

DRAWING TITLES	
SHEET	DESCRIPTION
1	COVER SHEET
2	PRELIMINARY PLAN
3	GRADING, SEDIMENT & EROSION CONTROL PLAN
4	PRELIMINARY FOREST CONSERVATION AND LANDSCAPE PLAN

GENERAL NOTES

- Existing Zoning: PEC-MXD-3 per April 2004 Comprehensive Zoning Plan and ZB Case No. 974-M
- Case Reference: 2008/29
- Plat Reference: Plat No. 17499 and 18000 recorded as a Plat of FCE for Parcels 462 and 837
- Gross Area of Tract: 28.84 ac.
- Area of 100 Year Floodplain: 1.46 ac.
- Area of Steep Slopes: 0.36 ac. (0.33 ac. Outside Floodplain)
- Net Area of Tract: 27.0504 ac.
- Number of Proposed Lots/Parcels: 3
- Area of Proposed Lots/Parcels:
 - Buildable Lots: 20.28 ac.
 - Open Space Lots: 7.58 ac.
- 116 apartments are proposed for Parcel B
- Area of Proposed Public Roads: 0.98 ac.
- Land for a Public Road will be dedicated under a plat to be submitted with the Final Plan for the Emerson.
- This project is in conformance with the latest Howard County Standards unless waivers have been approved.
- The existing topography shown hereon was provided by Daft-McCune-Walker, Inc dated September, 1998.
- Landscaping for this development and landscaping surety will be provided as part of the Developers Agreement, at final plan stage, in accordance with the latest edition of the Howard County Landscape Manual and the approved Emerson Landscape and Street Tree Design Criteria.
- This phase of the Emerson project complies with Section 16.1200 of the Howard County Code for Forest Conservation by retaining 0.84% ac. of existing forest and providing 0.62% ac. of reforestation. When evaluated cumulatively with previous phases of the project 71.14% ac. of forest have been cleared, 54.68% ac. have been retained, and 16.11% ac. have been reforested. The cumulative reforestation obligation is 14.92 ac.
- The coordinates shown hereon are based upon the Howard County Geodetic Control, which is based upon the Maryland State Coordinate System, Howard County Monument No's 47DC & 47EB were used for this project.
- This property is within the Metropolitan District.
- Stormwater management for this development will be provided by the following means:
 - Recharge volume (REV) will be via grass channel credit provided under the SDP for these parcels since the site grading and building locations are not known at this time. The water quality (WQV) will be provided through a micro-pool extended detention pond and the natural area conservation credit. Channel protection volume (CPV) will be provided through the micro-pool extended detention pond. Overbank flood protection volume and extreme flood protection volume are not required. The facility is to be privately owned by the HOA and jointly maintained.
- Existing utilities shown hereon are based on field surveys and record drawings.
- Floodplain analysis based on a Floodplain Analysis prepared by Daft-McCune-Walker, Inc. previously submitted under S-99-12.
- There are wetlands onsite within Open Space Lot 1 per SDP-05-124.
- Traffic study provided under S-99-12.
- The unmitigated noise study for this project was provided under S-99-12. The mitigated noise contour is based on a study prepared by Century Engineering, Inc. dated September, 2006.
- The geotechnical study for this project was prepared by The Robert B. Bolter Company dated March, 2006.
- Project Background Information:
 - Subdivision Name: Emerson Section 2 Phase 8/B
 - Tax Map/Block/Parcel: 47B/p/o 462 & p/o 837
 - Zoning: PEC-MXD-3
 - Election District: 6th
 - Total (Gross) Tract Area: 28.84 ac.
 - Number of Proposed Lots/Parcels: 3
 - Applicable Department of Planning & Zoning File No.'s: S-99-12 (Key Property), SDP-05-124, PB-339, PB-354, PB-379, WP-01-22, WP-07-31
 - The existing dwelling and shed on-site are to be removed.
 - The proposed access street shall be public.
 - BRL denotes the Building Restriction Line.
 - Sediment and erosion control measures will be provided in accordance with the 1994 Maryland Standards and Specifications for Soil Erosion and Sediment Control and will be shown on the Final Plan.
 - Street trees will be provided on the access street in accordance with Section 16.124 of the Howard County Subdivision Regulations.
 - Sidewalks are provided in accordance with Section 16.134 of the Howard County Subdivision Regulations.
 - A Community Input Meeting is not required in the MXD zone.
 - The open space lot is to be privately owned by the HOA.
 - Offsite grading is allowed since the adjacent property owners are the same as the subject property.
 - The minimum building setback restrictions from the property lines and the public road right-of-way lines for the Other Residential and Employment parcels shall be in accordance with the Comprehensive Sketch Plan Development Criteria approved under S-99-12, PB-339 and PB-354.
 - Phasing for this project is in accordance with the Decision and Order for Zoning Board Case No. 974-M and the Decision and Order approved for PB-339 (Comprehensive Sketch Plan, S-99-12).
 - There are no historic structures or cemeteries located on the subject property.
 - No grading, removal of vegetative cover or trees, paving and new structures shall be permitted within the wetlands, stream or their required buffers, flood plain and forest conservation easement.
 - This plan is subject to WP-07-31 to waive Section 16.121(e)(1) requiring open space lots to have a minimum of 4% of frontage onto a public road for access by pedestrians and maintenance vehicles. The waiver was denied on October 23, 2006.

COORDINATE TABLE

PTS	NORTHING	EASTING
1	535678.0108	154749.8624
2	535647.6780	154736.1974
3	534792.6577	153650.9698
4	534716.0816	153502.8612
5	534630.5630	153310.2230
6	534833.3836	153277.2532
7	535084.5281	153310.2274
8	535210.3186	153202.7390
9	535491.7924	153231.8035
10	535476.1744	153200.2083
11	535480.8347	153221.4231
12	535551.4523	153171.0204
13	535583.3151	153182.7041
14	535606.5648	153234.4951
15	535608.7820	153242.3150
16	535544.4387	153269.4214
17	535521.9882	153294.0828
18	535550.7737	153326.4018
19	535520.5857	153376.2344
20	535446.3399	153431.7465
21	535487.1856	153448.7146
22	535526.8661	153532.2269
23	535505.7807	153576.1481
24	535532.1748	153618.5073
25	535554.9945	153631.0346
26	535413.8501	153589.1039
27	535494.0520	153656.3553
28	536016.5873	153651.8059
29	536233.2873	153791.4738
30	535947.5018	154214.0469
31	535968.8232	154268.8343

