

**CONTRACTOR OPTION:**

CONTRACTOR TO VERIFY EXISTING CONDITION OF REFRIGERANT PIPING. IF PIPING IS FOUND TO BE IN GOOD CONDITION WITH NO LEAKS, CONTRACTOR CAN RE-USE EXISTING PIPING INSTEAD OF INSTALLING NEW PIPING. IF EXISTING PIPING IS RE-USED, CONTRACTOR MUST CLEAN AND PURGE LINES USING R-11 CLEANING KIT BEFORE NEW R410A REFRIGERANT IS INSTALLED AND NEW CONDENSING UNITS AND COILS CONNECTED. EXISTING LINES MUST HOLD PRESSURE AND DEMONSTRATE INTEGRITY THROUGH-OUT SYSTEM.

**BASE BID:**

ALL WORK ASSOCIATED WITH REPLACING EXISTING A/C SYSTEMS ASSOCIATED WITH THE CHAPEL, CULTURAL HALL, & FAMILY HISTORY SUITE.

**ALT #1 BID:**

ALL WORK ASSOCIATED WITH REMOVAL OF EXISTING MINI-SPLIT A/C SYSTEMS AND INSTALLING NEW DUCTED A/C SYSTEMS FOR THE STAKE SUITE.

**ALT #2 BID:**

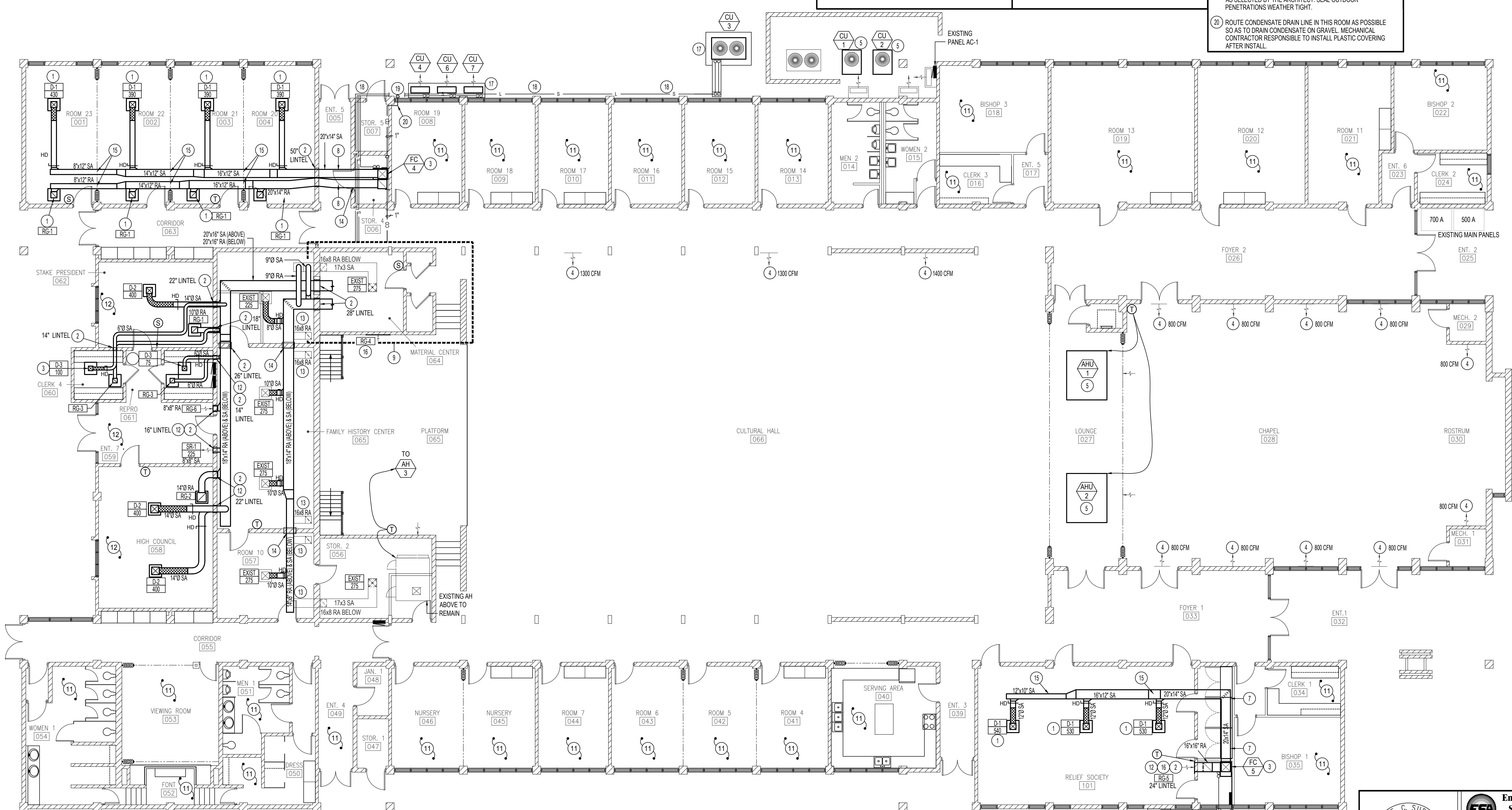
ALL WORK ASSOCIATED WITH REMOVAL OF EXISTING MINI-SPLIT A/C SYSTEMS AND INSTALLING NEW DUCTED A/C SYSTEMS FOR THE RELIEF SOCIETY ROOM.

**ALT #3 BID:**

ALL WORK ASSOCIATED WITH REMOVAL OF EXISTING MINI-SPLIT A/C SYSTEMS AND INSTALLING NEW DUCTED A/C SYSTEMS FOR THE PRIMARY ROOM.

**MECHANICAL NOTES:**

- 1 MIN QTY (2) 90° BENDS BETWEEN DIFFUSERS AND OR EQUIPMENT FOR SOUND ISOLATION. COORDINATE WITH CEILING AND LIGHTING FOR EXACT LOCATION OF DIFFUSER.
- 2 PROVIDE AND INSTALL NEW PENETRATION THRU BRICK WALL WITH LINTEL, SIZED FOR DIMENSIONS AS INDICATED ON PLANS.
- 3 NOT USED.
- 4 BALANCE EXISTING DIFFUSERS TO CFM AS INDICATED ON PLANS. REPORT TO ENGINEER IF EXISTING DIFFUSERS DO NOT CURRENTLY HAVE BALANCING DAMPERS OR BLADES.
- 5 SEE CONTRACTOR OPTION ON THIS SHEET FOR REFRIGERATION NOTE. RECONNECT DUCTWORK, MOUNTING HARDWARE, CONDENSATE DRAIN, AND REFRIGERATION LINES AFTER UNIT IS INSTALLED. LOCATIONS ARE APPROXIMATE. FIELD VERIFY EXACT EXISTING LOCATIONS & CONNECTIONS. SPECIFIED NEW CONDENSING UNITS TO BE 9" LONGER AND 3" WIDER THAN EXISTING. SHIFT CONDENSING UNIT LOCATIONS AS REQUIRED TO MAINTAIN MANUFACTURE RECOMMENDED CLEARANCES. DISASSEMBLE AND RE-ASSEMBLE NEW AIR HANDLER AS REQUIRED TO INSTALL IN THIS LOCATION.
- 6 PROVIDE MIN QTY (2) 90° ELBOWS WITH TURNING VANES BETWEEN GRILLE AND MECHANICAL EQUIPMENT FOR SOUND ISOLATION. DISTANCE BETWEEN ELBOWS AND EQUIPMENT/GRILLE MIN 12" IF POSSIBLE. MOUNT THE RETURN GRILLE AS HIGH AS POSSIBLE.
- 7 RUN DUCTWORK ALONG ROOF SLOPE AND AS HIGH AS POSSIBLE.
- 8 CUT CEILING SPACE AS REQUIRED FOR NEW DUCTWORK IN THIS LOCATION. PATCH, TAPE, TEXTURE AND PAINT TO EXISTING CONDITIONS.
- 9 NEW MECHANICAL MEZZANINE SPACE ABOVE BY OTHERS SEE ENLARGED SCALE PLAN ON SHEET M102.
- 10 AVOID STRUCTURAL BEAM. FIELD VERIFY EXACT LOCATION AND CLEARANCES.
- 11 NO WORK TO BE DONE IN THIS ROOM. PROTECT DURING CONSTRUCTION.
- 12 MIN OF QTY (2) 90° ELBOWS BETWEEN DIFFUSERS, GRILLES AND/OR EQUIPMENT FOR SOUND ISOLATION.
- 13 EXISTING DUCT TO BE TIED INTO NEW. MODIFY EXISTING DUCT AS REQUIRED.
- 14 RUN DUCTWORK THROUGH EXISTING PENETRATION AND MODIFY DUCT AS REQUIRED. CONTRACTOR RESPONSIBLE TO FIELD VERIFY EXACT EXISTING PENETRATION SIZE AND LOCATION.
- 15 PROVIDE PENETRATION THROUGH WALL ABOVE AS REQUIRED FOR NEW DUCTWORK.
- 16 INSTALL RETURN GRILLE AS HIGH AS POSSIBLE.
- 17 MECHANICAL CONTRACTOR TO PROVIDE AND INSTALL A 4" CONCRETE FOR NEW CONDENSING UNITS THAT EXTEND A MIN OF 4" UNDER NEW EQUIPMENT. SEE TYPICAL CONDENSING MOUNTING DETAIL ON SHEET M202.
- 18 REFRIGERATION LINES TO RUN AS HIGH AS POSSIBLE NEAR ROOF OVERHANG WHEN RUNNING REFRIGERATION LINES ON THE OUTSIDE OF THE BUILDING. SEE REFRIGERATION COVER DETAILS ON SHEET M202.
- 19 ROUTE MECHANICAL EQUIPMENT'S CONDENSATE DRAIN LINE AS SHOWN ON PLANS. CORE DRILL NEW PENETRATION THROUGH BRICK WALLS AS REQUIRED. CONTRACTOR TO FIELD VERIFY EXACT EXISTING CONDITIONS. CONDENSATE DRAINS TO PENETRATE OUTSIDE WALL APPROXIMATELY 6" ABOVE GRADE AND TERMINATE WITH 90° TURN TO GRAVEL BELOW. CONDENSATE TERMINATION TO BE OFFSET A MIN OF 1" FROM OUTSIDE WALL. PAINT EXPOSED OUTDOOR CONDENSATE DRAIN AS SELECTED BY THE ARCHITECT. SEAL OUTDOOR PENETRATIONS WEATHER TIGHT.
- 20 ROUTE CONDENSATE DRAIN LINE IN THIS ROOM AS POSSIBLE SO AS TO DRAIN CONDENSATE ON GRAVEL. MECHANICAL CONTRACTOR RESPONSIBLE TO INSTALL PLASTIC COVERING AFTER INSTALL.



**MAIN FLOOR MECHANICAL PLAN**  
 SCALE: 1/8" = 1'-0"  
 North

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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  
 Mechanical Engineer  
 License No. 12330-M  
 State of Hawaii

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

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

1	Date	Mark	Description

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

Sheet Title: MAIN FLOOR MECHANICAL PLAN

Sheet:  
**M101**

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