

ESC NOTES:

EROSION CONTROL NOTES:

- 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-3: ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
- ES-4: A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED 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, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
- 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: ALL EROSION CONTROL MEASURES SHALL CONFORM TO THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.
- ES-11: CONTRACTOR SHALL CONTACT COUNTY OF ROANOKE PRIOR TO START OF WORK TO SCHEDULE A PRE-CONSTRUCTION CONFERENCE AND AGAIN 48 HOURS PRIOR TO COMMENCING WORK.
- ES-12: CONTRACTOR SHALL INSTALL ADEQUATE EROSION CONTROL MEASURES DURING CONSTRUCTION TO PREVENT SILT-LADEN RUNOFF FROM LEAVING THE SITE. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES. ALL STREETS SHALL BE KEPT FREE FROM SILT, SEDIMENT, AND DEBRIS DURING CONSTRUCTION.
- ES-13: TREES IDENTIFIED ON THE PLANS ARE APPROXIMATE AND SHOULD NOT BE USED AS EXACT REFERENCES.
- ES-14: GENERALLY, TREES SHOWN ON THIS PLAN ARE INTENDED TO REMAIN UNDISTURBED AS PART OF THIS PROJECT.
- ES-15: PERMANENT OR TEMPORARY SOIL STABILIZATION MUST BE APPLIED TO DENUDED AREAS WITHIN 7 DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE NOT OTHERWISE PERMANENTLY STABILIZED. SOIL STABILIZATION MUST ALSO BE APPLIED WITHIN 7 DAYS TO DENUDED AREAS WHICH MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT (UNDISTURBED) FOR MORE THAN 30 DAYS. SEE EROSION CONTROL NARRATIVE AND SPECIFICATIONS FOR ADDITIONAL EROSION CONTROL REQUIREMENTS AND SPECIFICATIONS.
- ES-16: IN LOCATIONS WHERE UNDERGROUND UTILITIES ARE TO BE INSTALLED IN FORESTED AREAS, THE CONTRACTOR SHALL VERIFY ANY TREES TO BE REMOVED WITH THE OWNER.
- ES-17: IN WETLAND AREAS, THE CONTRACTOR SHALL COMPLY WITH REGULATIONS SET FORTH BY ARMY CORPS OF ENGINEERS NATIONWIDE PERMIT NUMBER 12 – UTILITY LINE ACTIVITIES. SPECIFICALLY THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING: A. ANY EXPOSED STREAM BANKS SHALL BE STABILIZED IMMEDIATELY UPON COMPLETION OF THE UTILITY LINE CROSSING OF EACH WATERBODY. B. ACCESS ROADS USED SOLELY FOR CONSTRUCTION OF THE UTILITY SHALL BE REMOVED UPON COMPLETION OF THE WORK AND THE AREA RESTORED TO PRECONSTRUCTION GRADE, ELEVATIONS AND WETLAND CONDITIONS. C. APPROPRIATE SOIL EROSION AND SEDIMENT CONTROLS SHALL BE USED AND MAINTAINED IN EFFECTIVE OPERATING CONDITION DURING CONSTRUCTION AND ALL EXPOSED SOIL AND OTHER FILLS, AS WELL AS ANY WORK BELOW THE ORDINARY HIGH WATER MARK OR HIGH TIDE LINE, SHALL BE PERMANENTLY STABILIZED AT THE EARLIEST PRACTICABLE DATE. D. CULVERTS PLACED IN STREAMS SHALL BE INSTALLED TO MAINTAIN LOW FLOW CONDITIONS. E. HEAVY EQUIPMENT WORKING IN WETLANDS SHALL BE PLACED ON MATS OR OTHER MEASURES SHALL BE TAKEN TO MINIMIZE SOIL DISTURBANCE. F. ANY TEMPORARY FILLS SHALL BE REMOVED IN THEIR ENTIRETY AND THE AFFECTED AREAS RETURNED TO THEIR PREEXISTING ELEVATION.
- ES-18: ALL UNPAVED AND UNGRAVELLED AREAS DISTURBED BY CONSTRUCTION SHALL BE SEEDED.
- ES-19: IF AT ANY POINT DURING THE PROJECT SILT-LADEN RUNOFF MIGRATES TOWARD THE EXISTING STREAMS THE CONTRACTOR SHALL INSTALL SILT FENCE BETWEEN THE WATER LINE WORK AREA AND THE EXISTING STREAMS. EXCAVATED MATERIAL FROM THE TRENCH SHALL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
- ES-20: OUTSIDE THE LIMITS OF THE PUBLIC RIGHT-OF-WAY, CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING CONSTRUCTION MATERIAL STAGING AREAS LOCATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR PRODUCING AND GAINING APPROVAL OF AN EROSION AND SEDIMENT CONTROL PLAN FOR THE STAGING AREAS FROM ROANOKE COUNTY.
- ES-21: 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.
- ES-22: CONTRACTOR TO REMOVE ALL SEDIMENT DEPOSITS FROM THE EXISTING STORM DRAINAGE SYSTEMS, DITCHES, CULVERTS, AND CONVEYANCE CHANNELS AFTER EACH STORM EVENT AND AT THE COMPLETION OF THE PROJECT.
- ES-23: CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING A SUITABLE STAGING AREA FOR THE PROJECT. CONTRACTOR TO PROVIDE AN APPROVED EROSION AND SEDIMENT CONTROL PLAN TO THE COUNTY OF ROANOKE ONCE A SITE LOCATED. STAGING AREA SHALL BE COORDINATED AND APPROVED BY THE COUNTY OF ROANOKE BEFORE THE PRECONSTRUCTION MEETING.

