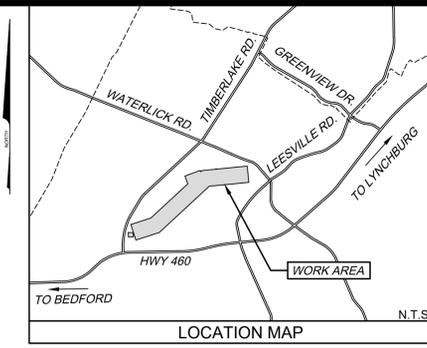


# MARTIN DRIVE REGIONAL W.W.P.S. CAMPBELL COUNTY, VIRGINIA CCUSA PROJECT NO. 80-2304

CONTRACT A: MARTIN DRIVE WWPS SITE AND PARALLEL GRAVITY SEWER / FORCE MAIN TO STATION 8+60  
 CONTRACT B: PARALLEL GRAVITY SEWER / FORCE MAIN STATION 8+60 TO STATION 26+60 PLUS 74 LF EAST  
 CONTRACT C: GRAVITY SEWER STATION 26+60 TO STATION 73+07, GRAVITY SEWER MANHOLE A21 - J4  
 CONTRACT D: GRAVITY SEWER NORTH OF STATION 73+07



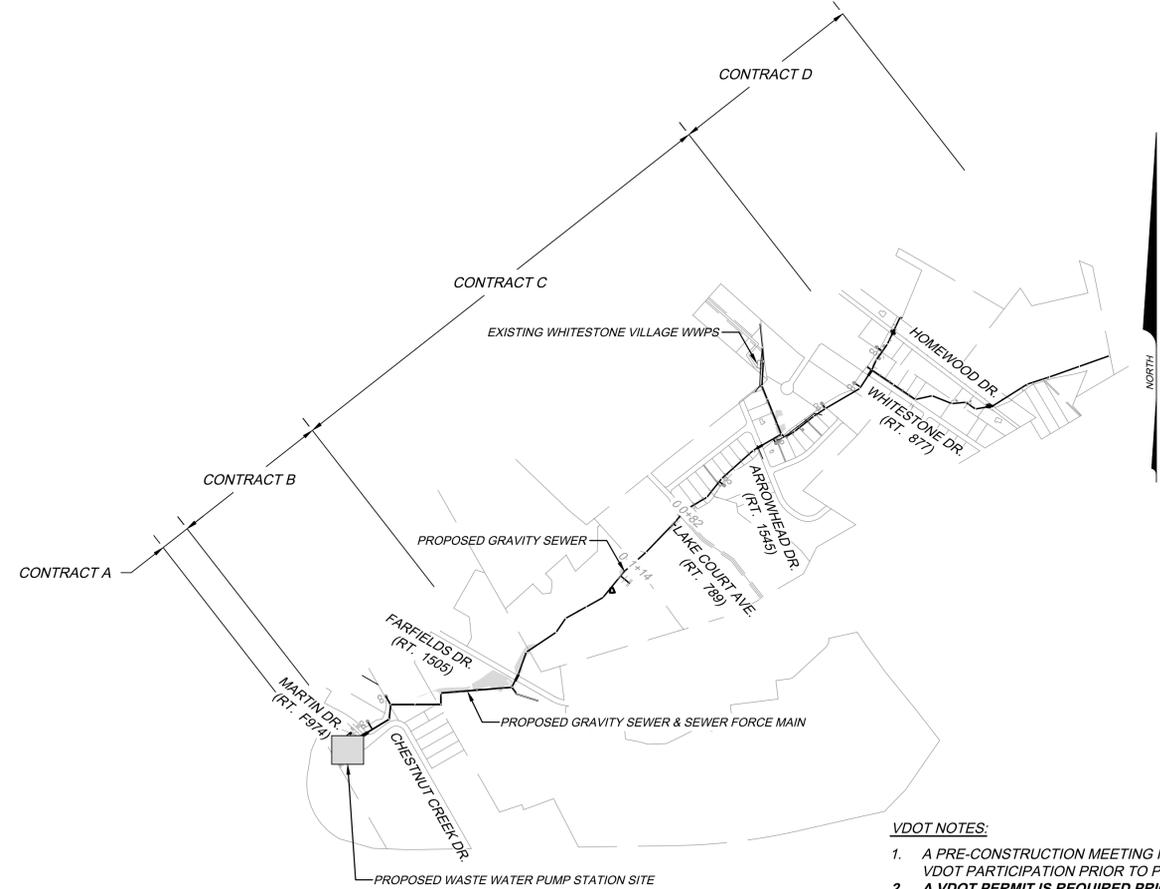
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 INSPIRED / RESPONSIVE / TRUSTED

434.847.7796  
 2524 LANGHORNE ROAD  
 LYNCHBURG, VA 24501

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### GENERAL NOTES

- OWNER: CAMPBELL COUNTY UTILITIES AND SERVICE AUTHORITY (C.C.U.S.A.)  
 CONTACT: TIM WAGNER, PE  
 ADDRESS: 20644 TIMBERLAKE RD. LYNCHBURG, VA 24502  
 PHONE: 434-239-8654
1. THIS PROJECT CONSISTS OF THE CONSTRUCTION OF APPROXIMATELY 10,400 L.F. OF SANITARY SEWER, APPROXIMATELY 2,000 L.F. OF SANITARY SEWER FORCE MAIN, AND A WASTE WATER PUMP STATION, WITH ASSOCIATED APPURTENANCES.
  2. TOTAL DISTURBED AREA: 7.9 AC. NO VIRGINIA STORMWATER PERMIT WILL BE REQUIRED.
  3. ALL DISTURBED AREAS SHALL RECEIVE PERMANENT SEEDING AND MULCH/EROSION CONTROL MATTING.
  4. ACTIVE CONSTRUCTION AND LAYDOWN AREAS ARE TO BE PROTECTED WITH TEMPORARY FENCING.
  5. CONTRACTOR MUST CONTACT MISS UTILITY AT VA811 PRIOR TO CONSTRUCTION.
  6. ALL TEMPORARY EROSION CONTROL DEVICES MUST BE REMOVED WITHIN 30 DAYS OF PERMANENT STABILIZATION OF THE SITE.
  7. ALL CONSTRUCTION STAGING, LOADING, TEMPORARY PARKING, AND LAYDOWN AREAS SHALL BE COORDINATED WITH THE OWNER PRIOR TO ANY CONSTRUCTION OR DEMOLITION ACTIVITIES.
  8. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE DUST CONTROL TO PREVENT DAMAGING AND/OR NUISANCE AIRBORNE DUST FROM LEAVING THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING WHATEVER MEASURES ARE NECESSARY TO CORRECT AND/OR COMPENSATE BORDERING PROPERTY OWNERS AND THE OWNER FOR ALL DAMAGES DUE TO DUST.
  9. THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK.
  10. CONTRACTOR SHALL VERIFY MARKING OF EXISTING UTILITY SERVICES BEFORE ANY CONSTRUCTION ACTIVITY.
  11. ALL MATERIAL REMOVED DURING CONSTRUCTION SHALL BE DISPOSED OF PROPERLY.
  12. ALL WORK SHALL BE SUBJECT TO INSPECTION BY STATE AND THE OWNER'S ENGINEER.

### VDOT NOTES:

1. A PRE-CONSTRUCTION MEETING IS REQUIRED WITH VDOT PARTICIPATION PRIOR TO PERMIT ISSUANCE.
2. A VDOT PERMIT IS REQUIRED PRIOR TO BEGINNING WORK WITHIN THE RIGHT-OF-WAY

ACCEPTABLE TO VDOT  
 VDOT REPRESENTATIVE \_\_\_\_\_ DATE: \_\_\_\_\_

VDOT'S REVIEW IS NOT INTENDED TO BE EITHER COMPLETE OR COMPREHENSIVE AS IT IS THE RESPONSIBILITY OF THE SUBMITTING ENGINEER/SURVEYOR THAT SIGNS AND SEALS THESE PLANS TO ENSURE THE COMPLETENESS AND ACCURACY OF THEIR PLANS IN ACCORDANCE WITH GOVERNING LAWS, REGULATIONS, SPECIFICATIONS AND STANDARDS. PLAN ERRORS AND OR OMISSIONS DISCOVERED DURING CONSTRUCTION REMAIN THE RESPONSIBILITY OF THE SUBMITTING ENGINEER/SURVEYOR.

APPROVED BY CAMPBELL COUNTY UTILITIES AND SERVICE AUTHORITY  
 (C.C.U.S.A.) FOR WATER AND SANITARY SEWER SYSTEM CONSTRUCTION.

C.C.U.S.A. \_\_\_\_\_ DATE \_\_\_\_\_

C.C.U.S.A. HAS REVIEWED THESE PLANS IN GOOD FAITH FOR GENERAL COMPLIANCE WITH ITS STANDARDS AND SPECIFICATIONS. HOWEVER, C.C.U.S.A. MAKES NO CLAIMS AS TO THE ACCURACY OR COMPLETENESS OF THESE PLANS. C.C.U.S.A. RESERVES THE RIGHT TO MAKE CHANGES AS NECESSARY DURING CONSTRUCTION TO RESPOND TO FIELD CONDITIONS AND ANY ERRORS OR OMISSIONS IN THESE PLANS.

