
SECTION 02910 -SEEDING

All work and materials shall conform to the Drawings and the provisions of MDOT SECTION 618- SEEDING, with the following modifications and additions:

MODIFICATIONS:

Section 618.01 a. Seed mixture for all lawn areas shall be modified from "Park Mixture" to the following:

A.	Lawn Seed Mixture:		
	<u>Name</u>	<u>Proportion by Weight</u>	<u>% Germination</u>
	Baron Bluegrass	20%	80
	Kentucky Bluegrass	20%	80
	Creeping Red Fescue	30%	85
	Champion Perennial Ryegrass	30%	90

Section 618.03 c. Modify seed rate of application for Seeding Method 1 to 5.50 lbs per Unit.

ADDITIONS:

PART 2 PRODUCTS

2.01 TOPSOIL:

- A. General: Limited topsoil is available on-site for re-use in landscape work. Contractor shall provide additional topsoil as required to complete landscape work. Before delivery of imported topsoil, furnish Resident with written statement giving location of properties from which topsoil is to be obtained, names and addresses of owners, depth to be stripped, and crops grown during past 2 years.

- B. Topsoil Testing: Provide soils testing by an approved soil testing laboratory, for both existing stockpiled topsoil and any topsoil imported from other sources. Submit following materials certification for each source of topsoil used:
 - a. Ph Factor.
 - b. Mechanical Analysis.
 - c. Percentage of Organic Content.
 - d. Recommendations on type and quantity of additives required to establish satisfactory Ph factor and supply of nutrients to bring topsoil to satisfactory level for planting.

- C. Topsoil Material: Fertile, friable, natural topsoil of loamy character, without admixture of subsoil material, obtained from a well-drained arable site, free from all clay, lumps, coarse sands, stones, plants, roots, sticks, and other foreign materials greater than 1/2" in every dimension, with acidity range of between Ph 5.0 and 7.0, and shall contain not less than 7% organic matter by weight as determined by loss on ignition of moisture-free samples as dried at 65 degrees C.
 - 1. Use only topsoil, whether stockpiled on site or imported, which is representative of topsoil soil test report as specified.

2.02 MULCH

- A. Anti-Erosion Mulch: Provide clean, seed-free salt hay or threshed straw of wheat, rye, oats or barley.

PART 3 EXECUTION

3.01 PREPARATION

- A. General: Stake seeding locations and outline areas before start of planting work.
1. NOTE: Notify Resident and allow opportunity for observing subgrade conditions prior to placing/spreading of any topsoil.
- B. Planting Soil (Topsoil) Depths: Unless indicated otherwise, provide planting soil depths not less than 4" for all lawn areas.
- C. Preparation for Planting Lawns at Changed Grades:
1. Loosen subgrade of lawn areas to a minimum depth of 4 inches. Remove stones over 1-1/2 inch in any dimension and sticks, roots, rubbish and other extraneous matter. Limit preparation to areas which will be planted promptly after preparation.
 2. Place approximately ½ of total amount of top soil required. Work into top of loosened subgrade to create a transition layer and then place remainder of planting soil. Add specified soil amendments and mix thoroughly into upper 4 inches of topsoil.
- D. Preparation for Planting Lawns at Unchanged Grades: Where lawns are to be planted in areas that have not been altered or disturbed by excavating, grading, or stripping operations, prepare soil for lawn planting as follows: Till to a depth of not less than 6 inches; apply soil amendments and initial fertilizers as specified; remove high areas and fill in depressions; till soil to a homogenous mixture of fine texture, free of all lumps, clods, stones, roots and other extraneous matter.
1. Apply specified commercial fertilizer at rates specified and thoroughly mix into upper 2 inches of topsoil. Delay application of fertilizer if lawn planting will not follow within a few days.
 2. Prior to preparation of unchanged areas, remove existing grass, vegetation and turf. Dispose of such material in accordance with all local, state, and federal regulations; do not turn over into soil being prepared for lawns.
- E. Preparation for Planting Lawns, General:
1. Fine grade lawn areas to smooth, even surface with loose, uniformly fine texture. Roll, rake and drag lawn areas, remove ridges and fill depressions, as required to meet finish grades. Remove all lumps, clods, stones, roots, and other extraneous matter greater than 1" size. Limit fine grading to areas which can be planted immediately after grading.
 2. Moisten prepared lawn areas before planting if soil is dry. Water thoroughly and allow surface moisture to dry before planting lawns. Do not create a muddy soil condition.

3. Restore lawn areas to specified condition if eroded or otherwise disturbed after fine grading and prior to planting.

3.02 HYDROSEEDING NEW LAWNS:

- A. NOTE: Hydro-seeding method is required for seeding except as otherwise approved by Resident.
- B. Apply slurry uniformly to all areas to be seeded. Provide rate of application as required to obtain specified seed sowing rate.
- C. Do not use wet seed or seed which is moldy or otherwise damaged in transit or storage.
- D. Protect seeded areas against erosion by spreading specified lawn mulch after completion of seeding operations. Spread uniformly to form a continuous blanket not less than 1-1/2 inch loose measurement over seeded areas.
 1. Protect seeded slopes greater than 1:2 against erosion with erosion netting or other methods acceptable to Resident.

3.03 MAINTENANCE AND ACCEPTANCE:

- A. Maintenance: Begin maintenance immediately after seeding.
 1. Maintain grassed areas by watering (on a daily basis during germination), fertilizing, weeding, mowing whenever the grass height exceeds 3", trimming, and other operations such as rolling, regrading and replanting as required to establish a smooth, acceptable lawn, free of eroded or bare areas.
 2. Maintain each lawn area until acceptance of such area.
 3. Include protection such as placement of signs and barricades.
 4. Repair damaged areas which do not produce a satisfactory stand of grass to re-establish the intended condition; re-fertilize, re-seed and re-mulch as required to produce satisfactory results.
 5. If maintenance period extends from fall of one growing season into the following spring, Contractor shall be required to provide a spring fertilization to all lawn areas in early spring.
- B. Maintenance Periods: Maintain grassed areas for not less than the period stated below, and longer as required to establish an acceptable lawn.
 1. Seeded lawns, not less than 60 days after completion of seeding.
 - a. Exclusion: Period November 15 through April 1.
- C. Acceptance: When seeding work is completed, including maintenance, Resident will, upon request, make an inspection to determine acceptability.
 1. Seeding work may be inspected for acceptance in parts agreeable to Resident, provided work offered for inspection is complete, including maintenance.
 2. If all other Work of Contract has been completed and some seeded areas still have not been accepted, Contractor shall maintain such period for an additional 60 days, exclusive of periods stated below. Seeded areas will be accepted upon attainment of a reasonably thick uniform stand of grass.

- a. Maintenance Exclusion Period: November 15 through April 1. NOTE: If maintenance period extends into spring of following year Contractor shall apply spring fertilization to seeded areas according to soil test requirements.
 - b. If at or near the end of such 60 day period, unacceptable areas still remain, Resident may direct a final re-seeding by Contractor or authorize the contract value of performing such work deducted from monies due to Contractor.
3. Acceptance of any seeded area shall be in writing. After acceptance, Contractor will be relieved of further expense for maintaining such areas, other than for damage caused by any Work under the Contract.

END OF SECTION 02910