



ABBREVIATIONS		LEGEND		DRAWING INDEX	
AC	AIR CONDITIONING		ALIGNMENT GUIDE		DETAIL OR SECTION CALLOUT SHEET WHERE CUTTING OR DETAIL SHOWN
ACU	AIR CONDITIONING UNIT		ANCHOR		ELBOW DOWN
AD	ACCESS DOOR		ELBOW UP		FLANGE
AFF	ABOVE FINISHED FLOOR		FLEX CONNECTION		TEE OUTLET UP
APPROX	APPROXIMATE		TEE OUTLET DOWN		AIR VENT
ARCH	ARCHITECT		A.A.V. AUTOMATIC AIR VENT		BALANCING VALVE
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING		BALL VALVE		BUTTERFLY VALVE
BDD	BACKDRAFT DAMPER		CHECK VALVE		CLEAN OUT - FLOOR
BFF	BELOW FINISHED FLOOR		CLEAN OUT - WALL		GATE VALVE
BOD	BOTTOM OF DUCT		GLOBE VALVE		HOSE BIBB OR WALL HYDRANT
BTUH	BRITISH THERMAL UNITS PER HOUR		INDIRECT DRAIN		INSTRUMENT TEST CONNECTION
CA	COMBUSTION AIR		MODULATING VALVE		PETE'S PLUG (TEST CONNECTION)
CD	CEILING DIFFUSER		PRESSURE GAGE		PUMP (DIRECTION SHOWN BY ARROW)
CFM	CUBIC FEET PER MINUTE		PRESSURE REDUCING VALVE		PRESSURE RELIEF VALVE
CIRC	CIRCULATING		SOLENOID VALVE		THERMOMETER
CO	CLEAN OUT		THREE WAY VALVE		TWO WAY VALVE
COND	CONDENSATE		UNION		WYE STRAINER WITH VALVE
CONT	CONTINUATION		WYE STRAINER		REDUCED PRESSURE BACKFLOW PREVENTER
COORD	COORDINATE		DCVA DOUBLE CHECK VALVE		DDCVA DOUBLE DETECTOR CHECK VALVE
COTG	CLEAN OUT TO GRADE		FLOOR DRAIN		FS FLOOR SINK
CW	COLD WATER		KITCHEN COLD WATER		KITCHEN HOT WATER
DEG	DEGREE		KITCHEN HOT WATER CIRCULATION		COLD WATER
DIA	DIAMETER		HOT WATER		HOT WATER CIRCULATION
DIM	DIMENSION		WASTE		VENT
DN	DOWN		VENT THROUGH ROOF		CHILLED WATER SUPPLY
DWG	EXISTING		CHILLED WATER RETURN		HEATING WATER SUPPLY
E	EACH, EXHAUST AIR		HEATING WATER RETURN		RAINWATER LEADER
ELEV, EL	ELEVATION		OVERFLOW RAINWATER LEADER		REFRIGERANT SUCTION
EAT	ENTERING AIR TEMPERATURE		RS REFRIGERANT SUCTION		RL REFRIGERANT LIQUID
EG	EXHAUST GRILLE		C CONDENSATE DRAIN		NG NATURAL GAS
EMR	ELEVATOR EQUIPMENT ROOM		LPNG LOW PRESSURE NATURAL GAS		SS SANITARY SEWER
ESP	EXTERNAL STATIC PRESSURE		F FIRE PROTECTION WATER		PIPE SIZE REDUCTION
EW	ENTERING WATER TEMPERATURE		PIPE SLOPE DOWN THIS DIRECTION		PIPE CAP
EXIST	EXISTING		1-HR OCCUPANCY SEPARATION WALL		FIRE DAMPER, WALL OR CEILING
EXP	EXPANSION		1-HR RATED WALL (CORRIDOR)		FIRE AND SMOKE DAMPER
EXH	EXHAUST		CEILING MOUNTED FIRE SPRINKLER		FIRE DAMPER
FD	FIRE DAMPER, FLOOR DRAIN		SIDE WALL MOUNTED FIRE SPRINKLER		VOLUME DAMPER
FDC	FIRE DEPARTMENT CONNECTION		ALARMED CHECK VALVE W/FLOW SWITCH		MOTOR OPERATED DAMPER
FDCI	FURNISHED BY OWNER INSTALLED BY CONTRACTOR		O.S. & Y. VALVE W/SUPERVISED TAMPER		CLEARANCE REQUIREMENT
FLA	FULL LOAD AMPS		FILTER		FILTER
FPM	FEET PER MINUTE				
FT	FOOT, FEET				
G	GAS				
GAL	GALLONS				
GALV	GALVANIZED				
GPH	GALLONS PER HOUR				
GRD	GRILLES, REGISTERS, AND DIFFUSERS				
GWB	GYPSON WALLBOARD				
HP	HORSEPOWER				
HVAC	HEATING, VENTILATION AND AIR CONDITIONING				
HW	HOT WATER				
HWC	HOT WATER CIRC				
HWG	HIGH WALL GRILLE				
HWR	HOT WATER RETURN				
HWS	HOT WATER SUPPLY				
ID	INDIRECT DRAIN, INSIDE DIAMETER				
IE	INVERT ELEVATION				
IN	INCH				
KW	KILOWATT, (1000 WATTS)				
LAT	LEAVING AIR TEMPERATURE				
LWG	LOW WALL GRILLE				
LWT	LEAVING WATER TEMPERATURE				
MAX	MAXIMUM				
MBH	1000 BTU PER HOUR				
MCA	MINIMUM CIRCUIT AMPS				
MIN	MINIMUM				
MTG	MOUNTING				
MFG	MANUFACTURER				
NC	NORMALLY CLOSED				
NIC	NOT IN CONTRACT				
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION				
NG	NATURAL GAS				
NO	NORMALLY OPEN				
NTS	NOT TO SCALE				
OAT	OUTSIDE AIR TEMPERATURE				
OC	ON CENTER				
OSD	OPPOSED BLADE DAMPER				
ORD	OVERFLOW ROOF DRAIN				
OSA	OUTSIDE AIR				
OS&Y	OUTSIDE STEM & YOLK				
PH	PHASE				
POC	POINT OF CONNECTION				
PSI	POUNDS PER SQUARE INCH				
RA	RETURN AIR				
RL	RAIN LEADER				
RD	ROOF DRAIN				
REF	REFERENCE				
REQD	REQUIRED				
RG	RETURN GRILLE				
RPM	REVOLUTIONS PER MINUTE				
RFBFP	REDUCED PRESSURE BACKFLOW PREVENTER				
SA	SUPPLY AIR				
SD	STORM DRAIN				
SHT	SHEET				
SM	SHEET METAL				
SO	SCREENED OPENING				
SP	STATIC PRESSURE				
SPD	STATIC PRESSURE DROP				
SPEC	SPECIFICATIONS				
TDH	TOTAL DYNAMIC HEAD				
TOD	TOP OF DUCT				
TPD	TOTAL PRESSURE DROP				
TSP	TOTAL STATIC PRESSURE				
TYP	TYPICAL				
V	VOLT, VENT				
VD	VOLUME DAMPER				
VTR	VENT THRU ROOF				
W	WASTE				
WB	WET BULB TEMPERATURE				
WCO	WALL CLEAN OUT				
W/	WITH				
WCO	WALL CLEAN OUT				
WG	WATER GAUGE				
WH	WALL HYDRANT				
WHA	WATER HAMMER ARRESTER				

NOTE: DRAWINGS MAY NOT CONTAIN ALL ABBREVIATIONS LISTED

- GENERAL NOTES**
- THE MECHANICAL SYSTEM SHALL CONSIST OF ALL WORK SHOWN ON THE DRAWINGS, INCLUDING PLANS, DIAGRAMS, DETAILS, ETC., AND ALL WORK AS IDENTIFIED IN THE SPECIFICATIONS. WORK INCLUDES FURNISHING, INSTALLING SYSTEM, INTEGRATION, TESTING, TRAINING AND WARRANTY OF THE MECHANICAL SYSTEMS AS SHOWN AND SPECIFIED. PROVIDE A COMPLETE AND WORKABLE MECHANICAL SYSTEM COMPLETE WITH ALL MECHANICAL WORK AS REQUIRED FOR SYSTEM OPERATION.
 - THE DESIGN OF MECHANICAL SYSTEMS HAS BEEN BASED UPON THE EQUIPMENT AS MANUFACTURED BY THE MANUFACTURERS LISTED ON THE EQUIPMENT SCHEDULE. EQUIPMENT NAMED IN THE SPECIFICATIONS MAY BE SUBSTITUTED PROVIDED THAT THE EQUIPMENT MEETS OR EXCEEDS ALL SCHEDULED AND SPECIFIED CRITERIA, AND HAS THE WRITTEN APPROVAL OF THE ENGINEER. COORDINATE THE INSTALLATION WITH ALL TRADES AND GUARANTEE IN WRITING THAT NO ADDITIONAL COST WILL BE INCURRED DUE TO PRODUCT SUBSTITUTION.
 - CONTRACTOR SHALL FIELD VERIFY ALL BUILDING AND SITE DIMENSIONS BEFORE BEGINNING CONSTRUCTION OR ORDERING EQUIPMENT. DO NOT SCALE FROM PLANS.
 - DIMENSIONS SHOWN FOR DUCTWORK WITH SOUND LINING SHALL BE NET FREE DIMENSION WITH SOUND LINING INSTALLED. SOUND LINING SHALL BE 1" THICK UNLESS OTHERWISE NOTED.
 - PIPING OR DUCTWORK PENETRATIONS THROUGH WALLS, PARTITIONS, CEILINGS AND ROOFING SYSTEMS SHALL BE SEALED AIRTIGHT. PIPING, DUCTWORK, OR STRUCTURAL COLUMN PENETRATION THROUGH PLENUMS, DUCTS OR RETURN SHAFTS SHALL BE SEALED AIRTIGHT. PIPING PENETRATIONS THROUGH SLAB SHALL BE SLEEVED AND SEALED WATERTIGHT.
 - CONFINE THE APPLICATION OF FLEXIBLE DUCTWORK TO LOCATIONS INDICATED BY THE CONTRACT DOCUMENTS. MAXIMUM LENGTH OF FLEXIBLE DUCTWORK SHALL NOT EXCEED SIX FEET.
 - PROVIDE ALL REQUIRED ELECTRICAL POWER, MOTOR STARTERS AND CONTROL INTERFACE AND CONNECTIONS AS REQUIRED FOR SYSTEM OPERATION. COORDINATE REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR.
 - PROVIDE ALL REQUIRED EQUIPMENT GUARDS AND STRUCTURAL SUPPORT AS RECOMMENDED BY EQUIPMENT MANUFACTURERS TO SUPPORT EQUIPMENT AND TO ASSURE SYSTEM PERFORMANCE AND SAFE OPERATION. COORDINATE PRIOR TO INSTALLATION. PROVIDE ACCESS PANELS AS REQUIRED TO MAINTAIN EQUIPMENT, ACCESS VALVES AND DAMPER OPERATORS. COORDINATE FIRE RATING WITH THE ARCHITECTURAL DOCUMENTS.
 - COORDINATE LOCATION OF ALL THERMOSTATS AND ALL WALL MOUNTED EQUIPMENT, WITH THE ARCHITECT. LOCATIONS AS SHOWN ON THE DRAWINGS ARE FOR REFERENCE ONLY. LOCATE THERMOSTATS 4'-0" AFF. UNLESS NOTED OTHERWISE.
 - PROVIDE UNIT SUPPORT PER MANUFACTURERS RECOMMENDATIONS. BUILDING AND STRUCTURE IS DESIGNED TO SUPPORT EQUIPMENT, BUT NOT DETAILED TO ACCOMMODATE EACH AVAILABLE EQUIPMENT CONFIGURATION OR MANUFACTURER. CONTRACTOR SHALL PROVIDE MATERIALS AND SERVICES INCLUDING BUT NOT LIMITED TO, ADDITIONAL STEEL, SUPPORT BRACKETS, HANGERS, ACCESSORIES, AND STRUCTURAL ENGINEERING AS REQUIRED TO SUPPORT EQUIPMENT.
 - MAINTAIN 10'-0" CLEARANCE BETWEEN OUTSIDE AIR INTAKE AND EXHAUST OUTLET.
 - PROVIDE FRAMING, CUTTING, BLOCKING AND PATCHING AS REQUIRED.
 - PROVIDE MINIMUM OUTSIDE AIR PER WASHINGTON ADMINISTRATIVE CODE REQUIREMENTS.
 - SHUT OFF FOR SMOKE CONTROL: PROVIDE SMOKE DETECTORS FOR AUTOMATIC FAN SHUT DOWN IN AIR CONDITIONING UNITS IN ACCORDANCE WITH UMC SECTION 608.
 - PROVIDE SMOKE DAMPERS IN COMPLIANCE WITH 1997 UBC SECTION 713.

2001 WSEC COMPLIANCE
FOR 2001 WSEC COMPLIANCE INFORMATION, SEE 4/M6.5

PLUMBING CONNECTION SCHEDULE						
FIXTURE	MARK	SYMBOL	SERVICE CONNECTION			
			WASTE	VENT	CW	HW
FLOOR CLEAN OUT	FCO	→	-	-	-	-
WALL CLEAN OUT	WCO	→	-	-	-	-
DRINKING FOUNTAINS	DF	⊕	2"	2"	1/2"	-
FLOOR DRAIN	FD	⊕	2"	2"	3/8"	-
FLOOR SINK	FS	⊕	2 1/4"	2"	-	-
HOSE BIB/WALL HYDRANT	HB/WH	→	-	-	3/4"	-
LAVATORY	L	⊕	2"	2"	1/2"	1/2"
SERVICE SINK	SS	⊕	3"	2"	1/2"	1/2"
SHOWER	SH	⊕	2"	2"	3/4"	3/4"
SINK	S	⊕	2"	2"	1/2"	1/2"
URINAL	U	⊕	2"	2"	1"	-
WATER CLOSET	WC	⊕	4"	2"	1 1/4"	-
YARD HYDRANT	YH	→	-	-	3/4"	-

EXTEND AND CONNECT PIPING TO ALL PLUMBING FIXTURES. FURNISH COMPLETE, FUNCTIONAL SYSTEM.

FAN COIL UNIT SCHEDULE														
MARK	AREA SERVED	DESIGN CONDITIONS					BASIS OF DESIGN							
		TOTAL COOLING	SENSIBLE COOLING		TOTAL HEATING		SUPPLY CFM	MIN. OUTSIDE AIR CFM	EXTERNAL STATIC IN. W.G.	ELECTRICAL				
			MBH	MBH	MBH	GPM				MODEL NUMBER	MOTOR HP	VOLTS/PHASE	WEIGHT LBS.	REMARKS
FC-1	DANCE 001	36.0	27.0	7.2	30.0	1400	300	0.375	-	2	460/3	600	1,2,3,4,5	
FC-2	DANCE 001	36.0	27.0	7.2	30.0	1200	300	0.375	-	2	460/3	600	1,2,3,4,5	
FC-3	FITNESS 002	36.0	27.0	7.2	30.0	1400	300	0.375	-	2	460/3	600	1,2,3,4,5	
FC-4	FITNESS 002	36.0	27.0	7.2	30.0	1200	300	0.375	-	2	460/3	600	1,2,3,4,5	
FC-5	GAME ROOM/SOUTH LOBBY	90.0	67.5	18.0	150.0	15.0	3200	1900	0.400	-	3	460/3	600	1,2,3,4,5
FC-6	MAINTENANCE 004/LOCKERS/REST	28.0	21.0	5.6	80.0	6.0	1250	1250	0.375	-	2	460/3	600	1,2,3,4,5
FC-7	PROGRAM ROOM 101	48.0	36.0	9.6	72.0	7.2	1800	980	0.375	-	2	460/3	600	1,2,3,4,5
FC-8	PROGRAM ROOM 102	48.0	36.0	9.6	72.0	7.2	1800	980	0.375	-	2	460/3	600	1,2,3,4,5
FC-9	PROGRAM ROOM 103	48.0	36.0	9.6	72.0	7.2	1800	980	0.375	-	2	460/3	600	1,2,3,4,5
FC-10	PROGRAM ROOM 104	48.0	36.0	9.6	72.0	7.2	1800	980	0.375	-	2	460/3	600	1,2,3,4,5
FC-11	MEETING/ADMIN/HEALTH	48.0	36.0	9.6	60.0	6.0	1600	660	0.400	-	2	460/3	600	1,2,3,4,5,6
FC-12	SENIOR/PROGRAM	64.0	48.0	12.8	96.0	9.6	2400	1400	0.400	-	2	460/3	600	1,2,3,4,5,6
SUM		566.0	424.5	113.2	794.0	79.4								

NOTE: A. EXTERNAL STATIC PRESSURE ALLOWS FOR DUCTWORK AND DIFFUSER, UNIT MANUFACTURER TO ADD ALLOWANCE FOR WET COIL. B. COIL CONDITIONS: COOLING 80/67 F EAT, 45 F EWT, 55 F LWT; HEATING: 55F EAT, 180 F EWT, 160 F LWT. C. SUM TOTALS DO NOT INCLUDE QUANTITIES FOR AHU-2.

