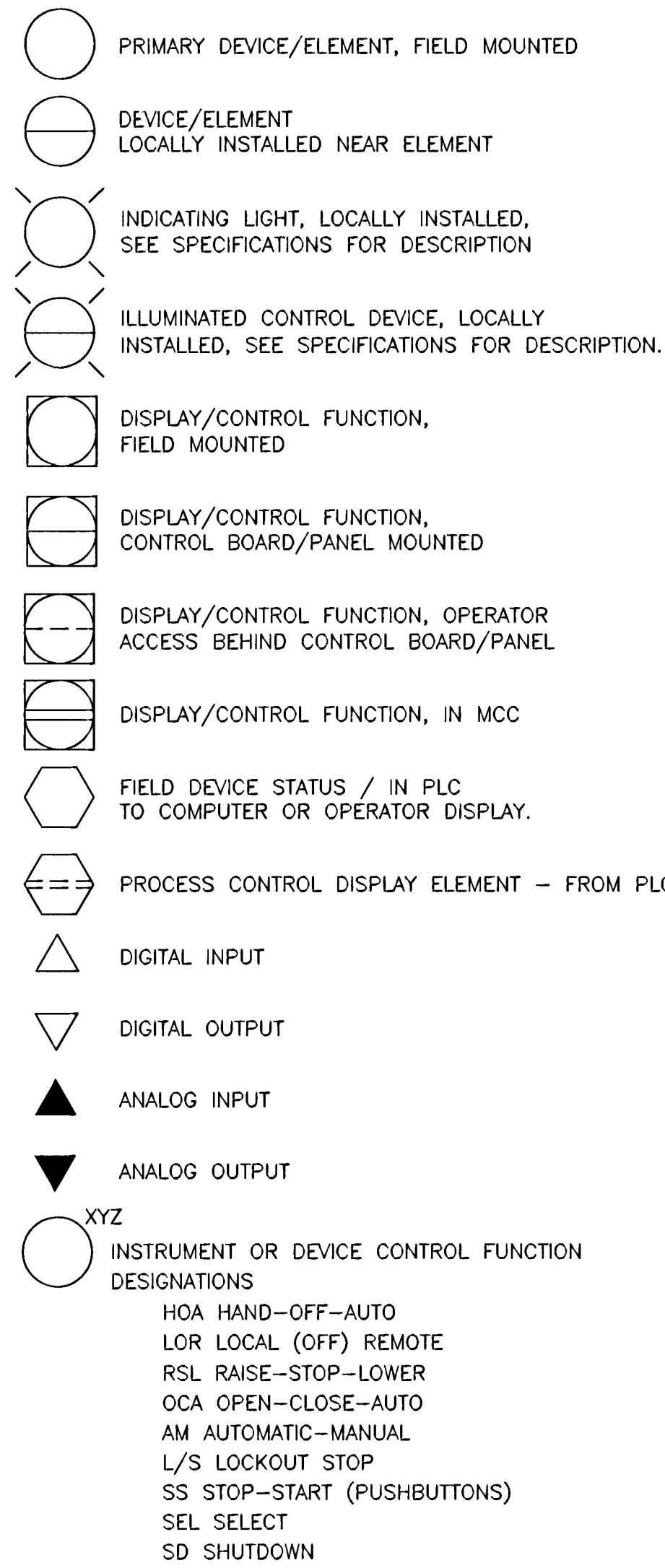
