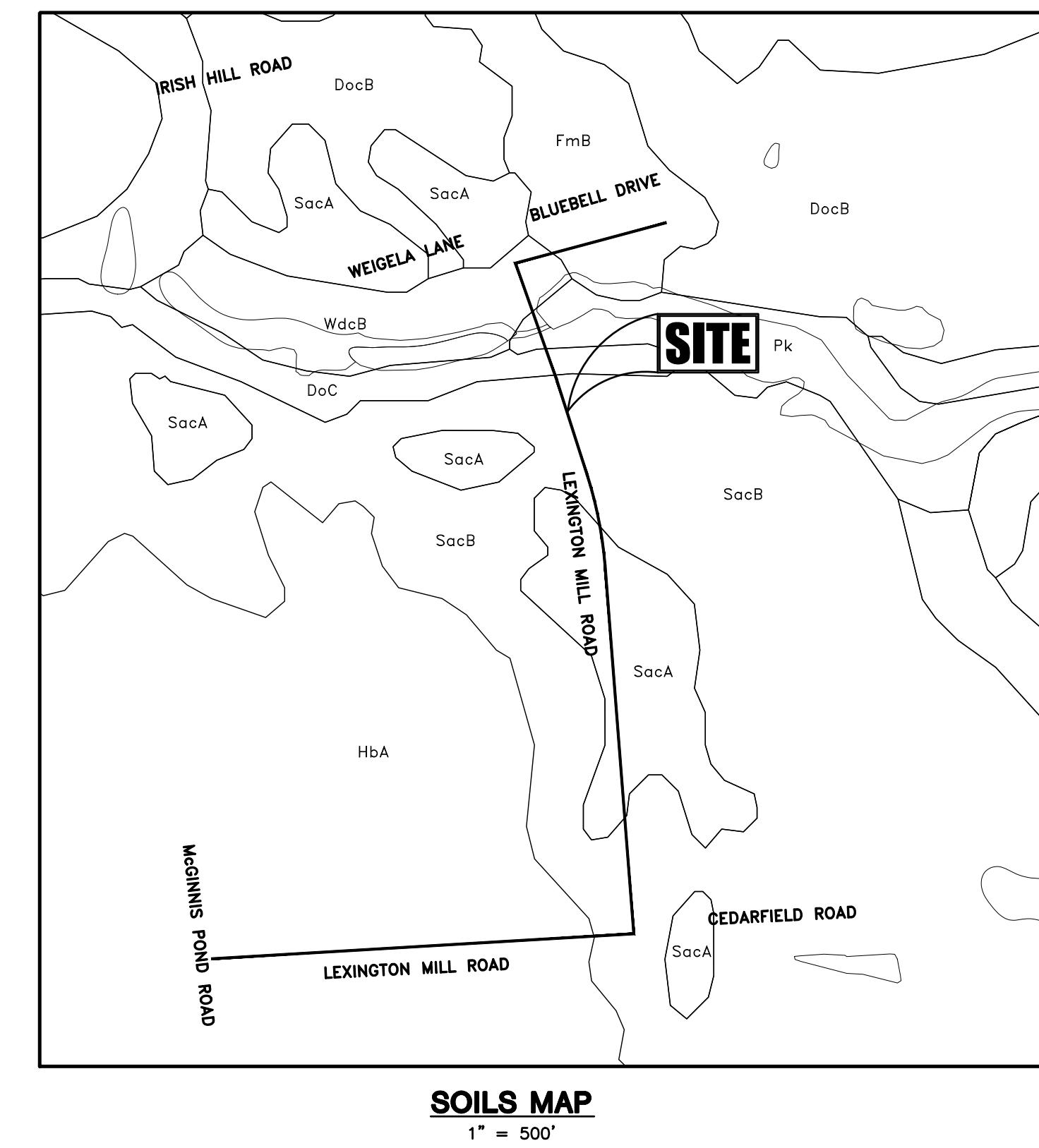
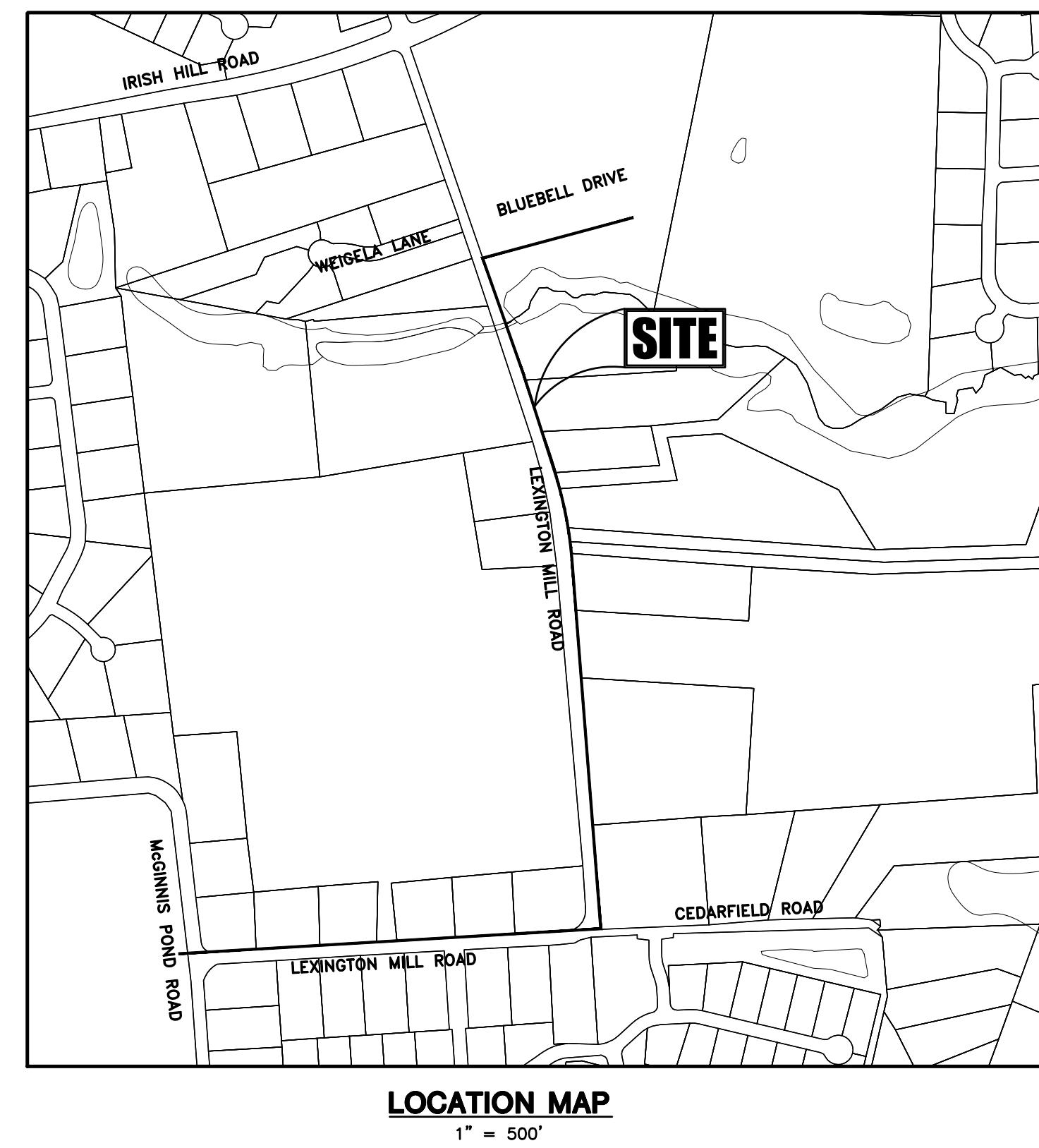
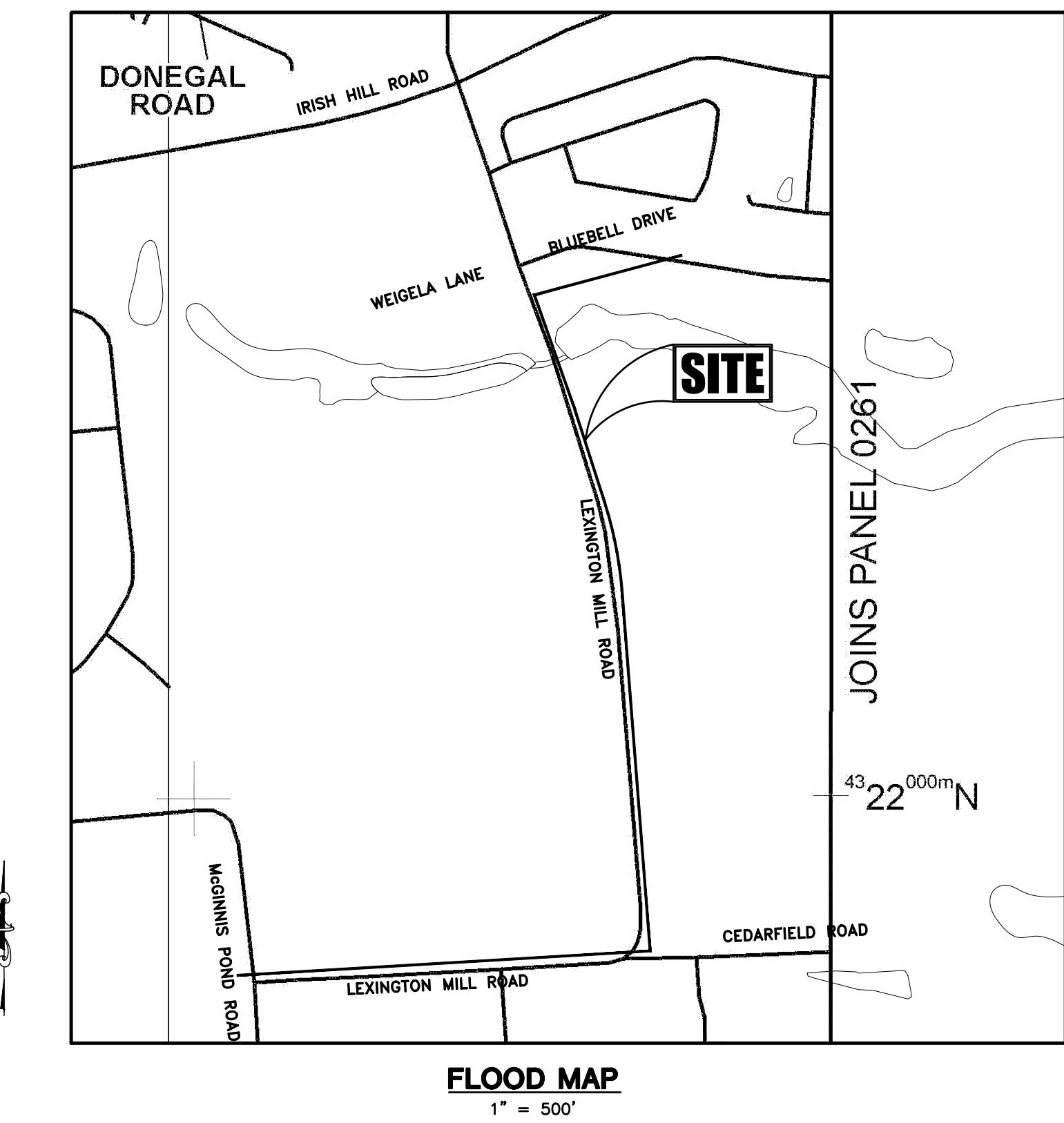


SOUTHWOOD ACRES / SOUTHERN MEADOWS PUMP STATION & FORCE MAIN IMPROVEMENTS SOUTH MURDERKILL HUNDRED KENT COUNTY, DELAWARE

DBF PROJECT NO. 0575B065

DECEMBER, 2025



DATA COLUMN				
1	PROJECT ADDRESS	BLUEBELL DRIVE, MAGNOLIA, DELAWARE 19962		
2	SITE ACREAGE	23.12 ACRES		
3	TAX MAP ID	SM-00-121.00-01-15.00-000, SM-00-121.00-01-19.11-000		
4	APPROXIMATE PROJECT CENTER	<u>LATITUDE</u> 38.513317	<u>LONGITUDE</u> -75.224583	
5	ENGINEER DAVIS, BOWEN & FRIEDEL, INC. 1 PARK AVENUE MILFORD, DE 19963 CONTACT NAME: SHARON K. CRUZ, P.E., AICP PHONE: (302) 424-1441 EMAIL: skc@dbfinc.com	<u>OWNER</u> SOUTHWOOD ACRES, LLC 1685 SOUTH STATE STREET DOVER, DE 19901 CONTACT NAME: DAVE GILGENAST PHONE: (302) 632-9702 EMAIL: dgilgenast@i-realty.com		
6	DATUM	<u>HORIZONTAL</u> NAD 83 (DE STATE PLANE)	<u>VERTICAL</u> NAVD 88	
7	LAND USE	<u>EXISTING</u> MOBILE HOME PARK		
8	STATE STRATEGIES MAP	INVESTMENT LEVEL AREA: 2 & 3		
9	FLOODPLAIN	THE PROJECT SITE IS NOT IMPACTED BY THE 100 YEAR FLOODPLAIN AS DETERMINED BY FEMA PANELS 10001C0245J, 10001C0261J, DATED 7/7/2014.		
10	TRANSPORTATION IMPROVEMENT DISTRICT (TID)	THE PROPERTY IS LOCATED IN THE MAGNOLIA (PROPOSED) TRANSPORTATION IMPROVEMENT DISTRICT (TID).		
11	GROUNDWATER RECHARGE	A PORTION OF THE PROJECT SITE IS LOCATED IN AN AREA OF EXCELLENT GROUNDWATER RECHARGE.		
12	WELLHEAD PROTECTION AREA	ALL OF THE PROPERTY IS NOT LOCATED IN A WELLHEAD PROTECTION AREA.		
13	WETLANDS	THE PROJECT SITE IS NOT IMPACTED BY FEDERALLY REGULATED WETLANDS.		
14	LIMIT OF DISTURBANCE	23,590± SQ. FT., 0.5416 ACRES		

TOTAL PROPOSED UNITS
198 MOBILE HOME UNITS - 198 EDUs
1 CLUBHOUSE - 3 EDUs
TOTAL PROPOSED EDUs = 201

DAVIS, BOWEN & FRIEDEL, INC.
ARCHITECTS, ENGINEERS & SURVEYORS

SALISBURY, MARYLAND (410) 543-9091
MILFORD, DELAWARE (302) 424-1441
EASTON, MARYLAND (410) 770-4744

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C-103	PUMP STATION ELEVATION PLAN & DETAILS
C-201 - C202	MISCELLANEOUS DETAILS
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E-301	ELEVATION, SCHEDULES & DETAILS
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ENGINEER'S STATEMENT

I, THE UNDERSIGNED, HEREBY STATE THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO MY BELIEF REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

A red circular stamp with a decorative border. The text "SHARON K. CRUZ" is at the top, "REGISTERED" is in the middle, and "PROFESSIONAL ENGINEER" is at the bottom. In the center, it says "DELAWARE" and "No. 12576". A diagonal line is drawn through the center of the stamp.

12-17-2025

DATE

R SANDY LOAM, 5 to 10 PERCENT SLOPES, MID-ATLANTIC COASTAL PLAIN (A)
R SANDY LOAM, 2 TO 5 PERCENT SLOPES (A)
OTT LOAMY SAND, 2 to 5 PERCENT SLOPES (A)
OK SANDY LOAM, 0 TO 2 PERCENT SLOPES (B)
MUCK, FREQUENTLY FLOODED (A/D)
AS SANDY LOAM, 0 to 2 PERCENT SLOPES, MID-ATLANTIC COASTAL PLAIN (B)
AS SANDY LOAM, 2 to 5 PERCENT SLOPES, MID-ATLANTIC COASTAL PLAIN (B)
OWN SANDY LOAM, 2 TO 5 PERCENT SLOPES (C)

OWNER'S STATEMENT

WE, THE UNDERSIGNED, HEREBY STATE THAT WE ARE THE OWNERS OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN, THE PLAN WAS MADE AT OUR DIRECTION, WE ACKNOWLEDGE THE SAME TO BE OUR ACT AND DESIRE THE PLAN BE RECORDED ACCORDING TO LAW.

The logo for Davis Bowen & Friedel, Inc. is positioned on the left side of the page. It features a square frame containing a stylized lowercase 'dbf' where the 'b' and 'f' are connected. Above this logo, the company name 'DAVIS BOWEN & FRIEDEL, INC.' is written in a large, bold, black, sans-serif font. To the right of the logo, the words 'ARCHITECTS • ENGINEERS • SURVEYORS' are written in a smaller, bold, black, sans-serif font.

