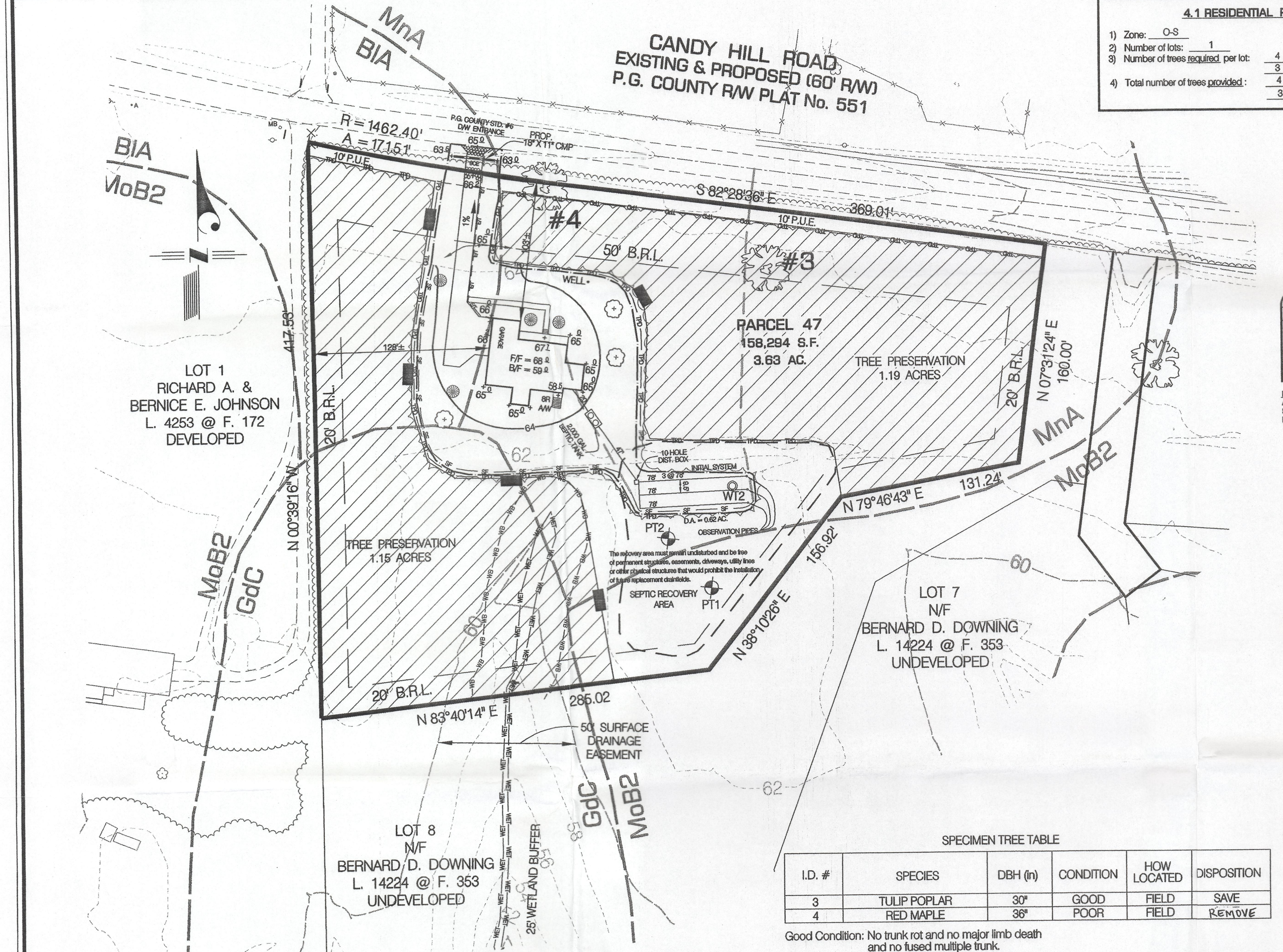
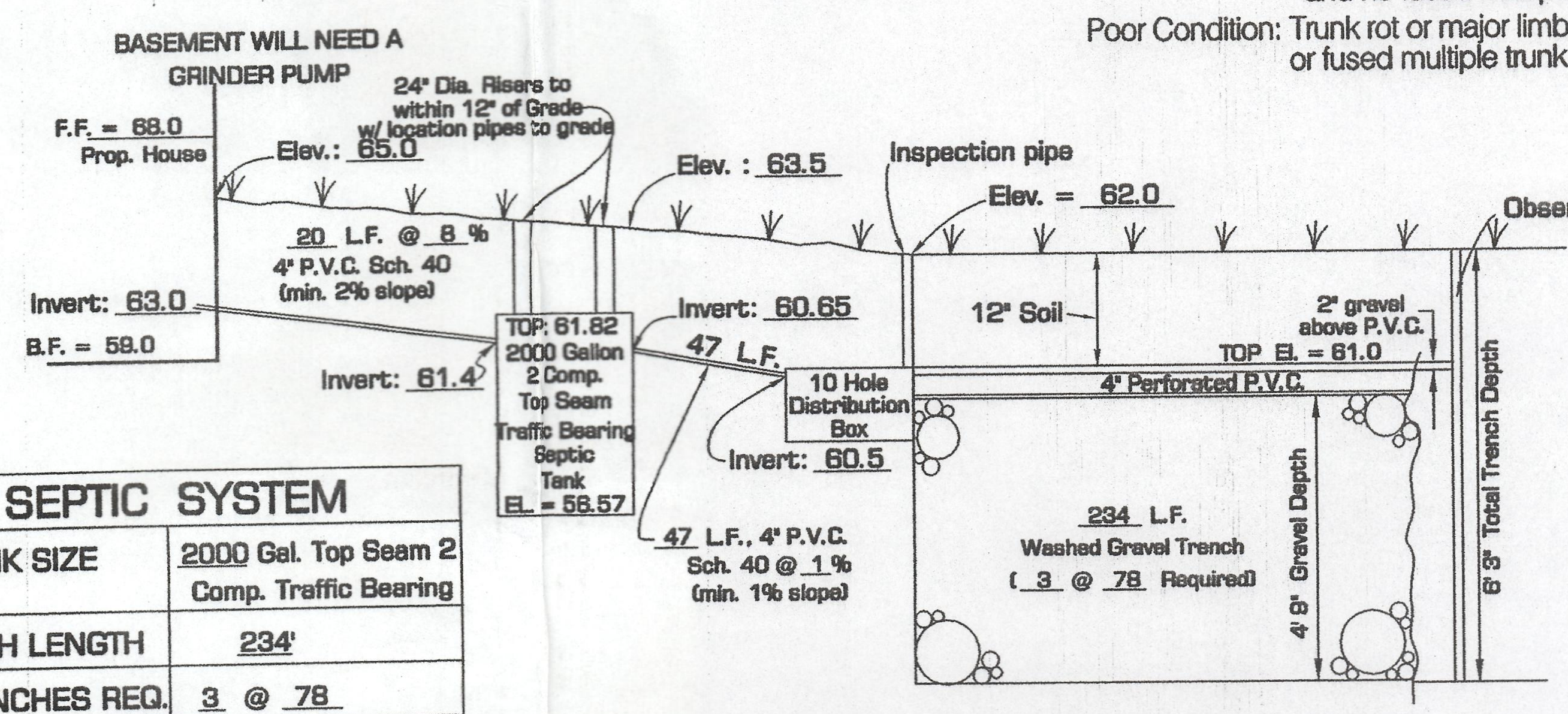


LEGEND

- Existing Contour
- Proposed Contour
- Existing Spot Shot 100+1
- Proposed Spot Shot 100+
- Existing Tree Line
- Proposed Tree Line
- Limits of Disturbance
- Silt Fence — SF —
- Tree Protection Device — TPD —
- Stabilized Construction Entrance — SCE
- Tree Protection Sign
- Tree Preservation Area
- Specimen Tree



SEPTIC SYSTEM

TANK SIZE	2000 Gal. Top Seam 2 Comp. Traffic Bearing
TRENCH LENGTH	234'
No. TRENCHES REQ.	3 @ 78
TOTAL DEPTH	6' 3"
GRAVEL DEPTH	4' 9"
TRENCH WIDTH	1.5

SOIL PERCOLATION TEST APPLICATION No. 5446 - 2003

SPECIMEN TREE TABLE

I.D. #	SPECIES	DBH (in)	CONDITION	HOW LOCATED	DISPOSITION
3	TULIP POPLAR	30"	GOOD	FIELD	SAVE
4	RED MAPLE	36"	POOR	FIELD	REMOVE

Good Condition: No trunk rot and no major limb death and no fused multiple trunk.
Poor Condition: Trunk rot or major limb death or fused multiple trunk.

"MISS UTILITY"
FOR LOCATION OF UTILITIES CALL 1-800-257-7777 48 HOURS IN ADVANCE OF ANY WORK IN THIS VICINITY.

SEQUENCE OF CONSTRUCTION

1.)	Arrange for a pre-construction meeting with the D.E.R. inspector.	1 day
2.)	Clear for and install all sediment controls.	1 day
3.)	Clear and rough grade lot.	5 days
4.)	Clear for and install well and septic system.	5 days
5.)	Install foundation and construct house.	90 days
6.)	Install driveway and fine grade lot.	3 days
7.)	Permanently stabilize all disturbed areas.	2 days
8.)	Upon approval of the inspector remove sediment controls and permanently stabilize.	1 day

TOTAL ESTIMATED CONSTRUCTION TIME 108 DAYS

NOTE:

1. The recovery area must remain undisturbed and be free of permanent structures, easements, driveways, utility lines or other physical structures that would prohibit the installation of future replacement drainfields.
2. All new septic tanks buried deeper than 1 foot shall be installed with risers at least 24 inches in diameter that extend to within 1 foot of final grade.
3. The perimeter of the recovery area must be clearly field staked prior to, and during grading activities associated with the permit in order to prevent inadvertent disturbance of this area.
4. Clean - out every 50 L.F. of pipe.

OWNER / APPLICANT:

DENT DOWNING
17302 NOTTINGHAM ROAD
UPPER MARLBORO, MD 20772
(301) 888-1387

CERTIFICATE OF COMPLIANCE

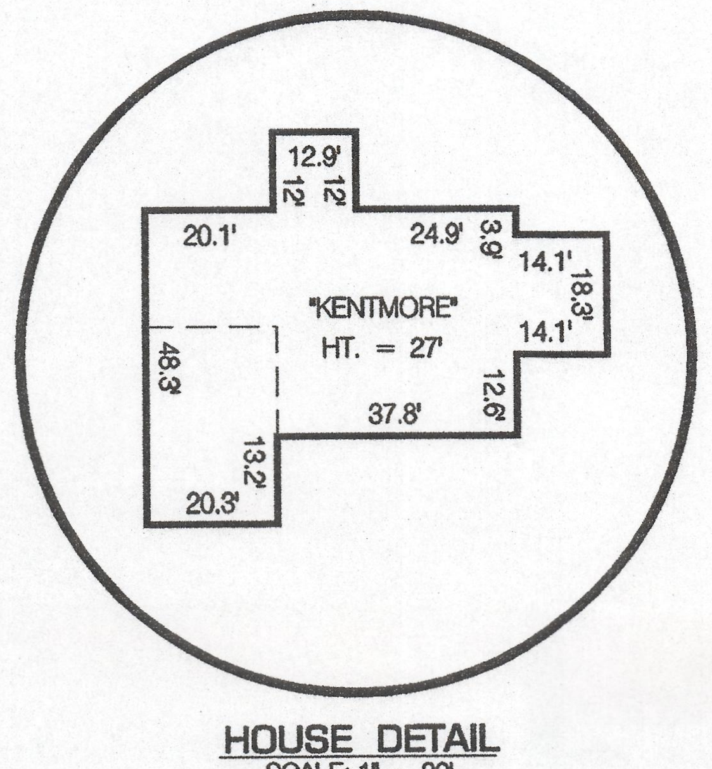
I certify that this plan has been designed in accordance with the requirements of Subtitle 4, Division 3 of the Code of Prince George's County, Maryland; and that I or my staff have inspected this site and that drainage flows from uphill properties onto this site, and from this site onto downhill properties have been addressed in substantial accordance with applicable codes.

STATE OF MARYLAND — CHANDER S. DHALWALA — NO. 8231 — REGISTERED PROFESSIONAL ENGINEER

Chander S. Dhalwala — 6/3/05
Chander S. Dhalwala, P.E. Maryland Registration No. 8231 — Date

4.1 RESIDENTIAL REQUIREMENTS

1) Zone: O-S
2) Number of lots: 1
3) Number of trees required per lot: 4 shade trees; 3 ornamental trees or evergreen trees
4) Total number of trees provided: 4 shade trees; 3 ornamental trees or evergreen trees



HOUSE DETAIL
SCALE: 1" = 30'

PLANT LIST

SYMBOL	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	REMARKS
(shade tree symbol)	4	ACER RUBRUM	RED MAPLE	2.5" CAL.	AS SHOWN	B & B
(ornamental tree symbol)	3	CORNUS KOUSA	KOUSA DOGWOOD	3/4" - 1" CAL.	AS SHOWN	B & B

NOTE:
ALL LANDSCAPING SHALL BE PLANTED IN ACCORDANCE WITH THE STANDARD DETAILS AND SPECIFICATIONS OF THE M.N.C.P. & P.C. LANDSCAPE MANUAL.

I HAVE REVIEWED THIS PLAN AND BEEN MADE AWARE OF THE WOODLAND CONSERVATION REQUIREMENTS. I UNDERSTAND THAT ANY ADDITIONAL WOODLAND CLEARING BEYOND THAT SHOWN ON THIS PLAN WILL REQUIRE A REVISED PLAN AND APPROVAL BY M-NCPPC.

B. Dent Downing — 6/2/05
SIGNED BY: DENT DOWNING — DATE

WOODLAND CONSERVATION AREA MANAGEMENT NOTES

REMOVAL OF HAZARDOUS TREES OR HAZARDOUS LIMBS BY DEVELOPERS OR BUILDERS

The developer and/or builder is responsible for the complete preservation of all forested areas shown on the approved plan to remain undisturbed. Only trees or parts thereof designated by the Department of Environmental Resources as dead, dying, or hazardous may be removed.

1. A tree is considered hazardous if a condition is present which leads a Licensed Arborist or a Licensed Tree Expert to believe that the tree or a portion of the tree has a potential to fall and strike a structure, parking area, or other high use area and result in personal injury or property damage.
2. If a hazardous condition may be alleviated by corrective pruning, the Licensed Arborist or a Licensed Tree Expert may proceed without further authorization. The pruning must be done in accordance with the latest edition of the ANSI A-300 Pruning Standard ("Tree, Shrub, and Other Woody Plant Maintenance - Standard Practices").
3. Corrective measures requiring the removal of the hazardous tree or portions thereof shall require authorization by the building or grading inspector if there is a valid grading or building permit for the subject lots or parcels on which the trees are located. Only after approval of the appropriate inspector may the tree be cut by chainsaw to near the existing ground level. The stump may not be removed or covered with soil, mulch or other materials that would inhibit sprouting.
4. Debris from the tree removal or pruning that occurs within 35 feet of the woodland edge may be removed and properly disposed of by recycling, chipping or other acceptable methods. All debris that is more than 35 feet from the woodland edge shall be cut up to allow contact with the ground, thus encouraging decomposition. The smaller materials shall be placed into brush piles that will serve as wildlife habitat.

