Regional Engineers

 Jack A. Elston

 Special Provision for Seeding

 August 5, 2022

This special provision was developed to update the seeding mixtures by eliminating seed varieties no longer available and allowing alternative fescues. It was also revised to replace the seeding dates with temperature requirements and establish a consistent period of establishment.

This special provision should be inserted into all contracts with SEEDING or INTERSEEDING.

The districts should include the BDE Check Sheet marked with the applicable special provisions for the November 18, 2022 and subsequent lettings. The Project Coordination and Implementation Section will include a copy in the contract.

80445m

# SEEDING (bde)

Effective: November 1, 2022

Revise Article 250.07 of the Standard Specifications to read:

“ **250.07 Seeding Mixtures.** The classes of seeding mixtures and combinations of mixtures will be designated in the plans.

When an area is to be seeded with two or more seeding classes, those mixtures shall be applied separately on the designated area within a seven day period. Seeding shall occur prior to placement of mulch cover. A Class 7 mixture can be applied at any time prior to applying any seeding class or added to them and applied at the same time.

|  |
| --- |
| TABLE 1 - SEEDING MIXTURES |
| Class - Type | Seeds | lb/acre (kg/hectare) |
| 1 | Lawn Mixture 1/ | Kentucky Bluegrass | 100 (110) |
|  |  | Perennial Ryegrass | 60 (70) |
|  |  | *Festuca rubra* ssp. r*ubra* (Creeping Red Fescue) | 40 (50) |
| 1A | Salt Tolerant | Kentucky Bluegrass | 60 (70) |
|  | Lawn Mixture 1/ | Perennial Ryegrass | 20 (20) |
|  |  | *Festuca rubra* ssp. *rubra* (Creeping Red Fescue)  | 20 (20) |
|  |  | *Festuca brevipilla* (Hard Fescue) | 20 (20) |
|  |  | *Puccinellia distans* (Fults Saltgrass or Salty Alkaligrass) | 60 (70) |
| 1B | Low Maintenance | Turf-Type Fine Fescue 3/ | 150 (170) |
|  | Lawn Mixture 1/ | Perennial Ryegrass | 20 (20) |
|  |  | Red Top | 10 (10) |
|  |  | *Festuca rubra* ssp. *rubra* (Creeping Red Fescue) | 20 (20) |
| 2 | Roadside Mixture 1/ | *Lolium arundinaceum* (Tall Fescue) | 100 (110) |
|  |  | Perennial Ryegrass | 50 (55) |
|  |  | *Festuca rubra* ssp. r*ubra* (Creeping Red Fescue) | 40 (50) |
|  |  | Red Top | 10 (10) |
| 2A | Salt Tolerant | *Lolium arundinaceum* (Tall Fescue) | 60 (70) |
|  | Roadside Mixture 1/ | Perennial Ryegrass | 20 (20) |
|  |  | *Festuca rubra* ssp. *rubra* (Creeping Red Fescue) | 30 (20) |
|  |  | *Festuca brevipila* (Hard Fescue)  | 30 (20) |
|  |  | *Puccinellia distans* (Fults Saltgrass or Salty Alkaligrass) | 60 (70) |
| 3 | Northern IllinoisSlope Mixture 1/ | *Elymus canadensis*(Canada Wild Rye) 5/ | 5 (5) |
|  |  | Perennial Ryegrass | 20 (20) |
|  |  | Alsike Clover 4/ | 5 (5) |
|  |  | *Desmanthus illinoensis*(Illinois Bundleflower) 4/ 5/ | 2 (2) |
|  |  | *Schizachyrium scoparium* | 12 (12) |
|  |  | (Little Bluestem) 5/ |  |
|  |  | *Bouteloua curtipendula* | 10 (10) |
|  |  | (Side-Oats Grama) 5/ |  |
|  |  | *Puccinellia distans* (Fults Saltgrass or Salty Alkaligrass) | 30 (35) |
|  |  | Oats, Spring | 50 (55) |
|  |  | Slender Wheat Grass 5/ | 15 (15) |
|  |  | Buffalo Grass 5/ 7/ | 5 (5) |
| 3A | Southern Illinois | Perennial Ryegrass | 20 (20) |
|  | Slope Mixture 1/ | *Elymus canadensis*(Canada Wild Rye) 5/ | 20 (20) |
|  |  | *Panicum virgatum* (Switchgrass) 5/ | 10 (10) |
|  |  | *Schizachyrium scoparium*(Little Blue Stem) 5/ | 12 (12) |
|  |  | *Bouteloua curtipendula*(Side-Oats Grama) 5/ | 10 (10) |
|  |  | *Dalea candida* (White Prairie Clover) 4/ 5/ | 5 (5) |
|  |  | *Rudbeckia hirta* (Black-Eyed Susan) 5/ | 5 (5) |
|  |  | Oats, Spring | 50 (55) |

