

EXISTING SYMBOLS

DRAINAGE	
	DITCH OR STREAM CENTERLINE
	DIRECTIONAL STREAM FLOW ARROW
	DRAINAGE INLET
	DRAINAGE JUNCTION BOX
	DRAINAGE MANHOLE
	DRAINAGE PIPE AND FLOW ARROW
	DRAINAGE PIPE HEADWALL
	RIPRAP - AREA FEATURE
	RIPRAP - LINEAR FEATURE

SURVEY CONTROL & MONUMENTATION	
	SURVEY BENCHMARK LOCATION
	SURVEY TIE POINT LOCATION
	SURVEY TRAVERSE POINT
	POINT OF CURVATURE OR TANGENCY
	POINT OF INTERSECTING TANGENTS

UTILITY	
	SOIL BORING LOCATION
	UTILITY TEST HOLE LOCATION
	CABLE TV DISTRIBUTION BOX
	ELECTRIC MANHOLE
	ELECTRIC METER
	ELECTRIC TRANSFORMER
	POLE MOUNTED LUMINAIRE
	GAS MANHOLE
	GAS METER
	GAS VALVE
	GAS PUMP - SERVICE STATION
	RAILROAD TRACKS
	SANITARY SEWER MANHOLE
	SANITARY SEWER VALVE
	SANITARY SEWER VENT OR CLEANOUT
	SEPTIC DRAIN FIELD
	TELEPHONE BOOTH
	TELEPHONE MANHOLE
	TELEPHONE TEST POINT
	TRAFFIC - CONDUIT JUNCTION WELL
	TRAFFIC - LIGHT POLE AND BASE
	TRAFFIC - PEDESTRIAN POLE & BASE
	TRAFFIC - SIGNAL CABINET & BASE
	TRAFFIC - SIGNAL POLE AND BASE
	UTILITY BOX
	UTILITY POLE GUY WIRE ANCHOR
	UTILITY POLE
	WATER - FIRE HYDRANT
	WATER METER
	WATER VALVE
	WELL HEAD
	MANHOLE - UNDETERMINED OWNER
	SANITARY CLEANOUT

UTILITY LINES	
	WATER LINE
	UNDERGROUND ELECTRIC
	OVERHEAD ELECTRIC
	SANITARY SEWER FORCE MAIN
	SANITARY GRAVITY SEWER
	UNDERGROUND COMMUNICATIONS
	OVERHEAD TELEPHONE
	STORMWATER DRAINAGE

MANMADE ROADSIDE FEATURES	
	BOLLARD - STEEL POLE
	BOLLARD - WOOD POST
	CURB
	CURB AND GUTTER
	FENCE - CHAINLINK OR STRANDED
	FENCE - STOCKADE OR SPLIT RAIL
	FLAG POLE
	GUARDRAIL - STEEL BEAM
	GUARDRAIL - WIRE ROPE
	LAMP AND POST - RESIDENTIAL
	MAILBOX
	PARKING METER AND POST
	PAVEMENT - FLEXIBLE
	PAVEMENT - RIGID
	PILE - BRIDGE
	PILLAR OR MISCELLANEOUS POST
	TRAFFIC SIGN AND POST
	WALL - BRICK OR BLOCK
	WALL - STONE
	BUILDING

NATURAL ROADSIDE FEATURES	
	GRASS LAWN
	HEDGEROW OR THICKET
	MARSH BOUNDARY LINE
	TREE - CONIFEROUS
	TREE - DECIDUOUS
	TREE STUMP
	SHRUBBERY
	DELINEATED WETLAND BOUNDARY LINE
	WOODS LINE BOUNDARY
	ORDINARY HIGH WATER BOUNDARY
	ORDINARY HIGH WATER/DELINEATED WETLAND BOUNDARY

RIGHT-OF-WAY SYMBOLS	
	PROPERTY MARKER - CONCRETE MON.
	PROPERTY MARKER - IRON PIPE
	HISTORIC RIGHT-OF-WAY BASELINE
	EXISTING RIGHT-OF-WAY
	EXISTING PROPERTY LINE
	EXISTING EASEMENT

PROPOSED SYMBOLS

RIGHT-OF-WAY SYMBOLS	
	PROPOSED RIGHT-OF-WAY MONUMENT
	PROPOSED DENIAL OF ACCESS
	PROPOSED PERMANENT EASEMENT
	PROPOSED RIGHT-OF-WAY
	PROPOSED R/W & DENIAL OF ACCESS
	TEMPORARY CONSTRUCTION EASEMENT
	PROPOSED RIGHT-OF-WAY BASELINE
	EXISTING DENIAL OF ACCESS
	EXISTING R/W & DENIAL OF ACCESS

UTILITY COMPANY FACILITIES	
	SANITARY GRAVITY SEWER
	SANITARY SEWER FORCE MAIN
	SANITARY SEWER MANHOLE
	SANITARY CLEANOUT
	WATER BY OTHERS
	GAS BY OTHERS
	STORMWATER DRAINAGE BY OTHERS
	UNDERGROUND COMM. BY OTHERS
	ELECTRIC BY OTHERS

CONSTRUCTION	
	CONCRETE SAFETY BARRIER - PERMANENT
	BIOFILTRATION SWALE
	BRICK PATTERNED SURFACE
	BUTT JOINT
	CONSTRUCTION BASELINE
	CONSTRUCTION SAFETY FENCE
	CURB, TYPE 1 & TYPE 3
	CURB, TYPE 2
	CURB & GUTTER, TYPE 1
	CURB & GUTTER, TYPE 2
	CURB & GUTTER, TYPE 3
	CURB & GUTTER, TYPE 4
	CLEAR ZONE
	DRAINAGE INLET
	DITCH
	FENCE - METAL
	FENCE - WOOD
	FLARED END SECTION
	GUARDRAIL, TYPE 1
	GUARDRAIL, TYPE 2
	GUARDRAIL, TYPE 3
	GUARDRAIL END ANCHORAGE
	GUARDRAIL END TREATMENT, TYPE 1
	GUARDRAIL END TREATMENT, TYPE 2
	GUARDRAIL END TREATMENT, TYPE 3
	IMPACT ATTENUATOR
	JUNCTION BOX - DRAINAGE
	LATERAL OFFSET
	LIMIT OF CONSTRUCTION
	MAILBOX
	MANHOLE
	PAVEMENT PATCH
	PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH
	PIPE & DIRECTIONAL FLOW ARROW
	RIPRAP
	P.C.C. SIDEWALK - 4"
	P.C.C. SIDEWALK - 6" (USE 8" DEPTH FOR CHANNELIZATION ISLANDS.)
	UNDERDRAIN
	UNDERDRAIN CLEANOUT
	UNDERDRAIN OUTLET
	SILT FENCE

TRAFFIC	
	ITMS CONDUIT
	SIGNAL CONDUIT
	CONDUIT JUNCTION WELL
	LUMINAIRE
	PAVEMENT MARKINGS
	PAVEMENT STRIPING
	TRAFFIC SIGN

PAVEMENT SECTION(S)	
	PROPOSED PAVEMENT - SEE CONSTRUCTION PLAN FOR MATERIALS AND DEPTHS.

IDENTIFIERS	
	ADJUST BY CONTRACTOR
	ADJUST BY OTHERS
	ABANDON BY CONTRACTOR
	CONCRETE SAFETY BARRIER
	CURB OR CURB & GUTTER
	CONVERT TO JUNCTION BOX
	CONVERT TO DRAINAGE MANHOLE
	CURB OPENING
	CURB RAMP / TYPE
	CURB RAMP / TYPE - WITHOUT SIDEWALK SURFACE DETECTABLE WARNING SYSTEM
	CONSTRUCTION SAFETY FENCE
	DRAINAGE INLET
	DO NOT DISTURB
	ENERGY DISSIPATOR
	FENCE
	FLARED END SECTION
	FILL WITH FLOWABLE FILL
	FILTRATION STRUCTURE
	GUARDRAIL
	JUNCTION BOX
	MANHOLE
	MONUMENT - RIGHT-OF-WAY
	PIPE
	RELOCATE BY CONTRACTOR
	RELOCATE BY OTHERS
	REMOVE BY CONTRACTOR
	REMOVE BY OTHERS
	RIPRAP
	UNDERDRAIN / LENGTH
	UNDERDRAIN OUTLET PIPE
	UNDERDRAIN CLEANOUT
	REMOVE BY TRAFFIC CONTRACTOR

LANDSCAPING	
	LANDSCAPE PLANTINGS
	SHRUBBERY
	CONIFEROUS TREE
	DECIDUOUS TREE

GENERAL NOTES

1. SANITARY SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MOST RECENT KENT COUNTY STANDARD SPECIFICATIONS FOR CONSTRUCTION, SPECIAL PROVISIONS, SUPPLEMENTAL SPECIFICATIONS, STANDARD DETAILS, AND THE RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES OR STRICTER STANDARDS IDENTIFIED BY THE ENGINEER. SANITARY SEWERS SHALL ALSO BE CONSTRUCTED IN ACCORDANCE WITH THE MOST RECENT DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL (DNREC) REQUIREMENTS.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING APPROVAL AND ACCEPTANCE OF THE SANITARY SEWER SYSTEM BY KENT COUNTY UPON COMPLETION OF CONSTRUCTION. AS-BUILT PLANS, SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR OR PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF DELAWARE MUST BE SUBMITTED TO KENT COUNTY BEFORE ACCEPTANCE.

3. DURING CONSTRUCTION, THE CONTRACTOR MUST HAVE IN THEIR POSSESSION ON SITE, A SET OF CONSTRUCTION PLANS BEARING KENT COUNTY'S STAMP OF APPROVAL.

4. A CONSTRUCTION PERMIT ISSUED BY THE STATE OF DELAWARE, DEPARTMENT OF TRANSPORTATION (DELDOT) IS REQUIRED BEFORE ANY WORK IS PERFORMED WITHIN A DELDOT RIGHT-OF-WAY. ALL WORK PERFORMED WITHIN DELDOT'S RIGHT-OF-WAY OR PROPERTY OWNED BY THE STATE OF DELAWARE SHALL BE PERFORMED IN ACCORDANCE WITH THE MOST RECENT DELDOT STANDARD SPECIFICATIONS AND UTILITY MANUAL.

5. CONSTRUCTION SHALL NOT DEVIATE FROM THE PLANS AND SPECIFICATIONS APPROVED BY KENT COUNTY WITHOUT WRITTEN PERMISSION FROM KENT COUNTY'S DEPARTMENT OF PUBLIC WORKS.

6. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS, DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK AND THE KENT COUNTY DRAINAGE CODE, AS AMENDED.

7. MANHOLE COVER(S) ON PRIVATELY OWNED AND MAINTAINED SEWER SYSTEMS SHALL NOT BE LABELED "KENT COUNTY."

8. THE LOCATION OF THE REFERENCE POINTS OF A PROJECT SHALL BE IDENTIFIED TO THE CONTRACTOR IN THE FIELD, TOGETHER WITH A LOCATION MAP BY THE DESIGN ENGINEER.

9. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE LAYOUT OF THE WORK AND WILL PROTECT AND PRESERVE THE ESTABLISHED REFERENCE POINTS AND WILL MAKE NO CHANGES OR RELOCATIONS WITHOUT THE PRIOR WRITTEN APPROVAL OF THE PUBLIC WORKS DIRECTOR.

10. SEWER PIPE WILL BE LAID TO GRADE AS SPECIFIED ON THE APPROVED CONSTRUCTION DRAWINGS.

11. THE PUBLIC WORKS DIRECTOR MAY REQUIRE A SPECIFIC MATERIAL, PERMIT MATERIAL NOT SPECIFIED, OR REQUIRE SPECIAL REINFORCEMENT, EXTRA WEIGHT PIPE OR SPECIAL INTERIOR OR EXTERIOR COATINGS OR ENCASEMENTS WHERE, IN HIS OR HER OPINION, CONDITIONS WARRANT THESE SPECIAL REQUIREMENTS. THESE REQUIREMENTS WILL BE STATED IN CONTRACT DOCUMENTS AS SPECIAL PROVISION.

12. THE COUNTY WILL MAINTAIN THE RESPONSIBILITY OF CONSTRUCTION INSPECTION, EITHER THROUGH COUNTY PERSONNEL OR ONE OR MORE CONTRACTED THIRD PARTIES AT THE DISCRETION OF THE DIRECTOR OF THE DEPARTMENT OF PUBLIC WORKS.

13. A MINIMUM OF ONE DENSITY TEST SHALL BE MADE EACH DAY THAT BACKFILLING OCCURS IN THE PUBLIC ROAD RIGHT-OF-WAY.

14. THE DEVELOPER SHALL BE RESPONSIBLE FOR THE PROJECT BEING BUILT IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PLANS AND SPECIFICATIONS.

15. ALL EXCAVATIONS SHALL BE ADEQUATELY GUARDED WITH BARRICADES AND LIGHTS IN ORDER TO PROTECT THE PUBLIC FROM HAZARD. THE CONTRACTOR IS RESPONSIBLE FOR THE SETUP OF THESE PUBLIC SAFETY DEVICES.

16. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CALL MISS UTILITY PRIOR TO EXCAVATING AND TO FIELD VERIFY THE LOCATION OF EXISTING UTILITIES.

17. TYPICAL SEQUENCE OF CONSTRUCTION:

A. CONTACT KENT COUNTY DEPARTMENT OF PUBLIC WORKS (48 HOURS NOTICE AT 302-744-2430) PRIOR TO ANY EXCAVATION OR ACTIVITY INVOLVING SANITARY SEWER CONSTRUCTION, PUMP STATION CONSTRUCTION OR LATERAL TIE-INS TO EXISTING LINES.

B. CONSTRUCT PROPOSED SANITARY SEWER SYSTEM AS APPROVED BY KENT COUNTY.

C. BACKFILL AND RE-GRADE AS REQUIRED.

D. PERFORM AIR TEST.

E. PERFORM PUMPING TEST.

F. LATERAL CONNECTIONS FROM NEW HOMES/OFFICE BUILDINGS INTO THE SEWER LINE WILL NOT BE PERMITTED UNTIL AFTER FINAL ACCEPTANCE.

18. A PRE-CONSTRUCTION MEETING IS REQUIRED WITH KENT COUNTY DEPARTMENT OF PUBLIC WORKS INSPECTIONS SECTION, PRIOR TO CONSTRUCTION COMMENCING.

19. CONTRACTOR SHALL DECOMMISSION THE EXISTING SEPTIC SYSTEM AND ASSOCIATED PIPING AS INDICATED ON PLANS PER DNREC REQUIREMENTS. THIS WORK IS INCIDENTAL TO PIPE INSTALLATION.

20. ALL ELECTRICAL COMPONENTS ARE INCIDENTAL TO PUMP STATION INSTALLATION.

CONSTRUCTION NOTES

1. DRAWINGS HAVE BEEN CREATED FROM KENT COUNTY GIS AND SITE SURVEY USING THE DELAWARE STATE COORDINATE SYSTEM. THE HORIZONTAL DATUM IS NAD 1983/2011 AND THE VERTICAL DATUM IS NAVD 1988. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL INFORMATION THAT MAY AFFECT WORK.

2. THE SIZES OF SANITARY SEWER PIPES, MANHOLES, LATERALS, CLEAN OUTS AND OTHER UTILITIES DEPICTED ON PLANS AND PROFILES ARE EXAGGERATED FOR ILLUSTRATIVE PURPOSES. PIPE LENGTHS SHOWN ARE ROUNDED TO THE NEAREST FOOT AND ARE MEASURED FROM INSIDE MANHOLE WALL TO INSIDE MANHOLE WALL.

3. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE KENT COUNTY DEPARTMENT OF PUBLIC WORKS (302-744-2430) 48 HOURS PRIOR TO THE START OF ALL CONSTRUCTION IN ACCORDANCE WITH ALL PERMITS ISSUED.

4. IN ACCORDANCE WITH THE KENT COUNTY WATER AND SEWER ORDINANCE, CONTRACTOR SHALL MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION AND 10' HORIZONTAL SEPARATION BETWEEN WATER AND SEWER, UNLESS OTHERWISE NOTED; 12" VERTICAL SEPARATION BETWEEN ALL OTHER UTILITIES.

5. THE CONTRACTOR IS RESPONSIBLE TO PROTECT ALL UTILITIES WITHIN AND ADJACENT TO THE AREA OF WORK. ANY DAMAGE CAUSED DURING CONSTRUCTION SHALL BE REPAIRED AT THE SOLE EXPENSE OF THE CONTRACTOR.

6. THRUST BLOCKS SHALL BE USED AT ALL BENDS.

7. BEDDING REQUIREMENTS SHALL BE AS SHOWN IN PLANS AND SPECIFICATIONS AND IS REQUIRED UNDER ALL PIPES.

8. FULL COMPENSATION FOR FURNISHING AND INSTALLING SANITARY SEWER PIPES, ASSOCIATED BENDS, WYES, CLEAN-OUTS, WARNING TAPE, VALVES, AND RELATED FITTINGS INCLUDING CONCRETE THRUST BLOCKS IN THE SEWER LINE EXCAVATION, E&S MEASURES, BACKFILL, BY-PASS PUMPING AND THE LIKE ARE INCIDENTAL TO INSTALLING THE SANITARY SEWER SYSTEM AS DESCRIBED HEREIN.

9. ALL DISTURBED AREAS IN THE RIGHT-OF-WAY AND/OR EASEMENT AREAS MUST BE RESTORED TO REFLECT THE PRE-EXISTING CONDITIONS, AT A MINIMUM.

10. A PRE-CONSTRUCTION MEETING IS REQUIRED WITH KENT COUNTY PUBLIC WORKS DEPARTMENT'S INSPECTION SECTION PRIOR TO CONSTRUCTION COMMENCING.

11. THE CONTRACTOR SHALL REPAIR ALL PAVEMENT AREAS AFFECTED BY WORK PER THE PAVEMENT PATCH DETAIL ON SHEET DT-01.

12. ALL PAVED AREAS TO BE RECONSTRUCTED OR WIDENED SHALL BE SAWCUT AT THE POINT WHERE THE NEW PAVEMENT IS TO TIE INTO THE EXISTING PAVEMENT.

13. IN AREAS WHERE PROPOSED CURB MEETS EXISTING CURB AND THE TWO CURB TYPES ARE NOT SIMILAR, THE PROPOSED CURB SHALL BE TRANSITIONED IN 10 LINEAR FEET, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. PAYMENT FOR THIS WORK, INCLUDING SAW CUTTING EXISTING CURB SHALL BE INCIDENTAL TO THE PROPOSED CURB ITEM.

14. WHERE PROPOSED CONCRETE SIDEWALK IS CONSTRUCTED TO MEET EXISTING SIDEWALK, THE EXISTING SIDEWALK SHALL BE SAWCUT AT THE TIE-IN POINT OR MEET THE NEAREST EXISTING SIDEWALK JOINT. ALL SAW CUTTING SHALL BE FULL DEPTH, UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER AND SHALL BE PAID FOR UNDER ITEM 762001 - SAW CUTTING, CONCRETE, FULL DEPTH.

15. THE CONTRACTOR SHALL DELIVER ALL EXCESS MILLED MATERIAL TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S MAGNOLIA MAINTENANCE YARD. THE MATERIAL SHALL BE NEATLY STOCKPILED AT THE YARD. COSTS FOR THIS WORK SHALL BE INCIDENTAL TO THE MILLING ITEM UTILIZED FOR PAYMENT ON THE CONTRACT.

ENVIRONMENTAL NOTES

1. ALL CONSTRUCTION DEBRIS, EXCAVATED MATERIAL, BRUSH, ROCKS, AND REFUSE INCIDENTAL TO SUCH WORK SHALL BE PLACED EITHER ON SHORE ABOVE THE INFLUENCE OF FLOOD WATERS OR ON SOME SUITABLE DUMPING GROUND.

2. THE EFFORT SHALL BE MADE TO KEEP CONSTRUCTION DEBRIS FROM ENTERING ADJACENT WATERWAYS OR WETLANDS. ANY DEBRIS THAT ENTERS THOSE AREAS SHALL BE REMOVED IMMEDIATELY.

3. THE DISPOSAL OF TREES, BRUSH, AND OTHER DEBRIS IN ANY STREAM CORRIDOR, WETLAND, SURFACE WATER, OR DRAINAGE AREA IS PROHIBITED.

4. DELDOT ENVIRONMENTAL STUDIES SECTION MUST BE NOTIFIED AT (302) 760-2093 AND AT DOT_ENVIRONMENTALSTUDIES@DELAWARE.GOV IF THERE ARE ANY CHANGES TO THE PROJECT METHODS, FOOTPRINT, MATERIALS, OR DESIGNS, TO ALLOW THE DEPARTMENT TO COORDINATE WITH THE APPROPRIATE RESOURCE AGENCIES (COE, DNREC, AND SHPO), FOR APPROVAL.

MAINTENANCE OF TRAFFIC NOTES

1. LANE CLOSURES WILL NOT BE ALLOWED ON WEEKDAYS FROM 6:00 AM TO 8:00 AM UNLESS NOTED OTHERWISE.

2. UTILIZE TA-10 OF THE DELDOT MUTCD AS NECESSARY FOR WORK ON SHOULDER OR WITHIN THE RIGHT TURN LANES. UTILIZE TA-27 AS NECESSARY FOR LANE CLOSURE AT THE SIDE OF AN INTERSECTION. THESE TA'S SHALL BE UTILIZED UNLESS DELDOT'S SAFETY PERMIT STATES OTHERWISE.

3. AT THE END OF THE WORKDAY CONTRACTOR SHALL PAVE OR BACK FILL AND COVER WITH STEEL PLATES PRIOR TO OPENING ROAD TO TRAFFIC. STEEL PLATES MUST FOLLOW ALL REQUIREMENTS IN SECTION 801.03.3 PART D OF THE DELDOT "STANDARD SPECIFICATIONS" DATED AUGUST 2016.

4. ALL PAVEMENT MARKINGS AFFECTED DURING CONSTRUCTION SHALL BE RESTORED IN-KIND.

5. PEDESTRIANS SHALL BE ACCOMMODATED AT ALL TIMES UTILIZING TA-28 AND OR/TA-29 OF THE DELAWARE MUTCD. IF A VIABLE PEDESTRIAN DETOUR OR TEMPORARY CROSSING SCHEME IS UNAVAILABLE, THE CONTRACTOR SHALL SEEK APPROVAL BY THE ENGINEER TO UTILIZE FLAGGERS TO SAFELY LEAD PEDESTRIANS THROUGH THE WORK ZONE. AT THE END OF EACH WORK DAY A VIABLE ROUTE FOR PEDESTRIANS MUST BE AVAILABLE USING ACCEPTABLE PEDESTRIAN ROUTE MATERIALS.

6. ACCEPTABLE MATERIALS FOR TEMPORARY PATHS SHALL INCLUDE CONCRETE, HOT-MIX, COMPACTED MILLINGS OR PLYWOOD WALKWAY STRUCTURE. PLYWOOD WALKWAY STRUCTURES SHALL ALSO INCLUDE DETECTABLE EDGING AND RAILINGS IN ACCORDANCE WITH ADA GUIDELINES AND THE DELAWARE MUTCD. TEMPORARY PEDESTRIAN PATHS SHALL BE INCIDENTAL TO ITEM 801000 UNLESS OTHERWISE SPECIFIED IN THE PLANS. STONE OR GRADED AGGREGATE BASE COURSE SHALL NOT BE USED FOR TEMPORARY PEDESTRIAN PATHS.

7. CONTRACTOR SHALL MAINTAIN ACCESS TO FAWN PATH DRIVE, BANNING ROAD, AND PACER WAY AT ALL TIMES. WHEN CLOSING ONE ENTRANCE TO A BUSINESS; A FLAGGER SHALL CONTROL VEHICLE ENTRANCE AND EXIT THROUGH THE OTHER ENTRANCE/EXIT LANE. THE NEIGHBORHOOD SHALL BE INFORMED ABOUT UPCOMING CONSTRUCTION AT LEAST 3 DAYS PRIOR TO CLOSING AN EXIT/ENTRANCE.

8. WORK SHALL BE PERFORMED IN A MANNER THAT WILL REASONABLY PROVIDE THE LEAST PRACTICABLE OBSTRUCTION TO TRAFFIC, CONSISTENT WITH SAFETY STANDARDS AND SHALL COMPLY WITH THE LATEST EDITION OF THE MANUAL TITLED "DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS" HERE AFTER REFERRED TO AS THE TRAFFIC CONTROL MANUAL.

9. LANE CLOSURES AND ROAD CLOSURES ARE PROHIBITED FROM OCCURRING DURING THE FIREFLY MUSIC FESTIVAL EVENT IN DOVER, DE FROM 12:00 AM WEDNESDAY PRIOR TO THE EVENT THROUGH 12:00 AM TUESDAY FOLLOWING THE EVENT. THE ENGINEER WILL PROVIDE THE DATES OF THE EVENT TWO WEEKS PRIOR TO THE RESTRICTION BEING IMPLEMENTED.

CORRECTION PERIOD

A. IF WITHIN ONE YEAR AFTER THE DATE OF SUBSTANTIAL COMPLETION (OR SUCH LONGER PERIOD OF TIME AS MAY BE PRESCRIBED BY THE TERMS OF ANY APPLICABLE SPECIAL GUARANTEE REQUIRED BY THE CONTRACT DOCUMENTS, OR BY ANY SPECIFIC PROVISION OF THE CONTRACT DOCUMENTS), ANY WORK IS FOUND TO BE DEFECTIVE, OR IF THE REPAIR OF ANY DAMAGES TO THE SITE, ADJACENT AREAS THAT CONTRACTOR HAS ARRANGED TO USE THROUGH CONSTRUCTION EASEMENTS OR OTHERWISE, AND OTHER ADJACENT AREAS USED BY CONTRACTOR AS PERMITTED BY LAWS AND REGULATIONS, IS FOUND TO BE DEFECTIVE, THEN CONTRACTOR SHALL PROMPTLY, WITHOUT COST TO OWNER AND IN ACCORDANCE WITH OWNER'S WRITTEN INSTRUCTIONS:

1. CORRECT THE DEFECTIVE REPAIRS TO THE SITE OR SUCH OTHER ADJACENT AREAS;

2. CORRECT SUCH DEFECTIVE WORK;

3. IF THE DEFECTIVE WORK HAS BEEN REJECTED BY OWNER, REMOVE IT FROM THE PROJECT AND REPLACE IT WITH WORK THAT IS NOT DEFECTIVE, AND

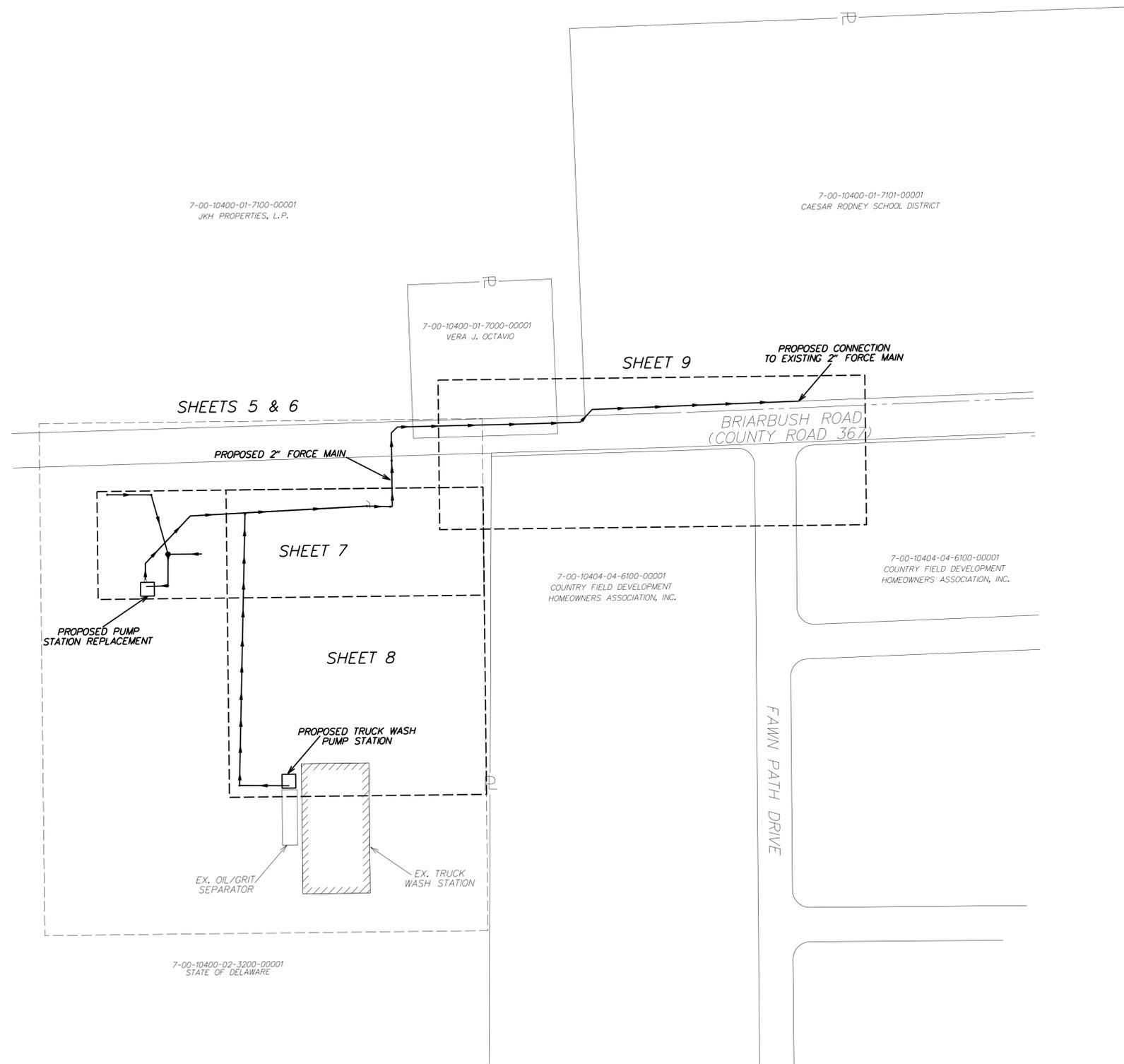
4. SATISFACTORILY CORRECT OR REPAIR OR REMOVE AND REPLACE ANY DAMAGE TO OTHER WORK, TO THE WORK OF OTHERS, OR TO OTHER LAND OR AREAS RESULTING THEREFROM.

B. IF CONTRACTOR DOES NOT PROMPTLY COMPLY WITH THE TERMS OF OWNER'S WRITTEN INSTRUCTIONS, OR IN AN EMERGENCY WHERE DELAY WOULD CAUSE SERIOUS RISK OF LOSS OR DAMAGE, OWNER MAY HAVE THE DEFECTIVE WORK CORRECTED OR REPAIRED OR MAY HAVE THE REJECTED WORK REMOVED AND REPLACED. CONTRACTOR SHALL PAY ALL CLAIMS, COSTS, LOSSES, AND DAMAGES (INCLUDING BUT NOT LIMITED TO ALL FEES AND CHARGES OF ENGINEERS, ARCHITECTS, ATTORNEYS, AND OTHER PROFESSIONALS AND ALL COURT OR ARBITRATION OR OTHER DISPUTE RESOLUTION COSTS) ARISING OUT OF OR RELATING TO SUCH CORRECTION OR REPAIR OR SUCH REMOVAL AND REPLACEMENT (INCLUDING BUT NOT LIMITED TO ALL COSTS OF REPAIR OR REPLACEMENT OF WORK OF OTHERS).

C. IN SPECIAL CIRCUMSTANCES WHERE A PARTICULAR ITEM OF EQUIPMENT IS PLACED IN CONTINUOUS SERVICE BEFORE SUBSTANTIAL COMPLETION OF ALL THE WORK, THE CORRECTION PERIOD FOR THAT ITEM MAY START TO RUN FROM AN EARLIER DATE IF SO PROVIDED IN THE SPECIFICATIONS.

D. WHERE DEFECTIVE WORK (AND DAMAGE TO OTHER WORK RESULTING THEREFROM) HAS BEEN CORRECTED OR REMOVED AND REPLACED UNDER THIS PARAGRAPH, THE CORRECTION PERIOD HEREUNDER WITH RESPECT TO SUCH WORK WILL BE EXTENDED FOR AN ADDITIONAL PERIOD OF ONE YEAR AFTER SUCH CORRECTION OR REMOVAL AND REPLACEMENT HAS BEEN SATISFACTORILY COMPLETED.

E. CONTRACTOR'S OBLIGATIONS UNDER THIS PARAGRAPH ARE IN ADDITION TO ALL OTHER OBLIGATIONS AND WARRANTIES. THE PROVISIONS OF THIS PARAGRAPH SHALL NOT BE CONSTRUED AS A SUBSTITUTE FOR, OR A WAIVER OF, THE PROVISIONS OF ANY APPLICABLE STATUTE OF LIMITATION OR REPOSE.



7-00-10400-01-7100-00001
JKH PROPERTIES, L.P.

7-00-10400-01-7101-00001
CAESAR RODNEY SCHOOL DISTRICT

7-00-10400-01-7000-00001
VERA J. OCTAVIO

7-00-10404-04-6100-00001
COUNTRY FIELD DEVELOPMENT
HOMEOWNERS ASSOCIATION, INC.

7-00-10404-04-6100-00001
COUNTRY FIELD DEVELOPMENT
HOMEOWNERS ASSOCIATION, INC.

7-00-10400-02-3200-00001
STATE OF DELAWARE

SHEETS 5 & 6

SHEET 9

SHEET 7

SHEET 8

BRIARBUSH ROAD
(COUNTY ROAD 367)