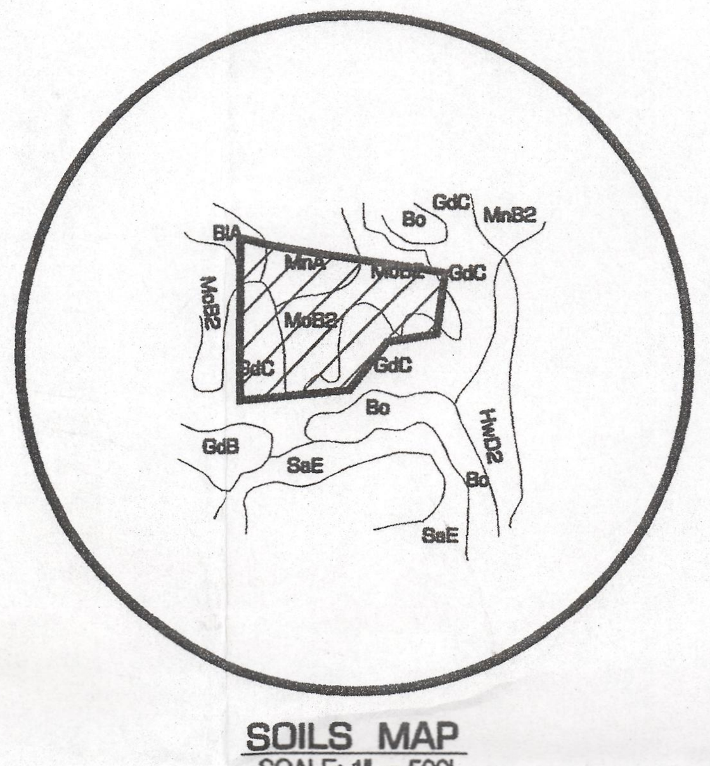
REMOVAL OF HAZARDOUS TREES, HAZARDOUS, LIMBS, NOXIOUS PLANTS OR NON-NATIVE PLANTS IN WOODLAND CONSERVATION AREAS OWNED BY INDIVIDUAL HOMEOWNERS

1. If the developer or builder no longer has an interest in the property the home owner shall obtain a written statement from the Licensed Arborist or Licensed Tree Expert identifying the hazardous condition and the proposed corrective measures prior to having the work conducted. The tree may then be removed by the arborist or tree expert. The stump shall be cut as close to the ground as possible and left in place. The removal or grinding of the stumps in the woodland conservation area is not permitted.
2. The removal of noxious, invasive, and non-native plant species from the woodland conservation areas may be done with the use of hand-held equipment only such as pruners or a chain saw. These plants may be cut near the ground and the material less than two inches in diameter may be removed from the area and disposed of appropriately. All material from these noxious, invasive, and non-native plants greater than two (2) inches in diameter shall be cut to allow contact with the ground, thus encouraging decomposition.
3. The use of broadcast sparying of herbicides is not permitted. However, the use of herbicides to discourage re-sprouting of invasive, noxious, or non-native plants is permitted if done as an application of the chemical directly to the cut stump immediately following cutting of plant tops. The use of any herbicide shall be done in accordance with the lable instructions.

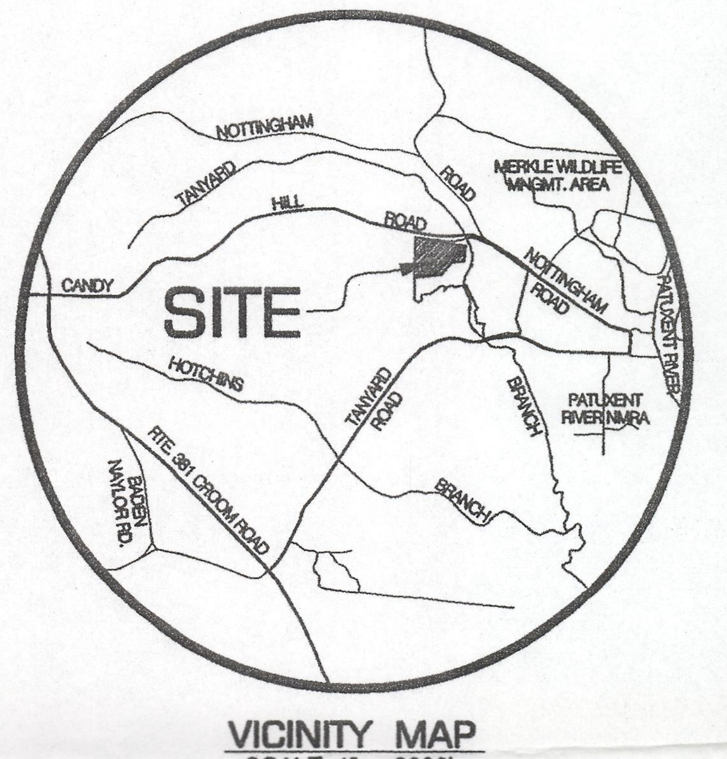
NOTE: The use of chainsaws is extremely dangerous and should not be conducted with poorly maintained equipment, without safety equipment, or by individuals not trained in the use of this equipment for the pruning and/or cutting of trees.

WOODLAND AREAS NOT COUNTED AS PART OF THE WOODLAND CONSERVATION REQUIREMENTS

1. A revised Tree Conservation Plan is required prior to clearing any woodland area which is not specififcally identified to be cleared on the most recently approved Type II Tree Conservation (TCP) on file in the office of the M-NCPPC, Environmental Planning Section located on the 4th floor of the County Administration Building at 14741 Governor Oden Bowie Drive, Upper Marlboro, Maryland 20772, phone 301-952-3650. Additional mitigation will be required for the clearing of all woodlands beyond that reflected on the approved plans. Although clearing may be allowed, it may be subject to additional replacement requirements, mitigation, and fees which must be reflected on TCP revisions approved by the M-NCPPC Environmental Planning Section.
2. Homeowners or property owners may remove trees less than two (2) inches diameter, shrubs, and vines in woodland areas which are saved but not part of the Woodland Conservation requirements after all permits have been released for the subject property. This area may not be tilled or have other ground disturbances which would result in damage to the tree roots. Raking the leaves and overseeding with native grasses, native flowers or native ground covers is acceptable. Seeding with invasive grasses including any variety of Kentucky 31 fescue is not acceptable.



SOILS MAP
SCALE: 1" = 500'
SOIL SURVEY SHEET No. 48
PREDOMINANT SOIL TYPES:
MnA - Matapeake silt loam - 0 to 2% slopes
MoB2 - Matapeake silt loam - moderately eroded - 2 to 5% slopes
GdC - Galestown loamy sand - 8 to 15% slopes



VICINITY MAP
SCALE: 1" = 2000'
A.D.C. STREET MAP No. 34, GRID G, H - 8, 9
W.S.S.C. 216SE14
TAX MAP No. 138, GRID D4

SITE ANALYSIS

1) Zoning: O-S
   Property Street Address: CANDY HILL ROAD
   Tax Account Number: 0259689
2) Minimum Building Restriction Lines:
   Front B.R.L.: 50'
   Side B.R.L.: 40' total 20' minimum
   Rear B.R.L.: 20'
3) Total Lot Area 158,294 s.f. or 3.63 ac.
   Disturbed Area 29,083 s.f. or 0.67 ac.
   Undisturbed Area 129,211 s.f. or 2.96 ac.
   Impervious Area 5,861 s.f. or 0.13 ac.
   Vegetatively Stabilized Area 23,222 s.f. or 0.53 ac.
   Percent of coverage 4 %
4) Aerial topography flown by 3DI, Inc.
5) All fill under buildings to be Class 1; all fill under driveways and walks to be Class 2; all remaining fill to be Class 3.
6) All Sediment Control and Stabilization measures shall be performed in accordance with the Standards and Specifications of the 1994 MDE Manual.

Woodland Conservation Worksheet
for
Prince George's County

Zone:	O-S		
Gross Tract:	3.63		
Floodplain:	0.00		
Previously Dedicated Land:	0.00		
Net Tract (NTA):	3.63	0.00	0.00

*Include acreage in the corresponding columns for each zone.

Property Description or Subdivision Name:	PARCEL 47
Is this site subject to the 1989 Ordinance?	N
Reforesation Requirement Reduction Questions	
Is this one (1) single family lot? (y,n)	Y
Are there prior TCP approvals which include a combinationof this lot and/or other lots. (y,n)	N
Is this a Mitigation Bank	N
Break-even Point (preservation) =	2.18 acres
Clearing permitted w/o reforestion=	1.45 acres

Woodland Conservation Calculations:		Net Tract (acres)	Floodplain (acres)	Off-site Impacts (acres)
Existing Woodland		3.63	0.00	
Woodland Conservation Threshold (NTA) =	50.00%	1.82		
Smaller of a or b		1.82		
Woodland above WCT		1.82		
Woodland cleared		0.84	0.00	0.00
Smaller of d or e		0.84		
Clearing above WCT (0.25 : 1) replacement requirement		0.00		
Clearing below WCT (2:1 replacement requirement)		0.00		
Afforestation Threshold (AFT) =	20.00%	0.00		
Off-site Mitigation being provided on this property		0.00		
Woodland Conservation Required		**1.82**		

Woodland Conservation Provided:	(acres)	
Woodland Preservation	2.34	
Afforestation Reforestation	0.00	
Area approved for fee-in-lieu	0.00	$0.00
Credits for Off-site Mitigation on another property	0.00	
Off-site Mitigation being provided on this property	0.00	
Total Woodland Conservation Provided	**2.34**	

Area of woodland not cleared	2.79 acres
Woodland retained not part of requirements:	0.45 acres

Prepared by: Elise P. Cary — Signed — Date 6/3/05
Revised 9/1/04

M-NCPPC
Prince George's County Planning Department
Environmental Planning Section
APPROVAL
TREE CONSERVATION PLAN
TCP II /09/05

	Approved by	Date
	R Finch	6/22/05
01		
02		
03		
04		
05		

PRINCE GEORGE'S SOIL CONSERVATION DISTRICT
APPROVAL
SEDIMENT CONTROL, GRADING, SOILS & DRAINAGE
SC#
POND
P#
DISTRICT SIGNATURE — DATE

M-NCPPC PRINCE GEORGE'S COUNTY — JUN 21 2005 — COUNTYWIDE PLANNING ENVIRONMENTAL PLANNING — RECEIVED

RECORD REFERENCES: L. 19100 @ 745, TAX MAP No. 138, GRID D4, ADC STREET MAP No. 34, GRID G,H - 8,9, W.S.S.C. 216SE14

SITE, GRADING, LANDSCAPE, TCP II & SEDIMENT CONTROL PLAN
L. 19100 F. 745
PARCEL 47
NOTTINGHAM (4th) ELECTION DISTRICT
PRINCE GEORGE'S COUNTY, MARYLAND

JOB NO.	PG-8884
SCALE:	1" = 50'
DRAWN BY:	KMC
CHECKED BY:	CSD
DATE:	NOVEMBER, 2004

REVISIONS
3-2-05 House moved back, additional tree preservation. BY
4/10/05 - AH - Spec. Tree Table added per EPS

RDA
ENGINEERS
LAND PLANNERS
LAND SURVEYORS
14603 MAIN STREET - UPPER MARLBORO, MD. 20772

SHEET 1 of 2

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 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

I. 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 growth.

b. The soil material is shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.

c. The original soil to be vegetated contains material toxic to plant growth.

d. The soil is so acidic that treatment with limestone is not feasible.

II. For the purpose of these standards nad 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

I. Topsoil salvaged from the existing site may be used to provide that it meets the standards 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 USDA-SCS in cooperation with Maryland Agricultural Experimental Station.

II. Topsoil Specifications – Soil to be used as topsoil must meet the following:

i. 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.

ii. 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:

i. Place topsoil (if required) and apply topsoil amendments as specified in 20.0 vegetative stabilization – Section I – Vegetative Stabilization Methods and Materials.

III. 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 perscribed 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 used.

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 apprpriate approval authority, may be used in lieu of natural topsoil.

ii. Place topsoil (if required) and apply soil amendments as specifiedin 20.0 Vegetative Stabilization – section I – Vegetative Stabilization Methods and Materials

V. Topsoil Application

i. When topsoiling, maintain needed erosion and sediment control practices such as diversions, grade stabilization structures, earth dikes, slope silt fence and sediment traps and basins.

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.

VI. Alternative for permanent seeding – Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below:

i. Composted sludge material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to perscribed amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:

a. Compacted sludge shall be supplied by, or organic from, a person or persons that are permitted (at the time of aquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.

b. Composted sludge shall contain at least 1 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 per 1,000 square feet.

iv. Compacted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate.

GENERAL SEDIMENT AND EROSION CONTROL NOTES

1. All sediment control measures shall be adjusted as necessary to meet field conditions at the time of construction, prior to any grading ar disturbances of existing surface material.
2. All sediment control measures shall be undertaken in strict conformance with approved plans and the standards and specifications approved by the Prince Georges County Soil Conservation District.
3. Periodic inspection and maintenance of all sediment control structures must be provided to insure that their intended purpose is accomplished. At the end of each work day, check all sediment control measures for integrity and proper operation.
4. It shall be the contractors responsibility to perform the work in a manner as to prevent the washing of any top soil, sediment or other debris onto adjacent properties. The Contractor shall be held liable for any such damages incurred.
5. All final grading shall be done in such a manner as to preclude any ponding of water.
6. The Developer is responsible for the aquisition of all required easements, rights and/or rights of way pursuant to the discharge from the sediment and erosion control practices, stromwater management practices and the discharge of storm water onto or across the grading or other work to be performed on adjacent or downstream properties affected by this plan.
7. Following the initial soil disturbance, or redisturbance, permanent or temporary stabilization shall be completed within:
   a) Seven calender days for the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes steeper than 3' horizontal to 1' vertical (3:1).
   b) Fourteen calendar days for all other disturbed or graded areas on the project site.
   The in place sediment control measures shall be maintained on a continuing basis until the site is permanently stabilized and all other permit requirements have been met.
8. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of the installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbing or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
9. Approval shall be requested upon final stabilization of all sites with disturbed areas in excess of 2 acres before the removal of controls.

e. Disturbed surface area: 0.67 Ac.

f. List of predominant soil types and general description per PGSCD Soil Survey:

MnA – Matapeake silt loam, 0 – 2% slopes.
MoB2 – Matapeake silt loam, 2 – 5% slopes.
GdC – Galestown loamy sand, 8 – 15% slopes.

19.0 STANDARDS AND SPECIFICATIONS FOR LANDGRADING

Definition

Reshaping of the existing land surface in accordance with a plan as determined by engineering and survey layout.

Purpose

The purpose of land grading specification is to provide for erosion control and vegetative establishment on those areas where existing land surface is to be reshaped by grading according to plan.

Design Criteria

The grading plan should be based upon the incorporation of building designs and street layouts that fit and utilize existing topography and desirable natural surrounding to avoid extreme grade modifications. Information submitted must provide sufficient topographic surveys and soil investigations to determine limitations that must be imposed on the grading operation related to slope stability, effect on adjacent properties and drainage patterns, measures for drainage and water removal and vegetative treatment, etc.

Many counties have regulations and design procedures already established for land grading and cut and fill slopes. Where these requirements exist, they shall be followed. The plan must show existing and proposed contours of the area(s) to be graded. The plan shall also include practices of erosion control, slope stabilization, safe disposal of runoff water and drainage, such as waterways, lined ditches, reverse slope benches (include grade and cross section), grade stabilization structures, retaining walls, and surface and subsurface drains. The plan shall also include phasing of these practices. The following shall be incorporated into this plan:

1. Provisions shall be made to safely conduct surface runoff to storm drains, protected outlets or to stable water courses to insure that surface runoff will not damage slopes or other graded areas.
2. Cut and fill slopes that are to be stabilized with grasses shall not be steeper than 2:1. (Where the slope is to be mowed, the slope should be no steeper than 3:1. 4:1 is preferred because of safety factorsrelated to mowing steep slopes.) Slopes exceeding 2:1 shall require special design and stabilization considerations that shall be adequately shown on the plans.
3. Reverse benches shall be provided whenever the vertical interval (height) of any 2:1 slope exceeds 20 feet; for 3:1 slope it shall be increased to 30 feet and for 4:1 to 40 feet. Benches shall be located to divide the slope face as equally as possible and shall convey the water to a stable outlet. Soils, seeps, rock outcrops, etc., shall also be taken into consideration when designing benches.
   a. Benches shall be a minimum of six feet wide to provide for ease of maintenance.
   b. Benches shall be designed with a reverse slope of 6:1 or flatter to the toe of the upper slope and with a minimum of one foot in depth. Bench gradient to the outlet shall be between 2 and 3 percent, unless accompanied by appropriate design and computations.
   c. The flow length within a bench shall not exceed 800' unless accompanied by appropriate design and computations. For flow channel stabilization see temporary swale.
4. Surface water shall be diverted from the face of all cut and/or fill slopes by the use of earth dikes, ditches and swales or conveyed downslope by the use of a designed structure, except where:
   a. The face of the slope is or it shall be stabilized and the face of all graded slopes shall be protected from surface runoff until they are stabilized.
   b. The face of the slope shall not be subject to any concentrated flows or surface water such as from natural drainageways, graded swales, downspouts, etc.
   c. The face of the slope will be protected by special erosion control materials, to include, but not limited to: approved vegetative stabilization practices (see section G), riprap or other approved stabilization methods.
5. Cut slopes occuring in ripable rock shall be serrated as shown on the following diagram. These serrations shall be made with conventional equipment as the excavation is made. Each step or serration shall be constructed on the contour and will have steps cut at nominal two-foot intervals with nominal three-foot horizontal shelves. These steps will vary depending on the slope ratio or the cut slope. The nominal slope line is 1:1. These steps will weather and act to hold moisture, lime fertilizer and seed thus producing a much quicker and longer lived vegetative cover and better slope stabilization. Overland flow shall be diverted from the top of all serrated slopes and carried to a suitable outlet.
6. Subsurface drainage shall be provided where necessary to intercept seepage that would otherwise adversely affect slope stability or create excessively wet site conditions.
7. Slopes shall not be created so close to property lines as to endanger adjoining properties without adequately protecting such properties against sedimentation, slippage, settlement, sudsidence or other related damages.
8. Fill material shall be free of brush, rubbish, rocks, logs, stumps, building debris, and other objectionable material. It should be free of stones over two (2) inches in diameter where compacted by hand or mechanical tampers or over eight (8) inches in diameter where compacted by rollers or other equipment. Frozen material shall not be placed in the fill nor shall the fill material be placed on a fozen foundation.
9. Stockpiles, borrow areas and spoil shall be shown on the plans and shall be subject to the provisions of this standard and specifications.
10. All disturbed areas shall be stabilized structurally or vegetatively in compliance 20.0 Standards and Specifications for Vegetative Stabilization.

OWNER'S/DEVELOPER'S CERTIFICATION

"I/we hereby certify that I/we have reviewed this erosion and sediment control plan and that all clearing, grading, construction and/or development will be done pursuant to this plan and that any responsible personnel involved in the construction project will have a certificate of attendance at a Department of Environment approved training program for the control of sediment and erosion before beginning the project."

Signature B. Dent Downing Date 6/2/05
Name (printed) DENT DOWNING Phone# (301) 888-1387
Firm - Complete Address 17302 NOTTINGHAM ROAD UPPER MARLBORO, MD 20772

CONSULTANT'S CERTIFICATION

"I certify that this plan of erosion and sediment control represents a practicable and workable plan based on my personal knowledge of the site, and that this plan was prepared in accordance with the requirements of the Prince Georges County Soil Conservation District and "Standards and Specifications for Soil Erosion and Sediment Control". I have reviewed this erosion and sediment control plan with the owner/developer.

Signature Chander S. Dhalwala MD. License No. # 8231
Date 6/3/05 Name (printed) CHANDER S. DHALWALA P.E.
(Include seal, company name, address and phone number if not included elsewhere on plan).

STATE OF MARYLAND · CHANDER S. DHALWALA · NO. 8231 · REGISTERED · PROFESSIONAL ENGINEER

24.0 MATERIALS SPECIFICATIONS

Table 27 - Geotextile Fabrics

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

** US Std. Sieve CW-02215

The properties shall be determined in accordance with the following procedures:
- Apparent opening size MSMT 323
- Grab tensile strength ASTM D 1682:
  4 x 8" specimen, 1 x 2" clamps, 12"/min.
  strain rate in both principal directions of goetextile fabric.
- Burst strength ASTM D 3786

Permanent and temporary seeding, sodding and mulching.

I. SITE PREPARATION

Permanent or temporary vegetation shall be established within (7) seven calendar days on the surface of all sediment control practices such as diversions, grade stabilization structures, berms, waterways, sediment control basins, and all slopes greater than 3 horizontal to 1 vertical (3:1) and within (14) fourteen calendar days for all other disturbed or graded areas on the project site. Mulching may only be used on disturbed areas as temporary cover where vegetation is not feasible or where seeding cannot be completed because of weather.

II. SEEDBED PREPARATION AND SEEDING APPLICATION

Loosen the top layer of the soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment or such as disc harrows, chisel plows or rippers mounted on construcrtion equipment. Incorporate the lime and fertilizer into the top 3 to 5 inches of the soil by discing or by other suitable means. Rough areas should not be rolled or dragged smooth, but left in a roughened condition. Steep slopes greater than 3:1 grade should be tracked by a dozer, leaving the soil in an irregular condition with the ridges running parallel to the contour of the slope. The top 1 to 3 inches of soil should be loose and friable. Permanent cover may require an application of topsoil. If so, it must meet the requirements set forth in section 21.0 Standards and Specifications for topsoil from the 1994 Standards and Specifications.

III. SOIL AMENDMENTS

Soil tests shall be made on sites over five acres to determine the exact requirements for both lime and fertilizer. For sites under five acres, In lieu of soil test, apply the following:

Fertilizer	Nitrogen	2 lbs/ sq. ft.	(90 lbs/ac)
	P_2O_5	4 lbs/ sq. ft.	(175 lbs/ac)
	K_2O	4 lbs/1,000 sq. ft.	(175 tons/ac)

For low maintenance areas apply 150 lbs/ac ureaform fertilizer (38-0-0) at 3.5 lbs/1,000 sf in addition to the above fertilizer at the time of seeding.

Ground limestone: 2tons/ac

IV. SEDIMENT CONTROL PRACTICE SEEDING

Select a seeding mixture from tables 25 or 26 in section G of the 1994 Standards and Specifications. Document seeding on the erosion and sediment control plan using appropriate chart below. Note: if sediment control practices are in for longer than 12 months, permanent seeding is required.

V. TEMPORARY/PERMANENT SEEDING MIXTURES AND RATES

Select a seeding mixture from tables 25 and 26 in section G of the 1994 Standards and Specifications. Document seeding on the erosion and sediment control plan using appropriate chart below.

Permanent Seeding Summary

	Seed Mixture (Hardiness Zone 7a) From Table 25					Fertilizer Rate 10-10-10	Lime Rate
	No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths		
*	Mix #7	Tall Fescue 83% Weeping Lovegrass 2% Serecia Lespedeza 15%	110 3 20	3/1 - 11/15	1/4"-1/2"	600 lb/ac (15 lb/1,000sf)	2 tons/ac (100lb/1,000sf)
**	Mix iii	Tall Fescue 95-100% Kentucky 0-5% Bluegrass	5-8 lbs. 1000sf	3/1 - 5/15 8/15 - 11/15	1/4"-1/2"		

* For low maintenance areas only
** For lawn areas

Temporary Seeding Summary

Seed Mixture (Hardiness Zone 7a) (From Table 26)					Fertilizer Rate 10-20-20			Lime Rate
No.	Species	Application rate(lb/ac)	Seeding Dates	Seeding Depths	N	P205	K20	
1	Annual ryegrass	50	2/1 - 4/30 8/15 - 11/1	1/4"-1/2"	90 lb/ac (2.0lb/ 1,000sf)	175 lb/ac (4 lb/ 1,000sf)	175 lb/ac (4 lb/ 1,000sf)	2tons/ac (100lb/ 1,000sf)
2	Weeping lovegrass	4	5/1 - 8/14	1/4"-1/2"				
					Equals 900 lbs. of 10-20-20 per acre			

VI. TURFGRASS ESTABLISHMENT

This includes lawns, parks, playgrounds, and commercial sites whichwill recieve a medium to a high level of maintenance. Areas to recieve seed shall be tilled by discing or other approved methods to a depth of 3 to 5 inches, leveled and raked to prepare a proper seedbed. Stones and debris over 1 1/2 inches in diameter shall be removed. The resulting seedbed shall be in such a condition that future mowing of grasses will pose no difficulty. Use certified material and choose a turfgrass mixture from page G-20 of the 1994 Standards and Specifications or select from the list in the most current University of Maryland publication, Agronomy Mimeo #77, "Turfgrass Cultivar Recommendations for Maryland". See mimeo at the end of this section.

VII. Mulching

All seedings require mulching. Also mulch during non seeding dates until seeding can be done. Mulch shall be unchopped, unrotted, small grain straw applied at a rate of 2 tons/acre or 90 lbs./1,000 sf (2 bales). If mulch anchoring tool is used, apply 2.5 tons/acre. Mulch materials shall be relatively free of all kinds of weeds and shall be competely free of noxiuos weeds. Spread mulch uniformly, either mechanically or by hand, to a depth of 1 to 2 inches. Mulch anchoring shall be accomplished immediately after mulch placement to minimize loss by wind or water. This may be done by mulch nettings, mulch anchoring tool, wood cellulose fober or liquid mulch binders.

Apply wood cellulose fiber at a dry weight of 1500 lbs/acre. If mixed with water, use 50 lbs. of wood cellulose fiber per 100 gallons of water.

Liquid binder should be applied heavier at the edge, where wind catches mulch in valleys, and on crest of banks. The remainder of the area should appear uniform after binder application. Apply rates recommended by the manufacturer to anchor and mulch. Staple light weight, plastic netting over mulch according to manufacturer's recommendations.

VIII. SODDING

Class of turfgrass sod shall be Maryland or Virginia State certified or approved sod. Sod shall be harvested, delivered and installed within a period of 36 hours. Sod is to be laid with long edges parallel to the contour using staggered and with all ends tightly abutted and not overlapping. Sod shall be rolled and thoroughly watered after installation. Daily watering to maintain 4 inches of moisture for the first week is required in the absence of rainfall. Sod is not to be applied on frozen ground.

IX. MAINTENANCE

a. Irrigate – Apply minimum 1" of water every 3 to 4 days depending on soil texture, when soil moisture becomes deficient to prevent loss of stand of protective vegetation.

b. Repairs – If stand provides between 40% and 94% ground coverage, overseed and fertilize using half of the rates originally applied. If stand provides less than 40% coverage, reestablish stand following original rates and procedures.

Note: Use of this information does not preclude meeting of all the requirements of the 1994 Standards and Specifications for Soil Erosion and Sediment Control Vegetative Practices.

24.0 MATERIALS SPECIFICATIONS

Table 28 - Stone Size

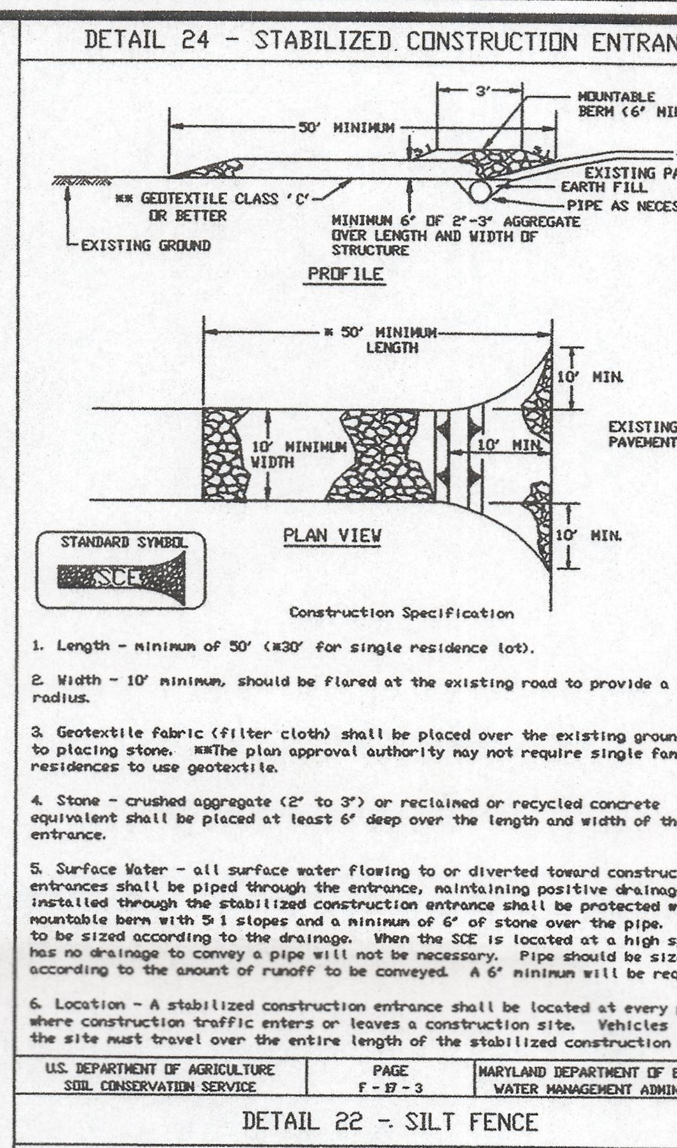
	SIZE RANGE	D_{50}	D_{100}	ASSHTO	WEIGHT
NUMBER 57*	3/8"–1 1/2"	1/2"	1 1/2"	M-43	N/A
NUMBER 1	2"–3"	2 1/2"	3"	M-43	N/A
RIP-RAP**	4"–7"	5 1/2"	7"	N/A	N/A
CLASS I	N/A	9.5"	15"	N/A	150lb.max.
CLASS II	N/A	16"	24"	N/A	700lb.max.
CLASS III	N/A	23"	34"	N/A	2,000lb.max.

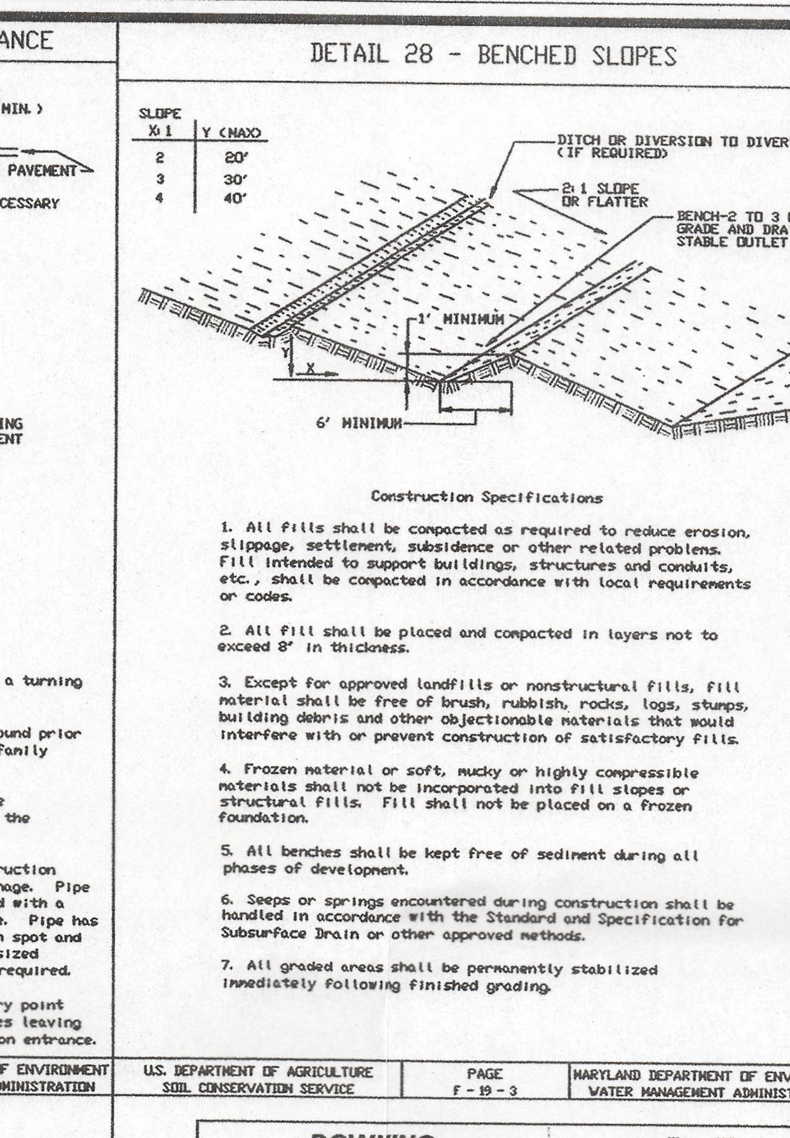
* This classification is to be used on the inside face of stone outlets and check dams.

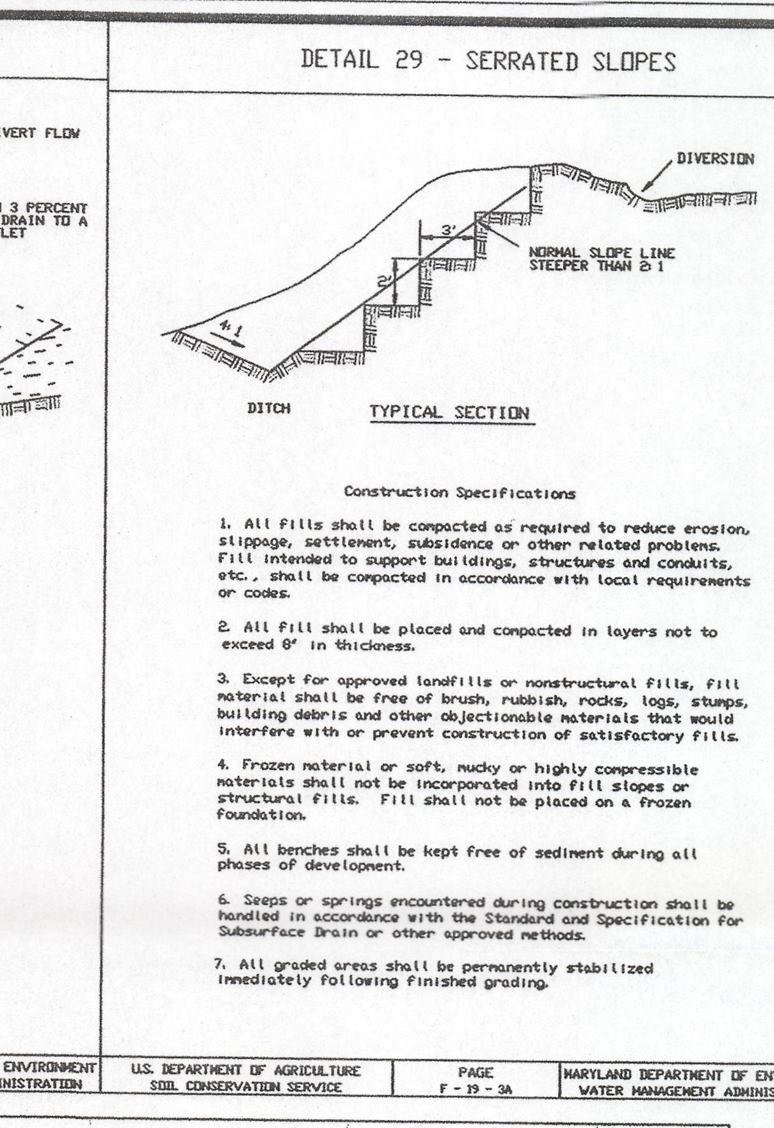
** This classification is to be used whenever small rip-rap is required. The State Highway Administration designation for this stone is Stones for Gabions (905.01.04)

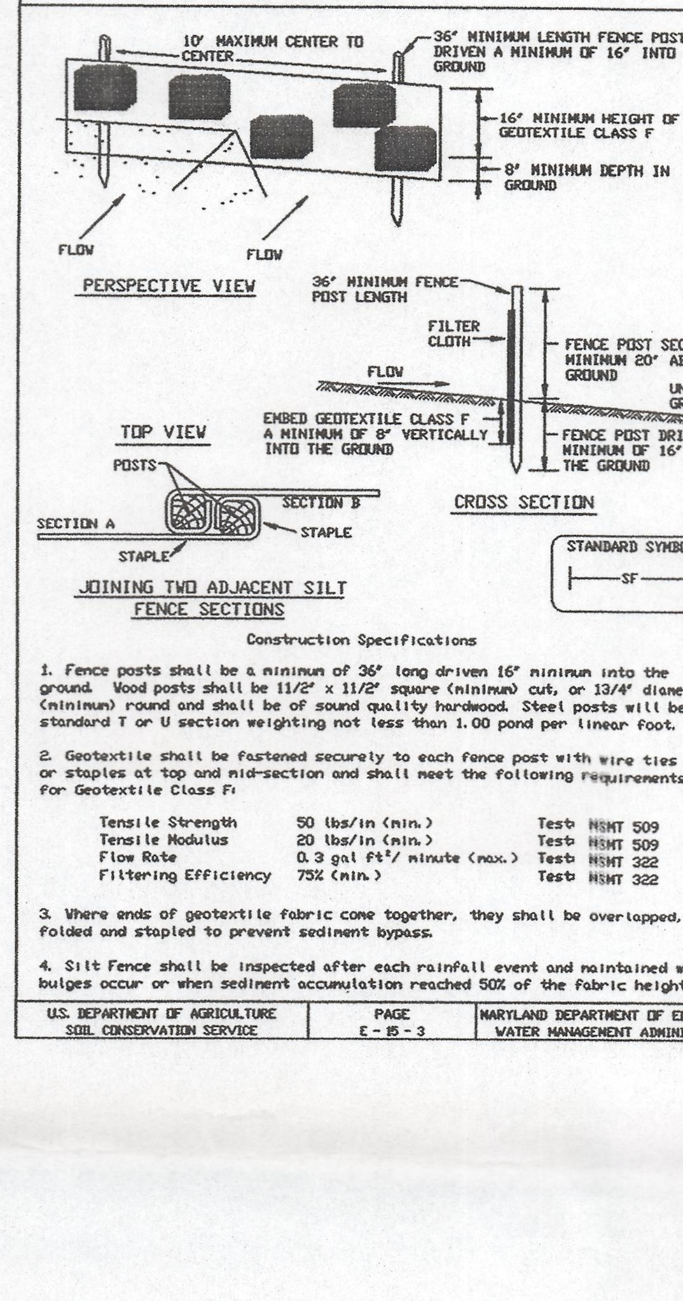
M-NCPPC
Prince George's County Planning Department
Environmental Planning Section
APPROVAL
TREE CONSERVATION PLAN
TCPII 09 1 05
Approved by C Finch Date 6/22/05

