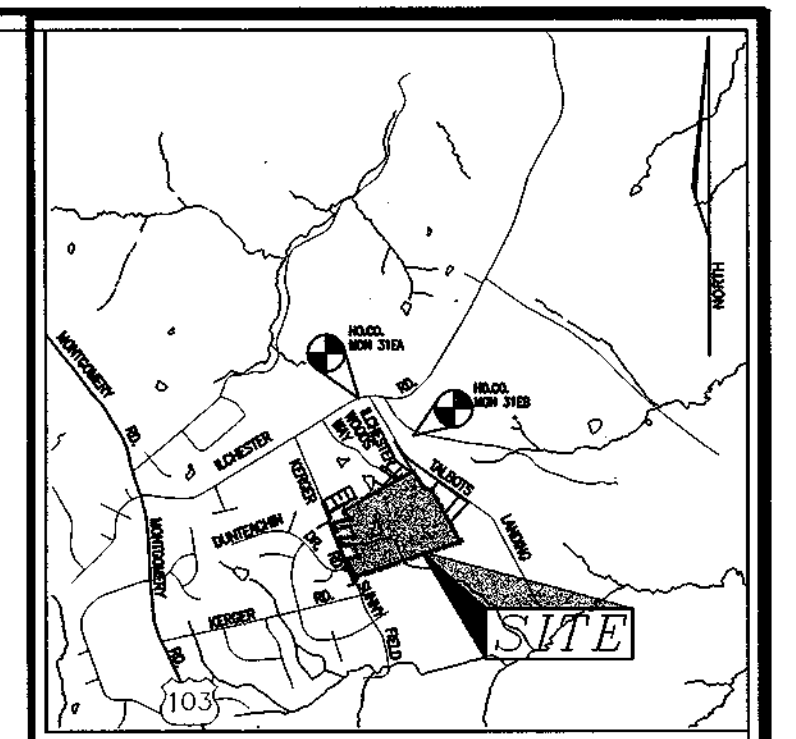


SHEET INDEX	
SHEET NO.	TITLE
1	COVER SHEET
2	PRELIMINARY PLAN
3	PRELIMINARY PLAN
4	PRELIMINARY GRADING & SEDIMENT CONTROL PLAN
5	PRELIMINARY GRADING & SEDIMENT CONTROL PLAN
6	FOREST CONSERVATION PLAN
7	FOREST CONSERVATION PLAN

# PRELIMINARY PLAN DENNIS PRESERVE PARCEL 226 HOWARD COUNTY, MARYLAND



VICINITY MAP  
SCALE: 1"=2000'

**BENCHMARKS**

BENCHMARK NO. 1: COUNTY CONTROL #31EA  
N. 569641.123, E. 1374815.935  
ELEV. = 469.603

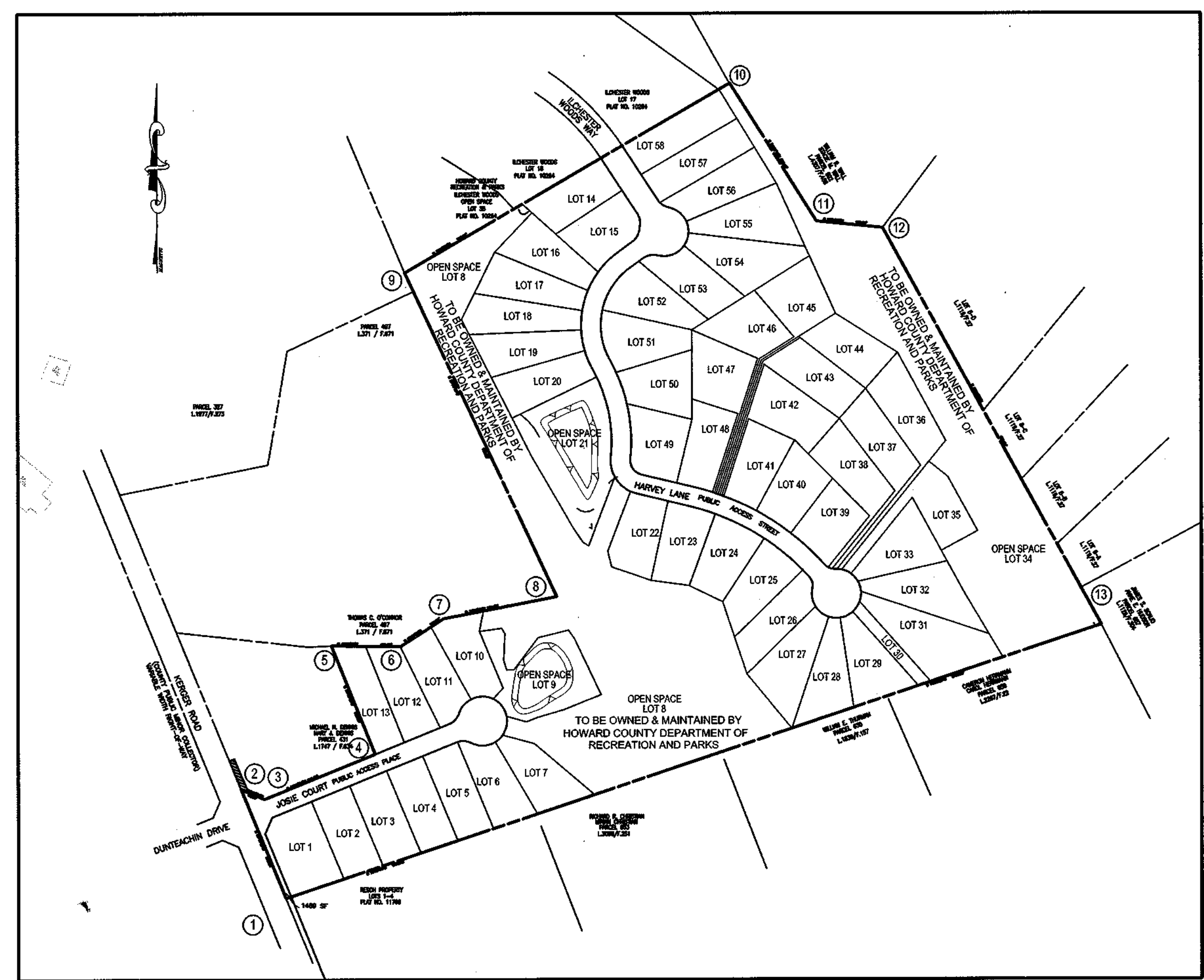
BENCHMARK NO. 2: COUNTY CONTROL #31EB  
N. 568730.984, E. 1376273.491  
ELEV. = 453.396

**SITE DATA**

LOCATION: TAX MAP 31, PARCEL 226  
1ST ELECTION DISTRICT  
EXISTING ZONING: R-20  
GROSS AREA OF PROJECT: 31.37± AC.  
NET AREA OF PROJECT: 29.80± AC.  
NUMBER OF DWELLING UNITS PROPOSED: 52  
AREA OF PROPOSED RESIDENTIAL LOTS: 18.32 AC.  
AREA OF PROPOSED NON-BUILDABLE LOT 30: 0.11 AC.  
OPEN SPACE AREA REQUIRED: 30% OR 9.41 AC.  
CREDITED OPEN SPACE AREA PROVIDED IN OPEN SPACE LOTS 8, 9, 21, 34 & 35: 33.9% OR 10.66 AC.  
NON-CREDITED OPEN SPACE AREA PROVIDED IN LOTS 8 & 34: 0.19 AC.  
RECREATION OPEN SPACE REQUIRED: 200SF/DU OR 10600 SF  
RECREATION OPEN SPACE PROVIDED: 17165± SF (LOT 35)  
AREA OF PROPOSED OPEN SPACE LOTS 8, 9, 21, 34 & 35: 10.85 AC.  
AREA OF PROPOSED 100 YEAR FLOODPLAIN DRAINAGE & UTILITY EASEMENT: 68389 SF (1.57 AC.)  
AREA OF PROPOSED ROADS: 2.06 AC.  
AREA OF PROPOSED DEDICATION TO KERGER ROAD: 0.03 AC.  
NUMBER OF LOTS/PARCELS PROPOSED: 58  
NUMBER OF BUILDABLE LOTS PROPOSED: 52  
NUMBER OF NON-BUILDABLE LOTS PROPOSED: 1  
NUMBER OF OPEN SPACE LOTS PROPOSED: 5  
AREA OF WETLANDS: 56947 SF  
TOTAL APPROXIMATE LIMIT OF DISTURBANCE: 904211 SF± (20.76 AC.)

**GENERAL NOTES**

- ALL ASPECTS OF THE PROJECT ARE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- DEED REFERENCE: 5342/533
- MINIMUM LOT SIZE: 14,000 SF.  
NUMBER OF BUILDABLE ENTITIES PROPOSED: 52 LOTS
- THE PROJECT BOUNDARY IS BASED ON A SURVEY BY FREDERICK WARD AND ASSOCIATES DATED DECEMBER, 2001.
- THE TOPOGRAPHY SHOWN HEREON IS BASED ON AERIAL PHOTOGRAMMETRIC BY GREENMAN PEDERSON 2/8/01
- WATER AND SEWER FOR THIS PROJECT WILL BE PUBLIC.
- STORM WATER MANAGEMENT (Cov, Wq, & Rev) TO BE PROVIDED FOR THE DEVELOPMENT. WATER QUALITY TO BE PROVIDED BY EXTENDED DETENTION. THE FACILITIES WILL BE LOCATED ON LOTS 9 & 21. THE FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED BY THE HOA.
- WETLANDS AND STREAMS SHOWN ONSITE ARE BASED ON A FIELD INVESTIGATION PERFORMED BY EXPLORATION RESEARCH AND AERIAL PHOTOGRAMMETRIC 6/8/00.
- FLOODPLAIN SHOWN ONSITE IS BASED ON STUDY PREPARED BY FREDERICK WARD ASSOCIATES, MAY, 2002.
- FOREST CONSERVATION PLAN PREPARED BY FREDERICK WARD AND ASSOCIATES, DATED JANUARY 2002.
- APFO TRAFFIC STUDY APPROVED UNDER S-01-06.
- PLANNING AND ZONING FILE NUMBERS: S-01-06, CAPITAL PROJECT NO. S-6200 (CONTRACT NO 10-3697), W&S CONT. NO. 14-1900-D, W. CONT. NO. 266-W, S. CONT. NO. 10-1215, WP-03-07.
- ALL LANDSCAPING REQUIREMENTS AS SET FORTH IN THE LANDSCAPE MANUAL SHALL BE COMPLIED WITH.
- STREET LIGHTING IS REQUIRED FOR THIS SITE.
- SEDIMENT AND EROSION CONTROL WILL BE PROVIDED FOR THIS SITE.
- THE STORM WATER FACILITIES SHOWN ON THIS PLAN IS AN APPROXIMATION OF THEIR ULTIMATE SIZE AND SHAPE. IT IS UNDERSTOOD THAT THE FACILITIES HAVE NOT BEEN DESIGNED AND THEIR SIZE AND SHAPE MAY CHANGE PRIOR TO FINAL PLAN STAGE.
- THIS PROPERTY IS WITHIN THE METROPOLITAN DISTRICT.
- TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO BURIAL/CEMETARY LOCATIONS ON SITE.
- NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE WETLANDS, STREAMS OR THEIR BUFFERS AND THE FOREST CONSERVATION EASEMENTS.
- 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 4.68 AC., ON-SITE REFORESTATION IN THE AMOUNT OF 1.95 AC. AND BY FEE-IN-LIEU FOR THE REMAINING 0.80 AC. OF REQUIRED REFORESTATION.
- STREET TREES ARE REQUIRED FOR THIS SUBDIVISION IN ACCORDANCE WITH SECTION 16.124(e)(1) OF THE SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL.
- LOTS 36-38 AND 42-47 WILL UTILIZE A USE-IN-COMMON DRIVEWAY. HOWARD COUNTY STANDARD DETAIL NO. R-6.06 WILL BE UTILIZED FOR THE ENTRANCE AT THE INTERSECTION OF THE PUBLIC ROAD.
- TREE PROTECTION FENCING WILL BE PROVIDED AT THE LIMITS OF DISTURBANCE WHERE GRADING IS ADJACENT TO ENVIRONMENTAL AREAS.
- OPEN SPACE LOTS 9, 21 AND 35 ARE TO BE PRIVATELY OWNED AND MAINTAINED BY THE HOA. OPEN SPACE LOTS 8 AND 34 ARE TO BE OWNED AND MAINTAINED BY HOWARD COUNTY DEPT. OF RECREATION AND PARKS.
- THIS DEVELOPMENT IS SUBJECT TO SECTION R310 OF THE INTERNATIONAL RESIDENTIAL CODE (IRC) 2000 EDITION WHICH REQUIRES EMERGENCY ESCAPE EXTERIOR WINDOWS OR DOORS FROM ALL BASEMENTS WITH HABITABLE SPACE.
- A NOISE STUDY IS NOT REQUIRED FOR THIS SITE.
- THIS SUBDIVISION IS SUBJECT TO THE REQUIREMENTS OF THE FOURTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS BASED ON THE SKETCH PLAN FOR THIS SUBDIVISION, S-01-06, BEING SUBMITTED FOR REVIEW AND OBTAINING APPROVAL. IN ADDITION, BECAUSE THIS PRELIMINARY PLAN DID NOT OBTAIN SIGNATURE APPROVAL PRIOR TO 11/01/01, THIS PLAN AND SUBDIVISION IS SUBJECT TO COMPLIANCE WITH COUNTY COUNCIL BILL 50-2001 WHICH AMENDS THE ZONING REGULATIONS, AND THE AMENDED ZONING REGULATIONS WHICH BECOME EFFECTIVE ON 01/08/02.
- NON-BUILDABLE LOT 30 TO BE TRANSFERRED TO OWNER OF ADJACENT PARCEL 659 FOR USE AS ACCESS.
- OPEN SPACE LOT 35 TO BE ACCESSED THROUGH OPEN SPACE LOT 34.
- PROPOSED STORMWATER MANAGEMENT PONDS #1 AND #2 ARE MICROPOOL EXTENDED DETENTION HAZARD CLASSIFICATION 'A'.
- PER WP-03-07 (APP. 11/05/02) WHICH GRANTED A WAIVER FROM THE REQUIREMENTS OF SECTION 16.147 OF THE SUBDIVISION REGULATIONS AND WHICH IS VALID FROM 11-5-02 TO 11-5-03 OR AS LONG AS THE SUBDIVISION REMAINS IN ACTIVE PROCESSING, ADJOINER DEED TRANSFERS OF LAND SHALL BE ACCOMPLISHED PRIOR TO SUBMISSION OF THE FUTURE FINAL SUBDIVISION PLAN FOR THIS PROJECT, AND THE NEW DEED RECORDING NUMBERS SHALL BE INDICATED WHERE REQUIRED ON THE FUTURE FINAL SUBDIVISION PLATS AND PLANS.
- EXCAVATION OF SEDIMENT FROM SWM MAINTENANCE TO BE HAULED OFF-SITE AND NOT STOCKPILED ON-SITE.



**LOCATION PLAN**  
SCALE: 1" = 200'

**SCHEDULE A  
PERIMETER LANDSCAPE EDGE**

CATEGORY	ADJACENT TO PERIMETER PROPERTIES								
	1	2	3	4	5	6	7	8	9
PERIMETER/FRONTAGE DESIGNATION	1	2	3	4	5	6	7	8	9
LANDSCAPE TYPE	B	A	A	A	A	A	A	A	A
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	175	294	238	478	727	461	253	1387	1745
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO	NO	Yes* 92	Yes* 397	Yes* 558	Yes* 277	Yes* 30	Yes* 1386	Yes** 1568
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO	NO	NO	NO	NO	NO
NUMBER OF PLANTS REQUIRED(LF REMAINING)	1:50 4	1:60 5	(146) 1:80 2	(81) 1:80 1	(168) 1:80 3	(184) 1:80 3	(223) 1:80 4	(1) 1:80 0	(177) 1:80 3
SHADE TREES	4	5	2	1	3	3	4	0	3
EVERGREEN TREES	4	5	2	1	3	3	4	0	3
SHRUBS	4	5	2	1	3	3	4	0	3
NUMBER OF PLANTS PROVIDED	4	5	2	1	3	3	4	0	3
SHADE TREES	4	5	2	1	3	3	4	0	3
EVERGREEN TREES	4	5	2	1	3	3	4	0	3
OTHER TREES (2:1 SUBSTITUTION)	4	5	2	1	3	3	4	0	3
SHRUBS (10:1 SUBSTITUTION)	4	5	2	1	3	3	4	0	3
DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED									

\* EXISTING WOODS TO REMAIN  
\*\*EXISTING HEDGEROW AND WOODS TO REMAIN  
\*\*\*LOT 15 BUFFER TO ADJACENT ROAD TO BE PROVIDED AT SDP STAGE.

**SCHEDULE D : STORMWATER  
MANAGEMENT AREA LANDSCAPING  
TYPE 'B' BUFFER**

LINEAR FEET OF PERIMETER (NO, YES AND LINEAR FEET)	PERIM. 10 LOT 9 567 LF	PERIM. 11 LOT 21 847 LF
	CREDIT FOR EXISTING VEGETATION (NO, YES AND %)	Yes* 430'
CREDIT FOR OTHER LANDSCAPING (NO, YES AND %)	NO	Yes 14% (5 TREES)
NUMBER OF TREES REQUIRED	(137)	(479)
SHADE TREES	3 SHADE TREES	10 SHADE TREES
EVERGREEN TREES	4 EVERGREEN TREES	12 EVERGREEN TREES
NUMBER OF TREES PROVIDED	3 SHADE TREES 4 EVERGREEN TREES 0 TREES	10 SHADE TREES 12 EVERGREEN TREES 0 TREES

\*EXISTING WOODS TO REMAIN

**GENERAL NOTES**

- FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING PROVIDED PER THE LANDSCAPE MANUAL TO BE POSTED AT FINAL PLAN PHASE IN THE AMOUNT OF \$14,400.00 FOR 38 SHADE TREES AND 20 EVERGREEN TREES.

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

*Margaret A. Wynn* 5/16/03  
**PLANNING DIRECTOR** DATE

**DEVELOPER**

LAND DESIGN AND DEVELOPMENT  
8000 MAIN STREET  
ELLICOTT CITY, MARYLAND 21043  
ATTN: MR. DONALD R. REUWER  
(410) 480-9105

**OWNERS**

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MARY JOYCELYN O'NEILL ET AL  
MICHAEL HARVEY AND MARY JOAN DENNIS  
5275 KERGER ROAD  
ELLICOTT CITY, MARYLAND 21043

**DRAINAGE AREA TABULATIONS**

No.	Area	'C'	% Imp.	Soil Types	Zone
I-1	0.96 Ac.	0.39	40	C	R-20
I-2	1.58 Ac.	0.30	30	B and C	R-20
I-3	0.34 Ac.	0.35	46	C	R-20
I-4	0.71 Ac.	0.37	22	C	R-20
I-5	0.13 Ac.	0.50	46	C	R-20
I-6	1.20 Ac.	0.30	32	B and C	R-20
I-7	1.61 Ac.	0.31	34	B and C	R-20
I-8	0.73 Ac.	0.29	30	B and C	R-20
I-9	1.88 Ac.	0.33	31	B and C	R-20
I-13	1.98 Ac.	0.33	10	C	R-20
I-14	0.51 Ac.	0.37	16	C	R-20
I-15	1.17 Ac.	0.41	7	C	R-20
I-16	0.71 Ac.	0.29	30	B and C	R-20
I-17	2.50 Ac.	0.29	0	B and C	R-20
I-18	2.40 Ac.	0.26	30	C	R-20
I-19	0.53 Ac.	0.26	30	C	R-20
I-20	0.50 Ac.	0.29	30	B and C	R-20
I-21	0.47 Ac.	0.29	30	B and C	R-20
I-22	1.02 Ac.	0.26	30	C	R-20

**COORDINATE TABLE**

NO.	NORTHING	EASTING
1	567097.9140	1375122.5371
2	567319.6721	1375031.9222
3	567299.8729	1375078.9755
4	567391.4097	1375303.5085
5	567612.0579	1375215.2430
6	567610.0618	1375354.8207
7	567667.0785	1375442.9744
8	567711.5470	1375672.4622
9	568370.6626	1375365.0598
10	568768.2836	1375983.3386
11	568474.6592	1376200.5349
12	568461.1516	1376334.6865
13	567653.4962	1376776.7064

**STORMWATER MANAGEMENT SUMMARY**

DA AREA (Ac)	Required (Ac-Ft)			Provided			
	Cpv	WQv	Rev	Cpv	WQv	Rev	
1A	5.72	0.23	0.097*	0.26+	0.23	0.097*	+
2A	0.44	0 x	0 xx	0 xx	0 x	0 xx	0 xx
2B	—	1.06	48*	0.97*	1.06	0.48*	0.97
2C	4.62	0 x	0 xx	0 xx	0 x	0 xx	0 xx
2D	1.55	0 x	0.0413	0.0054	0 x	0 ++	0 ++

+ PROVIDED BY ROOFTOP DISCONNECT  
++ SHEET FLOW TO BUFFER CREDIT  
\* PARTIAL NATURAL CONSERVATION CREDIT AND IN POND  
x EXEMPT BECAUSE IT IS LESS THAN 2.0 CFS  
xx EXEMPT, NO IMPERVIOUS AREA

**POND 1**

WQv=	ELEVATION	DISCHARGE
1 YR (Cpv)	377.3	0 CFS
100 YR	383.35	0.51 CFS

**POND 2**

WQv=	ELEVATION	DISCHARGE
1 YR (Cpv)	370.99	0 CFS
100 YR	372.07	23.71 CFS

**MINIMUM LOT SIZE CHART**

LOT NO.	GROSS AREA	PIPESTEM AREA	MINIMUM LOT SIZE
36	1801 SF	2143 SF	16458 SF
37	16283 SF	1604 SF	14679 SF
38	16507 SF	1082 SF	15445 SF
42	16940 SF	663 SF	16277 SF
43	16370 SF	1121 SF	16048 SF
44	15811 SF	1499 SF	14312 SF
45	15870 SF	1482 SF	14488 SF
46	15543 SF	1149 SF	14394 SF
47	16116 SF	672 SF	15444 SF

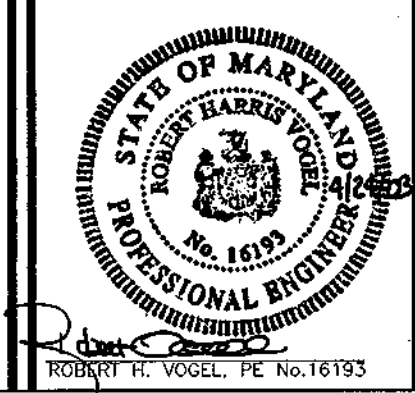
**PRELIMINARY PLAN  
DENNIS PRESERVE**

REF: S-01-06, WP-03-07  
TAX MAP #31, GRID 21  
1ST ELECTION DISTRICT

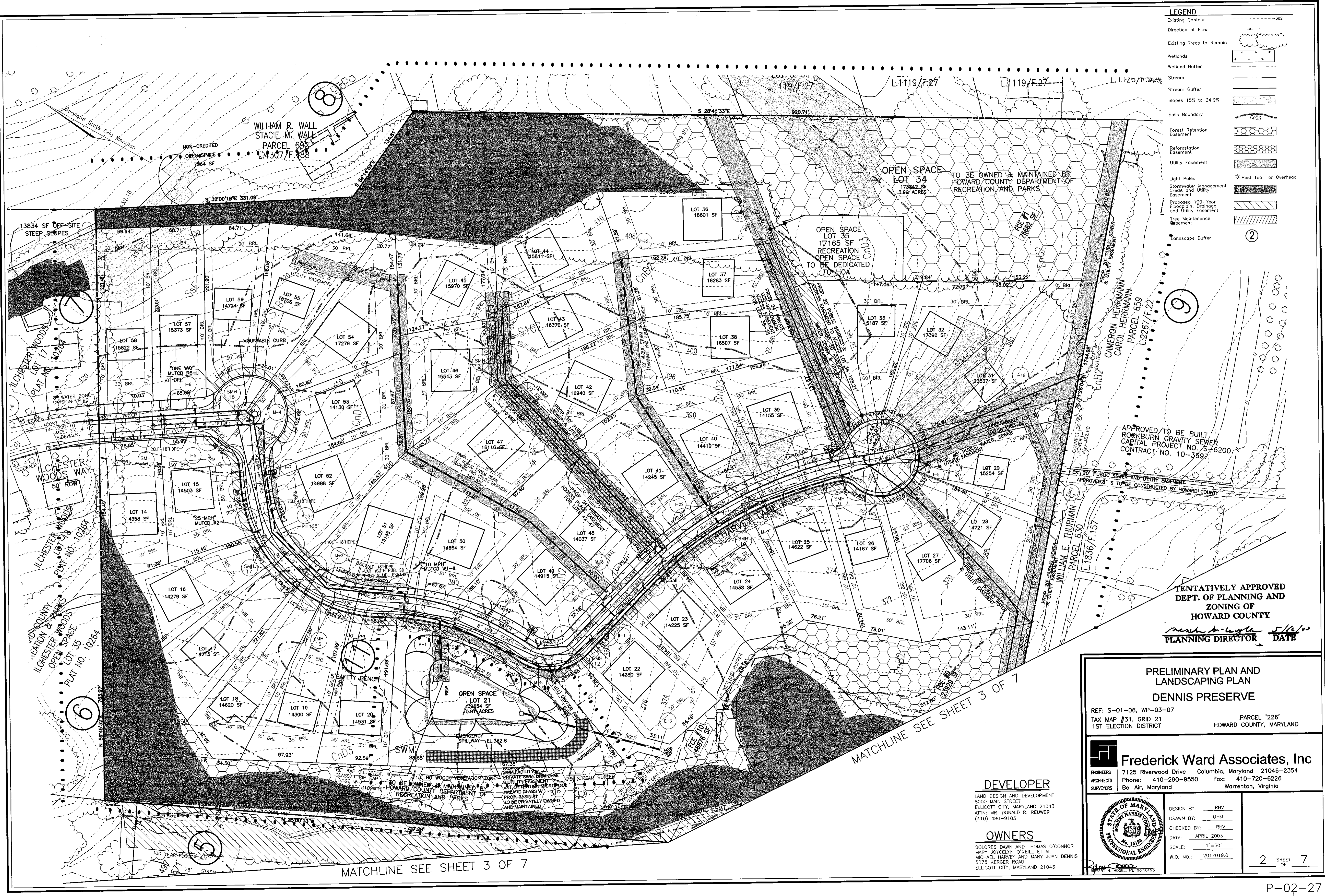
PARCEL '226'  
HOWARD COUNTY, MARYLAND

**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 Warrenton, Virginia



DESIGN BY: RHW  
DRAWN BY: MHM  
CHECKED BY: RHW  
DATE: APRIL 2003  
SCALE: 1"=200'  
W.O. NO.: 2017019.0



**LEGEND**

- Existing Contour
- Direction of Flow
- Existing Trees to Remain
- Wetlands
- Wetland Buffer
- Stream
- Stream Buffer
- Slopes 15% to 24.9%
- Soils Boundary
- Forest Retention Easement
- Reforestation Easement
- Utility Easement
- Light Poles
- Stormwater Management Credit and Utility Easement
- Proposed 100-Year Floodplain, Drainage and Utility Easement
- Tree Maintenance Easement
- Landscape Buffer

APPROVED TO BE BUILT  
ROCKBURN GRAVITY SEWER  
CAPITAL PROJECT NO. S/6200  
CONTRACT NO. 10-3697

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

**PRELIMINARY PLAN AND  
LANDSCAPING PLAN  
DENNIS PRESERVE**

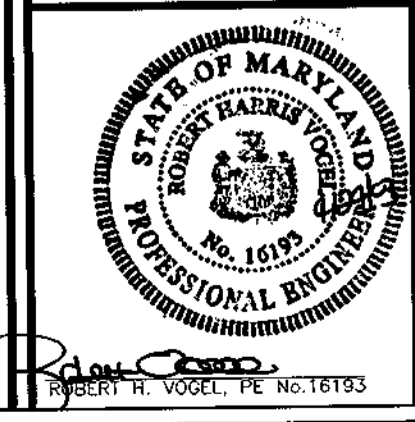
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ATTN: MR. DONALD R. REUWER  
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MICHAEL HARVEY AND MARY JOAN DENNIS  
5275 KERGER ROAD  
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DESIGN BY: RHW  
DRAWN BY: MWM  
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SCALE: 1"=50'  
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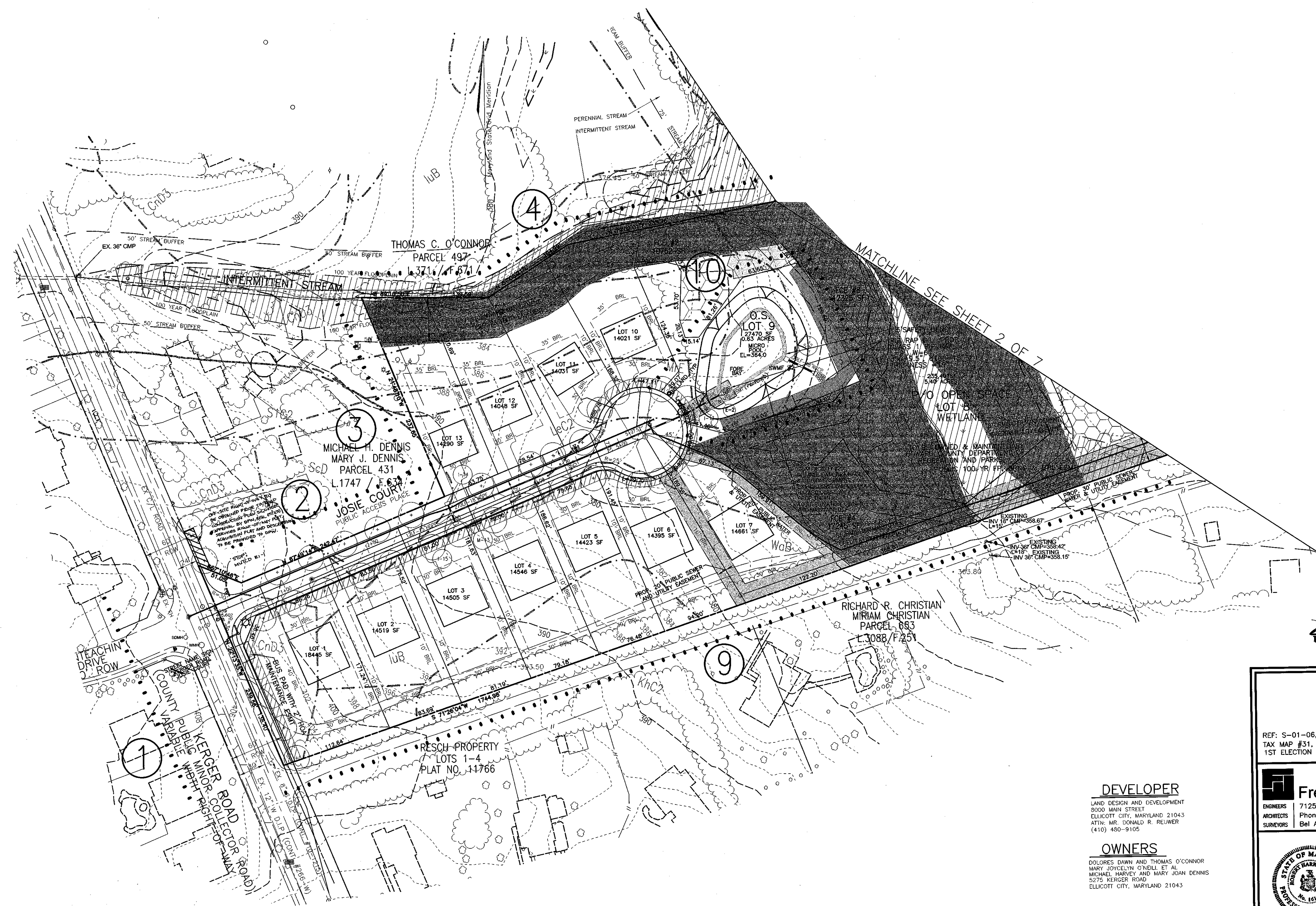
2 SHEET OF 7

MATCHLINE SEE SHEET 3 OF 7

MATCHLINE SEE SHEET 3 OF 7

**LEGEND**

Existing Contour	---
Direction of Flow	→
Existing Trees to Remain	
Wetlands	
Wetland Buffer	
Stream	
Stream Buffer	
Slopes 15% to 24.9%	
Soils Boundary	
Forest Retention Easement	
Reforestation Easement	
Utility Easement	
Light Poles	⊙ Post Top or Overhead
Stormwater Management Credit and Utility Easement	
Proposed 100-Year Floodplain, Drainage and Utility Easement	
Tree Maintenance Easement	
Landscape Buffer	



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HOWARD COUNTY

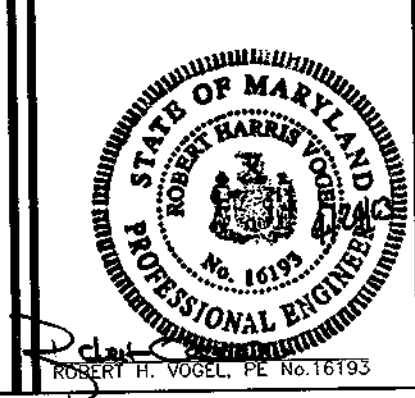
*David D. Leight* 5/16/03  
PLANNING DIRECTOR DATE

**PRELIMINARY PLAN AND  
LANDSCAPE PLAN  
DENNIS PRESERVE**

REF: S-01-06, WP-03-07  
TAX MAP #31, GRID 21  
1ST ELECTION DISTRICT

PARCEL '226'  
HOWARD COUNTY, MARYLAND

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7125 Riverwood Drive Columbia, Maryland 21046-2354  
Phone: 410-290-9550 Fax: 410-720-6226  
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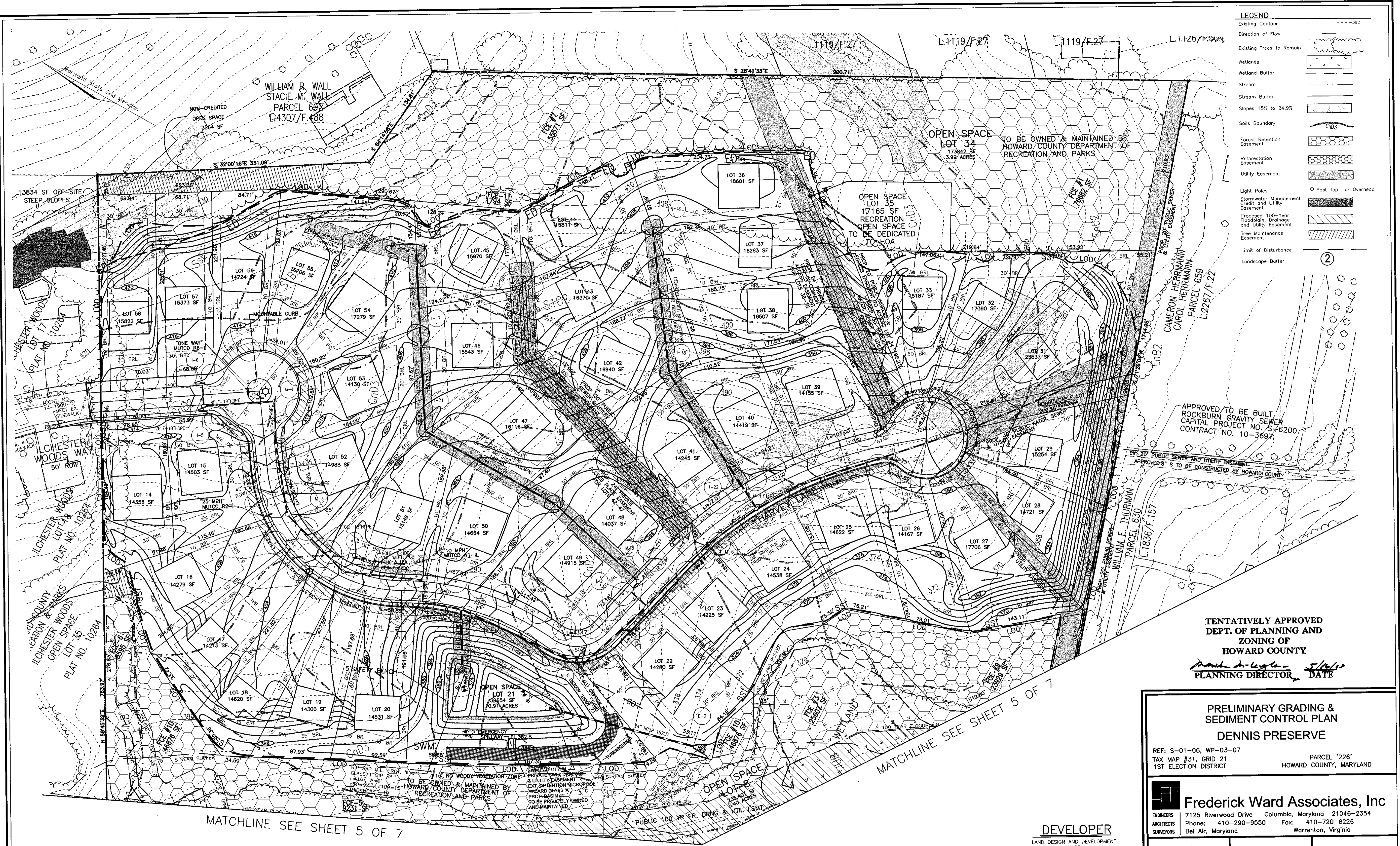


DESIGN BY: RHV  
DRAWN BY: MHM  
CHECKED BY: RHV  
DATE: APRIL 2003  
SCALE: 1"=50'  
W.O. NO.: 2017019.0

3 SHEET OF 7

**DEVELOPER**  
LAND DESIGN AND DEVELOPMENT  
8000 MAIN STREET  
ELLCOTT CITY, MARYLAND 21043  
ATTN: MR. DONALD R. REUWER  
(410) 480-9105

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5275 KERGER ROAD  
ELLCOTT CITY, MARYLAND 21043



**LEGEND**

Existing Contour	--- 382
Direction of Flow	→
Existing Trees to Remain	(Tree symbol)
Wetlands	(Wavy line symbol)
Wetland Buffer	(Dashed line symbol)
Stream	(Solid line symbol)
Stream Buffer	(Dashed line symbol)
Slopes 15% to 24.9%	(Hatched area symbol)
Soils Boundary	(Line with 'CnD3' label)
Forest Retention Easement	(Hatched area symbol)
Reforestation Easement	(Hatched area symbol)
Utility Easement	(Hatched area symbol)
Light Poles	(Star symbol)
Stormwater Management Credit and Utility Easement	(Hatched area symbol)
Proposed 100-Year Floodplain, Drainage and Utility Easement	(Hatched area symbol)
Tree Maintenance Easement	(Hatched area symbol)
Limit of Disturbance	(Dashed line symbol)
Landscape Buffer	(Dashed line symbol)

APPROVED TO BE BUILT  
ROCKBURN GRAVITY SEWER  
CAPITAL PROJECT NO. S-6200  
CONTRACT NO. 10-3697

TENTATIVELY APPROVED  
DEPT. OF PLANNING AND  
ZONING OF  
HOWARD COUNTY  
*Mark A. Gagliardi* 5/16/10  
PLANNING DIRECTOR DATE

**PRELIMINARY GRADING & SEDIMENT CONTROL PLAN**  
**DENNIS PRESERVE**

REF: S-01-06, WP-03-07  
TAX MAP #31, GRID 21  
1ST ELECTION DISTRICT  
PARCEL '226'  
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 Warrenton, Virginia

DESIGN BY:	RHV
DRAWN BY:	MMH
CHECKED BY:	RHV
DATE:	APRIL 2003
SCALE:	1"=50'
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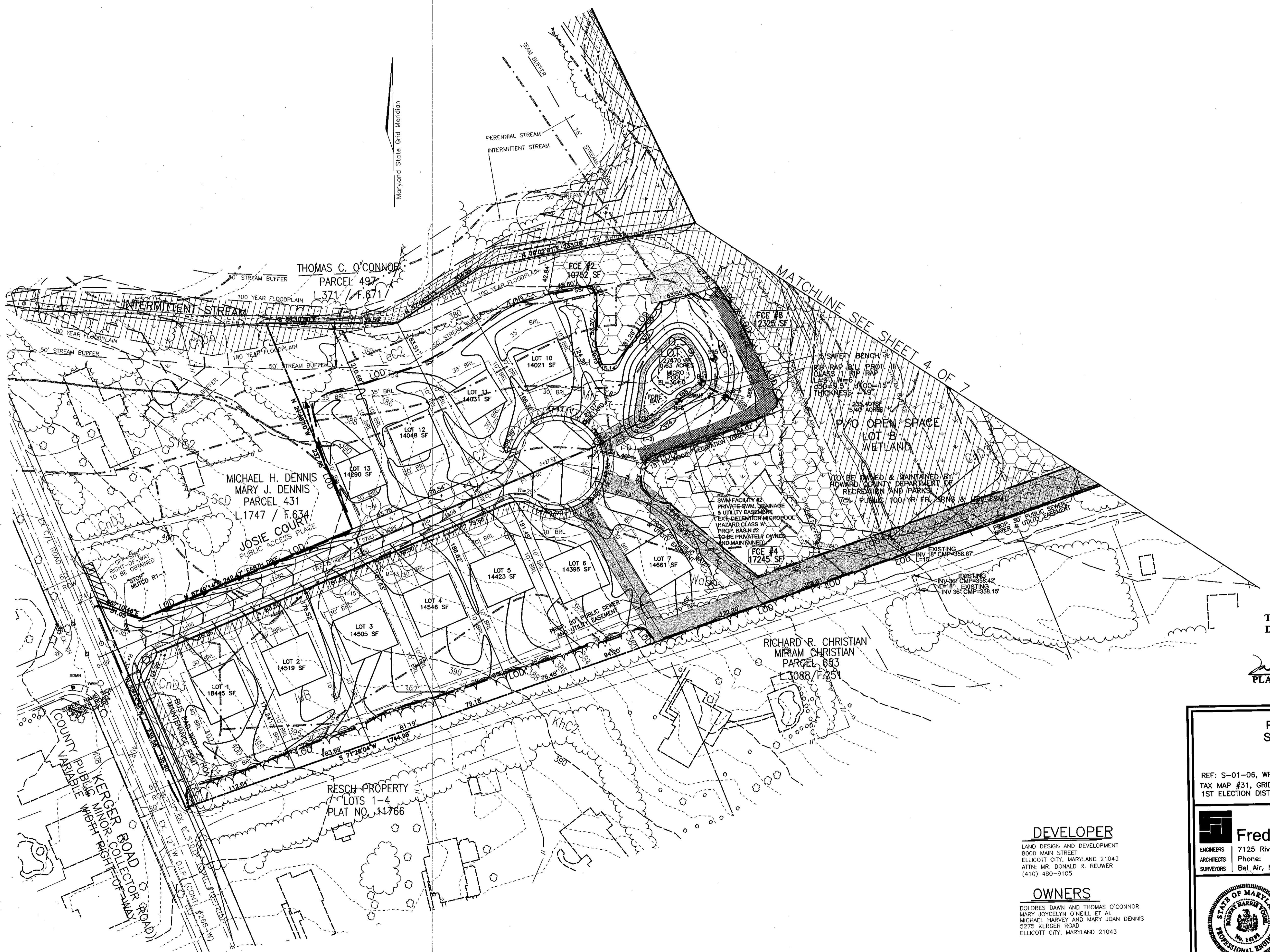
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MATCHLINE SEE SHEET 5 OF 7

MATCHLINE SEE SHEET 5 OF 7

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LEGEND	
Existing Contour	--- 382
Direction of Flow	→
Existing Trees to Remain	(Tree symbol)
Wetlands	(Wavy line symbol)
Wetland Buffer	(Dashed line symbol)
Stream	(Solid line symbol)
Stream Buffer	(Double line symbol)
Slopes 15% to 24.9%	(Hatched pattern symbol)
Soils Boundary	(Wavy line with 'CnD3' symbol)
Forest Retention Easement	(Hexagonal pattern symbol)
Reforestation Easement	(Cross-hatched pattern symbol)
Utility Easement	(Stippled pattern symbol)
Light Poles	⊙ Post Top or Overhead
Stormwater Management Credit and Utility Easement	(Stippled pattern symbol)
Proposed 100-Year Floodplain, Drainage and Utility Easement	(Hatched pattern symbol)
Tree Maintenance Easement	(Hatched pattern symbol)
Limit of Disturbance	(Dashed line symbol)
Landscape Buffer	(Dashed line symbol)

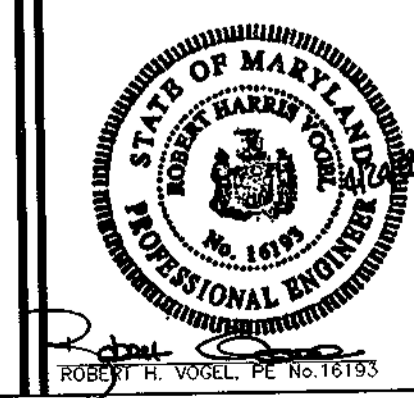


TENTATIVELY APPROVED  
 DEPT. OF PLANNING AND ZONING OF  
 HOWARD COUNTY  
*Mark D. Goff* 5/16/11  
 PLANNING DIRECTOR DATE

PRELIMINARY GRADING & SEDIMENT CONTROL PLAN  
 DENNIS PRESERVE

REF: S-01-06, WP-03-07  
 TAX MAP #31, GRID 21  
 1ST ELECTION DISTRICT  
 PARCEL '226'  
 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 Warronton, Virginia (410) 480-9105



DESIGN BY: RHW  
 DRAWN BY: MHM  
 CHECKED BY: RHW  
 DATE: APRIL 2003  
 SCALE: 1"=50'  
 W.D. NO.: 2017019.0

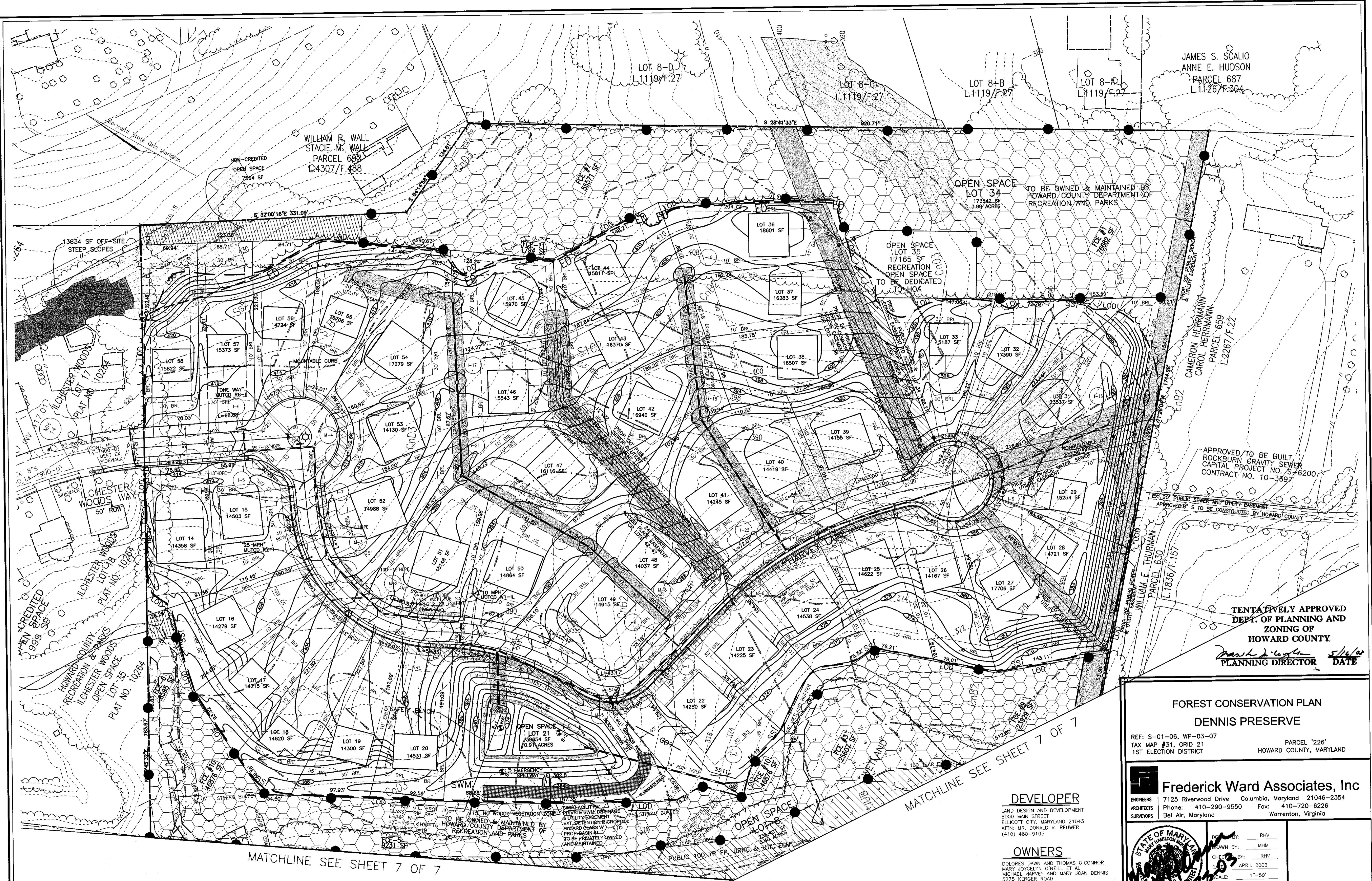
5 SHEET OF 7

**DEVELOPER**

LAND DESIGN AND DEVELOPMENT  
 8000 MAIN STREET  
 ELLICOTT CITY, MARYLAND 21043  
 ATTN: MR. DONALD R. REUWER  
 (410) 480-9105

**OWNERS**

DOLORES DAWN AND THOMAS O'CONNOR  
 MARY JOYCELYN O'NEILL ET AL  
 MICHAEL HARVEY AND MARY JOAN DENNIS  
 5275 HERGER ROAD  
 ELLICOTT CITY, MARYLAND 21043



JAMES S. SCALIO  
ANNE E. HUDSON  
PARCEL 687  
L.1126/F.304

WILLIAM R. WALL  
STACIE M. WALL  
PARCEL 688  
L.4307/F.488

OPEN SPACE  
LOT 34  
173942 SF  
3.99 ACRES  
TO BE OWNED & MAINTAINED BY  
HOWARD COUNTY DEPARTMENT OF  
RECREATION AND PARKS

OPEN SPACE  
LOT 35  
17165 SF  
RECREATION  
OPEN SPACE  
TO BE DEDICATED  
TO HOA

CAMERON HERRMANN  
CAROL HERRMANN  
PARCEL 659  
L.2267/F.22

APPROVED TO BE BUILT  
ROCKBURN GRAVITY SEWER  
CAPITAL PROJECT NO. S-6200  
CONTRACT NO. 10-3697

TENTATIVELY APPROVED  
DEPT. OF PLANNING AND  
ZONING OF  
HOWARD COUNTY

*Mark S. ...*  
PLANNING DIRECTOR DATE

**FOREST CONSERVATION PLAN  
DENNIS PRESERVE**

REF: S-01-06, WP-03-07  
TAX MAP #31, GRID 21  
1ST ELECTION DISTRICT  
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HOWARD COUNTY, MARYLAND

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5275 KERRIGER ROAD  
ELLICOTT CITY, MARYLAND 21043



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SEE SHEET 7 FOR LEGEND, NOTES AND DETAILS

MATCHLINE SEE SHEET 7 OF 7

MATCHLINE SEE SHEET 7 OF 7

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FOREST PROTECTION NOTES

NOTE: TREE PROTECTION FENCING WILL BE PROVIDED AT THE LIMITS OF DISTURBANCE WHERE GRADING IS ADJACENT TO ENVIRONMENTAL AREAS.

