



CAPITOL DEVELOPMENT DESIGN, INC.
ENGINEERS - PLANNERS - SURVEYORS

BROAD BRANCH STREAM RESTORATION SQUARE

EROSION & SEDIMENT CONTROL NOTES & DETAILS

REVISIONS

DATE: APRIL, 2010
 DWN. CA CHECKED MM
 SCALE: 1"=10'
 PROJECT/FILE NO. 10-022
 SHEET NO. 7 OF

Table 25 Permanent Seeding for Low Maintenance Areas

| MIX | Seed Mix (Use Certified Material if Available) | Planting | | Site Conditions | USDA Hardiness Zones ² | RECOMMENDED PLANTING DATES ³³ | | | | | | | | Notes |
|-----|--|----------|------------------|--------------------------------|-----------------------------------|--|------|------|------|------|-------|-------|-------|-------|
| | | LBS/AC | LBS/1000 Sq. Ft. | | | 3/1 | 3/15 | 5/16 | 6/2 | 8/1 | 8/15 | 8/15 | 11/15 | |
| | | | | | | 5/15 | 6/1 | 8/14 | 7/31 | 10/1 | 10/15 | 11/15 | | |
| 1 | Tall Fescue (75%), Canada Bluegrass (10%), Kentucky Bluegrass (10%) Rodeo (5%) ³⁴ | 150 | 3.4 | Moist to Dry | 5b | | x | | | | | | | A |
| | | | | | | 6a | | x | | | | | | |
| | | | | | | 7a | x | | | | | | x | |
| 2 | Kentucky Bluegrass (50%) Creeping Red Fescue or a Hard Fescue (40%) Rodeo (10%) | 150 | 3.4 | Moist to Moderately Dry to Dry | 5b | | x | | | x | | | B | |
| | | | | | | 6a | | x | | | | | | |
| | | | | | | 7a | x | | | | | | | x |
| 3 | Tall Fescue (85%) Perennial Ryegrass (10%) Kentucky Bluegrass (5%) | 125 | 2.9 | Moist to Dry | 5B | | x | | | x | | | C | |
| | | | | | | 6A | | x | | | | | | |
| | | | | | | 6B | x | | | | | | | x |
| 4 | Red Fescue or Chewings Fescue (80%) Perennial Ryegrass (20%) | 60 | .92 | Moist to Dry | 5b | | x | | | x | | | D | |
| | | | | | | 6a | | x | | | | | | |
| | | | | | | 6b | x | | | | | | | x |
| 5 | Tall Fescue (85%) or, Perennial Ryegrass (50%) Plus Crownvetch or Flatpea | 110 | 2.5 | Moist to Dry | 5b | | x | | | x | | | E | |
| | | | | | | 6a | | x | | | | | | x |
| | | | | | | 6b | x | | | | | | | x |
| 6 | Weeping Lovegrass (17%) Sericea Lespedeza (83%) | 4 | .09 | Dry to Very Dry | 6a | | x | | x | | | | F | |
| | | | | | | 7a | x | | | x | | | | |
| | | | | | | 7b | x | | | | x | | | |

Notes: A/Used by SHA on sloped areas. Add a legume for slopes > than 3:1
 B/Used in median areas by SHA. Shade tolerant.
 C/Popular Mix - Produces permanent grass uncover quickly. Bluegrass thickens stand.
 D/Best use on shady slopes not on poorly drained clay.
 E/Use on low maintenance, steep slopes. Use tall fescue draughty cond. Crown vetch best for 5b, 6a, 6b.
 F/Suitable for seeding in mid-summer.

- 31 See table 20 for a list of recommended varieties best suited for Maryland.
- 32 Refer to Figure 5.
- 33 Recommended planting dates are indicated by an x. For seeding during time periods not recommended use a nurse crop such as weeping love grass or millet (mid-summer), or cereal rye (late fall to early spring) refer to Table 26 Temporary Seeding
- 34 Maryland State Highway Administration Approved Mixes.

