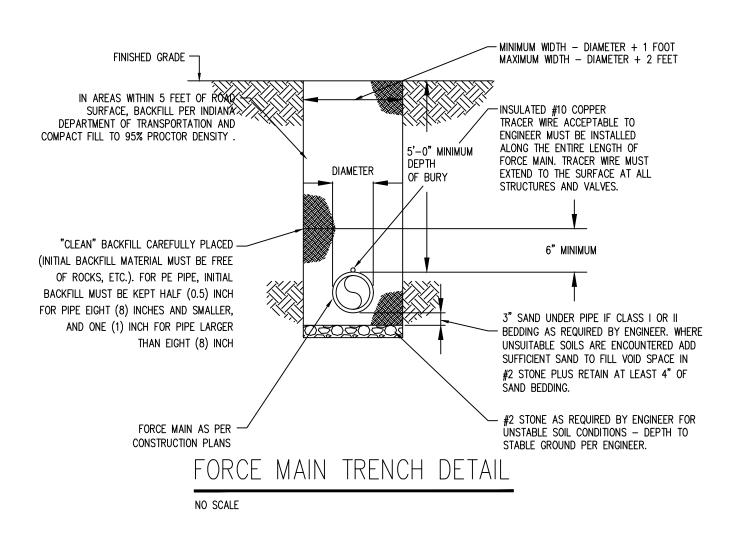


#10 TRACER WIRE TO BE SUPPORTED IN A TAPCO (TRAFFIC AND PARKING CONTROL CO., INC.) ROUND DOME SANITARY SEWER UTILITY MARKER INDICATING PRESSURE OR GRAVITY INSTALLATION, WHITE POLE 78"H, 54" ABOVE GROUND, GREEN TOP UTILITY MARKER TO BE LOCATED OUTSIDE THE MANHOLE (SEE DETAIL). UTILITY MARKER TO BE LOCATED WHERE A FORCE MAIN CROSSES A STREET, ALL LIFT STATION / FORCE MAIN MANHOLES, VALVES AND FITTINGS, AND AT DISTANCES NOT TO EXCEED 1,200 FEET ALONG STRAIGHT RUNS. 2. TEST CONNECTIONS ARE PREFERRED TO BE LOCATED ON OUTSIDE OF POST.



NO SCALE



WAGER MODEL 3000 -MANHOLE SCRUBBER -FINISHED GRADE NOTE: SEE TYPICAL MANHOLE DETAILS FOR ALL ASSOCIATED NOTATION MANHOLE -<u>SECTION A</u> WAGER MODEL 3000 MANHOLE SCRUBBER - MANHOLE <u>PLAN</u>

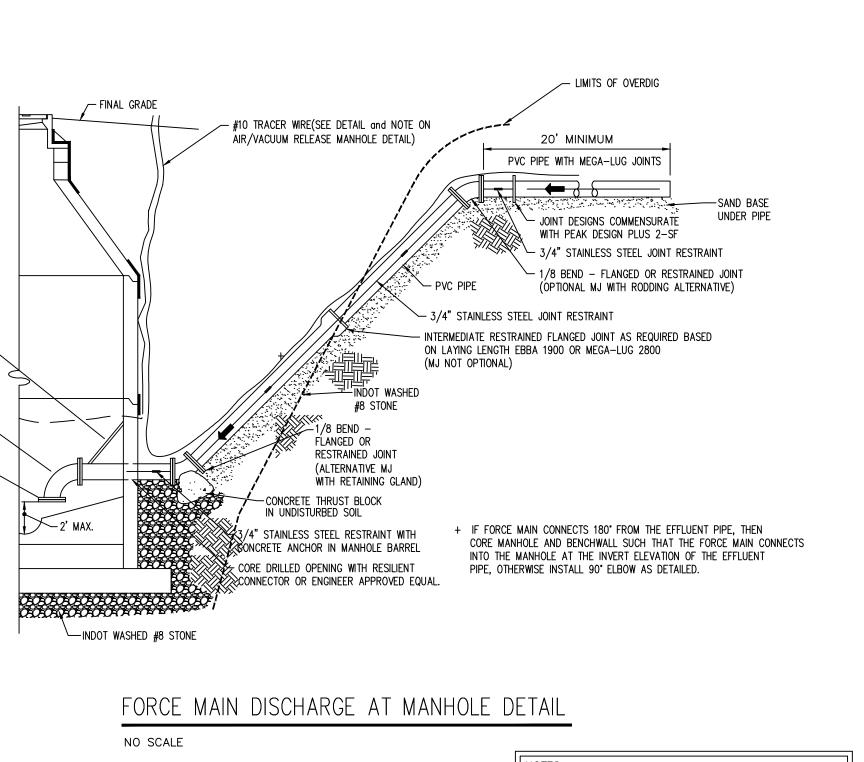
NOTES: 1. TO BE USED FOR FORCE MAINS WITH A DISCHARGE PIPE OF 4" OR SMALLER 2. WAGER MODEL 3000 MANHOLE SCRUBBER WITH 50LBS MIDAS ODOR CONTROL

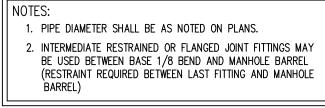
MEDIA IS REQUIRED TO BE INSTALLED.

