



20.0 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION DEFINITION

USING VEGETATION AS COVER FOR BARE SOIL TO PROTECT IT FROM FORCES THAT CAUSE EROSION.

PURPOSE

VEGETATIVE STABILIZATION SPECIFICATIONS ARE USED TO PROMOTE THE ESTABLISHMENT OF VEGETATION ON EXPOSED SOIL. WHEN SOIL IS STABILIZED WITH VEGETATION, THE SOIL IS LESS LIKELY TO ERODE AND MORE LIKELY TO ALLOW INFILTRATION OF RAINFALL...

CONDITIONS WHERE PRACTICE APPLIES

THIS PRACTICE SHALL BE USED ON DENuded AREAS AS SPECIFIED ON THE PLANS AND MAY BE USED ON HEAVILY ERODED OR CRITICALLY ERODING AREAS. THIS SPECIFICATION IS APPLICABLE TO TEMPORARY SEEDING TO QUICKLY ESTABLISH VEGETATION COVER FOR SHORT DURATION UP TO ONE YEAR...

EFFECTS ON WATER QUALITY AND QUANTITY

PLANTING VEGETATION IN DISTURBED AREAS WILL HAVE AN EFFECT ON THE WATER BUDGET, ESPECIALLY ON VOLUMES AND RATES OF RUNOFF. VEGETATION EVAPORATION, TRANSPIRATION, PRECIPITATION AND GROUNDWATER RECHARGE...

SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS

- A. SITE PREPARATION
1. INITIAL EROSION AND SEDIMENT CONTROL STRUCTURES EITHER TEMPORARY OR PERMANENT SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BERMS, WATERWAYS, OR SEDIMENT CONTROL BASINS.
2. PERFORM ALL GRADING OPERATIONS AT RIGHT ANGLES TO THE SLOPE...

- B. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS)
1. SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OVER 5 ACRES...

- C. SEEDING PREPARATION
1. TEMPORARY SEEDING
a. SEEDING PREPARATION SHALL CONSIST OF LOOSENING SOIL TO A DEPTH OF 3" TO 5" BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT...

- D. SEED SPECIFICATIONS
1. ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW. ALL SEED SHALL BE SUBJECT TO RE-TESTING BY A RECOGNIZED SEED LABORATORY...

- E. METHODS OF SEEDING
1. HYDROSEEDING - APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER, BROADCAST OR DROP SEEDER, OR A CULTIPACKER SEEDER.
2. IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES AMOUNTS WILL NOT EXCEED THE FOLLOWING...

- F. MULCH SPECIFICATIONS (IN ORDER OF PREFERENCE)
1. STRAW SHALL CONSIST OF THOROUGHLY THRESHED WHEAT, RYE OR OAT STRAW, REASONABLY FREE IN COLOR, AND SHALL NOT BE MUSTY, MODDY, CAKED, DECAYED, OR EXCESSIVELY DUSTY...

- G. MULCHING SEEDER AREAS - MULCH SHALL BE APPLIED TO ALL SEED AREAS IMMEDIATELY AFTER SEEDING.
1. IF GRADING IS COMPLETED OUTSIDE OF THE SEEDING SEASON, MULCH SHALL BE APPLIED AS DESCRIBED IN THIS SECTION AND MAINTAINED UNTIL THE SEEDING SEASON RETURNS...

- H. SECURING STRAW 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...

- I. INCREMENTAL STABILIZATION - CUT SLOPES
1. ALL CUTS SLOPES SHALL BE DRESSED, PREPARED, SEEDING AND MULCHED AS THE WORK PROGRESSES. SLOPES SHALL BE EXCAVATED AND STABILIZED IN EQUAL INCREMENTS NOT TO EXCEED 15'.
2. EXCAVATE AND STABILIZE ALL TEMPORARY SHALES, SIDE DITCHES, OR BERMS THAT WILL BE USED TO CONVEY RUNOFF FROM THE EXCAVATION...

- J. CONSTRUCTION SEQUENCES (REFER TO FIGURE 3 BELOW)
1. EXCAVATE AND STABILIZE ALL TEMPORARY SHALES, SIDE DITCHES, OR BERMS THAT WILL BE USED TO CONVEY RUNOFF FROM THE EXCAVATION. PERFORM PHASE 1 EXCAVATION, DRESS AND STABILIZE. PERFORM PHASE 2 EXCAVATION, DRESS AND STABILIZE. OVERSEED PREVIOUSLY SEEDS AREAS AS NECESSARY.

- K. ON SOIL HEATING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS INDICATING FERTILIZER AND LIME AMOUNTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:
1. PH FOR TOPSOIL SHALL BE BETWEEN 6.0 AND 7.5. IF THE TESTED SOIL DEMONSTRATES A PH OF LESS THAN 6.0, SUFFICIENT LIME SHALL BE FERTILIZER TO RAISE THE PH TO 6.5 OR HIGHER.

- L. MULCH APPLICATION
1. WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, EARTH DICES, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS.
2. GRADING ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED AT LEAST 4" - 8" DEEPER IN ELEVATION.

