CONST	RUCTION	NOTES
OWNER:		

CITY OF MILFORD 119 S. WALNUT STREET MILFORD, DE 19963

PH. (302) 422-6616

- ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF MILFORD STANDARD SPECIFICATIONS FOR CONSTRUCTION. ALL CONSTRUCTION WITHIN A STATE RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT DELAWARE DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATION FOR CONSTRUCTION AND MATERIALS.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL AMENDMENTS THERETO. THESE DRAWINGS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.
- 3. ALL WORK SHALL COMPLY WITH DELAWARE SEDIMENT & STORMWATER REGULATIONS AND DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK.
- 4. PLAN LOCATIONS AND DIMENSIONS SHALL BE STRICTLY ADHERED TO UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- FULL ACCESS SHALL BE PROVIDED FOR EMERGENCY VEHICLES, PEDESTRIANS, MAIL, TRASH PICKUP, DELIVERIES, AND ACCESS TO ALL BUILDINGS.
- EXISTING UTILITIES AS OF THIS DATE ARE SHOWN IN ACCORDANCE WITH THE BEST AVAILABLE INFORMATION. COMPLETENESS AND CORRECTNESS THEREOF IS NOT GUARANTEED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONFER WITH THE UTILITY COMPANIES INVOLVED IN ORDER TO SECURE THE MOST ACCURATE INFORMATION AVAILABLE AS TO UTILITY LOCATION. NO CONSTRUCTION AROUND OR ADJACENT TO UTILITIES SHALL BE DONE WITHOUT FIRST CALLING "MISS UTILITY" (1-800-282-8555) 72 HOURS PRIOR TO EXCAVATION TO HAVE UNDERGROUND UTILITY CABLES LOCATED AND MARKED.
- CONTRACTOR SHALL PERFORM TEST PITS AS NECESSARY TO VERIFY EXISTING CONDITIONS AT THE SITE. IN CERTAIN INSTANCES, SPECIFIC TEST PIT LOCATIONS HAVE BEEN IDENTIFIED AS REQUIRED BY THE ENGINEER. THIS DOES NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO VERIFY OTHER LOCATIONS AS NEEDED.
- THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE, AND ANY DAMAGE DONE TO THEM DUE TO THEIR NEGLIGENCE SHALL BE IMMEDIATELY AND COMPLETELY REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S SOLE EXPENSE. THIS SHALL INCLUDE BUT SHALL NOT BE LIMITED TO STORM DRAINS, INLETS, PAVEMENT, SIGNALS, CONDUITS, CABLES, PIPING POLES, AND OVERHEAD FACILITIES, ETC., REGARDLESS OF OWNERSHIP.
- THE CONTRACTOR SHALL PROTECT ALL ADJOINING AND NEARBY BUILDINGS, EQUIPMENT, ALL UTILITIES, STRUCTURES, FENCES, TREES, SHRUBBERY, ETC. FROM DAMAGE DUE TO EXCAVATION, DEMOLITION, AND CONSTRUCTION, DURING THE ENTIRE CONSTRUCTION PERIOD. ANY DAMAGE CAUSED DIRECTLY OR INDIRECTLY WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE
- 10. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ALL INSTALLED UTILITIES UNTIL THE COMPLETION OF CONSTRUCTION. PIPES WITH SHALLOW COVER SHALL BE PROTECTED FROM DAMAGE BY CONSTRUCTION MACHINERY WITH ADEQUATE TEMPORARY COVER. PIPING AND MANHOLE AND VAULT OPENINGS SHALL BE PROTECTED TO PREVENT MUD, DEBRIS AND WATER FROM ENTERING THE FACILITIES. THE CONTRACTOR SHALL CLEAN AND DISPOSE OF ALL MATERIAL TO THE SATISFACTION OF THE CITY OF MILFORD SHOULD THESE MATERIALS BE ALLOWED TO ENTER THE INSTALLED FACILITIES OR EXISTING FACILITIES WHERE CONNECTIONS EXIST.
- 11. THE CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTION ACTIVITIES WITHIN THE DESIGNATED LIMITS OF DISTURBANCE. ANY CHANGE TO THOSE LIMITS MUST BE AGREED UPON BY THE CITY OF MILFORD AND KENT CONSERVATION DISTRICT (KCD). STAGING AREAS SHALL ONLY BE THOSE APPROVED BY MILFORD AND KCD. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR THE LOCATION AND SIZE OF THE CONTRACTOR'S TEMPORARY LAY DOWN, STORAGE AREA AND CONSTRUCTION TRAILER. THIS AREA SHALL BE RESTORED TO ITS ORIGINAL BY THE CONTRACTOR UPON COMPLETION OF CONSTRUCTION.
- 12. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTY OWNER'S AND BUSINESS POINTS OF ACCESS
- 13. ALL FIRE HYDRANTS SHALL BE MARKED AND/OR PROTECTED IN ACCORDANCE WITH THE DELAWARE STATE FIRE REGULATIONS.
- 14. ALL COMMON FACILITIES INCLUDING, BUT NOT LIMITED TO, PAVED AREAS, SIDEWALKS, CURBING, LANDSCAPING, PUBLIC OPEN SPACE, AND/OR DAMAGE FACILITIES SHALL BE KEPT IN GOOD REPAIR AND MAINTAINED IN A SAFE SANITARY CONDITION.
- 15. ALL ROADWAYS ARE TO BE SWEPT FREE OF SEDIMENT ON A DAILY BASIS. CONTRACTOR SHALL MAINTAIN A CLEAN AND ORGANIZED WORKSITE AT ALL TIMES.
- 16. THE CONTRACTOR SHALL OPEN ONLY THAT SECTION OF TRENCH OR ACCESS PITS WHICH CAN BE BACKFILLED AND STABILIZED AT THE END OF EACH WORKING DAY. STEEL PLATES SHALL BE USED ON ANY TRENCH OR ACCESS PITS WHICH MUST REMAIN OPEN OVERNIGHT. THIS REQUIREMENT DOES NOT APPLY TO AREAS COMPLETELY CLOSED AND SECURE FROM VEHICULAR OR PEDESTRIAN TRAFFIC.
- 17. ALL MATERIALS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- 18. CONTRACTOR SHALL PROVIDE ALL NECESSARY ADAPTER FITTINGS OR REDUCERS REQUIRED TO CONNECT TO EXISTING UTILITIES.
- 19. THE CONTRACTOR SHALL USE ONLY NEW MATERIALS, PARTS, AND PRODUCTS. ALL MATERIALS SHALL BE STORED SO AS TO ASSURE THE PRESERVATION OF THEIR QUALITY AND FITNESS FOR THE INTENDED WORK.
- 20. THE CONTRACTOR SHALL MAINTAIN ONE COMPLETE SET OF CONTRACT DRAWINGS ON WHICH HE SHALL NOTE, IN RED, THE ALIGNMENTS AND INVERTS OF ALL UNDERGROUND UTILITIES INSTALLED OR ENCOUNTERED DURING THE PROSECUTION OF THE WORK. ALL DISCREPANCIES BETWEEN THE PLAN LOCATIONS AND ELEVATIONS OF BOTH THE EXISTING AND PROPOSED UTILITIES SHALL BE SHOWN ON THE AS-BUILT DRAWINGS TO BE MAINTAINED BY THE CONTRACTOR IN THE FIELD.
- 21. IT IS THE INTENT OF THE CONTRACT DOCUMENTS TO PROVIDE SUFFICIENT INFORMATION TO THE CONTRACTOR TO COMPLETE THE WORK. ALL OTHER INCIDENTAL WORK REQUIRED BY THE DRAWINGS OR SPECIFICATIONS FOR WHICH NO PAYMENT IS SPECIFICALLY PROVIDED AND ANY WORK OR MATERIALS NOT THEREIN SPECIFIED WHICH ARE REQUIRED TO COMPLETE THE WORK AND WHICH MAY FAIRLY BE IMPLIED AS INCLUDED IN THE CONTRACT OR WHICH THE ENGINEER MAY JUDGE TO BE SO INCLUDED SHALL BE FURNISHED AND CONSTRUCTED BY THE CONTRACTOR.
- 22. CONTRACTOR SHALL VERIFY THAT ALL APPLICABLE PERMITS HAVE BEEN OBTAINED PRIOR TO THE START OF WORK.
- 23. TRAFFIC AND SAFETY CONTROL SHALL BE MAINTAINED DURING CONSTRUCTION IN CONFORMANCE WITH THE CURRENT REVISION OF THE MANUAL ON DELAWARE TRAFFIC CONTROLS FOR STREET AND HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.

SEWER NOTES:

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF MILFORD STANDARD SPECIFICATIONS AND DETAILS.
- 2. REPRESENTATIVES DNREC, MAY INSPECT THIS PROJECT AT ANY TIME DURING THE CONSTRUCTION.
- 3. IN ACCORDANCE WITH TEN STATES STANDARDS, A MINIMUM TEN (10) FOOT HORIZONTAL AND EIGHTEEN (18) INCH VERTICAL SEPARATION MUST BE MAINTAINED BETWEEN WATER MAINS AND SANITARY SEWER. WHEN IT IS IMPOSSIBLE TO OBTAIN THE MINIMAL 10 FOOT HORIZONTAL SEPARATION AND/OR 18 INCH VERTICAL SEPARATION BETWEEN WATER MAINS AND SANITARY SEWER, THE OFFICE OF DRINKING WATER MUST SPECIFICALLY APPROVE ANY VARIANCE SUPPORTED BY DATA FROM THE DESIGN ENGINEER.
- 4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE APPROVAL AND ACCEPTANCE OF THE SANITARY SEWER BY THE CITY OF MILFORD UPON COMPLETION OF CONSTRUCTION.

SEQUENCE OF CONSTRUCTION

- 1. SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE CITY OF MILFORD AND KENT CONSERVATION DISTRICT.
- 2. CONTACT THE COUNTY FIVE DAYS PRIOR TO ANY SITE DISTURBANCE.
- INSTALL EROSION AND SEDIMENT CONTROL MEASURES AS REQUIRED. THE CONTRACTOR SHALL RECEIVE APPROVAL FROM THE CITY AND KENT CONSERVATION DISTRICT PRIOR TO EARTH MOVING ACTIVITY.

