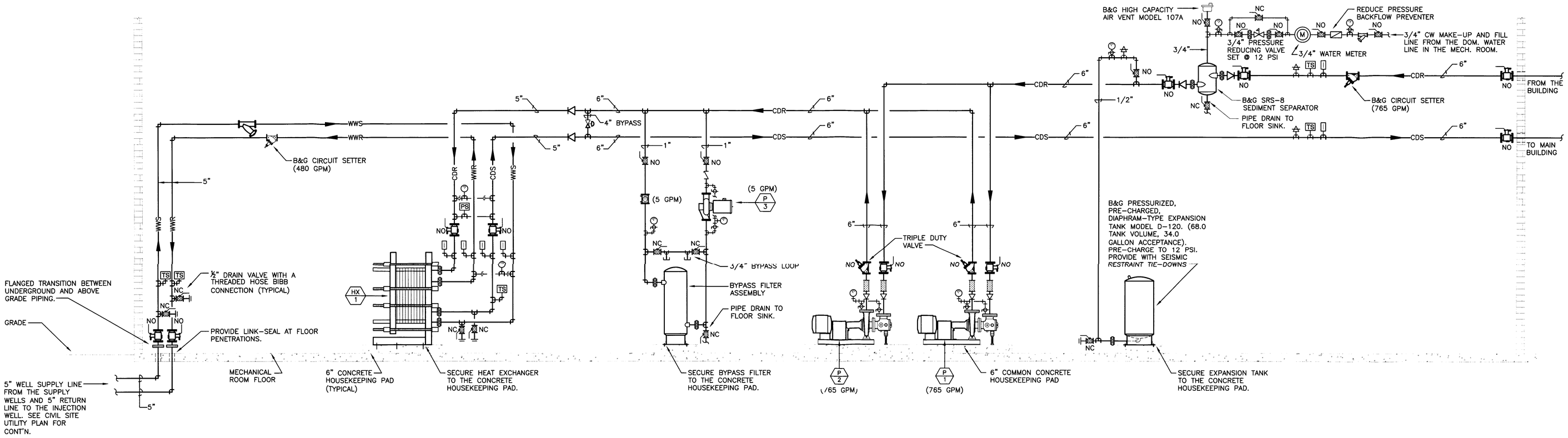
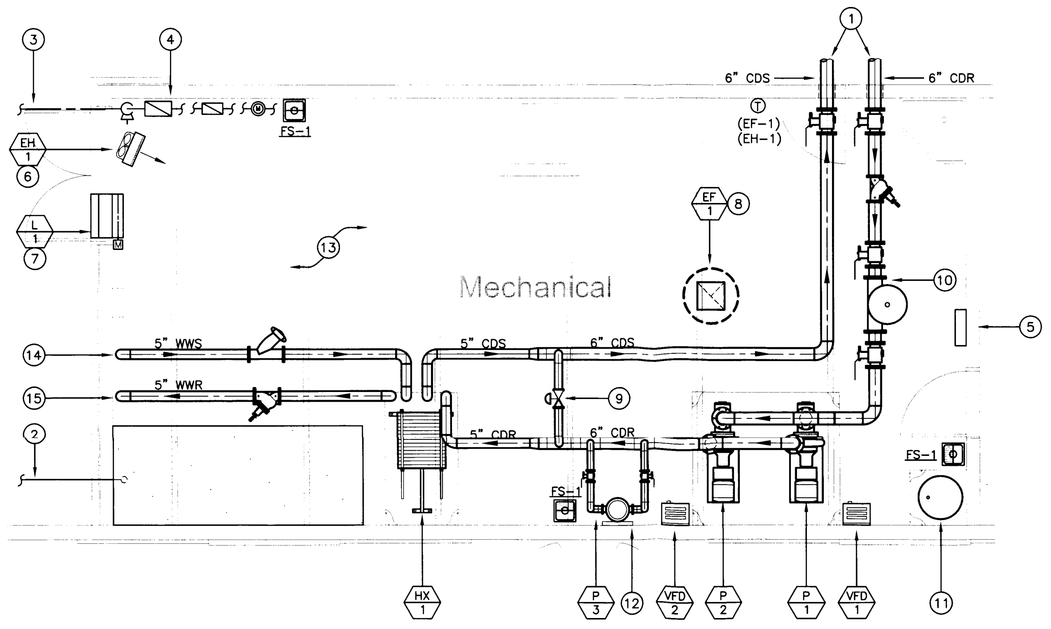


Condenser Water System Piping Schematic

N.T.S.



Building North

Enlarged Mechanical Room Plan

Scale: 1/4" = 1'-0"

Mechanical Room Keyed Notes

◯ SYMBOL USED FOR NOTE CALLOUT.

1. CONDENSER WATER PIPING FROM THE BUILDING, SEE SHEET M2.3 FOR CONT'N.
2. FIRE SERVICE AND FIRE RISER BY THE FIRE SPRINKLER CONTRACTOR. SEE THE CIVIL SITE UTILITY PLAN FOR CONT'N.
3. 4" WATER SERVICE FROM (2) 2" PARALLEL WATER METERS. SEE THE CIVIL SITE UTILITY PLAN FOR CONT'N.
4. PROVIDE A LINE-SIZED ISOLATION VALVE ON THE MAIN WATER RISE. TEE WATER MAIN AND ROUTE A ¾" LINE TO THE MECHANICAL SYSTEM FILL/MAKE-UP. SEE THE PIPING SCHEMATIC, THIS SHEET FOR THE CONTINUATION. ROUTE A 4" LINE TO A REDUCE PRESSURE BACKFLOW PREVENTER, SEE SHEET P1.3 FOR CONT'N.
5. DDC CONTROL PANELS.
6. MOUNT THE ELECTRIC HEATER FROM WALL BRACKETS. MOUNT THE BOTTOM OF THE HEATER AT 9'-0" A.F.F.
7. MOUNT THE BOTTOM OF THE LOUVER 8'-0" A.F.F.
8. EXTEND A FULL SIZE DUCT FROM THE EXHAUST FAN DOWN THROUGH THE CEILING. TERMINATE THE DUCT WITH AN EXPANDED METAL SCREEN WITH A 1" FRAME. PAINT THE EXPANDED METAL AND ALL VISIBLE DUCTWORK THE SAME COLOR AT THE CEILING.
9. 4" AUTOMATIC BYPASS AROUND HEAT EXCHANGER
10. SEDIMENT SEPARATOR. SEE THE PIPING SCHEMATIC, THIS SHEET, FOR PIPING REQUIREMENTS.
11. FLOOR MOUNTED EXPANSION TANK. SEE THE PIPING SCHEMATIC, THIS SHEET, FOR PIPING REQUIREMENTS.
12. ¨DE STREAM FILTER ASSEMBLY AND CIRCULATION JMP. SEE THE PIPING SCHEMATIC, THIS SHEET, FOR PIPING REQUIREMENTS.
13. SEE THE PIPING SCHEMATIC, THIS SHEET, FOR ADDITIONAL PIPING REQUIREMENTS.
14. 5" WELL WATER SUPPLY LINE FROM THE TWO SUPPLY WELLS. SEE THE CIVIL SITE UTILITY PLAN FOR CONT'N.
15. 5" WELL WATER LINE LINE TO THE RETURN WELL. SEE THE CIVIL SITE UTILITY PLAN FOR CONT'N.

Mechanical Room General Notes

A. KEEP CONDENSER, WELL, FIRE, AND DOMESTIC WATER PIPING LOCATED HIGH IN THE SPACE, CLEAR OF NORMAL MAINTENANCE AREAS.

B. SEE SPECIFICATION DIVISION 15300 FOR PIPING SYSTEM REQUIREMENTS.

C. SCHEMATIC IS FOR GENERAL INFORMATION (PIPE SIZES, VALVE TYPE, LOCATIONS, AND OTHER MISC. PIPING COMPONENTS). SEE THIS SHEET FOR LAYOUT AND ROUTING.

D. PROVIDE AIR VENTS AT ALL HIGH SPOTS IN SYSTEM. ALL AIR VENTS LOCATED IN MECHANICAL ROOM SHALL HAVE AUTOMATIC AIR VENTS PIPED TO DRAIN. ALL OTHER AIR VENTS SHALL BE MANUAL.

E. PROVIDE TRANSITIONS TO EQUIPMENT AS REQUIRED.

Water Treatment Notes

DESCRIPTION OF WORK (CLOSED LOOP):

The Mechanical Contractor shall fill each hydronic systems with clean fresh water prior to cleaning and thoroughly leak check system piping for leaks. Following leak check the closed systems shall be flushed until the leaving water runs clear. During this process the heat pump bypass line shall be opened and the heat pump isolation valves shall be closed to bypass the heat pump, flow strainer and flow control device. The side stream filter bag shall be removed during this initial flushing process. Prior to filling the Contractor shall coordinate with the Chemical Treatment Contractor to add initial chemical cleaning agent to facilitate flushing and to prevent corrosion during the leak check process. If more than two site visits to add chemical are needed due to multiple fill requirements during the leak check and repair the Mechanical Contractor shall pay additional cost of labor and chemical.

Following leak check the Mechanical Contractor shall coordinate with Chemical Treatment Contractor, for system drain down to insure systems not be left dry. Chemical Treatment Contractor shall then refill all systems with chemical cleaning agents, circulate for a minimum of 8 hours and flush until thoroughly clean.

Following clean and flush process, the Chemical Treatment Contractor shall shut the heat pump bypass and open the heat pump isolation valves for normal operation and inspect all flow control devices and strainers. When necessary, these components shall be flushed to insure unobstructed water flow to each heat pump. The Chemical Treatment Contractor shall then charge the system with final operating chemical charge, as agreed with Owner's representative.

At the conclusion of cleaning and treatment, the Chemical Treatment Contractor shall certify in writing that the system has been cleaned and treated as specified.

At the end of a one-year period the system shall again be checked and refilled as required to meet the owner's requirements. Service during the one-year period shall be required to maintain these requirements.

A QUALIFIED WATER TREATMENT CONTRACTOR SHALL BE UTILIZED TO FURNISH THE CLEANING MATERIAL & SUPERVISE THE FLUSHING & TREATMENT OF THE SYSTEM. APPROVED WATER TREATMENT CONTRACTORS MUST SHOW PROOF OF SIMILAR SERVICE FOR NOT LESS THAN 3 YEARS, & SHALL HAVE FULL-TIME SERVICE PERSONNEL LOCATED WITHIN ONE-HOUR FROM THE JOB SITE. MONITORING & TREATMENT OF THE SYSTEM SHALL BE PROVIDED FOR A PERIOD OF 1 YEAR FOLLOWING FINAL ACCEPTANCE OF BUILDING & SYSTEM. CHEMICAL TREATMENT CONTRACTORS MUST RECEIVE PRIOR APPROVAL TO BID FROM BOTH THE ENGINEER AND THE OWNER. CHEMICAL TREATMENT CONTRACTOR MUST HAVE FAVORABLE PRIOR EXPERIENCE WITH THIS CLIENT.

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OVER 25 YEARS OF EXCELLENCE
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New Jerome Middle School
Jerome Joint School District No. 261
Jerome, Idaho

LEATHAM - KROHN-VANOCKER ARCHITECTS
1735 Federal Way
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Amber Von Ocker, Architect
Wayne Thowless, Architect

DATE: 15 May 2006
REVISIONS:

JOB NO.: 0545
DRAWN BY: SJM / GB / ET
CHECKED BY: CEP

Middle School

MECHANICAL PIPING

M-4.1

56 . . 644a

PACKAGED ROOF TOP UNIT SCHEDULE (WITH ENERGY RECOVERY)

SYMBOL	TYPE / CONFIGURATION	AREA SERVED	NOMINAL TONS	SUPPLY FAN				RETURN/EXHAUST FAN				ENERGY RECOVERY DATA																COOLING DATA (99 °F AMBIENT)			HEATING DATA					ELECTRICAL DATA			O.S.A. (CODE REQUIREMENTS)		OPERATING WEIGHT	MANUFACTURER AND MODEL	REMARKS
				CFM	ESP	HP	V/ø	CFM	ESP	HP	V/ø	TYPE	WHEEL CFM (MAXIMUM)		WINTER DESIGN						SUMMER DESIGN								TEMP. DATA	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	TYPE	TEMP. DATA		INPUT CAPACITY (MBH)	OUTPUT CAPACITY (MBH)	TURNDOWN RATIO	V/ø	MCA (AMPS)	MROPD (AMPS)	MINIMUM (CFM)	MAXIMUM (CFM)			
													SUPPLY	EXHAUST	SUPPLY			EXHAUST			SUPPLY			EXHAUST			EDB				EDB	LDB									
															EDB	EWB	LDB	EDB	EWB	LDB	EDB	EWB	LDB	LWB	EDB	EWB	LDB															
AHU 1	ROOF MOUNTED / SEE PLANS	CAFETORIUM	25.0	12,000	1.0	15.0	208/3	12,000	1.00	10.0	208/3	WHEEL	2300	2100	-3.0	-3.0	47.0	72.0	60.0	--	99.0	63.0	79.4	61.8	99.0	63.0	--	75.8	62.0	312.9	265.1	INDIRECT GAS	68.7	95.4	450.0	300.8	20:1	208/3ø	174.4	200.0	0	2,300	12,000	McQUAY MODEL RPR-025C	1 2 3 4 5
AHU 2	ROOF MOUNTED / SEE PLANS	GYMNASIUM	40.0	15,000	1.0	15.0	208/3	15,000	0.75	15.0	208/3	WHEEL	5000	4800	-3.0	-3.0	42.7	72.0	60.0	--	99.0	63.0	81.1	60.3	99.0	63.0	--	77.0	60.1	455.3	411.2	INDIRECT GAS	64.7	108.2	900.0	611.0	20:1	208/3ø	248.0	250	0	5,000	14,000	McQUAY MODEL RPR-040C	1 2 3 4 5

1. VENMAR, TEMPTROL, INNOVENT
2. CAPACITIES FOR FANS AND COILS ARE BASED ON 3500 FEET ELEVATION.
3. PROVIDE UNIT WITH ARI CERTIFIED ENTHALPY WHEEL, MODULATING MOTORIZED OUTDOOR EXHAUST, RECIRCULATION, OUTDOOR BYPASS AND EXHAUST BYPASS DAMPERS, 100% ECONOMIZER CAPABILITIES, 5" ROOF TOP UNIT BASE, LIFTING LUGS, 2" DOUBLE WALL CONSTRUCTION, PREMIUM EFFICIENCY MOTORS, 2" THICK (MERV 8) FILTERS, ROOF CURB, INTERNAL VIBRATION ISOLATION, 1" DEFLECTION, AND SINGLE POINT ELECTRICAL CONNECTION.
4. PROVIDE STAND-ALONE DDC CONTROLS COMPLETE WITH MICRO TECH II CONTROL PACKAGE, ROOM SENSOR, CONTROL PAD, AND BACNET CAPABILITIES FOR CONNECTION TO BUILDING MANAGEMENT SYSTEM. PROVIDE CO2 CONTROLS TO MODULATE OUTSIDE AND RETURN AIR. PROVIDE VFD ON RETURN/EXHAUST FAN AND FROST CONTROL WITH FREE COOLING WHEEL CONTROL. THE MAXIMUM ALLOWABLE TOTAL HARMONIC DISTURBANCE SHALL BE 3%.
5. MANUFACTURER SHALL PROVIDE WARRANTY ON ROOF TOP UNIT: 2 YEAR PARTS, 5 YEAR WHEEL WARRANTY AND EXTENDED 10-YEAR WARRANTY ON GAS HEATER.

