

PRELIMINARY PLAN

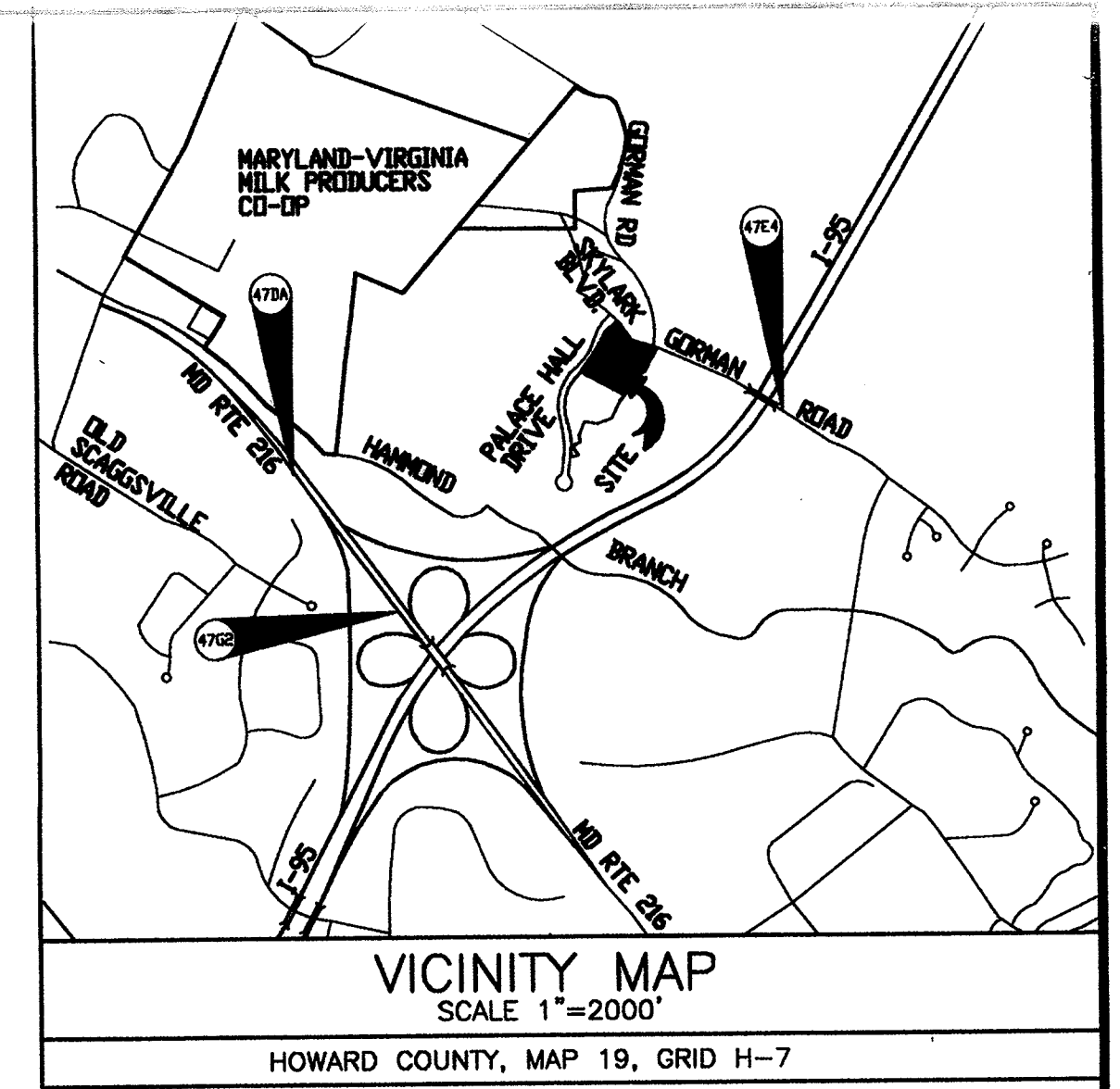
EMERSON TOWNHOUSES

SECTION 2, PHASE 6A, LOTS 46-90 & OPEN SPACE LOTS 91 & 92

A RESUBDIVISION OF PARCEL "A-1"

6th ELECTION DISTRICT

HOWARD COUNTY, MARYLAND



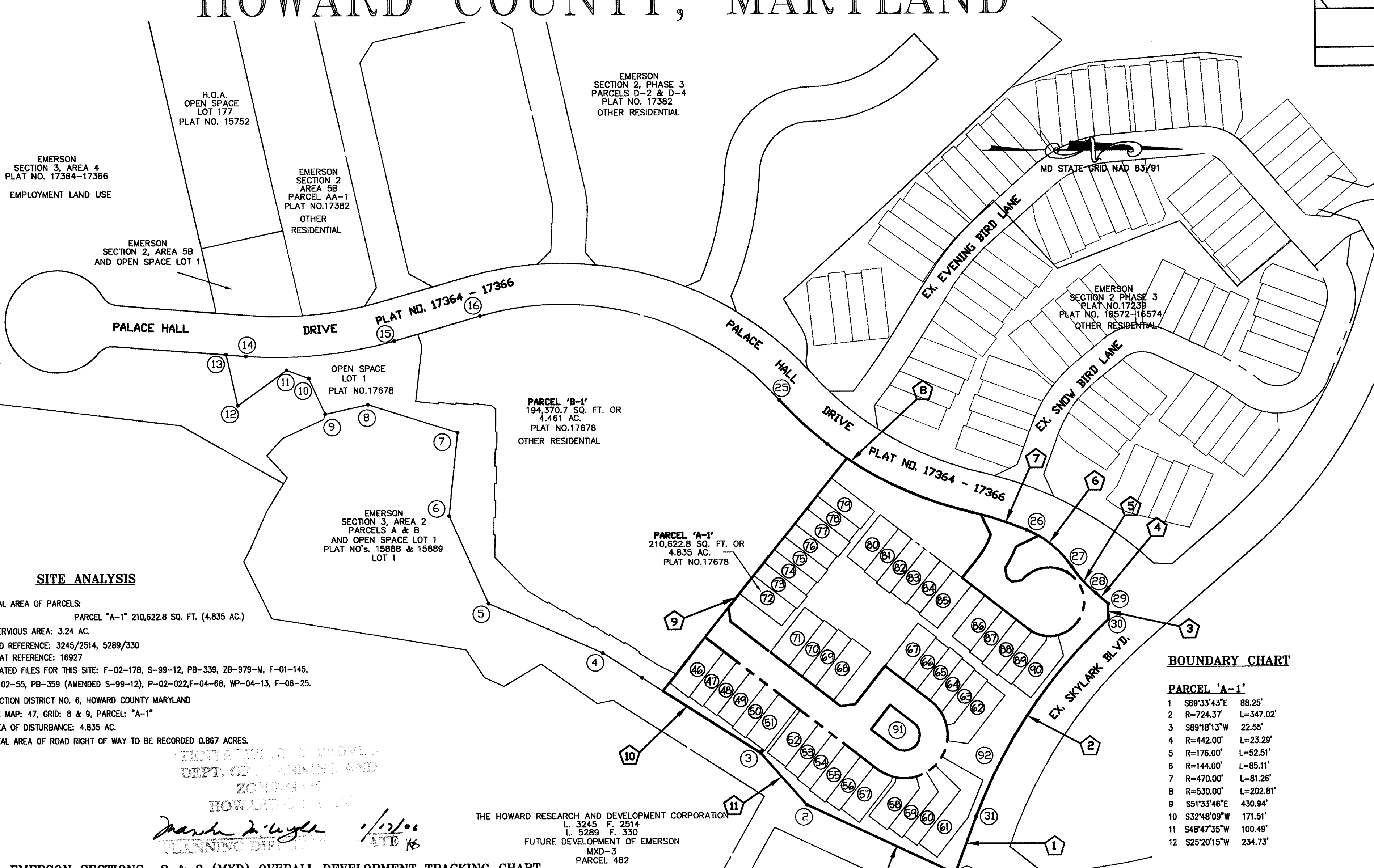
BENCHMARK

Horizontal Datum: Howard County Grid System
 NAD83 (91)
 Vertical Datum: NAD 83/91
 Howard County Monument 47DA
 N535405.46, E1349362.71, Elev. 315.90
 Howard County Monument 47C2
 N532936.96, E1351224.08, Elev. 364.21
 Howard County Monument 47E4
 N535846.14, E1355431.19, Elev. 338.91

