

EROSION & SEDIMENT CONTROL GENERAL NOTES

(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 4VAC65-30 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&SC NARRATIVE, PERMETER CONTROLS AND SEDIMENT TRAPS SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND DISTURBING ACTIVITY AND 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. 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 FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY OR PROVIDE DOCUMENTATION OF APPROVAL / PERMITTING FOR SAID SITE.

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&SC) MEASURES SHOWN ON THESE SHEETS 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, 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 SITE AS WELL AS BORROW AREAS AND SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.

ES-13. PERMANENT OR TEMPORARY SOIL STABILIZATION MEASURES SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE.

ES-14. TEMPORARY SOIL STABILIZATION MEASURES SHALL BE APPLIED WITHIN SEVEN (7) DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN FOURTEEN (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, FXTAL MILLET, & WINTER RYE MIX)
20	CROWN VETCH

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 ROANOKE COUNTY 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.

EROSION & SEDIMENT CONTROL SHEET NOTES (STAGE 2):

- THIS DRAWING IS INTENDED TO SHOW THE EROSION & SEDIMENT CONTROL (E&SC) MEASURES REQUIRED AS THE SITE IS BROUGHT TO FINISHED GRADE, THE STORM DRAINAGE SYSTEM IS MADE OPERATIONAL, TRENCHED UTILITIES ARE INSTALLED, AND THE PARKING LOT / DRIVE ISLES ARE PLACES UNDER STONE AND PAVED. COORDINATION WITH MEASURES INSTALLED IN STAGE 1 IS ALSO REQUIRED TO ENSURE COMPLIANCE WITH THE APPLICABLE MINIMUM STANDARDS (MS).
- REFER TO SHEET C6 FOR EROSION & SEDIMENT CONTROL (E&SC) NARRATIVE AND REFER TO SHEET C6 FOR LISTING AND STATEMENT OF COMPLIANCE WITH THE MINIMUM STANDARDS (MS-19).
- REFER TO SHEET D2 FOR STANDARD E&SC DETAILS AND DESIGN SUMMARY DATA.
- WHERE APPLICABLE, THIS SHEET SHOWS THE DRAINAGE AREAS (DIVIDES) AND THE TOTAL AREA (IN ACRES) DRAINING TO CRITICAL E&SC CONTROL MEASURES. THE AREAS DENOTED REPRESENT THE MAXIMUM AREA DRAINING TO A GIVEN MEASURE.
- WHERE APPLICABLE, THIS DRAWING SHOWS THE TYPES AND APPROXIMATE LIMITS OF SOILS ANTICIPATED TO BE ENCOUNTERED ON THE SITE. ALL SOIL DATA IS TAKEN FROM UNITED STATES DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICES - NATIONAL COOPERATIVE SOIL SURVEY PUBLICATIONS.
- REFER TO E&SC NARRATIVE ON SHEET C6 FOR INFORMATION REGARDING "CRITICAL EROSION AREAS."
- A CERTIFIED RESPONSIBLE LAND DISTURBER (RLD) SHALL OVERSEE AND BE INVOLVED IN ALL ASPECTS OF THE LAND DISTURBANCE ACTIVITIES (FROM INITIAL LAND DISTURBANCE THROUGH FINAL STABILIZATION). THE NAME OF THE RLD SHALL BE PROVIDED TO PLAN REVIEWING AUTHORITY AT OR PRIOR TO THE PRECONSTRUCTION CONFERENCE. THIS PERSON SHALL ATTEND THE PRECONSTRUCTION CONFERENCE AND PROVIDE A COPY OF HIS RLD CERTIFICATE.
- REFER TO "SEQUENCE OF WORK" AND NARRATIVE FOR PROVISIONS REGARDING REMOVAL OF E&SC MEASURES UPON COMPLETION OF THE WORK.

