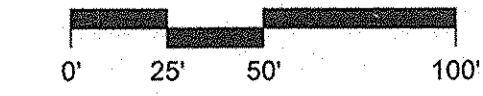
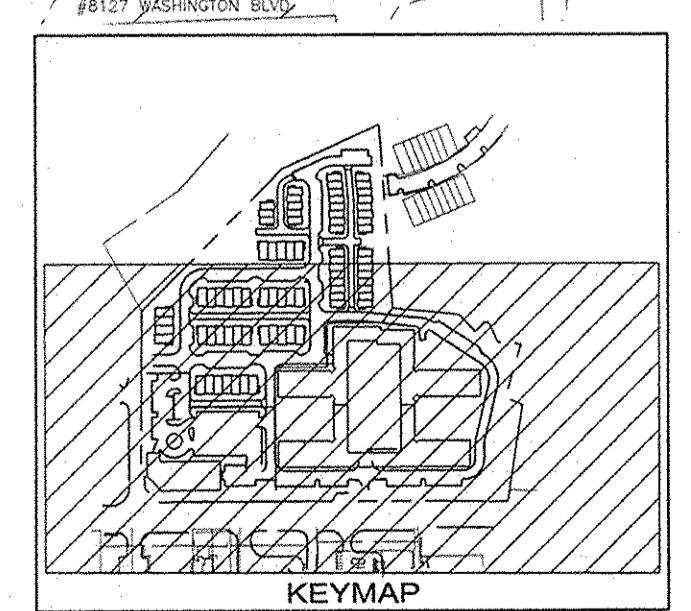


- GENERAL NOTES**
1. PROPOSED REFORESTATION AREA WILL BE PLANTED USING NATIVE SPECIES, 1 INCH CALIPER NURSERY STOCK, WITH TREE SHELTERS.
 2. ALL FOREST CONSERVATION AND REFORESTATION ACTIVITIES WILL BE PERFORMED IN ACCORDANCE WITH HOWARD COUNTY FOREST CONSERVATION MANUAL.
 3. LIMITS OF DISTURBANCE LINES AND ALL PROTECTIVE MEASURES WILL BE MAINTAINED AND ENFORCED THROUGHOUT THE CONSTRUCTION PERIOD.
 4. A MAINTENANCE AGREEMENT WILL BE ESTABLISHED FOR A TWO YEAR PERIOD AFTER INSTALLATION OF REFORESTATION FOR THE SURETY AND MAINTENANCE OF THE REFORESTATION AND CONSERVATION AREAS.
 5. ENVIRONMENTALLY SENSITIVE AREAS, INCLUDING WETLANDS AND WETLAND BUFFERS, STREAM BUFFER, 100-YEAR FLOODPLAIN, AND STEEP SLOPES EXIST ON THIS SITE, AS SHOWN ON PLANS.
 6. A USE-1 PERENNIAL STREAM EXIST OFF SITE TO THE NORTH. THE STREAM BUFFER AND FLOODPLAIN SHOWN ON SITE ARE ASSOCIATED WITH THIS STREAM.
 7. NO CRITICAL HABITATS OR RARE, THREATENED, OR ENDANGERED SPECIES ARE KNOWN TO EXIST ON THIS SITE ACCORDING TO THE MARYLAND DEPARTMENT OF ENVIRONMENT, APRIL 14, 2005.
 8. LANDSCAPE REQUIREMENTS WILL BE ADDRESSED WITH THE SUBSEQUENT SITE DEVELOPMENT PLANS ASSOCIATED WITH THIS PROJECT (SDP-07-104 AND SDP-07-113).
 9. THIS PROJECT COMPLIES WITH THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BY PROVIDING 0.45 ACRES OF ON-SITE REFORESTATION, 0.15 ACRES OF ON-SITE RETENTION, AND 4.69 ACRES OF OFF-SITE CONSERVATION. FOREST CONSERVATION SURETY WILL BE POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT AS FOLLOWS:

ON-SITE RETENTION:	\$1,306.80 (6,534 SF @ \$0.20/SF)
ON-SITE REFORESTATION:	\$9,801.00 (19,602 SF @ \$0.50/SF)
OFF-SITE REFORESTATION (HARLESS):	\$53,796.60 (107,593.2 SF @ \$0.50/SF)
OFF-SITE REFORESTATION (TALLEY):	\$48,351.60 (96,703.2 SF @ \$0.50/SF)
TOTAL SURETY POSTED:	\$113,256.00 (230,432.2 SF)

THE 0.70 ACRE FOREST CONSERVATION EASEMENT INCLUDES:
 0.15 ACRES RETENTION AREA
 0.10 ACRES FLOODPLAIN FOREST AREA
 0.45 ACRES REFORESTATION AREA

Course	Bearing	Distance
FC1	S 31°24'25" W	15.90'
FC2	N 89°18'44" W	51.01'
FC3	Rad: 61.00'	Arc: 41.24'
	Tan: 21.44'	CA: 38°44'16"
	Chd: N 39°45'44" W	40.46'
FC4	N 59°07'52" W	50.96'
FC5	N 45°31'47" W	164.18'
FC6	Rad: 81.00'	Arc: 99.72'
	Tan: 57.28'	CA: 70°32'05"
	Chd: N 80°47'50" W	93.54'
FC7	S 63°56'08" W	107.52'
FC8	N 53°20'05" W	44.41'
FC9	N 37°03'59" E	5.29'
FC10	N 76°59'50" E	65.77'
FC11	N 13°13'21" W	36.35'
FC12	N 36°56'28" E	10.75'
FC13	S 84°07'33" E	58.38'
FC14	N 36°56'28" E	64.15'
FC15	S 42°47'50" E	152.43'
FC16	N 52°23'28" E	50.00'
FC17	S 50°16'00" E	237.73'



NOTE
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APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
 [Signature] 2/1/08
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 2/4/08
 CHIEF, DIVISION OF LAND DEVELOPMENT

FINAL FOREST CONSERVATION PLAN & SOILS MAP
MISSION PLACE
 PARCELS A, B, & C
 W&S CONTRACT: 24-4402-D

6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

 Dewberry 203 PERRY PARKWAY, SUITE 1 GAITHERSBURG, MARYLAND 20877 PHONE: 301.948.8300 FAX: 301.258.7607	OWNER / DEVELOPER: MISSION ROAD INVESTORS, LLC c/o THE DOLBEN COMPANY, INC. 2600 MIDWAY BRANCH DR, 2nd FL ODENTON, MD 21113 CONTACT: MATTHEW BITAR PH: 301.912.3600 FX: 301.912.3400	Drawn by: KDM Designed by: KDM Checked by: JMC Zoned: CAC-CLI
	Section: NA Area: NA Phase: NA Scale: 1"=50'	Tax Map Grid & Parcel: MAP 43, GRID 14 PARCELS 214, 521, 446, 447 and 523

Sheet: **2 of 8**
 File number:

SOILS LEGEND
HOWARD COUNTY

NON-HYDRIC SOILS LIST

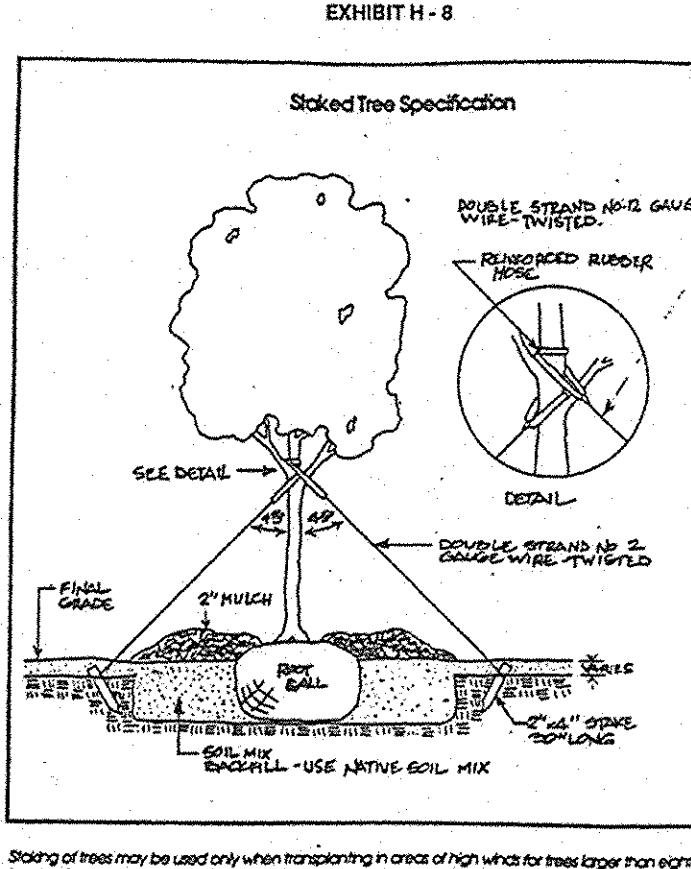
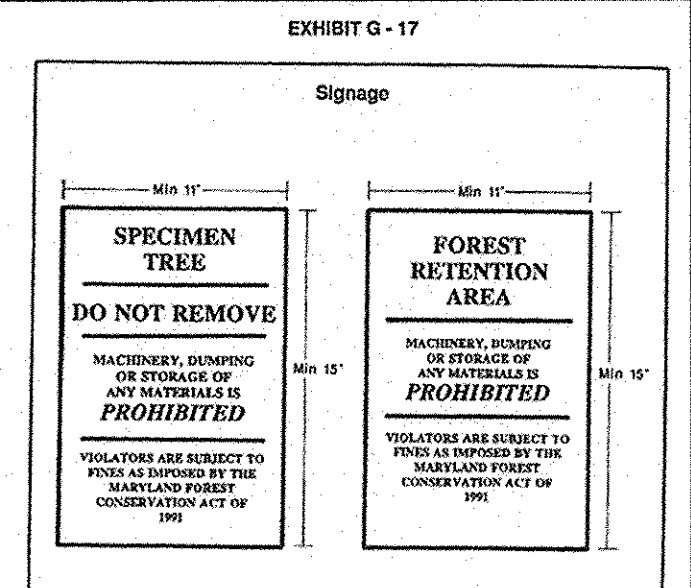
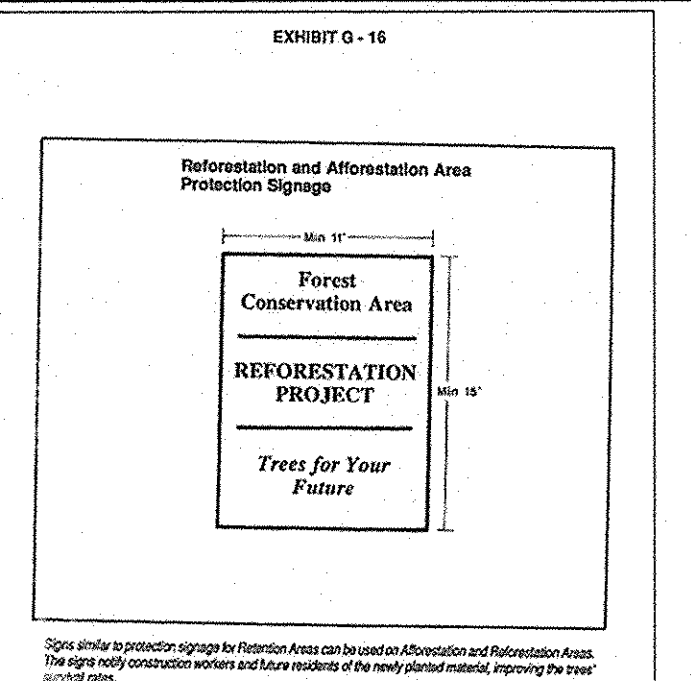
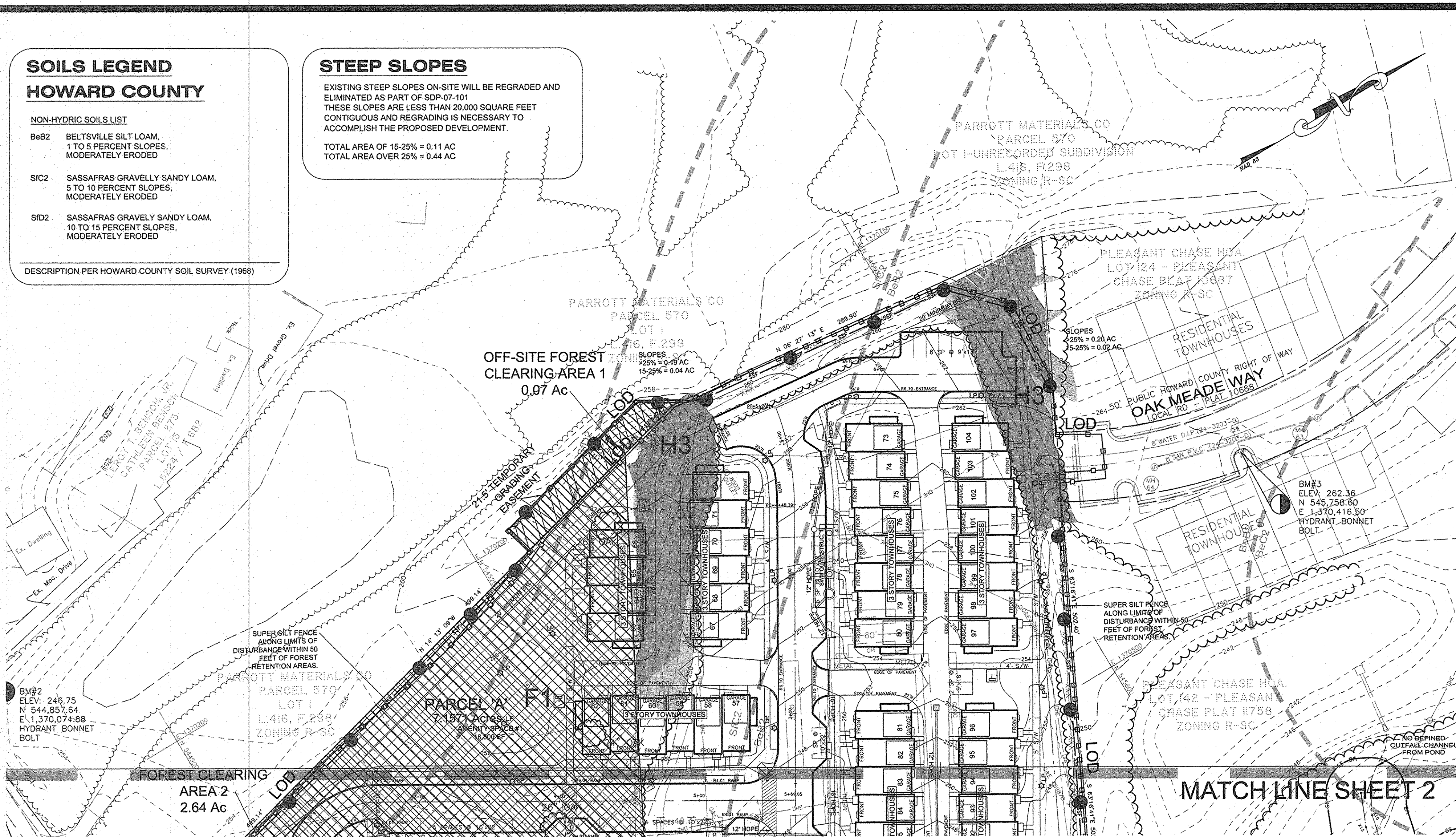
- BaB2 BELTSVILLE SILT LOAM,
1 TO 5 PERCENT SLOPES,
MODERATELY ERODED
- SiC2 SASSAFRAS GRAVELLY SANDY LOAM,
5 TO 10 PERCENT SLOPES,
MODERATELY ERODED
- SiD2 SASSAFRAS GRAVELLY SANDY LOAM,
10 TO 15 PERCENT SLOPES,
MODERATELY ERODED

DESCRIPTION PER HOWARD COUNTY SOIL SURVEY (1958)

STEEP SLOPES

EXISTING STEEP SLOPES ON-SITE WILL BE REGRADED AND ELIMINATED AS PART OF SDP-07-101 THESE SLOPES ARE LESS THAN 20,000 SQUARE FEET CONTIGUOUS AND REGRADEING IS NECESSARY TO ACCOMPLISH THE PROPOSED DEVELOPMENT.

TOTAL AREA OF 15-25% = 0.11 AC
TOTAL AREA OVER 25% = 0.44 AC



I. BASIC SITE DATA

Gross Site Area	16.63
Area Within 100 Year Floodplain	0.13
Area Within Agricultural Use or Preservation Parcel (If Applicable)	0.00
Temporary Off-site Disturbance	0.07
Net Tract Area	16.50
Land Use Category (R-RLD, R-RMD, R-S, C/I/O, I)	C-A-C/CLI

II. INFORMATION FOR CALCULATIONS

A. Net Tract Area (including 0.07 AC temp off-site clearing)	16.57
B. Reforestation Threshold (15% x A)	2.49
C. Afforestation Minimum (15% x A)	2.49
D. Existing Forest on Net Tract Area (including 0.07 AC temp off-site clearing)	4.32
E. Forest Areas to Be Cleared	4.17
F. Forest Areas to Be Retained	0.15
G. Forested Floodplain to Remain	0.10

III. DETERMINING REQUIREMENTS: AFFORESTATION OR REFORESTATION

1. REFORESTATION
If existing forest areas equal to or exceed the afforestation minimum (if D equals or is more than C), and clearing of forest areas is proposed reforestation requirements may apply.

If existing forests exceed the afforestation minimum (if D equals or is more than C), and no clearing of existing forest resources is proposed, no reforestation is required. No further calculations are needed.

IV. REFORESTATION CALCULATIONS

A. Net Tract Area	16.57
B. Reforestation Threshold (15% x A)	2.49
C. Existing Forest on Net Tract Area	4.32
D. Forest Areas to Be Cleared	4.17
E. Forest Areas to Be Retained	0.15
F. Forest Areas Cleared Above Reforestation Threshold (C - B, if E equals or is greater than B, Alternate 1) (C - B, if E is less than B, Alternate 2)	1.83
G. Forest Areas Cleared Below Reforestation Threshold (B - E, if applicable)	2.34
H. Forest Areas Retained Above Reforestation Threshold (E - B, Retained Credit, if applicable)	0.00

SELECT THE ALTERNATIVE THAT APPLIES:

2. CLEARING BELOW THE THRESHOLD
If forest areas to be retained are less than the reforestation threshold (if E is less than B), the following calculations apply:

Reforestation for clearing below threshold (G x 2)	4.68
Reforestation for clearing above threshold (F x 1/4)	0.46
Total Reforestation required (F x 1/4) + (G x 2)	5.14

Since clearing occurs below the threshold, no forest retention credit is possible.

LEGEND:

EXISTING	PROPOSED
8" SAN (676-5)	SANITARY SEWER
12" WATER (776-5)	WATER LINE, METER, VALVE & HYDRANT
24" STORM	STORM DRAIN
---	SITE BOUNDARY
---	LOT LINE
---	TREE LINE
---	FENCE
---	WETLANDS & BUFFER
---	STREAM BUFFER
---	100 YR FLOODPLAIN
---	BUILDING
---	POWER POLE
---	CURB
---	EDGE OF PAVEMENT
---	SIDEWALK
---	GAS LINE
---	OVERHEAD UTILITY
---	UNDERGR. TELE.
---	BENCH MARK & ELEV.
---	SOILS & TYPE
---	SPECIMEN TREE
---	USE-1 PERENNIAL STREAM

LEGEND:

---	STORM DRAIN
---	LOT LINE
---	TREE LINE
---	LIMITS OF DISTURB.
---	BUILDING
---	CURB
---	EDGE OF PAVEMENT
---	SIDEWALK
---	150 WATT POST-TYPE PRIVATE STREET LIGHT
---	150 WATT POST-TYPE PUBLIC STREET LIGHT
---	TREE PROTECTION SIGNAGE
---	FIRE HYDRANT

■	AREAS WITH 15-25% SLOPES
■	AREAS WITH 25% & GREATER SLOPES
F	FOREST
TURF	BUILDINGS, PARKING AND VEGETATION
H	HEDGE ROW
■	FOREST F-1; 2.64 AC UPLAND
■	FOREST F-2; 1.46 AC UPLAND
■	FOREST F-3; 0.14 AC UPLAND 0.10 AC FLOODPLAIN
■	FOREST TO BE REMOVED; 4.17 AC UPLAND
■	FOREST RETENTION; 0.14 AC UPLAND
■	FLOODPLAIN FOREST TO REMAIN; 0.10 AC
■	ON SITE FOREST CONSERVATION EASEMENT; 0.71 AC
■	ROUTE 1 DEDICATION; 0.6618 AC

GENERAL NOTES

- TOTAL GROSS AREA OF TRACT: 16.6255 AC
AREA OF OFF-SITE CLEARING: 0.0700 AC
AREA OF 100-YEAR FLOODPLAIN: 0.1350 AC
NET TRACT AREA: 16.5605 AC
- EXISTING ZONING: CAC-CL
- BOUNDARY FROM FROM SURVEY BY DEWBERRY & DAVIS, AUGUST 20, 2004.
- TOPOGRAPHY FROM SURVEY: DEWBERRY & DAVIS, JULY 7, 2004. CONTOUR INTERVAL 2 FEET.
- A PORTION OF 100-YEAR FLOODPLAIN EXISTS ON THE NORTHERN EDGE OF THIS SITE AS SHOWN ON RECORD PLAT 10689, PLEASANT CHASE, AND PLOTTED ON THE PLAN.
- THERE ARE WETLANDS AND WETLAND BUFFERS ON-SITE AS SHOWN BASED ON FIELD STUDY DONE BY MCCARTHY AND ASSOCIATES, JULY 2004 AND FEBRUARY 2006.
- THERE IS A 100 YEAR FLOODPLAIN AND STREAM BUFFER ON-SITE, AND A USE-1 PERENNIAL STREAM JUST OFF-SITE AS SHOWN BASED ON FIELD SURVEY BY DEWBERRY & DAVIS LLC JULY 2004.
- THE SUBJECT PROPERTY FALLS WITHIN THE DORSEY RUN SUB-WATERSHED (USE CLASS 1), PATAPSCO RIVER, LOWER BRANCH (#2130906).
- THERE ARE THREE FOREST STANDS ON THIS SITE TOTALING 4.34 ACRES; 4.24 ACRES IN UPLAND AND 0.10 ACRES IN FLOODPLAIN. SITE INVESTIGATIONS PERFORMED ON 3/21/05, BY DEWBERRY & DAVIS LLC.
- FIVE SPECIMEN CANDIDATE TREES WITH 30" + DBH MEASUREMENTS EXIST ON THE SUBJECT PROPERTY.
- NO HYDRIC SOILS EXIST ARE WITHIN THE SUBJECT PROPERTY ACCORDING TO THE HOWARD COUNTY SOIL SURVEY OF MARYLAND.
- PARCEL 525, TAX MAP 43, GRID 14 IS LISTED IN THE HOWARD COUNTY HISTORIC SITES INVENTORY AS HO-827. PURSUANT TO PLAN REVIEW BY THE HISTORIC DISTRICT COMMISSION ON MAY 03, 2007, THE EXISTING LOG CABIN BUILDING ON THE SITE WILL BE DEMOLISHED.
- NO CEMETARIES EXIST ON-SITE.

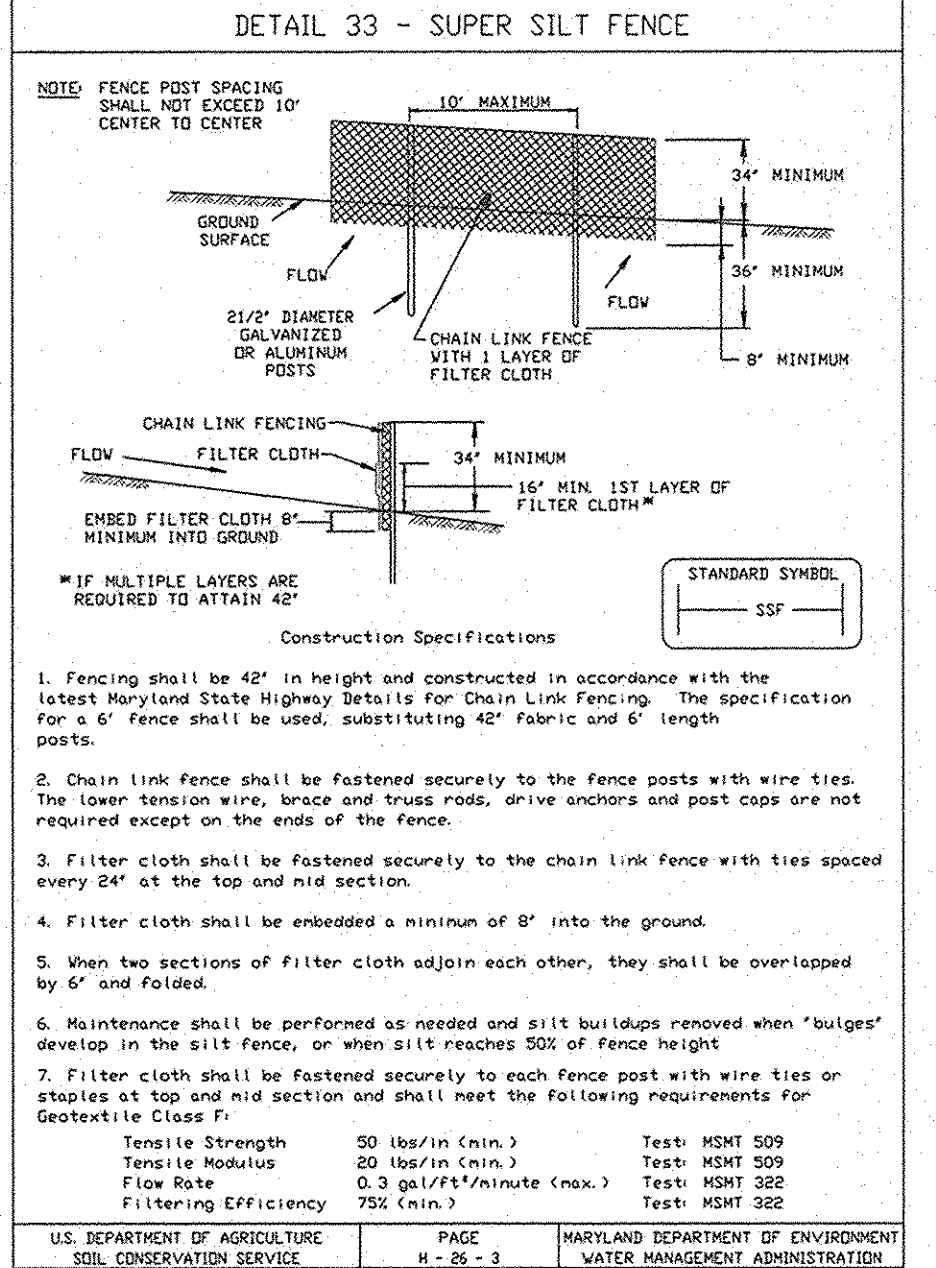
SPECIMEN TREE IDENTIFICATION LIST

BOTANICAL NAME/ COMMON NAME	TRUNK Ø (d.b.h.)	TREE HEIGHT	TREE CANOPY	TREE CONDITION	TO BE RETAINED
1. Quercus alba WHITE OAK	34"	60-70'	40'	GOOD	NO
2. Quercus alba WHITE OAK	36"	60-70'	40'	GOOD	NO
3. Quercus rubra NORTHERN RED OAK	40"	65-75'	40-50'	FAIR	NO
4. Morus alba WHITE MULBERRY	31"	60-70'	25-35'	POOR	NO
5. Quercus velutina BLACK OAK	30"	90-100'	40-60'	POOR	NO