- M. ALTERNATE FOR PERMANENT SEEDING - INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS MAY BE APPLIED AS SPECIFIED BELOW:
1. COMPOSTED SLUDGE MATERIAL FOR USE AS A SOIL CONDITIONER FOR SPECIFIED DISTURBED AREAS OVER 5 ACRES SHALL BE TESTED TO PRESCRIBE AMENDMENTS AND FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS...

- N. CONSTRUCTION SPECIFICATIONS
1. FENCE POSTS SHALL BE A MINIMUM OF 36" LONG DRIVEN 15" MINIMUM INTO THE GROUND. WOOD POSTS SHALL BE 1 1/2" X 1 1/2" SQUARE MINIMUM CUT, OR 1 1/4" DIAMETER MINIMUM ROUND AND SHALL BE OF SOUND QUALITY HANGNWOOD. STEEL POSTS SHALL BE STANDARD T OR U SECTION WEIGHING NOT LESS THAN 100 POUNDS PER LINEAR FOOT.

- O. SILT FENCE DESIGN CRITERIA
TABLE WITH COLUMNS: SLOPE STEEPNESS, MAXIMUM SLOPE LENGTH, SALT FENCE LENGTH.
SLOPE STEEPNESS: FLATTER THAN 50:1, 50:1 TO 10:1, 10:1 TO 5:1, 5:1 TO 3:1, 3:1 TO 2:1, 2:1 AND STEEPER.
MAXIMUM SLOPE LENGTH: UNLIMITED, 125 FEET, 100 FEET, 50 FEET, 40 FEET, 20 FEET.
SALT FENCE LENGTH: UNLIMITED, 1,000 FEET, 750 FEET, 500 FEET, 250 FEET, 125 FEET.

- P. SUPER SILT FENCE
TABLE WITH COLUMNS: SLOPE, SLOPE STEEPNESS, SLOPE LENGTH (MAXIMUM), SALT FENCE LENGTH (MAXIMUM).
SLOPE: 0-10%, 10-20%, 20-33%, 33-50%, 50+%.
SLOPE STEEPNESS: 0-101, 101-51, 51-31, 31-21, 21+.

STANDARDS AND SPECIFICATIONS FOR TOPSOIL

DEFINITION

PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PLOT TO ESTABLISHMENT OF PERMANENT VEGETATION.

PURPOSE

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, NITROGEN TONTS TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

CONDITIONS WHERE PRACTICE APPLIES

- 1. THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:
A. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ARGILLITE TO PRODUCE VEGETATION GROWTH.
B. THE SOIL MATERIAL IS 50 SHALL NOT BE DEEP ENOUGH TO SUPPORT PLANTS OR BURNISH CONTINUES SUPPLY OF NITROGEN AND PLANT NUTRIENTS.

- 2. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

- 1. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.

- 2. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 3. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 4. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 5. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 6. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 7. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 8. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 9. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 10. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 11. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 12. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 13. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 14. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 15. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 16. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 17. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 18. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 19. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 20. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 21. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 22. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 23. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 24. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 25. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 26. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 27. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 28. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 29. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 30. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 31. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 32. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 33. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 34. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 35. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 36. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 37. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 38. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

- 39. TOPSOIL SPECIFICATIONS - A SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIC OR SOIL SCIENTIST AND APPROVED BY THE APPLICABLE APPROVAL AUTHORITY...

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED. SEEDING PREPARATION - LOOSEN UPPER THREE INCHES OF SOIL BY RAJING. DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS - APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS. PER 1000 SQ.FT.). SEEDING - FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15, SEED WITH 2-1/2 BUSHELS PER ACRE OF ANNUAL RYE (3.2 LBS. PER 1000 SQ.FT.). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS. PER ACRE OF KEEPING LEAVES (0.07 LBS. PER 1000 SQ.FT.). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOO.

MULCHING - APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 80 LBS. PER 1000 SQ.FT.) OF UNWETTED SMALL GRAM STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 210 GAL. PER ACRE (5 GAL. PER 1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES 8 FT. OR HIGHER, USE 347 GAL. PER ACRE (8 GAL. PER 1000 SQ.FT.) FOR ANCHORING.

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-TERM VEGETATIVE COVER IS NEEDED. SEEDING PREPARATION - LOOSEN UPPER THREE INCHES OF SOIL BY RAJING. DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS - IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES: 1) PREPARED - APPLY 2 TONS PER ACRE DOLOMITE LIMESTONE (62 LBS. PER 1000 SQ.FT.) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS. PER 1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS. PER 1000 SQ.FT.). 2) ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITE LIMESTONE (92 LBS. PER 1000 SQ.FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS. PER 1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.

SEEDING - FOR THE PERIOD MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE.

SEEDING - FOR THE PERIOD MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE.

SEEDING - FOR THE PERIOD MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE.

SEEDING - FOR THE PERIOD MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE.

SEEDING - FOR THE PERIOD MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE.

SEEDING - FOR THE PERIOD MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE.

SEEDING - FOR THE PERIOD MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE.

SEEDING - FOR THE PERIOD MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE.

SEEDING - FOR THE PERIOD MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE.

SEEDING - FOR THE PERIOD MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE.

SEEDING - FOR THE PERIOD MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE.

SEEDING - FOR THE PERIOD MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE.

SEEDING - FOR THE PERIOD MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE.

SEEDING - FOR THE PERIOD MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1000 SQ