GENERAL SEQUENCE OF WORK: (CONTINUED FROM SHEET C4)

STAGE II - GENERALLY

6. FINE / FINAL GRADING:

6.1 SHAPE GRADE OF PARKING LOT AND ADJOINING AREA TO DRAIN TO NEW STORM DRAIN INLETS AND CONVEYANCE CHANNELS AS SOON AS PRACTICABLE. AS SOON AS THE SUBGRADE ELEVATION IS REACHED WITHIN THE PARKING LOT AND TRAVEL WAYS INSTALL PAVEMENT STONE BASE OR CONSTRUCTION ROAD STABILIZATION (CRS). INSTALL PAVEMENT BASE ASPHALT AS SOON AS PRACTICABLE.

6.2 AS EXCAVATION PROGRESSES AND IS COMPLETED, PLACE THE SITE TO FINISHED GRADE AS SOON AS PRACTICAL. APPLY TEMPORARY SEEDING (TS), OR TOPSOIL (TO) AND PERMANENT SEEDING (PS), TO DISTURBED AREA AND CUT SLOPES THAT WILL REMAIN DORMANT FOR LONGER THAN FOURTEEN (14) DAYS AND/OR WHEN FINAL GRADE IS REACHED.

6.3 FOR PERMANENT STABILIZATION OF DISTURBED AREAS, APPLY TOPSOIL (TO), SEEDING (PS), AND MULCH (MU), AND IMMEDIATELY PLACE SOIL STABILIZATION BLANKET/MATTING (BM) WHERE SHOWN.

6.4 INSTALL SILT FENCE (SF) OR DIVERSION DIKE (DD) ALONG THE TOP OF COMPLETED SLOPES TO PREVENT WASH-OVER AND EROSION ALONG THE FACE OF THE SLOPE. GRADE TOP OF SLOPE OR CHANNEL THE DIVERSION DIKE TO A FUNCTIONING INLET PROTECTED WITH INLET PROTECTION.

6.5 APPLY PERMANENT SOIL STABILIZATION MEASURES TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE.

6.6 APPLY PERMANENT STABILIZATION MEASURES TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.

7. UTILITY INSTALLATION (STORM DRAINAGE, SANITARY SEWER & WATER SERVICES):

7.1 ONCE GRADING HAS REACHED SUB-GRADE LEVEL OR AS OTHERWISE STIPULATED HEREIN, BEGIN INSTALLATION OF NEW STORM DRAINAGE PIPING SYSTEM. INSTALL NEW STORM DRAINAGE SYSTEM PIPING FROM LOWEST POINT IN SYSTEM TO HIGHEST POINT IN SYSTEM. INSTALL INLET PROTECTION (IP) AT THE END OF OPEN PIPES AND AROUND EACH STORM DRAIN INLET AS IT BECOMES OPERATIONAL. OTHER UTILITY INSTALLATION REQUIREMENTS INCLUDE:

7.1.1 NO MORE THAN 200 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.

7.1.2 EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.

7.1.3 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.

7.1.4 MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.

7.1.5 COMPLY WITH ALL APPLICABLE SAFETY REGULATIONS REGARDING TRENCHING.

ALL STAGES:

8. MAINTENANCE OF E&SC MEASURES:

8.1 ALL EROSION AND SEDIMENT MEASURES WILL BE CHECKED DAILY AND AFTER EACH MEASURABLE RAINFALL. THE CONTRACTOR IS RESPONSIBLE FOR ADHERING TO ALL MAINTENANCE REQUIREMENTS OF THE EROSION AND SEDIMENT CONTROL MEASURES AS OUTLINED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND THE E&SC NARRATIVE.

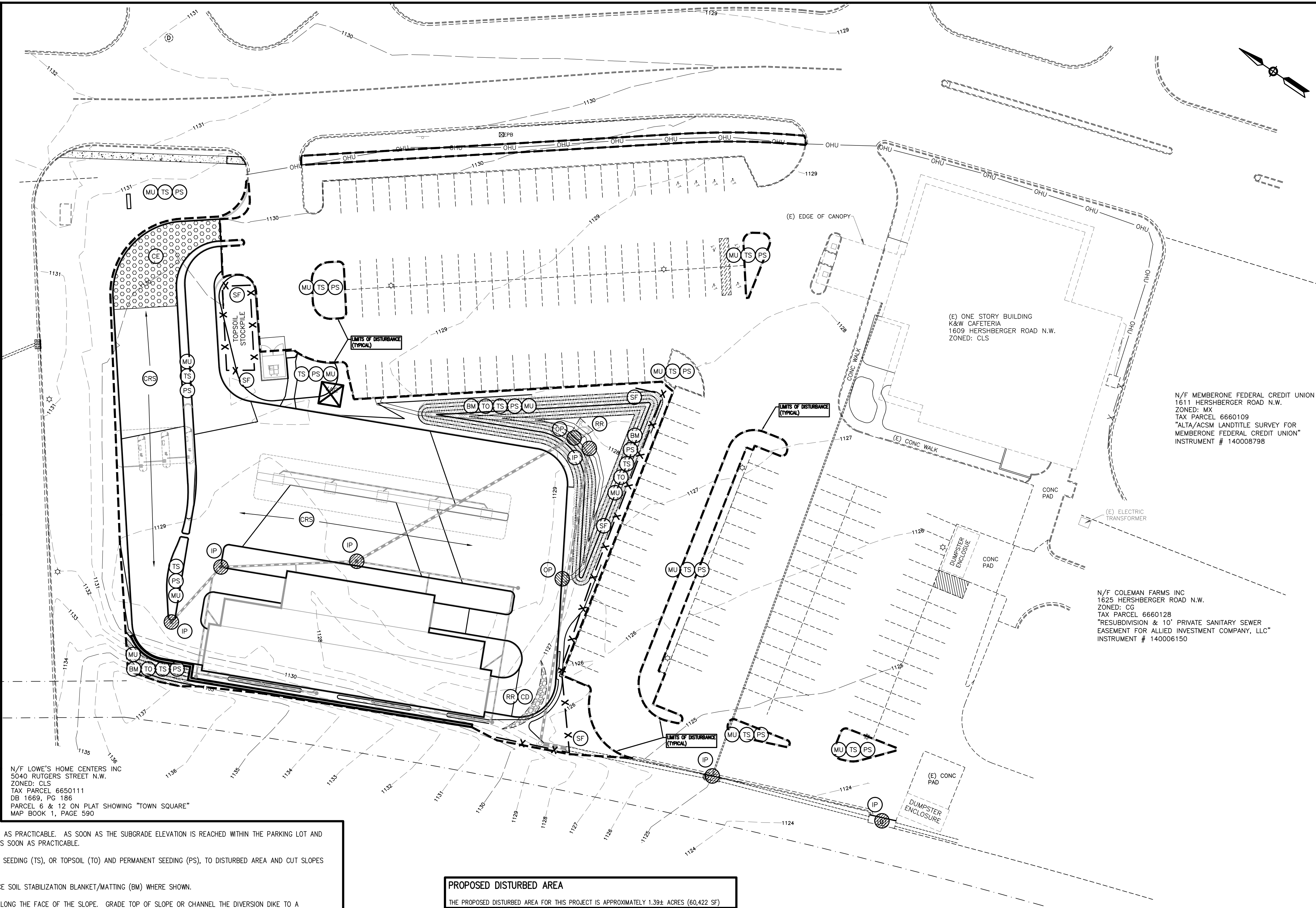
9. REMOVAL OF MEASURES:

9.1 PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IS UNIFORM AND MATURE ENOUGH TO SURVIVE AND INHIBIT EROSION.

9.2 UPON STABILIZATION OF ALL DISTURBED SURFACES, CALL-FOR FINAL INSPECTIONS.

9.3 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 E&SC INSPECTOR. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION. IF DEWATERING IS REQUIRED, WATER SHALL BE PUMPED TO AN APPROVED FILTERING DEVICE.