TOTAL REFORESTATION REQUIRED: 5.14 Ac.
PROPOSED REFORESTATION ON-SITE: 0.45 Ac.
PROPOSED REFORESTATION OFF-SITE: 4.69 Ac.



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APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
 [Signature] 2/1/08
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
 [Signature] 2/4/08
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

FINAL FOREST CONSERVATION PLAN & SOILS MAP
MISSION PLACE
PARCELS A, B, & C
W&S CONTRACT: 24-4402-D

6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

Dewberry
203 PERRY PARKWAY, SUITE 1
GATHERSBURG, MARYLAND 20877
PHONE: 301.948.8300
FAX: 301.258.7507

OWNER / DEVELOPER:
MISSION ROAD INVESTORS, LLC
c/o THE DOLBEN COMPANY, INC.
2600 MIDWAY BRANCH DR, 2ND FL
ODONTON, MD 21113
CONTACT: MATTHEW BITAR
PH: 301.912.3600
FX: 301.912.3400

Drawn by: KDM
Designed by: KDM
Checked by: JMC
Zone: CAC-CLI

Section: NA Area: NA Phase: NA Scale: 1"=50'
Tax Map Grid & Parcel: MAP 43, GRID 14 PARCELS 214, 521, 446, 447 and 523 Date: JAN 2008
Prior Submittals: ZB 1048M SDP-07-101 WP-06-096 SP-06-18 SDP-07-104 AA-06-016 HO-827 SDP-07-113

Sheet: 3 of 8
File number:

FOREST STAND DELINEATION

Three distinct forest stands were identified along with turf areas and hedgerows located within the subject property as follows:

Forest Stand F-1: This stand is approximately 2.64 acres of mid-age mixed hardwood forest with some variation in species composition along the stand fringe. The main characteristic of this upland forest stand is the size of the dominant species. Among these species are tulip poplar (*Liriodendron tulipifera*), American beech (*Fagus grandifolia*) and oak species (*Quercus spp.*), with a size range between 6" and 20" d.b.h. The understory is a mixture of mostly beech, green ash (*Fraxinus pennsylvanica*), red maple (*Acer rubrum*), hickory (*Carya sp.*), greenbrier (*Smilax sp.*), sweet gum (*Liquidambar styraciflua*) and various oak species. There are few understory species in this stand. The canopy closure is approximately 99%. Herbaceous species were not observed (snow time) apart from the edge of the forest. The preservation priority is high because a wetland of approximately 5,117 square feet is associated with this forest.

Forest Stand F-2: This upland forest stand occurs on approximately 1.46 acres of the Subject Property with some variation in species composition along the stand's fringe. The canopy comprises white oak (*Quercus alba*), red maple, sweet gum, and green ash. Canopy closure is approximately 75%. This forest stand is in an early seral successional level of hardwood development. Due to this stand's stage of development, most of the size classes of dominant species are in the range of 6" to 20" d.b.h. The understory comprises a mixture of black cherry (*Prunus serotina*), green ash, beech, scrub pine (*Pinus virginiana*) and eastern red cedar (*Juniperus virginiana*). The coverage within the understory is 60%. Among herbaceous species are Japanese honeysuckle (*Lonicera japonica*), brambles (*Rubus sp.*), Asiatic bittersweet (*Celastrus orbiculatus*), winterberry (*Ilex verticillata*), poison ivy (*Rhus radicans*), and other grasses. No wetland areas have been identified within this forest stand. The preservation priority is high.

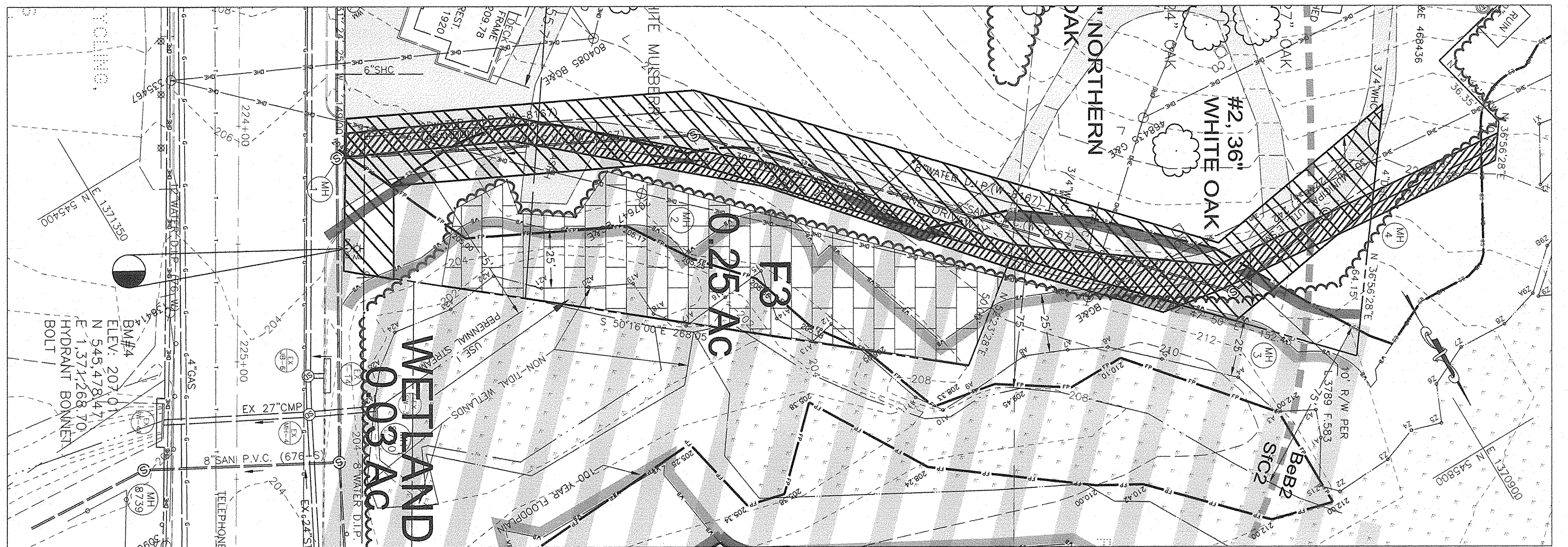
Forest Stand F-3: This forest stand occurs on approximately 0.25 acres of the subject property and is a continuation of a larger forest stand on the north. The canopy composition is a mixture of red maple, tulip poplar, and oak. The understory is very dense with some hardwood saplings but mostly with invasive species such as multiflora rose (*Rosa multiflora*), greenbrier, honeysuckle, English ivy (*Hedera helix*), common onion grass (*Allium vineale*), and poison ivy. This stand is contiguous to a stream and contains approximately 1,282 square feet of wetlands and 5,877 square feet of 100-year flood plain, which makes it high priority for preservation. There is a significant amount of trash and debris along the stream bank.

Building Area -1: Building Area 1 comprises of 3.23 acres of land; ninety seven (97%) percent of it is covered by buildings and gravel parking. Although there are small green areas along the perimeter, there are no trees or shrubs within the area.

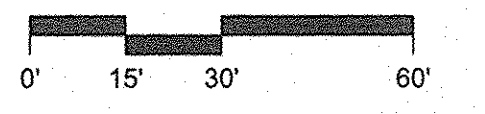
Building Area -2: Building Area 2 is totally covered by buildings and asphalt parking. There are no trees or any vegetation.

TURF-1: Turf 1 is comprised of the majority of Parcels 525, 446 and 447; it contains several houses, access driveways and a couple of wood sheds. The topography slopes down west to east. Four specimen trees were identified on this lot; a 31" white mulberry (*Morus alba*), two white oaks 34" and 36", and a 40" northern red oak (*Quercus borealis*). No environmentally sensitive areas are associated with TURF-1.

Hedgerow H-1: This upland tree row is a mix of trees, shrubs, and herbaceous species typical of middle succession growth on unused areas. The canopy comprises three sycamores (*Platanus occidentalis*), one tulip poplar, red maple, and white oak. The understory is made of green ash, various oak species, scrub pine, and red maple. Among the herbaceous species are greenbrier, bramble, honeysuckle, multiflora rose, winter berry, and poison ivy. No environmentally sensitive areas are associated with H-1.



DETAIL OF ENVIRONMENTAL BUFFER
1"=30'



FOREST STAND F1 ANALYSIS											
KEY	TYPE OF COMMUNITY	AREA	SOIL INFORMATION			HABITAT VALUE	EXISTING VEGETATION dominant sp. & %	STAND CHARACTERISTICS			FOREST AREA IN SENSITIVE ENVIRONMENTS
			SOIL TYPE	TYPICAL FOREST COVER FOR SOIL	WOODLAND SUITABILITY			SIZE DIAM.	AGE	GENERAL CONDITION	
F-1	upland hardwood	2.64	SfD2	PINE	75-84	not a critical habitat	dominant and co-dominant sp. beeches, poplar, red maple, green ash, various oak.	6"-20"	5 to 15	closed canopy good condition	0
			SfC2	PINE	75-84		dominant species beeches, poplar, red maple, green ash, various oak, beach pine,	6"-20"	5 to 15	closed canopy	0
FOREST STAND F2 ANALYSIS											
KEY	TYPE OF COMMUNITY	AREA	SOIL INFORMATION			HABITAT VALUE	EXISTING VEGETATION dominant sp. & %	STAND CHARACTERISTICS			FOREST AREA IN SENSITIVE ENVIRONMENTS
			SOIL TYPE	TYPICAL FOREST COVER FOR SOIL	WOODLAND SUITABILITY			SIZE DIAM.	AGE	GENERAL CONDITION	
F-2	upland hardwood	1.46	SfC2	PINE	75-84	not a critical habitat	dominant and co-dominant sp. beeches, poplar, red maple, green ash, various oak.	6"-20"	5 to 15	closed canopy good condition	0
			BeB2	PINE and OAK	65-74		beach pine	6"-20"	5 to 10	closed canopy	0
FOREST STAND F3 ANALYSIS											
KEY	TYPE OF COMMUNITY	AREA	SOIL INFORMATION			HABITAT VALUE	EXISTING VEGETATION dominant sp. & %	STAND CHARACTERISTICS			FOREST AREA IN SENSITIVE ENVIRONMENTS
			SOIL TYPE	TYPICAL FOREST COVER FOR SOIL	WOODLAND SUITABILITY			SIZE DIAM.	AGE	GENERAL CONDITION	
F-3	lowland hardwood	0.25	SfC2	PINE	75-84	high	dominant and co-dominant sp. poplar, red maple, various oak.	6"-20"	15 to 30	closed canopy fair condition heavy dumping and trash on ground level; invasive groundcover	0.25 ac.