FAWN PATH DRIVE

PROPOSED PUMP
STATION REPLACEMENT

PROPOSED 2" FORCE MAIN

PROPOSED CONNECTION
TO EXISTING 2" FORCE MAIN

PROPOSED TRUCK WASH
PUMP STATION

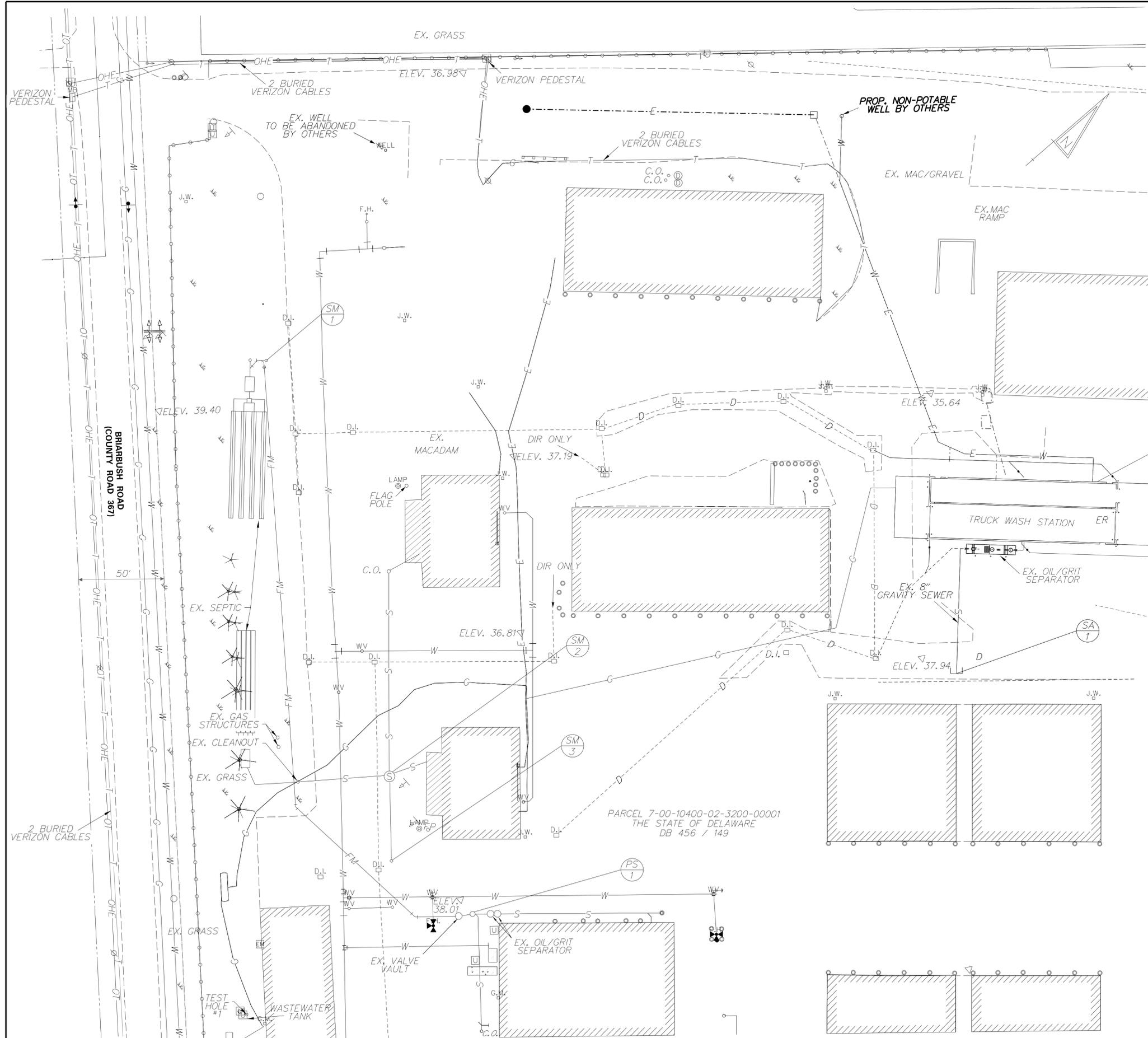
EX. OIL/GRIT
SEPARATOR

EX. TRUCK
WASH STATION

ADDENDUMS / REVISIONS	

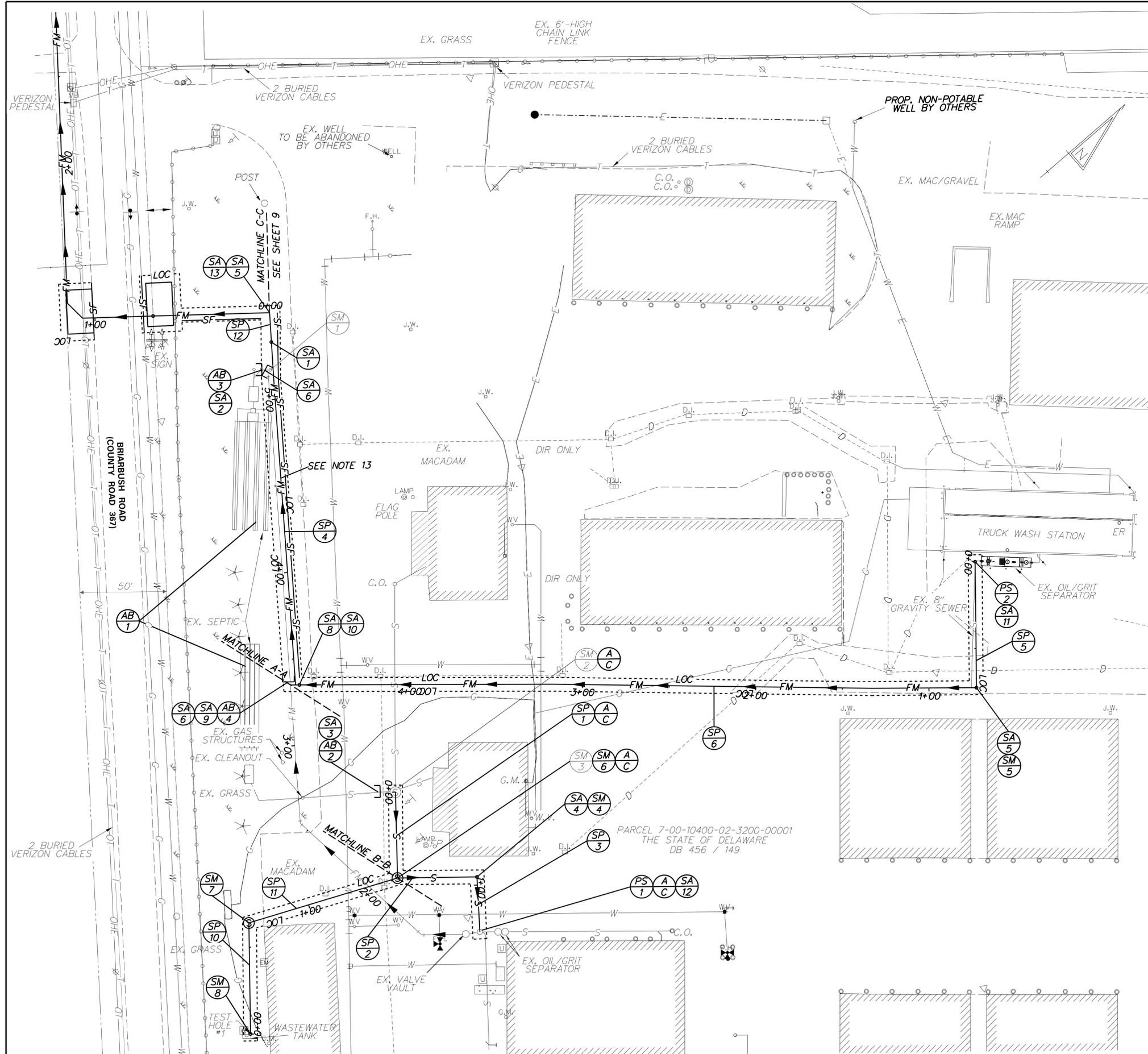
CONTRACT	BRIDGE NO.	N/A
T201780106	DESIGNED BY:	AMB
COUNTY	CHECKED BY:	JS
KENT		

SHEET NO.	4
TOTAL SHTS.	17



EXISTING STRUCTURE SCHEDULE						
NO.	STATION	TYPE/SIZE	RIM EL.	T.G. EL.	INV. EL.	EASTING
PS-1	5+41	EX. PUMP STATION	39.04	39.04	30.00	632463.04
SM-1	1+70.83	EX. CLEANOUT	38.44	38.44	34.66	632139.08
SM-2	6+71.47	EX. MANHOLE	37.41	37.41	34.43	632370.31
SM-3	6+22.07	EX. GRAVITY CLEANOUT	37.05	37.05	35.05	632408.45

SANITARY ACCESSORIES SCHEDULE		
NO.	DESCRIPTION	QUANTITY
SA-1	EX. 8" SEWER CAP	1



ADJUSTMENT SCHEDULE							
NO.	STATION	TYPE/SIZE	RIM EL.	T.G. EL.	INV. EL.	NORTHING	EASTING
PS-1	1+27.06	EX. PUMP STATION*	39.04	39.04	30.00	392976.40	632463.04
SM-2	0+00.00	EX. MANHOLE	37.41	37.41	34.43	392992.14	632370.31
SM-3	0+49.49	EX. GRAVITY CLEANOUT**	37.05	37.05	35.05	392960.76	632408.45

*SEE NOTE 7
**SEE NOTE 11

DEMOLITION SCHEDULE		
NO.	DESCRIPTION	QUANTITY
AB-1	ABANDON SEPTIC	2
AB-2	ABANDON 6" GRAVITY	81 LF
AB-3	ABANDON 4" GRAVITY	22 LF
AB-4	ABANDON 1.5" FORCE MAIN	183 LF

SANITARY PIPE SCHEDULE						
NO.	SIZE/TYPE	FT.	SLOPE(ft/ft)	INV. EL.	DIS. EL.	
SP-1	6" PVC SDR-35*	50	0.015	34.43	33.68	
SP-2	6" PVC SDR-35	48	0.015	33.68	32.99	
SP-3	6" PVC SDR-35	32	0.015	32.99	32.51	
SP-4	2" HDPE DR-11 FM	198	N/A	33.27	34.68	
SP-5	2" HDPE DR-11 FM	73	N/A	33.90	30.67	
SP-6	2" HDPE DR-11 FM	397	N/A	30.67	33.27	
SP-10	6" PVC SDR-35	64	0.020	36.70	35.42	
SP-11	6" PVC SDR-35	90	0.020	35.42	33.69	
SP-12	2" HDPE DR-11 FM	17	N/A	34.68	31.61	

*RE-SLOPE EXISTING PIPE

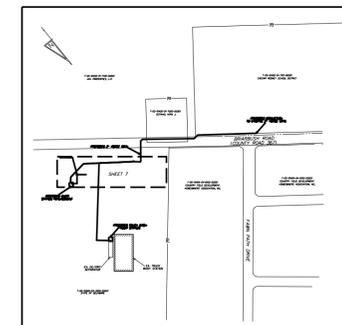
STRUCTURE SCHEDULE							
NO.	STATION	TYPE/SIZE	RIM EL.	T.G. EL.	INV. EL.	NORTHING	EASTING
PS-2	0+00	TRUCK WASH PUMP STATION*	37.30	37.30	26.40	393332.21	632488.71
SM-4	0+95.35	6" GRAVITY CLEANOUT	38.00	38.00	32.99	392995.85	632437.98
SM-5	0+72.53	2" FLUSHING CONNECTION	38.40	38.40	30.67	393285.38	632544.09
SM-6	0+49.49	48" MANHOLE	37.05	37.05	33.66	392960.71	632408.49
SM-7	0+64	48" MANHOLE	38.70	38.70	35.42	392878.92	632371.91
SM-8	0+00	6" GRAVITY CLEANOUT	38.72	38.72	36.70	392837.78	632420.93

*SEE NOTE 8

SANITARY ACCESSORIES SCHEDULE		
NO.	DESCRIPTION	QUANTITY
SA-1	2" AIR RELEASE VALVE	1
SA-2	4" SEWER CAP	1
SA-3	6" SEWER CAP	1
SA-4	HORIZONTAL 6" BEND, 90 DEGREES	1
SA-5	HORIZONTAL 2" BEND, 90 DEGREES	2
SA-6	1.5" SEWER CAP	2
SA-8	2" GATE VALVE WITH 2" CHECK VALVE	1
SA-9	1.5"x2" TEE	1
SA-10	2" x2" TEE	1
SA-11	1.25"x2" REDUCER	1
SA-12	1.25"x1.5" REDUCER	1
SA-13	VERTICAL 2" BEND, 45 DEGREES	2

NOTES:

- THE SANITARY FORCE MAIN SHALL BE INSTALLED WITH A MINIMUM COVER OF 42-INCHES.
- MAINTAIN A MINIMUM HORIZONTAL DISTANCE OF 10-FEET BETWEEN THE PROPOSED SEWER MAIN AND PROPOSED SEWER FORCE MAIN UNLESS A CROSSING IS SPECIFIED ON THE PLANS. MAINTAIN A MINIMUM VERTICAL SEPARATION OF 18-INCHES BETWEEN WATER MAINS AND THE PROPOSED SEWER FORCEMAIN AT ALL CROSSINGS.
- MAINTAIN A MINIMUM OF 12-INCHES OF VERTICAL SEPARATION BETWEEN THE FORCEMAIN AND ALL STORM DRAINS.
- CONTRACTOR SHALL INCLUDE BUTRESSES AT ALL BENDS, FITTINGS, AND VALVES PER DETAILS.
- *12 AWG TRACER WIRE SHALL BE INSTALLED OVER FORCEMAIN.
- CONTRACTOR SHALL ABANDON EXISTING SEPTIC SYSTEM & SEPTIC TANKS PER KENT COUNTY AND DNREC STANDARDS.
- EXISTING PUMPS SHALL BE REPLACED WITH E/ONE MODEL DH151 150 GALLON SIMPLEX UPGRADE OR APPROVED EQUAL. SEE DETAIL SHEET DT-04
- TRUCK WASH PUMP STATION SHALL BE E/ONE MODEL DH152 150 GALLON W-SERIES DUPLEX OR APPROVED EQUAL. SEE SHEET DT-04.
- A MINIMUM SEPARATION OF 5 FEET BETWEEN UTILITIES AND THE PROPOSED FORCEMAIN IS REQUIRED.
- CONTRACTOR SHALL CONFORM TO MINIMUM ISOLATION DISTANCES FROM POTABLE WATER WELLS PER DNREC'S "REGULATIONS GOVERNING THE CONSTRUCTION AND USE OF WELLS."
- CONTRACTOR SHALL REPLACE EXISTING GRAVITY CLEANOUT WITH MANHOLE SM-3 PER SITE PROFILES ON SHEET 7.
- ALL PROPOSED SANITARY SEWER PUMP STATIONS, FORCEMAIN, STRUCTURES, AND ACCESSORIES UPSTREAM OF THE VALVE ARRANGEMENT AT THE PROPERTY LINE SHALL BE OWNED AND MAINTAINED BY DELDOT.
- ALL PROPOSED SANITARY SEWER FORCEMAIN, STRUCTURES, AND ACCESSORIES DOWNSTREAM OF THIS ARRANGEMENT SHALL BE OWNED AND MAINTAINED BY KENT COUNTY.
- CONTRACTOR SHALL CONSTRUCT THE PROP. 2" FORCE MAIN PARALLEL TO THE EX. 1.5" FORCE MAIN. ONCE THE 2" FORCE MAIN HAS BEEN CONSTRUCTED, THE CONTRACTOR SHALL CONNECT THE EX. FORCE MAIN TO THE PROP. FORCE MAIN PER SHEET 7. CONTRACTOR SHALL THEN ABANDON THE PARALLEL SECTION OF THE 1.5" FORCE MAIN.
- VERIZON FACILITIES IDENTIFIED ON THIS DRAWING ARE BASED ON COMPANY RECORDS AND LOCATIONS ARE APPROXIMATE. FOR EXACT LOCATIONS CONTACT MISS UTILITY.



SANITARY PIPE SCHEDULE					
NO.	SIZE/TYPE	FT.	SLOPE(f1/f1)	INV. EL.	DIS. EL.
SP-1*	6" PVC SDR-26	50	0.015	34.43	35.05
SP-2	6" PVC SDR-26	48	0.015	35.05	32.99
SP-3	6" PVC SDR-26	32	0.015	32.99	32.51
SP-4	2" HDPE DR-11 FM	198	N/A	33.27	34.68
SP-10	6" PVC SDR-26	64	0.020	36.70	35.42
SP-11	6" PVC SDR-26	90	0.020	35.42	33.69
SP-12	2" HDPE DR-11 FM	17	N/A	34.68	31.61

*RE-SLOPE EXISTING PIPE

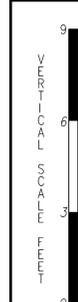
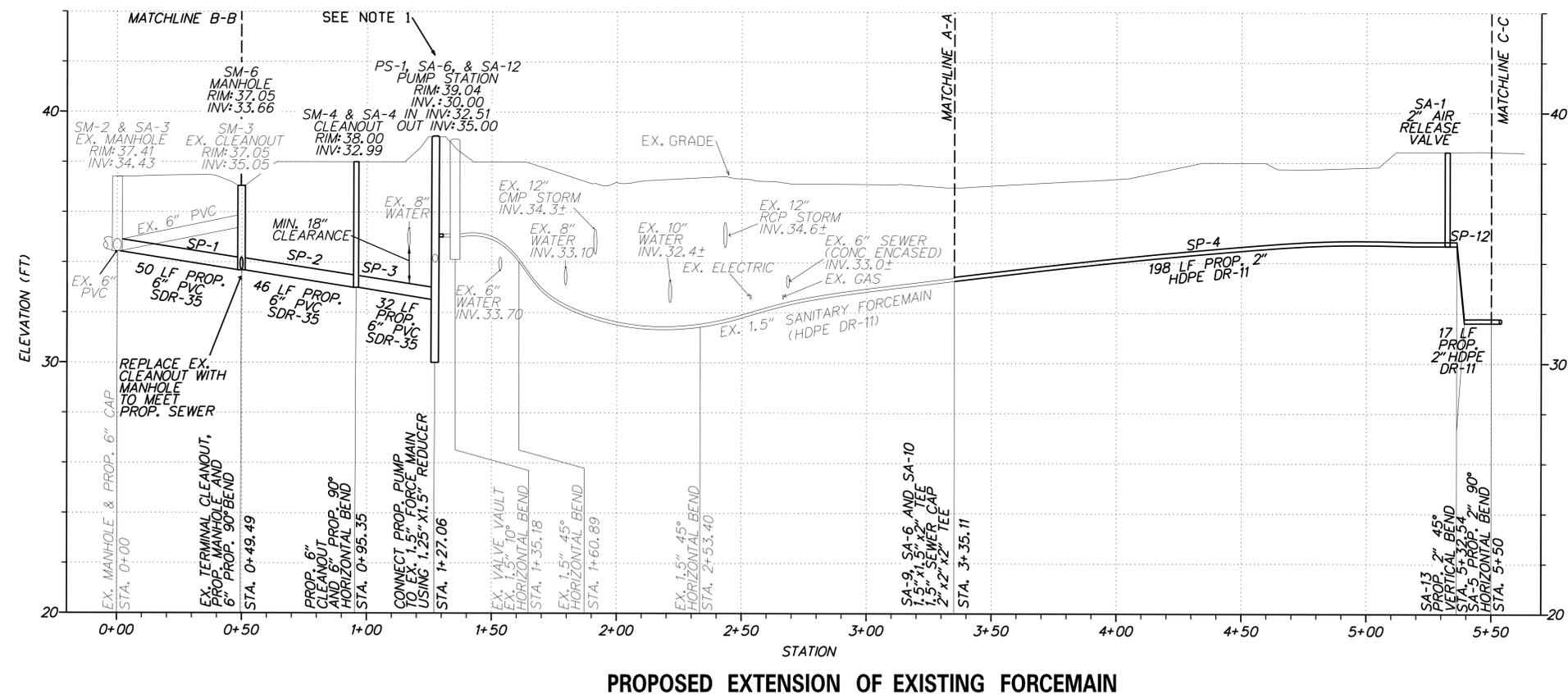
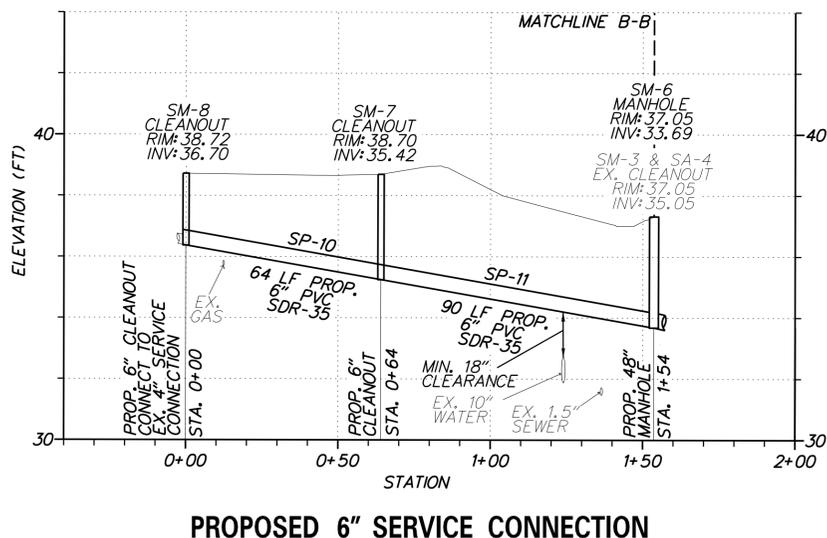
STRUCTURE SCHEDULE							
NO.	STATION	TYPE/SIZE	RIM EL.	T.G. EL.	INV. EL.	NORTHING	EASTING
SM-4	0+95.35	GRAVITY CLEANOUT	38.00	38.00	32.99	392995.85	632437.98
SM-6	0+49.49	48" MANHOLE	37.05	37.05	33.66	392960.71	632408.49
SM-7	0+64	6" GRAVITY CLEANOUT	38.70	38.70	35.42	392878.92	632371.91
SM-8	0+00	6" GRAVITY CLEANOUT	38.72	38.72	36.70	392837.78	632420.93

SANITARY ACCESSORIES SCHEDULE		
NO.	DESCRIPTION	QUANTITY
SA-1	2" AIR RELEASE VALVE	1
SA-4	HORIZONTAL 6" BEND, 90 DEGREES	1
SA-5	HORIZONTAL 2" BEND, 90 DEGREES	1
SA-6	1.5" SEWER CAP	1
SA-9	1.5" X 2" TEE	1
SA-10	2" X 2" TEE	1
SA-12	1.25" X 1.5" REDUCER	1
SA-13	VERTICAL 2" BEND, 45 DEGREES	2

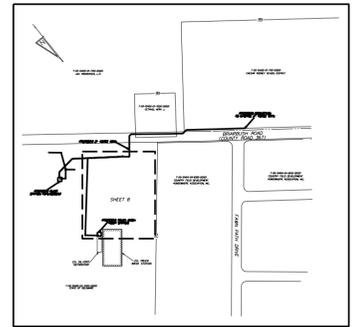
NOTES:

- EXISTING PUMPS SHALL BE REPLACED WITH EONE MODEL DH151 150 GALLON SIMPLEX UPGRADE OR APPROVED EQUAL. SEE DETAIL SHEET DT-04. THE OWNER SHALL RETAIN ANY EXISTING PUMPS.
- MAINTAIN A MINIMUM HORIZONTAL DISTANCE OF 10-FEET BETWEEN THE PROPOSED WATER MAIN AND PROPOSED SEWER FORCE MAIN UNLESS A CROSSING IS SPECIFIED ON THE PLANS. MAINTAIN A MINIMUM VERTICAL SEPARATION OF 18-INCHES BETWEEN WATER MAINS AND THE PROPOSED SEWER FORCEMAIN AT ALL CROSSINGS.
- MAINTAIN A MINIMUM OF 12-INCHES OF VERTICAL SEPARATION BETWEEN THE FORCEMAIN AND ALL STORM DRAINS.

