

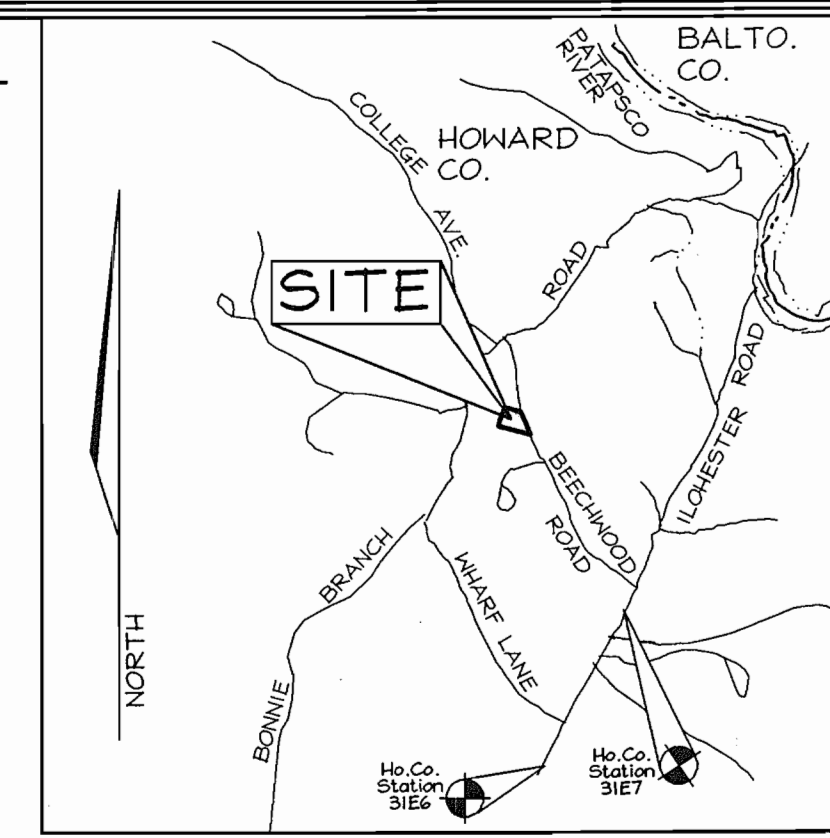
TYPICAL WQV SWALE SECTION
Not to Scale

SITE ANALYSIS DATA CHART

- a. Total project area: 1.47 Acres±
- b. Area of plan submission: 1.49 Acres±
- c. Limit of disturbed area: 1.02 Acres±
- d. Present zoning: "R-20" per 10/18/93 Comprehensive Zoning Plan.
- e. Proposed uses for site & structures: single family detached
- f. Floor space on each level of building(s) per user: See house templates this sheet
- g. Total number of units allowed: 4
- h. Total number of units proposed: 4
- i. Building coverage of site: 0.14 acres±; 9.4% of gross lot area
- j. Howard County file references: F 01-179; Contr. #10-1214; Contr. #634-W; WP-02-75; Plat #15727

LEGEND

- Existing Contour
- Proposed Contour
- Existing Spot Elevation
- Proposed Spot Elevation
- Direction of Flow
- Existing Trees to Remain
- Walk Out Basement
- Proposed Water Quality Swale
- Dry Well
- Proposed Check Dam



VICINITY MAP
SCALE: 1"=2000'

BENCHMARKS

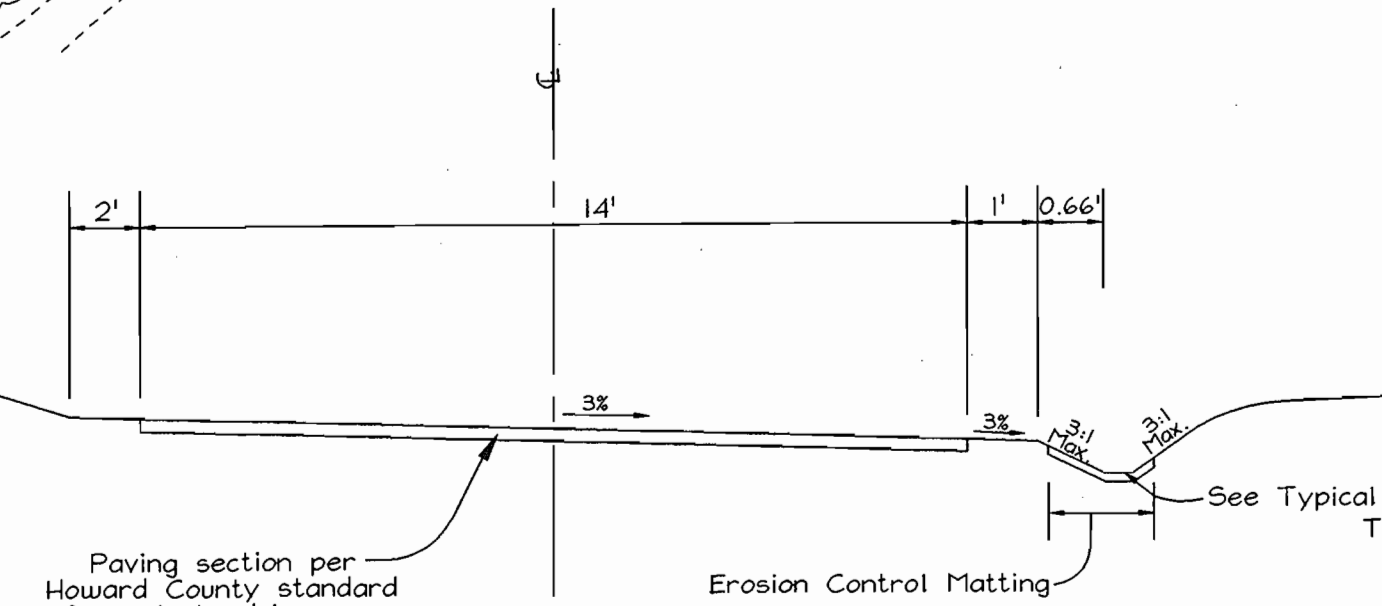
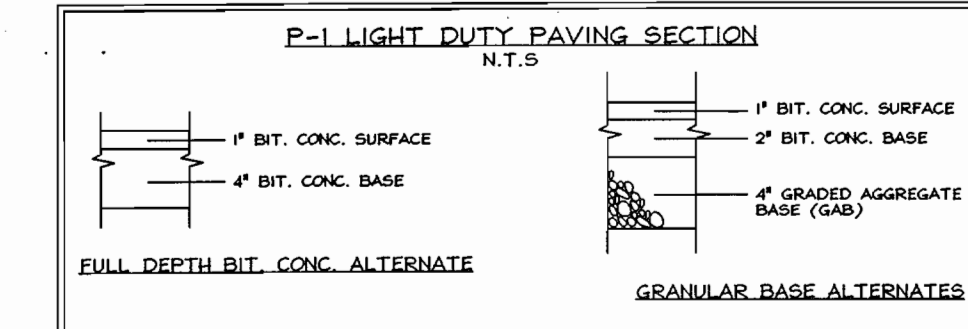
Sta. 31E6	N 173,996.1454	E 419,619.1591	El.: 147.1455 (meters)
	N 570,852.353	E 1,376,700.524	El.: 482.760 (feet)
Sta. 31E7	N 174,648.1551	E 419,648.0348	El.: 145.8422 (meters)
	N 572,335.322	E 1,377,503.920	El.: 478.648 (feet)

SHEET INDEX

DESCRIPTION	SHEET No.
Site Development Plan	1 of 3
Sediment and Erosion Control and Landscaping Plan	2 of 3
Sediment and Erosion Control, and Site Details	3 of 3

GENERAL NOTES

1. Property is within the Metropolitan District.
2. Public water and sewer will be used within this site.
3. The Contractor shall notify the following utility companies or agencies at least five(5) working days before starting work shown on these plans:
 - Verizon 1,800.743.0033/410.224.9210
 - AT&T 1,800.252.1133
 - State Highway Administration 410.531.5533
 - BGE(Contractor Services) 410.850.4620
 - BGE(Underground Damage Control) 410.787.9068
 - Miss Utility 1,800.257.7777
 - Colonial Pipeline Company 410.795.1390
 - Howard County Dept. of Public Works, Bureau of Utilities 410.313.4900
 - Howard County Health Department 410.313.2640
4. The contractor shall notify Miss Utility at 1-800-257-7777 at least 48 hours prior to any excavation work being done.
5. The contractor shall notify the Department of Public Works/Bureau of Engineering Construction Inspection Division at (410) 313-1880 at least five (5) working days prior the start of work.
6. The lots shown hereon comply with the minimum ownership, width and lot area as required by the Maryland State Department of the Environment.
7. Topography and Boundary for Beechwood Overlook is based on a field run survey prepared by John C. Mellema Sr., Inc. in July, 1997.
8. For floodplains and steep slopes analysis see F-01-179.
9. The project is in conformance with the latest Howard County Standards unless waivers have been approved.
10. The coordinates shown hereon are based upon the Howard County Geodetic Control which is based on the Maryland State Plane Coordinate system. Howard County monument numbers 31E6 and 31E7 were used for this project.
11. In accordance with section 128 of the Howard County Zoning Regulations, bay windows, chimneys, or exterior stairways not more than 16 feet in width may project not more than 4 feet into any setbacks. Porches, or decks, open or enclosed may project not more than 10 feet into the front or rear yard setback.
12. Driveway(s) shall be provided prior to issuance of a use and occupancy permit for any new dwelling to insure safe access for fire and emergency vehicles per the following (minimum) requirements:
 - A) Width-12 feet (14' serving more than one residence).
 - B) Surface-6 inches of compacted crusher run base with 1 1/2" Min. tar and chip coating.
 - C) Geometry-max. 15% grade, max. 10% grade change, and 45 foot turning radius.
 - D) Structures (bridges/culverts)-capable of supporting 25 gross tons (H25-loading).
 - E) Drainage elements-capable of safely passing 100 year flood with no more than one foot depth over driveway surface.
 - F) Structure clearance-minimum 12 feet.
 - G) Maintenance-sufficient to insure all weather use.
13. Forest conservation requirements have been provided for this project under F-01-179.
14. For flag or pipe stem lots, refuse collection, snow removal and road maintenance to be provided at the junction of flag or pipe stem and the road r/w and not onto the flag or pipe stem driveway.
15. Landscaping is provided for under the certified landscape plan on file with F-01-179.
16. For Sewer House Connections and Water House Connections see detail sheet 2. All Sewer House Connections to be a minimum of 2% and a maximum of 5%. If no slope is shown, 2.0% may be assumed. Contractor to provide a clean out at each bend along 4" Sewer House Connections.
17. No clearing, grading or construction is permitted within the forest conservation easement or steep slopes.
18. This plan has been prepared in accordance with the provisions of Section 16.124 of The Howard County Code and Landscape Manual. Financial surety for the required 4 trees in the amount of \$1,200.00 for lots 1 and 4. (One tree, \$300.00 for lot 1 and 3 trees, \$900.00 for lot 6).
19. Waiver Petition WP-02-75 was approved by the Planning Director on May 21, 2002. The petition requested a waiver for Section 16.16 (b) (1); grading, removal of vegetative cover and trees, new structures and paving shall not be permitted on land with existing steep slopes. The conditions of this approval allow only the grading shown on these plans within the steep slope areas. This grading must be restabilized and reforested.



Paving section per Howard County standard for private driveways see details this sheet

TYPICAL ROADWAY SECTION
CLASSIFICATION: USE-IN-COMMON
NOT TO SCALE

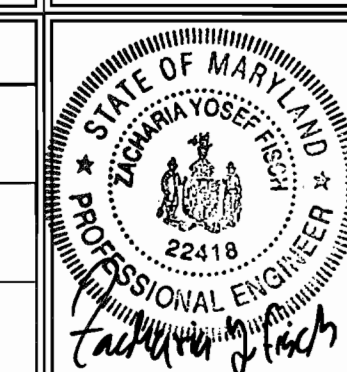
ADDRESS CHART

LOTS	STREET
1	4648 Beechwood Road
2	4642 Beechwood Road
3	4636 Beechwood Road
4	4630 Beechwood Road

OWNER/DEVELOPER
Michael L. Pfau
3675 Park Avenue, suite 301
Ellicott City, Md 21043
410.480.0023

