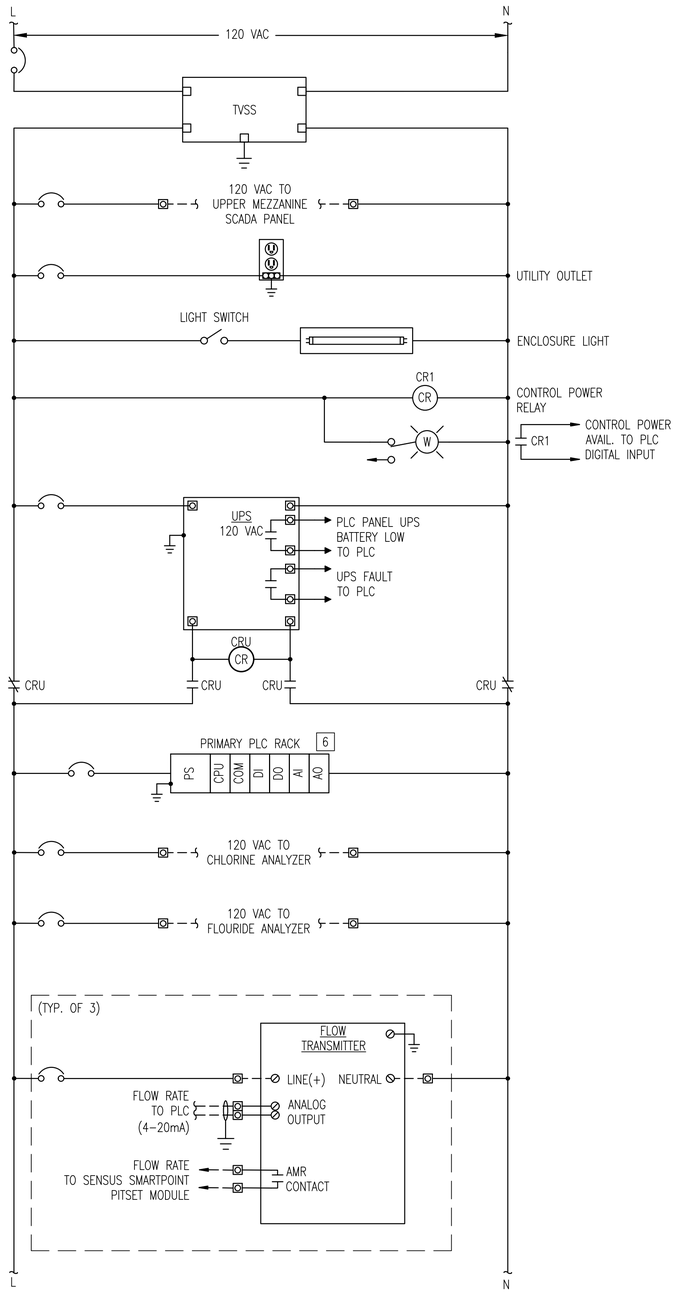
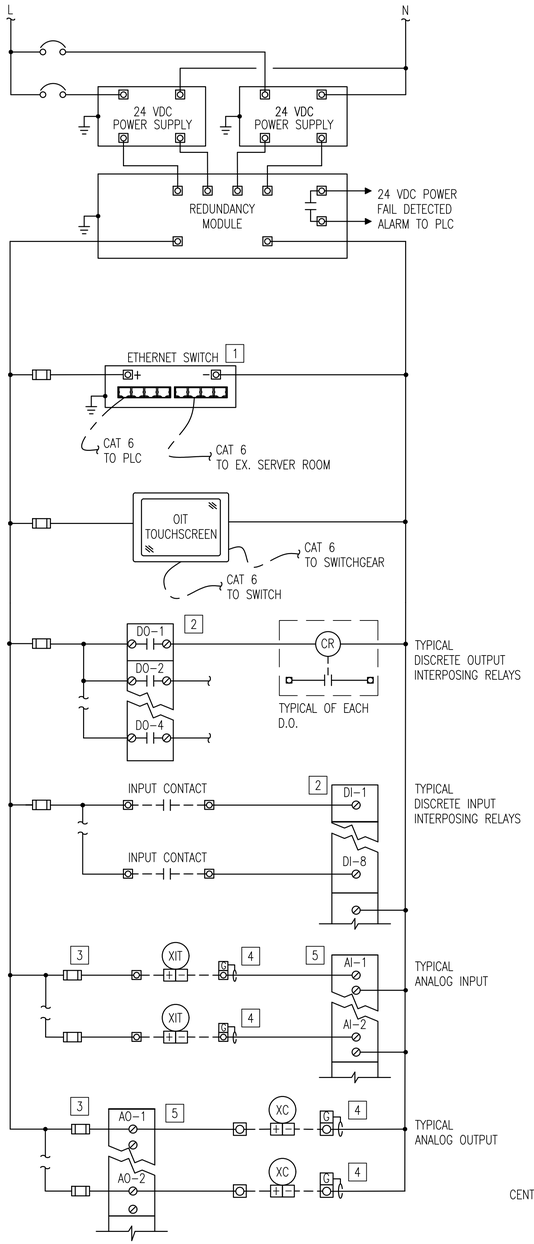
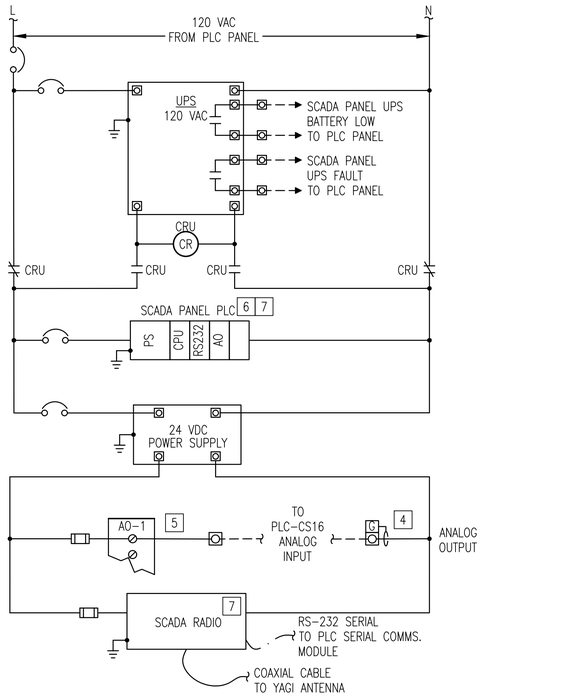


1 I0.09 PLC CONTROL PANEL ELEMENTARY
NTS





3 I0.09 SCADA PANEL ELEMENTARY 8
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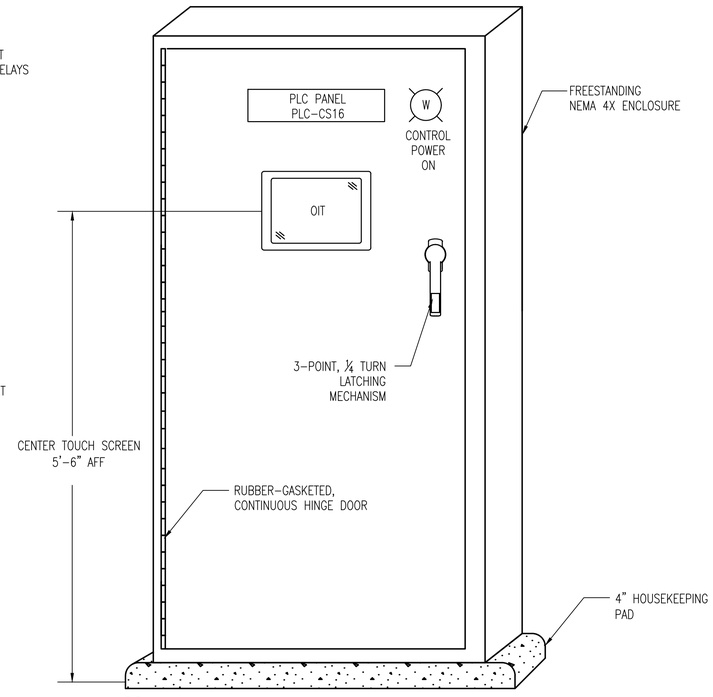

2 I0.09 PLC CONTROL PANEL ELEVATION
NTS

GENERAL SHEET NOTES

1. SEE I&C SYMBOLS, LEGENDS AND ABBREVIATIONS SHEETS FOR DETAILS.
2. NOT ALL I/O WIRING AND CONNECTIONS TO I/O CARDS ARE SHOWN. PROVIDE WIRING FOR I/O AS REQUIRED FOR ACTIVE AND SPARE I/O, AS APPLICABLE. PROVIDE INTERPOSING RELAYS WITH RC OR DIODE SNUBBER CIRCUITS FOR DISCRETE OUTPUTS, BOTH ACTIVE AND SPARES. PROVIDE FUSES ON ANALOG INPUTS AND OUTPUTS, BOTH ACTIVE AND SPARES. PROVIDE WIRING OF ALL I/O INCLUDING SPARES, TO FIELD TERMINAL STRIPS.
3. LABEL ALL EQUIPMENT WITHIN THE CONTROL PANEL INCLUDING TERMINAL BLOCKS, RELAYS AND CIRCUIT BREAKERS WITH ASSOCIATED CIRCUIT OR ID NUMBER.
4. REFER TO ELECTRICAL & MECHANICAL DRAWINGS FOR ADDITIONAL INSTALLATION, LOCATIONS, AND EQUIPMENT REQUIREMENTS.

SHEET KEYNOTES [X]

1. NOT ALL ETHERNET PORTS SHOWN. PROVIDE PORTS FOR ALL REQUIRED CONNECTIONS PLUS 20% SPARE. REFER TO NETWORK ARCHITECTURE FOR ADDITIONAL DETAILS AND REQUIREMENTS.
2. PROVIDE FUSED POWER TO DISCRETE I/O POINTS IN GROUPS OF 8 FOR BOTH ACTIVE AND SPARE.
3. PROVIDE INDIVIDUAL 0.1A FUSED ANALOG INPUT CIRCUITS FOR EACH ANALOG SIGNAL.
4. ANALOG SIGNAL WIRING SHALL BE TWISTED SHIELDED PAIRS WITH SHIELD GROUNDED AT ONE END. GROUND IN ASSOCIATED CONTROL PANEL WHERE POSSIBLE.
5. LOOP DIAGRAMS SHOWN SIMPLIFIED FOR CLARITY. USE TWISTED SHIELDED CONDUCTORS WITH DRAIN WIRES GROUNDED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS FOR ALL ANALOG POINTS.
6. PLC & I/O: THE PLC PANEL & SCADA PANEL SHOWN IN THE CONTRACT DRAWINGS IS BASED ON THE WAGO PLATFORM.
7. INSTALL NEW PLC AND SCADA RADIO IN EX. ABANDONED SCADA PANEL ON MEZZANINE LEVEL. PLC SHALL BE CONFIGURED TO PROVIDE A 4-20 mA ANALOG OUTPUT, PROPORTIONAL TO TANK LEVEL.
8. INSTALLED IN EXISTING SCADA PANEL ENCLOSURE.

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PADRAIC WILLIAM GRAY
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1/24/2020
PROFESSIONAL ENGINEER

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

CRYSTAL SPRING
PUMP STATION RELOCATION

PLC CONTROL DIAGRAMS

DRAWING I0.09

SHEET 75

REV	DATE	DESCRIPTION

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