01		
02		
03		
04		
05		

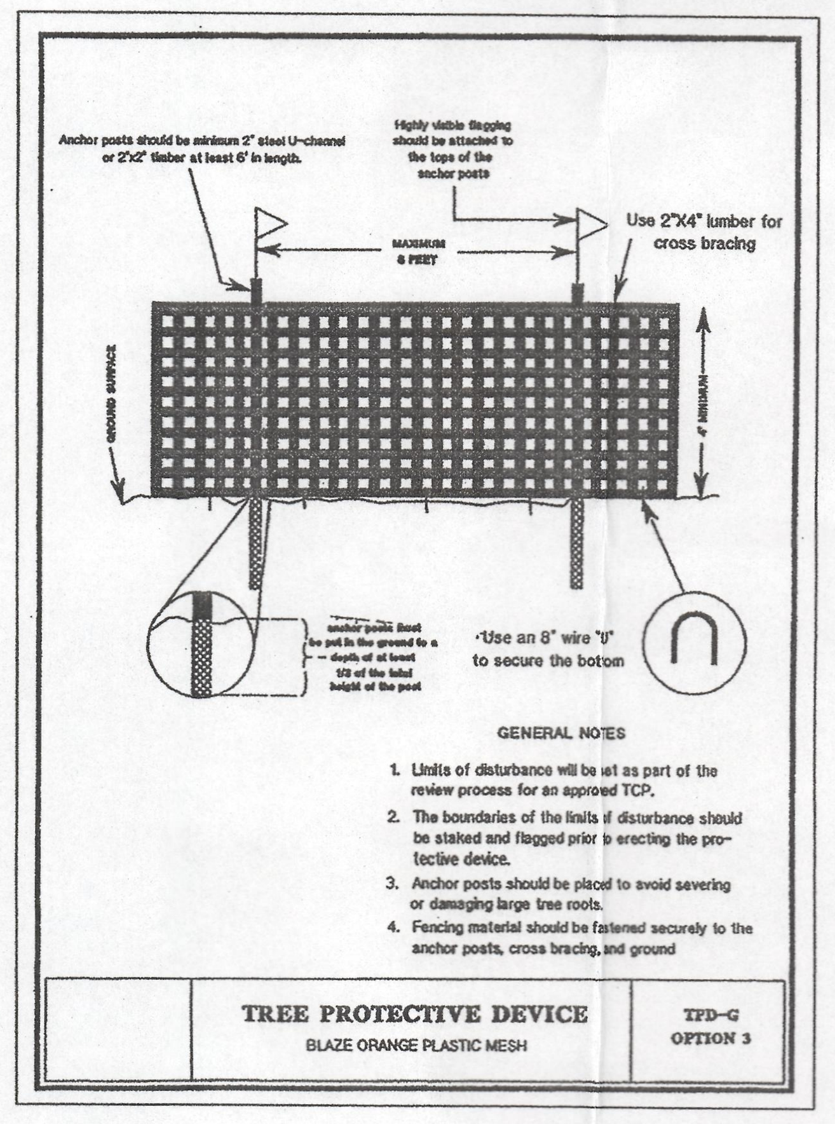


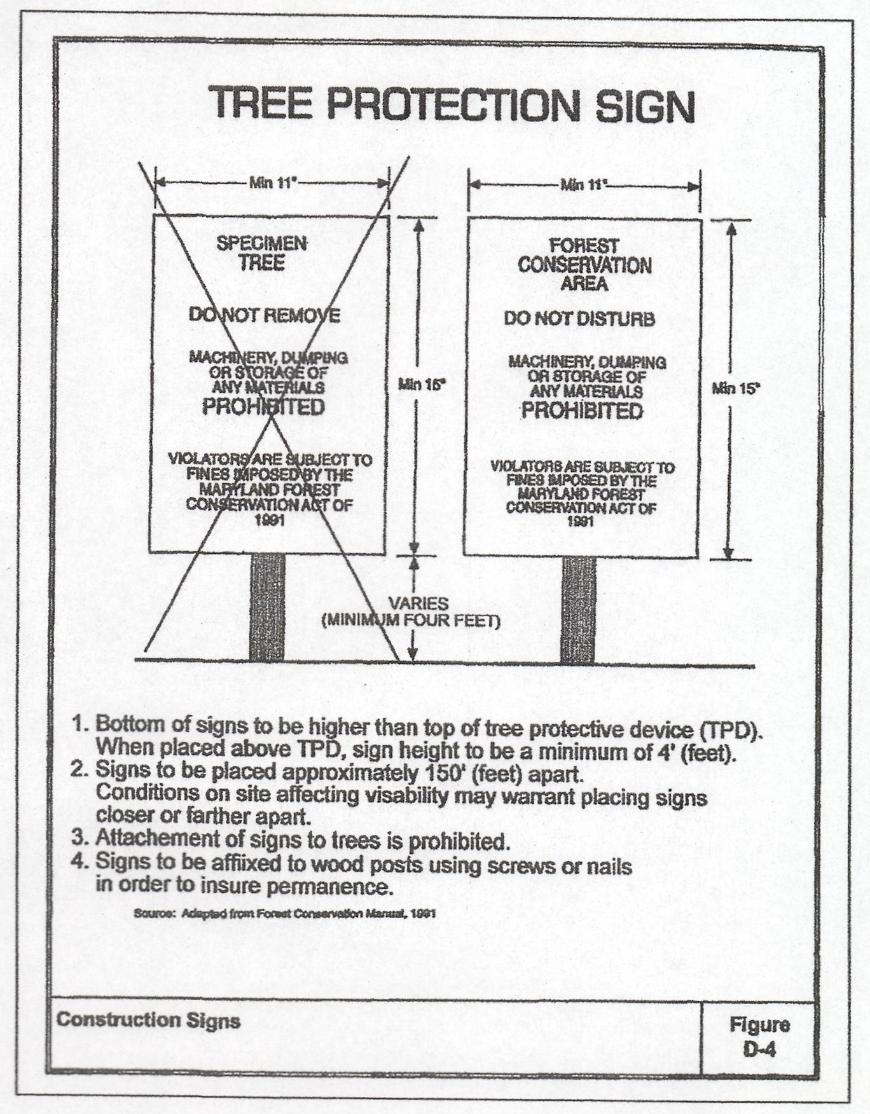






DOWNING	P. 47			
	drainfield			
perc depth	6.25			
daily design flow	1000	total depth	6.25	
loading rate	0.9	Rate(min/in.)	19	
absorptive layer	4.75			
trench spacing	9.5		min.	rate
** trench length**	233.9181287		1	3.5
			2	2.5
			3	2.3
INVERT AT HOUSE	63		4	2
LENGTH TO TANK	20		5	1.9
INVERT AT TANK	61.4		6	1.7
			7	1.6
			8	1.5
			9	1.4
			10	1.33
			11	1.26
	2000 gal septic tank		12	1.2
invert in	61.4		13	1.15
top of tank	61.82		14	1.1
inlet invert	60.9		15	1.04
outlet invert	60.65		16	1
bottom of tank(inside)	56.57		17	0.95
bottom of tank(outside)	56.32		18	0.93
			19	0.9
LENGTH OF PIPE TO FIELD	47		20	0.87
ELEV OF INV dist. Box	60.5		21	0.84
percent SLOPE	0.319148936		22	0.8
ELEV DIFFERENCE	0.15		23	0.78
ELEV OF INV drain field	60.2		24	0.76
TOP GROUND	61.7		25	0.74
			26	0.72
			27	0.69
			28	0.67
			29	0.65
			30	0.63





TREE CONSERVATION PLAN NOTES

1. Cutting or clearing of woodland not in conformance with this Plan or without the expressed written consent of the Planning Director or designee shall be subject to a $1.50 per square foot mitigation fee.
2. The Department of Environmental Resources (DER) must be contacted at (301) 731 - 8790 prior to the start of any work on the site to address implementation of Tree Conservation measures shown on this plan.
3. Property owners shall be notified by the Developer or Contractor of any Woodland Conservation Areas (Tree Save Areas, Reforestation Areas, Afforestation Areas, or Selective Clearing Areas) located on their lot or parcel of land and the associated fines for unauthorized disturbances to these areas. Upon the sale of the property the owner/developer or owners representative shall notify the purchaser of the property of any Woodland Conservation Areas.
4. All appropriate bonds will be posted with the Building Official prior to the issuance of any permits. These bonds will be retained as surety by the Building Official until all required activities have been satisfied.
5. The location of all Tree Protection Devices (TPD's) shown on this Plan shall be flagged or staked in the field prior to the pre-construction meeting with the Sediment and Erosion Control Inspector from DER. Upon approval of the flagged or staked TPD locations by the Inspector, installation of the TPDs may begin. TPD installation shall be completed prior to installation of initial Sediment Controls. No cutting or clearing of trees may begin before final approval of TPD installation.
6. Woodland Conservation - Tree Save Areas and/or Reforestation Areas shall be posted as shown at the same time as Tree Protective Device installation and/or start of reforestation activities. These signs shall remain in place until P.G. County Planning Dept. approves removal.

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PRINCE FREDERICK (301)855-9500 (410)535-8600

REVISIONS

JOB NO. PG-8884
SCALE: AS SHOWN
DRAWN BY: KMC
CHECKED BY: CSD
DATE: NOVEMBER, 2004

SEDIMENT CONTROL DETAIL SHEET
L. 19100 F. 745
PARCEL 47
NOTTINGHAM (4th) ELECTION DISTRICT
PRINCE GEORGE'S COUNTY, MARYLAND

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