|  |  |  |
| --- | --- | --- |
| Class – Type | Seeds | lb/acre (kg/hectare) |
| 4 | Native Grass 2/ 6/ | *Andropogon gerardi* | 4 (4) |
|  |  | (Big Blue Stem) 5/ |  |
|  |  | *Schizachyrium* *scoparium* | 5 (5) |
|  |  | (Little Blue Stem) 5/ |  |
|  |  | *Bouteloua curtipendula* | 5 (5) |
|  |  | (Side-Oats Grama) 5/ |  |
|  |  | *Elymus canadensis* | 1 (1) |
|  |  | (Canada Wild Rye) 5/ |  |
|  |  | *Panicum virgatum* (Switch Grass) 5/ | 1 (1) |
|  |  | *Sorghastrum nutans* (Indian Grass) 5/ | 2 (2) |
|  |  | Annual Ryegrass | 25 (25) |
|  |  | Oats, Spring | 25 (25) |
|  |  | Perennial Ryegrass | 15 (15) |
| 4A | Low Profile | *Schizachyrium* *scoparium* | 5 (5) |
|  | Native Grass 2/ 6/ | (Little Blue Stem) 5/ |  |
|  |  | *Bouteloua curtipendula* | 5 (5) |
|  |  | (Side-Oats Grama) 5/ |  |
|  |  | *Elymus canadensis* | 1 (1) |
|  |  | (Canada Wild Rye) 5/ |  |
|  |  | *Sporobolus heterolepis* | 0.5 (0.5) |
|  |  | (Prairie Dropseed) 5/ |  |
|  |  | Annual Ryegrass | 25 (25) |
|  |  | Oats, Spring | 25 (25) |
|  |  | Perennial Ryegrass | 15 (15) |
| 4B | Wetland Grass and | Annual Ryegrass | 25 (25) |
|  | Sedge Mixture 2/ 6/ | Oats, Spring | 25 (25) |
|  |  | Wetland Grasses (species below) 5/ | 6 (6) |
|  |  |  |  |
|  | Species: | % By Weight |
|  | *Calamagrostis canadensis* (Blue Joint Grass) | 12 |
|  | *Carex lacustris* (Lake-Bank Sedge) | 6 |
|  | *Carex slipata* (Awl-Fruited Sedge) | 6 |
|  | *Carex stricta* (Tussock Sedge) | 6 |
|  | *Carex vulpinoidea* (Fox Sedge) | 6 |
|  | *Eleocharis acicularis* (Needle Spike Rush) | 3 |
|  | *Eleocharis obtusa* (Blunt Spike Rush) | 3 |
|  | *Glyceria striata* (Fowl Manna Grass) | 14 |
|  | *Juncus effusus* (Common Rush) | 6 |
|  | *Juncus tenuis* (Slender Rush) | 6 |
|  | *Juncus torreyi* (Torrey's Rush) | 6 |
|  | *Leersia oryzoides* (Rice Cut Grass) | 10 |
|  | *Scirpus acutus* (Hard-Stemmed Bulrush) | 3 |
|  | *Scirpus atrovirens* (Dark Green Rush) | 3 |
|  | *Bolboschoenus fluviatilis* (River Bulrush) | 3 |
|  | *Schoenoplectus tabernaemontani* (Softstem Bulrush) | 3 |
|  | *Spartina pectinata* (Cord Grass) | 4 |

