

GENERAL NOTES:

1. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE LATEST EDITION OF THE WESTERN VIRGINIA REGIONAL DESIGN AND CONSTRUCTION STANDARDS AVAILABLE AT WWW.WESTERNVWATER.ORG OR BY CONTACTING THE AUTHORITY AT 540-853-5700. THE PROJECT SHALL ALSO COMPLY WITH THE GOVERNING JURISDICTION'S STANDARDS AND OTHER AGENCY STANDARDS (E.G., VDOT, DEQ, DCR, VDH, ETC.) WHERE APPLICABLE.
2. MH 20 - MH 32 NEED TO HAVE FULL EXTERIOR COATING AND JOINT WRAP APPLIED IN ADDITION TO JOINT WRAP APPLIED IN ADDITION TO JOINT SEALANT IN ACCORDANCE WITH LATEST ADDITION OF WVWA REGIONAL DESIGN STANDARDS.
3. BY-PASS PUMPING SHALL BE IN STRICT ACCORDANCE WITH SECTION CS-3.3.5 OF THE LATEST EDITION OF THE WVWA REGIONAL DESIGN AND CONSTRUCTION STANDARDS.
4. GROUNDWATER IS ANTICIPATED DURING CONSTRUCTION. SEE SECTION CS-3.3.6 OF THE LATEST EDITION OF THE WVWA REGIONAL DESIGN AND CONSTRUCTION STANDARDS FOR DEWATERING REQUIREMENTS. COSTS ASSOCIATED WITH TRENCH DEWATERING SHALL BE CONTEMPLATED AS DESCRIBED IN SECTION CS-3.3.6.D.
5. PRIOR TO CONSTRUCTION IN THE RIGHT-OF-WAY, ALL APPLICABLE PERMIT(S) FROM THE GOVERNING JURISDICTION AND/OR AGENCY MUST BE OBTAINED AND A COPY KEPT ON THE PROJECT SITE.
6. FOR PROJECTS REQUIRING TRAFFIC CONTROL IN THE CITY OF ROANOKE, NOTIFY MANAGER OF TRANSPORTATION, MARK JAMISON, AT 540-853-5471 AT LEAST 2 WEEKS IN ADVANCE OF REQUIRING TRAFFIC CONTROL. FOR A LANE CLOSURE PERMIT IN THE CITY OF ROANOKE, CONTACT THE TRAFFIC ENGINEER, HONG LIU, AT 540-853-2886. TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH THE MOST RECENT MUTCD MANUAL AND THE VDOT WORK AREA UNLESS OTHERWISE SPECIFIED.
7. THE CONTRACTOR SHALL NOTIFY THE AUTHORITY'S ENGINEERING COORDINATOR AT LEAST 3 DAYS PRIOR TO CONSTRUCTION.
8. A PRE-CONSTRUCTION CONFERENCE SHALL BE SCHEDULED AT LEAST 1 DAY PRIOR TO ANY CONSTRUCTION.
9. THE CONTRACTOR SHALL HAVE A VALID VA811 TICKET PRIOR TO EXCAVATION. CONTACT VA811 AT 811 OR 1-800-552-3120.
10. ALL EXISTING UTILITIES MAY NOT BE SHOWN OR MAY NOT BE SHOWN IN THEIR EXACT LOCATION. CONTRACTOR SHALL LOCATE ALL UTILITIES AND DETERMINE ALL INVERT ELEVATIONS PRIOR TO CONSTRUCTION TO ALLOW FOR ADJUSTMENTS DUE TO CONFLICTS WITH OTHER UTILITIES. THE CONTRACTOR SHALL COMPLY WITH THE VIRGINIA STATE WATER WORKS REGULATIONS, SECTION 12VAC5-590-1150, AND THE VIRGINIA STATE SEWAGE COLLECTION AND TREATMENT REGULATIONS WHERE LINES CROSS.
11. A CLEAN SET OF PLANS AND PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES.
12. CONSTRUCTION DEBRIS SHALL BE CONTAINERIZED IN ACCORDANCE WITH THE VIRGINIA LITTER CONTROL ACT.
13. PRIOR TO COMMENCING WORK, THE CONTRACTOR'S CERTIFIED RESPONSIBLE LAND DISTURBER SHALL OBTAIN AN EROSION AND SEDIMENT CONTROL PERMIT FOR THE PROJECT FROM THE LOCAL GOVERNING JURISDICTION AND DEQ (IF REQUIRED). ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE IN ACCORDANCE WITH THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND SHALL BE INSTALLED PRIOR TO CONSTRUCTION.
