

SHEET INDEX	
NO	DESCRIPTION
1	TITLE SHEET
2	PLAN AND PROFILE OF LIGHT MOON WAY
3	ROAD DETAILS AND STORM DRAIN PROFILES
4	DRAINAGE AREA MAP, GRADING PLAN AND SOILS MAP
5	SEDIMENT CONTROL NOTES AND DETAILS

ROADS, STORM DRAINS PLANS

EMERSON

SECTION ONE AREA TWO

LOTS 40-96

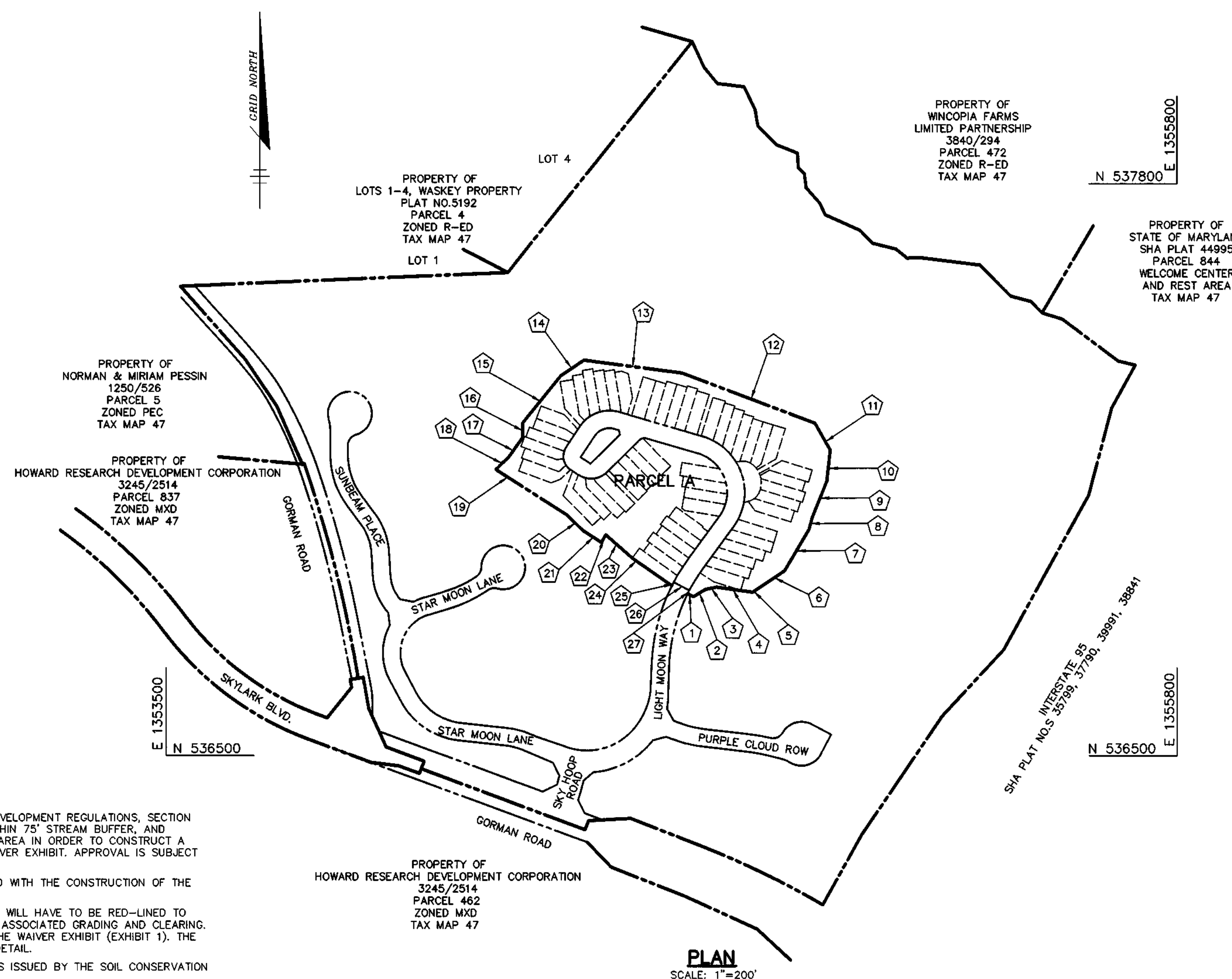
A RESUBDIVISION OF PARCEL A

6th ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

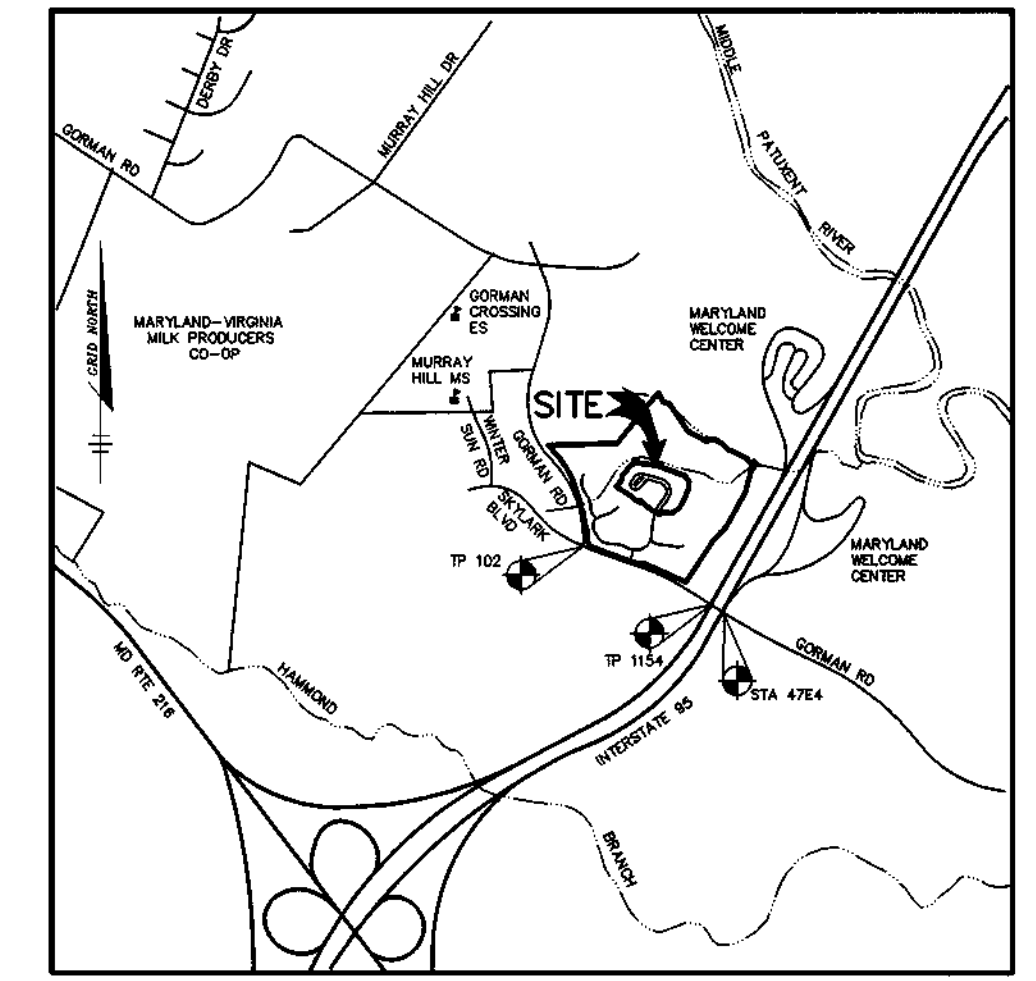
GENERAL NOTES

- 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) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- 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 III (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 EA ALONG WITH 2 TRAVERSE POINTS WERE USED FOR THIS PROJECT.
- WATER IS PUBLIC. CONTRACT NO. 34-3971-D
- SEWER IS PUBLIC. SEWER DRAINAGE AREA: PATUXENT CONTRACT NO. 34-3971-D
- STORMWATER MANAGEMENT FOR THIS DEVELOPMENT IS PROVIDED IN ACCORDANCE WITH THE 2000 MDC STORMWATER MANAGEMENT MANUAL UNDER F-01-140. PORTIONS OF OPEN SPACE LOTS 35, 36 & 39 ARE BEING USED AS NATURAL AREA CONSERVATION CREDIT AREAS, A CENTRAL PRIVATELY MAINTAINED STORMWATER WET POND IS BEING USED TO PROVIDE THE WATER QUALITY AND CHANNEL PROTECTION VOLUMES FOR THIS DEVELOPMENT.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE 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, AND WAS APPROVED UNDER F-01-140.
- THE NOISE STUDY FOR THIS PROJECT WAS PREPARED BY CENTURY ENGINEERING DATED MARCH 1999, AND WAS APPROVED UNDER F-01-140.
- 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, WP-01-99, P-01-21, F-01-140, WP-02-15.
- 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.E., 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 ROAD RIGHT OF WAYS ARE 40' WIDE AND 25 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 (35) LOCATION, TYPE AND NUMBER OF TREES SHOWN ON THIS PLAN ARE TENTATIVE AND ARE USED FOR BOND PURPOSES ONLY. THE FINAL LOCATION AND VARIETY OF 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 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(g)(2)(ii), WHICH PROHIBITED GRADING, REMOVAL OF VEGETATION WITHIN 75 FEET OF A STREAM, DATED JULY 21, 2000. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
 - 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. (REVISED BY WP-01-99)
- 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.n.2(ii) OF THE SUBDIVISION REGULATIONS.
- THERE ARE NO EXISTING PERMANENT STRUCTURES ON-SITE.
- WP-01-99 - A WAIVER OF SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, SECTION 16.115.c.(2) TO ALLOW GRADING AND CLEARING IN A FLOODPLAIN AREA, AND SECTION 16.116.c.2(ii) TO ALLOW GRADING AND CLEARING IN A STREAM BUFFER, FOR WORK ASSOCIATED WITH THE INSTALLATION OF THE WATER AND SEWER EXTENSIONS FROM THE ADJOINING SHA REST AREA PROPERTY.
- INTERNAL LANDSCAPING REQUIREMENTS TO BE ADDRESSED UNDER THE SITE DEVELOPMENT PLAN, SDP-02-34.

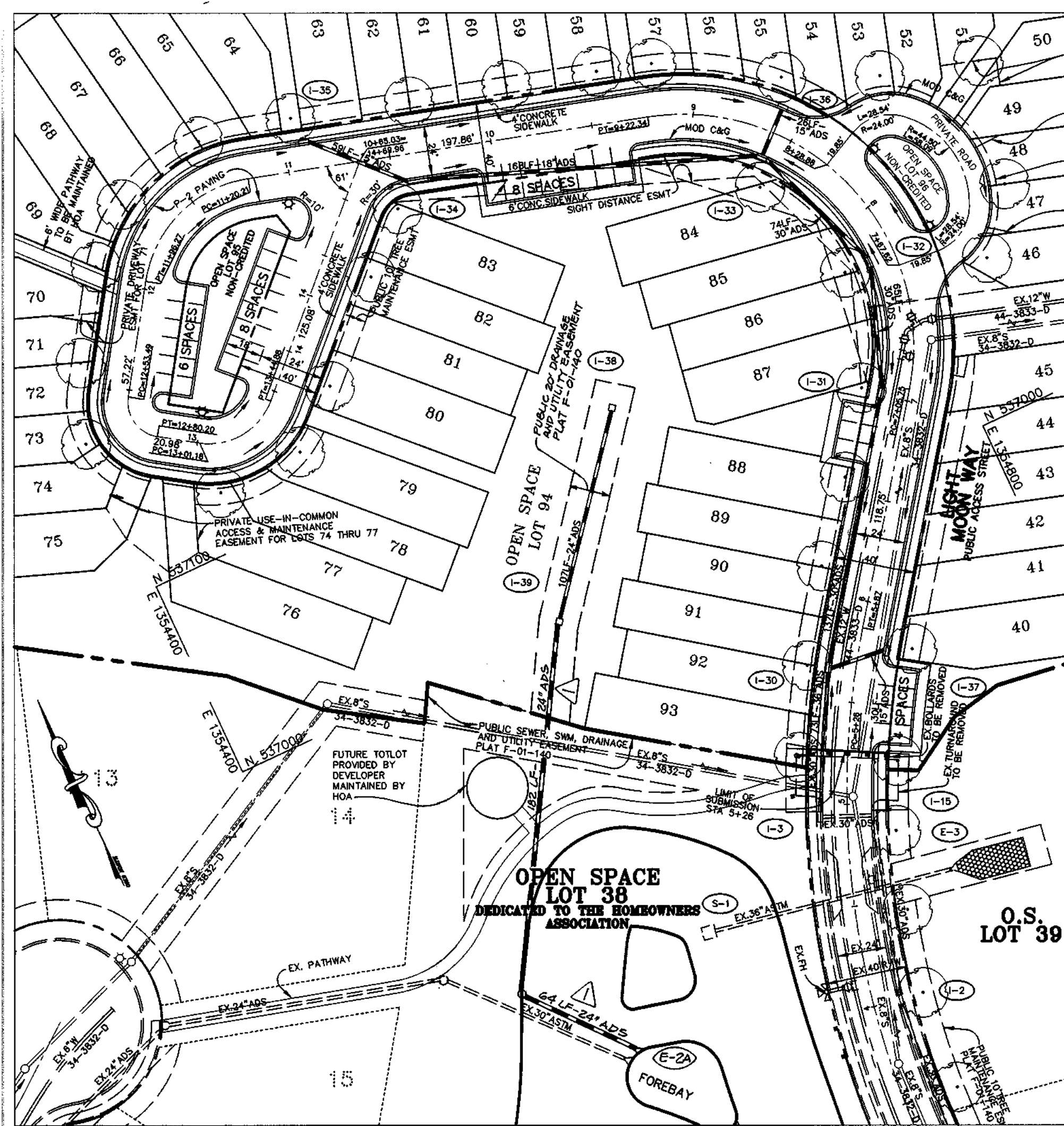


BOUNDARY CHART

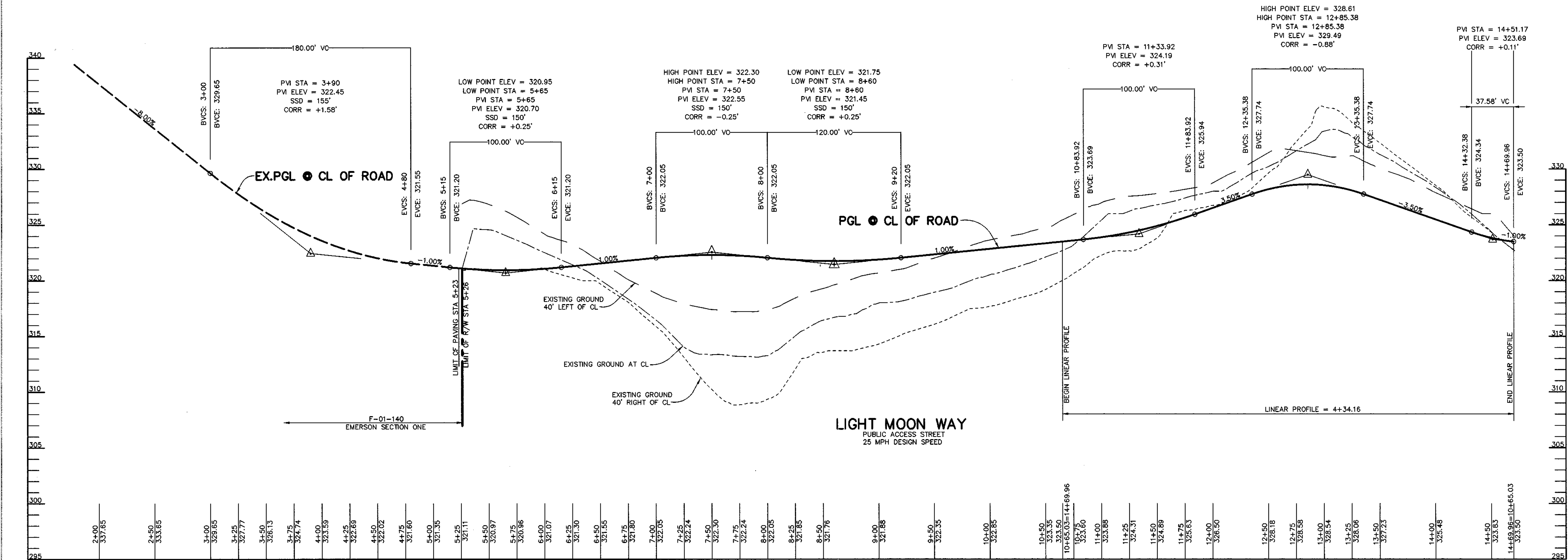
1	S 63°21'59" E	15.00'
2	N 58°47'03" W	31.52'
3	N 78°34'42" E	26.08'
4	S 82°06'32" W	82.59'
5	S 55°37'58" W	7.70'
6	S 56°18'20" W	80.32'
7	S 30°33'56" W	109.08'
8	S 15°52'32" W	31.83'
9	S 21°46'05" W	86.22'
10	S 06°13'11" W	71.33'
11	S 29°37'55" E	70.32'
12	S 69°19'10" E	323.06'
13	S 82°35'36" E	225.01'
14	S 55°55'54" W	63.53'
15	S 39°04'11" W	137.70'
16	S 00°13'45" W	33.36'
17	N 35°41'13" W	54.97'
18	S 45°43'53" W	40.45'
19	S 57°14'52" E	193.04'
20	S 45°42'39" E	50.00'
21	S 57°14'52" E	50.14'
22	S 29°42'51" W	20.03'
23	S 48°37'15" E	80.00'
24	S 54°56'15" E	110.16'
25	R = 440.00' L = 9.00'	
26	S 62°13'14" E	40.00'
27	R = 400.00' L = 80.00'	



AS BUILT CERTIFICATE	
DATE	
APPROVED : HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.	
<i>Andrew M. Donohue</i> CHIEF, BUREAU OF HIGHWAYS	DATE 11-15-01
APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.	
<i>Condy Harman</i> CHIEF, DIVISION OF LAND & DEVELOPMENT	DATE 11/20/01
<i>John P. ...</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 11/19/01
DATE NO.	REVISION
OWNER THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION THE ROUSE BUILDING 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044 410-992-6000	
DEVELOPER TROUTMAN COMPANY 9030 RED BRANCH ROAD SUITE 100 COLUMBIA, MARYLAND 21045 410-730-7065	
PROJECT EMERSON SECTION ONE AREA TWO LOTS 40-96 A RESUBDIVISION OF PARCEL A	
AREA TAX MAP 47 BLOCK 3.8 & 9 ZONED: R-ED PARCEL: P/O 837 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
TITLE SHEET	
Patton Harris Rust & Associates, pc ENGINEERS • SURVEYORS • PLANNERS LANDSCAPE ARCHITECTS • ENVIRONMENTAL SPECIALISTS 8818 Centre Park Drive, Columbia, MD 21045 • tel 410.997.8900 fax 410.997.9822	
	DESIGNED BY : CJR
	DRAWN BY: DAM
	PROJECT NO. 01058 RD1.DWG
	DATE : OCTOBER 29, 2001
	SCALE : AS SHOWN
	DRAWING NO. 1 OF 5



PLAN
SCALE: 1"=50'



PROFILE
SCALE:
HOR. - 1"=50'
VERT. - 1"=5'

CL CURVE DATA
FROM CL STA 5+26 TO STA 5+87
RADIUS = 420.00'
LENGTH = 61.00'
TANGENT = 30.55'
DELTA = 08°19'18"
CHORD = S 31°56'25"W 60.94'

CL CURVE DATA
FROM CL STA 7+05.75 TO STA 9+22.34
RADIUS = 113.00'
LENGTH = 218.80'
TANGENT = 160.85'
DELTA = 109°49'23"
CHORD = S 18°48'39"E 184.93'

CL CURVE DATA
FROM CL STA 11+20.21 TO STA 11+96.27
RADIUS = 60.00'
LENGTH = 76.07'
TANGENT = 44.11'
DELTA = 72°38'27"
CHORD = S 69°57'26"W 71.08'

CL CURVE DATA
FROM CL STA 12+53.49 TO STA 12+80.20
RADIUS = 17.00'
LENGTH = 26.70'
TANGENT = 17.00'
DELTA = 90°00'00"
CHORD = S 11°21'47"E 24.04"

CL CURVE DATA
FROM CL STA 13+01.18 TO STA 13+44.88
RADIUS = 32.00'
LENGTH = 43.71'
TANGENT = 26.03'
DELTA = 78°15'37"
CHORD = S 84°30'24"W 40.39'

STREET LIGHT CHART

LOCATION	TYPE
21' RIGHT OF STA 7+80 LIGHT MOON WAY	100 WATT HPS VAPOR COLONIAL POST TOP MOUNTED ON A 14' BLACK FIBERGLASS POLE
21' RIGHT OF STA 8+17 LIGHT MOON WAY	100 WATT HPS VAPOR COLONIAL POST TOP MOUNTED ON A 14' BLACK FIBERGLASS POLE
15' RIGHT OF STA 11+03 LIGHT MOON WAY	100 WATT HPS VAPOR COLONIAL POST TOP MOUNTED ON A 14' BLACK FIBERGLASS POLE
15' LEFT OF STA 13+00 LIGHT MOON WAY	100 WATT HPS VAPOR COLONIAL POST TOP MOUNTED ON A 14' BLACK FIBERGLASS POLE

AS BUILT CERTIFICATE

DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
Andrew M. Danek 11-15-01
CHIEF, BUREAU OF HIGHWAYS. DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
Chris Hemstra 11/20/01
CHIEF, DEVELOPMENT OF LAND DEVELOPMENT. DATE

Chris Hemstra 11/19/01
CHIEF, DEVELOPMENT ENGINEERING DIVISION. DATE

8-13-02 MODIFIED DRAINAGE FROM I-38 TO E-2A

DATE NO. REVISION

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

DEVELOPER
TROUTMAN COMPANY
9030 RED BRANCH ROAD
SUITE 100
COLUMBIA, MARYLAND 21045
410-730-7065

PROJECT
EMERSON
SECTION ONE AREA TWO
LOTS 40-96
A RESUBDIVISION OF PARCEL A

AREA
TAX MAP 47 BLOCK 3.8 & 9
ZONED: R-ED PARCEL: P/O 837
6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE
PLAN AND PROFILE OF LIGHT MOON WAY

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

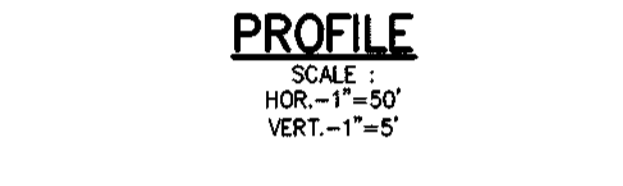
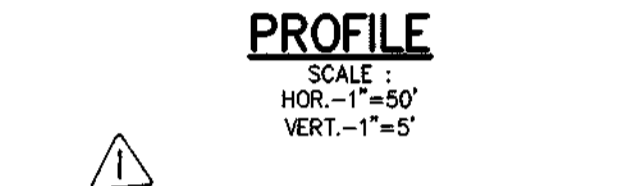
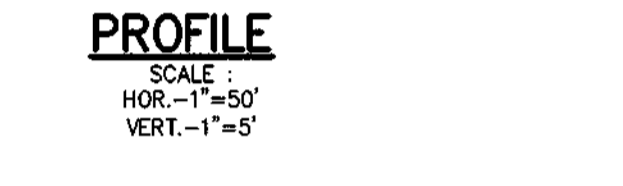
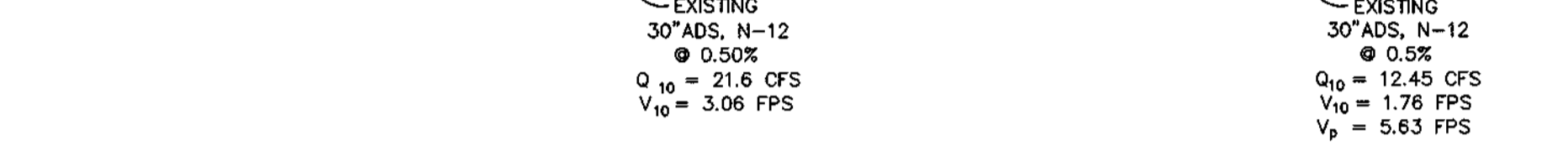
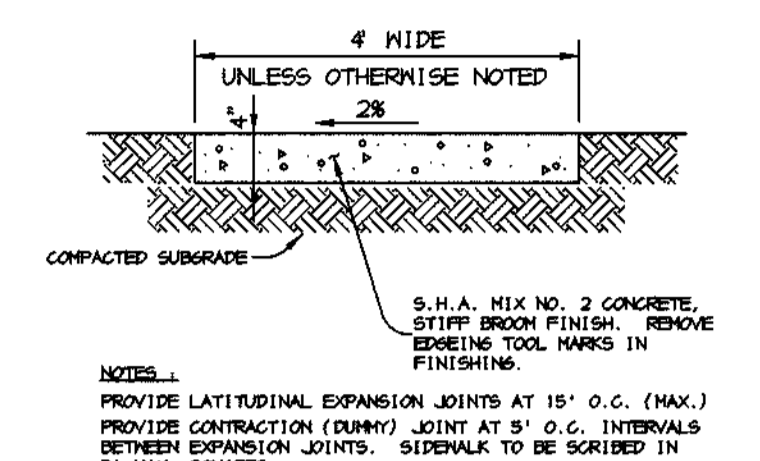
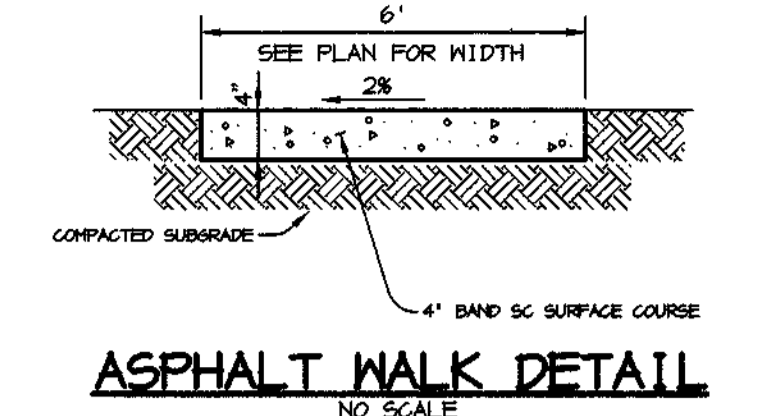
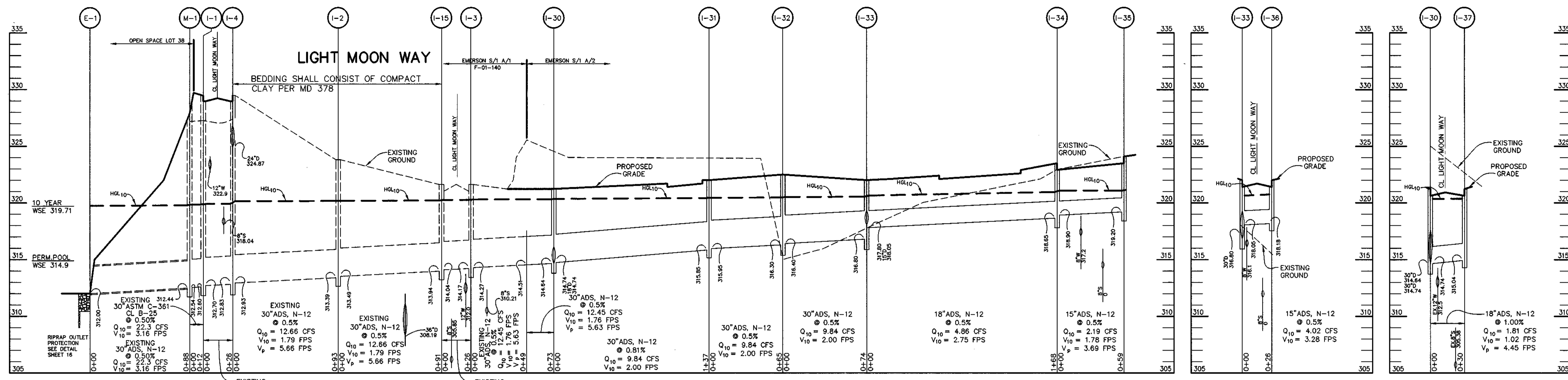
PROJECT NO. 01058
RD2.DWG

DATE: OCTOBER 29, 2001

SCALE: AS SHOWN

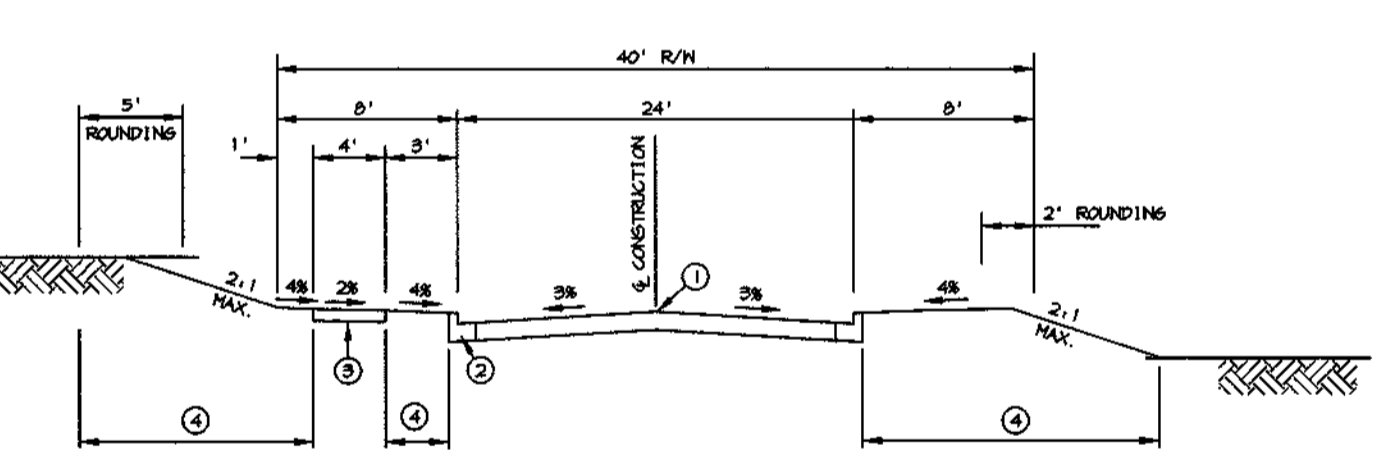
DRAWING NO. 2 OF 5

STATE OF MARYLAND
REGISTERED PROFESSIONAL ENGINEER
Christopher J. Reid
CHRISTOPHER J. REID #19949



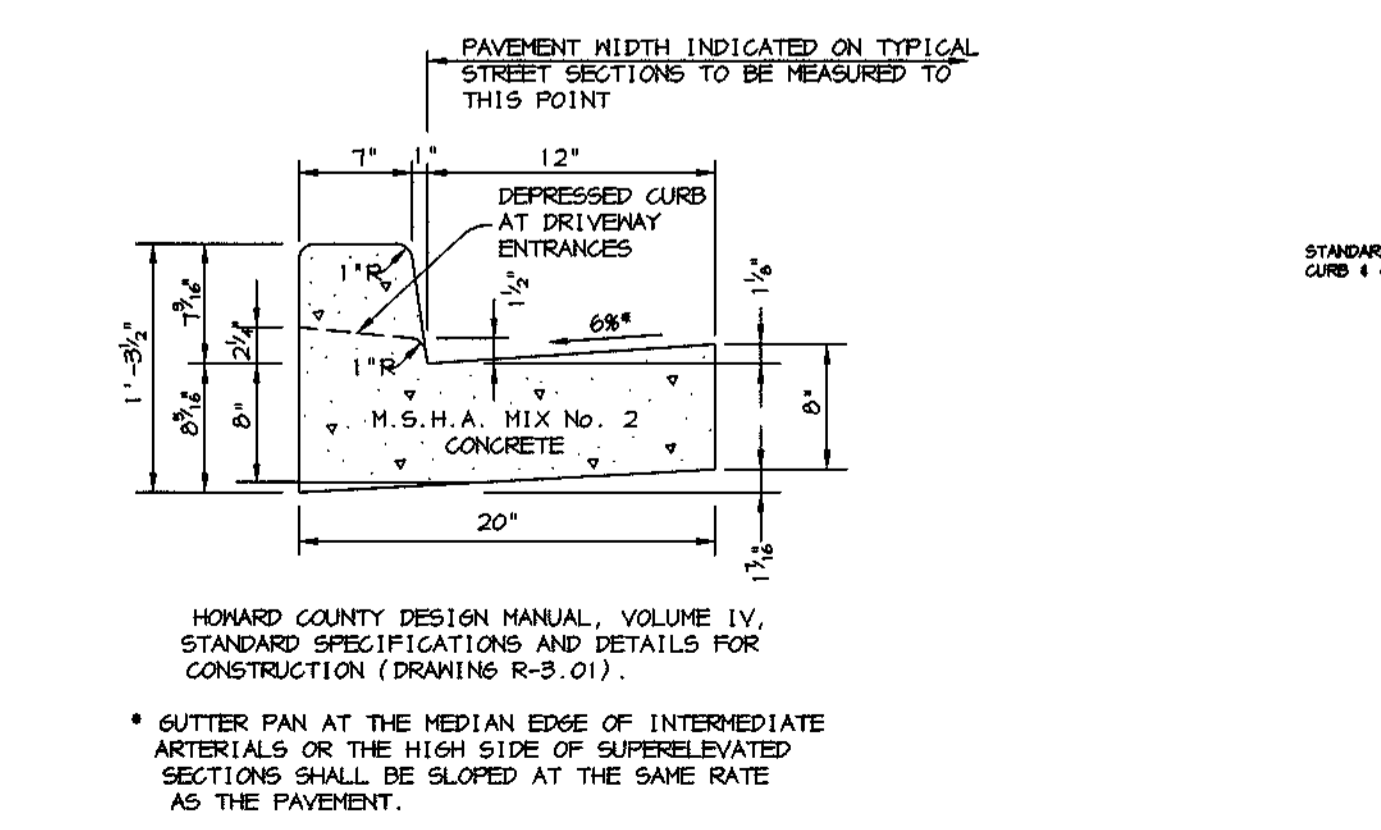
STRUCTURE SCHEDULE						
STRUCTURE	TYPE	LOCATION	INV. IN	INV. OUT	TOP	REMARKS
1-30	A-5	12.52 LT OF CL STA 5+65 LIGHT MOON WAY	315.14 (30")	314.64 (30")	321.23	HOCO STD. DETAIL SD-4.40
1-31	A-5	12.52 LT OF CL STA 7+01 LIGHT MOON WAY	315.95 (30")	315.85 (30")	322.30	HOCO STD. DETAIL SD-4.40
1-32	A-5	12.52 LT OF CL STA 7+75 LIGHT MOON WAY	316.40 (30")	316.30 (30")	322.52	HOCO STD. DETAIL SD-4.40
1-33	A-5	12.52 LT OF CL STA 8+60 LIGHT MOON WAY	317.80 (18")	318.05 (15")	322.03	HOCO STD. DETAIL SD-4.40
1-34	A-5	12.52 LT OF CL STA 10+38 LIGHT MOON WAY	318.90 (15")	318.65 (18")	323.51	HOCO STD. DETAIL SD-4.41
1-35	A-5	12.52 RT OF CL STA 10+90 LIGHT MOON WAY	-	319.20 (15")	324.05	HOCO STD. DETAIL SD-4.40
1-36	A-5	12.52 RT OF CL STA 8+60 LIGHT MOON WAY	-	318.18 (15")	322.07	HOCO STD. DETAIL SD-4.40
1-37	A-5	30.52 RT OF CL STA 5+67 LIGHT MOON WAY	-	314.94 (18")	321.23	HOCO STD. DETAIL SD-4.40
1-38	S	N 537085 E 1354639	-	316.00 (24")	320.2	HOCO STD. DETAIL SD-4.22
1-39	S	N 537001 E 1354572	314.88 (24")	314.78 (24")	320.2	HOCO STD. DETAIL SD-4.22
M-6	4'-0" MANHOLE	N 536848 E 1354478	312.45 (24")	312.85 (24")	326.35	HOCO STD. DETAIL G 5.11

PIPE SCHEDULE		
PIPE LENGTH	SIZE	TYPE
85	15"	ADS, N-12
198	18"	ADS, N-12
341	24"	ADS, N-12
303	30"	ADS, N-12

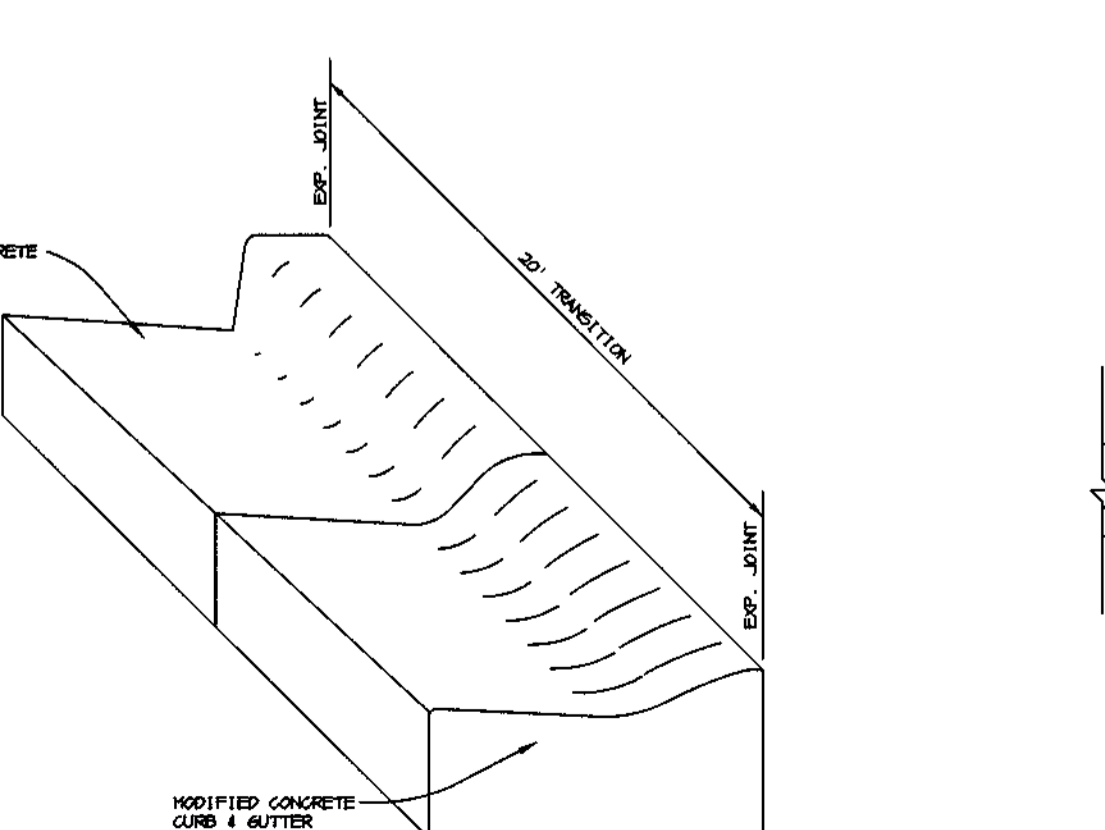


- 1 PROFILE GRADE LINE (PGL). SEE DESIGN MANUAL.
- 2 TYPE OF CURB (HOC, COMB, CURB & GUTTER) SEE DESIGN MANUAL.
- 3 4" CONCRETE SIDEWALK AS REQUIRED BY SUBDIVISION REGULATIONS.
- 4 INDICATES 2" TOPSOIL, SEED AND MULCH.

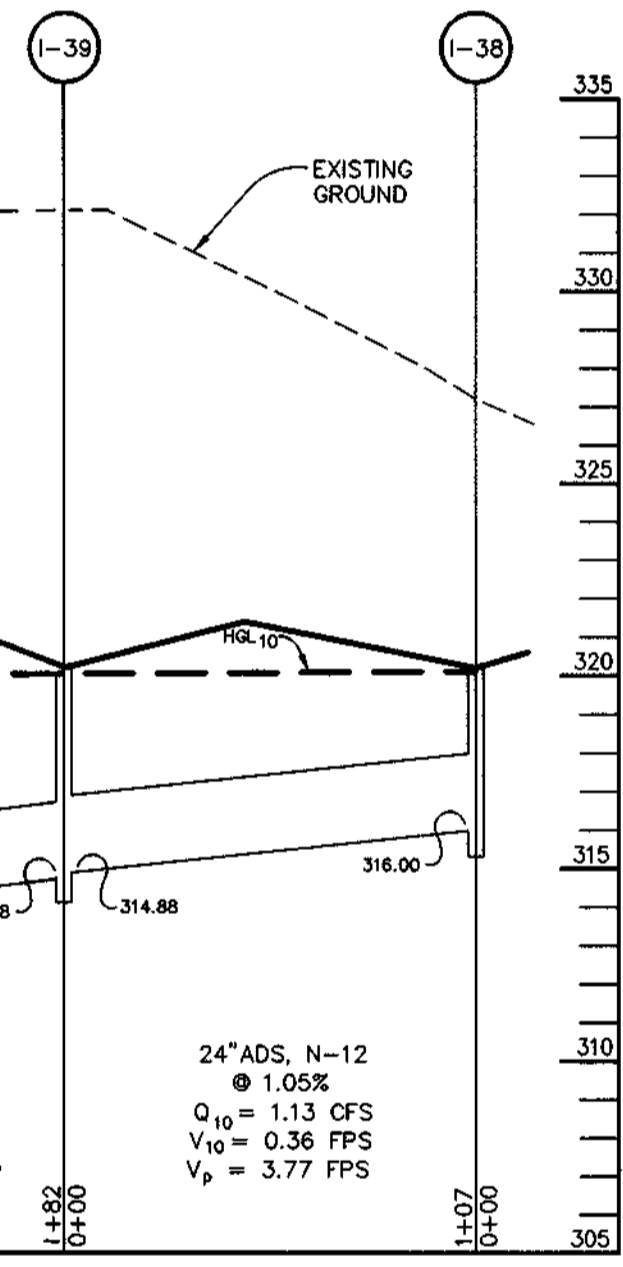
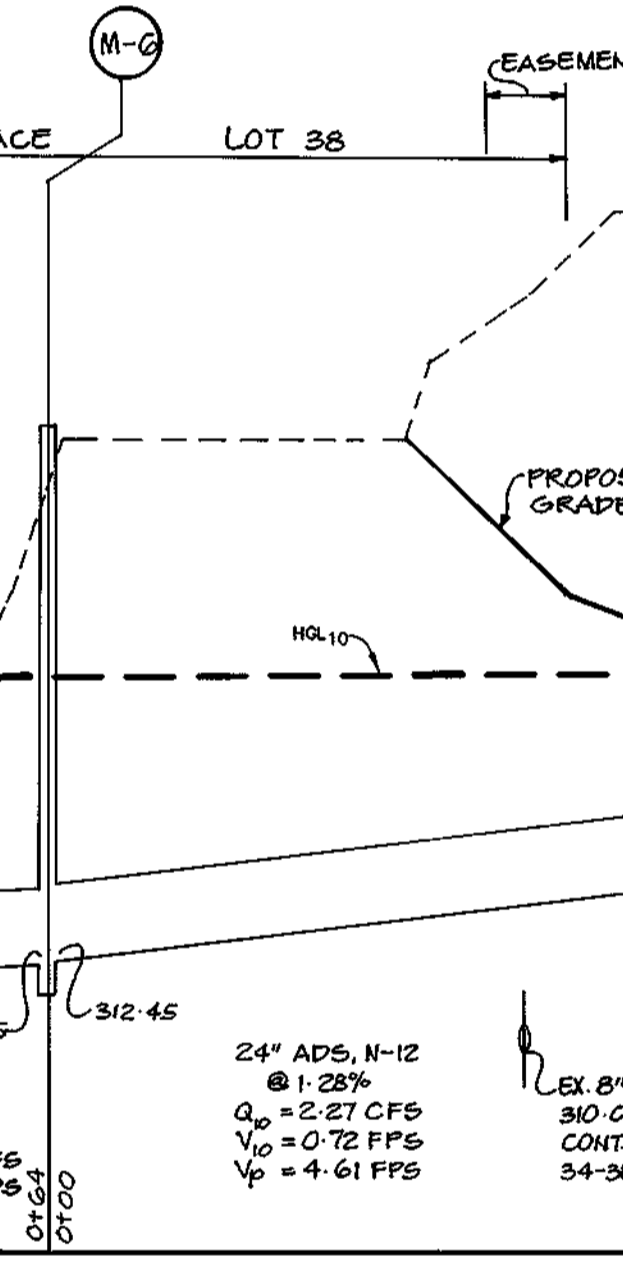
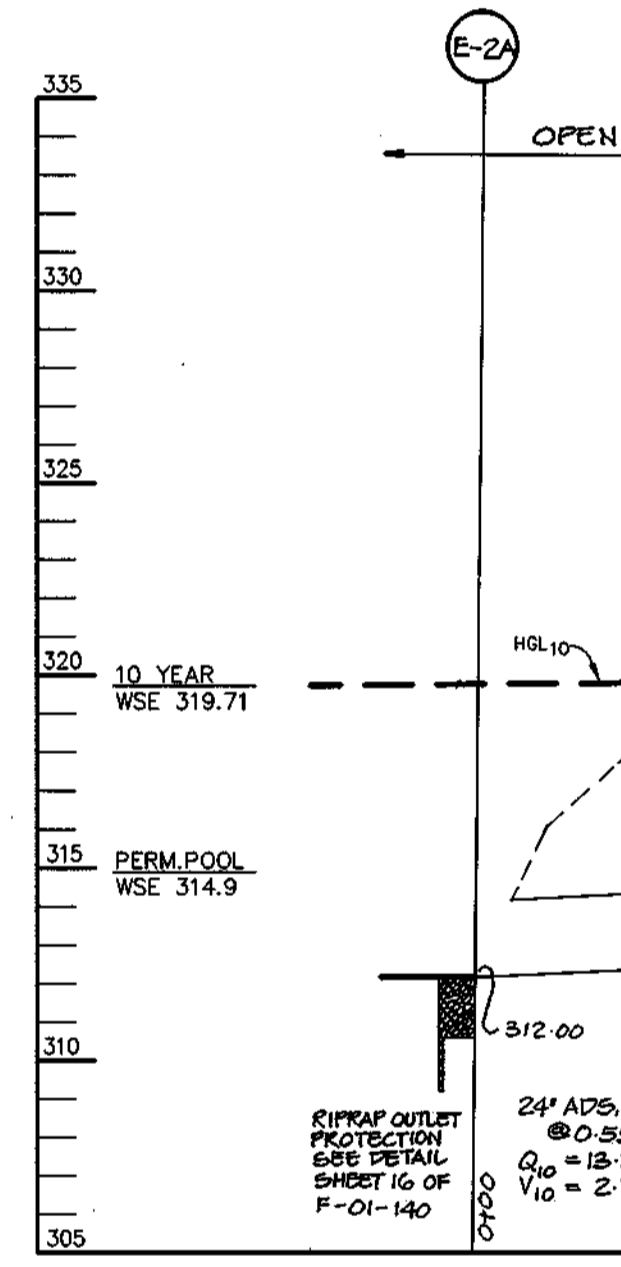
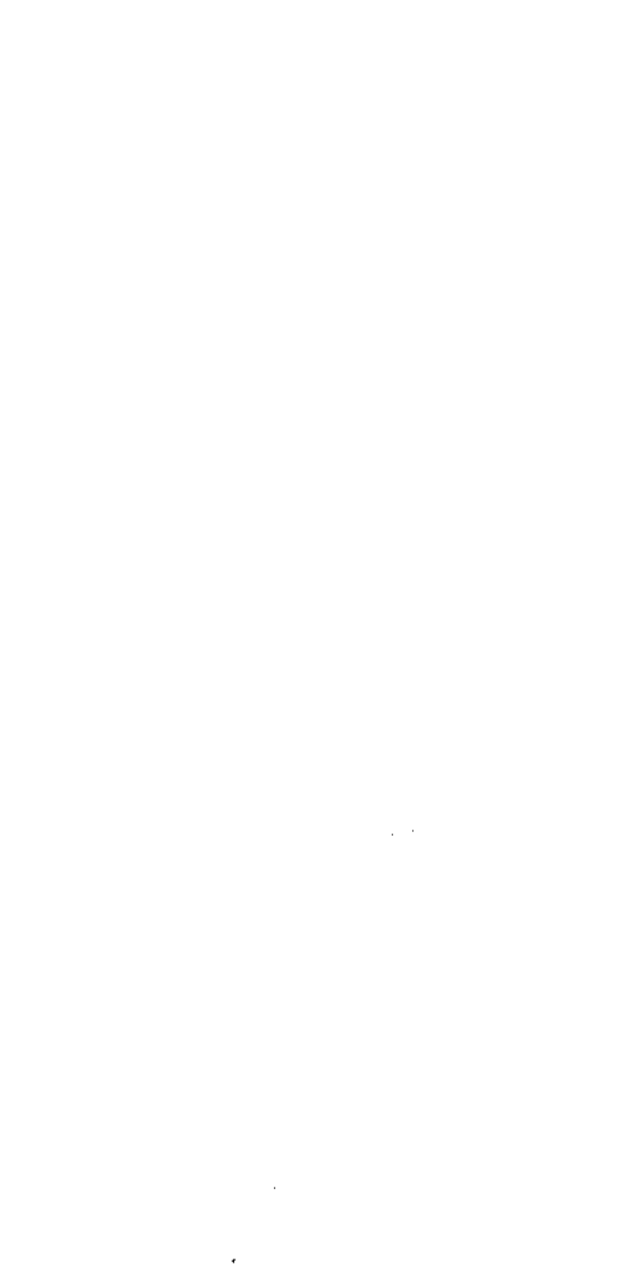
TYPICAL SECTION ACCESS STREET
NO SCALE
LIGHT MOON WAY FROM STA 5+26 TO STA 14+69 - 25 MPH DESIGN SPEED



STANDARD 7" COMBINATION CURB AND GUTTER
NO SCALE



CONCRETE CURB AND GUTTER TRANSITION
NO SCALE

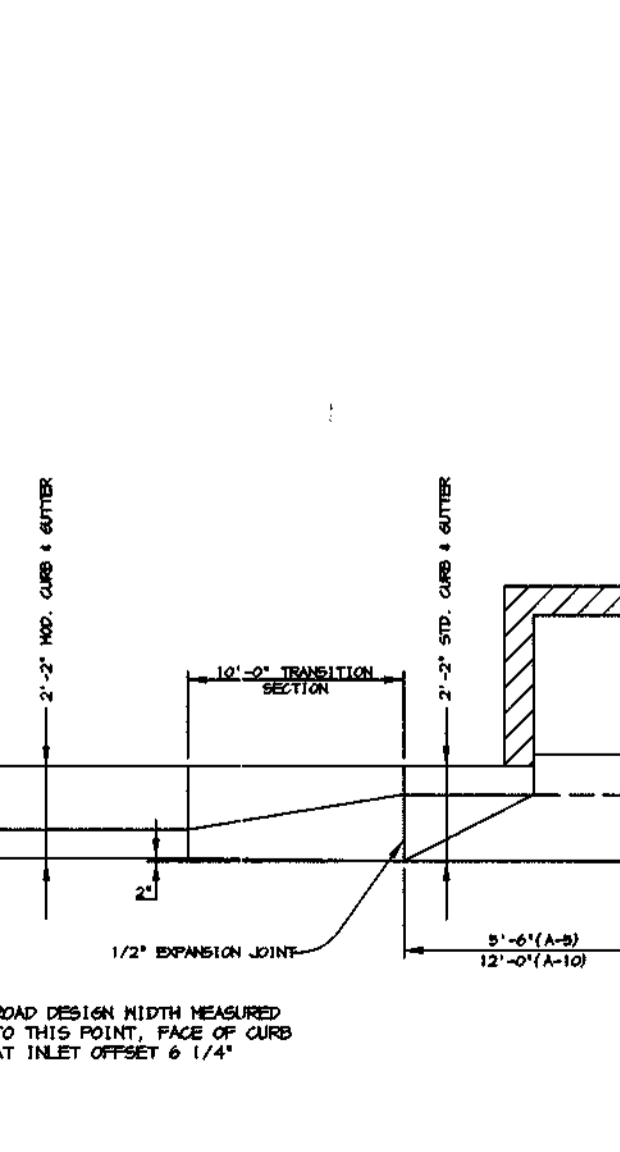


PROFILE SCALE: HOR.-1"=50', VERT.-1"=5'

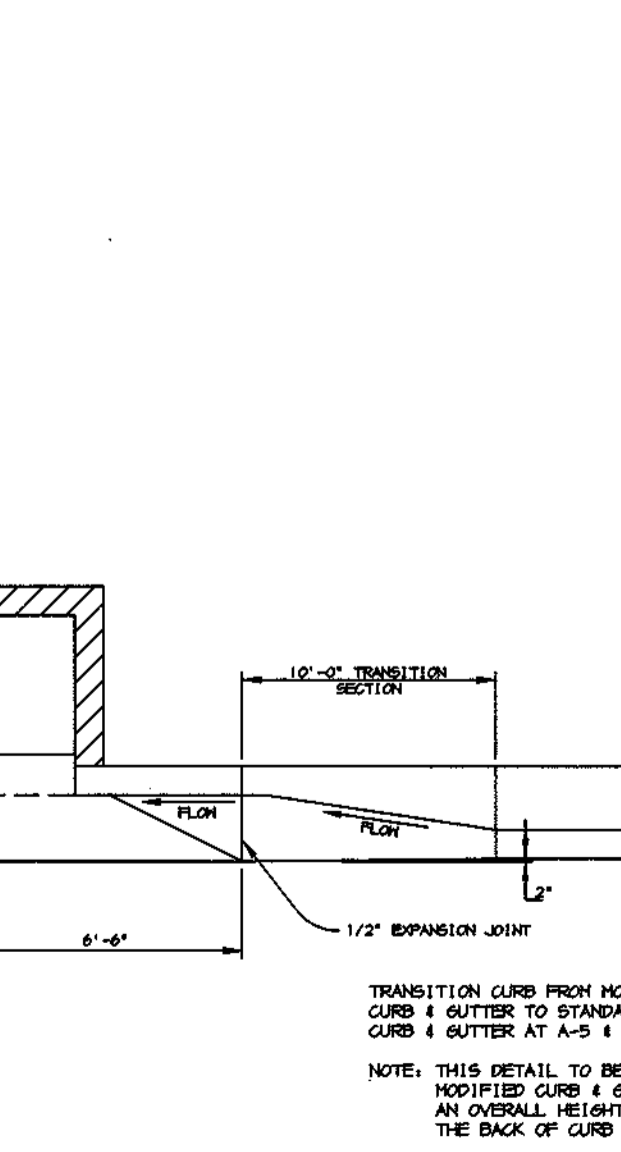
PROFILE SCALE: HOR.-1"=50', VERT.-1"=5'

PROFILE SCALE: HOR.-1"=50', VERT.-1"=5'

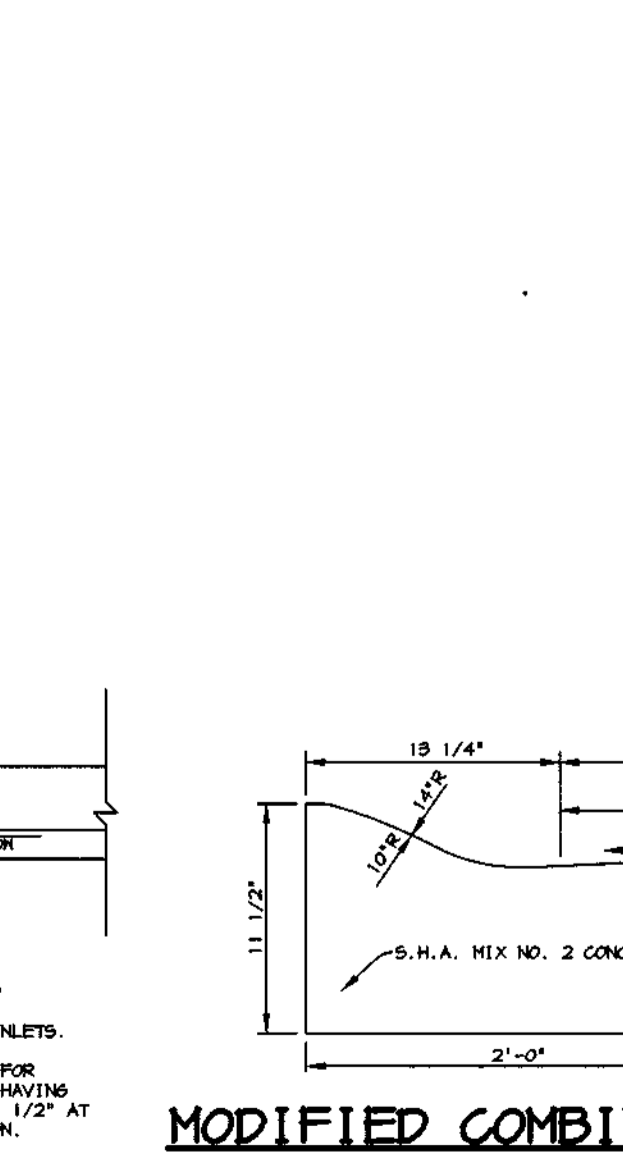
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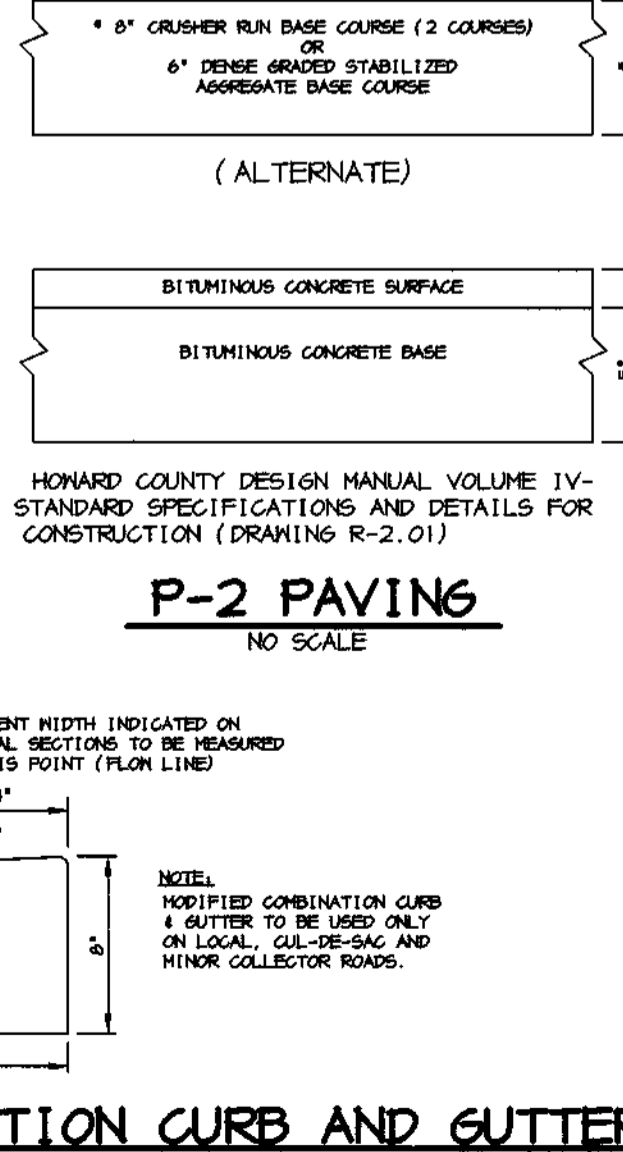
MODIFIED COMBINATION CURB AND GUTTER TRANSITION CURB SECTION AT "A" TYPE INLETS
NO SCALE



MODIFIED COMBINATION CURB AND GUTTER TRANSITION CURB SECTION AT "A" TYPE INLETS
NO SCALE



MODIFIED COMBINATION CURB AND GUTTER
NO SCALE



P-2 PAVING
NO SCALE

AS BUILT CERTIFICATE	
DATE	
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	11-15-01
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	11/2/01
APPROVED: CHIEF, DEVELOPMENT ENGINEERING DIVISION	11/19/01

DATE	NO.	REVISION
B-13-02	1	MODIFIED PROFILE, STRUCTURE & PIPE SCHEDULES.

