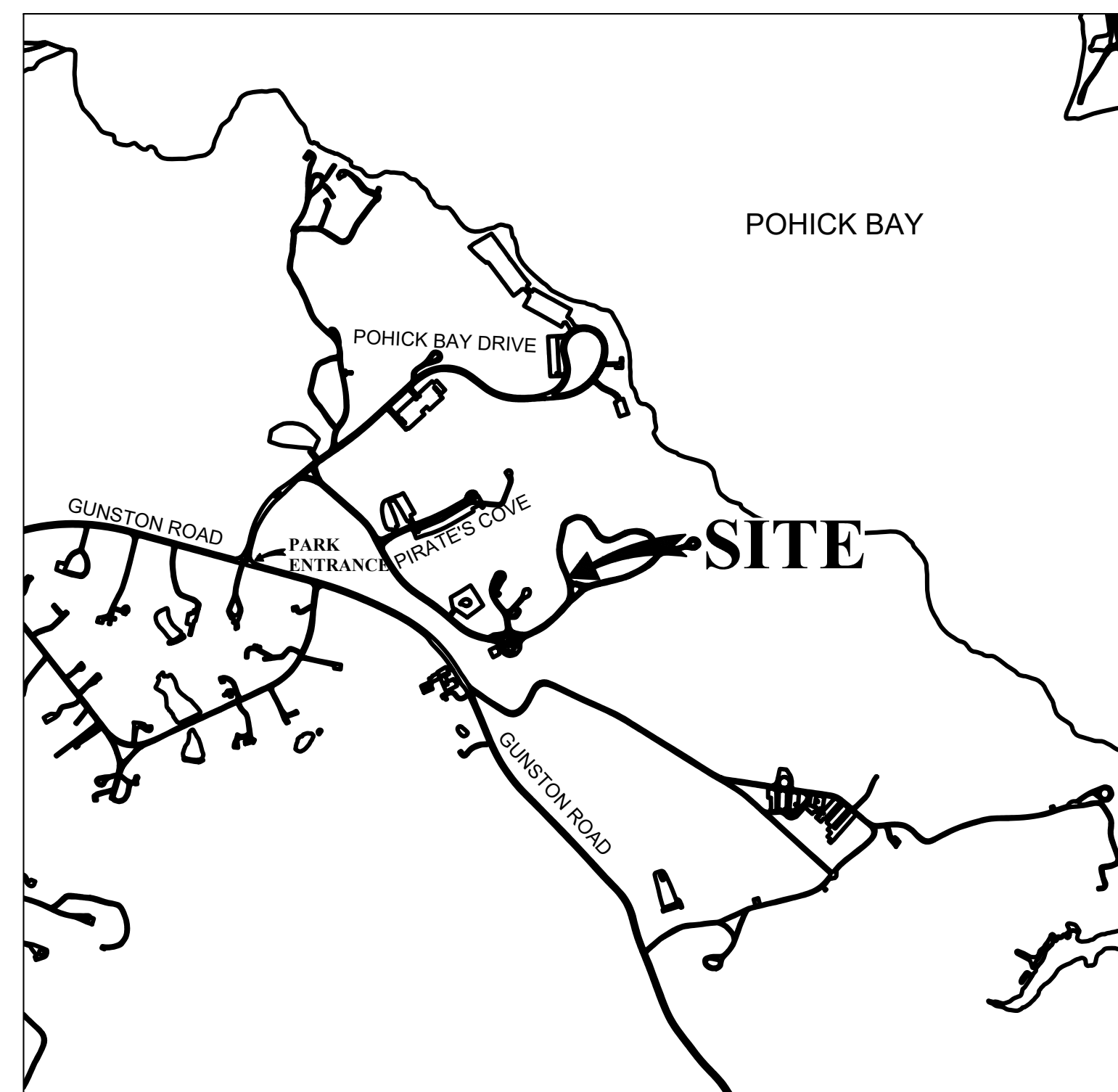


CIVIL ENGINEERING PLAN

POHICK BAY REGIONAL PARK CAMPGROUND

WATERLINE IMPROVEMENTS

6501 POHICK BAY DR
LORTON, VIRGINIA 22079



VICINITY MAP
SCALE: 1"= 1000'

OWNER/DEVELOPER

NORTHERN VIRGINIA REGIONAL
PARK AUTHORITY
5400 OX ROAD,
FAIRFAX STATION, VA 22039
CONTACT: TONY CANONICO

CIVIL ENGINEER

BOWMAN
13461 SUNRISE VALLEY DRIVE
SUITE 500
HERNDON, VIRGINIA 20171
CONTACT: ETHAN PACIFICO, P.E.

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NOTES:

- CONTRACTOR TO COORDINATE LOCATING OF EX. U.G. UTILITIES AND TEST PITS.
- CONTRACTOR IS RESPONSIBLE FOR MOBILIZATION AND PHASING OF PROJECT SUCH THAT NO MORE THAN 2,500 SF OR 250LF OF TRENCHING IS DISTURBED AT ANY POINT IN TIME. PREVIOUS PHASE MUST BE BACKFILLED AND STABILIZED PRIOR TO LAND DISTURBANCE IN SUBSEQUENT PHASE.

PROJECT DESCRIPTION:

THIS PLAN INVOLVES THE REPLACEMENT OF PORTIONS OF THE EXISTING WATERLINE AND EXTENSION AND CONNECTION OF A NEW 3" HDPE WATERLINE WITH 1" SERVICE CONNECTIONS AND HYDRANTS AT CAMPSITES.

DATUM NOTES:

HORIZONTAL DATUM: THE SITE SHOWN HEREON IS REFERENCED TO THE VIRGINIA COORDINATE SYSTEM OF NAD83 (2011) AS COMPUTED FROM A FIELD RUN BOUNDARY AND HORIZONTAL CONTROL SURVEY.

VERTICAL DATUM: THE SITE SHOWN HEREON IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1929 PER GPS OBSERVATIONS AND A CORPSCON CONVERSION.

SURVEY INFORMATION:

TOPOGRAPHY SURVEY IS PER FIELD SURVEY BY BOWMAN CONSULTING IN JANUARY 2024.

TOPOGRAPHIC SURVEY CERTIFICATION

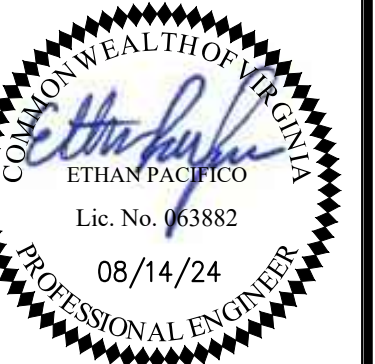
THIS TOPOGRAPHIC SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF, BRENT EVANS, LS FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION; THAT ORIGINAL DATA WAS OBTAINED ON JANUARY 12, 2024; AND THAT THIS DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.

Bowman

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COVER SHEET
POHICK BAY REGIONAL PARK
CAMPGROUND WATERLINE IMPROVEMENTS
MOUNT VERNON DISTRICT
FAIRFAX COUNTY, VA

PROJECT NO
COUNTY PROJECT NUMBER



PLAN STATUS	
02/23/24	DRAFT SUBMISSION
05/17/24	DRAFT SUBMISSION
08/14/24	FINAL SUBMISSION

DATE	DESCRIPTION
EP	KM MT
DESIGN	DRAWN CHKD
SCALE	H: AS SHOWN
	V:

JOB No.
DATE : FEBRUARY, 2024
FILE No. 140356-01-001

GENERAL NOTES

THESE GENERAL NOTES SHALL BE USED WHERE THEY ARE APPLICABLE TO THE PROJECT PLANS)

CONSTRUCTION NOTES

- THE CONTRACTOR SHALL VISIT THE SITE AND SHALL VERIFY EXISTING CONDITIONS PRIOR TO SUBMITTING A BID FOR THE CONSTRUCTION OF THE PROJECT.
- THE CONTRACTOR SHALL CAREFULLY EXAMINE THE SITE AND MAKE ALL INSPECTIONS NECESSARY IN ORDER TO DETERMINE THE FULL EXTENT OF THE WORK REQUIRED TO MAKE THE PROPOSED WORK CONFORM TO THE DRAWINGS AND SPECIFICATIONS. THE CONTRACTOR SHALL SATISFY HIMSELF AS TO THE NATURE AND LOCATION OF THE WORK, CONDITIONS, AND CONFIRMATION AND CONDITION OF EXISTING GROUND SURFACE AND THE CHARACTER OF THE EQUIPMENT AND FACILITIES NEEDED PRIOR TO AND DURING EXECUTION OF THE WORK. THE CONTRACTOR SHALL SATISFY HIMSELF AS TO THE CHARACTER, QUANTITY AND QUALITY OF SURFACE AND SUBSURFACE MATERIALS OR OBSTACLES TO BE ENCOUNTERED. ANY INACCURACIES OR DISCREPANCIES BETWEEN THE DRAWINGS AND SPECIFICATIONS MUST BE BROUGHT TO THE OWNER'S ATTENTION IN ORDER TO CLARIFY THE EXACT NATURE OF THE WORK TO BE PERFORMED PRIOR TO THE COMMENCEMENT OF ANY WORK.
- THE INSTALLATION OF TRENCH BACKFILL AND THE RESTORATION OF DISTURBED AREAS SHALL BE COMPACTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS OR AS DIRECTED BY THE OWNER OR OWNER REPRESENTATIVES. ALL COMPACTION SHALL BE AT ±2% OF THE OPTIMUM MOISTURE CONTENT.
- ALL SUBGRADE, SUBBASE, BASE AND SHOULDER MATERIAL SHALL BE PLACED AND COMPACTED TO THE DENSITY SPECIFIED IN THE PROJECT SPECIFICATIONS OR AS DIRECTED BY THE OWNER OR OWNER REPRESENTATIVES. ALL COMPACTION SHALL BE AT ±2% OF THE OPTIMUM MOISTURE CONTENT.
- WHERE EXISTING NATURAL DRAINAGE DITCHES OR STREAM BANKS ARE DISTURBED DURING CONSTRUCTION THE CONTRACTOR SHALL RESTORE THIS AREA TO ORIGINAL ALIGNMENT, GRADE AND INVERT.
- THE CONTRACTOR SHALL RESTORE ALL DRIVEWAYS/ROADWAYS DISTURBED DURING CONSTRUCTION. RESTORATION SHALL CONSIST OF THE FOLLOWING:

GRAVEL DRIVEWAY/ROADWAYS:

- PROVIDE MINIMUM 6" COMPACTED VDOT 21A

ASPHALT DRIVEWAY/ROADWAYS:

- 6" COMPACTED VDOT 21A SUBBASE
- 2" VDOT IM 19.0 BASE
- 1 1/2" VDOT SM 9.5A SURFACE

- THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING ROADS, TRAILS, BRIDGES, UTILITIES AND OTHER PARK FACILITIES WHICH OCCURS AS A RESULT OF THE PROJECT CONSTRUCTION.
- ALL STREET CUT AND PATCH WORK IN PUBLIC RIGHT-OF-WAY REQUIRED FOR UTILITIES INSTALLATION SHALL BE PERFORMED IN STRICT ACCORDANCE WITH COUNTY AND/OR PARK STANDARDS AND SPECIFICATIONS.
- NO BLASTING WILL BE ALLOWED WITHIN THIS PROJECT.
- THE APPROVAL OF THIS PLAN SHALL IN NO WAY GRANT PERMISSION BY THE OWNER FOR THE CONTRACTOR TO TRESPASS ON OFF-SITE PROPERTIES.
- THE APPROVAL OF THESE PLANS SHALL IN NO WAY RELIEVE THE CONTRACTOR OF COMPLYING WITH OTHER APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS.
- ALL UTILITIES NOTED TO BE RELOCATED OR REMOVED SHALL BE AT THE CONTRACTORS EXPENSE, TO INCLUDE ALL POLES AND STRUCTURES AS REQUIRED. ALL POLES REQUIRED TO BE RELOCATED MUST BE MOVED PRIOR TO CONSTRUCTION.
- THESE PLANS MAKE NO REPRESENTATION AS TO THE SUBSURFACE CONDITIONS AND THE PRESENCE OF SUBSURFACE WATER OR THE NEED FOR SUBSURFACE DRAINAGE FACILITIES.
- THE CONTRACTOR IS RESPONSIBLE FOR ARRANGING ALL NECESSARY INSPECTIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A SAFE CONSTRUCTION SITE AND COMPLYING WITH ALL OSHA REGULATIONS.
- EMERGENCY VEHICLE ACCESS SHALL BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
- ALL FINISHED GRADING, SEEDING, SODDING OR PAVING SHALL BE DONE IN SUCH A MANNER TO PRECLUDE THE PONDING OF WATER.
- THE ENGINEER SHALL NOT HAVE CONTROL OVER OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK SHOWN ON THESE PLANS. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S SCHEDULES OR FAILURE TO CARRY OUT THE WORK. THE ENGINEER IS NOT RESPONSIBLE FOR ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR THEIR AGENTS OR EMPLOYEES, OR OF ANY OTHER PERSONS PERFORMING PORTIONS OF THE WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING THE SITE FROM UNAUTHORIZED ACCESS AT ALL TIMES DURING CONSTRUCTION.

TRAFFIC MAINTENANCE

- ALL TRAFFIC MAINTENANCE AS REQUIRED TO ALLOW CONTINUED OPERATIONS OF PARK FACILITIES AND PUBLIC ROADWAYS SHALL CONFORM WITH THE VIRGINIA WORK AREA PROTECTION MANUAL, CURRENT EDITION.

UTILITIES

PRIMARY UTILITY COMPANIES

AMERICAN TELEPHONE & TELEGRAPH CO.	811
COLUMBIA GAS OF VIRGINIA	811
COLUMBIA GAS TRANSMISSION CORP.	811
COLONIAL PIPELINE CO.	811
COX COMMUNICATIONS	811
DOMINION VIRGINIA POWER	811
FAIRFAX COUNTY WATER AUTHORITY	811
FAIRFAX CO. WASTEWATER COLLECTION DIVISION	811
FAIRFAX CITY WATER SERVICE	811
FAIRFAX COUNTY PUBLIC SAFETY	811
FALLS CHURCH PUBLIC UTILITIES / WATER	811
MCI INTERNATIONAL	811
MCI WORLD	811
METROPOLITAN FIBER SYSTEMS	811
NORTHERN VIRGINIA ELEC. CO-OP	811
TRANSCO GAS PIPELINE CO.	811
TOWN OF HERNDON PUBLIC WORKS	811
TOWN OF VIENNA WATER SERVICE	811
SPRINT (GLOBAL ONE)	811
VERIZON (BELL ATLANTIC)	811
VERIZON SOUTH	811
WASHINGTON GAS	811

MISS UTILITY OF VIRGINIA

1-800-241-3624	811
1-800-543-8911 - (703) 631-5363 (METRO)	811
1-800-835-7191 (24 HRS)	811
1-800-926-2728	811
(703) 313-6527 OR (703) 313-6531	811
(703) 591-2606	811
(703) 698-5613	811
(703) 323-1211	811
(703) 385-7915 OR 385-7924 (24 HRS)	811
911	811
(703) 248-5044	811
1-800-852-6700	811
1-800-624-9675	811
(703) 852-6700	811
(703) 335-0500	811
1-800-440-8475 (24 HRS)	811
(703) 435-6860 STATION 185 (703) 368-3255	811
(703) 255-6381 AFTER 5:00 PM., (703) 255-6385	811
1-800-521-0579 (24 HRS)	811
1-800-275-2355 - (703) 954-2222 (24 HRS)	811
1-800-745-1944 (EMERGENCY REPAIR)	811
(703) 750-1000 (GAS LEAK (703) 750-4831)	811

EMERGENCY

1-800-241-3624	811
1-800-543-8911 - (703) 631-5363 (METRO)	811
1-800-835-7191 (24 HRS)	811
1-800-926-2728	811
(703) 313-6527 OR (703) 313-6531	811
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1-800-745-1944 (EMERGENCY REPAIR)	811
(703) 750-1000 (GAS LEAK (703) 750-4831)	811

FIBER OPTIC UTILITY COMPANES

FIBER OPTIC COMPANIES	MISS UTILITY	EMERGENCY
Abovenet Communications	811	1-888-636-2778
Comcast Communications in Alexandria	811	
Cavalier Telephone Company	811	1-888-662-5700
Comcast Communications in Reston	811	(after hours 703-841-7700)
Cox Communications Fiber Division	811	(703) 313-6527 or (703) 313-6531
Domimion Telecom	811	1-888-854-2138
Level 3 Communications, LLC	811	1-887-366-8344
Lightwave Spectrum, Inc.	811	1-800-388-6460
Looking Glass Network, Inc.	811	1-866-342-7288
MCI	811	(703) 391-5787; (Cell - 703-598-1721)
Verizon South	811	1-800-745-1944 (Emergency Repair)
Qwest Communications Corporation	811	1-800-283-4237
Sprint	811	1-800-521-0579
Star Power Communications	811	
TCG/AT&T	811	1-888-634-1840 (Pager)
WiiTel Communications	811	1-888-265-2283
XO Communications	811	
YIPES Communication, Inc.	811	
Xspedius	811	1-800-627-0181

EXISTING UTILITIES

- THE UTILITY INFORMATION SHOWN ON THESE PLANS IS TAKEN FROM AVAILABLE RECORD AND IN SOME CASES INFORMATION PROVIDED BY AN UNDERGROUND UTILITY DESIGNATING AND LOCATING COMPANY. THE NOVA PARK AUTHORITY DOES NOT GUARANTEE THAT THE UTILITY INFORMATION SHOWN ON THE PLANS IS COMPLETE OR ACCURATE. THE CONTRACTOR MUST VERIFY THE UTILITY LOCATIONS PRIOR TO CONSTRUCTION.
- ALL EXISTING UNDERGROUND UTILITIES IN THE VICINITY OF PROPOSED IMPROVEMENTS/CONSTRUCTION SHALL BE MARKED IN THE FIELD BY MISS UTILITY PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING THE FIELD MARKING OF UTILITIES WITH "MISS UTILITY".
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT EXISTING UTILITIES ARE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS WITHIN THE LIMITS OF CONSTRUCTION IN ACCORDANCE WITH THE REQUIREMENTS INDICATED ON THE CONSTRUCTION PLANS.
- CONTRACTORS SHALL NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITY LINES IN THE AREA OF PROPOSED CONSTRUCTION OR EXCAVATION AT LEAST 3 WORKING DAYS, BUT NOT MORE THAN 10 WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION IN ACCORDANCE WITH CHAPTER 63 OF FAIRFAX COUNTY CODE. NAMES AND TELEPHONE NUMBERS OF THE VARIOUS OPERATORS OF UNDERGROUND UTILITY LINES IN FAIRFAX COUNTY APPEAR ABOVE. THESE NUMBERS WILL ALSO BE USED TO SERVE EMERGENCY CONDITION NOTICE AS REQUIRED BY CHAPTER 63 OF THE FAIRFAX COUNTY CODE.
- THE CONTRACTOR SHALL CONTACT MISS UTILITY AT 811, UTILITY COMPANY REPRESENTATIVES, PERFORM TEST PITS, REVIEW CURRENT TEST PIT DATA, AND WHATEVER OTHER OPERATIONS AVAILABLE TO INSURE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES IN THE AREA OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE NOVA PARKS OF ANY POTENTIAL CONFLICTS PRIOR TO COMMENCING CONSTRUCTION.

MISS UTILITY

CALL "MISS UTILITY OF VIRGINIA" AT 811, 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDER GROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH REQUIREMENTS OF FAIRFAX COUNTY CODES AND REGULATIONS.

CAUTION!!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION

CONTRACTOR CONSTRUCTION NOTES:

- OVERHEAD WIRES - CONTRACTOR SHALL AVOID CONTACT AND DISRUPTION OF OVERHEAD LINES, AND MAINTAIN HORIZONTAL/VERTICAL CLEARANCE DURING CONSTRUCTION AS REQUIRED BY DOMINION ENERGY, VERIZON, ETC..
- UNDERGROUND UTILITIES - CONTRACTOR SHALL ENSURE THAT THERE IS NO DISTURBANCE OR DISRUPTION TO THE EXISTING UNDERGROUND SANITARY SEWER LINES BY TREE REMOVAL OPERATIONS WITHIN THE WORK ZONE AND VICINITY.

WATER SUPPLY NOTES

PIPING MATERIAL

MAIN:	3" HDPE PIPE
CAMPSITE SUPPLY LINES:	1" HDPE PIPE
FITTINGS:	HDPE PIPE IN ACCORDANCE WITH AWWA C901. SHALL CONFORM TO PIPE MATERIAL STANDARDS
TRACER WIRE:	COPPERHEAD SOLOSHOT EXTRA HIGH STRENGTH CCS (#14 AWG. TO BE INSTALLED WITH PIPING DURING BORING.
VALVE:	AVK SERIES 66
HYDRANTS:	MODEL SAH BACK FLOW PROTECTED, AUTOMATIC DRAINING, FREEZELESS, SELF CLOSING SANITARY YARD HYDRANT BY WOODFORD MANUFACTURING COMPANY (OR APPROVED EQUAL)

- PROPOSED WATERLINE AND HYDRANT LOCATION SHOWN ARE APPROXIMATE. ACTUAL ALIGNMENT SHALL BE FIELD ADJUSTED TO AVOID AS MANY TREE ROOTS AS FEASIBLE AND MAINTAIN REQUIRED CLEARANCES FROM OTHER UTILITIES. AFTER THE WATERLINE AND HYDRANTS HAVE BEEN STAKED, AND PRIOR TO ANY LAND DISTURBING ACTIVITIES, THE CONTRACTOR SHALL WALK THE SITE WITH THE OWNER AND MAKE ADJUSTMENTS TO WATERLINE ALIGNMENT OR HYDRANT LOCATIONS TO AVOID IMPACTS TO EXISTING MATURE TREES TO THE GREATEST EXTENT PRACTICAL.
- THE MAIN 3" HDPE LINE SHALL BE DIRECTIONALLY BORED TO MINIMIZE ENVIRONMENTAL IMPACTS. EACH HYDRANT SERVICE CONNECTION WILL REQUIRE TRENCHING FOR THE 1" HDPE, WHICH WILL ALSO SERVE AS THE RECEIVING PIT FOR THE BORING EQUIPMENT.
- THE AREA SURROUNDING THE HYDRANTS SHALL BE GRADED TO FLOW AWAY FROM THE HYDRANTS TO AVOID STANDING WATER AND CREATION OF MUDDY CONDITIONS.
- THE CONNECTION OF WATER PIPES TO INDIVIDUAL CAMP SITES SHALL BE INSTALLED SO THAT IT WILL NOT BE DAMAGED BY THE PARKING OF CAMPING VEHICLES. SOME CAMPSITES WILL REQUIRE BOLLARDS TO PROTECT THE HYDRANTS, AS DIRECTED BY OWNER IN THE FIELD.
- MINIMUM HORIZONTAL CLEARANCE FROM SEWER CONNECTIONS AND UNDERGROUND ELECTRIC LINES IS 5 FEET.
- NEW WATER MAINS MUST BE DISINFECTED IN ACCORDANCE WITH SECTION 12VAC5-590-1210 OF THE VIRGINIA WATERWORKS REGULATIONS.
- FOLLOWING DISINFECTION, WATERLINES MUST BE TESTED FOR BACTERIOLOGICAL QUALITY IN ACCORDANCE WITH SECTION 12VAC5-590-1000 OF THE VIRGINIA WATERWORKS REGULATIONS.
- CONTRACTOR TO PERFORM TEST PITS IN ORDER TO LOCATE ALL EXISTING UTILITIES BOTH HORIZONTAL AND VERTICAL. IN ORDER TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF A GIVEN UTILITY AND TO ASSIST THE CONTRACTOR AND/OR OWNER IN DETERMINING AREAS OF SPECIAL CONCERN, LOCATIONS WHERE TEST PITS ARE DESIGNATED SHOULD BE EXCAVATED PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES THAT OCCUR BY HIS FAILURE TO LOCATE OR PRESERVE THESE UNDERGROUND UTILITIES. THESE INDICATIONS ARE NOT INTENDED TO BE ALL INCLUSIVE AND WILL NOT RELIEVE THE CONTRACTOR AND/OR OWNER OF THE RESPONSIBILITY OF DIGGING ADDITIONAL TEST PITS, AS MIGHT BE REQUIRED BY ACTUAL SITE CONDITIONS. ANY DISCREPANCIES FOUND BETWEEN ACTUAL AND ASSUMED CONDITIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD AND TAKE NECESSARY AND PROPER STEPS TO PROTECT THE FACILITY AND ASSURE THE CONTINUANCE OF SERVICE.
- CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES AND COORDINATING ALL TEST PITS PRIOR TO CONSTRUCTION. NOTED THAT MISS UTILITY MAY NOT RESPOND TO REQUESTS AND/OR PROVIDE LOCATIONS/MARKINGS ON THIS PROPERTY. CONTRACTOR MAY NEED TO ENGAGE PRIVATE UTILITY LOCATING SERVICE - AT CONTRACTORS EXPENSE.

SURVEY NOTES

- THE PROPERTY IS CURRENTLY IN THE NAME OF NORTHERN VIRGINIA REGIONAL PARK AUTHORITY, AND DESIGNATED AS FAIRFAX COUNTY VIRGINIA MAP NUMBER 1144-01-0018
- THE PROPERTY AS SHOWN HEREON IS SUBJECT TO ALL COVENANTS AND RESTRICTIONS OF RECORD AND THOSE RECORDED HERewith.
- THE PROPERTY SHOWN HEREON LIES IN ZONE X (AREAS OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS SHOWN ON FEMA FLOOD INSURANCE RATE MAPS FOR FAIRFAX COUNTY, VIRGINIA, COMMUNITY -PANEL NUMBER 51059C0395E, EFFECTIVE DATE SEPTEMBER 17, 2010.
- APPROXIMATE LOCATION OF UNDERGROUND UTILITIES ARE SHOWN PER PRIVATE UTILITY MARK OUT PERFORMED BY ARMOUR UTILITY LOCATING ON JANUARY 19, 2024 AND FIELD LOCATED WITH CONVENTIONAL FIELD SURVEY METHODS UNLESS OTHERWISE NOTED.
- HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE PLANE NAD83 (2011). VERTICAL DATUM IS REFERENCED TO NGVD29 PER GPS OBSERVATIONS AND A CORPSCON CONVERSION.