WATER

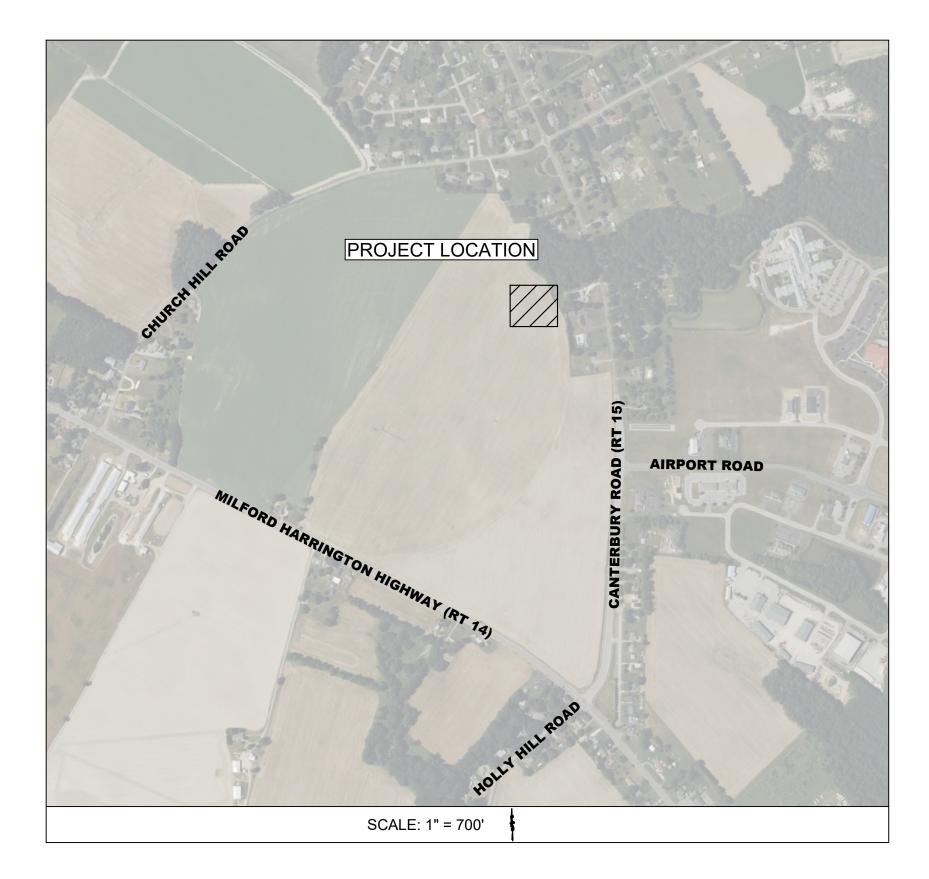
W

- 4. CLEAR AND GRUB AS NEEDED.
- 5. INSTALL THE FORCE MAIN PIPING TO THE DISCHARGE POINT AS SHOWN BY OTHERS. THE PIPING SHALL BE TESTED AND ACCEPTED PRIOR TO THE PUMP STATION STARTUP.
- 6. INSTALL THE PUMP STATION AND ALL SITE IMPROVEMENTS.
- 7. TESTING OF THE PUMP STATION SHALL BE CONDUCTED ONCE ALL PIPING AND STRUCTURES HAVE BEEN TESTED AND ACCEPTED AS REQUIRED.
- 8. AFTER CONSTRUCTION IS COMPLETE, REMOVE ALL EROSION AND SEDIMENT CONTROL MEASURES. STABILIZE AND RESTORE ALL AREAS AS REQUIRED.

LEGEND					
EXISTING	PROPOSED				
STRUCTURE / BUILDI	ING / OBJECT	FORCEMAIN			
TREE		ARV VAULT			
EX OVER HEAD ELEC		\sim			
EX BURIED TELEPHO					
PAVED ROADWAY		-			
		MJ 90° BEND			
G EX GAS LINE		MJ WYE			
	R FORCE MAIN	MJ 45° BEND			
EX SANITARY SEWER	R	MJ REDUCER			
EX PROPERTY LINE		MJ PLUG VALVE			
EX ELEC. TRANSFOR	RMER W/PAD — –	– – – PROPOSED EASEM	ENT		
EX TELEPHONE BOX					
• EX CLEAN OUT					
O EX BOLLARD				F ARRR	REVIATIONS USED
EX SIGN					
EX WATER VALVE				FM	FORCE MAIN
S EX SANITARY MANWA	'AY			МН	MANHOLE
EX FIRE HYDRANT				P.E.	PROFESSIONAL ENGINEER
O EX GAS METER				S	SEWER MANHOLE
EX CABLE BOX				SS	SANITARY SEWER PIPE

CITY OF MILFORD, DELAWARE **CONSTRUCTION PLANS** FOR CORPORATE CENTER PUMPING STATION





INDEX OF SHEETS			
TABLE OF CONTE	NTS		REVISED PER KENT COUNTY COMMENTS REVISION
COVER SHEET		_	COM
PUMP STATION PLAN & ELEVA		_	
			ENT COUN
PUMP STATION DETA		-1	PER KE
STATION ELECTRICAL		┫╎╎╎╎	ISED I
ELECTRICAL DETAI	LS	┓╷╷╷	
ELECTRICAL ONE-LI	NE		07-10-2024 DATE
ELECTRICAL CONTROL DI	AGRAMS		
9 SHEETS		-	L.
MCC PUMP STATION FLOW CC	NTRIBUTORS		CITY OF MILFORD 119 S. WALNUT STREET MILFORD, DE 19963 PH. (302) 422-6616
	EDUs	PER:	CITY OF MILFORD 9 S. WALNUT STRE AILFORD, DE 1996: PH. (302) 422-6616
		OWNER/DEVELOPER:	TY OF FORI H. (302
HICKORY GLEN CASCADES PUMP STATION	<u> </u>	ER/DE	19 C
STRIP LOTS	30	OWN	
			τ.) ε
TOTAL EDUS EXPECTED TOTAL DAILY FLOW (250 GPD/E	1,238 DU) 309,500		
)]]]]]]]]]]]]]]]]]]]
			CI TECHNOLOGIES, I ENGINEERS - PLANNERS - SURVEYORS 614 N. Dupont Highway, Suite 100 Dover DE. 19901 PHONE: (302) 747-5999 FAX: (302) 731-7807 Website: www.
FLOW CALCULAT	IONS		SUR SUR Dover 507 V
FLOW (GPD)/EDU	250		O(
EDU COUNT AVERAGE DAILY FLOW (GPD	1,238		TECHNOLOGIES Engineers - Planners - Surveyo 14 N. Dupont Highway, Suite 100 Dover DE. 1 22) 747-5999 FAX: (302) 731-7807 Websit
PEAKING FACTOR	1.55	- PLAN:	Highw FAX:
PEAK HOURLY FLOW (GPD)		С - РС Е - РС	JCI DuPont 7-5999
PEAK HOURLY FLOW (GPM) PUMP DESIGN FLOW (GPM)		0 SCALE	TTE ENGI 02) 747
PUMP DESIGN TDH (FT)	88		
VELOCITY (FPS) IN 6" PIPE	4.41		KCI
VELOCITY (FPS) IN 8" PIPE LEAD PUMP ON ELEV., FT.	2.57		
FM HIGH SPOT ELEV., FT.	42.25		i i i i i i i i i i i i i i i i i i i
LEAD PUMP OFF ELEV., FT.	20.40		
STATIC HEAD, FT. COUNTY FM HEAD, FT.	81.85		
FM LENGTH, FT.	57.65		
PS & FM FRICTION LOSS, FT	6.17		
DESIGN INCREASED TO MEET MINIAU 8" FM. 8" FM SELECTED TO MEET POS FOR MILFORD CORPORATE CENTER PEAKING FACTOR = (20+2[1238/10]^0.5	SIBLE FUTURE FLOW		TY OF MILFORD ENTER PUMPING STATIC KENT COUNTY DEL
		COVER SHEE	CIT CORPORATE C MILFORD
BE 1–80 1–80 1–80 PRO	AISS UTILITY DELMARVA VIEW DIG CALL 0-282-8555 (in Del.) 0-441-8355 (Md., Va.) TECT YOURSELF, GIVE TWO WORKING DAYS NOTICE	PROFESS IHEREBARED OR DULY LICENSED THE LAWS LICENSED THE LAWS LICENSED SIGNATURE: Drafting: Design: SCALE:	TJG Check: KAN KAN Check: DRS
BE 1–80 INGINEER	DELMARVA	PROFESS IHEREBYCERT PREPARED OR DULY LICENSET THE LAWS LICE EXPIRAT SIGNATURE: Drafting: Design:	TJG Check: KAN

SHEET No.

G-01

PS-01

PS-02

PS-03

E-01

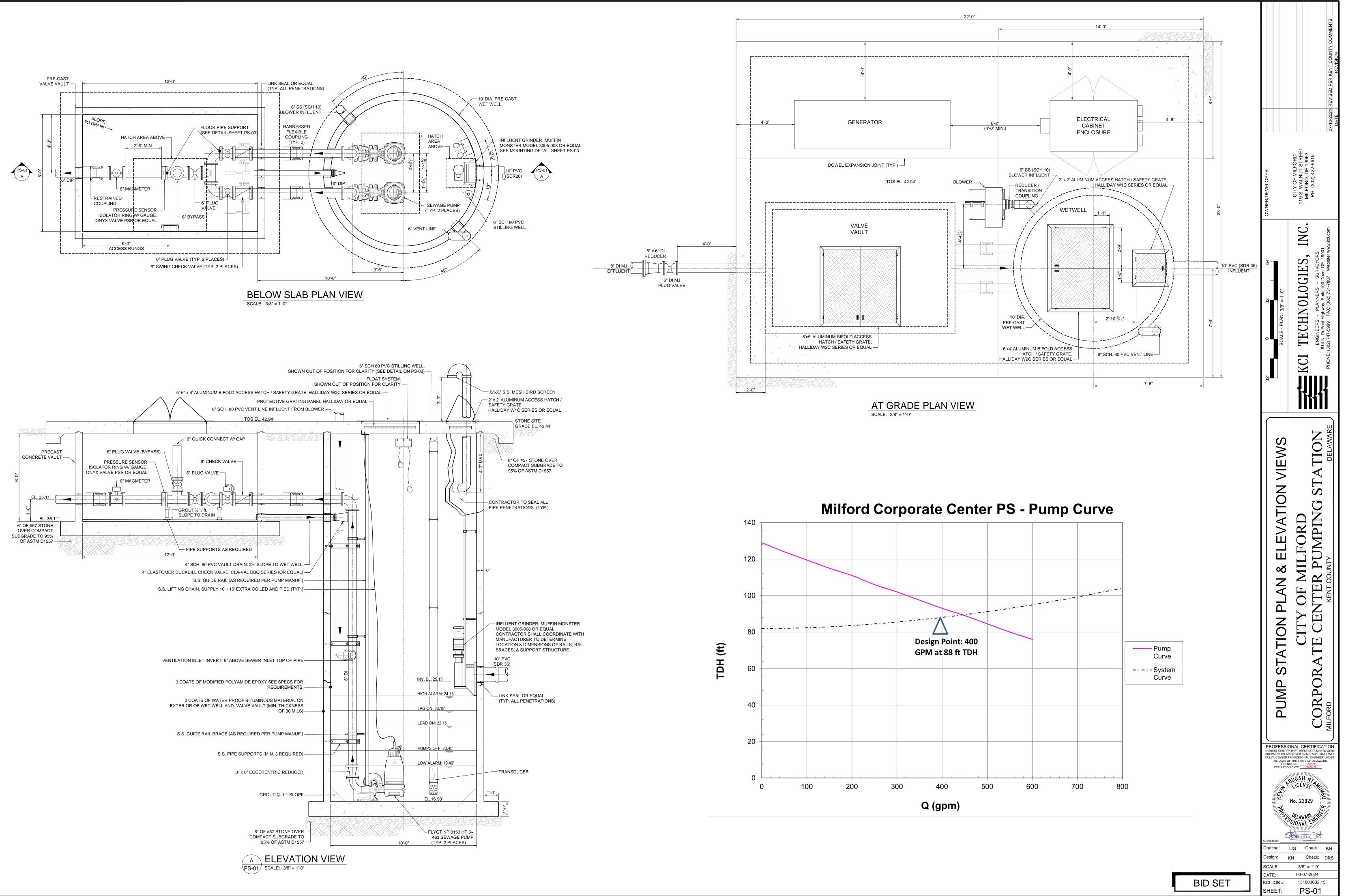
E-02

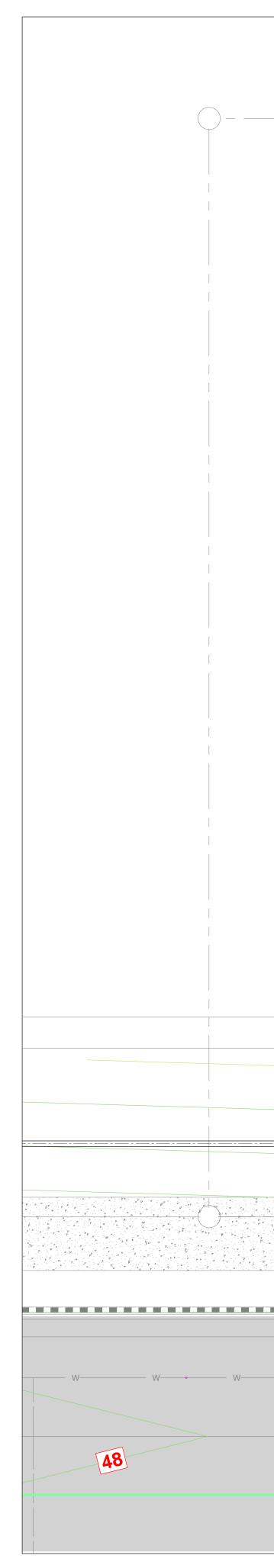
E-03

E-04

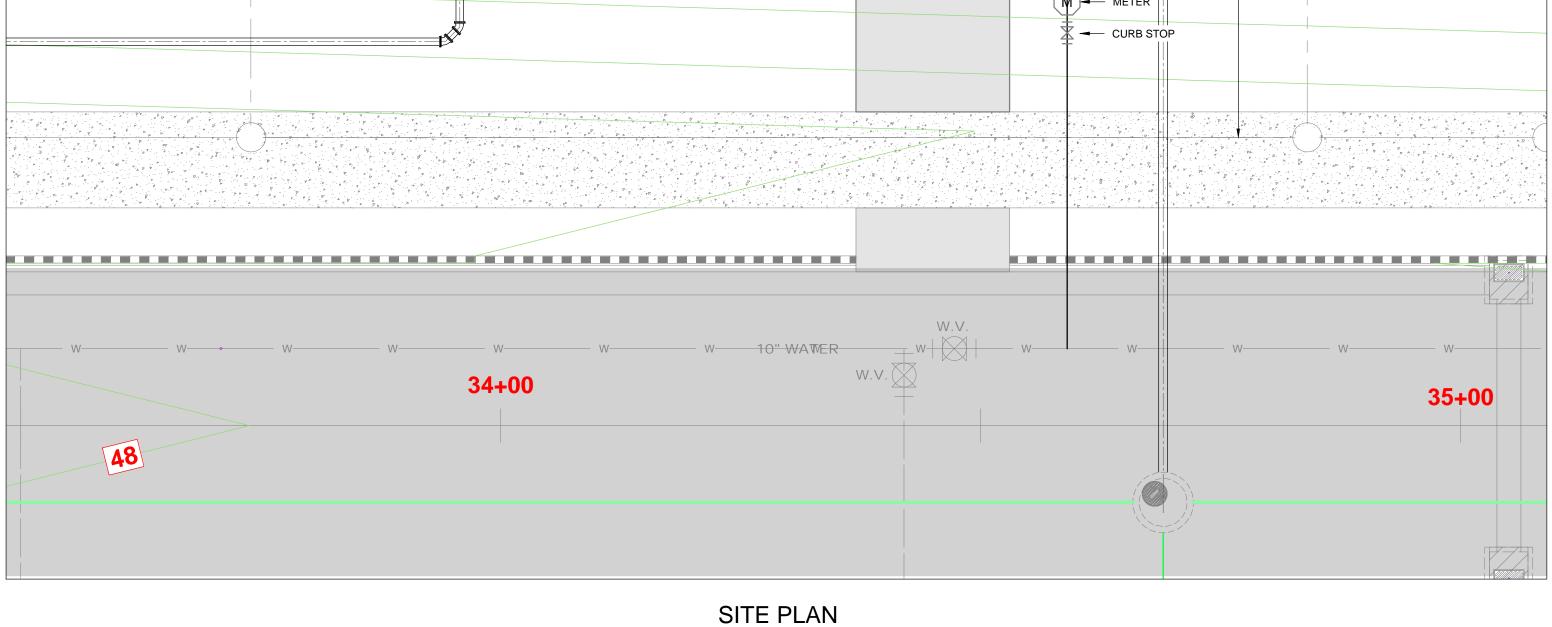
E-05

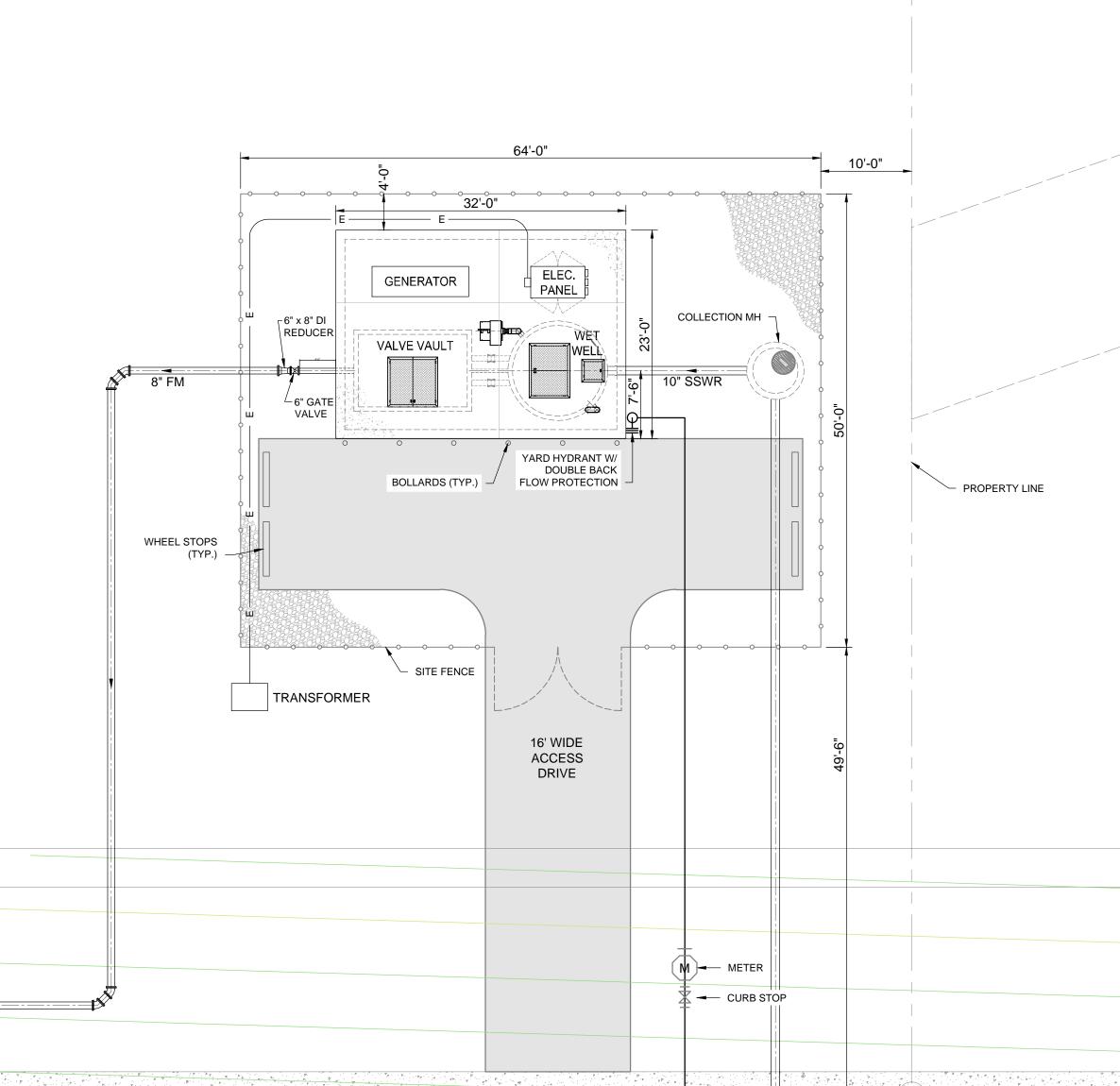
CITY OF MILFORD CITY MILFORD, DELAWAR



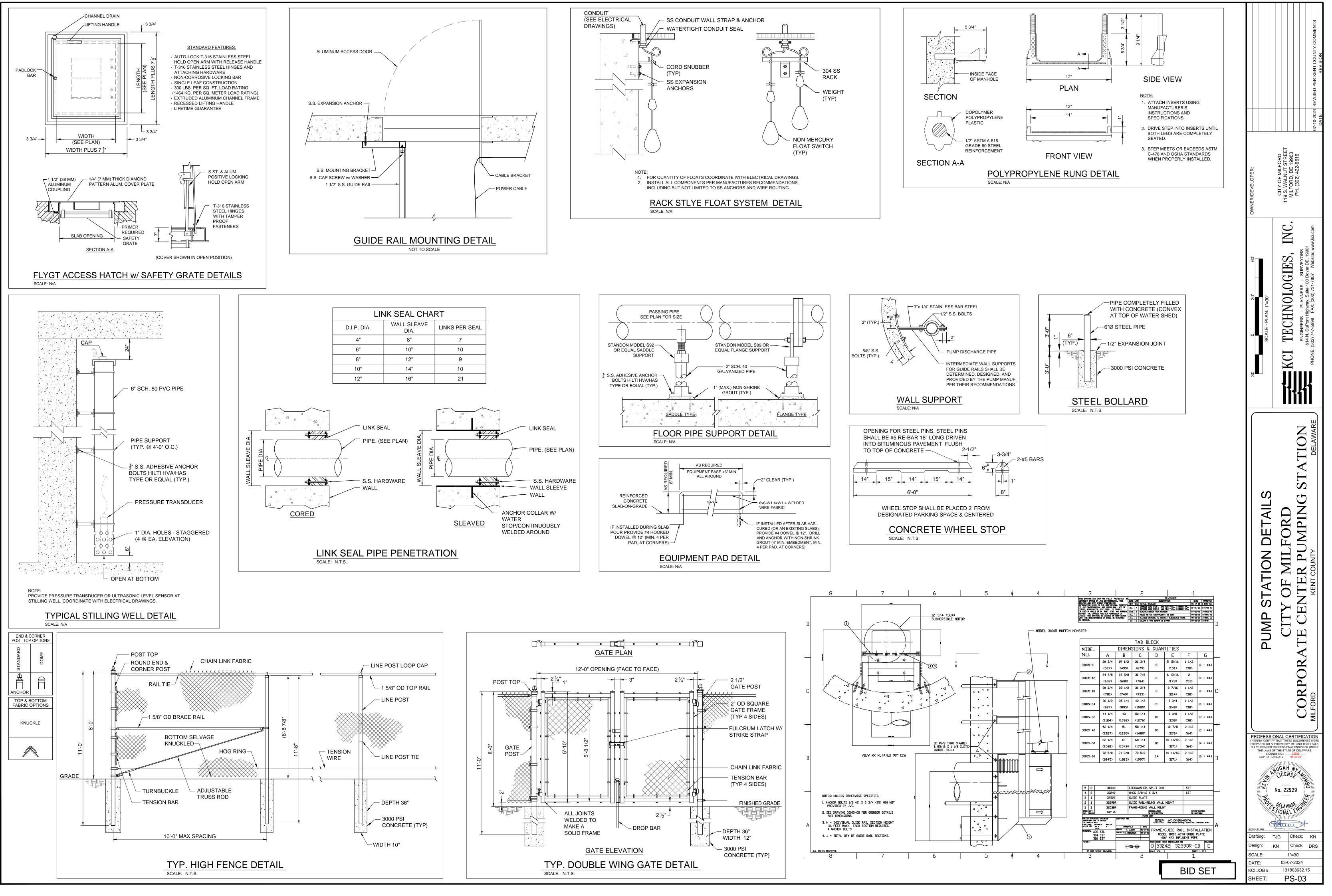








	07-10-2024 REVISION DATE REVISION
	OWNER/DEVELOPER: CITY OF MILFORD 119 S. WALNUT STREET MILFORD, DE 19963 PH. (302) 422-6616
	32" 0 32" 64" SCALE - PLAN: 3/8" = 1'-0" SCALE - PLAN: 3/8" = 1'-0" INC. ENGINEERS - PLANNERS - SURVEYORS 614 N. DUPONT Highway, Suite 100 Dover DE. 19901 PHONE: (302) 747-5999 FAX: (302) 731-7807 Website: www.kci.com
	PUMP STATION SITE PLAN CITY OF MILFORD CORPORATE CENTER PUMPING STATION MILFORD KENT COUNTY DELAWARE
BID SET	PROFESSIONAL CERTIFICATION IHEREBY CERTIFY THAT THESE DOCUMENTS WERE PUEPARED OR APPROVED BY ME, AND THAT I AM A DULL CONSED PROFESSIONAL ENGINEER UNDER LUCENSE NO: 22929 EXPIRATION DATE: 06-30-26 No. 22929 No. 22929 No. 22929 No. 22929 SIGNATURE: SYNAR Drafting: TJG Check: KN Design: KN Check: JRS SCALE: 3/8" = 1'-0" DATE: 03-07-2024 KCI JOB #: 131803632.15 SHEET: PS-02



GENERAL ELECTRICAL NOTES:

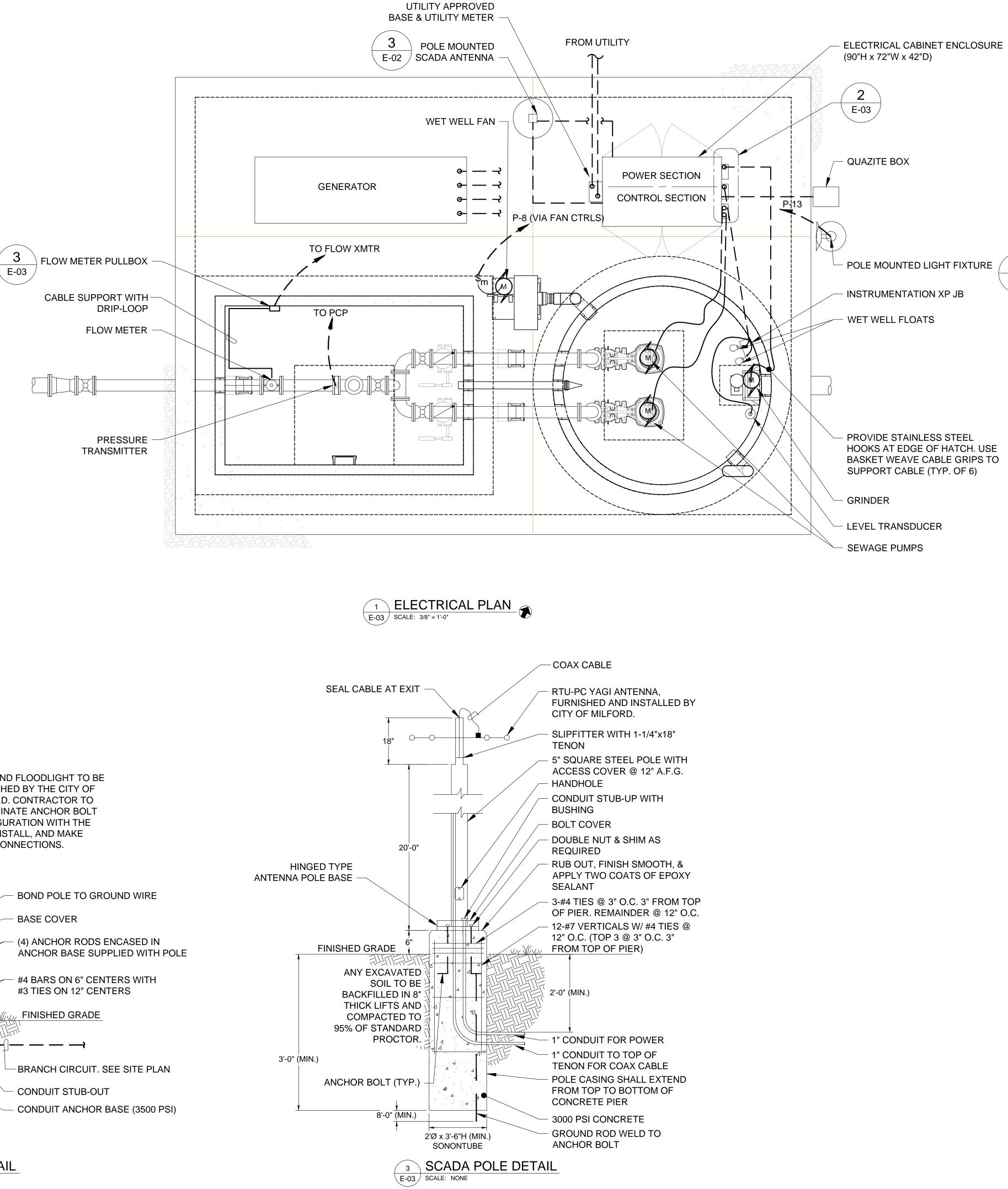
- PROVIDE MATERIALS THAT ARE NEW AND WITHOUT IMPERFECTIONS OR BLEMISHES, AND 1 PROTECTED FROM THE ELEMENTS PRIOR TO CONSTRUCTION.
- COMPLY WITH OWNER'S USE OF PREMISES AND SAFETY REGULATIONS. 2.
- 3. COORDINATE LOCATIONS OF ALL ELECTRICAL EQUIPMENT AND ROUTINGS OF ALL ELECTRICAL FEEDERS (AND ASSOCIATED PULLBOXES) AND BRANCH CIRCUITS WITH ALL OTHER UTILITIES (EXISTING AND NEW), WITH STRUCTURE, AND WITH BUILDING ELEMENTS.
- 4. UNLESS NOTED OTHERWISE, EVERY CONDUIT CONTAINING 120V RATED WIRING AND GREATER, SHALL CONTAIN A SEPARATE INSULATED GROUND WIRE RATED FOR 600V.
- PROVIDE SEPARATE UNSHARED NEUTRAL CONDUCTOR(S) FOR ALL BRANCH CIRCUITS 5. UTILIZING A NEUTRAL (I.E. 120V, 277V, ETC). PROVIDE SEPARATE UNSHARED NEUTRAL CONDUCTOR(S) FOR ALL FEEDERS REQUIRING A NEUTRAL (I.E. 1 PHASE-3 WIRE, 3 PHASE-4 WIRE FEEDERS). SHARING OF NEUTRAL CONDUCTORS BETWEEN ANY CIRCUIT (BRANCH OR FEEDER) IS NOT PERMITTED. MULTI-WIRE BRANCH CIRCUITS ARE NOT PERMITTED.
- PROVIDE STRUCTURAL SUPPORTS AS REQUIRED FOR CEILING AND WALL MOUNTED 6. EQUIPMENT.
- PROVIDE ALL CUTTING, PATCHING, AND ACCESS PANELS REQUIRED FOR ELECTRICAL WORK. 7. REPAIR AND REFINISH DISTURBED FINISH MATERIALS AND OTHER SURFACES TO MATCH ADJACENT UNDISTURBED SURFACES.
- ALL WORK AND EQUIPMENT SHALL COMPLY WITH ALL AUTHORITIES HAVING JURISDICTION, 8. INCLUDING BUT NOT LIMITED TO THE INTERNATIONAL MECHANICAL CODE, THE LOCAL FIRE MARSHALL, UNDERWRITERS LABORATORY (UL), AND THE NATIONAL ELECTRICAL CODE (NEC). MODIFICATIONS REQUIRED BY THE ABOVE SAID AUTHORITIES TO BRING THE SPACE UNDER CONTRACT UP TO CODE SHALL BE MADE WITHOUT ADDITIONAL CHARGE WHERE CONTRACT DOCUMENT REQUIREMENTS ARE IN EXCESS OF CODE REQUIREMENTS, THE CONTRACT DOCUMENTS SHALL GOVERN. DEVIATIONS FROM THE CONTRACT DOCUMENTS REQUIRED BY THE ABOVE AUTHORITIES SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW.
- CONTRACTOR SHALL VERIFY ALL POINTS OF CONNECTION BEFORE COMMENCING WORK. 9. CONTRACTOR SHALL REMOVE ALL WASTE MATERIALS. DEBRIS. AND RUBBISH FROM THE SITE AND LEGALLY DISPOSE OF IT.
- 10. A SET OF ELECTRICAL RECORD/COORDINATION DRAWINGS SHALL BE MAINTAINED AT THE JOB SITE. ACTUAL LOCATIONS OF ALL EQUIPMENT, CONDUIT, ETC., AND ALL DEVIATIONS OF THE WORK FROM THAT SHOWN ON THE CONTRACT DOCUMENTS SHALL BE MARKED ON THE RECORD/COORDINATION DRAWINGS. EACH TRADE SHALL REVIEW THE COORDINATION DRAWINGS AND RESOLVE ANY POTENTIAL CONFLICTS WITH OTHER TRADES PRIOR TO INSTALLING ANY PORTION OF THERE WORK.
- 11. WORK SHALL BE EXECUTED IN A GOOD WORKMANLIKE MANNER USING MECHANICS SKILLED IN THEIR RESPECTIVE TRADES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES FOR ALL COORDINATION OF WORK UNDER THIS CONTRACT. MAINTAIN THE CONSTRUCTION PREMISES IN A NEAT AND ORDERLY CONDITION AT THE END OF EACH WORKING DAY.
- 12. CONTRACTOR SHALL MAKE ALL FINAL EQUIPMENT CONNECTIONS AND PROVIDE THE NECESSARY DEVICES, ETC. FOR A COMPLETE AND OPERABLE SYSTEM.
- 13. ARRANGE CONDUIT, WIRING, EQUIPMENT AND OTHER WORK GENERALLY AS SHOWN, PROVIDING PROPER CLEARANCE AND ACCESS. CAREFULLY EXAMINE ALL CONTRACT DRAWINGS AND COORDINATE THE WORK WITH ALL TRADES. WHERE DEPARTURES ARE PROPOSED BECAUSE OF FIELD CONDITIONS OR OTHER CAUSES, PREPARE AND SUBMIT DETAILED DRAWINGS FOR ACCEPTANCE.
- 14. THE CONTRACT DRAWINGS ARE DIAGRAMMATIC. ALL OFFSETS, BENDS, FITTINGS AND ACCESSORIES ARE NOT NECESSARILY SHOWN, PROVIDE ALL SUCH ITEMS AS REQUIRED FOR COMPLETE OPERATIONAL SYSTEM.
- 15. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, PLAN REVIEWS AND CERTIFICATES OF INSPECTION REQUIRED BY THE AUTHORITIES HAVING JURISDICTION OVER THIS WORK.
- 16. COST INCURRED FROM DAMAGES AS A RESULT OF THE CONTRACTOR'S WORK WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. DAMAGES WILL NOT WARRANT COST OR DELAY CLAIMS.
- 17. CONTRACTOR SHALL COMPLY WITH LOCAL AND APPLICABLE CODES. IN THE EVENT OF A CONFLICT, THE MOST STRINGENT SHALL GOVERN. SHOULD A CONFLICT ARISE BETWEEN CONSTRUCTION DOCUMENTS AND APPLICABLE CODES, WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE ENFORCING CODE AUTHORITIES.
- 18. WHERE EVER POSSIBLE, THE CONTRACTOR SHALL OBTAIN ACTUAL ROUGH-IN DRAWINGS FOR THE ACTUAL ITEM OF EQUIPMENT TO BE INSTALLED PRIOR TO ROUGH-IN. THIS SHALL APPLY TO ALL EQUIPMENT, WHETHER IT IS TO BE INSTALLED BY THE CONTRACTOR OR BY OTHERS.
- 19. ANY EXISTING ELECTRICAL WORK SHOWN ON THESE DRAWINGS IS INDICATED FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. THE OWNER AND ENGINEER IN NO WAY WARRANT OR GUARANTEE EITHER THE ACCURACY OR COMPLETENESS OF THIS INFORMATION. FINAL LOCATIONS AND QUANTITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR TO THEIR OWN SATISFACTION.
- 20. THE CONTRACTOR SHALL VISIT THE SITE AND FIELD VERIFY EXISTING CONDITIONS PRIOR TO BEGINNING WORK. ROUTINGS SHOWN ON DRAWINGS ARE DIAGRAMMATIC. CONTRACTOR SHALL VERIFY THAT INTERFERENCES WILL NOT BE ENCOUNTERED. IF ANY DISCREPANCY IS DETECTED, THE CONTRACTOR SHALL BRING IT TO THE OWNER'S ATTENTION WITH **RECOMMENDATIONS FOR OWNER'S APPROVAL.**
- 21. PROVIDE 60-INCHES SLACK WIRE AT EACH OF ALL SPARE INSTRUMENTATION WIRES.
- 22. CONDUIT CONTAINING ANALOG SIGNALS SHALL BE LOCATED 6-INCHES (MINIMUM) AWAY FROM CONDUIT CONTAINING POWER CONDUCTORS OR DISCRETE SIGNALS.
- 23. ALL CONDUIT SHALL BE 3/4-INCH IN SIZE UNLESS OTHERWISE NOTED ON RISER DIAGRAMS.
- 24. SYSTEM INTEGRATOR SHALL VERIFY ALL APPROVED EQUIPMENT AND TERMINATIONS PRIOR TO INSTALLATION. THE SYSTEM INTEGRATOR SHALL VERIFY ALL WIRE COUNTS AND INCLUDE SPARES AS SHOWN HERE IN AND ASSEMBLE INSTRUMENT RISERS FOR CONSTRUCTION. THE RISERS SHALL BE SUBMITTED FOR APPROVAL AS A SHOP DRAWING.
- 25. ALL RELAYS SHALL HAVE LED INDICATION OF STATUS.
- 26. ALL FUSES AND BREAKERS SHALL BE SIZED IN ACCORDANCE WITH NEC.

