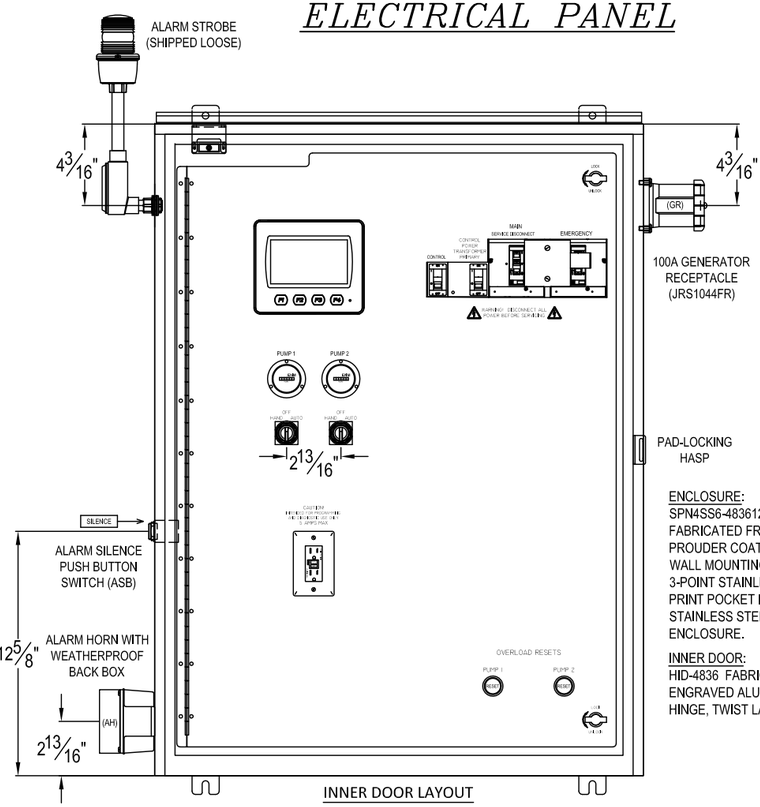
CITY OF ST. AUGUSTINE LIFT STATION DETAILS

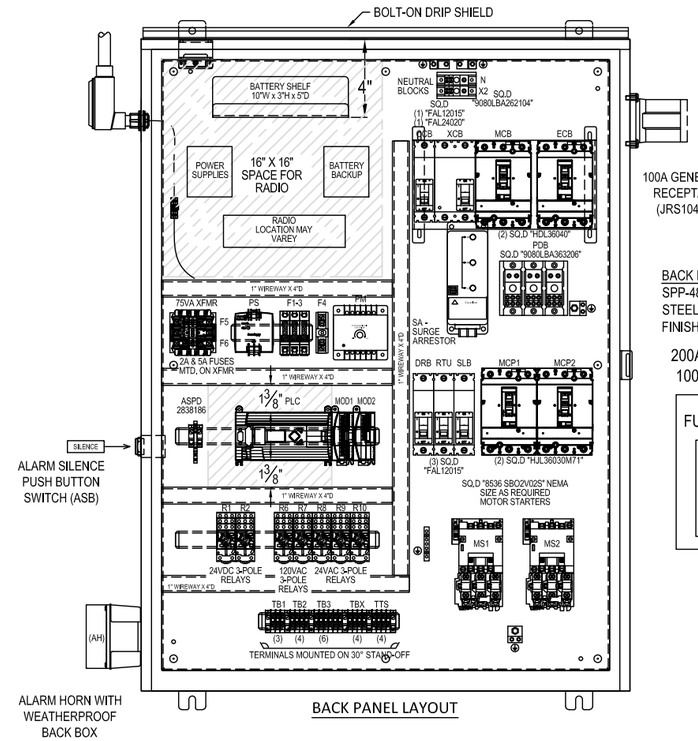
ELECTRICAL PANEL



INNER DOOR LAYOUT

ENCLOSURE:
SPN4SS6-483612 (48"H x 36"W x 12"D) NEMA 4X RATED, FABRICATED FROM 14 GA. TYPE 316 STAINLESS STEEL PROUDER COATED WHITE. PADLOCKING PROVISION, WALL MOUNTING BRACKETS, 90° OUTER DOOR STOP, 3-POINT STAINLESS STEEL PADLOCKABLE HANDLE, PRINT POCKET INSIDE OF OUTER DOOR, AND 36" STAINLESS STEEL DRIP SHIELD PROVIDED ON ENCLOSURE.

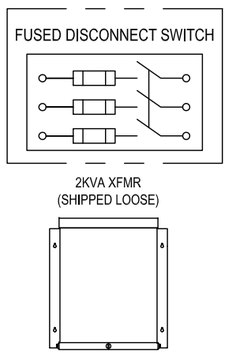
INNER DOOR:
HID-4836 FABRICATED FROM .125 BLACK ENGRAVED ALUMINUM WITH CONTINUOUS HINGE, TWIST LATCHES, AND 90° STOP.

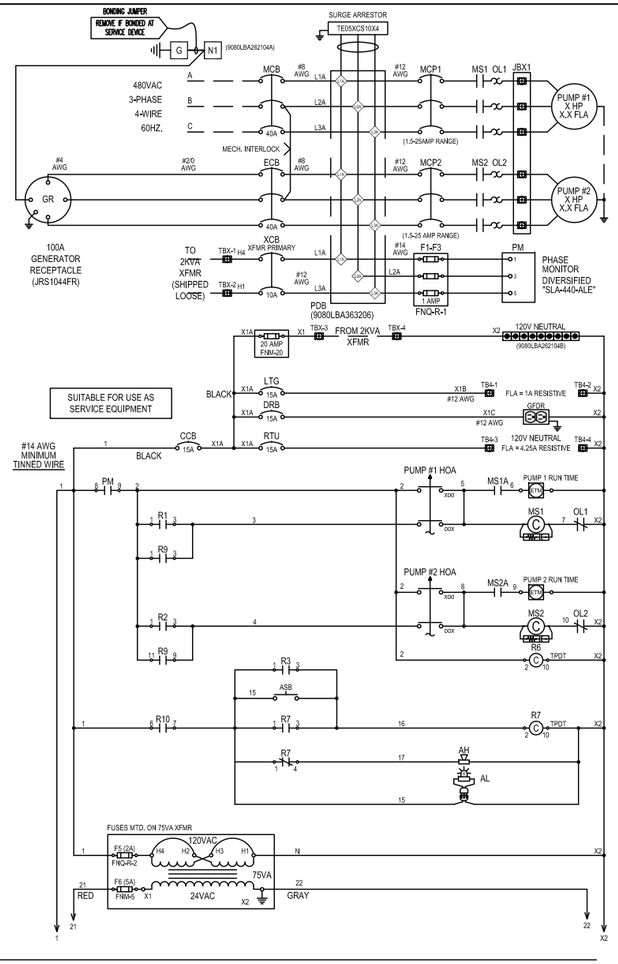


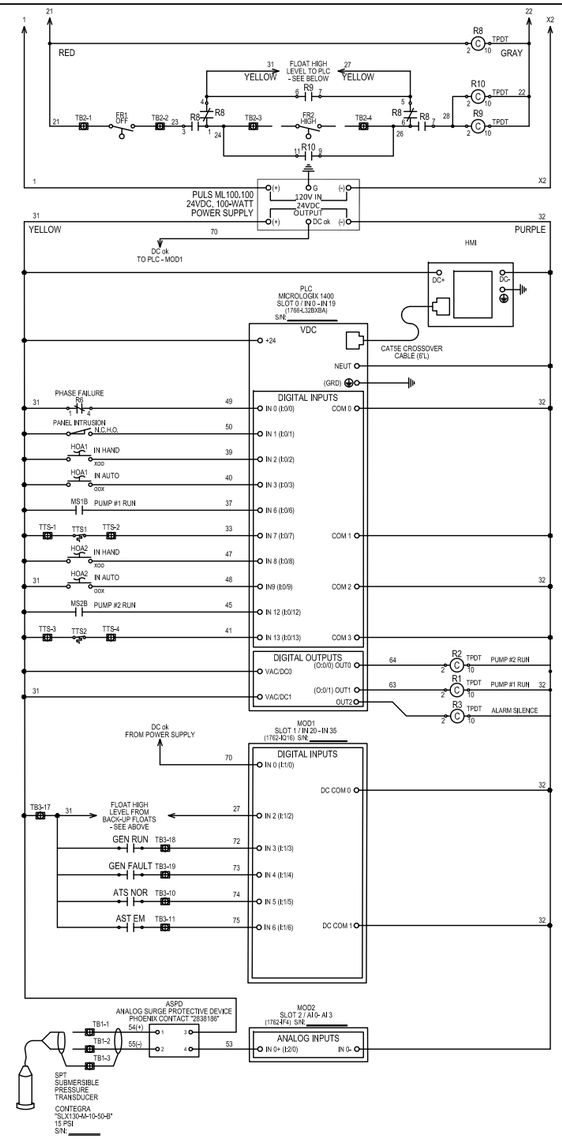
BACK PANEL LAYOUT

BACK PANEL:
SPP-4836 (45"H X 33"W), FABRICATED FROM 12GA. STEEL WITH WHITE POLYESTER POWDER COAT FINISH.

