

**TECHNICAL SPECIFICATION 415  
LOAMING, SEEDING, HYDROSEEDING, SODDING,  
AND EROSION CONTROL MATTING**

415.1 SCOPE OF WORK

This technical specification covers the furnishing of all labor, materials, testing, submittals, tools, and equipment necessary to loam, fertilize, seed, mulch, hydroseed, sod, or install erosion control matting on all areas shown on the drawings or as directed by the Engineer. The work shall consist of providing an accepted uniform stand of established perennial turf grasses, including watering, weed control and mowing. Where loaming, seeding, hydroseeding, sodding, and/or installing erosion control matting is included in other items, the technical portions of this technical specification shall apply.

415.2 MATERIALS

A. Loam

The loam shall comply with the requirements of Form 817, Section M.13.01, except that the loam shall be free from rocks and stones greater than 3/4 inch. Loam shall be delivered unfrozen to the job site. No existing loam taken from the site shall be reused without approval of the Engineer.

B. Fertilizer

Composite commercial fertilizer shall bear the manufacturer's guarantee statement of analysis and meet the minimum requirements of 10% nitrogen, 10% phosphoric acid, 10% potash, with at least 50% of the nitrogen being organically carried.

C. Mulch

Mulch shall comply with the requirements of Form 817, Section M.13.05.

D. Seed

Lawn seed shall be fresh, clean and new crop seed composed of the following varieties, mixed in proportion, and passing tests for the minimum percentages of purity and germination indicated:

	Proportion By Weight Percent	MIX Minimum Purity Percent	Minimum Germination Percent
Perennial Rye Grass	50 parts	98	90
Kentucky Blue Grass	20 parts	85	75
Fine Fescue	30 parts	98	85

E. Sod

The sod shall have a seed mix as recommended by the grower and approved by the Engineer for the specific use of the sod. Sod shall be living sod obtained from a commercial sod farm, and shall be free from noxious weeds, insect infestations, and fungous and bacterial diseases. The sod shall be cut to a minimum depth of one to one and one-half inches. Agricultural Ground Dolomitic Limestone shall conform to Form 817, Section M.13.02. A commercial grade granular fertilizer shall contain 15% nitrogen, 15% phosphoric acid, and 15% potash, with at least 50% of the nitrogen being organically carried. Stakes for pegging, when shown on the plans, shall be wood, approximately 1 inch x 2 inch and of sufficient length to penetrate the sod and the topsoil to a minimum depth of two inches of subsoil.

F. Erosion Control Matting

Erosion control matting shall comply with the requirements of Form 817, Section M.13.09.

415.3 SUBMITTALS

The following submittals shall be submitted to the Engineer for review and approval prior to installation:

- Gradation test results for loam
- Material certification/test results confirming percentage of organic matter in loam
- Manufacturer's guarantee statement of analysis for fertilizer
- Label from bag and/or manufacturer(s) cut sheet for mulch
- Affidavit and test report for seed mixture
- Manufacturer's guarantee statement for sod
- Manufacturer(s) cut sheet for erosion control matting

#### 415.4 CONSTRUCTION METHODS

Prior to spreading loam, the area shall be brought to a uniform grade 4 inches minimum below the finished surface or as indicated on the plans. The subgrade shall be thoroughly pulverized to a depth of at least 3 inches by rototilling, harrowing or by other approved methods. Loam shall be applied in a 4" layer, unless otherwise directed. The Contractor is responsible for a satisfactory catch of grass as herein specified. If required, or as directed by the Engineer, the newly seeded, hydroseeded or areas with erosion control matting shall be watered by the Contractor, as required, until a uniform stand of grass has been established.

Any sparse areas will be reseeded as required.

The fertilizer shall be applied at the rate of 20 pounds per 1000 square feet. Seeding and hydroseeding shall only be done from March 15<sup>th</sup> to June 15<sup>th</sup> or from August 15<sup>th</sup> to October 15<sup>th</sup>. Seeding at other times shall be done only when ordered or approved by the Engineer. Pulverized, dolomitic, agricultural limestone shall be spread at a rate of 46 pounds per 1000 square feet.

##### A. Seeding

The grass seed shall be applied at the rate of 6 pounds per 1000 square feet. The seeded area shall be mulched with a layer of grass hay or straw at the rate of 10 pounds per 100 square feet, and in lieu of an approved mulch, shall be thoroughly watered each day until satisfactory growth has been established. After establishment of the turf in the Spring, weed control shall be applied per the manufacturer's recommendation. The Contractor is responsible for one mowing at the direction of the Engineer.

##### B. Hydroseeding

Mulch shall be applied at a rate of 25-40 pounds per 1000 square feet. (40 lbs. per 1000 square feet for slopes greater than 2 to 1). After establishment of the turf in the Spring, weed control shall be applied per the manufacturer's recommendation. The Contractor is responsible for one mowing at the direction of the Engineer.

Fertilizer, seed, and mulch shall be applied using an acceptable hydroseeding distribution method approved by the Engineer.

##### C. Sodding

The fertilizer and or lime shall be applied at a rate as per the sod suppliers recommendation. Live sod shall be installed in conformance with Form 817, Section 9.53.03.

D. Erosion Control Matting

Erosion control matting shall be installed in accordance with Form 816, Section 9.50.03.7.

E. Warrantee

The Contractor shall warrantee the work for the one year period following the planting. Any bare areas shall be reestablished by the Contractor at the Contractor's expense.

415.5 MEASUREMENT

Measurement for this item will be based on the number of square yards of surface area acceptably loamed, seeded, hydroseeded, sodded, or where erosion control matting has been installed and accepted.

415.6 PAYMENT

Payment for this item will be based on the contract unit price per Square Yard for Loaming, Loaming & Seeding, Loaming & Hydroseeding, Loaming & Sodding, and Erosion Control Matting, including all labor, materials, testing, submittals, tools, and equipment necessary to complete the work as specified.

<b>PAY ITEM</b>	<b>PAY UNIT</b>
Loaming	S.Y.
Loaming & Seeding	S.Y.
Loaming & Hydroseeding	S.Y.
Loaming & Sodding	S.Y.
Erosion Control Matting	S.Y.