

## **CHAPTER 3 GRASSING AND SITE RESTORATION**

### **3.1 SCOPE**

This section covers cultivating, fertilizing and planting grass on all pipeline rights-of-way, and on all fill slopes, cut slopes, graded areas and disturbed areas as shown on the plans or as directed by the ENGINEER.

### **3.2 GENERAL**

A complete permanent grass cover of all areas to be grassed shall be obtained before these areas will be acceptable. All such areas shall be seeded within 30 days after completion of grading. All eroded areas shall be refilled and completely covered with grass before being acceptable. An acceptable grass cover is defined as a minimum 2-inch stand with bare spots less than 1 square foot after first mowing.

### **3.3 FERTILIZING AND GRASSING**

- A. General: Material shall be acceptable to the ENGINEER prior to use. Fertilizer shall be delivered in undamaged waterproof bags showing weight, chemical analysis and manufacturer. Lime shall be delivered in bags with a tag or label showing brand or trade name, magnesium carbonate equivalent and other pertinent information. Seed shall be delivered in original undamaged containers showing name of seed, net weight, percentage of pure seed and germination, origin, and date of packaging.
1. Fertilizer: Commercial type 4-12-12 or equivalent, conforming to state law.
  2. Lime: Agricultural grade ground limestone, containing at least 34% magnesium carbonate.
  3. Seed: Fescue, Bermuda or Pensacola Bahia, as required by seasonal or soil conditions, with at least 90% purity and 80% germination, conforming to state law.
- B. Planting: Topsoil shall be as specified in Chapter 2, "Earthwork".
1. Areas to be grassed shall be cultivated to a depth of 4 inches by mechanical tiller, with all clods or clumps broken up and foreign material and debris removed.
  2. Fertilizer shall be applied at a minimum rate of 1000 LB/acre, and lime applied at a minimum rate of 2000 LB/acre. Fertilizer and lime shall be thoroughly incorporated into the top 3 to 4 inches of soil, and the surface raked smooth before applying seed. Fertilizer and lime may be applied in one operation.
  3. Seed shall be applied evenly by a commercial applicator and raked in lightly. Seed shall not be sown immediately following rain, when the ground is too dry, or during windy periods. Seeded areas shall be compacted and dressed smooth with a roller or other means acceptable to the ENGINEER. Hydro-seeding is an acceptable method of grassing. Minimum application rates of seed shall be as specified below; heavier applications shall be made where necessary to provide an acceptable cover.
 

Fescue	200 LB/acre
Bermuda	40 LB/acre
Pensacola Bahia	40 LB/acre
  4. Immediately after seeding, the area shall be sprayed with asphalt emulsion or covered with a suitable erosion control fabric or other acceptable material. Asphalt emulsion shall be a type specifically designed for mulching of seeded areas. Erosion control

- fabric shall be manufactured of materials that are biodegradable within 4 to 8 months of outdoor exposure, and shall be applied per the manufacturer's recommendations.
5. After seeding is completed, seeded areas shall be watered as necessary until an acceptable grass cover is obtained.
- C. Temporary Cover: If areas to be grassed are ready for seeding at a time inappropriate for establishing the permanent grass cover, a temporary cover shall be provided for protection of such areas until the permanent cover can be established. At the appropriate time, the CONTRACTOR shall return to the site and provide the permanent cover as specified above.
1. Temporary cover shall be provided as specified above for the permanent cover, with the following exceptions:
    - a) Fertilizer shall be applied at one-half the rate specified for permanent cover.
    - b) Seed shall be Rye or Sudan Grass applied at rates to provide an adequate and acceptable temporary cover.
  2. After temporary seeding is completed, the seeded areas shall be watered until an acceptable grass cover is obtained.
- D. Maintenance: During the period of the guarantee, the CONTRACTOR shall repair all damage due to erosion and other causes, and shall maintain all grassed areas in an acceptable condition. During the maintenance period, grass shall be mowed at regular intervals and watered as required to prevent grass and soil from drying out. Maintenance instructions shall be furnished to the OWNER, and shall include cutting method and maximum grass height, and types, application frequency and recommended coverage of fertilizer and lime.
- E. In SCDOT right-of-ways, SCDOT *2007 Standard Specifications for Highway Construction* Section 810 "Seeding" shall take precedence.

*END OF SECTION*