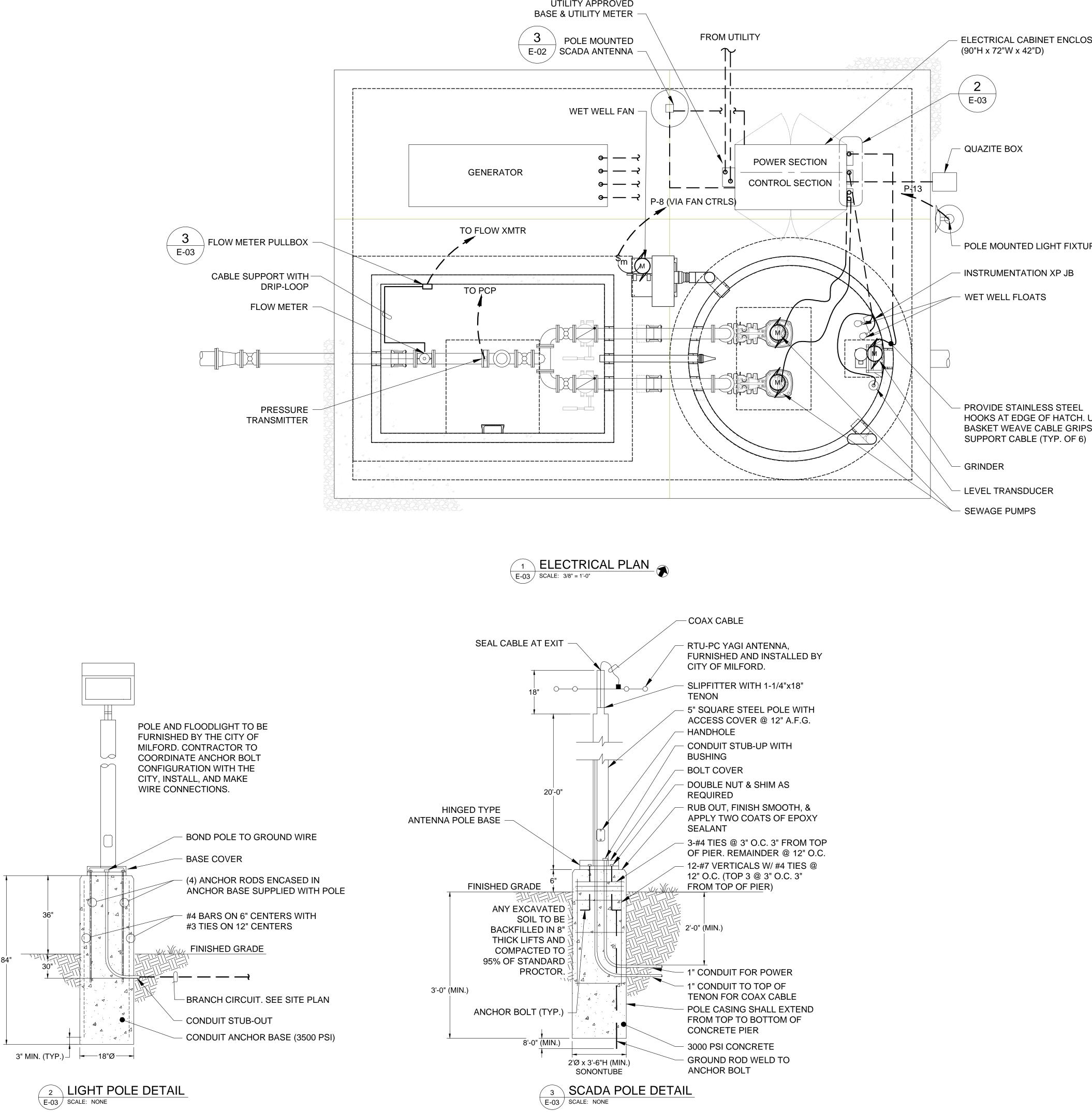
					— . — •		
			ELECTR LEGEND		ELECTRIC	AL CONTROL DIAGRAM SYMBOLS (ECD)	
ELECTRICAL ABBREVIATIONS	KW = KILO			REMOTE	\sim	CIRCUIT BREAKER	∠ COMM
A = AMPERE $AF = AMPERE FRAME$ $AFE = ABOVE EINISHED ELOOP$	LED = LIGH	D BANK CONNECTION BOX T EMITTING DIODE DISPLAY		AT PLC CABINET	° <u></u> ∤≮∘	CONTACTS - NORMALLY CLOSED	
AFF = ABOVE FINISHED FLOOR AFG = ABOVE FINISHED GRADE AIC = AMPERE INTERRUPTING CAPACITY	LSIG = LONG	KED ROTOR AMPS G TIME, SHORT TIME, INSTANTANEOUS, GROUND MUM CIRCUIT AMPACITY	FAULT		어ᅡᅌ	CONTACTS - NORMALLY OPEN	ER KEN
AT = AMPERE TRIP ATS = AUTOMATIC TRANSFER SWITCH	MCB = MAIN	I CIRCUIT BREAKER UAL TRANSFER SWTICH		AT LOCAL PANEL	0	CONTROL RELAY (SEQUENTIAL)	
AUTO = AUTOMATIC AWG = AMERICA WIRE GAUGE	NEC = NATIO	ONAL ELECTRICAL CODE ONAL ELECTRICAL MANUFACTURER'S ASSOCIAT		PANEL BOARD	0 0	DISCONNECT SWITCH	0-2024 R
BC = BATTERY CHARGER C = CONDUIT	P = POLE			AT SYSTEM CONTROL PANEL	ETM	ELAPSED TIME METER	
CB = CIRCUIT BREAKER CPT = CONTROL POWER TRANSFORMER CTRL = CONTROL	PB = PULL PFFB = PROV PH, = PHAS	VIDED FOR FUTURE BREAKER (BUS STRUCTURE) 0	PANEL WIREWAY TERMINATIONS			2D 863 963 963
DP = DISTRIBUTION PANEL DWG = DRAWING(S)	PLC = PROC	GRAMMABLE LOGIC CONTROLLER SE MONITOR	•	WIRING CONNECTIONS	000	FLOAT SWITCH - NORMALLY OPEN, CLOSE ON LEVEL DROP	PER: MILFORD VUT STREI , DE 19963 , 422-6616
DPDT = DOUBLE POLE-DOUBLE THROW ECD = ELECTRICAL CONTROL DIAGRAM	PRI = PRIM PSI = POUM	IARY NDS PER SQUARE INCH		REMOTE TERMINATIONS	°∕°	FLOAT SWITCH - NORMALLY OPEN, CLOSE ON LEVEL RISE	R/DEVELOPER: CITY OF MILF 9 S. WALNUT MILFORD, DE PH. (302) 422
ELEC = ELECTRICAL ETM = ELAPSED TIME METER EX = EXISTING	RGS = RIGIE	CYCLE TIMER D GALVANIZED STEEL OTE TERMINAL UNIT		- PANEL CONNECTIONS	N.C.	FLOW SWITCH - NORMALLY CLOSED,	OWNER,
FLA = FULL LOAD AMPS FVNR = FULL VOLTAGE NON-REVERSING	SPD = SURC	GE PROTECTION DEVICE NLESS STEEL		- REMOTE CONNECTIONS	N.C.	OPEN ON NO FLOW	
GFI = GROUND FAULT INTERRUPTING GND,G = GROUND	TB = TERN	LDED TWISTED PAIR MINAL BLOCK	+	POWER SUPPLY CONNECTION		FUSE	s 901 www.kci.cc
HMI = HUMAN MACHINE INTERFACE HP = HORSEPOWER	U.L. = UNDE	ERGROUND ERWRITER'S LABORATORIES		FOWER SOFFET CONNECTION	- +	GROUND (GND)	RVEYOR website:
I/O = INPUT/OUTPUT ISR = INTRINSICALLY SAFE RELAY JB = JUNCTION BOX	VAC = VOLT	ΓΑΜΡERES ΓS / ALTERNATING CURRENT ΓS / DIRECT CURRENT			НОА		OGIE surve e 100 Dover DI 31-7807 We
JH = JACKET HEATER KCMIL = THOUSAND CIRCULAR MILS	W = WIRE XDCR = TRAN	E		IENT SYMBOLS			ANNEL 30, Suit (302) 7
KV = KILOVOLT KVA = KILOVOLT AMPERE	XFMR = TRAN XMTR = TRAN	NSFORMER	Ú	AIR RELEASE VALVE	لما بەرەمە	HAND-OFF AUTOMATIC SWITCH	CHN LEERS - PL JPONT HIGHWE
PLAN SYMBOLS	CONDUIT	LEGEND:		CALIBRATION CYLINDER	Q√ 00-7-0	LIMIT SWITCH - NORMALLY OPEN - NORMALLY CLOSED	ENGIN 614 N. D VE: (302) 747
20A, 1 POLE, 120V MAN Sm STARTER (TOGGLE SW	/ITCH TYPE) WITH		\bigtriangledown	CENTRIFUGAL PUMP	0 0000	MANUAL MOTOR STARTER,	KC
$\begin{array}{ccc} & & \text{STARTER} (\text{TOGGLE SW} \\ & & \text{THERMAL OVERLOAD} \end{array}$	PROTECTION A - QUANTI B - SIZE OF C - QUANTI	TY OF CONDUCTORS CONDUIT (LARGER THAN 3/4-INCH) TY OF SPARE CONDUCTORS INCLUDED L COUNT (ITEM-A)	CT'S	CURRENT TRANSFORMER CONNECTIONS AT PHASE CONDUCTORS		SINGLE-POLE OVERCURRENT ELEMENT THERMOSTAT	
EQUIPMENT (SURFACE				DELTA-WYE POWER TRANSFORMER	РМ	PHASE MONITOR	
RECESSED)		-	<u> </u> ' =	SERVICE METER	Ŕ	PLC OUTPUT (RTU OUTPUT)	ON LAWARE
						POWER DISTRIBUTION BLOCK	
CONDUIT ROUTING: UI	NDERGROUND			DUPLEX RECEPTACLE		PRESSURE SWITCH - NORMALLY OPEN -	TA' S
				SINGLE RECEPTACLE	~ <u>7</u> °	CLOSES ON PRESSURE DROP	
LPA-1 HOMERUN TO PANELE INDICATES PANEL AND					Š	PRESSURE SWITCH - NORMALLY OPEN - CLOSES ON PRESSURE RISE	
RACEWAY-CONDUIT T	URNED DOWN		ТВ	TERMINAL ENCLOSURE	مـلـه	PUSH-BUTTON - MOMENTARY CONTACT	AL AL
			D-1	ELECTRICAL DISCONNECT		PUSH-BUTTON - MOMENTARY CONTACT START/STOP	II R II S II S
ABOVE GRADE BELOW GRADE RACEWAY-CHANGE IN			\bigcirc	JUNCTION BOX, HAZARDOUS LOCATION	പ്പ	PUSH-PULL BUTTON - MAINTAINED CONTACT	
ACEWAY-CHANGE IN	ELEVATION		J	JUNCTION BOX, NON-HAZARDOUS LOCATI		PUSH TO TEST (TRANSFORMER TYPE) INDICATING LAMP - X	LEH LEH
PLUG AND CORD CON	NECTION		Ų	FLOAT		INDICATES LENS COLOR: $R = RED (RUNNING)$ $B = BLUE (POSITION)$ $G = GREEN (STOPPED)$ $Y = YELLOW (POSITION)$	SAL SAL SAL
GFI GFI: GROUND FAULT C			م م			G = GREEN (STOPPED)Y = YELLOW (POSITION)W = WHITE (POWER)A = AMBER (ALARM)	RIC CE
WP: WEATHER PROOF				FLOW METER (MAGNETIC)	RCT	REPEAT CYCLE TIMER	
\$ SWITCH, 20A, 2P, 3W			G	GENERATOR	٥٩	SOLENOID	II SA II
EQUIPMENT ENCLOSURE	Ξ		JB	JUNCTION BOX	0-M-0	STARTER OR CONTACT COIL - DESIGNATION AS INDICATED	POR EI
GROUND ROD				MOTORIZED BUTTERFLY	. I		RP NP
GROUND ROD WITH TES	T WELL			VALVE		START-STOP PUSHBUTTON - MAINTAINED CONTACT	
			M	MOTOR			PROFESSIONAL CERTIFICATION
NEMA RATING O			Μ	MOTOR ACTUATOR	SPD	SURGE PROTECTION DEVICE	I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF DELAWARE. LICENSE NO.: <u>26121</u> EXPIRATION DATE: <u>06-30-26</u>
NEMA ENCLOSURE TYPES FOR MISCELLANED DISCONNECT SWITCHES AND ALL OTHER ELE SPECIFICALLY INDICATED SHALL BE RATED IN	CTRICAL EQUIPMENT ENCLOSURES NO			MOTORIZED BALLVALVE	م کے ہ _{N.C.}	THERMOSTAT, NORMALLY CLOSED, OPEN ON TEMP. RISE	LANKING VALE
· EXTERIOR APPLICATIONS: NEMA 4X S	TAINLESS STEEL JNLESS NOTED OTHERWISE)		M	MOTORIZED GATE VALVE	٥ ج ٥ _{٨.٥.}	THERMOSTAT, NORMALLY OPEN, CLOSE ON TEMP. RISE	Nat 2624
WET WELL APPLICATIONS: NEMA 4X S WET WELL APPLICATIONS: NEMA 7				MOTORIZED PINCH VALVE		TIMER RELAY	SIGNATURE:
NOTE: THIS IS A STANDARD LEGEND AND ABBREVIAT	IONS		Š	SOLENOID VALVE	°, ∧°	TIMER: NORMALLY OPENED TO CLOSE	Drafting: MD Check: SR Design: MD Check: SR
SHEET. NOT ALL THE INFORMATION SHOWN O THIS LEGEND IS USED ON THIS PROJECT.			×C.	SOLENOID VALVE (3-WAY)	ا مـــ	TIMER: NORMALLY CLOSED TO OPEN BID SET	SCALE: N/A DATE: 03-07-2024 KCI JOB #: 131803632.15
			<u>.</u> 7.2	()	\checkmark		SHEET: E-01