**SOUTHWOOD ACRES / SOUTHERN MEADOWS
PUMP STATION & FORCE MAIN IMPROVEMENTS
SOUTH MURDERKILL HUNDRED**

TITLE

C-001

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
CIVIL PLAN GENERAL NOTES																				
<p>1. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING TWO WEEKS PRIOR TO THE START OF CONSTRUCTION AND SHALL APPRISE AND COORDINATE DURING ALL PHASES OF CONSTRUCTION:</p> <ol style="list-style-type: none"> 1.1. THE COUNTY ENGINEER DEPARTMENT 302-744-2430 1.2. DAVIS, BOWEN & FRIEDEL, INC. 302-424-1441 1.3. KENT CONSERVATION DISTRICT 302-608-5370 1.4. DELOD CENTRAL DISTRICT 302-760-2000 <p>2. BOUNDARY AND TOPOGRAPHIC SURVEY WAS PERFORMED BY DAVIS, BOWEN & FRIEDEL, INC., MAY 2025.</p> <p>3. CONTRACTOR SHALL PROVIDE STAKEOUT NECESSARY FOR ALL WORK INCLUDED IN THESE PLANS. ALL STAKEOUT WORK IS TO BE PERFORMED UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF DELAWARE.</p> <p>4. THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY DEVIATION FROM THESE PLANS UNLESS WRITTEN APPROVAL HAS BEEN PROVIDED BY THE ENGINEER.</p> <p>5. ACCORDING TO FEMA FLOOD INVENTORY MAPS #10001C0245J, 10001C0261J DATED: JULY 7, 2014, THE SITE IS NOT IMPACTED BY THE 100 YEAR FLOODPLAIN.</p>																				
DRAINAGE, GRADING AND SEDIMENT CONTROL GENERAL NOTES																				
<p>1. ALL STORM DRAIN PIPING, INLET, MANHOLE, AND ENDSECTION INSTALLATION SHALL BE IN ACCORDANCE WITH DELDOT STANDARDS AND SPECIFICATIONS AND STANDARD CONSTRUCTION DETAILS.</p> <p>2. ALL STORM DRAIN DESIGNATED AS RCP IS TO BE REINFORCED CONCRETE PIPE, MEETING ASTM DESIGNATION: C-76 REINFORCED CONCRETE CULVERT, STORM DRAIN AND SEWER PIPE. FOR PIPE CLASSIFICATION, SEE PIPE SCHEDULE.</p> <p>3. ALL STORM DRAIN DESIGNATED AS HDPE IS TO BE HIGH DENSITY POLYETHYLENE PIPE. HDPE PIPE SHALL COMPLY WITH AASHTO M252, M29A, MP1, AND ASTM 3350. PIPE SHALL BE INSTALLED PER ASTM D2321 AND AS RECOMMENDED BY THE MANUFACTURER. ALL HDPE PIPE SHALL HAVE WATERTIGHT CONNECTIONS.</p> <p>4. PIPE SPAN LENGTHS ARE MEASURED FROM C/L OF STRUCTURE TO C/L OF STRUCTURE, WHERE APPLICABLE ARE ROUNDED TO THE NEAREST FOOT.</p> <p>5. ALL SEALS MUST BE WATERTIGHT AND CONCRETE STRUCTURES MUST BE PRECAST OR POURED IN PLACE.</p> <p>6. CONTRACTOR SHALL GRADE, TOPSOIL, SEED AND MULCH ALL DISTURBED AREAS OF CONSTRUCTION, INCLUDING PIPE INSTALLATION OR DITCH CONSTRUCTION. EROSION CONTROL MATTING SHALL BE PROVIDED ON ALL SLOPES GREATER THAN 3:1.</p> <p>7. THE CONTRACTOR SHALL PROVIDE SEDIMENT CONTROL MEASURES TO PROTECT STOCKPILE AREAS AND STORAGE AREAS. ALL AREAS USED BY THE CONTRACTOR FOR STAGING OPERATIONS SHALL BE FULLY RESTORED BY THE CONTRACTOR UPON COMPLETION OF THE PROJECT. IF THE STAGING AREA IS PAVED, IT SHALL BE RESTORED TO ITS ORIGINAL CONDITION. IF THE STAGING AREA IS UNPAVED, IT SHALL BE RE-GRADED, TOPSOILED, SEEDED AND MULCHED TO THE SATISFACTION OF THE ENGINEER. ALL COSTS ASSOCIATED WITH RESTORATION OF THE STAGING AREA SHALL BE AT THE CONTRACTOR'S EXPENSE. IF THE ENGINEER DETERMINES THAT A SATISFACTORY STAND OF GRASS DOES NOT EXIST AT THE TIME OF FINAL INSPECTION, ALL COSTS ASSOCIATED WITH RE-ESTABLISHING A SATISFACTORY STAND OF GRASS SHALL BE AT THE CONTRACTOR'S EXPENSE.</p> <p>8. EQUIPMENT AND/OR STOCKPILE MATERIAL SHALL NOT BE STORED IN THE DRIPLINE AREA OF ANY TREE.</p> <p>9. IF THE APPROVED PLAN NEEDS TO BE MODIFIED DUE TO THE SITE CONDITION DURING CONSTRUCTION, ADDITIONAL SEDIMENT AND STORMWATER CONTROL MEASURES MAY BE REQUIRED AS DEEMED NECESSARY BY THE SUSSEX CONSERVATION DISTRICT. ALL COSTS FOR THE ADDITIONAL MEASURES TO INCLUDE FLOCCULANTS SHALL BE AT THE SOLE COST OF THE CONTRACTOR.</p> <p>10. IF LARGE AMOUNTS OF SEDIMENT HAVE ENTERED INTO THE STORM DRAIN SYSTEM, THE COUNTY ENGINEER, PROJECT ENGINEER OR SUSSEX CONSERVATION DISTRICT MAY REQUIRE THE PIPES BE FLUSHED AND VIDEO INSPECTED. ALL COSTS FOR THE PIPE FLUSHING AND VIDEO INSPECTION SHALL BE AT THE SOLE COST OF THE CONTRACTOR.</p>																				
DEMOLITION AND SAFETY GENERAL NOTES																				
<p>1. MISS UTILITY OF DELMARVA SHALL BE NOTIFIED THREE CONSECUTIVE WORKING DAYS PRIOR TO EXCAVATION, AT 1-800-282-8555.</p> <p>2. EXISTING UTILITIES ARE SHOWN IN ACCORDANCE WITH THE BEST AVAILABLE INFORMATION. COMPLETENESS OR CORRECTNESS THEREOF IS NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANIES INVOLVED IN ORDER TO SECURE THE MOST ACCURATE INFORMATION AVAILABLE AS TO UTILITY LOCATION AND ELEVATION. NO CONSTRUCTION AROUND OR ADJACENT TO UTILITIES SHALL BEGIN WITHOUT NOTIFYING THEIR OWNERS AT LEAST 48 HOURS IN ADVANCE. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE AND ANY DAMAGE DONE TO THEM DUE TO HIS/HER NEGLIGENCE SHALL BE IMMEDIATELY AND COMPLETELY REPAIRED AT THE CONTRACTOR'S EXPENSE. TO LOCATE EXISTING UTILITIES IN THE FIELD PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT MISS UTILITY OF DELMARVA.</p> <p>3. THE CONTRACTOR SHALL REMOVE AND IMMEDIATELY REPLACE, RELOCATE, RESET OR RECONSTRUCT ALL OBSTRUCTIONS IN THE ROAD WAY, INCLUDING, BUT NOT LIMITED TO, MAILBOXES, SIGNS, LANDSCAPING, LIGHTING, PLANTERS, CULVERTS, DRIVEWAYS, PARKING AREAS, CURBS, GUTTERS, FENCES, OR OTHER NATURAL OR MAN-MADE OBSTRUCTIONS. TRAFFIC CONTROL, REGULATORY, WARNING AND INFORMATIONAL SIGNS SHALL REMAIN FUNCTIONAL AND VISIBLE TO THE APPROPRIATE LANES OF TRAFFIC AT ALL TIMES, WITH THEIR RELOCATION KEPT TO A MINIMUM DISTANCE. THE COST SHALL BE INCLUDED IN THE COST OF THIS BID.</p> <p>4. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND ORDERS OF ANY PUBLIC BODY HAVING JURISDICTION. THE CONTRACTOR SHALL ERECT AND MAINTAIN, AS REQUIRED BY THE CONDITIONS AND PROGRESS OF THE WORK, ALL NECESSARY SAFEGUARDS FOR SAFETY AND PROTECTION.</p> <p>5. DELAWARE REGULATIONS PROHIBIT THE BURIAL OF CONSTRUCTION DEMOLITION DEBRIS, INCLUDING TREES AND STUMPS ON CONSTRUCTION SITES. ANY SOLID WASTE FOUND DURING THE EXCAVATION FOR STRUCTURES AND UTILITY LINES ON AND OFF SITE MUST BE REMOVED AND PROPERLY DISCARDED. ANY REMEDIAL ACTION REQUIRED IS THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM.</p> <p>6. DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL WORK MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AS AMENDED AND ALL RULES AND REGULATIONS THERETO APPURtenant.</p>																				
EROSION AND SEDIMENT CONTROL NOTES																				
<p>1. THE DNREC SEDIMENT AND STORMWATER PROGRAM (OR DELEGATED AGENCY) SHALL BE NOTIFIED IN WRITING FIVE (5) DAYS PRIOR TO COMMENCING CONSTRUCTION. FAILURE TO DO SO CONSTITUTES A VIOLATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLAN.</p> <p>2. REVIEW AND/OR APPROVAL OF THE SEDIMENT AND STORMWATER MANAGEMENT PLAN SHALL NOT RELIEVE THE CONTRACTOR FROM HIS OR HER RESPONSIBILITIES FOR COMPLIANCE WITH THE REQUIREMENTS OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS, NOR SHALL IT RELIEVE THE CONTRACTOR FROM ERRORS OR OMISSIONS IN THE APPROVED PLAN.</p> <p>3. IF THE APPROVED PLAN NEEDS TO BE MODIFIED, ADDITIONAL SEDIMENT AND STORMWATER CONTROL MEASURES MAY BE REQUIRED AS DEEMED NECESSARY BY DNREC OR THE DELEGATED AGENCY.</p> <p>4. FOLLOWING SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED FOR ALL PERIMETER SEDIMENT CONTROLS, SOIL STOCKPILES, AND ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE WITHIN 14 CALENDAR DAYS UNLESS MORE RESTRICTIVE FEDERAL REQUIREMENTS APPLY.</p> <p>5. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL COMPLY WITH THE DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.</p> <p>6. AT ANY TIME A DEWATERING OPERATION IS USED, IT SHALL BE PREVIOUSLY APPROVED BY THE AGENCY CONSTRUCTION SITE REVIEWER FOR A NON-EROSIVE POINT OF DISCHARGE, AND A DEWATERING PERMIT SHALL BE APPROVED BY THE DNREC WELL PERMITTING BRANCH.</p> <p>7. APPROVAL OF A SEDIMENT AND STORMWATER MANAGEMENT PLAN DOES NOT GRANT OR IMPLY A RIGHT TO DISCHARGE STORMWATER RUNOFF. THE OWNER/DEVELOPER IS RESPONSIBLE FOR ACQUIRING ANY AND ALL AGREEMENTS, EASEMENTS, ETC., NECESSARY TO COMPLY WITH STATE DRAINAGE AND OTHER APPLICABLE LAWS.</p> <p>8. THE CONTRACTOR SHALL AT ALL TIMES PROTECT AGAINST SEDIMENT OR DEBRIS Laden RUNOFF OR WIND FROM LEAVING THE SITE. PERIMETER CONTROLS SHALL BE CHECKED DAILY AND ADJUSTED OR REPAIRED TO FULLY CONTAIN AND CONTROL SEDIMENT FROM LEAVING THE SITE. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED HALF OF THE EFFECTIVE CAPACITY OF THE CONTROL. IN ADDITION, THE CONTRACTOR MAY NEED TO ADJUST OR ALTER MEASURES IN TIMES OF ADVERSE WEATHER CONDITIONS, OR AS DIRECTED BY THE AGENCY CONSTRUCTION SITE REVIEWER.</p> <p>9. BEST AVAILABLE TECHNOLOGY (BAT) SHALL BE EMPLOYED TO MANAGE TURBID DISCHARGES IN ACCORDANCE WITH REQUIREMENTS OF 7, DEL. C. CH. 60 REGULATIONS GOVERNING THE CONTROL OF WATER POLLUTION, SECTION 9.1.02, KNOWN AS SPECIAL CONDITIONS FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES, AND DNREC POLICIES, PROCEDURES, AND GUIDANCE.</p> <p>10. THE NOTICE OF INTENT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER A NPDES GENERAL PERMIT FOR THIS PROJECT IS 7603. AT ANY TIME THE OWNERSHIP FOR THIS PROJECT CHANGES, A TRANSFER OF AUTHORIZATION OR A CO-PERMITTEE APPLICATION MUST BE SUBMITTED TO DNREC. THE PERMITTEE OF RECORD SHALL NOT BE RELIEVED OF THEIR RESPONSIBILITIES UNTIL A NOTICE OF TERMINATION HAS BEEN PROCESSED BY DNREC.</p>																				
DelDOT (CENTRAL DISTRICT) UTILITY PLAN NOTES																				
<p>1. PLANS ARE REVIEWED FOR GENERAL CONFORMITY. DELDOT IS NOT RESPONSIBLE FOR ERRORS OR OMISSIONS WITHIN THE PLAN SET. THE UTILITY OWNER IS RESPONSIBLE TO ENSURE ACCURACY OF PLANS AND CONFORMANCE WITH DELDOT STANDARDS.</p> <p>2. MANHOLE TOP SECTIONS WILL BE OFF SET CONE STYLE. ANY MANHOLE LIDS THAT ARE DETERMINED BY DELDOT TO NOT BE IN THE CENTER OF THE LANE SHALL BE ADJUSTED PRIOR TO FINAL PAVEMENT PLACEMENT.</p> <p>3. MANHOLE FRAME AND LIDS SHALL BE INITIALLY SET $\frac{1}{2}$" LOW AND ADJUSTED TO FINISH GRADE WITH CONCRETE COLLAR AFTER FINAL PAVEMENT HAS BEEN PLACED.</p> <p>4. CONCRETE COLLARS SHALL BE POURED AROUND MANHOLE FRAME AND LIDS/VALVE BOXES TO FINISH GRADE USING CLASS "A" CONCRETE.</p> <p>5. ALL BACKFILL MATERIAL IN EXISTING/PROPOSED ROADWAY SHALL CONFORM TO TYPE "C" BORROW. ALL BORROW BACKFILL SHALL BE COMPAKTED TO 95% USING AASHTO T99 STANDARD FOR TESTING.</p> <p>6. GABC PLACED SHALL BE COMPAKTED TO 98%</p> <p>7. COMPAKTING TESTING SHALL BE PERFORMED EVERY 100' AND TESTING SHALL BE TAKEN ON EACH LIFT OF MATERIAL PLACED. (WHEN UTILITY IS IN THE ROADWAY)</p> <p>8. TAR CHIP/HOT MIXES ROADS: TRAVEL WAY PAVEMENT DISTURBED SHALL BE RESTORED AT THE END OF THE DAY PRIOR TO REOPENING TO TRAFFIC. HOT MIX SHALL BE PLACE PER TEMP PATCHING DETAIL 6" GABC AND 2" TYPE "C" HOT MIX. HOT MIX/CONCRETE DRIVEWAYS SHALL BE IN TRM AT THE END OF THE DAY. IF TRENCH IS WITHIN 6 FT. OF A SHOULDER BUTT JOINT, EXTEND TOP COAT TO JOINT. HOT JOINT SEAL ALL PAVING PATCHES.</p> <p>9. TAR CHIP/HOT MIXES SHOULDER: SHOULDER DISTURBED MAY BE LEFT IN GABC TO FINISH GRADE OVERNIGHT BUT SHALL BE CLOSED USING APPROPRIATE SIGNING AND DRUMS. TEMP PAVEMENT SHALL BE PLACED FOR SHOULDER AT THE END OF EACH WORK WEEK.</p> <p>10. IF THE REMAINING PORTION OF HOTMIX BETWEEN THE PIPE TRENCH EXCAVATION AND EDGE OF PAVEMENT IS LESS THAN 3' THE REMAINING SECTION SHALL BE REMOVED AND REPAVED AS PART OF THE FULL DEPTH PAVING RESTORATION.</p> <p>11. ALL AREAS DISTURBED OUTSIDE OF THE PAVEMENT SHALL BE GRADED EACH DAY TO ENSURE POSITIVE DRAINAGE AND SHALL BE PERMANENTLY RESTORED AT THE END OF EACH WEEK.</p> <p>12. ALL TEMPORARY HOT MIX SHALL BE PLACED TO PROVIDE A SMOOTH RIDABLE SURFACE TO DELDOT STANDARDS.</p> <p>13. A SAFETY EDGE IS REQUIRED ON ALL HOT MIX PLACED.</p> <p>14. ANY STRIPING DISTURBED SHALL BE PLACED AT THE END OF THE DAY PRIOR TO OPENING TO TRAFFIC.</p> <p>15. PROOF ROLL OF GABC SHALL BE PERFORMED USING A LOADED 10 WHEELER PRIOR TO PLACEMENT OF HOT MIX.</p> <p>16. ALL MATERIALS AND WORKMANSHIP WITHIN THE STATE R/W SHALL BE COMPLETED IN ACCORDANCE WITH CURRENT STATE OF DELAWARE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, SUPPLEMENTAL SPECIFICATIONS, STANDARD CONSTRUCTION DETAILS, UTILITY MANUAL, SPECIAL PROVISIONS AND DESIGN MEMORANDUMS.</p> <p>17. THERE IS A ONE YEAR WARRANTY ON ALL EARTH WORK AND CONCRETE. A THREE YEAR WARRANTY ON ALL HOT MIX INCLUDING SUBGRADE/SUBGRADE ISSUES WITHIN THE PAVEMENT AREAS. WARRANTY DOES NOT START UNTIL ALL WORK IS COMPLETED AND A STAND OF GRASS HAS BEEN ESTABLISHED TO DELDOT STANDARDS AND A ACCEPTANCE LETTER HAS BEEN ISSUED.</p> <p>18. ALL DISTURBED AREAS WITHIN THE STATE RIGHT-OF-WAY, BUT NOT IN THE PAVEMENT, SHALL BE TOP-SOILED (6" MINIMUM) FERTILIZED, SEEDED AND MULCHED. IF SOD IS USED NEXT TO SIDEWALK OR SHARED-USE PATH, CONTRACTOR SHALL GRADE TOPSOIL ADJACENT TO THE SIDEWALK OR SHARED-USE PATH PRIOR TO PLACEMENT OF SOD TO ENSURE THAT SOD IS PLACED FLUSH OR JUST BELOW EDGE OF SIDEWALK OR SHARED-USE PATH TO AVOID WATER PONDING ON THE SIDEWALK OR SHARED-USE PATH.</p> <p>19. A 72-HOUR (MINIMUM) NOTICE SHALL BE GIVEN TO THE DELDOT DISTRICT PERMIT SUPERVISOR PRIOR TO STARTING UTILITY CONSTRUCTION.</p> <p>20. A 48 HOUR NOTICE IS REQUIRED TO BE GIVEN TO THE DELDOT INSPECTOR PRIOR TO MATERIAL RELEASES.</p> <p>21. ALL CONCRETE /HOT MIX MATERIALS SHALL BE RELEASED BY THE INSPECTOR PRIOR TO PLACEMENT.</p> <p>22. MISS UTILITY OF DELAWARE SHALL BE NOTIFIED THREE (3) CONSECUTIVE WORKING DAYS PRIOR TO EXCAVATION, AT 1800-282-8555.</p> <p>23. ALL SIGNING, STRIPING AND MAINTENANCE OF TRAFFIC IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL FOLLOW THE GUIDELINES SHOWN IN THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (DE MUTCD) FOR STREETS AND HIGHWAYS (LATEST EDITION). THE OWNER OR MAINTENANCE CORPORATION SHALL BE RESPONSIBLE FOR MAINTENANCE OF ALL SIGNS INSTALLED AS PART OF THIS PROJECT.</p> <p>24. A COPY OF THE UP TO DATE APPROVED CONSTRUCTION DOCUMENTS AND DELDOT APPROVAL LETTERS SHALL BE MAINTAINED ON THE PROJECT SITE AT ALL TIMES AND BE AVAILABLE FOR INSPECTION BY DELDOT PERSONNEL.</p> <p>25. EXISTING UTILITIES ARE SHOWN IN ACCORDANCE WITH THE BEST AVAILABLE INFORMATION. COMPLETENESS OR CORRECTNESS THEREOF IS NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANIES INVOLVED IN ORDER TO SECURE THE MOST ACCURATE INFORMATION AVAILABLE AS TO UTILITY LOCATION AND ELEVATION. NO CONSTRUCTION AROUND OR ADJACENT TO UTILITIES SHALL BEGIN WITHOUT NOTIFYING THEIR OWNERS AT LEAST 48 HOURS IN ADVANCE. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE AND ANY DAMAGE DONE TO THEM DUE TO HIS/HER NEGLIGENCE SHALL BE IMMEDIATELY AND COMPLETELY REPAIRED AT THE CONTRACTOR'S EXPENSE. TO LOCATE EXISTING UTILITIES IN THE FIELD PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT MISS UTILITY OF DELAWARE (SEE NOTE #5).</p> <p>26. SHOULD UTILITY RELOCATION BE REQUIRED, THE DEVELOPER MUST SUBMIT A UTILITY RELOCATION PLAN FOR DELDOT REVIEW, ALONG WITH CORRESPONDENCE FROM THE UTILITY COMPANIES STATING PRELIMINARY APPROVAL TO THE RELOCATION AND DESIGN OF THE UTILITIES PRIOR TO THE DELDOT PRE-CONSTRUCTION MEETING. NO PHYSICAL CONSTRUCTION CAN OCCUR UNTIL THE UTILITY PLANS ARE APPROVED, THE INDIVIDUAL UTILITY COMPANIES ISSUE FINAL APPROVAL, AND A DELDOT UTILITY PERMIT IS ISSUED TO THE UTILITY COMPANY.</p> <p>27. DESIGN AND INSTALLATION OF ALL PAVEMENT MARKINGS AND STRIPING SHALL BE AS OUTLINED IN THE LATEST VERSION OF THE DE MUTCD. FOR FINAL PERMANENT PAVEMENT MARKINGS EPOXY RESIN PAINT SHALL BE REQUIRED FOR LONG LINE STRIPING, THERMO PLASTIC (EXTRUDED OR PREFORMED) MATERIAL WILL BE REQUIRED ON ASPHALT SURFACES, FOR SHORT LINE STRIPING, I.E. SYMBOLS/LEGENDS. PERMANENT PAVEMENT MARKING TAPE (PER DELDOT APPROVED MATERIALS LIST) WILL BE REQUIRED ON CONCRETE SURFACES, FOR SHORT LINE STRIPING, I.E. SYMBOLS/LEGENDS.</p> <p>28. BREAKAWAY POSTS SHALL BE USED WHEN INSTALLING ALL SIGNS. REFERENCE DELDOT STANDARD CONSTRUCTION DETAIL T-15.</p> <p>29. ALL PROPOSED CLOSED STORM DRAIN SYSTEMS SHALL BE VIDEO INSPECTED, REPAIRED AS NECESSARY AND APPROVED PRIOR TO THE INSTALLATION OF FINAL PAVING. IF REPAIRS ARE NEEDED, THE REPAIRED PIPE SECTIONS WILL NEED TO BE VIDEO INSPECTED AGAIN BEFORE THE REPAIR CAN BE APPROVED.</p> <p>30. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT PAVING WITHIN THE STATE OF DELAWARE RIGHT-OF-WAY IS INSTALLED TO THE ELEVATIONS SHOWN AND THAT NO PONDING OF WATER EXISTS AFTER PAVING IS COMPLETE.</p> <p>31. THE DEPARTMENT RESERVES THE RIGHT TO STOP THE CONTRACTOR'S OPERATIONS, IF, IN THE OPINION OF THE DEPARTMENT'S REPRESENTATIVE, THE CONTRACTOR'S OPERATIONS ARE NOT IN COMPLIANCE WITH THE DELAWARE MUTCD, THE SPECIFICATIONS OR THE PLANS OR IF THE CONTRACTOR'S OPERATIONS ARE DEEMED UNSAFE.</p> <p>32. ALL ROADWAY CLOSURES OR LANE CLOSURES BEYOND THOSE SPECIFIED AND APPROVED IN THE PLANS SHALL BE APPROVED BY THE DISTRICT SAFETY OFFICER A MINIMUM OF TWO WEEKS IN ADVANCE OF THE PROPOSED RESTRICTION.</p> <p>33. TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE MAINTAINED IN GOOD CONDITION IN ACCORDANCE WITH THE BROCHURE ENTITLED "QUALITY GUIDELINES FOR TEMPORARY TRAFFIC CONTROL DEVICES", PUBLISHED BY THE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA). ANY TEMPORARY TRAFFIC CONTROL DEVICES THAT DO NOT MEET THE QUALITY GUIDELINES SHALL BE REMOVED AND REPLACED WITH ACCEPTABLE DEVICES. FAILURE TO COMPLY WILL RESULT IN WORK STOPPAGE.</p> <p>34. THE CONTRACTOR SHALL PROVIDE ALL PROPERTY OWNERS AND RESIDENTS WHO LIVE ADJACENT TO THE WORK ZONE WITH WRITTEN NOTICE, 48 HOURS IN ADVANCE OF THE START OF CONSTRUCTION WORK. THIS NOTIFICATION SHALL INCLUDE THE SCOPE OF WORK, WORKING HOURS, ANTICIPATED START AND COMPLETION DATES, A SUMMARY OF CONSTRUCTION ACTIVITIES WHICH MAY INTERFERE WITH ACCESS TO THE PROPERTY INCLUDING A SCHEDULE AND ACCESS CONSTRUCTION PLAN, CONTRACTOR NAME AND ADDRESS AND A DELDOT CONTACT PHONE NUMBER. FAILURE TO GIVE PROPER NOTICE WILL RESULT IN A SUSPENSION OF THE WORK REQUIRING NOTICE, UNTIL A PROPER NOTICE IS PROVIDED. THE CONTRACTOR SHALL PROVIDE WRITTEN VERIFICATION TO THE ENGINEER THAT THE PROPERTY OWNERS AND RESIDENTS WERE NOTIFIED.</p> <p>35. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE LOCAL 911 CENTER, LOCAL SCHOOLS AND THE DELDOT PUBLIC INFORMATION CENTER OF ALL ROADS AND LANES TO BE CLOSED A MINIMUM OF SEVEN CALENDAR DAYS BEFORE THE CLOSURE.</p> <p>36. THE CONTRACTOR SHALL NOTIFY THE LOCAL 911 CENTER IF ACCESS TO A FIRE HYDRANT IS TEMPORARILY RESTRICTED.</p> <p>37. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE TRANSPORTATION MANAGEMENT CENTER IS NOTIFIED EACH AND EVERY DAY WHEN WORK IS BEING PERFORMED IN STATE RIGHT-OF-WAY. THE CONTRACTOR SHALL IDENTIFY THE TYPE OF WORK, ANY LANE(S) OR SHOULDER(S) CLOSED, THE LENGTH OF TIME FOR WORK, WHEN THE LANE RESTRICTIONS ARE IN PLACE AND WHEN LANE RESTRICTIONS ARE LIFTED, CONTACT PERSON/PHONE NUMBER AND STATE INSPECTOR. THE TRANSPORTATION MANAGEMENT CENTER CAN BE REACHED AT (302) 659-4600.</p> <p>38. AT THE END OF EACH DAY, THE CONTRACTOR SHALL CORRECT ALL VERTICAL DIFFERENCES IN ACCORDANCE WITH TABLE 66-1 OF THE DELAWARE MUTCD.</p> <p>39. AT THE END OF EACH DAY'S OPERATION AND BEFORE TRAFFIC IS RETURNED TO UNRESTRICTED ROADWAY USE, TEMPORARY PAVEMENT MARKINGS SHALL BE APPLIED IN ACCORDANCE WITH THE DELAWARE MUTCD AND DELDOT'S TEMPORARY PAVEMENT MARKINGS POLICY.</p> <p>40. WHEN SIDE ROADS INTERSECT THE WORK ZONE, ADDITIONAL TRAFFIC CONTROL DEVICES SHALL BE ERECTED INCLUDING PERMANENT WARNING SIGNS.</p> <p>41. ALL STORAGE OF EQUIPMENT AND MATERIAL SHALL COMPLY WITH SECTION 66.21 OF THE DELAWARE MUTCD.</p> <p>42. ALL FLAGGERS SHALL COMPLY WITH CHAPTER 6E OF THE DELAWARE MUTCD.</p> <p>43. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS/HER WORK WITH OTHER CONTRACTORS IN THE AREA.</p> <p>44. ALL PERSONS WORKING WITHIN THE STATE RIGHT-OF-WAY SHALL WEAR A MINIMUM OF AN ANSI CLASS II SAFETY VEST MEETING OR EXCEEDING THE ANSI 107-2004 REQUIREMENTS, AS SPECIFIED IN THE DELAWARE</p> <p>45. ALL PAVEMENT MARKINGS THAT ARE NO LONGER IN USE AND CONFLICT WITH TEMPORARY PAVEMENT MARKINGS SHALL BE REMOVED AND COMPLETELY OBLITERATED BY A METHOD APPROVED BY THE ENGINEER. PAINTING OVER THE CONFLICTING PAVEMENT MARKINGS WILL NOT BE ACCEPTED AS A METHOD OF REMOVAL.</p> <p>46. WITHIN THE MAINLINE WORK AREA, PERMANENT ADVANCE WARNING SIGNS WITH THE LEGENDS ROAD WORK 1500 FT, ROAD WORK 1000 FT AND ROAD WORK 500 FT SHALL BE INSTALLED IN ADVANCE OF THE WORK AREA, IN BOTH DIRECTIONS. AN END ROAD WORK SIGN SHALL BE LOCATED 500 FEET DOWNSTREAM FROM THE WORK AREA. ON INTERSECTING ROADWAYS WITHIN THE PROJECT LIMITS, A ROAD WORK AHEAD SIGN SHALL BE PLACED AT A DISTANCE NOT LESS THAN 500 FEET IN ADVANCE OF THE WORK AREA AND AN END ROAD WORK SIGN SHALL BE LOCATED 500 FEET DOWNSTREAM OF THE WORK AREA. ALL PERMANENT ADVANCE WARNING SIGNS SHALL BE GROUND MOUNTED ON TWO NCHRP-350 OR MASE APPROVED BREAKAWAY POSTS AND SHALL BE MOUNTED IN COMPLIANCE WITH THE DELAWARE MUTCD. PERMANENT ADVANCE WARNING SIGNS SHALL BE MOUNTED AT A HEIGHT OF 7 FEET, MEASURED FROM THE ROADWAY TO THE BOTTOM OF THE SIGN. THE USE OF SKID MOUNTED SIGN SUPPORTS IS NOT ALLOWED UNLESS THE CONTRACTOR CAN DEMONSTRATE THAT A UTILITY CONFLICT EXISTS, WHICH SHALL BE VERIFIED BY THE ENGINEER; OR CONCRETE MEDIANES PREVENT THE INSTALLATION OF THE PERMANENT ADVANCE WARNING SIGNS IN THE APPROPRIATE LOCATION.</p>																				
DelDOT MAINTENANCE OF TRAFFIC NOTES																				
<p>1. All temporary traffic control and temporary traffic control devices shall be in accordance with the contract documents, the latest version of the Delaware Manual on Uniform Traffic Control Devices (DE MUTCD), current State of Delaware Department of Transportation Standard Specifications for Road and Bridge Construction, and Standard Construction Details, including all revisions as of the date of the entrance permit approval. Temporary Traffic Control Devices used on the project shall only be those listed on the Approved Products List (APL). If a category of devices does not have an APL, the device shall be compliant with the DE MUTCD.</p> <p>2. Contractor shall supply message boards that are to be placed ten (10) days prior to the start of construction and/or traffic pattern changes. The message boards must remain in place five (5) days after work has started and/or after traffic pattern changes have been implemented. The number of message boards, locations, and wording on the message boards shall be coordinated with the District Safety Officer.</p> <p>3. In accordance with Section 105.1.C of the Standard Specifications, the Department reserves the right to suspend the Contractor's operations, If, in the opinion of the Department's Representative, the Contractor's operations are not in compliance with the DE MUTCD, the specifications or the plans or if the Contractor's operations are deemed unsafe in accordance with Section 801.3.</p> <p>4. The Contractor shall be responsible for notifying the local 911 center, local schools and DelDOT Community Relations of all roads and lanes to be closed a minimum of seven (7) calendar days before the closure.</p> <p>5. The Contractor shall be responsible for ensuring that the Transportation Management Center (TMC) is notified daily before roadway activity is being performed in State right-of-way. The Contractor shall identify the type of work, any lane(s) or shoulder(s) closed, the length of time for work, when the lane restrictions are in place and when lane restrictions are lifted, contact person/phone number and State Inspector. The Transportation Management Center can be reached at (302) 659-4600.</p> <p>6. When side roads intersect the work zone, additional temporary traffic control devices shall be erected including permanent warning signs (see note 1).</p> <p>7. All storage of equipment and material shall comply with the DE MUTCD, Section 66.21.</p> <p>8. All pavement markings that are no longer in use and conflict with temporary pavement markings shall be removed and completely obliterated by a method approved by the Engineer. Painting over the conflicting pavement markings will not be accepted as a method of removal.</p> <p>9. The Contractor is responsible for the maintenance of existing pavement within the project limits for the duration of the contract or as directed by the Engineer.</p> <p>10. Typical Applications per the DE MUTCD shall be incorporated to achieve required temporary traffic control and safety requirements. This project is subject to the following Typical Applications unless directed otherwise by the DelDOT District Safety Officer: TA-1: "Work Beyond the Shoulder > 10 Feet from the Edge of the Travelled Way", TA-3: "Work Beyond the Shoulder < 10 Feet from the Edge of the Travelled Way", TA-10: "Lane Closure on a Two-Lane Road Using Flaggers" etc.</p> <p>11. Within the mainline work area, permanent advance warning signs with the legends ROAD WORK AHEAD shall be installed in advance of the work area in both directions. An END ROAD WORK sign shall be located 500 feet downstream from the work area in each direction. On intersecting roadways within the project limits, a ROAD WORK AHEAD sign shall be placed at a distance not less than 500 feet in advance of the work area and an END ROAD WORK sign shall be placed on the opposite side of the roadway of the ROAD WORK AHEAD sign. All permanent advance warning signs shall be ground mounted on two approved breakaway sign posts and shall be installed in compliance with the DE MUTCD. Permanent advance warning signs shall be placed at a height of 7 feet, measured from the roadway to the bottom of the sign. The use of skid mounted sign supports is not allowed unless the Contractor can demonstrate that a utility conflict exists, which shall be verified by the District Safety Officer; or concrete medians prevent the installation of the permanent advance warning signs in the appropriate location. All sign supports shall be as approved in the most recent version of the Temporary Traffic Control Devices APL.</p> <p>12. The use of millings and graded aggregate base course (GABC) in the travel way, temporary travel way, high volume entrances and access ramp for the purpose of providing a temporary roadway surface, pothole repair, tapered edge for utilities, butt joints, and longitudinal drop-offs (milling and paving operations) is prohibited unless it is otherwise designated to be used in the contract plans. Use cold patch, biminiuous concrete, biminiuous concrete wedge, or taper mill, as noted in the contract documents or approved by the engineer.</p> <p>13. Milling of GABC shall be used at the following locations where access to a business, residence, or edge drop off needs to be maintained unless otherwise noted in the plans or directed by the engineer to use biminiuous</p>																				

KENT COUNTY GENERAL NOTES

1. THE CONTRACTOR SHALL PROVIDE SEDIMENT CONTROL MEASURES TO PROTECT STOCKPILE AREAS AND STORAGE AREAS. ALL AREAS USED BY THE CONTRACTOR FOR STAGING OPERATIONS SHALL BE FULLY RESTORED BY THE CONTRACTOR UPON COMPLETION OF THE PROJECT. IF THE STAGING AREA IS PAVED, IT SHALL BE RESTORED TO ITS ORIGINAL CONDITION. IF THE STAGING AREA IS UNPAVED, IT SHALL BE RE-GRADED, TOPSOILED, SEEDED AND MULCHED TO THE SATISFACTION OF THE ENGINEER. ALL COSTS ASSOCIATED WITH RESTORATION OF THE STAGING AREA SHALL BE AT THE CONTRACTOR'S EXPENSE. IF THE ENGINEER DETERMINES THAT A SATISFACTORY STAND OF GRASS DOES NOT EXIST AT THE TIME OF FINAL INSPECTION, ALL COSTS ASSOCIATED WITH RE-ESTABLISHING A SATISFACTORY STAND OF GRASS SHALL BE AT THE CONTRACTOR'S EXPENSE.
2. EQUIPMENT AND/OR STOCKPILE MATERIAL SHALL NOT BE STORED IN THE DRIPLINE AREA OF ANY TREE.
3. THE CONTRACTOR SHALL CONTACT KENT COUNTY DEPARTMENT OF PUBLIC WORKS AT 302-744-2430 AT LEAST 48 HOURS IN ADVANCE OF STARTING CONSTRUCTION.
4. THE CONTRACTOR SHALL CONTACT MISS UTILITY OF DELMARVA AT 1-800-282-8555 FOR UTILITY LOCATIONS WITHIN AND SURROUNDING CONSTRUCTION AREAS NOT LESS THAN 3 DAYS BEFORE PERFORMING ANY EXCAVATION.
5. THE CONTRACTOR SHALL ESTABLISH BENCHMARK ELEVATION DATUM IN ACCORDANCE WITH KENT COUNTY DEPARTMENT OF PUBLIC WORKS.
6. THE CONTRACTOR SHALL PROVIDE TEMPORARY SEED AND MULCH FOR ALL AREAS WHERE SOIL IS EXPOSED AND SILT FENCE IS NOT SPECIFIED, IN ACCORDANCE WITH KENT CONSERVATION DISTRICT REQUIREMENTS.
7. THE CONTRACTOR SHALL MAINTAIN PUBLIC ROADS AND STREETS IN A BROOM SWEEP CONDITION AT ALL TIMES.
8. PIPE JOINTS TO BE RESTRAINED ARE SHOWN ON THE DRAWINGS.
9. 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.
10. MAINTENANCE OF TRAFFIC – ALL WORK SHALL BE PERFORMED IN A MANNER THAT WILL ENSURE THE LEAST PRACTICABLE OBSTRUCTION TO TRAFFIC CONSISTENT WITH SAFETY AND SHALL COMPLY WITH THE DEPARTMENT MANUAL ENTITLED "TRAFFIC CONTROLS FOR STREETS AND HIGHWAY CONSTRUCTION, MAINTENANCE, UTILITY AND EMERGENCY OPERATIONS". THE MOST CURRENT VERSION OF THIS MANUAL IN EFFECT AT THE TIME OF CONSTRUCTION SHALL BE USED. HEREINAFTER, THIS MANUAL SHALL BE REFERRED TO AS THE "TRAFFIC CONTROL MANUAL". THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR APPROVAL BY THE ENGINEER BEFORE THE START OF THE PROJECT.
11. ALL UTILITIES PLOTTED ON THE DRAWINGS ARE FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR, PRIOR TO LAYING A RUN OF PIPE OR OTHER INVOLVED CONSTRUCTION, SHALL EXCAVATE WITHIN THE ALIGNMENT AT POINTS OF POSSIBLE CONFLICT TO DETERMINE IF A CONFLICT EXISTS. ANY CONFLICTS SHALL BE COORDINATED BY THE CONTRACTOR WITH THE ENGINEER AND THE UTILITY INVOLVED. THE ENGINEER SHALL DETERMINE THE SOLUTION. EXCAVATING, BACK FILLING AND RESTORATION OF THE TEST HOLES AS REQUIRED FOR UTILITY INVESTIGATIONS SHALL BE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE UTILITIES AS SHOWN ON THE PLANS.
12. CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS FOR THE EXECUTION OF THIS CONTRACT.
13. ALL CONSTRUCTION SHALL BE PERFORMED TO THE SATISFACTION OF THE ENGINEER, KENT COUNTY DEPARTMENT OF PUBLIC WORKS (DPW), DELAWARE DEPARTMENT OF TRANSPORTATION (DELDOT) AND ALL RESPECTIVE UTILITY OWNER/S IN ACCORDANCE WITH ALL APPLICABLE CONTRACT DRAWINGS AND SPECIFICATIONS.
14. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND ORDERS OF ANY PUBLIC BODY HAVING JURISDICTION. THE CONTRACTOR SHALL ERECT AND MAINTAIN, AS REQUIRED BY THE CONDITIONS AND PROGRESS OF THE WORK, ALL NECESSARY SAFEGUARDS FOR SAFETY AND PROTECTION IN ACCORDANCE W/APPLICABLE OSHA REGULATION.
15. THE CONTRACTOR SHALL INSTALL THE PROPOSED SANITARY SEWER AND FORCE MAINS WITH A MINIMUM OF 3 FT. OF CLEARANCE FROM OTHER EXISTING AND PROPOSED UTILITIES. THE CONTRACTOR SHALL MAINTAIN A MINIMUM HORIZONTAL CLEARANCE OF 10 FT. BETWEEN WATER MAINS AND SANITARY SEWERS (BOTH EXISTING AND PROPOSED MAINS). IN CASES WHERE THIS MINIMUM HORIZONTAL CLEARANCE IS NOT SHOWN OR FEASIBLE, THE CONTRACTOR MAY INSTALL THE PROPOSED SANITARY SEWER LESS THAN 10 FT. FROM EXISTING WATER LINES, PROVIDED ALL EXISTING WATER MAINS REMAIN ON AN UNDISTURBED EARTH SHELF IN A SEPARATE TRENCH FROM THE PROPOSED SANITARY SEWER MAINS AND THERE IS AT LEAST 18 INCHES OF VERTICAL CLEARANCE WITH THE WATER MAIN HIGHER THAN THE SEWER. IF VERTICAL CLEARANCE BETWEEN PROPOSED SANITARY SEWER AND EXISTING WATER MAINS IS LESS THAN 18 INCHES, THE CONTRACTOR SHALL CONCRETE ENCASE THE SANITARY SEWER PIPING A MINIMUM OF 10 FT. ON EACH SIDE OF THE WATER MAIN CROSSING OR 10 FT. BEYOND THE LIMITS WHERE VERTICAL CLEARANCE IS NOT MAINTAINED.
16. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL MATERIALS FOR APPROVAL TO THE OWNER PRIOR TO COMMENCEMENT OF CONSTRUCTION. ALL MATERIALS ORDERED AND INSTALLED PRIOR TO THE OWNER'S REVIEW AND ACCEPTANCE WILL BE AT THE CONTRACTOR'S RISK.
17. 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.
18. "MANHOLE" SHALL INCLUDE PRECAST STRUCTURE, BEDDING, CONNECTION TO EXISTING AND PROPOSED SANITARY PIPING, FRAME AND COVER AND RELATED APPURTENANCES. SEE MANHOLE DETAILS AND APPLICABLE SPECIFICATIONS.
19. SANITARY SEWER PIPE AND FITTINGS SHALL BE TYPE PSM, POLYVINYL CHLORIDE (PVC) MATERIAL WITH A MINIMUM CELL CLASSIFICATION OF 12454B AND COMPLYING WITH ASTM D1784; INSIDE NOMINAL DIAMETER AS INDICATED ON THE DRAWINGS; BELL AND SPIGOT STYLE RUBBER RING SEALED ELASTOMERIC LOCKED-IN GASKET JOINT COMPLYING WITH ASTM F477.

