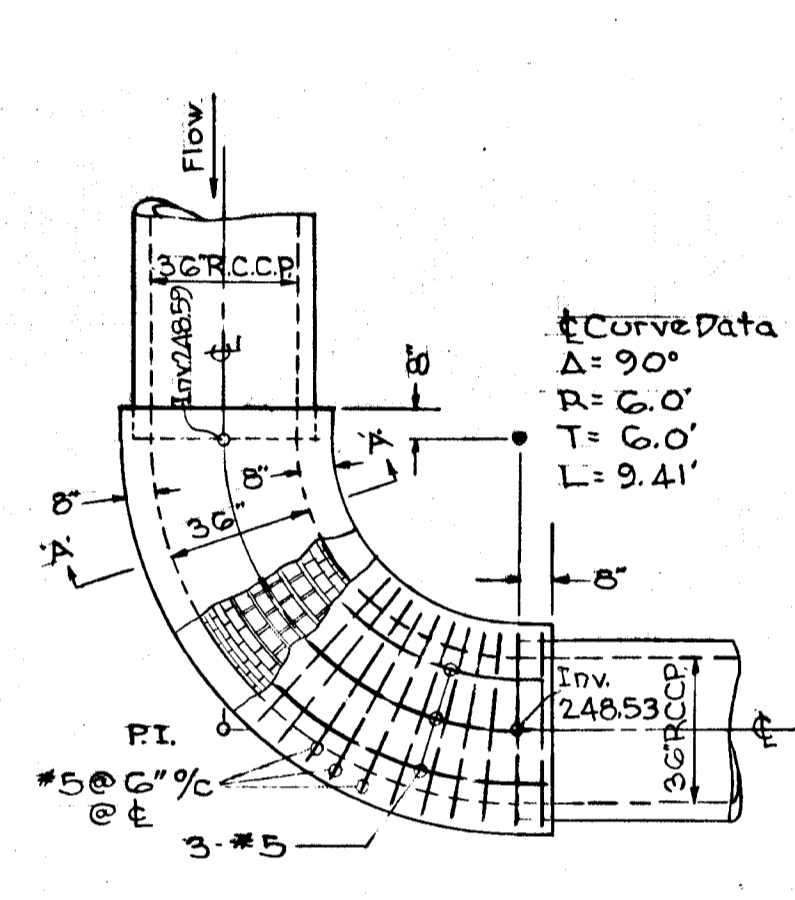


SUMMARY OF STORM DRAIN DATA

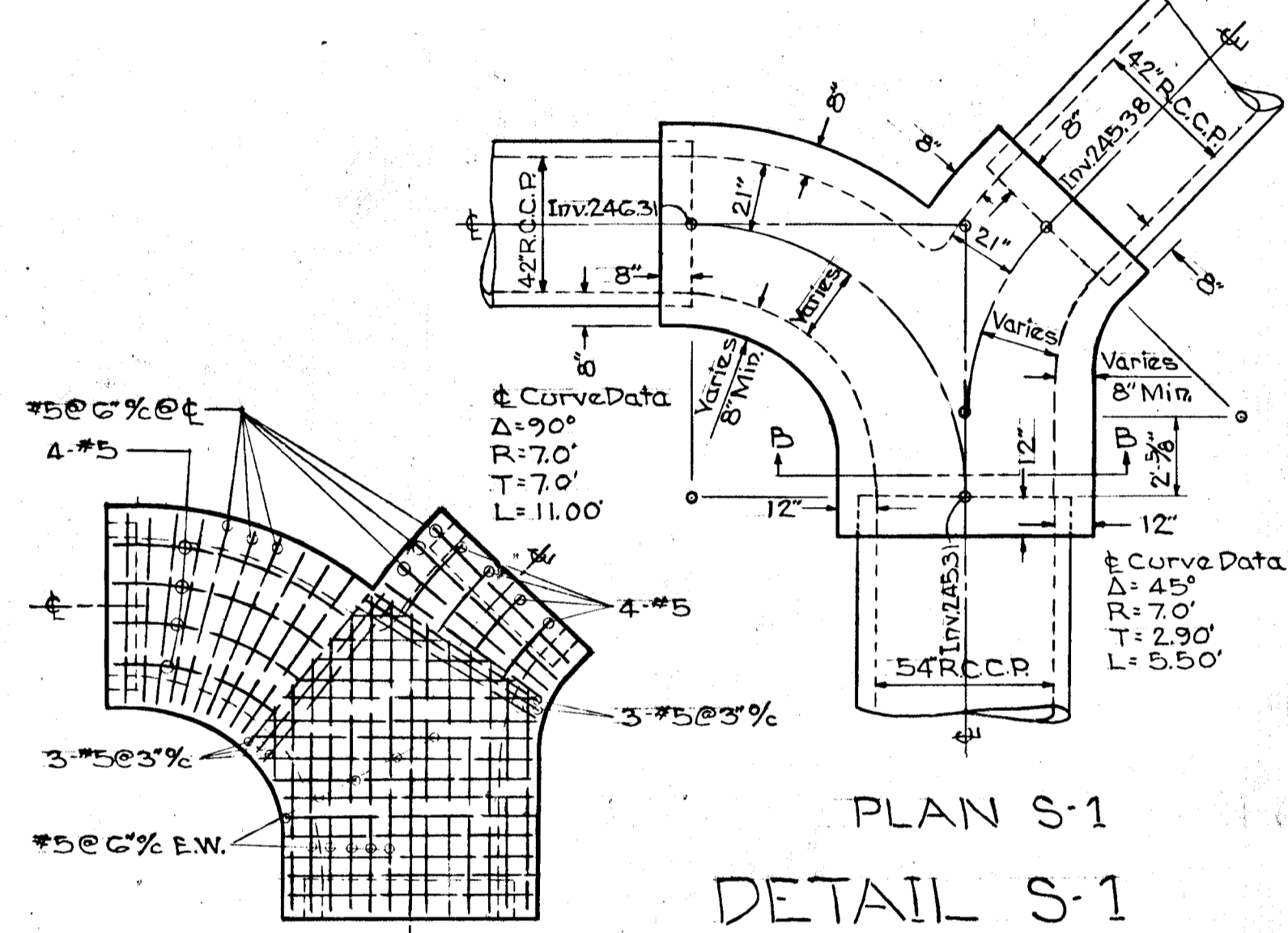
Structure	Type	Size	Top	Howard County Standard Detail	Invert Elevation		Q	Q Surch	Street Slope	Cap. cfs.	Surch. cfs.	V ₁ f.p.s.	V ₂ f.p.s.	Q ₁ c.f.s.	Q ₂ c.f.s.	Q ₃ c.f.s.	Q ₄ /Q ₁ %	Loss				L.H. In Structure Total	Remarks	Hydraulic Gradient		Pipe		Hyd. Grad. Slope %			
					In	Out												A	B	C	D			In	Out	Size	Length		Slope %		
M-3	Std. Manhole	48"	252.92	D-103, Page 158	252.80	252.60						7.1	7.1	51.36	51.36			0.14				0.14		252.05	257.91	36"	6'	0.60	0.57		
M-2	Std. Manhole	48"	258.65	D-103, Page 158	250.73	250.53						7.1	7.9	51.36	56.26	3.67 4.08	14%	0.18	0.20	0.08	0.46			256.13	255.67	36"	312'	0.60	0.57		
I-3	Dbl.'S Comb.		258.74	D-99, Page 154		252.86	3.67		0.60%	3.3	0.37		3.0		3.67										256.21						
I-2	Dbl.'S Comb.		258.74	D-99, Page 154		252.86	4.08		0.60%	3.3	0.78		3.3		4.08											256.23					
Wye 1	Std. Wye Fitting	36"x21"										7.9	8.9	56.26	64.24	10.21	18%		0.24	0.23	0.14	0.61			253.54	252.93	18"	12'	2.00	0.55	
I-1	Dbl.'S Comb.		255.25	D-99, Page 154	250.01	249.76	3.50	3.87	Sump	13.0		3.8	4.2	6.89	10.21			0.11	0.04							253.81	253.66	21"	21'	2.00	0.55
S-2	Bend Structure	36"x36"		See Detail	248.59	248.53						8.9	7.0	64.24	64.24				-0.46	0.24		-0.22			252.75	252.75	36"	49'	0.60	0.90	
M-1	Std. Manhole	48"	255.60	D-103, Page 158	248.24	247.74						7.0	7.3	64.24	70.85	7.54	11%	0.15	0.06	0.07	0.28			252.31	252.03	42"	285'	0.50	0.48		
S-1	Bend Structure	42"x54"		See Detail	246.31	245.31						7.3	8.4	70.85	134.69	66.30	95%		0.26	0.30	0.19	0.75			250.66	249.91	54"	11'	0.50	0.44	
Ex. I-18	EX. Dbl.'S Comb.				245.25	245.05	3.80	4.58	Sump	13.0		8.4	8.6	134.69	139.43	1.93	1.5%	0.21	0.06	0.01	0.28			249.86	249.58	54"	44'	0.41	0.48		
Ex. I-11	EX. Dbl.'S Comb.				244.87	244.83	2.51		Sump	13.0		8.6	8.9	139.43	141.46			0.24	0.08		0.32	Top Of Pipe Govern			249.37	248.90	54"	16'	3.19	0.50	
E-1	Std. End Support Wall	42"	247.69	D-46, Page 101	245.44																										

