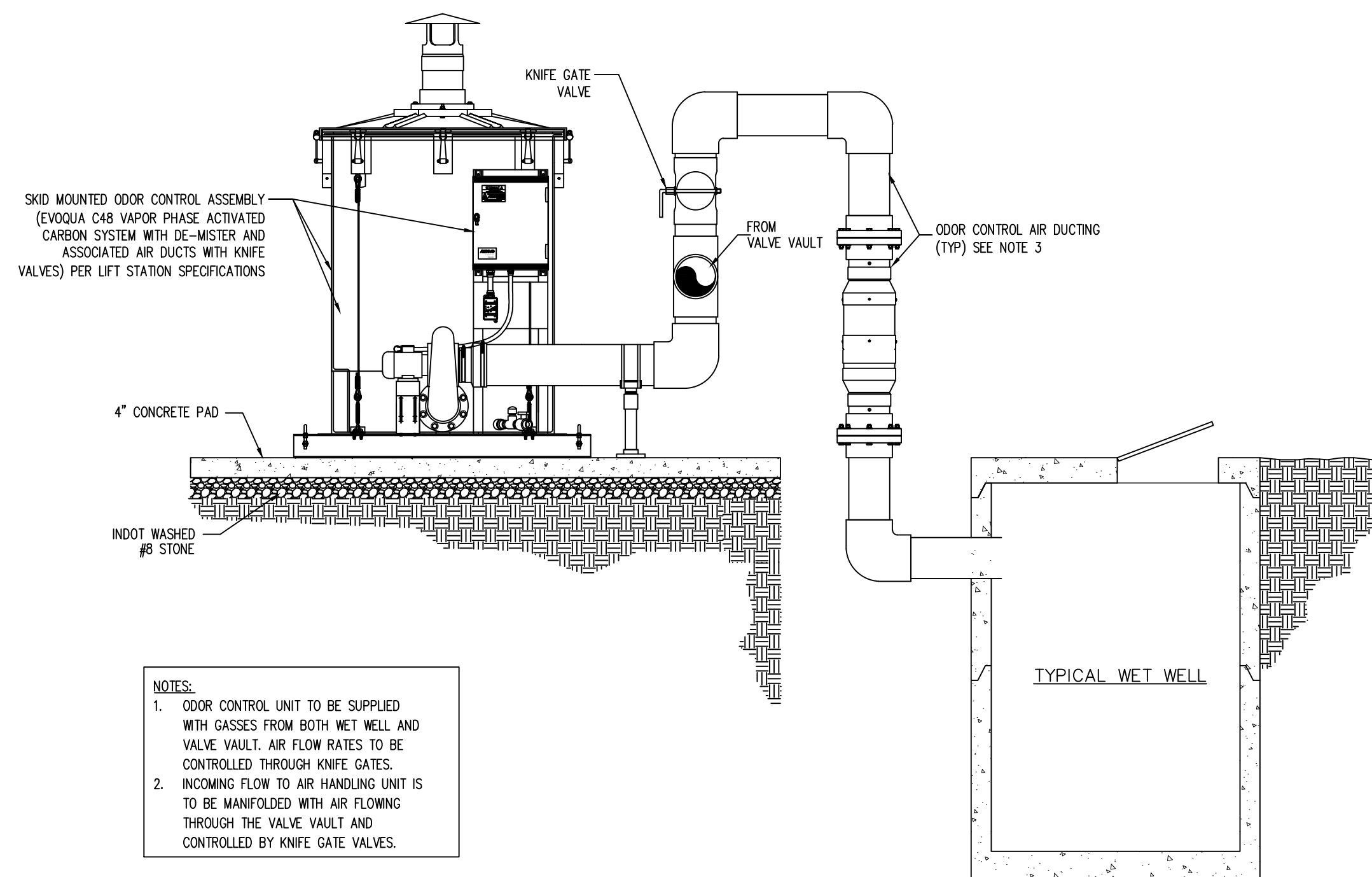
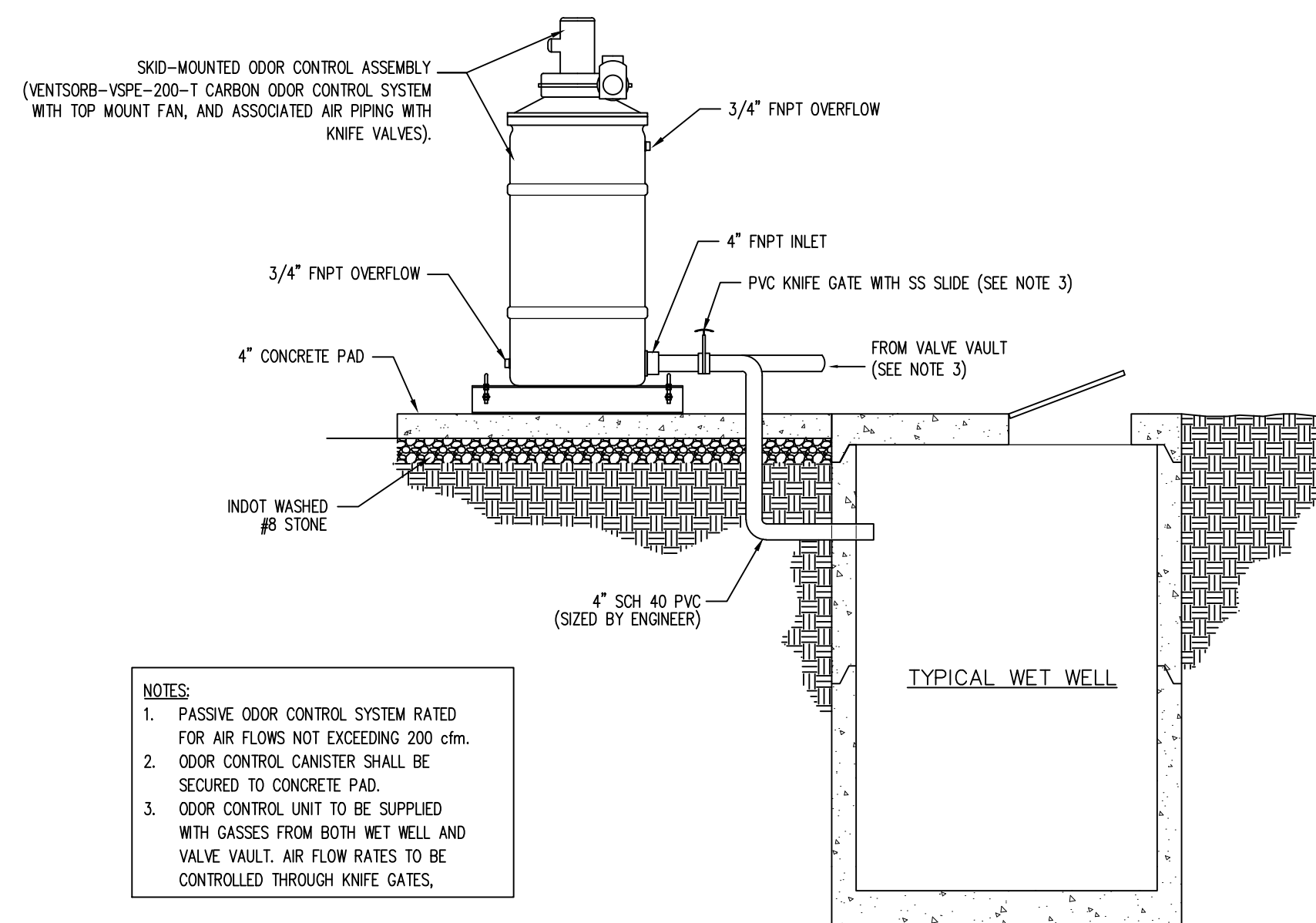




- NOTES:
1. ODOR CONTROL UNIT TO BE SUPPLIED WITH GASSES FROM BOTH WET WELL AND VALVE VAULT. AIR FLOW RATES TO BE CONTROLLED THROUGH KNIFE GATES.
 2. INCOMING FLOW TO AIR HANDLING UNIT IS TO BE MANIFOLDED WITH AIR FLOWING THROUGH THE VALVE VAULT AND CONTROLLED BY KNIFE GATE VALVES.

LIFT STATION ODOR CONTROL DETAIL (≥ 50 EDU)

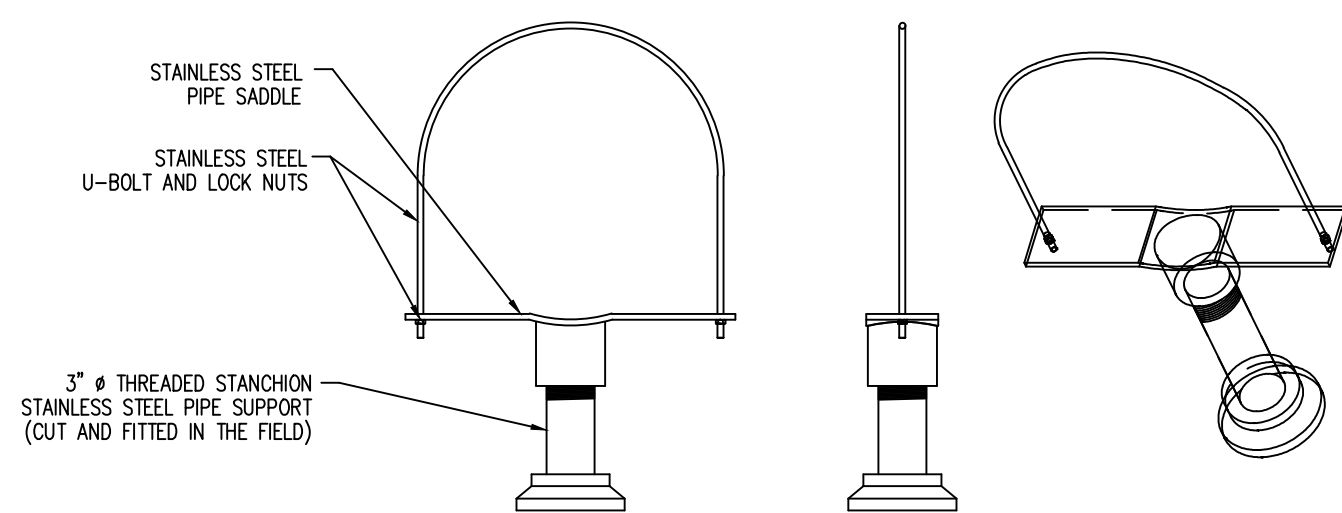
NO SCALE
(FOR INSTALLATIONS SERVING 50 EDU's OR MORE)



- NOTES:
1. PASSIVE ODOR CONTROL SYSTEM RATED FOR AIR FLOWS NOT EXCEEDING 200 cfm.
 2. ODOR CONTROL CANISTER SHALL BE SECURED TO CONCRETE PAD.
 3. ODOR CONTROL UNIT TO BE SUPPLIED WITH GASSES FROM BOTH WET WELL AND VALVE VAULT. AIR FLOW RATES TO BE CONTROLLED THROUGH KNIFE GATES.