EROSION CONTROL MINIMUM STANDARDS:

1. 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 FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.
- RESPONSE: DISTURBED AREAS WILL BE SEEDED AS PER THE E&S PLAN
2. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE, AS WELL AS BORROW AREAS AND SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
- RESPONSE: NOT APPLICABLE TO THIS PROJECT
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 IS UNIFORM, MATURE ENOUGH TO SURVIVE, AND WILL INHIBIT EROSION.
- RESPONSE: DISTURBED AREAS WILL BE SEEDED AS PER THE E&S PLAN.
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.
- RESPONSE: EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED AS THE FIRST STEP OF THE CONSTRUCTION PROCESS AS NOTED IN THE CONSTRUCTION SEQUENCE.
5. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES, AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
- RESPONSE: NOT APPLICABLE TO THIS PROJECT
6. SEDIMENT TRAPS AND SEDIMENT BASINS SHALL BE DESIGNED AND CONSTRUCTED BASED UPON THE TOTAL DRAINAGE AREA TO BE SERVED BY THE TRAP OR BASIN.
- a. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT TRAP SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA AND THE TRAP SHALL ONLY CONTROL DRAINAGE AREAS LESS THAN THREE ACRES.
- b. SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPRISED OF FLOW FROM DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES SHALL BE CONTROLLED BY A SEDIMENT BASIN. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT BASIN SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA. THE OUTFALL SYSTEM SHALL, AT A MINIMUM, MAINTAIN THE STRUCTURAL INTEGRITY OF THE BASIN DURING A 25-YEAR STORM OF 24-HOUR DURATION. RUNOFF COEFFICIENTS USED IN RUNOFF CALCULATIONS SHALL CORRESPOND TO A BARE EARTH CONDITION OR THOSE CONDITIONS EXPECTED TO EXIST WHILE THE SEDIMENT BASIN IS UTILIZED.
- RESPONSE: NOT APPLICABLE TO THIS PROJECT
7. CUT AND FILL SLOPES SHALL BE DESIGNED AND 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.
- RESPONSE: NOT APPLICABLE TO THIS PROJECT. NO CUT OR FILL SLOPES ARE PROPOSED AS A PART OF THIS PROJECT.
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.
- RESPONSE: NOT APPLICABLE TO THIS PROJECT. NO CUT OR FILL SLOPES ARE PROPOSED AS A PART OF THIS PROJECT.
9. WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
- RESPONSE: UNDERSTOOD
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.
- RESPONSE: THE EXISTING STORM SEWER INLETS LOCATED ON THIS PROJECT WILL BE PROTECTED BY UTILIZING THE DETAILS FOUND IN SPECIFICATION 3.07 OF THE VESCH. MULTIPLE DETAILS ARE INCLUDED IN THE PLAN BECAUSE MULTIPLE INLET STYLES EXISTING ON SITE.
11. BEFORE NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS OR PIPES 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.
- RESPONSE: NOT APPLICABLE TO THIS PROJECT
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.
- RESPONSE: UNDERSTOOD
13. WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES MORE THAN TWICE IN ANY SIX-MONTH PERIOD, A TEMPORARY VEHICULAR STREAM CROSSING CONSTRUCTED OF NONERODIBLE MATERIAL SHALL BE PROVIDED.
- RESPONSE: NOT APPLICABLE TO THIS PROJECT

