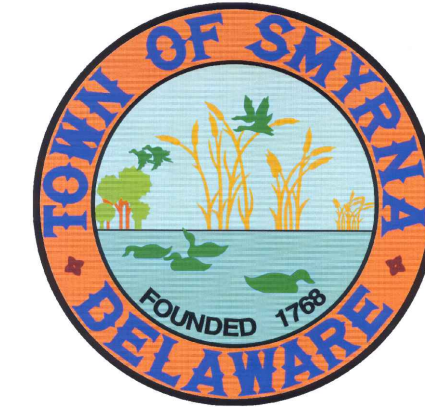


TOWN OF SMYRNA, DELAWARE



PUMP STATION PLANS FOR SIMONS CORNER APARTMENTS



LOCATION MAP
SCALE: 1" = 800'

GENERAL NOTES:

1. THE PURPOSE OF THIS PLAN IS TO PROVIDE NECESSARY DOCUMENTS TO CONSTRUCT THE SIMONS CORNER PUMP STATION FACILITY IN THE TOWN OF SMYRNA, DE.
2. FULL ACCESS SHALL BE PROVIDED FOR EMERGENCY VEHICLES, PEDESTRIANS, MAIL, TRASH PICKUP, DELIVERIES, AND ACCESS TO ALL BUILDINGS.
3. OWNER: TOWN OF SMYRNA. SEWER SYSTEM SUBJECT TO THE APPROVAL OF DNREC AND THE TOWN OF SMYRNA.
4. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE TOWN OF SMYRNA STANDARD SPECIFICATIONS AND DETAILS FOR WATER MAINS, SANITARY SEWERS, STORM DRAINS, STREETS, ROADS, AND ELECTRIC, DATED JUNE 2017, AND ALL SUBSEQUENT AMENDMENTS THERETO.
5. 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.
6. PLAN LOCATIONS AND DIMENSIONS SHALL BE STRICTLY ADHERED TO UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
7. GROUND SURFACE ELEVATIONS SHOWN ON THE DRAWINGS ARE CORRECT AS OF THE DATE OF THE ASSOCIATED FIELD SURVEY, JULY 2020 BY VAN CLEEF ENGINEERING ASSOCIATES, LLC. THE BENCHMARK IS A SANITARY SEWER MANHOLE LOCATED IN THE ACCESS ROAD ON THE SOUTHERN SIDE OF THE SITE.
DATUM: VERTICAL NAVD 83
HORIZONTAL NAD 83
8. NO DEBRIS SHALL BE BURIED ON SITE. DEBRIS ENCOUNTERED DURING CONSTRUCTION SHALL BE REMOVED TO AN AREA OR SITE WITH AN APPROVED DRY WASTE FILL PLAN AND EROSION AND SEDIMENT CONTROL PLAN.
9. 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 CONFIRM 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.
10. 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.
11. 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.
12. FINAL RESTORATION OF TEMPORARY EASEMENT AND DISTURBED CONSTRUCTION AREAS WITHIN ROAD RIGHT-OF-WAY AREAS AND ACROSS A GIVEN PROPERTY LIMIT SHALL OCCUR WITHIN 14 DAYS OF THE COMPLETION OF CONSTRUCTION ACROSS THAT PROPERTY LIMIT. SHOULD WINTER WEATHER CONDITIONS PRECLUDE FINAL RESTORATION ACTIVITY, TEMPORARY STABILIZATION AND PAVING SHALL BE COMPLETED WITHIN THIS SAME TIME FRAME. PERMANENT OR TEMPORARY STABILIZATION SHOULD OCCUR WITHIN 14 DAYS OF INITIAL DISTURBANCE OR REDISTURBANCE.
13. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTY OWNERS AND BUSINESSES POINTS OF ACCESS.
14. 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 TOWN SHOULD THESE MATERIALS BE ALLOWED TO ENTER THE INSTALLED FACILITIES OR EXISTING FACILITIES WHERE CONNECTIONS EXIST.
15. ALL EXCAVATION FOR STRUCTURES AND PIPE TRENCHES SHALL BE KEPT FREE OF WATER UNTIL BACKFILL IS PROPERLY TAMPED IN PLACE TO FINISHED GRADE. SPECIAL ATTENTION IS CALLED TO THE NEED TO PROPERLY REMOVE SEDIMENT FROM DEWATERING ACTIVITIES WITHOUT THE USE OF EXCAVATED SEDIMENT PITS. THE CONTRACTOR'S ATTENTION IS CALLED TO THE MANY HOMEOWNERS IN THE AREA AND THE NEED TO ACHIEVE DEWATERING ACTIVITY AND SEDIMENT REMOVAL WITH PORTABLE DEWATERING BOXES OR OTHER SIMILAR DEVICES WHILE MINIMIZING THE DISRUPTION TO BUSINESSES AND ADJACENT GROUND AREAS. WATER DISCHARGED FROM DEWATERING / SEDIMENT REMOVAL DEVICES SHALL BE CONVEYED TO EXISTING DRAINAGE FACILITIES SUCH AS INLETS AND DRAINAGE DITCHES SO AS TO PREVENT HAZARDOUS CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE AND INJURY WHICH OCCURS AS A RESULT OF IMPROPER DEWATERING / SEDIMENT REMOVAL ACTIVITIES.
16. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE APPROVAL AND ACCEPTANCE OF THE SANITARY SEWER SYSTEMS BY THE TOWN OF SMYRNA UPON COMPLETION OF CONSTRUCTION.
17. SANITARY SEWER SEPARATION FROM WATER MAINS SHALL BE PER TOWN OF SMYRNA AND OFFICE OF DRINKING WATER REQUIREMENTS: 10 FEET HORIZONTAL, 18 INCH VERTICAL MINIMUM AT ALL WATER AND SEWER CROSSINGS, UNLESS OTHERWISE NOTED.
18. THE CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTION ACTIVITIES WITHIN THE DESIGNATED LIMITS OF DISTURBANCE. ANY CHANGE TO THOSE LIMITS MUST BE AGREED UPON BY THE TOWN OF SMYRNA AND DNREC. STAGING AREAS SHALL ONLY BE THOSE APPROVED BY THE TOWN OF SMYRNA.
19. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DISPOSE OF ALL EXCAVATED/DREDGED MATERIAL NOT USED IN THE PROJECT CONSTRUCTION AT AN APPROVED UPLAND DISPOSAL SITE HAVING AN APPROVED EROSION AND SEDIMENT CONTROL PLAN.
20. THERE SHALL BE NO STOCKPILING OF MATERIALS OR PERMANENT FILLS, EXCEPT IN DESIGNATED AREAS.
21. ANY STRUCTURE OR FILL AUTHORIZED SHALL BE PROPERLY MAINTAINED, INCLUDING MAINTENANCE TO ENSURE PUBLIC SAFETY.
22. APPROPRIATE EROSION AND SEDIMENTATION CONTROLS MUST BE USED AND MAINTAINED IN EFFECTIVE OPERATING CONDITION DURING CONSTRUCTION, AND ALL EXPOSED SOIL AND OTHER FILLS, MUST BE PERMANENTLY OR TEMPORARILY STABILIZED WITHIN 14 DAYS.
23. THE ATTENTION OF THE CONTRACTOR IS CALLED TO THE FACT THAT STRAW, HAY OR SIMILAR MATERIAL SHALL NOT BE PERMITTED AS A MEANS TO STABILIZE DISTURBED AREAS OR FOR MULCHING SEEDED AREAS. HYDROSEEDING STAPLED STRAW MATTING SHALL BE USED TO PRECLUDE HAZARDOUS TRAFFIC PROBLEMS WITH THE USE OF STRAW OR HAY MULCHING. ALSO, IF DISTURBANCE IS OCCURRING DURING WINTER MONTHS AND OUT OF THE TEMPORARY OR PERMANENT SEEDING DATES THEN THE DISTURBED AREAS MUST BE STABILIZED WITH STAPLED STRAW MATTING OR EROSION CONTROL MATTING.
24. ALL COMMON FACILITIES INCLUDING, BUT NOT LIMITED TO: PAVED AREAS, SIDEWALKS, CURBING, LANDSCAPING, PUBLIC OPEN SPACE, AND/OR DRAINAGE FACILITIES SHALL BE KEPT IN GOOD REPAIR AND MAINTAINED IN A SAFE SANITARY CONDITION.
25. LIMIT OF DISTURBANCE = 1,845 SQUARE FEET / 0.042 ACRES

SEWER NOTES:

1. PRESSURE TEST FORCE MAIN PIPE PRIOR TO USE (SEE TOWN OF SMYRNA STANDARD SPECIFICATIONS).
2. ONLY ENOUGH TRENCH SHALL BE EXCAVATED WHICH CAN BE BACKFILLED DAILY.

INDEX OF SHEETS	
SHEET No.	TABLE OF CONTENTS
G-0.01	COVER SHEET
C-1.01	PROPOSED SITE PLAN
P-1.01	PUMP STATION & VALVE VAULT DESIGN
CP-2.01	CIVIL & PROCESS DETAILS
E-0.01	ELECTRICAL NOTES AND ABBREVIATIONS
E-0.02	ELECTRICAL LEGEND AND SYMBOLS
E-1.01	ELECTRICAL SITE PLAN
E-2.01	ELECTRICAL DETAILS I
E-2.02	ELECTRICAL DETAILS II
9 SHEETS	

STANDARD NOTES FOR UTILITY INSTALLATION:

1. CALL "MISS UTILITY" AT 1-800-257-7777, TOWN OF SMYRNA DEPARTMENT OF PUBLIC WORKS (302)-653-9289, 48 HOURS PRIOR TO THE START OF WORK.
2. EXCAVATED TRENCH MATERIALS SHOULD BE STORED AT THE STAGING AREA.
3. IMMEDIATELY FOLLOWING UTILITY INSTALLATION, THE TRENCH SHALL BE BACKFILLED, COMPACTED AND STABILIZED AT THE END OF EACH WORKING DAY OR COVER WITH STEEL PLATES. NO MORE TRENCH SHALL BE OPENED THAN CAN BE COMPLETED IN THE SAME DAY.
4. FULL COMPACTION OF BACKFILL AND PAVING SECTIONS ARE REQUIRED.
5. MULCHING TO DNREC SPECIFICATIONS OF ALL DISTURBED AREAS AND DAILY ON BACKFILL WILL BE REQUIRED.
6. ANY SEDIMENT CONTROL PRACTICES WHICH ARE DISTURBED DURING UTILITY CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE END OF EACH WORKING DAY.

SEQUENCE OF CONSTRUCTION:

1. SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE TOWN OF SMYRNA.
2. CONTACT THE TOWN OF SMYRNA FIVE DAYS PRIOR TO ANY SITE DISTURBANCE.
3. INSTALL EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THESE PLANS. CONTRACTOR SHALL RECEIVE APPROVAL FROM THE TOWN PRIOR TO EARTH MOVING ACTIVITY.
4. INSTALL ELECTRIC PRIMARY WIRE FROM PUMP STATION (THROUGH THE PARK) TO THE EXISTING UTILITY POLE AS SHOWN ON THE CONSTRUCTION PLANS. LEAVE EXCESS WIRE AT THE PUMP STATION AND UTILITY POLE AS LISTED ON THE CONSTRUCTION PLANS. STABILIZE DISTURBED AREAS.
5. INSTALL NEW PUMP STATION, WET WELL, AND VALVE AND METER VAULT. TIE INTO UPSTREAM GRAVITY MANHOLE (TO BE INSTALLED BY OTHERS) WITHIN THE PUMP STATION SITE. INSTALL CONTROLS AND ELECTRIC.
6. INSTALL FORCE MAIN FROM PUMP STATION TO VAULT AND METER VAULT AND INSTALL FLOW METER, BYPASS FOR VAULT, BYPASS PUMP CONNECTION AND INSTALL PLUG VALVES.
7. TIE INTO EXISTING FORCE MAIN ON THE SOUTH SIDE OF THE PUMP STATION FENCE, IF EXISTING FORCE MAIN CONNECTION POINT IS NOT AVAILABLE AT TIME OF COMPLETION OF THIS PROJECT THE FORCE MAIN PIPING SHALL BE CAPPED FOR FUTURE CONNECTION.
8. AFTER CONSTRUCTION IS COMPLETE, REMOVE, SILT FENCE, AND INLET PROTECTION. STABILIZE AS REQUIRED.

LEGEND	
EXISTING	PROPOSED
--- 45' ---	SEWER PIPING AS NOTED
--- 40' ---	LIMIT OF DISTURBANCE
---	SANITARY SEWER MANHOLE
---	WATER LINE
---	PAVING
---	CONCRETE PAD
---	FENCE
---	SILT FENCE

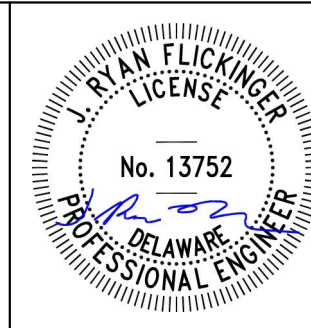
LIST OF ABBREVIATIONS USED

CO	CLEAN OUT
CONC.	CONCRETE
DIA.	DIAMETER
DI	DUCTILE IRON PIPE
EX.	EXISTING
FM	FORCE MAIN
H.B.	HORIZONTAL BEND
LOD	LIMIT OF DISTURBANCE
NO.	NUMBER
P.E.	PROFESSIONAL ENGINEER
PVC	POLYVINYL CHLORIDE
V.B.	VERTICAL BEND
W	WITH

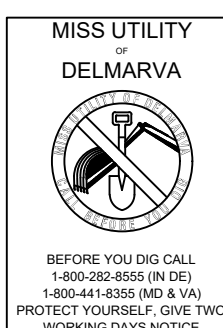
SITE ANALYSIS:

1. TOTAL SITE AREA: 0.046 AC ±
 2. TOTAL AREA TO BE DISTURBED: 0.046 AC ±
 3. TOTAL AREA TO BE VEGETATIVELY STABILIZED: 0.000 AC ±
 4. TOTAL AREA TO BECOME IMPERVIOUS: 0.046 AC ±
 5. ESTIMATED CUT VOLUME: 20.00 CY ± *
 6. ESTIMATED FILL VOLUME: 0.00 CY ±
- * CUT VOLUME REPRESENTS THE AMOUNT OF EARTH REMOVED TO INSTALL THE UTILITIES AND BEDDING, ALL PROPOSED GRADES TO MATCH EXISTING.

PREPARED BY
THE CONSULTING FIRM OF
KCI TECHNOLOGIES, INC.



SEAL



RYAN FLICKINGER, PE (DE PE #) 6/4/2024 DATE

PERMITTING SET
NOT FOR
CONSTRUCTION

PROFESSIONAL CERTIFICATION HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF DELAWARE. LICENSE NO. 13752 EXPIRATION DATE: 06-30-2026	
SIGNATURE: <i>[Signature]</i>	
Drafting: TJG	Check: JWC
Design: JWC	Check: AMW
SCALE: AS NOTED	
DATE: 06-04-2024	
KCI JOB #: 1303012 SCPS	
SHEET: G-0.01	

OWNER/DEVELOPER:	DATE:
SIMONS CORNER PARTNERS, LLC WILMINGTON, DE 19807 PH. (302) 425-3555	

OWNER/DEVELOPER:

SIMONS CORNER PARTNERS, LLC
WILMINGTON, DE 19807
PH. (302) 425-3555

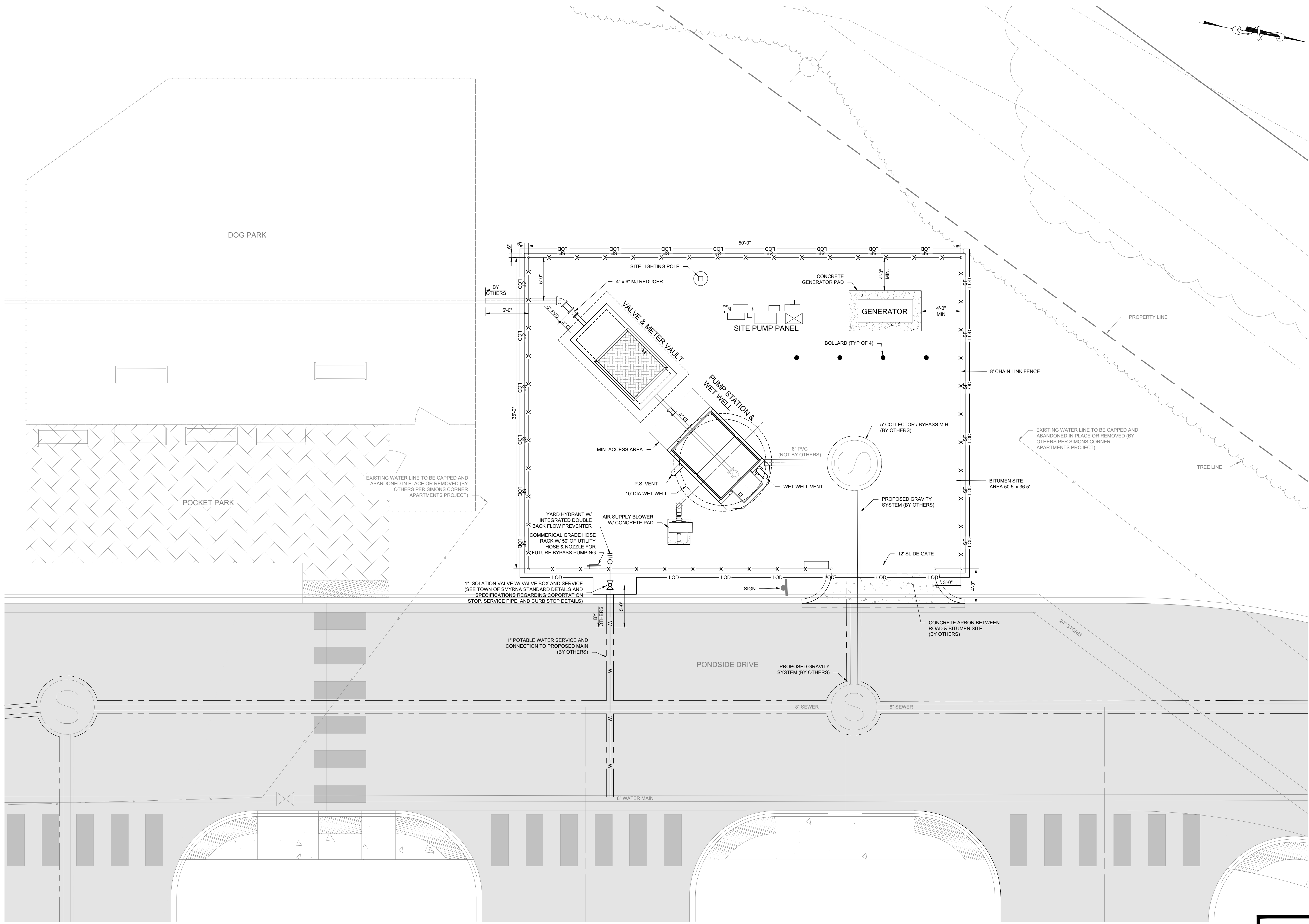
KCI TECHNOLOGIES, INC.
ENGINEERS - PLANNERS - SURVEYORS
1000 W. MARKET ST., SUITE 200
SMYRNA, DE 19886
PHONE: (302) 747-6599 FAX: (302) 731-7827 Website: www.kci.com

SCALE - PLAN:
0 10 20 30 40 50 60 70 80 90 100
FOOT

DELAWARE
KENT COUNTY
SMYRNA

COVER SHEET

SIMONS CORNER PUMP STATION



PROPOSED SITE PLAN
SCALE: 1" = 10'

PERMITTING SET
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CONSTRUCTION

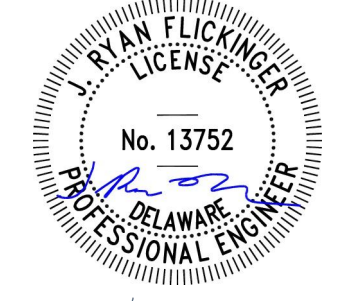
NO.	DATE	REVISION

OWNER/DEVELOPER:
SIMONS CORNER PARTNERS, LLC
WILMINGTON, DE 19807
PH. (302) 425-8555

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SMYRNA, DE 19967
PHONE: (302) 447-6699 FAX: (302) 731-7827 Website: www.kci.com

PROPOSED SITE PLAN
SIMONS CORNER PUMP STATION
SMYRNA KENT COUNTY DELAWARE

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LICENSE NO. 13752
EXPIRATION DATE: 06-30-2024

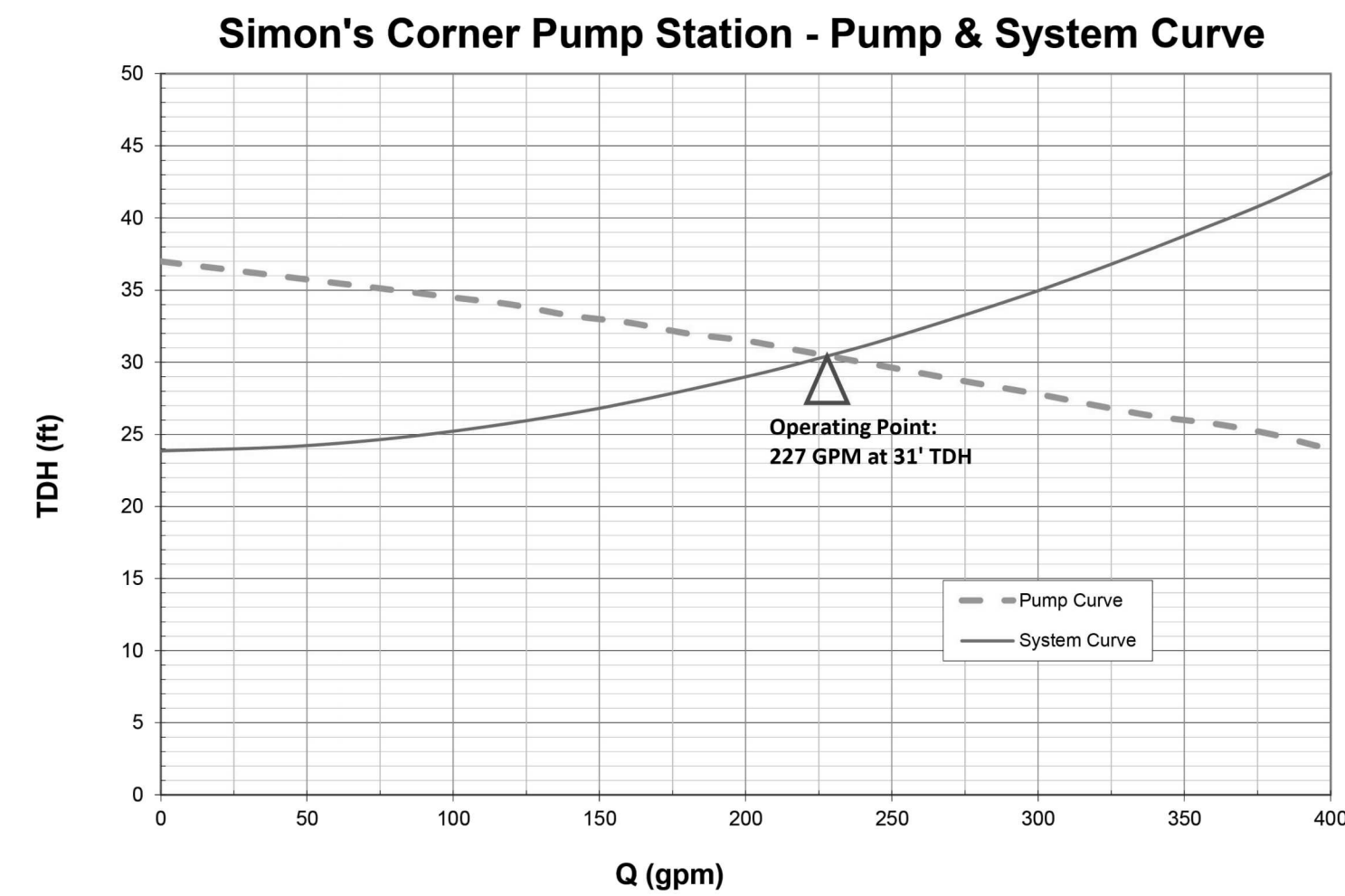


SIGNATURE: *J. Ryan Flickinger*

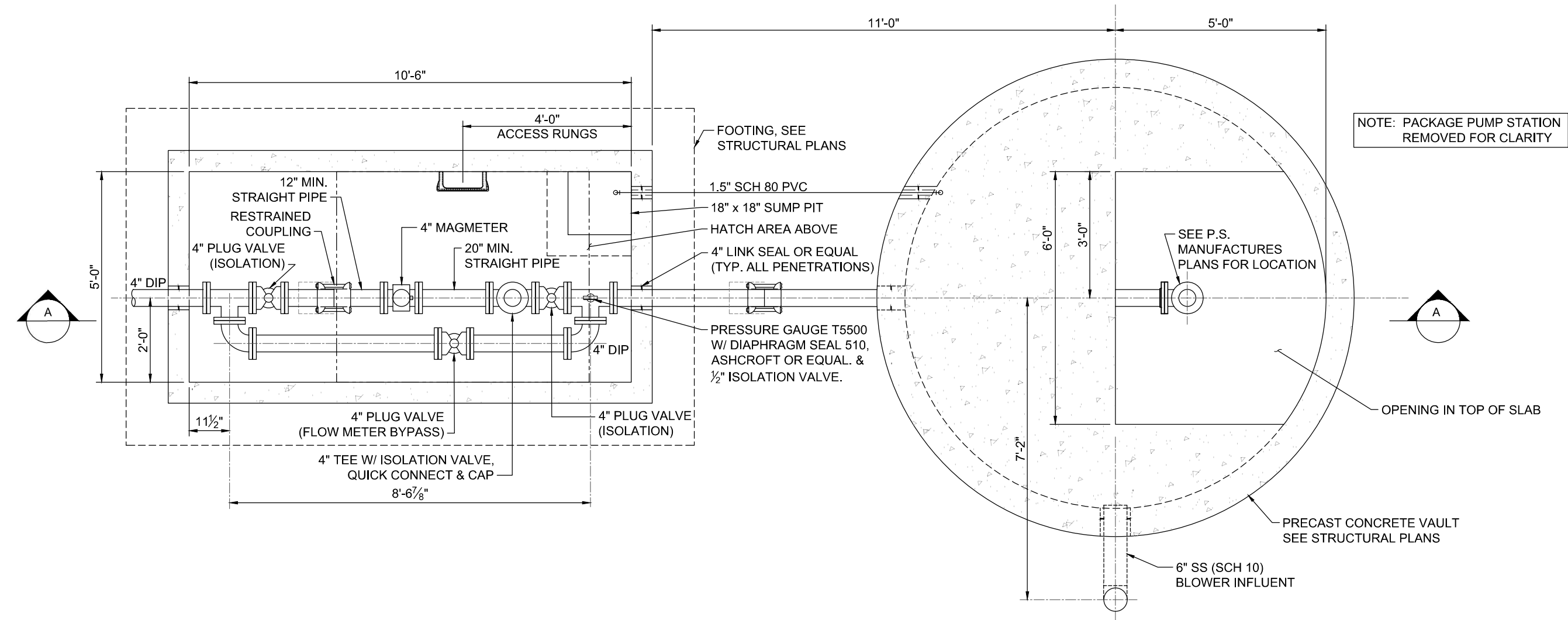
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Design: JWC	Check: AMW

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KCI JOB #: 1303012 SCPS
SHEET: C-1.01

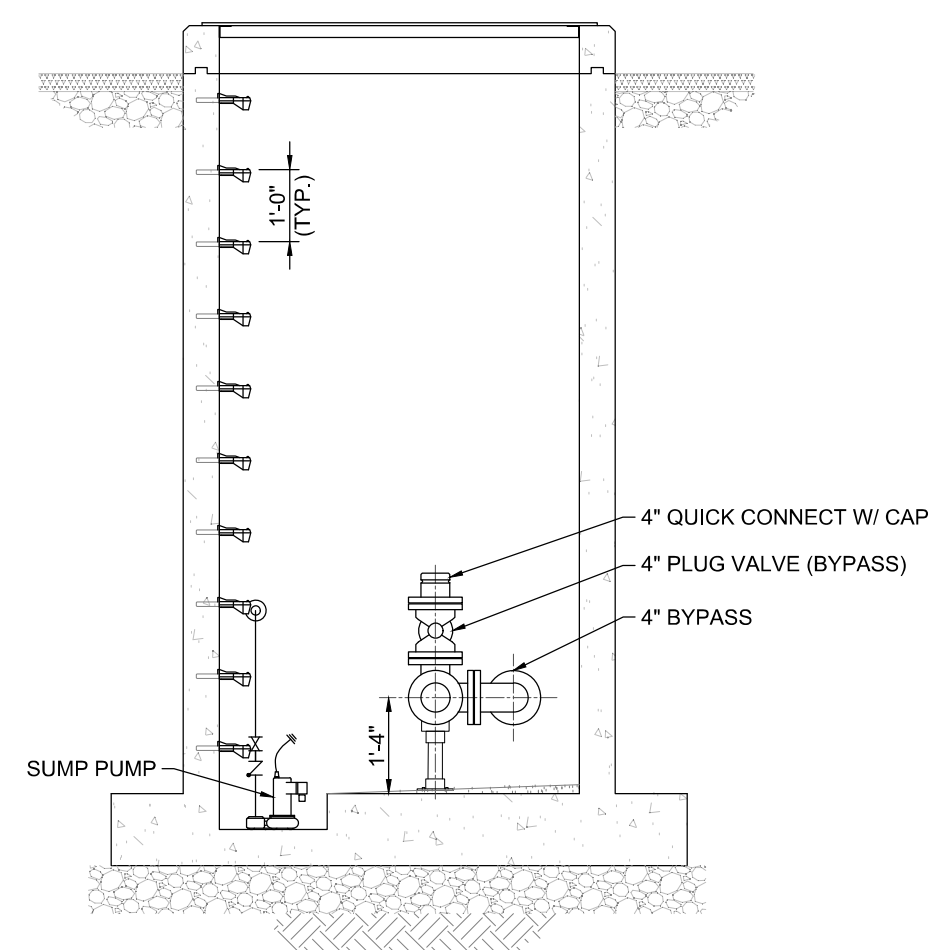
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 PLOT SHEET: C-1.01



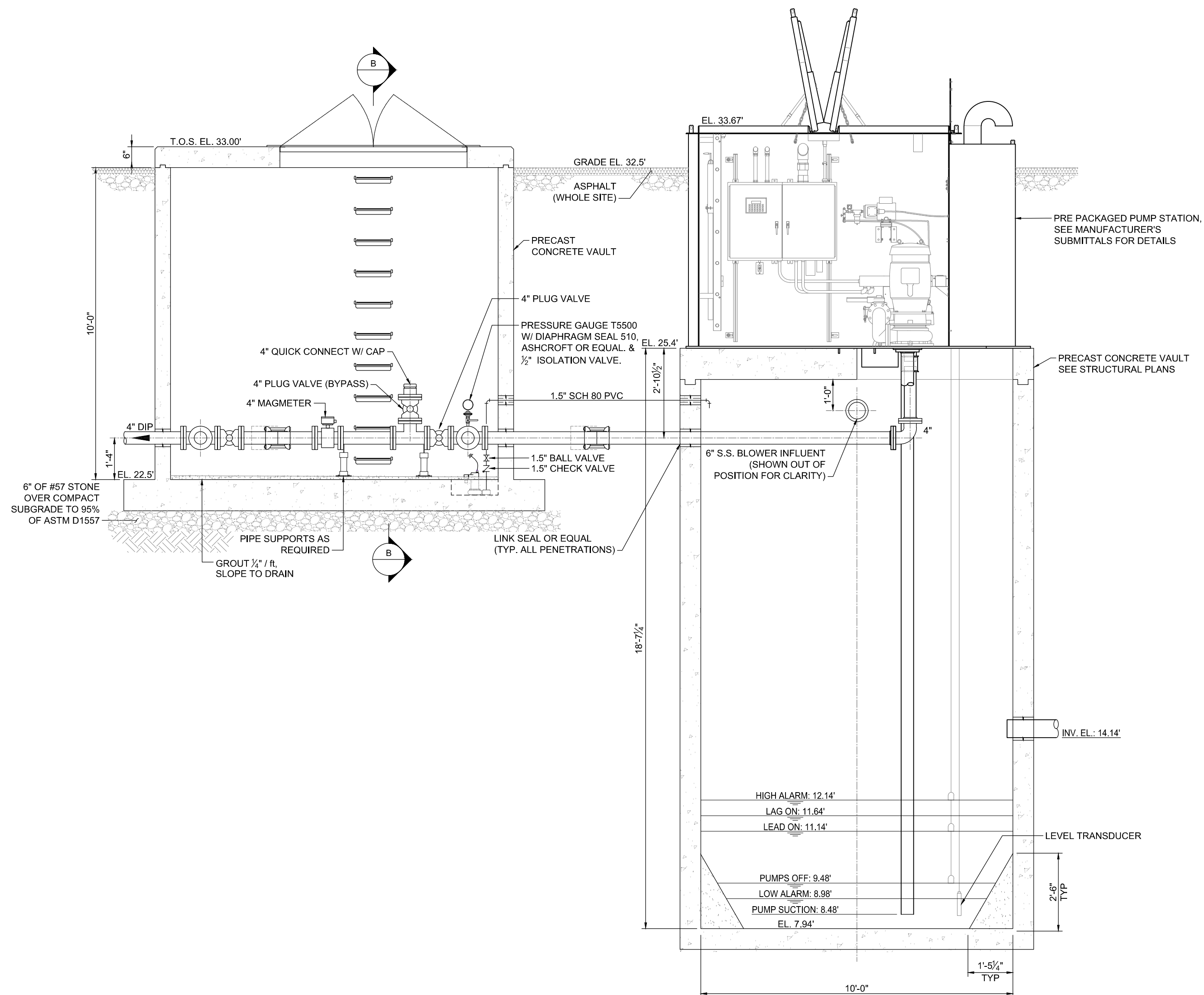
1 PUMP AND SYSTEM CURVE
SCALE: N/A



PLAN VIEW - PUMP STATION WET WELL AND VALVE VAULT
SCALE: 3/8" = 1'-0"



B SECTION VIEW - VALVE VAULT
SCALE: 3/8" = 1'-0"



A SECTION VIEW - PUMP STATION WET WELL AND VALVE VAULT
SCALE: 3/8" = 1'-0"

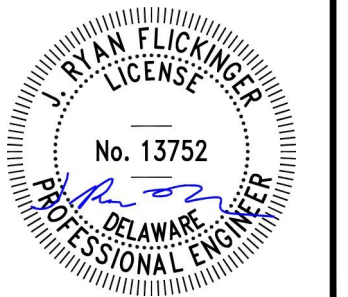
OWNER/DEVELOPER:
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WILMINGTON, DE 19807
PH. (302) 425-3555

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DELAWARE
KENT COUNTY

PUMP STATION & VALVE VAULT DESIGN
SIMONS CORNER PUMP STATION

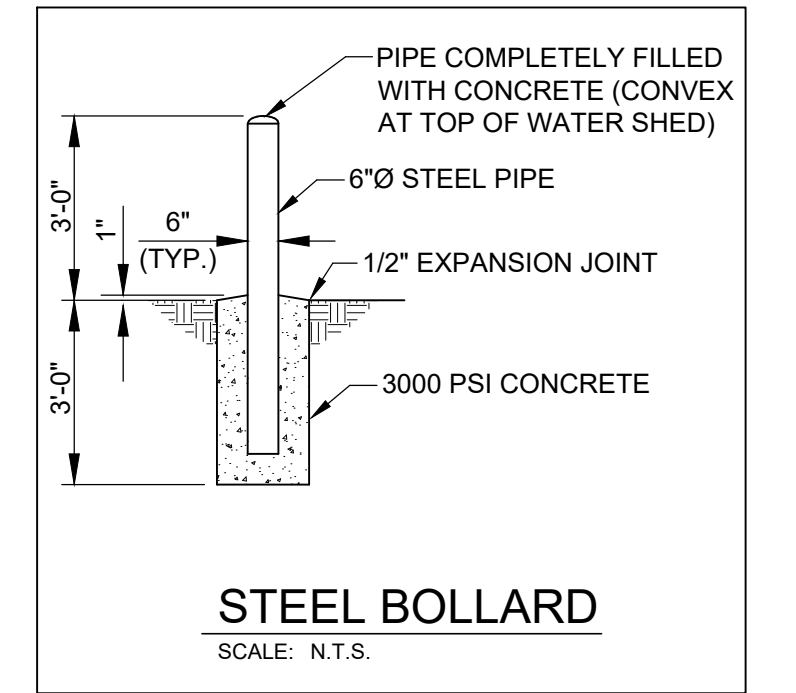
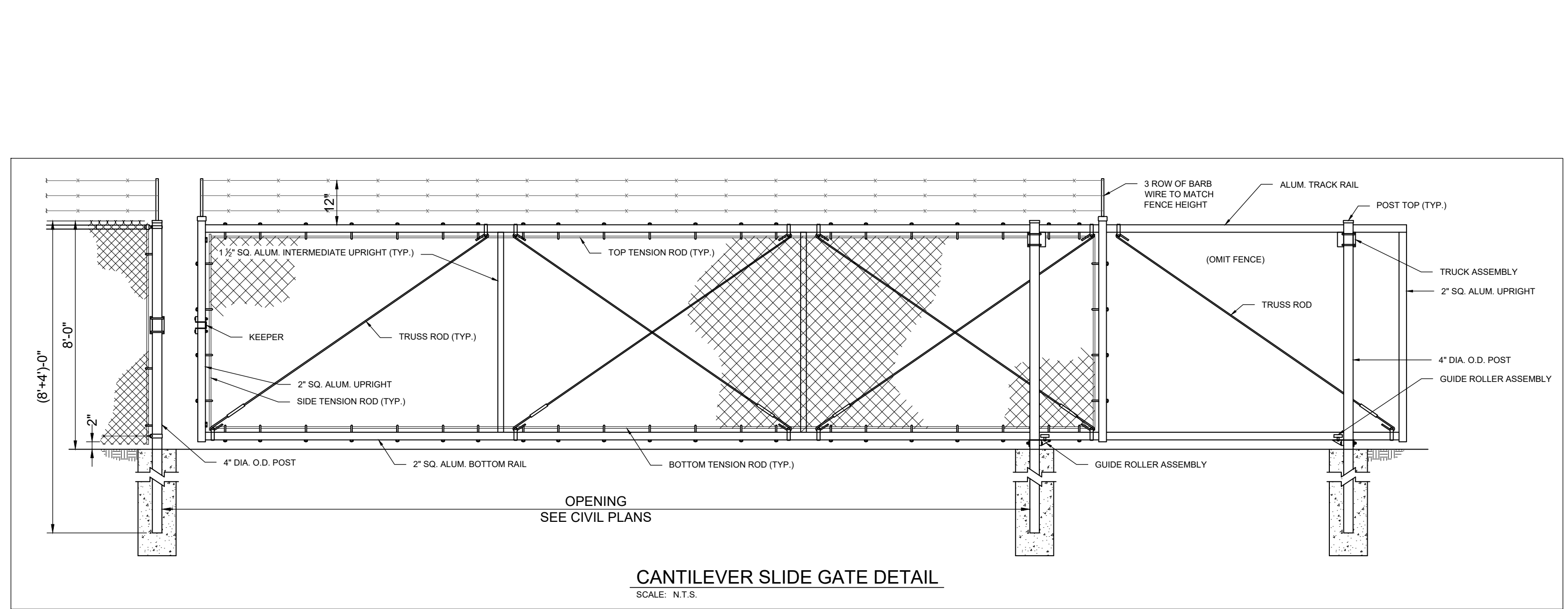
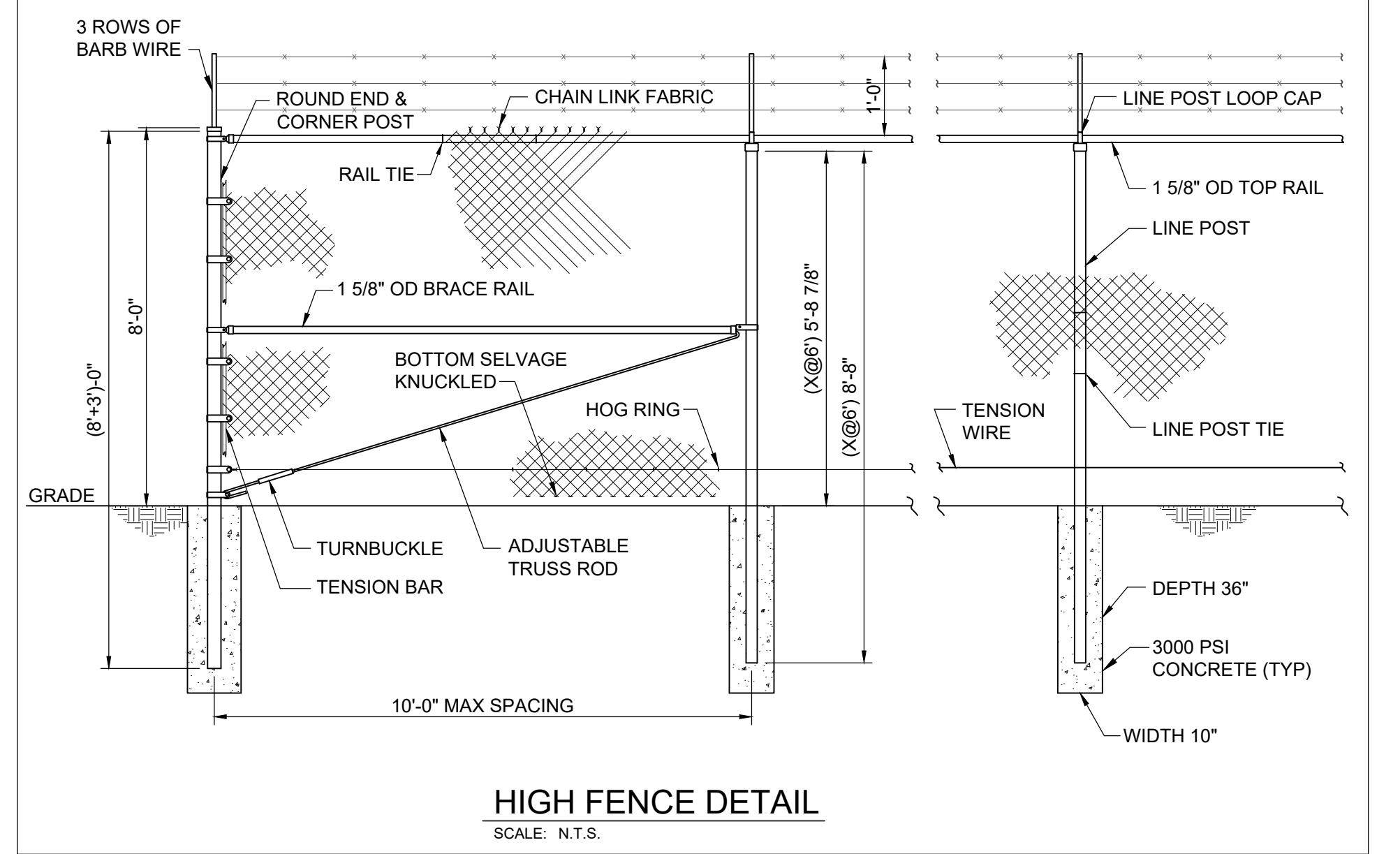
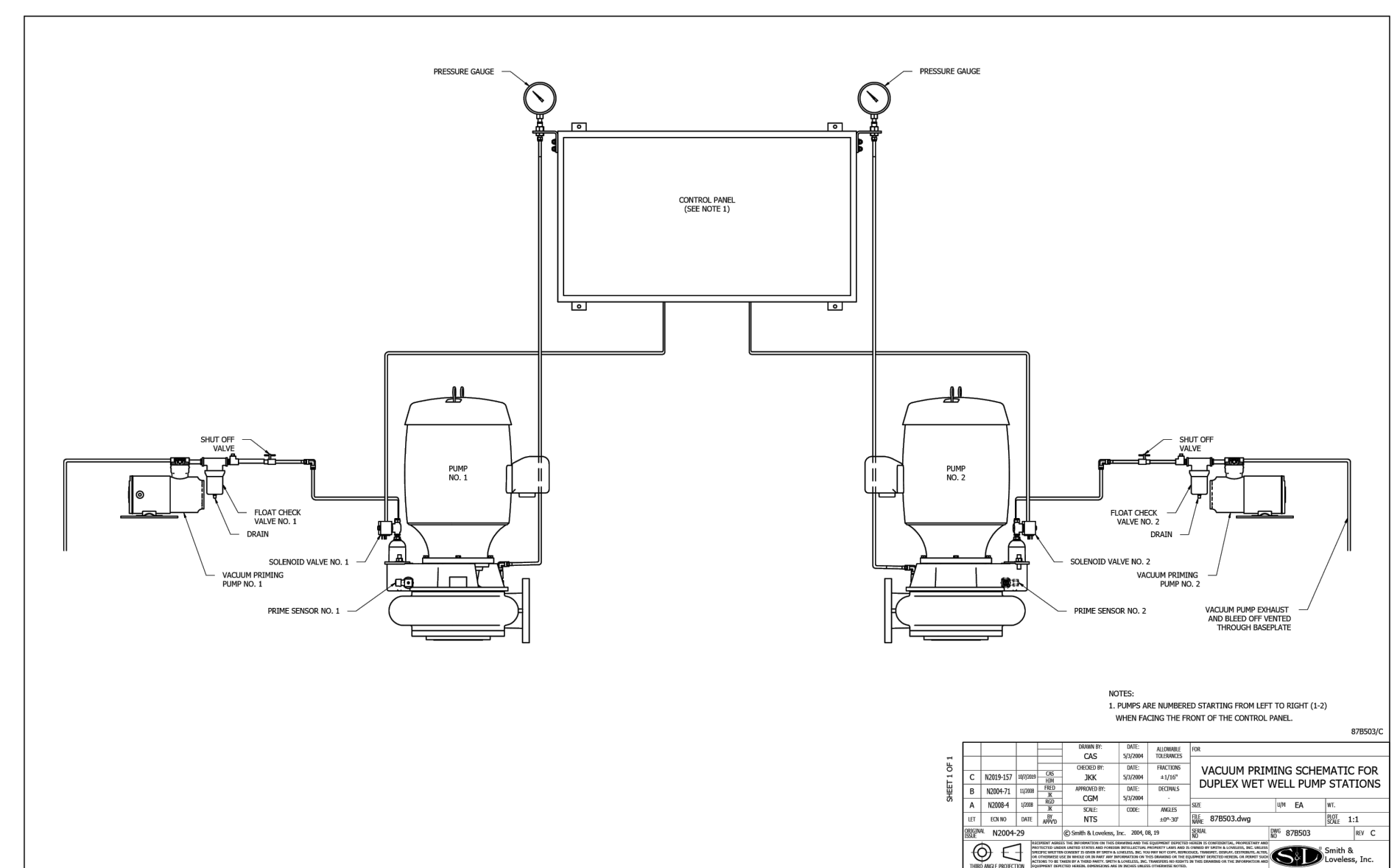
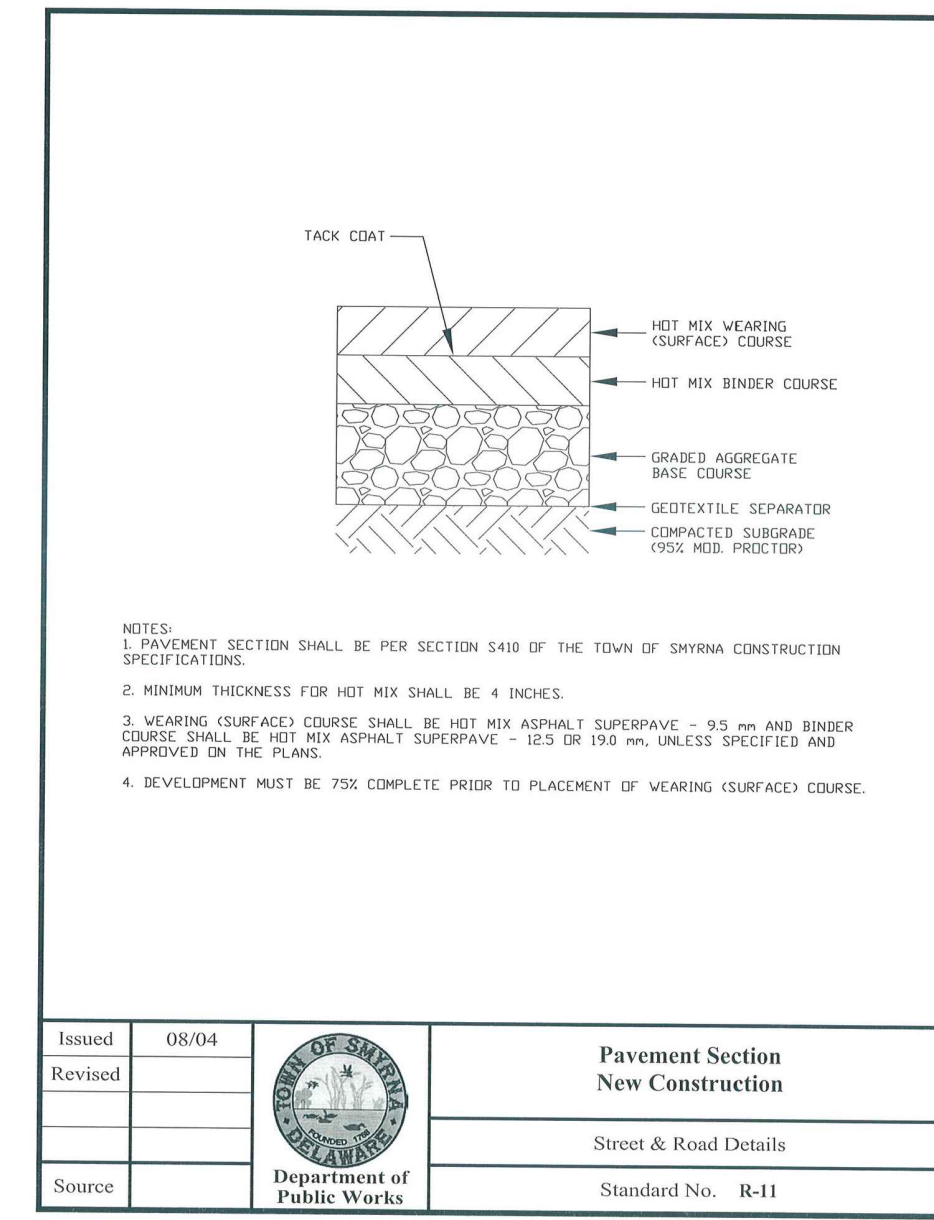
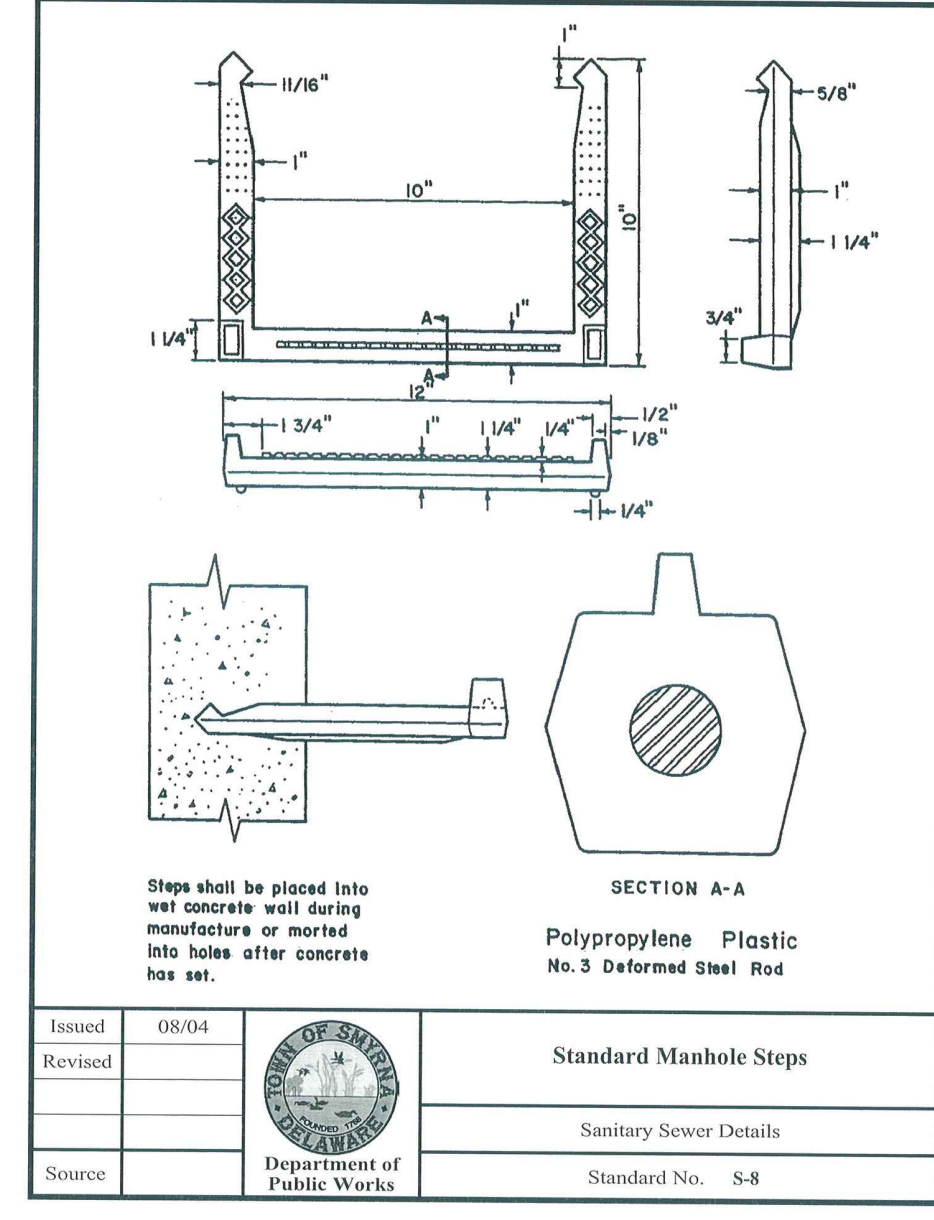
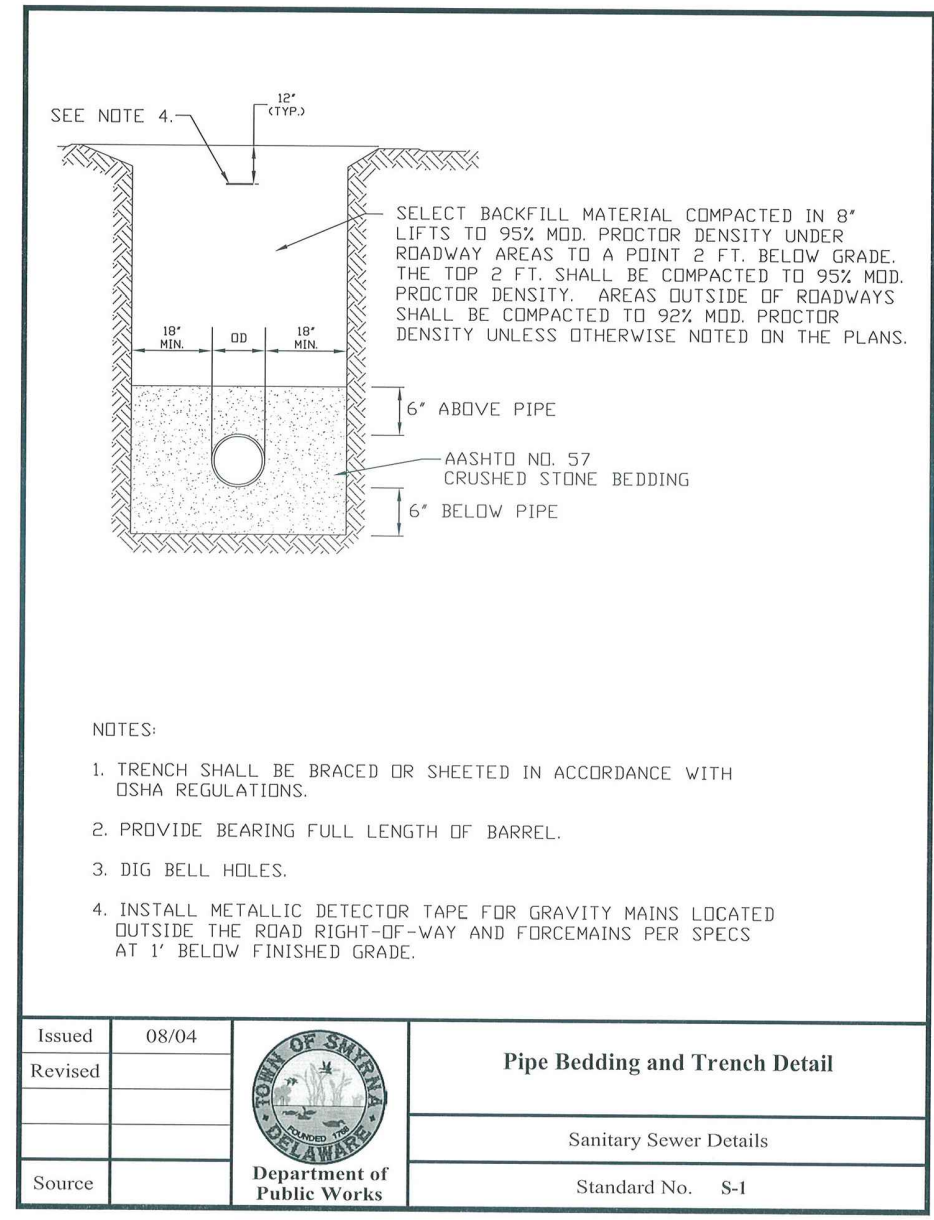
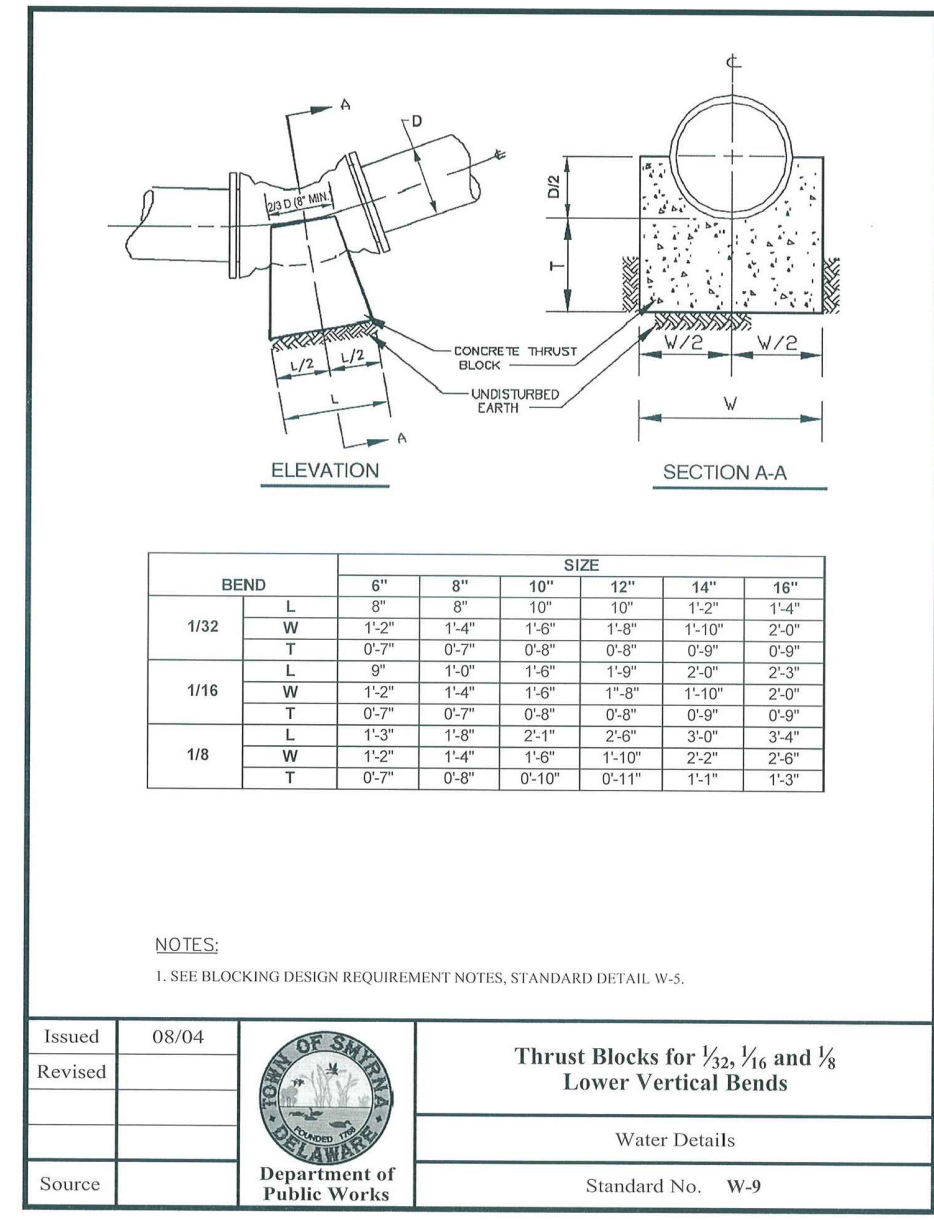
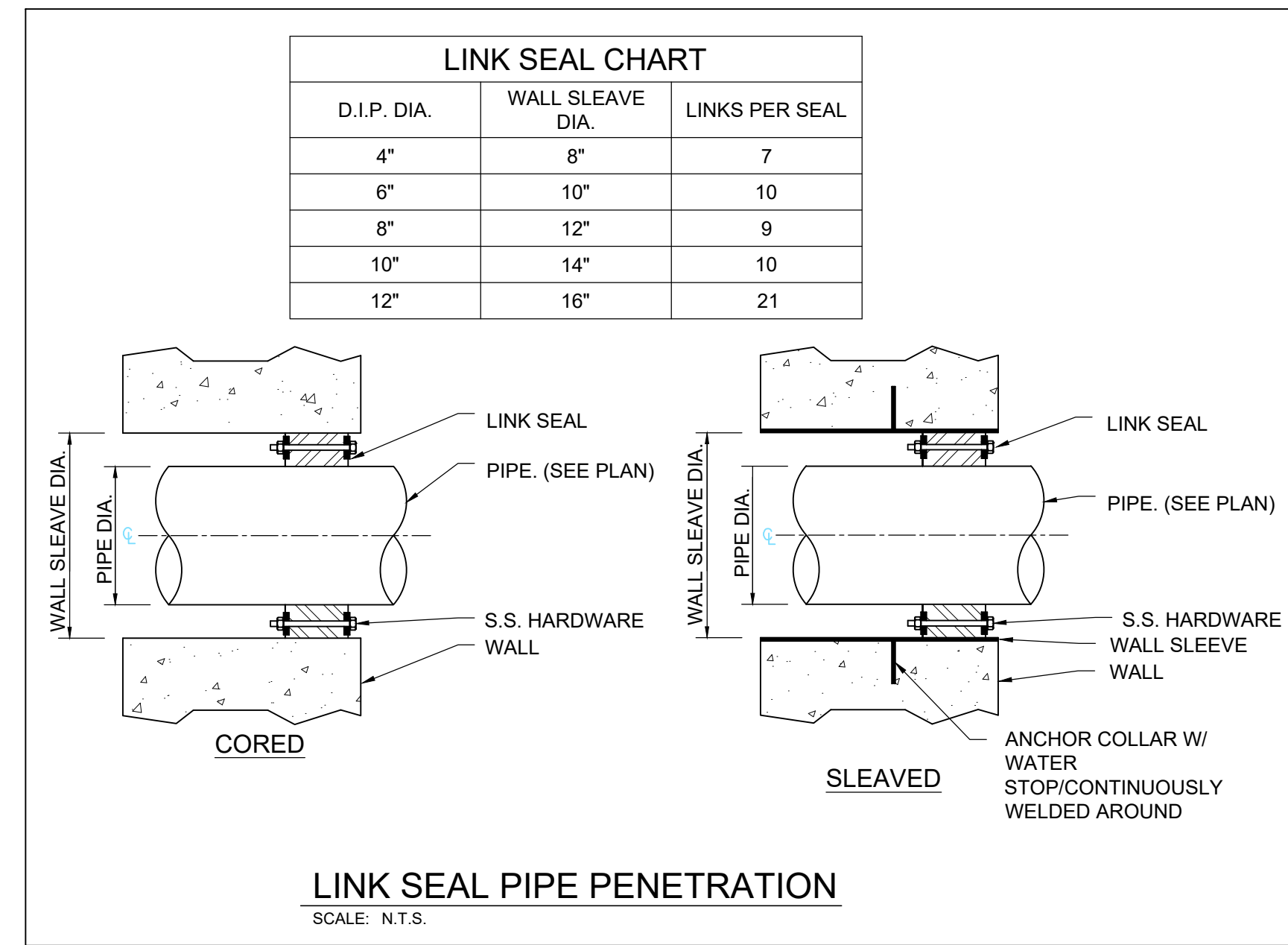
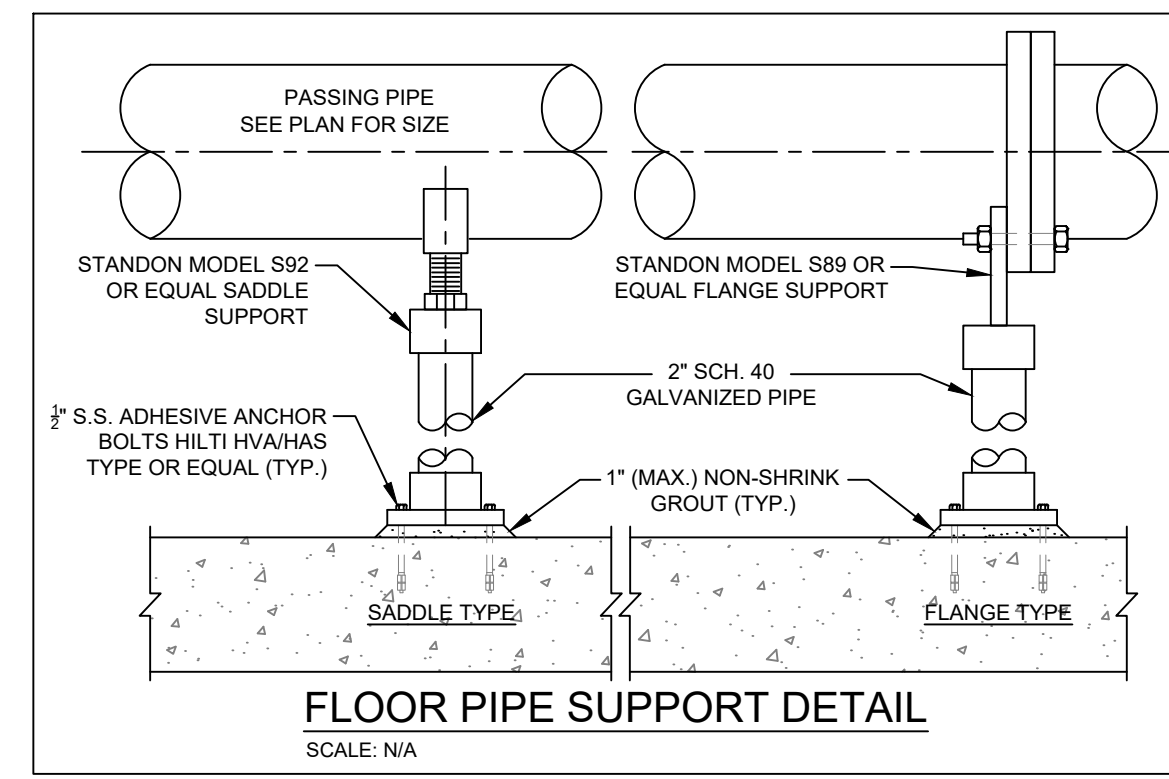
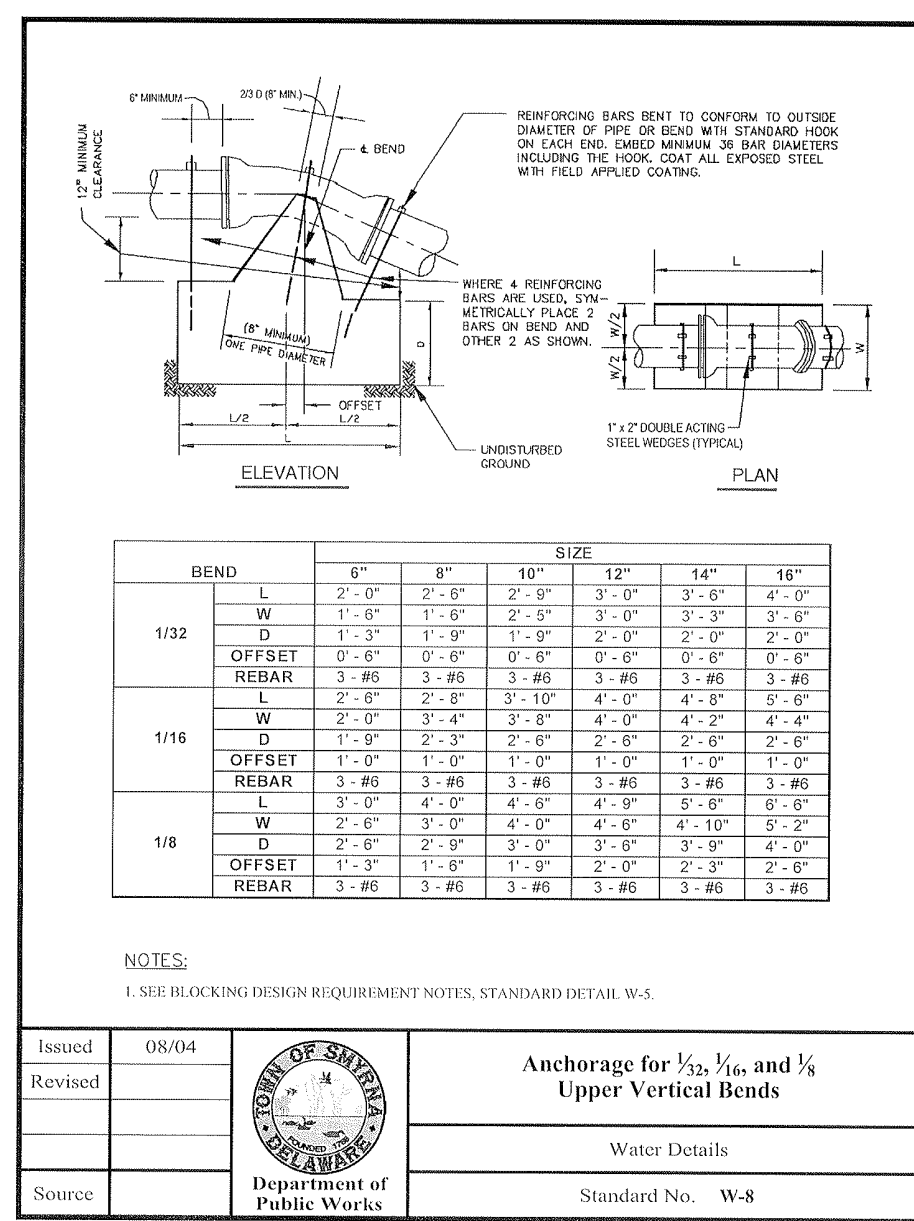
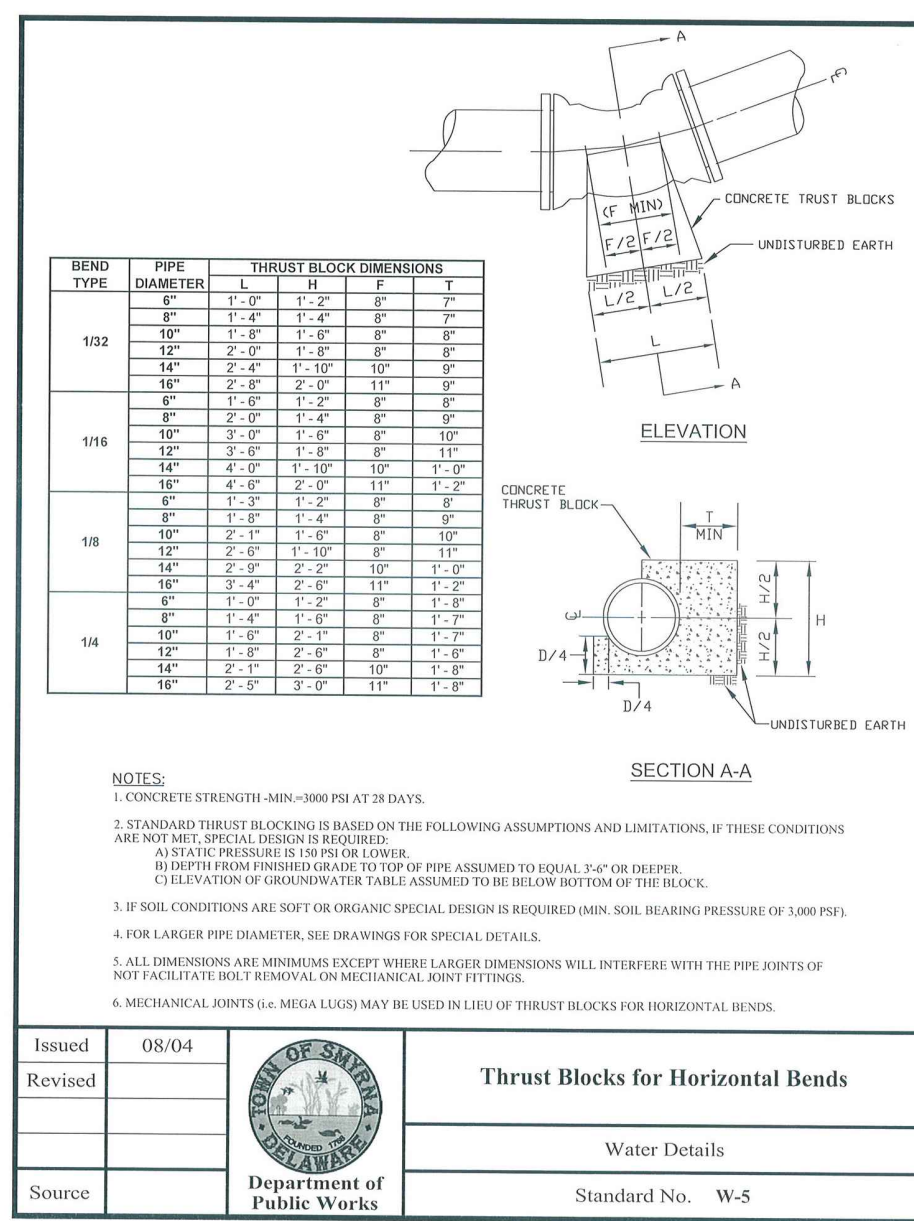
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE
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DULY LICENSED PROFESSIONAL ENGINEER UNDER
THE LAWS OF THE STATE OF DELAWARE.
LICENSE NO. 13752
EXPIRATION DATE 06-30-2024



SIGNATURE
Drafting: TJG Check: JWC
Design: JWC Check: AMW
SCALE: AS NOTED
DATE: 06-04-2024
KCI JOB #: 1303012 SCPS
SHEET: P-1.01

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NOT FOR
CONSTRUCTION

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 PLOT BY: JWC



CIVIL & PROCESS DETAILS

SIMONS CORNER PUMP STATION

DELAWARE
KENT COUNTY
SMYRNA

OWNER/DEVELOPER: SIMONS CORNER PARTNERS, LLC
100 WILMINGTON DE 19807
PH. (302) 425-3555

KCI TECHNOLOGIES, INC.
ENGINEERS - PLANNERS - SURVEYORS
600 W. MARKET ST. SUITE 200
SMYRNA, DE 19886
PHONE: (302) 447-6599 FAX: (302) 731-7267 Website: www.kci.com

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Design: JWC Check: AMW
SCALE: AS NOTED
DATE: 06-04-2024
KCI JOB #: 1303012 SCPS
SHEET: CP-2.01

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NOT FOR
CONSTRUCTION**

GENERAL ELECTRICAL NOTES:

- PROVIDE MATERIALS THAT ARE NEW AND WITHOUT IMPERFECTIONS OR BLEMISHES, AND PROTECTED FROM THE ELEMENTS PRIOR TO CONSTRUCTION.
- COMPLY WITH OWNER'S USE OF PREMISES AND SAFETY REGULATIONS.
- 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.
- PROVIDE SEPARATE CONDUITS FOR CONTROL AND POWER CONDUCTORS.
- ALL WIRING SHALL BE 600V, TYPE THHN-THWN COPPER CONDUCTORS INSTALLED IN CONDUIT UNLESS OTHERWISE NOTED.
- ALL ELECTRICAL PANELBOARDS, DISCONNECT SWITCHES, ENCLOSURES, BOXES, ETC. SHALL BE PROVIDED WITH PERMANENT LABELS INDICATING THEIR RESPECTIVE POWER SOURCE.
- 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 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 EQUIPMENT.
- PROVIDE ALL CUTTING, PATCHING, AND ACCESS PANELS REQUIRED FOR ELECTRICAL WORK. 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, 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. CONTRACTOR SHALL REMOVE ALL WASTE MATERIALS, DEBRIS, AND RUBBISH FROM THE SITE AND LEGALLY DISPOSE OF IT.
- 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 THEIR WORK.
- 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.
- CONTRACTOR SHALL MAKE ALL FINAL EQUIPMENT CONNECTIONS AND PROVIDE THE NECESSARY DEVICES, ETC. FOR A COMPLETE AND OPERABLE SYSTEM.
- 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.
- 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.
- CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, PLAN REVIEWS AND CERTIFICATES OF INSPECTION REQUIRED BY THE AUTHORITIES HAVING JURISDICTION OVER THIS WORK.
- 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.
- 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.
- 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.
- 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.
- 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.
- PROVIDE 60-INCHES SLACK WIRE AT EACH OF ALL SPARE INSTRUMENTATION WIRES.
- CONDUIT CONTAINING ANALOG SIGNALS SHALL BE LOCATED 6-INCHES (MINIMUM) AWAY FROM CONDUIT CONTAINING POWER CONDUCTORS OR DISCRETE SIGNALS.
- ALL CONDUIT SHALL BE 3/4-INCH IN SIZE UNLESS OTHERWISE NOTED .
- 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.
- ALL RELAYS SHALL HAVE LED INDICATION OF STATUS.
- ALL FUSES AND BREAKERS SHALL BE SIZED IN ACCORDANCE WITH NEC.
- SEE SPECIFICATIONS FOR WRITTEN CONTROL DESCRIPTIONS.

NOTE:
THIS IS A STANDARD LEGEND AND ABBREVIATIONS SHEET. NOT ALL THE INFORMATION SHOWN ON THIS LEGEND IS USED ON THIS PROJECT.

NEMA RATING OF ENCLOSURES	
NEMA ENCLOSURE TYPES FOR MISCELLANEOUS ELECTRICAL BOXES, PANELS, DISCONNECT SWITCHES AND ALL OTHER ELECTRICAL EQUIPMENT ENCLOSURES NOT SPECIFICALLY INDICATED SHALL BE RATED IN ACCORDANCE WITH THE FOLLOWING:	
•	EXTERIOR APPLICATIONS: NEMA 3R
•	INTERIOR, DRY APPLICATIONS: NEMA 12
•	INTERIOR, CONDITIONED APPLICATIONS: NEMA 1
•	DAMP, WET, OR CORROSIVE APPLICATIONS: NEMA 4X STAINLESS STEEL
•	HAZARDOUS APPLICATIONS: NEMA 7

MOUNTING HEIGHT SCHEDULE	
INTERIOR RECEPTACLES	18" ABOVE FINISHED FLOOR
EXTERIOR RECEPTACLES	24" ABOVE FINISHED GRADE
LIGHT SWITCHES	46" ABOVE FINISHED FLOOR
PANELBOARDS AND CONTROL PANELS	TOP OF PANEL TO BE 72" ABOVE FINISHED FLOOR
LIGHT FIXTURES	SEE LIGHT FIXTURE SCHEDULE
• UNLESS INDICATED OTHERWISE, DEVICE MOUNTING HEIGHTS ARE TO CENTER LINE OF DEVICE	

CONDUIT LEGEND:

- A#14-B (C)
- A - QUANTITY OF CONDUCTORS
 - B - SIZE OF CONDUIT (LARGER THAN 3/4-INCH)
 - C - QUANTITY OF SPARE CONDUCTORS INCLUDED IN TOTAL COUNT (ITEM-A)

EQUIPMENT LEGEND

- ABC-X
↑
IDENTIFICATION
- T_H = THERMOSTAT HEAT RELIEF
 - T_V = THERMOSTAT NORMAL VENTILATION
 - T_F = FREEZESTAT

LEGEND:

- EXISTING
- PROPOSED
- COAX CABLE
- ETHERNET COMMUNICATIONS
- ELECTRICAL POWER CONNECTIONS
- ANALOG COMMUNICATIONS
- DISCRETE COMMUNICATIONS
- NEMA BOUNDARY
- SERIAL COMMUNICATIONS
- G — GROUNDING CABLE
- FO — FIBER OPTIC COMMUNICATIONS
- P — PNEUMATIC SIGNAL / SERVICE

ABBREVIATIONS

- | | | |
|---|---|--|
| A = AMPERE | HH = HAND HOLE | PH, φ = PHASE |
| AC = ALTERNATING CURRENT | HMI = HUMAN MACHINE INTERFACE | PLC = PROGRAMMABLE LOGIC CONTROLLER |
| ACT = ABOVE COUNTER TOP | HP = HORSEPOWER | PNL = PANEL |
| AF = AMPERE FRAME | HPS = HIGH PRESSURE SODIUM | PM = PHASE MONITOR |
| AFF = ABOVE FINISHED FLOOR | IS = INTRINSICALLY SAFE | PRI = PRIMARY |
| AFG = ABOVE FINISHED GRADE | ISB = INTRINSICALLY SAFE BARRIER | PSI = POUNDS PER SQUARE INCH |
| AHF = ACTIVE HARMONIC FILTER | ISR = INTRINSICALLY SAFE RELAY | PS = POWER SUPPLY |
| AIC = AMPERE INTERRUPTING CAPACITY | JB = JUNCTION BOX | PVC = POLYVINYL CHLORIDE |
| AT = AMPERE TRIP | JH = JACKET HEATER | PWR = POWER |
| ATS = AUTOMATIC TRANSFER SWITCH | KCMIL = THOUSAND CIRCULAR MILS | RCT = REPEAT CYCLE TIMER |
| AUTO = AUTOMATIC | KV = KILOVOLT | RECEPT = RECEPTACLE |
| AWG = AMERICAN WIRE GAUGE | KVA = KILOVOLT AMPERE | RGS = RIGID GALVANIZED STEEL |
| BC = BATTERY CHARGER | KW = KILOWATT | RTU = REMOTE TELEMETRY UNIT |
| BLDG = BUILDING | LBC = LOAD BANK CONNECTION | RVSS = REDUCED VOLTAGE SOLID STATE |
| C = CONDUIT | LCP = LOCAL CONTROL PANEL | SCADA = SUPERVISORY CONTROL AND DATA ACQUISITION |
| CB = CIRCUIT BREAKER | LED = LIGHT EMITTING DIODE | SF = SUPPLY FAN |
| CKT = CIRCUIT | LRA = LOCKER ROTOR AMPERES | SPD = SURGE PROTECTION DEVICE |
| CMU = CONCRETE MASONRY UNIT | MAX = MAXIMUM | SS, SST = STAINLESS STEEL |
| CP = CONTROL PANEL | MCA = MAXIMUM CIRCUIT AMPACITY | STP = SHIELDED TWISTED PAIR |
| CPT = CONTROL POWER TRANSFORMER | MCB = MAIN CIRCUIT BREAKER | TB = TERMINATION BOX |
| CT = CURRENT TRANSDUCER | MCC = MOTOR CONTROL CENTER | TYP = TYPICAL |
| DC = DIRECT CURRENT | MCP = MAIN CIRCUIT PROTECTOR | UG = UNDERGROUND |
| DIV = DIVISION | MH = MANHOLE | UL = UNDERWRITERS LABORATORIES |
| DP = DISTRIBUTION PANEL | MIN = MINIMUM | UON = UNLESS OTHERWISE NOTED |
| DS = DISCONNECT SWITCH | MISC = MISCELLANEOUS | UPS = UNINTERRUPTIBLE POWER SUPPLY |
| DTP = DEMARCATION TERMINAL PANEL | MOD = MOTOR OPERATED DAMPER | UTP = UNSHIELDED TWISTED PAIR |
| DWG = DRAWING | MTS = MANUAL TRANSFER SWITCH | V = VOLT |
| ECD = ELECTRICAL CONTROL DIAGRAM | N = NEUTRAL | VA = VOLT-AMPERES |
| EF = EXHAUST FAN | NEC = NATIONAL ELECTRICAL CODE | VAC = VOLTS / ALTERNATING CURRENT |
| ELEC = ELECTRICAL | NEMA = NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION | VCP = VENTILATION CONTROL PANEL |
| ETM = ELAPSED TIME METER | NFPA = NATIONAL FIRE PROTECTION ASSOCIATION | VDC = VOLTS / DIRECT CURRENT |
| EX = EXISTING | NTS = NOT TO SCALE | VFD = VARIABLE FREQUENCY DRIVE |
| FLA = FULL LOAD AMPERES | OIT = OPERATOR INTERFACE TERMINAL | W = WIRE |
| FRP = FIBERGLASS REINFORCED POLYESTER | OL = OVERLOAD | WP = WEATHER PROOF |
| FT = FEET | P&ID = PROCESS AND INSTRUMENTATION DIAGRAM | XDCR = TRANSDUCER |
| FVNR = FULL VOLTAGE NON-REVERSING | P = POLE | XFMR = TRANSFORMER |
| G, GND = GROUND | PB = PULL BOX | XMTR = TRANSMITTER |
| GALV = GALVANIZED | PCP = PUMP CONTROL PANEL | XP = EXPLOSION PROOF |
| GFCI = GROUND FAULT CURRENT INTERRUPTER | PFFB = PROVIDED FOR FUTURE BREAKER | |

