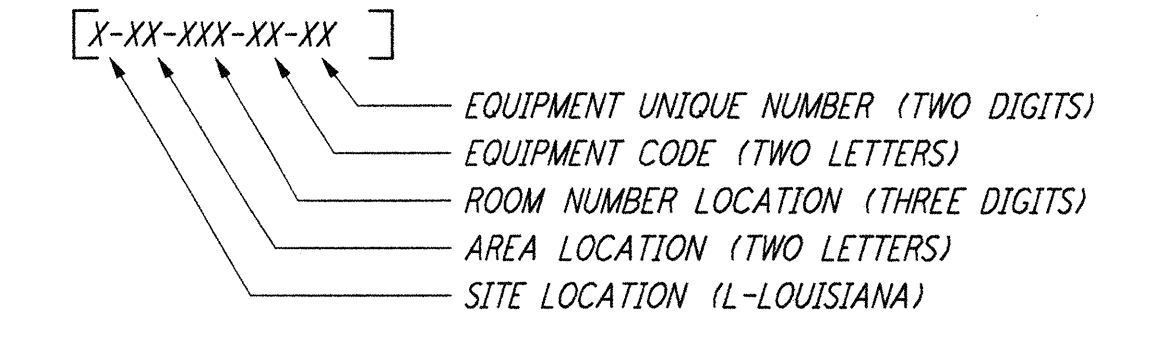


HEATING, VENTILATING AND AIR CONDITIONING LEGEND, SYMBOLS AND ABBREVIATIONS

This document and the design it covers are the property of PARSONS. They are loaned only with the borrower's expressed written agreement that they will not be reproduced, copied, loaned, exhibited, or used in any other way, except by written consent from PARSONS to the borrower.

DOUBLE LINE		SINGLE LINE		ABBREVIATIONS		EQUIPMENT IDENTIFICATION	
	SUPPLY AIR DUCT SECTION		CARBON FILTER	ABBY	WORD OR TERM	ABBY	WORD OR TERM
	SUPPLY AIR DUCT END ELEVATION		PNEUMATIC PISTON OPERATED CONTROL DAMPER (ROUND DUCT)	ABV	ABOVE	IN (")	INCH
	RETURN OR EXHAUST AIR DUCT SECTION		FILTER (85% ASHRAE EFFICIENCY RATING SHOWN)	AC	AIR CONDITIONING	INFL	INFILTRATION
	RETURN OR EXHAUST AIR DUCT END ELEVATION		PNEUMATIC DIAPHRAGM OPERATED CONTROL DAMPER (ROUND DUCT)	ACFM	ACTUAL CUBIC FEET PER MINUTE	INSTR	INSTRUMENT
	OUTSIDE AIR DUCT SECTION		HIGH EFFICIENCY PARTICULATE (HEPA) AIR FILTER	ACH	AIR CHANGES/HR	INSUL	INSULATION
	OUTSIDE AIR DUCT END ELEVATION		FIRE DAMPER	AF	AIR FINISHED FLOOR	IN WC	INCHES WATER COLUMN
	FLEXIBLE CONNECTION		MOTOR OPERATED FIRE DAMPER	AFMS	AIR FLOW MEASURING STATION	IN WG	INCHES WATER GAUGE
	ACCESS DOOR (AD) OR ACCESS PANEL (AP)		FLOW RATE METER	AI	ANALOG IN	KW	KILOWATT
	SUPPLY GRILLE OR REGISTER WALL OR SIDE OUTLET (FIRST FIGURE IS SIDE SHOWN, SECOND FIGURE IS SIDE NOT SHOWN)		C/C=COOLING COIL H/C=HEATING COIL H/U=HUMIDIFIER	AO	ANALOG OUT	L	LONG
	TRANSFER GRILLE OR REGISTER WALL OR SIDE OUTLET (FIRST FIGURE IS SIDE SHOWN, SECOND FIGURE IS SIDE NOT SHOWN)		ELECTRIC COIL	APPROX	APPROXIMATE	LB	POUND
	RETURN GRILLE OR REGISTER (LARGER SIDE FIGURE SHOWN FIRST, SMALLER SIDE FIGURE SHOWN SECOND)		HEATING COIL WITH INTERNAL FACE & BY-PASS DAMPER	ARCH	ARCHITECTURAL	LG	LEVEL GAUGE
	BRANCH TAKEOFF (ADJUSTABLE EXTRACTOR SHOWN)		FAN OR BLOWER (W/INLET VANES SHOWN)	ATM	ATMOSPHERE	LGTH	LENGTH
	PROPORTIONAL THROAT (T) WITH TURNING VANES AND VOLUME CONTROL DAMPERS		PROPELLER FAN	AUTO	AUTOMATIC	LRA	LOCKED ROTOR AMPERES
	PROPORTIONAL THROAT (T) WITH SPLITTER DAMPER		VAV TERMINAL UNIT	BD	BACKDRAFT DAMPER	LVG	LEAVING
	TRANSITION RECTANGULAR TO ROUND		PNEUMATIC PISTON OPERATED CONTROL DAMPER	BEL	BELOW	MAIN	MAINTENANCE
	ELBOW WITH TURNING VANES		PNEUMATIC DIAPHRAGM OPERATED CONTROL DAMPER	BFP	BOTTOM FLAT	MAX	MAXIMUM
	RADIUS ELBOW		PRESSURE RELIEF DAMPER (PRD)	BHG	BRAKE HORSEPOWER	MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR
	AIR FLOW DIRECTION (INTAKE, RETURN OR EXHAUST) AIR FLOW DIRECTION (SUPPLY)		MOTOR OPERATED CONTROL DAMPER	BLDG	BUILDING	MCC	MOTOR CONTROL CENTER
	DOOR LOUVER		PUMP	BOD	BOTTOM OF DUCT	MECH	MECHANICAL
	DOOR UNDERCUT		IN-LINE FAN	BOG	BOTTOM OF GRILLE	MFR	MANUFACTURER
	WALL LOUVER		GRAVITY ROOF SUPPLY OR EXHAUST VENT	BOL	BOTTOM OF LOUVER	MIN	MINIMUM
	DUCT PENETRATION TAG		FLOW CONTINUATION ARROW	BOP	BOTTOM OF REGISTER	MTD	MOUNTED
	PIPE PENETRATION TAG		SOUND TRAP	BOT	BOTTOM	MTG	MOUNTING
	SQUARE SUPPLY CEILING DIFFUSER WITH FLEXIBLE DUCT (FACE SIZE, NECK SIZE AND NUMBER OF DIRECTIONS SHOWN)		VANE AXIAL FAN	BOU	BOTTOM OF UNIT	MTR	MOTOR
	FLEXIBLE DUCT		ROOM TEMPERATURE TRANSMITTER	BTUH	BRITISH THERMAL UNITS PER HOUR	NC	NORMALLY CLOSED



CODE	EQUIPMENT
AC	AIR CONDITIONING UNIT/COMPRESSOR (AIR)
AF	FILTER
AH	AIR HANDLING UNIT
AS	SEPARATOR (AIR)
AU	AIR COOLED CONDENSING UNIT
BR	BOILER
CC	COOLING COIL
CH	CHILLER
CT	COOLING TOWER
CU	CONDENSATE RETURN UNIT
DE	DEHUMIDIFIER
DR	DEAERATOR
DV	VARIABLE AIR VOLUME BOX (DOUBLE DUCT)
EF	EXHAUST FAN
FC	FAN COIL UNIT
GP	GLYCOL MIX FEED PUMP
HT	CONVECTOR HEATER
HU	HUMIDIFIER
HC	HEATING COIL
HE	HEAT EXCHANGER
PA	PACKAGED AIR CONDITIONING UNIT
PF	PRESSURIZATION FAN
RC	COMPRESSOR (REFRIGERATION)
RE	RECEIVER
RF	RETURN FAN
SF	SUPPLY FAN
ST	SOUND TRAP/DUCT SILENCER
SV	VARIABLE AIR VOLUME BOX (SINGLE DUCT)
TK	TANK
TP	STEAM TRAP
UH	UNIT HEATER
WP	CIRCULATING WATER PUMP

CODE	SITE LOCATION
L OR LA	LOUISIANA

CODE	AREA LOCATION
CS	CORNER STATION
MA	MID STATION "A"
MB	MID STATION "B"
EA	END STATION "A"
EB	END STATION "B"

NO.	DATE	BY	CHKD	ENGR	PROJ	DESCRIPTION
1	8-7-98	DJB	AA	AA		ISSUED FOR AS-BUILT

ISSUED FOR CONSTRUCTION		
DRAWN	CLP	11-15-96
CHECKED	MN	10-25-96
ENGINEER	AA	1-23-96
PROJ	TDM	11-15-96

AS-BUILT DRAWINGS

100 WEST WALNUT STREET
PASADENA, CALIFORNIA

CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

LIGO-D960960-01-O

LASER INTERFEROMETER
GRAVITATIONAL-WAVE OBSERVATORY
SITE NO.2 - LIVINGSTON, LOUISIANA

TITLE	SCALE	CONTRACT NUMBER	PROJECT NUMBER
	NONE	PP150969	8094
DRAWING NO.	DESCRIPTION	SHEET NUMBER	REVISIONS
		LA-H-001	

HVAC LEGEND & ABBREVIATIONS