	SHEET INDEX
SHEET NO.	TITLE
1	COVER SHEET
2	PRELIMINARY PLAN
3	PRELIMINARY GRADING & SEDIMENT CONTROL PLAN
4	FOREST CONSERVATION PLAN
5	FOREST CONSERVATION DETAILS
6	COUNTY APPROVED PERCOLATION PLAN

## PRELIMINARY PLAN

# THE PRESERVE AT WAVERLY GLEN

LOTS 1-21, PRESERVATION PARCELS A-F AND NON-BUILDBALE BULK PARCEL G A RESUBDIVISION OF LOTS 1 & 2 AND PARCEL A OF SHADOW SHADE PLAT NO. 13808 AND LOT 1 OF HIGHPOINT AT BREEZEWOOD FARMS PLAT NO. 6385 HOWARD COUNTY, MARYLAND

VICINITY MAP SCALE: 1"=2000' **BENCHMARKS** 

HOWARD COUNTY MONUMENT 1014

8	SUMMARY TA	ABLE AREA 1					SUMMARY TA	BLE AREA 2		
REQUIREMENT	VOLUME REQUIREMENT W/O CREDITS	CREDITS	VOLUME REQUIREMENT AFTER CREDITS	NOTES	AREA 4.34 AC.	REQUIREMENT	VOLUME REQUIREMENT W/O CREDITS	CREDITS	VOLUME REQUIREMENT AFTER CREDITS	NOTES
WATER QUALITY VOLUME WQV	0.15 AC.FT.	4.01 AC. IN GRASS SWALE	0.09 AC. FT.	LOTS EXEMPT 25%+ IN NATURAL CONSERVATION	1	WATER QUALITY VOLUME WQV	0.07 AC.FT.	4.09 AC. IN LOTS	0.02 AC. FT.	LOTS EXEMPT 25%+ IN NATURAL CONSERVATION
RECHARGE VOLUME REV	0,04 AC.FT.	GRASS SIDE DITCH	o	LOTS EXEMPT 25%+ IN NATURAL CONSERVATION	2	RECHARGE VOLUME REV	0.02 AC.FT.	4.09 AC. IN LOTS GRASS SIDE DITCH	o	LOTS EXEMPT 25%+ IN NATURAL CONSERVATION
CHANNEL PROTECTION VOLUME CPV	0.22 AC.FT.	N/A	0.22 AC. FT.		3	CHANNEL PROTECTION VOLUME CPV	0.23 AC.FT.	1YR. RUNOFF LESS THAN 2 CFS	o	
OVERHEAD FLOOD PROTECTION, Q10P	N/A	N/A	N/A		4	OVERHEAD FLOOD PROTECTION, Q10P	N/A	N/A	N/A	
EXTREME FLOOD VOLUME, Q100P	N/A	N/A	N/A		5	EXTREME FLOOD VOLUME, Q100P	N/A	N/A	N/A	
TE: SWM PROVIDED BY A MICRA	OPOOL FO/P-1) P	ACILITY	•		NOTE	SWM PROVIDED BY A EXT	ENDED DETENTION	OF WOV.		

NOTE: SWM PROVIDED BY A EXTENDED DETENTION OF WQV.

WATER QUALITY

RECHARGE VOLUME

OVERHEAD FLOOD

NOTE: SWM PROVIDED: N/A

NOTE: SWM PROVIDED: N/A

2005

PROTECTION, Q10P

		SUMMARY TA	ABLE AREA 3			_
AREA	REQUIREMENT	VOLUME REQUIREMENT W/O CREDITS	CREOITS	VOLUME REQUIREMENT AFTER CREDITS	NOTES	3.
1	WATER QUALITY VOLUME WQV	0.04 AC.FT.	2.22 AC. IN LOTS	0.03 AC. FT.	LOTS EXEMPT 25%+ IN NATURAL CONSERVATION	
2	RECHARGE VOLUME REV	0.01 AC.FT.	2.22 AC, IN LOTS GRASS SIDE DITCH	0	LOTS EXEMPT 25%+ IN NATURAL CONSERVATION	
3	CHANNEL PROTECTION VOLUME CPV	0.30 AC.FT.	1YR. RUNOFF LESS THAN 2 CFS	o		
4	OVERHEAD FLOOD PROTECTION, Q10P	N/A	N/A	N/A		
5	EXTREME FLOOD VOLUME, Q100P	N/A	N/A	N/A		

**SUMMARY TABLE AREA 5** 

1.52 AC. IN

1YR. RUNOFF

LESS THAN 2 CFS

N/A

N/A

0.10 AC.FT,

0.02 AC.FT.

	3.63 AC.	KEGOIKEMENI	REQUIREMENT W/O CREDITS	CREDITS	REQUIREMENT AFTER CREDITS	NOTES
ATION	1	WATER QUALITY VOLUME WQV	0.06 AC.FT.	3.63 AC. IN LOTS	0	Lots exempt 25%+ in natural conservation
ATION	2	RECHARGE VOLUME REV	0.01 AC.FT.	3.63 AC. IN LOTS	0	LOTS EXEMPT 25%+ IN NATURAL CONSERVATION
	3	CHANNEL PROTECTION VOLUME CPV	0.24 AC.FT.	1YR. RUNOFF LESS THAN 2 CFS	o	
	4	OVERHEAD FLOOD PROTECTION, Q10P	N/A	N/A	N/A	
		EXTREME FLOOD				

#### VOLUME, Q100P NOTE: SWM PROVIDED: N/A

			SUMMARY TA	ABLE AREA 6
NOTES	AREA 19.0 AC.	REQUIREMENT	VOLUME REQUIREMENT W/O CREDITS	CREDITS
DTS EXEMPT 25%+ IN RAL CONSERVATION NC. IN AREA 5	1	WATER QUALITY VOLUME WQV	0.29 AC.FT.	2.95 AC. IN LOTS 16.05 AC. UNDEVELOPED
DTS EXEMPT 25%+ IN RAL CONSERVATION NC. IN AREA 5	2	RECHARGE VOLUME REV	0.07 AC.FT.	2.95 AC. IN LOTS 16.05 AC. UNDEVELOPED
	3	CHANNEL PROTECTION VOLUME CPV	0.28 AC.FT.	1YR, RUNOFF LESS THAN 2 CFS
	4	OVERHEAD FLOOD PROTECTION, Q10P	N/A	N/A
	5	EXTREME FLOOD VOLUME, Q100P	N/A	N/A

NOTE: SWM PROVIDED: N/A

			,,		
AREA 19.0 AC.	REQUIREMENT	VOLUME REQUIREMENT W/O CREDITS	CREDITS	VOLUME REQUIREMENT AFTER CREDITS	NOTES
1	WATER QUALITY VOLUME WQV	0.29 AC.FT.	2.95 AC. IN LOTS 16.05 AC. UNDEVELOPED	0	LOTS EXEMPT 25%+ IN NATURAL CONSERVATION 8.76AC. IN AREA 6
2	RECHARGE VOLUME REV	0.07 AC.FT.	2.95 AC. IN LOTS 16.05 AC. UNDEVELOPED	o	LOTS EXEMPT 25%+ IN NATURAL CONSERVATION 8.76AC. IN AREA 6
3	CHANNEL PROTECTION VOLUME CPY	0.28 AC.FT.	1YR, RUNOFF LESS THAN 2 CFS	o	
4	OVERHEAD FLOOD PROTECTION, Q10P	N/A	N/A	N/A	
5	EXTREME FLOOD	N/A	N/A	N/A	

### SUMMARY TABLE AREA 7

AREA 4.24 AC.	REQUIREMENT	REQUIREMENT W/O CREDITS	CREDITS	REQUIREMENT AFTER CREDITS	NOTES
1	WATER QUALITY VOLUME WQV	0.07 AC.FT.	1.95 AC. IN LOTS 2.29 AC. UNDEVELOPED	0	LOTS EXEMPT 25%+ IN NATURAL CONSERVATION 2.50AC. IN AREA 7
2	RECHARGE VOLUME REV	0.02 AC.FT.	1.95 AC. IN LOTS 2.29 AC. UNDEVELOPED	o	LOTS EXEMPT 25%+ IN NATURAL CONSERVATION 2.50AC. IN AREA 7
3	CHANNEL PROTECTION VOLUME CPV	0.07 AC.FT.	1YR. RUNOFF LESS THAN 2 CFS	0	
4	OVERHEAD FLOOD PROTECTION, Q10P	N/A	N/A	N/A	
5	EXTREME FLOOD VOLUME, Q100P	N/A	N/A	n/a	

	PHASING	CHART
ÆAR	PHASE	ALLOCATIONS

TENTATIVELY APPROVED DEPT. OF PLANNING AND HOWARD COUNTY

TB! HOMES, INC. 3675 PARK AVENUE, SUITE 301

ELLICOTT CITY, MARYLAND 21043

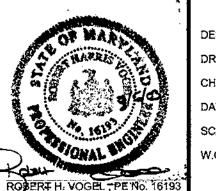
#### THE PRESERVE AT WAVERLY GLEN LOTS 1-21, PRESERVATION PARCELS A-F AND NON-BUILDABLE BULK PARCEL G A RESUBDIVISION OF LOTS 1 & 2 AND PARCEL A OF SHADOW SHADE PLAT NO. 13808 AND LOT 1 OF HIGHPOINT AT BREEZEWOOD FARMS PLAT NO. 6385

REF. S-02-03, F-99-25, F-86-13 PARCELS '304' & '102' TAX MAP 10 BLOCK 23 4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**COVER SHEET** 



FREDERICK WARD ASSOCIATES, INC. ENGINEERS 7125 Riverwood Drive Columbia, Maryland 21046-2354 ARCHITECTS | Phone: 410-290-9550 Fax: 410-720-6226 surveyors | Bel Air, Maryland Columbia, Maryland Warrenton, Virginia



DESIGN BY: DRAWN BY: CHECKED BY: MARCH, 2003 AS SHOWN 2017139.00

SHEET 6

## SITE DATA

LOCATION: TAX MAP 10, PARCELS '309' & '102' 4TH ELECTION DISTRICT EXISTING ZONING: RC-DEO GROSS AREA OF PARCEL: 2,158,349 SQ. FT. (49.55 ACRES) AREA OF RIGHT OF WAY: 110.171 SQ. FT. (2.53 ACRES). AREA OF EX. FLOODPLAIN: 92,019 SQ.FT (2.11 ACRES) AREA OF STEEP SLOPES (NOT LOCATED IN FLOODPLAIN): 132,279 SQ. FT. (3.04 ACRES) NET AREA OF PROJECT: 1,934,051 SQ. FT. (44.40 ACRES) NUMBER OF PROPOSED RESIDENTIAL LOTS/PARCELS: 22 AREA OF PROPOSED RESIDENTIAL LOTS 1-21: 1,093,477 SQ. FT. (25.10 ACRES) AREA OF PROPOSED BUILDABLE PRESERVATION PARCEL 'A': 674,126 SQ. FT. (15.48 ACRES) AREA OF PROPOSED NON-BUILDABLE PRESERVATION PARCELS 'B'-'F': 275,653 SQ. FT. (6.33 ACRES) AREA OF PROPOSED NON-BUILDABLE BULK PARCEL 'G': 4922 SQ. FT. (0.11 ACRES) NUMBER OF PROPOSED PRESERVATION PARCELS: 6 (1 BUILDABLE; 5 NON-BUILDABLE)

#### GENERAL NOTES

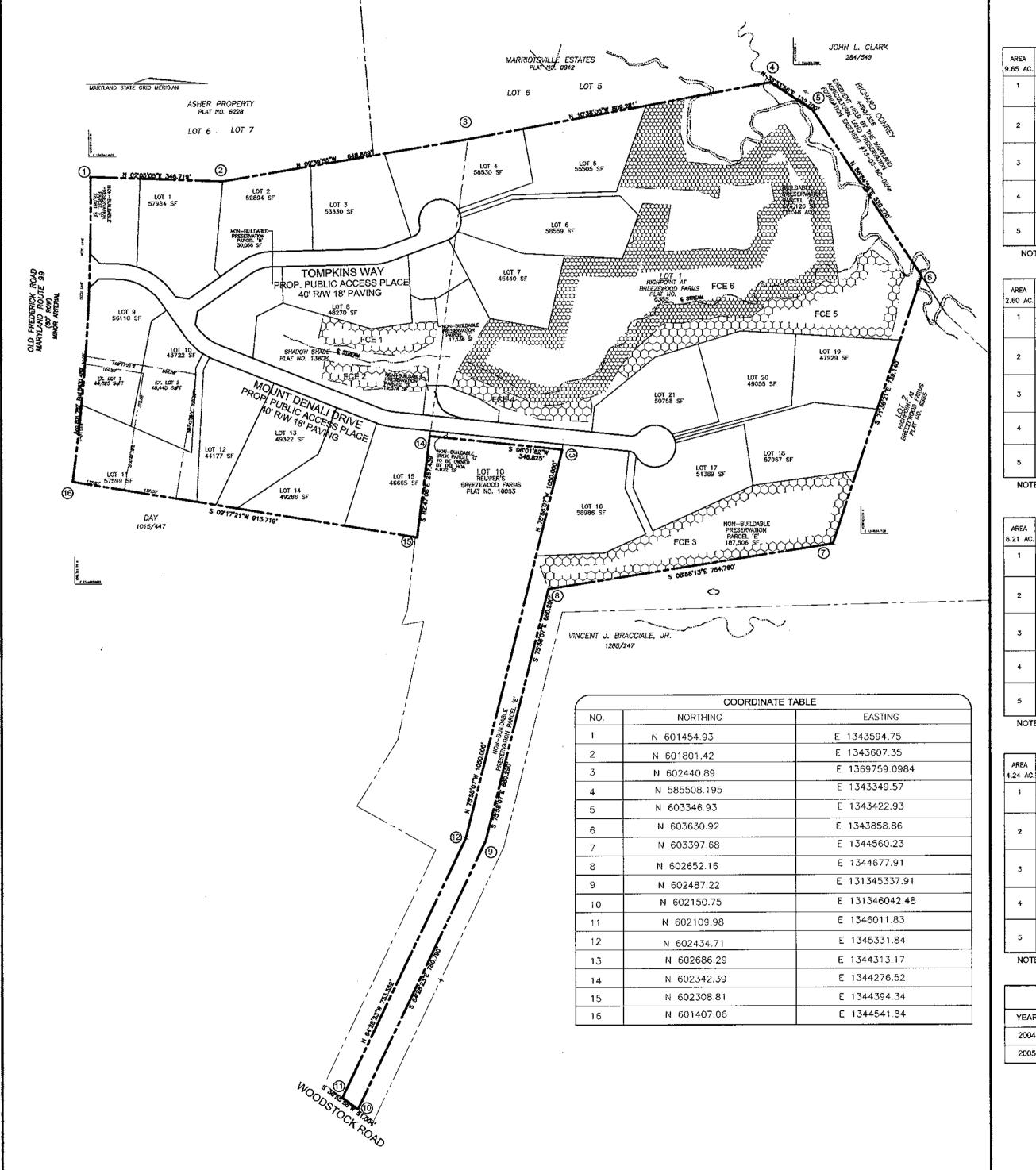
1. ALL ASPECTS OF THE PROJECT ARE IN CONFORMANCE WITH THE LATES'