Table 25 Permanent Seeding for Low Maintenance Areas (Cont'd)

| MIX | Seed Mix (Use Certified Material if Available) | Planting Rate | | Site Conditions | USDA Hardiness Zones ² | RECOMMENDED PLANTING DATES ³³ | | | | | | | | Notes |
|-----|--|---------------|------------------|-----------------------|-----------------------------------|--|------|------|------|------|-------|-------|-------|-------|
| | | LBS/AC | LBS/1000 Sq. Ft. | | | 3/1 | 3/15 | 5/16 | 6/2 | 8/1 | 8/15 | 8/15 | 11/15 | |
| | | | | | | 5/15 | 6/1 | 8/14 | 7/31 | 10/1 | 10/15 | 11/15 | | |
| 7 | Tall Fescue (83%), Weeping Lovegrass (2%) Plus Sericea Lespedeza (15%) | 110 | 2.5 | Dry to Very Dry | 5b | | x | | | | | | G | |
| | | | | | | 6a | | x | | | | | | |
| | | | | | | 6b | | | | | | | | x |
| 8 | Reed Canarygrass (75%) Redtop (6%) Plus Birdfoot Trefoil ³⁵ (19%) | 4 | .02 | Wet to Moderately Dr | 5b | | x | | | x | | | H | |
| | | | | | | 6a | | x | | | | | | |
| | | | | | | 6b | x | | | | | | | x |
| 9 | Tall Fescue (86%) Poa Trivialis (7%) Birdfoot Trefoil (7%) | 125 | 2.9 | Wet to Moderately Dry | 5b | | x | | | x | | | I | |
| | | | | | | 6a | | x | | | | | | |
| | | | | | | 6b | x | | | | | | | x |
| 10 | Tall Fescue (80%) Hard Fescue (20%) | 120 | 3.4 | Wet to Dry | 5b | | x | | | x | | | J | |
| | | | | | | 6a | | x | | | | | | |
| | | | | | | 6b | x | | | | | | | x |
| 11 | Hard Fescue (100%) | .75 | 1.7 | Moist to Dry | 5b | | x | | | x | | | K | |
| | | | | | | 6a | | x | | | | | | |
| | | | | | | 7a | x | | | | | | | x |

Notes: G/Weeping lovegrass may be seeded with tall fescue in mid-summer. Sericea lespedeza is best suited for zones 7a and 7b.
 H/Use on poorly drained soils - ditches or waterways. Birdfoot trefoils best for zones 5b, 6a, above 2,000 ft.
 I/Use in areas of moist shade. POA trivialis thrives in wet shady areas.
 J/Low fertility grass. Requires infrequent mowing, good companion for wild flowers.
 K/20-19

Leguminous seeds shall be inoculated or treated with unexpired approved cultures for the specific legume. In the proper proportions, as specified on the package label. The inoculant shall be stored at room temperature. Out of direct sun light and away from heating units. When seeding dry with mechanical seeders thoroughly mix the powder form of the inoculant with the seed by wetting the seed with a small amount of water and then adding the powder. The inoculated seed is then mixed without her seeds and planted within 48 hours. Seeds inoculated with liquid cultures shall be planted within 24 hours. Inoculated seed not planted within the specified time will be re-inoculated. When using hydraulic seeders, use 10 times the amount of inoculant specified for dry seeding. Inoculated seed shall not be exposed to sunlight or left in a slurry for more than one hour, otherwise re-inoculation will be necessary.

