

1 HVAC PLAN - BLDG PAL01
1/8" = 1'-0"

GENERAL NOTES

1 REFER TO SHEET M-001 FOR MECHANICAL NOTES, ABBREVIATIONS, AND LEGEND SYMBOLS.

KEYED NOTES

- 1 INSTALL THE NEW LOUVER IN THE EXISTING WALL OPENING. LOUVER SIZE SCHEDULED IS APPROXIMATE, BUT SHOULD BE WITHIN +/- 2" IN LENGTH AND HEIGHT BASED ON FIELD MEASUREMENTS. FIELD VERIFY THE EXACT OPENING SIZE AND PROVIDE AN EXACT LOUVER SIZE TO FIT THE OPENING. CONTRACTOR'S FIELD MEASUREMENT SHALL BE CLEARLY INDICATED ON THE LOUVER SHOP DRAWING.
- 2 INSTALL THE NEW MECHANICAL UNIT ON THE EXISTING CONCRETE MECHANICAL PAD.
- 3 EXTEND DUCT FULL SIZE OF CONNECTION TO MECHANICAL UNIT. EXTEND DUCT FULL SIZE OF CONNECTION TO LOUVER.
- 4 PROVIDE A 6" HIGH CONCRETE MECHANICAL PAD WITH 3/4" CHAMFERED EDGES EXTENDING FROM THE BUILDING OUT TO MIN. 6" BEYOND THE EDGES OF THE MECHANICAL UNIT. SLOPE THE PAD MIN. 2% TO DRAIN AWAY FROM THE BUILDING.
- 5 PROVIDE A NEW ROOM CIRCULATING HEAVY-DUTY COMMERCIAL DEHUMIDIFIER WITH HOT GAS REHEAT REFRIGERATION SYSTEM AND COATED STEEL HOUSING, 55 LBS. TO CFM, 17 PINTS PER DAY @ 65-DEG F 60% RH, 120/160, 4.0 AMPS. PROVIDE A CONDENSATE PUMP WITH INTEGRAL RESERVOIR TO SERVE THE DEHUMIDIFIER. CONDENSATE PUMP TO HAVE AN ABS TANK/MOTOR COVER/VOLUTE, STAINLESS STEEL MOTOR SHAFT, 1/2 GALLON TANK CAPACITY, 20' OF CLEAR TUBING, 150 HP MOTOR, 120/160, 65 GALLONS PER HOUR CAPACITY. INSTALL THE CONDENSATE PUMP OVERHEAD NEXT TO THE DEHUMIDIFIER. INSTALL THE DEHUMIDIFIER AT 8' A.F.F. ON (2) UNISTRUT SADDLES SUPPORTED BY ALL THREAD RODS. ALL THREAD RODS SHALL BE ANCHORED INTO THE CONCRETE CEILING DECK.
- 6 ROUTE THE MECHANICAL PIPING UP ALONG THE EXTERIOR WALL TO ABOVE CEILING HEIGHT, PENETRATE THE EXTERIOR WALL TO INSIDE THE BUILDING, AND CONTINUE AS SHOWN. SEAL THE WALL PENETRATIONS WEATHERIGHT. PROVIDE A MINIMUM 20-GAUGE SHEET METAL SHROUD OVER THE PIPING EXPOSED ON THE BUILDING EXTERIOR WITH A 30-DEGREE PITCHED TOP TO SHED RAIN. PAINT THE SHROUD TO MATCH THE BRICK. COLOR TO BE APPROVED BY THE GOVERNMENT. INFILL THE OPEN BOTTOM OF THE SHROUD WITH MIN. 5" DEEP INFILL OF STAINLESS STEEL WOOL FOR RODENT PROOFING.
- 7 INFILL THE EXISTING WALL OPENING. REFER TO G-003.
- 8 THE EXISTING WALLS AND CEILING OF THE VAULT ARE COVERED WITH A HEAVY GAUGE STEEL EXPANDED METAL MESH. CUT THE MESH BACK AS REQUIRED TO PROVIDE A NEW 6x6 DUCT PENETRATION THROUGH THE EXISTING CONCRETE LID AND/OR WALL. WALL PENETRATIONS SHALL BE AS HIGH ON THE WALL AS POSSIBLE, APPROXIMATELY 8' A.F.F. PATCH THE STEEL EXPANDED METAL MESH BY EXTENDING NEW MESH UP TO THE 2x2x1/8 STEEL ANGLE AROUND THE VAULT PENETRATION. OVERLAP THE STEEL ANGLE WITH THE MESH AND WELD THE MESH TO THE STEEL AND ANGLE. PAINT THE NEW STEEL MESH AND STEEL ANGLE BLACK TO MATCH EXISTING. REFER TO SHEET G-002 FOR DETAILS OF THE PENETRATION THROUGH THE CONCRETE VAULT CONSTRUCTION.
- 9 LOCATE THE EMERGENCY BUILDING HVAC SHUT-OFF SWITCH IN THIS VICINITY.
- 10 EXISTING DOOR GRILLE TO REMAIN FOR TRANSFER AIR.
- 11 NEW DOOR WILL HAVE A DOOR GRILLE FOR TRANSFER AIR. REFER TO THE ARCHITECTURAL PLANS.
- 12 CAREFULLY REMOVE THE EXISTING LAY-IN CEILING TILE AND GRID NEEDED TO INSTALL THE NEW DUCTWORK. CAREFULLY STORE ALL EXISTING CEILING MATERIALS FOR RE-INSTALLATION. ANY EXISTING TILE AND GRID DAMAGED DURING THIS WORK WILL BE REPLACED WITH NEW MATERIALS TO MATCH EXISTING.
- 13 ROUTE THE INSULATED 34" AHU PRIMARY CONDENSATE DRAIN AND 34" AUXILIARY DRAIN PAN LINE THROUGH THE EXTERIOR WALL, DOWN THE WALL, AND TERMINATE AT 8' A.F.F. PROVIDE A REMOVABLE INSECT SCREEN OVER THE END OF THE PIPE.
- 14 INSTALL THE RETURN AIR GRILLE ON THE UNDERSIDE OF THE RETURN AIR DUCT.
- 15 ROUTE THE CONDENSATE DRAIN LINE FROM THE CONDENSATE PUMP AT THE DEHUMIDIFIER TO ABOVE CEILING AND CONTINUE AS SHOWN.



06-20-2022

NO.	DATE	DESCRIPTION

DESIGNED BY: 28 JUN 2022	SUBMITTED BY: 28 JUN 2022
DRAWN BY: CROWWELL	CHECKED BY: CROWWELL
DATE: 06/20/2022	PROJECT NO.:
CONTRACT NO.:	CONTRACT NO.:
US ARMY CORPS OF ENGINEERS CHARLESTON DISTRICT CHARLESTON, SOUTH CAROLINA	CROWWELL 1300 East 6th Street Lake Park, AR 72260 601.972.9300 crowwell.com

FL027 HVAC-ELEC-PLUMB RESET
PALATKA, FL
HVAC PLAN - BLDG PAL01

SHEET ID
M-101

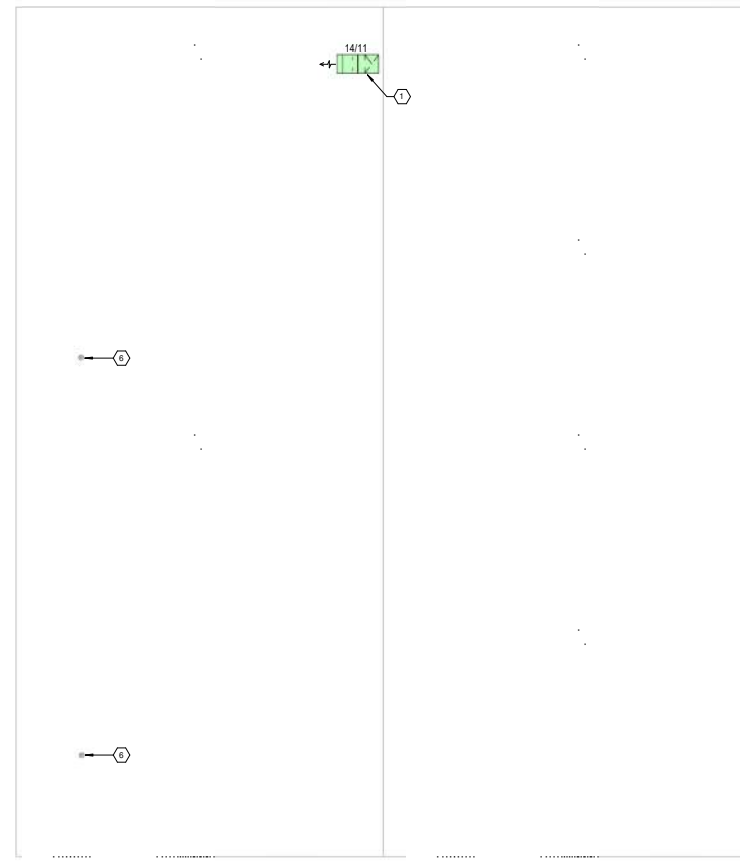
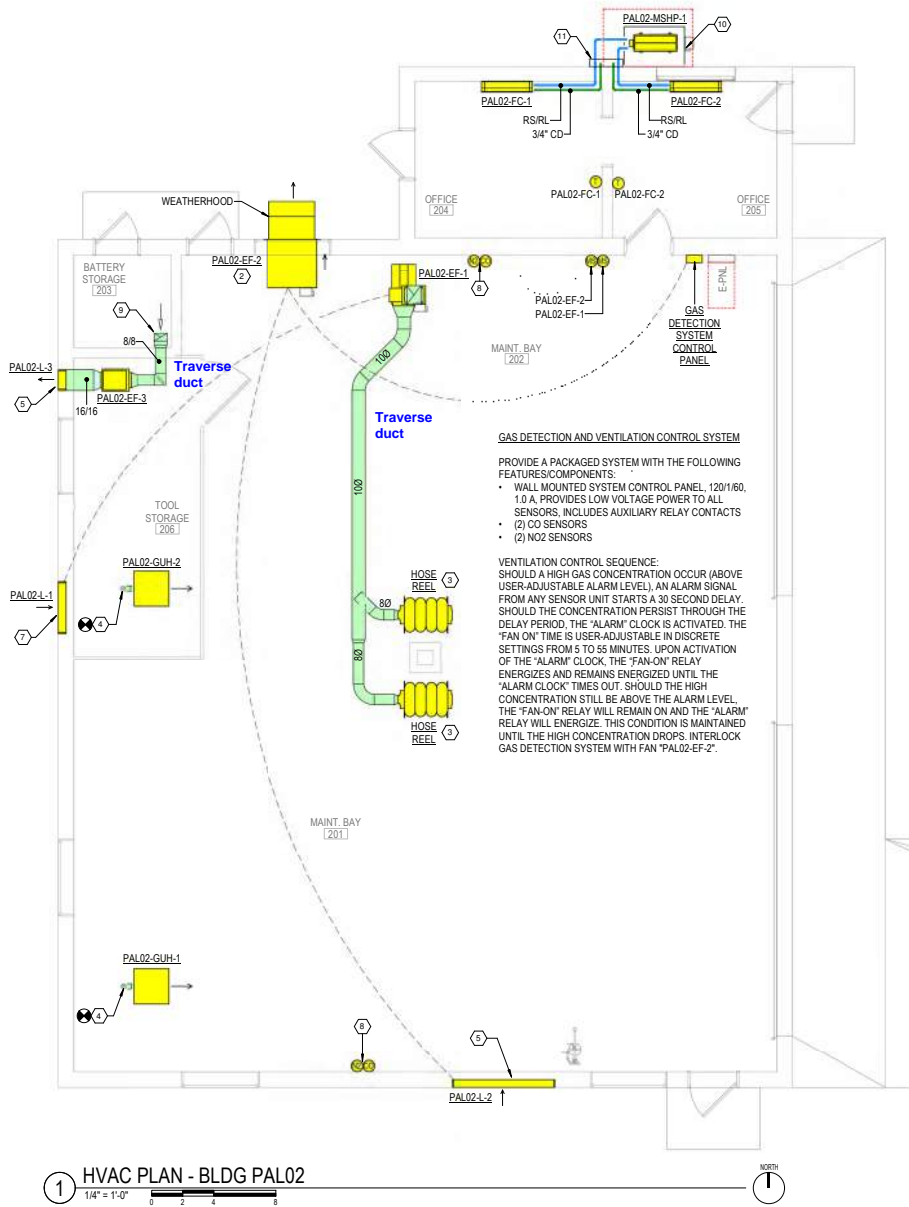
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GENERAL NOTES

