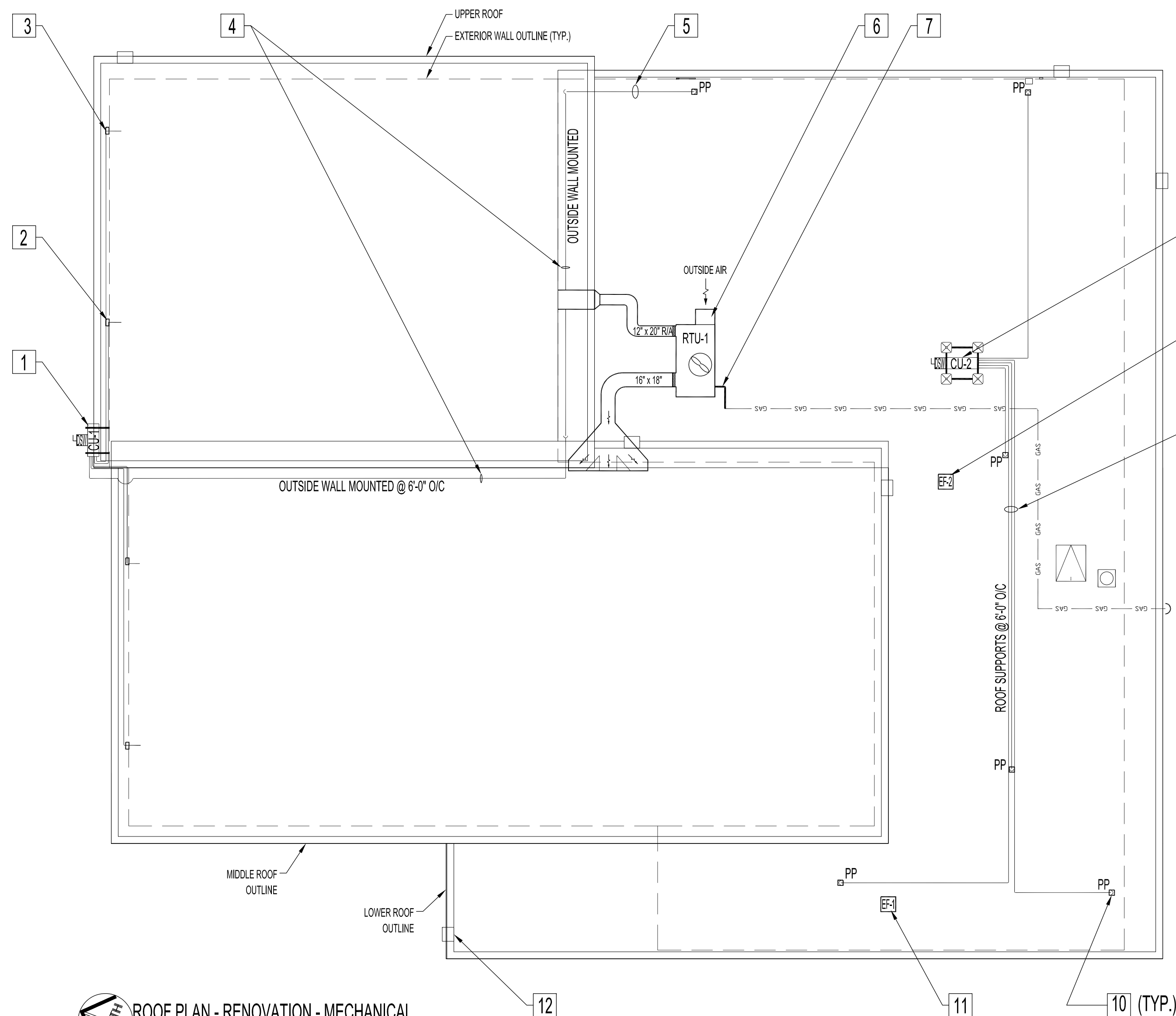


DETAIL - (RTU-1) RETURN & SUPPLY AIR DUCT  
SCALE: N.T.S



ROOF PLAN - RENOVATION - MECHANICAL  
SCALE: 1/8"=1'-0"

**RENOVATION NOTES - MECHANICAL**

- SUPPLY & INSTALL NEW AS NOTED
- 1 SUPPLY & INSTALL HEAT PUMP SYSTEM, ANCHORED TO PAINTED CANTILEVER SUPPORTS FOR CU-1. MOUNT 12'-0" ABOVE GRADE AT LOCATION SHOWN. SECURE UNIT AS PER MANUFACTURERS INSTRUCTIONS. SEE HEAT PUMP SYSTEM SCHEDULE.
  - 2 EXISTING RELOCATED, MODIFIED & PAINTED SHROUDS FOR EVAP1-A & AVAP3-A.
  - 3 NEW EXTERIOR SHROUDS TO HOUSE NEW CONDUITS, REFRIGERATION & CONDENSATE DRAIN LINES FOR EVAP2-A & EVAP4-A. PAINT TO MATCH.
  - 4 SURFACE RUN REFRIGERATION LINES SUPPORTED AND ANCHORED TO BIGFOOT OR EQUIVALENT UNI-STRUT SYSTEM. (SUPPLY & INSTALL) @ 6' ABOVE FINISHED ROOF AT EVERY 6'-0".
  - 5 REFRIGERATION LINES & CONTROL WIRING IN 1/2" EMT RUNS. MOUNT TO BRICK WALL AND SUPPORTED AND ANCHORED TO BIGFOOT OR EQUIVALENT UNI-STRUT SYSTEM. (SUPPLY & INSTALL) @ 6' ABOVE FINISHED ROOF AT EVERY 6'-0".
  - 6 NEW HORIZONTAL ROOF TOP UNIT (RTU-1), GAS FIRED, AIR COOLED CONDENSING UNIT WITH ECONOMIZER. MOUNT UNIT ON ROOF CURBS PROVIDED BY MANUFACTURER. INTER-LOCK TO BASEMENT 'GAS ROOF TOP UNIT FIRE ALARM SHUT DOWN' SWITCH. SEE ELECTRICAL DWG.
  - 7 NEW SECTION OF NATURAL GAS PIPING. CONNECT TO NEW ROOF TOP UNIT (RTU-1). SUPPLY & INSTALL BIGFOOT OR EQUIVALENT UNI-STRUT SYSTEM @ 6' ABOVE FINISHED ROOF AT EVERY 6'-0".
  - 8 HEAT PUMP SYSTEM CONDENSING UNIT (CU-2). MOUNT & ANCHOR UNIT TO BIGFOOT SUPPORT FRAME WORK OR EQUIVALENT, AS PER MANUFACTURERS INSTRUCTIONS.
  - 9 UNISEX WASHROOMS ( RM.109 & 110 ) EXHAUST FAN (EF-2) WITH DAMPER & CURB. (SUPPLY & INSTALL).
  - 10 ROOF PENETRATIONS & PITCH PANS FOR REFRIGERATION, ELECTRICAL CONDUIT & WIRING PASS THROUGH TO MAIN FLOOR EVAPORATOR LOCATIONS. SUPPLY & INSTALL.
  - 11 STAFF WASHROOM ( RM. 117 ) EXHAUST FAN (EF-1) WITH DAMPER & CURB. (SUPPLY & INSTALL).
  - 12 NEW ROOF SCUPPER & RAINWATER LEADER. SEE SPECIFICATIONS SECTION 'E'.

HEAT PUMP SYSTEM SCHEDULE												
TAG	NO. RECD	SERVES	BRK	COMPRESSOR MOTOR			CONDENSER		MANUFACTURER MODEL NUMBER	NOTES		
				NO.	OUTPUT	φ	VOLTS	HERTZ			φ	VOLTS
CU-1	1	(4) MAIN FLOOR & (1) MEZANINE FLOOR EVAPORATORS	30A	1	2.4KW	1	208	60	1	208-230V	60Hz	MITSUBISHI CITY PUMP-P48NHMU MULTI SPLIT-TYPE HEAT PUMP SYSTEM, VARIABLE REFRIGERANT FLOW, INVERTER DRIVEN (VARIABLE SPEED) COMPRESSOR, R410A REFRIGERANT COOLING: 48,000 Btu/h HEATING: 54,000 Btu/h
CU-2	1	(5) MAIN FLOOR EVAPORATORS	30A	1	2.4KW	1	208	60	1	208-230V	60Hz	MITSUBISHI CITY PUMP-P48NHMU MULTI SPLIT-TYPE HEAT PUMP SYSTEM, VARIABLE REFRIGERANT FLOW, INVERTER DRIVEN (VARIABLE SPEED) COMPRESSOR, R410A REFRIGERANT COOLING: 48,000 Btu/h HEATING: 54,000 Btu/h
EVAPX-A	9	ROOMS: 103, 104, 105, 106, 111, 115, M01										MITSUBISHI, MODEL # PKFY-P12NHMU-E 12,000 Btu, WALL MOUNTED EVAPORATORS
EVAPX-B	1	ROOM: 116										MITSUBISHI, MODEL # PKFY-P08NHMU-E 8000 Btu, WALL MOUNTED EVAPORATOR