ADJUSTMENT SCHEDULE							
NO.	STATION	TYPE/SIZE	RIM EL.	T.G. EL.	INV. EL.	NORTHING	EASTING
PS-1	1+27.06	EX. PUMP STATION	39.04	39.04	30.00	392976.40	632463.04
SM-2	0+00.00	EX. MANHOLE	37.41	37.41	34.43	392992.14	632370.31
SM-3	0+49.49	EX. GRAVITY CLEANOUT	37.05	37.05	35.05	392960.76	632408.45



KEY MAP



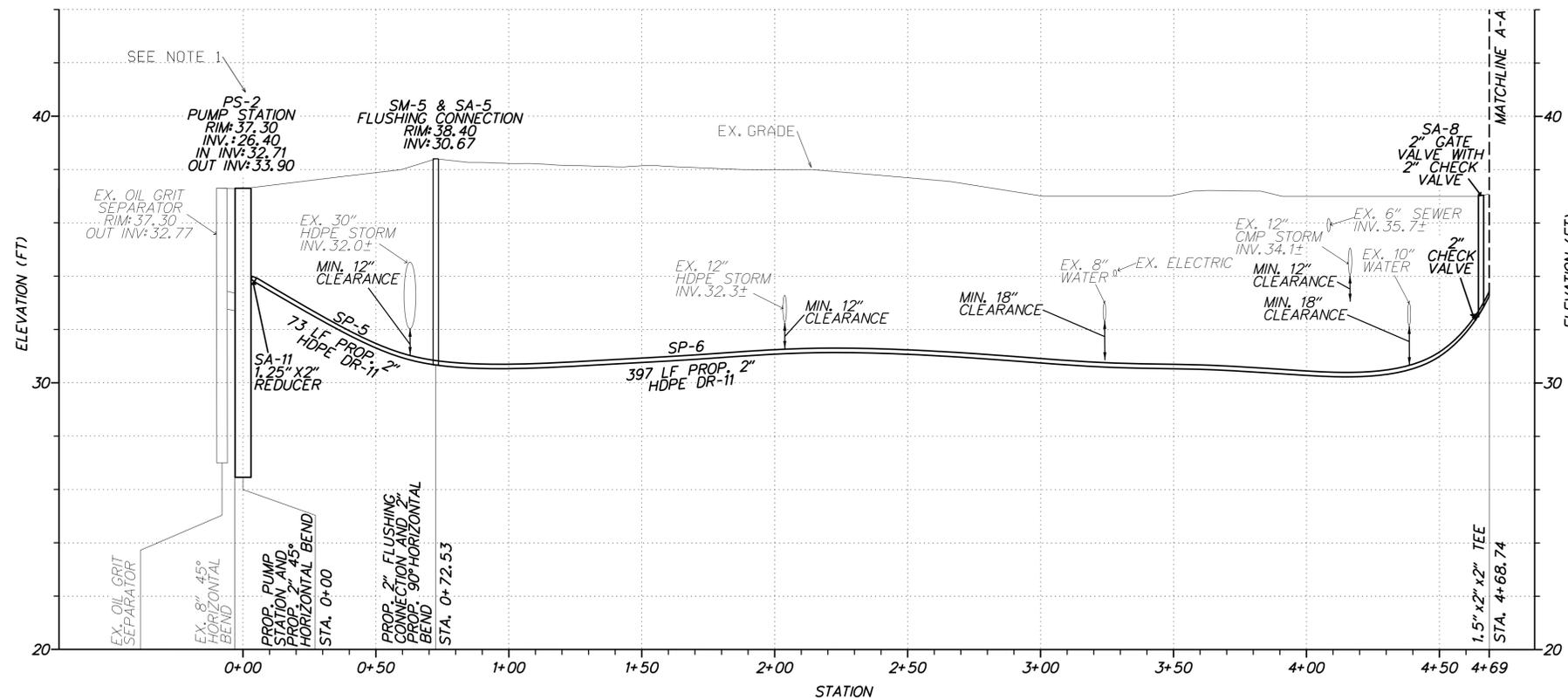
SANITARY PIPE SCHEDULE					
NO.	SIZE/TYPE	FT.	SLOPE	INV. EL.	DIS. EL.
SP-5	2" HDPE DR-11 FM	73	N/A	33.90	30.67
SP-6	2" HDPE DR-11 FM	397	N/A	30.67	33.27

STRUCTURE SCHEDULE							
NO.	STATION	TYPE/SIZE	RIM EL.	T.G. EL.	INV. EL.	NORTHING	EASTING
PS-2	0+00	TRUCK WASH PUMP STATION	37.30	37.30	26.40	393332.21	632488.71
SM-5	0+72.53	2" FLUSHING CONNECTION	38.40	38.40	30.67	393285.38	632544.09

SANITARY ACCESSORIES SCHEDULE		
NO.	DESCRIPTION	QUANTITY
SA-5	HORIZONTAL 2" BEND, 90 DEGREES	1
SA-8	2" GATE VALVE WITH 2" CHECK VALVE	1
SA-11	1.25" x 2" REDUCER	1

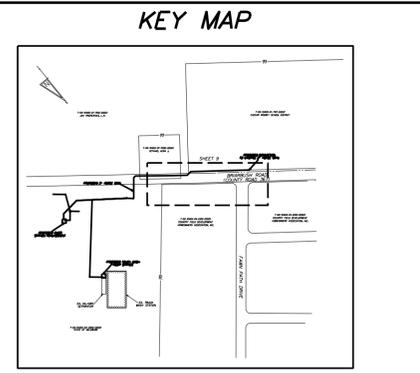
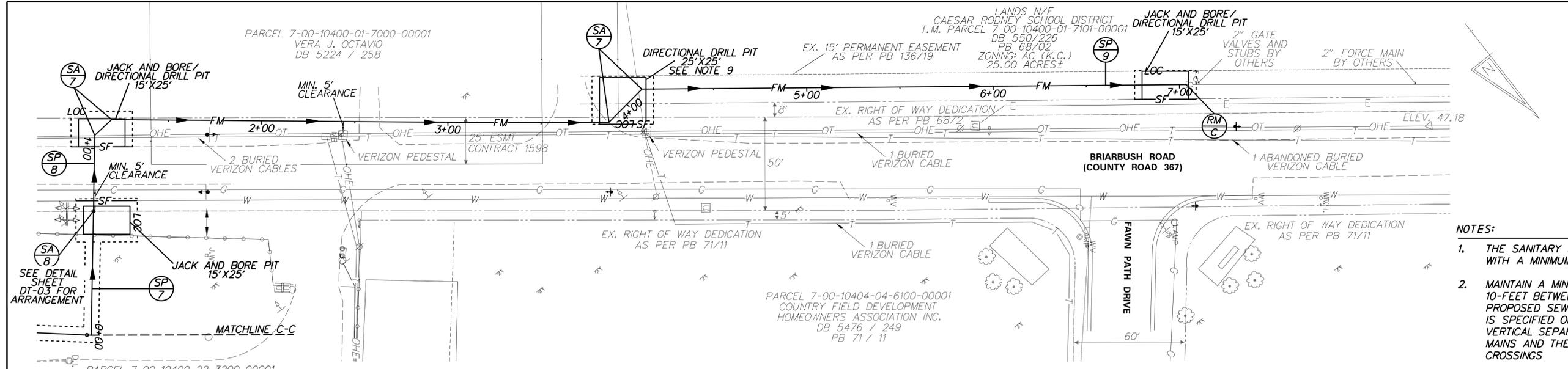
NOTES:

- TRUCK WASH PUMP STATION SHALL BE EONE MODEL DH152 150 GALLON W-SERIES DUPLEX OR APPROVED EQUAL. SEE SHEET DT-04.
- MAINTAIN A MINIMUM HORIZONTAL DISTANCE OF 10-FEET BETWEEN THE PROPOSED WATER MAIN AND PROPOSED SEWER FORCE MAIN UNLESS A CROSSING IS SPECIFIED ON THE PLANS. MAINTAIN A MINIMUM VERTICAL SEPARATION OF 18-INCHES BETWEEN WATER MAINS AND THE PROPOSED SEWER FORCEMAIN AT ALL CROSSINGS.
- MAINTAIN A MINIMUM OF 12-INCHES OF VERTICAL SEPARATION BETWEEN THE FORCEMAIN AND ALL STORM DRAINS.



