

LEGEND

- EXISTING 2' CONTOURS
- EXISTING 10' CONTOURS
- EXISTING TREE LINE
- SOIL LINES AND TYPES
- EXISTING WELL
- PROPOSED HOUSE
- 15%-24.9% SLOPES
- 25% AND GREATER SLOPE
- 1500 Sq.Ft. ALTERNATE WELL SITE
- PROPOSED PRIVATE SEWERAGE EASEMENT
- EXISTING PRIVATE SEWERAGE EASEMENT RECORD PLAT NO. 5073
- PRIVATE 24' WIDE USE-IN-COMMON DRIVEWAY ACCESS EASEMENT
- SPECIMEN TREES
- PROPOSED PERIMETER LANDSCAPE TREES

LANDSCAPING PLANT LIST

QTY.	KEY	NAME	SIZE
30	(Symbol)	ACER RUBRUM 'OCTOBER GLORY' (OCTOBER RED MAPLE)	2 1/2" - 3" CALIPER FULL CROWN, B&B

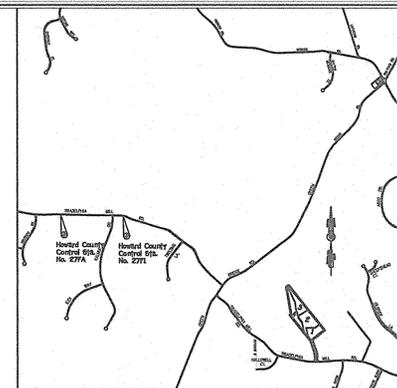
At The Time Of Plant Installation All Shrubs And Trees Listed And Approved On The Landscape Plan, Shall Comply With The Proper Height Requirement In Accordance With The Howard County Landscape Manual. In Addition, No Substitutions Or Relocations Of The Required Plantings May Be Made Without Prior Review And Approval From The Department Of Planning And Zoning. Any Deviation From The Approved Landscape Plan May Result In Denial Or Delay In The Release Of Landscape Surety Until Such Time As All Required Materials Are Planted And/Or Revision Are Made To The Applicable Plans.

The Owner, Tenants And/Or Their Agents Shall Be Responsible For Maintenance Of The Required Landscaping Including Both Plant Materials And Berms, Fences And Walls. All Plant Materials Shall Be Maintained In Good Growing Conditions, And When Necessary, Replaced With New Materials To Ensure Continued Compliance With Applicable Regulations. All Other Required Landscaping Shall Be Permanently Maintained In Good Condition, And When Necessary, Repaired Or Replanted.

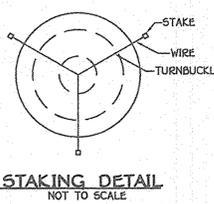
SOILS LEGEND

SOIL	NAME	CLASS
GIB2	Glenelg loam, 3 to 8 percent slopes, moderately eroded	B
GIC3	Glenelg loam, 8 to 15 percent slopes, severely eroded	B
GIB2	Glenelg silt loam, 3 to 8 percent slopes, moderately eroded	C
MIE	Manor loam, 25 to 45 percent slopes	B
MIB2	Manor loam, 3 to 8 percent slopes, moderately eroded	B
MIC2	Manor loam, 8 to 15 percent slopes, moderately eroded	B
MIC3	Manor loam, 8 to 15 percent slopes, severely eroded	B
MID3	Manor loam, 15 to 25 percent slopes, severely eroded	B

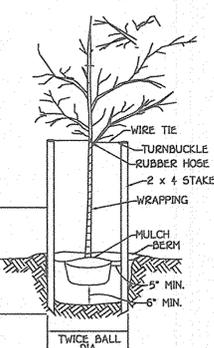
NOTES:
 * Hydric soils and/or contains hydric inclusions
 ** May contain hydric inclusions
 † Generally only within 100-year floodplain areas



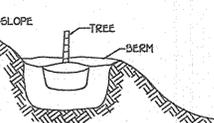
VICINITY MAP
SCALE: 1" = 1200'



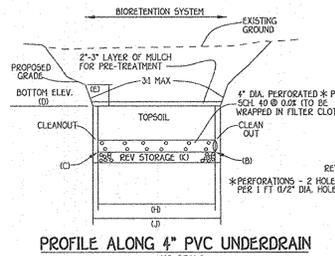
STAKING DETAIL
NOT TO SCALE



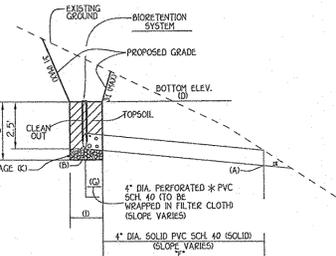
TREE PLANTING
NOT TO SCALE



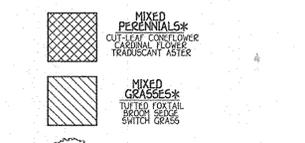
GRADING FOR PLANTING ON SLOPES
NOT TO SCALE



PROFILE ALONG 4" PVC UNDERDRAIN
NO SCALE



PROFILE ALONG 4" PVC OUTLET
NO SCALE

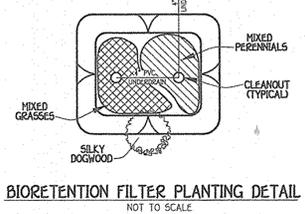


QUANTITY	NAME	MAXIMUM SPACING (FT.)
45	MIXED PERENNIALS	1 FT.
45	MIXED GRASSES	1 FT.
1	SILKY DOGWOOD	PLANT AWAY FROM INFLOW LOCATION

