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RENAUD SPIRIT CENTER
For the City of O'Fallon - Missouri



Key Plan

Scale

Jacobs Project No: F3940600

Drawing Title: PLUMBING SYMBOLS & ABBREVIATIONS

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P001

PLUMBING ABBREVIATIONS

EQUIPMENT DESIGNATION	DESCRIPTION	EQUIPMENT DESIGNATION	DESCRIPTION
A	COMPRESSED AIR	LV	LABORATORY VACUUM
AD	AREA DRAIN	MB	MOP BASK
ANC	ANCHOR	MH	MANHOLE
AP	ACCESS PANEL	MOV	MOTOR OPERATED VALVE
AW	ACID WASTE	MPG	MEDIUM PRESSURE GAS
AV	ACID VENT	MS	MOP SINK
BD	BALCONY DRAIN	MV	MEDICAL VACUUM
BC	BALANCING COCK	N	NITROGEN
BFV	BUTTERFLY VALVE	N2O	NITROUS OXIDE
BV	BALL VALVE	OD	OVERFLOW DRAIN
CKV	CHECK VALVE	ORD	OVERFLOW ROOF DRAIN
CD	CONDENSATE DRAIN	ORL	OVERFLOW RAIN LEADER
CL	CHLORINATED WATER	OS&Y	OUTSIDE SCREW & YOKE
CO	CLEANOUT	PERF	PERFORATED
CO2	CARBON DIOXIDE	PD	PUMP DISCHARGE
CP	CIRCULATING PUMP	PI	PRESSURE INDICATOR (GAUGE)
CW	DOMESTIC COLD WATER	PRESS	PRESSURE
DW	COMBINATION WASTE AND VENT	PRV	PRESSURE REDUCING VALVE
D	DRAIN	RC	REMOTE CHILLER
DE	DEIONIZED WATER	RD	ROOF DRAIN
DFU	DRAINAGE FEATURE UNIT	RHB	RECESSED HOSE BRB
DGDC	DOUBLE GATE, DOUBLE CHECK	RL	RAIN LEADER
DI	DISTILLED WATER	SA	SHOCK ABSORBER
DT	DRAIN TILE	SE	SEWAGE EJECTOR
DWR	DRINKING WATER RETURN	SH	SHOWER
DWS	DRINKING WATER SUPPLY	SS	SANITARY SEWER
DWH	DOMESTIC WATER HEATER	SSD	SUB SOIL DRAIN
ES	EMERGENCY SHOWER	SSK	SERVICE SINK
FCD	FLOOR CLEANOUT	ST	STORM SEWER
FFD	FUNNEL FLOOR DRAIN	SV	SOLENOID VALVE
FLEX	FLEXIBLE	SW	SOFT WATER
FS	FLOOR SINK	TP	TRAP PRIMER
FOG	FUEL OIL GAUGING	TPRV	TEMPERATURE & PRESSURE RELIEF VALVE
FOL	FUEL OIL LEVEL	TW	TEMPERED WATER
FOR	FUEL OIL RETURN	TWPP	TEMPERED WATER REDCIRCULATION PUMP
FOS	FUEL OIL SUPPLY	UR	URINAL
FOV	FUEL OIL VENT	V	VENT
IV	FLUSH VALVE	VAC	VACUUM
G	NATURAL GAS (LOW PRESSURE)	VC	VACUUM CLEANING
GLV	GLOBE VALVE	VIR	VENT THRU ROOF
GR	GREASE	VTRF	VENT THRU ROOF FLASHING
GV	GATE VALVE	VLV	VALVE
HB	HOSE BRB	VS	VENT STACK
HD	HUB DRAIN	W	SANITARY WASTE
HW	DOMESTIC HOT WATER	WC	WATER CLOSET
HWR	HOT WATER REDCIRCULATION	WCO	WALL CLEANOUT
HWP	HOT WATER REDCIRCULATION PUMP	WFS	WATER FLOW SWITCH
ICW	INDUSTRIAL COLD WATER	WG	WASTE GLYCOL
ID	INDIRECT DRAIN	WH	WALL HYDRANT
E	INVERT ELEVATION	WHA	WATER HAMMER ARRESTOR
IW	INDIRECT WASTE	WO	WASTE OIL
IR	ICE WATER RETURN	WS	WASTE STACK
IS	ICE WATER SUPPLY	WSP	WET STANDPIPE

