

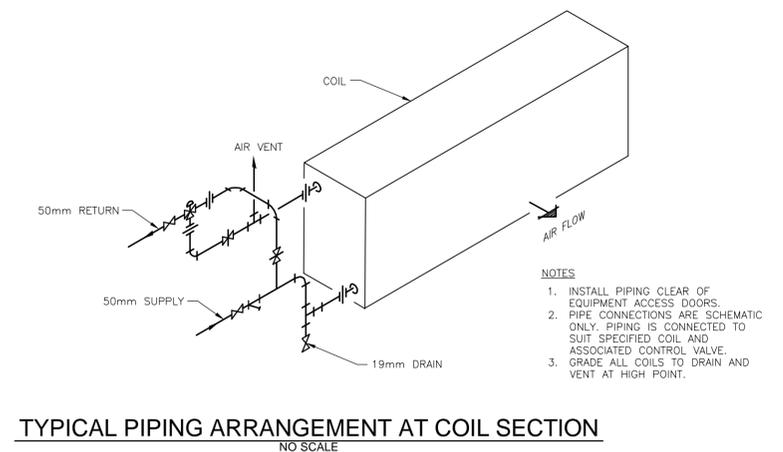
NEW HVAC - PART ROOF PLAN
1:100

- ### DRAWING NOTES
1. PROVIDE NEW ROOF CURB, FOOTPRINT OF NEW UNIT TO MATCH EXISTING. REFER TO STRUCTURAL FOR COORDINATION.
 2. INSTALL THERMOSTAT IN SECOND FLOOR CORRIDOR. CONFIRM WITH CONTRACT ADMINISTRATOR ON LOCATION.
 3. RECONNECT GAS LINE.
 4. SERVICE PLATFORM TO BE REPLACED IN KIND. PROVIDE SEALED SHOP DRAWINGS TO CONTRACT ADMINISTRATOR PRIOR TO INSTALLATION.

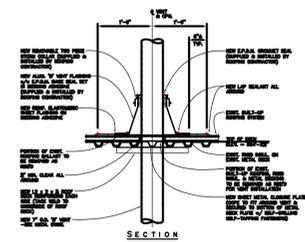
- ### GENERAL NOTES
1. REPAIR ROOF FROM AREAS AFFECTED BY DEMOLITION. REPLACE IN KIND.
 2. PROVIDE 19mm CONDENSATE DRAIN FOR AHU M639 DOWN THROUGH NEW OPENING AS INDICATED ON S-03. COORDINATE OPENING WITH STRUCTURAL. RUN IN CEILING SPACE AND DOWN TO NEAREST DRAIN IN ACID DIGESTION ROOM.
 3. PROVIDE TRANSITIONS AS REQUIRED FOR DUCT RECONNECTIONS.
 4. REFER TO P-1 AND P-2 FOR FURTHER DETAILS.

AIR HANDLING UNIT SCHEDULE			
TAG	AHU-M639	AHU-M651	
SUPPLY FAN			
AIR FLOW RATE (CFM / L/s)	15,850 / 7,481	11,078	5,229
E.S.P. (inWC / Pa)	1.0 / 249	2.0	496
MOTOR TYPE	TEFC		
MOTOR SIZE (hp / kW)	20 / 14.9	15	11.2
VOLTAGE/PHASE	600 / 3		
RETURN FAN			
AIR FLOW RATE (CFM / L/s)	10,025		4,732
E.S.P. (inWC / Pa)	0.25		62
MOTOR TYPE	TEFC		
MOTOR SIZE (hp)	7.5 / 5.6		
VOLTAGE/PHASE	600 / 3		
HEATING SECTION			
HEAT CAPACITY INFLU (MBH / kW)	1600 / 498.9		
HEAT CAPACITY OUTPUT (MBH / kW)	1440 / 422.0	222.0	66.1
FLUID	50% PROP. GLY.		
EGT (°F / °C)	110.0		43.3
LGT (°F / °C)	90.0		32.2
EAT (°F / °C)	-31.0 / -35.0	58.0	13.3
LAT (°F / °C)	53.0	11.7	75.0 / 23.9
FLOW RATE (GPM / L/S)	27.9		1.76
FLUID PRESSURE DROP (FT / M)	2.7		0.8
COOLING SECTION			
COOLING COIL NET CAPACITY (MBH / kW)	815.1 / 238.9	240	70.3
AIR EDWT (°F / °C)	87.0 / 30.6	75.7	24.3
AIR LWBT (°F / °C)	73.0 / 22.8	63.3	17.4
AIR LDBT (°F / °C)	58.5 / 14.7	58.4	13.8
AIR LWBT (°F / °C)	58.1 / 14.5	55.5	13.3
REFRIGERANT:	R410A	R410A	
EER	9.7	11.0	
VOLTAGE/PHASE:	600 / 3		600 / 3

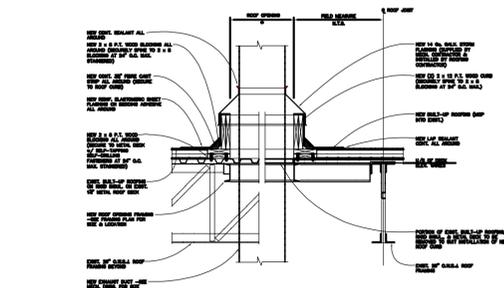
NOTES:
 1. AHU-M639 TO MATCH EXISTING ROOF CURB FOOTPRINT.
 2. PROVIDE SCHNEIDER VT 8800 CONTROLLER OW/LOCKABLE COVER FOR AHU-M651.



TYPICAL PIPING ARRANGEMENT AT COIL SECTION
NO SCALE



ROOF VENT DETAIL
NO SCALE



DUCT ROOF PENETRATION DETAIL
NO SCALE

B.M. ELEV.	DESIGNED BY	PDT		ENGINEER'S SEAL	
	DRAWN BY	JV			
	CHECKED BY	NDC		CONSULTANT PROJECT NO.	NORTH END SEWAGE TREATMENT PLANT NEWPCC MAIN BUILDING - HVAC REPLACEMENT NEW HVAC - PART ROOF PLAN
	APPROVED BY				
	HOR. SCALE	NONE	RELEASED FOR CONSTRUCTION DATE	163526	CITY DRAWING NUMBER
	VERTICAL				1-0101M-M0015-001
0 Issued for Tender	17/04/13	PDT			SHEET 6 OF 21
NO. REVISIONS	DATE	BY			M-2