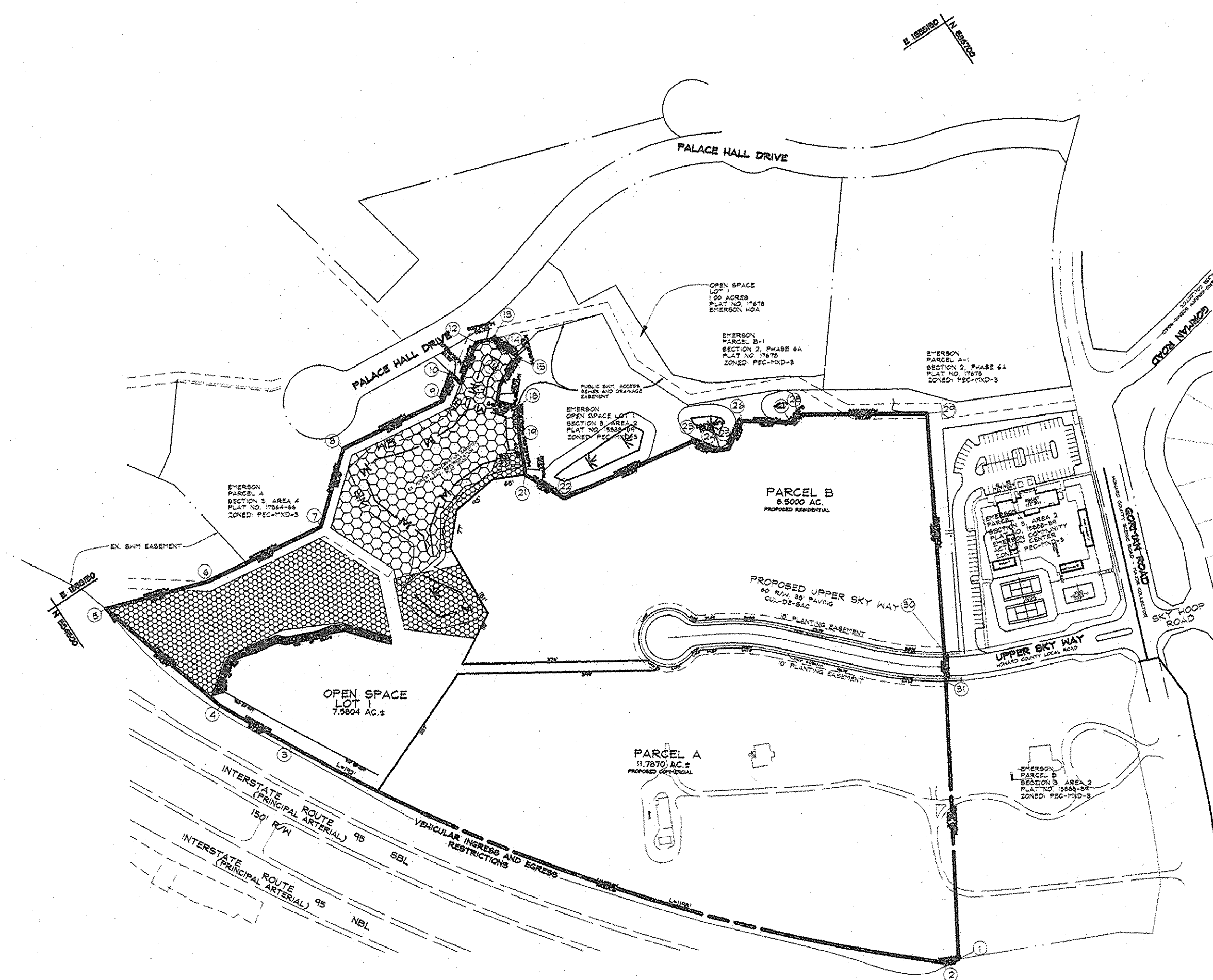
TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

DeMario Design Consultants, Inc.
PLANNING DIRECTOR

12/28/06
DATE

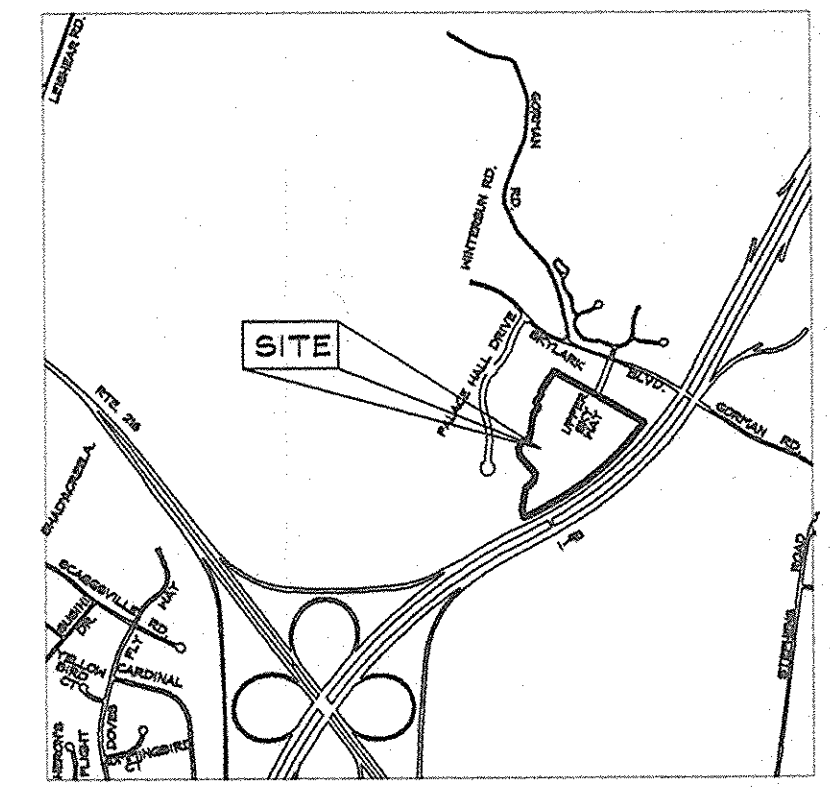
PRELIMINARY PLAN for EMERSON SECTION 2, PHASE 8B PARCELS A & B, AND OPEN SPACE LOT 1

TAX MAP 47, GRID 8, PARCEL P/O 462 & P/O 837
6TH ELECTION DISTRICT HOWARD COUNTY, MD



BENCHMARK

DESCRIPTION	
BENCHMARK #1	N. 536615.0157 E. 1533679.1226 47DC ELEV. 343.249
BENCHMARK #2	N. 536212.7456 E. 1534833.6403 47EB ELEV. 354.246



VICINITY MAP
SCALE: 1"=2000'

DRAWING LEGEND

- 650 --- EXISTING MINOR CONTOUR (2' INTERVAL)
- 650 --- EXISTING MAJOR CONTOUR (10' INTERVAL)
- ADJACENT PROPERTY LINE
- EXISTING PROPERTY BOUNDARY
- EX. ROAD / EDGE OF PAVING
- EX. GENER. LINE & MANHOLES, CLEAN-OUTS
- EX. OVERHEAD ELECTRIC & UTILITY POLES
- 650 --- PROPOSED MINOR CONTOUR (2' INTERVAL)
- 650 --- PROPOSED MAJOR CONTOUR (10' INTERVAL)
- PROP. STANDARD CURB & GUTTER /
- PROP. SIDEWALK CURB & GUTTER
- PROP. PRIVATE ROAD/DRIVE CENTERLINE
- EX. BUILDING
- PROPOSED BUILDING EXPANSION
- PROPOSED SPOT ELEVATION & FLOW ARROW
- EXISTING TREES
- PROPOSED ORNAMENTAL TREE
- PROPOSED SHADE TREE
- PROPOSED EVERGREEN TREE
- EXISTING TREELINE
- EXISTING SHRUB/BURSH LINE
- PROPOSED STORM DRAIN W/ INLETS & MANHOLE
- PROPOSED INLET PROTECTION MEASURES
- PROPOSED WATER LINE & HYDRANT
- PROPOSED GENER AND MANHOLES
- PROPOSED ELECTRIC TRANSFORMER
- PROPOSED ELECTRIC METER
- EXISTING FOREST CONSERVATION EASEMENT
- PROPOSED FOREST CONSERVATION EASEMENT
- 15' NO WOODY ZONE
- EXISTING WETLANDS
- 25' WETLANDS BUFFER

DATA SOURCES:

BOUNDARY AND TOPOGRAPHY BASED ON A SURVEY PREPARED BY DAFT-MCCUNE-WALKER, INC. DATED SEPTEMBER 1998. FLOODPLAIN BASED ON ANALYSIS BY DAFT-MCCUNE-WALKER, INC.

Section and Phase	File Reference Number	Gross Acreage	SFD Ac. (%)	Other Res. Ac. (%)	Employment Ac. (%)	Open Space Ac. (%)	SFD Units	SFD Density (C)	Other Res. Units (SFA/Apt/Condo)	Other Res. Density (D)
2/1A	F-01-136	8.4	3.6 (43%)	-0-	-0-	4.8 (57%)	-	-	80 SFA	10 D.U./Ac.
2/1B	F-01-137	97.8	49.7 (50.8%)	8.0 (8.2%)	-0-	40.1 (41%)	160	3.2	120 SFA	9.4 D.U./Ac.
2/2	F-01-145	12.7	-0-	12.7 (100%)	-0-	-0-	-	-	120 SFA	10 D.U./Ac.
2/3	F-02-55	18.5	-0-	12.0 (64.9%)	-0-	6.5 (35.1%)	-	-	-	-
3/1	F-02-131	69.5	-0-	-0-	22.0 (31.7%)	47.5 (68.3%)	-	-	-	-
3/2	F-02-178	12.3	-0-	-0-	8.9 (72.4%)	3.4 (27.6%)	-	-	-	-
2/4	F-03-13	44.5	27.4 (61.5%)	-0-	-0-	17.1 (38.5%)	120	4.4	-	-
2/5C	F-03-175	3.0	0.7 (23.3%)	-0-	0.2 (6.7%)	2.1 (70%)	-	-	100 SFA	10.6 D.U./Ac.
2/6A(F)	F-04-68	10.4	-0-	9.4 (90.4%)	-0-	1.0 (9.6%)	-	-	-	-
2/5A & 3/3	F-04-53	29.2	22.7 (77.7%)	-0-	3.9 (13.4%)	2.6 (8.9%)	87	3.9	60 Apt (EMP) 33 SFA (OR)	11.4 D.U./Ac.
2/5B & 3/4	F-04-127	23.9	-0-	2.9 (12.1%)	14.1 (59%)	6.9 (28.9%)	-	-	-	-
2/6B	F-05-89	6.2	4.9 (79.0%)	-0-	-0-	1.3 (21.0%)	20	4.1	-	-
2/7	F-05-93	8.5	-0-	8.5 (100%)	-0-	-0-	-	-	73 Apt 47 SFA	14.1 D.U./Ac.
2/8A(G)	F-07-	0.0	-0-	-0-	-0-	-0-	3	-	-	-
2/8B	F-06-11	28.8	-0-	8.5 (29.5%)	12.72 (44.2%)	7.58 (26.3%)	-	-	117 Apt	13.8 D.U./Ac.
TOTAL		373.7	109 (29.2%)	62 (16.6%)	60.9 (16.3%)	140.9 (37.7%)	390	3.6	250 Apt 500 SFA 750 Total	11.1 D.U./Ac.

Overall SFD Density	(E) Proposed	(B) Allowed	Land Use Acres	Proposed	Allowed	Max. Res. Units Proposed	Max. Res. Units Allowed
Overall SFD Density	3.6	3.8	SFD	109	117	390	450 (37.5%) 395 (34.5%)
Overall OR Density	11.1	12.1	OR	62	62	250	250 (20.8%) 250 (21.8%)
Overall Project Density	2.21	2.32	EMP	140.7	183	500	500 (41.7%) 500 (43.7%)
			Open Space	140.7	183	500	500 (41.7%) 500 (43.7%)
			TOTAL	373.7	516.9		1200

(A) SFD acreage includes Common Open Areas (COA Lots).
 (B) Overall allowed density based on maximum number of units allowed per ZB 979 M and Max. Allowed Land Use Acres.
 (C) Max. density for any individual SFD area is 5.0 units/acre.
 (D) Max. density for an individual OR area is 20.0 units/acre.

(E) Proposed density tabulations are shown for informational purposes only. Those tabulations will be reconciled against the maximum density tabulations with the last plat or phase.
 (F) Resubdivided by F-06-25 to create 1.0 ac of credited Open Space
 (G) This is a resubdivision of SFD Land Userrecorded with F-03-43

Note: This chart reflects the current information for this project at the time of recordation of each individual plat. For current information, refer to the most recently recorded plat.

DeMario Design Consultants, Inc.

The Old Firehouse
66 East Main Street, Suite 200
Westminster, MD 21157

Phone: (410) 386-6550
Fax: (410) 386-6554
eMail: dm@demariodesign.com

OWNER:
HOWARD RESEARCH AND DEVELOPMENT
10275 LITTLE PATUXENT PKWY
COLUMBIA, MD 21044
410-992-6000

DEVELOPER:
GENERAL GROWTH PROPERTIES
10275 LITTLE PATUXENT PKWY
COLUMBIA, MD 21044
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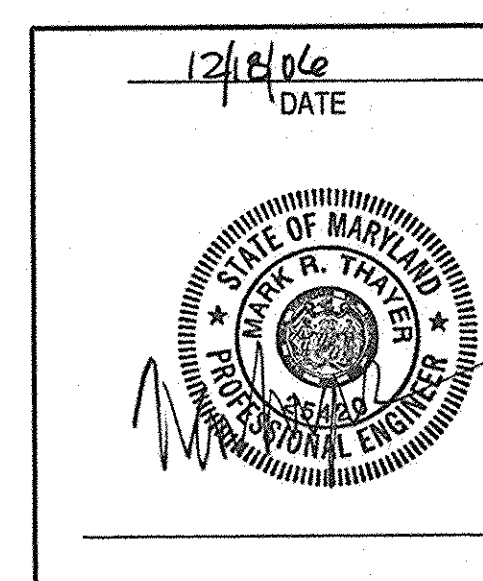
SITE ADDRESS:
UPPER SKY WAY

PRELIMINARY PLAN
EMERSON
SECTION 2, PHASE 8B,
PARCELS A AND B, OPEN SPACE LOT 1
COVER SHEET

6TH ELECTION DISTRICT HOWARD COUNTY, MD

REVISIONS		
NO.	DESCRIPTION OF CHANGES	DRN. REV. DATE

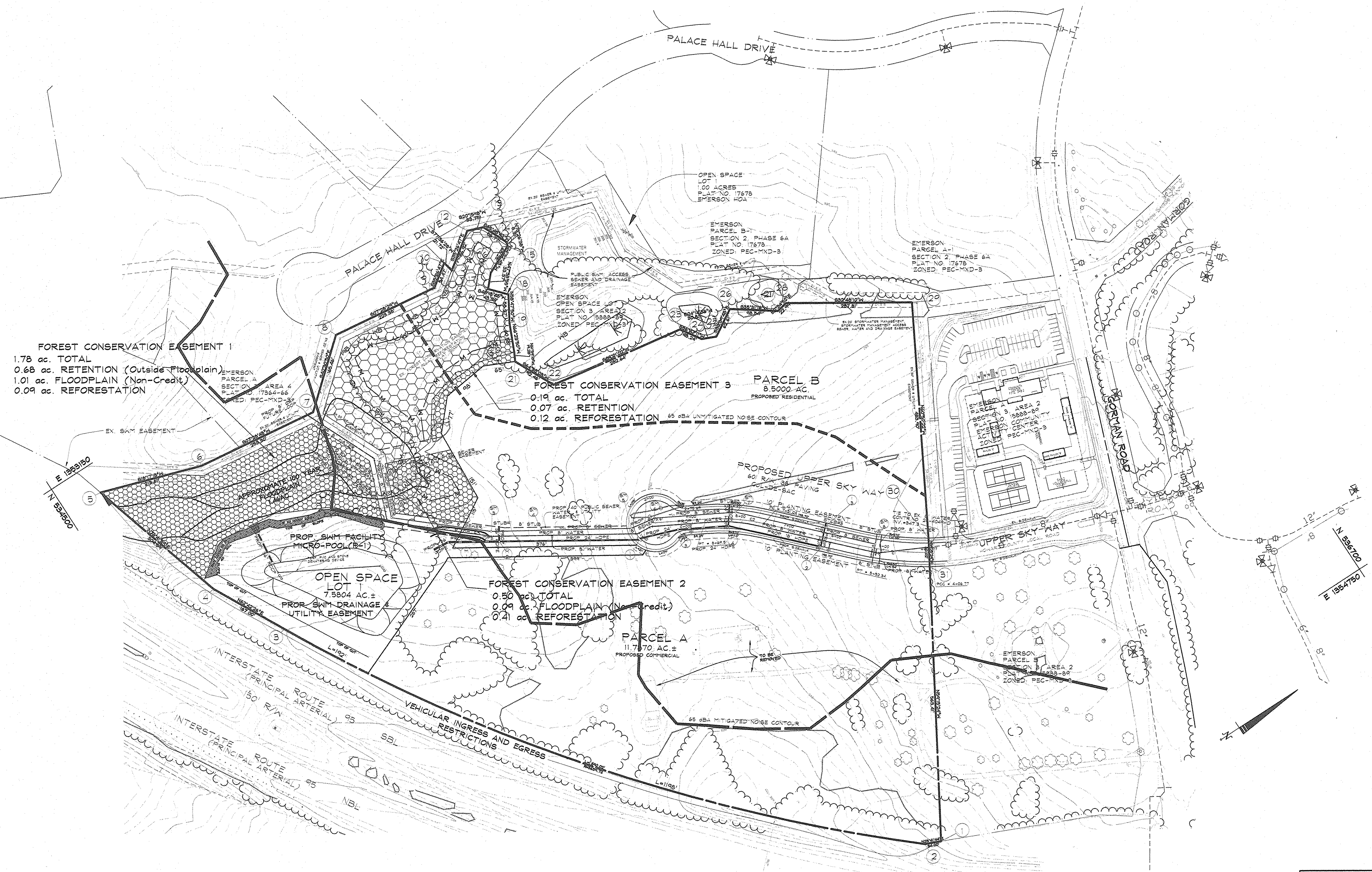
CO. FILE #	P-06-11	DES. BY:	JCO/MRT
TAX ACC. #	N/A	DRN. BY:	JCO
TAX MAP:	47	CHK. BY:	JCO
BLOCK / GRID:	8	DATE:	12.08.06
PARCEL #:	P/O 462, P/O 837	DDC JOB#:	05104.1
ZONE / USE:	PEC-MXD-3	SHEET NUMBER:	1 of 4
DWG. SCALE:	1"=200'		



E 1959150
N 556700

CURVE TABLE						
CURVE	LENGTH	RADIUS	TANGENT	DELTA	BEARING	CHORD
C 1	145.87	600.00	73.14	13°54'04"	N89°26'11"E	145.21
C 2	118.47	400.00	59.67	16°55'12"	S87°34'07"W	118.04

DRAWING LEGEND	
	EXISTING MINOR CONTOUR (2' INTERVAL)
	EXISTING MAJOR CONTOUR (10' INTERVAL)
	ADJACENT PROPERTY LINE
	EXISTING PROPERTY BOUNDARY
	EX. ROAD / EDGE OF PAVING
	EX. SEWER LINE & MANHOLES, CLEAN-OUTS
	EX. OVERHEAD ELECTRIC & UTILITY POLES
	PROPOSED MAJOR CONTOUR (2' INTERVAL)
	PROPOSED MAJOR CONTOUR (10' INTERVAL)
	PROP. STANDARD CURB & GUTTER
	PROP. VARIABLE CURB & GUTTER
	PROP. REVERSIBLE/MOUNTABLE CURB GUTTER
	PROPOSED PRIVATE ROAD/DRIVE CENTERLINE
	EX. BUILDING
	PROPOSED BUILDING EXPANSION
	PROPOSED SPOT ELEVATION & FLOW ARROW
	EXISTING TREES
	PROPOSED ORNAMENTAL TREE
	PROPOSED SHADE TREE
	PROPOSED EVERGREEN TREE
	EXISTING TREELINE
	EXISTING SHRUB/BRUSH LINE
	PROPOSED STORM DRAIN W/ MANHOLE
	PROPOSED INLET PROTECTION MEASURES
	PROPOSED WATER LINE & HYDRANT
	PROPOSED SEWER AND MANHOLES
	PROPOSED ELECTRIC TRANSFORMER
	PROPOSED ELECTRIC METER
	EXISTING FOREST CONSERVATION EASEMENT
	PROPOSED FOREST CONSERVATION EASEMENT
	15' NO HOODY ZONE
	EXISTING WETLANDS
	20' WETLANDS BUFFER



FOREST CONSERVATION EASEMENT 1
1.78 ac. TOTAL
0.68 ac. RETENTION (Outside Floodplain)
1.01 ac. FLOODPLAIN (Non-Credit)
0.09 ac. REFORESTATION

FOREST CONSERVATION EASEMENT 3
0.19 ac. TOTAL
0.07 ac. RETENTION
0.12 ac. REFORESTATION

FOREST CONSERVATION EASEMENT 2
0.50 ac. TOTAL
0.09 ac. FLOODPLAIN (Non-Credit)
0.41 ac. REFORESTATION

DATA SOURCES:
BOUNDARY AND TOPOGRAPHY BASED ON A SURVEY PREPARED BY DAFT-FIGGINS-WALKER, INC. DATED SEPTEMBER 1998. FLOODPLAIN BASED ON ANALYSIS BY DAFT-FIGGINS-WALKER, INC.

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66 East Main Street, Suite 200
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Phone: (410) 386-0500
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COLUMBIA, MD 21044
410-992-6200

DEVELOPER: GENERAL GROWTH PROPERTIES
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410-992-6200

SITE ADDRESS:
UPPER SKY WAY

PRELIMINARY PLAN
EMERSON
SECTION 2, PHASE 8B,
PARCELS A AND B, OPEN SPACE LOT 1
PRELIMINARY PLAN

6TH ELECTION DISTRICT HOWARD COUNTY, MD

12/22/06
DATE

NO.	DESCRIPTION OF CHANGES	DRN	REV	DATE
CO. FILE #	P-06-11	DES. BY:	JCO	
TAX ACC. #	N/A	DRN. BY:	TPM	
TAX MAP:	47	CHK. BY:	JCO	
BLOCK / GRID:	8	DATE:	12.08.06	
PARCEL #:	P/O 462, P/O 837	DDC JOB#:	05104.1	
ZONE / USE:	PEC-MXD-3	SHEET NUMBER:		
DWG. SCALE:	1"=100'		2 of 4	

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

Stephane Laffont
PLANNING DIRECTOR

12/22/06
DATE

DRAWING LEGEND

- 682 --- EXISTING MINOR CONTOUR (2' INTERVAL)
- 680 --- EXISTING MAJOR CONTOUR (10' INTERVAL)
- --- ADJACENT PROPERTY LINE
- N 00°28'00" W 122.00' --- EXISTING PROPERTY BOUNDARY
- --- EX. ROAD / EDGE OF PAVING
- --- EX. SEWER LINE & MANHOLES, CLEAN-OUTS
- --- EX. OVERHEAD ELECTRIC & UTILITY POLES
- 682 --- PROPOSED MINOR CONTOUR (2' INTERVAL)
- 680 --- PROPOSED MAJOR CONTOUR (10' INTERVAL)
- --- PROP. STANDARD CURB & GUTTER / PROP. REVERSE CURB & GUTTER
- --- PROP. REVERSE CURB & GUTTER
- --- PROPOSED PRIVATE ROAD/DRIVE CENTERLINE
- --- EX. BUILDING
- --- PROPOSED BUILDING EXPANSION
- 665.5 --- PROPOSED SPOT ELEVATION & FLOW ARROW
- --- EXISTING TREES
- --- PROPOSED ORNAMENTAL TREE
- --- PROPOSED SHADE TREE
- --- PROPOSED EVERGREEN TREE
- --- EXISTING TREELINE
- --- EXISTING SHRUB/BRUSH LINE
- --- PROPOSED STORM DRAIN W/ INLETS & MANHOLES
- --- PROPOSED INLET PROTECTION MEASURES
- --- PROPOSED WATER LINE & HYDRANT
- --- PROPOSED SEWER AND MANHOLES
- --- PROPOSED ELECTRIC TRANSFORMER
- --- PROPOSED ELECTRIC METER
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- --- PROPOSED FOREST CONSERVATION EASEMENT
- --- 15' NO WOODY ZONE
- --- EXISTING WETLANDS
- --- 20' WETLANDS BUFFER

DATA SOURCES:
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 Fax: (410) 388-0594
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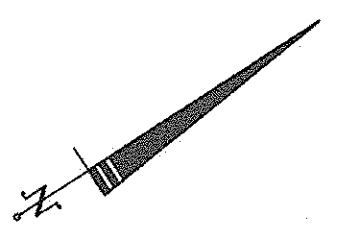
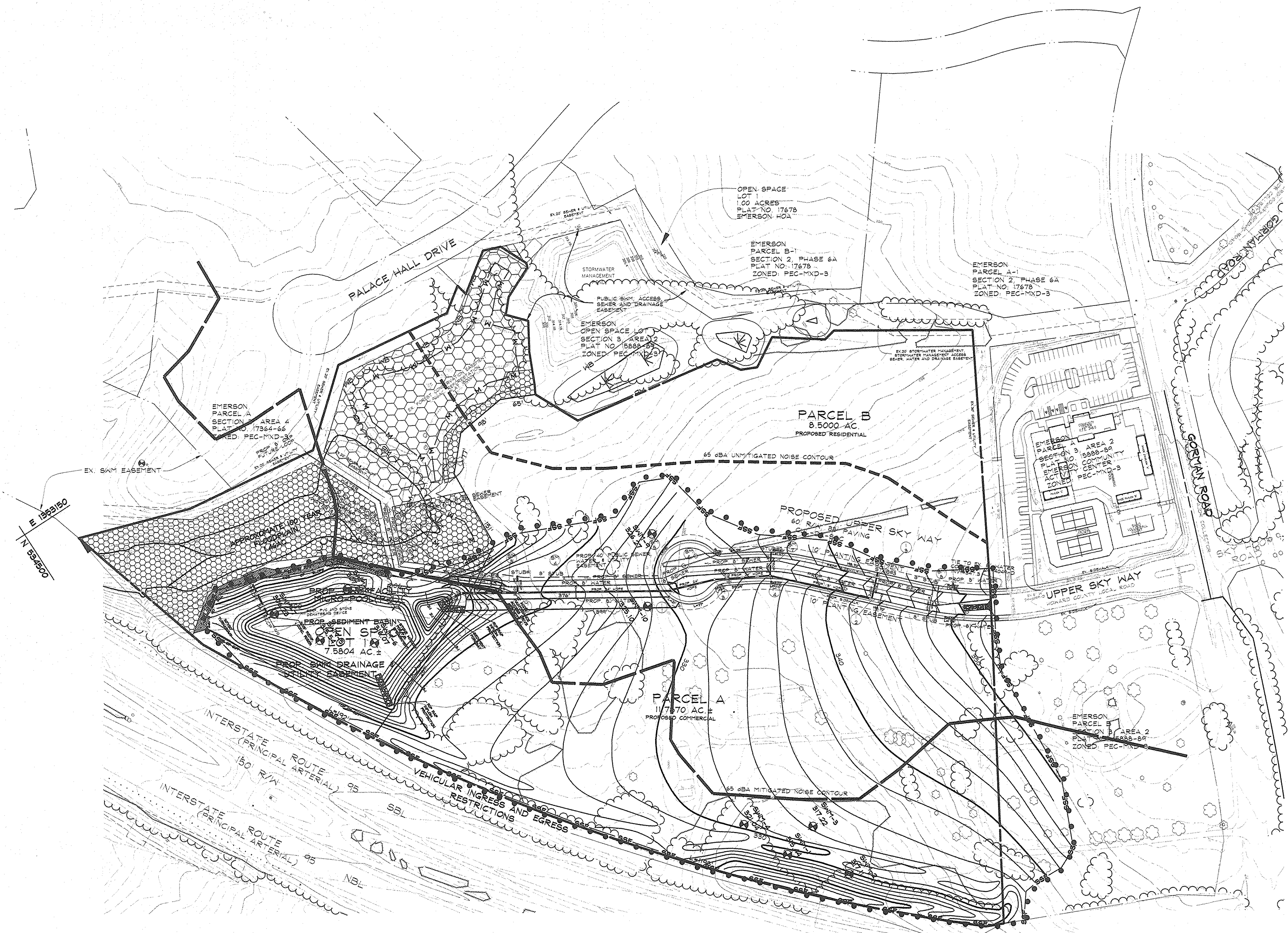
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6TH ELECTION DISTRICT HOWARD COUNTY, MD

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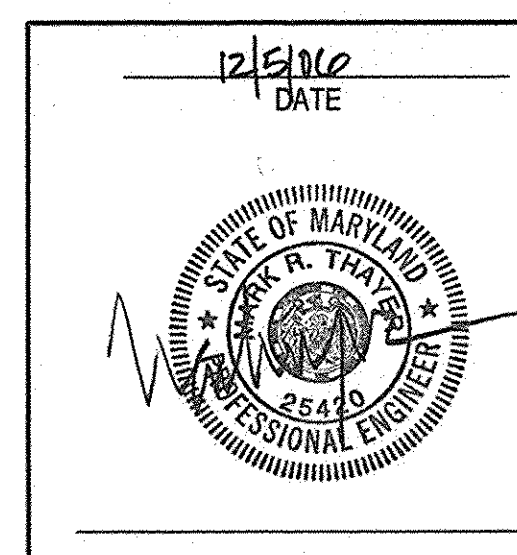
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ZONE / USE: PEC-MXD-3	SHEET NUMBER:
DWG. SCALE: 1"=100'	3 of 4



TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY

David Callahan
 PLANNING DIRECTOR

12/28/06
 DATE



W:\05104.1 - Emerson 2-8 (Plan)\Preliminary\05104.1_P2.DWG, 12/14/2006 4:47:28 PM

WETLAND - PLANTS REQUIRED - 35 (350 WHIPS/ACRE X 0.10 ACRES) TREE SHELTERS SHALL BE USED.

SPECIES NAME	COMMON NAME	SIZE	SPACING	QUANTITY	TOLERANCE	INDICATOR STATUS
ALNUS BERRULATA	COMMON ALDER	18"-24" HEIGHT/CONT. GROWN	11X11'	5	FULL SUN	OK
BELUTA NIGRA	RIVER BIRCH	18"-24" HEIGHT/CONT. GROWN	11X11'	10	FULL SUN	PAGN
CORNUS AMOMUM	BILKY DOGWOOD	18"-24" HEIGHT/CONT. GROWN	11X11'	10	FULL SUN	PAGN
QUERCUS BICOLOR	SHAMP WHITE OAK	18"-24" HEIGHT/CONT. GROWN	11X11'	10	FULL SUN TO PART SHADE	PAGN
TOTALS				35		

UPLANDS - PLANTS REQUIRED - 182 (350 WHIPS/ACRE X 0.52 ACRES) TREE SHELTERS SHALL BE USED.

SPECIES NAME	COMMON NAME	SIZE	SPACING	QUANTITY	TOLERANCE	INDICATOR STATUS
ACER RUBRUM	RED MAPLE	18"-24" HEIGHT/CONT. GROWN	11X11'	72	FULL SUN TO PART SHADE	PAC
LIQUIDAMBAR STYRACIFLUA	BURKET GUM	18"-24" HEIGHT/CONT. GROWN	11X11'	50	FULL SUN	PAC
NYSSA SYLVATICA	BLACK GUM	18"-24" HEIGHT/CONT. GROWN	11X11'	25	FULL SUN	PAC
QUERCUS PHellos	HILLOCK OAK	18"-24" HEIGHT/CONT. GROWN	11X11'	55	FULL SUN	PAC
TOTALS				182		

FOREST CONSERVATION LEGEND

- PROP. FOREST CONSERVATION EASEMENT LIMIT LINE
- PROP. FOREST CONSERVATION EASEMENT
- EX. FOREST CONSERVATION EASEMENT
- PROP. REFORESTATION
- PERMANENT FOREST PROTECTION SIGNS

SCHEDULE A - PERIMETER LANDSCAPE EDGE

CATEGORY	PERIMETER 1*	PERIMETER 2
LANDSCAPE TYPE	TYPE C	N/A**
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	1981.1 F.	8464.1 F.
CREDIT FOR EXISTING VEGETATION (DESCRIBE BELOW IF NEEDED)	280	---
CREDIT FOR BERM (DESCRIBE BELOW IF NEEDED)	0	---
NUMBER OF PLANTS REQUIRED: SHADE TREES	41	---
EVERGREEN TREES	62	---
SHRUBS	---	---
NUMBER OF PLANTS PROVIDED: SHADE TREES	41	---
EVERGREEN TREES	62	---
OTHER TREES (2:1 SUBSTITUTION)	---	---
SHRUBS	---	---
(DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	---	---

NOTES:

- 1* LANDSCAPE REQUIREMENTS TO BE DEFERRED TO THE SITE DEVELOPMENT PLAN STAGE FOR FUTURE TENANTS. REQUIRED SCREENING WILL BE INCORPORATED INTO FUTURE TENANT LANDSCAPE PLANS AND WILL ADDRESS REQUIREMENTS DEFINED IN "COMMERCIAL AND INDUSTRIAL DESIGN GUIDELINES" BY THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION.
- 2** ADJACENT PROPERTIES ARE CONTAINED WITHIN THE SAME SUBDIVISION.

THIS LANDSCAPE PLAN IS SUBJECT TO COMPLIANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE, THE LANDSCAPE MANUAL AND THE APPROVED EMERSON LANDSCAPE DESIGN CRITERIA

DRAWING LEGEND

- 682 --- EXISTING MINOR CONTOUR (2' INTERVAL)
- 680 --- EXISTING MAJOR CONTOUR (10' INTERVAL)
- --- ADJACENT PROPERTY LINE
- --- EXISTING PROPERTY BOUNDARY
- --- EX. ROAD / EDGE OF PAVING
- --- EX. SEWER LINE & MANHOLES, CLEAN-OUTS
- --- EX. OVERHEAD ELECTRIC & UTILITY POLES
- 682 --- PROPOSED MINOR CONTOUR (2' INTERVAL)
- 680 --- PROPOSED MAJOR CONTOUR (10' INTERVAL)
- --- EX. BUILDING
- --- EXISTING TREES
- --- EXISTING TREELINE
- --- EXISTING SHRUB/BUSH LINE
- --- EXISTING WETLANDS
- WB --- 25' WETLANDS BUFFER
- ⊙ --- PROPOSED STREETS TREES

FOREST CONSERVATION GOALS AND OBJECTIVES

THE GOALS AND OBJECTIVES OF THIS PRELIMINARY FOREST CONSERVATION PLAN ARE TO ACCOUNT FOR THE ANTICIPATED CLEARING OF APPROXIMATELY 5.81 ACRES OF EXISTING FOREST ON THIS PARCEL OF THE EMERSON DEVELOPMENT, AND TO RETAIN APPROXIMATELY 0.75 ACRES IN THE FOREST CONSERVATION EASEMENT. APPROXIMATELY 0.68 ACRES OF REFORESTATION IS PROPOSED ADJACENT TO EXISTING FORESTS AND REFORESTATION AREAS. SPECIES SHALL BE CHOSEN TO REFLECT AND ENHANCE THE EXISTING FOREST COMUNITY AND WILL BE SELECTED TO TOLERATE THE VARYING MOISTURE REGIMES IN THE DESIGNATED PLATING AREAS.

WHEN CALCULATED CUMULATIVELY WITH PREVIOUS PHASES OF THIS PROJECT, A TOTAL OF 71.4 ACRES OF FOREST SHALL BE CLEARED AND 54.68 ACRES OF FOREST SHALL BE RETAINED. THE TOTAL REFORESTATION OBLIGATION IS 14.52 ACRES, AND 16.11 ACRES OF REFORESTATION HAVE BEEN PROVIDED.

STREET TREE CHART

ROAD NAME	LENGTH	TREES REQUIRED	TREES PROVIDED
UPPER SKY WAY	1520CF	35	35

FCE SUMMARY CHART:

	RETENTION	REFORESTATION	FLOODPLAIN	TOTAL
FCE 1	0.68 AC	0.09 AC	1.01 AC	1.78 AC
FCE 2	0.09 AC	0.41 AC	0.09 AC	0.59 AC
FCE 3	0.07 AC	0.12 AC	0.00 AC	0.19 AC
TOTAL	0.75 AC	0.62 AC	1.10 AC	2.47 AC

THE FOREST CONSERVATION EASEMENT HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE AND THE FOREST CONSERVATION MANUAL. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.

FOREST CONSERVATION TRACKING CHART

DIST. FILE NUMBER	Section/Phase Number	Gross Area	Floodplain	Net Tract Area	Forest Area	Forest Cleared	Forest Retained	Reforest./Affor. Provided	Reforest./Affor. Required	Reforest./Affor. Excess	Future Forest Clearing	Future Forest Affor.	Comments
F-01-157	2 1A/B	106.20	9.90	102.70	24.70	7.93	16.77	0.61	5.03	4.42	4.40	4.40	
F-01-163	2/2	158.90	3.80	155.40	24.80	8.03	16.77	2.15	5.03	2.05	5.20	5.41	See Note A
F-02-35	2/3	137.89	4.00	133.35	34.40	12.55	21.87	1.27	5.09	5.76	2.18	3.91	See Note B
F-02-31	3/1	206.80	21.11	185.66	85.50	31.47	49.83	0.00	5.03	5.03	2.18	3.91	
F-02-178	3/2	220.27	21.27	199.00	87.50	41.67	45.83	0.00	5.03	5.03	2.18	3.91	See Note C
F-03-19	2/4	264.91	26.87	238.24	43.10	47.15	51.09	0.00	5.09	5.09	2.41	3.24	
F-03-175	2/5/C	267.84	27.40	240.44	49.62	47.54	51.09	0.00	5.77	5.77	2.41	3.24	
F-04-65	2/6/A	277.76	27.40	250.35	49.62	47.54	51.09	0.00	5.77	5.77	2.41	3.24	See Note D
F-04-181	2/4	277.76	27.40	250.35	49.62	47.54	51.09	0.00	5.35	5.35	2.41	3.91	See Note E
F-04-93	2/6/A	506.93	27.81	479.42	95.43	61.03	2.74	6.74	5.05	2.41	3.91		
F-04-127	2/6/B	532.63	32.43	500.20	115.66	63.51	52.38	8.51	11.51	3.00	2.41	3.91	See Note F
F-05-41	2/1/B	532.63	32.43	500.20	115.66	61.73	53.93	6.93	13.24	6.76	0.41	1.84	See Note G
F-05-19	2/7	541.14	32.43	508.76	115.66	61.78	53.93	7.81	13.24	5.46	0.41	1.84	
F-05-94	2/6/B	547.46	32.43	515.03	121.26	67.83	53.93	10.15	15.52	3.37	0.41	1.84	
SDP-05-124 (FARM POND)		547.46	32.43	515.03	121.26	67.83	53.93	10.15	15.43	0.34	0.41	1.84	
F-06-11	2/5/B	573.80	32.43	541.37	125.82	71.14	54.68	14.52	16.11	1.79	0.41	1.84	See Note H

FOREST CONSERVATION TRACKING CHART PROVIDED BY DAFT-McCUNE-WALKER, INC.

A. 1.2041 ACRES OF FUTURE FOREST CLEARING SHOWN ON F-01-157 HAS BEEN CLEARED FOR SOFT OPEN SPACE LOT 17A.

B. 1.014 ACRES OF FUTURE FOREST CLEARING SHOWN ON F-01-163 HAS BEEN CLEARED FOR SOFT OPEN SPACE LOT 17B.

C. GROSS AREA INCLUDES 1.074 ACRES FOR SANITARY SEWER EXTENSION AND CONTAINS 0.884 ACRES OF FLOODPLAIN. REFORESTATION IS BEING RETAINED. APPROXIMATELY 0.15 ACRES OF FUTURE REFORESTATION IS BEING PROVIDED.

D. GROSS AREA INCLUDES 0.24 ACRES FOR THE SANITARY SEWER BURN ON F-02-178. GROSS AREA ALSO INCLUDES 0.07 ACRES FOR FUTURE REFORESTATION BEING PROVIDED UNDER F-02-178.

E. THIS LINE ITEM ACCOUNTS FOR REFORESTATION PROVIDED UNDER F-02-178. GROSS AREA ALSO INCLUDES 0.24 ACRES FOR WETLAND MITIGATION AREA FLOODPLAIN COUNTED UNDER F-04-127.

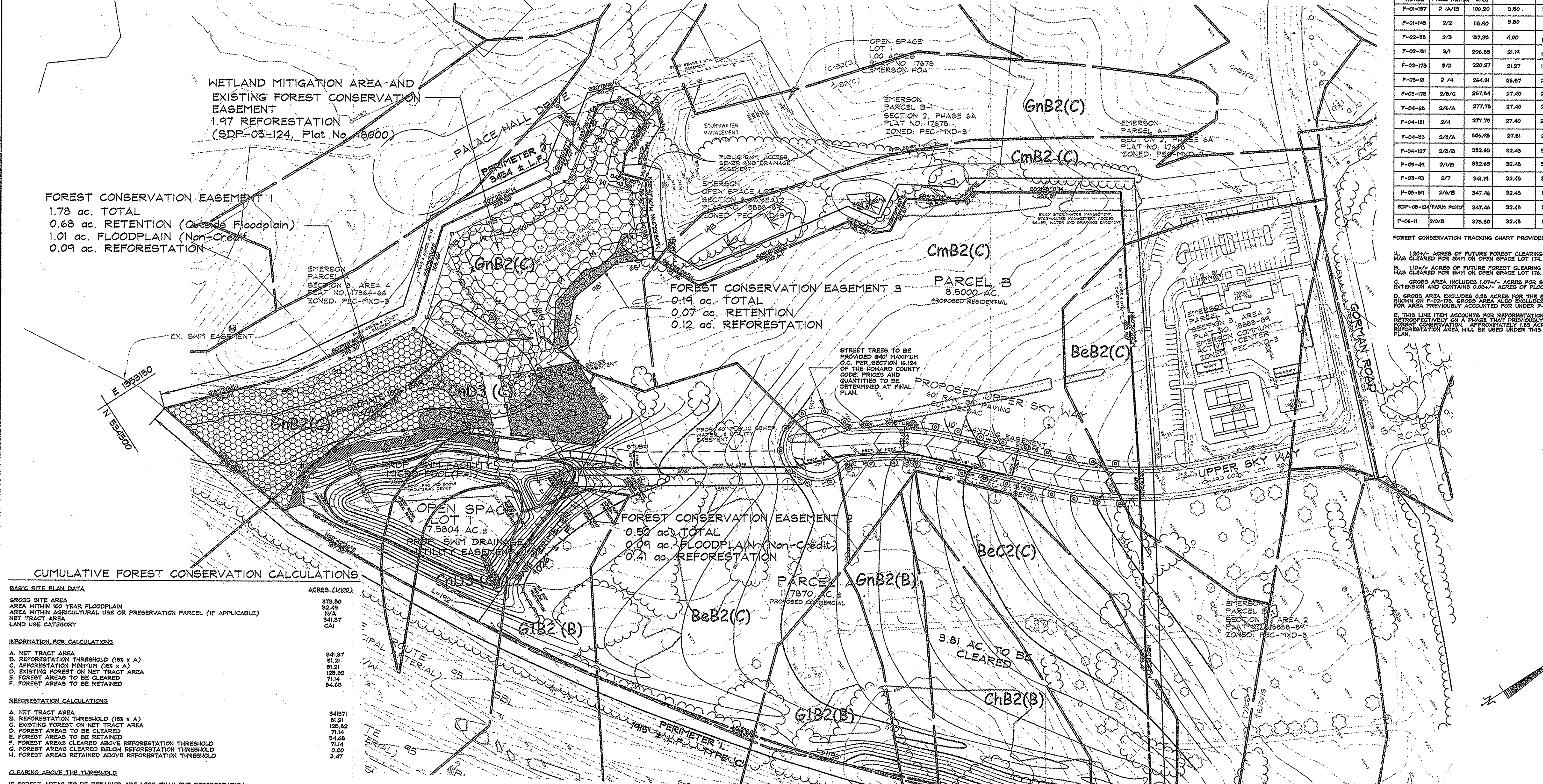
F. GROSS AREA INCLUDES 0.13 AC FOR SEWER SHOWN ON F-02-178. GROSS AREA ALSO INCLUDES 0.27 AC FOR WETLAND MITIGATION AREA FLOODPLAIN COUNTED UNDER F-04-127.

G. GROSS AREA INCLUDES 0.13 AC FOR SEWER SHOWN ON F-02-178. GROSS AREA ALSO INCLUDES 0.27 AC FOR WETLAND MITIGATION AREA FLOODPLAIN COUNTED UNDER F-04-127.

H. GROSS AREA INCLUDES 0.13 AC FOR SEWER SHOWN ON F-02-178. GROSS AREA ALSO INCLUDES 0.27 AC FOR WETLAND MITIGATION AREA FLOODPLAIN COUNTED UNDER F-04-127.

DATA SOURCES:

BOUNDARY AND TOPOGRAPHY BASED ON A SURVEY PREPARED BY DAFT-McCUNE-WALKER, INC. DATED SEPTEMBER 1998. FLOODPLAIN BASED ON ANALYSIS BY DAFT-McCUNE-WALKER, INC.



CUMULATIVE FOREST CONSERVATION CALCULATIONS

BASIC SITE PLAN DATA

DESCRIPTION	ACRES (1/100)
GROSS SITE AREA	373.80
AREA WITHIN 100 YEAR FLOODPLAIN	32.43
AREA WITHIN AGRICULTURAL USE OR PRESERVATION PARCEL (IF APPLICABLE)	N/A
NET TRACT AREA	341.37
LAND USE CATEGORY	CA1

INFORMATION FOR CALCULATIONS

DESCRIPTION	ACRES
A. NET TRACT AREA	341.37
B. REFORESTATION THRESHOLD (10% X A)	34.14
C. AFFORESTATION MINIMUM (5% X A)	17.07
D. EXISTING FOREST ON NET TRACT AREA	120.82
E. FOREST AREAS TO BE CLEARED	71.14
F. FOREST AREAS TO BE RETAINED	54.68

REFORESTATION CALCULATIONS

DESCRIPTION	ACRES
A. NET TRACT AREA	341.37
B. REFORESTATION THRESHOLD (10% X A)	34.14
C. EXISTING FOREST ON NET TRACT AREA	120.82
D. FOREST AREAS TO BE CLEARED	71.14
E. FOREST AREAS TO BE RETAINED	54.68
F. FOREST AREAS CLEARED ABOVE REFORESTATION THRESHOLD	71.14
G. FOREST AREAS CLEARED BELOW REFORESTATION THRESHOLD	0.00
H. FOREST AREAS RETAINED ABOVE REFORESTATION THRESHOLD	3.47

CLEARING ABOVE THE THRESHOLD

IF FOREST AREAS TO BE RETAINED ARE LESS THAN THE REFORESTATION THRESHOLD (IF F IS GREATER THAN B), THE FOLLOWING CALCULATIONS APPLY.

REFORESTATION FOR CLEARING ABOVE THRESHOLD

DESCRIPTION	ACRES
REFORESTATION FOR CLEARING ABOVE THRESHOLD	17.74
TOTAL REFORESTATION REQUIRED	0.00
TOTAL REFORESTATION PROVIDED	17.74

CREDIT FOR RETENTION ABOVE CONSERVATION THRESHOLD

DESCRIPTION	ACRES
CREDIT FOR RETENTION ABOVE CONSERVATION THRESHOLD	3.47
TOTAL REFORESTATION PROVIDED	16.11

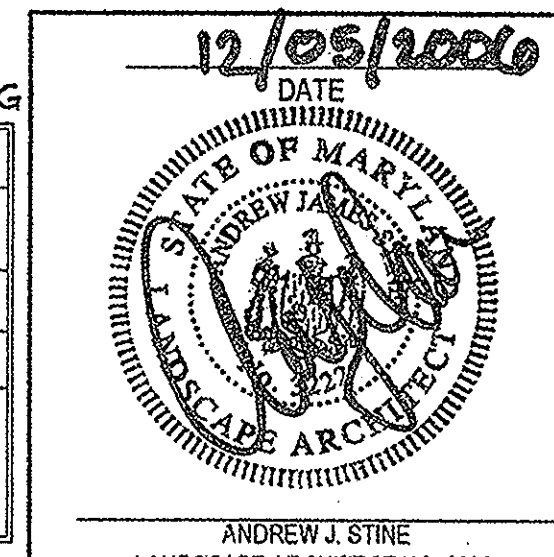
SOILS CHART

CODE(CLASS)	NAME	HYDRIC (Y/N/INCL.)	K VALUE
BeB2(C)	BELTSVILLE SILT LOAM, 1%-5% SLOPES, MODERATELY ERODED INCUSIONS	0.43	
BeC2(C)	BELTSVILLE SILT LOAM, 5%-10% SLOPES, MODERATELY ERODED INCUSIONS	0.43	
GnB2(C)	GLENVILLE SILT LOAM, 3%-8% SLOPES, MODERATELY ERODED INCUSIONS	0.32	
GnD3(C)	GLENVILLE SILT LOAM, 15%-25% SLOPES, MODERATELY ERODED INCUSIONS	0.32	
CmB2(B)	CHILLUM SILT LOAM, 1%-5% SLOPES, MODERATELY ERODED	N	0.43
CnD3(B)	CHILLUM-FAIRFAX LOAMS, 5%-15% SLOPES, SEVERELY ERODED	N	0.43
ChB2(B)	CHESTER SILT LOAM, 3%-8% SLOPES, MODERATELY ERODED	N	0.32
GlB2(B)	GLENELG LOAM, 3%-8% SLOPES, MODERATELY ERODED	N	0.32
SfB2(B)	SASSAFRAS LOAM, 3%-8% SLOPES, MODERATELY ERODED	N	0.32

SCHEDULE D STORMWATER MANAGEMENT AREA LANDSCAPING

LINEAR FEET OF PERIMETER	1026 L.F.
NUMBER OF PLANTS REQUIRED: SHADE TREES	21
EVERGREEN TREES	26
CREDIT FOR EXISTING VEGETATION (DESCRIBE BELOW IF NEEDED)	N/A
CREDIT FOR BERM (DESCRIBE BELOW IF NEEDED)	N/A
NUMBER OF PLANTS PROVIDED: SHADE TREES	0
EVERGREEN TREES	0
OTHER TREES (2:1 SUBSTITUTION) (DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	0

* TO BE DETERMINED AT FINAL PLAN



DeMario Design Consultants, Inc.

The Old Firehouse
89 East Main Street, Suite 200
Westminster, MD 21157

Phone: (410) 385-0550
Fax: (410) 385-0554
eMail: ddc@demariodesign.com

OWNER: HOWARD RESEARCH AND DEVELOPMENT
10275 LITTLE PATUXENT PKWY
COLUMBIA, MD 21044
410-992-9000

DEVELOPER: GENERAL GROWTH PROPERTIES
10275 LITTLE PATUXENT PKWY
COLUMBIA, MD 21044
410-992-6000

SITE ADDRESS: UPPER SKY WAY

PRELIMINARY PLAN
EMERSON
SECTION 2, PHASE 8B,
PARCELS A AND B, OPEN SPACE LOT 1
PRELIMINARY FOREST
CONSERVATION AND
LANDSCAPE PLAN

6TH ELECTION DISTRICT HOWARD COUNTY, MD

NO.	DESCRIPTION OF CHANGES	DRN.	REV.	DATE
CO. FILE #	P-06-11	DES. BY:	JCO/DMW	
TAX ACC. #	N/A	DRN. BY:	TPM	
TAX MAP:	47	CHK. BY:	JCO/MRT	
BLOCK / GRID:	8	DATE:	12.08.06	
PARCEL #	P/O 462, P/O 837	DDC JOB#:	05104.1	
ZONE / USE:	PEC-MXD-3	SHEET NUMBER:		
DWG. SCALE:	1"=100'			