	<u>CONTROLS</u>		<u>CONTROLS</u>				FIRE PROTECTION
PG	AIR PRESSURE GAUGE				≕F(AF)—		- FIRE - ANTIFREEZE
S	AIR SAMPLING POINT	C	UNITARY HEATING COIL		≕F(CA)-		— FIRE - CLEAN AGENT
C02	CARBON DIOXIDE SENSOR	н			=F(DEL)-		- FIRE - DELUGE
<u>(co</u>)	CARBON MONOXIDE SENSOR	C	UNITARY COOLING COIL		—F(D)—		- FIRE - DRAIN
CG	COMBUSTIBLE GAS SENSOR	0			=F(DRY)-		- FIRE - DRY
	CURRENT SENSOR	H	UNITARY HEAT RECOVERY COIL		≕F(PA)−		 FIRE - PRE-ACTION
CT CT	CURRENT TRANSMITTER WITH LEAD	н			F		— FIRE - WET
	DEWPOINT SENSOR	$[\land \land$	FILTER		× / / ×		SPRINKLER GUARD FOR UPTICHT, PEN
DPS		$/$ \vee \vee \vee \vee \vee \vee \vee \vee	FILTER		AC		ABBREVIATION FOR ANTICORROSION
	DIFFERENTIAL PRESSURE SENSOR				ΗT		ABBREVIATION FOR HIGH TEMPERATU
(DPT)	DIFFERENTIAL PRESSURE TRANSMITTER		AIR BLENDER		Ο		SPARE CABINET FOR 12 SPRINKLERS
FM	FLOW METER				SAN		DRAINAGE PIPING
FS	FLOW SWITCH		ENERGY WHEEL		••		FIRE EXTINGUISHER
FT	FLOW TRANSMITTER	~			 ∽¢		SIAMESE FIRE DEPARTMENT CONNEC
FZ	FREEZE STAT				م 4		PRIVATE HYDRANT - ONE HOSE OUTLE
HOA	HAND SWITCH				_		PUBLIC HYDRANT - TWO HOSE OUTLE
Н	HUMIDITY SENSOR		PLATE ENERGY RECOVERY COIL		•		
LC	LEVEL CONTROL						PUBLIC HYDRANT - TWO HOSE OUTLE
LS	LIMIT SWITCH				0		
LPI	LOOP POWER INDICATOR				•		PENDANT SPRINKLER
Nox	NITROGEN OXIDE SENSOR		AIR FLOW MEASURING STATION				SIDEWALL SPRINKLER
\bigcirc	OCCUPANCY SENSOR				DP		DRY PENDANT SPRINKLER
02	OXYGEN SENSOR		AIR FLOW PROBE		\bigtriangledown		DRY SIDEWALL SPRINKLER
PI	POSITION INDICATOR	Ι			FCP		FIRE ALARM CONTROL PANEL
PS	PRESSURE SENSOR	44444	BACKDRAFT DAMPER		FVC		FIRE VALVE CABINET
R	REFRIGERANT SENSOR				SPCAB		SPRINKLER CABINET
RH	RELATIVE HUMIDITY SENSOR	++++++	REFRIGERANT HOT GAS		ŀф		FIRE HOSE VALVE ASSEMBLY
R	RELAY				Ø		FIRE DAMPER
H	ROOM HUMIDITY SENSOR		REFRIGERANT SUCTION		ତ		SMOKE DAMPER
(SP)	STATIC PRESSURE SENSOR		REPRISEIVANT SOUTHIN		, O		FIRE SMOKE DAMPER
TS					ଁର୍ବ		DUCT MOUNTED SMOKE SENSOR
	TEMPERATURE SENSOR	NC	DAMPER ACTUATOR - ELECTRIC	2	P	۲Ţ	SUPERVISED BUTTERFLY VALVE
(T)	THERMOSTAT			画	B T	성	SUPERVISED BUTTERFLY VALVE NOR
T	THERMOSTAT WITH GUARD		DAMPER ACTUATOR - ELECTRIC	œ	đ	T S	SUPERVISED GATE VALVE