PRE-CONSTRUCTION ACTIVITIES

- 1. Install blaze orange fence and retention signs before construction begins.
2. Fencing shall be maintained in good condition and promptly repaired or restored as the situation warrants.
3. A qualified tree care expert shall determine if root pruning is required along the limit of disturbance. Root prune trees as required. Water any root-pruned trees immediately after root-pruning and monitor for signs of stress during construction.
4. A qualified tree care expert shall determine if any edge trees in retention areas are hazardous. At the direction of the qualified tree care expert, such trees shall be removed or heavily pruned.

CONSTRUCTION PHASE

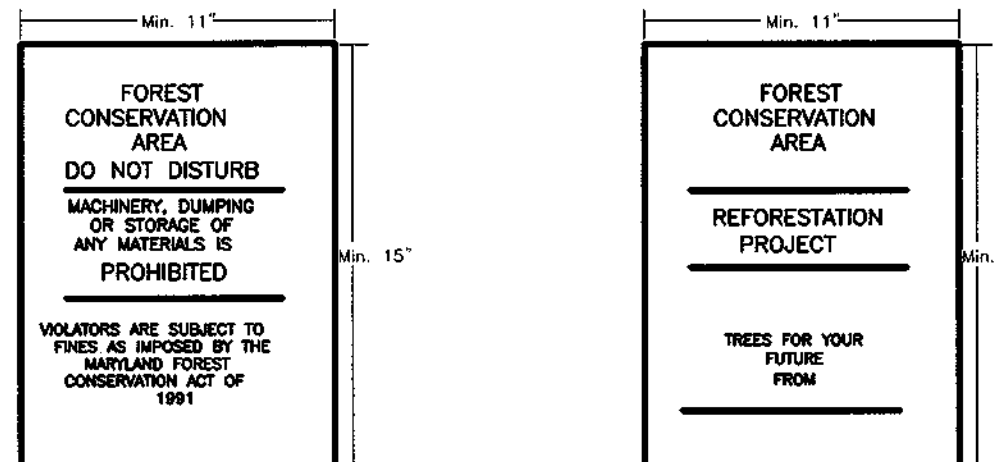
- 1. No disturbance or dumping is allowed inside the tree retention area.
2. No equipment shall be operated inside the tree retention area including tree canopies.
3. In the event of drought, the protected trees shall be monitored for signs of stress and watered as needed.

POST-CONSTRUCTION ACTIVITIES

- 1. At the direction of a qualified tree care expert, damages to retained trees shall be repaired by the contractor.
2. Fence removal and stabilization shall be as per the sediment and erosion control plan.
3. Do not remove signs.

COST ESTIMATE: (For bonding purposes, only)
RETENTION OF 4.68 ACRES (203,683 SF X 0.20) \$40,736.60
ON-SITE REFORESTATION OF 1.95 ACRES (84,224 SF X 0.50) \$42,482.00
FEE-IN-LIEU PROPOSED FOR REMAINING OBLIGATION OF 0.80 ACRE (34,848 SF X 0.50) \$17,424.00
TOTAL OBLIGATION TO BE BONDED \$83,198.60

SURETY NOTE
1. FINANCIAL SURETY IN THE AMOUNT OF \$83,198.60 WILL BE POSTED WITH THE FC MAINTENANCE AGREEMENT.
2. FOREST CONSERVATION REQUIREMENTS FOR 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 AT THE AMOUNT OF 4.68 AC. ON-SITE REFORESTATION IN THE AMOUNT OF 1.95 AC. AND BY FEE-IN-LIEU FOR THE REMAINING 0.80 AC. OF REQUIRED REFORESTATION.



Note:
1. Bottom of signs to be higher than top of tree protection fence.
2. Signs shall be located at a maximum spacing of 50'-100' around all FCE's. Conditions on-site affecting visibility may warrant placing signs closer or farther apart.
3. Attachment of signs to trees is prohibited.

FOREST CONSERVATION AREA SIGN

FCE AREA CHART table with columns: RETENTION, RE/AFFORESTATION, and rows for FCE-1 through FCE-11 and SUBTOTAL.

NOTE: THIS CHART IS FOR FOREST CONSERVATION PLAN REVIEW ONLY. FOR ACTUAL AREAS, SEE PLAT OF FOREST CONSERVATION EASEMENT AT FINAL PLAN PHASE.

HOWARD COUNTY FOREST CONSERVATION WORKSHEET

ZONED R-20

NET TRACT AREA:
A. TOTAL TRACT AREA 31.37
B. AREA WITHIN 100 YEAR FLOODPLAIN 1.57 AC
C. AREA TO REMAIN IN AGRICULTURAL PRODUCTION 0.00 AC
D. NET TRACT AREA 29.80 AC

LAND USE CATEGORY
INPUT THE NUMBER "1" UNDER THE APPROPRIATE LAND USE ZONING, AND LIMIT TO ONLY ONE ENTRY. ZONED R-20.
ARA 0 MDR 0 IDA 0 HDR 1 MPD 0 CIA 0

E. AFFOREST THRESHOLD 15% X D = 4.47 AC
F. CONSERVATION THRESHOLD 20% X D = 5.96 AC

EXISTING FOREST COVER:
G. EXISTING FOREST COVER (EXCLUDING FLOODPLAIN) = 6.70 AC
H. AREA OF FOREST ABOVE AFFORESTATION THRESHOLD = 2.55 AC
I. AREA OF FOREST ABOVE CONSERVATION THRESHOLD = 0.74 AC

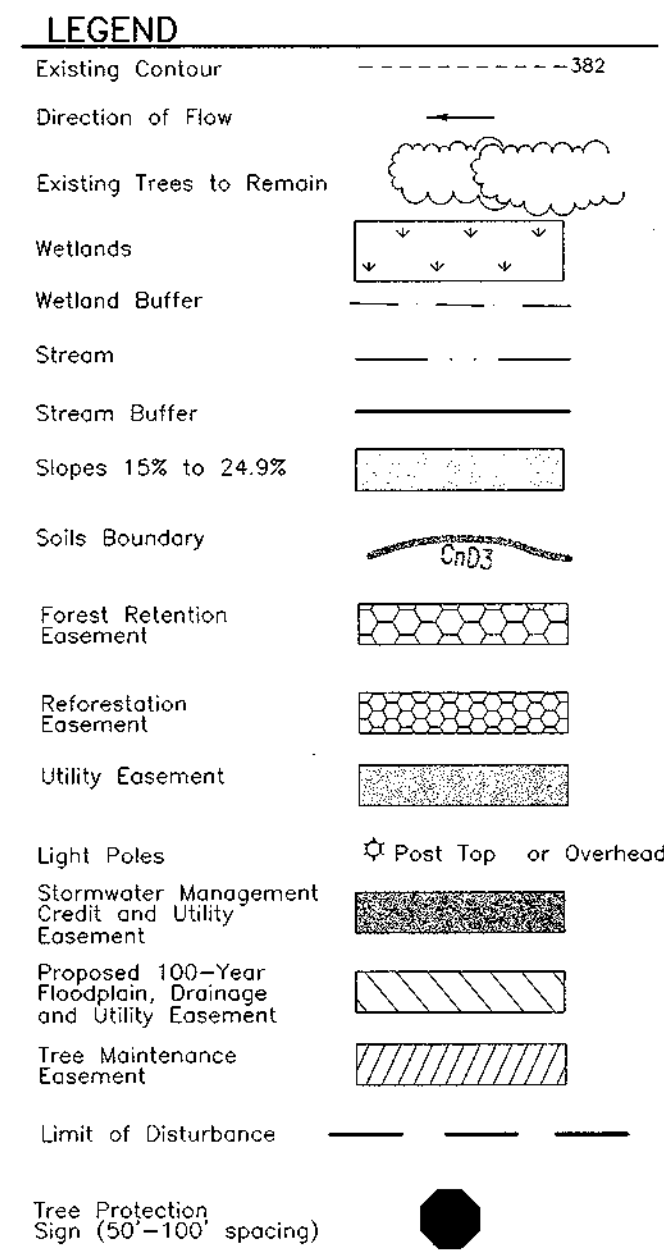
BREAK EVEN POINT:
(2 X I) + F = BREAK EVEN POINT (6.11 AC)
J. FOREST RETENTION WITH NO MITIGATION = 6.11 AC
K. CLEARING PERMITTED WITHOUT MITIGATION = 0.99 AC

PROPOSED FOREST CLEARING:
L. TOTAL AREA OF FOREST TO BE CLEARED = 2.02 AC
M. TOTAL AREA OF FOREST TO BE RETAINED = 4.68 AC

PLANTING REQUIREMENTS:
N. REFORESTATION FOR CLEARING ABOVE CONSERVATION THRESHOLD = 0.19 AC
P. REFORESTATION FOR CLEARING BELOW CONSERVATION THRESHOLD = 2.55 AC
Q. CREDIT FOR RETENTION ABOVE CONSERVATION THRESHOLD = 0.00 AC
R. TOTAL REFORESTATION REQUIRED = 2.75 AC
S. TOTAL AFFORESTATION REQUIRED = 0.00 AC
T. TOTAL REFORESTATION AND AFFORESTATION REQUIRED = 2.75 AC

OBLIGATION TO BE FULFILLED BY ON-SITE RETENTION OF 4.68 ACRES AND BY ON-SITE REFORESTATION OF 1.95 ACRES. FEE-IN-LIEU IS PROPOSED FOR THE REMAINING OBLIGATION OF 0.80 ACRE.

- NOTES
1. THE PROPERTY OUTLINE IS BASED ON A BOUNDARY SURVEY PREPARED BY FREDERICK WARD ASSOCIATES IN DECEMBER, 2001
2. THE EXISTING FEATURES AND CONTOURS SHOWN HEREON ARE BASED ON AERIAL TOPOGRAPHY PREPARED BY GREENMAN PEDERSON COMPANY AUGUST, 2001

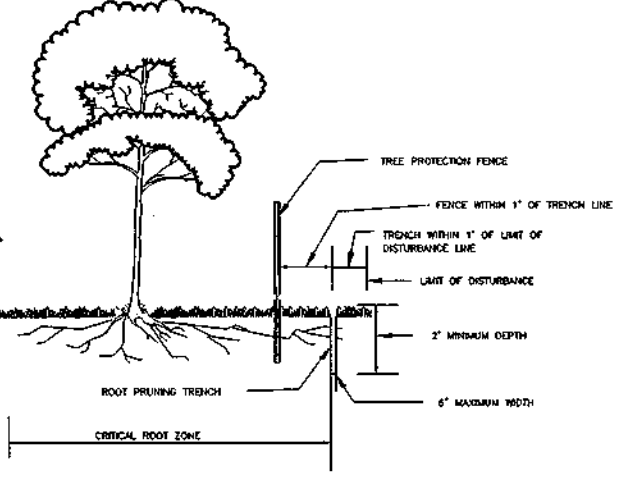


TENTATIVELY APPROVED DEPT. OF PLANNING AND ZONING OF HOWARD COUNTY.

Signature of Planning Director and Date.

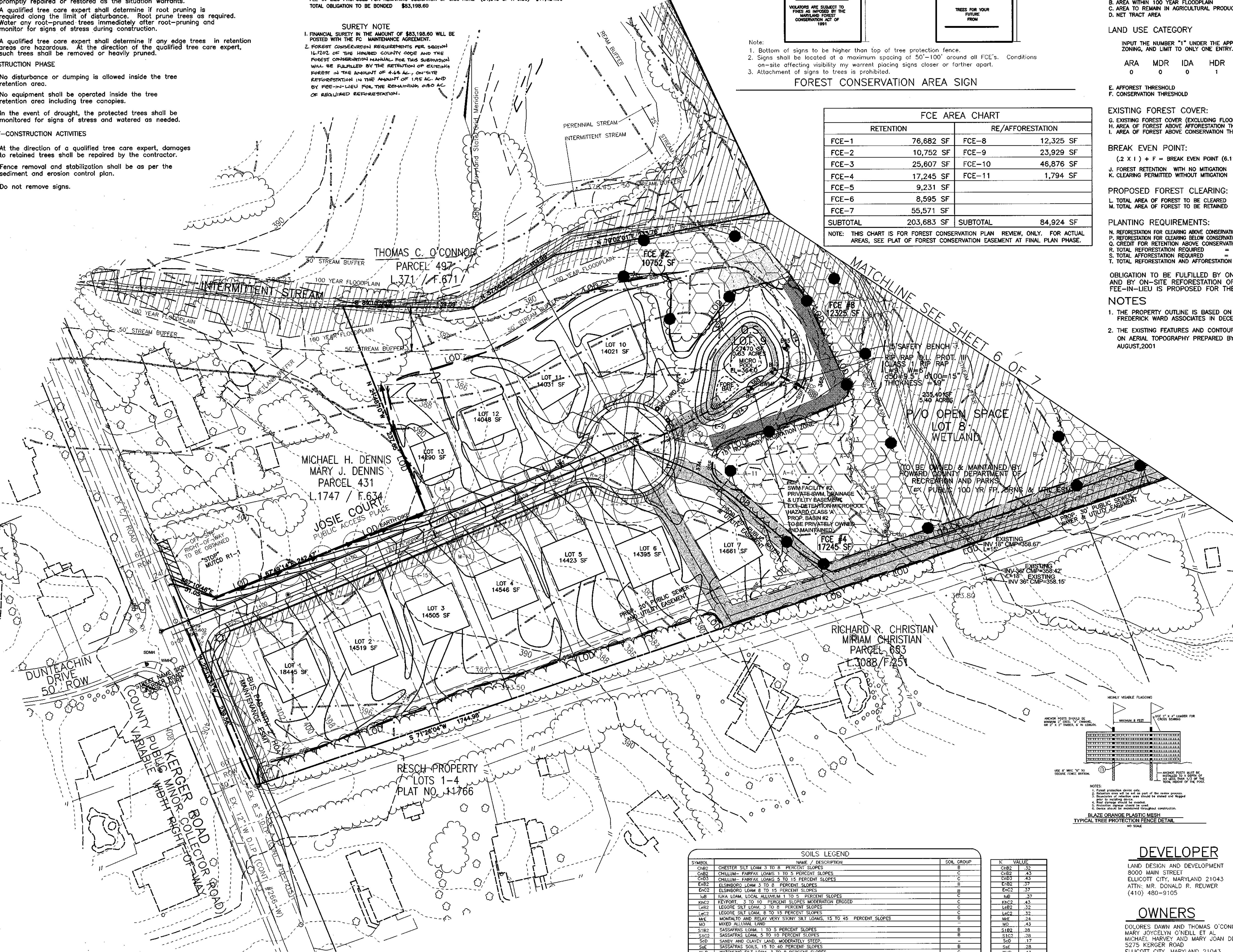
FOREST RETENTION AREAS AND NOTES

- 1. FORESTED STREAM BUFFERS ARE SUBSTANTIALLY RETAINED IN OPEN SPACE LOTS.
2. FORESTED WETLANDS AND THEIR BUFFERS ARE RETAINED IN OPEN SPACE LOTS.
3. NO RARE, THREATENED OR ENDANGERED SPECIES WERE OBSERVED ON THIS SITE.
4. THERE ARE NO WOODED STEEP SLOPES ON THIS SITE.
5. THERE ARE NO ISOLATED FOREST STANDS ON THIS SITE.
6. CHANGES IN GRADING AND RUNOFF WITHIN CONSTRUCTION/INSTALLATION AREAS WILL NOT ADVERSELY AFFECT THE SOILS WITHIN THE FOREST RETENTION AREA. SEDIMENT CONTROL MEASURES WILL REDIRECT CONCENTRATED FLOW RUNOFF TO STORMWATER MANAGEMENT FACILITIES, RETAIN SEDIMENT WITHIN THE CONSTRUCTION SITE, AND/OR REDIRECT CLEAN WATER AWAY FROM CONSTRUCTION AREAS.
7. FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1200 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 4.68
8. THE FOREST CONSERVATION EASEMENTS HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST RETENTION EASEMENTS. FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED WITHIN RETENTION AND REFORESTATION EASEMENTS.



- NOTES:
1. Retention Areas to be established as part of the forest conservation plan review process.
2. Boundaries of Retention Areas to be shown, flagged and/or fenced prior to clearing.
3. Exact location of trench should be identified.
4. Trench should be immediately backfilled with soil removed or organic soil.
5. Roots should be clearly cut using vibratory knife or other acceptable equipment.

ROOT PRUNING



SOILS LEGEND table with columns: SYMBOL, NAME / DESCRIPTION, SOIL GROUP, K VALUE.

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