PROPOSED TRUCK WASH FORCEMAIN



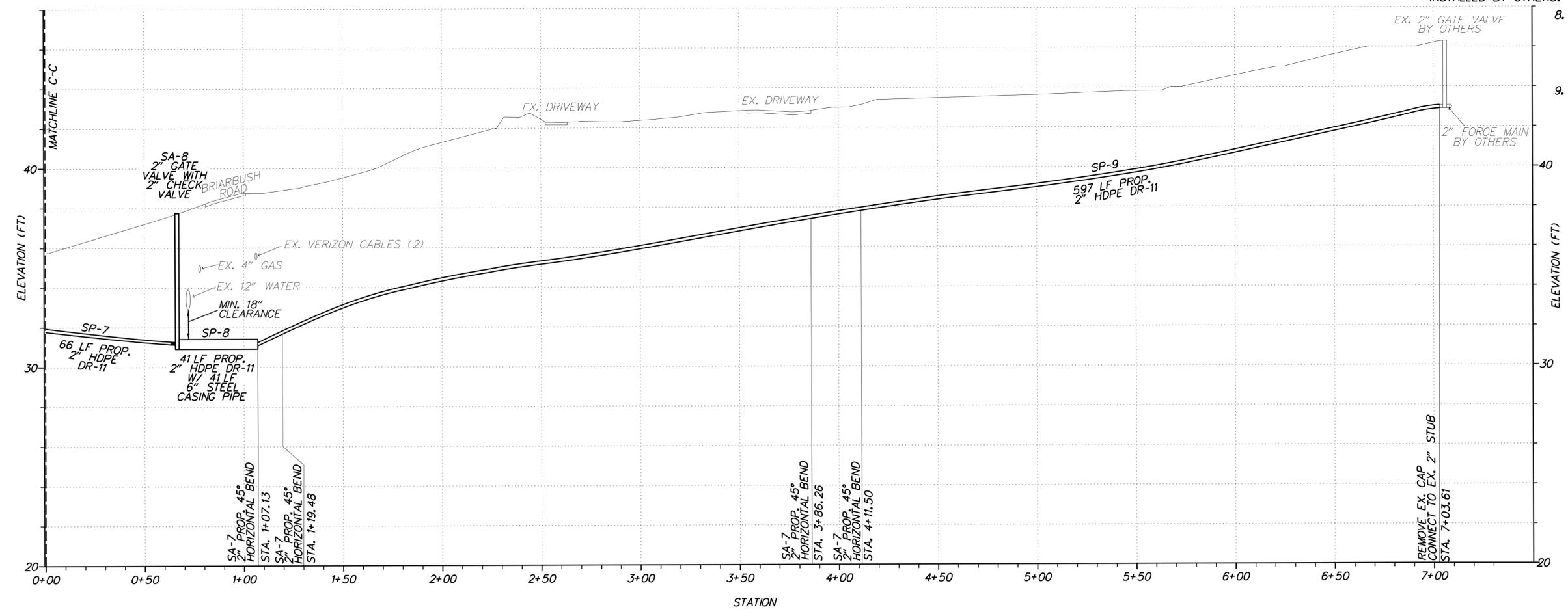


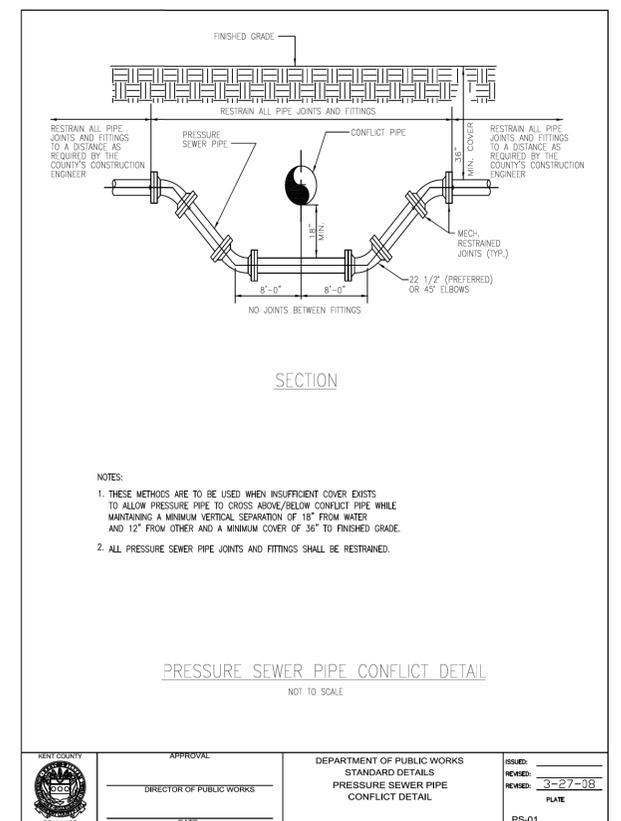
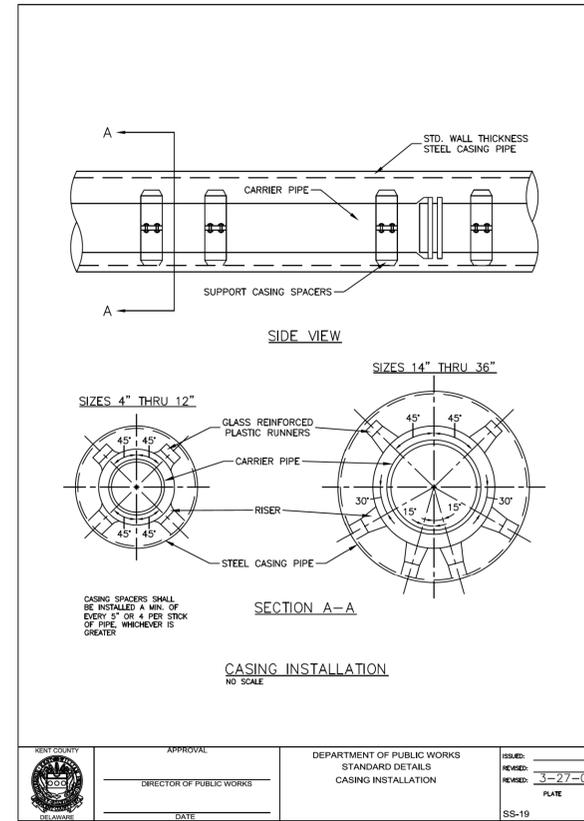
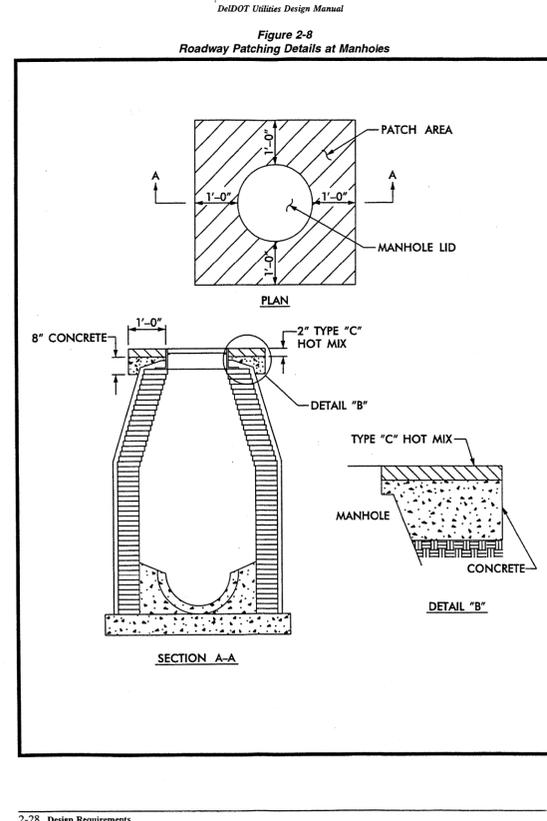
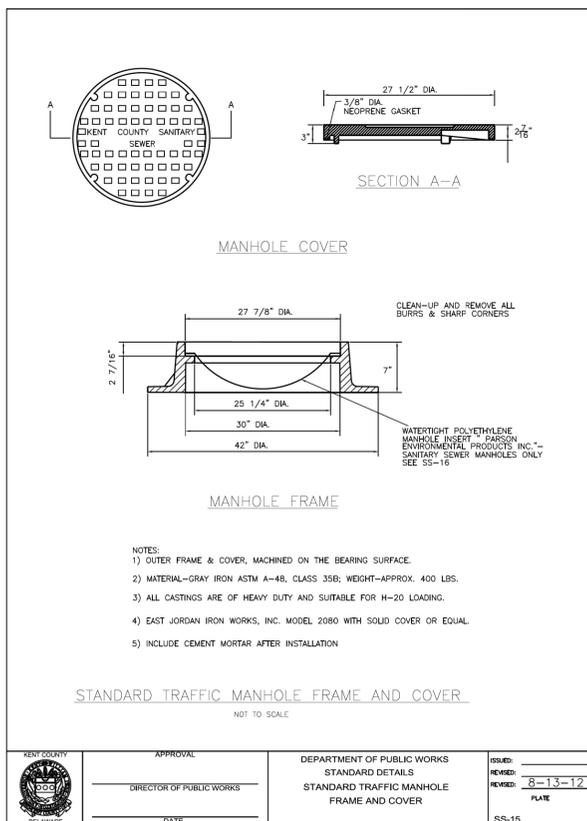
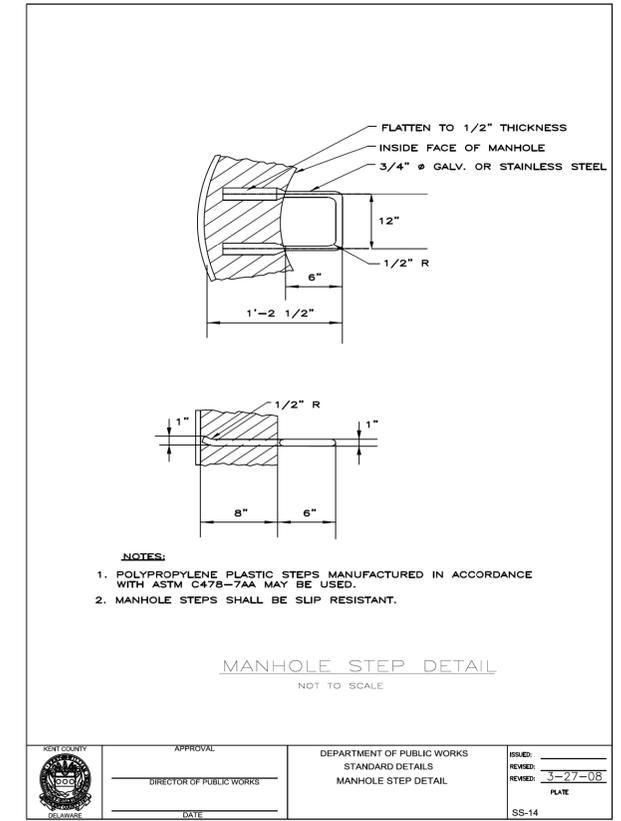
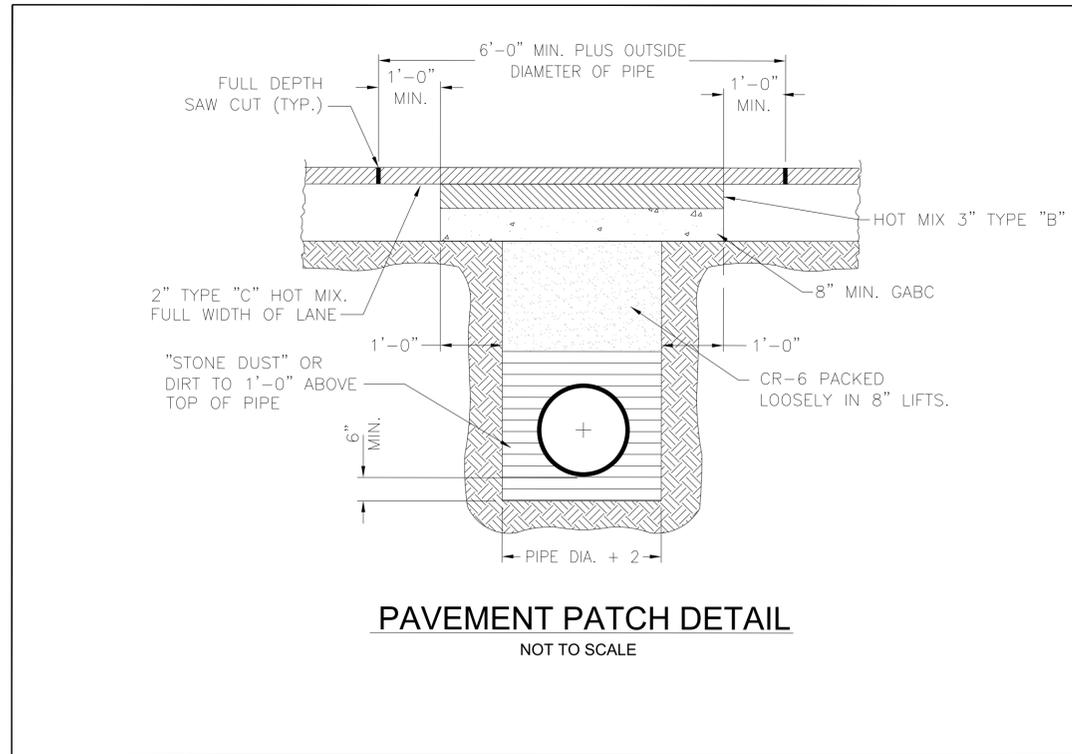
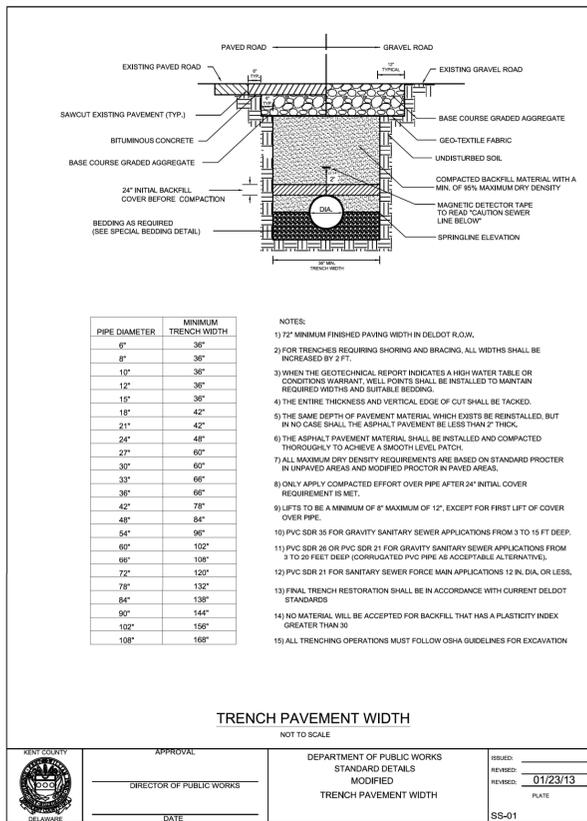
- NOTES:**
1. THE SANITARY FORCE MAIN SHALL BE INSTALLED WITH A MINIMUM COVER OF 42-INCHES.
 2. MAINTAIN A MINIMUM HORIZONTAL DISTANCE OF 10-FEET BETWEEN ALL WATER MAINS AND PROPOSED SEWER FORCE MAIN UNLESS A CROSSING IS SPECIFIED ON THE PLANS. MAINTAIN A MINIMUM VERTICAL SEPARATION OF 18-INCHES BETWEEN WATER MAINS AND THE PROPOSED SEWER FORCEMAIN AT ALL CROSSINGS
 3. CONTRACTOR SHALL INCLUDE BUTRESSES AT ALL BENDS, FITTINGS, AND VALVES PER DETAILS.
 4. *12 AWG TRACER WIRE SHALL BE INSTALLED OVER FORCE MAIN.
 5. A MINIMUM SEPARATION OF 5 FEET BETWEEN UTILITIES AND THE PROPOSED FORCEMAIN IS REQUIRED.
 6. CONTRACTOR SHALL VERIFY EXISTING FORCE MAIN CONNECTION ELEVATION PRIOR TO INSTALLATION.
 7. CONTRACTOR SHALL REMOVE EXISTING CAP ON EXISTING SEWER INSTALLED BY OTHERS.
 8. VERIZON FACILITIES IDENTIFIED ON THIS DRAWING ARE BASED ON COMPANY RECORDS AND LOCATIONS ARE APPROXIMATE. FOR EXACT LOCATIONS CONTACT MISS UTILITY.
 9. CONTRACTOR TO HOLD POLE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH DELMARVA POWER.

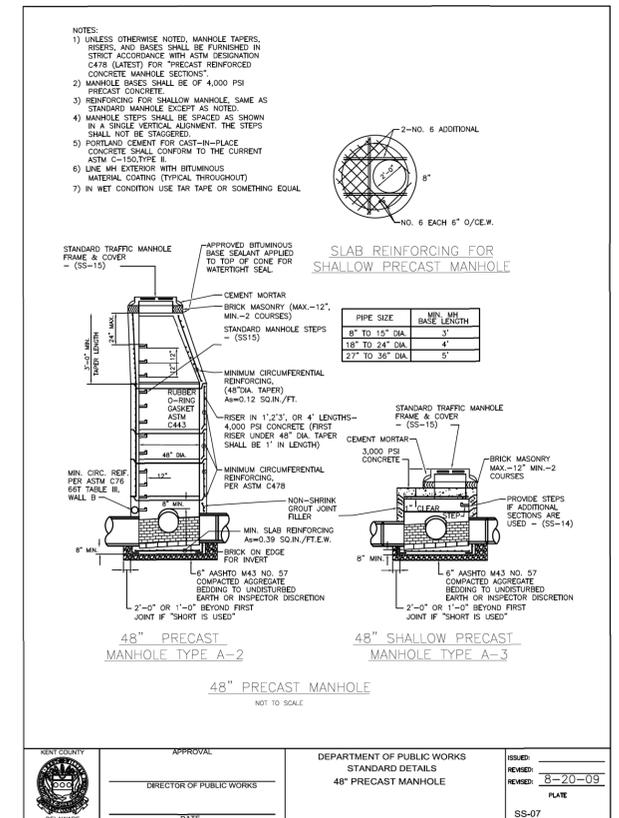
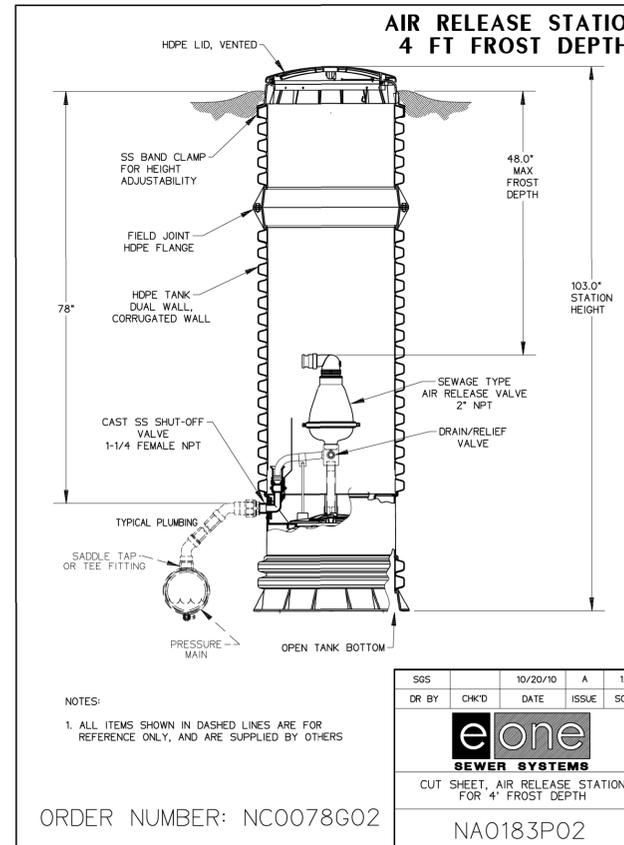
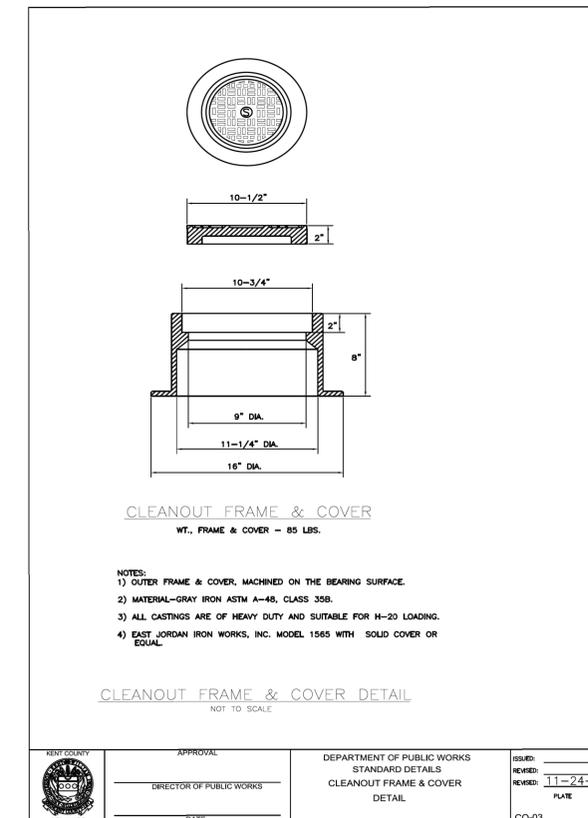
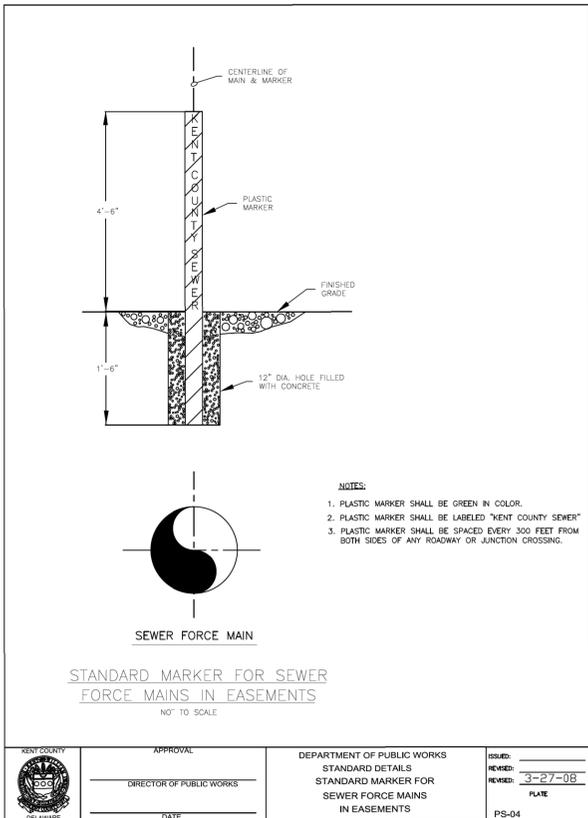
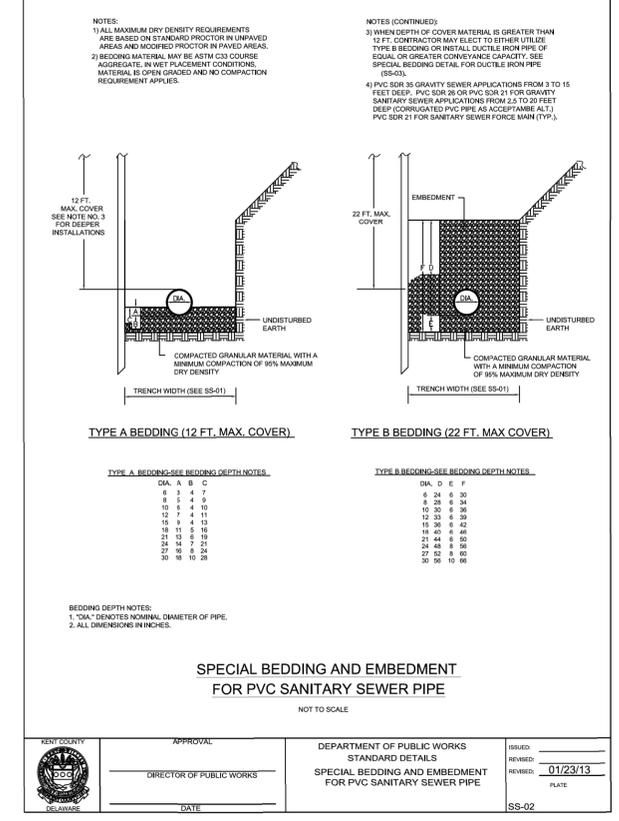
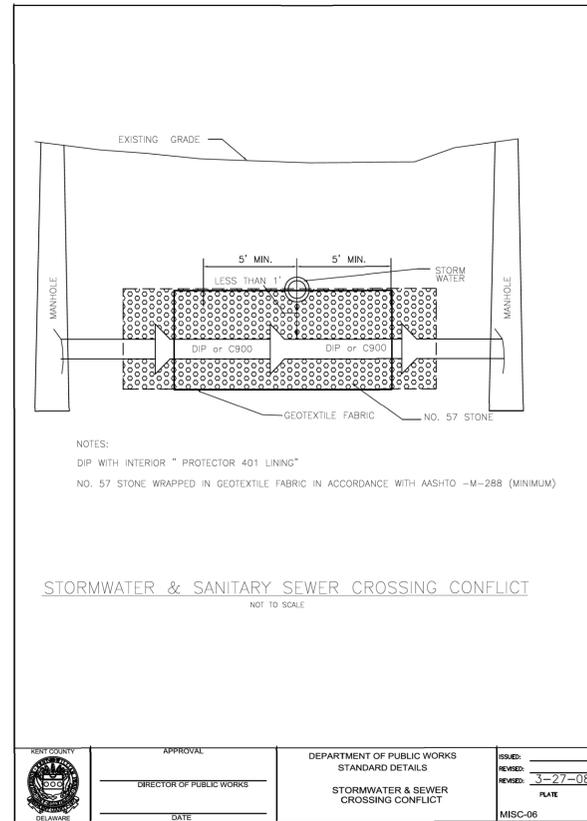
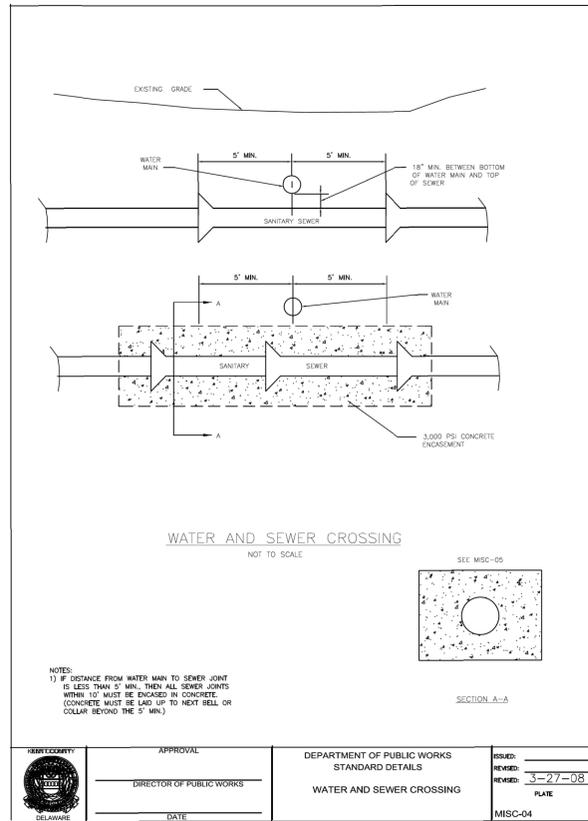
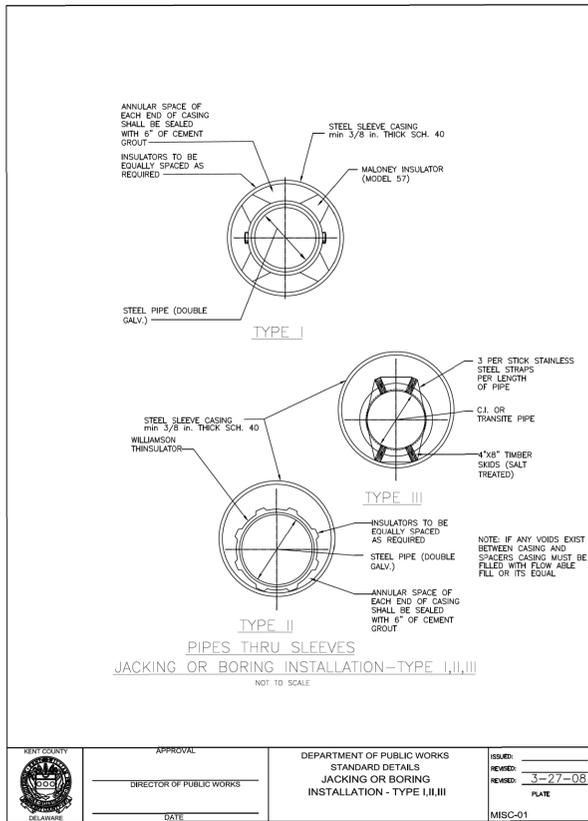
SANITARY PIPE SCHEDULE					
NO.	SIZE/TYPE	FT.	SLOPE	INV. EL.	DIS. EL.
SP-7	2" HDPE DR-11 FM	66	N/A	31.78	31.13
SP-8	2" HDPE DR-11 FM*	41	N/A	30.91	30.91
SP-9	2" HDPE DR-11 FM	597	N/A	31.08	42.48

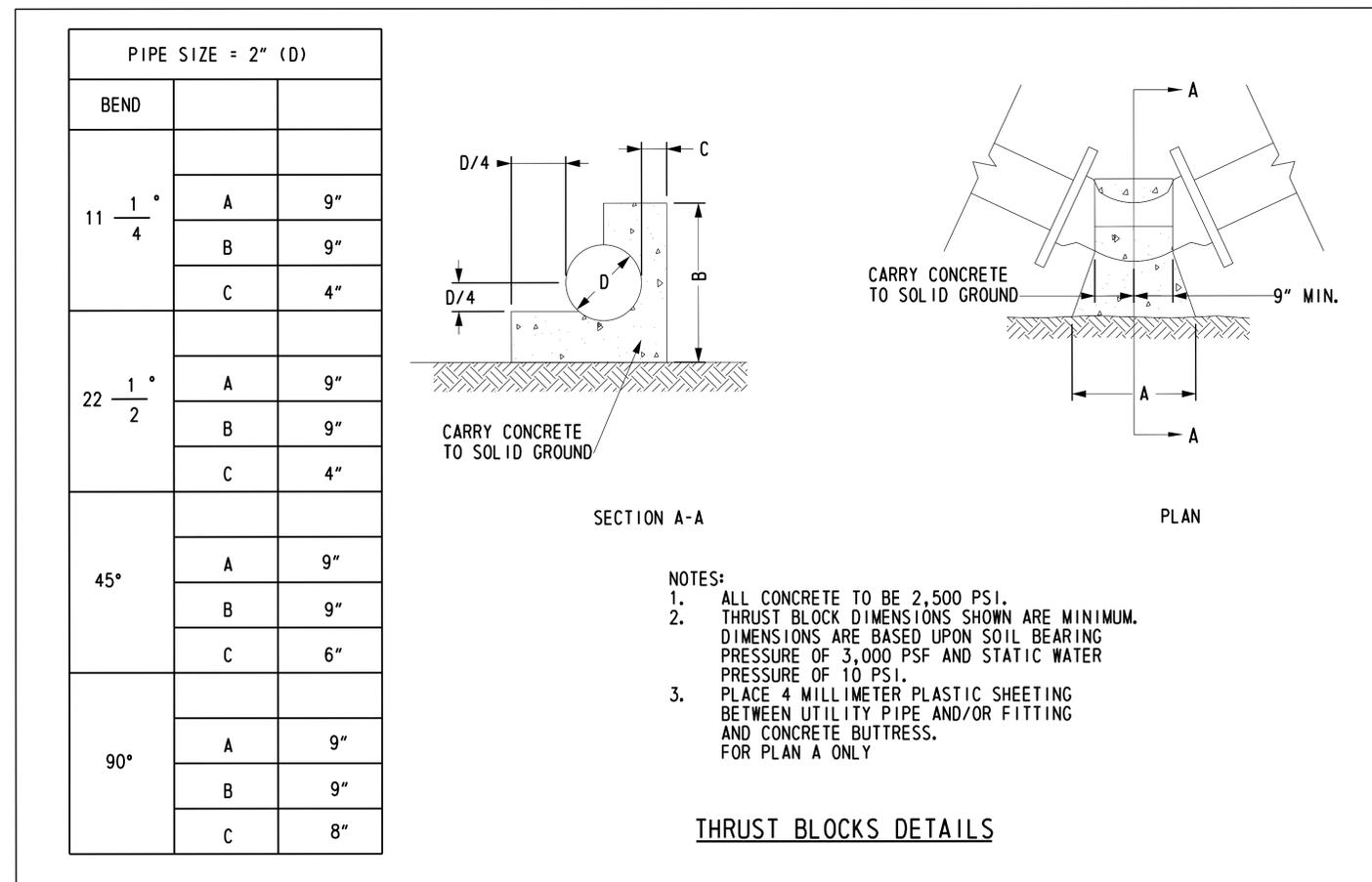
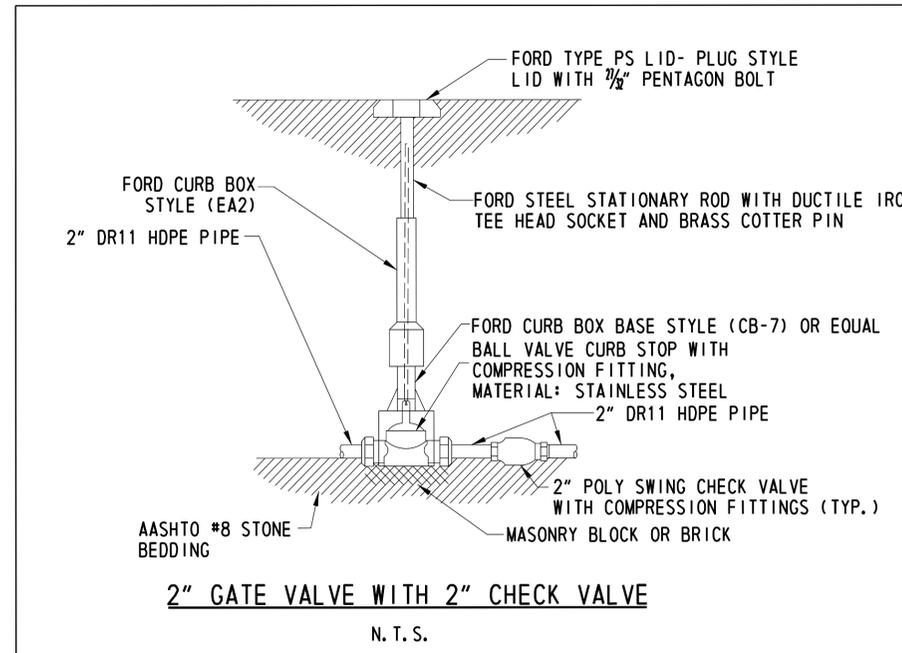
SANITARY ACCESSORIES SCHEDULE		
NO.	DESCRIPTION	QUANTITY
SA-7	HORIZONTAL 2" BEND, 45 DEGREES	4
SA-8	2" GATE VALVE W/ 2" CHECK VALVE	1

*JACK AND BORE WITH 41 LF OF 6" STEEL CASING PIPE









ADDENDUMS / REVISIONS

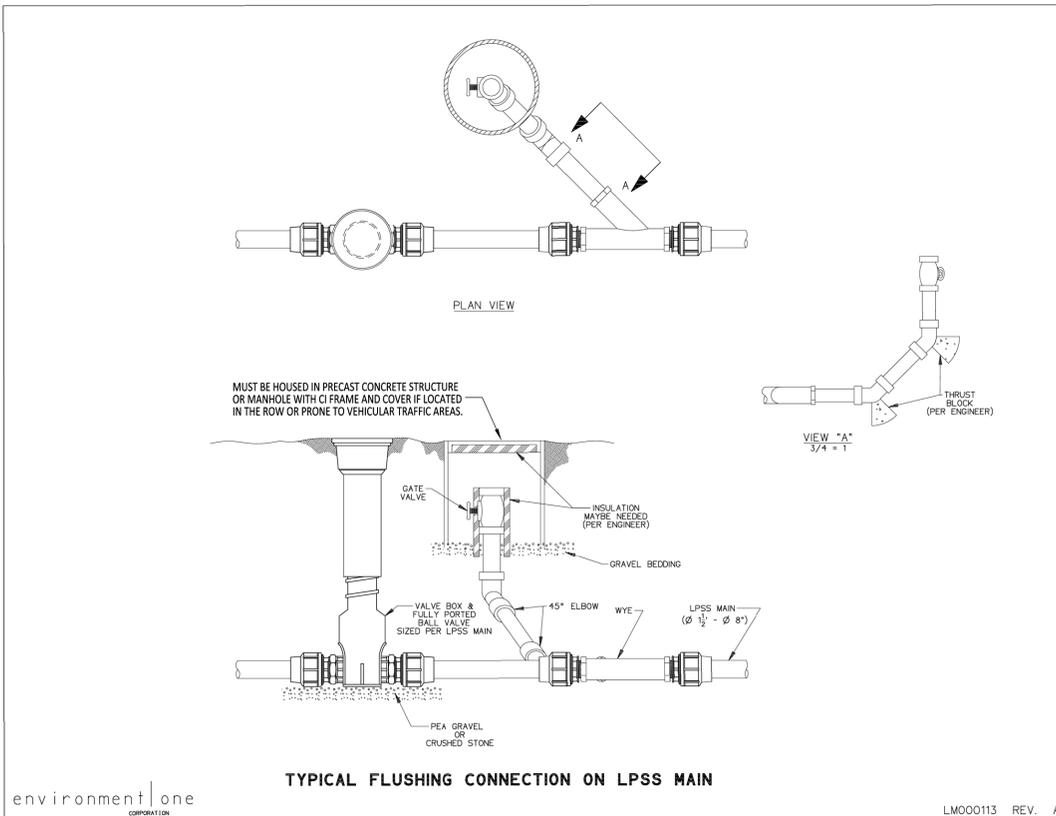
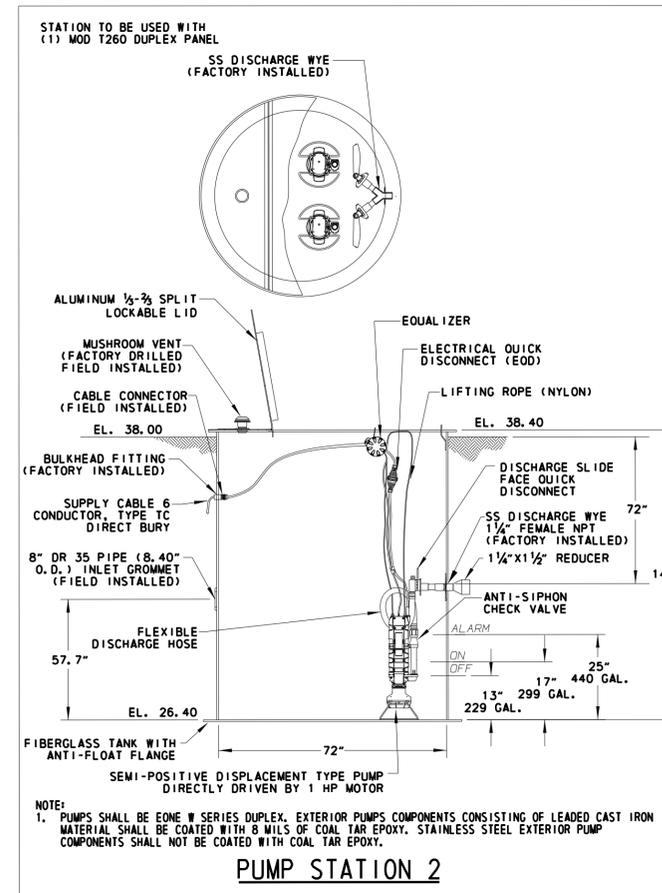
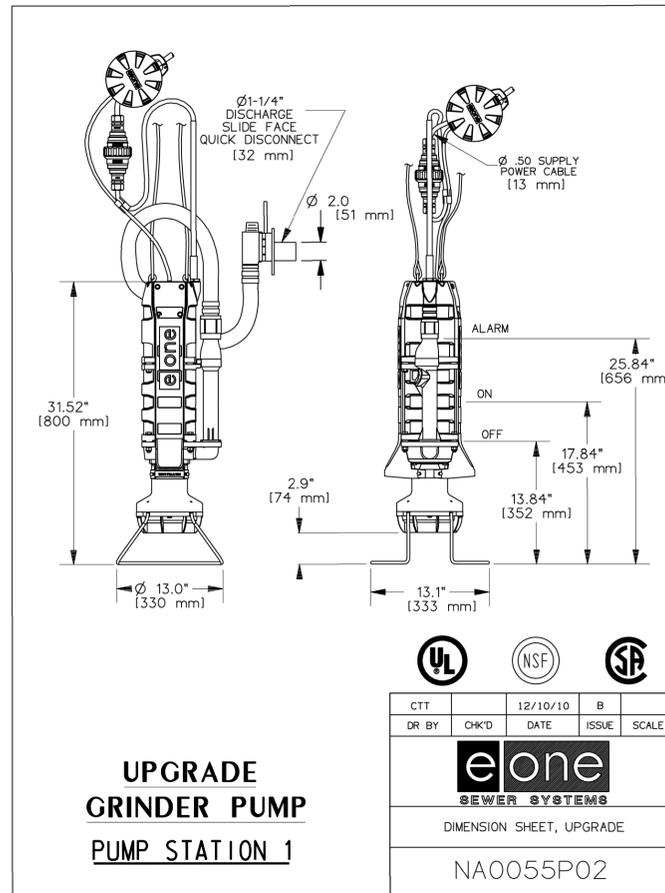
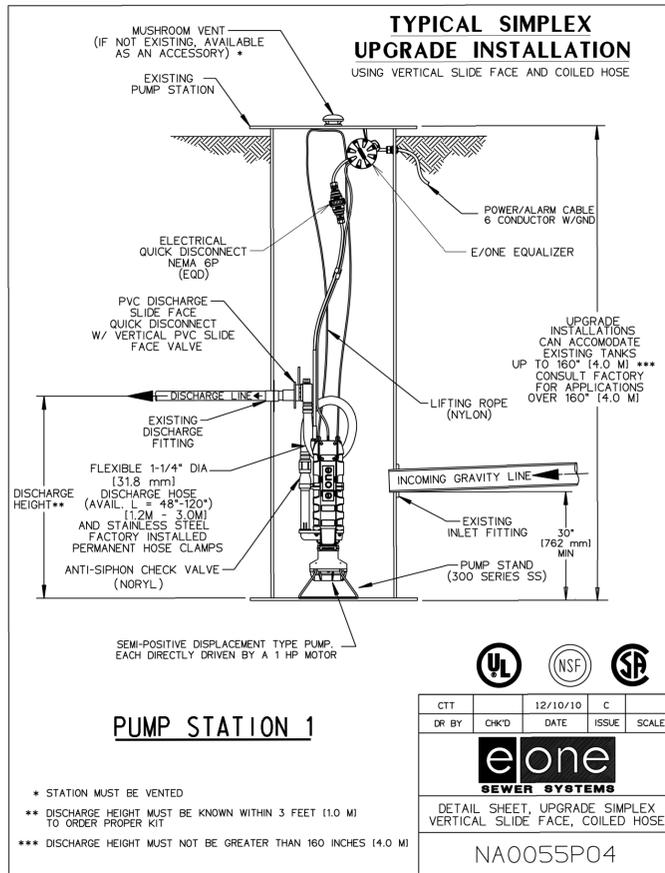
NOT TO SCALE

**MAGNOLIA YARD
SEWER IMPROVEMENTS**

CONTRACT	BRIDGE NO.	N/A
T201780106	DESIGNED BY:	AMB
COUNTY	CHECKED BY:	JS
KENT		

CONSTRUCTION DETAILS

DT-03
SHEET NO.
12
TOTAL SHTS.
17



SYMBOL LEGEND

ABBREVIATIONS

GENERAL NOTES (APPLICABLE TO ALL ELECTRICAL WORK)

HAZARDOUS LOCATION CLASSIFICATION NOTES
(APPLICABLE TO ALL ELECTRICAL WORK)

SYMBOL	DESCRIPTION	MOUNTING HEIGHT
	POWER TRANSFORMER, WITH GROUND	==
	SYSTEM GROUND OR EQUIPMENT GROUND	==
	CURRENT TRANSFORMER	==
	CIRCUIT BREAKER ATTRIBUTES: AF = FRAME SIZE AT = TRIP SIZE 3P = QTY. OF POLES L2 = MISC. INFORMATION LSGI = LONG, SHORT TIME, INSTANTANEOUS, GROUND FAULT TRIP FUNCTIONS	==
	MOTOR TERMINATION	==
	AUTOMATIC TRANSFER SWITCH	==
	JUNCTION BOX	==

A	AMPERES	KCMIL	THOUSAND CIRCULAR MILS
AFG	ABOVE FINISH GRADE	KVA	KILOVOLT AMPERES
AHJ	AUTHORITY HAVING JURISDICTION	KW	KILOWATTS
AIC	AMPERE INTERRUPTING CAPACITY	LFMC	LIQUID TIGHT FLEXIBLE METAL CONDUIT
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	MCB	MAIN CIRCUIT BREAKER
ATS	AUTOMATIC TRANSFER SWITCH	MISC	MISCELLANEOUS
AWG	AMERICAN WIRE GAUGE	MLO	MAIN LUGS ONLY
C	CONDUIT	NEC	NATIONAL ELECTRIC CODE
CB	CIRCUIT BREAKER	NEMA	NATIONAL ELECTRICAL MANUFACTURES ASSOCIATION
CPT	CONTROL POWER TRANSFORMER	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
CT	CURRENT TRANSFORMER	NO	NORMALLY OPEN OR NUMBER
CU	COPPER	NTS	NOT TO SCALE
DWG	DRAWING	P	POLE
ECB	ENCLOSED CIRCUIT BREAKER	PVC	POLYVINYL CHLORIDE
EM	EMERGENCY	RGS	RIGID GALVANIZED STEEL
EMT	ELECTRICAL METALLIC TUBING	RMC	RIGID METAL CONDUIT
EPO	EMERGENCY POWER OFF	RMS	ROOT MEAN SQUARED
EX	EXISTING	UG	UNDERGROUND OR UNDERGRADE
ETR	EXISTING TO REMAIN	UL	UNDERWRITERS LABORATORIES
FLA	FULL LOAD AMPERES	V	VOLT
FMC	FLEXIBLE METAL CONDUIT	VAC	VOLTS AC
FT	FEET	VT	VOLTAGE TRANSFORMER
GND.G	GROUND OR GROUNDING	W	WIRE
GRMC	GALVANIZED RIGID METALLIC CONDUIT	XFMR	TRANSFORMER
HP	HORSEPOWER	Δ	DELTA
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS	Y	WYE
		Ø	PHASE

- PROVIDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, COORDINATION, ADDITIONAL DESIGN AND ALL INCIDENTALS NECESSARY TO PROVIDE A COMPLETE AND OPERABLE SYSTEM AS DETAILED ON PLANS TO THE SATISFACTION OF THE ENGINEER AND THE OWNER. COORDINATE ALL WORK WITH THE ENGINEER BEFORE THE START OF WORK.
- PRIOR TO SUBMITTING BID, THE CONTRACTOR SHALL VISIT THE SITE AND BE THOROUGHLY FAMILIAR WITH THE EXISTING CONDITIONS AND PROPOSED CONSTRUCTION. CONTRACTOR SHALL INCLUDE IN THEIR BID ALL MATERIAL, LABOR AND ALL INCIDENTALS FOR A COMPLETE INSTALLATION WHETHER SPECIFICALLY CALLED FOR OR NOT. ALL ERRORS, DISCREPANCIES AND MISSED ITEMS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER DURING THE BIDDING PROCESS BY THE CONTRACTOR. THESE ITEMS SHALL BE INCLUDED IN THE BID PRICE. NO EXTRA COST WILL BE ALLOWED FOR ANY DISCREPANCY WHICH COULD HAVE BEEN NOTICED AT THE SITE VISIT BY THE CONTRACTOR.
- PERFORM WORK AS REQUIRED BY APPLICABLE CODES, REGULATIONS AND LAWS OF LOCAL, STATE AND FEDERAL GOVERNMENTS AND OTHER AUTHORITIES WITH LAWFUL JURISDICTION. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE. CONTRACTOR SHALL OBTAIN COMPLETE ELECTRICAL AND PLUMBING PERMIT.
- MATERIAL AND EQUIPMENT SHALL BE UL, NEMA, ANSI, IEEE, ADA & CBM APPROVED FOR INTENDED SERVICE. MATERIAL AND INSTALLATION SHALL MEET REQUIREMENTS OF NATIONAL AND STATE ELECTRICAL CODE.
- GIVE NOTICES, FILE PLANS, OBTAIN PERMITS AND LICENSES, PAY FEES, AND OBTAIN NECESSARY APPROVALS FROM AUTHORITIES THAT HAVE JURISDICTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE REQUIRED NOTICES, PERMITS, LICENSES, FEES, AND APPROVALS REQUIRED FOR THIS PROJECT. ALL FEES TO BE PAID BY THE CONTRACTOR.
- MAINTAIN RECORD DRAWINGS ON SITE. RECORD SET MUST BE COMPLETE AND CURRENT AND AVAILABLE FOR INSPECTION WHEN REQUISITIONS FOR PAYMENT ARE SUBMITTED.
- GUARANTEE WORK IN WRITING FOR TWO YEARS FROM DATE OF FINAL ACCEPTANCE. REPAIR OR REPLACE DEFECTIVE MATERIALS OR INSTALLATION AT NO COST TO OWNER DURING THE GUARANTEE PERIOD. CORRECT DAMAGE CAUSED IN MAKING NECESSARY REPAIRS AND REPLACEMENTS UNDER GUARANTEE AT NO COST TO OWNER. SUBMIT GUARANTEE TO OWNER BEFORE FINAL PAYMENT.
- DAMAGE TO FACILITIES AND EQUIPMENT SHALL BE REPLACED IMMEDIATELY BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
- THE LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE AND REQUIRE COORDINATION WITH ALL OTHER TRADES AND VERIFICATION OF EXISTING CONDITIONS. ROUTING OF CONDUIT IS DIAGRAMMATIC IN NATURE AND NOT INTENDED TO SHOW ALL REQUIRED OFFSETS AND DETAILS. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING ASSOCIATED EQUIPMENT AND CONDITIONS. COORDINATE THE LOCATION OF ALL EQUIPMENT WITH THE ENGINEER AND THE OWNER. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL OTHER TRADES' DRAWINGS AND SPECIFICATIONS AND COORDINATING WITH ALL OTHER TRADES DURING BIDDING AND CONSTRUCTION.
- FIELD VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO PERFORMING ANY DIGGING. ENGAGE A QUALIFIED ELECTRICAL TESTING COMPANY TO LOCATE ALL UNDERGROUND UTILITIES IN PROPOSED CONSTRUCTION AREAS BEFORE DIGGING. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THIS ORGANIZATION AND INCLUDING ALL ASSOCIATED COSTS IN THE BID PRICE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONTINUITY OF ALL POWER, CONTROL, AND COMMUNICATION FUNCTIONS TO ALL AREAS AFFECTED BY NEW CONSTRUCTION.
- CONTRACTOR SHALL NOT CUT ANY ACTIVE ELECTRICAL OR COMMUNICATIONS LINES DURING CONSTRUCTION. IF THE CONTRACTOR ACCIDENTALLY CUTS A LINE, THEN HE SHALL CONTACT THE ENGINEER IMMEDIATELY BEFORE PROCEEDING WITH FURTHER WORK.
- REPAIR AND PATCH ANY DISTURBED AREAS TO MATCH EXISTING CONDITIONS.
- IN ANY AREA REQUIRING THE PERFORMANCE OF ANY TRADE'S WORK, THIS CONTRACTOR SHALL CAREFULLY REMOVE AND STORE ANY OR ALL ELECTRICAL ITEMS IN PATH OF WORK, REINSTALLING AND RECONNECTING SAME AS REQUIRED, IN ACCORDANCE WITH THE PLANS AND/OR AS DIRECTED AFTER COMPLETION OF OTHER TRADE'S WORK IN THAT AREA.
- WHERE ELECTRICAL SYSTEMS PASS THROUGH RENOVATED AREAS TO SERVE OTHER PORTIONS OF THE PREMISES, SYSTEMS SHALL BE SUITABLY PROTECTED TO PREVENT DAMAGE OR RELOCATED AND THE SYSTEMS RESTORED TO NORMAL OPERATION. ANY OUTAGES IN SYSTEMS SHALL BE COORDINATED WITH OWNER.
- CONTRACTOR SHALL SUBMIT FOR APPROVAL, SHOP DRAWINGS FOR ALL EQUIPMENT AND MATERIALS USED ON THE PROJECT. SUBMITTALS SHALL BE APPROVED BY THE ENGINEER BEFORE PURCHASE OF MATERIALS.
- ALL ELECTRICAL CURRENT CARRYING PARTS SHALL BE COPPER FOR ALL EQUIPMENT.
- PERMANENTLY LABEL ALL NEW ELECTRICAL EQUIPMENT, INCLUDING BUT NOT LIMITED TO, DEVICE DESIGNATION AND SUPPLY CIRCUIT DESIGNATION. UPDATE PANEL DIRECTORIES TO INCLUDE NEW CIRCUIT INFORMATION RESULTING FROM THIS PROJECT.
- REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION THAT IS NOT SHOWN ON THE DRAWINGS.
- ALL POWER FEEDERS SHALL BE CONTINUOUS FROM SOURCE TO LOADS. SPLICES ON THE POWER FEEDERS ARE NOT ACCEPTABLE.
- CONTROL PANELS, VFD(S), DISCONNECTS, STARTERS, PANELBOARDS ETC. SHALL NOT BE USED AS PULL BOXES.

- THIS PROJECT CONTAINS AREAS THAT ARE CLASSIFIED AS A CLASS 1, DIVISION 1, GROUP D AND/OR CLASS 1, DIVISION 2, GROUP D HAZARDOUS LOCATION IN ACCORDANCE WITH NFPA 820 AND NFPA 70. HAZARDOUS CLASSIFIED AREAS ARE SHOWN ON THE DRAWINGS.
- ALL EQUIPMENT AND INSTALLATION METHODS USED IN AND AROUND HAZARDOUS CLASSIFIED AREAS SHALL BE RATED FOR USE IN A CLASS 1, DIVISION 1, GROUP D ENVIRONMENT OR A CLASS 1, DIVISION 2, GROUP D ENVIRONMENT IN ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS INCLUDING, BUT NOT LIMITED TO, NFPA 820 AND NFPA 70.
- PROVIDE HAZARDOUS SEAL-OFF FITTINGS FOR ALL CONDUITS AND CORDS PASSING FROM HAZARDOUS CLASSIFIED AREA INTO AN UNCLASSIFIED AREA. CONDUIT SEAL-OFF FITTINGS SHALL BE LOCATED PER NEC. SEAL-OFF FITTINGS SHALL NOT BE INSTALLED IN THE WET WELL.
- PROVIDE AIR/VAPOR/WATER TIGHT SEAL FOR ALL CONDUIT PENETRATIONS THROUGH WALLS AND FLOORS PASSING FROM HAZARDOUS CLASSIFIED AREA INTO UNCLASSIFIED AREA.
- THE USE OF INTRINSICALLY SAFE SYSTEMS SHALL BE PERMITTED FOR USE IN CLASSIFIED AREAS ONLY WHEN CLASSIFIED EQUIPMENT IS NOT AVAILABLE. IN ADDITION TO OTHER REQUIREMENTS, SUBMIT FOR APPROVAL, ALL SHOP DRAWINGS AND CONTROL DRAWINGS FOR THE COMPLETE INTRINSICALLY SAFE SYSTEM INCLUDING ALL EQUIPMENT FROM SOURCE TO DEVICE. PROVIDE REQUIRED ADDITIONAL DESIGN OF THESE SYSTEMS.

ELECTRICAL CONVENTIONS

SYMBOL	DESCRIPTION
WIRING	
	HOMERUN TO PANEL "LP2A", CIRCUITS #1,3,5 (VIA 20A-1P C/B'S), PROVIDE INSULATED GROUND CONDUCTOR IN ACCORDANCE WITH SPECIFICATIONS. NUMBER OF CIRCUITS INDICATED BY QUANTITY OF ARROW HEADS.
	HASH MARKS INDICATE QUANTITY OF #12 AWG COPPER CONDUCTORS IN CONDUIT. WHEN NO HASH MARKS ARE INDICATED, CONDUIT SHALL CONTAIN (2) #12 WIRES AND #12 GROUND WIRE. ASSUME 3/4" DIAMETER CONDUIT UNLESS NOTED OTHERWISE. EXAMPLE SHOWN AT LEFT INDICATES 2 HOT, 2 NEUTRAL (LONG LINES), AND 1 GROUND WIRES.
	EXPOSED OR CONCEALED CONDUIT AND/OR WIRING.
	BELOW GRADE CONDUIT AND/OR WIRING.
ANNOTATION	
	DETAIL REFERENCE "#" DENOTES DETAIL NUMBER "SHT" DENOTES SHEET NUMBER
	REVISION NUMBER
	SHEET KEYNOTE NUMBER
PRESENTATION	
	ELECTRICAL EQUIPMENT DESIGNATED BY SOLID HEAVY LINE WEIGHT INDICATES NEW WORK TO BE PROVIDED.
	ELECTRICAL EQUIPMENT DESIGNATED BY SOLID LIGHT LINE WEIGHT INDICATES EXISTING EQUIPMENT TO REMAIN, UNLESS OTHERWISE INDICATED.
	ELECTRICAL EQUIPMENT DESIGNATED BY DASHED HEAVY LINE WEIGHT REPRESENTS EXISTING EQUIPMENT TO BE REMOVED AND DISPOSED, UNLESS INDICATED TO BE REMOUNTED, RELOCATED, OR TURNED OVER TO OWNER.

ADDENDUMS / REVISIONS

MAGNOLIA YARD
SEWER IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201780106	DESIGNED BY:	JRM
COUNTY	CHECKED BY:	JL
KENT		

ELECTRICAL NOTES, LEGEND, AND
ABBREVIATIONS

E-001

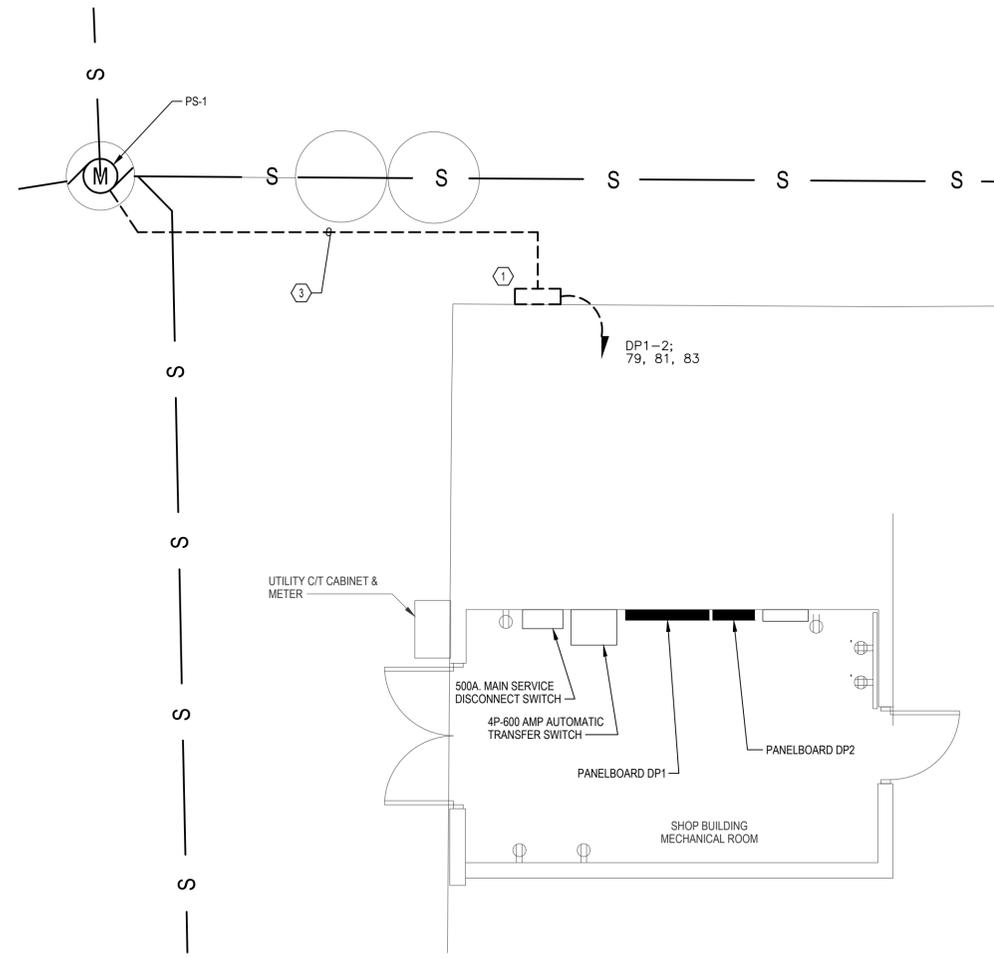
SHEET NO.	14
TOTAL SHTS.	17

GENERAL SHEET NOTES:

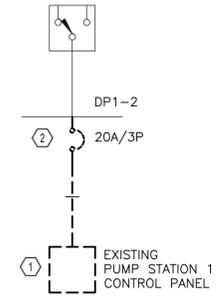
1. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAVE BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE ACTUAL EXISTING CONDITIONS IN DETAIL OR DIMENSION. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE ACTUAL EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING AND AWAIT DIRECTION BEFORE PROCEEDING WITH THE WORK.
2. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN HEAVY DASHED (- - -) SHALL BE REMOVED, AND ELECTRICAL ITEMS SHOWN LIGHT SOLID (———) SHALL BE EXISTING TO REMAIN.

SHEET KEYNOTES:

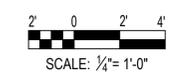
- ① REMOVE EXISTING PUMP CONTROLLER AND ASSOCIATED CONDUIT AND WIRE BACK TO SOURCE.
- ② REMOVE 20A/3P BREAKER IN PANEL DP1-2 SUPPLYING EXISTING PUMP STATION.
- ③ REMOVE WIRING FROM EXISTING PUMP CONTROLLER TO PUMP STATION PS-1. REMOVE EXISTING ABOVE GRADE CONDUIT.



1
E101 SCALE: 1/4" = 1'-0"
ELECTRICAL SITE PLAN - DEMO



2
E101 SCALE: NTS
ELECTRICAL SINGLE LINE - DEMO



E-101

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ADDENDUMS / REVISIONS	

CONTRACT	BRIDGE NO.	N/A
T201780106	DESIGNED BY:	JRM
COUNTY	CHECKED BY:	JL
KENT		

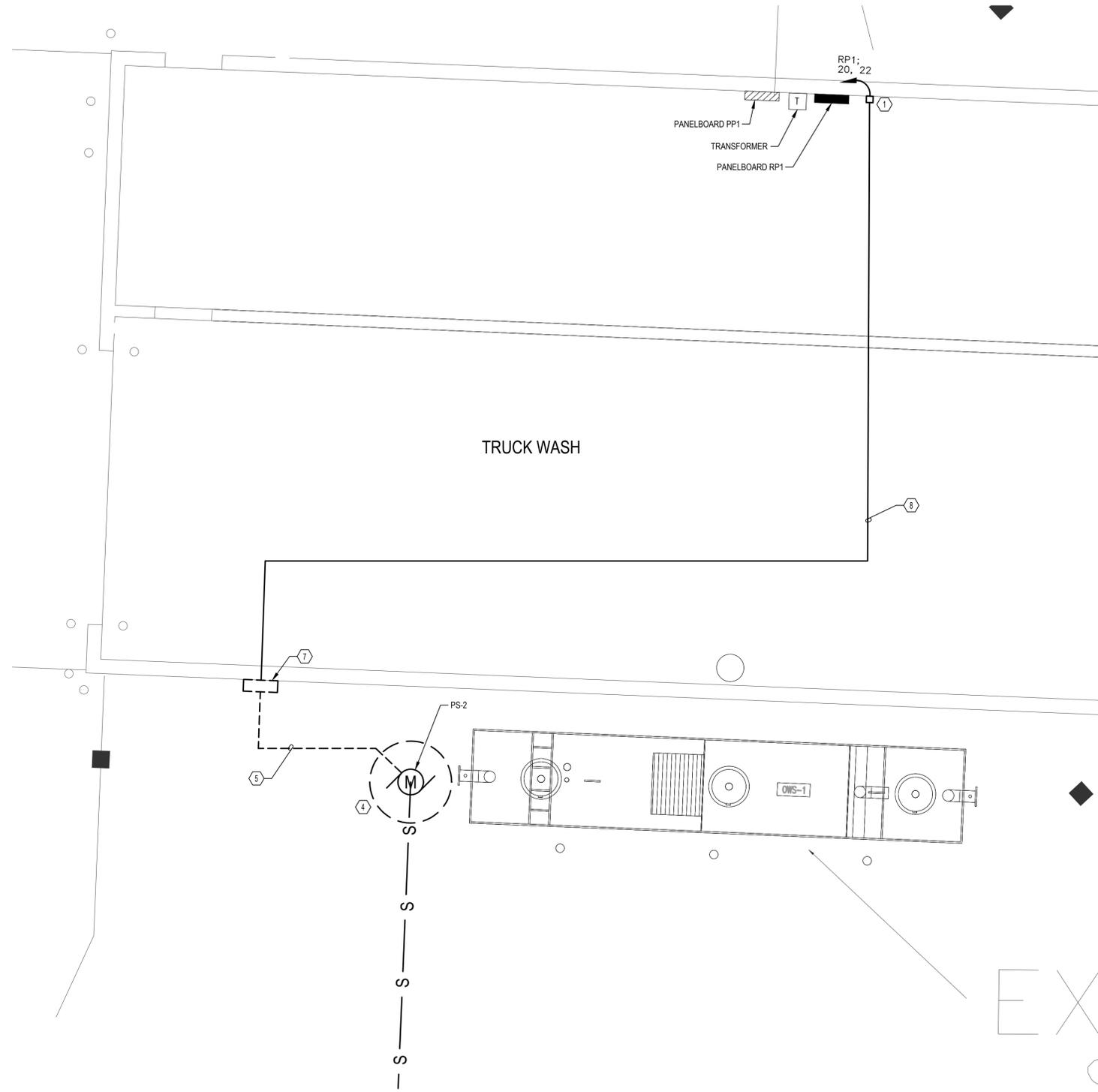
SHEET NO.	15
TOTAL SHTS.	17

GENERAL SHEET NOTES:

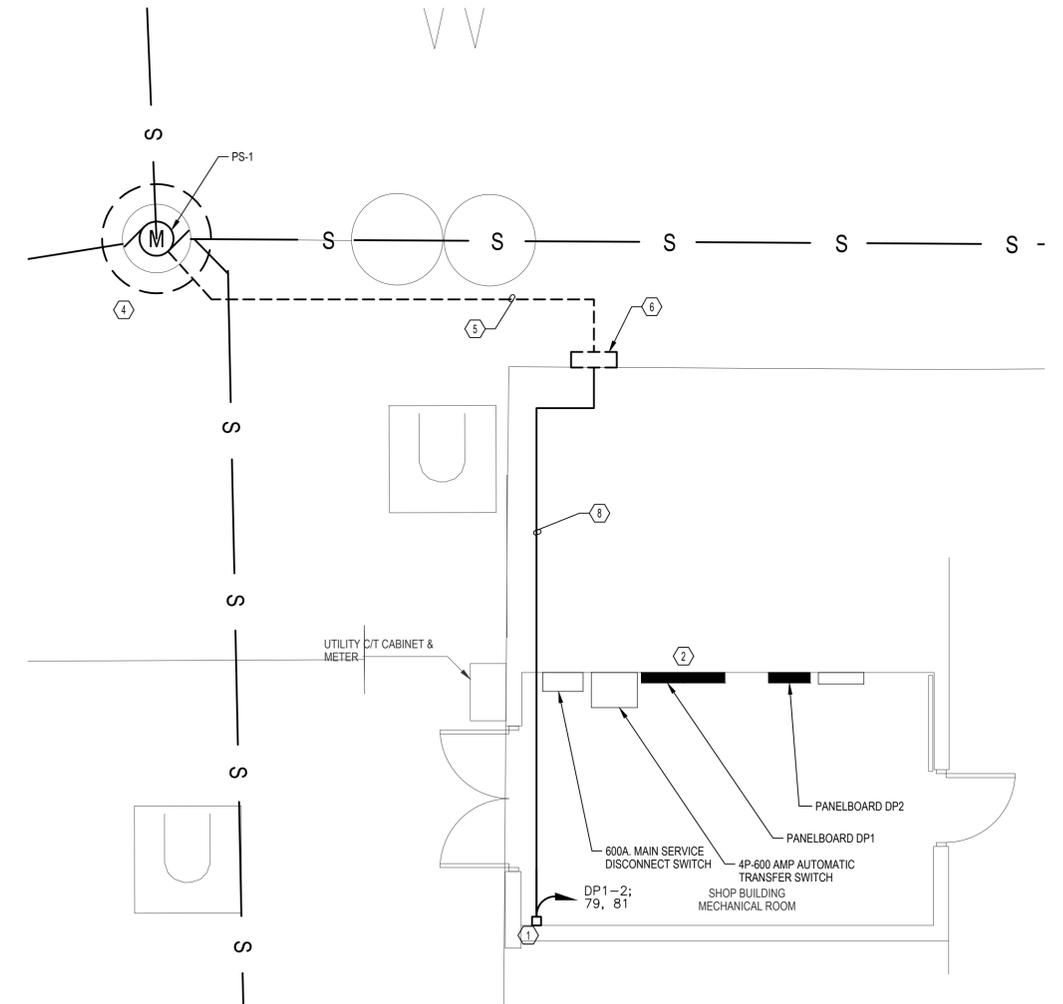
1. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE ACTUAL EXISTING CONDITIONS IN DETAIL OR DIMENSION. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE ACTUAL EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING AND AWAIT DIRECTION BEFORE PROCEEDING WITH THE WORK.
2. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN HEAVY SOLID (——) SHALL BE NEW, AND ELECTRICAL ITEMS SHOWN LIGHT SOLID (---) SHALL BE EXISTING TO REMAIN.

SHEET KEYNOTES:

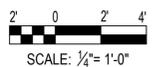
1. NEW WALL MOUNTED 208V/240V BUCK-BOOST TRANSFORMER FOR PUMP STATIONS.
2. REPLACE 20A/3P BREAKER FOR EXISTING PUMP STATION CONTROL WITH A 35A/2P BREAKER FOR NEW SIMPLEX PUMP STATION CONTROL. EXISTING PANEL IS MANUFACTURED BY SIEMENS. MATCH TYPE AND AIC RATING OF NEW BREAKER WITH EXISTING PANELBOARD. PROVIDE UPDATED TYPED PANEL SCHEDULE.
3. PROVIDE 35A/2P BREAKER FOR DUPLEX PUMP CONTROL IN AVAILABLE SPACE IN PANEL RP1. MATCH TYPE AND AIC RATING OF NEW BREAKER WITH EXISTING PANELBOARD. PROVIDE UPDATED TYPED PANEL SCHEDULE.
4. CLASSIFIED HAZARDOUS AREA BOUNDARY. AREA WHERE PUMP IS INSTALLED IS CLASSIFIED AS CLASS 1, DIVISION II.
5. PROVIDE 6#12 IN 3/4" C FOR PUMP POWER AND CONTROL.
6. PUMP STATION 1 SIMPLEX CONTROL PANEL, WITH INTERNAL CONTROL POWER TRANSFORMER AND INTEGRAL DISCONNECT SWITCH.
7. PUMP STATION 2 DUPLEX CONTROL PANEL, WITH INTERNAL CONTROL POWER TRANSFORMER AND INTEGRAL DISCONNECT SWITCH.
8. PROVIDE 3#10 + 1#10G IN 1" C.



1 ELECTRICAL - PUMP STATION 2
E102 SCALE: 1/4" = 1'-0"



2 ELECTRICAL - PUMP STATION 1
E102 SCALE: 1/4" = 1'-0"



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ADDENDUMS / REVISIONS

CONTRACT	BRIDGE NO.	N/A
T201780106	DESIGNED BY:	JRM
COUNTY	CHECKED BY:	JL
KENT		

EXISTING PANEL
PANEL: DP1 **SECTION 2** AMP: 400 VOLT: 120/208
PHASE: 3 4 WIRE + GND
MOUNTING: SURFACE MAIN: MLO AIC: 65K AMPS RMS SYM

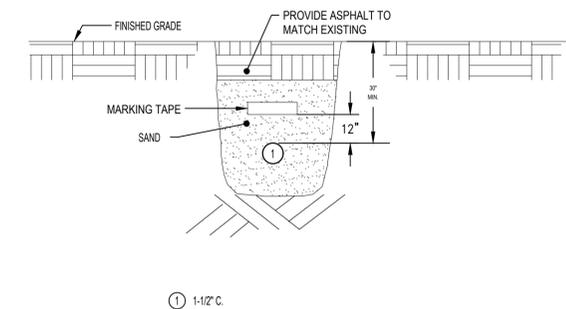
LIGHT TEXT - EXISTING TO REMAIN; BOLD TEXT - PROVIDE or NEW LOAD INDICATED

Branch Circuit Load Description	KVA Load			Trip Poles	Circuit Wiring				Ckt. No.	Phase	Ckt. No.	Trip Poles	KVA Load			Branch Circuit Load Description				
	A	B	C		NO	Size	GND	C					A	B	C					
PT AC NO. 1	0.00			35/2	-	-	-	43	A	44	-	40/3	0.00			UH 6 AND UH 10				
VEHICLE EXHAUST CONTROL PANEL		0.00		20/1	-	-	-	45	B	46	-	-		0.00		-				
VEHICLE EXHAUST	0.00			30/3	-	-	-	47	C	48	-	-		0.00	0.00	-				
HOSE REEL SYSTEM		0.00		-	-	-	-	49	A	50	-	-	40/3	0.00		UH 8 AND UH 9				
SPARE	0.00			20/1	-	-	-	51	B	52	-	-		0.00		-				
MOTORIZED DAMPER		0.00		20/1	-	-	-	53	C	54	-	-		0.00	0.00	-				
MOTORIZED DAMPER			0.00	20/1	-	-	-	55	A	56	-	-	20/3	0.00		UH 7				
FAN 1	0.00			30/3	-	-	-	57	B	58	-	-		0.00		-				
FAN 2	0.00		0.00	-	-	-	-	59	C	60	-	-		0.00	0.00	-				
AIR COMPRESSOR	0.00			60/3	-	-	-	61	A	62	-	-	20/1	0.00		EWI-1				
PUMP STATION 1	1.50			35/2	-	-	-	63	B	64	-	-	20/1	0.00	0.00	WASH SNK CONTROL				
SPACE		0.00		-	-	-	-	65	C	66	-	-	20/1	0.00	0.00	UH 2 AND UH 4				
SPACE			0.00	-	-	-	-	67	A	68	-	-	20/1	0.00	0.00	UH 1, UH 3 AND UH 5				
SPACE				-	-	-	-	69	B	70	-	-	20/1	0.00	0.00	FAN 3				
SPACE			0.00	-	-	-	-	71	C	72	-	-	20/1	0.00	0.00	FAN 4				
SPACE				-	-	-	-	73	A	74	-	-	20/1	0.00	0.00	FAN 5				
SPACE				-	-	-	-	75	B	76	-	-	20/1	0.00	0.00	FAN 6				
SPACE				-	-	-	-	77	C	78	-	-	20/1	0.00	0.00	DWH 1				
SPACE				-	-	-	-	79	A	80	-	-	30/3	0.00		SPD				
SPACE		1.50		-	-	-	-	81	B	82	-	-		0.00		-				
SPACE	0.00		0.00	-	-	-	-	83	C	84	-	-		0.00	0.00	SPACE				
SPACE				-	-	-	-	85	A	86	-	-		0.00	0.00	SPACE				
SPACE				-	-	-	-	87	B	88	-	-		0.00	0.00	SPACE				
SPACE	0.00			-	-	-	-	89	C	90	-	-		0.00	0.00	SPACE				
SPACE				-	-	-	-	91	A	92	-	-		0.00	0.00	SPACE				
SPACE				-	-	-	-	93	B	94	-	-		0.00	0.00	SPACE				
SPACE				-	-	-	-	95	C	96	-	-		0.00	0.00	SPACE				
SPACE				-	-	-	-	97	A	98	-	-		0.00	0.00	SPACE				
SPACE				-	-	-	-	99	B	100	-	-		0.00	0.00	SPACE				
SPACE				-	-	-	-	101	C	102	-	-		0.00	0.00	SPACE				
SPACE				-	-	-	-	103	A	104	-	-		0.00	0.00	SPACE				
SPACE				-	-	-	-	105	B	106	-	-		0.00	0.00	SPACE				
SPACE				-	-	-	-	107	C	108	-	-		0.00	0.00	SPACE				
<< PHASE SUB-TOTALS >>												1.50	1.50	0.00	0.00	0.00	0.00	0.00	0.00	MECH EQUIP. CIRCUIT BREAKERS SHALL BE HACR RATED.

PHASE A: 1.50 kVA
PHASE B: 1.50 kVA
PHASE C: 0.00 kVA

0.00 kVA CONNECTED LOAD (SECTION 1)
0.00 kVA CONNECTED LOAD (SECTION 2)
0.00 kVA TOTAL CONNECTED LOAD
0.00 kVA TOTAL DEMAND LOAD

PROVIDE THE FOLLOWING:



1 1-1/2" C.
DIRECT BURIED CONDUIT UNDER ASPHALT DETAIL
SCALE: NTS

EXISTING PANEL
PANEL: RP1 AMP: 125 VOLT: 120/208
PHASE: 3 4 WIRE + GND
MOUNTING: SURFACE MAIN: 100 MCB AIC: 10K AMPS RMS SYM

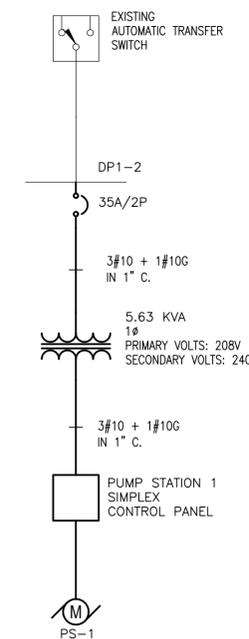
LIGHT TEXT - EXISTING TO REMAIN; BOLD TEXT - PROVIDE or NEW LOAD INDICATED

Branch Circuit Load Description	KVA Load			Trip Poles	Ckt. No.	Phase	Ckt. No.	Trip Poles	KVA Load			Branch Circuit Load Description			
	A	B	C						A	B	C				
AIR COMPRESSOR	1.32			15/1	1	A	2	20/1	1.18			OVERHEAD DOOR (EQUIPMENT RM)			
WATER SOFTENER		0.00		15/1	3	B	4	20/1		0.90		GENERAL RECEIPTS (WASH BAY)			
WATER HEATER			0.00	20/1	5	C	6	20/1			0.90	GENERAL RECEIPTS (WASH BAY)			
UH-1		0.24		15/1	7	A	8	20/1	0.18			RECEPT. FOR NETWORK SWITCH			
UH-2			0.24	15/1	9	B	10	20/1		0.18		RECEPT. FOR NETWORK SWITCH			
EF-2			0.53	15/1	11	C	12	20/1			0.18	RECEPT. FOR NETWORK SWITCH			
OIL/WATER SEPARATOR CONTROL PANEL	0.50			20/1	13	A	14	20/1	0.18			RECEPT. FOR NETWORK SWITCH			
IRH-1		0.22		15/1	15	B	16	20/1		0.50		WELL PUMP CONTROL PANEL			
IRH-3			0.22	15/1	17	C	18	20/1			0.50	TRANSFER PUMP CONTROL PANEL			
IRH-2	0.22			15/1	19	A	20	35/2	2.50			PUMP STATION 2			
IRH-4		0.22		15/1	21	B	22	-		2.50		-			
EF-1			0.42	15/3	23	C	24	20/1			0.00	SPARE			
**	0.42			**	25	A	26	20/1	0.00			SPARE			
**		0.42		**	27	B	28	20/1		0.00		SPARE			
EXTERIOR LIGHTING			0.07	20/1	29	C	30	20/1			0.00	SPARE			
EXTERIOR LIGHTING	0.07			20/1	31	A	32	20/1	0.00			SPARE			
EQUIPMENT ROOM LIGHTING		0.73		20/1	33	B	34	20/1		0.00		SPARE			
WASH BAY LIGHTING			1.40	20/1	35	C	36	20/1			0.00	SPARE			
WASH BAY LIGHTING	1.40			20/1	37	A	38	20/1	0.00			SPARE			
AUTOMATIC TRAP PRIMER		0.18		20/1	39	B	40	20/1		0.00		SPARE			
GENERAL RECEIPTS (EQUIP RM)			1.08	20/1	41	C	42	20/1			0.00	SPARE			
<< PHASE SUB-TOTALS >>									4.16	2.00	3.71	4.04	4.08	1.58	MECH EQUIPMENT CIRCUIT BRKRS SHALL BE HACR RATED.

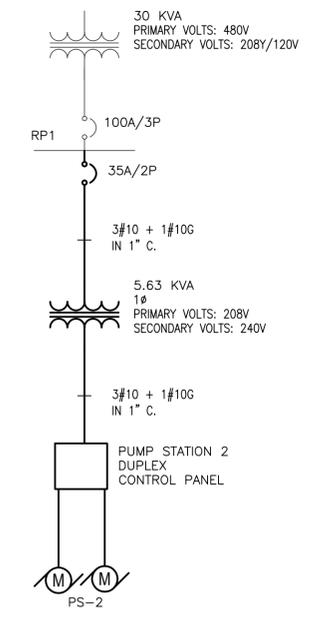
PHASE A: 8.20 kVA
PHASE B: 6.08 kVA
PHASE C: 5.29 kVA

19.57 kVA TOTAL CONNECTED LOAD
13.92 kVA TOTAL DEMAND LOAD

PROVIDE THE FOLLOWING:



2 ELECTRICAL SINGLE LINE - NEW - PUMP STATION 1
SCALE: NTS



3 ELECTRICAL SINGLE LINE - NEW - PUMP STATION 2
SCALE: NTS

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