TVO	TOTAL VOLATILE ORGANIC COMPOUND SENSOR			۲		T T	SUPERVISED OUSIDE SCREW AND YO
VIB	VIBRATION SENSOR						SUPERVISED OS&Y VALVE
AFS	AIR FLOW SWITCH	$ \mathcal{A} \odot \mathcal{B} $	CENTRIFUGAL FAN	- ¢	T	뮹	SUPERVISED WATERFLOW SWITCH
I/P	CURRENT TO PRESSURE			-> ERODE	Bujiji pis	ö	SUPERVISED BACKFLOW PREVENTER
E/P	ELECTRIC / PNEUMATIC			-74		Į.	
SCR	SILICON CONTROLLED RECTIFIER				u er		WET ALARM CHECK VALVE WITH TRIM
TCP	TEMPERATURE CONTROL PANEL		PROP FAN			1	
TEC	TERMINAL EQUIPMENT CONTROLLER				т ар		DELUGE ALARM CHECK WITH TRIMING
Л	SENSOR WELL		PLENUM FAN	-	₽. □_	ا م	AIR MENTENANCE DEVICE
	ALARM HORN				Ċ	õ	FLOOR AIR COMPRESSOR TANK
\bowtie	ALARM BEACON	\square		<u>F</u> p	-Uİ	Ē	MOUNTED AIR COMPRESSOR ASSEMB
AI	ANALOG INPUT		HUMIDIFIER	ţ.			DRY ALARM CHCEK VALVE WITH TRIMI
AO	ANALOG OUTPUT			Ŀ ^{li} Č	æ		PREACTION ALARM CHECK VALVE WIT
DI	DIRECT INPUT			۵			BOSTER PUMP (ALBANY PUMP)
	DIRECT OUTPUT	ENERGY CORE	ENERGY CORE	00	1	ā	TEST AND DRAIN VALVE
STR	STARTER			iQi	白	Ń	PRESSURE REDUCING VALVE
VFD	VARIABLE FREQUENCY DRIVE			ы	ю	o	1-1/2 FIRE CONNECTION ANGLE VALVE
X				сн	ю	0	2-1/2 FIRE CONNECTION ANGLE VALVE
		0		t⊐÷		*	FLOOR CONTROL VALVE ASSEMBLY
			ETHERNET CONNECTION	Φ	8	đ	CHECK VALVE
	THREE WAY MOTORIZED VALVE			Ę.	8	÷	TREADED BALL VALVE
NC 0	TWO WAY SOLENOID VALVE		CONTACT	G 00	a Ga	8	GROOVED BALL VALVE
O∰ NO	THREE WAY SOLENOID VALVE			്	ŕ	Ĵ	HYDRAULIC GONG
	TWO WAY PNEUMATIC VALVE			Ő	<u>*</u>	د ج	ELECTRIC BELL
ୗୖଡ଼୕ୖଽୖୖୖୖୖୠଽୖୖ୷ଽୖୄୖ ଔ	THREE WAY PNEUMATIC VALVE				C		
\bigcirc	PUMP	DDC_XXX	DDC PANEL	Ø	œ	a	ELBOW WITH DRAIN 1 IN.
$\langle s \rangle$	DUCT SMOKE DETECTOR			Ø	Q	D	GROOVE ELBOW
S H	DUCT SMOKE DETECTOR			Ļ		BO	GROOVE TEE
	AIR VALVE				æ	0 0	FIRE DEPARTMENT CONNECTION AND
					ei ei	¢	SIAMESE PROJECTING CONNECTION «
			COMPUTER		1	¢	SIAMESE CONNECTION «Y» FREE STAI
		A REAL PROPERTY OF THE REAL PR		G	Ð	ዋ	BODY FOR FIRE DEPARTMENT CONNE
		Annual Exp		αĵ	₿¤	•	CONCENTRIC GROOVED MECHANICAL
				0	8	۰	GROOVED MECHANICAL TEE OR CAP
				Û	8	•@•	REDUCING COUPLING
				0	8	•	THREADED MECHANICAL TEE OR CAP
				Ħ	ê	ф	THREADED MECHANICAL CROSS

	DRAWING INDEX
M500	MECHANICAL SWITCHGEAR LEGEND AND ABBREVIATIONS
M501	MECHANICAL SWITCHGEAR GENERAL NOTES AND SCHEDULES
M502	SWITCHGEAR MECHANICAL ENLARGED PLAN

The approved construction plans, documents, and all engineering must be posted on the job at all inspections in a visible and readily accessible location.

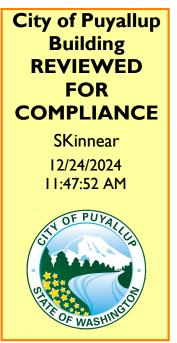
Full sized legible color plans are required to be provided by the permitee on site for inspection.

Approval of submitted plans is not an approval of omissions or oversights by this office or non compliance with any applicable regulations of local government. The contractor is responsible for making sure that the building complies with all applicable codes and regulations of the local government.

Separate Electrical Permit is required with the Washington State Department of Labor & Industries.

https://lni.wa.gov/licensing-permits/electrical/ electrical-permits-fees-and-inspections

or call for Licensing Information: 1-800-647-0982



	\square	¢\$	SIAMESE CONNECTION «Y» FREE S
G	Ð	ሞ	BODY FOR FIRE DEPARTMENT CON
¢	₿¤	¢	CONCENTRIC GROOVED MECHANIC
0	8	۰	GROOVED MECHANICAL TEE OR CA
Û	B	•@•	REDUCING COUPLING
0	8	٥	THREADED MECHANICAL TEE OR CA
E	ŧ	¢	THREADED MECHANICAL CROSS
1	0	¢.	THREADED MECHANICAL TEE
K-J		-	HORIZONTAL SPLIT CASE FIRE PUM
	₽		END SUCTION FIRE PUMP
Q (]			VERTICAL INLINE FIRE PUMP FIRE PUMP ANGLE BODY 4 WAY
	ļ.	ο	JOCKEY PUMP
			PREACTION CABINET
	®	I.	FIRE HOSE RACK
	000	IJ	SEISMIC EXPANSION LOOP
	Ţ	0	WALL POST INDICATOR VALVE (PIV)
			HANGER
	 	Ø	HYDRANT VALVE CONTROL
	-8-		WALL HYDRANT
			WALL MOUNTED PORTABLE FIRE EX

ITED PORTABLE FIRE EXTINGUISHER SEMI RECESSED CABINET FOR PORTABLE EXTINGUISHER

G SYSTEMS

PROTECTION		PLUMBING SYSTEMS
FREEZE	2 1/2"	PIPE SIZE
		PIPING ROUTED BELOW SLAB OR GRADE
JGE	AV	
Ν	AW	
ACTION	BBD	BOILER BLOWDOWN
ACTION	CA(##)	, , ,
	CD(P)	CONDENSATE DISCHARGE PUMPED
UGUARD FOR UPTICHT, PENDANT OR SIDEWALL SPRINKLER		DIONIZED WATER
		DIONIZED WATER RECIRCULATING
INET FOR 12 SPRINKLERS	DW	DISTILLED WATER
PIPING		DOMESTIC COLD WATER
GUISHER	()	DOMESTIC COLD WATER SOFTENED
		DOMESTIC HOT WATER
/DRANT - ONE HOSE OUTLET	_	DOMESTIC HOT WATER RECIRCULATION
DRANT - TWO HOSE OUTLETS	D	DRAIN
DRANT - TWO HOSE OUTLETSAND PUMPER CONNECTION	GW	GREASE WASTE
PRINKLER	H	HUMIDIFICATION
PRINKLER	LV	LABORATORY VENT
PRINKLER	LW	LABORATORY WASTE
NT SPRINKLER	G	NATURAL GAS (LOW PRESSURE)
ALL SPRINKLER	GD	GARAGE DRAINAGE
I CONTROL PANEL	GV	NATURAL GAS VENT
CABINET	MPG	MEDIUM PRESSURE GAS
CABINET	NPCW	NON-POTABLE COLD WATER
VALVE ASSEMBLY	NPCW(S)	NON-POTABLE COLD WATER SOFTENED
ER	NPHW	NON-POTABLE HOT WATER
/PER	NPHW(S)	NON-POTABLE HOT WATER SOFTENED
E DAMPER	PTS	PNEUMATIC TRANSPORT
ITED SMOKE SENSOR	PG	PROPANE GAS
D BUTTERFLY VALVE	R0	REVERSE OSMOSIS
D BUTTERFLY VALVE NORMALLY CLOSED	ROR	REVERSE OSMOSIS RECIRCULATION
D GATE VALVE	SL	SAMPLING LINE
D OUSIDE SCREW AND YORK (OS&Y) VALVE	SAN	SANITARY DRAIN
D OS&Y VALVE	SAN(O)	SANITARY DRAIN (OIL)
D WATERFLOW SWITCH	SAN(P)	SANITARY PUMPED
D BACKFLOW PREVENTER	SAN(RAD)	SANITARY RADIOACTIVE
I CHECK VALVE WITH TRIMING	ST	STORM DRAIN
	ST(0)	STORM DRAIN OVERFLOW
ARM CHECK WITH TRIMING	ST(P)	STORM DRAIN PUMPED
NANCE DEVICE	VAC	VACUUM (AIR)
COMPRESSOR TANK	VAC(EX)	VACUUM PUMP EXHAUST
AIR COMPRESSOR ASSEMBLY	V	VENT
I CHCEK VALVE WITH TRIMING	V(0)	VENT (OIL)
I ALARM CHECK VALVE WITH TRIMING	V(SE)	VENT (SEWAGE EJECTOR)
IMP (ALBANY PUMP)	(Q)	PIPE INSULATION
DRAIN VALVE		FIXTURE TRAP
REDUCING VALVE	СВ 🔾	CATCH BASIN
CONNECTION ANGLE VALVE	мн 〇	MAN HOLE
ONNECTION ANGLE VALVE	RD ⊘	ROOF DRAIN
ITROL VALVE ASSEMBLY	FD Ø	FLOOR DRAIN
VE	FFD Ø	FUNNEL FLOOR DRAIN
ALL VALVE		TRAP PRIMER
BALL VALVE	` <u>ک</u> رر` ا	HOSE BIBB
GONG	ri A -	PLUMBING FIXTURES
		T EOMBING TIXTORES
H DRAIN 1 IN.		LAB & MEDICAL GAS
BOW	WAGD	ANESTHETIC EVACUATION
BOM	WAGD	CARBON DIOXIDE
		DENTAL COMPRESSED AIR
	DV	
ONNECTION «Y» FREE STANDING	He	HELIUM
	H2	HYDROGEN
IC GROOVED MECHANICAL REDUCER	IA	INSTRUMENT AIR
COUPLING		
	MA	
MECHANICAL CROSS	MV	
	N2	NITROGEN
	N2O	NITROUS OXIDE
ON FIRE PUMP	02	OXYGEN
	Â	MEDICAL AIR OUTLET
NLINE FIRE PUMP	$\langle v \rangle$	MEDICAL VACUUM OUTLET
ANGLE BODY 4 WAY	N	MEDICAL NITROGEN OUTLET
		MEDICAL NITROUS OXIDE OUTLET
MP	\diamond	MEDICAL OXYGEN OUTLET
		LAB AIR SINGLE BENCH OUTLET
CABINET	V-	LAB VACUUM SINGLE BENCH OUTLET
		LAB NITROGEN SINGLE BENCH OUTLET
RACK		LAB NITROUS OXIDE SINGLE BENCH OUTL
		LAB OXYGEN SINGLE BENCH OUTLET
PANSION LOOP	A	LAB DOUBLE 45 DEGREE BENCH OUTLET
-		LAB DOUBLE BENCH OUTLET
		LAB QUAD 45 DEGREE BECNH OUTLET
	A A	
INDICATOR VALVE (PIV)		MEDICAL GAS MASTED ALADM DANEL
INDICATOR VALVE (PIV)		MEDICAL GAS MASTER ALARM PANEL
		MEDICAL GAS AREA ALARM PANEL
INDICATOR VALVE (PIV) ALVE CONTROL		MEDICAL GAS AREA ALARM PANEL MEDICAL GAS ZONE VALVE
ALVE CONTROL		MEDICAL GAS AREA ALARM PANEL