X DENOTES EVAPORATOR TAG NUMBER  
A/B DENOTES EVAPORATOR COOLING OUTPUT

HVAC SCHEDULE		
TAG	DESCRIPTION	REMARKS
RTU-1	AAON MODEL # RQ - 005 - 8 - H - EA09 - 379; A000 - R00 - QJD - 0A0 - N0000E - 00 - 00A0H00E; DIRECT DRIVE VARIABLE SPEED FAN, VARIABLE CAPACITY SCROLL COMPRESSOR MODULATING BURNER CONTROL, MODULATING ECONOMIZER W/ CO2 OVERRIDE. OPTIONS: ENTHALPY ECONOMIZER HUMIDITY SENSOR FOR OUTSIDE AIR REFRIGERANT CIRCUIT SIGHT GLASS UNIT. DISCONNECT SWITCH. FACTORY INSTALL CONVENIENCE 120V OUTLET. 12" HIGH ROOF CURB. EXTERNAL STATIC PRESSURE: 1.05 IN. WG. SUPPLY CFM / ESP: 2000 / 1.05IN. WG. COOLING: COOLING CAPACITY (MBH): 61.0 HEATING: TOTAL HEATING CAPACITY: 129.6 MBH LEAVING AIR TEMP: 118.5 °F DB / 73.7 °F WB INPUT: 160.0 MBH ELECTRICAL: RATING: 208 / 3 / 60 UNIT FLA: 27	ROOF TOP UNIT WITH SLEEPERS TO RAISE 12" TO CLEAR FIA HOOD
QC-1	MITSUBISHI HEAT & COOL 24VDC, CENTRALIZED DIGITAL CONTROLLER, MODEL # AG-150.	
DC-1	MITSUBISHI WALL MOUNTED CONTROLLER FOR EVAPORATORS, MODEL # PAR-30MAAU-L.	
PS	MITSUBISHI 1φ/100/240VOLT POWER SUPPLY, MODEL # PAC-SC51KUA FOR AG-150A-A.	
EF-1	EXHAUST FAN GREENHECK, MODEL # G-065-0GEX-QD, 1/2 HP, 3 SPEED. DAMPER: MODEL WD-100, 8"X8", CURB: MODEL # GPI-CURB, SIZE 17	ALSO SHOWN ON ELECTRICAL DWG. E2
EF-2	EXHAUST FAN GREENHECK, MODEL # G-080-0GEX-QD, 1/2 HP, 3 SPEED. DAMPER: MODEL WD-100, 10"X10", CURB: MODEL # GPI-CURB, SIZE 17	
RT-1	AAON MINI CONTROLLER, NETWORKABLE THERMOSTAT & CONTROLLER WITH BUILT-IN TEMPERATURE SENSOR, ECONOMIZER CONTROL, MULTIPLE ANALOG CONTROL INPUTS FOR CO2. BACKNET CAPABLE.	

GRILLE & DIFFUSER SCHEDULE			
TYPE	DESCRIPTION	QUANTITY	MANUFACTURER
A	SUPPLY GRILLE: ALUMINUM, 20" X14" / 620 / F / S / A / DOUBLE DEFLECTION 2" BLADE SPACING, FRONT BLADES PARALLEL TO SHORT DIMENSION.	3	PRICE
B	EGG CRATE FACE RETURN: ALUMINUM, 1/2" X 1/2" GRID, MILL FINISH, 8" X 8" TO 5'0" DUCT CONNECTION.	2	PRICE
C	RETURN GRILLE: ALUMINUM, 14" X 8" / 635 / F / A / MILL	1	PRICE
D	RETURN GRILLE: SIZE TO SUIT OPENING/ 635 / F / A / MILL, ALUMINUM.	1	PRICE
E	DOOR GRILLE: 18" X 12" / ATG1 / BF / B15.	4	PRICE
F	TRANSFER GRILLE: 24" X 12" / ATG1 / B / B15.	2	PRICE

NOTES:  
ALSO SEE ARCHITECTURAL, ROOF & ELECTRICAL DWGS & NOTES.

No.	REVISION/DESCRIPTION	BY	DATE

DRAWN	RCP	CHECKED	DTA	DESIGNED	DTA	APPROVED

THE CITY OF WINNIPEG  
PLANNING, PROPERTY AND DEVELOPMENT DEPARTMENT  
MUNICIPAL ACCOMMODATIONS DIVISION  
3-65 GARRY STREET, R3C 4K4

PROJECT  
FORT GARRY LIBRARY  
INTERIOR & EXTERIOR REFURBISHING

1360 PEMBINA HWY

SHEET TITLE  
ROOF PLAN & SCHEDULES  
RENOVATION  
MECHANICAL

SCALE	PROJECT No:	SHEET No:
AS SHOWN	2011-096	M2