

SECTION 734 SEEDING

734.01 Description. This work consists of furnishing and placing seed and soil supplements.

MATERIALS.

734.02 Water. Water shall conform to the requirements of [Section 803](#).

734.03 Soil Supplements.

- a. Limestone shall be ground agricultural limestone and shall contain not less than 85% calcium and magnesium carbonates. Dolomitic lime or magnesium lime shall contain at least 10% magnesium oxide. The limestone shall be ground to meet the following gradation:

<i>Sieve Size</i>	<i>Percent Passing</i>
No. 10 (2.00 mm)	100
No. 20 (850 μ m)	90
No. 100 (150 μ m)	50

- b. Fertilizer shall conform to the following mix requirements:

1. *Permanent Grass Seeding - Dry Ground, Wet Ground, and Subdivisions; and Temporary Grass Seeding - Dry Ground.*

- a. 70 lb/ac (78 kg/ha) nitrogen (N); 50% by weight of the nitrogen content shall be available from ureaformaldehyde.
- b. 42 lb/ac (47 kg/ha) available phosphate; phosphorous pentoxide (P_2O_5) shall be the sum of the water soluble and the citrato-soluble phosphate.
- c. 28 lb/ac (31 kg/ha) water soluble potash; potassium oxide (K_2O)

2. *Permanent Crown Vetch Seeding.*

- a. 152 lb/ac (170 kg/ha) nitrogen (N), 100% by weight of the nitrogen content shall be available from ureaformaldehyde
- b. 100 lb/ac (112 kg/ha) available phosphate; phosphorous pentoxide (P_2O_5) shall be the sum of the water soluble and the citrato-soluble phosphate.
- c. 100 lb/ac (112 kg/ha) water soluble potash; potassium oxide (K_2O)

- c. Commercial fertilizer shall be furnished in containers plainly marked with the chemical analysis of the product or, if provided in bulk, a certificate guaranteeing the fertilizer analysis must accompany each delivery to the Project. No fertilizer shall be used which has not been marketed in accordance with the State and Federal laws.

- d. The ureaformaldehyde specified above shall meet the following requirements:

1. The water insoluble nitrogen shall be at least 60% of the total nitrogen.

2. The activity index of the water insoluble nitrogen shall be either:
 - a. not less than 40% by the Association of Official Analytical Chemists International (AOAC International) method for ureaformaldehyde products, or
 - b. not less than 50% by the AOAC International alkaline permanganate method, or
 - c. 80% by the AOAC International neutral permanganate method.

- e. Wood cellulose fiber shall be a processed wood product having uniform fiber characteristics which remains in uniform suspension in water under agitation and blends with seed, fertilizer, and other additives to form a homogeneous slurry.

The fiber shall perform satisfactorily in hydraulic seeding equipment without clogging or damaging the system. The slurry shall contain a green dye that provides easy visual inspection for uniformity of application.

734.04 Grass and Agricultural Seeds.

- a. *Seeds.* All seed shall be fresh, clean, from new crop seed, and delivered to the site in original unopened packages in accordance with the Delaware Code and respective State laws.
- b. *Seed Inspection.*

1. Blended seed lots shall be mixed in the presence of an authorized representative of the Department. All such blended seed shall also display an official Department's inspection tag which has been sewn into or otherwise attached to the bag.

No seed shall be used after the expiration date placed on the official Department's inspection tag by an authorized representative of the Department.

2. With all single seed lots, the Contractor shall furnish to the Project inspector two copies of the certified mill analysis for the seed to be used. The Project inspector will compare the mill analysis with the mill tags sewn into the bags of seed for lot number, guaranteed analysis, and certification date.

If the mill tags and mill analysis data are identical and meet the Project requirements, single seed lots can be used on the basis of verification by the Project inspector.