LIFT STATION ODOR CONTROL DETAIL (< 50 EDU)

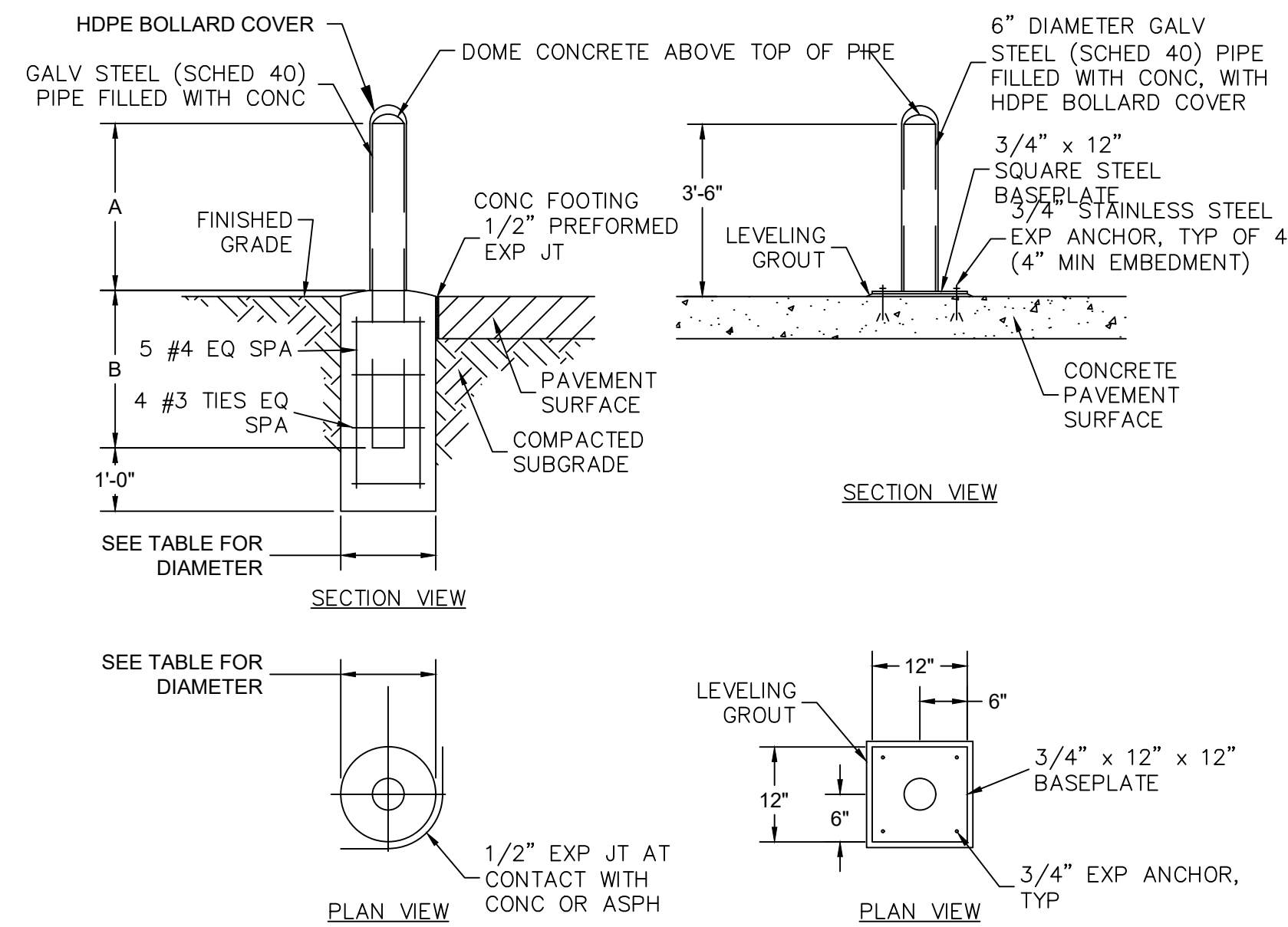
NO SCALE
(FOR INSTALLATIONS SERVING LESS THAN 50 EDU's)



- NOTES:
1. ANVIL INTERNATIONAL SIZES RANGE FROM 4" TO 36"
 2. ADJUSTMENT IS OBTAINED BY TURNING THE LOOKOUT NIPPLE. THE LOWER END OF THE NIPPLE IS STAKED, UP-SETTING THE THREADS TO PREVENT SEPARATION OF NIPPLE AND COUPLING DURING ADJUSTMENT.

ADJUSTABLE PIPE SUPPORT DETAIL

NO SCALE

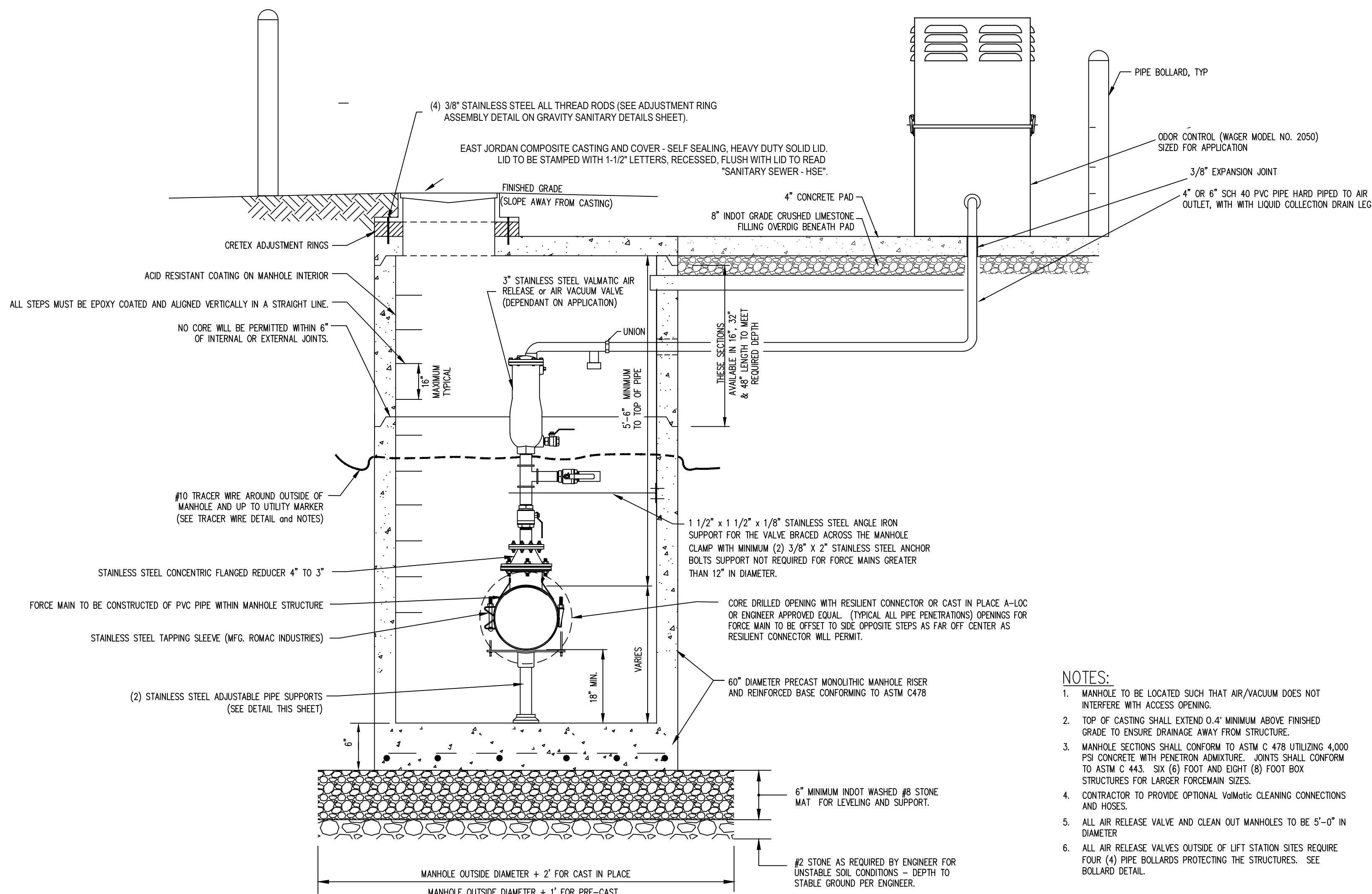


BOLLARDS		
	TYPE 1	TYPE 2
PIPE DIA	6"	8"
PIPE LENGTH	6'	7'
DIMENSION A	3'-6"	4'-0"
DIMENSION B	2'-6"	3'-0"
CONC FOOTING DIA	18"	24"

BOLLARD DETAIL

SCALE: NONE

- NOTES:
1. TYPE OF BOLLARD INSTALLED SHALL BE AS IDENTIFIED ON THE DRAWINGS OR AS DIRECTED BY THE ENGINEER.



- NOTES:
1. MANHOLE TO BE LOCATED SUCH THAT AIR/VACUUM DOES NOT INTERFERE WITH ACCESS OPENING.
 2. TOP OF CASTING SHALL EXTEND 0.4' MINIMUM ABOVE FINISHED GRADE TO ENSURE DRAINAGE AWAY FROM STRUCTURE.
 3. MANHOLE SECTIONS SHALL CONFORM TO ASTM C 478 UTILIZING 4,000 PS CONCRETE WITH PENETRON ADMIXTURE. JOINTS SHALL CONFORM TO ASTM C 443. SIX (6) FOOT AND EIGHT (8) FOOT BOX STRUCTURES FOR LARGER FORCEMAIN SIZES.
 4. CONTRACTOR TO PROVIDE OPTIONAL VALVATIC CLEANING CONNECTIONS AND HOSES.
 5. ALL AIR RELEASE VALVE AND CLEAN OUT MANHOLES TO BE 5'-0" IN DIAMETER.
 6. ALL AIR RELEASE VALVES OUTSIDE OF LIFT STATION SITES REQUIRE FOUR (4) PIPE BOLLARDS PROTECTING THE STRUCTURES. SEE BOLLARD DETAIL.

DISCLAIMER

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REVISED 10/10/2025

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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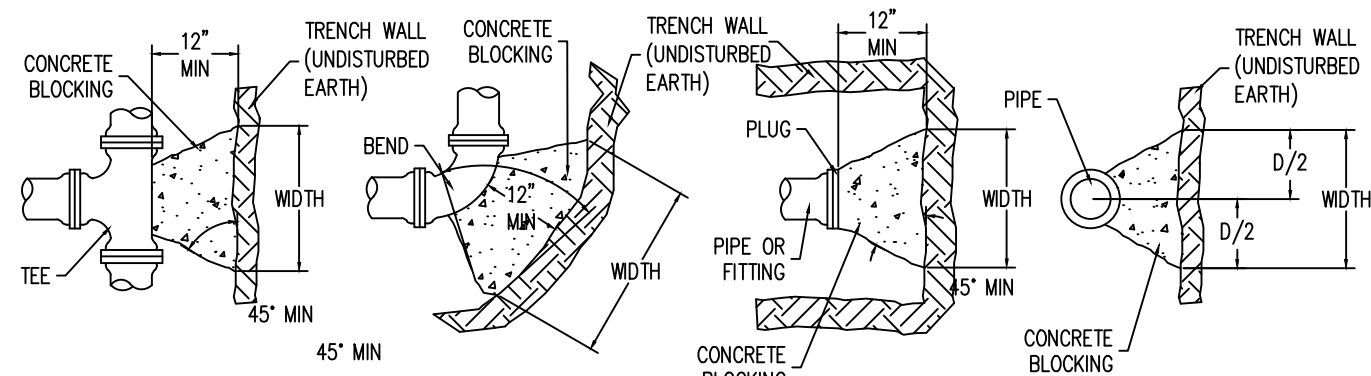
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PROJECT

SHEET

SHEET 1 OF 4

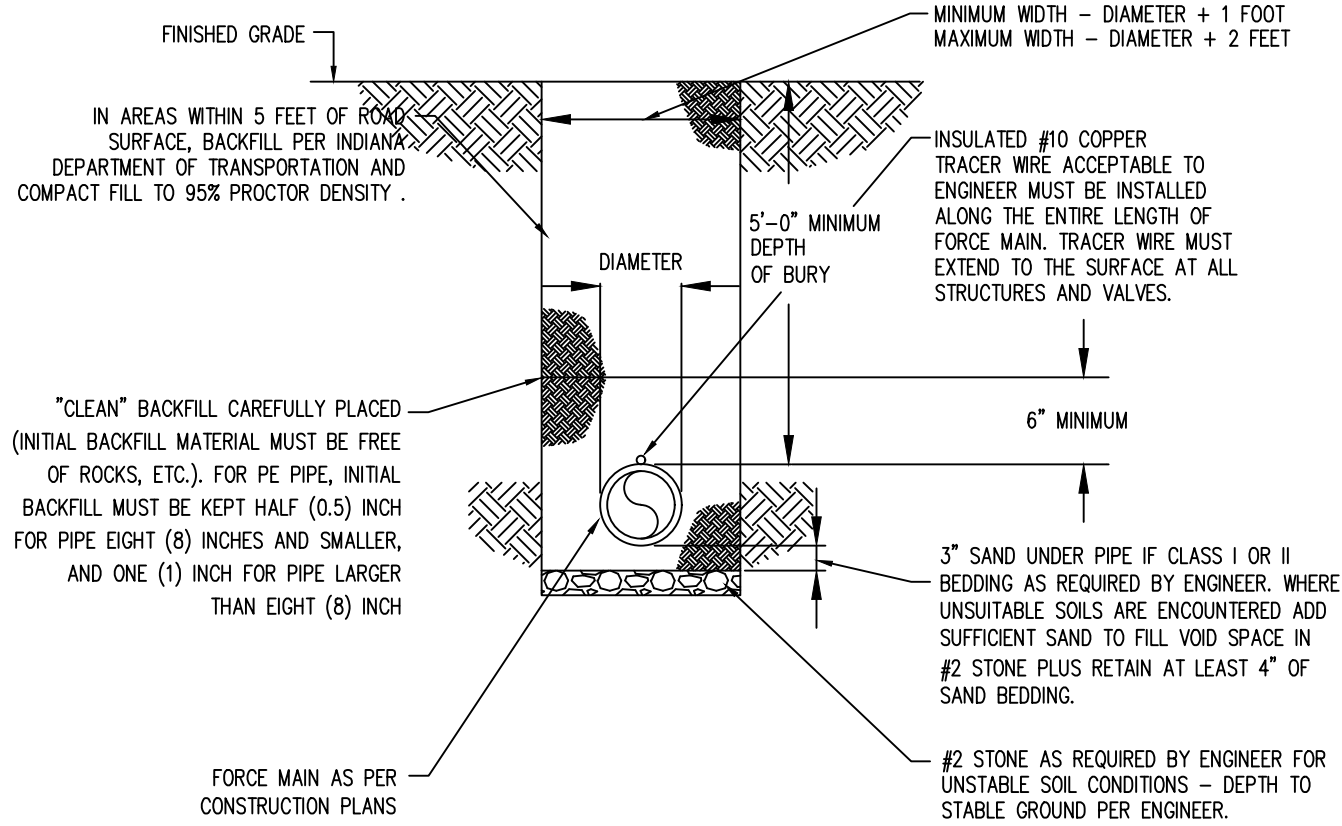


	TEE		22 1/2°		45°		90°		PLUG	
SIZE	W	D	W	D	W	D	W	D	W	D
3", 4"	2'-6"	1'-0"	1'-0"	0'-9"	1'-6"	1'-3"	2'-9"	1'-6"	1'-6"	1'-6"
6"	3'-3"	1'-6"	2'-0"	1'-0"	2'-6"	1'-6"	4'-3"	1'-6"	2'-3"	2'-3"
8"	4'-3"	2'-0"	2'-0"	1'-9"	3'-9"	1'-9"	6'-0"	2'-0"	3'-0"	3'-0"
10"	5'-3"	2'-6"	3'-0"	1'-9"	4'-0"	2'-6"	7'-3"	2'-6"	3'-9"	3'-9"
12"	6'-0"	3'-0"	3'-6"	2'-0"	4'-9"	3'-6"	7'-9"	3'-0"	4'-3"	4'-3"

- NOTES:
- CONCRETE REACTION BLOCKING SHALL NOT COVER PIPE JOINTS, BOLTS, OR GLANDS.
 - CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH NOT LESS THAN 2000 PSI AFTER 28 DAYS. UNOPENED BAGS OF SACKRETE ARE NOT ACCEPTABLE.
 - WRAP DI FITTINGS WITH 8 MIL VISQUEEN OR POLYETHYLENE ENCASEMENT.

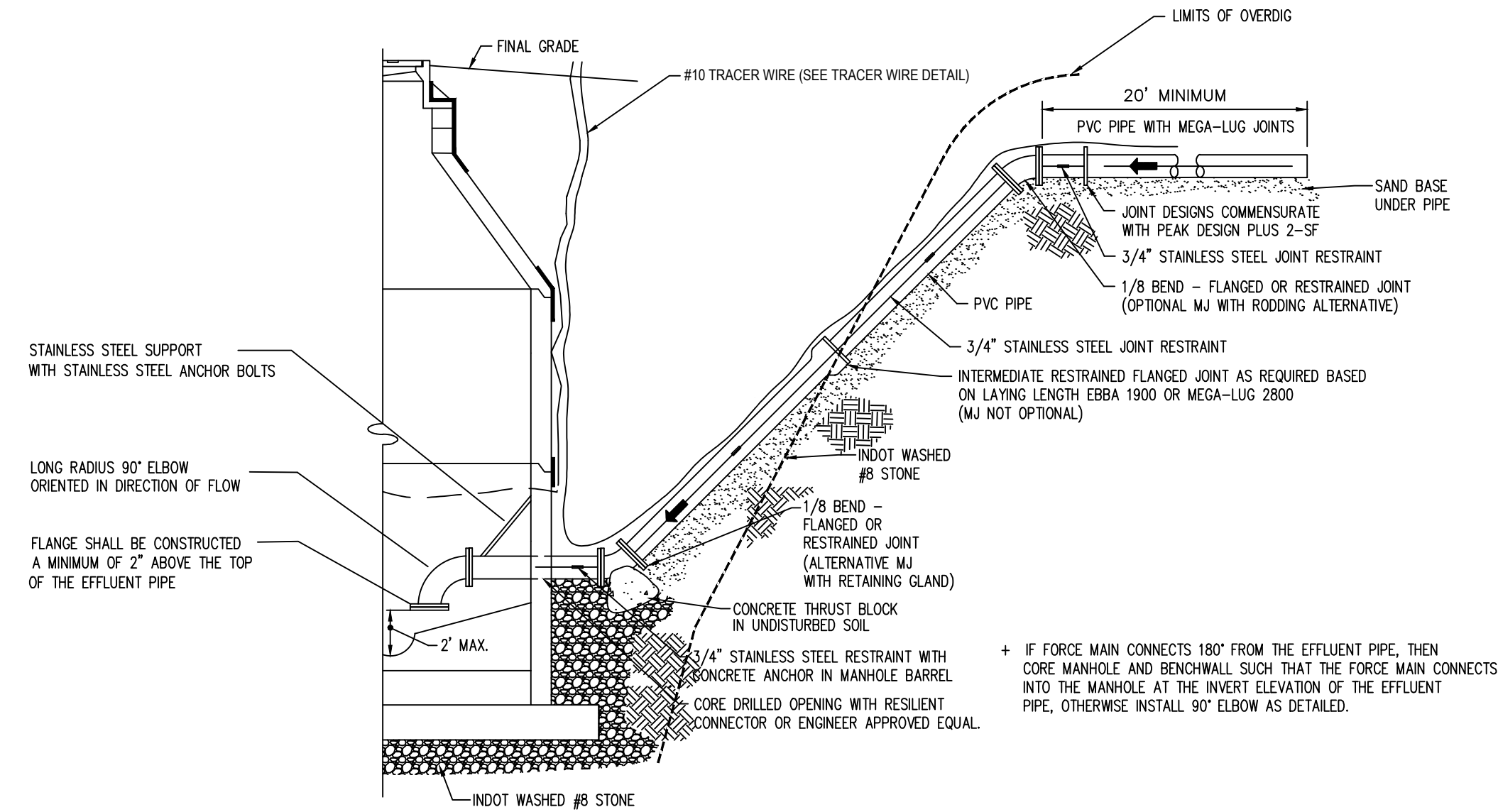
FORCE MAIN THRUST BLOCKING

NO SCALE



FORCE MAIN TRENCH DETAIL

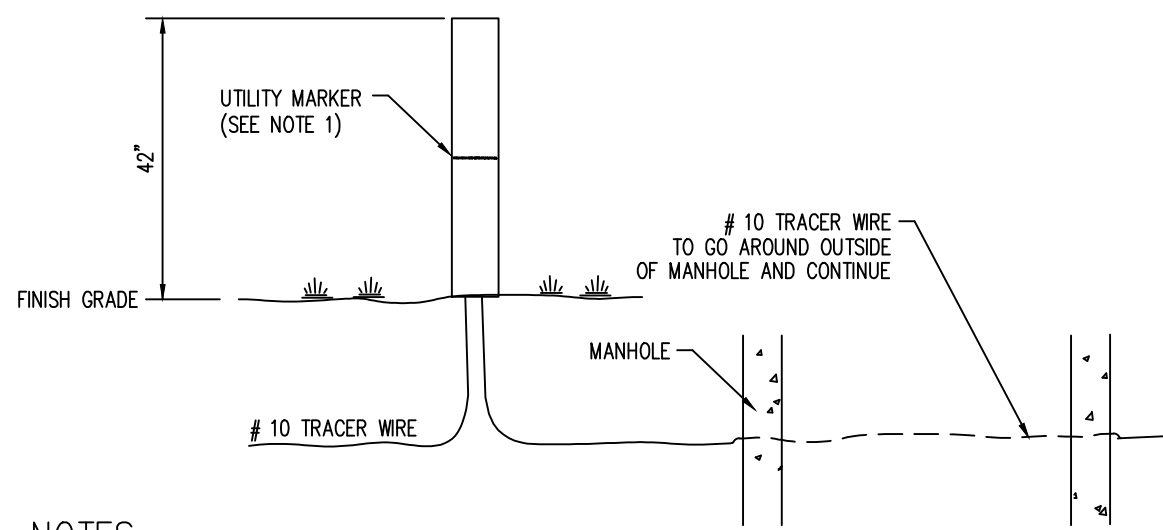
NO SCALE



FORCE MAIN DISCHARGE AT MANHOLE DETAIL

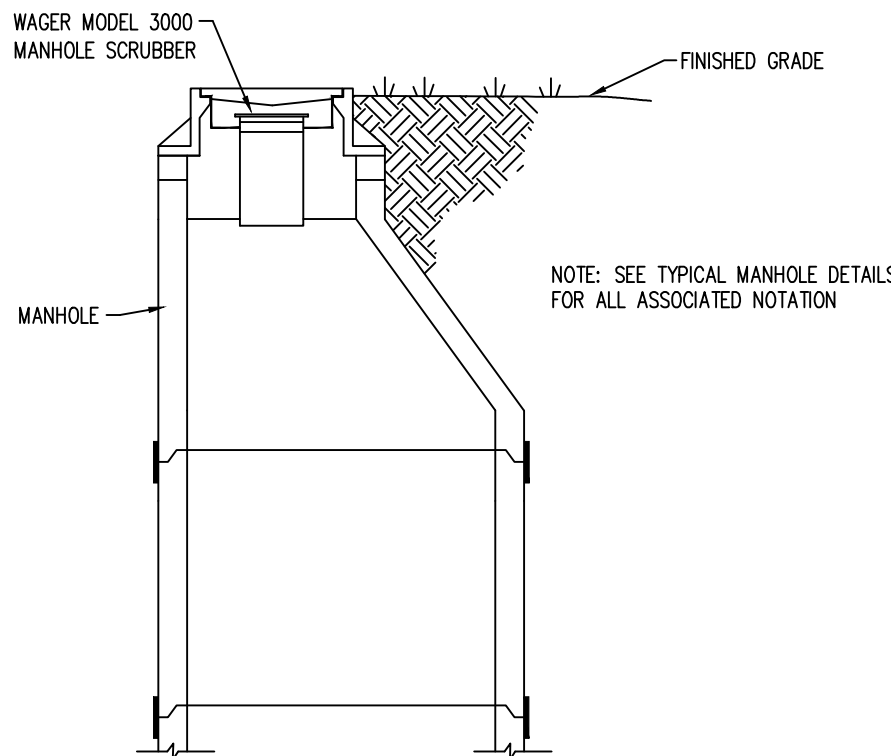
NO SCALE

- NOTES:
- PIPE DIAMETER SHALL BE AS NOTED ON PLANS.
 - INTERMEDIATE RESTRAINED OR FLANGED JOINT FITTINGS MAY BE USED BETWEEN BASE 1/8 BEND AND MANHOLE BARREL (RESTRAINT REQUIRED BETWEEN LAST FITTING AND MANHOLE BARREL).

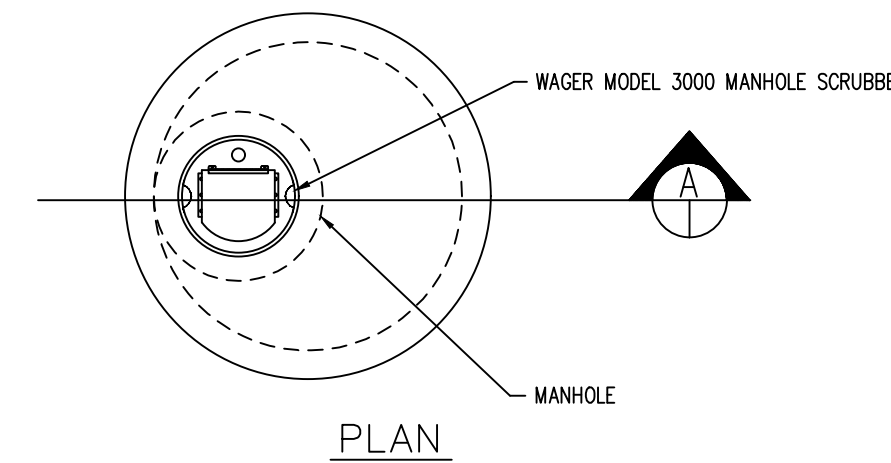


TRACER WIRE DETAIL

NO SCALE



SECTION A



PLAN

- NOTES:
- TO BE USED FOR FORCE MAINS WITH A DISCHARGE PIPE OF 4" OR SMALLER
 - WAGER MODEL 3000 MANHOLE SCRUBBER WITH SOLBIS MIDAS ODOR CONTROL MEDIA IS REQUIRED TO BE INSTALLED.

ODOR CONTROL AT FORCE MAIN DISCHARGE

NO SCALE

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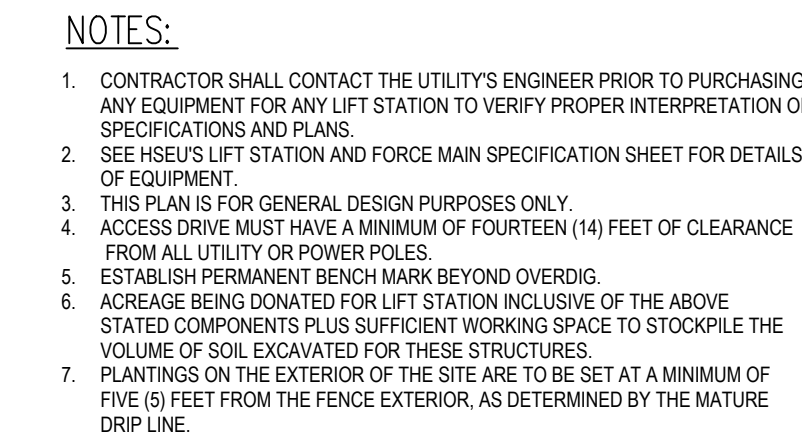
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SCALE: N/A

TITLE LIFT STATION and FORCE MAIN DETAILS

SHEET

SHEET 2 OF 4



<u>DISCLAIMER</u> 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 10/10/2025
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Diagram illustrating the cross-section of a lift station structure, showing the relationship between the existing ground, the lift station structure, and the required slopes.

Key Features and Dimensions:

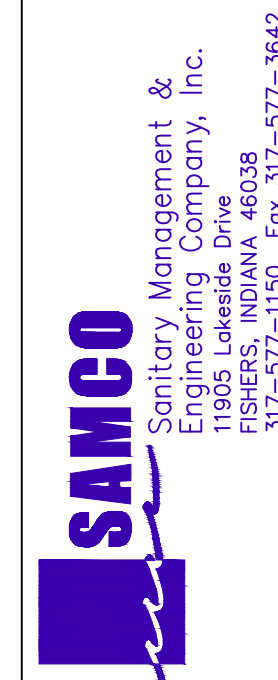
- MINIMUM 1/4" / FT SLOPE AWAY FROM LIFT STATION:** Indicated by a dashed line and arrow pointing away from the structure.
- 7' MINIMUM:** Horizontal distance from the centerline (CL) to the edge of the structure.
- SLOPE 1/4" / FT:** The required slope for the structure's side walls.
- CL (Centerline):** The vertical centerline of the structure.
- EXISTING GRADE:** The ground level on either side of the structure.
- Structure Layers (from top to bottom):**
 - 1-1/2" SURFACE
 - 6" BINDER
 - 6" #53 STONE BASE
 - 12" #2 STONE BASE
 - PREPARED SUBGRADE
- Side Slopes:** The slopes on either side of the structure, labeled with dimensions 1 and 3, indicating a 1:3 ratio.
- Compaction Requirement:** SIDE SLOPES MUST BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY. COMPACTION TESTING MAY BE REQUIRED BY ENGINEER.

- NOTES: 1. ACCESS DRIVE RADI TO BE A MINIMUM OF 45 FEET.
2. SLOPE ALONG CENTERLINE SHALL NOT EXCEED 5.00%.
3. FOR CENTERLINE GRADE CHANGES OF GREATER THAN 2.00%, A 25' VERTICAL CURVE SHALL BE INSTALLED.
4. CONTRACTOR MUST CONSIDER THE IMPACT TO LOCAL DRAINAGE. CULVERTS MUST BE INSTALLED TO PREVENT SURFACE DRAINAGE OVER DRIVE.
5. PREPARED SUBGRADE PER INDIANA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION No. 207.

REVISIONS	DRAWN

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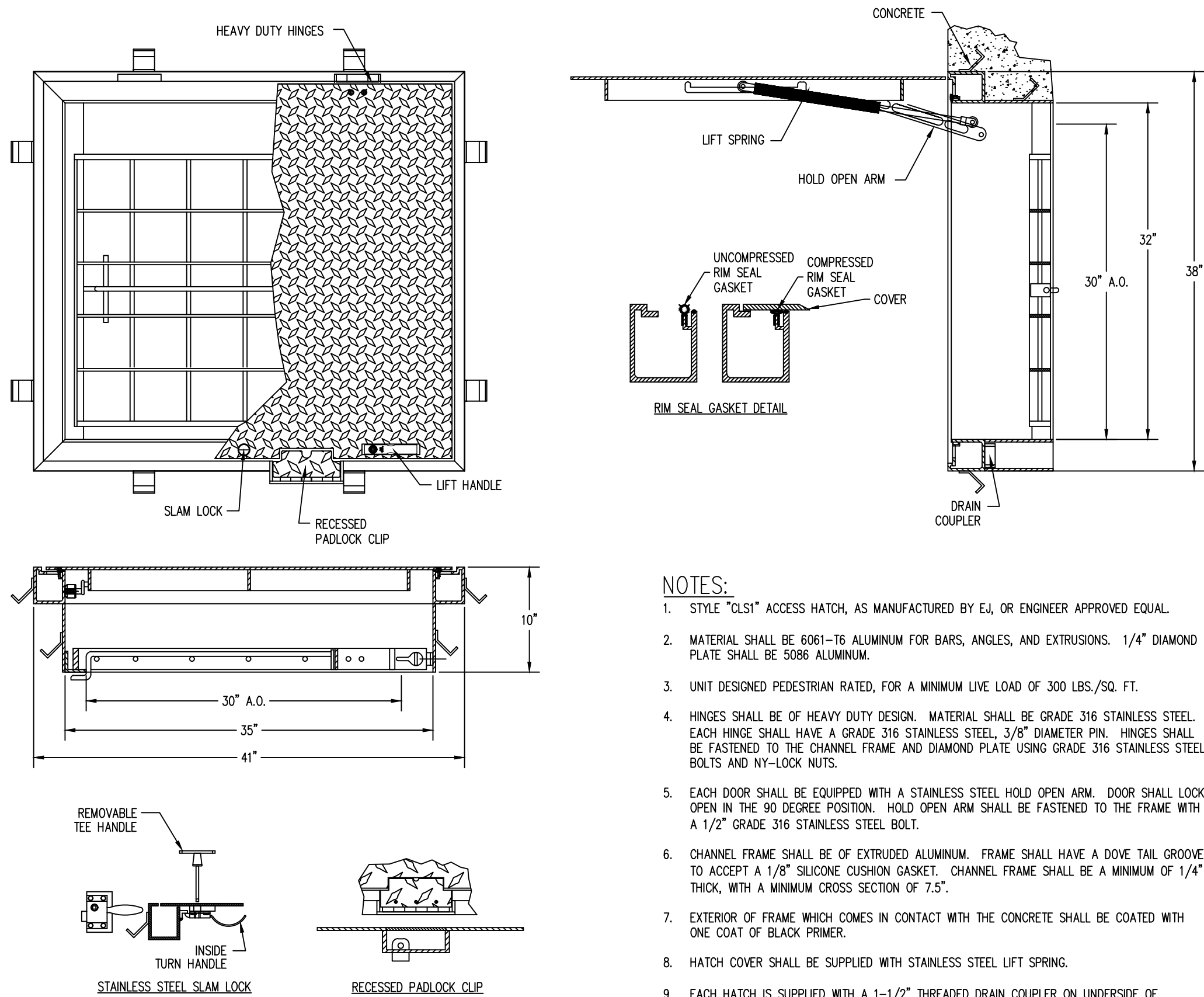
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SCALE:
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PROJECT	TITLE
PREPARED FOR	TYPICAL LIFT STATION AND FORCE MAIN DETAILS

SHEET

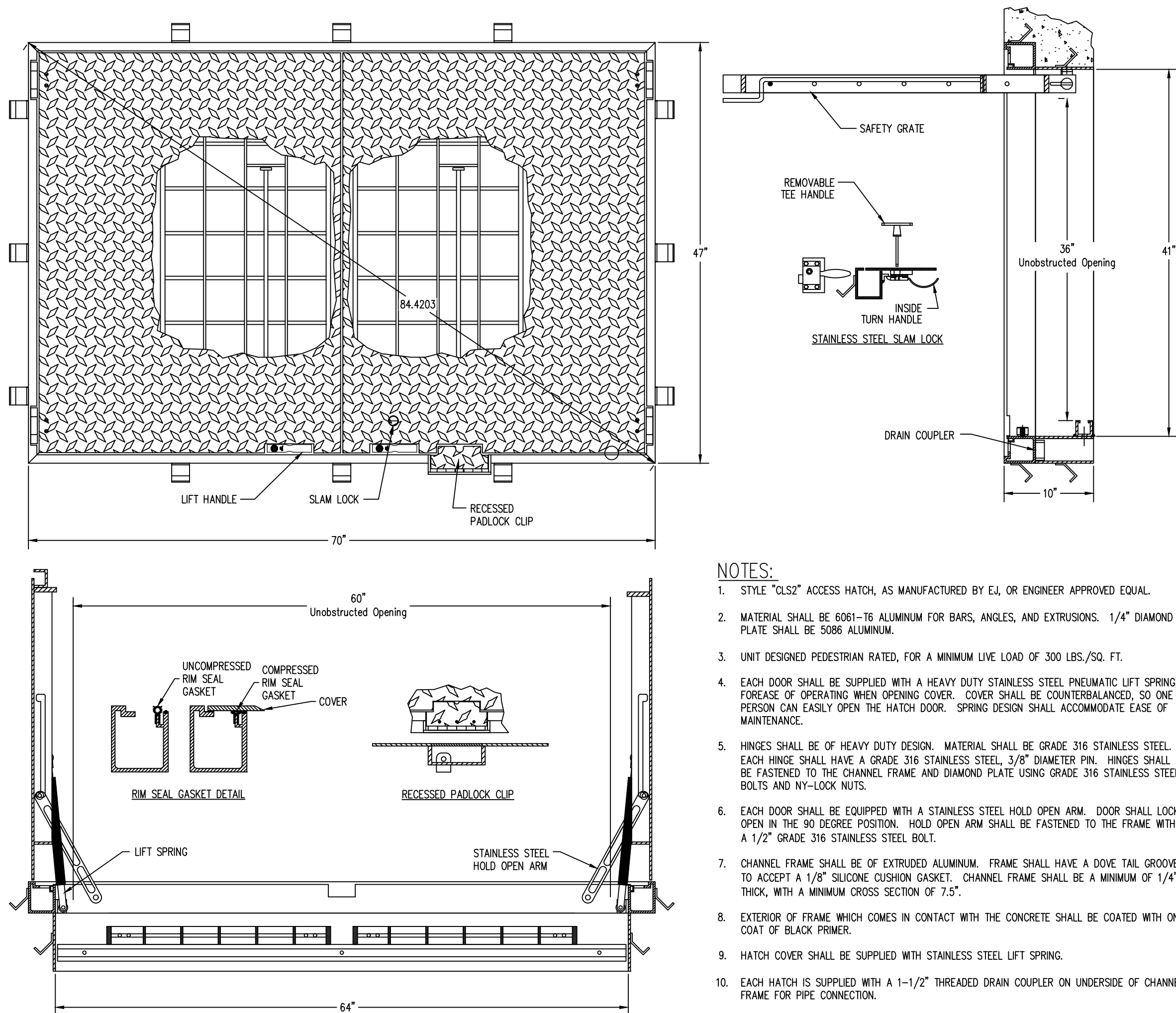


NOTES:

1. STYLE "QLS1" ACCESS HATCH, AS MANUFACTURED BY E4, OR ENGINEER APPROVED EQUAL.
2. MATERIAL SHALL BE 6061-T6 ALUMINUM FOR BARS, ANGLES, AND EXTRUSIONS. 1/4" DIAMOND 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 BOLTS AND NY-LOCK NUTS.
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.
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 PROTECTION AGAINST FALL THROUGH AND TO CONTROL ACCESS TO THE CONFINED SPACE.
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 SINGLE SAFE HATCH ®

NO SCALE



NOTES:

1. STYLE "QLS2" ACCESS HATCH, AS MANUFACTURED BY E4, OR ENGINEER APPROVED EQUAL.
2. MATERIAL SHALL BE 6061-T6 ALUMINUM FOR BARS, ANGLES, AND EXTRUSIONS. 1/4" DIAMOND PLATE SHALL BE 5086 ALUMINUM.
3. UNIT DESIGNED PEDESTRIAN RATED, FOR A MINIMUM LIVE LOAD OF 300 LBS./SQ. FT.
4. EACH DOOR SHALL BE SUPPLIED WITH A HEAVY DUTY STAINLESS STEEL PNEUMATIC LIFT SPRING, FOREASE OF OPERATING WHEN OPENING COVER. COVER SHALL BE COUNTERBALANCED, SO ONE PERSON CAN EASILY OPEN THE HATCH DOOR. SPRING DESIGN SHALL ACCOMMODATE EASE OF MAINTENANCE.
5. 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.
6. 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.
7. 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".
8. EXTERIOR OF FRAME WHICH COMES IN CONTACT WITH THE CONCRETE SHALL BE COATED WITH ONE COAT OF BLACK PRIMER.
9. HATCH COVER SHALL BE SUPPLIED WITH STAINLESS STEEL LIFT SPRING.
10. EACH HATCH IS SUPPLIED WITH A 1-1/2" THREADED DRAIN COUPLER ON UNDERSIDE OF CHANNEL FRAME FOR PIPE CONNECTION.
11. ALL HARDWARE SHALL BE STAINLESS STEEL.
12. 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.
13. 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.
14. UNITS SHALL BE SUPPLIED WITH ORANGE POWDER COATED HINGED SAFETY GRATES TO PROVIDE PROTECTION AGAINST FALL THROUGH AND TO CONTROL ACCESS TO THE CONFINED SPACE.
15. EACH UNIT SHALL BE SUPPLIED WITH RIMSEAL GASKET.
16. EACH HATCH SHALL BE SUPPLIED WITH A RECESSED PADLOCK CLIP (PADLOCK SUPPLIED BY OTHERS).

PEDESTRIAN RATED ALUMINUM DOUBLE SAFE HATCH ®

NO SCALE

DISCLAIMER

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317-577-1150 Fax 317-577-3642

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PROJECT

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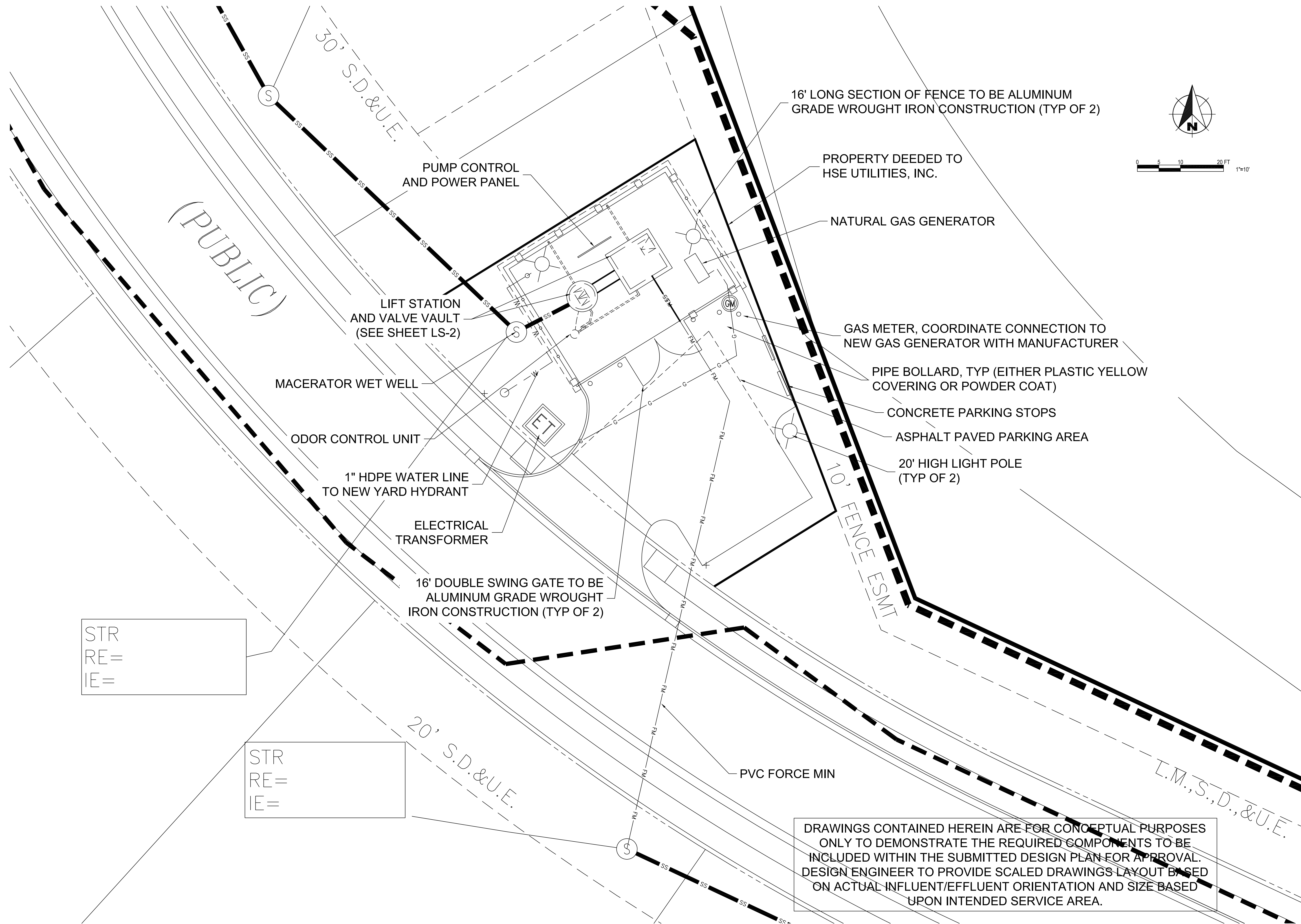
SCALE:

TYPICAL LIFT STATION AND FORCE MAIN DETAILS

SHEET

SHEET 4 of 4

C:\Users\Kallio\Public\Operations and Engineering - General\Engineering\HSE\Details\Combined LS-12-16-2022\CADD\229420-Lift Station_SIT.dwg, December 19, 2022 3:24 PM, THOMAS KALLIO, © Paul I. Cripe, Inc.



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Revisions	Issue	Date	Description

HAMILTON SOUTHEASTERN UTILITIES, INC.

LIFT STATION SITE PLAN
PROJECT EXAMPLE ONLY

CERTIFIED BY:

Date



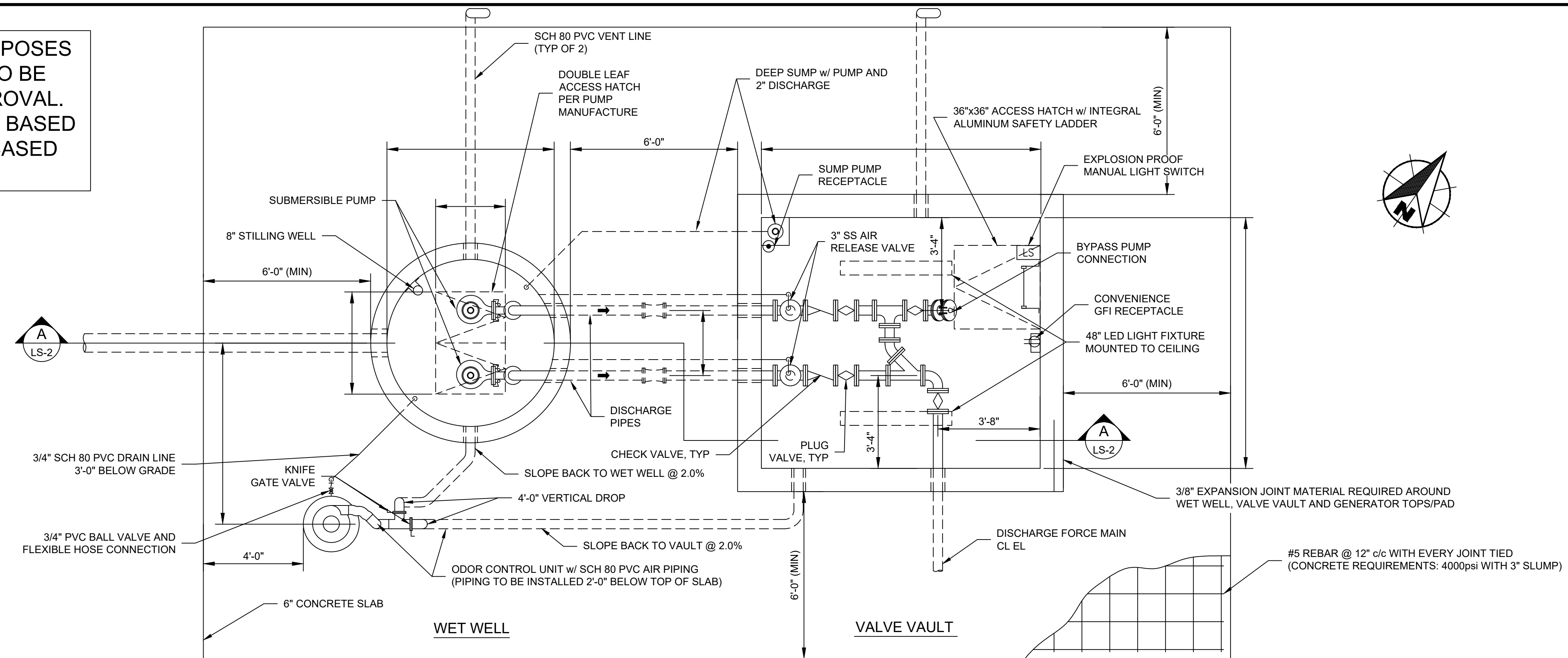
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MLN
Checked By:
KDJ
Quality Assurance:
RMH

Scale: 1"=10'

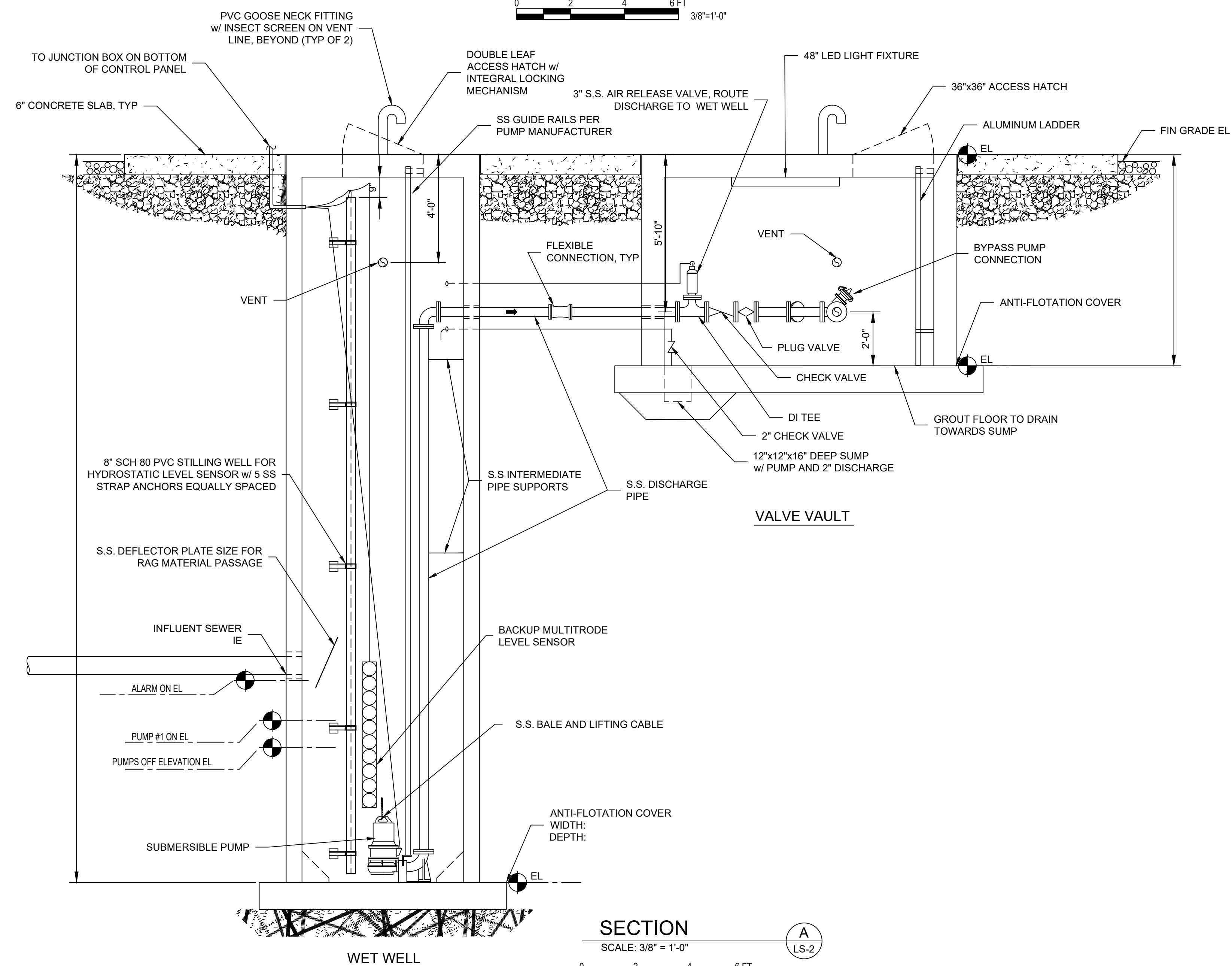
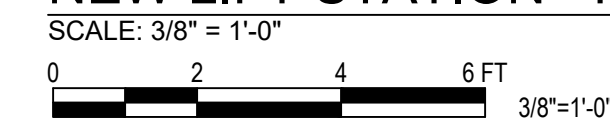
Sheet
LS-1

Date
Project Number

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.



NEW LIFT STATION - PLAN



NOTE:
ENTIRE EXCAVATION MUST BE
BACKFILLED WITH INDOT #8 STONE.

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LIFT STATION DETAILS
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Quality Assurance:

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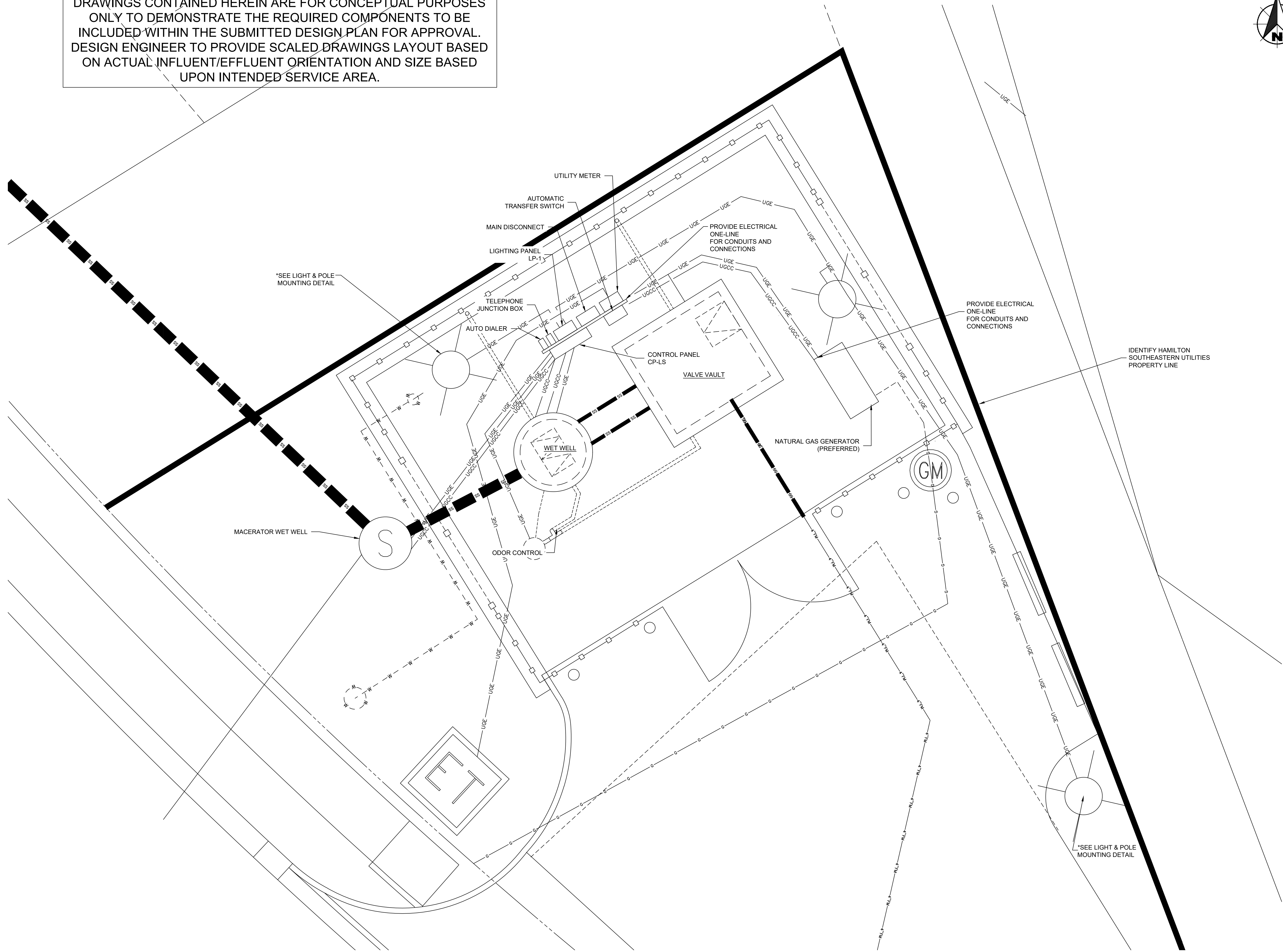
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Revisions	Issue	Date	Description

HAMILTON SOUTHEASTERN UTILITIES, INC.

LIFT STATION ELECTRICAL SITE PLAN
PROJECT EXAMPLE ONLY

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Date

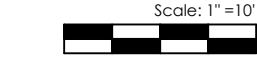


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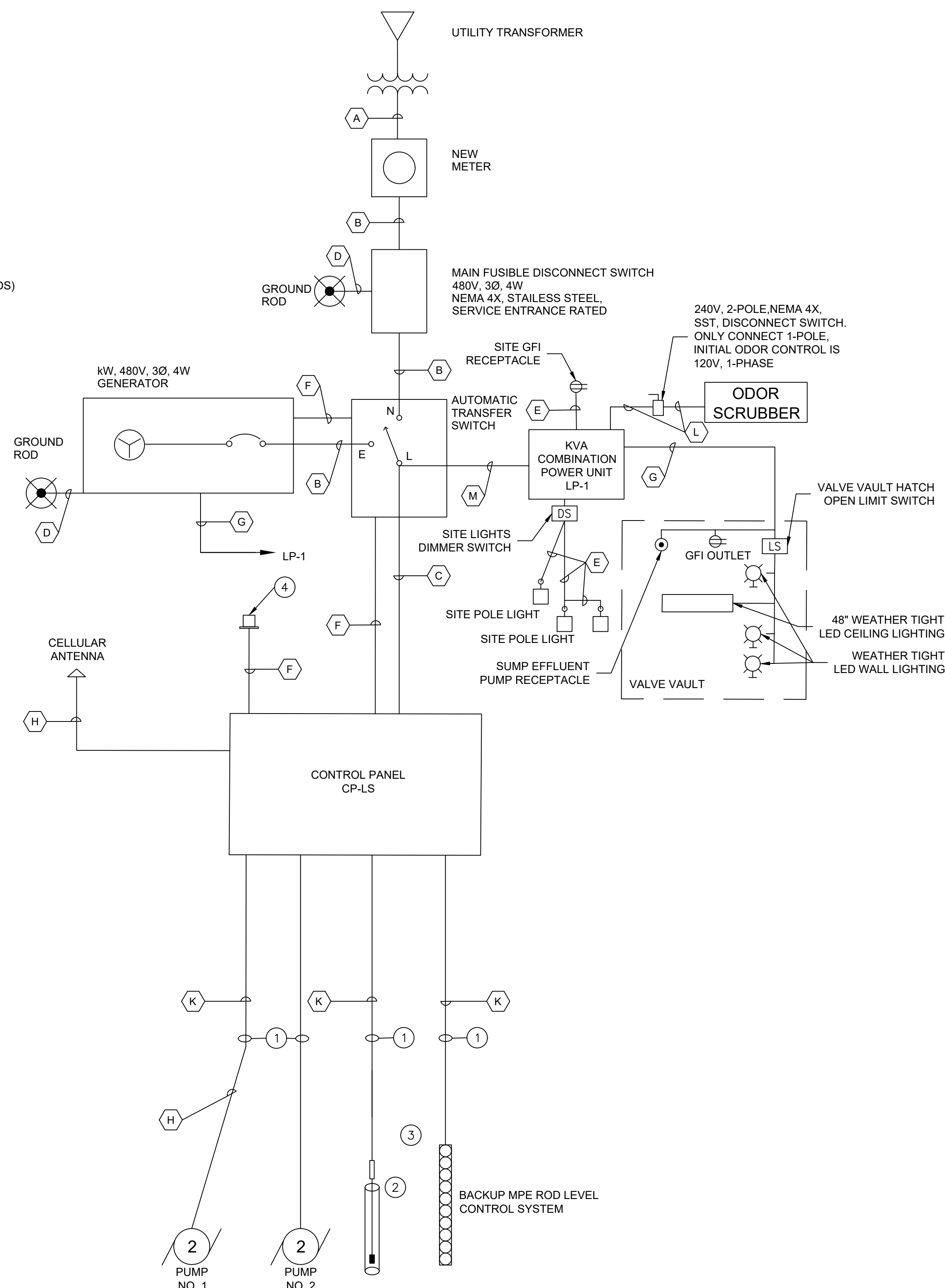
Project Number

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CONDUIT AND WIRE SCHEDULE

- | | |
|---|---|
| A | 3°C, 4 # ? |
| B | 3°C, 3 # ? #N, #G |
| C | 3°C, 3 # ?, #G |
| D | 3/4°C, #G |
| E | 1°C, 2 # ?, #G |
| F | 1°C, 4 # ? |
| G | 1°C, 6 # ?, #G |
| H | MANUFACTURER CABLE |
| I | 1°C, 2/C #TPS |
| J | 1°C, 12 # ? |
| K | 3°C, MANUFACTURER CABLE |
| L | 1°C, 2 # ?, #G AND 1°C SPARE (STUB UP AND CAP AT BOTH ENDS) |
| M | 1°C, 2 # ?, #G |

NOTE:
DESIGN ENGINEER TO PROVIDE
WIRE SIZES TO BE USED FOR
COMPONENTS.



480V, 3PH. SERVICE, LIFT STATION ONE-LINE DIAGRAM

SCALE: NO SCALE

KEYED NOTES:

- ① CONDUITS FOR PUMP CABLES, ROD LEVEL CABLES & SUBMERSIBLE PRESSURE TRANSMITTER, FURNISHED AND INSTALLED BY THE CONTRACTOR
- ② LEVEL SENSOR CABLE AND STAINLESS STEEL SUPPORT CABLE. PVC STILLING TUBE MOUNTED TO THE SIDE OF THE WELL, AND SUPPORTED EVERY 5' WITH 3/16 STAINLESS STEEL HARDWARE. POSITION STILLING TUBE SO THAT LEVEL SENSOR MAY BE PULLED UP THROUGH HATCH. SUBMERSIBLE LEVEL TRANSMITTER TO BE LOCATED BELOW THE LOWEST ROD LEVEL SEGMENT.
- ③ STAINLESS STEEL STRAIN RELIEF CABLE GRIP AND STAINLESS STEEL HOOK FOR SUPPORT OF ALL POWER AND CONTROL CABLES IN THE WET WELL, ACCESSIBLE FROM WET WELL HATCH.
- ④ HIGH LEVEL ALARM BEACON

GENERAL NOTES

1. BONDED 3 POINT GROUNDED SYSTEM BEYOND THE OVER DIG, IN ALL NATURAL, UNDISTURBED SOIL. ELECTRICIAN / ELECTRICAL CONTRACTOR TO PROVE / VALIDATE GROUND ATTACHMENT.
2. ALL PANELS TO BE NEMA 4X STAINLESS STEEL.