SEQUENCE OF CONSTRUCTION

- 1. The owner/developer that signs the certification on an erosion and sediment control plan is the responsible party regardless of any sale of the property or work of subcontractors. Erosion and sediment control plans are approved for one owner/developer only. All permits under an erosion and sediment control plan must be on only be issued to the owner/developer that signs the certification on the plan.
- 2. PGSCD approval of an erosion and sediment control plan, pursuant to meeting local permit requirements for grading, building or street improvements is valid only when the work to be performed under the permit is the same as (no more/no less than) that contained in the plan as approved by the PGSCD.
- 3. Any changes or modifications to an approved erosion and sediment control plan, not approved by the PGSCD, shall invalidate the plan approval.
- 4. Offsite borrow or spoil areas must have an approved and active erosion and sediment control plan.
- 5. Temporary designed sediment basins shall be removed within 36 months after the beginning of construction of the basin.
- 6. Disturbed surface area _____acres.
- 7. Volume of spoil material _____cuyd.
- 8. Volume of borrow material _____cuyd.
- 9. Volume of extra material _____cuyd.
- 10. Note: Excess material shall be taken to a site with approved/active sediment control.
- 11. List Predominant soil types and general description per PGSCD soil survey : SEE SHEET 11

EROSION AND SEDIMENT CONTROL NARRATIVE DESCRIPTION OF PROJECT

CONSTRUCTION ENTRANCE

SILT FENCE
 A SILT FENCE WILL BE INSTALLED IMMEDIATELY AFTER CONSTRUCTION ENTRANCE IS INSTALLED AND BEFORE ANY EARTH DISTURBANCE OR CLEARING ACTIVITIES ARE CONDUCTED. UPON APPROVAL BY THE INSPECTOR, THE SILT FENCE WILL BE REMOVED ONCE THE DISTURBED AREAS ARE STABILIZED. THE SILT FENCE WILL BE INSTALLED AND MAINTAINED IN ACCORDANCE TO STANDARDS SHOWN ON THE DETAIL SHEETS.

Section V - Turfgrass Establishment

Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which will receive a medium to high level of maintenance. Areas to receive seed shall be filled by disk or other approved methods to a depth of 2 to 4 inches in diameter shall be removed. The resulting seedbed shall be in such condition that future mowing of grasses will pose no difficulty.

Note: Once certified material. Certified material is the best guarantee of quality purity. The certification program of the Maryland Department of Agriculture, Turf and Seed Section, provides a reliable means of consumer protection and assures a pure genetic line.

A. Turfgrass Mixtures

1. Kentucky Bluegrass - Full sun mixture - For use in areas that receive intensive management. Irrigation required in the areas of central Maryland and eastern shore. Recommended Certified Kentucky Bluegrass Cultivars Seeding Rate: 1.5 to 2.0 pounds/1000 square feet. A minimum of three Kentucky Bluegrass cultivars should be chosen ranging from a minimum of 10% to a maximum of 35% of the mixture by weight.
2. Kentucky Bluegrass/Perennial Ryegrass - Full sun mixture - For use in full sun areas where rapid establishment is necessary and when turf will receive medium to intensive management. Certified Perennial Ryegrass Cultivars/Certified Kentucky Bluegrass Seeding Rate: 2 pounds mixture/1000 square feet. A minimum of 3 Kentucky Bluegrass Cultivars must be chosen, with each cultivar ranging from 10% to 35 % of the mixture by weight.
3. Tall Fescue/Kentucky Bluegrass - Full sun mixture - For use in drought prone and/or for areas receiving low to medium management in full sun to medium shade. Recommended mixture includes: certified Tall Fescue cultivars 95-100%, certified Kentucky Bluegrass Cultivars 0-5%. Seeding rate: 5 to 8 lb/1000 sq. ft. One or more cultivars may be blended.
4. Kentucky Bluegrass/Fine Fescue - Shade Mixture - For use in areas with shade in Bluegrass lawns. For establishment in high quality, intensively managed turf areas. Mixture includes: certified Kentucky Bluegrass Cultivars 30-40% and certified Fine Fescue and 60-70%. Seeding rate: 14 - 3 lb/1000 square feet. A minimum of 3 Kentucky Bluegrass Cultivars must be chosen, with each cultivar ranging from a minimum of 10% to a maximum of 35 % of the mixture by weight.

