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# PRELIMINARY PLANS

# EMERSON

## SECTION ONE

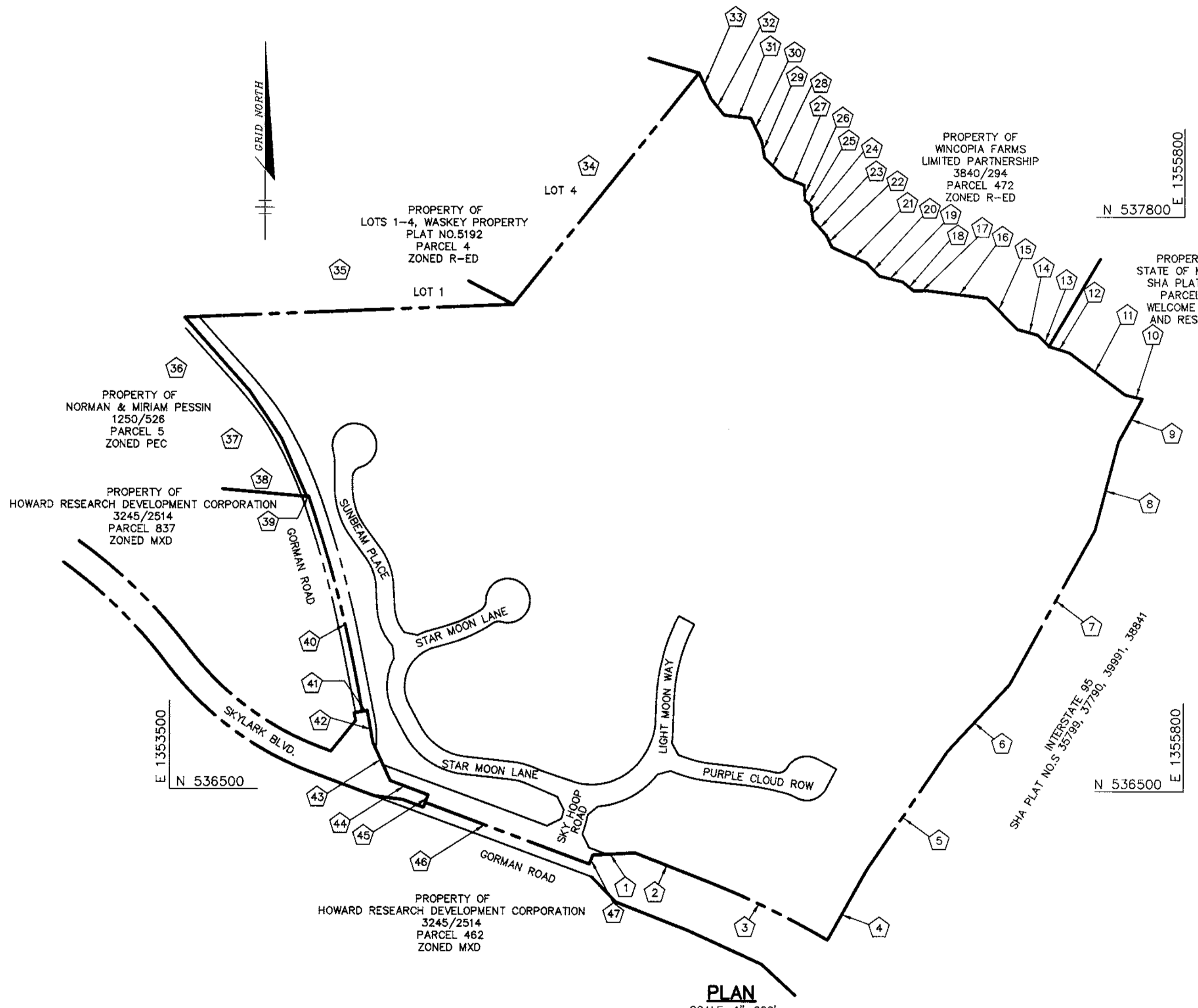
## LOTS 1 - 39 & PARCEL A

## 6th ELECTION DISTRICT

## HOWARD COUNTY, MARYLAND

### GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOL. IV "STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION" PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 513-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME II (1993) AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS, (JANUARY 1998)." A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM AERIAL SURVEY MAPS WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY AIR SURVEY CORP. FLOWN IN APRIL 1998.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 47 E4 ALONG WITH 2 TRAVERSE POINTS WERE USED FOR THIS PROJECT.
- WATER IS PUBLIC. CONTRACT NO. 34-3832-D.
- SEWER IS PUBLIC. SEWER DRAINAGE AREA: PATUXENT CONTRACT NO. 34-3832-D.
- THE PUBLIC STORMWATER MANAGEMENT FOR THIS SITE WILL BE PROVIDED BY A POCKET WETLANDS WITH ROUTINE MAINTENANCE BY THE HOMEOWNERS ASSOCIATION, AND WITH NON-ROUTINE MAINTENANCE BY HOWARD COUNTY.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
- THE WETLANDS DELINEATION STUDY FOR THIS PROJECT WAS PREPARED BY DAFT, MCCUNE & WALKER, INC.
- THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY WELLS & ASSOCIATES, DATED FEBRUARY 2000.
- THE NOISE STUDY FOR THIS PROJECT WAS PREPARED BY CENTURY ENGINEERING, DATED MARCH 1999.
- THE BOUNDARY SURVEY FOR THIS PROJECT WAS PREPARED BY DAFT, MCCUNE & WALKER, INC. JULY 2000.
- SUBJECT PROPERTY ZONED R-ED PER 10-18-93 COMPREHENSIVE ZONING PLAN, DATED JUNE 1999.
- ALL ELEVATIONS SHOWN ARE BASED ON THE U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929.
- SEE DEPARTMENT OF PLANNING AND ZONING FILE NOS.: S-00-12, WP-00-87, WP-01-39.
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- STORM DRAIN TRENCHES WITHIN ROAD RIGHT OF WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, I.B., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, LATEST AMENDMENTS.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- DESIGNED TRAFFIC SPEED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOL. III. ALL 40' AND 50' RIGHT OF WAYS 20 TO 35 M.P.H.
- ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO T180.
- ALL STREET CURB RETURNS SHALL HAVE 25' RADII UNLESS OTHERWISE NOTED.
- ALL STREET LIGHTS SHALL BE LOCATED BETWEEN 2'-0" AND 4'-0" BEHIND FACE OF CURB.
- STREET TREES (122) LOCATION, TYPE AND NUMBER OF TREES SHOWN ON THIS PLAN ARE TENTATIVE AND ARE USED FOR PURPOSES ONLY. THE FINAL LOCATION AND VARIETY OF TREES MAY VARY TO ACCOMMODATE FIELD CONDITIONS INCLUDING 20' CLEARANCE OF ANY STREET LIGHT AND SHALL BE IN ACCORDANCE WITH THE SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL. BOND RELEASE IS CONTINGENT UPON SECTION 16.124 OF THE HOWARD COUNTY 16.124 SUBDIVISION REGULATIONS, AS APPROVED BY THE DEPARTMENT OF PLANNING AND ZONING.
- WP-00-87 - A WAIVER OF SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, SECTION 16.116(d)(2)(i), WHICH PROHIBITED GRADING, REMOVAL OF VEGETATION WITHIN 75 FEET OF A STREAM, DATED JULY 21, 2000. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:  
PLEASE NOTE THAT THIS SET OF PLANS DOES NOT CONTAIN ALL OF THE REFERENCED EXHIBITS. SEE WP-00-87 FILE AT DPZ TO REVIEW DOCUMENTS.
- THE GRADING AND CLEARING ASSOCIATED WITH IMPACT AREA #1, FOR SUNBEAM PLACE TO CROSS THE STREAM, SHALL BE MINIMIZED AND COMPLY WITH THE FINAL ROAD PLANS, WHICH WILL BE REVIEWED AND APPROVED BY THE SRC. AS PROPOSED BY THE DEVELOPER WITH THIS WAIVER PETITION, THE UTILITY CROSSING OF THE STREAM MUST BE COINCIDENTAL WITH THE ROAD CROSSING. AS POSSIBLE, THE DEVELOPER SHALL COMPLY WITH COMMENT #1 OF THE JUNE 1, 2000, REVIEW COMMENTS FROM THE SOIL CONSERVATION DISTRICT (SCD) REGARDING ROAD DESIGN AND LOCATION, AND SHALL CONFIGURE THE ROAD SO THAT ANY REQUIRED CALMING FEATURE ALIGNS WITH THE STREAM CROSSING, AND THEREBY LESSENS THE ASSOCIATED GRADING/CLEARING.
- AS INDICATED IN THE COMMENTS FROM THE SCD, THE OUTFALL ASSOCIATED WITH IMPACT AREA #2 IS TO OUTFALL AT GRADE ELEVATION 308, UNLESS THE PRESENCE OF ROCK IS FOUND DURING FIELD INVESTIGATION, IN WHICH CASE THE OUTFALL MAY BE SHIFTED TO OUTFALL AT GRADE ELEVATION 314.
- THE L.O.D. FOR IMPACT AREAS #3 AND #4 SHALL BE IN ACCORDANCE WITH THEIR WAIVER EXHIBIT DATED MARCH 17, 2000. NEITHER THE WATER NOR THE SEWER LINES MAY BE EXTENDED BEHIND PROPOSED LOTS 34-40 (AS SHOWN IN THE EXHIBIT DATED MAY 8, 2000), DUE TO ADDITIONAL IMPACT TO THE STREAM BUFFER. FOR IMPACT AREAS #3 AND #4, LIMIT TREE CLEARING AS MUCH AS POSSIBLE, ESPECIALLY SPECIMEN TREES, TO FURTHER DECREASE GRADING OR CLEARING. THE UTILITIES MUST BE CONSOLIDATED INTO A SINGLE EASEMENT, AS PROPOSED ON THE WAIVER EXHIBIT.
- WP-01-39 - A WAIVER OF SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, SECTION 16.146, WHICH REQUIRES THE SUBMISSION OF A PRELIMINARY PLAN AFTER A SKETCH PLAN HAD BEEN SIGNED. THE WAIVER WAS DENIED, NOVEMBER 17, 2000.
- THERE ARE 55 TENTATIVE HOUSING UNIT ALLOCATIONS RESERVED FOR THE SFA UNITS ON BULK PARCEL A, AS SHOWN ON S-00-12, AND IN ACCORDANCE WITH SECTION 16.1106.h.2.(ii) OF THE SUBDIVISION REGULATIONS. THE DEADLINE TO SUBMIT A PRELIMINARY PLAN FOR THAT PARCEL WILL BE ESTABLISHED WHEN IT IS RECORDED ON A PLAN.
- THERE ARE NO EXISTING PERMANENT STRUCTURES ON-SITE.



