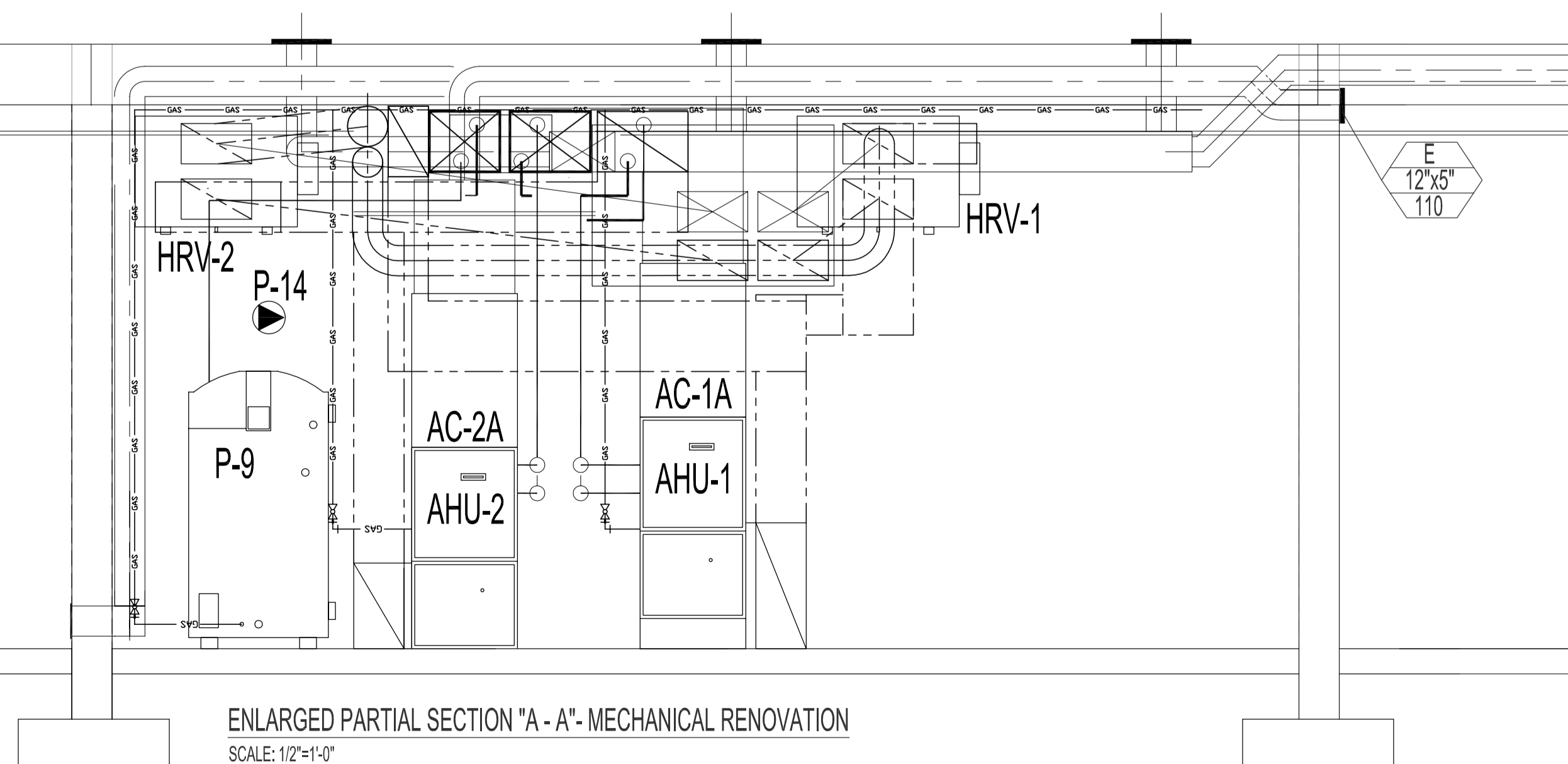


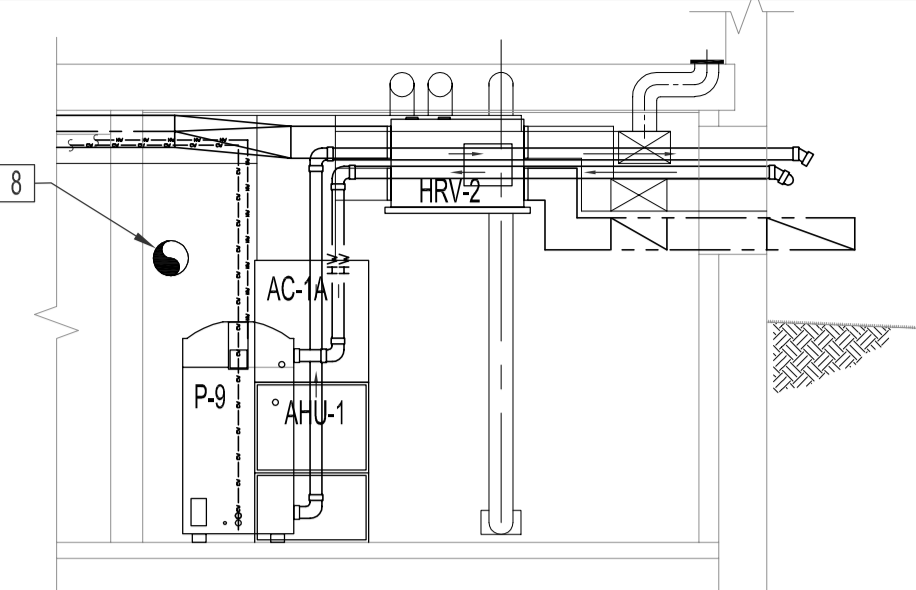
BASEMENT FLOOR PLAN - MECHANICAL DEMOLITION
SCALE: 1/8"=1'-0"

HVAC SCHEDULE		
TAG	DESCRIPTION	REMARKS
AHU-1	LENNOX MODEL # G61MPV-24C-090, NATURAL GAS FIRED UP-FLOW, HIGH EFFICIENCY (90% AFUE), DIRECT VENT, TWO STAGE, VARIABLE SPEED BLOWER FURNACE, CAPACITY: 82,000 BTU/HR OUTPUT (HIGH FIRE), NOMINAL FAN CAPACITY: 2000 CFM @ 0.80 IN. W.G., 1HP, SINGLE PHASE, 120 VOLT BLOWER C/W SPARE AIR FILTERS (10 PACK) AND RACK KIT FOR SIDE RETURN.	MAIN FLOOR FURNACE
AC-1	LENNOX MODEL # XC13-042-230-2, 3.5 TON CONDENSOR, 230V, SINGLE PHASE, MIN. CIRCUIT AMPACITY: 23.2AMP, C/W TXV, LOW AMBIENT KIT MODEL # 34M7Z, FREEZE/STAT, CRANKCASE HEATER MODEL # 67K90, AND COMPRESSOR LOW AMBIENT CUT-OFF 45F08.	MAIN FLOOR COOLING 3.5 TON
AC-1A	EVAPORATOR COIL: LENNOX MODEL # CX3-149C-0F, 3.5 TON CAPACITY, NOMINAL AIR FLOW 2000 CFM, REFRIGERANT: R-410A.	
AHU-2	LENNOX MODEL # G61MPV-24C-090, NATURAL GAS FIRED UP-FLOW, HIGH EFFICIENCY (90% AFUE), DIRECT VENT, TWO STAGE HEAT, VARIABLE SPEED BLOWER FURNACE, CAPACITY: 79,000 BTU/HR OUTPUT (HIGH FIRE), NOMINAL FAN CAPACITY: 1500 CFM @ 0.80 IN. W.G., 1/2 HP, SINGLE PHASE, 120 VOLT BLOWER C/W SPARE AIR FILTERS (10 PACK).	BASEMENT FLOOR FURNACE
AC-2	LENNOX MODEL # XC13-042-230-2, 2 TON CONDENSOR, 230V, SINGLE PHASE, MIN. CIRCUIT AMPACITY: 17.5AMP, C/W TXV, LOW AMBIENT KIT MODEL # 34M7Z, FREEZE/STAT, CRANKCASE HEATER MODEL # 67K90, AND COMPRESSOR LOW AMBIENT CUT-OFF 45F08.	BASEMENT FLOOR COOLING 2 TON
AC-2A	EVAPORATOR COIL: LENNOX MODEL # CX3-141B-0F, 2 TON CAPACITY, NOMINAL AIR FLOW 1500 CFM, REFRIGERANT: R-410A.	
HRV-1	FANTECH MODEL # SHR 6904 LIGHT COMMERCIAL HEAT RECOVERY VENTILATION SYSTEM, C/W TWO BLOWERS, TWO 12" X 12" ALUMINUM CORE HEAT EXCHANGERS, FOUR WASHABLE ELECTROSTATIC FILTERS, AIR CAPACITY: 400 CFM, EXTERNAL 3 POSITION (LOW/STAND BY/MEDIUM) ROCKER SWITCH THAT WILL OFFER CONTINUOUS VENTILATION, PRESET DEFROST SEQUENCE ACTIVATED AT AN OUTDOOR AIR TEMP. OF -5C, 120V, 1PH, 60HZ, 5.5A.	CONNECTED TO AHU-1
HRV-2	FANTECH MODEL # SHR 6904 LIGHT COMMERCIAL HEAT RECOVERY VENTILATION SYSTEM, C/W TWO BLOWERS, TWO 12" X 12" ALUMINUM CORE HEAT EXCHANGERS, FOUR WASHABLE ELECTROSTATIC FILTERS, AIR CAPACITY: 300 CFM, EXTERNAL 3 POSITION (LOW /STAND BY / MEDIUM) ROCKER SWITCH THAT WILL OFFER CONTINUOUS VENTILATION, PRESET DEFROST SEQUENCE ACTIVATED AT AN OUTDOOR AIR TEMP. OF -5C.	CONNECTED TO AHU-2
①	LENNOX "SIGNATURE SERIES" TWO-STAGE HEAT/COOL, THERMOSTAT, MODEL: 9815L.	

GRILLE & DIFFUSER SCHEDULE			
TYPE	DESCRIPTION	MANUFACTURER	REMARKS
A	1000 HEAVY DUTY ALUMINUM LINEAR BAR GRILLE, BRUSH ALUMINUM	E.H. PRICE TYPE LBP25C/R6	
B	1000 HEAVY DUTY ALUMINUM LINEAR BAR GRILLE, BRUSH ALUMINUM (FOR TOE KICKBOARD APPLICATION)		
C	ALUMINUM EGG CRATE FACE RETURN GRILLE, 7" X 7" X 1/2" ALUMINUM GRID CORE, ALUMINUM FINISH	E.H. PRICE TYPE 80FA/B15	
D	FIRE-RATED SQUARE PLAQUE DIFFUSER WITH OPTIONAL VOLUME CONTROLLER, TEE-BAR LAY-IN, WHITE POWDER COAT, 165°F FUSIBLE LINK	E.H. PRICE TYPE SPD-FR/B12	
E	FIRE-RATED STEEL CURVED VANE DIFFUSER, WITH OPTIONAL VOLUME CONTROLLER, TWO-WAY, WHITE POWDER COAT	E.H. PRICE TYPE SCVD-FR/B12	
F	FIRE-RATED LOUVERED FACE RETURN GRILLE WITH OPTIONAL VOLUME CONTROLLER, TEE-BAR LAY-IN, WHITE POWDER COAT	E.H. PRICE TYPE 33S-FR/S/B12	