SANITARY SEWER PIPE AND FITTINGS – 4 INCHES THROUGH 15 INCHES: ASTM D3034 AND F1336 WITH A MINIMUM WALL THICKNESS OF SDR 35. IF THE PIPE COYER EXCEEDS 15 FEET A MIN. OF PVC SDR 26 SHALL BE USED.

SANITARY SEWER PIPE AND FITTINGS – 18 INCHES THROUGH 27 INCHES: ASTM F679 AND F1336 WITH A MINIMUM WALL THICKNESS OF T-1.
20. SANITARY SEWER FLEXIBLE COUPLINGS SHALL BE RESILIENT, CHEMICAL-RESISTANT, THERMOPLASTIC OR WRC APPROVED EPDM RUBBER COUPLING, TWO SERIES 316 STAINLESS STEEL CLAMPS AND STAINLESS STEEL SCREWS AND HOUSINGS.
21. SADDLES SHALL BE PVC CORRECTLY CONTOURED FOR OUTSIDE DIAMETER OF PIPE AND INCORPORATING RING GASKET BELL OUTLET.
22. PIPE PLUGS SHALL BE DESIGNED FOR PERMANENT INSTALLATION AND SHALL BE REMOVABLE. OBTAIN PLUGS FOR VARIOUS TYPES OF PIPE USED FROM THE RESPECTIVE PIPE MANUFACTURER.
23. ALL PVC SANITARY SEWER AND FORCE MAINS SHALL BE MARKED WITH LOCATOR TAPE, LABELED "SANITARY SEWER", INSTALLED 18" ABOVE THE PIPE.
24. FINAL APPROVED SET OF PLANS AND SPECIFICATIONS SHALL BE MAINTAINED ON THE JOB SITE. FAILURE TO COMPLY WITH THIS PROVISION SHALL BE CONSIDERED CAUSE TO STOP THE WORK.
25. 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 ALL A 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.

KENT COUNTY GENERAL NOTES (CONTINUED)

ALL SANITARY SEWERS AND MANHOLES SHALL BE TESTED IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS. IN ADDITION ALL MANHOLES SHALL BE VACUUM TESTED IN ACCORDANCE WITH TM C1244 AND AS DESCRIBED BELOW:

VACUUM TESTING SHALL BE CARRIED OUT IMMEDIATELY AFTER ASSEMBLY AND PRIOR TO BACKFILLING. ALL LIFT HOLES SHALL BE PLUGGED WITH AN APPROVED NON-SHRINK GROUT, OR RUBBER PLUG. GROUT SHALL NOT BE PLACED IN THE HORIZONTAL JOINTS BEFORE TESTING. ALL PIPES ENTERING THE MANHOLE SHALL BE PLUGGED, TAKING CARE TO SECURELY BRACE THE PLUGS FROM BEING DRAWN INTO THE MANHOLE.

ALL MANHOLES SHALL BE VACUUM TESTED FOR LEAKAGE. A VACUUM OF TEN (10) INCHES OF MERCURY SHALL BE PLACED ON THE MANHOLE AND THE TIME MEASURED FOR THE VACUUM TO DROP NINE (9) INCHES OF MERCURY. THE VACUUM SHALL NOT DROP BELOW NINE (9) INCHES OF MERCURY FOR THE FOLLOWING TIME PERIODS FOR EACH SIZE OF MANHOLE.

THIRTY-EIGHT (48) INCHES DIAMETER - SIXTY (60) SECONDS
TWENTY-TWO (72) INCHES DIAMETER - NINETY (90) SECONDS

CONTRACTOR SHALL PROVIDE ALL MATERIAL AND EQUIPMENT NECESSARY FOR TESTING. IF TESTING FAILS, CONTRACTOR SHALL SEAL ALL LEAKS AND RE-TEST UNTIL ACCEPTABLE. THIS TESTING SHALL BE PERFORMED BEFORE BACKFILLING SO THAT ANY LEAKS CAN BE FOUND AND FIXED INTERNALLY. THE MANHOLE FRAME AND ADJUSTING RINGS SHALL BE IN PLACE WHEN TESTING.

ROUTINE PERIODIC INSPECTIONS DURING CONSTRUCTION WILL BE PROVIDED BY THE OWNER. THESE INSPECTIONS DO NOT RELIEVE THE CONTRACTOR FROM HIS OBLIGATION AND RESPONSIBILITY FOR CONSTRUCTING A SANITARY SEWER SYSTEM IN STRICT ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE OWNER.

AFTER TESTING IS COMPLETE AND ALL COMPONENTS OF THE SANITARY SEWER SYSTEM ARE DEEMED ACCEPTABLE TO THE OWNER, THE CONTRACTOR SHALL SUBMIT THE AS-BUILT DRAWINGS TO THE OWNER. ANY DISCREPANCIES NOTED DURING THE FINAL INSPECTION SHALL BE CORRECTED BY THE CONTRACTOR WITHIN 30 DAYS.

THE PROPERTY AND RIGHT OF WAY LINES SHOWN ON THESE DRAWINGS ARE APPROXIMATE, AND ARE NOT BASED ON METES AND BOUNDS FIELD RUN SURVEYS OR PROPERTY RECORDS.

THE CONTRACTOR SHALL TAKE PRECAUTIONS TO LOCATE PROPERTY LINES AND RIGHT OF WAY LINES PRIOR TO CONSTRUCTION AND AVOID CONSTRUCTION ACTIVITIES ON PRIVATE PROPERTY AND/OR RIGHTS OF WAYS WHERE SAID CONSTRUCTION IS PROHIBITED. THE CONTRACTOR MAY CONDUCT CONSTRUCTION ACTIVITIES ON PRIVATE PROPERTY PROVIDED HE HAS OBTAINED PRIOR WRITTEN PERMISSION FROM THE PROPERTY OWNER AND HAS SUBMITTED A COPY OF SAID WRITTEN PERMISSION TO THE DIRECTOR OF THE KENT COUNTY DEPARTMENT OF PUBLIC WORKS.

ANY REQUIRED EASEMENTS, PERMITS AND APPROVALS SHALL BE ACQUIRED BY THE DEVELOPER PRIOR TO COMMENCEMENT OF SANITARY SEWER CONSTRUCTION.

STRUCTURES AND/OR THRUST BLOCKING HAVE BEEN DESIGNED BASED ON THE FOLLOWING.

A MINIMUM 3,000 PSF PASSIVE SOIL BEARING CAPACITY.

A MINIMUM 28 DAY CONCRETE COMPRESSIVE STRENGTH OF 3,500 PSI (EXCEPT FOR PRECAST CONCRETE).

TEST PRESSURE (WORKING PLUS SURGE) IS 100 PSI.

DEPTH FROM FINISHED GRADE TO TOP OF PIPE ASSUMED TO BE 2.5 FT. OR DEEPER.

EXISTING SOIL CONDITIONS ARE NOT SOFT OR ORGANIC.

IF DIFFERING SITE CONDITIONS AND/OR DIFFERING MATERIAL PROPERTIES SHALL REQUIRE KENT COUNTY DPW APPROVAL OF SPECIAL DESIGN DETAILS PREPARED BY THE DESIGN ENGINEER PRIOR TO INITIATING OR RESUMING CONSTRUCTION ACTIVITIES.

THE CONTRACTOR SHALL ALLOW SUFFICIENT TIME FOLLOWING EXCAVATIONS FOR INSPECTION AND EVALUATION OF EXISTING SOIL SUBGRADE CONDITIONS BY THE CONSTRUCTION ENGINEER (AGENT FOR KENT COUNTY DPW). THE CONSTRUCTION ENGINEER SHALL INSPECT ALL STRUCTURE AND THRUST BLOCKING SUBGRADE AND PIPELINE SUBGRADE FOLLOWING EXCAVATION AND PRIOR TO CONSTRUCTION OF NEW WORK TO CONFIRM DESIGN CONDITIONS ARE MET AND SUBGRADE CONDITIONS ARE SUITABLE FOR CONSTRUCTION. IN THE EVENT THE SOIL BEARING CAPACITY IS LESS THAN THE MINIMUM DESIGN VALUE, THE CONSTRUCTION ENGINEER SHALL CAUSE AFFECTED CONSTRUCTION TO CEASE AND SHALL NOTIFY THE DESIGN ENGINEER FOR RE-DESIGN TO ACCOMMODATE THE REDUCED SOIL BEARING CAPACITY.

THE EVENT THE SUBGRADE CONDITION IS UNSTABLE, DUE TO UNSUITABLE MATERIALS AND/OR GROUNDWATER INFILTRATION/INTRUSION INTO THE SURROUNDING SOILS, AS DETERMINED BY THE CONSTRUCTION ENGINEER, THE CONTRACTOR SHALL, AS DIRECTED BY THE CONSTRUCTION ENGINEER, REMOVE THE UNSUITABLE MATERIAL AND FILL WITH SUITABLE APPROVED GRANULAR FILL MATERIAL.

EXISTING UNDERGROUND UTILITIES COORDINATION NOTES:

1. THE LOCATION OF UNDERGROUND UTILITIES AS INDICATED ON PLANS HAS BEEN OBTAINED FROM EXISTING RECORDS. NEITHER THE OWNER OR THE ARCHITECT/ENGINEER ASSUMES ANY RESPONSIBILITY WHATEVER IN RESPECT TO ACCURACY, COMPLETENESS, OR SUFFICIENCY OF THE INFORMATION SHOWN. THERE IS NO GUARANTEE, EITHER EXPRESSED OR IMPLIED THAT THE LOCATIONS, SIZE AND TYPE OF MATERIALS OF EXISTING UNDERGROUND UTILITIES INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED DURING CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH UTILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE OWNER OF HIS OPERATIONAL PLANS. IN THE EVENT OF AN UNEXPECTED UTILITY INTERFERENCE DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER. ANY SUCH MAINS AND/OR SERVICES DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED IMMEDIATELY AT HIS EXPENSE.
2. PRIOR TO PERFORMING ANY EXCAVATION GREATER THAN 6 INCHES, THE CONTRACTOR SHALL COORDINATE WITH KENT COUNTY DEPARTMENT OF PUBLIC WORKS AND ALL PRIVATE UTILITY COMPANIES TO DETERMINE THE LOCATION OF UNDERGROUND UTILITY LINES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ALL ORGANIZATIONS THAT CONTROL EXISTING UNDERGROUND UTILITIES IN THE CONSTRUCTION AREA OR WOULD BE AFFECTED BY CONSTRUCTION WORK AROUND THE EXISTING UTILITIES.
3. THE CONTRACTOR SHALL NOT START EXCAVATION UNTIL ALL UTILITY LINE LOCATIONS HAVE BEEN STAKED OR OTHERWISE CLEARLY MARKED AND DOCUMENTATION FURNISHED TO THE OWNER. ALL MARKINGS SHALL BE CONSIDERED APPROXIMATE, AND UTILITIES OTHER THAN THOSE SHOWN SHALL BE CONSIDERED TO EXIST.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEFINITE LOCATION OF EACH UTILITY WITHIN THE WORK AREA. CARE SHOULD BE EXERCISED DURING EXCAVATION WORK TO AVOID DAMAGING OR DISRUPTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING (AT CONTRACTOR'S EXPENSE) DAMAGE TO ANY UTILITY CAUSED BY THE CONTRACTOR'S WORK.
5. WHERE EXISTING UNDERGROUND UTILITIES OR OTHER CONSTRUCTION ARE EXPECTED TO BE IN PROXIMITY TO PROPOSED CONSTRUCTION, OR WHEN APPROACHING EXISTING UTILITIES OR STRUCTURES FOR CONNECTIONS, THE CONTRACTOR SHALL DIG TEST PITS TO DETERMINE THE EXACT LOCATION AND INVERTS OF THE EXISTING UTILITY TO ALLOW FOR POSSIBLE CHANGES TO THE PROPOSED UTILITY IN LINE AND/OR GRADE. THE CONTRACTOR SHALL ALSO DIG TEST PITS IN THE LOCATION OF THE PROPOSED CONNECTIONS TO EXISTING UTILITIES AND SHALL MAKE ALL MEASUREMENTS NECESSARY TO ENSURE PROPER CONNECTION. ANY NECESSARY CHANGES IN LINE OR GRADE OF WORK CAUSED BY FAILURE TO TAKE SUCH PRECAUTIONS SHALL BE AT THE EXPENSE OF THE CONTRACTOR.
6. WHEN IT IS NECESSARY TO EXCAVATE NEAR OR INTERFERE WITH ANY SEWER LINE, WATER SERVICES, DRAIN PIPE, CATCH BASIN, CULVERT, OR OTHER STRUCTURES, THE CONTRACTOR SHALL MAINTAIN THE SAME IN WORKING ORDER AND SHALL REPAIR AND MAKE GOOD ANY DAMAGE DONE DURING THE PROGRESS OF THE WORK.
7. WHERE EXISTING UTILITIES CROSS THE TRENCH EXCAVATION, THEY SHALL BE ADEQUATELY SUPPORTED AND PROTECTED FROM DAMAGE DUE TO CONSTRUCTION. ALL METHODS FOR SUPPORTING AND MAINTAINING THESE UTILITIES SHALL BE SUBJECT TO REVIEW BY OWNER. CARE SHALL BE TAKEN TO ENSURE THAT THE EXISTING UTILITY GRADES AND ALIGNMENT ARE MAINTAINED AND THE PIPE JOINTS ARE NOT DISTURBED. BACKFILL SHALL BE CAREFULLY PLACED AND TAMPED TO PREVENT DAMAGE OR FUTURE SETTLEMENT. ANY DAMAGE OR MISALIGNMENT OF THE UTILITIES DUE TO CONSTRUCTION OR SETTLEMENT SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
8. ANY UNPROTECTED CABLE (DIRECT BURIED) ENCOUNTERED THAT IS VERIFIED AS NOT ABANDONED IN PLACE SHALL BE PROTECTED. THE UTILITY OWNER MAY DIRECT THE CABLE BE PLACED IN SPLIT DUCT OF APPROPRIATE SIZE AND CONCRETE ENCASED THROUGH THE AREA OF CONSTRUCTION. CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO AVOID HAVING TO CUT AND SPLICING DIRECT BURIED CABLE. THE CONTRACTOR SHALL NOTE SPLIT DUCT PORTIONS ON AS-BUILTS.
9. ALL EXCESS EXCAVATED MATERIALS SHALL BE DISPOSED OF OFF COUNTY/STATE PROPERTY, EXCEPT FOR CONTAMINATED SOILS OR LIQUIDS. ALL CONTAMINATED SOILS AND LIQUIDS SHALL BE TRANSPORTED TO AN APPROVED RECEIVING SITE AS DIRECTED BY THE ENGINEER, FOR FINAL DISPOSITION.
10. INTERRUPTION OF EXISTING UTILITIES SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND/OR AT THE DIRECTION OF THE UTILITY OWNER/S.

SOUTHWOOD ACRES / SOUTHERN MEADOWS PUMP STATION & FORCE MAIN IMPROVEMENTS SOUTH MURDERKILL HUNDRED

DAVIS
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FRIEDEL, INC.
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302-422-1444

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SALISBURY, MARYLAND 21801
301-540-1444

SHARON K. CRUZ
REGISTERED
No. 12576
DELAWARE
PROFESSIONAL ENGINEER

10.1002/anie.201907002

GENERAL NOTES

Dwg.No.:

SHARON K. CRUZ
REGISTERED
NO. 12578
DELAWARE
PROFESSIONAL ENGINEER
12-17-2025

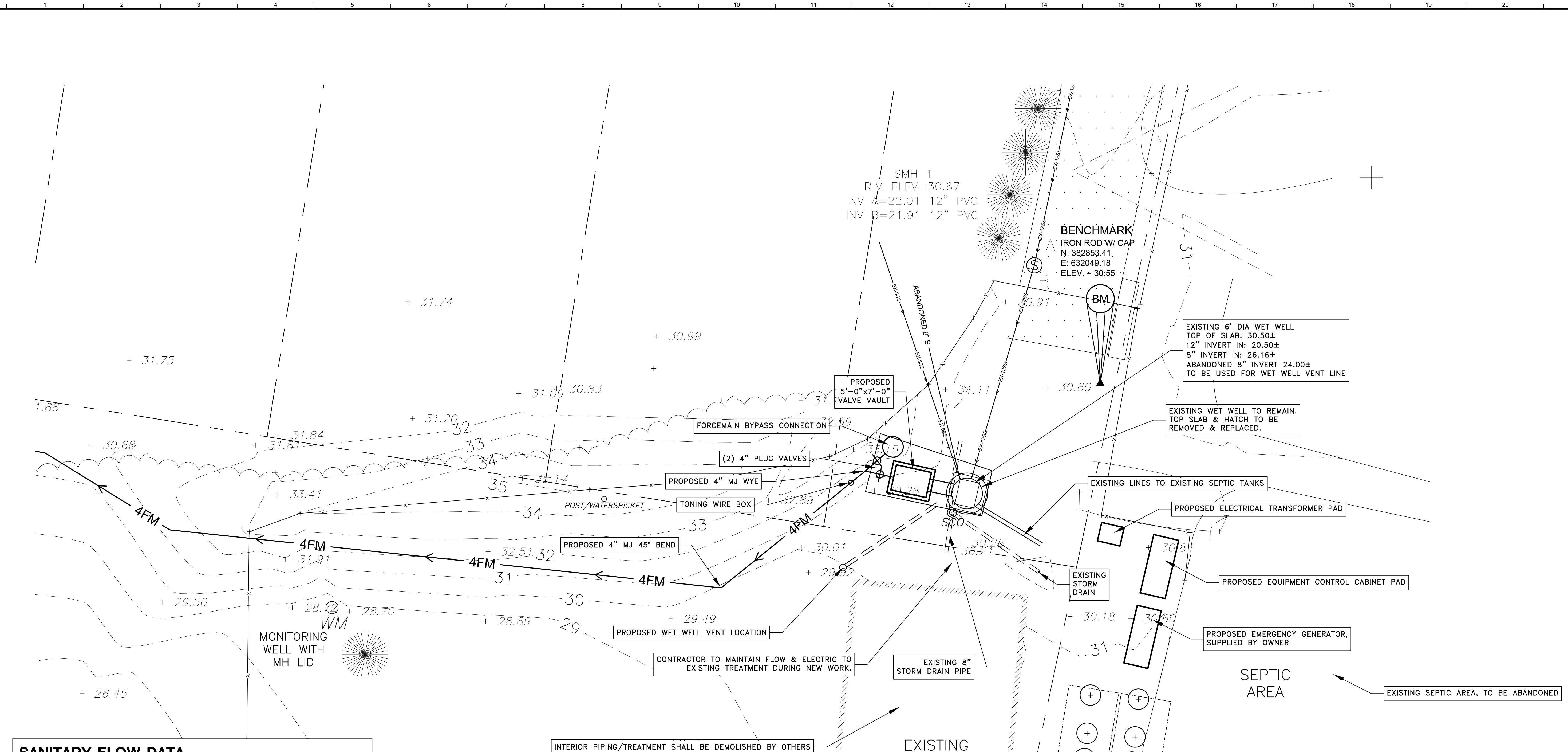
DAVIS BOWEN & FRIEDEL, INC.
ARCHITECTS • ENGINEERS • SURVEYORS
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410.770.4744

SOUTHWOOD ACRES / SOUTHERN MEADOWS
PUMP STATION & FORCE MAIN IMPROVEMENTS
SOUTH MURDERKILL HUNDRED
KENT COUNTY, DELAWARE

DATE COMMENTS
Date: 1
Scale: DECEMBER 2025
1"=10'
Dwgt. By: RJL
Proj. No.: 0575B065

PUMP STATION
SITE PLAN

Dwg. No.: C-101



SEQUENCE OF CONSTRUCTION

1. NOTIFY KENT CONSERVATION DISTRICT (KCD) OF INTENT TO BEGIN CONSTRUCTION AND SCHEDULE A PRE-CONSTRUCTION MEETING.
2. PLACE ALL PERMANENT WARNING SIGNS (AS NECESSARY) FOR CONSTRUCTION.
3. INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN.
4. TEST PIT TO VERIFY UTILITIES.
5. CLEAR AND GRUB WITHIN LIMITS AND PREPARE FOR CONSTRUCTION.
6. INSTALL NEW PUMP STATION, FORCEMAIN AND DOWNSTREAM CONNECTIONS AND CLOSE PLUG VALVE. COORDINATE WITH KENT COUNTY PUBLIC WORKS FOR CONNECTION TO EXISTING 24" FORCEMAIN. THIS WORK WILL BE COMPLETED IN STAGES, AND NO PORTION OF THE SITE WILL BE LEFT OPEN OVERNIGHT. THE PORTION OF THE SITE UNDER CONSTRUCTION EACH DAY WILL BE BACKFILLED, GRADED AND STABILIZED AT THE END OF EACH DAY.
7. AT THE COMPLETION OF WORK, SCHEDULE ACCEPTANCE OF WORK AND PREPARE STATION FOR START-UP.
8. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, SEED & MULCH.
9. UPON COMPLETION OF THE PROJECT AND APPROVAL FROM KCD, REMOVE ALL SEDIMENT AND EROSION CONTROLS WITHIN 14 DAYS.