### BOUNDARY CHART

1	S 86°49'15" W	95.82'
2	N 68°30'18" W	177.86'
3	R = 1969.86' L = 302.16'	
4	S 29°01'05" W	325.62'
5	S 34°06'42" W	325.62'
6	S 42°51'42" W	206.16'
7	S 28°49'32" W	400.00'
8	S 14°47'22" W	206.16'
9	S 28°49'32" W	111.29'
10	S 78°50'06" E	39.79'
11	S 53°11'44" E	158.71'
12	S 73°06'29" E	48.46'
13	S 43°54'39" E	35.46'
14	S 74°53'26" E	48.61'
15	S 44°49'31" E	98.51'
16	S 82°58'48" E	137.82'
17	N 88°04'21" E	28.92'
18	S 1°06'14" E	32.58'
19	S 78°15'13" E	55.01'
20	S 43°55'10" E	40.88'
21	S 65°52'50" E	86.51'
22	S 25°16'19" E	29.99'
23	S 41°30'55" E	46.49'
24	S 07°33'07" E	33.12'
25	S 48°49'26" E	19.70'
26	S 03°01'44" E	33.78'
27	S 68°17'36" E	50.72'
28	S 44°47'14" E	61.16'
29	S 09°32'59" E	37.57'
30	S 25°40'03" E	57.56'
31	S 83°15'33" E	61.16'
32	S 39°26'43" E	47.94'
33	S 24°42'10" E	64.18'
34	N 38°36'08" E	672.75'
35	N 87°37'38" E	745.82'
36	N 41°37'56" W	221.00'
37	N 34°03'35" W	129.47'
38	N 23°44'06" W	144.31'
39	S 71°05'08" W	4.28'
40	R = 3003.89' L = 503.78'	
41	S 80°41'39" W	11.80'
42	N 09°55'02" W	72.81'
43	N 24°33'43" W	95.27'
44	N 69°33'43" W	92.00'
45	N 20°28'17" E	18.36'
46	S 69°33'20" E	397.89'
47	S 21°29'42" W	22.17'

### MINIMUM LOT SIZE CHART

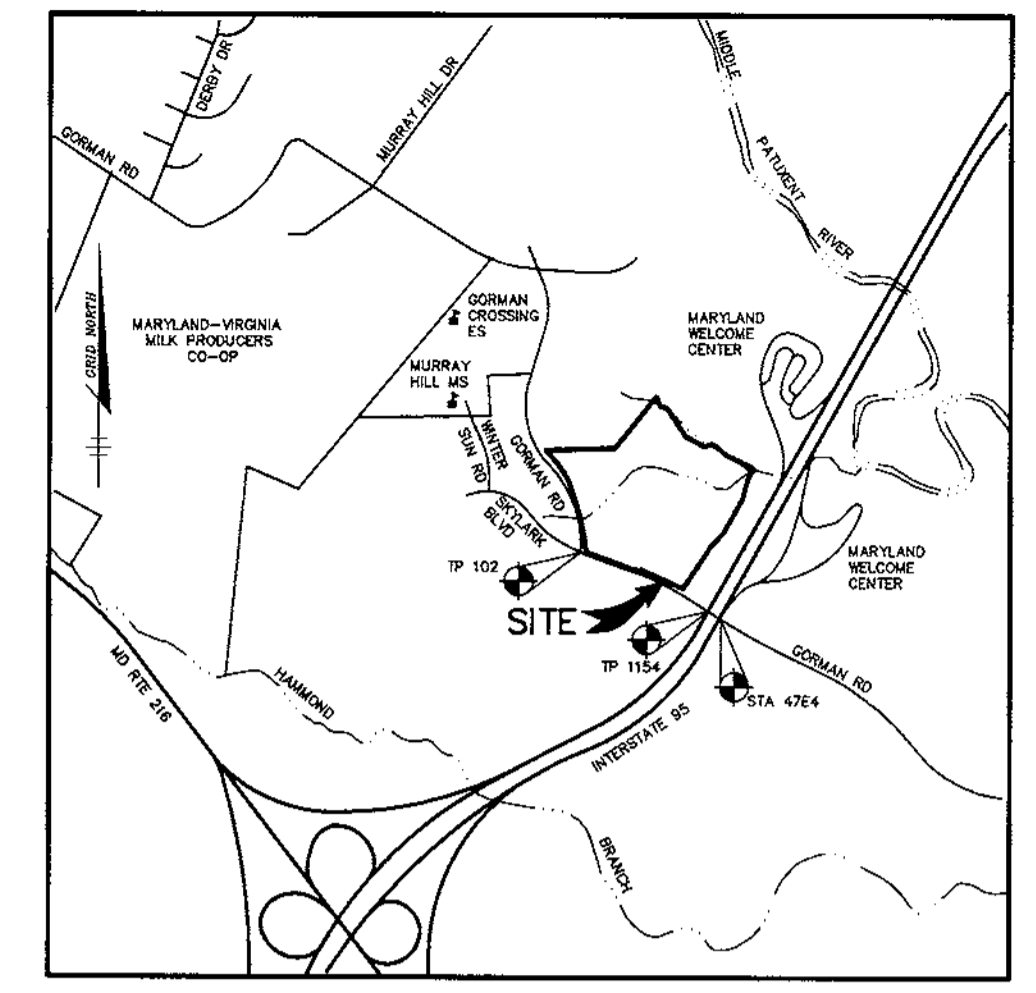
LOT NO.	GROSS AREA	PIPESTEM AREA	MINIMUM LOT SIZE
1	14958 SF	3407 SF	11851 SF
2	13550 SF	1927 SF	11623 SF
5	11141 SF	808 SF	10333 SF
6	14752 SF	1246 SF	13506 SF

### BENCHMARKS

TRAVERSE POINT 102  
ELEVATION 346.19  
N 536,499.165  
E 1,353,974.017  
LOCATED NEAR THE  
INTERSECTION OF GORMAN  
ROAD AND SKYLARK BLVD.

TRAVERSE POINT 1154  
ELEVATION 347.45  
N 536,018.069  
E 1,355,129.333  
LOCATED NEAR THE  
I-95 BRIDGE ALONG  
GORMAN ROAD

CONTROL STATION 47E4  
ELEVATION 339.00  
N 535,846.16  
E 1,355,431.23  
LOCATED NEAR THE  
I-95 BRIDGE ALONG  
GORMAN ROAD



### SITE TABULATION

AREA TABULATION		
EXISTING ZONING		R-ED
GROSS SITE AREA		51.83 ACRES
LESS STEEP SLOPES *		3.2 ACRES
LESS 100 YEAR FLOODPLAIN		3.7 ACRES
NET SITE AREA		44.93 ACRES
* SLOPES GREATER THAN 25%, OUTSIDE 100 YEAR FLOODPLAIN, SUSTAINED AT LEAST 10 VERTICAL FEET.		
AREA OF PROPOSED LOTS - DETACHED		8.59 ACRES
AREA OF PARCEL A (BULK RESIDENTIAL)		6.04 ACRES
TOTAL AREA OF PROPOSED RESIDENTIAL LOTS		14.63 ACRES
AREA OF PROPOSED OPEN SPACE - CREDITED		33.21 ACRES
O.S. DEDICATED TO HOMEOWNERS ASSOC.		8.20 ACRES
O.S. DEDICATED TO HOWARD COUNTY		25.01 ACRES
AREA OF PROPOSED OPEN SPACE - NON-CREDITED		0 ACRES
AREA OF PUBLIC ROADS		3.99 ACRES
AREA OF PRIVATE ROADS		0 ACRES
TOTAL AREA		51.83 ACRES
LIMIT OF DISTURBANCE		28.3 ACRES
OPEN SPACE REQUIRED (25% OF GROSS AREA)		12.96 ACRES
OPEN SPACE PROVIDED (64.1% OF GROSS AREA)		33.21 ACRES
RECREATION AREA REQUIRED (250/DETACHED UNIT)		8500 SF
RECREATION AREA PROVIDED		9712 SF
<b>MAXIMUM DENSITY ALLOWED</b>		
DENSITY: NO. OF UNITS ALLOWED AT 2 D.U./NET ACRE		90 D.U.
PROPOSED RESIDENTIAL LOTS/D.U. DETACHED		34 D.U.
BULK PARCEL A PROPOSED SFA UNITS		55*
TOTAL PROPOSED RESIDENTIAL LOTS/D.U.		34 D.U.
OPEN SPACE LOTS		5 LOTS
<b>TOTAL PROPOSED LOTS</b>		
		39 LOTS
PUBLIC WATER CONTRACT 34-3832-D		
PUBLIC SEWER CONTRACT 34-3832-D		

\* SEE NOTE 34

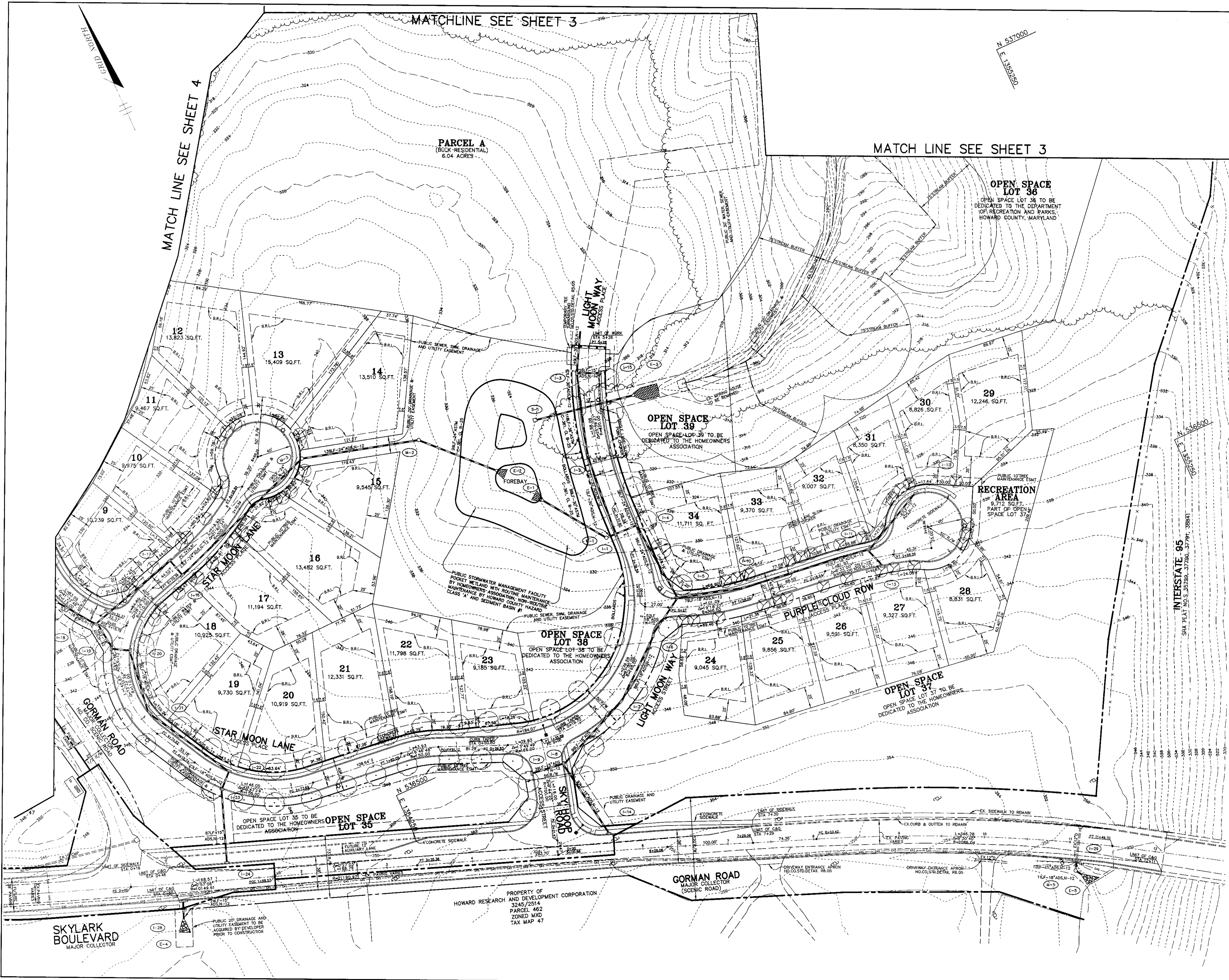
**TENTATIVELY APPROVED**  
DEPT. OF PLANNING AND  
ZONING OF  
HOWARD COUNTY  
*Paul R. [Signature]*  
PLANNING DIRECTOR 3/1/01

DATE	NO.	REVISION

<b>OWNER / DEVELOPER</b>	THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION THE ROUSE BUILDING 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044 410-992-6000
<b>PROJECT</b>	<b>EMERSON</b> SECTION ONE LOTS 1 - 39 & PARCEL A
<b>AREA</b>	TAX MAP 47 BLOCK 3, 8 & 9 ZONED: R-ED PARCEL: P/O 837 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
<b>TITLE</b>	<b>PRELIMINARY TITLE SHEET</b>

**RIEMER MUEGGE**  
a division of:  
**Patton Harris Rust & Associates, pc**  
ENGINEERS • SURVEYORS • PLANNERS  
LANDSCAPE ARCHITECTS • ENVIRONMENTAL SPECIALISTS  
8818 Centre Park Drive, Columbia, MD 21046 • tel 410.997.8900 fax 410.997.8282

	DESIGNED BY: CJR
	DRAWN BY: DAM
	PROJECT NO.: 99212/FINALS PRELIM.DWG
	DATE: FEBRUARY 21, 2001
	SCALE: AS SHOWN
	DRAWING NO.: 1 OF 13



SYMBOL	DESCRIPTION
B.R.L.	BUILDING RESTRICTION LINE
	EXISTING TREELINE
	PROPOSED STREET TREES
	30' LIGHT POLE W/ 12' ARM
	14' LIGHT POLE

TENTATIVELY APPROVED  
 DEPT. OF PLANNING AND ZONING OF  
 HOWARD COUNTY

*Paul Rust*  
 PLANNING DIRECTOR 3/1/01  
 DATE

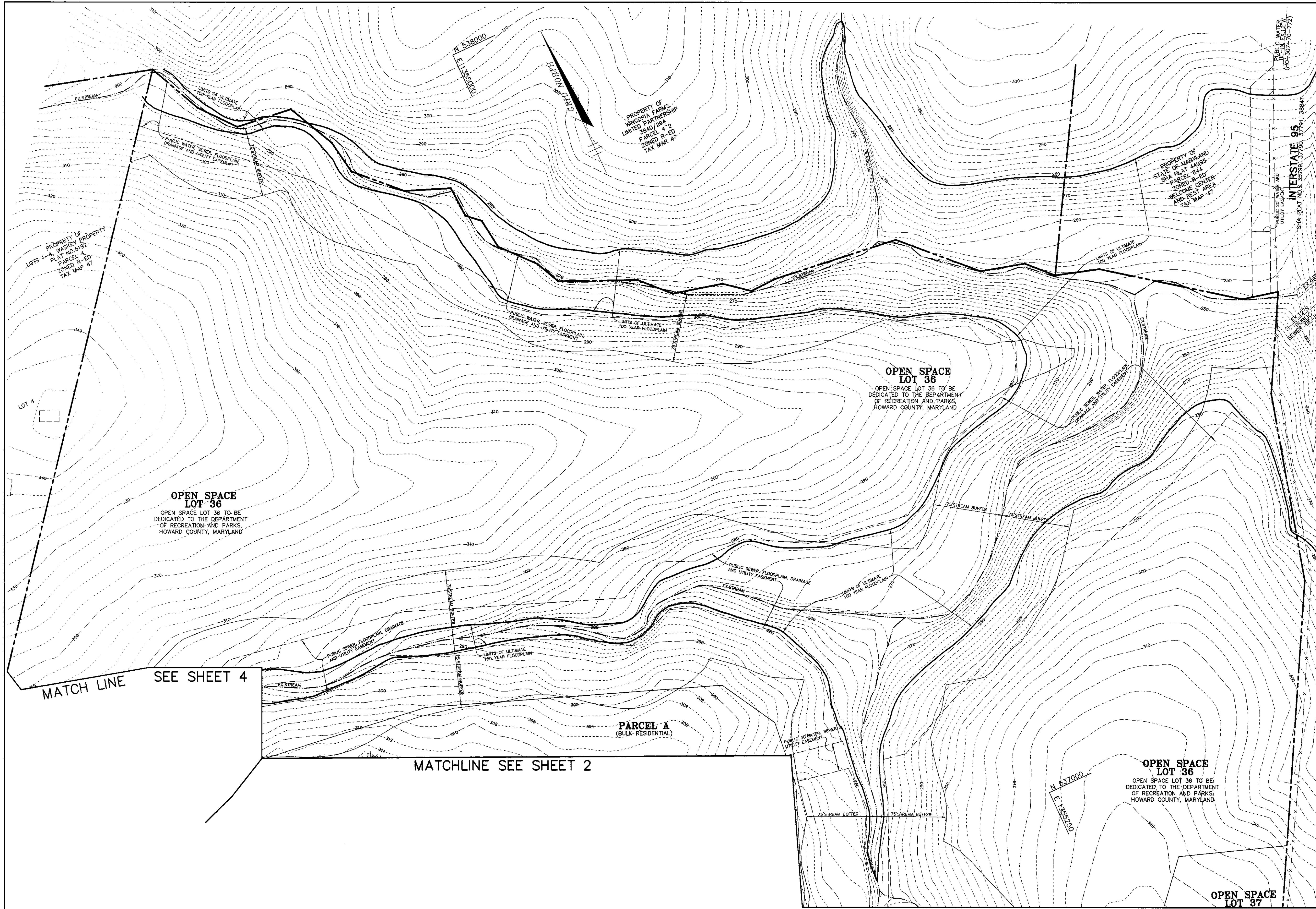
DATE	NO.	REVISION
OWNER / DEVELOPER		
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION THE ROUSE BUILDING 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044 410-992-6000		
PROJECT		
EMERSON SECTION ONE LOTS 1 - 39 & PARCEL A		
AREA		
TAX MAP 47 BLOCK 3, 8 & 9 ZONED: R-ED PARCEL: P/O 837 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
TITLE		
PRELIMINARY PLAN		

**RIEMER MUEGGE**  
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DESIGNED BY: CJR  
 DRAWN BY: DAM  
 PROJECT NO: 99212/FINALS  
 PRELIM2.DWG  
 DATE: FEBRUARY 21, 2001  
 SCALE: 1" = 50'  
 DRAWING NO. 2 OF 13

*Arthur E. Muegge*  
 ARTHUR E. MUEGGE #8707

F:\PROJECT\99212\FINALS\PRELIM2.DWG P13 FEB 16 13:36:13 2001 RIEMER MUEGGE & ASSOCIATES, INC.



SYMBOL	DESCRIPTION
B.R.L.	BUILDING RESTRICTION LINE
	EXISTING TREELINE
	PROPOSED STREET TREES

TENTATIVELY APPROVED  
 DEPT. OF PLANNING AND  
 ZONING OF  
 HOWARD COUNTY  
*John J. Rutter* 3/1/04  
 PLANNING DIRECTOR DATE

DATE NO.	REVISION
OWNER / DEVELOPER	
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION THE ROUSE BUILDING 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044 410-992-6000	
PROJECT	
EMERSON SECTION ONE LOTS 1 - 39 & PARCEL A	
AREA	TAX MAP 47 BLOCK 3, 8 & 9 ZONED: R-ED PARCEL: P/O 837 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TITLE	
PRELIMINARY PLAN	

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	DRAWN BY: DAM
	PROJECT NO : 99212/FINALS PRELIM3.DWG
	DATE : FEBRUARY 21, 2001
	SCALE : 1" = 50'
	DRAWING NO. 3 OF 13

F:\PROJECT\99212\FINALS\PRELIM3.DWG Fri Feb 16 13:44:54 2001 RIEMER MUEGGE & ASSOCIATES, INC.



SYMBOL	DESCRIPTION
B.R.L.	BUILDING RESTRICTION LINE
(Wavy line)	EXISTING TREELINE
(Circle with cross)	PROPOSED STREET TREES
(T-shaped symbol)	30' LIGHT POLE W/ 12' ARM
(Star symbol)	14' LIGHT POLE

MATCH LINE  
SEE SHEET 3

MATCH LINE  
SEE SHEET 2

MATCH LINE  
SEE SHEET 2

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 ZONING OF  
 HOWARD COUNTY

*Paul Rust* 3/1/01  
 PLANNING DIRECTOR DATE

DATE NO.	REVISION

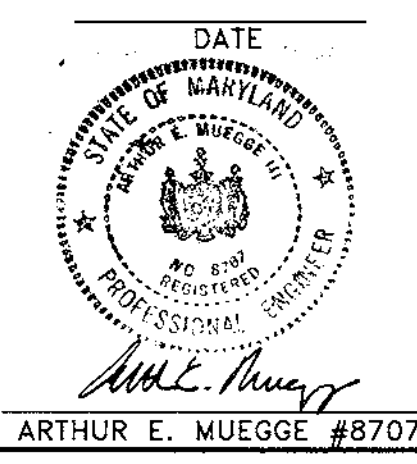
OWNER / DEVELOPER  
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION  
 THE ROUSE BUILDING  
 10275 LITTLE PATUXENT PARKWAY  
 COLUMBIA, MARYLAND 21044  
 410-992-6000

PROJECT  
**EMERSON**  
 SECTION ONE  
 LOTS 1 - 39 & PARCEL A

AREA  
 TAX MAP 47 BLOCK 3,8 & 9  
 ZONED: R-ED PARCEL: P/O 837  
 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**PRELIMINARY PLAN**

**RIEMER MUEGGE**  
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PROJECT NO :	99212/FINALS PRELIM4.DWG
DATE :	FEBRUARY 21, 2001
SCALE :	1" = 50'
DRAWING NO. :	4 OF 13

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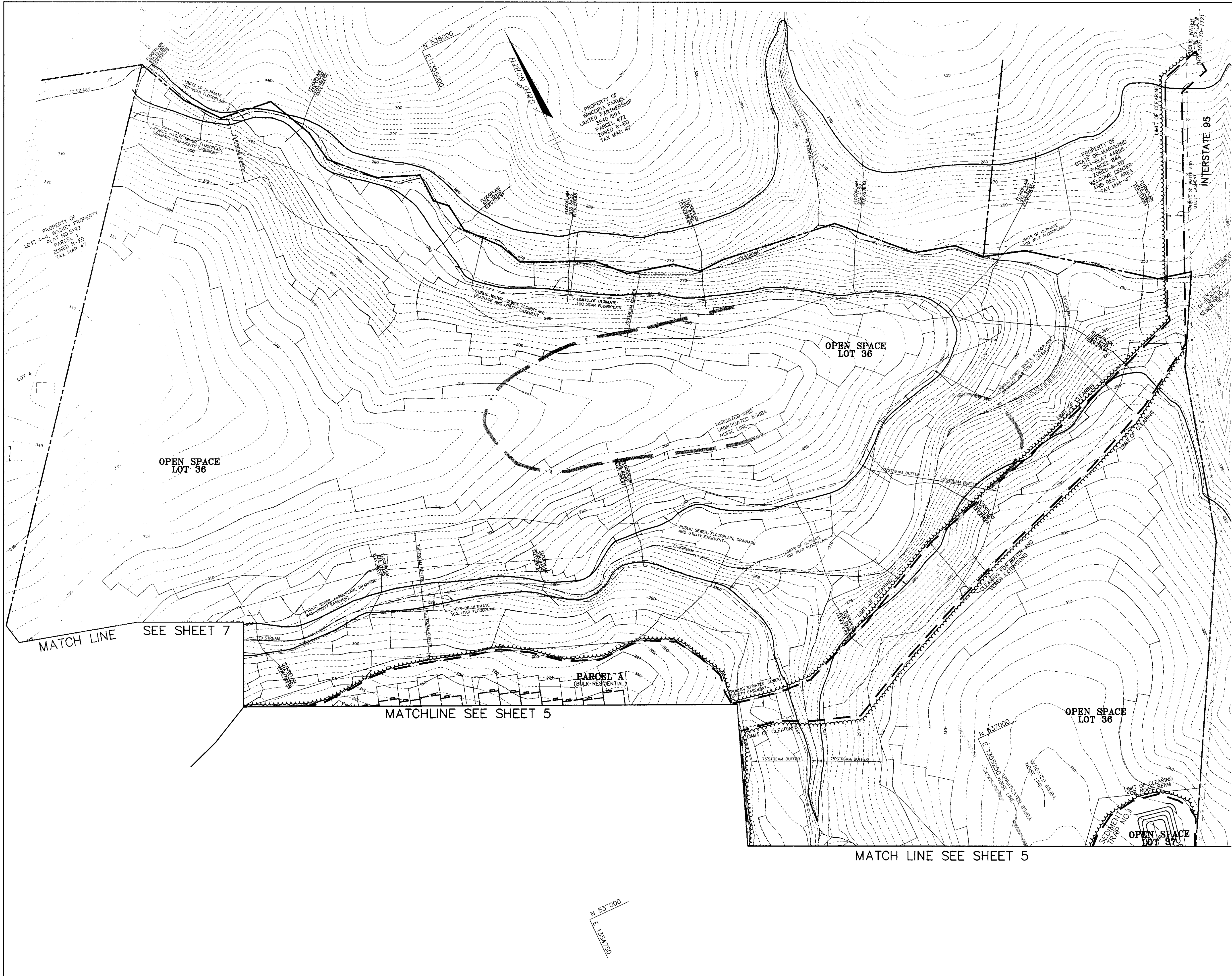


SYMBOL	DESCRIPTION
---	LIMIT OF DISTURBANCE
~~~~~	EXISTING TREELINE
~~~~~	PROPOSED TREELINE
[Hatched Box]	25% OR GREATER SLOPES
[Dotted Box]	15% - 24.9% SLOPES
---	UNMITIGATED NOISE LINE
---	MITIGATED NOISE LINE
---	DRAINAGE AREA LINES

TENTATIVELY APPROVED  
 DEPT. OF PLANNING AND ZONING OF  
 HOWARD COUNTY  
 PLANNING DIRECTOR *[Signature]* DATE 2/1/01

DATE	NO.	REVISION
OWNER / DEVELOPER		
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION THE ROUSE BUILDING 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044 410-992-6000		
PROJECT		
EMERSON SECTION ONE LOTS 1 - 39 & PARCEL A		
AREA		
TAX MAP 47 BLOCK 3.8 & 9 ZONED: R-ED PARCEL P/O B37 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
TITLE		
PRELIMINARY DRAINAGE AREA MAP AND GRADING PLAN		
RIEMER MUEGGE a division of Patton Harris Rust & Associates, pc ENGINEERS • SURVEYORS • PLANNERS LANDSCAPE ARCHITECTS • ENVIRONMENTAL SPECIALISTS 8818 Centre Park Drive, Columbia, MD 21045 • tel 410.997.8900 fax 410.997.9282		
DATE	DESIGNED BY :	CJR
	DRAWN BY :	DAM
	PROJECT NO. :	99212/FINALS PRELIMS.DWG
	DATE :	FEBRUARY 21, 2001
	SCALE :	1" = 50'
	DRAWING NO. :	5 OF 13

PROJECT: 99212/FINALS.DWG DATE: FEB 15 14 25:22 2001 RIEMER MUEGGE & ASSOCIATES, INC.



**LEGEND**

SYMBOL	DESCRIPTION
---	LIMIT OF DISTURBANCE
~~~~~	EXISTING TREELINE
~~~~~	PROPOSED TREELINE
▭	25% OR GREATER SLOPES
▭	15% - 24.9% SLOPES
---	UNMITIGATED NOISE LINE
---	MITIGATED NOISE LINE
---	DRAINAGE AREA LINES