If the entire bag of a single seed lot is not used, the weight of the seed used from the bag shall be so noted on the mill tag which shall be left intact on the bag. In addition, the Project inspector will also include the Contract number of the Project and the date on which the seed was used, and so verify the above with its signature on the mill tag. Partial bags which have the above information noted on the mill tag will be accepted for use on Department projects.

No seed shall be used which has a dated mill analysis or mill tag older than nine months.

- c. *Permanent and Temporary Seeding.* The Seeding Chart on the following pages shall be used for the following specified seeding:

<i>Permanent</i>	<i>Grass</i>	<i>Seeding</i>	-	<i>Dry</i>	<i>Ground,</i>
<i>Permanent</i>	<i>Crown</i>	<i>Vetch</i>		<i>Seeding,</i>	
<i>Permanent</i>	<i>Grass</i>	<i>Seeding</i>	-	<i>Wet</i>	<i>Ground,</i>
<i>Permanent</i>	<i>Grass</i>	<i>Seeding</i>	-	<i>Subdivisions,</i>	

Temporary Grass Seeding - Dry Ground, and
Temporary Grass Seeding - Wet Ground.

Seeding Chart					Modification Factors for Seeding Rate pounds per acre (kilograms per hectare)			Modification Factors for Seeding Periods	
<i>Species</i>	<i>Max. % Weed Seeds</i>	<i>Min. % Purity</i>	<i>Min. % Germination</i>	<i>Seeding Rate lb/ac (kg/ha)</i>	<i>Seeding Period A (2/16 to 4/15)</i>	<i>Seeding Period B (4/16 to 8/15)</i>	<i>Seeding Period C (8/16 to 2/15)</i>	<i>North District</i>	<i>Central and South Districts</i>
Permanent Grass Seeding - Dry Ground									
Hard Fescue blend ² (<i>Festuca trachyphylla</i>)	0.15	98	85	100 (113.0)	Add 5 lb/ac (6.0 kg/ha)	Add 4 lb/ac (5.0 kg/ha)	Add 5 lb/ac (6.0 kg/ha)		Add 3 lb/ac (4.0 kg/ha)
Perennial Ryegrass (<i>Lolium perenne</i>)	0.15	98	90	10 (12.0)	(<i>Agrostis alba</i>) + 65 lb/ac (73.0 kg/ha) Winter Rye (<i>Secale cereale</i>) from 2/16 to 3/1	Lespedeza (<i>Lespedeza stipulacea</i>)	(<i>Agrostis alba</i>) + 65 lb/ac (73.0 kg/ha) Winter Rye (<i>Secale cereale</i>) from 10/15 to 2/15		Weeping Lovegrass (<i>Eragrostis curvula</i>) during Seeding Period B ⁸
Total Seed Quantity lb/ac (kg/ha)				110 (125.0)	180 (204.0)	114 (130.0)	180 (204.0)		117 (134.0)
Permanent Crown Vetch Seeding									
Crown Vetch (<i>Coronilla varia</i>)	0.35	99	70 ³	30 (34.0)	Add 65 lb/ac (73.0 kg/ha)	Add 4 lb/ac (5.0 kg/ha)	Add 5 lb/ac (6.0 kg/ha)		

Seeding Chart					Modification Factors for Seeding Rate pounds per acre (kilograms per hectare)			Modification Factors for Seeding Periods	
Species	Max. % Weed Seeds ⁷	Min. % Purity	Min. % Germination	Seeding Rate lb/ac (kg/ha)	Seeding Period A (2/16 to 4/15)	Seeding Period B (4/16 to 8/15)	Seeding Period C (8/16 to 2/15)	North District	Central and South Districts
varia) variety: Penngift Annual Ryegrass (Lolium multiflorum)	0.15	95	90	22 (25.0)	kg/ha) Winter Rye (Secale cereale) from 2/16 to 3/1	Kobe Lespedeza (Lespedeza stipulacea)	Redtop (Agrostis alba) + 65 lb/ac (73.0 kg/ha) Winter Rye (Secale cereale) from 10/15 to 2/15		
Total Seed Quantity lb/ac (kg/ha)				52 (59.0)	117 (132.0)	56 (64.0)	122 (138.0)		
<i>Permanent Grass Seeding - Wet Ground⁴</i>									
Redtop (Agrostis alba)	0.75	95	90	40 (45.0)	Add 65 lb/ac (73.0 kg/ha)		Add 65 lb/ac (73.0 kg/ha)		
Creeping Bentgrass (Agrostis palustris)	0.75	98	90	25 (28.0)	Winter Rye (Secale cereale) from 2/16 to 3/1		Winter Rye (Secale cereale) from 10/15 to 2/15		

