

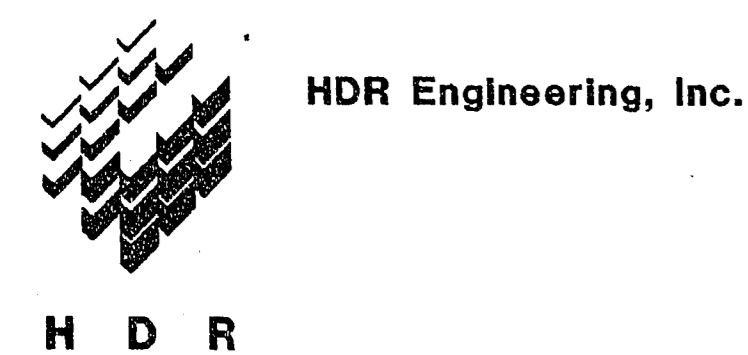
PLUMBING SYMBOLS	
SYMBOL	DESCRIPTION
---V---	VENT PIPING (V)
————	SOIL OR WASTE PIPING – ABOVE GRADE (W)
-----	SOIL OR WASTE PIPING – BELOW GRADE
—RD—	ROOF DRAIN PIPING – ABOVE GRADE
---RD---	ROOF DRAIN PIPING – BELOW GRADE
————	DOMESTIC COLD WATER (PWC)
-----	DOMESTIC HOT WATER (PWH)
—○—	RUNNING TRAP – W/ CLEANOUT AT FINISH FLOOR
○RD	ROOF DRAIN
○VTR ○CVTR	VENT THRU ROOF CHEMICAL VENT THRU ROOF
□FD	FLOOR DRAIN
—CO—	CLEANOUT
—G—	NATURAL GAS PIPING
—ACID—	ACID FEED
—CA—	COMPRESSED AIR
—CDR—	CONDENSER WATER RETURN
—CDS—	CONDENSER WATER SUPPLY
—CS—	CHLORINE SOLUTION
—CWR—	CHILLED WATER RETURN
—CWS—	CHILLED WATER SUPPLY
—HWR—	HEATING WATER RETURN
—HWS—	HEATING WATER SUPPLY
—RCY—	SCRUBBER RECIRCULATION
—SD—	SUMP PUMP DISCHARGE
—SH—	SODIUM HYDROXIDE
—SW—	SERVICE WATER

VALVE SYMBOLS	
SYMBOL	DESCRIPTION
— —	GATE VALVE
— —	GLOBE VALVE
— —	BALL VALVE
— —	PLUG VALVE – ECCENTRIC
— —	CHECK VALVE
— —	BUTTERFLY VALVE
— —	NEEDLE VALVE
— —	PLUG VALVE – PORTED OR GAS COCK
— —	BALANCING VALVE
— —	PRESSURE REDUCING VALVE (PRV)
— —	BACKWATER VALVE
— —	BACKFLOW PREVENTER
— —	HOSE BIB
— —	WALL HYDRANT

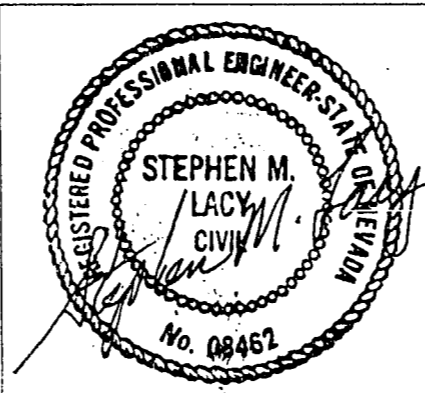
ABBREVIATIONS	
ABBREVIATION	DESCRIPTION
AFF	ABOVE FINISH FLOOR
BOD	BOTTOM OF DUCT
BOG	BOTTOM OF GRILLE
BOU	BOTTOM OF UNIT
FOB	FLAT ON BOTTOM
FOT	FLAT ON TOP
EA	EXHAUST AIR
OA	OUTSIDE AIR
OED	OPEN END DUCT
RA	RETURN AIR
RLF	RELIEF AIR
SA	SUPPLY AIR
VTR	VENT THRU ROOF

SHEET METAL SYMBOLS	
SYMBOL	DESCRIPTION
UP DOWN	SUPPLY AIR OR OUTSIDE AIR – ELBOW SHOWN FOR CLARITY
UP DOWN	EXHAUST AIR OR RETURN AIR – ELBOW SHOWN FOR CLARITY
	TRANSITION – DOUBLE SIDED
	TRANSITION – ONE SIDED
	TRANSITION – RECTANGULAR TO ROUND DUCT
	STANDARD BRANCH – FOR SUPPLY AIR W/ EXTRACTOR AND RETURN AIR
	ELBOW – W/ DOUBLE THICKNESS TURNING VAIN
	SPLITTER DAMPER
	RECTANGULAR DUCT INCLINE – RISE OR DROP IN RESPECT TO THE AIR FLOW
	ROUND DUCT INCLINE – RISE OR DROP IN RESPECT TO THE AIR FLOW
	FLEXIBLE CONNECTION
	FLEXIBLE DUCT
	SUPPLY AIR REGISTER OR GRILLE W/ DUCT MNTD. EXTRACTOR, EXTRACTOR NOT REQ'D. FOR END OF DUCT SUPPLY AIR REGISTER OR GRILLE.
	EXHAUST AIR OR RETURN AIR REGISTER OR GRILLE
	SUPPLY AIR ASSEMBLY SQUARE DIFFUSER
	SUPPLY AIR ASSEMBLY ROUND DIFFUSER
	DAMPER IN DUCT AS NOTED – BOD – BACKDRAFT DAMPER MOD – MOTOR OPERATED DAMPER
	ACCESS DOOR
	ACCOUSTICAL LINING – DUCT DIMENSIONS FOR NET FREE AREA
	RECTANGULAR DUCT OR OPENING SIZE – FIRST NUMBER INDICATES SIZE OF SIDE SHOWN
	ROUND DUCT SIZE
	FD = FIRE DAMPER VD = VOLUME DAMPER

NOTES:  
1. THIS IS A STANDARD MECHANICAL LEGEND.  
SOME SYMBOLS MAY NOT BE USED ON THIS PROJECT.



Issue No.	Description	Date	Drawn	Chkd	Resp. Engr.	Proj. Mgr.
1	CORRECTED ACCORDING TO CONSTRUCTION RECORDS	4-92	DJD	GAN	SML	



Project Manager	STEVE M. LACY	8-28-89
Architect	M.J. SHANAHAN	ME/Process
	A.J. PETERSON	Mechanical
Civil	A.J. PETERSON	G.A. NELSON
Electrical	F.E. MAYCOCK	Structural
		R.E. KUMM

### Sludge Dewatering Facilities

Los Vegas, Nevada

### MECHANICAL LEGEND

Scale	NONE	Project No.	00120-028-041	Drawing No.	45 of 69	Issue	1
Year	1989				M-13		

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