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**EROSION CONTROL NOTES:**

- ALL SEDIMENT AND EROSION CONTROL MEASURES ARE TO BE INSPECTED BY THE CONTRACTOR AT LEAST ONCE EVERY SEVEN (7) DAYS AND AFTER ANY STORM EVENT OF 1" OR GREATER PRECIPITATION DURING 24 HOUR PERIOD. THE CONTRACTOR SHALL PROVIDE THE ENGINEER AND OWNER WITH COPIES OF HIS INSPECTION REPORT AND SHALL HAVE 5 DAYS TO REPAIR AND/OR CORRECT DEFICIENCIES. DAMAGED OR INEFFECTIVE DEVICES SHALL BE REPAIRED OR REPLACED AS NECESSARY.
- ALL DISTURBED AREAS WHERE CONSTRUCTION HAS TEMPORARILY OR PERMANENTLY CEASED SHALL BE STABILIZED WITH GRASSING AS SOON AS PRACTICABLE AND IN NO CASE EXCEEDING 14 DAYS FOLLOWING WORK STOPPAGE UNLESS SAID CONSTRUCTION WILL RESUME WITHIN THE SUBSEQUENT 5 DAYS.
- THE CONTRACTOR SHALL KEEP A LOG OF INSPECTION ACTIVITIES CONTAINING THE DATE OF THE INSPECTION, THE CONDITION OF THE EROSION CONTROL DEVICES AND WHAT REMEDIAL ACTION WAS TAKEN. THIS LOG IS TO BE SUBMITTED TO THE ENGINEER ON A MONTHLY BASIS.
- ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION.
- THE CONTRACTOR SHALL TAKE NECESSARY ACTION TO MINIMIZE TRACKING OF MUD ONTO PAVED ROADWAY SURFACE FROM CONSTRUCTION AREAS, INCLUDING BUT NOT LIMITED TO EXTENDING THE MUD MAT. THE CONTRACTOR SHALL REMOVE MUD AND SOIL FROM THE PAVEMENT ON A DAILY BASIS. NO ADDITIONAL PAYMENT WILL BE MADE.
- SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED AS NECESSARY WITH SYNTHETIC OR VEGETATIVE MATS IN ADDITION TO GRASSING/HYDRO SEEDING TO ENSURE THEIR INTEGRITY. TEMPORARY SLOPE DRAINS SHALL BE INSTALLED AS NECESSARY DURING CONSTRUCTION WHERE SAID SLOPES EXCEED 8 VERTICAL FEET. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE.
- TEMPORARY DIVERSION BERMS/DITCHES SHALL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.
- WHENEVER THE SOIL EROSION AND SEDIMENTATION CONTROL ADMINISTRATOR DETERMINES THAT SIGNIFICANT EROSION AND SEDIMENTATION OCCURRING AS A RESULT OF LAND-DISTURBING ACTIVITY, DESPITE APPLICATION AND MAINTENANCE OF PROTECTIVE PRACTICES, THE PERSON CONDUCTING THE LAND-DISTURBING ACTIVITY WILL BE REQUIRED TO AND SHALL TAKE ADDITIONAL PROTECTIVE ACTION.
- SOIL TEST SHALL BE PERFORMED TO DETERMINE APPLICABLE FERTILIZER RATES FOR ALL DISTURBED AREAS/AREAS TO BE SEED.

**EROSION CONTROL CONSTRUCTION SEQUENCE:**

- NOTIFY NCDOT LOS INSPECTOR 48 HOURS BEFORE PROJECT STARTS.
- NO MAJOR GRADING ACTIVITIES OR BASIN CONSTRUCTION ARE TO TAKE PLACE DURING WET WEATHER OR PERIODS OF PREDICTED WET WEATHER.
- THE MAXIMUM AMOUNT OF LINEAR FEET THE PROJECT CAN HAVE OPEN AT ONE TIME IS 500'.
- SITE MUST BE STORM READY BEFORE ANY EXTENDED BREAKS IN CONSTRUCTION ACTIVITIES INCLUDING WEEKENDS.
- INSTALL ALL APPLICABLE EROSION CONTROL MEASURES (I.E. SILT FENCING, MUD MAT, ETC.)
- CLEAR AND GRUB SITE AS REQUIRED
- COMMENCE GRADING OPERATIONS.
- INSPECT AND REPAIR EROSION CONTROL MEASURES AS APPLICABLE
- COMMENCE CONSTRUCTION OF PEDESTRIAN GREENWAY BASE.
- INSTALL STORMWATER MANAGEMENT DEVICES. (I.E. STORMWATER PIPE, ETC.) (PROVIDE EROSION CONTROL MEASURES)
- INSTALL MATTING ON ALL SLOPES GREATER THAN 3:1
- ESTABLISH PERMANENT COVER ON ALL GRADED SLOPES.
- COMMENCE PAVING FOR PROPOSED PEDESTRIAN GREENWAY.
- ESTABLISH STRAW OR MULCH COVER AND TEMPORARY GRASSING COVER ON ALL BANKS, DITCHES, CUT & FILL SLOPES, ETC. IMMEDIATELY AFTER GRADING OPERATIONS. MAINTAIN COVER UNTIL PERMANENT. PROVIDE SILT FENCING ALONG ALL TOE OF SLOPES
- REMOVE TEMPORARY EROSION CONTROL DEVICES AFTER PERMANENT COVER HAS BEEN ESTABLISHED.
- NOTIFY NCDOT LOS INSPECTOR WHEN PROJECT IS READY FOR CLOSE OUT INSPECTION.
- FILE FOR NPDES NCD010000 E-NOTICE OF TERMINATION WHEN FINAL CLOSE OUT INSPECTION REPORT IS RECEIVED FROM NCDOT LOS.

**STABILIZATION REQUIREMENTS:**  
(4-30-2019)(Rev. 1-21-2025)

Stabilization for this project shall comply with the time frame guidelines as specified by the NCG-010000 general construction permit issued by the North Carolina Department of Environmental Quality Division of Energy, Mineral and Land Resources. Temporary or permanent ground cover stabilization shall occur within the following time frames from the last land-disturbing activity:

- Stabilize perimeter dikes, swales, ditches, and perimeter slopes within 7 calendar days.
- Stabilize high quality water (HQW) zones within 7 calendar days.
- Stabilize slopes steeper than 3:1 within 7 calendar days.
  - If slopes are 10 feet or less in length and are not steeper than 2:1, 14 calendar days are allowed.
- Stabilize slopes 3:1 to 4:1 within 14 calendar days.
  - 7 calendar days for slopes greater than 50 feet in length and with slopes steeper than 4:1.
  - 7 calendar days for perimeter dikes, swales, ditches, perimeter slopes, and HQW Zones.
- Stabilize areas with slopes flatter than 4:1 within 14 calendar days.
  - 7 calendar days for perimeter dikes, swales, ditches, perimeter slopes, and HQW Zones.

The stabilization timeframe for High Quality Water (HQW) Zones shall be 7 calendar days with no exceptions for slope grades or lengths. High Quality Water Zones (HQW) Zones are defined by North Carolina Administrative Code 15A NCAC 04A.0105 (25). Temporary and permanent ground cover stabilization shall be achieved in accordance with the provisions in this contract and as directed.

**NATIVE GRASS SEEDING AND MULCHING: (West)**

Native Grass Seeding and Mulching shall be performed on the disturbed areas of wetlands and riparian areas, and adjacent to Stream Relocation and/or trout stream construction within a 50 foot zone on both sides of the stream or depression, measured from top of stream bank or center of depression. The stream bank of the stream relocation shall be seeded by a method that does not alter the typical cross section of the stream bank. Native Grass Seeding and Mulching shall also be performed in the permanent soil reinforcement mat section of preformed scour holes, and in other areas as directed.

The kinds of seed and fertilizer, and the rates of application of seed, fertilizer, and limestone, shall be as stated below. During periods of overlapping dates, the kind of seed to be used shall be determined. All rates are in pounds per acre.

<b>August 1 - June 1</b>	<b>May 1 - September 1</b>
18# Creeping Red Fescue	18# Creeping Red Fescue
8# Big Bluestem	8# Big Bluestem
6# Indiangrass	6# Indiangrass
4# Switchgrass	4# Switchgrass

35# Rye Grain	25# German or Browntop Millet
500# Fertilizer	500# Fertilizer
4000# Limestone	4000 Limestone

Approved Creeping Red Fescue Cultivars:  
Aberdeen      Boreal      Epic      Cindy Lou

Fertilizer shall be 10-20-20 analysis. A different analysis of fertilizer may be used provided the 1-2-2 ratio is maintained and the rate of application adjusted to provide the same amount of plant food as a 10-20-20 analysis and as directed.

**Temporary Seeding**

Fertilizer shall be the same analysis as specified for *Seeding and Mulching* and applied at the rate of 400 pounds and seeded at the rate of 50 pounds per acre. German Millet or Browntop Millet shall be used in summer months and rye grain during the remainder of the year. The Engineer will determine the exact dates for using each kind of seed.

**Fertilizer Topdressing**

Fertilizer used for topdressing shall be 16-8-8 grade and shall be applied at the rate of 500 pounds per acre. A different analysis of fertilizer may be used provided the 2-1-1 ratio is maintained and the rate of application adjusted to provide the same amount of plant food as 16-8-8 analysis and as directed.

**Supplemental Seeding**

The kinds of seed and proportions shall be the same as specified for *Seeding and Mulching*, and the rate of application may vary from 25# to 75# per acre. The actual rate per acre will be determined prior to the time of topdressing and the Contractor will be notified in writing of the rate per acre, total quantity needed, and areas on which to apply the supplemental seed. Minimum tillage equipment, consisting of a sod seeder shall be used for incorporating seed into the soil as to prevent disturbance of existing vegetation. A clodbuster (ball and chain) may be used where degree of slope prevents the use of a sod seeder.

**Mowing**

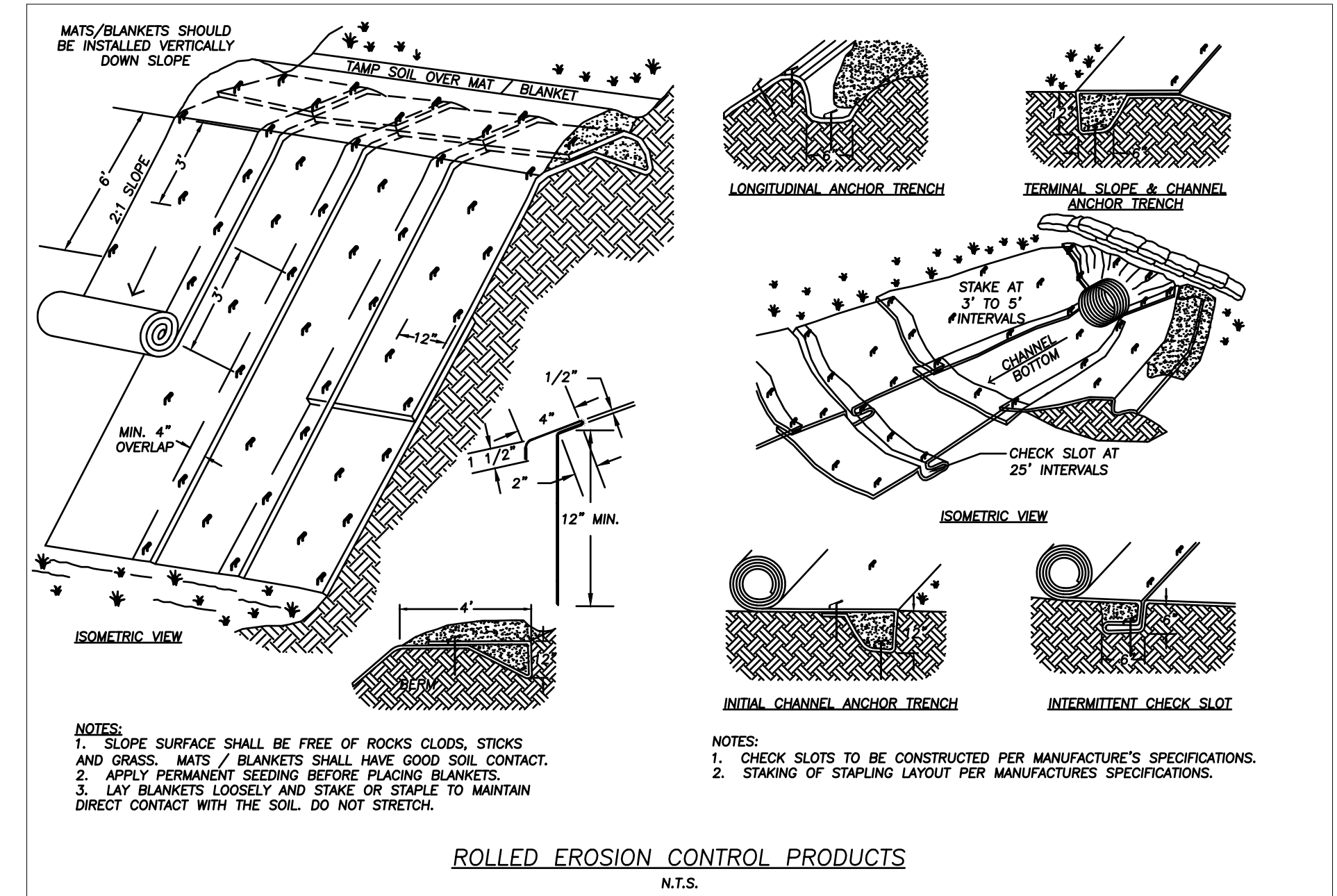
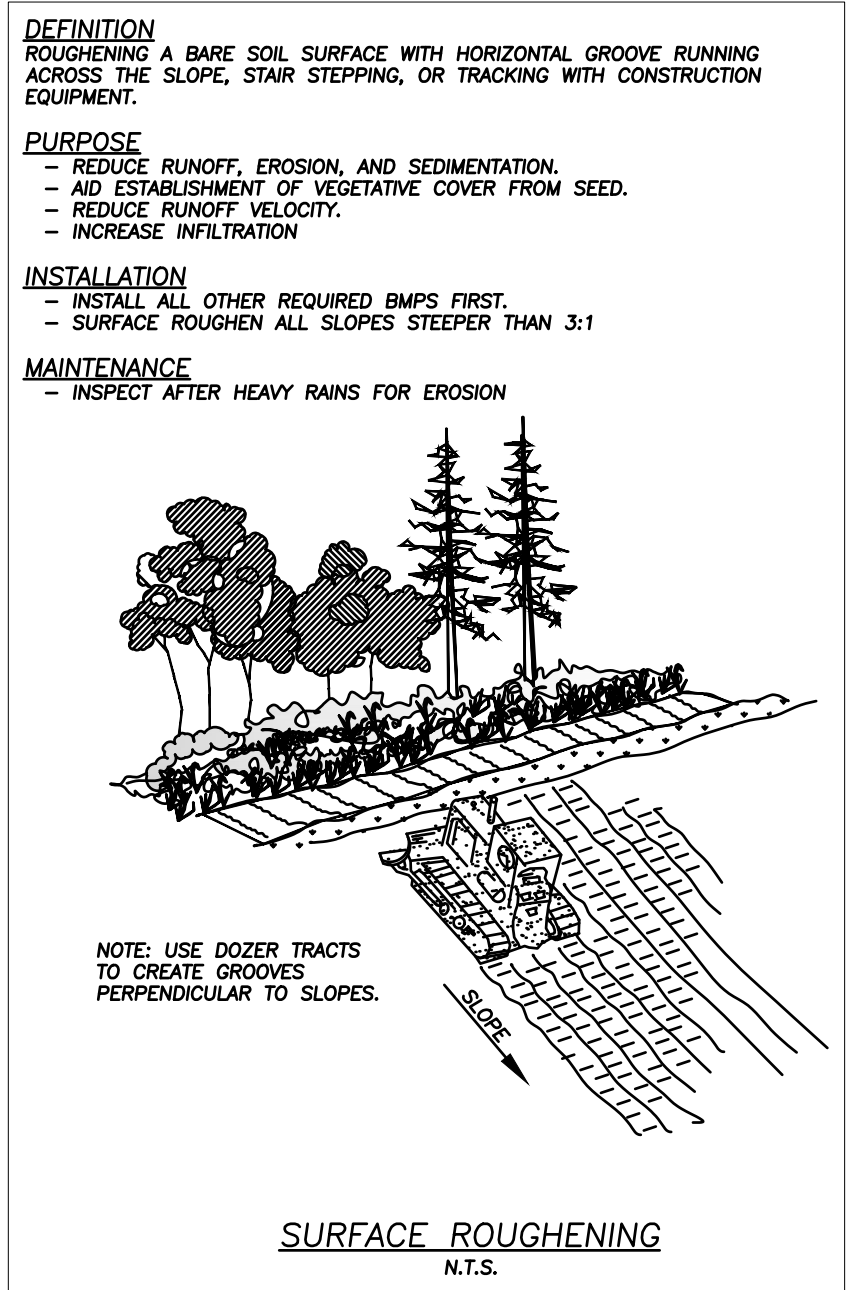
