SPECIAL PROVISION

NOTE: This special provision is generally written in the imperative mood. The subject, "the *Contractor*" is implied. Also implied in this language are "*shall*", "*shall be*", or similar words and phrases. The word "*will*" generally pertains to decisions or actions of Sedgwick County Public Works.

SEEDING

1. DESCRIPTION

Prepare the seedbed with fertilizer incorporated, provide the seed and plant at the rate and in the locations designated in the Contract Documents. Apply mulch after fertilizing and seeding operations to protect the seeded area.

BID ITEMS

Seeding

<u>UNITS</u> Lump Sum

2. MATERIALS

Provide seeds and nitrogen-fixing bacteria that comply with DIVISION 2100 of the Kansas Department of Transportation Standard Specifications for State Road and Bridge Construction (2007). Do not change seed or seed mixture without approval of the Engineer.

3. CONSTRUCTION REQUIREMENTS

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TABLE 1: GRASS & WILDFLOWER SEEDING SEASONS	
Туре	Season
Cool Season Grasses	February 15 thru April 20 August 15 thru September 30
Warm Season Grasses and Wildflowers	November 15 thru June 1

Seeding Seasons. Determine the seeding season using TABLE 1.

If cool season grasses are mixed with warm season grasses, seed during the warm season seeding season. Temporary seeding may be planted any time of the year.

The Engineer may extend the seeding season a few days in special situations when only a few acres of seeding would complete the entire project.

Seed the project during the proper seeding season to protect the finished grading. This may require seeding different parts of the project at different times or seasons. Complete the area once the seeding operations begin in an area.

b. Preparation of the Seedbed with Fertilizer. Unless shown otherwise in the Contract Documents, prepare the seedbed and seed all disturbed or cultivated areas within the right-of-way and construction easements. <u>Fertilizer shall be incorporated into the</u> <u>seedbed</u>.

The Grading Contractor shall repair eroded areas before the seedbed is prepared.

In urban areas, use a landscape box to level the seedbed. Grade seedbeds to the elevations of abutting sidewalks. Remove rocks and other debris detrimental to mowing with lawn maintenance equipment.

Before seeding, apply the fertilizer to the seedbed at the rates designated in the Contract Documents. Use a fertilizer attachment on the seed drill to apply the fertilizer. The Contractor may apply fertilizer using an agricultural type "broadcast spreader." Spread the fertilizer uniformly by hand methods in areas where it is impracticable to use a seed drill.

Use tillage implements that shall penetrate 2 to 3 inches to prepare a firm, friable and weed-free seedbed with the fertilizer incorporated. If the use of disks and harrows is impracticable, prepare the seedbed using hand methods, being careful to incorporate the fertilizer uniformly.

When fertilizer is designated for use with sod, apply an even blended fertilizer (such as 12-12-12 or 15-15-15) at the rate of 1 pound of actual nitrogen per 1000 square feet.

Prepare seedbeds in developed urban and residential areas using rotary tillers or similar equipment. Tractor mounted equipment is permitted if the area is large enough to facilitate the use of such equipment.

Do not injure trees while preparing the seedbed. If the Engineer designates areas of desirable perennial native grasses to remain, do not till such areas. If areas of annual grasses such as cheat, crabgrass or triple-awn are encountered, destroy such grasses by thorough disking. Do not destroy such annual grasses if, in the opinion of the Engineer, such areas will become unstable under bare conditions. Use a no-till drill to seed the permanent grasses.

Do not till areas if temporary or existing grasses provide stable slopes with no erosion. Seed the permanent grasses into the existing cover using a no-till drill.

c. Seeding. In rural areas, use seed drills that comply with subsection 156.1 of the KDOT Standard Specifications. If it is impracticable to operate a seed drill, broadcast the seed

SPECIAL PROVISION – SEEDING

with a standard manufacture grass seeder. A hydro-seeder may be used in place of the broadcast seeder when approved by the Engineer.

On lawn areas and small areas in developed urban areas, apply the seed with equipment suitable for the size of the area. Use manually operated drop-seeders, cyclone spreaders or other similar equipment when appropriate. After the seeding, but before mulching, hand rake the seeded lawn areas.

Similar size seeds may be mixed before drilling. The seed company will mix the seeds before delivery. Each bag of mixed seeds shall have a tag indicating the quantity (pounds) of each type seed and the total weight (pounds) of the bag. The Contractor will not mix the seeds.

If required, inoculate the seeds according DIVISION 2100 of the KDOT Standard Specifications.

The drill used for seeding shall accommodate the seed sizes and weight of seed by the use of as many compartments as required. Seeds of compatible size and weight may be mixed and placed in the same compartment. Drill seed at the rate and in the locations shown in the Contract Documents. Drills shall comply with subsection 156.1 of the KDOT specifications.

Drill the seeds into the prepared seedbed. The maximum depth for drilling grass seeds is ½ inch.

After an area is fertilized and seeded, firm the soil using a cultipacker or smooth roller.

d. Mulching. Place and punch the mulch immediately after fertilizing and seeding operations according to Section 904.3a of the Kansas Department of Transportation Standard Specifications for Road and Bridge Construction. The Contractor may choose to use wood cellulose fiber mulch meeting the requirements of Section 904.3a(2).

4. MEASUREMENT AND PAYMENT

The Engineer will measure "Seeding" by the lump sum. No measurement will be made of the area seeded. Fertilizer and mulch are <u>SUBSIDIARY</u> to the bid item, "Seeding." No separate measurement or payment will be made for fertilizer and mulch.

Payment for "Seeding" at the contract unit prices is full compensation for the specified work.

01-10-11 LTP