PLUMBING LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	COMPRESSED AIR		ANCHOR
	ACID WASTE		REDUCED PRESSURE BACKFLOW PREVENTER
	ACID VENT		DOUBLE GATE, DOUBLE CHECK ASSEMBLY
	CONDENSATE RETURN PUMP DISCHARGE		EXPANSION JOINT W/ GASKETS
	CHLORINATED WATER		FLUID FLOW DIRECTION
	DOMESTIC COLD WATER		PIPE RISER UP
	DRAIN LINE		PIPE TURNING DOWN
	DEIONIZED WATER		CONCENTRIC REDUCER
	DISTILLED WATER		ECCENTRIC REDUCER
	FORCE MAIN		CAPPED PIPE/OUTLET
	FUEL OIL GAUGING		PLUGGED PIPE/OUTLET
	FUEL OIL RETURN		EMERGENCY SHOWER / EYE WASH
	FUEL OIL SUPPLY		RUNNING TRAP
	LOW PRESSURE GAS		UNION
	DOMESTIC HOT WATER SUPPLY		HOSE BRB
	DOMESTIC HOT WATER REDCIRCULATION		RECESSED HOSE BRB
	INDIRECT WASTE		FLOOR SINK
	DRINKING WATER SUPPLY		FLOOR DRAIN
	DRINKING WATER RETURN		WALL CLEANOUT
	LIQUID PROPANE GAS		FLOOR CLEANOUT
	MEDIUM PRESSURE GAS		WALL HYDRANT
	OVERFLOW RAIN LEADER		GAS SHUT-OFF COOK
	OVERFLOW DRAIN		BALANCING VALVE
	PUMP DISCHARGE		FLOW CONTROL VALVE (CPM)
	RAIN LEADER		FLEXIBLE CONNECTION
	STORM DRAIN		OVERFLOW ROOF DRAIN
	SUB-SOIL DRAIN		ROOF DRAIN
	SOFT WATER		FUNNEL DRAIN OPEN
	TEMPERED WATER SUPPLY		BALL VALVE
	TEMPERED WATER REDCIRCULATION		BUTTERFLY VALVE
	SANITARY SEWER / WASTE		GATE VALVE
	WASTE OIL/COOL		STRAINER
	WASTE OIL		CHECK VALVE
	VENT LINE		GLOBE VALVE
	GREASE PIPING		SECTIONAL VALVE (SEE SPECIFICATIONS)
	VACUUM CLEANING LINE		THROTTLING VALVE (SEE SPECIFICATIONS)
	OXYGEN PIPING		ANGLE VALVE
	VACUUM PIPING		PRESSURE REDUCING VALVE
	PIPING BELOW FLOOR		PRESSURE GAGE W/ COOK
	WATER HAMMER ARRESTOR		PRESSURE RELIEF OR SAFETY VALVE
	SOLENOID VALVE		OUTSIDE SCREW AND YOKE
	MOTOR OPERATED VALVE		CIRCULATING PUMP
	AIR OPERATED VALVE		THERMOMETER
	RISER DIAGRAM DESIGNATION		MIXING VALVE (THERMOSTATIC)
	EQUIPMENT DESIGNATION		POINT OF CONNECTION
			POINT OF DISCONNECTION

PLUMBING PUMP SCHEDULE

MARK	MANUFACTURER	MODEL NO.	SERVICE	TYPE	GPM	HEAD	RPM	REMARKS
HWP-1	ARMSTRONG	ASTRO-300H	HWR	IN-LINE	5	10	3000	1/12 H.P. 120-1-60
HWP-2	ARMSTRONG	ASTRO-300H	HWR	IN-LINE	5	10	3000	1/12 H.P. 120-1-60
HWP-3	ARMSTRONG	ASTRO-300H	HWR	IN-LINE	5	10	3000	1/12 H.P. 120-1-60
SP-01	STANCOR	SE-40	ELEV SUMP	SUMP	5	21	3600	0.4 H.P. 120-1-60

* ALL BRONZE PUMP WITH AGLAST

FIXTURE BRANCH SCHEDULE

MARK	FIXTURE	CW	HW	WASTE	TRAP	VENT	REMARKS
WC-1	WATER CLOSET	1 1/2"	4"	INTEGRAL	2"		WALL HUNG MH=15"
WC-2	WATER CLOSET	1 1/2"	4"	INTEGRAL	2"		HANDICAPPED, WALL HUNG MH=17"
UR-1	URINAL	3"	3"	INTEGRAL	2"		WALL HUNG MH = 24"
UR-2	URINAL	3"	3"	INTEGRAL	2"		HANDICAPPED, WALL HUNG MH = 17"
LAV-1	LABATORY	1/2"	1/2"	2"	1-1/4"	2"	COUNTER TOP SEE ARCH. DWG.
LAV-2	LABATORY	1/2"	1/2"	2"	1-1/2"	2"	MH=34"
LAV-3	LABATORY	1/2"	1/2"	2"	1-1/2"	2"	MH=34"
SK-1	S.S. SINK	1/2"	1/2"	2"	1-1/2"	2"	SINGLE BOWL, SEE ARCH. DWG.
SK-2	S.S. SINK	1/2"	1/2"	2"	1-1/2"	2"	DOUBLE BOWL, HANDICAPPED
SK-3	S.S. SINK	1/2"	1/2"	2"	1-1/2"	2"	TRIPLE BOWL, SEE ARCH. DWG.
MS-1	MOP SINK	3/4"	3/4"	2"	2"	2"	HIGH/LOW HANDICAPPED *
WC-1	WATER COOLER	1/2"	1/2"	2"	1-1/4"	2"	RECESSED W/ CUSPOOR
WC-2	WATER COOLER	1/2"	1/2"	2"	1-1/4"	2"	
SH-1	SHOWER	1/2"	1/2"	2"	2"	2"	
SH-2	SHOWER	1/2"	1/2"	2"	2"	2"	HANDICAPPED

NOTES * HANDICAPPED DRINKING FOUNTAIN MH = 34" TO TOP OF BUBBLER.

GAS WATER HEATER SCHEDULE

MARK	MANUFACTURER	STORAGE	RECOVERY	TYPE	BTU/H	GAS CONN.	ELECTRICAL	REMARKS
DWH-001	LOCHINAR CFN0300-FM-SH400J-PT	400 GALLONS	309 G.P.H. @ 100°C RESE.	GAS	300,000	1"	120V/1W/60HERTZ	*

*HEATER TO BE PACKAGE UNIT MOUNTED WITH 1/4 HP CIRCULATING PUMP ON SKIDS WITH DIRECTORIAL HORIZONTAL VENT AND SUPPLY.

ELECTRIC WATER HEATER SCHEDULE

MARK	MANUFACTURER	STORAGE	RECOVERY	TYPE	KW	REMARKS
DWH-002	LOCHINAR 1618-082	82 GALLONS	74 G.P.H. @ 100°C RESE.	ELEC	18	480V/3W/60HERTZ

THERMOSTATIC MIXING VALVE SCHEDULE

MARK	SERVING	SELECTION BASED ON		WATER TEMP		PIPE SIZE		NOTES	
		MFR	MODEL	GPM	IN	OUT	IN		OUT
WV-001	HOT WATER	STANCOR	5-500 TEMP CONTROL	34	140	110	1"	1 1/4"	(1)
WV-002	HOT WATER	STANCOR	5-400 TEMP CONTROL	17	140	110	3/4"	1"	(1)

NOTES (1) MINIMUM FLOW RATE THRU VALVE = 0.5 GPM, MAXIMUM PRESSURE = 10 PSIG