

# 702

STATE OF OHIO

N.R.S. 718-A

FED.AID DIST. No	STATE	FED. AID PROJ. No	FISCAL YEAR	1 24
10	OHIO	NRS 718A	1933	

S.H. No 310 SEC. G-2 BRIDGE  
WILLIAMS COUNTY.  
PROPOSALS Nos. 1 & 2

DEPARTMENT OF HIGHWAYS

# BRYAN-NAPOLEON ROAD

S.H. No 310. SEC. G-2 BRIDGE & APPROACHES

SPRINGFIELD TWP

WILLIAMS COUNTY

### CONVENTIONAL SIGNS

State line	---
County line	- - - -
Township line	- - - - -
Section line	- - - - -
Property line	- - - - -
Center line	○ - - - - ○
City or Village line	○ - - - - ○
Fence line	x - - - - x
Telephone or telegraph poles	TTTTTTTT
Steam railroad	====
Electric line	— · — · — ·
Guard rail	— · — · — ·
Drain pipe - new	— · — · — ·
Drain pipe - old	— · — · — ·

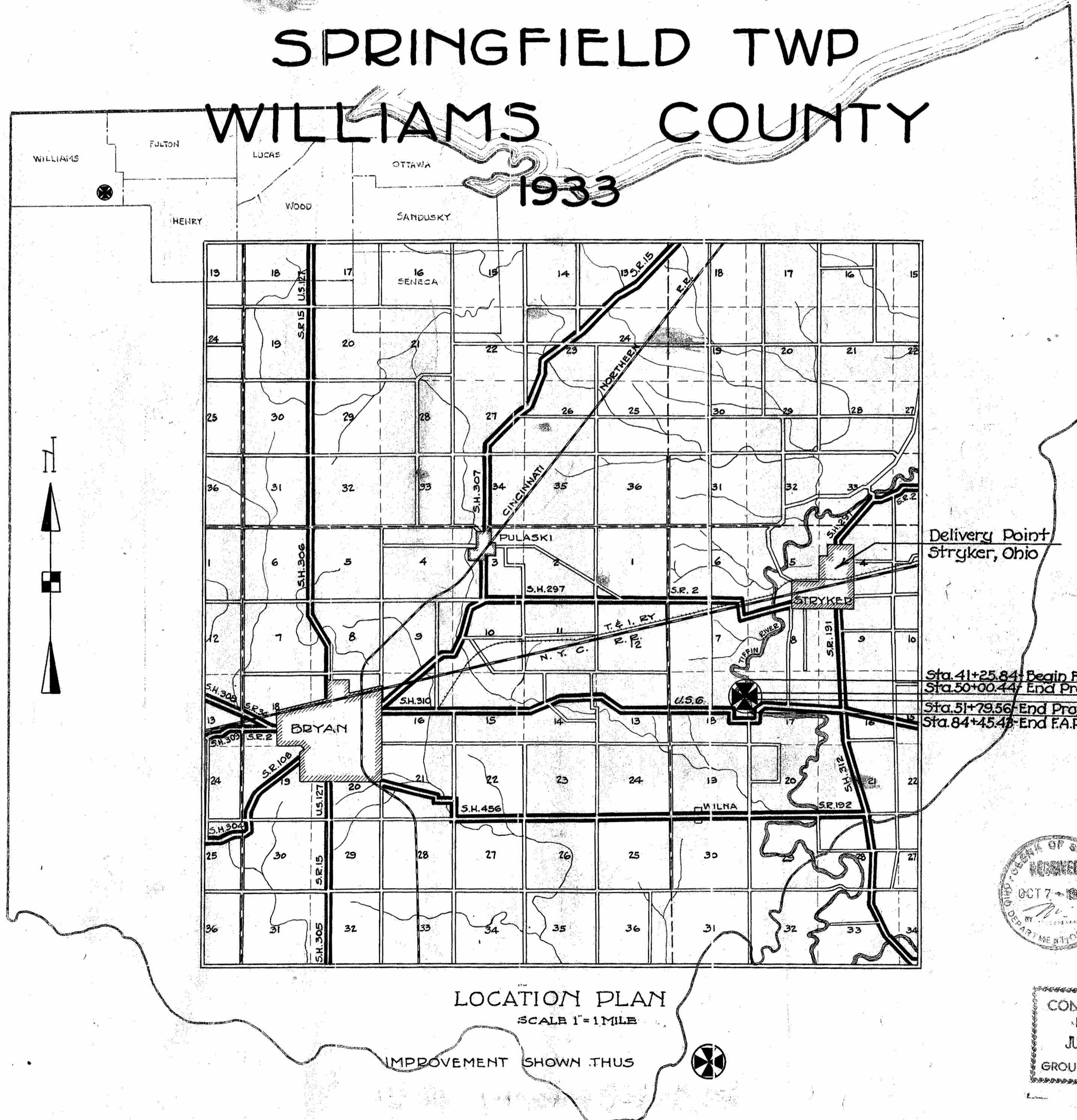
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Supplementary Structural Standards  
Dr. No R.R.-B, S-27 P.C. 1 & 2, I-8 C.B. 1-2 & 1-3, I-15 S.C., III.