Note: Turfgrass varieties should be selected from those listed in the most current University of Maryland Publication, Agronomy Mimeo #77, "Turfgrass Cultivar Recommendations for Maryland."

B. Ideal times of seeding

1. Western MD: March 15 - June 1, August 1 - October 1 (Hardiness Zones - 5b, 6a)
2. Central MD: March 1 - May 15, August 15 - October 15 (Hardiness Zone - 6b)
3. Southern MD, Eastern Shore: March 1 - May 15, August 15 - October 15 (Hardiness Zones - 7a, 7b)

C. Irrigation

If soil moisture is deficient, supply new seedlings with adequate water for plant growth (2" - 1" every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedlings are made late in the planting season, in abnormally dry or hot seasons, or in adverse sites.

D. Repairs and Maintenance

Inspect all seeded areas for failures and make necessary repairs, replacements, and reseeding within the planting season.

1. Once the vegetation is established, the site shall have 95% groundcover to be considered adequately stabilized.
2. If the stand provides less than 40% ground coverage, reestablish following original time, fertilizer, seeding preparation and seeding recommendations.
3. If the stand provides between 40% and 84 % ground coverage, overseeding and fertilizing using half of the rates originally specified are permitted in the plans.
4. Minimum maintenance fertilizer rates for permanent seedings are shown in Table 26. For lawns and vegetable lawns, minimum maintenance fertilizer rates are shown in Table 26. For lawns and vegetable lawns, minimum maintenance fertilizer rates are shown in Table 26. For lawns and vegetable lawns, minimum maintenance fertilizer rates are shown in Table 26. For lawns and vegetable lawns, minimum maintenance fertilizer rates are shown in Table 26.

Section II - Temporary Seeding

1. Select one or more of the species or mixtures listed in Table 26 for the appropriate Plant Hardiness Zone (from Figure 5) and enter them in the Temporary Seeding Summary below, along with application rates, seeding dates and seeding depths. If this Summary is not put on the plans and completed, then Table 26 must be put on the plans.

2. For sites having soil tests performed, the rates shown on this table shall be deleted and the rates recommended by the testing agency shall be written in. Soil tests are not required for Temporary Seeding.

3. Seeding grass and legumes to establish ground cover for a minimum period of one year on disturbed areas generally receiving low maintenance.

A. Seed Mixtures - Permanent Seeding

1. Select one or more of the species or mixtures listed in Table 26 for the appropriate Plant Hardiness Zone (from Figure 5) and enter them in the Permanent Seeding Summary below, along with application rates and seeding dates. Seeding depths can be estimated using Table 26. If this Summary is not put on the construction plans and completed, then Table 25 must be put on the plans. Additional planting specifications for exceptional sites such as shorelines, streambanks, or dunes or for special purposes such as wildlife or aesthetic treatment may be found in USDA-SCS Technical Field Office Guide, Section 342 - Critical Area Planting. For special lawn maintenance areas, see Sections IV Sod and V Turfgrass.
2. For sites having disturbed area over 5 acres, the rates shown on this table shall be deleted and the rates recommended by the testing agency shall be written in.

Section III - Permanent Seeding

Seeding grass and legumes to establish ground cover for a minimum period of one year on disturbed areas generally receiving low maintenance.

A. Seed Mixtures - Permanent Seeding

1. Select one or more of the species or mixtures listed in Table 26 for the appropriate Plant Hardiness Zone (from Figure 5) and enter them in the Permanent Seeding Summary below, along with application rates and seeding dates. Seeding depths can be estimated using Table 26. If this Summary is not put on the construction plans and completed, then Table 25 must be put on the plans. Additional planting specifications for exceptional sites such as shorelines, streambanks, or dunes or for special purposes such as wildlife or aesthetic treatment may be found in USDA-SCS Technical Field Office Guide, Section 342 - Critical Area Planting. For special lawn maintenance areas, see Sections IV Sod and V Turfgrass.
2. For sites having disturbed area over 5 acres, the rates shown on this table shall be deleted and the rates recommended by the testing agency shall be written in.

Section IV - Sod: To provide quick cover on disturbed areas (2:1 grade or flatter).

A. General specifications

1. Class of turfgrass sod shall be Maryland or Virginia State Certified or Approved. Sod labels shall be made available to the job foreman and inspector.
2. Sod shall be machine cut at a uniform soil thickness of " , plus or minus " , at the time of cutting. Measurement for thickness shall include top growth and thatch. Individual pieces of sod shall be cut to the suppliers width and length or overtopped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots.
3. Wherever possible, sod shall be laid with the long edges parallel to the contour and with staggering joints. Sod shall be rolled and tamped, pegged or otherwise secured to prevent slippage on new sod and to ensure solid contact between sod roots and the underlying soil surface.
4. In sod shall be watered immediately following rolling or tamping until the underside of the sod and soil surface below the sod are thoroughly wet. The operation of laying, tamping and irrigating for any piece of sod shall be completed within eight hours.
5. Sod Maintenance
6. In the absence of adequate rainfall, watering shall be performed daily or as often as necessary during the first week and in sufficient quantities to maintain moist soil to a depth of 4". Watering should be done during the heat of the day to prevent wilting.
7. After the first week, sod watering is required as necessary to maintain adequate moisture content.
8. The first mowing of sod should not be attempted until the sod is firmly rooted. No more than of the grass leaf shall be removed by the initial cutting and subsequent cuttings. Grass height shall be maintained between 2" and 3" unless otherwise specified.

| No. | Species | Seed Mixture (For Hardiness Zone... 6b...) | | | Fertilizer Rate | | | Lime Rate |
|-----|-----------------------------|--|--------------------------|---------------|-----------------------------|------------------------------|------------------------------|--------------------------------|
| | | (From Table 25) | Application Rate (lb/ac) | Seeding Dates | Seeding Depth | N | P205 | |
| 1 | Tall Fescue(33%) | 110 lb/ac | 3/1-10/15 | 1"-2" | | | | |
| 2 | Weeping Love Grass (2%)plus | 3 lb/ac | 3/1-10/15 | 1"-2" | 90 lb/ac (2 lb/ 1000 sq ft) | 175 lb/ac (4 lb/ 1000 sq ft) | 175 lb/ac (4 lb/ 1000 sq ft) | 2 tons/ac (100 lb/ 1000 sq ft) |
| 3 | Sericea Lespedeza(5%) | 20 lb/ac | 3/1-10/15 | 1"-2" | | | | |

SEDIMENT CONTROL GENERAL NOTES

- 1. The developer is responsible for the acquisition of all required easement, right and/or right of way pursuant to the discharge from the erosion and sediment control practices, storm water management practices and the discharge of storm water onto or across or grading or other work to be performed on adjacent or downstream properties affected by this plan.
- 2. Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) seven calendar days as to the surface of all perimeter contours, dikes, swales, ditches, perimeter slopes, and all slopes greater than three horizontal to one vertical (3:1) and b) fourteen days for all other disturbed or graded areas on the project site. In the place sediment control measures will be maintained on a continuing basis until the site is permanently stabilized and all permit requirements are met.
- 3. On all sites with disturbed areas in excess of two acres, approval of the inspection agency is requested upon completion of installation of perimeter erosion and sediment controls before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals will not be authorized until this initial approval by the inspection agency is made.
- 4. Approval shall be requested upon final stabilization of all sites with disturbed areas in excess of two acres before removal of controls.
- 5. The owner/developer that signs the certification on an erosion and sediment control plan is the responsible party regardless of any sale of the property or work of subcontractors. Erosion and sediment control plans are approved for one owner/developer only. All permits under an erosion and sediment control plan must be on only be issued to the owner/developer that signs the certification on the plan.
- 6. PGSCD approval of an erosion and sediment control plan, pursuant to meeting local permit requirements for grading, building or street improvements is valid only when the work to be performed under the permit is the same as (no more/no less than) that contained in the plan as approved by the PGSCD.
- 7. Any changes or modifications to an approved erosion and sediment control plan, not approved by the PGSCD, shall invalidate the plan approval.
- 8. Offsite borrow or spoil areas must have an approved and active erosion and sediment control plan.
- 9. Temporary designed sediment basins shall be removed within 36 months after the beginning of construction of the basin.
- 10. Disturbed surface area _____acres.
- 11. Volume of spoil material _____cuyd.
- 12. Volume of borrow material _____cuyd.
- 13. Volume of extra material _____cuyd.
- 14. Note: Excess material shall be taken to a site with approved/active sediment control.
- 15. List Predominant soil types and general description per PGSCD soil survey : SEE SHEET 11

G. Mulching Seeded Areas - Mulch shall be applied to all seeded areas immediately after seeding.

1. If grading is completed outside of the seeding season, mulch alone shall be applied as prescribed in this section and maintained until the seeding season returns and seeding can be performed in accordance with these specifications.
2. When straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tons/acre. Mulch shall be applied to a uniform loose depth of between 1" and 2". Mulch applied shall achieve a uniform distribution and depth so that the soil surface is not exposed. If a mulch anchoring tool is to be used, the rate should be increased to 2.5 tons/acre.
3. Wood cellulose fiber used as a mulch shall be applied at a net dry weight of 1,500 lbs per acre. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a minimum of 50 lbs of wood cellulose fiber per 100 gallons of water.
4. Securing Straw Mulch (Mulch Anchoring): Mulch anchoring shall be performed immediately following mulch application to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon size of area and erosion hazard:
 - a. A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of two (2) inches. This practice is most effective on large areas, but is limited to better slopes where equipment can operate safely. If used on sloping land, this practice should be used on the contour if possible.
 - b. Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 pounds/acre. The wood cellulose fiber shall be mixed with water and the mixture shall contain a minimum of 50 pounds of wood cellulose fiber per 100 gallons of water.
 - c. Application of liquid binders should be heavier at the edges where wind catches mulch, such as valleys and on crests of ridges. The remainder of area should appear uniform after binder application. Synthetic binders - such as Acrylic DLR (Agra-Tack), DCA-70, Petrosol, Terra Soil II, Terra Tack AK, and other approved epoxies may be used at rates recommended by the manufacturer to anchor mulch.
 - d. Lightweight plastic netting may be stapled over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4' to 15' wide and 300' to 3,000' long.

I. Incremental Stabilization - Cut Slopes

1. All cut slopes shall be dressed, prepared, seeded and mulched as the work progresses. Slopes shall be excavated and stabilized in equal increments not to exceed 15'.
2. Construction sequence (Refer to Figure 5 below):
 - a. Excavate and stabilize all temporary swales, side ditches, or berms that will be used to convey runoff from the excavation.
 - b. Perform phase 1 excavation, dress, and stabilize.
 - c. Perform phase 2 excavation, dress, and stabilize. Overseed phase 1 as necessary.
 - d. Perform final phase excavation, dress, and stabilize. Overseed previously seeded areas as necessary.

Note: Once excavation has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization.

J. Incremental Stabilization of Embankments - Fill Slopes

1. Embankments shall be constructed in lifts as prescribed on the plans.
2. Slopes shall be stabilized immediately when the vertical height of the multiple lifts reaches 15' or when the grading operation ceases as prescribed in the plans.
3. At the end of each day, temporary berms and pipe slope drains should be constructed along the top edge of the embankment to intercept surface runoff and convey it down the slope in a non-erosive manner to a sediment trapping device.

