

NOTES:

1. THE PROPERTY IS ZONED : R-20
2. THE TOPOGRAPHY SHOWN HEREON WAS FIELD-RUN BY SHANBERGER & LANE IN JANUARY OF 2004.
3. THIS PROPERTY IS SERVED BY EXISTING PUBLIC WATER AND SEWER.
4. EXISTING HOUSE SHOWN HEREON HAS BEEN FIELD-LOCATED.
6. ■■■■ DESIGNATES SOIL TYPE BOUNDARY

Key	Name	Scientific Name	Size	Condition	Retained
ST-1	American Beech	Fagus grandifolia	30"	Poor	YES
ST-2	Tulip Poplar	Liriodendron tulipifera	56"	Poor	YES

KEY	TYPE OF COMMUNITY	AREA	SOIL INFORMATION			EXISTING VEGETATION (Type and approx. %)	STAND CHARACTERISTICS			FOREST AREA IN SENSITIVE ENVIRONMENTS	
			SOIL TYPE	TYPICAL FOREST COVER	WOODLAND SUITABILITY INDEX		HABITAT VALUE	SIZE AVG. DIAM.	AGE		GENERAL CONDITIONS
F1	Mixed Hardwood	1.10 AC	Co	Mixed Hardwoods	75-84	GOOD	Boxelder 80% Black Walnut 20%	6-30+ in. 2-24 in.	50±	Good	All, in stream buffer, stream channel and floodplain
F2	Mixed Hardwood	0.87 AC	ME1	Mixed Upland Hardwoods	65-74	FAIR	Tulip Poplar 60%	6-30+ in.	100±	Good	0.42 Ac. on Steep Slopes
			MID2	Mixed Upland Hardwoods	65-74	FAIR	Black Locust 25%	6-12 in.			0.27 Ac. in Floodplain
			MIC2	Mixed Upland Hardwoods	65-74	FAIR	Boxelder 15%	4-10 in.			
L1	Lawn	0.73 AC	N/A	N/A	N/A	N/A	N/A	N/A	Good		

SOIL TYPES			
NAME	HYDRIC	HYDRIC INCLUSIONS	SLOPES < 15% WITH HIGH EROSION POTENTIAL
Co	yes	Hatboro	
GnB2			
M1B2			
M1D2			15-25%, moderately eroded
M1E			25-45% slopes

EASEMENT	TYPE	AREA (ACRES)
	RETENTION NON-CREDITED	0.26
		0.45
TOTAL		0.71

FOREST CONSERVATION WORKSHEET

Item	Acres
Net Tract Area	
A. Total Tract Area	2.70
B. Area Within 100 Year Floodplain	1.37
C. Other deductions	--
D. Net Tract Area	1.33
Zoning Use Category: RESIDENTIAL-SUBURBAN	
Land Use Category	
E. Afforestation Minimum (15 % x D)	0.20
F. Conservation Threshold (20 % x D)	0.27
Existing Forest Cover	
G. Existing Forest on Net Tract Area	0.60
H. Forest Area Above Conservation Threshold	0.33
Breakeven Point	
I. Forest Retention Above Threshold with no Mitigation	0.34
J. Clearing Permitted without Mitigation	0.26
Proposed Forest Clearing	
K. Forest Areas to be Cleared	0.34
L. Forest Areas to be Retained	0.26
Planting Requirements	
M. Reforestation for Clearing Above Threshold	0.08
N. Reforestation for Clearing Below the Threshold	0.02
P. Credit for Retention Above Conservation Threshold	0
Q. Total Reforestation Required	0.10
R. Total Afforestation Required	0
S. Total Reforestation and Afforestation Requirement	0.10

Forest Conservation Narrative

This Forest Conservation Plan complies with the Howard County Manual of 1998 and the Maryland Forest Conservation Act of 1991.

The site consists of 2.70 Ac. of which 1.37 Ac. are in the floodplain. The net tract area of 1.33 Ac. contains 0.60 Ac. of forest. These woodlands have been preserved to the maximum extent possible, resulting in retention within a Forest Conservation Easement of 0.26 Ac. This easement will include forested floodplain of 0.45 Ac, which is retained to ensure the easement meets the minimum criteria for forest easements. This additional area is not retained for credit.

Specimen trees will be retained and protected to the greatest extent possible.

For the outstanding reforestation obligation of 0.10 Ac. we are requesting a fee-in-lieu payment of \$2,178.00 (4,356 sq.ft.@\$0.50/s.f.). There exist no suitable onsite or offsite planting locations. The fee-in-lieu was paid on 9/16/05 as receipt No. 09011.

FOREST STAND NARRATIVE

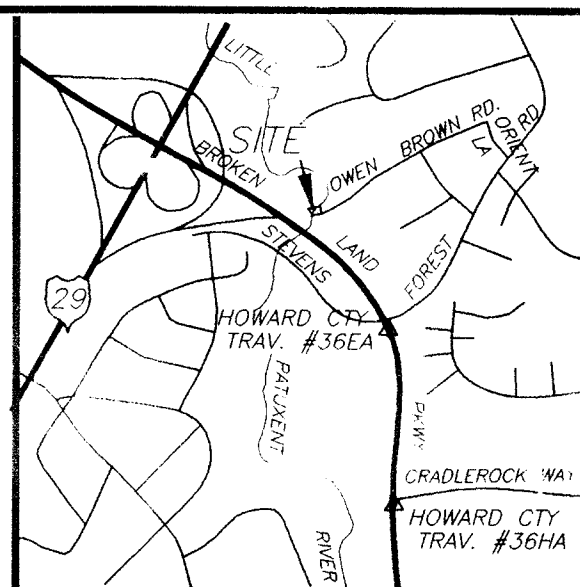
F1 - This forest stand occurs within the floodplain of the Patuxent River. The 1.10 Acre floodplain forest is dominated by the following species trees: boxelder (*Acer negundo*) and black walnut (*Juglans nigra*) in the overstory with spicebush (*Lindera benzoin*) as the dominant shrub. The herbaceous layer is dominated by Japanese honeysuckle (*Lonicera japonica*). The stand is in good health without significant invasive infestation. This stand would be considered a high priority for retention.

F2 - This forest stand occurs within the upland area of the site. The 0.87 Acre upland forest is dominated by the following overstory trees: tuliptree (*Liriodendron tulipifera*), black locust (*Robinia pseudoacacia*), and eastern red cedar (*Juniperus virginiana*). The understorey is dominated by: ironwood (*Carpinus caroliniana*), spicebush (*Lindera benzoin*), and multiflora rose (*Rosa multiflora*). The herbaceous layer is dominated by English ivy (*Hedera helix*) and Japanese honeysuckle (*Lonicera japonica*). This stand appears to be in good health. The two specimen trees are found within this stand. The areas of steep slopes and floodplain, as well as the specimen trees would be high priority for retention. Other areas would be of lesser priority.

L1 - The remainder of the site is the lawn area surrounding the existing buildings including scattered trees and paving.

Forest Tree Protection and Management Notes

1. Tree protection devices shall be installed prior to any grading or land clearing.
2. After the boundaries of the retention areas have been staked and flagged and before any disturbance has taken place a pre-construction meeting with the Howard County Inspector is required.
3. Provide maintenance to tree protection devices and signage to maintain their integrity throughout the duration of the project.
4. Attachment of signs to tree protection devices to maintain their integrity throughout the duration of the project.
5. Any significant changes made to the Forest Conservation Plan shall be made with the prior approval of the Howard County Dept. Of Planning and Zoning.
6. No burial of discarded material is permitted within the Forest Conservation and Planting areas.
7. No open burning within 100 feet of wooded areas is permitted.
8. Post construction phase:
 - a. Inspect existing trees around the perimeter of the site for signs of root or trunk damage and excessive soil compaction.
 - b. Remove dead or dying trees and evaluate for hazard tree removal.
 - c. All temporary forest protection devices will be removed after construction. Following completion of construction, prior to use, the County Inspector shall inspect the entire site for compliance with this Forest Conservation Plan.
9. A licensed Arborist or Forester should be retained for this service as needed.

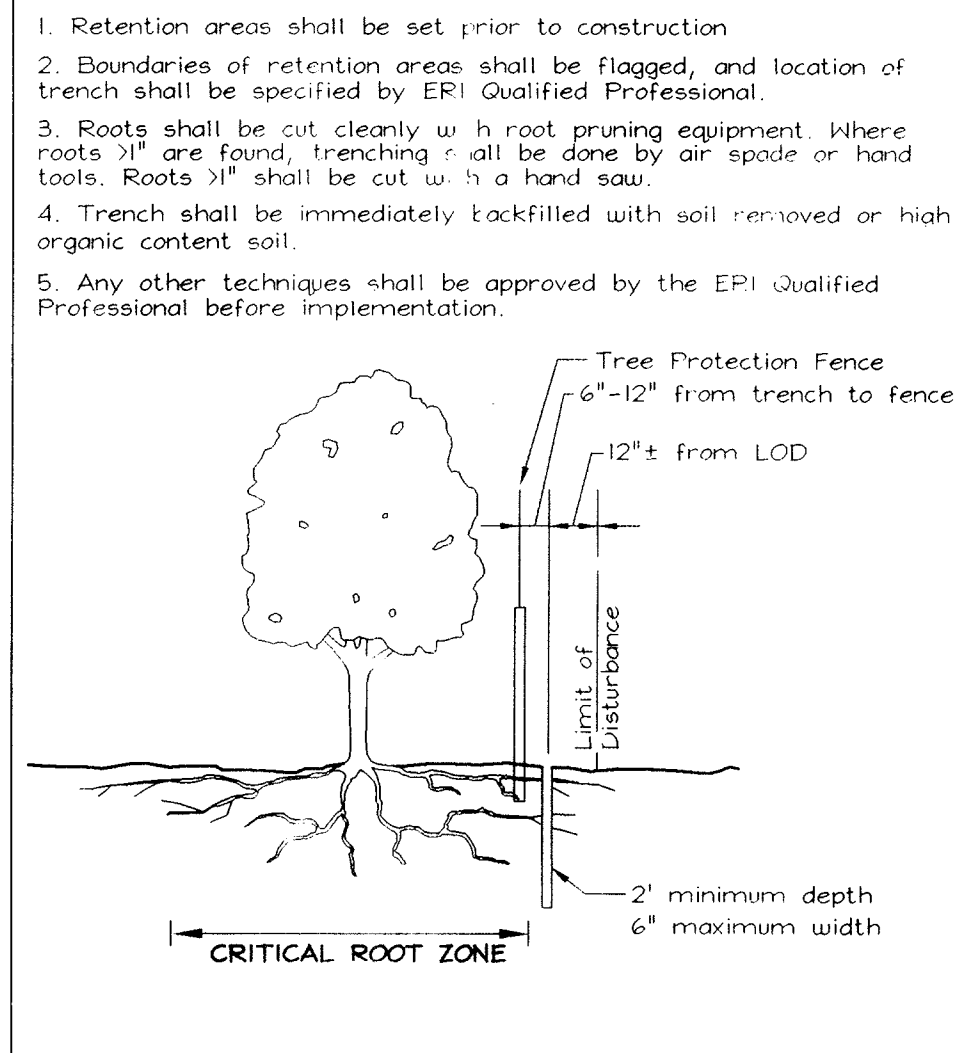


VICINITY MAP
SCALE: 1"=2000'

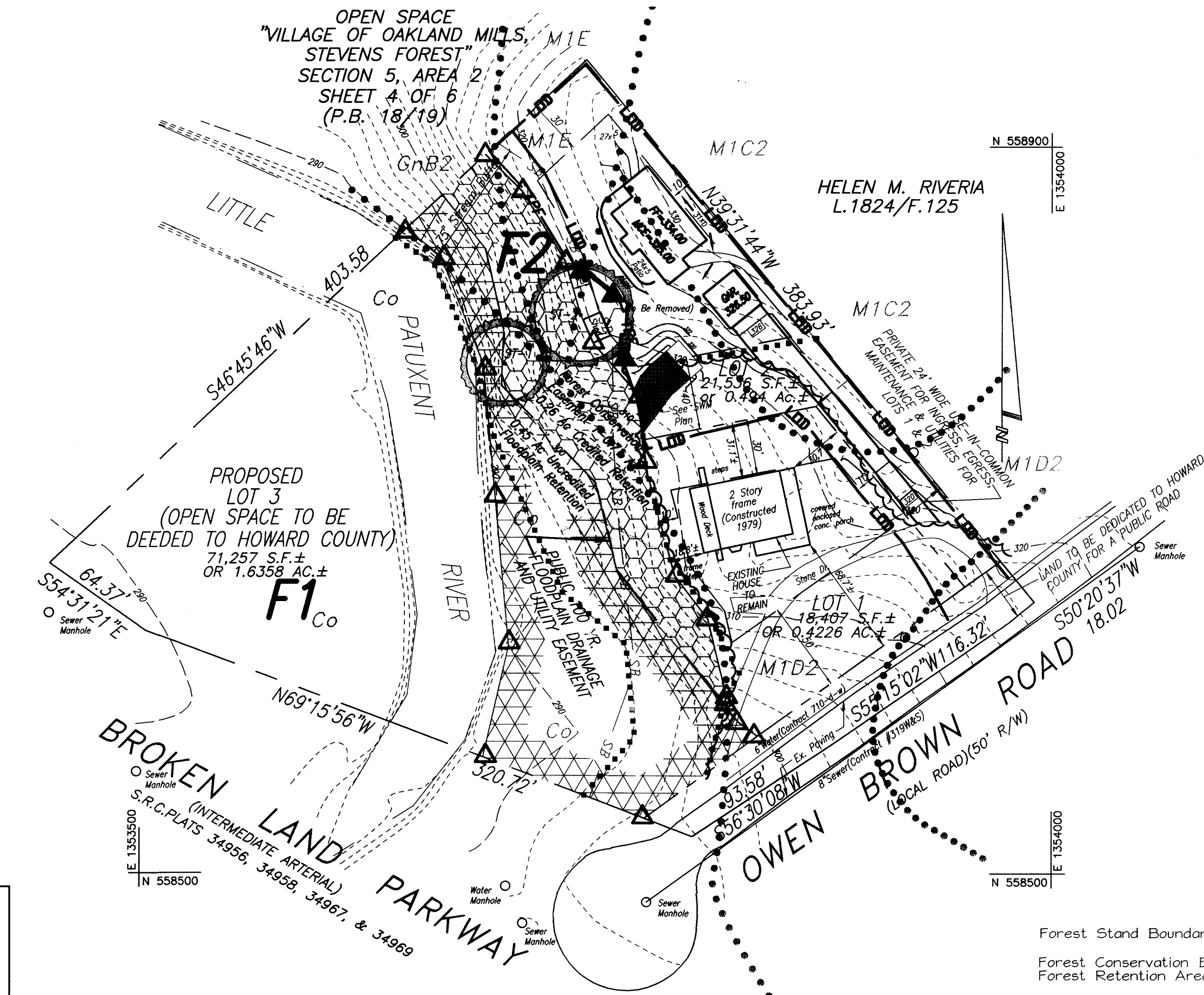
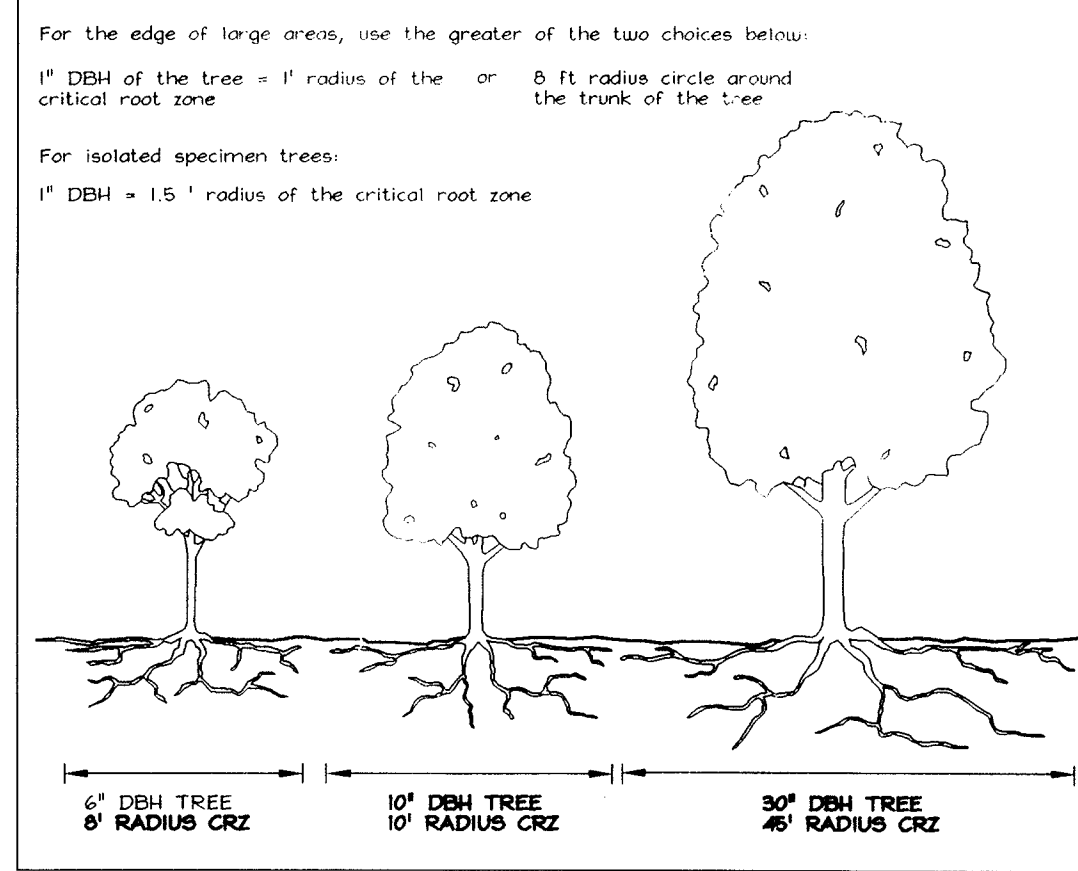
Soil Protection Zone Notes

1. The Soil Protection Zone shall include all areas contained inside the Limit of Disturbance.
2. Where possible, the Soil Protection Zone shall extend to the drip line of specimen trees. For other groups of trees, the zone shall be the drip line or 40% of the height of the tree, whichever is greater.
3. No construction activity is permitted within the Soil Protection Zone, whichever is greater.
4. If soil has been compacted or grading has taken place in the vicinity of the Soil Protection Zone, root pruning shall be implemented per Root Pruning detail, shown on this plan.
5. Root pruning shall occur prior to the beginning of construction.
6. Where the Soil Protection Zone must encroach inside the Critical Root Zone of a tree, soil disturbance shall be mitigated with vertical mulching, radial trenching, or another method approved by the ERI Forest Conservation Professional.
7. Prior to construction, the Limits of Disturbance shall be marked and the ERI Professional shall determine which trees will need preventative treatment or removal.
8. Tree maintenance and removal shall be undertaken by a qualified MD Tree Expert to ensure damage to surrounding trees is minimized.
9. Brush and limbs removed for construction shall be chipped and spread at the edge of the Soil Protection Zone to a depth of 6 inches. This shall occur outside the Soil Protection Zone where compaction could impact otherwise unprotected Critical Root Zone.

ROOT PRUNING



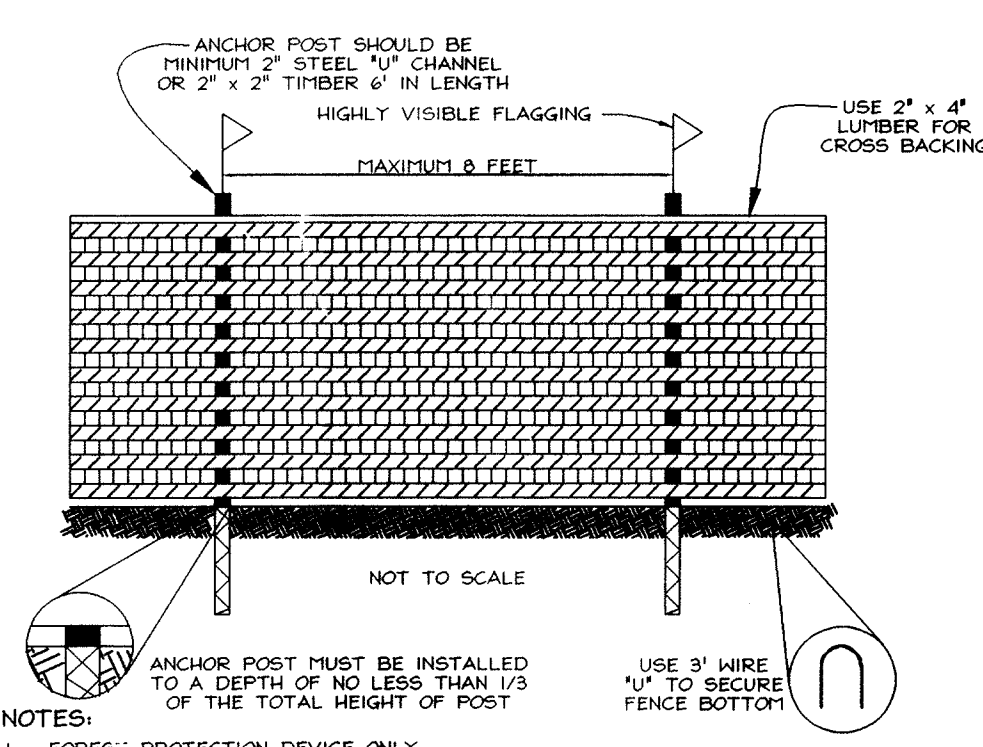
CRITICAL ROOT ZONE



PLAN VIEW
SCALE 1" = 50'

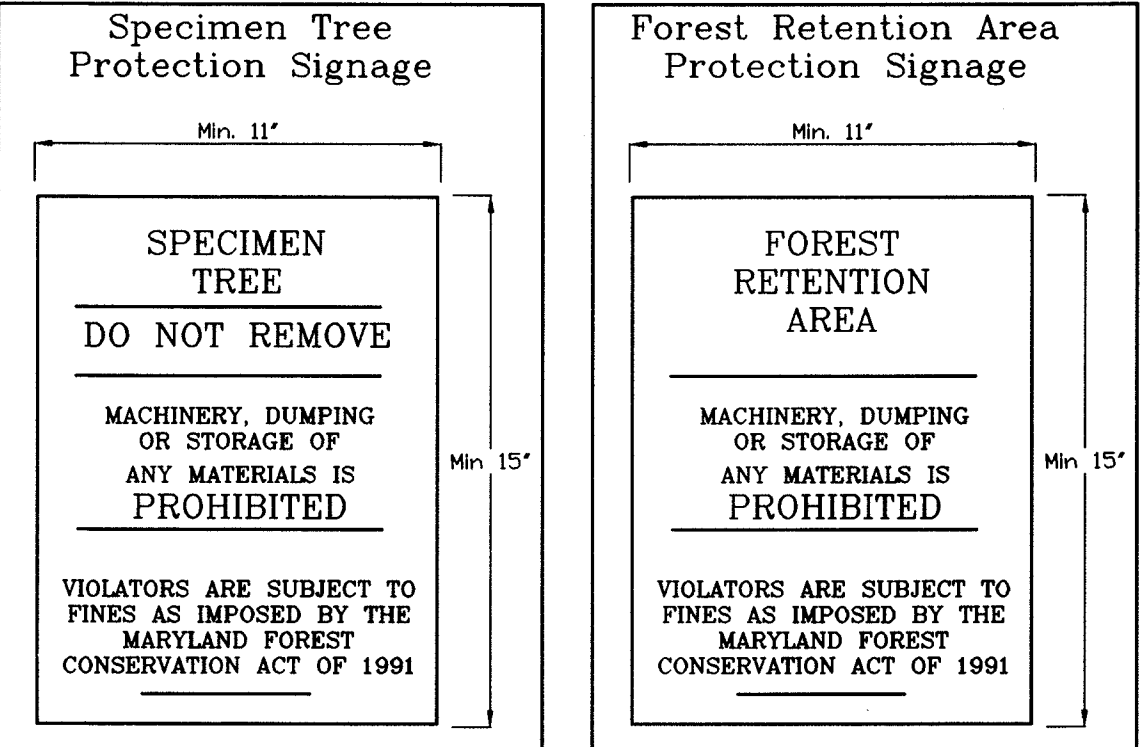
LEGEND

- Forest Stand Boundary: Dotted line
- Forest Conservation Easement: Hexagonal pattern
- Forest Retention Area: Cross-hatched pattern
- Forest Conservation Easement Non-Credited Floodplain Retention: Diagonal line pattern
- Steep Slopes - > 25%: Wavy line pattern
- Tree Protection Fence: TPF (line with triangles)
- Forest Conservation Easement Protection Signage: Triangle with 'X'
- Specimen Tree Protection Signage: Triangle with 'S'
- Soil Type Boundary: Dashed line
- Limit of Disturbance: LOD (line with dots)



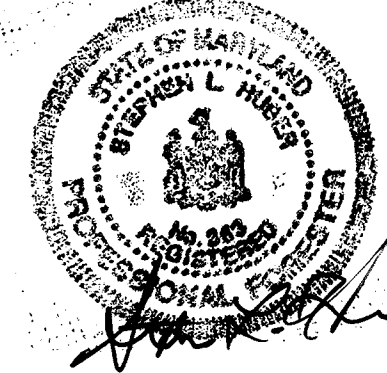
1. FOREST PROTECTION DEVICE ONLY.
2. RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
3. BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.
4. ROOT DAMAGE SHOULD BE AVOIDED.
5. PROTECTIVE SIGNAGE THAT ALSO BE USED.
6. DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

TREE PROTECTION DETAIL
BLAZE ORANGE PLASTIC MESH

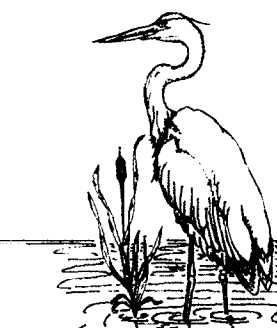


1. TEMPORARY SIGNAGE SHALL BE PLACED ATOP THE TREE PROTECTION FENCE IN LOCATIONS NOTED ON PLAN.
2. SPECIMEN TREE SIGNAGE SHALL BE PLACED ON THE TREE PROTECTION FENCE SURROUNDING THE SPECIMEN TREE ADJACENT TO THE NEW LOT.
3. ALL PERMANENT TREE PROTECTION SIGNS SHALL BE PLACED ON METAL 'T' POSTS OR PRESSURE TREATED WOOD POLES. NO ATTACHMENT OF SIGNS TO TREES IS PERMITTED.

TREE PROTECTION SIGNAGE
NOT TO SCALE



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FAX: 410-461-9693



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COMBINED FOREST STAND DELINEATION AND FOREST CONSERVATION PLAN
VILLAGE OF OAKLAND MILLS,
SECTION 5, AREA 2
LOTS 1, 2 & OPEN SPACE LOT 3
DUGGAN PROPERTY
(A RESUBDIVISION OF LOT 217, VILLAGE OF OAKLAND MILLS STEVENS FOREST, P.B.18/19)
6TH ELECTION DISTRICT, HOWARD COUNTY, MD
TAX MAP 36 GRID B PARCEL P/O 315
ZONED: R-20
SCALE: 1"=50'
SEPTEMBER 22, 2005
PREVIOUS DPZ FILES: P-68-01,F-69-023,
SHEET 1 OF 1 FDP-65-A

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Cristy Hamata 10/6/05
CHIEF, DIVISION OF LAND DEVELOPMENT DATE
10/5/05
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE