EROSION AND SEDIMENT CONTROL NARRATIVE:

PROJECT DESCRIPTION

PROJECT CONSISTS OF CONSTRUCTION ACTIVITIES FOR IMPROVEMENTS/REPLACEMENTS TO THE WESTERN VIRGINIA WATER AUTHORITY SEWER SYSTEM ALONG MURRAY RUN CREEK IN THE VICINITY OF THE CRAWFORD ROAD AND JANNEY LANE AS SHOWN ON THE PLANS. THE PROJECTED DISTURBED AREA IS 0.99 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 3. REMOVAL OF LINEAR EROSION CONTROLS.

EXISTING SITE CONDITIONS:

THE PROPOSED CONSTRUCTION IS GENERALLY LOCATED WITHIN VDOT RIGHTS-OF-WAY WITH PORTIONS LOCATED WITHIN EXISTING AND PROPOSED EASEMENTS AS

ADJACENT PROPERTY:

RESIDENTIAL 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 OWNER.

SOILS:

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

5C CHISWELL-LITZ COMPLEX, 7 TO 15 PERCENT SLOPES 5E CHISWELL-LITZ COMPLEX, 25 TO 50 PERCENT SLOPES 6C CHISWELL-LITZ-URBAN LAND COMPLEX, 2 TO 15 PERCENT SLOPES 6D CHISWELL-LITZ-URBAN LAND COMPLEX, 15 TO 35 PERCENT SLOPES

CRITICAL EROSION AREAS:

CRITICAL AREAS INCLUDE BANK AND TOE OF SLOPE ALONG THE PROPOSED DISTURBANCE IN THE VICINITY OF MURRAY BRANCH. THE PROPOSED EROSION AND SEDIMENT CONTROL MEASURES ARE INTENDED TO MINIMIZE ANY POTENTIAL PROBLEMS AND PROMOTE STABILIZATION. ANY CONSTRUCTION OCCURRING IN CLOSE PROXIMITY TO ORE BRANCH AND ASSOCIATED DRAINAGE SWALES ARE CONSIDERED CRITICAL AREAS.

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, STORMWATER QUANTITY MANAGEMENT REQUIREMENTS HAVE BEEN WAIVED FOR THIS PROJECT IN ACCORDANCE WITH THE APPROVED EXCEPTION REQUEST. THE TOTAL DISTURBED AREA FOR THIS PROJECT IS UNDER 1 ACRE TOTAL. ANY DISTURBED LAND ON A GIVEN WORKDAY WILL BE STABILIZED IMMEDIATELY PRIOR TO THE END OF THE WORKDAY.

TH DI:	IMUM STANDARDS IE FOLLOWING STANDARDS ARE TO BE PROVIDED OR ADDRESSED ON EVERY DEVELOPMENT PROJECT EXCEEDING 10,000 S.F. IN STURBANCE. THESE STANDARDS ARE CONSIDERED A MINIMUM AND MAY REQUIRE ADDITIONAL MEASURES AS DEEMED NECESSA PPROVING AUTHORITY OR THE CONSULTING ENGINEER.	
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
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.	ST DD 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 STRUCTURES
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 OCCUR IN ANY EXISTING OR NEW CUT OR FILL SLOPE, THE CONTRACTOR SHALL FIRST INSURE THAT THERE ARE NOT AREAS OF PONDED WATER AT THE TOPS OF THE SLOPES, AND THEN SHALL CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT GEOTECHNICAL ENGINEER FOR ON—SITE EVALUATION OF THE AREAS OF SEEPAGE.
10	ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.	FOR ALL STORM WATER INTAKES
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
		FOR ALL STORMWATER OUTLETS
12	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.	NO WORK IN LIVE
13	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	NO WORK IN LIVE
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13	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. 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. 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	NO WORK IN LIVE WATERCOURSE NO WORK IN LIVE WATERCOURSE NO WORK IN LIVE
13	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. 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. 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.	NO WORK IN LIVE WATERCOURSE APPLIED ALONG UTILITY INSTALLATION AND EVEL AIMED IN CONSTRUCTION

SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.

FREQUENCY STORM OF 24-HOUR DURATION IN ACCORDANCE WITH THE APPLICABLE CRITERIA.

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

EROSION AND DAMAGE DUE TO INCREASES IN VOLUME, VELOCITY AND PEAK FLOW RATE OF STORMWATER RUNOFF FOR THE STATED

PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION

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.

Sequence of Installation: Prior to any land disturbance Maintenance:

Refer to Std. & Spec. 3.02 Removal Events 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.

Sequence of Installation: Prior to any land disturbance

Maintenance: Refer to Std. & Spec. 3.05 Following permanent stabilization of all upland areas Removal Event:

occur immediately following.

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.