### Net Lengths of Project.

Proposal No. 1 179.12' or 0.033 Mi.  
Proposal No. 2 4140.47' or 0.784 Mi.



The standard specifications of the State of Ohio, Department of Highways, in force on the date of contract, together with the Supplemental Specifications for National Recovery Highway Funds Projects, will govern this improvement.

I hereby approve these plans and declare that the making of this improvement will not require the closing to traffic of the highway and that twenty-four hour traffic will be maintained at the beginning and end of the project.

The necessary right-of-way has been provided.

Approved H.S. Barber  
Date \_\_\_\_\_ Resident District  
Deputy Director

Approved R.J. Nicks  
Date 1-23-1933 Resident Division  
Deputy Director

Approved Elmer Stiley  
Date 10-5-33 Chief Engineer  
Bureau of Construction

Approved \_\_\_\_\_  
Date \_\_\_\_\_ Chief Engineer  
Bureau of Maintenance

Approved J.P. Burkey  
Date 5-26-33 Chief Engineer  
Bureau of Bridges

Approved H.P. Chapman  
Date \_\_\_\_\_ Chief Engineer & 1st.  
Asst. Director of Highways

Approved W. Menef  
Date \_\_\_\_\_ Director of Highways

Recommended for Approval \_\_\_\_\_  
Date \_\_\_\_\_ District Engineer, Bureau of Public Roads

Recommended for Approval \_\_\_\_\_  
Date \_\_\_\_\_ Chief Engineer, Bureau of Public Roads

Approved \_\_\_\_\_  
Date \_\_\_\_\_ Chief of Bureau



*C.K. For 20 ft. 718-A only*  
*C.L. Meyer*

FED. AID DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR
10	OHIO	NRS718-A	1933

S.H. 310 SEC. "G-2" BRIDGE  
WILLIAMS COUNTY

Tree Removals  
Prop. No. 1 = 48  
Prop. No. 2 = 5  
See sheet No. 24 for locations

### CULVERTS (C)

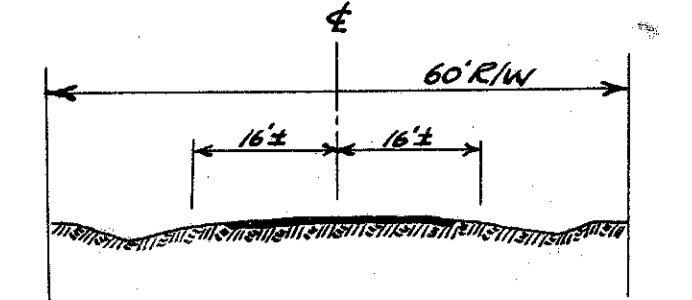
ITEM No	STATION	TYPE	NEW WORK				REMARKS
			SP. CONC. LIN. FT.	6" 12" 18" 24" 30" 36" 42" 48" 54" 60" 66" 72" 78" 84" 90" 96" 102" 108" 114" 120"	EXCA. CU. YDS.	STD. NO. C.B.	
1-C	40+90			6			Make connection
2-C	49+00			12			See sheet No. 7
3-C	54+50	Culvert Pipe	2	92			See sheet No. 8
4-C	57+00	"	1	54			See sheet No. 9
5-C	67+00	"	2	92			See sheet No. 10
Totals			2	243	0	0	