TOTAL APPROXIMATE LIMIT OF DISTURBANCE: 250,034 SF± (5.74 AC.)

- 4. THE TOPOGRAPHY SHOWN HEREON IS BASED ON
- POTOMAC AERIAL SURVEYS DATED 4/14/01. 5. WATER AND SEWER FOR THIS PROJECT WILL
- FACILTY NO. 3: EXTENDED DETENTION OF WQ. (HAZARD CLASS 'A') WQv only
- 8. THE FLOODPLAIN IS BASED ON F-86-13, HIGHPOINT AT BREEZEWOOD FARMS, LOTS 1 & 2, PLAT NO. 6385. 9. FOREST STAND DELINEATION PLAN PREPARED BY
- FREDERICK WARD AND ASSOC. DATED 7-21-01. 10. APFO TRAFFIC STUDY PREPARED BY THE TRAFFIC GROUP DATED
- 11. THERE IS NO GRADING OR DISTURBANCE WITHIN STEEP SLOPES ONSITE
- WITH A CONTIGUOUS AREA OF 20,000 SF OR GREATER.
- 12. ALL LANDSCAPING REQUIREMENTS AS SET FORTH IN THE LANDSCAPE
- MANUAL SHALL BE COMPLIED WITH.
- 13. STREET LIGHTING IS NOT REQUIRED FOR THIS SITE. 14. THE STORMWATER MANAGEMENT SYSTEM SHOWN ON THIS PLAN IS AN APPROXIMATION OF ITS ULTIMATE SIZE AND SHAPE, IT IS UNDERSTOOD THAT THIS SYSTEM HAS NOT BEEN FINAL DESIGNED AND ITS SIZE AND SHAPE MAY CHANGE ALTERING
- THE NUMBER OF UNITS ALLOCATED FOR THIS DEVELOPMENT. 15. THIS PROPERTY IS NOT WITHIN THE METROPOLITAN DISTRICT
- 16. TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO
- BURIAL/CEMETARY LOCATIONS ON SITE. 17. TRASH COLLECTION AND RECYCLING WILL BE CURBSIDE PICKUP