REMARKS: 1. BASIS OF DESIGN: TEMTROL. ACCEPTED ALTERNATES: GAYLORD (HUNTAIRE), PACE (YORK)
2. 1" INTERNALLY SPRING ISOLATED
3. DIRECT DRIVE FAN WITH VARIABLE SPEED DRIVE
4. 100% OUTSIDE AIR ECONOMIZER MIXING SECTION
5. CONSTANT VOLUME FAN COIL
6. HORIZONTAL UNIT ALL OTHERS ARE VERTICAL

CHILLER SCHEDULE	
MARK	REMARKS
CHILLER	AIR COOLED FLUID CHILLER, 60 TON NOMINAL CAPACITY, 95 DEGREE CONDENSER ENTERING AIR TEMPERATURE, 44 DEGREE LEAVAN SOLUTION TEMPERATURE, 54 DEGREE ENTERING SOLUTION TEMPERATURE, 20 PERCENT PROPYLENE GLYCOL SOLUTION. RECIP. COMPRESSOR, R-22 REFRIGERANT, 155 GPM COOLER FLOW VOLUME, 15.3 FEET HEAD PRESSURE DROP, 9.4 EER, 152 AMP MINIMUM CIRCUIT AMPACITY, 200 AMP MAXIMUM OVERCURRENT PROTECTION, 460 VOLT, 3 PHASE. CONTROL POWER CIRCUIT, 120 VOLT, 1 PHASE. WEIGHT: 6,000 POUNDS. AS MANUFACTURED BY CARRIER, 30C10R00 OR BY PRIOR APPROVAL. NOTE: CHILLER RATED AT ARI STANDARD CONDITIONS.

WATER HEATING AND CIRCULATION EQUIPMENT	
MARK	REMARKS
B-1, B-2	NATURAL GAS FIRED HOT WATER HEATING BOILER. CAST IRON SECTIONAL BOILER WITH FULL MODULATION POWER BURNER. ELECTRONIC INTERMITTENT IGNITION, LOW WATER CUT OFF WITH MANUAL RESET, DOUBLE LOW TEMPERATURE LIMIT CONTROLS. 491 MBH IN, 396 MBH OUT. 120 VOLT, 1 PHASE. BOILER: WEBB MOLAN 480 OR ACCEPTED EQUAL. BURNER: GORDON PIATT, 1/3 HORSEPOWER, 120 VOLT, 1 PHASE.
P-1, 2	INLINE HEATING WATER BOILER CIRCULATION PUMP, 40 GPM, 15 FEET TDH, 1750 RPM, 1/2 HP, 120 VOLT, 1 PHASE. AS MANUFACTURED BY ARMSTRONG, BELL AND GOSSETT, TACO OR ACCEPTED EQUAL.
HWP-1	BASE MOUNTED DUAL VERTICAL INLINE HEATING WATER CIRCULATION PUMP, 80 GPM, 60 FT. TDH, 1750 RPM, 5/8 HORSEPOWER, 460 VOLTS, 3 PHASE. BRONZE IMPELLER. CAST IRON VOLUTE. FURNISH WITH SUCTION DIFFUSER WITH STRAINER AND TRIPLE DUTY VALVE. MAXIMUM SUCTION DIFFUSER PRESSURE DROP: 2.3 FT HD. BASIS FOR DESIGN: ARMSTRONG DUAL ARM.
CWP-1	BASE MOUNTED VERTICAL INLINE CHILLED WATER CIRCULATION PUMP, 155 GPM, 70 FT. TDH, 1750 RPM, 7.5 HORSEPOWER, 460 VOLTS, 3 PHASE. BRONZE IMPELLER. CAST IRON VOLUTE. FURNISH WITH SUCTION DIFFUSER WITH STRAINER AND TRIPLE DUTY VALVE. MAXIMUM SUCTION DIFFUSER PRESSURE DROP: 2.3 FT HD. BASIS FOR DESIGN: ARMSTRONG ACCEPTED ALTERNATES: TACO, BELL AND GOSSETT, TACO.
DHWCP-1, 2	DOMESTIC HOT WATER CIRCULATION PUMP, IN-LINE BRONZE FITTED, 12 GPM, 20 FT. HEAD, 1/2 HP, 120 VOLT, 1 PHASE. AS MANUFACTURED BY ARMSTRONG, BELL AND GOSSETT, TACO OR ACCEPTED EQUAL.
AS-1	AIR SEPARATOR, 4" ARMSTRONG, BELL AND GOSSETT, TACO OR ACCEPTED EQUAL.
AS-2	AIR SEPARATOR, 3" ARMSTRONG, BELL AND GOSSETT, TACO OR ACCEPTED EQUAL.
ET-1	EXPANSION TANK, 33 GALLON VERTICAL BLADDER TYPE, W/ 11 GALLON ACCEPTANCE VOLUME W/ AIR CONTROL VALVE. ASME RATED, ARMSTRONG, BELL AND GOSSETT, TACO OR ACCEPTED EQUAL.
ET-2	EXPANSION TANK, 44 GALLON VERTICAL BLADDER TYPE, W/ 22 GALLON ACCEPTANCE VOLUME W/ AIR CONTROL VALVE. ASME RATED, ARMSTRONG, BELL AND GOSSETT, TACO OR ACCEPTED EQUAL.
BF-1	BYPASS FEEDER, FLAT BOTTOM STYLE. 5 GALLON CAPACITY. WINGERT OR EQUAL.
GLYCOL FEEDER	GLYCOL FEEDER, 50 GALLON, 120V 1/3HP PUMP. WINGERT GL50-E1 GLYCOL FEED SYSTEM OR EQUAL.

AIR HANDLING UNIT AHU-1	
SECTION	REMARKS
SUPPLY FAN	16,000 CFM, 1.5 INCHES EXTERNAL STATIC PRESSURE, ESTIMATED 2.5 INCH TOTAL STATIC PRESSURE, 22 INCH FORWARD CURVED FAN, 15 HORSEPOWER, 460 VOLT, THREE PHASE
FILTERS	2" PLEATED "Z" FILTER SECTION, 30 PERCENT MINIMUM EFFICIENCY.
CABINET	PERFORATED GALVANIZED SHEETMETAL INNER LINER, 2" THICK, 3 POUND DENSITY ACOUSTICAL INSULATION, SOLID GALVANIZED SHEETMETAL OUTER PANEL. FABRICATE WITH BOLTED CONSTRUCTION, FULLY AIRTIGHT, INTERNALLY SPRING ISOLATED FAN. FINISH IN STANDARD FACTORY ENAMEL.
ECONOMIZER	PROVIDE UNIT WITH FULL ECONOMIZER MIXING SECTION.
WEIGHT	2,200 POUNDS
ACCESS	ALL ACCESS FROM SIDES OF UNIT. REFER TO MECHANICAL DRAWINGS.
POWER	SINGLE POINT POWER CONNECTION. COORDINATE WITH ELECTRICAL CONTRACTOR.
SMOKE DETECTION	BY ELECTRICAL.
MANUFACTURER	BASIS FOR DESIGN: TEMTROL. ACCEPTABLE ALTERNATES: GAYLORD (HUNTAIRE), PACE (YORK)

AIR HANDLING UNIT AHU-2	
SECTION	REMARKS
SUPPLY FAN	6,500 CFM, .75 INCHES EXTERNAL STATIC PRESSURE, ESTIMATED 2 INCH TOTAL STATIC PRESSURE, 24 INCH SWG FLUG FAN, 7.5 HORSEPOWER, 460 VOLT, THREE PHASE
FILTERS	2" PLEATED "Z" FILTER SECTION, 30 PERCENT MINIMUM EFFICIENCY.
CABINET	PERFORATED GALVANIZED SHEETMETAL INNER LINER, 2" THICK, 3 POUND DENSITY ACOUSTICAL INSULATION, SOLID GALVANIZED SHEETMETAL OUTER PANEL. FABRICATE WITH BOLTED CONSTRUCTION, FULLY AIRTIGHT, INTERNALLY SPRING ISOLATED FAN. FINISH IN STANDARD FACTORY ENAMEL.
COOLING COIL	CHILLED WATER COOLING COIL. 192,000 BTU/HR. TOTAL COOLING CAPACITY, 144,000 BTU/HR. SENSIBLE COOLING CAPACITY, 85 DEGREE F DRY BULB ENTERING AIR TEMPERATURE, 67 DEGREE F WET BULB ENTERING AIR TEMPERATURE, 45 DEGREE F ENTERING WATER TEMPERATURE AND 56 DEGREE LEAVING WATER TEMPERATURE, .3" WATER AIR SIDE PRESSURE DROP, 5.6 FOOT WATER SIDE PRESSURE DROP, 39 GPM FLOW RATE. MAXIMUM AIR VELOCITY AT 500 FPM.
HEATING COIL	HOT WATER HEATING COIL. 275,000 BTU/HR. TOTAL HEATING CAPACITY 55 DEGREE F DRY BULB ENTERING AIR TEMPERATURE, 180 DEGREE F ENTERING WATER TEMPERATURE AND 160 DEGREE LEAVING WATER TEMPERATURE, .12" WATER AIR SIDE PRESSURE DROP, 4.9 FOOT WATER SIDE PRESSURE DROP, 30 GPM FLOW RATE. MAXIMUM AIR VELOCITY AT 500 FPM.
ECONOMIZER	PROVIDE UNIT WITH FULL ECONOMIZER MIXING SECTION.
PIPING CHASE	PROVIDE AIRTIGHT PIPE CHASE THROUGH ROOF TO AHU-2 FOR INTERNAL PIPING CONNECTION.
WEIGHT	5,600 POUNDS
ACCESS	ALL ACCESS FROM SIDES OF UNIT. REFER TO MECHANICAL DRAWINGS.
POWER	SINGLE POINT POWER CONNECTION. COORDINATE WITH ELECTRICAL CONTRACTOR.
SMOKE DETECTION	BY ELECTRICAL.
MANUFACTURER	BASIS FOR DESIGN: TEMTROL. ACCEPTABLE ALTERNATES: GAYLORD (HUNTAIRE), PACE (YORK)

AIR CONDITIONING UNIT SCHEDULE																			
MARK	CFM	EXT. STATIC PRES.	COOLING NOMINAL BTUH	HEATING NOMINAL BTUH	EER	WEIGHT, LBS.	MCA	MOCF	VOLTS	PHASE	DESCRIPTION								
AC-1	600	0.0"	18,000	6,400	10	100	1	-	208/230	1	MITSUBISHI PK18EK, WALL MOUNTED INDOOR UNIT, WITH REFRIGERANT LINE KIT, REMOTE MOUNTED THERMOSTAT PROVIDE MATCHING OUTDOOR UNIT OR ACCEPTED EQUAL. MATCHING OUTDOOR CONDENSING UNIT, MITSUBISHI OR ACCEPTED EQUAL.								
											OUTDOOR	-	16	200	18	-	208/230	1	

GAS FIRED DUCT FURNACE SCHEDULE												
MARK	CFM	HEATING OUTPUT BTUH	WEIGHT, POUNDS	ELECTRICAL VOLTS	PHASE	REMARKS						
GF-1	8,000	320,000	450	120	1	NATURAL GAS FIRED DUCT FURNACE. SEPARATED COMBUSTIONS, MINIMUM AFUE 80 PERCENT. STAINLESS STEEL HEAT EXCHANGER. FIELD COORDINATE LEFT AND RIGHT HAND. REZNOR HSC OR ACCEPTED EQUAL.						

UNIT HEATER SCHEDULE												
MARK	WATTS	VOLTS	PHASE	REMARKS								
UH-1	2000	208	1	ELECTRIC UNIT HEATER, WITH EXTERNAL WALL THERMOSTAT KING KB SERIES OR ACCEPTED EQUAL.								
UH-2	5000	277	1	ELECTRIC UNIT HEATER, WITH EXTERNAL WALL THERMOSTAT KING KB SERIES OR ACCEPTED EQUAL.								

GRILLE AND DIFFUSER SCHEDULE												
MARK	GPM OR APPLICATION	STATIC PRESSURE	INLET OR NECK SIZE	FRAME SIZE	BASIS FOR DESIGN	STYLE	REMARKS					
SD-1	50-125	.11" WG	6" X 6"	12" X 12"	PRICE	SMCD	1, 3, 7					
SD-3	178-275	.07" WG	10" X 10"	24" X 24"	PRICE	SMCD	1, 3, 7					
SD-4	276-400	.07" WG	12" X 12"	24" X 24"	PRICE	SMCD	1, 3, 7					
SD-5	400	.03" WG	22" X 36"	24" X 36"	PRICE	NTX-12	1, 3, 7					
SD-6	1600	.03" WG	22" X 36"	24" X 36"	PRICE	CVD	1, 3, 7					
SD-7	600-700	.09" WG	1 AT 8" RND.	38" X 4"	PRICE	RCU	1, 3, 7					
SD-8	250	.08" WG	1 AT 8" RND.	38" X 4"	PRICE	LBP 25C	1, 3, 6					
SD-9	400	.04" WG	4 AT 8" RND.	216" X 2.5"	PRICE	SDA50	1, 2, 3, 10, 11					
SD-10							NOT USED					
SD-11	1000	.012" WG	12" X 30"	12" X 30"	PRICE	HCD	1, 3, 7					
SD-12	125	.08" WG	10" RND.		PRICE	RCO	1, 3, 7					
SD-13	FIR-1			312" X 4"	PRICE	LBP 15A	6, 8					
SD-14	FIR-2			312" X 4"	PRICE	LBP 15A	6, 8					
SD-15	FIR-3			312" X 4"	PRICE	LBP 15A	6, 8					
SD-16	FIR-4			312" X 4"	PRICE	LBP 15A	6, 8					
SD-17	FIR-7			210" X 4"	PRICE	LBP 15A	6, 8					
SD-18	FIR-8			624" X 4"	PRICE	LBP 15A	6, 8					
SD-19	500	.09" WG	12" RND.		PRICE	RCO	1, 3, 7					

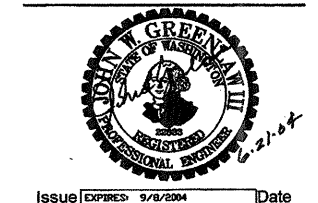
MARK	CFM	HEATING DATA BTUH	EWT	GPM	REMARKS		
RG-1	1600	.040" WG	30" X 22"	30" X 22"	PRICE	630	1, 3, 7
RG-3	2000	.040" WG	36" X 24"	36" X 24"	PRICE	630	1, 3, 7
RG-4	50-250	.040" WG	10" X 10"	12" X 12"	PRICE	PDR	1, 3
RG-5	2000	.020" WG	58" X 22"	60" X 24"	PRICE	LBP 25C	3, 6
RG-6	50-250	.040" WG	10" X 10"	12" X 12"	PRICE	PDR	1, 3
RG-7	150-300	.034" WG	10" X 10"	24" X 24"	PRICE	PDR	1, 3
RG-8	350	.04" WG	24" X 10"	24" X 12"	PRICE	SDR 50	1, 2, 3, 10
RG-9	2000	.044" WG	24" X 10"	242" X 12"	PRICE	630	1, 3, 7, 10
RG-10	1200	.025" WG	42" X 28"	42" X 28"	PRICE	96	1, 3, 7
RG-11	8000	.035" WG	40" X 84"	43" X 87"	PRICE	96	1, 3, 7
RG-12	8000	.038" WG	40" X 84"	43" X 87"	PRICE	96	1, 3, 7
RG-13	1200	.05" WG	72" X 8"	72" X 8"	PRICE	LBP 25C	1, 3, 6
RG-14	1600-2000	.01" WG	58" X 44"	60" X 46"	PRICE	LBP 25C	3, 6
RG-15	125	.04" WG	150" X 2.5"		PRICE	SDR 50	1, 2, 3, 10
EG-1	50-250	.040" WG	10" X 10"	12" X 12"	PRICE	PDR	1, 3
EG-2	150-300	.034" WG	10" X 10"	24" X 24"	PRICE	PDR	1, 3
EG-3	8000	.035" WG	64" X 48"	64" X 48"	PRICE	96	1, 3

- REMARKS:
- DUCT CONNECTION TO DIFFUSER, REGISTER OR GRILLE SHALL BE MINIMUM SCHEDULED NECK SIZE. PROVIDE TRANSITION FROM DUCT SIZE INDICATED ON PLAN TO GRILLE, REGISTER OR DIFFUSER AS REQUIRED.
 - MAKE CONTINUOUS GRILLE PER ARCHITECT PLANS, WITH INACTIVE SECTIONS.
 - COORDINATE THE FINAL LOCATION WITH ARCHITECT.
 - PROVIDE WITH FABRIC BACKDRAFT DAMPER
 - SEE ARCHITECTURAL PLANS FOR BREAK LOCATIONS IN LINEAR GRILLES.
 - PROVIDE GRILLE WITH BRUSHED ALUMINUM STANDARD FINISH.
 - STANDARD PAINTED FINISH, COORDINATE COLOR WITH ARCHITECT.
 - GRILLE COVER FOR FINNED TUBE RADIATOR IN ARCHITECTURAL ENCLOSURE. SEE DETAIL 6/M.3. ESTIMATE LENGTH FROM THE DRAWINGS FOR BIDDING AND FIELD VERIFY ACTUAL LENGTH PRIOR TO ORDERING.
 - PROVIDE EXTERIOR GRILLE WITH BUG SCREEN.
 - ESTIMATED DIMENSIONS, FIELD VERIFY SIZE PRIOR TO ORDERING.
 - PROVIDE SHOP FABRICATED PLENUM TO ALLOW CLEARANCE FOR DUCTWORK, REFER TO DRAWINGS.

ROOF VENTILATOR SCHEDULE												
MARK	CFM	STATIC PRESSURE	THROAT SIZE	CURB SIZE	BASIS FOR DESIGN	STYLE	REMARKS					
RV-1	1600-2000	0.035	30" X 22"	36" X 30"	GREENHECK	WRH	1					
RV-2	3200	0.05	36" X 24"	44" X 32"	GREENHECK	WRH	1					
RV-3	8000	0.024	48" X 24"	56" X 72"	GREENHECK	WRH	1					
RV-4	3200	0.03	48" X 32"	56" X 40"	GREENHECK	WRH	1					
RV-5	150	0.008	12" X 12"	20" X 20"	GREENHECK	WH	1					
RV-6	2000	0.024	36" X 24"	44" X 32"	GREENHECK	WRH	1					
RV-7	200	0.024	16" X 32"	24" X 40"	GREENHECK	WRH	1					

REMARKS: 1. PROVIDE WITH CUSHIONED BACKDRAFT DAMPER.

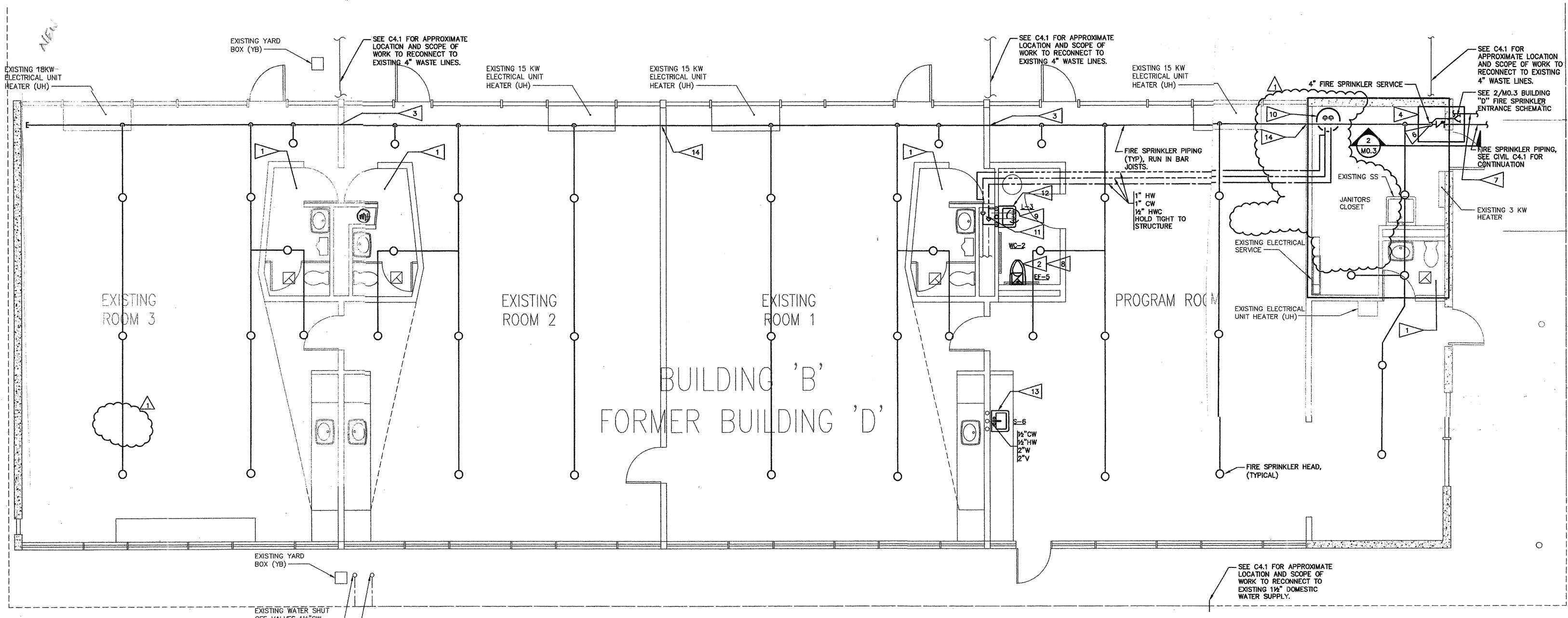
EXHAUST FAN SCHEDULE												
MARK	CFM	EXTERNAL STATIC PRESSURE	HP/WATTS	VOLTS	PHASE	REMARKS						
EF-1	1400	.5" W.G.	1/2	120	1	CENTRIFUGAL INLINE BELT DRIVE FAN, BACKDRAFT DAMPER. GREENHECK BSQ-130 OR ACCEPTED EQUAL.						
EF-2	150-200	.25" W.G.	1/4	120	1	CENTRIFUGAL INLINE BELT DRIVE FAN, BACKDRAFT DAMPER. GREENHECK BSQ-70 OR ACCEPTED EQUAL.						
EF-3	1000	.25" W.G.	1/4	120	1	ROOF EXHAUST FAN, BACKDRAFT DAMPER. GREENHECK GE-140 OR ACCEPTED EQUAL.						
EF-4	100	.25" W.G.	1/60	120	1	ROOF EXHAUST FAN, BACKDRAFT DAMPER AND SPEED CONTROL. GREENHECK G-060 OR ACCEPTED EQUAL.						



Issue	EXPIRES: 9/8/2004	Date
1	Approved - 07/12/04	

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Issue Date	06/24/2004
Drawn	RR/MS
Checked	JWC
M/H Project No.	0317
Cad File	2003.085



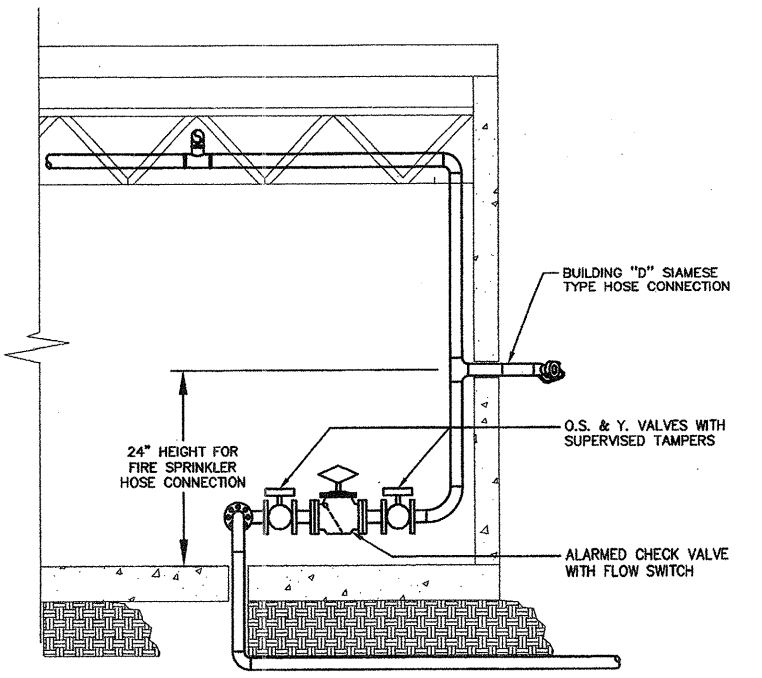
1 BUILDING D - MECHANICAL PLAN
 SCALE: 1/4"=1'-0" 03085M2.2.dwg

DRAWING NOTE:

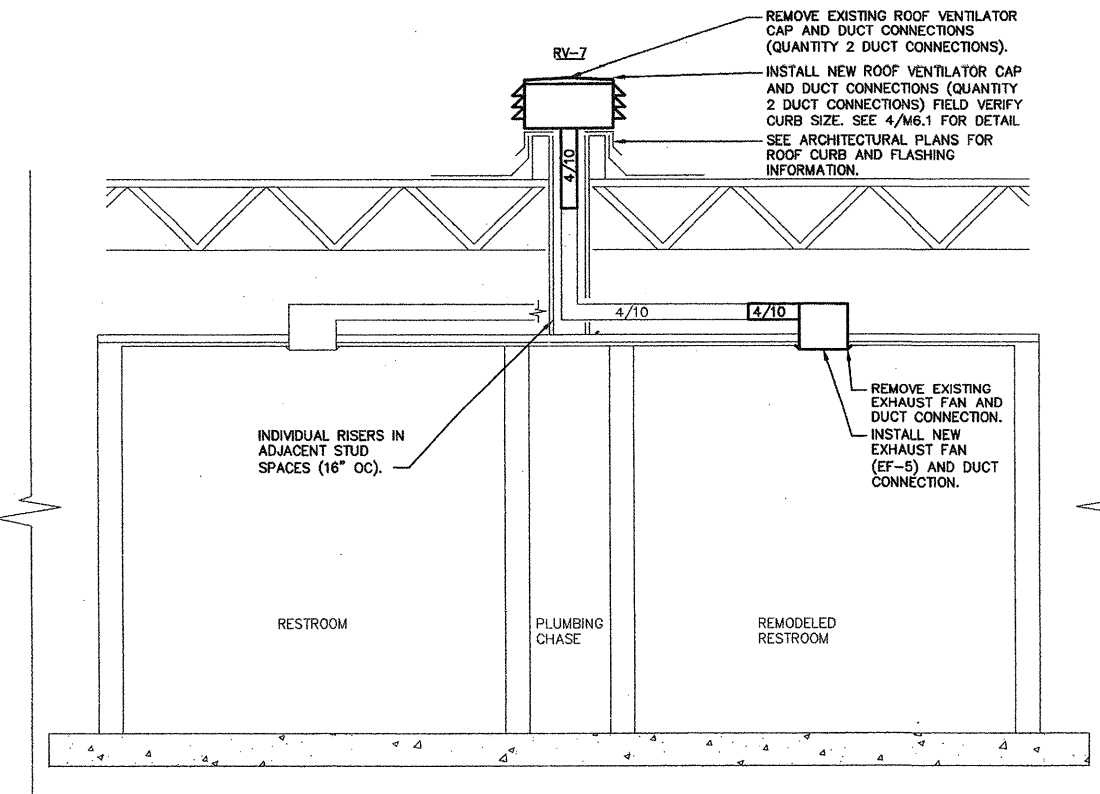
- BUILDING "D" SHALL BE FULLY SPRINKLED, PIPING ARRANGEMENT INDICATED IS DIAGRAMMATIC. PIPING DESIGN SHALL BE BY FIRE SPRINKLER CONTRACTOR. SEE SPECIFICATION SECTION 15300.

FLAG NOTES:

- NO MECHANICAL WORK IN THIS RESTROOM.
- REMOVE EXISTING WC AND REPLACE WITH WC-2. RECONNECT TO EXISTING PLUMBING.
- STUDWALL, CUT HOLE FOR 4" FIRE SPRINKLER PIPING, REPAIR TO MATCH EXISTING WALL SURFACE.
- SAW CUT SLAB, AND EXCAVATE, EXCAVATE UNDER SLAB AND FOOTING AS NECESSARY TO INSTALL FIRE SPRINKLER PIPING. FILL AND REPAIR TO MATCH EXISTING.
- NOT USED
- PER CITY OF MERCER ISLAND FIRE MARSHALL, ROO MANDERY, BUILDING D SHALL BE A ZONE OF THE MAIN BUILDING. BUILDING D WILL NOT REQUIRE ITS OWN SERVICE. BUILDING D WILL ALL BE SERVED FROM THE MAIN BUILDING FIRE SPRINKLER SUPPLY. BUILDING D WILL REQUIRE ITS OWN SIAMESE CONNECTION. ALSO SEE 2/MO.3.
- SEE C4.1 FOR APPROXIMATE LOCATION AND SCOPE OF WORK TO RECONNECT TO EXISTING 1.5" WATER PIPING. (NO MECHANICAL WORK. ALL WORK PROVIDED BY CIVIL CONTRACTOR.)
- REMOVE EXISTING EXHAUST FAN. PROVIDE NEW EXHAUST FAN AND DUCT CONNECTIONS. SEE 3/MO.3 BATHROOM SCHEMATIC.
- REMOVE EXISTING WATER HEATER.
- INSTALL A NEW DWH-2. SEE 3/MO.4 DOMESTIC ELECTRIC WATER HEATER DETAIL.
- POC TO EXISTING 1" HW AND CW PIPING.
- CONNECT L-3 TO ADJACENT LAVATORY RISERS. 1/2" CW, 1/2" HW, 2" W AND 2" V.
- REMOVE EXISTING SINK. INSTALL S-6 SINK ADDITION TO BE CONNECTED TO EXISTING SINK SERVICE ON ADJACENT SINK RISERS
- CORE DRILL CONCRETE WALL FOR 4" MAIN FIRE SPRINKLER PIPE RUN. MAINTAIN A MINIMUM 12" TO THE EDGE OF THE WALL. HOLD SPRINKLER PIPING TIGHT TO STRUCTURE. COORDINATE WITH ARCHITECT.

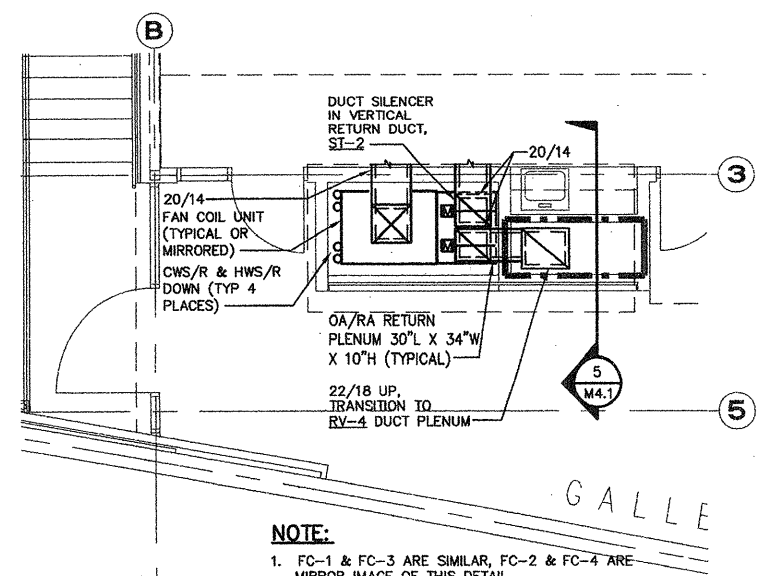
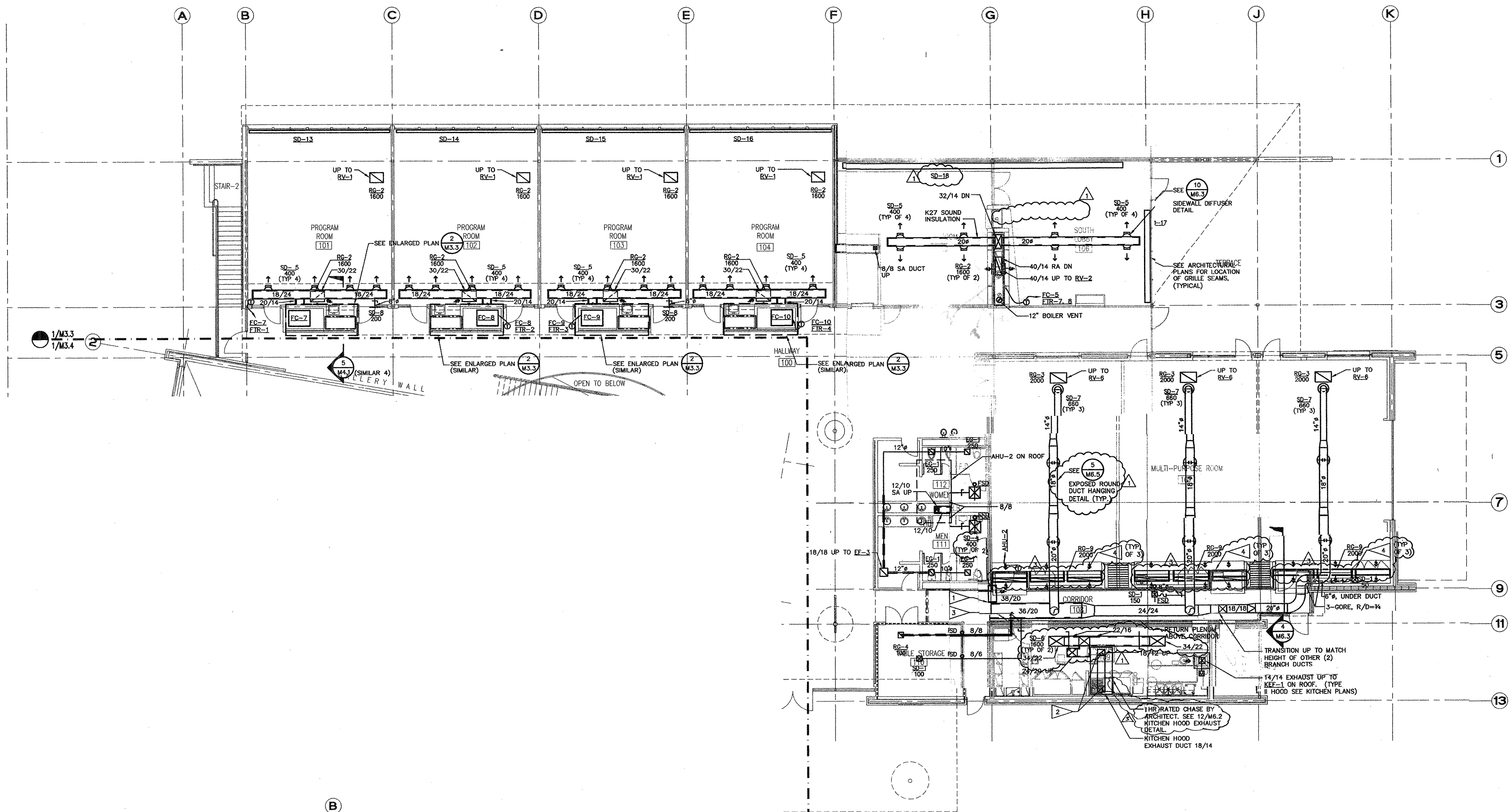


