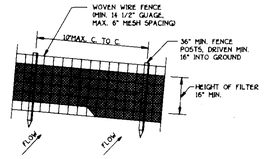
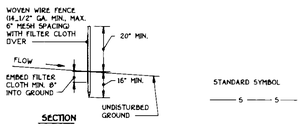


PERSPECTIVE VIEW



SECTION

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OF STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD

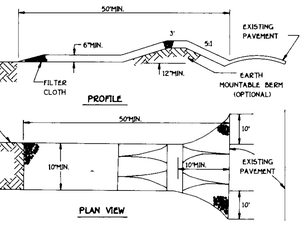
FENCE: WOVEN WIRE, 14 GA. 6" MAX. MESH OPENING

FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA TH ON OR APPROVED EQUAL

PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL

SILT FENCE

NOT TO SCALE

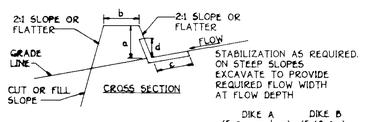


CONSTRUCTION SPECIFICATIONS

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THE SIX (6) INCHES.
4. WIDTH - TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE - 2

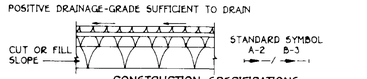
NOT TO SCALE



STABILIZATION AS REQUIRED. ON STEEP SLOPES EXCAVATE TO PROVIDE REQUIRED FLOW WIDTH AT FLOW DEPTH

	DIKE A (5 ac. or less)	DIKE B (5-10 ac.)
a-DIKE HEIGHT	18"	36"
b-DIKE WIDTH	24"	36"
c-FLOW WIDTH	4'	6'
d-FLOW DEPTH	8"	15"

POSITIVE DRAINAGE-GRADE SUFFICIENT TO DRAIN



CONSTRUCTION SPECIFICATIONS

1. ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF SHALL BE CONVEYED TO A SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.
6. STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN SEEDING SEASON, (B) FLOW CHANNEL AS PER THE CHART BELOW.

FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	.5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE, OR EXCELSIOR; SOD; 2" STONE
3	5.1-8.0%	SEED WITH JUTE, OR SOD; 2" STONE	LINED RIP-RAP 4"-8"
4	8.1-20%	LINED RIP-RAP 4"-8"	ENGINEERING DESIGN

A. STONE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.
B. RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 8 INCHES THICKNESS AND PRESSED INTO THE SOIL.
C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS

7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

EARTH DIKE

NOT TO SCALE

ALL DISTURBED AREAS SHALL BE STABILIZED AS FOLLOWS:

SEEDBED PREPARATION:
LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

SOIL AMENDMENTS:
APPLY TWO TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1,000 SQ.FT.) AND 600 LBS. PER ACRE 0-20-20 FERTILIZER (14 LBS./1,000 SQ.FT.) BEFORE SEEDING HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 38-0-0 UREAFORM FERTILIZER (9 LBS./1,000 SQ.FT.) AND 500 LBS. PER ACRE (11.5 LBS./1,000 SQ.FT.) OF 10-20-20 FERTILIZER.

SEEDING:
FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 100 LBS. PER ACRE (2.3 LBS./1,000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 60 LBS/ACRE (1.4 LBS./1,000 SQ.FT.) KENTUCKY 31 TALL FESCUE AND 2 LBS. PER ACRE (0.05 LBS./1,000 SQ.FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THROUGH FEBRUARY 28, PROJECT SITE BY: OPTION (1) - TWO TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) - USE SOD. OPTION (3) - SEED WITH 100 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH TWO TONS/ACRE WELL ANCHORED STRAW. ALL SLOPES SHOULD BE HYDROSEEDED.

MULCHING:
APPLY 1 TO 2 TONS PER ACRE (10 TO 90 LBS./1,000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING 200 GALLONS PER ACRE (5 GAL./1,000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT ACRES, ON SLOPES 8 FEET OR HIGHER USE 348 GALLONS PER ACRE (8 GAL./1,000 SQ.FT.) FOR ANCHORING.

MAINTENANCE:
INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

* FOR PUBLIC PONDS SUBSTITUTE CHEMUNG CROWNVETCH AT 15 LBS./ACRE AND KENTUCKY 31 TALL FESCUE AT 40 LBS/ACRE AS THE SEEDING REQUIREMENT. OPTIMUM SEEDING DATE FOR THIS MIXTURE IS MARCH 1 TO APRIL 30.

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION:
LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS:
APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1,000 SQ.FT.)

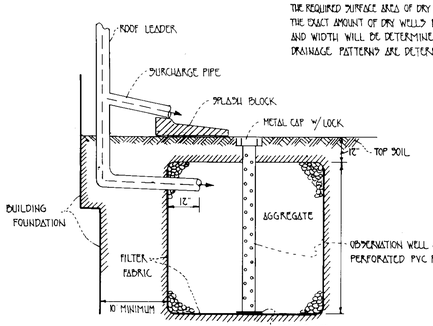
SEEDING:
FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 17 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./ACRE OF WEEPING LOVEGRASS (.07 LBS./1,000 SQ.FT. FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY: APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

MULCHING:
APPLY 1? TO 2 TONS PER ACRE (70 TO 90 LBS./1,000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL./1,000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT ACRES ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL./1,000 SQ.FT.) FOR ANCHORING.

REFER TO THE 1988 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

TEMPORARY SEEDING NOTES

NOTE:
THE REQUIRED SURFACE AREA OF DRY WELL IS 38.70 FT.. THE EXACT AMOUNT OF DRY WELLS REQUIRED AND LENGTH AND WIDTH WILL BE DETERMINED ONCE DOWNSPOUT DRAINAGE PATTERNS ARE DETERMINED.



PROFILE
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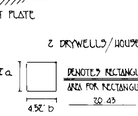
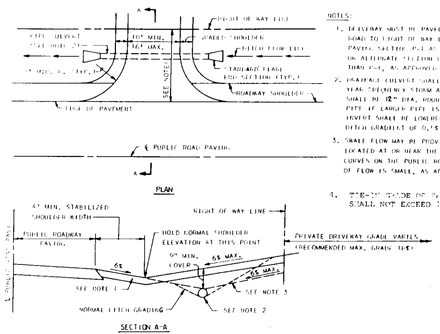


PLAN VIEW
NO SCALE

TYPICAL DRY WELL CROSS SECTION
(INFILTRATION MANUAL)
NO SCALE



RESIDENTIAL DRIVEWAY ENTRANCE

(CONNECTION TO OPEN SECTION ROADWAY)
NOT TO SCALE

1) A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICSENSES 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 RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: (1) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1, (2) 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 12, 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 FOR PERMANENT SEEDING (SEC. 50), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50), AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
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.
7) SITE ANALYSIS:

TOTAL AREA OF SITE	1.27	ACRES
AREA DISTURBED	1.20	ACRES
AREA TO BE ROOFED OR PAVED	0.40	ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.80	ACRES
TOTAL CUT	1000	CU.YDS.
TOTAL FILL	1000	CU.YDS.
OFFSITE WASTE/BORROW AREA LOCATION		CU.YDS.

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 CONTROLS 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.
11) TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGHTS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

SEDIMENT CONTROL NOTES

DEFINITION
Using vegetation as cover for barren 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, thereby reducing sediment loads and run-off to downstream areas, and improving wildlife habitat and visual resources.

CONDITIONS WHERE PRACTICE APPLIES
This practice shall be used on denuded areas be specified on the plans and may be used on highly erodible or critically eroding areas. This specification is divided into Temporary Seeding, to quickly establish vegetative cover for short duration (up to one year), and Permanent Seeding, for long term vegetative cover. Examples of applicable areas for Temporary Seeding are temporary Soil Stockpiles, cleared areas being left idle between construction phases, earth dikes, etc. and for Permanent Seeding are lawns, dams, cut and fill slopes and other areas at final grade, former stockpile and staging areas, etc.

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, infiltration evaporation, transpiration, percolation, and groundwater recharge. Vegetation, over time, will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth.
Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants will also help protect groundwater supplies by assimilating those substances present within the root zone.
Sediment control devices must remain in place during grading, seedbed preparation, seeding, mulching and vegetative establishment to prevent large quantities of sediment and associated chemicals and nutrients from washing into surface waters.

SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS

A. Site Preparation
   i. Install erosion and sediment control structures (either temporary of permanent) such as diversions, grade stabilization structures, berms, waterways, or sediment control basins.
   ii. Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.
   iii. Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed area over 5 acres.
B. Soil Amendments (Fertilizer and Lime Specifications)
   i. 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. Soil analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.
   ii. Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers shall be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warrantee of the producer.
   iii. Lime materials shall be ground limestone (hydrated or burnt lime may be substituted) which contains at least 50% total oxides (calcium oxide plus magnesium oxide). Limestone shall be ground to such fineness that at least 50% will pass through a #100 mesh sieve and 90-100% will pass through a #20 mesh sieve.
   iv. Incorporate lime and fertilizer into the top 3-5" of soil by disking or other suitable means.
C. Seedbed Preparation
   i. Temporary Seeding
      a. Seedbed preparation shall consist of loosening soil to a depth of 3" to 5" by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. Alternatively, it should not be rolled or dragged smooth, but left in the roughened condition. Sloped areas (greater than 3:1) should be tracked leaving the surface in an irregular condition with ridges running parallel to the contour of the slope.
      b. Apply fertilizer and lime as prescribed on the plans.
      c. Incorporate lime and fertilizer into the top 3-5" of soil by disking or other suitable means.
   ii. Permanent Seeding
      1. Minimum soil conditions required for permanent vegetative establishment:
         a. Soil pH shall be between 6.0 and 7.0.
         2. Soluble salts shall be less than 500 parts per million (ppm).
         3. The soil shall contain less than 40% clay, but enough fine grained material (>30% silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception is if lovegrass or sericea lespedeza is to be planted, then a sandy soil (<30% silt plus clay) would be acceptable.
         4. Soil shall contain 1.5% minimum organic matter by weight.
         5. Soil must contain sufficient pore space to permit adequate root penetration.
         6. If these conditions cannot be met by soils on site, fouling topsoil is required in accordance with Section 21 Standard and Specification for Topsoil.
      b. Areas previously graded in conformance with the drawings shall be maintained in a true and even grade, then scarified or otherwise loosened to a depth of 3-5" to permit bonding of the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from sliding down a slope.
      c. Apply soil amendments as per soil test or as included on the plans.
      d. Mix soil amendments into the top 3-5" of topsoil by disking or other suitable means. Lawn areas should be raked to smooth the surface, remove large objects like stones and branches, and ready the area for seed and application. Where site conditions will not permit normal seedbed preparation, loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 3:1) should be tracked by a dozer leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 1-3" of soil should be loose and friable. Seedbed loosening may not be necessary on newly disturbed areas.
   D. Seed Specifications
      i. 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. All seed used shall have been tested within the 6 months immediately preceding the date of sowing such material on this job.
      Note: Seed tags shall be made available to the inspector to verify type and rate of seed used.
      ii. Inoculant - The inoculant for treating legume seed in the seed mixtures shall be a pure culture of nitrogen-fixing bacteria prepared specifically for the species. Inoculants shall not be used later than the date indicated on the container. Add fresh inoculant as directed on package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until used. Temperatures above 75°-80° F. can weaken bacteria and make the inoculant less effective.
   E. Methods of Seeding
      i. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer), broadcast or drop method, or a cultipacker seeder.
         a. If fertilizer is being applied at the time of seeding, the application rates amounts will not exceed the following: nitrogen maximum of 100 lbs. per acre total of soluble nitrogen P205 (phosphorous) 200 lbs/ac. K20 (potassium) 200 lbs/ac.
         b. Lime - use only ground agricultural limestone, 6lb to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at 1m one time. Do not use burnt or hydrated lime when hydroseeding.
         c. Seed and fertilizer shall be mixed on site and seeding shall be done immediately and without interruption.
      ii. Dry Seeding: This includes use of conventional drop or broadcast spreaders.
         a. Seed spreads dry shall be incorporated into the subsoil at the rates prescribed on the Temporary or Permanent Seeding Summaries or Tables 26 or 26. The seeded area shall then be rolled with a weighted roller to provide good seed to soil contact.
         b. Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.
      iii. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil.
         a. Cultipacking seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seedbed must be firm after planting.
         b. Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.
   F. Mulch Specifications (in order of preference)
      i. Straw shall consist of thoroughly threshed wheat, rye or oat straw, reasonable bright in color, and shall not be musty, moldy, caked, decayed, or excessively dusty and shall be free of noxious weed seeds as specified in the Maryland Seed Law.
      ii. Wood Cellulose Fiber Mulch (WCFM)
         a. WCFM shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state.
         b. WCFM shall be dried green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniform spread slurry.
         c. WCFM, including dye, shall contain no germination or growth inhibiting factors.
         d. WCFM materials shall be manufactured and processed in a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material shall form a blotter-like ground cover, on application, having moisture absorption and percolation properties and shall cover and hold grass seed in contact with the soil without inhibiting the growth of the seedling.
         e. WCFM material shall contain no elements or compounds at concentration levels that will be phytotoxic.
         f. WCFM must conform to the following physical requirements: fiber length to approximately 10 mm., diameter appropriate, 1 mm. pH range of 4.0 to 8.5, ash content of 1.6% maximum and water holding capacity of 90% minimum.
      Note: Only straw mulch should be used in brush where any species of grass is desired.
   G. Mulching Seeded Areas - Mulch shall be applied to all seeded areas immediately after seeding.
      i. Mulching is completed outside of the seeding season, mulch along will be applied as prescribed in this section and maintained until the seedling season returns and seeding can be performed in accordance with these specifications.
      ii. When straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tons/acre. Mulch shall be applied in 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.
      iii. 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.
   H. 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.
      i. 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 flatter slopes where equipment can operate safely. If used on sloping land, this practice should be used on the contour if possible.
      ii. Wood cellulose fiber may be used for mulching 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 maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
      iii. Application of liquid binders should be heavier at the edges where wind catches mulch, such as in valleys and crest of banks. The remainder of area should be appear uniform after binder application. Synthetic binders - such as Acrylic DLR (Agro-Tack), DCA-70 Petroset, Terra Tax II, Terra Tack AR or other approved equal may be used at rates recommended by the manufacture to anchor mulch.
      iv. Lightweight plastic netting may be stapled over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4' to 15' feet wide and 300 to 3,000 feet long.

STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

BUILDER
DORSEY FAMILY BUILDERS
9926 GYPNESS MEDE DRIVE
ELLICOTT CITY MD 21042

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

ENGINEER'S CERTIFICATE
"I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."
Signature of Engineer (Print name below signature) — Date: 12/20/96

DEVELOPER'S CERTIFICATE
"I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."
Signature of Developer (Print name below signature) — Date: 2-27-97

Reviewed for HOWARD SCD and meets Technical Requirements.
U.S.D.A.-Natural Resources Conservation Service — Date: 3/11/97
This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
Howard SCD — Date: 3/11/97

OWNER/DEVELOPER
MARY LANE GENERAL PARTNERSHIP
MR. NICK LIPSKINT
BRANTLY DEVELOPMENT GROUP
8835-P COLUMBIA 100 PARKWAY
COLUMBIA, MARYLAND

APPROVED: DEPARTMENT OF PLANNING AND ZONING
DIRECTOR — DATE: 3/18/97
ACTING DIRECTOR OF LAND DEVELOPMENT — DATE: 3/14/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE: 3/12/97

SUBDIVISION			SECTION/AREA	LOT NO.
NORDAU ACRES				1 THRU 5
PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
12261	6	R-12	47	6	6069.01
WATER CODE			SEWER CODE	
B03			4360000	

SITE DEVELOPMENT PLAN
(NOTES AND DETAILS)

NORDAU ACRES

LOTS 1 THROUGH 5
GRID 6
6' TAX MAP No: 47 PARCEL: 665
6TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: FEB. 20, 1996
SHEET 2 OF 2

S.D.P.97-66

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT. (1 WEEK)
2. INSTALL SEDIMENT AND EROSION CONTROL DEVICES PER PLAN. (2 DAYS)
3. CLEAR AND GRUB SITE. (4 DAYS)
4. EXCAVATE FOR FOUNDATIONS AND ROUGH GRADE. (1 WEEK)
5. CONSTRUCT DWELLING. (60 DAYS PER DWELLING)
6. FINE GRADE SITE, INSTALL DRIVEWAYS. (2 DAYS)
7. INSTALL PERMANENT SEEDING. (2 DAYS)
8. REMOVE SEDIMENT CONTROL DEVICES AS PERMISSION IS GRANTED BY SEDIMENT CONTROL INSPECTOR AND UPLAND AREAS HAVE BEEN STABILIZED. (2 DAYS)

MINIMUM LOT SIZE CHART

LOT No.	GROSS AREA	PIPESTEM AREA	REMAINING AREA	100 YEAR FLOODPLAIN	25% SLOPES	MINIMUM LOT SIZE
1	14,119 Sq.Ft.	0.000 Sq.Ft.	14,119 Sq.Ft.	----	----	14,119 Sq.Ft.
2	13,154 Sq.Ft.	484 Sq.Ft.	12,670 Sq.Ft.	----	----	12,670 Sq.Ft.
3	13,994 Sq.Ft.	904 Sq.Ft.	13,090 Sq.Ft.	----	----	13,090 Sq.Ft.
4	14,834 Sq.Ft.	1,324 Sq.Ft.	13,510 Sq.Ft.	----	----	13,510 Sq.Ft.
5	19,160 Sq.Ft.	1,744 Sq.Ft.	17,416 Sq.Ft.	----	----	17,416 Sq.Ft.

M.C.E. & S.H.C ELEVATION CHART

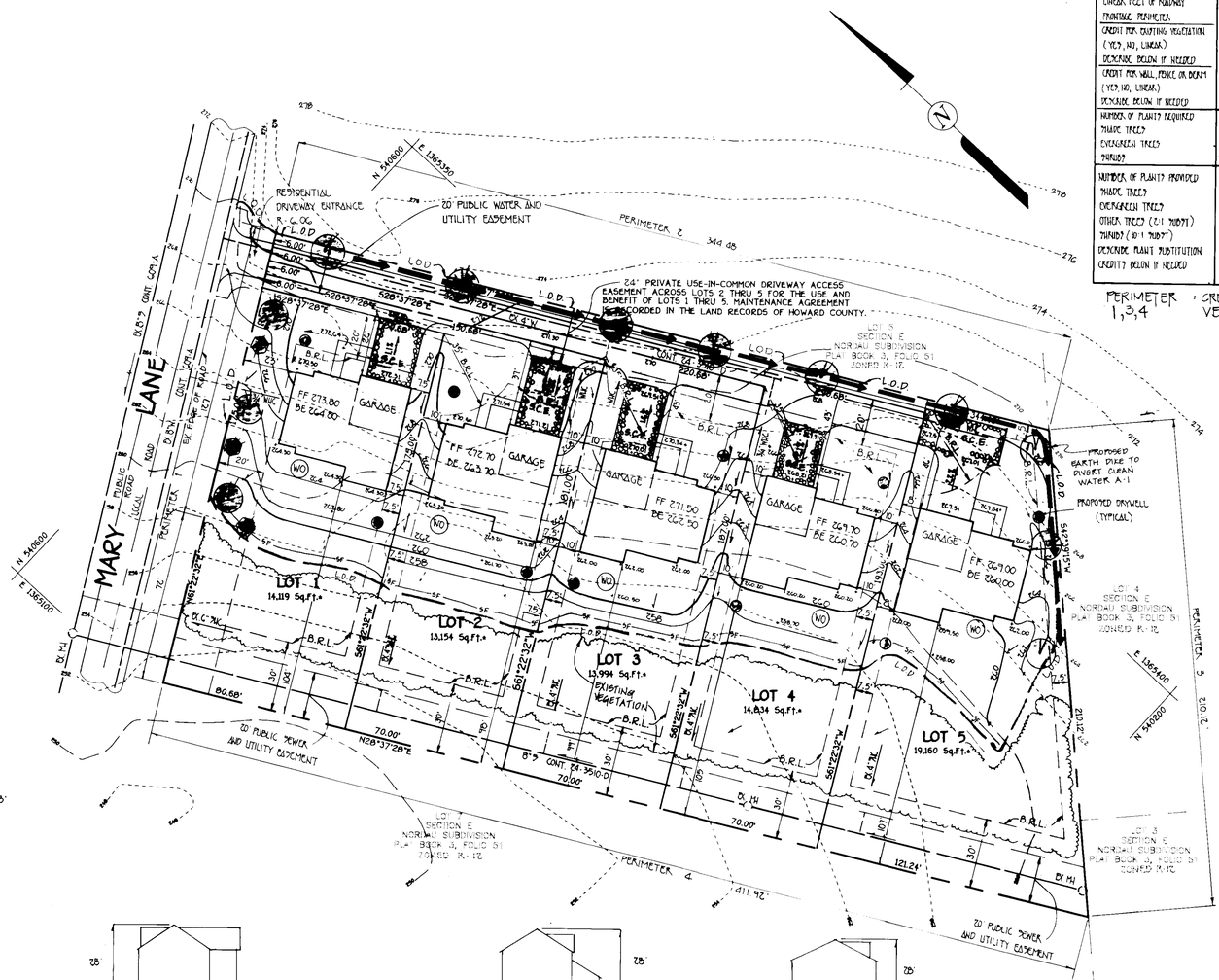
LOT NO.	M.C.E. ELEVATION	S.H.C. INV. ELEVATION • EASEMENT
1	251.6'	246.2'
2	252.5'	244.23'
3	253.8'	244.58'
4	253.0'	244.88'
5	256.7'	245.39'

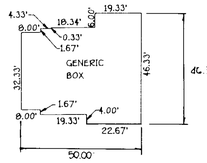
STREET ADDRESS CHART

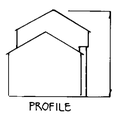
LOT NO.	STREET ADDRESS
1	8731 MARY LANE
2	8727 " "
3	8723 " "
4	8719 " "
5	8715 " "

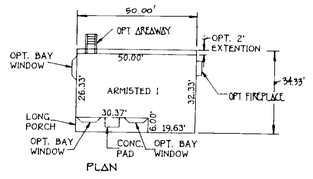
LEGEND

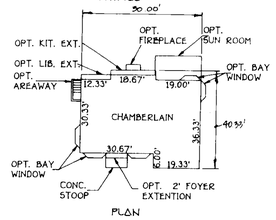
- EXISTING 2' INTERVAL CONTOUR
- EXISTING 10' INTERVAL CONTOUR
- PROPOSED 2' INTERVAL CONTOUR
- PROPOSED 10' INTERVAL CONTOUR
- G24 SPOT ELEVATION
- (W) PROPOSED WALKOUT
- FF FIRST FLOOR ELEVATION
- BE BASEMENT ELEVATION
- SILT FENCE
- EARTH DIKE
- TREE PROTECTION FENCE
- EXISTING TREE LINE
- EXISTING STREET TREE
- LOD LIMITS OF DISTURBANCE
- PROPOSED DRYWELL (TYPICAL)

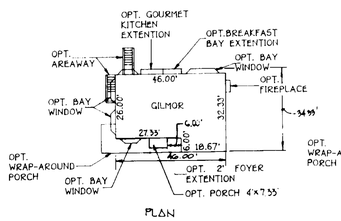


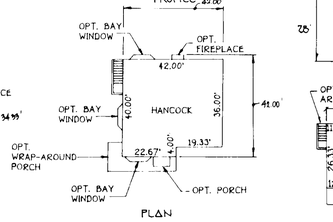


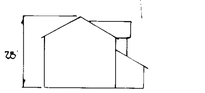


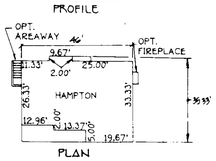


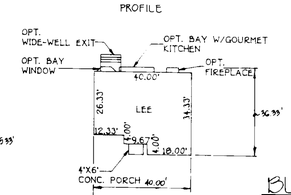












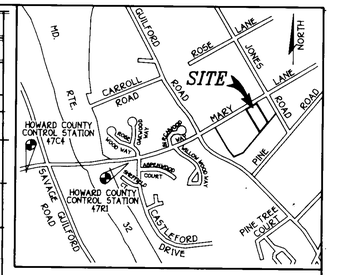
SCHEDULE 'A' - PERIMETER LANDSCAPE EDGE

PERIMETER	1	2	3	4
CATEGORY	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO PERIMETER PROPERTIES
LANDSCAPE TYPE	'D'	'A'	'A'	'A'
LINEAR FEET OF ROADWAY FRONTAGE PERIMETER	199.00	344.48	210.12	411.92
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR) DESCRIBE BELOW IF NEEDED	YES 72	NO	YES 60.12'	YES 411.92
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR) DESCRIBE BELOW IF NEEDED	-	NO	NO	NO
NUMBER OF PLANTS REQUIRED				
SHADE TREES	3	6	3	—
EVERGREEN TREES	3	—	—	—
SHRUBS	—	—	—	—
NUMBER OF PLANTS PROVIDED				
SHADE TREES	3	6	3	—
EVERGREEN TREES	3	—	—	—
OTHER TREES (2:1 SUBST.)	—	—	—	—
SHRUBS (10:1 SUBST.)	—	—	—	—
DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED				

PERIMETER 1,3,4 : CREDIT FOR EXISTING VEGETATION.