19. DENSITY:

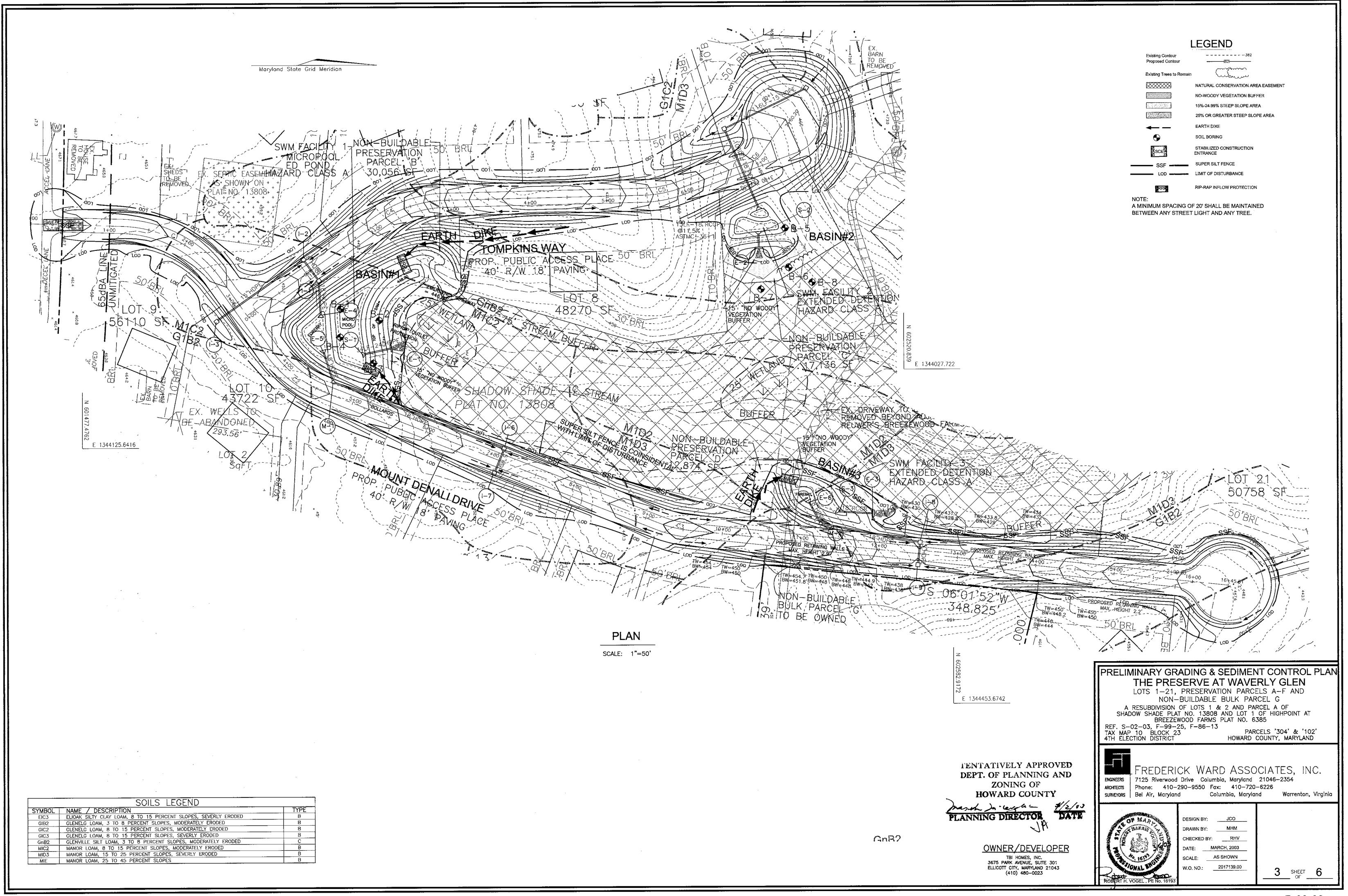
- 18. A NOISE STUDY WAS PREPARED BY ROBERT H. VOGEL , DATED SEPTEMBER 2002. THE NOISE CONTOUR IS BASED ON THE PROJECTED 2020 TRAFFIC STUDY.
- NUMBER OF ENTITIES PERMITTED BY RIGHT: 49.55/4.25 = 11 MAXIMUM RECEIVING YIELD: 44.4/2 = 22 NUMBER OF BUILDABLE ENTITIES PROPOSED: 21 LOTS AND 1 BUILDABLE
- PRESERVATION PARCEL = 22 TOTAL NUMBER OF DEO UNITS NEEDED: 22-11 = 115 DEOS FROM THE DIPAULA SENDING PLAT AND 6 DEOS FROM THE
- ACKERMAN SENDING PLAT. 20. AS A CONSEQUENCE OF ITS SUBMISSION FOR COUNTY REVIEW PRIOR TO NOVEMBER 15, 2001, THIS PROJECT IS SUBJECT TO COMPLIANCE WITH THE FOURTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. IN ADDITION, BECAUSE IT DID NOT HAVE PRELIMINARY APPROVAL PRIOR TO NOVEMBER 1, 2001, IT IS SUBJECT TO COMPLIANCE WITH COUNTY
- COUNCIL BILL 50-2001 WHICH AMENDS PORTIONS OF THE ZONING REGULATIONS. 21. THE EXISTING DRIVEWAY FROM WOODSTOCK ROAD WILL BE REMOVED WEST OF LOT 10 OF REUWER'S BREEZEWOOD FARMS, PLAT NO. 10063.
- 22. THE FOREST CONSERVATION EASEMENT TO BE RECORDED AS PART OF SHADOW SHADE, PLAT NO. 13808 WILL NOT BE RETAINED AS PART OF THIS SUBDIVISION. 23. PRESERVATION PARCELS 'A', 'E' & 'F' TO BE PRIVATELY OWNED WITH HOWARD COUNTY AND THE
- HOA AS EASEMENT HOLDERS. PRESERVATION PARCELS 'B', 'C', 'D' & 'G' ARE TO BE OWNED BY THE HOA WITH HOWARD COUNTY AS THE EASEMENT HOLDER. PRESERVATION PARCEL 'A' TO BE A BUILDABLE ENVIRONMENTAL PRESERVATION PARCEL. PRESERVATION PARCEL 'E' TO BE USED TO PRESERVE ENVIRONMENTALLY SENSITIVE RESOURCES. PRESERVATION PARCELS 'B', 'C' & 'D' ARE TO ENCOMPASS STORMWATER MANAGEMENT FACILITIES. THE 5% OPEN SPACE OBLIGATION FOR THE DENSITY RECEIVING SUBDIVISION WILL BE FULFILLED IN THE CREATION OF THE HOA OWNED PRESERVATION PARCELS B, C, AND D.
- 24. FOREST CONSERVATION PLAN PREPARED BY FREDERICK WARD AND ASSOCIATES, DATED JULY 2002.
- 25. PLANNING AND ZONING FILE NUMBERS: S-02-03, F-99-25, F-86-13 26. SEDIMENT AND EROSION CONTROL WILL BE PROVIDED FOR THIS SITE.
- 27. FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1202 OF THE HOWARD COUNTY CODE AND THE FOREST CONSERVATION MANUAL FOR THIS SUBDIVISION WILL BE FULFILLED BY THE RETENTION OF EXISTING FOREST IN THE AMOUNT OF 6.93 AC. AND REFORESTATION OF 5.36 AC. FOR A TOTAL FOREST
- CONSERVATION OBLIGATION AREA OF 12.29 AC. 28. STREET TREES ARE REQUIRED FOR THIS SUBDIVISION IN ACCORDANCE WITH SECTION 16.124(e)(1) OF THE SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL.
- 29. LOTS 18-20 AND 5-6 & PRESERVATION PARCEL A WILL UTILIZE .. USE-IN-COMMON DRIVEWAY, HOWARD COUNTY STANDARD DETAIL NO. R-6.06 WILL BE UTILIZED FOR THE ENTRANCE AT THE INTERSECTION OF
- 30. TREE PROTECTION FENCING WILL BE PROVIDED AT THE LIMITS OF DISTURBANCE WHERE GRADING IS ADJACENT TO ENVIRONMENTAL AREAS.
- 31. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE WETLANDS, STREAMS OR THEIR BUFFERS AND THE FOREST CONSERVATION EASEMENTS.

