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COLORADO
DEPARTMENT OF HIGHWAYS
 PLAN AND PROFILE OF PROPOSED
FEDERAL AID PROJECT NO. I-25-3(28)251
STATE HIGHWAY NO. 185
LARIMER & WELD COUNTIES

R.O.W. PURCHASED UNDER PROJECT I-25-3(16)251

Loveland (11/10-52)

SCALES OF ORIGINAL DRAWINGS
 ON PLAN: 1 IN. = 100 FT. HORIZONTAL
 ON PROFILE: 1 IN. = 10 FT. VERTICAL
 GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD
 GROSS LENGTH OF PROJECT 35,072.5 ft. = 6.632 Miles
 NET LENGTH OF PROJECT 35,390.6 ft. = 6.701 Miles

STA. 1+00 BEGIN I-25-3(28)251 =
 BEGIN I-25-3(27)251

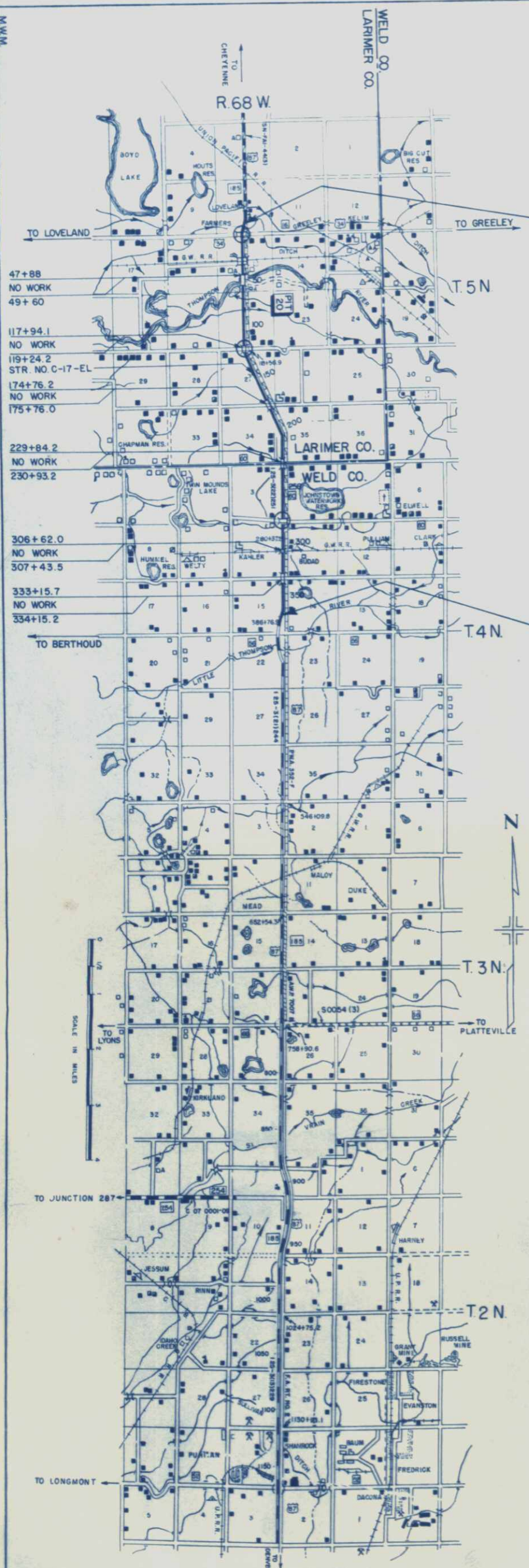
STA. 362+00 END I-25-3(28)251 =
 END I-25-3(27)251



RETURN TO DIST. 4 DESIGN

CONVENTIONAL SIGNS

- CENTER LINE
- RIGHT OF WAY LINE
- COUNTY LINE
- TOWNSHIP OR RANGE LINE
- LAND LINES
- RAILROAD
- BARBED WIRE FENCE
- COMBINATION WIRE FENCE
- SNOW FENCE
- TELEPHONE & TELEGRAPH LINES
- POWER LINE
- DETOUR
- PRESENT ROAD (Pon Sheets)
- Access Points
- C of A LINE
- ACCESS DENIED BY DEED
- MAIN LINE DELINEATOR
- RAMP DELINEATOR
- RAMP END DELINEATOR
- SIGN BRIDGE STRUCTURE



SEE SPECIAL PROVISIONS FOR
 NOTICE TO BIDDERS

COLORADO
 DEPARTMENT OF HIGHWAYS

APPROVED: *Michael M. ...*
 CHIEF ENGINEER 3-7-62
 DATE

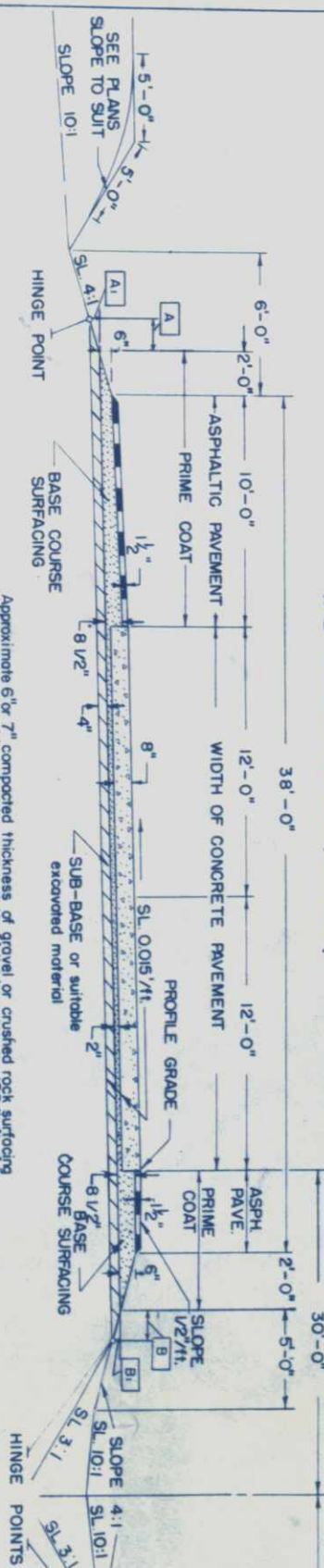
APPROVED: _____
 DIVISION ENGINEER
 DATE

DEPARTMENT OF COMMERCE
 BUREAU OF PUBLIC ROADS

FEDERAL ROAD DISTRICT	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	I-25-3(28)251	1	

TYPICAL SECTIONS OF IMPROVEMENT

1/2 SECTION A-A (U.S. 87)

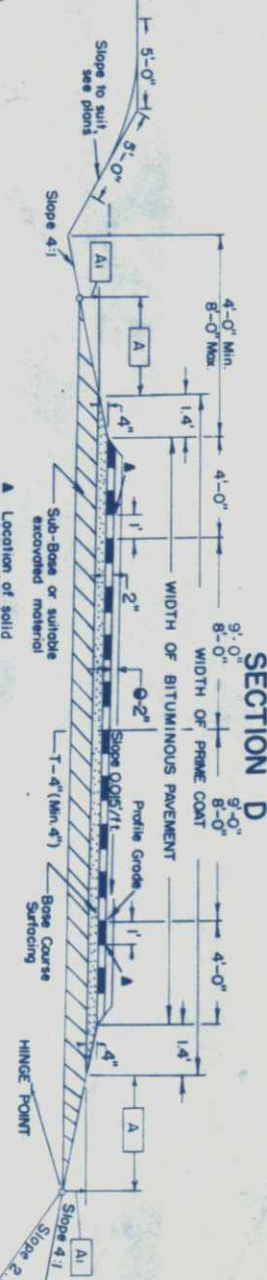
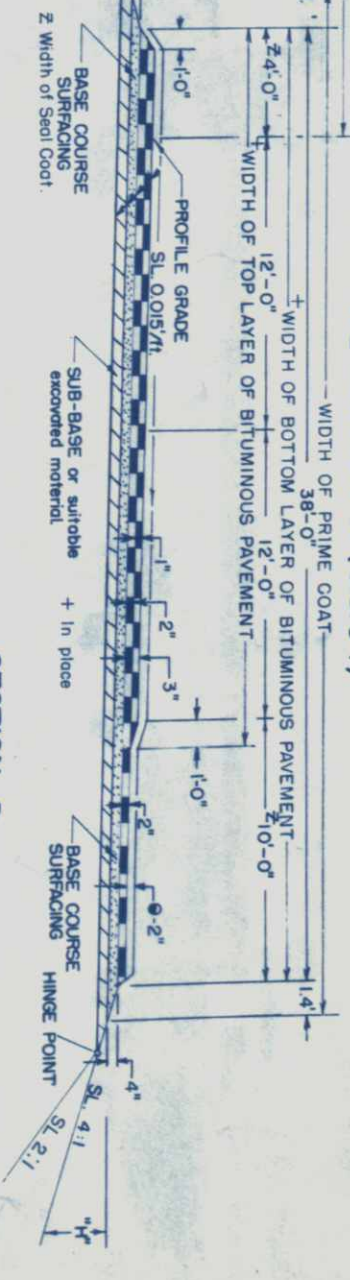


Approximate 6" or 7" compacted thickness of gravel or crushed rock surfacing shall be placed in separate courses of the following rates per 100 sq. ft. of roadway for section B,C,D

SECTION	②-A	B	C-10	D(16)	D(18)
Bituminous Pavement (Top Layer)	26	43	34	29	32
Bituminous Pavement (Bottom Layer)	179	92	65	56	61

⊕ Rate for 100 Lin. Ft. for Shoulder Areas and under Concrete Pavement.