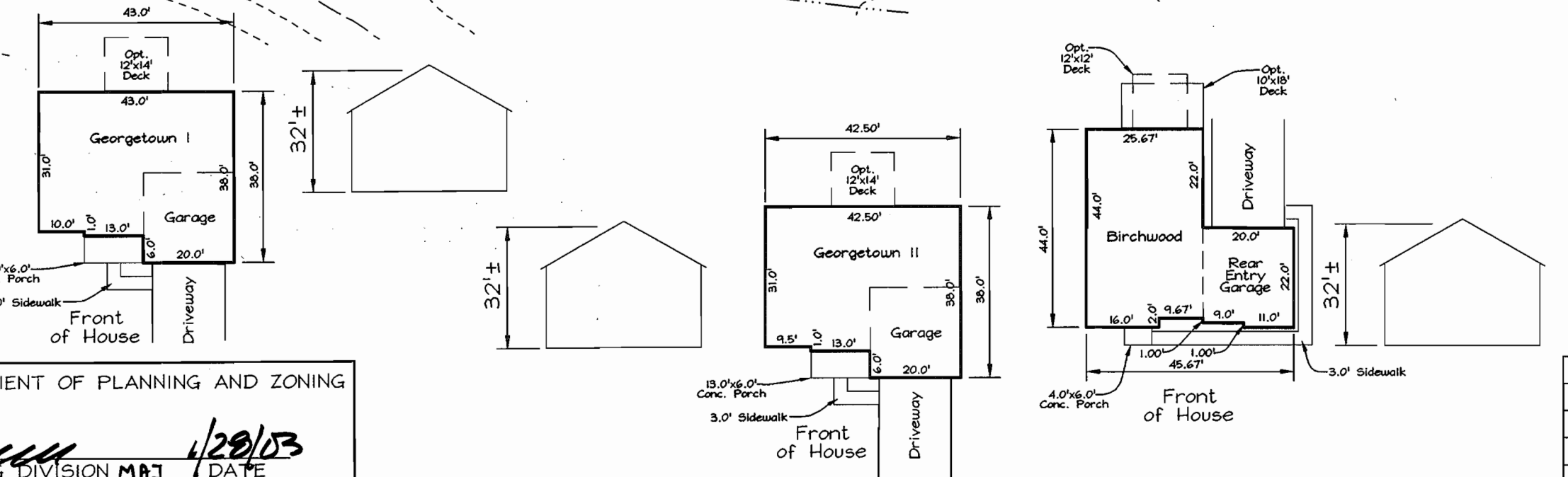
PERMIT INFORMATION CHART

Subdivision Name:	Beechwood Overlook	Section/Area:	N/A	Lot/Parcel No.:	311
Plat #	15727	Grid	4	Zoning	R-20
Tax Map No.	15727	Elect. District	31	Census Tract	6011
Water Code	D 02	Sewer Code			1251800



FSH Associates
Engineers Planners Surveyors
8318 Forrest Street Ellicott City, MD 21043
Tel: 410-750-2251 Fax: 410-750-7350
E-mail: FSHAssociates@cs.com

DESIGN BY: PS
DRAWN BY: MRM/JE
CHECKED BY: ZYF
SCALE: 1"=30'
DATE: Jan. 07, 2003
H.O. No.: 3120
SHEET No.: 1 OF 3



HOUSE TEMPLATES
SCALE: 1"=30'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

John P. ... 1/29/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION MARJ DATE

Cinda ... 1/29/03
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Marsha S. ... 1/31/02
DIRECTOR DATE

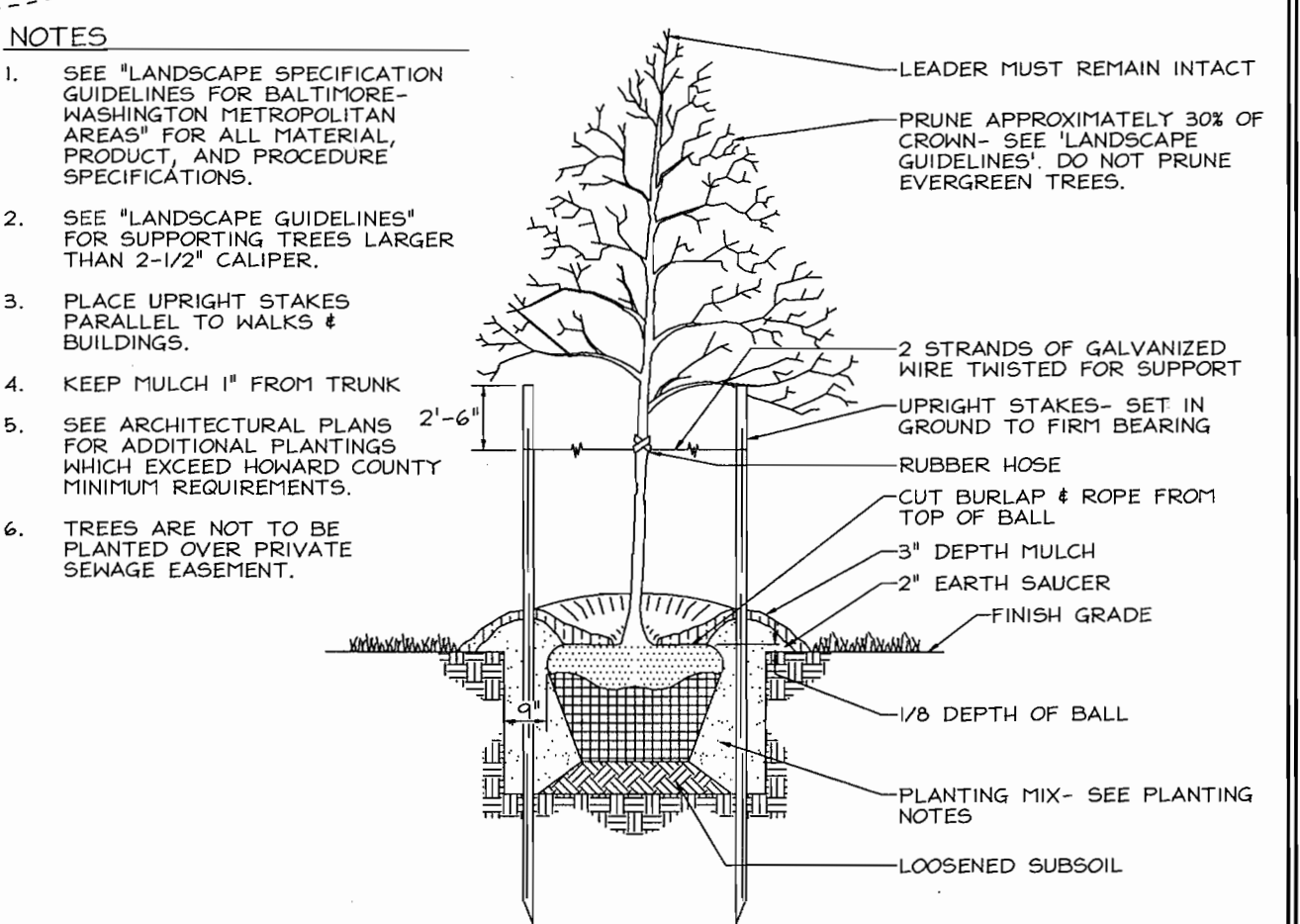
NUMBER	REVISION	DATE

SYMBOL	NAME / DESCRIPTION	SOIL GROUP
BrC3	Brandywine Loam, 8 to 15 percent slopes, severely eroded	C
BrF	Brandywine Loam, 25 to 60 percent slopes	C
Msd	Montalto on Relay very stony silt loam, 3 to 25 percent slopes	B

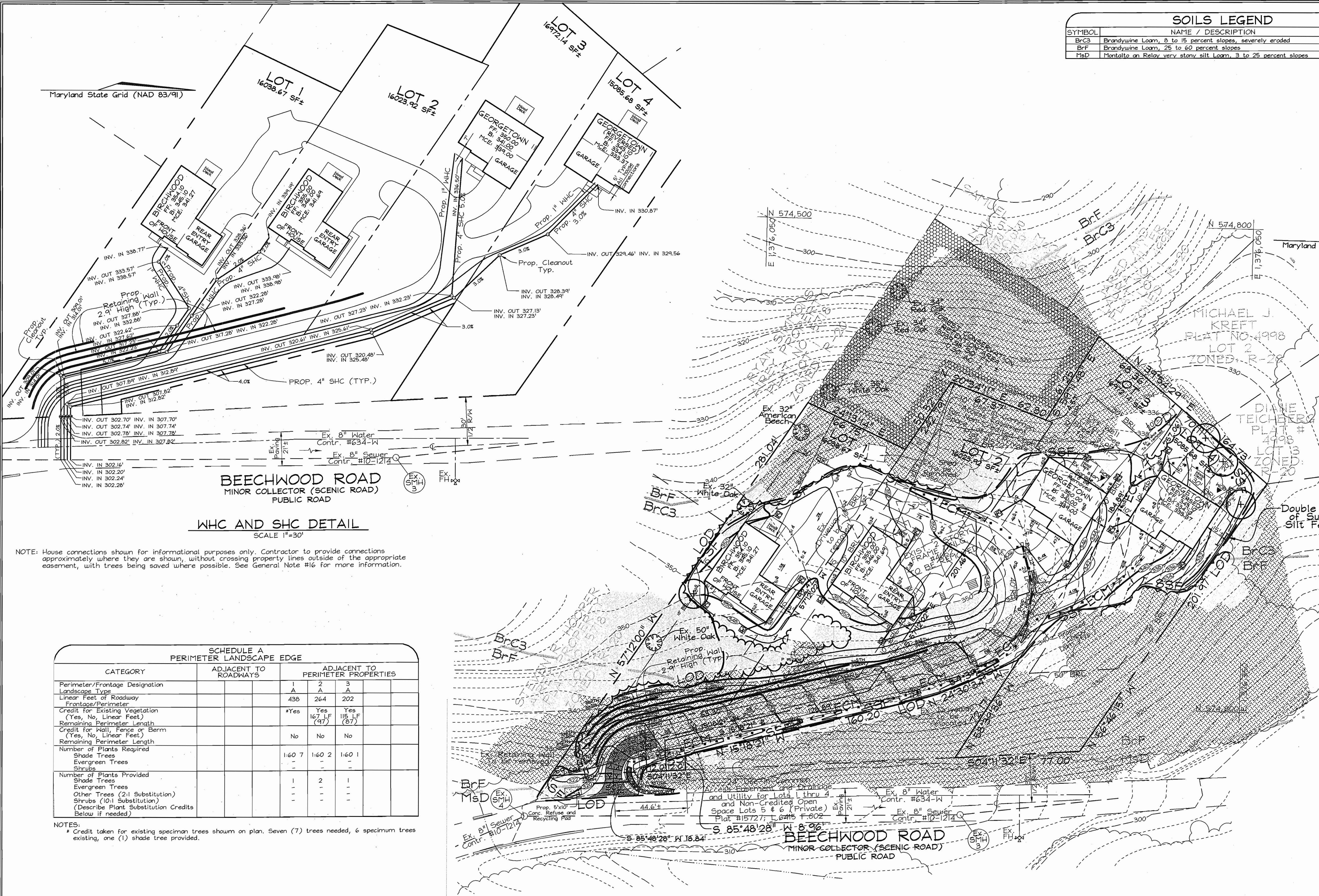
LEGEND	
Existing Contour	---382---
Proposed Contour	---382---
Spot Elevation	+0253
Direction of Flow	→
Existing Trees to Remain	
Stabilized Construction Entrance	
Silt Fence	SF SF
Super Silt Fence	SSF SSF
Limit of Disturbance	LOD
Erosion Control Matting	ECM
Proposed Check Dam	
Prop. Shade Tree	
Slopes 15% to 24.99%	
Slopes 25% and greater	

LANDSCAPE SCHEDULE				
KEY	QUAN.	BOTANICAL NAME	SIZE	NOTE
⊙	4	Quercus rubra (Shade Trees) Red Oak	2 1/2"-3" Cal.	B # B

- NOTES:
- At the time of installation, all shrubs and other plantings herewith listed and approved for this site, shall be of the proper height requirements in accordance with the Howard County Landscaping Manual. In addition, no substitutions or relocation of required plantings may be made without prior review and approval from the Department of Planning and Zoning. Any deviation from this approved Landscape Plan may result in denial or delay in the release of landscape surety until such time as all required materials are planted and/or revisions are made to applicable plans and certificates.
 - Landscaping requirements are provided in accordance with the certified landscape plan on file with F-01-179.
 - Financial surety for the required landscaping must be posted as part of the Grading Permit in the amount of \$300.00 (1 shade tree @ \$300.00 each) for Lot 1 and \$400.00 (3 shade trees @ \$133.33 each) for Lot 4.



TYPICAL TREE PLANTING AND STAKING
DECIDUOUS TREES UP TO 2-1/2" CALIPER
NOT TO SCALE



NOTE: House connections shown for informational purposes only. Contractor to provide connections approximately where they are shown, without crossing property lines outside of the appropriate easement, with trees being saved where possible. See General Note #16 for more information.

SCHEDULE A PERIMETER LANDSCAPE EDGE			
CATEGORY	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES	
Perimeter/Frontage Designation		1	2 3
Linear Feet of Roadway		488	264 202
Frontage/Perimeter			
Credit for Existing Vegetation (Yes, No, Linear Feet)		*Yes	Yes 167 LF (47) Yes 115 LF (87)
Remaining Perimeter Length			
Credit for Wall, Fence or Berm (Yes, No, Linear Feet)		No	No
Remaining Perimeter Length			
Number of Plants Required			
Shade Trees	1:60	7	1:60 2 1:60 1
Evergreen Trees			
Shrubs			
Number of Plants Provided			
Evergreen Trees	1	2	1
Other Trees (2:1 Substitution)	-	-	-
Shrubs (10:1 Substitution)	-	-	-
(Describe Plant Substitution Credits Below if needed)			

NOTES:
* Credit taken for existing specimen trees shown on plan. Seven (7) trees needed, 6 specimen trees existing, one (1) shade tree provided.

DEVELOPER'S/BUILDER'S CERTIFICATE
I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE(1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

Michael Pfaus 1/07/03
SIGNATURE OF DEVELOPER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chris Dammann 1/20/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION MJD DATE

Cindy Hanach 1/29/03
CHIEF, DIVISION OF LAND DEVELOPMENT H DATE

Mark V. Meyer 1/31/03
DIRECTOR DATE

DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL AND THAT ALL 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.

Michael Pfaus 1/07/03
SIGNATURE OF DEVELOPER DATE

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

Jan Myers/1/6 1/23/03
USDA-NATURAL RESOURCE CONSERVATION SERVICE DATE

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

J. R. Robertson/1/6 1/28/03
HOWARD SCD DATE

ENGINEERS CERTIFICATE
I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION 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.

Zacharia Y. Fisch 1/9/03
SIGNATURE OF ENGINEER DATE
ZACHARIA Y. FISCH

NUMBER	REVISION	DATE

OWNER/DEVELOPER
Michael L. Pfaus
3675 Park Avenue, suite 301
Ellicott City, Md. 21043
410.480.0023

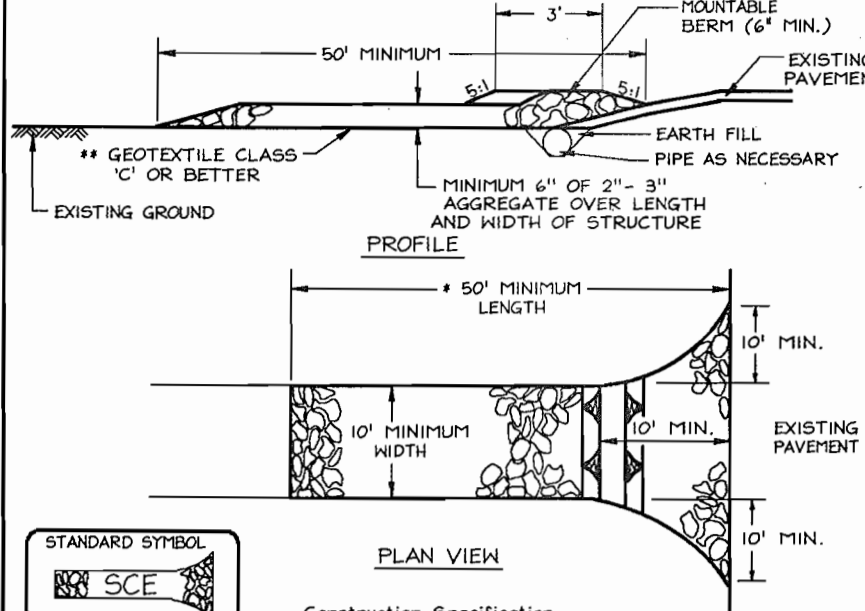
SEDIMENT AND EROSION CONTROL, LANDSCAPING, AND HOUSE CONNECTION PLAN
BEECHWOOD OVERLOOK
LOTS 1 THRU 4
TAX MAP 31 GRID 4 PARCEL 311
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

DESIGN BY: PS
DRAWN BY: MRM/JJE
CHECKED BY: ZF
SCALE: 1"=30'
DATE: Jan. 03, 2003
W.O. No.: 3120
SHEET No.: 2 OF 3

FSH Associates
Engineers Planners Surveyors
8318 Forrest Street, Ellicott City, MD 21043
Tel: 410-750-2251 Fax: 410-750-7350
E-mail: FSHAssociates@cs.com

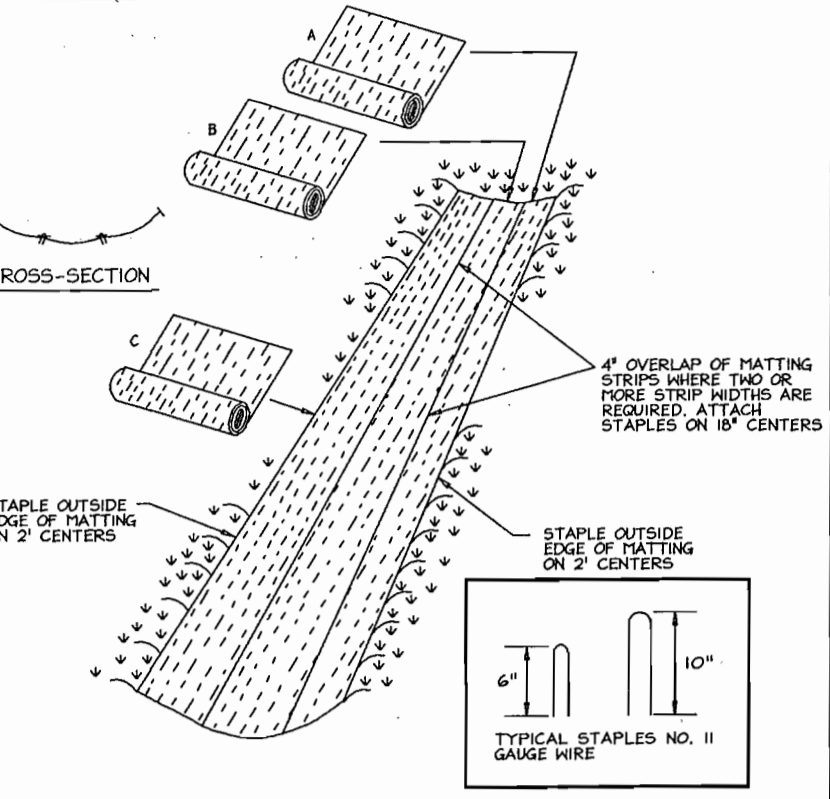
STATE OF MARYLAND
VICTORIA YOSEF
22418
PROFESSIONAL ENGINEER
1/2/03

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



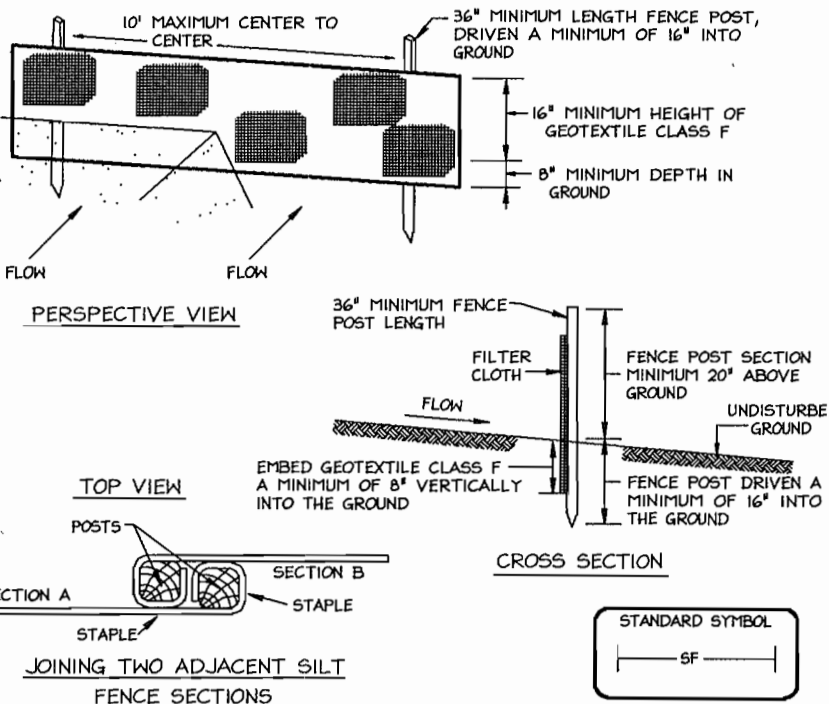
- Construction Specifications**
- Length - minimum of 50' (+ 30' for a single residence lot).
 - Width - 10' minimum, should be flared at the existing road to provide a turning radius.
 - Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. The plan approval authority may not require single family residences to use geotextile.
 - Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equipment shall be placed at least 6" deep over the length and width of the entrance.
 - 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 portable berm with 5:1 slopes and a minimum of 2' of stone over the pipe. Pipe has to be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
 - 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 stabilized construction entrance.
- U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE 7-17-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 30 - EROSION CONTROL MATTING