TENTATIVELY APPROVED  
 DEPT. OF PLANNING AND ZONING OF  
 HOWARD COUNTY

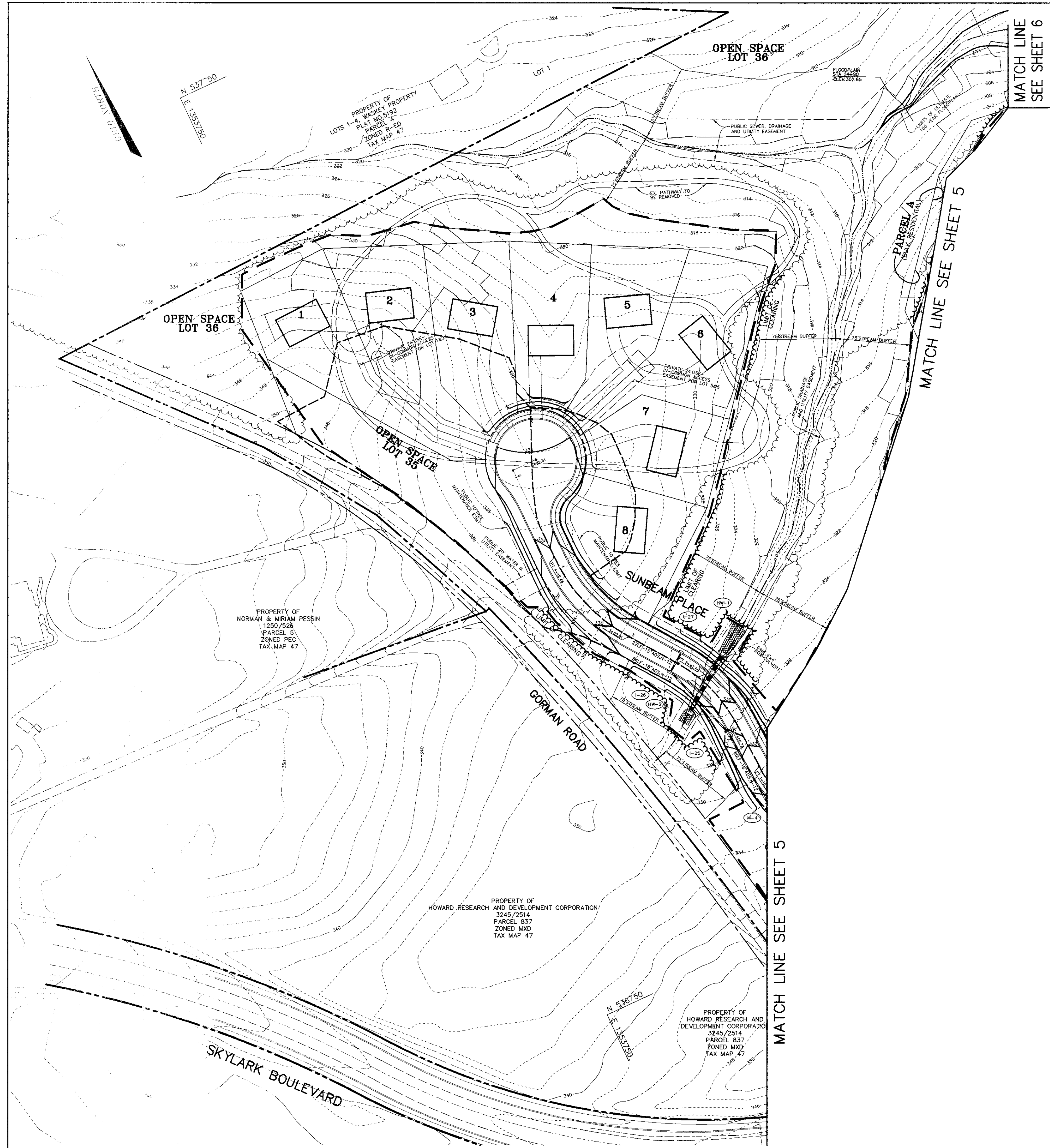
*Paul R. Korte* 3/1/01  
 PLANNING DIRECTOR DATE

DATE	NO.	REVISION
OWNER / DEVELOPER		
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION THE ROUSE BUILDING 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044 410-992-6000		
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EMERSON SECTION ONE LOTS 1 - 39 & PARCEL A		
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TITLE		
PRELIMINARY DRAINAGE AREA MAP AND GRADING PLAN		

**RIEMER MUEGGE**  
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 LANDSCAPE ARCHITECTS • ENVIRONMENTAL SPECIALISTS  
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	DATE	DESIGNED BY :	CJR
		DRAWN BY :	DAM
		PROJECT NO :	99212/FINALS PRELIM6.DWG
		DATE :	FEBRUARY 21, 2001
		SCALE :	1" = 50'
	DRAWING NO. :	6 OF 13	

C:\PROJECTS\99212\99212.dwg 1:1 Feb 15 15:30:09 2001 P:\H\MUEGGE & ASSOCIATES, INC.



SYMBOL	DESCRIPTION
---	LIMIT OF DISTURBANCE
~~~~~	EXISTING TREELINE
~~~~~	PROPOSED TREELINE
[Thick Line]	25% OR GREATER SLOPES
[Thin Line]	15% - 24.9% SLOPES
[Dashed Line]	UNMITIGATED NOISE LINE
[Dotted Line]	MITIGATED NOISE LINE
[Dashed Line]	DRAINAGE AREA LINES

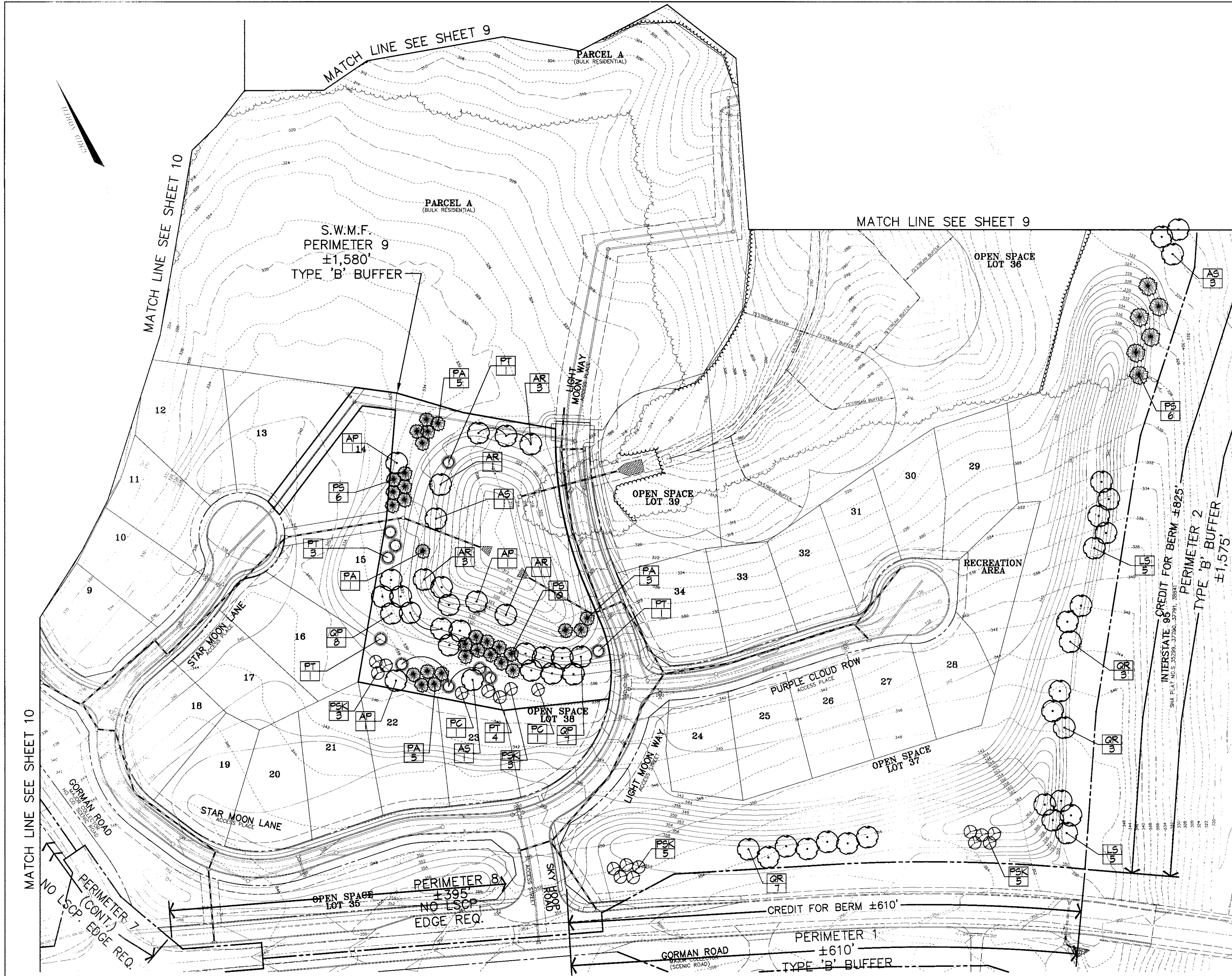
**DRAINAGE CHART**

INLET NO.	DRAINAGE AREA (AC)	'C' FACTOR	PERCENT IMPERVIOUS
I-1	0.24	0.62	63
I-2	0.05	0.74	80
I-3	0.05	0.74	80
I-4	0.09	0.65	67
I-5	0.01	0.87	100
I-6	0.05	0.47	40
I-7	0.24	0.43	33
I-8	0.22	0.45	36
I-9	0.10	0.47	40
I-10	0.10	0.54	30
I-11	0.23	0.50	22
I-12	1.31	0.38	11
I-13	1.52	0.33	5
I-14	0.30	0.45	37
I-15	0.09	0.72	78
I-16	0.76	0.49	20
I-17	0.58	0.46	19
I-18	0.02	0.54	50
I-19	0.22	0.36	23
I-20	0.10	0.54	50
I-21	0.16	0.50	44
I-22	0.40	0.51	45
I-23	0.43	0.32	16
I-24	0.48	0.44	35
I-25	0.06	0.58	50
I-26	1.04	0.38	25
I-27	0.49	0.62	49
24" STUB	3.60	0.60	58

TENTATIVELY APPROVED  
 DEPT. OF PLANNING AND ZONING OF  
 HOWARD COUNTY  
 PLANNING DIRECTOR 3/1/01  
 DATE

DATE	NO.	REVISION
OWNER / DEVELOPER		
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION THE ROUSE BUILDING 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044 410-992-6000		
PROJECT		
EMERSON SECTION ONE LOTS 1 - 39 & PARCEL A		
AREA		
TAX MAP 47 BLOCK 3, 8 & 9 ZONED: R-ED PARCEL: P/O 837 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
TITLE		
PRELIMINARY DRAINAGE AREA MAP AND GRADING PLAN		
RIEMER MUEGGE a division of: Patton Harris Rust & Associates, pc ENGINEERS • SURVEYORS • PLANNERS LANDSCAPE ARCHITECTS • ENVIRONMENTAL SPECIALISTS 8818 Centre Park Drive, Columbia, MD 21045 • tel 410.997.8900 fax 410.997.9282		
DATE		
DESIGNED BY : CJR		
DRAWN BY : DAM		
PROJECT NO : 99212/FINALS :PRELIM7.DWG		
DATE : FEBRUARY 21, 2001		
SCALE : 1" = 50'		
DRAWING NO. 7 OF 13		

C:\PROJ\01\PRELIM\DRAWING\PRELIM7.DWG (P) 1485 15 15 23:50 2001 RIEMER MUEGGE & ASSOCIATES, INC.