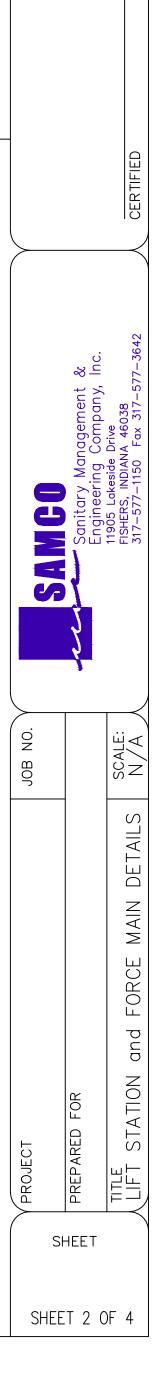
ODOR CONTROL AT FORCE MAIN DISCHARGE NO SCALE

STAINLESS STEEL SUPPORT ------WITH STAINLESS STEEL ANCHOR BOLTS LONG RADIUS 90° ELBOW ORIENTED IN DIRECTION OF FLOW FLANGE SHALL BE CONSTRUCTED -----A MINIMUM OF 2" ABOVE THE TOP OF THE EFFLUENT PIPE

HSE'S LIFT STATION PLAN, LIFT STATION AND FORCE MAIN DETAILS AND LIFT STATION AND FORCE MAIN SPECIFICATIONS ARE COMPLEMENTARY IN NATURE AND SHOULD NOT BE INTERPRETED INDIVIDUALLY WITHOUT REFERENCE TO THE OTHER SHEETS. REVISED 12/14/2022

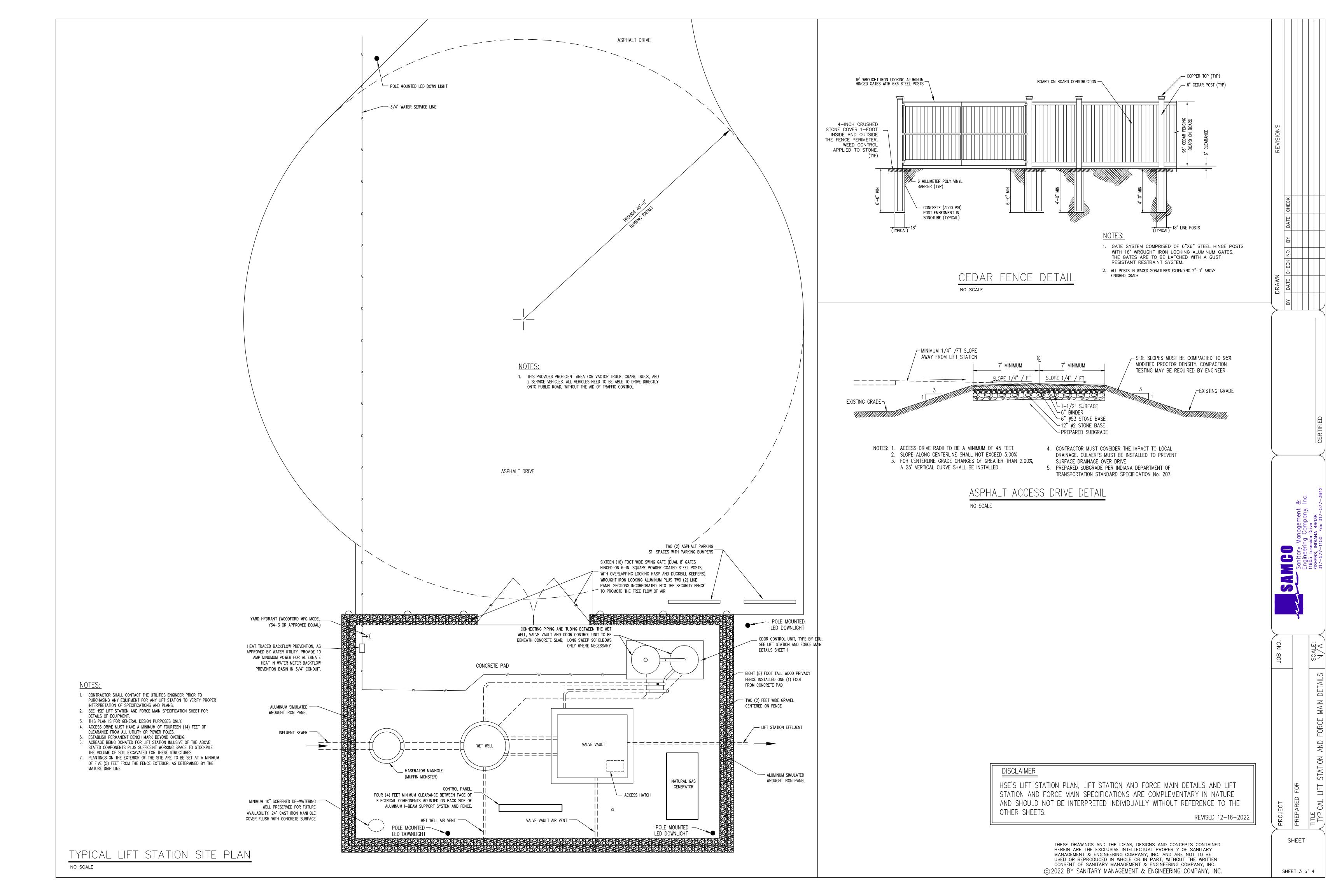


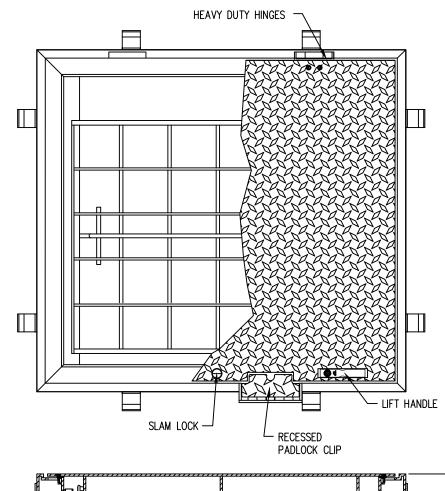


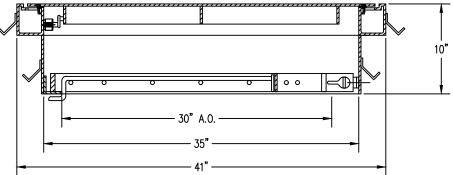


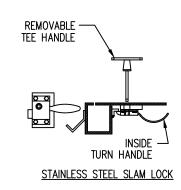
NOTE: CONTRACTOR SHALL CONTACT THE UTILITIES ENGINEER PRIOR TO PURCHASING ANY EQUIPMENT FOR THIS LIFT STATION OR FORCE MAIN TO VERIFY PROPER INTERPRETATION OF SPECIFICATIONS AND PLANS.

