

Erosion Prevention and Sediment Control

A. Description

Permanent control:

This work shall consist of furnishing and placing hay mulch, bark mulch, wood, straw or coconut fiber mat, synthetic mat, paper mat, jute mesh or other material as a soil stabilization product for erosion prevention and sediment control on slopes or ditches for protection to hold the ground and/or cover material (sod, seed, etc.) in place, at locations shown on the plans or where ordered.

Temporary control:

This work shall consist of furnishing, stockpiling, installing, sowing, maintaining, and removing temporary erosion prevention and sediment control devices at locations shown on the plans, or where ordered. Erosion prevention and sediment control device examples include: temporary seeding, silt fence, temporary mulch, stone check dams, and erosion stone.

B. Materials

Mulch

Hay mulch shall consist of cured hay, free from noxious weeds and rough or woody materials.

Bark mulch shall be bark chippings graded to approximately 3/8" to 2" width. The chippings shall not have been stored so long and under such conditions that the material has decomposed sufficiently so that it has lost its fibrous texture. Bark mulch must be approved as to grading and condition prior to its use.

Temporary mulches may be hay, straw, fiber mats, netting, wood cellulose, bark, chips or other acceptable material and shall be reasonably clean and free of noxious and materials toxic to plant growth.

Soil Stabilization

The soil stabilization materials furnished shall be of sufficient construction and strength to hold the processed ground and/or cover material (sod, seed, etc.) in place until an acceptable growth of natural or planted material is established.

Staples for soil stabilization material matting shall be those specified by the manufacturer.

Grass Seed for erosion control shall be one of the following:

1. Seed for temporary control shall be a quick growing species suitable to the area, such as annual or perennial ryegrass, providing a temporary cover which will not compete with the grasses subsequently sown for permanent cover.
2. Seed for a more permanent control shall be of the type specified in the plans or as set forth in NHDOT 644.2.3.

Geotextile filter fabric for silt fence shall be made from polypropylene, polyester, or other approved polymeric chemically stable material and be resistant to ultra violet radiation degradation for at least 12 months. Silt retention capacity shall be no less than 75 percent of silt and suspended solids.

Posts for silt fence shall be either wood or steel. Wood posts shall be sound quality hardwood with a minimum cross sectional area of 1.6 square inches. Steel posts shall be stand T or U section weighing not less than 1 pound per linear ft with projections for fastening wire to the fence. Maximum post spacing shall be 10 ft.

C. Construction Requirements

Permanent and Temporary erosion prevention and sediment control measure shall be incorporated into the project at the earliest practicable time, as specified on the plans. Temporary erosion prevention and sediment control measures shall be used to correct conditions that develop during construction to temporarily control erosion not associated with permanent control features.

All areas of disturbance must have temporary or permanent stabilization within 21 days of initial disturbance. After this time, any disturbance in the area must be stabilized at the end of each work day. The following exceptions apply:

1. Stabilization is not required if earthwork is to continue in the area within the next 24 hours and there is no precipitation forecast for the next 24 hours.
2. Stabilization is not required if the work is occurring in a self-contained excavation (i.e. no outlet) with a depth of 2 feet or greater (e.g. house foundation excavation, utility trenches).

All areas of disturbance must have permanent stabilization within 48 hours of reaching final grade.

D. Inspection Requirements

Personnel shall visually inspect all erosion control measures and cleared and graded areas of the construction site at least once every 7 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater, during the construction season.

The inspection will verify that any erosion control measures are in good condition. Discharge locations will be inspected to verify that pollutants are not entering the stormwater conveyance systems. Vehicle access points will be inspected for evidence of off-site sediment tracking. Any off-site accumulations of sediment will be immediately removed, and the area will be restored to pre-construction conditions.