TENTATIVELY APPROVED  
 DEPT. OF PLANNING AND ZONING OF  
 HOWARD COUNTY

*David T. Dows* 2/21/01  
 PLANNING DIRECTOR DATE

DATE NO.	REVISION
OWNER / DEVELOPER	
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION THE ROUSE BUILDING 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044 410-992-6000	
PROJECT	
EMERSON SECTION ONE LOTS 1 - 39 & PARCEL A	
AREA	
TAX MAP 47 BLOCK 3.8 & 9 ZONED: R-ED PARCEL: P/O 837 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
TITLE	
PRELIMINARY LANDSCAPE PLAN	

**RIEMER MUEGGE**  
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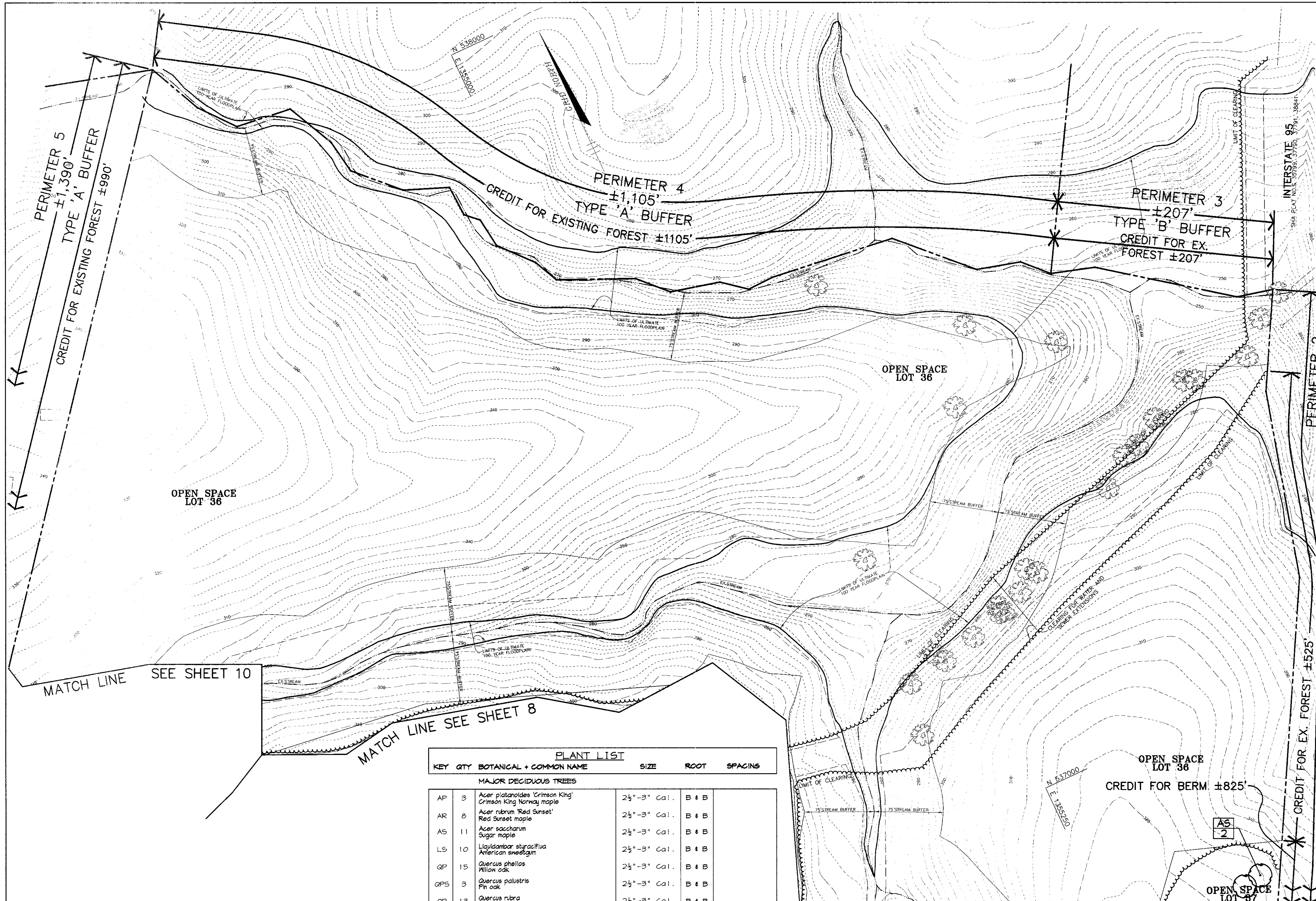
DATE: 2-21-01

DESIGNED BY: DMD  
 DRAWN BY: GTH  
 PROJECT NO: 99212/FINALS  
 DATE: FEBRUARY 21, 2001  
 SCALE: 1" = 50'  
 DRAWING NO. 8 OF 13

DAVID T. DOWS

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TENTATIVELY APPROVED  
DEPT. OF PLANNING AND ZONING OF  
HOWARD COUNTY

*James S. [Signature]* 3/1/01  
PLANNING DIRECTOR

DATE NO.	REVISION
OWNER / DEVELOPER	
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION THE ROUSE BUILDING 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044 410-992-6000	
PROJECT	EMERSON SECTION ONE LOTS 1 - 39 & PARCEL A
AREA	TAX MAP 47 BLOCK 3.8 & 9 ZONED: R-ED PARCEL: P/O B37 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TITLE	PRELIMINARY LANDSCAPE PLAN

**PLANT LIST**

KEY	QTY	BOTANICAL + COMMON NAME	SIZE	ROOT	SPACING
<b>MAJOR DECIDUOUS TREES</b>					
AP	3	Acer platanoides 'Crimson King' Crimson King Norway maple	2 1/2"-3" Cal.	B # B	
AR	8	Acer rubrum 'Red Sunset' Red Sunset maple	2 1/2"-3" Cal.	B # B	
AS	11	Acer saccharum Sugar maple	2 1/2"-3" Cal.	B # B	
LS	10	Liquidambar styraciflua American sweetgum	2 1/2"-3" Cal.	B # B	
QP	15	Quercus phellos Willow oak	2 1/2"-3" Cal.	B # B	
QPS	3	Quercus palustris Pin oak	2 1/2"-3" Cal.	B # B	
QR	13	Quercus rubra Red oak	2 1/2"-3" Cal.	B # B	
<b>EVERGREEN TREES</b>					
PA	18	Picea abies Norway spruce	6'-8' Ht.	B # B	
PS	22	Pinus strobus Eastern white pine	6'-8' Ht.	B # B	
PT	10	Pinus thunbergiana Japanese black pine	6'-8' Ht.	B # B	
<b>MINOR DECIDUOUS TREES</b>					
PC	2	Prunus cerasifera atropurpurea 'Thundercloud' Thundercloud purpleleaf plum	1 1/2"-2" Cal.	B # B	
PSK	16	Prunus serrulata 'Kwanzan' Kwanzan cherry	1 1/2"-2" Cal.	B # B	

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DATE: 2.21.01  
DESIGNED BY: :DMD  
DRAWN BY: GTH  
PROJECT NO.: 99212/FINALS  
DATE: FEBRUARY 21, 2001  
SCALE: 1" = 50'  
DRAWING NO. 9 OF 13

*David T. Dows*  
DAVID T. DOWS



SYMBOL	DESCRIPTION
	EXISTING TREELINE
	PROPOSED TREELINE
	FOREST CONSERVATION SIGNAGE
	FOREST CONSERVATION FENCE

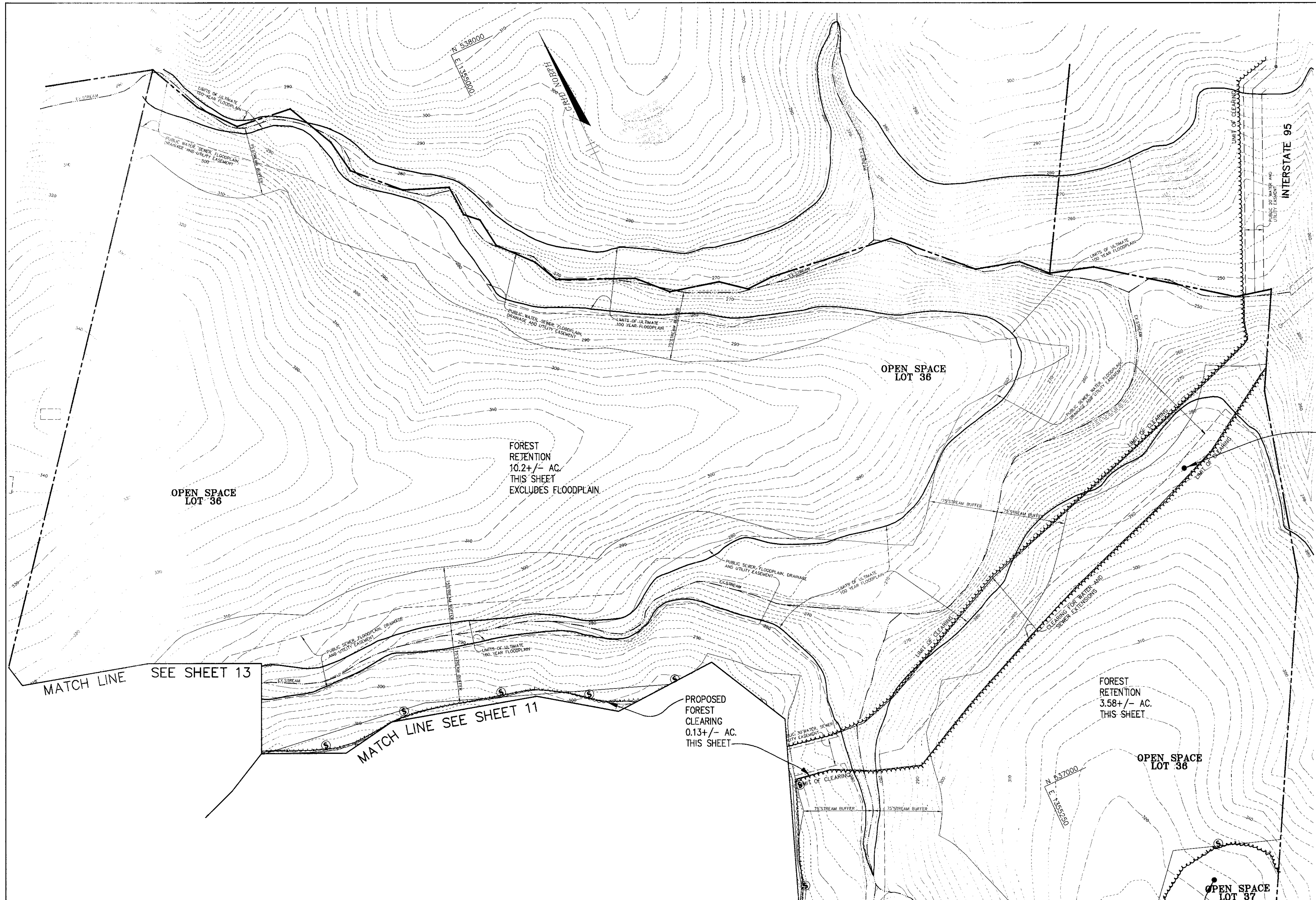
TENTATIVELY APPROVED  
 DEPT. OF PLANNING AND  
 ZONING OF  
 HOWARD COUNTY  
*James J. Smith* 3/1/01  
 PLANNING DIRECTOR DATE

