

MECHANICAL ABBREVIATIONS	
	LIQUID
LAT	LEAVING AIR TEMPERATURE
LAV	LAVATORY
LB/SHR	POUNDS PER HOUR
LF	LINEAL FOOT, FEET
LT	LINED TRANSFER AIR
LV	LOUVER
LWT	LEAVING WATER TEMPERATURE
MAU	MAKEUP AIR UNIT
MAX	MAXIMUM
MB	MOB BASIN
MBH	1,000 BTU/H
MC	MECHANICAL CONTRACTOR
MCC	MOTOR CONTROL CENTER
MEZZ	MEZZANINE
MIN	MINIMUM
MISC	MISCELLANEOUS
#	NUMBER
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OC	ON CENTER
ORD	OVERFLOW ROOF DRAIN
OSD	OVERFLOW STORM DRAIN
PC	PLUMBING CONTRACTOR
PD	PRESSURE DROP
PG	PRESSURE GAUGE
PLBG	PLUMBING
PRV	POWER ROOF VENTILATOR
PRV	PRESSURE REDUCING VALVE
PRV	PRESSURE REGULATING VALVE
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE AND TEMPERATURE FITTING
RA	RETURN AIR
RCF	REFLECTED CEILING PLAN
RO	ROOF DRAIN
REG	REGISTER
REQ	REQUIRED
RF	RETURN FAN
RH	RELATIVE HUMIDITY
RHC	REHEAT COIL
RL	REFRIGERANT LIQUID
RM	ROOM
RO	REVERSE OSMOSIS
RP	RADIANT PANEL
RPM	REVOLUTIONS PER MINUTE
RPZ	REDUCED PRESSURE BACKFLOW PREVENTER
RS	REFRIGERANT SUCTION
RTU	ROOFTOP UNIT
RWL	RAIN WATER LEADER
S	SUCTION
SA	SUPPLY AIR
SAN	SANITARY
SCCR	SHORT CIRCUIT CURRENT RATING
SCU	SELF CONTAINED UNIT
SCW	SOFTENED COLD WATER
SD	STORM DRAIN
SE	SEWAGE EJECTOR
SF	SUPPLY FAN, SQUARE FEET
SH	SHOWER
SP	STATIC PRESSURE, SLUMP PUMP
SR	SUCTION RISER
SS	STAINLESS STEEL
ST	STORM
STM	STEAM
STD	STANDARD
SU	SUPPLY UNIT
T	THERMOSTAT, TEMPERED
T-STAT	THERMOSTAT
TA	TRANSFER AIR
TC	TEMPERATURE CONTROL(S)
TCC	TEMPERATURE CONTROL(S) CONTRACTOR
TD	TEMPERATURE DIFFERENTIAL
TMV	THERMOSTATIC MIXING VALVE
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UG	UNDERGROUND
UH	UNIT HEATER
UNO	UNLESS NOTED OTHERWISE
UR	URNAL
V	VENT
VAV	VARIABLE AIR VOLUME
VD	VARIABLE DAMPER
VFD	VARIABLE FREQUENCY DRIVE
VSD	VARIABLE SPEED DRIVE (MOTOR CONTROLLER)
VTR	VENT THROUGH ROOF
W	WASTE
WC	WATER CLOSET
WCO	WALL CLEAN OUT
WH	WATER HEATER
WH	WALL HYDRANT
WP	WATERPROOF
WPD	WATER PRESSURE DROP
WS	WATER SOFTENER

MECHANICAL SHEET INDEX	
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MS.1	MECHANICAL DETAILS
MT.1	MECHANICAL SCHEDULES
MB.1	MECHANICAL CONTROLS



PROJECT

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ISSUED SET	2026-03-27
REVISIONS	

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(NOTES APPLY TO ALL SHEETS)

- 31 CONTRACTOR SHALL MAINTAIN ACCESS TO ALL SIDEWALKS, DRIVEWAYS, AND ENTRANCES SHALL BE KEPT CLEAR AND FREE OF ALL CONTRACTOR'S EQUIPMENT, MATERIAL, AND DEBRIS AT ALL TIMES.
- 32 CONTRACTOR SHALL THOROUGHLY EXAMINE THE EXISTING BUILDING WITH REGARD TO WHAT TEMPORARY MEASURES HE MUST TAKE IN ORDER TO PERMIT THE OWNER TO OCCUPY SPECIFIC AREAS OF THE BUILDING DURING THE VARIOUS CONSTRUCTION PHASES. REFER TO DIVISION 1, SECTION 1010, "SUMMARY OF WORK" FOR CONSTRUCTION SEQUENCING SCHEDULE. IN GENERAL, SYSTEMS MUST REMAIN IN USE IN THOSE DESIGNATED AREAS TO PERMIT THE OWNER TO FUNCTION IN A PRE-CONSTRUCTION MANNER.