ENERGY RECOVERY UNIT SCHEDULE

SYMBOL	SUPPLY FAN			EXHAUST FAN			WINTER DESIGN						SUMMER DESIGN						ELECTRICAL			MIN EFF	WEIGHT (LBS)	MANUFACTURER & MODEL	REMARKS
	CFM	ESP	HP	CFM	ESP	HP	SUPPLY			EXHAUST			SUPPLY			EXHAUST									
							EDB	EWB	LDB	EDB	EWB	LDB	EDB	EWB	LDB	EDB	EWB	LDB	MCA	MOCP	V/ø				
ERU A1	3025	1.1"	2	2030	1.1"	1 1/2	3.0	0.0	43.1	70.0	53.7	10.3	96.0	62.0	81.6	72.0	59.6	93.4	20.1	30	208/3	73.5%	1900	COOK MODEL ERV-3500	1 2 3 4 5
ERU B1	3050	1.1"	2	2300	1.1"	2	3.0	0.0	45.9	70.0	53.7	13.1	96.0	62.0	80.6	72.0	59.6	92.4	22.35	30	208/3	73.5%	1900	COOK MODEL ERV-3500	1 2 3 4 5
ERU C1	2315	1.1"	1 1/2	1115	1.1"	1 1/2	3.0	0.0	40.0	70.0	53.7	4.1	96.0	62.0	82.8	72.0	59.6	95.6	17.85	25	208/3	73.5%	1900	COOK MODEL ERV-2500	1 2 3 4 5
ERU D1	1050	1.1"	3/4	1150	1.1"	1	3.0	0.0	56.5	70.0	53.7	21.2	96.0	62.0	76.8	72.0	59.6	89.5	10.85	15	208/3	73.5%	1900	COOK MODEL ERV-1500	1 2 3 4
ERU D2	1200	1.1"	1	1350	1.1"	1 1/2	3.0	0.0	55.2	70.0	53.7	23.6	96.0	62.0	77.3	72.0	59.6	88.6	14.1	20	208/3	73.5%	1900	COOK MODEL ERV-1500	1 2 3 4
ERU D3	1905	1.1"	1	850	1.1"	3/4	3.0	0.0	47.3	70.0	53.7	5.1	96.0	62.0	80.1	72.0	59.6	95.2	15.0	20	208/3	73.5%	1900	COOK MODEL ERV-2500	1 2 3 4 5
ERU E1	2700	1.1"	2	2150	1.1"	1 1/2	3.0	0.0	44.9	70.0	53.7	17.3	96.0	62.0	81.0	72.0	59.6	90.9	20.1	30	208/3	73.5%	1900	COOK MODEL ERV-3500	1 2 3 4 5
ERU E2	2350	1.1"	1 1/2	1645	1.1"	1 1/2	3.0	0.0	43.6	70.0	53.7	12.0	96.0	62.0	81.4	72.0	59.6	92.8	17.85	25	208/3	73.5%	1900	COOK MODEL ERV-2500	1 2 3 4 5
ERU E3	2350	1.1"	1 1/2	1900	1.1"	1 1/2	3.0	0.0	46.9	70.0	53.7	15.7	96.0	62.0	80.3	72.0	59.6	91.4	17.85	25	208/3	73.5%	1900	COOK MODEL ERV-2500	1 2 3 4 5
ERU F1	3600	1.1"	3	3300	1.1"	3	3.0	0.0	47.8	70.0	53.7	21.2	96.0	62.0	80.0	72.0	59.6	89.5	30.1	40	208/3	73.5%	1900	COOK MODEL ERV-3500	1 2 3 4 5
ERU F2	3150	1.1"	2	2400	1.1"	1 1/2	3.0	0.0	45.8	70.0	53.7	13.8	96.0	62.0	80.7	72.0	59.6	92.1	20.1	30	208/3	73.5%	1900	COOK MODEL ERV-3500	1 2 3 4 5

1. APPROVED ALTERNATE MANUFACTURERS: GREENHECK (MODEL ERV) AND CARNES (MODEL WEBA).
2. PROVIDE WITH ON/OFF FROST PREVENTION CONTROLS, SINGLE POINT POWER CONNECTION, FACTORY 2" - MERV 8 FILTERS IN EACH AIR STREAM, MOTORIZED OUTDOOR AIR INTAKE, EXHAUST BACKDRAFT DAMPER, INTERNAL VIBRATION ISOLATION ON EACH FAN, INTAKE WEATHER HOOD, EXHAUST WEATHER HOOD, HINGED ACCESS DOORS, MANUFACTURER'S ROOF CURB, DOUBLE-WALL CONSTRUCTION, DUCT ADAPTORS, WHEEL ROTATION SENSOR, DIRTY FILTER SENSOR, ECONOMIZER CONTROL, AND LORENIZED FINISH. PROVIDE UNIT WITH UL APPROVAL LISTING AND 15-YEAR WARRANTY ON HEAT EXCHANGER.
3. CONNECT UNIT TO DDC CONTROL SYSTEM AND SEQUENCE AS INDICATED ON SHEET M-6.2.
4. MANUFACTURER SHALL PROVIDE AND INSTALL GRAHAM MODEL VLT 6000 VARIABLE FREQUENCY DRIVES FOR EXHAUST AND SUPPLY FANS. THE DRIVES SHALL BE PROVIDED WITH A CONTROLS INTERFACE TO INTEGRATE WITH THE AWARDED DDC CONTRACTOR. THE DRIVES SHALL BE PROVIDED WITHOUT DISCONNECTS AND BYPASSES.
5. DDC CONTRACTOR SHALL PROVIDE, WIRE AND COMMISSION AN EBTRON ADVANTAGE SILVER SERIES AIRFLOW MONITOR (MODEL STA104-P) FOR THE SUPPLY AND EXHAUST FANS. THE HVAC COTNRACTOR SHALL INSTALL THE SENSORS IN THE DUCTWORK.

PUMP SCHEDULE

SYMBOL	UNIT TYPE	SERVICE	CAPACITY			MOTOR			SUCTION DIFFUSER	TRIPLE DUTY VALVE	OPERATING WEIGHT (LBS)	MANUFACTURER AND MODEL	REMARKS
			FLOW (GPM)	HEAD (FT)	MIN EFF	HP	RPM	V/ø					
P 1	BASE MOUNTED	CONDENSER WATER	765	120	79	40	1750	208/3	GF-3	3DS-6B	1250	B&G SERIES 1510-4GB	1 2
P 2	BASE MOUNTED	CONDENSER WATER	765	120	79	40	1750	208/3	GF-3	3DS-6B	1250	B&G SERIES 1510-4GB	1 2
P 3	INLINE	BYPASS FILTER	5	10	--	92 W	2940	115/1	N/A	N/A	10	B&G NRF-22	1
P 4	INLINE BOOSTER	HEAT PUMP HPA16	5	35	--	1/6	3300	115/1	N/A	N/A	20	B&G SERIES PL-36	1

1. APPROVED ALTERNATE MANUFACTURERS: ARMSTRONG, TACO, PACO & PEERLESS.
2. PROVIDE UNIT WITH INVERTER DUTY, PREMIUM EFFICIENCY MOTOR WITH CLASS F INSULATION.

VARIABLE FREQUENCY DRIVE SCHEDULE

SYMBOL	SYSTEM LOCATION	SERVICE HORSEPOWER	V/ø	PURPOSE	MANUFACTURER AND MODEL	REMARKS
VFD 1	CONDENSER WATER PUMP (P-1)	40	208/3	MAINTAIN CONDENSER WATER LOOP PRESSURIZATION	GRAHAM MODEL VLT 6000	1 2 3 4
VFD 2	CONDENSER WATER PUMP (P-2)	40	208/3	MAINTAIN CONDENSER WATER LOOP PRESSURIZATION	GRAHAM MODEL VLT 6000	1 2 3 4

1. APPROVED MANUFACTURER: AAB, MAGNETEK, RELIANCE
2. PROVIDE W/FUSED DISCONNECT (W/FUSES), NEMA 1 ENCLOSURE, WALL MOUNTING BRACKETS, FACTORY AUTHORIZED START-UP.
3. PROVIDE WITH BACNET CONTROL SYSTEM INTERFACE.
4. PROVIDED BY THE DDC CONTRACTOR, INSTALLED BY THE ELECTRICAL CONTRACTOR.

HEAT EXCHANGER SCHEDULE

SYMBOL	SYSTEM	HEATING MODE				COOLING MODE				HX FLOW (GPM)		MAX PRESSURE LOSS (PSI)		MANUFACTURER AND MODEL	REMARKS
		WELL SIDE		CONDENSER SIDE		WELL SIDE		CONDENSER SIDE							
		EWT (°F)	LWT (°F)	EWT (°F)	LWT (°F)	EWT (°F)	LWT (°F)	EWT (°F)	LWT (°F)	WELL SIDE	CONDENSER SIDE	WELL SIDE	CONDENSER SIDE		
HX 1	CONDENSER LOOP	55.0	48.0	45.0	52.0	55.0	76.6	85.0	63.4	480	480	5.0	5.0	B&G MODEL P41-135-TMTL-74	1 2 3

1. APPROVED ALTERNATE MANUFACTURER: ALFA LAVAL, MUELLER
2. PROVIDE WITH 316 S.S. PLATES AND NITRIL LOCK GASKETS.
3. PIPING CONNECTIONS TO HEAT EXCHANGER AS SHOWN ON PIPING SCHEMATICS MAY NOT REFLECT EACH MANUFACTURER'S ACTUAL CONNECTION ORDER.

LOUVER SCHEDULE

SYMBOL	SERVICE	TYPE	NOMINAL SIZE (WXH)	MINIMUM FREE AREA (SQ.FT.)	FINISH	MANUFACTURER AND MODEL	REMARKS
L 1	INTAKE (MECH. ROOM)	FIXED DRAINABLE	30x20	5	BAKED ENAMEL	RUSKIN ELF6375X	1 2 3

1. ALTERNATE MANUFACTURERS: GREENHECK, CARNES, AIROLITE, LOUVERS & DAMPERS, & CESCO.
2. PAINT COLOR WILL BE PROVIDED BY ARCHITECT FOR LOUVER COLOR
3. PROVIDE WITH FLANGED FRAME, 120V/1ø MOTORIZED DAMPER, AND BIRD SCREEN.