DETAIL LEGEND:

- EX. DRIVEWAY
- EX. INGRESS/EGRESS EASEMENT
- EX. 30' SANITARY EASEMENT
- 25' WETLANDS BUFFER
- 75' STREAM BUFFER

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

William Demmons 2/1/08
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Cindy Hester 2/4/08
CHIEF, DIVISION OF LAND DEVELOPMENT DATE



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FINAL FOREST CONSERVATION DETAILS & SOILS MAP
MISSION PLACE
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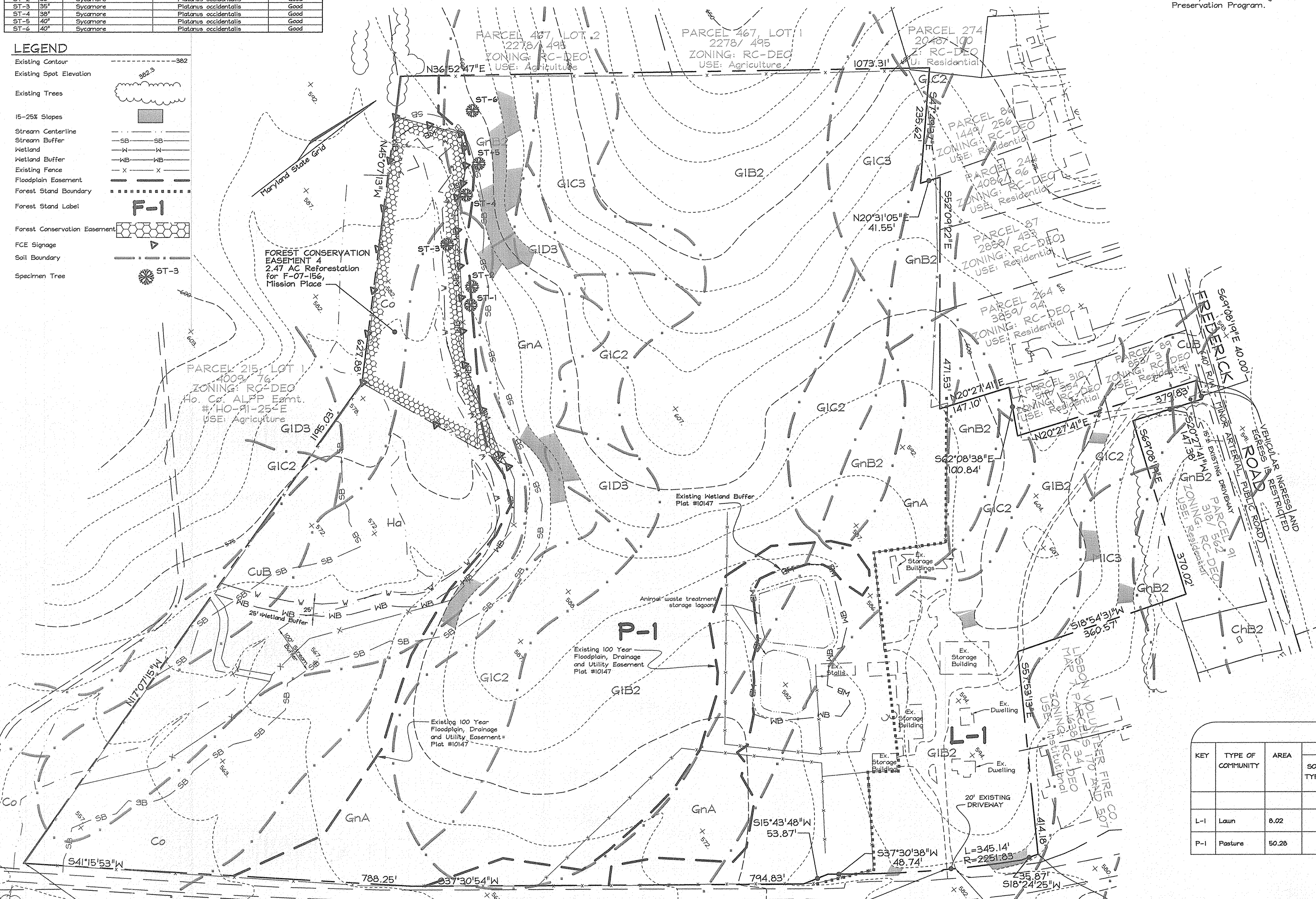
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

	OWNER / DEVELOPER: MISSION ROAD INVESTORS, LLC c/o THE DOLBEN COMPANY, INC. 2600 MIDWAY BRANCH DR, 2nd FL ODENTON, MD 21113 CONTACT: MATTHEW BITAR PH: 301.912.3600 FAX: 301.912.3400	Drawn by: KDM Designed by: KDM Checked by: JMC Zone: CAC-CLI
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Tax Map Grid & Parcel: MAP 43, GRID 14 PARCELS 214, 521, 446, 447 and 525	Date: JAN 2008	Prior Submittals: ZB 1048M SDP-07-101 WP-06-096 SP-06-18 SDR-07-104 AA-06-016 HO-827 SDP-07-113

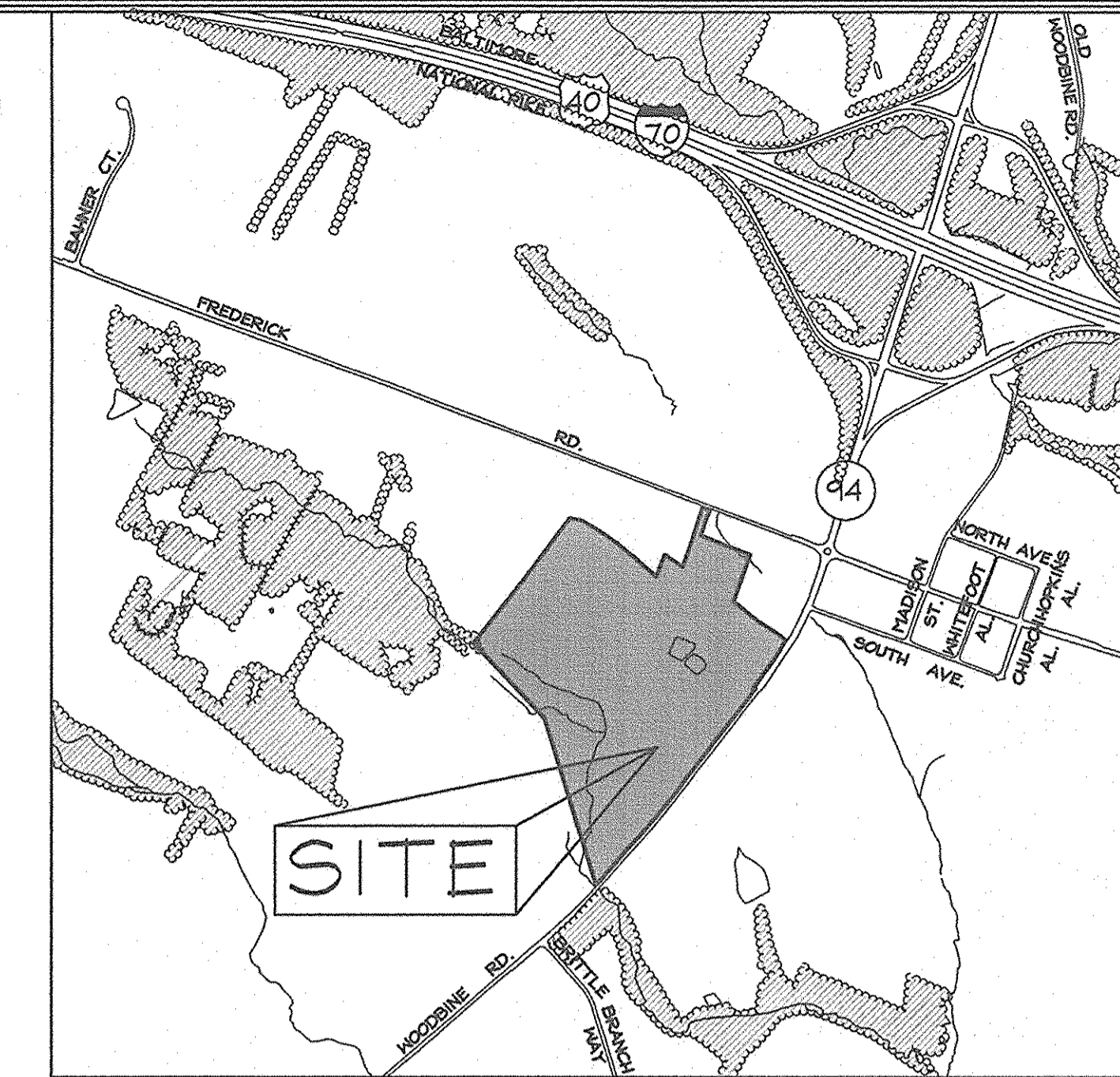
NO.	DBH	COMMON NAME	SCIENTIFIC NAME	CONDITION
ST-1	32"	Sycamore	Platanus occidentalis	Good
ST-2	36"	Sycamore	Platanus occidentalis	Good
ST-3	35"	Sycamore	Platanus occidentalis	Good
ST-4	38"	Sycamore	Platanus occidentalis	Good
ST-5	42"	Sycamore	Platanus occidentalis	Good
ST-6	40"	Sycamore	Platanus occidentalis	Good

LEGEND

- Existing Contour
- Existing Spot Elevation
- Existing Trees
- 15-25% Slopes
- Stream Centerline
- Stream Buffer
- Wetland
- Wetland Buffer
- Existing Fence
- Floodplain Easement
- Forest Stand Boundary
- Forest Stand Label
- Forest Conservation Easement
- FCE Signage
- Soil Boundary
- Specimen Tree



This property is encumbered with a Ho. Co. Agricultural Land Preservation Easement, HO-91-24-E, which is held by the Ho. Co. Agricultural Land Preservation Program.



GENERAL NOTES

- Per a search on the MERLIN website on October 11, 2007, the subject property contains no steep slopes greater than 25%, no rare, threatened or endangered species or critical habitats for rare, threatened or endangered species, no historic structures or other historic resources (including trees and cemeteries).
- No power lines were surveyed at this time because none are located near planting area.
- Floodplain area per plat #10147 = 15.54 Ac.
- This plan is associated with plat F-08-025.

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	SOIL GROUP	K VALUE
Co	Codorus silt loam	C	0.49
CuB	Cornus silt loam, local alluvium, 3 to 8 percent slopes	B	0.43
GIB2	Glenela loam, 3 to 8 percent slopes, moderately eroded	B	0.32
GIC2	Glenela loam, 8 to 15 percent slopes, moderately eroded	B	0.32
GIC3	Glenela loam, 8 to 15 percent slopes, severely eroded	B	0.32
GID3	Glenela loam, 15 to 25 percent slopes, severely eroded	B	0.32
GnA	Glenville silt loam, 0 to 3 percent slopes	C	0.32
GnB2	Glenville silt loam, 3 to 8 percent slopes, moderately eroded	C	0.32
Ha	Halboro silt loam	D	0.32
MIC3	Milnor loam, 8 to 15 percent slopes, severely eroded	B	0.32

* Hydric Soils

Forest Stand Delineation Narrative

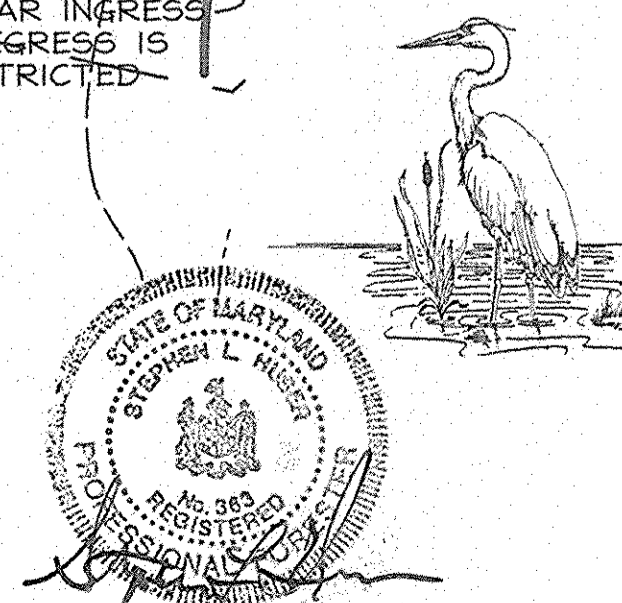
This Forest Stand Delineation was prepared in accordance with the Howard County Forest Conservation Manual. L1 and P1 The Pasture and Lawn areas contain scattered trees and shrubs along the existing stream and around the existing house sites. The pasture is actively used for cattle grazing. An easement is being created along the existing stream. There are minor areas of 15-25% slopes on the site as indicated on the plan.

FOREST STAND ANALYSIS TABLE

KEY	TYPE OF COMMUNITY	AREA	SOIL INFORMATION			EXISTING VEGETATION (Type and approx. %)	STAND CHARACTERISTICS			FOREST AREA IN SENSITIVE ENVIRONMENTS
			SOIL TYPE	TYPICAL FOREST COVER	WOODLAND SUITABILITY INDEX		HABITAT VALUE	SIZE AVG. DIAM	AGE	
NO ON-SITE FOREST RESOURCES EXIST										
L-1	Lawn	6.02								
P-1	Pasture	50.28								

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
[Signature] 2/1/08
 CHIEF, DEVELOPMENT ENGINEERING DIVISION, DATE
[Signature] 2/4/08
 CHIEF, DIVISION OF LAND DEVELOPMENT, DATE

M:\Hoffes 3336\dwg\Forest_Bank_Mission\PI3336_01_Mission.dwg, 1/22/2008 4:30:41 PM, shamos, 1.1



EXPLORATION RESEARCH, INC.
 ENVIRONMENTAL CONSULTANTS
 LANDSCAPE ARCHITECTS
 650 HOWARD LANE
 ELKIDGE, MARYLAND 21075
 TEL: (410) 667-0810 FAX: (410) 798-1688

OWNER
 Harless Farm Trust
 14965 Frederick Road
 Woodbine, MD 21797

OFFSITE FOREST MITIGATION PLAN
for MISSION PLACE
PARCELS A, B, & C
 on E. ALEXANDER ADAMS AND MARION HARLESS PROPERTY
 TAX MAP 7 GRID II & 17 PARCEL 215
 4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

FSH Associates
 Engineers Planners Surveyors
 6339 Howard Lane, Elkridge, MD 21075
 Tel: 410-567-5200 Fax: 410-796-1662
 E-mail: info@fshri.com

DESIGN BY: RAB/SHM
 DRAWN BY: SHM
 CHECKED BY: RAB/SLH
 SCALE: 1" = 100'
 DATE: Jan. 23, 2007
 W.O. No.: 2442
 SHEET No.: 5 OF 8

Easement 4: PLANTING AREA: 2.47 Ac.

Qty	Botanical Name	Common Name	Size	Credit/Plant	Total Credit
70	Acer negundo	Box Elder	1" Cal.	217.8	15,246
70	Betula nigra	River Birch	1" Cal.	217.8	15,246
70	Liquidambar styraciflua	Sweetgum	1" Cal.	217.8	15,246
71	Magnolia virginiana	Sweetbay	1" Cal.	217.8	15,463.80
71	Platanus occidentalis	Sycamore	1" Cal.	217.8	15,463.80
71	Quercus bicolor	Suamp White Oak	1" Cal.	217.8	15,463.80
71	Salix nigra	Black Willow	1" Cal.	217.8	15,463.80

494 Total Plantings 107,593.20 s.f. = 2.47 Ac.

FOREST CONSERVATION EASEMENT TABLE

EASEMENT	TYPE	AREA (ACRES)
4	Reforestation	2.47
TOTAL		2.47

Planting Areas Description

The proposed planting area totalling 2.47 Ac. is proposed entirely within stream buffer, wetland, and wetland buffer areas. The current land use is pasture, making it an ideal area to plant and provide a forested stream buffer.

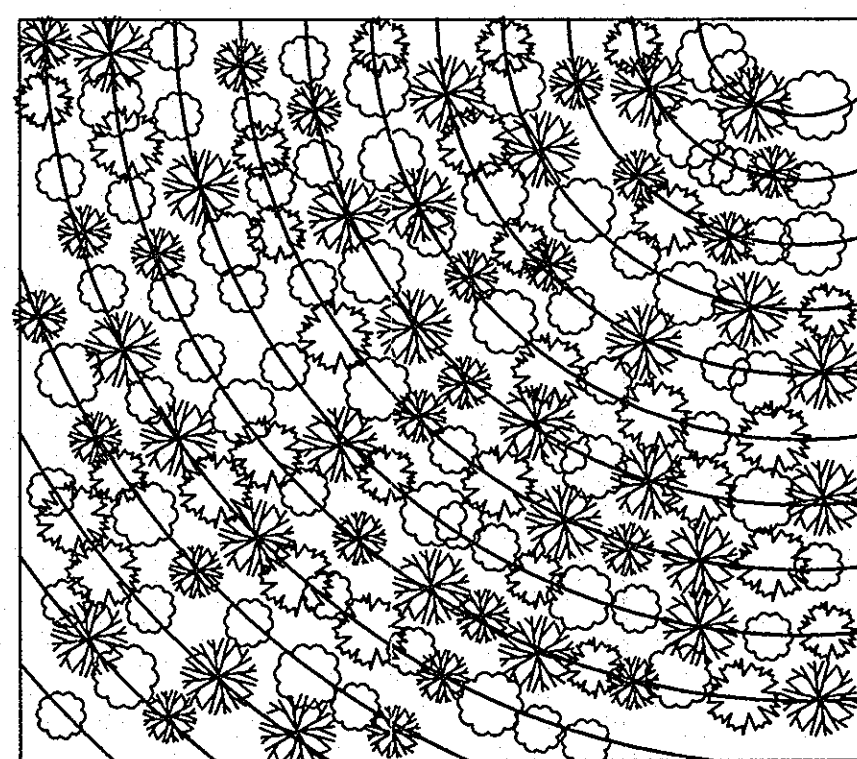
Planting will utilize a variety of species as shown in the proposed planting schedule. Stock will be randomly placed per the details on this sheet. All container grown whips will utilize tree shelters.

Plant Selection and Density Spacing Requirements.

Planting Material Size and Density Planting:
Planting size and density shall be varied with a combination of planting stock. Planting quantity and spacing are based on square footage credit, which varies by material size. A total of 45,560 sq. ft. of planting credit must be fulfilled for each acre planted. This credit can be fulfilled with any combination of material size in accordance with the following chart.

Material Size	Spacing	TPA	Sq. Ft. Credit Per Plant	Comments
2" caliper trees	20' x 20'	100	435.6	B & B
1" caliper trees	15' x 15'	200	217.8	B & B/Container
seedlings or whips	11' x 11'	350	125	Container 1-3 gal w/tree shelters
seedlings or shrubs	8' x 8'	700	62	Bare root

CURVILINEAR RANDOMIZED PLANTING



PLANT PLACEMENT DETAIL NOT TO SCALE

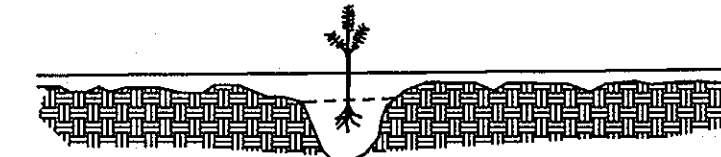
- MIX TREE AND SHRUB SPECIES IN THE STAGING AREA.
- SET THE GUIDE CURVILINEAR LINE AS CLOSE TO CONTOUR AS POSSIBLE.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 2/1/08
CHIEF, DEVELOPMENT ENGINEERING DIVISION & DATE

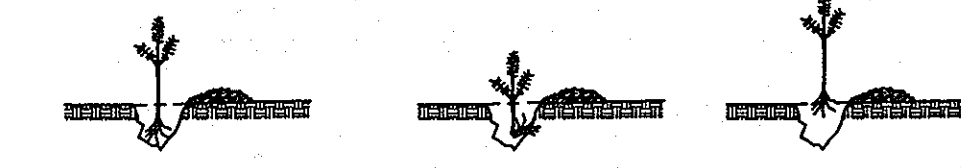
[Signature] 2/4/08
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

SEEDLING AND WHIP PLANTING

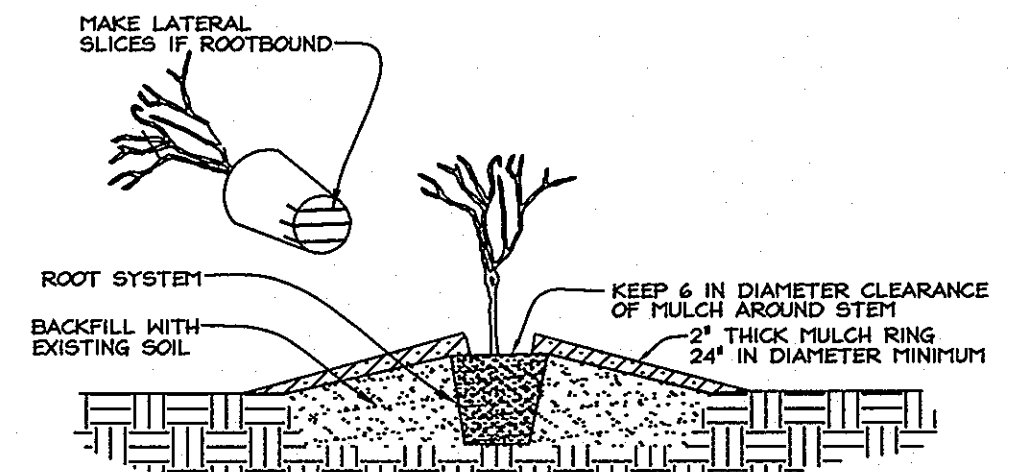


NOTE: MULCHING NEWLY PLANTED SEEDLINGS HELPS THE SOIL RETAIN MOISTURE AND THE SEEDLING FROM COMPACTION AND STEM INJURIES.

CORRECT PLANTING DEPTH

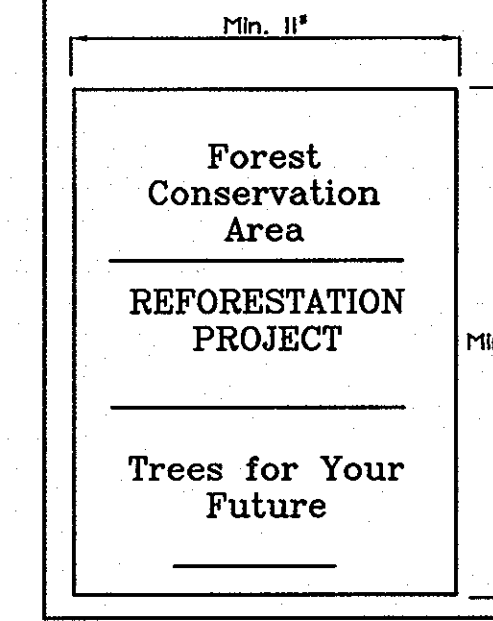


CORRECT AT SAME DEPTH AS SEEDLING WAS GROWN IN NURSERY
INCORRECT TOO DEEP AND ROOT IS BENT
INCORRECT TOO SHALLOW AND ROOTS ARE EXPOSED



- CONTAINER PLANTING NOT TO SCALE
- PLANTING PROCEDURE FOR CONTAINER GROWN PLANTS
- REMOVE THE PLANT EITHER BY CUTTING OR INVERTING THE CONTAINER
 - USE A KNIFE TO CUT THROUGH BOTTOM HALF OF THE ROOT BALL
 - PLANT SHRUBS ON FORCED UP POUNDS 4" ABOVE THE EXISTING GRADE WHEN HIGH WATER TABLE CONDITIONS EXIST, OTHERWISE PLANT FLUSH WITH EXISTING GRADE.
 - PLANTING HOLE TO BE 2-3 TIMES THE DIAMETER OF THE CONTAINER.
 - INSERT FERTILIZER TABLET, BACKFILL 2/3 OF THE ROOT BALL AND WATER.
 - AFTER WATER PERCOLATES, BACKFILL HOLE TO TOP OF ROOT BALL AND GENTLY TAMP SOIL TO FIRM CONTACT WITH PLANT.
 - APPLY MULCH RING AROUND PLANT KEEPING A 6" IN CLEARANCE FROM STEM.

Reforestation and Afforestation Area Protection Signage



SIGN DETAIL: PERMANENT SIGN

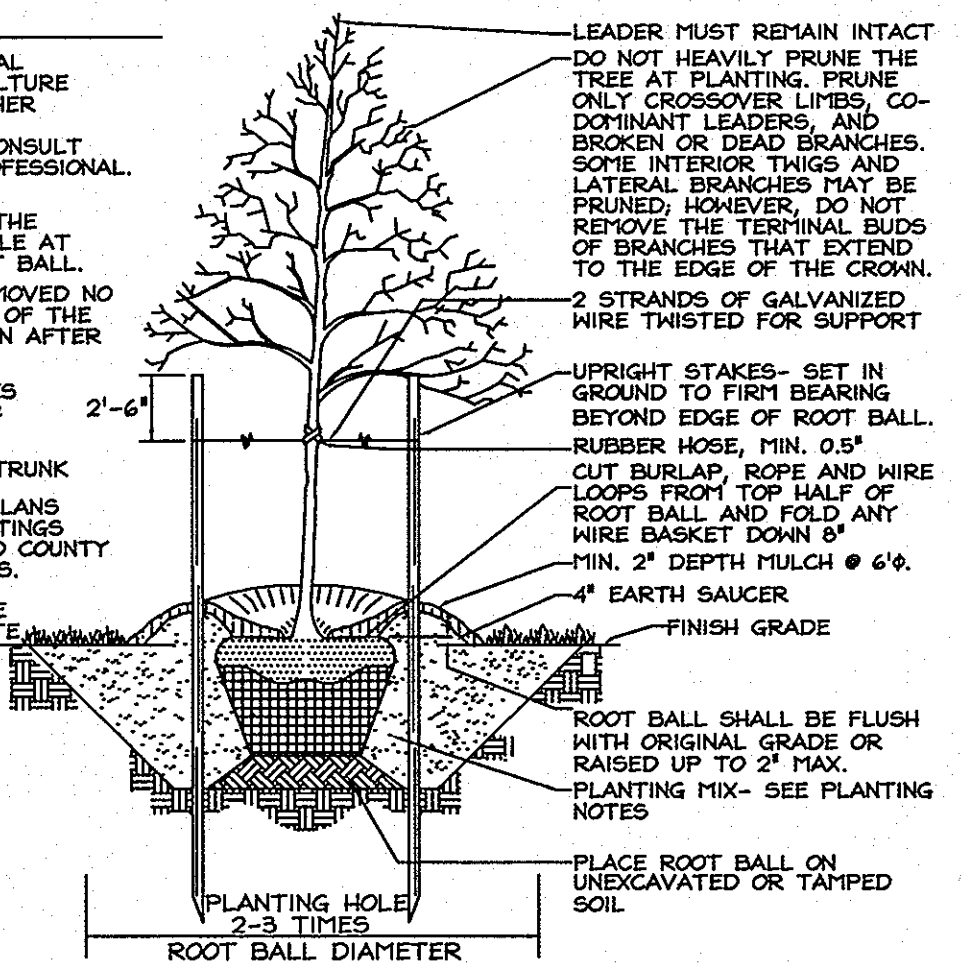
SIGNAGE NOTE: All tree protection signs shall be placed on metal 1" posts or pressure treated wood poles. No attachment of signs to trees is permitted. Signs shall be placed every 75' to 100' as shown on plan view. Signage shall remain in place in perpetuity.

Reforestation Area Planting Notes

- Initial planting inspection and certification required. Planting contractor to notify ER qualified professional 24 hours in advance of planting.
- Reforestation areas may be planted as soon as reasonable to do so. Late winter- early spring plantings are preferred. Earliest planting dates will vary from year to year but planting may generally begin as soon as the ground is no longer frozen. Alternate planting dates may be considered as conditions warrants.
- Soil amendments and fertilization recommendations will be made based upon the results of soil analysis for nitrogen, phosphorus, potassium, organic matter content and pH. If required, fertilizer will be provided using a slow release, soluble 16-8-16 analysis designed to last 5-8 years contained in polyethylene perforated bags such as manufactured by ADCO Works, P.O. Box 310 Hollins, N.Y. 14223 or approved equal.
- Plant materials shall be planted in accordance with the planting diagram, planting details and planting schedule.
- Plant stock must be protected from desiccation at all times prior to planting. Materials held for planting shall be moistened and placed in cool shaded areas until ready for placement.
- Planting materials shall be nursery grown and inspected prior to planting. Plants not conforming to the American Standards for Nursery Stock specifications for size, form, vigor, or roots, or due to trunk wounds, breakage, desiccation, insect or disease must be replaced.
- Newly planted trees may require watering at least once per week during the first growing season depending on rainfall in order to get established. The initial planting operation should allow for watering during installation to completely soak backfill materials.
- Mulch shall be applied in accordance with the diagram provided and shall consist of composted, shredded hardwood bark mulch, free of wood alcohol.
- Planting holes should be excavated to a minimum diameter of 2.5 to 3 times the diameter of the root ball or container. Mechanical auguring is preferred with scarification of the sides of each hole.
- All nursery stock may be sprayed with deer repellent containing Bitrex such as Repellex(TM). All nursery stock to be grown with deer repellent tablets in growing medium, such as Repellex Tablets.

NOTES

- CONSULT INTERNATIONAL SOCIETY OF ARBORICULTURE GUIDELINES FOR FURTHER DETAILS OF PLANTING SPECIFICATIONS, OR CONSULT WITH A QUALIFIED PROFESSIONAL.
- EACH TREE SHALL BE PLANTED SUCH THAT THE TRUNK FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL.
- STAKES SHALL BE REMOVED NO LATER THAN THE END OF THE FIRST GROWING SEASON AFTER PLANTING.
- PLACE UPRIGHT STAKES PARALLEL TO WALKS & BUILDINGS.
- KEEP MULCH 1" FROM TRUNK
- SEE ARCHITECTURAL PLANS FOR ADDITIONAL PLANTING WHICH EXCEED HOWARD COUNTY MINIMUM REQUIREMENTS.
- TREES ARE NOT TO BE PLANTED OVER PRIVATE SEWAGE EASEMENT.



TYPICAL TREE PLANTING AND STAKING DECIDUOUS TREES UP TO 2-1/2" CALIPER NOT TO SCALE

POST-CONSTRUCTION MANAGEMENT PROGRAM

Reforestation Area Monitoring Notes

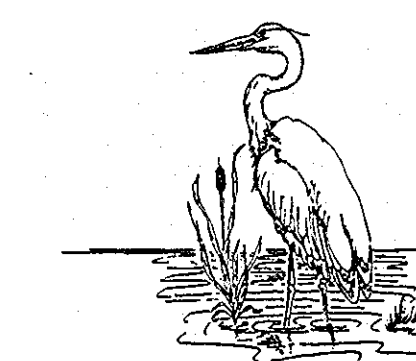
- Monthly visits during the first growing season are to assess the success of the plantings and to determine if supplemental watering, pest control, invasive plant management, mowing or other actions are necessary. Early spring visits will document winter kill and autumn visits will document summer kill.
- The minimum survival rate shall be 75% of the total number of trees planted per acre at the end of the two year maintenance period. Wild tree seedlings from natural regeneration on the planting site may be counted up to 50% toward the total survival number if they are healthy native species at least 12 inches tall.
- Survival will be determined by a stratified random sample of the plantings. The species composition of the sample population should be proportionate to the amount of each species in the entire planting to be sampled.
- Effective monitoring will assess plant survivability during the first growing season and make recommendations for reinforcement planting if required at that time.

Forest Tree Protection and Management Notes

- Any significant changes made to the Forest Conservation Plan shall be made with the prior approval if the Howard County Dept. Of Planning and Zoning.
- Forest protection and management to be in accordance with a forest management plan. The plan shall be prepared by a MD. licensed forester to facilitate the landowners management objectives, such as wildlife enhancement, water quality, aesthetics, forest products, etc.
- Future forest harvests may be conducted under a Howard County approved forest harvest plan, prepared by a MD. licensed forester.



EXPLORATION RESEARCH, INC.
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS
6539 HOWARD LANE
GREENBELT, MARYLAND 21076
TEL: (410) 567-5200 FAX: (410) 796-1582



Surety in the amount of \$53,796.60 shall be posted as part of the Developer's Agreement for Mission Place, F-07-156, for 2.47 ac/107,593 sq. ft.

OWNER
Harless Farm Trust
14965 Frederick Road
Woodbine, MD 21797

OFFSITE FOREST MITIGATION PLAN for MISSION PLACE PARCELS A, B, & C on E. ALEXANDER ADAMS AND MARION HARLESS PROPERTY

TAX MAP 7 GRID II # 17 PARCEL 215
4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

FSH Associates
Engineers Planners Surveyors
6339 Howard Lane, Elkridge, MD 21076
Tel: 410-567-5200 Fax: 410-796-1582
E-mail: info@fsher.com

DESIGN BY: RAB/SMH
DRAWN BY: SMH
CHECKED BY: RAB/SLH
SCALE: As Shown
DATE: Jan. 23, 2008
H.O. No.: 2442
SHEET No.: 6 OF 8

GENERAL NOTES

1. Per a search on the MERLIN website on November 15, 2007, the subject property contains no rare, threatened or endangered species or critical habitats for rare, threatened or endangered species, no historic structures or other historic resources (including trees and cemeteries).
2. No power lines were surveyed at this time because none are located near the proposed planting area.
3. There is no FEMA Floodplain on-site.
4. Area of steep slopes 25% and greater = 0.23 Ac.

See Sheet 8 of 8 for
Vicinity Map



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Howard County Seal

2/1/08
DATE

2/1/08
DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION

CHIEF, DIVISION OF LAND DEVELOPMENT

SYMBOL	NAME / DESCRIPTION	SOIL GROUP	K VALUE
ChB2	Chester silt loam, 3 to 8 percent slopes, moderately eroded	B	0.32
Co	Codorus silt loam	B	0.44
CuB	Cornus silt loam, local alluvium, 3 to 8 percent slopes	B	0.43
GIB2	Glenela loam, 3 to 8 percent slopes, moderately eroded	B	0.32
GIC2	Glenela loam, 8 to 15 percent slopes, moderately eroded	B	0.32
GIC3	Glenela loam, 8 to 15 percent slopes, severely eroded	B	0.32
GID2	Glenela loam, 15 to 25 percent slopes, moderately eroded	B	0.32
GID3	Glenela loam, 15 to 25 percent slopes, severely eroded	B	0.32
GnA	Glenville silt loam, 0 to 3 percent slopes	C	0.32
GnB2	Glenville silt loam, 3 to 8 percent slopes, moderately eroded	C	0.32
Ha	Hatboro silt loam	D	0.32
MIB2	Manor loam, 3 to 8 percent slopes, moderately eroded	B	0.37
MIC2	Manor loam, 8 to 15 percent slopes, moderately eroded	B	0.37
MIC3	Manor loam, 8 to 15 percent slopes, severely eroded	B	0.32
MID2	Manor loam, 15 to 25 percent slopes, moderately eroded	B	0.37
MID3	Manor loam, 15 to 25 percent slopes, severely eroded	B	0.37
MtE	Mt. Airy channery loam, 25 to 45 percent slopes	A	0.28

* Hydric Soils

LEGEND

Forest Easement Signage	Proposed	Existing	Existing Contour 5	Existing Contour 25	Property Boundary Line	Soils Division Line	Forest Stand Type Boundary	Existing Stream	Stream Buffer	Wetlands	25' Wetlands Buffer
Existing Forest Conservation Easement											
Steep Slopes 15-24.9%											
Steep Slopes >25%											

This property is encumbered with a Ho. Co. Agricultural Land Preservation Easement, HO-03-02-PPSD, which is held by the Ho. Co. Agricultural Land Preservation Program.

Surety in the amount of \$48,351.60 shall be posted as part of the Developer's Agreement for 2.22 ac/94,703.20 sq. ft.

OWNER
Talley Family LLP
1525 Daisy Road
Woodbine, MD 21797
410-442-2300

FSH Associates
Engineers Planners Surveyors
6339 Howard Lane
Elkridge, MD 21075
Tel: 410-567-5200 Fax: 410-798-1562

OFFSITE FOREST MITIGATION PLAN for MISSION PLACE (PARCELS A, B, & C)

on Talley Property Parcel 2

RE-03-02 DS2, P.N. 15816, F-04-054 FC, P.N. 17192 & RE-03-02 DS1, P.N. 15815, F-03-28-S, P.N. 16071

TAX MAP & GRID B PARCEL 392 & 34

4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

DESIGN BY: RAB
DRAWN BY: SM1
CHECKED BY: SLH
SCALE: 1"=100'
DATE: Jan. 23, 2008
M.O. No.: 2442
SHEET No.: I OF 8

EXPLORATION RESEARCH, INC.
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS
6339 HOWARD LANE
ELK RIDGE, MARYLAND 21075
TEL: (410) 567-5200 FAX: (410) 798-1562

KEY	TYPE OF COMMUNITY	AREA Acres	SOIL INFORMATION			EXISTING VEGETATION (Type and approx. %)	STAND CHARACTERISTICS			FOREST AREA IN SENSITIVE ENVIRONMENTS	
			SOIL TYPE	TYPICAL FOREST COVER	WOODLAND SUITABILITY INDEX		HABITAT VALUE	SIZE AVG. DIAM.	AGE		GENERAL CONDITIONS
F-1	Upland Hardwoods	4.47	MID2 MIB2 GIB2	Mixed upland Hardwood	65-74 95+ 75-84	fair fair good	Black oak 60% White oak 20% Mockernut Hickory 20%	12-16 10-16 6-12	48-72 50-80 36-72	Poor Heavy understory grazing	1.2 Ac. Steep slopes 15-25%
OF-1	Open Field	41.01	Co Ha GIB2	Mixed water Tolerant Hardwoods	75-84 95+ 65-74	good good good					
			GID3 GID2 MIC3 MIB3 GIB2	Mixed upland Hardwood	75-84 75-84 65-74 65-74 65-74	good good fair fair fair	N/A	N/A	N/A	N/A	N/A
C-1	Crop Field	27.16	GNA GIB2 GIC2 MIC2 MIB2	Mixed water Tolerant Hardwoods	65-74 75-84 75-84 65-74 65-74	good good fair fair fair	N/A	N/A	N/A	N/A	N/A
C-2	Crop Field	32.21	Co G3 GNA	Mixed water Tolerant Hardwoods	75-84 75-84 65-74	good good good	N/A	N/A	N/A	N/A	N/A
			GIB2 GIC3 MIB2 MIC2	Mixed upland Hardwood	75-84 75-84 65-74 65-74	good good fair fair	N/A	N/A	N/A	N/A	N/A
L-1	Lawn (Farm Stead)	2.86	GIB2	Mixed upland Hardwood	65-74	fair	N/A	N/A	N/A	N/A	N/A
L-2	Lawn	1.62	MIB2	Mixed upland Hardwood	65-74	fair	N/A	N/A	N/A	N/A	N/A

Forest Stand Narrative
 F-1: This forest stand is 4.47 Ac. in size and contains steep slopes. The canopy is dominated by black oak, Quercus velutina, white oak, Quercus alba and mockernut hickory, Carya tomentosa. The area is currently grazed and the understory is sparse.
 L-1: This 2.86 Ac. area surrounds an existing house and various farm out buildings. The area contains lawn, and ornamental tree plantings. No environmentally sensitive areas are covered by L-1.
 L-2: This 1.62 Ac. area surrounds an existing house located on the south west corner of the property. The area contains lawn and various ornamental plantings. The area contains no environmentally sensitive areas.
 C-1: This 27.16 Ac. crop area is currently in active crop land production. There are no environmentally sensitive areas.
 C-2: This 32.21 Ac. crop area is currently in active crop production. The area contains environmentally sensitive areas including streams and associated buffers.
 OF-1: This 41.01 Ac. open field area contains grazing pastures and open field. The area contains wetlands, streams and associated buffers.

Easement 10: PLANTING AREA: 0.17 Ac.

0.17 Ac = 7,405 Sq. ft.
 0.17 Ac x 200 TPA (for 1" cal.) = 34 trees required

Qty	Botanical Name	Common Name	Size	Credit/Plant	Total Credit
4	Acer rubrum	Red Maple	1" cal.	217.8	871.2
5	Betula nigra	River Birch	1" cal.	217.8	1,089
5	Liquidambar styraciflua	Sweetgum	1" cal.	217.8	1,089
5	Nyssa sylvatica	Black Gum	1" cal.	217.8	1,089
5	Platanus occidentalis	Sycamore	1" cal.	217.8	1,089
5	Quercus bi-color	Swamp White Oak	1" cal.	217.8	1,089
5	Quercus rubra	Red Oak	1" cal.	217.8	1,089

Easement 11: PLANTING AREA: 1.82 Ac.

1.82 Ac = 79,279 Sq. ft.
 1.82 Ac x 200 TPA (for 1" cal.) = 364 trees required

Qty	Botanical Name	Common Name	Size	Credit/Plant	Total Credit
36	Acer rubrum	Red Maple	1" cal.	217.8	7,840.8
36	Betula nigra	River Birch	1" cal.	217.8	7,840.8
36	Liquidambar styraciflua	Sweetgum	1" cal.	217.8	7,840.8
36	Liriodendron tulipifera	Tulip Poplar	1" cal.	217.8	7,840.8
36	Nyssa sylvatica	Black Gum	1" cal.	217.8	7,840.8
36	Platanus occidentalis	Sycamore	1" cal.	217.8	7,840.8
37	Quercus alba	White Oak	1" cal.	217.8	8,058.6
37	Quercus bi-color	Swamp White Oak	1" cal.	217.8	8,058.6
37	Quercus palustris	Pin Oak	1" cal.	217.8	8,058.6
37	Quercus rubra	Red Oak	1" cal.	217.8	8,058.6

364 Total Plantings 79,279.20 s.f. = 1.82 Ac.

Easement 12: PLANTING AREA: 0.23 Ac.

0.23 Ac = 10,019 Sq. ft.
 0.23 Ac x 200 TPA (for 1" cal.) = 46 trees required

Qty	Botanical Name	Common Name	Size	Credit/Plant	Total Credit
10	Acer rubrum	Red Maple	1" cal.	217.8	2178
9	Betula nigra	River Birch	1" cal.	217.8	1960.2
9	Liquidambar styraciflua	Sweetgum	1" cal.	217.8	1960.2
9	Platanus occidentalis	Sycamore	1" cal.	217.8	1960.2
9	Quercus palustris	Pin Oak	1" cal.	217.8	1960.2

46 Total Plantings 10,019 s.f. = 0.23 Ac.

Native Seed Mix

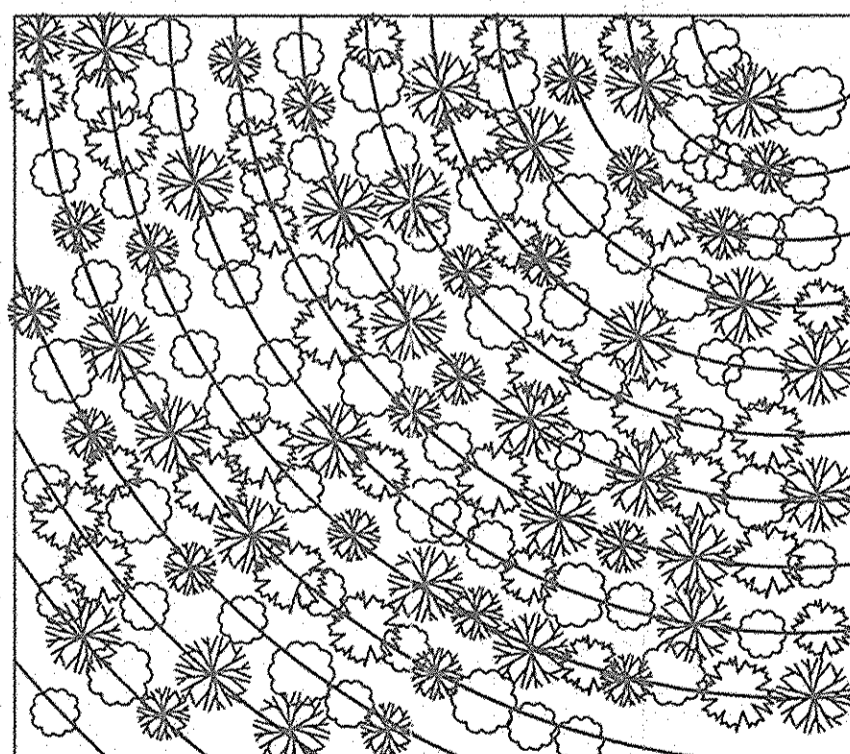
Percentage	Botanical Name	Common Name
25%	Agrostis alba	Redtop
25%	Carex vulpinoides	Fox Sedge
25%	Alopecurus pratensis	Meadow Fox Tail
20%	Andropogon scoparius	Little Bluestem
5%	Chrysanthemum leucanthemum	Ox Eye Daisy

Surety in the amount of \$48,351.60 shall be posted as part of the Developer's Agreement for 2.22 ac/96,703.20 sq. ft.

FOREST CONSERVATION EASEMENT TABLE

EASEMENT	TYPE	AREA (ACRES)
10	Reforestation	0.17
11	Reforestation	1.82
12	Reforestation	0.23
TOTAL		2.22

CURVILINEAR RANDOMIZED PLANTING



PLANT PLACEMENT DETAIL NOT TO SCALE

- MIX TREE AND SHRUB SPECIES IN THE STAGING AREA.
- SET THE GUIDE CURVILINEAR LINE AS CLOSE TO CONTOUR AS POSSIBLE.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 2/1/08
 CHIEF, DEVELOPMENT ENGINEERING DIVISION, DATE

[Signature] 2/1/08
 CHIEF, DIVISION OF LAND DEVELOPMENT, DATE

POST-CONSTRUCTION MANAGEMENT PROGRAM

Reforestation Area Monitoring Notes

- Monthly visits during the first growing season are to assess the success of the plantings and to determine if supplemental watering, pest control, invasive plant management, mowing or other actions are necessary. Early spring visits will document winter kill and autumn visits will document summer kill.
- The minimum survival rate shall be 75% of the total number of trees planted per acre at the end of the two year maintenance period. Kill tree seedlings from natural regeneration on the planting site may be counted up to 50% toward the total survival number if they are healthy native species at least 12 inches tall.
- Survival will be determined by a stratified random sample of the plantings. The species composition of the sample population should be proportionate to the amount of each species in the entire planting to be sampled.
- Effective monitoring will assess plant survivability during the first growing season and make recommendations for reinforcement planting if required at that time.

Forest Tree Protection and Management Notes

- Any significant changes made to the Forest Conservation Plan shall be made with the prior approval of the Howard County Dept. Of Planning and Zoning.
- Forest protection and management to be in accordance with a forest management plan. The plan shall be prepared by a MD. licensed forester to facilitate the landowners management objectives, such as wildlife enhancement, water quality, aesthetics, forest products, etc.
- Future forest harvests may be conducted under a Howard County approved forest harvest plan, prepared by a MD. licensed forester.

Planting Areas Description

The proposed planting area, totalling 2.22 Ac. is proposed entirely within stream and wetland buffer areas. The current land use is pasture land, making it an ideal area to plant and provide a forested stream buffer.

Planting will utilize a variety of sizes and species as shown in the proposed planting schedule. The larger stock will be placed farther upland. All container grown stock will utilize tree shelters. The entire area will be stabilized with the described seed mix cover crop. The planting as specified will more than satisfy the required acreage.

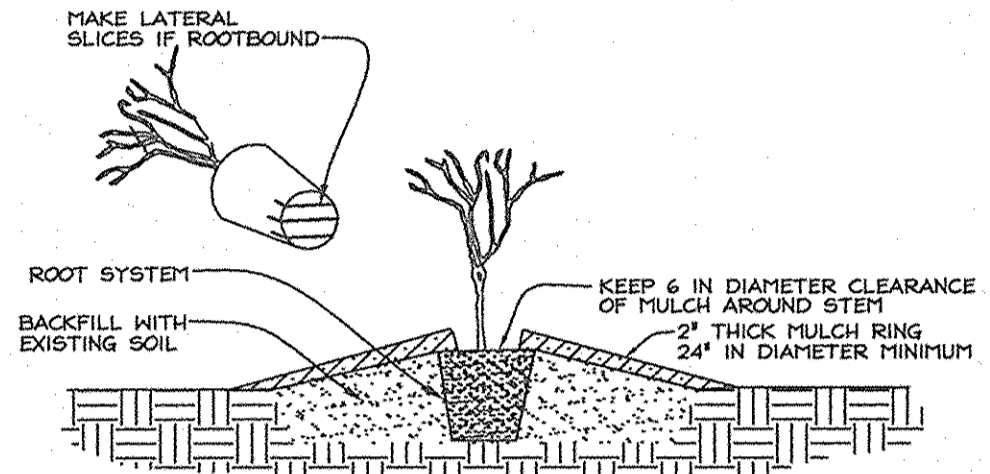
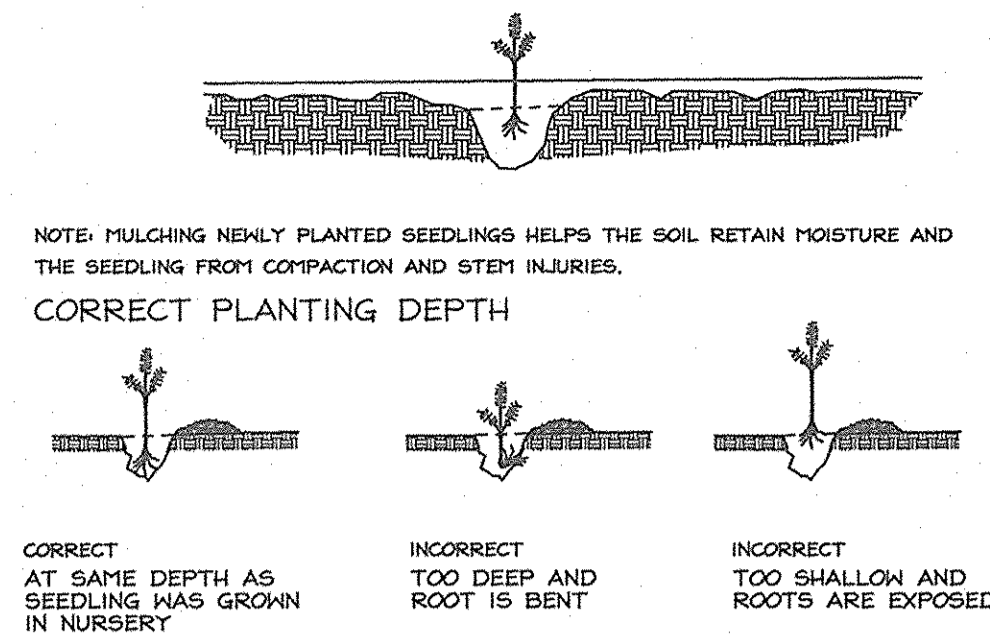
Plant Selection and Density Spacing Requirements.

Planting Material Size and Density Planting:
 Planting size and density shall be varied with a combination of planting stock. Planting quantity and spacing are based on square footage credit, which varies by material size. A total of 43,560 sq. ft. of planting credit must be fulfilled for each acre planted. This credit can be fulfilled with any combination of material size in accordance with the following chart.

Plant Material Size Table.