SHARON K. CRUZ
REGISTERED
DELAWARE
PROFESSIONAL ENGINEER
No. 12576
12-17-2025

12-17-2025

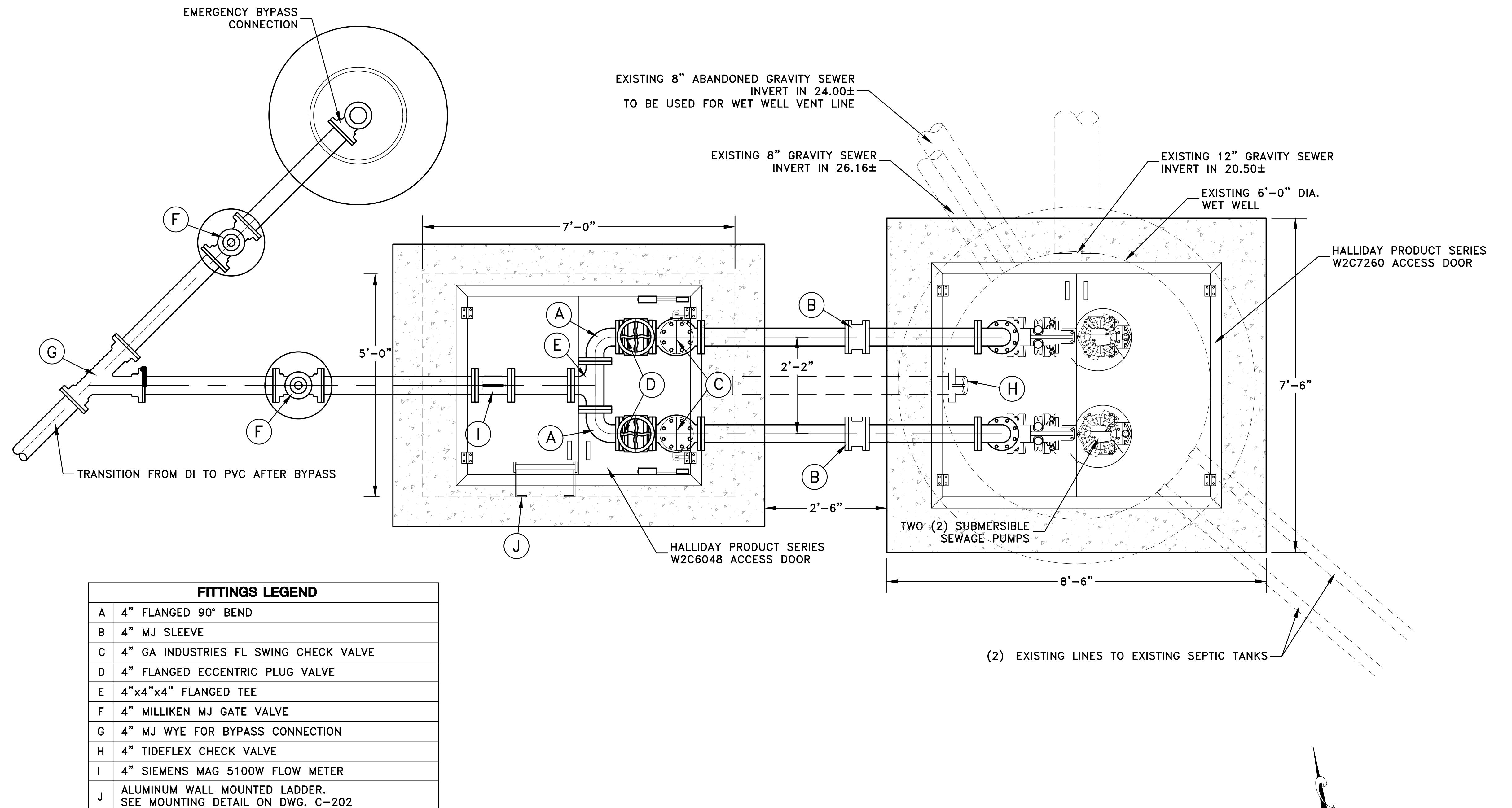
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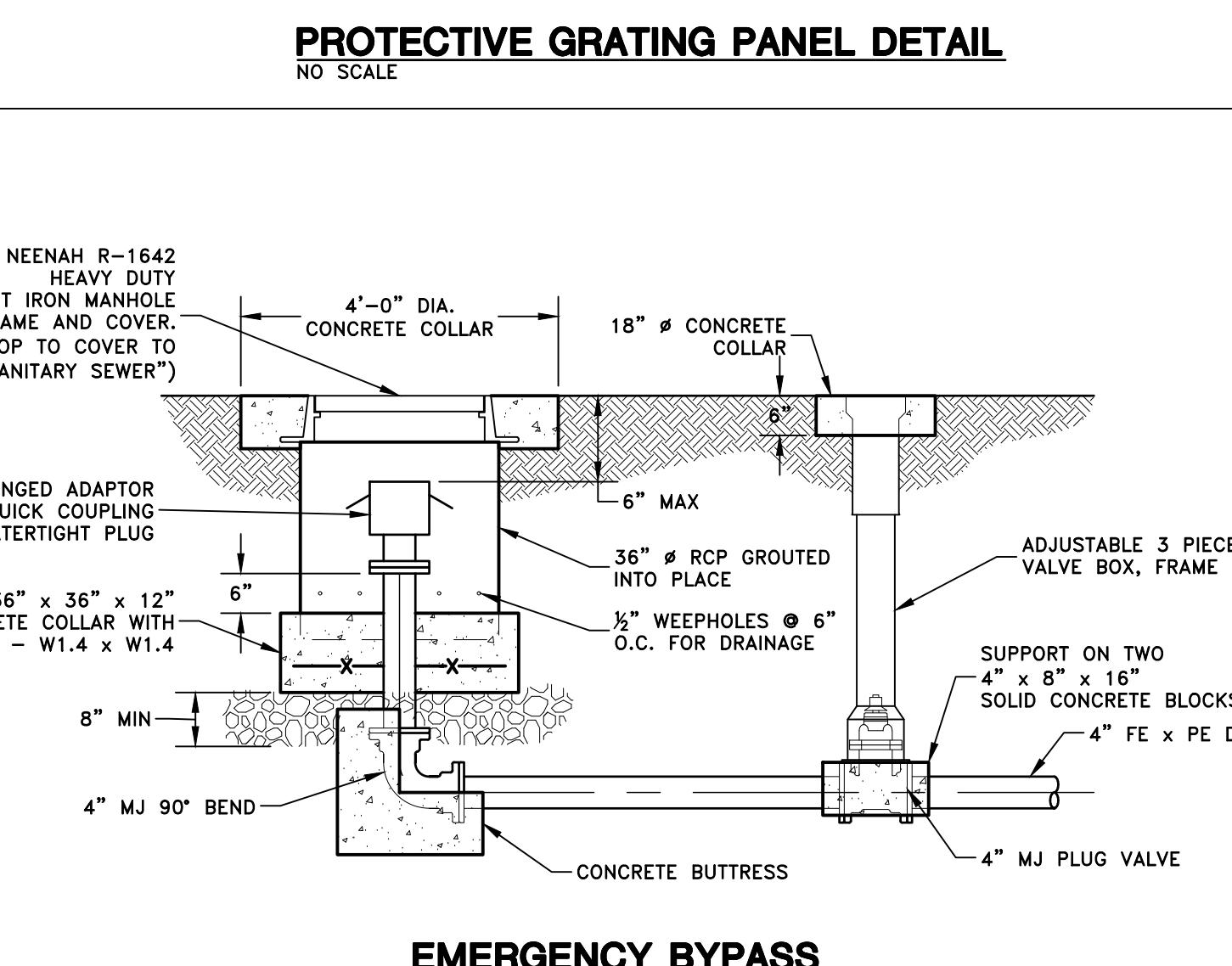
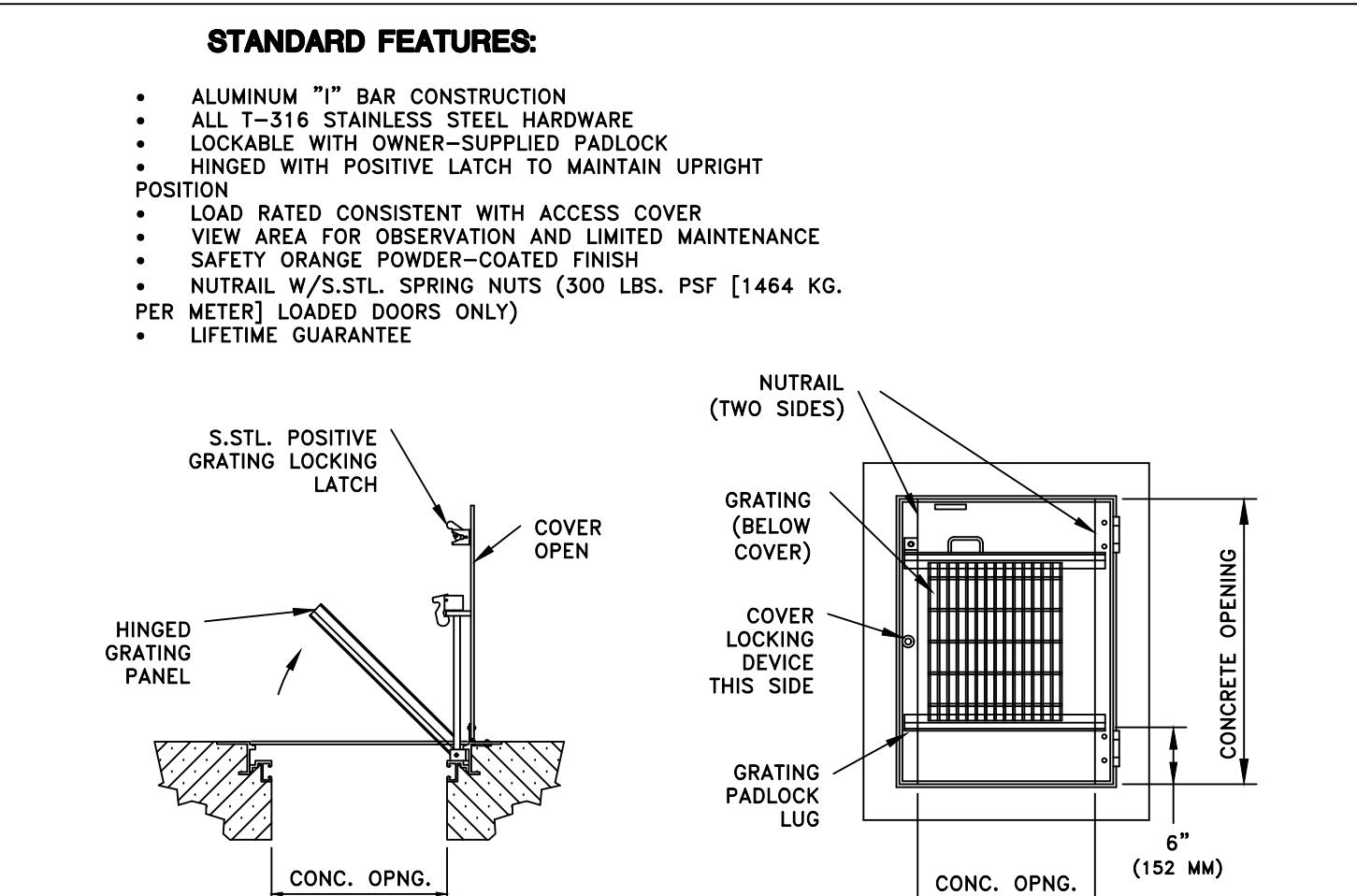
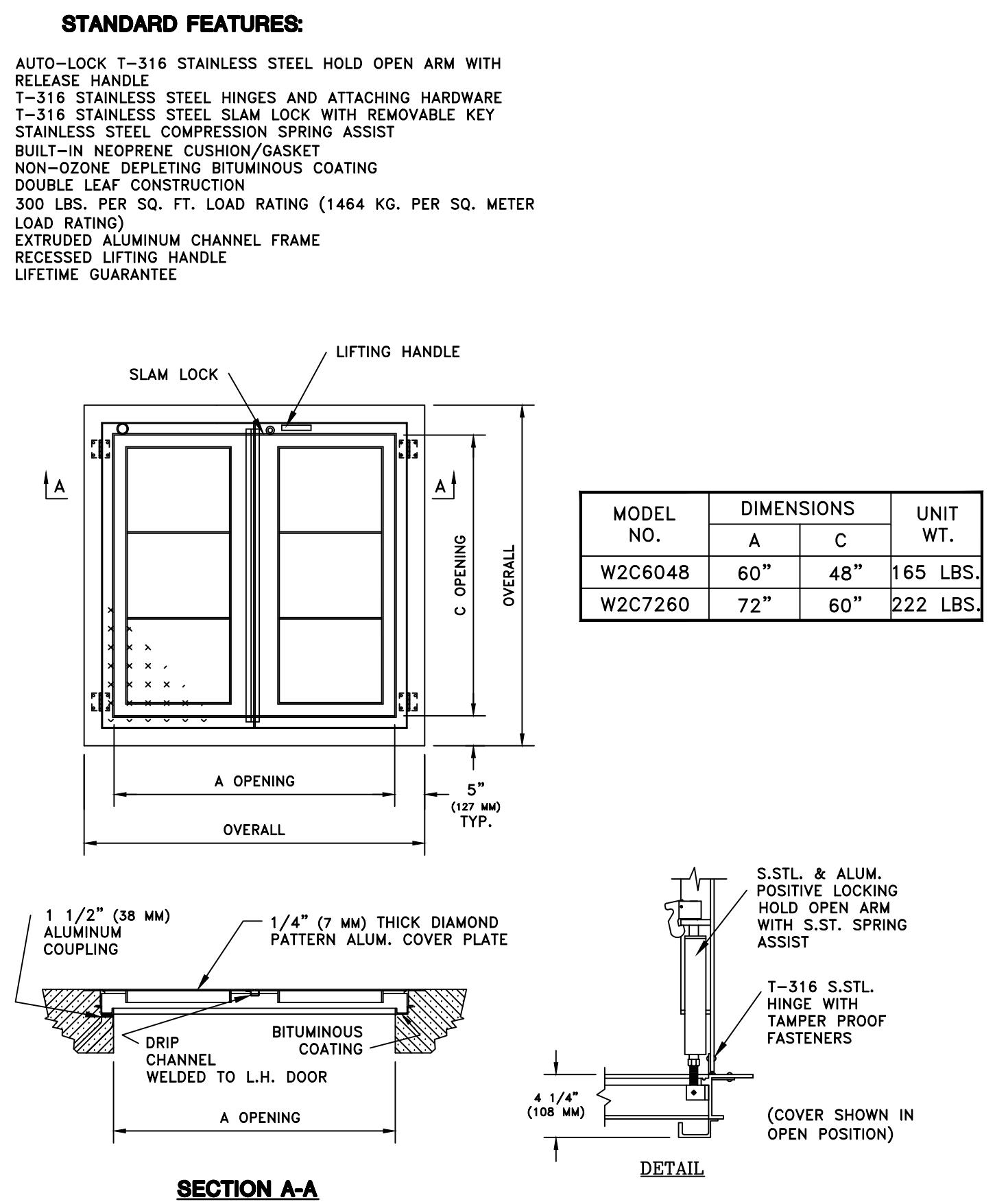
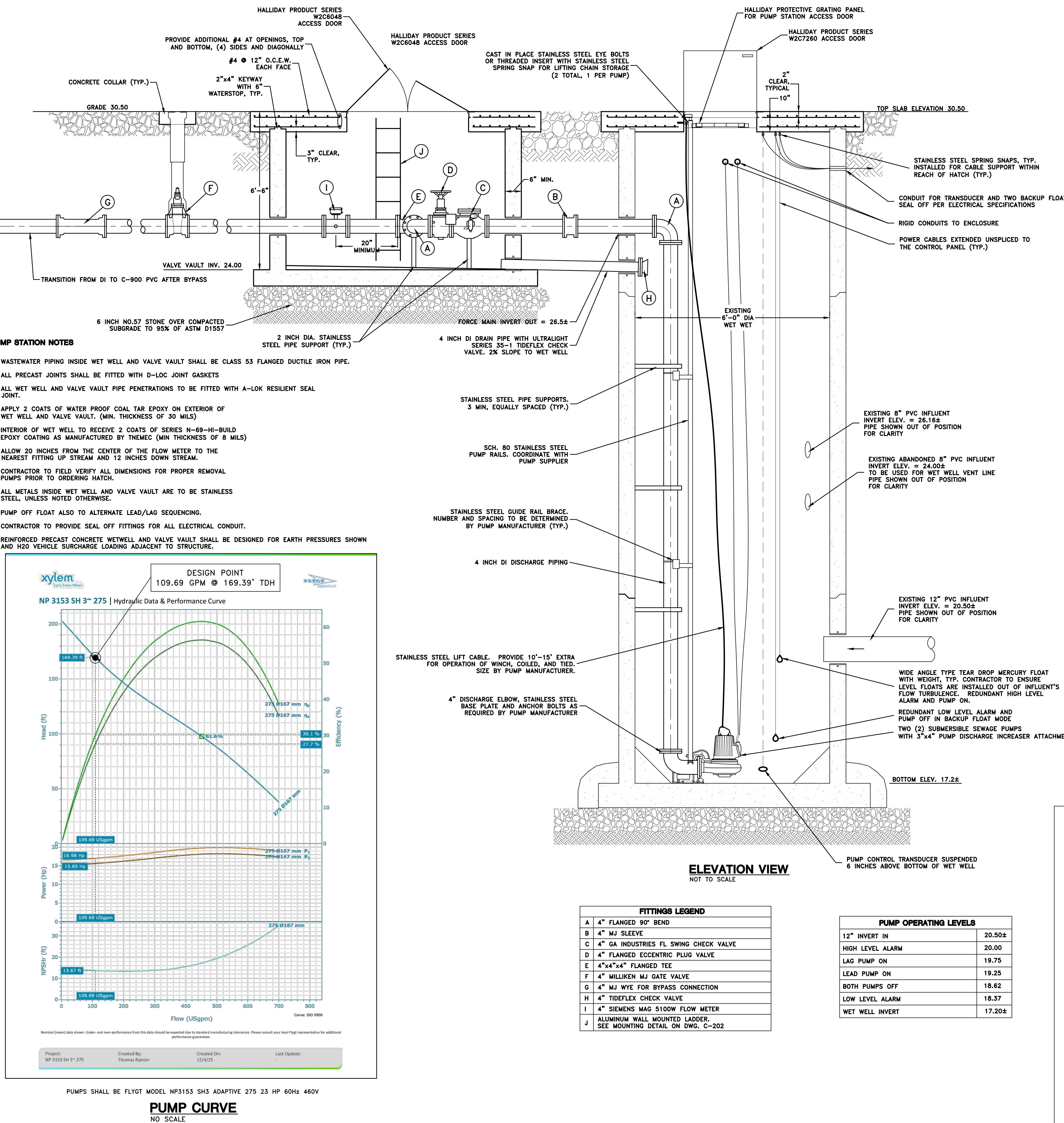
SOUTHWOOD ACRES / SOUTHERN MEADOWS
PUMP STATION & FORCE MAIN IMPROVEMENTS
SOUTH MURDERKILL HUNDRED
KENT COUNTY, DELAWARE

Comments
Date: 1
Date: DECEMBER 2025
Scale: 3/4" = 1'-0"
Dwgt. By: RJL
Proj. No.: 0575B065

PUMP STATION
PLAN VIEW

Dwg. No.: C-102

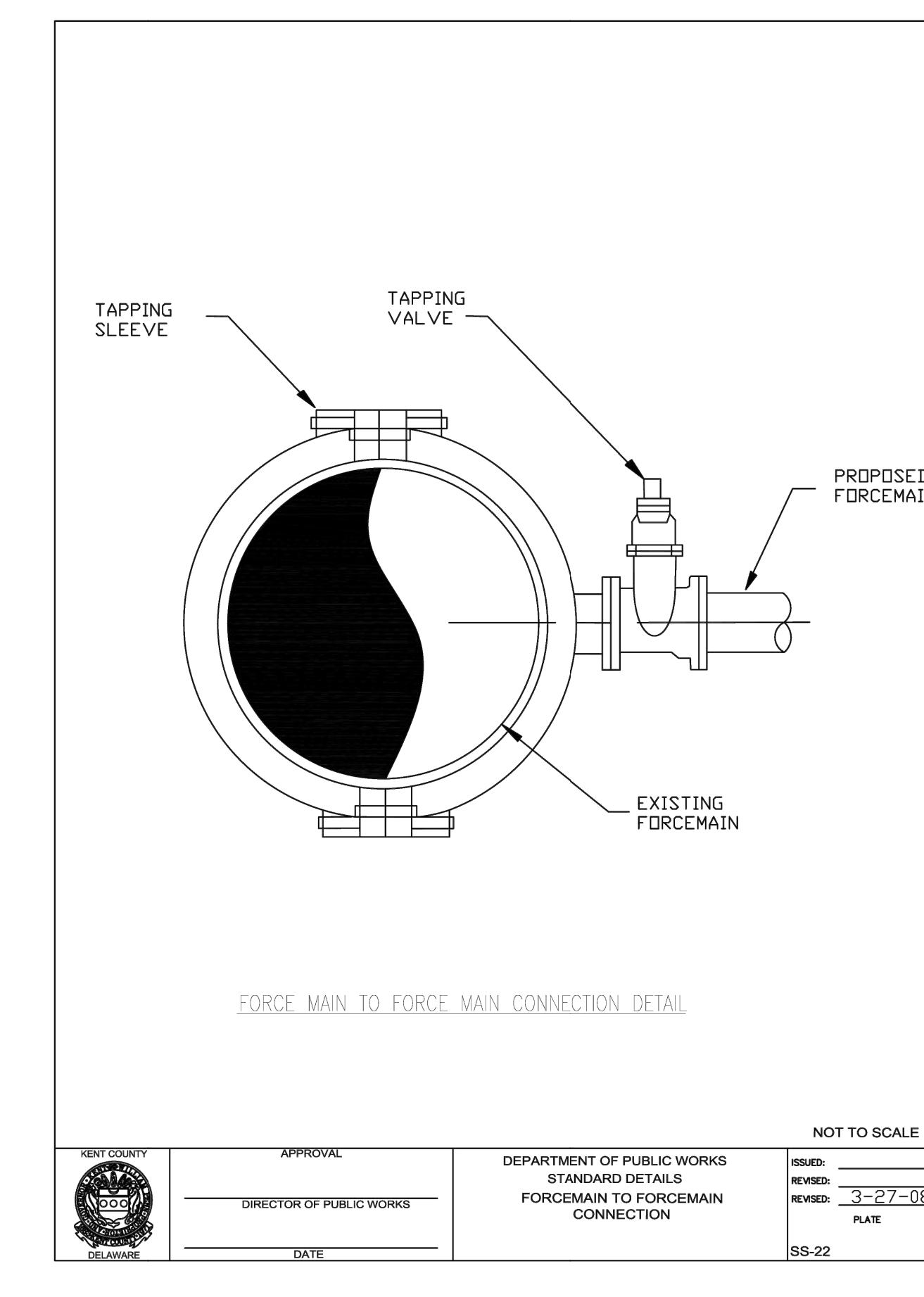
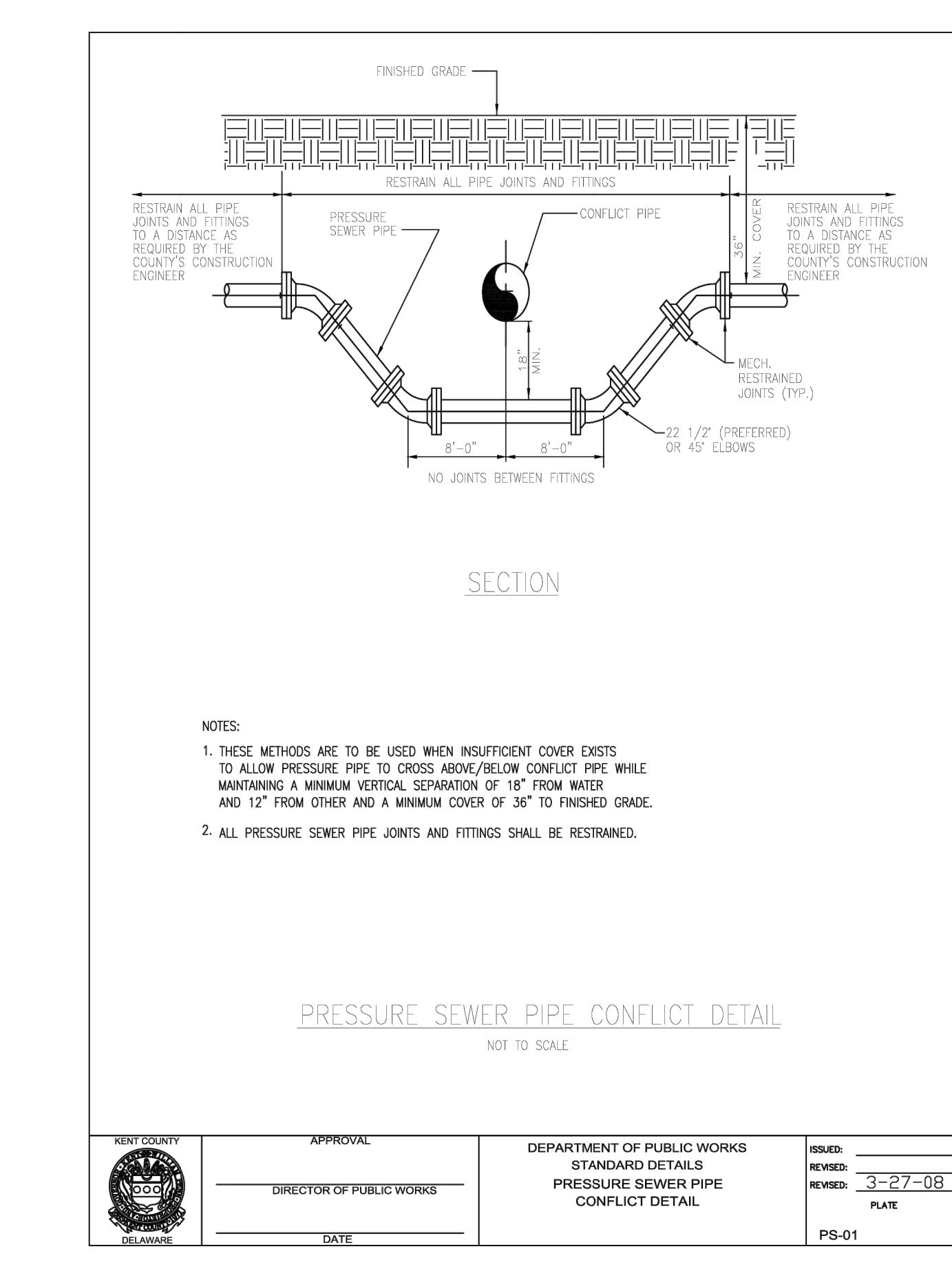
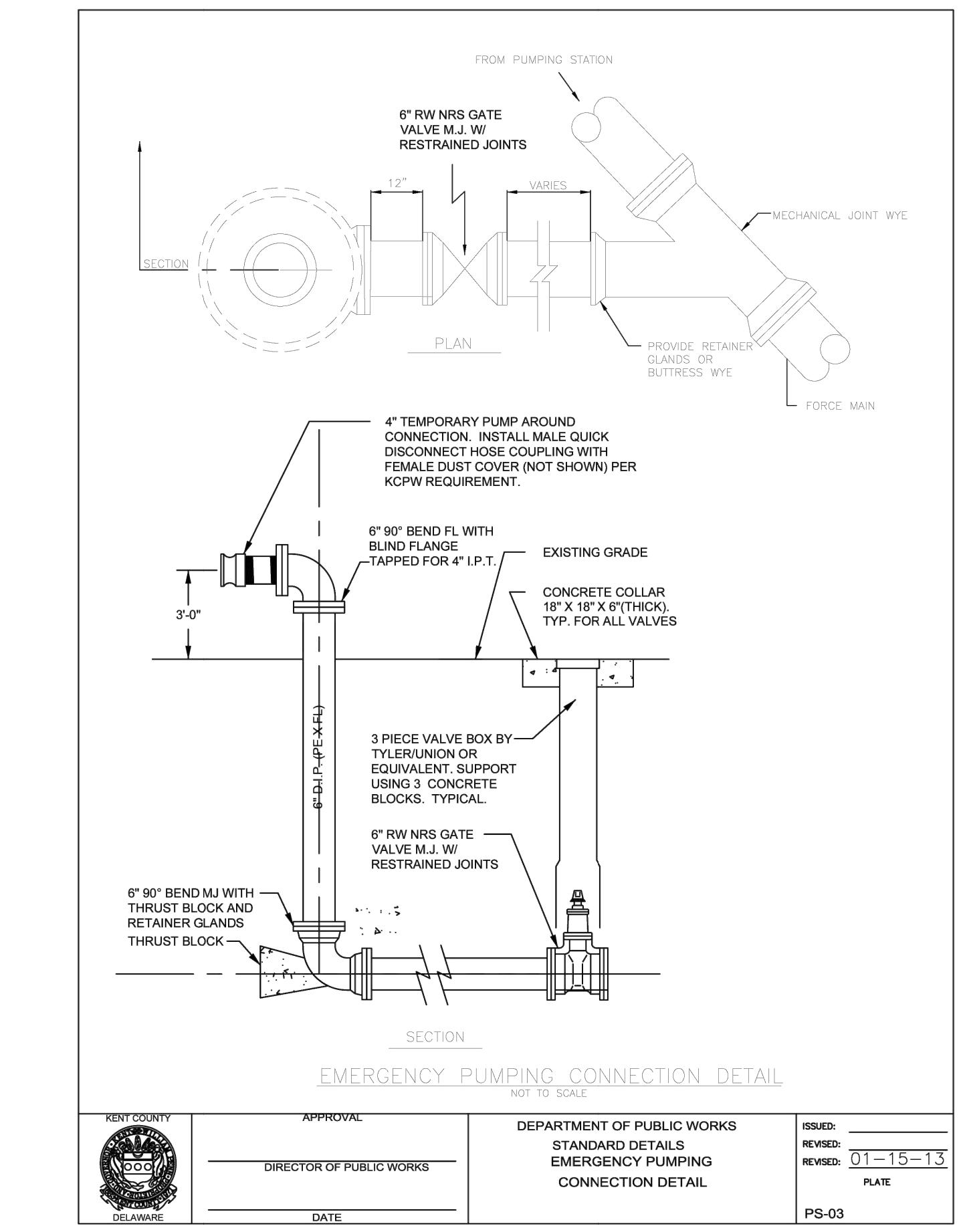
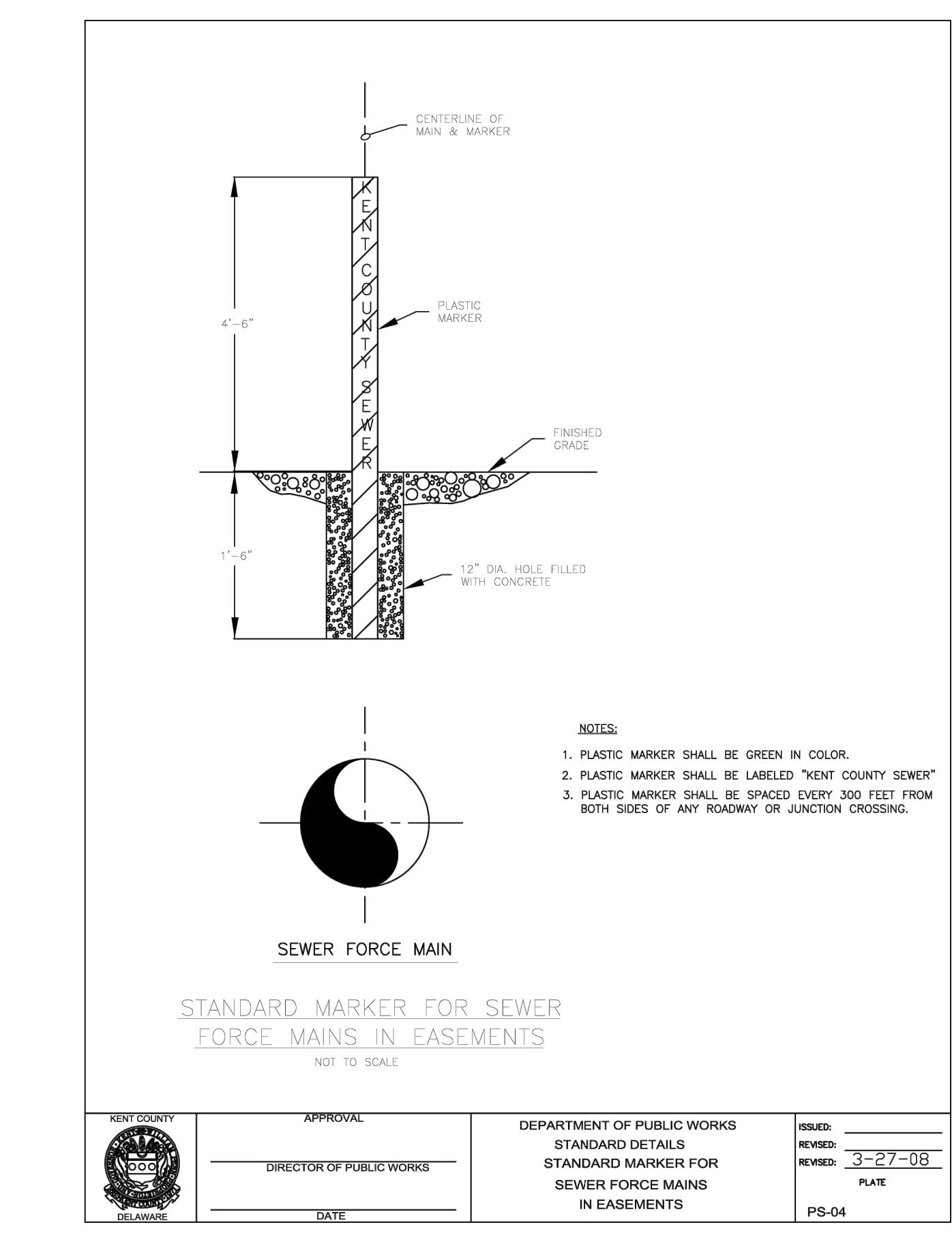
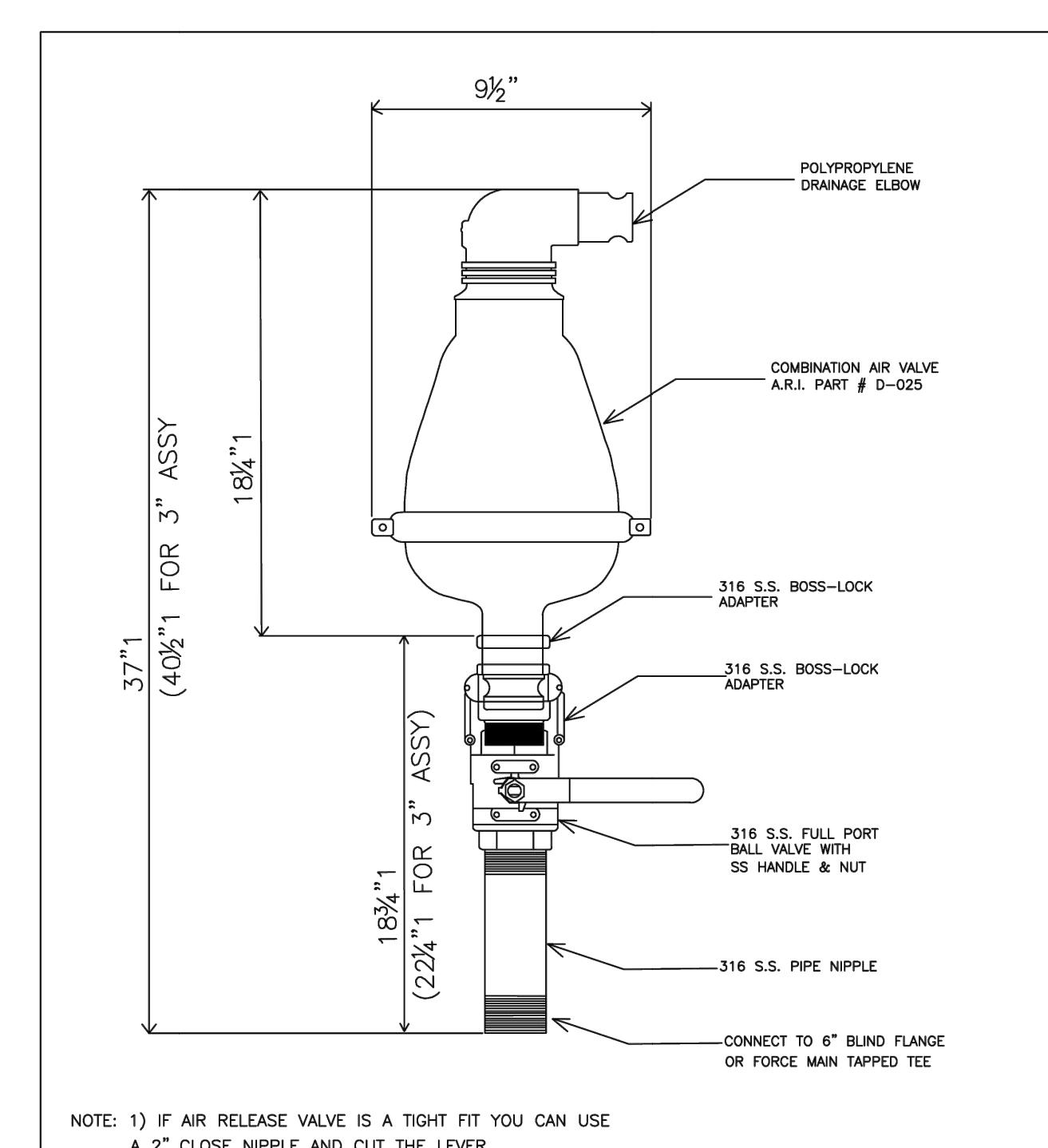
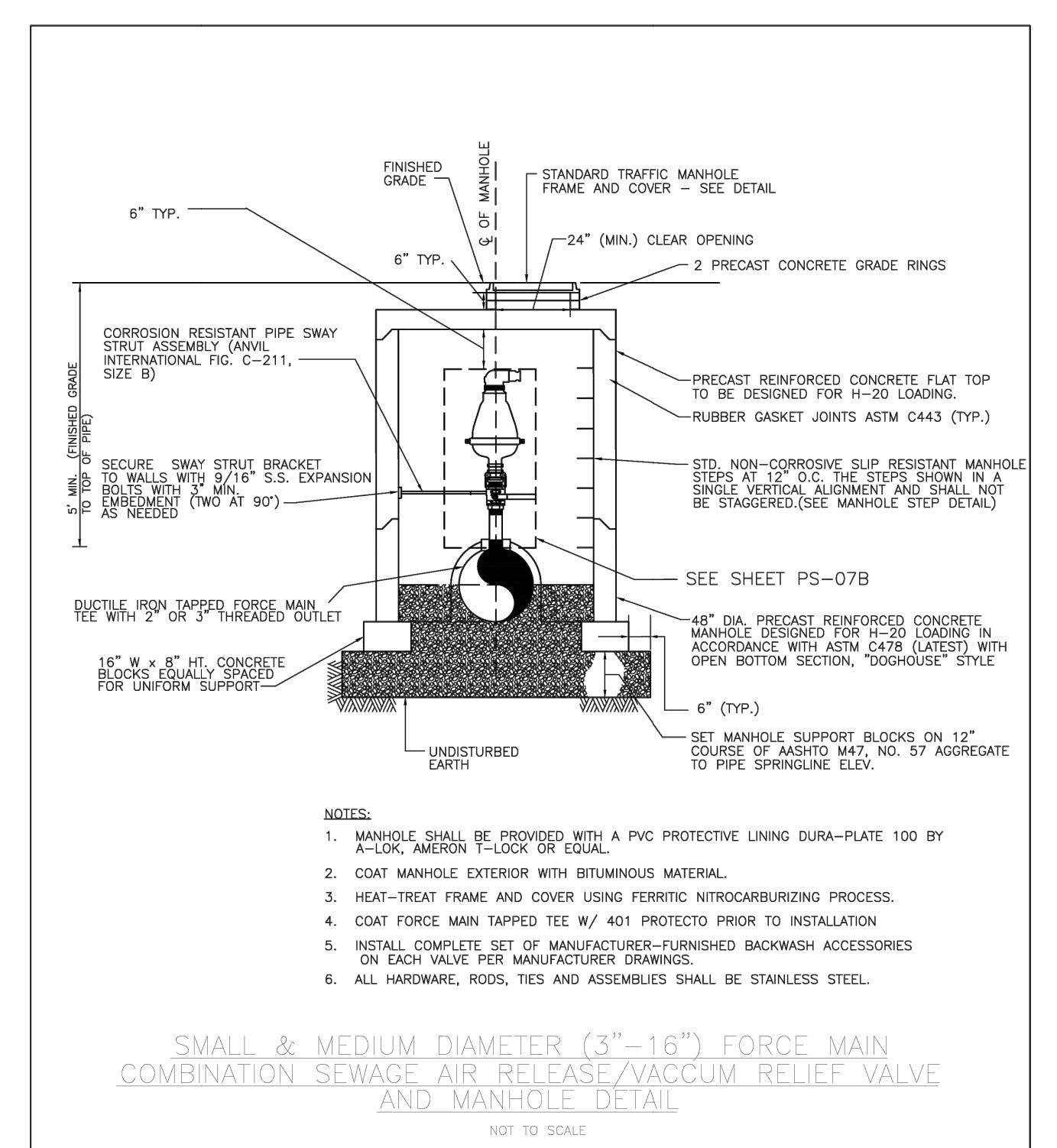
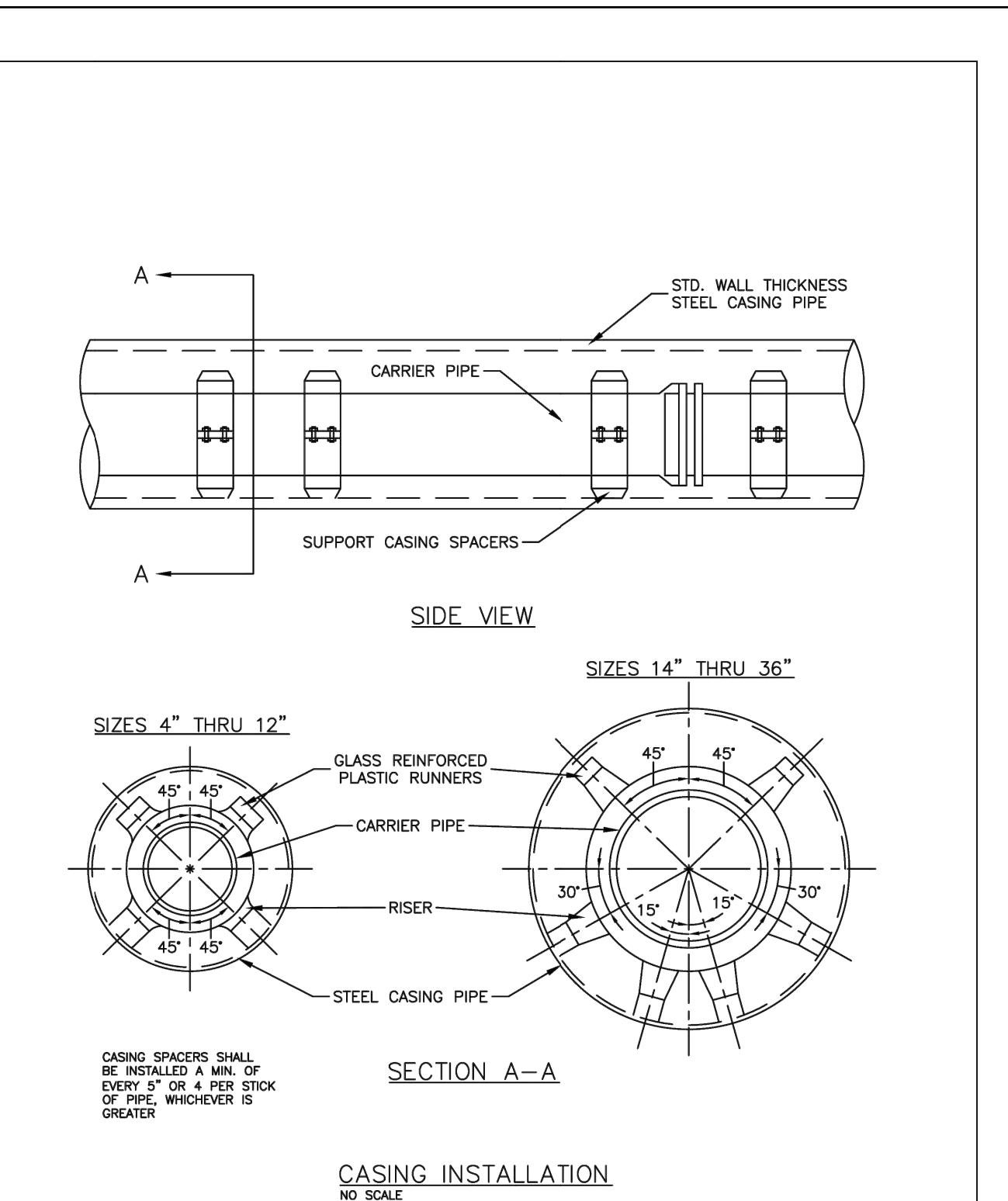
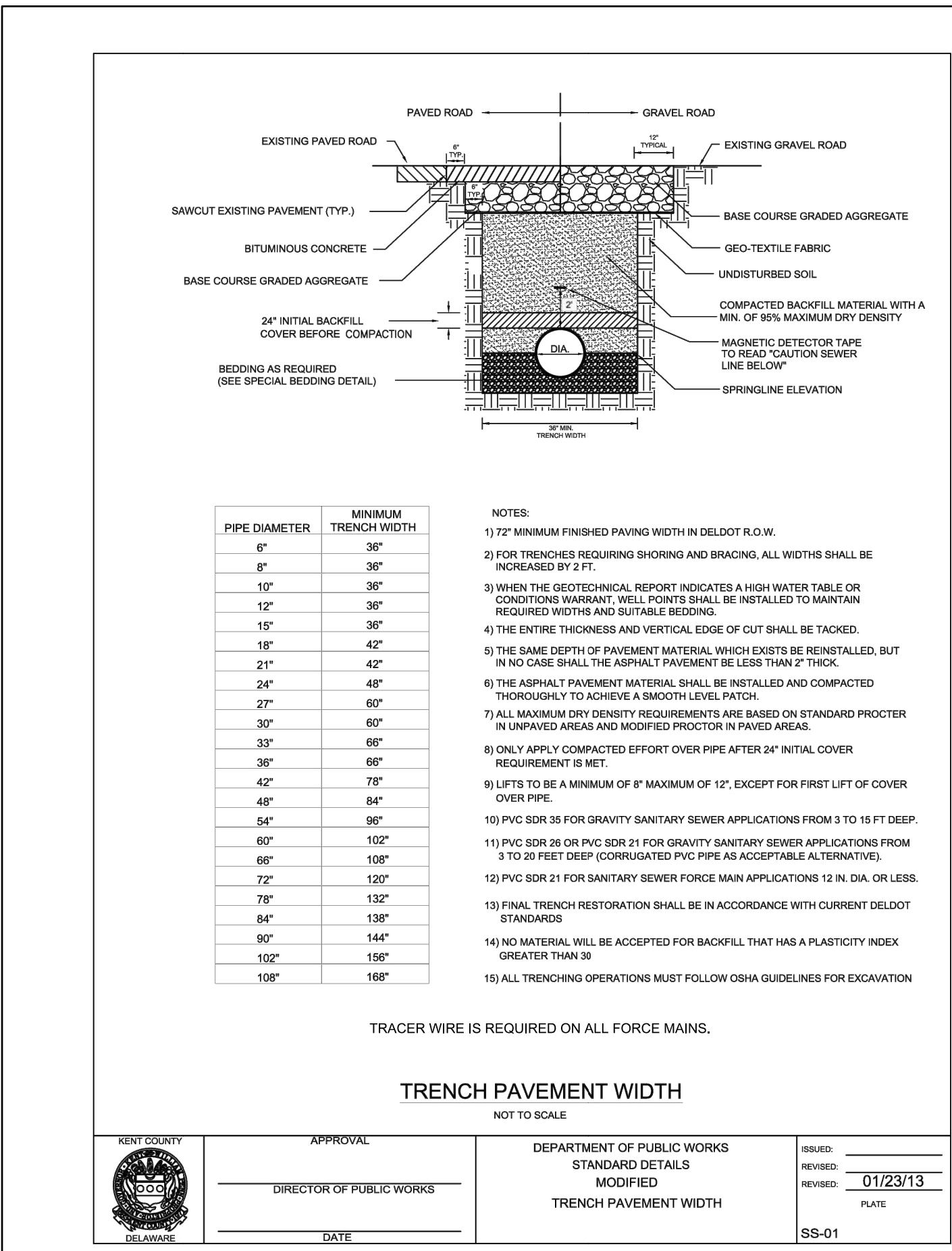




