

GENERAL NOTES:

1. ALL MATERIAL SHALL BE NEW AND BE CSA APPROVED OR ULC LISTED.
2. THE CONTRACTOR SHALL ENSURE THAT ALL MATERIALS AND EQUIPMENT ARE INSTALLED IN FULL COMPLIANCE WITH THE CURRENT ONTARIO FIRE CODE AND ONTARIO BUILDING CODE.
3. PROVIDE ALL MATERIAL AND EQUIPMENT AND PERFORM ALL LABOUR REQUIRED TO INSTALL COMPLETE AND OPERABLE MECHANICAL SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.
4. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS, FEES AND INSPECTIONS.
5. CONTRACTOR SHALL APPLY & PAY FOR THE BUILDING PERMIT & ESA PERMIT FOR THE SCOPE OF WORK INVOLVED.
6. INSTALL ALL MECHANICAL EQUIPMENT AND APPURTENANCES IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS, CONTRACT DOCUMENTS, AND APPLICABLE CODES AND REGULATIONS.
7. COORDINATE ALL EQUIPMENT CONNECTIONS WITH MANUFACTURERS' CERTIFIED DRAWINGS. FIELD VERIFY AND COORDINATE ALL DUCT DIMENSIONS BEFORE COMMENCING WORK.
8. LOCATIONS AND SIZES OF ALL FLOOR, WALL, AND ROOF OPENINGS SHALL BE COORDINATED WITH ALL TRADES INVOLVED. CONTRACTOR IS RESPONSIBLE FOR STRUCTURAL REVIEW OF ANY NEW OPENINGS AS WELL AS FINISHING OPENINGS TO THE SATISFACTION OF THE OWNER.
9. CONTRACTOR SHALL BE FAMILIAR AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, BY-LAWS AND REGULATIONS RELATING TO THE WORK.
10. CONTRACTOR SHALL ENSURE THAT ALL PERSONS ON THE SITE HAVE SUCCESSFULLY COMPLETED THE SAFETY ORIENTATION AND REQUIREMENTS SET OUT BY THE OWNER, AS WELL AS MAINTAINING CURRENT WHMIS TRAINING.
11. CONTRACTOR SHALL PROVIDE AND PAY FOR ALL MATERIALS, LABOUR, WATER, TOOLS, PLANT, EQUIPMENT, LIGHT, HEAT AND POWER AS MAY BE NECESSARY FOR THE EXECUTION OF THE WORK.
12. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION SAFETY AT THE SITE AND FOR COMPLIANCE WITH THE RULES, REGULATIONS AND PRACTICES REQUIRED BY THE APPLICABLE CONSTRUCTION SAFETY LEGISLATION AND OTHER AUTHORITIES HAVING JURISDICTION.
13. CONTRACTOR SHALL PROVIDE ONE SET OF AS-BUILT DRAWINGS UPON COMPLETION OF WORK. AS-BUILTS TO BE CLEAN AND ALL CHANGES SHALL BE CLEARLY LEGIBLE AND IN RED INK.
14. CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ANY OR ALL DEFECTS IN

- WORKMANSHIP WHICH MAY ARISE FOR A PERIOD OF 12 MONTHS FROM SUBSTANTIAL COMPLETION. WARRANTY FOR THE OWNER SUPPLIED EQUIPMENT WILL BE PROVIDED BY
15. CONTRACTOR SHALL PROVIDE 3 COPIES OF OPERATION AND MAINTENANCE MANUALS TO THE OWNER PRIOR TO FINAL PAYMENT IS REQUESTED. THE MANUALS WILL BE APPROVED BY THE ENGINEER.
 16. THE CONTRACTOR SHALL PROVIDE INITIAL STARTUP OF ALL EQUIPMENT, BUILDING AUTOMATION CONTROLS AND SHALL ASSIST THE OWNERS REPRESENTATIVE IN THE PROPER OPERATION AND MAINTENANCE OF THE EQUIPMENT.

HVAC NOTES:

1. MAINTAIN FULL CROSS-SECTIONAL AREA WHERE OFFSETS ARE REQUIRED.
2. DUCTWORK TO BE GALVANIZED STEEL LOCK FORMING QUALITY TO ASTM A653/A653M, Z40 ZINC COATING, THICKNESS, FABRICATION & REINFORCEMENT TO SMACNA, JOINTS TO SMACNA 2" W.C. SEAL CLASS 'B'.
3. DUCT HANGARS, SUPPORTS, ROD, CONNECTIONS TO MSS-SP58 / MSS-SP69. CONFIGURATION & SPACING TO SMACNA. INSTALL STRAP HANGERS IN ACCORDANCE WITH SMACNA.
4. SEAL ALL DUCT JOINTS WITH WATERPROOF DUCT SEALANT.
5. INSULATE NEW OUTDOOR DUCTWORK WITH MIN. 2 LAYERS OF 1-1/2" RIGID MINERAL FIBRE BOARD, STAGGERED JOINTS. TO ASTM C612, FACTORY APPLIED VAPOUR RETARDER JACKET TO CGSB 51-GP-52MA. CLAD WITH 3M VENTURECLAD OR STUCCO EMBOSSED ALUMINUM 0.02" CAULKED & OVERLAPPED SEAMS.
6. CONTRACTOR SHALL PROVIDE SERVICES OF A CERTIFIED & INDEPENDENT TAB CONTRACTOR TO TEST & BALANCE AIR HANDLER FOR OVERALL FLOW ONLY. TESTING DOWNSTREAM IS NOT REQUIRED. SUBMIT 3 COPIES OF THE BALANCE REPORT TO THE ENGINEER.

EQUIPMENT NOTES:

- MUA-1 ENGINEERED AIR MODEL DJX40/V MAKE-UP AIR UNIT, NATURAL GAS INDIRECT FIRED MAKE-UP AIR UNIT; 2.175 cfm @ 3/4" ESP, 208/3/60; 300MBH INPUT, 275MBH OUTPUT; 1 SHP MOTOR, F/A-END 26"x18"; S/A-TOP 30"x18".
- CP-1 AXIOM NEUTRA-PUMP, 1.9GAL/HR. ACID NEUTRALIZER & PUMP IN ONE, 1 GALLON TANK SIZE C/W NEUTRALIZER MEDIA & CORDED 120V CONNECTION.

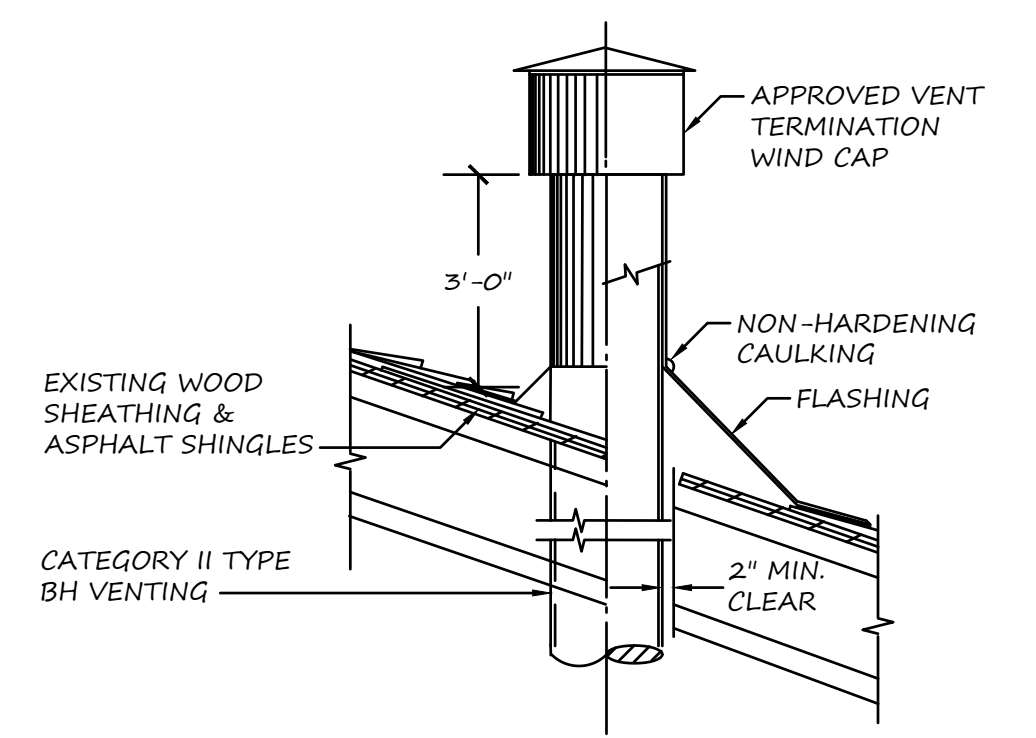
CONSTRUCTION NOTES:

1. DISCONNECT EXISTING SENSORS & CONTROL WIRING FROM EXISTING MUA.
2. WALL-MOUNT NEW MUA CONTROL ENCLOSURE IN EXISTING MECHANICAL ROOM.

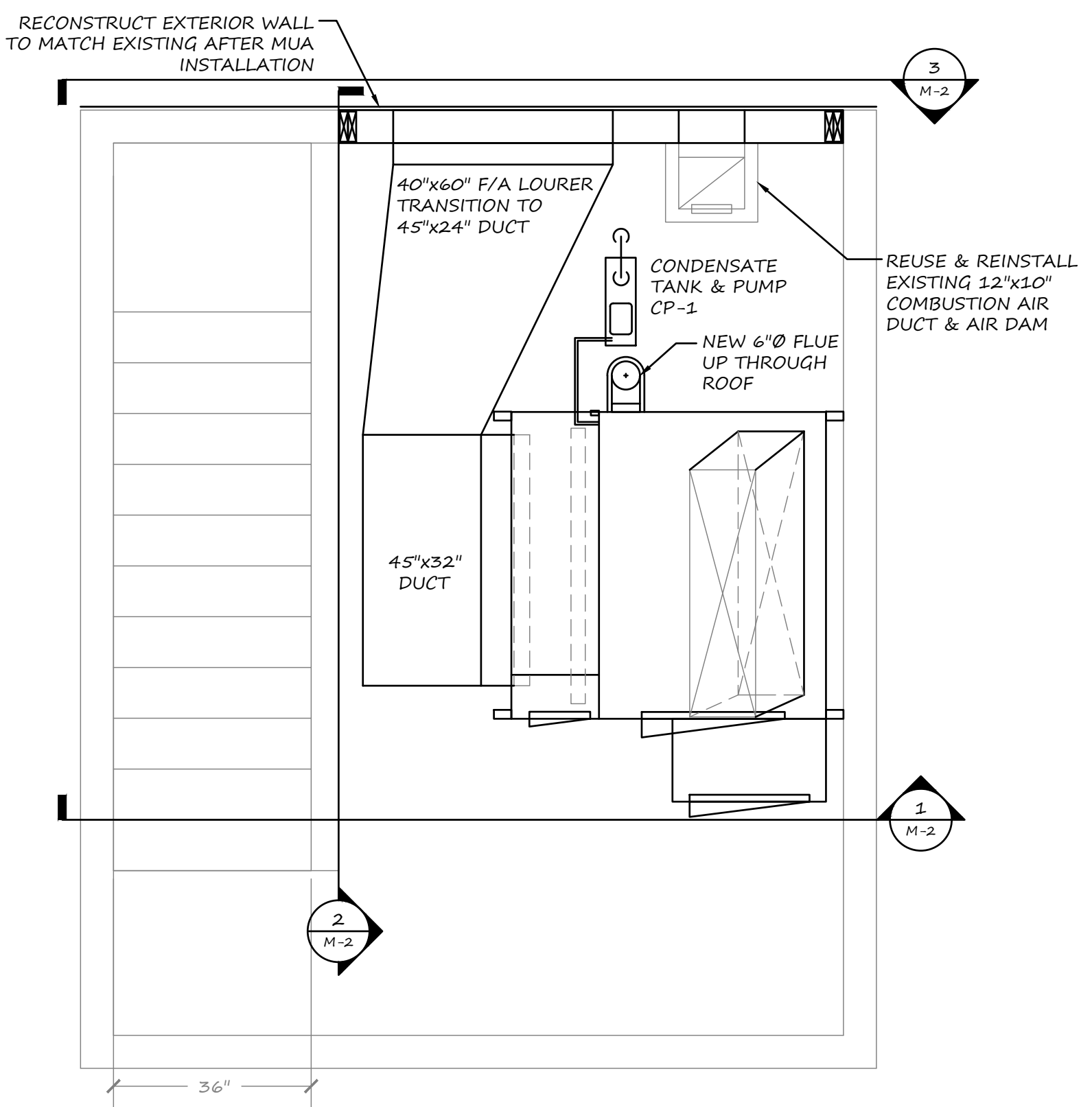
3. SUPPLY & INSTALL NEW ELECTRICAL DISCONNECT (NOT SUPPLIED) & REFEED FROM EXISTING MUA ELECTRICAL PANEL.
4. MODIFY EXISTING CONTROLS WIRING, SENSORS, INPUT/OUTPUTS & SEQUENCE TO ACCOMMODATE NEW MUA-1.
5. FABRICATE & INSTALL NEW 1.9"x5.9" F/A DUCT AT EXISTING F/A LOUVRE. TRANSITION TO 26"x18" MUA-1 INTAKE. INSULATED.
6. FABRICATE NEW 30"x20" SUPPLY AIR PLENUM. PROVIDE FLEXIBLE CONNECTION TO EXISTING DUCT & FIRE DAMPER.
7. SEAL ALL JOINTS WITH WATER-BASED SEALANT & INSULATE.
8. SUPPLY & INSTALL NEW 6"Ø POSITIVE PRESSURE S/S VENTING W/ 1" INSULATION & CONNECT INTO EXISTING 8"Ø VENTING AT WALL.
9. CONNECT 1-1/4"Ø GAS TO NEW MUA-1. REUSE PIPING WHERE POSSIBLE.
10. SUPPLY & INSTALL NEW 2P-30A BREAKER & 2C#12 WIRE TO NEW MUA-1 FROM EXISTING ELECTRICAL PANEL TO NEW LOCAL DISCONNECT. PROVIDE ESA PERMIT & SIGN-OFF CERTIFICATE UPON COMPLETION.

SEQUENCE OF OPERATION FOR NEW MUA-1:

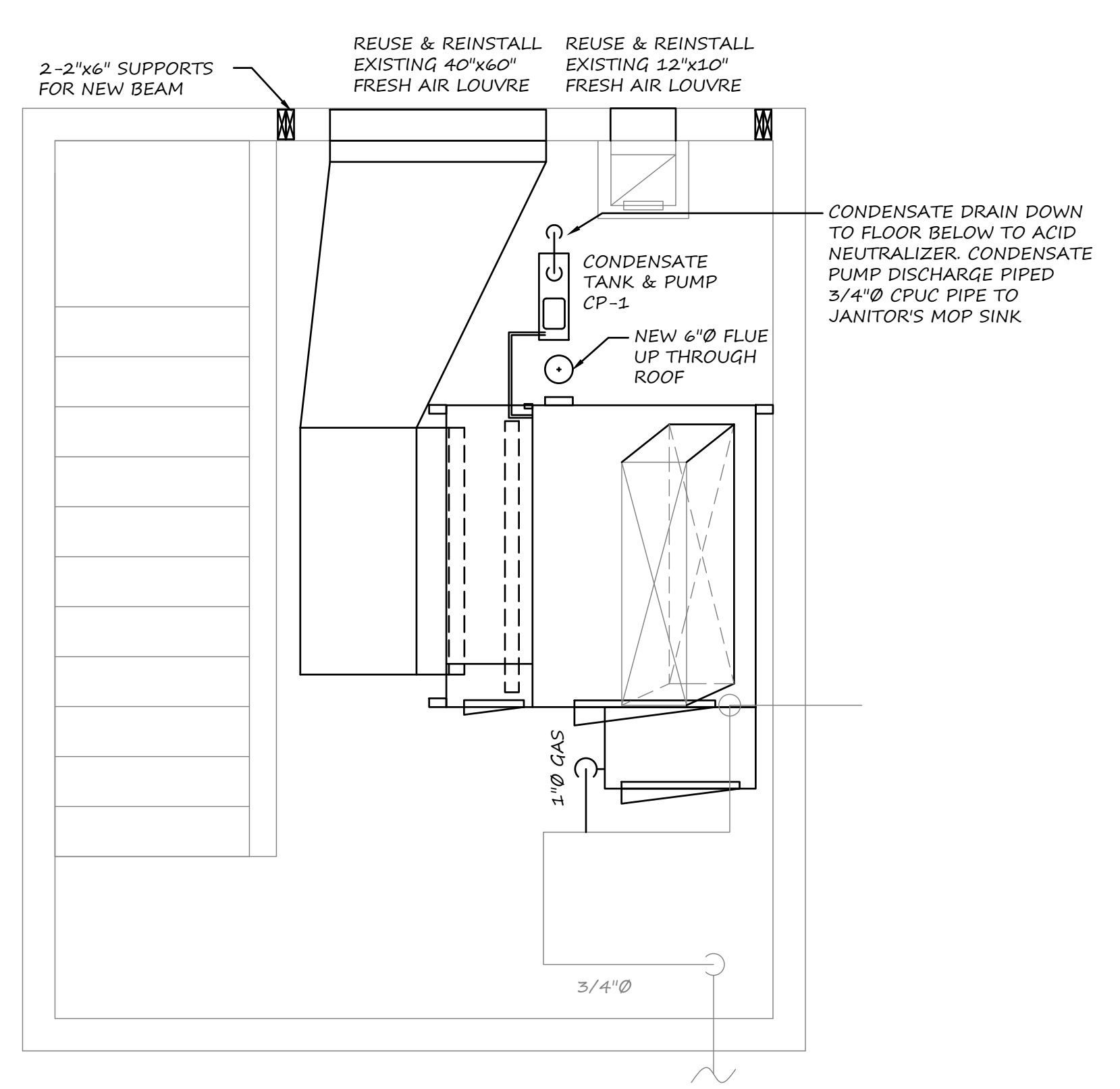
SYSTEM START/STOP:
 MANUAL TIME CLOCK TO ENABLE/DISABLE MUA-1.
 OCCUPIED PERIOD WILL BE INITIALLY SET FROM 7:00 TO 9:00AM, 11:30-1:30PM, 5:00-7:00PM ADJUSTABLE
 MANUALLY ADJUST MUA-1 SUPPLY AIR TEMPERATURE SETPOINT TO 72°F.