	PIPING SYSTEMS (HVAC)
2 1/2" BBD	
BFW	
BR	BRINE RETURN
BS	
	CHILLED WATER RETURN CHILLED WATER RETURN - GLYCOL
	CHILLED WATER RETURN - PROCESS
CHWS	CHILLED WATER SUPPLY
	CHILLED WATER SUPPLY - GLYCOL
()	CHILLED WATER SUPPLY - PROCESS CONDENSER WATER RETURN
	CONDENSER WATER RETURN - COOLING TOWER
CSW	CONDENSER WATER SUPPLY
	CONDENSER WATER SUPPLY - COOLING TOWER
	DUAL TEMPERATURE RETURN (HOT OR CHILLED) DUAL TEMPERATURE SUPPLY (HOT OR CHILLED)
	FLUID COOLER FILTRATION SUPPY
	FLUID COOLER FILTRATION RETURN
FOF	
FOS	
FOV	
	HEAT RECOVERY LOOP RETURN HEAT PUMP WATER SUPPLY
	HEAT RECOVERY LOOP RETURN
	HEAT RECOVERY LOOP SUPPLY
	HEATING WATER RETURN HEATING WATER RETURN - GLYCOL
	HEATING WATER SUPPLY
	HEATING WATER SUPPLY - GLYCOL
G	
GV	
REF(HG)	
REF(L) REF(S)	
REF(V)	
RV	
	STEAM (NOMINAL PRESSURE) STEAM - CLEAN (NOMINAL PRESSURE)
	STEAM CONDENSATE (NOMINAL PRESSURE)
	STEAM PUMPED CONDENSATE (NOMINAL PRESSURE)
SV 	STEAM VENT PIPE INSULATION
	PIPING COMPONENTS ISOLATION VALVE (GENERIC)
	GATE VALVE
	BUTTERFLY VALVE NPS 6 AND LESS BUTTERFLY VALVE NPS 8 AND MORE
α ⊫ ⊕ . α ⇔ ₀φ	BALL VALVE
–⊫– Ё ○ —□	PLUG VALVE
	NEEDLE VALVE CHECK VALVE (GENERIC)
	BALANCING VALVE
	FLOW LIMITING VALVE
	PRESSURE REDUCING VALVE 2-WAY CONTROL VALVE (GENERIC)
2-WAY 1	TWO-WAY ELECTRIC CONTROL VALVE, BUTTERFLY TYPE
四〇 巻 亡 Č 之 一茶 ー 3-WAY . 」 . 」	
	THREE-WAY ELECTRIC CONTROL VALVE, BUTTERFLY TYPE SOLENOID 2-WAY CONTROL VALVE
	SOLENOID 3-WAY CONTROL VALVE
• • • •	SAFETY OR RELIEF VALVE ANGLE VALVE
÷ــــــــــــــــــــــــــــــــــــ	BOILER STOP AND CHECK VALVE
	DOUBLE CHECK VALVE ASSEMBLY
	MULTI-PURPOSE VALVE (SHUT-OFF, BALANCING AND CHECK
	REDUCE PRESSURE BACKFLOW PREVENTER SUCTION DIFFUSER
	PUMP (GENERIC)
	Y-STRAINER (GENERIC)
⊗	STEAM TRAP (GENERIC) AUTOMATIC AIR VENT
	MANUAL AIR VENT
╺╾ႃ⋹ <mark>╴</mark> ───	
	SHOCK ABSORBER TEMPERATURE GAUGE
	PRESSURE GAUGE
⊘ ¬	TEMPERATURE AND PRESSURE TRAP
——————————————————————————————————————	SIGHT FLOW GLASS FLEXIBLE CONNECTOR
	EXPANSION JOINT
— _	GUIDE
—×—	
1%	FLOW ARROW PIPING SLOPE
a a —;	PIPE CAP
	PIPE CROSS PIPING ELBOW UP
	PIPING ELBOW OP
	PIPING TEE UP
	UNION CONNECTION FLANGED CONNECTION
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
	STANDARD CLEAN-OUT IN LINE END OF RUN STANDARD CLEAN-OUT THROUGH FLOOR END OF RUN
—	STANDARD CLEAN-OUT THROUGH FLOOR IN LINE
	DIFFERENTIAL PRESSURE CONTROL VALVE
	Y-PATTERN MANUAL BALANCING/SHUT-OFF VALVE

