

CHAPTER 7

EROSION & SEDIMENT CONTROL

7.00 GENERAL INSPECTION

Inspection personnel assigned to erosion control work should review project plans, specifications, special provisions, and road standards pertaining to erosion control. The right-of-way contracts should be reviewed for special treated areas not mentioned on the plans. For seeding, fertilizing, and mulching, a pre-measurement using slope distances of the project is needed before the contractor starts. Both the contractor and inspector need to know the quantities of seed, fertilizer, and mulch required on the project.

Attention should be given to the erosion control plan and proposal notes for the special items and conditions involved with each individual project. This will include seed mixtures, seed variety (Crownvetch - Emerald, Bluegrass - Kentucky, etc.), fertilizer type and rate.

Material delivered to the project and damaged due to improper storage or handling should be rejected, even though it may have been previously accepted.

[Specification 4169](#) should be referred to for material requirements.

The testing requirements for seed and fertilizer are outlined in [Materials I.M. 469.02](#) and [469.03](#).

The inspector is to observe the following operations:

- Mixing seed for Native Grass, Wildflower and Wetland Grass seeding mixtures and addition of sticking agent and inoculant
- Application of seed, fertilizer, and mulch

Record the quantities of these materials used in the project records.

All revisions made to the seed mixtures, fertilizer, or rate of fertilizer should be approved by the Office of Construction or the Office of Design (Roadside Development Section).

7.01 EQUIPMENT

Proper equipment in good working condition and operated at a reasonable speed must be used to get the best results. Where possible, the equipment should be operated on the contour or parallel to the slope.

Equipment for preparation of the seedbed includes a disc, cultipacker, spike tooth harrow, spring tooth harrow, slope harrow, and a rotary tiller. Other equipment may be approved for use provided that it achieves the desired results.

A heavy disc, such as a Rome disc, may be required in areas of heavy vegetation. A slope harrow may be required in areas of light soil, where equipment tracks damage the appearance of the seedbed.

Equipment for applying seed and fertilizer consists of a hydro-seeder, gravity seeder, end gate cyclone seeder, cyclone seeder, and a seed drill. The cyclone seeder (hand seeder) is usually used to spread seed and fertilizer in small areas or areas inaccessible to field equipment. If allowed by the contract documents, aerial equipment may be used for the application of seed and fertilizer. Contract documents may also specify where seeding must be done with a seed drill with a no-till attachment.

Equipment should be checked for proper rate of application of seed and fertilizer by measuring a representative area and weighing the required amount of seed to be applied. All seeders must be cleaned when changing seed mixtures, particularly when changing from rural seeding to urban seeding.

7.02 CONTRACT ADMINISTRATION

Both the project engineer and the inspector should review the construction period shown on the proposal form. On most projects, the contract will have a late start date with a specified number of work days.

For overseeding, the work is to be done during February and March when the soil is friable from frost action. Working days are not to be charged until April 1, unless winter work is required in the contract documents.

The placement of special ditch control for the spring planting period should be done as soon as weather and soil will allow. After April 1, working days should be charged whenever it is possible to perform the controlling operation.