C-103

SOUTHWOOD ACRES / SOUTHERN MEADOWS
PUMP STATION & FORCE MAIN IMPROVEMENTS
SOUTH MURDERKILL HUNDRED
KENT COUNTY, DELAWARE

Dwg.No.: C-201

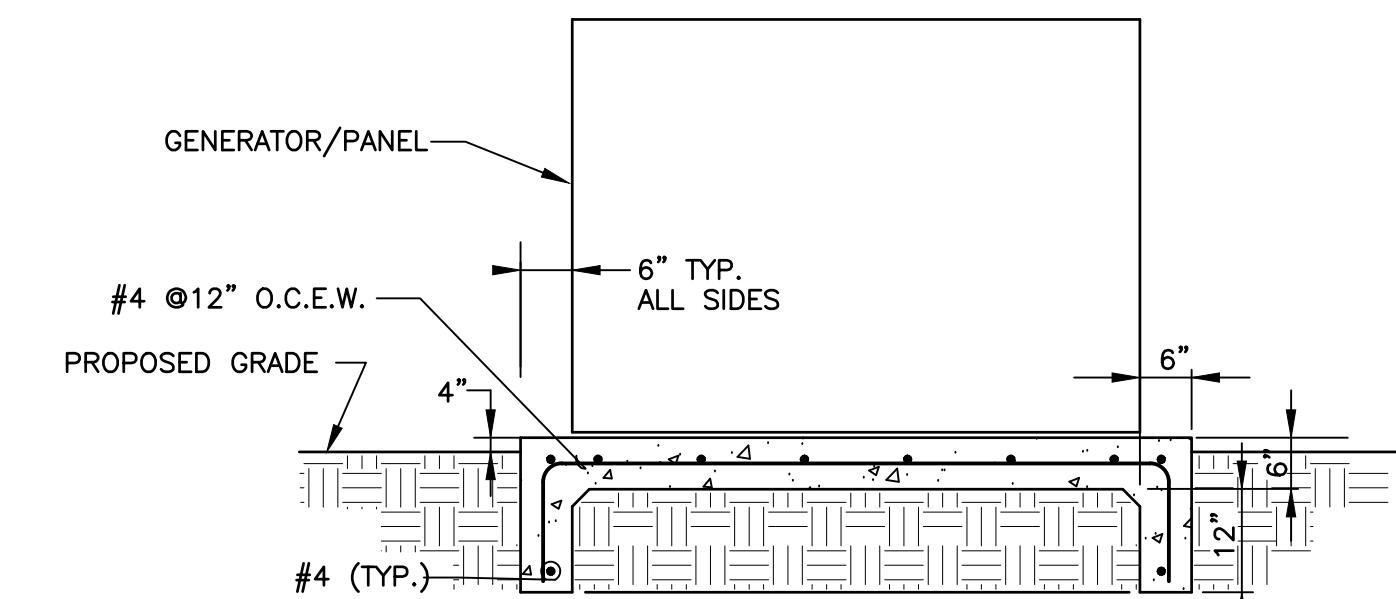


SHARON K. CRIZ
REGISTERED
No. 12576
PROFESSIONAL ENGINEER
12-17-2025

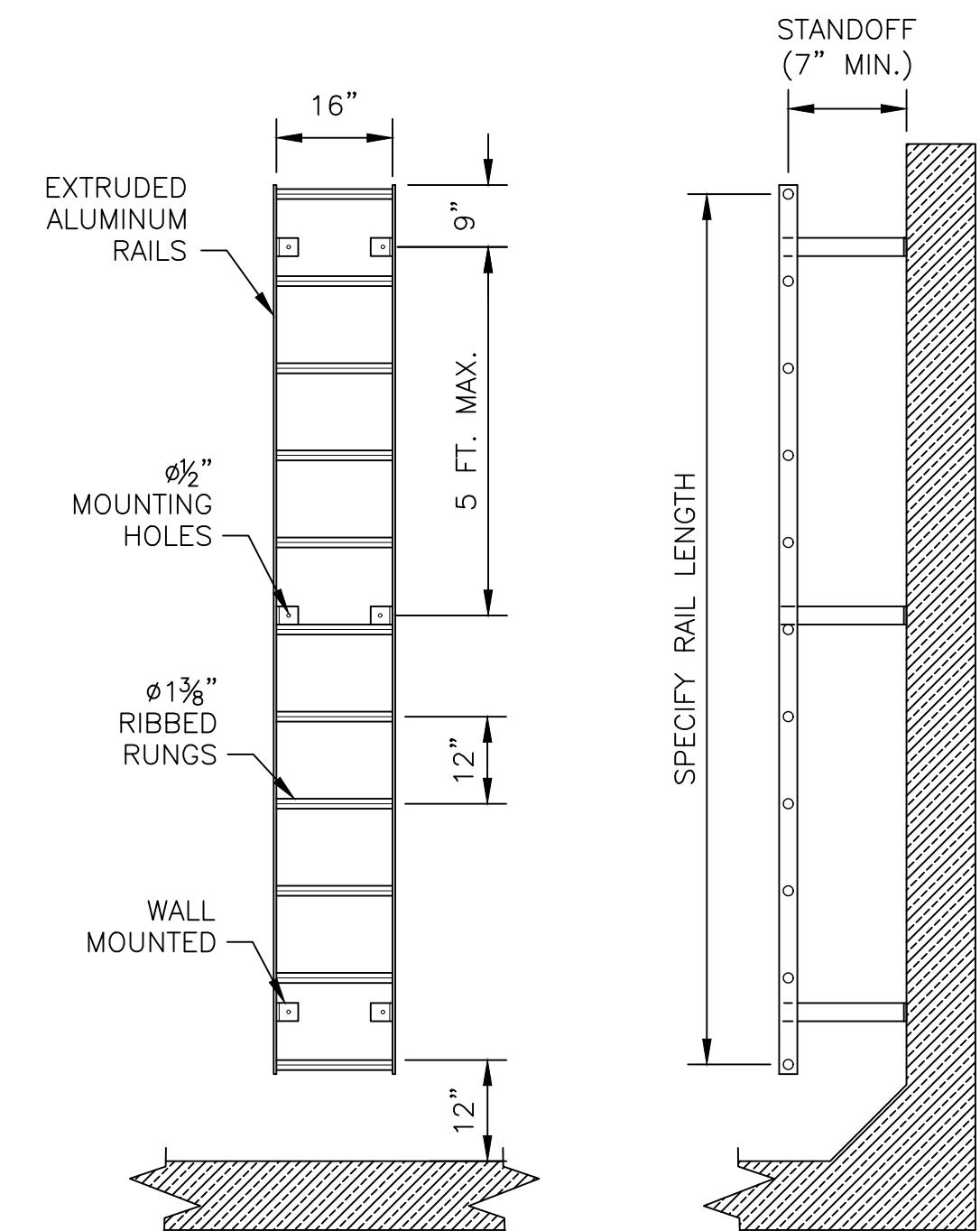
DAVIS BOWEN & FRIEDEL, INC.
ARCHITECTS • ENGINEERS • SURVEYORS
WILMINGTON, DELAWARE 410.543.2091
BOSTON, MASSACHUSETTS 302.424.1441

STANDARD FEATURES:

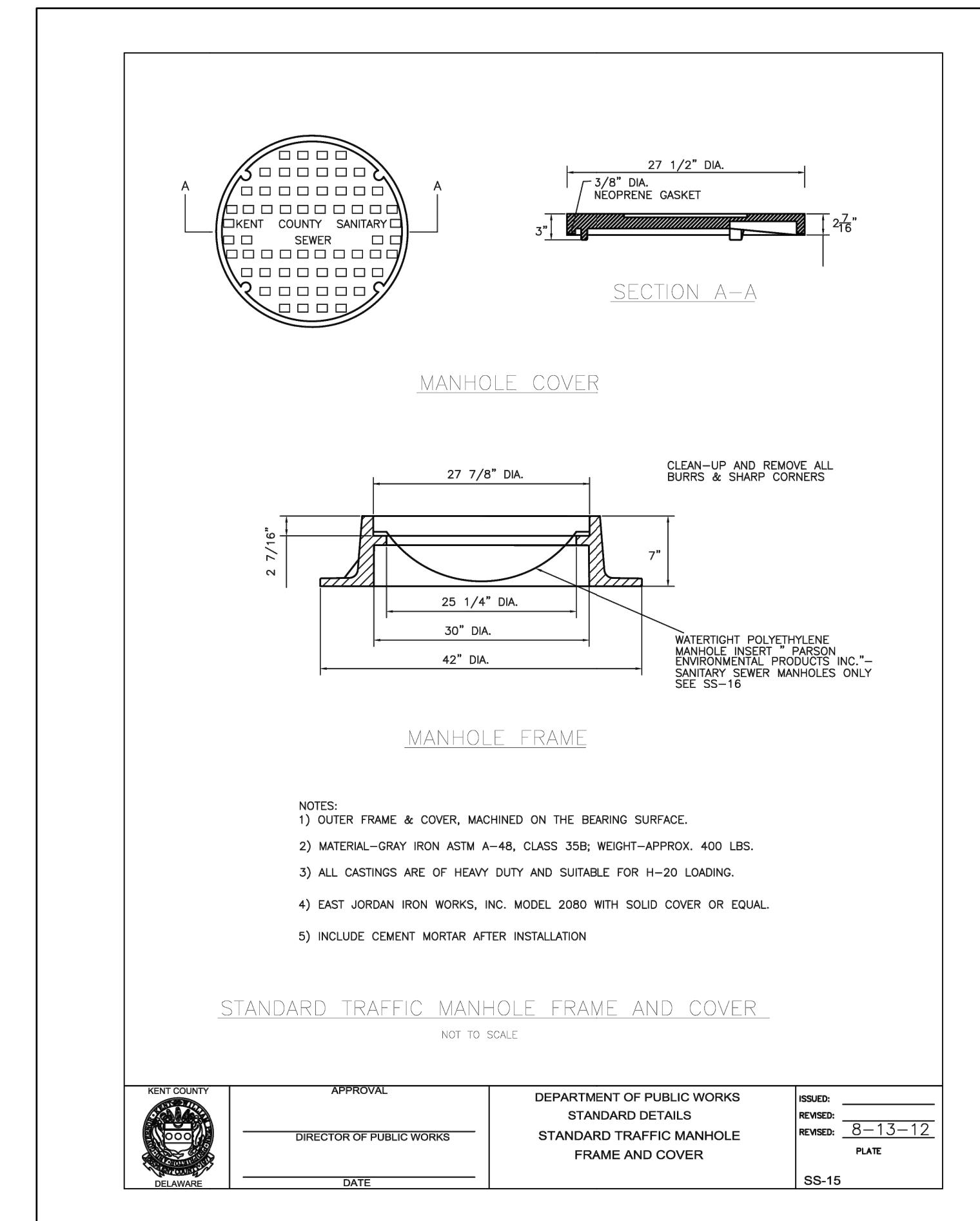
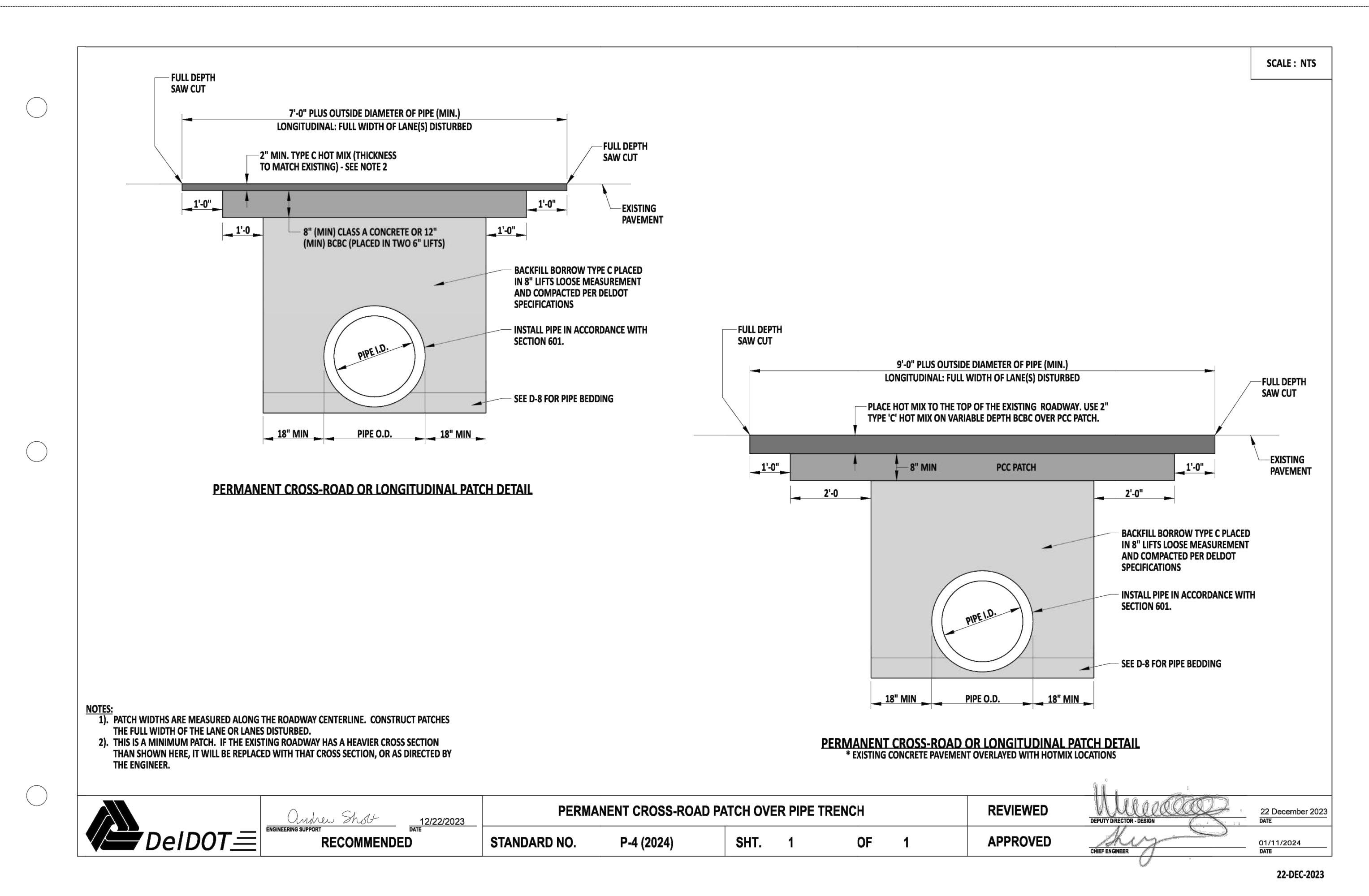
- ALL ALUMINUM WELDED CONSTRUCTION
- SLIP RESISTANT RIBBED RUNG DESIGN
- CUSTOM FIT WALL MOUNTED STANDOFFS
- WALL-ONLY MOUNTING
- ROUND WALL MOUNTING
- WELDED STAINLESS STEEL CONSTRUCTION