14. THE CONTRACTOR SHALL PROVIDE ADEQUATE MEANS OF CLEANING ALL VEHICLES AND EQUIPMENT PRIOR TO ENTERING PUBLIC STREETS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE STREETS ARE KEPT IN A CLEAN, MUD- AND DUST-FREE CONDITION AT ALL TIMES.
15. FIELD CHANGES SHALL BE APPROVED BY THE AUTHORITY'S ENGINEERING DIVISION PRIOR TO COMMENCEMENT OF CHANGES.
16. THE CONTRACTOR SHALL MAKE PROVISIONS TO PROVIDE ACCESS TO ALL PROPERTIES DURING CONSTRUCTION AND SHALL MAINTAIN SAFE ACCESSIBILITY TO FIRE HYDRANTS, IF ANY, AT ALL TIMES.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND UNCOVERING ALL MANHOLES AFTER PAVING. MANHOLE RIMS SHALL BE INSTALLED TO GRADE AND FLUSH WITH THE FINAL GRADE/PAVEMENT WITHIN THE ROAD RIGHT-OF-WAY AND MAINTAINED YARDS. MANHOLE RIMS SHALL BE INSTALLED A MINIMUM OF 18" ABOVE GRADE IN AREAS OUTSIDE OF THE ROAD RIGHT-OF-WAY, WITHIN WOODED AREAS, OR WITHIN NON-MAINTAINED GRASS AREAS. THE MANHOLE RIM ELEVATIONS SHOWN ON THE PLANS AND PROFILES ARE FOR INFORMATIONAL AND QUANTITY PURPOSES ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL RIM ELEVATIONS PRIOR TO ORDERING PRODUCTS.
18. UNREPAIRED ROADWAYS OPENED TO TRAFFIC SHALL HAVE, AT A MINIMUM, COMPACTED AGGREGATE MATERIAL VDOT 21A OR 21B FLUSH WITH THE ADJACENT ROADWAY SURFACE AND SHALL BE INSPECTED AND REPAIRED ON A DAILY BASIS. SOME AREAS WILL REQUIRE A TEMPORARY PATCH UNTIL FINAL PAVING CAN BE COMPLETED.
19. THE CONTRACTOR SHALL NOT EXCAVATE MORE TRENCH LENGTH THAN CAN BE RESTORED WITHIN THE SAME WORK DAY. ALL TRENCHES SHALL BE BACKFILLED OR PLATED AT THE END OF EACH WORK DAY OR WHEN THE CONTRACTOR IS NOT ON SITE.
20. THE CONTRACTOR SHALL SUPPLY THE AUTHORITY WITH CORRECT AS-BUILT PLANS (IN THE FORM OF NEAT, RED-LINE MARKUPS) BEFORE SUBSTANTIAL COMPLETION WILL BE GRANTED.
21. THE CONTRACTOR SHALL MAINTAIN UTILITY SERVICE TO ALL EXISTING CUSTOMERS THROUGHOUT CONSTRUCTION.
22. EXISTING FEATURES THAT ARE REMOVED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED IN THE SAME OR BETTER CONDITION, AT THE EXPENSE OF THE CONTRACTOR.
23. IN AREAS WHERE IT IS NECESSARY TO BENCH SLOPES TO INSTALL UTILITY LINES, FINAL SLOPES SHALL BE RESTORED TO THE ORIGINAL SLOPE OR TO THE SLOPE NECESSARY TO SUCCESSFULLY STABILIZE THE SLOPE.
24. CONTRACTOR SHALL BE RESPONSIBLE FOR SAFETY ON THIS SITE. CONTRACTOR SHALL INSTALL ANY BARRIERS, TEMPORARY FENCING, FLASHERS, LIGHTING, OR ANY OTHER MEANS NECESSARY TO PROTECT UNAUTHORIZED PERSONNEL FROM HAZARDOUS AREAS.
25. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING SURROUNDING STRUCTURES. CONTRACTOR SHALL PROVIDE SHORING, OR OTHER MEANS NECESSARY TO PROTECT ADJACENT BUILDINGS AND PROPERTY.
26. EXISTING MAILBOXES MAY NOT BE SHOWN ON PLANS.
27. ALL EXISTING ROADSIDE DITCHES IMPACTED BY THE PROPOSED CONSTRUCTION SHALL BE FINE GRADED TO DRAIN AND PERMANENTLY SEEDED AS SOON AS POSSIBLE.
28. ANY REQUIRED PAVEMENT DISTURBANCE MUST MEET OR EXCEED THE EXISTING PAVEMENT SECTION DEPTH.
29. BACKFILL MATERIAL AND COMPACTION WITHIN CITY OF ROANOKE RIGHTS-OF-WAY SHALL BE IN ACCORDANCE WITH DETAIL G-12 ON SHEET 7.
30. WATERTIGHT LIDS SHOWN IN THE PROFILES SHALL BE IN ACCORDANCE WITH DETAIL S-5 SHOWN ON SHEET 8.
- 31.

DEMOLITION NOTES:

1. CONTRACTOR SHALL REMOVE ALL OBSTRUCTIONS, INDICATED ON THE PLANS OR NOT, NECESSARY TO ACCOMPLISH THE WORK.
2. CARE SHALL BE TAKEN TO PROTECT EXISTING VEGETATION, TREES, RETAINING WALLS, AND OTHER EXISTING FEATURES NOT REQUIRED TO BE REMOVED FOR CONSTRUCTION.
3. CONTRACTOR SHALL REPLACE AND REPAIR ALL LAWNS, TERRACES, FENCES, SIDEWALKS, CURBS, CROSS WALKS, GUTTERS, DRIVEWAYS, OR PAVEMENTS, AND REPAIR AND MAKE GOOD ALL OTHER DAMAGE THAT MAY OCCUR DURING CONSTRUCTION WORK.
4. CONTRACTOR SHALL REPLACE AND REPAIR AFFECTED CONSTRUCTION AREAS WITH MATERIALS CONSISTENT WITH EXISTING CONDITIONS.
5. CONTRACTOR SHALL BECOME FAMILIAR WITH PROJECT AREA TO INCLUDE REPAIR AND REPLACEMENT COSTS IN BID.

TREE PROTECTION NOTES:

1. PROVIDE TEMPORARY FENCE AROUND DRIP LINE OF INDIVIDUAL TREES OR DRIP LINE OF GROUPS OF TREES TO REMAIN.
2. DO NOT STORE CONSTRUCTION MATERIALS, DEBRIS, OR EXCAVATED MATERIAL WITHIN DRIPLINE OF TREES TO REMAIN.
3. DO NOT PERMIT VEHICLES, EQUIPMENT, OR FOOT TRAFFIC WITHIN DRIPLINE OF TREES TO REMAIN.
4. WHERE EXCAVATION FOR NEW CONSTRUCTION IS REQUIRED WITHIN DRIPLINE OF TREES TO REMAIN, HAND CLEAR AND EXCAVATE TO MINIMIZE DAMAGE TO ROOT SYSTEMS OR REQUEST A FIELD REVIEW WITH THE ENGINEER FOR APPROVAL OF AN ALTERNATE ROUTE.

FIELD ADJUSTMENT NOTES:

1. PROPOSED SANITARY SEWER AND LATERAL ALIGNMENTS ARE BASED ON AVAILABLE INFORMATION AND INDICATE THE GENERAL LOCATION AND ARRANGEMENT OF UNDERGROUND SANITARY SEWER PIPING. INSTALL PIPING AS INDICATED, TO EXTENT PRACTICAL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD LOCATE ALL LATERALS, EXISTING UTILITIES, ETC.
2. EXISTING CONDITIONS MAY NECESSITATE SLIGHT ADJUSTMENTS IN THE ALIGNMENT AND GRADE. FIELD ADJUSTMENTS MAY NOT BE MADE THAT REDUCE THE CAPACITY OR SERVICEABILITY WITHOUT APPROVAL FROM ENGINEER. ALL FIELD ADJUSTMENTS SHALL BE APPROVED BY THE WESTERN VIRGINIA WATER AUTHORITY.
3. FIELD ADJUSTMENTS SHALL BE MADE WHEN A LESS DISRUPTIVE CONSTRUCTION ACTIVITY AND DISTURBANCE TO PRIVATE PROPERTY WILL NOT RESULT IN AN INCREASE IN CONTRACT PRICE OR DELAY TO THE SCHEDULE.
4. FIELD ADJUSTMENTS RESULTING IN A CHANGE IN SCHEDULE OR CONTRACT PRICE SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION. NO CHANGES IN CONTRACT SCHEDULE OR PRICE WILL BE MADE FOR FIELD ADJUSTMENTS MADE WITHOUT ENGINEER'S APPROVAL.
5. NO FIELD ADJUSTMENTS SHALL BE MADE WITHOUT APPROVAL OF THE CONSULTING ENGINEER AND WESTERN VIRGINIA WATER AUTHORITY.
6. ANY NEW ALIGNMENTS, CHANGES IN GRADES, ALTERNATIVE PIPE SIZES OR MANHOLES WILL REQUIRE A NEW SET OF PLANS STAMPED BY THE CONSULTING ENGINEER. AUTHORITY ENGINEERS WILL REVIEW PLANS WITHIN ONE DAY OF SUBMITTAL. PLAN SHEETS MAY BE 8.5X11 IF THE INFORMATION IS LEGIBLE.

ADJACENT UTILITIES NOTES:

1. CONTRACTOR SHALL CONSTRUCT CROSSING SUCH THAT EXISTING UTILITIES REMAIN FUNCTIONAL. CARE SHALL BE TAKEN TO PREVENT DISRUPTIONS TO EXISTING UTILITIES OR UNDERMINING OF SUPPORTING SOILS OR STRUCTURES.
2. CONTRACTOR SHALL EXERCISE CARE IN DETERMINING THE LOCATION OF ANY UNDERGROUND UTILITY TO AVOID DAMAGING OR DISRUPTING UTILITY SERVICE. IF CONTRACTOR INADVERTENTLY DAMAGES ANY UTILITY LINE OR CABLE, HE SHALL BE RESPONSIBLE FOR IMMEDIATELY CONTACTING THE AFFECTED UTILITY COMPANY FOR REPAIR, OR HAVE REPAIRED, THE DAMAGE AT HIS EXPENSE.
3. FOR UTILITIES THAT CANNOT BE DISTURBED OR TEMPORARILY REMOVED, CONSTRUCTION SHALL BE ACHIEVED BY TUNNELING, BORE & JACKING, OR A COMBINATION OF BOTH.
4. CONTRACTOR IS RESPONSIBLE FOR CONTACTING ANY AFFECTED UTILITY COMPANY FOR COORDINATION OF RELOCATIONS OR TEMPORARY SHORING OF UTILITY.
5. THE EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE BASED UPON AVAILABLE INFORMATION. UTILITIES MAY EXIST WITHIN THE CONSTRUCTION AREA OF THESE PLANS THAT ARE NOT SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND DEPTH OF ALL UTILITIES BEFORE COMMENCING WORK, AND FOR ANY DAMAGES WHICH OCCUR BY HIS FAILURE TO LOCATE SUCH UTILITIES. IF DURING CONSTRUCTION OPERATIONS THE CONTRACTOR SHOULD ENCOUNTER UTILITIES OTHER THAN THOSE SHOWN ON THESE PLANS, HE SHALL IMMEDIATELY NOTIFY THE ENGINEER AND TAKE NECESSARY AND PROPER STEPS TO PROTECT THE FACILITY AND ASSURE CONTINUANCE OF SERVICE. CALL MISS UTILITIES AT 1-800-552-7001 (TOLL FREE) 48 HOURS BEFORE DIGGING.

GENERAL CONSTRUCTION NOTES:

1. DURING CONSTRUCTION, CONTRACTOR SHALL LIMIT DISRUPTION TO RESIDENTIAL ACCESS DRIVEWAYS, COORDINATE CONSTRUCTION ACTIVITIES THAT MAY AFFECT DRIVEWAYS WITH THE PROPERTY OWNER, AND PROVIDE OWNER WITH ACCESS BY END OF WORK DAY OR AS SOON AS POSSIBLE DURING ALL TIMES OF CONSTRUCTION.
2. SOILS FOR THIS SITE ARE UNCLASSIFIED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HIRE GEOTECHNICAL ENGINEER TO CLASSIFY SOILS, IF NEEDED.
3. ALL EXISTING SURFACE APPURTENANCES (MANHOLE FRAMES & COVERS, ETC.) FOR ABANDONED UTILITIES SHALL BE REMOVED SO THAT NO EVIDENCE EXISTS AT THE SURFACE.

EROSION & SEDIMENT CONTROL GENERAL NOTES:

THE PURPOSE OF THIS PROJECT IS TO UPGRADE EXISTING SANITARY SEWER FACILITIES THAT ARE EITHER UNDERSIZED OR ARE DETERIORATING DUE TO AGE. THE FACILITIES INCLUDE EXISTING SANITARY SEWER PIPE AND MANHOLES. THE PROPOSED ALIGNMENT RUNS PARALLEL TO THE EXISTING FACILITIES FOR THE MAJORITY OF THE PROJECT. THE ONE EXCEPTION OCCURS ALONG THE UPSTREAM REACH OF THE PROJECT WHERE IT IS PROPOSED TO REPLACE THE EXISTING FACILITIES IN-PLACE DUE TO CONSTRAINTS PROVIDED BY EXISTING ABOVE GROUND PHYSICAL FEATURES. THE EXISTING AND PROPOSED ALIGNMENTS CROSS THE TRIBUTARY OF GLADE CREEK IN THREE (3) SEPARATE LOCATIONS WITHIN THE PROJECT LIMITS. DUE TO THE LINEAR NATURE OF THIS PROJECT, IT IS NOT ANTICIPATED THAT A CHANGE OF LAND USE WILL OCCUR AS A RESULT OF THIS PROJECT. THE EXISTING GROUND COVER WILL BE RESTORED TO THE EXISTING STATE FOR THE ENTIRE LENGTH OF THE PROJECT.

(ADOPTED FROM TABLE 6-1 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK)

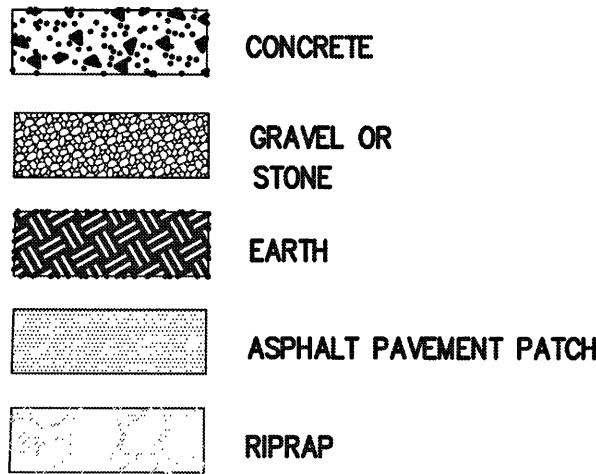
- ES-1. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS 4VAC50-30 EROSION AND SEDIMENT CONTROL REGULATIONS.
- ES-2. UNLESS OTHERWISE NOTED HEREON OR STIPULATED BY THE LAND DISTURBING PERMIT, THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRECONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
- ES-3. UNLESS OTHERWISE NOTED IN THE E&S NARRATIVE, PERIMETER CONTROLS AND SEDIMENT TRAPS SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND DISTURBING ACTIVITY AN SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
- ES-4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- ES-5. IF OFF-SITE FILL OR BORROW AREAS ARE TO BE USED, THE LOCATION OF THE OFF-SITE FILL OR BORROW AREAS WILL BE PROVIDED TO THE EROSION AND SEDIMENT CONTROL ADMINISTRATOR ALONG WITH EVIDENCE OF AN ACTIVE LAND-DISTURBANCE PERMIT FOR THE OFF-SITE FILL OR BORROW AREAS. IF THE OFF-SITE FILL OR BORROW AREAS ARE NOT CURRENTLY PERMITTED FOR LAND-DISTURBING ACTIVITIES, AN EROSION AND SEDIMENT CONTROL PLAN FOR THE FILL/BORROW SITES SHALL BE SUBMITTED AND APPROVED PRIOR TO COMMENCING ANY LAND DISTURBING ACTIVITIES ON SAID SITES.
- ES-6. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.
- ES-7. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
- ES-8. DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
- ES-9. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.
- ES-10. THE EROSION AND SEDIMENT CONTROL (E&S) MEASURES SHOWN ON THESE STREETS ARE TO BE CONSTRUCTED DURING THE SITE GRADING AND CONSTRUCTION. REFER TO THE FOLLOWING SHEETS FOR EROSION AND SEDIMENT CONTROL NARRATIVE, SEQUENCE OF WORK, DETAILS, AND DESIGN DATA.

- ES-11. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES, AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
- ES-12. DURING CONSTRUCTION OF THE PROJECT, ON-SITE SOIL STOCKPILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON THE SITE AS WELL AS BORROW AREAS AND SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE. REFER TO ES-5 FOR ADDITIONAL REQUIREMENTS.
- ES-13. PERMANENT OR TEMPORARY SOIL STABILIZATION MEASURES SHALL BE APPLIED TO DENUDED AREAS WITHIN 7 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE.
- ES-14. TEMPORARY SOIL STABILIZATION MEASURES SHALL BE APPLIED WITHIN 7 DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 14 DAYS. PERMANENT STABILIZATION MEASURES SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.
- ES-15. PERMANENT SEEDING APPLIED TO ALL MECHANICALLY STABILIZED SLOPES AND SLOPES STEEPER THAN 3:1 AND SHALL MEET THE FOLLOWING SEED MIXTURE:

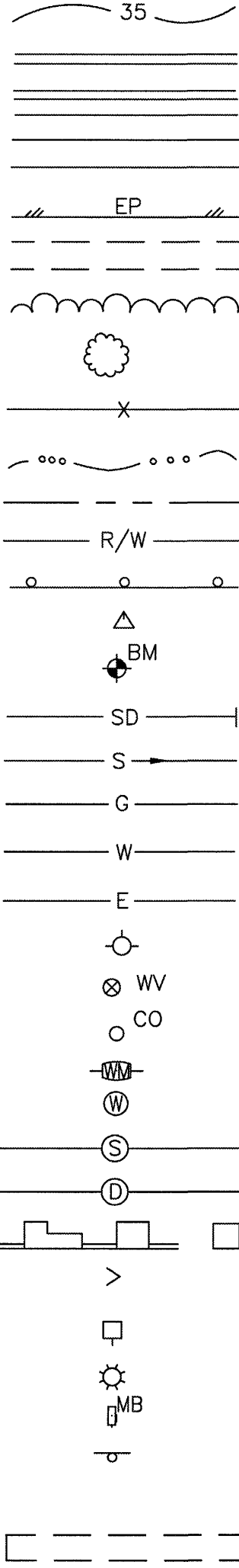
POUNDS PER ACRE	SEED TYPE
108	KENTUCKY 31
2	RED TOP
20	SEASONAL NURSE CROP (ANNUAL RYE, FOXTAIL MILLET, & WINTER RYE MIX)

- ES-16. ALL AREAS DISTURBED BY THE WORK OF THIS PROJECT SHALL BE STABILIZED BY EITHER THE CONSTRUCTION OF A PERMANENT SURFACE SUCH AS CURB, PAVEMENT, OR CONCRETE SIDEWALK, OR STABILIZED BY MEANS OF PERMANENT SEEDING OR ANOTHER APPROVED STABILIZATION METHOD.
- ES-17. FOLLOWING THE COMPLETION OF SITE DEVELOPMENT CONSTRUCTION/GRADING, CONFIRMED STABILIZATION OF ALL DISTURBED AREAS, CONFIRMATION THAT EROSION OR SEDIMENTATION IS NO LONGER OCCURRING ON THE PROJECT SITE OR AT ITS BOUNDARIES, CONFIRMATION THAT DRAINAGE FLOWS ARE FUNCTIONING ACCORDING TO DESIGN, AND APPROVAL HAS BEEN GRANTED BY THE EROSION AND SEDIMENT CONTROL INSPECTOR, THE CONTRACTOR MAY THEN BEGIN TO REMOVE THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES. THIS WORK SHALL BE DONE IN A CAREFUL, NEAT, AND ORGANIZED MANNER. IF DEWATERING IS REQUIRED, WATER SHALL BE PUMPED TO AN APPROVED FILTERING DEVICE.

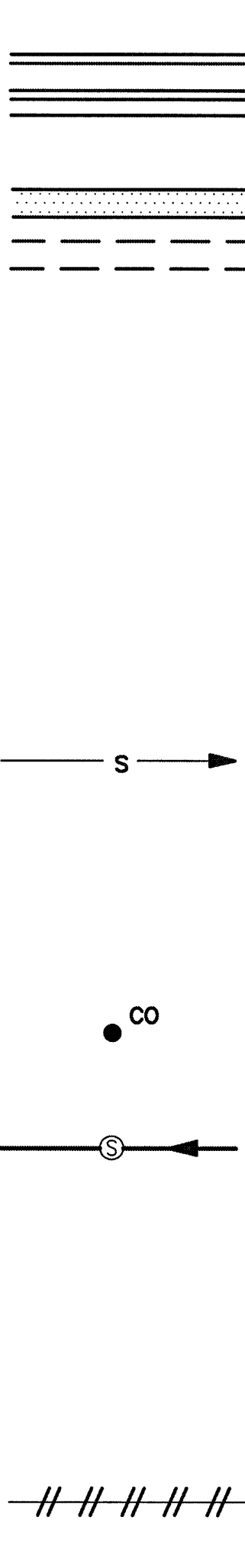
MATERIALS SYMBOLS



EXISTING

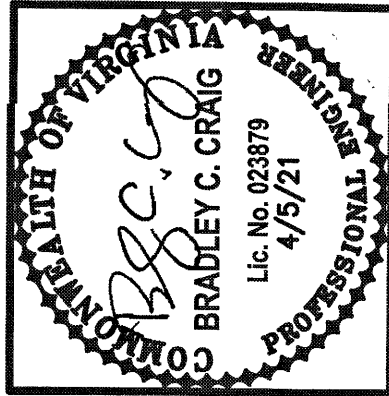


NEW



DESCRIPTION

- CONTOUR, CONTOUR WITH ELEVATION  
CONCRETE CURB  
CONCRETE CURB & GUTTER  
CONCRETE WALK OR SLAB  
EDGE OF PAVEMENT  
UNPAVED OR GRAVEL ROAD  
TREE LINE  
TREE OR SHRUB  
FENCE  
EDGE OF WATER  
PROPERTY LINE  
RIGHT-OF-WAY LINE  
GUARD RAIL  
FIELD SURVEY TRAVERSE POINT  
BENCHMARK  
STORM DRAIN AND ENDWALL  
SANITARY SEWER  
GAS MAIN OR SERVICE LINE  
WATER MAIN OR SERVICE LINE  
ELECTRICAL LINE  
FIRE HYDRANT  
WATER VALVE  
CLEANOUT  
WATER METER  
WATER MANHOLE  
SANITARY SEWER MANHOLE  
STORM DRAIN MANHOLE  
DROP INLET (CURB AND GRATING TYPES)  
GUY WIRE  
POWER POLE, GUY AND ANCHOR  
LIGHT POLE  
MAILBOX  
STREET SIGN  
ABANDON OR REMOVE  
DRIVEWAY CULVERT



Date									
Revisions									

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BERKLEY ROAD SANITARY SEWER REPLACEMENT

**SANITARY SEWER GENERAL NOTES**

ROANOKE, VIRGINIA

Vertical Scale:	N/A
Horizontal Scale:	1"=30'
Commission Number:	3941
Sheet No.:	2