EROSION AND SEDIMENT CONTROL NARRATIVE:

PROJECT DESCRIPTION

PROJECT CONSISTS OF CONSTRUCTION ACTIVITIES FOR IMPROVEMENTS/REPLACEMENTS TO THE WESTERN VIRGINIA WATER AUTHORITY SEWER SYSTEM IN THE ROANOKE RIVER AS SHOWN ON THE PLANS. THE PROJECTED DISTURBED AREA IS 0.25 ACRES. WORK WILL INCLUDE THE FOLLOWING ACTIVITIES:

1. TRENCH EXCAVATION AND BACKFILLING, PRIMARILY CONFINED TO WITHIN EXISTING AND PROPOSED EASEMENTS. INSTALLATION OF EROSION CONTROLS LINEAR TO THE WORK AREAS AS INDICATED ON PLANS; 2. FINAL SEEDING AND STABILIZATION MEASURES; AND

EXISTING SITE CONDITIONS:

3. REMOVAL OF EROSION CONTROLS.

THE PROPOSED CONSTRUCTION IS GENERALLY LOCATED WITHIN CITY OF ROANOKE RIGHTS-OF-WAY WITH PORTIONS LOCATED WITHIN EXISTING AND PROPOSED EASEMENTS AS SHOWN.

ADJACENT PROPERTY:

RESIDENTIAL AND COMMERCIAL PROPERTIES ARE ADJACENT TO THE PROJECT AREA

OFF-SITE AREAS:

THERE ARE NO OFFSITE MATERIALS REQUIRED EXCEPT FOR RIPRAP AND BEDDING AND BACKFILL STONE. SHOULD THE CONTRACTOR ENCOUNTER UNSUITABLE MATERIALS AND REQUIRE MATERIAL OFFSITE, CONTRACTOR WILL PROVIDE LOCATION AND ANY REGULATORY REQUIREMENTS FOR THE BORROW AREA TO THE ENGINEER, OWNER, CITY OF ROANOKE, AND ROANOKE COUNTY, AS NECESSARY. THESE PLANS DO NOT PROVIDE FOR ANY LAY-DOWN AREA, BORROW/DISPOSAL SITES, STOCK PILE AREA, OR ANY OTHER FORM OF STAGING ACTIVITY. THE CONTRACTOR EXECUTING WORK SHOWN ON THESE PLANS SHALL BE RESPONSIBLE FOR SECURING ACCESS AND ALL APPROPRIATE PERMITTING FOR OFF-SITE AREAS USED FOR THESE PURPOSES. THE LOCATION AND DESCRIPTION OF ANY SUCH AREAS SHALL BE PROVIDED TO THE OWNER PRIOR TO THE PRE-CONSTRUCTION MEETING. SUPPORTING APPROVAL DOCUMENTATION SHALL BE PROMPTLY PROVIDED TO THE

THE FOLLOWING SOILS INFORMATION IS ACCORDING TO THE SCS SOILS INFORMATION FROM THE NRCS WEB SOIL SURVEY:

5E CHISWELL-LITZ COMPLEX, 25 TO 50 PERCENT SLOPES 6C CHISWELL-LITZ-URBAN LAND COMPLEX, 2 TO 15 PERCENT SLOPES 52 UDORTHENTS-URBAN LAND COMPLEX

CRITICAL EROSION AREAS:

CRITICAL AREAS INCLUDE DISTURBED STREAMBANKS AND SURROUNDING AREAS ALONG WITH ANY WORK WITHIN LIVE WATERCOURSES. THE PROPOSED EROSION AND SEDIMENT CONTROL MEASURES ARE INTENDED TO MINIMIZE ANY POTENTIAL PROBLEMS AND PROMOTE STABILIZATION.

EROSION AND SEDIMENT CONTROL MEASURES — GENERAL: ALL STRUCTURAL AND VEGETATIVE EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK" (VESCH), LATEST EDITION.

