Sheet: M301

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