FOR SHALL INITIATE THE COORDINATION PROCESS BY PR

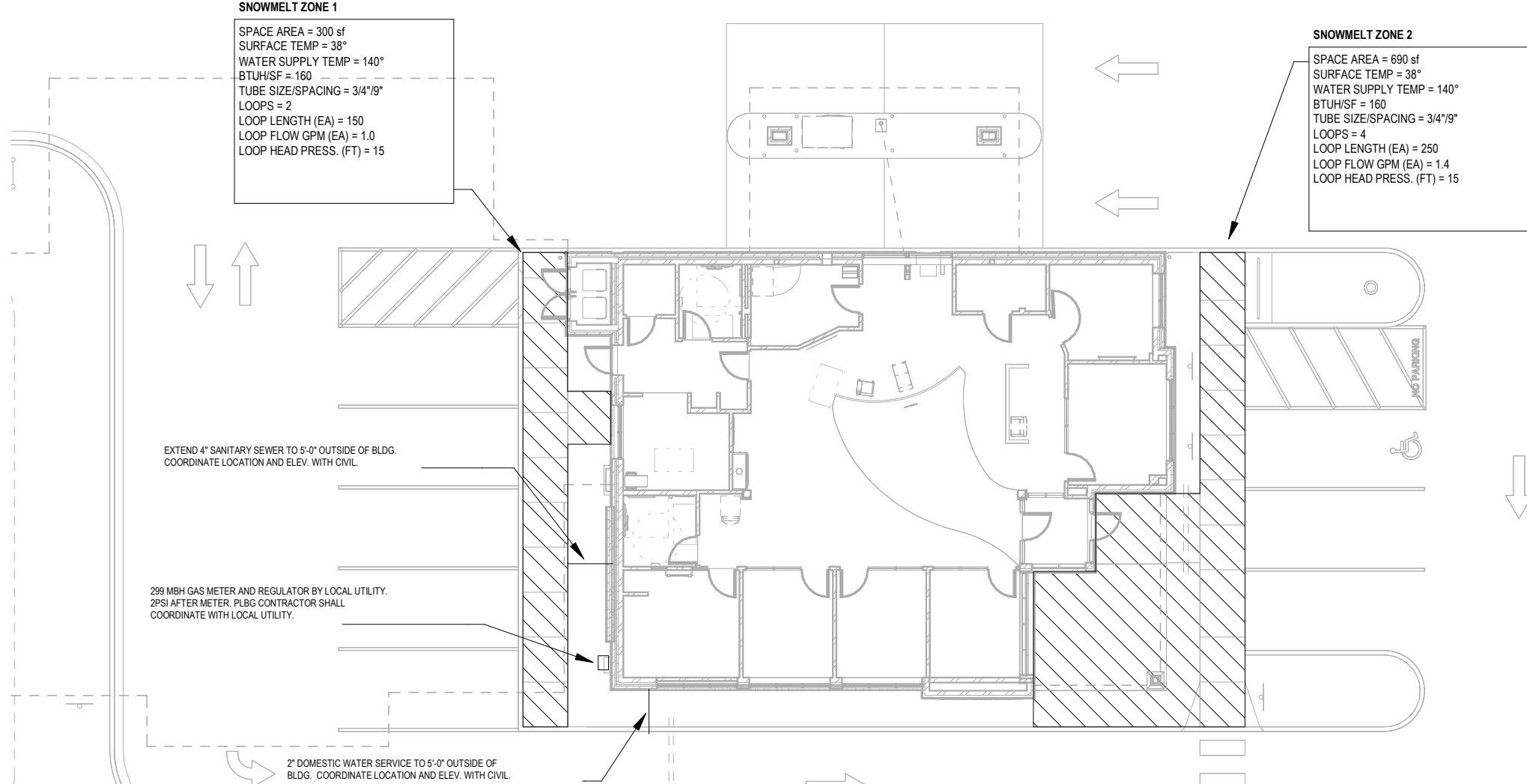
- 9 HVAC CONTRACTOR SHALL CLOSELY COORDINATE WITH GENERAL CONTRACTOR FOR EXACT FIRE AND FIRE/SMOKE DAMPER PENETRATION SIZES IN WALLS AND FLOORING. FLOOR OPENINGS PROVIDED BY PRECAST MANUFACTURER ARE OVERSIZED AND M.C. MUST RELAY EXACT (NOT NOMINAL) OPENING SIZE MEETING UL LISTING TO CONCRETE INSTALLER FOR FRAMING OUT FLOOR OPENING. FLOOR OPENING SHALL HAVE 0.5" FREE SPACE AROUND ALL FOUR SIDES OF DAMPER AT ANY TIME TO ALLOW FOR EXPANSION, NO EXCEPTIONS. INSTALL MOUNTING ANGLE ON ALL FOUR SIDES OF FIRE DAMPERS; ANGLES SHALL NOT BE SECURED TO FLOOR OR WALL. FIRE CAULKING AROUND DAMPERS IS STRICTLY PROHIBITED. REFER TO STANDARDS UL555 & UL555S AND DAMPER MANUFACTURER'S INSTALLATION INSTRUCTIONS.

OUND PIPING WITH GENERAL CONTRACTOR TO ENSURE PROPER FOOTING

- 5 ADJUST SEWER INVERTS TO KEEP BOTTOM OF PIPES IN LINE WHERE PIPE SIZES CHANGE.
- 6 PROVIDE SHUTOFF VALVES IN ALL WATER PIPING SYSTEM BRANCHES IN WHICH BRANCH PIPING SERVES TWO OR MORE FIXTURES (NOT SHOWN FOR CLARITY) AND WHERE SHOWN ON PLAN AND RISERS.
- 7 INSTALL PIPING SO THAT ALL VALVES, STRAINERS, UNIONS, TRAPS, FLANGES, AND OTHER ACCESSORIES REQUIRING ACCESS

UNDERGROUND PIPING WITH GENERAL CONTRACTOR TO ENSURE PROPER FOOTING DEE

- 5 ALL VALVES SHALL BE ADJUSTED FOR SMOOTH AND EASY OPERATION.
- 6 ALL VALVES (EXCEPT CONTROL VALVES) AND STRAINERS SHALL BE FULL SIZE OF PIPE BEFORE REDUCING SIZE TO MAKE CONNECTIONS TO EQUIPMENT AND CONTROLS.
- 7 FIRE PROTECTION CONTRACTOR IS RESPONSIBLE FOR ALL REMOVING, CUTTING, PATCHING, AND REPLACEMENT OF ALL



NO SCALE



1010 Mainstreet, Suite 100
Hopkins, MN 55343
Tel: 952.278.8880

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MECHANICAL GENERAL
NOTES & SITE PLAN

MO.1



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706 Bush Lake Road
Edina, MN 55439
(612) 930-0050 | www.epinc.com

MAIN LEVEL & BELOW FLOOR PLAN - PLUMBING

Drawn By: JB & DM

Checked By: JH

M1.1

392.0002

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GENERAL NOTES:

A. SEE SHEET MD.1 FOR GENERAL NOTES

KEY NOTES:



- EXISTENCE 4" SANITARY TO 5' OUTSIDE BUILDING WITH FLOOR CLEANOUT. COORDINATE EXIST' LOCATIONS WITH CIVIL.
- EXISTENCE 4" STORM TO 5' OUTSIDE BUILDING WITH FLOOR CLEANOUT. COORDINATE EXIST' LOCATIONS WITH CIVIL.
- EXISTENCE 2" DOMESTIC WATER SERVICE FROM 5' OUTSIDE BUILDING INTO BUILDING.
- EXISTENCE 4" STORM TO 5' OUTSIDE BUILDING WITH FLOOR CLEANOUT. COORDINATE EXIST' LOCATIONS WITH CIVIL.
- PROVIDE RUSH FOR FUTURE WATER SOFTENER WITH BYPASS LINE AND SHUT OFF VALVES.
- MOIST WATER HEADER ON WALL WITH RIGORATE AT 8' ABOVE FLOOR. SEE DETAIL.
- GAS METER A REGULATOR OR LOCAL UTILITY. WORK 1/2" B20w AFTER SETBACK. PROVIDE BUILDING SHUT OFF IMMEDIATELY 4"X6" 20w AFTER SETBACK.
- DROP STORM PIPING DOWN ALONG WALL TO BELOW GRADE. PROVIDE WITH CLEANOUT & VENT PIPING IN ROOM FOR FLOOR PENETRATION.
- VENT UP TO VENT THROUGH ROOF.
- MOIST WALL WITH HYDRANT AT 1' ABOVE GRADE. PROVIDE SHUT OFF VALVE FOR INTERIOR BATHROOM.
- DROP OVERFLOW DRAIN DOWN WALL AND DISCHARGE AT 18" ABOVE GRADE. SEE DETAIL 4.6M.2.
- EXISTENCE CONDENSATION DRAIN AS HIGH AS POSSIBLE AND THROUGH WALL TO UTILITY 1/4" DISCHARGE CONDENSATION DRAIN INTO FLOOR DRAIN.
- EXISTENCE 1" PIPING FROM MAIN IN BLDG TO GRADE OUTSIDE BUILDING. ROUTE TO GREEN SPACE AND GRAB FOR IRRIGATION CONTROL. PROVIDE WATER VALVE IN ROOM WITH CLEANOUT.
- DROP STORM PIPING IN PRIOR TO BELOW GRADE. PROVIDE WITH WALL CLEANOUT IN PRIOR TO BELOW GRADE. TRANSITION.