1/2 SECTION A (U.S. 34)



GENERAL NOTES

- The seed used for this project shall consist of 10 lbs. of crested wheat grass per acre.
- During construction of this project, traffic will use the present traveled roadway except where detours are shown on plans.
- Thickness of Sub-Base Surfacing & Asphaltic Pavement materials as shown on plans is approximate only. These materials are to be placed on the base of homages shown on plans.
- This project is to be constructed in conformity with the Standard Specifications of the Colorado Department of Highways, adopted January 1, 1958.
- All quantities on preliminary plans are to be considered approximate only.
- For Alignment and Grades, see project No. I-25-3(22)251 & I-25-3(27)251
- For preliminary plan quantities of Asphaltic Road Materials the following rates of application were used:
 - ① 0.35 Gals per sq. yd.
 - ② 0.40 Gals per sq. yd.
 - ③ 5.33 Lbs. per sq. yd.
 - ④ 24.0 Lbs. per sq. yd.
- Rate of application and grade of Asphaltic Material shall be as determined by the Engineer at time of application.
- The grading for removing detours, temporary connections, approaches to project and for constructing sign islands shall be paid for as Unclassified Excavation as follows: 1.750 Cu. Yds. - Larimer County, 1,250 Cu. Yds. - Weld County. Excavated Material for detours, connections and approaches is to be disposed of as directed by the Engineer.
- ⊕ Extended Aluminum Sign Panels are used on Ground Sign Structures; reference is to be made to Standards 5-522-A and 5-523-A(1) for an increase in the length of the Sign Posts.

The Engineer shall establish Grades and Locations for all Posts. Wood Posts shall be Set and Tamped firm and plumb. U-2 Channel Posts shall be driven plumb or set in the same manner as Wood Posts.

In computing Areas of Sign Panels, the areas shall be based on Geometrical Squares, Rectangles, or Triangles. Odd Shapes, such as Shields, Octagons, etc. are to be figured on this basis as follows:

Interstate Shield: 3'x3' or 2'x2' Square. Octagon: 2.5'x2.5' Square. U.S. Shield: 35" x 30" or 28" x 24" Rectangle. Yield Panel: 5' Equilateral Triangle.

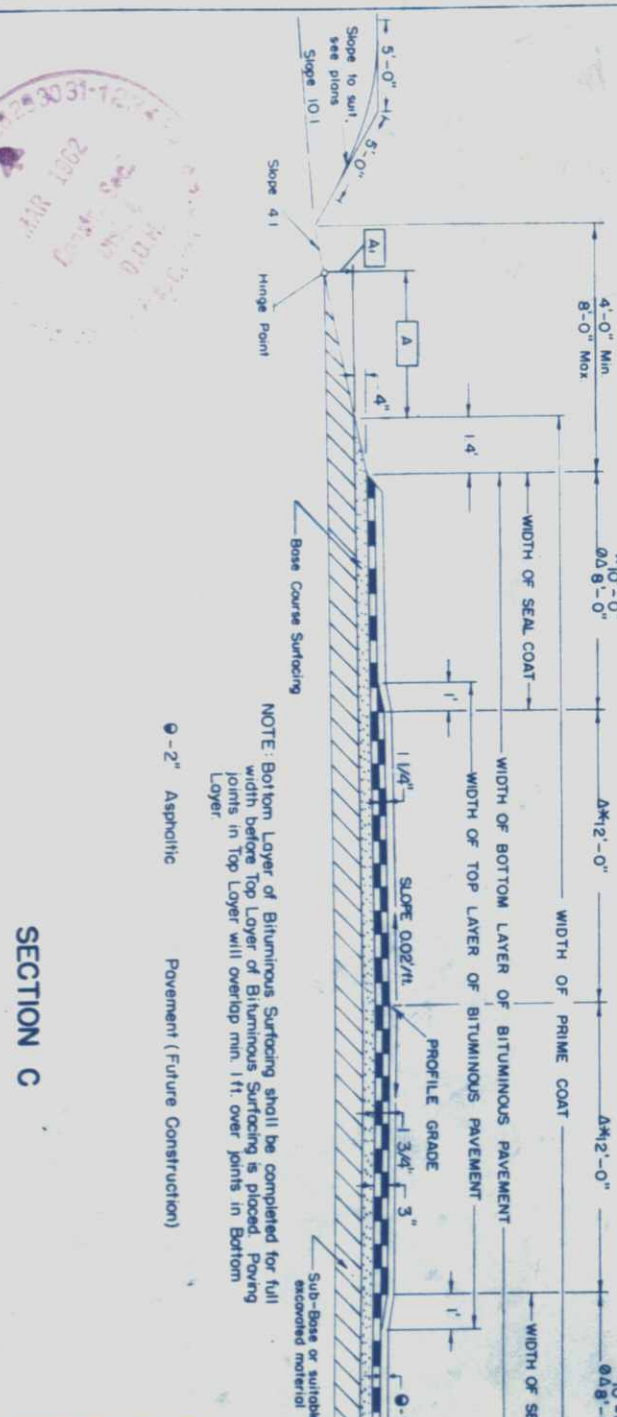
* Federal Specifications, Standards and Handbooks* referred to in these plans, and Special Provisions are available from the Business Service Center, Bldg. 41; Denver Federal Center.

Military Specifications (Designated as "Mil") are available from the Air Material Command, Wright-Patterson Air Force Base, Ohio. (Attn. E.W.B.F.E.).

Class "A" Concrete aggregate may be substituted for "pavement" aggregate.

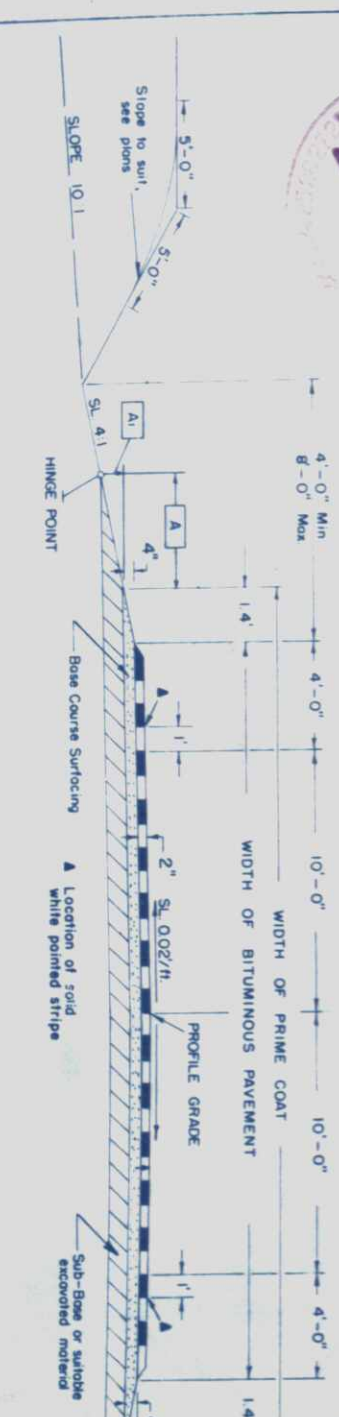
TABULATION OF HINGE POINTS

TYPICAL SECTION	THICKNESS OF SUB-BASE	A	A1	B	B1
A-A	4"	1.4'	-0.4'	1.3'	-0.3'
A	8"	2.8'	-0.7'	2.5'	-0.6'
C	14"	5.1'	-1.3'		
D	5"	1.8'	-0.5'		
D	14"	5.0'	-1.3'		



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SUMMARY OF APPROXIMATE QUANTITIES

ITEM NO.	ITEM	UNIT	LARIMER COUNTY		WELD COUNTY		PROJECT TOTALS			
			ROADWAY	SIGNING	ROADWAY	SIGNING				
13	Unclassified Excavation	Cu Yd	750	1,000						
13	Stripping	Cu Yd	3,000							
17	Metring	M Gal	1,970							
18	Ton Mile Overhaul	Ton Mi.	273,850							
21	Seeding	Acres	205.7							
23	Sub-Base Material (Class 1)	Ton	48,500							
23	Sub-Base Material (Class 2)	Ton	20,100							
26	Gravel or Crushed Rock Surfacing (Grading C)	Ton	63,600							
29	Asphalt (95-100 Penetration)	Ton	1,150							
30	Asphaltic Road Material MC (Prime)	Gal	98,900							
30	Asphaltic Road Material PC (Aggregate Seal)	Gal	3,340							
31	Stone Screenings (Type I)	Ton	130							
32	Plant Mixed Asphaltic Surfacing	Ton	1,730							
32	Plant Mixed Asphaltic Shoulder Roll	Ton	290							
37	Concrete Pavement (8" Thick)	Sq. Yd	118,895							
37	Concrete Pavement (10" Thick)	Sq. Yd	1,310							
44	Sign Posts (4"x4" Timber)	Lin. Ft.		162						
44	Sign Posts (6"x6" Timber)	Lin. Ft.		266						
46	Concrete Footings (Type I-C)	Each		21						
46	Concrete Footings (Type I)	Each		24						
47	Concrete Footings (Type II)	Each		2						
47	Reinforcing Steel	Lbs.	60,300							
48	Sign Posts (6" x 6" x 20' Beam)	Lin. Ft.		120						
48	Sign Posts (8" x 6" x 20' Beam)	Lin. Ft.		64						
48	Sign Posts (8" x 6" x 20' Beam)	Lin. Ft.		30						
53	12" Curved Metal Culvert Pipe	Lin. Ft.	918							
65	Concrete Slope and Ditch Paving	Cu. Yd	16							
75	Metal Spike Guard Fence (Beam Type)	Lin. Ft.	3,050	75						
76	Barrier Fence with Metal Posts	Lin. Ft.	4,765							
92	Timber Guard Posts	Each	573							
93	Metal Embankment Protectors (Type 3)	Each	40							
149	Sign Panels (Class I)	Sq. Ft.		111						
149	Sign Panels (Class II)	Sq. Ft.		1,149						
149	Sign Panels (Class III)	Sq. Ft.		2,622						
150	Sign Bridge Structure (50"x8'-10" Frame)	Each		3						
150	Flashing Number Units	Each		3						
	STATE FORCES (Non Federal Aid)									
	Signage and Shading entire Project		2.5							
	FORCE ACCOUNT									
	FURNISH & INSTALL LUMINAIRES, WIRE & POLES FOR INTERCITY LIGHTING (Work by Pub. Serv. Co. forces)		2.5							
	FURNISH & INSTALL POWER LINES TO ILLUM OVERHAUL SIGNS & BEACONS (Work by Public Service Co.)		2.5							
	FURNISH & INSTALL LUMINAIRES, WIRE & POLES FOR INTERCITY LIGHTING (Work by Central Power Co.)		2.5							
	FORCE ACCOUNT (Non Federal Aid)									
	FURNISH & INSTALL LUMINAIRES, WIRE & POLES FOR INTER LIGHTING (Work by Public Serv. Co.)		2.5							

* Public Service Co.

TABULATION OF GUARD POSTS AND GUARD FENCE

STATION	GUARD POSTS			GUARD FENCE	
	SIDE	SPACING	NO	LOCATION	LIN FT
30+00 TO 38+50 41+00 TO 44+00 * MAIN LINE	LT & RT	CULV	2	RT OF E. FR. RD.	850
36+00 (N.B.) BRIDGES (47+)	LT & RT	BR END CULV EM	12 4	BRIDGE APPRS.	300
51+00 52+00 TO 67+00	LT & RT (MEDIAN)	200'	16		
70+25 (N.B.) 75+35 TO 84+35	LT & RT	CULV	2		
92+41 94+00	LT & RT	100' CULV	42 4		
104+50 TO 107+00	LT & RT	CULV	2	RT OF E. FR. RD.	250
104+50 (N.B.) 142+25 TO 146+25	LT & RT	100' CULV	20 4		
163+00 (N.B.) 197+40 (OUTSIDE SH)	LT & RT	CULV	4 2		
204+00 (N.B.) 217+00 (OUT SH)	LT & RT	CULV	2		
217+50 220+00 TO 229+00	LT & RT	CULV 100'	3 40		
230+ (BRIDGE)	LT & RT	BR END	60	BRIDGE APPRS.	150
233+00 TO 241+00 255+00 (OUT SH) 265+50 (N.B.)	LT & RT RT (MED) LT	BR END 100' CULV	60 35 1	BRIDGE APPRS.	150
299+00 TO 305+00 306+ (BRIDGES) 309+00 TO 322+00 328+00 TO 332+00	LT & RT LT & RT LT & RT LT & RT	100' BR END 100' (MED) 200'	28 12 56 6	BRIDGE APPRS.	300
333+ (BRIDGES) 336+00 TO 340+00 354+00 (N.B.)	LT & RT LT & RT LT & RT	BR END 100' CULV	12 20 4	BRIDGE APPRS.	300
SEPARATION WC+ INTERCHANGE 12+ INTERCHANGE 118+ INTERCHANGE 175+ INTERCHANGE 280+	Ø Ø Ø Ø Ø	Ø Ø Ø Ø Ø	255 79 70 135	BRIDGE APPRS. BRIDGE APPRS. BRIDGE APPRS. BRIDGE APPRS.	300 300 300 150
LARIMER CO TOTALS			573		3,050
WELD CO TOTALS			317		900
PROJECT TOTALS			890		4,025

* EXCEPT THROUGH INTERCHANGES
 Ø FOR LOCATIONS SEE DETAILS OF INTERCHANGES
 Ø 6 POSTS ON EXIT END OF BRIDGES

TABULATION OF BARRIER FENCE

Ø LOCATION	# SIDE	BARRIER FENCE	
		LIN FT	REIN STEEL
1+00 TO 7+65 126+00 TO 130+00 196+00 TO 199+00	RT RT RT	665 400 1,300	6,208 6,208 6,208
1+00 TO 7+00 20+00 TO 24+00 92+00 TO 96+00	LT LT LT	600 400 400	6,072 6,072 6,072
133+00 TO 136+00	LT	300	9,072
211+00 TO 218+00 291+00 TO 296+00 357+00 TO 360+00	LT LT LT	700 500 300	9,072 9,072 9,072
LARIMER CO TOTAL		4,765	50,800
WELD CO TOTAL		800	10,000
PROJECT TOTAL		5,565	60,800

* MAY BE ADJUSTED BY ENGINEER TO MEET ACTUAL FIELD CONDITIONS.
 Ø BARRIER FENCE TO BE PLACED BETWEEN FR. RD. & MATERIAL LANE.

TABULATION OF CONCRETE PAVEMENT AND APPROACH SLABS

STATIONS	CONCRETE PAVEMENT (8" THICK)	BRIDGE APPROACH SLABS	REIN STEEL
1+00 TO 47+68 47+68.0 TO 47+88.3 49+59.7 TO 49+80	24,894	134'	6,208
49+80 TO 57+34.5 BK = 57+32.6 AM TO 117+71.0 117+71.0 TO 117+94.4 119+23.9 TO 119+47.3	4,034	196	9,072
119+47.3 TO 126+98.0 BK = 126+88.3 AM TO 174+49.1 174+49.1 TO 174+76.5 175+75.7 TO 176+03.1	25,389	230'	10,603
176+03.1 TO 213+24.3 BK = 213+62.2 AM TO 229+62.6 229+62.6 TO 229+84.5 230+92.9 TO 231+14.88	19,817	183	8,510
231+14.88 TO 256+75.1 BK = 256+76.5 AM TO 306+42.0 306+42.0 TO 306+62.3 307+43.2 TO 307+63.5	13,633	169	7,888
307+63.5 TO 333+29.7 332+95.7 TO 333+16.0 334+14.9 TO 334+35.2 334+35.2 TO 362+00	13,504	169	7,888
LARIMER CO TOTAL	118,895	1,303	60,276
WELD CO TOTAL	68,385	959	40,062
PROJECT TOTAL	187,280	2,162	100,338

Δ CONCRETE PAVEMENT 10" THICK

TABULATION OF LENGTH AND DESIGN DATA

STATION	ROADWAY LIN FT	NO WORK LIN FT
1+00 BEGIN I 25-3(28) 251 = BEGIN I 25-3(27) 251 47+88 BRIDGE END C 17-BL & C 17-BM BIG THOMPSON RIVER 49+60 BRIDGE END	4,688.0	172.0
57+34.5 BK = EQUATION 57+32.6 AM	774.5	
117+94.1 BRIDGE END C 17-DG & C 17-DO S.H. 402 119+24.2 BRIDGE END	6,061.5	130.1
126+98.0 BK = EQUATION 126+88.3 AM	773.8	
174+76.2 BRIDGE END C 17-EE & C 17-EI 175+76.0 BRIDGE END	4,787.9	99.8
213+24.5 BK = EQUATION 213+62.2 AM	3,748.5	
229+84.2 BRIDGE END C 17-BR & C 17-BQ S.H. 60 (LARIMER-WELD CO. LINE) -9+230+59.9 BRIDGE END (STA 250+37 PROJECTED) 230+93.2 BRIDGE END	1,622.0	109.0
256+75.1 BK = EQUATION 256+76.5 AM	2,581.9	
306+62.0 BRIDGE END C 17-CE & C 17-CB 307+43.5 BRIDGE END	4,985.5	81.5
333+15.7 BRIDGE END C 17-DH & C 17-DY 334+15.2 BRIDGE END 362+00 END I 25-3(28) 251 = END I 25-3(27) 251	2,572.2	99.5
LARIMER CO TOTALS	22,456.2	2,784.8
WELD CO TOTALS	12,924.4	129.2
PROJECT TOTALS	35,380.6	691.9

SUMMARY

DESIGN DATA

ROADWAY LARIMER CO
 ROADWAY WELD CO
 ROADWAY NET LENGTH
 NO WORK SECTIONS
 GROSS LENGTH

MAXIMUM GRADE
 MAXIMUM DEGREE OF CURVE
 MINIMUM NP5D - HORIZONTAL
 MINIMUM NP5D - VERTICAL
 MAXIMUM DESIGN SPEED

LIN FT
 22,456.2
 12,924.4
 35,380.6
 6,919.9
 36,072.5

MILES
 4.253
 2.448
 6.701
 0.131
 6.832

3.49 %
 2+00'
 1500'
 6057
 70 MPH

SURFACING PLAN

IT IS ESTIMATED THAT MATERIAL FOR SURFACING FOR THE PROJECT IS AVAILABLE IN THE VICINITY OF THE PIT INDICATED IN THE FOLLOWING TABULATIONS. ESTIMATED QUANTITIES INVOLVED IN THESE OPERATIONS ARE SHOWN BELOW. ALTERATION OF THE SURFACING PLAN, AS HERE OUTLINED, WILL BE ALLOWED ONLY ON WRITTEN PERMISSION FROM THE DEPARTMENT.

FED. ROAD REG. NO.	DIVISION	PROJECT NO.	SHEET NO.
9	COLORADO	1-25-3(28)231	5

STATIONS	SOURCE	PLANT MIX		GRADING C COURSE TONS	TON MILE OVERHALL		BASE COURSE
		TOP COURSE TONS	BOTTOM COURSE TONS		TOP COURSE	BOTTOM COURSE	
MAIN LINE	PIT NO. 20	1+00 TO 47+68	1,214	8,402	1,165	6,061	18,217
		49+80 TO 55+00	135	936	58	401	41,697
		55+00 TO 57+34.5 BK.	61	422	24	169	24,605
		57+33.6 AH. TO 117+71.0	1,570	10,869	1,862	10,815	29,494
		119+47.3 TO 126+98.0 BK	195	1,351	326	2,258	18,794
		126+88.3 AH. TO 174+49.1	1,238	8,569	2,715	18,794	20,289
		176+03.1 TO 213+24.5 BK.	966	6,699	2,929	20,289	10,169
		213+62.2 AH TO 229+62.6	416	2,881	1,468	10,169	18,217
		231+14.8 TO 256+75.1 BK	666	4,609	2,532	18,217	41,697
		256+76.5 AH TO 306+42.0	1,291	8,938	6,023	41,697	24,605
307+63.5 TO 332+95.7	656	4,558	3,552	24,605	29,494		
334+35.2 TO 362+00	719	4,977	4,261	29,494	1,836		
ESTIMATED FOR BRIDGE APPROACHES		414	340			1,836	
ESTIMATED FOR BRIDGE APPROACHES		72	588			1,429	
INTERCHANGE, STA. 12+							
NORTHWEST LOOP		214	409			482	
1+00 TO 7+70		214	409			482	
NORTHWEST LOOP		214	409			482	
1+00 TO 7+70		214	409			482	
NORTHWEST CONNECTION		326	618			729	
3+00 TO 13+85		326	618			729	
NORTHWEST CONNECTION		366	695			820	
2+20 TO 14+40		366	695			820	
SOUTHEAST CONNECTION		356	675			796	
3+00 TO 14+85		356	675			796	
SOUTHEAST CONNECTION		354	673			794	
2+20 TO 14+00		354	673			794	
NORTHWEST FRONTAGE ROAD		50	98			116	
18+76.6 TO 20+25		50	98			116	
NORTHWEST FRONTAGE ROAD		193	375			442	
11+79.1 TO 17+43		193	375			442	
SOUTHEAST FRONTAGE ROAD		216	419			494	
-1+18 TO 5+17.4		216	419			494	
ESTIMATED FOR CROSS ROAD, 40+		17	33			22	
INTERCHANGE, STA. 118+							
SOUTHEAST RAMP		374	710			1,124	
3+40 TO 15+85		374	710			1,124	
SOUTHWEST RAMP		345	656			1,039	
0+19 TO 11+70		345	656			1,039	
NORTHEAST RAMP		351	667			1,056	
0+19 TO 11+90		351	667			1,056	
NORTHWEST RAMP		331	628			994	
3+45 TO 14+47		331	628			994	
CROSS ROAD		532	1,032			1,634	
-3+00 TO 13+64		532	1,032			1,634	
ESTIMATED FOR TRANSITIONS AND SPANDRELS		91	167			264	