ENLARGED PARTIAL SECTION "A - A" - MECHANICAL RENOVATION
SCALE: 1/2"=1'-0"



ELEVATION "B" - MECHANICAL ROOM B-04
SCALE: 1/4"=1'-0"

MECHANICAL DEMOLITION NOTES

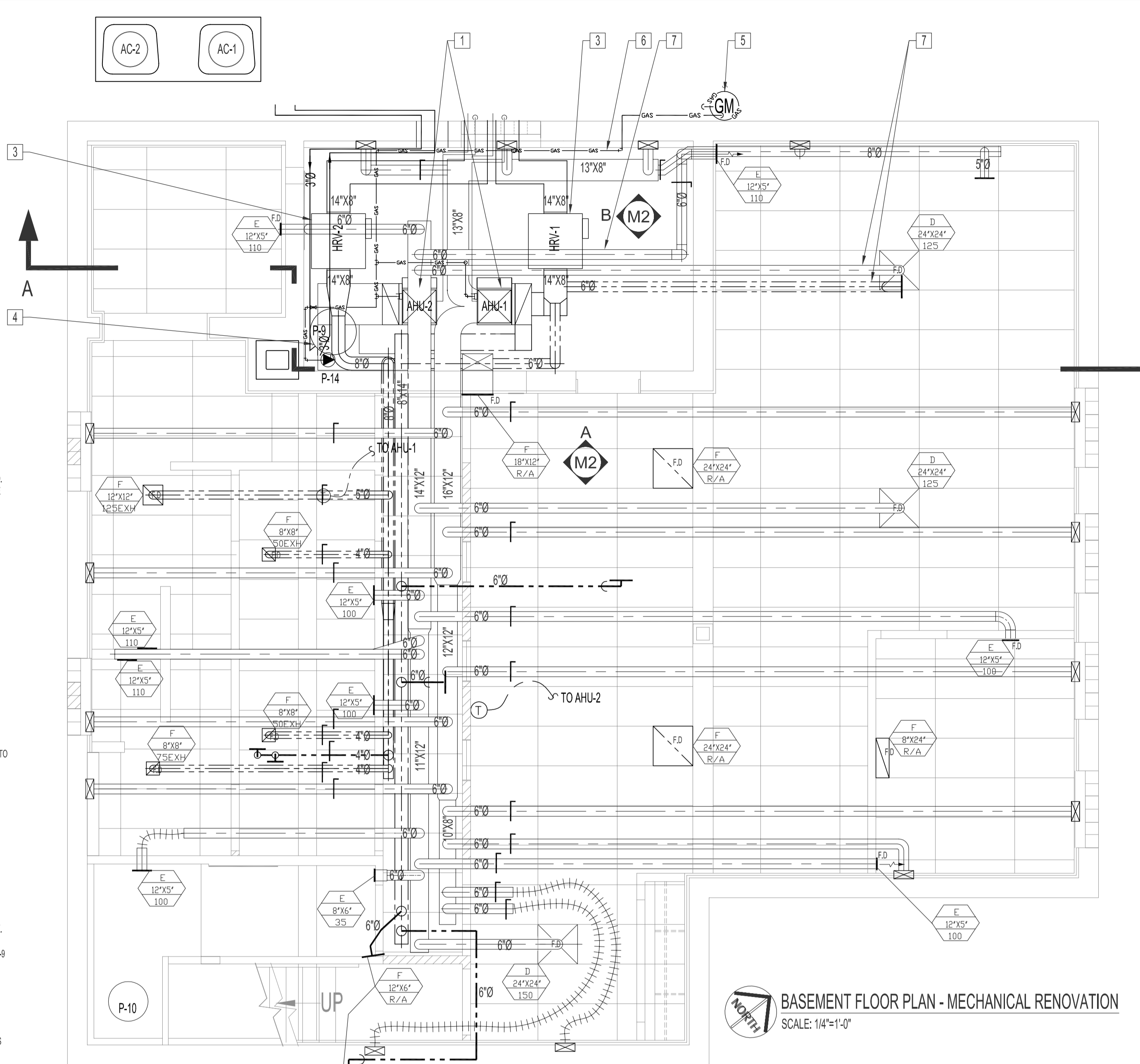
DO NOT DISCONNECT EXISTING SECURITY SYSTEM COMPONENTS (MOTION SENSORS, DOOR CONTACTS, ETC). HANG COMPONENTS ABOVE NEW CEILING SPACE TEMPORARY FOR REINSTALLATION BY OTHERS.

- REMOVE AND DISCARD EXISTING FRESH AIR INTAKE & COMBUSTION AIR INTAKE GRILLES.
- REMOVAL OF EXISTING GAS METER AND PRV TO BE DONE BY MANITOBA HYDRO. CONTRACTOR TO DISCONNECT & DISCARD EXISTING GAS LINE FROM FURNACE TO EXTERIOR REGULATOR.
- REMOVE AND DISCARD COMPLETE EXISTING FURNACE, SUPPLY AND RETURN DUCTWORK, HANGERS, DIFFUSERS, THERMOSTATS, EXHAUST FANS AND ALL ASSOCIATED MECHANICAL COMPONENTS FROM BASEMENT FLOOR.
- REMOVE AND DISCARD EXISTING EXHAUST FAN & WIRING BACK TO SOURCE. PATCH WALL TO MATCH EXISTING & WATER TIGHT, PRIOR TO EXTERIOR WALL WATER PROOFING.

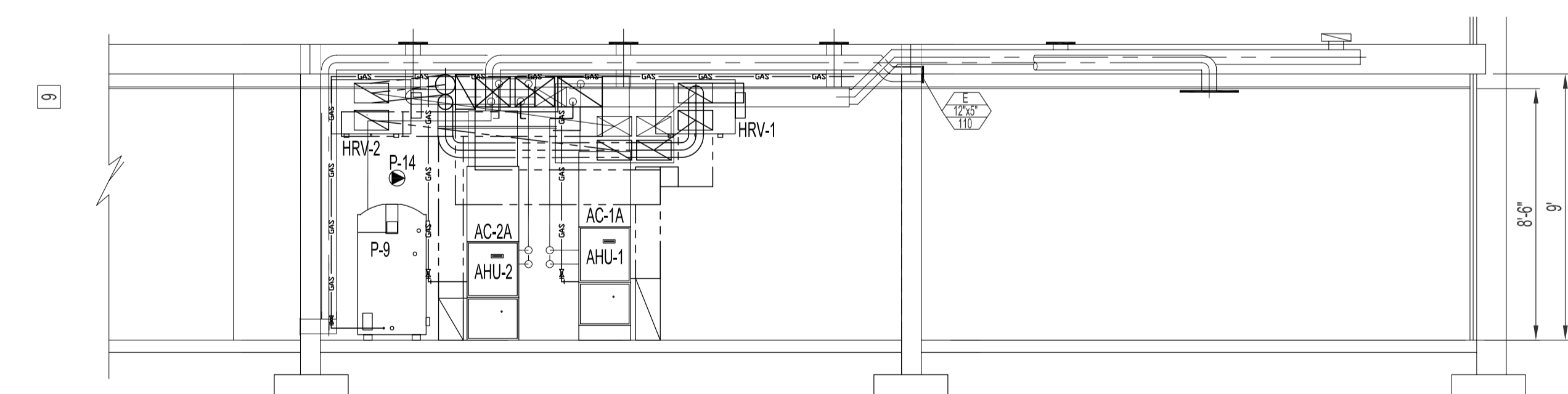
MECHANICAL RENOVATION NOTES:

SUPPLY & INSTALL, UNLESS OTHERWISE NOTED.

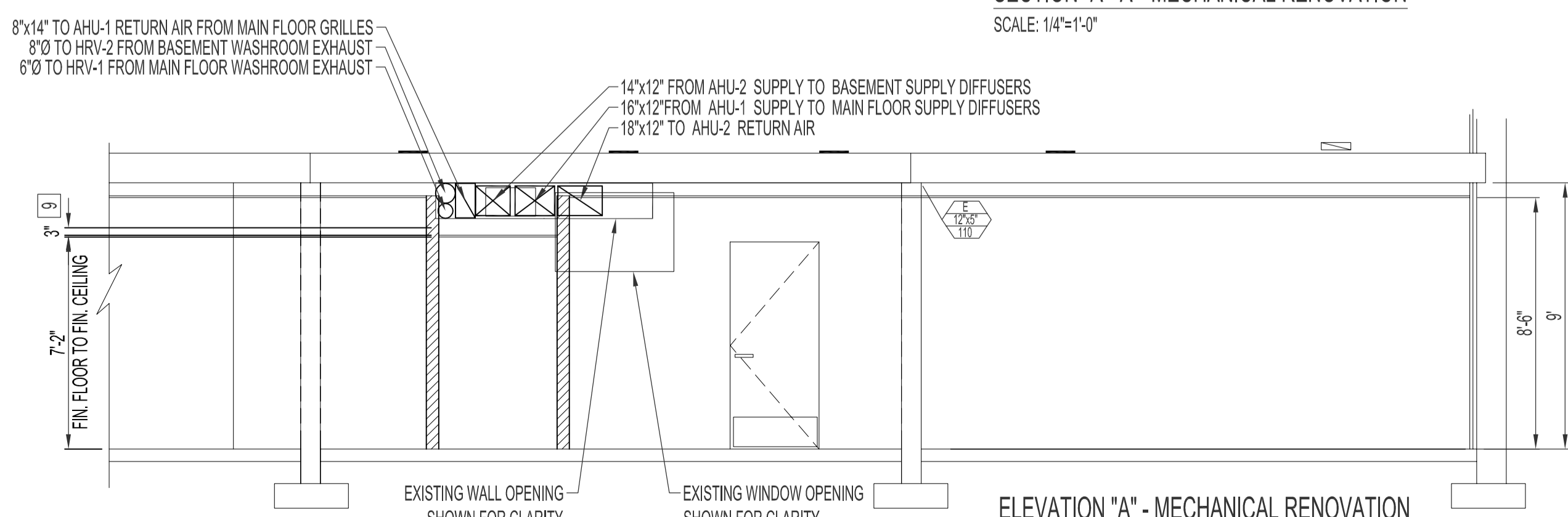
- SUPPLY & INSTALL A FULLY-FUNCTIONING HVAC SYSTEM AHU-1, AHU-2, AC-1A, AC-2A, AS PER MANUFACTURING INSTALLATION INSTRUCTIONS & DIVISION 23 - MECHANICAL. FLEXIBLE AIR-TIGHT CONNECTIONS ARE REQUIRED ON FURNACES TO DUCTWORK. ROUTE GAS VENT PIPING THROUGH EXISTING WINDOW OPENING. SEE DRAWING M1. SEAL WINDOW OPENING AS PER ARCHITECTURAL DRAWING AFTER ALL PENETRATIONS (AHU-1, AHU-2, HRV-1, HRV-2, P-9) ARE FINALIZED. ROUTE CONDENSATE DRAIN LINES TO DISCHARGE ABOVE NEW DRAIN FUNNEL. SEE DRAWING M5. BASEMENT FURNACE, AHU-2, RETURN AIR IS VIA ABOVE CEILING SPACE TO RETURN AIR GRILLE AT MECHANICAL ROOM WALL.
- SUPPLY & INSTALL A FULLY-FUNCTIONING AIR CONDITIONING SYSTEM AC-1 & AC-2, AS PER MANUFACTURING INSTALLATION INSTRUCTIONS & DIVISION 23 - MECHANICAL.
- SUPPLY & INSTALL A FULLY-FUNCTIONING HRV SYSTEM HRV-1 & HRV-2, AS PER MANUFACTURING INSTALLATION INSTRUCTIONS & DIVISION 23 - MECHANICAL. FLEXIBLE AIR-TIGHT CONNECTIONS ARE REQUIRED BETWEEN HRV'S DUCTWORK.
- SUPPLY & INSTALL A FULLY-FUNCTIONING HOT WATER CIRCULATING SYSTEM P-9 & P-14, AS PER MANUFACTURING INSTALLATION INSTRUCTIONS & DIVISION 22 - PLUMBING. ROUTE GAS VENT PIPING THROUGH EXISTING OPENING NEXT TO EXISTING WINDOW. SEE DRAWING M1.
- NEW GAS SERVICE, METER AND PRV BY MANITOBA HYDRO.
- SUPPLY & INSTALL NEW GAS LINE WITH SHUT-OFF VALVES TO ALL NATURAL GAS EQUIPMENT.
- ROUTE DUCT THROUGH FIRE-RATED CEILING GYPSUM BOARD & BETWEEN FLOOR JOISTS. FIRE-STOP ALL PENETRATIONS THROUGH FIRE-RATED CEILING, AS PER NOTES ON DRAWING M1. ALL DUCTS RUNNING NORTH & SOUTH SHALL BE ROUTED BETWEEN FLOOR JOIST TO ACCOMMODATE FIRE DAMPERS. REPLACE EXISTING CROSS-BRACING WITH 2"x4" BRACE, MOUNT FLUSH WITH THE UNDERSIDE OF THE FLOOR JOIST.
- CAP EXISTING DUCT AT CHIMNEY WALL SURFACE.
- 3" MINIMUM CLEARANCE FROM UNDERSIDE OF ALL DUCTS, COMPONENTS TO TOP OF CEILING TILE. EXCEPT FOR CEILING DIFFUSERS, TYPICAL FOR BASEMENT FLOOR & MAIN FLOOR.



