

NATURAL RESOURCES CONSERVATION SERVICE CONSTRUCTION SPECIFICATION

SEEDING

1. SCOPE

The work shall consist of furnishing all labor, equipment and materials for seeding a permanent grass mixture on the areas shown on the drawings and/or all disturbed areas unless otherwise specified or approved.

2. GENERAL

Liming, fertilizing, seeding and mulching shall be performed within 10 days from disturbance any time during the year except during the fall period specified in Section 11. Temporary seeding shall be used in the summer months as specified in Section 11. Lime, fertilizer, mulch and dormant seeding shall be used in the winter after the dates specified in Section 11.

The local Natural Resources Conservation Service office shall be notified at least 48 hours prior to the date and time fertilizing, seeding and mulching operations are to be performed. These operations are to proceed only in the presence of a NRCS Engineer or designated representative unless otherwise approved.

3. LIME

The limestone, where required, shall be standard agricultural ground limestone with a moisture content not in excess of 10 percent. The rate of application, if required, shall be as specified on the drawings.

4. FERTILIZER

The fertilizer, where required, shall be a regular commercial fertilizer (including liquid form) meeting the requirements of the applicable Indiana state laws, and shall be in such physical condition to insure uniform application over the area to be fertilized. Rates of application shall be as shown on the drawings or as specified in Section 11. Organic fertilizers shall not be used.

5. SEED

The seed shall be good quality seed and shall conform to the latest seed laws of the United States and of Indiana. Species, the source of production if native grasses are used, and rate of seeding shall be as specified on the drawings or as specified in Section 11.

Seed shall be applied at a pure live seed (PLS) rate. Use the following equation to calculate the amount of bulk seed required per acre:

$$\text{Seed Rate (lbs. per acre)} / (\% \text{ Purity} \times \% \text{ Germination}) = \text{Bulk Seed Required (Lbs. per Acre)}$$

6. PREPARATION OF SEEDBED

The entire area to be seeded shall be reasonably smooth and all washes and gullies shall be filled to conform to the desired cross-section before actual seedbed preparation is begun. At this stage of the operation, the required fertilizer and lime for dry application shall be applied uniformly and incorporated into the top 3 inches of the soil with suitable tillage

equipment. In special areas, the seedbed preparation shall be as shown on the drawings. The seedbed preparation operation shall be suspended when the soil is too wet or too dry. On side slopes steeper than 2-1/2:1, the 3 inch minimum depth of seedbed preparation is not required, but the soil shall be worked enough to insure sufficient loose soil to provide adequate seed cover.

7. SOWING THE SEED

Unless otherwise specified, the seeding operation shall be performed immediately after preparation of the seedbed.

The seed shall be drilled, broadcast or hydraulically seeded by equipment that will insure uniform distribution of the seed.

- a. If a hydraulic seeder is used, the seed and fertilizer may be applied together with water.
- b. Where dry methods of seed application are used, the fertilizer shall be applied prior to seed application in accordance with Section 4 of this specification.

Immediately after seeding, the soil shall be firmed with a cultipacker or other equipment approved by the NRCS Engineer or designated representative to give the seed a cover of not more than 1/2 inch. On slopes greater than 2-1/2:1, the seed may be covered by hand without cultipacking.

8. MULCHING

The required mulching shall be performed as soon as possible after seeding unless otherwise specified. The mulch shall be applied uniformly over the area. The type and rate shall be as shown on the drawings or as specified in Section 11.

When mulching is required, all areas seeded during any one day shall be mulched within 24 hours unless otherwise approved by the NRCS Engineer or designated representative. The mulch may be spread by any means that results in a uniform cover.

The mulch shall be anchored unless otherwise approved by the NRCS Engineer or designated representative. Anchoring of the mulch may be performed by a commercially available tackifier specified by the manufacturer, a mulch anchoring tool, by installation of mulch netting, or by other methods approved by the NRCS Engineer or designated representative.

9. FERTILIZER

The following minimum amounts of fertilizer per acre shall be applied uniformly over the area to be seeded or sodded:

Nitrogen (N)	<u>60</u> Pounds
Phosphoric Acid (P2O5)	<u>60</u> Pounds
Potash (K2O)	<u>60</u> Pounds

This specification can be met by applying fertilizer having an analysis of 12-12-12 at the rate of 500 pounds per acre.

10. SEED

The following kinds and rates of seed per acre shall be sown:

<u>Kind of Seed</u>	<u>Pounds Per Acre</u>	<u>Pounds Per 1000 Sq. Ft.</u>
Low endophyte tall fescue	45	

11. ADDITIONAL ITEMS WHICH APPLY TO THIS JOB

1/2 Straw mulch shall be applied as specified in section 8 of this specification. The rate shall be 1-
tons per acre.