**LEGEND**

RF®	REBAR FOUND	— FM —	SANITARY FORCE MAIN
PF®	PIPE FOUND	— SS —	SANITARY LINE (GRAVITY)
⊕	LIGHT POLE	⊙	SANITARY MANHOLE
△	CONTROL POINT	⊙	SANITARY CLEANOUT
○	COMPUTED POINT	⊕	FORCE MAIN PLUG VALVE
●	REBAR SET	⊙	SANITARY STRUCTURE MARKER
UT	UNDERGROUND TELEPHONE		
—	EDGE OF PAVEMENT		
⊕	FIRE HYDRANT		
⊙	SMALL DECIDUOUS TREE		

VIRGINIA UNIFORM CODING SYSTEM FOR EROSION AND SEDIMENT CONTROL PRACTICES  
 \* CHART TAKEN FROM THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (JULY 1992)

- ⊕ SF SUPER SILT FENCE (3.05)
- ⊕ TS TEMPORARY SEEDING (3.31)
- ⊕ PS PERMANENT SEEDING (3.32)
- ⊕ MU MULCHING (3.35)
- ⊕ SA SOIL STABILIZATION BLANKETS & MATTING (3.36)

VIRGINIA CERTIFIED RESPONSIBLE LAND DISTURBER

NAME - PRINTED \_\_\_\_\_ SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

PHONE # \_\_\_\_\_ COMPANY \_\_\_\_\_

ADDRESS \_\_\_\_\_



THE ENGINEER AND/OR SURVEYOR TAKES NO RESPONSIBILITY FOR THE LOCATION OR ACCURACY OF THE UTILITIES AS SHOWN HEREON OR ANY UTILITIES WITHIN THE PROJECT THAT MAY NOT BE SHOWN HEREON. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE UTILITY COMPANIES TO SEE IF ANY UTILITIES EXIST WITHIN THE AREA OF THE PROJECT BEFORE ANY CONSTRUCTION BEGINS. ANY COST INCURRED BY DAMAGING ANY UTILITY WITHIN THE PROJECT SHALL BE AT THE EXPENSE OF THE CONTRACTOR.

48 WORKING HOURS PRIOR TO STARTING THE WORK, THE CONTRACTOR SHALL CALL VIRGINIA 811 AT PHONE NUMBER 811 AND ADVISE THE NATURE AND LOCATION OF THE WORK.

COVER FOR MARTIN DRIVE REGIONAL W.W.P.S. CAMPBELL COUNTY, VIRGINIA

PROJECT NO.	20230622
LAT.	37.313701
LONG.	-79.260689
DATE:	03/05/2025
DRAWN BY:	MSF
CHECKED BY:	MDW



**BID SET**

CCUSA # 80-2304

**HURT & PROFFITT**

SHEET NO.	REV.
G-101	---

THIS SHEET IS INTENDED TO BE REPRODUCED AT 24X36. REPRODUCTION OF THIS SHEET AT A DIFFERENT SIZE THAN INTENDED SHALL VOID THE SCALE SHOWN ON THE SHEET.

**GENERAL NOTES :**

- PRIOR TO STARTING CONSTRUCTION THE CONTRACTOR SHALL MAKE SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED AND ALL BONDS OR FEES HAVE BEEN PAID. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES. THESE INCLUDE COUNTY PERMIT AND VDOT PERMIT.
- EXISTING SITE FEATURES AND UTILITIES SHOWN HAVE BEEN BASED UPON SURVEYS AND OTHER SOURCES BELIEVED TO BE RELIABLE. THE CORRECTNESS OR COMPLETENESS OF THE INFORMATION SHOWN IS NOT GUARANTEED. THE CONTRACTOR SHALL VERIFY ALL INFORMATION BEFORE COMMENCING WORK.
- THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 811 A MINIMUM OF 48 HOURS PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR SHALL MAINTAIN TRAFFIC PATTERNS AND SAFETY AT ALL TIMES ON SITE AND ON ADJACENT ROADWAYS.
- NUMERICALLY WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE. NO SCALING OF DIMENSIONS TO BE ACCEPTED.
- CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL SITE IMPROVEMENTS AND UTILITIES. ALL DISCREPANCIES SHALL BE IDENTIFIED TO THE ENGINEER IN WRITING.
- THE CONTRACTOR SHALL MAINTAIN A COPY OF THE DRAWINGS AND SPECIFICATIONS AT THE SITE AT ALL TIMES DURING THE CONSTRUCTION. THE CONTRACTOR SHALL MAINTAIN RED LINE SET OF AS-BUILT DRAWINGS THROUGHOUT THE PROJECT AND SHALL TURN THEM OVER TO THE OWNER PRIOR TO FINAL PAYMENT.
- ALL WORK PERFORMED AND MATERIALS SUPPLIED SHALL CONFORM TO THE PLANS AND/OR PROJECT SPECIFICATIONS. ANY WORK NOT COVERED IN THE PLANS OR SPECIFICATIONS SHALL CONFORM TO THE LATEST EDITION OF THE VDOT ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS. IN THE EVENT OF CONFLICT AMONG ANY OF THESE STANDARDS, SPECIFICATIONS OR PLANS, THE MOST STRINGENT SHALL GOVERN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES AND GOVERNMENT AGENCIES WHO MIGHT HAVE UTILITY LINES ON OR ABOUT THE PREMISES, OR WHO MIGHT BE AFFECTED BY CONSTRUCTION. THE LOCATIONS OF UNDERGROUND FACILITIES SHOWN ON THESE PLANS ARE BASED ON FIELD SURVEYS. IT SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY TO CONTACT THE APPROPRIATE UTILITY COMPANIES. NO COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR DAMAGE AND REPAIR TO THESE FACILITIES CAUSED BY HIS WORK FORCE OR ACTIVITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ADEQUATE EROSION AND SEDIMENT CONTROL MEASURES INCLUDING AIRBORNE DUST DURING CONSTRUCTION AND FOLLOWING CONSTRUCTION UNTIL SUCH TIME AS PROPER VEGETATION IS REESTABLISHED.
- ALL CLEARED MATERIALS TO BE REMOVED FROM SITE AND DISPOSED OF LEGALLY AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES THAT ARE TO REMAIN IN PLACE. ANY DAMAGED UTILITY LINE SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
- ALL UNSUITABLE MATERIAL AND OTHER CONSTRUCTION DEBRIS SHALL BE HAULED OFF SITE AND DISPOSED OF LEGALLY.
- PRIOR TO DISCONNECTION AND/ OR RELOCATION OF UTILITY SERVICES, CONTRACTOR TO CONTACT OWNERS REPRESENTATIVE TO COORDINATE SUCH ACTIVITIES WITH UTILITY COMPANIES.
- CONTRACTOR SHALL COMPLY WITH ALL OSHA STANDARDS AND REGULATIONS FOR OPEN TRENCH EXCAVATIONS.
- ALL EXCAVATION SHALL BE UNCLASSIFIED. CONTRACTOR RESPONSIBLE FOR EXCAVATING ALL MATERIALS INCLUDING ROCK.
- CONTRACTOR RESPONSIBLE FOR COORDINATING WITH THE VIRGINIA DEPARTMENT OF TRANSPORTATION, CAMPBELL COUNTY, AND OTHER GOVERNING BODIES FOR PERMITS AND INSPECTIONS AS REQUIRED.
- THE AREA SHOWN HEREON IS LOCATED IN FLOOD HAZARD ZONE 'X' AND IS NOT LOCATED WITHIN FLOOD HAZARD ZONE 'A' FOR A 100 YEAR FLOOD AS DETERMINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY AS SHOWN ON COMMUNITY-PANEL MAP #51031C0085D & 51031C0103D DATED AUGUST 28, 2008.
  - FOR PLANNING PURPOSES ONLY, AN APPROXIMATE 100 YEAR FLOODPLAIN ELEVATION HAS BEEN ESTIMATED FOR SANITARY SEWER IMPROVEMENT DESIGN. THIS ELEVATION HAS NOT BEEN SUBMITTED TO NOR APPROVED BY FEMA.
- CONSTRUCTION LIMITS SHALL INCLUDE ALL DISTURBED AREAS. ALL DISTURBED AREAS SHALL BE SEEDED AND PROVIDED WITH EROSION CONTROL DURING AND AT THE END OF CONSTRUCTION.
- ALL SLOPES STEEPER THAN 2:1 SHALL BE PROTECTED WITH VDOT EC-2 EROSION CONTROL MATTING FROM TOP OF SLOPE TO TOE OF SLOPE. THE CONTRACTOR SHALL ENSURE THE PROPER INSTALLATION OF SUCH MEASURES IN ACCORDANCE WITH VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS AND THE MANUFACTURER'S WRITTEN RECOMMENDATIONS.
- THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL CONFINED SPACE ENTRY REGULATIONS.
- MAINTAIN ALL OVERHEAD AND UNDERGROUND ELECTRICAL, TELEPHONE, WATER, AND GAS SERVICES AND ALL OTHER UTILITIES DURING ENTIRE CONSTRUCTION PERIOD. UTILITY OUTAGES WILL NOT BE ALLOWED.
- THE CONTRACTOR SHALL MAINTAIN SURFACE DRAINAGE AND SUBSURFACE DEWATERING DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL PUMPS AND PIPING REQUIRED TO MAINTAIN SURFACE DRAINAGE.
- THE CONTRACTOR SHALL BE FULLY LIABLE FOR REPAIR OF ANY DAMAGES ON PUBLIC OR PRIVATE PROPERTY CAUSED BY HIS CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL REPLACE ALL DISTURBED SURFACES IN KIND, INCLUDING PAVEMENT, STONE, DITCHES, MAILBOXES, STORM CULVERTS, FENCING, ETC. AT NO ADDITIONAL COST TO THE OWNER.
- ALL EXISTING SIGNS, CURBS, GUARDRAIL FENCING, STONE, STRUCTURES, LANDSCAPING, PLANTERS, SHRUBS, AND OTHER PHYSICAL IMPROVEMENTS TEMPORARILY REMOVED BY THE CONTRACTOR SHALL BE REPLACED TO ORIGINAL CONDITION, OR TO THE PROPERTY OWNER AND TO THE SATISFACTION OF THE OWNER AND PROPERTY OWNER.
- ALL PROPERTY PINS OR VDOT MONUMENTS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY A LAND SURVEYOR LICENSED IN THE COMMONWEALTH OF VIRGINIA AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION FROM PROPERTY OWNERS FOR USE OF ANY ACCESS POINTS OTHER THAN THOSE LOCATED WITHIN RIGHT-OF-WAYS AND OBTAINED EASEMENTS. WRITTEN PERMISSION SHALL CONTAIN CONDITIONS FOR USE AND RESTORATION AGREEMENTS BETWEEN PROPERTY OWNER AND CONTRACTOR. COPIES OF WRITTEN PERMISSION SHALL BE PROVIDED TO OWNER PRIOR TO USING OTHER ACCESS POINTS.
- TREES AND SHRUBS TO REMAIN IN PLACE SHALL BE ROPED OFF DURING GRADING OPERATIONS TO KEEP EQUIPMENT AWAY FROM ROOT SYSTEMS. ALL TREES WITHIN PERMANENT EASEMENT AND PUMP STATION LIMITS OF CONSTRUCTION SHALL BE REMOVED AND GRUBBED. IN TEMPORARY EASEMENT THE CONTRACTOR SHALL MAKE SELECT CUTTING OF TREES, TAKING THE SMALLEST TREES FIRST. TREES MANDATORY FOR SANITARY SEWER CONSTRUCTION. TREES NOT REQUIRING REMOVAL FOR SANITARY SEWER INSTALLATION SHALL BE PROTECTED AND REMAIN UNDISTURBED.
- VDOT RESIDENCY POLICY FOR UTILITY CROSSING PRIVATE ENTRANCES IS TO REQUIRE THE UTILITY TO BE BORED UNDER THE ENTRANCES UNLESS THE PROPERTY OWNER AGREES IN WRITING TO ALLOW IT TO BE OPEN CUT.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES OR EROSION/SEDIMENT CAUSED BY THE TESTING OF THE SANITARY SEWER. THE CONTRACTOR IS TO MAKE EVERY EFFORT TO MINIMIZE IMPACTS.
- THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH: THESE PLANS, CAMPBELL COUNTY UTILITIES AND SERVICE AUTHORITY SPECIFICATIONS, THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) ROAD AND BRIDGE SPECIFICATIONS, DATED 2020; THE VDOT ROAD AND BRIDGE STANDARDS, DATED 2016; THE VIRGINIA WORK AREA PROTECTION MANUAL, DATED 2011, REVISION DATED NOVEMBER, 2020.
- WHERE STANDARD SLOPE ROUNDOFFS WOULD DAMAGE TREES, BUSHES OR OTHER DESIRABLE VEGETATION, THEY SHALL BE OMITTED WHEN SO ORDERED BY THE ENGINEER.
- CONSTRUCT EXCAVATION SUPPORT SYSTEMS AS REQUIRED BY OSHA AND U.S. ARMY CORPS OF ENGINEERS SAFETY & HEALTH REQUIREMENTS MANUAL EM 385-1-1, AND SECTIONS 23 A AND 23 B TO ADEQUATELY SUPPORT EXISTING SOIL AND ADJACENT STRUCTURES DURING EXCAVATION ACTIVITIES.