THE FOLLOWING STANDARDS ARE TO BE PROVIDED OR ADDRESSED ON EVERY DEVELOPMENT PROJECT EXCEEDING 10,000 S.F. IN AREA OF

No.	CRITERIA, TECHNIQUE OR METHOD	PRACTICES PROVIDED
1	PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE HAS BEEN REACHED ON ANY PORTION OF THE SITE, TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN (7) DAYS TO DENUDED AREAS THAT MAY BE AT FINAL GRADE BUT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN FOURTEEN (14) DAYS, PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE (1) YEAR.	TS PS MU FOR ALL DENUDED AREAS
2	DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES 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 SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.	TS PS MU FOR PROVIDED STOCKPILE
3	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 TOWN, IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.	TS PS MU FOR ALL DENUDED AREAS
4	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.	FOR ALL DRAINAGE DIVIDES
5	STABILIZATION METHODS SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.	TS PS MU FOR ALL EARTHEN STRUCTURE
6	SEDIMENT TRAPS AND BASINS SHALL BE DESIGNED AND CONSTRUCTED BASED UPON THE TOTAL DRAINAGE AREA TO BE SERVED BY THE TRAP OR BASIN.	SEE TEMPORARY SEDIMENT TRAP DETAIL
7	CUT AND FILL SLOPES SHALL BE CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE (1) YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZATION MEASURES UNTIL THE PROBLEM IS CORRECTED.	TS PS MU FOR ALL ERODING SLOPES
8	CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.	SCC
9	WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.	SHOULD SEEPS DOCUR IN ANY EXISTING DI CUT DIR FILL SLOPE, THE CONTRACTOR SH FIRST INSURE THAT THERE ARE NOT AREA PUNDED WATER AT THE TOPS OF THE SLO AND THEN SHALL CONTRACT BOTH THE DESI ENGINEER FIR DIN-SITE EVALUATION OF TI AREAS OF SEEPAGE.
10	ALL STORM SEVER 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.	FOR ALL STORM WATER INTAKE
11	BEFORE NEWLY CONSTRUCTED STORMWATER 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.	RR OP

EROSION AND SEDIMENT CONTROL NARRATIVE (CONT'D):

STRUCTURAL PRACTICES

1. TEMPORARY STONE CONSTRUCTION ENTRANCE - STD. & SPEC. 3.02

Temporary stone construction entrance shall be used to reduce the amount of mud transported onto paved roadways by motor vehicles and runoff.

Refer to Std. & Spec. 3.02 To be coordinated with final stone placement

2. SILT FENCE - STD. & SPEC. 3.05

Silt fence shall be used to intercept and detain small amounts of sediment from disturbed areas and to decrease the velocity of sheet flows and low-to-moderate level channel flows during construction.

Refer to Std. & Spec. 3.05 Following permanent stabilization of all upland areas

3. RIPRAP - STD. & SPEC. 3.19

Riprap shall be used to protect the soil from the erosive forces of concentrated runoff, to slow the velocity of concentrated runoff while enhancing the potential for infiltration, and to stabilize slopes with seepage problems and/or non-cohesive soils.

Immediately following land disturbance Refer to Std. & Spec. 3.19

None, permanent

4. UTILITY STREAM CROSSING - STD. & SPEC. 3.25

Utility stream crossing strategies shall be used to help protect sediment from entering the stream from construction within approach areas and to minimize the amount of disturbance within the stream itself.

Stabilization of the streambed, banks, and approach areas should occur immediately following the attainment of final grade.

VEGETATIVE PRACTICES

Removal Event:

GENERAL: A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED BY PAVEMENT. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IS UNIFORM AND MATURE ENOUGH TO SURVIVE AND INHIBIT EROSION. NEW VEGETATION SHALL BE MAINTAINED AT A MINIMUM OF ONE FULL YEAR AFTER PLANTING. NEW SEEDING SHALL BE SUPPLIED WITH ADEQUATE MOISTURE, ESPECIALLY LATE IN THE SEASON, AND IN ABNORMALLY HOT OR DRY WEATHER. STABILIZATION PRACTICES SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE APPROPRIATE VESCH STANDARD AND SPECIFICATION

PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN (7) DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN 14 DAYS. PE14ANENT SEEDING SHALL BE USED ON ALL AREAS THAT ARE NOT AT FINAL GRADE AND THAT WILL BE LEFT DORMANT FOR A PERIOD OF MORE THAN 1 YEAR.

1. TEMPORARY SEEDING - STD. & SPEC. 3.31

Temporary seeding shall be applied over denuded areas within 7 days for areas that will not be brought to final grade within 30 days. Temporary seeding

Sequence of Installation: When cleared areas will not be brought to final grade within 30 days Refer to Std. & Spec. 3.31; areas which fail to establish vegetative cover adequate to prevent rill erosion are to be reseeded. Maintenance: Removal Event: As needed for final grading.