STATIONS	SOURCE	PLANT MIX		GRADING C COURSE TONS	TON MILE OVERHALL		BASE COURSE
		TOP COURSE TONS	BOTTOM COURSE TONS		TOP COURSE	BOTTOM COURSE	
INTERCHANGE, STA. 175+		NORTHWEST RAMP	290	550	771	1,462	
		3+50 TO 13+20	290	550	771	1,462	
		SOUTHWEST RAMP	93	177	247	471	
		1+50 TO 4+60	93	177	247	471	
		SOUTHWEST FRONTAGE ROAD	816	1,583	2,169	4,209	
		0+14 TO 24+17.9	816	1,583	2,169	4,209	
		CROSSROAD	408	792	1,085	2,106	
		12+00 TO 24+00	408	792	1,085	2,106	
		ESTIMATED FOR TRANSITIONS AND SPANDRELS	98	180	261	479	
			98	180	261	479	
INTERCHANGE, STA. 280+		NORTHWEST RAMP	305	579	1,414	2,684	
		2+70 TO 12+85	305	579	1,414	2,684	
		NORTHWEST RAMP	273	519	1,266	2,406	
		0+19 TO 10+60	273	519	1,266	2,406	
		SOUTHWEST RAMP	255	485	1,182	2,249	
		2+70 TO 11+18	255	485	1,182	2,249	
		SOUTHWEST RAMP	273	519	1,266	2,406	
		0+19 TO 9+30	273	519	1,266	2,406	
		ESTIMATED FOR TRANSITIONS AND SPANDRELS	63	115	292	533	
			63	115	292	533	
EAST FRONTAGE ROAD		22+95.5 TO 48+14.2	866	1,662	640	1,242	
		49+34.2 TO 55+00	192	373	83	161	
		55+00 TO 77+00	748	1,452	439	853	
		85+50 TO 103+58.9	615	1,194	694	1,348	
		136+24.5 TO 142+76.0	222	430	436	844	
		143+73.4 TO 225+00	2,763	5,364	7,770	15,084	
		236+00 TO 267+70.2	507	2,917	2,074	11,931	
		292+36.8 TO 327+50	1,194	2,317	6,207	12,045	
		339+00 TO 362+00	782	1,518	4,666	9,056	
			782	1,518	4,666	9,056	
LARIMER COUNTY TOTALS		17,728	63,556	31,439	112,876		
		17,728	63,556	31,439	112,876		
WELD COUNTY TOTALS		7,030	32,391	35,072	159,161		
		7,030	32,391	35,072	159,161		
PROJECT TOTALS		24,758	95,947	66,511	272,037		
		24,758	95,947	66,511	272,037		

Material to be placed on top of present asphaltic mat.

IT IS ESTIMATED THAT MATERIAL FOR SUBBASE FOR THE PROJECT IS AVAILABLE IN THE VICINITY OF THE PIT INDICATED IN THE FOLLOWING TABULATIONS. ESTIMATED QUANTITIES INVOLVED IN THESE OPERATIONS ARE SHOWN BELOW. ALTERATION OF THE SUBBASE PLAN, AS HERE OUTLINED, WILL BE ALLOWED ONLY ON WRITTEN PERMISSION FROM THE DEPARTMENT.

SUBBASE PLAN

MATERIAL TO BE PLACED	SOURCE	THICKNESS IN INCHES	QUANTITY		OVERALL		TYPICAL SECTION USED
			TONS	CLASS II	TON MILES	CLASS II	
MAINLINE							
1+00 TO 4+78.88	PIT NO 20	4"	9,001		8,619		AA
49+60 TO 57+34.5 BK		4"	1,487		1,236		AA
57+32.6 AM TO 117+94.1		4"	11,638		11,606		AA
119+24.2 TO 126+98.0 BK		4"	1,488		2,180		AA
126+88.3 AM TO 174+76.2		4"	9,193		20,186		AA
173+76.0 TO 213+24.5 BK		4"	7,197		21,757		AA
213+62.2 AM TO 229+84.2		4"	3,114		10,998		AA
230+93.2 TO 256+75.0 BK		4"	4,957		19,582		AA
256+76.3 AM TO 308+62.0		4"	4,939		44,672		AA
307+43.5 TO 333+15.7		4"	5,347		26,661		AA
334+15.2 TO 362+00		4"			31,677		AA
EST. FOR SPEED CHANGE LANES							
-3+18 TO 2+80 LT		4"	134		191		12'
10+65 TO 17+20 LT & RT		4"	306		354		12'
22+25 TO 28+55 RT		4"	134		126		12'
100+15 TO 106+80 LT		4"	80		104		12'
129+25 TO 136+80 RT		4"	87		162		12'
188+00 TO 195+40 LT		4"	51		151		12'
265+40 TO 270+90 LT		4"	52		229		12'
289+20 TO 294+70 RT		4"	52		253		12'
EST. FOR TRANSITIONS AND SPANDRELS							
		4"	215		623		12'
		4"	143		416		12'
APPROACH TO PROJECT							
-4+50 TO 1+00		8"	1,986		2,887		AA
TRANSITIONS -4+50 TO -9+46.5		8"	1,144		1,776		AA
INTERCHANGE, STA. 12+							
NORTH WEST LOOP							
1+00 TO 7+70		0"					D
NORTH EAST LOOP							
1+00 TO 2+00		0"					D
2+00 TO 2+50		14"					D
2+50 TO 7+70		0"	112		132		D
SOUTH EAST LOOP							
1+00 TO 7+70		0"					D
SOUTH WEST LOOP							
1+00 TO 7+70		0"					D
NORTH WEST CONNECTION							
3+00 TO 13+85		0"					D
NORTH EAST CONNECTION							
2+20 TO 11+50		0"					D
11+50 TO 12+00		14"					D
12+00 TO 18+40		0"	105		124		D
SOUTH EAST CONNECTION							
3+00 TO 4+00		0"					D
4+00 TO 4+50		14"					D
4+50 TO 14+85		0"	105		124		D
SOUTH WEST CONNECTION							
2+20 TO 14+00		0"					D

SUBBASE PLAN (CONT'D)

MATERIAL TO BE PLACED	SOURCE	THICKNESS INCHES	QUANTITY		OVERALL		TYPICAL SECTION USED
			TONS	CLASS II	TON MILES	CLASS II	
NORTH WEST FRONTAGE ROAD							
18+76.6 TO 20+25		14"	438		517		C
NORTH EAST FRONTAGE ROAD							
11+74.1 TO 17+43		0"					C
SOUTH EAST FRONTAGE ROAD							
-1+18 TO 5+17.4		0"					C
INTERCHANGE, STA. 118+							
SOUTH EAST RAMP							
3+40 TO 15+85		5"	996		1,577		D
SOUTH WEST RAMP							
0+19 TO 11+70		5"	921		1,458		D
NORTH EAST RAMP							
0+19 TO 11+90		5"	937		1,484		D
NORTH WEST RAMP							
3+45 TO 14+47		5"	882		1,397		D
EST. FOR TRANSITIONS AND SPANDRELS							
		5"	209		331		-
CROSS ROAD -3+00 TO 12+84							
		0"					C
INTERCHANGE, STA. 175+							
NORTH WEST RAMP							
3+50 TO 13+20		14"	2,027		5,389		D
SOUTH EAST RAMP							
1+50 TO 4+60		14"	651		1,731		D
SOUTH WEST FRONTAGE ROAD							
0+14 TO 24+17.9		14"	7,077		18,816		C
EST. FOR TRANSITIONS AND SPANDRELS							
		14"	628		1,600		-
CROSS ROAD 12+00 TO 24+00							
		0"					C
INTERCHANGE, STA. 280+							
NORTH WEST RAMP							
2+70 TO 12+85		14"	2,132		9,894		D
NORTH EAST RAMP							
0+19 TO 10+60		14"	1,911		8,860		D
SOUTH EAST RAMP							
2+70 TO 11+18		14"	1,787		8,285		D
SOUTH WEST RAMP							
0+19 TO 9+30		14"	1,913		8,869		D
EST. FOR TRANSITIONS AND SPANDRELS							
		14"	403		1,868		-
EAST FRONTAGE ROAD							
22+95.3 TO 48+14.2		0"					C
48+34.2 TO 103+58.9		0"					C
136+24.5 TO 142+76		0"					C
SOUTH WEST RAMP							
143+73.4 TO 226+00		0"					C
233+00 TO 267+70.2		0"					C
292+38.8 TO 328+00		0"					C
337+50 TO 362+00		0"					C
EST. FOR IRREGULARITIES LARIMER CO.							
			4,405		1,822		7,839
EST. FOR IRREGULARITIES WELD CO.							
			2,913		1,115		12,370
TOTALS LARIMER CO.							
			49,456		20,040		86,225
TOTALS WELD CO.							
			27,647		12,261		36,087
PROJECT TOTALS							
			76,103		32,301		122,292
* APPROX. THICKNESS BASED ON CURVE "D" Δ FOR WIDENING SHOULDERS							

TABULATION OF ASPHALTIC SHOULDER ROLL AND EMBANKMENT PROTECTORS

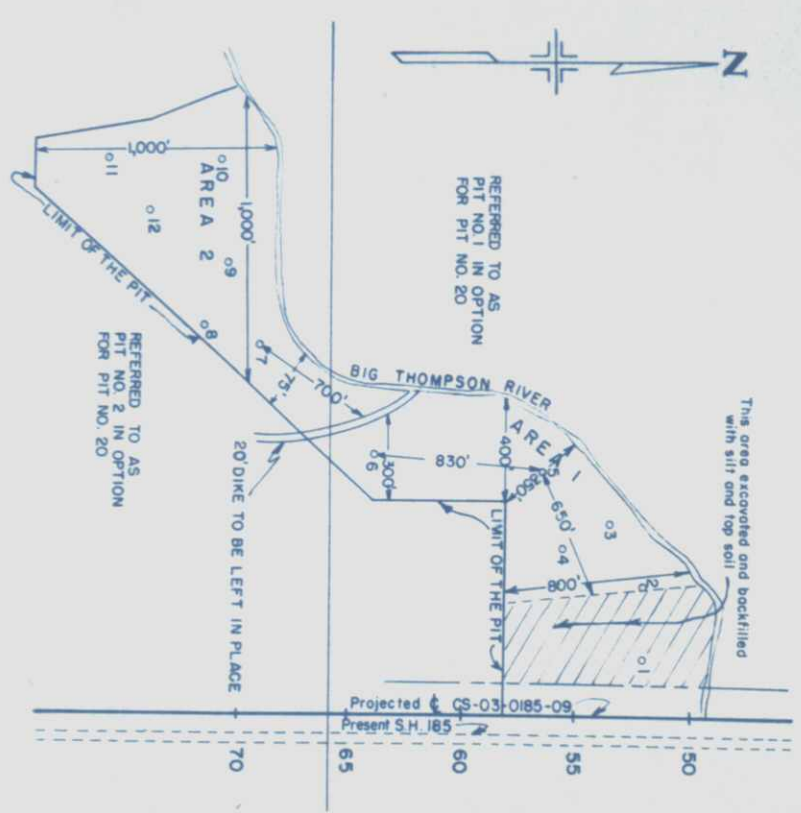
LOCATION	SIDE	SHOULDER ROLL	EMB PROTECTORS TYPE 3	12" G.M.P.	CONC SLOPE PAVE*
		LIN. FT.	EACH	LIN. FT.	CU. YDS.
46+50 TO 47+88	LT & RT	276			
49+60 TO 51+00 51+00	LT & RT LT & RT	280	2	24 LT 38 RT	0.8
75+00 TO 85+00 80+00	LT & RT LT & RT	2,000	2	32 LT 36 RT	0.8
75+00	LT & RT		2	30 LT 28 RT	0.8
112+50 TO 117+94 112+50	LT (NB) & LT (SB) & LT (NB) & LT (SB)	1,088	2	22 NB 24 SB	0.8
119+24 TO 123+00 123+00	LT (NB) & LT (SB) & LT (NB) & LT (SB)	752	2	28 NB 24 SB	0.8
141+00 TO 147+00 142+00 TO 145+00 144+50	LT RT LT & RT	600 300	2	18 LT 24 RT	0.8
166+50 TO 171+00 166+50	LT & RT LT & RT	900	2	24 LT 28 RT	0.8
175+76 TO 179+00 179+00	LT LT	324	1	20	0.4
221+50 TO 229+84 221+50	LT & RT LT & RT	1,668	2	26 LT 34 RT	0.8
Sub-Totals		8,188	17	460	6.8
230+93 TO 240+00 230+93 TO 238+00 238+00 240+00	LT RT RT LT	907 707	1 1	32 28	0.4 0.4
299+00 TO 306+62 303+00 306+62	LT & RT LT & RT LT & RT	1,524	2 2	34 LT 30 RT 38 LT 40 RT	0.8 0.8
307+43 TO 320+00 314+00 320+00	LT & RT LT & RT LT & RT	2,514	2 2	32 LT 32 RT 24 LT 22 RT	0.8 0.8
329+00 TO 333+16 332+00 TO 333+16 333+16	LT RT LT & RT	416 116	2	22 LT 26 RT	0.8
334+15 TO 340+00 340+00	LT & RT LT & RT	1,170	2	32 LT 36 RT	0.8
Sub-Totals		7,354	14	428	5.6
INTERCHANGE, STA. 12+ CROSS ROAD 4+00 TO 6+00 4+00	LT & RT LT & RT	400	2	38 LT 38 RT	0.8
7+50 TO 11+75 7+50	LT & RT LT & RT	850	2	10 LT 10 RT	0.8
18+00 TO 22+00 22+00	LT & RT LT & RT	800	2	14 LT 28 RT	0.8
N. W. LOOP (-)0+20 TO 6+00 6+00 1+55 = (18+00 CR) TO 1+80	RT RT LT	620 25	1	8	0.4
N. E. LOOP 2+50 TO 8+90 2+50 6+95 TO 7+20 (DN C.R.)	RT RT LT	640 25	1	6	0.4
S. E. LOOP (-)0+20 TO 6+00 6+00 1+50 = 11+75 CR TO 1+75	RT RT LT	620 25	1	16	0.4

NB = North Bound Lane
SB = South

LOCATION	SIDE	SHOULDER ROLL	EMB PROTECTORS TYPE 3	12" G.M.P.	CONC SLOPE PAVE*
		LIN. FT.	EACH	LIN. FT.	CU. YDS.
S. W. LOOP 2+00 TO 8+90 2+00 6+95 TO 7+20 = 18+00 CR	RT RT LT	690 25	1	4	0.4
N. W. CONN. 6+00 TO 15+50 6+00 15+50 7+50 TO 9+50 7+50	RT RT RT LT LT	950 200	1 1 1	18 30 20	0.4 0.4 0.4
N. E. CONN. 1+35 TO 11+00 1+35 11+00	RT RT RT	965	1 1	44 10	0.4 0.4
S. E. CONN. 5+00 TO 14+95 5+00 14+95	RT RT RT	995	1 1	10 40	0.4 0.4
S. W. CONN. 2+00 TO 10+00 2+00 10+00	RT RT RT	800	1 1	30 10	0.4 0.4
N. E. FR. RD. 9+00 TO 17+00 10+00	LT LT	800	1	16	0.4
S. E. FR. RD. (-)2+00 TO 6+00 6+00	LT LT	800	1	12	0.4
INTERCHANGE, STA. 118+ N. E. RAMP 3+00 TO 7+00 3+00	RT RT	400	1	16	0.4
INTERCHANGE, STA. 175+ N. W. RAMP 4+00 TO 8+00 4+00	RT RT	400	1	10	0.4
Sub-Totals		11,030	23	468	9.2
INTERCHANGE, STA. 280+ CROSS ROAD 0+00 TO 7+00 9+00 TO 9+96 0+00 9+00	LT & RT LT & RT LT & RT LT & RT	1,400 192	2 2	8 LT 8 RT 8 LT 8 RT	0.8 0.8
12+04 TO 13+00 14+00 TO 18+00 18+00	LT & RT LT & RT LT & RT	192 800	2	8 LT 8 RT	0.8
N. W. RAMP 6+00 TO 12+50 6+00	RT RT	650	1	4	0.4
N. E. RAMP 0+00 TO 8+00 8+00	RT RT	800	1	8	0.4
S. E. RAMP 4+00 TO 11+50 4+00	RT RT	750	1	8	0.4
S. W. RAMP 0+00 TO 6+00 6+00	RT RT	600	1	10	0.4
N. E. FR. RD. 4+00 TO 12+50 4+00	LT & RT LT & RT	1,700	2	8 LT 8 RT	0.8
S. E. FR. RD. 0+00 TO 7+00 7+00	LT & RT LT & RT	1,400	2	8 LT 8 RT	0.8
Sub-Totals		8,484	14	110	5.6
LARIMER CO. TOTALS		290 TONS = 18,218	40	918	16.0
WELD CO. TOTALS		239 TONS = 15,638	28	538	11.2
PROJECT TOTALS		529 TONS = 35,056	68	1,456	27.2

* Concrete slope paving may be constructed from class "Pavement" concrete

PIT NO. 20
SUB-BASE & SURFACING MATERIAL
& STONE SCREENINGS
 LOCATION: S.W. 1/4, Sec. 15 & N.W. 1/4, Sec. 22, T. 5 N. R. 68 W.
 OWNER: JO ANNE PULLIAM, LOVELAND, COLO.
 QUANTITY AVAILABLE: 465,000 CU. YDS.
 HAUL: 2,000 FT. TO STA. 55+00
 STRIPPING: 5,000 CU. YDS.
 SAMPLE NO. 2604