Material Size	Spacing	TPA	Sq. Ft. Credit per Plant	Comments
2" caliper trees	20' x 20'	100	435.6	B & B
1" caliper trees	15' x 15'	200	217.8	B & B
seedlings or whips	11' x 11'	350	125	Container 1-3 gal w/tree shelters
seedlings or shrubs	8' x 8'	700	62	Bare root

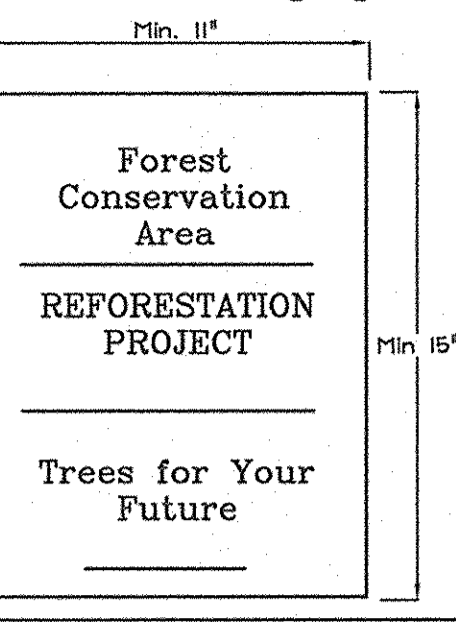
SEEDLING AND WHIP PLANTING



CONTAINER PLANTING NOT TO SCALE

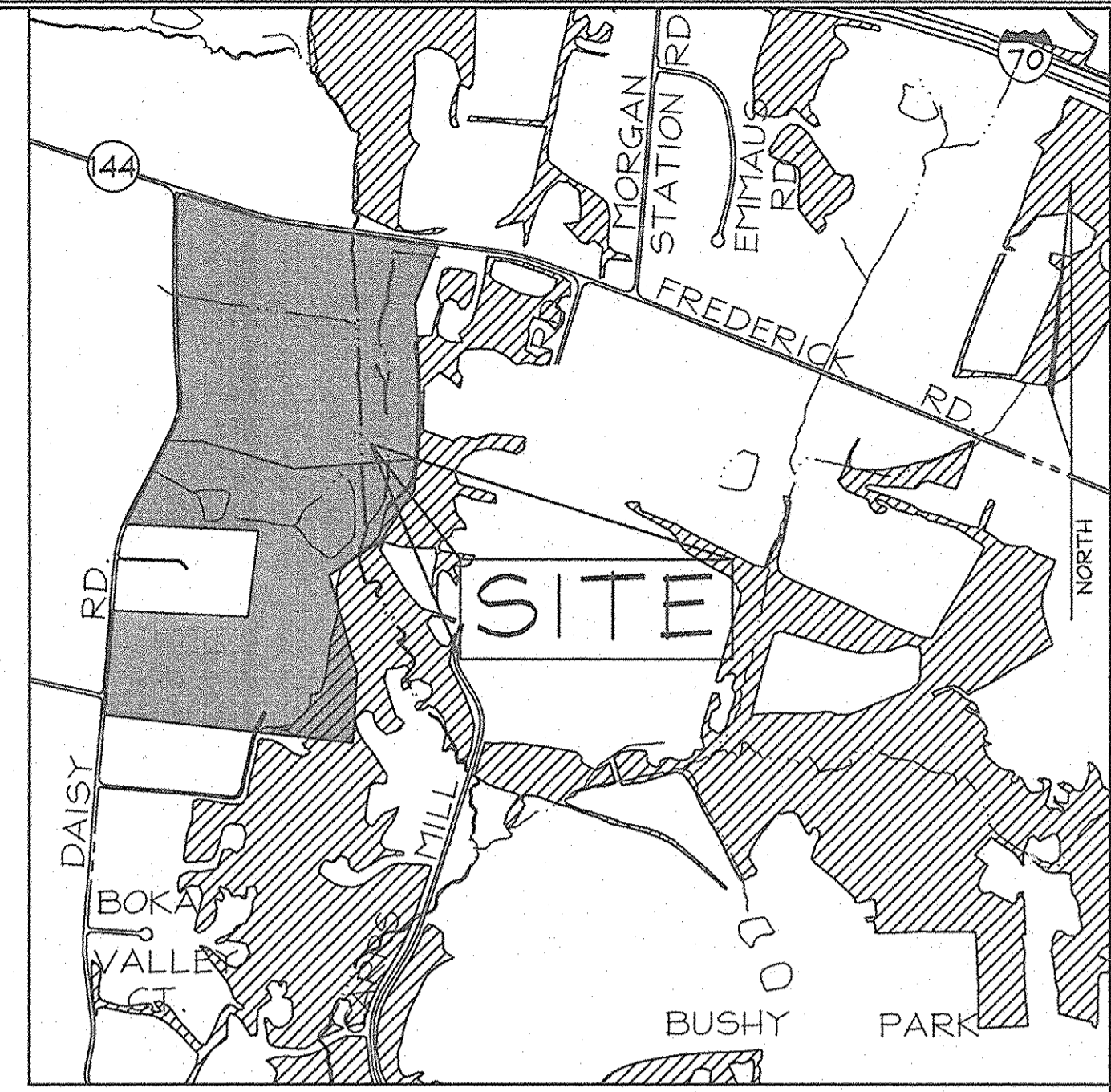
- PLANTING PROCEDURE FOR CONTAINER GROWN PLANTS
- REMOVE THE PLANT EITHER BY CUTTING OR INVERTING THE CONTAINER
 - USE A KNIFE TO CUT THROUGH BOTTOM HALF OF THE ROOT BALL
 - PLANT SHRUBS OR FORCED UP HEDGES 4" ABOVE THE EXISTING GRADE WHEN HIGH WATER TABLE CONDITIONS EXIST, OTHERWISE PLANT FLUSH WITH EXISTING GRADE.
 - PLANTING HOLE TO BE 2-3 TIMES THE DIAMETER OF THE CONTAINER.
 - INSERT FERTILIZER TABLET, BACKFILL 2/3 OF THE ROOT BALL AND WATER.
 - AFTER WATER PERCOLATES, BACKFILL HOLE TO TOP OF ROOT BALL AND GENTLY TAMP SOIL TO FIRM CONTACT WITH PLANT.
 - APPLY MULCH RING AROUND PLANT KEEPING A 6" IN CLEARANCE FROM STEM.

Reforestation and Afforestation Area Protection Signage



SIGN DETAIL: PERMANENT SIGN

SIGNAGE NOTE: All tree protection signs shall be placed on metal "T" posts or pressure treated wood poles. No attachment of signs to trees is permitted. Signs shall be placed every 75' to 100' as shown on plan view. Signage shall remain in place in perpetuity.

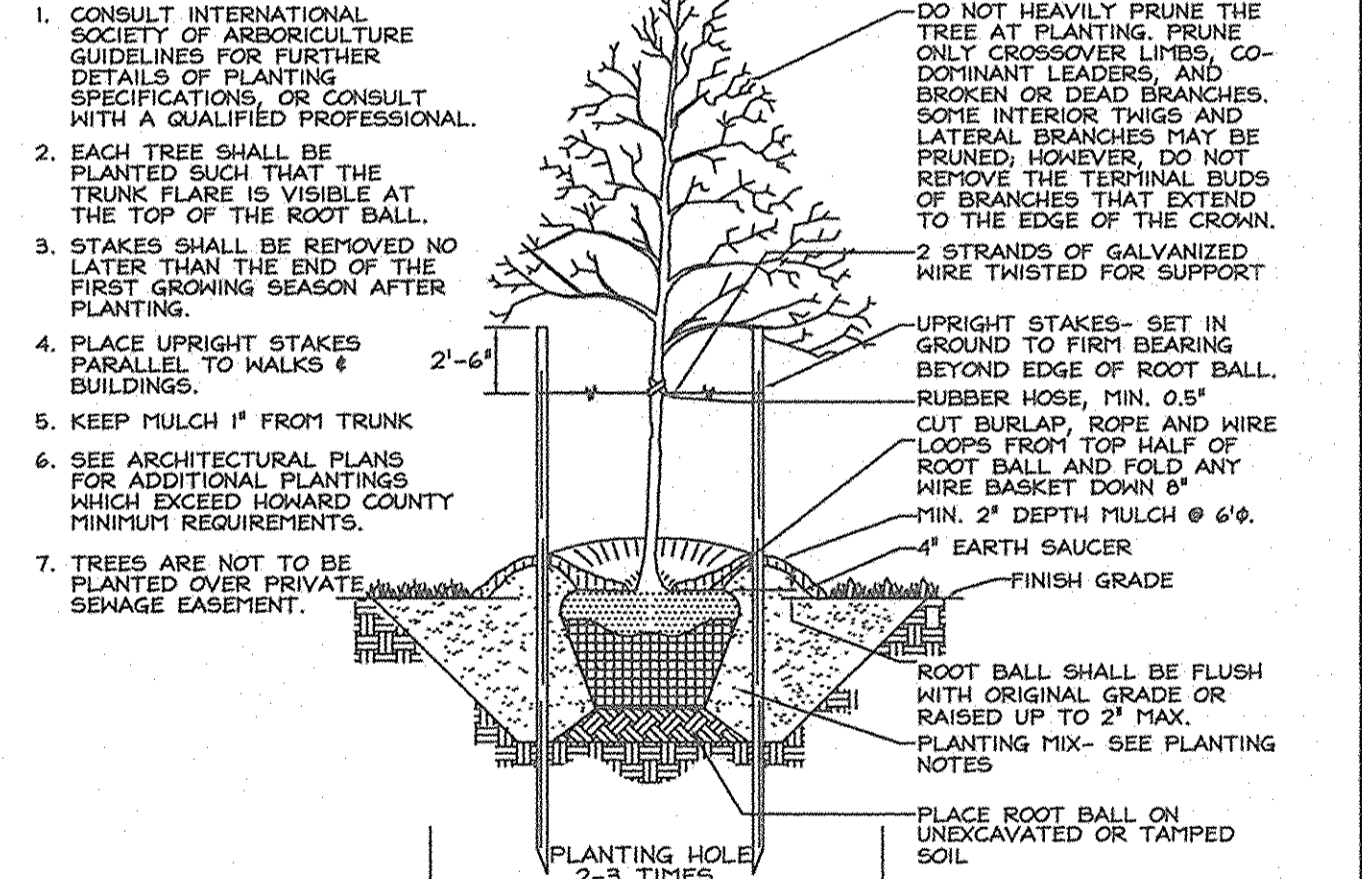


VICINITY MAP SCALE=1:1000'

Reforestation Area Planting Notes

- Initial planting inspection and certification required. Planting contractor to notify Howard County after planting is complete.
- Reforestation areas may be planted as soon as reasonable to do so. Late winter- early spring plantings are preferred. Earliest planting dates will vary from year to year but planting may generally begin as soon as the ground is no longer frozen. Alternate planting dates may be considered as conditions warrant.
- Soil amendments and fertilization recommendations will be made based upon the results of soil analysis for nitrogen, phosphorus, potassium, organic matter content and pH, if required. Fertilizer will be provided using a slow release, soluble 16-8-16 analysis designed to last 5-8 years contained in polyethylene perforated bags such as manufactured by AIDCO Works, P.O. Box 310 Hollis, N.Y. 11423 or approved equal.
- Plant materials shall be planted in accordance with the planting diagram, planting details and planting schedule.
- Plant stock must be protected from desiccation at all times prior to planting. Materials held for planting shall be moistened and placed in cool shaded areas until ready for placement.
- Planting materials shall be nursery grown and inspected prior to planting. Plants not conforming to the American Standards for Nursery Stock specifications for size, form, vigor, or roots, or due to trunk wounds, breakage, desiccation, insect or disease must be replaced.
- Newly planted trees may require watering at least once per week during the first growing season depending on rainfall in order to get established. The initial watering operation should allow for watering during installation to completely soak backfill materials.
- Mulch shall be applied in accordance with the diagram provided and shall consist of composted, screened hardwood bark mulch, free of wood alcohol.
- Planting holes should be excavated to a minimum diameter of 2.5 to 3 times the diameter of the root ball or container. Mechanical auguring is preferred with scarification of the sides of each hole.
- All nursery stock may be sprayed with deer repellent containing Bitrex such as Repellex(TM). All nursery stock to be grown with deer repellent tablets in growing medium, such as Repellex Tablets.

NOTES



TYPICAL TREE PLANTING AND STAKING DECIDUOUS TREES UP TO 2-1/2" CALIPER NOT TO SCALE

OFFSITE FOREST MITIGATION PLAN for MISSION PLACE (PARCELS A, B, & C)

on Talley Property Parcel 2
 RE-03-02 DS2, P.N. 15816, F-04-054 FC, P.N. 17192 &
 RE-03-02 DS1, P.N. 15815, F-03-28-S, P.N. 16071
 TAX MAP 8 GRID 13 PARCEL 392 & 34
 4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND



FSH Associates
 Engineers Planners Surveyors
 6330 Howard Lane Elkridge, MD 21075
 Tel: 410-567-5200 Fax: 410-798-1862

OWNER
 Talley Family LLP
 1525 Daisy Road
 Woodbine, MD 21797
 410-442-2300

DESIGN BY: RAB
 DRAWN BY: SMM
 CHECKED BY: SLH
 SCALE: As Shown
 DATE: Jan. 23, 2008
 H.O. No.: 2442
 SHEET No.: 8 OF 8

EXPLORATION RESEARCH, INC.
 ENVIRONMENTAL CONSULTANTS
 LANDSCAPE ARCHITECTS
 6330 HOWARD LANE
 ELK RIDGE, MARYLAND 21075
 TEL: (410) 567-5210 FAX: (410) 798-1862