LANDSCAPE SCHEDULE

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
12		ACER RUBRUM ' OCTOBER GLORY '	OCTOBER GLORY MAPLE	2½"-3"
3		PINUS STROBUS	WHITE PINE	6'-8' HT.



VICINITY MAP
SCALE: 1"=1200'

GENERAL NOTES:

1. THE CONTRACTOR SHALL NOTIFY THE THE CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEASE (5) FIVE WORKING DAYS PRIOR TO THE START OF WORK.
2. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEASE 48 HOURS PRIOR TO ANY EXCAVATION WORK.
3. THIS PROJECT IS SUBJECT TO HOWARD COUNTY FILES WP 96-63 WHICH THE PLANNING DIRECTOR ON JANUARY 24, 1996 APPROVED A REQUEST TO WAIVE:
   1. SECTION 16.145 WAIVE REQUIREMENT OF A SKETCH PLAN
   2. SECTION 16.146 TO WAIVE THE REQUIREMENT OF A PRELIMINARY PLAN
4. HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON HOWARD COUNTY GEODETIC CONTROL STATIONS:
   STA. 47C4 N 539846.16 (FEET) E 1361365.50 (FEET)
   STA. 47R1 N 539729.30 (FEET) E 1363085.80 (FEET)
5. BOUNDARY SURVEY PERFORMED ON OR ABOUT NOVEMBER 7, 1995 BY FISHER, COLLINS & CARTER, INC.
6. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
7. SITE ANALYSIS:
   A. THIS PROJECT IS ZONED R-12.
   B. TOTAL AREA OF BUILDING LOT: 1.751 AC.
   C. LIMIT OF SUBDIVISION AREA: 1.751 AC.
   D. TOTAL NUMBER OF BUILDABLE LOTS: 5
8. PROJECT BACKGROUND:
   LOCATION: TAX MAP 47 GRID: 6 PARCEL 665
   ELECTION DISTRICT: SECOND
   TOTAL TRACT AREA: 1.751 AC.
9. THIS PLAN IS FOR HOUSE SITING AND LOT GRADING. LANDSCAPING IMPROVEMENTS SHOWN WITHIN THE SITE ON THIS S.D.P. ARE NOT USED FOR CONSTRUCTION. FOR CONSTRUCTION, SEE APPROVED WATER AND SEWER PLANS CONTRACT NO. 14-3500.
10. CONTRACTOR WILL CHECK SEWER HOUSE CONNECTION ELEVATION AT PROPERTY LINE PRIOR TO CONSTRUCTION.
11. SECTION 128.A.1.c. OF THE ZONING REGULATIONS ALLOWS PORCHES OR DECKS, OPEN OR ENCLOSED NOT TO PROJECT MORE THAN 10 FEET INTO THE REQUIRED FRONT OR REAR YARD BUILDING RESTRICTION LINES.
12. STORMWATER MANAGEMENT OBLIGATIONS ARE FULFILLED UNDER F-96-84 AS A FEE-IN-LIEU.

NOTE:
THIS PLAN HAD BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED 15 TREES HAD BEEN POSTED AS PART OF THE GRADING PERMIT. In the amount of $1500.00

13 THIS PLAN IS SUBJECT TO F. 96-84, & WP 96-63

SHEET INDEX

SHEET INDEX	DESCRIPTION
1 OF 2	PLAN VIEW
2 OF 2	NOTES AND DETAIL

BUILDER
DORSEY FAMILY HOMES
9926 CYPRESSMEDE DRIVE
ELLICOTT CITY MD 21042
410-465-7200

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

ENGINEER'S CERTIFICATE

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MARY LANE GENERAL PARTNERSHIP
MR. NICK LIPARINI
BRANTLY DEVELOPMENT GROUP
10275-P COLUMBIA 100 PARKWAY
COLUMBIA, MARYLAND

APPROVED: DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE: 3/18/97

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE: 3/14/97

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE: 3/12/97

SUBDIVISION			SECTION/AREA	LOT NO.
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PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
12261	6	R-12	47	6	6069.01
WATER CODE		SEWER CODE		
B 03		4360000		

SITE DEVELOPMENT PLAN
(GENERIC)

NORDAU ACRES

LOT 1 THROUGH 5

TAX MAP 47 GRID 6 PARCEL 665
6th ELECTION DIST. HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' DATE: 1996
SHEET 1 OF 2

S.D.P. 97-66