2 BUILDING D - FIRE SPRINKLER ENTRANCE SCHEMATIC
 SCALE: NONE 03085M2.2.dwg



3 BATHROOM SCHEMATIC
 SCALE: NONE 03085M2.2.dwg

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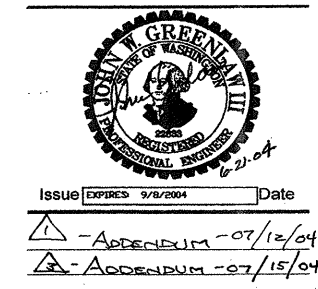


2 TYPICAL ENLARGED LOWER LEVEL HVAC PLAN EAST
 SCALE: 1/4"=1'-0"
 03.085M3.1

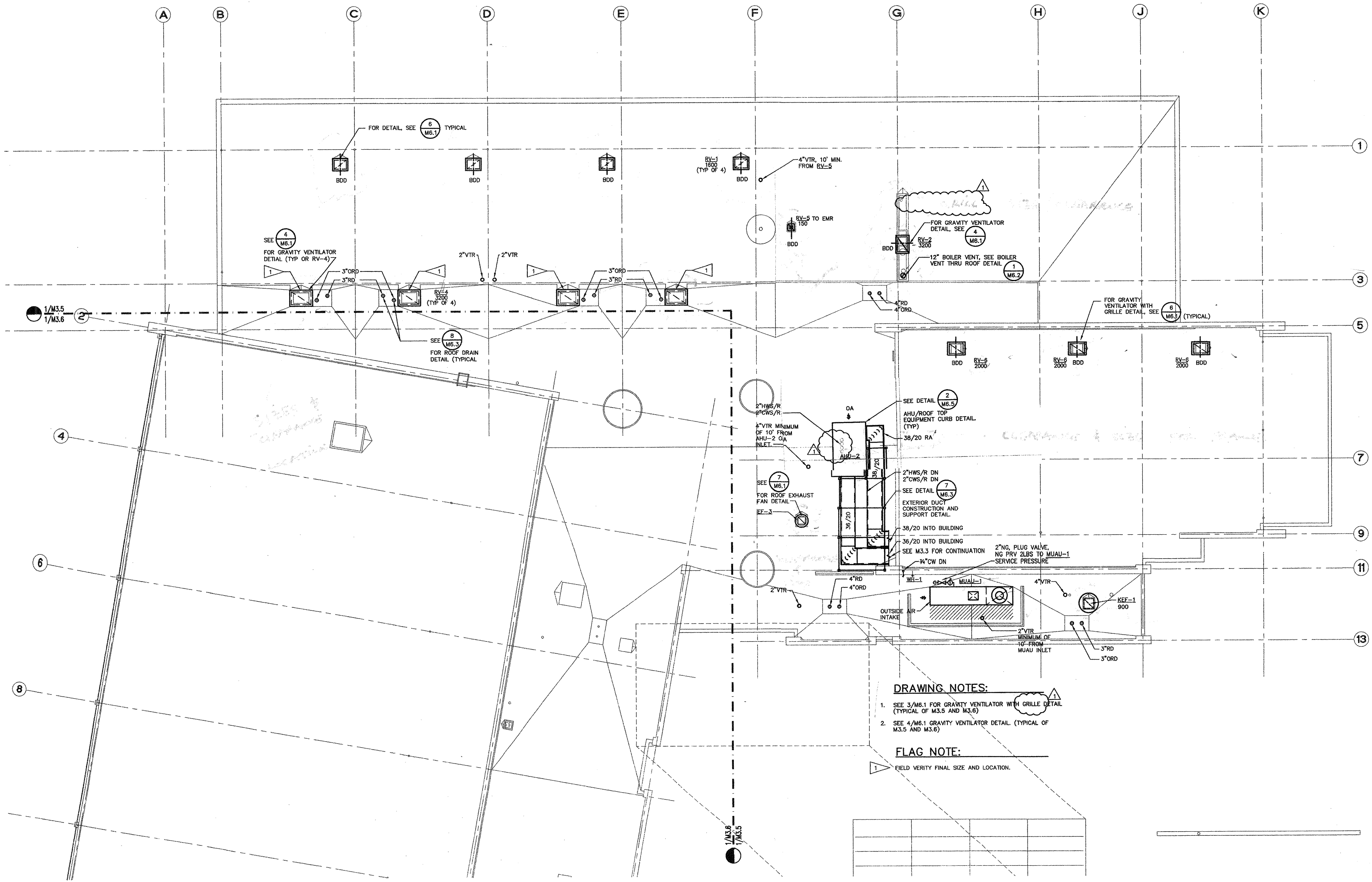
DRAWING NOTE:
 1. COORDINATE CEILING MOUNTED EQUIPMENT WITH REFLECTED CEILING PLANS AND ARCHITECT.

FLAG NOTES:
 1 CONTINUED ON M3.5
 2 ACCESS PANEL IN KITCHEN EXHAUST DUCT.
 3 STRUCTURAL WILL PROVIDE OPENINGS IN BLOCK WALL FOR DUCT PENETRATION. COORDINATE SIZE OF OPENING AND LOCATION WITH ARCHITECTURAL AND STRUCTURAL. TRANSITION DUCTS THROUGH PENETRATION AS REQUIRED.
 4 PROVIDE 3 EQUALLY SPACED, 10" HIGH X 78" LONG, ACUSTICALLY LINED RETURN BOOTS IN EACH OF MULTIPURPOSE ROOM 107 A, B AND C (TOTAL QUANTITY OF 9). COORDINATE WITH FRAMING CONTRACTOR. BLANK OFF AND PAINT NON ACTIVE SECTIONS BLACK. ALSO SEE 4/M6.3.

1 MAIN LEVEL HVAC PLAN EAST
 SCALE: 1/8"=1'-0"
 03085M3.3.dwg



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DRAWING NOTES:

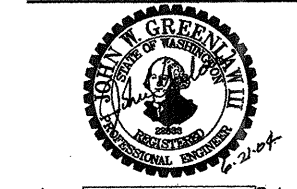
- SEE 3/M6.1 FOR GRAVITY VENTILATOR WITH GRILLE DETAIL (TYPICAL OF M3.5 AND M3.6)
- SEE 4/M6.1 GRAVITY VENTILATOR DETAIL (TYPICAL OF M3.5 AND M3.6)

FLAG NOTE:

FIELD VERIFY FINAL SIZE AND LOCATION.

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

03085M3.5.dwg



Issue Expires: 9/9/2004 Date: _____

Drawn	RR/MWS
Checked	JWG
MJH Project No.	0317
Cad File	2003.085

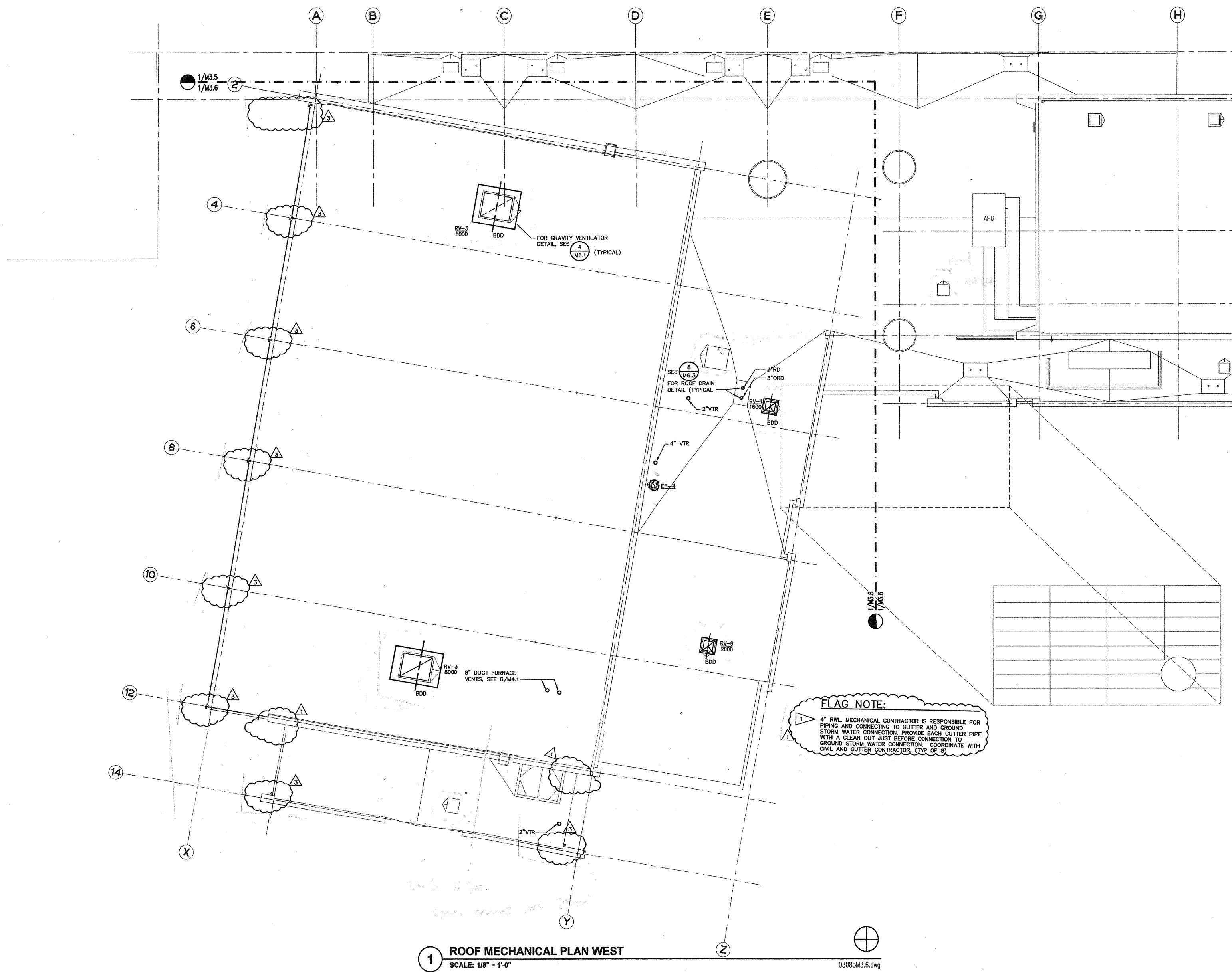
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Issue Date: 06/24/2004
 Drawn: RR/MWS
 Checked: JWG
 MJH Project No.: 0317
 Cad File: 2003.085

ROOF MECHANICAL PLAN EAST

M3.5

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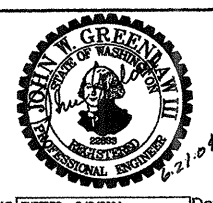
Issue (EXPRES) 9/8/2004 Date

△	Appendum - 07/12/04
△	Appendum - 07/18/04

100% CD

Issue Date	06/24/2004
Drawn	RV/MWS
Checked	JWC
MJH Project No.	0317
Cad File	2003.085

ROOF MECHANICAL PLAN WEST
M3.6



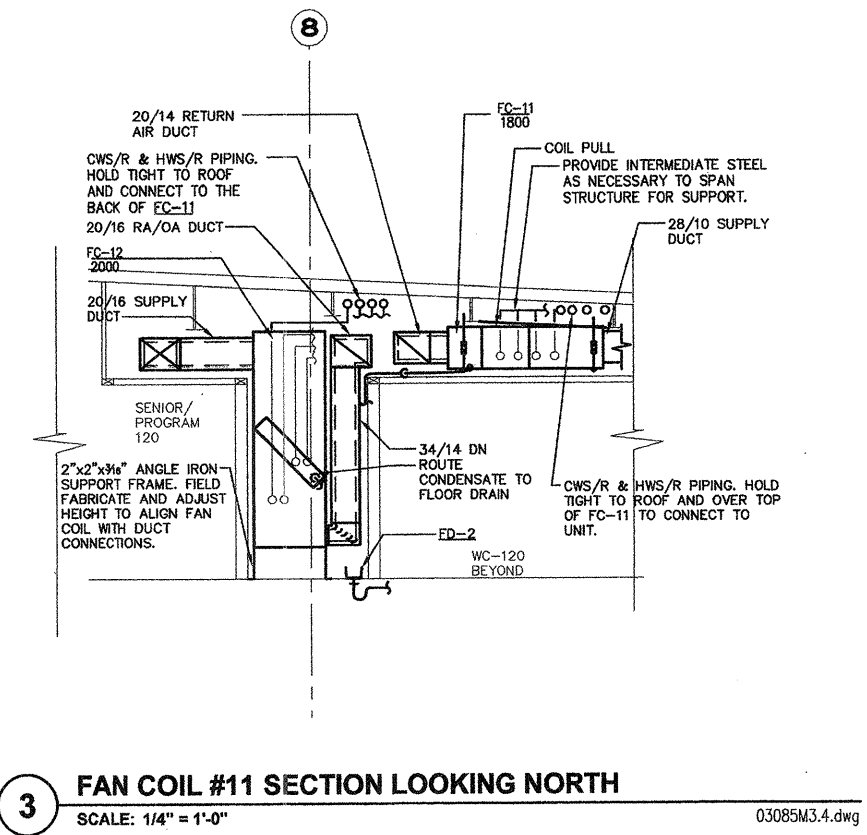
Issue [EXPRES 9/8/2004] Date _____
Drawn [JWC] _____
Checked [JWC] _____
M/J Project No. 0317
Cad File 2003.085

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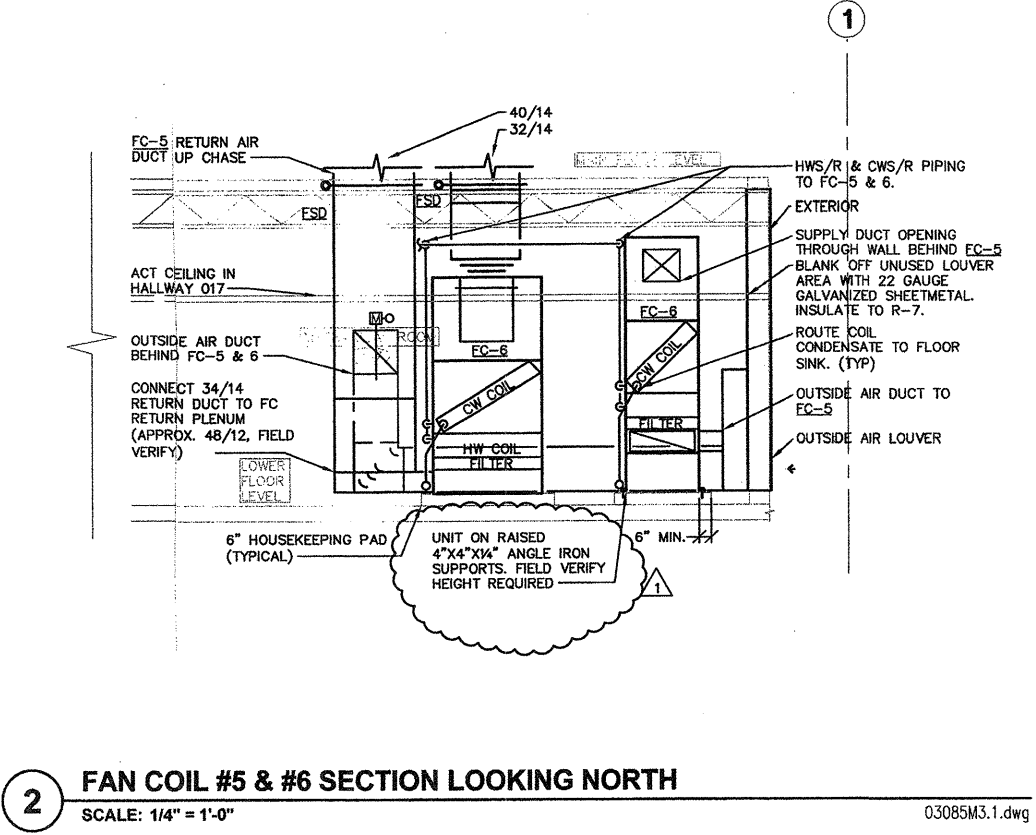
Issue Date 06/24/2004
Drawn JWC
Checked JWC
M/J Project No. 0317
Cad File 2003.085

MECHANICAL SECTIONS

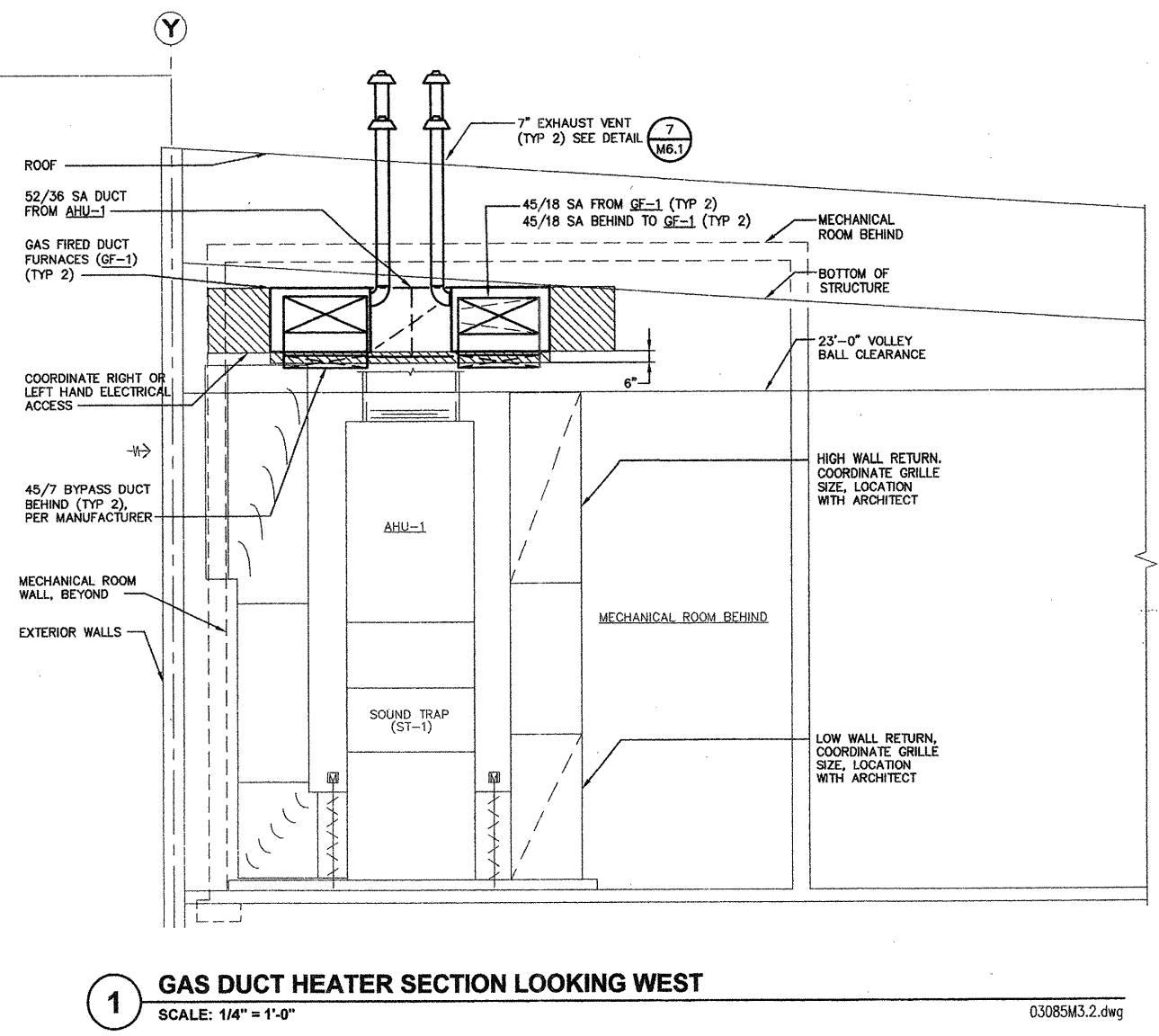
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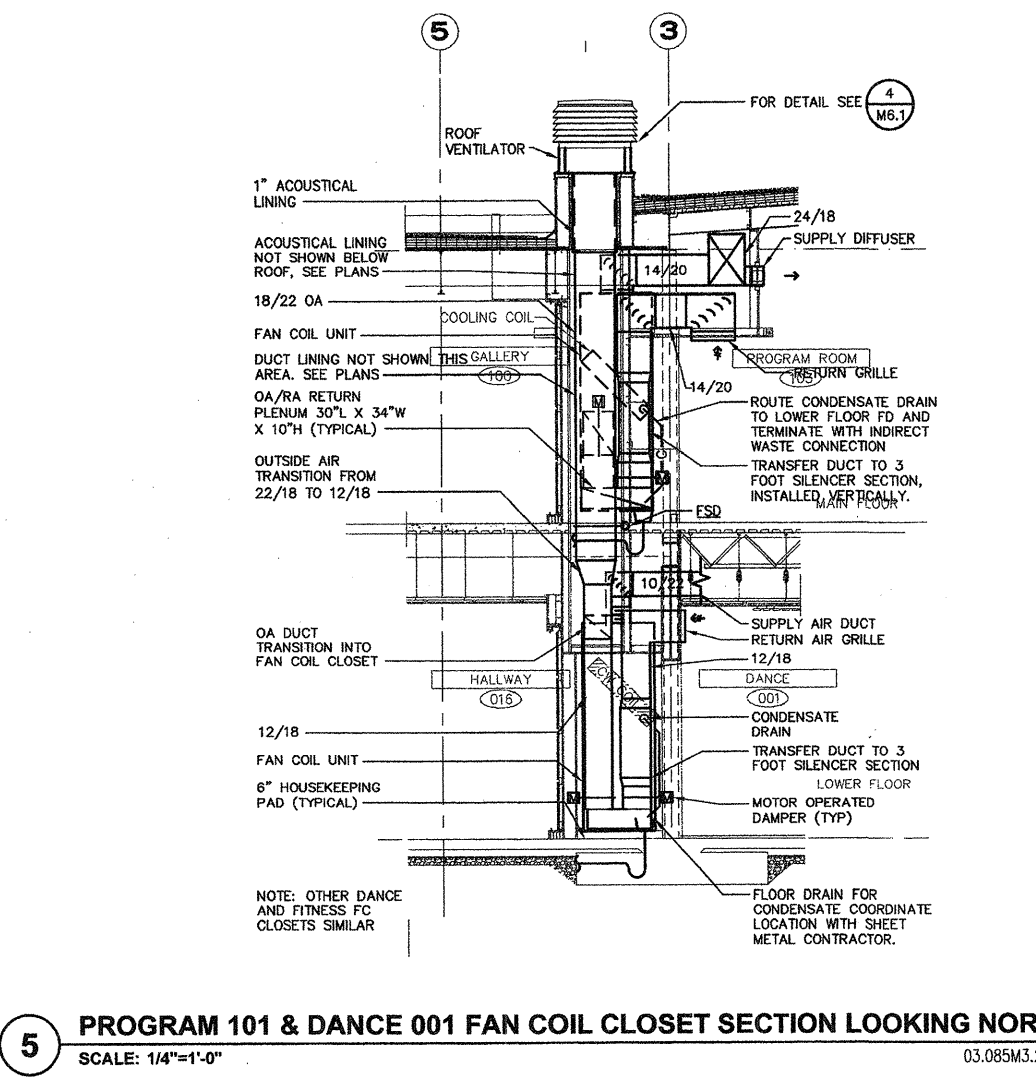
3 FAN COIL #11 SECTION LOOKING NORTH
SCALE: 1/4" = 1'-0" 03085M3.4.dwg



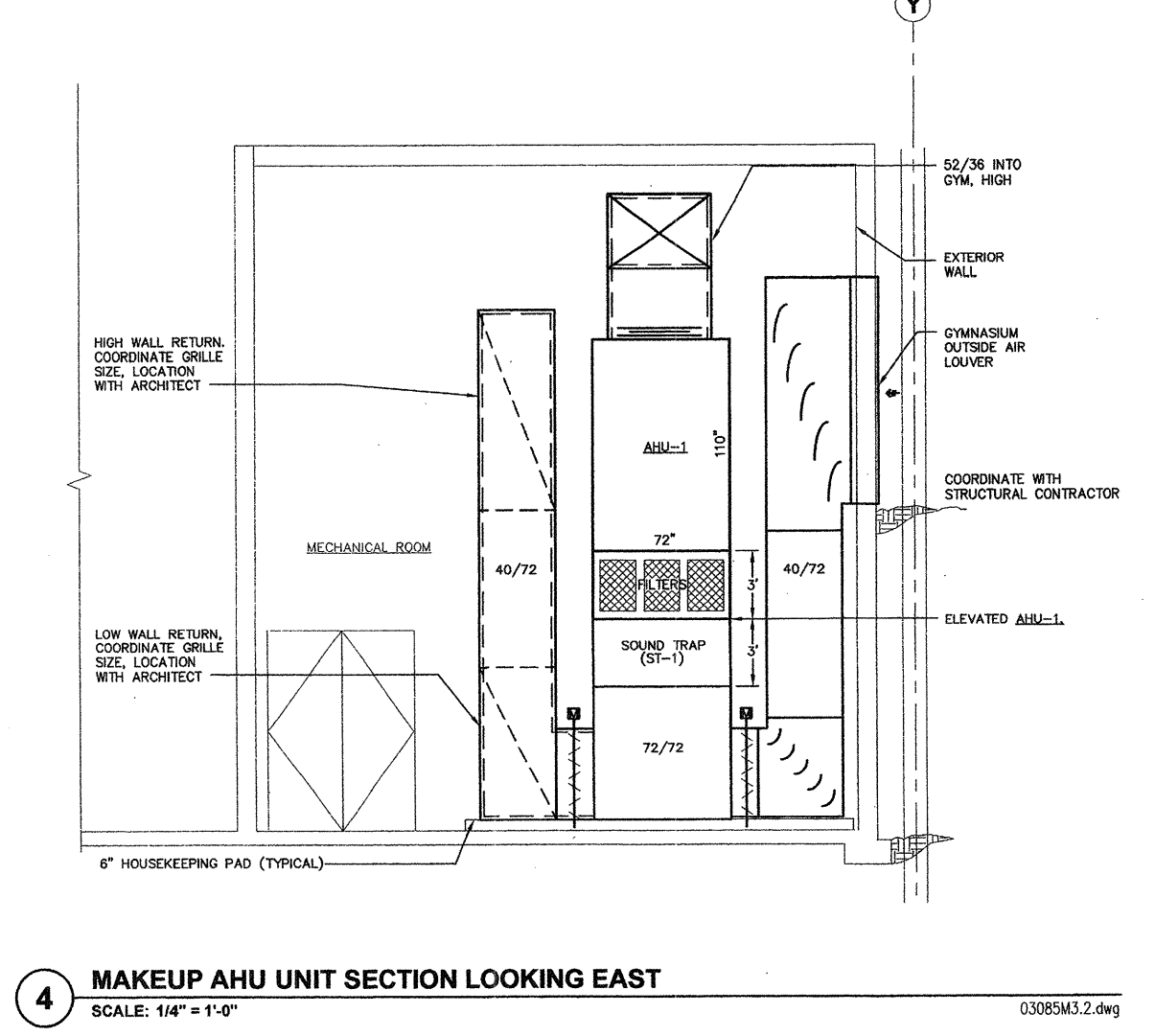
2 FAN COIL #5 & #6 SECTION LOOKING NORTH
SCALE: 1/4" = 1'-0" 03085M3.1.dwg



1 GAS DUCT HEATER SECTION LOOKING WEST
SCALE: 1/4" = 1'-0" 03085M3.2.dwg



5 PROGRAM 101 & DANCE 001 FAN COIL CLOSET SECTION LOOKING NORTH
SCALE: 1/4" = 1'-0" 03085M3.2



4 MAKEUP AHU UNIT SECTION LOOKING EAST
SCALE: 1/4" = 1'-0" 03085M3.2.dwg

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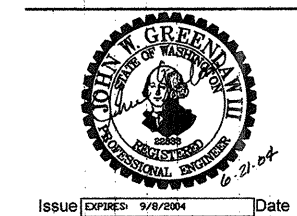
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 1900 W. Nickerson Street,
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 720 Olive Way, Suite 1400
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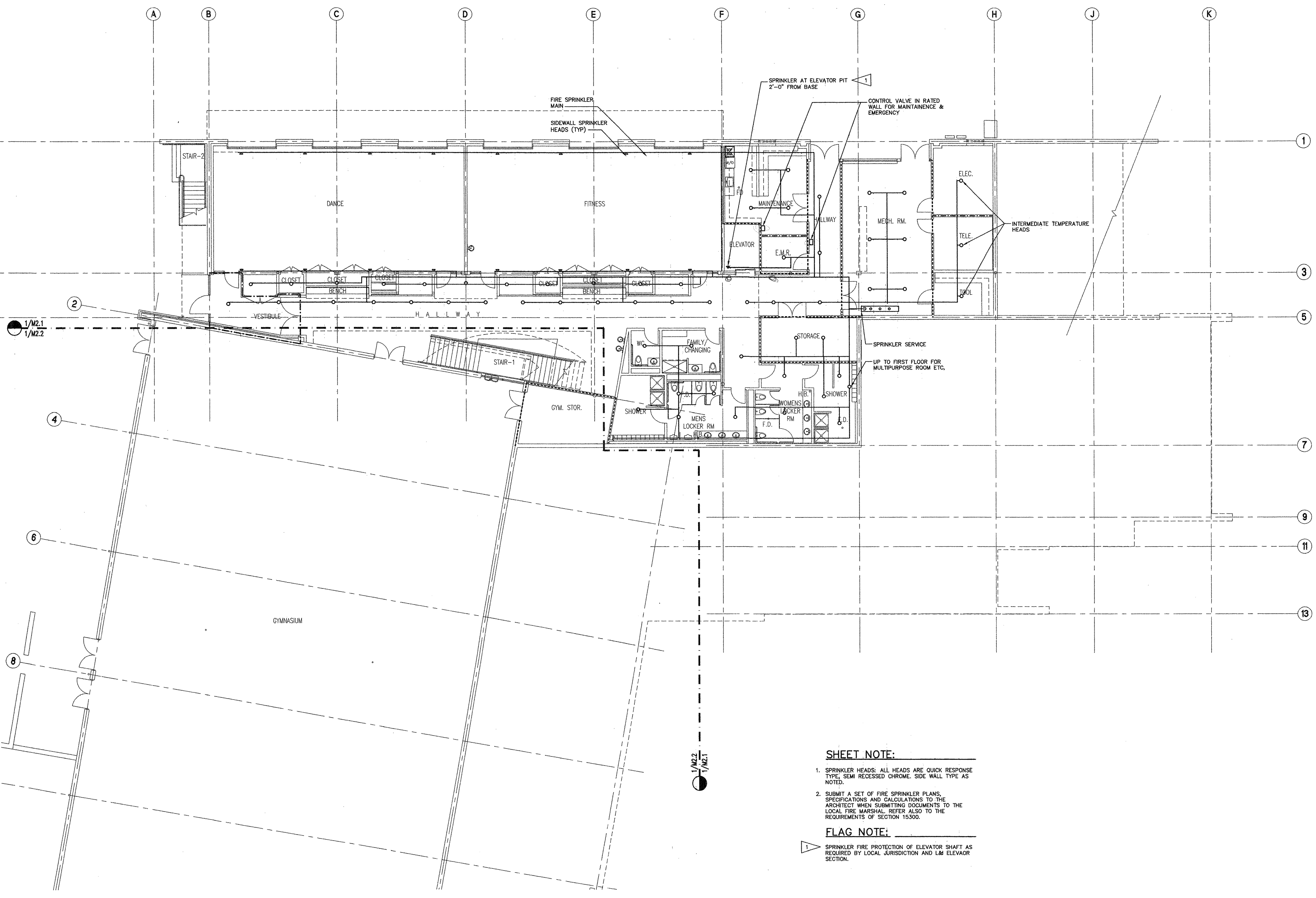
FOOD FACILITIES PLANNING
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Issue	Expires	Date



SHEET NOTE:

1. SPRINKLER HEADS: ALL HEADS ARE QUICK RESPONSE TYPE, SEMI RECESSED CHROME, SIDE WALL TYPE AS NOTED.
2. SUBMIT A SET OF FIRE SPRINKLER PLANS, SPECIFICATIONS AND CALCULATIONS TO THE ARCHITECT WHEN SUBMITTING DOCUMENTS TO THE LOCAL FIRE MARSHAL. REFER ALSO TO THE REQUIREMENTS OF SECTION 15300.

FLAG NOTE:

- SPRINKLER FIRE PROTECTION OF ELEVATOR SHAFT AS REQUIRED BY LOCAL JURISDICTION AND L&M ELEVATOR SECTION.

1 LOWER LEVEL FIRE SPRINKLER DIAGRAMMATIC ROUTING PLAN EAST
 SCALE: 1/8" = 1'-0"

03085M5.1.dwg

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Issue Date	06/24/2004
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Cad File	2003.085

LOWER LEVEL FIRE SPRINKLER ROUTING PLAN EAST

M5.1



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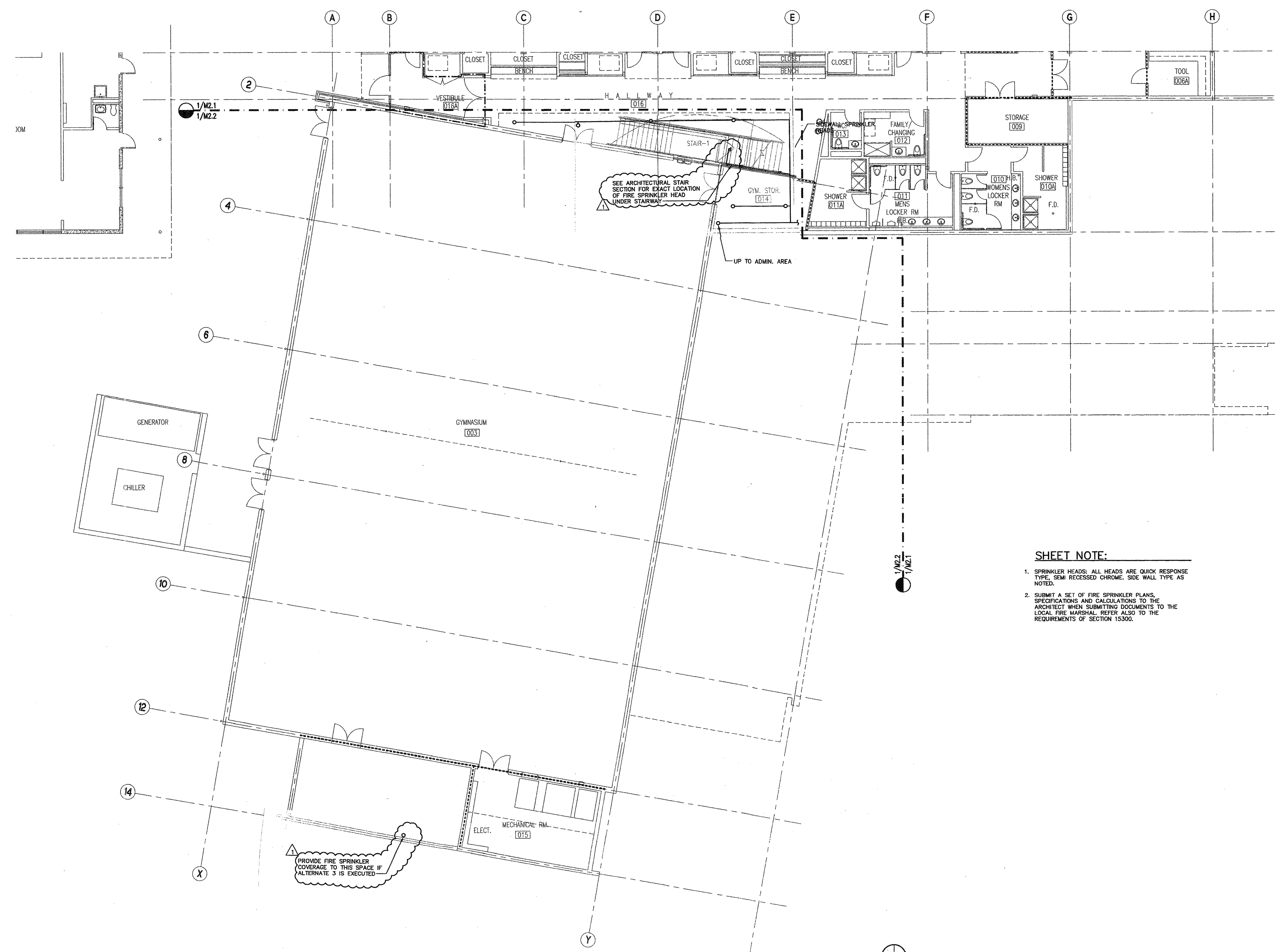
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SHEET NOTE:

1. SPRINKLER HEADS: ALL HEADS ARE QUICK RESPONSE TYPE, SEMI RECESSED CHROME, SIDE WALL TYPE AS NOTED.
2. SUBMIT A SET OF FIRE SPRINKLER PLANS, SPECIFICATIONS AND CALCULATIONS TO THE ARCHITECT WHEN SUBMITTING DOCUMENTS TO THE LOCAL FIRE MARSHAL REFER ALSO TO THE REQUIREMENTS OF SECTION 15300.

1 LOWER LEVEL FIRE SPRINKLER DIAGRAMMATIC ROUTING PLAN WEST
SCALE: 1/8" = 1'-0"

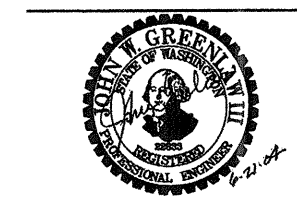
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Issue Date 06/24/2004
Drawn RR
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MJH Project No. 0317
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LOWER LEVEL FIRE SPRINKLER ROUTING PLAN WEST

M5.2

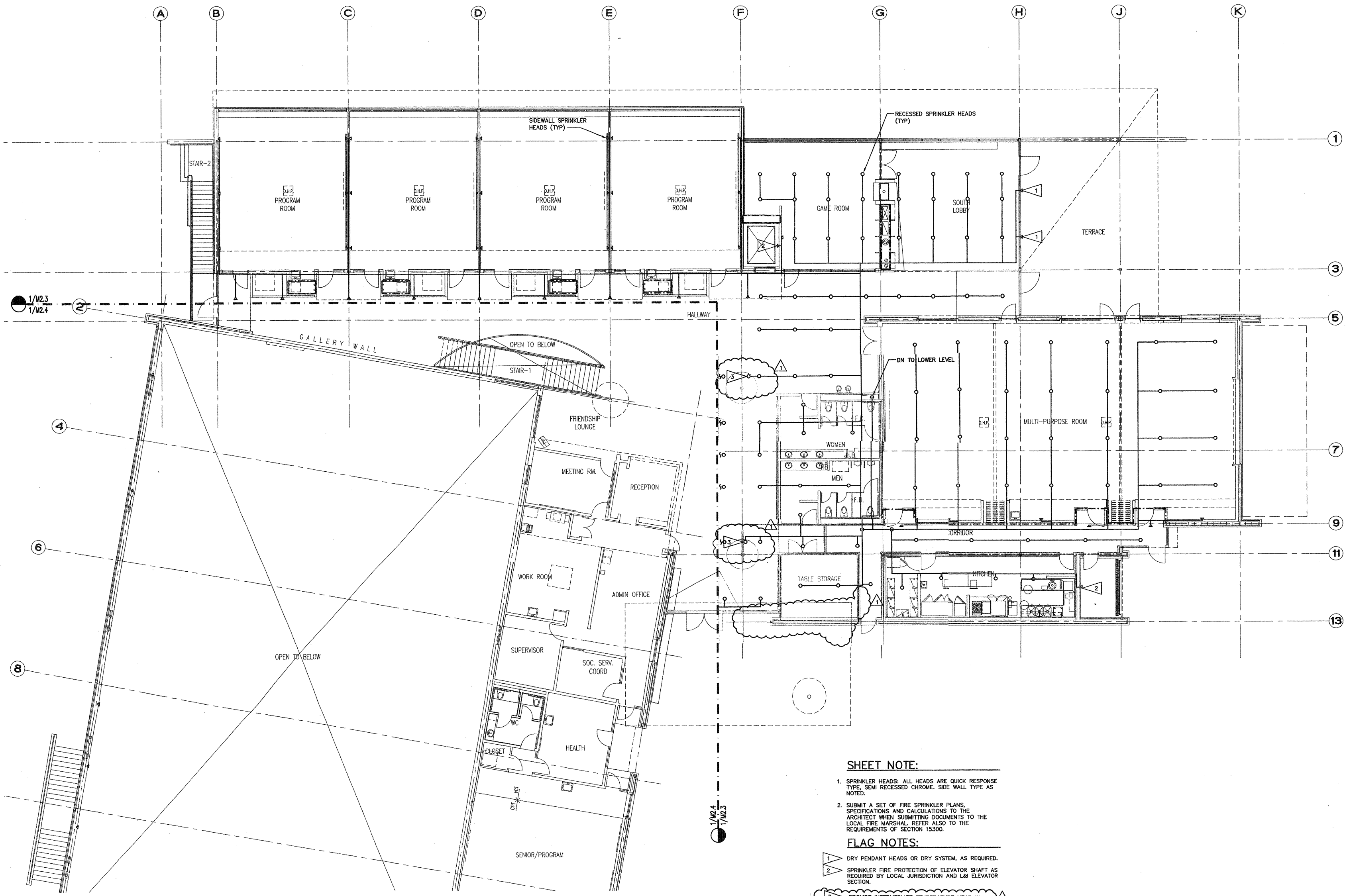


Issue Expires: 9/8/2004 Date

- APPENDUM 07/12/04

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SHEET NOTE:

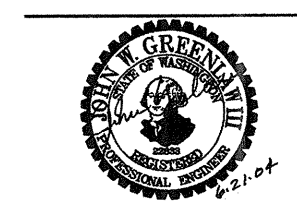
- SPRINKLER HEADS: ALL HEADS ARE QUICK RESPONSE TYPE, SEMI RECESSED CHROME. SIDE WALL TYPE AS NOTED.
- SUBMIT A SET OF FIRE SPRINKLER PLANS, SPECIFICATIONS AND CALCULATIONS TO THE ARCHITECT WHEN SUBMITTING DOCUMENTS TO THE LOCAL FIRE MARSHAL. REFER ALSO TO THE REQUIREMENTS OF SECTION 15300.

FLAG NOTES:

- 1 DRY PENDANT HEADS OR DRY SYSTEM, AS REQUIRED.
- 2 SPRINKLER FIRE PROTECTION OF ELEVATOR SHAFT AS REQUIRED BY LOCAL JURISDICTION AND L&M ELEVATOR SECTION.
- 3 PROVIDE INTERMEDIATE TEMPERATURE HEAD IN SKYLIGHTS.

1 MAIN LEVEL FIRE SPRINKLER DIAGRAMMATIC ROUTING PLAN EAST
 SCALE: 1/8" = 1'-0"

03085M5.3.dwg



Issue/Date: 06/24/2004 Date
 Appendium - 07/12/04

100% CD

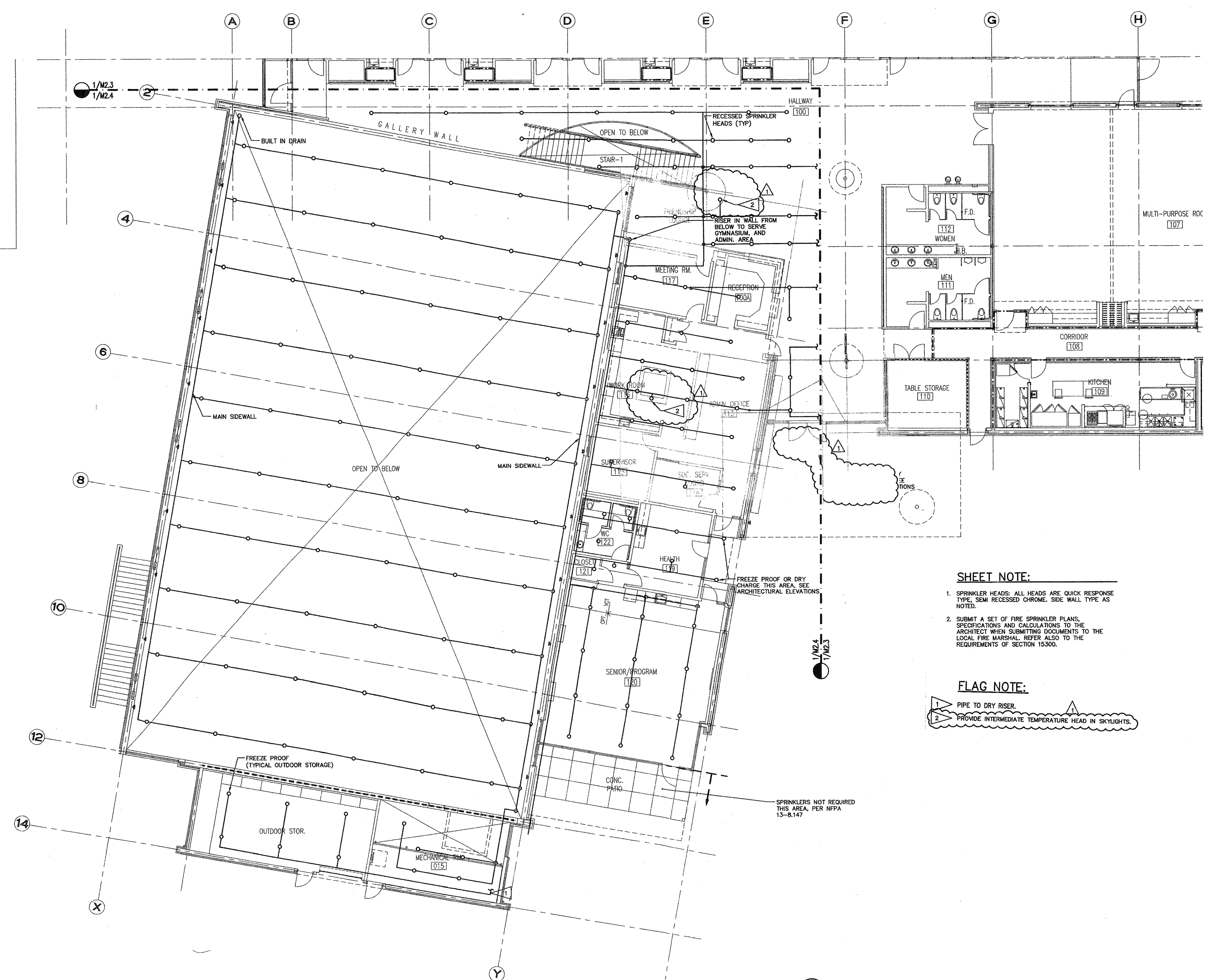
Issue Date	06/24/2004
Drawn	RR
Checked	DO
M/H Project No.	0317
Cad File	2003.085

MAIN LEVEL FIRE SPRINKLER ROUTING PLAN EAST

M5.3

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 - INTERIOR DESIGN**
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 Seattle, WA 98104



SHEET NOTE:

1. SPRINKLER HEADS: ALL HEADS ARE QUICK RESPONSE TYPE, SEMI RECESSED CHROME, SIDE WALL TYPE AS NOTED.
2. SUBMIT A SET OF FIRE SPRINKLER PLANS, SPECIFICATIONS AND CALCULATIONS TO THE ARCHITECT WHEN SUBMITTING DOCUMENTS TO THE LOCAL FIRE MARSHAL. REFER ALSO TO THE REQUIREMENTS OF SECTION 15300.

FLAG NOTE:

- 1 PIPE TO DRY RISER.
- 2 PROVIDE INTERMEDIATE TEMPERATURE HEAD IN SKYLIGHTS.

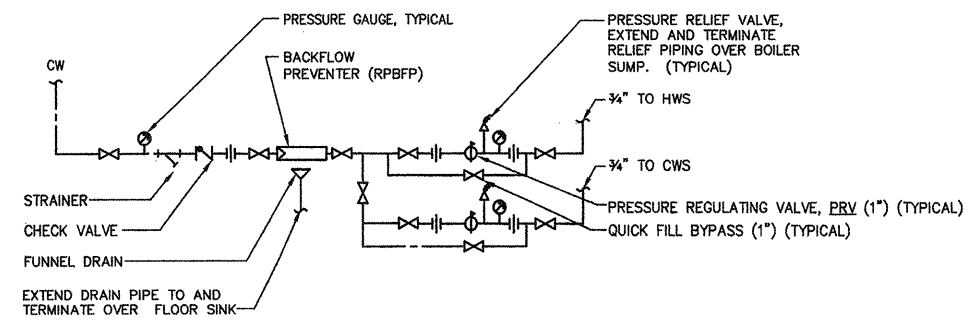
1 MAIN LEVEL FIRE SPRINKLER DIAGRAMMATIC ROUTING PLAN WEST
 SCALE: 1/8" = 1'-0"
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Issue Date	06/24/2004
Drawn	RR
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MAIN LEVEL FIRE SPRINKLER ROUTING PLAN WEST

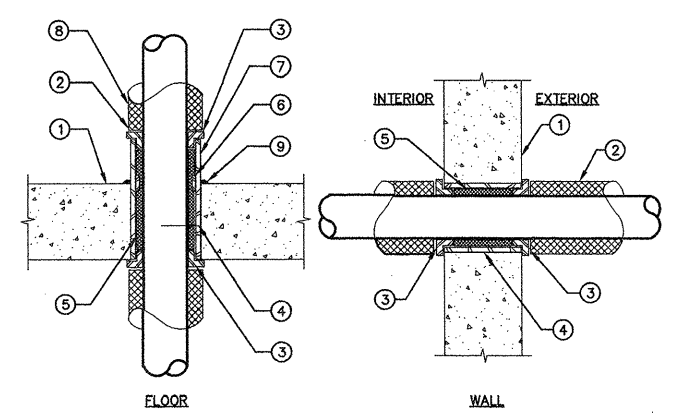
M5.4



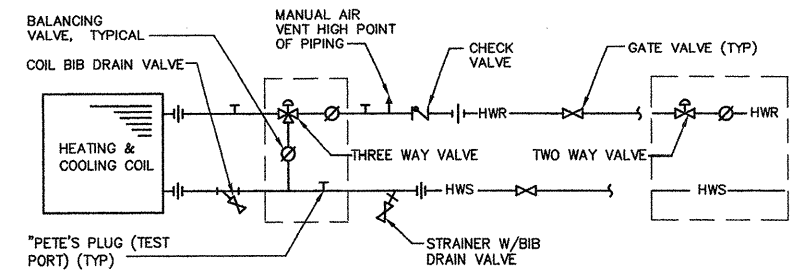
3 HEATING & CHILLED WATER FILL PIPING DIAGRAM
SCALE: NONE

NOTES:

- PRECAST CONCRETE OR EXISTING CONCRETE WALL OR FLOOR.
- PIPE INSULATION TO BUTT AGAINST PLUG.
- PLUG USED TO SEAL AROUND PASS THROUGH PIPE AND SUPPORTS PIPE. PROVIDE ADHESIVE CEMENT BETWEEN INSULATION AND PLUG TO SEAL FOR VAPOR BARRIER IN CHILLER WATER PIPING.
- SLEEVE PRESSED FIT INTO CORED HOLE.
- COMPLETELY FILL THE VOID BETWEEN THE PIPE AND THE SLEEVE WITH FIREFILL MATERIAL.
- INSERT PIPE TO SUPPORT SLEEVE EXTENSION.
- SLEEVE EXTENSION.
- INSULATION ABOVE FLOOR.
- SEAL AROUND PIPE FOR WATERPROOFING.



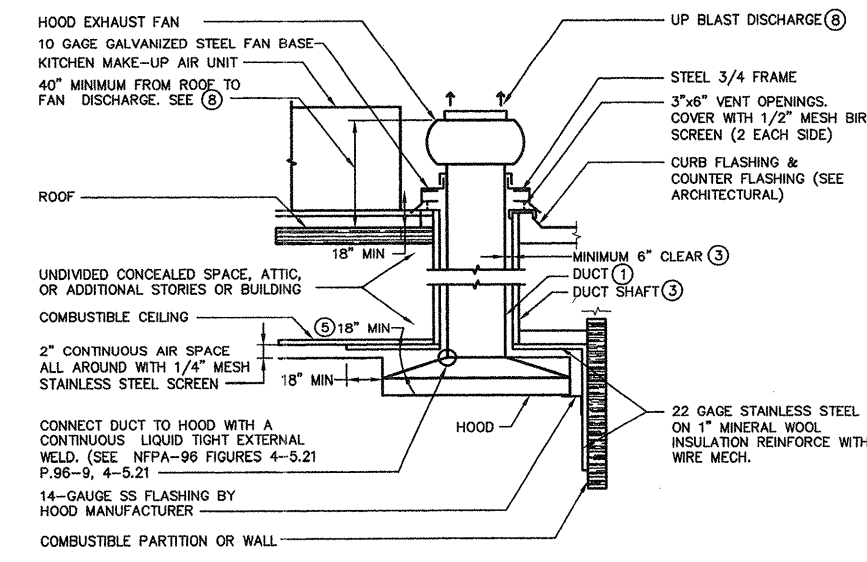
6 INSULATED PIPE PENETRATION THRU CONCRETE WALL OR FLOOR
SCALE: NONE



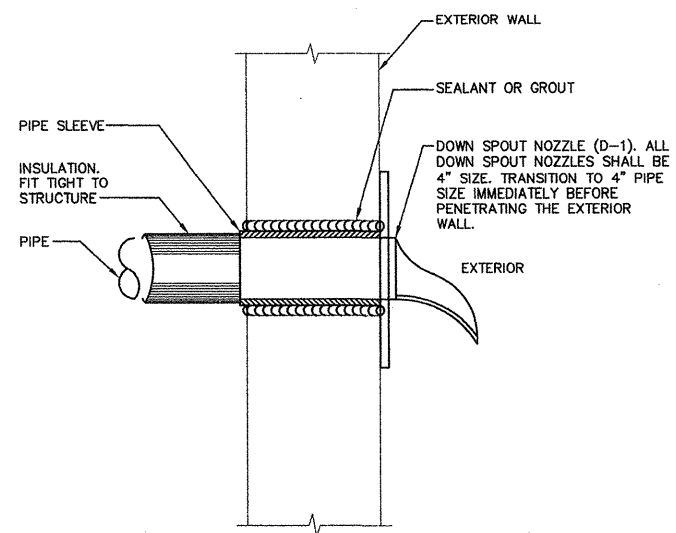
9 HEATING & COOLING COIL PIPING DIAGRAM
SCALE: NONE

NOTES:

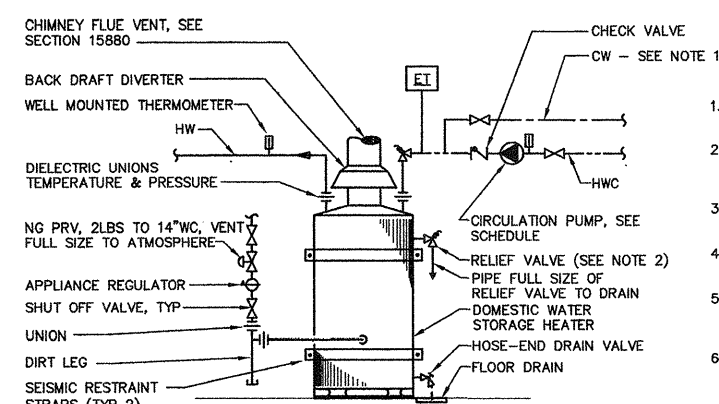
- DUCTS SHALL BE A MINIMUM OF 16-GAUGE STEEL OR 18-GAUGE STAINLESS STEEL. CONTINUOUSLY SLOPE DUCT BACK TO THE KITCHEN HOOD AT 1/4" PER FOOT.
- ALL SEAMS AND JOINTS SHALL BE CONSTRUCTED LIQUID-TIGHT WITH AN EXTERNAL WELD.
- DUCTS SHALL HAVE A MINIMUM OF A 6" VENTILATED AIR SPACE, AND A CONTINUOUS ENCLOSED SHAFT EXTENDING FROM THE CEILING ABOVE THE HOOD, THROUGH THE ROOF. (CONSTRUCTION OF THE SHAFT SHOULD BE UL LISTED NON-COMBUSTIBLE ASSEMBLY AS OUTLINED IN THE FIRE RESTRICTIVE DIRECTORY AND REQUIRED BY CODE. ANY SUPPORTING MEMBER ADDED TO PROVIDE RIGIDITY TO THE ASSEMBLY SHOULD BE METAL). SEE ARCHITECTURAL DOCUMENTS.
- DUCTS SHALL EXTEND ABOVE THE ROOF SO THAT THERE IS AT LEAST 40" OF CLEARANCE FROM THE OUTLET TO THE ROOF SURFACE.
- 18" CLEARANCE SHALL BE MAINTAINED TO COMBUSTIBLE MATERIALS FROM THE HOOD, VENT AND FAN IN THE OPEN, UNLESS IT IS PROTECTED IN ACCORDANCE WITH NFPA PHAMPHLET NO. 96, APPENDIX "A".
- TROUGHS AND GUTTERS ARE NOT PERMITTED EXCEPT BENEATH FILTERS.
- EXHAUST FANS SHALL BE MOUNTED OUTSIDE OF THE BUILDING.
- DETAILS MUST COMPLY WITH NFPA STANDARD 96 DISCHARGE MINIMUM 10'-0" FROM ADJACENT BUILDINGS, AIR INTAKES, PROPERTY LINES. EXCEPTION SEE NFPA P96-11, 4-521.
- ACCESS DOORS PER UMC.



12 KITCHEN HOOD EXHAUST DETAIL
SCALE: NONE



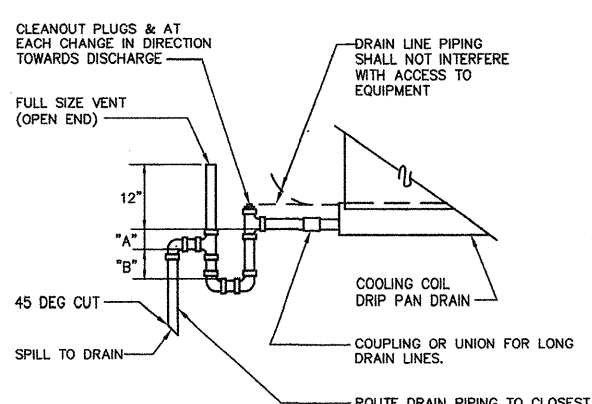
2 OVERFLOW RAIN LEADER TERMINATION DETAIL
SCALE: NONE



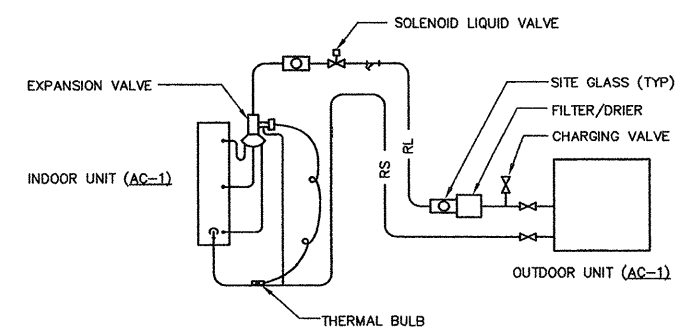
5 GAS WATER HEATER/ FLUE THRU ROOF DETAIL
SCALE: NONE

NOTES:

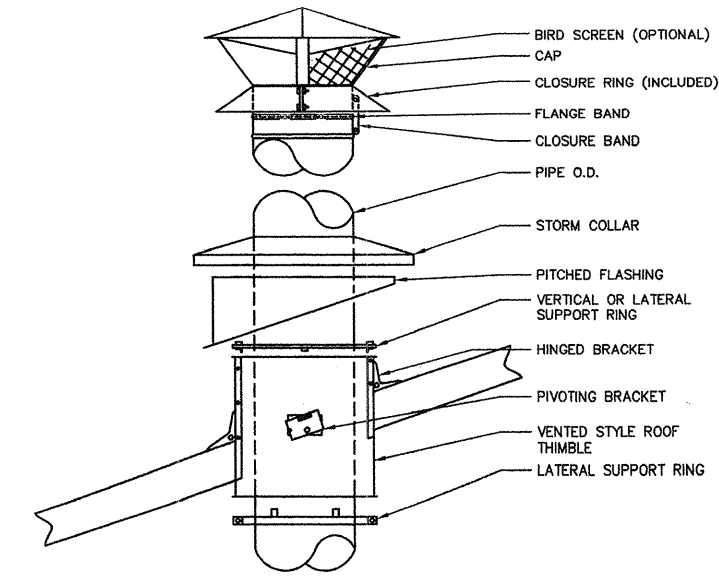
- COLD WATER SUPPLY MUST BE FROM ABOVE TANK.
- T&P RELIEF VALVE ELEMENT MUST BE IN TANK ASME RATED.
- PROVIDE 4" AIR GAP ON RELIEF & DISCHARGE.
- FLASH PENETRATION THRU ROOF WEATHER TIGHT.
- VENT SHALL BE ADEQUATELY BRACED BELOW ROOF TO AVOID MOVEMENT.
- PROVIDE CLEARANCE FROM VENT STACK TO COMBUSTIBLE.



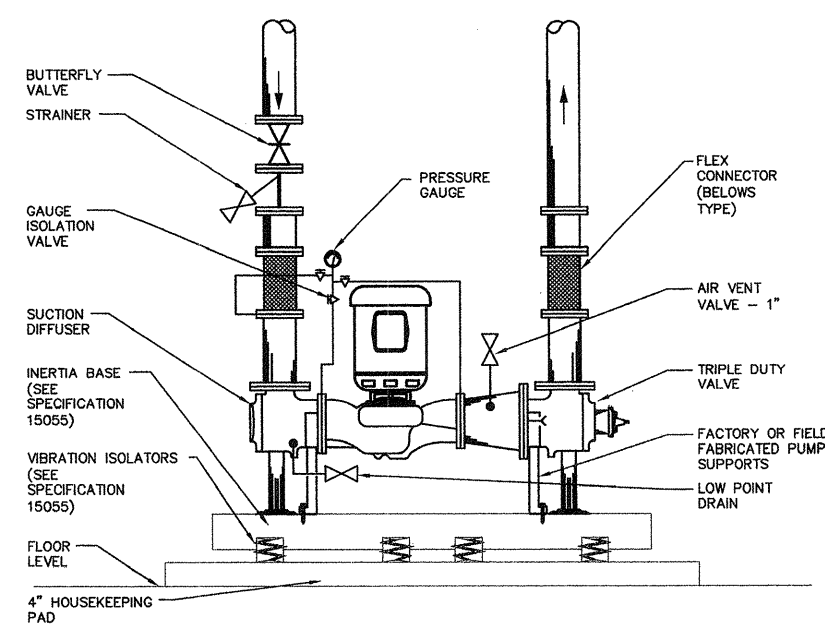
8 COOLING COIL DRAIN PAN DETAIL
SCALE: NONE



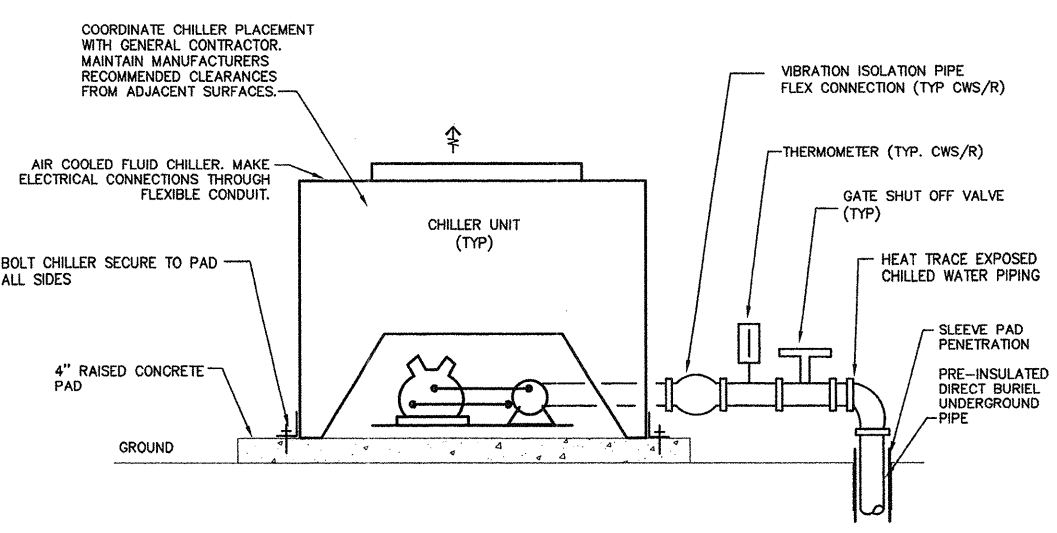
11 EVAPORATOR AND CONDENSING UNIT DETAIL
SCALE: NONE



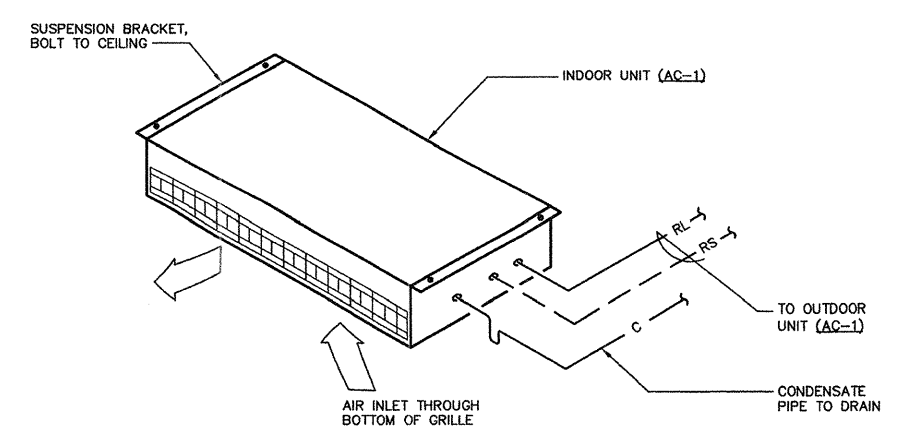
1 BOILER VENT THROUGH ROOF DETAIL
SCALE: NONE



4 VERTICAL IN-LINE PUMP DETAIL
SCALE: NONE



7 CHILLER UNIT DETAIL
SCALE: NONE



10 INDOOR AIR CONDITIONING UNIT DETAIL (AC-1)
SCALE: NONE

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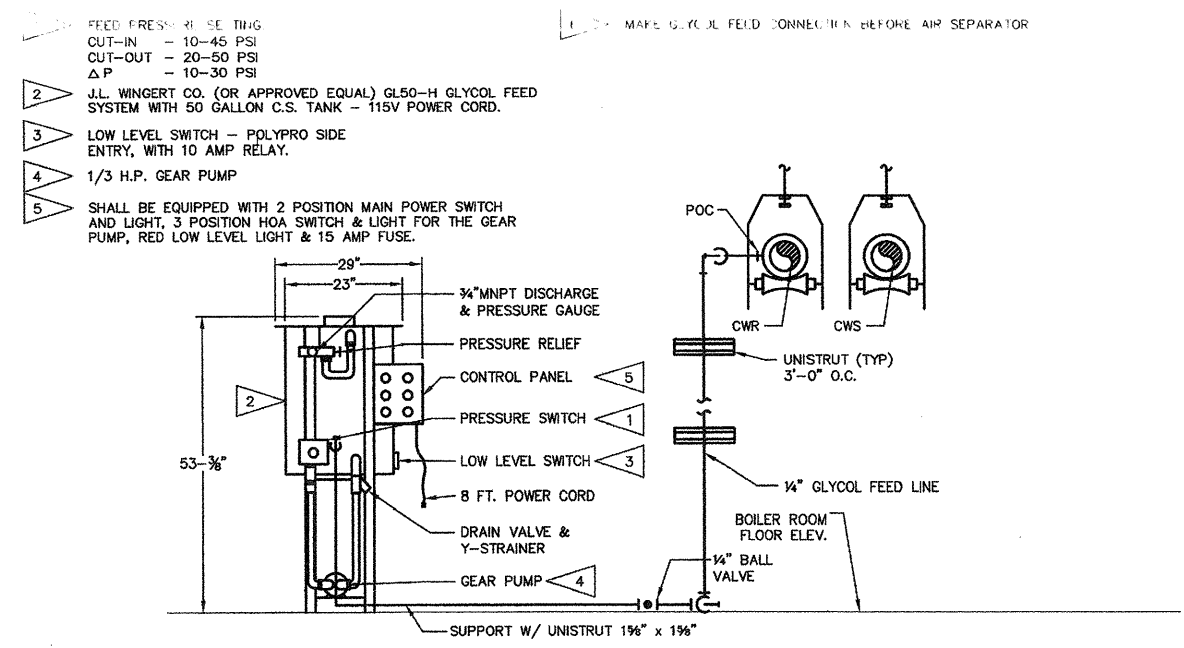
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Professional Engineer
Issue EXPIRES: 9/18/2004 Date

