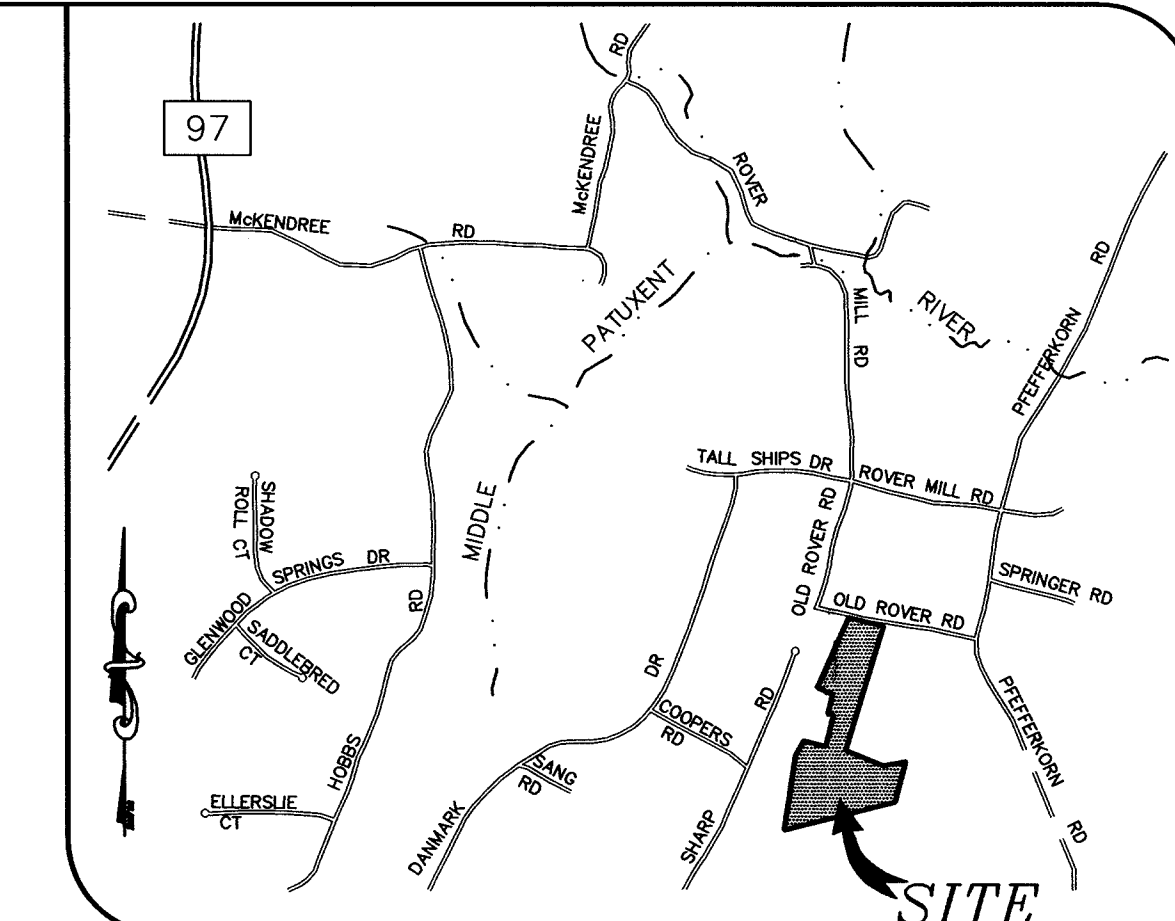


date	5/5/00
project	89010
illustration	FL
scale	1" = 100'
approval	FL



VICINITY MAP
SCALE: 1" = 2000'

GENERAL NOTES:

- SITE DATA:
TAX MAP 15 - P/O PARCEL 175 - BLOCK 19
DEED REFERENCE : 3450/661
GROSS AREA : 27.69 ACRES ±
ZONING : RR
- TOPOGRAPHIC DATA BASED ON HOWARD COUNTY'S 200 SCALE MAPS FOR OFFSITE AND FIELD RUN BY MILDENBERG, BOENDER & ASSOCIATES, INC. FOR ONSITE.
- BOUNDARY BASED ON DEED DESCRIPTION F-88-204.
- BASED ON AVAILABLE COUNTY DATA, NO HISTORIC STRUCTURES OR BURIAL GROUNDS EXIST ON SITE.
- SOILS DATA BASED ON HOWARD COUNTY SOIL SURVEY DATED 1968, SHEET 13.
- STORMWATER MANAGEMENT CONTROL WILL BE PROVIDED BY THE METHOD OF DETENTION FOR QUALITY. THE FACILITY WILL BE PRIVATELY OWNED & MAINTAINED.
- NO FLOODPLAIN STUDY IS REQUIRED PER SECTION 16.115(d) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. FLOODPLAIN EXISTS ON THE PRESERVATION PARCEL AT A LOCATION NOT CRITICAL TO THE PROPOSED DEVELOPMENT. 100 YEAR FLOODPLAIN AND UTILITY EASEMENT BASED ON F-88-204, PLAT 8239.
- WETLAND STUDY WAS COMPLETED BY WILDMAN ENVIRONMENTAL SERVICES ON OCTOBER, 1997.
- PRIVATE WATER AND PRIVATE SEWERAGE WILL BE UTILIZED. SHARED SEPTIC TO BE FOR LOT 11 THRU 14 AND PRESERVATION PARCEL "A".
- USE-IN-COMMON DRIVEWAY MUST BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING STANDARDS TO ENSURE SAFE VEHICLES FOR LOTS 12 THRU 14 AND PRESERVATION PARCEL "A".
A) WIDTH- 12 FEET (14 FEET IF 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% CHANGE AND MINIMUM OF 45 FT TURNING RADIUS
D) STRUCTURES (CULVERTS/BRIDGES)- CAPABLE OF SUPPORTING 25 GROSS TONS (425 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 INSURE ALL WEATHER USE.
- EACH LOT WILL HAVE MORE THAN TWO (2) PARKING SPACES, NO ON STREET PARKING IS REQUIRED.
- NO NOISE STUDY IS REQUIRED FOR THIS DEVELOPMENT.
- ALL AREAS SHOWN ARE MORE OR LESS.
- | | |
|--|--|
| | DENOTES EXISTING SEPTIC AREA. |
| | DENOTES PROPOSED SEPTIC EASEMENT. |
| | DENOTES PROPOSED 10' PUBLIC TREE MAINTENANCE AND UTILITY EASEMENT. |
| | DENOTES WETLANDS |
| | DENOTES SPECIMEN TREE. |
| | DENOTES PROPOSED PRIVATE USE-IN-COMMON EASEMENT. |
- OPEN SPACE IS NOT REQUIRED PER SUBDIVISION REGULATIONS, SEC. 16.121.(a)(2)*.
- THE PRESERVATION PARCEL ACREAGE NECESSARY TO SUPPORT THE CLUSTER SUBDIVISION IS LOCATED ON-SITE & OFF-SITE.
TOTAL ACREAGE OF SUBDIVISION = 27.69 ACRES.
BASE DEVELOPMENT RIGHTS ALLOWED BY RIGHT = .6
(27.69 / 4.25 = 6.52)
MAXIMUM DEVELOPMENT RIGHTS ALLOWED BY DENSITY EXCHANGE OPTION = .13
(27.69 / 2 = 13.85)
ACTUAL DEVELOPMENT PROPOSED = .12 UNITS.
DEO RIGHTS REQUIRED TO BE TRANSFERRED FROM A SENDING PARCEL = .6
(.12 PROPOSED - .6 BASE = .6)
- ALL EXISTING STRUCTURES, DRIVEWAYS AND PAVING TO BE REMOVED AND EXISTING WELLS (S) AND SEPTIC SYSTEM(S) TO BE PROPERLY ABANDONED.
- PRESERVATION PARCEL "A" IS TO BE USED FOR THE PURPOSE OF ONE SINGLE FAMILY DETACHED UNIT AND FOREST CONSERVATION ONLY.
- NON-BUILDABLE PRESERVATION PARCEL "B" IS TO BE USED FOR THE PURPOSE SHARED SEPTIC SYSTEM AND PRIVATELY MAINTAINED STORMWATER MANAGEMENT FACILITY.
- INSTALL SPEED CONTROL DEVICE PER DETAILS SHOWN ON THIS SHEET.
- THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 10,000 SQ. FT. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT VARIANCES FOR ENCROACHMENTS INTO THE PRIVATE SEWERAGE EASEMENT, & RECORDATION OF A MODIFIED EASEMENT SHALL NOT BE NECESSARY.

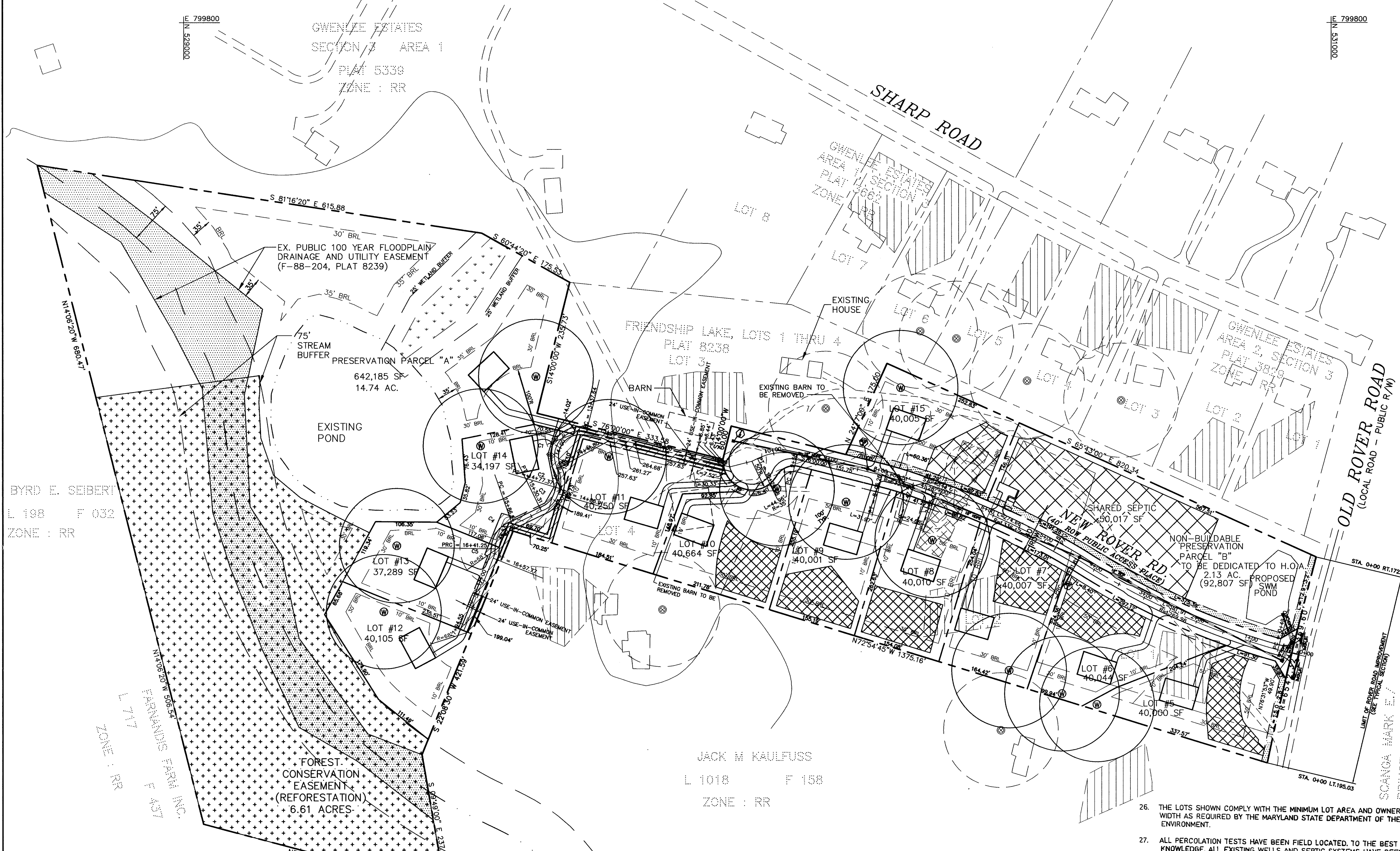
MINIMUM LOT SIZE CHART

LOT NO.	GROSS AREA	PIPESTEM AREA	MINIMUM LOT SIZE
12	40,105 SQ. FT.	4,287 SQ.FT.	35,818 SQ.FT.
13	37,289 SQ. FT.	3,378 SQ.FT.	33,911 SQ.FT.
14	34,197 SQ. FT.	1,643 SQ.FT.	32,554 SQ.FT.

TENTATIVELY APPROVED
DEPT. OF PLANNING AND
ZONING OF
HOWARD COUNTY
PLANNING DIRECTOR DATE

FRIENDSHIP LAKES, LOTS 5-15, PRESERVATION PARCELS "A" & "B"
A RESUBDIVISION OF FRIENDSHIP LAKE, LOTS 1, 2, & 4
TAX MAP 15, PARCEL 175
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
PRELIMINARY EQUIVALENT SKETCH PLAN

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



BYRD E. SEIBER
L 188 F 032
ZONE : RR

JACK M KAULFUSS
L 1018 F 158
ZONE : RR

DUANE E MILLER
L 801300 F 048
ZONE : RR

OWNER
CHARLOTTE A. SMITH
LOUIS W. ET AUXIER
CHRISTOPHER AUXIER
13721 OLD ROVER ROAD
WEST FRIENDSHIP, MD 21794

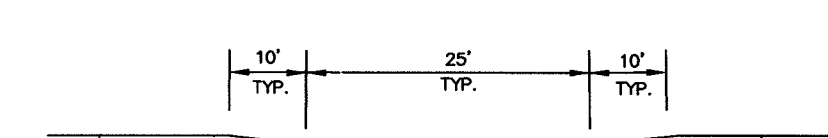
DEVELOPER
SAMUEL T. ECKER
P. O. BOX 337
WEST FRIENDSHIP, MD 21794-0337



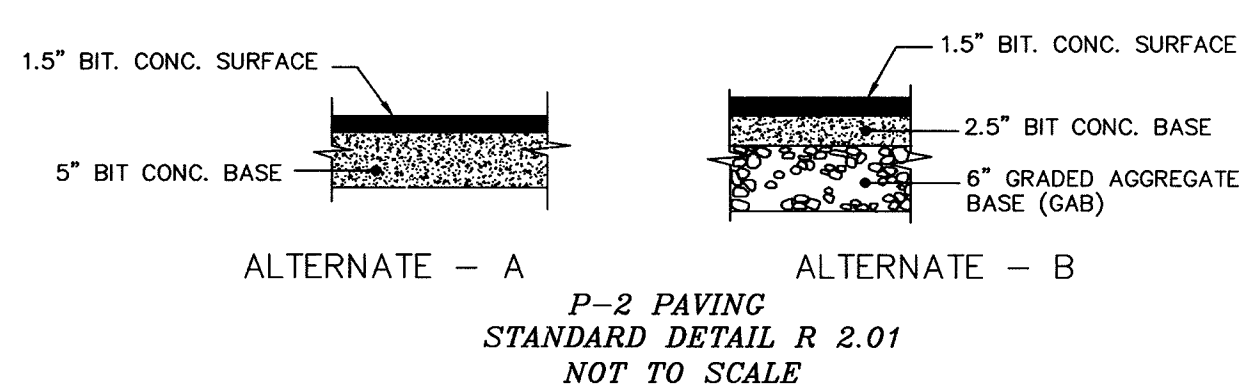
APPROVED FOR PRIVATE WATER AND SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT
DATE

**ROVER ROAD (EAST BOUND)
TYPICAL SECTION**

NOT TO SCALE
STA. 0+00 RT. 172.81' TO STA. 0+00 LT. 195.03'



SPEED CALMING DEVICE DETAIL
NTS
PUBLIC ACCESS PLACE/USE-IN-COMMON DRIVEWAY
STA. 3+50±, STA. 7+50±, & STA. 13+20±



LEGEND

- FOREST CONSERVATION EASEMENT
- EX. PUBLIC 100 YEAR FLOODPLAIN DRAINAGE AND UTILITY EASEMENT
- EXISTING SEPTIC AREA.
- PROPOSED SEPTIC EASEMENT.
- PROPOSED 10' PUBLIC TREE MAINTENANCE AND UTILITY EASEMENT.
- WETLANDS
- EXISTING WELL
- PROPOSED WELL

99010.DWG/210-PES.DWG

SP:99.13



NOTE:
THIS PLAN IS FOR THE PURPOSE OF
PRELIMINARY GRADING PLAN ONLY

- NOTE**
- THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 10,000 SQ.FT. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT VARIANCES FOR ENCROACHMENTS INTO THE PRIVATE SEWERAGE EASEMENT, RECORDATION OF A MODIFIED EASEMENT SHALL NOT BE NECESSARY.
 - ALL WELLS AND SEPTIC SYSTEMS WITHIN 100' OF THE PROPERTY LINE HAVE BEEN SHOWN.
 - ALL EXISTING STRUCTURES TO BE REMOVED. EXISTING WELL(S) AND SEPTIC SYSTEM(S) TO BE PROPERLY ABANDONED.

LEGEND

- FOREST CONSERVATION EASEMENT
- EX. PUBLIC 100 YEAR FLOODPLAIN DRAINAGE AND UTILITY EASEMENT
- EXISTING SEPTIC AREA.
- PROPOSED SEPTIC EASEMENT.
- PROPOSED 10' PUBLIC TREE MAINTENANCE AND UTILITY EASEMENT.
- WETLANDS
- PASSED PERC TEST HOLE.
- FAILED PERC TEST HOLE
- EXISTING WELL
- PROPOSED WELL
- LIMIT OF DISTURBANCE

- *PRIVATE STORMWATER MANAGEMENT FACILITY**
- NON-MD378 DETENTION POND
BOTTOM EL. 547.50
TOP ENBANKMENT EL. 552.00
2' WEIR CREST EL. 549.50
6" DIA. ORIFICE INV. EL. 547.50
2 YEAR STM. EL. 548.90
10 YEAR STM. EL. 550.46
100 YEAR STM. EL. 552.13
 - STORMCEPTOR STC 900
STORAGE REQUIRED - 0.4 ACRE
STORAGE PROVIDED - 0.55 ACRE
2' WEIR CREST EL. 549.50



OWENLY ESTATES
SECTION 7 AREA 1
PLAT 5339
ZONE : RR

FRIENDSHIP LAKE, LOTS 1 THRU 4
PLAT 8338
LOT 3

JACK M KAUFFUSS
L 1018 F 158
ZONE : RR

SCANCA MARK E.
PRINCE DEBORAH E.
L 4589 F 104
ZONE : RR

FOREST CONSERVATION EASEMENT (REFORESTATION)
6.81 ACRES

EX. PUBLIC 100 YEAR FLOODPLAIN DRAINAGE AND UTILITY EASEMENT (F-88-204, PLAT 8239)

75' STREAM BUFFER PRESERVATION PARCEL "A"
642,185 SF
14.74 AC.
EXISTING POND



APPROVED FOR PRIVATE WATER AND SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT
Donna M. ...
DATE 5/15/00

* THE PROPOSED STORMWATER POND AND STORMCEPTOR ARE TO BE PRIVATELY OWNED AND MAINTAINED BY THE HOME OWNER'S ASSOCIATION.

TENTATIVELY APPROVED
DEPT. OF PLANNING AND ZONING OF
HOWARD COUNTY
Samuel T. Ecker
PLANNING DIRECTOR DATE 4/6/00
JA

DEVELOPER
SAMUEL T. ECKER
P. O. BOX 337
WEST FRIENDSHIP, MD 21794-0337

OWNER
CHARLOTTE A. SMITH
LOUIS W. ET AUXIER
CHRISTOPHER AUXIER
13721 OLD ROVER ROAD
WEST FRIENDSHIP, MD 21794

project	99010	date	5/5/00
illustration	FL	engineering	FL
scale	1" = 100'	approval	FL

no.	description	revisions	date

"B"
FRIENDSHIP LAKES, LOTS 5-15, PRESERVATION PARCELS "A" & "B"
A RESUBDIVISION OF FRIENDSHIP LAKE, LOTS 1, 2, & 4
TAX MAP 15, PARCEL I75
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
PRELIMINARY GRADING PLAN

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorssey Hall Drive, Suite 202, Beltsville, Maryland, 21042
(410) 997-0286, Balt. (301) 621-5321, Wash. (410) 997-0288 Fax.

SCHEDULE A : PERIMETER LANDSCAPED EDGE

CATEGORY	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES
LANDSCAPE TYPE	B (PERIMETERS 1 & 13)	A (PERIMETERS 2 TO 12)
LINEAR FEET OF PERIMETER	279.60 LF	4233.64 LF
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	YES, 129.32 LF OF CREDIT FOR SWM LANDSCAPING	YES, 825 LF OF EXISTING TREES
CREDIT FOR WALL, FENCE, OR BERM (YES, NO, LINEAR FEET)	NO	NO
NUMBER OF PLANTS REQUIRED		
SHADE TREES	3 SHADE TREES	57 SHADE TREES
EVERGREEN TREES	4 EVERGREEN TREES	0 EVERGREEN TREES
SHRUBS	0 SHRUBS	0 SHRUBS

PERIMETER	EDGE TYPE
PERIMETER 1 SFD TO ROAD - 150.28 LF 1 SHADE TREE / 50 LF 3 1 EVERGREEN / 40 LF 4	B
PERIMETER 2 SFD TO SFD - 640 LF EXISTING TREES TO REMAIN	A
SFD TO SFD - 735.16 LF 1 SHADE TREE / 60 LF 12	A
PERIMETER 3 SFD TO SFD - 392.57 LF 1 SHADE TREE / 60 LF 7	A
PERIMETER 4 SFD TO PRES. PARCEL - 286.39 LF 1 SHADE TREE / 60 LF 5	A
PERIMETER 5 SFD TO PRES. PARCEL - 185.02 LF 1 SHADE TREE / 60 LF 3	A
PERIMETER 6 SFD TO PRES. PARCEL - 271.83 LF 1 SHADE TREE / 60 LF 5	A

PERIMETER	EDGE TYPE
PERIMETER 7 SFD TO PRES. PARCEL - 198.96 LF 1 SHADE TREE / 60 LF 3	A
PERIMETER 8 SFD TO SFD - 262.37 LF 1 SHADE TREE / 60 LF 4	A
PERIMETER 9 SFD TO SFD - 60 LF 1 SHADE TREE / 60 LF 1	A
PERIMETER 10 SFD TO SFD - 206 LF 1 SHADE TREE / 60 LF 3	A
PERIMETER 11 SFD TO SFD - 130 LF EXISTING TREES TO REMAIN	A
SFD TO SFD - 45 LF 1 SHADE TREE / 60 LF 1	A

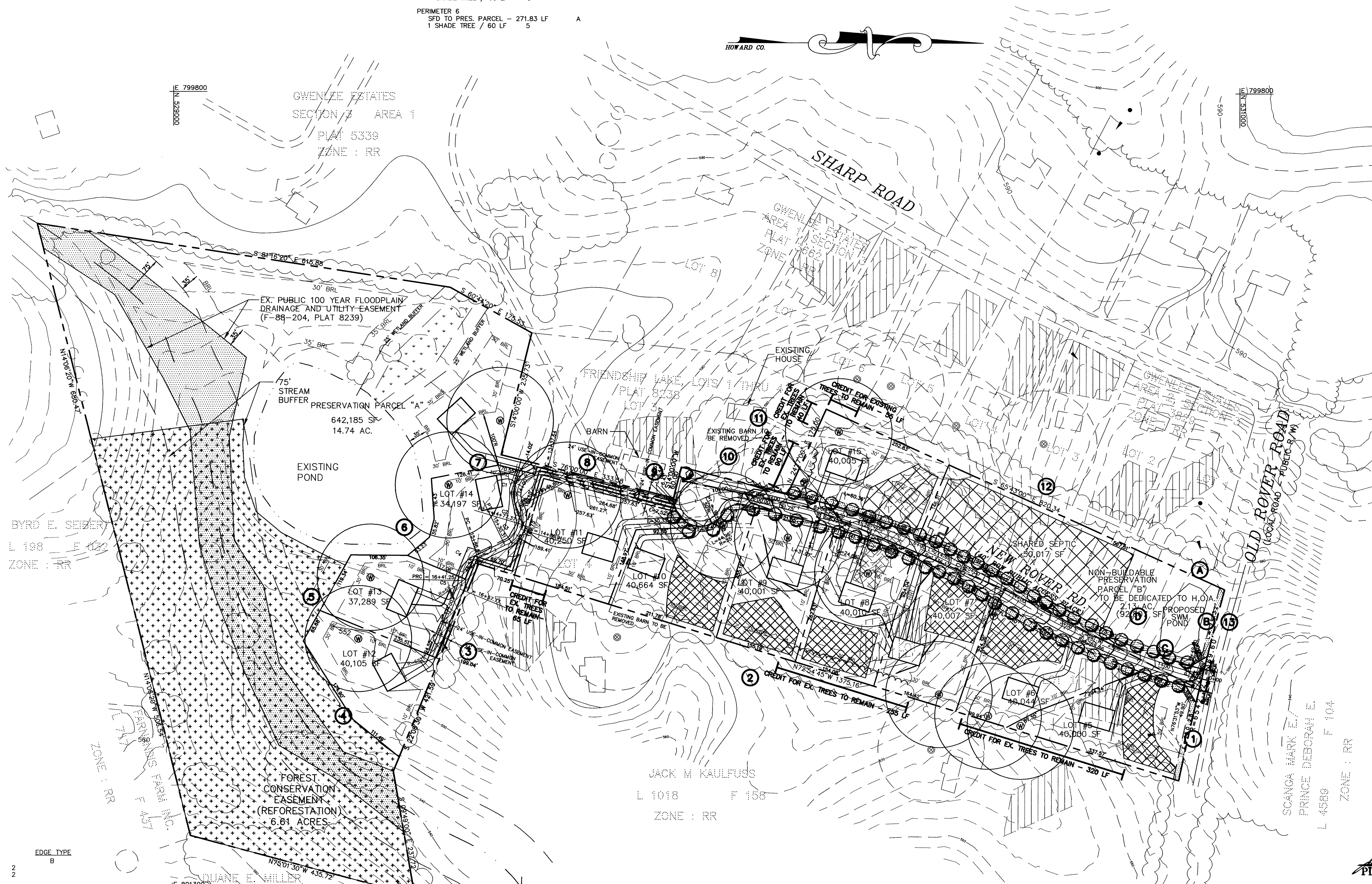
PERIMETER	EDGE TYPE
PERIMETER 12 SFD TO SFD - 55 LF EXISTING TREES TO REMAIN	A
SFD TO SFD - 765.34 LF 1 SHADE TREE / 60 LF 13	A
PERIMETER 13 OS/SFD TO ROAD - 129.32 LF CREDIT FOR SWM LANDSCAPING	B

TOTAL PLANTING OBLIGATION

SHADE TREES	60
EVERGREEN TREES	4
SHRUBS	0

NOTES:

1. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
2. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING IS THE DEVELOPER'S RESPONSIBILITY AS PART OF THE DPW DEVELOPERS AGREEMENT.



LEGEND

- ◆◆◆ FOREST CONSERVATION EASEMENT
- ▨ EX. PUBLIC 100 YEAR FLOODPLAIN DRAINAGE AND UTILITY EASEMENT
- ▨ EXISTING SEPTIC AREA
- ▨ PROPOSED SEPTIC EASEMENT
- ▨ PROPOSED 10' PUBLIC TREE
- ▨ WETLANDS
- ⊙ EXISTING WELL
- ⊙ PROPOSED WELL

SWM PERIMETER	EDGE TYPE
SWM PERIMETER A - 80 LF 1 SHADE TREE / 50 LF 1 EVERGREEN / 40 LF	B
SWM PERIMETER B - 140 LF 1 SHADE TREE / 50 LF 1 EVERGREEN / 40 LF	B
SWM PERIMETER C - 90 LF 1 SHADE TREE / 50 LF 1 EVERGREEN / 40 LF	B
SWM PERIMETER B - 146 LF 1 SHADE TREE / 50 LF 1 EVERGREEN / 40 LF	B
TOTAL PLANTING OBLIGATION	
SHADE TREES	10
EVERGREEN TREES	12
SHRUBS	0

STREET TREE CALCULATIONS

NEW ROVER ROAD - 2224 / 40 = 56
TOTAL TREES REQUIRED = 56 TREES
TOTAL TREES PROVIDED = 56 TREES



SCHEDULE D : STORMWATER MANAGEMENT AREA LANDSCAPING

LINEAR FEET OF PERIMETER	456 LF
CREDIT FOR EXISTING VEGETATION (NO, YES AND LINEAR FEET)	N/A
CREDIT FOR OTHER LANDSCAPING (NO, YES AND %)	N/A
NUMBER OF TREES REQUIRED	
SHADE TREES	10 SHADE TREES
EVERGREEN TREES	12 EVERGREEN TREES

STREET TREE PLANTING SCHEDULE

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
56	○	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LITTLELEAF LINDEN	2 1/2" - 3" CAL.
TOTAL				
56				STREET TREES

TENTATIVELY APPROVED
DEPT. OF PLANNING AND ZONING OF
HOWARD COUNTY

[Signature] 6/6/07
PLANNING DIRECTOR DATE

OWNER

CHARLOTTE A. SMITH
LOUIS W. ET AUXIER
CHRISTOPHER AUXIER
13721 OLD ROVER ROAD
WEST FRIENDSHIP, MD 21794

DEVELOPER

SAMUEL T. ECKER
P. O. BOX 337
WEST FRIENDSHIP, MD 21794-0337

Project	Date	Illustration	Scale	Approval
99010	5/5/00	FL	1" = 100'	

Description	Revisions

FRIENDSHIP LAKES, LOTS 5-15, PRESERVATION PARCELS "A" & "B"
A RESUBDIVISION OF FRIENDSHIP LAKE, LOTS 1, 2, & 4
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
PRELIMINARY LANDSCAPE PLAN

MILDENBERG, BOENDER & ASSOC., INC.
Surveyors
Planners
5072 Dorsey Hill Drive, Suite 202, Ellicott City, Maryland, 21042
(410) 987-0296 Fax. (301) 621-5521 Wash. (410) 987-0298 Fax.

PLANTING SPECIFICATIONS AND NOTES

SITE PREPARATION AND SOILS

1. PROTECTION FENCING AND SILT FENCES FOR SEDIMENT AND EROSION CONTROL ARE TO BE INSTALLED AS A FIRST ORDER OF BUSINESS, IF NECESSARY.
2. DISTURBANCE OF SOILS SHOULD BE LIMITED TO THE PLANTING FIELD FOR EACH PLANT. AS SHOWN ON THE DETAIL VIEW, A PLANTING FIELD OF RADIUS = 5 X DIAMETER OF THE ROOT BALL OR CONTAINER IS RECOMMENDED.
3. SOIL MIX FOR ALL PLANTS EXCEPT ERICACEOUS MATERIAL: SOIL MIX SHALL CONSIST OF EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME OF COMPOSTED SLUDGE.
4. SOIL MIX FOR ERICACEOUS MATERIAL: SOIL MIX SHALL CONSIST OF EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME PEAT MOSS.
5. ALL MIXING IN 3 AND 4 SHALL BE LIMITED TO CONTAINER GROWN OR BALL AND BURLAP STOCK ONLY AND CONFINED TO THE PLANTING FIELD AND IMMEDIATE ADJACENT SOIL SURFACE AREA AND SHALL BE DONE TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.

PLANT STORAGE AND INSPECTION

1. FOR CONTAINER GROWN NURSERY STOCK, PLANTING SHOULD OCCUR WITHIN 2 WEEKS AFTER DELIVERY TO THE SITE.
2. FOR BALL AND BURLAP NURSERY STOCK, PLANTING SHOULD OCCUR WITHIN THREE DAYS AFTER DELIVERY TO THE SITE.
3. PLANTING STOCK SHOULD BE INSPECTED PRIOR TO PLANTING. PLANTS NOT CONFORMING TO STANDARD NURSERYMAN SPECIFICATIONS FOR SIZE, FORM, VIGOR, ROOTS, TRUNK WOUNDS, INSECTS AND DISEASE SHOULD BE REPLACED.
4. UNTIL PLANTED, ALL PLANT STOCK SHALL BE KEPT IN A SHADED, COOL, AND MOISTENED ENVIRONMENT.

PLANT INSTALLATION

1. THE PLANTING FIELD SHOULD BE PREPARED AS SPECIFIED (SEE DETAIL). NATIVE STOCKPILED SOILS SHOULD BE USED FOR SOIL MIX AND BACKFILL FOR PLANTING FIELD. AFTER PLANT INSTALLATION, RAKE SOILS EVENLY OVER THE PLANTING FIELD AND COVER WITH AT LEAST 4 INCHES OF MULCH. WATER, GENEROUSLY, TO SETTLE SOIL BACKFILLED AROUND TREES.
2. PLANTING FIELD DIAMETERS SHOULD BE REDUCED OR PLANTING FIELD MOVED IF IT APPEARS THAT EXCESSIVE EXISTING ROOT DAMAGE MAY OCCUR DURING DIGGING OPERATION NEAR EXISTING FOREST.
3. CARE SHALL BE TAKEN WHEN DIGGING PLANTING FIELDS NOT TO CHOP THRU LARGER EXISTING ROOTS FROM EXISTING MATURE TREES. IF ROOTS GREATER THAN 1/2 INCH ARE ENCOUNTERED PLEASE TRY TO DIG AROUND THEM AS MUCH AS POSSIBLE TO MINIMIZE IMPACT TO EXISTING TREES. THEY WERE HERE FIRST.
4. CONTAINER GROWN STOCK SHOULD BE REMOVED FROM THE CONTAINER AND ROOTS GENTLY LOOSENEED FROM THE SOIL IF THE ROOTS ENCIRCLE THE ROOT BALL. SUBSTITUTION IS STRONGLY RECOMMENDED. J-SHAPED OR KINKED ROOT SYSTEMS SHOULD ALSO BE NOTED. ROOTS MAY NOT BE TRIMMED ON SITE, DUE TO THE INCREASED CHANCES OF SOIL BORNE DISEASES.
5. FOR BALL AND BURLAP STOCK, PLACE TREE IN PREPARED PLANTING FIELD AND REMOVE WIRE AND/OR STRING FROM ROOT BALL. THEN PEEL BACK BURLAP TO BASE OF ROOT BALL AND COVER ENTIRE ROOT BALL WITH TOPSOIL MIXTURE INDICATED ABOVE AND WATER GENEROUSLY.
6. FOR TREES PLANTED IN THE AFFORESTATION AREA, CONTRACTOR SHALL EVENLY DISPERSE SPECIES IN GROUPS OF TWO (2) TO FOUR (4) PER SPECIES, OVER THE ENTIRE DESIGNATED AREA TO BE PLANTED WHILE MAINTAINING AN AVERAGE SPACING OF INDIVIDUAL TREES AT PROPER SPACING INDICATED ON PLANT LIST.
7. AVOID PLANTING IN A STRAIGHT GRID PATTERN. TREES SHALL BE PLANTED ON AN AVERAGE SPACING AS INDICATED ON PLANT LISTS TO OBTAIN A MORE NATURAL APPEARANCE.

8. NEWLY PLANTED TREES MAY NEED WATERING AS MUCH AS ONCE A WEEK FOR THE ENTIRE GROWING SEASON, DUE TO THE WELL DRAINED NATIVE SOILS FOUND ON THIS SITE COMBINED WITH THE LOOSENESS OF THE BACKFILLED AREA WITHIN THE PLANTING FIELD. THE NEXT TWO YEARS MAY REQUIRE WATERING ONLY A FEW TIMES A YEAR DURING SUMMER AND DRY MONTHS. AFTER THAT PERIOD, TREES SHOULD ONLY NEED WATER IN SEVERE DROUGHTS. ANY WATERING PLAN SHOULD COMPENSATE FOR RECENT RAINFALL PATTERNS.

FERTILIZING

1. DO NOT FERTILIZE NEWLY PLANTED TREES WITHIN THE FIRST GROWING SEASON AFTER PLANTING. DOING SO MAY CAUSE A SPURT OF CANOPY GROWTH WHICH THE ROOTS CANNOT SUPPORT AND ADD ADDITIONAL SHOCK TO THE ALREADY DISTURBED PLANT.
2. NOTHING SHOULD BE ADDED TO THE SOIL WITHOUT TESTING IT FIRST TO DETERMINE ITS NEEDS.
3. IF AND WHEN IT IS TIME TO FERTILIZE, ORGANIC FERTILIZERS ARE PREFERRED TO SYNTHETIC FERTILIZERS. BONE MEAL OR SEAWEED BASED PRODUCTS ARE AVAILABLE COMMERCIALY AND ARE RECOMMENDED. THEY HAVE THE ABILITY TO SUPPLY NUTRIENTS TO THE PLANT AS NEEDED WHILE MINIMIZING THE RISK OF EXCESS NUTRIENTS ENTERING THE FOREST SYSTEM AND WATER SUPPLY.

MAINTENANCE SCHEDULE

1. ANNUAL MAINTENANCE DURING THE GROWING SEASON, FOR A THREE YEAR PERIOD.
2. ASSESS TREE MORTALITY OF PLANTING STOCK, REMOVE AND REPLACE ANY DEAD OR DISEASED PLANTINGS.
3. VOLUNTEER SEEDING OF NATIVE, LOCAL AND ENDEMIC VEGETATION IS TO BE EXPECTED. DO NOT DISCOURAGE THIS EFFORT UNLESS IT IS NEGATIVELY EFFECTING THE PLANTED STOCK.

4. REMOVE THROUGH MANUAL MEANS (GRUBBING, PULLING, CUTTING) AGGRESSIVE, NOXIOUS, INVASIVE SPECIES AND ALL HERBACEOUS VEGETATION WITHIN A 3-FOOT RADIUS SURROUNDING THE PLANTED WOODY NURSERY STOCK.
5. REMOVE AND DISPOSE OF MAN-MADE TRASH, INCLUDING ITEMS CONTAINED WITHIN ENTIRE PLANTING AREA. DO NOT REMOVE DOWN AND DEAD MATERIAL NATURALLY OCCURRING OR ACCUMULATING, UNLESS IT IS SMOTHERING PLANTING STOCK.
6. A 75 PERCENT SURVIVAL OF PLANTED STOCK MUST BE ACHIEVED AT THE END OF THE 24 MONTH MANAGEMENT PERIOD. IF NOT, ADDITIONAL PLANTINGS MAY BE REQUIRED TO ACHIEVE THIS GOAL.

SUPERVISION

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, PUBLIC LANDS AND FORESTRY DIVISION.

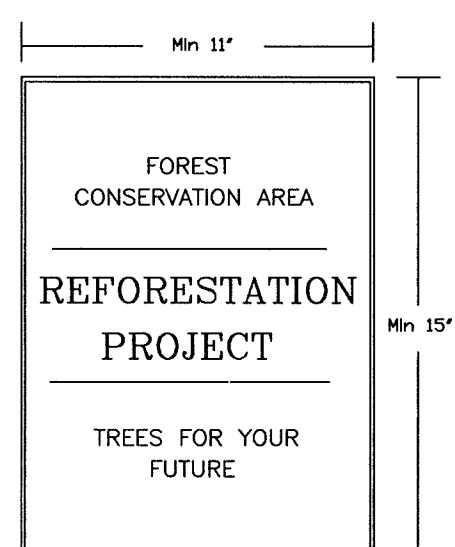
STANDARD NON-DISTURBANCE NOTE:
"THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION OR DISTURBANCE OF VEGETATION IN THE FOREST CONSERVATION EASEMENTS EXCEPT AS PERMITTED BY HOWARD COUNTY."

NOTE: THIS PLAN IS TO BE USED FOR PRELIMINARY FOREST CONSERVATION PURPOSES ONLY.

HOWARD CO.

LEGEND

- ▲ FOREST CONSERVATION SIGNAGE
- ◆ FOREST CONSERVATION EASEMENT (REFORESTATION)

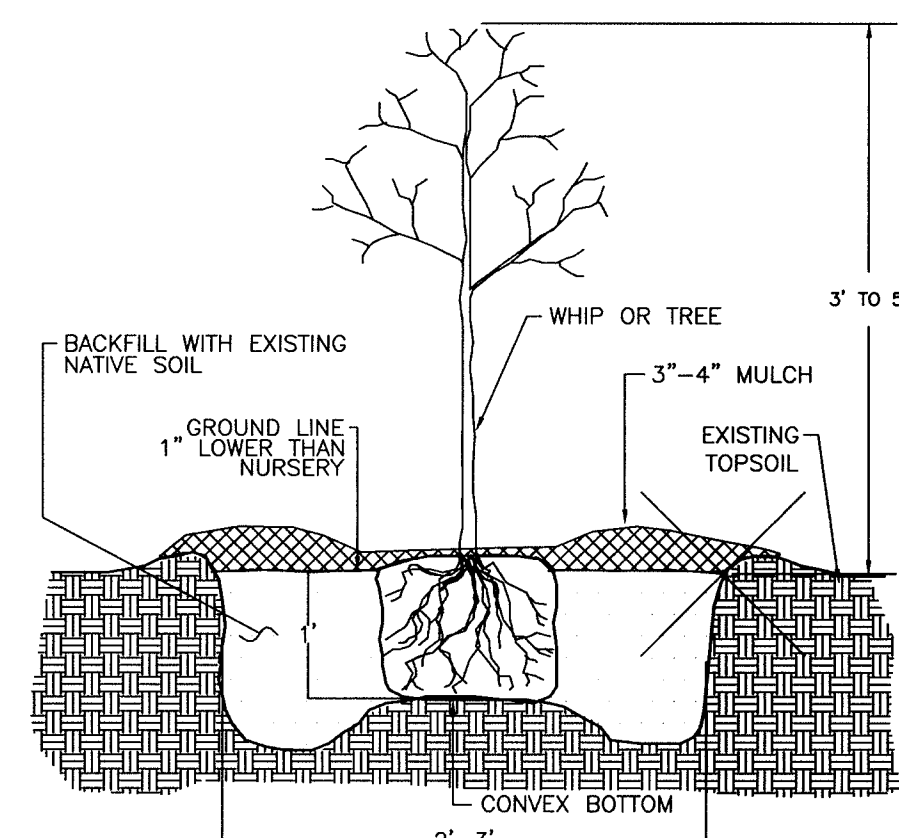


SIGNAGE DETAIL

NOT TO SCALE

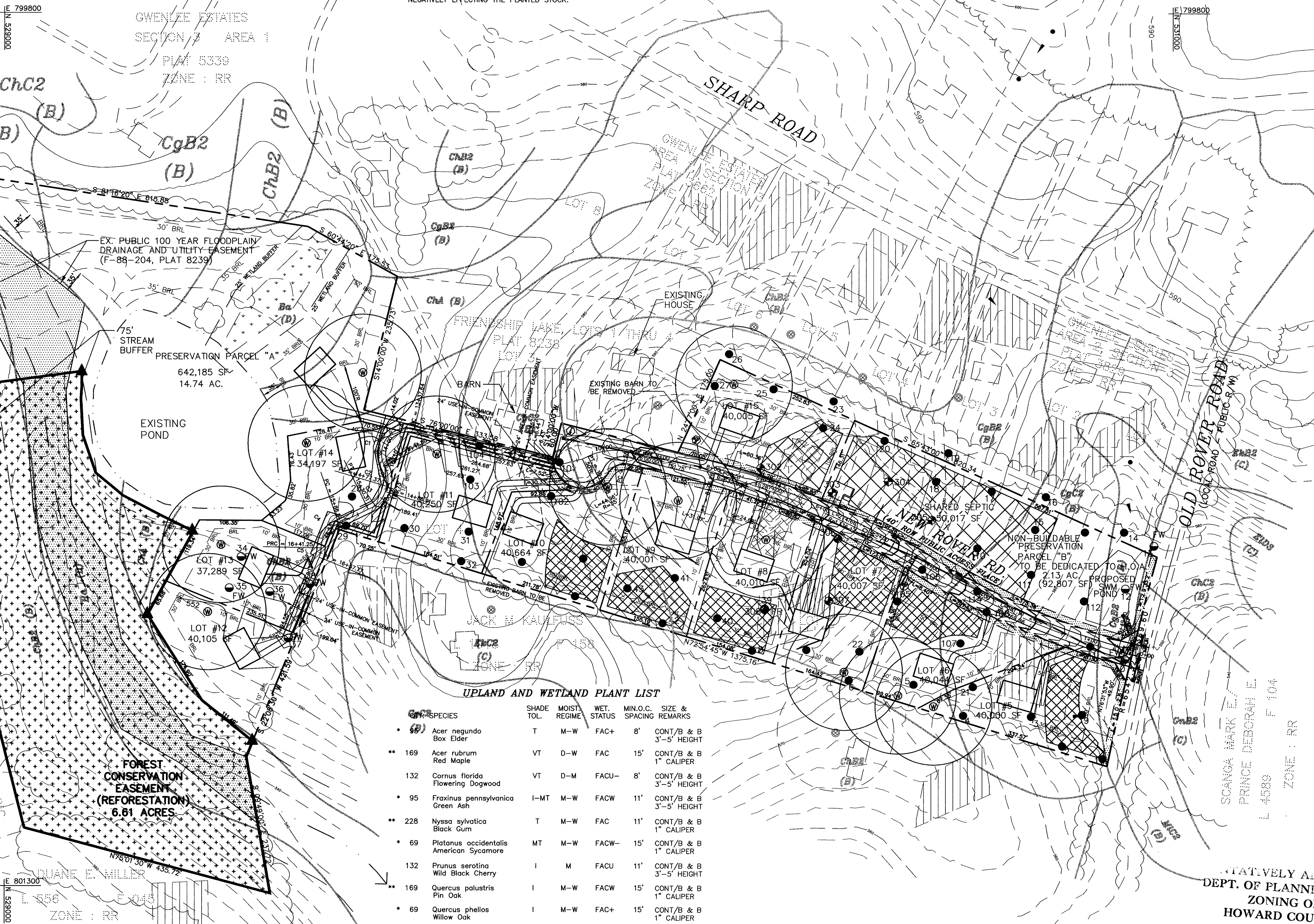
FOREST CONSERVATION DATA

I. BASIC SITE DATA	ACRES
GROSS SITE AREA	27.89
AREA WITHIN 100 YEAR FLOODPLAIN	2.50
AREA WITHIN AGRICULTURAL USE OR PRESERVATION PARCEL	12.24
NET TRACT AREA	13.16
LAND USE CATEGORY	RURAL - MEDIUM DENSITY
II. FOREST CONSERVATION WORKSHEET DATA SUMMARY	
B. REFORESTATION THRESHOLD (25%)	3.29
C. AFFORESTATION MINIMUM (20%)	2.63
D. EXISTING FOREST ON NET TRACT AREA	3.42
E. FOREST AREAS TO BE CLEARED	3.42
F. FOREST AREAS TO BE RETAINED	0.00
IV. REFORESTATION CALCULATIONS	
G. FOREST AREAS CLEARED ABOVE REFORESTATION THRESHOLD	0.13
H. FOREST AREAS CLEARED BELOW REFORESTATION THRESHOLD	3.29
I. FOREST AREAS RETAINED ABOVE REFORESTATION THRESHOLD	0.00
REFORESTATION FOR CLEARING ABOVE THRESHOLD	0.03
REFORESTATION FOR CLEARING BELOW THRESHOLD	6.58
TOTAL REFORESTATION REQUIRED	6.61
TOTAL REFORESTATION PROVIDED	6.61



TREE PLANTING DETAIL

CONTAINER GROWN



UPLAND AND WETLAND PLANT LIST

SPECIES	SHADE TOL.	MOIST REGIME	WET. STATUS	MIN. O.C.	SIZE & SPACING	REMARKS
69 Acer negundo Box Elder	T	M-W	FAC+	8'	CONT/B & B 3'-5' HEIGHT	
169 Acer rubrum Red Maple	VT	D-W	FAC	15'	CONT/B & B 1" CALIPER	
132 Cornus florida Flowering Dogwood	VT	D-M	FACU-	8'	CONT/B & B 3'-5' HEIGHT	
95 Fraxinus pennsylvanica Green Ash	I-MT	M-W	FACW	11'	CONT/B & B 3'-5' HEIGHT	
228 Nyssa sylvatica Black Gum	T	M-W	FAC	11'	CONT/B & B 1" CALIPER	
69 Platanus occidentalis American Sycamore	MT	M-W	FACW-	15'	CONT/B & B 1" CALIPER	
132 Prunus serotina Wild Black Cherry	I	M	FACU	11'	CONT/B & B 3'-5' HEIGHT	
169 Quercus palustris Pin Oak	I	M-W	FACW	15'	CONT/B & B 1" CALIPER	
69 Quercus phellos Willow Oak	I	M-W	FAC+	15'	CONT/B & B 1" CALIPER	
95 Quercus rubra Red Oak	MT	D-M	UPL	15'	CONT/B & B 1" CALIPER	
69 Salix nigra Black Willow	VI	M-W	FACW+	15'	CONT/B & B 1" CALIPER	
TOTAL					1322 TREES	

* THESE SPECIES SHOULD BE USED IN STREAM BUFFER AND FLOODPLAIN AREAS.
** THESE SPECIES SHOULD BE USED IN BOTH UPLAND AND STREAM BUFFER/FLOODPLAIN AREAS.
NOTE: WHIPS OR SEEDINGS MAY BE SUBSTITUTED FOR THE 1" CALIPER OR 3' - 5' TREES. IF WHIPS OR SEEDINGS ARE TO BE USED, MULTIPLY THE QUANTITIES BY 3.5 TO DETERMINE THE NUMBER OF TREES REQUIRED.

STATUTORY APPROVAL
DEPT. OF PLANNING AND ZONING OF
HOWARD COUNTY
PLANNING DIRECTOR - DATE

MD DNR QUALIFIED PROFESSIONAL

Stephanie Demchik 5/3/00
STEPHANIE DEMCHIK

DEVELOPER
SAMUEL T. ECKER
P. O. BOX 337
WEST FRIENDSHIP, MD 21794-0337

OWNER
CHARLOTTE A. SMITH
LOUIS W. ET AUXIER
CHRISTOPHER AUXIER
13721 OLD ROVER ROAD
WEST FRIENDSHIP, MD 21794

Project	99010	Date	5/15/00
Illustration	FCL	Engineering	FCL
FCL	FCL	Approval	FCL
Scale	1" = 100'		

no.	description	date
	revisions	

FRIENDSHIP LAKES, LOTS 5-15, PRESERVATION PARCELS "A" & "B"
A RESUBDIVISION OF FRIENDSHIP LAKE, LOTS 1, 2, & 4
TAX MAP 15, PARCEL 175
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
PRELIMINARY FOREST CONSERVATION PLAN

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042
(410) 997-0296 Fax (301) 627-5521 Wash. (410) 997-0298 Fax