**SANITARY NOTES:**

- ALL SANITARY SEWER LINES TO BE INSTALLED AND TESTED PER CCUSA STANDARDS AND SPECIFICATIONS AT THE CONTRACTORS EXPENSE.
- ANY CHANGES TO THE PLANS MUST BE APPROVED BY CCUSA PRIOR TO CONSTRUCTION.
- ANY CRUSHED, OVAL SHAPED, OR OTHERWISE UNACCEPTABLE PIPE WILL BE REPLACED BY THE CONTRACTOR AT CONTRACTORS EXPENSE.
- SANITARY SEWER TRENCH SHALL BE PER CCUSA STANDARD DETAIL C-150.
- CONTRACTOR TO FIELD VERIFY ALL INVERTS AND CONNECTION POINTS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. IF POTENTIAL CONFLICTS ARE DETECTED, CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY.
- MAINTAIN 18" OF VERTICAL SEPARATION BETWEEN STORM SEWER LINES, WATER LINES AND THE SANITARY SEWER LINE.
- CONTRACTOR MUST MAINTAIN 10' HORIZONTAL SEPARATION BETWEEN WATER AND SANITARY SEWER LINES AT ALL TIMES.
- ALL PROPOSED GRAVITY SANITARY SEWER LINES SHALL BE SDR 35 PVC UNLESS OTHERWISE NOTED.
- ALL PROPOSED SEWER SERVICE LATERALS SHALL BE SDR 26 PVC PER CCUSA STANDARD DETAILS S-110 & S-120.
- ALL MANHOLES SHALL BE PRECAST CONCRETE UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL VERIFY THE LOCATION AND ACTIVITY OF ALL LATERALS PRIOR TO CONNECTING TO THE EXISTING SEWER MAIN. THE CONTRACTOR SHALL PROPERLY ABANDON IN-ACTIVE SEWER LATERALS.
- ALL EXISTING SURFACE IMPROVEMENTS DAMAGED DURING INSTALLATION OF THE SEWER MAIN AND LATERALS SHALL BE REPLACED IN LIKE KIND.
- LIMITS OF PAVEMENT DISTURBANCE IN PAVEMENT IS DEFINED BY THE LIMITS OF THE UTILITY TRENCH.
- ALL ABANDONED SEWER MAINS ARE TO BE FILLED WITH FLOWABLE FILL.

**CONSTRUCTION SEQUENCE**

- INSTALL TRAFFIC CONTROL DEVICES PRIOR TO WORK IN VDOT RIGHT-OF-WAY.
- INSTALL E&S CONTROLS AS REQUIRED BEFORE STARTING WORK.
- INSTALL PUMP STATION, FORCE MAIN, GRAVITY SANITARY SEWER LINE, AND ALL APPURTENANCES.
- INSTALL SEEDING AND ALL RESTORE DISTURBED AREAS AS WORK PROGRESSES.
- CONTRACTOR TO RESTORE ALL AREAS BACK TO EITHER PROPOSED GRADES OR EXISTING CONDITIONS AS WORK PROGRESSES, A MAXIMUM OF 500 LF CAN BE UNRESTORED AT ONE TIME. ALL DISTURBED AREAS, HAUL ROADS, CONSTRUCTION ROADS, LAY DOWN AREAS, ETC. SHALL BE RESTORED. MEASURES MUST BE REMOVED WITHIN 30 DAYS OF PERMANENT STABILIZATION OF THE SITE.

**VDOT UTILITY INSTALLATION GENERAL NOTES:**

(THESE NOTES ONLY APPLY TO WORK IN VDOT RIGHT-OF-WAY)

- ALL WORK SHALL COMPLY WITH APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS INCLUDING BUT NOT LIMITED TO: OSHA, NESC, DOT, ETC. GENERAL NOTES APPLY TO ALL DRAWINGS.
- ALL WORK IN PUBLIC ROADS SHALL BE PERFORMED IN ACCORDANCE WITH THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) 2016 ROAD AND BRIDGE STANDARDS AND 2020 ROAD AND BRIDGE SPECIFICATIONS. ALL WORK IN PUBLIC ROADS AND RIGHTS-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE VIRGINIA WORK AREA PROTECTION MANUAL 2011 EDITION, REVISION 2.1: NOVEMBER 1, 2020.
- A VDOT LAND USE PERMIT IS REQUIRED FOR WORK PERFORMED WITHIN STATE RIGHT-OF-WAY. ACTIVITIES PERFORMED WITHIN STATE RIGHT-OF-WAY SHALL BE LIMITED TO THOSE EXPRESSLY COVERED BY THE PERMIT WORK DESCRIPTION.
- PERMISSIONS GRANTED BY VDOT LAND USE PERMIT APPLY ONLY TO WORK PERFORMED INSIDE STATE RIGHT-OF-WAY AND IN NO WAY GRANTS PERMISSION FOR WORK TO BE PERFORMED ON PRIVATELY OWNED PROPERTY. CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE PERMISSION OF PRIVATE PROPERTY OWNERS WHEN PERFORMING WORK OUTSIDE OF STATE RIGHT-OF-WAY, INCLUDING ACTIVITIES PERFORMED WITHIN PRESCRIPTIVE EASEMENTS.
- CONTRACTOR SHALL MAINTAIN APPROVED COPIES OF ALL PROJECT RELATED VDOT PERMITS AND REFERENCED APPROVED PLANS ON-SITE AT ALL TIMES.
- VDOT LAND USE SECTION SHALL BE NOTIFIED 5 DAYS PRIOR TO INITIATING WORK WITHIN STATE RIGHT-OF-WAY. LYNCHBURG DISTRICT VDOT LAND USE SECTION POINTS OF CONTACT ARE LISTED BELOW BY COVERAGE AREA:
  - AMHERST AND NELSON COUNTIES: PATRICIA MARTIN 434-856-8152
  - APPOMATTOX AND CAMPBELL COUNTIES: DANIEL NEWLAND 434-841-6863
  - BUCKINGHAM, CHARLOTTE, CUMBERLAND, AND PRINCE EDWARD COUNTIES: CHARLES EDWARDS 434-505-3262
  - HALIFAX AND PITTSYLVANIA COUNTIES: DAVID SHELTON 434-433-3135
- PRIOR TO INITIATING WORK WITHIN STATE RIGHT-OF-WAY, THE CONTRACTOR SHALL HOLD A PRE-CONSTRUCTION CONFERENCE WITH OWNER, ENGINEER, LOCALITY, SUBCONTRACTORS, AND VDOT.
- MAINTENANCE OF TRAFFIC (MOT) PLAN(S) SHALL BE PROVIDED BY THE CONTRACTOR FOR VDOT REVIEW PRIOR TO THE ISSUANCE OF A LAND USE PERMIT BY VDOT.
- CONTRACTOR IS RESPONSIBLE FOR NOTIFYING VDOT TRAFFIC OPERATIONS CENTER (540-375-0170) UPON ENTERING AND EXITING THE ROADWAY.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY SIGNS, FLAG PERSONS AND OTHER DEVICES (LIGHTS, BARRICADES, ETC.) PROVIDING PROTECTION FOR TRAFFIC AND WORKERS IN ACCORDANCE WITH THE 2011 VIRGINIA WORK AREA PROTECTION MANUAL, REVISION 2.1: NOVEMBER 1, 2020 OR AS DIRECTED BY THE AREA LAND USE ENGINEER.
- IMPLEMENTATION OF TEMPORARY LANE CLOSURES MUST BE ENTERED INTO THE VDOT LANE CLOSURE ADVISORY MANAGEMENT SYSTEM (LCAMS) AND VTRAFFIC A MINIMUM OF ONE (1) WEEK PRIOR TO THE PLANNED EXECUTION OF LANE CLOSURE ACTIVITIES ON STATE MAINTAINED HIGHWAYS ROUTES 460, 29, 58 AND ALL LIMITED ACCESS AS NOTED ON THE PLANS. THE PERMITTEE OR THEIR CONTRACTOR(S) MAY ENTER THEIR REQUESTS DIRECTLY OR PROVIDE WRITTEN EMAIL REQUESTS TO THE VDOT REGIONAL OPERATIONS CENTER AT: SALESMSMARTTRAFFICCENTER@VDOT.VIRGINIA.GOV
- CONTRACTOR SHALL ENSURE THAT ALL SIGNS ARE IN ACCORDANCE WITH THE 2009 MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 2011 VIRGINIA SUPPLEMENT TO THE MUTCD AND THE 2011 VIRGINIA WORK AREA PROTECTION MANUAL, REVISION 2.1: NOVEMBER 1, 2020.
- FOR ALL ACTIVITIES PERFORMED UNDER THE AUSPICES OF A VDOT LAND USE PERMIT INVOLVING THE INSTALLATION, MAINTENANCE, AND REMOVAL OF WORK ZONE TRAFFIC CONTROL DEVICES, AT LEAST ONE INDIVIDUAL SHALL BE ON-SITE WHO IS VERIFIED BY VDOT IN-BASIC WORK ZONE TRAFFIC CONTROL. AN INDIVIDUAL VERIFIED BY VDOT IN INTERMEDIATE WORK ZONE TRAFFIC CONTROL SHALL BE ON-SITE TO PROVIDE SUPERVISION DURING WORK ZONE ADJUSTMENTS OR CHANGES TO TRAFFIC CONTROL DUE TO FIELD CONDITIONS. INDIVIDUALS SHALL HAVE THEIR VERIFICATION CARDS WITH THEM WHILE ON THE WORK SITE.
- UNLESS OTHERWISE APPROVED IN WRITING BY THE VDOT AREA LAND USE ENGINEER, ALL WORK IN PUBLIC ROADS CLASSIFIED AS "ARTERIAL" OR "COLLECTOR" SHALL BE LIMITED TO THE HOURS OF 9:00 AM TO 3:30 PM, MONDAY THROUGH FRIDAY, IN THE LYNCHBURG DISTRICT. PUBLIC ROADS CLASSIFIED AS "LOCAL" ROADS SHALL HAVE UNRESTRICTED WORK HOURS AND DAYS, UNLESS OTHERWISE DIRECTED BY THE VDOT AREA LAND USE ENGINEER.
- PERMITTED NON-EMERGENCY WORK WILL NOT BE ALLOWED ON PUBLIC ROADS CLASSIFIED AS "ARTERIAL" OR "COLLECTOR" FROM NOON ON THE PRECEDING WEEKDAY THROUGH THE FOLLOWING STATE OBSERVED HOLIDAYS: NEW YEAR'S DAY, MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY, THANKSGIVING DAY, AND CHRISTMAS DAY.
- WORK IN THE VICINITY OF SCHOOL ENTRANCES AND ON SCHOOL ROADS SHOULD BE AVOIDED DURING THE HOURS OF ADMISSION AND DISMISSAL SO AS NOT TO DISRUPT SCHOOL TRAFFIC.
- NO EQUIPMENT OR MATERIALS SHALL BE STORED ON ROAD SURFACES OR ALLOWED TO OCCUPY THE CLEAR ZONE DURING PERIODS OF INACTIVITY. SEE THE 2011 VIRGINIA WORK AREA PROTECTION MANUAL, REVISION 2.1: NOVEMBER 1, 2020 (APPENDIX A, PAGE A-4) FOR CLEAR ZONE DEFINITIONS.
- EXCAVATION MATERIALS SHALL BE STORED AWAY FROM PAVED ROADWAYS. ALL SPILLED MATERIALS SHALL BE IMMEDIATELY REMOVED FROM THE TRAVEL SURFACES AND SHOULDERS.
- MUNICIPAL ROAD SIGNS, DELINEATORS, GUARDRAILS, ETC. SHALL NOT BE REMOVED WITHOUT PRIOR WRITTEN PERMISSION FROM THE APPROVING AUTHORITY.
- DURING CONSTRUCTION, ALL VDOT DRAINAGE STRUCTURES SHALL BE PROTECTED AGAINST SILTATION BY SEDIMENT TRAPPING DEVICES, PROPERLY INSTALLED IN ACCORDANCE WITH VDOT STANDARDS AND SPECIFICATIONS AND VIRGINIA DEPARTMENT OF ENVIRONMENTAL (DEQ) STANDARDS. SEDIMENT TRAPPING DEVICES SHALL BE MAINTAINED UNTR. UPSTREAM STABILIZATION HAS BEEN ADEQUATELY ACHIEVED.
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL CONFORM TO THE VDOT 2016 ROAD AND BRIDGE STANDARDS, 2020 ROAD AND BRIDGE SPECIFICATIONS, AND 1992 DCR VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK - THIRD EDITION.
- CONTRACTOR IS RESPONSIBLE FOR CONTACTING MISS UTILITY (1-800-552-7001) TO IDENTIFY AND MARK THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES.

- CONTRACTOR SHALL CONTACT VDOT TRAFFIC ENGINEERING SECTION (JAMES HOLT: 434-856-8158) A MINIMUM OF 7 DAYS PRIOR TO COMMENCEMENT OF INSTALLATION ACTIVITIES WITHIN 1,000 FEET OF SIGNALIZED INTERSECTIONS, FLASHING SIGNS, OR OTHER VDOT ELECTRICAL FACILITIES. THIS INCLUDES EXCAVATION, TRENCHING, FLOWING, OR BORING.
- PLACEMENT OF FIBER OPTIC CABLE SHALL BE LIMITED TO THE AREAS OF THE STATE RIGHT-OF-WAY DESCRIBED BELOW:
  - OUTERMOST PORTION OF THE STATE RIGHT-OF-WAY AS ALLOWED BY EXISTING TERRAIN.
  - A MINIMUM OF 3 FEET FROM THE TOE OF FILL SLOPES.
  - A MINIMUM OF 2 FEET FROM THE BREAK POINTS OF SLOPES STEEPER THAN 3:1, UNLESS PUSHED, BORED OR JACKED.
  - FIBER PLACED UNDER PAVED AREAS SHALL BE PUSHED, BORED, OR JACKED.
  - FIBER PLACED WITHIN THE SHOULDER OF THE ROAD SHALL BE INSTALLED AS FOLLOWS:
    - NO CLOSER THAN 4.0 FEET FROM THE EDGE OF PAVEMENT, OR WHITE LINE, AND NO CLOSER THAN 2.0 FEET FROM THE FACE OF GUARDRAIL.
    - IF MINIMUM 4.0 AND 2.0 FOOT OFFSETS CANNOT BE ACHIEVED, VDOT LAND USE SECTION POINT OF CONTACT SHALL BE NOTIFIED TO AUTHORIZE ANY DEVIATIONS TO THE PERMITTED ACTIVITY.
    - IF MINIMUM 4.0 FOOT OFFSET FROM EDGE OF PAVEMENT IS ACHIEVABLE BUT RESULTS IN THE PLACEMENT OF FIBER INSIDE THE ROADSIDE DITCHLINE, BORING WILL BE REQUIRED BENEATH THE DITCH CENTERLINE.
    - NO CLOSER THAN 3.0 FEET FROM THE BACK OF POST IN GUARDRAIL SECTIONS.
- FOR AERIAL CROSSINGS, MINIMUM VERTICAL CLEARANCES OF 18 FEET (NON-LIMITED ACCESS) AND 21 FEET (LIMITED ACCESS) SHALL BE MAINTAINED OVER ROADWAYS.
- ALL BURIED UTILITIES WITHIN LIMITED ACCESS RIGHT-OF-WAY SHALL MAINTAIN A MINIMUM OF 36 INCHES OF COVER.
- WITH THE EXCEPTION OF TELECOMMUNICATION AND CABLE TELEVISION, ALL BURIED UTILITIES WITHIN NON-LIMITED ACCESS RIGHT-OF-WAY SHALL MAINTAIN A MINIMUM OF 36 INCHES OF COVER. TELECOMMUNICATION AND CABLE TELEVISION FACILITIES BURIED WITHIN NON-LIMITED ACCESS RIGHT-OF-WAY SHALL MAINTAIN A MINIMUM OF 30 INCHES OF COVER.
- UTILITY MARKERS SHALL BE LOCATED BEYOND THE AREAS OF NORMAL MAINTENANCE ACTIVITIES. THE PREFERRED PLACEMENT LOCATION IS AT THE STATE RIGHT-OF-WAY LINE. IF THIS IS NOT OBTAINABLE, OTHER AREAS MAY INCLUDE BESIDE SIGN POSTS LOCATED BEHIND THE DITCH LINE, IMMEDIATELY BEHIND THE BACK OF GUARDRAIL, OR BUNCHED TIGHTLY TOGETHER WITH EXISTING UTILITY MARKERS OR PEDESTALS.
- JUNCTION BOXES SHALL MEET OR EXCEED VDOT STANDARDS JB-R1 & R2 AND JB-S1, S2, S3, S4. JUNCTION BOXES INSTALLED BETWEEN EDGE OF PAVEMENT AND DITCHLINE SHALL BE LOAD BEARING IN NATURE AND HAVE CONCRETE COLLARS PER VDOT STANDARD.
- NO EXCAVATION (OPEN CUTS, FLOWS, BORE PITS, PULL POINTS, COUPLERS, ETC.) WILL BE ALLOWED ON AREAS OF A 3:1 SLOPE OR GREATER WITHOUT PRIOR APPROVAL BY THE VDOT DISTRICT ENGINEER'S DESIGNEE.
- CONTRACTOR SHALL MAINTAIN AND PROVIDE UPON COMPLETION OF WORK, A SET OF COMPLETE "AS-BUILT" PLANS TO VDOT.
- ANY ERRORS, CONFLICTS, OR DISCREPANCIES FOUND ON THE APPROVED PLANS SHALL BE REPORTED TO THE UTILITY OWNER. VDOT SHALL BE NOTIFIED FOR RESOLUTION BEFORE PROCEEDING FURTHER WITH THE WORK, IF THE STATE MAINTAINED RIGHT-OF-WAY IS AFFECTED.
- THE COMMONWEALTH TRANSPORTATION BOARD, MEMBERS OF THE BOARD, THE COMMONWEALTH AND ALL COMMONWEALTH EMPLOYEES, AGENTS, AND OFFICES, SHALL BE ABSOLVED FROM ALL RESPONSIBILITIES, DAMAGES AND LIABILITIES AS A RESULT OF WORK ARISING FROM THE EXERCISE OF THE PRIVILEGES GRANTED BY PLAN AND/OR PERMIT APPROVAL.

**HURT & PROFFIT**  
INSPIRED / RESPONSIVE / TRUSTED

434.847.7796  
2524 LANGHORNE ROAD  
LYNCHBURG, VA 24501

HANDP.COM  
LYNCHBURG, VA 24501  
ENVIRONMENTAL  
SURVEYING • LAND DEVELOPMENT  
CONSTRUCTION TESTING & INSPECTION • CULTURAL RESOURCES

**NOTES FOR**  
**MARTIN DRIVE REGIONAL W.W.P.S.**  
**CAMPBELL COUNTY, VIRGINIA**

PROJECT NO.	20230622
LAT.	37.313701
LONG.	-79.260669
DATE:	03/05/2025
DRAWN BY:	MSF
CHECKED BY:	MDW



**BID SET**

**CCUSA # 80-2304**

**HURT & PROFFIT**

SHEET NO.	REV.
G-102	---

THIS SHEET IS INTENDED TO BE REPRODUCED AT 24X36. REPRODUCTION OF THIS SHEET AT A DIFFERENT SIZE THAN INTENDED SHALL VOID THE SCALE SHOWN ON THE SHEET.

**EROSION AND SEDIMENT CONTROL NARRATIVE**

**I. PROJECT DESCRIPTION**

THIS PROJECT CONSISTS OF THE CONSTRUCTION OF APPROXIMATELY 10,400 LF OF SANITARY SEWER, APPROXIMATELY 2,000 L.F. OF SANITARY SEWER FORCE MAIN, AND A WASTE WATER PUMP STATION, WITH ASSOCIATED APPURTENANCES. A TOTAL OF APPROXIMATELY 7.9 ACRES WILL BE DISTURBED AS A RESULT OF CONSTRUCTION ACTIVITIES.

**II. EXISTING SITE CONDITIONS**

THIS SITE LOCATED IN A COMBINATION OF VDOT RIGHT-OF-WAY, PARTIALLY WOODED PRIVATE PROPERTY, AND PRIVATE RIGHT-OF-WAY.

**III. ADJACENT PROPERTY**

THE SURROUNDING PROPERTIES ARE ZONED (R-SF) RESIDENTIAL SINGLE FAMILY, (R-MH) RESIDENTIAL MULTIFAMILY, (B-GC) GENERAL COMMERCIAL, AND (B-HC) HEAVY COMMERCIAL. ALL MEASURE SHALL BE TAKEN TO ENSURE THAT THE SITE IS STABILIZED AND NO ADDITIONAL SEDIMENT IS DEPOSITED INTO THE DRAINAGE CHANNEL.

**IV. OFFSITE AREAS**

ALL GRADING SHALL OCCUR ON SITE. WE DO NOT ANTICIPATE ANY OFFSITE ACTIVITY TO OCCUR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INDEPENDENTLY VERIFYING QUANTITIES TO HIS OWN SATISFACTION.

**V. SOILS**

THE SOIL SURVEY MAP FOR CAMPBELL COUNTY, VIRGINIA, VERSION 16, DATED SEPTEMBER 5, 2023 INDICATES THAT THIS SITE CONSISTS OF CHEWACLA-TOCCOA COMPLEX; WORSHAM SOILS, 0 TO 4 PERCENT SLOPES; CECIL FINE SANDY LOAM, 6 TO 15 PERCENT SLOPES; ERODED; MANTEO CHANNERY LOAM, 25 TO 60 PERCENT SLOPES; TALLAPOOSA LOAM, 15 TO 25 PERCENT SLOPES; APLING FINE SANDY LOAM, 6 TO 15 PERCENT SLOPES; ERODED; TALLAPOOSA LOAM, 6 TO 15 PERCENT SLOPES; CECIL FINE SANDY LOAM, 15 TO 25 PERCENT SLOPES; ERODED.

**VI. STORMWATER**

A VIRGINIA STORMWATER PERMIT WILL NOT BE REQUIRED.

**VII. CRITICAL AREAS**

CRITICAL AREAS ARE CREEK CROSSING, ROAD CROSSINGS, AND STEEP SLOPES.

**VIII. EROSION AND SEDIMENT CONTROL**

ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED BY THE CONTRACTOR IN ACCORDANCE WITH THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.

**A. STRUCTURAL PRACTICES**

- 3.05 SUPER SILT FENCE (SSF) - A TEMPORARY SEDIMENT BARRIER CONSTRUCTED OF POSTS PLACED ACROSS OR AT THE TOE OF A SLOPE OR IN A MINOR DRAINAGE WAY TO INTERCEPT AND DETAIN SEDIMENT AND DECREASE FLOW VELOCITIES FROM DRAINAGE AREAS OF LIMITED SIZE. SILT FENCE SHALL BE INSTALLED ALONG THE EDGE OF PAVEMENT AT THE LIMITS OF GRADING AS SHOWN ON THE PLANS.
- 3.19 RIPRAP (RR) - A PERMANENT EROSION-RESISTANT GROUND COVER OF LARGE, LOOSE, ANGULAR STONE WITH FILTER FABRIC OR GRANULAR UNDERLINING.
- 3.21 TEMPORARY SEEDING (TS) - THE CONTRACTOR IS TO IMPLEMENT TEMPORARY SEEDING IF DISTURBED LAND IS LEFT EXPOSED FOR OVER 30 DAYS AND CONSTRUCTION IS NOT COMPLETE IN THIS AREA.
- 3.32 PERMANENT SEEDING (PS) - ESTABLISHMENT OF PERENNIAL VEGETATIVE COVER BY PLANTING SEED ON ROUGH-GRADED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR A YEAR OR MORE OR WHERE PERMANENT, LONG-LIVED VEGETATIVE COVER IS NEEDED ON FINE-GRADED AREAS.
- 3.35 MULCHING (MU) - APPLICATION OF PLANT RESIDUES OR OTHER SUITABLE MATERIALS TO DISTURBED SURFACES TO PREVENT EROSION AND REDUCE OVERLAND FLOW VELOCITIES. FOSTERS PLANT GROWTH BY INCREASING AVAILABLE MOISTURE AND PROVIDING INSULATION AGAINST EXTREME HEAT OR COLD. EC-2 SHALL BE USED AS MULCHING MATERIAL FOR THIS PROJECT.

**B. VEGETATIVE PRACTICES**

SEEDING MEASURES SHALL BE USED ON DISTURBED SOIL AT CUT/FILL SLOPES, SIDES OF SEDIMENT BASINS, DITCH LINES, OR AREAS OUTSIDE OF ON-GOING CONSTRUCTION PRACTICES WITHIN SEVEN (7) DAYS OF COMPLETED GRADING. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH PERMANENT SEEDING IMMEDIATELY FOLLOWING FINAL GRADING.

UNLESS OTHERWISE INDICATED, ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.

**C. MINIMUM STANDARDS (MS):**

ALL APPLICABLE VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS AND MINIMUM STANDARDS SHALL BE ADHERED TO DURING ALL PHASES OF CONSTRUCTION. THESE INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

- MS-1 STABILIZATION OF DENUDED AREAS: PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO BARE AREAS WITHIN 7 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE UNLESS OTHERWISE SHOWN. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN 7 DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE, BUT WILL REMAIN DORMANT OR UNDISTURBED FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.
- MS-2 STABILIZATION OF SOIL STOCKPILES: DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
- MS-3 PERMANENT VEGETATIVE COVER: 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 CCUSA INSPECTOR, IS UNIFORM AND MATURE ENOUGH TO SURVIVE AND INHIBIT EROSION.
- MS-4 TIMING AND STABILIZATION OF SILT TRAPPING MEASURES: SEDIMENT TRAPS, STORM DRAIN INLET PROTECTION, SILT FENCING, AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND DISTURBING ACTIVITY. THE STRUCTURES SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.