EQUIPMENT PAD DETAIL
NOT TO SCALE



WALL MOUNTED LADDER
NO SCALE



C-202

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21															
<p>Standard Detail & Specifications Silt Fence</p> <p>Section</p> <p>Plan</p> <p>Source: Adapted from MD Sds. & Specs for ESC Symbol: SF Detail No: DE-ESC-3.121 Sheet 1 of 2 Effective July 2023</p>	<p>Standard Detail & Specifications Silt Fence</p> <p>Construction Detail</p> <p>Construction Notes:</p> <ol style="list-style-type: none"> Geosynthetic fabric to be fastened securely to fence posts with wire ties or staples. When two sections of filter cloth adjoin each other they shall be overlapped by six inches and folded. Maintenance shall be performed as needed and material removed when "bulges" develop in the silt fence. <p>Materials:</p> <ol style="list-style-type: none"> Stakes: Steel (either T or U) or 2" x 2" hardware Geosynthetic Fabric: Type GSD Reinforcing strip: Wooden lath or plastic strip <p>Source: Adapted from MD Sds. & Specs for ESC Symbol: SF Detail No: DE-ESC-3.121 Sheet 2 of 2 Effective July 2023</p>	<p>Standard Detail & Specifications Dust Control</p> <p>Temporary Methods:</p> <ol style="list-style-type: none"> Mulches - See DE-ESC-3.4.5, Standard Detail and Specifications for Mulching. Vegetative cover - See DE-ESC-3.4.3, Std. Detail and Specifications for Vegetative Stabilization. Adhesives - Use on mineral soils only (not effective on muck soils). Keep traffic off these areas. The following table may be used for general guidance. <table border="1"> <thead> <tr> <th>Type of Emulsion</th> <th>Water Dilution</th> <th>Type of Nozzle</th> <th>Apply Gal/Sec.</th> </tr> </thead> <tbody> <tr> <td>Latex emulsion</td> <td>12.5:1</td> <td>Fine spray</td> <td>235</td> </tr> <tr> <td>Resin-in-water emulsion</td> <td>4:1</td> <td>Fine spray</td> <td>300</td> </tr> <tr> <td>Acrylic emulsion (non-traffic)</td> <td>7:1</td> <td>Coarse spray</td> <td>450</td> </tr> <tr> <td>Acrylic emulsion (traffic)</td> <td>3:5:1</td> <td>Coarse spray</td> <td>350</td> </tr> </tbody> </table> <p>4. Tillage - For emergency temporary treatment, scarify the soil surface to prevent or reduce the amount of blowing dust until a more appropriate solution can be implemented. Begin tillage operation on the windward side of the site using a chisel-type plow for best results.</p> <p>5. Sprinkling - Sprinkle site with water until the surface is moist. Repeat as needed.</p> <p>6. Calcium Chloride - Apply as flakes or granular material with a spreader at a rate that will keep the soil surface moist. Re-apply as necessary.</p> <p>7. Barriers - Place barriers such as solid board fences, snow fences, hay bales, etc. at right angle to the prevailing air currents at intervals of approx. 10X their height.</p> <p>Permanent Methods:</p> <ol style="list-style-type: none"> Vegetative cover - See DE-ESC-3.4.3, Std. Detail and Specifications for Vegetative Stabilization. Stone - Apply layer of crushed stone or coarse gravel to protect soil surface. <p>Source: Adapted from VA ESC Handbook Symbol: SF Detail No: DE-ESC-3.4.8 Sheet 1 of 1 Effective July 2023</p>	Type of Emulsion	Water Dilution	Type of Nozzle	Apply Gal/Sec.	Latex emulsion	12.5:1	Fine spray	235	Resin-in-water emulsion	4:1	Fine spray	300	Acrylic emulsion (non-traffic)	7:1	Coarse spray	450	Acrylic emulsion (traffic)	3:5:1	Coarse spray	350	<p>Standard Detail & Specifications Construction Site Pollution Prevention</p> <p>Delaware NPDES Discharge Permit General Permit for Discharge of Stormwater from Construction Activities</p> <p>Notes:</p> <p>The Construction Site Pollution Prevention Plan includes the following elements:</p> <ol style="list-style-type: none"> 1. Material Inventory 2. Concrete 3. Detergents 4. Paints (enamel and latex) 5. Cleaning solvents 6. Pesticides 7. Wood scraps 8. Fertilizers 9. Petroleum based products <p>2. Good housekeeping practices</p> <ol style="list-style-type: none"> a. Store only enough product required to do the job. b. Store all materials in a neat, orderly manner in their original labeled containers and covered. c. Do not mix different substances. d. When possible, use all of a product prior to disposal of the container. e. Manufacturers' instructions for disposal should be strictly adhered to. <p>3. Waste management practices</p> <ol style="list-style-type: none"> a. Collect and store all waste materials in securely lidded dumpsters in a location that does not drain to a waterbody. b. Salvage and/or recycle waste materials whenever possible. c. The dumpsters shall be emptied a minimum of twice per week, or more if necessary. The licensed trash hauler is responsible for cleaning out dumpsters. <p>4. Spill prevention practices</p> <ol style="list-style-type: none"> a. Identify potential spill areas and contain them in covered areas with no connection to the storm drain system. b. Post warning signs in hazardous material storage areas. c. Perform preventive maintenance on all tanks, valves, pumps, pipes and other equipment as necessary. d. Prioritize low or non-toxic substances for use. <p>Source: Adapted from USEPA Pub. 840-B-92-002 Symbol: SF Detail No: DE-ESC-3.6.1 Sheet 2 of 4 Effective July 2023</p>	<p>Standard Detail & Specifications Construction Site Pollution Prevention</p> <p>Notes (cont.)</p> <ol style="list-style-type: none"> d. Dispose of all trash in accordance with all applicable Delaware laws. e. Littering is strictly prohibited. Trash cans should be placed at all lunch spots and recycle bins should be placed near the construction trailer. f. If fertilizer bags can not be stored in a weather-proof location, they should be kept on a pallet and covered with plastic sheeting which is overlapped and anchored. <p>4. Equipment maintenance practices</p> <ol style="list-style-type: none"> a. If possible, equipment should be taken to off-site commercial facilities for washing and maintenance. b. If performed on-site, wash vehicles with high-pressure water spray without detergents in an area contained by an impervious berm. c. Use drip pans for all equipment maintenance. d. Inspect equipment for leaks on a daily basis. e. Direct washout from concrete trucks into a temporary pit for hardening and proper disposal. f. Equip fuel nozzles with automatic shut-off valves. g. Dispose of all used products such as oil, antifreeze, solvents and tires in accordance with manufacturers' recommendations and local, state and federal laws and regulations. <p>5. Spill prevention practices</p> <ol style="list-style-type: none"> a. Identify potential spill areas and contain them in covered areas with no connection to the storm drain system. b. Post warning signs in hazardous material storage areas. c. Perform preventive maintenance on all tanks, valves, pumps, pipes and other equipment as necessary. d. 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Type of Emulsion	Water Dilution	Type of Nozzle	Apply Gal/Sec.																																
Latex emulsion	12.5:1	Fine spray	235																																
Resin-in-water emulsion	4:1	Fine spray	300																																
Acrylic emulsion (non-traffic)	7:1	Coarse spray	450																																
Acrylic emulsion (traffic)	3:5:1	Coarse spray	350																																

**SOUTH MURDERKILL HUNDRED
PUMP STATION & FORCE MAIN IMPROVEMENTS
SOUTH MURDERKILL HUNDRED
KENT COUNTY, DELAWARE**

FORCE MAIN SITE PLAN

.No.:

C-501

MATCHLINE SHEET C-502

SHARON K. CRUZ
REGISTERED
DELAWARE
PROFESSIONAL ENGINEER
No. 12576
12-17-2025

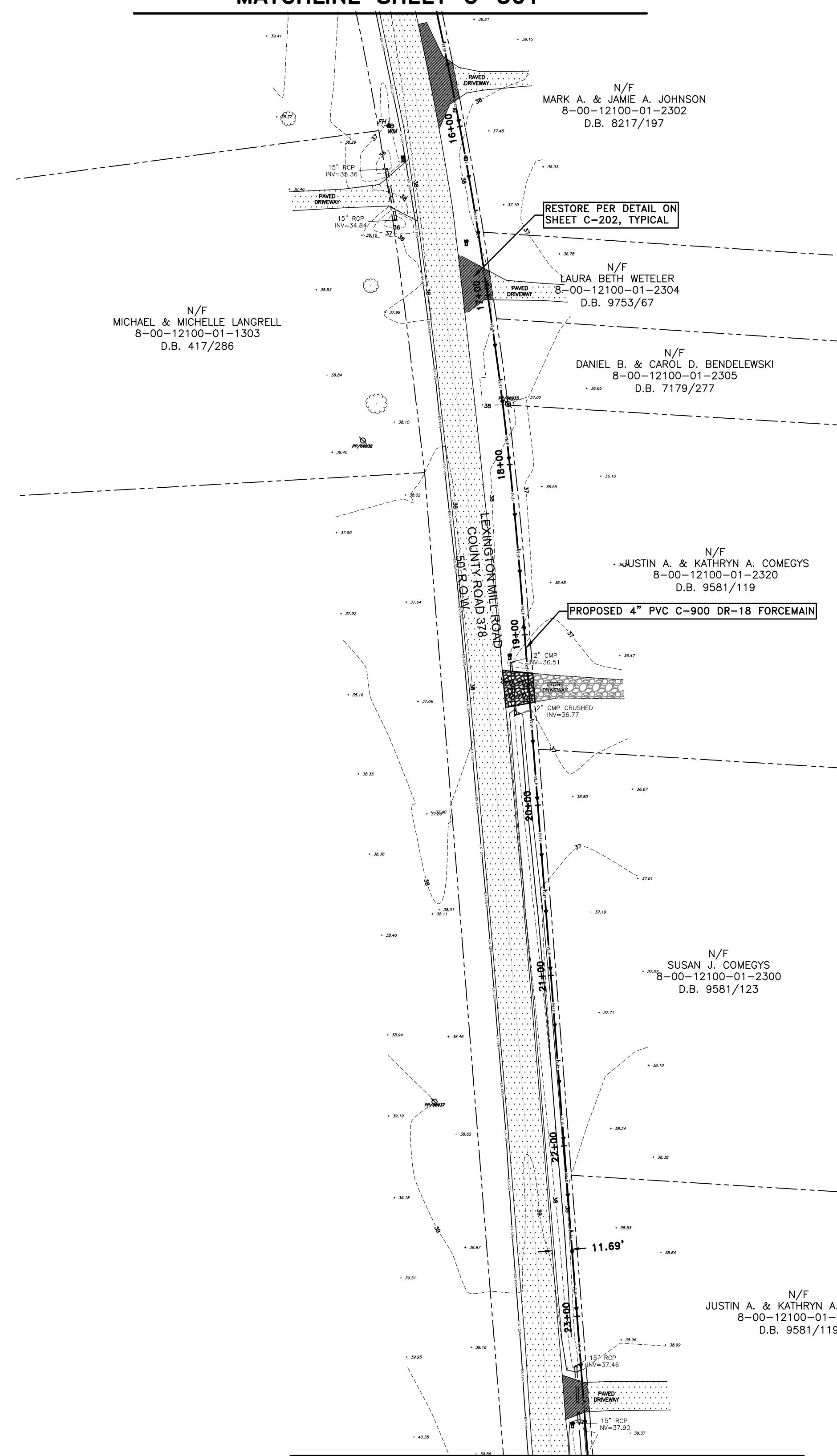
DAVIS BOWEN & FRIEDEL, INC.
ARCHITECTS • ENGINEERS • SURVEYORS
dBF
BOSTON, MASSACHUSETTS 02108
BALTIMORE, MARYLAND 21202
410.543.2091
410.770.4744
302.424.1441

SOUTHWOOD ACRES / SOUTHERN MEADOWS
PUMP STATION & FORCE MAIN IMPROVEMENTS
SOUTH MURDERKILL HUNDRED
KENT COUNTY, DELAWARE

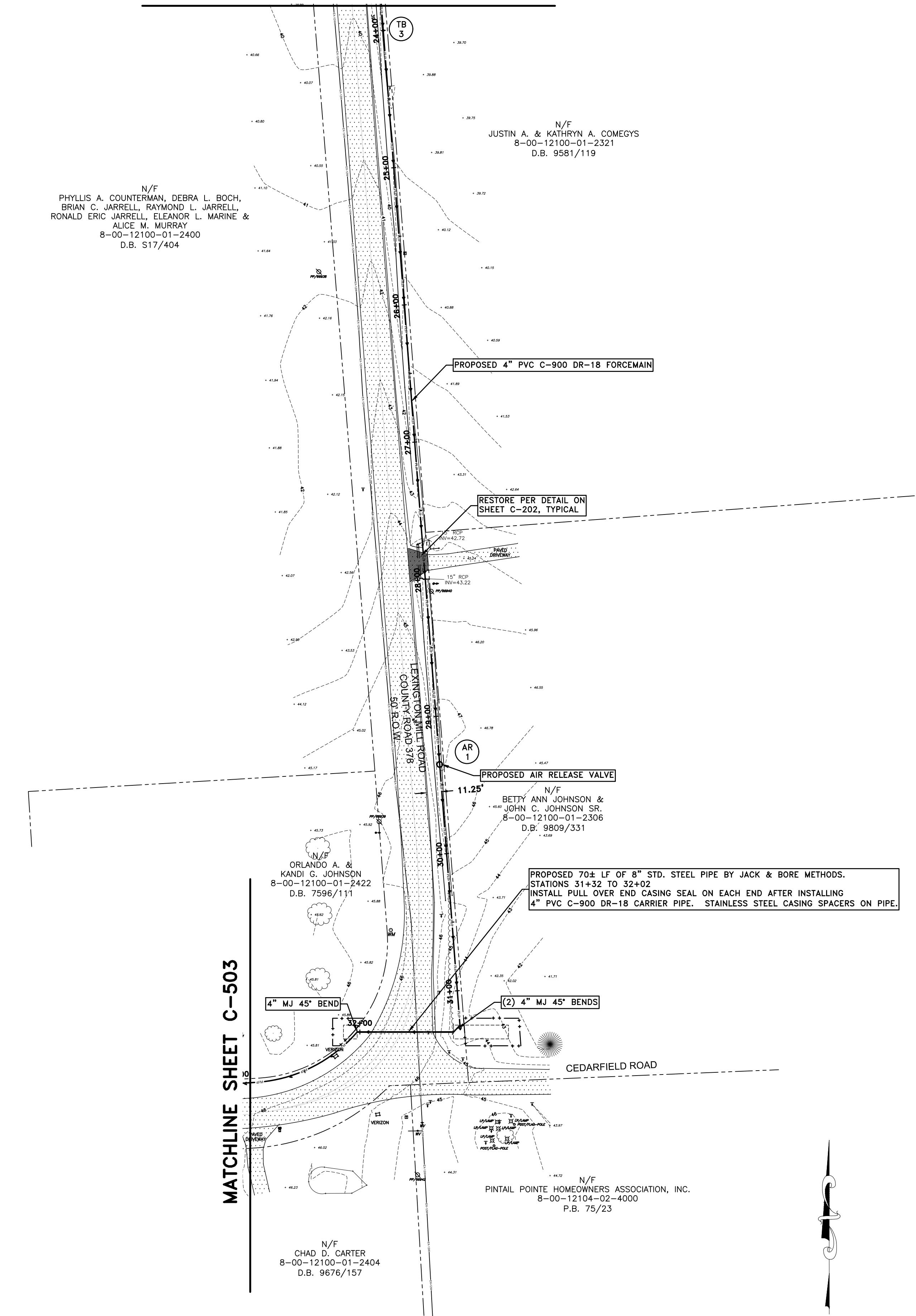
	DATE	COMMENTS
Date:	1	DECEMBER 2025

FORCE MAIN
SITE PLAN
C-502
Dwg.No.:
THIS DRAWING, THE DESIGN AND CONSTRUCTION FEATURES DISCLOSED ARE PROPRIETARY TO DAVIS, BOWEN & FRIEDEL, INC., AND SHALL NOT BE ALTERED OR REUSED WITHOUT WRITTEN PERMISSION. COPYRIGHT © 2025

MATCHLINE SHEET C-501

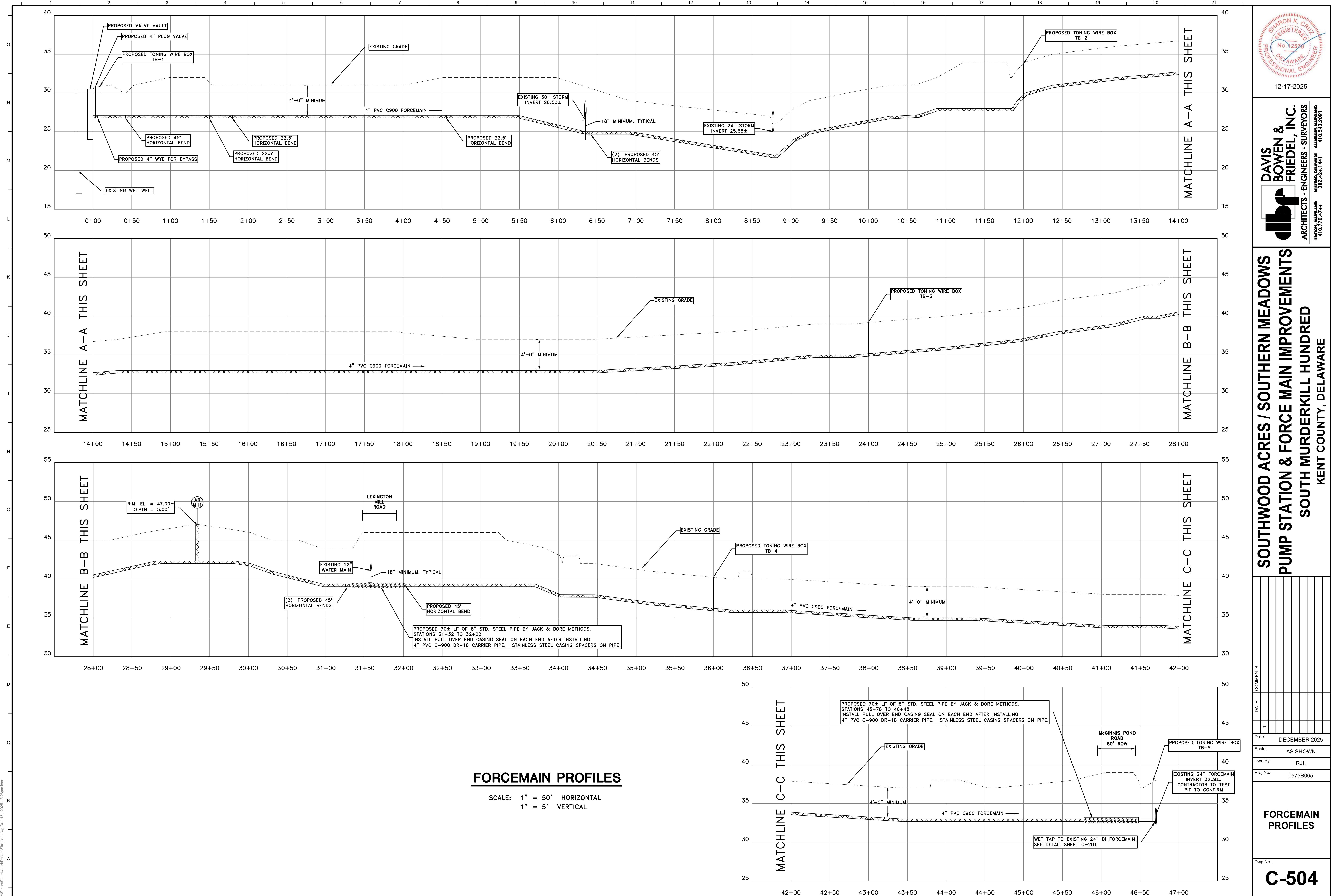


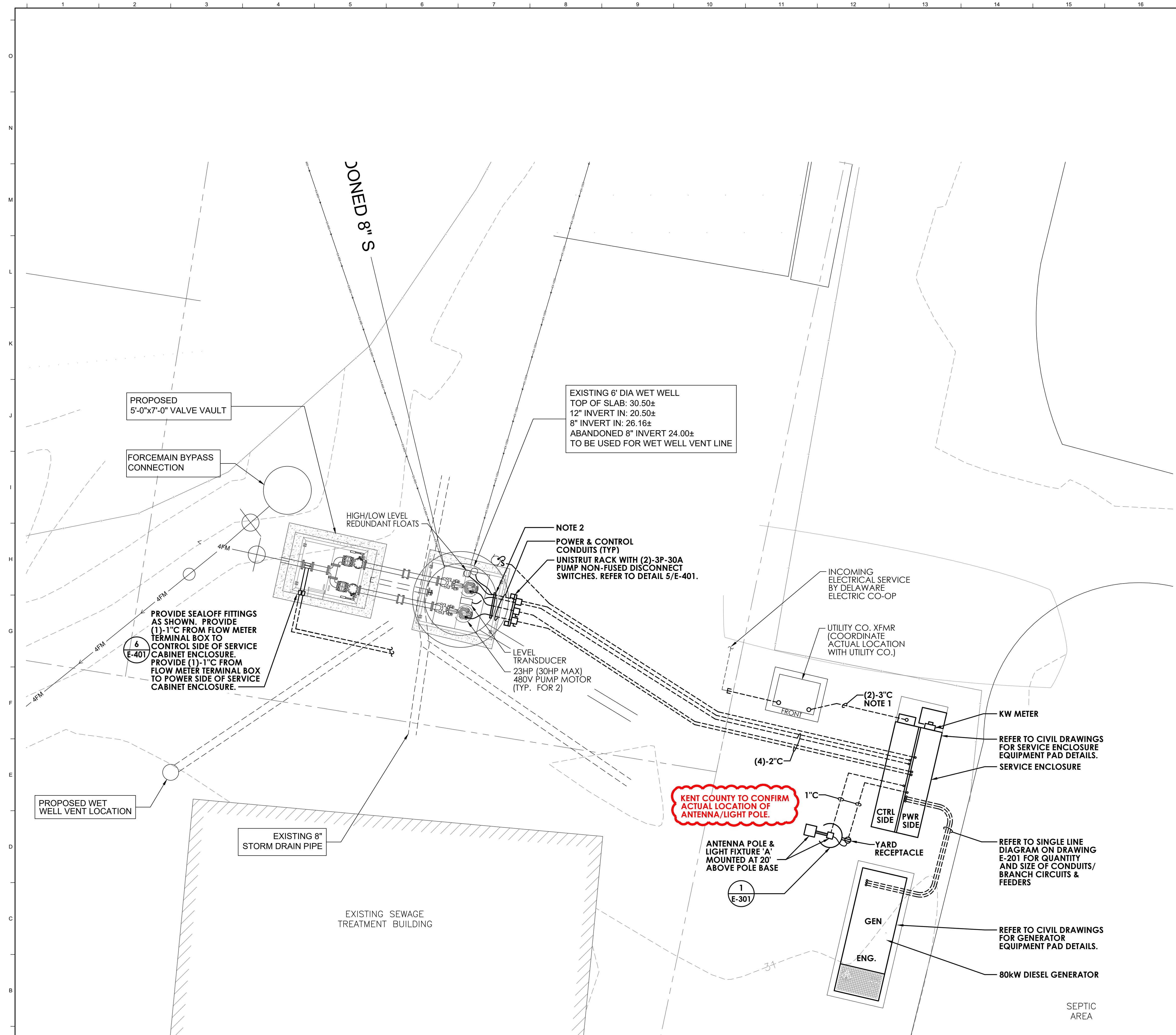
MATCHLINE A-A THIS SHEET



MATCHLINE SHEET C-503







LEGEND AND ABBREVIATIONS

EXISTING WIRING AND/OR EQUIPMENT TO REMAIN, OR PROVIDED BY OTHERS
NEW WIRING AND/OR EQUIPMENT. ARROW INDICATES HOMERUN,
LETTERS DENOTE CIRCUIT
NEW WIRING RUN IN FLOOR CONSTRUCTION AND/OR UNDERGROUND
EQUIPMENT REFERENCE SYMBOL

LIGHTING FIXTURE - UPPER CASE LETTER
DENOTES FIXTURE TYPE IN LIGHTING FIXTURE SCHEDULE

SWITCH: SINGLE POLE

CIRCUIT BREAKER

DISCONNECT SWITCH : POLES & AMPACITY AS NOTED

STARTER: SIZE & TYPE AS NOTED

DUPLEX CONVENIENCE RECEPTACLE MOUNTED 18" A.F.F.-U.N.O.
SPECIAL PURPOSE RECEPTACLE WITH NEMA
DESIGNATION

MOTOR AND MOTOR OUTLET: NUMBER DENOTES HORSEPOWER
OR WATTS IF GREATER THAN 50

TRANSFORMER

QUAZITE BOX

THERMOSTAT - SELF CONTAINED WITH EQUIPMENT

ACROSS THE LINE STARTER

BLOCK HEATER
BATTERY CHARGER
BYPASS CONTACTOR
DIGITAL METER
EMERGENCY PUSHBUTTON OPERATOR - GENERATOR
GENERATOR ANNUNCIATOR
GROUND FAULT CIRCUIT INTERRUPTER
ISOLATION CONTACTOR
PHOTOCELL
PHASE LOSS MONITOR
SELF CONTAINED METER
SURGE PROTECTIVE DEVICE
SOFT START CONTROLLER
TERMINAL BLOCK
UNLESS NOTED OTHERWISE
VARIABLE FREQUENCY DRIVE
WITH
TRANSFORMER

GENERAL NOTES

GENERAL NOTES
(NOT REFERENCED ON DRAWINGS)

(NOT REFERENCED ON DRAWINGS)

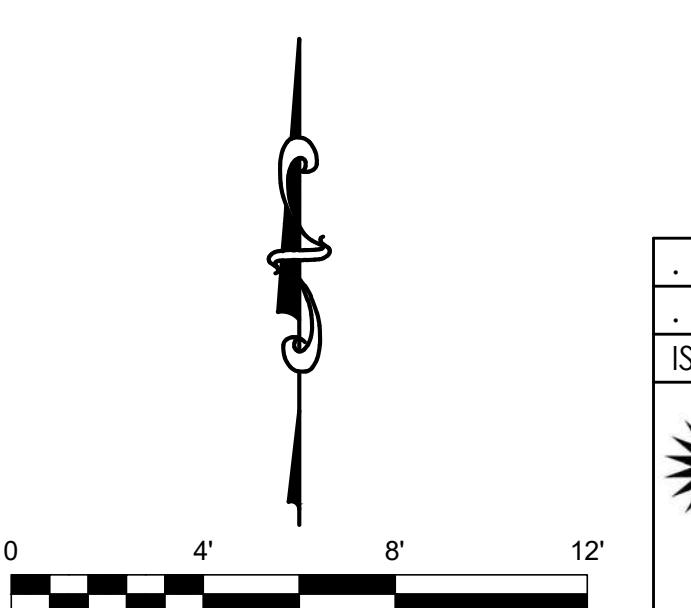
1. COORDINATE LOCATION OF PAD MOUNTED TRANSFORMER AND ROUTE OF NEW INCOMING SERVICE WITH UTILITY COMPANY. UNDERGROUND CONDUIT SIZE AND ROUTING SHOWN IS DIAGRAMMATIC. MODIFY ROUTING AS REQUIRED. UTILITY COMPANY IS DELAWARE ELECTRIC CO-OP (DEC).
2. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH KENT COUNTY WASTEWATER SPECIFICATIONS.
3. ALL UNDERGROUND CONDUIT SHALL BE SCHEDULE 80 PVC. ALL CONDUIT RISING ABOVE GRADE SHALL BE RIGID STEEL. TRANSITION RIGID STEEL TO PVC 24" BELOW GRADE.
4. PROVIDE TO THE GENERAL CONTRACTOR, FINAL DIMENSIONS OF GENERATOR AND EQUIPMENT ENCLOSURE SO THAT CONCRETE PADS WILL BE PROVIDED TO ACCOMMODATE ALL EQUIPMENT SHOWN ON PLANS.