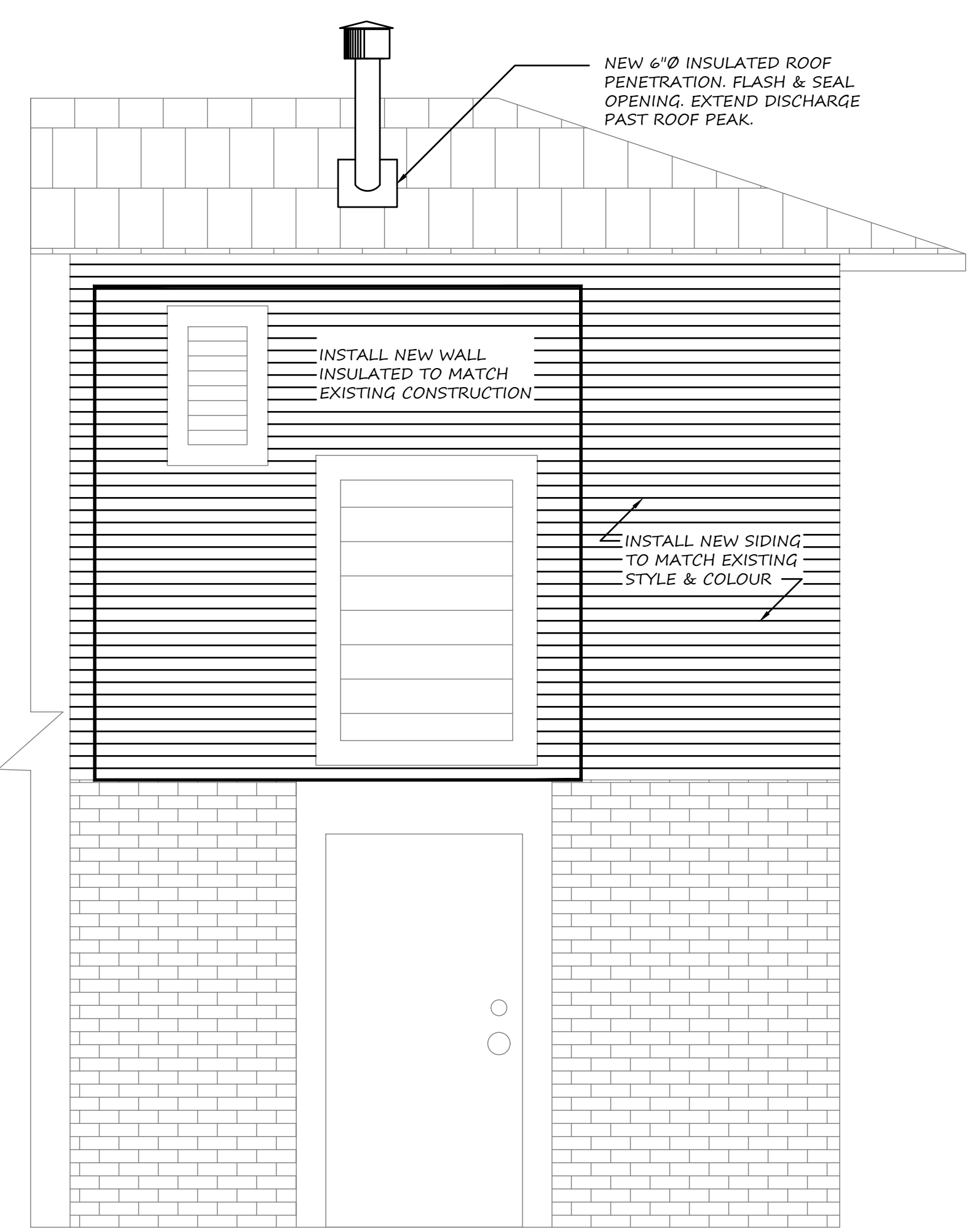
FLUE THRU ROOF - DETAIL
NO SCALE



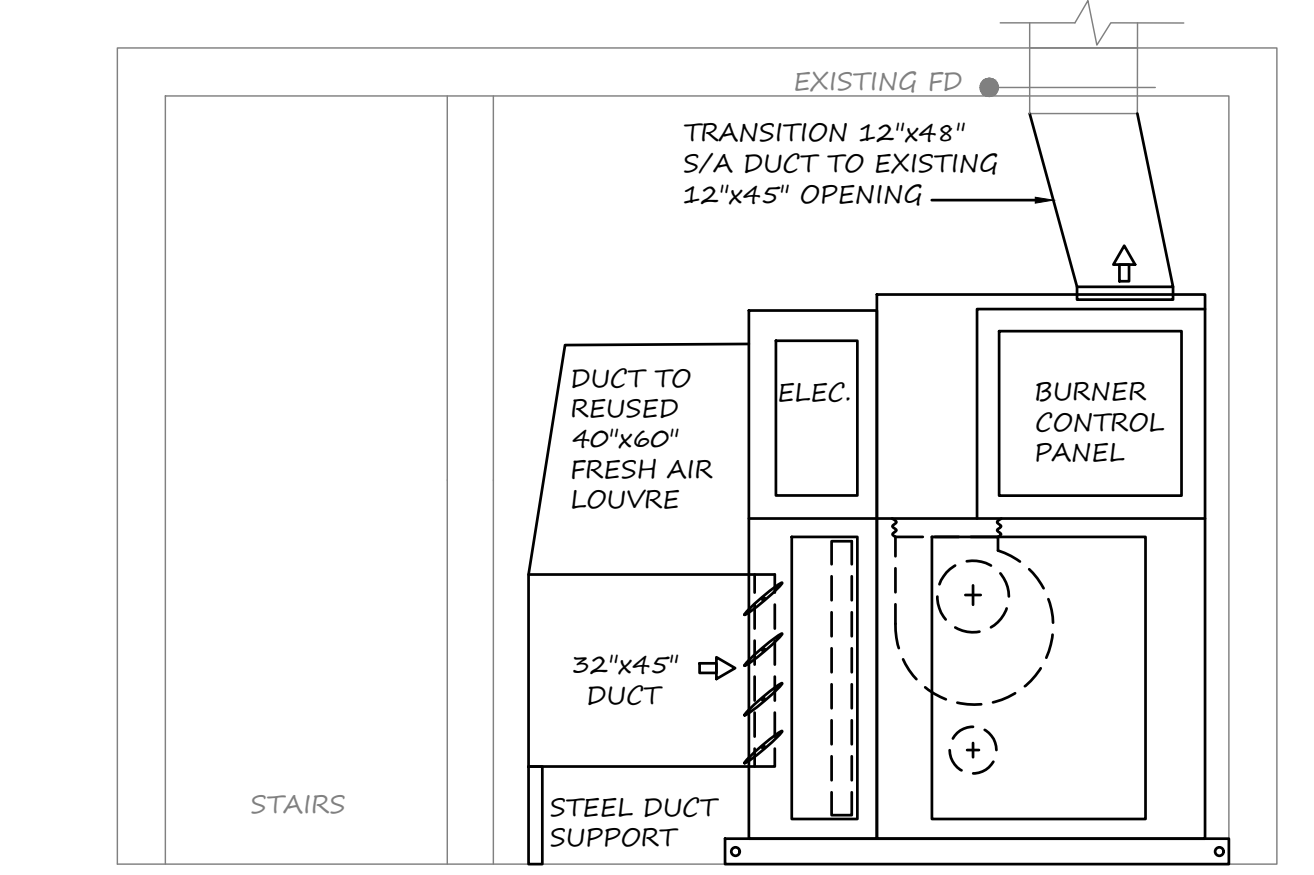
MUA PLAN VIEW - NEW
1/2"=1'-0"