			RICAL CONTROL DIAGRAM		AL CONTROL DIAGRAM SYMBOLS (ECD)	MENTS
ELECTRICAL ABBREVIATIONS	KW = KILOWATT LBC = LOAD BANK CONNECTION BOX		REMOTE			
A = AMPERE $AF = AMPERE FRAME$ $AFF = ABOVE FINISHED FLOOR$	LED = LIGHT EMITTING DIODE DISPLAY LRA = LOCKED ROTOR AMPS		AT PLC CABINET	0-}¥0 ~↓↓~	CONTACTS - NORMALLY ODEN	
AFG = ABOVE FINISHED GRADE AIC = AMPERE INTERRUPTING CAPACITY	LSIG = LONG TIME, SHORT TIME, INSTANTANEOUS, GRO MCA = MINIMUM CIRCUIT AMPACITY	OUND FAULT Δ	AT LOCAL PANEL	에는	CONTACTS - NORMALLY OPEN	
AT = AMPERE TRIP ATS = AUTOMATIC TRANSFER SWITCH AUTO = AUTOMATIC	MCB = MAIN CIRCUIT BREAKER MTS = MANUAL TRANSFER SWTICH		PANEL BOARD	○ —(×××)— ○	CONTROL RELAY (SEQUENTIAL)	L L L L L L L L L L L L L L L L L L L
AUTO = AUTOMATIC AWG = AMERICA WIRE GAUGE BC = BATTERY CHARGER	NEC = NATIONAL ELECTRICAL CODE NEMA = NATIONAL ELECTRICAL MANUFACTURER'S ASSO NFPA = NATIONAL FIRE PROTECTION ASSOCIATION	OCIATION	AT SYSTEM CONTROL PANEL	0 0	DISCONNECT SWITCH	ДАТЕ ДАТЕ
C = CONDUIT CB = CIRCUIT BREAKER	P = POLE PB = PULL BOX	•	PANEL WIREWAY TERMINATIONS	ETM	ELAPSED TIME METER	
CPT = CONTROL POWER TRANSFORMER CTRL = CONTROL	PFFB = PROVIDED FOR FUTURE BREAKER (BUS STRUCT PH, = PHASE	TURE)		0 7 0	FLOAT SWITCH - NORMALLY OPEN,	FORD STREET 19963 -6616
DP = DISTRIBUTION PANEL DWG = DRAWING(S) DPDT = DOUBLE POLE-DOUBLE THROW	PLC = PROGRAMMABLE LOGIC CONTROLLER PM = PHASE MONITOR PRI = PRIMARY	•	WIRING CONNECTIONS	-	CLOSE ON LEVEL DROP FLOAT SWITCH - NORMALLY OPEN,	RVDEVELOPER: CITY OF MILF 9 S. WALNUT MILFORD, DE PH. (302) 422
ECD = ELECTRICAL CONTROL DIAGRAM ELEC = ELECTRICAL	PSI = POUNDS PER SQUARE INCH RCT = RUN CYCLE TIMER		REMOTE TERMINATIONS	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	CLOSE ON LEVEL RISE	ER/DEVE CITY MILFO PH. (3
ETM = ELAPSED TIME METER EX = EXISTING	RGS = RIGID GALVANIZED STEEL RTU = REMOTE TERMINAL UNIT		PANEL CONNECTIONS	N.C.	FLOW SWITCH - NORMALLY CLOSED, OPEN ON NO FLOW	Z MO
FLA = FULL LOAD AMPS FVNR = FULL VOLTAGE NON-REVERSING GFI = GROUND FAULT INTERRUPTING	SPD = SURGE PROTECTION DEVICE S.S. = STAINLESS STEEL STP = SHIELDED TWISTED PAIR		- REMOTE CONNECTIONS	n ^F n		NC.
GND,G = GROUND HMI = HUMAN MACHINE INTERFACE	TB = TERMINAL BLOCK UG = UNDERGROUND	+	POWER SUPPLY CONNECTION		FUSE	S, I E. 19901 bsite: www.
HP = HORSEPOWER $I/O = INPUT/OUTPUT$	U.L. = UNDERWRITER'S LABORATORIES VA = VOLTAMPERES			- 1	GROUND (GND)	SURVEY SURVEY Dover DE 007 Web
ISR = INTRINSICALLY SAFE RELAY JB = JUNCTION BOX JH = JACKET HEATER	VAC = VOLTS / ALTERNATING CURRENT VDC = VOLTS / DIRECT CURRENT W = WIRE	EQUIPM	IENT SYMBOLS			NERS - Suite 100
KCMIL = THOUSAND CIRCULAR MILS KV = KILOVOLT	XDCR = TRANSDUCER XFMR = TRANSFORMER	 └	AIR RELEASE VALVE		HAND-OFF AUTOMATIC SWITCH	CHNO UPONT HIGHWAY, S
KVA = KILOVOLT AMPERE	XMTR = TRANSMITTER			બ¦ખ્		TECT ENGINEERS 14 N. DUPONT 02) 747-5999
PLAN SYMBOLS	CONDUIT LEGEND:		CALIBRATION CYLINDER	\$\vee\$0\$\	LIMIT SWITCH - NORMALLY OPEN - NORMALLY CLOSED	
20A, 1 POLE, 120V MANUAL MOTOR \$STARTER (TOGGLE SWITCH TYPE) W	А#14-В (С)	\bigcirc	CENTRIFUGAL PUMP	0000	MANUAL MOTOR STARTER,	KC
THERMAL OVERLOAD PROTECTION	A - QUANTITY OF CONDUCTORS B - SIZE OF CONDUIT (LARGER THAN 3/4-INCH) C - QUANTITY OF SPARE CONDUCTORS INCLUDED	CT'S	CURRENT TRANSFORMER CONNECTIONS	S 000	OVERCURRENT ELEMENT THERMOSTAT	
TRANSFER SWITCH, TYPE AS NOTED	IN TOTAL COUNT (ITEM-A)		DELTA-WYE POWER TRANSFORMER	PM	PHASE MONITOR	
RECESSED)		÷ .		Ŕ	PLC OUTPUT (RTU OUTPUT)	ON
CONDUIT ROUTING			SERVICE METER		POWER DISTRIBUTION BLOCK	
	D		DUPLEX RECEPTACLE			LA S
FLEXIBLE CONDUIT			SINGLE RECEPTACLE	0 <u> </u>	PRESSURE SWITCH - NORMALLY OPEN - CLOSES ON PRESSURE DROP	№
LPA-1 HOMERUN TO PANELBOARD, NOTAT INDICATES PANEL AND CIRCUIT	TION			\sim	PRESSURE SWITCH - NORMALLY OPEN - CLOSES ON PRESSURE RISE	
RACEWAY-CONDUIT TURNED DOWN	١	ТВ	TERMINAL ENCLOSURE	مله	PUSH-BUTTON - MOMENTARY CONTACT	AL I ARI API
		D-1	ELECTRICAL DISCONNECT		PUSH-BUTTON - MOMENTARY CONTACT START/STOP	ER/ UN
ABOVE GRADE BELOW GRADE RACEWAY-CONDUIT TURNED UP		\bigcirc	JUNCTION BOX, HAZARDOUS LOCATION		PUSH-PULL BUTTON - MAINTAINED CONTACT	ENI ENI PULLEN
ACEWAY-CHANGE IN ELEVATION		\bigcirc	JUNCTION BOX, NON-HAZARDOUS LOCAT		PUSH TO TEST (TRANSFORMER TYPE) INDICATING LAMP - X	
PLUG AND CORD CONNECTION		Q	FLOAT		INDICATES LENS COLOR: $R = RED (RUNNING)$ $B = BLUE (POSITION)$ $G = GREEN (STOPPED)$ $Y = YELLOW (POSITION)$	CAL EN]
GFI GFI GFI: GROUND FAULT CIRCUIT INTER		ø (⊡)	FLOW METER (MAGNETIC)		W = WHITE (POWER) A = AMBER (ALARM)	CE CE
WP: WEATHER PROOF COVER SINGLE POLE LIGHTING CONTROL TO	OGGLE			RCT	REPEAT CYCLE TIMER	
\$ SWITCH, 20A, 2P, 3W		R	GENERATOR	0∕~0	SOLENOID	ELE ELE
		JB	JUNCTION BOX	0-M-0	STARTER OR CONTACT COIL - DESIGNATION AS INDICATED	
						DRP BRD
Image: Optimized Sector Control GROUND ROD WITH TEST WELL		\ ↓	VALVE		START-STOP PUSHBUTTON - MAINTAINED CONTACT	
		M	MOTOR			PROFESSIONAL CERTIFICATION
NEMA RATING OF ENCLO		М	MOTOR ACTUATOR	SPD	SURGE PROTECTION DEVICE	PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF DELAWARE. LICENSE NO:26121 EXPIRATION DATE:06-30-26
DISCONNECT SWITCHES AND ALL OTHER ELECTRICAL EQU SPECIFICALLY INDICATED SHALL BE RATED IN ACCORDANC	JIPMENT ENCLOSURES NOT		MOTORIZED BALLVALVE	٥ ٢ ٥ _{N.C.}	THERMOSTAT, NORMALLY CLOSED, OPEN ON TEMP. RISE	SETH D. RANG
EXTERIOR APPLICATIONS: NEMA 4X STAINLESS STE INTERIOR APPLICATIONS: NEMA 12 (UNLESS NOTE) VALUE VALUE ADDITIONS: NEMA 4X STAINLESS STE	D OTHERWISE)	M	MOTORIZED GATE VALVE	٥ ج ٥ _{N.O.}	THERMOSTAT, NORMALLY OPEN, CLOSE ON TEMP. RISE	Nation 1
 VALVE VAULT APPLICATIONS: NEMA 4X STAINLESS STE WET WELL APPLICATIONS: NEMA 7 			MOTORIZED PINCH VALVE	0O	TIMER RELAY	SSIONAL ENGINE
NOTE: THIS IS A STANDARD LEGEND AND ABBREVIATIONS		or S	SOLENOID VALVE	°, ∧°	TIMER: NORMALLY OPENED TO CLOSE	SIGNATURE:Drafting:MDCheck:SRDesign:MDCheck:SR
SHEET. NOT ALL THE INFORMATION SHOWN ON THIS LEGEND IS USED ON THIS PROJECT.		× Ko	SOLENOID VALVE (3-WAY)	مب م	TIMER: NORMALLY CLOSED TO OPEN BID SET	SCALE: N/A DATE: 03-07-2024 KCI JOB #: 131803632.15
		2~2		\checkmark		SHEET: E-01

