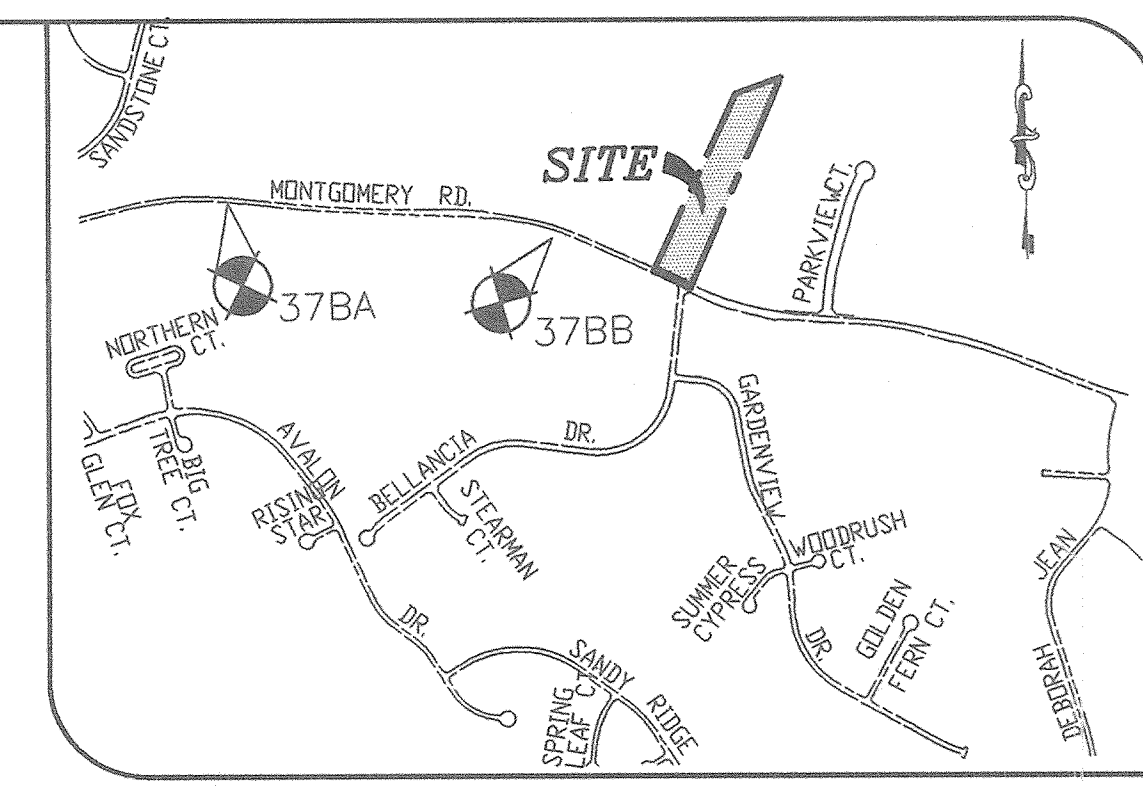
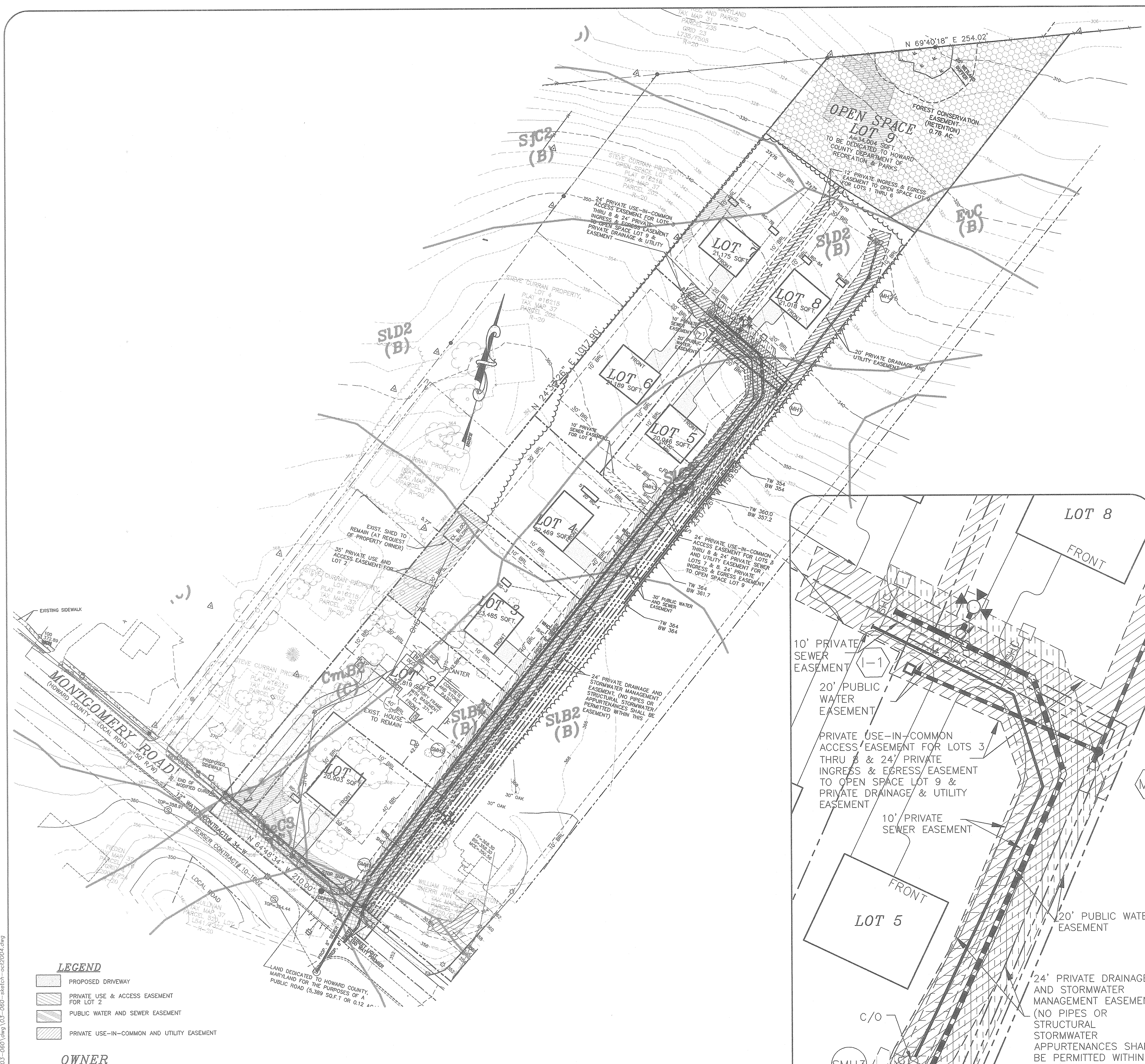


HA\_03-060.dwg (03-060-sketch-032004.dwg)



**GENERAL NOTES**

1. SITE DATA :  
 TAX MAP : 37, PARCEL : 47, BLOCK : 5  
 DEED REFERENCE : L 3856, F 269  
 AREA OF SITE : 4.99 ACRES±  
 ZONING : R-20  
 MINIMUM LOT SIZE : 18,000 SQ. FT.  
 NUMBER OF PROPOSED BUILDABLE LOTS : 8  
 AREA OF PROPOSED BUILDABLE LOTS : 3.84 AC±  
 AREA OF REQUIRED OPEN SPACE : 10%±4.44 AC OR 0.44 AC  
 AREA OF PROPOSED OPEN SPACE : 0.78 AC±  
 AREA IN PROPOSED ROAD DEDICATION : 0.37 AC±
2. TOPOGRAPHY SHOWN HEREON IS BASED ON A FIELD RUN SURVEY BY MILDENBERG BOENDER & ASSOCS. ON OR ABOUT JUNE 2003. OFFSITE TOPO IS SUPPLEMENTED WITH HOWARD COUNTY AERIAL TOPOGRAPHY.
3. BOUNDARY INFORMATION BASED ON BOUNDARY SURVEY PERFORMED BY MILDENBERG BOENDER & ASSOCS., INC., ON OR ABOUT AUGUST 2003.
4. NO HISTORIC STRUCTURES OR BURIAL GROUNDS EXIST ON-SITE PER THE HOWARD COUNTY HISTORIC SITES LIST DATED DECEMBER 1994 AND THE HOWARD COUNTY CEMETERIES AND GRAVESITES INVENTORY, RESOLUTION # 47-1994.
5. SOILS DATA BASED ON HOWARD COUNTY SOIL SURVEY DATED 1968, SHEET 26.
6. PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. PUBLIC WATER AND SEWER WILL BE UTILIZED.
7. ALL AREAS ARE MORE OR LESS.
8. EXISTING STRUCTURES ON LOT 2 IS TO REMAIN.
9. THIS PLAN IS SUBJECT TO COUNCIL BILL 45-2003, THE AMENDED FIFTH EDITION OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND TO THE FEBRUARY 2, 2004, ZONING REGULATIONS.
10. NO STEEP SLOPES, 15% TO 25% SLOPES, STREAMS OR WETLANDS EXIST ON SITE.
11. HORIZONTAL AND VERTICAL DATUMS ARE RELATED TO THE MARYLAND NAD 83 (HORZ) AND NGVD29 (VERT) AS PROJECTED FROM HOWARD COUNTY CONTROL STATIONS NO. 37BA & 37BB.  
 STA. No. 37BA N 563,785.818 ELEV. 394.786  
 E 1,376.343.172  
 STA. No. 37BB N 563,663.415 ELEV. 373.822  
 E 1,378,040.471
12. TRAFFIC STUDY WAS PREPARED BY MARS GROUP ON OR ABOUT AUGUST 2004.
13. FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND ROAD RIGHT-OF-WAY LINE AND NOT TO THE PIPESTEM LOT DRIVEWAY.
14. FOR DRIVEWAY INTERSECTION DETAIL USE HOWARD COUNTY STANDARD DETAILS R-6-05
15. STORMWATER MANAGEMENT IS SATISFIED THROUGH THE USE OF THE GRASS CHANNEL CREDIT, THE ROOFTOP DISCONNECTION CREDIT, AND THE NON-ROOFTOP DISCONNECTION CREDIT IN ACCORDANCE WITH THE 2000 MARYLAND STORMWATER DESIGN MANUAL.
16. WETLANDS OR FOREST STANDS EXIST ON-SITE PER FIELD INVESTIGATION BY WILDMAN ENVIRONMENTAL SERVICES IN JANUARY 2004.
17. THE CONTRACTOR SHOULD BE AWARE THAT THE GROUND CLEARANCE TO THE EXISTING OVERHEAD POWER LINES IN THE VICINITY OF THE EXISTING HOUSE ON LOT 2 AND OVER LOT 1.
18. ADEQUATE FACILITIES ROAD TEST EVALUATION WAS PERFORMED BY MARS GROUP IN AUGUST 2004.
19. THE STORMWATER MANAGEMENT SYSTEMS SHOWN ON THIS PLAN ARE AN APPROXIMATION OF THEIR SIZE AND SHAPE. IT IS UNDERSTOOD THAT THESE SYSTEMS HAVE BEEN DESIGNED, BUT THEIR SIZE AND SHAPE MAY CHANGE ALTERING THE NUMBER OF UNITS ALLOCATED FOR THIS DEVELOPMENT.
20. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, OR PLACEMENT OF NEW STRUCTURES IS PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAMS, OR THEIR BUFFERS AND FOREST CONSERVATION EASEMENT AREAS.
21. THIS SUBDIVISION IS SUBJECT TO WP-05-34 APPROVED ON DECEMBER 10, 2004, WHICH WAIVED SECTION 16.121(g)(1) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS TO PERMIT A MINIMUM OF 40 FEET OF PUBLIC ROAD FRONTAGE FOR AN OPEN SPACE LOT TO BE REDUCED TO ZERO FEET FOR PROPOSED OPEN SPACE LOT 9. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:  
 1. THE PROPOSED OPEN SPACE ACCESS EASEMENT FROM THE PROPOSED PUBLIC ROAD TO PROPOSED OPEN SPACE LOT 9 SHALL COMPLY WITH THE REQUIREMENTS OF SUBDIVISION SECTIONS 16.121(g)(2)(a), b, c, AND d.  
 2. ALL BRL'S SHALL COMPLY WITH THE REQUIREMENTS OF ZONING SECTIONS 108.D.4.a AND b.
22. THIS SUBDIVISION IS SUBJECT TO WP-05-78 DENIED FEBRUARY 28, 2005, WHICH WAIVED SECTION 16.120(b)(4) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS TO PERMIT A RESIDENTIAL LOT TO BE IRREGULAR IN SHAPE.
23. STREET ADDRESS SIGNAGE FOR EACH LOT SHALL BE AT THE PUBLIC ROAD FRONTAGE.
24. THE PROPOSED HOUSE LOCATION FOR LOTS 3 THRU 8 SHALL BE AT LEAST 10 FEET FROM THE PUBLIC WATER & SEWER EASEMENT.
25. IF A TEMPORARY USE PERMIT TO ALLOW THE BLOCK BUILDING (ACCESSORY STRUCTURE) TO REMAIN ON AN UNIMPROVED LOT (NO PRINCIPAL STRUCTURE) IS DENIED, THE BUILDING MUST BE REMOVED OR THE LOT MUST BE REDESIGNED SO THAT THE STRUCTURE IS IN COMPLIANCE WITH THE ZONING REGULATIONS.

TENTATIVELY APPROVED  
 DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY

*Steph Lelintz* 3/10/06  
 PLANNING DIRECTOR DATE

**MINIMUM LOT SIZE TABLE**

LOT NO.	MINIMUM LOT AREA	PIPESTEM	TOTAL LOT AREA
2	23,192 sq.ft.	4,627 sq.ft.	27,819 sq.ft.
3	22,410 sq.ft.	1,075 sq.ft.	23,485 sq.ft.
4	20,897 sq.ft.	1,572 sq.ft.	22,469 sq.ft.
5	18,031 sq.ft.	2,015 sq.ft.	20,046 sq.ft.
6	18,015 sq.ft.	3,174 sq.ft.	21,189 sq.ft.
7	18,000 sq.ft.	3,175 sq.ft.	21,175 sq.ft.
8	18,187 sq.ft.	2,831 sq.ft.	21,018 sq.ft.

- LEGEND**
- PROPOSED DRIVEWAY
  - PRIVATE USE & ACCESS EASEMENT FOR LOT 2
  - PUBLIC WATER AND SEWER EASEMENT
  - PRIVATE USE-IN-COMMON AND UTILITY EASEMENT

**OWNER**  
 MARJORIE D. GONCE  
 6229 MONTGOMERY ROAD  
 ELKRIDGE, MARYLAND 21075

**CURVE TABLE**

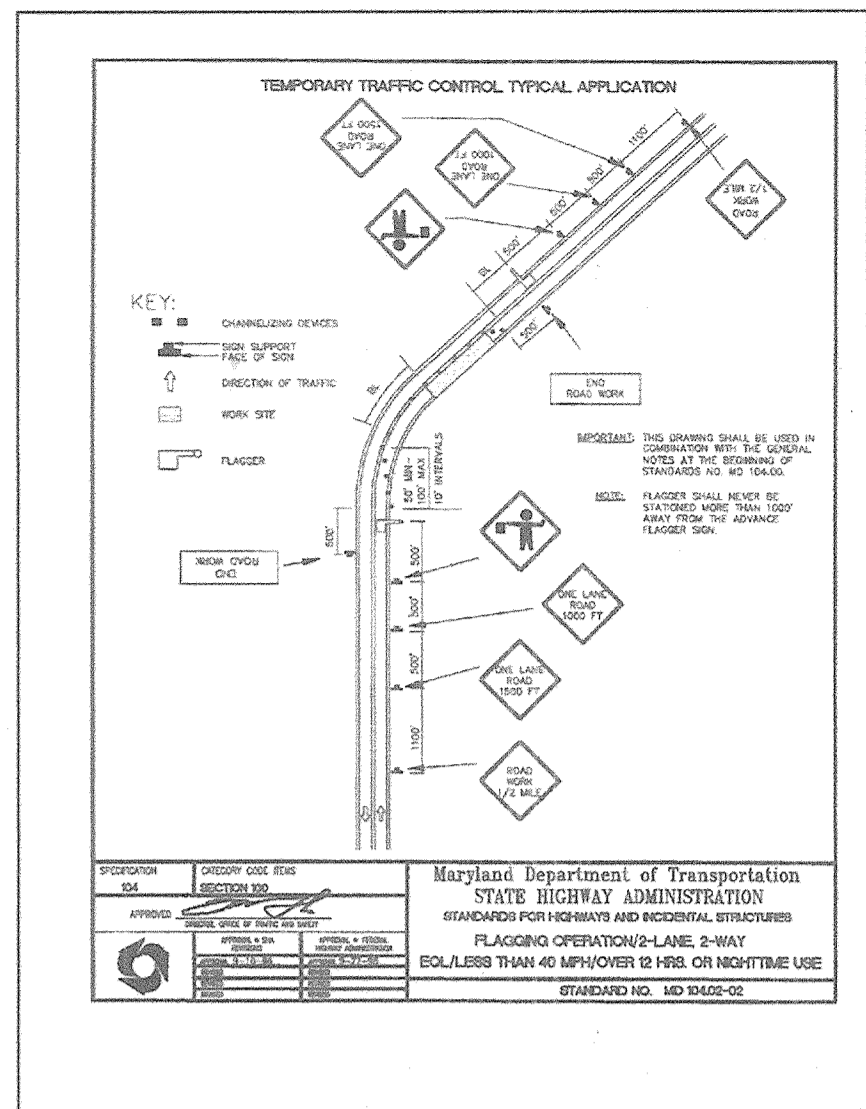
CURVE	LENGTH	RADIUS	TANGENT	DELTA	CHORD
C1	57.69'	45.00'	33.57'	73°27'14"	53.82'

date	MAR. 2006
project	03-060
illustration	engineering
scale	1"=50'
approval	SJD/MMT

no.	description	revisions

TAX MAP 37 - PARCEL 47 - GRID 5  
**MARBUCK ESTATES**  
 HOWARD COUNTY, MARYLAND  
 FIRST ELECTION DISTRICT  
 PRELIMINARY EQUIVALENT SKETCH PLAN

**MILDENBERG, BOENDER & ASSOC., INC.**  
 Engineers Planners Surveyors  
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland - 21042  
 (410) 997-0296 Fax. (301) 621-5521 Wash. (410) 997-0298 Fax.



**FOREST CONSERVATION WORKSHEET**  
VERSION 1.0

NET TRACT AREA:  
 A. Total tract area: 4.99  
 B. Area within 100 year floodplain: -0.00  
 C. Area to remain in agricultural production or utility ROW: -0.00  
 D. Net tract area: 4.99

LAND USE CATEGORY:  
 (from table 3.2.1, page 46, Manual) Input the number "1" under the appropriate land use, and limit to only one entry.  
 AKA MOR 0 HVR 1 HPO 0A

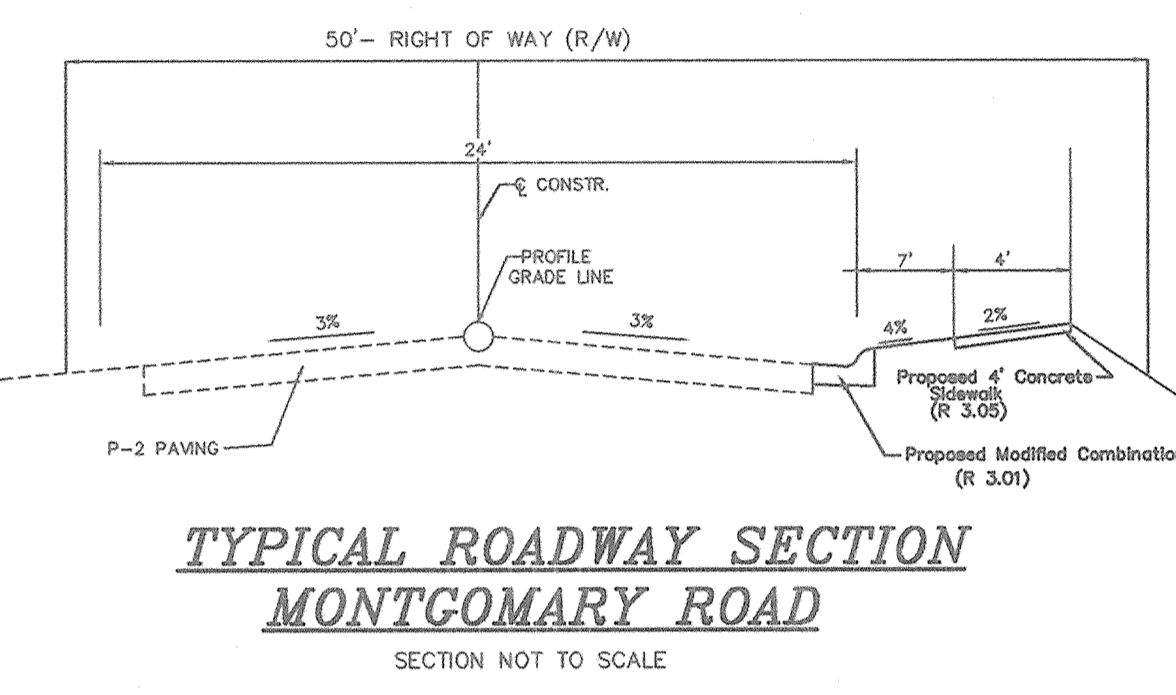
E. Afforestation Threshold: 15% x D = 0.75  
 F. Conservation Threshold: 20% x D = 1.00

EXISTING FOREST COVER:  
 G. Existing forest cover (excluding floodplain): -3.05  
 H. Area of forest above afforestation threshold: -2.30  
 I. Area of forest above conservation threshold: -2.00

BREAK EVEN POINT:  
 J. Forest retention above threshold with no mitigation: -1.41  
 K. Credits permitted without mitigation: -1.64

PROPOSED FOREST CLEARING:  
 L. Total area of forest to be cleared: -2.27  
 M. Total area of forest to be retained: -0.70

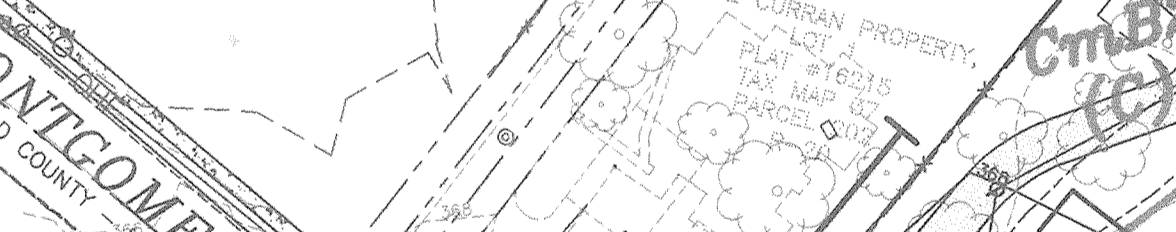
PLANTING REQUIREMENTS:  
 N. Reforestation for clearing above conservation threshold: -0.51  
 O. Reforestation for clearing below conservation threshold: -0.54  
 P. Credits for retention above conservation threshold: -0.00  
 Q. Total reforestation required: -0.51  
 R. Total afforestation required: -0.00  
 S. Total reforestation and afforestation required: -0.51



**TYPICAL ROADWAY SECTION MONTGOMERY ROAD**  
SECTION NOT TO SCALE



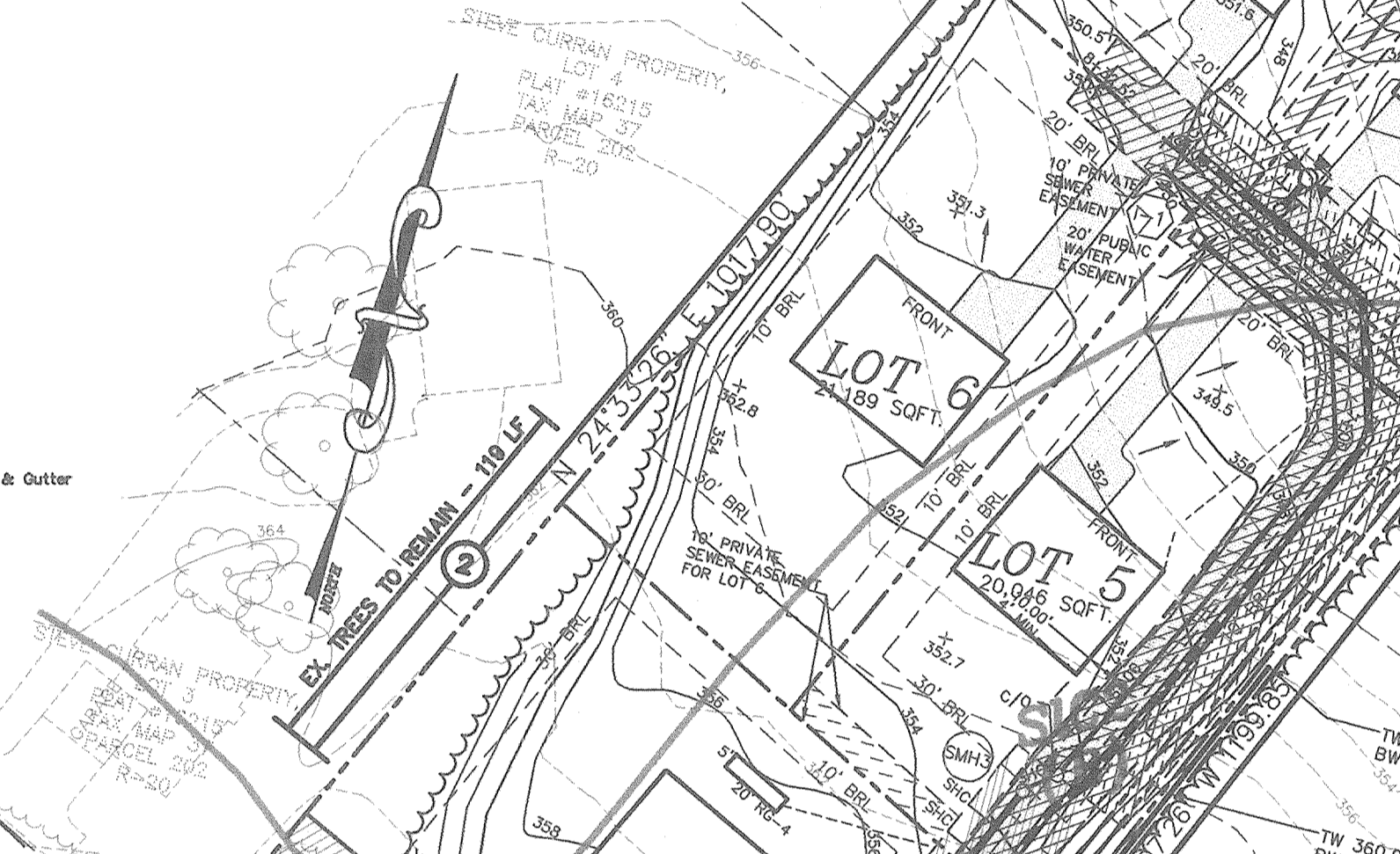
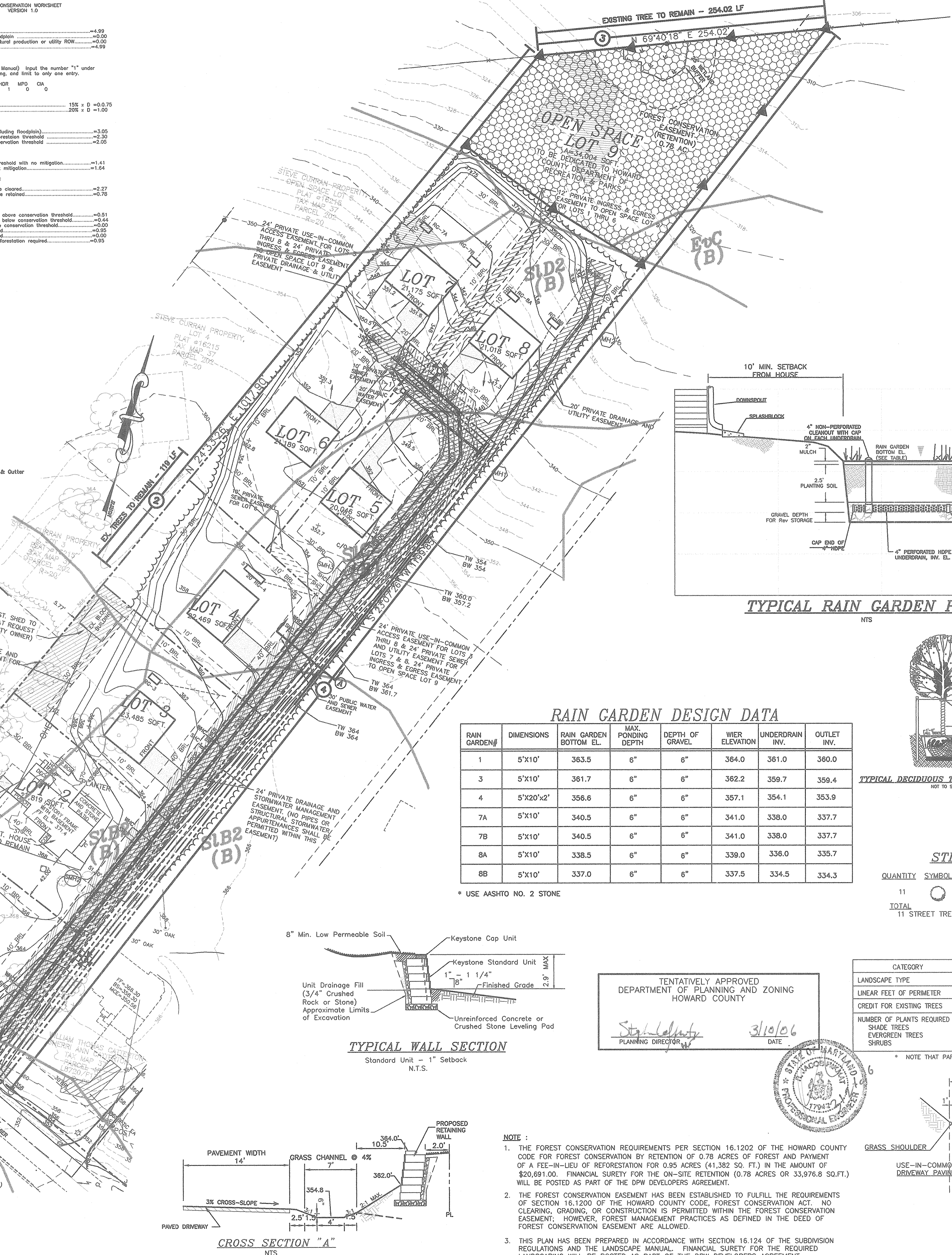
**TYPICAL DECIDUOUS TREE PLANTING DETAIL**  
NOT TO SCALE



**STREET TREE REQUIREMENT PLANTING SCHEDULE**



**SCHEDULE A: PERIMETER LANDSCAPED EDGE**

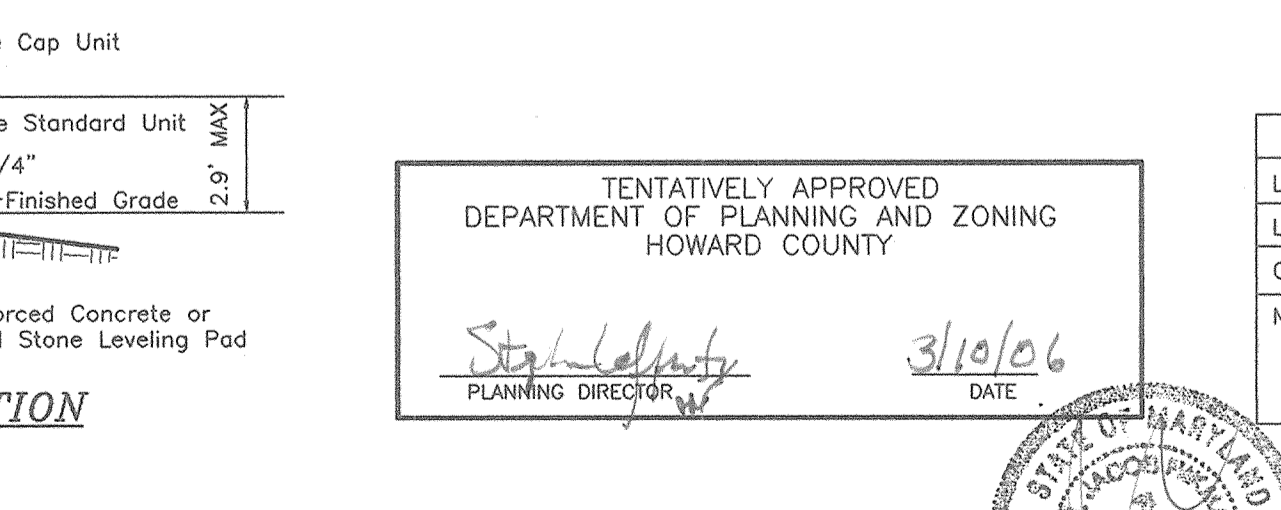


**TYPICAL RAIN GARDEN PROFILE**  
N.T.S.

**RAIN GARDEN DESIGN DATA**

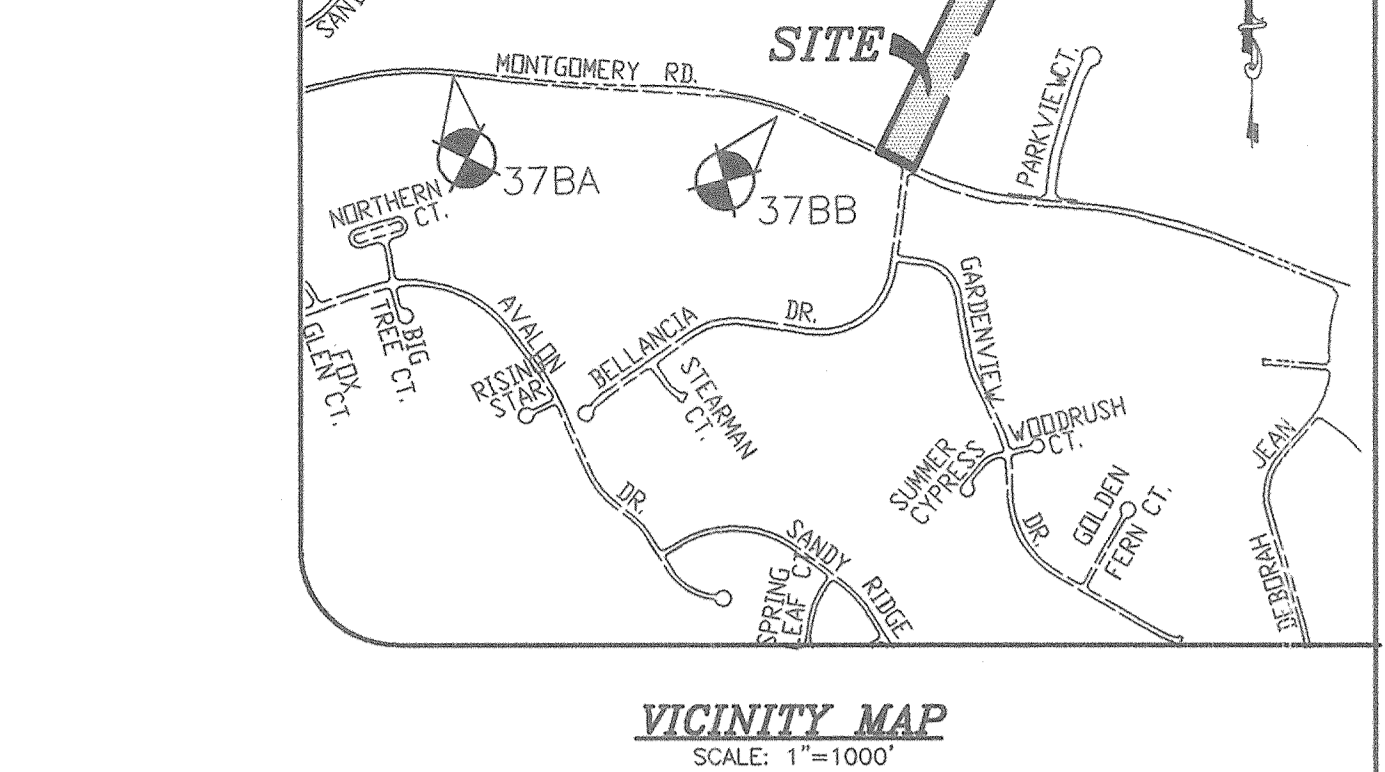
RAIN GARDEN#	DIMENSIONS	RAIN GARDEN BOTTOM EL.	MAX. PONDING DEPTH	DEPTH OF GRAVEL	WIER ELEVATION	UNDERDRAIN INV.	OUTLET INV.
1	5'x10'	363.5	6"	6"	364.0	361.0	360.0
3	5'x10'	361.7	6"	6"	362.2	359.7	359.4
4	5'x20'x2'	356.6	6"	6"	357.1	354.1	353.9
7A	5'x10'	340.5	6"	6"	341.0	338.0	337.7
7B	5'x10'	340.5	6"	6"	341.0	338.0	337.7
8A	5'x10'	338.5	6"	6"	339.0	336.0	335.7
8B	5'x10'	337.0	6"	6"	337.5	334.5	334.3

\* USE AASHTO NO. 2 STONE



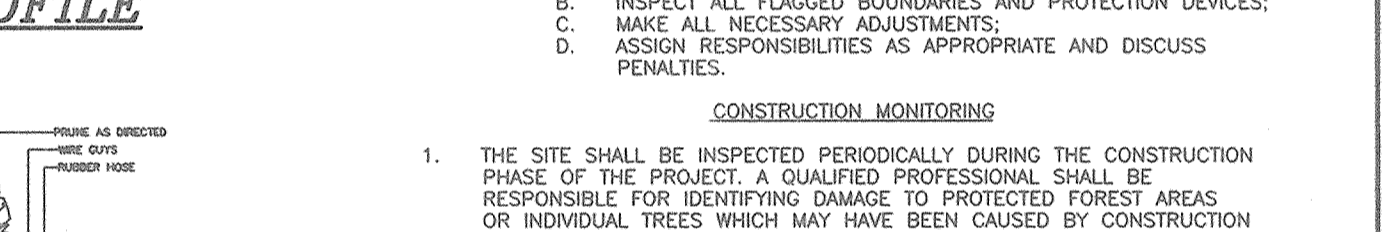
**TYPICAL WALL SECTION**  
Standard Unit - 1" Setback  
N.T.S.

- NOTE:**
- THE FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1202 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BY RETENTION OF 0.78 ACRES OF FOREST AND PAYMENT OF A FEE-IN-LIEU OF REFORESTATION FOR 0.95 ACRES (41,382 SQ. FT.) IN THE AMOUNT OF \$20,891.00. FINANCIAL SURETY FOR THE ON-SITE RETENTION (0.78 ACRES OR 33,976.8 SQ.FT.) WILL BE POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT.
  - THE FOREST CONSERVATION EASEMENT HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1202 OF THE HOWARD COUNTY CODE, FOREST CONSERVATION ACT. NO CLEARING, GRADING, OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT; HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
  - THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING WILL BE POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT.

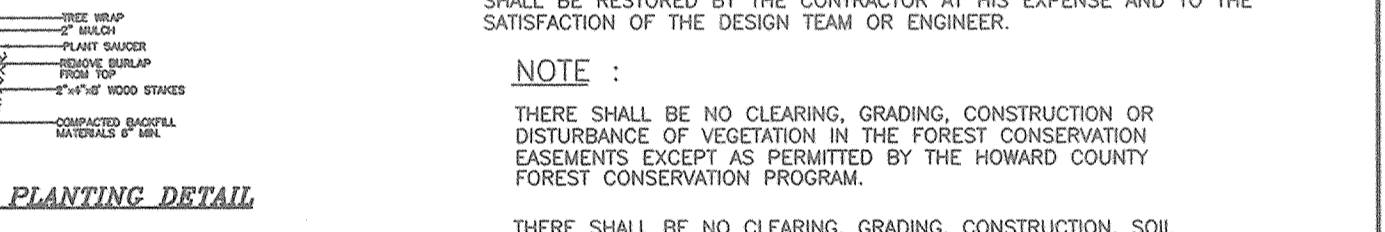


**VICINITY MAP**  
SCALE: 1"=1000'

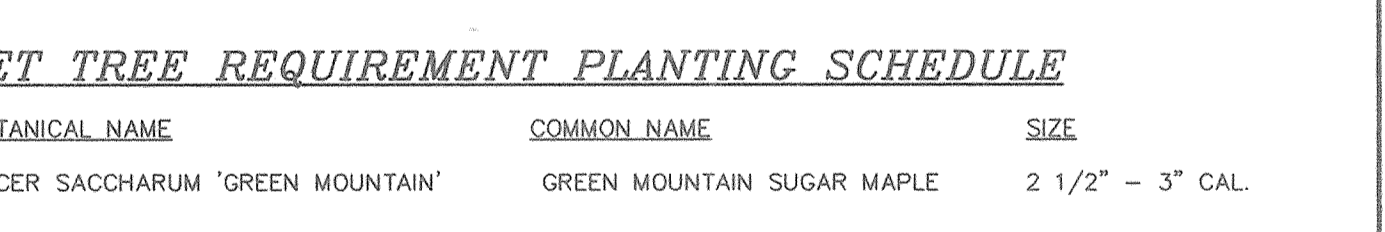
- GENERAL NOTES**  
FOREST PROTECTION
- ALL FOREST RETENTION AREAS SHALL BE TEMPORARILY PROTECTED BY WELL ANCHORED BLAZE ORANGE PLASTIC MESH FENCING AND SIGNAGE AS INDICATED ON THE PLANS. THE DEVICES SHALL BE INSTALLED ALONG THE FOREST RETENTION BOUNDARY PRIOR TO ANY LAND CLEARING, GRUBBING, OR GRADING 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 SMOTHERING, EXCESSIVE WETTING FROM DE-WATERING OPERATIONS, OFF-SITE RUN OFF, SPILLAGE AND DRAMING 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 STOCKPIPING 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, SPECIFIC 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 DESIGN TEAM OR ENGINEER.
- NOTE:**
- THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION, SOIL COMPACTION, OR EXCAVATION, INTRODUCTION OF TOXIC CHEMICALS OR OTHER DISTURBANCES DETRIMENTAL TO THE LIVE SPECIMEN TREES OR CRITICAL ROOT ZONES FOR THESE TREES EXCEPT AS PERMITTED BY THE HOWARD COUNTY FOREST CONSERVATION PROGRAM.
- THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION, SOIL COMPACTION, OR EXCAVATION, INTRODUCTION OF TOXIC CHEMICALS OR OTHER DISTURBANCES DETRIMENTAL TO THE LIVE SPECIMEN TREES OR CRITICAL ROOT ZONES FOR THESE TREES EXCEPT AS PERMITTED BY THE HOWARD COUNTY FOREST CONSERVATION PROGRAM.



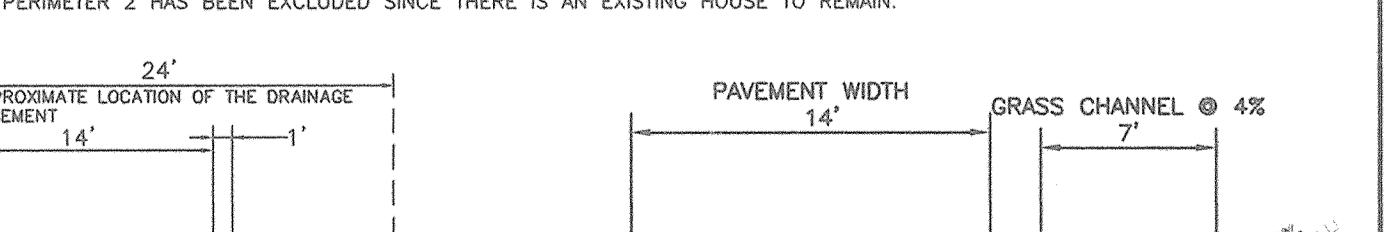
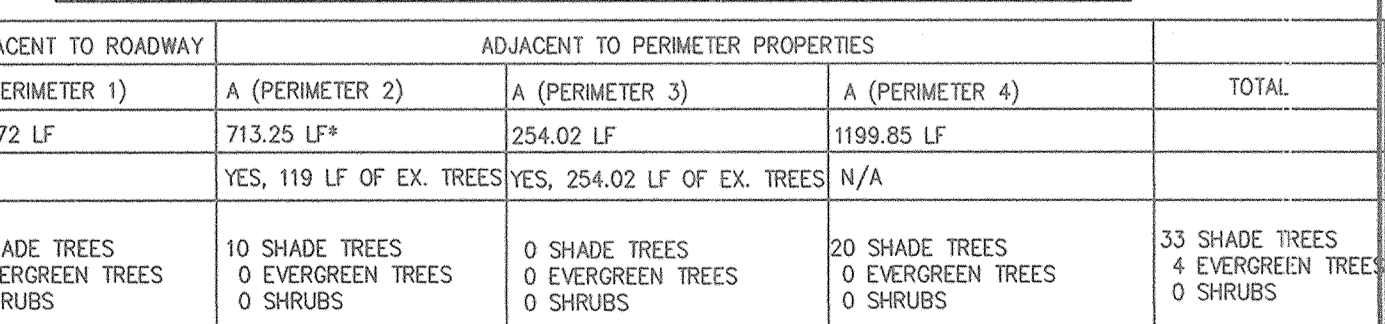
**CROSS SECTION "A"**  
N.T.S.



**GRASS CHANNEL DETAIL**  
N.T.S.



**VIC DRIVEWAY CROSS SECTION TREATED BY GRASS CHANNEL**  
N.T.S.



TENTATIVELY APPROVED  
DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY

Steve D. Smith  
PLANNING DIRECTOR  
3/10/06  
DATE

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 997-0298 Fax

project 03-060 illustration SJD/MMT scale 1"=50'

date DEC 2005 engineering approval

TAX MAP 37 - PARCEL 47 - GRID 5

MARBUCK ESTATES

HOWARD COUNTY, MARYLAND

FIRST ELECTION DISTRICT

PRELIMINARY GRADING, LANDSCAPE, & FOREST CONSERVATION PLAN

2 OF 2

SP-05-007