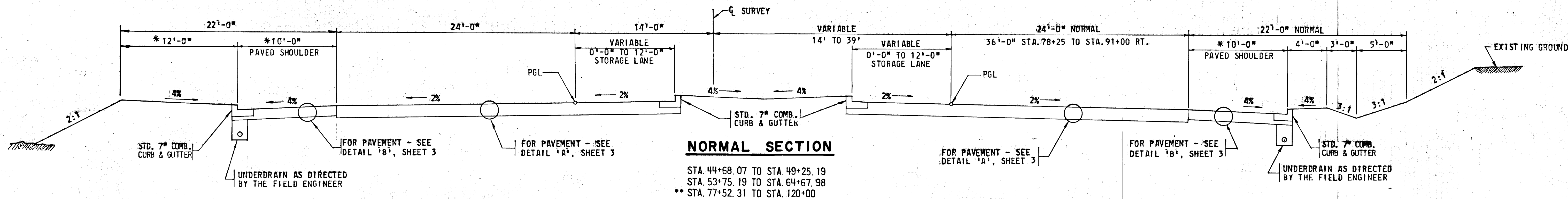
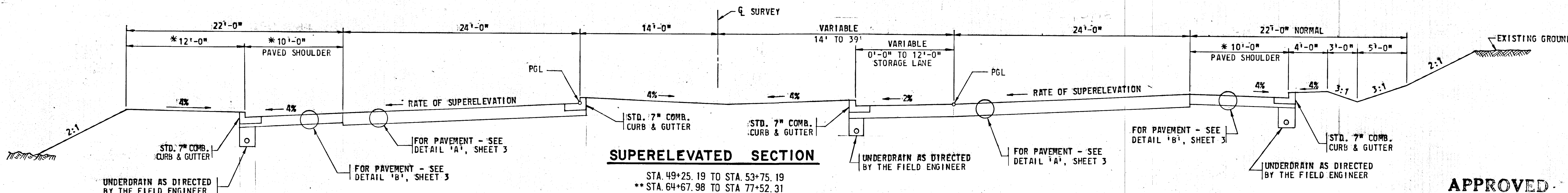


\* NOTE:  
FOR RAMP TAPERS, ACCELERATION LANES & DECELERATION LANES, ADJACENT TO MAIN-LINE RT. OR LT., SEE PART SECTION SHEET NO. 3

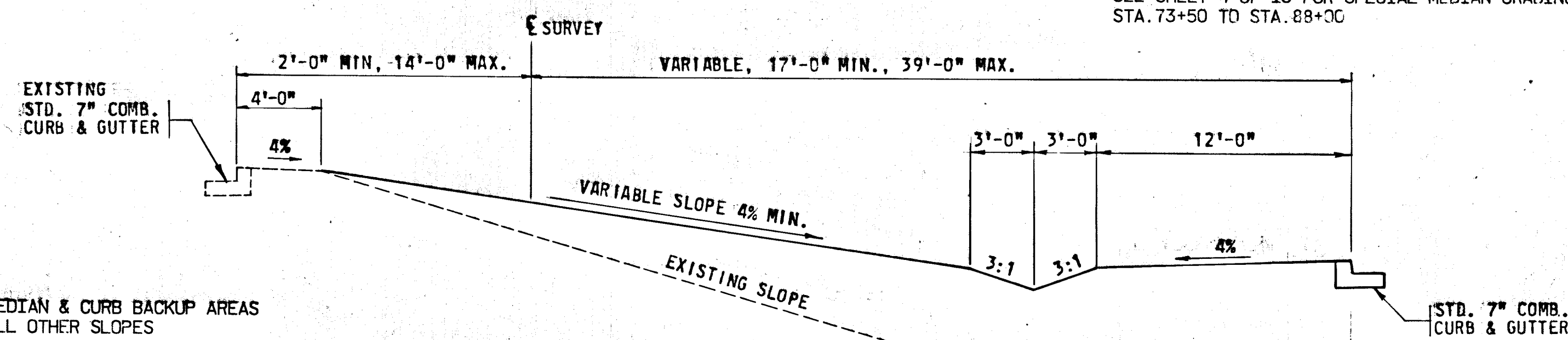


**NORMAL SECTION**  
STA. 44+68.07 TO STA. 49+25.19  
STA. 53+75.19 TO STA. 64+67.98  
\*\* STA. 77+52.31 TO STA. 120+00

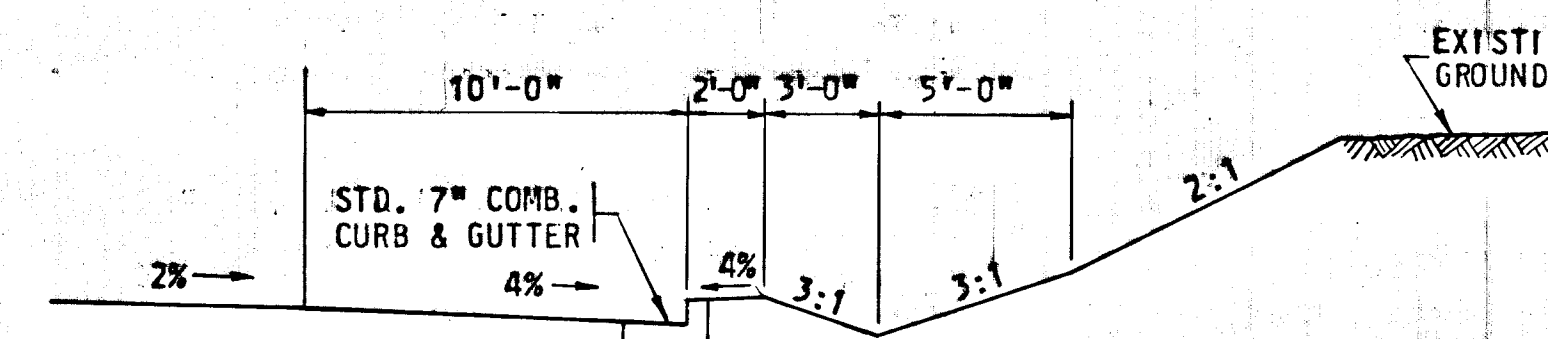


**SUPERELEVATED SECTION**  
STA. 49+25.19 TO STA. 53+75.19  
\*\* STA. 64+67.98 TO STA. 77+52.31

\*\* SEE SHEET 4 OF 13 FOR SPECIAL MEDIAN GRADING STA. 73+50 TO STA. 88+00



NOTE: 4" TOPSOIL ON MEDIAN & CURB BACKUP AREAS  
2" TOPSOIL ON ALL OTHER SLOPES



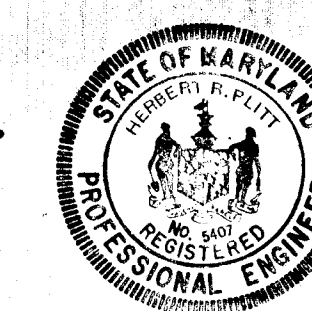
**GRADING SECTION TO BE USED IN CUTS RT.**

STA. 90+25 TO STA. 120+00  
(AS DIRECTED BY THE ENGINEER IN THE FIELD)

**MEDIAN GRADING IN BIFURCATED AREA**

**TYPICAL SECTIONS FOR SNOWDEN RIVER PARKWAY**

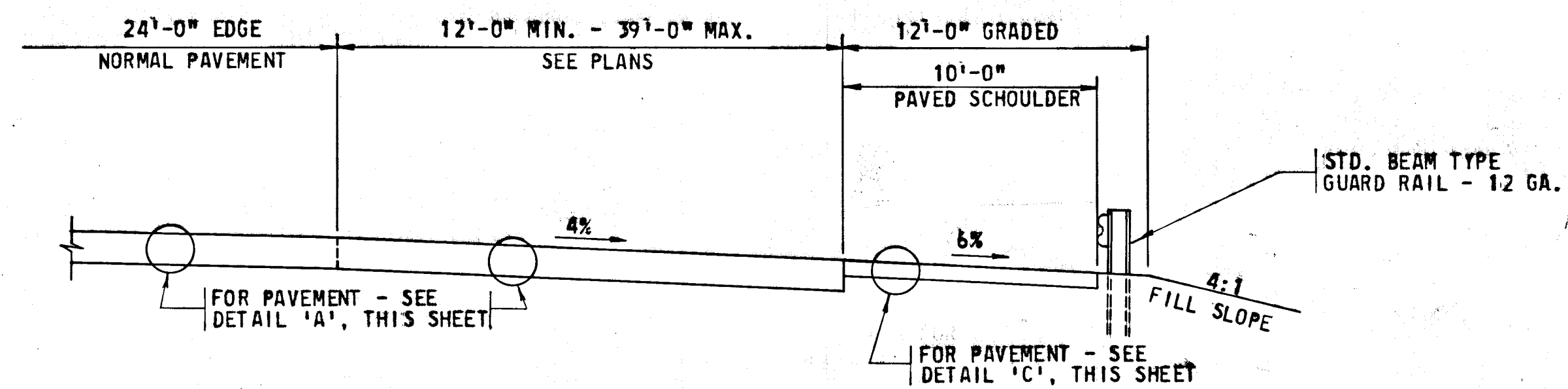
**APPROVED**  
OFFICE OF PLANNING AND ZONING OF HOWARD COUNTY  
DATE: 1/22/71  
*[Signature]*



DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 12/18/70  
CHIEF, BUREAU OF HIGHWAYS DATE  
OFFICE OF PLANNING AND ZONING  
CHIEF ENGINEER, DIVISION OF LAND DEVELOPMENT DATE

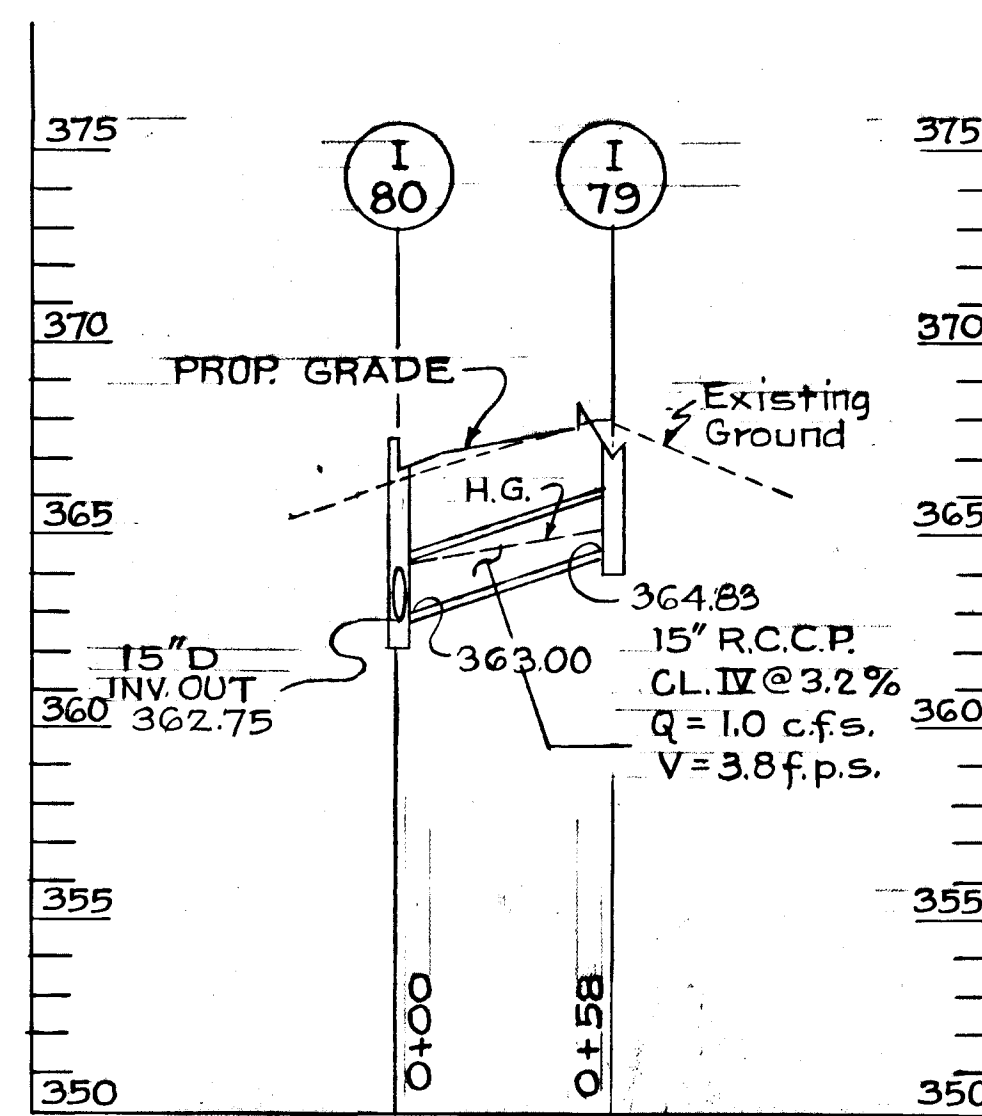
*[Signature]*  
GREEN ASSOCIATES, INC.  
CONSULTING ENGINEERS  
BALTIMORE, MARYLAND

Re. Date	Rev. No.	Revision Description
<b>COLUMBIA</b>		
6TH ELECTION DISTRICT HOWARD COUNTY		
HOWARD RESEARCH AND DEVELOPMENT CORP.		
THE VILLAGE OF CROSS KEYS - BALTIMORE, MARYLAND, 21218		
PROJECT AREA		
E.G.U. SUBDIVISION SECTION 1 AREA 3		
SUBJECT TITLE SNOWDEN RIVER PARKWAY TYPICAL SECTION		
Des. By	Drawn AS SHOWN	Draw No. 2 of 13
Des. By	Date FEB. 23, 1970	C.C.F. file
CM. By	Approved	

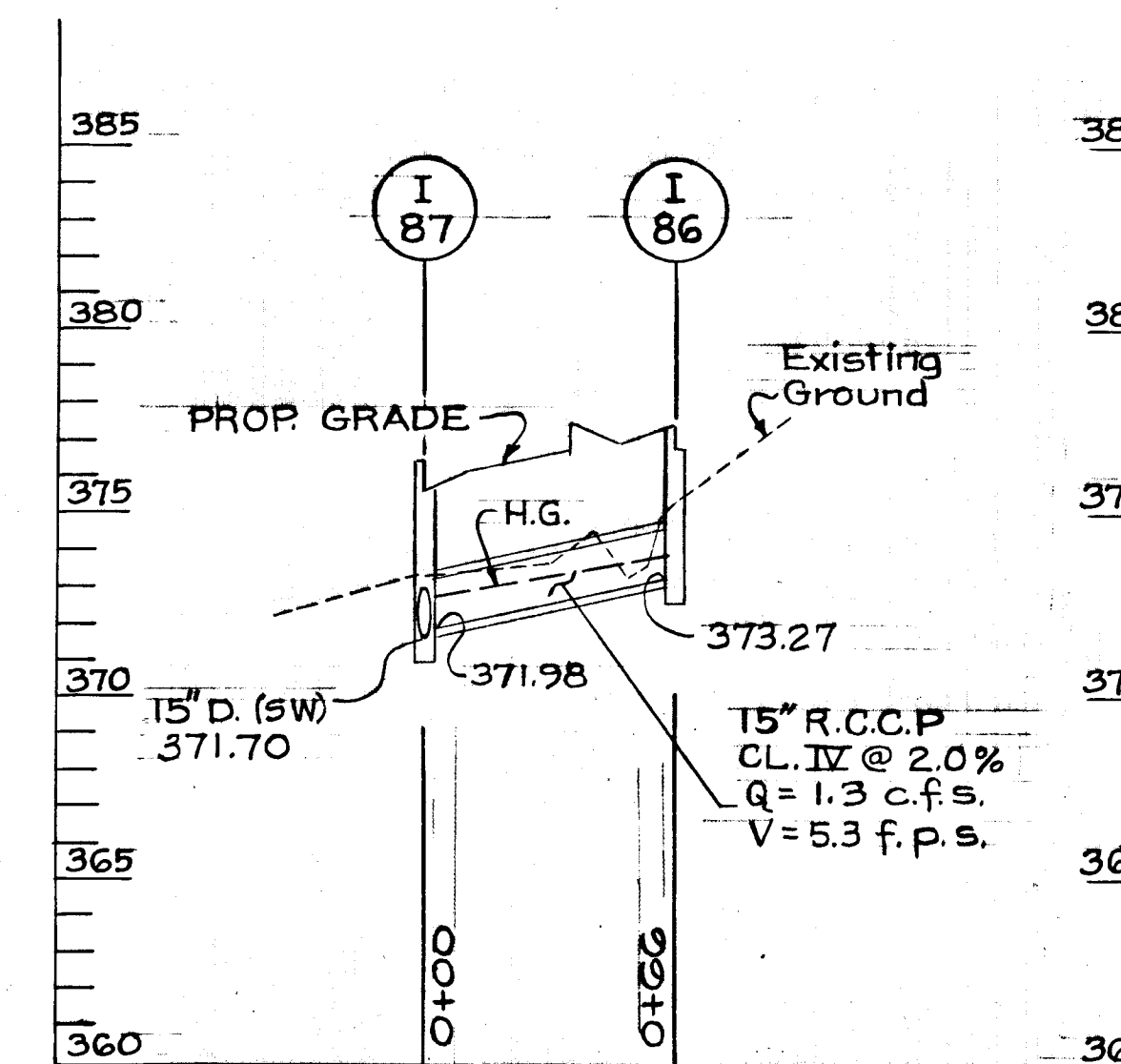


**PART SECTION  
RAMP 'C' TAPER RIGHT**

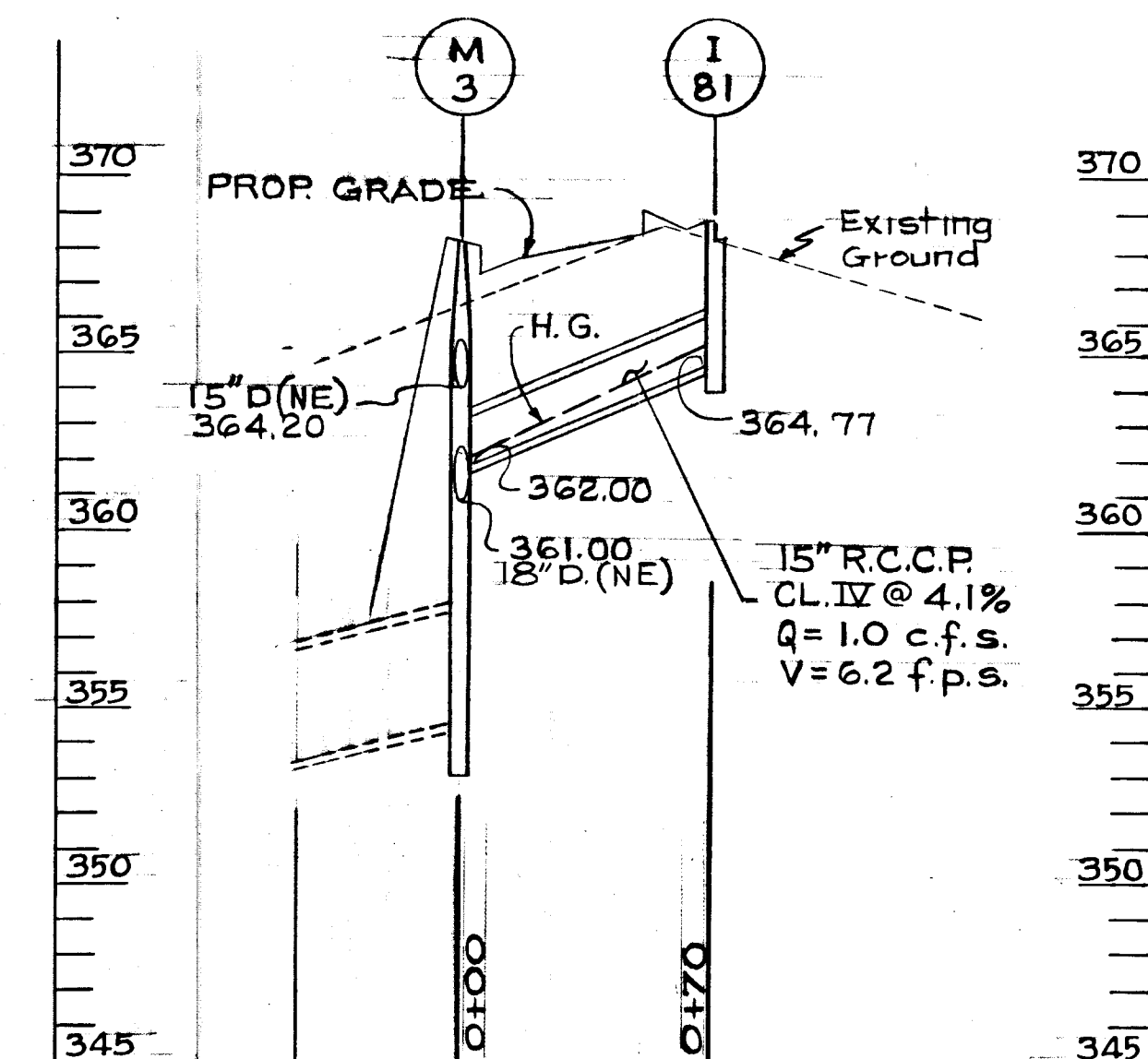
SCALE: 1" = 5'  
STA. 63+15 TO STA. 67+65



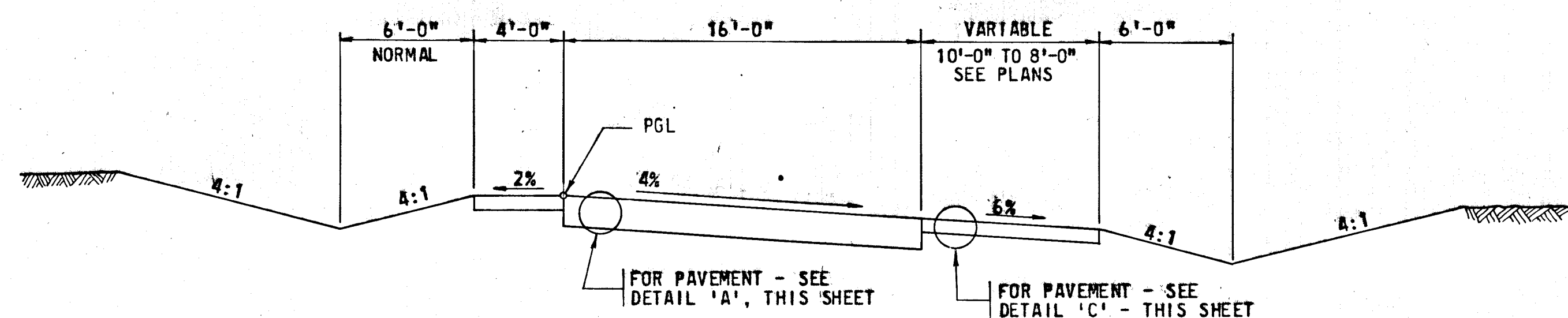
☉ STA. 63+20, Page 7



☉ STA. 70+50, Page 8

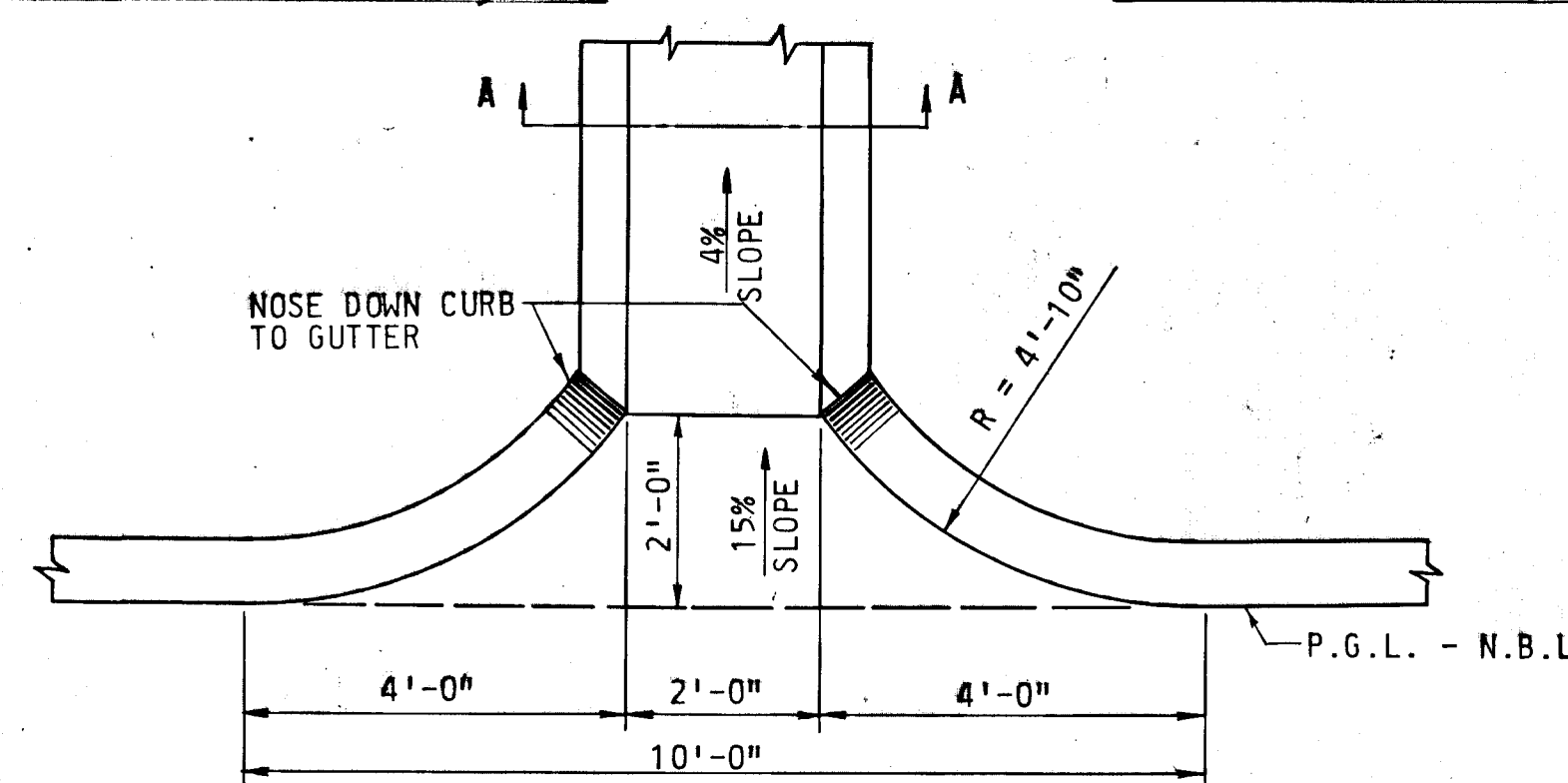


☉ STA. 64+85, Page 7



**RAMP 'C' STA. 5+55 TO STA. 6+50  
RAMP 'D' STA. 18+50 TO STA. 19+63**

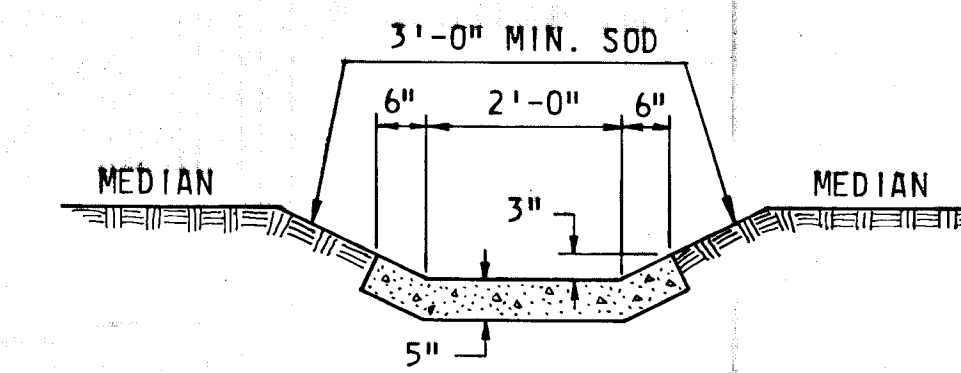
SCALE: 1" = 5'



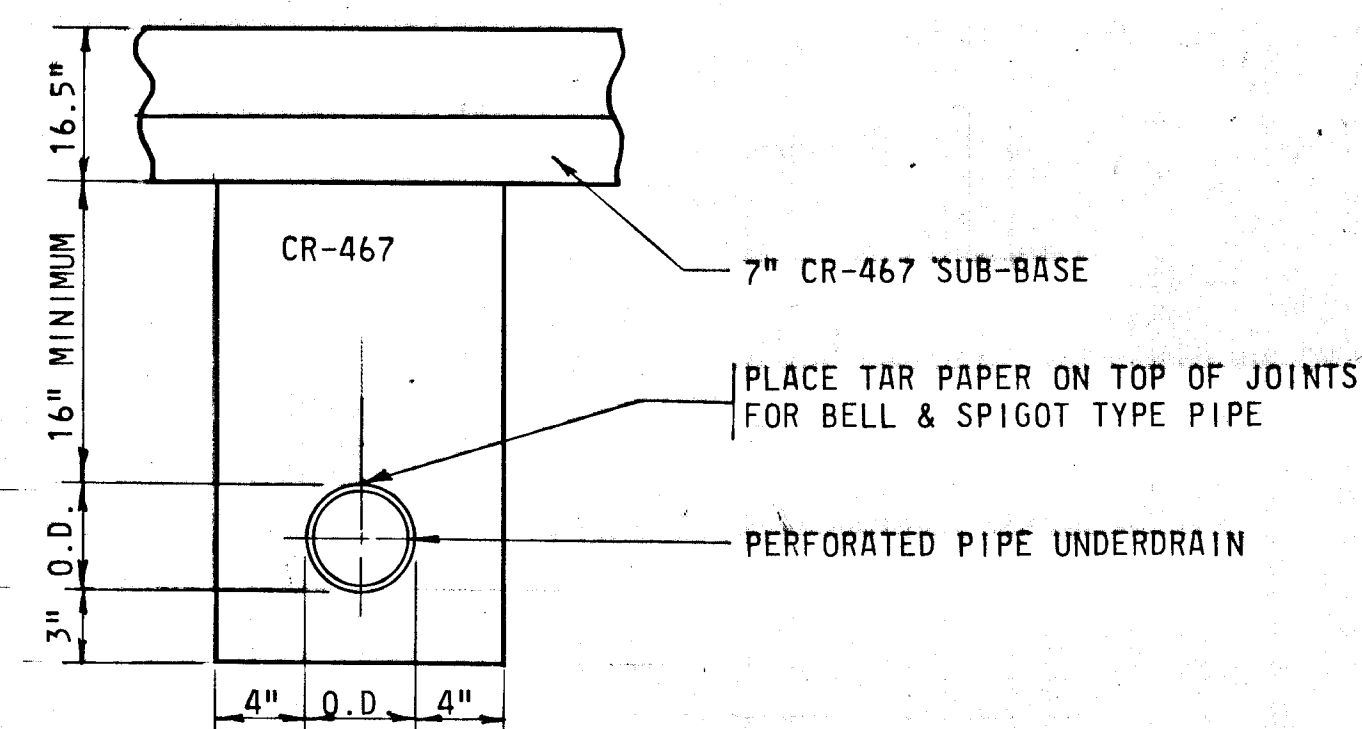
PLAN

**CURB OPENING DETAIL**

SCALE: 1/2" = 1'-0"

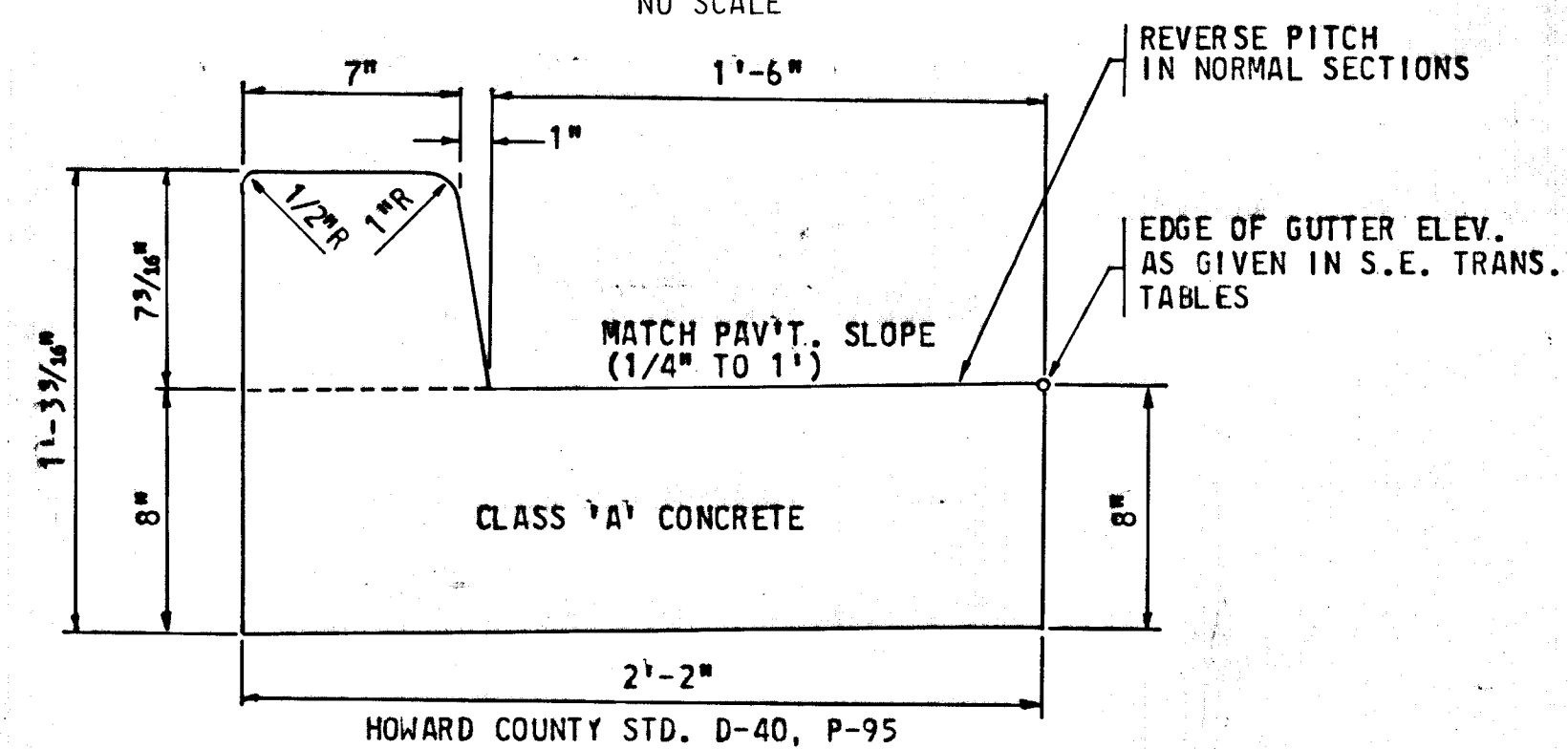


SECTION 'AA'



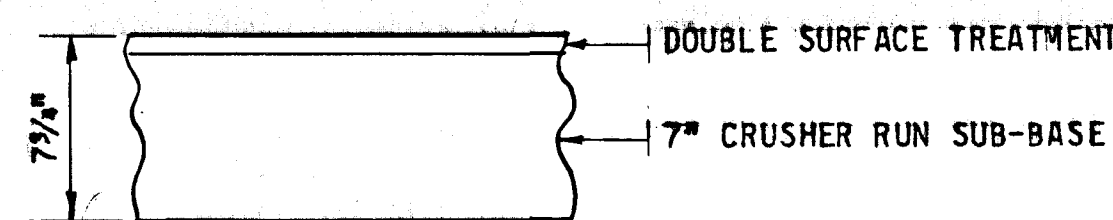
**SUB-BASE DRAINAGE DITCH SECTION**

NO SCALE



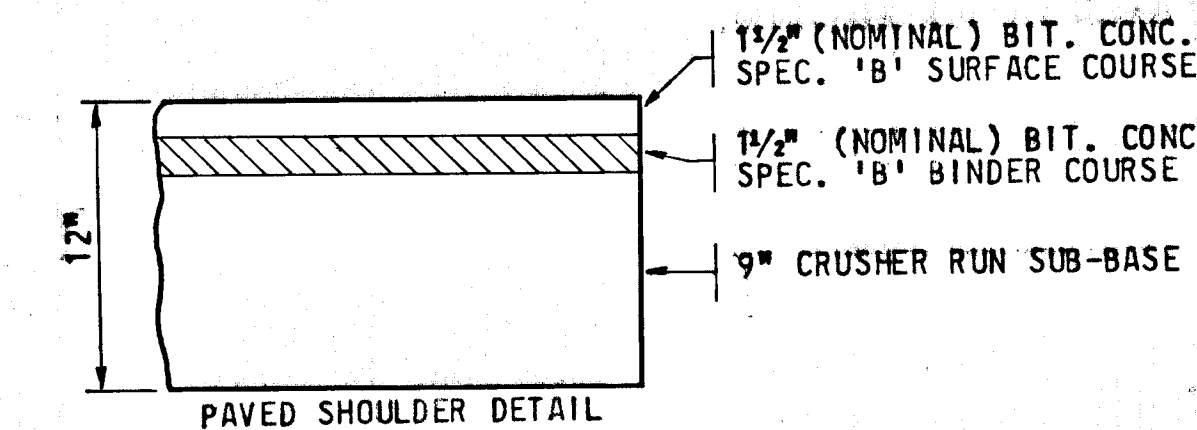
**CURB & GUTTER DETAIL  
ADJACENT TO MEDIAN**

SCALE: 2" = 1'



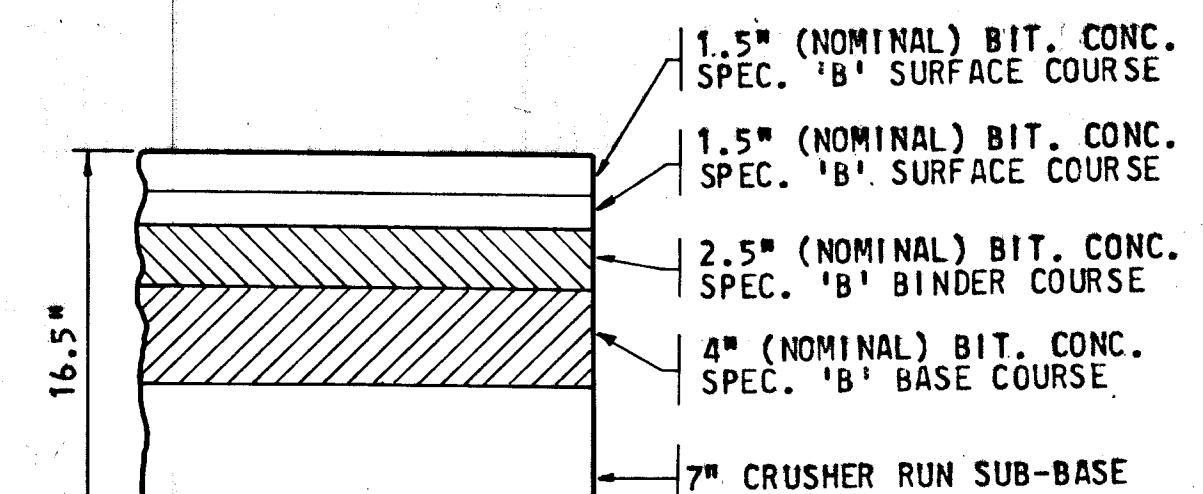
**PAVING DETAIL 'C'**

SCALE: 1/2" = 1'-0"



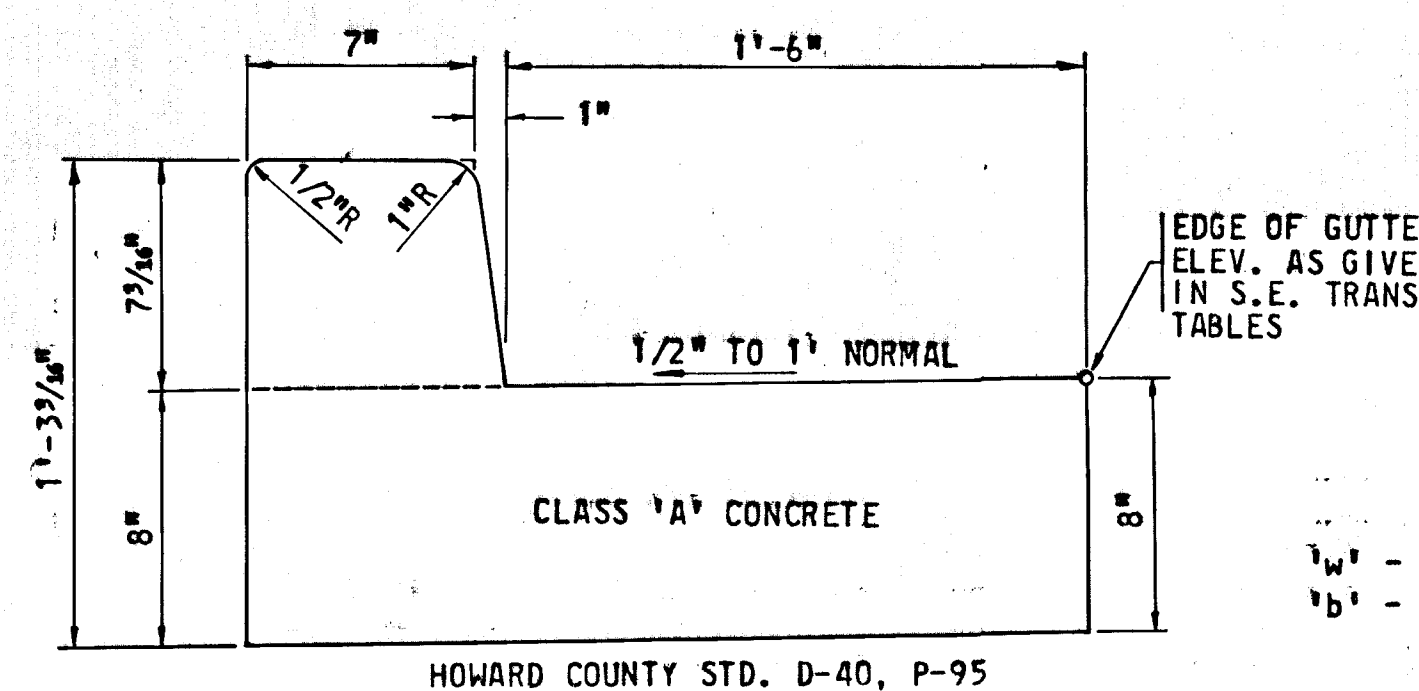
**PAVING DETAIL 'B'**

SCALE: 1 1/2" = 1'-0"



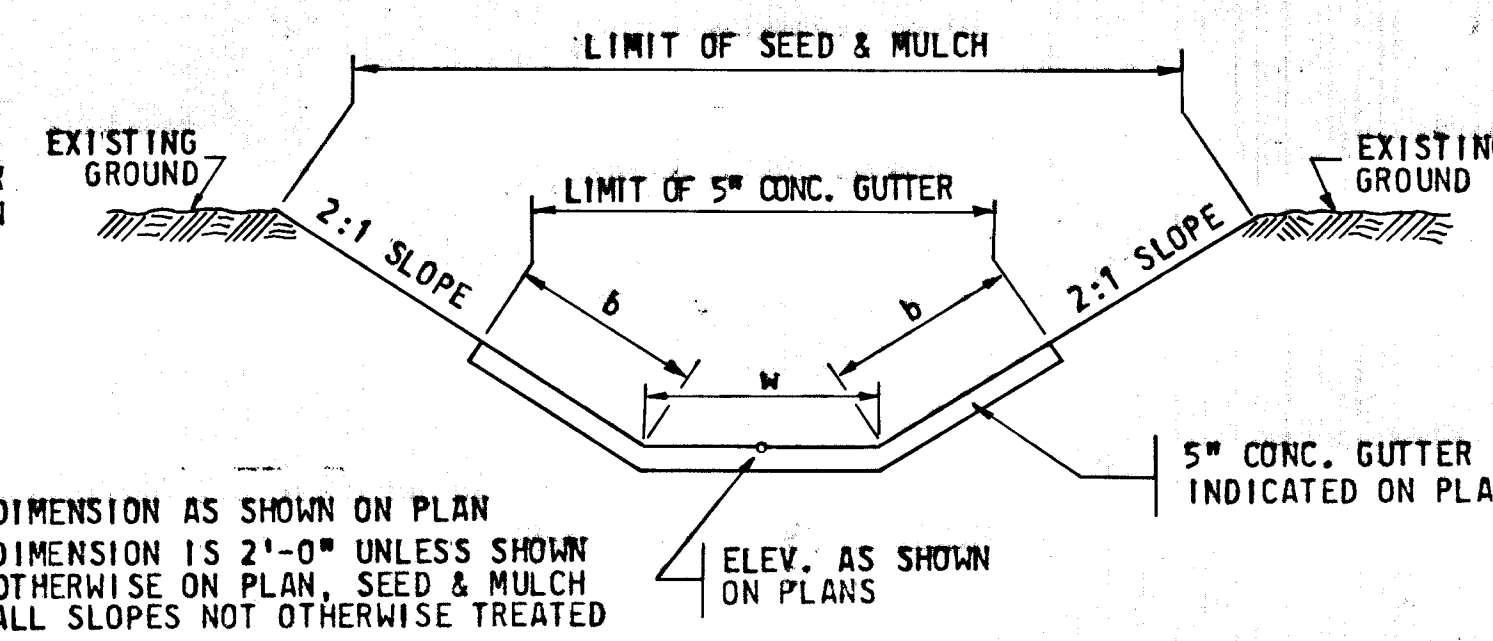
**PAVING DETAIL 'A'**

SCALE: 1 1/2" = 1'-0"



**CURB & GUTTER DETAIL  
ADJACENT TO SHOULDER**

SCALE: 2" = 1'



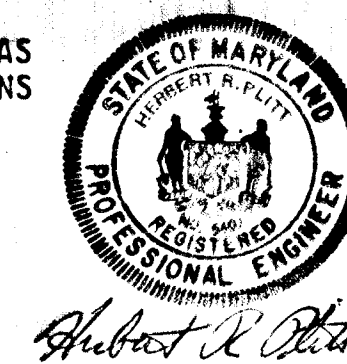
**INLET & OUTLET DITCH DETAIL**

NOT TO SCALE

1'w' - DIMENSION AS SHOWN ON PLAN  
1'b' - DIMENSION IS 2'-0" UNLESS SHOWN OTHERWISE ON PLAN. SEED & MULCH ALL SLOPES NOT OTHERWISE TREATED

DEPARTMENT OF PUBLIC WORKS  
*D. H. Weisand* 12/18/70  
 CHIEF, BUREAU OF HIGHWAYS DATE  
 OFFICE OF PLANNING AND ZONING  
 CHIEF ENGINEER, DIVISION OF LAND DEVELOPMENT DATE

GREEN ASSOCIATES, INC.  
 CONSULTING ENGINEERS  
 BALTIMORE, MARYLAND



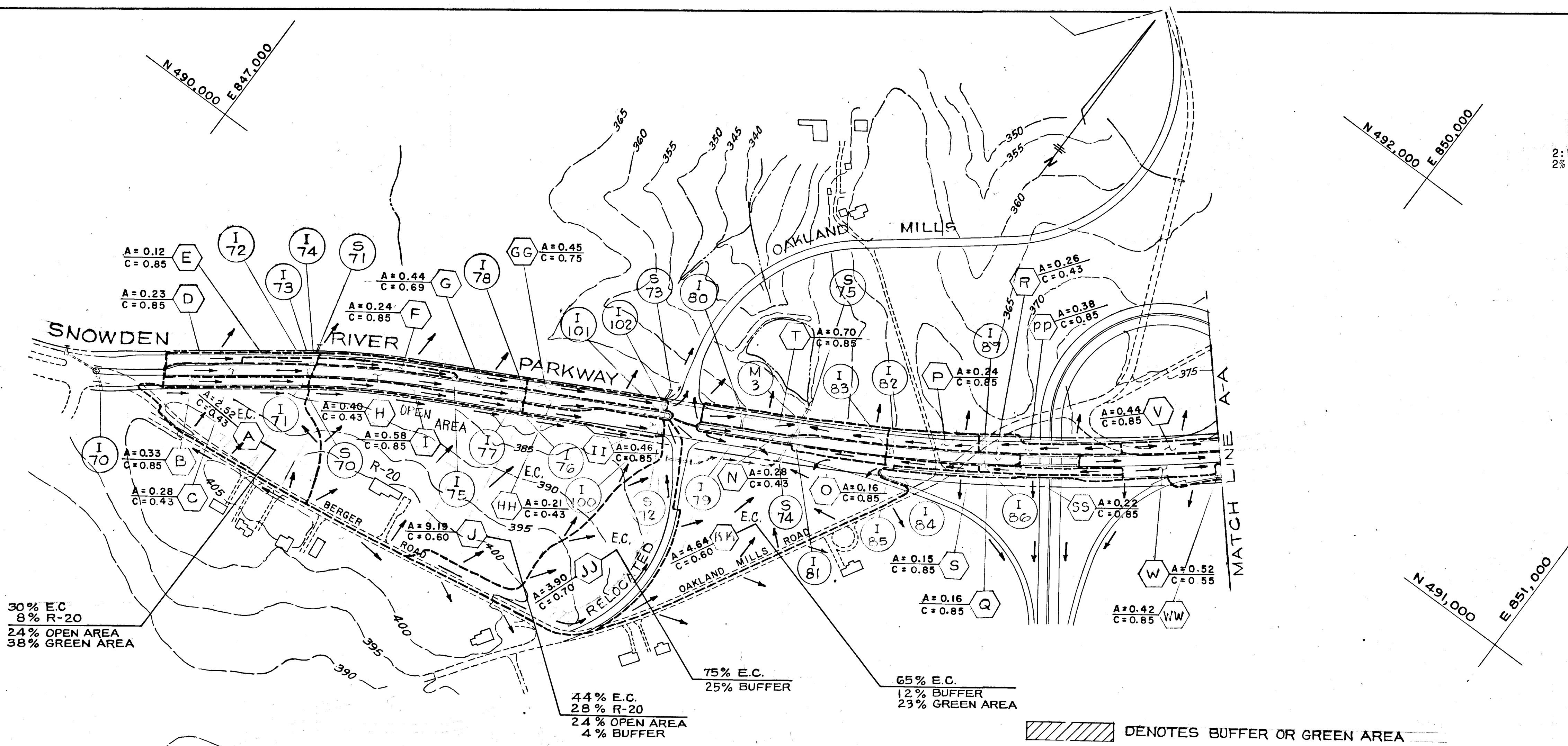
APPROVED  
 OFFICE OF PLANNING  
 AND ZONING OF  
 HOWARD COUNTY  
 DATE: 1/22/71  
*J. H. J.*

Rev. Date	Rev. No.	Revision Description
<b>COLUMBIA</b>		
M A R Y L A N D		
E L E C T I O N D I S T R I C T H O W A R D C O U N T Y		
HOWARD RESEARCH AND DEVELOPMENT CORP. <small>THE VILLAGE OF CROSS KEYS - BALTIMORE, MARYLAND 21210</small>		
PROJECT AREA	E.G.U. SUBDIVISION SECTION 1 AREA 3	
PROJECT TITLE	SNOWDEN RIVER PARKWAY TYPICAL SECTIONS & DETAILS	
Des. By	Scale	Draw. No.
Drn. By	Date	C. C. F. No.
CHK By	Approved	









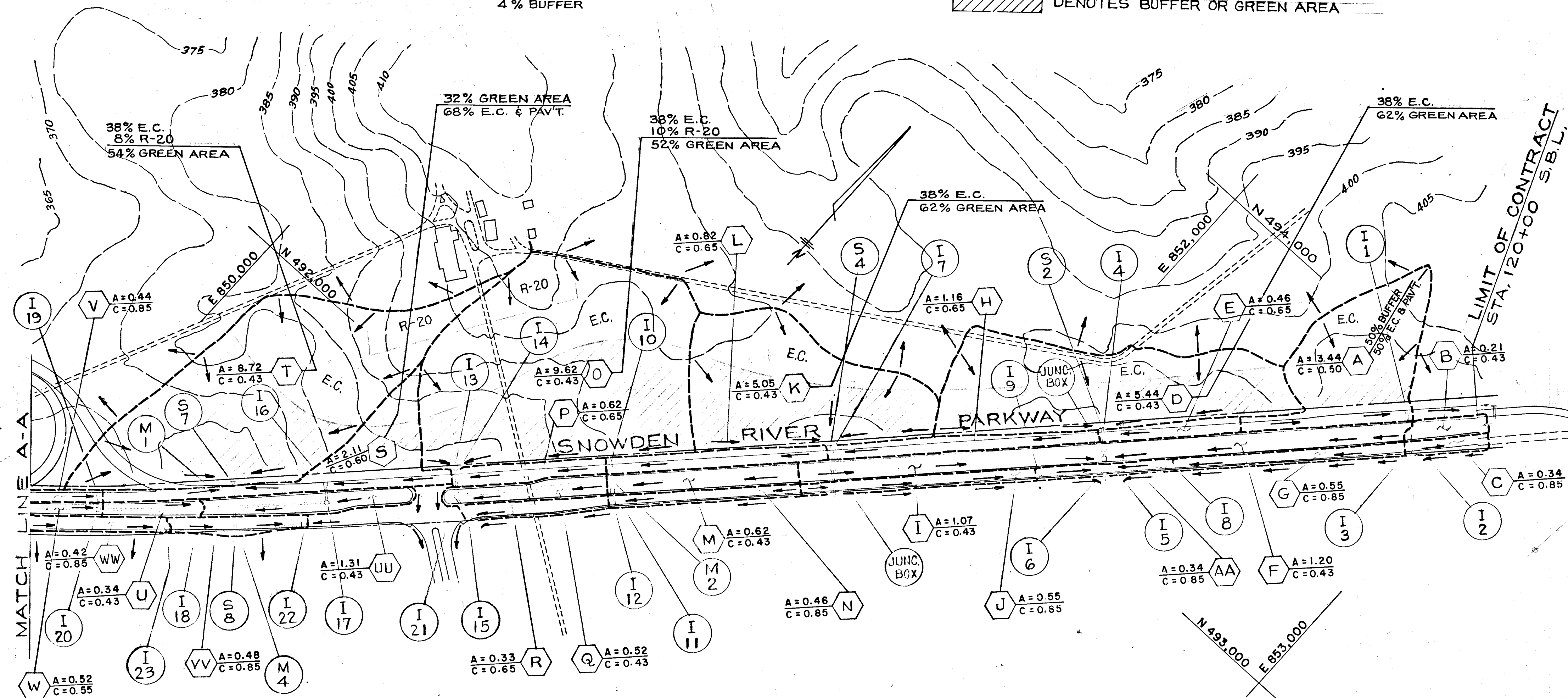
30% E.C.  
8% R-20  
24% OPEN AREA  
38% GREEN AREA

44% E.C.  
28% R-20  
24% OPEN AREA  
4% BUFFER

75% E.C.  
25% BUFFER

65% E.C.  
12% BUFFER  
23% GREEN AREA

/// DENOTES BUFFER OR GREEN AREA



38% E.C.  
8% R-20  
54% GREEN AREA

32% GREEN AREA  
68% E.C. & PAVT.

38% E.C.  
10% R-20  
52% GREEN AREA

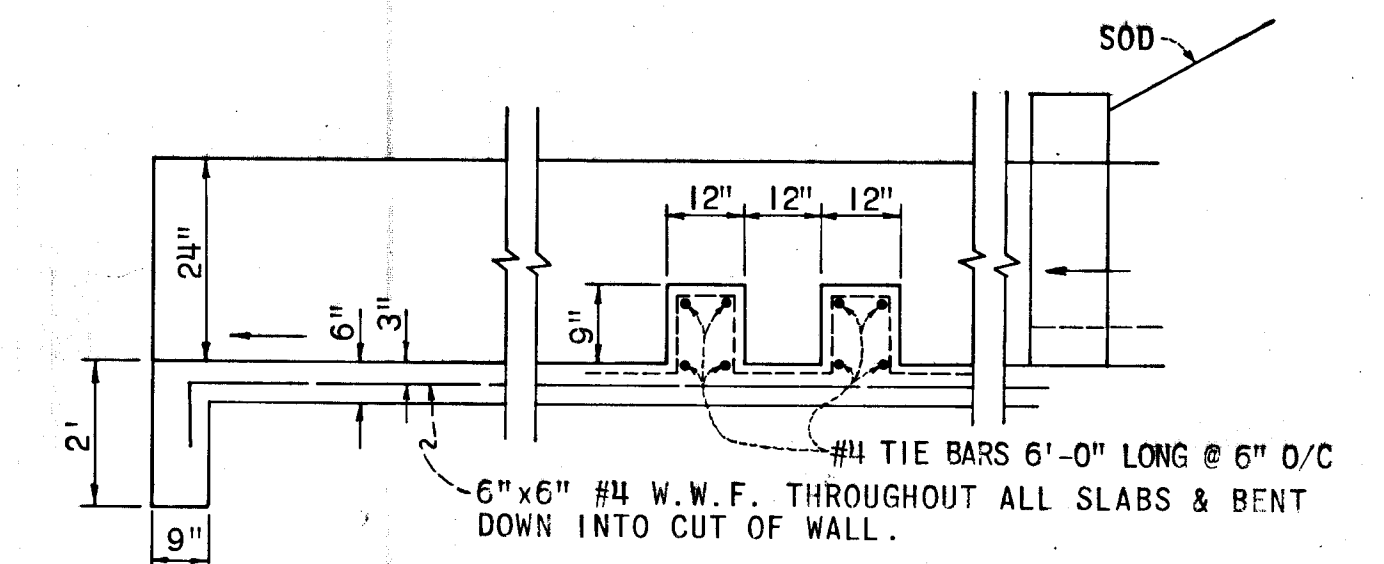
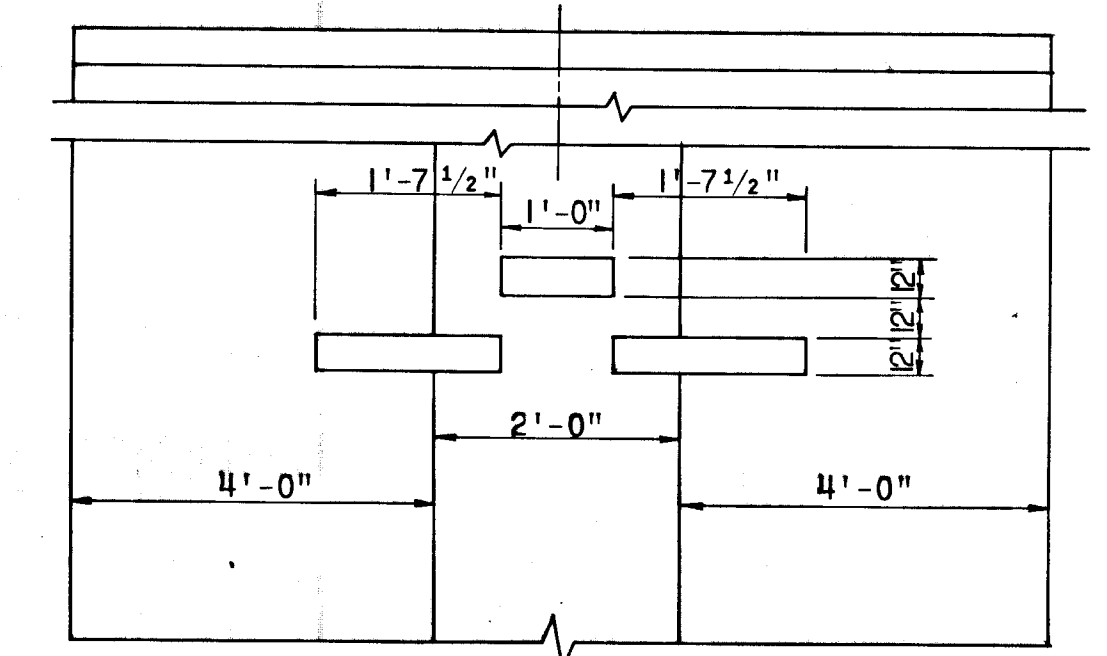
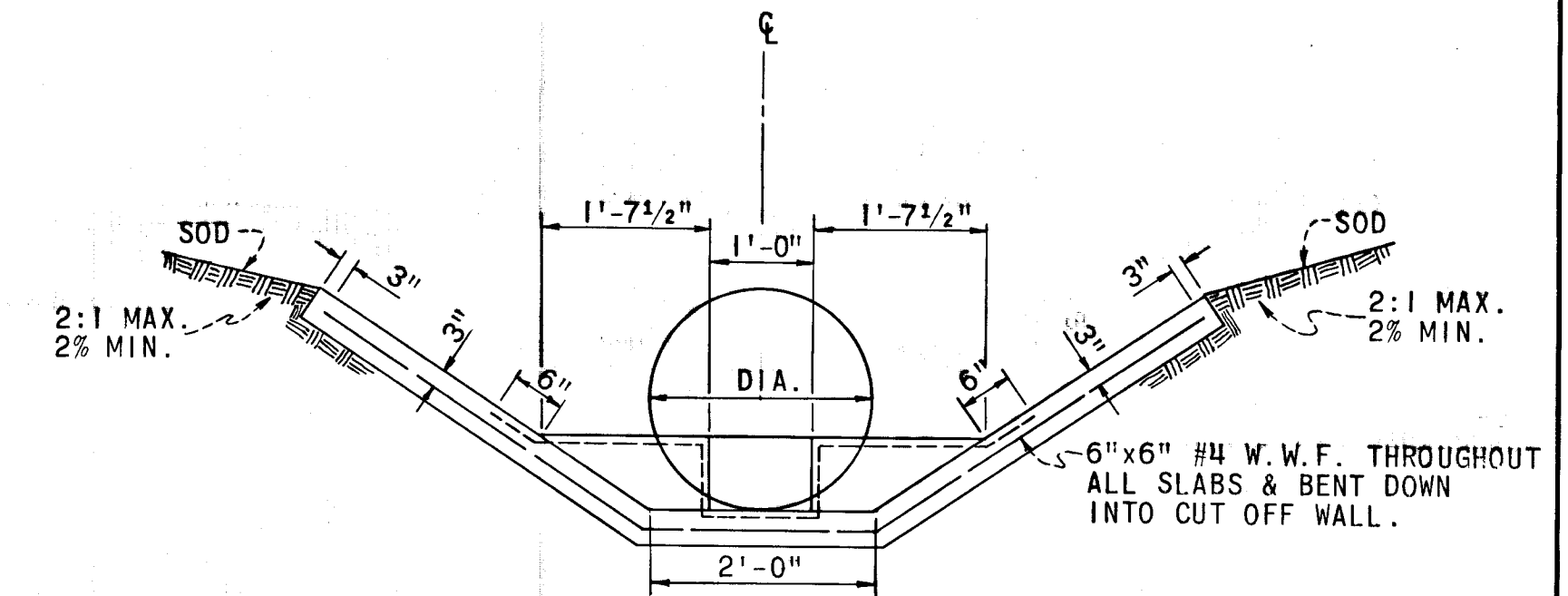
38% E.C.  
62% GREEN AREA

38% E.C.  
62% GREEN AREA

LIMIT OF CONTRACT  
STA. 120+00 S.B.L.

LIMIT OF TEMPORARY  
TIE-IN STA. 125+25

**DRAINAGE AREA MAP**  
SCALE: 1" = 200'



**VELOCITY CHECK DETAIL**

NO SCALE

VELOCITY CHECK TO BE USED  
AT THE FOLLOWING LOCATIONS  
671 - STA. 50+42 LT.

**APPROVED**  
OFFICE OF PLANNING  
AND ZONING OF  
HOWARD COUNTY  
DATE: 1/22/71

*J. B. D.*



DEPARTMENT OF PUBLIC WORKS  
*S. W. Newland* 12/18/70  
CHIEF, BUREAU OF HIGHWAYS DATE  
OFFICE OF PLANNING AND ZONING  
BALTIMORE, MARYLAND  
CHIEF ENGINEER, DIVISION OF LAND DEVELOPMENT DATE

*Robert R. Platt*  
GREEN ASSOCIATES, INC.  
CONSULTING ENGINEERS  
BALTIMORE, MARYLAND

Rev. Date	Rev. No.	Revision Description

**COLUMBIA**  
M A R Y L A N D  
6TH ELECTION DISTRICT HOWARD COUNTY  
HOWARD RESEARCH AND DEVELOPMENT CORP.  
THE VILLAGE OF CROOK KEYS BALTIMORE, MARYLAND 21220

PROJECT AREA: E. G. U. SUBDIVISION SECTION 1 AREA 3  
PROJECT TITLE: SNOWDEN RIVER PARKWAY DRAINAGE AREA MAP

Des. By: J.F. Scale: 1" = 200' Draw. No: 5 OF 13  
Date: J.B.D. Date: FEB. 23, 1970 C.C.T. No.  
Checked By: Approved:

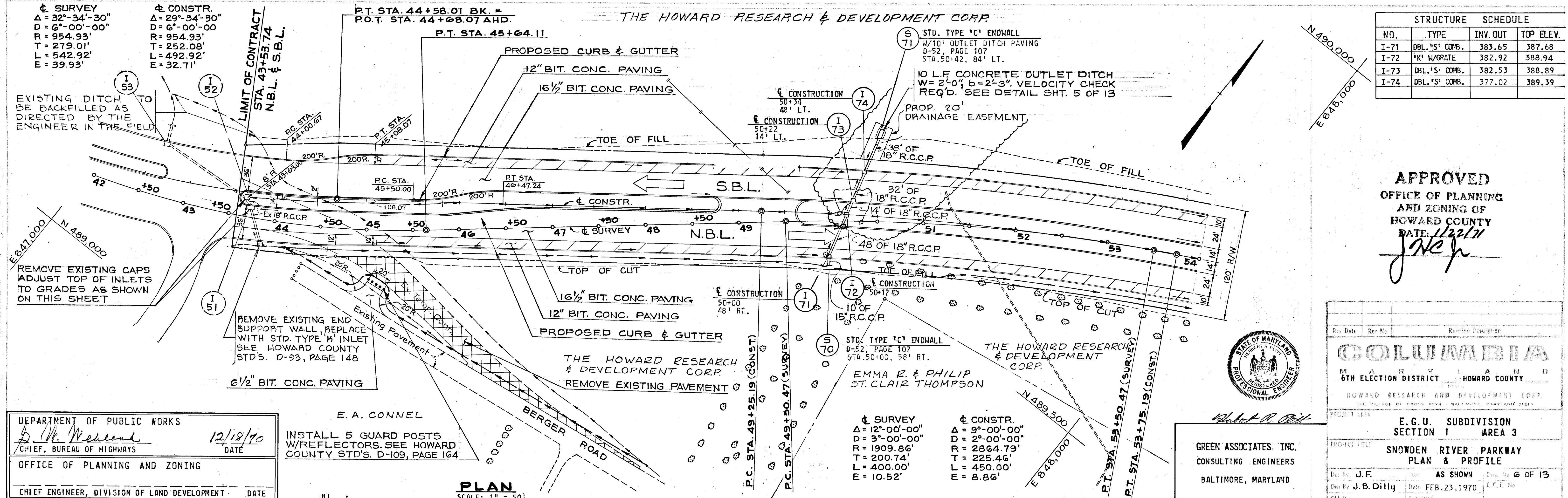


Δ = 32°-34'-30"  
 D = 6°-00'-00"  
 R = 954.93'  
 L = 279.01'  
 E = 542.92'  
 T = 39.93'

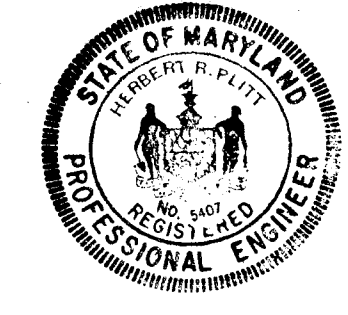
Δ = 29°-34'-30"  
 D = 6°-00'-00"  
 R = 954.93'  
 L = 492.92'  
 T = 252.08'  
 E = 32.71'

THE HOWARD RESEARCH & DEVELOPMENT CORP.

STRUCTURE		SCHEDULE	
NO.	TYPE	INV. OUT	TOP ELEV.
I-71	DBL.'S' COMB.	383.65	387.68
I-72	'K' W/GRATE	382.92	388.94
I-73	DBL.'S' COMB.	382.53	388.89
I-74	DBL.'S' COMB.	377.02	389.39



APPROVED  
 OFFICE OF PLANNING  
 AND ZONING OF  
 HOWARD COUNTY  
 DATE: 1/22/71  
*J. Neff*



GREEN ASSOCIATES, INC.  
 CONSULTING ENGINEERS  
 BALTIMORE, MARYLAND

Rev. No.	Revision Description

HOWARD RESEARCH AND DEVELOPMENT CORP.  
 THE VILLAGE OF CROSS KEYS & BAYVIEW, MARYLAND 21227

PROJECT AREA: E.G.U. SUBDIVISION SECTION 1 AREA 3  
 PROJECT TITLE: SNOWDEN RIVER PARKWAY PLAN & PROFILE

Drawn By: J.F. Date: FEB. 23, 1970  
 Checked By: J.B. Dilly

DEPARTMENT OF PUBLIC WORKS  
*S. M. Weiland*  
 CHIEF, BUREAU OF HIGHWAYS  
 DATE: 12/18/70

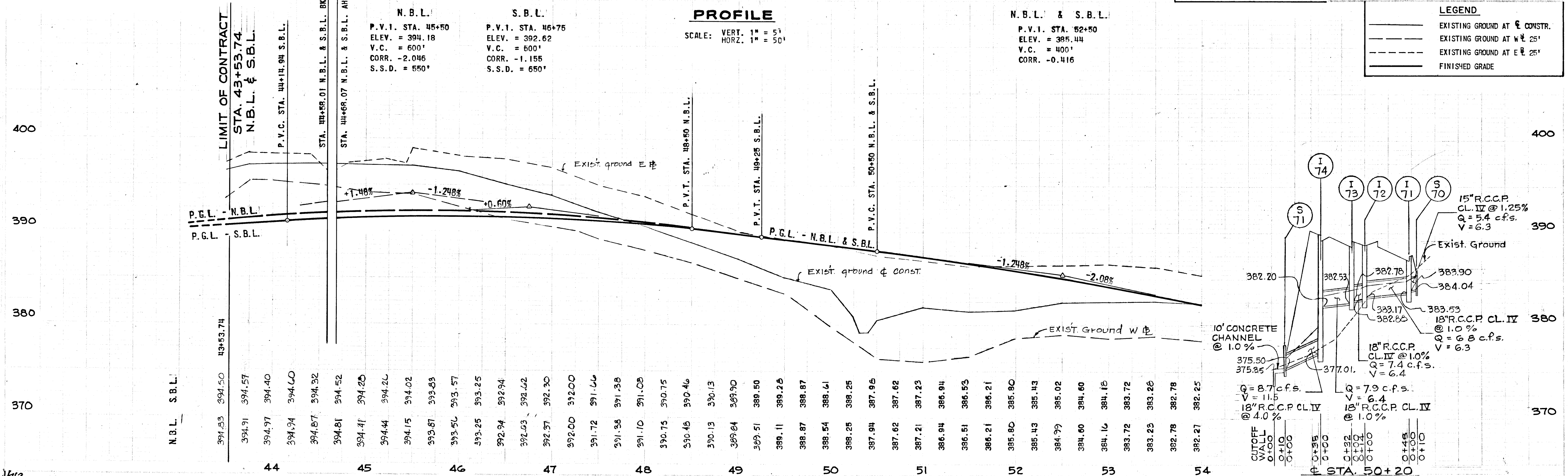
OFFICE OF PLANNING AND ZONING  
 CHIEF ENGINEER, DIVISION OF LAND DEVELOPMENT

E. A. CONNELL  
 INSTALL 5 GUARD POSTS  
 W/REFLECTORS. SEE HOWARD  
 COUNTY STD'S. D-109, PAGE 164

PLAN SCALE: 1" = 50'

PROFILE

SCALE: VERT. 1" = 5'  
HORZ. 1" = 50'



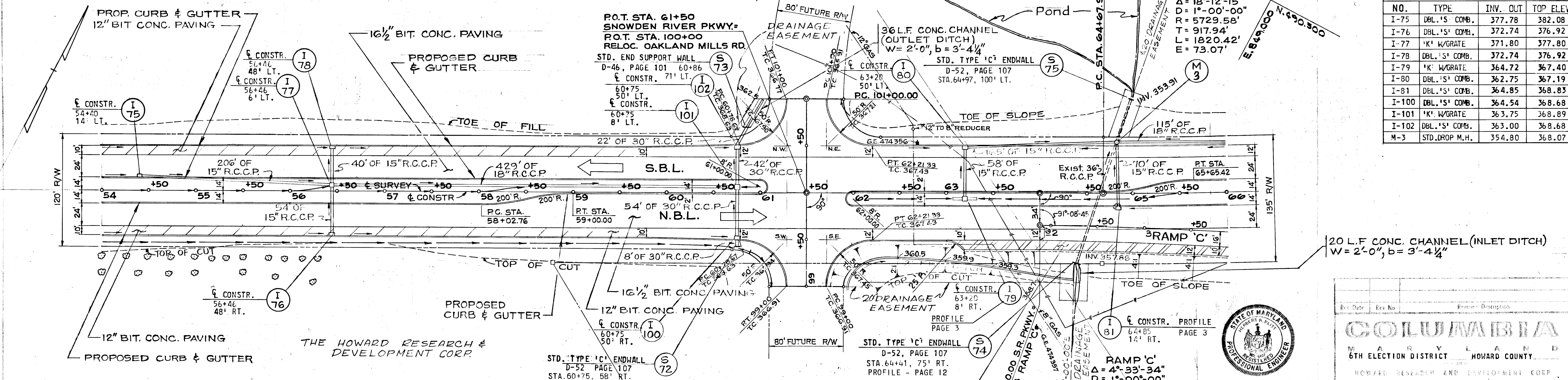
LEGEND

- EXISTING GROUND AT E CONSTR.
- EXISTING GROUND AT W @ 25'
- EXISTING GROUND AT E @ 25'
- FINISHED GRADE



THE HOWARD RESEARCH & DEVELOPMENT CORP.

STRUCTURE		SCHEDULE		
NO.	TYPE	INV.	OUT.	TOP ELEV.
I-75	DBL.'S' COMB.	377.78	382.08	
I-76	DBL.'S' COMB.	372.74	376.92	
I-77	'K' W/GRATE	371.80	377.80	
I-78	DBL.'S' COMB.	372.74	376.92	
I-79	'K' W/GRATE	364.72	367.40	
I-80	DBL.'S' COMB.	362.75	367.19	
I-81	DBL.'S' COMB.	364.85	368.83	
I-100	DBL.'S' COMB.	364.54	368.68	
I-101	'K' W/GRATE	363.75	368.89	
I-102	DBL.'S' COMB.	363.00	368.68	
M-3	STD. DROP M.H.	354.80	368.07	



DEPARTMENT OF PUBLIC WORKS  
 B. M. McKeand  
 CHIEF, BUREAU OF HIGHWAYS  
 OFFICE OF PLANNING AND ZONING  
 CHIEF ENGINEER, DIVISION OF LAND DEVELOPMENT

DATE: 12/18/70

THE GENERAL ELECTRIC CO.  
 7 3/4" BIT. TREATED PAVING

**APPROVED**  
 OFFICE OF PLANNING AND ZONING OF HOWARD COUNTY  
 DATE: 1/22/71  
 JAC

STATE OF MARYLAND  
 REGISTERED PROFESSIONAL ENGINEER  
 Robert R. Blitt

GREEN ASSOCIATES, INC.  
 CONSULTING ENGINEERS  
 BALTIMORE, MARYLAND

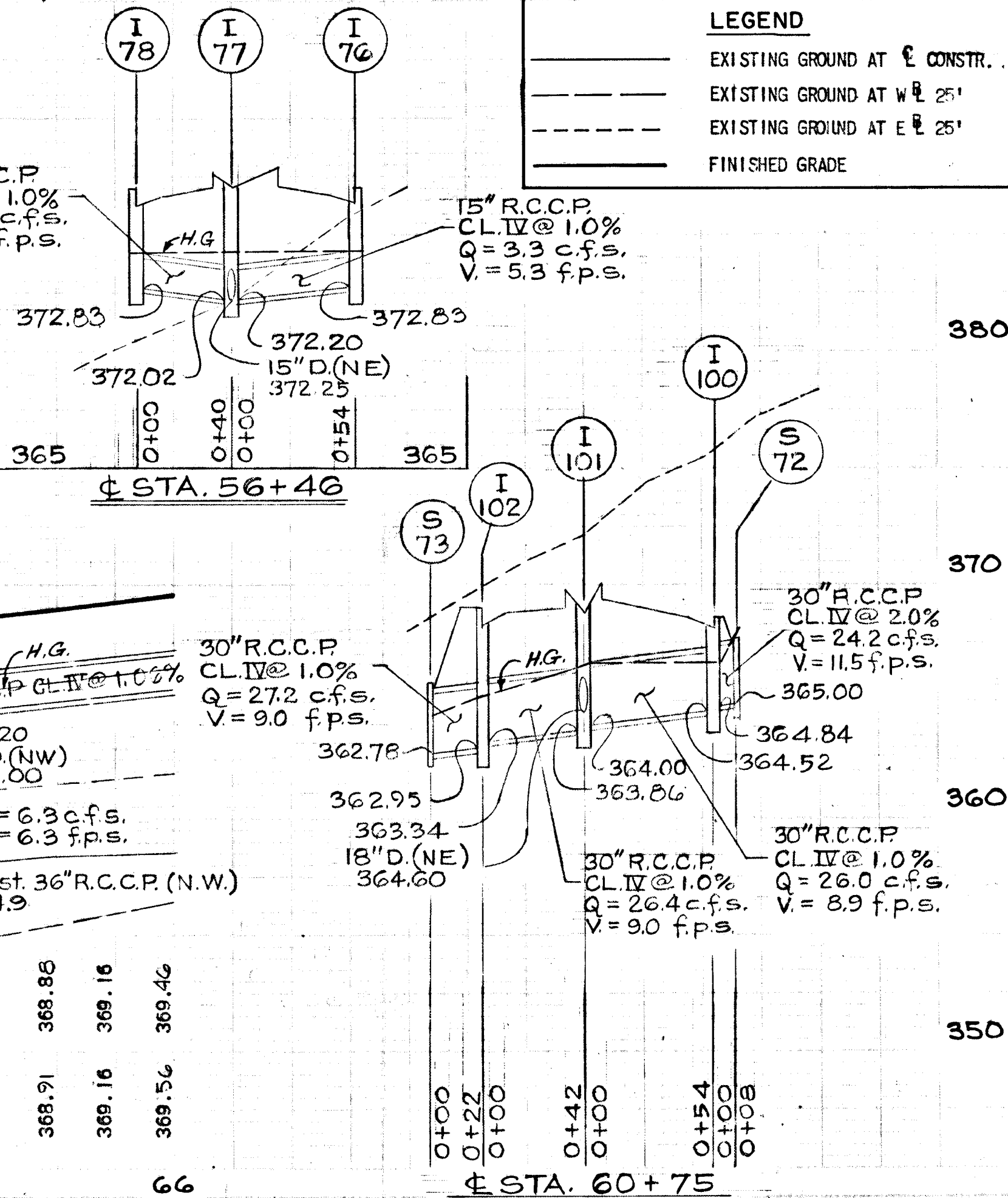
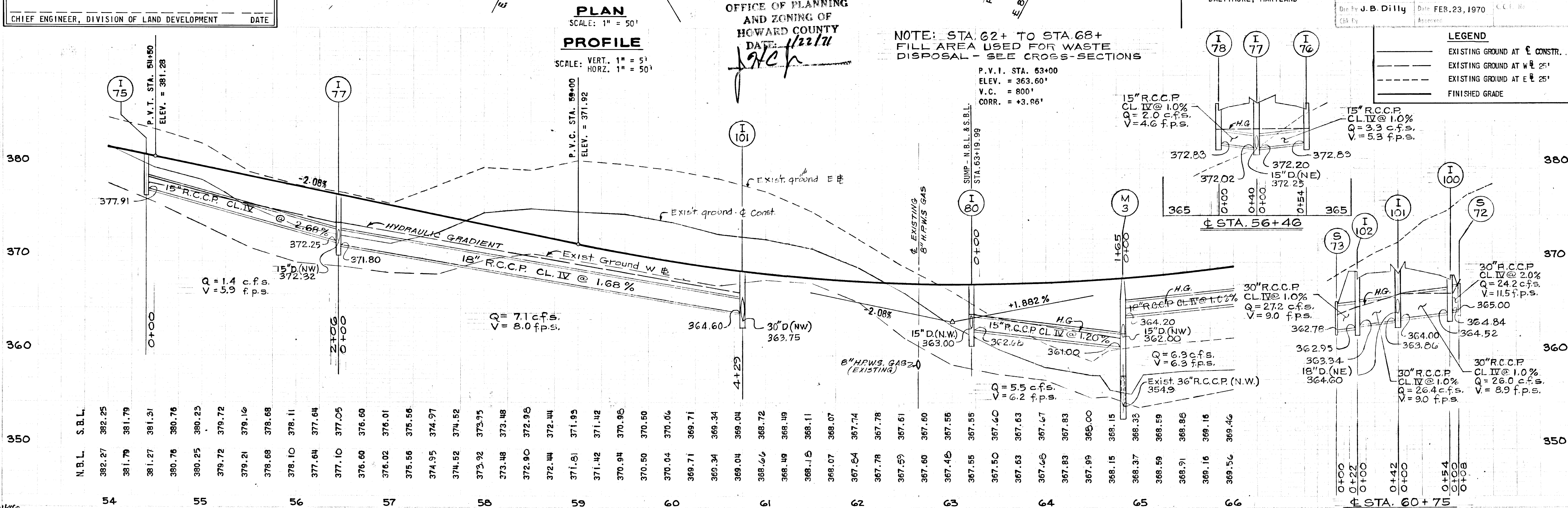
COLUMBIA  
 MARYLAND  
 6TH ELECTION DISTRICT HOWARD COUNTY

HOWARD RESEARCH AND DEVELOPMENT CORP.  
 THE VILLAGE OF CROOK ACCT. BALTIMORE, MARYLAND 21210

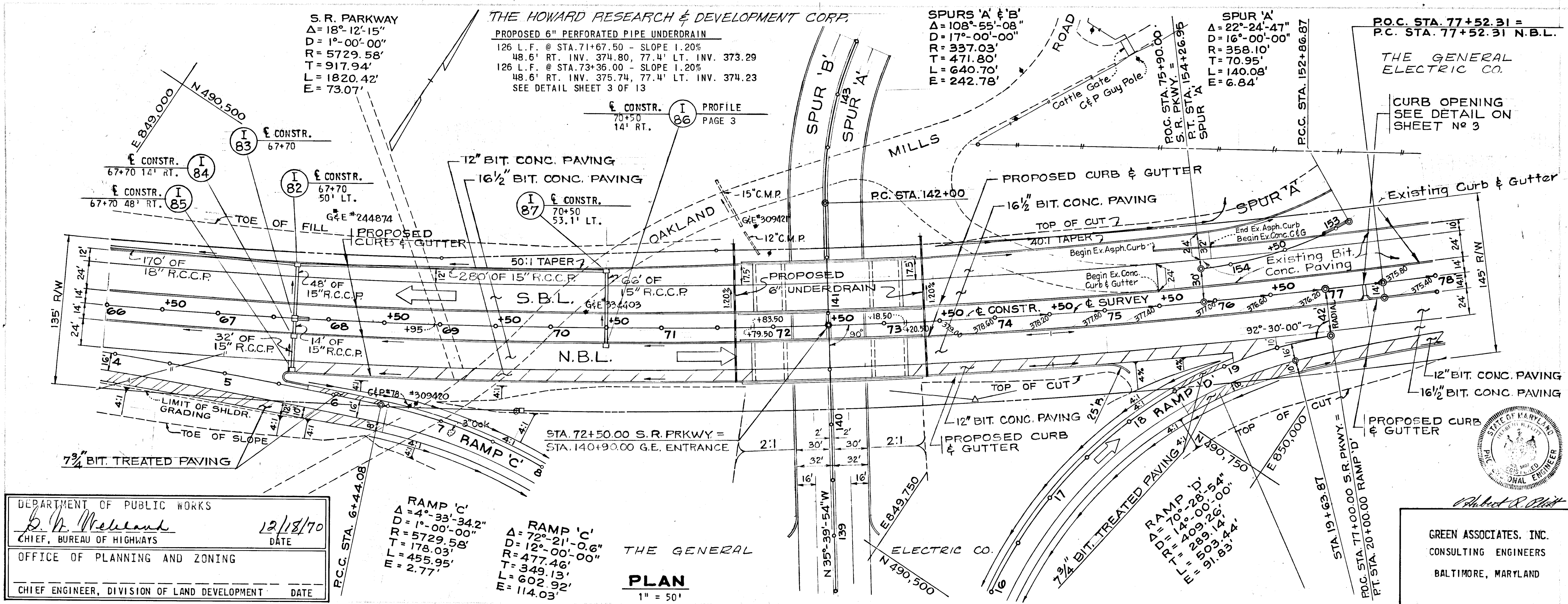
E. G. U. SUBDIVISION  
 SECTION 1 AREA 3

SNOWDEN RIVER PARKWAY  
 PLAN & PROFILE

Drawn by J.F. AS SHOWN SHEET 7 OF 13  
 Date FEB. 23, 1970  
 Checked by J.B. Dilly  
 Approved







STRUCTURE		SCHEDULE	
NO.	TYPE	INV. OUT	TOP ELEV.
I-82	DBL. 'S' CO#B.	367.00	372.09
I-83	K W/GRATE	367.70	372.82
I-84	DBL. 'S' COMB.	368.08	373.05
I-85	DBL. 'S' COMB.	368.65	373.13
I-86	DBL. 'S' COMB.	373.30	377.41
I-87	DBL. 'S' COMB.	371.70	376.33

NOTE: LT. STA. 75+48 TO STA. 76+00 REMOVE EXISTING BIT. CURB & EXISTING PAVED SHOULDER AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

**APPROVED**  
 OFFICE OF PLANNING  
 AND ZONING OF  
 HOWARD COUNTY  
 DATE: 1/22/71  
*J.M.P.*

DEPARTMENT OF PUBLIC WORKS  
*S.H. McElreath*  
 CHIEF, BUREAU OF HIGHWAYS  
 OFFICE OF PLANNING AND ZONING  
 CHIEF ENGINEER, DIVISION OF LAND DEVELOPMENT  
 DATE: 12/18/70

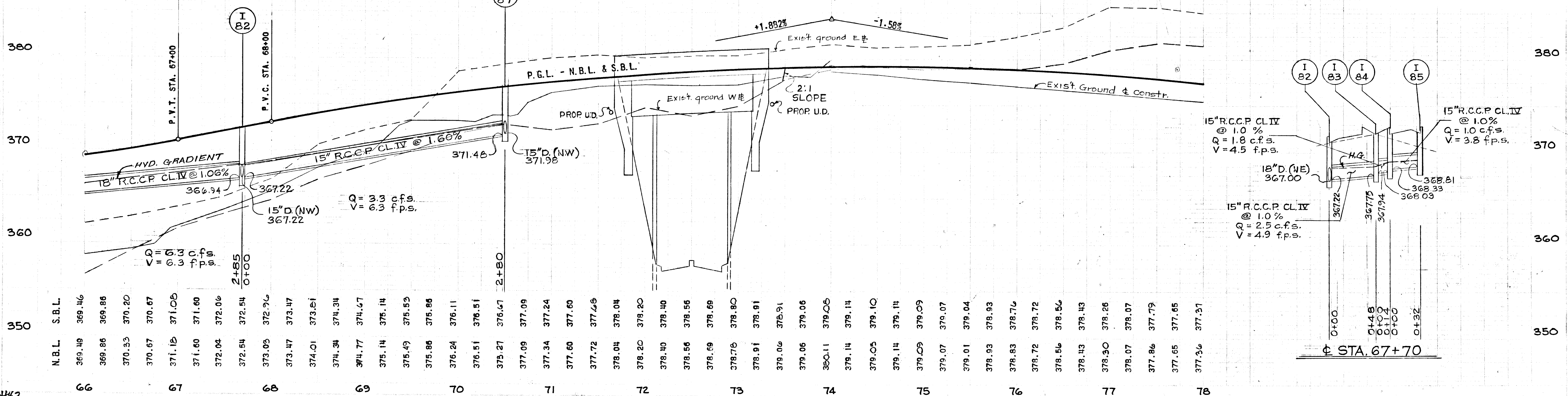
STATE OF MARYLAND  
 PROFESSIONAL ENGINEER  
 GREEN ASSOCIATES, INC.  
 CONSULTING ENGINEERS  
 BALTIMORE, MARYLAND

Rev. Date	Rev. No.	Revision Description
<b>COLUMBIA</b>		
M. A. R. V. L. A. N. D.		
6TH ELECTION DISTRICT HOWARD COUNTY		
HOWARD RESEARCH AND DEVELOPMENT CORP.		
PROJECT AREA		
E. G. U. SUBDIVISION SECTION 1 AREA 3		
PROJECT TITLE		
SNOWDEN RIVER PARKWAY PLAN & PROFILE		
Des. By	AS SHOWN	8 OF 13
Dir. By	J. B. Dilly	Date FEB. 23, 1970
CHK. BY	Approved	

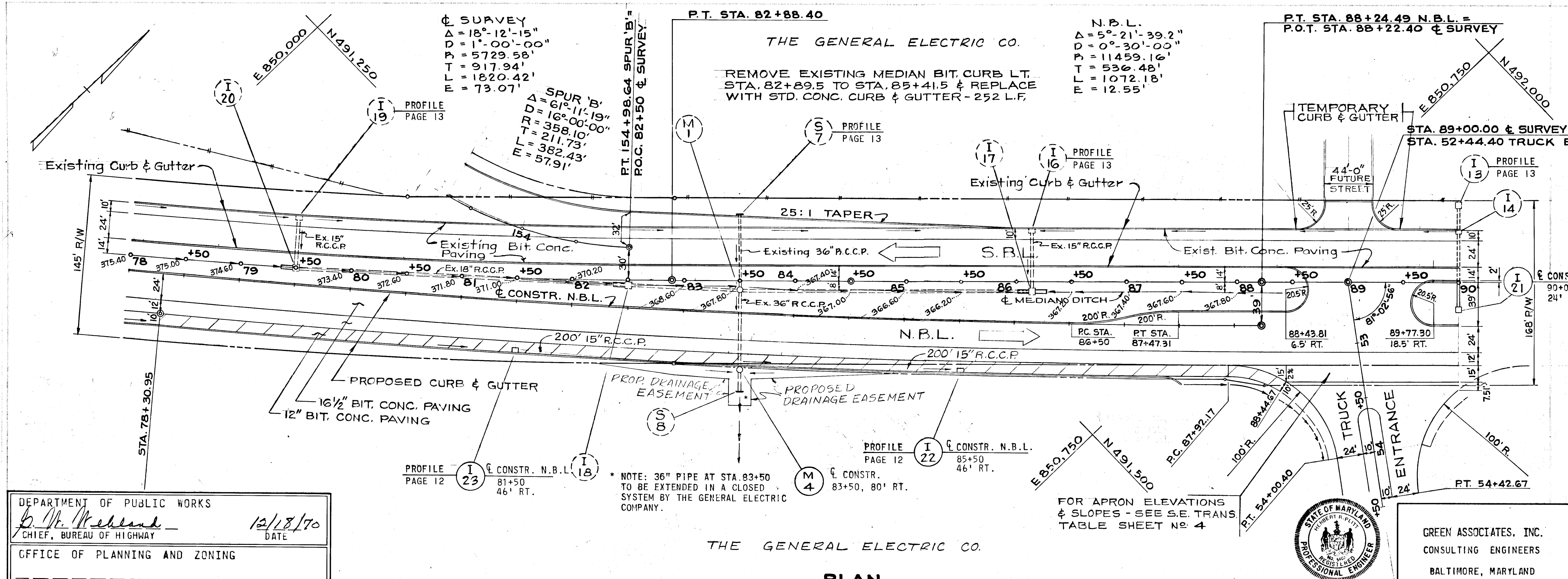
**PROFILE**  
 VERT. 1" = 5'  
 HORZ. 1" = 50'

