

## SECTION 32 9223 - SODDING

### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. Fertilizing.
- B. Sod installation.
- C. Maintenance.

#### 1.2 RELATED REQUIREMENTS

- A. Section 32 1125 – Turf Surfaced Roadways: Materials and installation of turf surfaced roadways.

#### 1.3 DEFINITIONS

- A. Weeds: Includes Dandelion, Jimsonweed, Quackgrass, Horsetail, Morning Glory, Rush Grass, Mustard, Lambsquarter, Chickweed, Cress, Crabgrass, Canadian Thistle, Nutgrass, Poison Oak, Blackberry, Tansy Ragwort, Bermuda Grass, Johnson Grass, Poison Ivy, Nut Sedge, Nimble Will, Bindweed, Bent Grass, Wild Garlic, Perennial Sorrel, and Brome Grass.

#### 1.4 REFERENCE STANDARDS

- A. TPI (SPEC) - Guideline Specifications to Turfgrass Sodding 2006.

#### 1.5 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Certificate: Certify grass species and location of sod source.
- C. Certificate: Certify fertilizer and herbicide mixture approval by authority having jurisdiction.
- D. Maintenance Data: Include maintenance instructions, cutting method and maximum grass height; types, application frequency, and recommended coverage of fertilizer; and herbicides.
- E. Maintenance Contract.

#### 1.6 QUALITY ASSURANCE

- A. Sod Producer: Company specializing in sod production and harvesting with minimum five years' experience and certified by the State of Connecticut.
- B. Installer Qualifications: Company approved by the sod producer.

#### 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver sod on pallets. Protect exposed roots from dehydration.
- B. Do not deliver more sod than can be laid within 24 hours.

## 1.8 MAINTENANCE

- A. Provide a separate maintenance contract for specified maintenance service.

## PART 2 PRODUCTS

### 2.1 REGULATORY REQUIREMENTS

- A. Comply with regulatory agencies for fertilizer and herbicide composition.
- B. Provide certificate of compliance from authority having jurisdiction indicating approval of fertilizer and herbicide mixture.

### 2.2 MATERIALS

- A. Sod: TPI (SPEC), Certified Turfgrass Sod quality; cultivated grass sod; type indicated in plant schedule on Drawings; with strong fibrous root system, free of stones, burned or bare spots; containing no more than 5 weeds per 1000 sq ft (100 sq m). Minimum age of 18 months, with root development that will support its own weight without tearing, when suspended vertically by holding the upper two corners.
- B. Turfgrass Species: Sod of grass species as follows, with not less than 95 percent germination, not less than 85 percent pure seed, and not more than 0.5 percent weed seed:
  - 1. Mix of three to six new varieties of turf-type fescues which require reduced frequency of watering, fertilization, and mowing as recommended by the sod producer.

### 2.3 FERTILIZERS

- A. Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent from natural organic sources of urea formaldehyde, phosphorous, and potassium with nitrogen, phosphorous and potassium in amounts recommended in the soil analysis per Section 32 9119.13 - Topsoil Placement and Grading.
- B. Fertilizer: Slow-release Fertilizer: Granular or pelleted fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorous and potassium in amounts recommended the soil analysis per Section 32 9119.13 - Topsoil Placement and Grading.
- C. Water: Clean, fresh, and free of substances or matter that could inhibit vigorous growth of grass.

### 2.4 HERBICIDES

- A. Herbicides: Herbicide, registered and approved by the EPA, acceptable to authorities having jurisdiction, and of type recommended by manufacturer for each specific problem and as required for Project conditions and application. Do not use restricted pesticides unless authorized in writing by authorities having jurisdiction.
  - 1. Pre-Emergent Herbicide (Selective and Nonselective): Effective for controlling the germination or growth of weeds within planted areas at the soil level directly below the mulch layer.
  - 2. Post-Emergent Herbicide (Selective and Nonselective): Effective for controlling weed growth that has already germinated.

## 2.5 ACCESSORIES

- A. Wood Pegs: Softwood, sufficient size, and length to ensure anchorage of sod on slope.

## 2.6 FIELD CONDITIONS

- A. Planting Restrictions: Plant during one of the following periods. Coordinate planting periods with initial maintenance periods to provide required maintenance from date of Substantial Completion.
  - 1. CONNECTICUT:
    - a) Spring Planting: March 15th to June 15th.
    - b) Fall Planting: August 15th to October 15th.
- B. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit planting to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Verify that prepared soil base is ready to receive the work of this section.

### 3.2 PREPARATION

- A. Prepare subgrade in accordance with Section 31 2200.

### 3.3 FERTILIZING

- A. Apply fertilizer in accordance with manufacturer's instructions.
- B. Apply after smooth raking of topsoil and prior to installation of sod.
- C. Apply fertilizer no more than 48 hours before laying sod.
- D. Mix thoroughly into upper 2 inches (50 mm) of topsoil.
- E. Lightly water to aid the dissipation of fertilizer.

### 3.4 LAYING SOD

- A. Moisten prepared surface immediately prior to laying sod.
- B. Lay sod immediately after delivery to site to prevent deterioration.
- C. Lay sod smooth and tight with no open joints visible, and no overlapping; stagger end joints 12 inches (300 mm) minimum. Do not stretch or overlap sod pieces.
- D. Where new sod adjoins existing grass areas, align top surfaces.
- E. Where sod is placed adjacent to hard surfaces, such as curbs, pavements, etc., place top elevation of sod 1/2 inch (13 mm) below top of hard surface.

- F. On slopes 6 inches per foot (500 mm per m) and steeper, lay sod perpendicular to slope and secure every row with wooden pegs at maximum 2 feet (600 mm) on center. Drive pegs flush with soil portion of sod.
- G. Water sodded areas immediately after installation. Saturate sod to 4 inches (100 mm) of soil.
- H. After sod and soil have dried, roll sodded areas to ensure good bond between sod and soil and to remove minor depressions and irregularities. Roll sodded areas with roller not exceeding 2000 lbs. (Roll sodded areas with roller not exceeding 900 kg.)

### 3.5 MAINTENANCE

- A. Provide maintenance at no extra cost to Owner; Owner will not pay for water.
- B. See Section 01 7000 - Execution and Closeout Requirements, for additional requirements relating to maintenance service.
- C. Provide a separate maintenance contract for specified maintenance service.
- D. Maintain sodded areas immediately after placement until grass is well established and exhibits a vigorous growing condition.
- E. Mow grass at regular intervals to maintain at a maximum height of 2-1/2 inches (65 mm). Do not cut more than 1/3 of grass blade at any one mowing.
- F. Neatly trim edges and hand clip where necessary.
- G. Immediately remove clippings after mowing and trimming.
- H. Water to prevent grass and soil from drying out.
- I. Roll surface to remove irregularities.
- J. Control growth of weeds. Apply herbicides in accordance with manufacturer's instructions. Remedy damage resulting from improper use of herbicides.
- K. Immediately replace sod to areas that show deterioration or bare spots.
- L. Protect sodded areas with warning signs during maintenance period.

### 3.6 SATISFACTORY TURF

- A. Turf installations shall be, at the end of maintenance period, a healthy, uniform, close stand of grass has been established, free of weeds and surface irregularities as determined by Landscape Architect.
- B. Use specified materials to reestablish turfgrass that does not comply with requirements and continue maintenance until turf is satisfactory.

### 3.7 CLEAN UP

- A. Promptly remove soil and debris created by turf work from paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.
- B. Remove nondegradable erosion-control measures after grass establishment period.

END OF SECTION