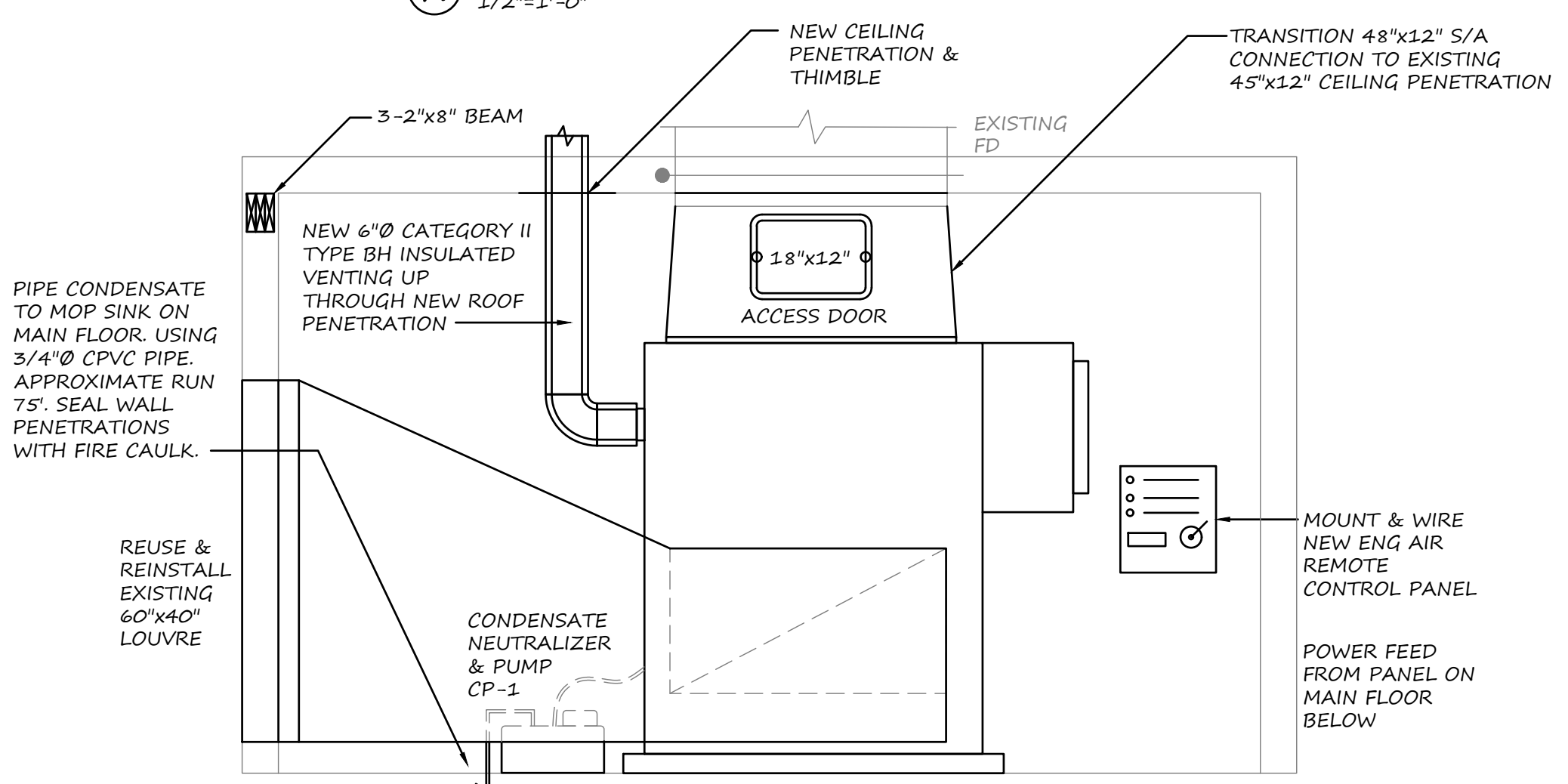
MUA - GAS CONNECTION TO MUA
1/2"=1'-0"



EXTERIOR ELEVATION
1/2"=1'-0"



MUA - NEW - ELEVATION
1/2"=1'-0"



MUA - NEW - ELEVATION
1/2"=1'-0"

AE-1955 ELIZABETH ST MUA.dwg

ISSUED FOR PERMIT & TENDER		10/31/19
No.	Revision/Issue	MM/DD/YY

Firm Name

Seal

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Drawing Description
RAINY RIVER DISTRICT SOCIAL SERVICES ADMINISTRATION BOARD
 450 SCOTT ST.
 FORT FRANCES, ON

Project Name and Address
ELIZABETH COURT MAKE-UP AIR NEW WORK
 1301 ELIZABETH ST.
 FORT FRANCES, ON
 P9A 1W4

Project	AE-1955	Sheet	M-2
Date	OCTOBER 31, 2019		
Scale	AS SHOWN		