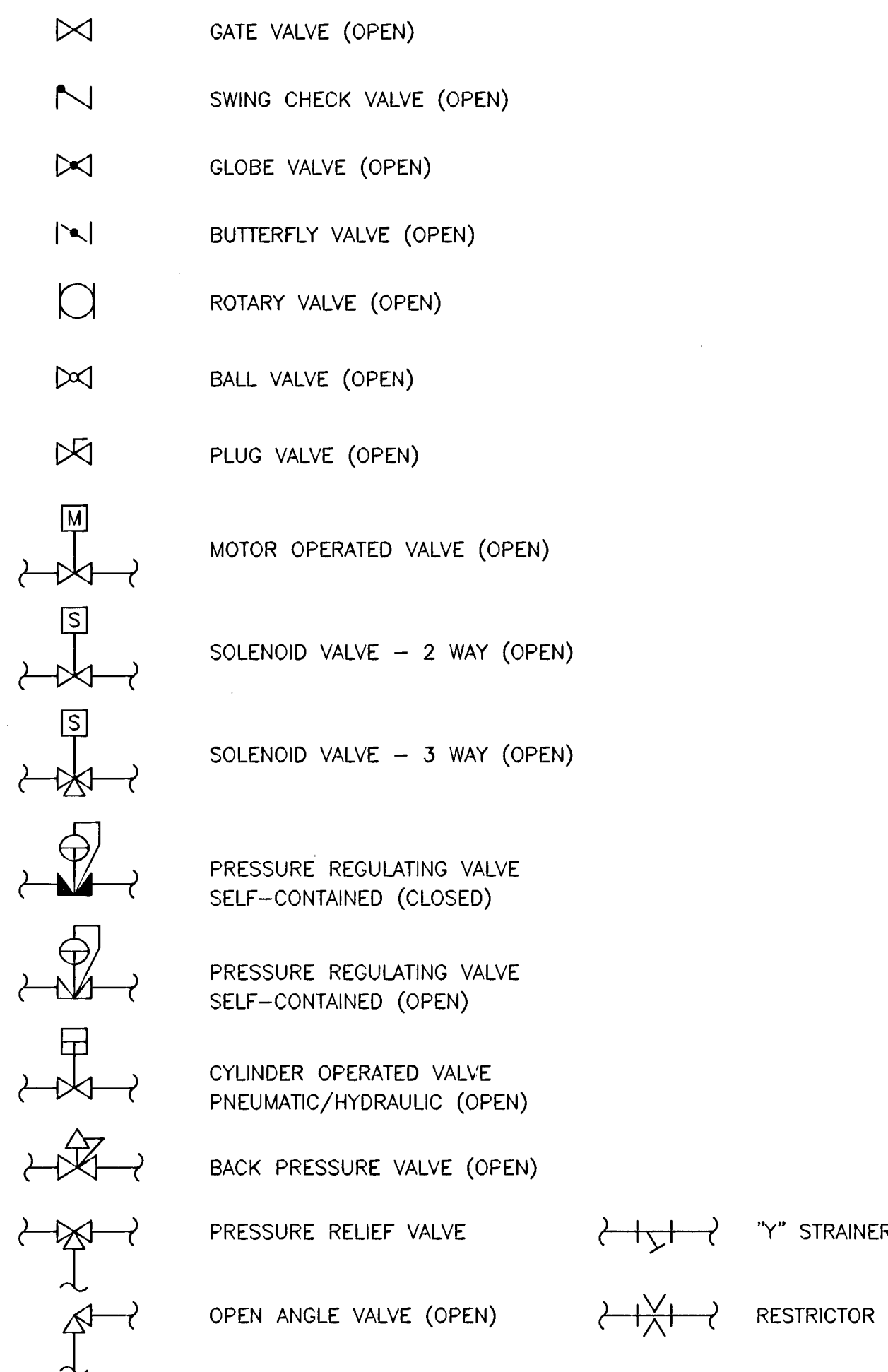