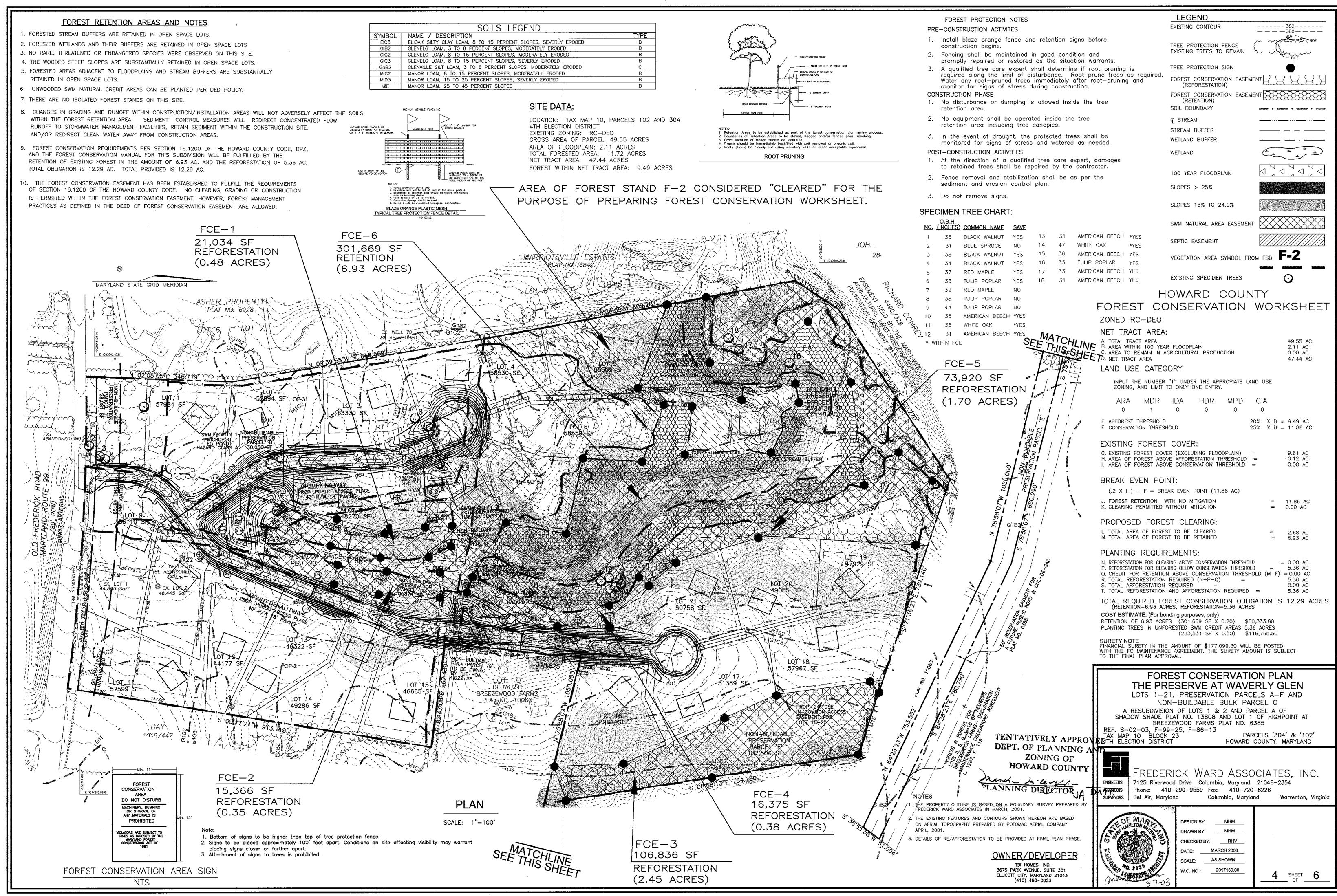


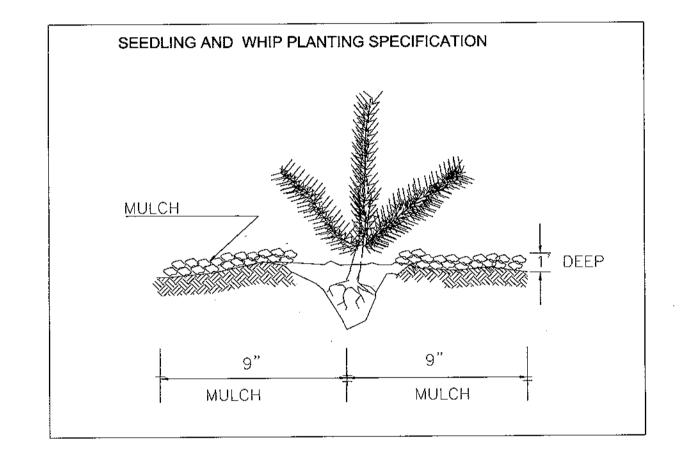
**LOCATION PLAN** 

SCALE: 1"=200'

			LEGEND
MINIMUM LOT SIZE CHART	SCHEDULE A PERIMETER LANDSCAPE EDGE	SCHEDULE D : STORMWATER  MANAGEMENT AREA LANDSCAPING	EXISTING CONTOUR382
LOT NO. GROSS AREA PIPESTEM AREA MINIMUM LOT SIZE	CATEGORY ADJACENT TO ADJACENT TO ROADWAYS PERIMETER PROPERTIES	LINEAR FEET OF PERIMETER  SWM FACILITY 1 508 LF SWM FACILITY 2 223 LF SWM FACILITY 3 283 LF	EXISTING TREES TO REMAIN
5 55505 SF 1733 SF 53772 SF Pe 11 57599 SF 5280 SF 52319 SF	rimeter/Frontage Designation 1 2 3 4 5 6 7 8 9 10 ndscape Type B B A A B A A A A	CREDIT FOR EXISTING VEGETATION (NO, YES AND LINEAR FEET) NO NO NO	SOIL BOUNDARY
18 57967 SF 1487 SF 59454 SF 59654 SF 59454 SF	near Feet of Roadway 350 511 915 267 348 385 880 1302 1060 1345 Frontage/Perimeter 915 267 348 385 880 1302 1060 1345	CREDIT FOR OTHER LANDSCAPING (NO, YES AND %) No No No	© STREAM ——···—··
19 47929 SF 2554 SF 45375 SF Cre	Sear Feet of Roddwdy	NUMBER OF TREES REQUIRED (225)  SHADE TREES SHADE TREES 13 EVERGREEN TREES 4 SHADE TREES 6 SHADE TREES 7 EVERGREEN TREES	STREAM BUFFER ———————————————————————————————————
20 49055 SF 1010 SF 48045 SF cr	edit for Wall, Fence or Berm (Yes, No. Linear Feet No	NUMBER OF TREES PROVIDED	WETLAND BUFFER — — — — —
Num	Shade Trees   1:50 7 1:50 10 1:60 15 1:60 4 1:50 7 1:60 6 1:60 15 1:60 6   1:60 0 1:60 22	SHADE TREES - SHADE TREES - SHADE TREES - SHADE TREES - EVERGREEN TREES	WETLAND Lake Lake Lake Lake Lake Lake Lake Lake
Nu	Evergreen Trees     1:40 9 1:40 13 1:40 9		100 YEAR FLOODPLAIN
	Shade Trees       - <td< th=""><th>STREET TREE CALCULATIONS</th><th>SLOPES &gt; 25%</th></td<>	STREET TREE CALCULATIONS	SLOPES > 25%
	Other Trees (2:1 Substitution)       -       <	ROAD NAMELENGTHTREES REQUIREDTREES PROVIDEDMOUNT DENALI DRIVE3420 LF8686	
	Below if needed)  Existing Woods to Remain	TOMPKINS WAY 1630 LF 40 40	SLOPES 15% TO 24.9%
		GENERAL NOTES	NATURAL AREA EASEMENT
		1. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING PROVIDED PER	
		THE LANDSCAPE MANUAL TO BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT.	SEPTIC EASEMENT
OUDVE TADLE		<ol> <li>FINANCIAL SURETY FOR THE REQUIRED 126 STREET TREES WILL BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT.</li> </ol>	
CURVE TABLE  CURVE RADIUS LENGTH TANGENT CHORD BEARING DELTA			- 1/1/2
CURVE         RADIUS         LENGTH         TANGENT         CHORD         BEARING         DELTA           C1         160.00         148.13         79.85         142.90         \$28*18'32"W         53*2'42"           C2         150.00         86.96         44.74         85.75         N38*13'21"E         33*13'3"           C3         150.00         40.82         20.54         40.70         N13'49'01"E         15'35'38"			SEE THIS SHEET
C3 150.00 40.82 20.54 40.70 N13'49'01"E 15'35'38"  C4 150.00 88.77 45.73 87.48 \$18'12'54"E 33'54'26"			IN SHEET
C5         150.00         49.46         24.96         49.24         N10'42'30"W         18'53'39"           C6         25.00         15.39         7.95         15.15         N37'47'28"W         35'16'16"	MARRIOTS VILLE, ESTATES	E 1545304.2399	The state of the s
	ROAL WOULD THE TOTAL OF THE PARTY OF THE PAR		POPULEE.
MARYLAND STATE GRID MERIDIAN	and the second of the second o		
ASHER PROPERTYAL	A CONTRACTOR OF THE PARTY OF TH		$\boldsymbol{i}$ / $\boldsymbol{i}$ / $\boldsymbol{i}$
PLAT NO. 6228	The second of th		$I \cap I' \cap I'$
The state of the s	(0° 8° 1)		
E 13435424521	30' 881 7 7 18 18 18 18 18 18 18 18 18 18 18 18 18	P W I SE TO THE SETO	
N 09 39 5	EN COUNTY TO THE TOTAL T	COMMON ACCERS TO THE PARTY OF T	
N 02'05'05'E 376719 727777	30 BRI 1 30	SERVATION PARCEL A	
70 BRI - LOT 30 BRI	THE	PELL BUTTER / BUTTER	20 J J J J J J J J J J J J J J J J J J J
EN LOT 1	LOT 3	PARCEL W.	
MANUEL DARIES DA	LOT 6 3 / LOT 6		
PRESERVATION BY BRICEL BY PARCEL BY		VIEW TO PERIMETER	
	10'BRU 7259384 180 180 180 180 180 180 180 180 180 180	CLUSTER SUBDIV.	
	SWM		
A SOLUTION OF TOMPKING VIEW OF TOMPKING			
FROE PUBLIC AND RAW 18	ACCESS PLACE SO BRILLIAN TO THE PAYING TO TH		
		A STATE OF THE STA	
ESSENT PROPERTY OF THE PROPERT	None Bullion B		
		274.65	
		1829 1 19 30 BR. 7 19 19 19 19 19 19 19 19 19 19 19 19 19	
293.56 29	REWERS GREEZEWORD THRUS		TENTATIVELY APPROVED
EX ON THE EX	PARCELY ON STATE OF THE PROPERTY OF THE PROPER		DEPT. OF PLANNING AND
The second secon		1979 10 20 VE 80 V	ZONING OF
A COESS PLANS PLAN	THE STATE OF THE S	\$ 319.88 TO 56 TO 100 TO 50 TO	HOWARD COUNTY
The state of the s			DATE
	Man to the second of the secon	(8)	JA JA DATE
TOI 12 TO	SOFOR	10 BRILL 10	
	BULK PARCEL G (5)	2 2 20 18	PRELIMINARY PLAN AND LANDSCAPE PLAN CONCEPT PLAN
LOI 1	TOT TO	275.47 10' BRI	THE PRESERVE AT WAVERLY GLEN
30'BRE 15700' - 30'BRE	BREEZEWOOD EARTHS OF STATE OF	50'81	LOTS 1-21, PRESERVATION PARCELS A-F AND NON-BUILDABLE BULK PARCEL G
	THAME I TERME	PROP 24 USE - NIN-EONMON ACCESS - NIN-EONMON A	A RESUBDIVISION OF LOTS 1 & 2 AND PARCEL A OF SHADOW SHADE PLAT NO. 13808 AND LOT 1 OF HIGHPOINT AT
\$ 09 1 21 ml 30 BRI	WHILE STATE IN BUILDING TO THE STATE OF THE	288 MT COT TO 20 - STATE OF ST	BREEZEWOOD FARMS PLAT NO. 6385
1015/447	30 BRI.	NON-BUILDABLE OF THE PROPERTY	REF. S-02-03, F-99-25, F-86-13 TAX MAP 10 BLOCK 23 PARCELS '304' & '102' 4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
W. W		PARCEL E' 1344534.7139  Solve To Angle	
一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个	30 BR. 14 1000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	FREDERICK WARD ASSOCIATES, INC.
		150 TO 15	ENGINEERS 7125 Riverwood Drive Columbia, Maryland 21046—2354
		8 08 58 13 5	ARCHITECTS Phone: 410-290-9550 Fax: 410-720-6226 SURVEYORS Bel Air, Maryland Columbia, Maryland Warrenton, Virginia
			DESIGN BY: JCO
			DRAWN BY: MHM  CHECKED BY: RHV
	C. MATRICE.	OWN	IER/DEVELOPER DATE: MARCH, 2003
	PLAN PLAN SHEEL NEW NO.	3675 (	TBI HOMES, INC.  PARK AVENUE SUITE 301
	SCALE: 1"=100'	ELLICO	ONAL BRIGHT W.O. NO.: 2017139.00 W.O. NO.: 2017139.00 PER 10103
			ROGERT H. VOGEL, PE NO. 10193







NOTE: 1). Plant mix to be 1/3 pioneer & 2/3 mid to late successional species

2). Plant larger stock and evergreens around perimeter to protect interior

3). When shrubs are specified, plant them in clusters.

4). Do not plant trees in a grid pattern.

#### DENSITY CHART

1. RANDOMLY SPACE SEEDLINGS / WHIPS SO THAT NO MORE THAN 5 OF

PLANT 1" CAL TREES AROUND PERIMETER OF REFORESTATION AREA.

3. REFORESTATION MANAGEMENT RECORDS SHOULD BE KEPT FOR HOWARD COUNTY REVIEW.

ANY PARTICULAR SPECIES ARE PLANTED IN SUCCESSION.

NO ORNAMENTAL CULTIVARS TO BE USED.

2. ALL PROPOSED PLANT MATERIAL TO BE NATIVE PLANT SPECIES.

		DEMONIT ON WAT		
	SIZE	QTY. PER ACRE	AVERAGE SPACING	
_	1" CALIPER WHIPS	200 360	15'×15' 11'×11'	

#### **REFORESTATION PROVIDED - FCE-1**

0.48 ACRES OR 21,034 SF

1" CALIPER TREES 40 (.20 AC) @ 200 TREES PER ACRE SEEDLINGS - WITH TREE SHELTERS

101 (.28 AC) @ 360 WHIPS PER ACRE

## REFORESTATION PROVIDED - FCE-2

0.35 ACRES OR 15,366 SF 1" CALIPER TREES 30 (.15 AC) @ 200 TREES PER ACRE

SEEDLINGS - WITH TREE SHELTERS 72 (.20 AC) @ 360 WHIPS PER ACRE

### REFORES

432 (1.2 AC) @ 360 WHIPS PER ACRE

		PLANT SCHEDULE - FCE -	3	
REFORESTATION PROVIDED - FCE-3	QUAN.	BOTANICAL NAME	SIZE	,
2.45 ACRES OR 106,836 SF	84	Acer rubrum Red Maple	1" Cal.	
1" CALIPER TREES	83	Liquidambar straciflua American Sweet Gum	1" Cal.	
250 (1.25 AC) @ 200 TREES PER ACRE	83	Fraxinus americana White Ash	1" Cal.	
SEEDLINGS - WITH TREE SHELTERS	108	Acer rubrum Red Maple	3-4'	