### Roadway Drainage (D)

ITEM No	STATION	RT. OF LT.	TYPE	NEW WORK		
				6" LIN. FT.	12" LIN. FT.	18" LIN. FT.
1-D	40+97	48+93	Lt. Drain	796		
2-D	49+07	49+80	Lt. Drain	73		
3-D	49+80	50+00	Lt. Drain		20	
4-D	51+42	51+62	Lt. Drain		20	
5-D	51+62	54+43	Lt. Drain	281		
6-D	51+64	51+84	Lt. Drain		20	
7-D	51+84	54+43	Rt. Drain	259		
8-D	54+57	56+50	Lt. Drain	193		
9-D	54+57	56+93	Lt. Drain	236		
10-D	57+00	66+00	Lt. Drain	900		
11-D	57+07	66+00	Rt. Drain	893		
Totals				2222	1409	60

### PRIVATE DRIVE APPROACHES (A)

ITEM No	STATION	RT. OF LT.	PLACE		Stone
			CON. I.P.	Lin. Ft.	
1-A	48+50	Rt.	12'		3
2-A	57+50	Lt.	20		3
3-A	57+50	Rt.	20		3
4-A	61+20	Lt.	20		3
5-A	61+20	Rt.	20		3
6-A	66+21	Lt.			3
7-A	66+21	Rt.			3
8-A	69+00	Lt.			3
9-A	69+00	Rt.			3
Totals					27



$\Delta = 19^\circ - 28'$  LT.  
 $D = 3^\circ - 00'$   
 $T = 327.60'$   
 $R = 1909.86'$   
 $L = 648.89'$

Sta. 40+90 = 40'-12" Cor. I.P. and 2 sid. W/ Catch Basins in place. No work required.

Existing Pavt. is Traffic Bound Macadam.

PC. STA. 42+25.84  
NAIL IN HUB  
55° W TO NAIL IN HUB  
55° W TO NAIL IN HUB  
55° E TO NAIL IN HUB

PI. STA. 45+53.44  
NAIL IN HUB  
55° W TO NAIL IN HUB  
55° E TO NAIL IN HUB

DATA ON APPROACH CURVE  
 $\Delta = 89^\circ - 49'$  RT.  
 $D = 19^\circ - 00'$   
 $T = 300.8'$   
 $R = 301.55'$   
 $L = 472.72'$   
P.C. Sta. 45+46.9  
P.T. Sta. 50+19.62

PROPOSED STRUCTURE  
54'-67.5'-54' cont. steel  
1 bm. f conc. deck; 15° RT.  
Skew. 4° Conc. W.S.  
No Appro. Slabs. H=27'

B.M. Spike in N. side 24" elm stump 135° RT. of STA. 49+11  
ELEV. 700.92

### RIP-RAP

ITEM No	STATION	NEW WORK	REMARKS
1-R	51+70	Sq. yds.	See channel cross-section
Totals		100	

B.M. Spike in NW side of 2" Hickory 55° RT. of STA. 51+40  
ELEV. 694.57

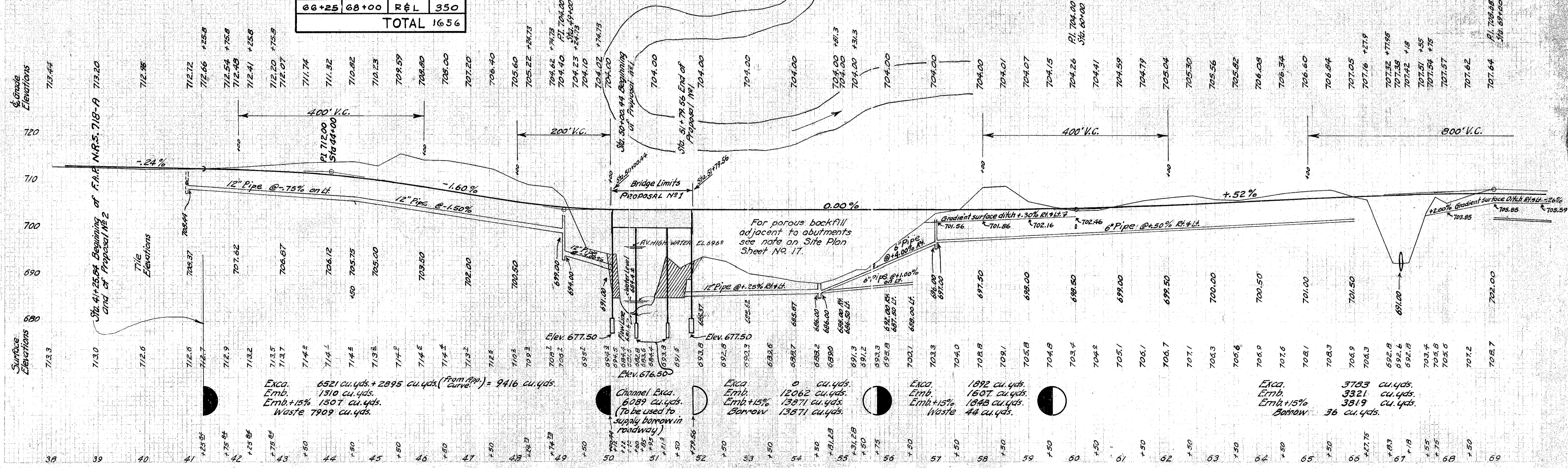
B.M. Spike in N. side of 15" Walnut 75° RT. of STA. 58+62  
ELEV. 712.29