BASEMENT FLOOR PLAN - MECHANICAL RENOVATION
SCALE: 1/4"=1'-0"



SECTION "A - A" - MECHANICAL RENOVATION
SCALE: 1/4"=1'-0"



ELEVATION "A" - MECHANICAL RENOVATION
SCALE: 1/4"=1'-0"

NOTES :

- SEE NOTES ON DRAWING M1.
- BASEMENT SUPPLY DIFFUSERS TO BE MOUNTED 12" ABOVE FINISH FLOOR, UNLESS OTHERWISE NOTED.
- MAIN FLOOR SUPPLY DIFFUSERS TO BE FLUSH WITH FINISH FLOOR, UNLESS OTHERWISE NOTED.
- BASEMENT RETURN GRILLES TO BE MOUNTED 12" BELOW FINISH CEILING, UNLESS OTHERWISE NOTED.
- MAIN FLOOR RETURN GRILLES TO BE FLUSH WITH FINISH FLOOR, UNLESS OTHERWISE NOTED.

NO.	REVISION/DESCRIPTION	BY	DATE
SEALS			

ORIGINAL STAMPED BY: DOUG PALEY, P. ENG.
DATE: 2007.10.17

DRAWN BY	CHECKED BY	APPROVED
RCPI/DTA	USER APPROVAL	

CITY OF WINNIPEG
PLANNING, PROPERTY & DEVELOPMENT DEPARTMENT
CIVIC ACCOMMODATIONS DIVISION
300 - 65 GARRY ST. R3C 4K4

PROJECT
COMMUNITY POLICE SERVICE CENTRE

1400 HENDERSON HWY.
SHEET TITLE
BASEMENT FLOOR PLAN
MECHANICAL
DEMOLITION & RENOVATION

SCALE	PROJECT NO.	SHEET NO.
AS SHOWN	2004-023	M2