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

DEVELOPER
TROUTMAN COMPANY
9030 RED BRANCH ROAD
SUITE 100
COLUMBIA, MARYLAND 21045
410-730-7065

PROJECT
EMERSON
SECTION ONE AREA TWO
LOTS 40-96
A RESUBDIVISION OF PARCEL A

AREA
TAX MAP 47 BLOCK 3.8 & 9
ZONED: R-ED PARCEL: P/O 837
6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE
ROAD DETAILS AND STORM DRAIN PROFILES

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: 01058
RD3.DWG
DATE: OCTOBER 29, 2001
SCALE: AS SHOWN
DRAWING NO. 3 OF 5

SOILS CLASSIFICATION

SYMBOL	NAME	GROUP	DESCRIPTION
GnB2	GLENVILLE	C	LOAM, 3% - 8% SLOPES, MODERATELY ERODED
MgC3	MANOR	B	GRAVELLY LOAM, 8% - 15% SLOPES, SEVERELY ERODED
MIC2	MANOR	B	LOAM, 8% - 15% SLOPES, MODERATELY ERODED
MID2	MANOR	B	LOAM, 15% - 25% SLOPES, MODERATELY ERODED
MI	MANOR	B	LOAM, 25% - 45% SLOPES
SIC2	SASSAFRAS	B	GRAVELLY SANDY LOAM, 5% - 10% SLOPES, MODERATELY ERODED
SIB2	SASSAFRAS	B	GRAVELLY SANDY LOAM, 10% - 15% SLOPES, MODERATELY ERODED
SIB2	SASSAFRAS	B	LOAM, 1% - 5% SLOPES, MODERATELY ERODED
SIC2	SASSAFRAS	B	LOAM, 5% - 10% SLOPES, MODERATELY ERODED

* HYDRIC SOILS
** MAY CONTAIN HYDRIC INCLUSIONS

DRAINAGE CHART

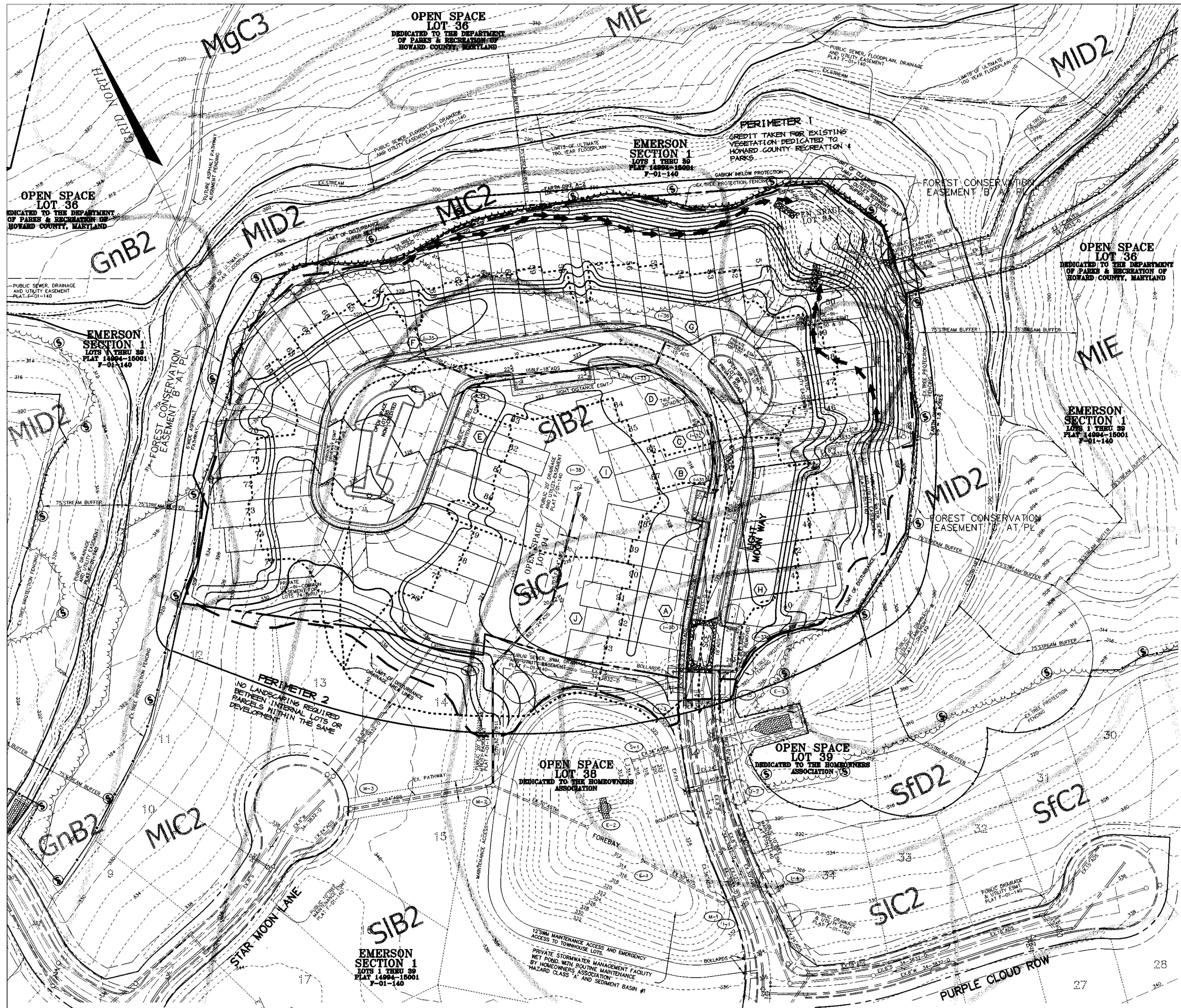
INLET NO.	INLET DESIGNATION	DRAINAGE AREA (AC)	'C' FACTOR	PERCENT IMPERVIOUS
I-30	A	0.41	0.60	41
I-31	B	0.06	0.65	33
I-32	C	0.04	0.54	50
I-33	D	0.32	0.62	63
I-34	E	0.66	0.64	65
I-35	F	0.51	0.65	67
I-36	G	0.80	0.67	70
I-37	H	0.34	0.71	76
I-38	I	0.62	0.34	19
I-39	J	0.58	0.26	7

STONE OUTLET SEDIMENT TRAP #1

DRAINAGE AREA	4.1 ACRES
STORAGE REQUIRED (WET)	3690 CF
STORAGE REQUIRED (DRY)	3690 CF
STORAGE PROVIDED (WET)	3690 CF @ 296.00
STORAGE PROVIDED (DRY)	3690 CF @ 297.44
RISER CREST ELEVATION	301.0
TOP OF DAM	302.0
BOTTOM ELEVATION	294.0
SIDE SLOPES	2:1
DEPTH	7'
CLEANOUT ELEVATION	295.00
EX Q2	2.1 CFS
PR Q2	2.1 CFS
2 YEAR WSE	301.00

LEGEND

SYMBOL	DESCRIPTION
---	LIMIT OF DISTURBANCE
~~~~~	EXISTING TREELINE
-----	DRAINAGE AREA LINES
-----	SOIL LINES



BY THE DEVELOPER :

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

*Chris J. Reid* 10-26-01  
DEVELOPER DATE

BY THE ENGINEER :

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*Chris J. Reid* 10-26-01  
ENGINEER DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

*John Meyer* 11/8/01  
NATURAL RESOURCES CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

*John Robertson* 11/8/01  
HOWARD SOIL CONSERVATION DISTRICT DATE

AS BUILT CERTIFICATE

DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

*Andrew M. Daniels* 11-15-01  
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*Cinda Hamilton* 11/20/01  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*Chris J. Reid* 11/19/01  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DATE NO.	REVISION

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

DEVELOPER  
TROUTMAN COMPANY  
9030 RED BRANCH ROAD  
SUITE 100  
COLUMBIA, MARYLAND 21045  
410-730-7065

PROJECT  
**EMERSON**  
SECTION ONE, AREA TWO  
LOTS 40-96  
A RESUBDIVISION OF PARCEL A

AREA TAX MAP 47 BLOCK 3.8 & 9  
ZONED: R-ED PARCEL: P/O 837  
6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

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

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10-26-01  
DATE

DESIGNED BY : CJR

DRAWN BY : DAM

PROJECT NO : 01058  
RD4.DWG

DATE : OCTOBER 29, 2001

SCALE : AS SHOWN

DRAWING NO. 4 OF 5

*Chris J. Reid*  
CHRISTOPHER J. REID #19949

PLAN  
SCALE: 1" = 50'