#### PLANT SCHEDULE - FCE - 1 SIZE SPACING (FT) BOTANICAL NAME 1" Col. 15 X 15 Red Maple Acer rubrum 3-4' 11 X 11 Red Maple Platanus occidentalis 3-4' 11 X 11 Sycamore Prunus serotina 11 X 11 3-4' Black Cherry Quercus palustris 3-4' 11 X 11

	PLANT SCHEDULE - FCE - 2				
QUAN.	BOTANICAL NAME	SIZE	SPACING (FT)		
30	Acer rubrum Red Maple	1" Cal.	15 X 15		
18	Acer rubrum Red Maple	3-4'	11 X 11		
18	Platanus occidentalis Sycamore	3-4'	11 X 11		
18	Prunus serotina Black Cherry	3-4'	11 X 11		
18	Quercus palustris Pin Oak	3-4'	11 X 11		

PLANT SCHEDULE - FCE - 3			
QUAN.	BOTANICAL NAME	SIZE	SPACING (FT)
84	Acer rubrum Red Maple	1" Cal.	15 X 15
83	Liquidambar straciflua American Sweet Gum	1" Cal.	15 X 15
83	Fraxinus americana White Ash	1" Cal.	15 X 15
108	Acer rubrum Red Maple	3-4'	11 X 11
108	Platanus occidentalis Sycamore	3-4'	11 X 11
108	Prunus serotina Black Cherry	3-4'	11 X 11
108	Quercus palustris Pin Oak	3-4'	11 X 11
108	Fraxinus pennsylvanica Green Ash	3-4'	11 X 11

#### TOTAL

	PLANT SCHEDULE			
QUAN.	BOTANICAL NAME	SIZE	SPACING (FT)	
233	Acer rubrum Red Maple	1" Cal.	15 X 15	
130	Liquidambar straciflua American Sweet Gum	1" Cal.	15 X 15	
129	Fraxinus americana White Ash	1" Cal.	15 X 15	
209	Acer rubrum Red Maple	3-4'	11 X 11	
208	Platanus occidentalis Sycamore	3-4'	11 X 11	
208	Prunus serotina Black Cherry	3–4'	11 X 11	
208	Quercus palustris Pin Oak	3-4'	11 X 11	
208	Fraxinus pennsylvanica Green Ash	3-4'	11 X 11	

PLANT SCHEDULE - FCE - 4			
QUAN.	BOTANICAL NAME	SIZE	SPACING (FT)
32	Acer rubrum Red Maple	1" Cal.	15 X 15
16	Acer rubrum Red Maple	3-4'	11 X 11
16	Platanus occidentalis Sycamore	3-4'	11 X 11
16	Prunus serotina Black Cherry	3-4'	11 X 11
16	Quercus palustris Pin Oak	3-4'	11 X 11
16	Fraxinus pennsylvanica	3-4'	11 X 11

	PLANT SCHEDULE - FCE - 5		
QUAN.	BOTANICAL NAME	SIZE	SPACING (FT)
47	Acer rubrum Red Maple	1" Cal.	15 X 15
47	Liquidambar straciflua American Sweet Gum	1" Cal.	15 X 15
46	Fraxinus americana White Ash	1" Cal.	15 X 15
72	Acer rubrum Red Maple	3-4'	11 X 11
72	Platanus occidentalis Sycamore	3-4'	11 X 11
72	Prunus serotina Black Cherry	3-4'	11 X 11
72	Quercus palustris Pin Oak	3-4'	11 X 11
72	Fraxinus pennsylvanica Green Ash	3-4'	11 X 11

TENTATIVELY APPROVED DEPT. OF PLANNING AND ZONING OF HOWARD COUNTY

PLANNING DIRECTOR

FOREST CONSERVATION DETAILS THE PRESERVE AT WAVERLY GLEN LOTS 1-21, PRESERVATION PARCELS A-F AND NON-BUILDABLE BULK PARCEL G A RESUBDIVISION OF LOTS 1 & 2 AND PARCEL A OF SHADOW SHADE PLAT NO. 13808 AND LOT 1 OF HIGHPOINT AT BREEZEWOOD FARMS PLAT NO. 6385

REF. S-02-03, F-99-25, F-86-13 TAX MAP 10 BLOCK 23 4TH ELECTION DISTRICT PARCELS '304' & '102' HOWARD COUNTY, MARYLAND

FREDERICK WARD ASSOCIATES, INC. ENGINEERS 7125 Riverwood Drive Columbia, Maryland 21046-2354

ARCHITECTS Phone: 410-290-9550 Fax: 410-720-6226 SURVEYORS | Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

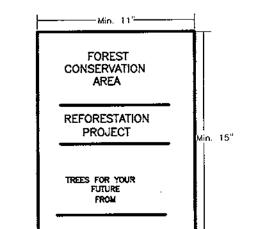
> ELW DE\$IGN BY: DRAWN BY: CHECKED BY: DATE: MARCH, 2003 AS SHOWN SCALE: \_ W.O. NO.: 2017139.00 5 SHEET 6

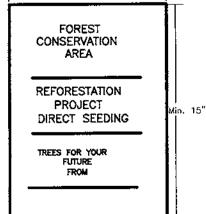
### 4. YEAR 1: INSPECT TREES FOR HEALTH AND VIGOR AT: A. BEGINNING OF GROWING SEASON, B. MIDSUMMER AND C. FALL. ADJUST WATERING, PEST CONTROL,

WEEDING AND FEEDING AS NEEDED. AFTER ONE-YEAR REPLACE ANY TREES THAT DID NOT SURVIVE DURING THE NEXT PLANTING SEASON. 5. YEAR 2: INSPECT TREES FOR HEALTH AND VIGOR IN APRIL & OCTOBER.

ADJUST WATERING, PEST CONTROL, WEEDING AND FEEDING AS NEEDED. REPLACE ANY TREES THAT DID NOT SURVIVIVE YEAR 2 DURING THE NEXT PLANTING SEASON UP TO 50% OF ORIGINAL INSTALLATION.