2. PERMANENT SEEDING - STD. & SPEC. 3.32

Permanent seeding shall also be used on all areas that are not at final grade and that will be left dormant for a period of more than 1 year. If conflicts exist between the project specifications and the VESCH Std. & Spec. 3.32, the more stringent requirement shall apply. Permanent seeding mixes and rates

Sequence of Installation: Within 7 days of achieving final grade or as noted above Soil Testing Requirements: Refer to Std. & Spec. 3.32

Refer to Std. & Spec. 3.32; areas which fail to establish vegetative cover adequate to prevent rill erosion are to be immediately reseeded, following identification of the cause of poor germination.

ALL NON—PAVED AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH PERMANENT SEEDING IMMEDIATELY FOLLOWING FINISH GRADING. SEEDING SHALL BE IN ACCORDANCE WITH STD. & SPEC. 3.32, PERMANENT SEEDING. SEED TYPE SHALL BE AS SPECIFIED FOR "MINIMUM CARE LAWNS" AND "GENERAL SLOPES" IN THE HANDBOOK. MULCH (STRAW OR FIBER) SHALL BE USED ON ALL SEEDED SURFACES. IN ALL SEEDING OPERATIONS SEED, FERTILIZER AND LIME SHALL BE

APPLIED PRIOR TO MULCHING. MANAGEMENT STRATEGIES

3. CONSTRUCTION SHALL BE SEQUENCED SO THAT GRADING OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE. 4. ISOLATE TRENCHING FOR UTILITIES AND DRAINAGE FROM DOWNSTREAM CONVEYANCES IN ORDER TO MINIMIZE PERIMETER CONTROLS.

5. ALL CUT AND FILL SLOPES SHALL BE SEEDED WITHIN SEVEN (7) DAYS OF ACHIEVING FINAL GRADE. 6. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE MAINTAINED UNTIL THEY ARE NO LONGER REQUIRED TO COMPLY WITH THE CONTRACT DOCUMENTS OR STATE LAW. ONLY AFTER INSPECTION AND APPROVAL FROM THE VESCP AUTHORITY MAY ITEMS BE REMOVED FOLLOWING THE STABILIZATION OF CONTRIBUTING AREAS.

INSPECTIONS

THE GENERAL CONTRACTOR SHALL INSPECT DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED, AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL MEASURES, AND THE AREA OF CONSTRUCTION VEHICLE ACCESS AT LEAST EVERY FOURTEEN (14) CALENDAR DAYS, AND WITHIN FORTY-EIGHT (48) HOURS OF THE END OF A STORM EVENT PRODUCING 1/4" OR GREATER OF PRECIPITATION. WHERE AREAS HAVE BEEN FINALLY OR TEMPORARILY STABILIZED OR RUNOFF IS UNLIKELY DUE TO WINTER CONDITIONS (SITE IS COVERED WITH SNOW, ICE, OR FROZEN GROUND EXISTS) SUCH INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH.

INSPECT DISTURBED AREAS AND AREAS OF MATERIALS STORAGE THAT ARE EXPOSED TO PRECIPITATION FOR EVIDENCE OF, OR THE POTENTIAL FOR SEDIMENT ENTERING THE STORM DRAIN SYSTEM. INSPECT E&S CONTROLS IN ACCORDANCE WITH REQUIREMENTS STATED HEREIN, AND INSPECT POINTS OF STORM DRAIN DISCHARGE FOR EXCESSIVE SEDIMENTATION. CORRECT SITE CONTROLS AS REQUIRED TO REDUCE SEDIMENTATION OF STORM DRAINS, CULVERTS, AND RECEIVING

IF CONTROLS OR SEDIMENT PREVENTION AREAS ARE FOUND TO BE IN NEED OF REPAIR OR MODIFICATION, THE GENERAL CONTRACTOR SHALL PROVIDE ADDITIONAL MEASURES OR MODIFICATIONS TO EXISTING MEASURES AS REQUIRED. ANY ADDITIONAL MEASURES OR MODIFICATIONS TO EXISTING MEASURES SHALL BE RECORDED AS FIELD REVISIONS TO THESE PLANS. IN THE EVENT THAT ADDITIONAL CONTROLS ARE FOUND TO BE REQUIRED, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THESE CONTROLS BEFORE THE NEXT ANTICIPATED STORM EVENT. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICAL, THEY SHALL BE IMPLEMENTED AS SOON AS PRACTICAL

A REPORT SUMMARIZING THE SCOPE OF INSPECTIONS, NAME OF INSPECTOR, INSPECTOR'S QUALIFICATIONS, DATES OF INSPECTIONS, MAJOR OBSERVATIONS PERTAINING TO THE IMPLEMENTATION OF THESE EROSION CONTROL PLANS, AND ACTIONS TAKEN SHALL BE MADE AND RETAINED AS A PART OF THESE PLANS. MAJOR OBSERVATIONS OF THESE REPORTS SHALL INCLUDE: THE LOCATIONS OF EXCESSIVE SEDIMENTATION FROM THE SITE; LOCATIONS OF CONTROLS IN NEED OF REPAIR; LOCATIONS OF FAILED OR INADEQUATE CONTROLS; AND LOCATIONS WHERE ADDITIONAL CONTROLS ARE NEEDED.

THIS PROJECT IS LINEAR IN NATURE AND ALL DISTURBED AREAS WILL BE RETURNED TO ORIGINAL CONDITION UPON COMPLETION OF CONSTRUCTION. EXISTING DRAINAGE PATTERNS WILL BE MAINTAINED DURING AND AFTER CONSTRUCTION AND THE PROJECT WILL RESULT IN MINIMAL TO NONE INCREASED STORMWATER

ENVIRONMENTAL INVENTORY

THERE ARE NOT TIDAL SHORES, WETLANDS, NON-TIDAL WETLANDS, RESOURCE PROTECTION AREAS OR HYDRIC SOILS ASSOCIATED WITH THIS PROJECT SITE. SLOPES IN EXCESS OF 25% DO EXIST ON-SITE BUT NOT IN AREAS WHERE CONSTRUCTION ACTIVITIES ARE ANTICIPATED.

GENERAL EROSION AND SEDIMENT CONTROL NOTES:

- UNLESS OTHERWISE INDICATED, CONSTRUCT AND MAINTAIN ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, AND VIRGINIA REGULATIONS VR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS. ES-1:
- ES-2: VESCP AUTHORITY INSPECTORS WILL MAKE A CONTINUING REVIEW AND EVALUATION OF THE METHODS AND EFFECTIVENESS OF THE E.S.C. PLAN.
- PLACE ALL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO OR AS THE FIRST STEP IN CLEARING, GRADING, OR LAND DISTURBANCE.
- MAINTAIN A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN ON THE SITE AT ALL TIMES.
- PRIOR TO COMMENCING LAND-DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFFSITE BORROW OR WASTE AREA), SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE ARCHITECT/ENGINEER FOR REVIEW AND ACCEPTANCE. ES-5:
- PROVIDE ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE VESCP AUTHORITY.
- ALL DISTURBED AREAS SHALL DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND-DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT. ES-7:
- ES-8: DURING DEWATERING OPERATIONS, PUMP WATER INTO AN APPROVED FILTERING DEVICE.
- INSPECT ALL EROSION CONTROL MEASURES DAILY AND AFTER EACH RUNOFF—PRODUCING RAINFALL EVENT. MAKE ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES IMMEDIATELY.
- THE CONTRACTOR SHALL HAVE A RESPONSIBLE LAND DISTURBER ON-SITE AS REQUIRED. PROVIDE WVWA WITH RESPONSIBLE LAND DISTURBER'S CURRENT CERTIFICATE PRIOR TO COMMENCING THE WORK.

CONSTRUCTION SEQUENCING

- INSTALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES, INCLUDING COFFERDAM, ON EAST SIDE OF RIVER.
- 2. INSTALL SANITARY SEWER WITHIN COFFERDAM. REMOVE COFFERDAM AND STABILIZE ALL AFFECTED AREAS.
- . REPEAT OPERATION FOR REMAINING SANITARY SEWER INSTALLATION ON WEST SIDE OF RIVER.
- REMOVE TEMOPORARY EROSION SEDIMENT CONTROL MEASURES ONCE PERMANENT STABILIZATION HAS OCCURED.

SEEDING SCHEDULES

TEMPORARY SEEDING SCHEDULE

ACCEPTABLE TEMPORARY SEEDING PLANT MATERIALS PLANTING DATES

SPECIES (LBS/ACRE) 50/50 MIX OF ANNUAL RYEGRASS (LOLIUM SEPT 1-FEB 15 50-100 MULTI-FLORUM) &

CEREAL (WINTER) RYE (SECALE CEREALE)

ANNUAL RYEGRASS FEB 16-APR 20 (LOLIUM MULTI-FLORUM)

GERMAN MILLET MAY 1-AUG 31 (SETARIA ITALICA)

SEEDINGS MADE IN FALL FOR WINTER COVER AND DURING HOT AND DRY SUMMER MONTHS SHALL BE MULCHED IMMEDIATELY UPON COMPLETION OF SEED APPLICATION WITH TACKIFIED STRAW, IN ACCORDANCE WITH VA E&S STD 3.35.

(PS) PERMANENT SEEDING SCHEDULE

GENERAL SLOPE (3:1 OR LESS) TOTAL	
	BS PER ACRE
KENTUCKY 31 FESCUE KENTUCKY BLUEGRASS RED TOP GRASS SEASONAL NURSE CROP WHITE CLOVER	200 LBS. 10 LBS. 10 LBS. 30 LBS. 2 LBS.
SEASONAL NURSE CROP	252 LBS.

SEEDINGS TO BE MULCHED AT THE RATE OF 2 TONS PER ACRE

APPLICATION, IN ACCORDANCE WITH VA E&S STD 3.35.

WITH TACKIFIED STRAW, IMMEDIATELY UPON COMPLETION OF SEED

MARCH, APRIL THROUGH MAY 15 MAY 16 THROUGH AUGUST 15 AUGUST 16 THROUGH SEPTEMBER, OCTOBER NOVEMBER THROUGH FEBRUARY

FOXTAIL MILLET ANNUAL RYE WINTER RYE LIME AND FERTILIZER NEEDS SHALL BE DETERMINED BY SOIL TESTS.

WESTERN VIRGINI

60-100

WATER AUTHORITY

Drawing Copyright © 2021

Blacksburg, VA 24060-5548 540.552.5548 . www.chacompanie



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING THIS STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

WESTERN VIRGINIA WATER AUTHORITY

PIEDMONT PARK SANITARY SEWER REPLACEMENT

d. By Dat	App'd.	Submittal / Revision	No.
ACW 03/25	EES	BIDDING DOCUMENTS	◬
		EDOC	

EKUSIUN & SEDIMENT CONTROL NARRATIVE AND NOTES

Designed By: Drawn By: Checked By EES ACW DBH Issue Date: Project No: Scale: 03/25/22 65825 AS NOTED

> Drawing No.: C-501

AND RECEIVING CHANNEL. FOR ALL STORMWATER OUTLETS 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 THESE STRUCTURES IF ARMORED BY NONERODIBLE COVER MATERIALS. FOR WORK IN LIVE WATERCOURSE WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES MORE THAN TWICE IN ANY SIX (6) MONTH PERIOD, A TEMPORARY STREAM CROSSING CONSTRUCTED OF NONERODIBLE MATERIAL. NO VEHICLE CROSSINGS ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET. THE BEDS AND BANKS OF ANY WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED. FOR WORK IN LIVE WATERCOURSE RR TS PS MU THE BEDS AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS FOR WORK IN LIVE WATERCOURSE INDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCURDANCE WITH THE FULLDWING STANDARDS IN ADDITION TO UTHER APPLICABLE CRITERIA; 1) NO MORE THAN 500 LINEAR FEET OF ANY TRENCH MAY BE OPENED AT ONE TIME. 2) EXCAVATED MATERIAL BE PLACED ON THE UPHILL SIDE OF TRENCHES. 3) 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. 4) MATERIAL USED FOR APPLIED ALONG UTILITY INSTALLATION BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION. 5) AND EXPLAINED IN CONSTRUCTION SEQUENCE SHALL BE COMPLIED WITH. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED OR 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 FOR ALL POINTS OF INGRESS/EGRESS SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE VESCP AUTHORITY. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION. TS PS MU PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION AND DAMAGE DUE TO INCREASES IN VOLUME, VELOCITY AND PEAK FLOW RATE OF STORMWATER RUNOFF FOR THE STATED FREQUENCY STORM OF 24-HOUR DURATION IN ACCORDANCE WITH THE APPLICABLE CRITERIA. SEE PLANS & CALC'S

EROSION CONTROL LEGEND SYMBOL DESCRIPTION ST'D. & SPEC REGREGAL (CE) CONSTRUCTION ENTRANCE 3.02 SILT FENCE 3.05 RIPRAP UTILITY STREAM CROSSING 3.25 DEWATERING STRUCTURE 3.26 TOPSOILING TEMPORARY SEEDING 3.31 PERMANENT SEEDING MULCHING 3.35