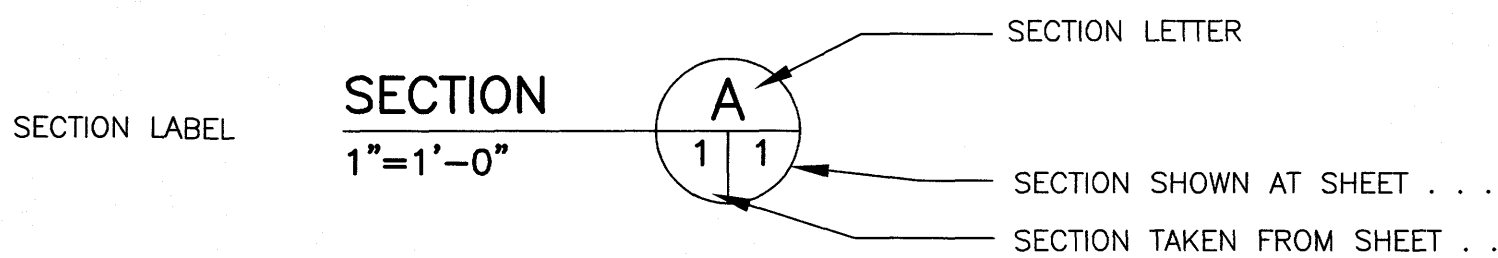


ITEM	EXISTING	PROPOSED
WATER LINE	— 8" w —	— 8" W —
SANITARY SEWER	— 8" ss —	— 8" —
STORM DRAIN	== 24" ==	— 18" —
U/G TELEPHONE	— ugt —	— UGT —
U/G ELECTRIC	— uge —	— UGE —
O/H TELEPHONE	— oht —	— OHT —
O/H POWER	— ohp —	— OHP —
RIGHT-OF-WAY LINE	— P _W —	— P —
PROPERTY LINE	— P —	— P —
CENTERLINE	— CL —	— CL —
PERM. UTILITY EASEMENT	— — — — —	— — — — —
TEMP. CONSTRUCTION EASEMENT	— — — — —	— — — — —
BLOW-OFF CHAMBER or AIR RELEASE VALVE	— — — — —	— — — — —
WATER METER	— — — — —	— — — — —
VALVE	— — — — —	— — — — —
FIRE HYDRANT	— — — — —	— — — — —
REDUCER	— — — — —	— — — — —
WATER MANHOLE	— — — — —	— — — — —
SANITARY SEWER MANHOLE	— — — — —	— — — — —
WINGED HEADWALL	— — — — —	— — — — —
HEADWALL	— — — — —	— — — — —
TELEPHONE PEDESTAL	— — — — —	— — — — —
POWER POLE	— — — — —	— — — — —
GUY WIRE	— — — — —	— — — — —
MAILBOX	— — — — —	— — — — —
FENCE	— — — — —	— — — — —

ITEM	EXISTING	PROPOSED
TREE		
WOODS		
DOT MONUMENT		
PROPERTY CORNER		
HORIZONTAL CONTROL		
CONTOUR LINE — INDEX		
CONTOUR LINE — INTERMEDIATE		
RIVER OR STREAM		
DITCH OR SWALE		
CONSTRUCTION LIMITS		
GUARD RAIL		
GRAVEL ROAD		
PAVEMENT		
U.S. ROUTES		
VA SECONDARY ROUTES		
SANITARY MANHOLE MARKER		



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E-3	WATER TREATMENT PLANT — ELECTRICAL SCHEMATICS

GENERAL NOTES:

- WATER MAIN PIPE SHALL BE PVC OR DUCTILE IRON. WATER SERVICE LINES SHALL BE POLYETHYLENE PRESSURE TUBING PRESSURE CLASS 200 PIPE.
- TEST PRESSURE FOR WATER PIPE SHALL BE 200 PSI.
- LOCATION OF WATER METERS SHOWN IS FOR REFERENCE ONLY. EXACT LOCATION WILL BE DETERMINED DURING CONSTRUCTION BY OWNER.
- FIRE HYDRANT AND BLOWOFF LOCATIONS ARE APPROXIMATE AND SHALL BE COORDINATED WITH OWNER.
- EXISTING UTILITY LOCATIONS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO EXCAVATION. THE CONTRACTOR SHALL PROTECT AND MAINTAIN EXISTING UTILITIES WHILE CONSTRUCTION IS IN PROGRESS.
- NEW WATER LINES SHALL BE INSTALLED A MINIMUM OF 6' OFF THE EDGE OF ANY VDOT ROADWAY, UNLESS OTHERWISE INDICATED ON PROJECT PLAN SHEETS.
- DISTURBED PAVEMENT, INCLUDING PAVED SHOULDERS, OPEN CUTTING DRIVEWAYS, PARKING LOTS, ETC. SHALL BE REPLACED IN ACCORDANCE WITH SPECIFICATIONS.
- ALL WATER SERVICE LINES CROSSING PAVED VDOT ROADWAYS SHALL BE BORED OR JACKED, UNLESS APPROVED OTHERWISE. ALL SERVICE LINE UNDER ROADWAY SHALL BE CASED IN 2" PVC.
- WATER LINES SHALL NOT BE INSTALLED WITHIN 30' OF EXISTING DRAINFIELDS.
- MINIMUM CLEARANCE AT STORM DRAINS SHALL BE 36" EDGE TO EDGE.
- PROPERTY LINES ARE BASED ON COUNTY TAX MAPPING AND ARE APPROXIMATE.
- CHAMBERS OR PITS CONTAINING VALVES, BLOW OFFS, METERS, OR OTHER APPURTENANCES TO THE DISTRIBUTION SYSTEM SHALL BE DRAINED TO THE SURFACE OF THE GROUND WHERE THEY ARE NOT SUBJECT TO FLOODING BY SURFACE WATER OR TO ABSORPTION PITS LOCATED ABOVE THE SEASONAL GROUNDWATER TABLE ELEVATION.
- NO BLOW OFF VALVE, AIR RELEASE VALVE, VACUUM BREAKER, OR OTHER FLUSHING DEVICE SHALL BE DIRECTLY CONNECTED TO ANY SANITARY SEWER OR STORM DRAIN.
- ALL VALVES, BENDS, TEES, PLUGS, & CAPS SHALL BE RESTRAINED WITH CONCRETE ANCHORS IN ACCORDANCE WITH PROJECT PLANS AND SPECIFICATIONS AND AS DETAILED IN THE STANDARD DETAIL DRAWINGS CA-1, CA-2, CA-5, & CA-6. CA-5 ANCHORS SHALL BE USED AT ALL STUBOUTS. CONTRACTOR SHALL REFER TO THE STANDARD DETAILS FOR RESTRAINT REQUIREMENTS BASED ON FIELD CONDITIONS.
- WHEN LOCATED IN VDOT RIGHTS-OF-WAY, VALVE BOXES SHALL BE BURIED BELOW GRADE. DEPTH OF COVER SHALL BE COORDINATED WITH INSPECTOR. FIRE HYDRANTS SHALL BE LOCATED BEHIND THE DITCH LINE AND WATER MAINS SHALL BE CONSTRUCTED IN THE LOCATIONS SHOWN ON THE PLANS.
- CULVERTS REMOVED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
- AIR RELEASE VALVES SHOWN ON PLANS SHALL BE FIELD LOCATED AT THE HIGH POINT IN THE WATER MAIN.
- PROPOSED WATER SERVICE LINES SHALL BE 3/4" FOR SINGLE SERVICE AND 1" FOR DOUBLE SERVICES UNLESS OTHERWISE NOTED.
- VDOT ENGINEER TO BE NOTIFIED 24 HOURS PRIOR TO BEGINNING ANY PAVING OPERATIONS.
- RIGHTS-OF-WAY THROUGHOUT THE PROJECT TO BE VERIFIED BY VDOT.
- ALL TRAFFIC CONTROL SHALL CONFORM TO THE 2003 VIRGINIA WORK AREA PROTECTION MANUAL.
- INSTALL BULKHEAD ANHORS AT ALL LINE TERMINATIONS AND CAP LOCATIONS.
- ALL CONCRETE CAPS AND CRADLES SHALL BE CONSTRUCTED WITH A WIDTH AT LEAST 12" GREATER THAN THE INSTALLED PIPE DIAMETER AND A MINIMUM LENGTH TO EXTEND 12" BEYOND EACH END OF THE CROSSED PIPE. PLASTIC SHALL BE PLACED BETWEEN THE PIPE AND CONCRETE SURFACES TO PREVENT BONDING.