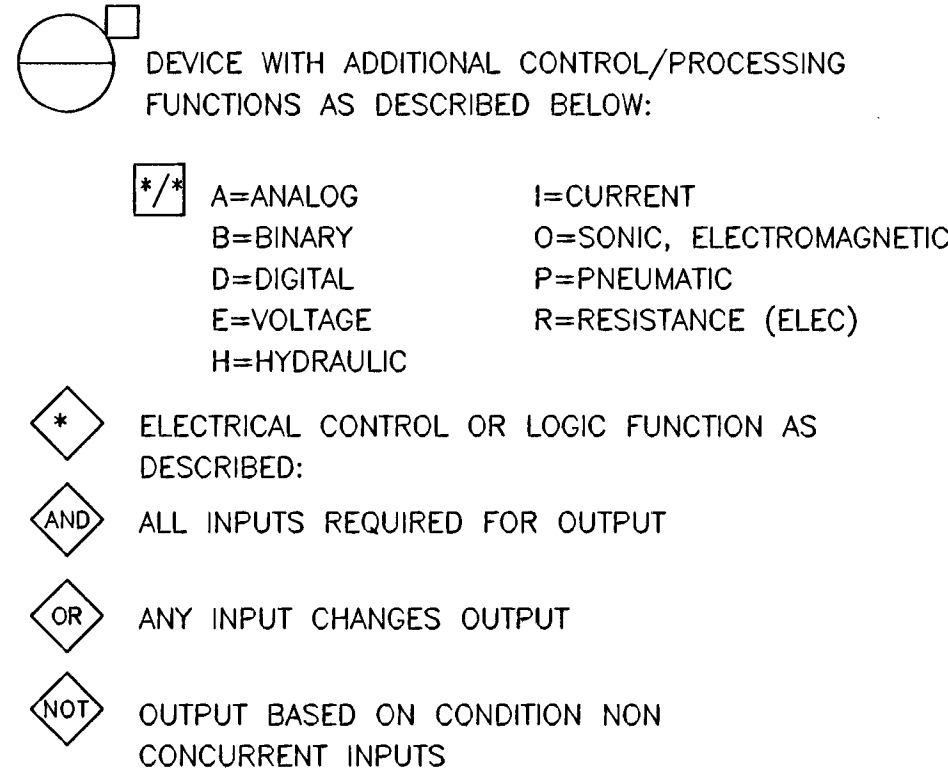
INSTRUMENT AND FUNCTION SYMBOLS



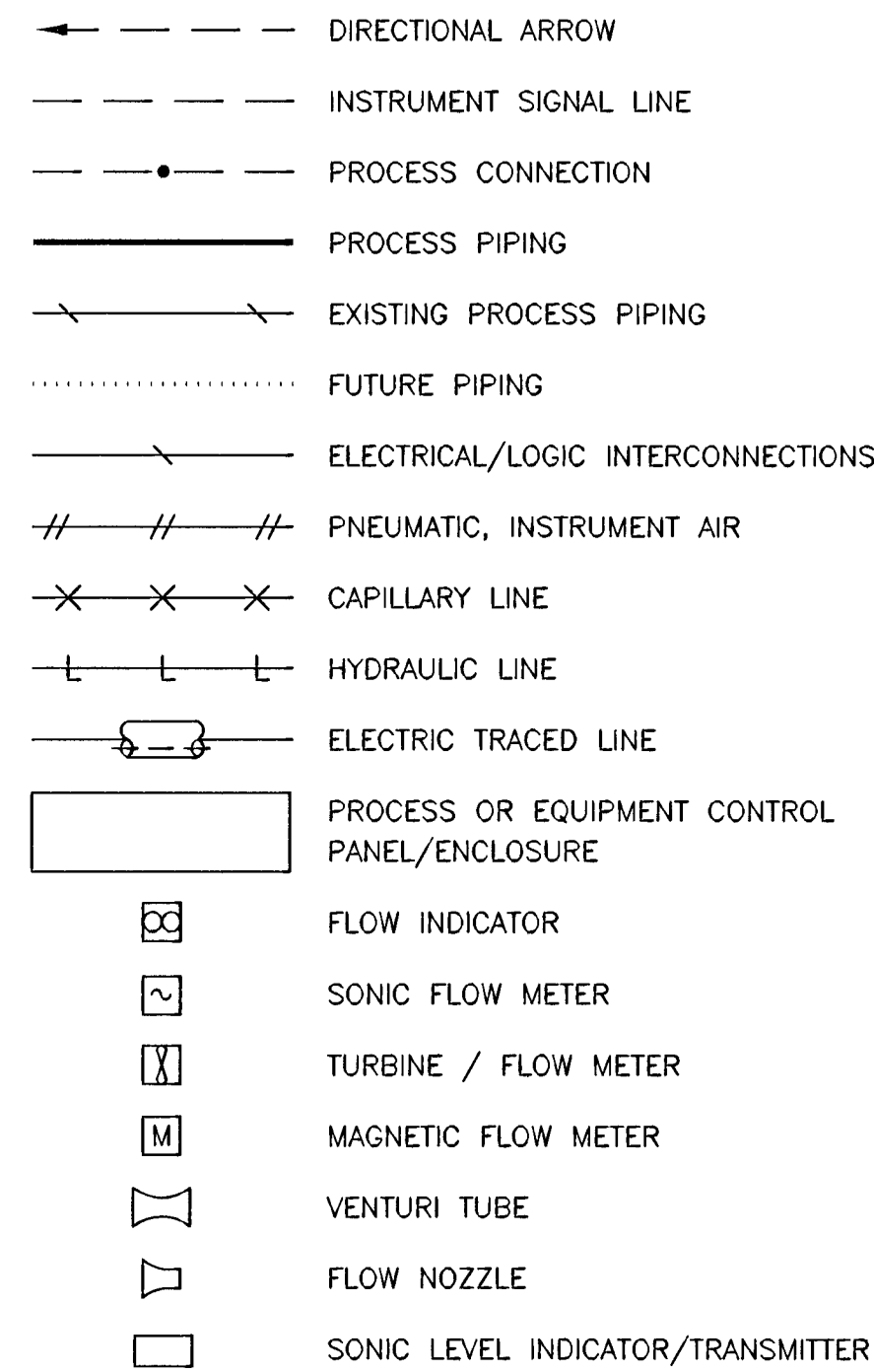
VALVE SYMBOLS



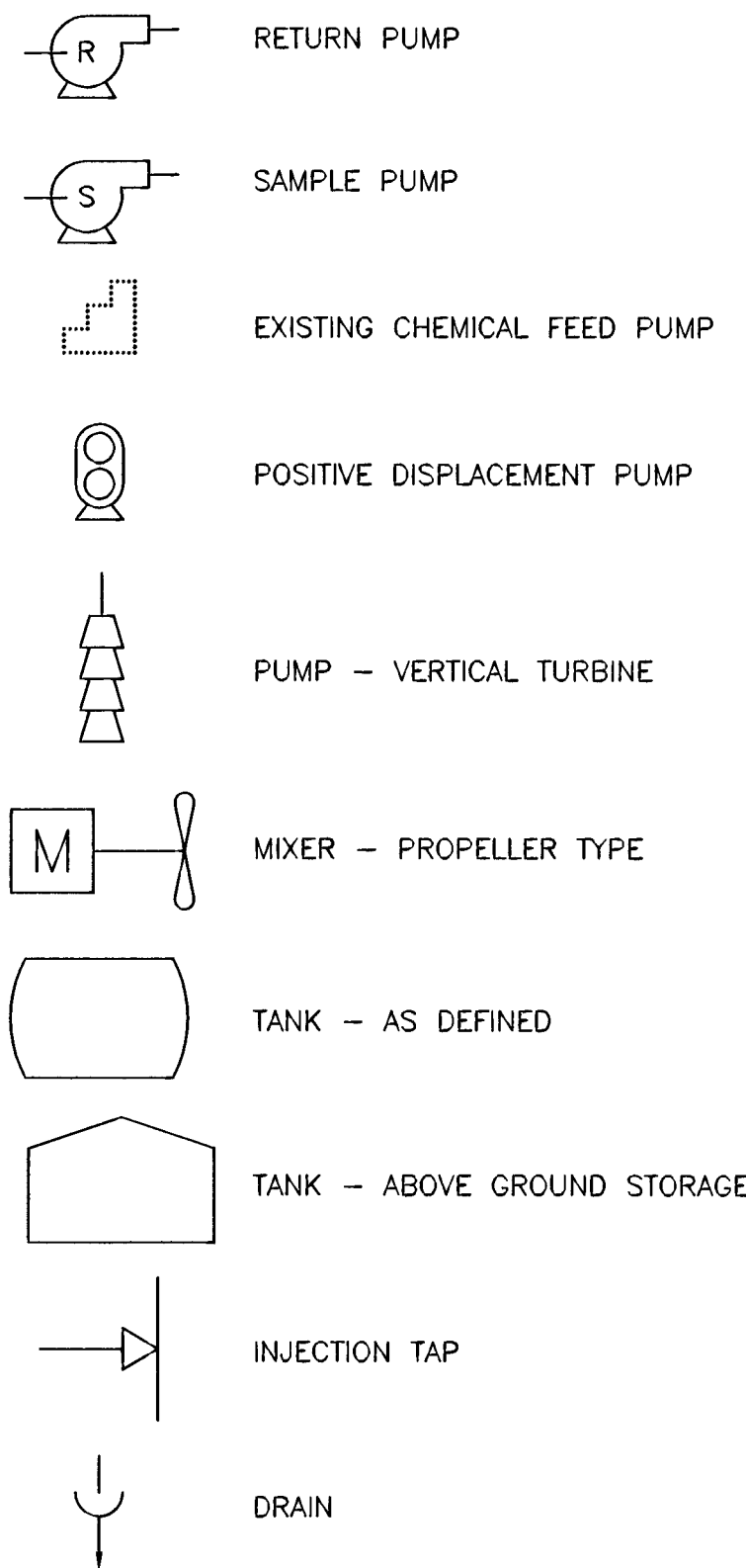
INSTRUMENT AND FUNCTION SYMBOLS



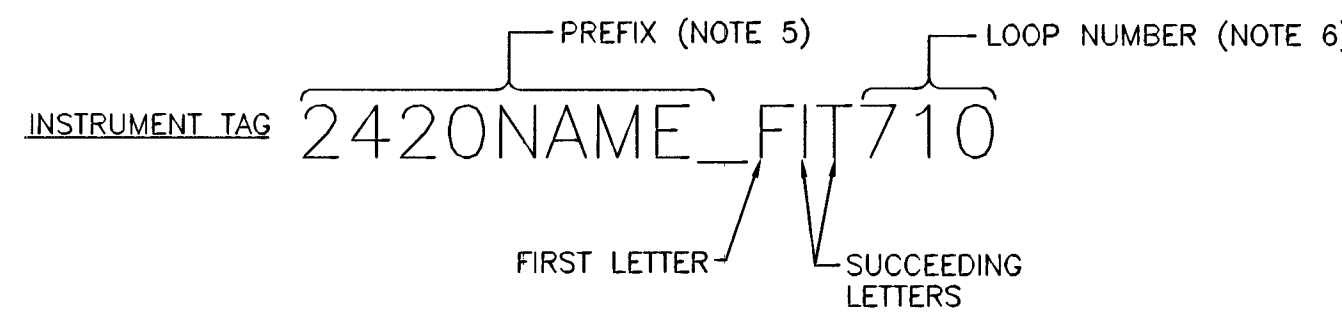
LINE SYMBOLS



EQUIPMENT/DEVICE SYMBOLS



EXAMPLE - DEVICE IDENTIFICATION



ALPH.	TAG NUMBER LETTER IDENTIFICATION			
	FIRST LETTER	SECOND LETTER	THIRD LETTER	
	FUNCTION	INPUT FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYZER	ALARM/ HI ALARM		
B			CLOSE, STOP, DECREASE	
C	COMMUNICATION	CONTROL		
D		DIFFERENTIAL	OPEN, START, INCREASE	DRAWDOWN
E	VOLTAGE	SENSOR (PRIMARY ELEMENT)		EAST
F	FLOW	FAIL		
G				
H	HAND	HI-HI ALARM		