DATE	NO.	REVISION
OWNER / DEVELOPER		
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION THE ROUSE BUILDING 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044 410-992-6000		
PROJECT		
EMERSON SECTION ONE LOTS 1 - 39 & PARCEL A		
AREA		
TAX MAP 47 BLOCK 3, 8 & 9 ZONED: R-ED PARCEL: P/O 837 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
TITLE		
PRELIMINARY FOREST CONSERVATION PLAN		

**RIEMER MUEGGE**  
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DATE: 2-23-01	DESIGNED BY: CJR
STATE OF MARYLAND 	DRAWN BY: DAM
PROJECT NO.: 99212/FINALS FCPI.DWG	DATE: FEBRUARY 21, 2001
SCALE: 1" = 50'	DRAWING NO.: 11 OF 13

P:\p01\fcpi\99212\FINALS\FCP1.DWG Mod Feb 21 09 36:41 2001 RIEMER MUEGGE A DIVISION OF PHRBA



SYMBOL	DESCRIPTION
	EXISTING TREE LINE
	PROPOSED TREE LINE
	FOREST CONSERVATION SIGNAGE
	FOREST CONSERVATION FENCE

PROPOSED FOREST CLEARING 0.72+/- AC.

TENTATIVE APPROVED  
DEPT. OF PLANNING AND  
ZONING  
HOWARD COUNTY  
*Paul R. Rust* 3/16/01  
PLANNING DIRECTOR DATE

DATE NO.	REVISION
OWNER / DEVELOPER	
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION THE ROUSE BUILDING 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044 410-992-6000	
PROJECT	
EMERSON SECTION ONE LOTS 1 - 39 & PARCEL A	
AREA	
TAX MAP 47 BLOCK 3.8 & 9 ZONED: R-ED PARCEL: P/O 837 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
TITLE	
PRELIMINARY FOREST CONSERVATION PLAN	

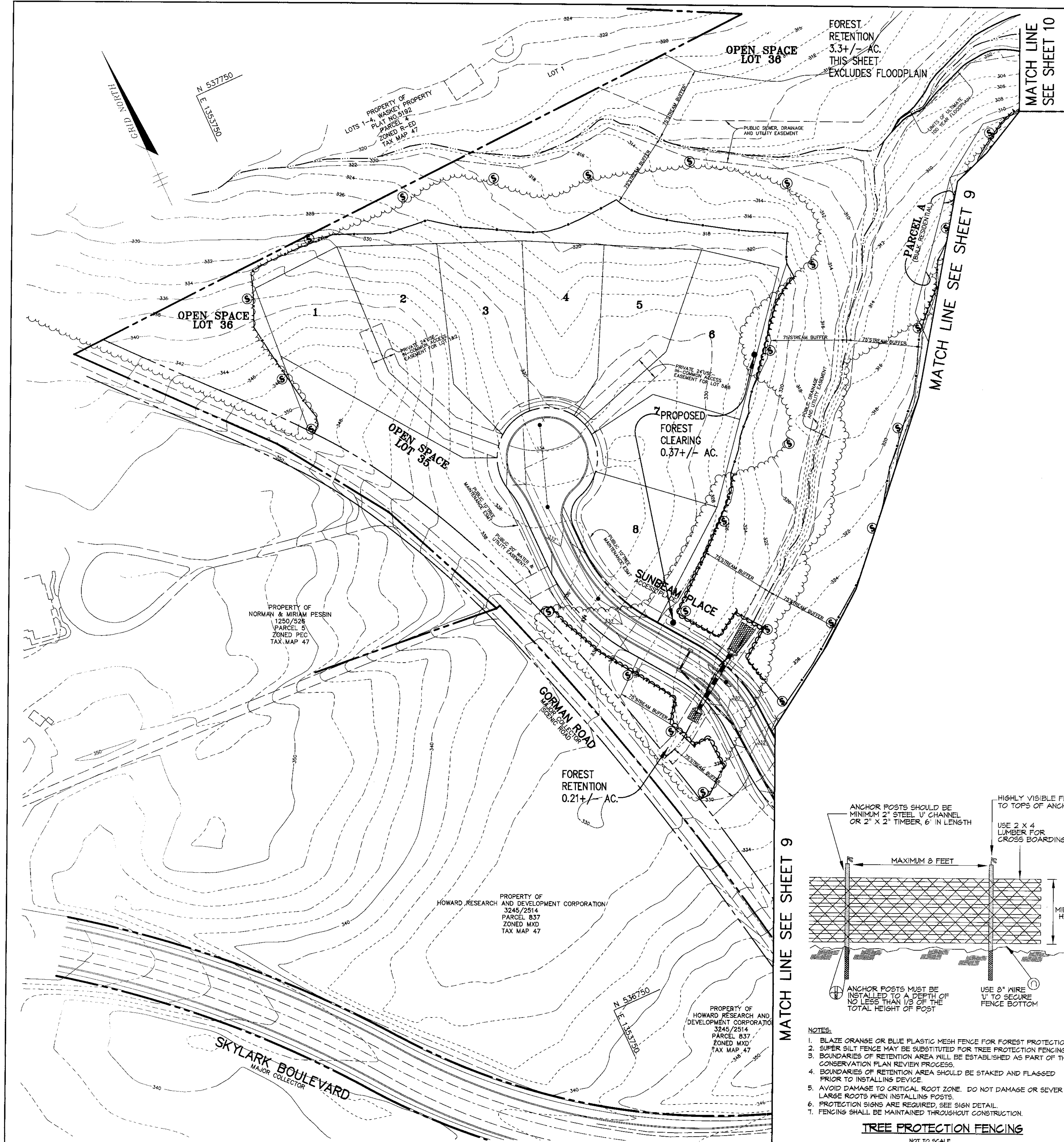
**RIEMER MUEGGE**  
a division of:  
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LANDSCAPE ARCHITECTS • ENVIRONMENTAL SPECIALISTS  
2818 Centre Park Drive, Columbia, MD 21045 • tel: 410.997.8900 fax: 410.997.9292

2-23-01  
DATE

DESIGNED BY: CJR  
DRAWN BY: DAM  
PROJECT NO. 99212/FINALS  
FCP2.DWG  
DATE: FEBRUARY 21, 2001  
SCALE: 1" = 50'  
DRAWING NO. 12 OF 13

STATE OF MARYLAND  
LANDSCAPE ARCHITECT  
DMW, INC. FOR FOREST CONSERVATION ONLY

A:\PROJECTS\99212\FINALS\FCP2.DWG 2001 FEB 21 09:37:56 2001 RHEMER MUEGGE & ASSOCIATES, PC DIVISION OF PHRGA



MATCH LINE  
SEE SHEET 10

MATCH LINE SEE SHEET 9

MATCH LINE SEE SHEET 9

**LEGEND**

SYMBOL	DESCRIPTION
	EXISTING TREELINE
	PROPOSED TREELINE
	FOREST CONSERVATION SIGNAGE
	FOREST CONSERVATION FENCE

**GOALS AND OBJECTIVES**  
DEVELOPMENT OF EMERSON SECTION I UNDER THE CURRENT FOREST CONSERVATION ACT REQUIRES THE CLEARING OF APPROXIMATELY 3.67 ACRES OF EXISTING FOREST. CREDIT FOR RETENTION OF FORESTS ABOVE THE CONSERVATION THRESHOLD WILL OFFSET ANY REFORESTATION REQUIREMENT; AS SUCH, NO REFORESTATION WILL BE REQUIRED. THIS PLAN PROPOSES RETENTION OF APPROXIMATELY 19.63 ACRES OF FOREST; THIS AMOUNT IS 7.27 ACRES IN EXCESS OF THE AMOUNT OF REQUIRED RETENTION. THE ADDITIONAL RETENTION ACREAGE WILL BE USED TO PARTIALLY DEFRAY REFORESTATION OBLIGATIONS ASSOCIATED WITH DEVELOPMENT OF THE STONE LAKE PROJECT.

THE GOALS AND OBJECTIVES OF THIS PRELIMINARY FOREST CONSERVATION PLAN ARE TO PROVIDE FOR SHORT TERM FOREST RETENTION AREA PROTECTION BY IDENTIFYING THOSE AREAS AND INDICATING THE LOCATIONS OF FOREST PROTECTION FENCING AND SIGNAGE. ESTABLISHING THESE SHORT TERM PROTECTION MEASURES PRIOR TO ANY EARTH MOVING ACTIVITIES WILL HELP ENSURE THAT THESE AREAS WILL NOT BE DISTURBED DURING CONSTRUCTION ACTIVITIES.

**FOREST CONSERVATION WORKSHEET**

**NET TRACT AREA**

A. TOTAL TRACT AREA	51.83
B. AREA WITHIN 100 YEAR FLOODPLAIN	3.7
C. AREA TO REMAIN IN AGRICULTURAL PRODUCTION	0.00
D. NET TRACT AREA	48.13

**LAND USE CATEGORY** (FROM TABLE 3.2.1, PAGE 40, MANUAL)  
INPUT THE NUMBER '1' UNDER THE APPROPRIATE LAND USE ZONING AND LIMIT TO ONLY ONE ENTRY.