PIPING SYSTEMS (HVAC)

18"x12"

18"x12"

5

5

 \Box

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CAR

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(T)

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WORK DEFINITION ----- NEW WORK (N) EXISTING (E) ----- REMOVE EXISTING (D) REMOVE EXISTING EQUIPMENT (D) ---- FUTURE — - - — TEMPORARY, AS NOTED RELOCATE (R) ###> KEY NOTE (###) EQUIPMENT IDENTIFICATION CONNECTION TO EXISTING DISCONNECT (CUT AND CAP) <u>(HVAC)</u> *NOTE: ALL DUCT SIZES ARE INTERIOR, FREE DIMENSIONS ALWAYS WIDTH (HORIZONTAL DIM.) x HEIGHT (VERTICAL DIM.) \longrightarrow AIR FLOW ARROW ──18"ø───Ŷ───18"ø────Ŷ ROUND DUCT AND SIZE* EXTERIOR DUCT TREATMENT* 30"x12" DUCT SECTION, SUPPLY AIR. APPLIES TO RECT., ROUND AND OVAL DUCT SECTION, OUTSIDE AIR. APPLIES TO RECT., ROUND AND OVAL DUCT SECTION, RETURN AIR. APPLIES TO RECT., ROUND AND OVAL DUCT SECTION, EXHAUST AIR. APPLIES TO RECT., ROUND AND OVAL FLEXIBLE DUCT ELBOW TURN, SUPPLY DOWN. APPLIES TO RECT., ROUND AND OVAL DUCT SECTION, OUTSIDE AIR. APPLIES TO RECT., ROUND AND OVAL DUCT SECTION, OUTSIDE AIR. APPLIES TO RECT., ROUND AND OVAL DUCT SECTION, OUTSIDE AIR. APPLIES TO RECT., ROUND AND OVAL CHANGE IN DUCT ELEVATION RISING IN DIRECTION INDICATED CHANGE IN DUCT ELEVATION DROPPING IN DIRECTION INDICATED ELBOW, RECTANGULAR, SMOOTH RADIUS WITH SPLITTER VANES (0.25 R/W DEFAULT) ELBOW, RECTANGULAR, SMOOTH RADIUS WITHOUT VANES (1.5 R/W DEFAULT) ELBOW, ROUND, SMOOTH RADIUS (1.5 R/W DEFAULT) MITERED ELBOW, RECTANGULAR, WITHOUT VANES MITERED ELBOW, RECTANGULAR, WITH TURNING VANES RECTANGULAR TO ROUND TRANSITION DUCT ACCESS DOOR (TOP, SIDE, BOTTOM) FLEXIBLE CONNECTION BACKDRAFT DAMPER CABLE OPERATED DAMPER MANUAL DAMPER MOTORIZED DAMPER PRESSURE INDEPENDENT REGULATOR FIRE DAMPER SMOKE DAMPER SMOKE AND FIRE DAMPER DUCT SILENCER/TRANSFER ELBOW CONTROL DEVICE (REFER TO CONTROLS LEGEND) AIR FLOW MEASURING STATION (REFER TO CONTROLS LEGEND) — QUANTITY TYPE SIZE (IN.) AIR OUTLET OR INLET TAG)REFER TO SCHEDULE) VOLUME (CFM) ← _ _ _ RECTANGULAR DIFFUSER, SUPPLY. OPTIONAL ARROWS SHOW THE FLOW DIRECTION. RECTANGULAR REGISTER OR GRILLE, RETURN RECTANGULAR REGISTER OR GRILLE, EXHAUST ROUND DIFFUSER, SUPPLY