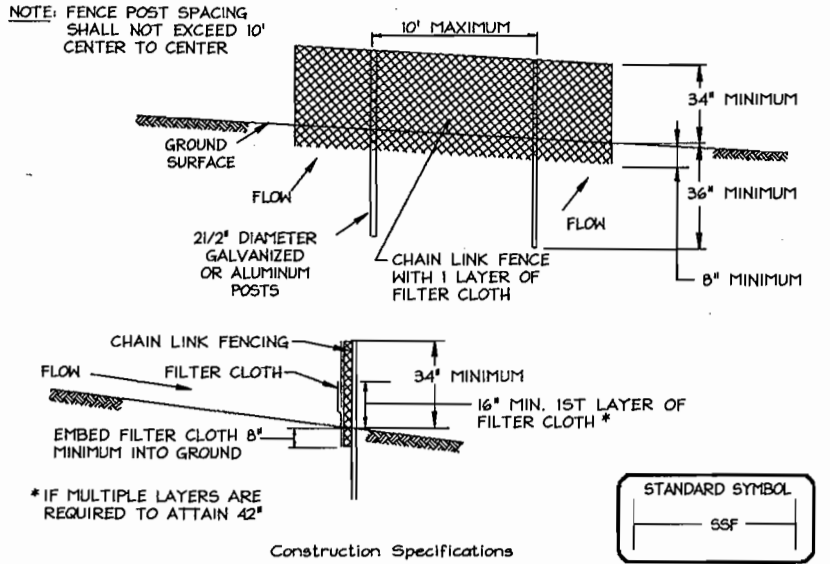
- Construction Specifications**
- Key-in the matting by placing the top ends of the matting in a narrow trench, 6" in depth. Backfill the trench and tamp firmly to conform to the channel cross-section. Secure with a row of staples spaced 4' down slope from the trench. Spacing between staples is 6".
 - Staple the 4" overlap in the channel center using an 18" spacing between staples.
 - Before stapling the outer edges of the matting, make sure the matting is smooth and in firm contact with the soil.
 - Staples shall be placed 2' apart with 4 rows for each strip, 2 outer rows, and 2 alternating rows down the center.
 - Where one roll of matting ends and another begins, the end of the top strip shall overlap the upper end of the lower strip by 4" staple fashion. Reinforce the overlap with a double row of staples spaced 4' apart in a staggered pattern on either side.
 - The discharge end of the matting line should be similarly secured with 2 double rows of staples.
- Note: If flow will enter from the edge of the matting then the area affected by the flow must be key-in.
- U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE 6-22-2 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 22 - SILT FENCE

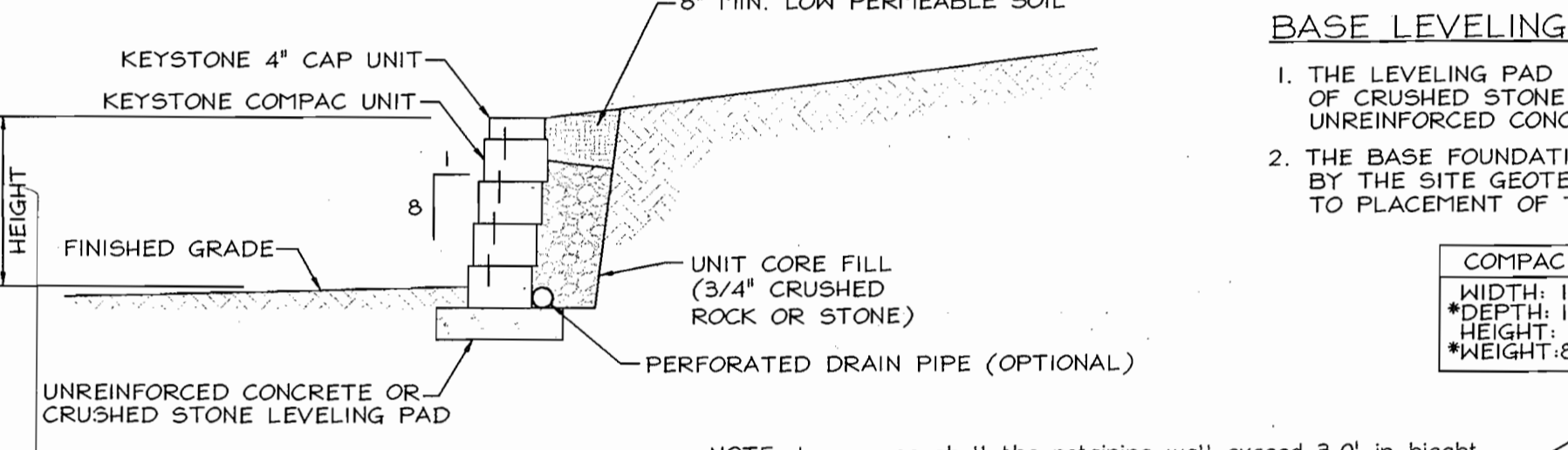


- Construction Specifications**
- Fence posts shall be a minimum of 36" long, 10" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum) cut, or 1 3/4" diameter (minimum) round and shall be of solid quality hardwood. Steel posts will be standard T or U section weighing not less than 100 pound per linear foot.
 - Geotextile 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:
Tensile Strength 50 lbs/in (min.) Test: MSFT 504
Tensile Modulus 20 lbs/in (min.) Test: MSFT 504
Flow Rate 0.3 gal ft²/minute (max.) Test: MSFT 322
Filtering Efficiency 75% (min.) Test: MSFT 322
 - Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
 - Silt fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reaches 50% of the face height.
- U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE 5-5-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

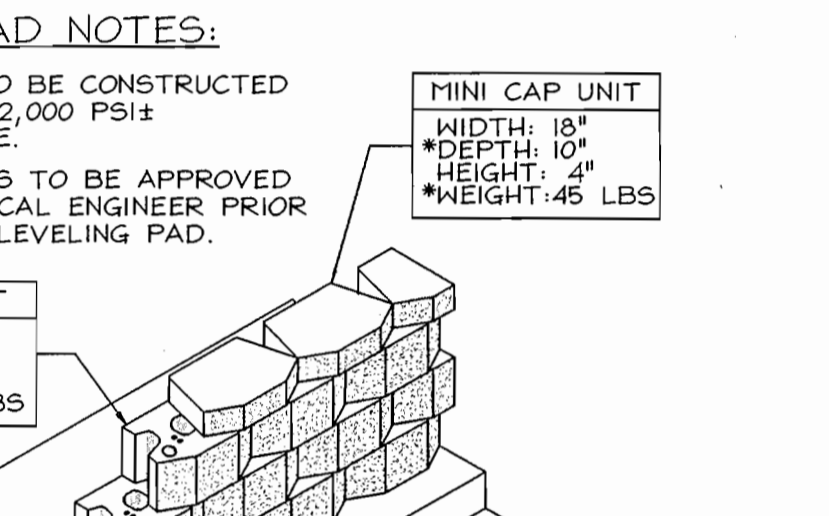
DETAIL 33 - SUPER SILT FENCE



- Construction Specifications**
- 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.
 - Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and brace rods, drive anchors and posts are not required except on the ends of the fence.
 - Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
 - Filter cloth shall be embedded a minimum of 6" into the ground.
 - When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
 - Maintenance shall be performed as needed and silt buildup removed when 'bulges' develop in the silt fence, or when silt reaches 50% of fence height.
 - 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:
Tensile Strength 50 lbs/in (min.) Test: MSFT 504
Tensile Modulus 20 lbs/in (min.) Test: MSFT 504
Flow Rate 0.3 gal ft²/minute (max.) Test: MSFT 322
Filtering Efficiency 75% (min.) Test: MSFT 322
- U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE 8-28-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



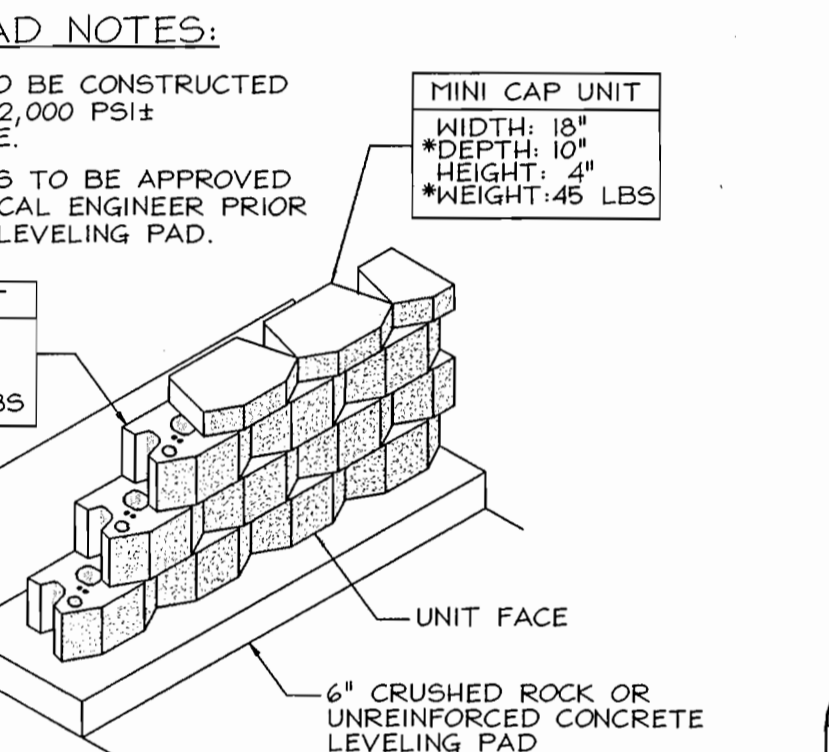
- TYPICAL GRAVITY WALL SECTION**
- COMPACT UNIT - 1" MINIMUM SETBACK
NOT TO SCALE
- NOTES: In no case shall the retaining wall exceed 3.0' in height.



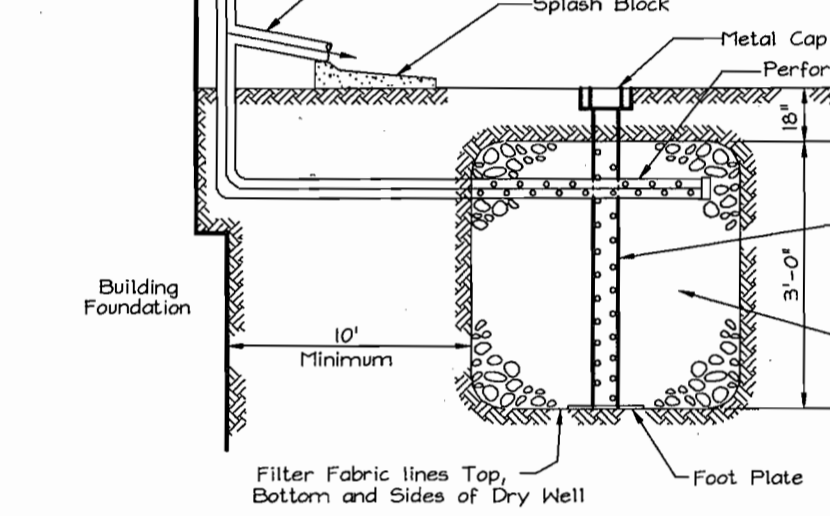
- TYPICAL RETAINING WALL DETAILS**
- NOT TO SCALE
- *DIMENSIONS & HEIGHT MAY VARY BY REGION

BASE LEVELING PAD NOTES:

- THE LEVELING PAD IS TO BE CONSTRUCTED OF CRUSHED STONE OR 2,000 PSI UNREINFORCED CONCRETE.
- THE BASE FOUNDATION IS TO BE APPROVED BY THE SITE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF THE LEVELING PAD.



TYPICAL DRY WELL CROSS SECTION
NOT TO SCALE



TYPICAL DRY WELL CROSS SECTION
NOT TO SCALE

DRY WELL CHART

LOT No.	VOLUME REQUIRED	VOLUME PROVIDED	No. WELLS	SIZE WELLS
1	182 cf	192 cf	4	4'x4'x3'deep
2	182 cf	192 cf	4	4'x4'x3'deep
3	153 cf	192 cf	4	4'x4'x3'deep
4	154 cf	192 cf	4	4'x4'x3'deep

21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL

- Definition**
Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.
- Purpose**
To provide a suitable soil medium for vegetable 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 21 or flatter slopes where the exposed subsoil/parent material is not adequate to produce vegetative growth.
- The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish adequate supplies of moisture and plant nutrients.
 - The original soil to be vegetated contains limestone toxic to plant growth.
 - The soil is so acidic that treatment with limestone is not feasible.
- Construction and Material Specifications**
- Topsoil adviced 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 Experiment Station.
 - Topsoil Specifications - Soil to be used as topsoil must meet the following:
a. Topsoil shall be a loamy, sandy loam, clay loam, or silty loam, sandy clay loam, or other soil as recommended by an agronomist or a soil scientist and approved by the appropriate authority. Topsoil shall not be a mixture of contrasting textures and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, silt, silt, loam, or other materials larger than 1/4" and 1/2" in diameter.
b. Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, johnsongrass, nutgrass, poison ivy, thistle, or others as specified.
c. Where the subsoil is either highly acidic or composed of heavy loam, ground limestone shall be spread at the rate of 4-8 lbs/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.
d. For sites having disturbed areas under 5 acres:
i. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
ii. For sites having disturbed areas over 5 acres:
1. On soil meeting topsoil specifications, obtain test results indicating 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% percent by weight.
c. Topsoil having soluble salt content greater than 500 parts per million shall not be used.
d. No top 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 (30 days min.) to permit dissipation of phytotoxic materials.
e. Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
iii. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
- Topsoil Application**
- When topsoiling, maintain needed erosion and sediment control practices such as diversion, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins.
 - Grades on the areas to be topsoiled, which have been previously established, shall be maintained, shall 4" or higher in elevation.
 - Topsoil shall be uniformly distributed in a 4" or 6" 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.
 - 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 seeded preparation.

PERMANENT SEEDING NOTES

- APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.
- SEEDING 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 schedules:
1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft.) and 600 lbs per acre 10-10-10 fertilizer (14 lbs./1000 sq ft.) before seeding. Harrow or disc into upper three inches of soil. At the time of seeding, apply 400 lbs. per acre 30-0-0 ureamform fertilizer (9 lbs/1000 sq ft.).
2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft.) and apply 1000 lbs. per acre 10-10-10 fertilizer (23 lbs/1000 sq ft.) before seeding. Harrow or disc into upper three inches of soil.
- SEEDING:** For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs. per acre (14 lbs/1000 sq ft.) of Turf Type Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Turf Type Tall Fescue per acre and 2 lbs. per acre (.05 lbs/1000 sq ft.) of weeping lovegrass. During the period of October 1 thru February 28, protect site by applying 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use seed, Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.
- MULCHING:** Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 200 gallons per acre (5 gal/1000 sq ft.) of emulsified asphalt on flat areas. On slopes 5 feet or higher, use 340 gallons per acre (8 gal/1000 sq ft.) for anchoring.
- MAINTENANCE:** Inspect all seeded areas and make needed repairs, replacements and reseedings.
- TEMPORARY SEEDING NOTES**
- SEEDING 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/1000 sq ft.).
- SEEDING:** For the periods March 1 thru April 30 and August 1 thru November 15, seed with 2 1/2 tons per acre of annual ryegrass (3.2 lbs/1000 sq ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (.07 lbs/1000 sq ft.). For the period November 1 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 seed.
- MULCHING:** Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 200 gallons per acre (5 gal/1000 sq ft.) of emulsified asphalt on flat areas. On slopes 5 feet or higher, use 340 gallons per acre (8 gal/1000 sq ft.) for anchoring.
- REFER TO THE 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.**

SEDIMENT CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Department of Inspection, License and Permits Sediment Control Division prior to the start of any construction (313-1855).
- All vegetation and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.
- Following initial soil disturbance or redistribution, 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.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 7, HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding, sod, temporary seeding, and mulching (Sec. G). Temporary stabilization with mulch alone shall be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- 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.
- Site Analysis:
Total Area: 1.47 Acres
Area Disturbed: 1.02 Acres
Area to be roofed or paved: 0.36 Acres
Area to be vegetatively stabilized: 0.66 Acres
Total Soil: 4,108 sq ft.
Total Fill: 462 cu yd
Offsite waste/borrow area location: #
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment controls must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
- 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 shall be back-filled and stabilized within one working day, whichever is shorter. Earthwork quantities are solely for the purpose of calculating fees. Contractor to verify all quantities prior to the start of construction.
- To be determined by contractor, with pre-approval of the Sediment Control Inspector with an approved and active grading permit.

SEQUENCE OF CONSTRUCTION

- Obtain Grading permit.
- Notify Howard County Department of Inspections, License and Permits at (410) 313-1850 at least 24 hours before starting any work.
- Install Stabilized Construction Entrance, Silt Fence and Super Silt Fence. (1 week)
- Clear, grub, and rough grade site, for disturbances within steep slope areas provide immediate stabilization. (1 week)
- Construct use-in-common drive, retaining walls, Stormwater Management Grass Swale and begin house construction. (2 weeks)
- Complete house construction, fine grade site, and install Erosion Control Matting. (2 months)
- Install landscaping. (1 week)
- During grading and after each rainfall, contractor will inspect and provide necessary maintenance to the sediment control measures on this plan.
- Following initial soil disturbance or any redistributions, permanent or temporary stabilization shall be completed within:
A. 7 calendar days for all perimeter sediment control structures, dikes, swales and all slopes greater than 3:1.
B. 14 calendar days for all other disturbed areas.
- Upon stabilization of all disturbed areas and with the permission of the sediment control inspector, remove all sediment control measures and stabilize any remaining disturbed area. (1 week)

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Michael J. Pfaus 1/20/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION MAJ DATE

Cinda Hermita 1/29/03
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Thomas J. DeWeger 1/30/03
DIRECTOR DATE

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

John Pyles 1/23/03
USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

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

J.R. Roberts 1/23/03
HOWARD SCD DATE

ENGINEERS CERTIFICATE

I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION 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.

Zacharia Y. Fisch 1/9/03
SIGNATURE OF ENGINEER DATE
ZACHARIA Y. FISCH

DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL AND THAT ALL 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.

Michael Pfaus 1/27/03
SIGNATURE OF DEVELOPER DATE
MICHAEL PFAUS

OWNER/DEVELOPER

Michael L. Pfaus
3675 Park Avenue, Suite 301
Ellicott City, MD 21043
410.480.0053

SEDIMENT EROSION CONTROL AND SITE DETAILS
BEECHWOOD OVERLOOK
LOTS 1 THRU 4

TAX MAP 31 GRID 4 PARCEL 311
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

DESIGN BY: PS
DRAWN BY: M2/JE
CHECKED BY: ZYF
SCALE: As Shown
DATE: Jan. 03, 2003
SHEET No. 3 OF 3

FSH Associates
Engineers Planners Surveyors
8318 Forest Street Ellicott City, MD 21043
Tel: 410-750-2251 Fax: 410-750-7350
E-mail: FSHAssociates@cs.com