6. CONTRACTOR TO FOLLOW ALL STATE AND COUNTY GUIDELINES FOR AFFORESTATION & REFORESTATION.





CHUCK SCHNEIDER DNR QUALIFIED FOREST PROFESSIONAL

TOTAL

492 (2.46 AC) @ 200 TREES PER ACRE

1044 (2.90 AC) @ 360 WHIPS PER ACRE

REFORESTATION PROVIDED - FCE-4

32 (.16 AC) @ 200 TREES PER ACRE

80 (.22 AC) @ 360 WHIPS PER ACRE

SEEDLINGS - WITH TREE SHELTERS

REFORESTATION PROVIDED - FCE-5

140 (.70 AC) @ 200 TREES PER ACRE

360 (1.0 AC) @ 360 WHIPS PER ACRE

SEEDLINGS - WITH TREE SHELTERS

1.70 ACRES OR 73,920 SF

1" CALIPER TREES

0.38 ACRES OR 16,375 SF

1" CALIPER TREES

SEEDLINGS - WITH TREE SHELTERS

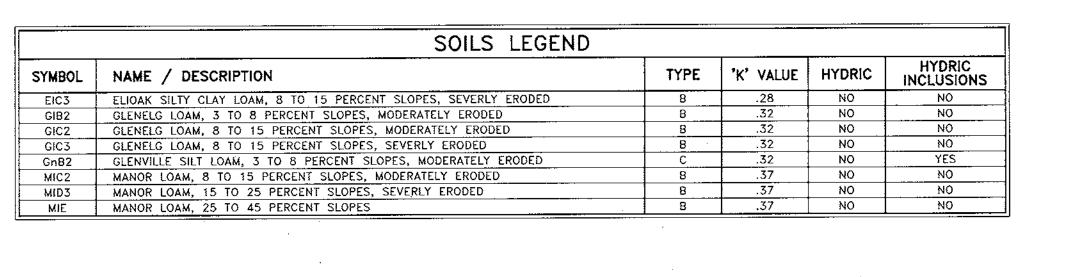
REFORESTATION PROVIDED - TOTAL

5.36 ACRES OR 233,531 SF

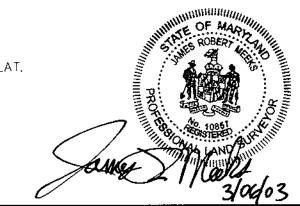
1" CALIPER TREES

1. The signs notify construction workers and future residents of the newly planted material, improving the trees' survival rates.





- 1. ON-SITE WETLAND DELINEATION PREPARED BY ECO-SCIENCE
- PROFESSIONALS ON OCTOBER 25, 2000.
- 2. FOREST STAND DELINEATION PREPARED BY FREDERICK WARD ASSOC. ON APRIL 26, 2001.
- 3. THE PROPERTY OUTLINE IS BASED ON A BOUNDARY SURVEY PREPARED BY FREDERICK WARD ASSOC., DATED MARCH 2001.
- 4. THE EXISTING FEATURES AND CONTOURS SHOWN HEREON ARE BASED ON AERIAL TOPOGRAPHY PREPARED BY POTOMAC AERIAL SURVEYS, INC. ON APRIL 4, 2001.
- 5. THERE IS A 100 YEAR FLOODPLAIN ON SITE.
- 6. THERE ARE NO HISTORIC SITES ON THE SUBJECT PARCEL.
- 7. EXISTING WELL ON NON-BUILDABLE PRESERVATION PARCEL 'F' PREVIOUSLY ABANDONED.
- 8. EXISTING HOUSE ON NON-BUILDABLE PRESERVATION PARCEL 'F' TO BE REMOVED AND PRIOR TO RECORD PLAT.
- 9. THERE IS NO FOUNDATION UNDER THE WESTERN 25' OF THE EXISTING HOUSE ON NON-BUILDABLE PRESERVATION PARCEL 'F'.
- 10. EXISTING WELL ON LOT 9 PREVIOUSLY ABANDONED.
- 11. EXISTING BARNS AND WELL ON LOT 9 TO BE ABANDONED PRIOR TO RECORD PLAT. 12. EXISTING WELL ON LOT 10 TO BE ABANDONED PRIOR TO RECORD PLAT.
- 13. EXISTING HOUSE, SEPTIC AND WELL ON LOT 6 TO REMAIN.
- 14. ALL WELLS SHALL BE DRILLED PRIOR TO RECORD PLAT.



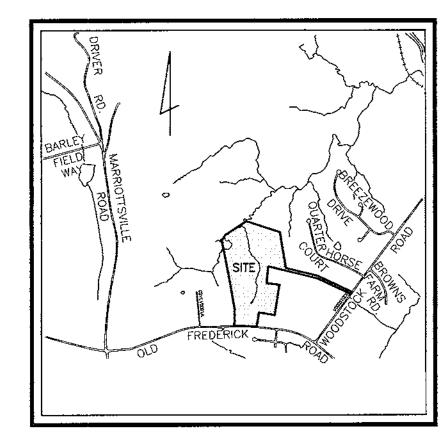
- 15. GROUNDWATER APPROPRIATION PERMIT SHALL BE OBTAINED PRIOR
- TO RECORD PLAT SUBMITTAL.
- 16. THE PURPOSE OF THIS PERCOLATION PLAN IS TO ESTABLISH SEPTIC AND WELL
- LAYOUT AND SHOULD NOT BE USED FOR ULTIMATE LOT/ROAD LAYOUT.

THE PURPOSE OF THIS REVISED PERCOLATION CERTIFICATION PLAN IS TO REMOVE 2 LOTS AND ACCOMMODATE MINOR REVISIONS TO THE ROAD ALIGNMENT.

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS ON LOTS 1-21 AND BULIDABLE PRESERVATION PARCEL 'A'.

COUNTY HEALTH OFFICER

PERCOLATION CERTIFICATION: I CERTIFY THAT THE LOCATIONS SHOWN HEREON ARE BASED ON FIELD LOCATIONS DONE UNDER MY DIRECT SUPERVISION, AND ARE CORRECT, TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF.



VICINITY MAP SCALE: 1"=2000'

#### LEGEND

EXISTING CONTOUR	382
EXISTING TREES TO REMAIN	
SOIL BOUNDARY	****** * ***** * ***** * ***** * ***** *
Ç STREAM	
STREAM BUFFER	
WETLAND BUFFER	
WETLAND	Adie Adie Adie
100 YEAR FLOODPLAIN	
SLOPES > 25%	
SLOPES 15% TO 24.9%	
PASSED PERC. TEST	<b>\$</b>
FAILED PERC. TEST	0
PREVIOUS PASSED PERC. T	EST 🖺
PREVIOUS FAILED PERC. TE	ST 🗆
EXISTING WELL	<b>@</b>
PROPOSED WELL	00
PROPERTY LINE	

TENTATIVELY APPROVED DEPT. OF PLANNING AND ZONING OF **HOWARD COUNTY** 

LANNING DIRECTOR DATE

### OWNER/DEVELOPER

TBI HOMES, INC. 3675 PARK AVENUE, SUITE 301 ELLICOTT CITY, MARYLAND 21043 (410) 480-0023

# PRELIMINARY PLAN PERCOLATION CERTIFICATION PLAN THE PRESERVE AT WAVERLY GLEN

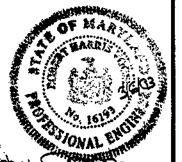
TAX MAP 10 BLOCK 23 4TH ELECTION DISTRICT

PARCELS '304' & '102' HOWARD COUNTY, MARYLAND



FREDERICK WARD ASSOCIATES, INC.

ENGINEERS | 7125 Riverwood Drive Columbia, Maryland 21046-2354 ARCHITECTS Phone: 410-290-9550 Fax: 410-720-6226 Columbia, Maryland SURVEYORS | Bel Air, Maryland Warrenton, Virginia



W.O. NO.: 2017139.0