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MAIN LEVEL PLAN - HVAC

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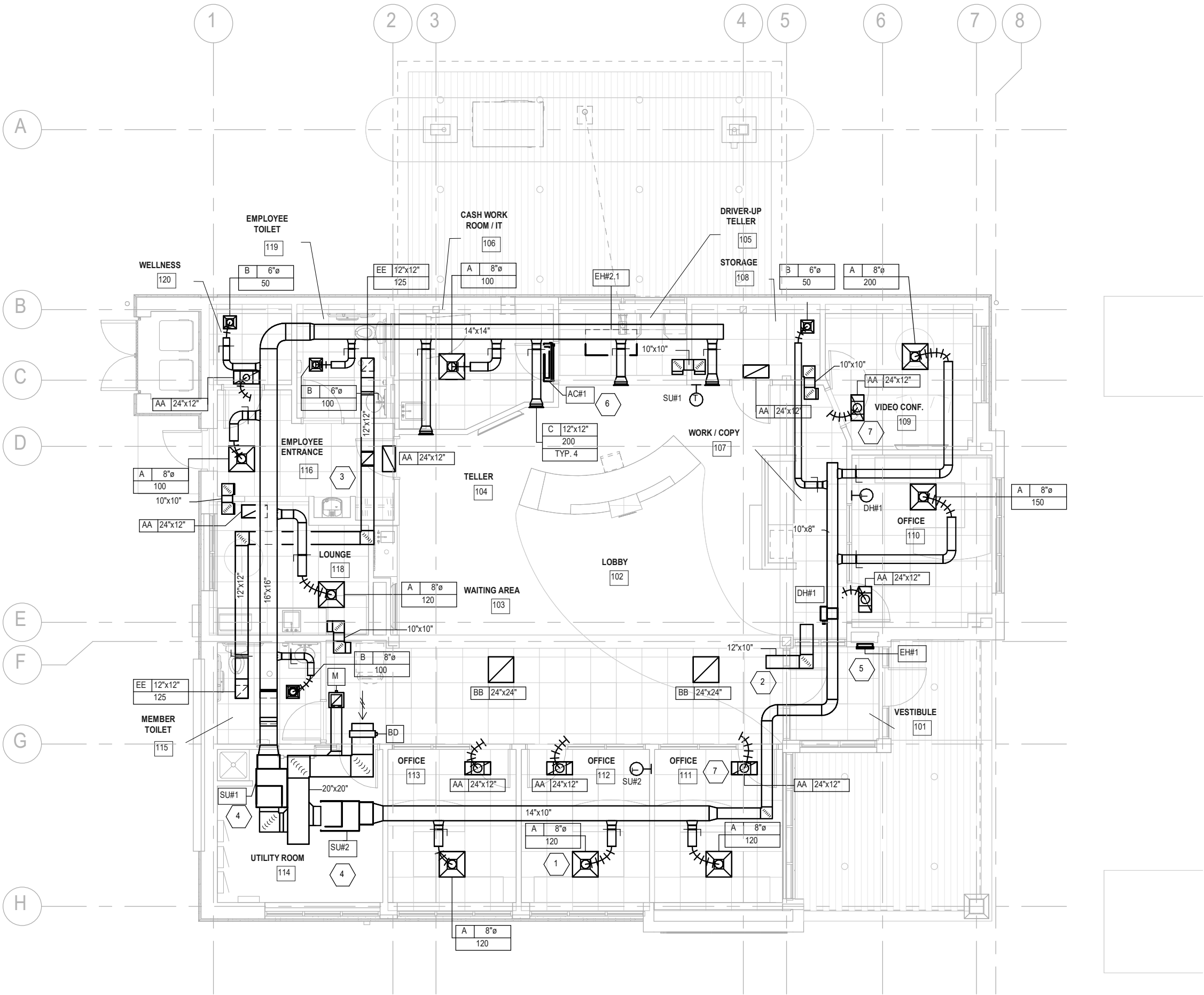
GENERAL NOTES:

- SEE SHEET M0.1 FOR GENERAL NOTES
- ALL HVAC SYSTEMS TO BE BALANCED PER SECTION 6.7.3.3.1 OF ASHRAE 90.1-2019
- ALL DUCTS TO BE SEAL CLASS A AT 2 INCH W.G. PRESSURE CLASS RATING.

