

## SECTION 32 92 00

### TURF AND GRASSES

#### PART 1 GENERAL

##### 1.01 SUMMARY

- A. Section Includes:
  - 1. Restoration of construction area by installation of topsoil, seed, sod, soil amendments, mulch, and erosion control.
- B. Related Sections:
  - 1. Section 01 57 13 - Temporary Erosion and Sediment Control.
  - 2. Section 31 23 00 - Excavation and Fill.
  - 3. Section 32 93 00 – Trees, Shrubs, Perennials.

##### 1.02 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment
  - 1. Seed Mixture. Measurement will be by the pound of specified seed mixture sown.
  - 2. Roadside seeding. The unit of measurement and basis of payment shall be by the square yard or acre. The contract price bid for the roadside seeding shall include the cost of furnishing and installing seed, mulch and commercial fertilizer.
  - 3. Sodding. Measurement will be by the square yard of specified sod installed. Payment shall include all preparation of topsoil prior to placement.
  - 4. Fertilizer. The cost shall be considered incidental to Seeding unless a specific bid item is provided.
  - 5. Mulch Material. The cost shall be considered incidental to Seeding unless a specific bid item is provided.
  - 6. Water for sod shall conform to MnDOT 2575 with the exception that the cost of water shall be considered incidental

##### 1.03 REFERENCES

- A. Minnesota Department of Transportation "Standard Specifications for Construction" 2020 Edition (MnDOT Spec.).

##### 1.04 SUBMITTALS

- A. Provide the following submittals consistent with Section 01 33 00.
- B. Provide source and invoice for seed to be used for this Project.
- C. Producer's certificate of compliance – Written documentation verifying compliance of mixture of seed furnished. Include percentage of various seed species, year of production, germination rate, seed bag tags, and weed seed content. Submit to the Engineer at least 5 days prior to delivery.
- D. Species within native seed mixes species shall have their origin documented by the Minnesota Crop Improvement Association (MCIA) to certify that the product is a local ecotype plant.
- E. Label from soil moisture amendment product utilized.

F. Provide sample of compost blend to Engineer when compost is bid.

#### 1.05 TURF ESTABLISHMENT PERIOD

- A. The Establishment Period for plants shall begin for immediately after installation, with the approval of the Engineer, and continue until the date that the Engineer performs a final inspection:
1. The establishment period for seeded and sodded areas is 30 days.

### **PART 2 PRODUCTS**

#### 2.01 FERTILIZER

- A. Fertilizer, Type 3 shall be applied to all seed areas at the rate of 200 lbs/acre.

#### 2.02 SEED

- A. Seed shall be in accordance with Mn/DOT Technical Memorandum: 05-03-ENV-01. MnDOT seed mixture 25-141 shall be used in all rural seeding operations as determined by the Engineer and MnDOT seed mixture 25-151 shall be used in all urban seeding operations as determined by the Engineer.
- B. Sod shall be Sodding Type Mineral.
- C. Any sod grown in peat will not be acceptable.

#### 2.03 TOPSOIL

- A. Topsoil used for sodding and seeding areas shall be in accordance with Section 3877 of the Minnesota Department of Transportation Standard Specification.
- B. Material for topsoil borrow shall conform to Mn/DOT Spec. 3877.
- C. 100% of the material, including soil clumps must pass a 1" sieve.
- D. Imported topsoil may be required.

### **PART 3 EXECUTION**

#### 3.01 SOWING SEED

- A. The seeding shall not be done until the Engineer has inspected the area and approved the subgrade preparation and topsoil materials.
- B. If so directed by the Engineer, the Contractor shall reseed, at the Contractor's cost, any area on which the original seed has failed to grow, using the type of seed directed by the Engineer.

#### 3.02 SOD

- A. The Contractor shall furnish and install sod and topsoil to the areas designated by the Engineer. Sod shall be Sodding Type Mineral. Any sod grown in peat will not be acceptable.

- B. The Contractor shall use a sod cutter to make a straight line cut at full sod widths to match existing sod areas. Waste material shall then be removed and the area prepared to allow a depth of four inches (4") for topsoil placement.
- C. The topsoil shall not be placed until the Engineer has inspected the area and approved the subgrade preparation and topsoil materials. Sod shall be placed ½" below flush level with concrete sidewalks or other features to allow proper drainage.
- D. The topsoil fine grading shall not be completed more than twenty-four (24) hours prior to the sod laying operation. The Contractor shall be required to remove topsoil placed on unapproved areas or topsoil which does not meet Mn/DOT Spec. 3877 with such removal at the Contractor's expense.
- E. At all times during grading, preparation and sod laying, it shall be the Contractor's responsibility to see that all catch basins in the working area are kept clean. Gutters shall be cleaned and free of dirt and other materials at the end of each working day to ensure proper drainage.

### 3.03 FERTILIZER

- A. Fertilizer type 3 shall be applied to all seed areas at the rate of 200 lbs/acre.

### 3.04 TOPSOIL

- A. The Contractor shall not dump the topsoil on the street.
- B. The Contractor shall furnish and four inches (4") of topsoil to the areas designated by the Engineer.
- C. Prior to sod installation, all topsoil borrow material must be approved by the Engineer.
- D. The grading shall consist of a uniform and smooth surface.
- E. Any sags or rises shall be corrected prior to the placement of sod or seed.

### 3.05 TURF ESTABLISHMENT

- A. Water seeded and or sodded areas as necessary during the establishment period to provide establishment of turf over 85% per each square foot of seeded areas and 100% of sodded areas.

### 3.06 MULCH

- A. Type 1 mulch shall be applied in accordance with Section 2575.3 of the Minnesota Department of Transportation Standard Specification when seeding operations are taking place.
- B. Type 6 (hydro mulch blend) shall be in accordance with Section 3884 of the Minnesota Department of Transportation Standard Specification.
- C. Areas to be mulched shall be as shown on the plan or as directed by the Engineer in the field.

### 3.07 WATER

- A. Watering of the seed shall be the responsibility of the Contractor.
- B. The watering of seed shall conform to Mn/DOT Specification 2575.3.

- C. Water can be purchased from the City of Northfield Water Salesman located at the City of Northfield Maintenance Facility.

### 3.08 STREET SWEEPING

- A. The Contractor shall sweep the streets following the completion of the sodding and seeding operations.
- B. All sweeping shall be completed within three (3) calendar days after completion of the sodding and seeding operation.
- C. This sweeping shall be with a pick-up power sweeper and shall continue until all loose material is completely cleaned up to the satisfaction of the City Engineer.
- D. Also, all catch basins shall be cleaned to the Engineer's satisfaction within the same time requirements stated above.

**END OF SECTION**