Seeding Chart					Modification Factors for Seeding Rate pounds per acre (kilograms per hectare)			Modification Factors for Seeding Periods	
<i>Species</i>	<i>Max. % Weed Seeds</i>	<i>Min. % Purity</i>	<i>Min. % Germination</i>	<i>Seeding Rate lb/ac (kg/ha)</i>	<i>Seeding Period A (2/16 to 4/15)</i>	<i>Seeding Period B (4/16 to 8/15)</i>	<i>Seeding Period C (8/16 to 2/15)</i>	<i>North District</i>	<i>Central and South Districts</i>
palustris)	0.50	98	85		to 3/1		10/15 to 2/15		
Sheep Fescue ₅ (Festuca ovina)	0.50	98	80	35 (40.0)					
Rough Stalked Bluegrass (Poa trivialis)				25 (28.0)					
Total Seed Quantity lb/ac (kg/ha)				125 (141.0)	190 (214.0)		190 (214.0)		
<i>Permanent Grass Seeding - Subdivisions</i>									
Hard Fescue blend ² (Festuca trachyphylla)	0.15	98	85	100 (113.0)				Add 50 lb/ac (56.0 kg/ha)	
Perennial Ryegrass (Lolium perenne)	0.15	98	90	10 (12.0)				Kentucky Bluegrass (Poa pratensis)	
								during Seeding	

Seeding Chart					Modification Factors for Seeding Rate pounds per acre (kilograms per hectare)			Modification Factors for Seeding Periods	
Species	Max. % Weed Seeds 7	Min. % Purity	Min. % Germination	Seeding Rate lb/ac (kg/ha)	Seeding Period A (2/16 to 4/15)	Seeding Period B (4/16 to 8/15)	Seeding Period C (8/16 to 2/15)	North District	Central and South Districts
								Periods A ¹ , B ¹ , and C ¹	
Total Seed Quantity lb/ac (kg/ha)				110 (125.0)				160 (181.0)	

Seeding Chart					Modification Factors for Seeding Rate pounds per acre (kilograms per hectare)			Modification Factors for Seeding Periods	
Species	Max. % Weed Seeds 7	Min. % Purity	Min. % Germination	Seeding Rate lb/ac (kg/ha)	Seeding Period A (2/16 to 4/15)	Seeding Period B (4/16 to 8/15)	Seeding Period C (8/16 to 2/15)	North District	Central and South Districts
<i>Temporary Grass Seeding - Dry Ground</i>									
Annual Ryegrass (<u>Lolium multiflorum</u>)	0.15	95	90	40 (45.0)	Add 65 lb/ac (73.0 kg/ha)		Add 65 lb/ac (73.0 kg/ha)		
					Winter Rye (<u>Secale cereale</u>)		Winter Rye (<u>Secale cereale</u>)		
					from 2/16		from		

Seeding Chart					Modification Factors for Seeding Rate pounds per acre (kilograms per hectare)			Modification Factors for Seeding Periods	
<i>Species</i>	<i>Max. % Weed Seeds</i> 7	<i>Min. % Purity</i>	<i>Min. % Germination</i>	<i>Seeding Rate lb/ac (kg/ha)</i>	<i>Seeding Period A (2/16 to 4/15)</i>	<i>Seeding Period B (4/16 to 8/15)</i>	<i>Seeding Period C (8/16 to 2/15)</i>	<i>North District</i>	<i>Central and South Districts</i>
					to 3/1		10/15 to 2/15		
Total Seed Quantity lb/ac (kg/ha)				40 (45.0)	105 (118.0)		105 (118.0)		
<i>Temporary Grass Seeding - Wet Ground</i> ⁶									
Annual Barnyard grass/ Duck Millet (<i>Echinochloa</i> spp.)	1.00	90	90	40 (45.0)	Add 65 lb/ac (73.0 kg/ha) Winter Rye (<i>Secale cereale</i>) from 2/16 to 3/1		Add 65 lb/ac (73.0 kg/ha) Winter Rye (<i>Secale cereale</i>) from 10/15 to 2/15		
Total Seed Quantity lb/ac (kg/ha)				40 (45.0)	105 (118.0)		105 (118.0)		

Seeding Chart Notes

- 1 The seed shall be a blend of certified Bluegrass varieties with no one variety representing more than 25% by weight of the total, at least one variety must be a Mid-Atlantic ecotype.
- 2 Combination of improved certified varieties with SR-3000 representing a minimum of 50% by weight of the total.
- 3 Germination shall include a total of 60% minimum quick germination or normal sprouts plus a minimum of 20% hard seed.
- 4 *Permanent Seeding - Wet Ground* should be used on saturated or seasonally flooded areas as dictated by defined wetland limits on the Plans.

Seeding Chart					Modification Factors for			Modification	
					Seeding Rate			Factors for	
					pounds per acre			Seeding Periods	
					(kilograms per hectare)				
<i>Species</i>	<i>Max. % Weed Seeds</i>	<i>Min. % Purity</i>	<i>Min. % Germination</i>	<i>Seeding Rate lb/ac (kg/ha)</i>	<i>Seeding Period A (2/16 to 4/15)</i>	<i>Seeding Period B (4/16 to 8/15)</i>	<i>Seeding Period C (8/16 to 2/15)</i>	<i>North District</i>	<i>Central and South Districts</i>

- 5 Festuca ovina shall be an improved variety of Sheep Fescue as approved by the Department. Selection should be based on performance within the Mid-Atlantic region as determined by the most current National Turfgrass Evaluation Program Progress Report.
- 6 Wet, bare ground, leaf litter covered or partially vegetated retention ponds, traps, or basins, or all intermittently flooded sites in general may be seeded with *Temporary Seeding - Wet Ground*. No wood fiber mulch shall be added to the hydroseeder. In addition, no mulching item should be included with this seeding. Unless indicated on the Plans, Echinochloa spp. is equivalent to E. muricata, E. crusgalli, or E. walteri. No fertilizer or limestone shall be applied with this seeding.
- 7 No Johnsongrass seed (Sorghum halapense) or Canada Thistle (Cirsium arvense) shall be allowed under the maximum allowable percentage of weed seeds and in accordance with Section 1, Chapter 24, Title 3 of the Delaware Code.
- 8 Add 3 lb/ac (4.0 kg/ha) Weeping Lovegrass on all slopes 1:3 (vertical to horizontal) or steeper and greater than 100 (250 mm) vertically in height throughout the Central and South Districts during all seeding periods to *Permanent Grass Seeding - Dry Ground*, *Permanent Crown Vetch Seeding*, and *Permanent Grass Seeding - Wet Ground*.

734.05 Seed Inoculant. The inoculant for *Permanent Crown Vetch Seeding* shall be a pure culture of nitrogen fixing bacteria selected for maximum vitality and for the ability to transform nitrogen from the air into soluble nitrates and deposit them in the soil. Inoculant shall consist of purely bred cultures and shall not be used later than the date indicated on the container. Four times the normal amount of inoculant as indicated on the packaging shall be used for wet application. The inoculant shall be kept as cool as possible until used. Since temperatures above 75 to 80 °F (24 to 27 °C) weaken the bacteria, the Contractor shall take every precaution possible while handling the inoculant.

CONSTRUCTION METHODS.

734.06 General. This work shall consist of preparing the ground and furnishing and placing all lime, fertilizer, and seed on the areas indicated on the Plans and as specified by the Engineer. This work shall include, in addition to the lime, fertilizer, and seed, the specified quantity of inoculant and mulch required in the seeding slurry when placing crown vetch. The Engineer reserves the right to stop seeding operations whenever conditions are determined to be unfavorable. All materials used on this Contract shall be obtained by the Contractor from a dealer or manufacturer whose product is shown by analysis to fulfill the guarantee claimed by the producers.

Permanent Seeding - Wet Ground and *Temporary Grass Seeding - Wet Ground*, where specified for dry application by the kilogram, shall be seeded through a hand spinner type spreader. Areas specified for this method of application shall be remote sites not otherwise accessible with wet application equipment.

734.07 Seeding Slopes Flatter than 1:3 (vertical to horizontal).

- a. *General.* All topsoil placement and grading where specified shall be completed before seeding. This shall apply to the following specified seeding:

Permanent Grass Seeding - Dry Ground,
Permanent Grass Seeding - Wet Ground,
Permanent Grass Seeding - Subdivisions,
Temporary Grass Seeding - Dry Ground, and
Temporary Grass Seeding - Wet Ground

- b. *Seedbed Preparation for Dry Ground Areas with Topsoil.* The area to be seeded shall be thoroughly loosened to a depth of not less than 6O (150 mm). The topsoil shall be original surface friable loam topsoil conforming to [Section 732](#). The topsoil shall be of uniform quality, free from gravel and stones retained on a 2O (50 mm) sieve, heavy clay, frozen clods, lumps, roots, sticks, and foreign materials harmful to plant growth, such as 2O (50 mm) or larger fragments of hot-mix, concrete, and surface treatment. If shaped to the prescribed grade, the seedbed shall be considered satisfactory and shall require no further work.

However, when the area to be seeded is partially sodded, barren, weedy, or packed and hard, any grass and weeds shall first be cut or otherwise satisfactorily removed, and the soil shall then be scarified or otherwise loosened to a depth of not less than 6O (150 mm). Clods and lumps shall be broken. Rubbish, rocks, fragments 2O (50 mm) or larger of hot-mix, concrete, surface treatment, and other extraneous matter shall be removed clear of the seeding site.

No seedbed preparation will be required for *Permanent Grass Seeding - Wet Ground*, *Temporary Grass Seeding - Wet Ground*, or *Temporary Grass Seeding - Dry Ground*.

- c. *Quantities of Material.* The quantity of limestone as specified according to [Subsection 734.03](#) (a) shall be applied at the rate of 3000 lb/ac (3400 kg/ha). Fertilizer, wood cellulose fiber, and other required seeding agents shall be applied in accordance with [Subsection 734.03](#).

The quantity of seed applied shall be in accordance with the Seeding Chart under [Subsection 734.04](#).

- d. *Application Equipment.* All wet application equipment shall have a tank equipped with an agitation system capable of keeping all of the solids in a state of complete suspension at all times during the seeding operation. All dry application equipment to include drop or hopper type spinner spreaders and drills shall require that all seed be blended by the seed supplier and so certified prior to dumping or loading to reduce seed segregation.

- e. *Wet Application of Lime, Fertilizer, Wood Cellulose Fiber, Seed, Inoculant, and Any Coloring or Binding Agents.* The Contractor shall apply all ingredients specified for the seeding operations described in [Subsection 734.07](#) (a) according to both manufacturer's equipment and material specifications and as set forth according to individual seeding requirements as specified under [Subsection 734.03](#).

Permanent Grass Seeding - Dry Ground shall be used in accordance with this Section on all areas not delineated or defined as wetlands that are flatter than 1:3 (vertical to horizontal) in grade and on areas behind guardrail to the top or breakpoint of slope. The only exception shall apply to slopes 1:3 (vertical to horizontal) or steeper in urban areas as described under [Subsection 734.08](#). In these

areas, topsoil shall be required at a depth of 6O (150 mm) in accordance with [Sections 732](#) and [733](#) respectively.

Permanent Grass Seeding - Wet Ground shall be used in accordance with this Section on all areas delineated or defined as wetland on the Plans with the exception of dry fill such as stormwater pond embankments and dikes or regraded areas comprised of fill above the original wetland profile. Areas stripped under [Section 202](#) and specified for *Permanent Grass Seeding - Wet Ground* shall be covered with 6O (150 mm) of topsoil in accordance with [Section 733](#). Permanent dry fill areas above the original wetland profile, as described above, shall be seeded under *Permanent Grass Seeding - Dry Ground*.

In stormwater management ponds with permanent pools *Permanent Grass Seeding - Wet Ground* shall be used on the slope between the permanent pool water level and the contour line 2N (0.6 m) above the water level. In ponds without permanent pools, this seeding mix shall be applied from the pond bottom to the elevation reached during flood routing 1O (25 mm) of runoff (water quality extended detention).

Permanent Grass Seeding - Subdivisions shall be used in accordance with this Section on all areas defined as legal subdivisions or residential communities where maintenance is provided by the Department from curb to curb only or is limited to the traveled way and shoulders. Areas specified for *Permanent Grass Seeding - Subdivisions* shall be topsoiled with 6O (150 mm) of approved topsoil in accordance with [Section 732](#).

Temporary Grass Seeding - Dry Ground shall be used in accordance with [Subsection 734.03](#) on all areas that represent dry ground areas disturbed during actual construction and/or prior to the establishment of permanent grades as determined by the Engineer in the field.

Temporary Grass Seeding - Wet Ground shall be used on wet, bare ground, leaf litter covered or partially vegetated retention ponds, traps, basins, and all intermittently flooded areas during construction.

- f. *Dry Application of Lime, Fertilizer, and Seed.* Only the ingredients described shall be applied by dry application. All lime, fertilizer, and seed shall be applied each as a separate operation when using dry methods of application. Dry application of lime, fertilizer, and seed shall apply to all forms of seeding described under [Subsection 734.07](#) (e).
- g. *Responsibility for Seeded Areas.* The Contractor shall perform all seeding and mulching in accordance with this Section in the presence of the Engineer. If all work as noted is performed in complete accordance with this Section to the satisfaction of the Engineer, all seeding and mulching so approved shall be accepted.

The Department retains the right to request that the Contractor reseed any and all areas where a satisfactory stand of grass or crown vetch or both as determined by the Engineer does not exist at the time of the final inspection.

If the Engineer determines that reseeding is necessary, the Contractor shall begin reseeding within five working days of an oral or written request from the Engineer.

734.08 Seeding Slopes 1:3 (vertical to horizontal) or Steeper.

- a. *General.* For slopes 1:3 (vertical to horizontal) or steeper, the following specified seeding shall be used:

*Permanent Crown Vetch Seeding,
Permanent Grass Seeding - Dry Ground, and*

Temporary Grass Seeding - Dry Ground

- b. *Seedbed Preparation.* All slopes shall be tilled and scarified across the slope, or tracked to prevent gully and sheet erosion to the satisfaction of the Engineer.
- c. *Quantities of Material.* The quantity of limestone as specified according to [Subsection 734.03](#) (a) shall be applied at the rate of 3000 lb/ac (3400 kg/ha) for all seeding except *Permanent Crown Vetch Seeding* which shall be applied at a rate of 55 lb/ac (60 kg/ha). Fertilizer, wood cellulose fiber, and other required seeding agents shall be applied in accordance with [Subsection 734.03](#). Refertilization and liming when specified for use shall be applied in accordance with [Subsection 734.03](#) (a) and (b)(1).