KITCHEN EXHAUST HOOD SCHEDULE

SYMBOL	TYPE	HOOD DIMENSIONS		EXHAUST AIR			MAKE-UP AIR			MANUFACTURER AND MODEL	REMARKS
		LENGTH	WIDTH	AIRFLOW CFM	DUCT CONNECTION	MAX S.P. LOSS	AIRFLOW CFM	DUCT CONNECTION	MAX S.P. LOSS		
H 1	KITCHEN EXHAUST HOOD (CANOPY) (TYPE-II)	11'-6"	9'-0"	5,980	22X22	0.75	4,184	(2) 10X24	0.25	CAPTIVE AIRE (2) 5424R	1 2
H 2	KITCHEN EXHAUST HOOD (WALL) (TYPE-II)	3'-6"	3'-6"	700	11X10	0.25	--	--	--	CAPTIVE AIRE 4224VH2	1 3

1. APPROVED ALTERNATE HOOD MANUFACTURER: GREENHECK, E-CON AIR, DUO AIRE
2. PROVIDE WITH PRE-WIRED REMOTE MOUNTED HOOD CONTROL PANEL (INCLUDING ALL CONTROLS, CONTACTORS, STARTERS, LIGHTS AND SURFACE MOUNTED SWITCHES), EXHAUST/SUPPLY COLLARS, SURFACE MOUNTED PILOT LIGHT.
3. PROVIDE WITH EXHAUST COLLAR AND EXHAUST FAN SWITCH ON WALL.

MAKE-UP AIR FAN SCHEDULE

SYM	TYPE	AREA SERVED	BLOWER				ELECTRICAL		MAXIMUM SONES	OPERATING WEIGHT (LBS)	MANUFACTURER AND MODEL	REMARKS
			CFM	ESP	MAXIMUM RPM	DRIVE	HP	V/ø				
MAU 1	FILTERED KITCHEN SUPPLY	HOOD H-1	4,184	0.50	725	BELT	1 1/2	208/3	18.5	425	COOK MODEL 150KSP-B	1 2

1. ALTERNATE MANUFACTURERS: GREENHECK, CARNES, ACME, PENN, CAPITVE AIRE.
2. PROVIDE WITH MANUFACTURER'S ROOF CURB, BIRDSCREEN, FILTERS, BACKDRAFT DAMPER, AND PRE-WIRED NEMA 3R ELECTRICAL DISCONNECT SWITCH.

EXHAUST FAN SCHEDULE

SYM	TYPE	AREA SERVED	BLOWER				ELECTRICAL		MAXIMUM SONES	OPERATING WEIGHT (LBS)	MANUFACTURER AND MODEL	REMARKS
			CFM	ESP	MAXIMUM RPM	DRIVE	HP/W	V/ø				
EF 1	CENTRIFUGAL ROOFTOP UPBLAST	MECHANICAL ROOM	1,500	0.25	1125	BELT	1/4 HP	120/1	10.4	75	COOK MODEL ACRU 135-R3B	1 3 5
EF 2	CENTRIFUGAL ROOFTOP UPBLAST	AREAS 'A' & 'E' RESTROOMS	1,600	0.75	1420	BELT	1/2 HP	120/1	14.7	125	COOK MODEL ACRU 135R5B	1 3 5
EF 3	CENTRIFUGAL ROOFTOP UPBLAST	AREAS 'B' & 'F' RESTROOMS	900	0.75	1375	BELT	1/3 HP	120/1	10.2	140	COOK MODEL ACRU 150RH4B	1 3 5
EF 4	CENTRIFUGAL ROOFTOP UPBLAST	AREAS 'A' & 'E' RESTROOMS	700	0.75	1900	BELT	1/4 HP	120/1	12.2	85	COOK MODEL ACRU 100R3B	1 3 5
EF 5	CEILING CABINET	WOMEN'S E230	200	0.40	1100	DIRECT	125 W	120/1	2.0	50	COOK MODEL GC-420	1 2 5
EF 6	CEILING CABINET	MEN'S E229	200	0.40	1100	DIRECT	125 W	120/1	2.0	50	COOK MODEL GC-420	1 2 5
EF 7	CEILING CABINET	MEN'S A105	100	0.50	1080	DIRECT	74 W	120/1	2.5	40	COOK MODEL GC-144	1 2 5
EF 8	CEILING CABINET	WOMEN'S B105	100	0.50	1080	DIRECT	74 W	120/1	2.5	40	COOK MODEL GC-144	1 2 5
EF 9	CEILING CABINET	TOILET D103	150	0.40	1200	DIRECT	102 W	120/1	3.0	40	COOK MODEL GC-164	1 2 5
EF 10	CENTRIFUGAL ROOFTOP UPBLAST	AREA 'D' RESTROOMS	1,700	0.75	1200	BELT	1/2 HP	120/1	13.0	100	COOK MODEL ACRU 150R5B	1 3 5
EF 11	CEILING CABINET	JANITOR C100	100	0.50	1080	DIRECT	74 W	120/1	2.5	40	COOK MODEL GC-144	1 2 5
EF 12	CEILING CABINET	TOILET C109	100	0.50	1080	DIRECT	74 W	120/1	2.5	40	COOK MODEL GC-144	1 2 5
EF 13	CEILING CABINET	KILN C132	200	0.40	1100	DIRECT	125 W	120/1	2.0	50	COOK MODEL GC-420	1 2 9
EF 14	CEILING CABINET	TOILET C117	100	0.50	1080	DIRECT	74 W	120/1	2.5	40	COOK MODEL GC-144	1 2 5
EF 15	CENTRIFUGAL ROOFTOP UPBLAST	HOOD H-1	5,980	1.00	890	BELT	2 HP	208/3	17.3	350	COOK MODEL VCR 245V9B	1 4 6
EF 16	CENTRIFUGAL ROOFTOP UPBLAST	HOOD H-2	700	0.50	1080	BELT	1/6 HP	120/1	5.9	110	COOK MODEL ACRU 135R3B	1 3 8
EF 17	RANGE HOOD EXHAUST	EXT. RESOURCE CLASSROOM B121	200	0.30	--	DIRECT	--	120/1	4.0	22	BROAN ALLURE MODEL QS130	7
EF 18	CEILING CABINET	ELEVATOR EQUIPMENT	300	0.60	1180	DIRECT	115 W	120/1	3.0	65	COOK MODEL GC-720	1 2 10
EF 19 THRU EF 22		LABS	1,000	1.50	2850	BELT	3/4	208/3	86 LwA	450	COOK 100 CPS-LE-B	1 8 11
EF 23	CEILING CABINET	TIME OUT D102	100	0.50	1080	DIRECT	74 W	120/1	2.5	40	COOK MODEL GC-144	1 2 5