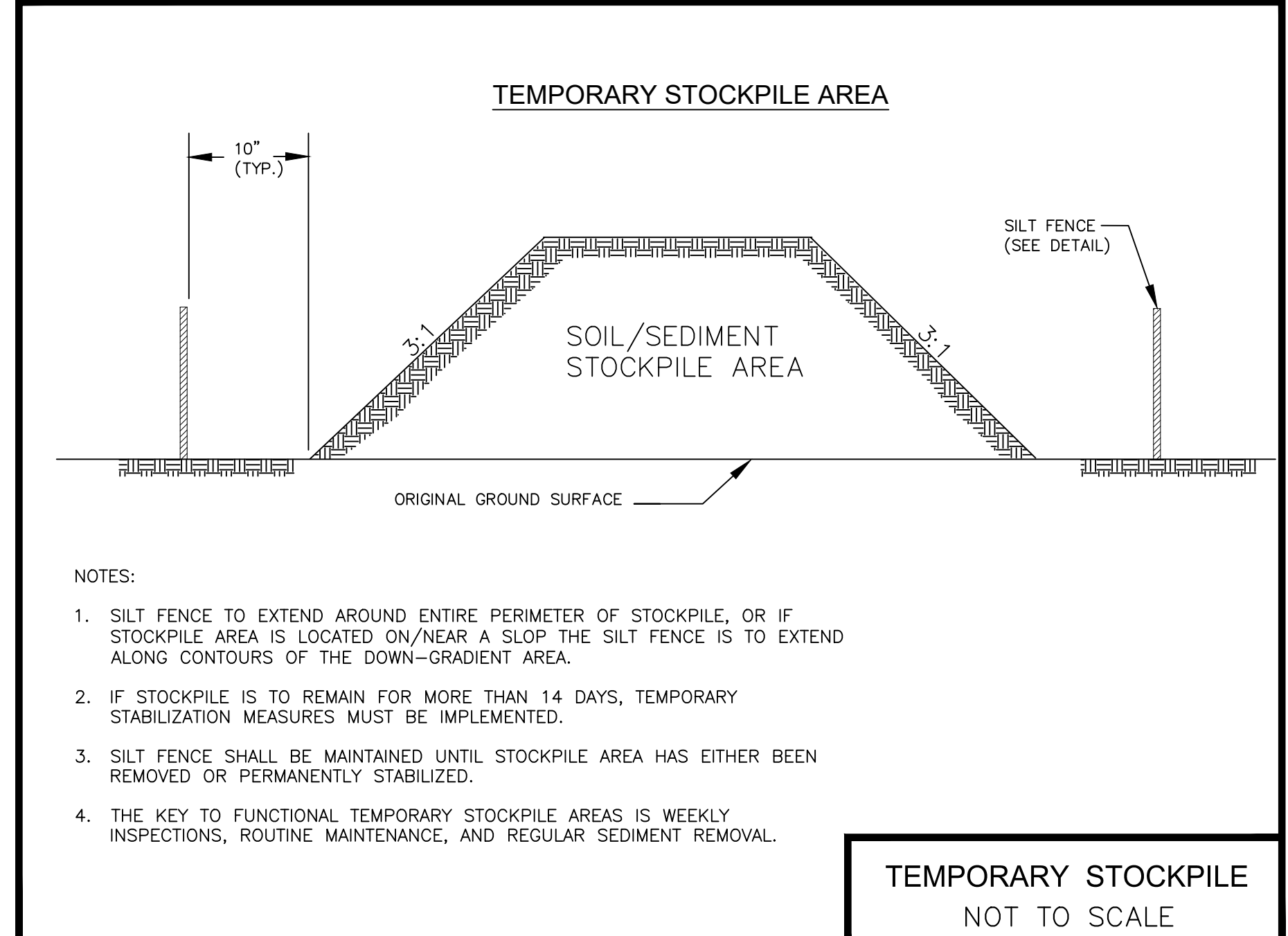
The minimum mowing height shall be 6 inches.

**Measurement and Payment**

Native Grass *Seeding and Mulching* will be measured and paid for in accordance with Article 1660-8 of the *Standard Specifications*.

**SEEDING AND MULCH**

REFERENCE: THE ABOVE IS FROM THE NCDOT'S "NATIVE SEEDING AND MULCHING\_WEST (FULL)" SPECIAL PROVISION.

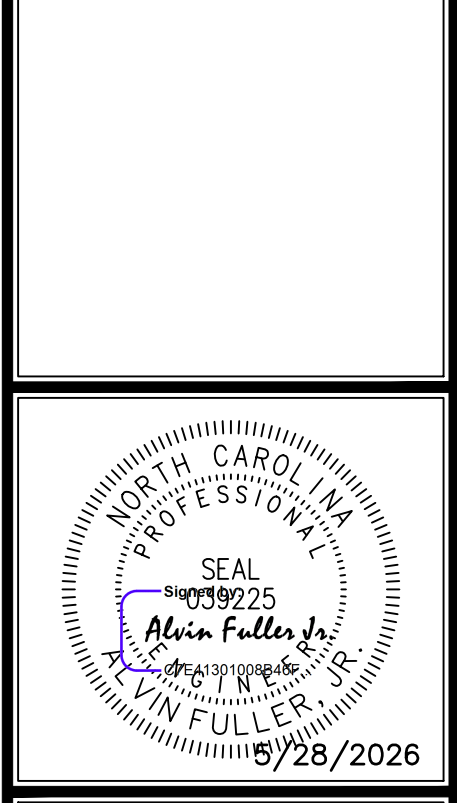


**REVISIONS**

NO.	DESCRIPTION	DATE	BY
1	REVISION BASED ON NCDOT REVIEW	1/24/25	MFC
2	REVISION BASED ON USDO REVIEW	1/27/26	MFC

**APPROVALS**

PROJECT ENG:	DESIGNED BY:	DRAWN BY:	CHECKED BY:	APPROVED:
AF	AF	JDK	MFC	AF



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SHEET TITLE  
**STANDARD EROSION AND SEDIMENTATION CONTROL DETAILS**  
DATE: AUG. 2022 | SCALE: AS SHOWN

PROJECT  
**ESTATOE TRAIL PHASE III (CASHIERS VALLEY RD. TO ROSMAN HWY.) FOR THE CITY OF BREVARD, NC**  
TRANSYLVANIA COUNTY NORTH CAROLINA

N.B. NO.	SHEET
REF.	<b>EC1</b>
PROJECT NO.	OF
<b>22017</b>	
FILE: <b>22017-SEC</b>	



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