(ISA) INSTRUMENT IDENTIFICATION SCHEDULE

	FIRST LETTER		SUCCEEDING LETTER		
	VARIABLE	MODIFIER	PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYSIS		ALARM		AUTOMATIC
B	BREAKER		USER'S CHOICE	CLOSE OR STOP	BYPASS/REVERSE
C	COMMUNICATIONS			CONTROL	
D	DENSITY	DIFFERENTIAL		OPEN OR START	
E	VOLTAGE (EMF)		PRIMARY ELEMENT	SENSOR	
F	FLOW RATE	RATIO	FAIL	FAIL	FAIL/INCOMPLETE
G	GAUGING		GLASS		LOCAL/MANUAL/HAND
H	HAND				HIGH OR OPEN
I	CURRENT		INDICATE		INTERMEDIATE
J	POWER	SCAN			
K	TIME	TIME RATE		CONTROL STATION	
L	LEVEL		LIGHT		LOW OR CLOSE
M	MOTOR	MOMENTARY		MOTOR	MIDDLE
N	STATUS		INPUT	FORWARD	ON OR OPERATE
O				OFF	OVERLOAD
P	PRESSURE	PNEUMATIC	POINT (TEST)	POSITION	
Q	QUALITY OR EVENT	TOTALIZE		EMERGENCY/ABNORMAL	
R	RADIOACTIVITY		RECORD OR PRINT	REMOTE	RUN/FORWARD
S	SPEED OR FREQUENCY	SUM	SWITCH	SWITCH	STOP
T	TEMPERATURE			TRANSMIT	
U	MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION	MULTIFUNCTION
V	VARIABLE OR VISCOSITY			VALVE OR DAMPER	VFD/VALVE
W	WEIGHT OR FORCE	TORQUE	WELL		UNCLASSIFIED
X	MOD. LIGHT OR VALVE		UNCLASSIFIED	UNCLASSIFIED	RESET
Y	INTERLOCK			RELAY OR COMPUTE	
Z	POSITION			DRIVE OR ACTUATOR	

INSTRUMENT EXAMPLES

- LI = LEVEL INDICATE
- MR = MOTOR RUNNING
- ZS = POSITION SWITCH

OWNER/DEVELOPER:
SIMONS CORNER PARTNERS, LLC
WILMINGTON, DE 19807
PH. (302) 425-3555

KCI TECHNOLOGIES, INC.
ENGINEERS - PLANNERS - SURVEYORS
1000 North DuPont Highway
SMYRNA, DE 19886
PHONE: (302) 747-6589 FAX: (302) 731-7267 Website: www.kci.com

DELAWARE
KENT COUNTY
SMYRNA

ELECTRICAL NOTES AND ABBREVIATIONS
SIMONS CORNER PUMP STATION

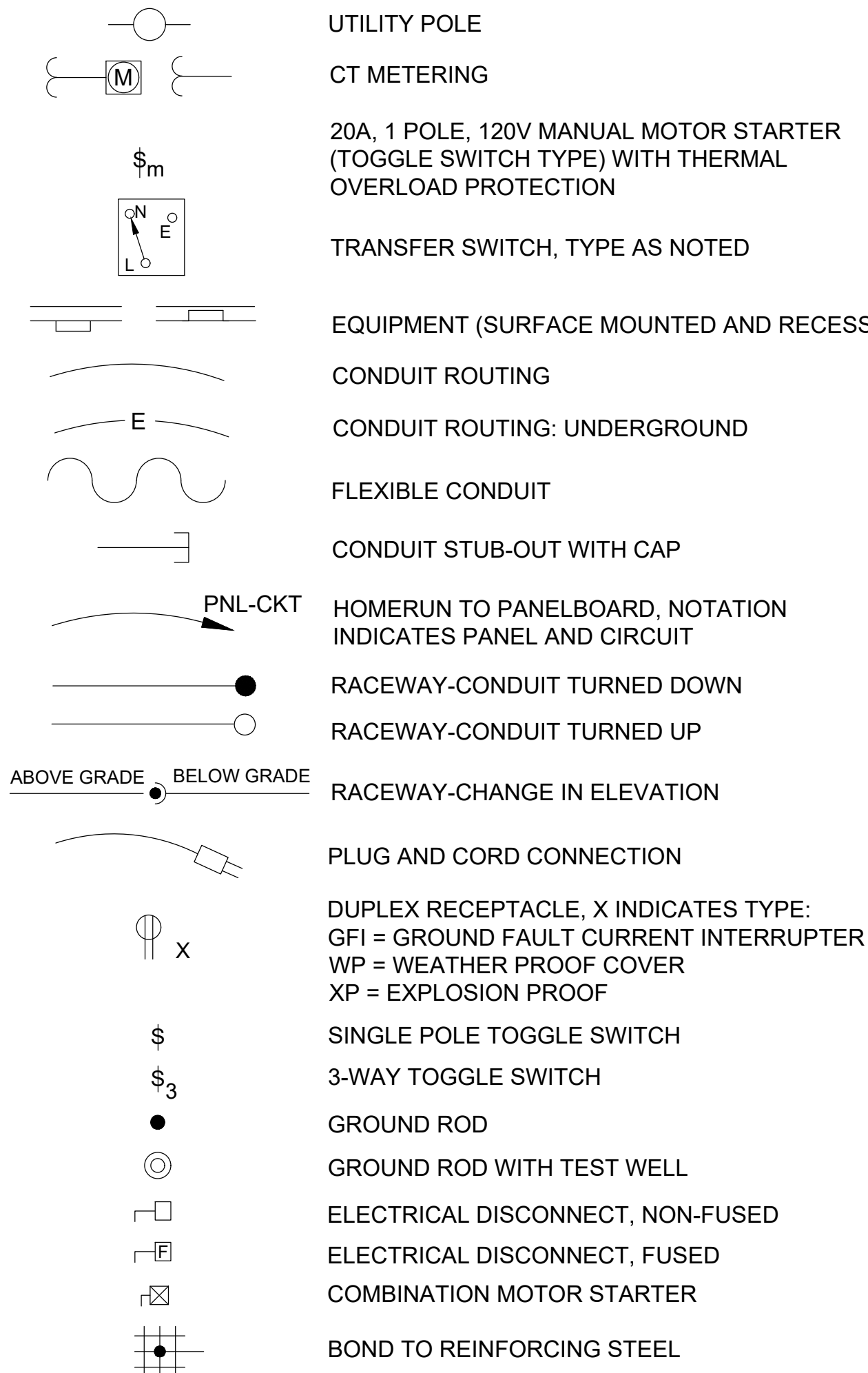
PROFESSIONAL CERTIFICATION
HEREBY CERTIFY THAT THESE DOCUMENTS WERE
PREPARED OR APPROVED BY ME, AND THAT I AM A
DAILY LICENSED PROFESSIONAL ENGINEER UNDER
THE LAWS OF THE STATE OF DELAWARE.
LICENSE NO. 2014
EXPIRATION DATE: 02/28/2024



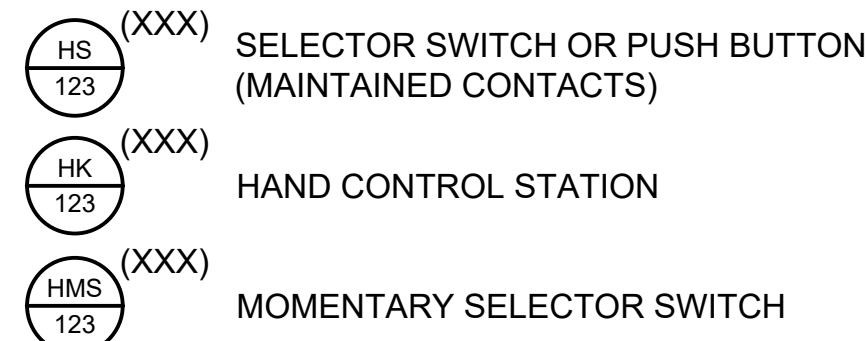
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Design: MHD Check: SDR
SCALE: AS NOTED
DATE: 06-04-2024
KCI JOB #: 1303012 SCPS
SHEET: E-0.01

**PERMITTING SET
NOT FOR
CONSTRUCTION**

PLAN SYMBOLS



HAND SWITCHES



HAND SWITCH-NOTES (XXX)

- ACK = ACKNOWLEDGE PUSHBUTTON
- AT = ALARM TEST
- CL = CLOSE
- ES = EMERGENCY STOP
- HOA = HAND-OFF-AUTOMATIC
- LO = LOCKOUT STOP
- LR = LOCAL-REMOTE
- MA = MANUAL-AUTOMATIC
- OP = OPEN
- PA = PERSONAL ALARM
- POT = POTENTIOMETER
- RES = RESET
- SEL = SELECTOR
- SP = STOP
- ST = START

ELECTRICAL CONTROL DIAGRAM

LEGEND (ECD):

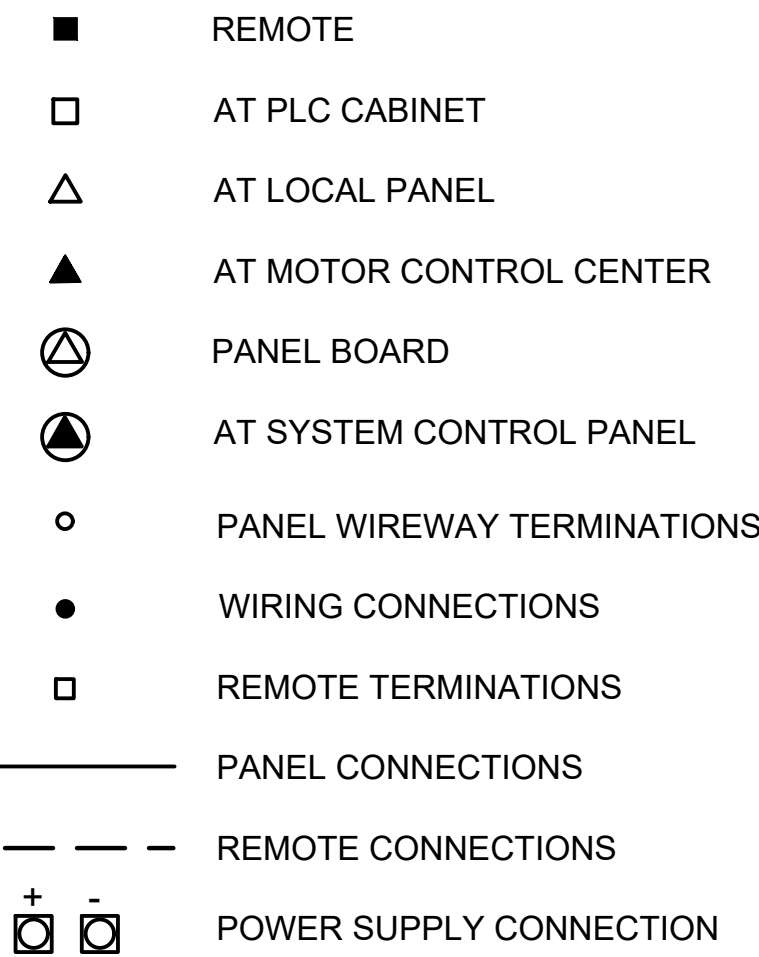
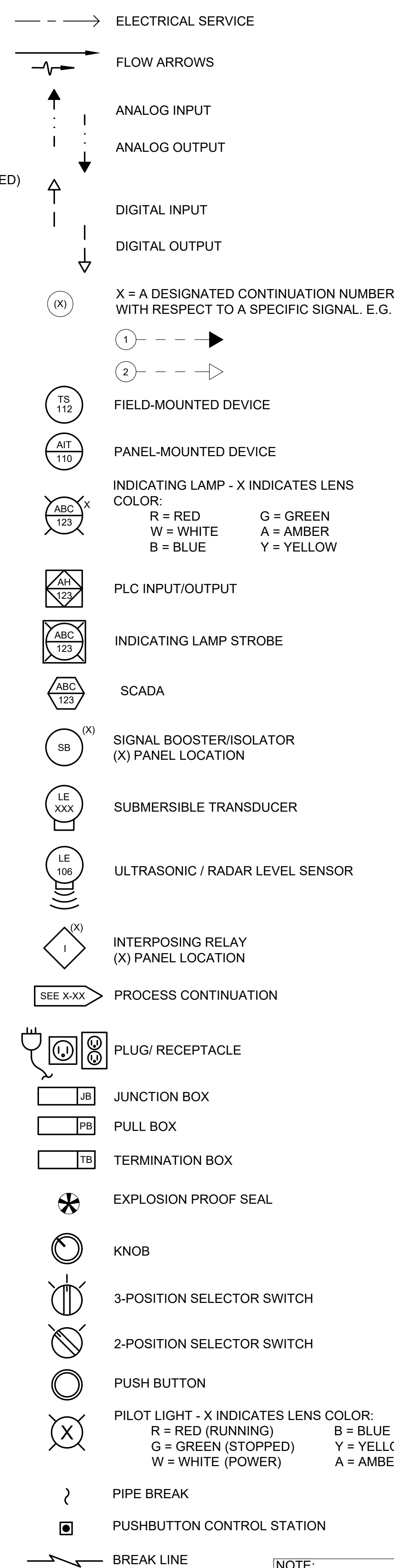
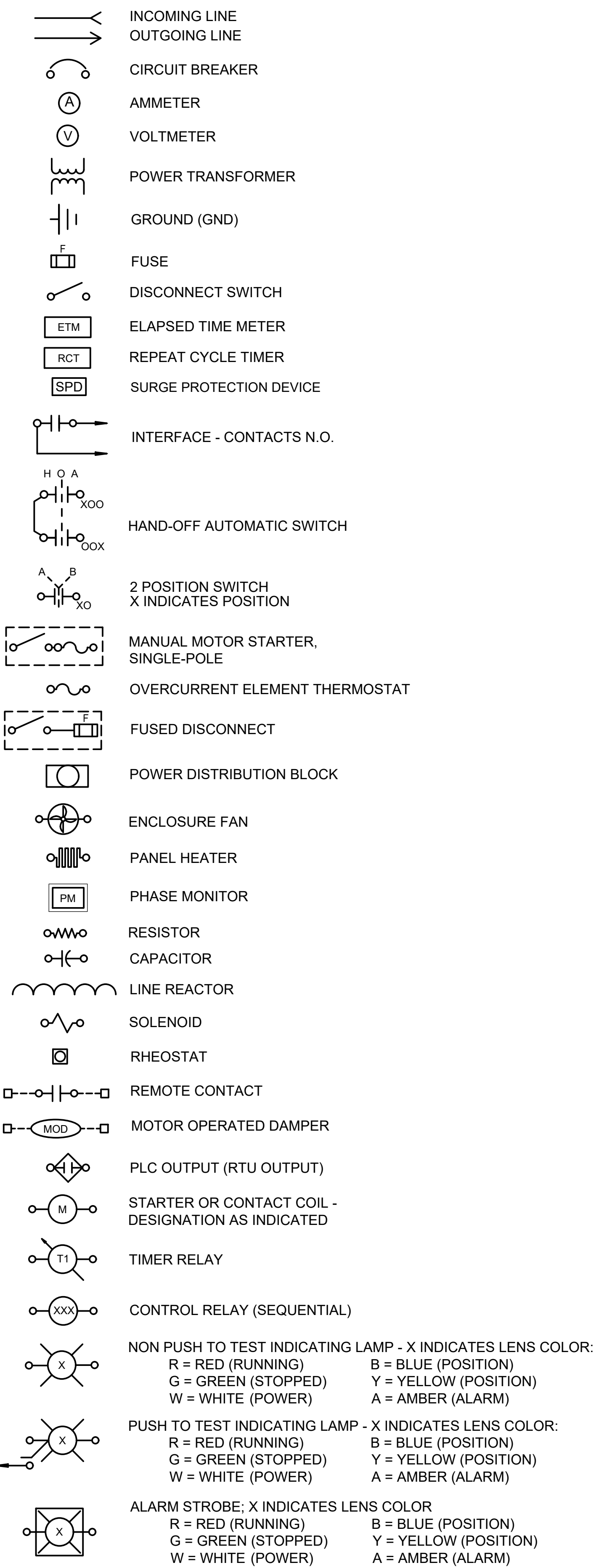


DIAGRAM SYMBOLS

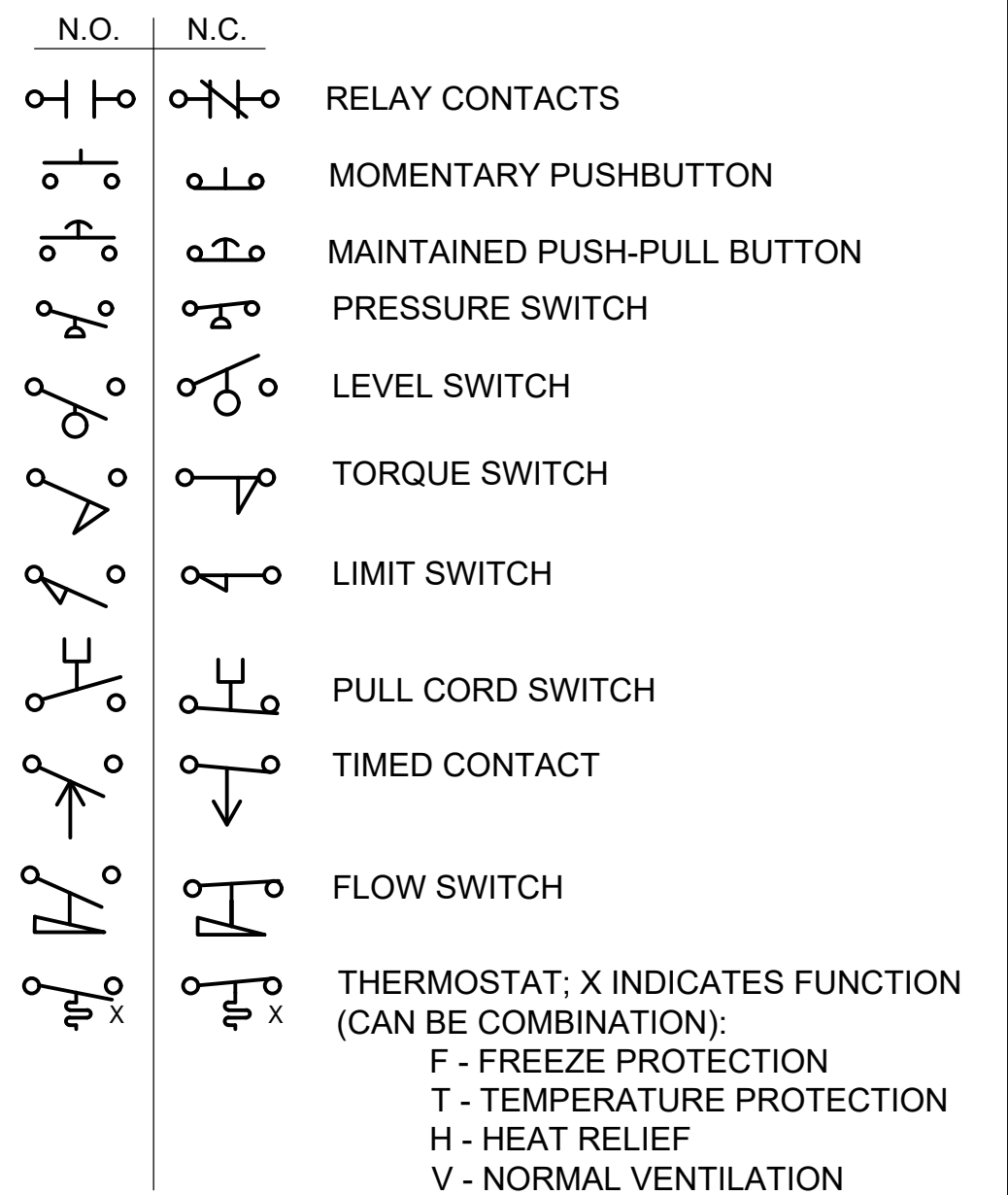
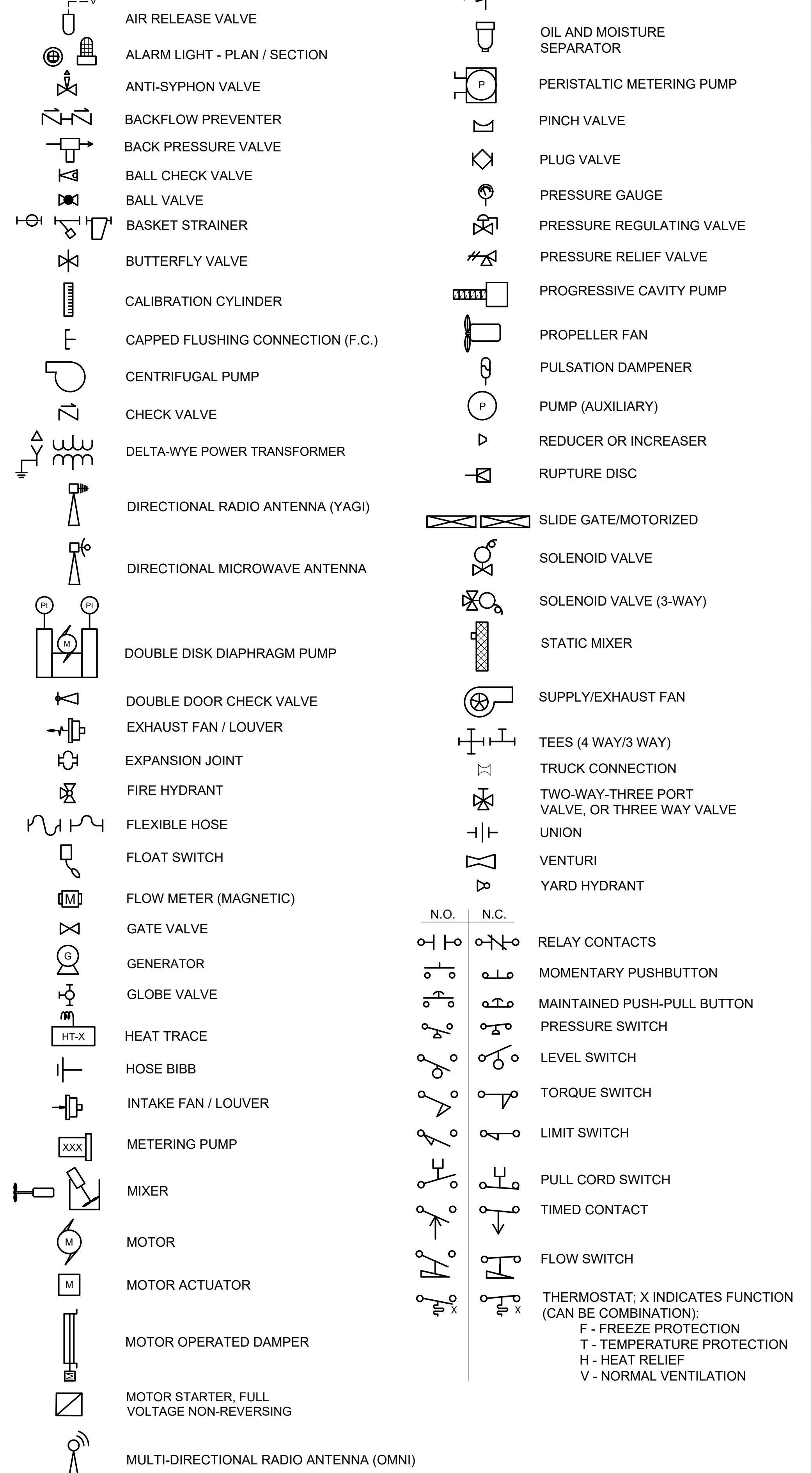


NOTE:
THIS IS A STANDARD LEGEND AND ABBREVIATIONS SHEET. NOT ALL THE INFORMATION SHOWN ON THIS LEGEND IS USED ON THIS PROJECT.

ELECTRICAL CONTROL DIAGRAM SYMBOLS (ECD)



EQUIPMENT SYMBOLS



ELECTRICAL LEGENDS AND SYMBOLS

SIMONS CORNER PUMP STATION

DELAWARE
KENT COUNTY
SMYRNA

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF DELAWARE.
LICENSE NO. 2010
EXPIRATION DATE: 02/28/2024

SIGNATURE: _____
Drafting: MHD Check: SDR
Design: MHD Check: SDR
SCALE: AS NOTED
DATE: 06-04-2024
KCI JOB #: 1303012 SCPS
SHEET: E-0.02

**PERMITTING SET
NOT FOR
CONSTRUCTION**

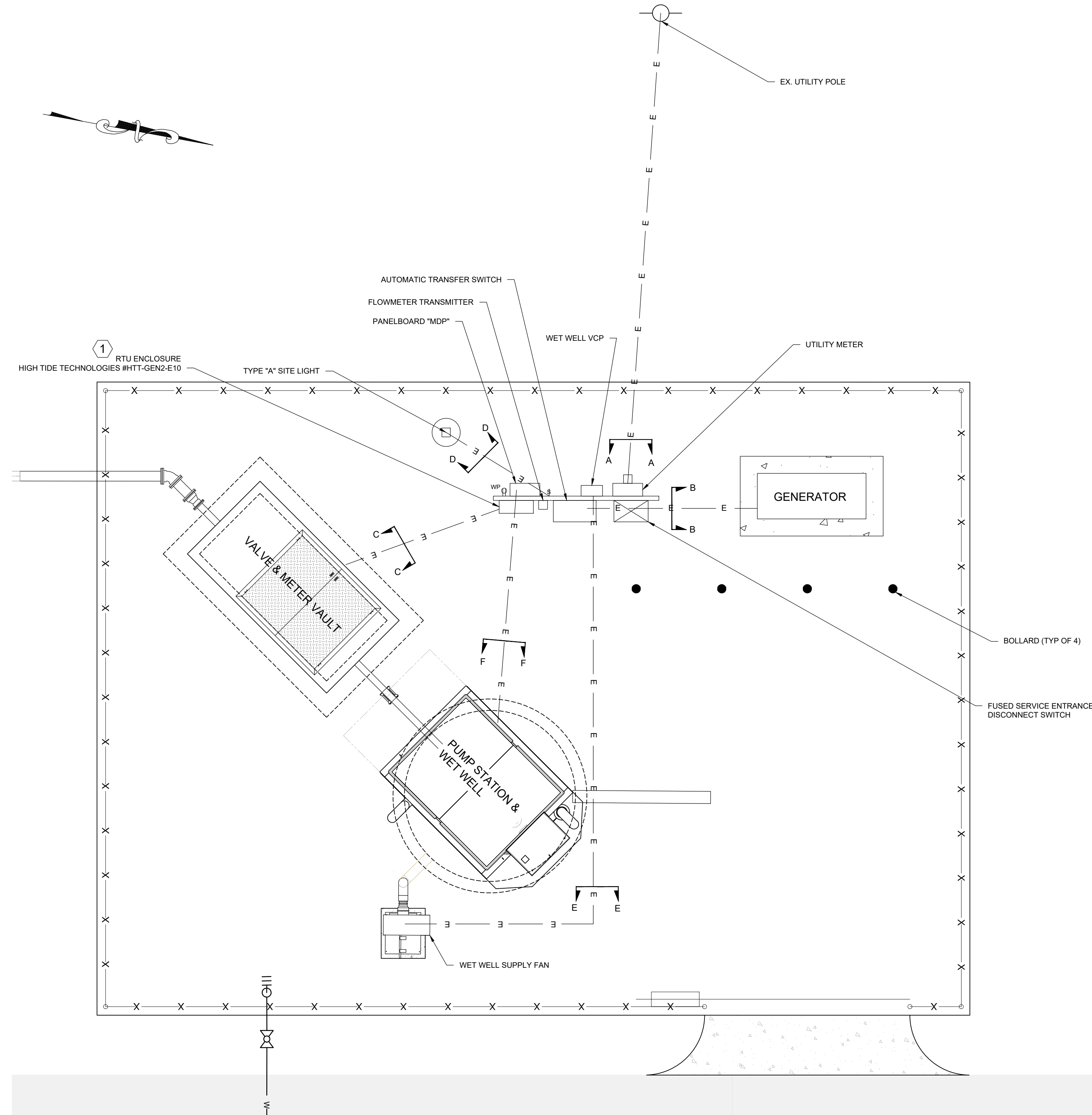
OWNER/DEVELOPER:
SIMONS CORNER PARTNERS, LLC
WILMINGTON, DE 19807
PH. (302) 425-3555

ENGINEERS - PLANNERS - SURVEYORS
KCI TECHNOLOGIES, INC.
600 North DuPont Highway
P.O. Box 1000
Philadelphia, PA 19107
PHONE: (802) 747-6599 FAX: (802) 731-7267 Website: www.kci.com

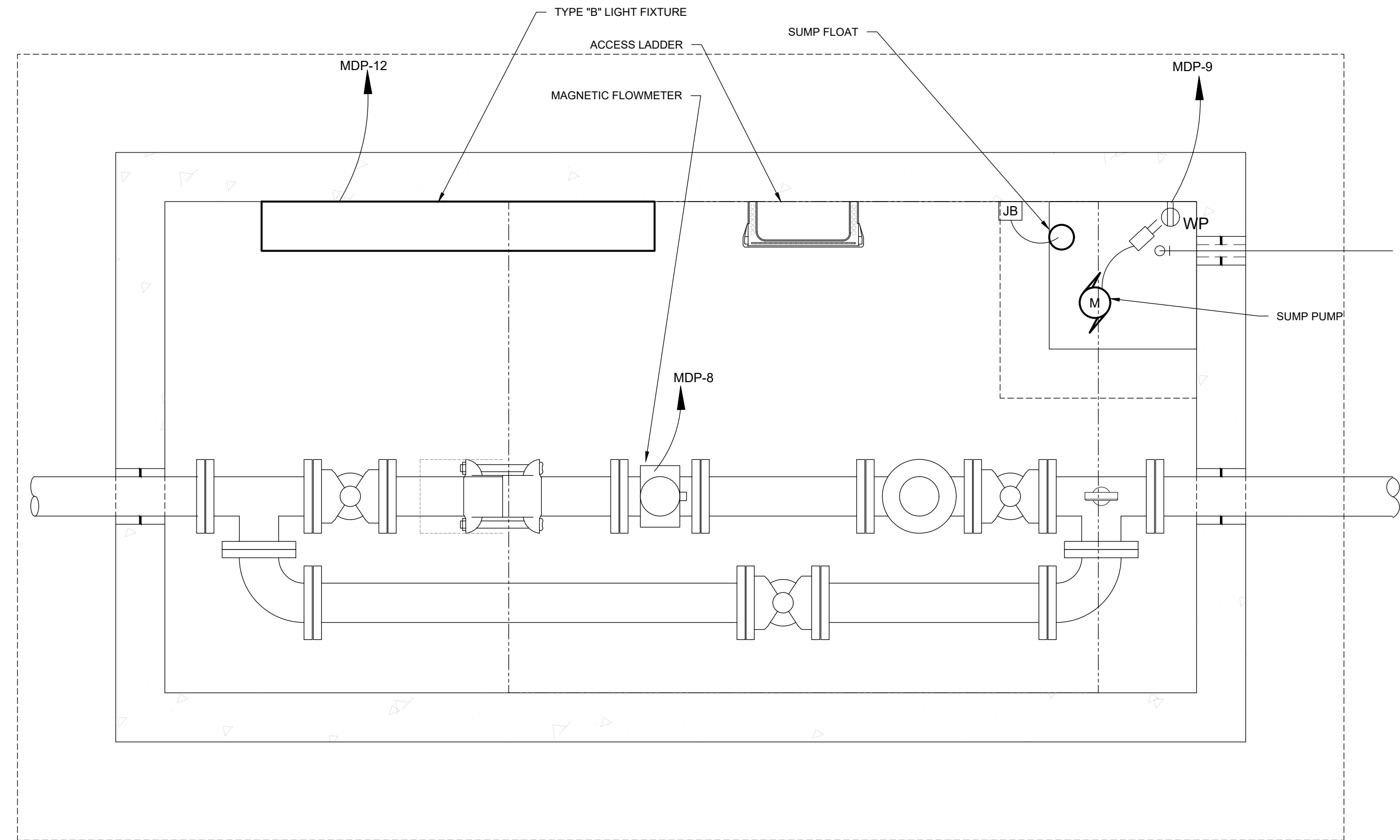
⊗ SHEET KEY NOTES:

- SCADA PANEL SIGNALS:

TYPE	DESIGNATION
DI	LOW LEVEL
DI	HIGH LEVEL
DI	PLC POWER FAILURE
DI	STATION POWER FAILURE
DI	GENERATOR FAILURE
DI	PUMP-1 FAILURE
DI	PUMP-2 FAILURE
DI	SUMP PUMP FAILURE
DI	UNAUTHORIZED ENTRY
DI	STATION COMMON ALARM



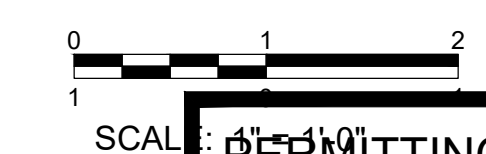
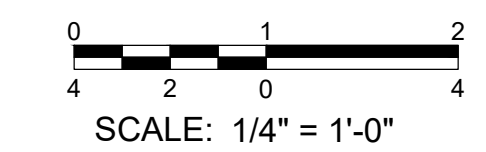
1 ELECTRICAL SITE PLAN
E-1.01 SCALE: 1/4" = 1'-0"



2 ELECTRICAL VAULT PLAN
E-1.01 SCALE: 1" = 1'-0"

LIGHTING FIXTURE SCHEDULE					
TYPE	DESCRIPTION	LAMPS	MOUNTING	VOLTAGE	MANUFACTURER & CATALOG NUMBER
A	LOW PROFILE AREA/SITE LIGHT WITH DAWN/DUSK PHOTOCONTROL, 4000K TEMP, 70 CRI, 5200 LUMENS, 39 WATT	LED	SQUARE POLE MOUNT AT 16'-0" AFG	120VAC	BEACON: RAR1-80L-39-4K7-4W-120 ASQU-BLT-7PR-TL
B	4-FOOT FIXTURE WITH FIBERGLASS HOUSING WITH DAMP AND WET LOCATION AND VAPOR TIGHT RATING, ACRYLIC LENS, POLYACETAL LATCHES ATTACHED TO HOUSING, 4000K TEMP, 80 CRI, 2000 LUMENS, 15 WATT	LED	WALL MOUNT 0'-6" BELOW CEILING	120VAC	BEACON: LXEN4-40XW-RFA-EU

GRAPHIC SCALES



**PERMITTING SET
NOT FOR
CONSTRUCTION**

OWNER/DEVELOPER: SIMONS CORNER PARTNERS, LLC
WILMINGTON, DE 19807
PH: (302) 425-8555

KCI TECHNOLOGIES, INC.
ENGINEERS - PLANNERS - SURVEYORS
1000 W. MARKET STREET, SUITE 100
SMYRNA, DE 19886
PHONE: (302) 747-5599 FAX: (302) 731-7297 Website: www.kci.com

DELAWARE
KENT COUNTY
SMYRNA

ELECTRICAL SITE PLAN
SIMONS CORNER PUMP STATION

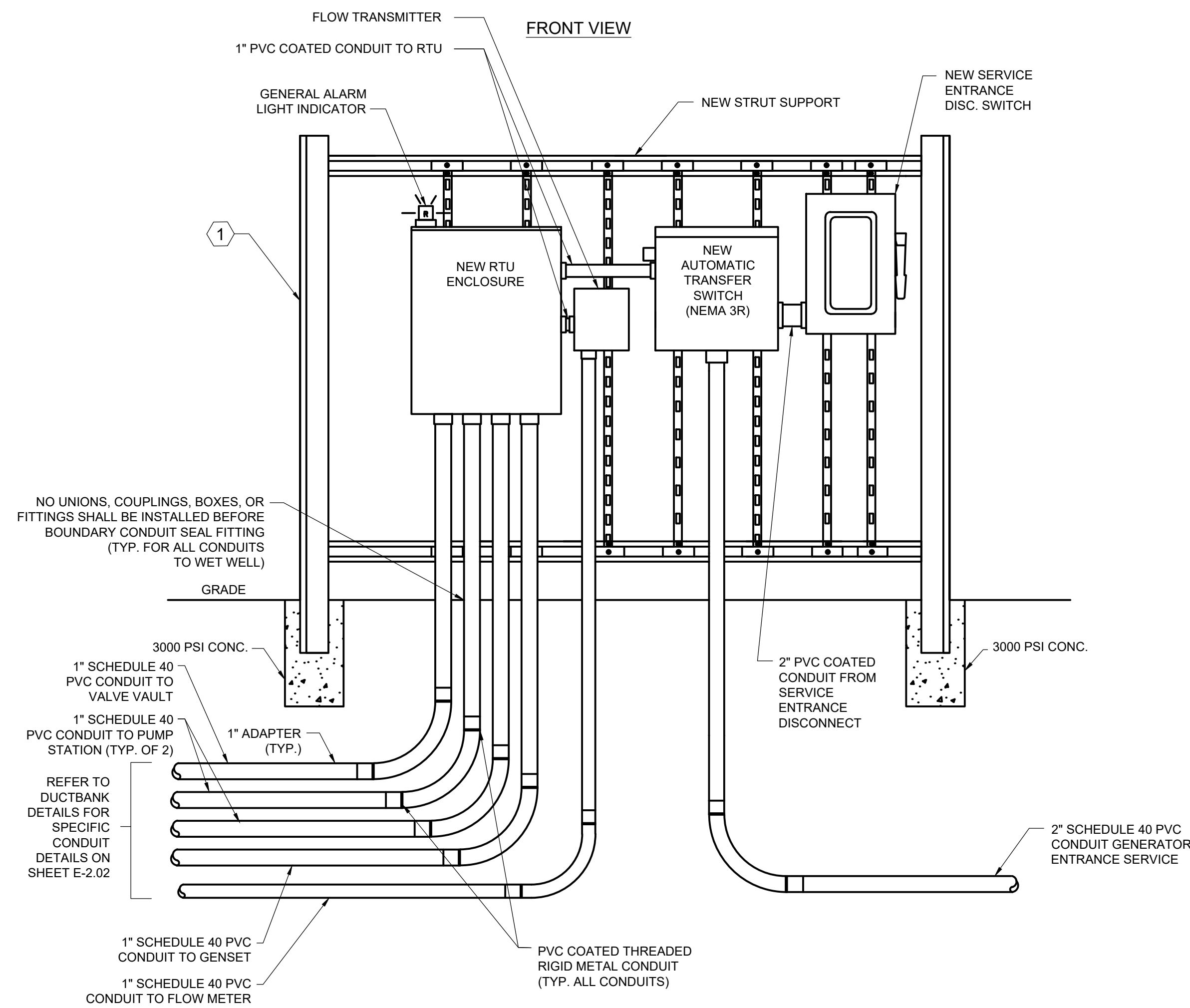
PROFESSIONAL CERTIFICATION
HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF DELAWARE.
LICENSE NO: 2022
EXPIRATION DATE: 06/30/2024

SIGNATURE: [Signature]
Drafting: MHD Check: SDR
Design: MHD Check: SDR
SCALE: AS NOTED
DATE: 06-04-2024
KCI JOB #: 1303012 SCPS
SHEET: E-1.01

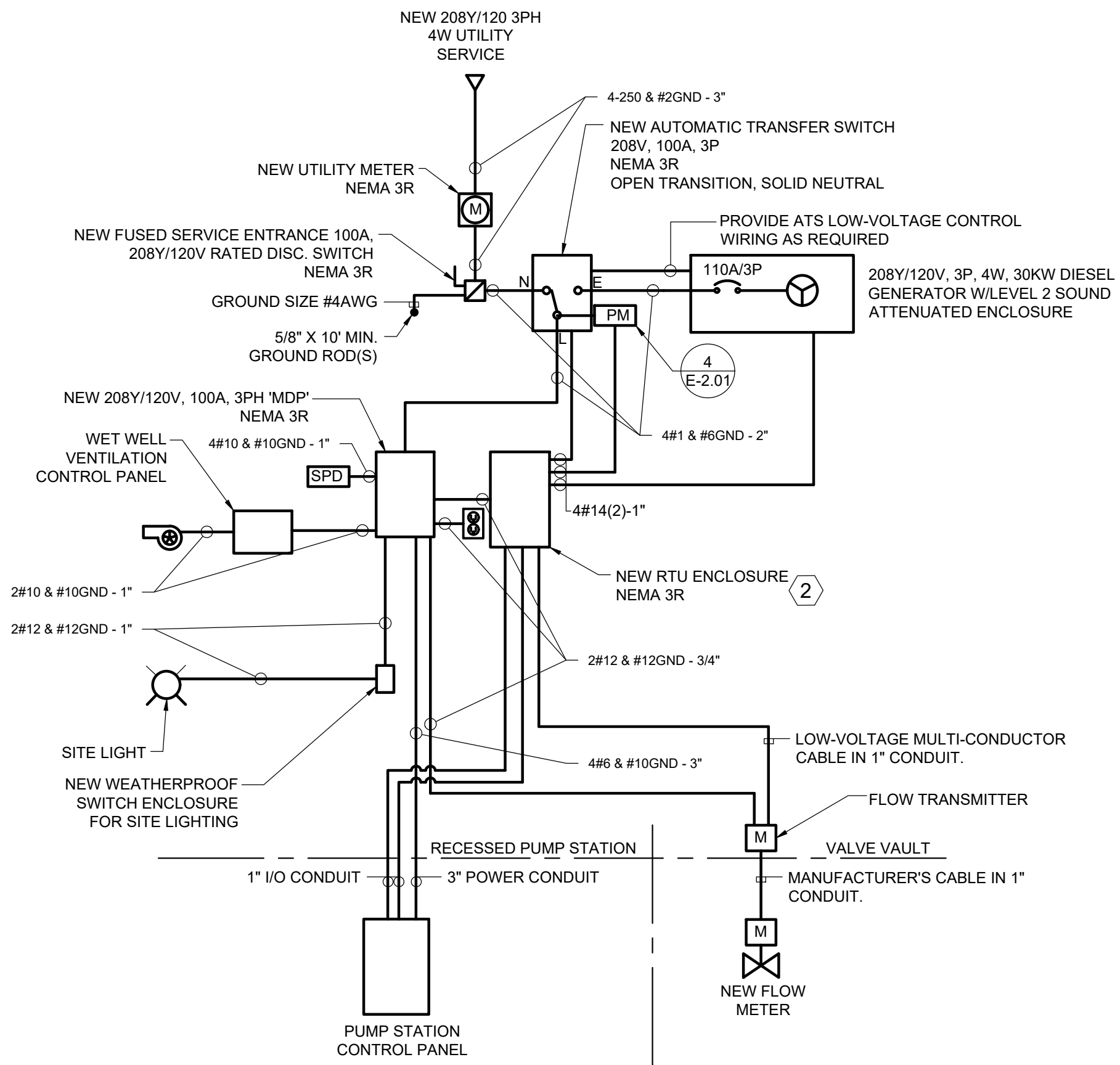
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⊗ SHEET KEY NOTES:

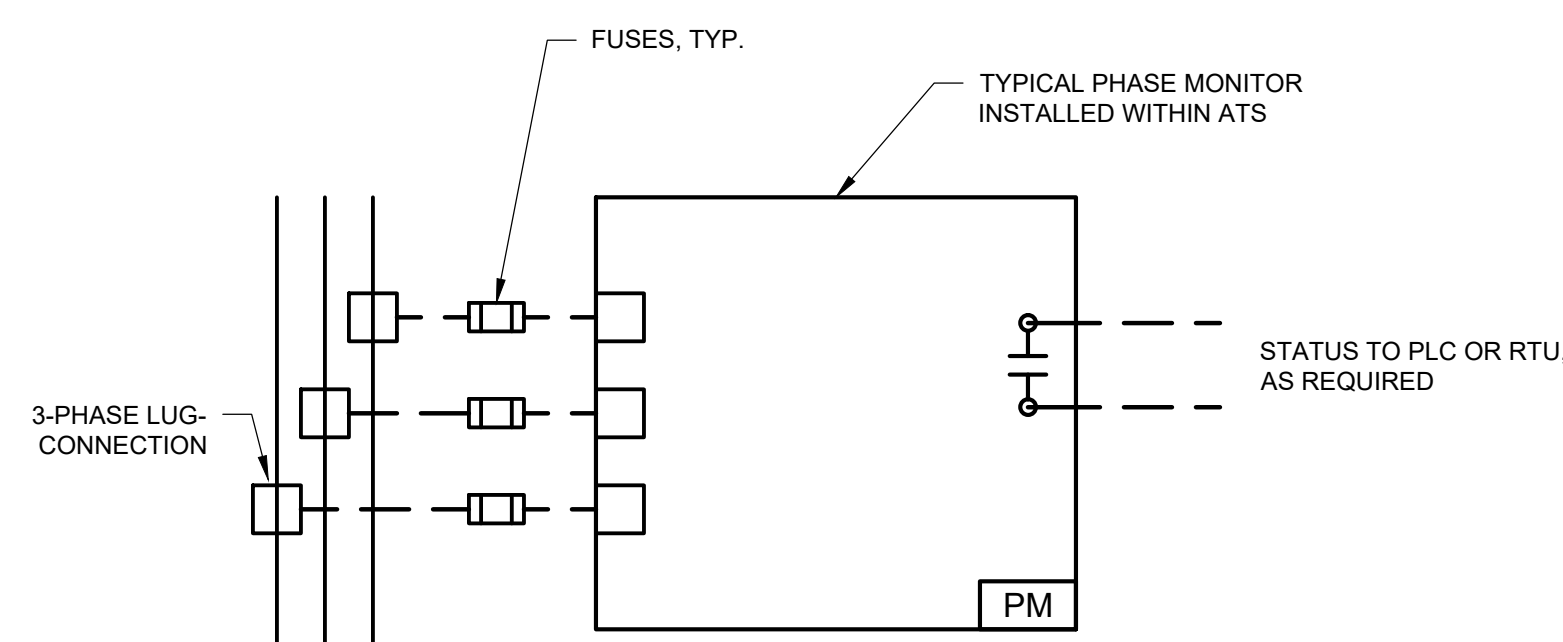
- CONTRACTOR SHALL PROVIDE CORROSION RESISTANT STRUT SUPPORT INCLUSIVE OF ALL FASTENING EQUIPMENT THAT INCLUDE BUT NOT LIMITED TO CONDUITS, HANGERS, STRAPS, CONDUIT BODIES, MOUNTING ACCESSORIES, ETC.
- PROVIDE LOW-VOLTAGE, MULTI-CONDUCTOR CABLE TO NEW SCADA RTU FOR AUXILIARY/ALARM STATUSES FROM NEW PUMPING STATION CONTROL PANEL. PROVIDE LOW-VOLTAGE, ANALOG CABLE FROM FLOW METER TRANSMITTER AND WIRE TO HIGH TIDE RTU ANALOG INPUT TERMINALS.
- WHEN HATCH IS OPENED, SWITCH CONTACTS SHALL CLOSE.



1 ELECTRICAL PANEL ELEVATIONS
SCALE: NONE

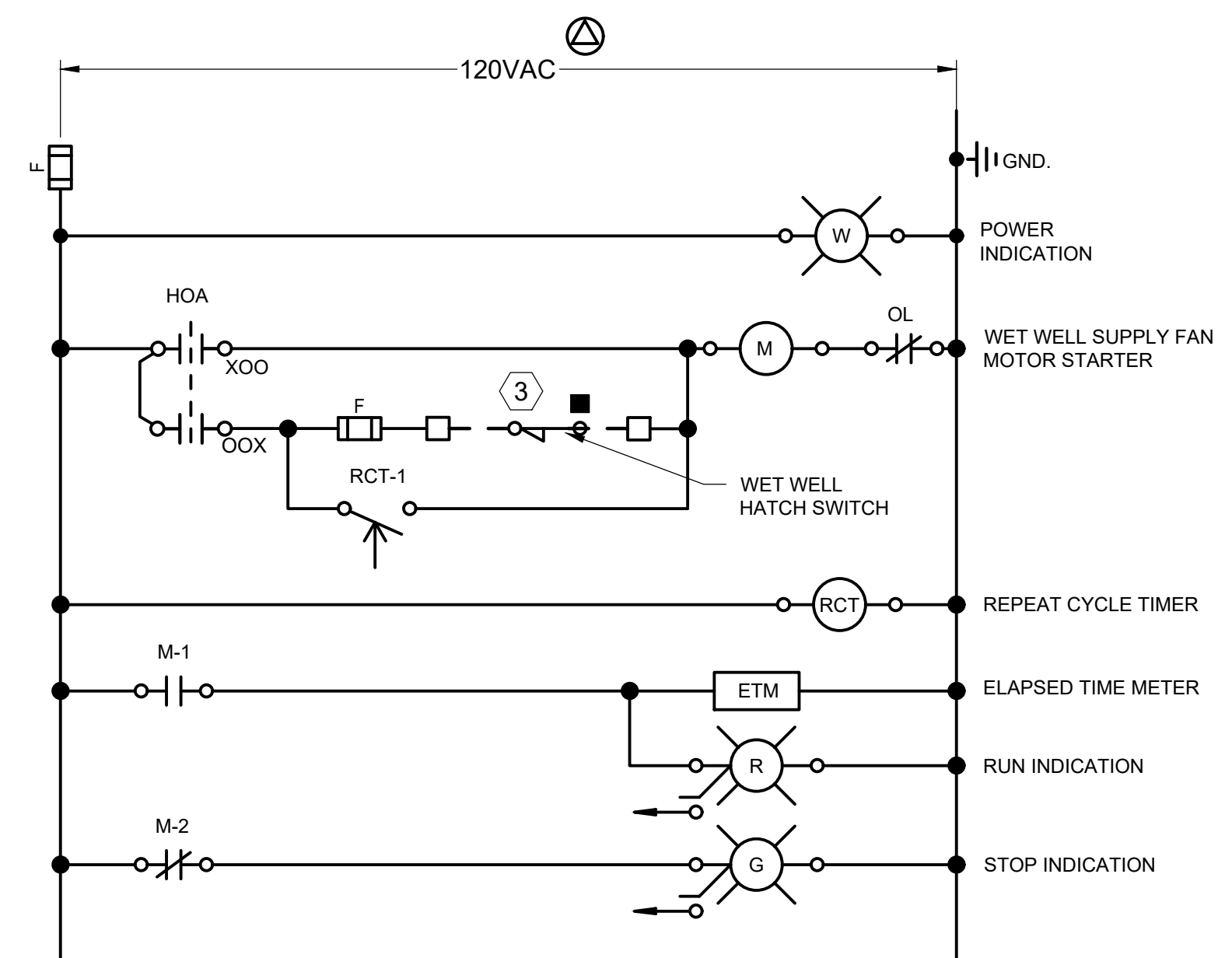


2 ELECTRICAL SINGLE LINE DIAGRAM
SCALE: NONE



NOTES:
1. POWER MONITORS ARE TO HAVE OVER-CURRENT PROTECTION. PROVIDE MANUFACTURER RECOMMENDED DEVICES.

3 PHASE MONITOR RISER
SCALE: NONE



4 WET WELL VCP ECD
SCALE: NONE

PERMITTING SET NOT FOR CONSTRUCTION

OWNER/DEVELOPER: SIMONS CORNER PARTNERS, LLC
WILMINGTON, DE 19807
PH. (302) 425-3555

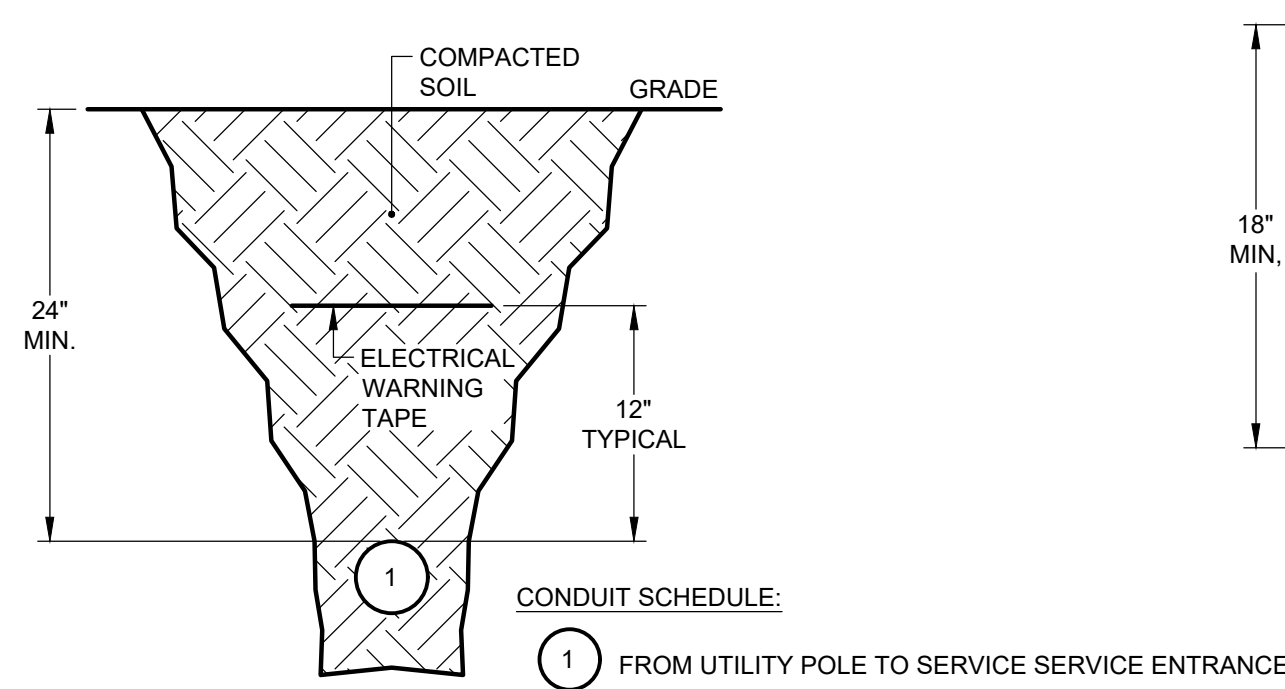
ENGINEERS - PLANNERS - SURVEYORS
KCI TECHNOLOGIES, INC.
600 N. MARKET STREET, SUITE 100
WILMINGTON, DE 19801
PHONE: (302) 747-6599 FAX: (302) 731-7297 Website: www.kci.com

DELAWARE
SMYRNA
KENT COUNTY

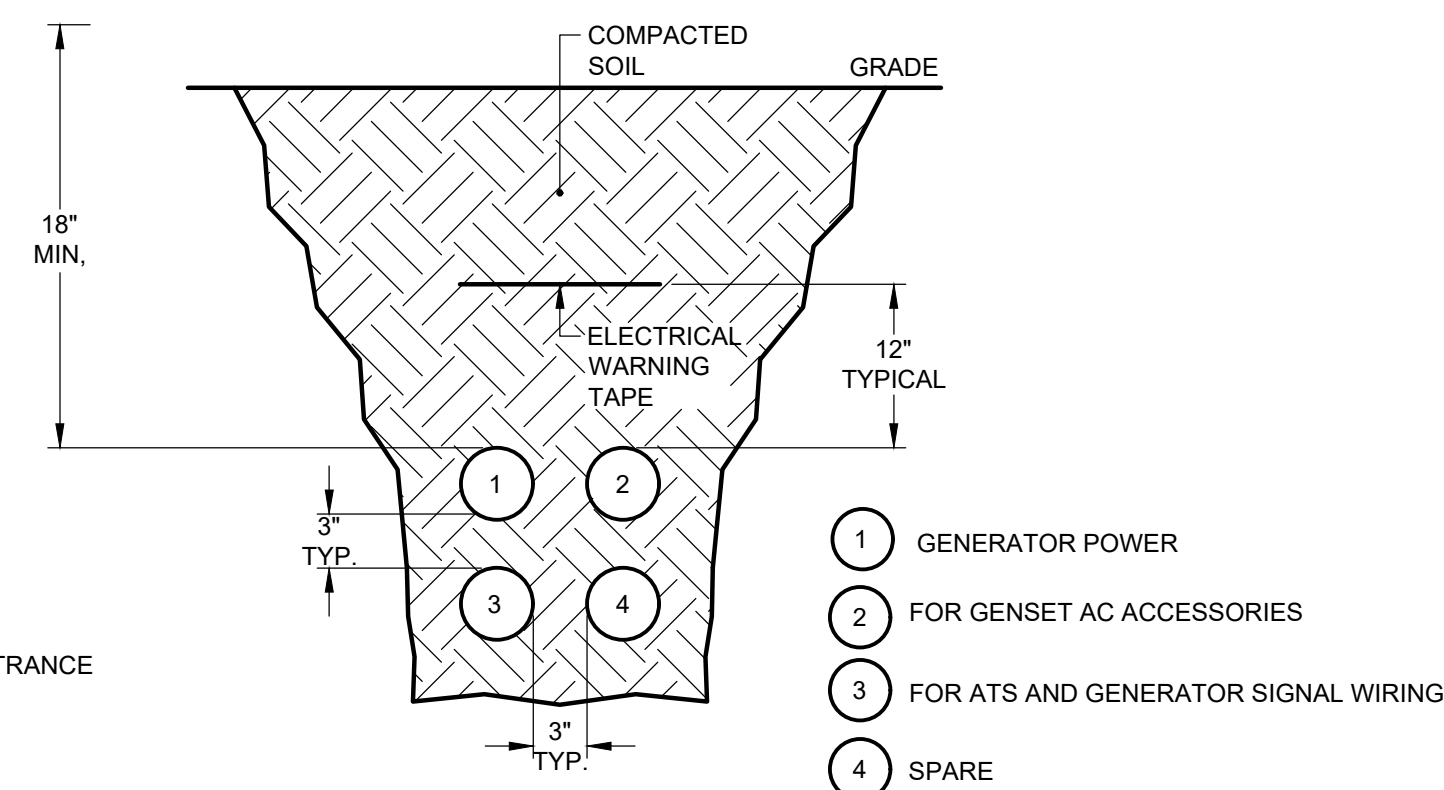
ELECTRICAL DETAILS I
SIMONS CORNER PUMP STATION

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF DELAWARE.
LICENSE NO. 20221
EXPIRATION DATE: 06/30/2026

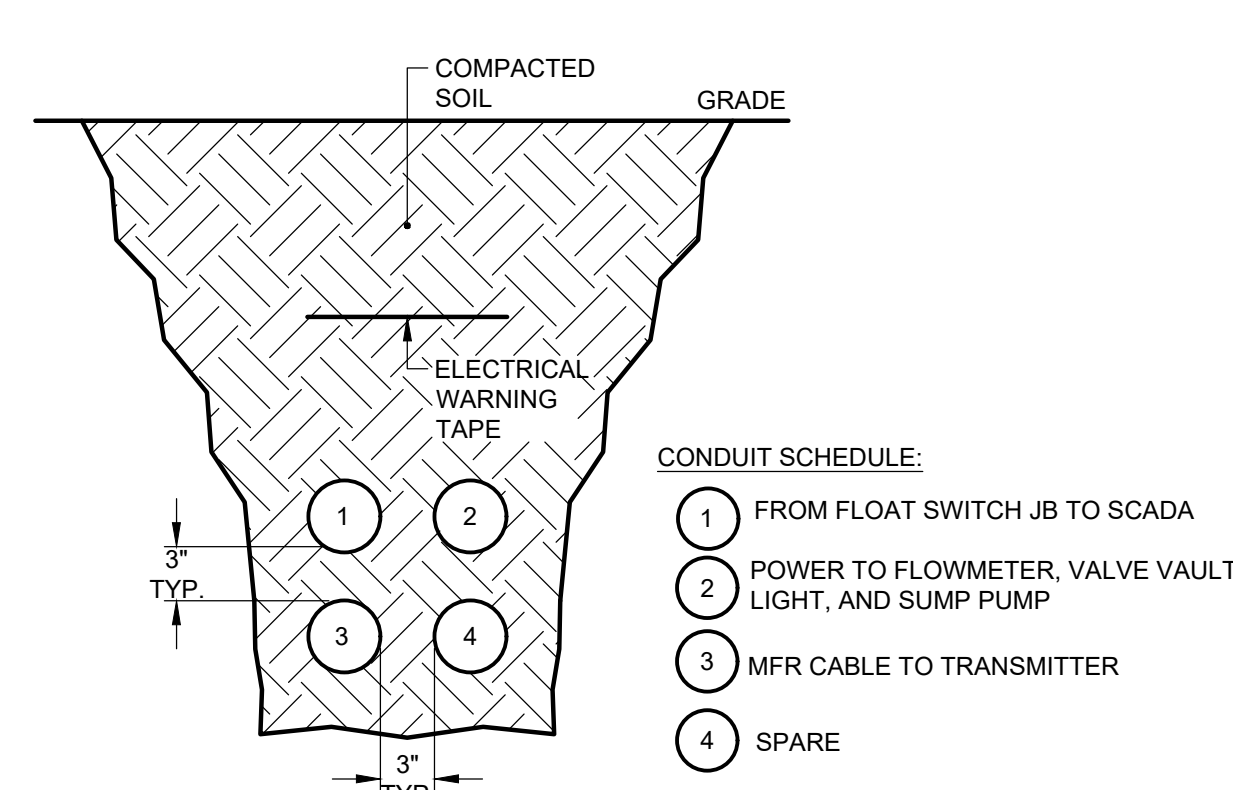
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SHEET: E-2.01		



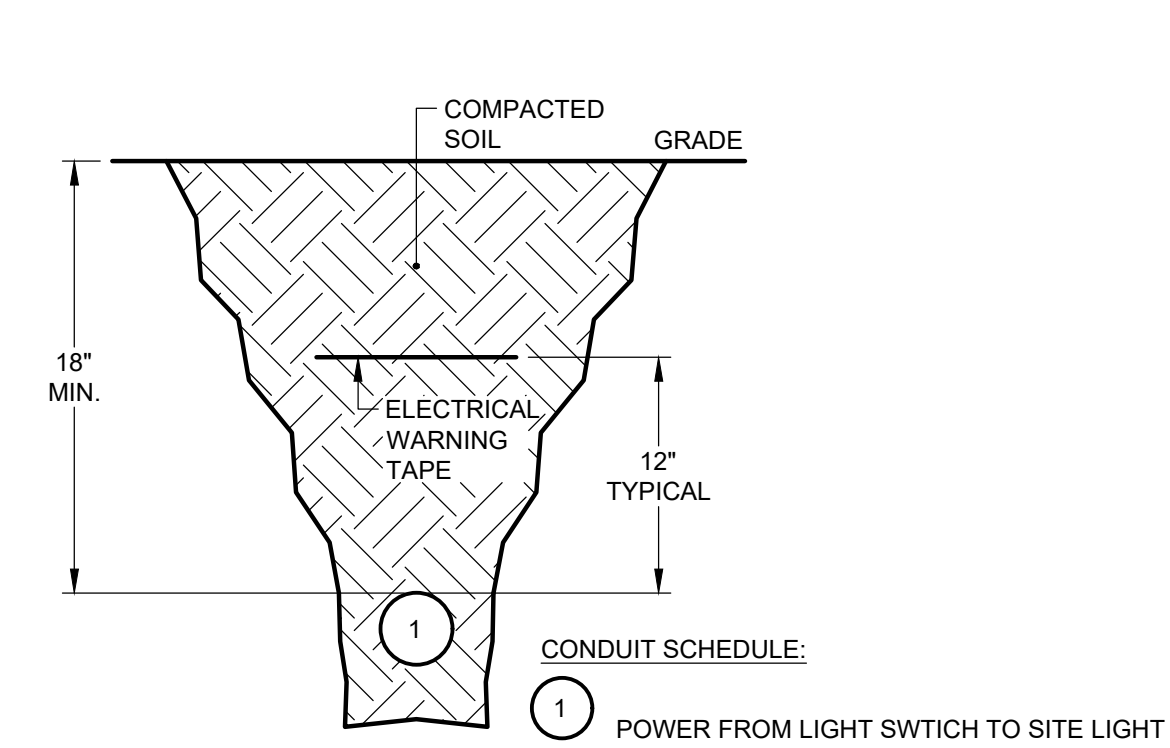
A DUCT BANK DETAIL A-A
E-2.02 SCALE: NONE