BIORETENTION FILTER	A	B	C	D	E	F	G	H	I	J	K
1	525.50	506.50	N/A	509.00	509.50	55	5'	N/A	10'	10'	102'
2	469.50	470.50	470.50	473.00	473.50	40'	5'	10'	10'	20'	101'
3	475.85	476.0	476.0	478.50	479.0	30'	5'	10'	10'	20'	101'

PRIVATE BIORETENTION FILTER OPERATION & MAINTENANCE SCHEDULE

- ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND PESTS. INVESTIGATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING.
- SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION BEYOND TREATMENT. TREATMENT OF ALL DISEASED TREES AND SHRUBS AND REPLACEMENT OF ALL DEFICIENT STAKES AND WIRES.
- MULCH SHALL BE INSPECTED EACH SPRING. SPRING REINFORCE MULCH LAYER BEFORE APPLYING NEW LAYER. ONCE EVERY 2 TO 3 YEARS.
- SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.



BIORETENTION FILTER PLANTING DETAIL
NOT TO SCALE

PERIMETER	P-1	P-2	P-3	P-4	P-5	TOTALS
CATEGORY	ADJACENT TO ROADWAY	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO PERIMETER PROPERTIES	
LANDSCAPE TYPE	NONE	A	A	A	A	
LINEAR FEET OF PERIMETER	100.00 L.F.	2442.99' L.F.	1631.99' L.F.	445.22' L.F.	620.50' L.F.	
CREDIT FOR EXISTING VEGETATION (NO, YES AND %)	NO	YES (1462.02') 1462.02'/60'/TREE= 24	YES (985'150') 1135'60'/TREE= 19	YES (165.0') 165.0'/60'/TREE= 3	NO	YES 46
CREDIT FOR WALL, FENCE OR BERM (NO, YES AND %)	NO	NO	NO	NO	NO	
NUMBER OF TREES REQUIRED		2442'60'/TREE= 40	1631.99'60'/TREE= 27	(445.22'60'/TREE= 7)	(620.50'60'/TREE= 10)	84
SHADE TREES	0	40	27	7	10	0
EVERGREEN TREES	0	0	0	0	0	0
NUMBER OF PLANTS PROVIDED		40-24 CREDIT= 16	27-19 CREDIT= 8	7-3 CREDIT= 4	10	38
SHADE TREES	0	0	0	0	0	0
EVERGREEN TREES	0	0	0	0	0	0

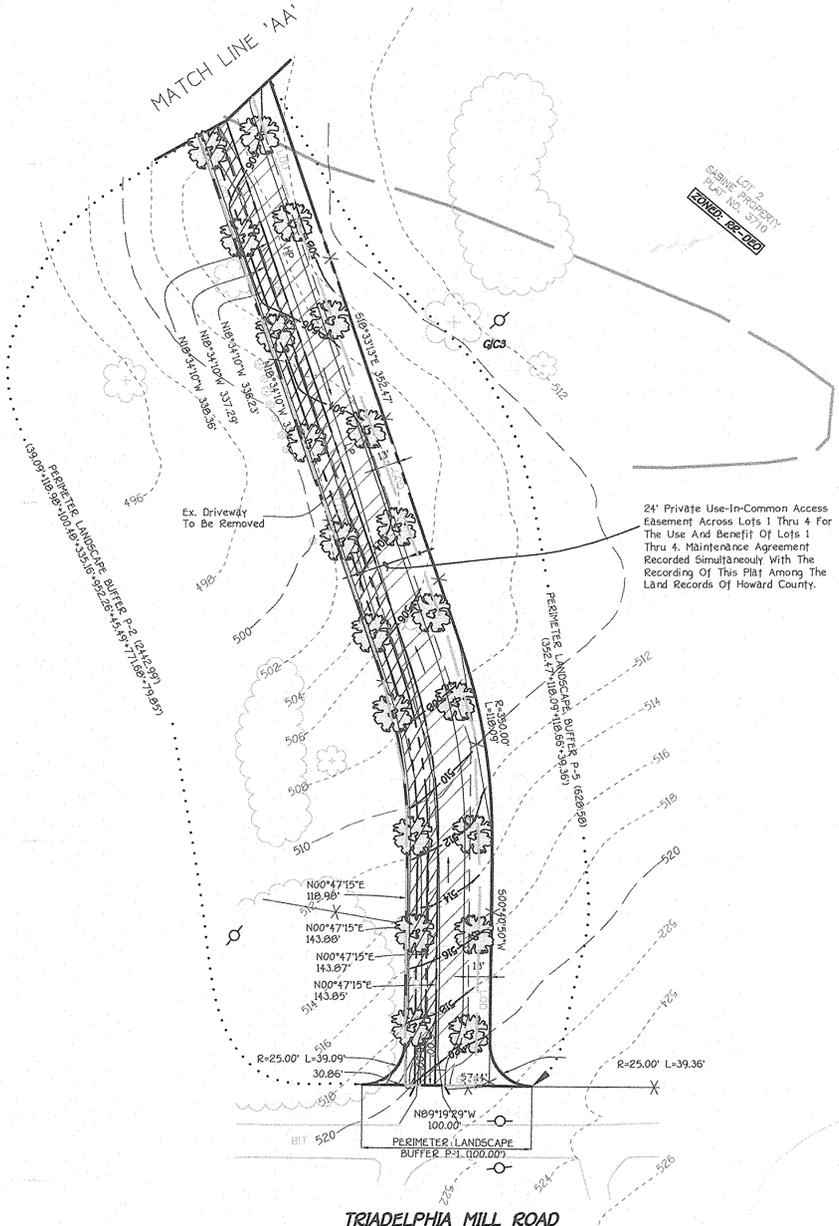
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- LOT 1 - LANDSCAPE SURETY IN THE AMOUNT OF \$4200.00 (4 SHADE TREES @ 300/EA)
 LOT 4 - LANDSCAPE SURETY IN THE AMOUNT OF \$4800.00 (6 SHADE TREES @ 300/EA)
 LOT 3 - LANDSCAPE SURETY IN THE AMOUNT OF \$2400.00 (8 SHADE TREES @ 300/EA)

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Cindy Hunter 10/23/07
 CHIEF, DIVISION OF LAND DEVELOPMENT
 Linda Westland Phelps 10/16/07
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

Developer's/Builder's Certificate
 I/We certify that the landscaping shown on this plan will be done according to Section 16.124 of the Howard County Code and the Howard County Landscape Manual. I/We further certify that upon completion of Certification of Landscape Installation accompanied by an executed one year guarantee of plant materials will be submitted to the Department of Planning and Zoning.
 Neal A. Phelps 9/18/07
 Neal Phelps Date
 Linda Westland Phelps 9/18/07
 Linda Westland Phelps Date



OWNER/DEVELOPER
 Neal A. Phelps & Linda Westland Phelps
 13760 Triadelphia Mill Road
 Clarksville, Maryland 21029-1022
 (410) 531-7959



GENERAL NOTES:

- This Area Designates A Private Sewerage Easement Of 10,000 Square Feet As Required By The Maryland State Department Of The Environment For Individual Sewage Disposal Improvements Of Any Nature In This Area Are Restricted Until Public Sewerage Is Available. These Easements Shall Become null And Void Upon Connection To A Public Sewerage System. The County Health Officer Shall Have The Authority To Grant Adjustments To The Private Sewerage Easement. Recordation Of A Modified Easement Shall Not Be Necessary.
- The Lots Shown hereon Comply With The Minimum Ownership Width And Lot Area As Required By The Maryland State Department Of The Environment.
- Subject Property Zoned RS-250 Per 02/02/04 Comprehensive Zoning Plan And Per The "Comp Lite" Zoning Amendments Effective 7/29/06.
- Coordinates Based On NAD '83, Maryland Coordinate System As Projected By Howard County Geodetic Control Stations No. 277A And No. 277I.
 Sta. 277A N 173420.2919 (4 meters) E 39341.6417 (meters)
 Sta. 277I N 173420.7613 (meters) E 398878.9484 (meters)
- This Plat Is Based On Field Run Monumented Boundary Survey Performed On Or About June, 2006, By Fisher, Collins And Carter, Inc.
- B.C.L. Denotes Building Restriction Line.
- ⊙ Denotes Iron Pin Set Capped "F.C.C. 105".
- ⊙ Denotes Iron Pipe Or Iron Bar Found.
- ⊙ Denotes Angular Change In Bearing Of Boundary Or Rights-Of-Way.
- ⊙ Denotes Concrete Monument Set With Aluminum Plate "F.C.C. 105".
- ⊙ Denotes Concrete Monument Or Stone Found.
- 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 Lines And Not To The Pipestem Lot Driveway.
- Driveway(s) Shall Be Provided Prior To Issuance Of A Residential Occupancy Permit For Any New Dwelling To Insure Safe Access For Fire And Emergency Vehicles Per The Following Minimum Requirements:
 a) Width - 12 Feet 6 Inches Serving More Than One Residence.
 b) Surface - Six (6") Inches Of Compacted Crusher Run Base With Tar And Chip Coating. (1-1/2" Minimum).
 c) Geometry - Maximum 15% Grade, Maximum 10% Grade Change And 45-Foot Turning Radius.
 d) Structures (Culverts/Bridges) - Capable Of Supporting 25 Gross Tons (1-25' Loading).
 e) Drainage Elements - Capable Of Safely Passing 100 Year Flood With No More Than 1 Foot Depth Over Surface.
 f) Structure Clearances - Minimum 12 Feet.
 g) Maintenance - Sufficient To Ensure All Weather Use.
- All Lot Areas Are More Or Less (+ or -).
- Distances Shown Are Based On Surface Measurement And Not Reduced To NAD '83 Grid Measurement.
- No Easements Exist On This Site Based On A Visual Site Visit And Based On An Examination Of The Howard County Compendium Of Planning Maps.
- Wetlands Area Delineated By Eco-Science Professionals August, 2006. No Non-Tidal Wetlands Exist Within Subdivision Limits.
- Plat Subject To Prior Department Of Planning And Zoning File Numbers: F-82-27.
- This Plat Is In Compliance With The Amended Fifth Edition Of The Subdivision And Land Development Regulations. Development Of Construction On These Lots/Parcels Must Comply With Setback And Buffer Regulations In Effect At The Time Of Submission Of The Plat And Grading Permit Application.
- Landscaping For Lots 1, 3 And 4 On File With This Plat Is Provided In Accordance With A Certified Landscape Plan In Accordance With Section 16.124 Of The Howard County Code And The Landscape Manual. Lot 2 Is Exempt From The Perimeter Landscape Requirements Of Section 16.124 Of The Howard County Code And The Landscape Manual Because Lot 2 Contains An Existing Dwelling To Remain. Landscape Surety Provided In The Amount Of \$11,400.00 For 37 Shade Trees At \$300/each Will Be Posted With The Developer's Agreement For This Plat (F-07-30).
- There Is An Existing Dwelling/Structure(s) Located On Lot 2 To Remain. No New Buildings, Extensions Or Additions To The Existing Dwelling/Structure(s) Are To Be Constructed At A Distance Less Than The Zoning Regulations Require.
- Water Quality Volume (Wqv) And Groundwater Recharge Volume (Rcv) Requirements Will Be Met By Applying The Roof Top Disconnection, Non-Rooftop Disconnection Credits Along With Bioretention Filter Systems In Accordance With The Criteria Contained In Chapters 3 & 5 Of The 2000 Maryland Stormwater Design Manual (Manual). Channel Protection Volume (Cpv) Is Not Required Because The Computed Discharge For The Cpv Storm For Each Design Point Is Less Than The 2.0 Cfs As Handled In The Above Referenced Manual.
- Forest Conservation Obligation Of 2.0 Acres Reafforestation To Fulfill The Requirements Of Section 16.1200 Of The Howard County Code Forest Conservation Act Is Provided By Off-Site Planting On The Hobart Mill/Leux Property, Tax Map 6, Grid B, Tax Parcel No. 15. A Forest Conservation Surety In The Amount Of \$43,560.00 Based On 2.0 Acres X 43,560 Sq.Ft./Acres X \$600/Acres Will Be Posted With The Developers Agreement For This Plat (F-07-30).
- Lot 3 Septic System Must Be Installed Prior To Building Permit Approval.
- Waiver Petition File Number Wp-07-81 For The Phelps Estates Was Approved By The Director Of The Department Of Planning And Zoning On January 25, 2007. The Specific Sections Waived Were Section 16.120 (4) (i), Requiring Regular Rectangularly Shaped Lots Section 16.120 (4) (ii), Lot Ratio Not To Exceed 3:1 Lot Depth Section 16.120 (4) (iii), Lots Not To Be Encumbered By Environmentally Sensitive Features Section 16.120 (4) (iv), Front Setbacks To Be Dimensioned On A Straight Line, Subject To The Following Conditions:
 1. A 35' Environmental Building Restriction Line From The Stream Bank Buffer On Lot 3 Shall Be Shown On The Final Plat, F-07-30.
 2. A Note Shall Be Added To Final Plat, F-07-30, Indicating That No Grading, Disturbance Or Construction Of Any Kind May Occur Within The Stream Bank Buffer On Lot 3.
 3. The Proposed House On Lot 4 Shall Be Shifted Away From The Western Property Line To Allow For A Minimum Of 20' Of Existing Vegetation To Remain For Landscape Buffering From The Western Adjoining Properties. The Front Setback On Lot 4 Shall Be Created As An Arc With A Radius Dimensioned From The Pipestem And Established At A Distance To Meet The 200' Lot Width.
 No Grading, Disturbance Or Construction May Occur Within The 100' Stream Bank Buffer Located On Lot 3.

SUPPLEMENTAL PLAN, STORMWATER MANAGEMENT, FOREST CONSERVATION, LANDSCAPE TOPOGRAPHIC AND SOILS

Phelps Estates
 LOTS 1 THRU 4

(A RESUBDIVISION OF LOT 7, SABINA HILL PLAT NO. 5073)
 TAX MAP #2B PARCEL: 300
 3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1" = 50' SHEET 1 OF 3 DATE: September 16, 2007



F-07-030

PLANTING SCHEDULE

FCE # 1 - 2.00 Acres
 Planting units Required 1400
 Planting units Provided 1400

Qty	Species	Size	Spacing	Total FCA Units
100	Acer rubrum - Red maple	2-3" whip	11' o.c.	
25	Diospyros virginiana - Persimmon	2-3" whip	11' o.c.	
150	Liriodendron tulipifera - Tulip poplar	2-3" whip	11' o.c.	
80	Nyssa sylvatica - Black gum	2-3" whip	11' o.c.	
80	Platanus occidentalis - Sycamore	2-3" whip	11' o.c.	
100	Prunus serotina - Black cherry	2-3" whip	11' o.c.	
60	Quercus alba - White oak	2-3" whip	11' o.c.	
30	Ulmus rubra - Slippery Elm	2-3" whip	11' o.c.	
75	Viburnum prunifolium - Blackhaw	2-3" whip	11' o.c.	
700		Total whip plantings x 2 units/tree = FCA unit credit		1400
		Total Unit Credit		1400