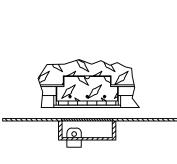
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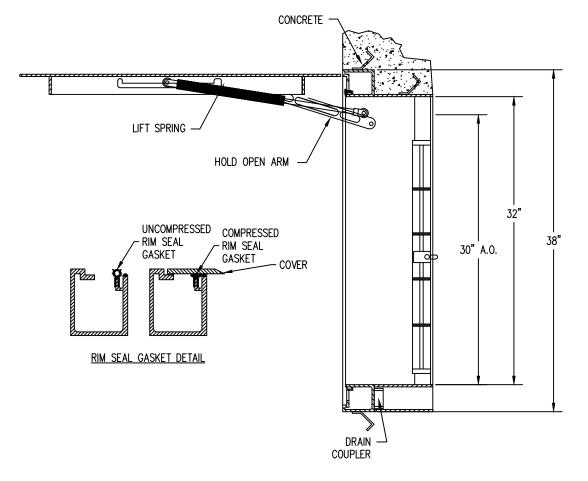








RECESSED PADLOCK CLIP



- 1. STYLE "CLS1" ACCESS HATCH, AS MANUFACTURED BY EJ, OR ENGINEER APPROVED EQUAL.
- PLATE SHALL BE 5086 ALUMINUM.
- 3. UNIT DESIGNED PEDESTRIAN RATED, FOR A MINIMUM LIVE LOAD OF 300 LBS./SQ. FT. 4. HINGES SHALL BE OF HEAVY DUTY DESIGN. MATERIAL SHALL BE GRADE 316 STAINLESS STEEL. EACH HINGE SHALL HAVE A GRADE 316 STAINLESS STEEL, 3/8" DIAMETER PIN. HINGES SHALL BE FASTENED TO THE CHANNEL FRAME AND DIAMOND PLATE USING GRADE 316 STAINLESS STEEL
- 5. EACH DOOR SHALL BE EQUIPPED WITH A STAINLESS STEEL HOLD OPEN ARM. DOOR SHALL LOCK OPEN IN THE 90 DEGREE POSITION. HOLD OPEN ARM SHALL BE FASTENED TO THE FRAME WITH A 1/2" GRADE 316 STAINLESS STEEL BOLT.
- 6. CHANNEL FRAME SHALL BE OF EXTRUDED ALUMINUM. FRAME SHALL HAVE A DOVE TAIL GROOVE TO ACCEPT A 1/8" SILICONE CUSHION GASKET. CHANNEL FRAME SHALL BE A MINIMUM OF 1/4" THICK, WITH A MINIMUM CROSS SECTION OF 7.5".
- 7. EXTERIOR OF FRAME WHICH COMES IN CONTACT WITH THE CONCRETE SHALL BE COATED WITH ONE COAT OF BLACK PRIMER.
- 8. HATCH COVER SHALL BE SUPPLIED WITH STAINLESS STEEL LIFT SPRING.
- 9. EACH HATCH IS SUPPLIED WITH A 1-1/2" THREADED DRAIN COUPLER ON UNDERSIDE OF CHANNEL FRAME FOR PIPE CONNECTION.
- 10. ALL HARDWARE SHALL BE STAINLESS STEEL.

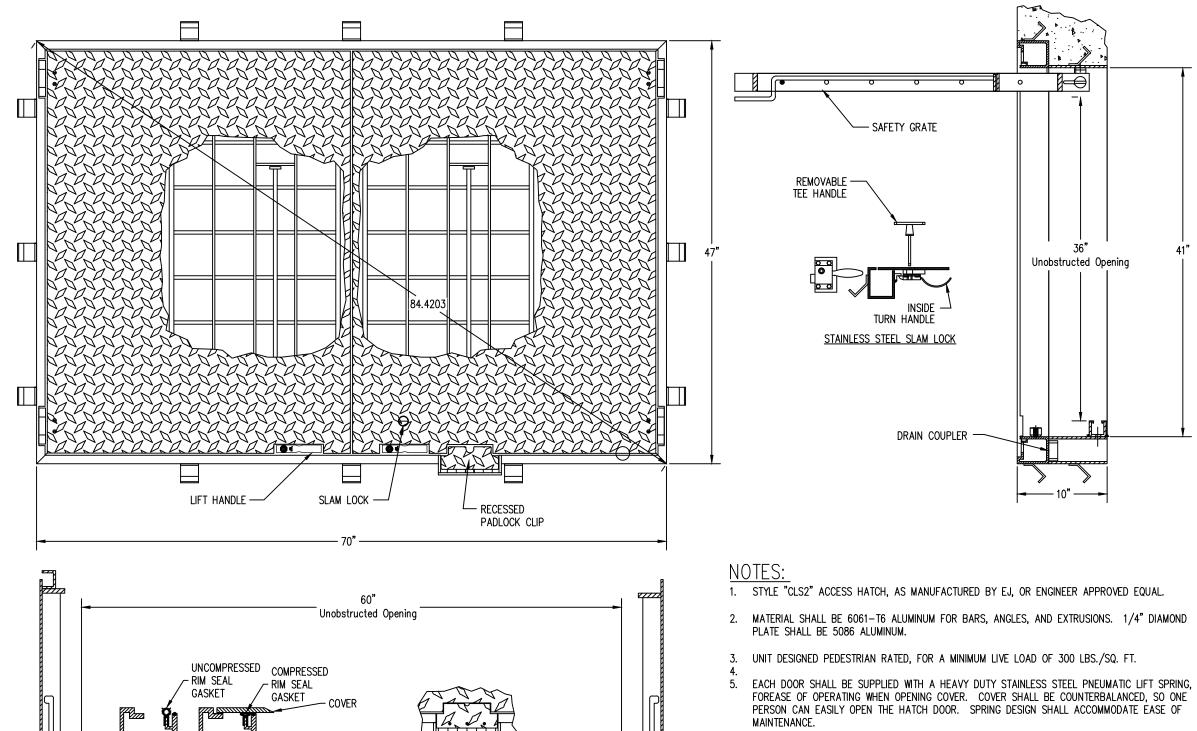
BOLTS AND NY-LOCK NUTS.