END OF GENERAL SEQUENCE OF WORK



N/F LOWE'S HOME CENTERS INC
5040 RUTGERS STREET N.W.
ZONED: CLS
TAX PARCEL 6650111
DB 1669, PG 186
PARCEL 6 & 12 ON PLAT SHOWING "TOWN SQUARE"
MAP BOOK 1, PAGE 590

N/F MEMBERONE FEDERAL CREDIT UNION
1611 HERSHBERGER ROAD N.W.
ZONED: MX
TAX PARCEL 6660109
"ALTA/ACSM LANDTITLE SURVEY FOR
MEMBERONE FEDERAL CREDIT UNION"
INSTRUMENT # 140008798

N/F COLEMAN FARMS INC
1625 HERSHBERGER ROAD N.W.
ZONED: CS
TAX PARCEL 6660128
"RESUBDIVISION & 10' PRIVATE SANITARY SEWER
EASEMENT FOR ALLIED INVESTMENT COMPANY, LLC"
INSTRUMENT # 140006150

PROPOSED DISTURBED AREA

THE PROPOSED DISTURBED AREA FOR THIS PROJECT IS APPROXIMATELY 1.39± ACRES (60,422 SF)

EROSION CONTROL LEGEND

- CE CONSTRUCTION ENTRANCE (STD. 3.02)
- IP INLET PROTECTION (STD. 3.07)
- SF SILT FENCE (STD. 3.05/PLATE 3.05-2)
- RR RIP RAP (STD 3.19)
- TO TOPSOILING (STD 3.30)
- CD CHECK DAM (STD. 3.20)
- OP OUTLET PROTECTION (STD. 3.18)
- BM SOIL STABILIZATION BLANKETS & MATTING (STD 3.36)
- CRS CONSTRUCTION ROAD STABILIZATION
- PS PERMANENT SEEDING MIXTURE (STD. 3.32)
- TS TEMPORARY SEEDING (STD. & SPEC. 3.31)
(DETAIL ON SHEET C4)
- MU MULCH (STD. 3.35)

(SEE SHEET D2 FOR EROSION CONTROL DETAILS (UNLESS OTHERWISE NOTED))



CALL THREE WORKING DAYS
BEFORE YOU DIG
811
ONE CALL SYSTEMS INC.
CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING
UTILITIES PRIOR TO BEGINNING CONSTRUCTION

NOTICE TO CONTRACTORS REGARDING EXISTING UTILITIES

Contractors are specifically cautioned that the location and/or elevation of existing utilities as shown on these plans is approximate only. The information is not to be relied on as being exact or complete.
The Contractor must call the appropriate utility provider or one-call system a minimum of 72 hours before beginning any construction activities in order to verify the locations of all existing utilities. It is the responsibility of the contractor to verify the utility locations and determine if any existing utilities conflict with the proposed construction.

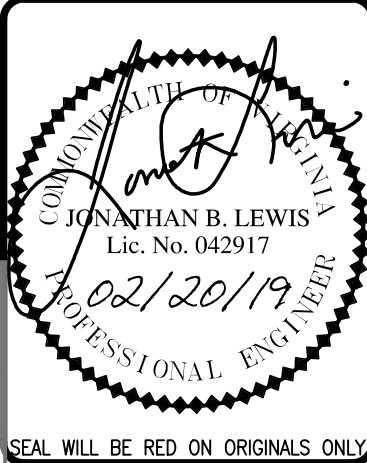
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REV.	DATE	BY

PROPOSED CONSTRUCTION PLANS
ULTIMATE SHINE CAR WASH
RUTGERS STREET N.W., ROANOKE, VA
EROSION CONTROL PLAN ~ STAGE 1

HIGHLANDS
ENGINEERING, LLC
4132 Basco Highway, Suite 2 ~ Johnson City, TN 37601
Phone: (423) 926-2007 E-mail: highlandseng@gmail.com



City of Roanoke
Planning, Building, & Development
COMPREHENSIVE DEVELOPMENT PLAN

APPROVED

by Ken Richardson
04/30/2019

DRAWN BY:
CAS
CHECKED BY:
JBL
DATE:
02-20-19
SCALE:
1"=30'
DRAWING NAME:
WLD ROANOKE 07
SHEET NUMBER:
C5
OF
16
SHEETS