**EROSION AND SEDIMENT CONTROL MAINTENANCE:**

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL DEVICES FOR THE DURATION OF THE PROJECT. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE CHECKED WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL TO INSURE THAT ALL DEVICES ARE IN PLACE AND FUNCTIONING AS REQUIRED. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE MAINTAINED PER THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. IN GENERAL, IF THE SILT BUILD UP BEHIND A BARRIER BECOMES AS DEEP AS 9 INCHES, THE SILT IS TO BE REMOVED AND THE BARRIER REPAIRED OR REPLACED. AFTER COMPLETION OF THE PROJECT, AND PERMANENT SEEDING HAS BEEN ESTABLISHED, EROSION CONTROL DEVICES AND ANY SILT BUILD UP SHALL BE REMOVED. DISTURBED AREAS DUE TO THIS CLEANUP OPERATION SHALL BE REPAIRED, RESEEDED AND REMULCHED.

**EROSION AND SEDIMENT CONTROL DEVICES:**

PERIMETER EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITY. AS CONSTRUCTION PROCEEDS, ALL ADDITIONAL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AS SOON AS POSSIBLE. EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE PLAN ARE A MINIMUM AND THE PROJECT CONDITION MAY DICTATE ADDITIONAL CONTROL. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE PER THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.

MS-5 STABILIZATION OF EARTHEN STRUCTURES: STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES, AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.

MS-6 SEDIMENT BASINS: A SEDIMENT BASIN SHALL CONTROL SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPRISED OF FLOW FROM DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES. THE SEDIMENT BASIN SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE THE ANTICIPATED SEDIMENT LOADING FOR THE LAND DISTURBING ACTIVITY. THE OUTFALL DEVICE OR SYSTEM DEVICE SHALL TAKE INTO ACCOUNT THE TOTAL DRAINAGE AREA FLOWING THROUGH THE DISTURBED AREA TO BE SERVED BY THE BASIN.

MS-7 CUT AND FILL SLOPES: CUT AND FILL SLOPES SHALL BE 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.

MS-8 CONCENTRATED RUNOFF DOWN CUT OR FILL SLOPES: CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME, OR SLOPE DRAIN STRUCTURE.

MS-9 WATER SEEPS FROM A SLOPE FACE: WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.

MS-10 STORM SEWER INLET PROTECTION: ALL STORM SEWER INLETS SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.

MS-11 STABILIZATION OF OUTLETS: 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.

MS-12 WORK IN LIVE WATERCOURSES: PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT AND SEDIMENT TRANSPORT WHEN WORKING IN LIVE WATERCOURSES. THE WORK AREA SHALL BE STABILIZED TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION OF CAUSEWAYS AND COFFERDAMS. EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NON-ERODIBLE COVER MATERIALS.

MS-13 CROSSING A LIVE WATERCOURSE: WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES MORE THAN TWICE IN ANY SIX MONTH PERIOD, A TEMPORARY STREAM CROSSING CONSTRUCTED OF NON-ERODIBLE MATERIALS SHALL BE PROVIDED.

MS-14 APPLICABLE REGULATIONS: ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET.

MS-15 STABILIZATION OF BED AND BANKS: THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.

MS-16 UNDERGROUND UTILITIES: UNDERGROUND UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:  
 A. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPEN AT ONE TIME.  
 B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.  
 C. EFFLUENT FOR 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 OFFSITE PROPERTY.  
 D. RE-STABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS.  
 E. APPLICABLE SAFETY REGULATIONS SHALL BE COMPILED WITH AT ALL TIMES.

MS-17 CONSTRUCTION ACCESS ROUTES: 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 PAVED OR PUBLIC ROAD SURFACE, THE ROAD SURFACE 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 DEVELOPMENT LOTS, AS WELL AS TO LARGER LAND-DISTURBING ACTIVITIES.

MS-18 TEMPORARY E&S CONTROL MEASURE REMOVAL: ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE CCUSA INSPECTOR.

MS-19 ADEQUACY OF RECEIVING CHANNELS: PROPERTIES AND WATERWAYS DOWNSTREAM FROM THE DEVELOPMENT SITE SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION, AND DAMAGE DUE TO INCREASES IN VOLUME, VELOCITY, AND PEAK FLOW RATES OF STORM WATER RUNOFF FOR THE STATED FREQUENCY STORM OF 24 HOUR DURATION.

**MANAGEMENT STRATEGIES**

EROSION AND SEDIMENT CONTROL SHALL BE DISCUSSED BETWEEN THE GRADING CONTRACTOR AND THE OWNER PRIOR TO ANY EXCAVATION SO THAT LIMITS OF CONSTRUCTION AND EROSION CONTROL METHODS ARE CLEARLY UNDERSTOOD BY BOTH PARTIES. CONSTRUCTION SHALL BE SEQUENCED SO THAT GRADING OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE. THERE IS TO BE NO TRACKING OF MUD OR DIRT BY CONSTRUCTION EQUIPMENT ONTO ANY PAVED DRIVES OR ROADS. SEDIMENT TRAPPING MEASURES SHALL BE INSTALLED AS A FIRST STEP IN GRADING AND SHALL BE SEEDED AND MULCHED IMMEDIATELY FOLLOWING INSTALLATION. SEEDING OR OTHER STABILIZATION SHALL FOLLOW IMMEDIATELY AFTER GRADING. AREAS WHICH ARE NOT TO BE DISTURBED SHALL BE CLEARLY MARKED BY FLAGS, SIGNS, ETC. AFTER ACHIEVING ADEQUATE STABILIZATION, THE TEMPORARY E&S CONTROLS SHALL BE CLEANED AND REMOVED.

**D. MAINTENANCE**

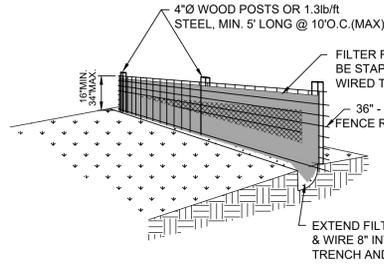
THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL EROSION AND SEDIMENT CONTROL MEASURES. THESE SHALL BE CHECKED DAILY AND AFTER EACH SIGNIFICANT RAINFALL; ANY DEFICIENCIES SHALL BE REPAIRED IMMEDIATELY IN ACCORDANCE WITH THE LATEST EDITION OF THE VESCH OR AS DEEMED NECESSARY BY THE LOCAL APPROVING AUTHORITY.

**IX. CONSTRUCTION SEQUENCE**

1. INSTALL TRAFFIC CONTROL DEVICES BEFORE STARTING ANY WORK IN VDOT RIGHT-OF-WAY.
2. INSTALL E&S CONTROLS AS NECESSARY BEFORE STARTING WORK.
3. INSTALL PERIMETER CONTROLS AND ALL APPURTENANCES AS SHOWN ON PLANS.
4. INSTALL THE SANITARY SEWER LINE AND APPURTENANCES.
5. REPLACE PAVEMENT SECTION WHERE UTILITY LINE HAS CROSSED DRIVEWAYS AND ROADS.
6. INSTALL SEEDING AND RESTORE ALL DISTURBED AREAS.
7. CONTRACTOR TO RESTORE ALL AREAS BACK TO EITHER PROPOSED GRADES OR EXISTING CONDITIONS AFTER COMPLETION OF THE PROJECT. ALL DISTURBED AREAS, HAUL ROADS, CONSTRUCTION ROADS, LAY DOWN AREAS, ETC. SHALL BE RESTORED. MEASURES SHALL BE REMOVED WITHIN 30 DAYS OF PERMANENT STABILIZATION OF THE SITE.

**EROSION AND SEDIMENT CONTROL NOTES:**

- E1. 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.
- E2. EXCESS EXCAVATION DISPOSED OF OFF THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.
- E3. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATION OF THE LATEST EDITION OF VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS AVA050-3.0 EROSION AND SEDIMENT CONTROL REGULATIONS.
- E4. EROSION AND SEDIMENT CONTROLS SHALL BE MAINTAINED SO THAT SEDIMENT CARRYING RUNOFF FROM THE SITE WILL NOT ENTER STORM DRAINAGE FACILITIES.
- E5. EROSION AND SEDIMENT CONTROLS SHALL BE MAINTAINED UNTIL THE DISTURBED AREA IS STABILIZED.
- E6. PROPERTIES ADJOINING THE SITE SHALL BE KEPT CLEAN OF MUD OR SILT CARRIED FROM THE SITE BY VEHICULAR TRAFFIC OR RUNOFF.
- E7. THE DISPOSAL OF WASTE MATERIALS REMOVED FROM EROSION AND SEDIMENT CONTROL FACILITIES AND THE DISPOSAL OF THESE FACILITIES SHALL BE IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. SETTLED, TRAPPED, AND FILTERED RESIDUES SHALL NOT BE REUSED AT THIS SITE.
- E8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PERIODICALLY INSPECT ALL SEDIMENT AND EROSION CONTROL DEVICES AND INSURE THAT THEY ARE IN GOOD WORKING ORDER. AT A MINIMUM, ALL DEVICES SHALL BE INSPECTED WEEKLY AND AFTER MAJOR RAINFALL EVENTS ANY DEVICE NEEDING REPAIRS SHALL BE REPAIRED WITHIN 24 HOURS.
- E9. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL DEVICES IF, DURING THE COURSE OF CONSTRUCTION, CCUSA DETERMINES THAT THEY ARE REQUIRED.
- E10. THE PLANNING APPROVING AUTHORITY, MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
- E11. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- E12. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTAL EROSION AND SEDIMENT CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
- E13. DURING DEWATERING OPERATIONS, WATER SHALL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
- E14. THE CONTRACTOR SHALL MAINTAIN, REPAIR AND/OR REPLACE ANY EXISTING SEDIMENT CONTROL DEVICES ENCOUNTERED AND DISTURBED DURING THE COURSE OF CONSTRUCTION. AT THE END OF EACH DAY ALL MEASURES AND DEVICES SHALL BE REPAIRED OR REPLACED BEFORE LEAVING THE WORK SITE.
- E15. ALL EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THIS PLAN SET ARE TO BE INSTALLED PRIOR TO CONSTRUCTION.
- E16. EROSION AND SEDIMENT CONTROL MEASURES SHALL COMPLY WITH THE VESCH, 1992 EDITION OR LATER. THE CONTRACTOR SHALL MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES AS NECESSARY AND SHALL BE RESPONSIBLE FOR ALL ADDITIONAL MEASURES AS DETERMINED BY CCUSA.
- E17. ALL PROPOSED DRAINAGE CHANNELS WILL NEED TO BE REVIEWED IN THE FIELD DURING AND AFTER CONSTRUCTION TO DETERMINE IF EROSION OR SCOUR IS OCCURRING AND IF SUCH IS FOUND, TO DETERMINE APPROPRIATE REMEDIAL CORRECTIVE MEASURES.
- E18. CONTRACTOR TO TAKE SPECIAL CARE IN EXECUTING THE EROSION AND SEDIMENT CONTROL PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING SEDIMENT AND/OR CLEANING OUT STORM PIPES AS NECESSARY IF SEDIMENT COLLECTS WITHIN THE VDOT RIGHT OF WAY OR ON PRIVATE PROPERTY.
- E19. EROSION AND SEDIMENT CONTROL AND STORM WATER MANAGEMENT SHALL CONFORM TO THE CAMPBELL COUNTY STANDARDS AND REGULATIONS AND SHALL BE ENFORCED BY THE CAMPBELL COUNTY EROSION AND SEDIMENT CONTROL OFFICERS.
- E20. ALL DITCHES, SWALES, AND NATURAL WATERCOURSES DOWNSTREAM OF THIS PROJECT WILL BE FIELD REVIEWED DURING AND AFTER CONSTRUCTION TO ENSURE COMPLIANCE TO MINIMUM STANDARD 19 (MS-19) (VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, 1992). IF EROSION OR SCOUR IS OCCURRING, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CORRECTIVE MEASURES.