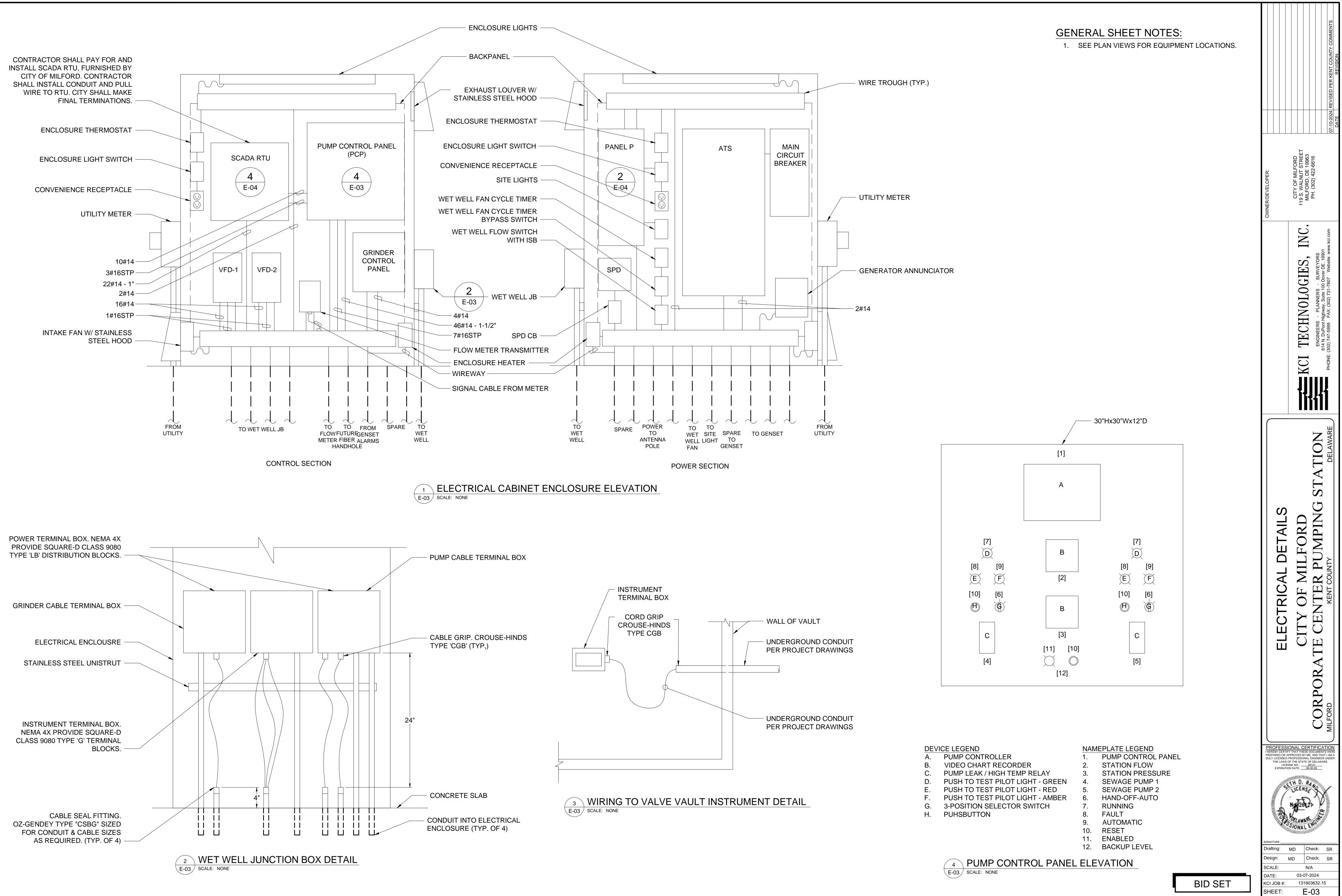
	NEM
DIS	MA ENCLOSURE TYPES SCONNECT SWITCHES A ECIFICALLY INDICATED S
• • •	EXTERIOR APPLICATIC INTERIOR APPLICATION VALVE VAULT APPLICATIC WET WELL APPLICATIC

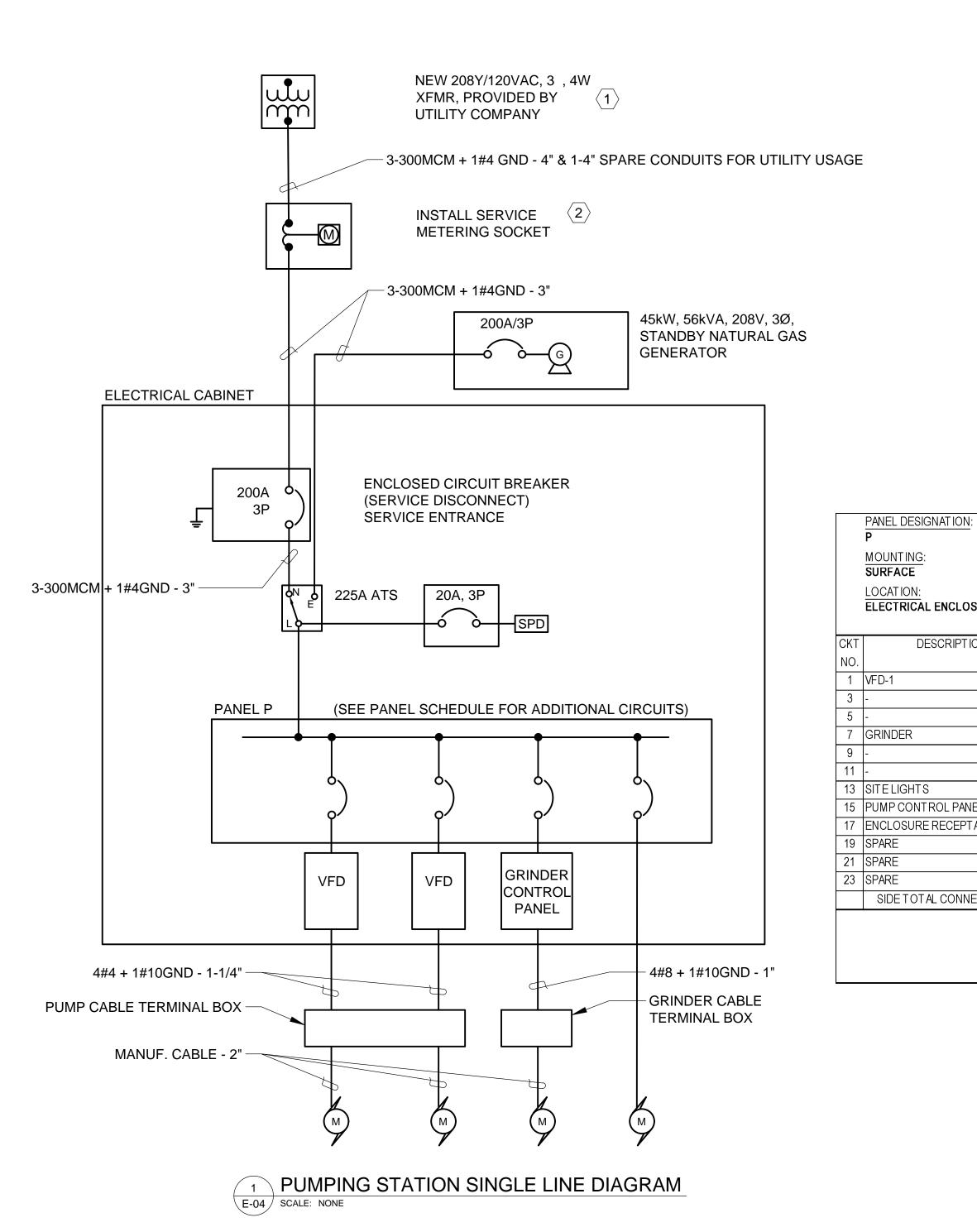
NOTE:
THIS IS A STANDARD LEGEN
SHEET. NOT ALL THE INFOR
THIS LEGEND IS USED ON T





1 E-03	 GENERAL SHEET NOTES: 1. SEE CIVIL SITE PLANS FOR UTILITY LOCATIONS. 2. CONDUIT PATHS SHOWN ARE APPROXIMATE. SEE SINGLE LINE DIAGRAM FOR SIZES NOT INDICATED ON THIS SHEET. 	
2		OWNER/DEVELOPER: CITY OF MILFORD 119 S. WALNUT STREET MILFORD, DE 19963 PH. (302) 422-6616
E-02		32 ^m 0 32 ^m 64 ^m SCALE - PLAN: 3/8 ^m = 1 ^{-10^m} SCALE - PLAN: 3/8 ^m = 1 ^{-10^m}
		STATION ELECTRICAL PLAN CITY OF MILFORD CORPORATE CENTER PUMPING STATION MILFORD KENT COUNTY BELAWARE
		PROFESSIONAL CERTIFICATION Inference or approved by me, and that I am a duly licensed professional engineer under the Laws of the start or pelavare. LICENSE NO: 26121 EXPIRATION DATE: 06-30-26 Opportunity 05-30-26 SIGNATURE: Drafting: MD Check: SR
	BID SET	Design: MD Check: SR SCALE: 3/8" = 1'-0"

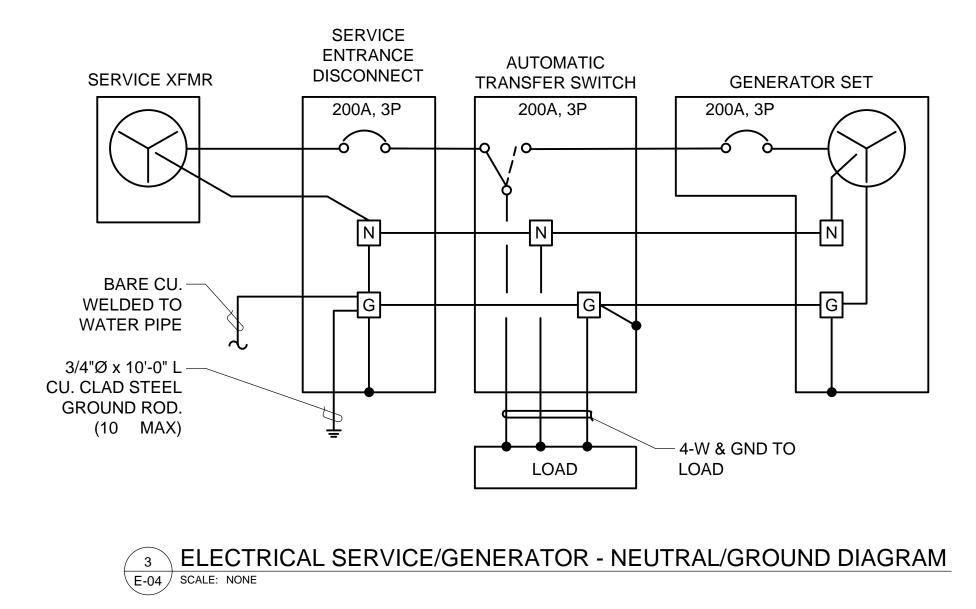




GENERATOR DESIGN CRITERIA

GENERATOR ALTERNATOR CAPACITY RATING VOLTAGE FREQUENCY FLA AT STANDBY RATING EMISSIONS RPM **RUNNING KW/KVA** VOLTAGE DIP LIMIT FREQUENCY DIP LIMIT GENERATOR TYPE FUEL CONSUMPTION

CUMMINS C45 N6 CUMMINS UC2D 45 KW / 56 KVA STANDBY 120/208 VAC, 3-PHASE, 4W 60 HZ 156 EPA TIER 3 1800 23.6 KW / 26.9 KVA 20.0% 7.5% NATURAL GAS 710 SCFH (@100% LOAD)



2	PANEL SCHEDULE
E-04	SCALE: NONE

DESCRIPTION	BF	REAK	ER	LC	AD (K	VA)	WI	RE	GND.	COND.	CON	D. (GND.	WI	RE	LO	AD (K	(VA)	BF	REAKE	ER	DESCRIPTION	CKT
	Α	Р	GFI	A	В	С	NO.	SIZE	SIZE	SIZE	SIZ	E	SIZE	SIZE	NO.	A	В	С	GFI	Ρ	A		NO.
	60	3		5.3			4	4	10	1 1/4	11	4	10	4	4	5.3				3	60	VFD-2	2
					5.3												5.3					-	4
						5.3												5.3				-	6
DER	40	3		2.3			4	8	10	1	3/4		12	12	2	1.0				1	20	WET WELL FAN	8
					2.3						3/4		12	12	2		2.0			1	20	GENERAT OR BLOCK HEAT ER	10
						2.3					3/4		12	12	2			0.5		1	20	BATTERYCHARGER	12
lights	20	1		0.2			2	12	12	3/4	3/4		12	12	2	1.0				1	20	ENCLOSURE HVAC/LIGHTS	14
CONTROL PANEL	20	1			0.2		2	12	12	3/4	3/4		12	12	2		0.5			1	20	SCADARTU	16
OSURE RECEPT ACLES	20	1				0.5	2	12	12	3/4	3/4		12	12	2			0.2		1	20	FLOWMETER	18
Ξ	20	1																		3	20	SPARE	20
-	20	1																				-	22
-	20	1																				-	24
E T OT AL CONNECT ED KVA			•	7.8	7.8	8.1										7.3	7.8	6			•	SIDE TOTAL CONNECTED KVA	
LOAD:	A:		15.1	KVA	•											-	•	•				•	•
	B:		15.6	KVA																			
	C:		14.1	KVA																			
TOTALL	.OAD:		44.8	KVA																			

ELECTRICAL ENCLOSURE

VOLTAGE: 120/208 VOLT, 3 PHASE, 4 WIRE BUS AMP: 225 AMP (100% NEUTRAL) MAIN BREAKER: MLO

<u>MIN. AIC:</u> 10,000 TOTAL POLES: 24 NOTES:

GENERAL SHEET NOTES:

1. SEE PLAN VIEWS FOR EQUIPMENT LOCATIONS.

$\langle x \rangle$ SHEET KEY NOTES:

- 1. CONTRACTOR IS RESPONSIBLE TO COORDINATE UTILITY INSTALLATION OF NEW ELECTRIC SERVICE AND TRANSFORMER.
- 2. PROVIDE AND CONNECT AS REQUIRED BY UTILITY.

		RTU (SCADA)
GENERATOR CONTROL PANEL	GENERATOR RUNNING	DI
	GENERATOR FAULT	— DI
	GENERATOR LOW FUEL	DI
	REMOTE START	DO
ATS	ATS IN EMERGENCY POSITION	— DI
VFD-1	VFD 1 RUNNING	
	VFD 1 FAIL	
VFD-2	VFD 2 RUNNING	
	VFD 2 FAIL	
PUMP CONTROL PANEL	HIGH WELL ALARM	DI
	LOW WELL ALARM	DI
	FLOAT BACKUP ACTIVE	DI
	PUMP 1 TEMP/SEAL FAIL	DI
	PUMP 2 TEMP/SEAL FAIL	DI
	WELL LEVEL	AI
	STATION FLOW	
	STATION PRESSURE	AI
	STATION PRESSURE	
GRINDER CONTROL	STATION PRESSURE	
		AI
CONTROL	GRINDER RUNNING	AI



