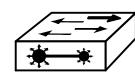
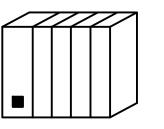


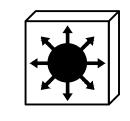
PROGRAMMABLE LOGIC COMPUTER (PLC) WITH COMMUNICATIONS MODULES



LAYER 2 NETWORK SWITCH X = SEE NETWORK HARDWARE



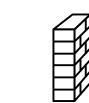
REMOTE I/O RACK WITH COPPER ETHERNET PORT



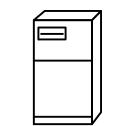
LAYER 3 NETWORK SWITCH  $\dot{X}$  = SEE NETWORK HARDWARE SCHEDULE



ROUTER



FIREWALL



 $\infty$ 

SERVER

VPN GATEWAY

ACCESS POINT



WORKSTATION

RS-232 SERIAL CABLE

CAT6 ETHERNET CABLE HARDWIRED I/O SIGNALS EXISTING FIBER OPTIC CABLE

EXISTING CAT6 ETHERNET CABLE

LAPTOP

## PLAN SYMBOLS

FIELD MOUNTED DEVICE/INSTRUMENT TAG CONTROL ENCLOSURE THERMOSTAT, HIGH TEMP.

FREEZESTAT

MOTOR OPERATED DAMPER

HOME RUN CONDUIT/CABLE C-X- CONDUIT TAG. SEE TAG IDENTIFICATION SCHEDULE

## GENERAL CIRCUIT/CONDUIT TAG IDENTIFICATION

TAG	CONDUIT SIZE	CONDUCTORS	NOTES
C-X (Y)	3/4" (X=2 THRU 18) 1" (X=19 THRU 30) 2" (X=31 THRU 100)	X-#14, 1-#14G	(Y) DENOTES ADDITIONAL SPARES
P-X (Y)	3/4" (X=2 THRU 14) 1" (X=15 THRU 24) 2" (X=25 THRU 80)	X-#12, 1-#12G	(Y) DENOTES ADDITIONAL SPARES
RTD-X (Y)	3/4" (X=1 THRU 4) 1" (X=2 THRU 7) 1 1/2" (X=8 THRU 14)	X-#14 SHIELDED PAIR	(Y) DENOTES ADDITIONAL SPARES
TSP-X (Y)	3/4" (X=1,2) 1" (X=3,4) 2" (X=5 THRU 16)	X-#18 TWISTED SHIELDED PAIR	(Y) DENOTES ADDITIONAL SPARES
TST-X (Y)	3/4" (X=1,2) 1" (X=3,4) 2" (X=5 THRU 16)	X-#18 TWISTED SHIELDED TRIAD	(Y) DENOTES ADDITIONAL SPARES
ETH-X (Y)	1" (X=1 THRU 4)	X-# OF CAT6 CABLES	(Y) DENOTES ADDITIONAL SPARES
FO-X	1" (X=2-12) 2" (X=12-48)	X-# OF MULTIMODE FIBER OPTIC STRANDS	COORDINATE CONDUIT AND INSTALLATION REQUIREMENTS WITH F.O. CABLE MANUFACTURER'S CABLE SIZE AND BEND RADIUS REQUIREMENTS.
M-X	CONDUIT SIZE AS REQUIRED	X-MANUFACTURER SUPPLIED CABLE	CABLE AS PROVIDED OR RECOMMENDED BY EQUIPMENT MANUFACTURER. COORDINATE CONDUIT AND INSTALLATION REQUIREMENTS WITH MANUFACTURER.
AC-X (Y)	1" (X=1,2)	X-ANTENNA CABLE	(Y) DENOTES ADDITIONAL SPARES
TOTAL CONDU	JCTORS REQUIRED = X + Y		

PADRAIC WILLIAM GRAY Lic. No. 50246 1/24/2020



WESTERN VIRGINIA WATER AUTHORITY 601 South Jefferson Street, Suite 300 Roanoke, Virginia 24011

SCALE: **NOT TO SCALE** DES: **CRM** DRAWN: CRM HORIZ: N/A VERT: N/A CHECK: PWG DATE: 1/24/20

CRYSTAL SPRING PUMP STATION RELOCATION

SYMBOLS AND LEGENDS

REV DATE DESCRIPTION SHEET 10.0268