LINEAR DIFFUSER SIDEWALL REGISTER OR GRILLE, SUPPLY SIDEWALL GRILLE, RETURN OR EXHAUST UNDERCUT DOOR DOOR GRILLE OR LOUVER TRANSFER GRILLE OR LOUVER

COIL (REFER TO CONTROLS LEGEND) — QUANTITY TYPE

LENGTH (FT.) RADIATION HEATING TAG (REFER TO SCHEDULE) CAPACITY (MBH)

ABBREVIATIONS

A/C AIR CONDITIONING UNIT AUTOMATIC AIR VENT AAV ADA AMERICANS WITH DISABILITIES ACT ADJ ADJUSTABLE ABOVE FINISHED CEILING AFC AFF ABOVE FINISHED FLOOR AFG ABOVE FINISHED GRADE ABOVE FINISH ROOF AFR AUTHORITY HAVING JURISDICTION AHJ ACCESS PANEL AP AIR PRESSURE DROP APD AVG AVERGAGE BAS BUILDING AUTOMATION SYSTEM BDD BACKDRAFT DAMPER BHP BRAKE HORSEPOWER BUILDING MANAGEMENT SYSTEM BMS BOD BOTTOM OF DUCT BOP BOTTOM OF PIPE BRITISH THERMAL UNIT BTU BTUH BRITISH THERMAL UNIT PER HOUR C/W COMPLETE WITH CAV CONSTANT AIR VOLUME CBV CIRCUIT BALANCING VALVE CFM CUBIC FEET PER MINUTE DRY BULB TEMEPRATURE DB DECIBEL(S) dB dBA A-WEIGHTED DECIBLES DIRECT DIGITAL CONTROL DDC DEG DEGREE DIA./Ø DIAMETER DIFF DIFFERENTIAL DIV DIVISION DOWN DN DWG DRAWING EA EXHAUST AIR EA (D) EXHAUST AIR, DISHWASH EA (G) EXHAUST AIR, GENERAL EA (K) EXHAUST AIR, KITCHEN EA (LAB) EXHAUST AIR, LABORATORY EA (LD) EXHAUST AIR, LAUNDRY/DRYER EA (W) EXHAUST AIR, WASHROOM EAT ENTERING AIR TEMPERATURE EAV EXHAUST AIR VALVE ECM ELECTRONICALLY COMMUNICATED MOTOR EXISTING TO BE DEMOLISHED ED (DEMOLITION PLANS) ENERGY EFFICIENCY RATIO EER ETHELYENE GLYCOL EG EMCS ENERGY MANAGMENT CONTROL SYSTEM EXISTING RELOCATED (NEW ER CONSTRUCTION PLANS) EXISTING TO BE RELOCATED ERL (DEMOLITION PLANS) EXTERNAL STATIC PRESSURE ESP EWT ENTERING WATER TEMPERATURE EXIST / E EXISTING (DEMOLITION PLANS) FC FAIL CLOSED FLA FULL LOAD AMPERAGE FO FAIL OPEN FP FIRE PROTECTION FPM FEET PER MINUTE FEET PER SECOND FPS FT FOOT/FEET GAUGE GA GALLON (US) GAL GENERAL CONTRACTOR GC GEO GEODETIC GPM GALLONS PER MINUTE HEPA HIGH EFFICIENCY PARTICULATE AIR (FILTER) HORSEPOWER HP HR HOUR HVAC HEATING / VENTILATING / AIR CONDITIONING ΗZ HERTZ INVERT ELEVATION INTEGRATED ENERGY EFFECIENCY IEER RATIO INCHES IN IN WG INCHES WATER GAUGE IPLV INTEGRATED PART LOAD VALUE kW KILOWATT kWh KILOWATT HOUR LAT LEAVING AIR TEMPERATURE LBS POUNDS LINEAR FEET LWT LEAVING WATER TEMPERATURE Μ METER MAX MAXIMUM THOUSAND OF BTUH MBH MCA MINIMUM CIRCUIT AMPS MERV MINIMUM EFFECIENCY REPORTING VALUES MFR MANUFACTURER MIN MINIMUM MOP MAXIMUM OVERCURRENT PROTECTION MWT MEAN WATER TEMPERATURE NOT APPLICABLE N/A NOISE CRITERIA NC NORMALLY CLOSED NC NOT IN CONTRACT NIC NO NORMALLY OPEN NOMINAL PIPE SIZE NPS NTS NOT TO SCALE OUTSIDE AIR OA OFCI OWNER FURNISHED, CONTRACTOR INSTALLED OFE OWNER FURNISHED EQUIPMENT OFOI OWNER FURNISHED / OWNER INSTALLED PROPYLENE GLYCOL PG POE POINT OF ENTRANCE POS POINT OF SERVICE PPM PARTS PER MILLION POUNDS PER SQUARE INCH PSI PSIA POUNDS PER SQUARE INCH, ABSOLUTE POUNDS PER SQUARE INCH, GAGE PSIG PNEUMATIC TUBE STATION PTS POLYVINYL CHLORIDE PVC RETURN AIR RA RELA RELIEF AIR REQD REQUIRED RH RELATIVE HUMIDITY RPM REVOLUTIONS PER MINUTE SUPPLY AIR SA SEER SEASONAL ENERGY EFFICIENCY RATION SP STATIC PRESSURE SP STAIR PRESSURIZATION AIR (*) SRV SAFETY RELIEF VALVE TA TRANSFER AIR TEMP TEMPERATURE TSP TOTAL STATIC PRESSURE TSTAT THERMOSTAT TYP TYPICAL UC UNDER CUT (DOOR) UNDERGROUND UG UP UP VAV VARIABLE AIR VOLUME VARIABLE FREQUENCY DRIVE VFD VIF VERIFY IN FIELD VTR VENT-THRU-ROOF WITH W/ W/O WITHOUT WB WET BULB TEMPERATURE WG WATER GAUGE ZN-# ZONE °C CELSIUS

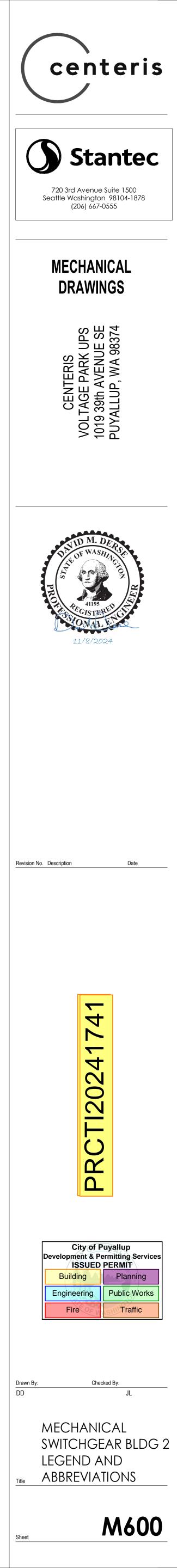
°F FAHRENHEIT

EQUIPMENT IDENTIFICATION

AB-# AIR BLENDER

AC-# AIR COMPRESSOR

ACU-# AIR CONDITIONING UNIT ADS-# AIR AND DIRT SEPARATOR AF-# AIR FILTER AHU-# AIR HANDLING UNIT AS-# AIR SEPARATOR ATU-# AIR TERMINAL UNIT B-# BOILER BCU-# BLOWER COIL UNIT BT-# BATH TUB CB-# CHILLED BEAM CC-# COOLING COIL CH-# CHILLER CONV-# CONVECTOR CRU-# CONDENSATE RETURN UNIT CT-# COOLING TOWER CU-# CONDENSING UNIT CUH-# CABINET UNIT HEATER CV-# CONTROL VALVE DAC-# DOOR AIR CURTAIN DC-# DUST COLLECTOR DCT-# DECONTAMINATION TANK DCVA-# DOUBLE CHECK VALVE ASSEMBLY DF-# DRINKING FOUNTAIN DG-# DOOR GRILLE DS-# DUCT SILENCER DU-# DEHUMIDIFICATION UNIT DWH-# DOMESTIC WATER HEATER E-# EXHAUST GRILLE / REGISTER / DIFFUSER EL-# EXPANSION LOOP ERC-# ENERGY RECOVERY COIL ERU-# ENERGY RECOVERY UNIT ES-# EMERGENCY SHOWER ETU-# EXHAUST TERMINAL UNIT EWC-# ELECTRIC WATER COOLER EWS-# EYE WASH STATION F(C)-# FAN CEILING F(E)-# FAN EXHAUST F(LE)-# FAN LABORATORY EXHAUST F(R)-# FAN RETURN F(S)-# FAN SUPPLY F(T)-# FAN TRANSFER F-# FAN FCU-# FAN COIL UNIT FD-# FLOOR DRAIN FFU-# FAN FILTER UNIT FPP-# FIRE PROTECTION PUMP FPTU-# FAN POWERED TERMINAL UNIT FTR-# FINNED TUBE RADIATOR FUR-# FURNACE GFS-# GLYCOL FEED SYSTEM GSG-# GAS-FIRED STEAM GENERATOR(*) H(C)-# HOOD (CANOPY) H(HC)-# HOOD (HEAT AND CONDENSATE) H(I)-# HOOD (INTAKE) H(K)-# HOOD (KITCHEN) H(R)-# HOOD (RELIEF) H(RH)-# HOOD (RANGE) H-# HUMIDIFIER HC-# HEATING COIL HP-# HEAT PUMP HRU-# HEAT RECOVERY UNIT HT-# HYDROPNEUMATIC TANK HX-# HEAT EXCHANGER LATU-# LAB AIR TERMINAL UNIT LAV-# LAVATORY MAC-# MEDICAL AIR COMPRESSOR MAU-# MAKEUP AIR UNIT MD-# MOTORIZED DAMPER MSK-# MOP SINK MV-# MIXING VALVE MVP-# MEDICAL VACUUM PUMP P-# PUMP PDU-# POOL DEHUMIDIFICATION UNIT PRV-# PRESSURE REDUCING VALVE PTAC-# PACKAGED TERMINAL AIR CONDITIONER R-# RETURN AIR GRILLE / REGISTER / DIFFUSER RD-# ROOF DRAIN RH-# RANGE HOOD RP-# RADIANT PANEL RPBP-# REDUCED PRESSURE BACKFLOW PREVENTER RTU-# ROOFTOP UNIT S-# SUPPLY GRILLE / REGISTER / DIFFUSER SH-# SHOWER SK-# SINK SPC-# SOLAR PANEL COLLECTOR SSF-# SIDE STREAM FILTER T(B)-# TANK (BUFFER TANK) T(E)-# TANK (EXPANSION TANK) T(H)-# TANK (HYDRO PNEUMATIC TANK) T(S)-# TANK (STORAGE TANK) T-# TRANSFER AIR GRILLE UH-# UNIT HEATER UR-# URINAL USG-# UNFIRED STEAM GENERATOR UV-# UNIT VENTILATOR VA-# VALVE VFD-# VARIABLE FREQUENCY DRIVE WC-# WATER CLOSET WS-# WATER SOFTENER L-# LOUVER



	FAN SCHEDULE															
UNIT IDENTIFICATION				FAN WHEEL		FAN MOTOR			ELECTRICAL							
MARK	NUMBER	UNIT/AREA SERVED	MAX AIRFLOW (CFM) (IN-WG)	TYPE	SPEED (RPM)	BHP	HP	SPEED (RPM)	DRIVE TYPE	VOLTS	PHASE	OPERATING WEIGHT (LBS.)	MANUFACTURER	MODEL NUMBER	NOTES	
TF	1	SWITCHGEAR ROOM	200	0.25	INLINE	1,276	0.1	1/6	1,276	DIRECT	120	1	80	GREENHECK	BSQ-90	1
NOTES: 1. PROVIDE V	VITH SPEED CON	ITROLLER, BACKDRAFT D.	amper, locali	LY ADJUSTABL	E LINE VOLTAC	GE THERMOSTA										

LOUVER SCHEDULE											
UNIT IDENTIFICATION			TYPE	MAX APD	BLADE TYPE	NET FREE AREA (SF)	SIZE (')		MODEL NUMBER	NOTES	
MARK	NUMBER	SYSTEM SERVED		("W.C.)			312E ()	WANUFACIURER		NUTES	
LVR	1	SWITCHGEAR ROOM	STATIONARY	0.1	HORIZONTAL DRAINABLE	1.94	24'X24'	RUSKIN	ELF375		
LVR	2	SWITCHGEAR ROOM	STATIONARY	0.1	HORIZONTAL DRAINABLE	1.94	24'X24'	RUSKIN	ELF375	1	
NOTES:								•	·		
T. PROVID	I. PROVIDE WITH CLASS 1A MOTORIZED DAMPER INTERLOCKED WITH FAN OPERATION.										

