

U-2905A

**Project Special Provisions  
Erosion Control**

Alamance County

**SEEDING AND MULCHING:**

(West)

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 (kilograms per hectare).

## Shoulder and Median Areas

**August 1 - June 1**

20# (23kg)	Kentucky Bluegrass
75# (85kg)	Hard Fescue
25# (28kg)	Rye Grain
500# (560kg)	Fertilizer
4000# (4500kg)	Limestone

**May 1 - September 1**

20# (23kg)	Kentucky Bluegrass
75# (85kg)	Hard Fescue
10# (12kg)	German or Browntop Millet
500# (560kg)	Fertilizer
4000# (4500kg)	Limestone

## Areas Beyond the Mowing Pattern, Waste and Borrow Areas:

**August 1 - June 1**

100# (110kg)	Tall Fescue
15# (17kg)	Kentucky Bluegrass
30# (34kg)	Hard Fescue
25# (28kg)	Rye Grain
500# (560kg)	Fertilizer
4000# (4500kg)	Limestone

**May 1 - September 1**

100# (110kg)	Tall Fescue
15# (17kg)	Kentucky Bluegrass
30# (34kg)	Hard Fescue
10# (12kg)	German or Browntop Millet
500# (560kg)	Fertilizer
4000# (4500kg)	Limestone

## Approved Tall Fescue Cultivars

Adventure	Chieftain	Jaguar	Rebel Jr
Adventure II	Coronado	Jaguar III	Renegade
Amigo	Crossfire II	Kentucky 31	Safari
Anthem	Debutante	Kitty Hawk	Shenandoah
Apache	Duster	Monarch	Tempo
Apache II	Falcon	Montauk	Titan
Arid	Falcon II	Mustang	Tomahawk
Austin	Finelawn	Olympic	Trailblazer
Bonanza	Finelawn I	Pacer	Tribute
Bonanza II	Finelawn Petite	Phoenix	Vegas
Brookstone	Genesis	Pixie	Wolfpack
Bulldog 51	Grande	Pyramid	Wrangler
Chapel Hill	Guardian	Rebel	
Chesapeake	Houndog	Rebel II	

Approved Kentucky Bluegrass Cultivars:

Adelphi	Columbia	Merit	Sydsport
Baron	Fylking	Plush	Touchdown
Bristol	Glade	Ram I	Vantage
Challenger	Kenblue	Rugby	

Approved Hard Fescue Cultivars:

Aurora	Nordic	Spartan	Warwick
Bardur	Reliant	Valda	
Crystal	Scaldis	Waldina	

On cut and fill slopes 2:1 or steeper add 20# (23kg) Sericea Lespedeza January 1 - December 31.

Fertilizer shall be 10-20-20 analysis. Upon written approval of the Engineer, 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.

**TEMPORARY SEEDING:**

Fertilizer shall be the same analysis as specified for *Seeding and Mulching* and applied at the rate of 400 pounds (450kg) and seeded at the rate of 50 pounds per acre (55kg per hectare). 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 (560 kg per hectare). Upon written approval of the Engineer, 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.

**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 (28kg to 85kg per hectare). The actual rate per acre (hectare) will be determined prior to the time of topdressing and the Contractor will be notified in writing of the rate per acre (hectare), 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 on this project shall be six inches (152 mm).

**SPECIALIZED HAND MOWING:**

**Description**

This work consists of specialized hand mowing around or under fixed objects, including but not limited to guardrails, signs, barriers and slopes in a method acceptable to the Engineer.

Specialized hand mowing shall be completed with mechanically powered trimmers, string trimmers, hand operated rotary mowers, or self-propelled mowers of sufficient size and quality to perform the work timely and efficiently.

The quantity of mowing to be performed will be affected by the actual conditions that occur during the construction of the project. The quantity of mowing may be increased, decreased or eliminated entirely as directed. Such variations in quantity will not be considered as alterations in the details of construction or a change in the character of the work.

**Measurement and Payment**

*Specialized Hand Mowing* will be measured and paid for as the actual number of hours worked while hand mowing along the surface of the ground, as directed. Where an area has been mowed more than once, as directed, separate measurement will be made each time the area is mowed.

Payment will be made under:

<b>Pay Item</b>	<b>Pay Unit</b>
Specialized Hand Mowing	Hour

**RESPONSE FOR EROSION CONTROL:**

The 2002 *Standard Specifications* are revised as follows:

Page 16-40, Section 1675,  
Delete Section 1675 and insert the following:

**1675-1 Description**

Furnish the labor, materials, tools and equipment necessary to move personnel, equipment, and supplies to the project necessary for the pursuit of any or all of the following work as shown herein, by an approved subcontractor.

- (A) Seeding and Mulching
- (B) Temporary Seeding and Mulching
- (C) Temporary Mulching
- (D) Fertilizer Topdressing
- (E) Repair Seeding
- (F) Supplemental Seeding
- (G) Silt Fence Installation or Repair
- (H) Installation of Matting for Erosion Control

### **1675-2 Construction Methods**

Provide an approved subcontractor who performs an erosion control action as described in Form 1675. Each erosion control action may include one or more of the above work items.

### **1675-3 Measurement and Payment**

*Response for Erosion Control* will be measured and paid for by counting the actual number of times the subcontractor moves onto the project, including borrow and waste sites, and satisfactorily completes an erosion control action described in Form 1675. The provisions of Article 104-5 of the *Standard Specifications* will not apply to this item of work.

Payment will be made under:

<b>Pay Item</b>	<b>Pay Unit</b>
Response for Erosion Control	Each

### **MINIMIZE REMOVAL OF VEGETATION:**

The Contractor shall minimize removal of vegetation at stream banks and disturbed areas within the project limits as directed.

### **STOCKPILE AREAS:**

The Contractor shall install and maintain erosion control devices sufficient to contain sediment around any erodible material stockpile areas as directed.

### **WASTE AND BORROW SOURCES:**

Payment for temporary erosion control measures, except those made necessary by the Contractor's own negligence or for his own convenience, will be paid for at the appropriate contract unit price for the devices or measures utilized in borrow sources and waste areas.

No additional payment will be made for erosion control devices or permanent seeding and mulching in any commercial borrow or waste pit. All erosion and sediment control

practices that may be required on a commercial borrow or waste site will be done at the Contractor's expense.

### **GRAVEL CONSTRUCTION ENTRANCE:**

#### **Description**

This work consists of furnishing, installing, and maintaining and removing any and all material required for the construction of a *Gravel Construction Entrance*.

#### **Materials**

Refer to Division 10

<b>Item</b>	<b>Section</b>
Filter Fabric for Drainage, Type 2	1056
Stone for Erosion Control, Class A	1042

#### **Construction Methods**

The Contractor shall install a Gravel Construction Entrance in accordance with the detail in the plans and at locations as directed.

#### **Measurement and Payment**

*Filter Fabric for Drainage* will be measured and paid for in accordance with Subarticles 876-5(C) and 876-6(C) of the *Standard Specifications*.

*Stone for Erosion Control, Class \_\_* will be measured and paid for in accordance with Articles 1610-4 and 1610-5 of the *Standard Specifications*.

Such price and payment shall be considered full compensation for all work covered by this section including all materials, construction, maintenance, and removal of *Gravel Construction Entrance*.

### **TEMPORARY DIVERSION:**

This work consists of installation, maintenance, and cleanout of *Temporary Diversions* in accordance with Section 1630 of the *Standard Specifications*. The quantity of excavation for installation and cleanout will be measured and paid for as *Silt Excavation* in accordance with Articles 1630-4 and 1630-5 of the *Standard Specifications*.