1 REFER TO SHEET M-001 FOR MECHANICAL NOTES, ABBREVIATIONS, AND LEGEND SYMBOLS.

KEYED NOTES

- 1 MODIFY THE EXISTING ROOF PENETRATION TO TERMINATE THE EXHAUST DUCT THROUGH THE ROOF AT A GOOSENECK FITTING WITH GALVANIZED 1/4" EXPANDED METAL BIRDSCREEN OVER THE OPENING.
- 2 INSTALL THE NEW FAN IN THE EXISTING WALL AT 12' A.F.F.
- 3 INSTALL THE BOTTOM OF THE HOSE REEL AT 12' A.F.F.
- 4 CONNECT THE NEW 4" TYPE-B DOUBLE WALL FLUE TO THE EXISTING FLUE STACK.
- 5 INSTALL THE NEW LOUVER IN THE EXISTING WALL AT 10'-0" A.F.F. LOUVER IS SIZED TO COURSE-OUT IN THE EXISTING CMU BLOCK.
- 6 EXISTING FLUE TO REMAIN.
- 7 MODIFY THE EXISTING 24"x24" OPENING TO ACCOMMODATE THE NEW LOUVER. THE BOTTOM EXISTING OPENING IS 10' A.F.F. AND THE BOTTOM OF THE LOUVER WILL BE AT THE SAME HEIGHT.
- 8 UNLESS OTHERWISE INSTRUCTED BY THE SENSOR MANUFACTURER, INSTALL THE CO AND NO2 SENSORS AT 5' A.F.F.
- 9 PROVIDE A 10"x6" EXHAUST RISER IN THE CORNER OF THE ROOM EXTENDING FROM THE FLOOR TO THE CEILING. INSTALL EXHAUST GRILLES AT 6' A.F.F. AND 6" BELOW THE CEILING. REFER TO 3/M-901 FOR FURTHER DETAILS.
- 10 PROVIDE A 6" HIGH CONCRETE MECHANICAL PAD WITH 3/4" CHAMFERED EDGES EXTENDING FROM THE BUILDING OUT TO MIN. 6" BEYOND THE EDGES OF THE MECHANICAL UNIT. SLOPE THE PAD MIN. 2% TO DRAIN AWAY FROM THE BUILDING.
- 11 ROUTE THE MECHANICAL PIPING UP ALONG THE EXTERIOR WALL TO ABOVE CEILING HEIGHT, PENETRATE THE EXTERIOR WALL TO INSIDE THE BUILDING, AND CONTINUE AS SHOWN. SEAL THE WALL PENETRATIONS WEATHERTIGHT. PROVIDE A MINIMUM 20-GAUGE SHEET METAL SHROUD OVER THE PIPING EXPOSED ON THE BUILDING EXTERIOR WITH A 30-DEGREE PITCHED TOP TO SHED RAIN. PAINT THE SHROUD TO MATCH THE BRICK. COLOR TO BE APPROVED BY THE GOVERNMENT. INFILL THE OPEN BOTTOM OF THE SHROUD WITH MIN. 6" DEEP INFILL OF STAINLESS STEEL WOOL FOR RODENT PROOFING.



GAS DETECTION AND VENTILATION CONTROL SYSTEM

PROVIDE A PACKAGED SYSTEM WITH THE FOLLOWING FEATURES/COMPONENTS:

- WALL MOUNTED SYSTEM CONTROL PANEL, 120/1/60, 1.0 A, PROVIDES LOW VOLTAGE POWER TO ALL SENSORS. INCLUDES AUXILIARY RELAY CONTACTS
- (2) CO SENSORS
- (2) NO2 SENSORS

VENTILATION CONTROL SEQUENCE:
 SHOULD A HIGH GAS CONCENTRATION OCCUR (ABOVE USER-ADJUSTABLE ALARM LEVEL), AN ALARM SIGNAL FROM ANY SENSOR UNIT STARTS A 30 SECOND DELAY. SHOULD THE CONCENTRATION PERSIST THROUGH THE DELAY PERIOD, THE "ALARM" CLOCK IS ACTIVATED. THE "FAN ON" TIME IS USER-ADJUSTABLE IN DISCRETE SETTINGS FROM 5 TO 55 MINUTES. UPON ACTIVATION OF THE "ALARM" CLOCK, THE "FAN-ON" RELAY ENERGIZES AND REMAINS ENERGIZED UNTIL THE "ALARM CLOCK" TIMES OUT. SHOULD THE HIGH CONCENTRATION STILL BE ABOVE THE ALARM LEVEL, THE "FAN-ON" RELAY WILL REMAIN ON AND THE "ALARM" RELAY WILL ENERGIZE. THIS CONDITION IS MAINTAINED UNTIL THE HIGH CONCENTRATION DROPS. INTERLOCK GAS DETECTION SYSTEM WITH FAN "PAL02-EF-2".

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DESIGNED BY: [Signature]
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 DATE: 20 JUN 2025
 SOLICITATION NO.:
 CONTRACT NO.:

FL007 HVAC-ELEC-PLUMB RESET
 PAL02A, FL
 HVAC PLANS - BLDG PAL02

SHEET ID
M-103

06-20-2022
 DATE

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