I	CURRENT (ELEC.)	INDICATE		INLET, SUCTION
J	POWER			
K	TIME		CONTROL STATION	
L	LEVEL	LOW ALARM	LIGHT	
M	MOTOR			
N	INTRUSION	RUN, ON, OPERATING		NORTH
O		LOW-LOW ALARM		OUTLET DISCHARGE
P	PRESSURE			PLC
Q	QUANTITY	TOTALIZE, INTEGRATE		
R				RTU
S	SPEED	STATUS, SWITCH		SOUTH
T	TEMPERATURE		TRANSMIT	
U		MULTIFUNCTION		UN-NEEDED/OBSOLETE
V	VIBRATION			
W	WEIGHT			WEST
X	TEST	MULTIFUNCTION		UNCLASSIFIED FIELD DEVICE
Y	EVENT, STATE	RELAY, COMPUTE, CONVERT		
Z	POSITION			SCADA COMPUTER

NOTES:

- COVERS ALL ANALYSIS NOT LISTED IN TABLE. TYPE OF ANALYSIS WILL BE DEFINED OUTSIDE TAGGING BALLOON ON DIAGRAM.
- INTENDED TO COVER UNLISTED MEANINGS THAT WILL BE USED TO A LIMITED EXTENT. MEANINGS WILL BE DEFINED OUTSIDE TAGGING BALLOON ON DIAGRAM.
- FUNCTION OF COMPUTING DEVICE WILL BE DEFINED OUTSIDE TAGGING BALLOON. SEE ABBREVIATIONS FOR DESIGNATION.
- USERS CHOICE
- THE INSTRUMENT LOOP NUMBERS SHALL BE PRECEDED BY THE FOLLOWING PREFIXES.

PREFIX	LOCATION
1985V010	ZONE 1985 VALVE 10

- THE CONTRACTOR SHALL UTILIZE THE DISTRICT'S INSTRUMENT TAG NUMBERING CRITERIA FOR ALL INSTRUMENTATION AND ELECTRICAL COMPONENTS INCLUDING: (SEE SCHEDULE A, SECTION 26 05 53)
- A. WIRING (WIRE LABELS, TERMINALS, WIRE LISTS, ETC)
- B. FLOW INSTRUMENTATION
- C. FIELD DISPLAYS
- D. SOLENOID VALVES
- E. LEVEL SWITCHES
- F. CONTINUOUS LEVEL INSTRUMENTATION
- G. SECURITY TAGGING
- H. DATA TAGGING