SHEET NOTES

1. MINIMUM BURIAL DEPTH OF ALL CONDUITS SERVING EQUIPMENT LESS THAN 600V SHALL BE 24" BELOW GRADE. CLOSELY COORDINATE INSTALLATION OF ALL CONDUITS WITH UNDERGROUND PIPING, EQUIPMENT AND SERVICES.
2. PROVIDE STAINLESS STEEL HOOKS AT TOP OF WELL BELOW HATCH. PROVIDE KELLEMS GRIP TO SUPPORT EACH CABLE. SECURE TO STAINLESS STEEL WELL MOUNTED BRACKET. MOUNT BRACKET 18" BELOW TOP OF WELL.
3. FLOWMETER LOCATED ABOVE GRADE, CABLE TO BE PROVIDED WITH DRIP-LOOP, CONDUIT PENETRATING ENCLOSURE MOUNTING PAD TO BE SEALED TO PREVENT WATER INCIUSION INTO CONDUIT

1 PUMP STATION - PARTIAL SITE PLAN

SCALE: 1/4"=1'-0"





FAYDA ENGINEERING & ENERGY SOLUTIONS, LLC

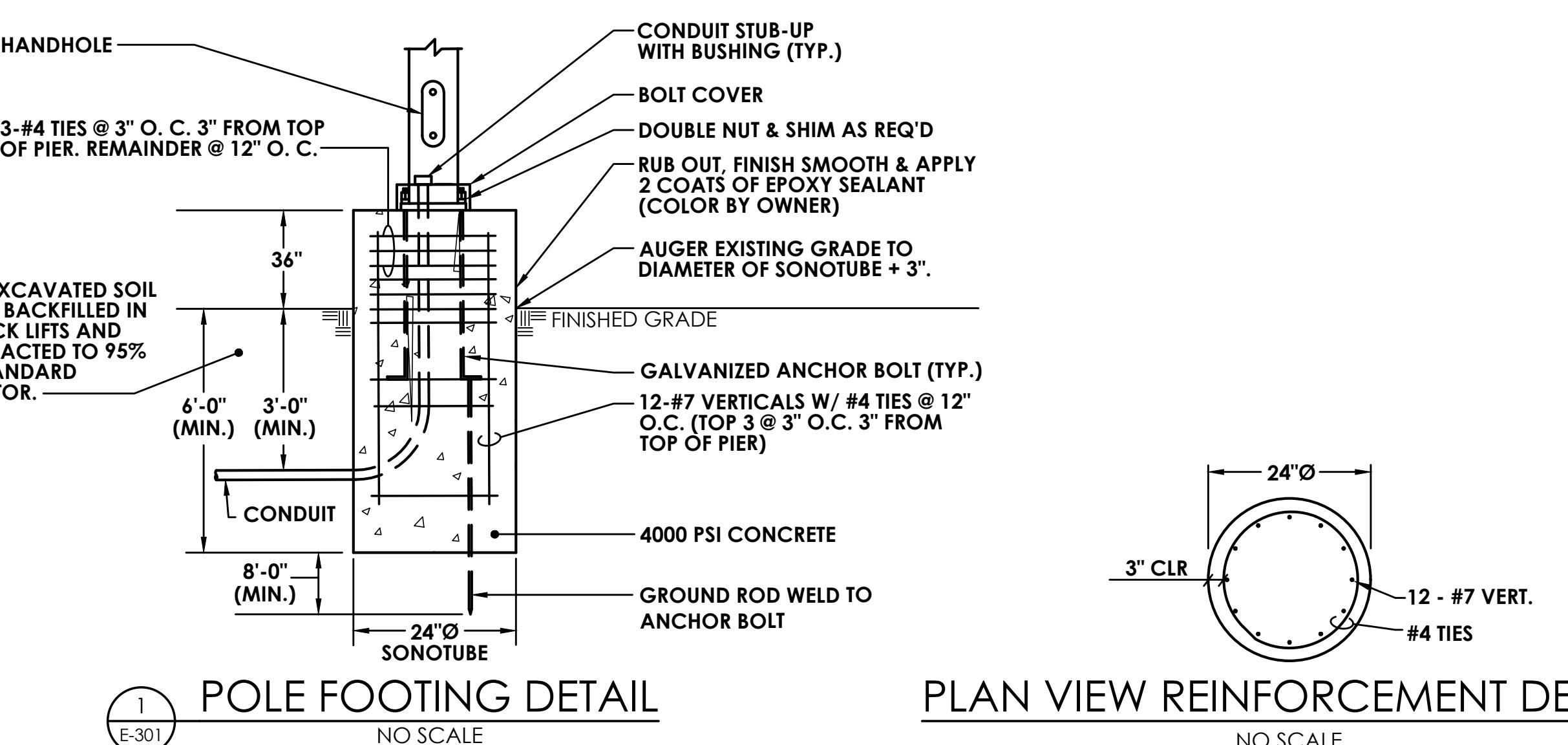
SCHEDULE FOR POWER PANEL: PP1							GENERAL PANEL DATA:				30 CIRCUIT 14KAIC					
CKT. No.:	LOAD SERVED		KVA		CIRCUIT PROTECTOR		WIRING DATA	WIRING DATA	CIRCUIT PROTECTOR		KVA			LOAD SERVED		CKT. No.:
	TYPE OF LOAD		PHASE A B C		VOLTS		CKT BRKR.		CKT BRKR.	VOLTS	PHASE A B C	TYPE OF LOAD				
1	SURGE PROTECTION DEVICE	5	0.1				480/277	3P-30A	SEE SLD	SEE SLD	0.1			2		
3				0.1							0.1			4		
5					0.1							0.1				
7	PUMP #1 VFD (23HP) (30HP) MAX	9	11				480	3P-80A	SEE SLD	SEE SLD	11			8		
9				11							11			10		
11					11						11					
13	SPARE		-				480	3P-80A	-	-	3P-80A	480	-	14		
15				-							3P-80A	480	-	16		
17					-						3P-80A	480	-			
19	DIGITAL METER		0.1				480	3P-15A	-	SEE SLD	3P-30A	480	6	20		
21				0.1							3P-30A	480	6	22		
23					0.1						3P-30A	480	6			
25	SPACE		-			-		-	-	-	-	-		SPACE	26	
27	SPACE			-		-		-	-	-	-	-		SPACE	28	
29	SPACE			-		-		-	-	-	-	-		SPACE	30	
			11.2										A= 28.3	17.1		
				11.2									B= 28.3	17.1		
					11.2								C= 28.3	17.1		
													TOTAL KVA = 84.9			
													TOTAL AMPS AT 480V = 102.2			

TYPE	MANUF.	CATALOG NUMBER	LAMP DRVR	LAMP DATA			Fixture Type			Mounting	REMARKS	
				CRI	TEMP	WATT	FLUOR	LED	H.I.D.			
A	BEACON OUTDOOR LIGHTING HAPCO	<u>Fixture</u> RAR1-160L-70-4K7 -2-UNV-ASQ-LGS- 7PR-TL <u>Pole</u> RTA-40E8B4-01 WITH CUSTOM 1-1/4"x12" TENON	-	80+	4K	70	-	X	-	ANTENNA POLE, 20' ABOVE BASE CONCRETE BASE	LED CUTOFF, CORROSION RESISTANT DIE CAST ALUMINUM HOUSING, LIGHT GRAY GLOSS FINISH, UNIVERSAL 120V-277V ELECTRONIC DRIVER. ARM MOUNTED ON TAPERED ALUMINUM POLE 20'-0"FT ABOVE BASE. COORDINATE DRILL PATTERN MOUNTING OPTION WITH POLE AND LIGHTING Fixture MANUFACTURER. SATIN ALUMINUM FINISH (0.219" SHAFT THICKNESS). WITH CUSTOM 1-1/4"x12" TENON TOP.	
B	LSI	LXC2 30 LED NW- PSE100LED120- 35148302	-	85+	4K	NW 800 LUMEN/FT	-	-	LED	UNISTRUT/ ENCLOSURE	30" CABINET LIGHT W/POWER SUPPLY 7 WATTS PER FOOT (17.5 WATT INPUT)	*

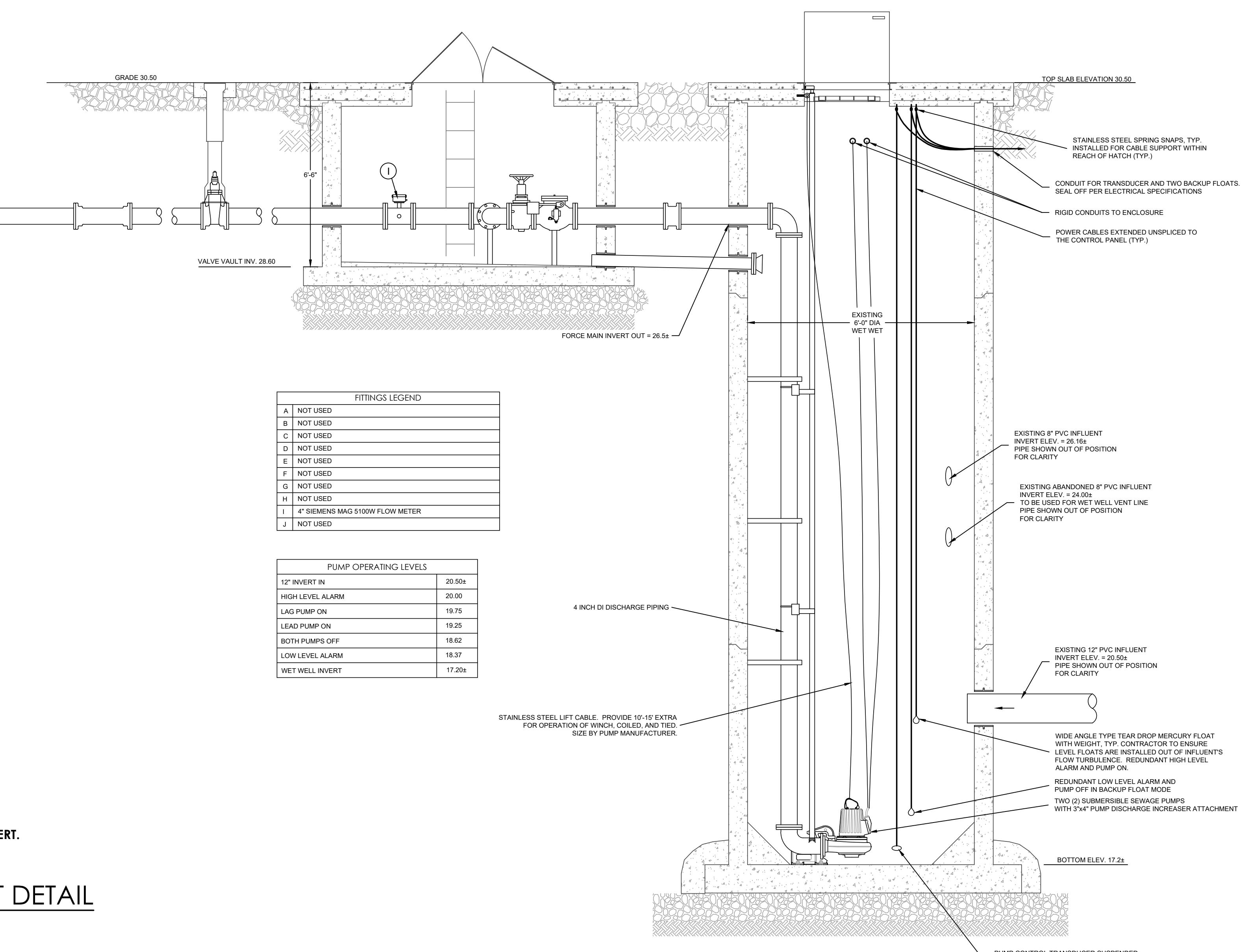
SUPPLY FAN SCHEDULE

Ventilation Fan Sizing		
Top of Wet Well Invert	30.00	FT
Bottom of Wet Well Invert	17.20	FT
Wet Well Diameter	6.00	FT
Volume	361.91	FT ³
Supply Fan	250.00	CFM
Air Exchanges per Hour	41	Exchange
Minimum Air Changes/Hr.-Intermittent	30	138%

SCHEDULE FOR POWER PANEL: DP1							GENERAL PANEL DATA:									
LOCATED IN: SERVICE ENCLOSURE							208Y/120VAC, 3Phase, 4Wire 40A - MAIN CIRCUIT BREAKER									
CKT. No.:	LOAD SERVED		KVA		CIRCUIT PROTECTOR	WIRING DATA	WIRING DATA	CIRCUIT PROTECTOR		KVA		LOAD SERVED		CKT. No.:		
	TYPE OF LOAD		PHASE					PHASE	CKT BRKR.	PHASE	CKT BRKR.	TYPE OF LOAD				
CKT. No.:	LOAD SERVED	TYPE OF LOAD	PHASE A	PHASE B	PHASE C	VOLTS	CKT BRKR.	A	CKT BRKR.	B	CKT BRKR.	LOAD SERVED	TYPE OF LOAD	CKT. No.:		
1	BATTERY CHARGER	15	.1			120	1P-20A	#12	#12	1P-20A	120	1.5		2		
3	GEN. LTG. & RECEPT.	17 18		.2		120	1P-20A	#12	#12	1P-20A	120	.21	YARD LTG. FIXTURE	19	4	
5	WET WELL SUPPLY FAN (1/2HP)	22			1.7	120	1P-20A	#12	#12	1P-20A	120		.1	ENCL. LTG/VENT FAN #1	20	6
7	ENCL. LTG/VENT FAN #2	20	.1			120	1P-20A	#12	#12	1P-20A	120	.3	ENCLOSURE HEATER #1	21	8	
9	ENCLOSURE HEATER #2	21			.3	120	1P-20A	#12	#12	1P-20A	120	.54	ENCL/YARD RECEPTACLES		10	
11	SPARE				-	120	1P-20A	-	-	1P-20A	120		-	SPARE		12
13	PUMP CONTROL PANEL	25	.5			120	1P-20A	#12	#12	1P-20A	120	.1		FLOW METER MONITOR		14
15	SPARE			-		120	1P-20A	-	-	1P-20A	120		-	SPARE		16
17	SPARE				-	120	1P-20A	-	-	1P-20A	120			SPARE		18
19	SPARE		-			120	1P-20A	-	-	1P-20A	120	-		SPARE		20
21	SPARE			-		120	1P-20A GFCI	-	-	1P-20A GFCI	120		-	SPARE		22
23	SPARE				-	120	1P-20A	-	-	1P-20A	120		-	SPARE		24
25	SPACE		-			-	-	-	-	-	-			SPACE		26
27	SPACE			-		-	-	-	-	-	-			SPACE		28
29	SPACE				-	-	-	-	-	-	-		-	SPACE		30
			0.7									A= 2.6		1.9		
				0.5								B= 1.25		.75		
					1.7							C= 2.4		.7		
												TOTAL kVA = 6.25				
												TOTAL AMPS AT 208V = 17.4				



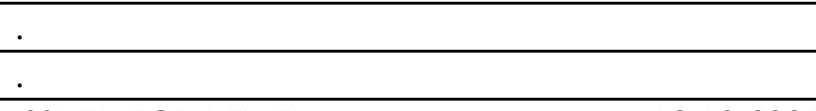
PLAN VIEW REINFORCEMENT DETAIL



WET WELL & VALVE VAULT - SECTION VIEW

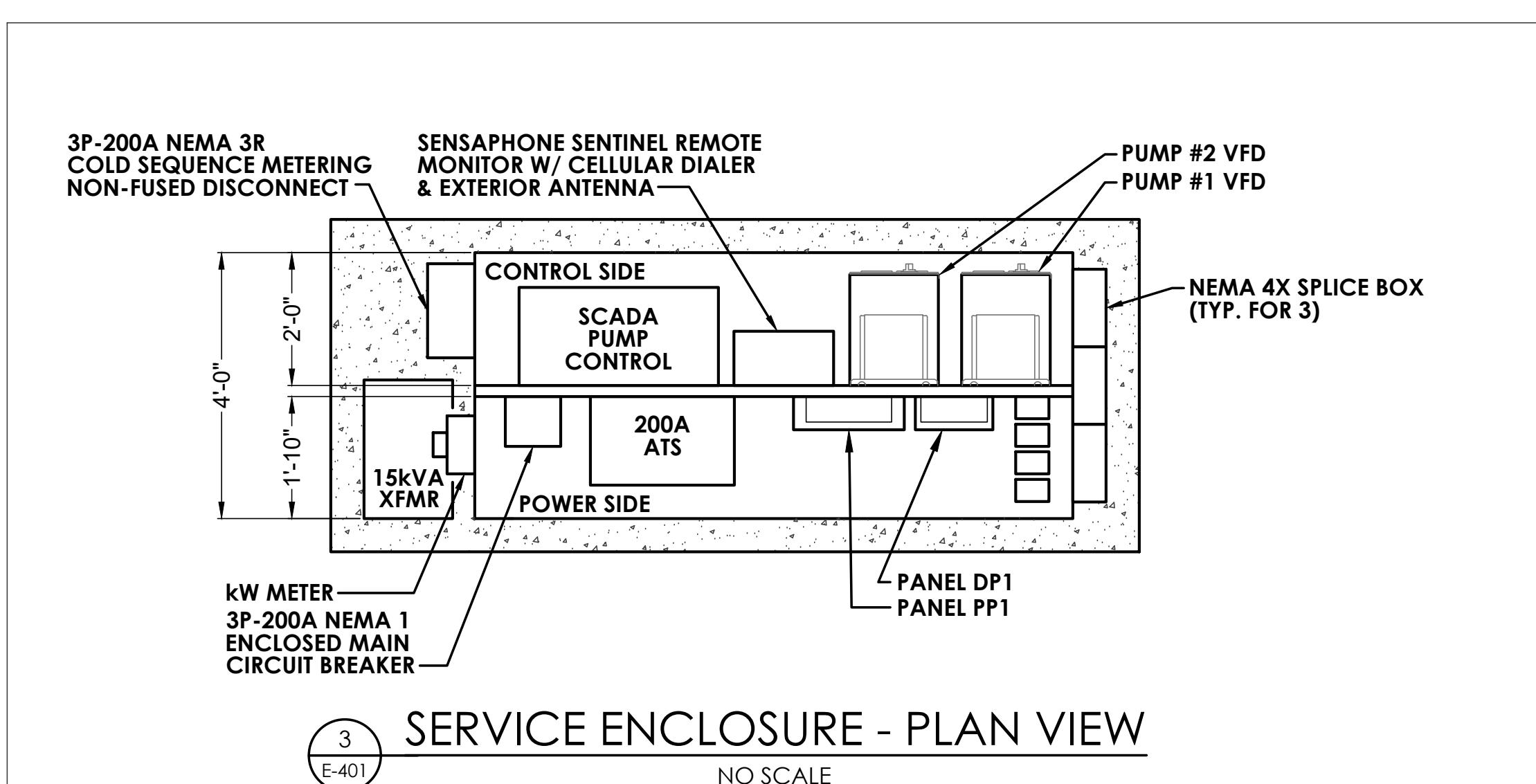
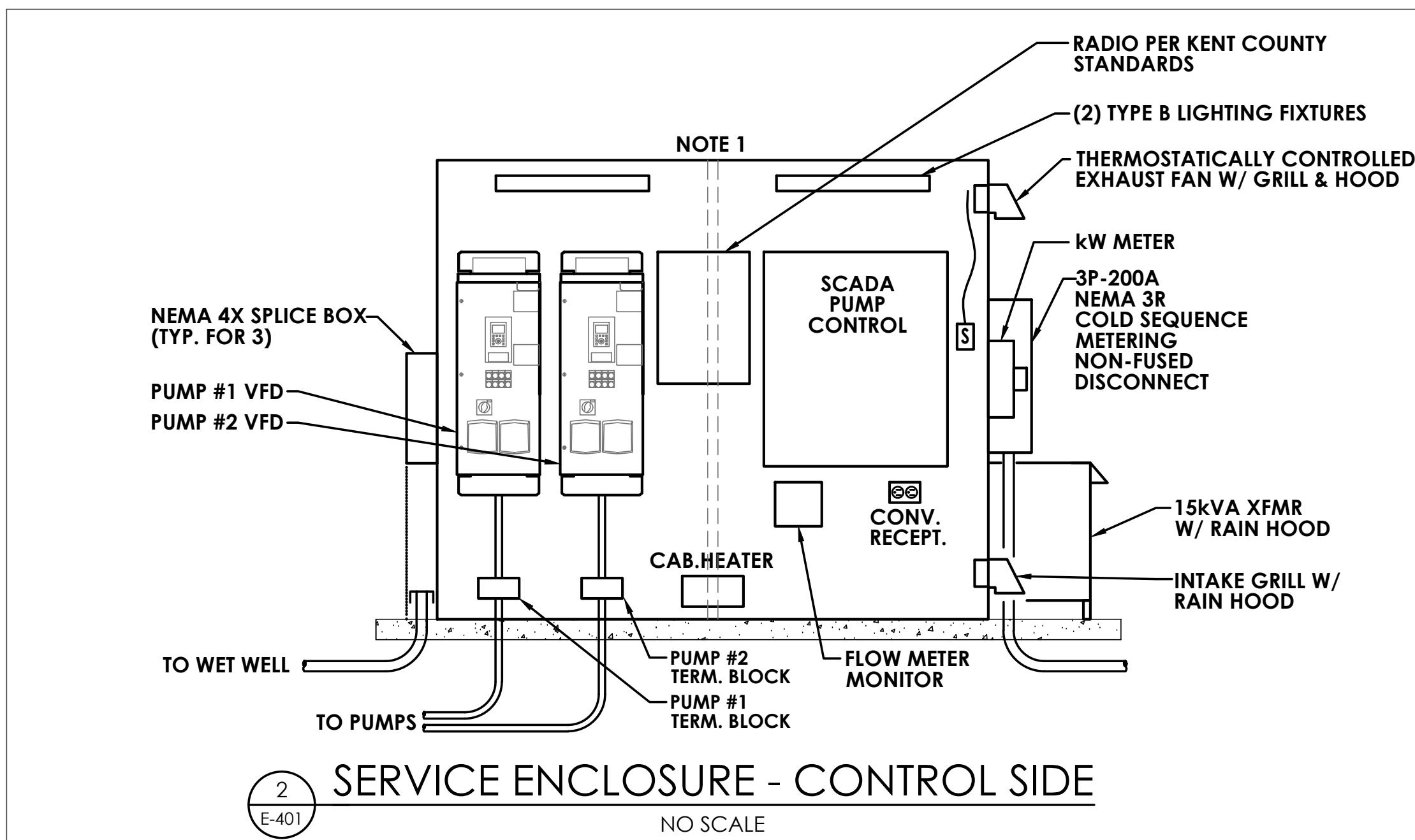
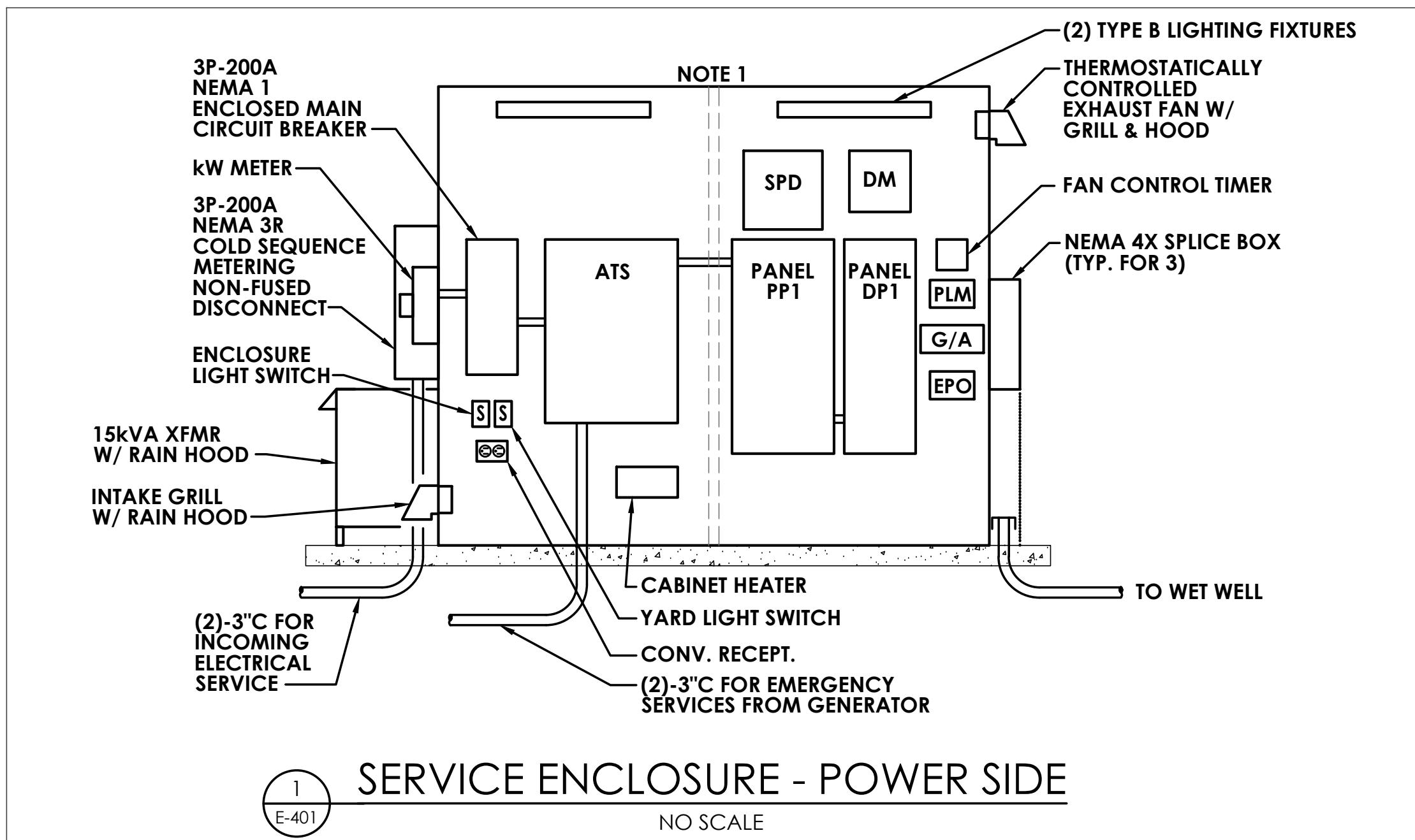
GENERAL NOTE: SECTION VIEW IS FOR REFERENCE ONLY. REFER TO DETAILS AND PARTIAL PLANS FOR WET WELL & VALVE VAULT ELECTRICAL REQUIREMENTS.

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ISSUED FOR REVIEW	12-10-2025
 <p>FAYDA ENGINEERING & ENERGY SOLUTIONS, LLC</p> <p>801 W. Newport Pike, Wilmington, DE 19804 Tel: 302-999-1060, Fax: 302-999-1053 www.FaydaFFS.com FF&FS COMM. NO: 25-1653</p>	
Dwg. No.: E-SCI	

ELEVATION, SCHEDULES & DETAILS

wg.No.:



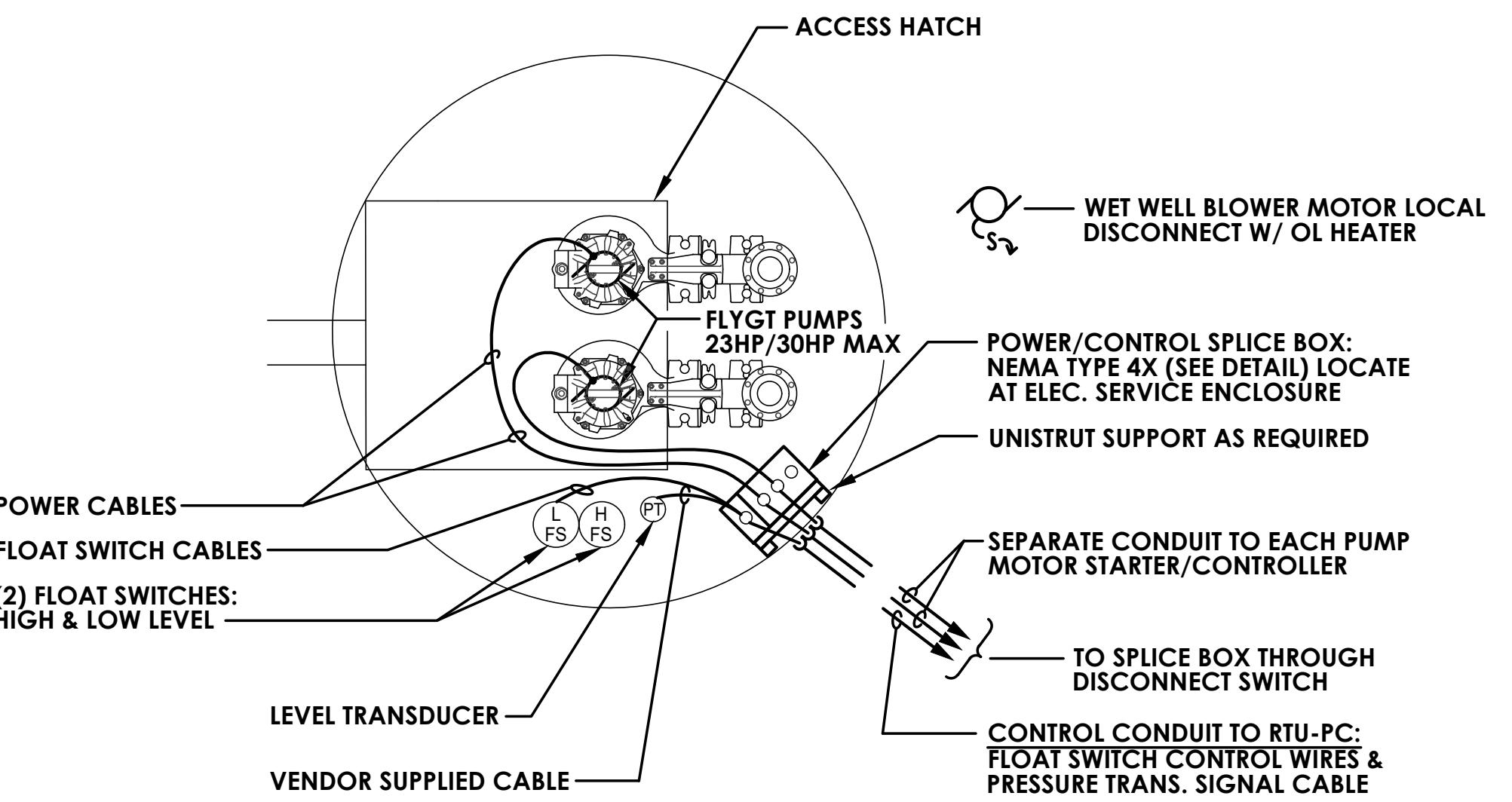
SHEET NOTES

1. MODIFY LOCATIONS OF ALL EQUIPMENT TO ENSURE CENTER MULLION OF SERVICE ENCLOSURE DOES NOT RESTRICT ACCESS TO ANY EQUIPMENT INSIDE ENCLOSURE.

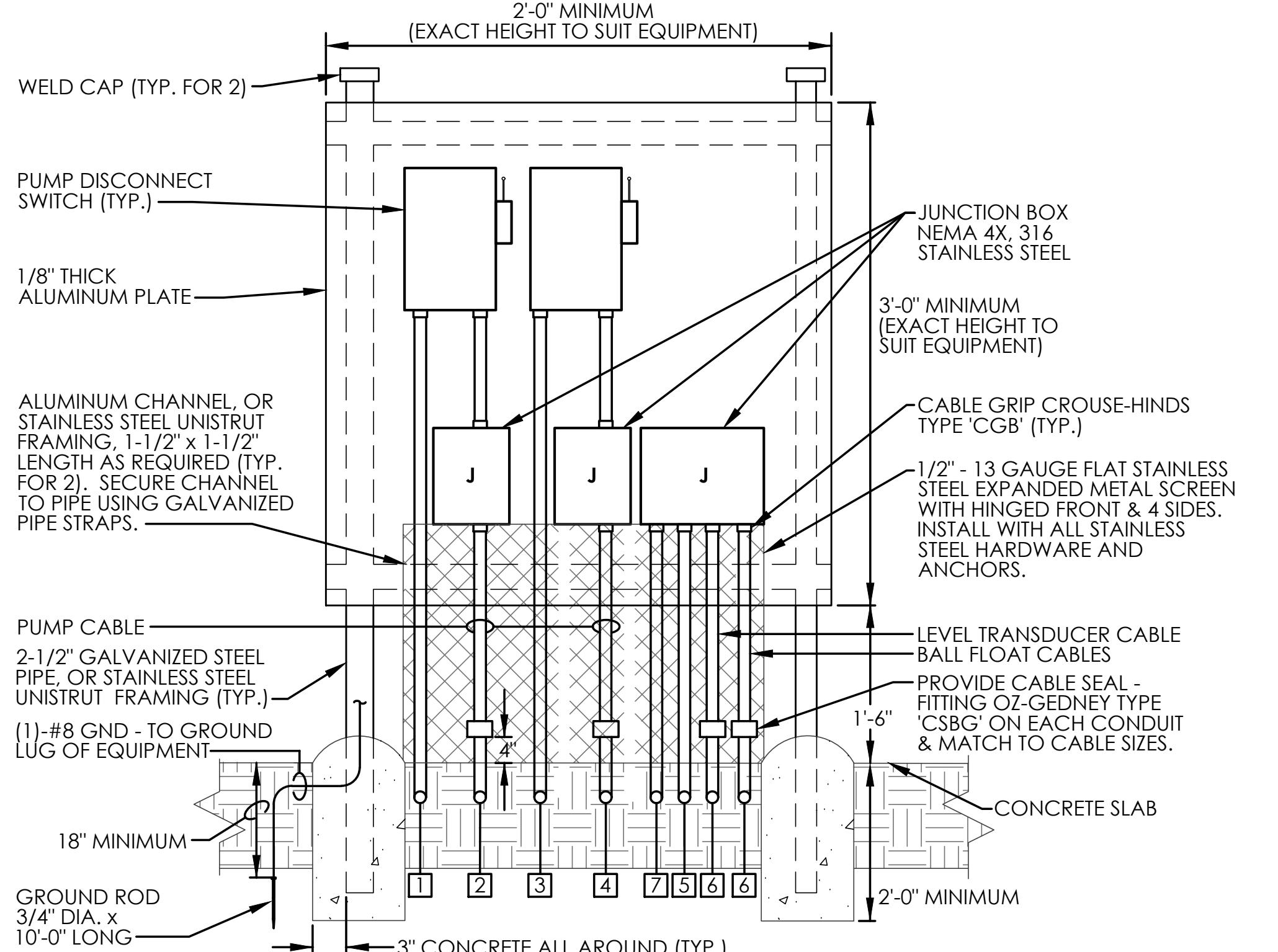
GENERAL NOTES

(NOT REFERENCED ON DRAWINGS)

1. ALL INTERCONNECTING WIRING WITHIN ENCLOSURE SHALL BE IN SCHEDULE 40 PVC. LIQUID-TIGHT FLEXIBLE NONMETALLIC CONDUIT IN LENGTHS NOT EXCEEDING 12" MAY BE USED WHERE INSTALLATION OF RIGID CONDUIT IS IMPRACTICAL.
2. ELECTRICAL CONTRACTOR IS ENCOURAGED TO CONSOLIDATE PANEL EQUIPMENT, AND/OR PRESENT AN ALTERNATE LAYOUT FOR REVIEW BY KENT COUNTY.
3. SEAL FAILURE AND OVERTEMPERATURE MODULES TO BE FURNISHED BY PUMP MANUFACTURER.
4. KENT COUNTY WASTEWATER DIVISION WILL PROVIDE PROGRAMMING OF SCADA SYSTEM.

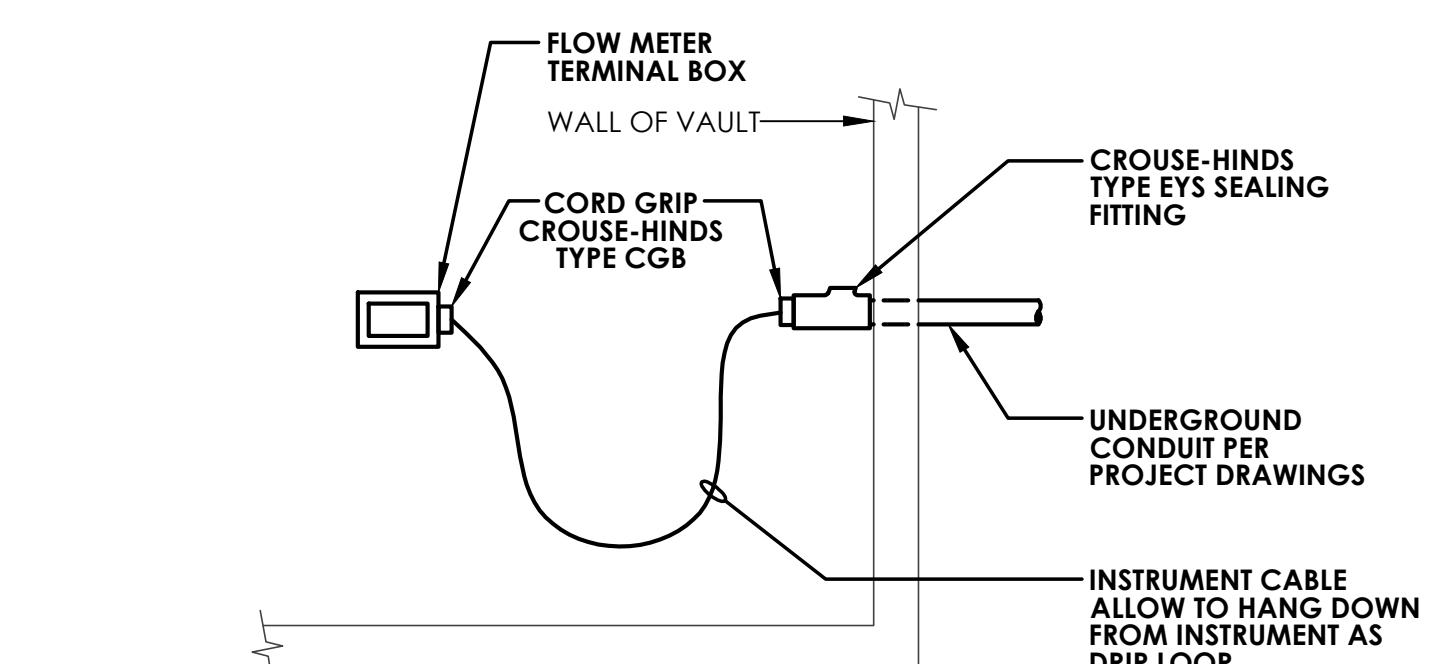


TYPICAL PUMPSTATION WIRING DIAGRAM



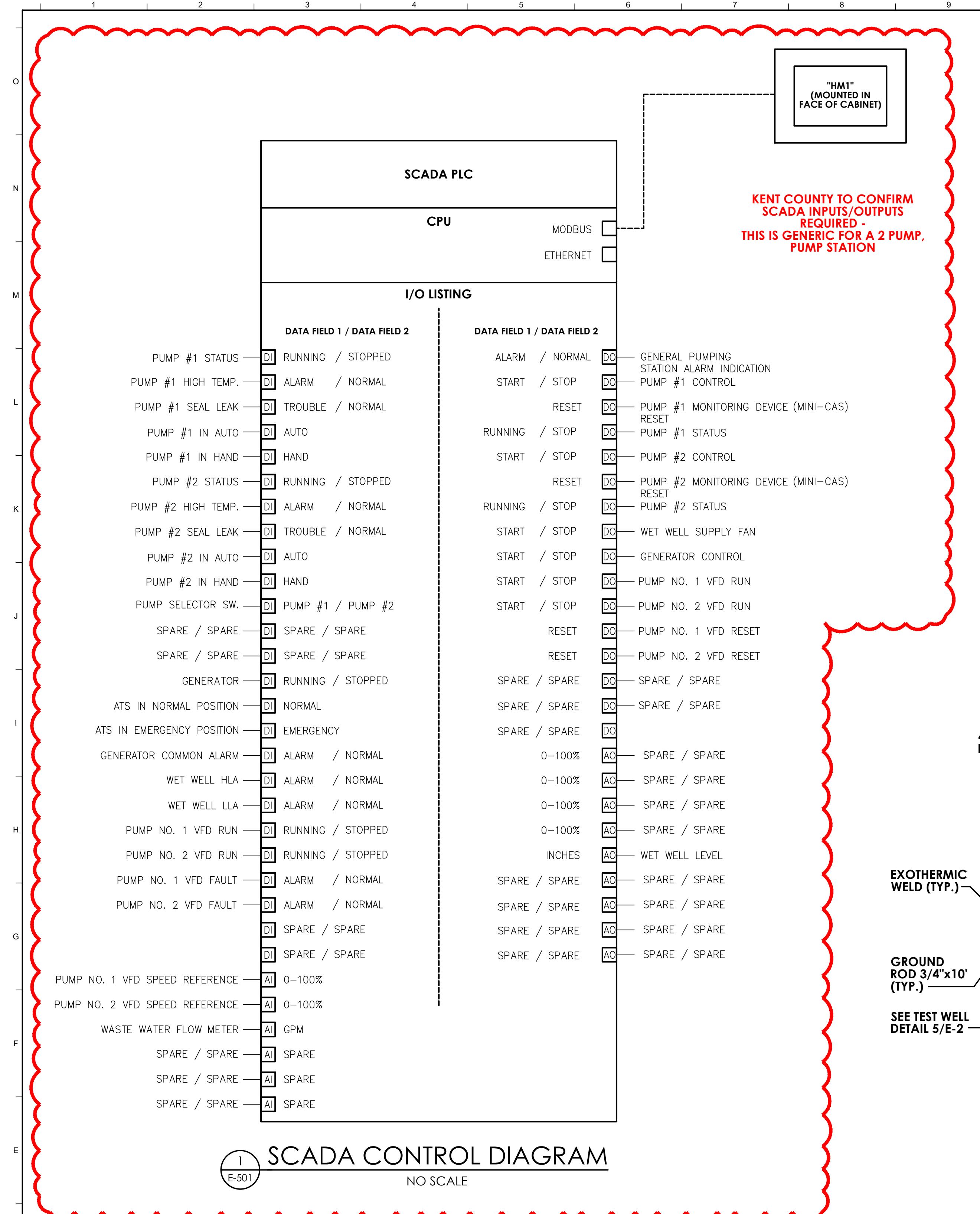
EQUIPMENT SUPPORT STRUCTURE

- 1 PUMP #1 CONDUIT TO SERVICE ENCLOSURE
- 2 PUMP #1 CONDUIT/CABLE TO WET WELL
- 3 PUMP #2 CONDUIT TO SERVICE ENCLOSURE
- 4 PUMP #2 CONDUIT/CABLE TO WET WELL
- 5 TRANSDUCER CONDUIT TO SERVICE ENCL.
- 6 TRANSDUCER CABLE TO WET WELL
- 7 FLOAT CABLE TO SERVICE ENCLOSURE

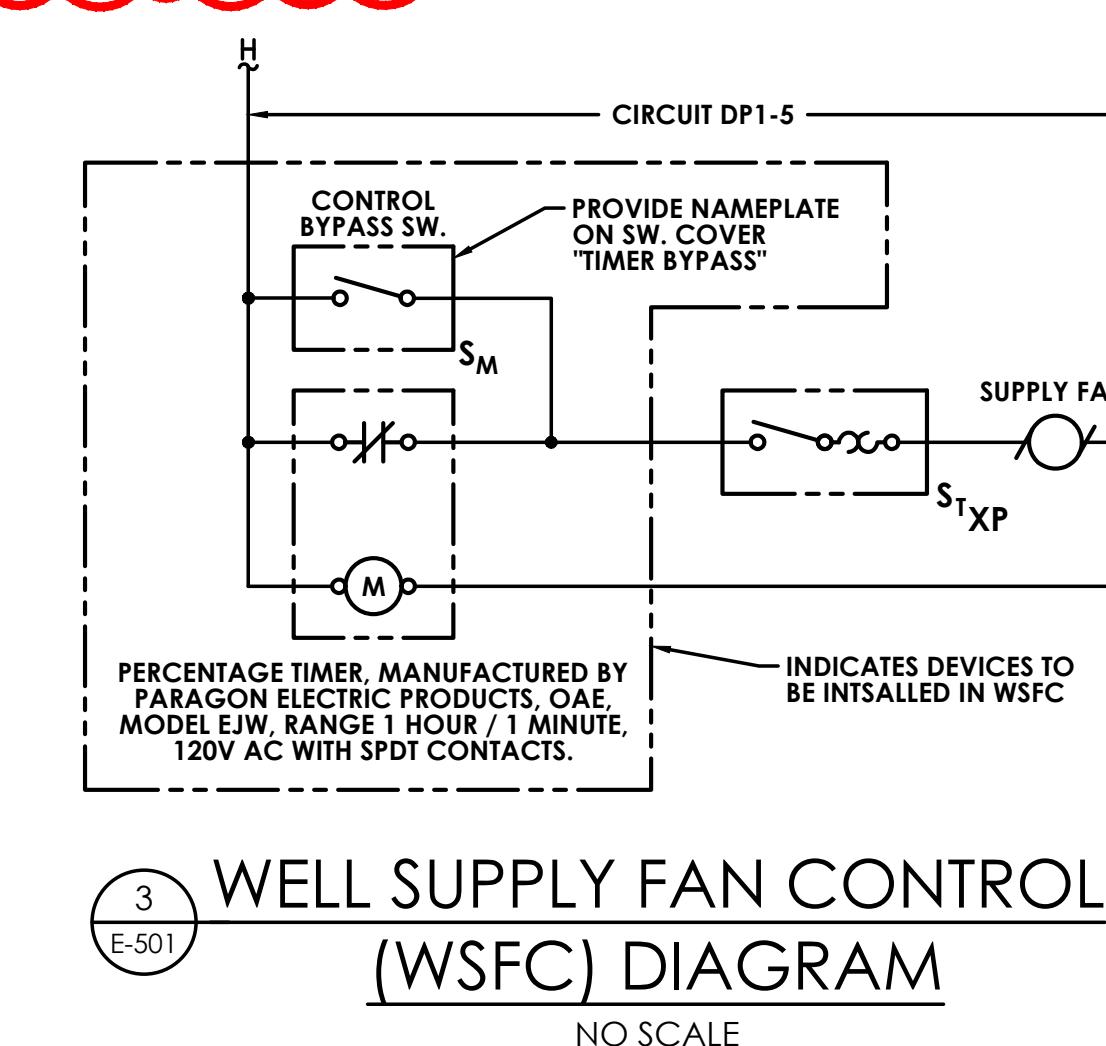
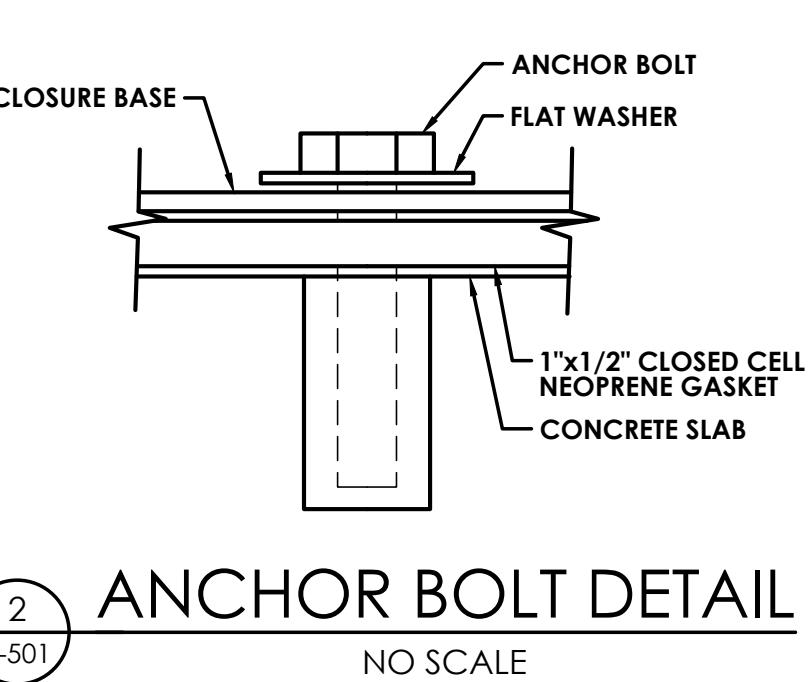


6 E-401 ELEVATION - WIRING TO INSTRUMENT
LOCATED IN UNDERGROUND VAULT

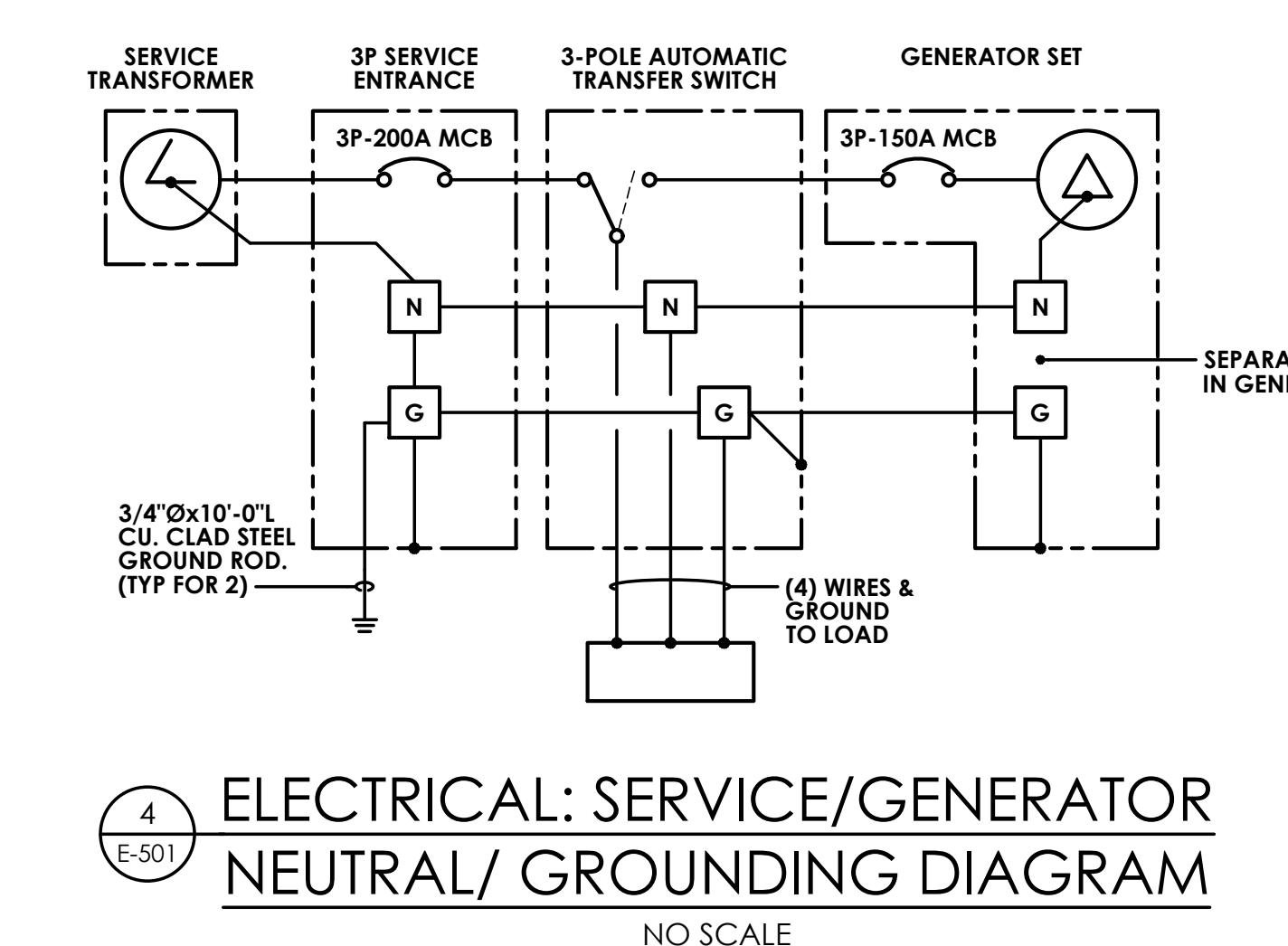
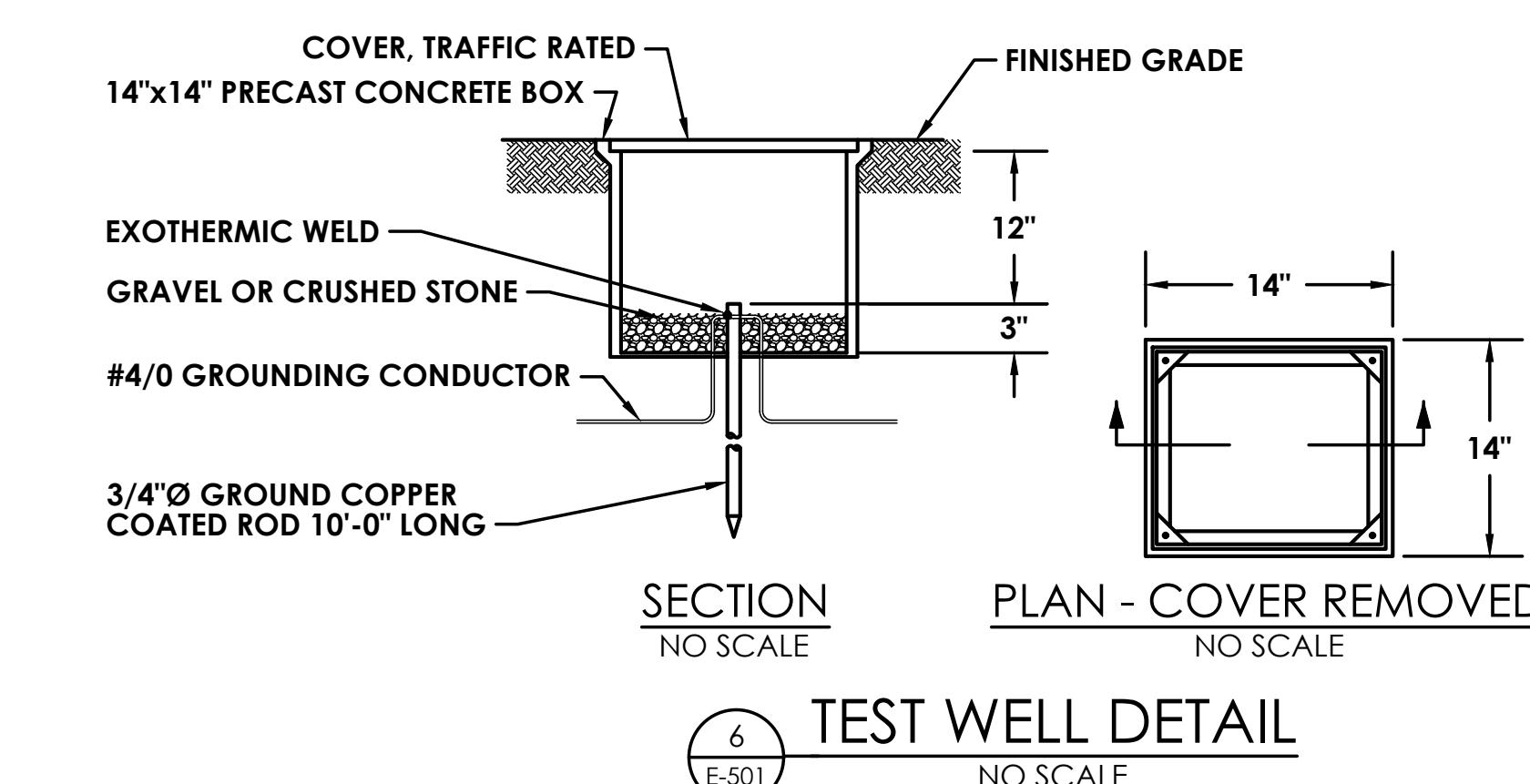
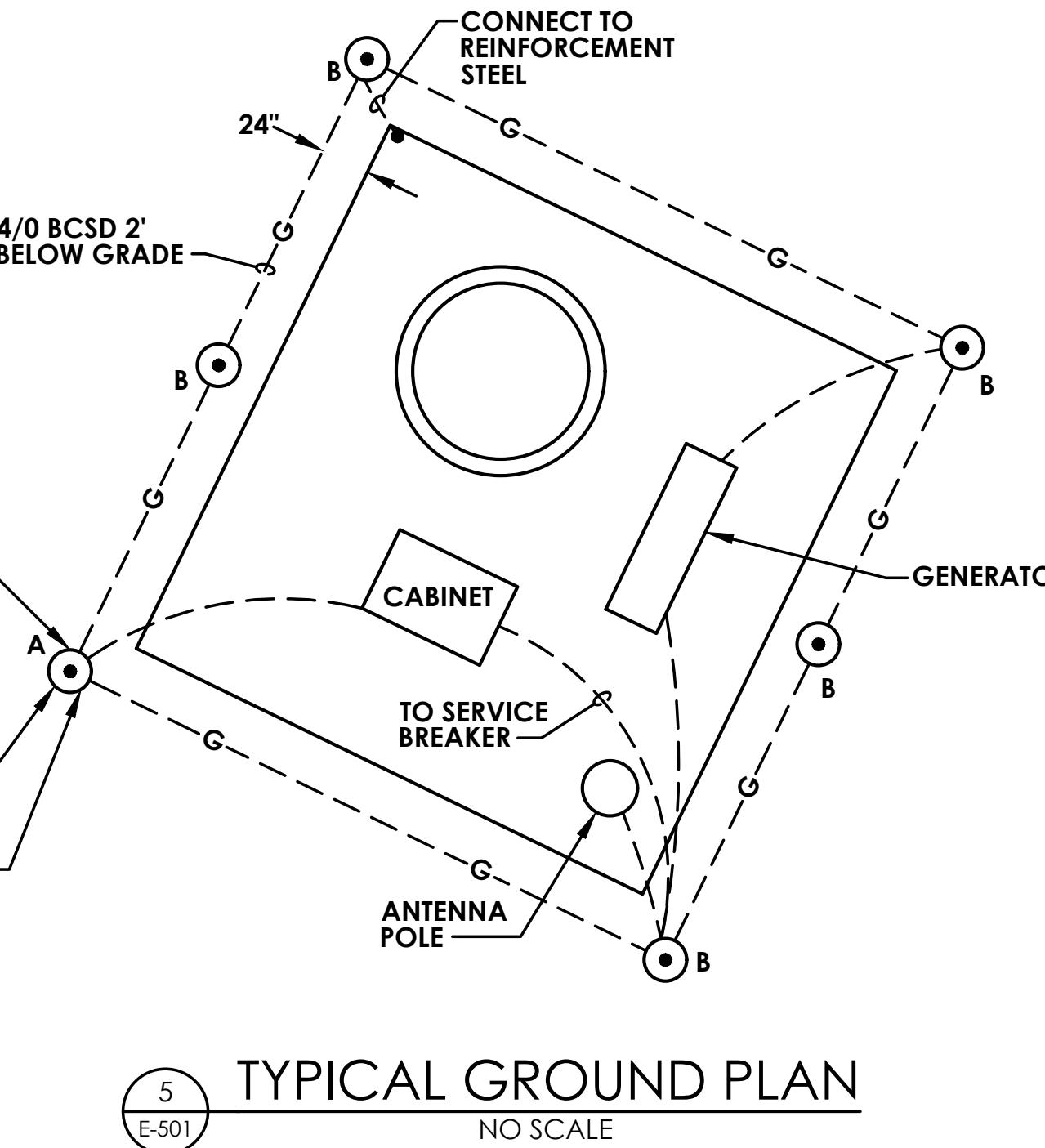
DETAILS	
Date:	DECEMBER 2025
Scale:	AS NOTED
Dwn.By:	EF/MG
Proj.No.:	0575B065
DETAILS	
Dwg.No.:	E-401



1 SCADA CONTROL DIAGRAM
E-501 NO SCALE



Southern Meadow Flow Material List					
Number	Qty	Item	Manufacturer	Part number	Supplier
1	2	Antenna Cable Ends	Amphenol	172102H243	DigiKey
2	?	Antenna Cable	Times Microwave	LMR-400-DB	DigiKey
3	1	Yagi Antenna	Laird	YS8966	Talley
4	1	Antenna Surge Protector	PolyPhaser	IS-B50LN-C2	PolyPhaser
5	?	40' pole	Hapco (CUSTOM TENON, 1-1/4" x 12")	RTA40EBB4-01	Dover Electric
6	1	DCUPS	Alttech	CBI245A	Alttech Corp
7	2	Batteries		12VDC-7.2AH	
8	1	Surge Suppressor	Superior Electric	DIN1P-20-120-1G-15	
9	1	Din Rail mounted Breaker	Eaton	FAZ-B10-1-NA-L-SP	Automation Direct
10	2	Fuse holders	DINector	DN-F6	Automation Direct
11	1	RS232 - 485 Converter	Advantech	BB-485DRC1	
12	1	24VDCPower supply	Rhino	PSE24-120S	Automation Direct
13	1	Flow Meter 6000 w/Comm Modual	Siemans		
14	1	Radio	4RF	APSQ-N928-SSC-HD-22-ENAA	
15	1	Radio DIN Rail mounting bracket	4RF	APGA-MBRK-DIN	Aviat
16	1	Radio Whip	4RF	PCT-CBL-19530IN N1 T1	Aviat
17	1	Enclosure	Hoffman	A242410LP	United Electric
18	1	Din Rail	DINector	DN-R35S1-2	Automation Direct
19	1	Misc. Hardware		Concrete Base	
20					



**SOUTHWOOD ACRES / SOUTHERN MEADOWS
PUMP STATION & FORCE MAIN IMPROVEMENTS
SOUTH MURDERKILL HUNDRED
KENT COUNTY, DELAWARE**

DAVIS BOWEN & FRIEDEL, INC.
ARCHITECTS • ENGINEERS • SURVEYORS
MILFORD, DELAWARE SAUGERTY, MARYLAND
410-543-2091 302-424-1441

DETAILS

DATE: DECEMBER 2025

Scale: AS NOTED

Dwn.By: EF/MG

Proj.No.: 0575B065

Dwg.No.: E-501

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