

**DESCRIPTION**

Under this item, the CONTRACTOR shall furnish all labor, material and equipment necessary to establish turf in the locations shown on the plans and as directed by the ENGINEER.

**MATERIAL**

Seeds shall be as specified in NYSDOT Standard Specifications, Section 713-04, latest revision, and further specified as follows:

**Seed Mix 'A'**

<b>Name</b>	<b>Variety</b>	<b>Min. % Germination</b>	<b>Max. % of Mix By Weight</b>
Red Fescue (Festuca Rubra)	Commercial 85	85%	42%
Kentucky Bluegrass (Poa Pratensis)	Commercial 75	85%	16%
Perennial Ryegrass (Lolium Perene)	Commercial 90	90%	42%

**Total Rate of Seed Application: 305 lbs/acre**

**Seed Mix 'B' – (Reclamation Mix)**

<b>Name</b>	<b>Variety</b>	<b>Min. % Germination</b>	<b>Max. % of Mix By Weight</b>
Penngift Crownvetch <sup>1</sup>	- - -	- - -	46.5%
Pennfine Perennial Ryegrass	- - -	- - -	46.5%
Select Empire Birdsfoot Trefoil <sup>2</sup>	- - -	- - -	5.8%
Weeping Love Grass	- - -	- - -	1.2%

**Total Rate of Seed Application: 86 lbs/acre**

Notes:

1. 10 Times Inoculant – Keep in cool area.
2. Add Birdsfoot trefoil inoculant.

**Seed Mix ‘C’ – (Revitalization Mix)**

<b>Name</b>	<b>Variety</b>	<b>Min. % Germination</b>	<b>Max. % of Mix By Weight</b>
Penngift Crownvetch <sup>1</sup>	- - -	- - -	87%
Select Empire Birdsfoot Trefoil <sup>2</sup>	- - -	- - -	11%
Weeping Love Grass	- - -	- - -	2%

**Total Rate of Seed Application: 46 lbs/acre**

Notes:

1. 10 Times Inoculant – Keep in cool area.
2. Add Birdsfoot trefoil inoculant.

Fertilizer shall be as specified for NYSDOT Standard Specifications, Section 713-03 Fertilizer, Type No. 3 (10-6-4), or approved equal.

For manual seed application, straw mulch shall be as specified for NYSDOT Standard Specifications, Section 713-19 Straw, latest revision.

Hydrospray mulch (anchorage) shall be as manufactured by National Fiber, Inc. or approved equal.

Copolymer gel (such as AquaGel Series 500C/500D or approved equal) may be used as a water management tool for turf establishment. The gel material shall be able to hold up to 400 times its weight in distilled water. Copolymer gel products shall be used in conjunction with the watering application practices contained in these specifications. The CONTRACTOR must demonstrate compliance with these specifications during the seeding establishment period whether or not a copolymer gel product is used.

**CONSTRUCTION DETAILS**

**Manual Seed Application**

Placement of seeding shall comply with NYSDOT Standard Specifications, sub-section 610-3, latest revision, except as herein modified. Ground preparation for seeding Method No. 2 shall apply. The rate of fertilizer application shall be 80 lbs/acre. The rate of mulch application shall be 3 tons/acre. The rate of mulch anchorage application shall be 400 lbs/acre.

**Hydroseed Application**

Water all areas to receive hydroseed on the day before hydroseeding operation to provide residual moisture within the first 1/4 inch of the soil surface. The CONTRACTOR shall not allow the soil surface to be overly saturated with water prior to hydroseeding.

Apply the hydroseeding in the form of a slurry consisting of seed mixture, organic soil amendments, commercial fertilizer, and any other chemicals specified. Direct the spray operation so that this procedure will drill and mix the slurry components into the soil, the slurry spray will also penetrate the soil surface to ensure maximum impregnation and

coverage.

Spray the area with a uniform visible coat, using the dark color of the cellulose fiber as a visual guide. The slurry shall be applied in a downward drilling motion via a fan stream nozzle.

The CONTRACTOR shall take every precaution to prevent any of the slurry from being sprayed onto hardscape areas including concrete walks, fences, walls, buildings, etc. The CONTRACTOR shall remove all slurry sprayed onto these surfaces at no additional cost to the OWNER.

The rate of fertilizer application in the hydroseed slurry shall be 80 lbs/acre, with a rate of hydrospray mulch application of 1200 lbs/acre.

#### **Watering – Initial**

Proper watering of newly seeded areas is crucial to successful turf establishment. After placement of seeding, the CONTRACTOR shall uniformly apply water over the entire newly seeded area at least once each calendar day for 4 consecutive weeks, until seed germination occurs in accordance with these specifications. The watering effort shall be such that the top ½” of soil is kept moist during the duration of the seed germination process. Any areas damaged by excessive or careless application of water will be repaired at the CONTRACTOR’S expense.

If the ENGINEER determines that the newly seeded areas are not being watered in accordance with these specifications, the CONTRACTOR shall immediately adjust his watering practice to conform as needed.

#### **Watering – Subsequent**

After grass seed has germinated, the CONTRACTOR shall continue to apply a minimum of ½” of water at least one day each week for the duration of the project over newly seeded areas, until final acceptance by the OWNER.

#### **Care of Seeded Areas**

The CONTRACTOR shall care for seeded turf areas until final acceptance of the contract. Care shall consist of providing protection against traffic by providing approved warning signs or barricades; and shall consist of repairs to any seeded turf areas damaged by wind, water, fire, traffic or other causes. Damaged areas shall be repaired to re-establish the condition and grade of the area prior to seeding and shall then be refertilized, reseeded and remulched as specified herein. The CONTRACTOR shall mow all turf establishment areas seeded to a height of 3” after initial growth reaches 5”, and then once a week thereafter unless otherwise approved. Clippings from the first mowing shall be removed or mulched and left in place.

#### **Seeding - Seasonal Restrictions**

Placement of permanent seeding shall be in accordance with the seeding manufacturer’s recommendations and as approved by the ENGINEER.

#### **METHOD OF MEASUREMENT**

Seeding shall be paid for at the unit price bid per square yard.

**BASIS OF PAYMENT**

The work shall include furnishing all labor, materials, equipment and incidentals to complete the work as specified, including application of water as specified.

In accordance with New York State Department of Environmental Conservation Phase II regulations, Minimum Acceptable Growth for permanent seeding is defined as a uniform, perennial, vegetative cover with a minimum density of **80%** established on the entire seeded area. Any 1' x 1' area in the newly seeded lawn should have 80% of its surface covered as defined above in order to qualify as "Minimum Acceptable Growth". Seeding under this item shall be paid in increments as follows:

- 25% paid after initial placement of seed
- 50% paid after Minimum Acceptable Growth is verified by the ENGINEER.
- 25% paid after Project Acceptance.

Payment will be made under:

<b><u>Item No.</u></b>	<b><u>Item</u></b>	<b><u>Pay Unit</u></b>
C610.0202	Seeding – Seed Mix A	SY
C610.0204	Seeding – Seed Mix B	SY
C610.0206	Seeding – Seed Mix C	SY