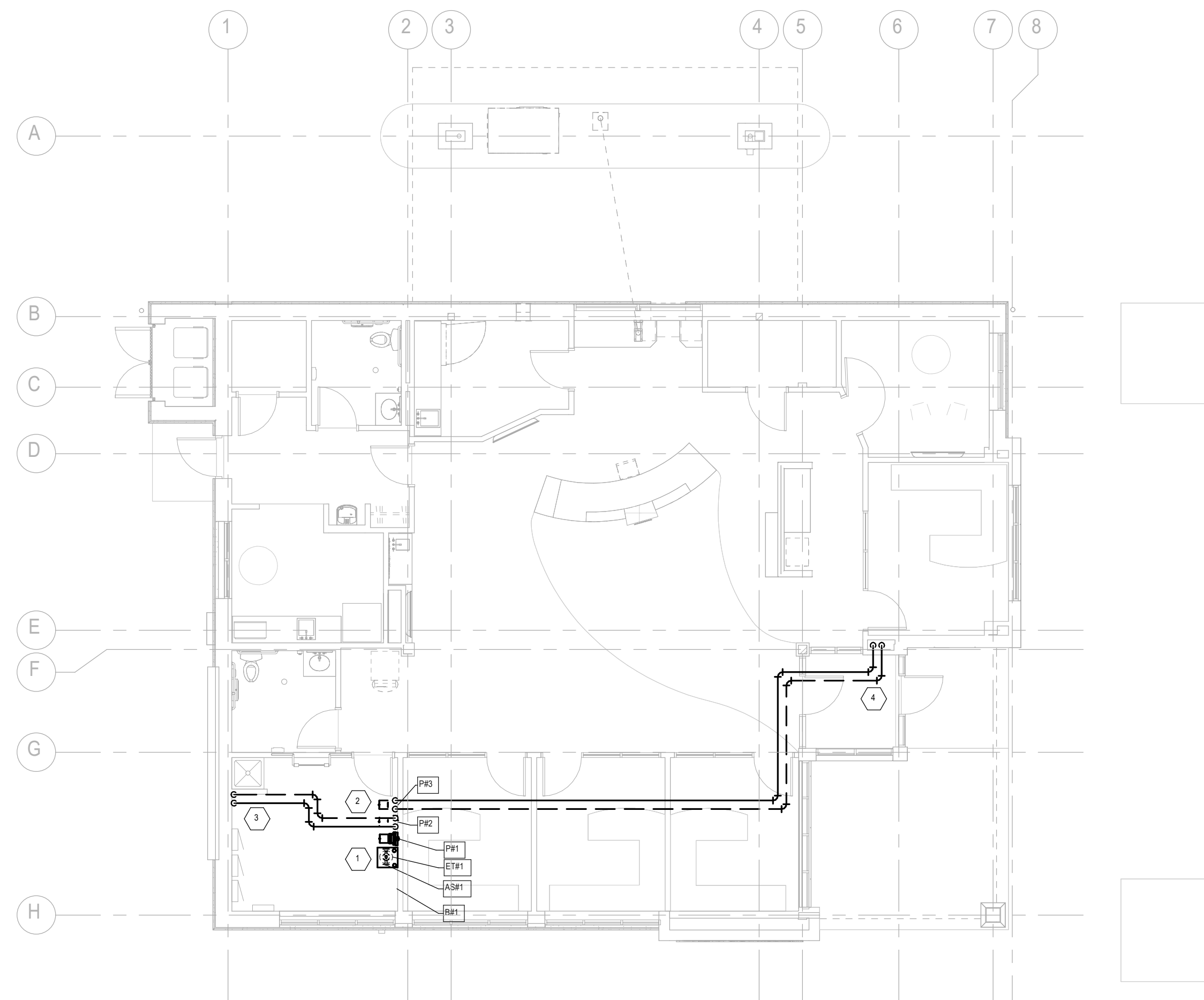
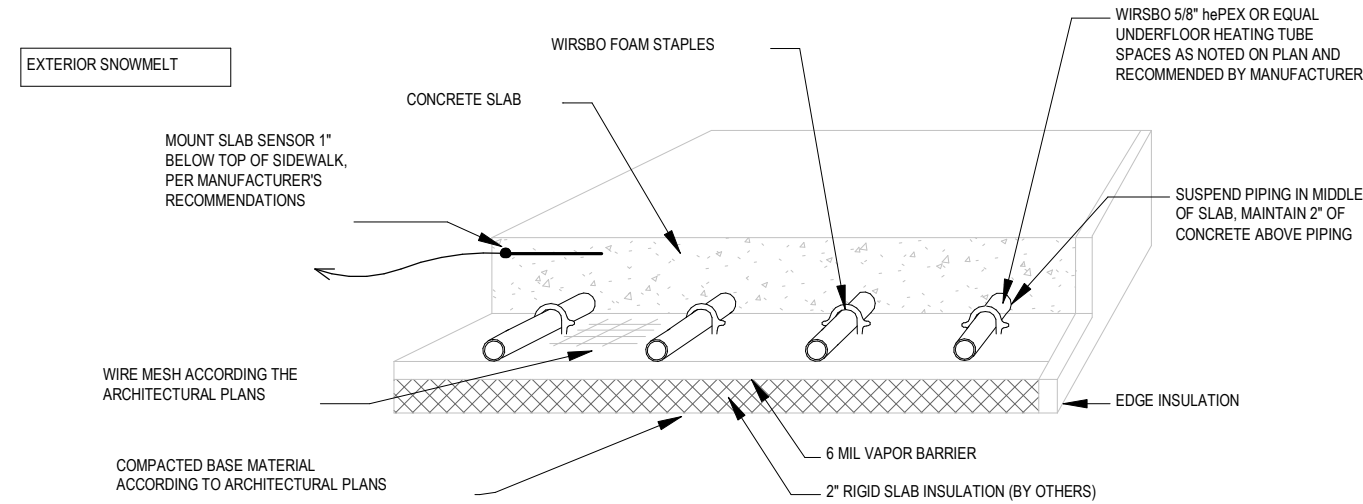
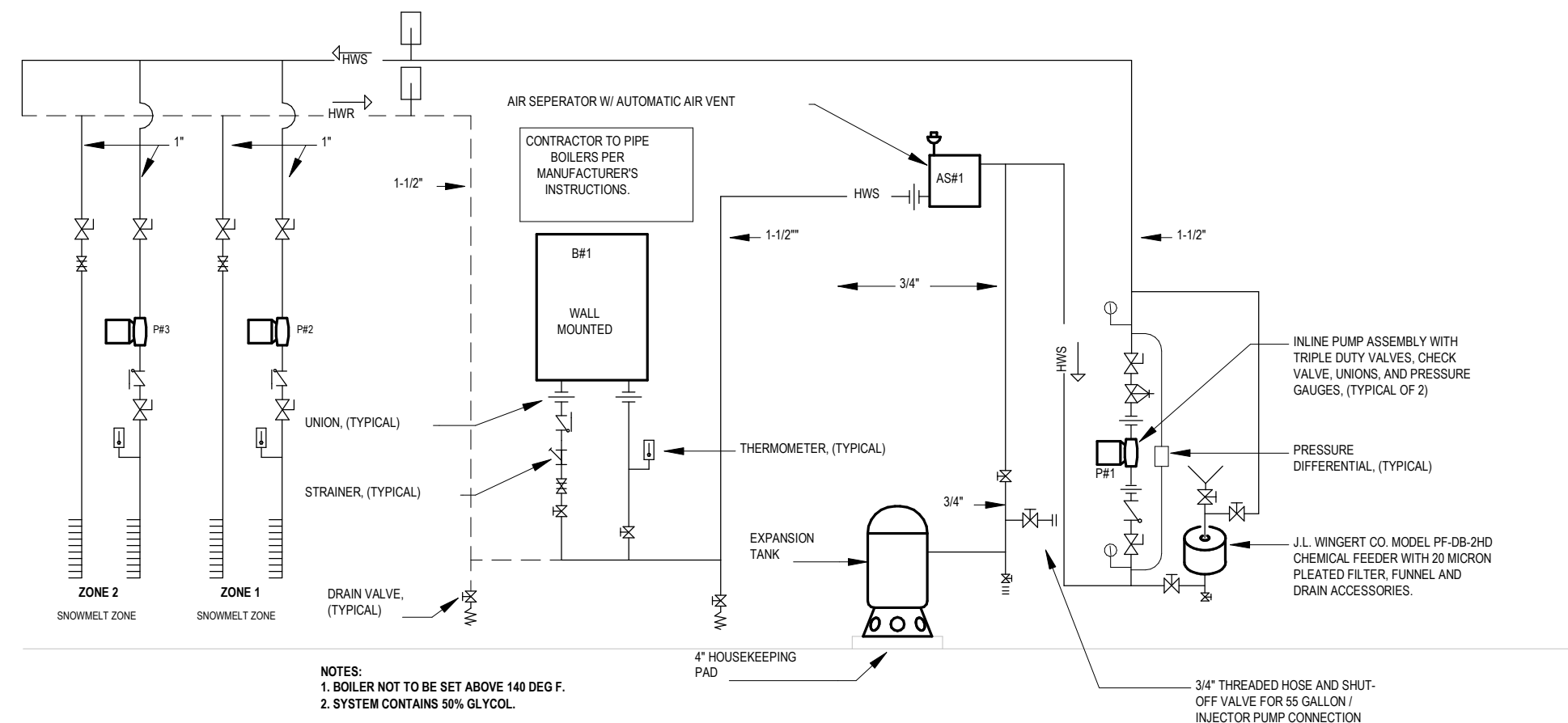
KEY NOTES:



- PROVIDE DIFFUSER (TYPICAL). SEE DETAIL 1M6.1.
 INSTALL LINE TRANSFER DUCT. SEE DETAIL 1M6.1.
 EXHAUST EXHAUST AIR UP THROUGH ROOF AND CONNECT TO ROOF
 EXHAUST FAN. SEE DETAIL 3M6.1.
 INSTALL FURNACE HANG FROM STRUCTURE AS HIGH AS POSSIBLE AND
 SUPPORT FROM STRUCTURE WITH VIBRATION SOLIDS. EXHIBIT
 FLEU AND COMBUSTION AIR FROM FURNACE THROUGH ROOF. SIZE AND
 INSTALL PER MANUFACTURER'S INSTRUCTIONS.
 INSTALL WALL MOUNTED ELECTRIC HEATER WITH HEATING NO. ONE
 VOLTAGE WALL THERMOSTAT. PROVIDE RELAY AND INTERLOCK WITH
 OUTDOOR AIR TEMPERATURE SENSOR. OUTDOOR AIR TEMPERATURE
 SENSOR TO BE INSTALLED WITHIN CONCISELY WEATHER PROOF
 EXTERIOR ENCLOSURE. COORDINATE FINAL LOCATION WITH ARCHITECT
 PRIOR TO INSTALL.
 MOUNT INDOOR COOLING UNIT WITH BOTTOM 6" ABOVE DOOR. EXTEND
 CONDENSATE DRAIN UP THROUGH ROOF OUTDOOR UNIT. SIZE AND
 INSTALL PER MANUFACTURER'S INSTRUCTIONS.
 PROVIDE RETURN GRILLE PLEXIN BOX AND FLEX DUCT WHERE SHOWN
 SEE DETAIL 2M6.1.



1 MAIN LEVEL PLAN - HVAC
SCALE: 1/8" = 1'-0"



GENERAL NOTES:

- A. SEE SHEET M0.1 FOR GENERAL NOTES
- B. ALL HVAC SYSTEMS TO BE BALANCED PER SECTION 6.7.3.3.1 OF ASHRAE 90.1-2019

The logo for HTG architects features the letters "HTG" in a large, bold, sans-serif font. A thick, dark grey swoosh underline starts under the "H", curves under the "T" and "G", and ends under the "G". Below the swoosh, the word "architects" is written in a smaller, lowercase, sans-serif font.

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ep **emanuelson-podas**
consulting engineers

Emanuelson-Podas, Inc.
7706 Bush Lake Road
Edina, MN 55439
(952) 930-0060 | www.epinc.com

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MAIN LEVEL PLAN - PIPING

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M3.1

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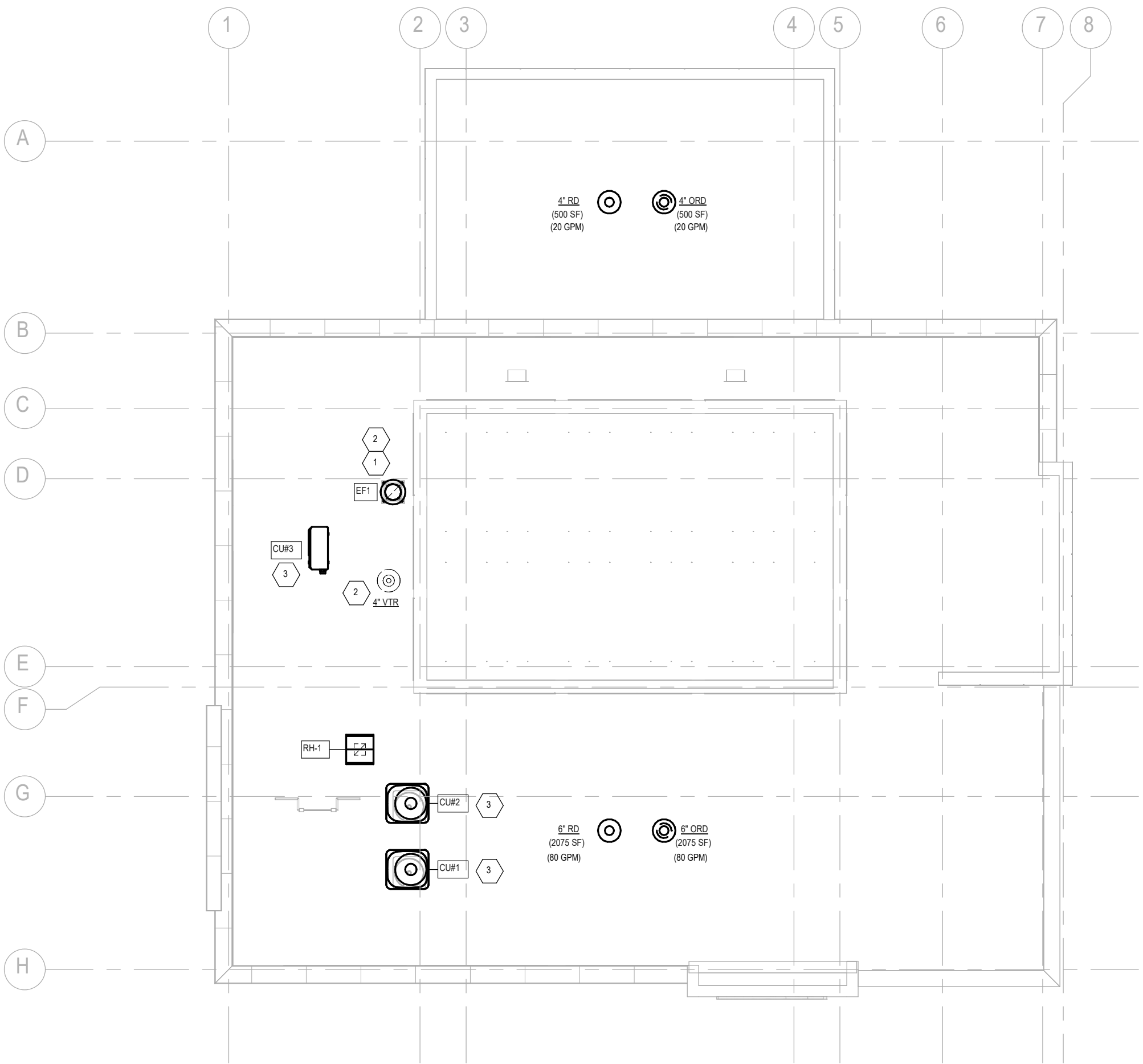
ROOF PLAN - MECHANICAL

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1 ROOF PLAN - MECHANICAL
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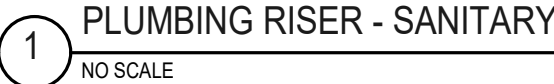
PLUMBING RISER DIAGRAMS

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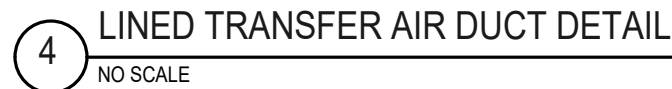
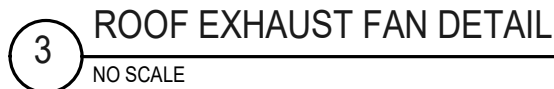
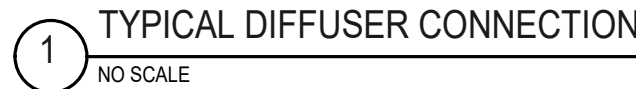
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PLUMBING FIXTURE SCHEDULE									
NOTES:									
1. TRAP AND SUPPLY WRAP. ASSE 1070 MIXING VALVE.									
2. COUNTER BY OTHERS - COORDINATE CLEARANCE SIZE AND ROUGH IN ELEVATION.									
3. 4FT. HOSE AND MOP RACK.									
MARK	FIXTURE	LOCAL CONNECTION SIZES (INCHES)				MOUNTING HEIGHT	NOTES		
		WASTE	VENT	CW	HW				
2FD	FLOOR DRAIN	2"	1-1/2"	---	---	FLOOR			
EW1C	ELECTRIC WATER COOLER	2"	1-1/2"	1/2"	---	WALL			
L1	LAVATORY	1-1/2"	1-1/2"	1/2"	1/2"	COUNTER	1,2		
MS1	JANITOR'S SINK, FLOOR MOUNTED	2"	1-1/2"	1/2"	1/2"				
S1	SINK	2"	1-1/2"	1/2"	1/2"	COUNTER	1,2		
S3	SINK	2"	1-1/2"	1/2"	1/2"	COUNTER	1,2		
S3	SINK	2"	1-1/2"	1/2"	1/2"	COUNTER	1,2		
WC1	WATER CLOSET, FLOOR-MOUNTED, FLUSH+VALVE	4"	2"	1-1/4"	---				
WH	HYDRANT - WALL (FREEZE PROOF)	---	---	3/4"	---	WALL			