ARA	MDR	IDA	HDR	MPD	CIA
0	0	0	1	0	0

E. AFFORESTATION THRESHOLD 15% x D = 7.22  
F. CONSERVATION THRESHOLD 20% x D = 9.63

**EXISTING FOREST COVER**

G. EXISTING FOREST COVER (EXCLUDING FLOODPLAIN)	23.3
H. AREA OF FOREST ABOVE AFFORESTATION THRESHOLD	16.08
I. AREA OF FOREST ABOVE CONSERVATION THRESHOLD	13.67

**BREAK EVEN POINT**

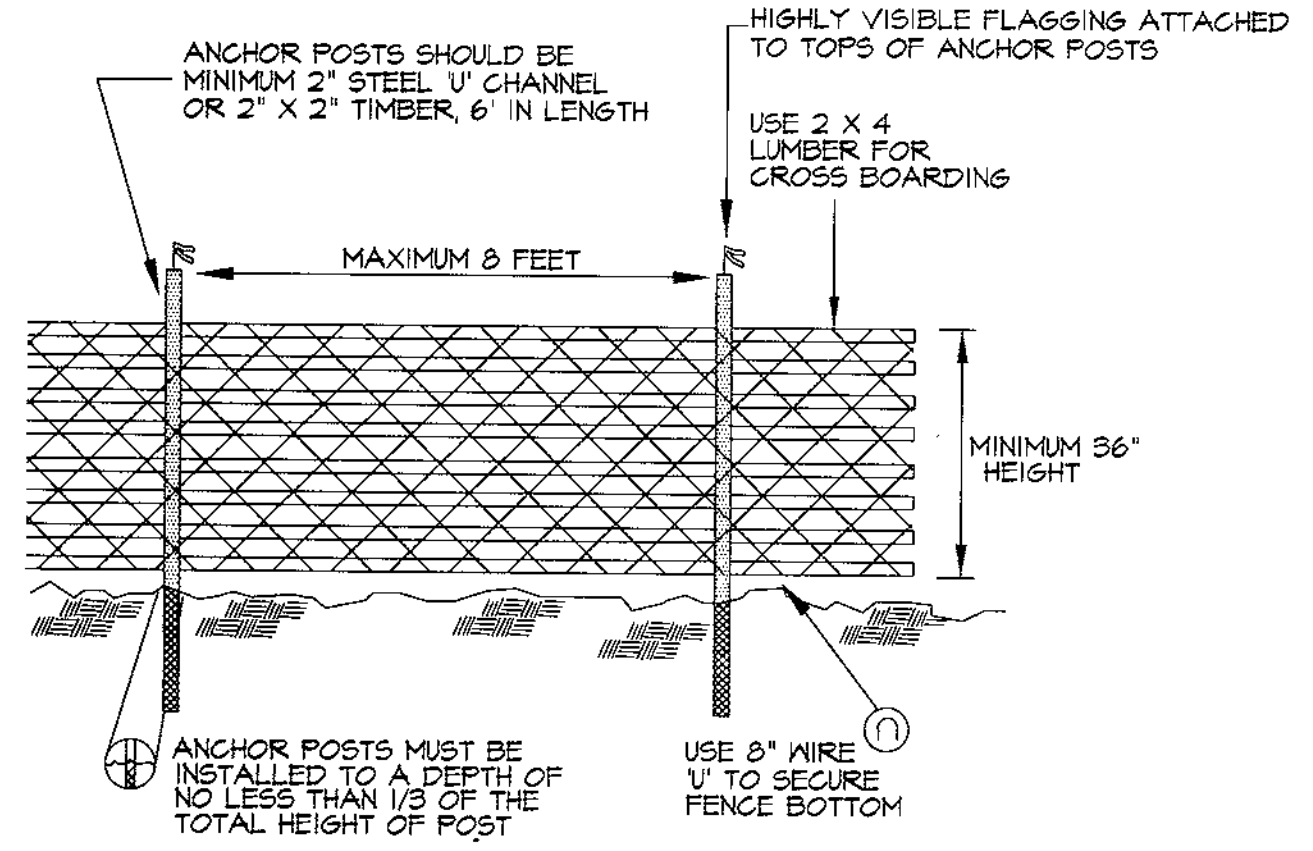
J. FOREST RETENTION ABOVE THRESHOLD WITH NO MITIGATION	12.36
K. CLEARING PERMITTED WITHOUT MITIGATION	10.94

**PROPOSED FOREST CLEARING**

L. TOTAL AREA OF FOREST TO BE CLEARED	3.67
M. TOTAL AREA OF FOREST TO BE RETAINED	19.63

**PLANTING REQUIREMENTS**

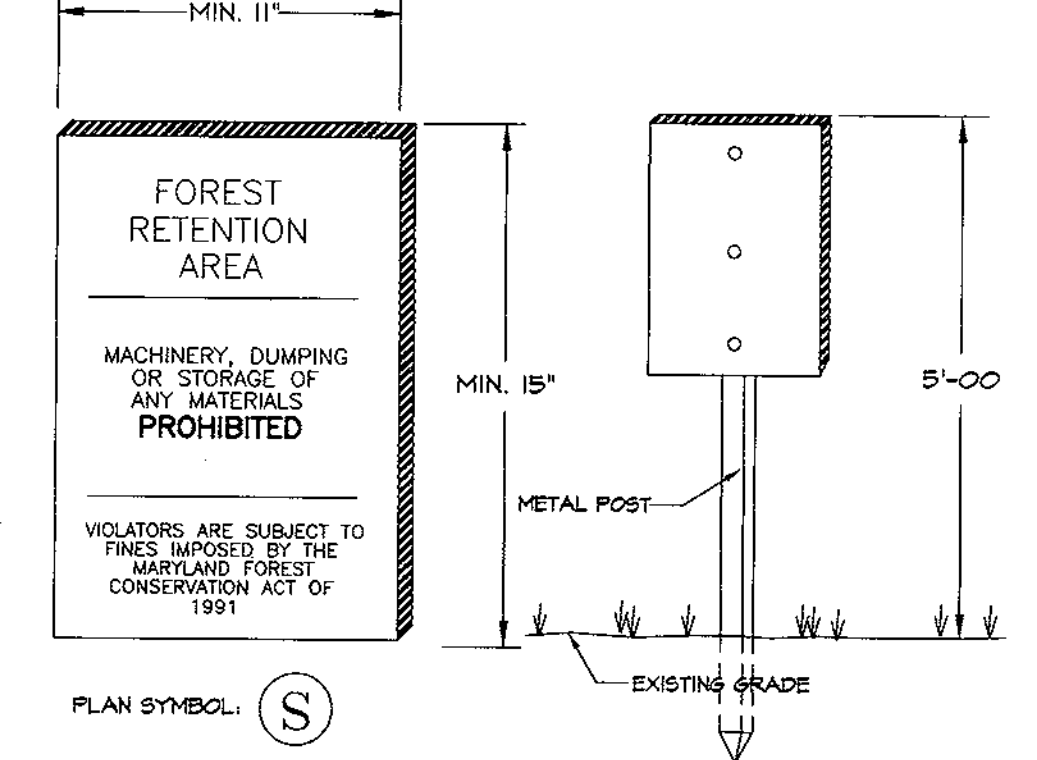
N. REFORESTATION FOR CLEARING ABOVE CONSERVATION THRESHOLD	0.92
P. REFORESTATION FOR CLEARING BELOW CONSERVATION THRESHOLD	0.00
Q. CREDIT FOR RETENTION ABOVE CONSERVATION THRESHOLD	10.00
R. TOTAL REFORESTATION REQUIRED	0.00
S. TOTAL AFFORESTATION REQUIRED	0.00
T. TOTAL REFORESTATION AND AFFORESTATION REQUIRED	0.00



- NOTES:**
1. BLAZE ORANGE OR BLUE PLASTIC MESH FENCE FOR FOREST PROTECTION DEVICE ONLY.
  2. SUPER SILT FENCE MAY BE SUBSTITUTED FOR TREE PROTECTION FENCING.
  3. BOUNDARIES OF RETENTION AREA WILL BE ESTABLISHED AS PART OF THE FOREST CONSERVATION PLAN REVIEW PROCESS.
  4. BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.
  5. AVOID DAMAGE TO CRITICAL ROOT ZONE. DO NOT DAMAGE OR SEVER LARGE ROOTS WHEN INSTALLING POSTS.
  6. PROTECTION SIGNS ARE REQUIRED, SEE SIGN DETAIL.
  7. FENCING SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.

**TREE PROTECTION FENCING**  
NOT TO SCALE

DEPT. OF PLANNING AND ZONING  
HOWARD COUNTY  
DATE: 2/1/01



- NOTES:**
1. SIGNAGE SHALL BE LOCATED ON FOREST CONSERVATION / REFORESTATION / AFFORESTATION EASEMENT BORDER.
  2. SEE PLAN FOR PLACING.
  3. SIGNS TO BE PLACED ON METAL POSTS 5' +/- ABOVE FINISH GRADE. PLACE SIGNS EVERY 100' AROUND PERIMETER OF FOREST RETENTION AREA.

**FOREST RETENTION AREA SIGN DETAIL**  
NOT TO SCALE

DATE	NO.	REVISION

OWNER / DEVELOPER  
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION  
THE ROUSE BUILDING  
10275 LITTLE PATUXENT PARKWAY  
COLUMBIA, MARYLAND 21044  
410-992-6000

PROJECT  
**EMERSON SECTION ONE**  
LOTS 1 - 39 & PARCEL A

AREA  
TAX MAP 47 BLOCK 3, 8 & 9  
ZONED: R-ED PARCEL: P/O 837  
6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE  
**PRELIMINARY FOREST CONSERVATION PLAN**

**RIEMER MUEGGE**  
a division of:  
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DESIGNED BY: CJR  
DRAWN BY: DAM  
PROJECT NO: 99212/FINALS  
DATE: FEBRUARY 21, 2001  
SCALE: 1" = 50'  
DRAWING NO: 13 OF 13