K. Construction sequence: Refer to Figure 4 (below).

- a. Excavate and stabilize all temporary swales, side ditches, or berms that will be used to divert runoff around the fill. Construct Slope Stiff Fence on the low side of fill as shown in Figure 5, unless other methods shown on the plans address this area.
 - b. Place phase 1 embankment, dress and stabilize.
 - c. Place phase 2 embankment, dress and stabilize.
 - d. Place final phase embankment, dress and stabilize. Overseed previously seeded areas as necessary.
- Note: Once the placement of fill has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization.

Section III - Temporary Seeding

Vegetation - annual grass or grain used to provide cover on disturbed areas for up to 12 months. For longer duration of vegetative cover, Permanent Seeding is required.

A. Seed Mixtures - Temporary Seeding

1. Select one or more of the species or mixtures listed in Table 26 for the appropriate Plant Hardiness Zone (from Figure 5) and enter them in the Temporary Seeding Summary below, along with application rates and seeding depths. If this Summary is not put on the plans and completed, then Table 26 must be put on the plans.
2. For sites having soil tests performed, the rates shown on this table shall be deleted and the rates recommended by the testing agency shall be written in. Soil tests are not required for Temporary Seeding.

Section III - Permanent Seeding

Seeding grass and legumes to establish ground cover for a minimum period of one year on disturbed areas generally receiving low maintenance.

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2. For sites having disturbed area over 5 acres, the rates shown on this table shall be deleted and the rates recommended by the testing agency shall be written in.

Section IV - Sod: To provide quick cover on disturbed areas (2:1 grade or flatter).

A. General specifications

1. Class of turfgrass sod shall be Maryland or Virginia State Certified or Approved. Sod labels shall be made available to the job foreman and inspector.
2. Sod shall be machine cut at a uniform soil thickness of " , plus or minus " , at the time of cutting. Measurement for thickness shall include top growth and thatch. Individual pieces of sod shall be cut to the suppliers width and length or overtopped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots.
3. Wherever possible, sod shall be laid with the long edges parallel to the contour and with staggering joints. Sod shall be rolled and tamped, pegged or otherwise secured to prevent slippage on new sod and to ensure solid contact between sod roots and the underlying soil surface.
4. In sod shall be watered immediately following rolling or tamping until the underside of the sod and soil surface below the sod are thoroughly wet. The operation of laying, tamping and irrigating for any piece of sod shall be completed within eight hours.
5. Sod Maintenance
6. In the absence of adequate rainfall, watering shall be performed daily or as often as necessary during the first week and in sufficient quantities to maintain moist soil to a depth of 4". Watering should be done during the heat of the day to prevent wilting.
7. After the first week, sod watering is required as necessary to maintain adequate moisture content.
8. The first mowing of sod should not be attempted until the sod is firmly rooted. No more than of the grass leaf shall be removed by the initial cutting and subsequent cuttings. Grass height shall be maintained between 2" and 3" unless otherwise specified.

TABLE 27 GEOTEXTILE FABRICS

| CLASS | APPARENT OPENING SIZE MM. MAX. | GRAB TENSILE STRENGTH LB. MIN. | BURST STRENGTH PSI. MIN. |
|----------------|--------------------------------|--------------------------------|--------------------------|
| A | 0.30 | 250 | 500 |
| B | 0.60 | 200 | 320 |
| C | 0.30 | 200 | 320 |
| D | 0.60 | 90 | 145 |
| E | 0.30 | 90 | 145 |
| F (SILT FENCE) | 0.40-0.80* | 90 | 190 |

* US STD. SIEVE C2-02215

TABLE 28 STONE SIZE

| | SIZE RANGE | D ₁₀ | D ₅₀ | AASHTO | WEIGHT |
|-----------|---------------|-----------------|-----------------|--------|--------|
| NUMBER 57 | 3/8" - 1 1/2" | 1/2" | 1 1/2" | M-43 | N/A |