EROSION AND SEDIMENT CONTROL MEASURES

- UTILITY STREAM CROSSING:** WHEN CROSSING SMALL WATERWAYS, IN-STREAM UTILITY CONSTRUCTION SHOULD BE CARRIED OUT AS OUTLINED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH), LATEST EDITION, SECTION 3.25.
- SILT FENCE:** SILT FENCE SHALL BE USED TO PREVENT SEDIMENT LADEN RUNOFF FROM LEAVING THE SITE AND TO REDUCE THE VELOCITY OF THE STORM WATER (VESCH STANDARDS AND SPEC. 3.05). SILT FENCE CHECKS SHALL BE PLACED IN DITCHES RECEIVING STORM WATER RUNOFF FROM THE AFFECTED WORK AREAS.
- PERMANENT SEEDING:** PERMANENT SEEDING SHALL BE USED TO STABILIZE DISTURBED AREAS. (VESCH STANDARDS AND SPEC. SECTION 3.32)
- PERMANENT STABILIZATION:** PERMANENT SEEDING SHALL BE USED FOR PERMANENT STABILIZATION.
- MAINTENANCE:** ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AS QUICKLY AS POSSIBLE. PERMANENT SEEDING WHICH DOES NOT RESULT IN GOOD STANDS OF GRASS MUST BE RESEED. AREAS IN WHICH EROSION OCCURS MUST BE REGRADED AND RESEED AS QUICKLY AS POSSIBLE. ALL EROSION CONTROL MEASURES MUST BE CHECKED AND REPAIRED (IF NECESSARY) AFTER EACH RAINFALL.

EROSION & SEDIMENT CONTROL NOTES

- CONTRACTOR SHALL INSTALL AND MAINTAIN SEDIMENT AND EROSION CONTROL AS NEEDED IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK STANDARD 1992 EDITION.
- A. NO MORE THAN 200 LINEAR FEET OF TRENCH MAY BE OPEN AT ONE TIME FOR EACH CREW.
B. EXCAVATED MATERIAL SHALL BE PLACED ON UPHILL SIDE OF TRENCH.
C. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF SITE PROPERTIES.
D. RESTABILIZATION SHALL BE ACCORDING TO VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK.
E. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY REGULATIONS.
- 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
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINENCE AND UPKEEP OF E&S MEASURES.
- SILT FENCE BARRIERS WILL BE USED AS TEMPORARY E&S CONTROL UNTIL THE PERMANENT SEEDING IS IN PLACE.

E&S LEGEND

NO.	TITLE	KEY	SYMBOL
3.02	TEMPORARY STONE CONSTRUCTION ENTRANCE	CE	
3.05	SILT FENCE	SF	
3.08	CULVERT INLET PROTECTION	CIP	
3.18	OUTLET PROTECTION	OP	
3.29	SURFACE ROUGHENING	SR	
3.32	PERMANENT SEEDING	PS	



ANDERSON & ASSOCIATES, INC.
Professional Design Services
www.andassoc.com
Virginia - North Carolina - Tennessee

100 Ardmore Street
Blacksburg, Va. 24060
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FERRUM, VIRGINIA

LEGEND & INDEX SHEET