E1	SYME	BOLS LEGEND		
NONE				
	AW	ACID WASTE	LPR	LOW PRESSURE CONDENSATE
	ATV	AIR RELIEF	LPS	LOW PRESSURE STEAM
	— BBD ———	BOILER BLOWDOWN CONDENSATE	——— MA ———	
	C	(HVAC DRAIN PAN)	——— MPR ———	MEDIUM PRESSURE CONDENSATE
		CONDENSATE (HVAC DRAIN PAN)	MPS	MEDIUM PRESSURE STEAM
	CA	COMPRESSED AIR	——— MU ———	
	— CHWR ———	CHILLED WATER RETURN	N2	NITROGEN
	— CHWS ———	CHILLED WATER SUPPLY	NG	
	— CWR ———	CONDENSER WATER RETURN	NO	
	CWS	CONDENSER WATER SUPPLY	NPW	
		DOMESTIC COLD WATER	OX	OXYGEN
_		DOMESTIC HOT WATER	PC	
_		DOMESTIC HOT WATER RECIRC.	PCWR	PROCESS COLD WATER RETURN
	D	DRAIN	PCWS	PROCESS COLD WATER SUPPLY
		PUMP FORCE MAIN	RD	
3		FUEL OIL FILL	RL	
		FUEL OIL RETURN	RS	REFRIGERANT SUCTION REVERSE OSMOSIS WATER
		FUEL OIL SUPPLY	RO	
	FOV	FUEL OIL TANK VENT		RAIN WATER - ABOVE FLOOR
	—— FW ———	FEEDWATER		
	—— GR ———	GLYCOL RETURN	SP	SPRINKLER MAIN PIPING
	GS	GLYCOL SUPPLY	SWR	SOLAR WATER RETURN
			3w3	
	— н ——	HUMIDIFICATION LINE	TP	
	— H2 ———	HYDROGEN GAS	— — — TF — — — — — — — — — — — — — — — —	TRAP PRIMER - BELOW GRADE
	— HPWR ——		TWS	TEMPERED WATER RETURN TEMPERED WATER SUPPLY
	— HPWS ——	HEAT PUMP WATER SUPPLY		SANITARY SOIL VENT - ABOVE FLOOR
	— HPC ——	HIGH PRESSURE CONDENSATE	V	SANITARY SOIL VENT - ABOVE FLOOR
	— HPS ——			
	— HTWR ——		VAC	
	— HWR ———		VC	VACUUM CLEANING (HOUSE) VACUUM PUMP DISCHARGE
· · · · ·	— HWS ———	HOT WATER SUPPLY		SANITARY SOIL WASTE - ABOVE FLOOR
	— IND ——	INDUSTRIAL WASTE		
	IW	INDIRECT WASTE		SANITARY SOIL WASTE - BELOW GRADE
	LN	LIQUID NITROGEN		SANITARY WET VENT - ABOVE FLOOR
) <del>,</del>	LOX	LIQUID OXYGEN		SANITARY WET VENT - BELOW GRADE
		LOW PRESSURE CONDENSATE		
	LP	LIQUID PETROLEUM GAS		

3

PIPING LINETYPE LEGEND

A1

NONE

1

		PIPE ELBOW TURNED DN		GLOBE VALVE	F&T	STEAM TRAP (FLOAT & THERMOSTATIC INDICATED		EXPANSION LOOP	UP	CHANGE IN ELEVATION (UP, DOWN, RISE OR DROP)		ΜΟΤΟΙ
	o	PIPE ELBOW TURNED UP		LOCKABLE BALL VALVE		T.T.= THERMOSTATIC INDICATED T.T.= THERMOSTATIC TRAP, B.T.= BUCKET TRAP)		EXPANSION LOOP (BRAIDED/MANUFACTURED)				
	~	PIPING TEE DOWN	₹	PLUG VALVE	®	PUMP ~ POINT OF		FLOOR DRAIN		SUPPLY DUCT TURNED UP/DN		FLEXIE
G		PIPING TEE UP	. v.		 	TRIANGLE INDICATES DIRECTION OF FLOW	FD			RETURN DUCT TURNED UP/DN	T	TEMPE THERN
		PIPE STACK		2-WAY CONTROL VALVE	<u>_</u>		SA	SHOCK ABSORBER (WATER HAMMER ARRESTER)			H	HUMID
		45° ELBOW DOWN	¥	3-WAY CONTROL VALVE	G	GAS SHUT-OFF VALVE	°°	FIRE DEPARTMENT CONNECTION		EXHAUST DUCT TURNED UP/DN		SENSC
		PIPING TO BE REMOVED		LOCK & SHIELD VALVE		HOSE END DRAIN VALVE W/CAP				ROUND DUCT TURNED UP/DN	(Co2)	CARBO
_		CAPPED PIPING	<b>\</b>	CHECK VALVE	£		°~°	FREE STANDING FIRE DEPARTMENT CONNECTION			Co	CARBO
	$\Phi$	CAPPED BELOW FINISHED FLOOR		BALANCING VALVE		TEMPERATURE/PRESSURE TAP (PETE'S PLUG)		DEPARTMENT CONNECTION		MITERED DUCT ELBOW W/TURNING VANES	AP	ACCES
		CONCENTRIC REDUCER		CIRCUIT SETTER		THERMOMETER WITH COCK		WATER GONG			DSD	DUCT
		ECCENTRIC REDUCER		AIR VENT ~ REFER TO SPECIFICATIONS	S	SOLENOID VALVE		DUCTWORK ~ FIRST DIMENSION IS		RADIUS DUCT ELBOW	( <u>EF-</u>	ROOFT
		DIRECTION OF FLOW		STRAINER WITH BLOWDOWN			12x8S	SIDE SHOWN IN INCHES S= SUPPLY, R= RETURN,				
F		PIPE PITCHES DOWN		VALVE AND CAP		ORIFICE FLOWMETER		E= EXHAUST AIR, OA= OUTSIDE AIR F.O. = FLAT OVAL	·]	DUCT/PIPE CAP (SINGLE/DOUBLE LINE)	() SF	ROOFT
		PIPE GUIDE		EXPANSION VALVE	DP	DIFFERENTIAL PRESSURE TRANSMITTER		ACCOUSTICAL LINING (DUCT			$\bowtie$	CEILIN
		EXPANSION JOINT	1	(AUTOMATIC)	$\mathbb{H} \times \times \times \times$	HUMIDIFIER (DUCT/AHU MOUNTED)		DIMENSION FOR NET FREE AREA)		VOLUME DAMPER		CEILIN
	<u>E_3</u>			RELIEF/SAFETY VALVE			$\vdash$ — — –					CEILIN
_				PRESSURE GAUGE WITH COCK		FINNED TUBE BASEBOARD	$\overline{}$	DUCTWORK TO BE REMOVED		FIRE DAMPER		CEILIN
				SIGHT GLASS	HB/WHYD	HOSE BIB/WALL HYDRANT		SINGLE LINE DUCTWORK	fD		$\square$	CEILIN
		FLANGED CONNECTION		PRESSURE REDUCING	O FCO	FLOOR CLEANOUT		TO BE REMOVED		SMOKE DAMPER		CEILIN
		BACKFLOW PREVENTER	PRV	VALVE	T.			DUCT TRANSITION	SD			
		FLEXIBLE CONNECTION	FS	FLOW SWITCH		FUSIBLE LINK VALVE		SQUARE TO ROUND DUCT		FIRE AND SMOKE DAMPER	$\bullet$	POINT - EXIST
E		SHUT-OFF/ISOLATION VALVE REFER TO SPECIFICATIONS		SELF-CONTAINED TEMP.	wco	WALL CLEANOUT		TRANSITION	- FSD			DIREC
	¢	GATE VALVE ~ OUTSIDE SCREW & YOKE (OS&Y)		CONTROL VALVE WITH REMOTE SENSOR	Ţ	AQUASTAT		FLEX DUCT ~ DOUBLE LINE		BACKDRAFT DAMPER		0
		SUREVV & TURE (USAT)						FLEX DUCT ~ SINGLE LINE	BDD			

AAV	AUTOMATIC AIR VENT	CU	COPPER; CONDENSING UNIT	GV	GRAVITY VENTILATOR
AAV	ABOVE CEILING	CUH	CABINET UNIT HEATER	H	HUMIDIFIER
ACC	AIR COOLED CONDENSER	C.V.	CONTROL VALVE	HB	HOSE BIBB
		C.V.	COLD WATER; CLOCKWISE	HC; HDC	HANDICAP ACCESS
ACU		DB	DRY BULB TEMPERATURE	HGT; HT	HEIGHT
ADA	AMERICANS WITH DISABILITIES ACT	DC	DOUBLE CONTAINED	HP	HEAT PUMP
<u>AD</u>	ACCESS DOOR	DDC	DIRECT DIGITAL CONTROL	HRU	HEAT RECOVERY UNIT
AE		DET	DETAIL	HTR	HEATER
AW	ACID WASTE	DIA	DIAMETER	H&V	HEATING AND VENTILATION
AFF; A.F.F.	ABOVE FINISHED FLOOR	DIC	DOWN IN CHASE	HVAC	HEATING, VENTILATING AND AIR COND.
AHU	AIR HANDLING UNIT	DIW	DOWN IN WALL	HW	HOT WATER
AP	ACCESS PANEL	DN	DOWN	HWR	HOT WATER RETURN
APPROX.	APPROXIMATE; APPROXIMATELY	DS	DOWNSPOUT	HWS	HOT WATER SUPPLY
APMR	AS PER MFR'S RECOMMENDATIONS	DT	DROP AND TRANSITION		
ATC	AUTOMATIC TEMPERATURE CONTROL		DRAIN VALVE	HX	
AV	AIR VENT	DV		ID	
BC	BALANCING COCK	DWG		IN WG	
BDD	BACKDRAFT DAMPER	EA			
BG	BLAST GATE	EF		INV. EL.	
BF	BARRIER FREE	EG	EXHAUST GRILLE	IPS <u>KE-#</u>	IRON PIPE SIZE KITCHEN EQUIPMENT NUMBER
BFP	BACKFLOW PREVENTER	ELEV	ELEVATION	LD	LINEAR DIFFUSER
BHP	BRAKE HORSEPOWER	ELONG	ELONGATE	<u>LE-#</u>	SCIENCE LAB EQUIPMENT NUMBER
BLDG	BUILDING	ENC	ENCLOSURE		
BOD	BOTTOM OF DUCT	ER	EXHAUST REGISTER	LP	
B.T.U.; BTU	BRITISH THERMAL UNIT	ESP	EXTERNAL STATIC PRESSURE	LPR	LOW PRESSURE STEAM RETURN
C; CONV.	CONVECTOR	ET	EXPANSION TANK	LPS	LOW PRESSURE STEAM SUPPLY
CCW	COUNTER CLOCKWISE	(E)	EXISTING	MAX	MAXIMUM
CFF	CAPPED FOR FUTURE	F&T	FLOAT AND THERMOSTATIC	MBH	1000 BTUH/hr.
CFM	CUBIC FEET PER MINUTE	FBO	FURNISHED BY OTHERS	MFR	MANUFACTURER
CLG	CEILING	FBP	FACE AND BYPASS	MIN	MINIMUM
<u>CO</u>	CLEANOUT	FC	FLEXIBLE CONNECTION	MOD	MOTOR OPERATED DAMPER
СМ	CONSTRUCTION MANAGER	<u>FCO</u>	FLOOR CLEANOUT	MPG	MEDIUM PRESSURE GAS
CNTR	COUNTER; COUNTER TOP	<u>FD-#</u>	FLOOR DRAIN TAG	MPV	MULTI-PURPOSE VALVE
CONN	CONNECT; CONNECTION	FD	FIRE DAMPER	MTD	MOUNTED
CONT.	CONTINUE; CONTINUATION	FIN	FINISH	MTG	MOUNTING
COORD.	COORDINATE	FL	FLOOR	MUA	MAKE UP AIR
CORR	CORRIDOR	FTG	FOOTING	N.C.	NORMALLY CLOSED
CR	CHEMICAL RESISTING	FTR	FINNED TUBE RADIATION	N.O.	NORMALLY OPEN
СТ	COOLING TOWER	FS	FLOW SWITCH	NIC	NOT IN CONTRACT
CTE	CONNECT TO EXISTING	FM	FORCE MAIN	NPT	NATIONAL PIPE THREAD
CTR	CENTER	GC	GENERAL CONTRACTOR	NTS	NOT TO SCALE
CTRLN	CENTERLINE	GPM	GALLONS PER MINUTE	OA	OUTSIDE AIR

A4 NONE

ABBREVIATIONS

5

OTORIZED	DAMPER

FLEXIBLE CONNECTION

TEMPERATURE SENSOR OR THERMOSTAT (AS SPECIFIED)

HUMIDISTAT OR HUMIDITY SENSOR (AS SPECIFIED)

CARBON DIOXIDE SENSOR

CARBON MONOXIDE SENSOR

ACCESS PANEL

DUCT SMOKE DETECTOR

ROOFTOP EXHAUST FAN

ROOFTOP SUPPLY FAN

CEILING DIFFUSER ~ 4-WAY BLOW

CEILING DIFFUSER ~ 3-WAY BLOW

CEILING DIFFUSER ~ 2-WAY BLOW

CEILING DIFFUSER ~ CORNER BLOW

CEILING RETURN GRILLE

CEILING EXHAUST GRILLE

POINT OF CONNECTION - EXISTING TO NEW

DIRECTION OF AIR FLOW

ECTION OF AIR FL	OW		
OBD	OPPOSED BLADE DAMPER	UH	UNIT HEATER
OD	OUTSIDE DIAMETER	UIC	UP IN CHASE
OED	OPEN ENDED DUCT	UIW	UP IN WALL
<u>P-#</u>	PLUMBING FIXTURE TAG	UV	UNIT VENTILATOR
PD	PUMPED DISCHARGE	V	VENT
PRS	PRESSURE REDUCING STATION	VAC	VACUUM
PRV	PRESSURE REDUCING VALVE	VB	VACUUM BREAKER
RA	RETURN AIR	VCFF	VALVE & CAP FOR FUTURE
RD	ROOF DRAIN	VD	VOLUME DAMPER - MANUAL
REC	RECOMMENDATION	VLV	VALVE
REG	REGULAR	VS	VENT STACK
RF	RETURN FAN	VTR	VENT TO ROOF
RG	RETURN GRILLE	W	WASTE
RHC	REHEAT COIL	W/	WITH
RM	ROOM	WB	WET BULB TEMPERATURE, °F
RPZ	PREDUCED PRESSURE BFP	WCO	WALL CLEANOUT
RR	RETURN REGISTER	WH	WATER HEATER
RV	RELIEF VALVE	WHYD	WALL HYDRANT
RW	RAIN WATER	Ø	DIAMETER
S	SUPPLY AIR	@	AT
SA-" "	SHOCK ABSORBER OF PDI SIZE (" ") AS INDICATED	&	AND
SCV	SELF-CONTAINED VALVE	%	PERCENT
SD	SMOKE DAMPER		
SF	SUPPLY FAN		
SG	SUPPLY GRILLE		
SGL	SINGLE		
SHT	SHEET	<b></b>	
SPLR	SPRINKLER		<u>NOTE</u>
SQ. FT; SF	SQUARE FEET		NERAL NOTES, SYNMBOL LEGEND TAILS ARE TO BE CONSIDERED AS

SUPPLY REGISTER

STAINLESS STEEL

TRENCH DRAIN

TOP OF DUCT

TRAP PRIMER

TIGHT TO STEEL

TURNING VANE

TEMPERED WATER

TRANSFER GRILLE

TOTAL STATIC PRESSURE

S/O SHUT-OFF

SR

S.S.

TD

ΤG

TOD

<u>TP</u>

TSP

TTS

ΤV

ΤW

TYP TYPICAL

10

			CANAL STUDIO
		ISTER, GRILLE & DIFFUSER TAG	Architecture / Planning / Interior Design
S1 1 1	QUA	USER, REGISTER OR GRILLE No. NTITY AIR FLOW	
		<u>UBE TAG</u>	<b>207 553 2115</b> One Canal Plaza, Suite 888 Portland, Maine 04101
FT-1-		UBE No. GTH	
2.1	GPM		canal5studio.com
VAV-1	VAV	<u>TAG</u> No. MUM CFM	Project Title
350 - 2.1 -			
		IPMENT TAG	INTERIOR
AHU 1		E DESIGNATOR IBER	RENOVATIONS
AHU		I <u>PMENT TAG</u> (ON FLOOR/ROOF ABOV E DESIGNATOR	ONE PORTLAND SQUARE,
<u></u>	NUM	IBER	PORTLAND, MAINE, 04101  AEI PROJECT NO. 16008
		AIL REFERENCE SYMBOL	
A1		AIL No. ET DETAIL LOCATED ON	Verrill Dana
			Attorneys at Law
A1		TION REFERENCE SYMBOL TION No.	
MH-500	SHE	ET SECTION LOCATED ON	
	_		3
			160 Veranda Street Portland, Maine 04103 T: 207.221.2260 F: 207.221.2266 Web: www.allied-eng.com
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			anda d, Mi 1.2260 w.allie
			160 Veran Portland, T: 207.221.22 F: 207.221.22 Web: www.a
			160 V Portls F: 207. Web: v
PER	UH	UNIT HEATER	Commissioning
	UIC UIW	UP IN CHASE UP IN WALL	
٩G	UV	UNIT VENTILATOR	
	V	VENT	
STATION	VAC VB	VACUUM VACUUM BREAKER	
	VCFF	VALVE & CAP FOR FUTURE	
	VD VLV	VOLUME DAMPER - MANUAL VALVE	Alied F Structural Mechanic
	VS	VENT STACK	ctural ctural
	VTR	VENT TO ROOF	Stru
	W W/	WASTE WITH	TE OF May
	WB	WET BULB TEMPERATURE, °F	IAN A.
E BFP	WCO WH	WALL CLEANOUT WATER HEATER	AN A. MACDONALD No. 6990
	WHYD	WALL HYDRANT	CENSED CONTINUE
	ø @	DIAMETER AT	What with the
PDI SIZE	&	AND	
VE	%	PERCENT	
			Mark Date Description
	· · · · · · · · · · · · · · · · · · ·		Project Status
		NOTE	ISSUED FOR
	AND DE APPLIC	NERAL NOTES, SYNMBOL LEGENDS ETAILS ARE TO BE CONSIDERED AS ABLE TO ALL PLUMBING AND HVAC	
	DRAWIN AND	NGS FOR THIS PROJECT. SYMBOLS ABBREVIATIONS SHOWN ON THIS ARE FOR REFERENCE ONLY AND DO	SEPTEMBER 21, 2016
		ICATE THEIR INCORPORATION INTO THE DESIGN.	Drawing Title
			PLUMBING AND HVAC NOTES,
			LEGEND AND
JRE			ABBREVIATIONS
			Scale: 12" = 1'-0"
			Drawing Number
			P00.0