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

- Siemens 100amp Breaker Style Disconnect 42
- 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 Arrestor
- 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)

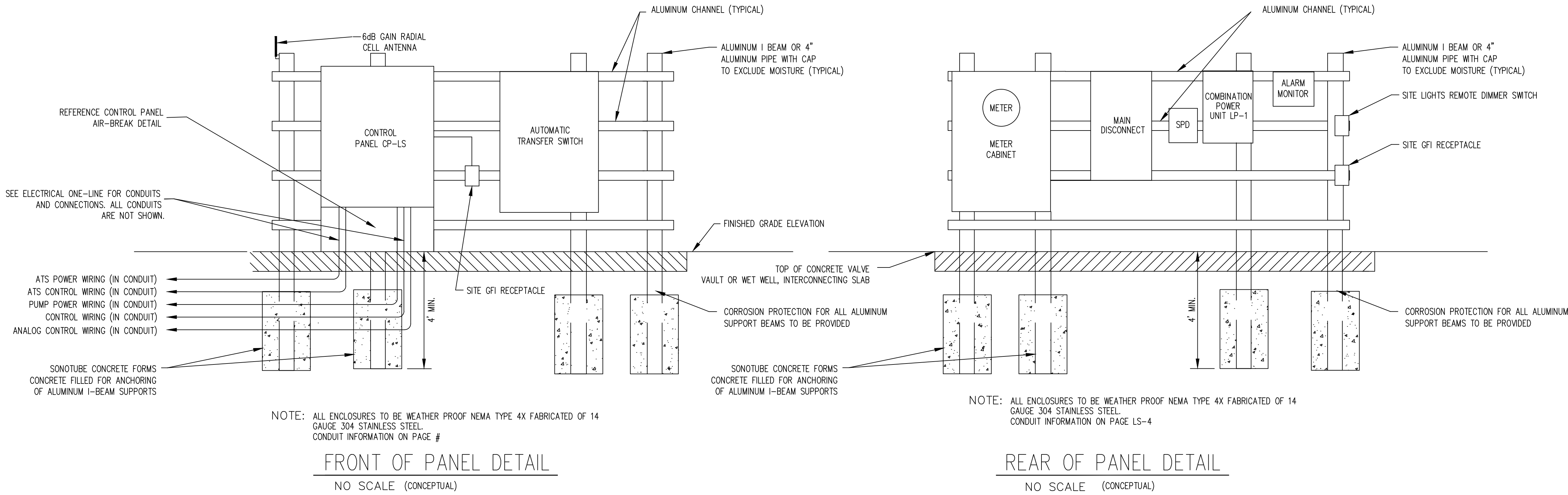
Parts List

Manufacturer	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
Siemens	100A
Eaton	FD3100L
Eaton	HMC5 5 Amp
Eaton	FD3015L
Altech	2D20UL
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 Bradley	1492-J4
Allen Bradley	1492-EAJ35
Allen Bradley	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)

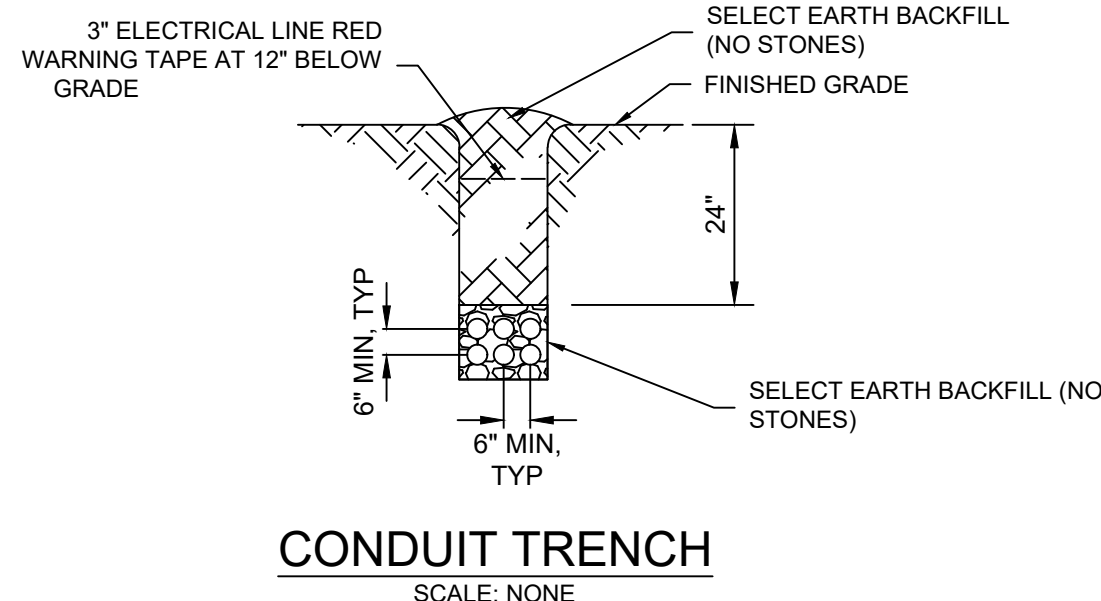
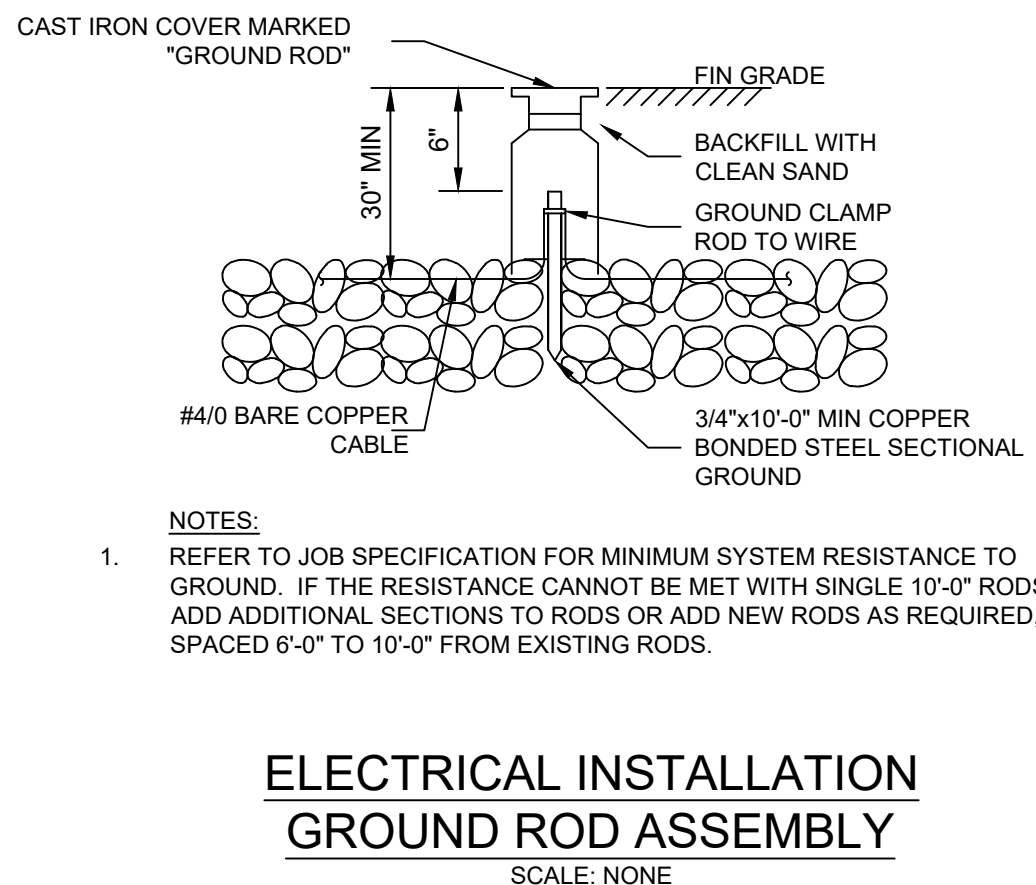
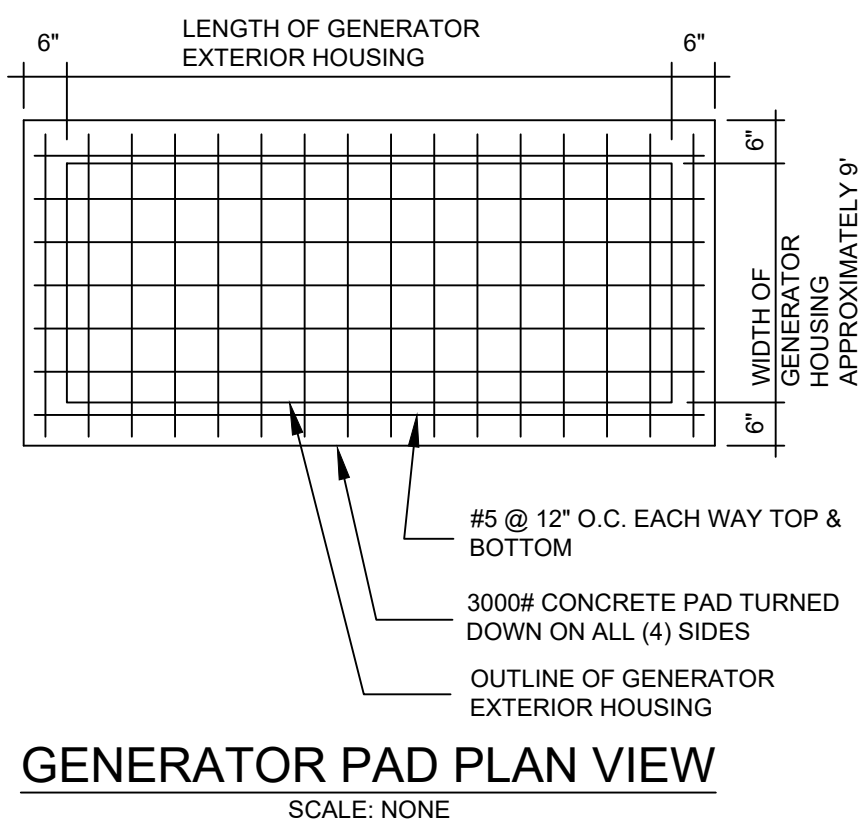
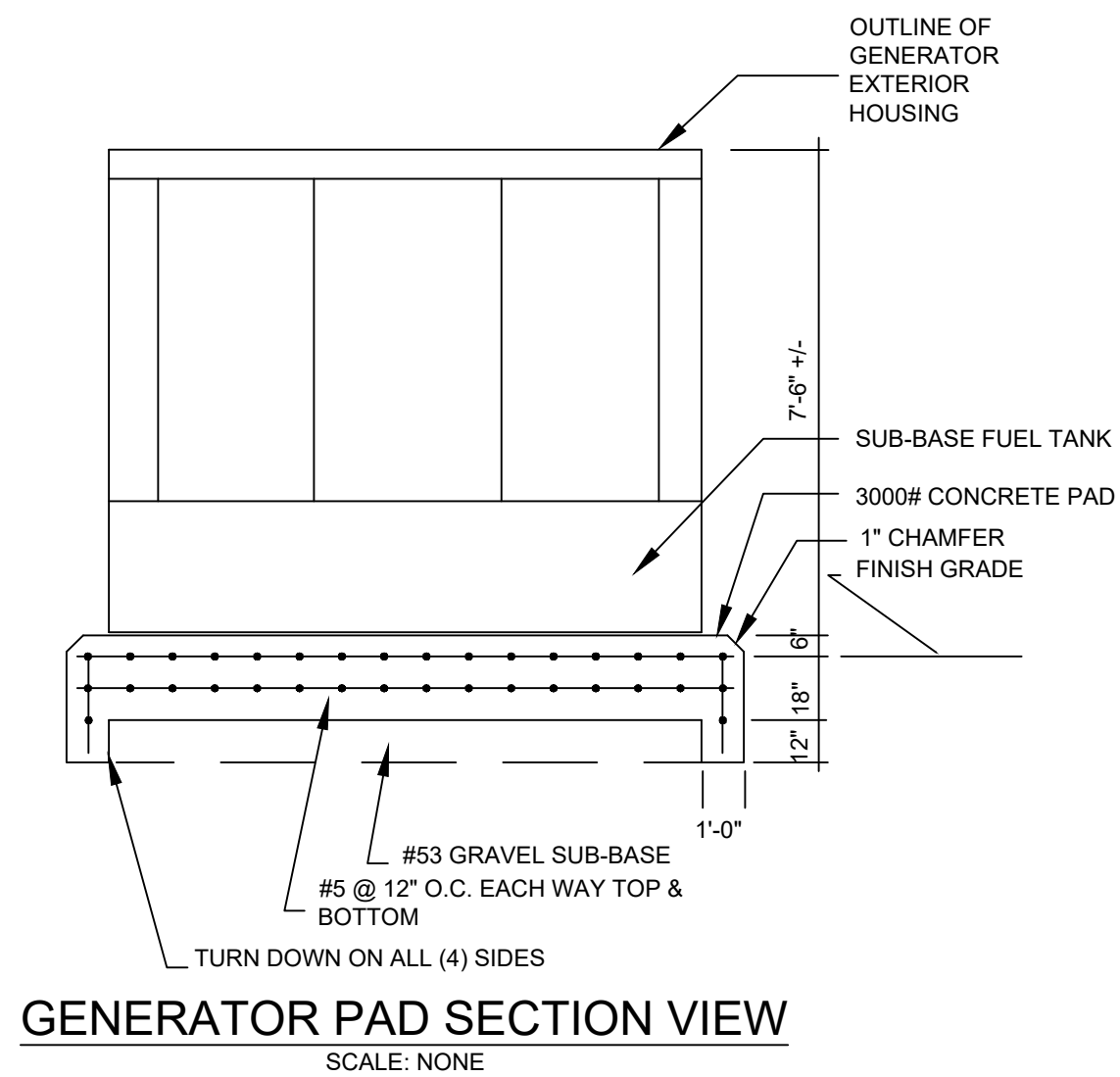
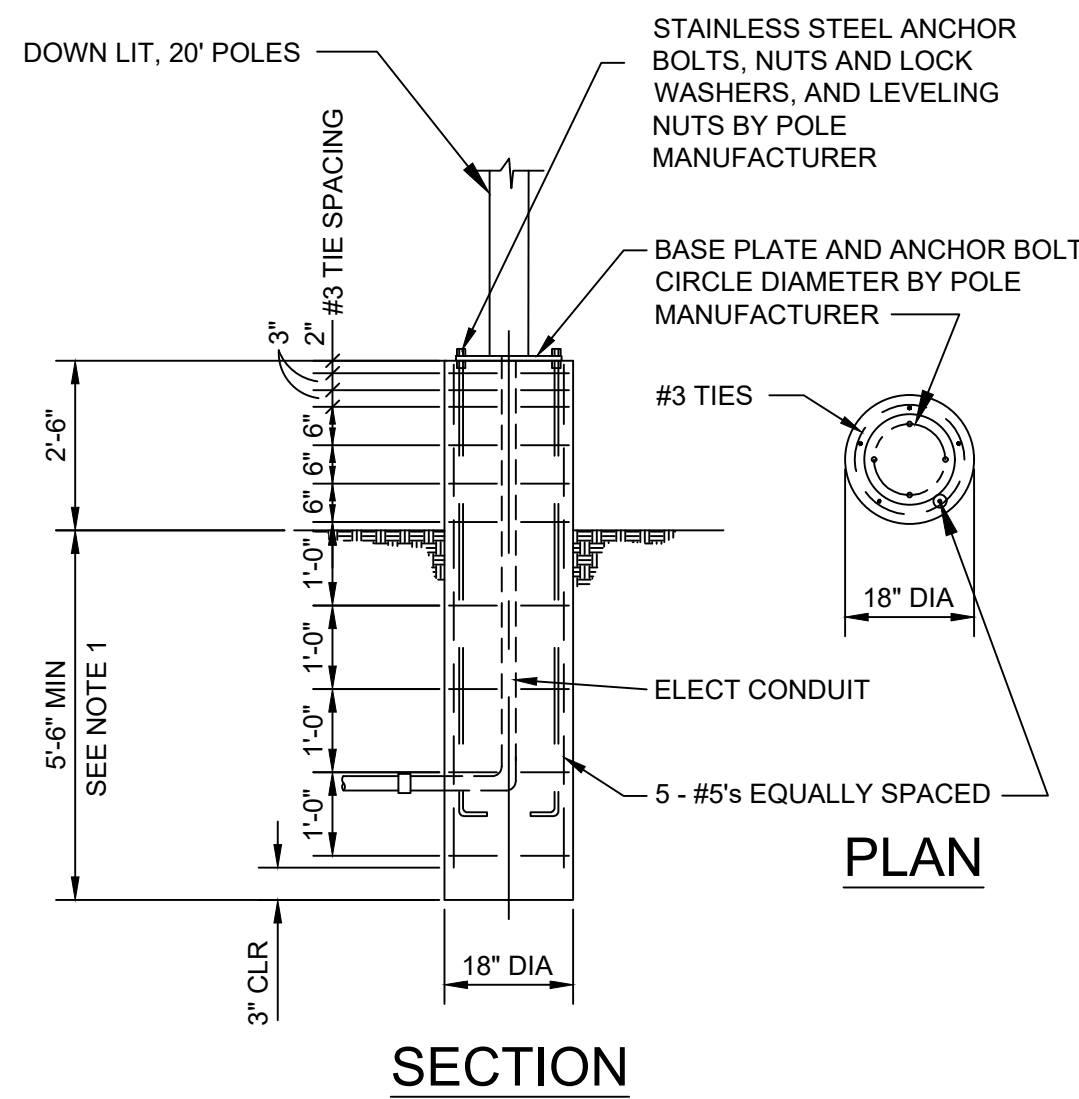
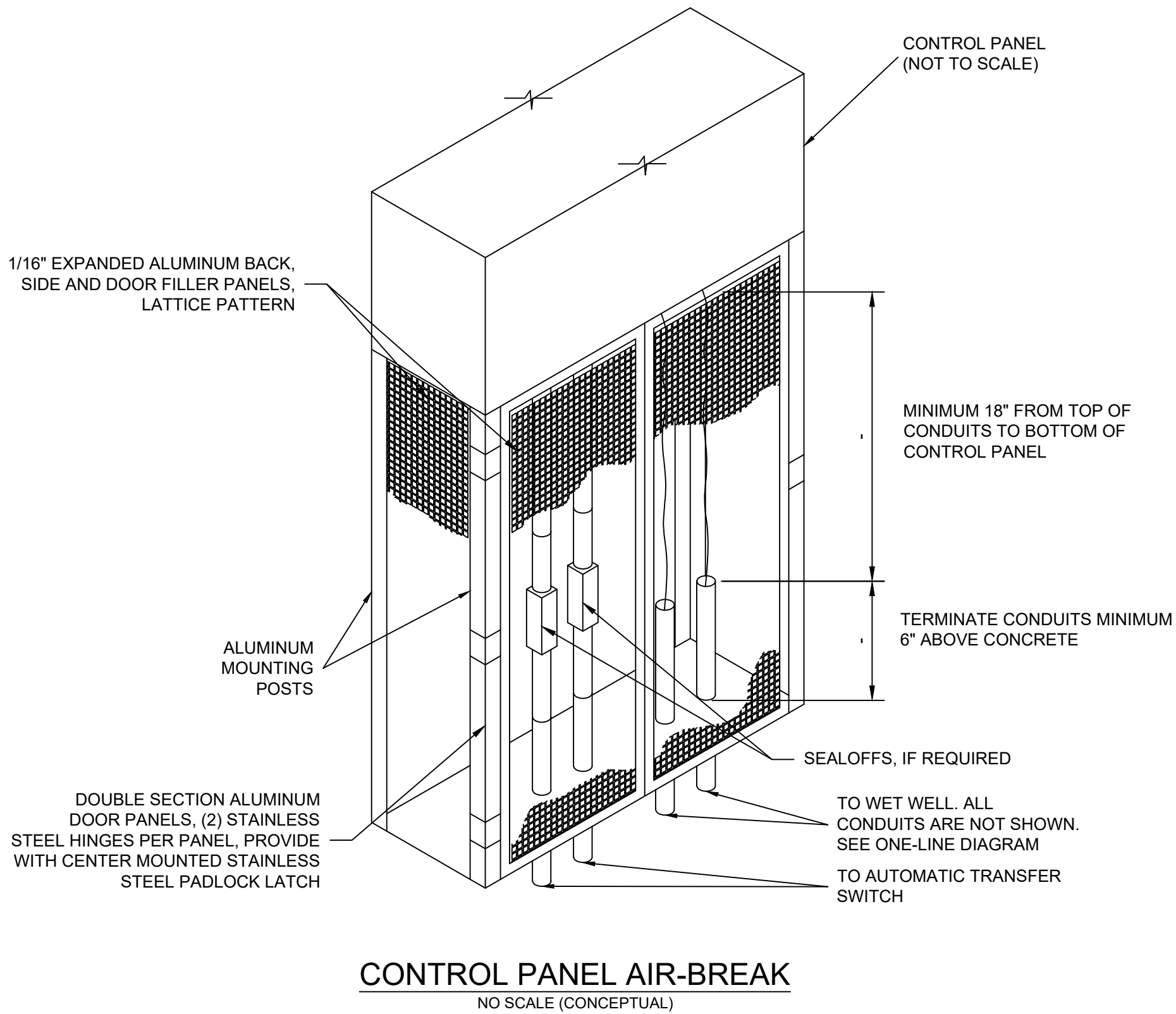
RAB	RAB PS4-11-20D2
RAB	RAB BCK-S4
RAB	RAB ALED4T105/D10/WS2
RAB	RAB BOLT4/11
RAB	RAB WSREM
RAB	W34-35L
Square D	
Current Tech.	GG40-120/240-2G-5
	20A, GFCI, duplex with corrosion resistant "in-use" type cover
	20A, GFCI, duplex with corrosion resistant "in-use" type cover
	20A, GFCI, duplex with corrosion resistant "in-use" type cover
	20A Roller Arm Switch IP68

WW Williams	30KW
WW Williams	100A

C:\Users\Kallio\SAMCO, Inc.\Operations and Engineering - General\Engineering\HSE Details\And Specs\Lift Station\Lift Station Electrical.dwg, December 19, 2022 3:30 PM, THJ\JAS KALLO, © Paul L. Cripe, Inc.



PANEL SCHEDULE		DESIGNATION:		PANEL "LP-1"				MAINS:		25 AMP MAIN CIRCUIT BREAKER			
		LOCATION:		EXTERIOR LIGHTING PANEL				BUS SIZE		100 AMP			
		VOLTAGE:		120/240V				PANEL MOUNTING:		SURFACE			
		PHASE:		1 PHASE, 3 WIRE				ALL BREAKERS:		14,000 A.I.C. (MINIMUM)			
O.K.T. NO.	LOAD DESCRIPTION	#	KVA	O.K.T. BKR.		KVA		O.K.T. BKR.		KVA	#	LOAD DESCRIPTION	O.K.T. NO.
				AMPS	POLE	A	B	AMPS	POLE				
1	SITE POLE LIGHT		1.00	20	1	0.00		20	1	0.50		GENERATOR - BATTERY CHARGER	2
3	VALVE VAULT LIGHTS		1.00	20	1		0.00	20	1	1.00		GENERATOR - STRIP HEATER	4
5	SITE GFI RECEPTACLE		0.18	20	1	0.00		20	1	0.18		VALVE VAULT GFI RECEPTACLE	6
7	SUMP EFFLUENT PUMP RECEPTACLE		0.18	20	1		0.00	20	1	0.55		ODOR CONTROL UNIT	8
9	SPARE			20	1	0.00		20	1			SPARE	10
11	SPARE			30	2		0.00	20	2	1.50		GENERATOR - BLOCK HEATER	12
13	SPARE					0.00							14
15	SPARE			40	2		0.00	30	2			SPD	16
17						0.00							18
TOTAL CONNECTED LOAD:						0.00	0.00	TOTAL =		6.09	KVA		
#	ONE (1) OR TWO (2) DIGIT NUMBERS REFER TO CONDUIT & WIRE SCHEDULE ON THIS SHEET. NEMA 4x, STAINLESS STEEL ENCLOSURE												



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.