BENCHMARKS

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
BENCHMARK #1	6929420	11863158	134.0	IRON ROD SET
BENCHMARK #2	6929568	11863437	125.1	IRON ROD SET
BENCHMARK #3	6929817	11863401	118.2	IRON ROD SET
BENCHMARK #4	6929837	11863536	123.2	IRON ROD SET
BENCHMARK #5	6930033	11863444	122.3	IRON ROD SET
BENCHMARK #6	6930300	11863605	121.3	IRON ROD SET
BENCHMARK #7	6930100	11863838	119.4	IRON ROD SET
BENCHMARK #8	6930195	11864049	119.0	IRON ROD SET

Bowman

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GENERAL NOTES
POHICK BAY REGIONAL PARK
CAMPGROUND WATERLINE IMPROVEMENTS
MOUNT VERNON DISTRICT
FAIRFAX COUNTY, VA

PROJECT NO
COUNTY PROJECT NUMBER



PLAN STATUS
02/23/24 DRAFT SUBMISSION
05/17/24 DRAFT SUBMISSION
08/14/24 FINAL SUBMISSION

DATE	DESCRIPTION
EP	KM
DESIGN	DRAWN
SCALE	H: NO SCALE
	V:

JOB No.
DATE : FEBRUARY, 2024
FILE No. 140356-01-001

SHEET 06

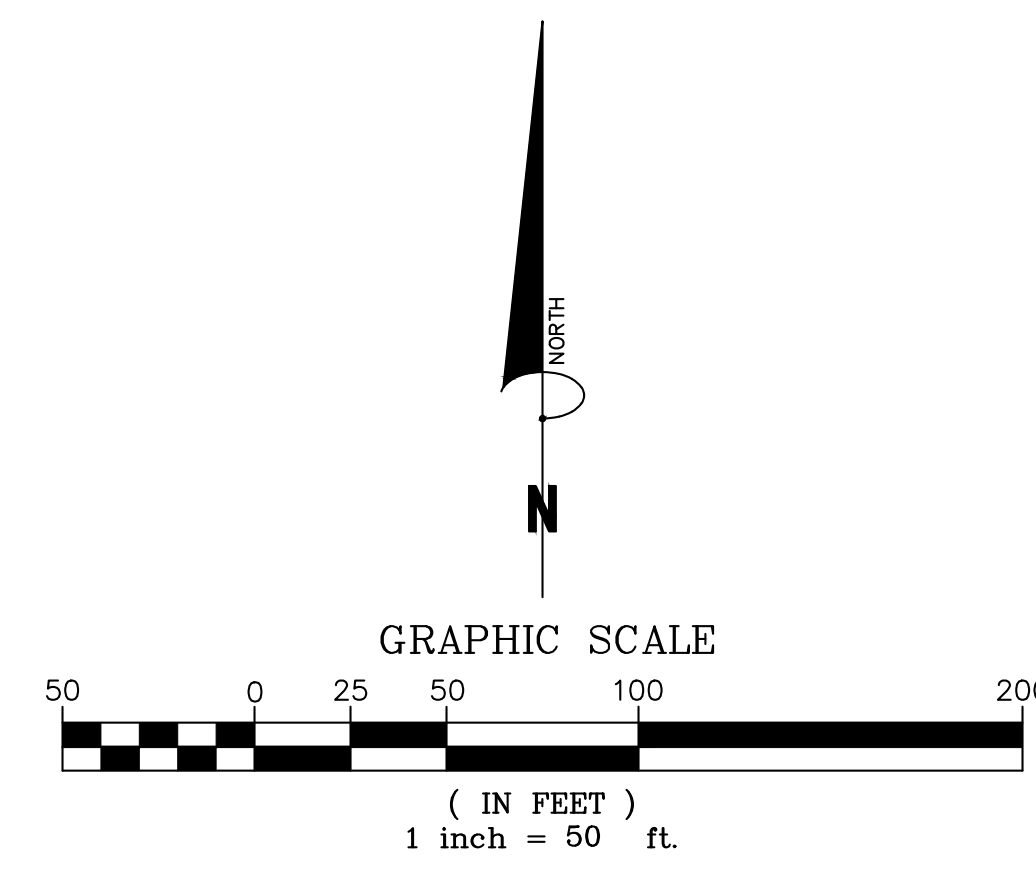
SHEET 06

SHEET 05

SHEET 04

LEGEND

- B/D/C HT BUILDING HEIGHT
- CONC CONCRETE
- CSW CONCRETE SIDEWALK
- EB ELECTRIC BOX
- EP EDGE OF PAVEMENT
- FF FINISH FLOOR
- IPF IRON PIN FOUND
- PKF PK NAIL FOUND
- SN SIGN
- TRANS TRANSFORMER
- WDF WOOD FENCE
- AC AIR CONDITIONER
- BOLLARD BOLLARD
- CO CLEAN OUT
- EB ELECTRIC BOX
- EM ELECTRIC METER
- EO ELECTRIC OUTLET
- RD ROOF DRAIN
- SIGN SIGN
- NA SIGN-NO ALCOHOL
- SIS STORM INLET (SQUARE)
- UM UNKNOWN MANHOLE
- WS WATER SPIGOT
- WELL WELL
- EX. TREE W/SIZE EX. TREE W/SIZE
- APPRX. LOC. EX. UNDERGROUND ELECTRIC APPRX. LOC. EX. UNDERGROUND ELECTRIC
- APPRX. LOC. EX. UNDERGROUND WATER LINE APPRX. LOC. EX. UNDERGROUND WATER LINE
- EX. EDGE OF GRAVEL EX. EDGE OF GRAVEL
- EX. FENCE EX. FENCE
- APPRX. LOC. EX. UNDERGROUND SANITARY APPRX. LOC. EX. UNDERGROUND SANITARY
- SITE 4 SITE LOCATION
- BENCHMARK LOCATION BENCHMARK LOCATION



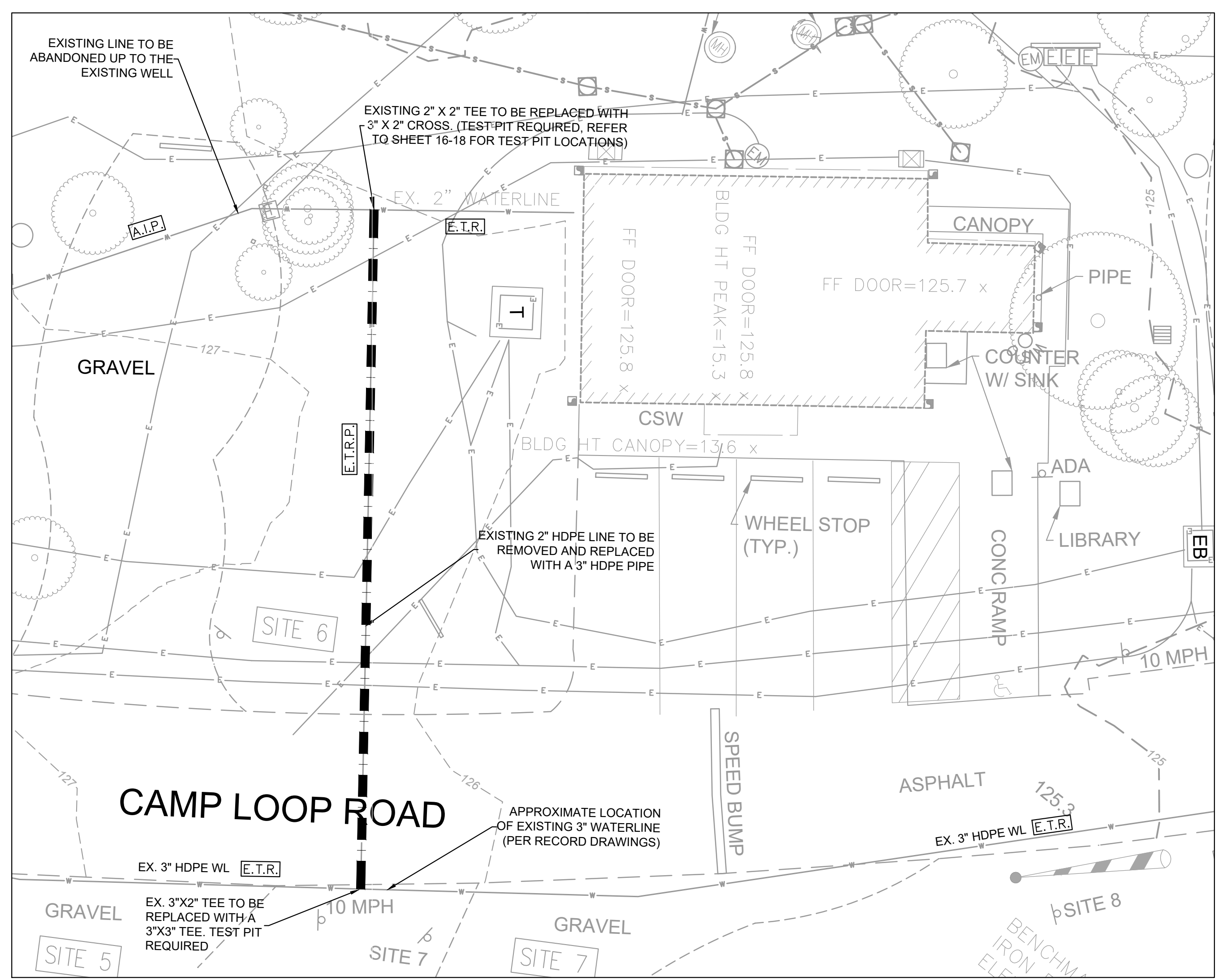
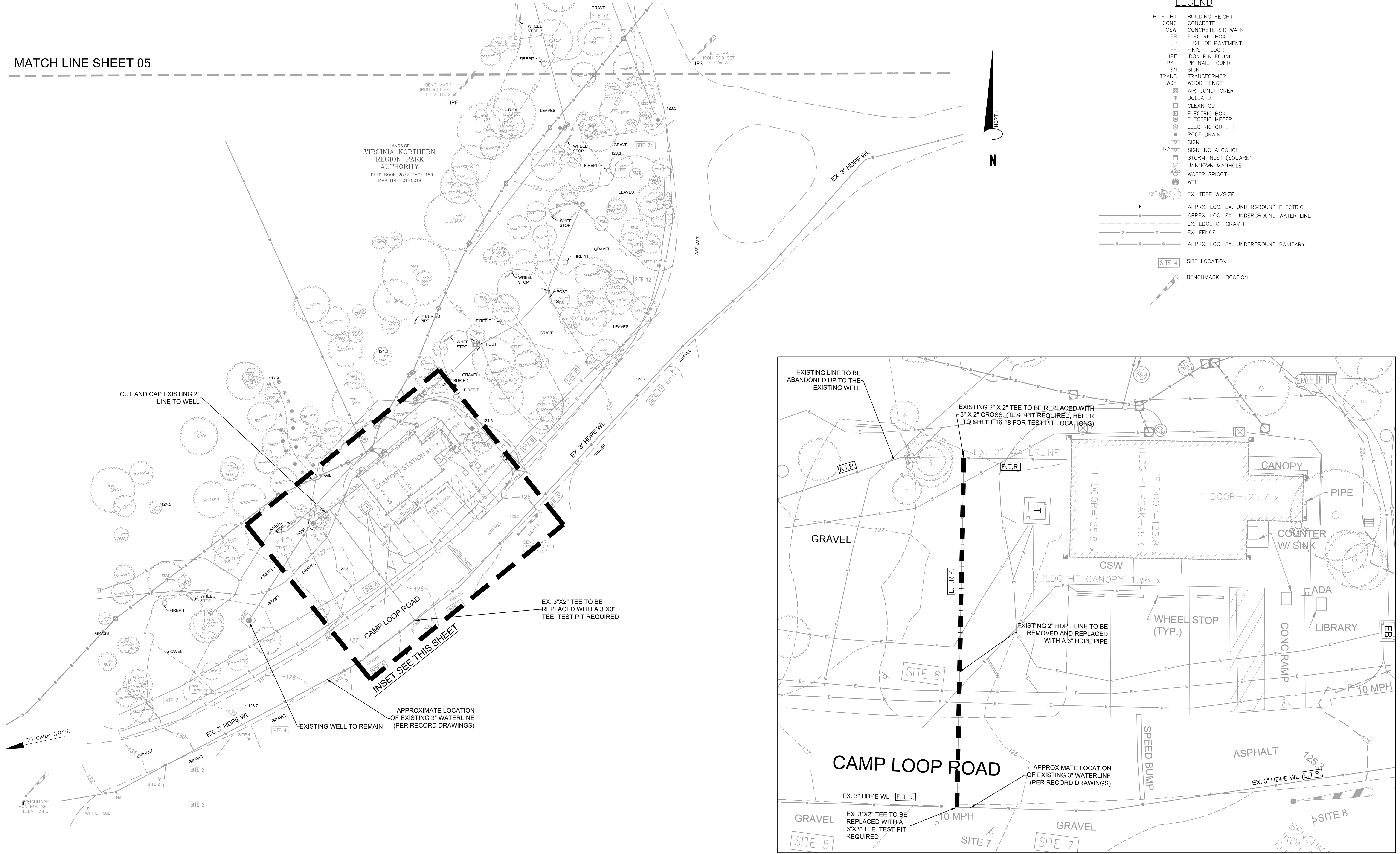
MATCH LINE SHEET 05

LEGEND

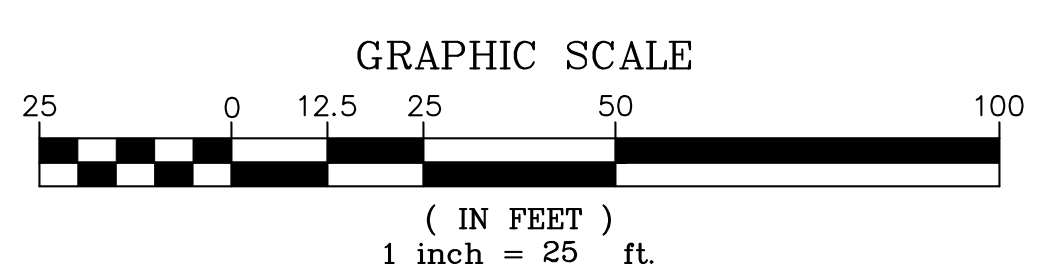
- BLDG HT BUILDING HEIGHT
- CONC CONCRETE
- CSW CONCRETE SIDEWALK
- EB ELECTRIC BOX
- EP EDGE OF PAVEMENT
- FF FINISH FLOOR
- IPF IRON PIN FOUND
- PKF PK NAIL FOUND
- SN SIGN
- TRANS TRANSFORMER
- WDF WOOD FENCE
- AIR AIR CONDITIONER
- BOLLARD
- CLEAN OUT
- ELECTRIC BOX
- ELECTRIC METER
- ELECTRIC OUTLET
- ROOF DRAIN
- SIGN
- SIGN-NO ALCOHOL
- STORM INLET (SQUARE)
- UNKNOWN MANHOLE
- WATER SPIGOT
- WELL
- EX. TREE W/SIZE
- APPRX. LOC. EX. UNDERGROUND ELECTRIC
- APPRX. LOC. EX. UNDERGROUND WATER LINE
- EX. EDGE OF GRAVEL
- EX. FENCE
- APPRX. LOC. EX. UNDERGROUND SANITARY

- SITE 4 SITE LOCATION
- BENCHMARK LOCATION

LANDS OF
VIRGINIA NORTHERN
REGION PARK
AUTHORITY
DEED BOOK 2537 PAGE 189
MAP:1144-01-0018



COMFORT STATION #1 INSET PLAN
SCALE 1" = 10'



DEMOLITION LEGEND

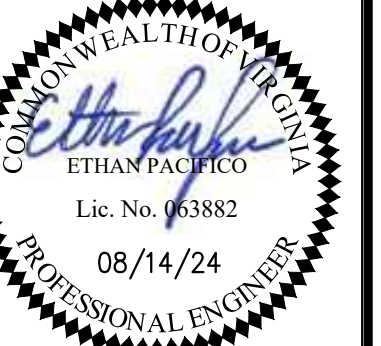
[E.T.R.]	EXISTING TO REMAIN
[E.T.R.P.]	EXISTING TO BE REPLACED
[A.I.P.]	ABANDON IN PLACE
[Thick Dashed Line]	EXISTING PIPE TO BE REMOVED AND REPLACED

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EXISTING CONDITIONS AND DEMOLITION PLAN (1 OF 3)
POHICK BAY REGIONAL PARK
CAMPGROUND WATERLINE IMPROVEMENTS
MOUNT VERNON DISTRICT
FAIRFAX COUNTY, VA

PROJECT NO
COUNTY PROJECT NUMBER

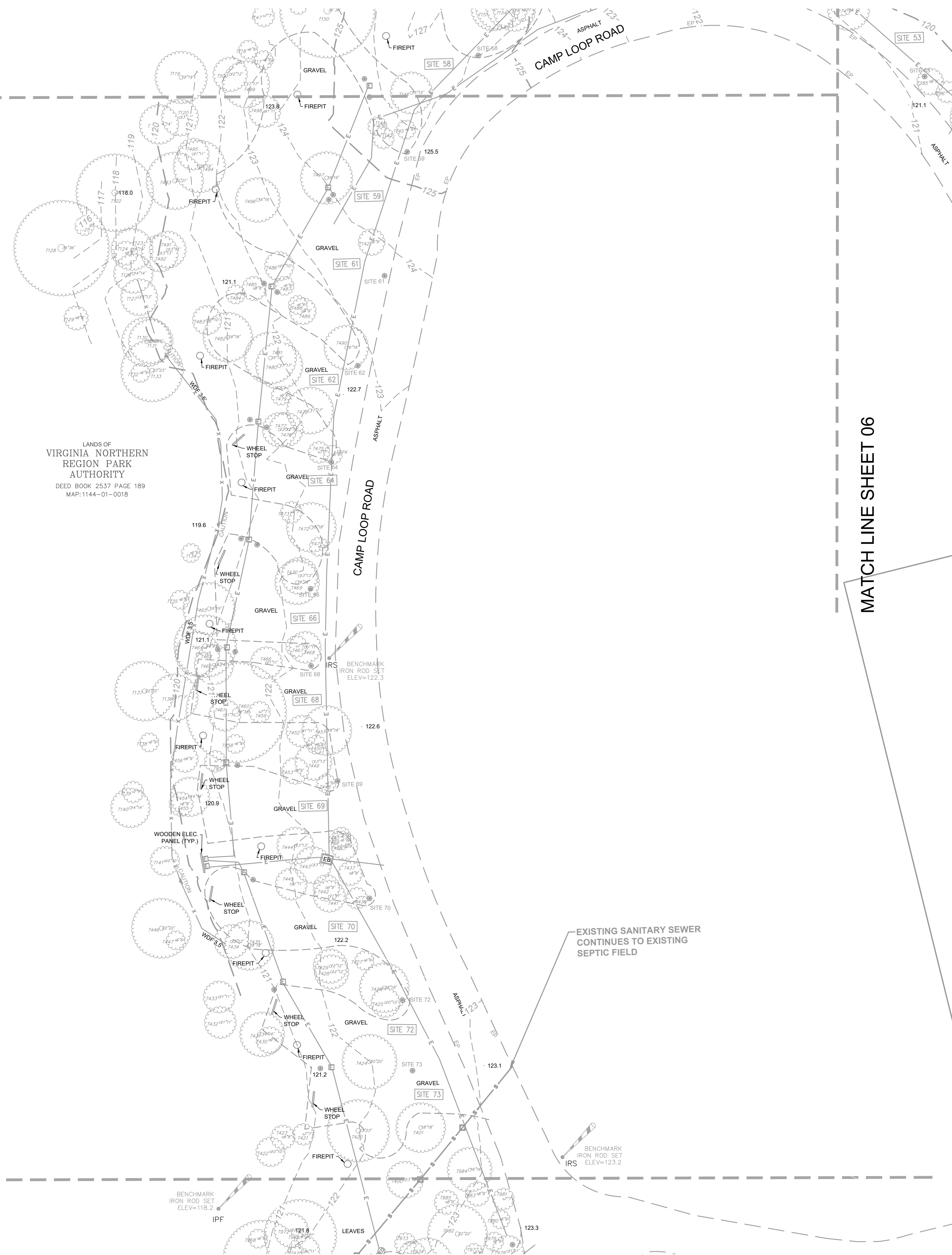


PLAN STATUS
02/23/24 DRAFT SUBMISSION
05/17/24 DRAFT SUBMISSION
08/14/24 FINAL SUBMISSION

DATE	DESCRIPTION
EP	KM MT
DESIGN	DRAWN CHKD
SCALE	H: 1" = 25'
V:	
JOB No.	
DATE :	FEBRUARY, 2024
FILE No.	140356-01-001

MATCH LINE SHEET 06

MATCH LINE SHEET 04



LEGEND

- BLDG HT BUILDING HEIGHT
- CONC CONCRETE
- CSW CONCRETE SIDEWALK
- EB ELECTRIC BOX
- EP EDGE OF PAVEMENT
- FF FINISH FLOOR
- IPF IRON PIN FOUND
- PKF PK NAIL FOUND
- SN SIGN
- TRANS TRANSFORMER
- WDF WOOD FENCE
- AIR COND AIR CONDITIONER
- BOLLARD BOLLARD
- CLEAN OUT CLEAN OUT
- ELECTRIC BOX ELECTRIC BOX
- ELECTRIC METER ELECTRIC METER
- ELECTRIC OUTLET ELECTRIC OUTLET
- ROOF DRAIN ROOF DRAIN
- SIGN SIGN
- NA SIGN-NO ALCOHOL
- STORM INLET (SQUARE) STORM INLET (SQUARE)
- UNKNOWN MANHOLE UNKNOWN MANHOLE
- WATER SPIGOT WATER SPIGOT
- WELL WELL
- EX. TREE W/SIZE EX. TREE W/SIZE
- APPRX. LOC. EX. UNDERGROUND ELECTRIC APPRX. LOC. EX. UNDERGROUND ELECTRIC
- APPRX. LOC. EX. UNDERGROUND WATER LINE APPRX. LOC. EX. UNDERGROUND WATER LINE
- EX. EDGE OF GRAVEL EX. EDGE OF GRAVEL
- EX. FENCE EX. FENCE
- APPRX. LOC. EX. UNDERGROUND SANITARY APPRX. LOC. EX. UNDERGROUND SANITARY
- SITE 4 SITE LOCATION
- BENCHMARK LOCATION BENCHMARK LOCATION

NORTH

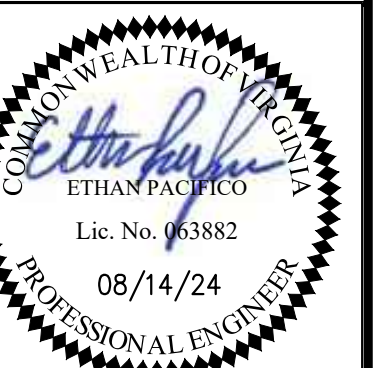
GRAPHIC SCALE
(IN FEET)
1 inch = 25 ft.



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EXISTING CONDITIONS AND DEMOLITION PLAN (2 OF 3)
POHICK BAY REGIONAL PARK
CAMPGROUND WATERLINE IMPROVEMENTS
MOUNT VERNON DISTRICT
FAIRFAX COUNTY, VA

PROJECT NO
COUNTY PROJECT NUMBER



PLAN STATUS	
02/23/24	DRAFT SUBMISSION
05/17/24	DRAFT SUBMISSION
08/14/24	FINAL SUBMISSION

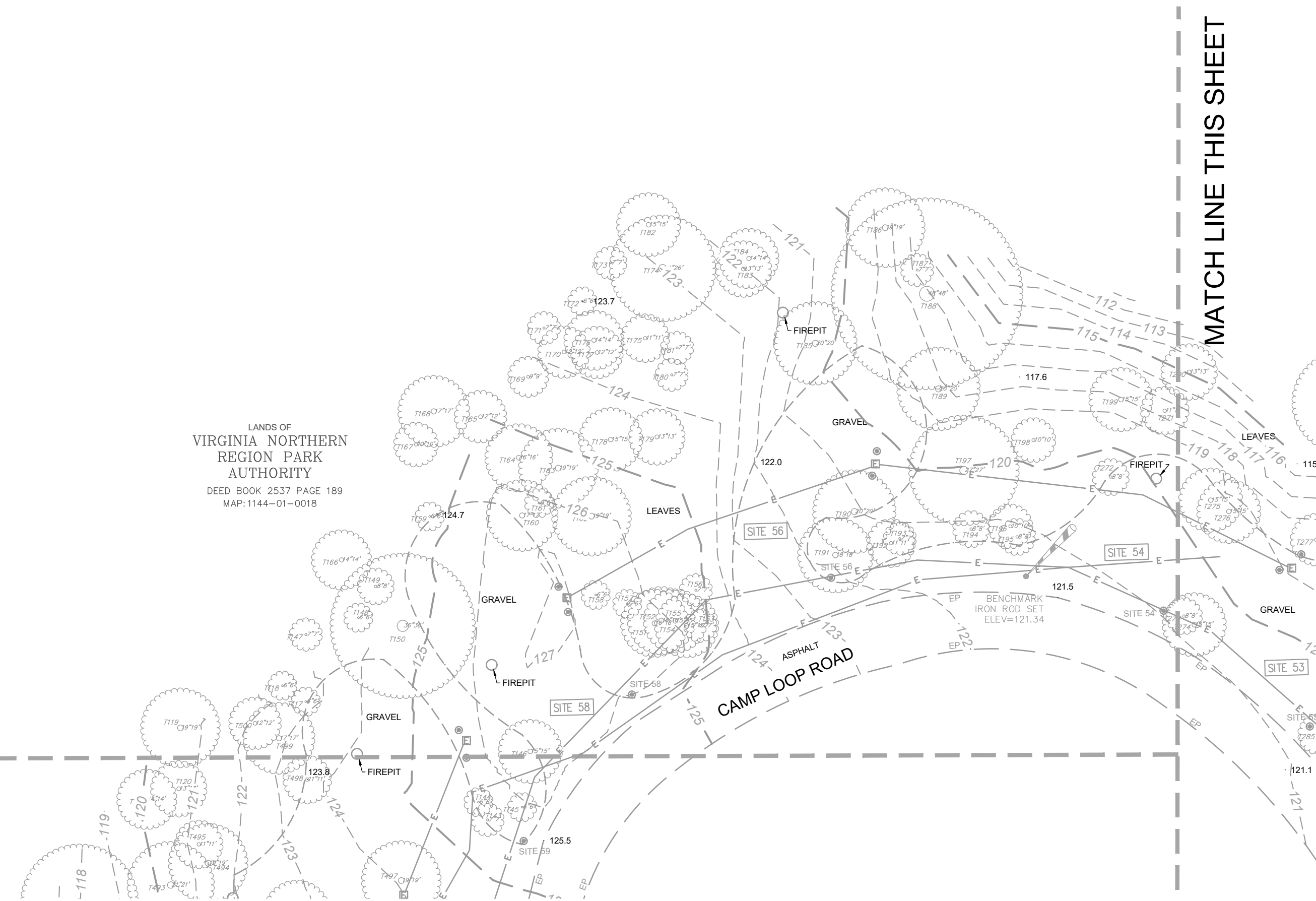
DATE	DESCRIPTION

DATE	DESIGN	KM	MT

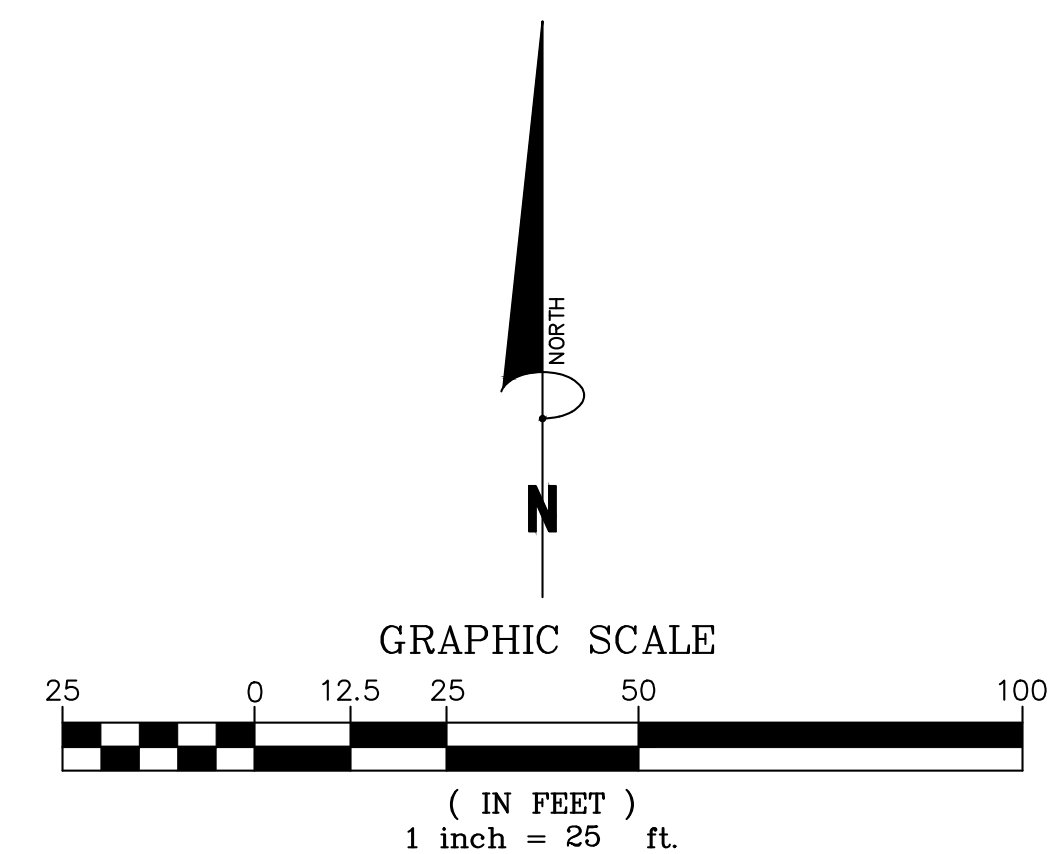
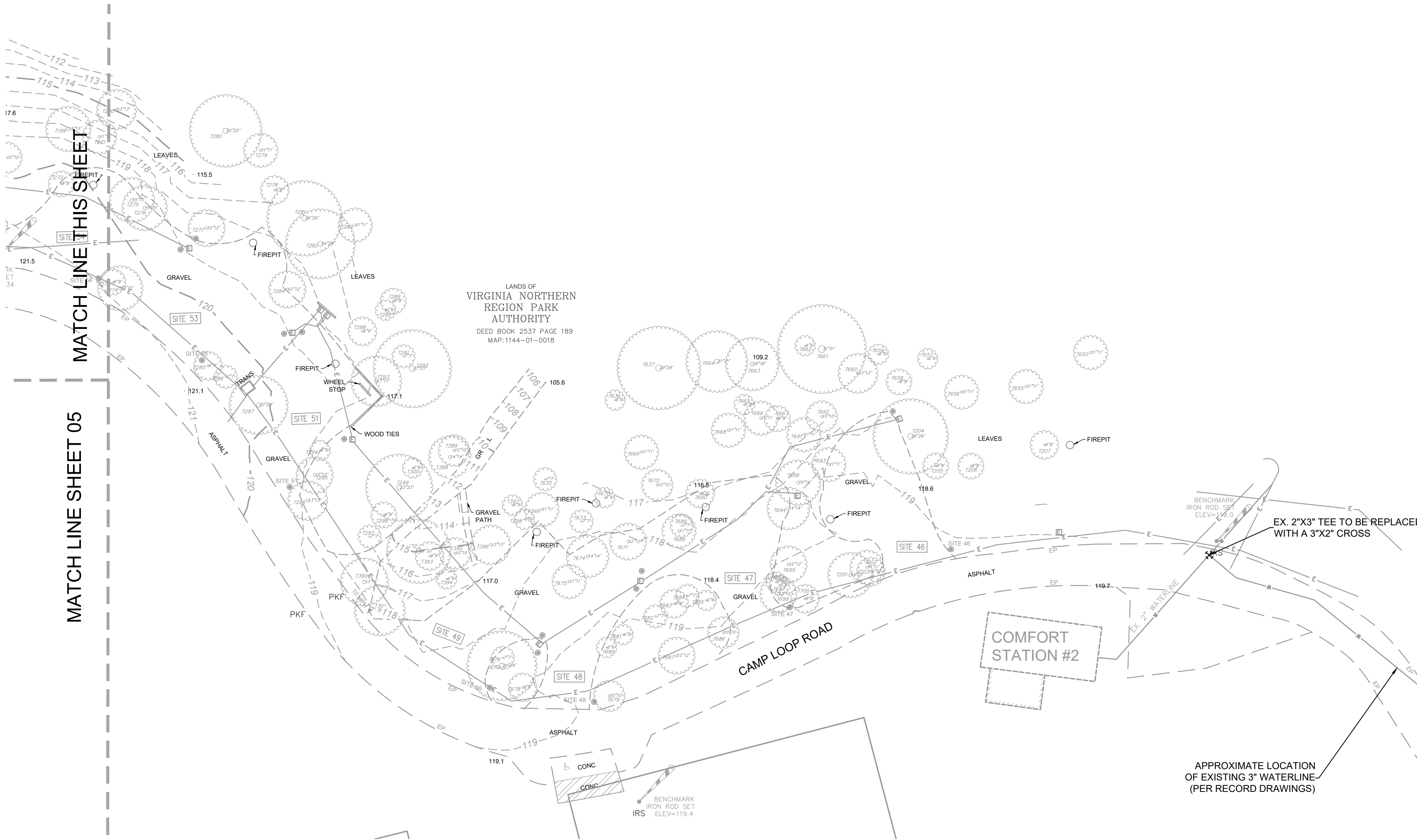
JOB No.
DATE : FEBRUARY, 2024
FILE No. 140356-01-001

LEGEND

- BLDG HT BUILDING HEIGHT
- CONC CONCRETE
- CSW CONCRETE SIDEWALK
- EB ELECTRIC BOX
- EP EDGE OF PAVEMENT
- FF FINISH FLOOR
- IPF IRON PIN FOUND
- PKF PK NAIL FOUND
- SN SIGN
- TRANS TRANSFORMER
- WDF WOOD FENCE
- ⊠ AIR CONDITIONER
- BOLLARD
- CLEAN OUT
- ⊞ ELECTRIC BOX
- ⊞ ELECTRIC METER
- ⊞ ELECTRIC OUTLET
- ⊞ ROOF DRAIN
- ⊞ SIGN
- ⊞ SIGN-NO ALCOHOL
- ⊞ STORM INLET (SQUARE)
- ⊞ UNKNOWN MANHOLE
- ⊞ WATER SPIGOT
- ⊞ WELL
- ⊞ EX. TREE W/SIZE
- E APPRX. LOC. EX. UNDERGROUND ELECTRIC
- W APPRX. LOC. EX. UNDERGROUND WATER LINE
- - - EX. EDGE OF GRAVEL
- x - x - EX. FENCE
- - - APPRX. LOC. EX. UNDERGROUND SANITARY
- ⊞ SITE LOCATION
- ⊞ BENCHMARK LOCATION



MATCH LINE SHEET 05

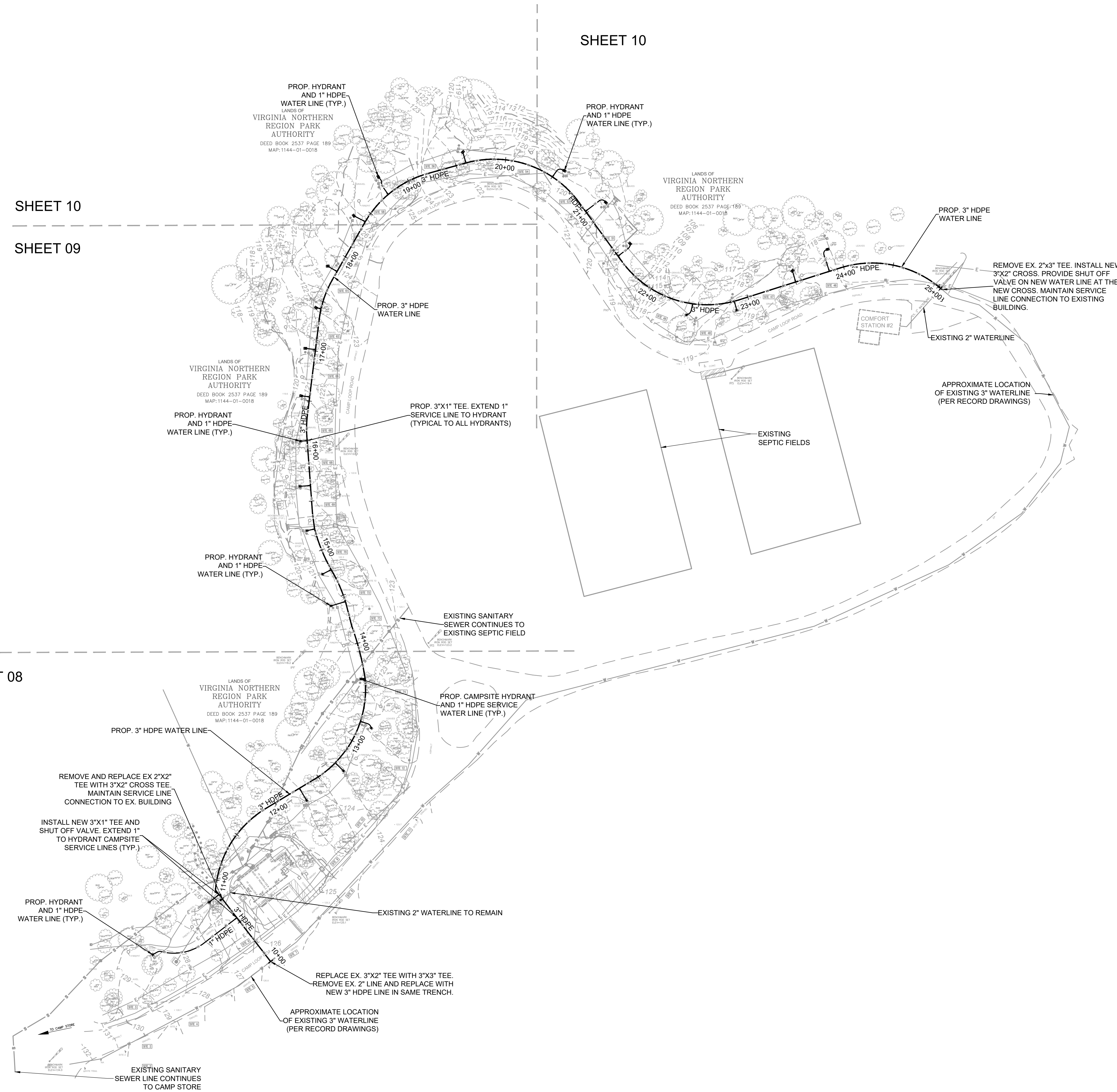


SHEET 10

SHEET 10

SHEET 09

SHEET 08



LEGEND

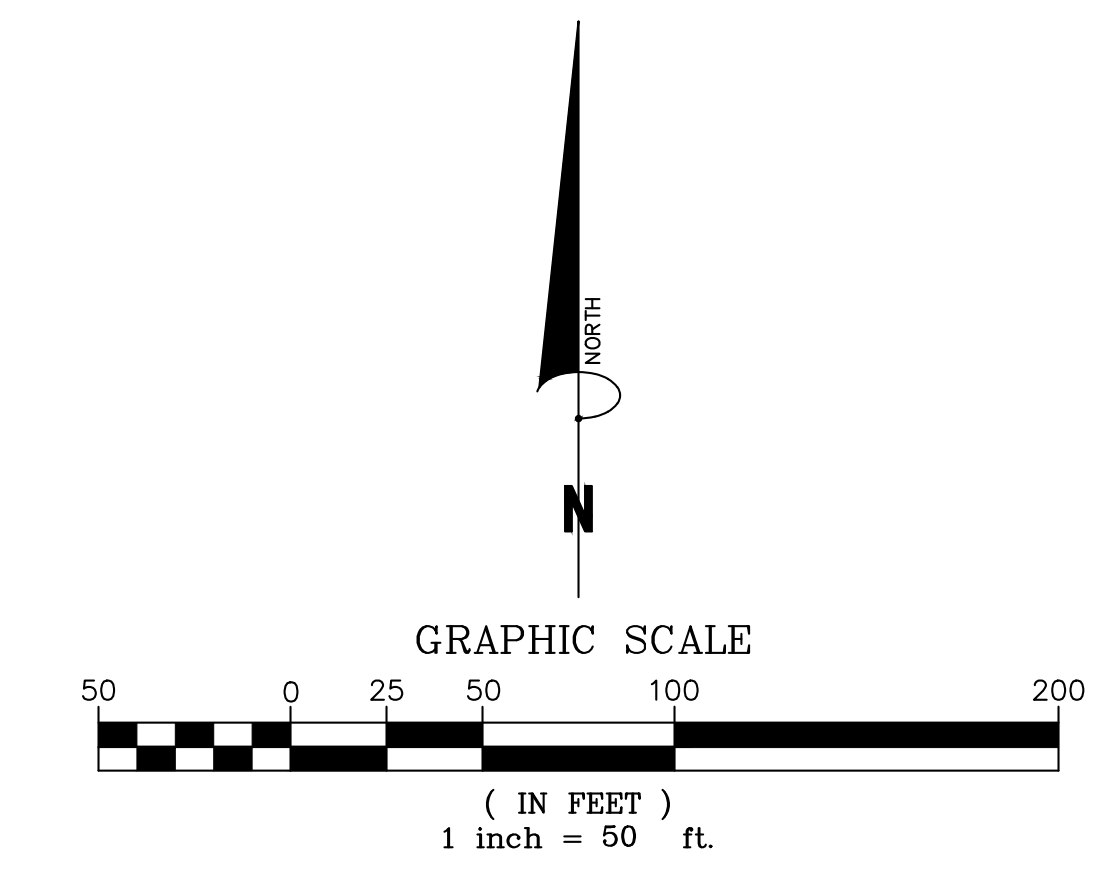
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- CONC CONCRETE
- CSW CONCRETE SIDEWALK
- EB ELECTRIC BOX
- EP EDGE OF PAVEMENT
- FF FINISH FLOOR
- IPF IRON PIN FOUND
- PKF PK NAIL FOUND
- SN SIGN
- TRANS TRANSFORMER
- WDF WOOD FENCE
- AC AIR CONDITIONER
- BOLLARD BOLLARD
- CO CLEAN OUT
- EB ELECTRIC BOX
- EM ELECTRIC METER
- EO ELECTRIC OUTLET
- RD ROOF DRAIN
- SI SIGN
- NA SIGN-NO ALCOHOL
- SI STORM INLET (SQUARE)
- UM UNKNOWN MANHOLE
- WS WATER SPOIGOT
- WELL WELL
- EX TREE W/SIZE
- APPRX. LOC. EX. UNDERGROUND ELECTRIC
- APPRX. LOC. EX. UNDERGROUND WATER LINE
- EX. EDGE OF GRAVEL
- EX. FENCE
- APPRX. LOC. EX. UNDERGROUND SANITARY
- PROP. 1" HDPE WATER SERVICE LINE
- PROP. 3" HDPE WATER LINE
- PROP. YARD HYDRANT
- PROP. WATERLINE CAP
- SITE LOCATION
- BENCHMARK LOCATION

WATER SUPPLY NOTES

WATER SUPPLY TO CAMPSITES: INSTALL 1,516 LINEAR FEET OF 3" HDPE WATER MAIN FROM EXISTING TEE NEAR COMFORT STATION #1 TO EXISTING TEE NEAR COMFORT STATION #2. INSTALL ANTI-SIPHON, FROST-FREE HYDRANT WITH SEPARATE SHUT OFF VALVE AT EACH CAMPSITE USING 1" HDPE WATERLINE. INSTALL TRACER TAPE ABOVE ALL LINES.

PIPE MATERIAL:
MAIN LINE - 3" HDPE PIPE (PE4710/AWAA/ANSI STANDARD C 901)
HYDRANT SUPPLY LINES - 1" HDPE PIPE (PE4710/AWAA/ANSI STANDARD C 901)

HYDRANTS: ANTI-SIPHON, FREEZELESS YARD HYDRANT MODEL 54H BY WOODFORD MANUFACTURING COMPANY OR APPROVED EQUAL. HYDRANTS SHALL BE CONNECTED TO THE PIPE USING BRASS HYDRANT ELLS, AND PER MANUFACTURER'S SPECIFICATIONS. PROVIDE SHUT OFF VALVE AT/NEAR HYDRANT LOCATION.

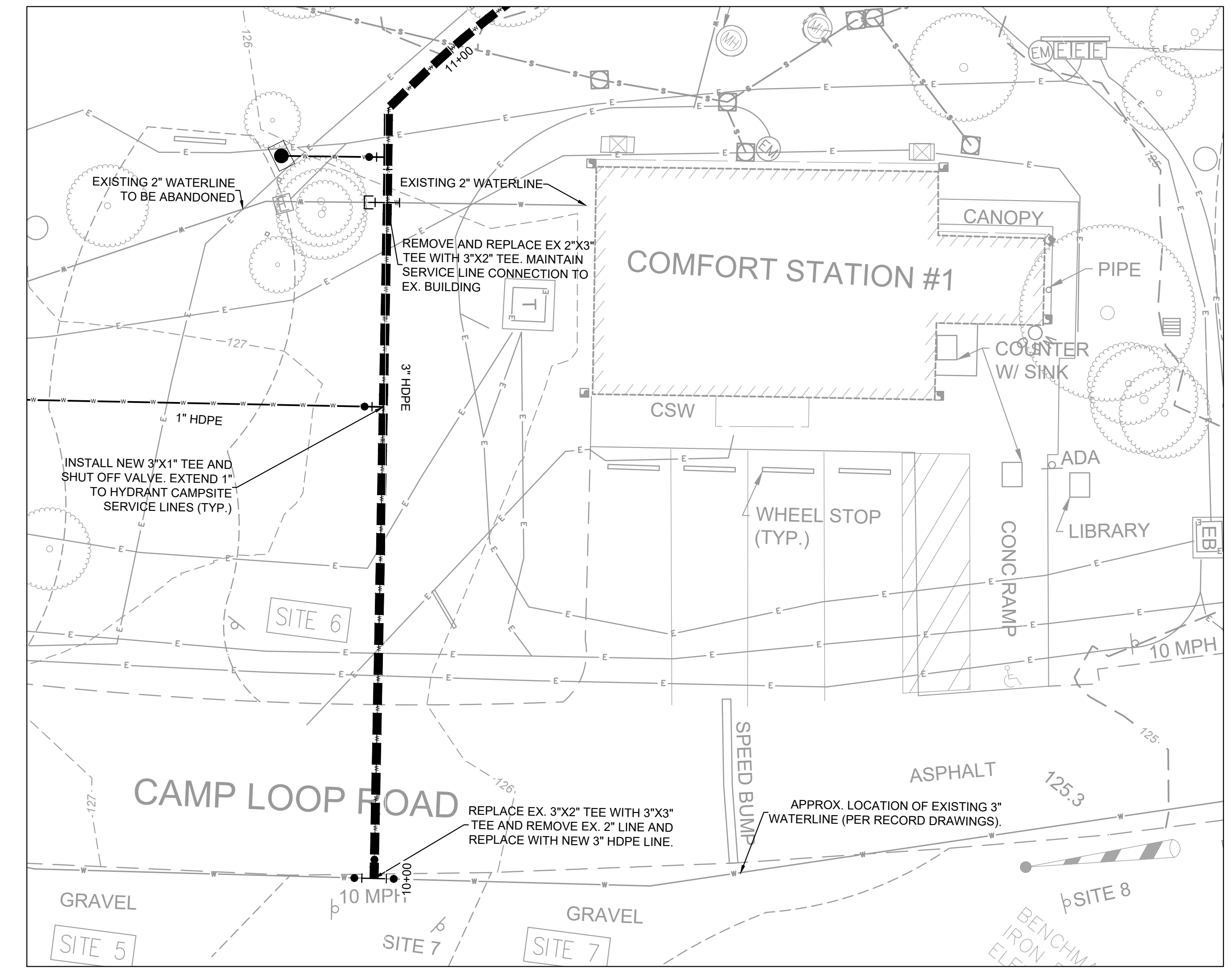
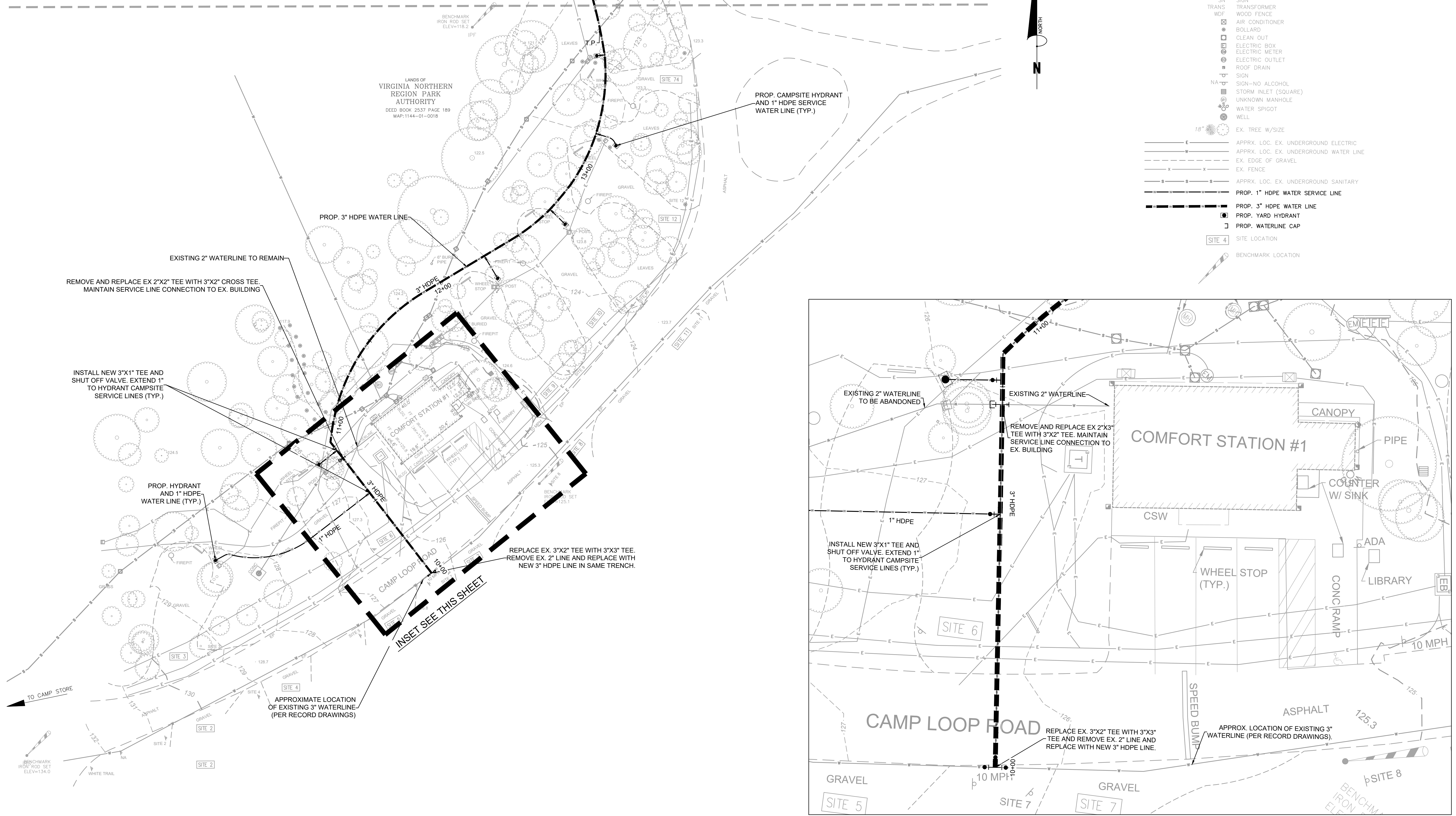