Sequence of Installation: Immediately following land disturbance Maintenance: Refer to Std. & Spec. 3.19 Removal Event: None, permanent

4. TEMPORARY VEHICULAR STREAM CROSSING - STD. & SPEC. 3.24

Temporary vehicular stream crossing strategies shall be used to provide a means for construction traffic to cross flowing streams without damaging the channel or banks and to keep sediment generated by construction traffic out of the stream.

Sequence of Installation: Prior to any land disturbance

Refer to Std. & Spec. 3.24 When no longer needed all material shall be removed and stabilization of the streambed, banks, and approach areas should

5. 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.

Sequence of Installation: Prior to any land disturbance

Refer to Std. & Spec. 3.25 Maintenance: Removal Event: Stabilization of the streambed, banks, and approach areas should occur immediately following the attainment of final grade.

6. SOIL STABILIZATION BLANKETS AND MATTING - STD. & SPEC. 3.36

Soil stabilization blankets and matting shall be used to aid in controlling erosion on critical areas by providing a microclimate which protects young vegetation and promotes its establishment.

During establishment of vegetation Sequence of Installation: Refer to Std. & Spec. 3.36 Maintenance: Removal Event: None, degradable

VEGETATIVE PRACTICES

Maintenance:

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 AND THE EROSION AND SEDIMENT CONTROL PLAN.

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 mixes shall be as described on the detail drawings.

Sequence of Installation: When cleared areas will not be brought to final grade within 30 days Refer to Std. & Spec. 3.31: greas 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 are found on this sheet.

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 Maintenance:

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

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

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.

<u>INSPECTIONS</u>

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

SELF-EXPLANATORY

SEE PLANS & CALC'S

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.
- 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. ES-5: 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/ENGINÈER FOR REVIEW AND ACCEPTANCE. 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 ES-7:
- DURING DEWATERING OPERATIONS, PUMP WATER INTO AN APPROVED FILTERING DEVICE. ES-8:
- 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. ES-9:
- 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. ES-10:

CONSTRUCTION SEQUENCING

- . INSTALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES
- 2. INSTALL SANITARY SEWER
- STABALIZE ALL AFFECTED AREAS.
- H. REMOVE TEMOPORARY EROSION SEDIMENT CONTROL MEASURES ONCE PERMANENT STABILIZATION HAS OCCURED

SEEDING SCHEDULES

TS) <u>TEMPORARY SEEDI</u>NG SCHEDULE

ACCEPTABLE TEMPORARY SEEDING PLANT MATERIALS

PLANTING DATES (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 60-100

GERMAN MILLET MAY 1-AUG 31 50 (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

(LOLIUM MULTI-FLORUM)

(PS) PERMANENT SEEDING SCHEDULE

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

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

SEASONAL NURSE CROP

WHITE CLOVER

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

ANNUAL RYE FOXTAIL MILLET ANNUAL RYE WINTER RYE

2 LBS. 252 LBS.

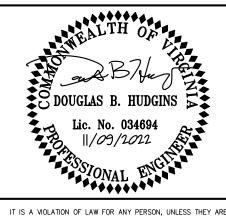
LIME AND FERTILIZER NEEDS SHALL BE DETERMINED BY SOIL TESTS.

SEEDINGS TO BE MULCHED AT THE RATE OF 2 TONS PER ACRE WITH TACKIFIED STRAW, IMMEDIATELY UPON COMPLETION OF SEED APPLICATION, IN ACCORDANCE WITH VA E&S STD 3.35.

EROSION CONTROL LEGEND					
SYMBOL	DESCRIPTION	ST'D. & SPEC.			
(CE)	CONSTRUCTION ENTRANCE	3.02			
SF	SILT FENCE	3.05			
(<u>P</u>)	STORM DRAIN INLET PROTECTION	3.07			
RR	RIPRAP	3.19			
SC	TEMPORARY VEHICULAR STREAM CROSSING	3.24			
SO	UTILITY STREAM CROSSING	<i>3.25</i>			
SR	SURFACE ROUGHENING	3.29			
<u>o</u>	TOPSOILING	3.30			
ST	TEMPORARY SEEDING	3.31			
PS	PERMANENT SEEDING	3.32			
MU	MULCHING	3.35			
B/M	SOIL STABILIZATION BLANKETS & MATTING	3.36			







IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS HEY AR A CTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY, IF AN ITEM BEARING STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERIN ENGINEER, 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

CRAWFORD JANNEY SANITARY SEWER REPLACEMENT

No.	Submittal / Revision	App'd.	Ву	Date
◬	BID ISSUE	DBH	ccs	11/09/22

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EROSION &

SEDIMENT CONTROI

Issue Date: Project No: 11/09/2022 072986.000 AS SHOWN

Drawing No.: