

# INDEX OF SHEETS

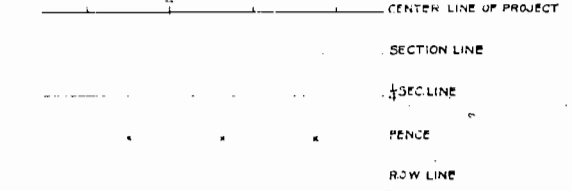
- 1 TITLE SHEET
- 2 TYPICAL SECTION & SUMMARY
- 3 & 4 DETAILS OF BRIDGE STA. 16+ (CONST. DIV. NO. 2)
- 5 STANDARD SUPERELEVATION SHEET (M-1-A)
- 6 to 9 PLAN AND PROFILE

# COLORADO STATE HIGHWAY DEPARTMENT

## PLAN AND PROFILE OF PROPOSED U.S. PUBLIC WORKS PROJECT NO. N.R.S. 379 STATE HIGHWAY NO. 92

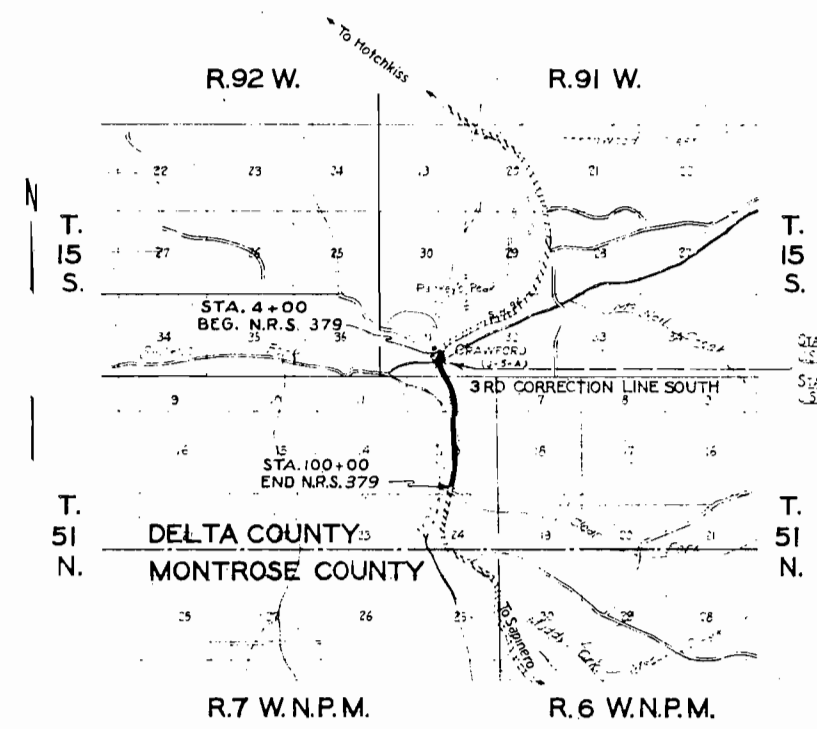
### DELTA COUNTY

# CONVENTIONAL SIGNS



**SCALES**  
ON PLAN, 1 IN. = 100 FT.  
ON PROFILE 1 IN. = 100 FT. HORIZONTAL  
1 IN. = 10 FT. VERTICAL  
GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD  
GROSS LENGTH OF PROJECT 9466.4 FT. = 1.792 MI.  
NET LENGTH OF PROJECT

*Note: staff R.O.W. (Denver) doesn't have the R.O.W. plans for this project*



STATION 4+00  
BEG. N.R.S. 379  
STATION 100+00  
END N.R.S. 379  
3RD CORRECTION LINE SOUTH  
DELTA COUNTY  
MONTROSE COUNTY  
R. 7 W.N.P.M.  
R. 6 W.N.P.M.

*see 50/25(8)*

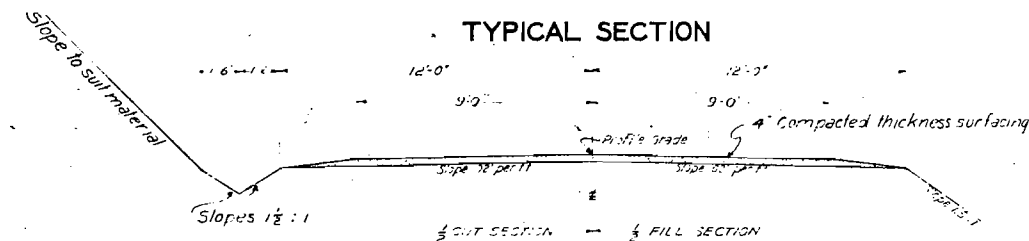
SCALE: 1 IN. = 1 MI.

RECOMMENDED FOR APPROVAL 1/10/34  
*Stallman*  
ASSISTANT ENGINEER  
APPROVED  
*Chas. D. Vail*  
STATE HIGHWAY ENGINEER  
RECOMMENDED FOR APPROVAL  
DIST. ENG. BUREAU PUBLIC ROADS  
RECOMMENDED FOR APPROVAL  
CHIEF ENG. BUREAU PUBLIC ROADS  
APPROVED  
DIRECTOR BUREAU PUBLIC ROADS

# TYPICAL CROSS SECTION OF IMPROVEMENT AND SUMMARY OF QUANTITIES

PLAN ROAD DIST. NO.	STATE	U.S. HW	SHEET NO.	TOTAL SHEETS
1	COLD	N.R.S. 379	2	

Revised as const. 11-20-34 O.A.G.



The thickness of the surfacing is to be considered approximate only. The surfacing is to be placed at the rate of 27 cu yds per 100 ft. of roadway.

## GENERAL NOTES

This Project is to be constructed in conformity with the Standard Specifications of the Colorado State Highway Department, adopted January 1, 1930.

All quantities on preliminary plans are to be considered as approximate only.

All roadway excavation required to construct this project is to be obtained as indicated on the plans. Quantities involved beyond the limits of ditch as shown on the typical section, either noted on profile as "Borrow", or on the List of Structures as "Embankment", are to be classified and paid for as "Unclassified Excavation". These quantities are to be stated as part of the original excavation of locations indicated on the plans. Any slope stakes beyond the limits of the typical ditches are subject to change by the Engineer in fit embankment requirements actually encountered during construction.

All curves are to be super-elevated and widened, provided for by the Standard Super-elevation Sheet.

## SUMMARY OF CONSTRUCTION QUANTITIES

No.	ITEM	UNIT	QUANTITY		
Const. Div. No. 1					
10a	Clearing and Grubbing	Lump Sum	•		
11a	Removing 7 Structures	"	•		
11b	Removing Detour Bridge	"	•		
12a	Removing Fence	Lin. Ft.	435		
12b	Removing and Rebuilding Fence	"	8760		
13c	Unclassified Excavation	Cu. Yd.	40,955.8		
14x	Unclassified Excavation (Structural)	"	204.3		
18a	Sta. Yd. Overhaul	Sta. Yd.	150,030.5		
18b	Yd. M.	Yd. M.	8,446		
30x	Gravel or Crushed Rock Surfacing	Cu. Yd.	2,617.5		
53a	15" Corr. Metal Culvert Pipe	Lin. Ft.	228		
53b	18" " " "	"	388		
53c	36" " " "	"	130		
65	Dry Rubble Slope Paving	Sq. Yd.	15		
55	Relaying Pipe	Lin. Ft.	60		
68	Stone Underdrain	"	300		
	Constructing Detour Bridge	Lump Sum	•		
Const. Div. No. 2 - Br. 175, Sta. 12+82 to 16+53 - 1 Span @ 36'-7"					
13c	Unclassified Excavation	Cu. Yd.	335.5		
14b	Dry Common Excavation - Struct.	Cu. Yd.	639.4		
Const. Div. No. 3 - Br. 175, Sta. 16+53 to 18+20 - 1 Span @ 36'-7"					
42a	Untreated Bridge Timber	M.T.S.M.	0.240		
46a	Cross 4" Concrete	Cu. Yd.	297		
47	Reinforcing Steel	Lb.	25680		
48	Structural Steel	"	14637		
48	Removal of Disused Bridge	Lump Sum	•		
38	Drain Pipes	Each	4		

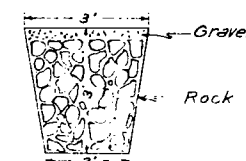
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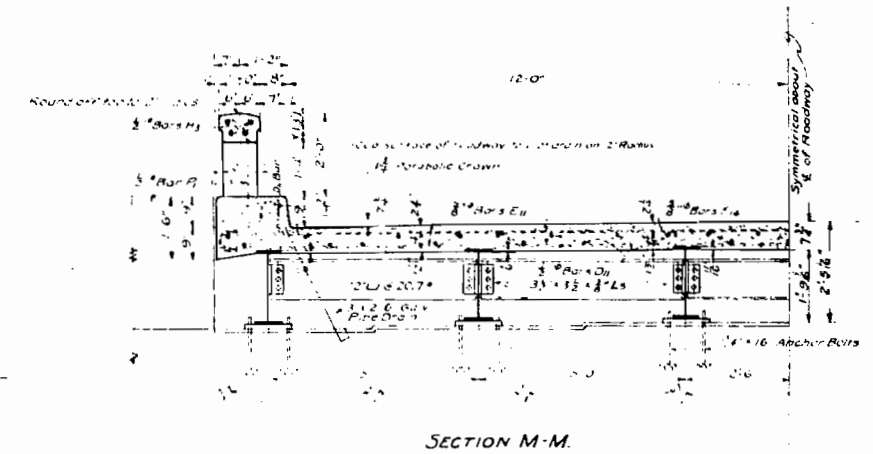
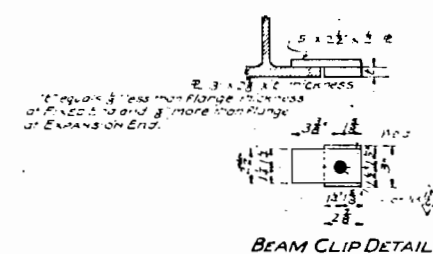
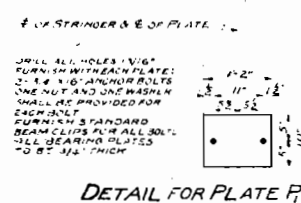
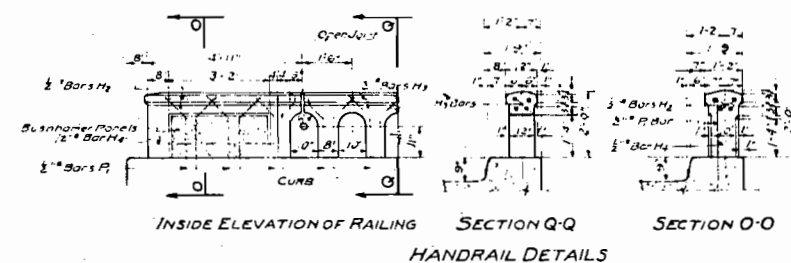
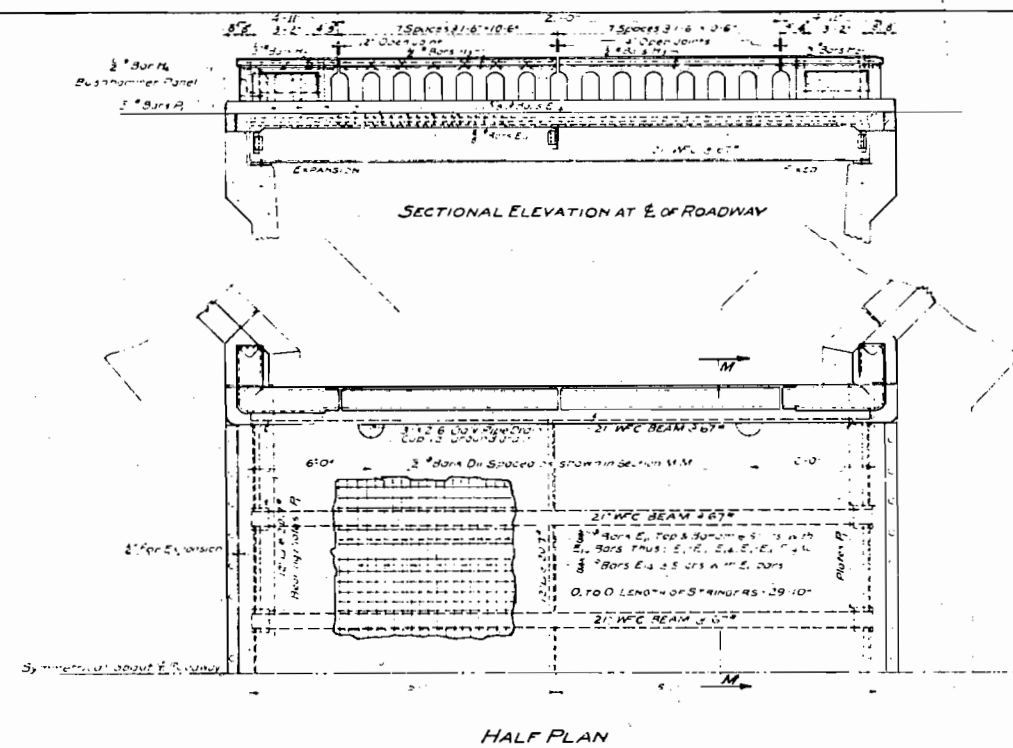
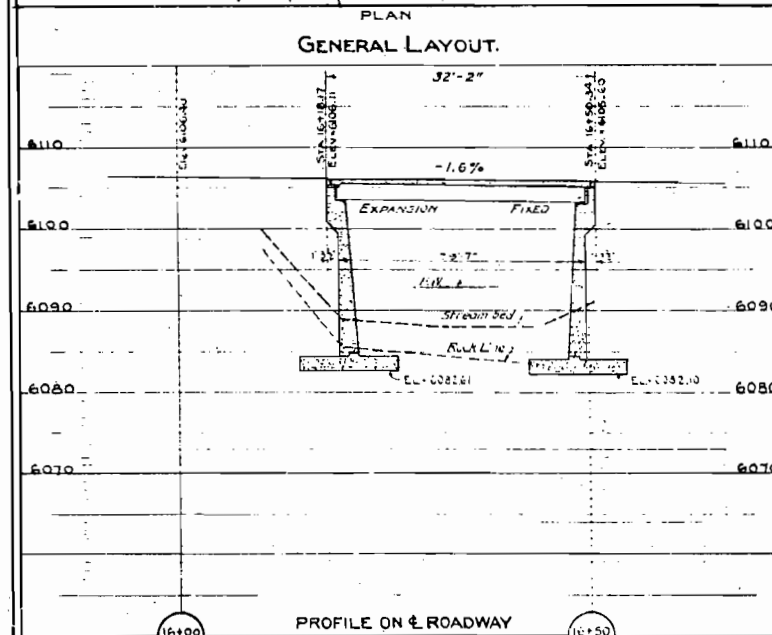
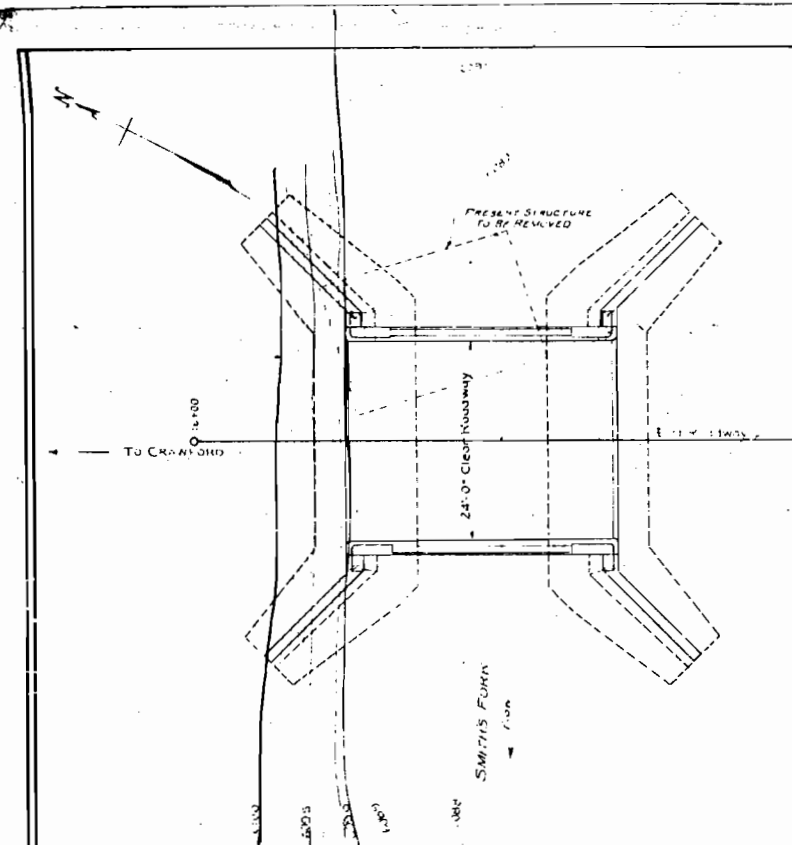
STATION	SIDE	Removing & Rebuilding	Removing
22+00 to 27+50	R	600	
22+00 to 39+00	L	1620	
31+40 to 37+25	R	585	
37+50 to 62+00	L	450	
62+00 to 73+50	R	1150	120
64+25 to 81+50	R	1725	95
81+50 to 85+50	L	400	
13+20 to 16+20	R	320	
16+50 to 17+00	L	325	
18+00 to 22+00	L	400	
17+00 to 22+00	R	500	
26+00 to 29+00	L	300	
85+50 to 88+60	L	310	
15+00 to 15+75	L	75	
TOTALS		8760	435

## TABULATION OF STRUCTURES

STATION	DESCRIPTION	REMOVE STRUCTURES	UNCL. EXCAV. CU. YD.	UNCL. STRUCT. EXCAV. CU. YD.	DRY RUBBLE SLOPE PAVING SQ. YD.	CORR. MET. PIPE LIN. FT.			RELAYING PIPE LIN. FT.	MISCELLANEOUS
						15"	18"	36"		
6+65	C.M.P. Side Culvert			3.8		30				
7+80	" " "			1.5		12				
10+50	C.M.P. Cross Culvert & Slope Paving R & L & Ditch		14.4		6		52			
11+35	Relay 15"x20' C.M.P.								20	
13+25	C.M.P. Side Culvert			11.1		30				
13+50	" Cross			10.0	3	36				
13+67	Remove 15"x20' C.M.P.	1								
14+00 to 15+50	Ditches		66.7							
15+10	C.M.P. Side Culvert			5.6		30				
17+75	Remove Wooden Box Culvert	1								
17+75	C.M.P. Side Culvert			4.3		30				
19+50	Extend C.M.P. Cross Culvert			0.7	3	6				
21+40	Relay 18"x16' C.M.P. & Ditch		29.6						16	
23+10	Extend C.M.P. Cross Culvert			0.7	3	6				
28+50	C.M.P. Cross Culvert			17.8			48			
39+90	Remove 12"x20' & 15"x24' C.M.P.	1					50			
39+90	C.M.P. Cross Culvert			27.8						
44+65	Relay 15"x24' C.M.P.			2.0					24	
44+75	C.M.P. Side Culvert			7.4		30				
46+00	Remove Wooden Box Culvert	1	(14.8)				40			
46+50	C.M.P. Cross Culvert & Ditches		(1.9)	11.1						
52+00	Remove 10"x20' C.M.P.	1								
52+25	C.M.P. Cross Culvert & Ditch		27.8	12.8		50				
64+50	" " " " "			16.3		30	36			
65+75	" Side " " "			6.8						
74+50	" Cross " " "			35.6		30		76		
74+75	" " " " "			3.5		20				
79+70	" " " " "			2.6		30				
90+40	" Cross " " "			14.9				54		
90+50	Remove Wooden Box Culvert	1								
92+20	C.M.P. Side Culvert			3.3		20				
95+00 to 98+65	Ditches		67.6							
97+80	C.M.P. Cross Culvert			7.3		30				
98+00	Remove 10"x20' C.M.P.	1								
13+95 to 15+83	Stone Underdrain									300' Stone underdrain
16+50	Constructing & Removing Detour Bridge									Detour Bridge
TOTALS CONST. DIV. NO. 1		7	239.1	204.3	15	228	388	130	60	
CONSTRUCTION DIVISION NO. 2										
16+18.2 to 16+50.3	Concrete I-Beam Bridge									Quantities in Summary

Stone Underdrain required between Sta. 13+95 and 15+83.





**BAR LIST FOR ENTIRE SUPERSTRUCTURE** r.w.c.

MARK	SIZE	NUMBER	LENGTH	L	M	P	D
E <sub>18</sub>	3/8"	25	28'-3 1/2"		2'	2'	
E <sub>11</sub>	3/8"	100	28'-5"		26"	2'	3'
D <sub>11</sub>	1/2"	39	30'-10"				
M <sub>2</sub>	2"	16	4'-5"				
M <sub>3</sub>	1/2"	16	10'-2"				
M <sub>4</sub>	1/2"	8	3'-6"				
P <sub>1</sub>	1/2"	30	6'-0"	4'	5'		

**BENDING DIAGRAM**  
ALL DIMENSIONS ARE TO OF RAIL

**BAR LIST FOR ENTIRE SUPERSTRUCTURE** r.w.c.

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**BENDING DIAGRAM**  
ALL DIMENSIONS ARE TO OF RAIL

SUMMARY OF QUANTITIES FOR ENTIRE STRUCTURE					
ITEM NUMBER	DESCRIPTION	UNIT	SUPERSTRUCTURE	SUBSTRUCTURE	TOTAL
1-2	Dry Rock Structural Excavation	CY			
1-3	Dry Common "	"		6394	6394
1-4	Wet Rock	"			
1-5	Wet Common	"			
2-1	Untreated Bridge Timber	MBM		6240	6240
2-2	Class A Concrete	CU	27	172	297
3-1	Reinforcing Steel - overrun included	LBS	5000	2500	30000
3-2	Structural Steel - " "	LBS	14577	60	14637
4-1	Removal of Disused Bridge	CU			14637
5-1	Drain Pipes - 12" x 20' x 10' (10' x 10' x 10')	PCS	4		4
5-2	Expansion Joint Material 2' x 10'	Lin Ft	24		24
5-3	Expansion Joint Material 2' x 10' x 10' (10' x 10' x 10')	CU		4	4
5-4	Unclassified Excavation	CU			1358

LOADING DATA  
LIVE LOAD = AASHTO 401 12.2 CLASS B H-15  
DEAD LOAD = 1.0 KIPS PER SQ FT (2011) 4044 WEARING  
SURFACE WHICH INCLUDES THE 1" CONCRETE MONOLITHIC WEARING  
SURFACE

**COLORADO**  
STATE HIGHWAY DEPARTMENT  
GENERAL LAYOUT & DETAILS FOR  
SUPERSTRUCTURE: 30' SPAN x 24" R  
ROWLY I-BEAM CONCRETE BRIDGE  
Across SMITH'S FORK  
Sta. 16+81.17 to 16+50.34  
Near Cromford Sec. 31 T15S R91W

Designed by RMA	Approved by <i>P. J. Bailey</i>
Made by RMA	Bridge Engineer
Checked by OWC	Date: <i>Jan 5<sup>th</sup> 1993</i>

4043 " " Fr 12 1/2 Bars	@ 0.064 Lbs per Lin Ft	=	2687 Lbs
1021 " " Fr 2 "	@ 0.080 Lbs " " "	=	673 "
1022 " " Fr 4 "	@ 0.043 Lbs " " "	=	607 "
81 " " Fr 4 "	@ 0.042 Lbs " " "	=	122 "
413 " " Fr 4 "	@ 0.044 Lbs " " "	=	685 "
418 " " Fr 6 "	@ 0.031 Lbs " " "	=	4935 "
4387 " Lin Ft 1 "	@ 1400 Lbs " " "	=	14916 "
For Backhaul for overrun		=	235 "
Total		=	25000 Lbs

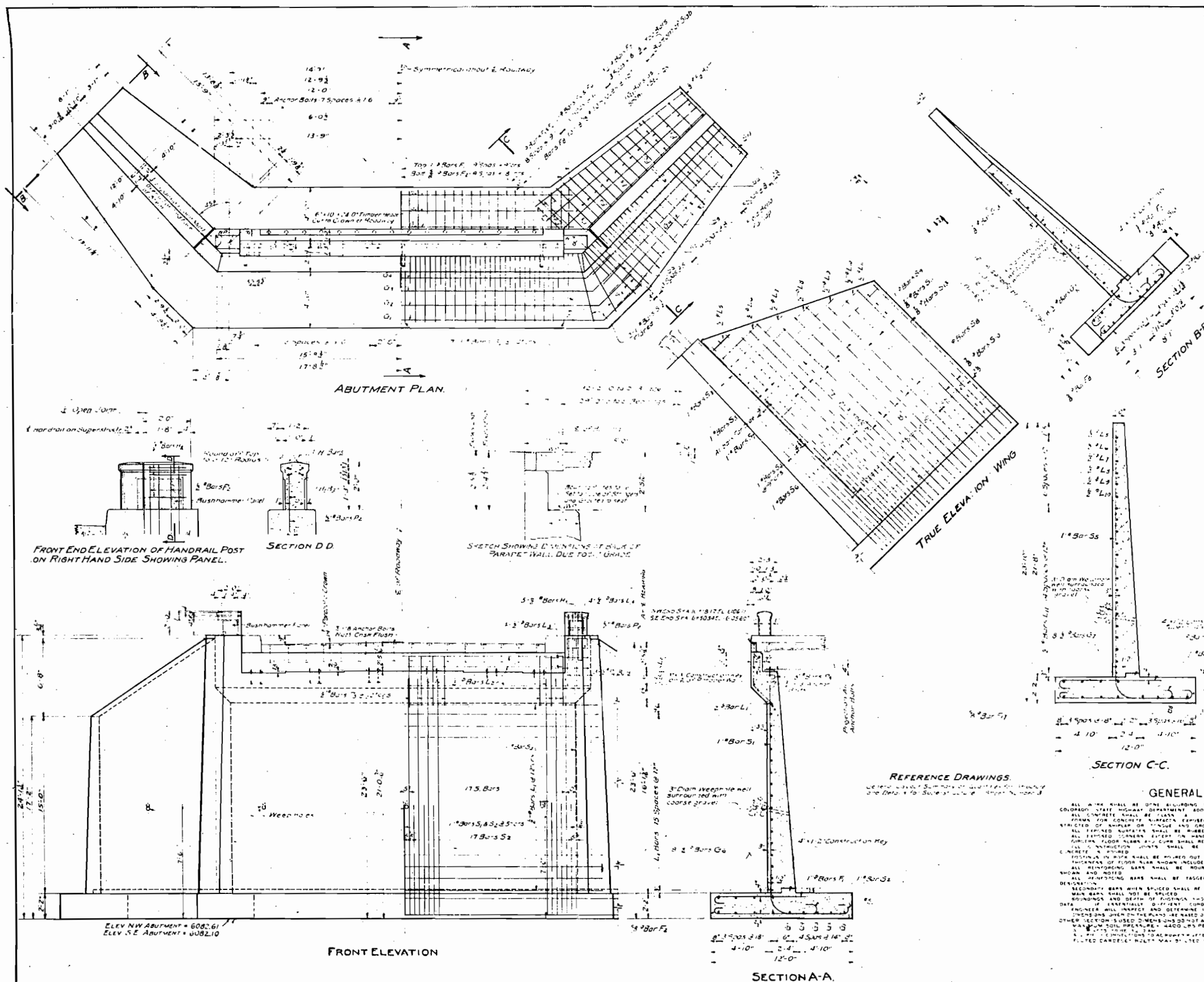
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LIVE LOAD = 8 A S. H O AUG 1978 CLASS A H-15  
DEAD LOAD = ASSUMES 4 LBS PER SQ FT ADDITIONAL WEA  
SURFACE AND H-15 CEMENT FIVE TO IN CONCRETE NONSLITTING WEA  
SUBSIDE

Across SMITH'S FORK  
Sta. 16+18.17 to 16+50.34  
Near Crawford Sec. 31, T. 15 S., R. 91 W.

Designed by RMA.	Approved by <i>Pat Bailey</i>
Made by RMA	Bridge Engineer
Checked by	Date: <i>Jan 5<sup>th</sup> 1933</i>

STRUCTURE NO. J-6-A.

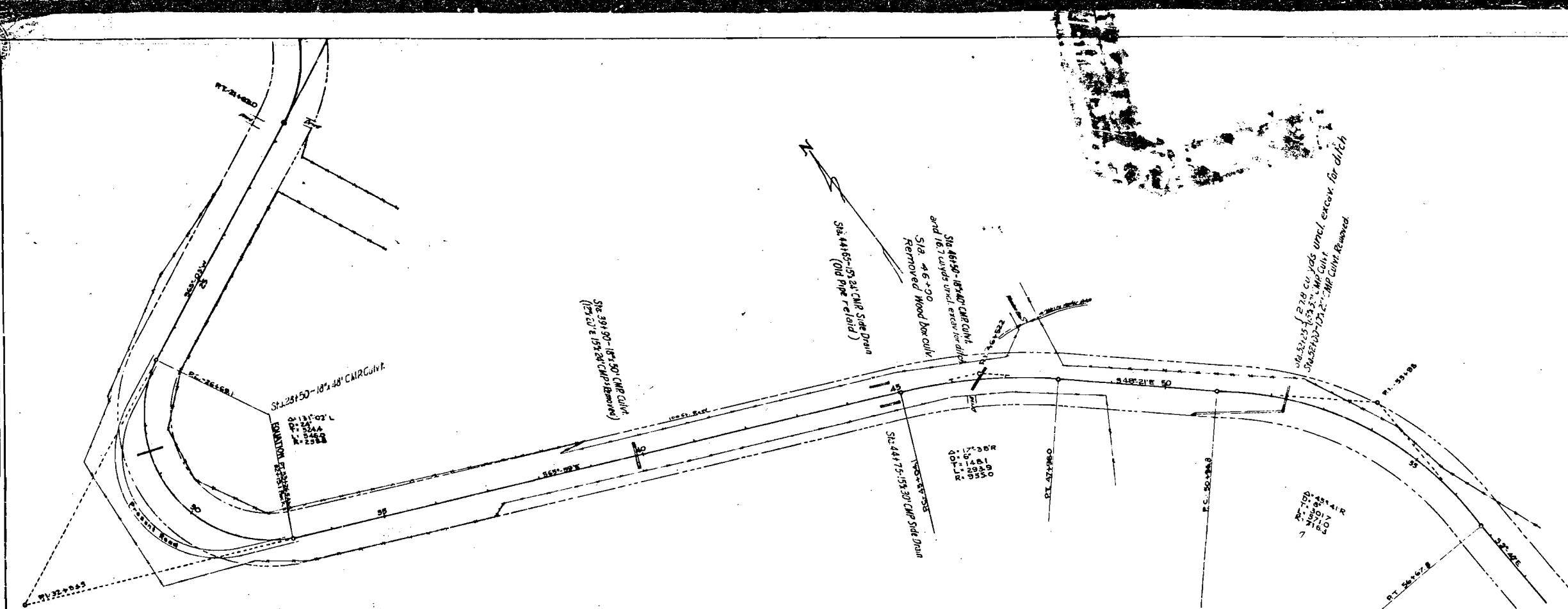


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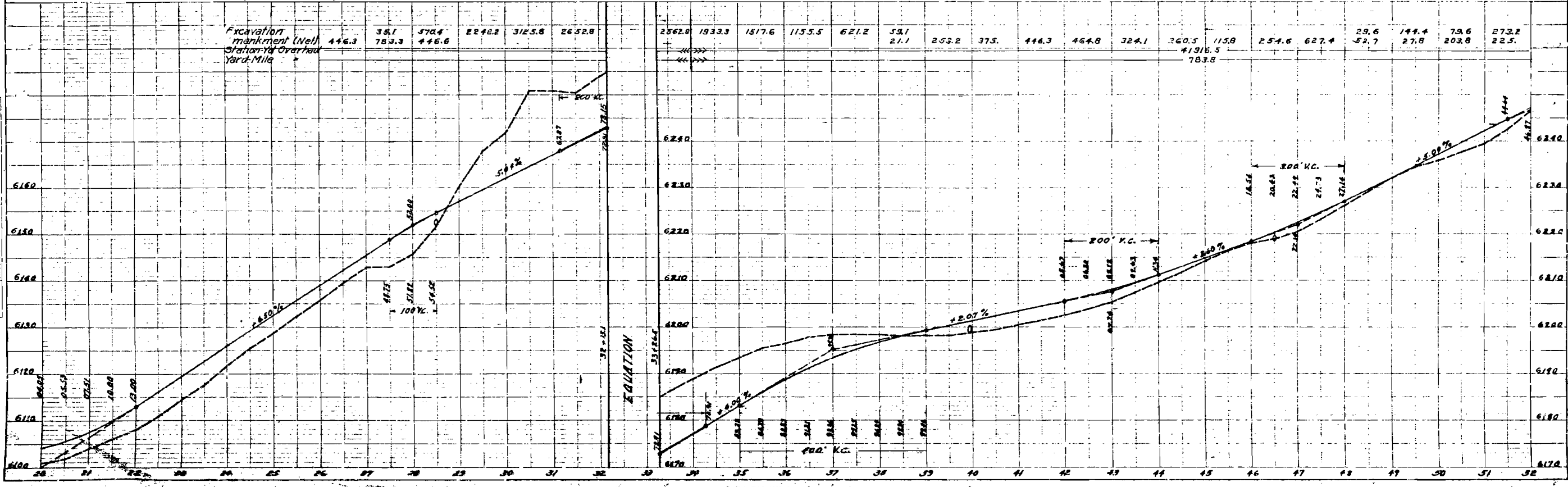




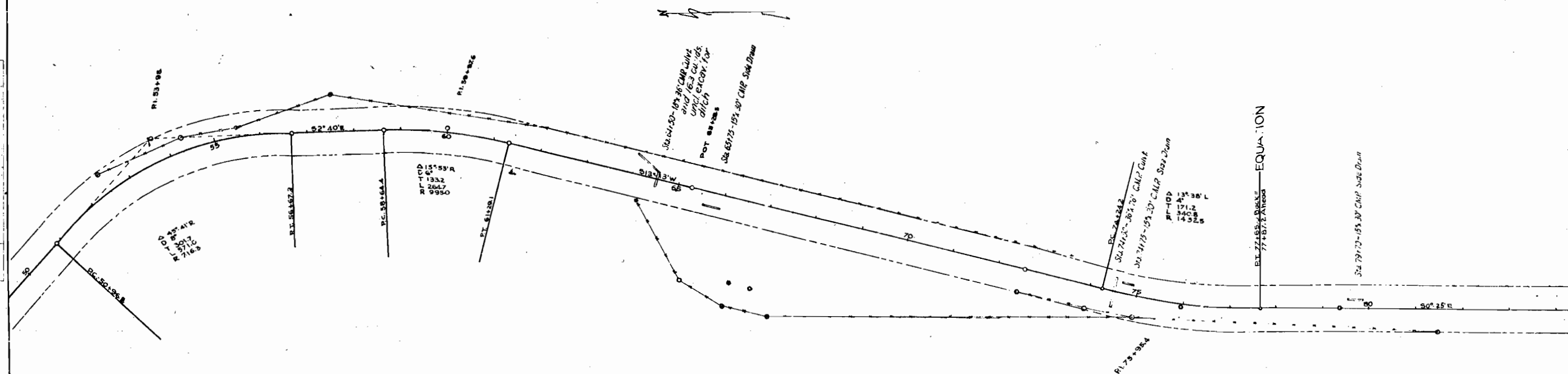
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 2. PROPOSED  
 3. NOTE BOOK  
 4. EXISTING  
 5. AT OF MAP  
 6. CHANGES



PROFILE  
 1. EXISTING  
 2. PROPOSED  
 3. NOTE BOOK  
 4. EXISTING  
 5. AT OF MAP  
 6. CHANGES



PLAN	NO. 1000	DATE
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