- 11. EACH HATCH SHALL BE SUPPLIED WITH A GRADE 316 STAINLESS STEEL SLAM LOCK, WITH KEY WAY PROJECTED BY A THREADED PLUG. PLUG SHALL BE FLUSH WITH THE TOP OF THE 1/4" DIAMOND PLATE. SLAM LOCK SHALL BE FASTENED WITH FOUR GRADE 316 STAINLESS STEEL BOLTS AND WASHERS.
- 12. EACH HATCH SHALL BE EQUIPPED WITH AN ALUMINUM LIFT HANDLE. THE LIFT HANDLE SHALL BE FLUSH WITH THE TOP OF THE 1/4" DIAMOND PLATE.
- 13. UNITS SHALL BE SUPPLIED WITH ORANGE POWDER COATED HINGED SAFETY GRATES TO PROVIDE
- 14. EACH UNIT SHALL BE SUPPLIED WITH RIMSEAL GASKET.
- 15. EACH HATCH SHALL BE SUPPLIED WITH A RECESSED PADLOCK CLIP (PADLOCK SUPPLIED BY OTHERS).

PEDESTRIAN RATED ALUMINUM SAFE HATCH® NO SCALE

2. MATERIAL SHALL BE 6061-T6 ALUMINUM FOR BARS, ANGLES, AND EXTRUSIONS. 1/4" DIAMOND

PROTECTION AGAINST FALL THROUGH AND TO CONTROL ACCESS TO THE CONFINED SPACE.



PEDESTRIAN RATED ALUMINUM SAFE HATCH® NO SCALE

RECESSED PADLOCK CLIP

STAINLESS STEEL

HOLD OPEN ARM

<u>RIM SEAL GASKET DETAIL</u>

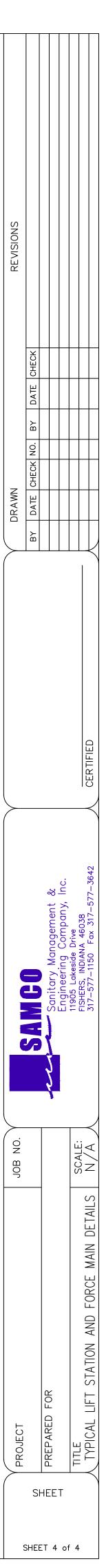
- LIFT SPRING

- 6. HINGES SHALL BE OF HEAVY DUTY DESIGN. MATERIAL SHALL BE GRADE 316 STAINLESS STEEL. EACH HINGE SHALL HAVE A GRADE 316 STAINLESS STEEL, 3/8" DIAMETER PIN. HINGES SHALL BE FASTENED TO THE CHANNEL FRAME AND DIAMOND PLATE USING GRADE 316 STAINLESS STEEL BOLTS AND NY-LOCK NUTS.
- 7. EACH DOOR SHALL BE EQUIPPED WITH A STAINLESS STEEL HOLD OPEN ARM. DOOR SHALL LOCK OPEN IN THE 90 DEGREE POSITION. HOLD OPEN ARM SHALL BE FASTENED TO THE FRAME WITH A 1/2" GRADE 316 STAINLESS STEEL BOLT.
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- 16. EACH UNIT SHALL BE SUPPLIED WITH RIMSEAL GASKET.
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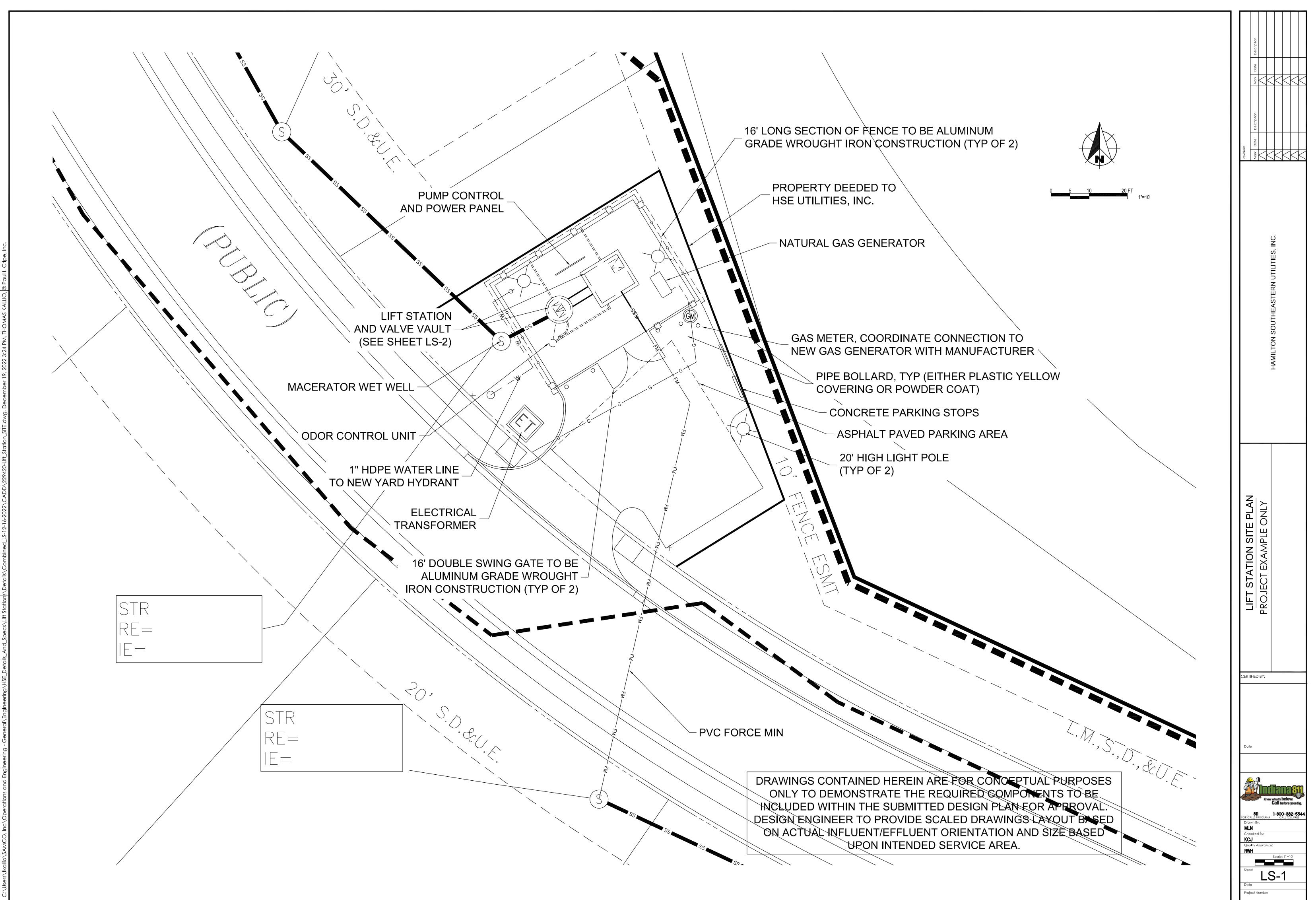
DISCLAIMER