1. 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.
2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/ CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
4. 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.
5. ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
6. THE EXISTING TOPOGRAPHY SHOWN WAS COMPLETED BY christopher consultants, ltd ON DECEMBER 2004.
7. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLAN COORDINATE SYSTEM MONUMENT NOS 47DA, 47C2 AND 47E4 WERE USED FOR THIS PROJECT (NAD 1983/91).
8. WATER IS TO BE PUBLIC.
9. SEWER IS TO BE PUBLIC.
10. EX. UTILITIES ARE BASED ON FIELD RUN TOPOGRAPHY BY christopher consultants, ltd ON DECEMBER 2004, AND SUPPLEMENTED WITH HOWARD COUNTY RECORDS.
11. CONTRACTOR SHALL VERIFY SIZE AND LOCATIONS OF ALL UNDERGROUND UTILITIES AND TEST PIT ALL UTILITIES, INCLUDING PROPOSED TIE IN LOCATIONS, AT LEAST 5 DAYS PRIOR TO STARTING ANY WORK ON THESE DRAWINGS. DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER AND IN ADVANCE OF CONSTRUCTION START.
12. ANY DAMAGE CAUSED BY THE CONTRACTOR TO EXISTING PUBLIC RIGHT-OF-WAY, EXISTING PAVING, EXISTING CURB AND GUTTER, EXISTING UTILITIES, ETC. SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
13. ALL FILL AREAS SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED AND VERIFIED IN ACCORDANCE WITH AASHTO T-180—STANDARD.
14. CONTRACTOR SHALL MAINTAIN ALL SEDIMENT CONTROL DEVICES WITHIN THE LIMITS OF THE SITE DURING CONSTRUCTION OF THE SITE IMPROVEMENTS. CONTRACTOR SHALL PROVIDE ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES AS MAY BE NECESSARY DURING CONSTRUCTION AND/OR BY GOVERNING AGENCIES.
15. THERE ARE NO KNOWN CEMETERIES OR BURIAL GROUNDS ON THIS SITE. HOWEVER, UPON DISCOVERY OF ANY EVIDENCE OF BURIAL OR GRAVES, THE DEVELOPER WILL BE SUBJECT TO SECTION 16.1305 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
16. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE WETLANDS, STREAM(S) OR THEIR REQUIRED BUFFERS AND FOREST CONSERVATION EASEMENT AREAS.
17. THE SUBJECT PROPERTY IS ZONED MXD-3 "OTHER RESIDENTIAL" PER THE 2/2/04 COMPREHENSIVE ZONING PLAN AND ZB-979M.
18. THE CONTRACTOR SHALL TEST PIT ALL EXISTING UTILITIES AT LEAST FIVE (5) DAYS PRIOR TO STARTING ANY WORK SHOWN ON THESE DRAWINGS.
19. OPERATING EXISTING VALVES, SWITCHES, SERVICES OR START UP OF NEW SERVICES SHALL BE COORDINATED WITH THE OWNERS REPRESENTATIVE.
20. STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III (1993) AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS, (JANUARY 1990)".
21. A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
22. THE PUBLIC STORMWATER MANAGEMENT FOR THIS SITE WILL BE PROVIDED BY PRIVATE MET PONDS PREVIOUSLY BUILT UNDER F-01-145 & F-02-178.
23. THE TRAFFIC STUDY FOR THIS PROJECT AREA WAS PREPARED BY WELLS & ASSOCIATES, DATED FEBRUARY 2000.
24. THE NOISE STUDY FOR THIS PROJECT AREA WAS PREPARED BY CENTURY ENGINEERING, DATED MARCH 1999.
25. THE BOUNDARY SURVEY FOR THIS PROJECT AREA WAS PREPARED BY DAFT, MCCLUNE, & WALKER, INC. DATED JULY 2000.
26. ALL ELEVATIONS SHOWN ARE BASED ON THE U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929.
27. CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
28. PIPES SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
29. NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.
30. ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
31. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
32. STORM DRAIN TRENCHES WITHIN ROAD RIGHT OF WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV I.e., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, LATEST AMENDMENTS.
33. PROFILE DIMENSIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
34. DESIGNED TRAFFIC SPEED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOL. III. ALL 40' & 50' RIGHT OF WAYS SHALL BE 25MPH.
35. ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO T180.
36. ALL STREET CURBS SHALL HAVE 10' RADIUS UNLESS OTHERWISE NOTED.
37. ALL STREET LIGHTS SHALL BE LOCATED BETWEEN 2'-0" AND 4'-0" BEHIND FACE OF CURB.
38. STREET TREE (57) LOCATION, TYPE AND NUMBER OF TREES SHOWN ON THIS PLAN ARE TENTATIVE AND ARE USED FOR BONDING 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 AND THE APPROVED EMERSON STREETScape DESIGN CRITERIA. THE BOND RELEASE IS CONTINGENT UPON SECTION 16.124 OF THE HOWARD COUNTY SUBDIVISION REGULATIONS, AS APPROVED BY THE DEPARTMENT OF PLANNING AND ZONING.
39. THERE ARE NO EXISTING PERMANENT STRUCTURES ON-SITE.
40. FOREST CONSERVATION OBLIGATIONS AND OPEN SPACE REQUIREMENTS FOR THIS PHASE OF THE EMERSON MXD PROJECT WERE ADDRESSED UNDER F-04-68.
41. RESIDENTIAL INTERNAL LANDSCAPING AND PARKING LOT INTERNAL LANDSCAPING WILL BE ADDRESSED ON THE FUTURE SITE DEVELOPMENT PLAN FOR EMERSON SECTION TWO, PHASE 6A.
42. TRASH SERVICE WILL BE PROVIDED AT THE PUBLIC RIGHT OF WAY FOR LOTS 44-88. MAIL WILL BE PROVIDED IN A CENTRAL KIOSK SERVICE.
43. OPEN SPACE AREAS MAY CONTAIN ACTIVE RECREATION FACILITIES AS ALLOWED IN THE APPROVED DEVELOPMENT CRITERIA.
44. STREAM BUFFERS ARE DETERMINED BY LAND USE ADJOINING THE OPEN SPACE. EMPLOYMENT USE = 50' BUFFER FROM ANY STREAM. RESIDENTIAL USES = 50' BUFFER FOR INTERMITTENT STREAMS AND 75' BUFFER FOR PERENNIAL STREAMS.
45. PHASING FOR THIS PROJECT IS IN ACCORDANCE WITH THE DECISION AND ORDER FOR ZONING CASE ZB-979M AND THE DECISION AND ORDER FOR PB-339 (COMPREHENSIVE SKETCH PLAN S-99-12).
46. ON SEPT. 3, 1998 THE ZONING BOARD GRANTED APPROVAL OF ZB-979M FOR THE PRELIMINARY DEVELOPMENT PLAN AND DEVELOPMENT CRITERIA FOR 516 ACRES OF LAND RE-ZONED AS PEC-MXD-3 AND R-SC-MXD-3.
47. DEVELOPMENT FOR THIS PHASE WILL BE DONE IN ACCORDANCE WITH THE DEVELOPMENT CRITERIA APPROVED WITH COMPREHENSIVE SKETCH PLAN S-99-12 (PB-339).
48. 50 HOUSING UNIT ALLOCATIONS WERE RESERVED FOR THIS PARCEL. 30 ADDITIONAL ALLOCATIONS FROM F-05-49 WERE RECEIVED PER PLAT 17381. THE REMAINING 44 UNITS ARE HEREBY SHIFTED TO EMERSON SECTION 2, PHASE 7, PARCEL A, F-05-93.
49. THE MINIMUM BUILDING SETBACK RESTRICTIONS FROM PROPERTY LINES AND PUBLIC ROAD RIGHT OF WAY LINES FOR ALL SFA LOTS SHALL BE IN ACCORDANCE WITH THE COMPREHENSIVE SKETCH PLAN DEVELOPMENT CRITERIA APPROVED UNDER F-05-12 (PB-339 AND F-05-35).
50. WP-04-13 WAS APPROVED ON 5/4/03 FOR THE SUBJECT PROPERTY. THIS WAIVER PETITION FROM THE DIVISION OF LAND DEVELOPMENT WAS A WAIVER FROM SECTION 16.145 TO NOT SUBMIT A PRELIMINARY PLAN FOR PHASE 6 OF THE EMERSON MXD PROJECT AND PROCEED WITH SUBMISSION OF THE FINAL PLAN. THE ONLY CONDITION APPLIED TO THE WAIVER WAS THAT THE PETITIONER SHALL PROCEED WITH SUBMISSION OF A FINAL PLAN APPLICATION WITHIN 9 MONTHS OF THE APPROVAL OF THE WAIVER.
51. THIS DEVELOPMENT WILL NOT INCLUDE ANY MODERATE INCOME HOUSING UNITS.

BOUNDARY COORDINATE TABLE

NO.	NORTH	EAST
1	536506.8740	1353904.9733
2	536294.7218	1353804.5198
3	536228.5194	1353728.9157
4	536002.8472	1353583.4665
5	535839.9125	1353511.6778
6	535783.3200	1353383.1162
7	535796.4237	1353261.8588
8	535668.1019	1353220.9687
9	535606.5698	1353261.8588
10	535583.3089	1353182.7034
11	535551.6503	1353171.0209
12	535480.8380	1353221.4313
13	535464.6892	1353147.9363
14	535493.3164	1353150.2093
15	535706.9480	1353128.2529
16	535830.3130	1353092.2345
25	536260.5019	1353216.3957
26	536613.2665	1353408.3009
27	536677.4709	1353460.2703
28	536712.1799	1353499.4111
29	536729.6519	1353514.8132
30	536729.6519	1353537.3588
31	536537.6901	1353822.2796



SITE ANALYSIS

1. TOTAL AREA OF PARCELS:
PARCEL "A-1" 210,622.8 SQ. FT. (4.835 AC.)
2. IMPERVIOUS AREA: 3.24 AC.
3. DEED REFERENCE: 3245/2514, 5289/330
PLAT REFERENCE: 16927
4. RELATED FILES FOR THIS SITE: F-02-178, S-99-12, PB-339, ZB-979-M, F-01-145, F-02-55, PB-359 (AMENDED S-99-12), P-02-022, F-04-68, WP-04-13, F-06-25.
5. ELECTION DISTRICT NO. 6, HOWARD COUNTY MARYLAND
6. TAX MAP: 47, GRID: B & 9, PARCEL: "A-1"
7. AREA OF DISTURBANCE: 4.835 AC.
8. TOTAL AREA OF ROAD RIGHT OF WAY TO BE RECORDED 0.867 ACRES.

EMERSON SECTIONS 2 & 3 (MXD) OVERALL DEVELOPMENT TRACKING CHART

SECTION & PHASE	FILE REF. NUMBER	GROSS AC.	SFD AC. (A)	OTHER RES. AC. (B)	EMPLOYMENT AC. (C)	OPEN SPACE AC. (D)	SFD UNITS	SFD DENSITY (C)	OTHER RES. UNITS (SFA/APT/CONDO)	OTHER RES. DENSITY (D)
2/1A	F-01-136	8.4	3.6(4.3%)	-0-	-0-	4.8(57%)	-	-	-	-
2/1B	F-01-137	97.8	49.7(50.8%)	8.0(8.2%)	-0-	40.1(41%)	160	3.2	80 SFA	10 D.U./AC.
2/2	F-01-145	12.7	-0-	12.7(100%)	-0-	-0-	-	-	120 SFA	9.4 D.U./AC.
2/3	F-02-55	18.5	-0-	12.0(64.9%)	-0-	6.5(35.1%)	-	-	120 SFA	10 D.U./AC.
3/1	F-02-131	69.5	-0-	22.0(31.7%)	-0-	47.5(68.3%)	-	-	-	-
3/2	F-02-178	12.3	-0-	8.9(72.4%)	-0-	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%)	-	-	-	-
2/6A(F)	F-04-68	10.4	-0-	9.4(90.4%)	-0-	1.0(9.6%)	-	-	100 SFA	10.6 D.U./AC.
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	-	-
2/5B & 3/4	F-04-127	23.9	-0-	2.9(12.1%)	14.1(59.0%)	6.9(28.9%)	-	-	60 APT, 33 SFA	11.4 D.U./AC.
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.
TOTAL		344.9	109.0(31.6%)	53.5(15.5%)	49.1(14.2%)	133.3(38.7%)	387	3.6	133 APT, 500 SFA	10.7 D.U./AC.

BOUNDARY CHART

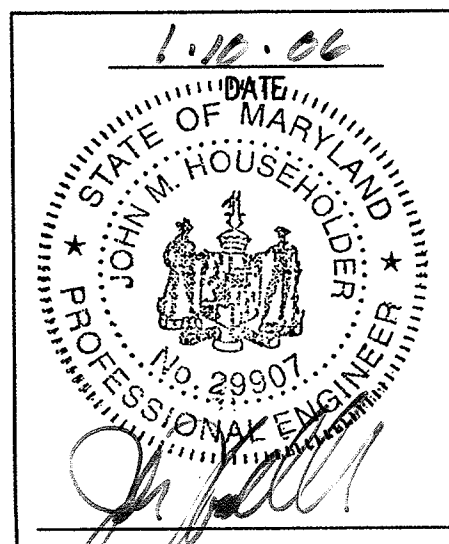
PARCEL "A-1"

1	S89°33'43"E	88.25'
2	R=724.37'	L=347.02'
3	S89°18'13"W	22.55'
4	R=442.00'	L=23.29'
5	R=176.00'	L=52.51'
6	R=144.00'	L=85.11'
7	R=470.00'	L=81.26'
8	R=530.00'	L=202.81'
9	S51°33'46"E	430.94'
10	S32°48'09"W	171.51'
11	S48°47'35"W	100.49'
12	S25°20'15"W	234.73'

OVERALL VIEW

SCALE: 1" = 100'

- (A) SFD ACREAGE INCLUDES COMMON OPEN AREA(COA LOTS).
- (B) OVERALL ALLOWED DENSITY BASED ON MAXIMUM NUMBER OF UNITS ALLOWED PER ZB 979M AND MAX ALLOWED LAND USE ACREAGES.
- (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) PROP. DENSITY TABULATIONS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
- (F) RE-SUBDIVIDED BY F-06-25 TO CREATE 1.0 AC. OF CREDITED OPEN SPACE.



SHEET INDEX

NO.	TITLE
1	TITLE SHEET
2	PRELIMINARY PLAN
3	PRELIMINARY GRADING PLAN, DRAINAGE AREA & SOILS MAP
4	PRELIMINARY ROAD PROFILES
5	PRELIMINARY LANDSCAPING PLAN

Date	No.	Revision Description

OWNER/DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10275 LITTLE PATUXENT PKWY
 COLUMBIA, MD 21044
 TEL: (410) 992-6027 FAX: (410) 992-6149

AREA:
 TAX MAP 47
 ZONED: MXD-3-OR
 6TH ELECTION DISTRICT

**BLOCKS 8&9
 PARCEL "A-1"
 HOWARD COUNTY, MARYLAND**

engineering - surveying - land planning
 christopher consultants, Inc.
 1172 columbia gateway drive (suite 100) - columbia, md 21046-2990
 410.872.8690 - metro 301.981.0146 - fax 410.872.8693

PROJECT: EMERSON TOWNHOUSES
 SECT. 2, PH. 6A, LOTS 46-90, OPEN SPACE LOTS 91 & 92,
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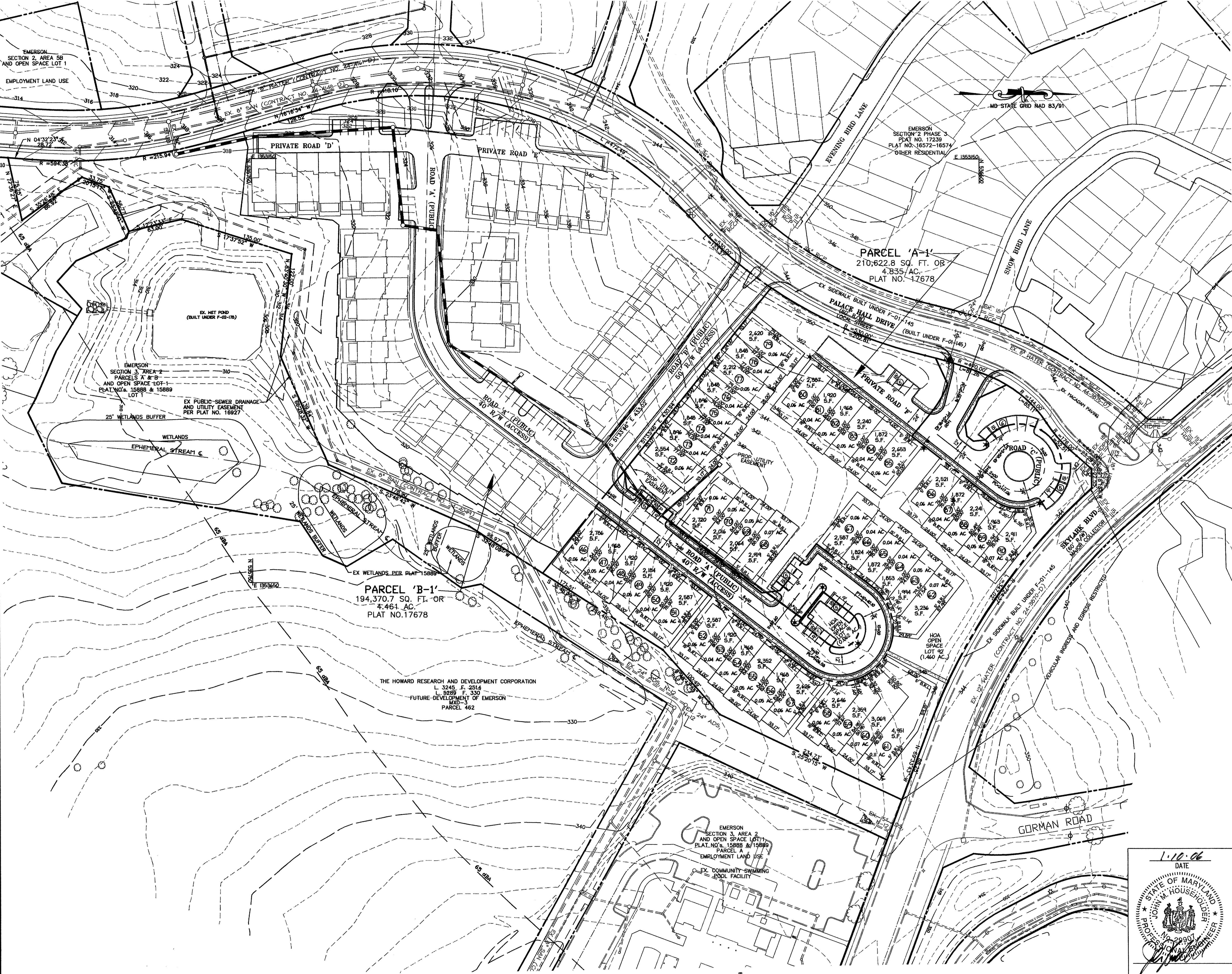
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DRAWN: DAM	DATE: 1/9/06	
CHECKED: BAM	APPROVED: JMH	1 of 5

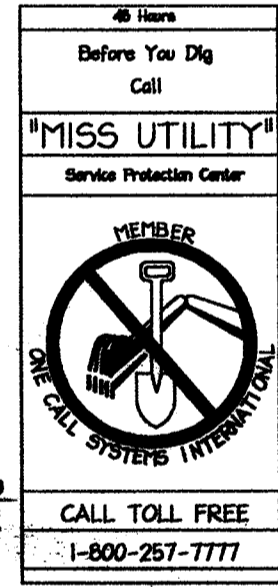
MDC-203

LEGEND

- EX CONTOURS
- STREAM
- STREAM BUFFER
- EX. STORMDRAIN
- EX. SANITARY
- EX. WATER
- EX. TREE
- PROP. CURB
- PROPERTY LINE



TENTATIVELY APPROVED
 DEPT OF PLANNING AND ZONING OF
 HOWARD COUNTY
 PLANNING DIRECTOR *[Signature]* DATE 1/10/06



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 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10275 LITTLE PATUXENT PKWY
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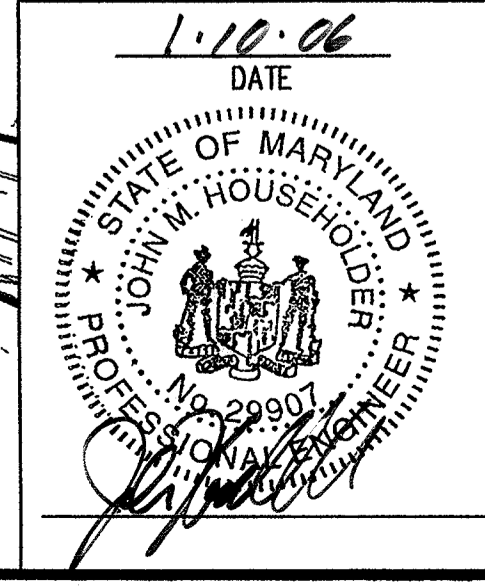
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 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

christopher consultants
 engineering · surveying · land planning
 christopher consultants, ltd.
 7172 columbia gateway drive (suite 100) columbia, md 21046-2990
 410.872.8880 · telex 301.881.0148 · fax 410.872.8883

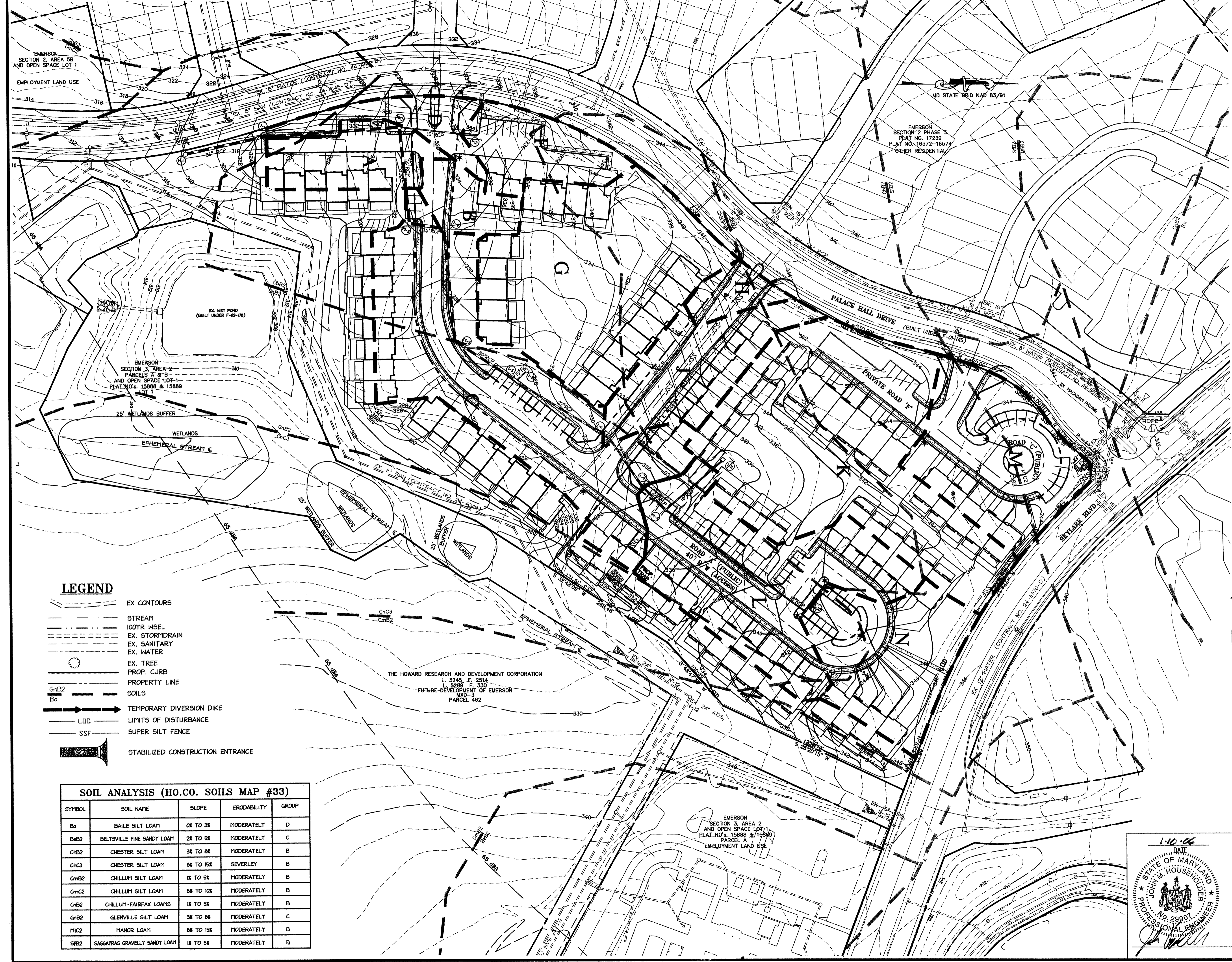
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DESIGN: BAM	SCALE: 1" = 50'	PROJECT: 049102.00
DRAWN: DAM	DATE: 1/9/06	2 OF 5
CHECKED: BAM	APPROVED: JMH	



MDC-203



DRAINAGE CHART				
AREA	INLET NO.	DRAINAGE AREA (AC.)	"C" FACTOR	% IMPER.
A	I-1	0.31	0.73	70
B	I-4	0.17	0.51	41
C	I-5	1.32	0.52	42
D	Ex. Inlet	0.21	0.44	32
F	I-2	0.31	0.60	53
G	I-8	1.22	0.43	30
H	I-7	0.12	0.71	68
J	I-6	0.45	0.65	60
K	I-11	1.55	0.45	33
L	I-9	0.98	0.68	64
M	Ex. Inlet	0.64	0.64	59
N	I-10	0.60	0.53	44

LEGEND

- EX CONTOURS
- STREAM
- 100YR WSEL
- EX. STORMDRAIN
- EX. SANITARY
- EX. WATER
- EX. TREE
- PROP. CURB
- PROPERTY LINE
- SOILS
- TEMPORARY DIVERSION DIKE
- LOD LIMITS OF DISTURBANCE
- SSF SUPER SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE

SOIL ANALYSIS (HO.CO. SOILS MAP #33)

SYMBOL	SOIL NAME	SLOPE	ERODABILITY	GROUP
Ba	BAILE SILT LOAM	0% TO 3%	MODERATELY	D
BeB2	BELTSVILLE FINE SANDY LOAM	2% TO 5%	MODERATELY	C
ChB2	CHESTER SILT LOAM	3% TO 8%	MODERATELY	B
ChC3	CHESTER SILT LOAM	8% TO 15%	SEVERLEY	B
CmB2	CHILLUM SILT LOAM	1% TO 5%	MODERATELY	B
CmC2	CHILLUM SILT LOAM	5% TO 10%	MODERATELY	B
ChB2	CHILLUM-FAIRFAX LOAMS	1% TO 5%	MODERATELY	B
GnB2	GLENVILLE SILT LOAM	3% TO 8%	MODERATELY	C
MnC2	MANOR LOAM	8% TO 15%	MODERATELY	B
SrB2	SASSAFRAS GRAVELLY SANDY LOAM	1% TO 5%	MODERATELY	B

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



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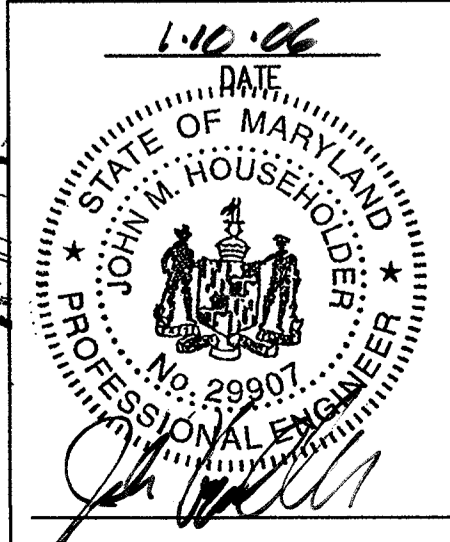
AREA:
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6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

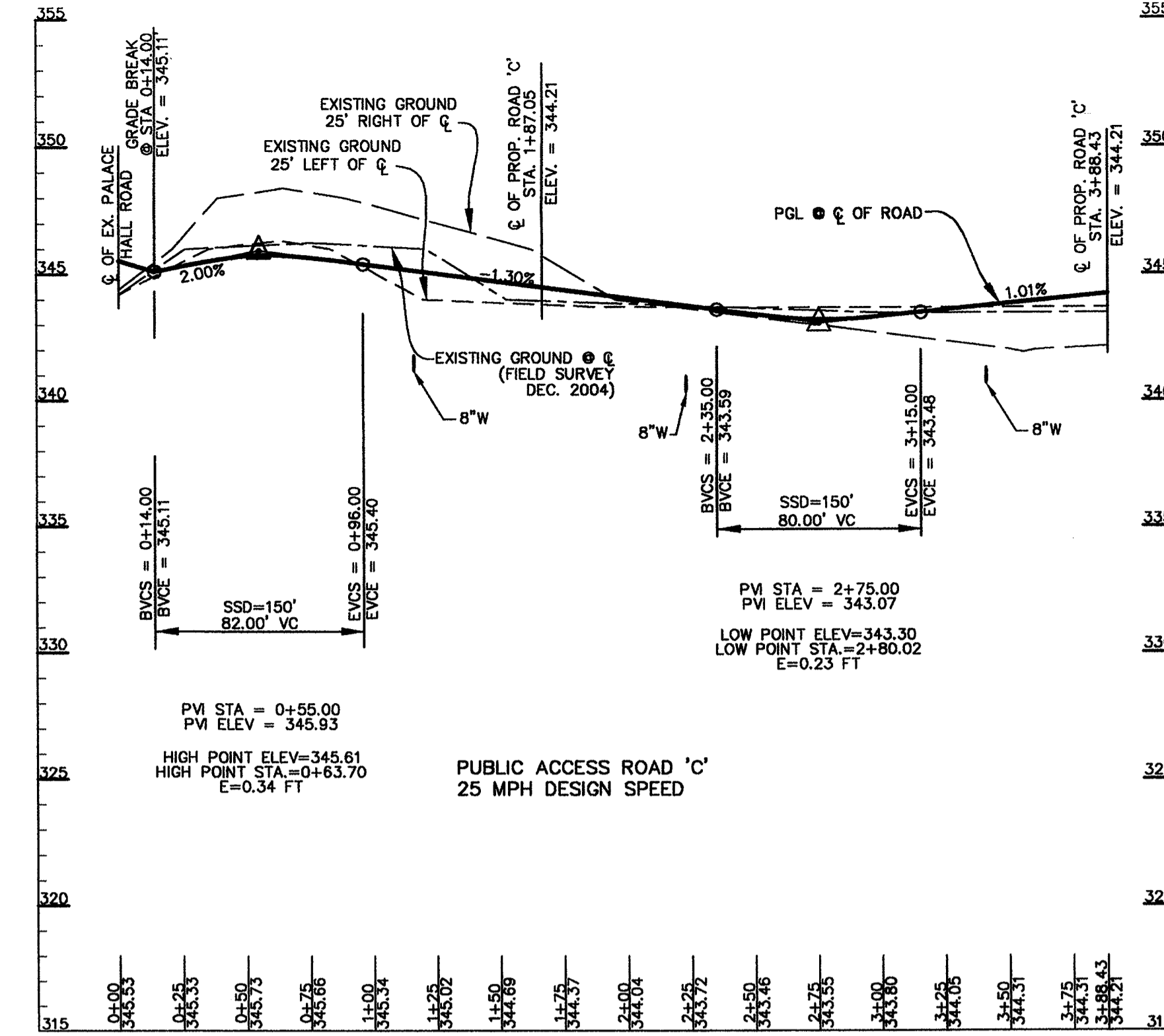
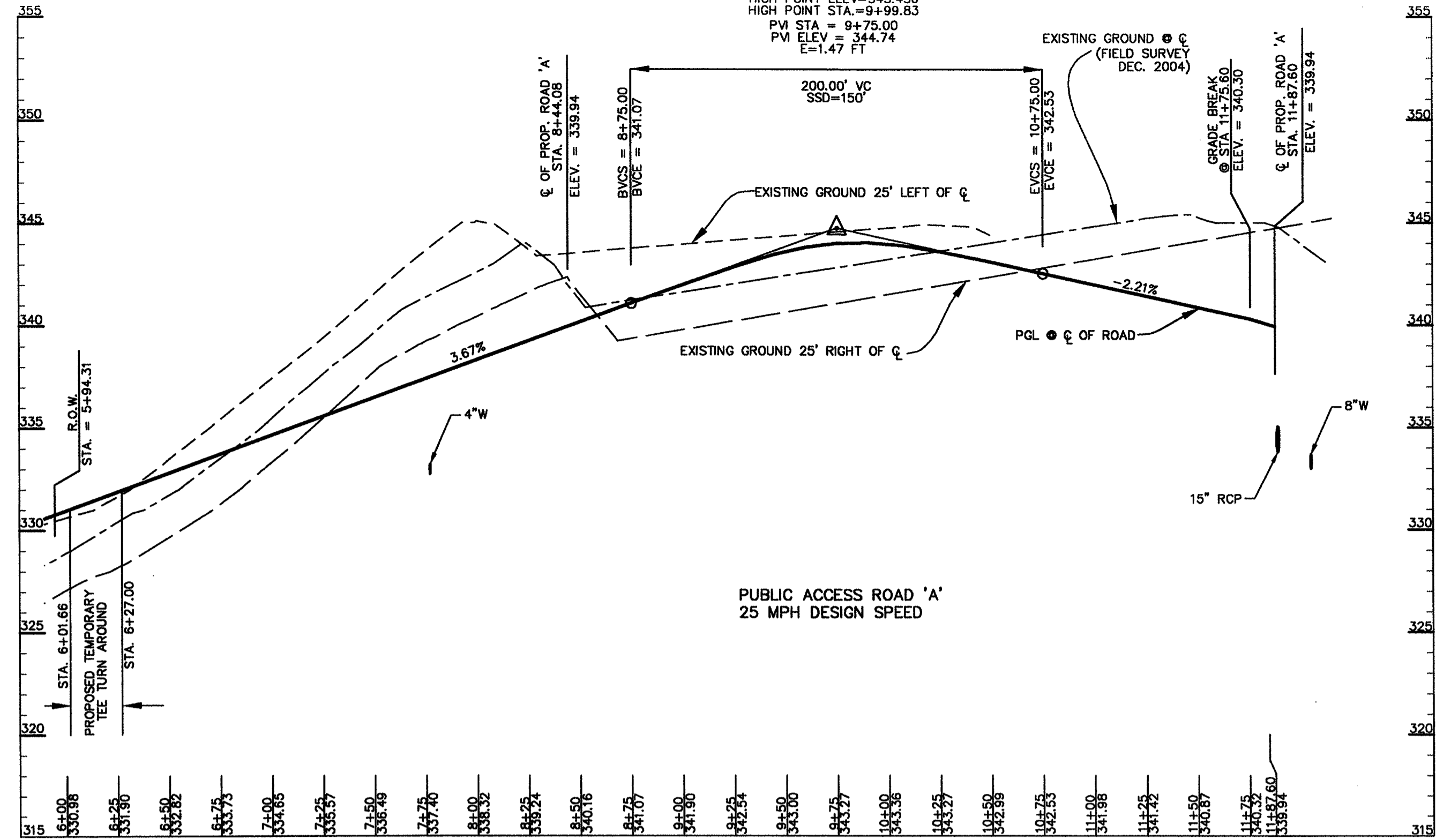
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TITLE: **PRELIMINARY GRADING PLAN,
DRAINAGE AREA, AND SOILS MAP**

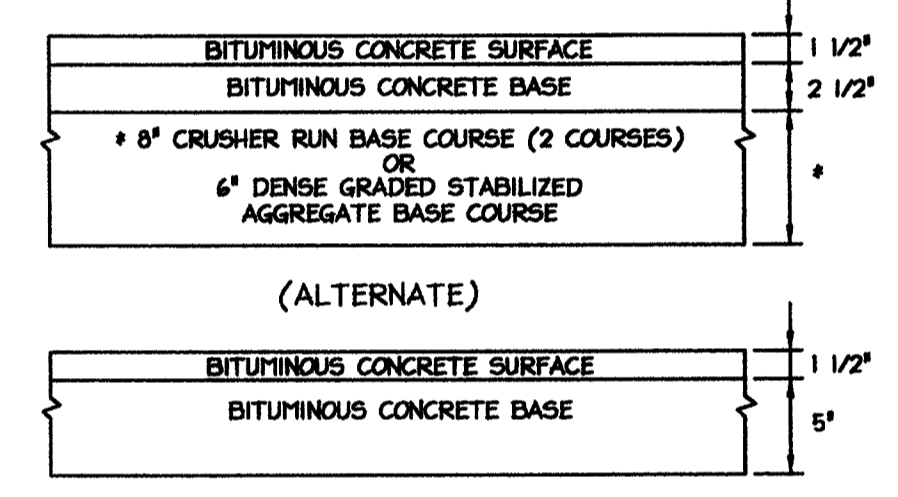
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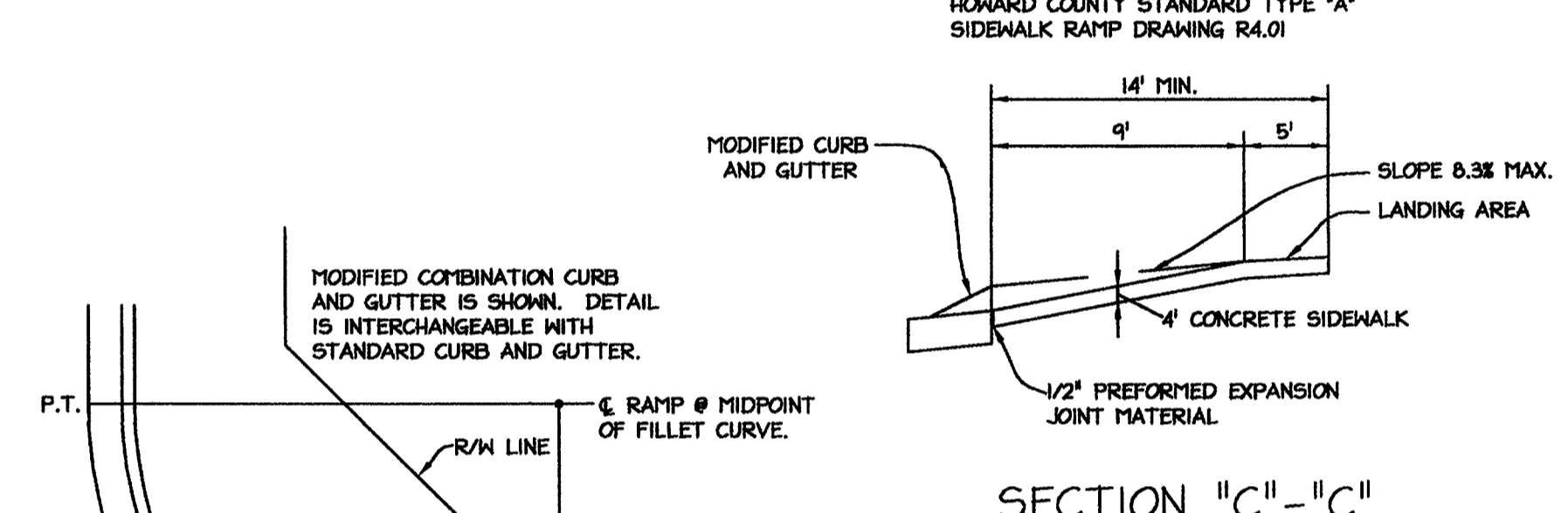
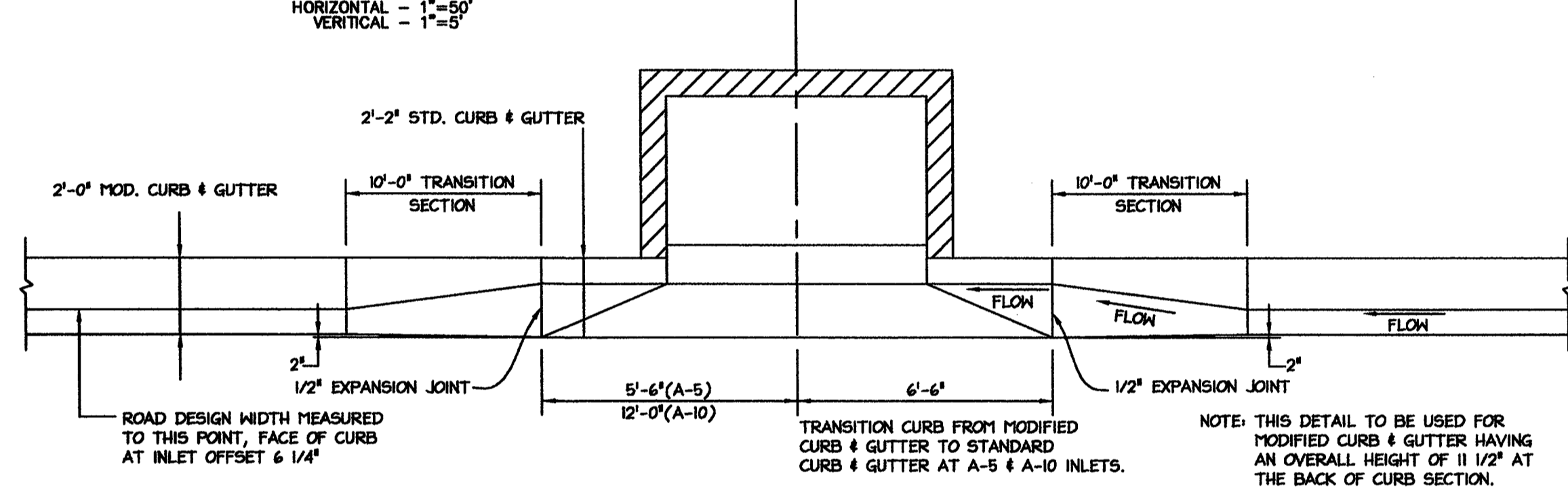


ROAD 'A' PROFILE (PUBLIC)

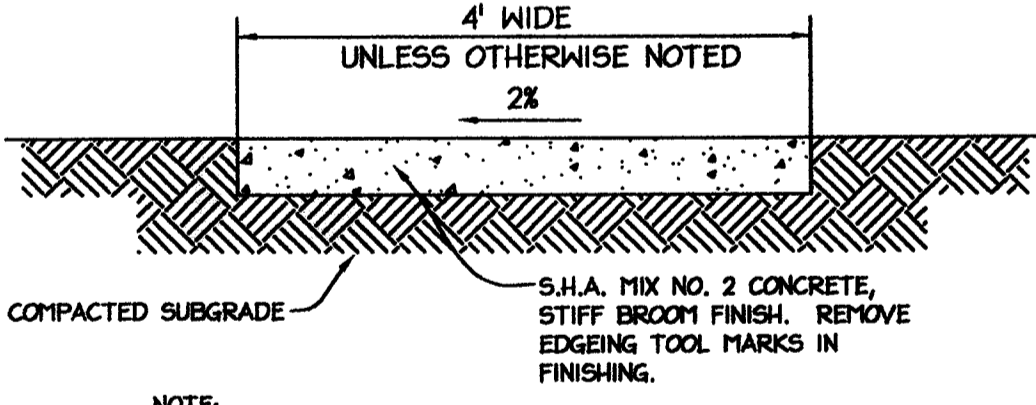
ROAD 'C' PROFILE (PUBLIC)



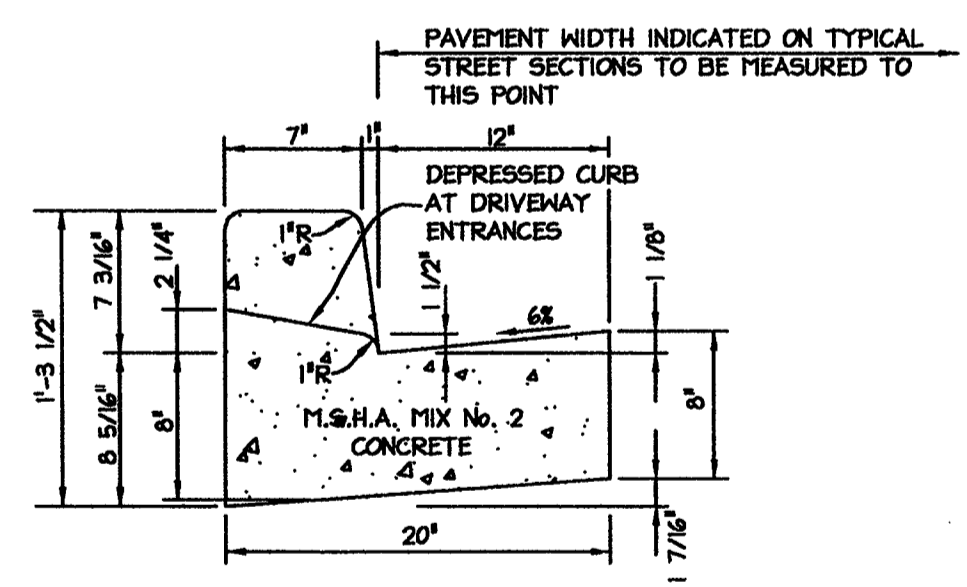
HOWARD COUNTY DESIGN MANUAL VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.01)



HANDICAP RAMP DETAIL

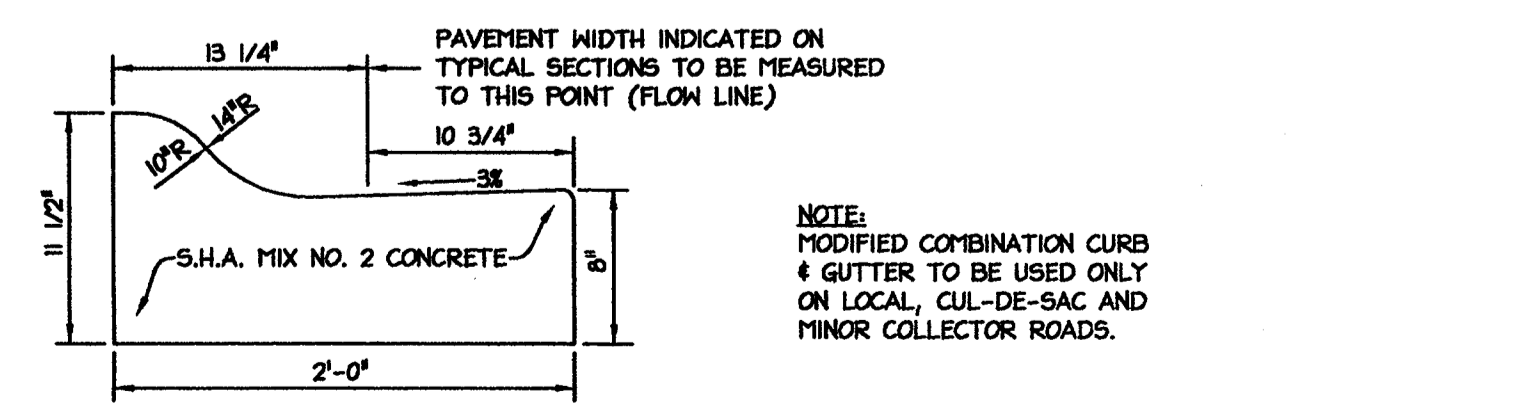


NOTE: PROVIDED LATITUDINAL EXPANSION JOINTS AT 15' O.C. (MAX.) PROVIDED CONTRACTION (DUMPT) JOINTS AT 5' O.C. INTERVALS BETWEEN EXPANSION JOINTS. SIDEWALK TO BE SCRIBED IN 5' MAX. SQUARES.



HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWINGS R-3.01). * GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AS THE PAVEMENT.

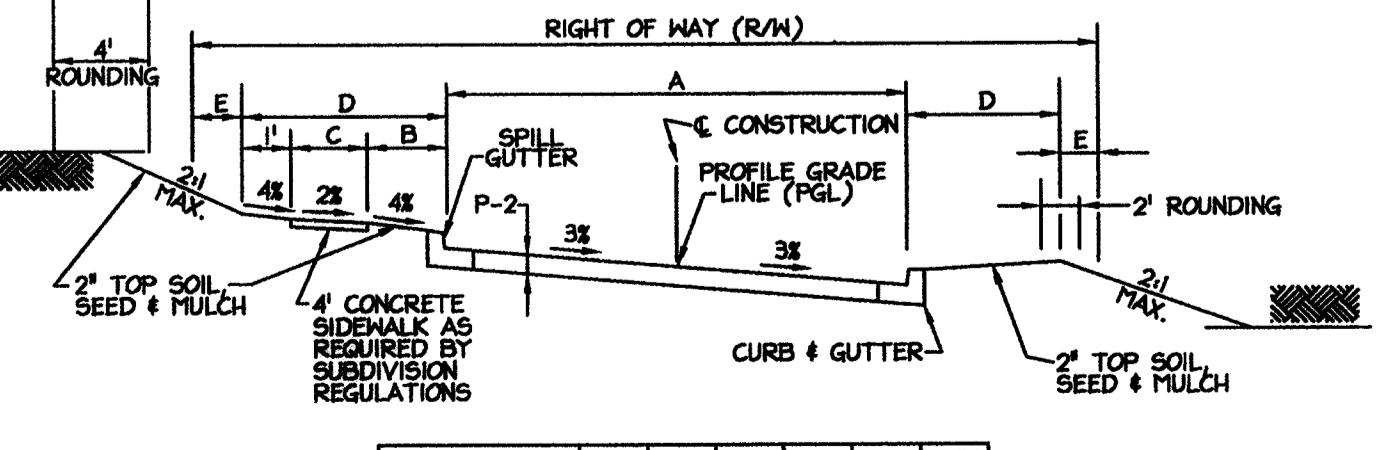
STANDARD 7" COMBINATION CURB AND GUTTER



MODIFIED COMBINATION CURB AND GUTTER

* GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OF THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AND IN THE SAME DIRECTION AS THE PAVEMENT. MATCH PAVEMENT CROSS SLOPE WHEN CURB IS LOCATED ON THE LOW SIDE OF SUPERELEVATED SECTION AND THE RATE OF SUPERELEVATION IS GREATER THAN 3% FOR MODIFIED CURB AND GUTTER.