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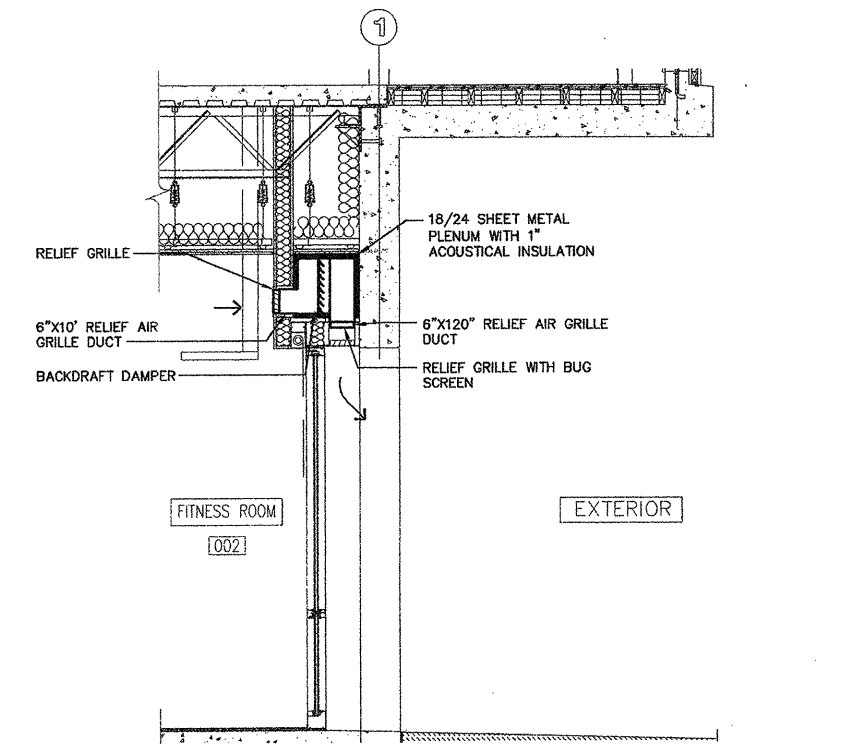
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Drawn RR
Checked DO
MJI Project No. 0317
Cad File 2003.085

DETAILS

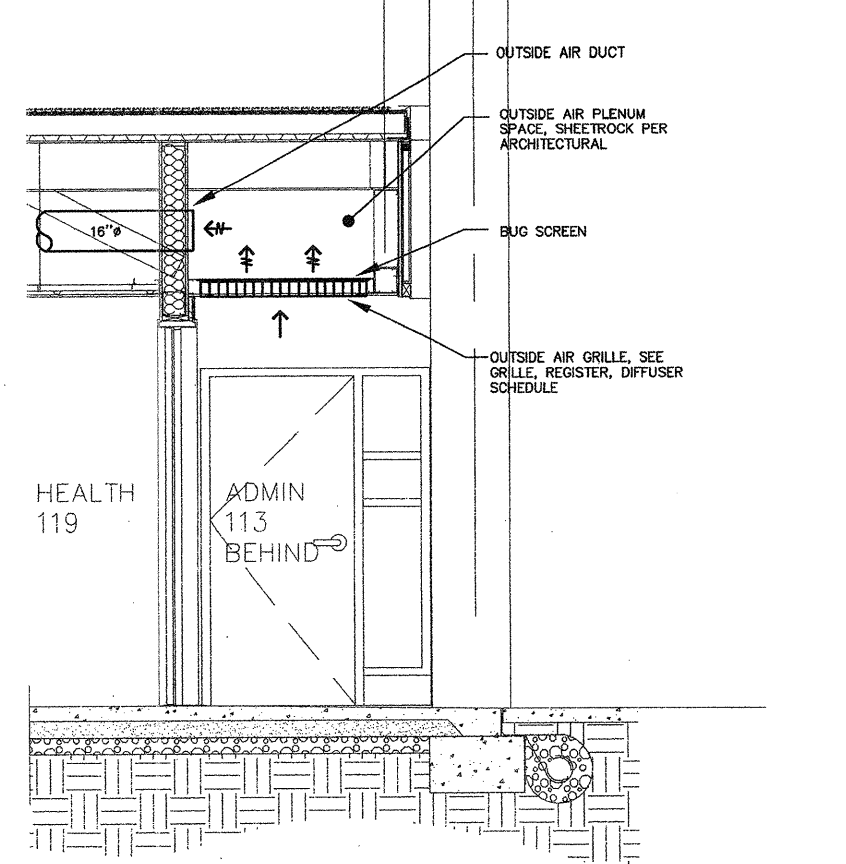
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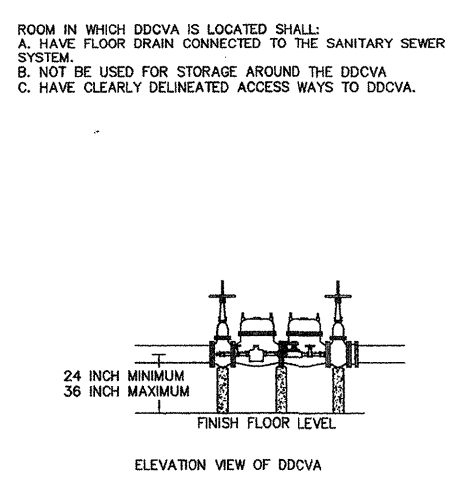
2 CHILLED WATER GLYCOL SYSTEM
M6.3 SCALE: NONE



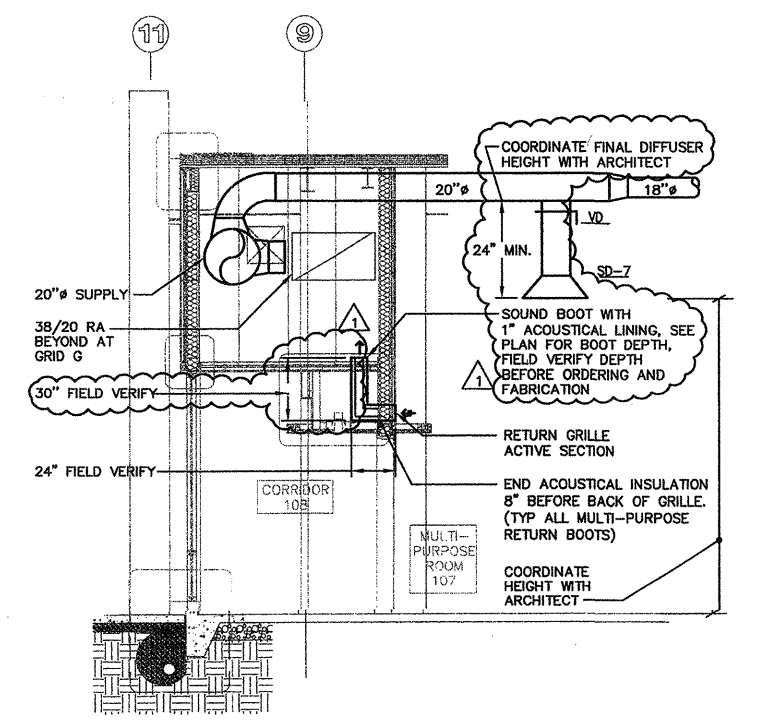
5 RELIEF GRILLE AT DANCE AND FITNESS ROOM DETAIL
M6.3 SCALE: NONE



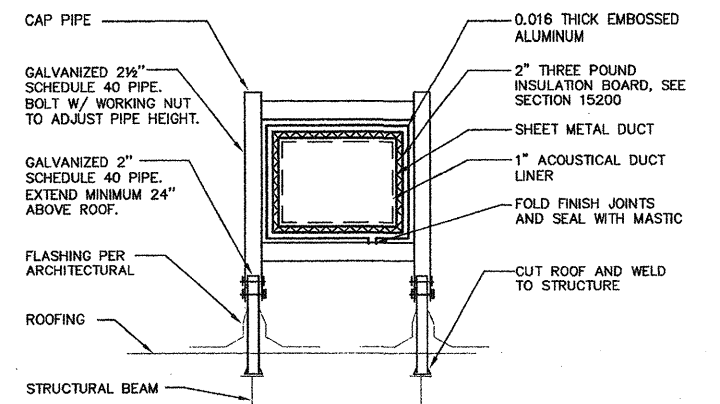
9 OUTSIDE AIR GRILLE - HEALTH ALCOVE SECTION
M6.3 SCALE: NONE



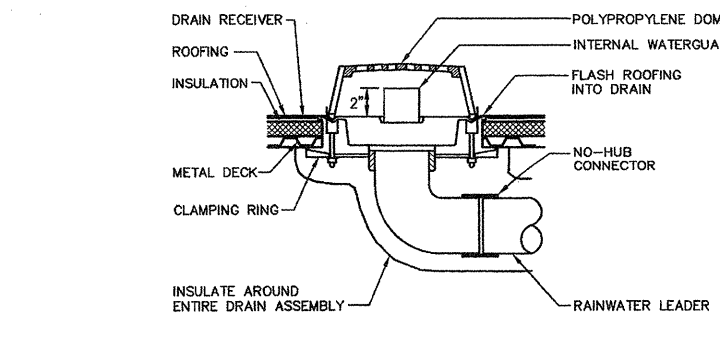
1 DOUBLE DETECTOR CHECK VALVE SCHEMATIC
M6.3 SCALE: NONE



4 CORRIDOR 108 SECTION LOOKING NORTH
M6.3 SCALE: NONE



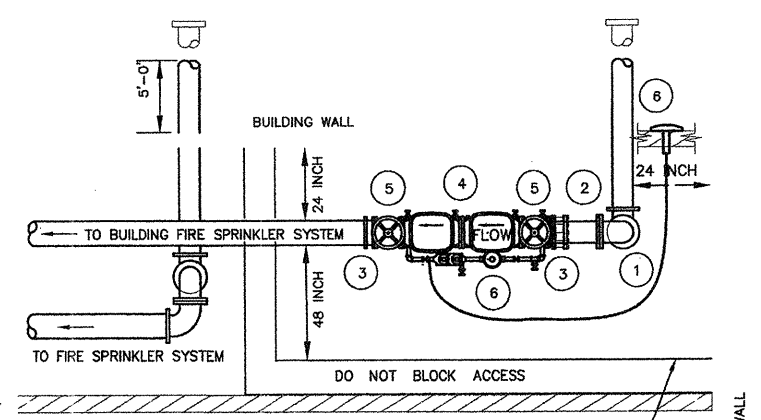
7 EXTERIOR DUCT CONSTRUCTION AND SUPPORT DETAIL
M6.3 SCALE: NONE



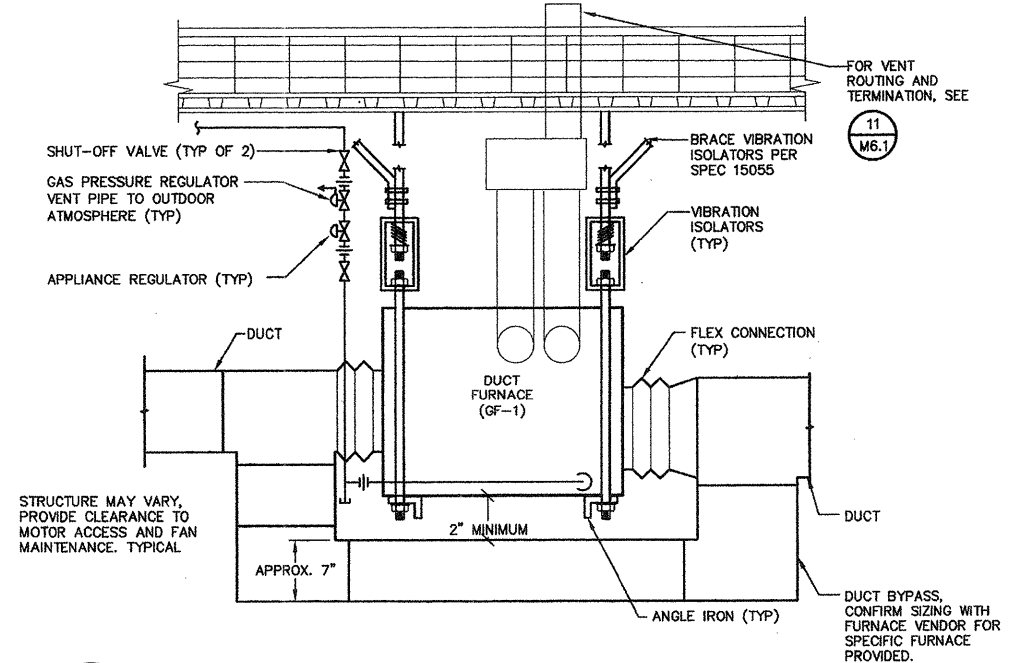
8 ROOF DRAIN DETAIL
M6.3 SCALE: NONE

- 2-90° BENDS (FL x FL) WITH FLANGED DUCTILE IRON PIPE SPOOL
- 18" LONG SPOOL (FL x PE)
- FLANGE COUPLING ADAPTOR
- APPROVED DDCVA ON MAIN LINE IN HORIZONTAL POSITION ONLY. (PER LATEST DEPT. OF HEALTH APPROVED LIST OF BACKFLOW PREVENTION DEVICES) BOTTOM OF DDCVA SHALL BE A MINIMUM OF 24 INCH ABOVE FLOOR LEVEL AND NOT HIGHER THAN 3 FEET MAXIMUM. INSTALL 3 CONCRETE PADS OR ADJUSTABLE PIPE SUPPORT COLUMNS UNDER DDCVA
- O.S. & Y VALVES TO BE RESILIENT SEATED WITH TAMPER SWITCHES. ADD WIRING IN ACCORDANCE WITH L & I
- METERED 3/4 INCH BY-PASS DDCVA - BY-PASS METER SHALL BE A 3/4 INCH "SENSUS-ECR" SR POSITIVE DISPLACEMENT METER EQUIPPED WITH A REMOTE READ SENSOR PLATE MOUNTED ON THE OUTSIDE OF THE BUILDING WALL.

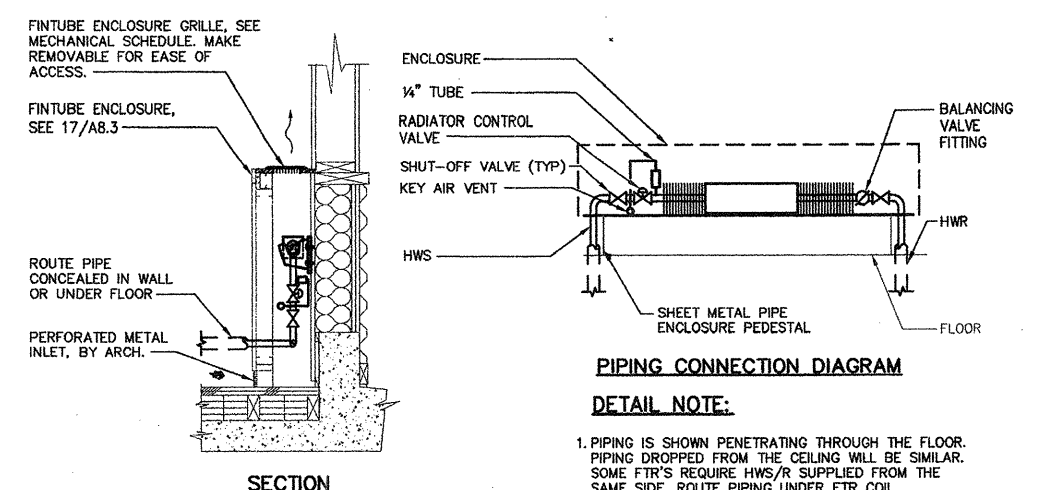
AFTER FIELD INSTALLATION, MAIN DDCVA AND BY-PASS DDCVA MUST BE TESTED SATISFACTORILY BY A DEPARTMENT OF HEALTH CERTIFIED BACKFLOW ASSEMBLY TESTER. TEST REPORT MUST BE SUBMITTED TO MERCER ISLAND CITY WATER UTILITY ENGINEERING DEPARTMENT PRIOR TO ACTIVATION OF NEW LINE. INSTALL BRASS PLUGS AT ALL TEST COCKS.



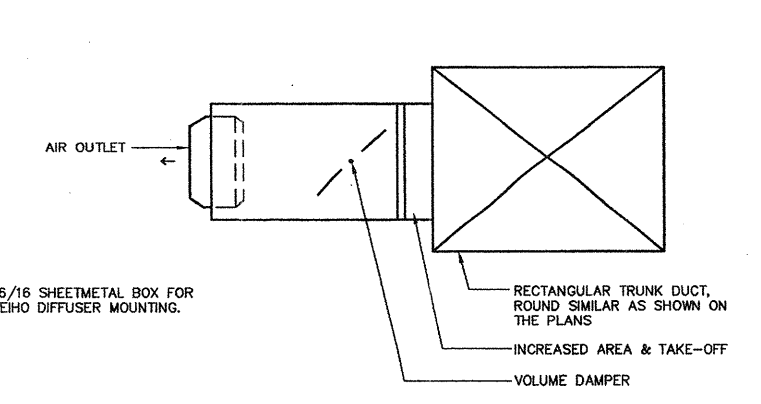
PERIMETERS OF MINIMUM CLEARANCES TO BE PAINTED ON FLOOR IN WHITE ENAMEL PAINT STRIPE, WITH 2 INCH STENCILED BLACK LETTERS TO SAY: "DO NOT BLOCK ACCESS"



3 DUCT FURNACE MOUNTING DETAIL
M6.3 SCALE: NONE



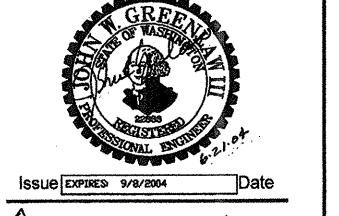
6 FINNED TUBE RADIATION ENCLOSURE DETAIL
M6.3 SCALE: NONE



10 SIDEWALL DIFFUSER DETAIL
M6.3 SCALE: NONE

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Approved - 07/12/04

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Checked DO
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Cad File 2003.085