200A DISCONNECT SWITCH WITH
100A FUSES, SHIPPED AS PART







LEGEND:

ANN	= ALARM HORN
AL	= ALARM LIGHT
ASB	= ALARM SILENCE BUTTON
CCB	= CONTROL CIRCUIT BREAKER
CT	= CURRENT TRANSFORMER
DRB	= DUPLEX RECEPTACLE BREAKER
ECB	= EMERGENCY CIRCUIT BREAKER
ETM	= ELAPSED TIME METER
F	= FUSE
FB	= FUSE BLOCK
FL	= FLASHER
GFCR	= GROUND FAULT DUPLEX RECEPTACLE
GR	= GENERATOR RECEPTACLE
HOA	= HAND-OFF-AUTO SELECTOR SWITCH
MCB	= MOTOR CIRCUIT BREAKER
MCP	= MOTOR CIRCUIT BREAKER
MS	= MOTOR STARTER
OL	= OVERLOAD
PM	= PHASE MONITOR
R	= RELAY
RTU	= REMOTE TELEMETRY UNIT
SA	= SURGE ARRESTOR
SLB	= SITE LIGHT BREAKER
SR	= START RELAY
TB	= TERMINAL BLOCK
TPDT	= THREE POLE, DOUBLE THROW
TTS	= THERMAL TERMINAL STRIP
XFMR	= TRANSFORMER

NOTES:
1) CONTROL WIRING TO BE #14 AWG.
2) PANEL TO BE ULL RWH LABELED AND SERVICE ENTRANCE RATED.
3) FOR LOADS GREATER THAN 100 AMPS, USE CURRENT TRANSFORMER TERMINALS.
4) "TB3" TERMINALS ARE FOR TELEMETRY.
5) RELAY "R3" IS NOT BEING USED.
6) RELAYS ARE TPDT UNLESS SPECIFIED OTHERWISE.

Item	Description	Manufacturer	Partnumber	Qty	Spares
1	Enclosure, NEMA 4X, Type 316 SS, 48"H X36"W X 12"D	Schaefer	SPN4SS6-483612	1	
2	Back panel, Painted White Steel, 12 Gauge	Schaefer	SPP-4836	1	
3	Hinged Innerdoor, 125 Black Aluminum	ECS	HID-4836	1	
4	Surge Voltage Protection Modular Terimal Block,24Vdc	Phoenix Contact	2838186(TT-2PE-24DC)	1	
5	Lightning Arrestor, 240/120VAC,3 Phase, Delta, 4 Wire (B High Leg) plus Gr	APT	TE03XCS10	1	
6	Generator Receptacle 600V, 100A, 4P, 4W	RussellStoll	JRS1044FR	1	
7	Circuit Breaker, 600VAC, 3Pole	Square D	HDL36040	2	
8	Motor Circuit Protector, 600VAC, 3 Pole	Square D	HJL36030M71	2	
9	Circuit Breaker,120VAC, 1 Pole, 15A, 10KAIC	Square D	FAL12015	4	
10	Circuit Breaker,480VAC, 2 Pole, 20A, 18KAIC	Square D	FAL24020	1	
11	Universal Lockout Plate	ECS	690-002	1	
12	Phase Monitor Relay, 3 phase (Base Mount)	Diversified	SLA-440-ALE	1	1
13	Starter, FVNR, NEMA, 208/240/480V,	Square D	8536SBO2V02S	2	1
14	O/L Heaters, Class 20 Type B	Square D	B10.2	6	
15	Overload Reset Pushbutton, NEMA 1	Square D	9066RA1	2	
16	Transient Suppression Module	Square D	9999ST1	2	
17	Control Power Transformer, 75VA, 120/240-24VAC	Square D	9070TF75D23	1	
18	Fuse, Slo-Blo, Time Delay, 250VAC, 5A	Bussmann	FNM-5	1	1
19	Fuse, Slo-Blo, Time Delay, 250VAC, 20A	Bussmann	FNM-20	1	1
20	Fuse, Slo-Blo, Time Delay, 500VAC, 1A (Rejection Type)	Bussmann	FNQ-R-1	3	3
21	Fuse, Slo-Blo, Time Delay, 500VAC, 2A (Rejection Type)	Bussmann	FNQ-R-2	1	1
22	Fuse Block, 1 Pole	Bussmann	BM6031PQ	1	1
23	Fuse Block, 3 Pole, Class R, Ultrasafe	Wago	811-430	1	
24	DC Power Supply 100 Watt 120/208/240VAC/ 1 Phase / 24-28VDC,4.2 Amps	Puls	ML100.100	1	1
25	PLC, Micrologix 1400	Allen-Bradley	1766-L32BXBA	1	
26	Expansion Module, 16pt. Digital Input	Allen-Bradley	1762-IQ16	1	
27	4 Channel Analog Input - Current/Voltage Module	Allen-Bradley	1762-IF4	1	
28	Maple Industries 7" GRAPHIS HMI	Maple Industries	HMI5070P	1	
29	CAT5 Crossover Enet Patch Cord, 7ft, Blue	AllenTel	AT1507-REC	1	
30	Battery mounting bracket	ECS	BMB11	1	
31	Relay, 11 Pin, Plug-in, 3PDT, 24DC(11 Pin)	Square D	RUMC32BD	2	1
32	Relay, 11 Pin, Plug-in, 3PDT, 120VAC(11 Pin)	Square D	RUMC32F7	2	1
33	Relay, 11 Pin, Plug-in, 3PDT, 24VAC(11 Pin)	Square D	RUMC32B7	3	1
34	Pushbutton, 30 mm, NEMA 4X, flush type, Universal	Square D	9001SKR1U	1	
35	Sel. Sw., 30mm, NEMA 4X, 3 Pos. maintained, On-Off-On	Square D	9001SKS43B	2	
36	Elapse Time Meter, Round, 6 Digit, 120VAC	ENM	70000792 (T50B2)	2	
37	Snap Switch, Plunger Style Panel Mounting	Square D	9007AP221	1	
38	Alarm Horn, Silver, 4", 120VAC	Wheelock	31T-115-S	1	
39	Weatherproof Back Box, Silver	Wheelock	WBB-S	1	
40	Ground Fault Circuit Interrupter, Snap - Connect, 15A 120VAC	Leviton	MN759-W	1	
41	Power Distr. Block, 600VAC, 175A, 2 pole	Square D	9080LBA262104	1	
42	Power Distr. Block, 600VAC, 350A, 3 pole	Square D	9080LBA363206	1	
43	Terminal, 600VAC, 60A, 1 pole	Square D	9080GR6	21	
44	Equipment Ground Bar Kit, 5pt., (1) #14-#4 or (2) #14 or #12	Square D	PK5GTA	1	
45	Ground Lug, 2/0-14 AWG	Panduit	LAMA2/0-14-Q Y	2	
46	Ground Lug, Two Barrel 1/0-14 AWG	Thomas & Betts	ADR11-21	2	

BILL OF MATERIALS (SHIPPED LOOSE)

47	Fusible Disconnect Switch, 240VAC, 3 Pole, 200A	Square D	H324DS	1	
48	Control Power Transformer, 2000VA, 240/480-120/240VAC	Square D	2S1FSS	1	
49	Class RK1, 250VAC, 100 A, Dual Element, Time Delay Fuse (3 Spares)	Bussmann	LPN-RK-100SPI	6	3
50	Equipment Ground Bar Kit, 200 Amp	Square D	PKOGTA2	1	
51	Nuetral Assembly Insulated, 200 Amp	Square D	SN20A	1	
52	Red Strobe, 120 Volt AC, 1/2" NPT Female	Ingram	CT015F-R	1	1
53	Submersible Pressure Transducer, 4-20mA, 15 PSI, 50' cable, Breather	Contegra	SLX 130-M-10-50-B	1	
54	Spare Fuse, Slo-Blo, Time Delay, 250VAC, 5A	Bussmann	FNM-5	1	1
55	Spare Fuse, Slo-Blo, Time Delay, 250VAC, 20A	Bussmann	FNM-20	1	1
56	Spare Fuse, Slo-Blo, Time Delay, 500VAC, 1A (Rejection Type)	Bussmann	FNQ-R-1	2	1
57	Spare Fuse, Slo-Blo, Time Delay, 500VAC, 1A (Rejection Type)	Bussmann	FNQ-R-2	1	1

CITY OF ST. AUGUSTINE
LIFT STATION DETAILS
ELECTRICAL PANEL

REVISION DATE:	FEB 2017
NOT TO SCALE	LS-3

C.O.S.A.