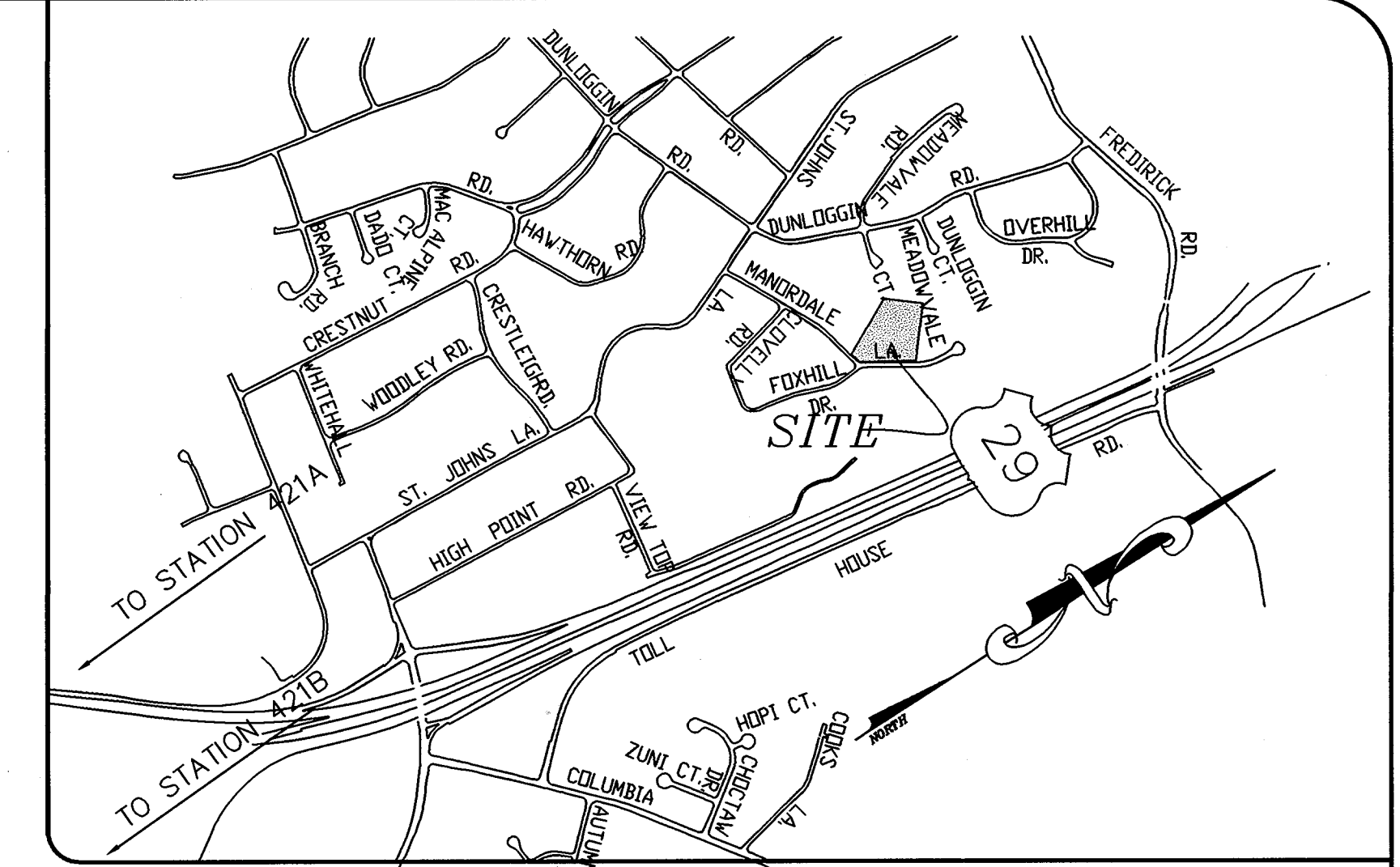
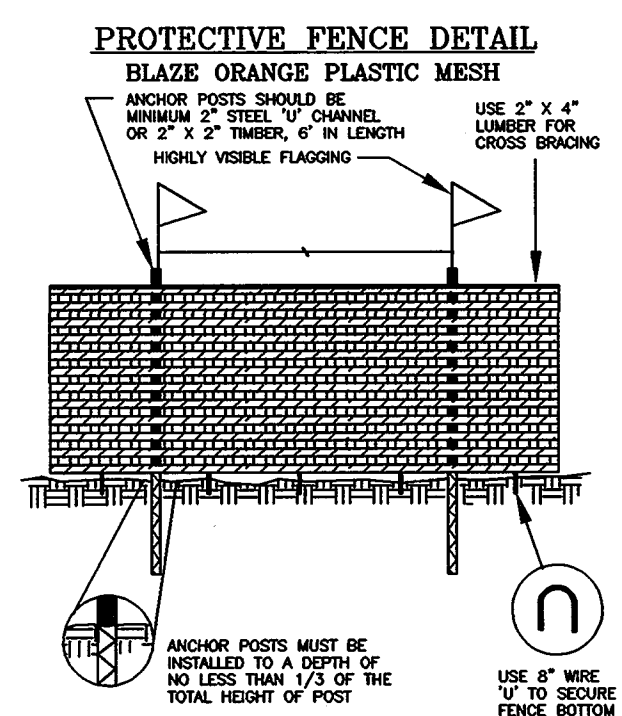


FOREST CONSERVATION DATA

I. BASIC SITE DATA	ACRES
GROSS SITE AREA	3.03
AREA WITHIN 100 YEAR FLOODPLAIN	0.00
AREA WITHIN AGRICULTURAL USE OR PRESERVATION PARCEL	0.00
NET TRACT AREA	3.03
LAND USE CATEGORY	RESIDENTIAL - SUBURBAN
II. FOREST CONSERVATION WORKSHEET DATA SUMMARY	
B. REFORESTATION THRESHOLD (20%)	0.61
C. AFFORESTATION MINIMUM (15%)	0.45
D. EXISTING FOREST ON NET TRACT AREA	2.26
E. FOREST AREAS TO BE CLEARED	1.31
F. FOREST AREAS TO BE RETAINED	0.94
V. AFFORESTATION CALCULATIONS	
G. FOREST AREAS CLEARED ABOVE AFFORESTATION THRESHOLD	1.31
H. FOREST AREAS CLEARED BELOW AFFORESTATION THRESHOLD	0.00
I. FOREST AREAS RETAINED ABOVE AFFORESTATION THRESHOLD	0.33
REFORESTATION FOR CLEARING ABOVE THRESHOLD	0.33
CREDIT FOR FOREST AREAS RETAINED ABOVE THRESHOLD	0.00
TOTAL REFORESTATION REQUIRED	0.00

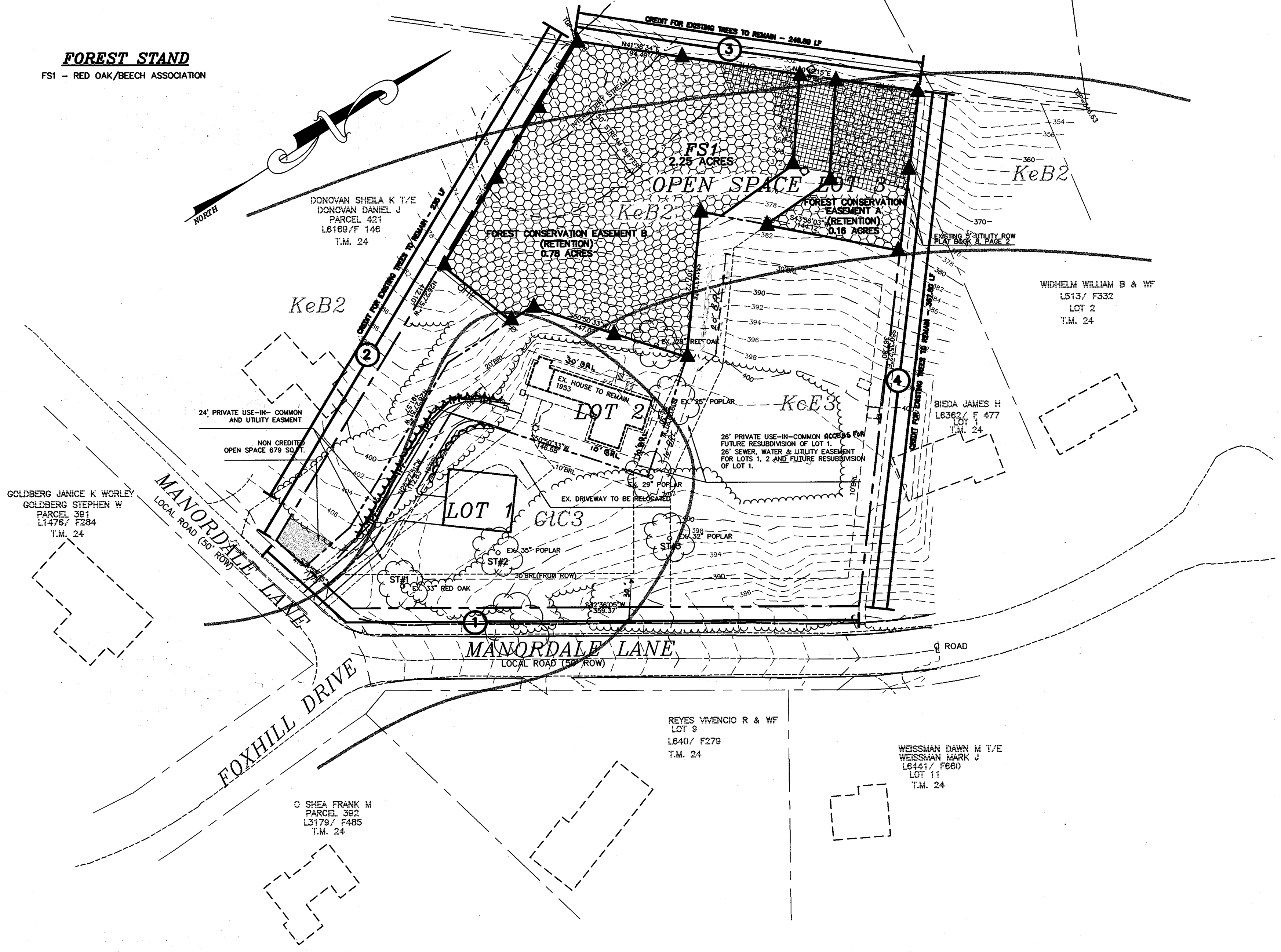
SPECIMEN TREES

KEY	SPECIES
ST#1	33" RED OAK
ST#2	35" POPLAR
ST#3	32" POPLAR



FOREST STAND

FS1 - RED OAK/BEECH ASSOCIATION

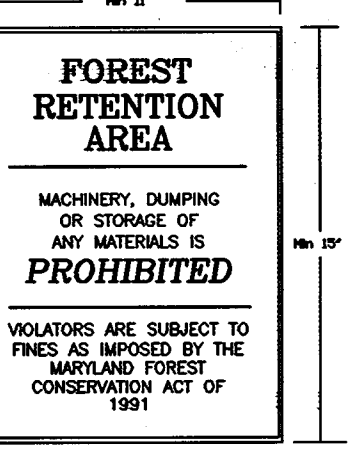


FOREST RETENTION NOTES

- FOREST PROTECTION**
- ALL FOREST RETENTION AREAS SHALL BE TEMPORARILY PROTECTED BY WELL ANCHORED BLAZE ORANGE PLASTIC MESH FENCING AND SIGNAGE AS INDICATED ON THE PLANS. THE DEVICES SHALL BE INSTALLED ALONG THE FOREST RETENTION BOUNDARY PRIOR TO ANY LAND CLEARING, GRUBBING, OR GRADING ACTIVITIES.
 - THE FOREST PROTECTION DEVICES SHALL BE INSTALLED SUCH THAT THE CRITICAL ROOT ZONES OF ALL TREES WITHIN THE RETENTION AREA NOT OTHERWISE PROTECTED WILL BE WITHIN FOREST PROTECTION DEVICES.
 - ALL PROTECTION DEVICES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION, INCLUDING SILT FENCE BEING USED AS PROTECTIVE FENCING. ALL DEVICES SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION HAS CEASED IN THE IMMEDIATE VICINITY.
 - ATTACHMENT OF SIGNS, OR ANY OTHER OBJECTS TO TREES IS PROHIBITED. NO EQUIPMENT, MACHINERY, VEHICLES, MATERIALS OR EXCESSIVE PEDESTRIAN TRAFFIC SHALL BE ALLOWED WITHIN THESE PROTECTED AREAS.
 - INSTALLATION AND MAINTENANCE OF PROTECTIVE FENCING AND SIGNAGE SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL TAKE THE UTMOST CARE TO PROTECT TREE ROOT SYSTEMS DURING ALL CONSTRUCTION ACTIVITIES. TREE ROOT SYSTEMS SHALL BE PROTECTED FROM SMOOTHERING, FLOODING, EXCESSIVE WETTING FROM DE-WATERING OPERATIONS, OFF-SITE RUN OFF, SPILLAGE AND DRAINING OF MATERIALS THAT MAY BE HARMFUL TO TREES.
 - THE GENERAL CONTRACTOR SHALL PREVENT PARKING OF CONSTRUCTION VEHICLES AND EQUIPMENT, AND THE STORING OF BUILDING SUPPLIES OR STOCKPILING OF EARTH WITHIN FOREST CONSERVATION EASEMENTS. REMOVAL OF TOPSOIL OR ROOT MAT WITHIN THE TREE PRESERVATION AREA SHALL BE PROHIBITED.
 - THE GENERAL CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY TREES DAMAGED OR DESTROYED WITHIN THE FOREST CONSERVATION EASEMENTS. ROOT PRUNING SHALL BE USED AT THE LIMIT OF DISTURBANCE OR LIMIT OF GRADING WITHIN AND ADJACENT TO ALL PRESERVATION AREAS, AS NECESSARY.
- PRE-CONSTRUCTION MEETING**
- AFTER THE BOUNDARIES OF THE FOREST RETENTION AREAS HAVE BEEN FIELD LOCATED AND MARKED, AND AFTER THE FOREST PROTECTION DEVICES HAVE BEEN INSTALLED, BUT BEFORE ANY OTHER DISTURBANCE HAS TAKEN PLACE ON SITE, A PRE-CONSTRUCTION MEETING SHALL TAKE PLACE ON SITE. THE DEVELOPER, CONTRACTOR OR PROJECT MANAGER, AND HOWARD COUNTY INSPECTORS SHALL ATTEND. THE PURPOSE OF THIS MEETING WILL BE:
 - TO IDENTIFY THE LOCATIONS OF THE FOREST RETENTION AREAS, SPECIMEN TREES WITHIN 50 FEET OF THE LIMIT OF DISTURBANCE, LIMITS OF CONSTRUCTION, EMPLOYEE PARKING AREAS AND EQUIPMENT STAGING AREAS;
 - INSPECT ALL FLAGGED BOUNDARIES AND PROTECTION DEVICES;
 - MAKE ALL NECESSARY ADJUSTMENTS;
 - ASSIGN RESPONSIBILITIES AS APPROPRIATE AND DISCUSS PENALTIES.
- CONSTRUCTION MONITORING**
- THE SITE SHALL BE INSPECTED PERIODICALLY DURING THE CONSTRUCTION PHASE OF THE PROJECT. A QUALIFIED PROFESSIONAL SHALL BE RESPONSIBLE FOR IDENTIFYING DAMAGE TO PROTECTED FOREST AREAS OR INDIVIDUAL TREES WHICH MAY HAVE BEEN CAUSED BY CONSTRUCTION ACTIVITIES, SUCH AS SOIL COMPACTION, ROOT INJURY, TRUNK WOUNDS, LIMB INJURY, OR STRESS CAUSED BY FLOODING OR DROUGHT CONDITIONS. ANY SUCH DAMAGE THAT MAY OCCUR SHALL BE REMEDIATED IMMEDIATELY USING APPROPRIATE MEASURES. SEVERE PROBLEMS MAY REQUIRE CONSULTATION WITH A PROFESSIONAL ARBORIST.
 - THE CONSTRUCTION PROCEDURE SHALL NOT DAMAGE AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE AS DESIGNATED ON THE PLANS. ANY DAMAGE SHALL BE RESTORED BY THE CONTRACTOR AT HIS EXPENSE AND TO THE SATISFACTION OF THE DESIGNER OR ENGINEER.
 - RESOURCES, PUBLIC LANDS AND FORESTRY DIVISION SUPERVISION
- 1. ALL FOREST CONSERVATION ACTIVITIES SHALL BE DONE UNDER THE DIRECT SUPERVISION OF SOMEONE FROM THE DESIGN TEAM OR OTHER QUALIFIED PROFESSIONAL AS DETERMINED BY THE REQUIREMENTS OF COMAR 08.19.06.01 AND THE MARYLAND DEPARTMENT OF NATURAL RESOURCES.**

GENERAL NOTES:

- SITE DATA:
 - ZONING: R-20
 - TAX MAP 24 PARCEL 343
 - DEED REFERENCE: 6415/96
 - GROSS AREA: 3.03 ACRES ±
 - MINIMUM LOT SIZE: 12,000 SQ. FT.
 - NUMBER OF PROPOSED BUILDABLE LOTS: 2
 - NUMBER OF PROPOSED OPEN SPACE LOTS: 1
 - AREA OF REQUIRED OPEN SPACE: 3.03X40% = 1.212 Ac ±
 - AREA OF PROPOSED OPEN SPACE: 3.03X40% = 1.228 Ac ±
 - AREA OF NON-CREDITED OPEN SPACE = 0.016 Ac ±
 - AREA OF CREDITED OPEN SPACE = 1.212 Ac ±
- THIS PLAN IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT OCTOBER 2002 BY MILDENBERG, BOENDER & ASSOC., INC.
- THE COORDINATES SHOWN HEREON ARE BASED ON NAD '83 MARYLAND COORDINATE SYSTEM AS PROMULGATED BY HOWARD COUNTY GEODETIC CONTROL STATIONS 421A AND 421B
 - STATION NO. 421A N 543390.386 ELEVATION 312.667
 - E 1364912.655
 - STATION NO. 421B N 542366.879 ELEVATION 283.120
 - E 1363076.003
- NO BURIAL GROUNDS OR CEMETERIES EXIST ON SITE.
- STEEP SLOPES AND STREAMS EXIST ON SITE.
- NO WETLANDS EXIST ON SITE PER FIELD INVESTIGATION BY MILDENBERG BOENDER AND ASSOCIATES ON NOVEMBER 2002.
- NO HISTORIC DISTRICTS ARE ADJACENT TO THIS SITE. THE SITE IS NOT ADJACENT TO A DESIGNATED SCENIC ROAD.
- EXISTING STRUCTURE ON LOT 2 IS TO REMAIN. NO NEW BUILDINGS, EXTENSIONS OR ADDITIONS TO THE EXISTING DWELLING ARE TO BE CONSTRUCTED AT A DISTANCE LESS THAN THE ZONING REGULATIONS REQUIRE.
- THIS PROJECT IS EXEMPT FROM STORMWATER MANAGEMENT REQUIREMENTS. NET DISTURBANCE IS LESS THAN 5,000 SQ.FT.
- THIS SUBDIVISION IS SUBJECT TO THE 5TH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE ZONING REGULATIONS AS AMENDED UNDER COUNCIL BILL # 50-2001.
- PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. PUBLIC WATER AND SEWER WILL BE UTILIZED.
- ALL AREAS ARE MORE OR LESS.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 - WIDTH - 12 FEET (14 FEET SERVING MORE THAN ONE RESIDENT)
 - SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING.
 - GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM OF 45-FOOT RADIUS.
 - STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING).
 - DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
 - STRUCTURE CLEARANCES - MINIMUM 12 FEET
 - MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
- THIS SUBDIVISION IS IN COMPLIANCE WITH SECTION 16.124 OF HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- FOREST CONSERVATION EASEMENT(S) HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF HOWARD COUNTY CODE AND FOREST CONSERVATION ACT. NO CLEARING, GRADING, OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, EXCEPT AS SHOWN ON AN APPROVED ROAD CONSTRUCTION DRAWING OR SITE DEVELOPMENT PLAN. HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
- FOREST CONSERVATION OBLIGATIONS IN ACCORDANCE WITH SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION ACT FOR THIS SUBDIVISION HAS BEEN FULFILLED BY RETENTION OF 2.26 ACRES (48,946 ± SQ. FT.).
- THIS SUBDIVISION IS IN COMPLIANCE WITH SECTION 16.124 OF HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, OR PLACEMENT OF NEW STRUCTURES IS PERMITTED WITHIN THE LIMITS OF STREAMS, OR THEIR BUFFERS AND FOREST CONSERVATION EASEMENT AREAS.
- THIS PROJECT IS EXEMPT FROM STORMWATER MANAGEMENT REQUIREMENTS. DISTURBANCE IS LESS THAN 5,000 SQ.FT.



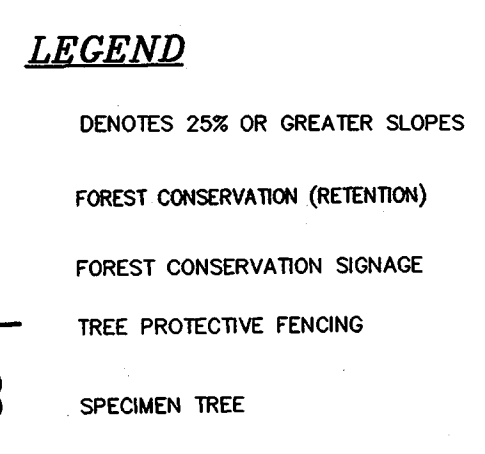
DEVELOPER'S/OWNER'S CERTIFICATE

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 CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE-YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

Chafin P 3/18/03
NAME DATE

SIGNAGE DETAILS

NOT TO SCALE



SCHEDULE A : PERIMETER LANDSCAPED EDGE

CATEGORY	ADJACENT TO ROADWAYS		ADJACENT TO PERIMETER PROPERTIES		TOTAL
	A (PERIMETER 1)	A (PERIMETER 2)	A (PERIMETER 3)	A (PERIMETER 4)	
LANDSCAPE TYPE	N/A	431.12 LF	246.89 LF	367.80 LF	
LINEAR FEET OF PERIMETER	N/A	431.12 LF	246.89 LF	367.80 LF	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	N/A	YES, 386.63 LF OF EX. TREES TO REMAIN (97.10 LF REMAINING)	YES, 246.89 LF OF EX. TREES TO REMAIN	YES, 367.80 LF OF EX. TREES TO REMAIN	
NUMBER OF PLANTS REQUIRED					
SHADE TREES	0	0	0	0	0
EVERGREEN TREES	0	0	0	0	0
SHRUBS	0	0	0	0	0
CREDIT FOR EXISTING VEGETATION	N/A	N/A	N/A	N/A	0
SHADE TREES	0	0	0	0	0
EVERGREEN TREES	0	0	0	0	0
NUMBER OF PLANTS PROVIDED					
SHADE TREES	0	0	0	0	0
EVERGREEN TREES	0	0	0	0	0
OTHER TREES (2:1 SUBSTITUTION)	0	0	0	0	0
SHRUBS (10:1 SUBSTITUTION)	0	0	0	0	0

SOILS CLASSIFICATION:

KEE3 KELLY SILT LOAM, 15 TO 30 PERCENT SLOPES, SEVERELY ERODED (D)
 KeB2 KELLY SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED (D)
 GC2 GLENGLG LOAM, 8 TO 15 SLOPES, MODERATELY ERODED (B)

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Cindy Hamilton 3/21/03
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Chafin P 3/18/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION MA3 DATE

REGISTERED PROFESSIONAL ENGINEER

Stephanie Demchik 3/19/03
STEPHANIE DEMCHIK, RLA NO. 3038

OWNER

CHRISTOPHER BROWN
4228 COLUMBIA RD.
ELLCOTT CITY MD 21042

date NOV. 2002
project 02068
illustration SAA
scale SAA
approval RHH
1"=60'

date
description
revisions

HOWARD COUNTY
SECOND ELECTION DISTRICT
MANORDALE LANE
LOTS 1,2 AND OPEN SPACE LOT 3
TAX MAP 24 PARCEL 343
LANDSCAPE, FOREST CONSERVATION, & SUPPLEMENTAL PLAN

MILDENBERG, BOENDER & ASSOC., INC.
Planners Surveyors Engineers
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland, 21042
(410) 997-0296 Fax: (410) 997-0296

1 OF 1