

GENERAL NOTES:

- ALL ASPECTS OF THE PROJECT ARE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS.
- PROJECT BACKGROUND:**
TAX MAP : 38 PARCEL 22 GRID: 2
ELECTION DISTRICT : FIRST
ZONING : R-ED
DEED REFERENCE :
DPZ FILES : F-91-30 (THE GABLES AT LAWYERS HILL), F-03-166
- AREA TABULATION:**
A. TOTAL TRACT AREA: 2.29 AC±
B. NUMBER OF PROPOSED BUILDABLE LOTS : 1
C. NUMBER OF PROPOSED NON-BUILDABLE PARCELS : 1
D. NUMBER OF OPEN SPACE LOTS : 1
E. AREA OF BUILDABLE LOTS : 0.42 AC±
F. MINIMUM LOT AREA : 14,000 SQ.FT.
G. OPEN SPACE REQUIRED : 30% OF 2.09AC. = 0.63 AC.
H. OPEN SPACE PROVIDED: 0.72 AC±
I. OPEN SPACE CREDITED: 0.63 AC±
NOTE: OPEN SPACE PROVIDED FOR TAX MAP 38, PARCEL 22, ONLY. OPEN SPACE WAS PREVIOUSLY PROVIDED FOR "GABLES AT LAWYERS HILL," PARCEL A, UNDER F-91-030.
- MINIMUM LOT SIZE AND OPEN SPACE REQUIREMENTS SHOWN ABOVE ARE IN ACCORDANCE WITH SECTION 16.121(a)(2) OF THE HOWARD COUNTY SUBDIVISION REGULATIONS, 5th ED.
- BOUNDARY AND TOPOGRAPHY SHOWN HEREON IS BASED ON FIELD RUN & MONUMENTED SURVEY BY MILDENBERG, BOENDER & ASSOC. ON OR ABOUT MARCH 2003.
- HORIZONTAL AND VERTICAL DATUMS ARE RELATED TO THE MARYLAND NAD 83 (HORZ) AND NGVD29 (VERT) AS PROJECTED FROM HOWARD COUNTY CONTROL STATIONS NO. 38AA & 38BA.
STA. No. 38AA N 561,158.784 ELEV. 220.778
E 1,389,726.391
STA. No. 38BA N 562,553.278 ELEV. 166.944
E 1,390,967.927
- NO FLOODPLAIN OR WETLAND EXIST ON SITE AS CERTIFIED BY MILDENBERG, BOENDER & ASSOCIATES IN WETLAND CERTIFICATION LETTER DATED APRIL 14, 2003.
- PUBLIC WATER AND SEWAGE ALLOCATION WILL BE GRANTED AT THE TIME OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT THAT TIME.
- THIS PROPOSED SUBDIVISION WILL CONSIST OF SINGLE FAMILY DETACHED DWELLINGS.
- THERE ARE NO EXISTING STRUCTURES ON THE SUBJECT PROPERTY.
- NO STEEP SLOPES 25% OR GREATER EXISTS ON SITE.
- THIS SUBDIVISION IS IN COMPLIANCE WITH SECTION 16.124 OF HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- LANDSCAPING HAS BEEN PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING ON OPEN SPACE LOT 2 (6 SHADE TREES, 9 EVERGREENS) IN THE AMOUNT OF \$3,150.00, LOT 1 (11 SHADE TREES) IN THE AMOUNT OF \$3,300.00, AND LOT A (23 SHRUBS) IN THE AMOUNT OF \$600.00 FOR A TOTAL OF \$7,050.00 WILL BE POSTED AS PART OF THE GRADING PERMIT.
- SOILS DATA BASED ON HOWARD COUNTY SOIL SURVEY DATED JULY 1968, SHEET 20.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
A) WIDTH - 12 FEET (14 FEET SERVING MORE THAN ONE RESIDENCE).
B) SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING.
C) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM OF 45-FOOT TURNING RADIUS.
D) STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING).
E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
F) STRUCTURE CLEARANCES - MINIMUM 12 FEET.
G) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
- STORMWATER MANAGEMENT FOR PARCEL A OF THE GABLES AT LAWYERS HILL WAS PROVIDED UNDER F-91-030.
- 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 0.30 ACRES (13,068 SQ. FT.) OF FOREST AND A FEE-IN-LIEU OF 0.72 ACRES (31,363.2 SQ. FT.) IN THE AMOUNT OF \$15,881.60. FINANCIAL SURETY FOR THE 0.30 ACRES HAS BEEN POSTED IN THE AMOUNT OF \$2,613.60 AS PART OF THE DPW DEVELOPERS AGREEMENT.
- 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.
- THIS SUBDIVISION CONFORMS TO THE 5TH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE ZONING REGULATIONS AS AMENDED UNDER COUNCIL BILL # 50-2001.
- SWM PROVIDED VIA SURFACE SAND FILTER TO BE PRIVATELY OWNED AND MAINTAINED. SWM HAS BEEN PROVIDED FOR FUTURE DEVELOPMENT.
- FOR FLAG OR PIPE STEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPE STEM AND THE ROAD RIGHT-OF WAY LINE ONLY AND NOT ONTO THE FLAG OR PIPE STEM LOT DRIVEWAY.
- NON BUILDABLE BULK PARCEL A WILL BE CONVERTED TO BUILDABLE UNDER F-3-166, WHEN ALLOCATIONS ARE GRANTED AND THAT PLAT IS RECORDED.

SUPPLEMENTAL PLAN

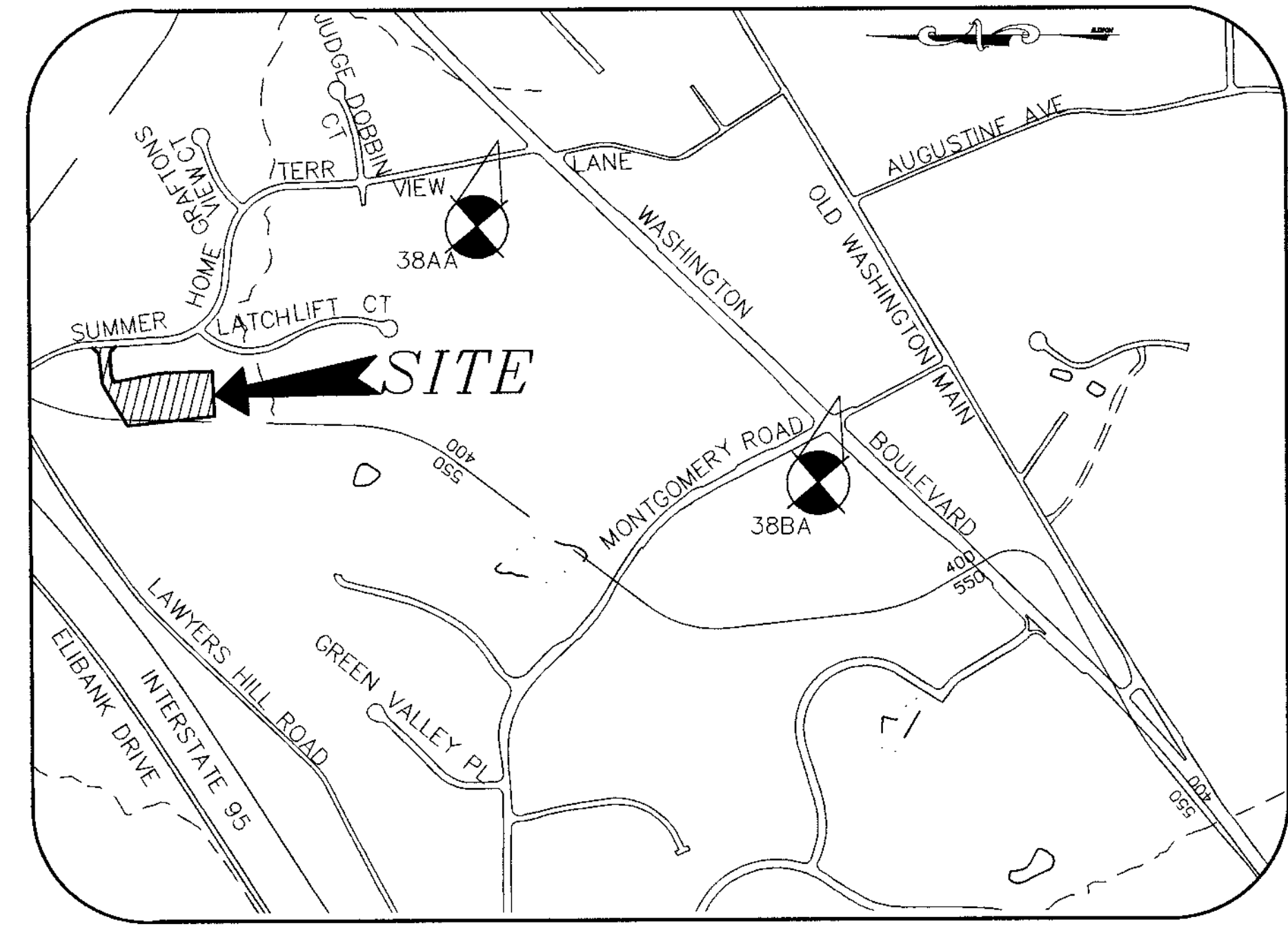
WIERKOWSKI PROPERTY

LOT 1, NON-BUILDABLE BULK PARCEL A, & OPEN SPACE LOT 2

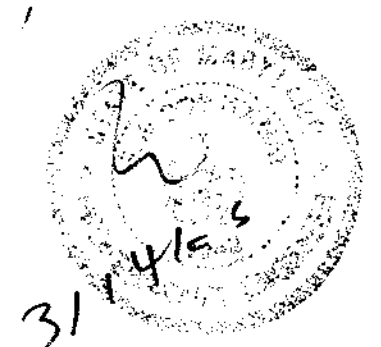
FIRST ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

<i>SHEET INDEX</i>	
COVER SHEET	1
SUPPLEMENTAL PLAN	2
STORMWATER MANAGEMENT DETAILS	3



VICINITY MAP
SCALE: 1"=1000'



OWNER
REUWER LONG TERM HOLDINGS
8000 MAIN STREET
ELLCOTT CITY, MD 21043
(410) 480-9105

DEVELOPER
LAND DESIGN AND DEVELOPMENT, LLC
8000 MAIN STREET
ELLCOTT CITY, MD 21043
(410) 480-9105

APPROVED: DEPARTMENT OF PUBLIC WORKS	
CHIEF BUREAU OF HIGHWAYS	DATE
APPROVED: DEPARTMENT OF PLANNING AND ZONING	
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>[Signature]</i>	3/29/05
<i>[Signature]</i>	3/10/05
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE

date	MAR 2005
project	03-011
illustration	HSP
recycle	HSP
AS SHOWN	RJH

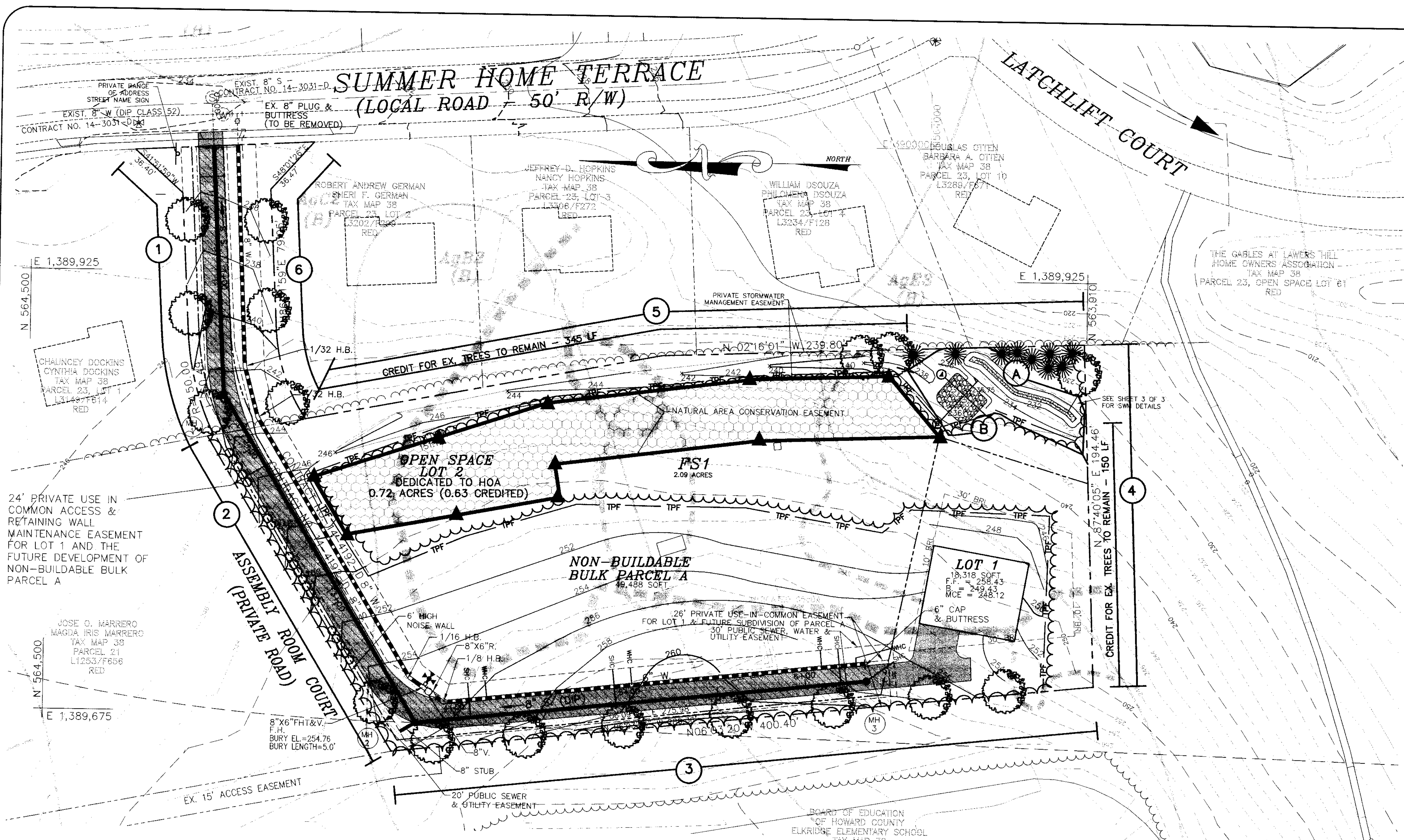
date	
description	
revisions	
no.	

COVER SHEET

WIERKOWSKI PROPERTY
LOT 1, NON-BUILDABLE BULK PARCEL A, & OPEN SPACE LOT 2
TAX MAP 38, PARCEL 22, GRID 2
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

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

#_L03-0751(DWG)1-LOT5UB 103201-COVER.DWG



FOREST RETENTION NOTES
FOREST PROTECTION

1. 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.
2. 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.
3. 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.
4. 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 MOST CARE TO PROTECT TREE ROOT SYSTEMS DURING ALL CONSTRUCTION ACTIVITIES. TREE ROOT SYSTEMS SHALL BE PROTECTED FROM SWATHING, FLOODING, EXCESSIVE WETTING FROM DE-WATERING OPERATIONS, OFF-SITE RUN OFF, SOLLAGE AND DRAWING OF MATERIALS THAT MAY BE HARMFUL TO TREES.
5. 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.
6. REMOVAL OF TOPSOIL OR ROOT MAT WITHIN THE TREE PRESERVATION AREA SHALL BE PROHIBITED.
7. THE GENERAL CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY TREES DAMAGED OR DESTROYED WITHIN THE FOREST CONSERVATION EASEMENTS. CONSTRUCTION SHALL BE USED AT THE LIMIT OF DISTURBANCE OR LIMIT OF GRADING WITHIN AND ADJACENT TO ALL PRESERVATION AREAS, AS NECESSARY.

PRE-CONSTRUCTION MEETING

1. 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:
 - A. 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.
 - B. INSPECT ALL FLAGGED BOUNDARIES AND PROTECTION DEVICES.
 - C. MAKE ALL NECESSARY ADJUSTMENTS.
 - D. ASSIGN RESPONSIBILITIES AS APPROPRIATE AND DISCUSS PENALTIES.

CONSTRUCTION MONITORING

1. 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, LIMBS INJURY, OR STRESS CAUSED BY FLOODING OR DROUGHT CONDITIONS.
2. ANY SUCH DAMAGE THAT MAY OCCUR SHALL BE REMEDIATED IMMEDIATELY USING APPROPRIATE MEASURES. SEVERE PROBLEMS MAY REQUIRE CONSULTATION WITH A PROFESSIONAL ARBORIST.
3. 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 ENVIRONMENTAL CONSULTANTS, RESOURCES, PUBLIC LANDS AND FORESTRY DIVISION SUPERVISOR.

FOREST CONSERVATION WORKSHEET

NET TRACT AREA:

- A. TOTAL TRACT AREA: 2.29
- B. AREA WITHIN 100 YEAR FLOODPLAIN: 0.00
- C. AREA TO REMAIN IN AGRICULTURAL PRODUCTION: 0.00
- D. NET TRACT AREA: 2.29

LAND USE CATEGORY:

ARA 0 MDR 0 DA 1 HDR 0 MPD 0 CIA 0

E. AFFORESTATION THRESHOLD: 158 X D = 0.34
 F. CONSERVATION THRESHOLD: 208 X D = 0.48

EXISTING FOREST COVER:

- G. EXISTING FOREST COVER (EXCLUDING FLOODPLAIN): 2.09
- H. AREA OF FOREST ABOVE AFFORESTATION THRESHOLD: 1.75
- I. AREA OF FOREST ABOVE CONSERVATION THRESHOLD: 1.63

BREAK EVEN POINT:

- J. FOREST RETENTION ABOVE THE THRESHOLD WITH NO MITIGATION: 1.78
- K. CLEARING PERMITTED WITHOUT MITIGATION, PROPOSED FOREST CLEARING: 1.31
- L. TOTAL AREA OF FOREST TO BE CLEARED: 1.79
- M. TOTAL AREA OF FOREST TO BE RETAINED: 0.30

PLANTING REQUIREMENTS:

- N. REFORESTATION FOR CLEARING ABOVE THE CONSERVATION THRESHOLD: 0.41
- O. REFORESTATION FOR CLEARING BELOW CONSERVATION THRESHOLD: 0.32
- P. CREDIT FOR RETENTION ABOVE CONSERVATION THRESHOLD: 0.00
- R. TOTAL REFORESTATION REQUIRED: 0.72
- S. TOTAL AFFORESTATION REQUIRED: 0.00
- T. TOTAL REFORESTATION AND AFFORESTATION REQUIRED: 0.72

SCHEDULE D: STORMWATER MANAGEMENT AREA LANDSCAPING

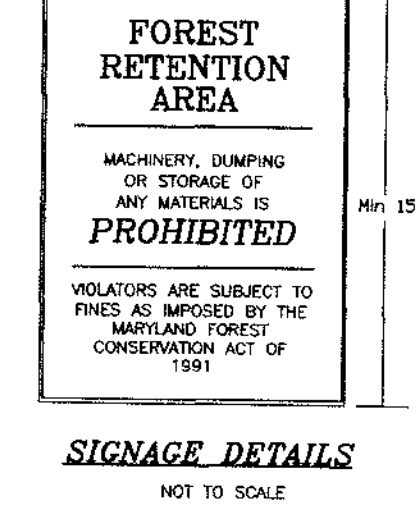
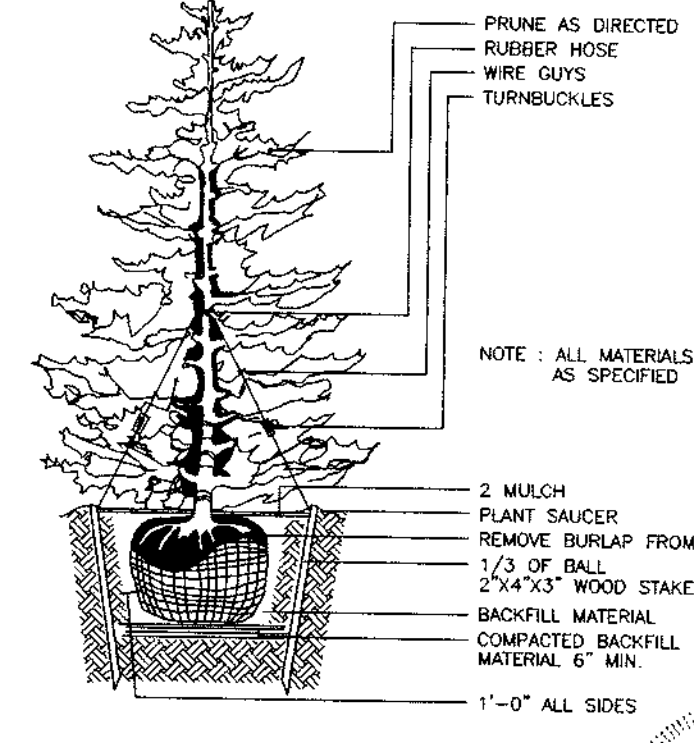
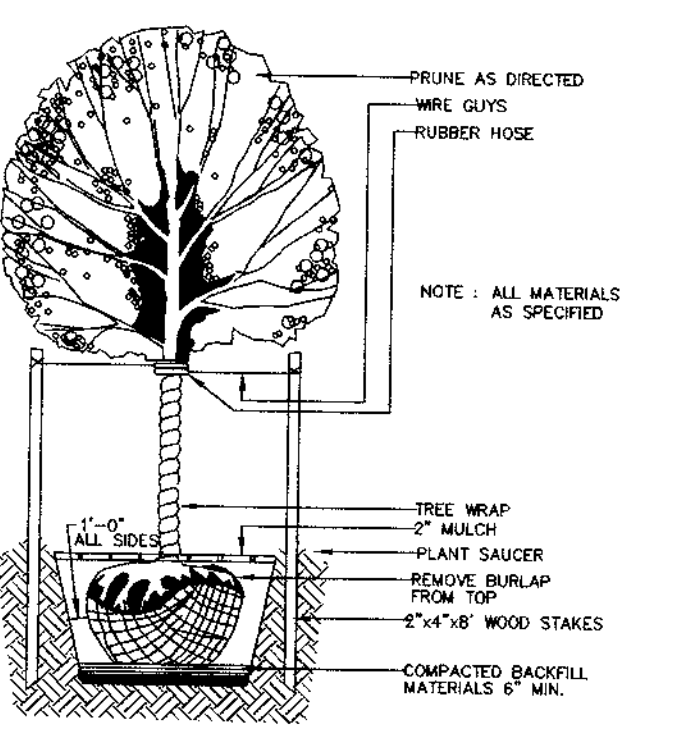
LINEAR FEET OF PERIMETER	130 LF (PERIMETER A)	125 LF (PERIMETER B)	89 LF (TOTAL)
CREDIT FOR EXISTING VEGETATION (NO, YES AND LINEAR FEET)	NO	YES, 125 LF OF EX. TREES	NO
CREDIT FOR OTHER LANDSCAPING (NO, YES AND X)	N/A	N/A	N/A
NUMBER OF TREES REQUIRED	3 SHADE TREES 0 EVERGREEN TREES	0 SHADE TREES 3 EVERGREEN TREES	3 SHADE TREES 3 EVERGREEN TREES
NUMBER OF TREES PROVIDED	0 SHADE TREES 9 EVERGREEN TREES	0 SHADE TREES 0 EVERGREEN TREES	0 SHADE TREES 9 EVERGREEN TREES
SUBSTITUTION TREES (SMALL DEODIOUS TREES)	0	0	0

LANDSCAPE REQUIREMENT PLANTING SCHEDULE

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
19	○	ACER RUBRUM 'RED SUNSET'	RED SUNSET RED MAPLE	2 1/2" - 3" CAL.
9	●	ILEX 'NELLIE R. STEVENS'	NELLIE STEVENS HOLLY	6" - 8" HT.
20	○	VIBURNUM CARLESII	KOREAN SPICE VIBURNUM	2 1/2" - 3" HT.
TOTAL				48 TREES & SHRUBS (17 SHADE TREES, 9 EVERGREENS, 20 SHRUBS)

SCHEDULE A: PERIMETER LANDSCAPED EDGE

CATEGORY	ADJACENT TO PERIMETER PROPERTIES						TOTAL
	A (PERIMETER 1)	A (PERIMETER 2)	A (PERIMETER 3)	A (PERIMETER 4)	A (PERIMETER 5)	A (PERIMETER 6)	
LINEAR FEET OF PERIMETER	175.94'	207.37'	400.40'	194.46'	445.34'	169.97'	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	N/A	N/A	N/A	YES, 150 LF OF EX. TREES TO REMAIN	YES, 345 LF OF EX. TREES TO REMAIN	N/A	
NUMBER OF PLANTS REQUIRED	3 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	3 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	7 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	1 SHADE TREE 0 EVERGREEN TREES 0 SHRUBS	2 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	3 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	19 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS
CREDIT FOR EXISTING VEGETATION	N/A	N/A	N/A	N/A	N/A	N/A	
NUMBER OF PLANTS PROVIDED	3 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES	1 SHADE TREE 0 EVERGREEN TREES 0 SUBSTITUTION TREES	7 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES	1 SHADE TREE 0 EVERGREEN TREES 0 SUBSTITUTION TREES	2 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES	3 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES	17 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES



TYPICAL DECIDUOUS TREE PLANTING DETAIL NOT TO SCALE

TYPICAL EVERGREEN TREE PLANTING DETAIL NOT TO SCALE

SIGNAGE DETAILS NOT TO SCALE

LEGEND

- FOREST CONSERVATION EASEMENT (RETENTION)
- ▲ FOREST RETENTION AREA SIGNAGE
- PROPOSED TREE LINE
- TPF TREE PROTECTIVE FENCING

SOILS CLASSIFICATION

SYMBOL	DESCRIPTION
AgB2	AURA GRAVELLY LOAM, 1 TO 5 PERCENT SLOPES, MODERATELY ERODED
AgC2	AURA GRAVELLY LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED
AgE3	AURA GRAVELLY LOAM, 10 TO 30 PERCENT SLOPES, SEVERELY ERODED

DEVELOPER'S/OWNER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE IN ACCORDANCE TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF NOTICE, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

NAME: *Donald Rouner* DATE: *3/14/05*

DATE: *4/29/05*

DATE: *4/29/05*

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors

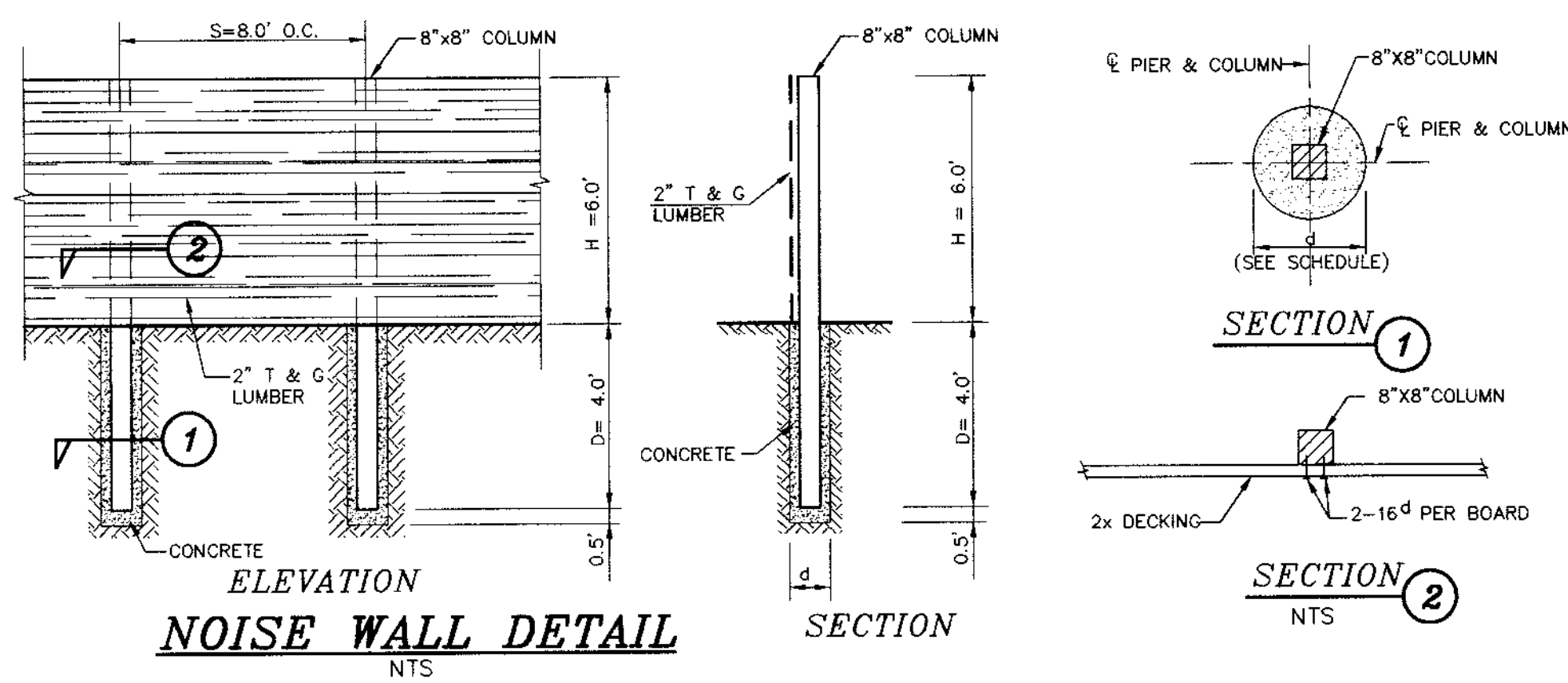
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
 (410) 997-0296 Fax: (410) 997-0298 Fax

PROJECT: LOT 1, NON-BUILDABLE BULK PARCEL A, & OPEN SPACE LOT 2
 TAX MAP 38, PARCEL 22, GRID 2
 FIRST ELECTION DISTRICT

LANDSCAPE, FOREST CONSERVATION & SUPPLEMENTAL PLAN

DATE: MAR 2005
 ILLUSTRATION: 03-011
 SCALE: HSP
 APPROVAL: AS SHOWN R/H

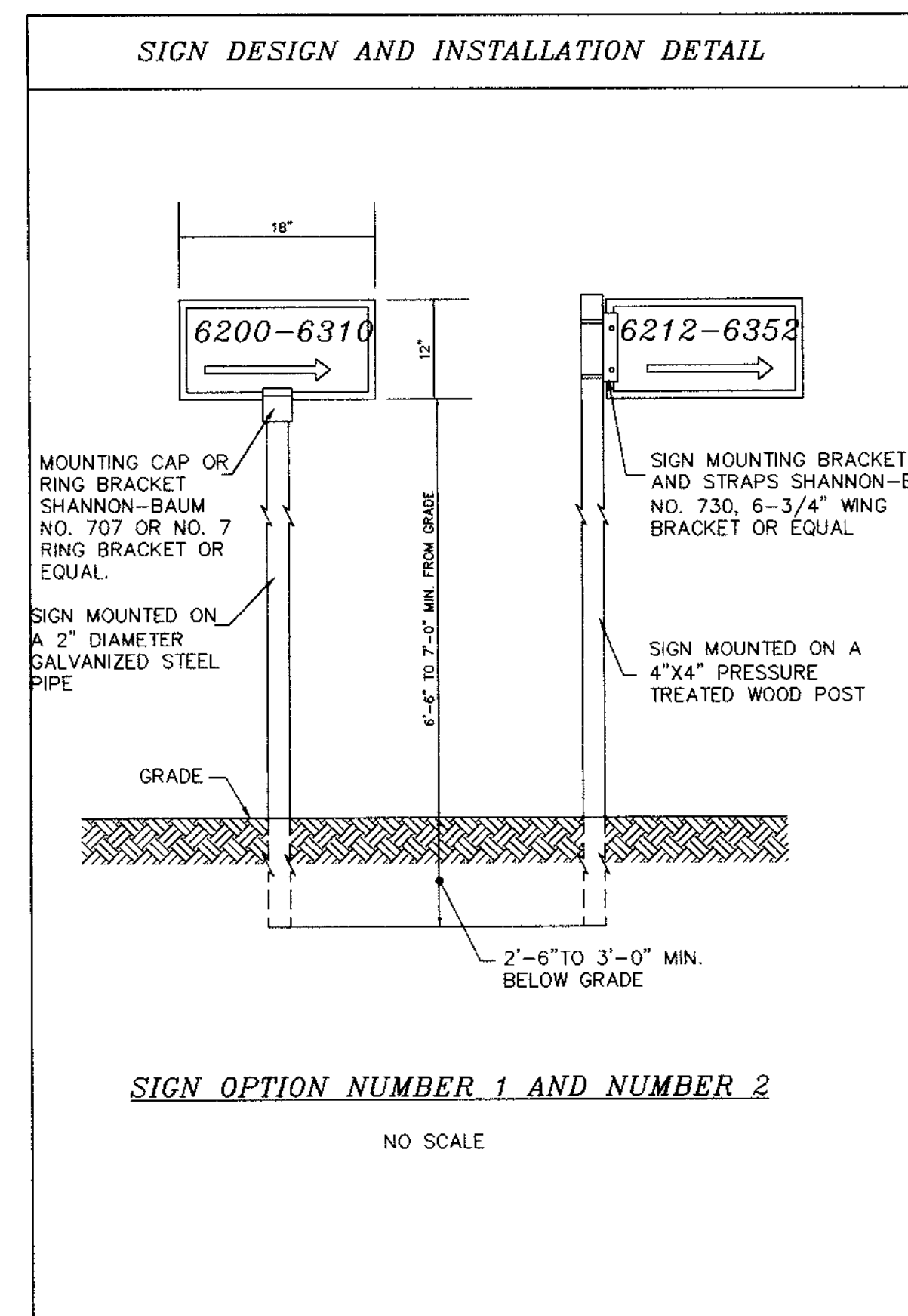
2 OF 3



SCHEDULE				
H	S	D	d	POST SIZE
6	8'	4'	16"	8"x8"

- NOTES:
- GENERAL:
 - HEIGHT OF BARRIER SHALL BE BASED ON ACOUSTIC REQUIREMENTS.
 - BARRIER WALLS HAVING A HEIGHT (H) NOT INDICATED IN THE TABLES SHALL BE CONSTRUCTED AS SHOWN IN THE HIGHER HEIGHT CATEGORY.
 - SIDING:
 - 2 INCH WOOD DECKING MATERIAL SHALL BE UTILIZED TO SPAN HORIZONTALLY BETWEEN POSTS. DESIGN CRITERIA IS BASED ON AN INCREASE IN STRESS FOR WIND LOADS AS CONSIDERED APPROPRIATE. DECKING SHALL BE MC15.
 - SIDING IN CONTACT WITH THE GROUND AND FOR A DISTANCE OF 6" ABOVE GRADE SHALL BE TREATED WITH WOOD PRESERVATIVE.
 - POST: ALLOWABLE BENDING STRESS OF 1400 LBS. PER SQ. IN. AND A 33 1/3% INCREASE IN STRESS FOR WIND LOADS AS CONSIDERED APPROPRIATE. DESIGN CRITERIA IS BASED ON AN ALLOWABLE BENDING STRESS OF 1400 LBS. PER SQ. IN. AND A 33 1/3% INCREASE FOR WIND LOAD.
 - WOOD POST SHALL BE UTILIZED AT THE SPACING INDICATED ON THE SCHEDULE. DESIGN CRITERIA IS BASED ON AN ALLOWABLE BENDING STRESS OF 1400 LBS. PER SQ. IN. AND A 33 1/3% INCREASE FOR WIND LOAD.
 - POST EMBEDDED IN CONCRETE SHALL BE TREATED WITH A WOOD PRESERVATIVE IN THE AREA OF EMBEDMENT AND 12" ABOVE GRADE.
 - CONCRETE:
 - CONCRETE IN THE PIERS SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 2500 LBS. PER SQ. IN.
 - CONCRETE SHALL BE PLACED IN DRILLED PIERS UTILIZING THE EARTH AS THE FORMS.
 - FOUNDATIONS:
 - THE DRILLED PIERS HAVE BEEN DESIGNED UTILIZING AN ALLOWABLE PASSIVE PRESSURE OF 300 LBS. PER SQ. FT. AND THE FOLLOWING FORMULA: $D = \left(\frac{14.52M}{Pd} \right)^{1/3}$

M = MOMENT AT TOP OF DRILLED PIER (FT./LBS.)
 P = ALLOWABLE PASSIVE PRESSURE (300 LBS PER SQ.FT.)
 d = DIAMETER OF PIER (FT.)
 D = DEPTH OF PIER (FT.)
 - ALTERNATIVE #1 (PRESERVATIVE TREATMENT) ALTERNATIVE #1 REPRESENTS THE ADDITIONAL COST FACTOR FOR TREATING THE BASIC WOOD STRUCTURE INDICATED ON THIS REFERENCE PLAN. THE NECESSITY FOR TREATMENT AND THE TYPE OF PRESERVATIVE WILL BE SUBJECT TO LOCAL CONDITIONS. ALL TREATMENTS SHALL CONFORM TO AWWA STD C-14.
 - ALTERNATIVE #2 (PAINTING) ALTERNATIVE #2 REPRESENTS THE ADDITIONAL COST FACTOR REQUIRED TO PAINT ONE SIDE OF THE BASIC WOOD STRUCTURE SHOWN ON THIS REFERENCE PLAN. PAINTING SHALL CONSIST OF 3 APPLICATIONS OF PAINT. 2 COATS OF LATEX BASE PAINT CONFORMING TO FEDERAL SPECIFICATION TT-P-009966 SHALL BE APPLIED OVER PRIMER COAT CONFORMING TO FEDERAL SPECIFICATION TT-P-00250.
 - ALTERNATIVE #3 (STAINING) ALTERNATIVE #3 REPRESENTS THE ADDITIONAL COST FACTOR REQUIRED TO STAIN ONE SIDE OF BASIC WOOD STRUCTURE. STAIN SHALL CONSIST OF 2 COATS OF SEMI-TRANSPARENT SEALER STAIN APPLIED IN ACCORDANCE WITH MANUFACTURERS WRITTEN INSTRUCTIONS.



THE FOLLOWING STANDARD SIGN DESIGN SPECIFICATIONS SHALL APPLY:

- THE SIGN SIZE SHALL BE 12"x18".
- THE SIGN MATERIAL SHALL BE 0.080 GAUGE THICKNESS ANODIZED ALUMINUM.
- THE SIGN SHALL HAVE A GREEN BACKGROUND WITH 3" HIGH WHITE REFLECTIVE NUMBERS AND ARROW WITH A WHITE REFLECTIVE BORDER.
- WHERE A PRIVATE ROAD NAME IS IN USE OR PART OF A PRIVATE HOMEOWNER'S ARTICLES OF INCORPORATION AGREEMENT THE SIGN SIZE WILL BE ENLARGED TO ACCOMMODATE THE NECESSARY LETTERING BUT REMAIN PROPORTIONAL TO THE ABOVE DESIGN LIMITS.
- THE SIGN WILL BE INSTALLED WITHIN THE COMMON DRIVEWAY EASEMENT AREA AS NOTED ON THE FINAL PLAT.
- ADDRESS NUMBER IDENTIFICATION SIGNS ARE TO BE PROVIDED UNDER THE TENETS OF THE HOMEOWNER'S ASSOCIATION INCORPORATION OR A PROPERTY MANAGEMENT COMPANY FOR INSTALLATION AND MAINTENANCE IN ACCORDANCE WITH THE DEPARTMENT OF PLANNING AND ZONING ADDRESS NUMBERING SYSTEM AND PER SECTION 3.503(a) OF THE HOWARD COUNTY CODE-PUBLIC SIGNS. MAINTENANCE/ REPAIR AND REPLACEMENT OF THE ADDRESS NUMBER DIRECTIONAL SIGNS WILL BE THE RESPONSIBILITY OF THE HOMEOWNER'S ASSOCIATION OR A PROPERTY MANAGEMENT COMPANY.
- COMPLIANCE REGARDING THE INSTALLATION OF THE NEW ADDRESS NUMBER DIRECTIONAL SIGNS WILL BE ENFORCED BY THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS AT THE TIME OF FINAL APPROVAL FOR ISSUANCE OF THE USE AND OCCUPANCY PERMITS.

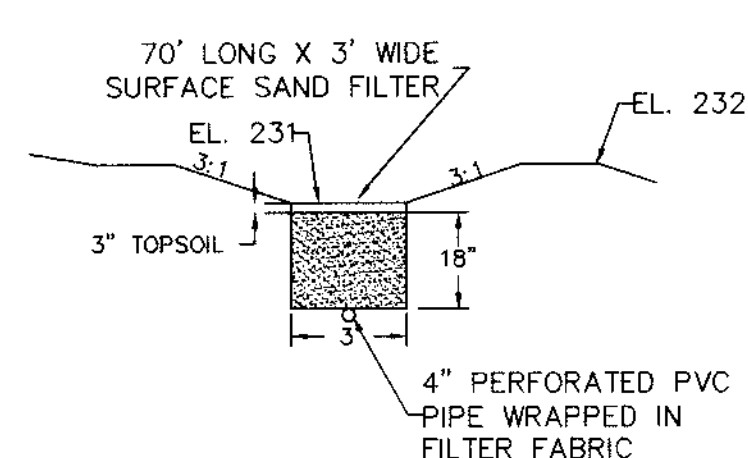
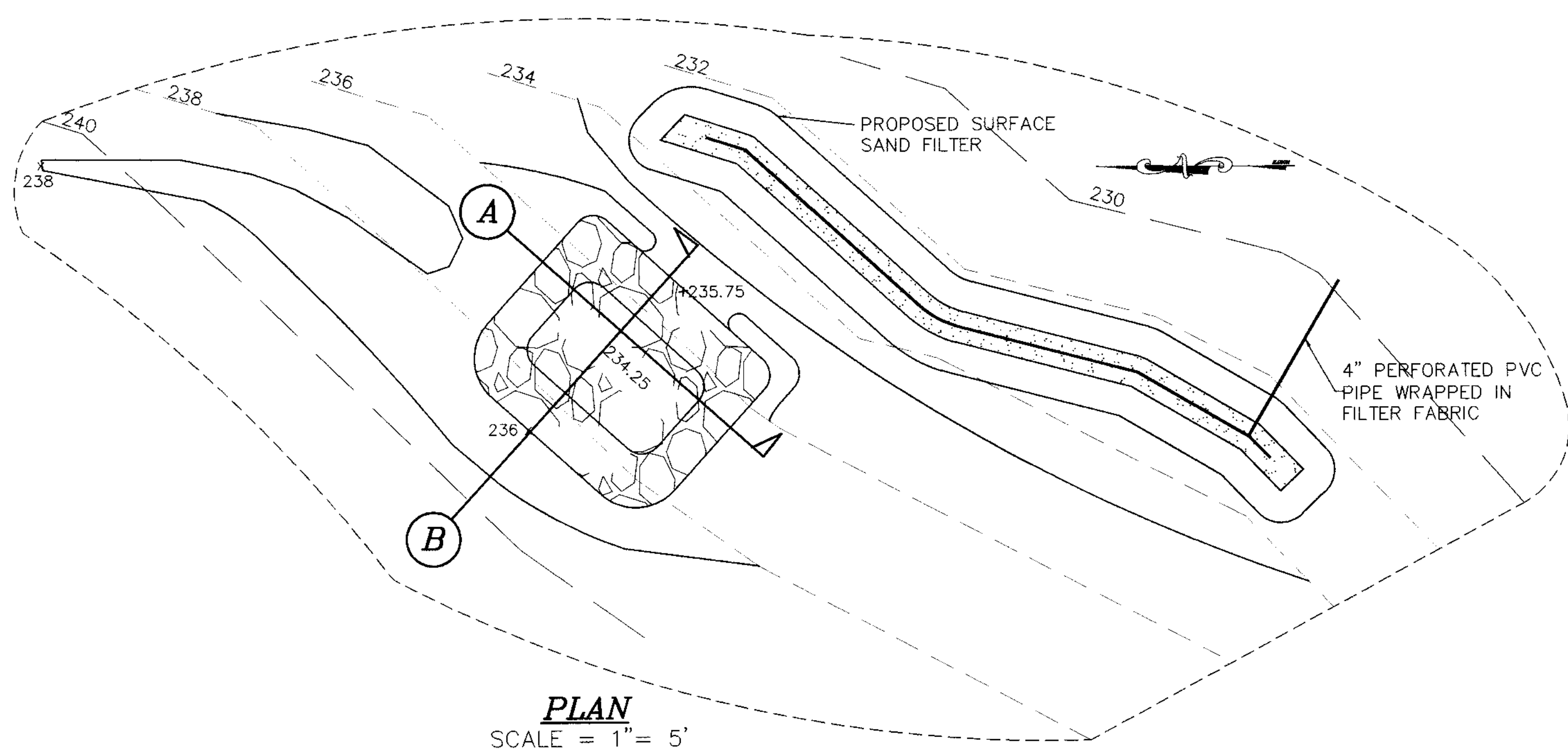
SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT. (1 DAY)
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AT LOCATION SHOWN. (1 DAY)
- CONSTRUCT SUPER SILT FENCES. (2 DAYS)
- COMPLETE CONSTRUCTION AS SHOWN INCLUDING SWALE AND SURFACE SAND FILTER. (60 DAYS)
- SEED AND MULCH DISTURBED AREAS. (2 DAYS)
- UPON STABILIZATION OF THE SITE AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE REMAINING DISTURBED AREAS.

NOTE: THE ABOVE SEQUENCE OF CONSTRUCTION WAS TAKEN FROM GP-04-62. PLEASE REFER TO GP-04-62 FOR FURTHER DETAIL.

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED UNDERGROUND STORMWATER FILTRATION SYSTEMS (F-2 AND F-3)

- THE SEDIMENT CHAMBER OUTLET DEVICES SHALL BE CLEANED AND/OR REPAIRED WHEN DRAW-DOWN TIMES WITHIN THE CHAMBER EXCEED 36 HOURS.
- DEBRIS AND LITTER SHALL BE REMOVED AS NECESSARY TO INSURE PROPER OPERATION OF THE SYSTEM.
- SEDIMENT SHALL BE CLEANED OUT OF THE SEDIMENTATION CHAMBER WHEN IT ACCUMULATES TO A DEPTH OF 6 INCHES. VEGETATION WITHIN THE SEDIMENT CHAMBER SHALL BE LIMITED TO A HEIGHT OF 18 INCHES.
- WHEN WATER PONDS ON THE SURFACE OF THE FILTER BED FOR MORE THAN 72 HOURS, THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REPLACED WITH FRESH MATERIAL. PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS AND LIQUID MUST BE FOLLOWED BY THE OWNER.
- A LOG BOOK SHALL BE MAINTAINED TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
- THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
- ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION SYSTEM HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.



STORMWATER MANAGEMENT FACILITY

3/21/05

OWNER AND DEVELOPER
 REUMER LONGTERM HOLDINGS
 8000 MAIN STREET
 ELLICOTT CITY, MARYLAND 21043
 410-480-9105

OWNER AND DEVELOPER
 LAND DESIGN AND DEVELOPMENT, LLC
 8000 MAIN STREET
 ELLICOTT CITY, MARYLAND 21043
 410-480-9105

APPROVED: DEPARTMENT OF PUBLIC WORKS

CHIEF BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

3/21/05

CHIEF, DIVISION OF LAND DEVELOPMENT DATE

3/21/05

CHIEF, DEVELOPMENT ENGINEERING DIVISION MJD DATE

project	date	approval
03-011	MAR 2005	HSP
illustration	engineering	HSP
HSP	HSP	HSP
scale	AS SHOWN	RJH

date	description	revisions

WIERKOWSKI PROPERTY
 LOT 1, NON-BUILDABLE BULK PARCEL A, & OPEN SPACE LOT 2
 TAX MAP 38, PARCEL 22, GRID 2
 HOWARD COUNTY, MARYLAND
 FIRST ELECTION DISTRICT
 STORMWATER MANAGEMENT DETAILS

MILDENBERG,
 BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland, 21042
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