MATCH LINE SHEET 09

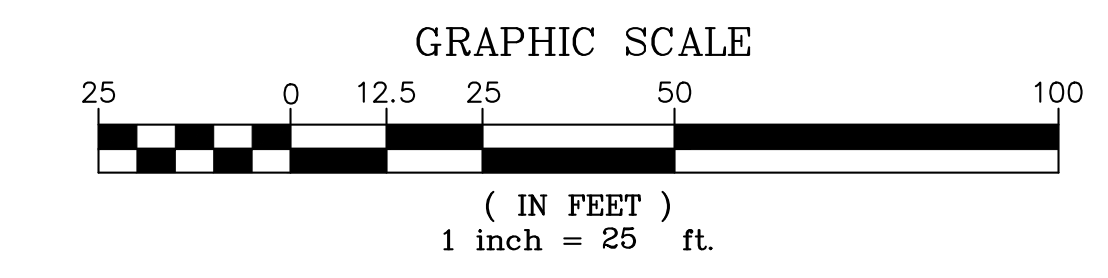
EXISTING SANITARY
SEWER CONTINUES TO
EXISTING SEPTIC FIELD

LEGEND

- BLDG HT BUILDING HEIGHT
- CONC CONCRETE
- CSW CONCRETE SIDEWALK
- EB ELECTRIC BOX
- EP EDGE OF PAVEMENT
- FF FINISH FLOOR
- IPF IRON PIN FOUND
- PKF PKY NAIL FOUND
- SN SIGN
- TRANS TRANSFORMER
- WDF WOOD FENCE
- AIR CONDITIONER
- BOLLARD
- CLEAN OUT
- ELECTRIC BOX
- ELECTRIC METER
- ELECTRIC OUTLET
- ROOF DRAIN
- SIGN
- SIGN-NO ALCOHOL
- STORM INLET (SQUARE)
- UNKNOWN MANHOLE
- WATER SPIGOT
- WELL
- EX. TREE W/SIZE
- APPRX. LOC. EX. UNDERGROUND ELECTRIC
- APPRX. LOC. EX. UNDERGROUND WATER LINE
- EX. EDGE OF GRAVEL
- EX. FENCE
- APPRX. LOC. EX. UNDERGROUND SANITARY
- PROP. 1" HDPE WATER SERVICE LINE
- PROP. 3" HDPE WATER LINE
- PROP. 3" HDPE WATER LINE
- PROP. YARD HYDRANT
- PROP. WATERLINE CAP
- SITE LOCATION
- BENCHMARK LOCATION



COMFORT STATION #1 INSET PLAN
SCALE 1" = 10'



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PROJECT NO
COUNTY PROJECT NUMBER

ETHAN PACHECO
Lic. No. 63882
08/14/24
PROFESSIONAL ENGINEER

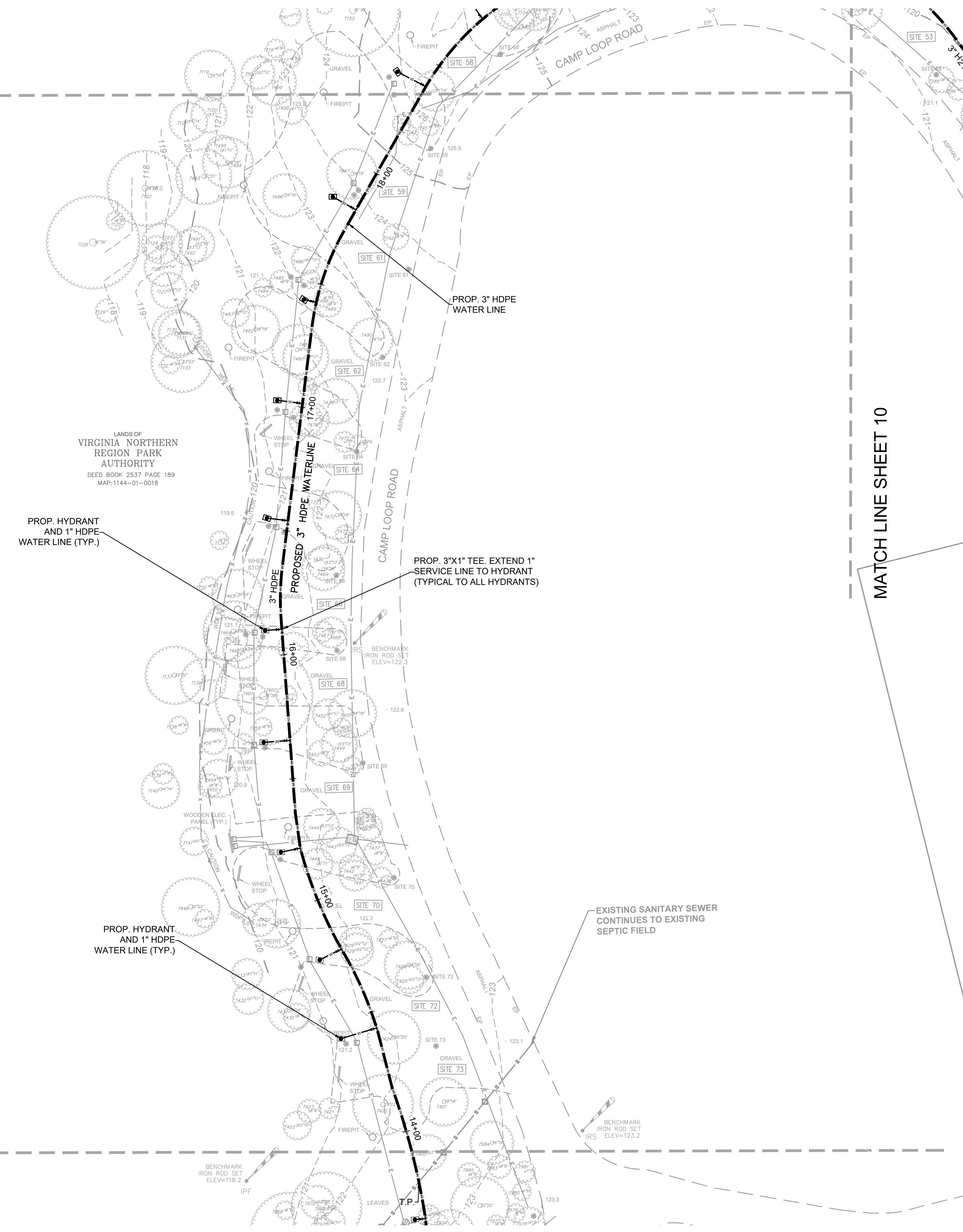
PLAN STATUS

02/23/24	DRAFT SUBMISSION
05/17/24	DRAFT SUBMISSION
08/14/24	FINAL SUBMISSION

DATE	DESCRIPTION
EP	KM MT
DESIGN	DRAWN CHKD
SCALE	H: 1"=25' V:
JOB No.	
DATE : FEBRUARY, 2024	
FILE No. 140356-01-001	
SHEET	08 OF 19

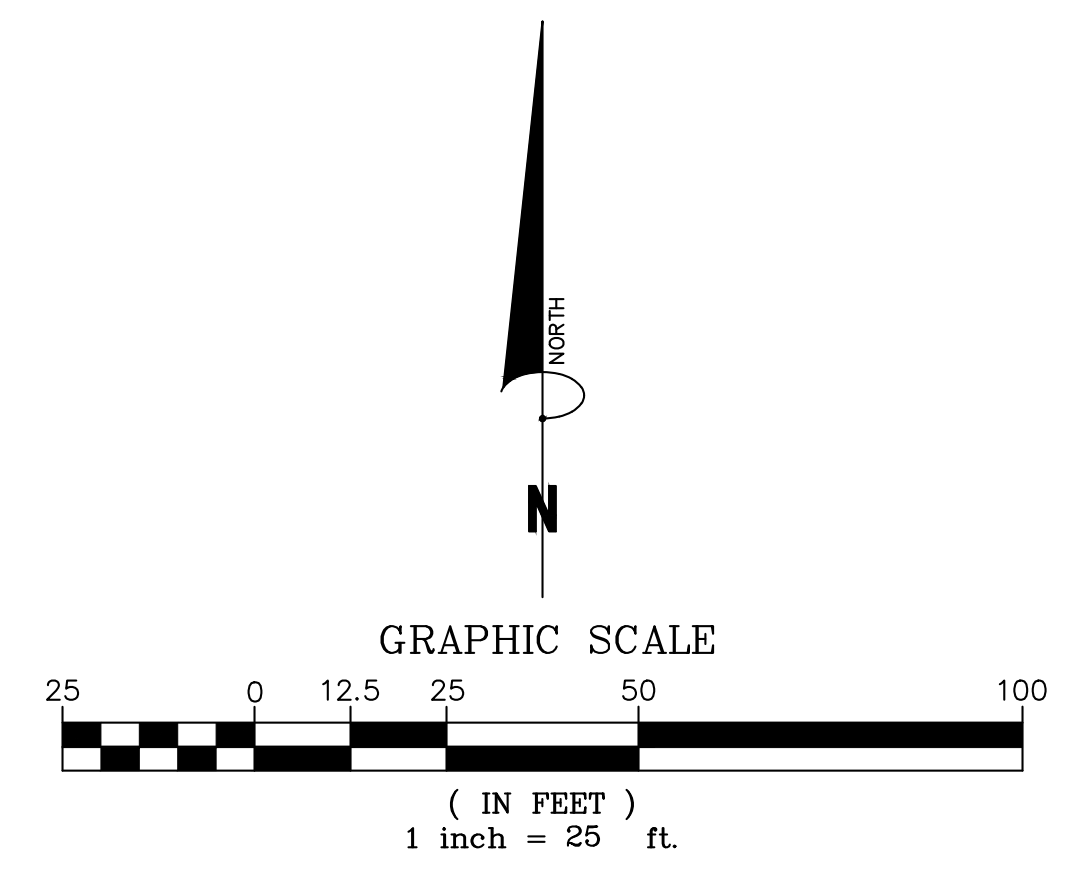
MATCH LINE SHEET 10

MATCH LINE SHEET 08

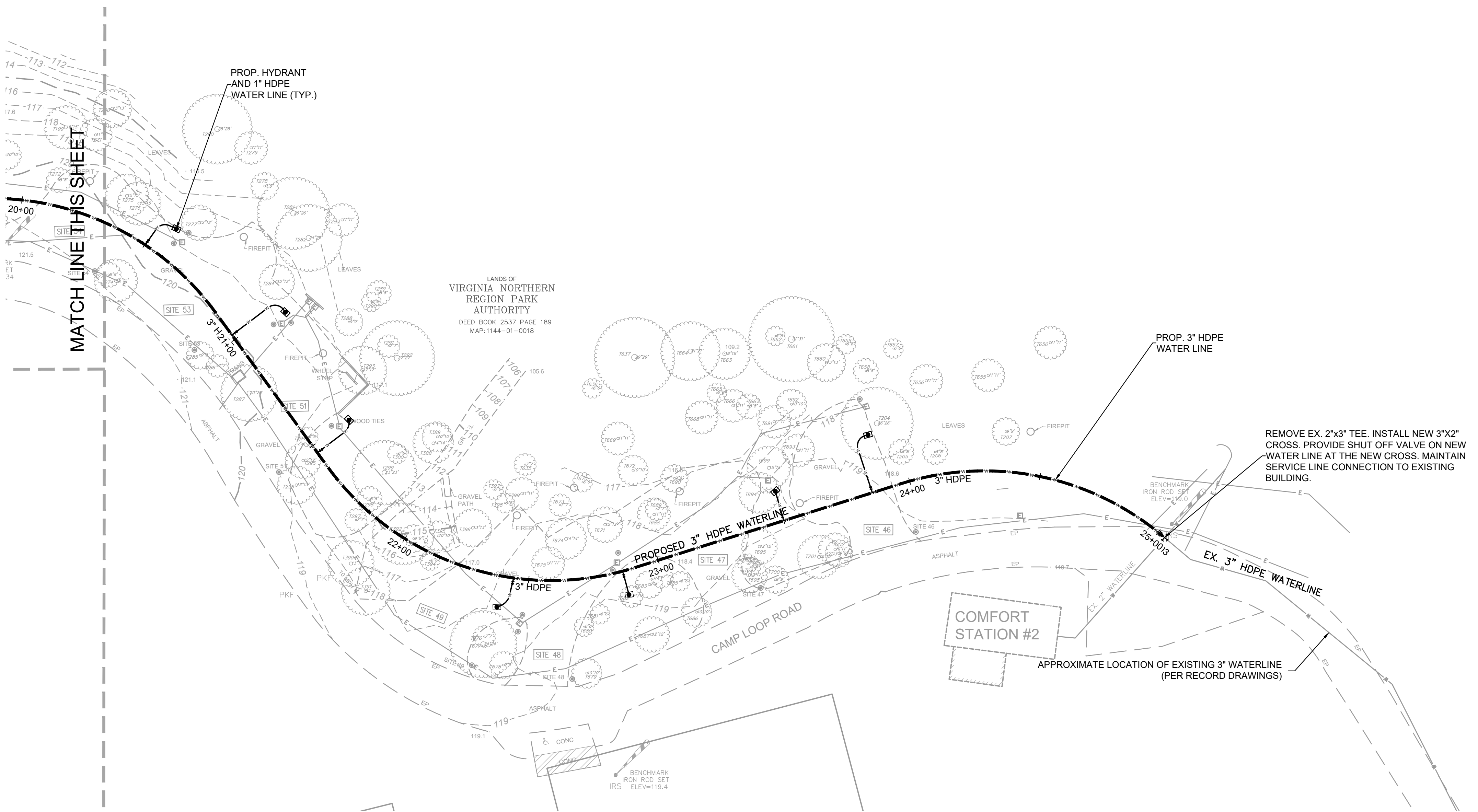


LEGEND

- BLOG HT BUILDING HEIGHT
- CONC CONCRETE
- CSW CONCRETE SIDEWALK
- EB ELECTRIC BOX
- EP EDGE OF PAVEMENT
- FF FINISH FLOOR
- IPF IRON PIN FOUND
- PKF PK NAIL FOUND
- SN SIGN
- TRANS TRANSFORMER
- WDF WOOD FENCE
- AC AIR CONDITIONER
- BOLLARD BOLLARD
- CO CLEAN OUT
- EB ELECTRIC BOX
- EM ELECTRIC METER
- EO ELECTRIC OUTLET
- RD ROOF DRAIN
- SN SIGN
- NA SIGN-NO ALCOHOL
- SIS STORM INLET (SQUARE)
- UM UNKNOWN MANHOLE
- WS WATER SPIGOT
- WELL WELL
- EX. TREE W/SIZE EX. TREE W/SIZE
- E APPRX. LOC. EX. UNDERGROUND ELECTRIC
- W APPRX. LOC. EX. UNDERGROUND WATER LINE
- X EX. EDGE OF GRAVEL
- X EX. FENCE
- S APPRX. LOC. EX. UNDERGROUND SANITARY
- PROP. 1" HDPE WATER SERVICE LINE
- PROP. 3" HDPE WATER LINE
- PROP. YARD HYDRANT
- PROP. WATERLINE CAP
- SITE 4 SITE LOCATION
- BENCHMARK LOCATION

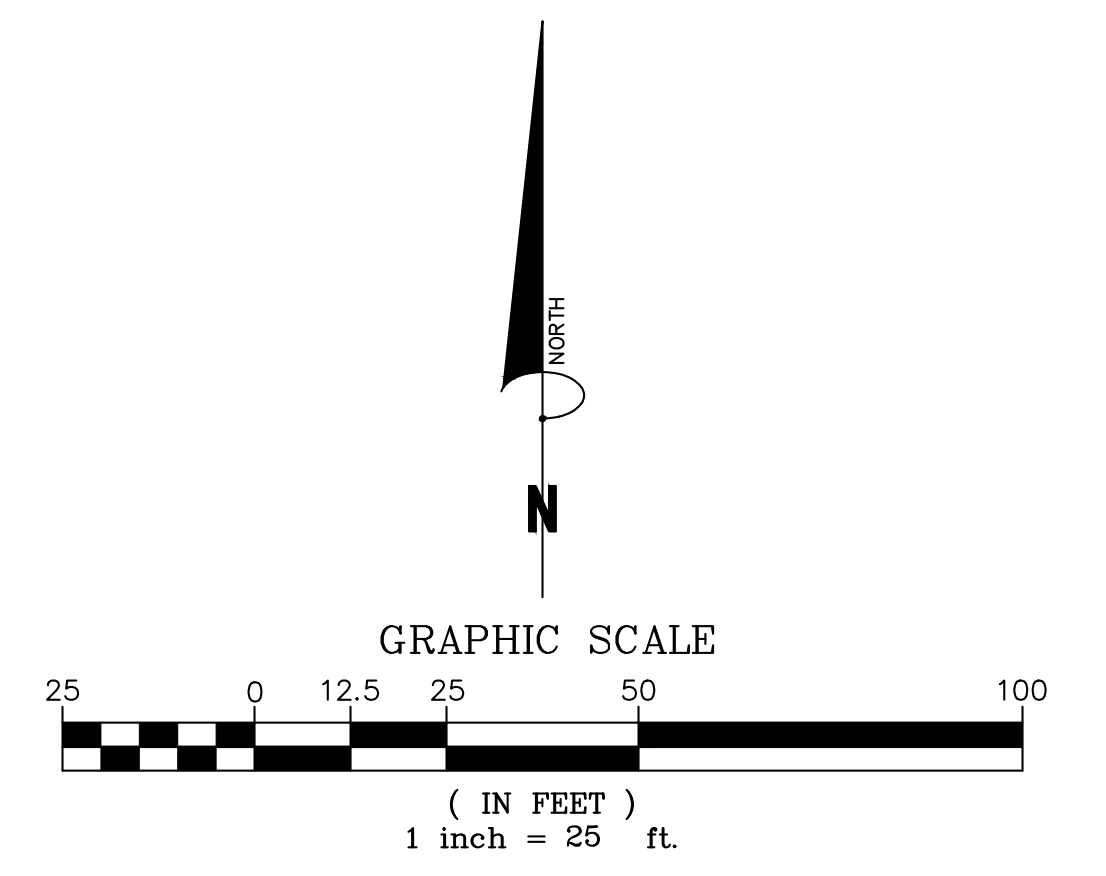


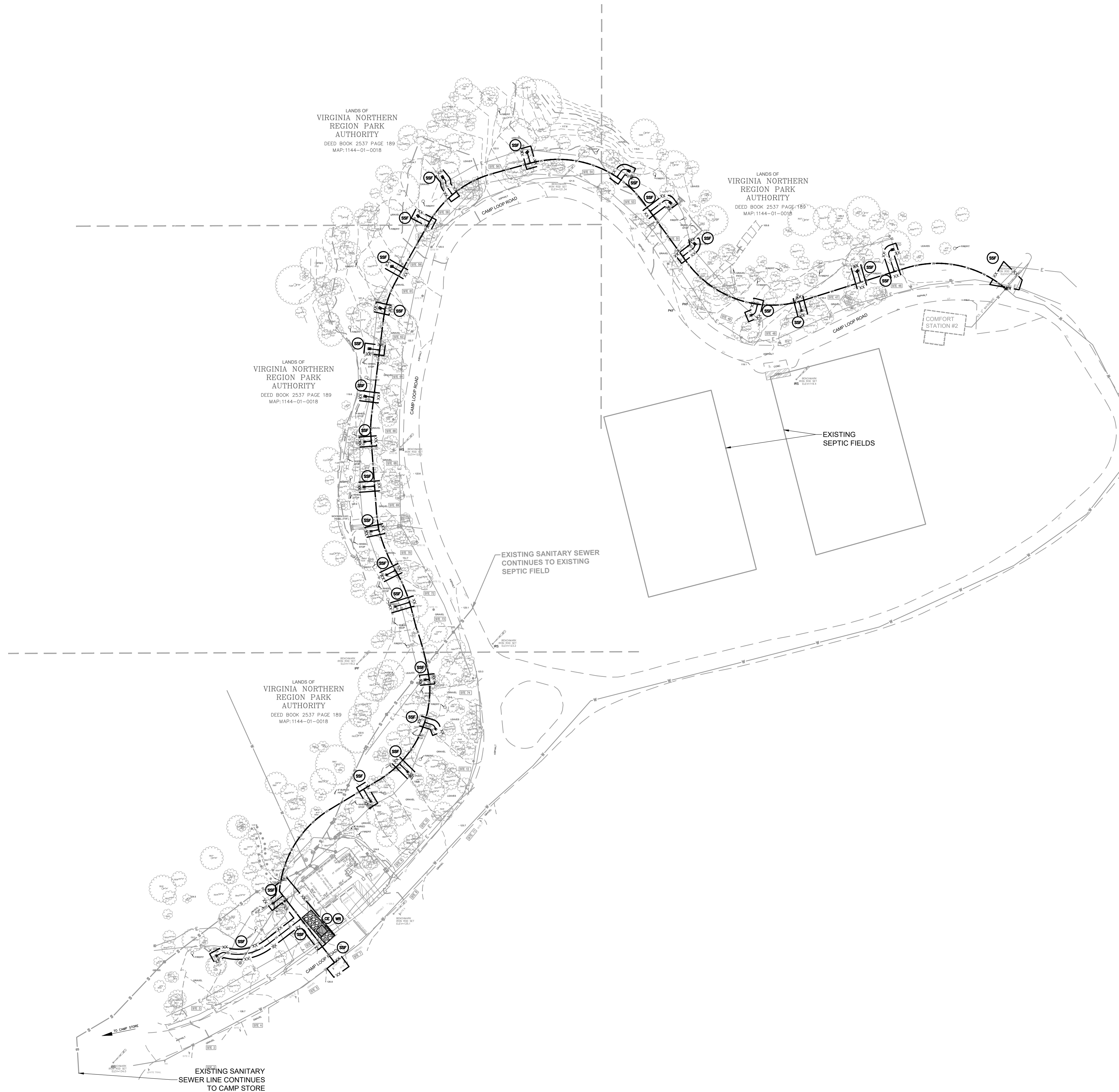
MATCH LINE SHEET 09



LEGEND

- BLDG. HT BUILDING HEIGHT
- CONC CONCRETE
- CSW CONCRETE SIDEWALK
- EB ELECTRIC BOX
- EP EDGE OF PAVEMENT
- FF FINISH FLOOR
- IPF IRON PIN FOUND
- PKF PK NAIL FOUND
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- TRANS TRANSFORMER
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- APPRX. LOC. EX. UNDERGROUND ELECTRIC
- APPRX. LOC. EX. UNDERGROUND WATER LINE
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- EX. FENCE
- APPRX. LOC. EX. UNDERGROUND SANITARY
- PROP. 1" HDPE WATER SERVICE LINE
- PROP. 3" HDPE WATER LINE
- PROP. YARD HYDRANT
- PROP. WATERLINE CAP
- SITE LOCATION
- BENCHMARK LOCATION





EROSION AND SEDIMENT CONTROL LEGEND			
NO.	TITLE	KEY	SYMBOL
3.02	CONSTRUCTION ENTRANCE	CE WR	
	MODIFIED SUPER SILT FENCE/TREE PROTECTION	SSF	

SILT FENCE NOTE:
 *MODIFIED SUPER SILT FENCE TO SERVE AS PERIMETER EROSION CONTROL AND TREE PROTECTION. TRENCHLESS FENCE INSTALLATION IS BEING USED WHERE POSSIBLE IN ORDER TO NOT IMPACT THE ADJACENT TREE ROOTS.