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REVISED 12-16-2022



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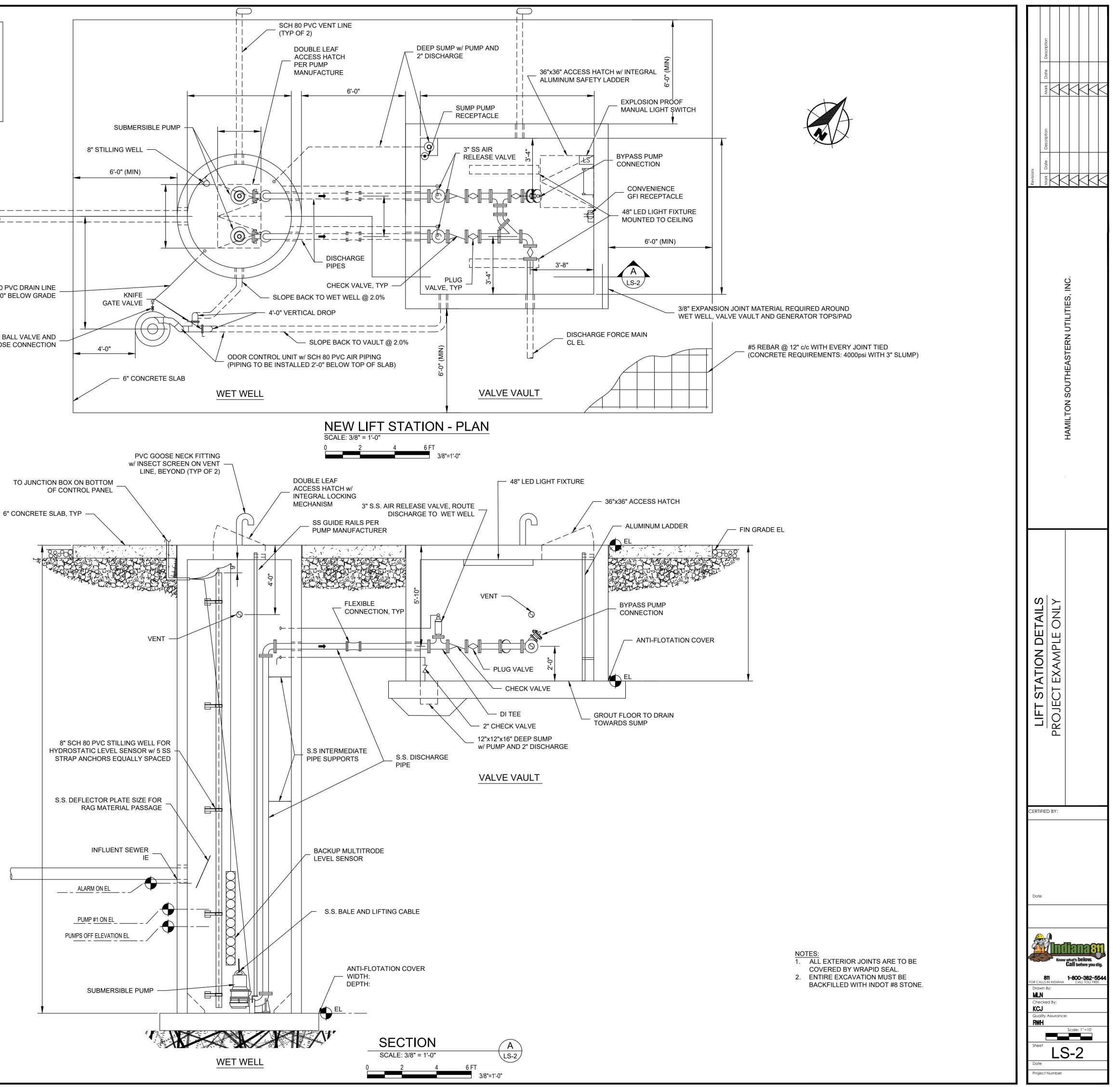


