

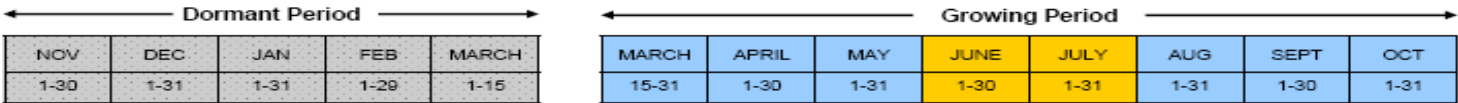
ROADSIDE DEVELOPMENT SEEDING FOR ACTIVE CONSTRUCTION - MOUNTAIN REGION - WorkSheet for Roadside Managers

Seed Selection within Nutrient Management Guidelines: **Step 1.** Determine if the site will be seeded in the Dormant or Growing Period. Seeding of CORE MIX will be most effective if completed from March 15 to May 31 and Aug 1 through Oct 31, as these are periods of optimal establishment for cool season grasses. Over-seeding should be completed during this time of optimal establishment. If the project schedule dictates regular seeding during the Dormant Period or June - July than the establishment of the turf may be hindered. A Dormant Period Temporary Seeding mix should be used during the dormant period and may be used in the August through October period, based on weather and field conditions.

PROJECT:

PPMS#
DATE:
ISSUED BY:

Approximately _____ Acres will be disturbed on this project and will require the establishment of **persistent and perennial grasses and/or legumes.**



Step 2. Determine if the site will be seeded with a Permanent Seed Mix or Temporary Seed Mix within each Period (Shading indicates best time of year to plant).

Temporary Seed Mix

Dormant Period Seeding		
Code	lbs/A	Description
D-1	100	20% Barley, Cereal Rye(Secale Cerial) or Winter Wheat & Fescue 80% Certified Tall
D-2	10	100% Barley, Cereal Rye(Secale Cerial) or Winter Wheat
D-3		

Permanent Seed Mix for Regular Seeding and Over Seeding (Core Mix)

Code	lbs/A	Description
1	70	100% Certified Fine Fescue (Chewings, Creeping Red, Hard or Sheep)
2	100	100% Certified Tall Fescue
3	100	50% Certified Fine Fescue (Chewings, Creeping Red, Hard or Sheep) & 50% Certified Tall Fescue
4	20	100% Orchardgrass
5	0	No Natives
6		
7		

Nurse and Companion Species (Additives)

Code	lbs/A	Description
A	10	100% Barley, Cerial Rye (Secale cereal) or Winter Wheat (Dormant Period Nurse Crop)
B	10	100% Foxtail Millet (Growing Period Nurse Crop)
C	30	**100% Crown Vetch* (Companion)
D	10	**100% Sericia Lespedeza* (Companion)
E	10	100% Birdfoot Trefoil* (Companion)
F	10	100% White Clover
G		
H		

NOTE: The temporary seed, as directed by the Engineer, is to be used only on areas that are to be regraded, later disturbed or left dormant for more than 15 days.

Lime may be applied, fertilizer can be applied at 50% of Nutrient Management Rate. Fertilizer shall NOT be applied when the ground is frozen.

Erosion Control Mulch, as directed by the Engineer, is to be used on areas that are to be left dormant for more than 15 days between Dec 1 and February 29.

Erosion Control Mulch, as listed on the "VDOT Approved Product List," shall be applied in accordance with the manufacture's recommendations. Erosion Control Mulch (or approved method) shall provide 100% coverage of all denuded areas of land.

Over Seeding Note: Use 100% of seed mixture supplied. The Engineer will require the contractor to perform over seeding when the density of the persistent perennial cover is between 50-75%. Recommendations for the application of seed mixtures, fertilizer, lime, etc are to be obtained from the District Roadside Manager if less than 50% ground cover density of a persistent perennial cover as specified in the seeding mixture is obtained.

A **Nurse** crop is annual species such as rye and millet are temporary varieties and are not considered permanent vegetative cover.

A **Companion** species is perennial grass and/or legumes added to the Permanent Seed Mix to enhance the probability of establishing a vegetative cover.

*Legumes should be planted in the spring, and fertilizer should be applied at the Nutrient Management Rate. Legume seed shall be inoculated with the appropriate strain and rate of bacteria. For hydroseeding, use three times the dry seeding rate of inoculant. Sericia lespedeza seed must be hulled if planted in the Growing period, and un-hulled if planted in the Dormant period.

**To be seeded on sites with greater than 3:1 slope and other area that is designated as an area that will not be mowed. Other legumes or listed companion species can be seed on non-mow and mow areas.

ROADSIDE DEVELOPMENT SEEDING FOR ACTIVE CONSTRUCTION - MOUNTAIN REGION - Worksheet for Roadside Managers

PROJECT:

Step 3. The District Roadside Manager completes the Seeding Schedule and Seeding Summaries.

PPMS#

DATE:

ISSUED BY:

Seeding Schedule

Assign Permanent Seed Mix with Nurse and Companion Species

Project Number	Project Area	NON-MOW	NOW	NON-MOW	NOW	NON-MOW	NOW
		Dormant Period Nov 1 - March 15		Growing Period Cool Season Feb 15* - May 31 Aug 1 - Oct 31		Growing Period Warm Season June 1 - July 31	
** Fine Fescue Type							

* Seed that is expected to lay dormant on site may be planted outside the cool and warm season Growing Period.

**Specify type as Chewings, Creeping Red, Hard and/or Sheep Fescue. May mix types.

Mulch and Topsoil Specifications

Type I mulch (Straw) to be used on newly seeded areas adjacent to all waterways, wetlands, swamps, sinkholes, or any area in which drainage flows toward areas under the jurisdiction of the environmental regulatory agencies. Type I shall be applied to provide a minimum of 90% coverage. Type I mulch shall be tacked with Fiber mulch at the rate of 750 lbs per acre and/or mulch tackifier.

Type II mulch (Wood Fiber Mulch) may be substituted for Type I mulch at the recommendation of the District Roadside Manager. Type II mulch shall be applied at a rate of 1500 (net dry weight) per acre to provide a minimum of 90 percent coverage, and shall be applied over the seed in a separate application.

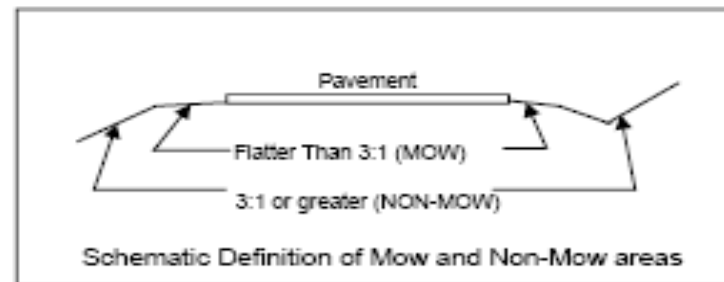
All topsoil is to be free of hard lumps, clods, rocks and foreign debris, and is to be hand raked to tie into existing lawns.

Seeding Summary

Project Number	Topsoil 2" Class		Seeding				
	A	B	Regular Seeding	Temporary Seeding ¹	Over Seeding	Legume Seeding	Legume Over Seeding
	Acres		lbs	lbs	lbs	lbs	lbs
0							
0							
0							
0							
0							
0							
Total			0	0			
Pay Item Quantities	0	0	0		0	0	0

¹ **Temporary Seeding** quantities are included with Regular Seeding pay quantities.

Note: All seed must be in conformance with the current Nutrient Management Plan and with VDOT seed specifications for Grasses and Legumes and be provided at the project site in bags labeled and not opened for use on VDOT projects with a green tag certifying inspection of the Virginia Crop Improvement Association.

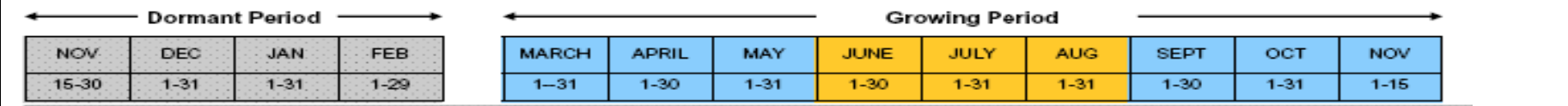


ROADSIDE DEVELOPMENT SEEDING FOR ACTIVE CONSTRUCTION - COASTAL PLAIN REGION - WorkSheet for Roadside Managers

Seed Selection within Nutrient Management Guidelines: **Step 1.** Determine if the site will be seeded in the Dormant or Growing Period. Seeding of CORE MIX will be most effective if completed from March 15 to May 31 and Aug 1 through Oct 31, as these are periods of optimal establishment for cool season grasses. Over-seeding should be completed during this time of optimal establishment. If the project schedule dictates regular seeding during the Dormant Period or June - July then the establishment of the turf may be hindered. A Dormant Period Temporary Seeding mix should be used during the dormant period and may be used in the August through October period, based on weather and field conditions.

PROJECT:

PPMS#
DATE:
ISSUED BY:



Approximately _____ Acres will be disturbed on this project and will require the establishment of **persistent and perennial grasses and/or legumes.**

Step 2. Determine if the site will be seeded with a Permanent Seed Mix or Temporary Seed Mix within each Period (Shading indicates best time of year to plant).

Temporary Seed Mix

Dormant Period Seeding		
Code	lbs/A	Description
D-1	100	20% Barley, Cereal Rye(Secale Cerial) or Winter Wheat & Fescue 80% Certified Tall
D-2	10	100% Barley, Cereal Rye(Secale Cerial) or Winter Wheat
D-3		

Growing Period Seeding		
Code	lbs/A	Description
G-1	100	20% Foxtail Millet & Certified Tall Fescue 80%
G-2		

NOTE: The temporary seed, as directed by the Engineer, is to be used only on areas that are to be regraded, later disturbed or left dormant for more than 15 days.

Lime may be applied, fertilizer can be applied at 50% of Nutrient Management Rate. Fertilizer shall **NOT** be applied when the ground is frozen.

Erosion Control Mulch, as directed by the Engineer, is to be used on areas that are to be left dormant for more than 15 days between Dec 1 and February 29.

Erosion Control Mulch, as listed on the "VDOT Approved Product List," shall be applied in accordance with the manufacture's recommendations.

Erosion Control Mulch (or approved method) shall provide 100% coverage of all denuded areas of land.

Permanent Seed Mix for Regular Seeding and Over Seeding (Core Mix)

Code	lbs/A	Description
1	70	100% Certified Fine Fescue (Chewings, Creeping Red, Hard or Sheep)
2	100	100% Certified Tall Fescue
3	100	50% Certified Fine Fescue (Chewings, Creeping Red, Hard or Sheep) & 50% Certified Tall Fescue
4		
5	0	No Natives
6	40	*100% Bermuda hulled or un-hulled
7		

Over Seeding Note: Use 100% of seed mixture supplied. The Engineer will require the contractor to perform over seeding when the density of the persistent perennial cover is between 50-75%. Recommendations for the application of seed mixtures, fertilizer, lime, etc are to be obtained from the District Roadside Manager if less than 50% ground cover density of a persistent perennial cover as specified in the seeding mixture is obtained.

*Must be hulled if planted in the Growing Period, and un-hulled if planted in the Dormant Period.

Nurse and Companion Species (Additives)

Code	lbs/A	Description
A	10	100% Barley, Cerial Rye (Secale cereal) or Winter Wheat (Dormant Period Nurse Crop)
B	10	100% Foxtail Millet (Growing Period Nurse Crop)
C	30	**100% Crown Vetch* (Companion)
D	10	**100% Sericia Lespedeza* (Companion)
E	10	100% Birdfoot Trefoil* (Companion)
F	10	100% White Clover* (Companion)
G	20	**100% Weeping Lovegrass
H		

A **Nurse** crop is annual species such as rye and millet are temporary varieties and are not considered permanent vegetative cover.

A **Companion** species is perennial grass and/or legumes added to the Permanent Seed Mix to enhance the probability of establishing a vegetative cover.

*Legumes should be planted in the spring, and fertilizer should be applied at the Nutrient Management Rate. Legume seed shall be inoculated with the appropriate strain and rate of bacteria. For hydroseeding, use three times the dry seeding rate of inoculant. Sericia lespedeza seed must be hulled if planted in the Growing period, and un-hulled if planted in the Dormant period.

**To be seeded on sites with greater than 3:1 slope and other area that is designated as an area that will not be mowed. Other legumes or listed companion species can be seed on non-mow and mow areas.

ROADSIDE DEVELOPMENT SEEDING FOR ACTIVE CONSTRUCTION - COASTAL PLAIN REGION - Worksheet for Roadside Managers

PROJECT:
 PPMS#
 DATE:
 ISSUED BY:

Step 3. The District Roadside Manager completes the Seeding Schedule and Seeding Summaries.

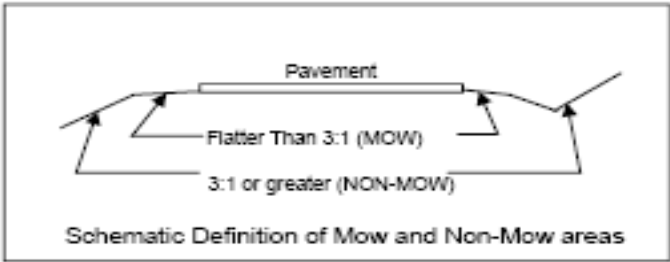
Seeding Schedule							
Assign Perminante Seed Mix with Nurse and Companion Species							
Project Number	Project Area	NON-MOW	NOW	NON-MOW	NOW	NON-MOW	NOW
		Dormant Period Nov 15 - Feb 28/29		Growing Period Cool Season Feb 1* - May 14 Aug 16 - Nov 14		Growing Period Warm Season May 15 - Aug 15	
** Fine Fescue Type							

* Seed that is expected to lay dormant on site may be planted outside the cool and warm season Growing Period.
 **Specify type as Chewings, Creeping Red, Hard and/or Sheep Fescue. May mix types.

Mulch and Topsoil Specifications
Type I mulch (Straw) to be used on newly seeded areas adjacent to all waterways, wetlands, swamps, sinkholes, or any area in which drainage flows toward areas under the jurisdiction of the environmental regulatory agencies. Type I shall be applied to provide a minimum of 90% coverage. Type I mulch shall be tacked with Fiber mulch at the rate of 750 lbs per acre and/or mulch tackifier.
Type II mulch (Wood Fiber Mulch) may be substituted for Type I mulch at the recommendation of the District Roadside Manager. Type II mulch shall be applied at a rate of 1500 (net dry weight) per acre to provide a minimum of 90 percent coverage, and shall be applied over the seed in a separate application.
All topsoil is to be free of hard lumps, clods, rocks and foreign debris, and is to be hand raked to tie into existing lawns.

Seeding Summary							
Project Number	Topsoil 2" Class		Seeding				
	A	B	Regular Seeding	Temporary Seeding ¹	Over Seeding	Legume Seeding	Legume Over Seeding
	Acres		lbs	lbs	lbs	lbs	lbs
0							
0							
0							
0							
0							
0							
0							
Total			0	0			
Pay Item Quantities	0	0	0		0	0	0

¹ **Temporary Seeding** quantities are included with Regular Seeding pay quantities.
Note: All seed must be in conformance with the current Nutrient Management Plan and with VDOT seed specifications for Grasses and Legumes and be provided at the project site in bags labeled and not opened for use on VDOT projects with a green tag certifying inspection of the Virginia Crop Improvement Association.



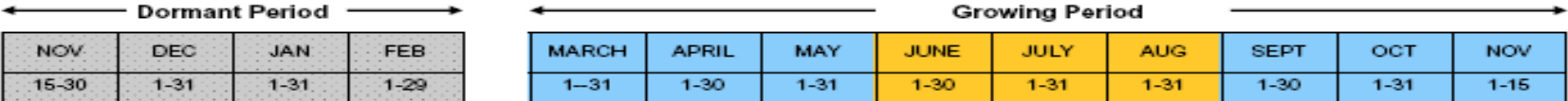
ROADSIDE DEVELOPMENT SEEDING FOR ACTIVE CONSTRUCTION - Piedmont REGION - WorkSheet for Roadside Managers

PROJECT:

Seed Selection within Nutrient Management Guidelines: **Step 1.** Determine if the site will be seeded in the Dormant or Growing Period. Seeding of CORE MIX will be most effective if completed from March 15 to May 31 and Aug 1 through Oct 31, as these are periods of optimal establishment for cool season grasses. Over-seeding should be completed during this time of optimal establishment. If the project schedule dictates regular seeding during the Dormant Period or June - July then the establishment of the turf may be hindered. A Dormant Period Temporary Seeding mix should be used during the dormant period and may be used in the August through October period, based on weather and field conditions.

PPMS#
DATE:
ISSUED BY:

Approximately _____ Acres will be disturbed on this project and will require the establishment of **persistent and perennial grasses and/or legumes.**



Step 2. Determine if the site will be seeded with a Permanent Seed Mix or Temporary Seed Mix within each Period (Shading indicates best time of year to plant).

Temporary Seed Mix

Dormant Period Seeding		
Code	lbs/A	Description
D-1	100	20% Barley, Cereal Rye(Secale Cerial) or Winter Wheat & Fescue 80% Certified Tall
D-2	10	100% Barley, Cereal Rye(Secale Cerial) or Winter Wheat
D-3		

Growing Period Seeding		
Code	lbs/A	Description
G-1	100	20% Foxtail Millet & Certified Tall Fescue 80%
G-2		

NOTE: The temporary seed, as directed by the Engineer, is to be used only on areas that are to be regraded, later disturbed or left dormant for more than 15 days.

Lime may be applied, fertilizer can be applied at 50% of Nutrient Management Rate. Fertilizer shall **NOT** be applied when the ground is frozen.

Erosion Control Mulch, as directed by the Engineer, is to be used on areas that are to be left dormant for more than 15 days between Dec 1 and February 29.

Erosion Control Mulch, as listed on the "VDOT Approved Product List," shall be applied in accordance with the manufacture's recommendations.

Erosion Control Mulch (or approved method) shall provide 100% coverage of all denuded areas of land.

Permanent Seed Mix for Regular Seeding and Over Seeding (Core Mix)

Code	lbs/A	Description
1	70	100% Certified Fine Fescue (Chewings, Creeping Red, Hard or Sheep)
2	100	100% Certified Tall Fescue
3	100	50% Certified Fine Fescue (Chewings, Creeping Red, Hard or Sheep) & 50% Certified Tall Fescue
4		
5	0	No Natives
6	40	*100% Bermuda hulled or un-hulled
7		

Over Seeding Note: Use 100% of seed mixture supplied. The Engineer will require the contractor to perform over seeding when the density of the persistent perennial cover is between 50-75%. Recommendations for the application of seed mixtures, fertilizer, lime, etc are to be obtained from the District Roadside Manager if less than 50% ground cover density of a persistent perennial cover as specified in the seeding mixture is obtained.

*Must be hulled if planted in the Growing Period, and un-hulled if planted in the Dormant Period.

Nurse and Companion Species (Additives)

Code	lbs/A	Description
A	10	100% Barley, Cerial Rye (Secale cereal) or Winter Wheat (Dormant Period Nurse Crop)
B	10	100% Foxtail Millet (Growing Period Nurse Crop)
C	30	**100% Crown Vetch* (Companion)
D	10	**100% Sericia Lespedeza* (Companion)
E	10	100% Birdfoot Trefoil* (Companion)
F	10	100% White Clover* (Companion)
G	20	**100% Weeping Lovegrass
H		

A **Nurse** crop is annual species such as rye and millet are temporary varieties and are not considered permanent vegetative cover.

A **Companion** species is perennial grass and/or legumes added to the Permanent Seed Mix to enhance the probability of establishing a vegetative cover.

*Legumes should be planted in the spring, and fertilizer should be applied at the Nutrient Management Rate. Legume seed shall be inoculated with the appropriate strain and rate of bacteria. For hydroseeding, use three times the dry seeding rate of inoculant. Sericia lespedeza seed must be hulled if planted in the Growing period, and un-hulled if planted in the Dormant period.

**To be seeded on sites with greater than 3:1 slope and other area that is designated as an area that will not be mowed. Other legumes or listed companion species can be seed on non-mow and mow areas.

ROADSIDE DEVELOPMENT SEEDING FOR ACTIVE CONSTRUCTION - PIEDMONT REGION - Worksheet for Roadside Managers

PROJECT:

Step 3. The District Roadside Manager completes the Seeding Schedule and Seeding Summaries.

PPMS#
DATE:
ISSUED BY:

Seeding Schedule

Assign Perminante Seed Mix with Nurse and Companion Species

Project Number	Project Area	NON-MOW	NOW	NON-MOW	NOW	NON-MOW	NOW
		Dormant Period Nov 1 - March 15		Growing Period Cool Season Feb 15* - May 31 Aug 1 - Oct 31		Growing Period Warm Season June 1 - July 31	
** Fine Fescue Type							

* Seed that is expected to lay dormant on site may be planted outside the cool and warm season Growing Period.
**Specify type as Chewings, Creeping Red, Hard and/or Sheep Fescue. May mix types.

Mulch and Topsoil Specifications

Type I mulch (Straw) to be used on newly seeded areas adjacent to all waterways, wetlands, swamps, sinkholes, or any area in which drainage flows toward areas under the jurisdiction of the environmental regulatory agencies. Type I shall be applied to provide a minimum of 90% coverage. Type I mulch shall be tacked with Fiber mulch at the rate of 750 lbs per acre and/or mulch tackifier.

Type II mulch (Wood Fiber Mulch) may be substituted for Type I mulch at the recommendation of the District Roadside Manager. Type II mulch shall be applied at a rate of 1500 (net dry weight) per acre to provide a minimum of 90 percent coverage, and shall be applied over the seed in a separate application.

All topsoil is to be free of hard lumps, clods, rocks and foreign debris, and is to be hand raked to tie into existing lawns.

Seeding Summary

Project Number	Topsoil 2" Class		Seeding				
	A	B	Regular Seeding	Temporary Seeding ¹	Over Seeding	Legume Seeding	Legume Over Seeding
	Acres		lbs	lbs	lbs	lbs	lbs
0							
0							
0							
0							
0							
0							
0							
Total			0	0			
Pay Item Quantities	0	0	0		0	0	0

¹ **Temporary Seeding** quantities are included with Regular Seeding pay quantities .

Note: All seed must be in conformance with the current Nutrient Management Plan and with VDOT seed specifications for Grasses and Legumes and be provided at the project site in bags labeled and not opened for use on VDOT projects with a green tag certifying inspection of the Virginia Crop Improvement Association.