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OVERALL EROSION AND SEDIMENT CONTROL PLAN
POHICK BAY REGIONAL PARK
 CAMPGROUND WATERLINE IMPROVEMENTS
 MOUNT VERNON DISTRICT
 FAIRFAX COUNTY, VA

PROJECT NO.
 COUNTY PROJECT NUMBER

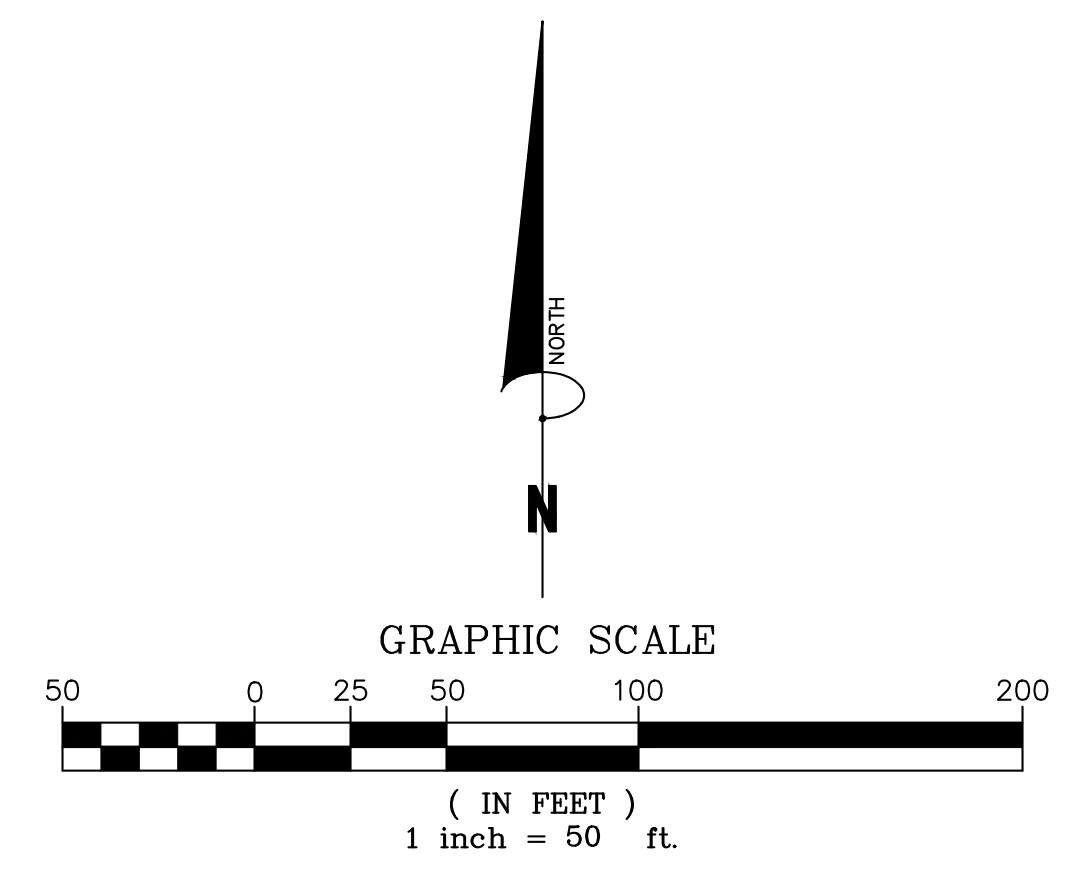
ETHAN PACIFIC
 Lic. No. 63882
 08/14/24
 PROFESSIONAL ENGINEER

PLAN STATUS
 02/23/24 DRAFT SUBMISSION
 05/17/24 DRAFT SUBMISSION
 08/14/24 FINAL SUBMISSION

DATE	DESCRIPTION
EP	KM MT
DESIGN	DRAWN CHKD
SCALE	H: AS SHOWN V:

JOB No.
 DATE : FEBRUARY, 2024
 FILE No. 140356-01-001

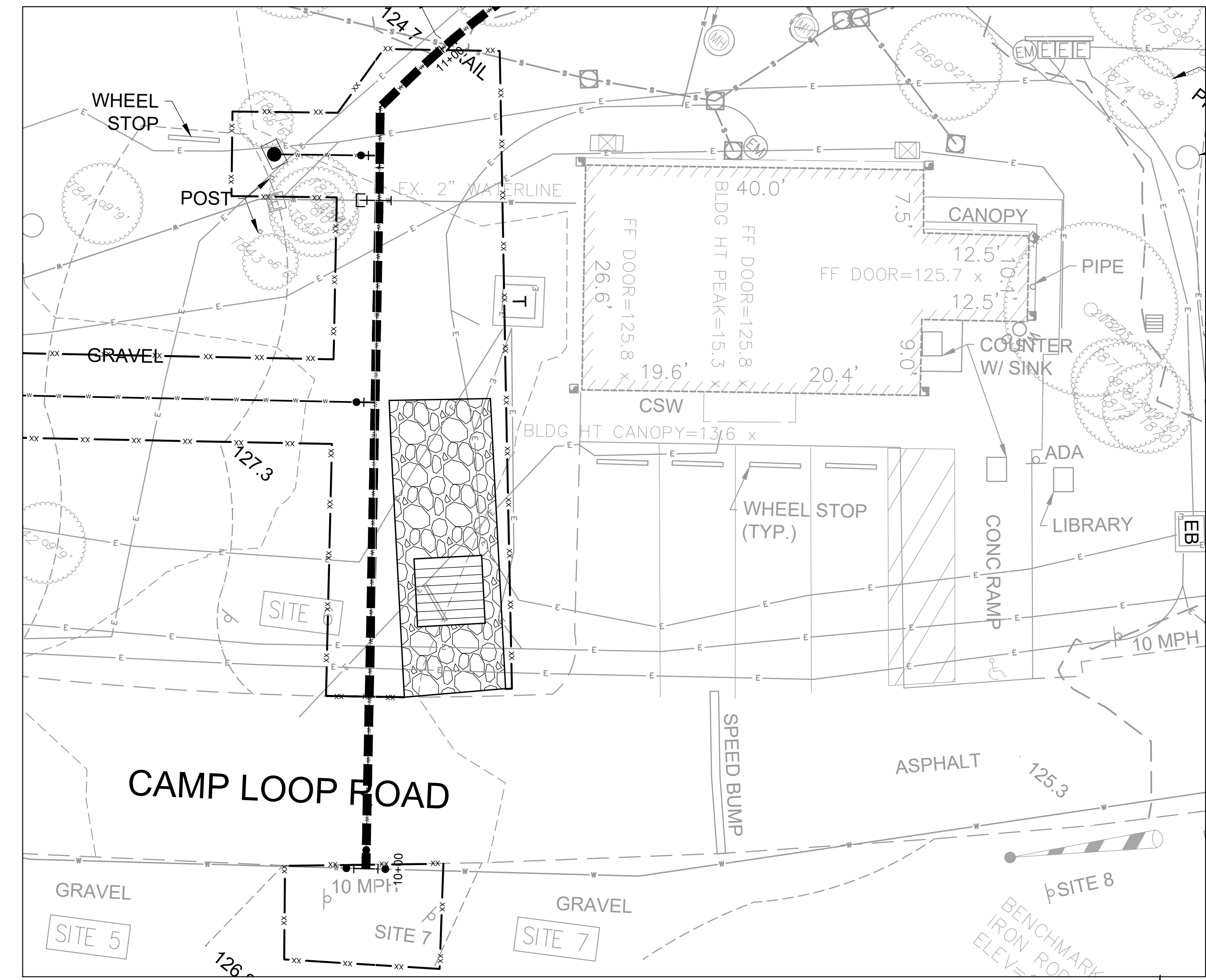
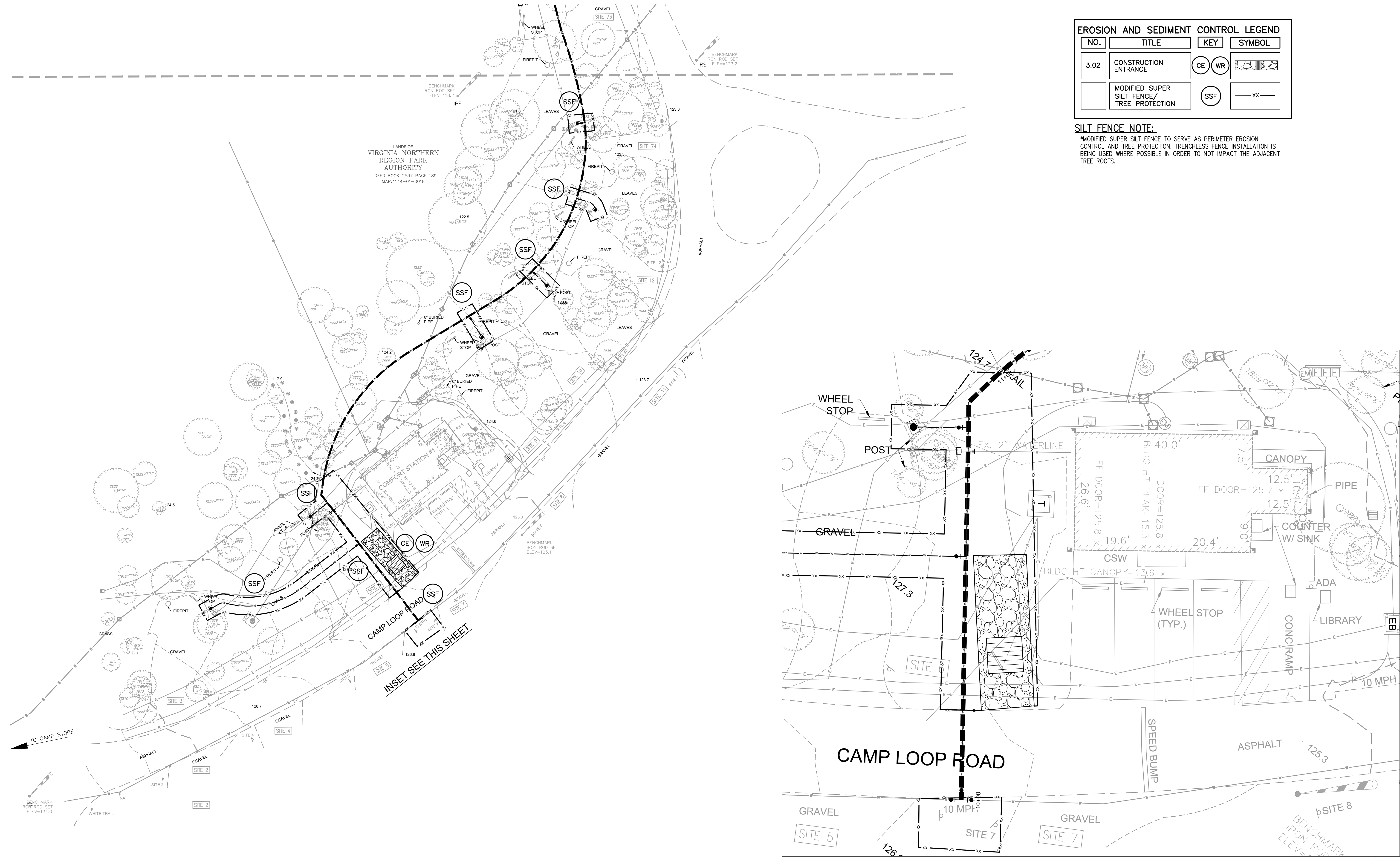
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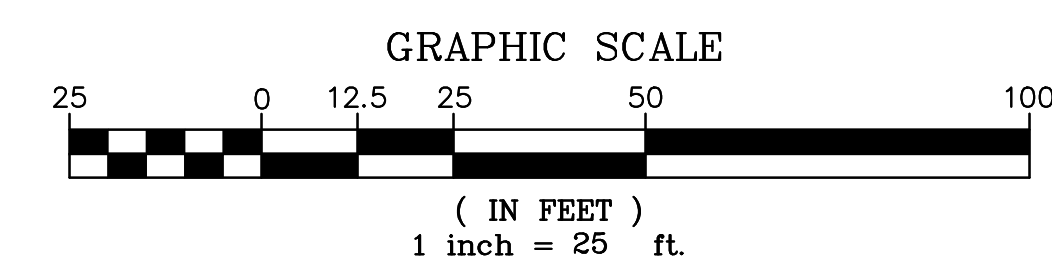
EROSION AND SEDIMENT CONTROL LEGEND			
NO.	TITLE	KEY	SYMBOL
3.02	CONSTRUCTION ENTRANCE	CE WR	
	MODIFIED SUPER SILT FENCE/TREE PROTECTION	SSF	—xx—

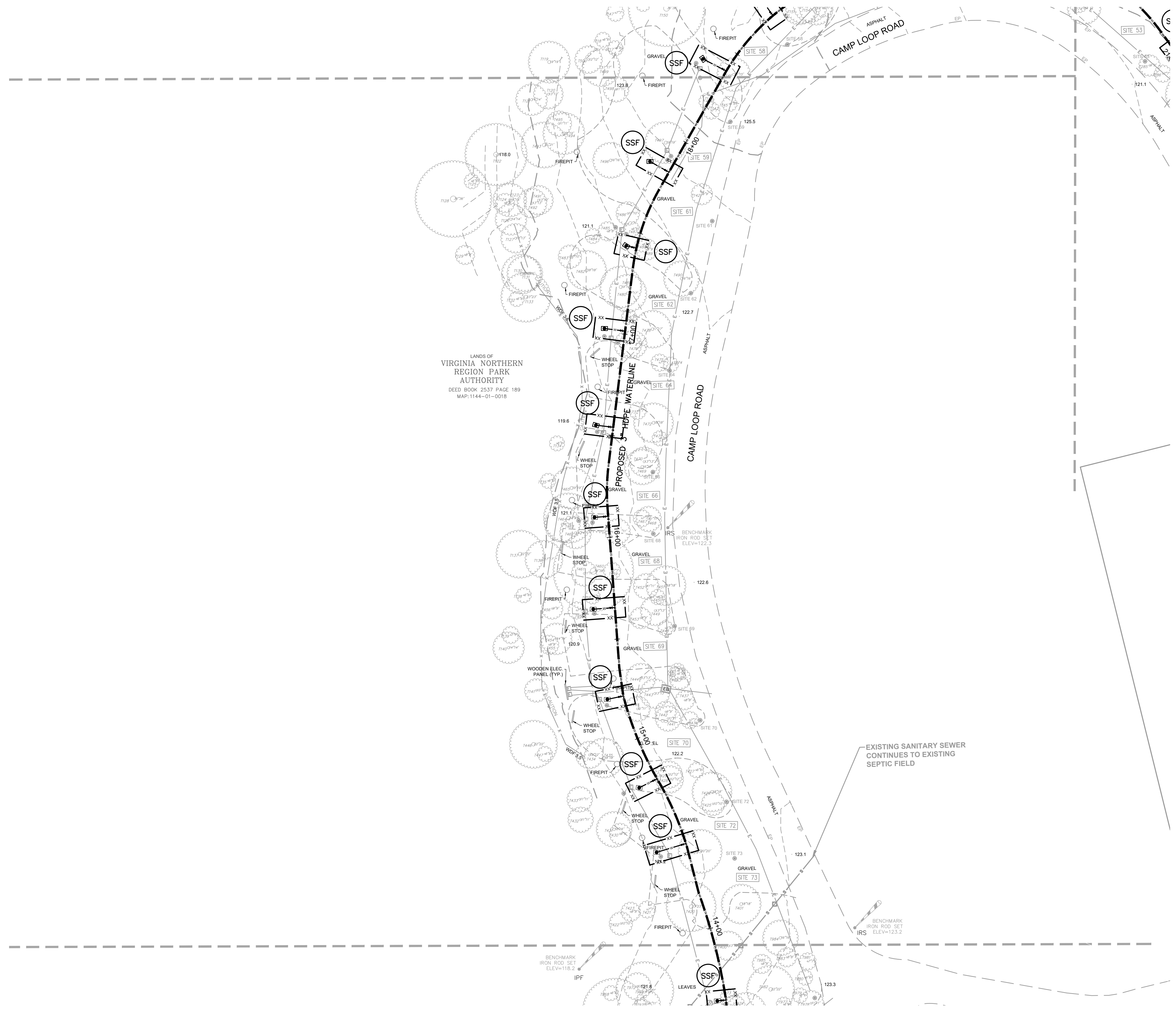
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COMFORT STATION #1 INSET PLAN
SCALE 1" = 10'

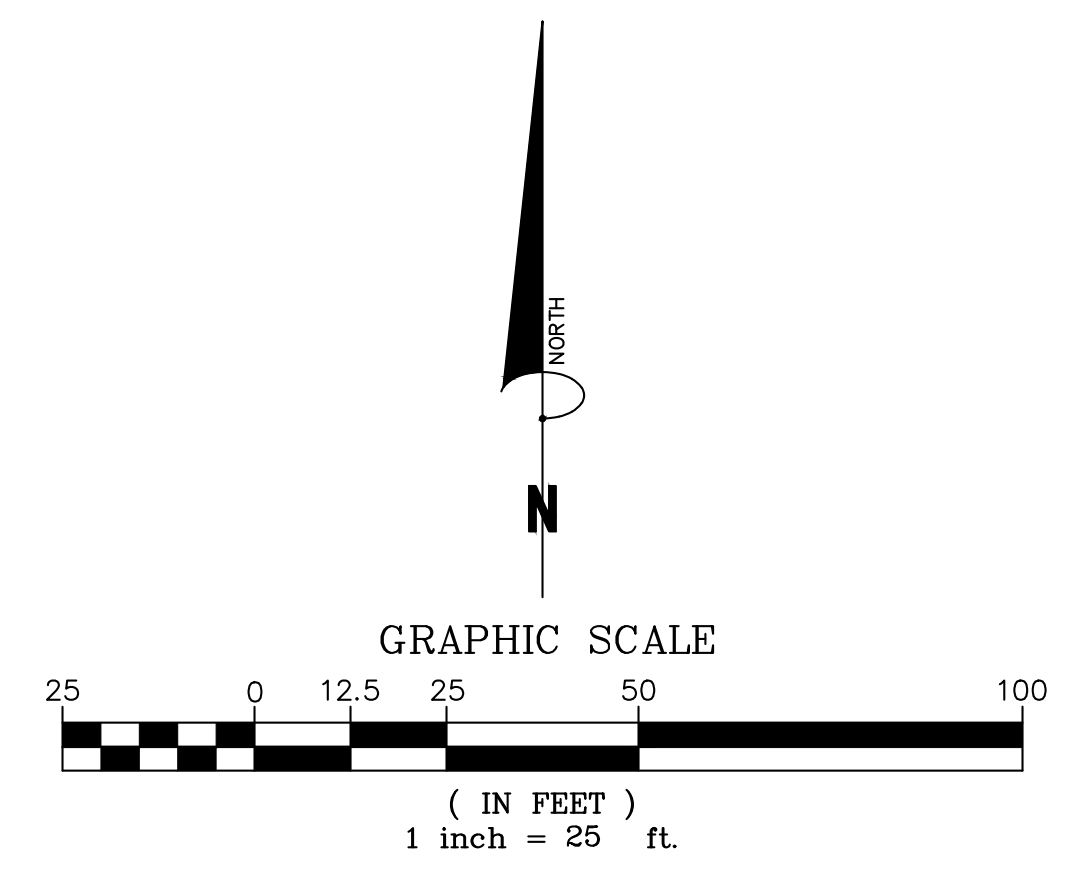




LANDS OF
VIRGINIA NORTHERN
REGION PARK
AUTHORITY
DEED BOOK 2537 PAGE 189
MAP:1144-01-001B

EROSION AND SEDIMENT CONTROL LEGEND			
NO.	TITLE	KEY	SYMBOL
3.02	CONSTRUCTION ENTRANCE	CE WR	
	MODIFIED SUPER SILT FENCE/TREE PROTECTION	SSF	

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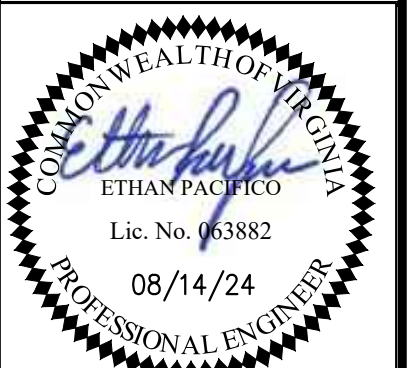


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EROSION AND SEDIMENT CONTROL PLAN (2 OF 3)
POHICK BAY REGIONAL PARK
CAMPGROUND WATERLINE IMPROVEMENTS
MOUNT VERNON DISTRICT
FAIRFAX COUNTY, VA

PROJECT NO
COUNTY PROJECT NUMBER



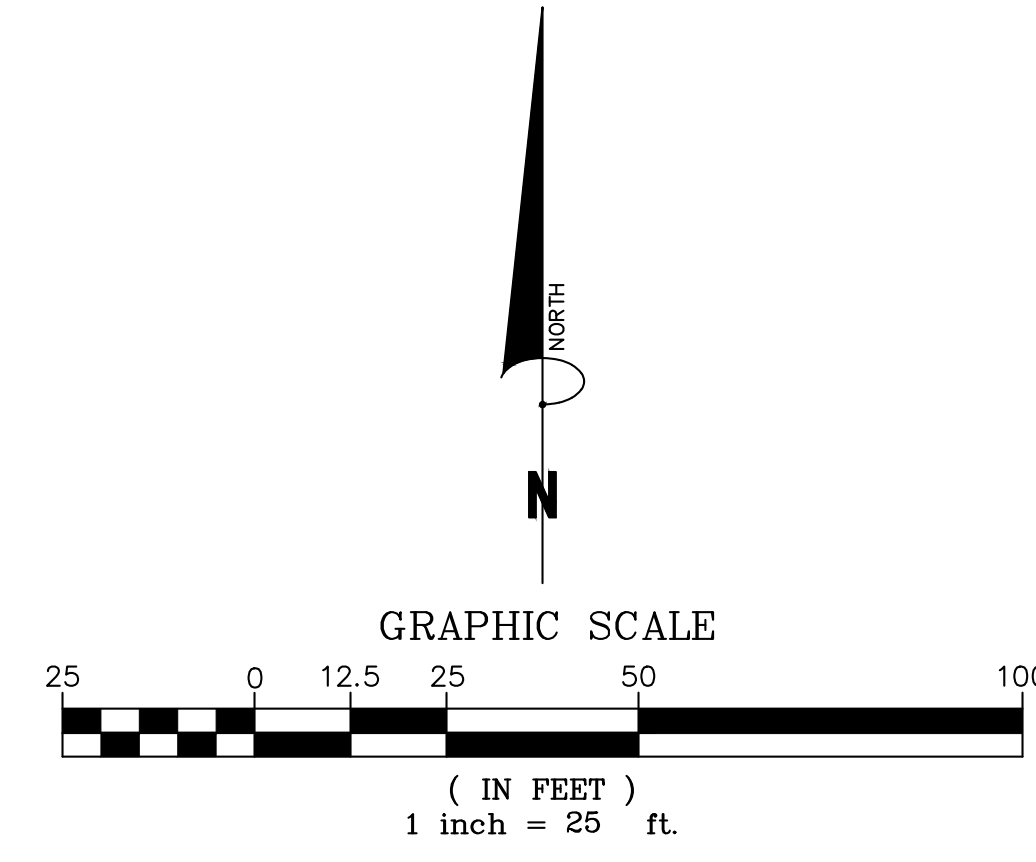
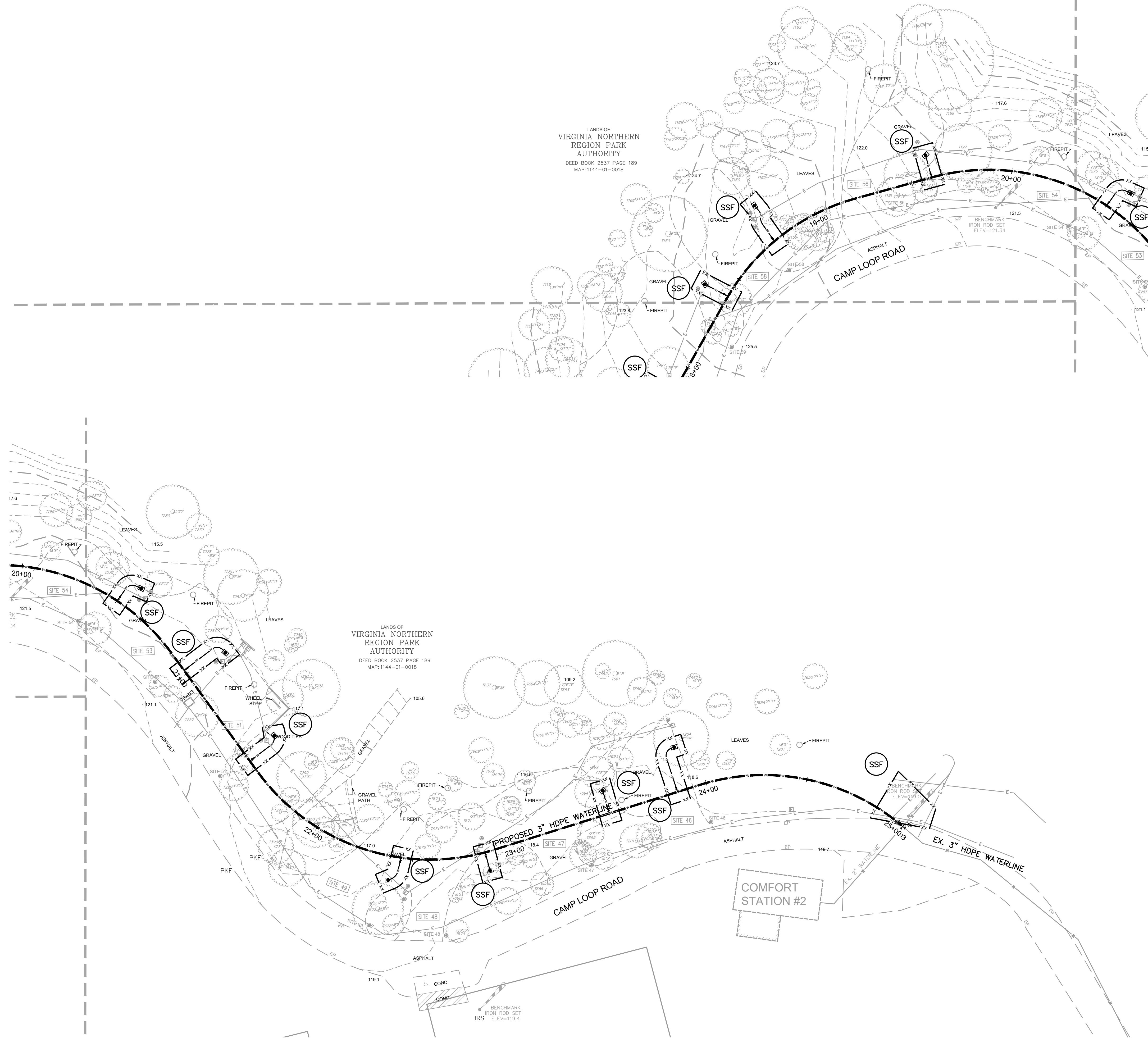
PLAN STATUS	
02/23/24	DRAFT SUBMISSION
05/17/24	DRAFT SUBMISSION
08/14/24	FINAL SUBMISSION

DATE	DESCRIPTION
EP	KM MT
DESIGN	DRAWN CHKD
SCALE	H: AS SHOWN V:

JOB No.
DATE : FEBRUARY, 2024
FILE No. 140356-01-001

NO.	TITLE	KEY	SYMBOL
3.02	CONSTRUCTION ENTRANCE	CE WR	
	MODIFIED SUPER SILT FENCE/TREE PROTECTION	SSF	— xx —

SILT FENCE NOTE:
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LAND CONSERVATION NOTES

- MEASURES TO CONTROL EROSION AND SILTATION SHALL BE PROVIDED PURSUANT TO AND IN COMPLIANCE WITH CURRENT FEDERAL, STATE AND LOCAL REGULATIONS. THE INFORMATION CONTAINED IN THE CONSTRUCTION PLANS AND/OR THE APPROVAL OF THE PLANS SHALL IN NO WAY RELIEVE THE CONTRACTOR OR HIS AGENT OF ANY LEGAL RESPONSIBILITY WHICH MAY BE REQUIRED BY THE CODE OF VIRGINIA OR ANY ORDINANCE ENACTED BY THE COUNTY OF FAIRFAX.
- ALL AREAS, ON OR OFF-SITE, WHICH ARE DISTURBED BY THIS CONSTRUCTION AND WHICH ARE NOT PAVED OR BUILT UPON SHALL BE ADEQUATELY STABILIZED TO CONTROL EROSION AND SEDIMENTATION. ACCEPTABLE STABILIZATION SHALL CONSIST OF PERMANENT GRASS SEED MIXTURE INSTALLED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. ALL SLOPES 2:1 AND GREATER SHALL BE SODDED AND STAKED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE OWNER'S REPRESENTATIVE.
- PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.
- DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE, AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE. STOCKPILES SHALL ALSO BE APPROVED BY PARK AUTHORITY OR ENGINEER OF RECORD.
- A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT, IN THE OPINION OF THE LOCAL PROGRAM ADMINISTRATOR OR HIS DESIGNATED AGENT, IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.
- SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
- STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
- SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPRISED OF FLOW FROM DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES SHALL BE CONTROLLED BY A SEDIMENT BASIN. THE SEDIMENT BASIN SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE THE ANTICIPATED SEDIMENT LOADING FROM THE LAND-DISTURBING ACTIVITY. THE OUTFALL DEVICE OR SYSTEM DESIGN SHALL TAKE INTO ACCOUNT THE TOTAL DRAINAGE AREA FLOWING THROUGH THE DISTURBED AREA TO BE SERVED BY THE BASIN.
- CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROBLEM IS CORRECTED.
- CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.
- WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
- ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
- BEFORE NEWLY CONSTRUCTED STORM WATER CONVEYANCE CHANNELS ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.
- WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. NONERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COFFERDAMS. EARTHEN FILL MAY BE USED FOR THE STRUCTURES IF ARMORED BY NONERODIBLE COVER MATERIALS.
- WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES MORE THAN TWICE IN ANY SIX-MONTH PERIOD, A TEMPORARY STREAM CROSSING CONSTRUCTED OF NONERODIBLE MATERIAL SHALL BE PROVIDED.
- ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE ADHERED TO.
- THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN A WATERCOURSE IS COMPLETED.
- WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL SUBDIVISION LOTS AS WELL AS TO LARGER LAND DISTURBING ACTIVITIES.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE LOCAL PROGRAM ADMINISTRATOR. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
- REFER TO THIS SHEET FOR EROSION & SEDIMENT CONTROL NARRATIVE.
- UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE REQUIREMENTS, STANDARDS AND SPECIFICATIONS:
 - NO MORE THAN 250 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
 - EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
 - EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
 - MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
 - RE-STABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS AND REQUIREMENTS.
 - APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.

EROSION & SEDIMENT CONTROL NARRATIVE:

PROJECT DESCRIPTION

THIS SITE, LOCATED IN FAIRFAX COUNTY IS PROPOSED TO EXTEND THE EXISTING 3" HDPE WATERLINE AROUND THE CAMP ROAD TO PROVIDE SERVICE TO THE CAMPSITES. IMPROVEMENTS CONSIST OF THE ADDITION OF NEW 3" HDPE WATERLINE, 1" SERVICE LATERALS AND ASSOCIATED APPURTENANCES AND YARD HYDRANTS AT EACH CAMPSITE. THE MAJORITY OF THE CONSTRUCTION SHALL BE DIRECTIONALLY BORED SO AS TO LIMIT THE DISTURBED AREA. THE DISTURBED AREA IS NOT TO EXCEED 2,500 SF AT ANY ONE TIME.

EXISTING SITE CONDITIONS

THE EXISTING TOPOGRAPHY CONSISTS OF SLOPES RANGING FROM 3:1 TO 20:1. THE MAJORITY OF THE SITE IS WOODED.

ADJACENT PROPERTY

THE PARK IS BOUNDED ON THE NORTH BY THE POHICK BAY WATER PARK, WEST BY ADDITIONAL CAMPSITES AND PARK OFFICE, EAST BY POHICK BAY, AND FORESTED LAND TO THE SOUTH.

OFF-SITE AREAS

THERE ARE NO OFFSITE AREAS THAT WILL BE NEGATIVELY IMPACTED BY THIS DEVELOPMENT. APPROVED EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN SPECIFIED AT THE PERIPHERAL BOUNDARIES OF THE PROPOSED LIMITS OF DISTURBANCE.

SOILS

(SEE SOILS MAP, LOCATED ON THIS SHEET)

CRITICAL EROSION AREAS

THERE ARE NO CRITICAL AREAS IDENTIFIED ON SITE WITHIN THE LIMITS OF DISTURBANCE.

EROSION AND SEDIMENT CONTROL MEASURES

UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. THE MINIMUM STANDARDS OF THE VESCH SHALL BE ADHERED TO UNLESS OTHERWISE WAIVED OR APPROVED BY A VARIANCE.

STRUCTURAL PRACTICES

1. TEMPORARY CONSTRUCTION ENTRANCE - 3.02

CONSTRUCTION ENTRANCE IS PROVIDED OFF OF THE CAMP LOOP ROAD TO THE IMPROVEMENTS AREA. DRIVERS OF CONSTRUCTION VEHICLES WILL BE REQUIRED TO WASH THEIR WHEELS BEFORE LEAVING THE IMPROVED AREA. IT IS THE CONTRACTORS RESPONSIBILITY TO INSURE THAT THERE IS AN ADEQUATE WATER SOURCE TO PERFORM SUCH WASHING.

2. SUPER SILT FENCE/TREE PROTECTION BARRIER-3.05

SUPER SILT FENCE SEDIMENT BARRIERS WILL BE INSTALLED DOWNSLOPE OF AREAS WITH MINIMAL GRADES TO FILTER SEDIMENT-LADEN RUNOFF FROM SHEET FLOW AS INDICATED ON THE GRADING AND PHASE I EROSION AND SEDIMENT CONTROL PLAN. THE SUPER SILT FENCE WILL ALSO SERVE AS TREE PROTECTION DEVICE FOR THESE AREAS AS SHOWN ON THE PLAN. (SEE SHEET 12)

3. STABILIZATION MEASURES

STABILIZE AREAS WHICH ARE TO REMAIN UNWORKED SHALL BE VEGETATED AS EARLY AS POSSIBLE. AREAS BROUGHT TO FINISHED GRADE MUST BE SEEDING WITHIN 7 DAYS. LIKEWISE, AREAS THAT WILL NOT BE WORKED LONGER THAN 30 DAYS MUST ALSO BE SEEDING WITHIN 7 DAYS PRIOR TO END OF WORK.

VEGETATIVE PRACTICES

1. TEMPORARY SEEDING - 3.31

ALL DENUDED AREAS WHICH WILL BE LEFT DORMANT FOR EXTENDED PERIODS OF TIME, SHALL BE SEEDING WITH FAST GERMINATING TEMPORARY VEGETATION IMMEDIATELY FOLLOWING GRADING. SEE THIS SHEET FOR SEEDING NOTES. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 14 DAYS.

MANAGEMENT STRATEGIES

- CONSTRUCTION WILL BE SEQUENCED SO THAT GRADING OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE.
- SEDIMENT TRAPPING MEASURES WILL BE INSTALLED AS A FIRST STEP IN GRADING AND WILL BE SEEDING AND MULCHED IMMEDIATELY FOLLOWING INSTALLATION.
- TEMPORARY SEEDING OR OTHER STABILIZATION WILL FOLLOW IMMEDIATELY AFTER GRADING.
- AREAS, WHICH ARE NOT TO BE DISTURBED, WILL BE CLEARLY MARKED BY FLAGS, SIGNS, ETC.
- THE JOB SUPERINTENDENT SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES.
- AFTER ACHIEVING ADEQUATE STABILIZATION, THE TEMPORARY E&S CONTROLS WILL BE CLEANED UP AND REMOVED.

PERMANENT STABILIZATION 3.32

ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH PERMANENT SEEDING. SEEDING SHALL BE PERFORMED AS OUTLINED IN THE SEEDING NOTES, SEE THIS SHEET.

MAINTENANCE

THE SITE SUPERINTENDENT, OR HIS/HER REPRESENTATIVE, SHALL MAKE A VISUAL INSPECTION OF ALL MECHANICAL CONTROLS AND NEWLY STABILIZED AREAS (I.E., SEEDING AND MULCHED AND/OR SODDED AREAS) ON A DAILY BASIS, ESPECIALLY AFTER A HEAVY RAINFALL EVENT TO INSURE THAT ALL CONTROLS ARE MAINTAINED AND PROPERLY FUNCTIONING. ANY DAMAGED CONTROLS SHALL BE REPAIRED PRIOR TO THE END OF THE DAY INCLUDING RE-SEEDING AND MULCHING OR RE-SODDING IF NECESSARY.

THE FOLLOWING ITEMS WILL BE CHECKED IN PARTICULAR:

- THE SILT FENCE BARRIER WILL BE CHECKED REGULARLY FOR UNDERMINING OR DETERIORATION OF THE FABRIC. SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF SEDIMENT DEPOSITION REACHES HALF WAY TO THE TOP OF THE BARRIER.
- THE SEEDING AREAS WILL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED AND RESEEDING AS NEEDED.
- NO UNPROTECTED, DISTURBED AREA SHALL DRAIN TO ROADWAY PAVEMENTS SUCH THAT THE SUBBASE, BASE, OR WEARING SURFACE ARE CONTAMINATED BY SILT TRAPPED AT LOW POINTS OR INLETS.

SODDING - 3.33

ALL SODDED AREAS, IF PROPOSED, SHALL BE CONDUCTED IN ACCORDANCE OF SECTION 3.33 OF THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK.

DUST CONTROL

CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE ENTIRE CONSTRUCTION PHASE BY THE APPLICATION OF WATER AND/OR APPROVED ADHESIVES PER STD. 3.39 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (CURRENT EDITION).



SEQUENCE OF CONSTRUCTION

SEDIMENT CONTROL PLAN (PHASE I & II):

- SCHEDULE AND ATTEND PRE-CONSTRUCTION MEETING WITH OWNER. WORK AREA LIMITS ARE TO BE FLAGGED IN THE FIELD PRIOR TO MEETING DATE.
- INSTALL TREE PROTECTION FENCING/SUPER SILT FENCE PRIOR TO INSTALLING BORE PITS.
- INSTALL PERIMETER SEDIMENT CONTROLS INCLUDING CONSTRUCTION ENTRANCE AND SUPER SILT FENCE, AS APPROPRIATE AND AS ROOM ALLOWS FOR CLEARING OPERATIONS, AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN.

- CONSTRUCTION OF THE PROPOSED WATERLINE SHALL BE DONE IN SEGMENTS WITH NO MORE THAN 250 LF OR 2,500 SF OF DISTURBANCE AT ANY ONE TIME. THE MAJORITY OF THE CONSTRUCTION SHALL BE DIRECTIONALLY BORED.
- THE BEGINNING OF THE WATERLINE SHALL BE TRENCHED UP TO THE LOCATION AS SHOWN ON THE PLANS ON SHEET 12. THE EXTENTS OF THE TRENCH SHALL HAVE SUPER SILT FENCE.
- AT EACH BORE PIT (STARTING AND RECEIVING) THERE SHALL BE SUPER SILT FENCE AROUND THE EXTENTS OF THE PIT TO ENSURE SEDIMENT DOES NOT LEAVE THE PIT.
- FOR EACH CAMPSITE THE 1" SERVICE LINE SHALL BE DIRECTIONALLY BURIED. THE TRENCH SHALL BE LINED WITH SUPER SILT FENCE DURING CONSTRUCTION AND REMOVED ONCE THE GROUND IS STABILIZED AND THE INSTALLATION OF THE SERVICE LINE AND HYDRANT ARE COMPLETE.
- SINCE THIS WILL BE PHASED CONSTRUCTION IT IS NOT RECOMMENDED TO INSTALL ALL THE EROSION AND SEDIMENT MEASURES AT ONCE.
- STOCKPILE AREAS SHALL BE LOCATED UPHILL OF THE BORE PITS AND WILL BE ADEQUATELY PROTECTED WITH SUPER SILT FENCE.
- AFTER CONSTRUCTION OPERATIONS HAVE ENDED AND ALL DISTURBED AREAS HAVE BEEN STABILIZED.

EXCESS HAULING MATERIAL NOTE:

ANY EXCESS GRADING SHALL BE LOCATED WITHIN THE LIMITS OF THE SITE AT A LOCATION APPROVED BY THE OWNER OR THE ENGINEER OF RECORD.

GENERAL EROSION & SEDIMENT CONTROL NOTES:

- UNLESS OTHERWISE NOTED, ALL VEGETATIVE AND EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE TO THE LATEST EDITION OF MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.
- FOR ADDITIONAL DETAILS AND SPECIFICATIONS NOT SHOWN HEREON, REFER TO THE LATEST EDITION OF VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.
- A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ONSITE AT ALL TIMES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NOT SHOWN HEREON THAT ARE DEEMED NECESSARY BY THE APPROVING AUTHORITY AND/OR THE SITE INSPECTOR.
- THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL DEVICES DAILY. ANY DAMAGED CONTROLS SHALL BE REPAIRED OR REPLACED BY THE CLOSE OF EACH WORKING DAY.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
7B	Beltville silt loam, 2 to 7 percent slopes	9.3	13.9%
40	Grist Mill sandy loam, 0 to 25 percent slopes	1.3	1.9%
76B	Matapoke silt loam, 2 to 7 percent slopes	6.6	9.8%
77B	Mattapex loam, 2 to 7 percent slopes	1.5	2.3%
90B	Sassafras sandy loam, 2 to 7 percent slopes	8.9	13.2%
90C	Sassafras sandy loam, 7 to 15 percent slopes	1.3	2.0%
91C	Sassafras-Marumasco complex, 7 to 15 percent slopes	1.6	2.4%
91D	Sassafras-Marumasco complex, 15 to 25 percent slopes	5.5	8.2%
91E	Sassafras-Marumasco complex, 25 to 45 percent slopes	27.9	41.5%
95	Urban land	3.2	4.8%
W	Water	0.0	0.1%
Totals for Area of Interest		67.3	100.0%

TABLE 3.32-D

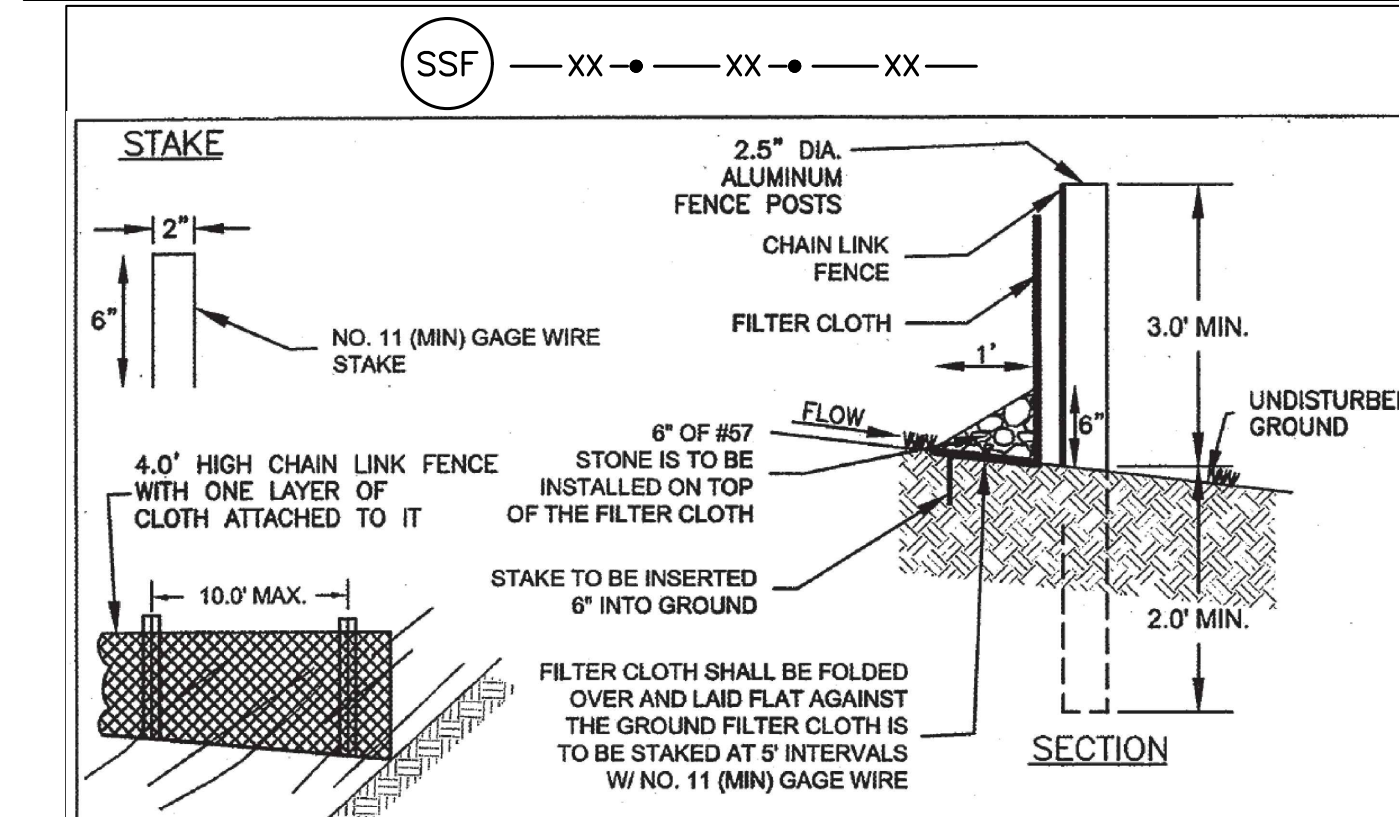
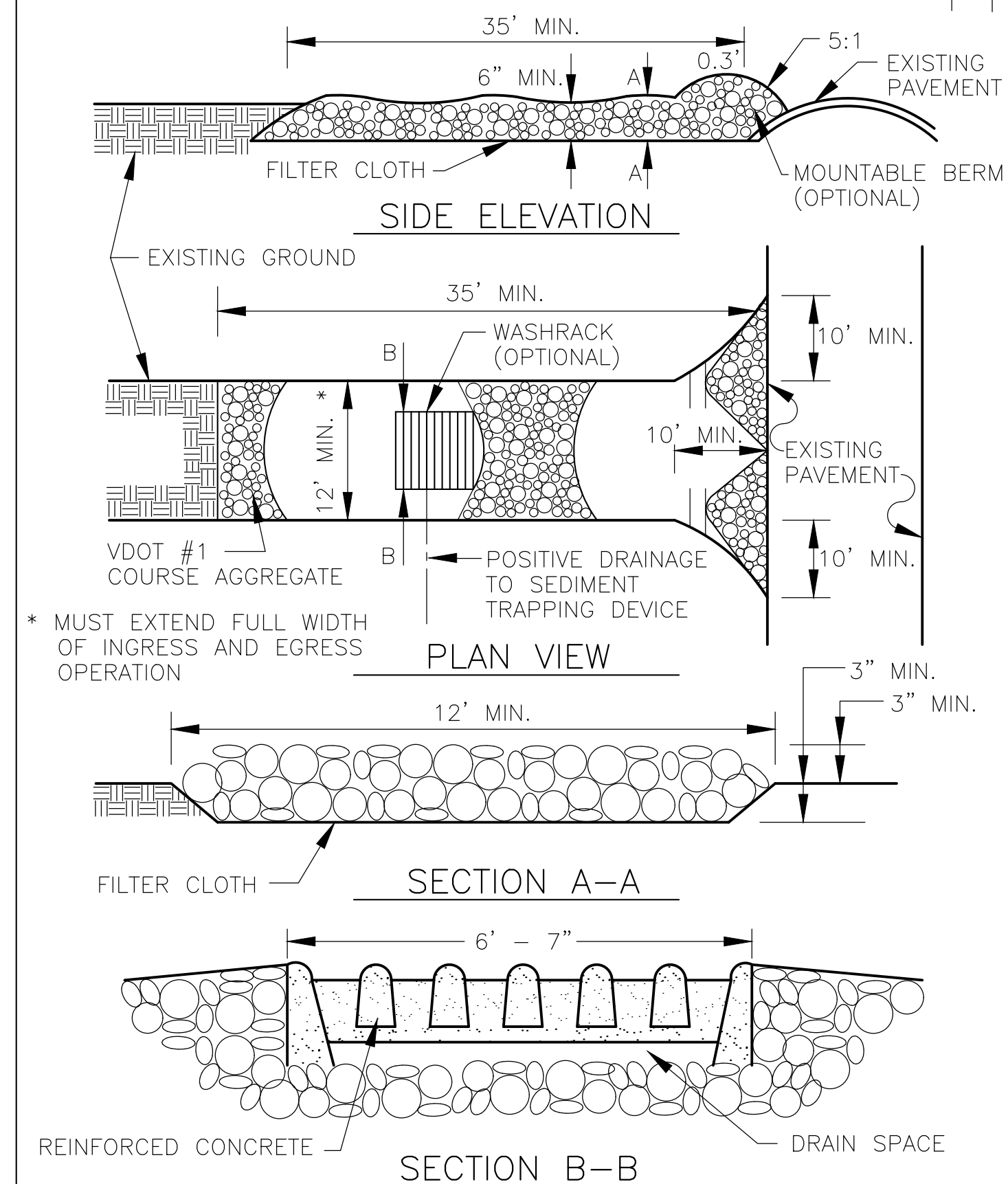
SITE SPECIFIC SEEDING MIXTURES FOR COASTAL PLAIN AREA

Minimum Care Lawn	Total Lbs. Per Acre
- Commercial or Residential - Kentucky 31 or Turf-Type Tall Fescue or - Common Bermudagrass **	175-200 lbs. 75 lbs.
High-Maintenance Lawn	
- Kentucky 31 or Turf-Type Tall Fescue or - Hybrid Bermudagrass (seed) **	200-250 lbs. 40 lbs. (unhulled)
- Hybrid Bermudagrass (by other vegetative establishment method, see Std. & Spec. 3.34)	30 lbs. (hulled)
General Slope (3:1 or less)	
- Kentucky 31 Fescue - Red Top Grass - Seasonal Nurse Crop *	128 lbs. 2 lbs. 20 lbs. 150 lbs.
Low Maintenance Slope (Steeper than 3:1)	
- Kentucky 31 Tall Fescue - Common Bermudagrass ** - Red Top Grass - Seasonal Nurse Crop * - Sericea Lespedeza **	93-108 lbs. 0-15 lbs. 2 lbs. 20 lbs. 150 lbs.

* Use seasonal nurse crop in accordance with seeding dates as stated below:
 February, March through April Annual Rye
 May 1st through August Foftail Millet
 September, October through November 15th Annual Rye
 November 16th through January Winter Rye

** May through October, use hulled seed. All other seeding periods, use unhulled seed. Weeping Lovegrass may be added to any slope or low-maintenance mix during warmer seeding periods; add 10-20 lbs./acre in mixes.

TEMPORARY STONE CONSTRUCTION ENTRANCE



PERSPECTIVE VIEW FENCING
 CHAIN LINK FENCE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST STD STANDARDS. POSTS SHALL BE PLACED WITHOUT CONCRETE EMBEDMENT.
 NOTES:
 1. CHAIN LINK FENCE SHALL BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES.
 2. FILTER CLOTH SHALL BE FASTENED SECURELY TO CHAIN LINK FENCE WITH TIES SPACED 2.0' AT THE TOP, MID SECTION, AND BOTTOM.
 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6\"/>

TABLE 3.31-B
ACCEPTABLE TEMPORARY SEEDING PLANT MATERIALS
QUICK REFERENCE FOR ALL REGIONS

Planting Dates	Species	Rate (lbs./acre)
Sept. 1 - Feb. 15	50/50 Mix of Annual Ryegrass (<i>Lolium multi-florum</i>) & Cereal (Winter) Rye (<i>Secale cereale</i>)	50 - 100
Feb. 16 - Apr. 30	Annual Ryegrass (<i>Lolium multi-florum</i>)	60 - 100
May 1 - Aug 31	German Millet (<i>Setaria italica</i>)	50

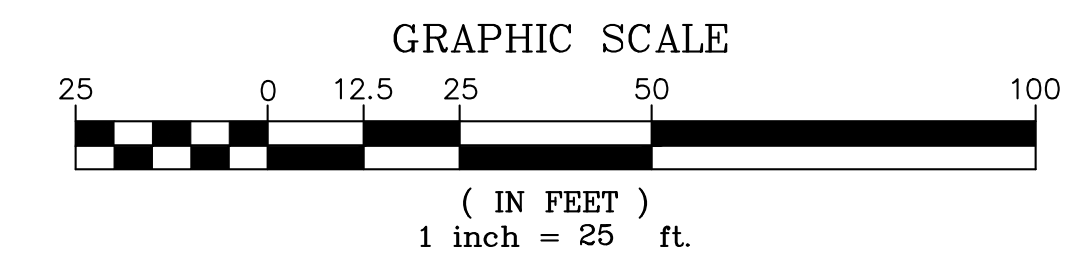
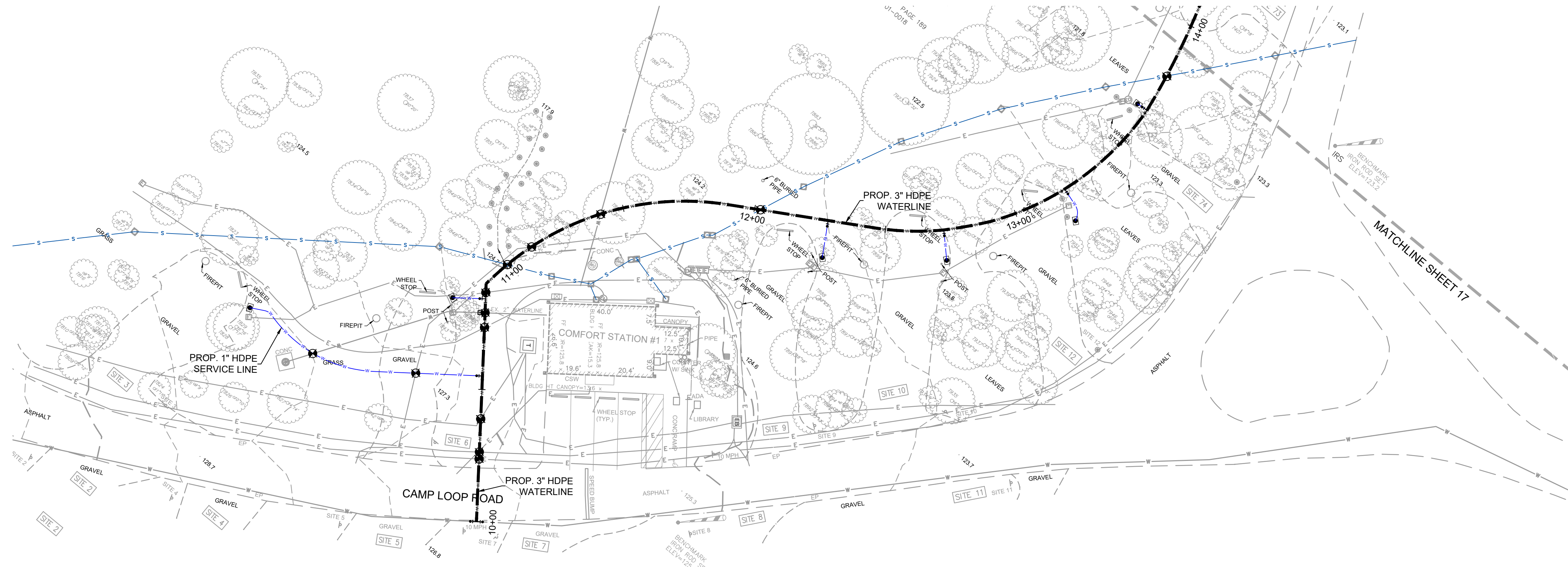
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EROSION AND SEDIMENT CONTROL DETAILS
POHICK BAY REGIONAL PARK
 CAMPGROUND WATERLINE IMPROVEMENTS
 MOUNT VERNON DISTRICT
 FAIRFAX COUNTY, VA

PROJECT NO
 COUNTY PROJECT NUMBER

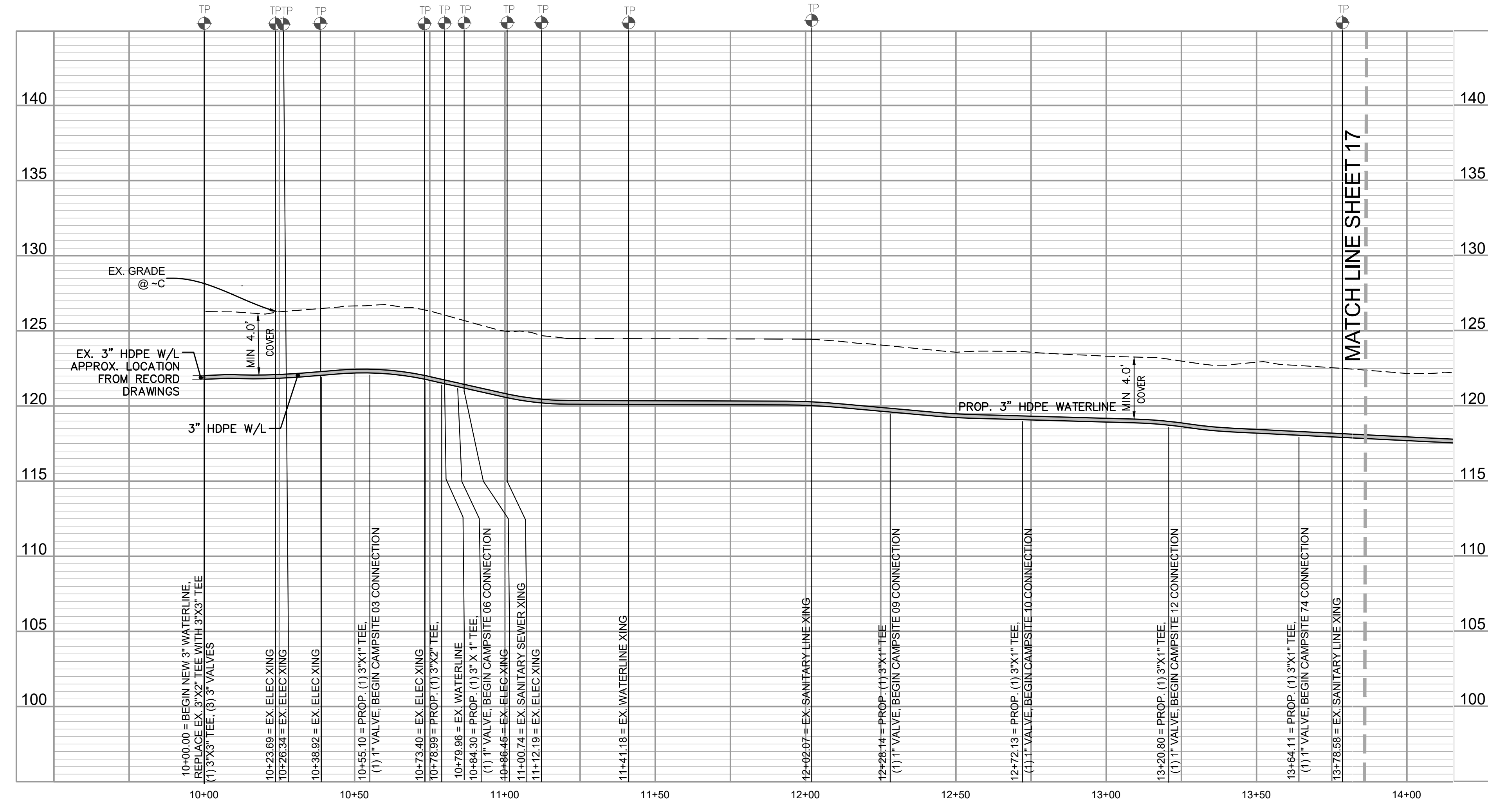
PLAN STATUS
 02/23/24 DRAFT SUBMISSION
 05/17/24 DRAFT SUBMISSION
 08/14/24 FINAL SUBMISSION

DATE DESCRIPTION
 EP KM MT
 DESIGN DRAWN CHKD
 SCALE H: AS SHOWN
 V:
 JOB No.
 DATE : FEBRUARY, 2024
 FILE NO. 140356-01-001



LEGEND

- BLDG HT BUILDING HEIGHT
- CONC CONCRETE
- CSW CONCRETE SIDEWALK
- EB ELECTRIC BOX
- EP EDGE OF PAVEMENT
- FF FINISH FLOOR
- IPF IRON PIN FOUND
- PKF PK NAIL FOUND
- SN SIGN
- TRANS TRANSFORMER
- WDF WOOD FENCE
- AC AIR CONDITIONER
- BOLLARD BOLLARD
- CLEAN OUT CLEAN OUT
- EB ELECTRIC BOX
- EM ELECTRIC METER
- EO ELECTRIC OUTLET
- RD ROOF DRAIN
- SN SIGN
- NA SIGN-NO ALCOHOL
- SIM STORM INLET (SQUARE)
- UM UNKNOWN MANHOLE
- WS WATER SPIGOT
- WELL WELL
- EX. TREE W/SIZE EX. TREE W/SIZE
- APPRX. LOC. EX. UNDERGROUND ELECTRIC APPRX. LOC. EX. UNDERGROUND ELECTRIC
- APPRX. LOC. EX. UNDERGROUND WATER LINE APPRX. LOC. EX. UNDERGROUND WATER LINE
- EX. EDGE OF GRAVEL EX. EDGE OF GRAVEL
- EX. FENCE EX. FENCE
- APPRX. LOC. EX. UNDERGROUND SANITARY APPRX. LOC. EX. UNDERGROUND SANITARY
- PROP. 1" HDPE SERVICE LINE PROP. 1" HDPE SERVICE LINE
- PROP. 3" HDPE MAIN WATER LINE PROP. 3" HDPE MAIN WATER LINE
- PROP. YARD HYDRANT PROP. YARD HYDRANT
- OUT AND CAP OUT AND CAP
- SITE LOCATION SITE LOCATION
- BENCHMARK LOCATION BENCHMARK LOCATION
- TEST PIT TEST PIT
- 3"x1" TEE, 1" SHUT OFF VALVE 3"x1" TEE, 1" SHUT OFF VALVE

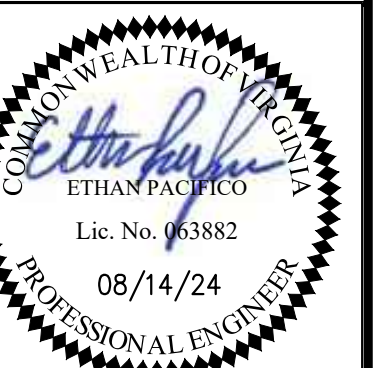


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WATERLINE PLAN AND PROFILE (1 OF 3)
POHICK BAY REGIONAL PARK
 CAMPGROUND WATERLINE IMPROVEMENTS
 FAIRFAX COUNTY, VIRGINIA
 MOUNT VERNON DISTRICT

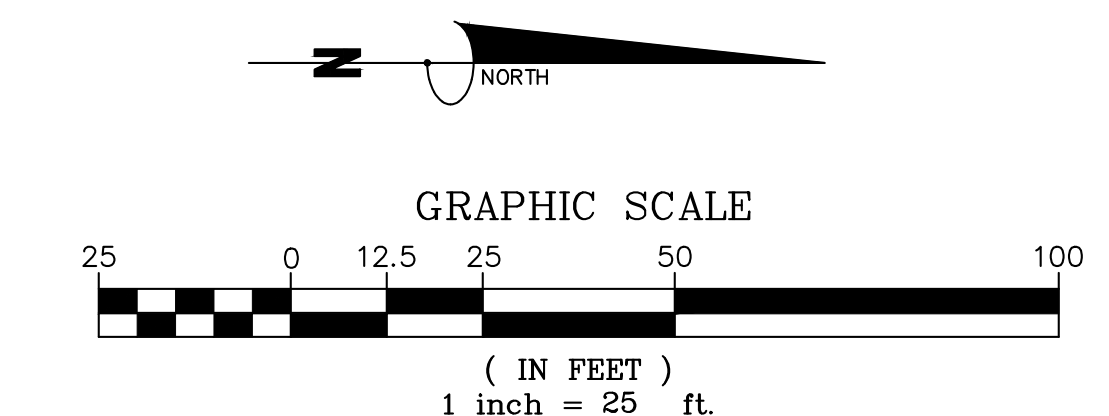
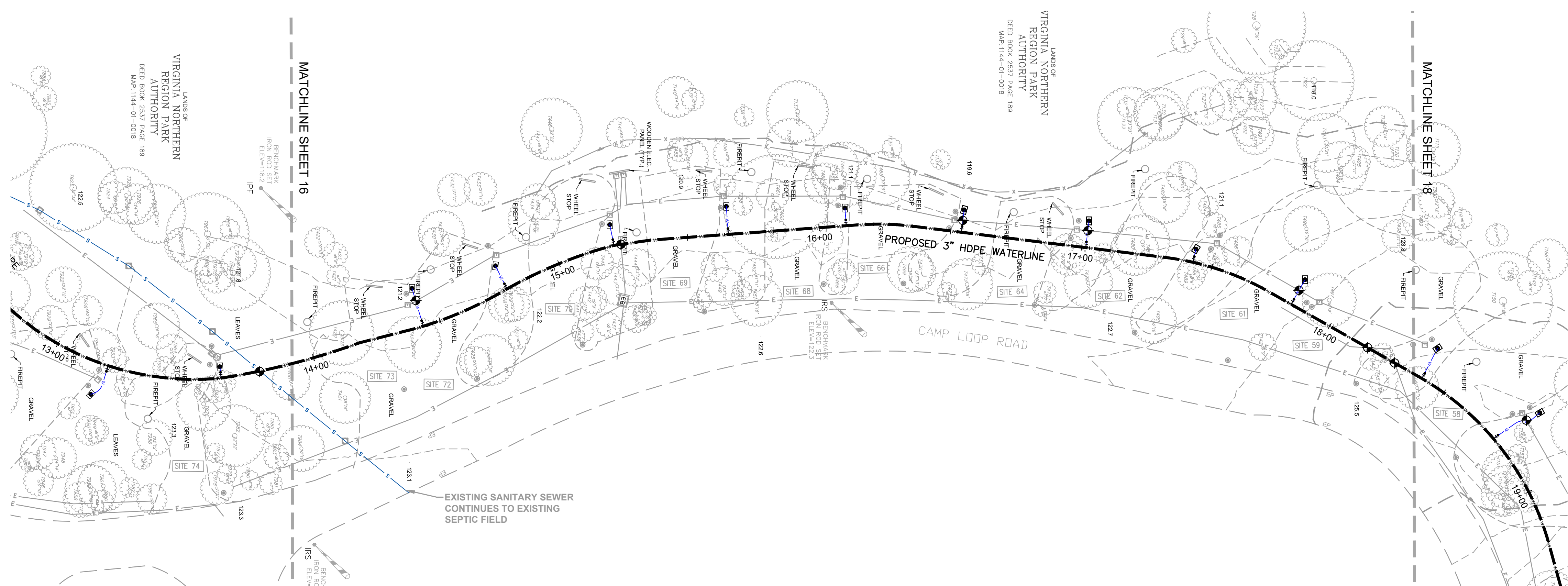
PROJECT NO
COUNTY PROJECT NUMBER



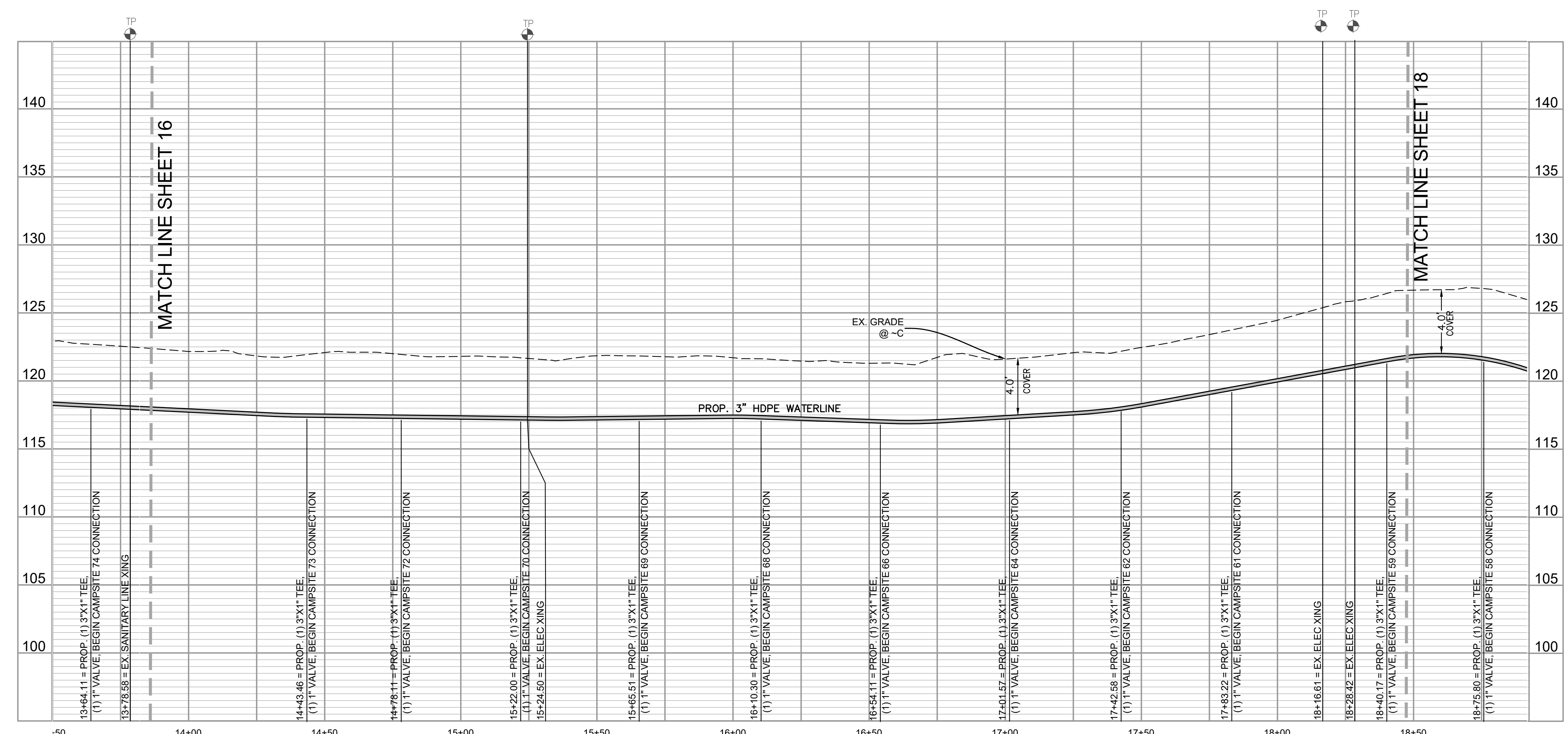
PLAN STATUS		
02/23/24	DRAFT SUBMISSION	
05/17/24	DRAFT SUBMISSION	
08/14/24	FINAL SUBMISSION	

DATE	DESCRIPTION
	EP KM MT
	DESIGN DRAWN CHKD
	SCALE H:1" = 25'
	V: 1" = 5'
	JOB No.
	DATE : FEBRUARY, 2024
	FILE No. 140356-01-001

Cad file name : V:\140356 - Pohick Bay Regional Park\140356-01-001 (ENG) - Pohick Bay Regional Park - Campground\Engineering\Engineering Plans\Sheets\140356-01-001-P&P.dwg



- LEGEND**
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 - SN SIGN
 - TRANS TRANSFORMER
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 - WDF AIR CONDITIONER
 - BOLLARD
 - CLEAN OUT
 - ELECTRIC BOX
 - ELECTRIC METER
 - ELECTRIC OUTLET
 - ROOF DRAIN
 - SIGN
 - SIGN-NO ALCOHOL
 - STORM INLET (SQUARE)
 - UNKNOWN MANHOLE
 - WATER SPIGOT
 - WELL
 - EX. TREE W/SIZE
 - APPRX. LOC. EX. UNDERGROUND ELECTRIC
 - APPRX. LOC. EX. UNDERGROUND WATER LINE
 - EX. EDGE OF GRAVEL
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WATERLINE PLAN AND PROFILE (2 OF 3)

POHICK BAY REGIONAL PARK

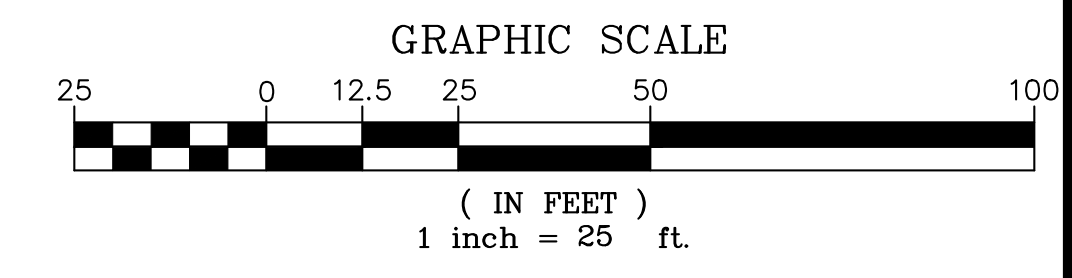
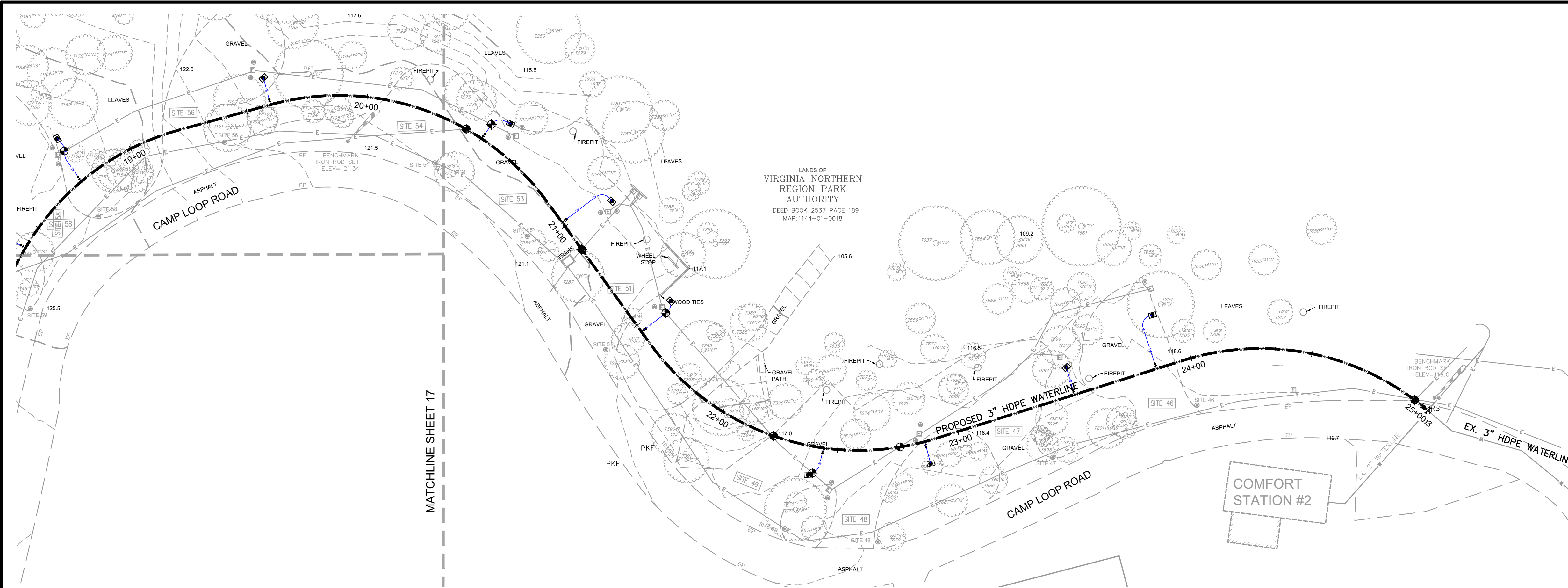
CAMPGROUND WATERLINE IMPROVEMENTS
FAIRFAX COUNTY, VIRGINIA
MOUNT VERNON DISTRICT

PROJECT NO
COUNTY PROJECT NUMBER

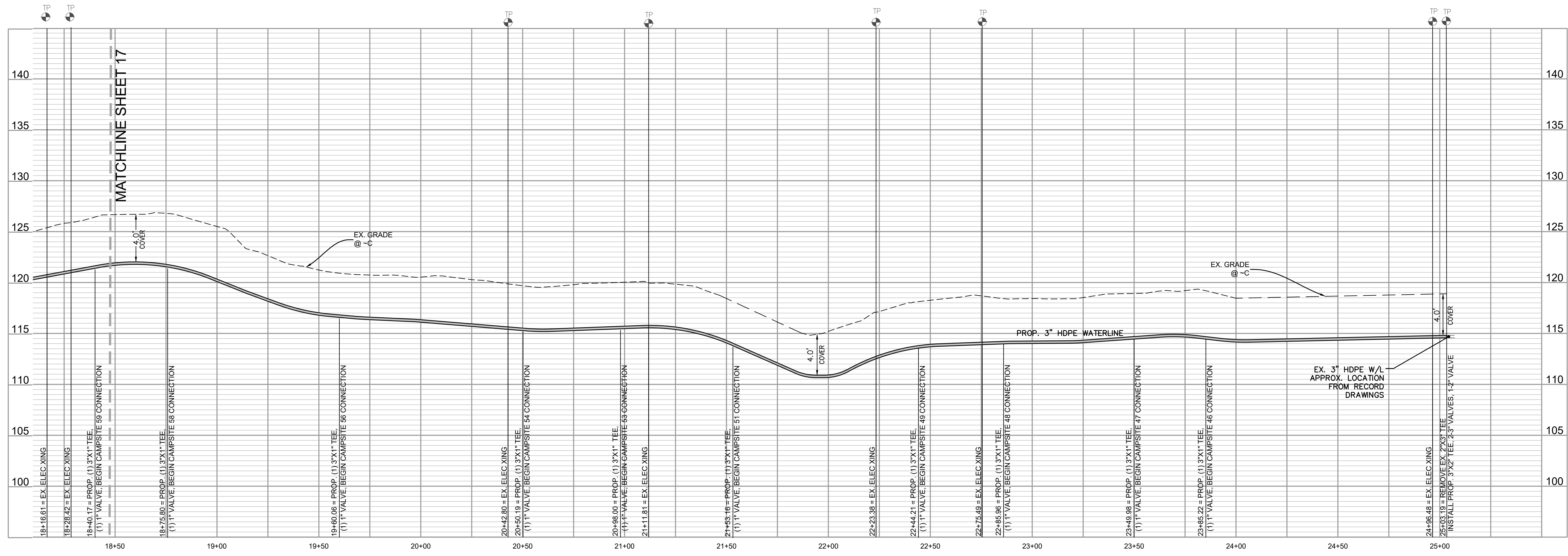
PLANNING STATUS
02/23/24 DRAFT SUBMISSION
05/17/24 DRAFT SUBMISSION
08/14/24 FINAL SUBMISSION

DATE	DESCRIPTION
EP	KM
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JOB No.	
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SHEET 17 OF 19



- LEGEND**
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 - ⊞ EX. TREE W/SIZE
 - APPRX. LOC. EX. UNDERGROUND ELECTRIC
 - APPRX. LOC. EX. UNDERGROUND WATER LINE
 - EX. EDGE OF GRAVEL
 - EX. FENCE
 - APPRX. LOC. EX. UNDERGROUND SANITARY
 - PROP. 1" HDPE SERVICE LINE
 - PROP. 3" HDPE MAIN WATER LINE
 - ⊞ PROP. YARD HYDRANT
 - ⊞ CUT AND CAP
 - ⊞ SITE LOCATION
 - ⊞ BENCHMARK LOCATION
 - ⊞ TEST PIT
 - ⊞ 3"x1" TEE, 1" SHUT OFF VALVE



Bowman

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WATERLINE PLAN AND PROFILE (3 OF 3)
POHICK BAY REGIONAL PARK
CAMPGROUND WATERLINE IMPROVEMENTS
MOUNT VERNON DISTRICT
FAIRFAX COUNTY, VA

PROJECT NO
COUNTY PROJECT NUMBER

ETHAN PACHECO
Lic. No. 63882
08/14/24
PROFESSIONAL ENGINEER

PLAN STATUS

02/23/24	DRAFT SUBMISSION
05/17/24	DRAFT SUBMISSION
08/14/24	FINAL SUBMISSION

DATE	DESCRIPTION	MT
EP	KM	MT
DESIGN	DRAWN	CHKD

SCALE H: 1" = 25'
V: 1" = 5'

JOB No.
DATE : FEBRUARY, 2024
FILE No. 140356-01-001

SHEET **18** OF **19**



The Model S4H is an automatic draining, sanitary, frost proof Yard Hydrant, with ASSE 1052 double check backflow preventer. This hydrant is designed for use in public areas such as campgrounds and parks or any location where potable water is required.