NOTE: FOR PROFILE OF RAMPS 'C' & 'D' SEE SHEET 4 OF 13

**N.B.L. & S.B.L.**  
 P.V.I. STA. 74+00  
 ELEV. = 384.30  
 V.C. = 1200'  
 CORR. -5.193  
 S.S.D. > 675'







STRUCTURE SCHEDULE			
NO.	TYPE	INV. OUT	TOP ELEV.
I-13	'K' W/GRATE	EXISTING	INLET
I-14	DBL.'S' COMB.	EXISTING	INLET
I-16	DBL.'S' COMB.	EXISTING	INLET
I-17	'K' W/GRATE	EXISTING	INLET
I-18	'K' W/GRATE	EXISTING	INLET
I-19	DBL.'S' COMB.	EXISTING	INLET
I-20	'K' W/GRATE	EXISTING	INLET
I-21	'K' W/GRATE	366.00	370.35
I-22	DBL.'S' COMB.	363.61	367.71
I-23	DBL.'S' COMB.	367.83	371.93
M-1	STD. DROP M.H.	EXISTING	MANHOLE
M-4	STD. DROP M.H.	358.00	369.42

DEPARTMENT OF PUBLIC WORKS  
*B. W. Meland*  
 CHIEF, BUREAU OF HIGHWAY  
 12/18/70  
 DATE

OFFICE OF PLANNING AND ZONING  
 CHIEF ENGINEER, DIVISION OF LAND DEVELOPMENT  
 DATE

**COLUMBIA**  
 6TH ELECTION DISTRICT HOWARD COUNTY  
 HOWARD RESEARCH AND DEVELOPMENT CORP.  
 THE VILLAGE OF PIPES RUN, EDLWYCE, MARYLAND 21076

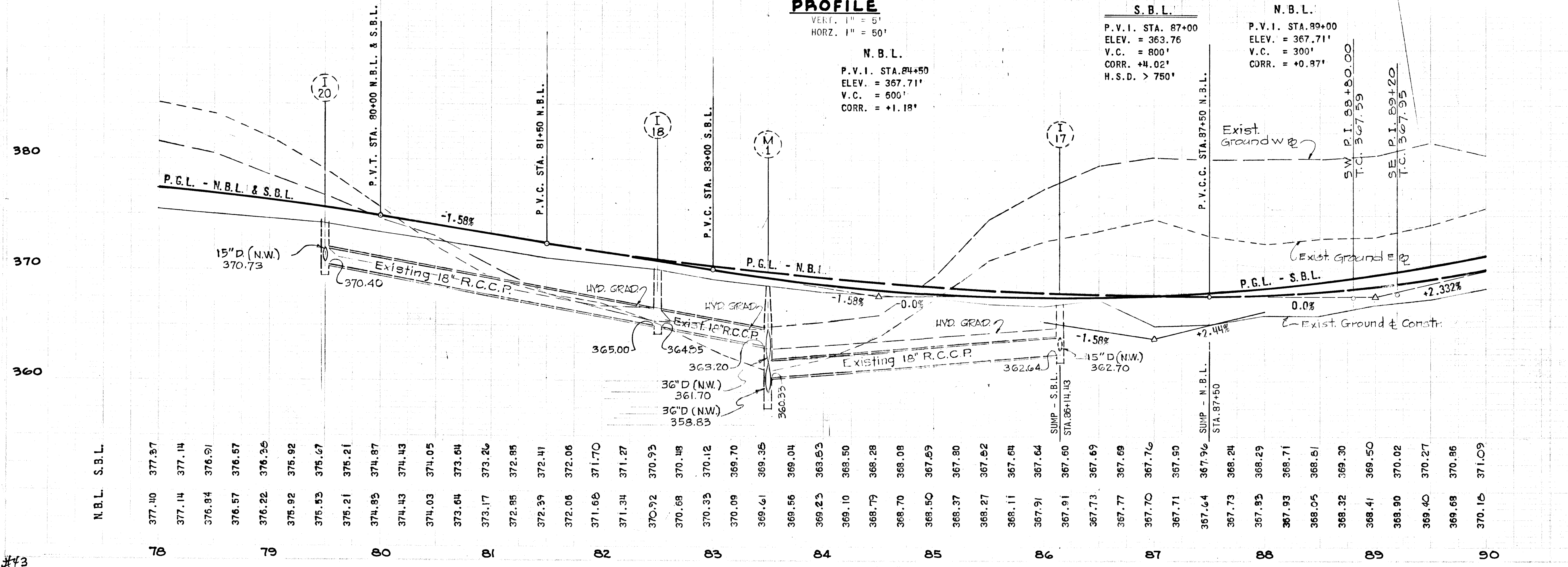
PROJECT AREA  
**E.G.U. SUBDIVISION SECTION 1 AREA 3**

PROJECT TITLE  
**SNOWDEN RIVER PARKWAY PLAN & PROFILE**

Drawn By: J.F. AS SHOWN 9 OF 13  
 Date: FEB. 23, 1970  
 Checked By: J.B. Dilly

**GREEN ASSOCIATES, INC.**  
 CONSULTING ENGINEERS  
 BALTIMORE, MARYLAND

**PLAN**  
**PROFILE**



**LEGEND**

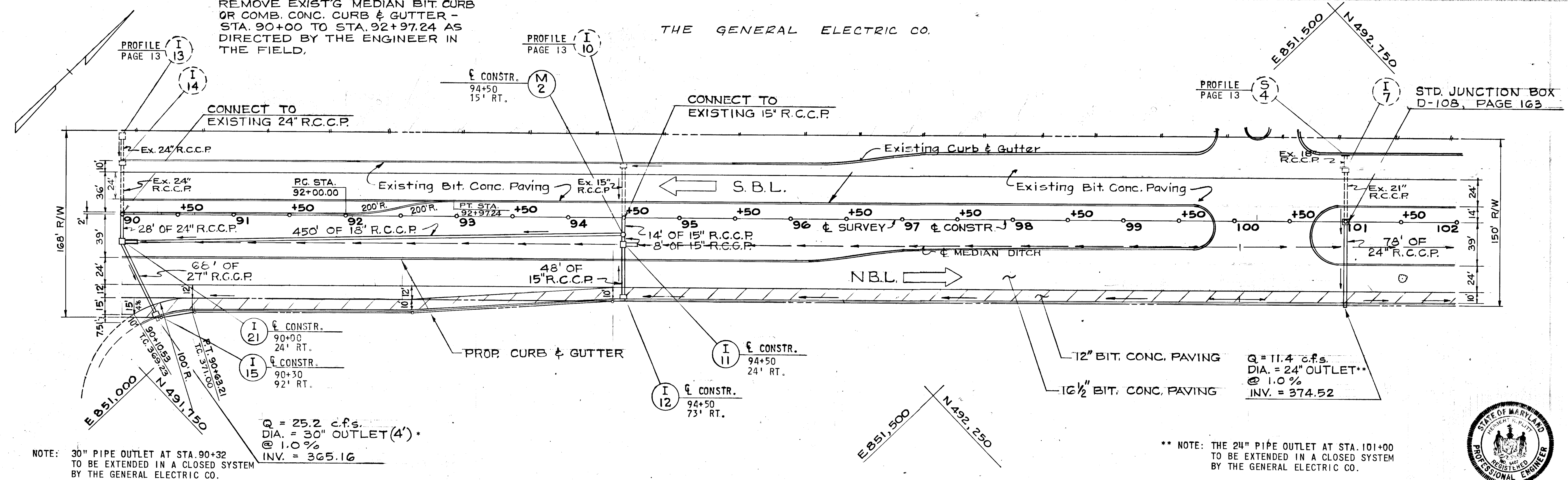
- EXISTING GROUND AT & CONSTR.
- EXISTING GROUND AT W & E 25'
- EXISTING GROUND AT E & W 25'
- FINISHED GRADE

**APPROVED**  
 OFFICE OF PLANNING AND ZONING OF HOWARD COUNTY  
 DATE: 1/22/71  
*J. H. C.*



REMOVE EXIST'G MEDIAN BIT CURB OR COMB. CONC. CURB & GUTTER - STA. 90+00 TO STA. 92+97.24 AS DIRECTED BY THE ENGINEER IN THE FIELD.

THE GENERAL ELECTRIC CO.



STRUCTURE		SCHEDULE	
NO.	TYPE	INV. OUT	TOP ELEV.
I-7	DBL.'S' COMB.	EXISTING	INLET
I-10	DBL.'S' COMB.	EXISTING	INLET
I-11	'K' W/GRATE	375.25	380.40
I-12	DBL.'S' COMB.	376.00	380.07
I-13	'K' W/GRATE	EXISTING	INLET
I-14	DBL.'S' COMB.	EXISTING	INLET
I-15	DBL.'S' COMB.	365.00	369.76
I-21	'K' W/GRATE	366.00	370.18
M-2	STD. M.H.	370.00	380.85

APPROVED  
OFFICE OF PLANNING  
AND ZONING OF  
HOWARD COUNTY  
DATE: 1/22/70  
*J. B. Dilly*

STATE OF MARYLAND  
REGISTERED PROFESSIONAL ENGINEER  
*Robert J. Pitt*

Rev. Date:    Rev. No:    Revision Description:

**COLUMBIA**  
6TH ELECTION DISTRICT    HOWARD COUNTY  
HOWARD RESEARCH AND DEVELOPMENT CORP.  
THE VILLAGES OF CROSS KEYS, BALTIMORE, MARYLAND 21210

PROJECT AREA: E. G. U. SUBDIVISION SECTION 1 AREA 3

PROJECT TITLE: SNOWDEN RIVER PARKWAY PLAN & PROFILE

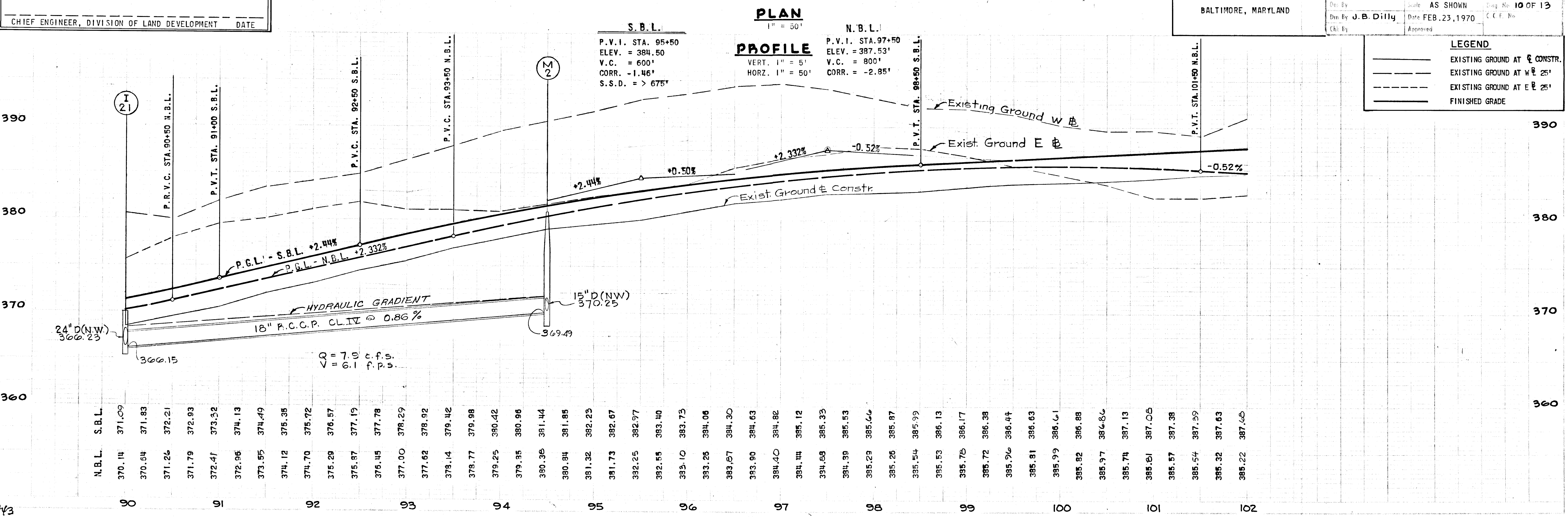
De. By:    Date: AS SHOWN    Drawing No: 10 OF 13  
Des. By: J. B. Dilly    Date: FEB. 23, 1970    C.C.E. No:  
Chk. By:    Approved:

DEPARTMENT OF PUBLIC WORKS  
*B. N. Walden*    12/18/70  
CHIEF, BUREAU OF HIGHWAYS    DATE

OFFICE OF PLANNING AND ZONING  
CHIEF ENGINEER, DIVISION OF LAND DEVELOPMENT    DATE

GREEN ASSOCIATES, INC.  
CONSULTING ENGINEERS  
BALTIMORE, MARYLAND

THE GENERAL ELECTRIC CO.



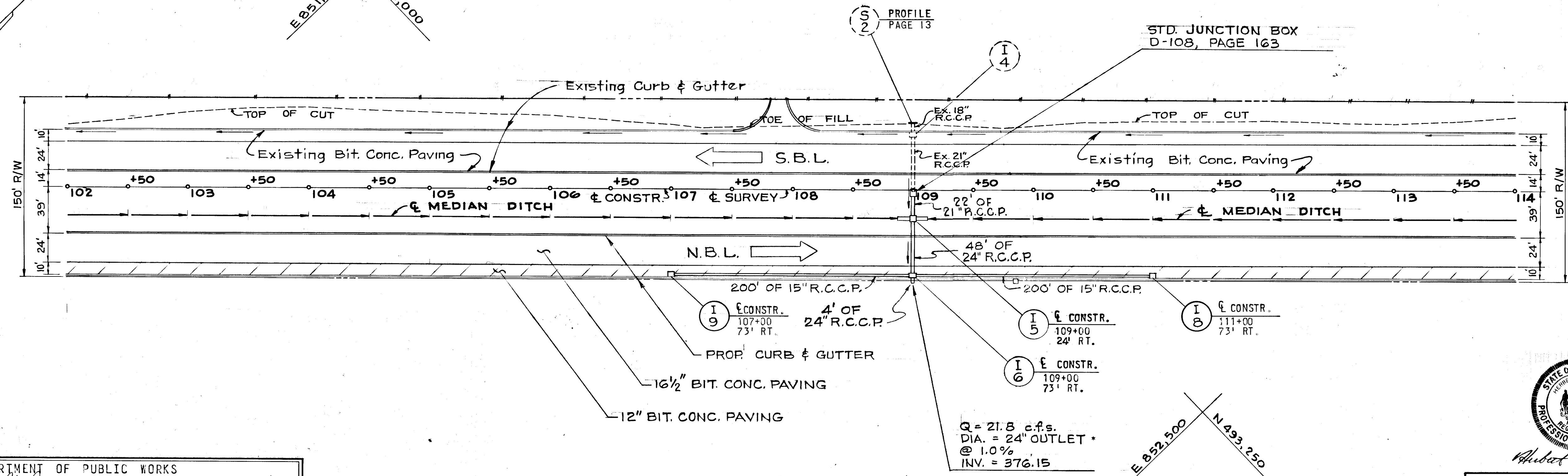
**LEGEND**

- EXISTING GROUND AT  $\phi$  CONSTR.
- - - EXISTING GROUND AT W  $\phi$  25'
- - - EXISTING GROUND AT E  $\phi$  25'
- FINISHED GRADE



THE GENERAL ELECTRIC CO.

STRUCTURE SCHEDULE			
NO.	TYPE	INH. OUT	TOP ELEV.
I-4	DBL.'S' COMB.	EXISTING	INLET
I-5	'K' W/GRATE	377.75	381.85
I-6	DBL.'S' COMB.	376.20	381.53
I-8	DBL.'S' COMB.	378.20	382.31
I-9	DBL.'S' COMB.	378.20	382.31



APPROVED  
OFFICE OF PLANNING  
AND ZONING OF  
HOWARD COUNTY  
DATE: 1/22/71  
*J. J. [Signature]*

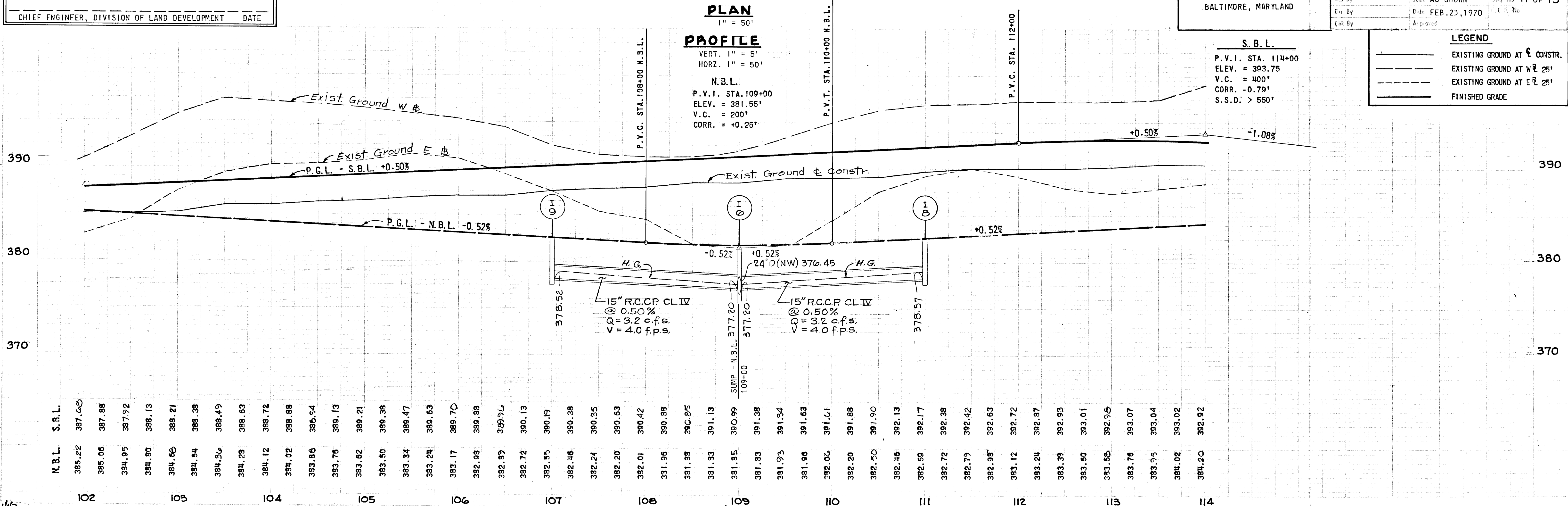
DEPARTMENT OF PUBLIC WORKS  
*G. H. McKeand*  
CHIEF, BUREAU OF HIGHWAYS  
OFFICE OF PLANNING AND ZONING  
CHIEF ENGINEER, DIVISION OF LAND DEVELOPMENT  
DATE: 12/18/70

STATE OF MARYLAND  
PROFESSIONAL ENGINEER  
*Arthur H. Elliot*  
GREEN ASSOCIATES, INC.  
CONSULTING ENGINEERS  
BALTIMORE, MARYLAND

Rev. Date	Rev. No.	Revision Description
<b>COLUMBIA</b> 6TH ELECTION DISTRICT HOWARD COUNTY HOWARD RESEARCH AND DEVELOPMENT CORP. THE VILLAGE OF CHERRY KEYS BALTIMORE, MARYLAND 21210 PROJECT AREA: E.G.U. SUBDIVISION SECTION 1 AREA 3 PROJECT TITLE: SNOWDEN RIVER PARKWAY PLAN & PROFILE Des. By: Scale AS SHOWN Deg. No. 11 OF 13 Dwn. By: Date FEB. 23, 1970 C.C.F. No. C.H. By: Approved		

PLAN  
1" = 50'

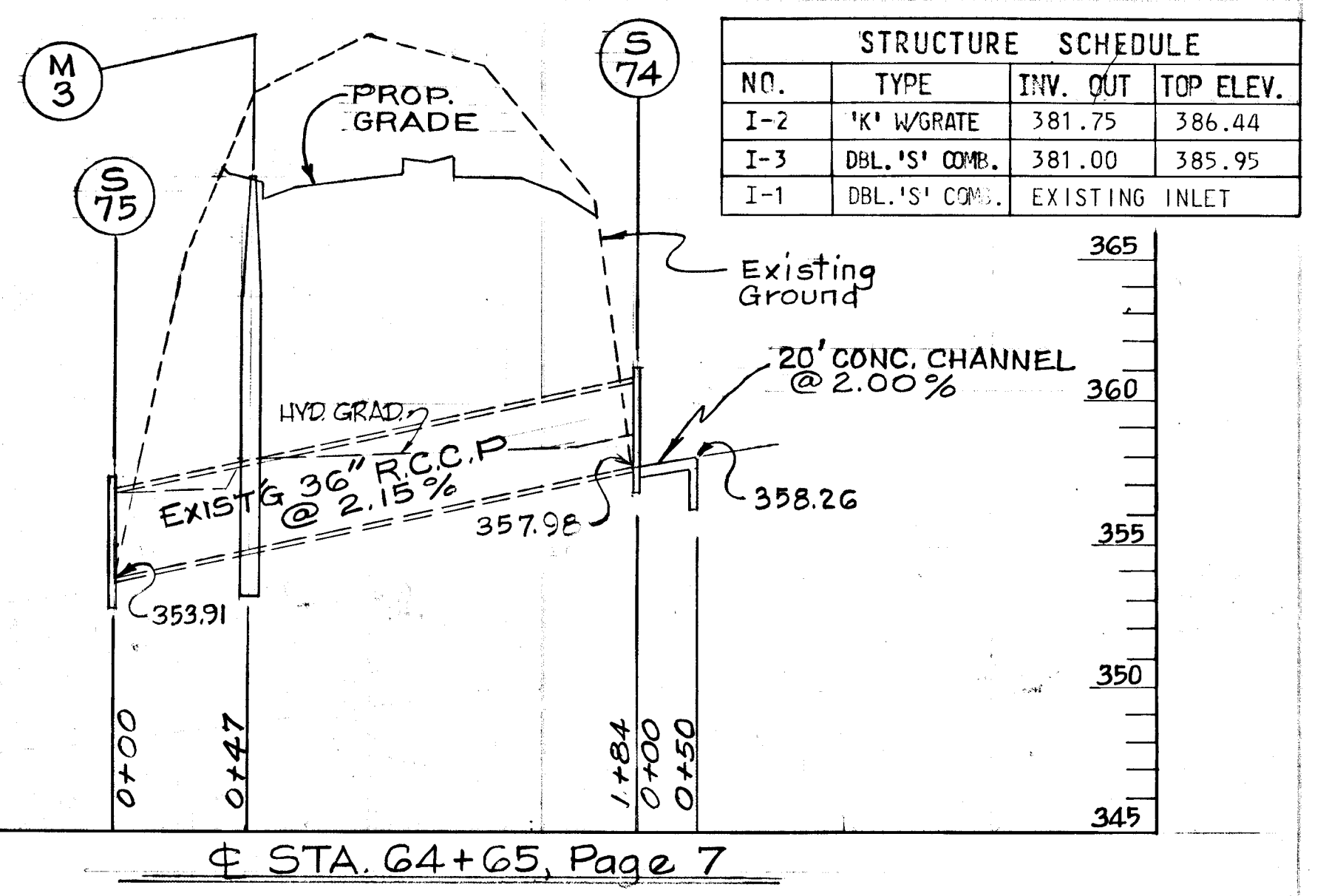
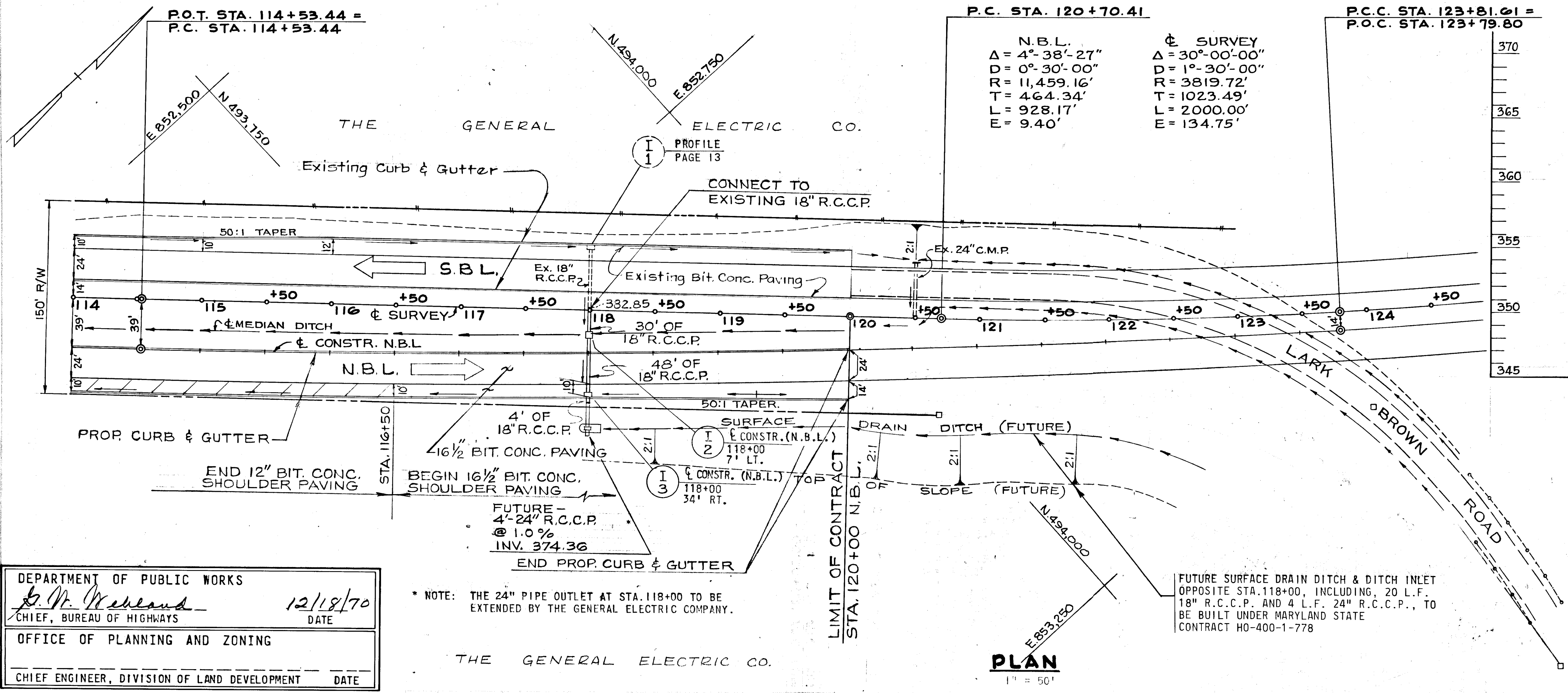
PROFILE  
VERT. 1" = 5'  
HORZ. 1" = 50'



LEGEND

- EXISTING GROUND AT E CONST.
- - - EXISTING GROUND AT W 25'
- - - EXISTING GROUND AT E 25'
- FINISHED GRADE





**STATE OF MARYLAND**  
REGISTERED PROFESSIONAL ENGINEER  
Hubert P. Alt

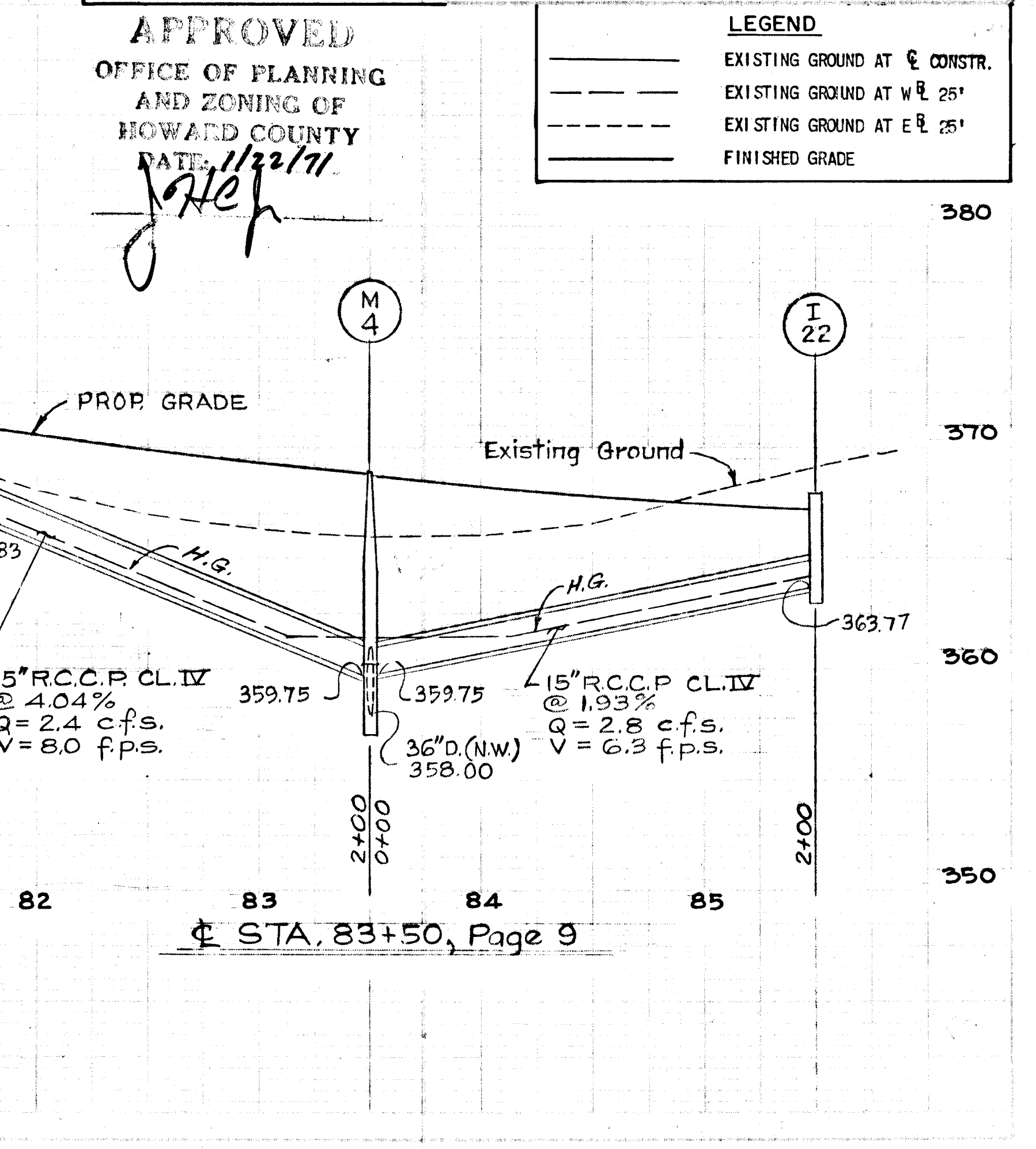
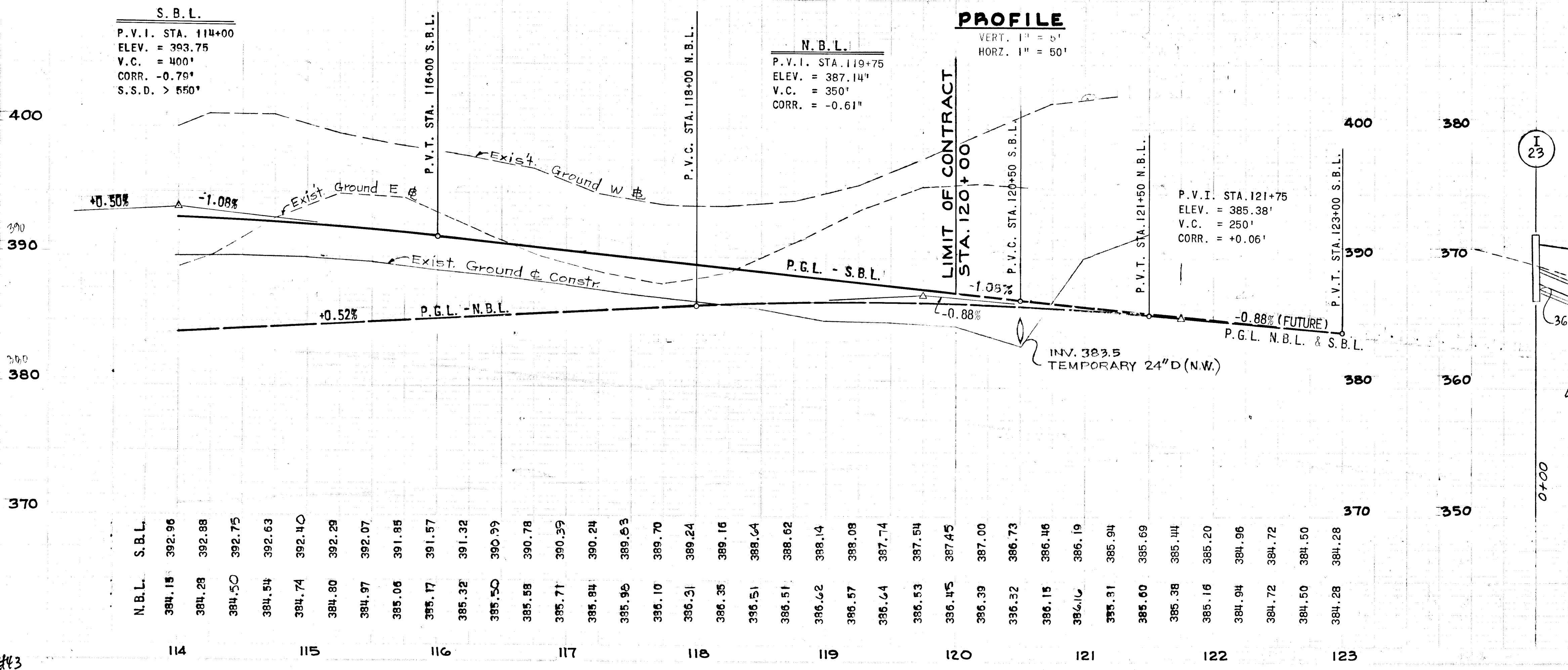
**GREEN ASSOCIATES, INC.**  
CONSULTING ENGINEERS  
BALTIMORE, MARYLAND

**COLUMBIA**  
6TH ELECTION DISTRICT HOWARD COUNTY  
HOWARD RESEARCH AND DEVELOPMENT CORP.

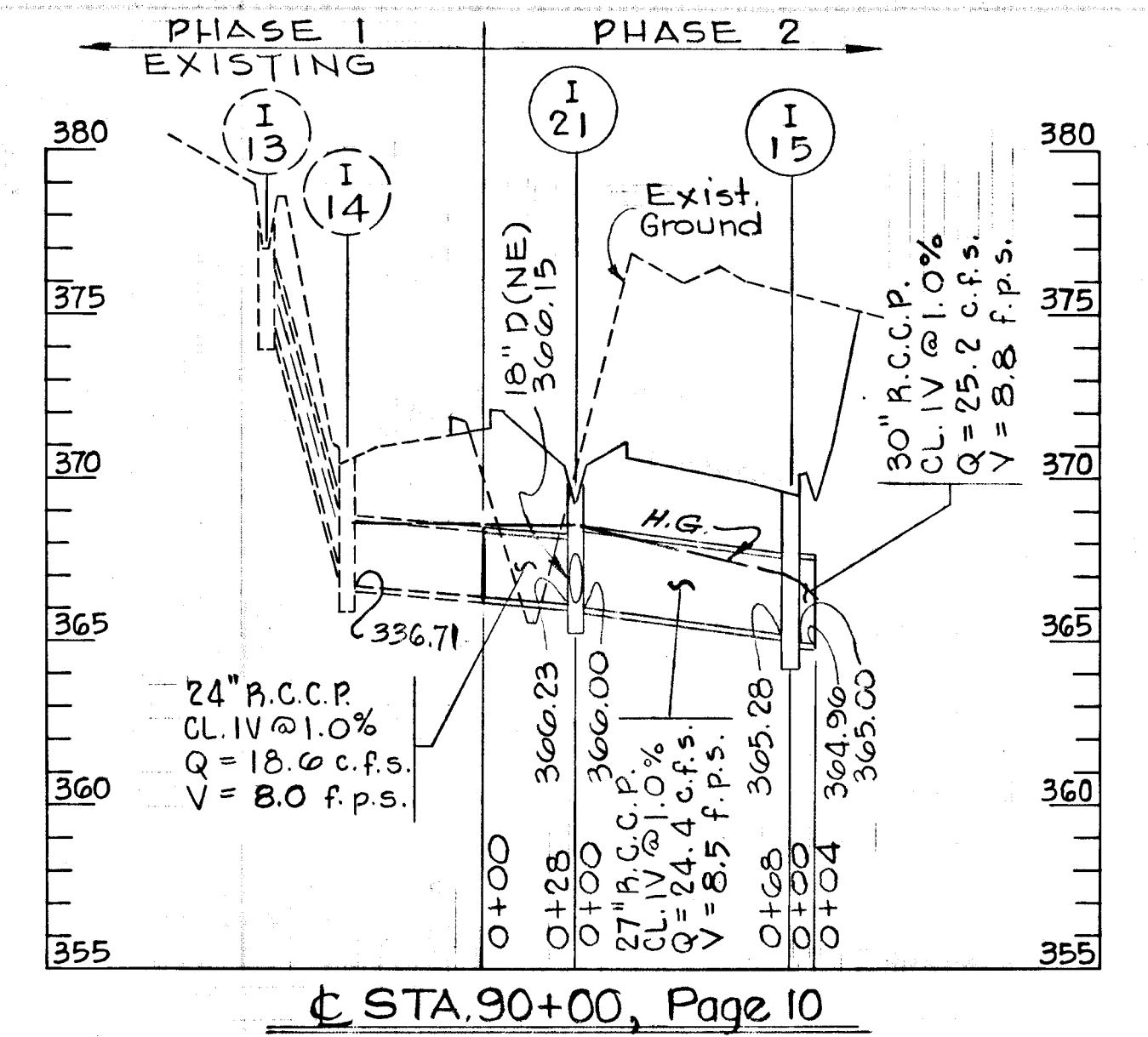
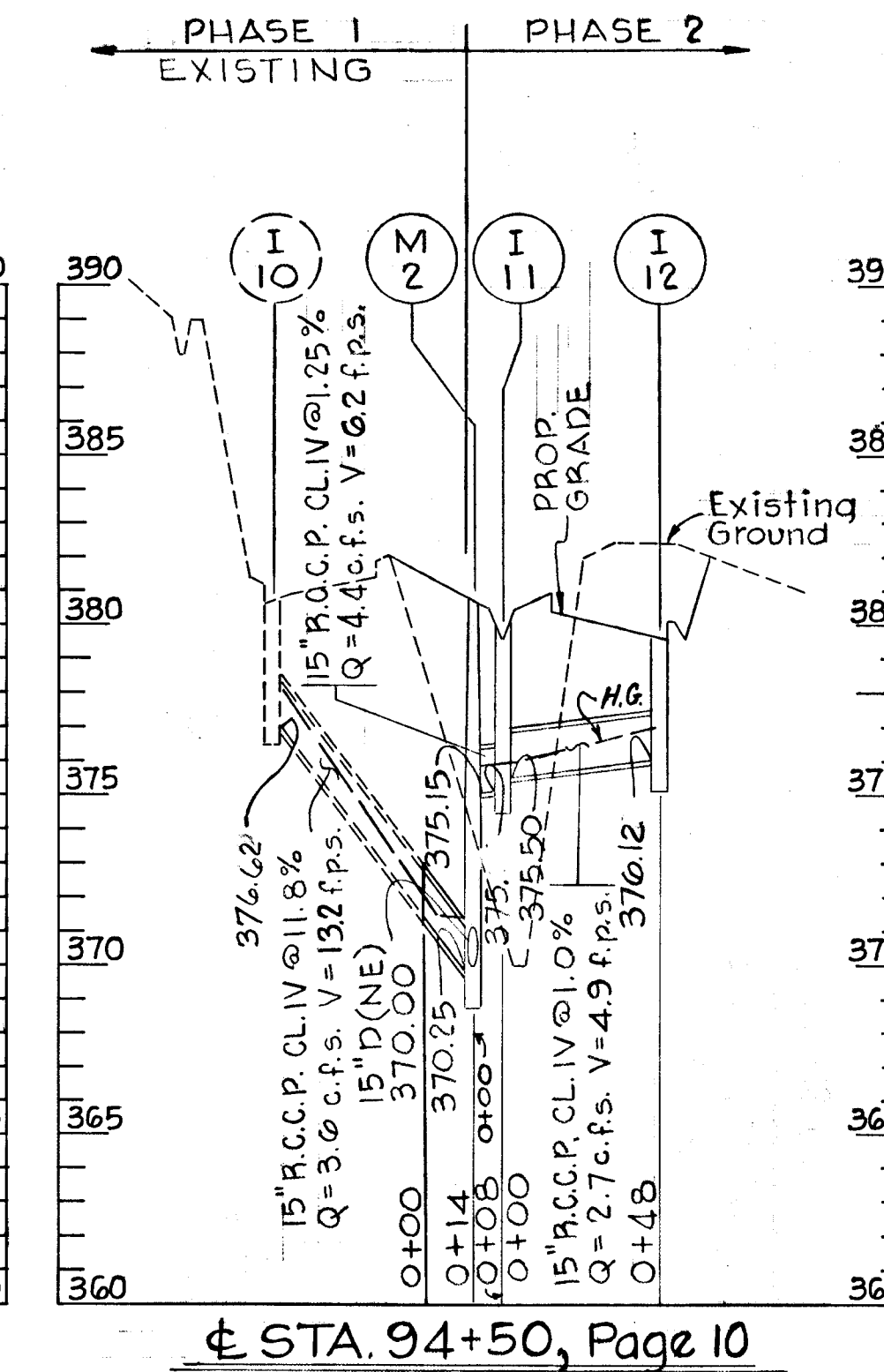
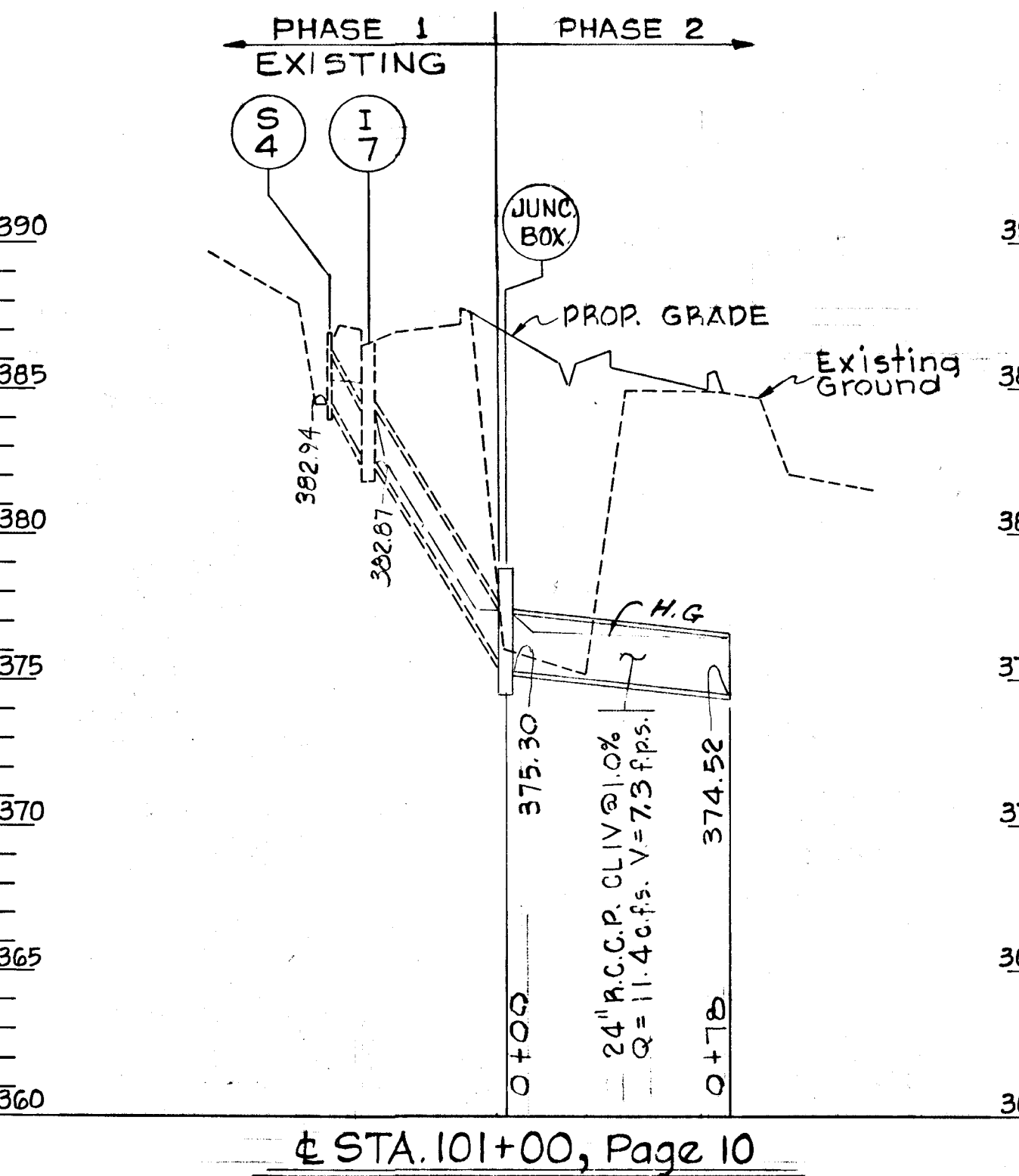
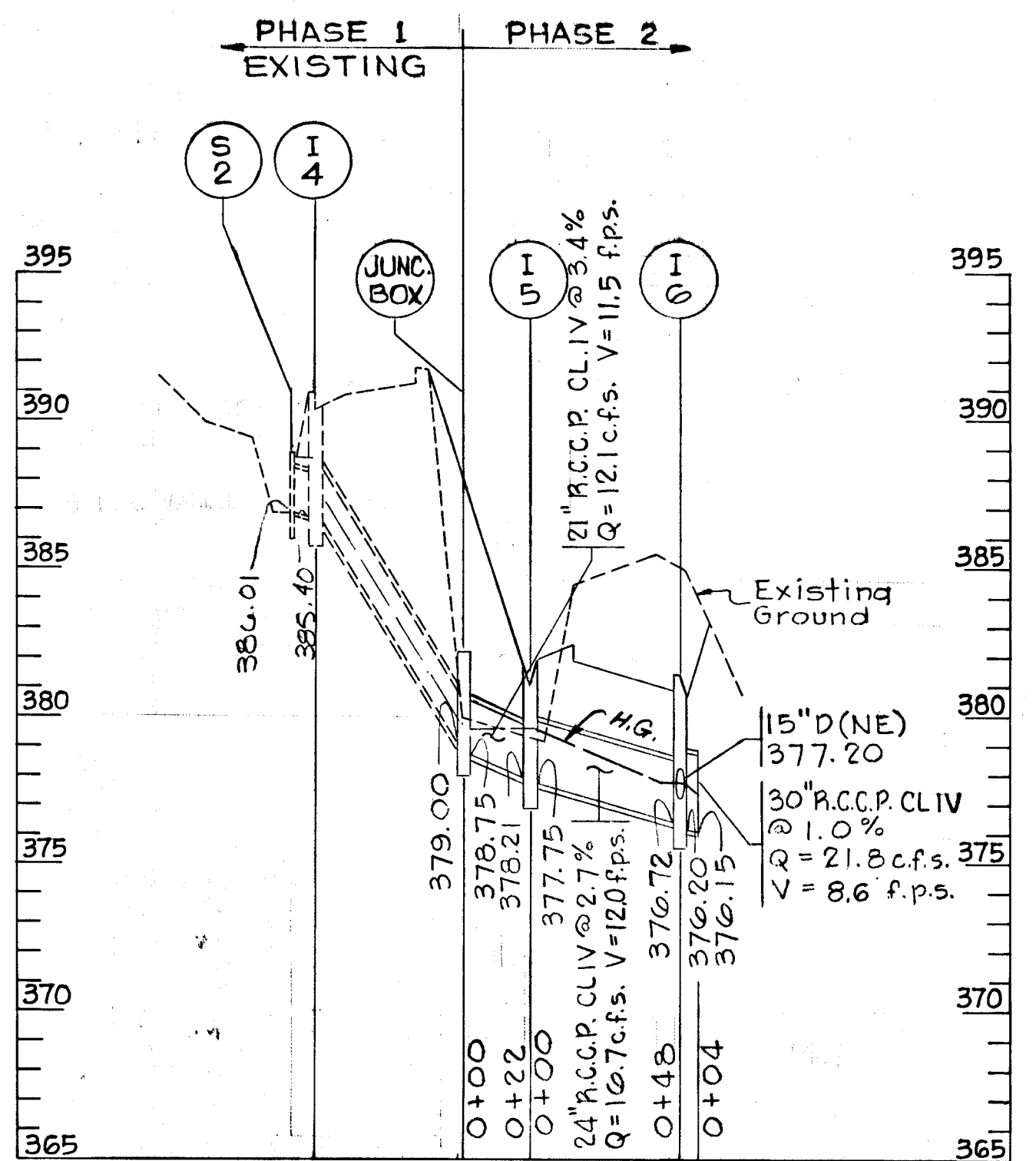
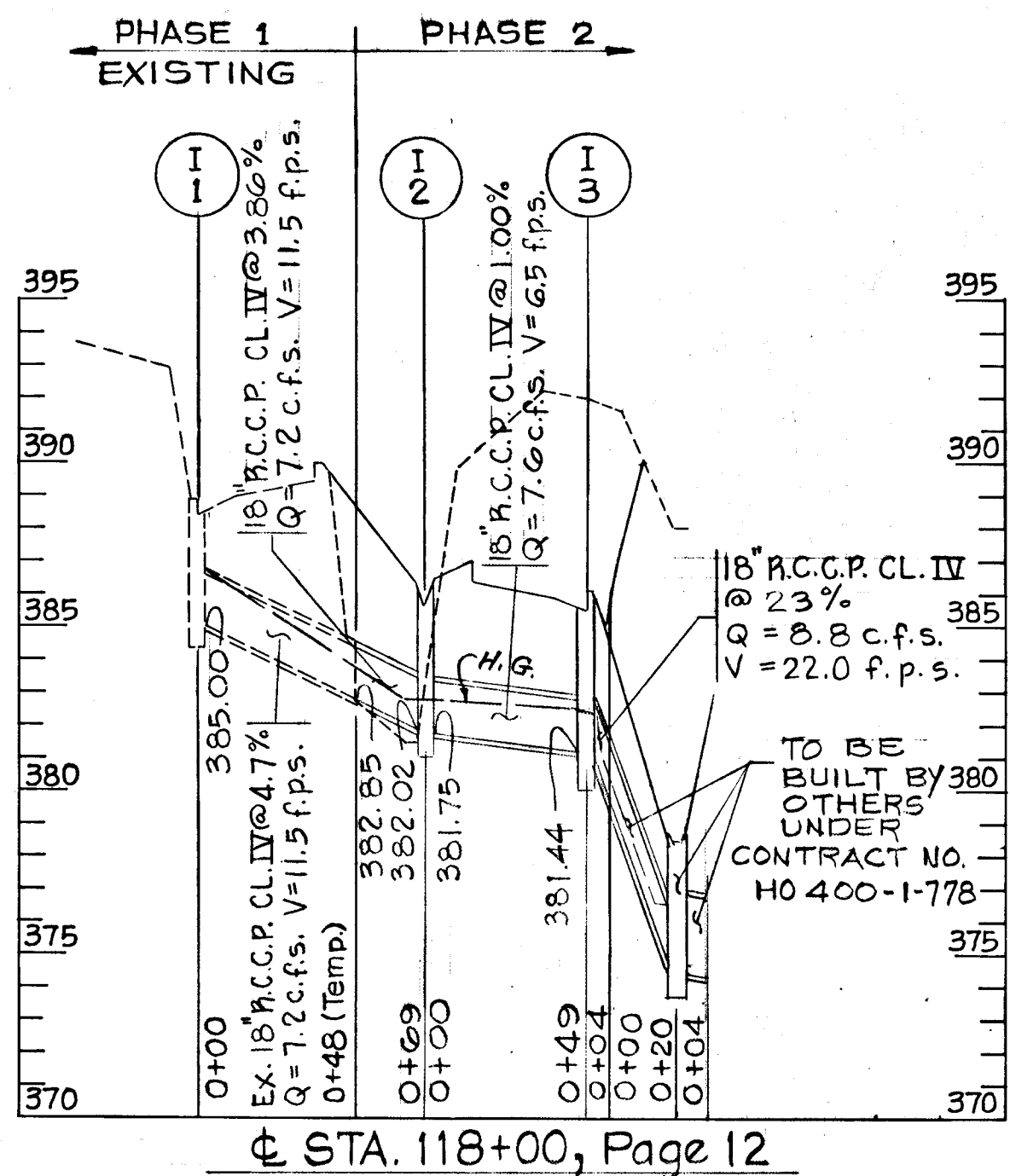
**E.G.U. SUBDIVISION SECTION 1 AREA 3**  
**SNOWDEN RIVER PARKWAY PLAN & PROFILE**

