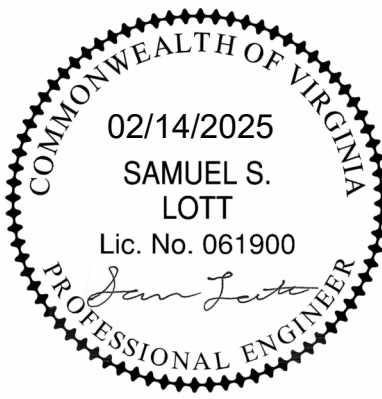




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MECHANICAL SPECIFICATIONS			
GENERAL 1. PERFORM WORK IN ACCORDANCE WITH APPLICABLE STATUTES, ORDINANCES, CODES AND REGULATIONS OF GOVERNMENTAL AUTHORITIES HAVING JURISDICTION. 2. OBTAIN ALL PERMITS REQUIRED. 3. CONTRACT DRAWINGS ARE DIAGRAMMATIC ONLY AND DO NOT GIVE FULLY DIMENSIONED LOCATIONS OF VARIOUS ELEMENTS OF WORK. DETERMINE EXACT LOCATIONS FROM FIELD MEASUREMENTS 4. GUARANTEE WORK FOR 1 YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION OF THE PROJECT. DURING THAT PERIOD MAKE GOOD ANY FAULTS OR IMPERFECTIONS THAT MAY ARISE DUE TO DEFECTS OR OMISSIONS IN MATERIAL, EQUIPMENT OR WORKMANSHIP. AT THE OWNER'S OPTION, REPLACEMENT OF FAILED PARTS OR EQUIPMENT SHALL BE PROVIDED. 5. IMMEDIATELY PRIOR TO SUBSTANTIAL COMPLETION OF THE PROJECT, REPLACE AIR FILTERS. 6. PROVIDE EQUIPMENT HOUSEKEEPING PADS UNDER ALL FLOOR MOUNTED AND GROUND MOUNTED HVAC EQUIPMENT, AND AS SHOWN ON THE DRAWINGS. CONCRETE PADS ARE TO BE 4" THICK UNLESS OTHERWISE INDICATED ON THE DRAWINGS. 7. PROVIDE NAMEPLATES WITH 1/2" HIGH LETTERS AND FASTENED WITH EPOXY OR SCREWS. 8. MAINTAIN QUALITY CONTROL OVER SUPERVISION, SUBCONTRACTORS, SUPPLIERS, MANUFACTURERS, PRODUCTS, SERVICES, SITE CONDITIONS AND WORKMANSHIP TO PRODUCE WORK IN ACCORDANCE WITH CONTRACT DOCUMENTS. 9. COMPLY WITH INDUSTRY STANDARDS EXCEPT WHEN MORE RESTRICTIVE TOLERANCES OR SPECIFIED REQUIREMENTS INDICATE MORE RIGID STANDARDS OR MORE PRECISE WORKMANSHIP. 10. PERFORM WORK BY PERSONS QUALIFIED TO PRODUCE WORKMANSHIP OF SPECIFIED QUALITY. 11. SECURE PRODUCTS IN PLACE WITH POSITIVE ANCHORAGE DEVICES DESIGNED AND SIZED TO WITHSTAND STRESSES, VIBRATION, AND RACKING. UNDER NO CONDITIONS SHALL MATERIAL OR EQUIPMENT BE SUSPENDED FROM STRUCTURAL BRIDGING. 12. PROVIDE FINISHES TO MATCH APPROVED SAMPLES. ALL EXPOSED FINISHES SHALL BE APPROVED BY THE ARCHITECT. SUBMIT COLOR SAMPLES AS REQUIRED. 13. COMPLY WITH INSTRUCTIONS IN FULL DETAIL, INCLUDING EACH STEP IN SEQUENCE. SHOULD INSTRUCTION CONFLICT WITH CONTRACT DOCUMENTS, REQUEST CLARIFICATION FROM ARCHITECT / ENGINEER BEFORE PROCEEDING.	DUCTWORK 1. DUCT MATERIAL AND CONSTRUCTION: USE LOCK FORMING QUALITY PRIME GALVANIZED STEEL SHEETS OR COILS UP TO 80" WIDE. STENCIL EACH SHEET WITH GAUGE AND MANUFACTURER'S NAME. STENCIL COILS OF SHEET STEEL THROUGHOUT ON 10" CENTERS WITH GAUGE AND MANUFACTURER'S NAME. PROVIDE CERTIFICATION OF DUCT GAUGE AND MANUFACTURER FOR EACH SIZE DUCT. 2. RECTANGULAR LOW DUCT CONSTRUCTED OF SHEET METAL IN ACCORDANCE WITH THE LATEST EDITION OF SMACNA HVAC DUCT CONSTRUCTION STANDARDS. 3. LOW PRESSURE ROUND DUCTS SHALL BE SHOP FABRICATED WITH SNAP LOCK LONGITUDINAL SEAMS. DUCTS SHALL BE CONSTRUCTED FOR A MINIMUM OF 2" W.G. STATIC PRESSURE. MEDIUM PRESSURE ROUND DUCTWORK SHALL BE WELDED SPIRAL SEAM SUCH AS MANUFACTURED BY UNITED SHEET METAL COMPANY. KITCHEN EXHAUST DUCT: WELDED BLACK STEEL, MINIMUM 18 GAUGE. SHOWER AREA EXHAUST SYSTEMS: WELDED 304 STAINLESS STEEL. 4. FLEXIBLE DUCT LOW PRESSURE SHALL BE A CONTINUOUS GALVANIZED SPRING STEEL, WIRE HELIX, WITH REINFORCED METALIZED COVER, REINFORCED VAPOR BARRIER JACKET RATED FOR USE AT SYSTEM PRESSURE (6" WC MINIMUM), THERMAL CHARACTERISTICS OF R-6 BTU/HR/SQ. FT./"F AND 2" WALL THICKNESS INSULATION WITH 1" OVERLAP. ACCEPTABLE MANUFACTURERS: FLEXMASTER, HART & COOLEY, OMNIAR. 5. ACCEPTABLE MANUFACTURERS: FLEXMASTER, THERMOFLEX, OMNIAR. 6. FIRE DAMPERS: FIRE DAMPERS FOR REQUIRED RUL RATINGS THAT ARE 95% MINIMUM FREE AREA. PROVIDE TYPE B OR TYPE C UL DAMPERS FOR LOW, MEDIUM AND HIGH-PRESSURE RECTANGULAR, SQUARE OR ROUND DUCTS. DAMPERS SHALL BE ACTIVATED BY A FUSIBLE LINK DESIGNED TO REACT AT 165°F. INSTALL PER MANUFACTURER'S RECOMMENDATIONS TO PROVIDE A UL ASSEMBLY. PROVIDE SEALED SLEEVE TO MEET DESIRED LEAKAGE PERFORMANCE. 7. WALL LOUVERS: REFER TO SCHEDULE ON DRAWINGS. COORDINATE WITH ARCHITECTURAL DRAWINGS. ALL LOUVER FRAMES SHALL BE A MINIMUM OF 1/8" EXTRUDED ALUMINUM. BEGINNING POINT OF WATER PENETRATION AT 0.01 OZ/SQ. FT. SHALL BE A MINIMUM OF 800 FT/MIN. PROVIDE ALL LOUVERS WITH REMOVABLE ALUMINUM BIRD SCREEN WITH 1/4" MESH. 8. DRAIVE DAMPERS: MANUAL BALANCING DAMPERS THAT MEET OR EXCEED THE FOLLOWING MINIMUM CONSTRUCTION STANDARDS: FRAME 16-GAUGE, BLADES 16-GAUGE, BEARINGS CORROSION RESISTANT, COUPSED BLADE, DAMPER MATERIAL TO BE DETERMINED BY THE ARCHITECT. 9. INSTALLATION: USE CONSTRUCTION METHODS AND REQUIREMENTS AS OUTLINED IN SMACNA HVAC DUCT CONSTRUCTION STANDARDS AS WELL AS SMACNA BALANCING AND ADJUSTING PUBLICATIONS, UNLESS OTHERWISE INDICATED. REFER TO THE SPECIFICATIONS. REFER TO THE DRAWINGS FOR ADDITIONAL INFORMATION. REINFORCE DUCTS IN ACCORDANCE WITH RECOMMENDED CONSTRUCTION PRACTICE OF SMACNA. PROVIDE ADDITIONAL REINFORCEMENT OF LARGE PLENUMS AS REQUIRED TO PREVENT EXCESSIVE FLEXING AND OR VIBRATION.	FANS 1. PROVIDE FAN TYPE, ARRANGEMENT, ROTATION, CAPACITY, SIZE, MOTOR HORSEPOWER, AND MOTOR VOLTAGE AS SHOWN. FAN CAPACITIES AND CHARACTERISTICS ARE SCHEDULED ON THE DRAWINGS. PROVIDE FANS CAPABLE OF ACCOMMODATING STATIC PRESSURE VARIATIONS OF +10% OF SCHEDULED DESIGN AT THE DESIGN AIR FLOW. 2. ACCEPTABLE MANUFACTURERS: COOK, GREENHECK, PENN VENTILATOR, ACME, CARNES, TWIN CITY. 3. SAFETY DISCONNECT SWITCH: PROVIDE A FACTORY-WIRED TO MOTOR, SAFETY DISCONNECT SWITCH ON EACH UNIT. 4. PREFABRICATED ROOF CURBS: FURNISH PREFABRICATED ROOF CURBS AS DETAILED. THE MINIMUM HEIGHT IS 14". INCLUDE A RESILIENT PAD ON EACH ROOF CURB SO THE EQUIPMENT CAN BE MOUNTED ON THE TOP FLANGE FOR PROPER SEAL. COORDINATE ROOF SLOPE AND CURBS TO ENSURE EQUIPMENT IS INSTALLED IN LEVEL POSITION. PROVIDE DOUBLE SHELL TO PROTECT INSULATION FROM DAMAGE. 5. DAMPERS: WHERE AUTOMATIC BACKDRAFT DAMPER IS SCHEDULED, MULTIBLADED, ROLL FORMED ALUMINUM BLADES, NYLON BEARINGS, NEOPRENE WEATHER STRIP ON BLADE EDGE. 6. FURNISH KITCHEN HOOD EXHAUST FANS WITH VENTED CURB EXTENSION THAT MEETS NFPA 96, CLEANOUT FORT, GREASE TAP, CURB SEAL, DRAIN CONNECTION AND HINGE KIT. 7. ROOFTOP VENTILATION AND EXHAUST SYSTEMS: PROVIDE EACH MOTOR WITH INTERNAL OVERLOAD PROTECTION, ALUMINUM, STAINLESS STEEL OR PLASTIC COATED BIRD GUARD, SCREWS AND FASTENERS OF STAINLESS STEEL OR NONFERROUS MATERIAL, ALL ALUMINUM CONSTRUCTION UNLESS INDICATED OTHERWISE ON FAN SCHEDULE. WEATHER CONSTRUCTION, CORROSION RESISTANT FASTENERS, MINIMUM 16 GAUGE MARINE ALLOY ALUMINUM. ALUMINUM BASE SHALL BE CONTINUOUSLY WELDED CURB CAP CORNERS.	STANDARD OPERATING PROCEDURE GENERAL BUILDING EXHAUST FANS (EF-1820) 1. EXHAUST FANS SHALL OPERATE CONTINUOUSLY WHILE LIGHTS ARE ON IN SPACE THAT THE FAN SERVES. GENERAL BUILDING EXHAUST FAN (EF-3) 1. EXHAUST FANS SHALL OPERATE CONTINUOUSLY WHILE THE 7-DAY PROGRAMMABLE DIGITAL TIMER IS ACTIVATED. DIGITAL TIMER SHALL BE SET TO BUILDING OCCUPANCY. GENERAL BUILDING EXHAUST FAN (REF-1) 1. EXHAUST FANS SHALL OPERATE CONTINUOUSLY WHILE THE 7-DAY PROGRAMMABLE DIGITAL TIMER IS ACTIVATED. DIGITAL TIMER SHALL BE SET TO BUILDING OCCUPANCY. PACKAGED AIR CONDITIONING UNIT WITH GAS HEAT (IEKX-RTU-14-1) 1. CONTROLLER: UNITS SHALL BE PROVIDED WITH STAND-ALONE FACTORY MOUNTED CONTROLS CAPABLE OF MAINTAINING THE SEQUENCES OF OPERATIONS AS LISTED BELOW. IF THE FACTORY MOUNTED CONTROLS CANNOT MAINTAIN THE SEQUENCES OF OPERATIONS AS DESCRIBED, THE CONTROLS CONTRACTOR SHALL PROVIDE A THIRD-PARTY CONTROLLER CAPABLE OF MAINTAINING THE SEQUENCES OF OPERATIONS. THE CONTROLS CONTRACTOR SHALL PROVIDE ALL THE NECESSARY SENSORS, WIRING, AND CONTROLS TO MAINTAIN THE SEQUENCE OF OPERATIONS. THE UNITS SHALL BE CONTROLLED BY SPACE MOUNTED THERMOSTAT. 2. OCCUPIED MODE: ON A SIGNAL FROM THE SPACE MOUNTED OCCUPANCY SENSOR THE SUPPLY AIR FAN SHALL OPERATE CONTINUOUSLY AND THE ASSOCIATED OUTDOOR AIR MOD SHALL MODULATE TO THE BALANCED POSITION. ON A SIGNAL FROM THE SPACE MOUNTED THERMOSTAT THE UNIT SHALL ENTERING COOLING OR HEATING MODE. DURING COOLING MODE, THE DX COOLING SHALL SEQUENCE TO MAINTAIN SPACE TEMPERATURE SETPOINT 74°F (ADJ.). DURING HEATING MODE, THE GAS FURNACE SHALL STAGE TO MAINTAIN SPACE TEMPERATURE SETPOINT 72°F (ADJ.). 3. UNOCCUPIED MODE: ON A SIGNAL FROM THE SPACE MOUNTED OCCUPANCY SENSOR, THE SUPPLY AIR FAN SHALL CYCLE AND THE ASSOCIATED OUTDOOR AIR MOD SHALL MODULATE FULLY CLOSED. THE DX COOLING OR GAS FURNACE SHALL MODULATE AS REQUIRED TO MAINTAIN SETBACK TEMPERATURE. 4. SAFETIES AND AUXILIARY CONTROLS: A. CONDENSATE OVER FLOW SWITCH. B. FILTER ALARM (WHEN FILTER DIFFERENTIAL IS GREATER THAN 1" WC, MANUALLY ADJUSTABLE) C. DUCT MOUNTED SMOKE DETECTOR (EX-RTU-1 AND EX-RTU-4 ONLY) PACKAGED AIR CONDITIONING UNIT WITH HOT GAS REHEAT AND GAS HEAT (RTU-1821) 1. REFER TO MANUFACTURER'S SEQUENCE OF OPERATIONS