Unlike conventional hydrants which drain the water into the ground, the Model S4H employs a reservoir below frost line to contain the water. The hydrant is completely sealed to prevent surface and ground water from entering reservoir or service line. The valve, with its unique venturi design, removes the stored water along with the water being used.

The Model S4H is equipped with a diverter spout, which allows the hydrant to be operated independently from the backflow preventer. When the hydrant is to be used with a hose, the diverter sleeve is pulled down during flow and water is automatically diverted to the backflow preventer hose connection. The diverter will work with or without a hose attached to the backflow preventer and will automatically release any time the hydrant is shut off.

An important feature of the S4H is easy maintenance. The entire working portion of the hydrant can be removed from the reservoir without any excavation.

SPECIFICATIONS:
HOSE CONNECTION BACKFLOW PREVENTER (BFP)

- NIDEL® Model 37HF
- ASSE 1052 Approved
- Field Testable (see instruction sheet)

• Two Check Valves
OPTIONAL: ASSE 1057 listed - Consists of NIDEL® Model 34HF Single Check Vacuum Breaker
Order example: S4H-Bury-Depth-SC

ADA COMPLIANT - Meets ADA requirements for height and 5 lbs. Max operating force.

PATENT - See website for more information:
<http://www.WoodfordMfg.com/Woodford/patents/>

FEMALE INLET - 1" N.P.T.

FINISH - Painted Forest Service brown.

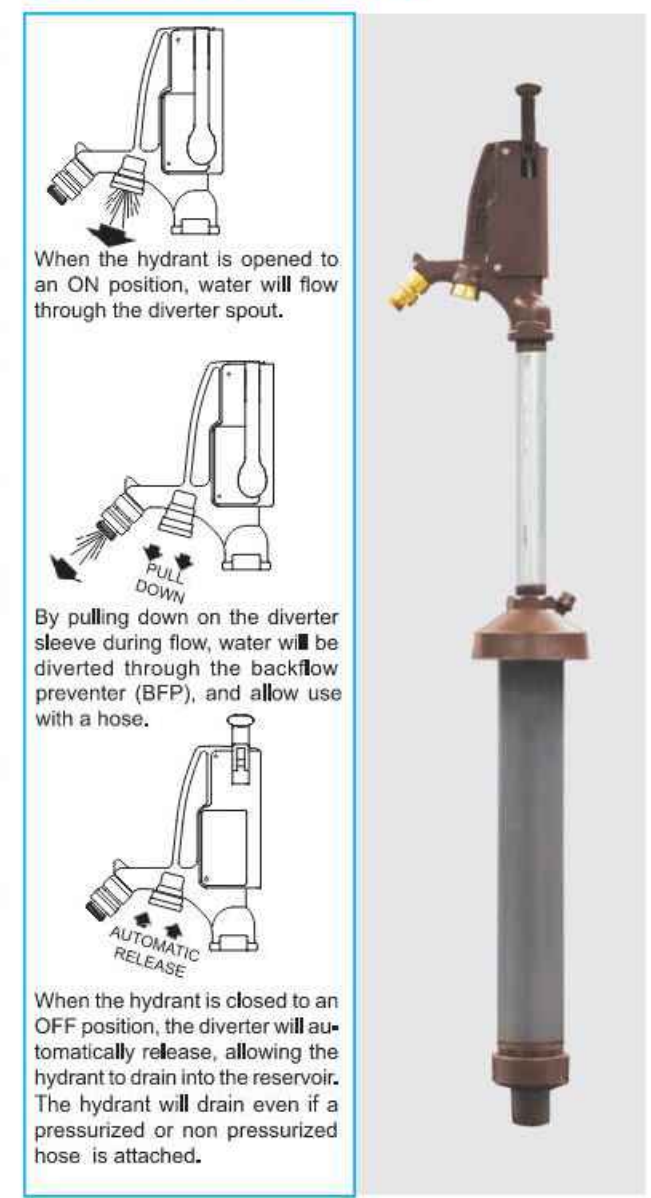
MIN PRESSURE - 20 psi

MAX PRESSURE - 100 psi

MAX TEMPERATURE - 120° F

FLOW RATES (GPM)	PSI	DIVERTER	BFP
20	7.0	1.5	
30	9.0	3.0	
40	10.0	5.0	
50	11.0	8.0	
60	12.0	7.0	
70	13.0	8.0	
80	14.0	8.0	
90	14.5	9.5	
100	15.0	10.0	

Backflow Protected Automatic Draining Freezeless, Self Closing Sanitary Yard Hydrant Model S4H



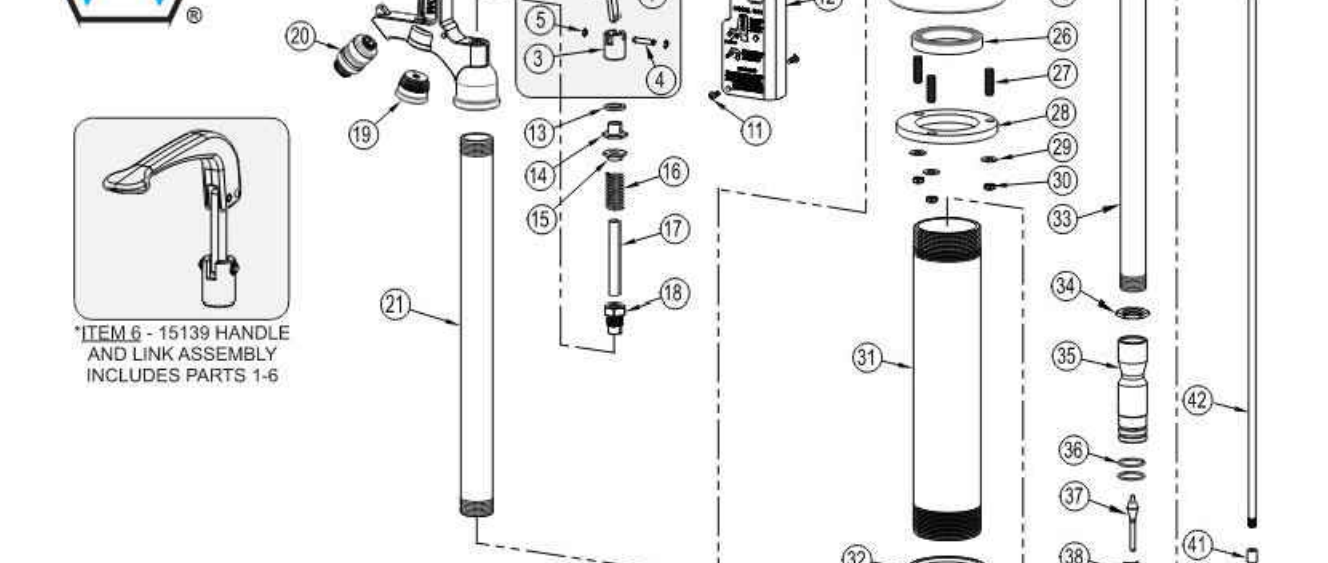
NOTICE
FOR WINTER USE: The hydrant must be operated at full flow, through the diverter, for a minimum of 30 seconds before and after each use to drain the hydrant and prevent freezing.

For Installation / Troubleshooting Instructions go to www.woodfordmfg.com or call 1-800-621-6032

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MODEL S4H PARTS LIST

ITEM	PART #	DESCRIPTION	ITEM	PART #	DESCRIPTION
1	50040	Roll Pin	32	10492	Operating Link Assembly (Includes Items 1-5)
2	10375	Clevis Link	33	10492	LOWER PIPE (Bury Depth & Length)
3	10376	Clevis	10501	1	Bury (25 1/8" Long)
4	10377	Clevis Pin	10502	2	Bury (38 1/2" Long)
5	10319	E-Ring (2)	10503	3	Bury (52 1/2" Long)
6	15139	Handle & Link Assembly	10504	4	Bury (66 1/8" Long)
7	10552	S4H Head	10505	5	Bury (80" Long)
8	10551	Handle Pin	10506	6	Bury (93 5/8" Long)
9	10328	Stop Screw	10507	7	Bury (107 3/8" Long)
10	10329	Jam Nut	1	10324	1" Lock Nut
11	10336	Head Cover Screws (4)	35	15233	Venturi Assembly
12	15240	Head Cover	36	10321	Venturi O-Rings (2)
13	10307	Washer	37	15134	Valve Plug
14	10308	Swivel Nut	38	10322	Valve Plug Guide
15	10494	Lock Nut	39	10489	Inlet Screen
16	10489	Spring	40	10323	Snap Ring #3000
17	10465	Operating Rod Extension	41	10497	Coupling
18	15232	Packing Nut Assembly (Includes 10484 Internal & 10327 External O-Rings)	42	OPERATING ROD (Bury Depth & Length)	
19	15220	Diverter Assembly	10521	1	Bury (47 1/8" Long)
20	37HF-BR	37HF Backflow Preventer	10522	2	Bury (60 3/4" Long)
21	10496	Upper Pipe	10523	3	Bury (74 1/2" Long)
22	10555	Vent Cap	10524	4	Bury (88 1/8" Long)
23	10556	3/8" Pipe Nipple	10525	5	Bury (102" Long)
24	15136	Snifter Valve	10526	6	Bury (115 5/8" Long)
25	10584	Casing Cover	10527	7	Bury (129 3/8" Long)
26	10491	Cup Gasket			
27	10534	Threaded Stud (3)			
28	10483	Reservoir Flange			
29	10332	Flat Washer (3)			
30	10331	Hex Nut (3)			
31	RESEVOIR PIPE (Bury Depth & Length)				
10511	1	Bury (27 7/16" Long)			
10512	2	Bury (41 1/16" Long)			
10513	3	Bury (54 13/16" Long)			
10514	4	Bury (68 7/16" Long)			
10515	5	Bury (82 5/16" Long)			
10516	6	Bury (95 15/16" Long)			
10517	7	Bury (109 11/16" Long)			

* Must ship by truck line due to length.

WOODFORD MANUFACTURING COMPANY, LLC.

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To view our complete product line visit: www.woodfordmfg.com or email: sales@woodfordmfg.com

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Rev. 06/16 Form No. S4H.112

OR APPROVED EQUAL

INSTALLATION, MAINTENANCE AND TROUBLE SHOOTING OF THE WOODFORD MODEL S4H HYDRANT



INSTALLATION
The S4H is designed to be 28 1/2" from grade to the hose connection outlet. The reservoir of the S4H extends below bury depth (frostline). The supply line should be installed deeper than normal bury depth (see overall bury depth schedule).

For convenient maintenance, a shut-off valve ahead of each hydrant is recommended.

WARNING: FLUSH SUPPLY LINE BEFORE CONNECTING HYDRANT.

With the hydrant completely assembled, make the connection to the supply line, tightening with a pipe wrench on the inlet casting (#32).

The bottom of the casing cover (#25) must be 4 1/2" above grade to allow easy access to remove the three nuts.

MAINTENANCE

- To remove hydrant from reservoir:
1. Turn off water supply.
 2. Remove the three nuts located under the casing cover (#25).
 3. Pull hydrant straight up and remove from the reservoir.
- To reinstall:
1. Clean and inspect the two venturi O-rings (#36). Replace O-rings if damaged. Lubricate with silicone grease or other non-toxic lubricant that is safe for rubber.
 2. Clean cup gasket (#26). Replace if damaged.
 3. Insert hydrant in the reservoir. Align the studs with the holes in the flange. Replace and tighten the nuts.
 4. Turn on water supply and check for leaks.

TROUBLE SHOOTING

1. WATER LEAKS FROM UNDERNEATH CASING COVER WHILE HYDRANT IS ON.
Tighten nuts (#30) under casing cover (#25). If leak persists, remove hydrant from reservoir and inspect cup gasket (#26) for cracks or damage. Remove cup gasket and measure from top of reservoir flange (#28) to top of reservoir (#31). Dimension should be 1/2". If necessary, adjust flange by threading flange on reservoir. Reinstall hydrant.

2. WATER LEAKS FROM DIVERTER, OR FILLS RESERVOIR, WHILE HYDRANT IS OFF.
Check linkage adjustment. With the head cover off, lift handle and check if the linkage (#1-5) has a small amount of play and is not binding. Adjust lock nut (#15) and swivel nut (#14) down to increase play. If hydrant continues to leak, valve plug (#37) may be fouled or damaged. Remove hydrant from the reservoir. Hold or lock the handle down in an open position. Remove snap ring (#40), screen (#39) and valve plug guide (#38). Unthread valve plug (#37) with screwdriver. Check for damage or obstruction. Check venturi O-rings (#36) for damage. Reinstall parts and hydrant.

CAUTION

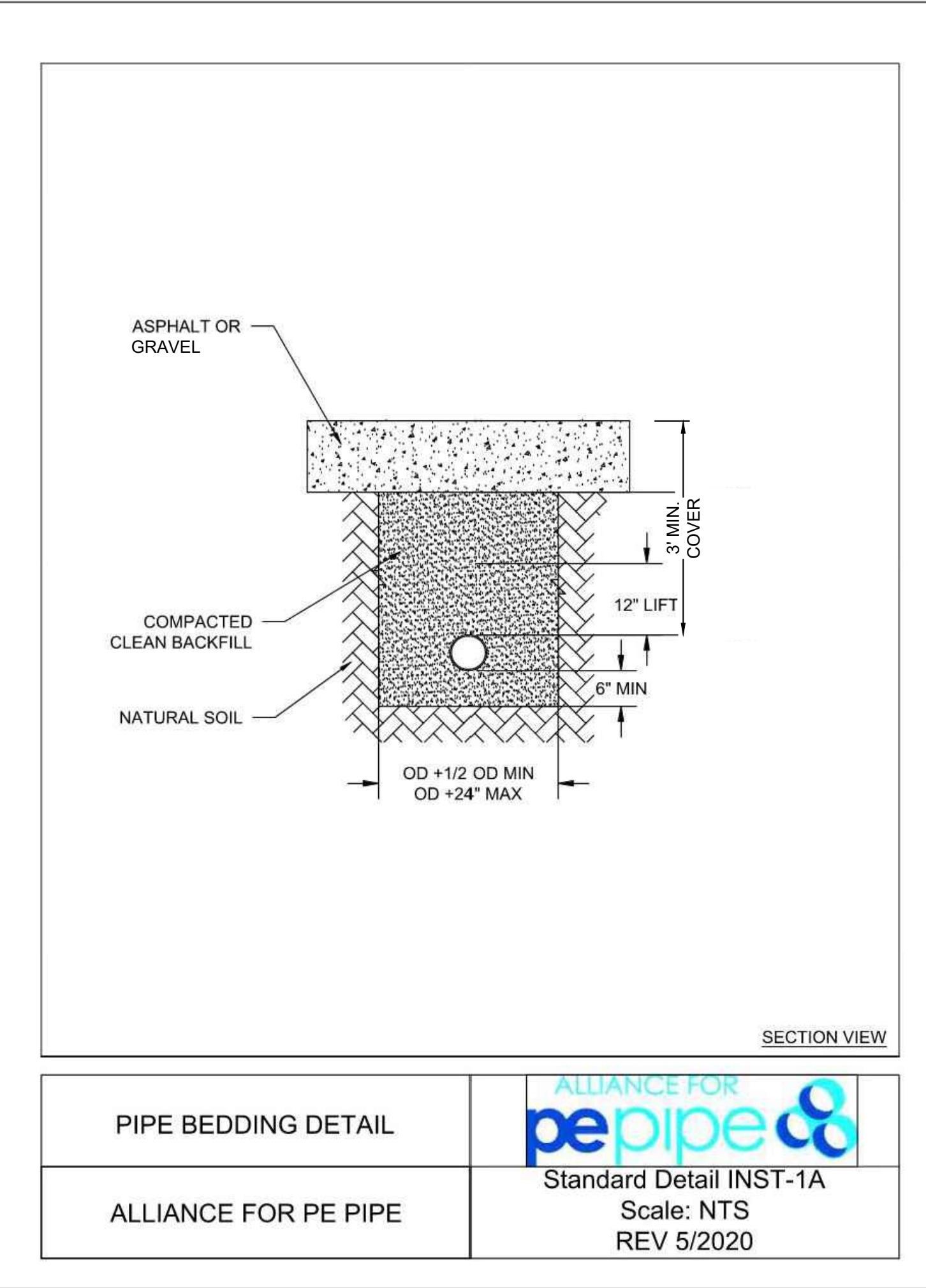
A compressed spring can be dangerous. Be careful not to get fingers caught in linkage parts if spring were to suddenly expand.

OPERATION

The hydrant shall be run for a minimum of 30 seconds before user draws for drinking water.

FOR WINTER USE: The hydrant must be operated at full flow, through the diverter, for a minimum of 30 seconds before and after each use to drain the hydrant and prevent freezing.

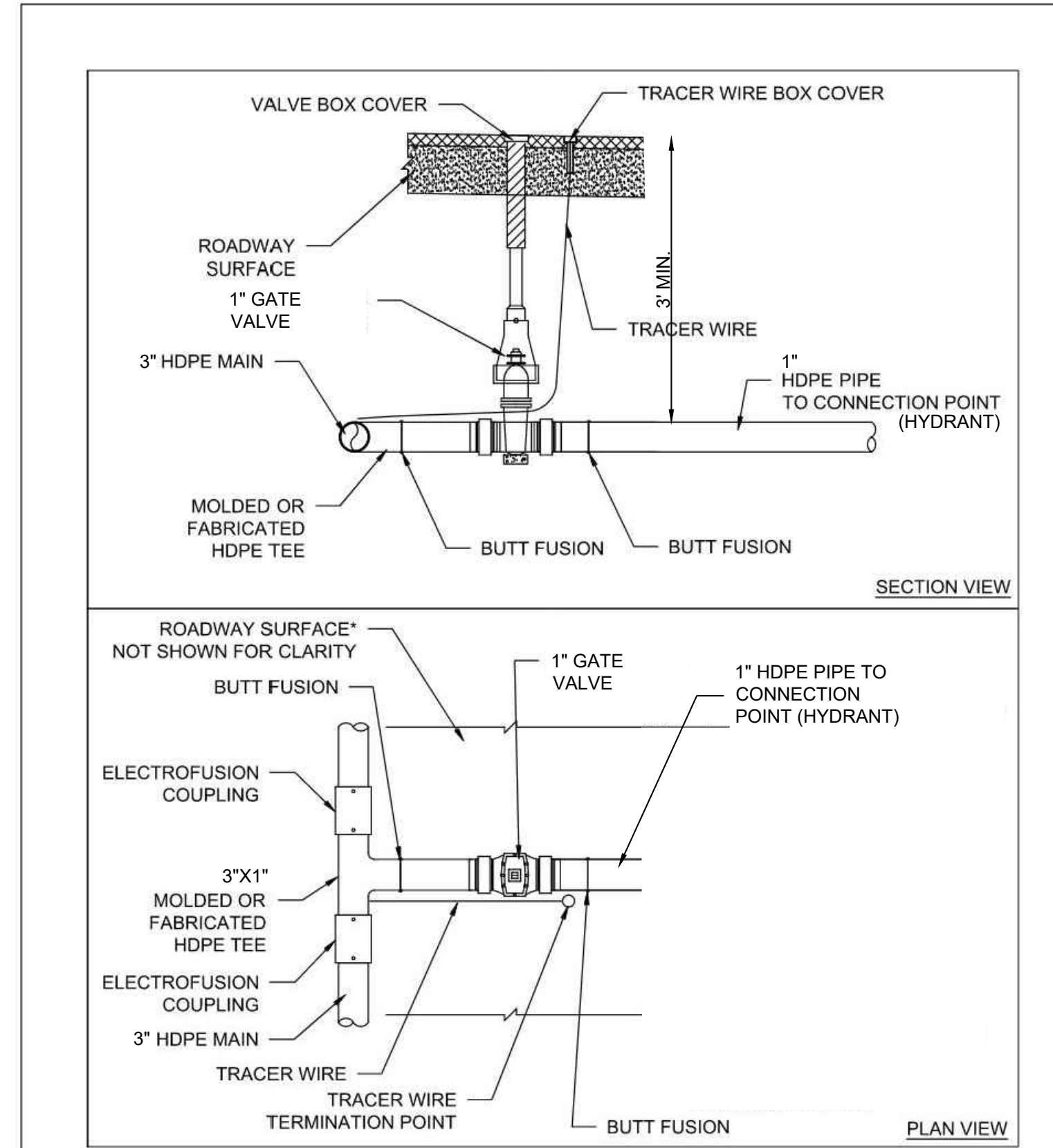
Rev. 06/16 Form No. S4H/INSTAL.101.doc



PIPE BEDDING DETAIL

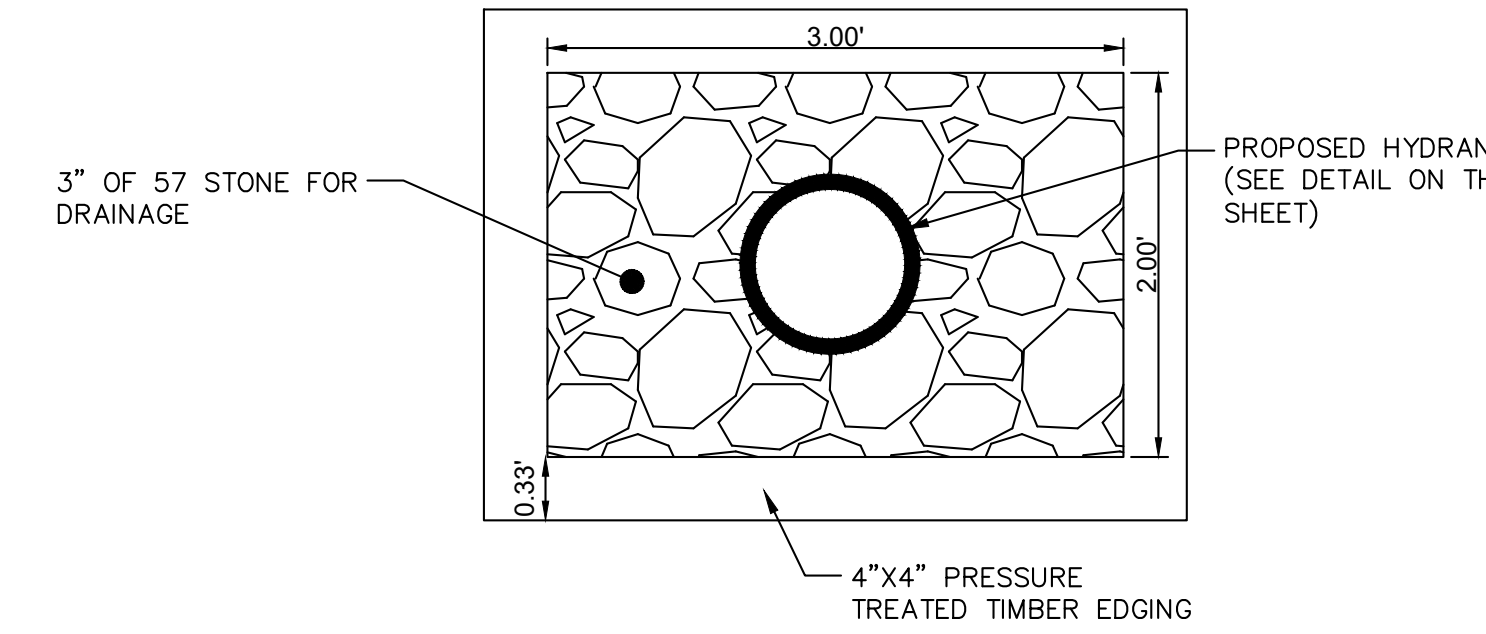
ALLIANCE FOR PE PIPE

Standard Detail INST-1A
Scale: NTS
REV 5/2020



HYDRANT SERVICE CONNECTION DETAIL

NOTE:
1. CONTRACTOR TO PROVIDE COMPLETE SHOP DRAWING OF PIPE AND APPURTENANCES, MATERIALS, ASSEMBLY, OPERATION OF HYDRANT SERVICE LINE, VALVES, ETC.



HYDRANT STONE BASE PLAN VIEW

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WATER LINE DETAILS
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CAMPGROUND WATERLINE IMPROVEMENTS
MOUNT VERNON DISTRICT
FAIRFAX COUNTY, VA

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02/23/24 DRAFT SUBMISSION
05/17/24 DRAFT SUBMISSION
08/14/24 FINAL SUBMISSION

DATE DESCRIPTION
EP KM MT
DESIGN DRAWN CHKD
SCALE H: NTS
V:

JOB No.
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