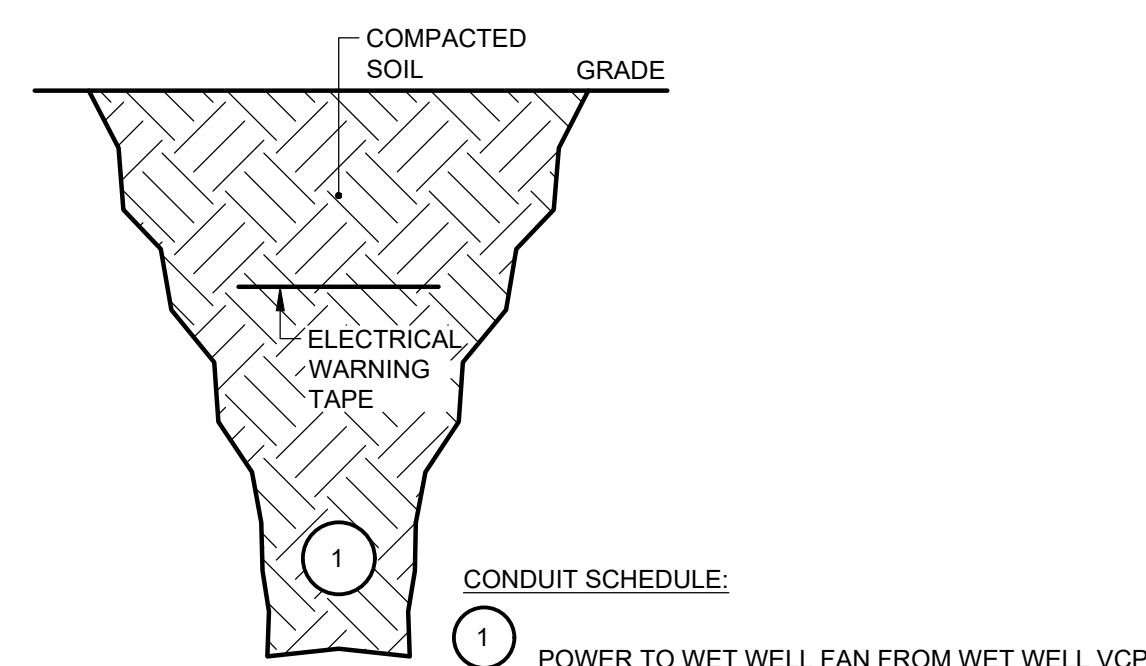
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E-2.02 SCALE: NONE



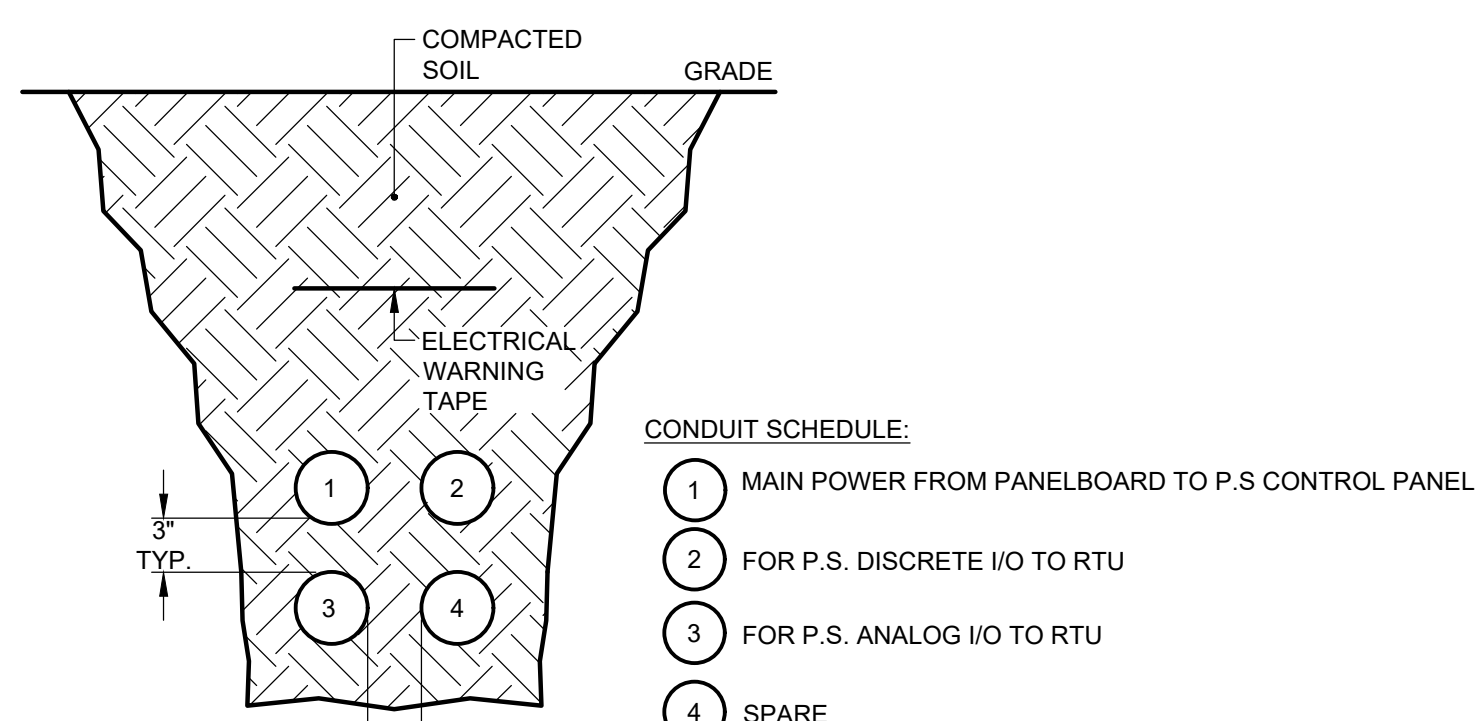
C DUCT BANK DETAIL C-C
E-2.02 SCALE: NONE



D DUCT BANK DETAIL D-D
E-2.02 SCALE: NONE



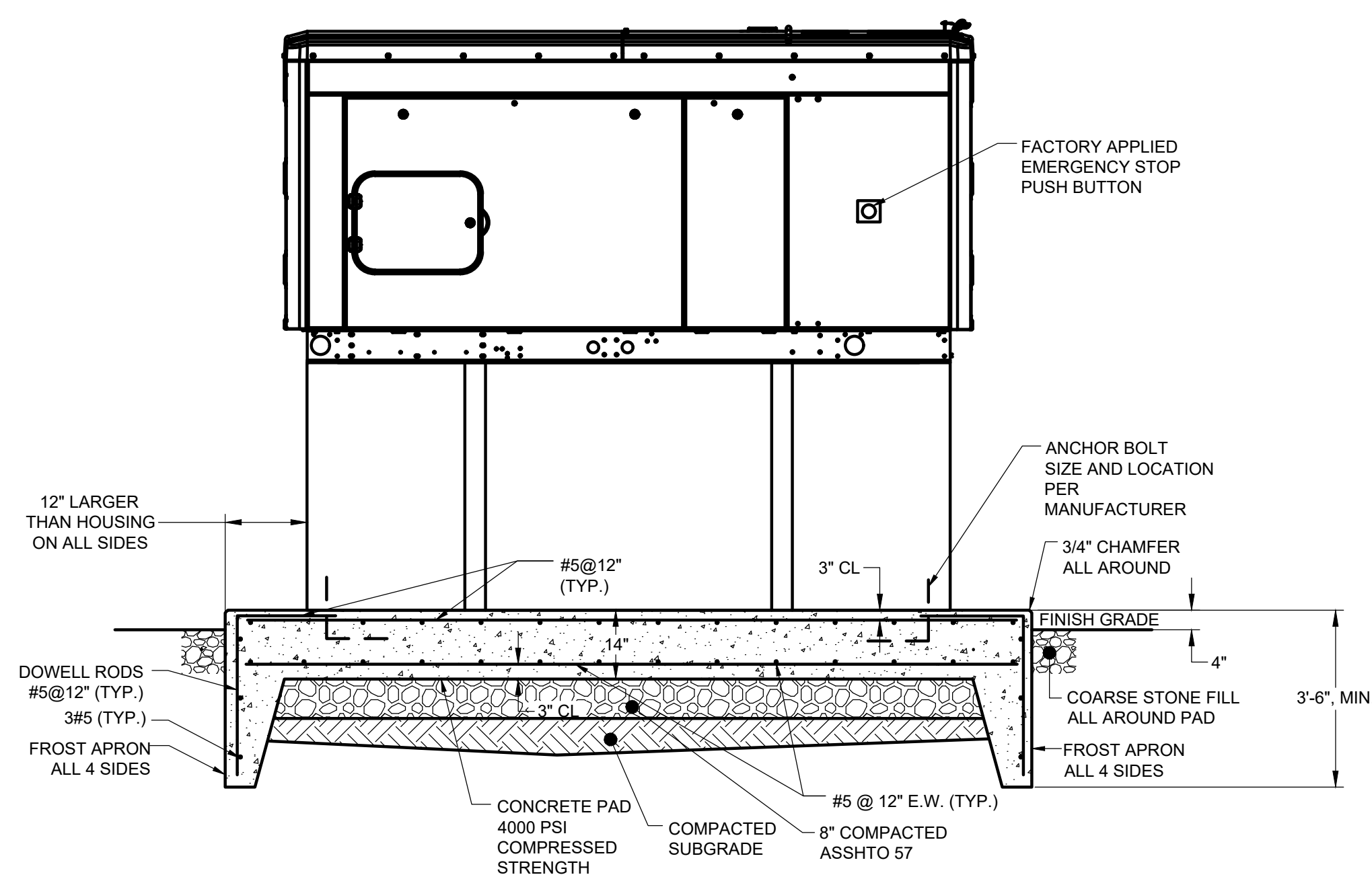
E DUCT BANK DETAIL E-E
E-2.02 SCALE: NONE



F DUCT BANK DETAIL F-F
E-2.02 SCALE: NONE

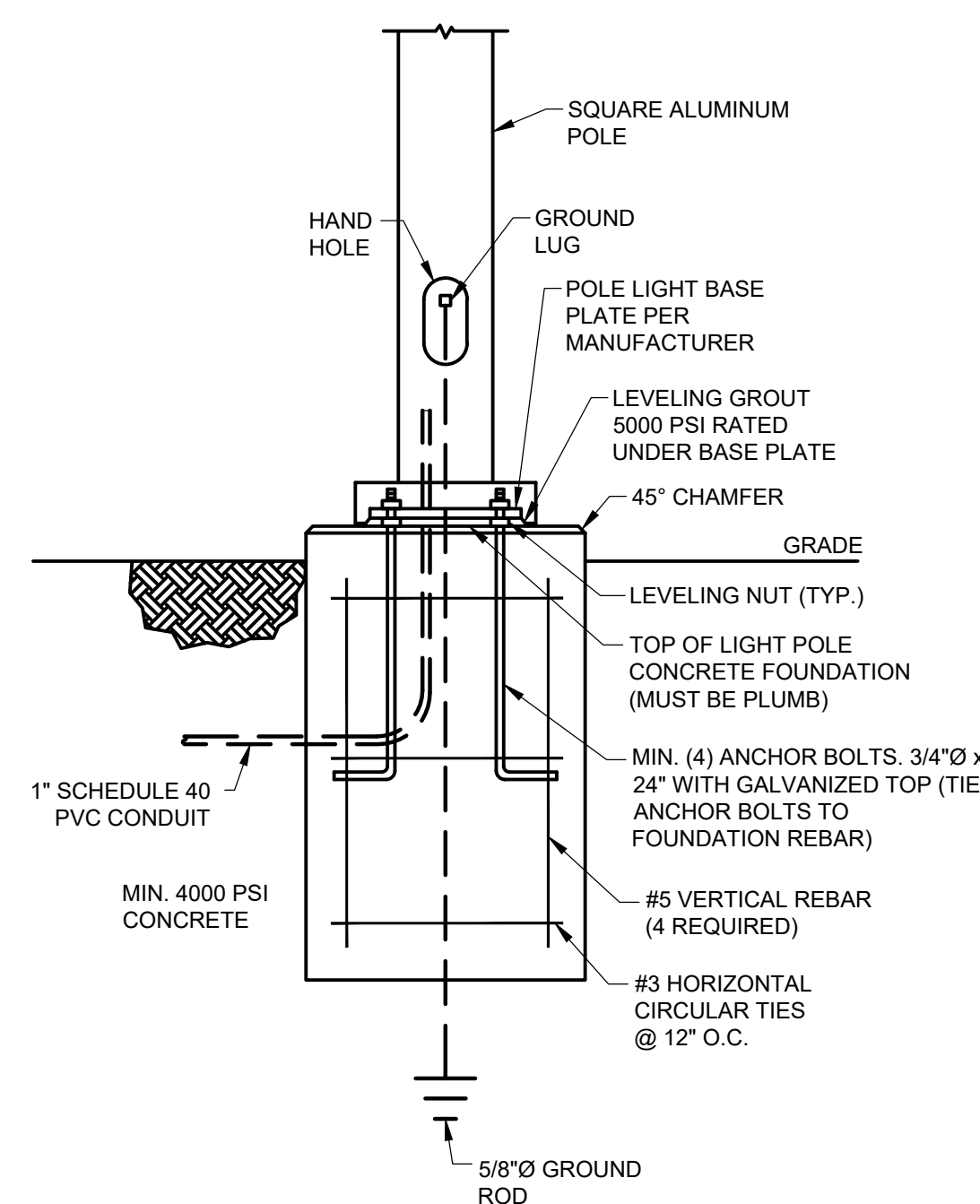
PANEL DESIGNATION:	VOLTAGE:	MIN. AC:
MDP	120/208 VOLT, 3 PHASE, 4 WIRE	10,000
MOUNTING:	BUS AMP:	TOTAL POLES:
RACK	100 AMP (100% NEUTRAL)	24
LOCATION:	MAIN BREAKER:	NOTES:
EXTERIOR	70 AMP	

CKT NO.	DESCRIPTION	BREAKER			LOAD (KVA)			BREAKER			DESCRIPTION	CKT NO.
		A	P	GFI	A	B	C	A	P	A		
1	SPD	30	3	-	0.1						PUMP CONTROL PANEL	2
3	-							4.3			-	4
5	-								4.3		-	6
7	RTU						0.1				-	8
9	SUMP PUMP RECPTACLE	20	1	-	0.6			0.1		-	1	20
11	GENSET COOLANT HEATER	20	1	-	1.5					-	1	20
13	GENSET BATTERY CHARGER	20	1	-	0.3					-	3	20
15	GENSET BATTERY HEATER	20	1	-	1.0					-	-	-
17	VCP-WW	30	1	-			1.0			-	-	-
19	RACK CONVENIENCE RECPT.	20	1	-	0.7					-	1	20
21	-										-	-
23	-										-	-
SIDE TOTAL CONNECTED KVA					1.69	2.56	2.6	4.4	4.4	4.4	SIDE TOTAL CONNECTED KVA	
LOAD:		A:			6.1 KVA							
		B:			7.0 KVA							
		C:			7.0 KVA							
TOTAL LOAD:					20.1 KVA							

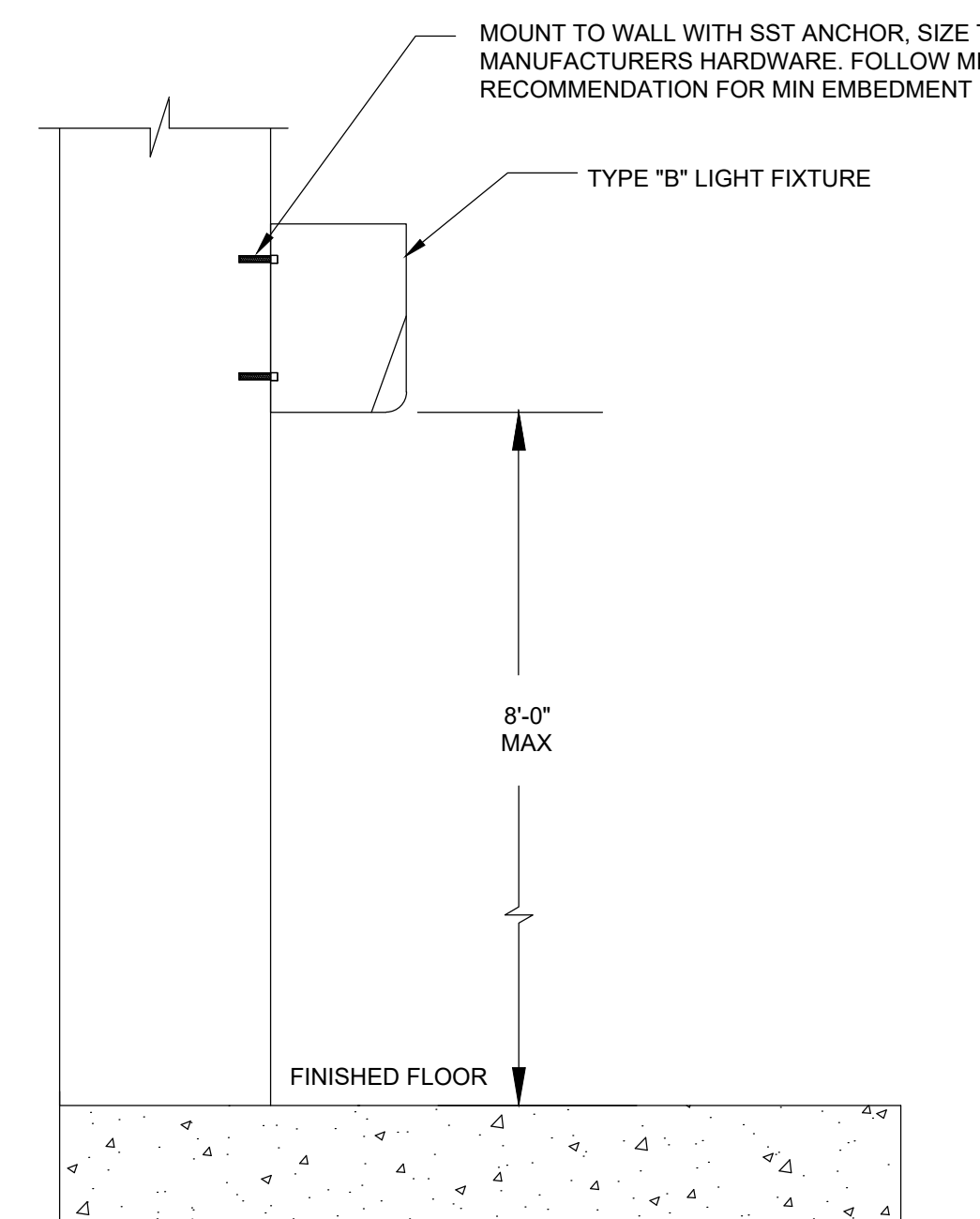


NOTES:
1. PAD SIZE SHALL BE BASED ON DIMENSIONS OF FINAL APPROVED GENERATOR/HOUSING.
2. ALL GENERATOR ENCLOSURES SHALL BE LEVEL 2 SOUND ATTENUATED.

1 GENERATOR PAD MOUNTING DETAIL
E-2.02 SCALE: NONE



2 SITE LIGHT BASE DETAIL
E-2.02 SCALE: NONE



3 WALL MOUNTED LIGHT DETAIL
E-2.02 SCALE: NONE

**PERMITTING SET
NOT FOR
CONSTRUCTION**

OWNER/DEVELOPER:
SIMONS CORNER PARTNERS, LLC
WILLIAMSTON, DE 19807
PH. (302) 425-3555

KCI TECHNOLOGIES, INC.
ENGINEERS - PLANNERS - SURVEYORS
600 North DuPont Highway
P.O. Box 1000
Philadelphia, PA 19106
PHONE: (802) 747-5599 FAX: (802) 731-7297 Website: www.kci.com

ELECTRICAL DETAILS II
SIMONS CORNER PUMP STATION
DELAWARE
KENT COUNTY
SMYRNA

PROFESSIONAL CERTIFICATION
HEREBY CERTIFY THAT THESE DOCUMENTS WERE
PREPARED OR APPROVED BY ME, AND THAT I AM A
DAILY LICENSED PROFESSIONAL ENGINEER UNDER
THE LAWS OF THE STATE OF DELAWARE.
LICENSE NO. 2022
EXPIRATION DATE: 06/30/2024



SIGNATURE:
Drafting: MHD Check: SDP
Design: MHD Check: SDP
SCALE: AS NOTED
DATE: 06-04-2024
KCI JOB #: 1303012-SCPS
SHEET: E-2.02