STORM DRAIN DESIGN DATA

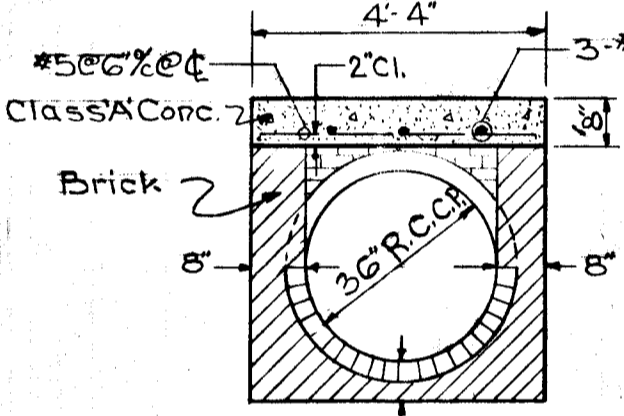
Location	Area No	Incr Acres	Total Acres	C	CA	Accum CA	Time Conc.	I in/hr	Q c.f.s.	Pipe Size	Slope %	Vel	L ft	Time In Pipe	Remarks
From To	M-3	A	10.70	0.80	8.56		9.0	6.0	51.36	36"	0.57	0.60	7.1	6'	
Fut Sys. 3	M-3	A	10.70		8.56		9.0	6.0	51.36	36"	0.57	0.60	7.1	312'	0.7
	M-2	B	0.65	0.80	0.54		5.0	6.8	3.67	15"	0.43	2.00	3.0	19'	
	M-2	C	0.75	0.80	0.60		5.0	6.8	4.08	15"	0.50	2.00	3.3	19'	
	M-2	A-C	12.10		9.70		9.7	5.8	56.26	36"	0.70	0.60	7.9	304'	0.6
Fut Sys. 2	I-1	D	1.18	0.90	1.06		6	6.5	6.89	18"	0.55	2.00	3.8	12'	
	I-1	E	0.65	0.70	0.45		5	6.8	3.50						Sump 20' / 10'
	I-1	D-E	1.83		1.57		6	6.5	10.21	21"	0.55	2.00	4.2	21'	
	S-2	A-E	13.93		11.27		10.3	5.7	64.24	36"	0.90	0.60	8.9	27'	0.2
	S-2	M-1	13.93		11.27		10.3	5.7	64.24	36"	0.90	0.60	8.9	49'	0.2
Fut Sys. 2	M-1	G	1.28		1.16		6.2	6.5	7.54	21"	0.29	0.50	3.1		
	M-1	A-G	15.21		12.43		10.5	5.7	70.85	42"	0.48	0.50	7.3	285'	0.7
	E-1	S-1	15.07	0.8	12.06		12	5.5	66.30	42"	0.43	0.50	6.9		
	S-1	EX-I-18	30.28		24.49		12	5.5	134.69	54"	0.44	0.50	8.4	11'	
	EX-I-18	I	0.84	0.60	0.56		5	6.8	3.80						
	EX-I-18	J	0.40	0.75	0.30		6	6.5	1.95	18"	0.05	1.0	1.1		
	EX-I-18	A-J	31.52		25.35		12	5.5	139.43	54"	0.48	0.41	8.6	44'	
	EX-I-11	K	0.41	0.80	0.37		5	6.8	2.51						
	EX-I-11	A-K	31.93		25.72		12	5.5	141.46	54"	0.50	3.19	8.9	16'	



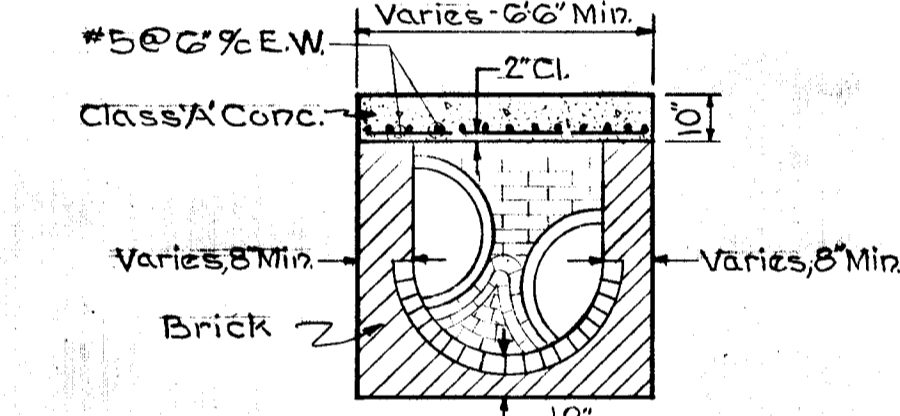
DETAIL S-2
NO SCALE



PLAN S-1
DETAIL S-1
NO SCALE

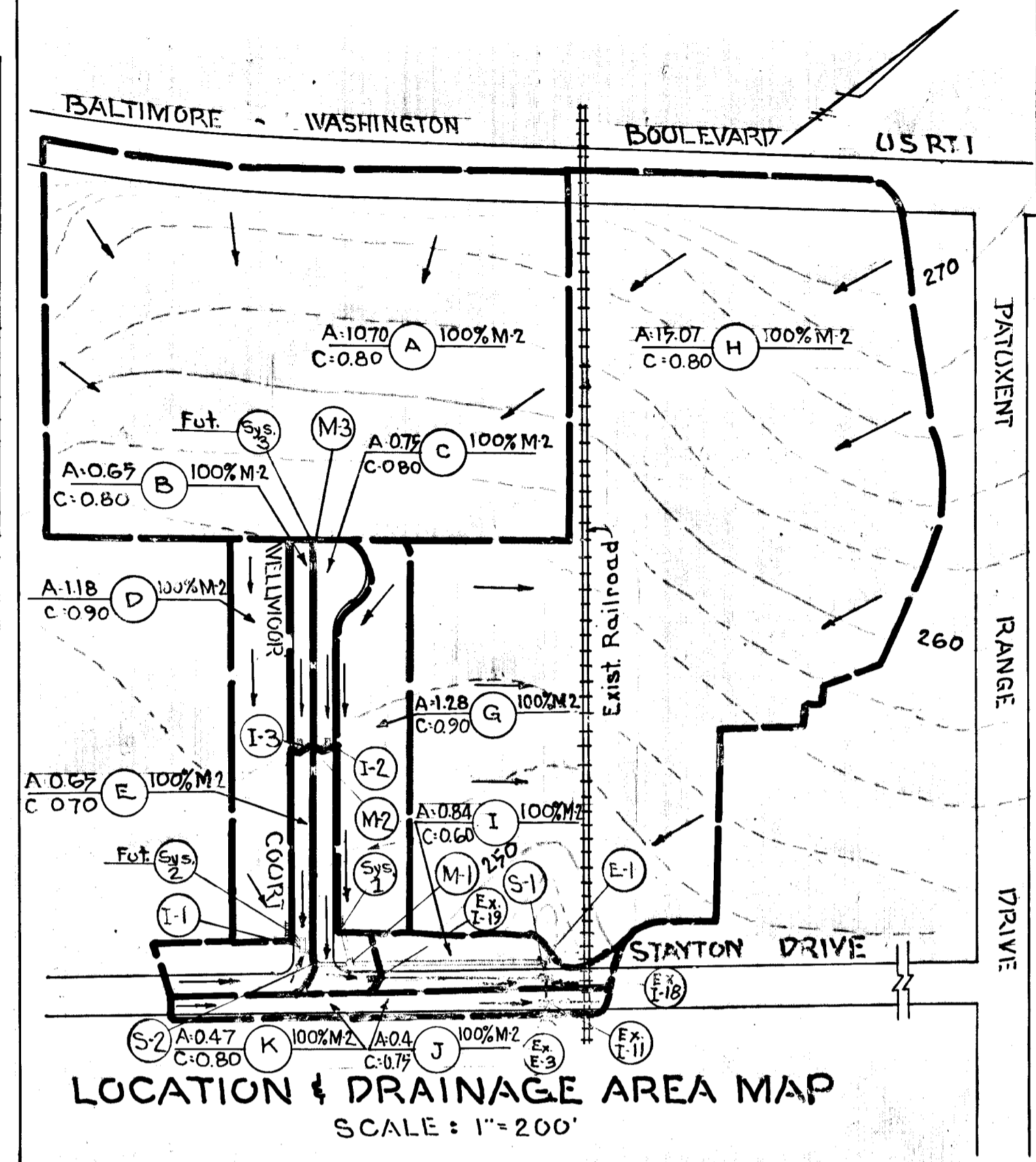


SECTION A-A



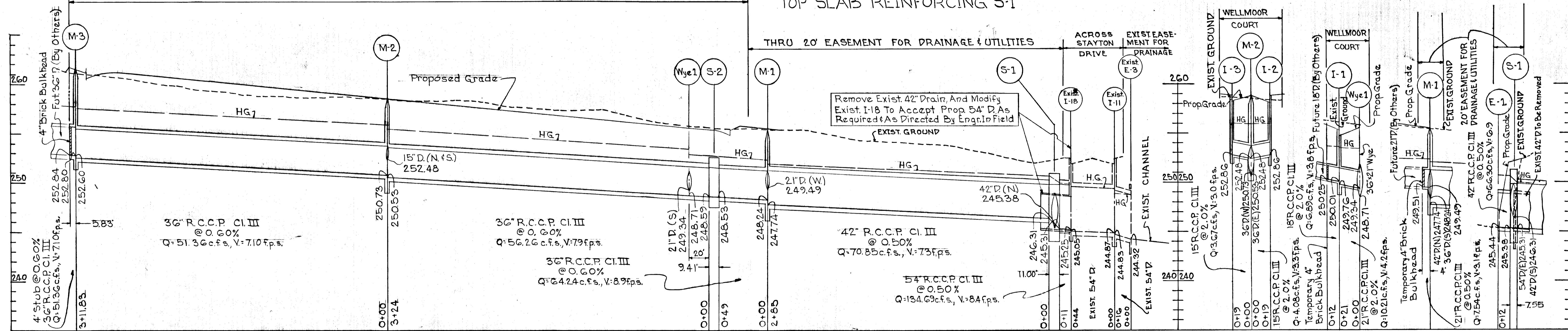
SECTION B-B

LOCATION & DRAINAGE AREA MAP
SCALE: 1" = 200'



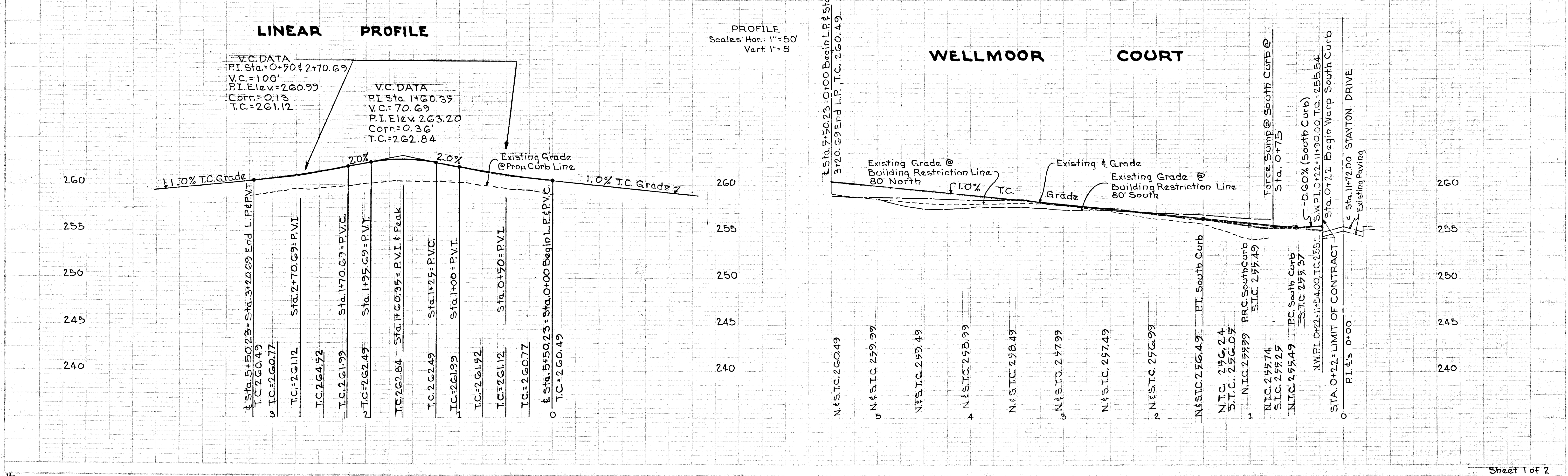
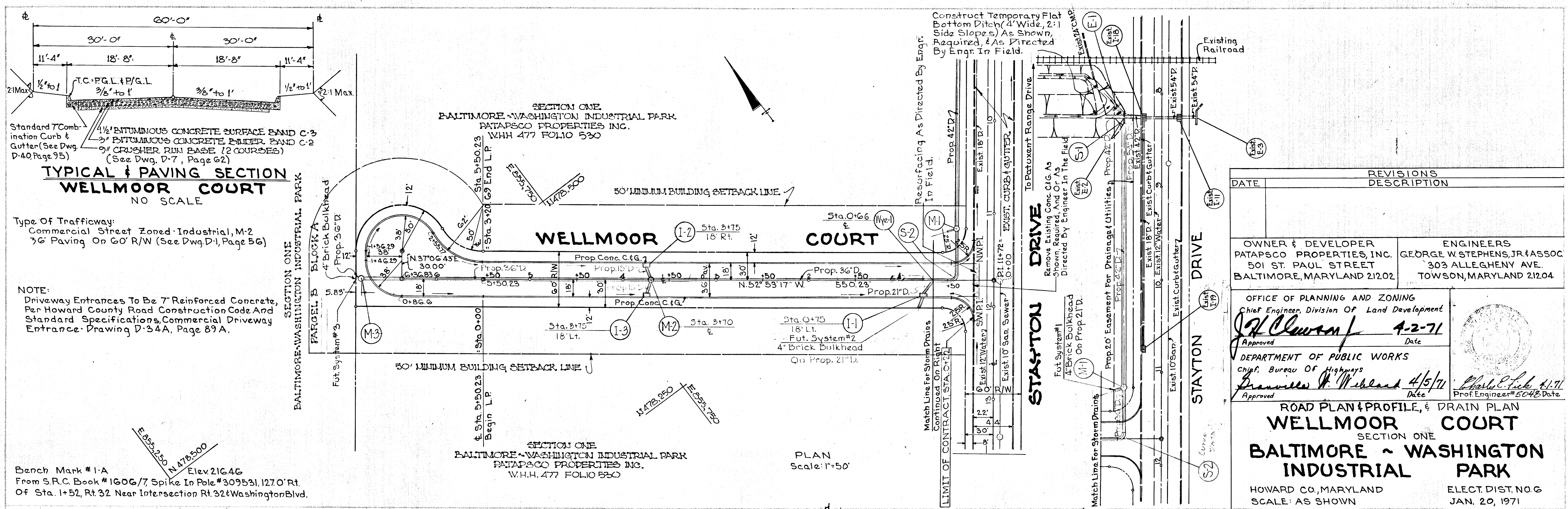
ALONG WELLMOOR COURT

TOP SLAB REINFORCING S-1



PROFILES
Scales: Hor. 1" = 50'
Vert. 1" = 5'

C.F.H. Designed C.F.H. Drawn C.E.F. Checked		ENGINEER GEORGE WM. STEPHENS, JR. AND ASSOCIATES, INC. Towson, Maryland-21204 Charles P. Lab 5048 4-1-71 Prof. Engineer No. Date	OWNER AND DEVELOPER PATAPSCO PROPERTIES INCORPORATED 501 Saint Paul Street Baltimore, Maryland-21202	Dept. of Public Improvements Approved Principal Eng. Date Principal Arch.	HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS Chief, Bureau Of Highways Approved Date	OFFICE OF PLANNING AND ZONING Chief Engineer, Division Of Development Approved Date	STORM DRAINS SECTION ONE BALTIMORE WASHINGTON INDUSTRIAL PARK HOWARD COUNTY, MD. ELECTION DISTRICT NO. 6	REVISIONS Date Description By	Sheet 2 of 2 Drawing No. Contract No.
		Director	Approved Date	Approved Date	Approved Date	Approved Date	Approved Date	Approved Date	Approved Date



PERCOLATION TEST DATA

Lot No	Block	Average Percolation Time in minutes for second inch	Maximum depth permitted for effluent pipe to enter sewage disposal area at its highest elevation with reference to existing grade at time of percolation test
1	G	3 Min.	2'
2	G	3 Min.	3'
3	G	6 Min.	4'
4	G	4 Min.	3'
1	H	6 Min.	3'
2	H	16 Min.	3'
3	H	5 Min.	2'
4	H	5 Min.	3'

APPROVED For individual Sewer and Water Systems
 (Signature) 9/3/74
 County Health Officer Date

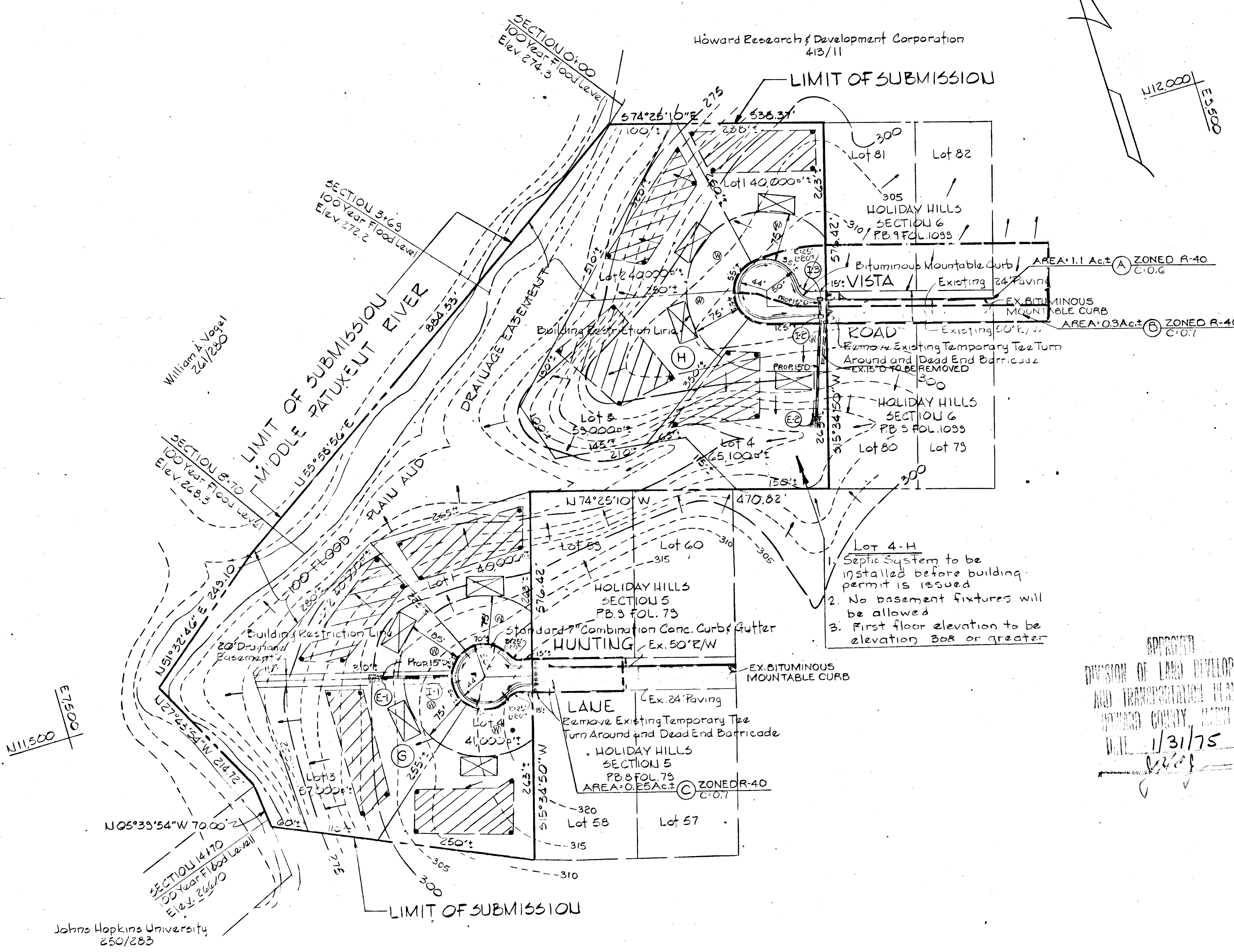
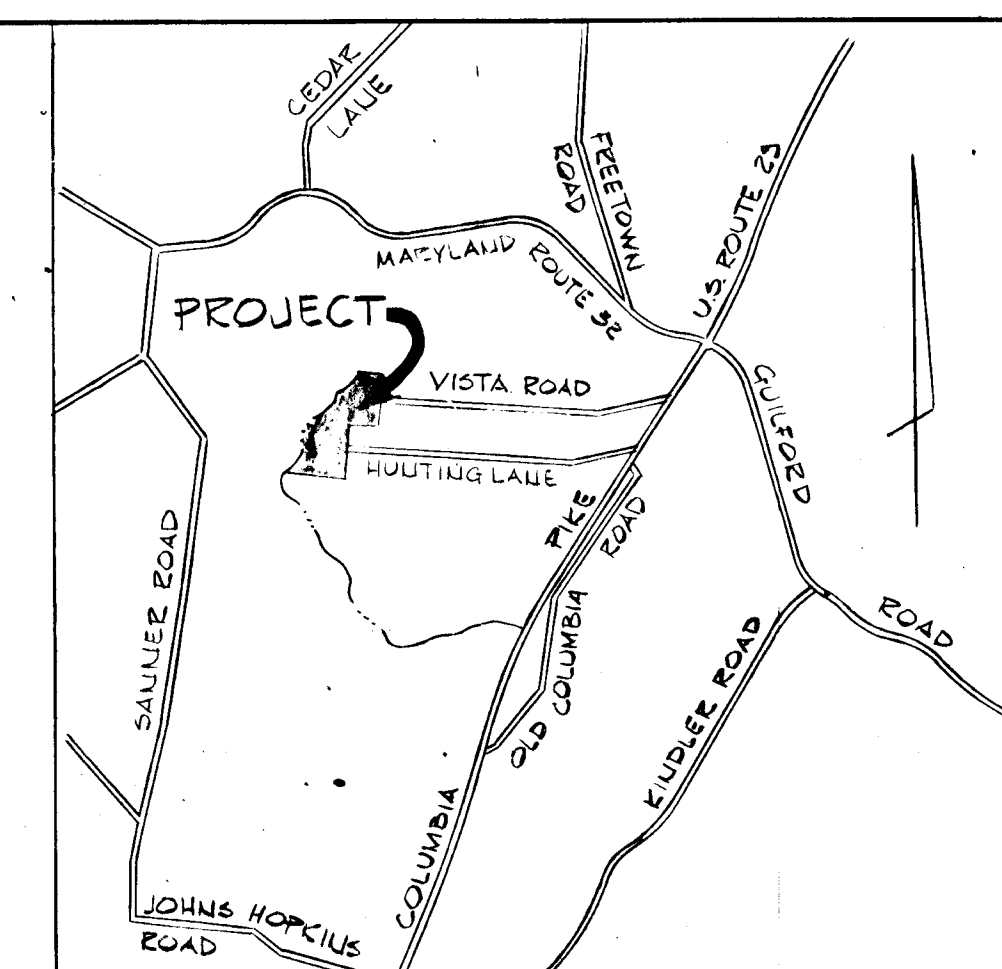
NOTE: THE LOTS SHOWN HEREON COMPLY WITH MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF HEALTH REGULATIONS.

GENERAL NOTES

- PRESENT ZONING R-40.
- TOTAL NUMBER OF LOTS 8
- AREA OF LOTS 13.2 Ac.±
- AREA OF ROADS 0.5 Ac.±
- TOTAL AREA 13.7 Ac.±
- PRIVATE SEWAGE AND PRIVATE WATER WILL BE USED WITHIN THIS DEVELOPMENT.
- CONTOURS SHOWN HEREON ARE FROM USGS QUADRANGLE MAP.

LEGEND

- THIS AREA DESIGNATES A PRIVATE SEWAGE EASEMENT OF APPROXIMATELY 10,000 SQ. FT., AS REQUIRED BY THE MARYLAND STATE HEALTH DEPARTMENT FOR INDIVIDUAL SEWAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE AND SERVICING AND RESIDENTIAL STRUCTURE CONSTRUCTED ON THESE BUILDING SITES. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWAGE SYSTEM.
- DENOTES LOCATION OF TEST HOLE.
- APPROXIMATE LOCATION OF DWELLING.
- DENOTES APPROXIMATE LOCATION OF WELL.



Lot 4-H
 1. Septic System to be installed before building permit is issued.
 2. No basement fixtures will be allowed.
 3. First floor elevation to be elevation 308 or greater.

APPROVED
 DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING
 HOWARD COUNTY, MARYLAND
 DATE 1/31/75
 (Signature)

DRAINAGE AREA MAP

RIVERSIDE ESTATES.

SECTION 3

PURDUM & JESCHKE
 CONSULTING ENGINEERS &
 LAND SURVEYORS
 1023 N. CALVERT STREET
 BALTIMORE, MARYLAND

OWNER & DEVELOPER
 RESIDENTIAL DEVELOPERS, INC.
 P.O. BOX 700
 SEABROOK, MARYLAND 20801

5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DECEMBER 4, 1974 SHEET 3 OF 3 SCALE: 1"=100'

(Signature)
 WILLIAM G. RASCHKE REG. NO. 4575

Chief, Bureau of Highways	Date	Chief, Division of Land Development and Transportation Planning	Date
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