CONCRETE CURB AND GUTTER TRANSITION



CLASSIFICATION	A	B	C	D	E	R/W
ACCESS STREET	24'	3'	4'	8'	0'	40'
	24'	7'	4'	12'	1'	50'

TYPICAL SECTION ACCESS STREET

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

Date	No.	Revision Description

OWNER/DEVELOPER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10275 LITTLE PATUXENT PKWY
 COLUMBIA, MD 21044
 TEL: (410) 992-6027 FAX: (410) 992-6149

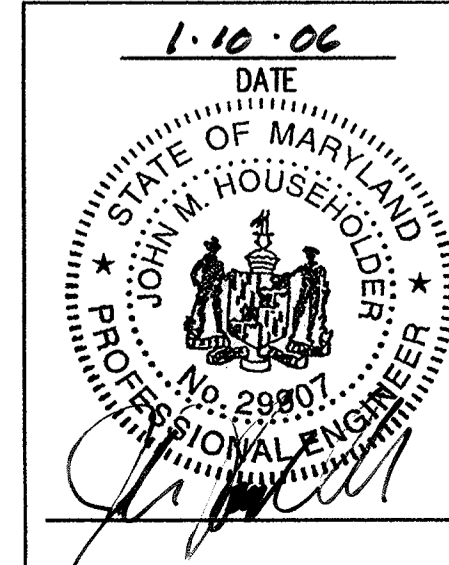
AREA:
 TAX MAP 47 BLOCKS 8&9
 ZONED: MXD-3-DR PARCEL 'A-1'
 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

christopher consultants
 engineering · surveying · land planning
 christopher consultants, Inc.
 7172 columbia gateway drive (suite 100) · columbia, md 21046-2900
 410.872.8660 · metro 301.881.0146 · fax 410.872.8683

PROJECT: **EMERSON TOWNHOUSES**
 SECT. 2, PH. 6A, LOTS 46-90, OPEN SPACE LOTS 91 & 92, A RESUBDIVISION OF PARCEL "A-1"

TITLE: **PARCEL "A-1" ROAD PROFILES**

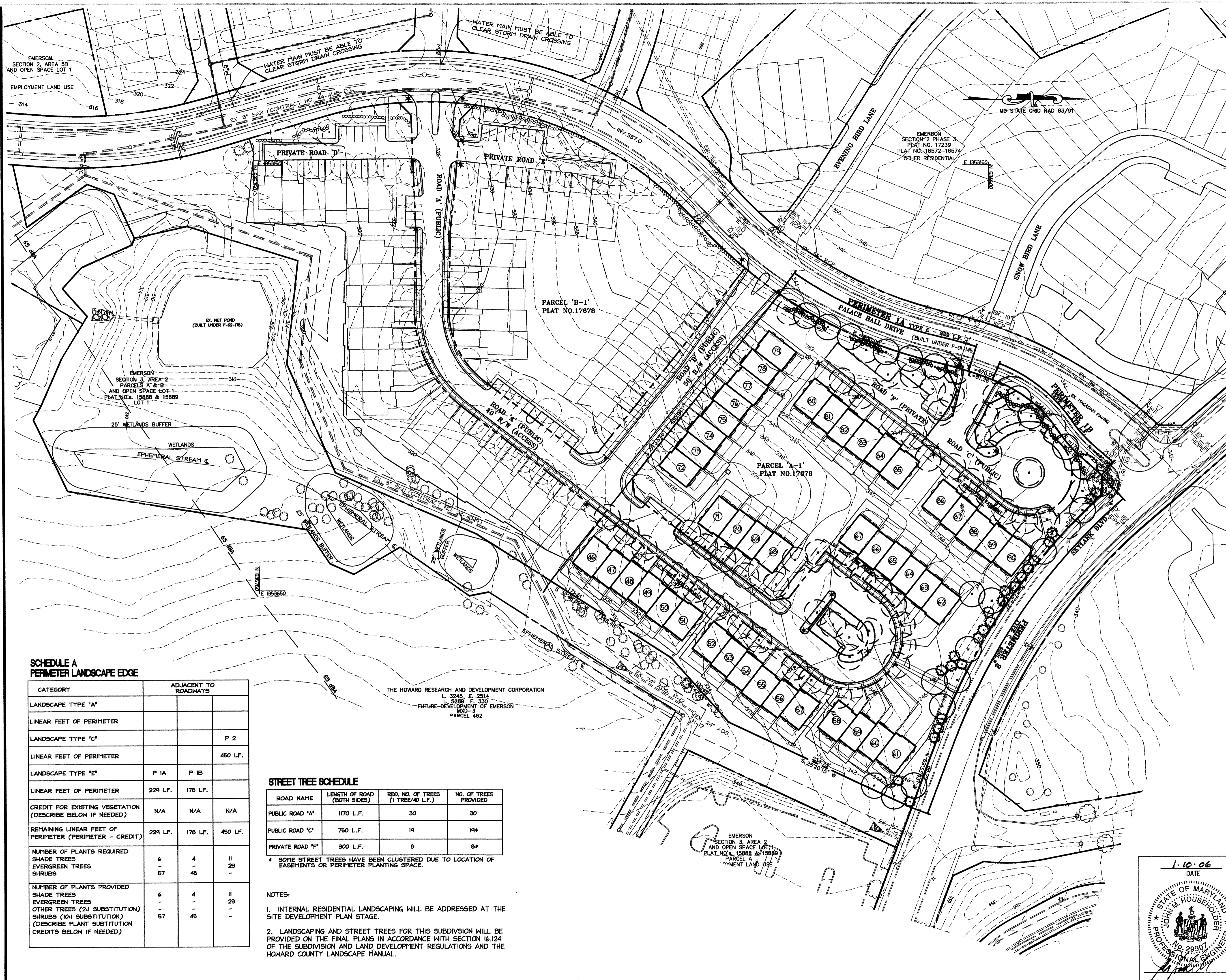
DESIGN: BAM	SCALE: 1" = 50'	PROJECT: 049102.00
DRAWN: DAM	DATE: 1/9/06	
CHECKED: BAM	APPROVED: JMH	4 of 5



MDC-203

LEGEND

- EX CONTOURS
- STREAM1
- EX. STORMDRAIN
- EX. SANITARY
- EX. WATER
- EX. TREE
- PROP. CURB
- PROPERTY LINE
- EX. STREET TREES (PART OF DEVELOPMENT OF BULK PARCEL B)
- PROP. SHADE TREE
- PROP. STREET TREE
- PROP. EVERGREEN TREE



SCHEDULE A PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO ROADWAYS		
LANDSCAPE TYPE 'A'			
LINEAR FEET OF PERIMETER			
LANDSCAPE TYPE 'C'			P 2
LINEAR FEET OF PERIMETER			450 LF.
LANDSCAPE TYPE 'E'	P 1A	P 1B	
LINEAR FEET OF PERIMETER	229 LF.	176 LF.	
CREDIT FOR EXISTING VEGETATION (DESCRIBE BELOW IF NEEDED)	N/A	N/A	N/A
REMAINING LINEAR FEET OF PERIMETER (PERIMETER - CREDIT)	229 LF.	176 LF.	450 LF.
NUMBER OF PLANTS REQUIRED			
SHADE TREES	6	4	11
EVERGREEN TREES	-	-	23
SHRUBS	57	45	-
NUMBER OF PLANTS PROVIDED			
SHADE TREES	6	4	11
EVERGREEN TREES	-	-	23
OTHER TREES (2:1 SUBSTITUTION)	-	-	-
SHRUBS (10:1 SUBSTITUTION) (DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	57	45	-

STREET TREE SCHEDULE

ROAD NAME	LENGTH OF ROAD (BOTH SIDES)	REQ. NO. OF TREES (1 TREE/40 L.F.)	NO. OF TREES PROVIDED
PUBLIC ROAD 'A'	1170 L.F.	30	30
PUBLIC ROAD 'C'	750 L.F.	19	19*
PRIVATE ROAD 'F'	300 L.F.	8	8*

* SOME STREET TREES HAVE BEEN CLUSTERED DUE TO LOCATION OF EASEMENTS OR PERIMETER PLANTING SPACE.

NOTES:

- INTERNAL RESIDENTIAL LANDSCAPING WILL BE ADDRESSED AT THE SITE DEVELOPMENT PLAN STAGE.
- LANDSCAPING AND STREET TREES FOR THIS SUBDIVISION WILL BE PROVIDED ON THE FINAL PLANS IN ACCORDANCE WITH SECTION 16.124 OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE HOWARD COUNTY LANDSCAPE MANUAL.

Before You Dig
Call
MISS UTILITY
Service Protection Center

CALL TOLL FREE
1-800-251-7771

TENTATIVELY APPROVED
DEPT. OF PLANNING AND ZONING OF
HOWARD COUNTY

Marshall D. Wynn 1/19/06
PLANNING DIRECTOR DATE

Date	No.	Revision Description
OWNER/DEVELOPER: THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION 10275 LITTLE PATUXENT PKWY COLUMBIA, MD 21044 TEL: (410) 992-6027 FAX: (410) 992-6149		
AREA: TAX MAP 47 ZONED: MXD-3-DR BLOCKS 8&9 6TH ELECTION DISTRICT PARCEL 'A-1' HOWARD COUNTY, MARYLAND		

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410.872.8890 · fax: 410.872.8893

PROJECT: **EMERSON TOWNHOUSES**
SECT. 2, PH. 6A, LOTS 46-90, OPEN SPACE LOTS 91 & 92,
A RESUBDIVISION OF PARCEL 'A-1'

TITLE: **PRELIMINARY LANDSCAPE PLAN**

DESIGN: LES	SCALE: 1" = 50'	PROJECT: 049102.00
DRAWN: LES	DATE: 1/9/06	
CHECKED: BKC	APPROVED:	5 OF 5

1-10-06
DATE

MDC-203