B.M. Spike in N. side of 8" Maple 45° RT. of STA. 57+80  
ELEV. 704.87

### TYPE SC GUARD RAIL

From Station	To Station	Side	Lin. Ft.
49+00	49+96	R&L	192
51+83	57+40	R&L	1114
66+25	68+00	R&L	350
TOTAL 1656			

B.M. Square chiseled in S.E. corner of South wall of conc. catch basin 22' RT. of Sta. 40+90  
ELEV. 710.98



Exca. 6521 cu. yds. + 2895 cu. yds. (from app.) = 9416 cu. yds.  
Emb. 1310 cu. yds.  
Emb. +15% 1507 cu. yds.  
Waste 7909 cu. yds.

Channel Exca. 6089 cu. yds.  
(To be used to supply borrow in roadway)

Exca. 0 cu. yds.  
Emb. 12062 cu. yds.  
Emb. +15% 13971 cu. yds.  
Borrow 13971 cu. yds.

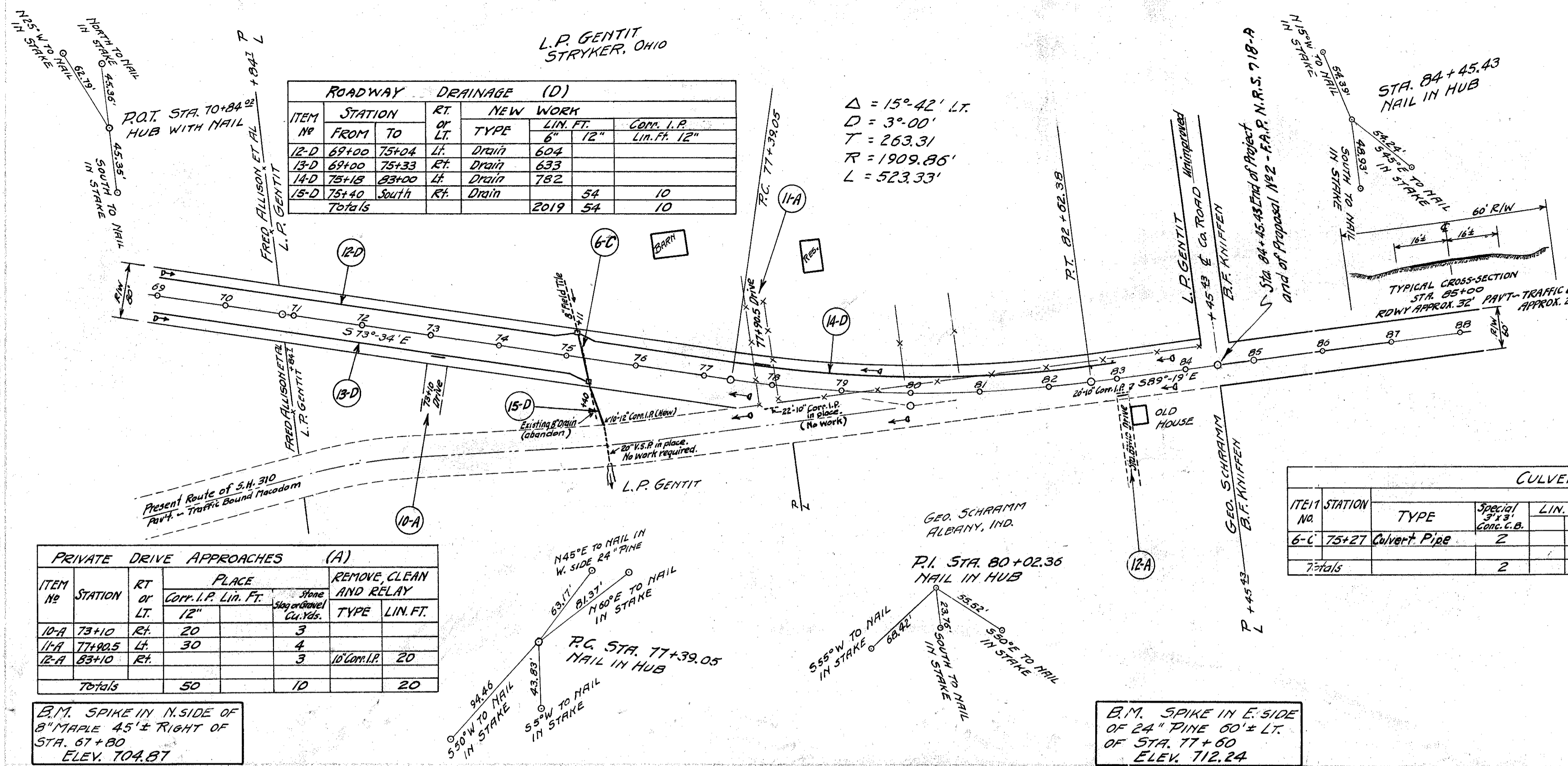
Exca. 1892 cu. yds.  
Emb. 1607 cu. yds.  
Emb. +15% 1843 cu. yds.  
Waste 44 cu. yds.

Exca. 3783 cu. yds.  
Emb. 3321 cu. yds.  
Emb. +15% 3819 cu. yds.  
Borrow 36 cu. yds.

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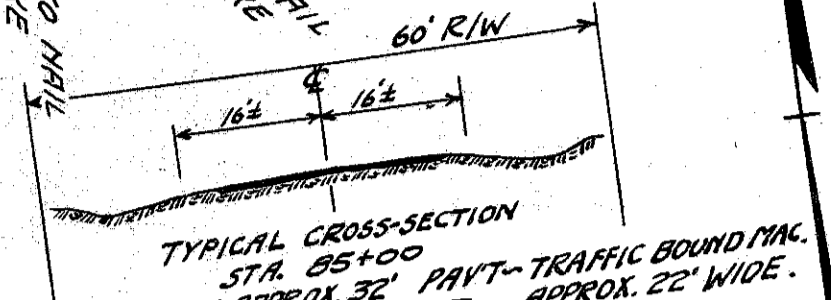
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S.H. 310 SEC. "G-2" BRIDGE  
WILLIAMS COUNTY



ROADWAY		DRAINAGE (D)			
ITEM NO.	STATION FROM TO	RT OF LT.	NEW TYPE	LIN. FT.	COM. I.P. LIM. FT. 12"
12-D	69+00	75+04	Lt.	Drain	604
13-D	69+00	75+33	Rt.	Drain	633
14-D	75+18	83+00	Lt.	Drain	782
15-D	75+40	South	Rt.	Drain	54
Totals					2019

$\Delta = 15^{\circ}42' LT.$   
 $D = 3^{\circ}00'$   
 $T = 263.31$   
 $R = 1909.86'$   
 $L = 523.33'$



Tree Removals  
 Proposal No. 2 = 62  
 See Sheet No. 24 for locations

PRIVATE DRIVE APPROACHES (A)		PLACE		REMOVE, CLEAN AND RELAY	
ITEM NO.	STATION	RT OF LT.	Comp. I.P. Lin. Ft.	Type	Lin. Ft.
10-A	73+10	Rt.	20	3	
11-A	77+00.5	Lt.	30	4	
12-A	83+10	Rt.	3	10' Comp. I.P.	20
Totals			50	10	20

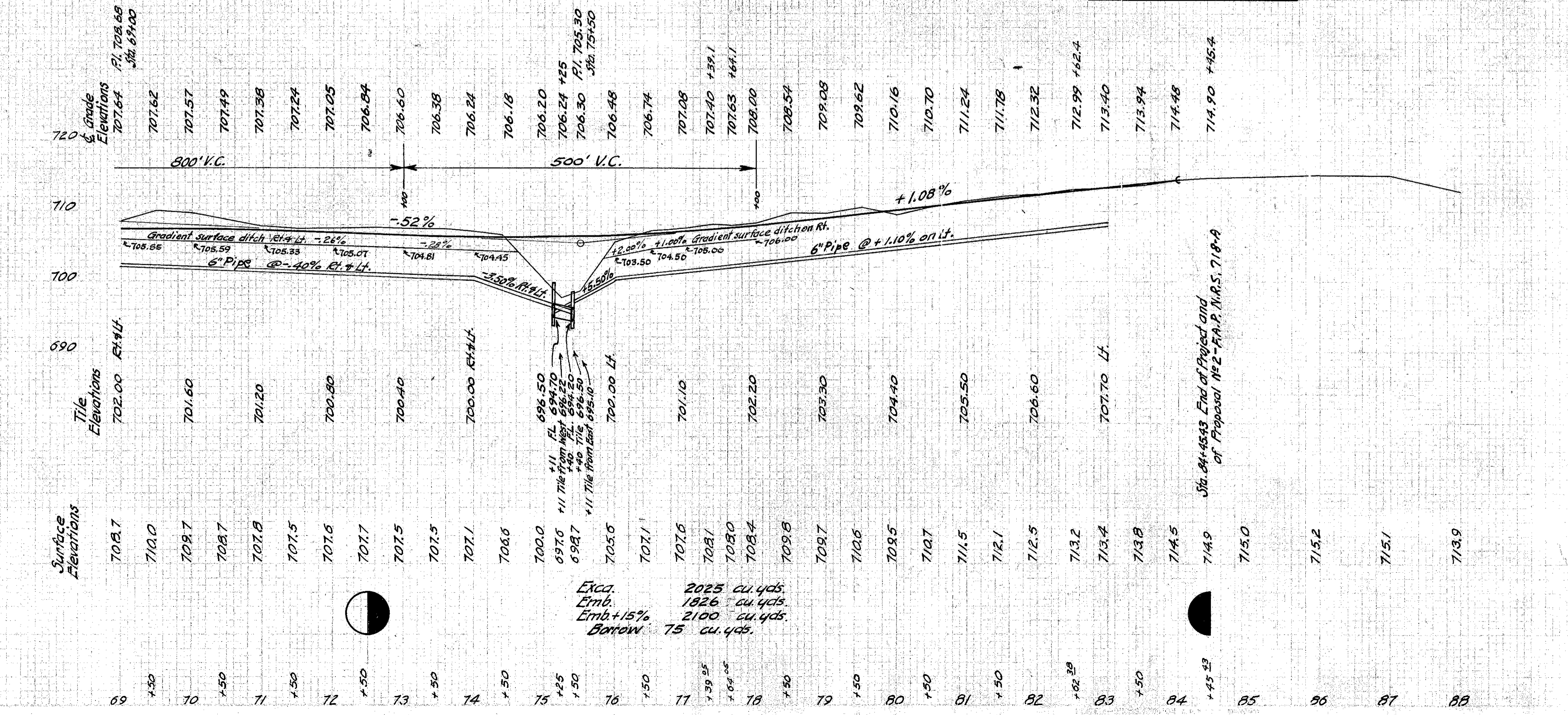
CULVERTS (C)		TYPE		LIN. FT.		EXCA. CU. YDS.		REMARKS
ITEM NO.	STATION	Special 3' x 3' Conc. C.P.	24"	6"	8"	12"		
6-C	75+27		76	18	6	6	55	See Sheet No. 12
Totals		2	76	18	6	6	55	

SCHEDULE OF SUPERELEVATION AND WIDENING							
Sta. 76+39.05			To Sta. 83+62.38				
LEFT	CENTER	RIGHT	LEFT	CENTER	RIGHT		
Deduct from E. Gr.	Elev. 10' Lt. &	W	STATION	GRADE	W	Elev. 10' Rt. &	Add to Edge Gr.
.17	706.51	10'	76+39.05	706.68	10'	706.51	0.00
	706.57		76+50	706.74		706.62	.05
	706.91		77+00	707.08		707.20	.29
	707.23		77+30.05	707.40		707.71	.48
	707.33		77+50	707.50		707.86	.53
	707.46		77+64.05	707.63		708.06	.60
	707.71		77+88.05	707.88		708.43	.72
	707.83		78+00	708.00		708.55	
	708.37		78+50	708.54		708.09	
	708.91		79+00	709.08		709.63	
	709.45		79+50	709.62		710.17	
	709.99		80+00	710.16		710.71	
	710.53		80+50	710.70		711.25	
	711.07		81+00	711.24		711.79	
	711.61		81+50	711.78		712.33	
	712.15		82+00	712.32		712.87	
	712.28		82+12.38	712.45		713.00	.72
	712.69		82+50	712.86		713.23	.54
	712.82		82+62.38	712.99		713.30	.48
	713.23		83+00	713.40		713.53	.30
	713.77		83+50	713.94		713.83	.06
.17	713.90	10'	83+62.38	714.07	10'	713.90	0.00

B.M. SPIKE IN N. SIDE OF 8" MAPLE 45' ± RIGHT OF STA. 67 + 80  
 ELEV. 704.87

B.M. SPIKE IN E. SIDE OF 24" PINE 60' ± LT. OF STA. 77 + 60  
 ELEV. 712.24

B.M. SPIKE IN W. SIDE OF 30" ELM 32' LT. OF STA. 84 + 10  
 ELEV. 715.05



SCHEDULE OF SUPERELEVATION AND WIDENING							
Sta. 53+81.28			To Sta. 67+77.95				
LEFT	CENTER LINE	RIGHT	LEFT	CENTER LINE	RIGHT		
Deduct from E. Gr.	Elev. 10' Lt. &	W	STATION	GRADE	W	Elev. 10' Rt. &	Add to Edge Gr.
0.00	703.83	10'	53+81.28	704.00	10'	703.83	.17
.09	703.92		54+00				
.24	704.07		54+31.28				
.33	704.16		54+50				
.48	704.31		54+81.28				
.72	704.52		55+31.28				
			55+50				
			55+75				
			56+00				
			56+50				
			57+00				
			57+50				
	704.52		58+00	704.00		703.83	
	704.53		58+50	704.01		703.84	
	704.59		59+00	704.07		703.90	
	704.70		59+50	704.15		703.98	
	704.81		60+00	704.26		704.09	
	704.96		60+50	704.41		704.24	
	705.14		61+00	704.59		704.42	
	705.34		61+50	704.79		704.62	
	705.59		62+00	705.04		704.87	
	705.85		62+50	705.30		705.13	
	706.11		63+00	705.56		705.39	
	706.37		63+50	705.82		705.65	
	706.63		64+00	706.08		705.91	
	706.89		64+50	706.34		706.17	
	707.15		65+00	706.60		706.43	
	707.39		65+50	706.84		706.67	
	707.60		66+00	707.05		706.88	
.72	707.71		66+27.95	707.16		706.99	
.48	707.63		66+77.95	707.32		707.15	
.45	707.61		66+83	707.33		707.16	
.37	707.58		67+00	707.38		707.21	
.29	707.54		67+18	707.42		707.25	
.24	707.52		67+27.95	707.45		707.28	
.11	707.45		67+55	707.51		707.34	
.01	707.38		67+75	707.54		707.37	
0.00	707.38	10'	67+77.95	707.55	10'	707.38	.17

SCHEDULE OF SUPERELEVATION AND WIDENING							
Sta. 41+25.84			To Sta. 49+74.73				
LEFT	CENTER LINE	RIGHT	LEFT	CENTER LINE	RIGHT		
Deduct from E. Gr.	Elev. 10' Lt. &	W	STATION	GRADE	W	Elev. 10' Rt. &	Add to Edge Gr.
.17	712.49	10'	41+25.84	712.66	10'	712.49	0.00
	712.37		41+75.84	712.54		712.61	.24
	712.24		42+25.84	712.41		712.72	.48
	712.03		42+75.84	712.20		712.75	.72
	711.90		43+00	712.07		712.62	
	711.57		43+50	711.74		712.29	
	711.15		44+00	711.32		711.87	
	710.65		44+50	710.82		711.37	
	710.06		45+00	710.23		710.78	
	709.42		45+50	709.59		710.14	
	708.63		46+00	708.80		709.35	
	707.83		46+50	708.00		708.55	
	707.03		47+00	707.20		707.75	
	706.23		47+50	706.40		706.95	
	705.43		48+00	705.60		706.15	
	705.05		48+24.73	705.22		705.77	.72
	704.45		48+74.73	704.62		704.93	.48
	704.23		49+00	704.40		704.59	.36
	704.06		49+24.73	704.23		704.30	.24
	703.93		49+50	704.10		704.05	.12
.17	703.85	10'	49+74.73	704.02	10'	703.85	0.00

EXCA. 2025 cu. yds.  
 Emb. 1826 cu. yds.  
 Emb. +15% 2100 cu. yds.  
 Bottom 75 cu. yds.