DRAWN BY **MDA**
DESIGNED BY **MDA**
CHECKED BY **SSL**
DATE **02/14/2025**
SCALE **1/4" = 1'-0"**
REVISIONS
1 06-10-2025 GC COORDINATION & CODE REVIEW

RAM HOUSE
ALTERATIONS & ADDITION
LOWER LEVEL MECHANICAL DEMOLITION PLAN

410 ELM AVE
ROANOKE CITY, VIRGINIA

DRAWN BY	MDA
DESIGNED BY	MDA
CHECKED BY	SSI
DATE	02/14/202
SCALE	3/16" = 1'-0"
REVISIONS	

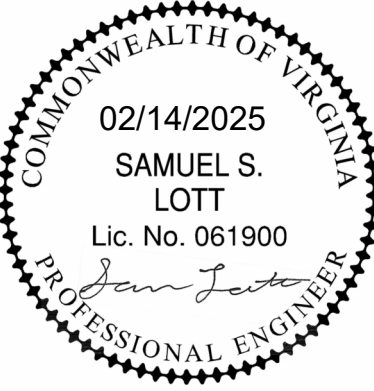
MECHANICAL GENERAL NOTES:

1. DEMOLISH ALL EXISTING MECHANICAL EQUIPMENT, DUCTWORK, PIPING, AND ALL RELATED APPURTENANCES ON THIS FLOOR.

1 LOWER LEVEL MECHANICAL DEMOLITION PLAN
Scale: 3/16" = 1'-0"

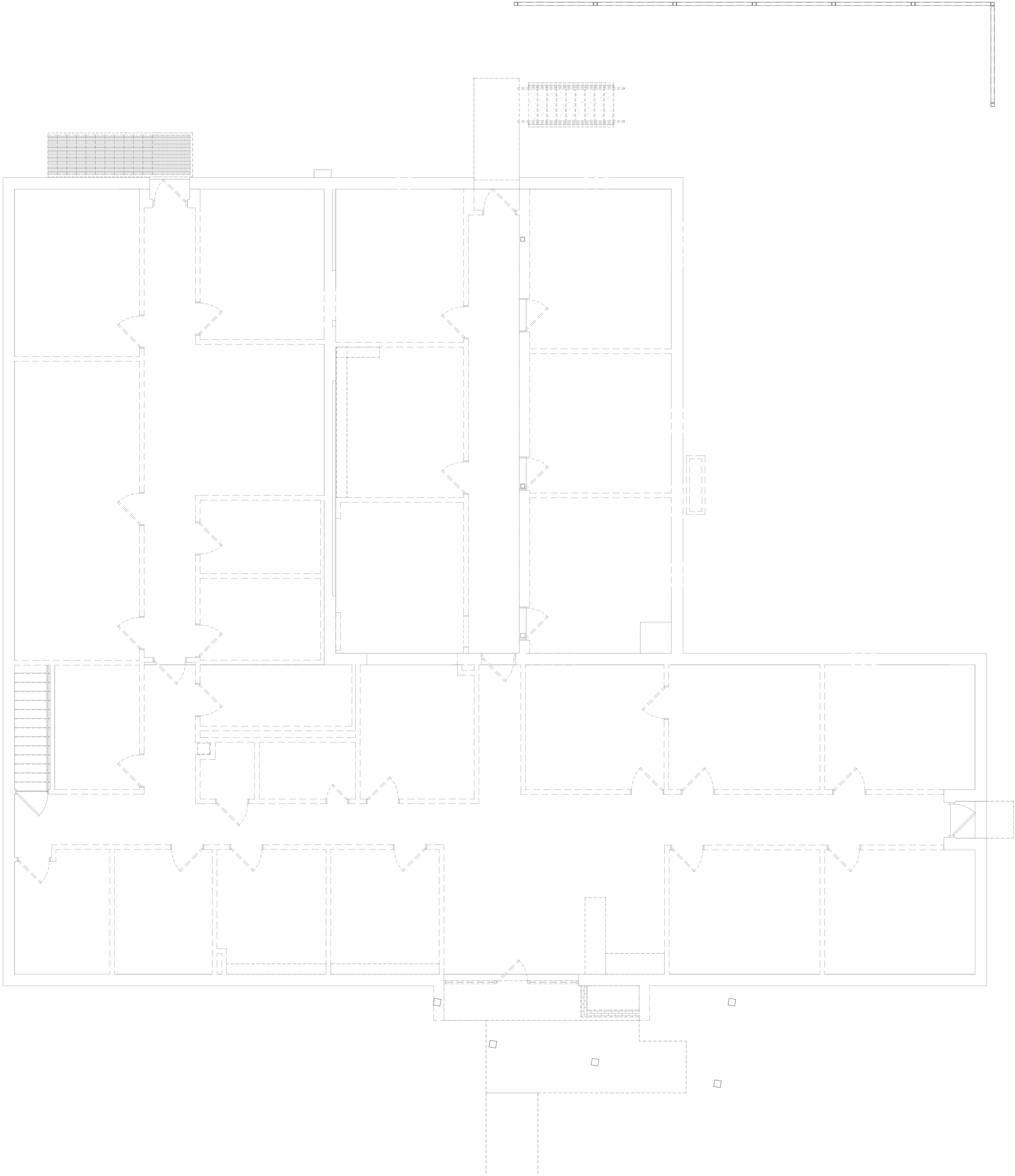


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1. DEMOLISH ALL EXISTING MECHANICAL EQUIPMENT, DUCTWORK, PIPING, AND ALL RELATED APPURTENANCES ON THIS FLOOR.



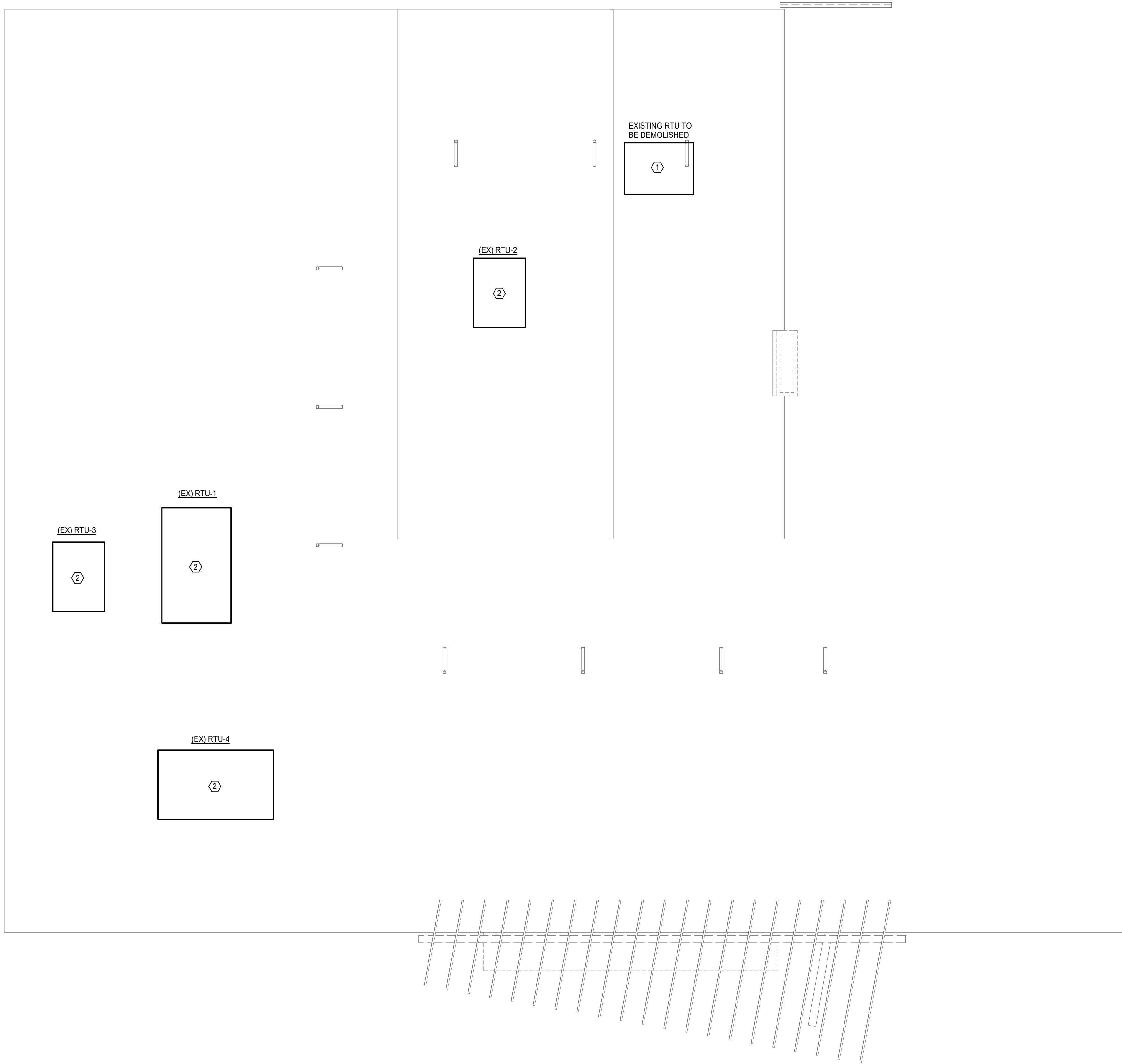
1 MAIN LEVEL MECHANICAL DEMOLITION PLAN
Scale: 3/16" = 1'-0"

RAM HOUSE
ALTERATIONS & ADDITION
MAIN LEVEL MECHANICAL DEMOLITION PLAN
410 ELM AVE
ROANOKE CITY, VIRGINIA

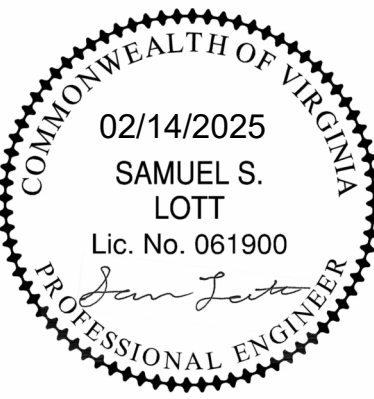
DRAWN BY	MDA
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CHECKED BY	SSL
DATE	02/14/2025
SCALE	3/16" = 1'-0"
REVISIONS	

MECHANICAL KEYED NOTES:

1. DEMOLISH EXISTING UNIT ALONG WITH ALL ASSOCIATED DUCTWORK, ROOF CURB, PIPING, AND APPURTENANCES.
2. REMOVE EXISTING UNIT AND DEMOLISH ASSOCIATED DUCTWORK, PIPING, AND APPURTENANCES. COORDINATE WITH GC TO CAP EXISTING ROOF PENETRATION AND RESEAL WATER AND AIR TIGHT. EXISTING UNIT AND CURB SHALL BE SALVAGED AND REUSED DURING NEW CONSTRUCTION. RE: M1.03 FOR NEW LOCATIONS.



1 ROOF MECHANICAL DEMOLITION PLAN
Scale: 3/16" = 1'-0"

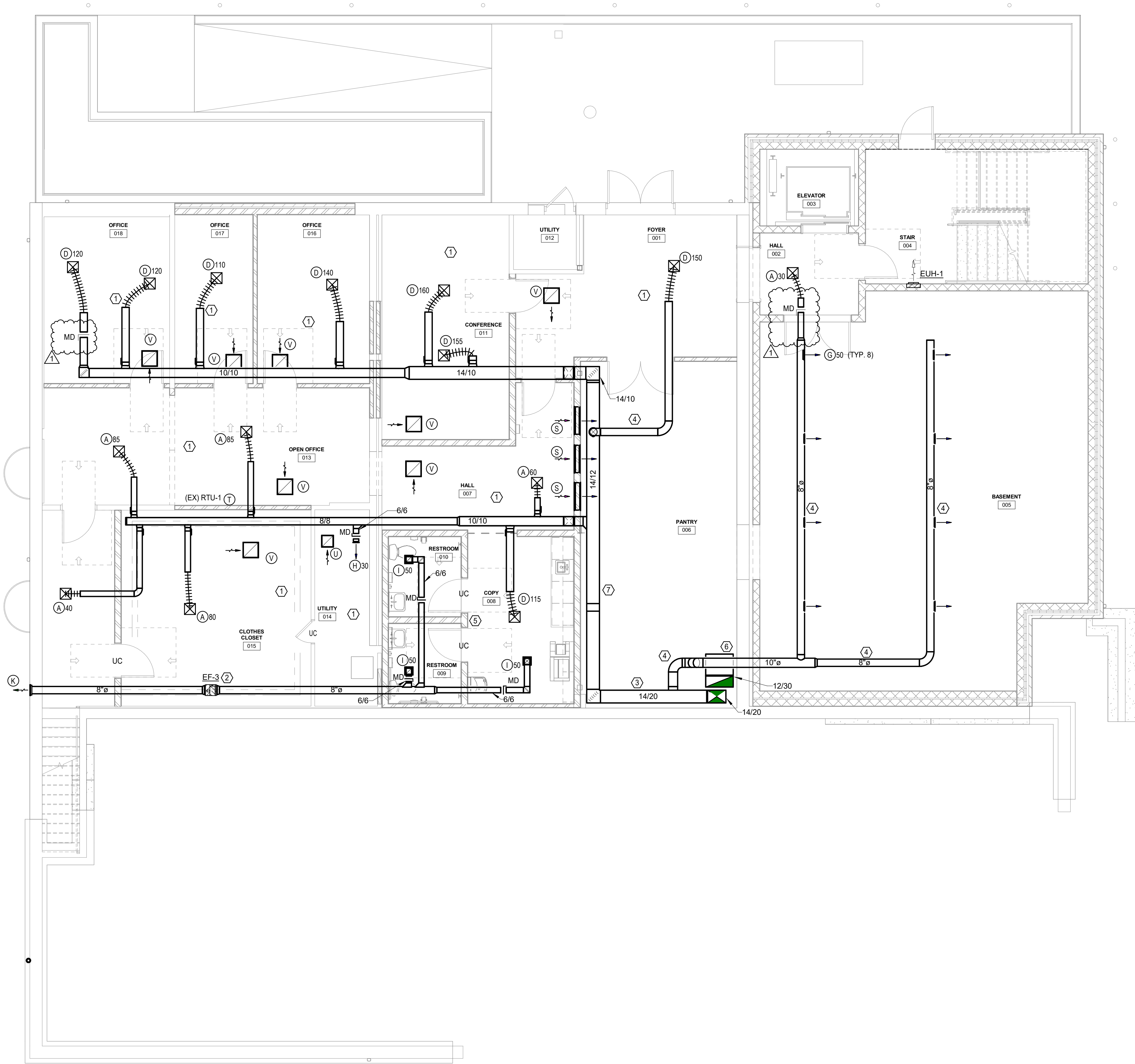


MECHANICAL GENERAL NOTES:

1. ROUTE DUCTWORK BETWEEN/THROUGH STRUCTURAL BEAMS AND TRUSSES WHEREVER POSSIBLE. COORDINATE IN FIELD FOR EXACT LOCATION OF STRUCTURAL MEMBERS.
2. CONTRACTOR TO PAINT ALL EXPOSED DUCTWORK WITH PAINT GRIP GALVANIZED STEEL. PAINT FLAT BLACK OR AS SPECIFIED BY ARCH.
3. FIELD COORDINATE FINAL AIR TERMINAL LOCATIONS WITH EXISTING STRUCTURAL.

MECHANICAL KEYED NOTES: ○

1. SPACE ABOVE CEILING SHALL BE USED AS A RETURN AIR PLENUM. ALL MATERIALS SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 723. PRIOR TO BIDDING, CONTRACTOR SHALL INFORM ALL TRADES THAT HAVE WORK IN THE RETURN AIR PLENUM AREA.
2. MOUNT FAN FROM STRUCTURE WITH UNISTRUT SUPPORT AS CLOSE TO DECK AS POSSIBLE. RE: 7/M2.01
3. INTERNALLY LINE ALL EXPOSED DUCT IN THIS AREA IN LIEU OF EXTERNAL INSULATION. ALL DUCT SIZES SHOWN REPRESENT INSIDE CLEAR SIZES.
4. ALL ROUND DUCTWORK IN THIS AREA SHALL BE DOUBLE WALLED SPIRAL ROUND.
5. APPROXIMATE LOCATION OF DIGITAL TIMER INTERLOCKED WITH EE-3. COORDINATE WITH OWNER PRIOR TO CONSTRUCTION FOR FINAL MOUNTING LOCATION AND OCCUPANCY SETTINGS. PROVIDE TIMER WITH TAMPER RESISTANT COVER.
6. DUCTWORK SHALL BE OPEN TO SPACE. PROVIDE CONSTRUCTION GRADE HARDWARE OVER DUCT OPENING.
7. ROUTE DUCT TIGHT TO STRUCTURE.
8. ROUTE DUCTWORK IN BULKHEAD.



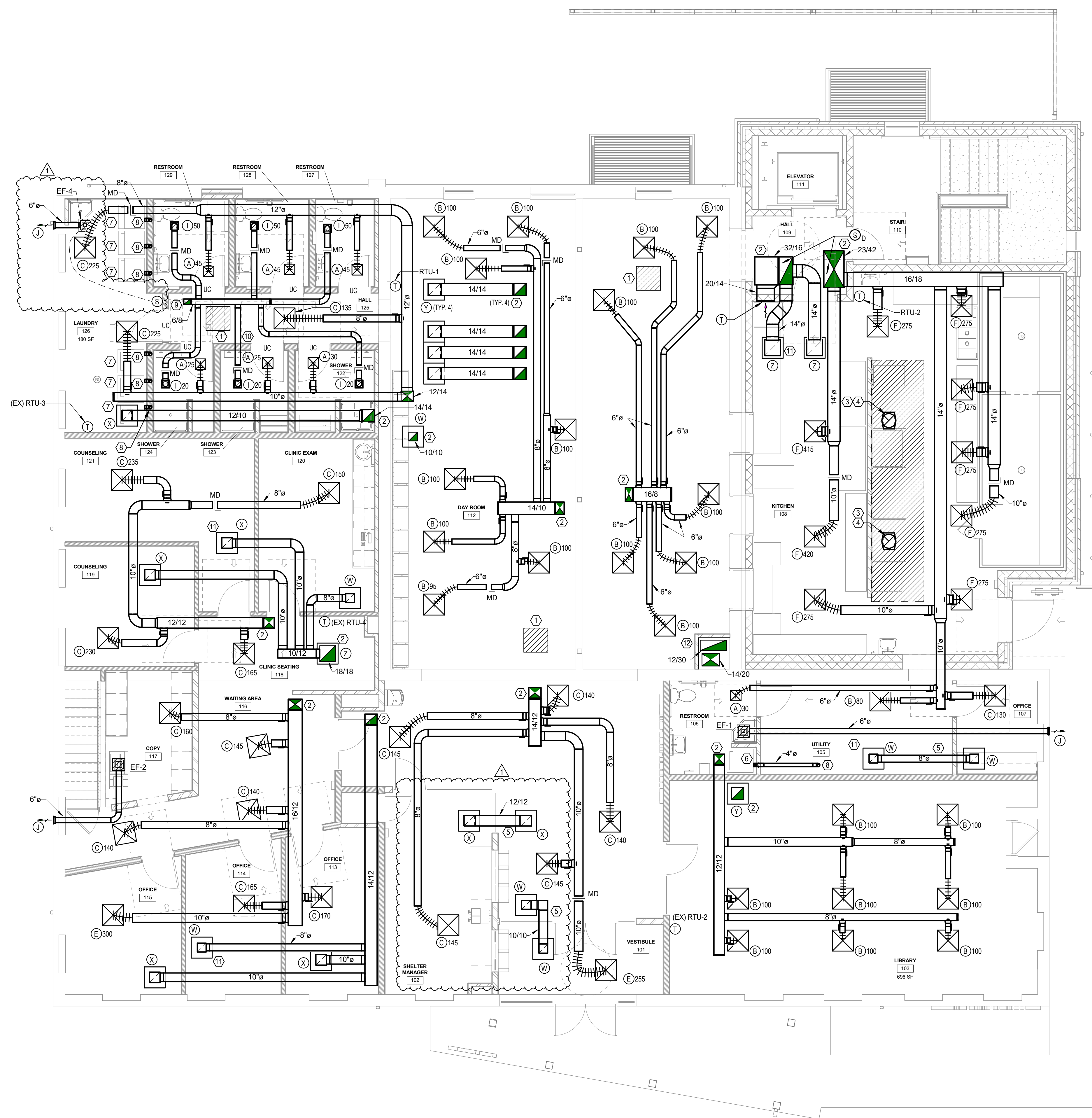
1 LOWER LEVEL MECHANICAL PLAN
Scale: 3/16" = 1'-0"

MECHANICAL GENERAL NOTES:

- ROUTE DUCTWORK BETWEEN STRUCTURAL BEAMS AND TRUSSES WHEREVER POSSIBLE. COORDINATE IN FIELD FOR EXACT LOCATION OF STRUCTURAL MEMBERS.

MECHANICAL KEYED NOTES:

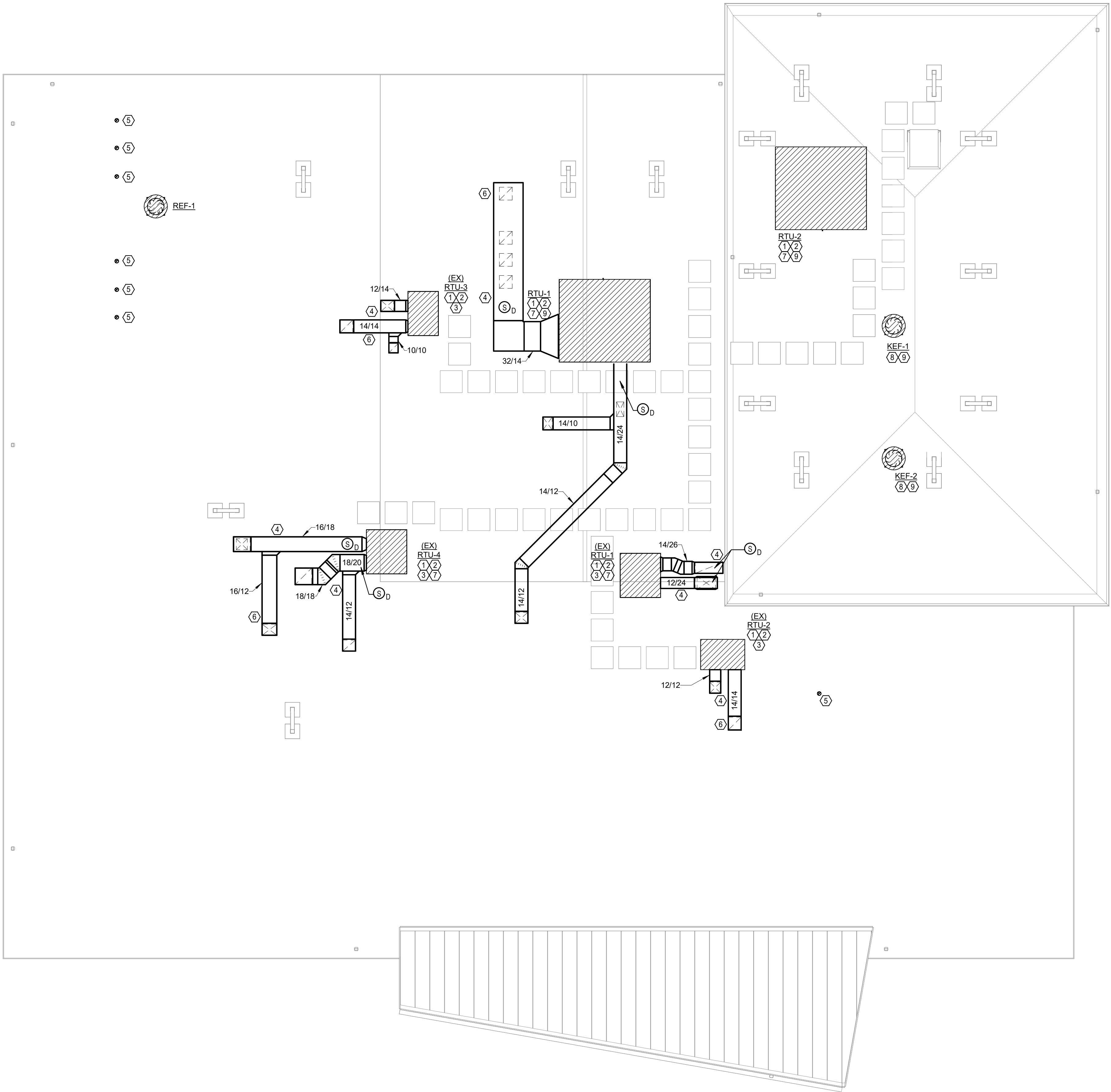
- PROVIDE GPS IDF-2 (DN) DISTRIBUTION FAN. COORDINATE WITH ARCHITECT'S REFLECTED CEILING PLAN PRIOR TO CONSTRUCTION AND PROVIDE MANUFACTURER RECOMMENDED MOUNTING HARDWARE.
- ROUTE DUCT THROUGH ROOF TO CORRESPONDING RTU. RE: M1.03 FOR CONTINUATION.
- KITCHEN GREASE EXHAUST DUCT SHALL BE WELDED BLACK STEEL CONSTRUCTION. SLOPE DUCT TOWARDS HOOD. PROVIDE CLEANOUTS IN EACH CHANGE OF DIRECTION AND 12'. PROVIDE WITH FIREWRAPPING.
- ROUTE KITCHEN GREASE EXHAUST DUCT TO KITCHEN EXHAUST FAN ON ROOF. RE: M1.03 FOR CONTINUATION.
- TRANSITION DUCTWORK SHALL BE INTERNALLY LINED FOR SOUND ATTENUATION. PROVIDE DUCTWORK WITH EXTERIOR INSULATION AS SPACE ALLOWS.
- PROVIDE DRYERBOX MODEL DB-350 OR APPROVED EQUAL IN WALL DIRECTLY BEHIND DRYER.
- PROVIDE DRYERBOX MODEL 480 OR APPROVED EQUAL IN WALL DIRECTLY BEHIND DRYER.
- ROUTE 4" Ø DRYER EXHAUST VENT TO DRYER ROOF CAP WITH BACK DRAFT DAMPER. CONTRACTOR TO VERIFY LENGTH OF DUCT ROUTE IS LESS THAN OR EQUAL TO 35 FEET WITH 5 FOOT ADDED TO TOTAL LENGTH FOR EVERY 4" 90° BEND. PROVIDE PERMANENT NAMEPLATE WITH TOTAL DUCT RUN WITHIN 6'-0" FROM EXHAUST CONNECTION. RE: M1.03 FOR CONTINUATION.
- ROUTE DUCT THROUGH ROOF TO CORRESPONDING FAN ON ROOF. RE: M1.03 FOR CONTINUATION.
- APPROXIMATE LOCATION OF DIGITAL TIMER INTERLOCKED WITH REF-1. COORDINATE WITH OWNER PRIOR TO CONSTRUCTION FOR FINAL MOUNTING LOCATION AND OCCUPANCY SETTINGS. PROVIDE TIMER WITH TAMPER RESISTANT COVER.
- REFER TO DETAIL 5 ON SHEET M2.01. TYPICAL FOR ALL.
- ROUTE DUCTWORK THROUGH CHASE TO LOWER LEVEL BELOW.



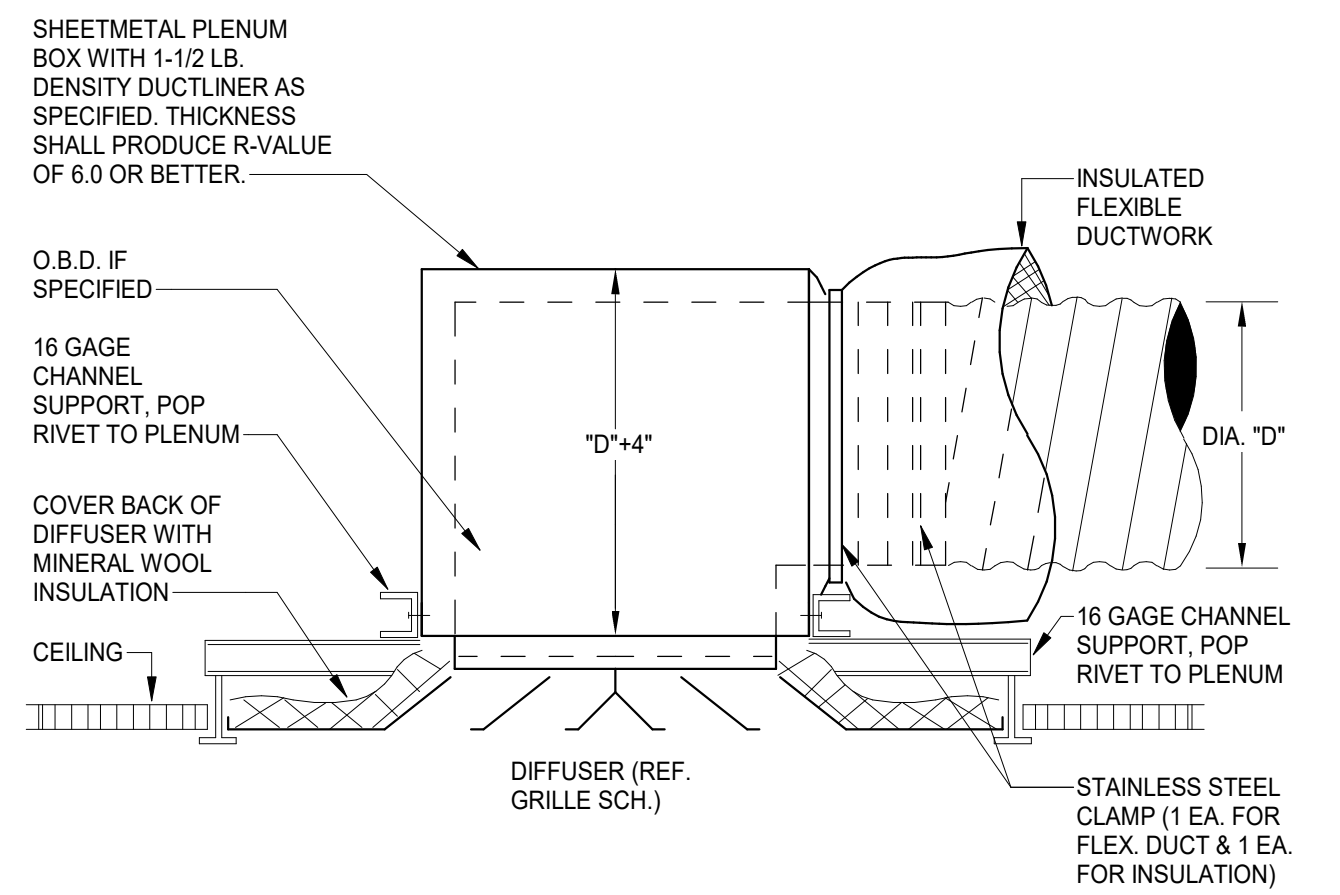
1 MAIN LEVEL MECHANICAL PLAN
Scale: 3/16" = 1'-0"

MECHANICAL KEYED NOTES: ○

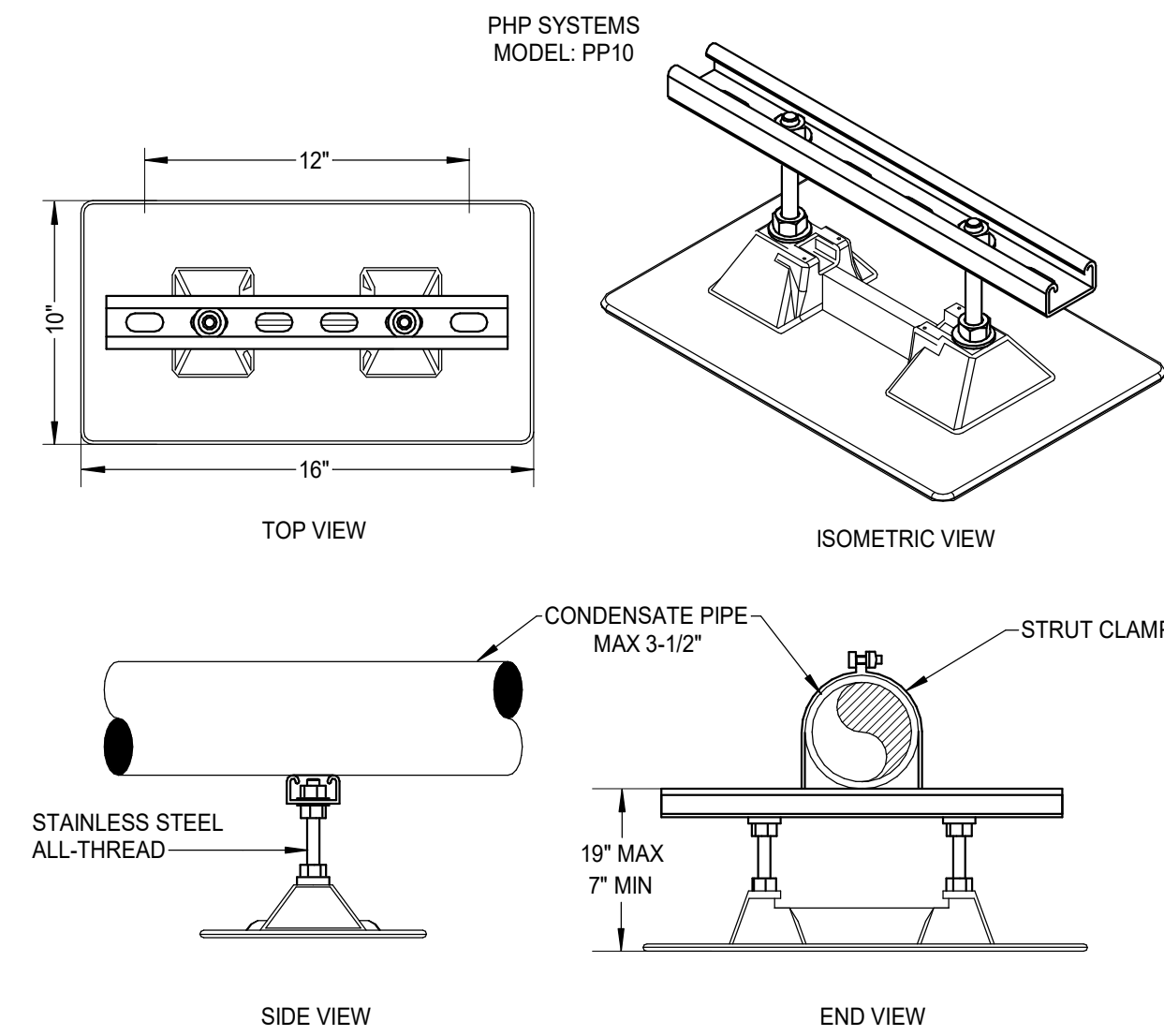
- KEEP RTU A MINIMUM 10'-0" FROM ALL BUILDING INLETS. PROVIDE OUTDOOR AIR INTAKE WITH INSECT SCREEN. RTU SHALL BE LOCATED 10'-0" FROM BUILDING EDGE. OUTDOOR AIR INTAKES SHALL BE LOCATED 10'-0" FROM EXHAUST POINTS. CONTRACTOR TO FIELD VERIFY FINAL LOCATION.
- ROUTE 1-1/4" CONDENSATE DRAIN LINE W/ AIR TRAP FROM UNIT AND DISCHARGE AT NEAREST ROOF DRAIN OR GUTTER. INSULATE CONDENSATE DRAIN LINE. PROVIDE 1/8" SLOPE FOR CONDENSATE PIPING. RE: 9/MZ.01
- RELOCATE REMOVED RTU AND ROOF CURB AS SHOWN. COORDINATE WITH GC TO PROVIDE NECESSARY ROOF PENETRATIONS.
- ROUTE DUCTWORK ALONG ROOF AND PENETRATE ROOF AS SHOWN. PROVIDE PRO-R RECTANGULAR DUCTWORK FOR ALL EXTERIOR ROUTING. COORDINATE WITH MANUFACTURER FOR INSTALLATION GUIDELINES.
- APPROXIMATE LOCATION OF DRYER VENT ROOF CAP. PROVIDE DRYER JACK MODEL 477 OR APPROVED EQUAL.
- ROUTE DUCTWORK FROM EXTERNAL MAIN AND PENETRATE ROOF BEFORE ROUTING TO AIR TERMINAL. REFER TO DETAILS FOR DUCTWORK PENETRATION THROUGH ROOF. PROVIDE PREFABRICATED ROOF CURB AS REQUIRED. TYP.
- PROVIDE DUCT MOUNTED SMOKE DETECTOR IN SUPPLY AND RETURN TRUNK DUCT. REFER TO SHEET M0.02 FOR SPECIFICATIONS.
- PROVIDE KITCHEN EXHAUST FAN WITH MANUFACTURER RECOMMENDED HINGE KIT.
- REFER TO SHEETS PROVIDED BY CAPTIVEAIRE FOR ALL UNIT INFORMATION AND SPECIFICATIONS.



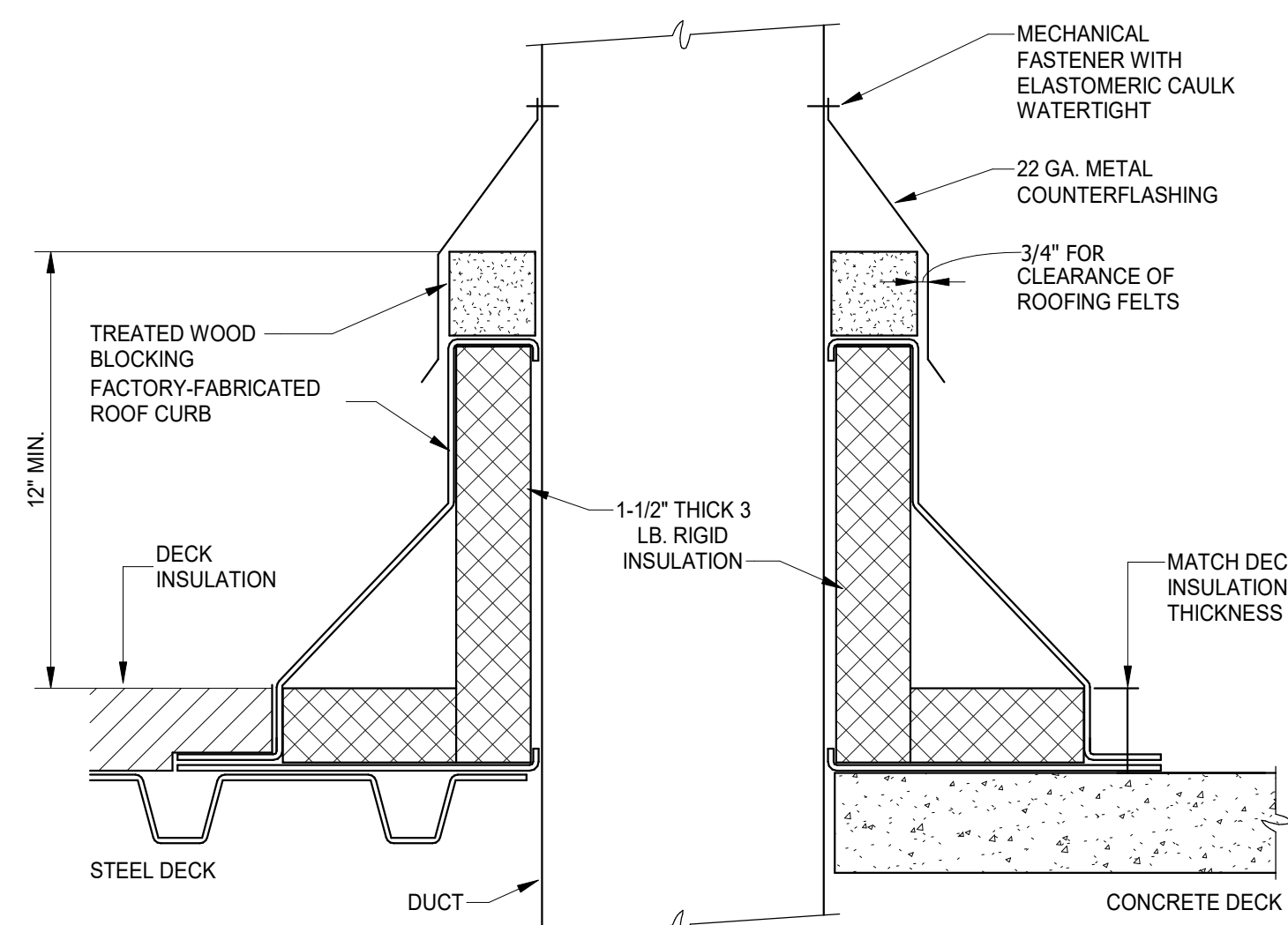
1 ROOF MECHANICAL PLAN
Scale: 3/16" = 1'-0"



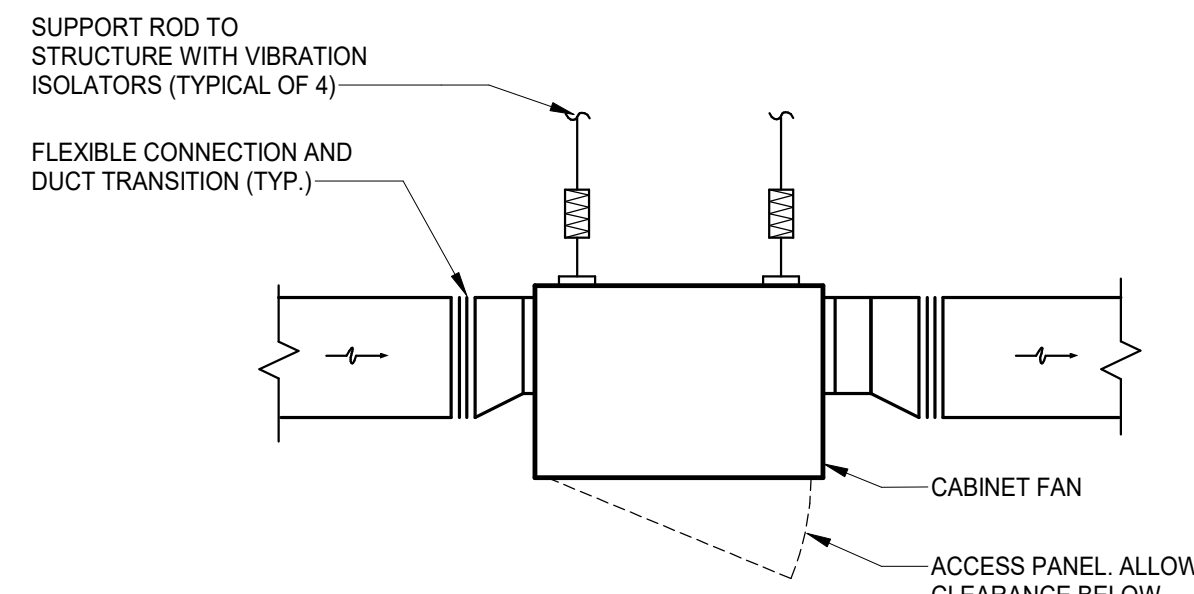
10 FLEX DUCT CONNECTION AT SUPPLY AIR DIFFUSER
Scale: NONE



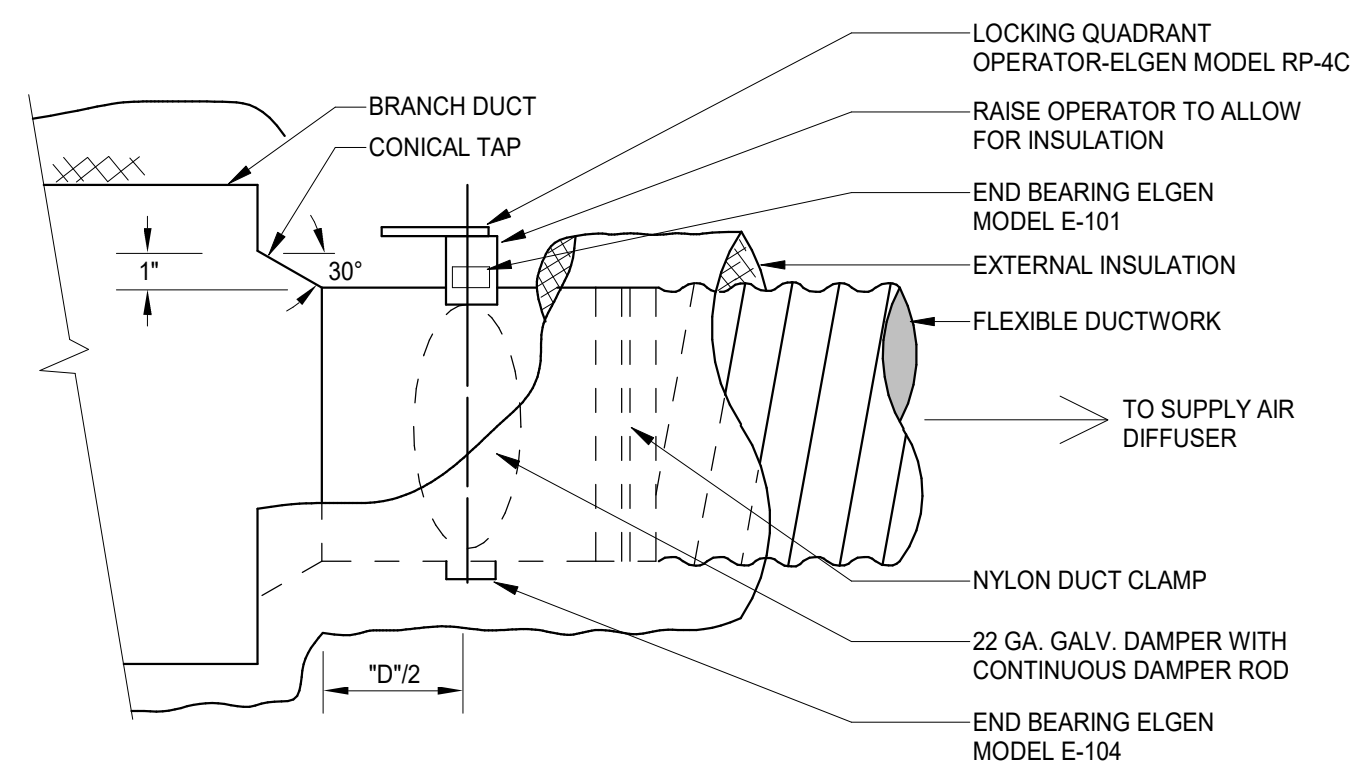
9 CONDENSATE PIPE SUPPORT ON ROOF
Scale: NONE



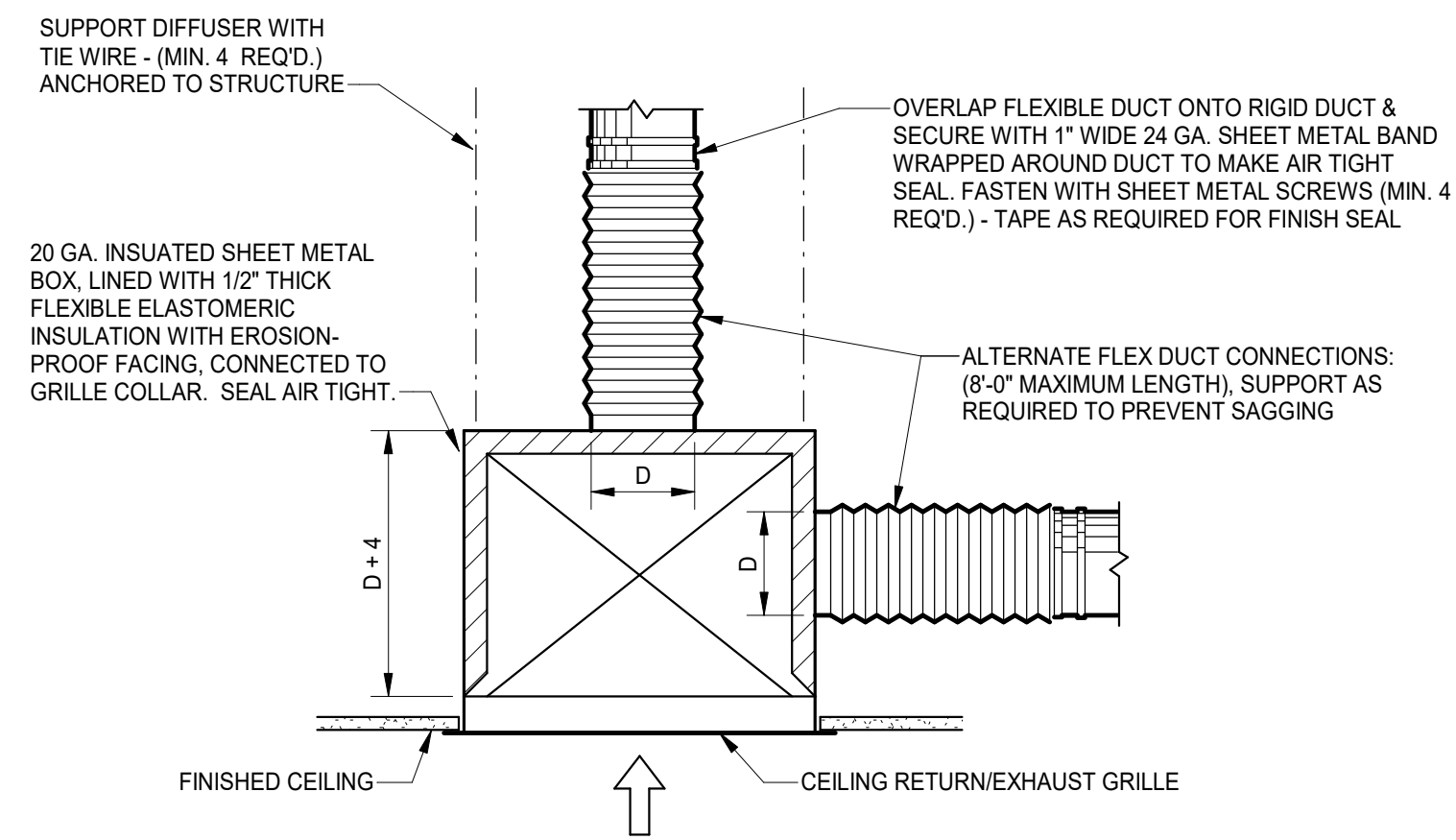
8 DUCT ROOF PENETRATION DETAIL
Scale: NONE



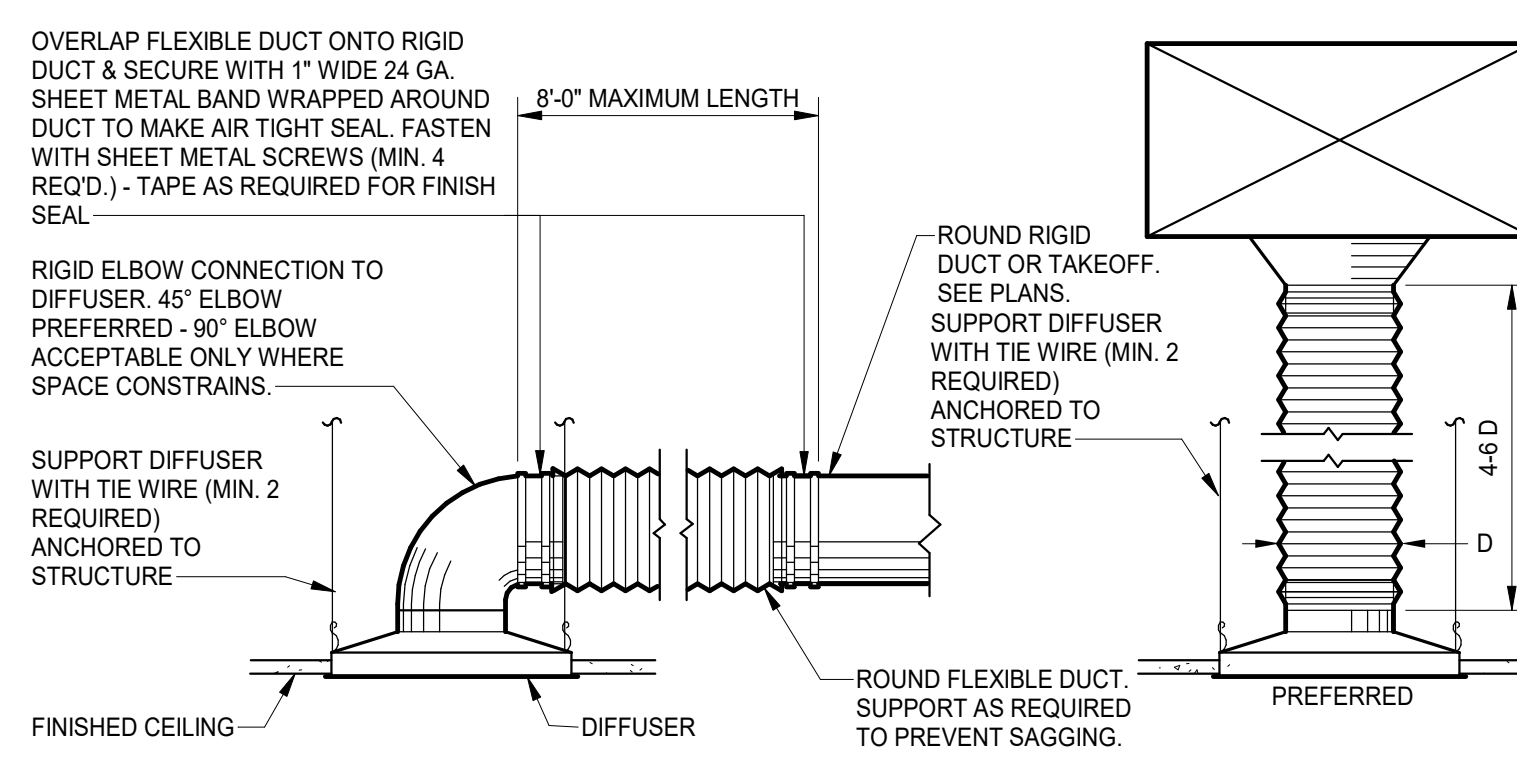
7 IN-LINE CABINET FAN DETAIL
Scale: NONE
NOTE:
1. REFER TO PLANS FOR EXACT DUCT ARRANGEMENT.



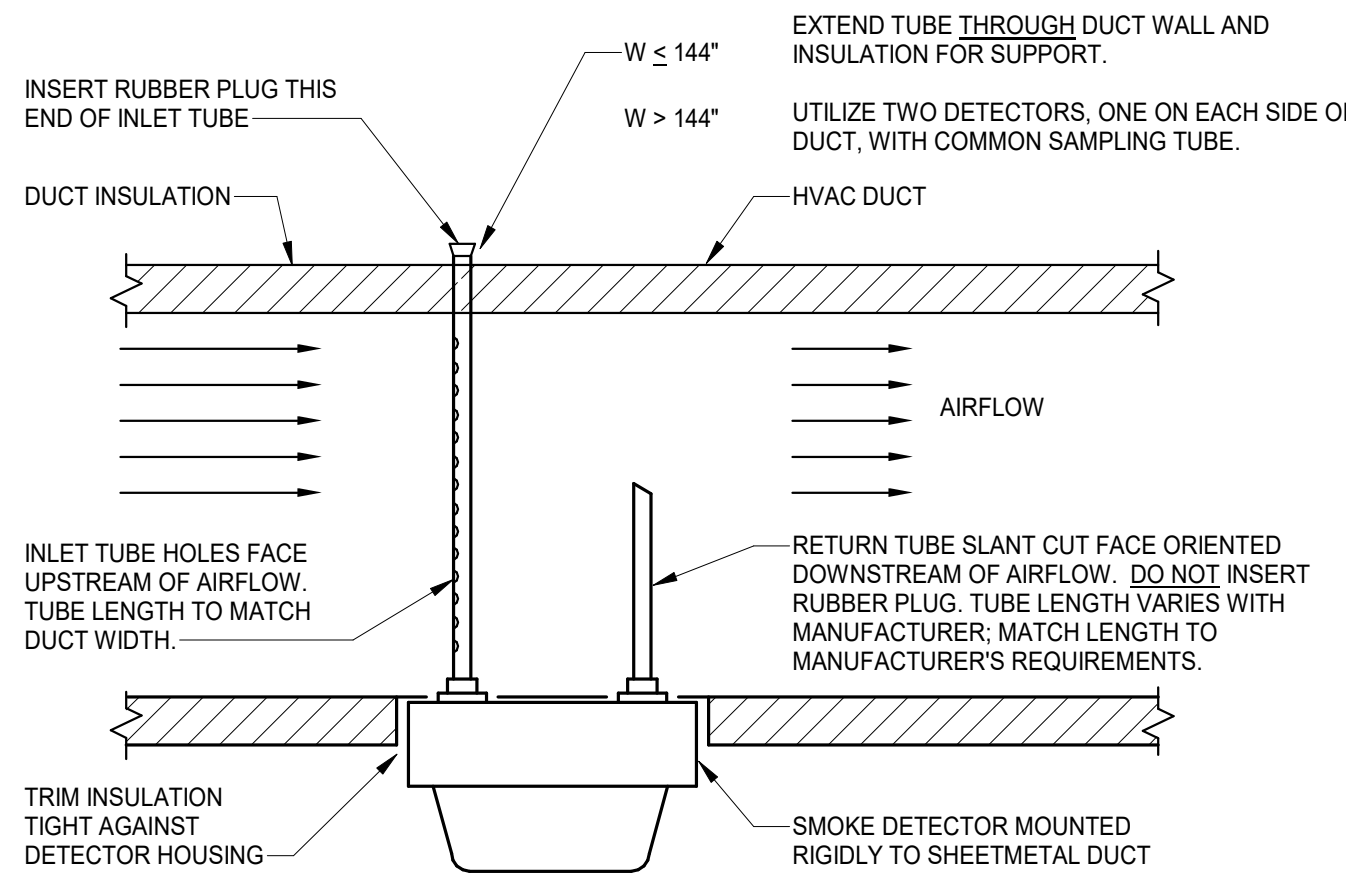
6 FLEXIBLE DUCT TAP - CONICAL
Scale: NONE



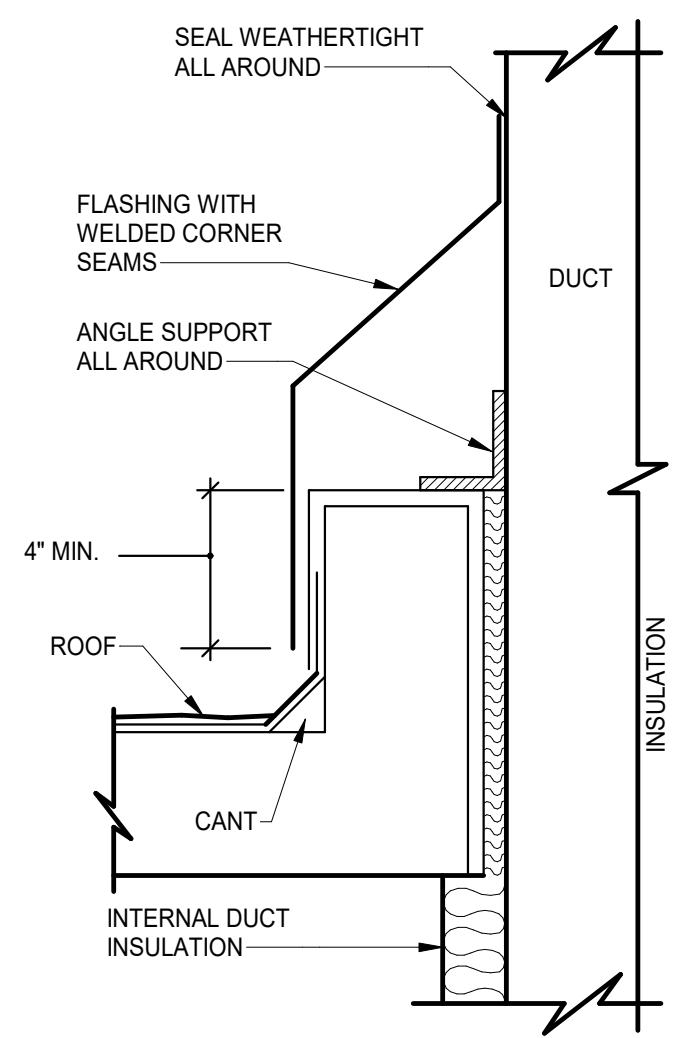
5 DUCTED RETURN/EXHAUST GRILLE INSTALLATION
Scale: 12" = 1'-0"



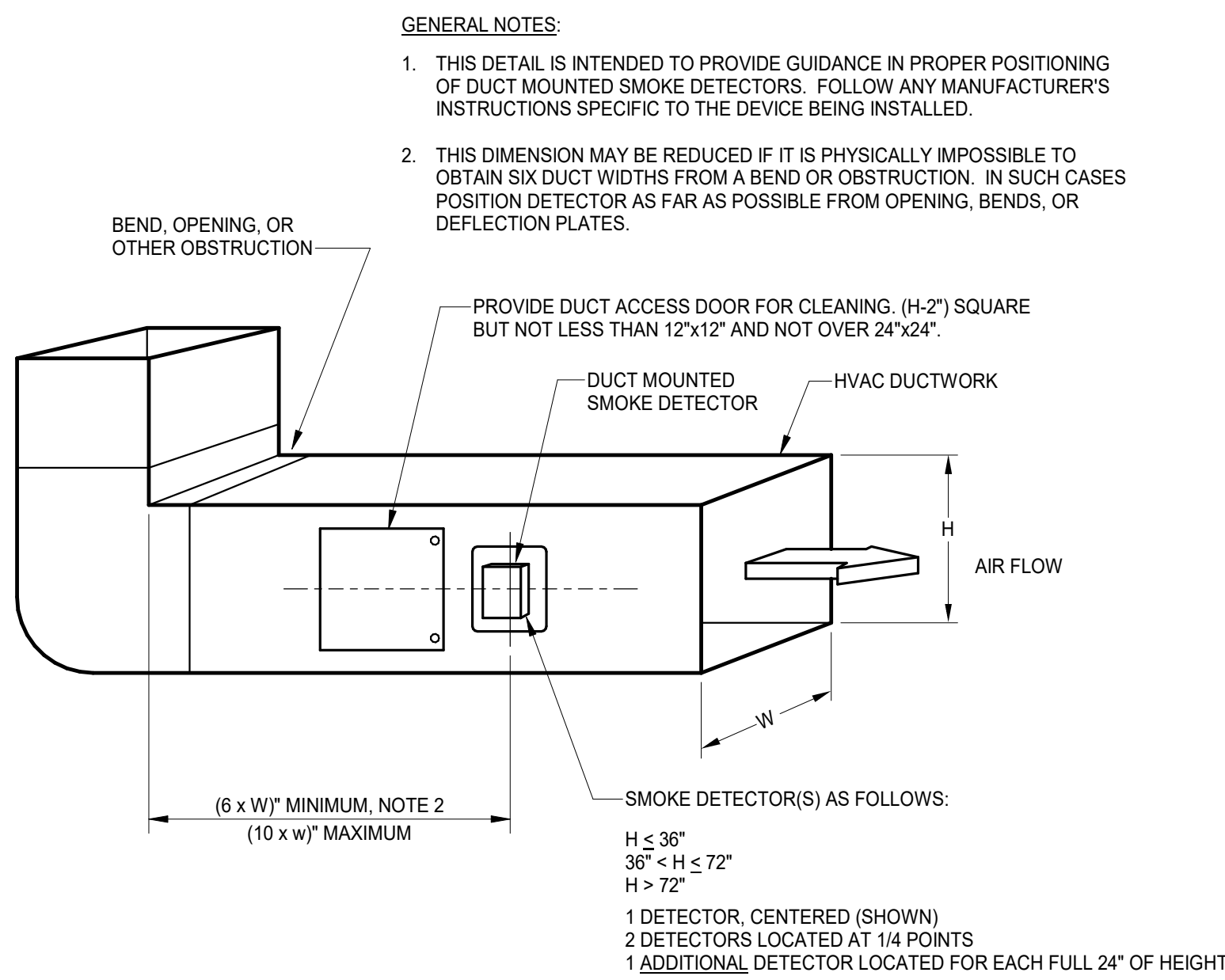
4 CEILING DIFFUSER INSTALLATION
Scale: NONE



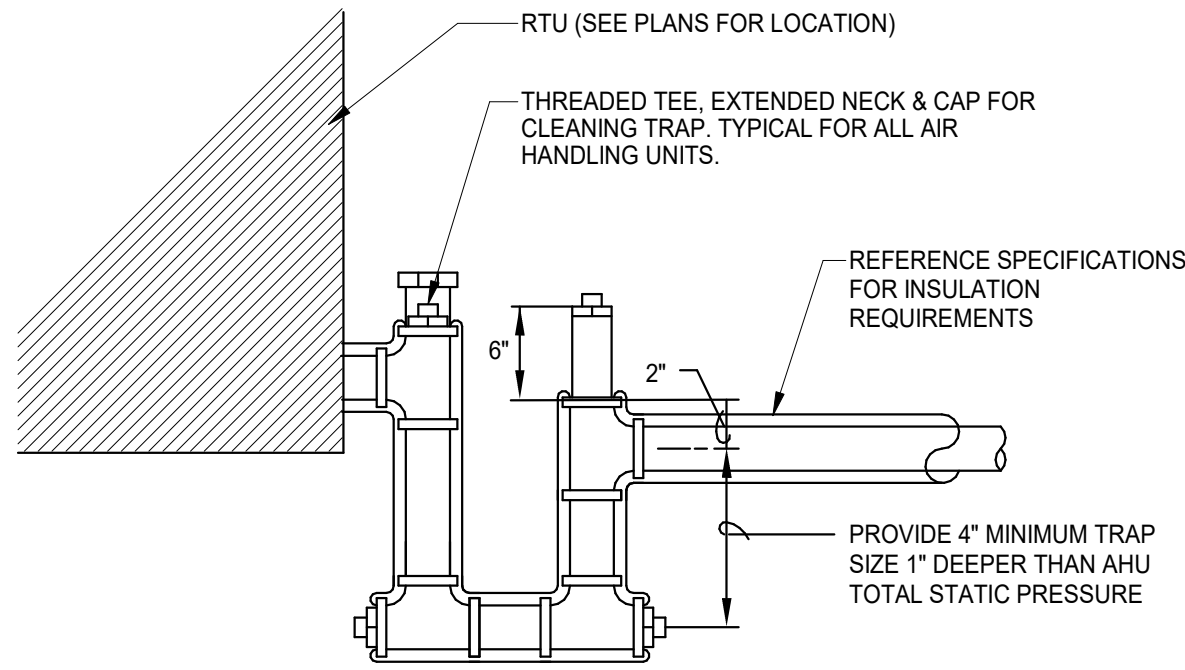
3 DUCT DETECTOR MOUNTING DETAIL
Scale: NONE
NOTE:
1. PROVIDE DUCT ACCESS TO SAMPLE/INLET TUBES VIA ACCESS DOOR.
2. COORDINATE EXACT LOCATION WITH ELECTRICAL CONTRACTOR AND FIRE ALARM SUPPLIER.
3. DUCT DETECTOR CANNOT BE INSTALLED IN RETURN AIR OPENINGS.



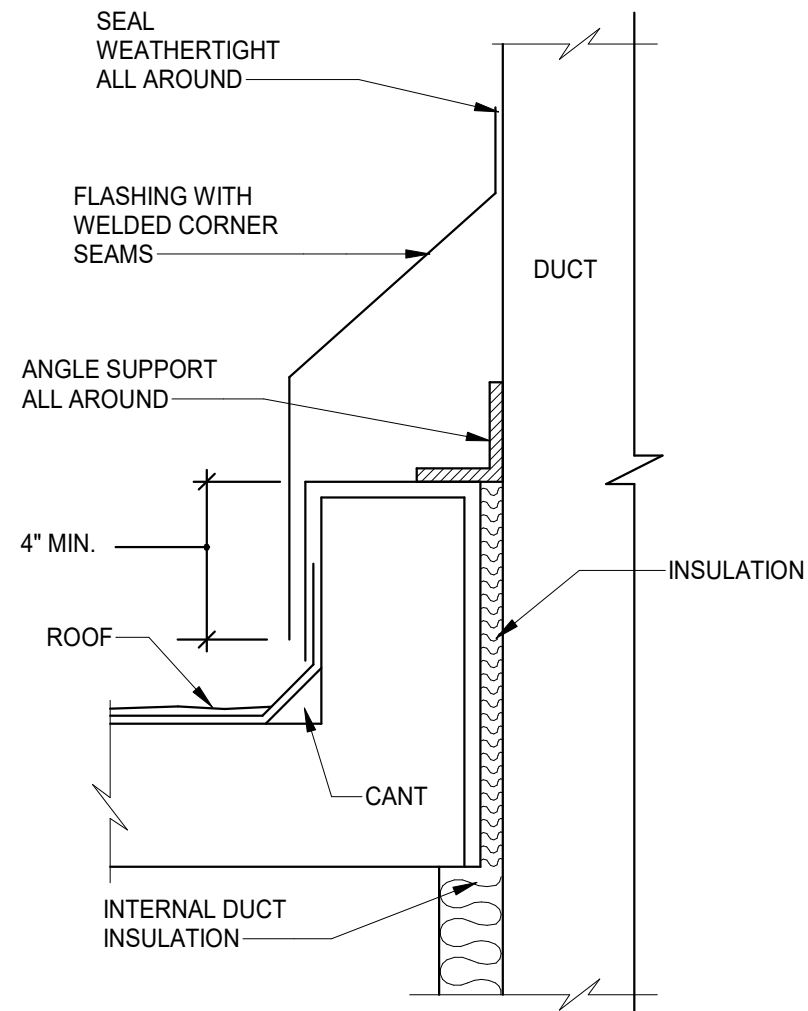
2 DUCT FLASHING AT ROOF CURB DETAIL
Scale: NONE



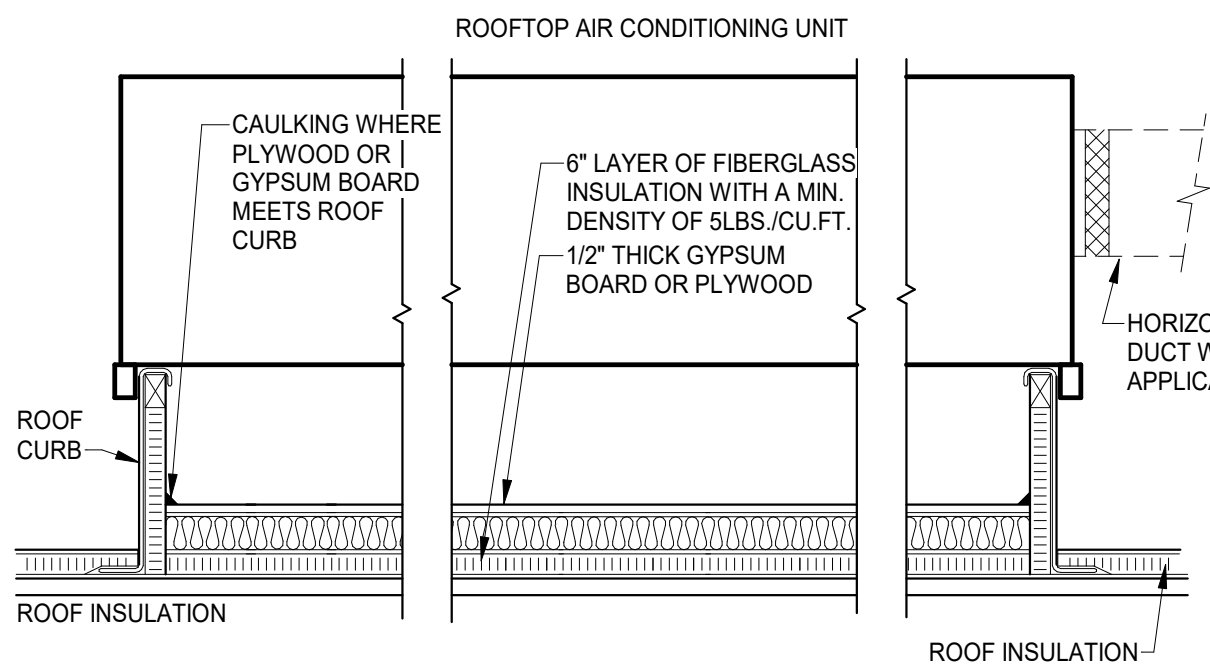
1 DUCT DETECTOR LOCATION DETAIL
Scale: NONE



4 **CONDENSATE DRAIN PIPING AT RTU**
Scale: NONE

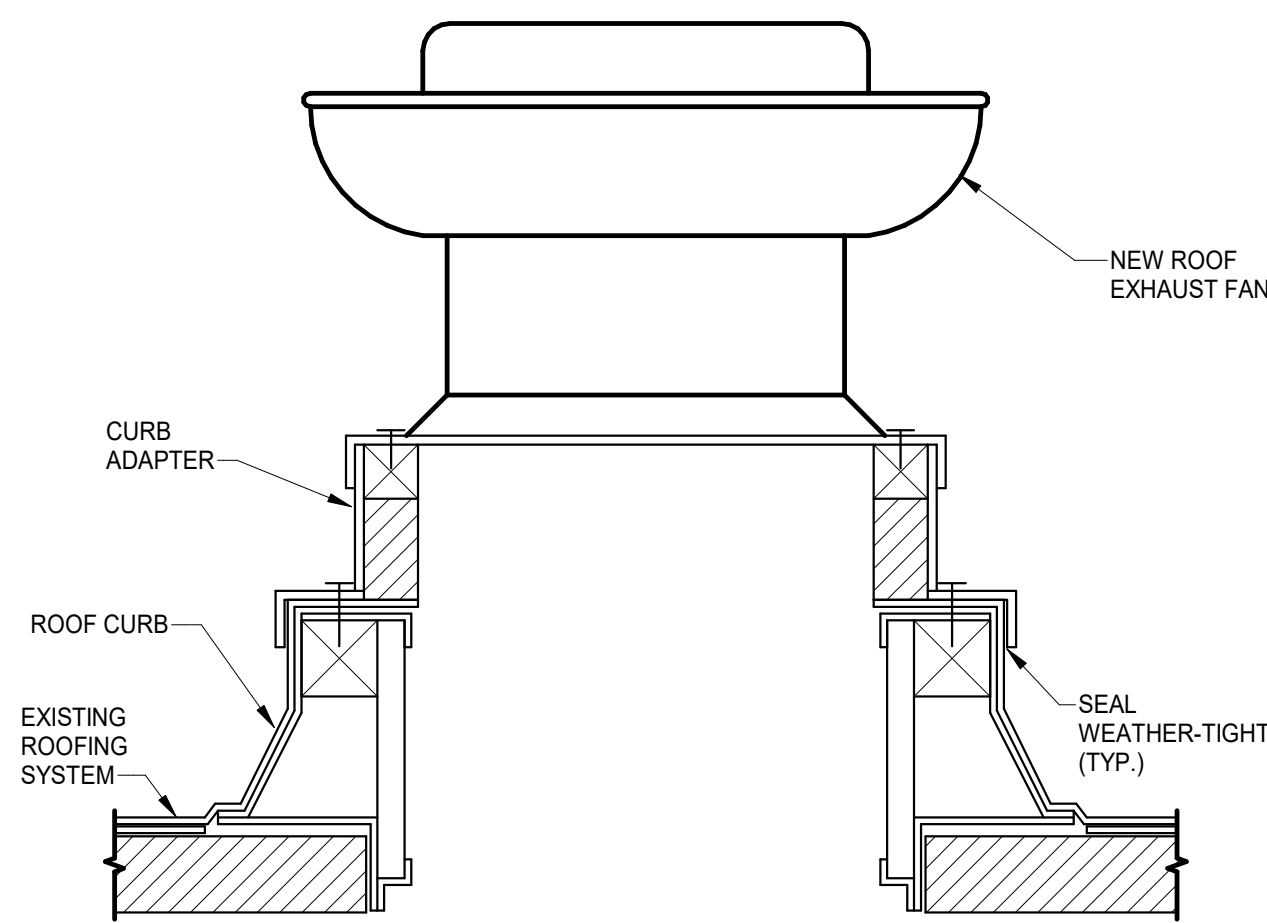


3 **DUCT FLASHING AT ROOF CURB**
Scale: NONE

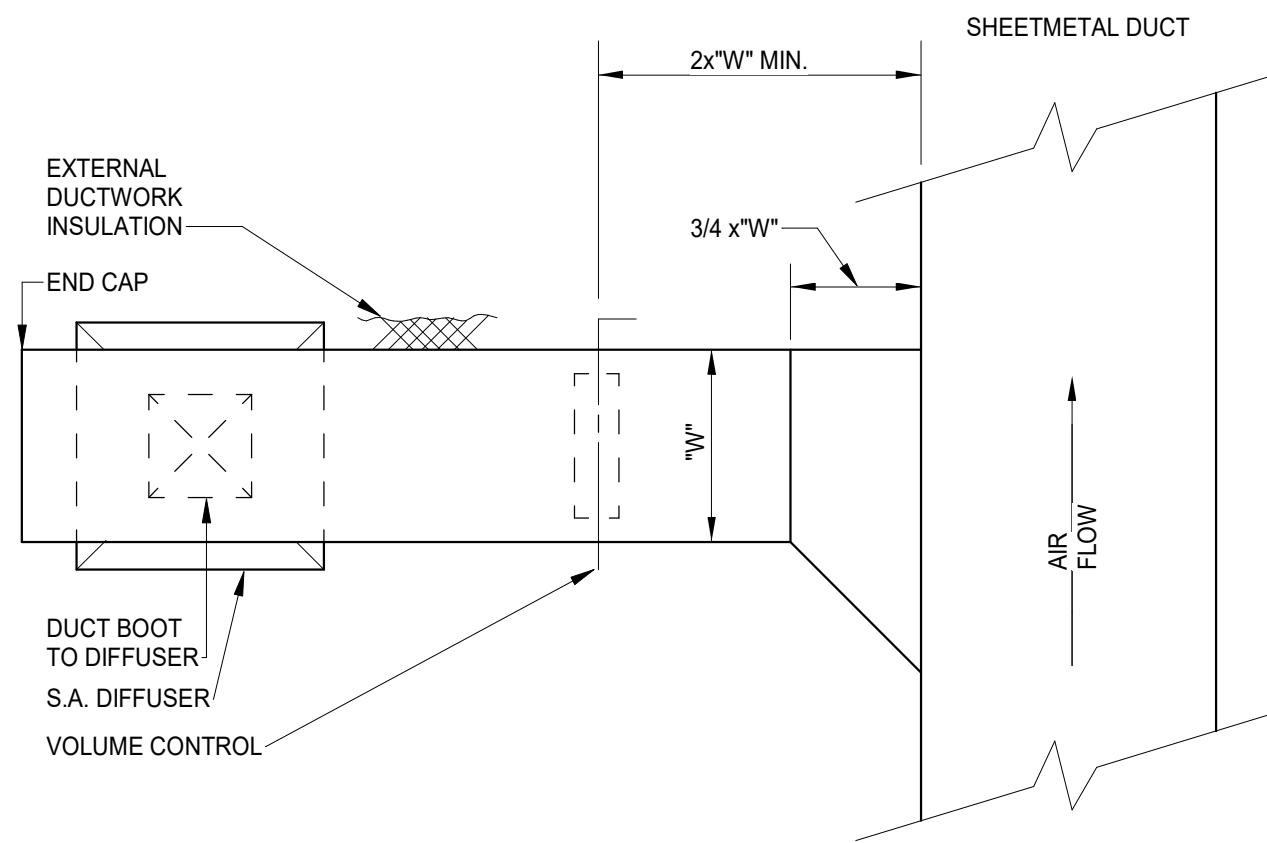


- NOTES:
1. CUT ROOF OPENING JUST LARGE ENOUGH TO ACCOMMODATE SUPPLY AND RETURN DUCTWORK. CAULK AIR TIGHT THE SPACE BETWEEN DUCTWORK AND ROOF OPENINGS.
 2. PROVIDE 5# DENSITY INSULATION UNDER UNIT ON TOP OF ROOF AND INSIDE ROOF CURB. COVER INSULATION WITH 1/2" THICK PLYWOOD OR GYPSUM BOARD AND CAULK BETWEEN PLYWOOD OR GYPSUM AND ROOF CURB.
 3. ROOF INSULATION SHALL EXTEND UNDER UNIT.

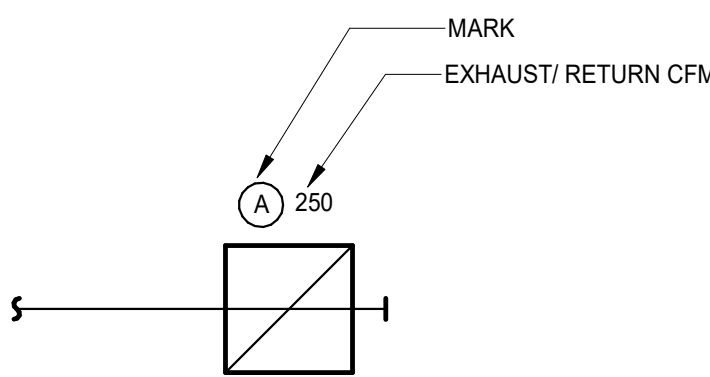
7 **ROOFTOP AIR CONDITIONING UNIT MOUNTING DETAIL**
Scale: NONE



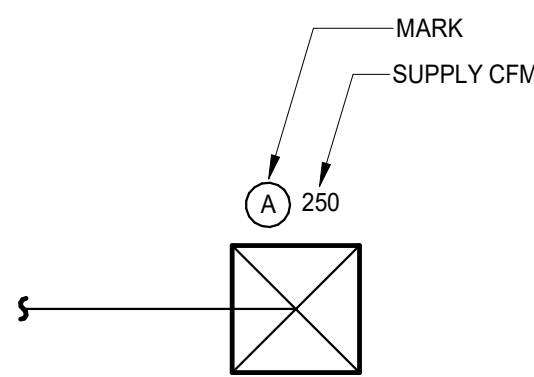
2 **ROOF FAN WITH CURB ADAPTER DETAIL**
Scale: NONE



1 **RIGID DUCT TAP TO SINGLE SUPPLY AIR DIFFUSER**
Scale: NONE



6 **REGISTER SIZING**
Scale: NONE



5 **DIFFUSER SIZING**
Scale: NONE