**FOREST CONSERVATION WORKSHEET
 VERSION 1.0**

BASIC SITE DATA:		
A. TOTAL TRACT AREA	15.8 Ac	
B. AREA WITHIN 100 YEAR FLOODPLAIN	0.00	
C. AREA TO REMAIN IN AGRICULTURAL PRODUCTION	0.00	
D. NET TRACT AREA	15.8 Ac	
LAND USE CATEGORY (from Table 3.2.1, page 10, NHDNR)		
AREA	IDEA	HSR
INFORMATION FOR CALCULATIONS:		
E. AFFORESTATION THRESHOLD	0.25 x D =	3.95
F. FOREST CONSERVATION THRESHOLD	0.25 x D =	3.95
EXISTING FOREST COVER:		
G. EXISTING FOREST COVER EXCLUDING FLOODPLAIN		6.6
H. AREA OF FOREST ABOVE REFORESTATION THRESHOLD		3.44
I. AREA OF FOREST ABOVE CONSERVATION THRESHOLD		2.65
FOREST RETENTION ABOVE THRESHOLD WITH NO MITIGATION:		
J. FOREST RETENTION ABOVE THRESHOLD WITH NO MITIGATION		0.53
K. BREAK-EVEN POINT		4.48
L. CLEARING PERMITTED WITHOUT MITIGATION		2.12
PROPOSED FOREST CLEARING:		
M. TOTAL AREA OF FOREST TO BE CLEARED		3.32
N. TOTAL AREA OF FOREST TO BE RETAINED		3.20
PLANTING REQUIREMENTS:		
O. REFORESTATION FOR CLEARING ABOVE CONSERVATION THRESHOLD		0.66
P. REFORESTATION FOR CLEARING BELOW CONSERVATION THRESHOLD		1.31
Q. CREDIT FOR RETENTION ABOVE CONSERVATION THRESHOLD		2.0
R. TOTAL REFORESTATION REQUIRED		2.0
S. TOTAL AFFORESTATION REQUIRED		0
T. TOTAL REFORESTATION AND AFFORESTATION REQUIRED		2.0

FCP NOTES

- ANY FOREST CONSERVATION EASEMENT (FCE) AREA SHOWN HEREON IS SUBJECT TO PROTECTIVE COVENANTS WHICH MAY BE FOUND IN THE LAND RECORDS OF HOWARD COUNTY WHICH RESTRICT THE DISTURBANCE AND USE OF THESE AREAS.
- THE FOREST CONSERVATION EASEMENTS HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE, FOREST CONSERVATION ACT. NO CLEARING, GRADING, OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENTS, HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
- FORESTED AREAS OCCURRING OUTSIDE OF THE FCE SHALL NOT BE CONSIDERED PART OF THE FCE AND SHALL NOT BE SUBJECT TO PROTECTIVE LAND COVENANTS.
- LIMITS OF DISTURBANCE SHALL BE RESTRICTED TO AREAS OUTSIDE THE LIMIT OF TEMPORARY FENCING OR THE FCE BOUNDARY, WHICHEVER IS GREATER.
- THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION OR DISTURBANCE OF VEGETATION IN THE FOREST CONSERVATION EASEMENT, EXCEPT AS PERMITTED BY HOWARD COUNTY DPZ.
- NO STOCKPILES, PARKING AREAS, EQUIPMENT CLEANING AREAS, ETC. SHALL OCCUR WITHIN AREAS DESIGNATED.
- TEMPORARY FENCING SHALL BE USED TO PROTECT FOREST RESOURCES DURING CONSTRUCTION. THE FENCING SHALL BE PLACED ALONG ALL FCE BOUNDARIES WHICH OCCUR WITHIN 15 FEET OF THE PROPOSED LIMITS OF DISTURBANCE.
- PERMANENT SIGNAGE SHALL BE PLACED 50' - 100' APART ALONG BOUNDARIES OF ALL AREAS INCLUDED IN THE FOREST CONSERVATION OBLIGATION OF 2.0 ACRES PLANTING TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE, FOREST CONSERVATION ACT IS PROVIDED BY OFF-SITE PLANTING ON PROPERTY OF HOBART MULLINEUX, TAX MAP 6, GRID 8, TAX PARCEL NO. 15. A FOREST CONSERVATION SURETY IN THE AMOUNT OF \$43,560.00 BASED ON 2.0 ACRES X \$43,560/ACRES X 0.50/54FT. = \$43,560.00 WILL BE POSTED WITH THE DEVELOPER'S AGREEMENT ASSOCIATED WITH PHELPS ESTATES RECORDED PLAT 07-07-030.
- THE UNENCUMBERED AREA OF WETLAND AND STREAM BUFFER BETWEEN THE EXISTING AND PROPOSED EASEMENT AREAS IS MAINTAINED AS ACCESS FOR FARM EQUIPMENT.

MULTIFLORA ROSE CONTROL NOTE:

PRIOR TO PLANTING ALL MULTIFLORA ROSE WITHIN PLANTING AREAS SHALL BE REMOVED. REMOVAL OF THE ROSE MAY BE PERFORMED WITH MOWING AND HERBICIDE TREATMENTS. PHYSICAL REMOVAL OF ALL TOP GROWTH FOLLOWING BY A PERIODIC HERBICIDE TREATMENT OF STUMP SPROUTS IS RECOMMENDED. NATIVE TREE AND SHRUB SPECIES OCCURRING WITHIN THE ROSE THICKETS SHOULD BE RETAINED WHEREVER POSSIBLE. HERBICIDES TREATMENTS SHALL OCCUR ON 2 MONTH INTERVALS DURING THE FIRST GROWING SEASON AND ONCE EACH IN THE SPRING AND FALL FOR SUBSEQUENT YEARS. HERBICIDE USED SHALL BE MADE SPECIFICALLY TO ADDRESS WOODY PLANT MATERIAL AND SHALL BE APPLIED AS PER MANUFACTURERS SPECIFICATIONS. CARE SHOULD BE TAKEN NOT SPRAY PLANTED TREES OR NATURALLY OCCURRING NATIVE TREE/SHRUB SEEDLINGS. IT IS RECOMMENDED THAT INITIATION OF ROSE REMOVAL BEGIN AT LEAST SIX MONTHS PRIOR TO PLANTING.

PLANTING NOTES:

PLANTING DENSITY BASED ON 700 PLANTING UNITS PER ACRE. 2" CALIPER TREES = 7 PLANTING UNITS, 1" CALIPER TREES = 3.5 PLANTING UNITS, WHIPS WITH SHELTER = 2 PLANTING UNITS.
 1" CALIPER TREES SHOULD BE STAGGERED ALONG THE OUTER PERIMETER OF THE PLANTING AREA TO SERVE AS DEMARCATION OF THE BOUNDARY. THE TREES SHOULD BE NO CLOSER THAN 15 FOOT SPACING.
 PLANTING SHALL BE MADE IN A CURVILINEAR FASHION ALONG CONTOUR. THE PLANTING SHOULD AVOID A GRID APPEARANCE BUT SHOULD BE SPACED TO FACILITATE MAINTENANCE.
 MULTIFLORA ROSE/HEAVY BRUSH REMOVAL/CONTROL MAY BE REQUIRED PRIOR TO INSTALLATION OF PLANTING.
 ALL WHIPS ARE REQUIRED TO BE INSTALLED WITH TREE SHELTERS PER HOWARD COUNTY FCA REQUIREMENTS.

PLANTING/SOIL SPECIFICATIONS

- PLANTING OF NURSERY STOCK SHALL TAKE PLACE BETWEEN MARCH 15th AND APRIL 30th OR SEPTEMBER 15th AND NOVEMBER 15th.
- A TWELVE (12) INCH LAYER OF TOPSOIL SHALL BE SPREAD OVER ALL FORESTATION AREAS IMPACTED BY SITE GRADING TO ASSURE A SUITABLE PLANTING AREA. DISTURBED AREAS SHALL BE SEEDED AND STABILIZED AS PER GENERAL CONSTRUCTION PLAN FOR PROJECT. PLANTING AREAS NOT IMPACTED BY SITE GRADING SHALL HAVE NO ADDITIONAL TOPSOIL INSTALLED.
- ALL BAREROOT PLANTING STOCK SHALL HAVE THEIR ROOT SYSTEMS DIPPED INTO AN ANTI-DESICCANT GEL PRIOR TO PLANTING.
- PLANTS SHALL BE INSTALLED SO THAT THE TOP OF ROOT MASS IS LEVEL WITH THE TOP OF EXISTING GRADE. BACKFILL IN THE PLANTING PITS SHALL CONSIST OF 3 PARTS EXISTING SOIL TO 1 PART FINE FINES OR EQUIVALENT.
- FERTILIZER SHALL CONSIST OF AGRIFORM 22-8-2, OR EQUIVALENT, APPLIED AS PER MANUFACTURER'S SPECIFICATIONS.
- A TWO (2) INCH LAYER OF HARDWOOD MULCH SHALL BE PLACED OVER THE ROOT AREA OF ALL PLANTINGS.
- PLANT MATERIAL SHALL BE TRANSPORTED TO THE SITE IN A TARPED OR COVERED TRUCK. PLANTS SHALL BE KEPT MOIST PRIOR TO PLANTING.
- ALL NON-ORGANIC DEBRIS ASSOCIATED WITH THE PLANTING OPERATION SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.

SEQUENCE OF CONSTRUCTION

- SEDIMENT CONTROL AND TREE PROTECTION DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH GENERAL CONSTRUCTION PLAN FOR SITE. SITE SHALL BE GRADED IN ACCORDANCE WITH GENERAL CONSTRUCTION PLANS.
- PROPOSED FORESTATION AREAS IMPACTED BY SITE GRADING SHALL BE TOPSOILED AND STABILIZED AS PER NOTE NO. 2 OF PLANTING/SOIL SPECIFICATIONS FOR PROJECT.
- PLANTS SHALL BE INSTALLED AS PER PLANT SCHEDULE AND THE PLANTING/SOIL SPECIFICATIONS FOR THE PROJECT.
- UPON COMPLETION OF THE PLANTING, SIGNAGE SHALL BE INSTALLED AS PER THE FOREST PROTECTION DEVICES SHOWN ON THE FOREST CONSERVATION PLAN.
- PLANTINGS SHALL BE MAINTAINED AND GUARANTEED IN ACCORDANCE WITH THE MAINTENANCE AND GUARANTEE REQUIREMENTS FOR PROJECT.

MAINTENANCE OF PLANTINGS

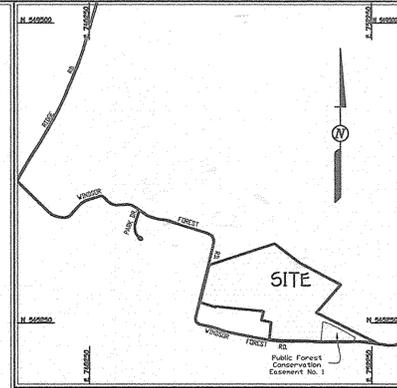
- MAINTENANCE OF PLANTINGS SHALL LAST FOR A PERIOD OF 26 MONTHS.
- ALL PLANT MATERIAL SHALL BE WATERED TWICE A MONTH DURING THE 1st, GROWING SEASON. WATERING MAY BE MORE OR LESS FREQUENT DEPENDING ON WEATHER CONDITIONS. DURING 2nd. GROWING SEASON, ONCE A MONTH DURING MAY-SEPTEMBER, IF NEEDED.
- INVASIVE EXOTICS AND NOXIOUS WEEDS WILL BE REMOVED FROM FORESTATION AREAS. OLD FIELD SUCCESSIONAL SPECIES WILL BE RETAINED.
- PLANTS WILL BE EXAMINED A MINIMUM TWO TIMES DURING THE GROWING SEASON FOR SERIOUS PLANT PESTS AND DISEASES. SERIOUS PROBLEMS WILL BE TREATED WITH THE APPROPRIATE AGENT.
- DEAD BRANCHES WILL BE PRUNED FROM PLANTINGS.

GUARANTEE REQUIREMENTS

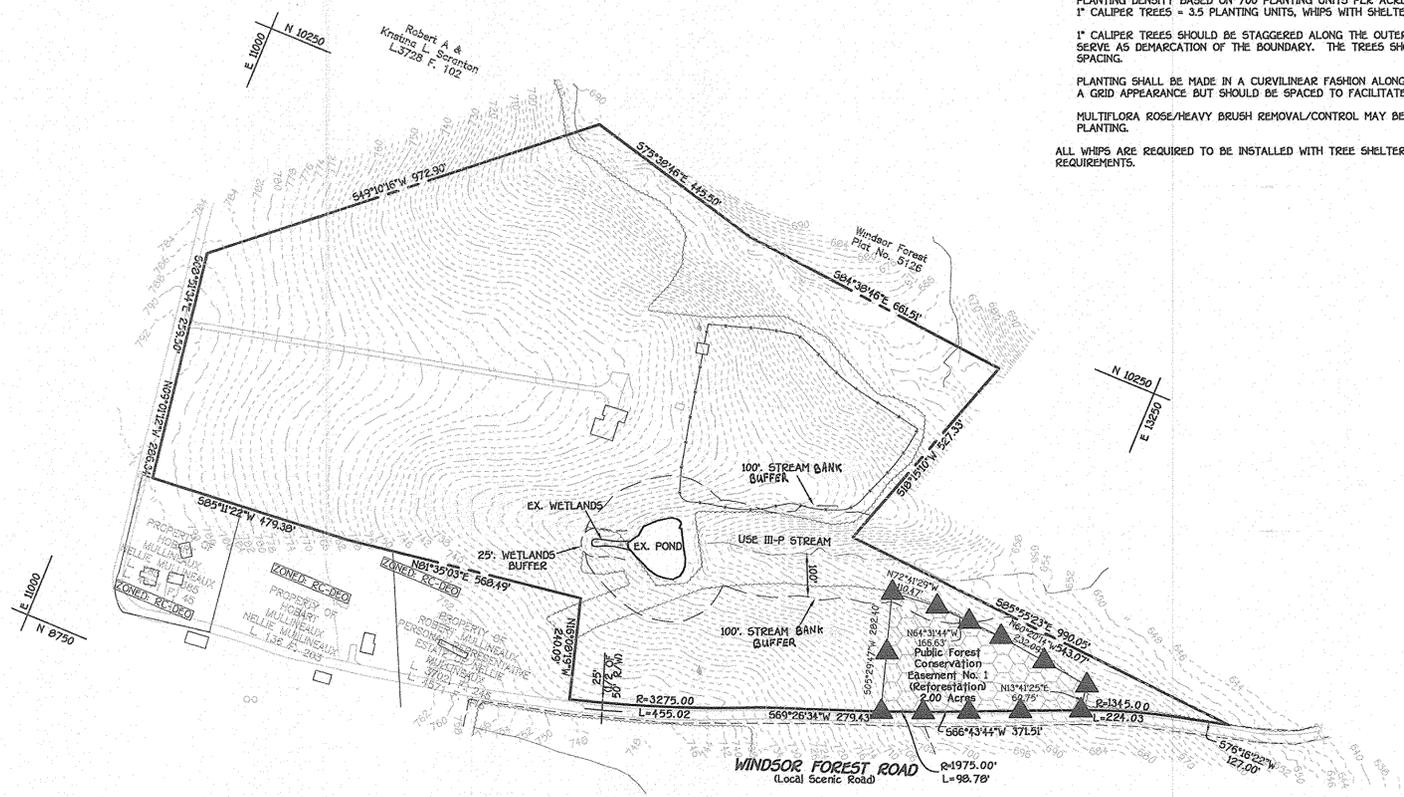
- A 75 PERCENT SURVIVAL RATE OF FORESTATION PLANTINGS WILL BE REQUIRED AT THE END OF THE 24 MONTH MAINTENANCE PERIOD. ALL PLANT MATERIAL BELOW THE 75 PERCENT THRESHOLD WILL BE REPLACED AT THE BEGINNING OF THE NEXT GROWING SEASON.

SURETY FOR FORESTATION

- THE DEVELOPER SHALL POST A SURETY (BOND, LETTER OF CREDIT) TO ENSURE THAT REFORESTATION PLANTINGS ARE COMPLETED. UPON ACCEPTANCE OF THE PLANTINGS BY THE COUNTY, THE BOND SHALL BE RELEASED.
- SURETY FOR OFF-SITE REFORESTATION (2.0 AC. X \$43,560/AC X 0.50/54FT. = \$43,560.00) IS POSTED WITH THE DEVELOPER'S AGREEMENT ASSOCIATED WITH THE PHELPS ESTATES RECORDED PLAT 07-07-030.

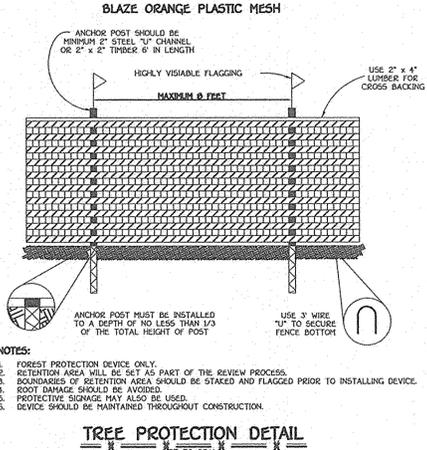


VICINITY MAP
 SCALE: 1" = 1200'

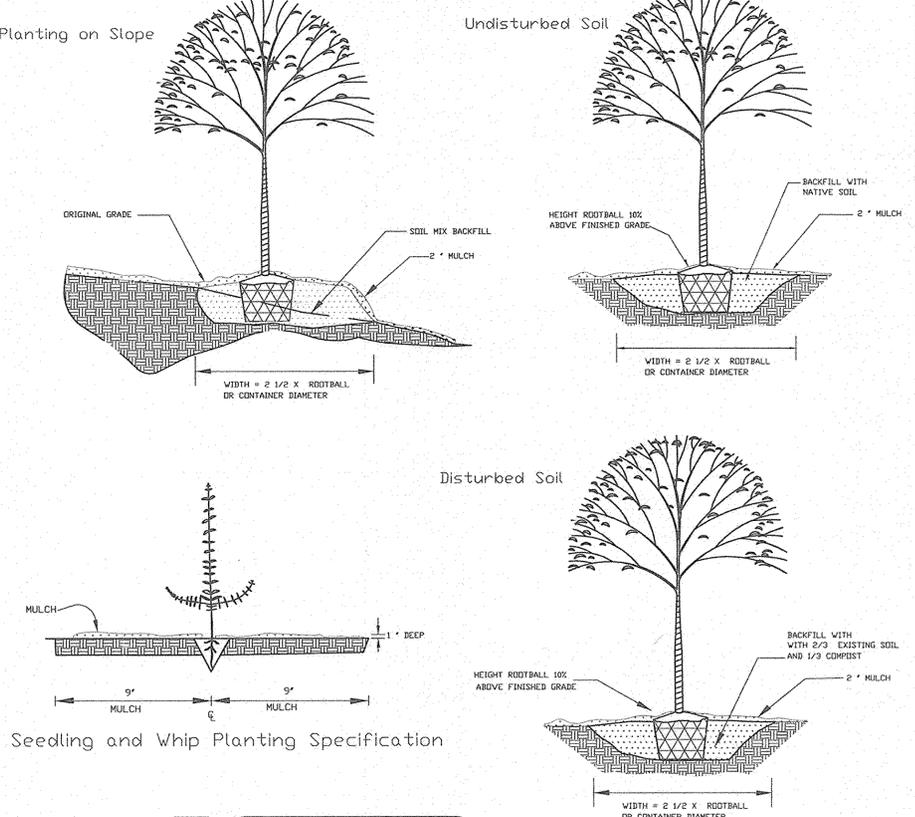


PLAN
 SCALE: 1" = 200'

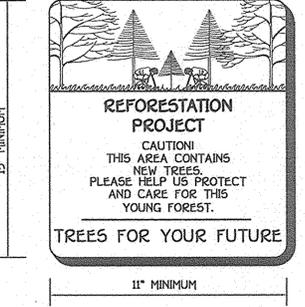
OFF-SITE FOREST REFORESTATION TABULATION	
REFORESTATION EASEMENT NUMBERS	F.C.E. NO. 1
REFORESTATION EASEMENT AREA	2.00 AC.
OFF-SITE SUBDIVISION REFORESTATION OBLIGATION	PHELPS ESTATES 07-07-030 TM. #28, GRID 19, PAR. #300 LIBER 0288, FOLIO 653



- NOTES:
- FOREST PROTECTION DEVICE ONLY.
 - RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
 - BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.
 - ROOT DAMAGE SHOULD BE AVOIDED.
 - PROTECTIVE SIGNAGE MAY ALSO BE USED.
 - DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.



Seedling and Whip Planting Specification



OFF-SITE REFORESTATION PLAN
 FOREST CONSERVATION PLAT OF EASEMENT
 HOBART MULLINEUX PROPERTY
 TAX MAP 6, GRID 8, PARCEL 15
 FOURTH ELECTION DISTRICT
 ZONED: RC-DEO
 REFORESTATION PLANTING PLAN
 NOTES AND SPECIFICATIONS

DATE: OCTOBER 10, 2007
 SHEET 3 OF 3

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE, OFFICE PARK, 12272 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 461-2855

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 10/18/07 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 10/18/07 DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

Eco-Science Professionals, Inc.
 CONSULTING ECOLOGISTS

MD DNR Qualified Professional
 USACOE Wetland Designer
 Certification WDCP-93M0061004B
 [Signature]
 JOHN R. CANOLIS

PHELPS ESTATES
 OWNER/DEVELOPER
 Neal A. Phelps & Linda Westland Phelps
 13760 Tridaphnia Mill Road
 Clarksville, Maryland 21029-1022
 (410) 531-7908

HOBART MULLINEUX PROPERTY
 OWNER
 Robert Arthur Scranton
 19750 Windsor Forest Road
 Mount Airy Maryland, 21771
 410-549-1689