WATER HEATER - ELECTRIC SCHEDULE												
NOTES:												
1. SET TEMPERATURE TO 120°F.												
2. PROVIDE AMTROL THERM-X-TROL ST-5 EXPANSION TANK. CONNECT TO COLD WATER AT INLET TO HEATER.												
MARK	MANUFACTURER	MODEL	TANK CAPACITY GALLS.	EWT °F	LWT °F	RECOVERY (GPH)	TOTAL INPUT (KWH)	ELECTRICAL DATA				NOTES
								STAGES/NO. OF ELEMENTS	VOLTS	PHASE	FLA	
WH#1	A.O. SMITH	DEL-10	10.0	40	140	23	4	1	208	1	19.2	1.4

UNIT HEATER - ELECTRIC SCHEDULE													
NOTES:													
1. PROVIDE WITH INTEGRAL CONCEALED THERMOSTAT, RECESSED MOUNTING, INTEGRAL DISCONNECT.													
MARK	MANUFACTURER	MODEL	AIRFLOW (CFM)	HEATING DATA			ELECTRICAL DATA				MOUNT	NOTES	
				CAPACITY (KW)	CAPACITY (MBH)	EAT (°F)	VOLTS	PHASE	FLA	MCA			CONTROL
EH#1	BERKO	FRC-4027F	100	2	6.8	65	208	1	9.6	0	INTEGRAL	WALL	1

RADIANT PANEL - ELECTRIC SCHEDULE															
NOTES:															
1. PROVIDE WITH 1" FOIL BACK INSULATION, PANEL TO BE 24 GAUGE. SUPPORT PANELS FROM STRUCTURE.															
2. PROVIDE UNIT WITH FACTORY WIRED POWER RELAYS.															
LOCATION						HEATING DATA			ELECTRICAL DATA						
MARK	ROOM NAME	ROOM NO	MANUFACTURER	MODEL	SIZE (LxW)	CAP (KW)	CAP (MWH)	VOLTS	PHASE	FLA	MCA	MOCIP	CONTROL	MOUNT SURFACE	NOTES
EH2.1			BERKO	CP502	48"x24"	0.5	1.7	208	1	3.6	4.5	20			

DUCT COIL - ELECTRIC SCHEDULE									
NOTES:									
... UNIT SHALL HAVE SCR CONTROLLER, DISCHARGE AIR TEMPERATURE SENSOR, AIR FLOW PROVING SWITCH AND SPACE START / STOP...									
MARK	MANUFACTURER	MODEL	AIRFLOW (CFM)	EAT (°F)	LAT (°F)	INPUT (KW)	ELECTRICAL DATA VOLTS PHASE		NOTES
DH#1	THERMOLEC	CUSTOM	400	60	100	4	208	3	1

PLUMBING PUMP SCHEDULE											
NOTES:											
1. BRONZE WITH REPLACEABLE CARTRIDGE, CONSTANT SPEED.											
MARK PPH1	MANUFACTURER BELL & GOSSETT	MODEL NSF-18S	SERVES BUILDING LOOP	PUMP TYPE INLINE	GPM 1	PUMP HEAD (FT WG) 15	MOTOR DATA				NOTES 1
							HP 90W	RPM 3000	VOLTS 120	PHASE 1	

MECHANICAL EQUIPMENT	ROOM NAME & NUMBER	AREA (SQ. FT)	PEOPLE	MAX SUPPLY CFM...	ASHRAE 62.1 REQUIREMENTS					ACTUAL OUTDOOR AIR		
					SPACE CLASSIFICATION	PEOPLE RATE (CFM/PER)	AREA RATE (CFM/SF)	Ez	Voz (CFM)	OA		
										MIN %	Total CFM	
SU1	OFFICE 113	120	3	120	OFFICE	5.0	0.06	0.8	28	23.1%	28	
	OFFICE 112	120	3	120	OFFICE	5.0	0.06	0.8	28	23.1%	28	
	OFFICE 111	122	3	120	OFFICE	5.0	0.06	0.8	28	23.3%	28	
	OFFICE 110	145	3	150	OFFICE	5.0	0.06	0.8	30	19.8%	35	
	CONF 109	115	4	200	OFFICE	5.0	0.06	0.8	34	16.8%	47	
SU2	TOILET 115	65	1	100	BATHROOM	0.0	0.00	0.8	0	0.0%	23	
	LOUNGE 118	115	3	120	BREAKROOM	5.0	0.06	0.8	27	22.8%	28	
	ENTRANCE 116	100	0	120	CORRIDOR	0.0	0.06	0.8	8	6.3%	28	
	WELLNESS 120	32	1	100	BREAKROOM	5.0	0.06	0.8	9	8.7%	23	
	TOILET 119	57	1	100	BATHROOM	0.0	0.00	0.8	0	0.0%	23	
	IT 106	100	0	100	STORAGE	5.0	0.06	0.8	8	7.5%	23	
	STORAGE 108	52	0	100	STORAGE	5.0	0.06	0.8	4	3.9%	23	
	TELLER 104	275	2	250	LOBBY	5.0	0.06	0.8	33	13.3%	58	
	WAITING AREA 103	235	3	250	LOBBY	5.0	0.06	0.8	36	14.6%	58	
	LOBBY 102	330	0	250	LOBBY	5.0	0.06	0.8	25	9.9%	58	
	COPY 107	115	0	250	LOBBY	5.0	0.06	0.8	9	3.5%	58	
	TOTALS		2,098	27	2,450					304		570
	NOTES: 1. REBALANCE EXISTING UNITS ACCORDING TO THE SCHEDULE.											

