

NATURAL RESOURCES CONSERVATION SERVICE

CONSTRUCTION SPECIFICATION

806 - SEEDING

1. SCOPE

This work shall consist of preparing a seedbed, furnishing and placing lime, fertilizer, seed and mulch on all disturbed areas and those areas shown on the drawings for the purpose of producing vegetative cover.

2. MATERIALS

Seed

All seed shall conform to the current rules and regulations of New York State and shall meet or exceed the standards for purity and germination or pure live seed as specified in Section 6.

No seed will be used with a date of test more than 9 months old. All seed shall be fully tagged or certified by a commercial supplier. Seed which has become wet, moldy or otherwise damaged in transit or storage shall not be used.

Fertilizer

The fertilizer shall be a commercial grade fertilizer and meet the standard for grade and quality specified by state law. Where fertilizer is furnished from bulk storage, the supplier shall furnish certification of analysis and weight.

Inoculants

The inoculant for treating legume seeds shall be a pure culture of nitrogen-fixing bacteria prepared specifically for the species. Inoculate legumes with the proper fresh culture no more than 8 hours prior to sowing unless pre-inoculated coated seed is used. If hydroseeding is used, inoculate immediately prior to hydroseeding. Use four times the recommended inoculant when hydroseeding. The inoculant shall be used no later than the date indicated on the container or as otherwise specified. Inoculant will be stored according to manufacturers recommendations until ready for use. A mixing medium, as recommended by the manufacturer, shall be used to bond the inoculant to the seed. When used with hydraulic seeding equipment with fertilizer in the mix, the inoculant shall be added last and it shall not remain in the seeder longer than 4 hours.

Lime

Lime shall consist of Standard Ground Agricultural Limestone, or approved equivalent. Standard Ground Agricultural Limestone is defined as ground limestone meeting current requirements of the State Department of Agriculture.

Mulch

Mulch shall be small grain, hay, or other approved mulch material. The mulch material shall be air dry and shall not be musty, moldy, caked, or otherwise of low quality. Mulch must be free of undesirable weed seeds. If mulch anchoring is specified in Section 6, use wood fiber hydromulch or other pre-approved materials and techniques.

3. SEEDBED PREPARATION AND TREATMENT

Areas to be treated shall be dressed to a smooth, firm surface.

On sites where equipment can safely operate, (generally slopes 3H:1V or flatter), the seedbed shall be adequately loosened to a depth of 4 to 6 inches and smoothed. Disking and dragging may be necessary.

On sites where equipment cannot operate, the seedbed shall be prepared by hand or other means such that the surface is scarified and roughened so that seed will stay in place.

If seeding is to be done immediately following construction, seedbed preparation may not be required except on compacted, polished, or freshly cut areas.

Rocks 4 inches and larger in diameter, trash, weeds, and other debris that will interfere with seeding or future operation and maintenance shall be removed.

Seedbed preparation shall be discontinued when soil moisture conditions are not suitable for the preparation of a satisfactory seedbed.

4. SEEDING, LIMING, FERTILIZING, AND MULCHING

Seeding will be done only when soil moisture conditions and surface roughness are suitable for equipment to operate on the site and seed to germinate.

Seed, fertilizer, and lime materials and application rates shall be as specified in Section 6. Substitutions shall be approved by the approving official or designated representative.

Fertilizer and lime shall be uniformly applied as specified in Section 6. When specified, the fertilizer and lime shall be thoroughly incorporated into the soil immediately after being applied. Incorporation shall be by disking, harrowing, or other methods which mix the materials into the soil.

All operations shall be performed in such a manner that the seed is applied in the specified quantities and uniformly on the designated areas. The method and rate of seed application shall be as specified in Section 6.

After seeding, firm the seedbed to obtain good soil to seed contact.

The rate, amount, and type of mulching material shall be as specified in Section 6. Mulch shall be applied uniformly to the seeded areas immediately after seeding. Hay and mulch materials shall be stabilized. For small areas, when saturation is specified, the entire mulch shall be saturated with water applied uniformly at a rate that will avoid runoff. When tracking is specified, the tracks will be run up and down the slope, (producing dozer track impressions across the slope) offsetting each pass to cover the entire area with tracks.

Livestock will be excluded from seeded areas for 1 full growing season.

The seeding, liming, fertilizing, and mulching operations must produce a good vegetative cover over the entire area to be seeded. Necessary steps shall be taken to keep the seeding materials in place until germination otherwise, areas shall be re-seeded where original seeding failed.

5. MEASUREMENT AND PAYMENT

Method 1

For items of work for which specific unit prices are established in the contract, the seeded area will be measured to the nearest 0.1 acre of surface area. Payment for the seeding will be made at the contract unit price. Such payment shall constitute full compensation for all labor, materials, equipment, tools, and other appurtenances necessary and incidental to the completion of the work.

Method 2

For items of work for which specific lump sum prices are established in the contract, the quantity of seeding will not be measured. Payment for this item will be made at the contract lump sum price. Such payment shall constitute full compensation for all labor, materials, equipment, tools, and other appurtenances necessary and incidental to the completion of the work.

Compensation for any item of work described in the contract but not listed in the bid schedule will be included in the payment for the item of work to which it is made subsidiary. Such items and the items to which they are made subsidiary are identified in Section 6.

6. ITEMS OF WORK AND ADDITIONAL CONDITIONS:

A. Bid item ____, Seeding

This item shall consist of work and materials necessary to create a smooth firm seedbed, and to seed, fertilize, lime and mulch all disturbed areas.

Fertilizer shall be applied at a rate of __ lb./ac of _____, or equivalent.
Fertilizer shall / shall not be incorporated.

Lime shall be applied at a rate of __ ton/ac, 100% ENV.
Lime shall / shall not be incorporated.

The seeding mixture shall consist of:

<u>Certified Seed</u>	<u>Cultivar</u>	<u>P.L.S. lbs./ac</u> (cool season)
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

If the seeding is to be completed after August 15, do not seed legume with the above mixture, but rather substitute the following for legume as listed below:

<u>Species</u>	<u>Rate</u>	<u>Seeding Date</u>	<u>Seeding Method</u>
_____	_____	_____	_____
_____	_____	_____	_____

If the seeding is to be completed after September 15, apply a cover crop as listed below:

<u>Species</u>	<u>Rate</u>	<u>Seeding Date</u>	<u>Seeding Method</u>
_____	_____	_____	_____
_____	_____	_____	_____

Seeding method shall be:

- Drill _____
- Broadcast _____
- Hydroseeder _____
- Cultipacker Seeder _____
- Impregnated Mat _____
- Other _____

If warm season grass is used, Spring seed only.

Straw or hay mulch shall be applied at a rate of __ ton/ac.

Mulch anchoring shall/shall not be used.

<u>Mulch Type</u>	<u>Rate</u>	<u>Mulch Anchor Method/Material</u>
_____	_____	_____
_____	_____	_____

B. SPECIAL REQUIREMENTS: