

# HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

1. A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start

of any construction, (313-1855). 2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", and revisions thereto.

3. Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site. 4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 7, of the HOWARD COUNTY

DESIGN MANUAL, Storm Drainage. 5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL (Section G) for permanent seeding, sod, temporary seeding, and mulching. Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination

6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the

Howard County Sediment Control Inspector. 55.3 Ac Acres
0.90 Ac Acres
0.35 Ac Acres 7. Site Analysis: Total Area of Site Area Disturbed 0.55 Ac Acres
500 C.Y. Cu. Yds.
500 C.Y. Cu. Yds. Area to be roofed or poved Area to be vegetatively stabilized Total Cut Total Fill Offsite waste/borrow area location \_\_

8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.

9. Additional sediment control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.

10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial

approval by the inspection agency is made. Trenches for the construction of utilities is limited to three pipe lengths or that which can be back filled and stabilized within one working day, whichever is shorter.

# HOWARD SOIL CONSERVATION DISTRICT PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

SEEDBED PREPARATION: Loosen upper three inches of soil by raking, disking, or other acceptable means before seeding, if not previously loosened. SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following

1) PREFERRED -- Apply 2 tons per acres dolomitic limestone (92 lbs/1000sq, ft., schedules: and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq. ft.) before seeding. Harrow or disk into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform

fertilizer (9 lbs/1000sq, ft.) 2) ACCEPTABLE -- Apply 2 tons per acres dolomitic limestone (92 lbs/1000sq, ft.) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq. ft.) before seeding. Harrow or disk into upper three inches of soil.

SEEDING -- For the periods March I thru April 30, and August I thru October 15, seed with 60 lbs per acre (1.4 lbs/1000sq, ft.) of Kentucky 31 Tall Fescue. For the period May I thru July 31, seed with 60 lbs per acre (1.4 lbs/1000sq, ft.) of Kentucky 31 Tall Fescue and 2 lbs. per acre (.05 lbs/1000sq, ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) - 2 tans per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) - Use sod. Option (3) - Seed with 60 lbs. per acre Kentucky 31 Tall Fescue and mulch 2 tans / acre well anchored straw.

MULCHING -- Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000sq, ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000sq, ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000sq, ft.) for anchoring.

MAINTENANCE -- Inspect all seeding areas and make needed repairs, replacements and

## HOWARD SOIL CONSERVATION DISTRICT TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short-termivegetative cover

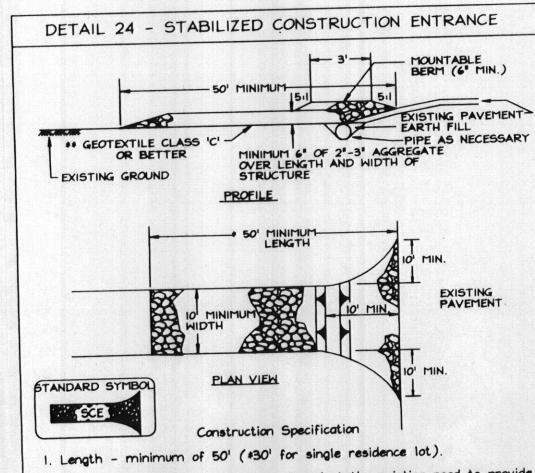
SEEDBED PREPARATION: -- Loosen upper three inches of soil by raking, disking, or other acceptable means before seeding, if not previously loosened.

SOIL AMENDMENTS: -- Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000sq, ft.)

SEEDING -- For periods March I thru April 30, and from August 15 thru October 15 seed with 2-12 bushels per acre of annual rye (3.2 lbs/1000sq, ft.). For the period May I thru August 14, seed with 3 lbs. per acre of weeping lovegrass (.07 lbs/1000sq, 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 sod. MULCHING -- Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000sq, ft.) of unrotted weed free small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000sq, ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000sq, ft.) for anchoring.

Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for additional rates and methods not covered.



2. Width - 101 minimum, should be flared at the existing road to provide

3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. \*\*The plan approval authority may not require single family residences to use geotextile.

4. Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.

5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a straining of 6 of states and the pipe has to be sized according to entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.

6. Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

HARYLAND DEPARTMENT OF ENVIRONMENT HATER MANAGEMENT ADMINISTRATION

DETAIL 33- SUPER SILT FENCE NOTE: FENCE POST SPACING SHALL NOT EXCEED 10' CENTER TO CENTER TO 10' MAXIMUM 34" MINIMUM THE MENTAL AND A GROUND SURFACE 21/2" DIAMETER GALVANIZED L & MINIMUM CHAIN LINK FENCING -FLOW FILTER CLOTH-- 16" MIN. IST LAYER OF FILTER CLOTH\* EMBED FILTER CLOTH 8"\_\_\_\_\_\_ STANDARD SYMBOL \*IF MULTIPLE LAYERS ARE REQUIRED TO ATTAIN 42" \_\_\_\_SSF -\_\_ Construction Specifications

1. Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length posts.

2. Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence. 3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.

4. Filter cloth shall be embedded a minimum of 8" into the ground. 5. When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.

6. Maintenance shall be performed as needed and silt buildups removed develop in the silt fence, or when silt reaches 50% of

7. Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F: Test: MSMT 509 50 lbs/in (min. Tensile Strength Test: MSMT 509 20 lbs/in (min.)
0.3 gal/ft2/minute (max.) Tensile Modulus Test: MSMT 322 Flow Rate

Filtering Efficiency

MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

# 21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

## Definition Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

### Conditions Where Practice Applies

- This practice is limited to areas having 2:1 or flatter slopes where:
- a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative b. The soil material is so shallow that the rooting zone is not deep enough to support plants
- or furnish continuing supplies of moisture and plant nutrients. The original soil to be vegetated contains material toxic to plant growth. The soil is so acidic that treatment with limestone is not feasible.
- For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

#### Construction and Material Specifications

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.

Topsoil Specifications - Soil to be used as topsoil must meet the following:

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 agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5 % by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1-1/2" in diameter.

Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistle, or others as specified.

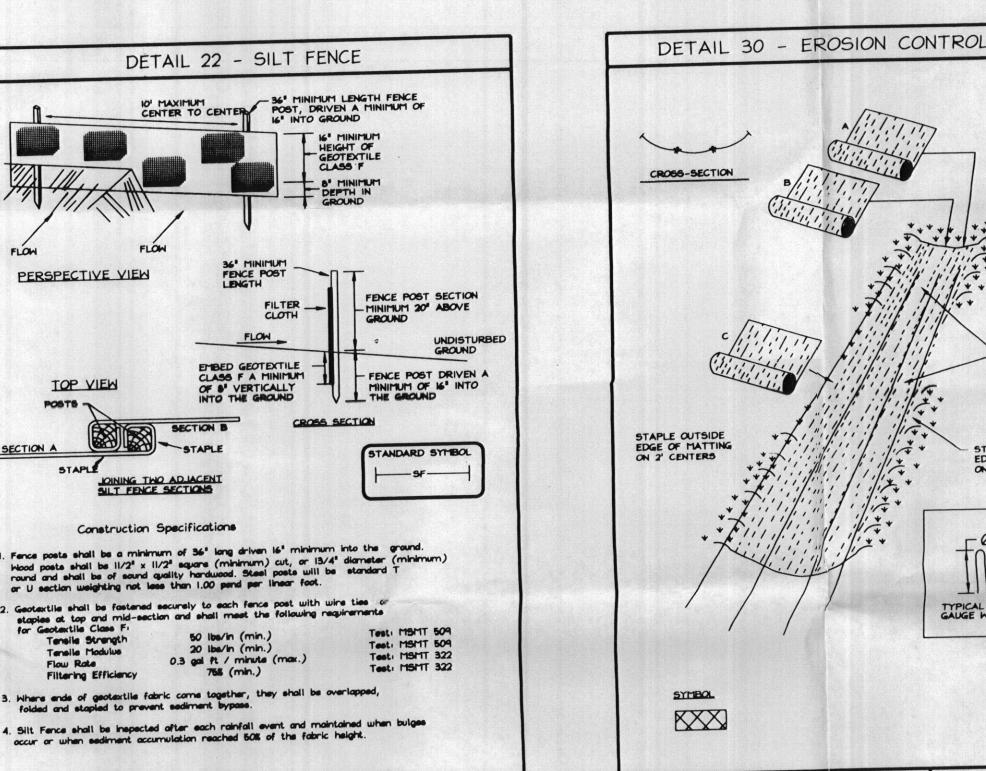
iii. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.

II. For sites having disturbed areas under 5 acres:

Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization Section 1 - Vegetative Stabilization Methods and Materials.

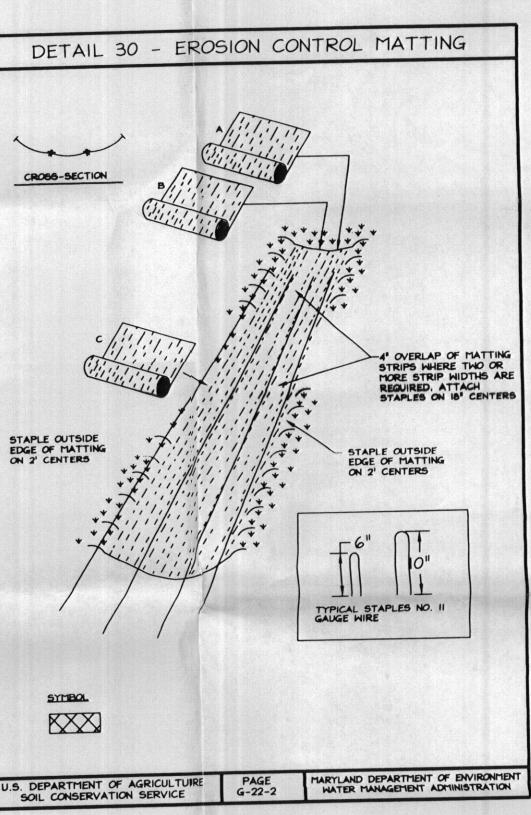
#### IV. For sites having disturbed areas over 5 acres:

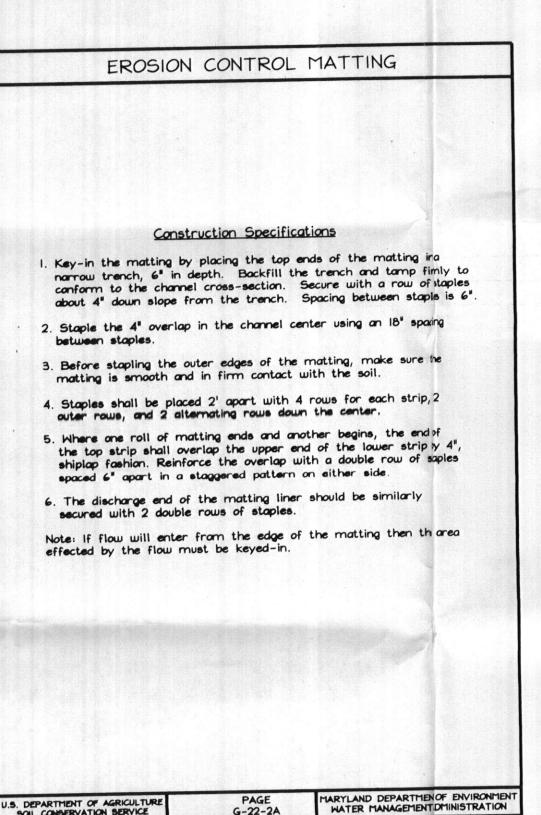
- i. On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following: a. pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH
- of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher b. Organic content of topsoil shall be not less than 1.5 percent by weight. c. Topsoil having soluble salt content greater than 500 parts per million shall not be
- d. No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phyto-toxic materials.
- Note: Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in
- ii. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization -- Section I - Vegetative Stabilization Methods and Materials.
- i. When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps
- ii. Grades on the areas to be topsoiled, which have been previously established, shall be
- maintained, albeit 4" 8" higher in elevation. iii. Topsoil shall be uniformly distributed in a 4" - 8" layer and lightly compacted to a
- minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be
- corrected in order to prevent the formation of depressions or water pockets. iv. Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.
- Alternative for Permanent Seeding Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified
- . Composted Sludge Material for use as a soil conditioner for sites having 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:
- a. Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.
- b. Composted sludge shall contain at least I percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a Ph of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the
- requirements prior to use. c. Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.
- ii. Composte perative Extension Service, University of Maryland and Virginia Polytechnic Institutes. Revised 1973.



MARYLAND DEPARTMENT OF ENVIRONMEN WATER MANAGEMENT ADMINISTRATION

E-15-3





## SEQUENCE OF CONSTRUCTION:

I DAY I. OBTAIN GRADING PERMIT. 2. NOTIFY THE HOWARD COUNTY DEPT OF INSPECTIONS, LICENSES AND PERMITS AT LEAST 24 HOURS PRIOR TO I DAY STARTING WORK. I DAY 3. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE. 4. INSTALL SILT FENCE AND SUPER SILT FENCE 3 DAYS AT LIMIT OF DISTURBANCE SHOWN HEREON. INSTALL DRIVEWAY CULVERT AND DIVERSION CHANNEL

ON HIGH SIDE OF DRIVEWAY. STABILIZE WITH EROSION 6 DAYS CONTROL MATTINGS.

6. CLEAR AND GRUB TO SUBGRADE. 5 DAYS 7. BEGIN EXCAVATION FOR HOUSE FOUNDATIONS AND BEGIN 60 DAYS HOUSE CONSTRUCTION. INSTALL SEPTIC SYSTEM.

8. THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON AFTER EACH RAINFALL AND ON A DAILY BASIS.

9. REMOVE SEDIMENT FROM ROADWAYS AND DRESS STABILIZED CONSTRUCTION ENTRANCE AS REQUIRED.

10. FINE GRADE AND STABILIZE WITH PERMANENT SEEDING MIXTURE AND STRAW MULCH. INSTALL INDIVIDUAL DRIVEWAY AND HOUSE WALK.

II. WITH PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT AND EROSION CONTROL MEASURES AND STABILIZE ANY REMAINING DISTURBED AREAS WITH PERMANENT SEEDING MIXTURE AND STRAW MULCH. TOTAL TIME:

LDE Inc.

Engineers, Surveyors, Planners 9250 Rumsey Road, Suite 106 Columbia, Maryland - 21045

(410)715-1070 - (301)596-3424 - FAX(410)715-9540

GRADING & SEDIMENT CONTROL NOTES AND DETAILS

MAINTENANCE

5 DAYS

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND

MEET THE TECHNICAL REQUIREMENTS

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

ENGINEER'S CERTIFICATE Program for the Control of Sediment and Erosion before beginning I also authorize periodic on site inspections by

I hereby certify that this plan for the property of the personal represents a practical and workship plan based in my personal knowledge of the site conditions and the plan because the personal accordance with the requirements of the Howard fall Conservation I/We certify that all development and/or construction will be done according to these plans, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training

U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

authorized agents, as

7/05/05

TENANT HOUSE BDB BOARMAN PROPERT EDS Tax Map No. 41 - Grid No. 13 - Parcel 62 5th Election District - Howard County, Maryland CHECKED 12124 Route 216 Fulton, Maryland REVISIONS REVISE SITE ANALYSIS DUE TO DRIVEWAY RELOCATION Christopher L. Rand Florentine & Rosette Boarman 13187 Highland Road 12124 Route 216 Highland, Maryland 2077 Fulton, Maryland 20759

SHOWN

04-006

GP05-85