AS SHOWN  
DATE: FEB. 23, 1970

12 OF 13







DEPARTMENT OF PUBLIC WORKS  
*S. N. McKeand*  
 CHIEF, BUREAU OF HIGHWAYS  
 OFFICE OF PLANNING AND ZONING  
 CHIEF ENGINEER, DIVISION OF LAND DEVELOPMENT

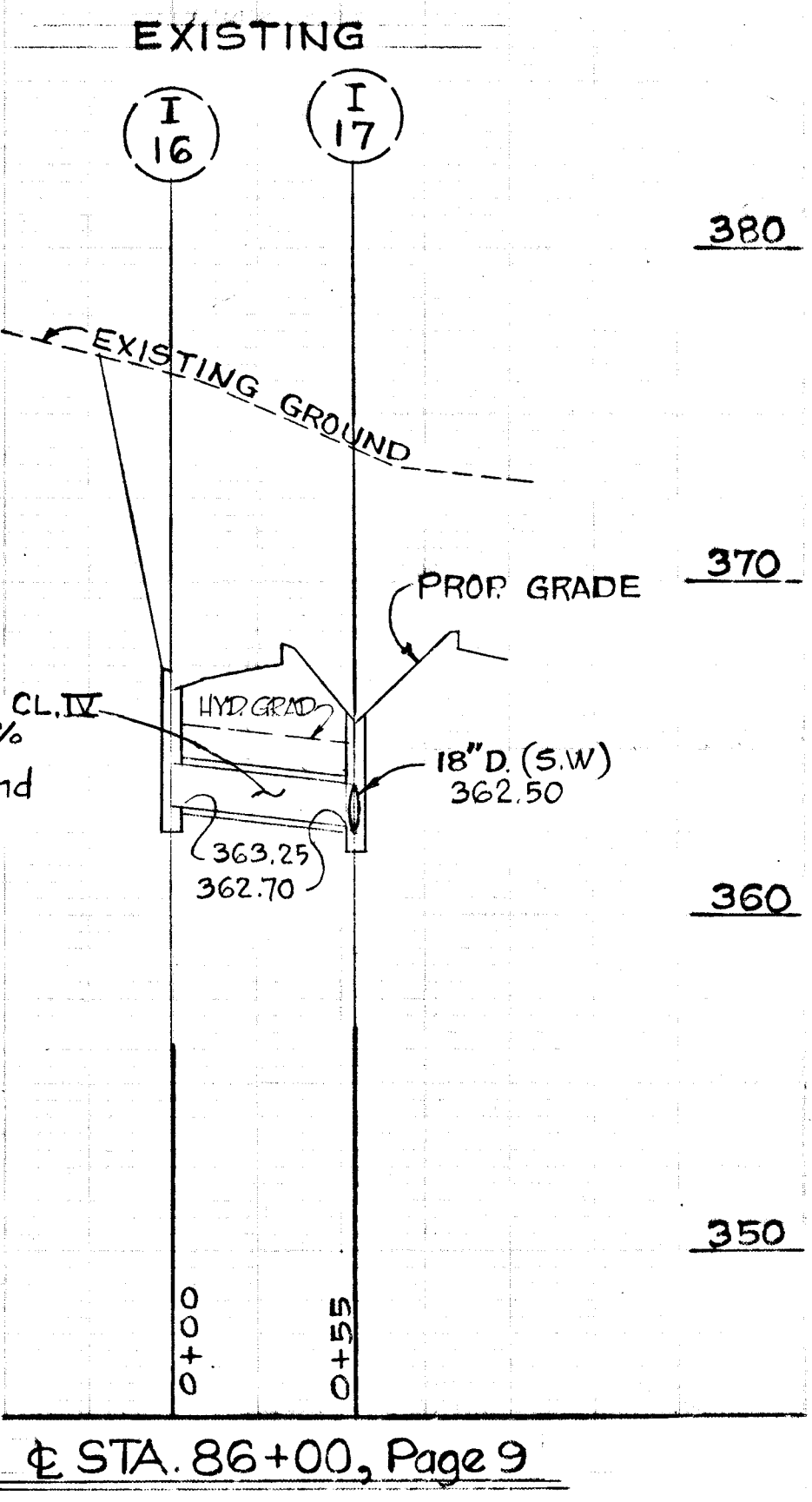
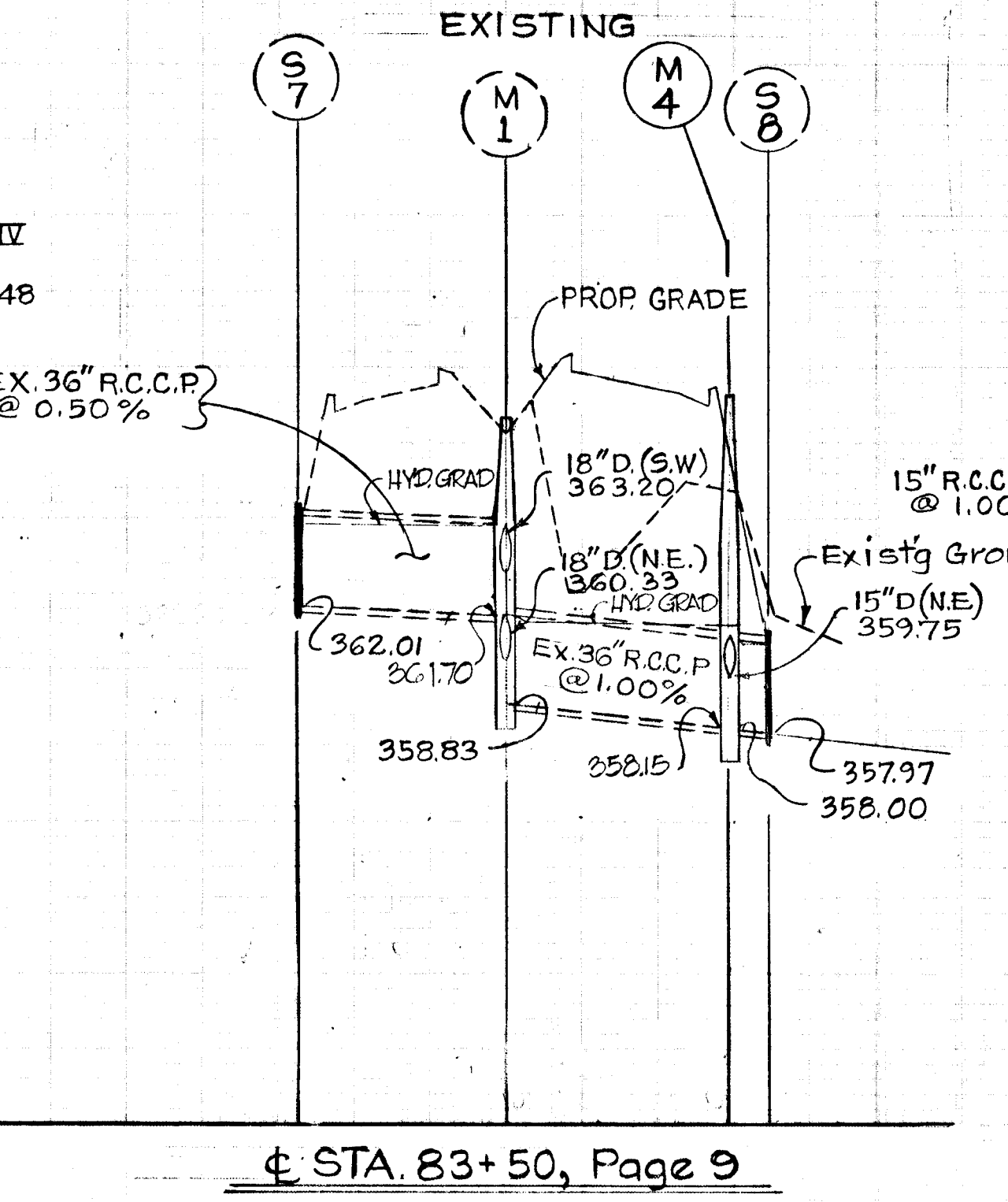
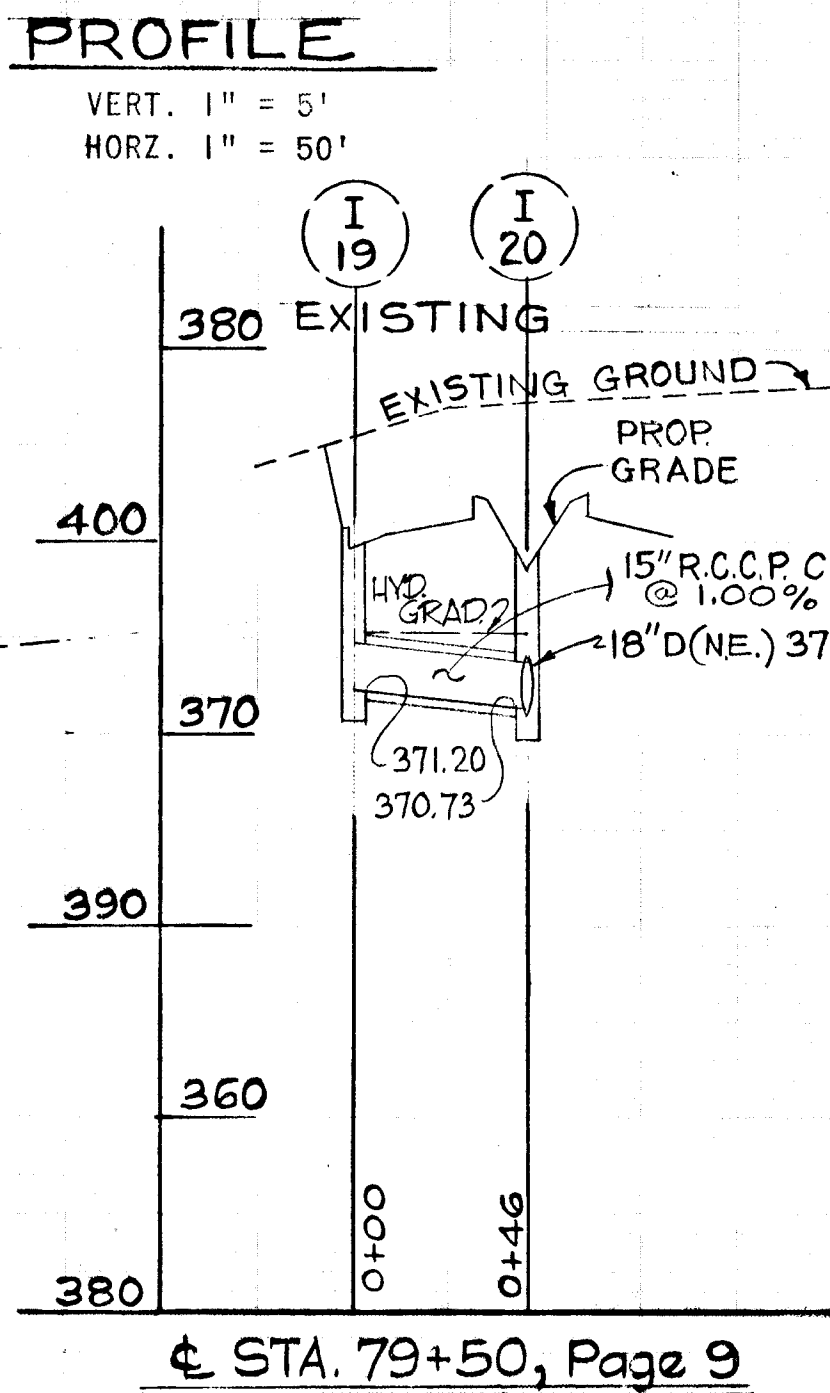
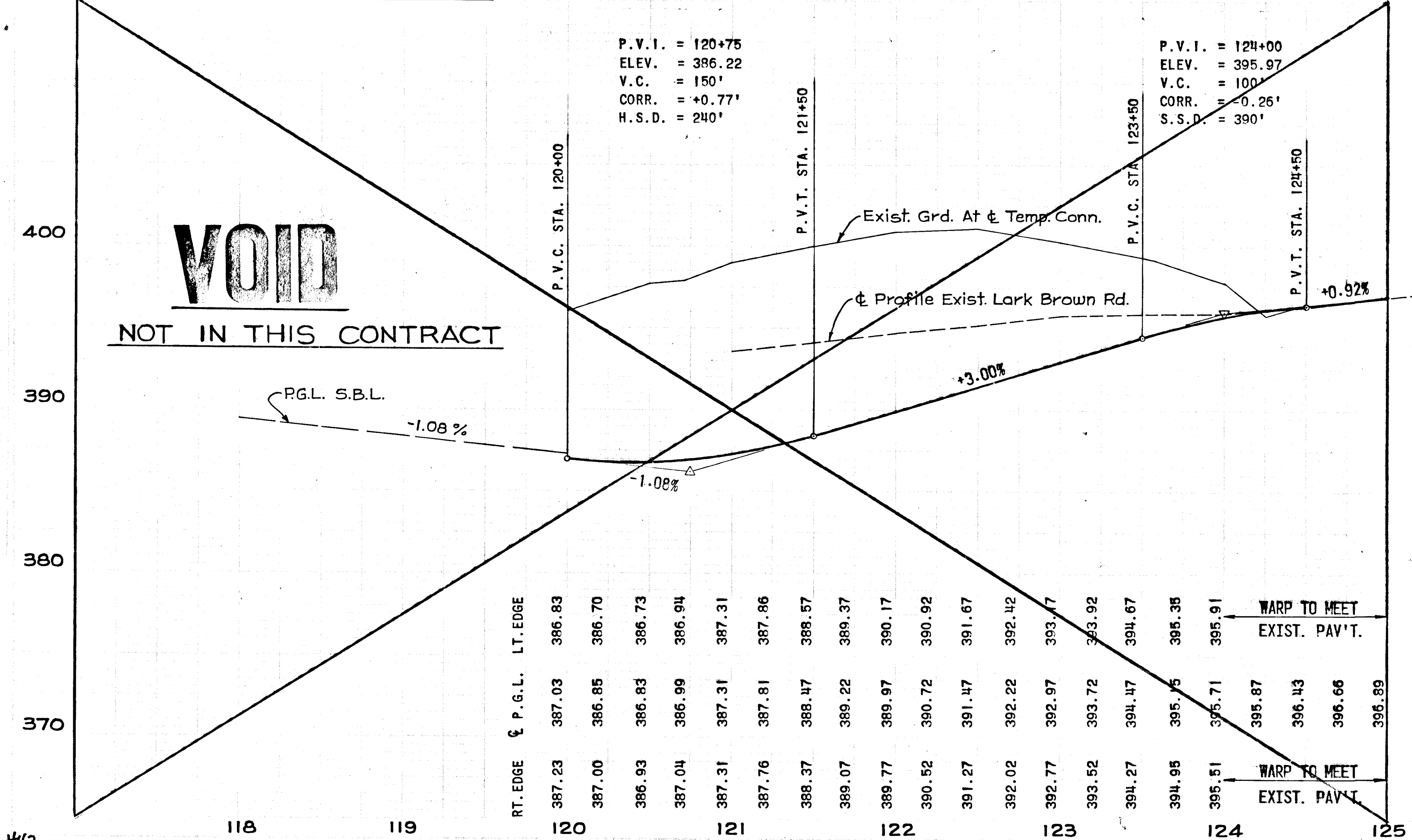
DATE: 12/18/70

APPROVED  
 OFFICE OF PLANNING  
 AND ZONING OF  
 HOWARD COUNTY  
 DATE: 1/22/71  
*J. J. [Signature]*

9-26-69 1 DRAINAGE @ STA. 90+00

**COLUMBIA**  
 6TH ELECTION DISTRICT HOWARD COUNTY  
 HOWARD RESEARCH AND DEVELOPMENT CORP.  
 PROJECT AREA: E. G. U. SUBDIVISION SECTION 1 AREA 3  
 PROJECT TITLE: SNOWDEN RIVER PARKWAY ROADWAY & DRAINAGE PROFILES  
 Drawn by: J.F. Date: AS SHOWN 13 of 13  
 Date: FEB. 23, 1970

GREEN ASSOCIATES, INC. CONSULTING ENGINEERS BALTIMORE, MARYLAND



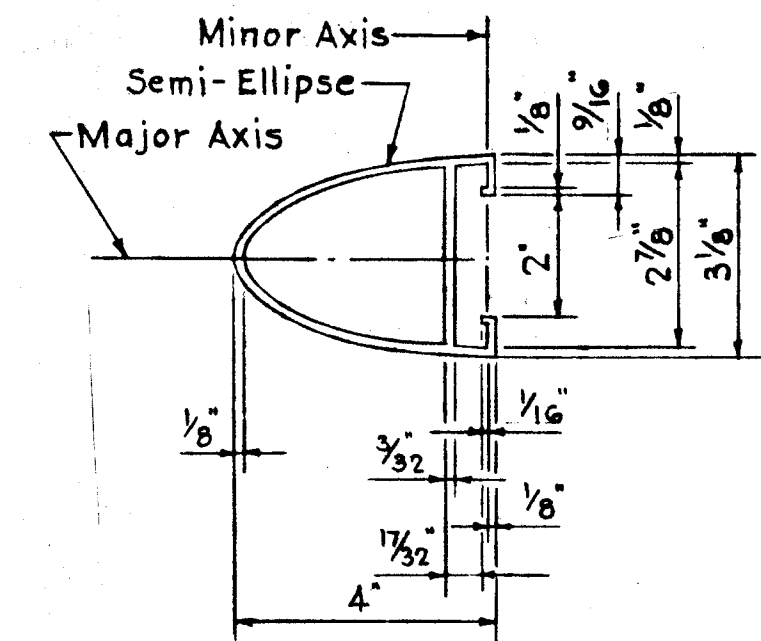
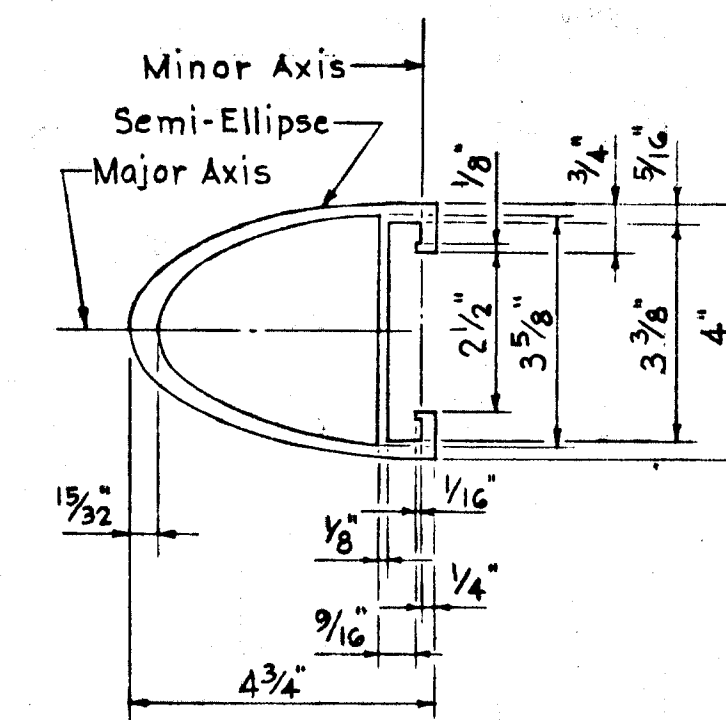
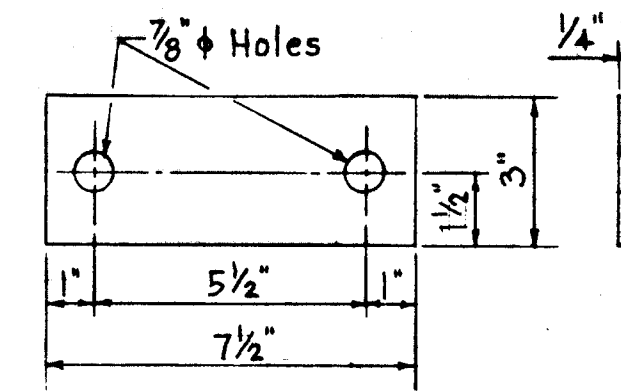
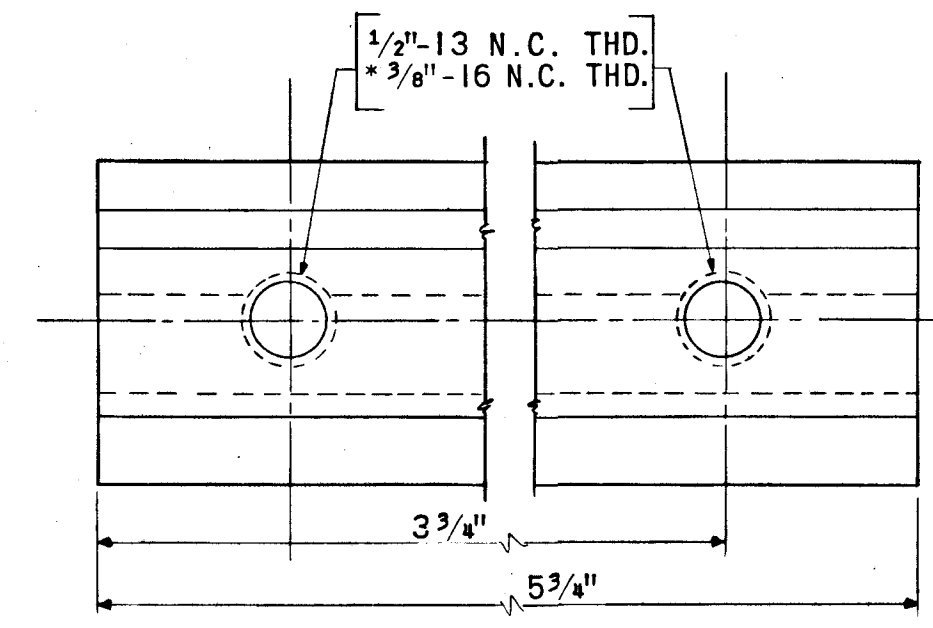
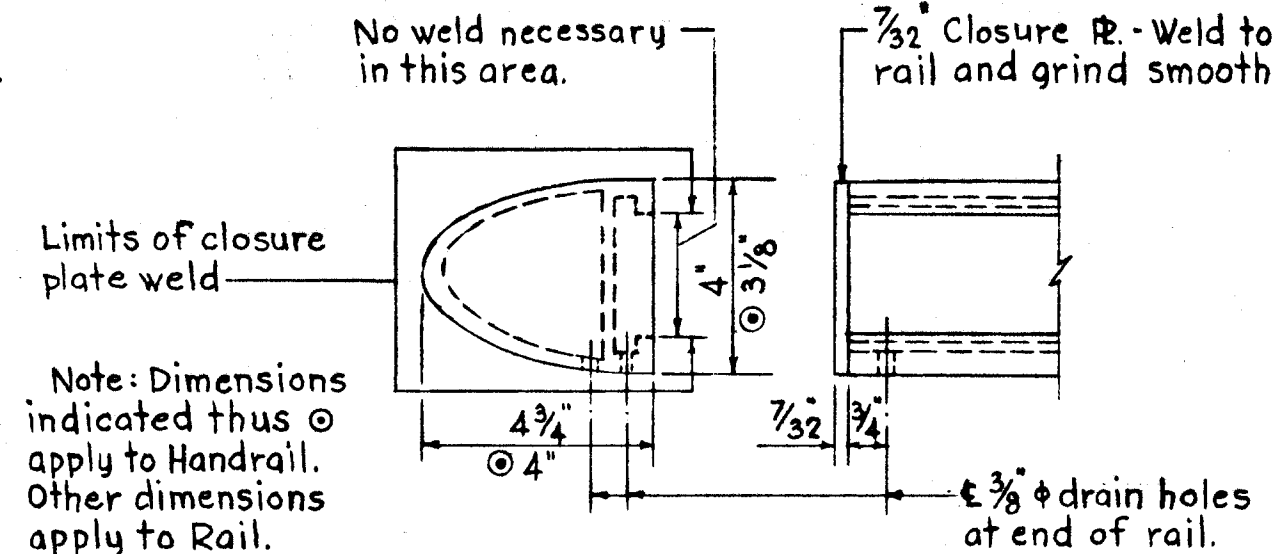
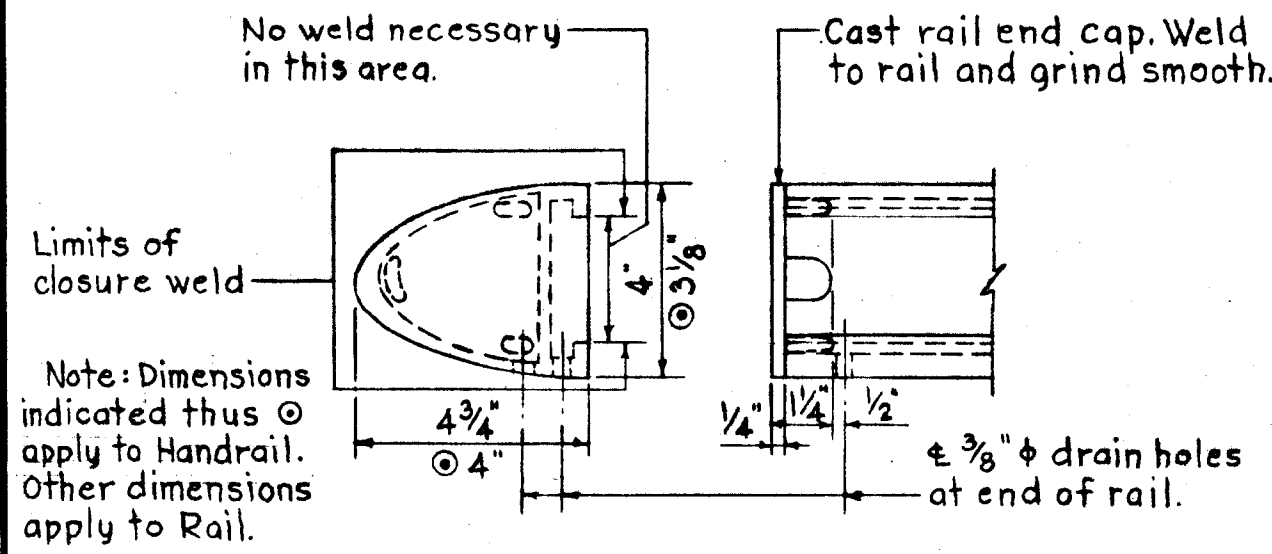


		SUPERSTRUCTURE ELEVATIONS - S.B.L.																				
		¢ BRG.	SPAN NO. 1			¢ BRG.	¢ PIER	SPAN NO. 2					¢ BRG.	¢ PIER	SPAN NO. 3			¢ BRG.				
		ABUT. NO. 1	A1	A2	A3	¢ BRG.	NO. 1	¢ BRG.	B1	B2	B3	B4	B5	B6	B7	¢ BRG.	NO. 2	¢ BRG.	C1	C2	C3	ABUT. NO. 2
W.P.	FINISHED GRADE	379.60	379.64	379.69	379.74	379.78	379.79	379.79	379.86	379.92	379.98	380.04	380.10	380.15	380.20	380.25	380.26	380.26	380.29	380.32	380.34	380.37
E.S.	FINISHED GRADE	376.89	376.94	376.98	377.03	377.07	377.08	377.09	377.15	377.22	377.28	377.34	377.39	377.44	377.49	377.54	377.55	377.55	377.58	377.61	377.64	377.66
W.C.	FINISHED GRADE	376.93	376.98	377.02	377.07	377.11	377.12	377.13	377.19	377.26	377.32	377.38	377.43	377.48	377.53	377.58	377.59	377.59	377.62	377.65	377.68	377.70
1	STATION	71+84.38				72+09.11	72+10.12	72+11.13								72+88.87	72+89.88	72+90.88				73+17.13
	P.G.L. EL.	378.11				378.29	378.30	378.31								378.76	378.77	378.77				378.88
	FINISHED GRADE	377.00	377.05	377.09	377.13	377.17	377.18	377.19	377.25	377.31	377.37	377.43	377.49	377.54	377.59	377.64	377.65	377.65	377.68	377.71	377.74	377.77
2	STATION	71+84.47				72+09.17	72+10.18	72+11.19								72+88.81	72+89.82	72+90.83				73+17.04
	P.G.L. EL.	378.11				378.29	378.30	378.31								378.76	378.77	378.77				378.88
	FINISHED GRADE	377.31	377.35	377.40	377.44	377.48	377.49	377.49	377.56	377.62	377.68	377.74	377.79	377.85	377.90	377.95	377.95	377.96	377.99	378.02	378.05	378.08
3	STATION	71+84.56				72+09.22	72+10.23	72+11.24								72+88.76	72+89.77	72+90.77				73+16.95
	P.G.L. EL.	378.11				378.29	378.30	378.31								378.76	378.77	378.77				378.88
	FINISHED GRADE	377.62	377.66	377.70	377.75	377.79	377.80	377.80	377.87	377.93	377.99	378.04	378.10	378.15	378.21	378.25	378.26	378.26	378.30	378.33	378.36	378.39
B.S.	STATION	71+84.57				72+09.23	72+10.24	72+11.24								72+88.76	72+89.76	72+90.77				73+16.94
	P.G.L. EL.	378.11				378.29	378.30	378.31								378.76	378.77	378.77				378.88
	FINISHED GRADE	377.63	377.68	377.73	377.77	377.81	377.82	377.83	377.89	377.96	378.02	378.08	378.13	378.18	378.23	378.28	378.29	378.29	378.32	378.35	378.38	378.40
4	STATION	71+84.65				72+09.28	72+10.28	72+11.29								72+88.71	72+89.71	72+90.72				73+16.86
	P.G.L. EL.	378.11				378.29	378.30	378.31								378.76	378.76	378.77				378.88
	FINISHED GRADE	377.78	377.82	377.87	377.91	377.96	377.96	377.97	378.03	378.10	378.16	378.21	378.27	378.32	378.37	378.42	378.43	378.43	378.46	378.49	378.52	378.55
5	STATION	71+84.74				72+09.33	72+10.34	72+11.34								72+88.66	72+89.66	72+90.67				73+16.77
	P.G.L. EL.	378.11				378.29	378.30	378.31								378.76	378.76	378.77				378.88
	FINISHED GRADE	377.93	377.98	378.02	378.07	378.11	378.12	378.12	378.19	378.25	378.31	378.37	378.42	378.48	378.53	378.57	378.58	378.58	378.61	378.64	378.67	378.70
6	STATION	71+84.82				72+09.39	72+10.39	72+11.39								72+88.61	72+89.61	72+90.61				73+16.68
	P.G.L. EL.	378.11				378.30	378.30	378.31								378.76	378.76	378.77				378.88
	FINISHED GRADE	378.09	378.13	378.18	378.22	378.26	378.27	378.28	378.34	378.40	378.46	378.52	378.58	378.63	378.68	378.73	378.73	378.74	378.77	378.80	378.83	378.85
E.C. & P.G.L.	STATION	71+84.84				72+09.40	72+10.40	72+11.41								72+88.59	72+89.60	72+90.60				73+16.66
	P.G.L. EL.	378.11	378.16	378.21	378.25	378.30	378.30	378.31	378.37	378.44	378.50	378.56	378.61	378.66	378.71	378.76	378.76	378.77	378.80	378.83	378.85	378.88
	FINISHED GRADE	378.13	378.18	378.23	378.27	378.32	378.32	378.33	378.39	378.46	378.52	378.58	378.63	378.68	378.73	378.78	378.78	378.79	378.82	378.85	378.87	378.90
E.P.	FINISHED GRADE	380.78	380.83	380.87	380.92	380.96	380.97	380.98	381.04	381.10	381.16	381.22	381.28	381.33	381.38	381.43	381.43	381.44	381.47	381.49	381.52	381.55

		SUPERSTRUCTURE ELEVATIONS - N.B.L.																				
		¢ BRG.	SPAN NO. 1			¢ BRG.	¢ PIER	SPAN NO. 2					¢ BRG.	¢ PIER	SPAN NO. 3			¢ BRG.				
		ABUT. NO. 1	A1	A2	A3	¢ BRG.	NO. 1	¢ BRG.	B1	B2	B3	B4	B5	B6	B7	¢ BRG.	NO. 2	¢ BRG.	C1	C2	C3	ABUT. NO. 2
W.P.	FINISHED GRADE	380.76	380.81	380.86	380.91	380.96	380.97	380.98	381.04	381.11	381.17	381.22	381.28	381.33	381.38	381.43	381.43	381.43	381.47	381.50	381.53	381.55
E.S.	FINISHED GRADE	378.07	378.12	378.18	378.23	378.28	378.28	378.29	378.36	378.42	378.48	378.54	378.59	378.64	378.69	378.74	378.74	378.75	378.78	378.81	378.84	378.87
W.C. & P.G.L.	STATION	71+81.67				72+09.60	72+10.60	72+11.59								72+88.41	72+89.40	72+90.40				73+18.33
7	P.G.L. EL.	378.09				378.30	378.30	378.31								378.76	378.76	378.77				378.89
	FINISHED GRADE	378.13	378.18	378.23	378.28	378.33	378.34	378.34	378.41	378.47	378.53	378.59	378.64	378.69	378.74	378.79	378.80	378.80	378.83	378.86	378.89	
	STATION	71+81.69				72+09.61	72+10.61	72+11.60								72+88.40	72+89.39	72+90.39				73+18.31
8	P.G.L. EL.	378.09				378.30	378.30	378.31								378.76	378.76	378.77				378.89
	FINISHED GRADE	378.28	378.33	378.38	378.43	378.48	378.49	378.50	378.56	378.62	378.68	378.74	378.79	378.85	378.90	378.94	378.95	378.95	378.99	379.02	379.05	379.08
	STATION	71+81.78				72+09.66	72+10.66	72+11.66								72+88.34	72+89.34	72+90.34				73+18.22
9	P.G.L. EL.	378.09				378.30	378.30	378.31								378.76	378.76	378.77				378.99
	FINISHED GRADE	378.44	378.49	378.54	378.59	378.64	378.64	378.65	378.71	378.78	378.83	378.89	378.95	379.00	379.05	379.10	379.11	379.14	379.17	379.20	379.23	
	STATION	71+81.87				72+09.72	72+10.71	72+11.71								72+88.29	72+89.29	72+90.28				73+18.13
B.S.	P.G.L. EL.	378.09				378.30	378.30	378.31								378.76	378.76	378.77				378.99
	FINISHED GRADE	378.57	378.63	378.68	378.73	378.78	378.78	378.79	378.86	378.92	378.98	379.04	379.09	379.14	379.19	379.24	379.24	379.25	379.28	379.31	379.34	379.37
	STATION	71+81.95				72+09.77	72+10.76	72+11.75								72+88.25	72+89.24	72+90.23				73+18.05
10	P.G.L. EL.	378.09				378.30	378.30	378.31								378.76	378.76	378.77				378.89
	FINISHED GRADE	378.54	378.59	378.65	378.70	378.75	378.76	378.77	378.84	378.90	378.96	379.02	379.07	379.12	379.17	379.21	379.22	379.22	379.25	379.28	379.31	379.33
	STATION	71+81.96				72+09.77	72+10.76	72+11.76								72+88.24	72+89.24	72+90.23				73+18.04
11	P.G.L. EL.	378.09				378.30	378.30	378.31								378.76	378.76	378.77				378.89
	FINISHED GRADE	378.35	378.40	378.45	378.50	378.55	378.55	378.56	378.62	378.68	378.74	378.80	378.86	378.92	378.98	379.04	379.04	379.05	379.08	379.11	379.14	379.17
	STATION	71+82.02				72+09.82	72+10.82	72+11.81								72+88.19	72+89.18	72+90.18				73+17.95
E.C. & P.G.L.	P.G.L. EL.	378.09				378.30	378.30	378.31								378.76	378.76	378.77				378.89
	FINISHED GRADE	378.17	378.23	378.28	378.33	378.38	378.38	378.39	378.46	378.52	378.58	378.64	378.69	378.74	378.79	378.84	378.84	378.85	378.88	378.91	378.94	378.97
	STATION	71+82.02				72+09.82	72+10.82	72+11.81														



Note: At Contractor's option, cast rail end caps may be substituted for rail end plates.



**CAST RAIL END CAP**

Note: Open ends of all Handrails and Rails shall be closed.  
Scale: 3" = 1'-0"

**RAIL END PLATE**

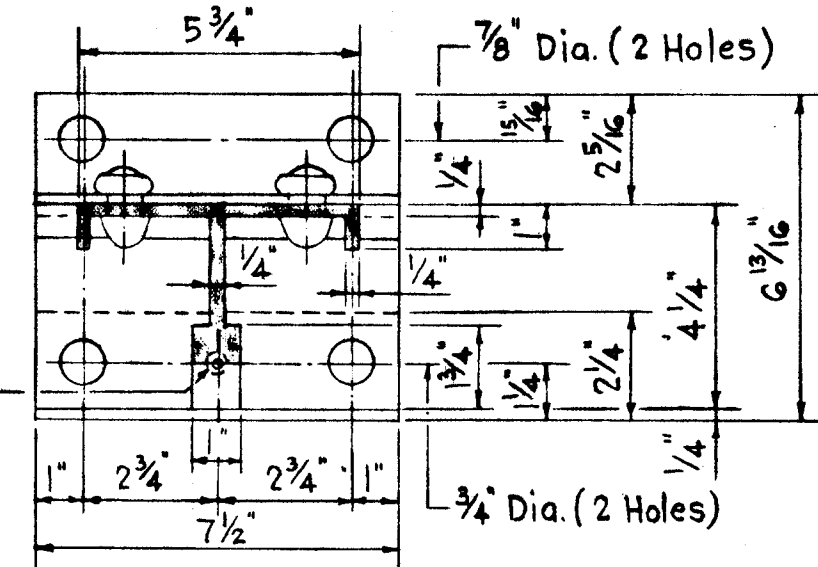
Note: Open ends of all Handrails and Rails shall be closed.  
Scale: 3" = 1'-0"

CLAMP BAR DETAILS  
(\* APPLIES TO HANDRAIL ONLY)  
SCALE: FULL SIZE

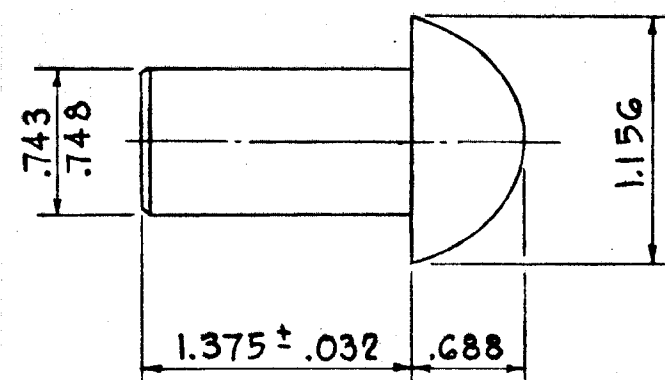
ANCHOR PLATE  
Scale: 3" = 1'-0"

RAIL MEMBER  
Scale: None

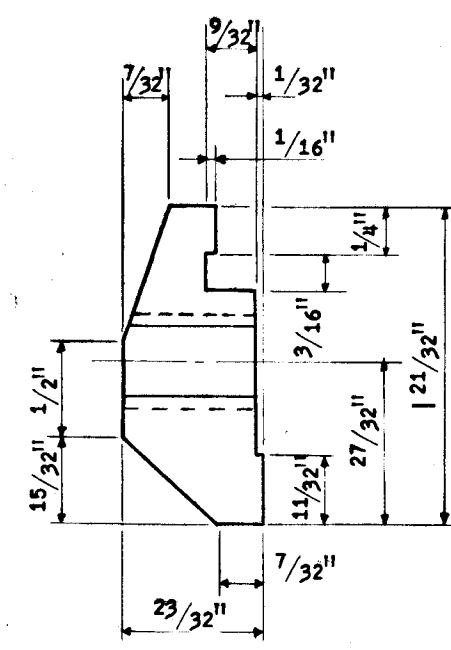
HANDRAIL MEMBER  
Scale: None



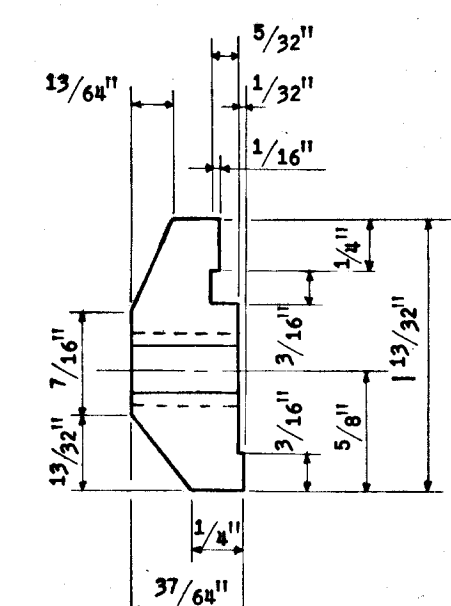
SECTION A-A  
Scale: 3" = 1'-0"



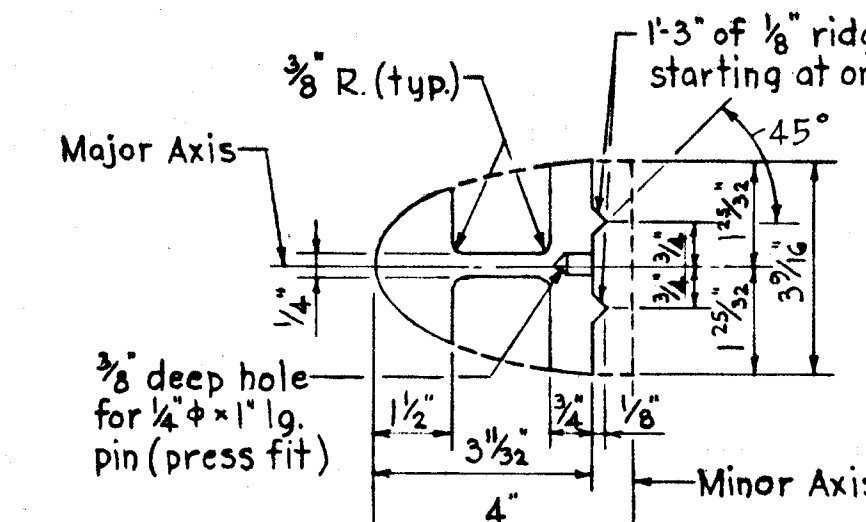
RVET  
Shop Rivet Rail Post To Base  
Scale: 1" = 1'-0"



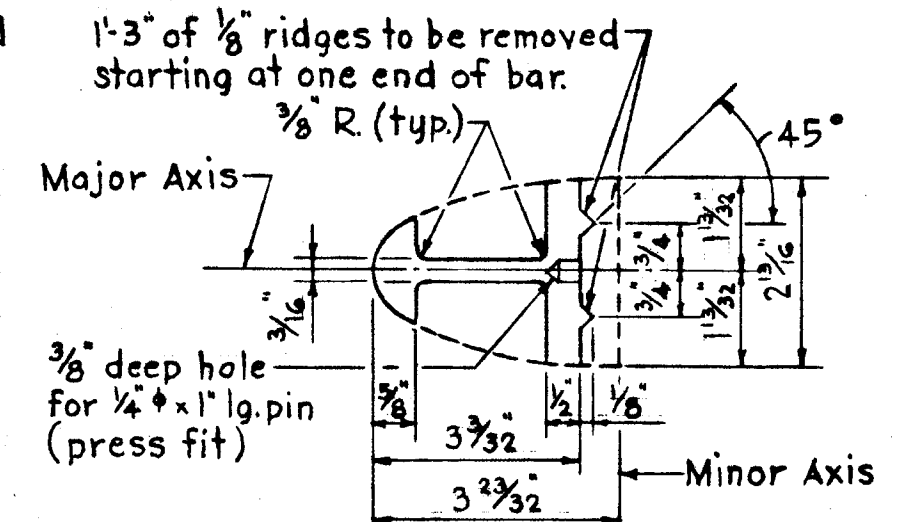
FOR RAIL MEMBER



FOR HANDRAIL



SECTION THRU SPLICE AND/OR EXPANSION BAR FOR RAIL MEMBER  
Scale: None



SECTION THRU SPLICE AND/OR EXPANSION BAR FOR HANDRAIL MEMBER  
Scale: None

± 7/16" x 1/8" Vert. slots in post for 3/8"-16 N.C. x 7/8" long Hex. Hd. Bolt ± 3/4" O.D., 3/8" I.D., 1/8" thk. Washer.

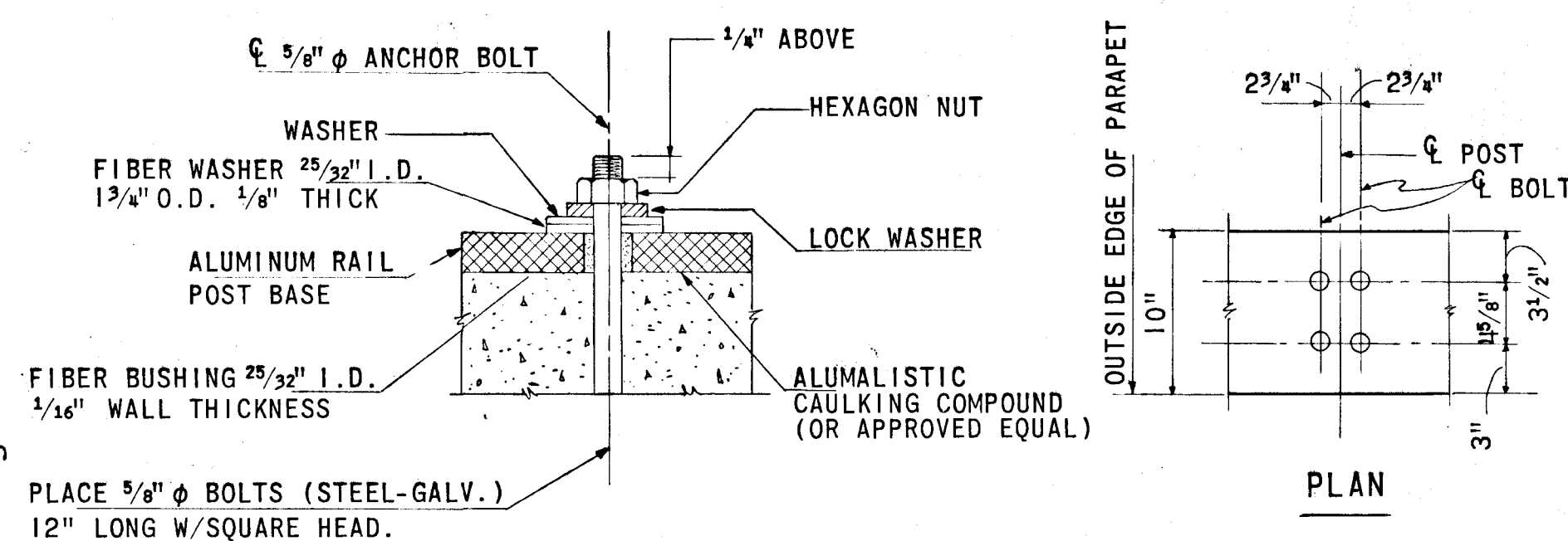
Base plate may be furnished in one piece extrusion, or in two extrusions welded together as shown.

(2) 3/8"-11 thd. Heavy Alum. Hex. Nuts ± 1 1/2" O.D., 1/2" I.D., .102 min. thickness Aluminum Washers.

(2) 3/4"-10 thd. Heavy Alum. Hex. Nuts ± 1 1/2" O.D., 1/2" I.D., 1/8" thick Aluminum Washers.

(2) 3/8" Anchor Studs with (2) 3/4"-10 thd. Hex. Steel Nuts.  
Anchor Plate.  
Note: Treatment of exposed and/or sawed edges - Break all edges - (no radius involved)

POST-FOR ONE STRAND RAIL  
Scale: 3" = 1'-0"



RAIL POST ANCHOR BOLT DETAILS  
NO SCALE

- MATERIAL FOR ALUMINUM WASHERS SHALL CONFORM TO A.S.T.M. DESIGNATION: B-209, ALLOY ALCLAD 2024-T4.
- MATERIAL FOR RIVETS SHALL CONFORM TO A.S.T.M. DESIGNATION: B-316, ALLOYS 6061-T6 AND 6053-T61 FOR CHEMICAL COMPOSITION ONLY AND SHALL CONFORM WITH MIL-R-1150A IN ALL OTHER RESPECTS. THESE RIVETS SHALL BE BUTTON HEAD AND CONE POINT AND SHALL BE COLD DRIVEN.
- MATERIAL FOR CLAMP BAR BOLTS AND CAP SCREWS SHALL BE STAINLESS STEEL AND CONFORM TO A.S.T.M. DESIGNATION: A-193, IDENTIFICATION SYMBOL BB.
- MATERIAL FOR ANCHOR PLATES SHALL BE STEEL CONFORMING TO A.S.T.M. DESIGNATION A-36.
- BOTTOM OF POST BASES SHALL BE THOROUGHLY COATED WITH AN APPROVED CAULKING COMPOUND OR AN APPROVED ZINC CHROMATE PAINT.
- MATERIAL FOR PINS SHALL CONFORM TO A.S.T.M. DESIGNATION: B-211, ALLOY 6061-T6 AND PINS SHALL BE PRESS FIT.

- ALL RAILINGS SHALL BE FABRICATED AND ERECTED AS INDICATED ON THE CONTRACT DRAWINGS.
- POSTS TO BE SET PERPENDICULAR TO TOP OF PARAPET. FOR POST SPACING SEE CONTRACT DRAWINGS (MAXIMUM 8'-0" SPACING).
- RAILS SHALL BE PARALLEL TO THE GRADE OF THE ROADWAY. RAIL SECTIONS TO BE ATTACHED TO AS MANY POSTS AS POSSIBLE, BUT NOT LESS THAN THREE (EXCEPT WHERE INDICATED OTHERWISE ON CONTRACT DRAWINGS).
- THE CENTERLINE OF ANY SPLICE AND/OR EXPANSION JOINT IS TO BE LOCATED AT LEAST 2'-0" AWAY FROM CENTERLINE OF A POST EXCEPT WHERE INDICATED OTHERWISE ON PLANS. EXPANSION AND/OR SPLICE JOINTS FOR EACH STRAND OF TWO STRAND RAILING ARE TO BE PLACED IN THE SAME LOCATION AND IN THE SAME PANEL.

- MATERIAL FOR RAILS, POSTS (INCLUDING BASES), SPLICES AND CLAMP BARS SHALL CONFORM TO A.S.T.M. DESIGNATION: B-221, ALLOY 6061-T6. RAILS SHALL HAVE A MILL FINISH. POSTS SHALL HAVE A MILL FINISH EXCEPT THAT ANY SAWED SURFACES SHALL HAVE A FINISH COMPARABLE TO 250 MICRO-INCH.
- MATERIAL FOR RAIL END PLATES SHALL CONFORM TO A.S.T.M. DESIGNATION: B-209, ALLOY 6061, T6. MATERIAL FOR CAST RAIL END CAPS SHALL CONFORM TO A.S.T.M. DESIGNATION: B-10P ALLOY SG 704.
- MATERIAL FOR ANCHOR STUDS SHALL CONFORM TO A.S.T.M. DESIGNATION: A-276, TYPE 430 STAINLESS STEEL, ANNEALED, HOT-FINISHED, ULTIMATE STRENGTH 70,000 P.S.I. MIN., 20% MIN. ELONGATION. THREADS TO BE ROLLED AND NOT CUT.
- MATERIAL FOR HEAVY ALUMINUM NUTS SHALL CONFORM TO A.S.T.M. DESIGNATION: B-211, ALLOY 6061-T6 OR ALLOY 6262-T9.
- MATERIAL FOR STEEL NUTS SHALL CONFORM TO A.S.T.M. DESIGNATION: A-307.

APPROVED  
OFFICE OF PLANNING AND ZONING OF HOWARD COUNTY  
DATE 1/22/71  
J.N.C.P.

GREEN ASSOCIATES, INC.  
CONSULTING ENGINEERS  
BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS  
Dr. David W. Weiland 12/18/70  
CHIEF, BUREAU OF HIGHWAYS DATE  
OFFICE OF PLANNING AND ZONING  
CHIEF, ENGINEER, DIVISION OF LAND DEVELOPMENT DATE

- NOTES:
- FOR GENERAL PLAN, SEE SHEET NO. 2.
  - FOR RAIL POST SPACING, SEE SHEET NO. 6.

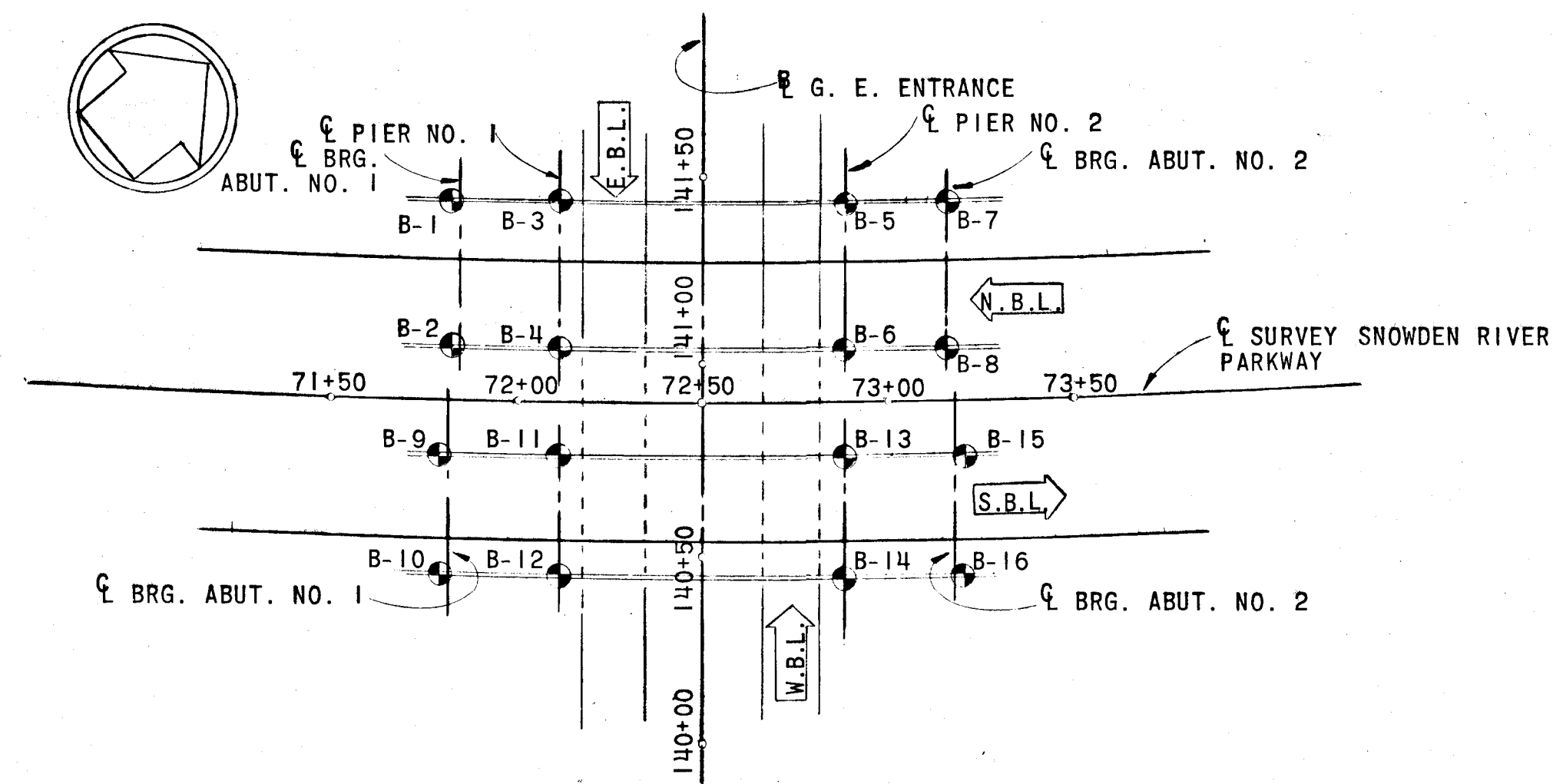
COLUMBIA  
M A R Y L A N D  
6TH ELECTION DISTRICT HOWARD COUNTY  
HOWARD RESEARCH AND DEVELOPMENT CORP.  
THE VILLAGE OF LEMON GLEN BALTIMORE, MARYLAND 21204  
PROJECT TITLE: E.G.U. SUBDIVISION SECTION 1 AREA 3  
PROJECT NO.: SNOWDEN RIVER PARKWAY INTERCHANGE NO. 6 - BRIDGE AT G.E. ENTRANCE RAILING DETAILS  
By: L.J.W. Scale: AS NOTED Date: DEC., 1969  
By: L.J.W. Date: DEC., 1969



EL. 380	BORING NO. 1 STA. 71+83.0 57' LT. CL SURVEY SNOWDEN RIVER PKWY.	BORING NO. 2 STA. 71+83.0 12' LT. CL SURVEY SNOWDEN RIVER PKWY.	BORING NO. 3 STA. 72+10.50 57' LT. CL SURVEY SNOWDEN RIVER PKWY.	BORING NO. 4 STA. 72+10.50 12' LT. CL SURVEY SNOWDEN RIVER PKWY.	BORING NO. 5 STA. 72+89.50 57' LT. CL SURVEY SNOWDEN RIVER PKWY.	BORING NO. 6 STA. 72+89.50 12' LT. CL SURVEY SNOWDEN RIVER PKWY.	BORING NO. 7 STA. 73+17.0 57' LT. CL SURVEY SNOWDEN RIVER PKWY.	EL. 380
370	EL. 373.9 RED MICA SILTY CLAY W/S ROCK FRAGMENTS	EL. 376.9 RED MICA SILTY CLAY W/S DECOMPOSED ROCK	EL. 374.4 BROWN, SILTY CLAY WITH MED. GRAVEL AND MICA	EL. 376.7 RED SILTY CLAY W/S MICA AND DECOMPOSED ROCK	EL. 375.3 BLACK TOPSOIL	EL. 377.6 RED MICA SILTY CLAY W/S ROCK FRAGMENTS	EL. 375.9 RED MICA SILTY CLAY	370
360	15.0 2 61	11.0 2 55	6.0 2 31	9.0 3 36	6.0 2 81	15.0 3 51	15.0 3 51	360
350	4 135	22.0 4 100*	20.0 5 100	17.0 5 100/2*	19.0 4 120	21.0 4 100/5*	23.7 5 100/5*	350
340	28.5 6 100*	24.3 5 100*	24.7 7 100*	24.5 7 100/5*	25.0 5 100/1*	24.3 5 100/3*	23.7 7 100/1*	340
330	WATER TABLE AT COMPLETION 11'-3"	WATER TABLE AT COMPLETION 11'-3"	WATER TABLE AT COMPLETION 8'-8"	WATER TABLE AT COMPLETION 13'-12"	WATER TABLE AT COMPLETION 15'-2"	WATER TABLE AT COMPLETION 21'-4"	WATER TABLE AT COMPLETION 20'-8"	330

EL. 380	BORING NO. 8 STA. 73+17.0 12' LT. CL SURVEY SNOWDEN RIVER PKWY.	BORING NO. 9 STA. 71+80.0 12' RT. CL SURVEY SNOWDEN RIVER PKWY.	BORING NO. 10 STA. 71+80.0 50' RT. CL SURVEY SNOWDEN RIVER PKWY.	BORING NO. 11 STA. 72+10.50 12' RT. CL SURVEY SNOWDEN RIVER PKWY.	BORING NO. 12 STA. 72+10.50 50' RT. CL SURVEY SNOWDEN RIVER PKWY.	BORING NO. 13 STA. 72+89.50 12' RT. CL SURVEY SNOWDEN RIVER PKWY.	BORING NO. 14 STA. 72+89.50 50' RT. CL SURVEY SNOWDEN RIVER PKWY.	EL. 380
370	EL. 377.6 RED BROWN MICA SILTY CLAY	EL. 378.1 DRY REDDISH BROWN FINE SANDY CLAY W/S MICA	EL. 377.4 RED MICA SILTY CLAY W/S DECOMPOSED ROCK	EL. 378.0 FINE SANDY CLAY W/S MICA	EL. 377.8 RED MICA SILTY CLAY W/S DECOMPOSED ROCK	EL. 378.6 RED MICA SILTY CLAY W/S DECOMPOSED ROCK & ROCK FRAGMENTS	EL. 378.7 BROWN, MICACEOUS, SANDY SILT	370
360	20.0 5 100/2*	14.0 3 34	12.0 3 35	11.0 4 38	18.0 5 100	11.0 3 70	11.0 3 77	360
350	25.2 7 100/2*	20.0 4 56	21.0 4 100*	24.5 8 100/1*	27.0 7 100	22.0 5 100/1*	21.0 5 100/3*	350
340	28.9 6 100/3*	28.9 6 100/3*	24.5 5 100/1*	24.5 9 100/1*	30.0 10 100/0*	28.5 6 100/1*	28.7 6 100/3*	340
	WATER TABLE AT COMPLETION 27'-9"	WATER TABLE AT COMPLETION 21'-9" AFTER 24 HRS. 7'-6"	WATER TABLE AT COMPLETION 15'-2"	WATER TABLE AT COMPLETION 24 FT. AFTER 24 HRS. 7'-6"	WATER TABLE NONE	WATER TABLE AT COMPLETION 24'-7"	WATER TABLE NONE	

EL. 380	BORING NO. 15 STA. 73+20.0 12' RT. CL SURVEY SNOWDEN RIVER PKWY.	BORING NO. 16 STA. 73+20.0 50' RT. CL SURVEY SNOWDEN RIVER PKWY.	EL. 380
370	EL. 378.9 RED BROWN, SILTY CLAY & DECOMPOSED ROCK W/S ROCK FRAGMENTS	EL. 378.9 RED AND BROWN, SILTY CLAY WITH MICA & SOME ROCK FRAGMENTS	370
360	16.0 3 109	16.0 3 35	360
350	26.0 7 100/1*	23.9 6 100/5*	350
340	29.3 8 100/1*	23.9 7 100/3*	340
	WATER TABLE AT COMPLETION 8'-8"	WATER TABLE NONE	



BORING LOCATION PLAN  
SCALE: 1" = 40'-0"

DEPTH	SOIL DESCRIPTION	SAMPLE NO.	CASING BLOWN PER FOOT	% RECOVERY
1.	HAMMER WEIGHT	140 LB.		
2.	HAMMER DROP	30 IN.		
3.	HOLE DIAMETER	4 IN.		
4.	BORING METHOD:	HOLLOW STEM AUGERS		

- NOTES:
- FOR GENERAL NOTES, SEE SHEET NO. 2.
  - BORINGS ARE TAKEN BY GREEN ASSOCIATES, INC., SOILS AND FOUNDATIONS DIVISION ON SEPTEMBER 22 TO OCTOBER 1, 1969.

**APPROVED**  
OFFICE OF PLANNING  
AND ZONING OF  
HOWARD COUNTY  
DATE: 1/22/71

HOWARD COUNTY		
6TH ELECTION DISTRICT HOWARD COUNTY		
HOWARD RESEARCH AND DEVELOPMENT CORP. THE MILLS OF CROSS KEYS, BALTIMORE, MARYLAND 21220		
E.G.U. SUBDIVISION SECTION I AREA 3		
SNOWDEN RIVER PARKWAY INTERCHANGE NO. 6 - BRIDGE AT G.E. ENTRANCE SUBSURFACE DATA		
L.J.W.	AS NOTED	11 OF 11
H.A.S.	DEC., 1969	
L.J.W.		

GREEN ASSOCIATES, INC.  
CONSULTING ENGINEERS  
BALTIMORE, MARYLAND

DEPARTMENT OF PUBLIC WORKS Granville M. McKeand 12/8/70 CHIEF, BUREAU OF HIGHWAYS	DATE
OFFICE OF PLANNING AND ZONING	
CHIEF ENGINEER, DIVISION OF LAND DEVELOPMENT	DATE

BRIDGE No.

Survey Book No.

File No. Pocket No. Folder No.

INDEXED F70-59



# COLUMBIA

ELECTION DISTRICT 6

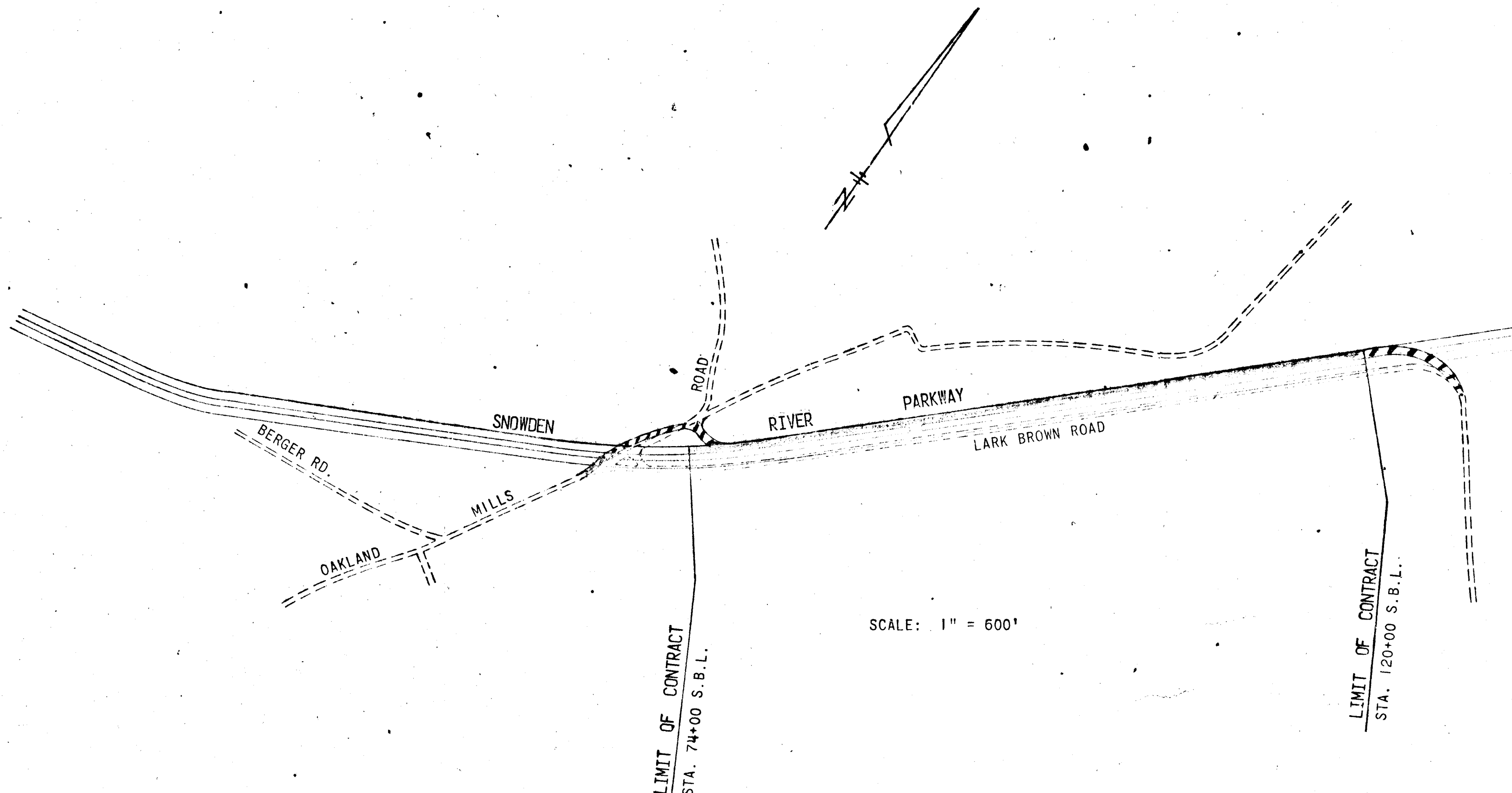
## SNOWDEN RIVER PARKWAY

PHASE - 1 S.B.L.

STA. 74+00 TO STA. 120+00

HOWARD RESEARCH & DEVELOPMENT CORP.

HOWARD COUNTY, MARYLAND

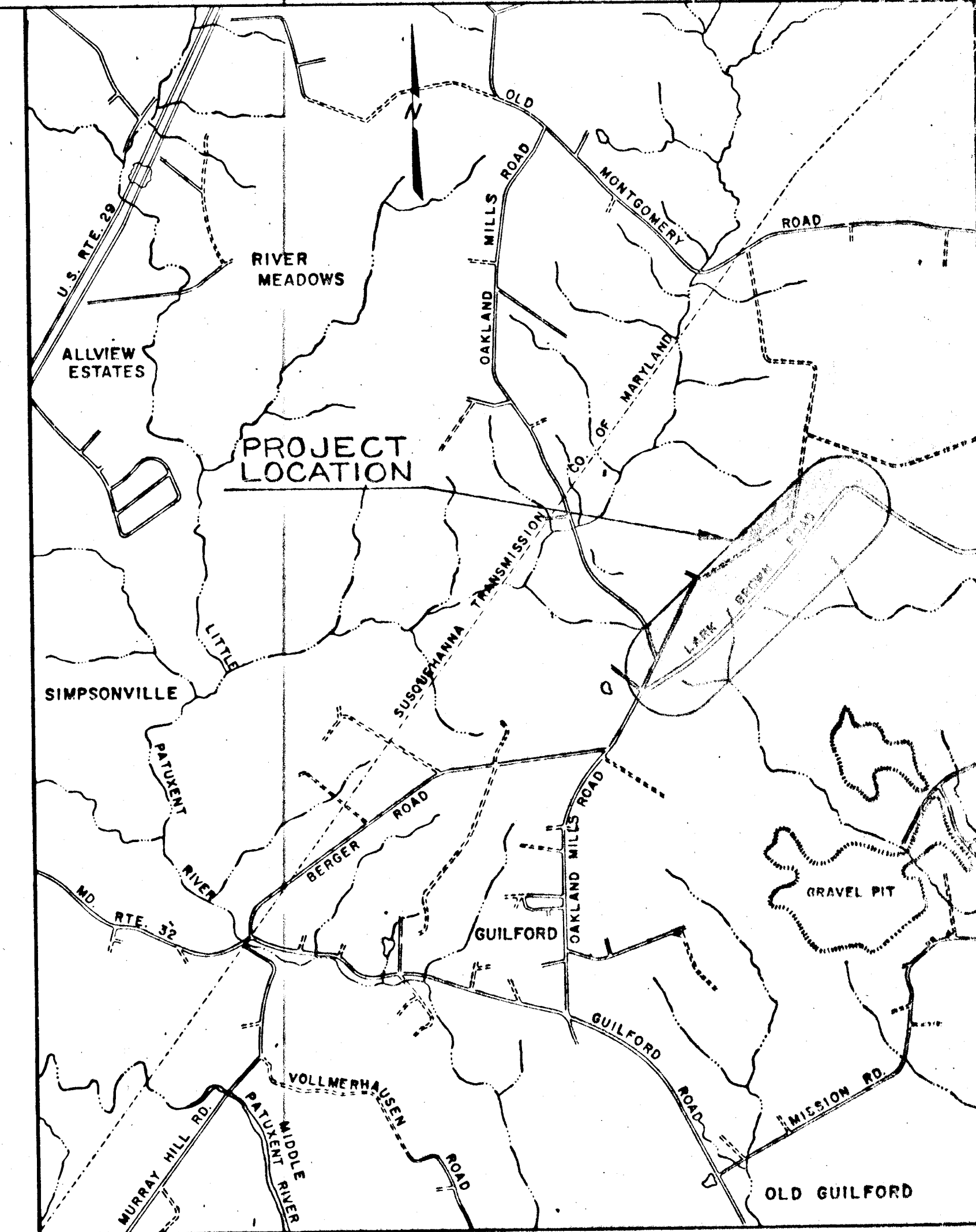


SCALE: 1" = 600'

LIMIT OF CONTRACT  
STA. 74+00 S.B.L.

LIMIT OF CONTRACT  
STA. 120+00 S.B.L.

SHEET INDEX	
SHEET	DESCRIPTION
1	TITLE SHEET & VICINITY MAP
2	TYPICAL SECTIONS
3	PAVING & DRAINAGE DETAILS
4	DRAINAGE AREA MAP
5	PLAN & PROFILE - STA. 68+00 TO 78+00
6	PLAN & PROFILE - STA. 78+00 TO 90+00
7	PLAN & PROFILE - STA. 90+00 TO 102+00
8	PLAN & PROFILE - STA. 102+00 TO 114+00
9	PLAN & PROFILE - STA. 114+00 TO 125+00
10	ROADWAY & DRAINAGE PROFILES



VICINITY MAP

SCALE: 1" = 2000'

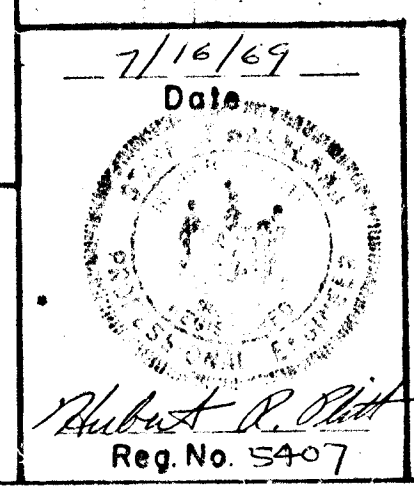
GENERAL NOTES

- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTION TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES, WHERE DIRECTED BY THE ENGINEER, A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS.
- FOR ALL DETAILS NOT SHOWN ON DRAWINGS, SEE HOWARD COUNTY ROAD CONSTR. CODE AND STD. SPECS.
- TREES ARE TO BE PROTECTED AGAINST DAMAGE TO THE MAXIMUM EXTENT REASONABLE. TREES WHICH ARE TO REMAIN IN STREETS AND OTHER RIGHTS OF WAY WILL BE MARKED BY THE ENGINEER PRIOR TO COMMENCING OF CONSTRUCTION OPERATIONS.
- DEVELOPER WILL PLACE ROADS TO SUBGRADE FOR THE FULL WIDTH OF THE RIGHT OF WAY BEFORE INSTALLATIONS OF UTILITIES.
- THE DEVELOPER SHALL ACCOMPLISH ALL GRADING WITHIN EASEMENT AREAS WHERE UTILITIES ARE TO BE INSTALLED BEFORE NOTICE TO PROCEED WILL BE ISSUED.
- CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES AT LEAST THREE DAYS BEFORE STARTING WORK SHOWN ON THIS THESE DRAWINGS:  
 BELL TELEPHONE SYSTEM 393-3649  
 LONG DISTANCE CABLE DIVISION 393-3553 OR 3554  
 BALTIMORE GAS & ELECTRIC CO. 539-8000 EXT. 691
- ALL DETAILS ARE FROM THE "ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS" ISSUED OR APPROVED BY THE COUNTY COMMISSIONERS AND THE HOWARD COUNTY ROAD DEPARTMENT.
- ALL ROADS ARE DESIGNED FOR 30 M.P.H. TRAFFIC SPEED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIAL STANDARDS.
- ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND G.S. MEAN SEA LEVEL DATUM 1929.

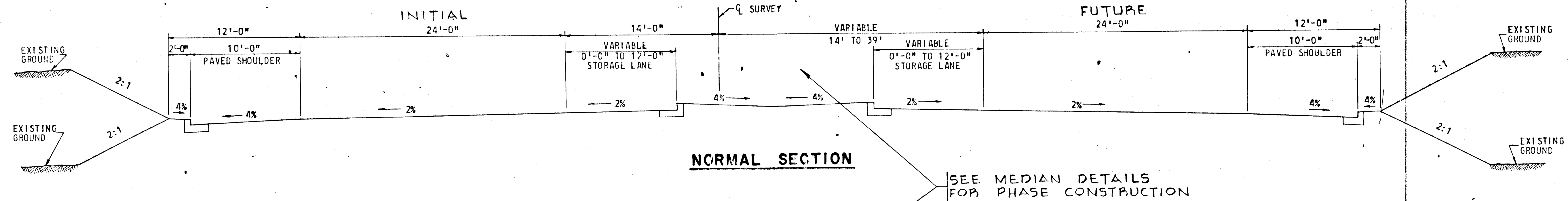
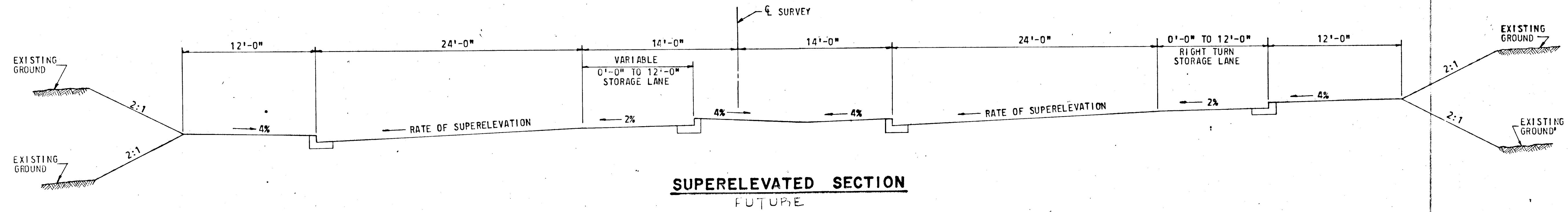
DEPARTMENT OF PUBLIC WORKS  
*D. W. McKeand* 12/22/70  
 CHIEF, BUREAU OF HIGHWAYS DATE

OFFICE OF PLANNING AND ZONING  
*J. H. Clawson* 1/22/71  
 CHIEF ENGINEER, DIVISION OF LAND DEVELOPMENT DATE

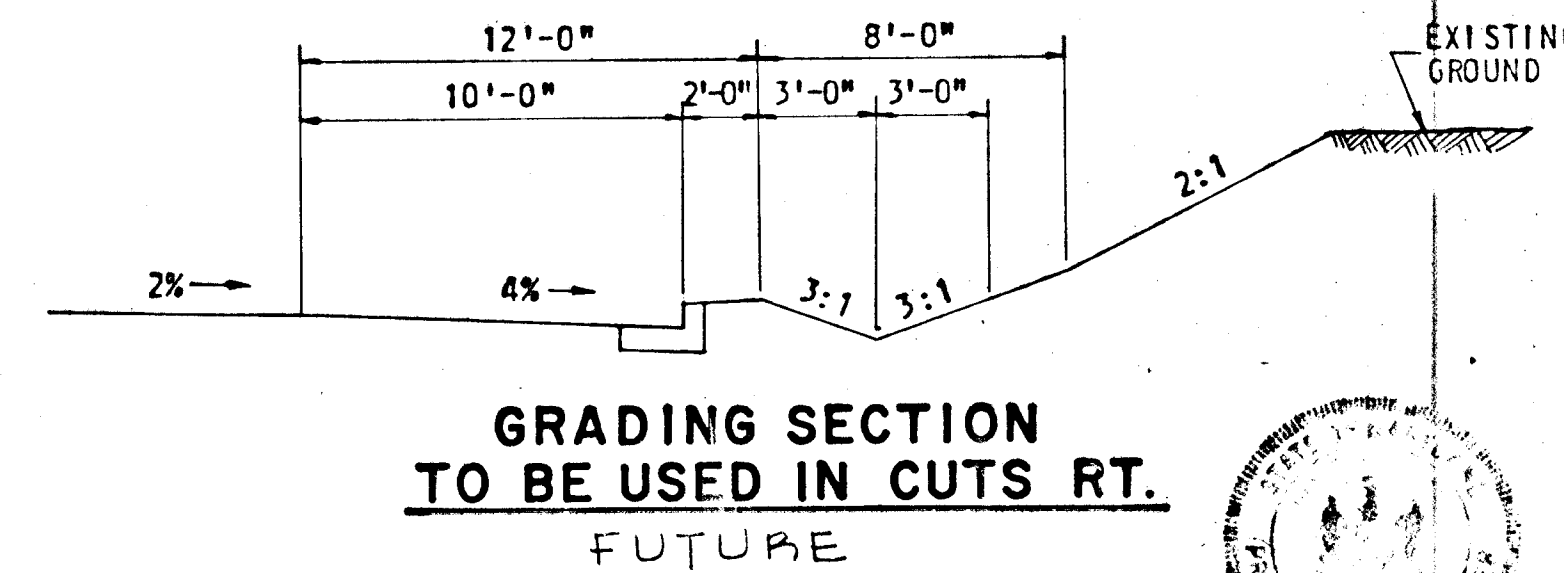
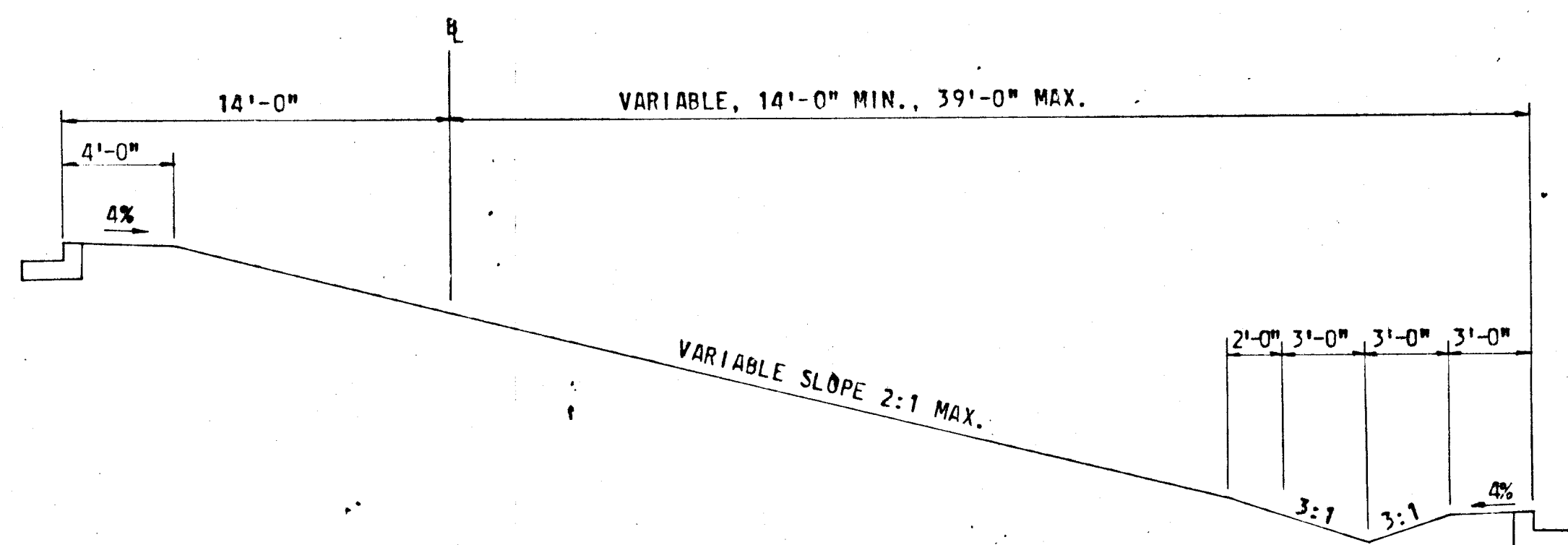
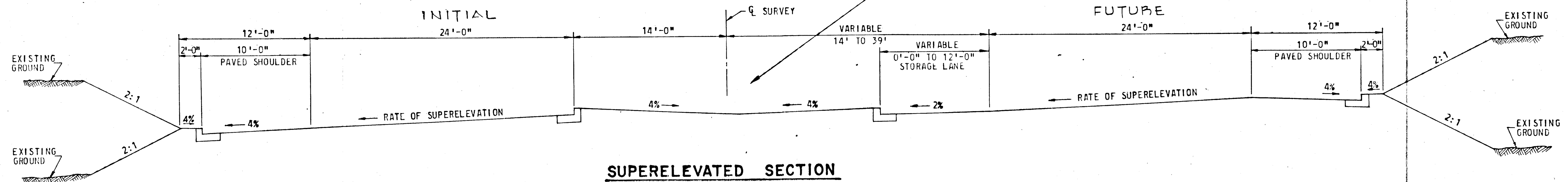
GREEN ASSOCIATES, INC.  
 CONSULTING ENGINEERS  
 1130 N. CHARLES ST.  
 BALTIMORE, MARYLAND







SEE MEDIAN DETAILS FOR PHASE CONSTRUCTION



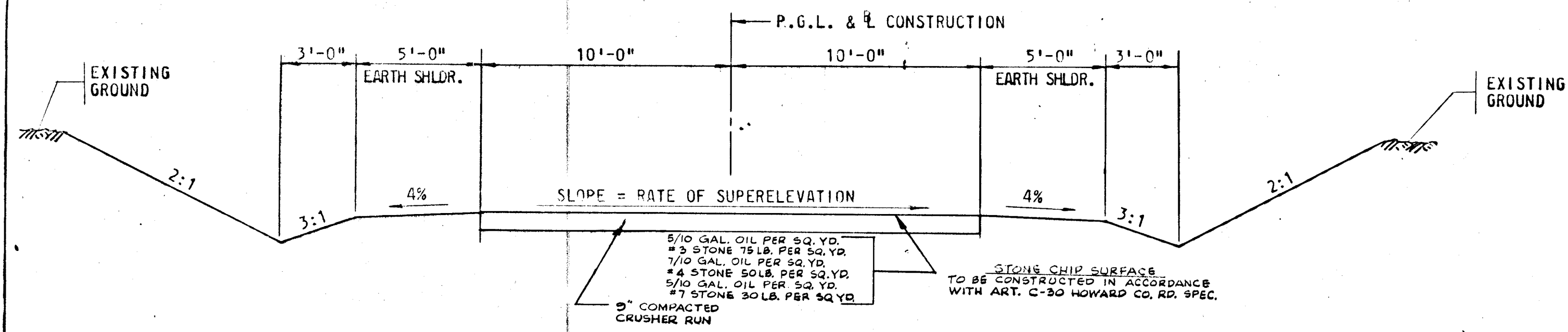
APPROVED  
OFFICE OF PLANNING  
AND ZONING OF  
HOWARD COUNTY  
DATE: 11/22/71  
*J. H. P.*

Rev. No.	Rev. Date	Revision Description
<b>COLUMBIA</b>		
MARYLAND 6TH ELECTION DISTRICT HOWARD COUNTY		
OWNER: HOWARD COUNTY HOWARD RESEARCH AND DEVELOPMENT CORP. THE VILLAGE OF CROSS KEYS - BALTIMORE, MARYLAND 21210		
PROJECT AREA	E. G. U. SUBDIVISION SECTION 1 AREA 3	
PROJECT TITLE	SNOWDEN RIVER PARKWAY TYPICAL SECTIONS	
Des. By	Scale: AS SHOWN	Sheet No. 2 OF 10
Dir. By	Date	C.C.T. No.
Chk. By	Approved	

DEPARTMENT OF PUBLIC WORKS  
*D. W. Weiland* 12/22/70  
CHIEF, BUREAU OF HIGHWAYS DATE  
OFFICE OF PLANNING AND ZONING  
CHIEF ENGINEER, DIVISION OF LAND DEVELOPMENT DATE

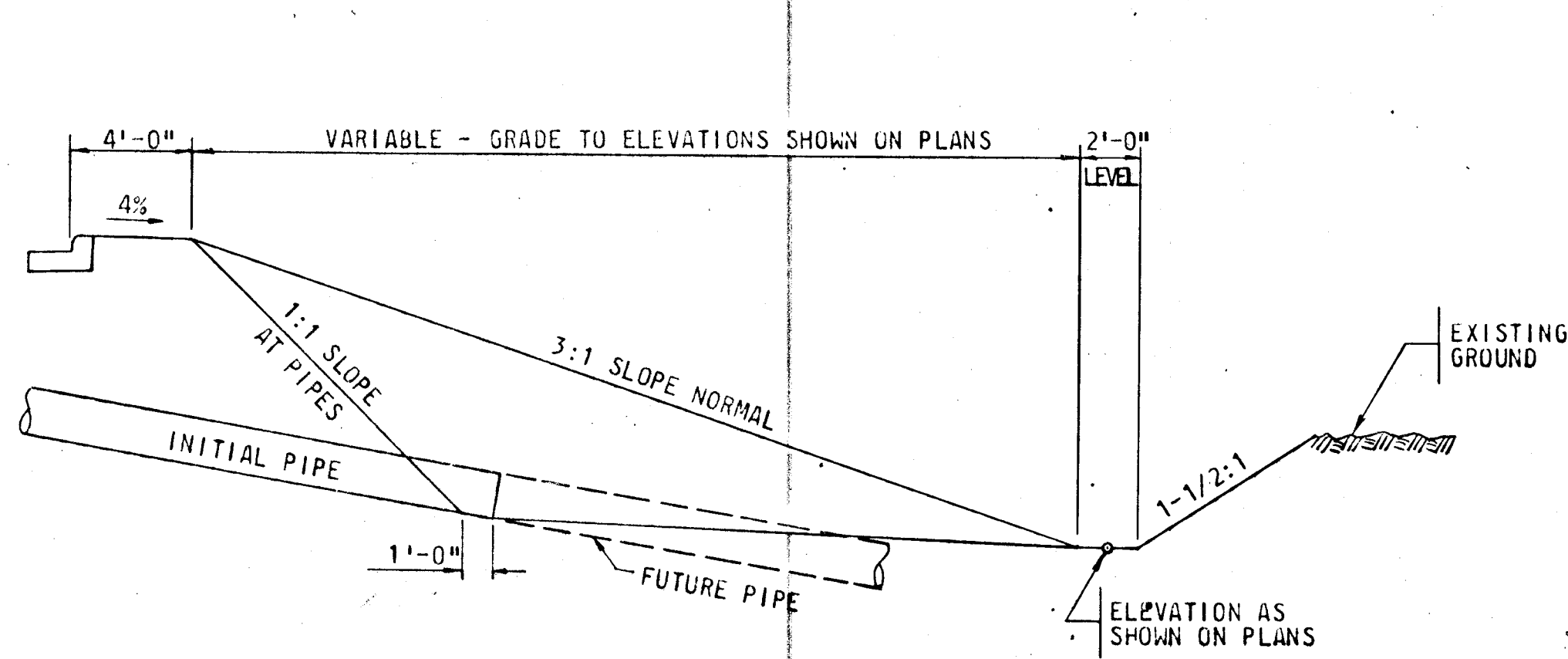
GREEN ASSOCIATES, INC.  
CONSULTING ENGINEERS  
BALTIMORE, MARYLAND



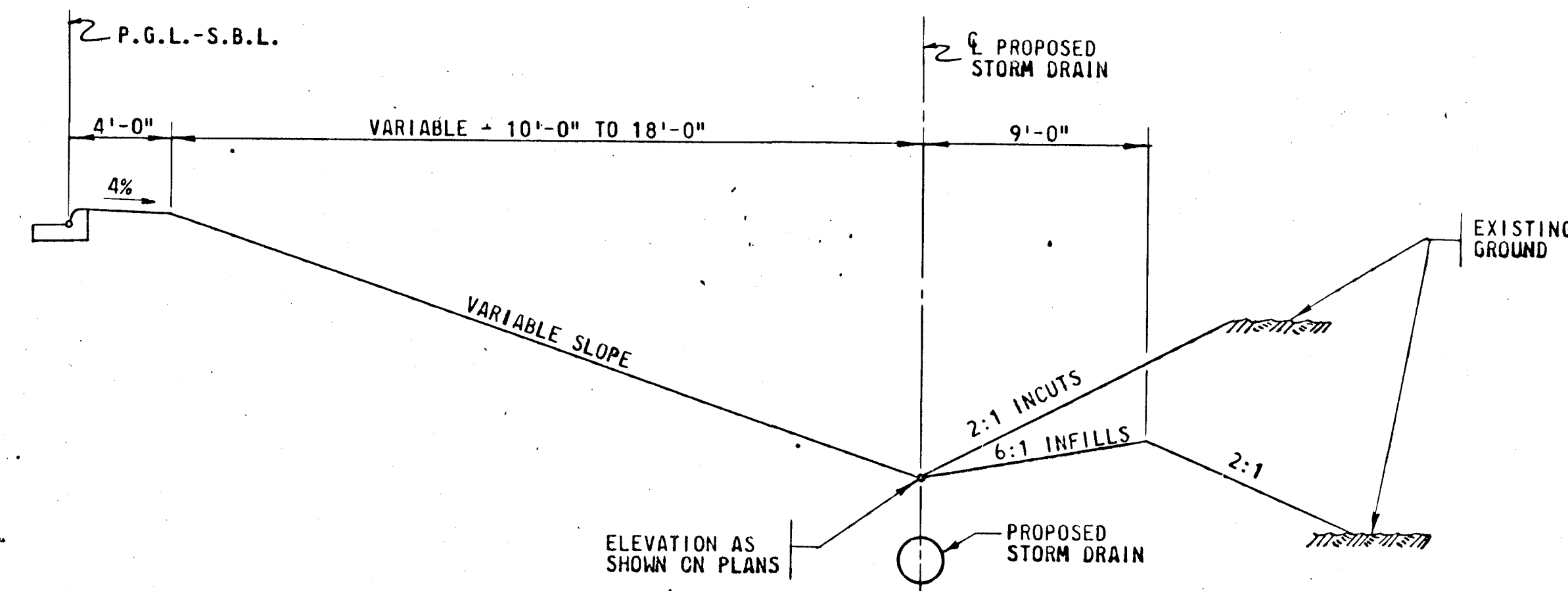


**TEMPORARY CONNECTIONS**

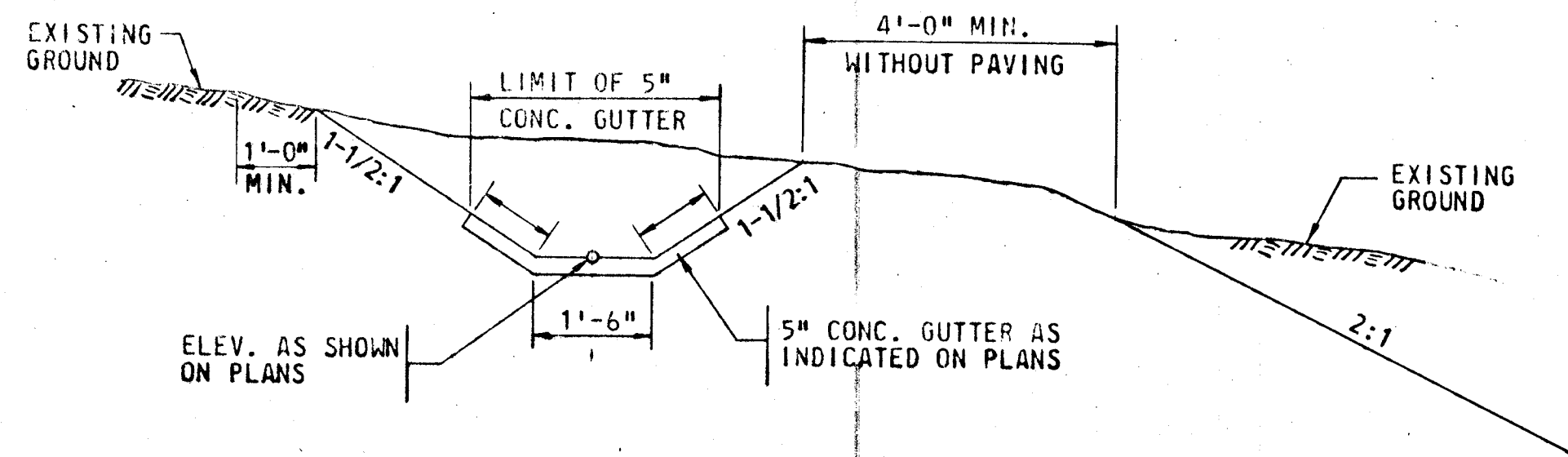
SCALE: 1" = 4'-0"



**INITIAL GRADING FOR TEMPORARY DRAINAGE**  
STA. 87+00 TO STA. 118+00

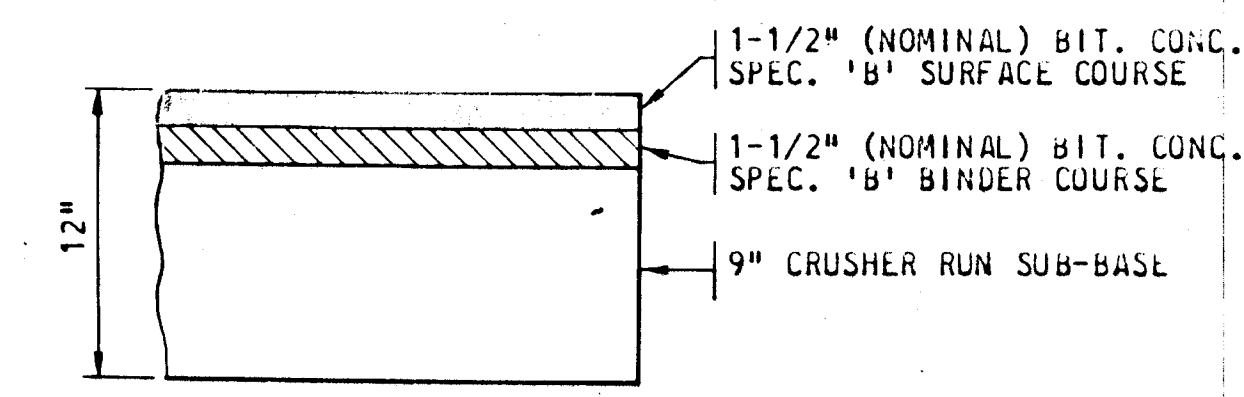


**SPECIAL MEDIAN GRADING TO COVER STORM DRAINS**  
STA. 74+00 TO STA. 86+25



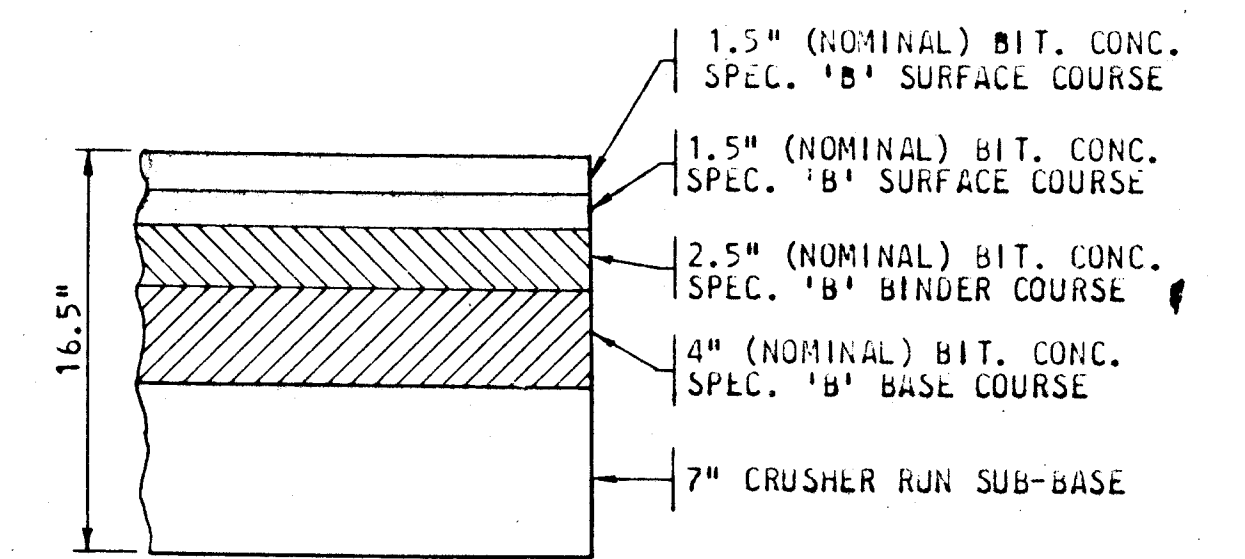
**BERM DITCH DETAIL**

NOT TO SCALE



**PAVED SHOULDER DETAIL**

SCALE: 1-1/2" = 1'-0"

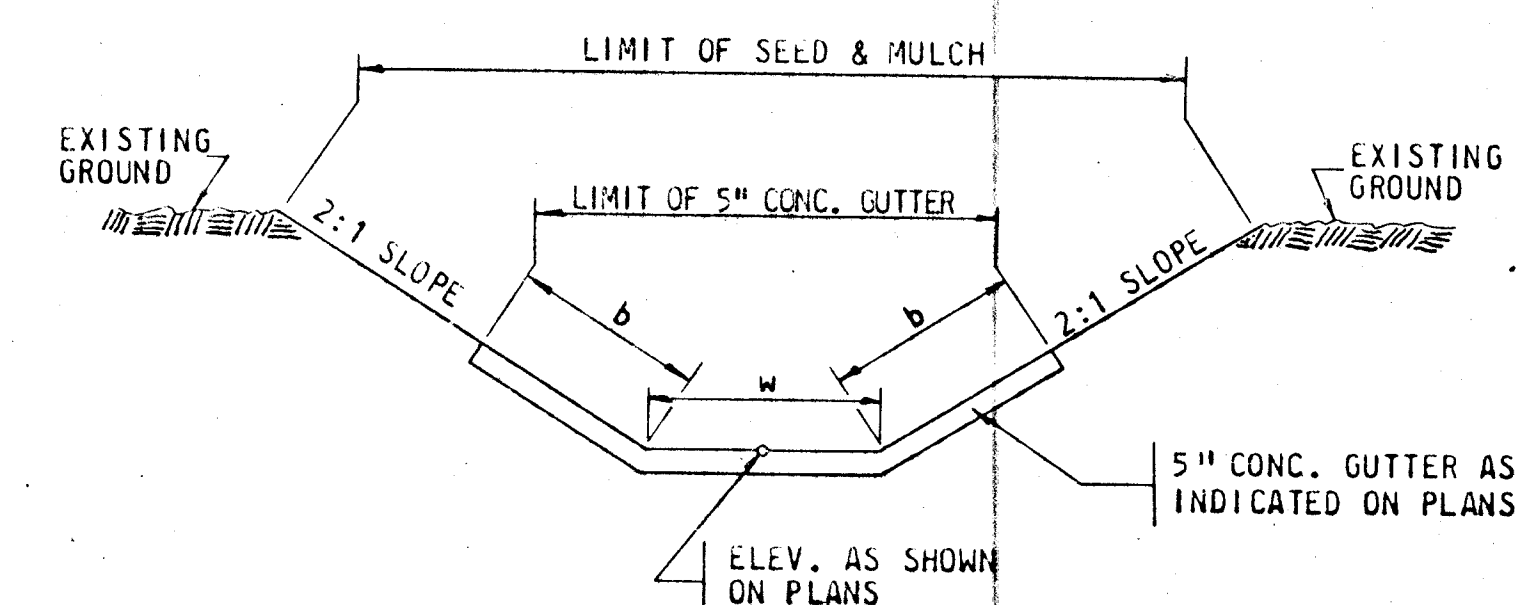


**PAVING DETAIL**

SCALE: 1-1/2" = 1'-0"

HOWARD COUNTY STD., D-9, P-64

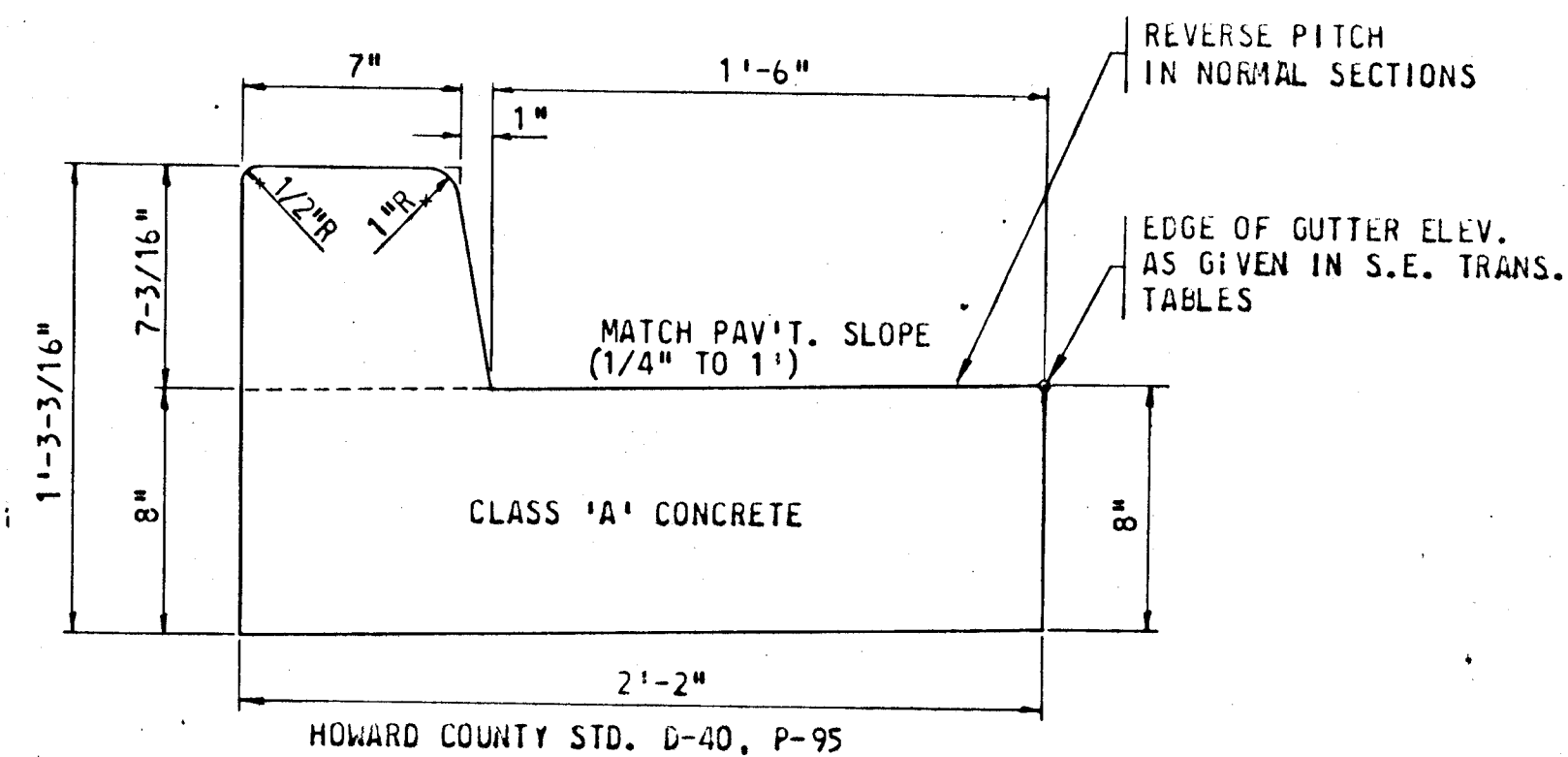
**APPROVED**  
OFFICE OF PLANNING AND ZONING OF HOWARD COUNTY  
DATE: 12/22/70  
*J. H. K.*



**INLET & OUTLET DITCH DETAIL**

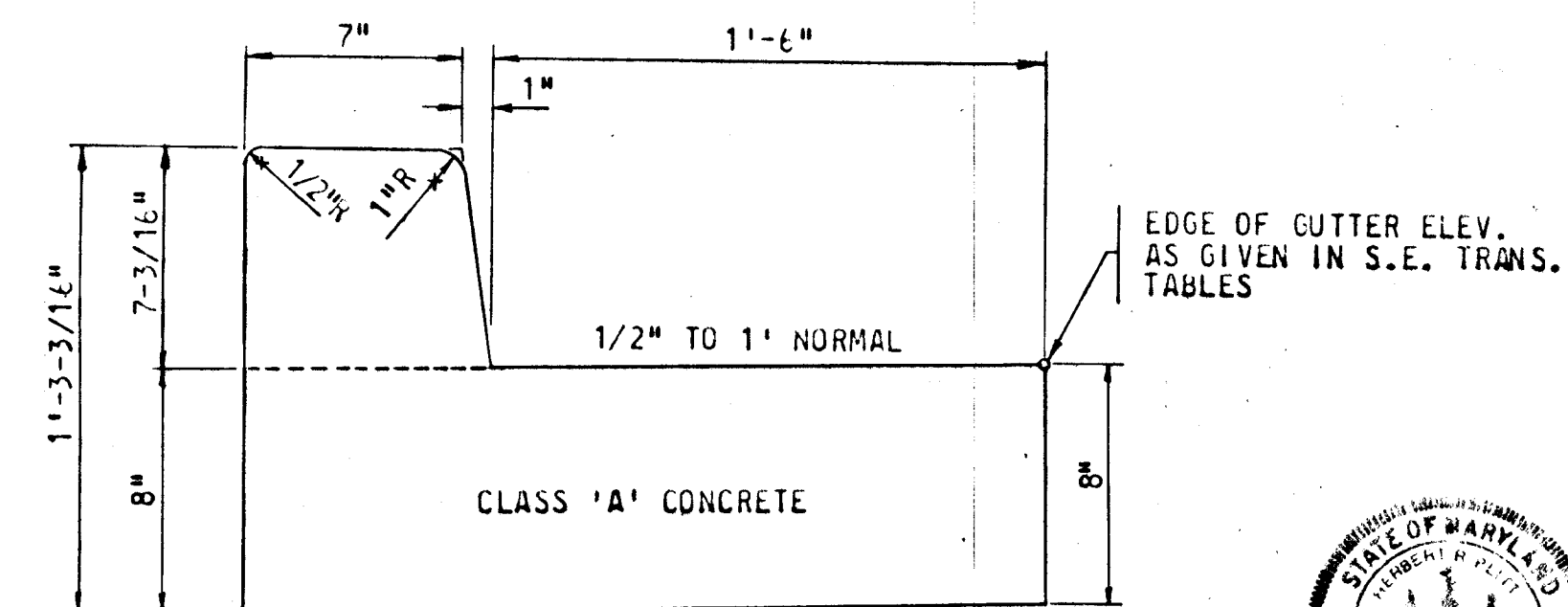
NOT TO SCALE

'w' - DIMENSION AS SHOWN ON PLAN  
'b' - DIMENSION IS 2'-0" UNLESS SHOWN OTHERWISE ON PLAN, SEED & MULCH ALL SLOPES NOT OTHERWISE TREATED



**CURB & GUTTER DETAIL ADJACENT TO MEDIAN**

SCALE: 2" = 1'



**CURB & GUTTER DETAIL ADJACENT TO SHOULDER**

SCALE: 2" = 1'

DEPARTMENT OF PUBLIC WORKS  
*S. M. McNeil* 12/22/70  
CHIEF, BUREAU OF HIGHWAYS DATE

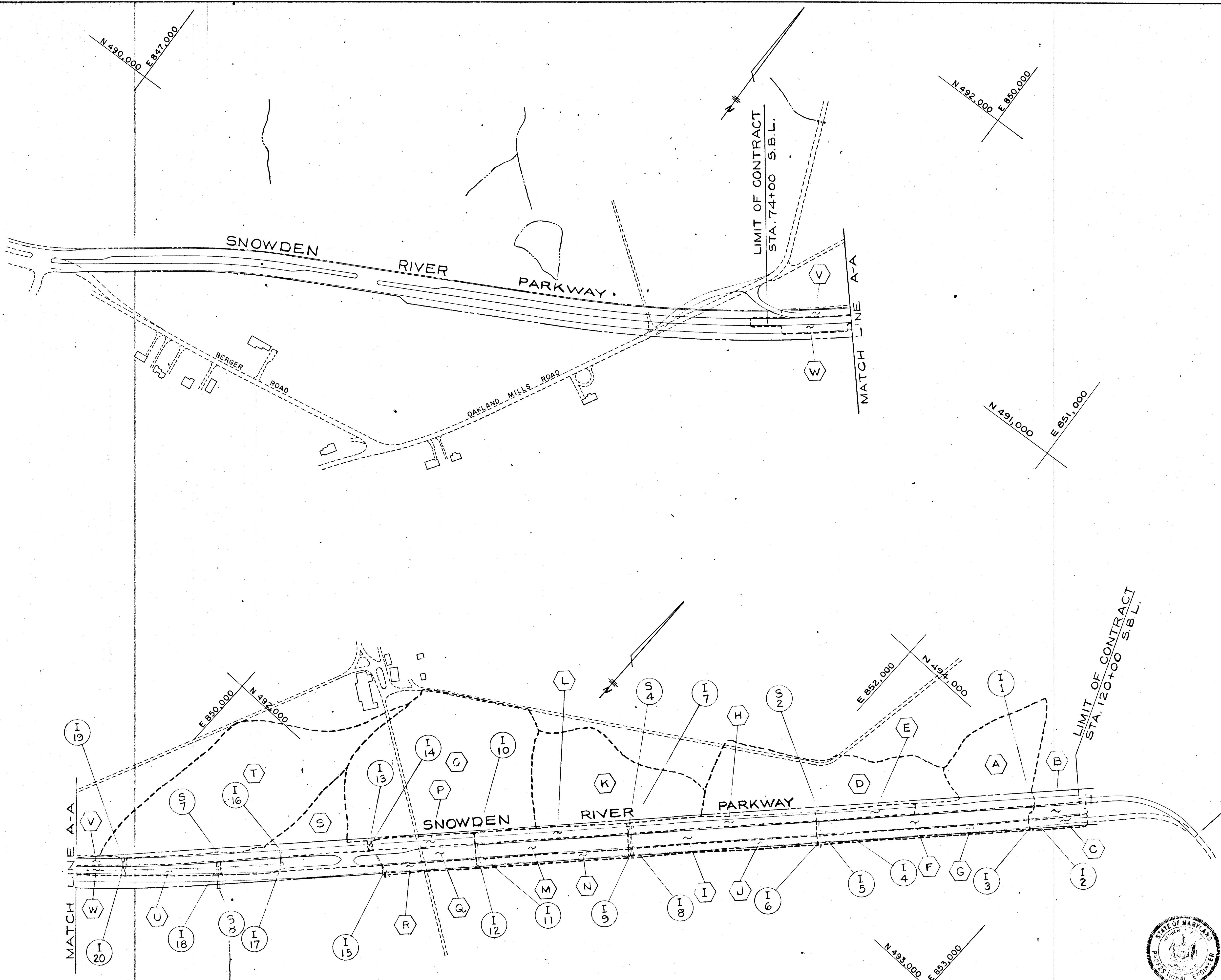
OFFICE OF PLANNING AND ZONING  
CHIEF ENGINEER, DIVISION OF LAND DEVELOPMENT DATE

GREEN ASSOCIATES, INC.  
CONSULTING ENGINEERS  
BALTIMORE, MARYLAND



Rev Date	Rev No	Revision Description
<b>COLUMBIA</b> MARYLAND 6TH ELECTION DISTRICT HOWARD COUNTY OWNER AND DEVELOPER HOWARD RESEARCH AND DEVELOPMENT CORP. THE VILLAGE OF CROSS KEYS - BALTIMORE, MARYLAND 21210		
PROJECT AREA: E. G. U. SUBDIVISION SECTION 1 AREA 3		
PROJECT TITLE: SNOWDEN RIVER PARKWAY PAVING & DRAINAGE DETAILS		
Des By	Scale AS SHOWN	Eng. No. 3 OF 10
Dwn By	Date	C.C.F. No.
Chk By	Approved	

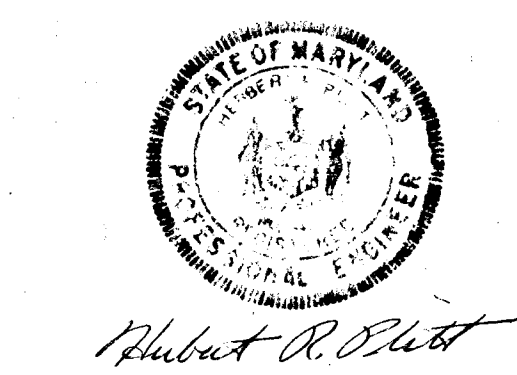




APPROVED  
 OFFICE OF PLANNING  
 AND ZONING OF  
 HOWARD COUNTY  
 DATE 12/22/70  
*J. B. D.*

**DRAINAGE AREA MAP**  
 SCALE: 1" = 200'

DEPARTMENT OF PUBLIC WORKS  
*B. M. Williams*  
 CHIEF, BUREAU OF HIGHWAYS  
 DATE 12/22/70  
 OFFICE OF PLANNING AND ZONING  
 CHIEF ENGINEER, DIVISION OF LAND DEVELOPMENT



GREEN ASSOCIATES, INC.  
 CONSULTING ENGINEERS  
 BALTIMORE, MARYLAND

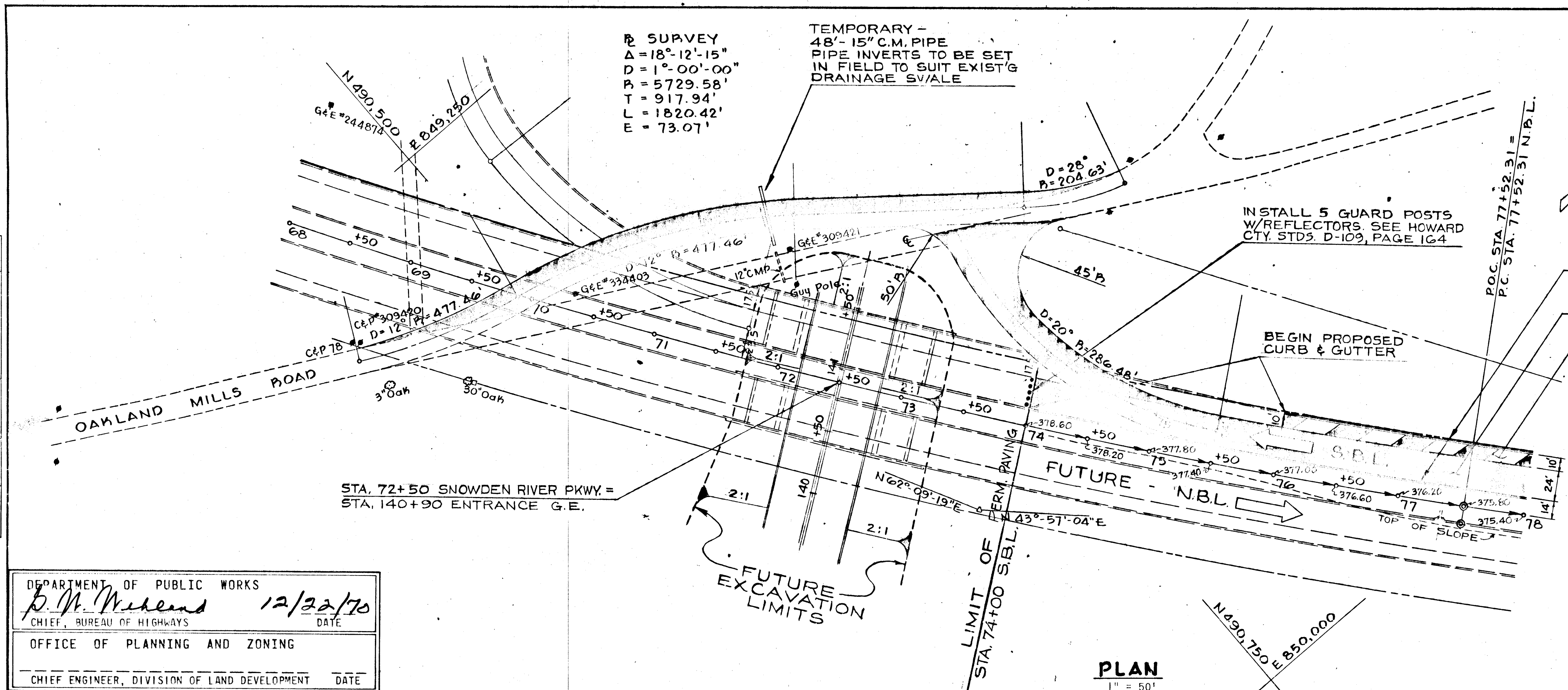
Rev. No.	Rev. Date	Revision Description
<b>COLUMBIA</b>		
M A R Y L A N D		
6TH ELECTION DISTRICT HOWARD COUNTY		
OWNER AND DEVELOPER HOWARD RESEARCH AND DEVELOPMENT CORP. THE VILLAGE OF CROSS KEYS BALTIMORE, MARYLAND 21210		
PROJECT AREA		
E. G. U. SUBDIVISION SECTION 1 AREA 3		
PROJECT TITLE		
SNOWDEN RIVER PARKWAY DRAINAGE AREA MAP		
Des. By	J. F.	Scale 1" = 200'
Drn. By	J. B. D.	Date
Chk. By		Approved
Dwg. No.	4 OF 10	C.C.F. No.



DATE  
BY  
SURVEYED  
PLOTTED  
CHECKED  
NOTE BOOK  
NO.

DATE  
BY  
SURVEYED  
PLOTTED  
CHECKED  
NOTE BOOK  
NO.

DEPARTMENT OF PUBLIC WORKS  
*D. M. Wickens* 12/22/70  
CHIEF, BUREAU OF HIGHWAYS DATE  
OFFICE OF PLANNING AND ZONING  
CHIEF ENGINEER, DIVISION OF LAND DEVELOPMENT DATE



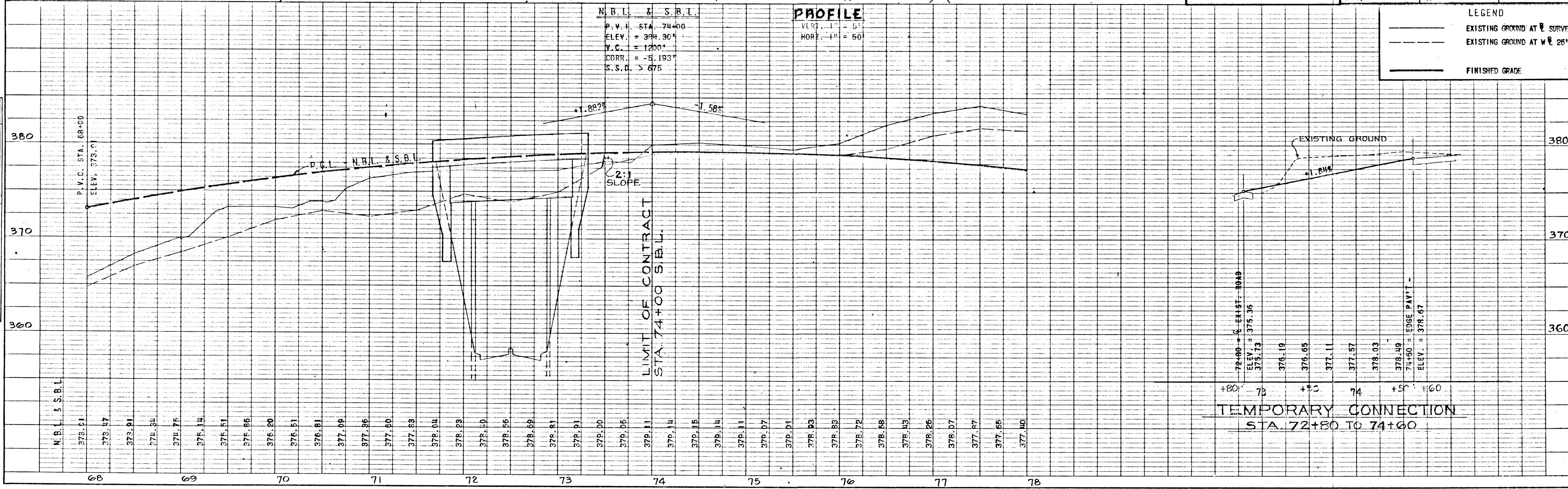
PROP CURB & GUTTER  
16 1/2" BIT. CONC. PAVING  
12" BIT. CONC. PAVING



GREEN ASSOCIATES, INC.  
CONSULTING ENGINEERS  
BALTIMORE, MARYLAND

APPROVED  
OFFICE OF PLANNING  
AND ZONING OF  
HOWARD COUNTY  
DATE 1/22/71  
*J. H. C.*

Rev Date	Rev No	Revision Description
<b>COLUMBIA</b> MARYLAND 5TH ELECTION DISTRICT HOWARD COUNTY OWNED AND DEVELOPED BY HOWARD RESEARCH AND DEVELOPMENT CORP. THE VILLAGE OF CROSS KEYS - BALTIMORE, MARYLAND 21210		
PROJECT AREA		
E. G. U. SUBDIVISION SECTION 1 AREA 3		
PROJECT TITLE		
SNOWDEN RIVER PARKWAY PLAN & PROFILE		
Des By	Scale	Dwg No
Drn By	Date	C.C.F. No
Chk By	Approved	



LEGEND  
 - - - - - EXISTING GROUND AT SURVEY  
 - - - - - EXISTING GROUND AT W.P. 25'  
 ——— FINISHED GRADE

TEMPORARY CONNECTION  
STA. 72+80 TO 74+60

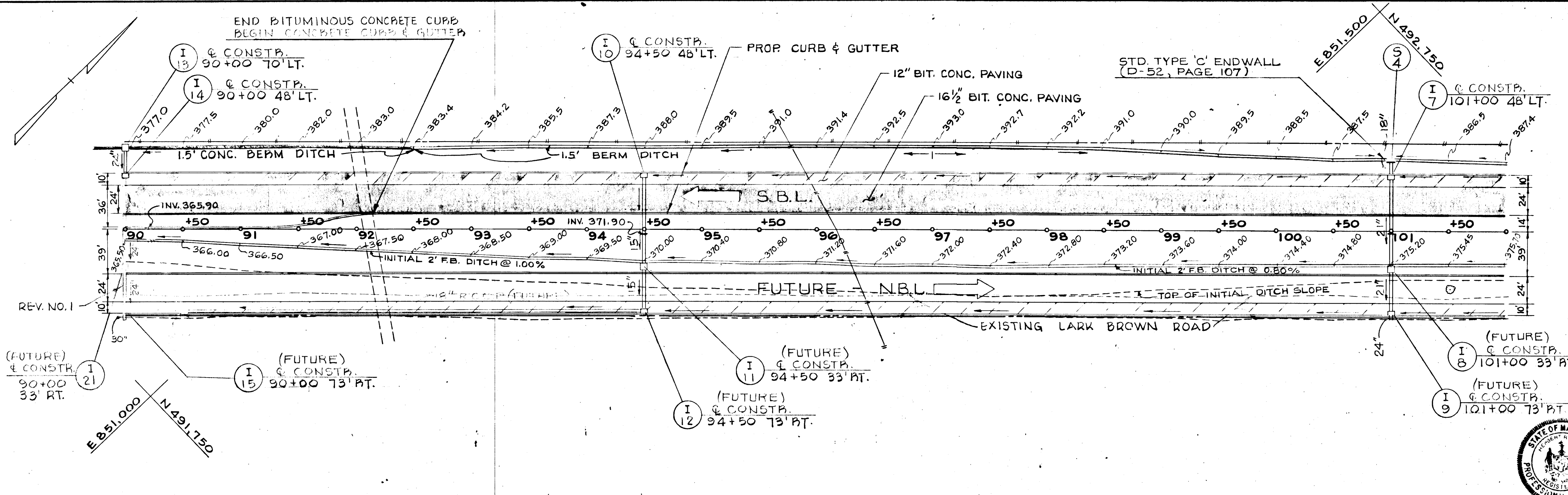






DATE  
BY  
SURVEYED  
PLOTTED  
CHECKED  
NO. OF WAY CHECKED

DATE  
BY  
SURVEYED  
PLOTTED  
CHECKED  
NO. OF WAY CHECKED



STRUCTURE SCHEDULE			
NO.	TYPE	INV. OUT	TOP ELEV.
I-7	DBL.'S' COMP.	382.50	386.97
I-8	K' W/GRATE	371.25	SET IN FIELD
I-9	DBL.'S' COMP.	369.75	373.91
I-10	DBL.'S' COMP.	377.10	381.13
I-11	K' W/GRATE	368.00	SET IN FIELD
I-12	DBL.'S' COMP.	366.08	370.53
I-13	K' INLET	374.60	SET IN FIELD
I-14	DBL.'S' COMP.	366.74	371.05
I-15	DBL.'S' COMP.	363.75	368.45
I-21	K W/GRATE	365.25	SET IN FIELD

APPROVED  
OFFICE OF PLANNING  
AND ZONING OF  
HOWARD COUNTY  
DATE 1/22/70  
*[Signature]*

DEPARTMENT OF PUBLIC WORKS  
CHIEF, BUREAU OF HIGHWAYS  
OFFICE OF PLANNING AND ZONING  
CHIEF ENGINEER, DIVISION OF LAND DEVELOPMENT

12/22/70  
DATE

GREEN ASSOCIATES, INC.  
CONSULTING ENGINEERS  
BALTIMORE, MARYLAND



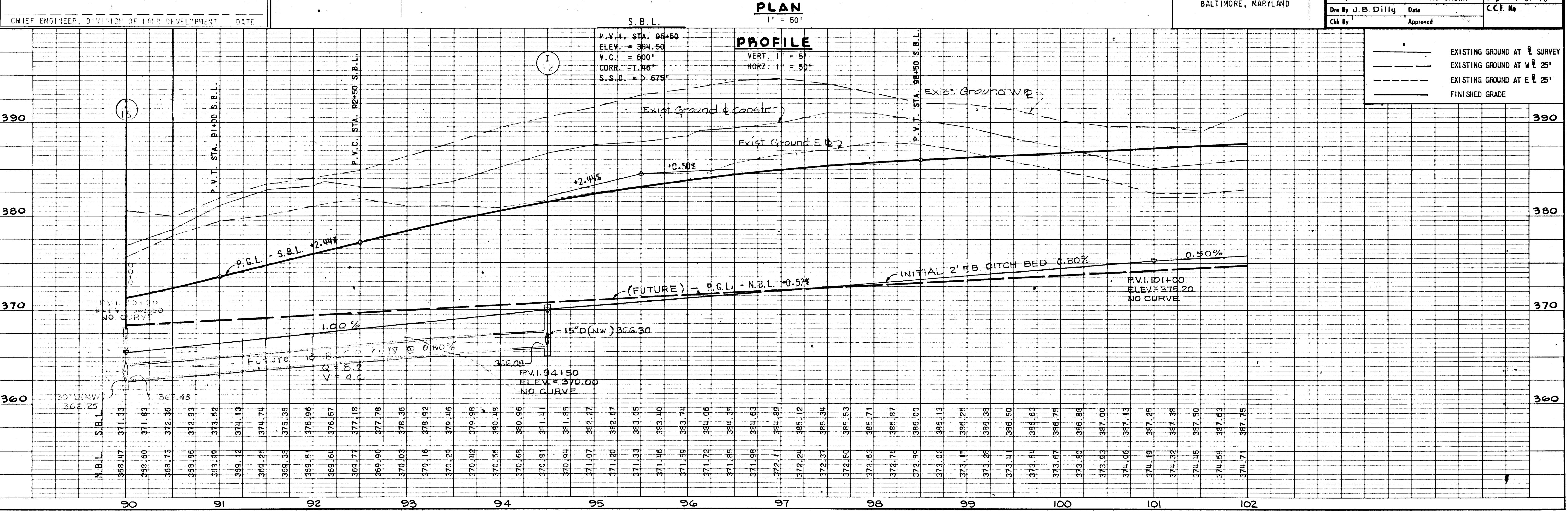
Rev Date Rev No Revision Description

**COLUMBIA**  
M A R Y L A N D  
5TH ELECTION DISTRICT HOWARD COUNTY  
OWNER AND DEVELOPER  
HOWARD RESEARCH AND DEVELOPMENT CORP.  
THE VILLAGES OF CROSS KEYS - BALTIMORE, MARYLAND 21210

PROJECT AREA E. G. U. SUBDIVISION  
SECTION 1 AREA 3

PROJECT TITLE SNOWDEN RIVER PARKWAY  
PLAN & PROFILE

Des By Scale AS SHOWN Dwg. No 7 OF 10  
Dra By J. B. Dilly Date C.C.F. No  
Chk By Approved





DATE	
BY	
NO.	
DATE	
BY	
NO.	
DATE	
BY	
NO.	

DATE	
BY	
NO.	
DATE	
BY	
NO.	
DATE	
BY	
NO.	

DEPARTMENT OF PUBLIC WORKS  
*B. M. M...*  
 CHIEF, BUREAU OF HIGHWAYS  
 12/22/70  
 DATE

OFFICE OF PLANNING AND ZONING  
 CHIEF ENGINEER, DIVISION OF LAND DEVELOPMENT  
 DATE

NO.	TYPE	INV. OUT	TOP ELEV.
I-4	DBL'S COMB	386.50	390.97
I-5	K' W/GRATE	375.50	SET IN FIELD
I-6	DBL'S COMB	373.75	378.07

APPROVED  
 OFFICE OF PLANNING AND ZONING OF HOWARD COUNTY  
 DATE: 11/22/71  
*J. R. ...*

Rev Date	Rev No	Revision Description

**COLUMBIA**  
 MARYLAND  
 6TH ELECTION DISTRICT HOWARD COUNTY  
 OWNER AND DEVELOPER  
 HOWARD RESEARCH AND DEVELOPMENT CORP.  
 THE VILLAGE OF CROSS KEYS - BALTIMORE, MARYLAND 21210

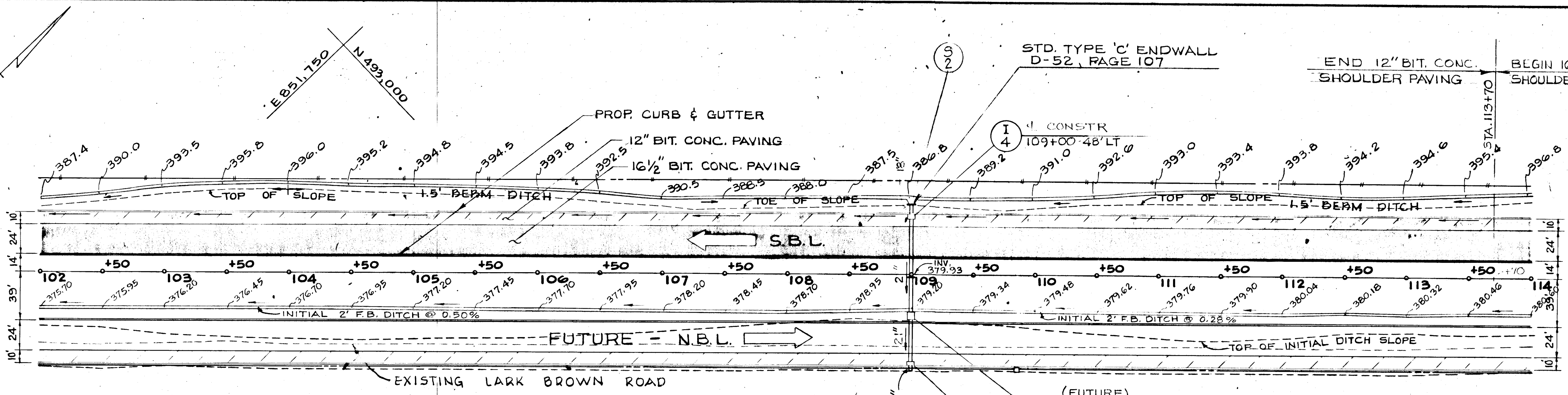
PROJECT AREA: E. G. U. SUBDIVISION SECTION 1 AREA 3

PROJECT TITLE: SNOWDEN RIVER PARKWAY PLAN & PROFILE

Des By: Scale AS SHOWN Dwg. No 8 OF 10  
 Dra By: Date C.C.F. No  
 Chk By: Approved

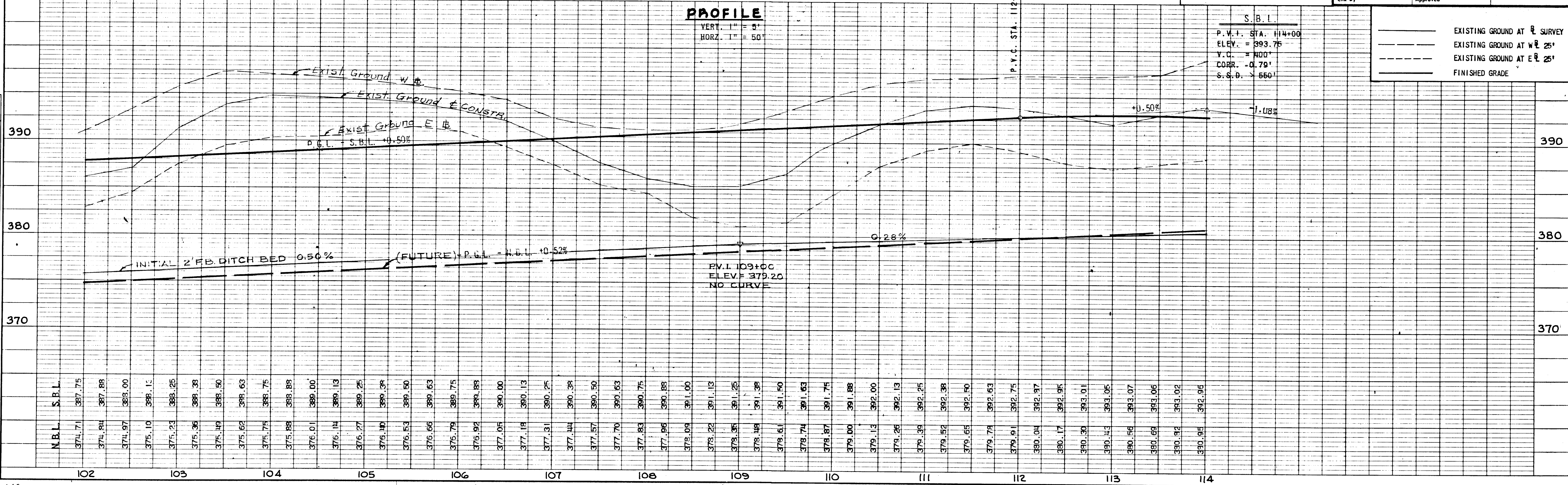


GREEN ASSOCIATES, INC.  
 CONSULTING ENGINEERS  
 BALTIMORE, MARYLAND



PLAN  
 1" = 50'

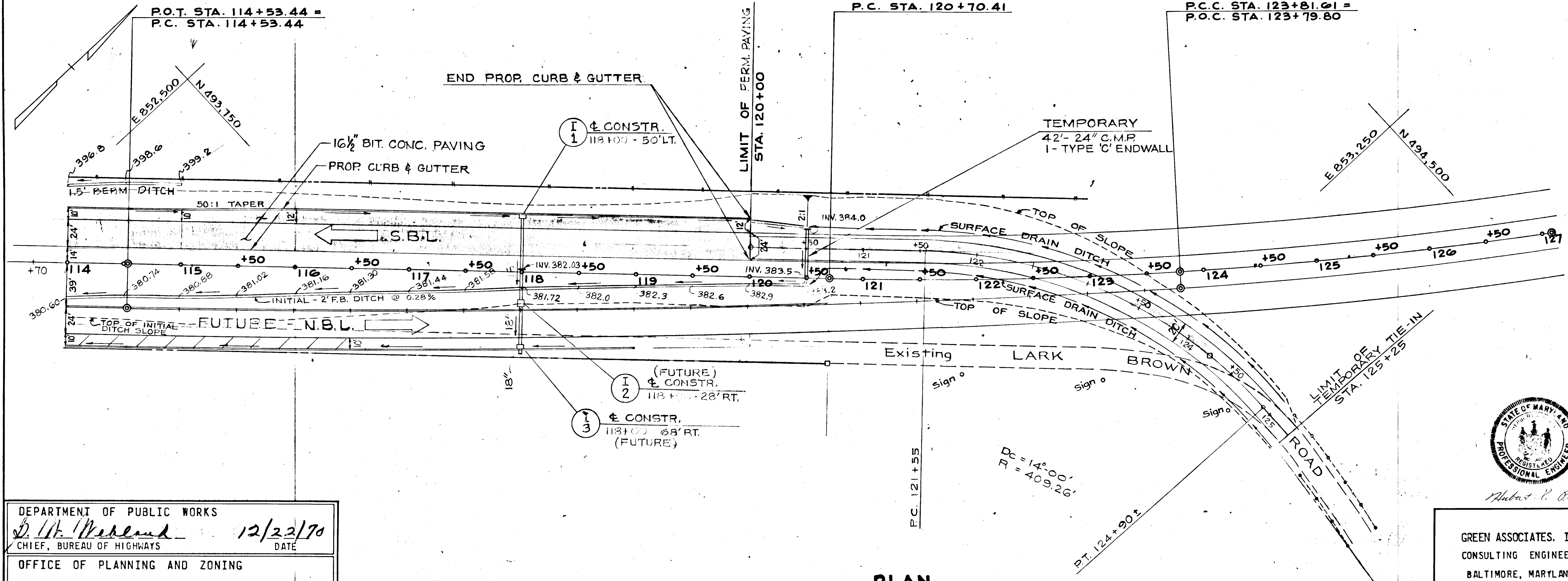
PROFILE  
 VERT. 1" = 5'  
 HORIZ. 1" = 50'



#43



DATE	
BY	
NO.	
PLAN	
NO.	
DATE	
BY	
NO.	
PROFILE	
NO.	
DATE	
BY	
NO.	



STRUCTURE SCHEDULE			
NO.	TYPE	INV OUT	TOP ELEV.
I-1	DBL'S COMB	385.00	389.07
I-2	K' W/GRATE	380.00	SET IN FIELD
I-3	DBL'S COMB	378.60	382.75

APPROVED  
OFFICE OF PLANNING  
AND ZONING OF  
HOWARD COUNTY  
DATE: 1/23/71  
*JHC*

DEPARTMENT OF PUBLIC WORKS  
*B. W. McKeand* 12/23/70  
CHIEF, BUREAU OF HIGHWAYS  
OFFICE OF PLANNING AND ZONING  
CHIEF ENGINEER, DIVISION OF LAND DEVELOPMENT

STATE OF MARYLAND  
REGISTERED PROFESSIONAL ENGINEER  
*Hubert P. Clark*

GREEN ASSOCIATES, INC.  
CONSULTING ENGINEERS  
BALTIMORE, MARYLAND

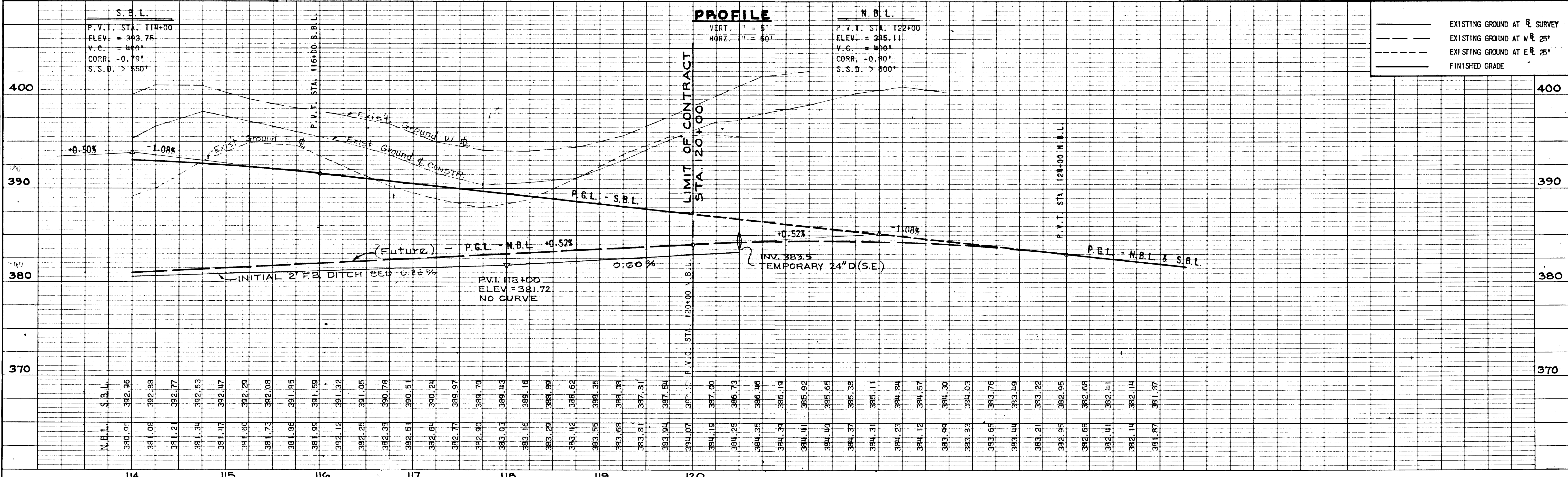
Rev Date	Rev No	Revision Description

**COLUMBIA**  
MARYLAND  
6TH ELECTION DISTRICT HOWARD COUNTY  
OWNER AND DEVELOPER  
HOWARD RESEARCH AND DEVELOPMENT CORP.  
THE VILLAGE OF CROSS KEYS - BALTIMORE, MARYLAND 21210

PROJECT AREA: E.G.U. SUBDIVISION SECTION 1 AREA 3  
PROJECT TITLE: SNOWDEN RIVER PARKWAY  
PLAN & PROFILE

Des By	Scale AS SHOWN	Dwg. No 9 OF 10
Drn By	Date	C.C.F. No
Chk By	Approved	

PLAN  
1" = 50'



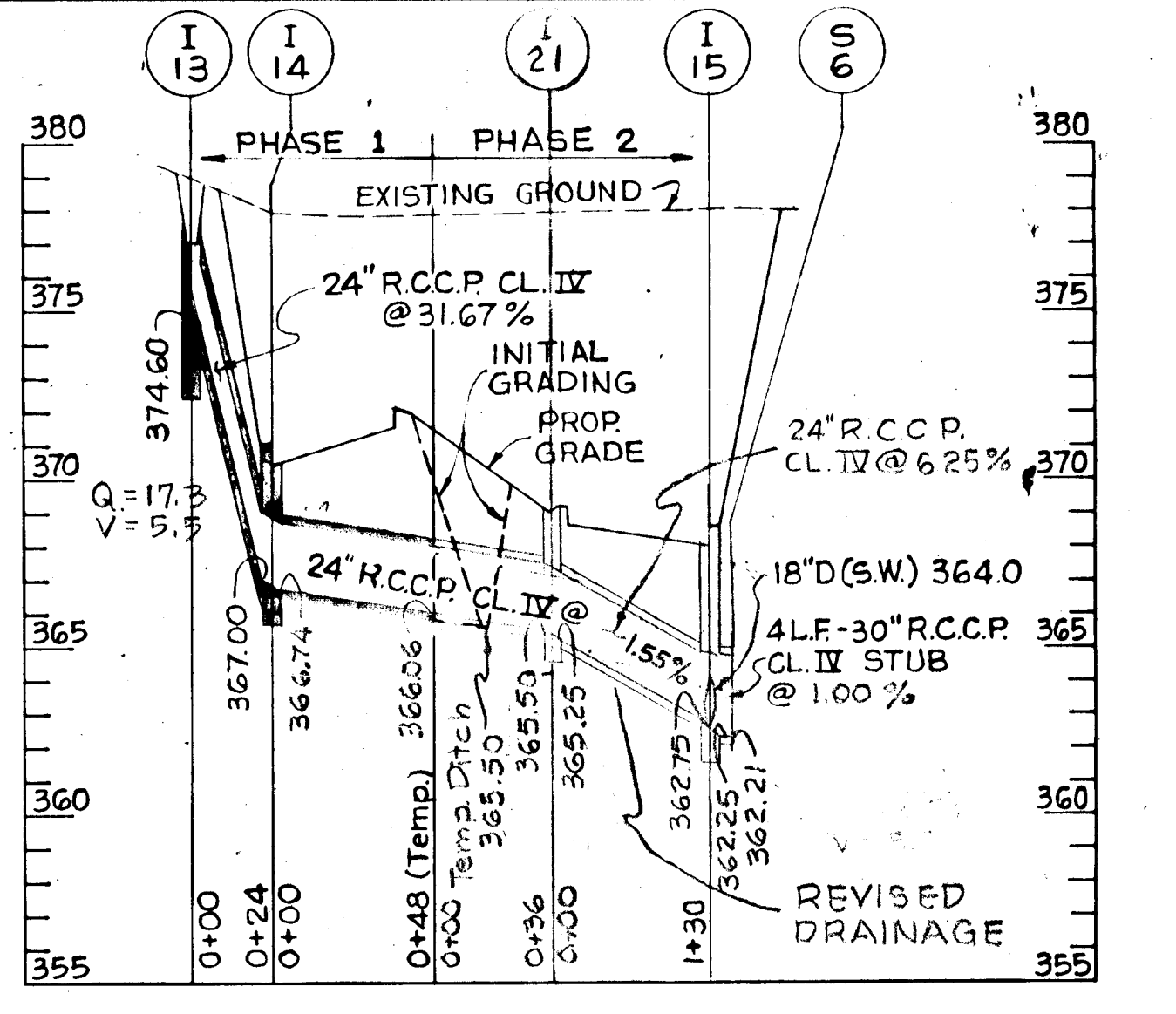
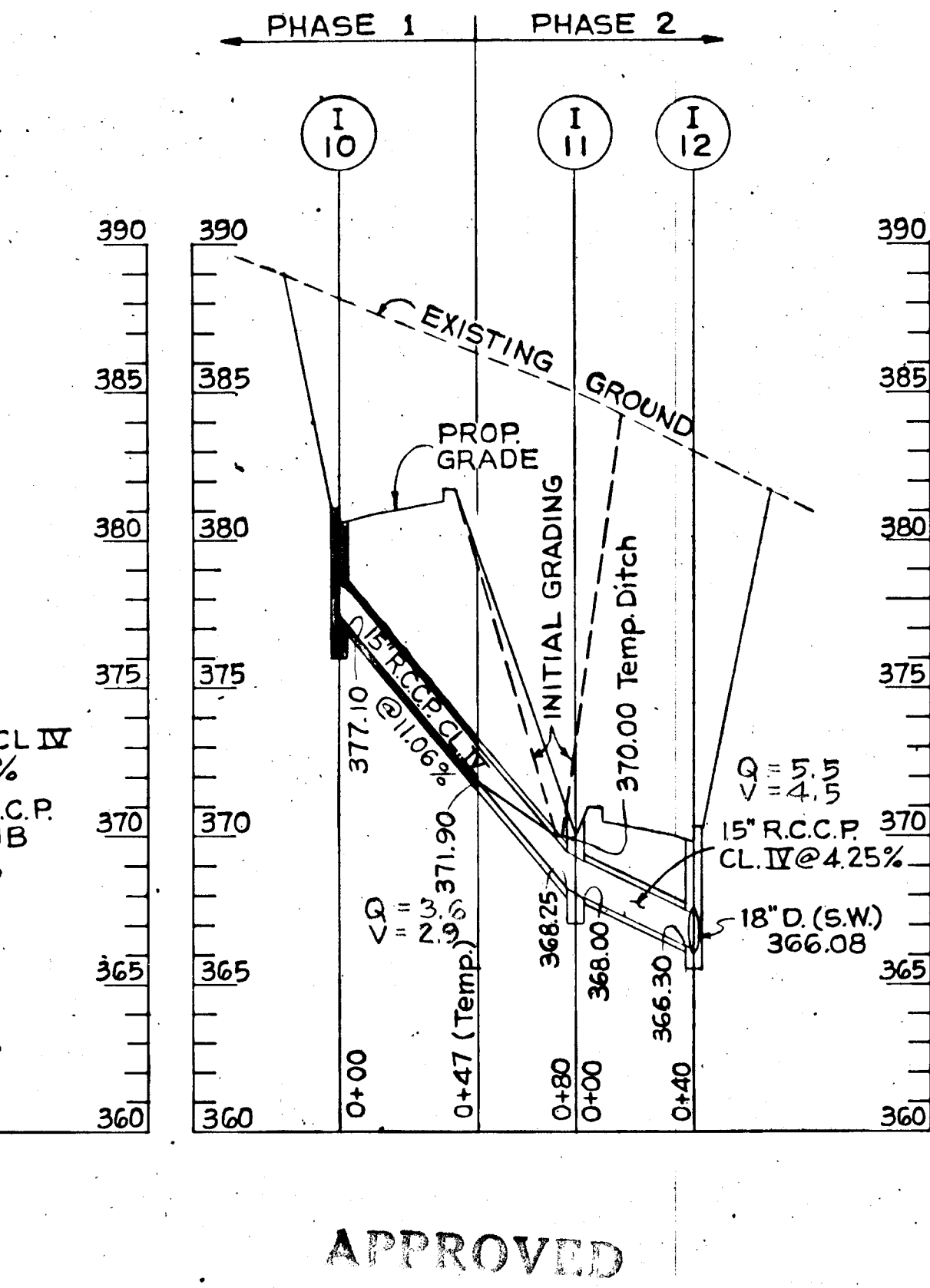
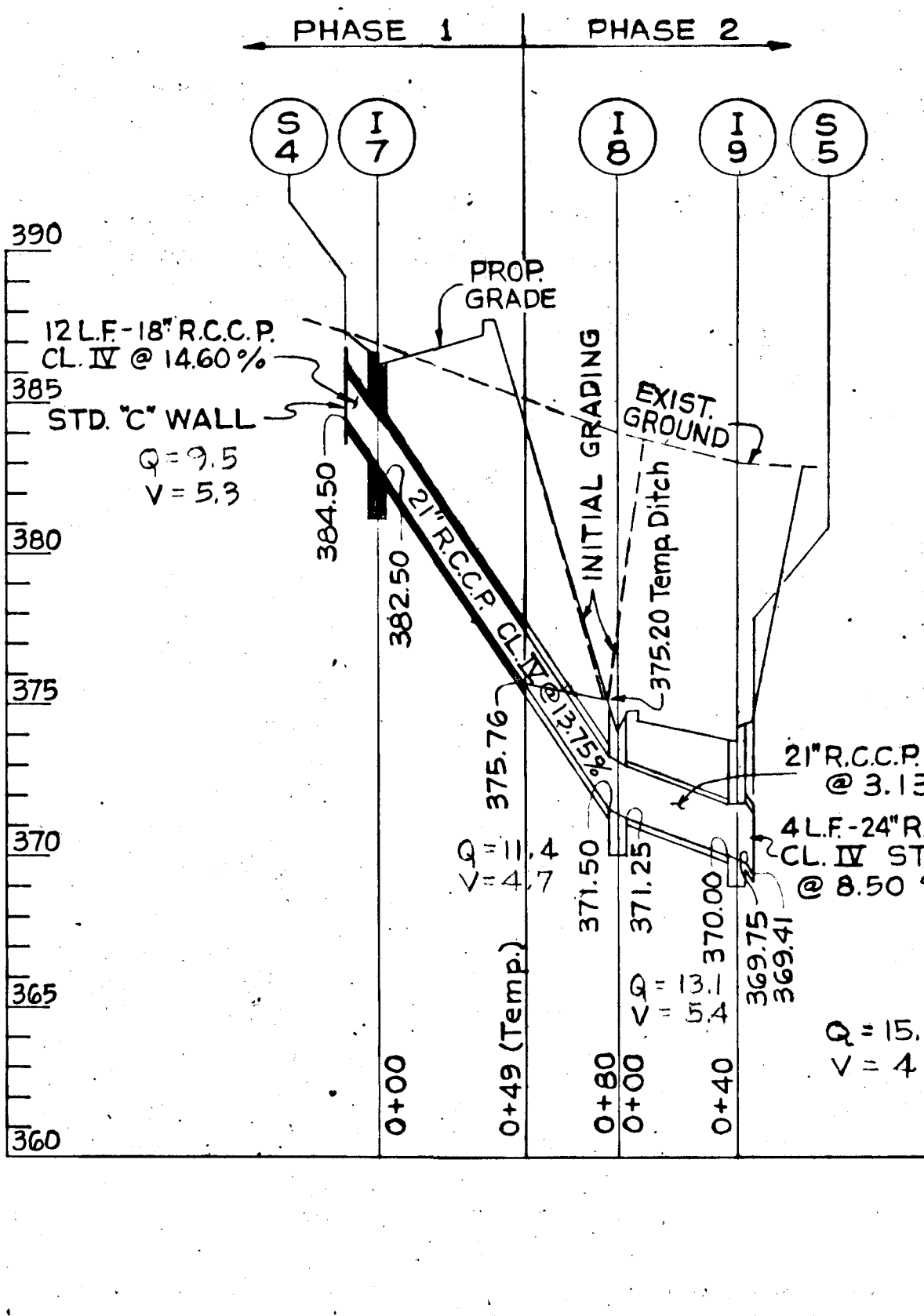
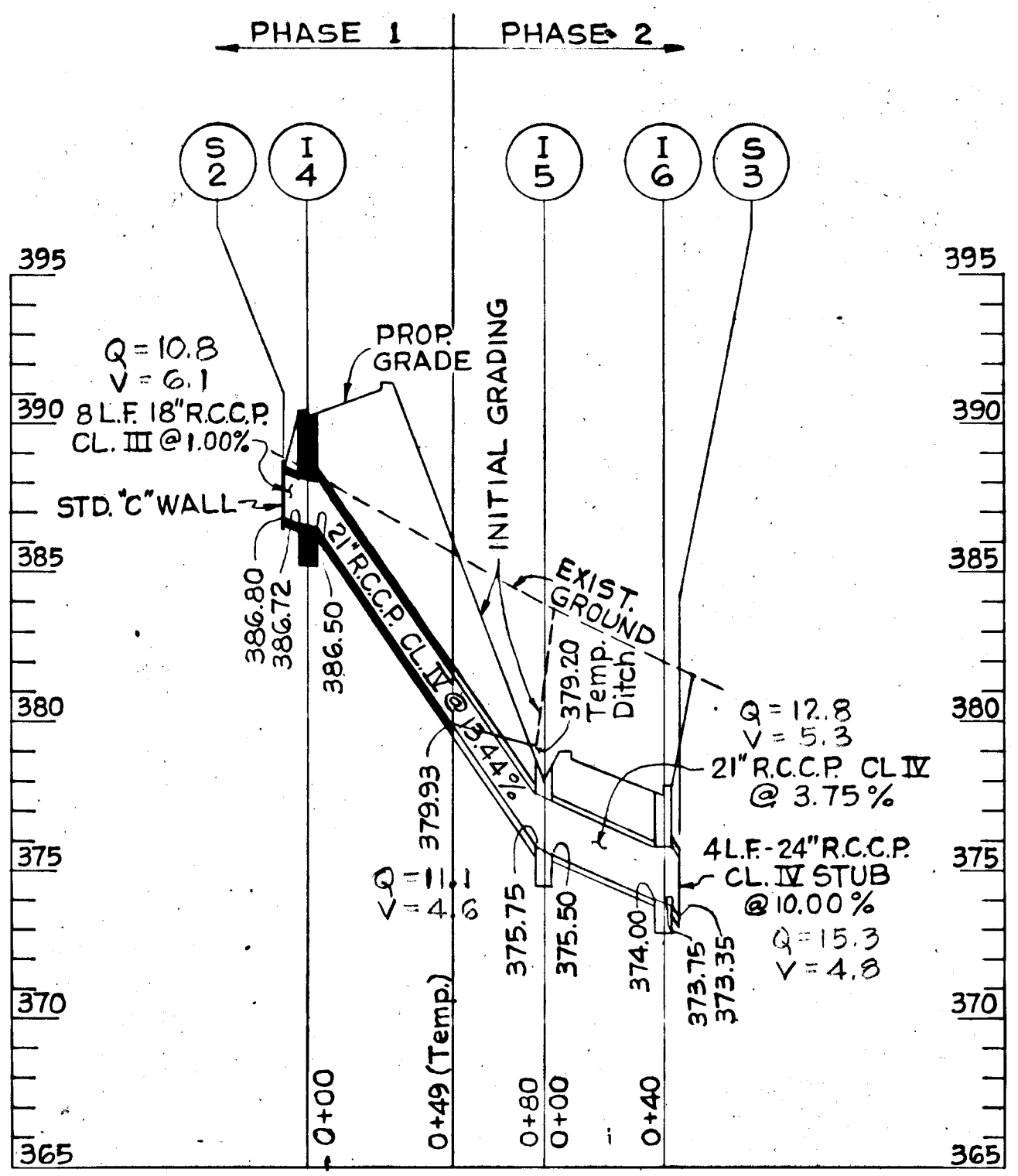
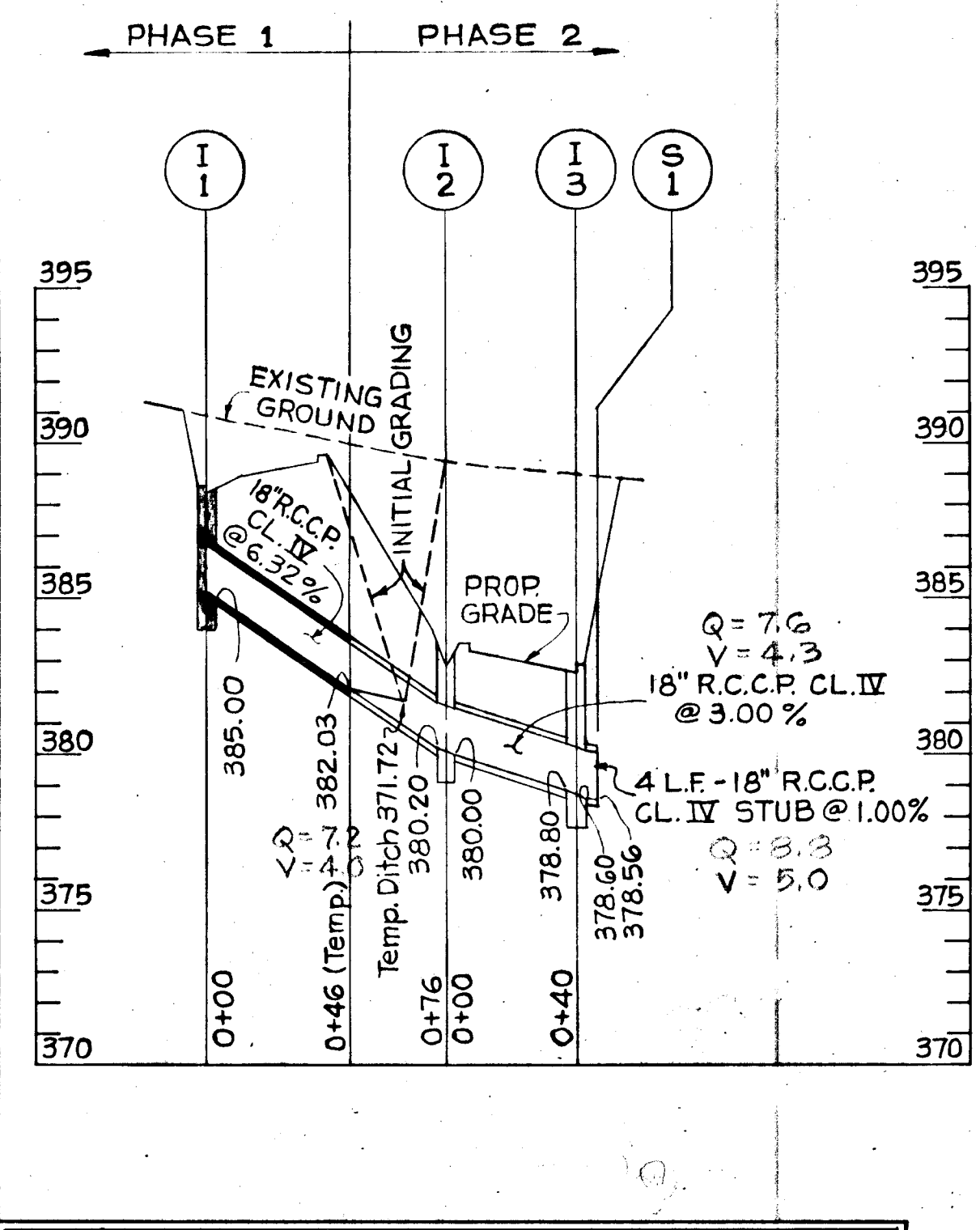
PROFILE  
VERT. 1" = 5'  
HORZ. 1" = 50'

---	EXISTING GROUND AT E SURVEY
---	EXISTING GROUND AT W E 25'
---	EXISTING GROUND AT E E 25'
---	FINISHED GRADE

DATE	
BY	
NO.	
PROFILE	
NO.	
DATE	
BY	
NO.	



PLAN SURVEYED, PLOTTED, GRADES CHECKED, ALIGNMENT CHECKED, NOTE BOOK NO. OF PAGES CHECKED.



DEPARTMENT OF PUBLIC WORKS  
*D. W. McElwain* 12/22/78  
 CHIEF, BUREAU OF HIGHWAYS DATE  
 OFFICE OF PLANNING AND ZONING  
 CHIEF ENGINEER, DIVISION OF LAND DEVELOPMENT DATE

APPROVED  
 OFFICE OF PLANNING AND ZONING OF HOWARD COUNTY  
 DATE: 12/22/78  
*J. H. [Signature]*

GREEN ASSOCIATES, INC.  
 CONSULTING ENGINEERS  
 BALTIMORE, MARYLAND

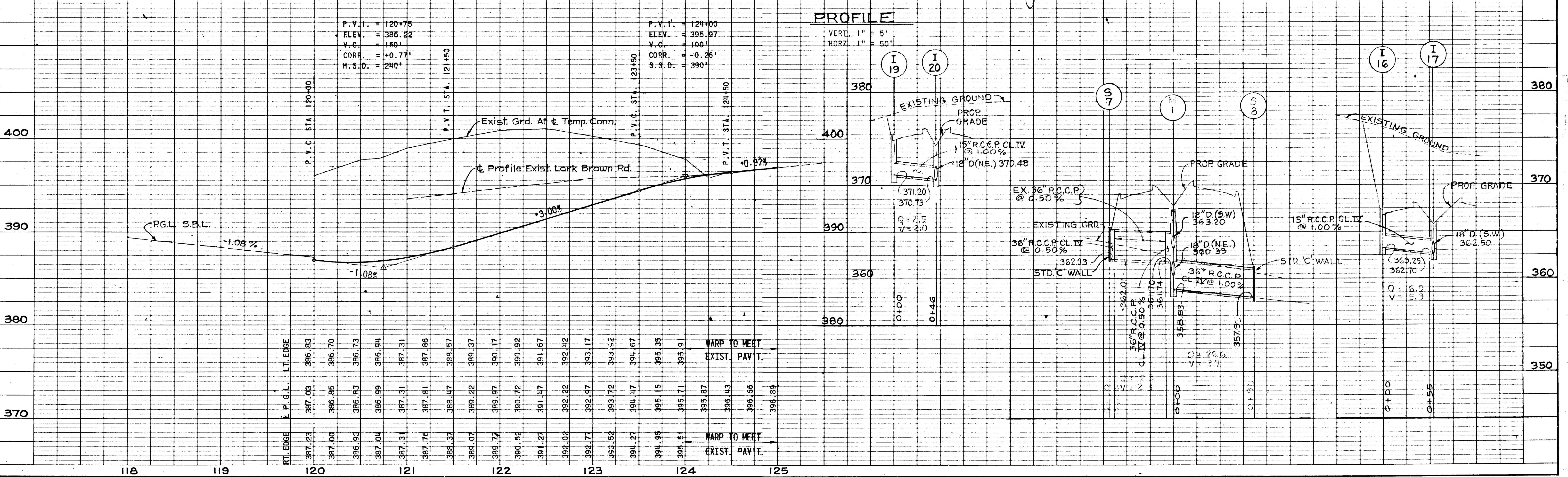
10-5-69 | DRAINAGE @ STA. 90+00  
 Rev Date Rev No Revision Description

**COLUMBIA**  
 MARYLAND  
 6TH ELECTION DISTRICT HOWARD COUNTY  
 OWNER AND DEVELOPER  
 HOWARD RESEARCH AND DEVELOPMENT CORP.  
 THE VILLAGE OF CROSS KEYS - BALTIMORE, MARYLAND 21210

PROJECT AREA: E. G. U. SUBDIVISION SECTION 1 AREA 3  
 PROJECT TITLE: SNOWDEN RIVER PARKWAY ROADWAY & DRAINAGE PROFILES

Des By Scale AS SHOWN Dwg. No 10 OF 10  
 Dwn By Date C.C.F. No  
 Ckt By Approved

PROFILE SURVEYED, PLOTTED, GRADES CHECKED, STRUC. WIRE NOTATIONS CHECKED, NOTE BOOK NO.



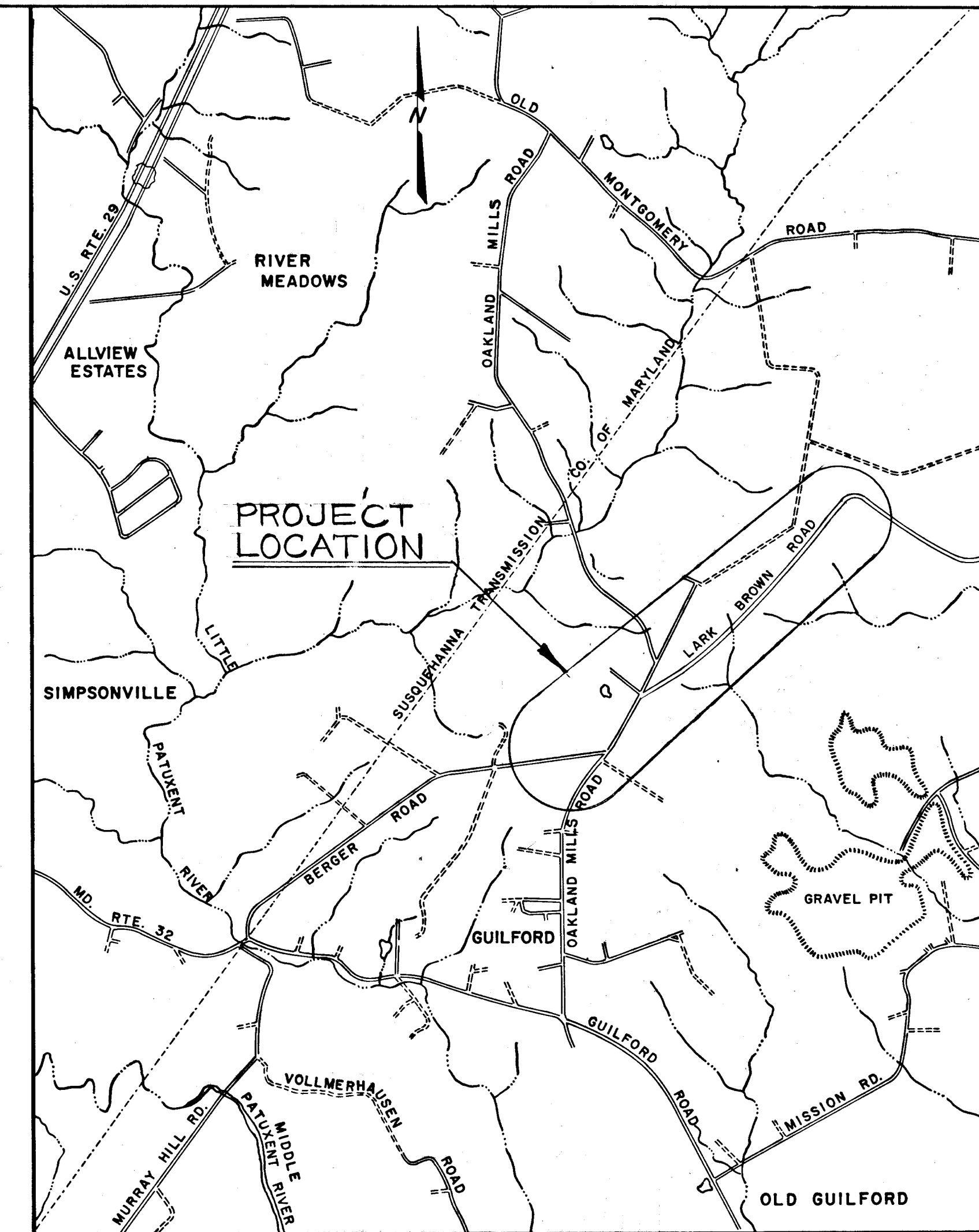
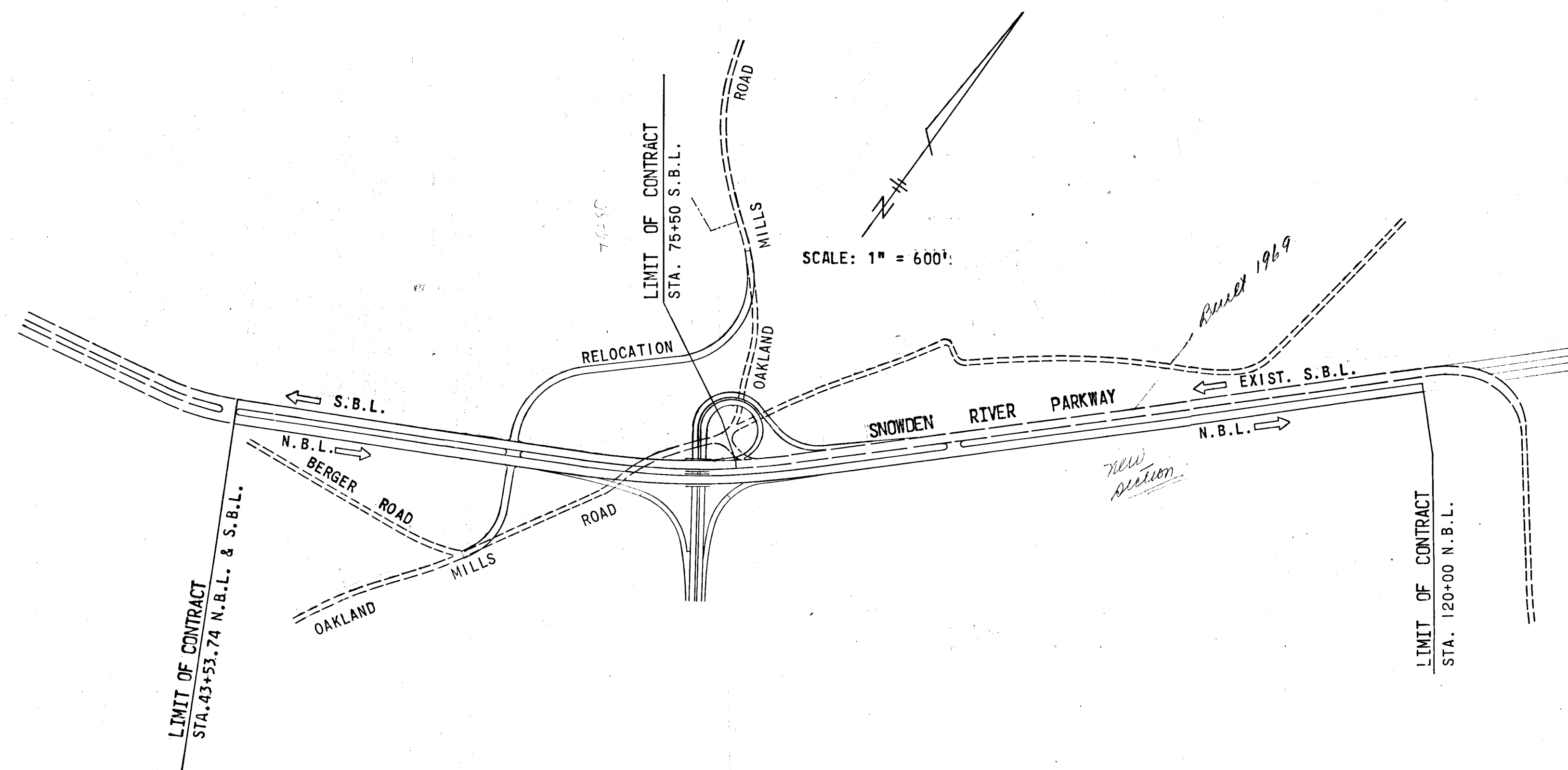


# COLUMBIA

ELECTION DISTRICT 6

## SNOWDEN RIVER PARKWAY

HOWARD RESEARCH & DEVELOPMENT CORP.  
HOWARD COUNTY, MARYLAND



VICINITY MAP  
SCALE: 1" = 2000'

GENERAL NOTES

- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTION TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES, WHERE DIRECTED BY THE ENGINEER, A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS.
- FOR ALL DETAILS NOT SHOWN ON DRAWINGS, SEE HOWARD COUNTY ROAD CONSTR. CODE AND STD. SPECS. AS REVISED AUGUST 6, 1968.
- TREES ARE TO BE PROTECTED AGAINST DAMAGE TO THE MAXIMUM EXTENT REASONABLE. TREES WHICH ARE TO REMAIN IN STREETS AND OTHER RIGHTS OF WAY WILL BE MARKED BY THE ENGINEER PRIOR TO COMMENCING OF CONSTRUCTION OPERATIONS.
- DEVELOPER WILL PLACE ROADS TO SUBGRADE FOR THE FULL WIDTH OF THE RIGHT OF WAY BEFORE INSTALLATIONS OF UTILITIES.
- THE DEVELOPER SHALL ACCOMPLISH ALL GRADING WITHIN EASEMENT AREAS WHERE UTILITIES ARE TO BE INSTALLED BEFORE NOTICE TO PROCEED WILL BE ISSUED.
- CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES AT LEAST THREE DAYS BEFORE STARTING WORK SHOWN ON THIS/ THESE DRAWINGS:  
BELL TELEPHONE SYSTEM 393-3649  
LONG DISTANCE CABLE DIVISION 393-3553 OR 3554  
BALTIMORE GAS & ELECTRIC CO. 639-8000 EXT. 691
- ALL DETAILS ARE FROM THE "ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS" ISSUED OR APPROVED BY THE COUNTY COMMISSIONERS AND THE HOWARD COUNTY ROAD DEPARTMENT.
- ALL ROADS ARE DESIGNED FOR 50 M.P.H. TRAFFIC SPEED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIAL STANDARDS.
- ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND G.S. MEAN SEA LEVEL DATUM 1929.
- ALL INLET BOXES AND MANHOLES TO HAVE A MINIMUM OF 8" CONCRETE FOOTER.
- TEMPORARY, COMPACTED, 18 INCH HIGH, EARTH FILLED DIVERSION BERMS SHALL BE CONSTRUCTED ABOVE THE LIPS OF FILL SLOPES ON THE R-O-W CONCURRENTLY WITH THE INITIAL GRADING AND DIRECTED TO UNDISTURBED SOU AREAS AT THE END OF EACH DAY.
- ALL SWALES SHALL BE SODDED AND TAMPED, AND SOU AREAS SHALL BE SEED OR SODDED IN CONJUNCTION WITH THE HOWARD COUNTY SOIL CONSERVATION DISTRICT AND THE HOWARD COUNTY PLANNING BOARD STANDARDS ENTITLED "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN URBANIZING AREAS".
- CONTRACTOR TO NOTIFY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT 465-3180 AT LEAST THREE DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
- ALL DISTURBED SLOPE AREAS TO BE STABILIZED AS SOON AS GRADING IS COMPLETED.
- ON ALL FILLS IN SUMP AREAS, RELIANCE PLASTIC & CHEMICAL COMPANY "FLEXIBLE TUBE DOWN DRAINS AND PANS" OR APPROVED EQUAL, SHALL BE USED.

SHEET INDEX	
SHEET	DESCRIPTION
1	TITLE SHEET & VICINITY MAP
2	TYPICAL SECTIONS
3	TYPICAL SECTIONS & DETAILS
4	SUPERELEVATION TRANSITION SCHEDULE
5	DRAINAGE AREA MAP
6	PLAN & PROFILE STA. 43+53.74 TO STA. 54+00
7	PLAN & PROFILE STA. 54+00 TO STA. 66+00
8	PLAN & PROFILE STA. 66+00 TO STA. 78+00
9	PLAN & PROFILE STA. 78+00 TO STA. 90+00
10	PLAN & PROFILE STA. 90+00 TO STA. 102+00
11	PLAN & PROFILE STA. 102+00 TO STA. 114+00
12	PLAN & PROFILE STA. 114+00 TO STA. 120+00
13	DRAINAGE PROFILES

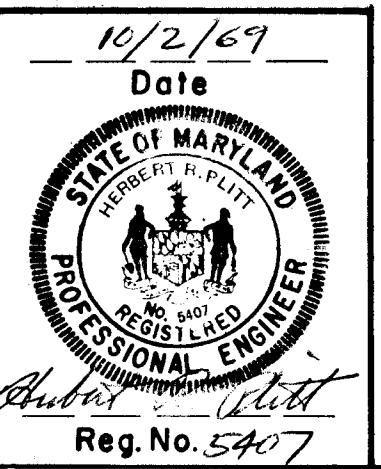
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

REVIEWED *E. J. Sauer* DATE 11/5/70  
APPROVED *H. Campbell* DATE 11/5/70  
HOWARD S.C.D.

DEPARTMENT OF PUBLIC WORKS  
*B. M. McCreath* 12/18/70  
CHIEF, BUREAU OF HIGHWAYS DATE

OFFICE OF PLANNING AND ZONING  
*J. H. Claws* 1/22/71  
CHIEF ENGINEER, DIVISION OF LAND DEVELOPMENT DATE

GREEN ASSOCIATES, INC.  
CONSULTING ENGINEERS  
1130 N. CHARLES ST.  
BALTIMORE, MARYLAND





**SUPERELEVATION TRANS. SCHEDULE**

**SPUR 'A'**

STATION	PGL ELEV.	RT. EDGE GUTTER	SLOPE	LT. EDGE GUTTER	30' RT. OF PGL
140+15	357.61	357.58	-2.00%	357.04	357.01
NORMAL SECTION					
141+33.33	358.36	358.33	-2.00%	357.79	357.76
141+50	358.50	358.46	-2.67%	357.74	357.70
141+75	358.75	358.70	-3.67%	357.71	357.65
142+00	359.04	358.97	-4.67%	357.71	357.64
142+25	359.37	359.29	-5.67%	357.76	357.67
142+33.33	359.49	359.40	-6.00%	357.78	357.69
FULL SUPERELEVATION					
152+61.87	377.03	376.94	-6.00%	375.32	375.23
152+75	377.17	377.09	-5.47%	375.61	375.53
153+00	377.43	377.36	-4.47%	376.16	376.09
153+11.87	377.55	377.49	-4.00%	376.41	376.35
END CURB & GUTTER. LT. FOR CONTINUATION SEE "SPUR 'A' TAPER" BELOW					

**SPUR 'B'**

30' LT. OF PGL	RT. EDGE GUTTER	SLOPE	LT. EDGE GUTTER	PGL ELEV.	STATION
357.01	357.04	-2.00%	357.58	357.61	140+15
NORMAL SECTION					
357.32	357.35	-2.00%	357.89	357.92	140+66.67
357.47	357.50	-1.67%	357.95	357.97	140+75
357.92	357.93	-0.67%	358.11	358.12	141+00
358.23	358.23	0.00%	358.23	358.23	141+16.67
358.39	358.39	+0.33%	358.30	358.29	141+25
358.90	358.88	+1.33%	358.52	358.50	141+50
359.26	359.23	+2.00%	358.69	358.66	141+66.67
359.45	359.42	+2.33%	358.79	358.75	141+75
360.04	359.99	+3.33%	359.09	359.04	142+00
361.34	361.26	+5.33%	359.82	359.74	142+50
361.81	361.72	+6.00%	360.10	360.01	142+66.67
FULL SUPERELEVATION					
375.71	375.62	+6.00%	374.00	373.91	149+25
375.55	375.47	+5.00%	374.12	374.05	149+50
375.33	375.27	+4.00%	374.19	374.13	149+75
375.06	375.01	+3.00%	374.20	374.16	150+00
374.74	374.71	+2.00%	374.17	374.14	150+25
374.53	374.51	+1.44%	374.12	374.10	150+38.95
374.36	374.35	+1.00%	374.08	374.06	150+50
373.93	373.93	0.00%	373.93	373.93	150+75
373.45	373.47	+1.00%	373.74	373.75	151+00
373.13	373.15	+1.65%	373.60	373.62	151+16.21
372.95	372.99	-2.00%	373.52	373.55	151+25
372.44	372.49	-3.00%	373.30	373.34	151+50
371.94	372.00	-4.00%	373.08	373.14	151+75
371.43	371.51	-5.00%	372.86	372.93	152+00
370.92	371.01	-6.00%	372.63	372.72	152+25
FULL SUPERELEVATION					
370.31	370.40	-6.00%	372.02	372.11	153+00
370.24	370.32	-5.53%	371.82	371.90	153+25
370.17	370.25	-5.10%	371.62	371.70	153+50
370.11	370.18	-4.83%	371.49	371.56	153+66.96
END CURB & GUTTER RT. 153+66.96					

370.09	370.16				153+75
370.00	370.06				154+00
369.90	369.96				154+25
369.79	369.85				154+50
369.64	369.70				154+75
369.43	369.49				154+98.64

32' LT. OF BASELINE OF SURVEY

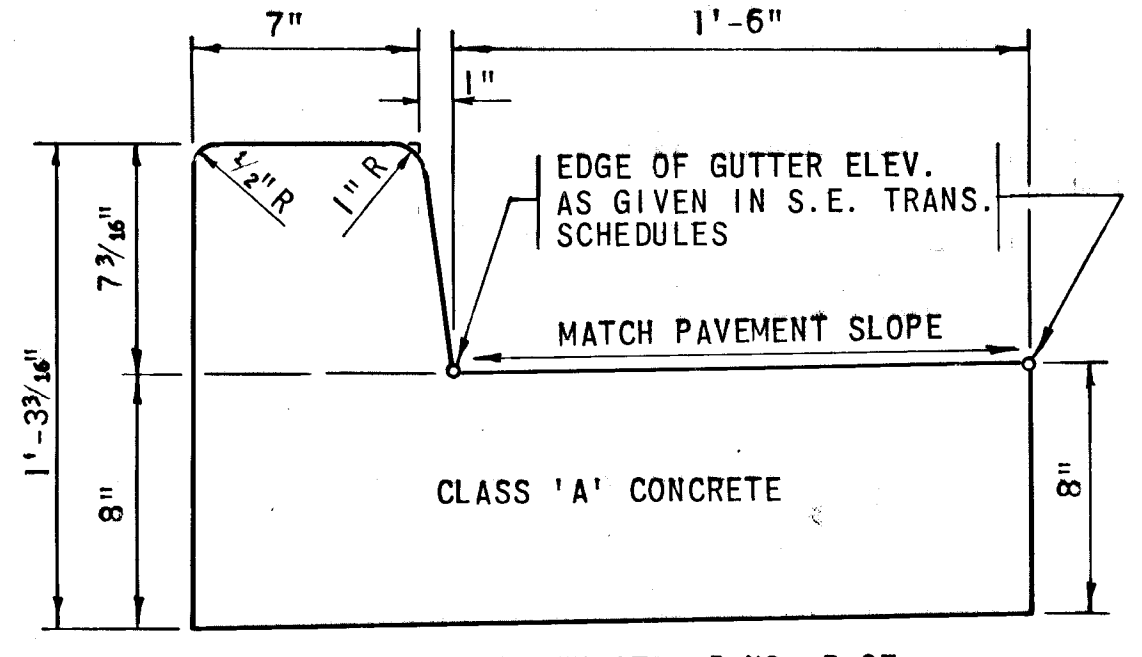
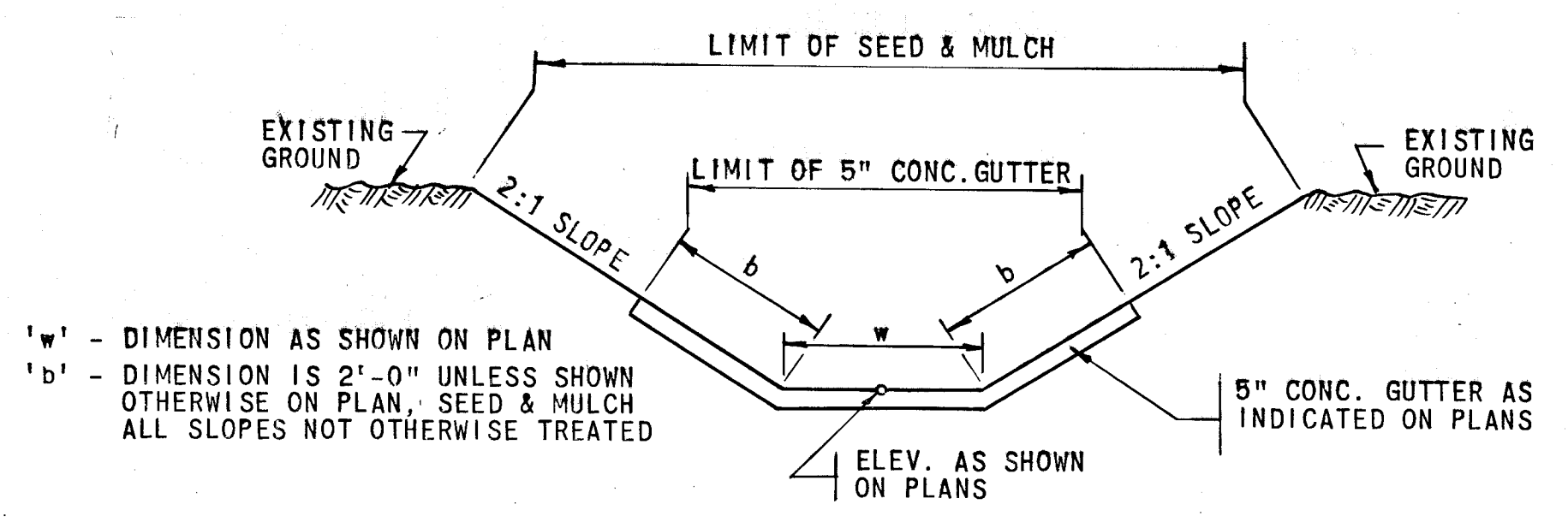
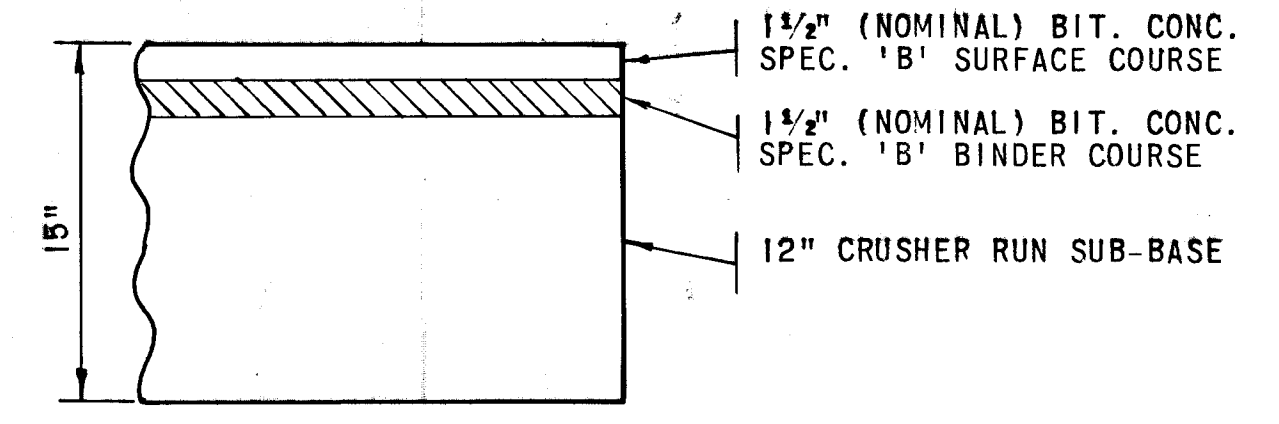
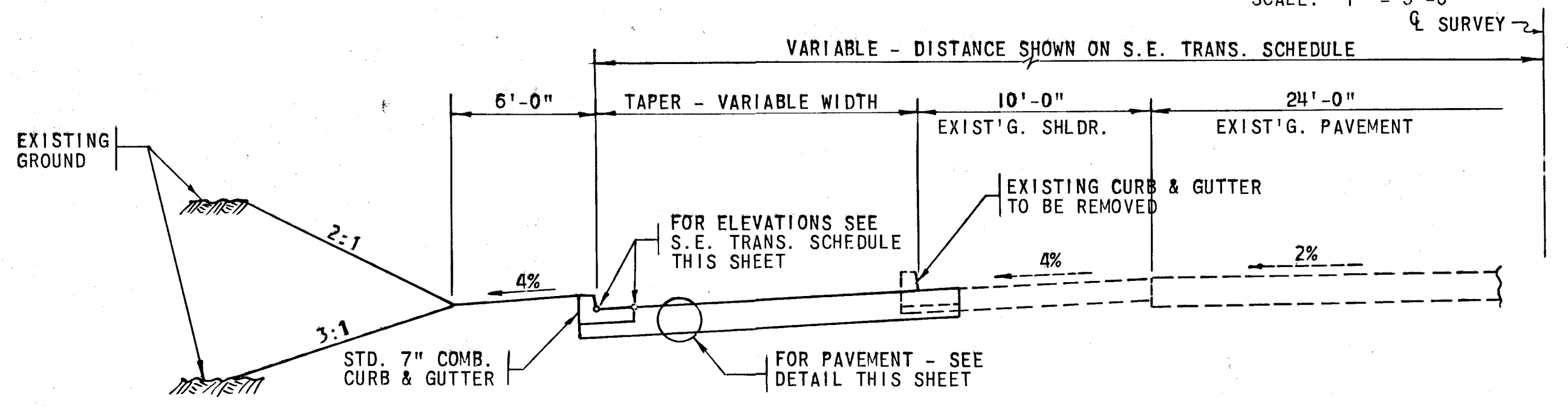
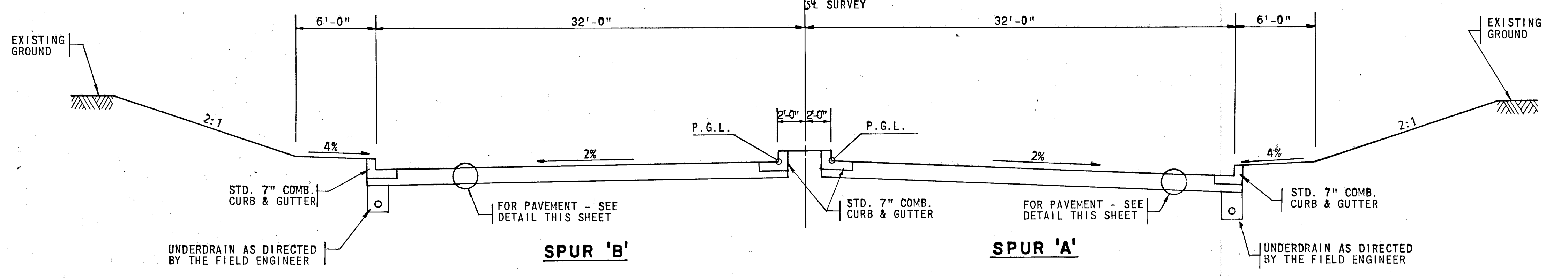
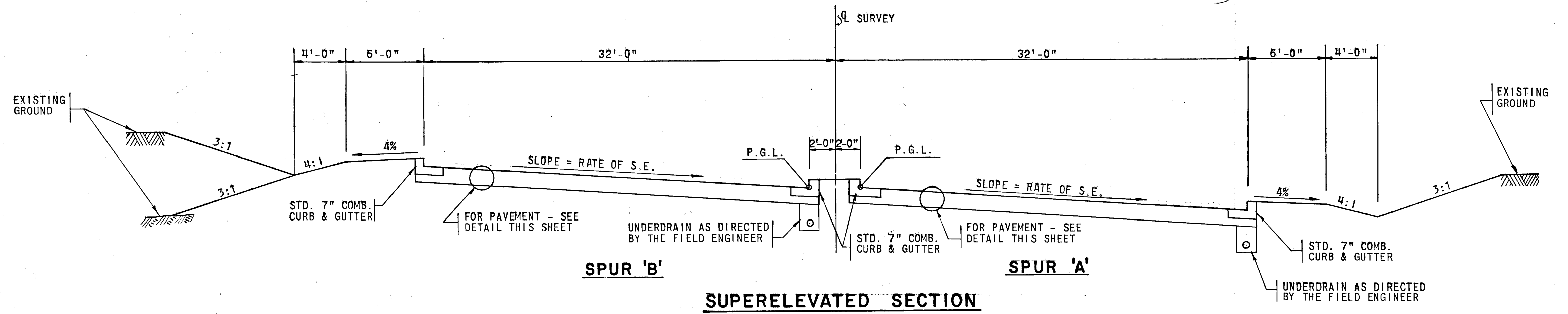
**SPUR 'B' TAPER**

GUTTER ELEV.	DISTANCE LT. OF C	RT. EDGE GUTTER	DISTANCE LT. OF C	STATION SURVEY & EXHY.
369.43	62.00'	369.49	60.50'	82+50
369.08	61.00'	369.14	59.50'	+75
368.89	60.46'	368.95	58.96'	+88.40
368.72	60.00'	368.78	58.50'	83+00
368.38	59.00'	368.44	57.50'	+25
368.07	58.00'	368.13	56.50'	+50
367.80	57.00'	367.86	55.50'	+75
367.55	56.00'	367.61	54.50'	84+00
367.34	55.00'	367.40	53.50'	+25
367.16	54.00'	367.22	52.50'	+50
367.00	53.00'	367.06	51.50'	+75
366.89	52.00'	366.95	50.50'	85+00
366.80	51.00'	366.86	49.50'	+25
366.74	50.00'	366.80	48.50'	+50
366.72	49.00'	366.78	47.50'	+75
366.72	48.00'	367.78	46.50'	86+00

**EXISTING CURB & GUTTER**

**SPUR 'A' TAPER**

STATION SURVEY & EXHY.	DISTANCE RT. OF C	LT. EDGE GUTTER	DISTANCE RT. OF C	GUTTER ELEV.
153+11.87	30.50	376.41	32.00	376.35
153+25	30.50	376.63	32.00	376.57
153+50	30.50	376.95	32.00	376.89
153+75	30.50	377.17	32.00	377.11
154+00	30.50	377.34	32.00	377.28
154+15	TIE TO EXISTING	CURB & GUTTER		



**INLET & OUTLET DITCH DETAIL**  
NOT TO SCALE

**CURB & GUTTER DETAIL**  
SCALE: 2" = 1'-0"

DEPARTMENT OF PUBLIC WORKS  
**B. N. Hebeand** 6/10/71  
 CHIEF, BUREAU OF HIGHWAYS DATE

OFFICE OF PLANNING AND ZONING  
**J. H. Clauson** 6/10/71  
 CHIEF, DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING DATE

HOWARD COUNTY STD. D-40, P-95

Rev. No.	Rev. Date	Revision Description
1		

COLUMBIA

MARYLAND

OWNER AND DEVELOPER  
 HOWARD RESEARCH AND DEVELOPMENT CORP.  
 THE VILLAGE OF ORCHES KEY - BALTIMORE, MARYLAND 21218

PROJECT TITLE: **INTERCHANGE NO. 6**  
 TYPICAL SECTIONS & DETAILS

Drawn By: J.F. AS SHOWN  
 Date: 5-13-71  
 Check By: J.T.J. Approved



DEPARTMENT OF PUBLIC WORKS  
*Granville P. Meland*  
 CHIEF, BUREAU OF HIGHWAYS  
 6/11/71  
 DATE

OFFICE OF PLANNING AND ZONING  
*J. H. Clouston*  
 CHIEF, DIVISION OF LAND DEVELOPMENT & TRANSPORTATION PLANNING  
 6/10/71  
 DATE

① SURVEY  
 S.R. PKWY.  
 $\Delta = 18^{\circ}12'15''$   
 $D = 1^{\circ}00'00''$   
 $R = 5729.58'$   
 $T = 917.94'$   
 $L = 1820.42'$   
 $E = 73.07'$

② SURVEY  
 S.R. PKWY.  
 $\Delta = 18^{\circ}12'15''$   
 $D = 1^{\circ}00'00''$   
 $R = 5729.58'$   
 $T = 917.94'$   
 $L = 1820.42'$   
 $E = 73.07'$

③ SURVEY  
 S.R. PKWY.  
 $\Delta = 18^{\circ}12'15''$   
 $D = 1^{\circ}00'00''$   
 $R = 5729.58'$   
 $T = 917.94'$   
 $L = 1820.42'$   
 $E = 73.07'$

④ SURVEY  
 S.R. PKWY.  
 $\Delta = 18^{\circ}12'15''$   
 $D = 1^{\circ}00'00''$   
 $R = 5729.58'$   
 $T = 917.94'$   
 $L = 1820.42'$   
 $E = 73.07'$

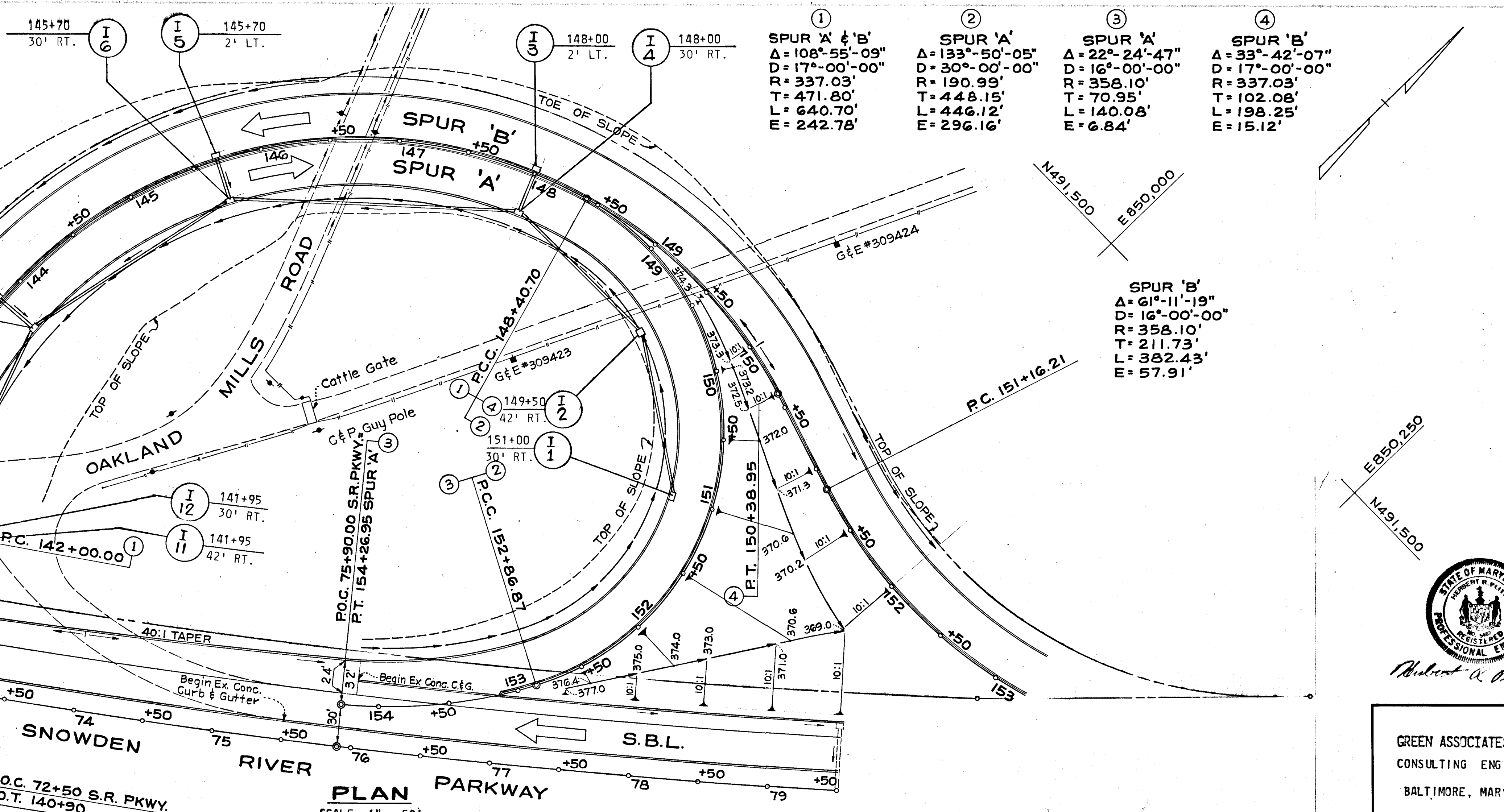
⑤ SURVEY  
 S.R. PKWY.  
 $\Delta = 18^{\circ}12'15''$   
 $D = 1^{\circ}00'00''$   
 $R = 5729.58'$   
 $T = 917.94'$   
 $L = 1820.42'$   
 $E = 73.07'$

⑥ SURVEY  
 S.R. PKWY.  
 $\Delta = 18^{\circ}12'15''$   
 $D = 1^{\circ}00'00''$   
 $R = 5729.58'$   
 $T = 917.94'$   
 $L = 1820.42'$   
 $E = 73.07'$

⑦ SURVEY  
 S.R. PKWY.  
 $\Delta = 18^{\circ}12'15''$   
 $D = 1^{\circ}00'00''$   
 $R = 5729.58'$   
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 $L = 1820.42'$   
 $E = 73.07'$



STRUCTURE SCHEDULE			
NO.	TYPE	INV. OUT	TOP ELEV.
I-1	DBL.'S' COMB.	370.21	374.31
I-2	'K' W/GRATE	368.10	372.48
I-3	DBL.'S' COMB.	369.22	373.06
I-4	DBL.'S' COMB.	367.17	371.27
I-5	DBL.'S' COMB.	363.00	367.63
I-6	DBL.'S' COMB.	361.20	365.83
I-7	DBL.'S' COMB.	359.30	362.91
I-8	DBL.'S' COMB.	356.90	361.11
I-9	'K' W/GRATE	357.00	359.80
I-10	DBL.'S' COMB.	355.00	359.26
I-11	'K' W/GRATE	354.50	357.66
I-12	DBL.'S' COMB.	353.40	358.24
M-1	DROP M.H.	352.20	359.16



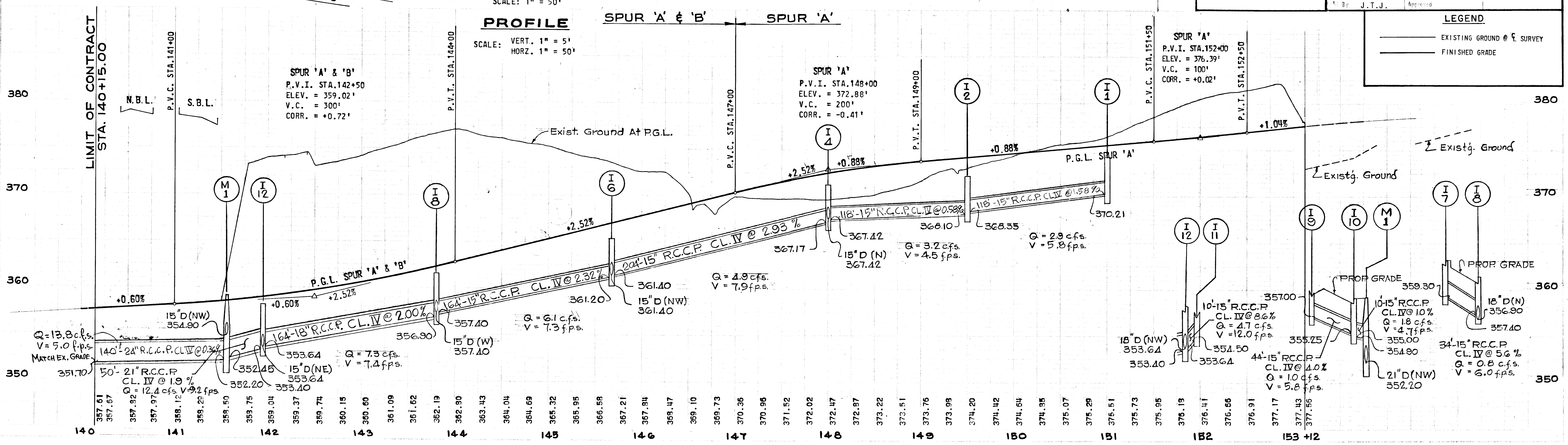
Rev Date: Rev No: Revision Description:

**COLUMBIA**  
 MARYLAND  
 6TH ELECTION DISTRICT HOWARD COUNTY  
 HOWARD RESEARCH AND DEVELOPMENT CORP.  
 THE VILLAGE OF PROSE KEYS - BALTIMORE, MARYLAND 21210

PROJECT TITLE: **INTERCHANGE NO 6 SPUR A & B**

By: J.F. AS SHOWN Date: 5-13-71  
 Checked: J.A.Z. Approved: J.T.J.

GREEN ASSOCIATES, INC.  
 CONSULTING ENGINEERS  
 BALTIMORE, MARYLAND



LEGEND

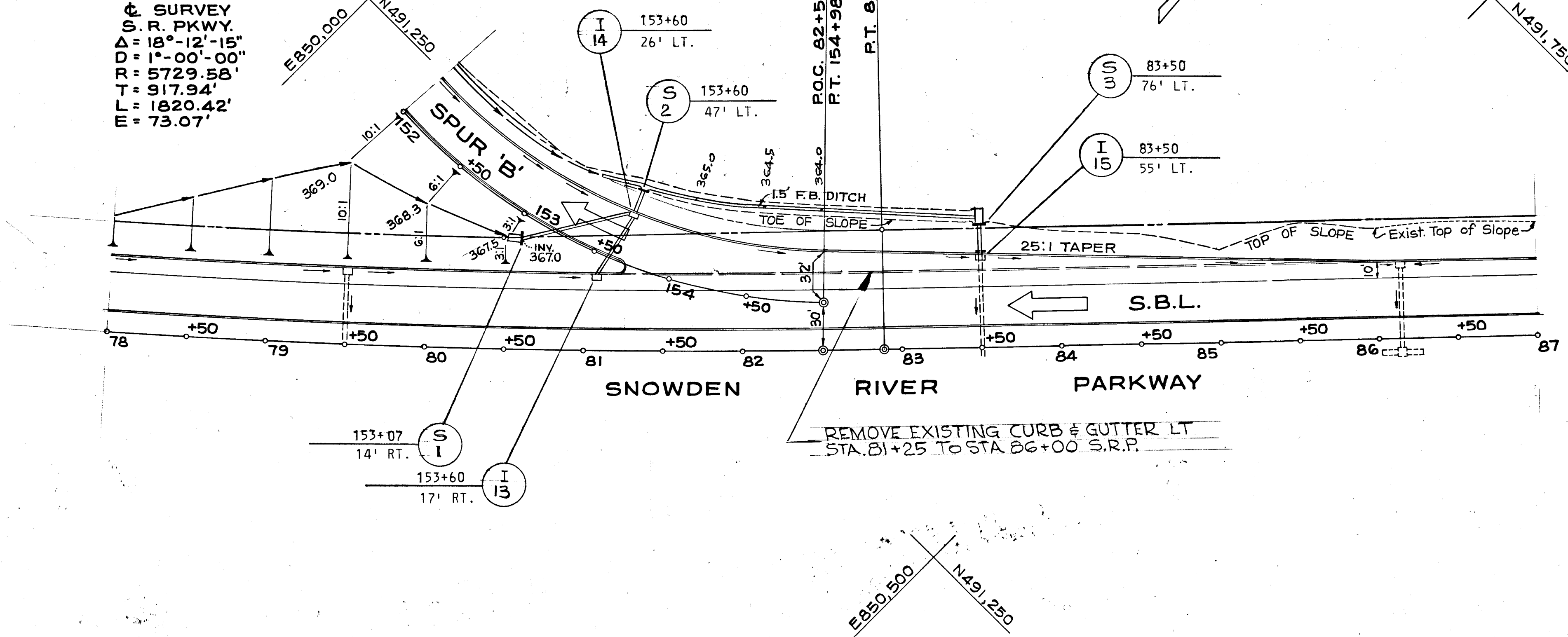
- EXISTING GROUND @ SURVEY
- FINISHED GRADE



SPUR 'B'  
 $\Delta = 61^{\circ}-11'-19"$   
 $D = 16^{\circ}-00'-00"$   
 $R = 358.10'$   
 $T = 211.73'$   
 $L = 382.43'$   
 $E = 57.91'$

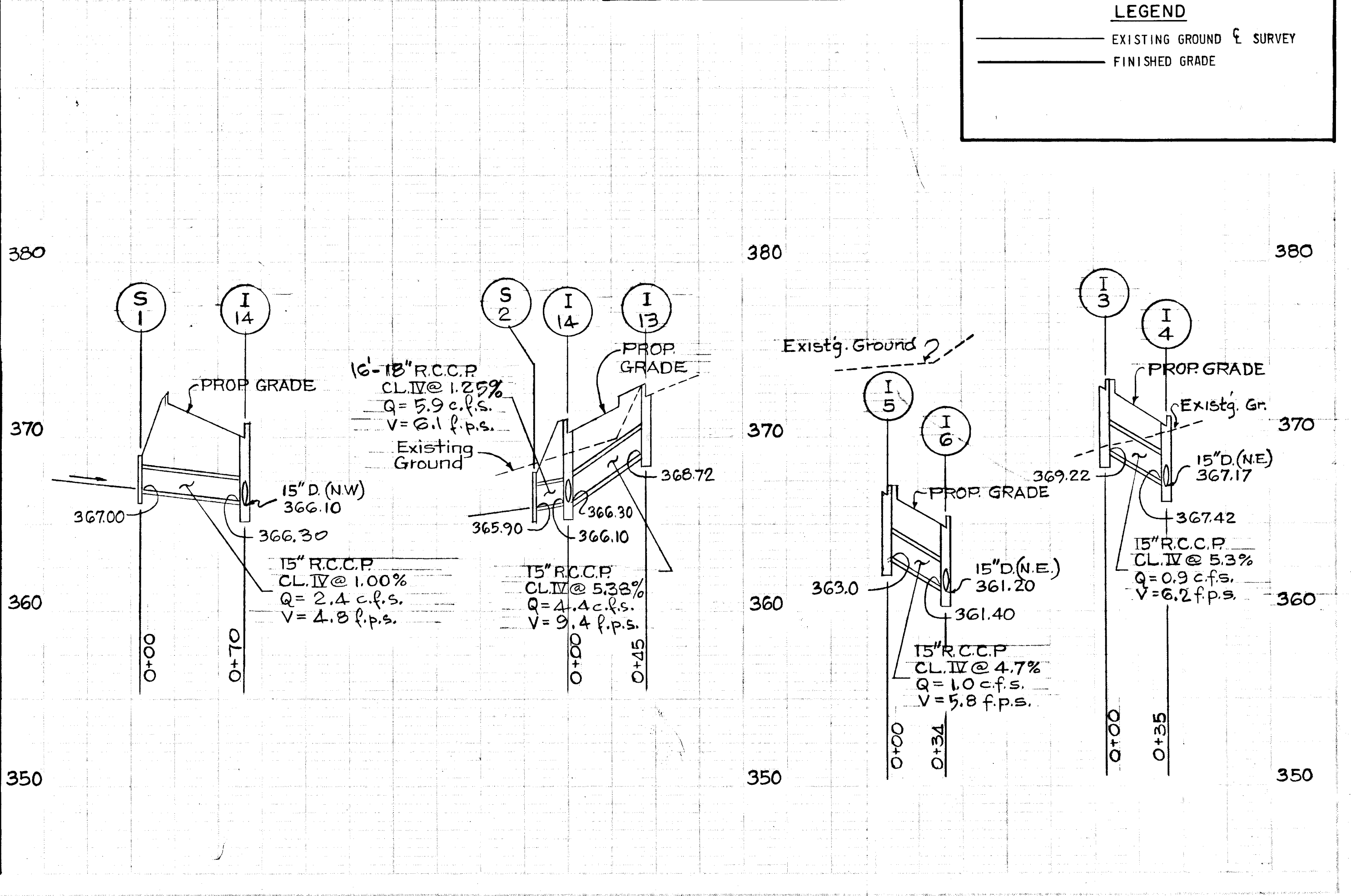
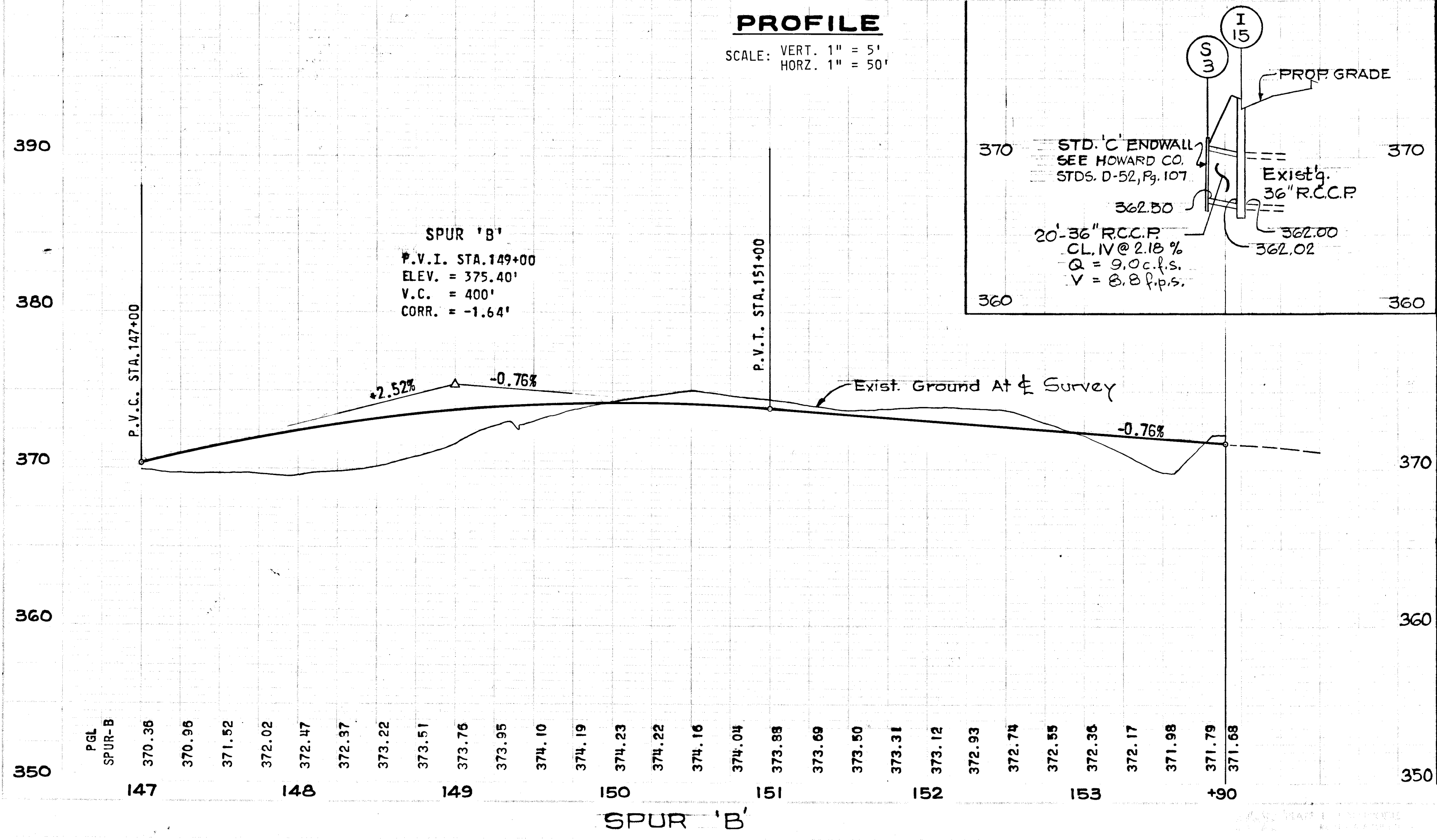
STRUCTURE SCHEDULE			
NO.	TYPE	INV. OUT	TOP ELEV.
I-13	DBL. 'S' COMB.	368.72	372.82
I-14	DBL. 'S' COMB.	366.10	370.72
I-15	DBL. 'S' COMB.	362.00	368.67
S-1	'C' ENDWALL	AS NOTED	
S-2	'C' ENDWALL	AS NOTED	
S-3	'C' ENDWALL	AS NOTED	

¢ SURVEY  
 S. R. PKWY.  
 $\Delta = 18^{\circ}-12'-15"$   
 $D = 1^{\circ}-00'-00"$   
 $R = 5729.58'$   
 $T = 917.94'$   
 $L = 1820.42'$   
 $E = 73.07'$



**PLAN**  
 SCALE: 1" = 50'

**PROFILE**  
 SCALE: VERT. 1" = 5'  
 HORIZ. 1" = 50'



**LEGEND**

- EXISTING GROUND & SURVEY
- FINISHED GRADE

STATE OF MARYLAND  
 PROFESSIONAL ENGINEER  
*Robert R. Pitt*

GREEN ASSOCIATES, INC.  
 CONSULTING ENGINEERS  
 BALTIMORE, MARYLAND

PROJECT TITLE: INTERCHANGE No. 6  
 SPUR 'B'

Rev. Date: Rev. No.: Revision Description:

Drawn By: J.F. Date: 5-13-71