DISTRICT STANDARD LOOP NUMBERING CONVENTION			
LOOP NUMBER	MAJOR PROCESS SYSTEM	LOOP NUMBER	PROCESS TYPE, LOCATION, UNIT NUMBER
000	MASTER STATION	010	SCADA COMPUTERS, NETWORK
		020	ENVIRONMENT
		030	SPARE
100	RESERVOIRS, TANKS, BASINS	100	SINGLE UNIT
		120	WELL OILER
		130	TRANSDUCER PROBE DRAWDOWN
		140	CAPACITIVE PROBE DRAWDOWN
		150	SURGE TANKS/SUPPRESSORS
		160	INLET SUMP
		170	UNDERDRAIN
		180	OUTLET SUMP
		190	MIXER
200	PUMPS	200	STATION/SINGLE PUMP GROUP
		210	PUMP GROUP 1
		220	PUMP GROUP 2
		230	PUMP GROUP 3
		240	PUMP GROUP 4
		250	PUMP GROUP 5
		260	PUMP GROUP 6
		270	PUMP GROUP 7
		280	PUMP GROUP 8
		290	WELL PUMP
300	FACILITY	300	COMMON
		310	CONTROL BUILDING
		320	DISINFECTION BUILDING
		330	VAULT
		340	FIRE SYSTEM
		350	SPARE
		360	POWER
		370	ENVIRONMENT
		380	AIR SYSTEMS
		390	WEATHER
400	DISINFECTION	400	COMMON
		410	RESIDUAL ANALYZERS
		420	SAMPLE COLLECTION/RETURN
		430	WASHDOWN
		440	SPARE
		450	SODIUM HYPOCHLORITE
		460	CL2 GAS
		470	SPARE
		480	SPARE
		490	SPARE
500	COMMUNICATION	500	GENERAL
		510	RADIO
		520	LAND LINE (TELEPHONE)
		530	SPARE
		540	SPARE
		550	SPARE
		560	SPARE
		570	REPEATER BATTERY
		580	SPARE
		590	SPARE
600	FIELD COMPUTER	600	COMMON
		610	RTU
		620	PLC
		630	DPC 3301 (HOCKEY PUCK)
		640	DPC 3301 (HOCKEY PUCK)
		650	DPC 3301 (HOCKEY PUCK)
		660	DPC 3301 (HOCKEY PUCK)
		670	BATTERY
		680	SPARE
		690	SPARE
700	DISTRIBUTION	700	PRESSURE STATION
		710	PRV STATION
		720	RATE OF FLOW STATION
		730	RECHARGE VALVE
		740	CHECK VALVE
		750	ELECTRIC VALVE (MOV)
		760	ISOLATION VALVE
		770	RELIEF VALVE
		780	SPARE
		790	SPARE

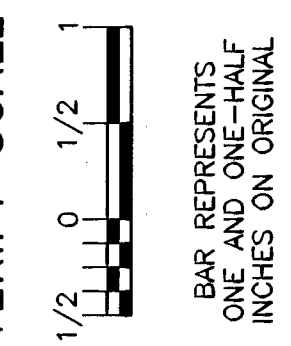
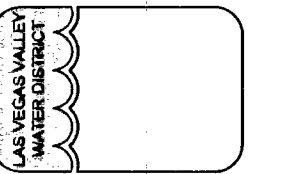


LAS VEGAS VALLEY WATER DISTRICT

1001 S. VALLEY VIEW BOULEVARD

LAS VEGAS, NEVADA 89165

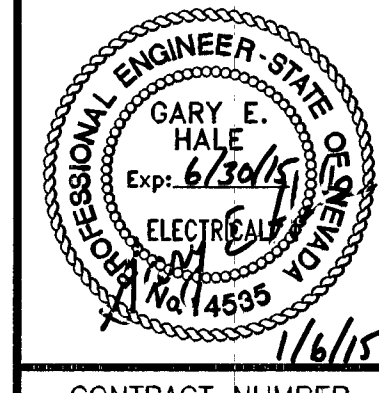
(702) 890-0011



NECESSARY SYSTEM IMPROVEMENTS, PRV NO. 225 INSTALLATION

INSTRUMENTATION ABBREVIATIONS, SYMBOLS, LEGEND AND GENERAL NOTES

DRAWN BY: CHRISTOPHER G. BLANK	04/17/2013
CHECKED BY: GARY E. HALE	04/18/2013
RECOMMENDED BY: GARY E. HALE	DATE
ACCEPTED BY: PETER J. JAUGH	DATE



CONTRACT NUMBER

C1405

DRAWING NUMBER 11

SHEET 16 OF 18