LEGEND

MANUAL VALVE (FOR TYPE, SEE MECHANICAL DWGS)

MOTOR OPERATED VALVE (OPEN/CLOSE TYPE)

MOTOR OPERATED VALVE (MODULATING TYPE)

2-WAY SOLENOID VALVE

PUMP

PROPORTIONING OR METERING PUMP

₽

GATE

M MOTOR

GRINDER

ISOLATING DIAPHRAGM SEAL

BAR SCREEN

 \simeq

HYDRAULIC GATE

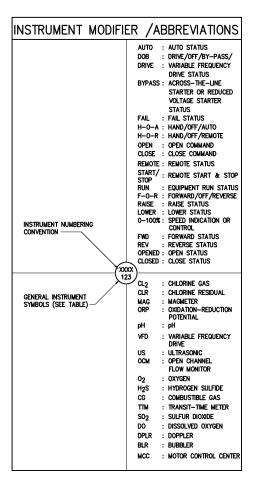
OPEN CHANNEL WEIR

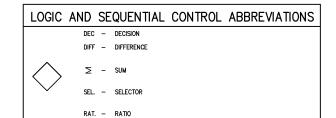
HYDRAULIC GA

CHECK VALVE

GENERAL INSTRUMENT SYMBOLS			
FIELD MOUNTED	COMMON HOUSING	FRONT-PANEL MOUNTED DEVICE (LOCAL CONTROL PANEL)	
REAR-PANEL MOUNTED DEVICE (LOCAL CONTROL PANEL)	PROGRAMMABLE LOGIC CONTROLLER SYSTEM FUNCTION BLOCK	DEVICE MOUNTED ON MCC CUBICLE FRONT	
(X) OPERATIONAL	\Diamond	CONTROL STRATEGY	
OPERATIONAL INTERLOCK	LOGIC BLOCK	CONTROL STRATEGY DESCRIPTION	

	FIRST LETTER		SUCCEEDING LETTERS		
LETTER	MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYSIS		ALARM OR PLC/DCS DISCRETE INPUT		
В	BURNER, COMBUSTION		USER'S CHOICE	USER'S CHOICE	BYPASS
С	CONDUCTIVITY (ELECTRICAL)			CONTROLLER	CLOSE
D	DENSITY (MASS) OR SPECIFIC GRAVITY	DIFFERENTIAL			DRIVE (VFD)
E	VOLTAGE (EMF)		PRIMARY ELEMENT		
F	FLOW	RATIO (FRACTION)			
G	USER'S CHOICE		GLASS		
Н	HAND SWITCH (SELECTOR SWITCH)				HIGH
ı	CURRENT (ELECTRICAL)		INDICATE OR PLC/DCS ANALOG INPUT		
J	POWER	SCAN			
K	TIME OR TIME— SCHEDULE	TIME RATE OF CHANGE		CONTROL STATION	
L	LEVEL		LIGHT (PILOT)		LOW
М	MOISTURE OR HUMIDITY	MOMENTARY			MIDDLE OR Intermediate
N	USER'S CHOICE		NOTIFY OR PLC/DCS DISCRETE INPUT	USER'S CHOICE	USER'S CHOICE
0	USER'S CHOICE		ORIFICE (RESTRICTION)		OPEN
Р	PRESSURE OR VACUUM		POINT (TEST CONNECTION)		
Q	QUANTITY		INTEGRATE OR TOTALIZE		
R	RADIATION	REMOTE CONTROL	RECORD OR PRINT		
S	SPEED OR FREQUENCY	SAFETY		SWITCH	
T	TEMPERATURE			TRANSMIT	
U	MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION	MULTIFUNCTION
٧	VIBRATION			VALVE, DAMPER OR LOUVER	
W	WEIGHT OR FORCE		WELL		
X	PLC COMMAND		UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED
Y	EVENT, STATE OR PRESENCE			RELAY OR COMPUTE	
Z	POSITION, DIMENSION			DRIVE, ACTUATOR OR UNCLASSIFIED FINAL CONTROL ELEMENT	





OPERATIONAL INTERLOCK ABBREVIATIONS

⊗

- OR LOGIC

AND

- AND LOGIC

 \Diamond

- DIRECT INTERLOCK OR COMPLEX LOGIC

INSTRUMENT LINE SYMBOLS

---- ELECTRICAL SIGNAL (HARDWIRED)

INTERNAL SYSTEM LINK (SOFTWARE)

— L HYDRAULIC LINE

OR PROCESS PIPES OR CHANNELS
OR INSTRUMENT PROCESS CONNECTION

NOTE
(*) ASTERISK IDENTIFIES FIELD INSTRUMENTS FURNISHED BY EQUIPMENT SUPPLIERS.

SASTERISK IDENTIFIES LOCAL CONTROL PANELS FURNISHED BY EQUIPMENT SUPPLIERS

			DESIGNED	OMC	Γ
				240	
			DRAWN	DMC	
			CHECKED		
RECORD DRAWINGS	MAR 2008	RLT			
CONSTRUCTION	MAR 2004	RLT	PROJ. ENGR.	DAN	
REGULATORY APPROVAL	NOV 2003	RLT			
PRELIMINARY DESIGN	NOV 2002	RLT			

THIS DOCUMENT ORIGINALLY ISSUED FOR CONSTRUCTION AND SEALED BY ROBERT S. DIFIORE, SEAL NO. 22769

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RECORD DRAWING

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CITY OF ROANOKE VIRGINIA

REGIONAL WATER POLLUTION CONTROL PLANT WET WEATHER IMPROVEMENTS

INSTRUMENTATION AND CONTROL LEGEND AND GENERAL NOTES

THE SCALE BAR
SHOWN BELOW
MEASURES ONE
INCH LONG ON
THE ORIGINAL
DRAWING.

?	DATE JUI	Y 2003
	H & S JOB NUMBER	30788
	CONTRACT NUMBER	DRAWING NUMBER
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NO. ISSUED FOR DATE BY APPROVED