The quantity of seed applied shall be in accordance with the Seeding Chart under [Subsection 734.04](#).

- d. *Application Equipment.* All wet application equipment shall have a tank equipped with an agitation system capable of keeping all of the solids in a state of complete suspension at all times during the seeding operation. All dry application equipment to include drop or hopper type spinner spreaders and drills shall require that all seed be blended by the seed supplier and so certified prior to dumping or loading to reduce seed segregation.
- e. *Wet Application of Lime, Fertilizer, Wood Cellulose Fiber, Seed, Inoculant, and Any Coloring or Bindings Agents.* The Contractor shall apply all ingredients specified for the seeding operations described in [Subsection 734.08](#) (a) according to both manufacturer's equipment and materials specifications and as set forth according to individual seeding requirements as specified under [Subsection 734.03](#).

Permanent Crown Vetch Seeding shall be used in accordance with this Section on all slopes 1:3 (vertical to horizontal) or steeper such as fill embankments or berms that are not mowable. Areas specified for crown vetch shall not be topsoiled. Landlocked or isolated small areas such as guardrail end terminal slopes shall be seeded with crown vetch rather than other normally specified seeding to facilitate maintenance.

The only exception shall apply to slopes 1:3 (vertical to horizontal) or steeper in urban areas, where at the designer's discretion, *Permanent Grass Seeding - Dry Ground* may be selected in lieu of *Permanent Crown Vetch Seeding*. In these areas, topsoil shall be placed at a depth of 60 (150 mm) in accordance with [Section 732](#) or [733](#) respectively.

- f. *Dry Application of Lime, Fertilizer, and Seed.* Only the ingredients described shall be applied by dry application. All lime, fertilizer, and grass seed shall be applied each as a separate operation when using dry methods of application. Dry application of lime, fertilizer, and grass seed shall apply to all forms of seeding described under [Subsection 734.07](#) (e).

All lime, fertilizer and crown vetch seed shall be applied each as a separate operation when using dry methods of application. Inoculant shall be pre-mixed with the crown vetch seed at triple the normal rate of inoculant in the presence of the Project inspector. The inoculant and crown vetch seed must be mixed with an approved wetting or bonding agent.

- g. *Responsibility for Seeded Areas.* The responsibilities for seeded areas shall conform to the requirements of [Subsection 734.07](#) (g).

734.09 Method of Measurement. The quantity of refertilization and the type of seeding will be measured in square yards (square meters) of surface area.

Exceptions to this are *Permanent Grass Seeding - Wet Ground* and *Temporary Grass Seeding - Wet Ground* when specified for dry application. For these exceptions, the quantity will be measured in total number of pounds (kilograms) of grass seed.

Where units are expressed in total square yards (square meters), the quantity will be measured along the ground surface of seeded areas.

734.10 Basis of Payment. The quantity of refertilization and the type of seeding will be paid for at the Contract unit price per square yard (square meter). Price and payment will constitute full compensation for preparing the ground; for furnishing and placing all materials; and for all labor, equipment, tools, and incidentals required to complete the work.

Exceptions to this are *Permanent Grass Seeding - Wet Ground* and *Temporary Grass Seeding - Wet Ground* when bid by the pound (kilogram). For these exceptions, price and payment will constitute full compensation for furnishing and placing all materials and for all labor, equipment, tools, and incidentals required to complete the work.

Payment for any and all reseeding of areas, where a satisfactory stand of grass or crown vetch, or both, as determined by the Engineer does not exist at the time of final inspection, will be made at the Contract unit price for seeding and mulching. If the Contractor fails to respond within five working days of the Engineer's oral or written request, no payment for such reseeding will be made.