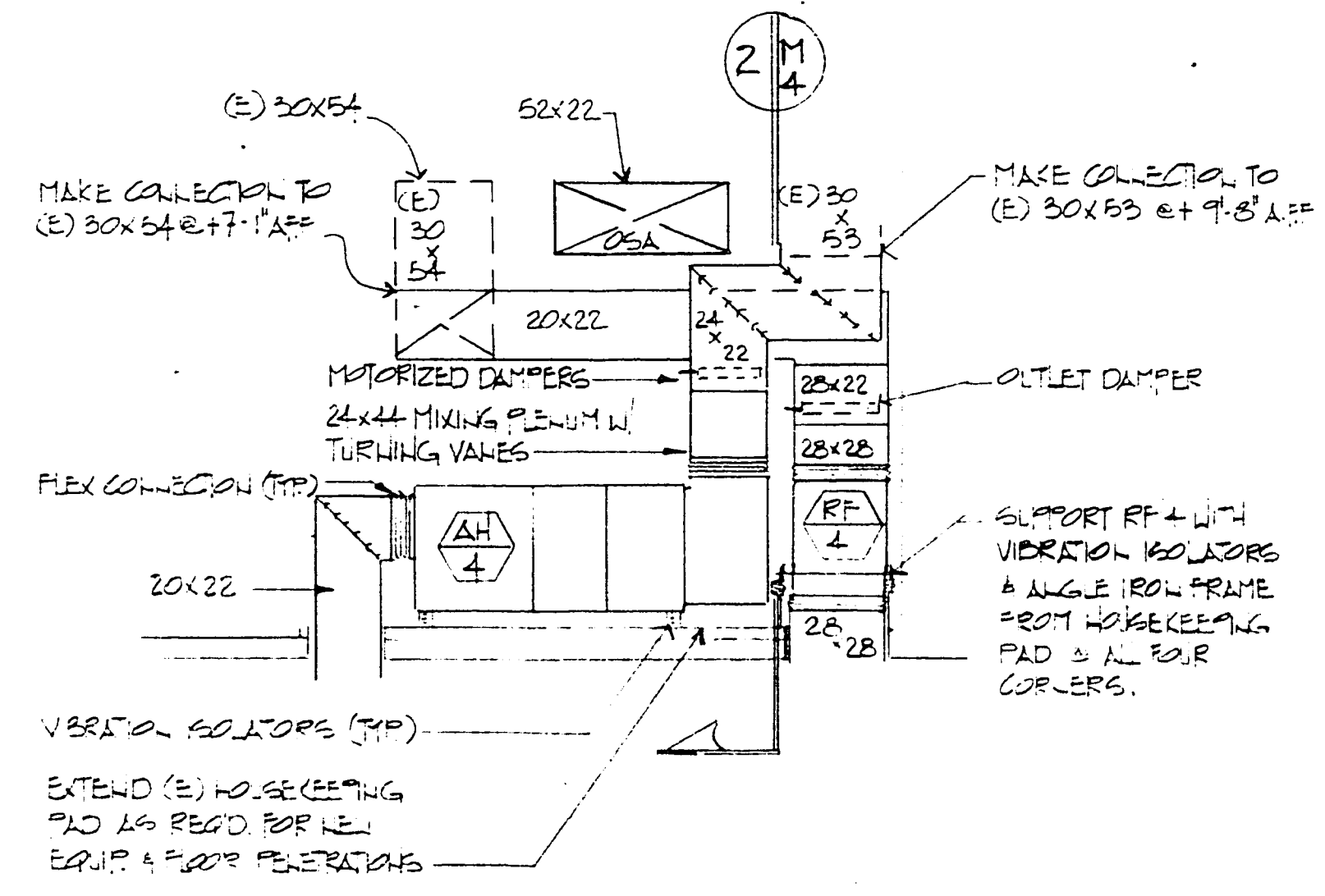
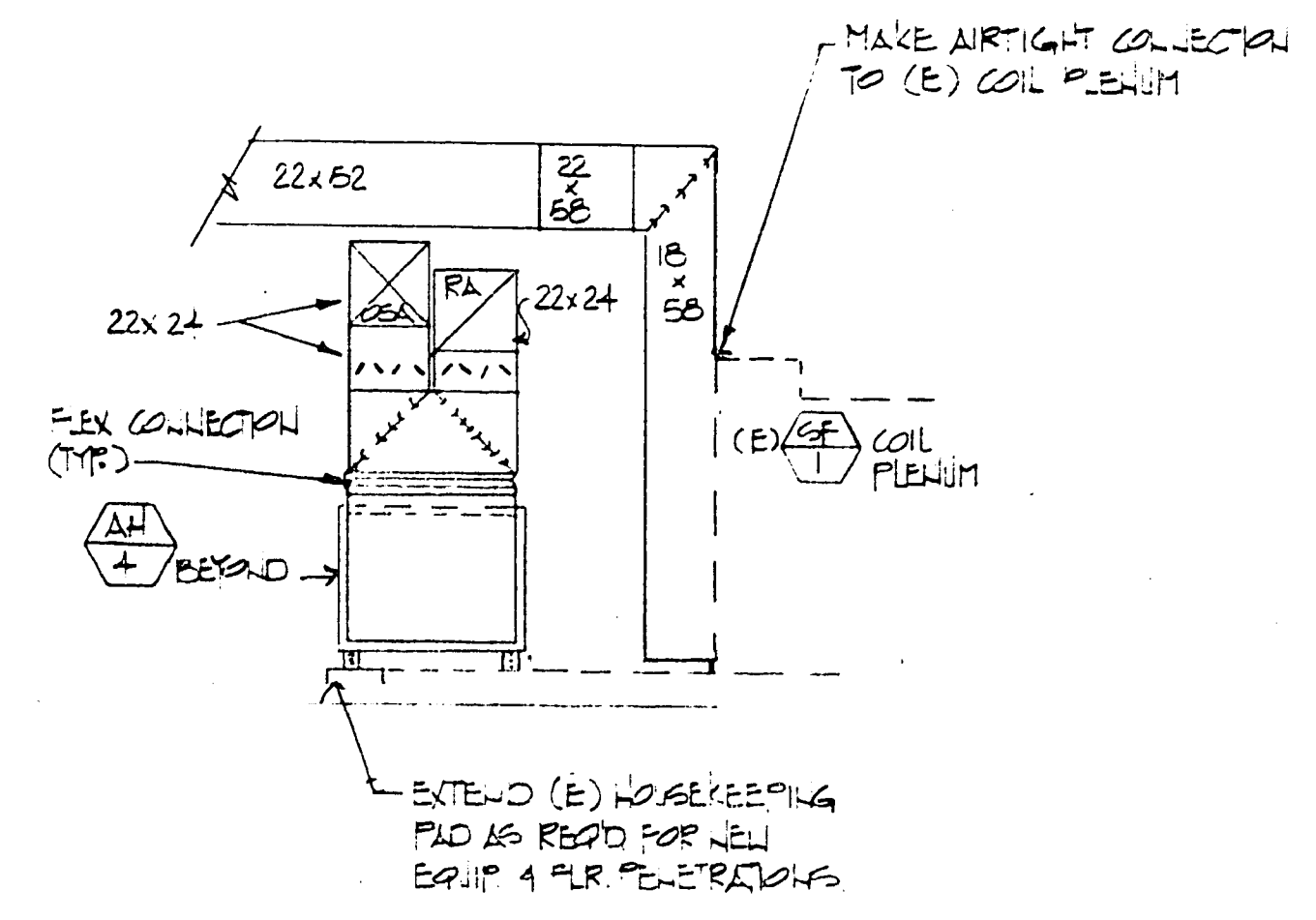
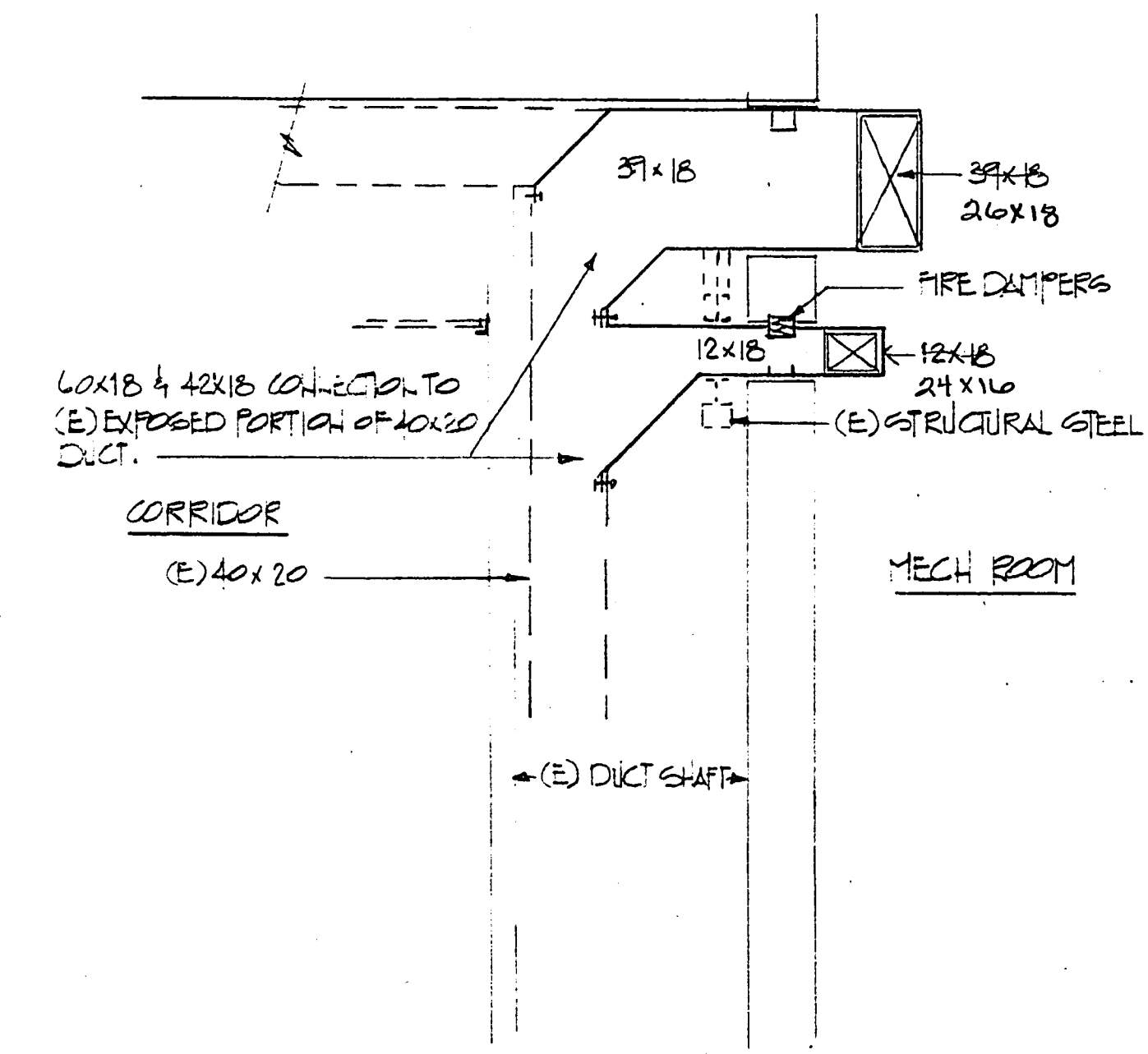




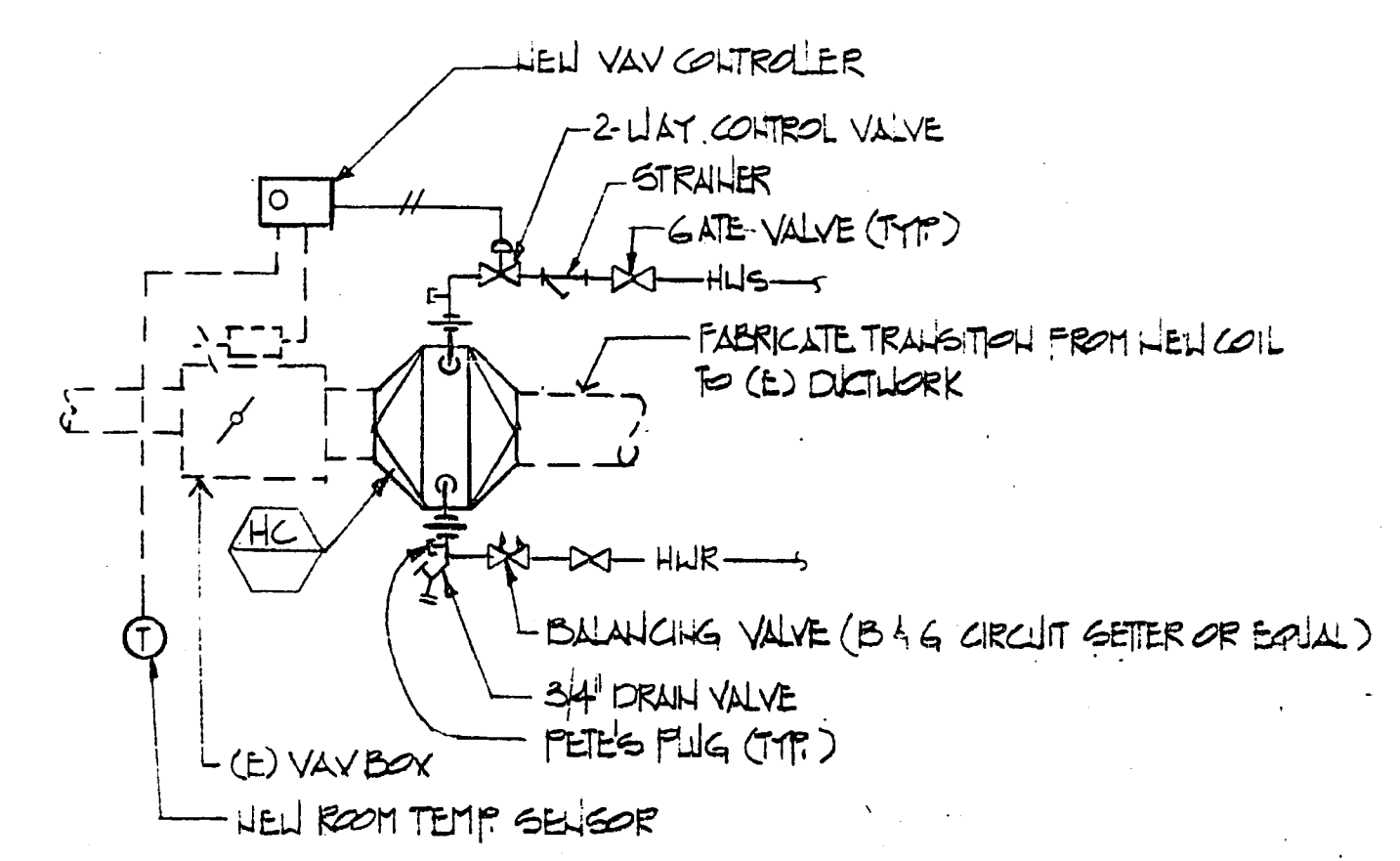
SECTION 1
1/4"=1'-0"



SECTION 2
1/4"=1'-0"

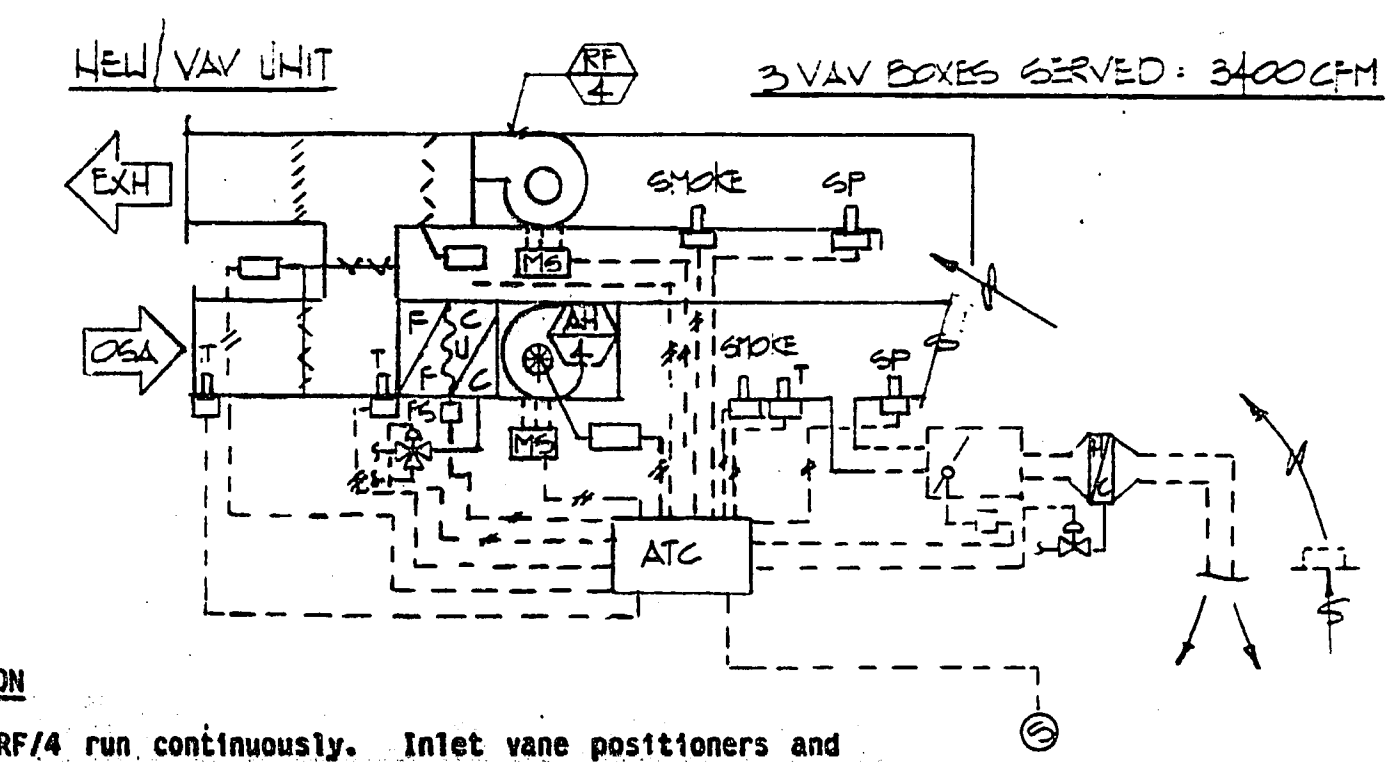


SECTION 3
1/4"=1'-0"

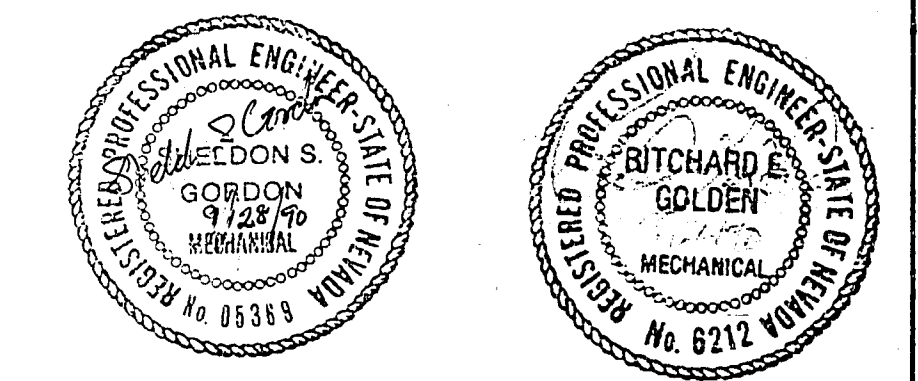


SECTION 4
TYPICAL HEATING COIL INSTALLATION DETAIL
NO SCALE

MECHANICAL EQUIPMENT SCHEDULE								
SYM	DESCRIPTION	MAKE & MODEL NO.	CAPACITY	ACCESSORIES	HP/KW	ELEC	WT	REMARKS
AH 4	VAV AIR HANDLER - HORIZONTAL DRAW THRU - MED. PRESSURE	McQUAY TYPE M&L SIZE 108	3400 CFM @ 3.5 ESP 55°F EDB, 60°F EWB 55°F LDB, 10 MBTU SENSIBLE COOLING	CHILLED WATER COOLING COIL, ANGULAR FILTER RACK, VIBRATION ISOLATORS, INLET VALVE CONTROLS	5HP	480V	1200#	
RF 4	INLINE CENTRIFUGAL RETURN FAN	CARLES VIDA 18	3400 CFM @ .25" ESP	OUTLET DAMPERS, VIBRATION ISOLATION	1HP	480V	30#	
FM 4	FAN POWERED MIXING BOX	TEMPMASTER TYPE HFB SIZE D 30" LER 18	1050 CFM COOLING 880 CFM HEATING 17,000 BTU ELEC HEAT	3KW ACCESSORY ELECTRIC RESISTANCE HEATER SUPPORT FROM DECK W/ VIBRATION ISOLATORS	1/4HP 277V 5KW	1P		
FM 2	"	"	SIZE D 30" LER 18 625 CFM COOLING 240 CFM HEATING 10,000 BTU ELEC HEAT	3KW	1/4HP 277V 5KW	1P		
HC 1	HYDRAULIC HEATING COIL	McQUAY 100 BHP/HR SIZE 27H28W	17,000 BTU @ 10 ΔT 60°F EDB, 110°F LDB 180°F EWB, 150°F LWB 5.7 GPM @ .4 PSI ΔP @ 87.2°F EWB	MODULATING CONTROL VALVE - SEE DETAIL 4 M4				
HC 2	"	McQUAY 50HQB002C SIZE 18H18W	2.4 GPM @ .1 PSI 37126 BTU/HR					
HC 3	"	McQUAY 50HQB032C SIZE 12H12W	8.5 GPM @ .1 PSI 13105 BTU/HR					



- SEQUENCE OF OPERATION**
- Fans AH/4 and RF/4 run continuously. Inlet vane positioners and outlet damper on fans adjust to maintain static pressures of +1.25" and -.05" W.C. at supply and return ductwork respectively. The fans may be started and stopped manually at the EMS control. Either ionization smoke detector in supply and return ductwork shall stop both fans on alarm. Outside air and return air dampers shall be modulated to maintain the supply air setpoint. If the supply air temperature increases above its setpoint, the three-way chilled water valve will modulate open. The zone logic controller will receive a signal from each of four zones and reset the supply air temperature setpoint to satisfy the zone requiring the most cooling. The supply air setpoint range is 50°F to 60°F (adjustable). A low limit freezeostat will shut down both fans if the mixed air temperature falls below 40°F. Mixed air and outdoor air temperature sensors monitor these conditions for management information.
 - The existing VAV boxes' minimum air flow shall be adjusted to 50% of maximum. The existing sensors shall be replaced with adjustable setpoint ES 11 thermostats. On a call for cooling, the VAV damper shall be adjusted open. On reduced demand for cooling, the VAV damper shall be adjusted to its minimum position. If space temperature continues to decrease, the new two-way heating valve will be modulated open.



Reference Information and Notes: Revised: _____ Description: _____ Submit: _____ App'd: _____ Date: _____ Refer to Tracing for Latest Revision				Designed: REG Drawn: BR Checked: REG Date: 9/25/90	PLAZA LEVEL MECHANICAL PLAN Kennedy/Jenike/Chilton Submitted: _____ Approved: _____ Reno, Nevada	FIRE STATION #1 HVAC REMODEL LAS VEGAS, NV.	Scale: AS NOTED Job No.: _____ Sheet: 4 of 6 M-4
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