EROSION CONTROL MINIMUM STANDARDS (CONT):

14. ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET.
- RESPONSE: UNDERSTOOD
15. THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.
- RESPONSE: NOT APPLICABLE TO THIS PROJECT
16. UNDERGROUND UTILITY LINES 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 OPENED AT ONE TIME.
- b. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
- c. 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.
- d. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
- e. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS.
- f. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.
- RESPONSE: UNDERSTOOD
17. 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 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.
- RESPONSE: UNDERSTOOD
18. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE LOCAL PROGRAM 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.
- RESPONSE: UNDERSTOOD
19. 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 FOLLOWING STANDARDS AND CRITERIA:
- a. CONCENTRATED STORMWATER RUNOFF LEAVING A DEVELOPMENT SITE SHALL BE DISCHARGED DIRECTLY INTO AN ADEQUATE NATURAL OR MAN-MADE RECEIVING CHANNEL, PIPE OR STORM SEWER SYSTEM. FOR THOSE SITES WHERE RUNOFF IS DISCHARGED INTO A PIPE OR PIPE SYSTEM, DOWNSTREAM STABILITY ANALYSES AT THE OUTFALL OF THE PIPE OR PIPE SYSTEM SHALL BE PERFORMED.
- b. ADEQUACY OF ALL CHANNELS AND PIPES SHALL BE VERIFIED IN THE FOLLOWING MANNER:
- (1) THE APPLICANT SHALL DEMONSTRATE THAT THE TOTAL DRAINAGE AREA TO THE POINT OF ANALYSIS WITHIN THE CHANNEL IS ONE HUNDRED TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE PROJECT IN QUESTION; OR
- (2) (A) NATURAL CHANNELS SHALL BE ANALYZED BY THE USE OF A TWO-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP CHANNEL BANKS NOR CAUSE EROSION OF CHANNEL BED OR BANKS.
- (b) ALL PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS SHALL BE ANALYZED BY THE USE OF A TEN-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP ITS BANKS AND BY THE USE OF A TWO-YEAR STORM TO DEMONSTRATE THAT STORMWATER WILL NOT CAUSE EROSION OF CHANNEL BED OR BANKS; AND
- (c) PIPES AND STORM SEWER SYSTEMS SHALL BE ANALYZED BY THE USE OF A TEN-YEAR STORM TO VERIFY THAT STORMWATER WILL BE CONTAINED WITHIN THE PIPE OR SYSTEM.
- c. IF EXISTING NATURAL RECEIVING CHANNELS OR PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS OR PIPES ARE NOT ADEQUATE, THE APPLICANT SHALL:
- (1) IMPROVE THE CHANNELS TO A CONDITION WHERE A TEN-YEAR STORM WILL NOT OVERTOP THE BANKS AND A TWO-YEAR STORM WILL NOT CAUSE EROSION TO THE CHANNEL BED OR BANKS; OR
- (2) IMPROVE THE PIPE OR PIPE SYSTEM TO A CONDITION WHERE THE TEN-YEAR STORM IS CONTAINED WITHIN THE APPURTENANCES; OR
- (3) DEVELOP A SITE DESIGN THAT WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A TWO-YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A NATURAL CHANNEL OR WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A TEN-YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A MAN-MADE CHANNEL; OR

EROSION CONTROL MINIMUM STANDARDS (CONT):

- (4) PROVIDE A COMBINATION OF CHANNEL IMPROVEMENT, STORMWATER DETENTION, OR OTHER MEASURES WHICH IS SATISFACTORY TO THE PLAN-APPROVING AUTHORITY TO PREVENT DOWNSTREAM EROSION.
- d. THE APPLICANT SHALL PROVIDE EVIDENCE OF PERMISSION TO MAKE THE IMPROVEMENTS.
- e. ALL HYDROLOGIC ANALYSES SHALL BE BASED ON THE EXISTING WATERSHED CHARACTERISTICS AND THE ULTIMATE DEVELOPMENT OF THE SUBJECT PROJECT.
- f. IF THE APPLICANT CHOOSES AN OPTION THAT INCLUDES STORMWATER DETENTION, HE SHALL OBTAIN APPROVAL FROM THE LOCALITY OF A PLAN FOR MAINTENANCE OF THE DETENTION FACILITIES. THE PLAN SHALL SET FORTH THE MAINTENANCE REQUIREMENTS OF THE FACILITY AND THE PERSON RESPONSIBLE FOR PERFORMING THE MAINTENANCE.
- g. OUTFALL FROM A DETENTION FACILITY SHALL BE DISCHARGED TO A RECEIVING CHANNEL, AND ENERGY DISSIPATORS SHALL BE PLACED AT THE OUTFALL OF ALL DETENTION FACILITIES AS NECESSARY TO PROVIDE A STABILIZED TRANSITION FROM THE FACILITY TO THE RECEIVING CHANNEL.
- h. ALL ON-SITE CHANNELS MUST BE VERIFIED TO BE ADEQUATE.
- i. INCREASED VOLUMES OF SHEET FLOWS THAT MAY CAUSE EROSION OR SEDIMENTATION ON ADJACENT PROPERTY SHALL BE DIVERTED TO A STABLE OUTLET, ADEQUATE CHANNEL, PIPE OR PIPE SYSTEM, OR TO A DETENTION FACILITY.
- RESPONSE: UNDERSTOOD

SEEDING SCHEDULE:

PERMANENT SEEDING MIXTURE SHALL CONSIST OF THE FOLLOWING:

KENTUCKY 31 OR TURF-TYPE TALL FESCUE	180 lbs/acre
IMPROVED PERENNIAL RYEGRASS	10 lbs/acre
KENTUCKY BLUEGRASS	10 lbs/acre
	200 lbs/acre

LIME AND FERTILIZER SHALL BE APPLIED TO ALL SEEDED AREAS AS PER THE FOLLOWING APPLICATION RATES:

LIME: 2 TONS/ACRE PULVERIZED AGRICULTURAL GRADE LIMESTONE (90lbs/1000 sqft)
FERTILIZER: 1000 lbs/acre 10-20-10 OR EQUIVALENT NUTRIENTS (23lbs/1000 sqft)

EROSION CONTROL LEGEND:

- CE CONSTRUCTION ENTRANCE
- SF SILT FENCE
- IP INLET PROTECTION
- CIP CULVERT INLET PROTECTION
- OP OUTLET PROTECTION
- RR RIP RAP
- TS TOP SOILING
- PS PERMANENT SEEDING
- MU MULCHING

CERTIFICATION

I certify under penalty of law that I understand the terms and conditions of this Virginia Stormwater Management Program (VSMP) general permit that authorizes the storm water discharges from the construction activity identified as part of this certification.

Signature (Contractor)	Date
Title	Address of Site Project
Contractor Name	
Contractor Address	
Contractor Phone #	
Signature (Subcontractor)	Date
Title	
Subcontractor Name	
Subcontractor Address	
Subcontractor Phone #	
Signature	Date
Title	
Subcontractor Name	
Subcontractor Address	
Subcontractor Phone #	



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DRAWN : BJM
CHECKED: DAA
QA / QC : JKD

REV.#
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COMMENTS
1ST REVIEW
RECORD

DATE
06 JUL 12
04 SEP 13

SOUTH PEAK DEVELOPMENT
PHASE I WATER SYSTEM IMPROVEMENTS

EROSION & SEDIMENT CONTROL NOTES

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