BOILER - GAS FIRED SCHEDULE																							
NOTES:																							
1. PROVIDE WITH OPTIONAL CONDENSATE NEUTRALIZATION KIT, LOW WATER CUTOFF, CONCENTRIC VENT KIT, INTERFACE MODULE (CONNECTION TO BAS).																							
2. CAPACITY BASED ON 50% GLYCOL.																							
LOCATION				WATER DATA								HEATER DATA				VENTING			ELECTRICAL DATA				
MARK	ROOM NAME	ROOM NO.	MANUFACTURER	MODEL	FLOW RATE (GPM)	WATER PD (FT)	EWI (°F)	LWT (°F)	CONN (IN)	INPUT (MBH)	OUTPUT (MBH)	THERMAL EFF. (%)	WATER VOLUME (GAL)	VENT (IN)	AIR (IN)	MATERIAL	VOLTS	PHASE	FLA	MCA	MOPP	WEIGHT (LBS)	NOTES
SBT			LOCHINVAR	WHB255	11	130	150	114	158				5.0			PVC	120	1	4	5	15	220	1.2

FURNACE - GAS FIRED SCHEDULE																										
NOTES:																										
1. CONCENTRIC VENT KIT FOR VENT AND COMBUSTION AIR PIPES TO TERMINATE THROUGH A SINGLE EXIT.																										
2. SIDE RETURN VULNET WITH FILTER RACK AND 1" FILTERS.																										
3. ECM FAN MOTORS.																										
4. ACID NEUTRALIZATION KIT FOR CONDENSATE PIPING.																										
5. HONEYWELL VISIONPRO 8000, PROGRAMMABLE THERMOSTAT.																										
MARK	MANUFACTURER	MODEL	SUPPLY AIRFLOW (CFM)	OUTSIDE AIR (CFM)	ESP (IN WG)	MOTOR (HP)	HEATING DATA						COOLING DATA						ELECTRICAL DATA						WEIGHT (LBS)	NOTES
							EAT (°F)		LAT (°F)		INPUT (MBH)		OUTPUT (MBH)	STAGES	EAT DBWB (deg F)	LAT DBWB (deg F)	CAPACITY TOTAL (MBH)	CA CONN. SIZE (IN)	VENT CONN. SIZE (IN)	VOLTS	PHASE	FLA	MCA	MOCp		
							MIN	MAX	MIN	MAX	MIN	MAX														
SLJ1	CARRIER	060V14L4	1200	59	1.5	1/2	55	100	39	2	8067	55/53	42	3	120	1	10.1	10.9	25	128	ALL					
SLJ2	CARRIER	040V14-10	800	0.5	1/2	55	100	26	40	39	2	8067	55/53	24	3	120	1	6.3	7	20	126	ALL				

CONDENSING UNIT - AIR COOLED SCHEDULE														
NOTES:														
1. PROVIDE REFRIGERANT PIPE QUANTITIES AND TRAPS PER MANUFACTURER'S PIPING SCHEMATIC. CONTRACTOR TO VERIFY REFRIGERANT LINE LENGTHS WITH MANUFACTURER FOR LINE SIZES.														
2. PROVIDE WITH UNIT STAND-OFF KIT, AND FACTORY INSTALLED TXV. PROVIDE WITH LOW AMBIENT KIT.														
				CONDENSER DATA					MOTOR DATA					
MARK	MANUFACTURER	MODEL	SEER/EEER	COOLING CAPACITY TON (TDBH)	FAN NO	FAN MOTOR HP	NO COMP	AMB TEMP (deg F)	REFRIG. TYPE	VOLTS	PHASE	MCA	WEIGHT (LBS)	NOTES
CUJ1	CARRIER	26TPAB	19	3	1	1/5	1	90	R-454B	208	1	20.9	214	
CUJ2	CARRIER	26TPAB	18	2	1	1/5	1	90	R-454B	208	1	15.5	171	ALL

FAN SCHEDULE																
NOTES:																
1. 24-INCH PREINSULATED HINGED ROOF CURB AND CURB MOUNTED LOW LEAK MOTORIZED DAMPER, ACTUATOR TO BE SAME VOLTAGE AS FAN MOTOR. VERIFY CURB HEIGHT WITH ROOF INSULATION...																
		FAN DATA				MOTOR DATA				ELECTRICAL DATA						
MARK	MANUFACTURER	MODEL	CFM	ESP IN W/G	RPM	DRIVE TYPE	BHP	HP	SONES	VOLTS	PHASE	FLA	MCA	MOPC	WEIGHT (LBS)	NOTES
EF1	GREENHECK	G-098-VG	250	.5	1200	DIRECT	.05	1/6	5.4	208	1	1.5	1.9	15	54	1.

PUMP SCHEDULE													
NOTES:													
1. PUMP SIZING IS FOR BIDDING PURPOSES ONLY. FINAL PUMP SELECTION SHALL BE BASED ON FINAL RADIANT FLOOR LAYOUT.													
2. CAPACITY BASED ON 50% PROPYLENE GLYCOL.													
MARK	MANUFACTURER	MODEL	SERVES	TYPE	WATER FLOW (GPM)	PUMP HEAD (FT WG)	MOTOR DATA						NOTES
							HP	VOLTS	PHASE	FLA	MCA	MOCP	
PH1	BELL & GOSSETT	PL-30B	SOILER	INLINE	10.7	25	1/5	120	1	2.1	2.6	20	1.2
PH2	BELL & GOSSETT	PL-30B	ZONE 1	INLINE	5.6	20	1/12	120	1.4	1.75	20	1.2	
PH3	BELL & GOSSETT	PL-30B	ZONE 1	INLINE	5.6	20	1/12	120	1	1.4	1.75	20	1.2

GRAVITY VENTILATOR SCHEDULE												
NOTES:												
1. PROVIDE ROOF CURB, BIRD SCREEN, HINGE KIT, AND 120V MOTORIZED DAMPER.												
MARK	LOCATION		MANUFACTURER	MODEL	TYPE	AIRFLOW (CFM)	VELOCITY (FPM)	MAX PD (IN WG)	OVERALL HOOD SIZE W x L x H (IN)	THROAT SIZE W x L x H (IN)	CURB HEIGHT (IN)	NOTES
	ROOM NAME	ROOM NO										
RH-1	ROOF	--	GREENHECK	RC33	INTAKE	570	400	0.05	26 x 24 x 14	12 x 12 x 5	12"	1

AIR SEPARATOR SCHEDULE							
NOTES:							
1.							
MARK	MANUFACTURER	MODEL	SERVICE	FLUID FLOW (GPM)	MAX PD (FT)	PIPE SIZE (IN)	NOTES
AS#1	SPIROTHERM	VDR 100TM	SNOWMELT	3	2	1	

EXPANSION TANK SCHEDULE								
NOTES:								
1. WATER IS A SOLUTION OF 50% GLYCOL.								
MARK	MANUFACTURER	MODEL	SERVICE	EST. SYSTEM VOLUME (GAL)	TANK VOLUME (GAL)	ASME RATING (PSI)	OPERATING TEMP (°F)	NOTES
ET#1	WESSELS	NLA-35	SNOWMELT	30	9	125	140	1

DIFFUSER, REGISTER, & GRILLE SCHEDULE

NOTES:

1. CONTRACTOR IS RESPONSIBLE TO VERIFY LOCATIONS, INSTALLATION METHODS, AND QUANTITIES PRIOR TO ORDERING MATERIALS.

2. VERIFY FRAME TYPE: PLASTER OR LAY-IN FRAME.

3. MANUFACTURERS OPTIONAL INSULATED ALUMINUM PLENUM BOX.

4. PROVIDE TRIM MOUNTING FRAME.

5. PROVIDE MANUFACTURERS REMOTE DAMPER.

MARK	MANUFACTURER	MODEL	LOCATION	AIR	TYPE	FEATURES	DAMPER	MAX STATIC P.D. (IN WG)	FINISH	NOTES
A	TITUS	TMS	LAY-IN CEILING	SUPPLY	DIFFUSER	24"x24" NECK SIZE ON PLAN	N	0.1	WHITE	1.2
B	TITUS	TMS	LAY-IN CEILING	SUPPLY	DIFFUSER	12"x12" NECK SIZE ON PLAN	N	0.1	WHITE	1.2.4
C	TITUS	272RL	SURFACE	SUPPLY	REGISTER	SIZE ON PLAN	N	0.1	WHITE	1.2
AA	TITUS	50F	LAY-IN CEILING	RETURN	GRILLE	SIZE ON PLAN	N	0.1	WHITE	1.2
BB	TITUS	50F	LAY-IN CEILING	RETURN	GRILLE	SIZE ON PLAN	N	0.1	WHITE	1.2
EE	TITUS	50F	LAY-IN CEILING	EXHAUST	GRILLE	SIZE ON PLAN	N	0.1	WHITE	1.2

SPLIT SYSTEM COOLING OUTDOOR UNIT SCHEDULE															
NOTES:															
1. MAINTAIN MANUFACTURERS RECOMMENDATIONS FOR SERVICE ACCESS TO UNIT. PROVIDE MANUFACTURERS REFRIGERANT LINE SETS. PROVIDE CUSTOM SIZING AS REQUIRED FOR...															
2. INSTALL CONDENSING UNIT WITH RUBBER SUPPORT BLOCKS. MAINTAIN MANUFACTURER REQUIRED CLEARANCES.															
3. LOW AMBIENT KIT FOR OPERATION DOWN TO -20°F.															
MARK	MANUFACTURER	MODEL	NOMINAL CAPACITY (TONS)	REFRIGERANT TYPE	CAPACITY				ELECTRICAL DATA					WEIGHT (LBS)	NOTES
					CLG (MBH)	SEER	VOLTS	PHASE	FLA	MCA	MOPC				
CUJ3	CARRIER	PULY-A16NKA7	1.5	R454B	18	19.5	208	1	12.8	16	30	218	1.2		

SPLIT SYSTEM COOLING INDOOR UNIT SCHEDULE											
NOTES:											
1. PROVIDE WIRED WALL THERMOSTAT AND INTEGRAL CONDENSATE PUMP.											
MARK	MANUFACTURER	MODEL	TYPE	CAP (MBH)	FAN DATA CFM	ELECTRICAL DATA			WEIGHT (LBS)	NOTES	
					VOLTS	PHASE	FLA	MCA			
AC81	MITSUBISHI	PXA-18GA	WALL	18	425	208	1	0.1	16	28	1



Hopkins, MN 55343

Bismarck

Hopkins, MN 55343

Tel: 952.278.8880

MAYO EMPLOYEES

FEDERAL CREDIT UNION

NEW BUILDING

605 WEST AVE S.

LA CROSSE, WI

ISSUED SET 2026-03-27

REVISIONS

DATE	NO
------	----

[illegible]

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Minnesota

Reg No. _____ Date _____

Emmanuelson-Podas, Inc.
7706 Bush Lake Road
Edina, MN 55439
(952) 930-0060 | www.epinc.com

MECHANICAL SCHEDULES

Drawn By: JB & DM

Checked By: JH

M7.1

392.0002

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PROJECT

NEW BUILDING

ISSUED SET 2026-03-27

REVISIONS

DATE NO

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Minnesota

Reg No. _____ Date _____



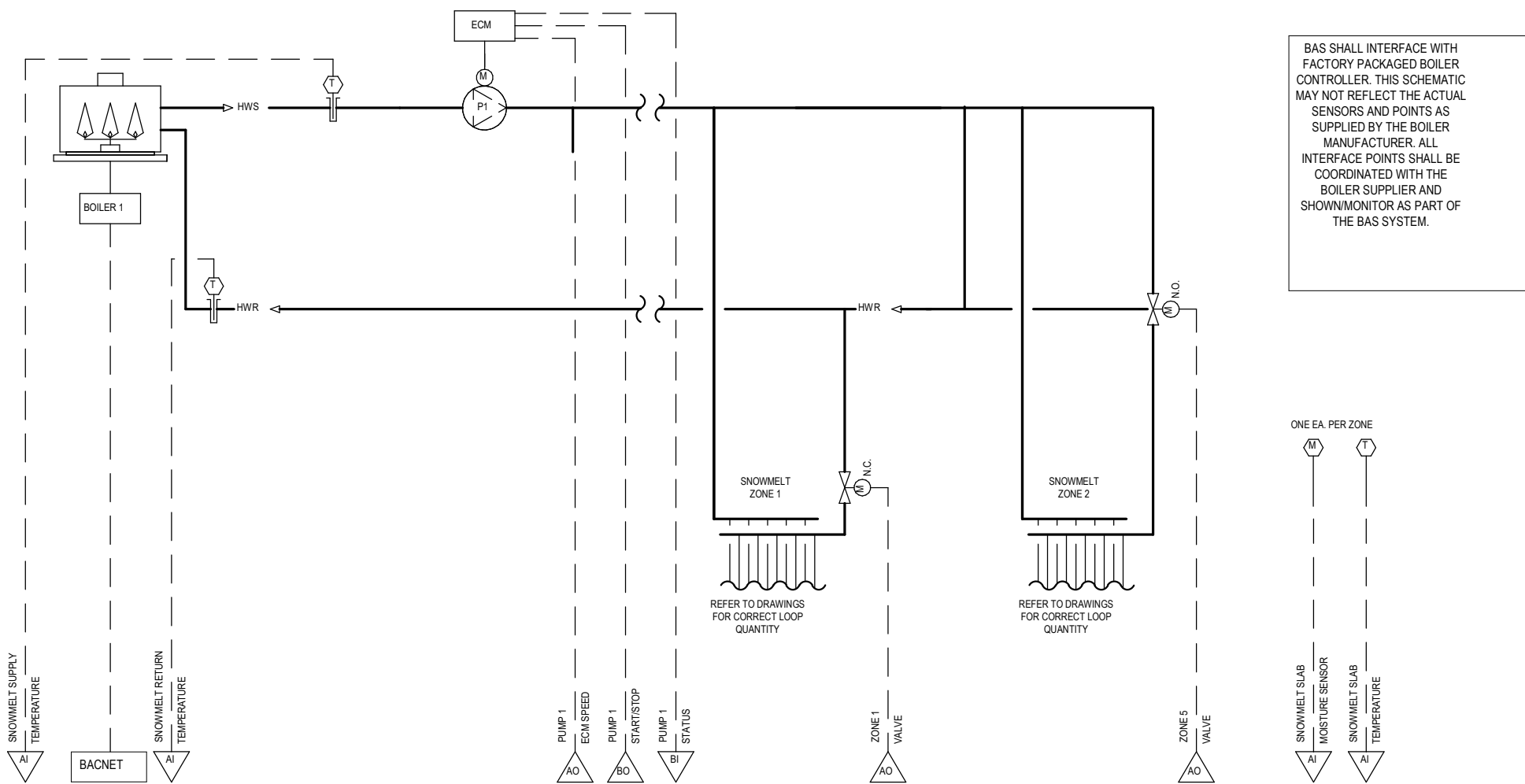
MECHANICAL CONTROLS

Drawn By: JB & DM Checked By: JH

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POINTS LIST: SNOWMELT SYSTEMS

[illegible]

1 CONTROL DIAGRAM: SNOW MELT - HYDRONIC
NO SCALE