1. APPROVED ALTERNATE MANUFACTURERS: GREENHECK, PENN, CARNES, & BARRY BLOWER.
2. PROVIDE UNIT WITH MANUFACTURER'S ALUMINUM ROOF CAP (FLAT ROOF) EQUAL TO COOK MODEL PR (W/ INTEGRAL BIRD SCREEN AND ROOF CURB), BACKDRAFT DAMPER, OUTLET FLEX DUCT CONNECTION, STANDARD DISCONNECT SWITCH, HANGING VIBRATION ISOLATORS, AND WHITE ALUMINUM GRILLE.
3. PROVIDE UNIT WITH MANUFACTURER'S ROOF CURB W/ DAMPER TRAY AND BACKDRAFT DAMPER, PRE-WIRED NEMA 3R ELECTRICAL DISCONNECT SWITCH, AND INTEGRAL BIRD SCREEN.
4. PROVIDE UNIT WITH MANUFACTURER'S ROOF CURB, PRE-WIRED NEMA 3R ELECTRICAL DISCONNECT SWITCH, AND HINGED SUB BASE.
5. CONTROL FAN WITH DIRECT DIGITAL CONTROL SYSTEM.
6. CONTROL FAN WITH WALL MOUNTED HOOD CONTROL PANEL.
7. PROVIDE UNIT WITH 2-SPEED FAN AND 2-POSITION HALOGEN LIGHT SWITCH. ARCHITECT TO SELECT COLOR.
8. CONTROL FAN WITH WALL SWITCH.
9. CONTROL FAN WITH HEAT RISE THERMOSTAT WITH MANUAL OVERRIDE.
10. CONTROL FAN WITH HEAT RISE THERMOSTAT.
11. PROVIDED WITH MANUFACTURER'S ROOF CURB WITH CURB CAP, INLET BOX, FAN DRAIN, BOLTED ACCESS DOOR, PHENOLIC EPOXY POWER COAT WITH UV PROTECTION, WEATHER COVER, S.S. HARDWARE, S.S. SHAFT, DISCHARGE NOZZLE. UNIT SHALL HAVE AN EFFECTIVE DISCHARGE HEIGHT OF 10'-0" ABOVE THE ROOF.

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Wayne Thouwsen, Architect

New Jerome Middle School
Jerome Joint School District No. 261
Jerome, Idaho

DATE: 15 May 2006
REVISIONS:

JOB NO.: 0545
DRAWN BY: SJM / GB / LT
CHECKED BY: CEP

Middle School
MECH. SCHEDULES
M-8.2