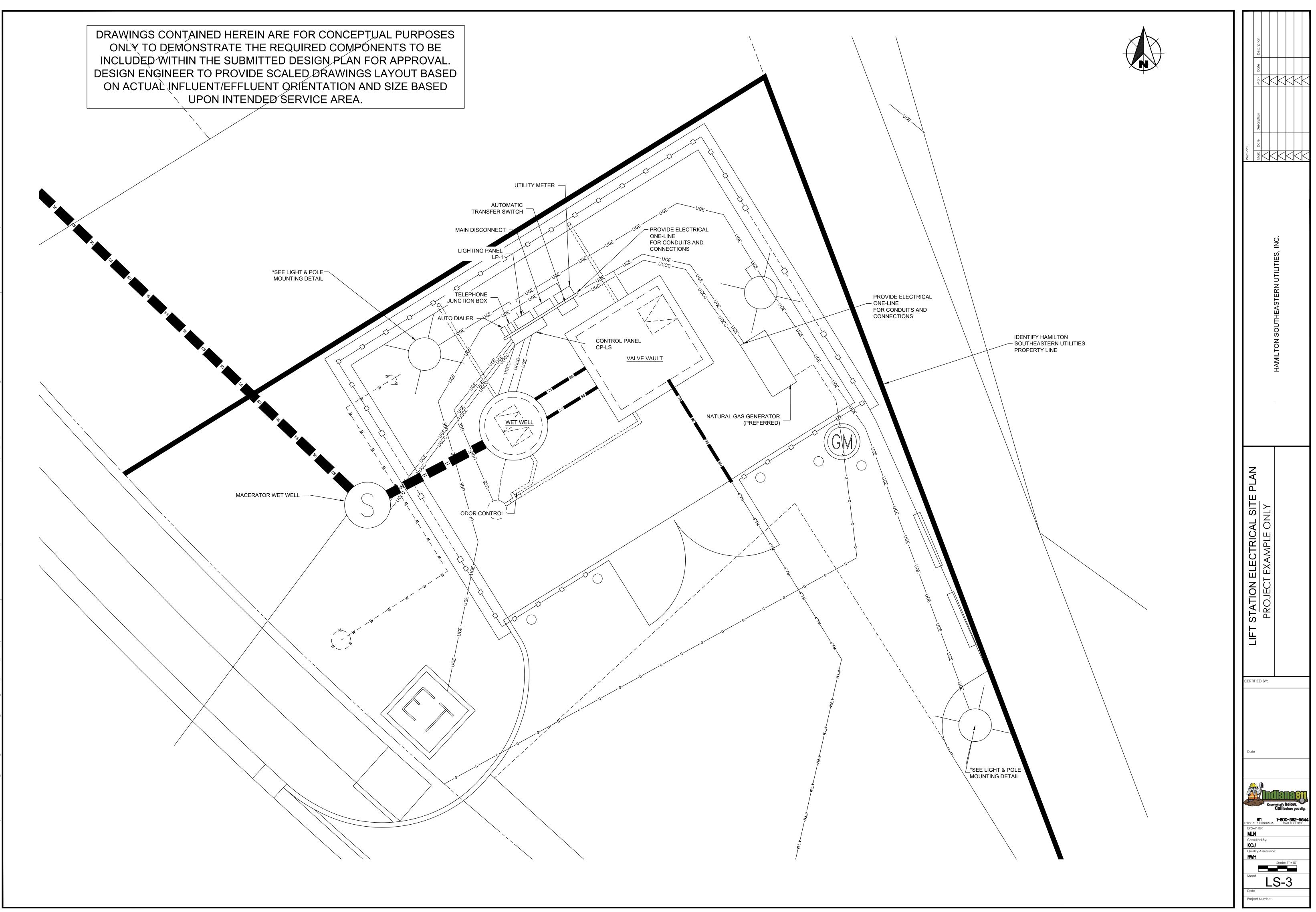
DRAWINGS CONTAINED HEREIN ARE FOR CONCEPTUAL PURPOSES ONLY TO DEMONSTRATE THE REQUIRED COMPONENTS TO BE INCLUDED WITHIN THE SUBMITTED DESIGN PLAN FOR APPROVAL. DESIGN ENGINEER TO PROVIDE SCALED DRAWINGS LAYOUT BASED ON ACTUAL INFLUENT/EFFLUENT ORIENTATION AND SIZE BASED UPON INTENDED SERVICE AREA.

A ∖LS-2∕

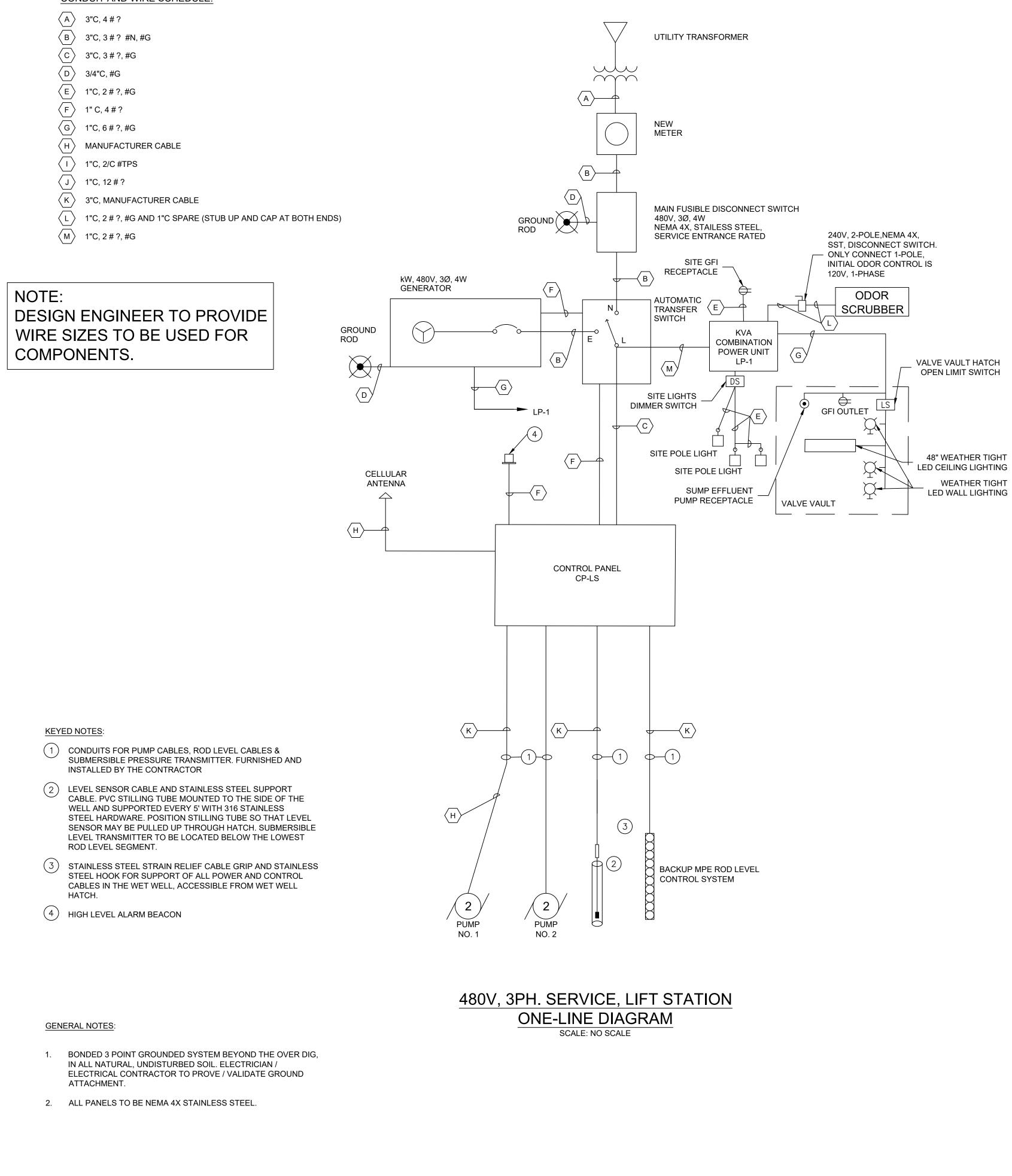
3/4" SCH 80 PVC DRAIN LINE 3'-0" BELOW GRADE

3/4" PVC BALL VALVE AND FLEXIBLE HOSE CONNECTION





CONDUIT AND WIRE SCHEDULE:



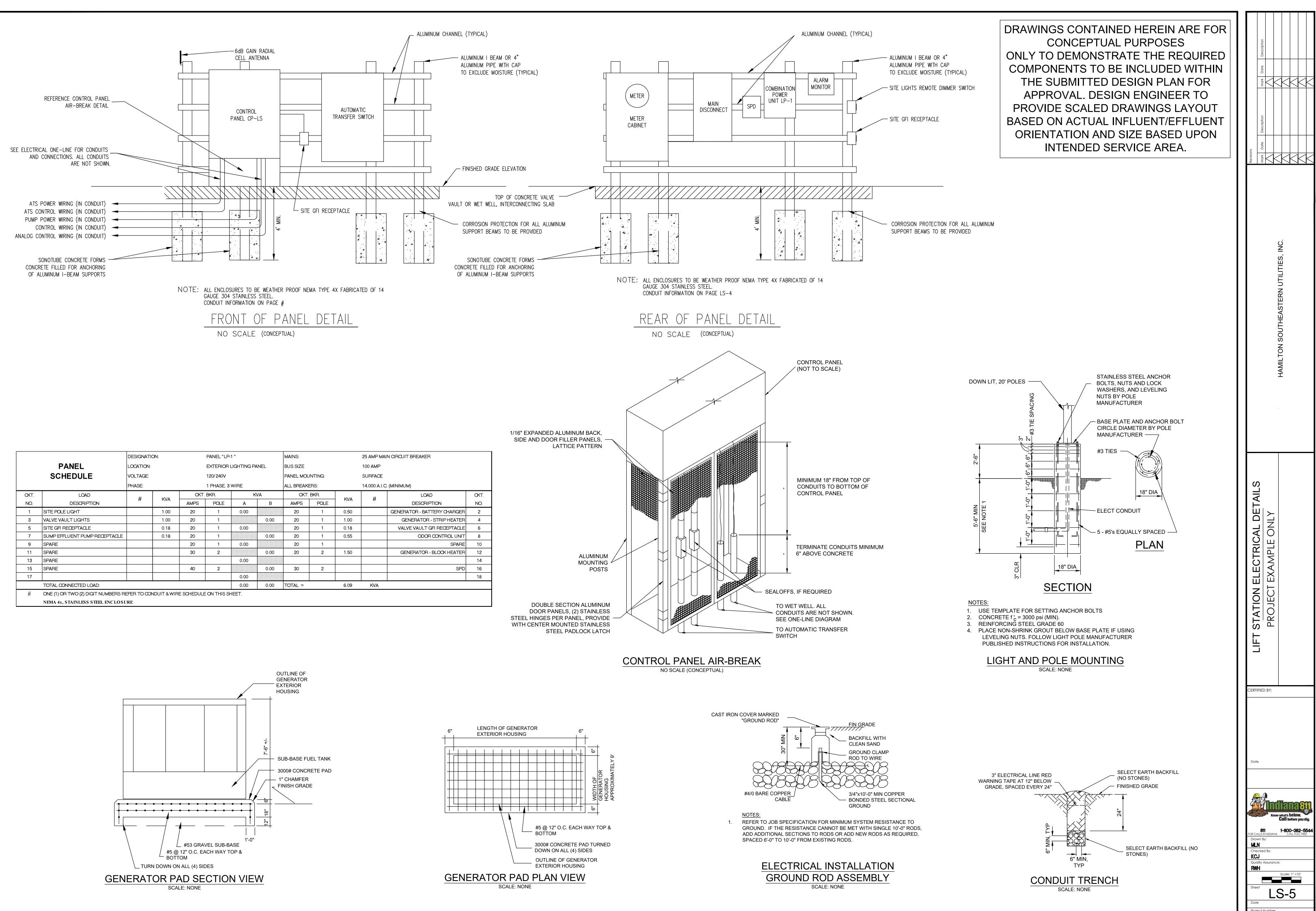
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Specs for a 2 pump control cabinet Control Cabinet (Nema 4X) Control Cabinet Back Plate Control Cabinet Inner door Kit (Swing Out Panels) **Control Cabinet Heater** Control Cabinet Document Holder X2 (1 on each door) Control Cabinet Cooling Fan & Filter Kit Cooling Fan Stainless all weather covers for fan kit Junction Boxes Cabinet (NEMA 4X) Junction Boxes Back Plate Junction Boxes Feed Through Wire Way ALL BREAKERS TO BE 600v Rated Siemans 100amp Breaker Style Disconnect 4X cabinet 100amp main breaker (or Equal) Motor Rated Breakers (or Equal) 15amp breaker (or Equal) Altech Control Breaker 20a 2p (or Equal) Altech Control Breaker 20a 1p (or Equal) Altech Control Breaker 16a 1p (or equal) Altech Control Breaker 4a 1p (or Equal) 480v to 120v open type IP20 Din Rail Receptacles PLC Sola Tracking Filter Sola Power Supplies 24vdc (2 Will be needed) Sola Diode Sola UPS Sola Battery Sierra Wireless Cell Modem Modem Din Rail Mount Sierra Wireless Power Supply Cell Modem Antenna Start Relay Seal Relays PLC Live Relays Relay Base Pilot Light (red) Seal Failure Pilot Light (green) Pump On 30mm selector switch (HOA 3 position) Push Button (For Reset) Terminal Blocks End Anchors Din Rail 6' Wireways w/covers 2x2 (white) Wireways w/covers 1x2 (white) MPE Level Probe Level Probe Control Relay Transducer Transducer Surge Arrester Transducer Bellow Horse Power compatible VFD LCP mounting kit LCP Panels MCB 101 card Site Lighting and Electrical Poles for Area Lighting Pole Base Cover Kit Pole Light Heads Pole Anchor Kit Pole Light Commission Tool Valve Vault Lighting Mini-Substation LP-1, 10KVA, 480V to 240/120V Surge Protection Device Site Convenience Receptacle Valve Vault Convenience Receptacle Valve Vault Sump Effluent Pump Receptacle Valve Vault Lights Hatch Open Limit Switch

Generator / ATS / Docking Station MTU Generator Natural Gas Generator to have sound barrier Enclosure ASCO Automatic Transfer Switch (NEMA 4X)

Parts	s List
Manufacture	Part Number
Hoffman	Hoff A62H4818SSLP3PT
Hoffman	Hoff A60P48
Hoffman	Match Cabinet Part number (Hoff A62H4818SSLP3PT)
Hoffman	DAH2001A 115Volt 200Watt
Hoffman	ADP2
Rittal	SK3243.110
Rittal	SK3243.080
Hoffman	A16H1208SSLP
Hoffman	A16P12
Hoffman	F66W24SS
Siemans	100A
Eaton	FD3100L
Eaton	
Eaton	FD3015L 2D20UL
Altech Altech	1D20UL
Altech	1D16UL
Altech	1D4UL
Emerson	CE2000MH 2KVA
Allen Bradley	1492-REC15
Allen Bradley	1769-L24ER-QBFC1B
Sola	STFE100-10N
Sola	SDN2.5-24-100P
Sola	SDN2.5-20 RED
Sola	SDU 10-24
Sola	SDU 24 BAT
Sierra Wireless	AirLink RV50 (DC)NA
Sierra Wireless	Din Rail RV50 Mounting Bracket
Sierra Wireless	AC-12VDC Adapter for GX Series, LS5300 RV50, MP70,CG
Panorama Antenna	Low Profile 2x2 MiMO LTE/Cell 9' Cable SMA(N) Threaded Bolt
Allen Bradley 8 Pin	700-HA32Z24
Macromatic 8 Pin	SFP120A100
Allen Bradley 8 Pin	700-HA32Z24
Allen Bradley 8 Pin	700-HN100
Allen Bradley	800T-Q24R
Allen Bradley	800T-Q24G
Allen Bradley	800T-J2A
Allen Bradley	800T (Type 4,13)
Allen Bradely	1492-J4
Allen Bradley	1492-EAJ35
Allen Bradely	1' x 1-3/8" x 3' Standard Size din rail
Panduit	Standard White
Panduit	Standard White
MPelectronics	115-10-100
MPelectronics	LPC420R
MPelectronics	LM-10-100
MPelectronics	LM Surge
MPelectronics	TVB1
Dan Foss	VLT Aqua Drive 2HP
Dan Foss	130B1117 (one for each pump)
Dan Foss	130B1107 (one for each pump)
Dan Foss	Option B 130B1212 (one per VFD)
RAB	RAB PS4-11-20D2
RAB	RAB BCK-S4
RAB	RAB ALED4T105/D10/WS2
RAB	RAB BOLT4/11
RAB	RAB WSREM
RAB	W34-35L
Square D	
Current Tech.	GG40-120/240-2G-5
	20A, GFCI, duplex with corrosion resistant "in-use" type cover
	20A, GFCI, duplex with corrosion resistant "in-use" type cover
	20A, GFCI, duplex with corrosion resistant "in-use" type cover
	20A Roller Arm Switch IP68
WW Williams	30KW
WW Williams	100A

Revisions	Mark Date Description Mark Date Description							
	HAMILTON SOUTHEASTERN UTILITIES, INC.							
I IFT STATION FI FCTRICAL ONF-LINF								
CERTII	FIED BY:							
Date								





			DESIGNATION:		PANEL "LP-1 "			MAINS:		25 AMP MAIN CIRCUIT BRE			
PANEL		LOCATION:			EXTERIOR LIGHTING PANEL			BUS SIZE		100 AMP			
	SCHEDULE		VOLTAGE: PHASE:			120/240V 1 PHASE, 3 WIRE			PANEL MOUNTING: ALL BREAKERS:		SURFACE 14,000 A.I.C. (MINIMUM)		
OKT.	LOAD	#		OKT. BKR.		KVA		OKT. BKR.			Щ		
NO.	DESCRIPTION		KVA	AMPS	POLE	А	В	AMPS	POLE	- KVA	#	DE	
1	SITE POLE LIGHT		1.00	20	1	0.00		20	1	0.50		GENERATOR	
3	VALVE VAULT LIGHTS		1.00	20	1		0.00	20	1	1.00		GENER	
5	SITE GFI RECEPTACLE		0.18	20	1	0.00		20	1	0.18		VALVE VA	
7	SUMP EFFLUENT PUMP RECEPTACLE		0.18	20	1		0.00	20	1	0.55			
9	SPARE			20	1	0.00		20	1				
11	SPARE			30	2		0.00	20	2	1.50		GENERA	
13	SPARE					0.00							
15	SPARE			40	2		0.00	30	2				
17						0.00							
TOTAL CONNECTED LOAD:					0.00	0.00	TOTAL =	•	6.09	KVA			
#	ONE (1) OR TWO (2) DIGIT NUMBERS R NEMA 4x, STAINLESS STEEL ENCLOSU		NDUIT & WIR	E SCHEDULE	E ON THIS SH	IEET.							