|  |  |  |
| --- | --- | --- |
| Class – Type | Seeds | lb/acre (kg/hectare) |
| 5 | Forb with | Annuals Mixture (Below)  | 1 (1) |
|  | Annuals Mixture 2/ 5/ 6/ | Forb Mixture (Below)  | 10 (10) |
|  |  |  |
|  | Annuals Mixture - Mixture not exceeding 25 % by weight of |  |
|  | any one species, of the following: |  |
|  |  |  |
|  | *Coreopsis lanceolata* (Sand Coreopsis) |  |
|  | *Leucanthemum maximum* (Shasta Daisy) |  |
|  | *Gaillardia pulchella* (Blanket Flower) |  |
|  | *Ratibida columnifera* (Prairie Coneflower) |  |
|  | *Rudbeckia hirta* (Black-Eyed Susan) |  |
|  |  |  |
|  | Forb Mixture - Mixture not exceeding 5 % by weight PLS of |  |
|  | any one species, of the following: |  |
|  |  |  |
|  | *Amorpha canescens* (Lead Plant) 4/ |  |
|  | *Anemone cylindrica* (Thimble Weed) |  |
|  | *Asclepias tuberosa* (Butterfly Weed) |  |
|  | *Aster azureus* (Sky Blue Aster) |  |
|  | *Symphyotrichum* *leave* (Smooth Aster) |  |
|  | *Aster novae-angliae* (New England Aster) |  |
|  | *Baptisia leucantha* (White Wild Indigo) 4/ |  |
|  | *Coreopsis palmata* (Prairie Coreopsis) |  |
|  | *Echinacea pallida* (Pale Purple Coneflower) |  |
|  | *Eryngium yuccifolium* (Rattlesnake Master) |  |
|  | *Helianthus mollis* (Downy Sunflower) |  |
|  | *Heliopsis helianthoides* (Ox-Eye) |  |
|  | *Liatris aspera* (Rough Blazing Star) |  |
|  | *Liatris pycnostachya* (Prairie Blazing Star) |  |
|  | *Monarda fistulosa* (Prairie Bergamot) |  |
|  | *Parthenium integrifolium* (Wild Quinine) |  |
|  | *Dalea candida* (White Prairie Clover) 4/ |  |
|  | *Dalea purpurea* (Purple Prairie Clover) 4/ |  |
|  | *Physostegia virginiana* (False Dragonhead) |  |
|  | *Potentilla arguta* (Prairie Cinquefoil) |  |
|  | *Ratibida pinnata* (Yellow Coneflower) |  |
|  | *Rudbeckia subtomentosa* (Fragrant Coneflower) |  |
|  | *Silphium laciniatum* (Compass Plant) |  |
|  | *Silphium terebinthinaceum* (Prairie Dock) |  |
|  | *Oligoneuron rigidum* (Rigid Goldenrod) |  |
|  | *Tradescantia ohiensis* (Spiderwort) |  |
|  | *Veronicastrum virginicum* (Culver's Root) |  |

|  |  |  |
| --- | --- | --- |
| Class – Type | Seeds | lb/acre (kg/hectare) |
| 5A | Large Flower Native | Forb Mixture (see below) | 5 (5) |
|  | Forb Mixture 2/ 5/ 6/ |  |  |
|  |  |  |  |
|  | Species: | % By Weight |
|  | *Aster novae-angliae* (New England Aster) | 5 |
|  | *Echinacea pallida* (Pale Purple Coneflower) | 10 |
|  | *Helianthus mollis* (Downy Sunflower) | 10 |
|  | *Heliopsis helianthoides* (Ox-Eye) | 10 |
|  | *Liatris pycnostachya* (Prairie Blazing Star) | 10 |
|  | *Ratibida pinnata* (Yellow Coneflower) | 5 |
|  | *Rudbeckia hirta* (Black-Eyed Susan) | 10 |
|  | *Silphium laciniatum* (Compass Plant) | 10 |
|  | *Silphium terebinthinaceum* (Prairie Dock) | 20 |
|  | *Oligoneuron rigidum* (Rigid Goldenrod) | 10 |
| 5B | Wetland Forb 2/ 5/ 6/ | Forb Mixture (see below)  | 2 (2) |
|  |  |  |  |
|  | Species: | % By Weight |
|  | *Acorus calamus* (Sweet Flag) | 3 |
|  | *Angelica atropurpurea* (Angelica) | 6 |
|  | *Asclepias incarnata* (Swamp Milkweed) | 2 |
|  | *Aster puniceus* (Purple Stemmed Aster) | 10 |
|  | *Bidens cernua* (Beggarticks) | 7 |
|  | *Eutrochium maculatum* (Spotted Joe Pye Weed) | 7 |
|  | *Eupatorium perfoliatum* (Boneset) | 7 |
|  | *Helenium autumnale* (Autumn Sneeze Weed) | 2 |
|  | *Iris virginica shrevei* (Blue Flag Iris) | 2 |
|  | *Lobelia cardinalis* (Cardinal Flower) | 5 |
|  | *Lobelia siphilitica* (Great Blue Lobelia) | 5 |
|  | *Lythrum alatum* (Winged Loosestrife) | 2 |
|  | *Physostegia virginiana* (False Dragonhead) | 5 |
|  | *Persicaria* *pensylvanica* (Pennsylvania Smartweed) | 10 |
|  | *Persicaria* l*apathifolia* (Curlytop Knotweed) | 10 |
|  | *Pychanthemum virginianum* (Mountain Mint) | 5 |
|  | *Rudbeckia laciniata* (Cut-leaf Coneflower) | 5 |
|  | *Oligoneuron* *riddellii* (Riddell Goldenrod) | 2 |
|  | *Sparganium eurycarpum* (Giant Burreed) | 5 |
| 6 | ConservationMixture 2/ 6/ | *Schizachyrium* *scoparium*(Little Blue Stem) 5/ | 5 (5) |
|  |  | *Elymus canadensis*(Canada Wild Rye) 5/ | 2 (2) |
|  |  | Buffalo Grass 5/ 7/ | 5 (5) |
|  |  | Vernal Alfalfa 4/ | 15 (15) |
|  |  | Oats, Spring | 48 (55) |
| 6A | Salt TolerantConservation | *Schizachyrium* *scoparium*(Little Blue Stem) 5/ | 5 (5) |
|  | Mixture 2/ 6/ | *Elymus canadensis*(Canada Wild Rye) 5/ | 2 (2) |
|  |  | Buffalo Grass 5/ 7/ | 5 (5) |
|  |  | Vernal Alfalfa 4/ | 15 (15) |
|  |  | Oats, Spring | 48 (55) |
|  |  | *Puccinellia distans* (Fults Saltgrass or Salty Alkaligrass) | 20 (20) |
| 7 | Temporary Turf | Perennial Ryegrass | 50 (55) |
|  | Cover Mixture | Oats, Spring  | 64 (70) |

Notes:

1/ Seeding shall be performed when the ambient temperature has been between 45 ⁰F (7 ⁰C) and 80 ⁰F (27 ⁰C) for a minimum of seven (7) consecutive days and is forecasted to be the same for the next five (5) days according to the National Weather Service.

2/ Seeding shall be performed in late fall through spring beginning when the ambient temperature has been below 45 ⁰F (7 ⁰C) for a minimum of seven (7) consecutive days and ending when the ambient temperature exceeds 80 ⁰F (27 ⁰C) according to the National Weather Service.

3/ Specific variety as shown in the plans or approved by the Engineer.

4/ Inoculation required.

5/ Pure Live Seed (PLS) shall be used.

6/ Fertilizer shall not be used.

7/ Seed shall be primed with KNO3 to break dormancy and dyed to indicate such.

Seeding will be inspected after a period of establishment. The period of establishment shall be six (6) months minimum, but not to exceed nine (9) months. After the period of establishment, areas not exhibiting 75 percent uniform growth shall be interseeded or reseeded, as determined by the Engineer, at no additional cost to the Department.”

80445