**"SUPER" SILT FENCE (SSF)**  
 (WITH WIRE SUPPORT)  
 VESCH STD. 3.05  
 N.T.S.

**TABLE 3.31-B (TS)**  
 (Revised June 2003)  
**TEMPORARY SEEDING SPECIFICATIONS QUICK REFERENCE FOR ALL REGIONS**

SEED		
APPLICATION DATES	SPECIES	APPLICATION RATES
Sept. 1 - Feb. 15	50/50 Mix of Annual Ryegrass (lolium multi-florum) & Cereal (Winter) Rye (Secale cereale)	50 - 100 (lbs/acre)
Feb. 16 - Apr. 30	Annual Ryegrass (lolium multi-florum)	60 - 100 (lbs/acre)
May 1 - Aug. 31	German Millet	50 (lbs/acre)
FERTILIZER & LIME		
<ul style="list-style-type: none"> <li>• Apply 10-20-10 fertilizer at a rate of 450 lbs. / acre (or 10 lbs. / 1,000 sq. ft.)</li> <li>• Apply Pulverized Agricultural Limestone at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)</li> </ul>		

**NOTE:**  
 - A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site.  
 - Incorporate the lime and fertilizer into the top 4 – 6 inches of the soil by disking or by other means.  
 - When applying Slowly Available Nitrogen, use rates available in Erosion & Sediment Control Technical Bulletin #4, 2003 Nutrient Management for Development Sites at <http://www.dcr.state.va.us/sw/e&s.htm#pubs>

**TABLE 3.32-D (PS)**  
 (Revised June 2003)  
**PERMANENT SEEDING SPECIFICATIONS FOR PIEDMONT AREA**

SEED <sup>1</sup>		
LAND USE	SPECIES	APPLICATION PER ACRE
Minimum Care Lawn (Commercial or Residential)	Tall Fescue <sup>1</sup>	95-100%
	Perennial Ryegrass	0-5%
	Kentucky Bluegrass <sup>1</sup>	0-5%
		<b>TOTAL: 175-200 lbs.</b>
High-Maintenance Lawn	Tall Fescue <sup>1</sup>	<b>TOTAL: 200-250 lbs.</b>
General Slope (3:1 or less)	Tall Fescue <sup>1</sup>	128 lbs
	Red Top Grass or Creeping Red Fescue	2 lbs
	Seasonal Nurse Crop <sup>2</sup>	20 lbs
		<b>TOTAL: 150 lbs.</b>
Low-Maintenance Slope (Steeper than 3:1)	Tall Fescue <sup>1</sup>	108 lbs
	Red Top Grass or Creeping Red Fescue	2 lbs
	Seasonal Nurse Crop <sup>2</sup>	20 lbs
		<b>TOTAL: 150 lbs.</b>

1 - When selecting varieties of turfgrass, use the Virginia Crop Improvement Association (VCIA) recommended turfgrass variety list. Quality seed will bear a label indicating that they are approved by VCIA. A current turfgrass variety list is available at the local County Extension office or through VCIA at 804-746-4884 or at <http://sudan.cses.vt.edu/html/Turf/turf/publications/publication2.htm>

2 - Use seasonal nurse crop in accordance with seeding dates as stated below:  
 February 16<sup>th</sup> - April ..... Annual Rye  
 May 1<sup>st</sup> - August 15<sup>th</sup> ..... Foxtail Millet  
 August 16<sup>th</sup> - October ..... Annual Rye  
 November - February 15<sup>th</sup> ..... Winter Rye

3 - Substitute Sericea lespedeza for Crownvetch east of Farmville, VA (May through September use hulled seed, at other periods, use unhulled Sericea). If Flatpea is used, increase rate to 30 lbs./acre. If Weeping Lovegrass is used, include in any slope or low maintenance mixture during warmer seeding periods, increase to 30-40

**FERTILIZER & LIME**

- Apply 10-20-10 fertilizer at a rate of 500 lbs. / acre (or 12 lbs. / 1,000 sq. ft.)
- Apply Pulverized Agricultural Limestone at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)

**NOTE:**  
 - A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site.  
 - Incorporate the lime and fertilizer into the top 4 – 6 inches of the soil by disking or by other means.  
 - When applying Slowly Available Nitrogen, use rates available in Erosion & Sediment Control Technical Bulletin #4, 2003 Nutrient Management for Development Sites at <http://www.dcr.state.va.us/sw/e&s.htm#pubs>

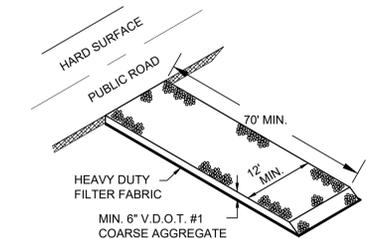
\*FOR WETLAND AREAS, PERMANENT SEED MIX SHALL BE ERNST-865 VA SOUTHERN PIEDMONT FACW MIX

**TABLE 3.35-A (MU)**  
**ORGANIC MULCH MATERIALS AND APPLICATION RATES**

MULCHES	RATES:		NOTES:
	Per Acre	Per 1,000 sq. ft.	
Straw or Hay	1 ½ - 2 tons (Minimum 2 tons for winter cover)	70 - 90 lbs.	Free from weeds and coarse matter. Must be anchored. Spread with a mulch blower or by hand.

VIRGINIA UNIFORM CODING SYSTEM FOR EROSION AND SEDIMENT CONTROL PRACTICES  
 \* CHART TAKEN FROM THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (JULY 1992)

- (TS) TEMPORARY SEEDING
- (PS) PERMANENT SEEDING
- (MU) MULCH
- (CIP) CULTVERT INLET PROTECTION
- (SSF) \*SUPER\* SILT FENCE W/ WIRE SUPPORT (3.05)



**TEMPORARY CONSTRUCTION ENTRANCE (CE)**  
 VESCH STD. 3.02  
 N.T.S.

**HURT & PROFFITT**  
 INSPIRED / RESPONSIVE / TRUSTED

434.947.7796  
 2524 LANGHORNE ROAD  
 LYNCHBURG, VA 24501

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 ENVIRONMENTAL SURVEYING • LAND DEVELOPMENT • ENVIRONMENTAL ENGINEERING • CONSTRUCTION TESTING & INSPECTION • CULTURAL RESOURCES

**ESC NOTES FOR**  
**MARTIN DRIVE REGIONAL W.W.P.S.**  
**CAMPBELL COUNTY, VIRGINIA**

PROJECT NO. 20230622  
 LAT. 37.313701  
 LONG. -79.266669  
 DATE: 03/05/2025  
 DRAWN BY: MSF  
 CHECKED BY: MDW



**BID SET**

CCUSA # 80-2304

**HURT & PROFFITT**

SHEET NO. G-103 REV. ---

THIS SHEET IS INTENDED TO BE REPRODUCED AT 200% REPRODUCTION OF THIS SHEET AT A DIFFERENT SIZE THAN INTENDED SHALL VOID THE SCALE SHOWN ON THE SHEET



THIS SHEET IS INTENDED TO BE REPRODUCED AT 24X36. REPRODUCTION OF THIS SHEET AT A DIFFERENT SIZE THAN INTENDED SHALL VOID THE SCALE SHOWN ON THE SHEET.

**SANITARY SEWER PLAN AND PROFILE STA. 11+00 - 23+50**  
 FOR  
**MARTIN DRIVE REGIONAL W.W.P.S.**  
**CAMPBELL COUNTY, VIRGINIA**

PROJECT NO. 20230622  
 LAT. 37.313701  
 LONG. -79.260669  
 DATE: 03/05/2025  
 DRAWN BY: MSF  
 CHECKED BY: MDW

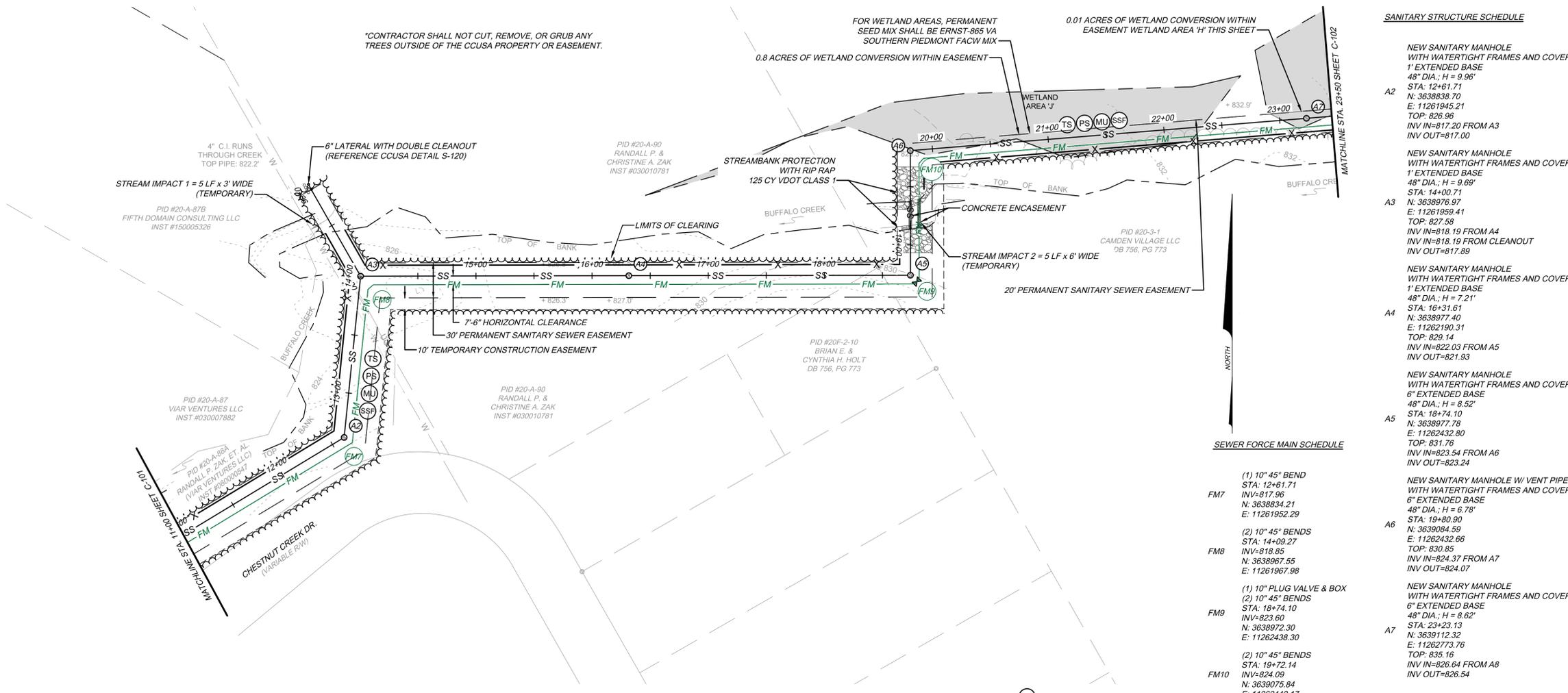


**BID SET**

CCUSA # 80-2304

**HURT & PROFFITT**

SHEET NO. C-101 REV. ---

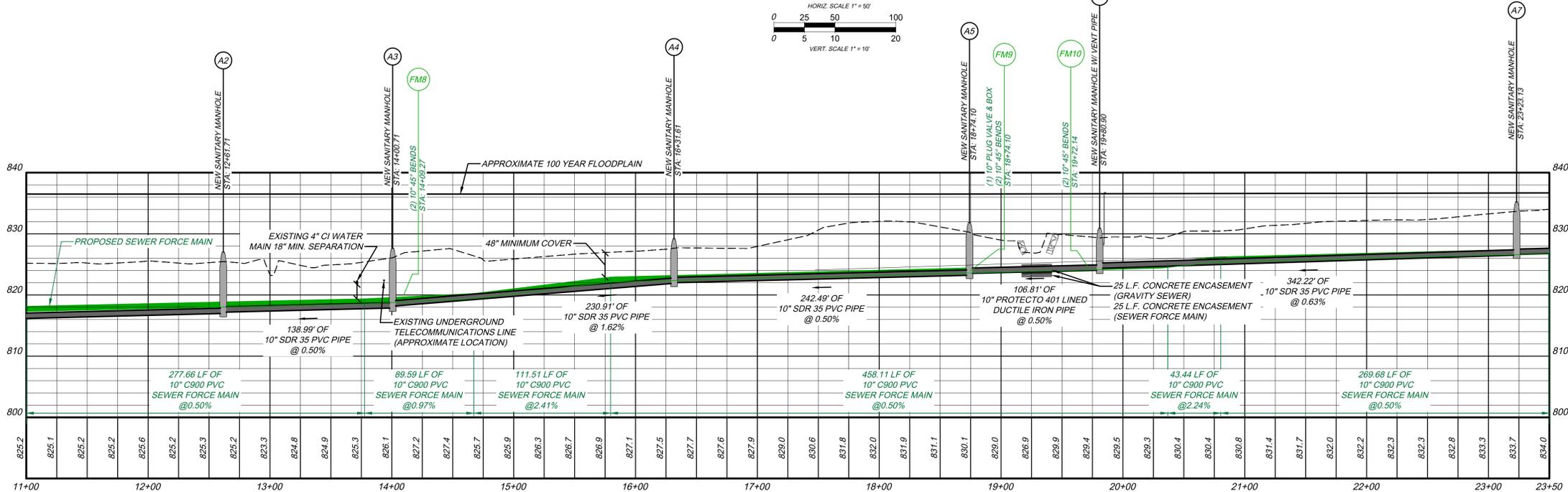
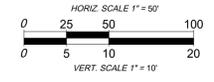


**SANITARY STRUCTURE SCHEDULE**

- A2 NEW SANITARY MANHOLE WITH WATERTIGHT FRAMES AND COVERS  
 1' EXTENDED BASE  
 48" DIA.; H = 9.96'  
 STA: 12+61.71  
 N: 3638838.70  
 E: 11261945.21  
 TOP: 826.96  
 INV IN=817.20 FROM A3  
 INV OUT=817.00
- A3 NEW SANITARY MANHOLE WITH WATERTIGHT FRAMES AND COVERS  
 1' EXTENDED BASE  
 48" DIA.; H = 9.69'  
 STA: 14+00.71  
 N: 3638976.97  
 E: 11261959.41  
 TOP: 827.59  
 INV IN=818.19 FROM A4  
 INV IN=818.19 FROM CLEANOUT  
 INV OUT=817.89
- A4 NEW SANITARY MANHOLE WITH WATERTIGHT FRAMES AND COVERS  
 1' EXTENDED BASE  
 48" DIA.; H = 7.21'  
 STA: 16+31.61  
 N: 3638977.40  
 E: 11262190.31  
 TOP: 829.14  
 INV IN=822.03 FROM A5  
 INV OUT=821.93
- A5 NEW SANITARY MANHOLE WITH WATERTIGHT FRAMES AND COVERS  
 6" EXTENDED BASE  
 48" DIA.; H = 8.52'  
 STA: 18+74.10  
 N: 3638977.78  
 E: 11262432.80  
 TOP: 831.76  
 INV IN=823.54 FROM A6  
 INV OUT=823.24
- A6 NEW SANITARY MANHOLE W/ VENT PIPE WITH WATERTIGHT FRAMES AND COVERS  
 6" EXTENDED BASE  
 48" DIA.; H = 6.78'  
 STA: 19+80.90  
 N: 3639094.59  
 E: 11262432.66  
 TOP: 830.85  
 INV IN=824.37 FROM A7  
 INV OUT=824.07
- A7 NEW SANITARY MANHOLE WITH WATERTIGHT FRAMES AND COVERS  
 6" EXTENDED BASE  
 48" DIA.; H = 8.62'  
 STA: 23+23.13  
 N: 3639112.32  
 E: 11262773.76  
 TOP: 835.16  
 INV IN=826.64 FROM A8  
 INV OUT=826.54

**SEWER FORCE MAIN SCHEDULE**

- FM7 (1) 10" 45° BEND  
 STA: 12+61.71  
 INV=817.96  
 N: 3638834.21  
 E: 11261952.29
- FM8 (2) 10" 45° BENDS  
 STA: 14+09.27  
 INV=818.85  
 N: 3638967.55  
 E: 11261967.98
- FM9 (1) 10" PLUG VALVE & BOX  
 (2) 10" 45° BENDS  
 STA: 18+74.10  
 INV=823.60  
 N: 3638972.30  
 E: 11262438.30
- FM10 (2) 10" 45° BENDS  
 STA: 19+72.14  
 INV=824.09  
 N: 3639075.84  
 E: 11262442.17



- FORCE MAIN NOTES**
- MAINTAIN POSITIVE GRADE THROUGHOUT THE LENGTH OF THE FORCE MAIN SO THAT NO HIGH SPOTS WILL BE FORMED.
  - ALL FORCE MAIN FITTINGS SHALL BE PROTECTO 401 LINED DUCTILE IRON WITH MECHANICAL JOINT RESTRAINTS. ALL PIPE WITHIN 50 FEET OF VALVES AND FITTINGS SHALL HAVE EXTERNAL BELL JOINT RESTRAINTS.

ALL MANHOLES IN WOODED AREAS TO BE 18" ABOVE GRADE. ALL OTHERS TO BE AT GRADE.