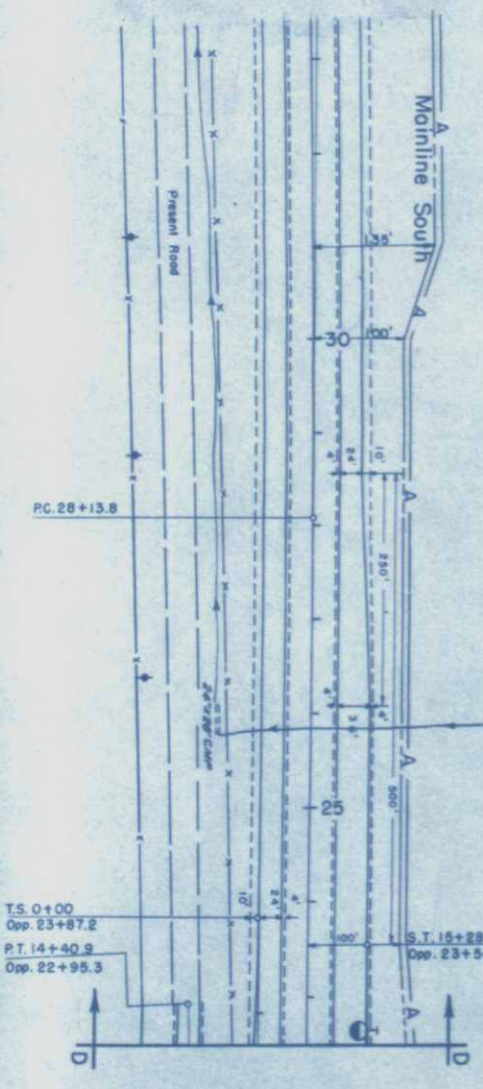
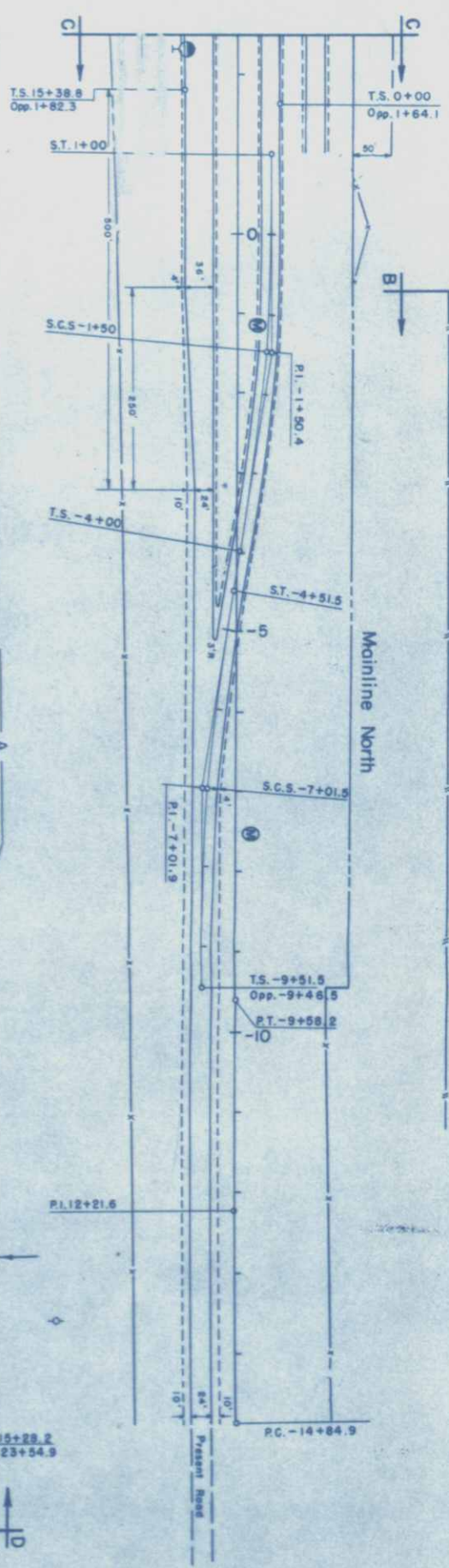
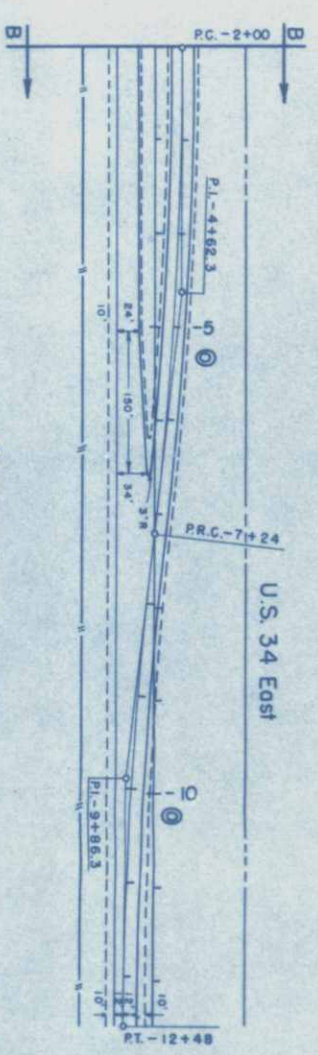
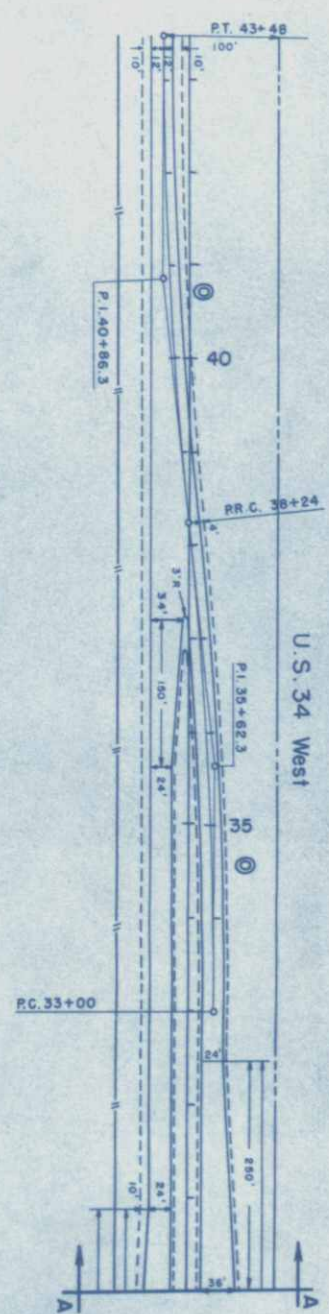


TEST NO.	DEPTH IN FEET		MATERIAL
	FROM	TO	
1	0.0	3.0	OVERBURDEN
1A	3.0	4.0	SILT & MUCK
1B	4.0	7.0	SAND & GRAVEL
1C	7.0	9.0+	CLAY & SHALE
2	0.0	4.0	OVERBURDEN
2A	4.0	5.0	S. & M.
2B	5.0	9.0	S. & G.
2C	9.0+		C. & S.
3	0.0	1.0	OVERBURDEN
3A	1.0	9.5	S. & G.
3B	9.5+		C. & S.
4	0.0	1.0	OVERBURDEN
4A	1.0	11.0	S. & G.
4B	11.0+		C. & S.
5	0.0	9.5	S. & G.
5A	9.5+		C. & S.
6	0.0	1.0	OVERBURDEN
6A	1.0	12.0	S. & G.

TEST NO.	DEPTH IN FEET		MATERIAL
	FROM	TO	
7	0.0	6.0	OVERBURDEN
7A	6.0	12.0	S. & G.
8	0.0	5.0	OVERBURDEN
8A	5.0	6.0	S. & M.
8B	6.0	12.0	S. & G.
9	0.0	1.5	OVERBURDEN
9A	1.5	8.0	S. & G.
9B	8.0	9.0	S. & M.
9C	9.0	12.0	S. & G.
10	0.0	4.0	OVERBURDEN
10A	4.0	12.0	S. & G.
11	0.0	3.0	OVERBURDEN
11A	3.0	10.0	S. & G.
11B	10.0+		S. & M.
12	0.0	3.5	OVERBURDEN
12A	3.5	8.0	S. & G.
12B	8.0	10.0+	S. & M.

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	1-25-3(28)251	8	

INTERCHANGE STA. 12+
US 87 & US 34



SEE LEGEND ON SHEET 10

FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	I-25-3(28)251	9	

LEGEND

CONTROL LINE ————

LANE EDGE ————

SHOULDER OF TRAFFIC ————

DIRECTION OF WAY ————

RIGHT OF WAY ————

CONTROL OF ACCESS ————

ACCESS DENIED BY DEED ————

LIGHTING, 20,000 LUMEN(10' ARM) TYPE III (WOODEN POLE) ————

GUARD POSTS ————

GUARD FENCE ————

INTERCHANGE STA. 12+
US 87 & US 34

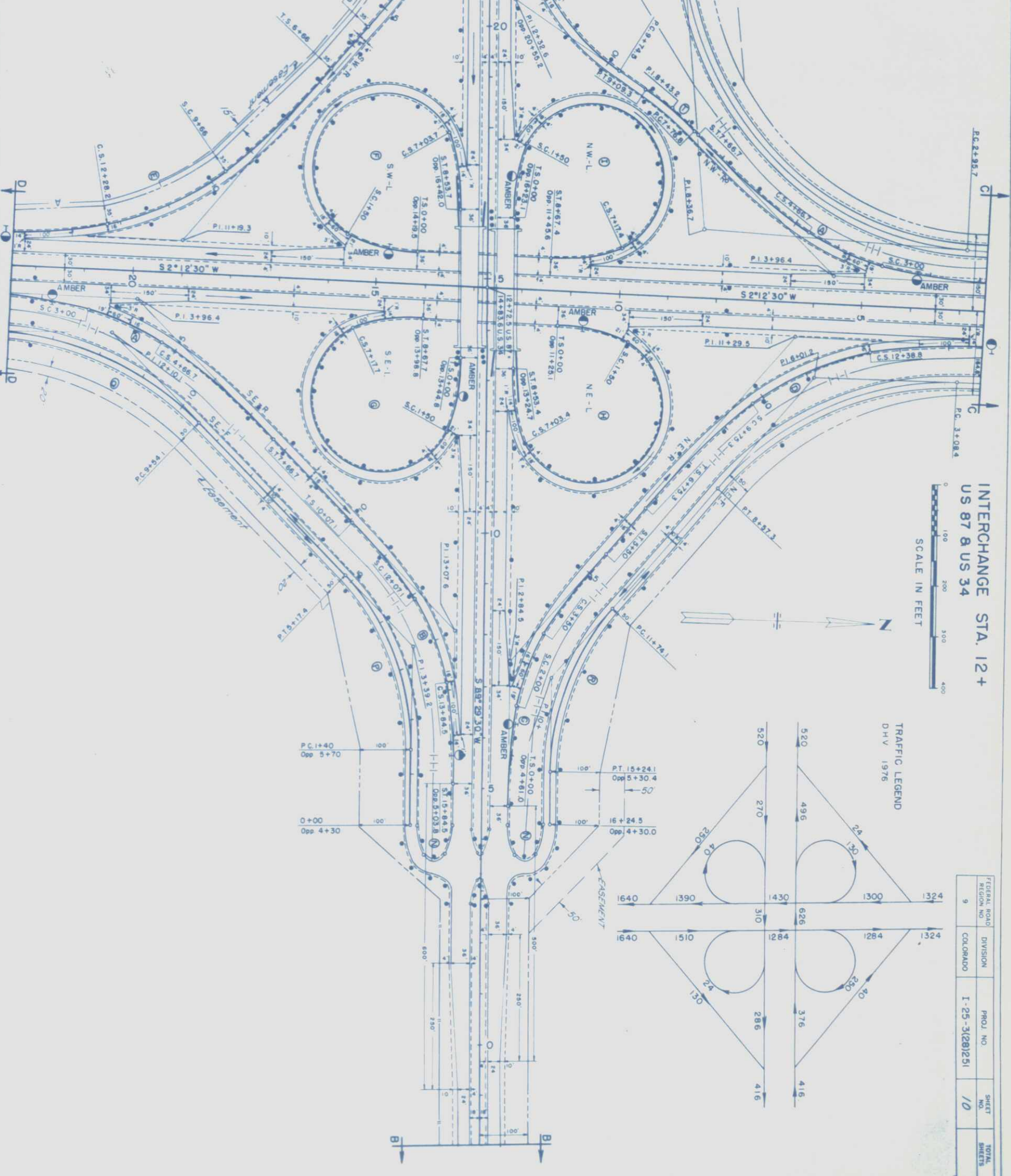
SCALE IN FEET

0 100 200 300 400

TRAFFIC LEGEND
 D.H.V. 1976

FEDERAL ROAD NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	I-25-3(20)251	10	

A	Δ	98	Ts	Ls	Δc	Dc	Tc	Lc	Rc
B	Δ	13°30'	396.4'	300'	15°00'	9°00'	83.8'	166.7'	636.7'
C	Δ	48°17'	1270'	200'	21°17'	12°00'	89.7'	177.4'	477.5'
D	Δ	42°00'	1200'	200'	18°00'	12°00'	150.0'	150.0'	477.5'
E	Δ	50°43'	1330'	300'	23°43'	9°00'	263.5'	263.5'	636.7'
F	Δ	50°36'	1330'	300'	23°43'	9°00'	263.5'	263.5'	636.7'
G	Δ	267°24'	28830'	150'	210°24'	38°00'	553.7'	553.7'	150.8'
H	Δ	272°45'	28830'	150'	215°43'	38°00'	553.4'	553.4'	150.8'
I	Δ	267°17'	28830'	150'	210°17'	38°00'	553.4'	553.4'	150.8'
J	Δ	272°36'	28830'	150'	215°36'	38°00'	553.4'	553.4'	150.8'
K	Δ	175°00'	2000'	200'	44°00'	12°00'	366.7'	366.7'	477.5'
L	Δ	90°00'	2000'	200'	70°00'	40°00'	387.5'	387.5'	443.2'
M	Δ	8°45'	4222.30'	250.4'	3°30'	3°30'	175.0'	175.0'	143.2'
N	Δ	180°00'	27°51'	62°09'	120'	25'	11'		
O	Δ	6°33'	1°15'	262.3'	524.0'	4584.0'			
P	Δ	43°17'	12°00'	199.2'	377.4'	477.5'			
Q	Δ	43°46'	9°00'	256.0'	486.8'	636.7'			
R	Δ	42°00'	12°00'	183.3'	350.0'	477.5'			
S	Δ	49°24'	9°00'	292.8'	548.9'	636.7'			
T	Δ	107°36'	8°00'	66.4'	132.5'	716.2'			
U	Δ	80°43'	9°00'	541.0'	896.8'	636.7'			
V	Δ	3°00'	0°15'	600.2'	1200.0'	1910.0'			

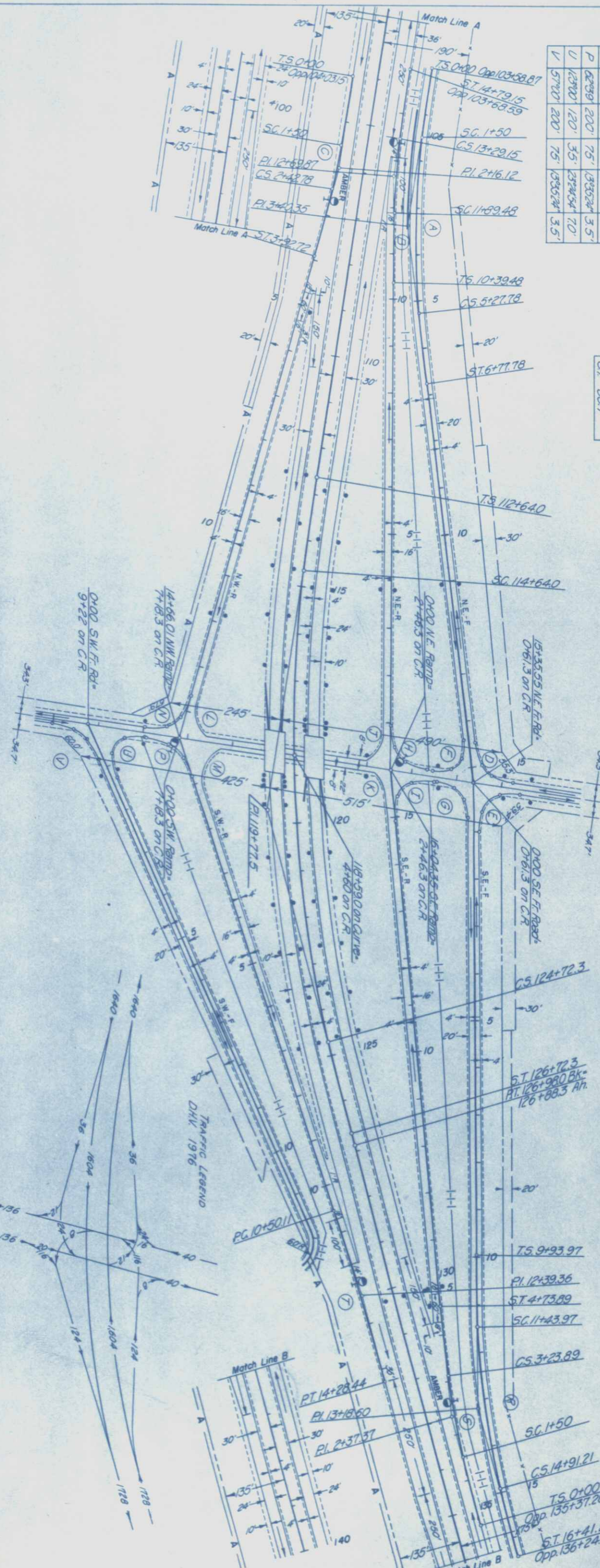


INTERCHANGE STA. 118+

A	15°50'	340.65'	11°20'	3°00'	189.52'	377.78'	19.10'	2°15'	150'	50.01'	100.01'
B	8°39'	230.39'	4°29'	3°00'	189.20'	393.67'	19.10'	2°15'	150'	50.01'	100.01'
C	7°17'	198.58'	2°47'	3°00'	146.40'	32.78'	19.10'	2°15'	150'	50.01'	100.01'
R	14°55'	334.65'	10°25'	3°00'	174.10'	347.22'	19.10'	2°15'	150'	50.01'	100.01'
S	9°43'	237.37'	5°13'	3°00'	87.01'	123.89'	19.10'	2°15'	150'	50.01'	100.01'
T	3°47'	190.1'	189.25'	378.33'	5.732'						
D	7°46'	150'	50'	190.28'	5.5'						
E	9°09'	150'	50'	194.42'	6.5'						
F	10°14'	100'	35'	223.72'	5.0'						
G	8°21'	120'	45'	197.49'	4.0'						
H	8°57'	150'	50'	190.28'	5.5'						
I	10°35'	150'	40'	194.42'	6.5'						
N	8°20'	150'	50'	190.28'	5.5'						
P	8°29'	200'	75'	133.24'	3.5'						
U	12°30'	120'	35'	234.54'	7.0'						
V	5°20'	200'	75'	133.24'	3.5'						

Δ	24°10'	17
Δ	71.35'	75
Δ	20°10'	AC
Δ	2°00'	DC
Δ	509.5'	TC
Δ	1,008.3'	LC
Δ	286.5'	RC
Δ	290.0'	BC
Δ	200'	LS
Δ	1,333.3'	LT
Δ	66.7'	ST

Δ	98°03'	70'
X	78°09'	70'
L	97°53'	70'
M	117°21'	70'



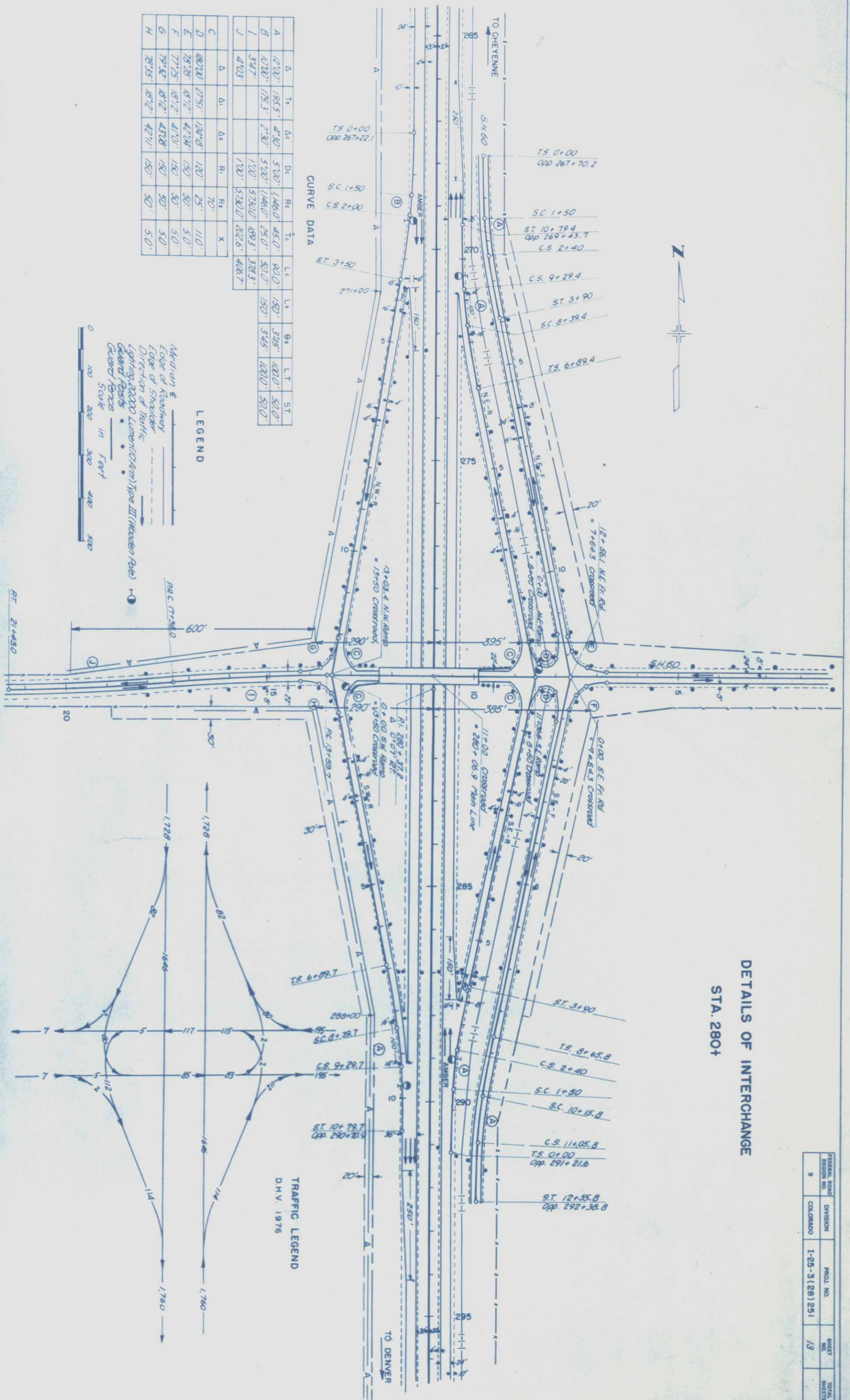
LEGEND
 CENTERLINE OF MEDIAN
 EDGE OF PAVEMENT
 EDGE OF SHOULDER
 DIRECTION OF TRAFFIC
 LIGHTING, 20,000 LUMEN (10' DIA) Type III (Moosey's Pole)
 GUARD POSTS
 GUARD FENCE

SCALE IN FEET
 0 100 200 300 400

FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	1-2-5-3(28)251	11	

FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	1-25-3(28) 251	1/3	

DETAILS OF INTERCHANGE
STA. 280+



CURVE DATA

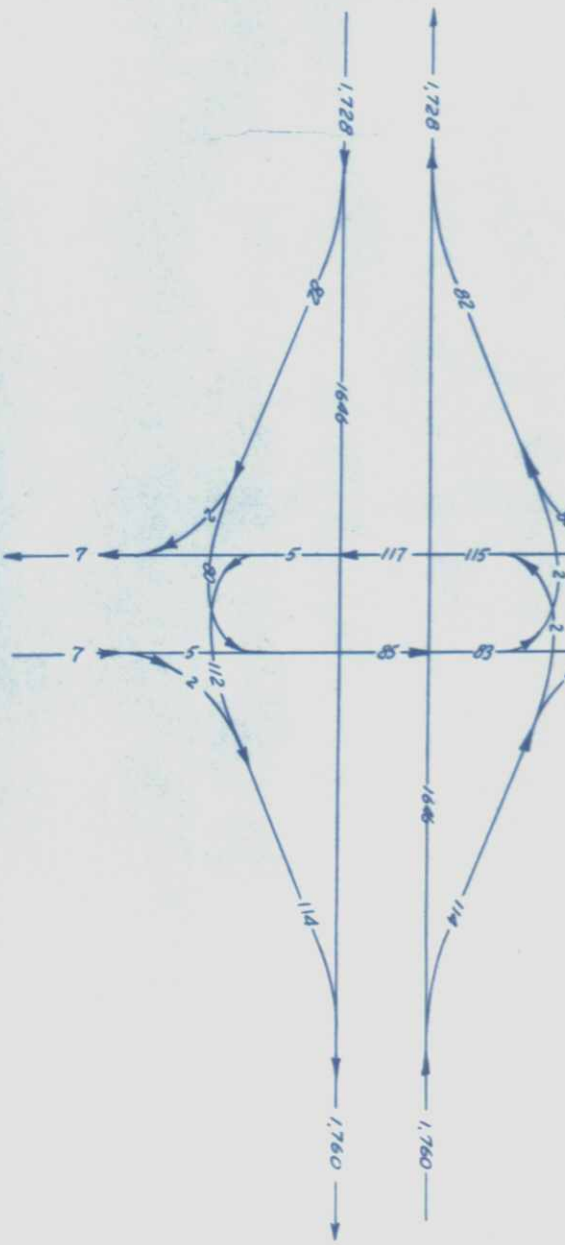
A	B	C	D	E	F	G	H	I	J
1200'	1070'	347'	403'	1800'	7775'	7932'	7835'	1070'	403'
1955'	1753'			1812'	1812'	1812'	1812'		
430'	230'			4214'	4170'	4370'	4211'		
5700'	5700'			150'	150'	150'	150'		
1460'	1460'			50'	50'	50'	50'		
450'	250'			50'	50'	50'	50'		
900'	900'			50'	50'	50'	50'		
150'	150'			50'	50'	50'	50'		
150'	150'			50'	50'	50'	50'		
345'	345'			50'	50'	50'	50'		
1080'	1080'			50'	50'	50'	50'		
520'	520'			50'	50'	50'	50'		
5700'	5700'			50'	50'	50'	50'		
1893'	1893'			50'	50'	50'	50'		
3783'	3783'			50'	50'	50'	50'		
2226'	2226'			50'	50'	50'	50'		
4687'	4687'			50'	50'	50'	50'		

LEGEND



TRAFFIC LEGEND

D.H.V. 1976



TABULATION OF GROUND SIGNS

SIGN NO.	SIGN CODE	STATION	SIGN PANEL SIZE	SIGN PANEL MATERIAL	LEGEND AND BORDER	BACK-GROUND	NO OF POSTS	LENGTH OF POST	POST TYPE						SIGN PANEL MATERIAL			CONCRETE FOOTING		
									LIN. FT.						SQ. FT.			NO.		
									U-2	4"x4" TIMBER	6"x6" TIMBER	6WF20 BEAM	8WF20 BEAM	10WF25-BEAM	I	II	III	I-C	I	II
65	IM 11-1-25	1+50 SE-L	4'x5' 6-1		SP BLACK	R YELLOW	1	17'			17						20.00			
66	IRI-2	8+00 SE-L	TRIANGLE 60° SIDES 6-V		"	"	1	16'			16					10.83				
67	IRI-2	7+80 SW-L	"		"	"	1	16'			16					10.83				
68	IRI-2	7+80 NW-L	"		"	"	1	16'			16					10.83				
69	IRI-2	7+50 NE-L	"		"	"	1	16'			16					10.83				
70	SPECIAL	11+60 (U.S. 34)	9' x 10'		CO WHITE	P GREEN	2	16'-11"			33.83					90.00		2		
71	W-113	4+90 SE-F	DIAMOND 30° SIDES		SP BLACK	R YELLOW	1	16'			16					6.25				
72	IM 3-4	9+00 (U.S. 34)	DIAMOND 48° SIDES 6-VI		"	"	2	16'			32					16.00				
73	IRI-2	15+00 SE-R	TRIANGLE 60° SIDES 6-V		"	"	1	16'			16					10.83				
74	R-102-40	1+00 SE-F	2'-0"x2'-6"		SP BLACK	R WHITE	1	14'			14					5.00				
75	R-1	DPP 3+00 (U.S. 34)	OCTAGON 30° x 30°		R WHITE	RS RED	1	14'			14					6.25				
76	SPECIAL	3+00 (U.S. 34)	8' x 4'		CO WHITE	P GREEN	2	16'			32					32.00				
77	W-121	1+00 (U.S. 34)	DIAMOND 48° SIDES 6-VI		SP BLACK	R YELLOW	2	16'			32					16.00				
78-83	DELETED																			
84	R-102-60	25+00 (FR. RD.)	2'-0"x2'-6"		"	R WHITE	1	14'			14					5.00				
85	W-102-R	30+20 (FR. RD.)	DIAMOND 30° SIDES		"	R YELLOW	1	16'			16					6.25				
86	SPECIAL	32+00	12' x 8'		CO WHITE	P GREEN	2	14'-11"			29.83					96.00		2		
87	R-102-45	33+00 (FR. RD.)	2'-0"x2'-6"		SP BLACK	R WHITE	1	14'			14					5.00				
88a	IM 6-101-S	34+00	2'-6"x1'-3"		R WHITE	RS BLUE	1	18'								3.13				
88b	IM 1-1-36(25)	34+00	SHIELD 36" x 36"		"	RS RD & BLU	1	18'			18					9.00				
88c	MI-1-30(87)	34+00	SHIELD 35" x 30"		SP BLACK	R WHITE	1	18'								7.29				
89	R-1	40+50 (FR. RD.)	OCTAGON 30° x 30°		R WHITE	RS RED	1	14'			14					6.25				
90	IR 2-1-70	44+00	4'x5' 6-1		SP BLACK	R WHITE	1	17'			17					20.00				
91-92	DELETED																			
93	SPECIAL	56+00	11' x 5'		CO WHITE	P GREEN	2	11'-11"			23.83					55.00		2		
94	SPECIAL	66+00	13' x 5'		"	"	2	11'-11"			23.83					65.00		2		
95	SPECIAL	68+00	12' x 10'		"	"	2	16'-11"			33.83					120.00		2		
96	DELETED																			
97	IR 2-1-70	85+50	4'x5' 6-1		SP BLACK	R WHITE	1	17'			17					20.00				
98a	IM 6-101-N	95+50	2'-6" x 1'-3"		R WHITE	RS BLUE	1	18'								3.13				
98b	IM 1-1-36(25)	95+50	SHIELD 36" x 36"		"	RS RD & BLU	1	18'			18					9.00				
98c	MI-1-30(87)	95+50	SHIELD 35" x 30"		SP BLACK	R WHITE	1	18'								7.29				
99	SPECIAL	101+00	12' x 6'		CO WHITE	P GREEN	2	12'-11"			25.83					72.00		2		
100 to 103	DELETED																			
104	R-102-45	0+00 NW-F	2'-0"x2'-6"		SP BLACK	R WHITE	1	14'			14					5.00				
105	IRI-2	13+00 NE-R	TRIANGLE 60° SIDES 6-V		"	R YELLOW	1	16'			16					10.83				
106	IM 3-4	109+00	DIAMOND 48° SIDES 6-VI		"	"	2	16'			32					16.00				
107	R-102-35	7+50 NE-F	2'-0"x2'-6"		"	R WHITE	1	14'			14					5.00				
108	W-113	10+00 NE-F	DIAMOND 30° SIDES		"	R YELLOW	1	16'			16					6.25				
109	R-102-60	13+00 NE-F	2'-0"x2'-6"		"	R WHITE	1	14'			14					5.00				
110	SPECIAL	3+00 CROSSROAD	8' x 7'		CO WHITE	P GREEN	2	13'-11"			27.83					56.00		2		
111	R-1	14+80 NE-F	OCTAGON 30° x 30°		R WHITE	RS RED	1	14'			14					6.25				
112	ID 8-1	0+30 CROSSROAD	4' x 2'		CO WHITE	P GREEN	1	15'			15					8.00				
113	ID 8-1	1+00 CROSSROAD	4' x 2'		"	"	1	15'			15					8.00				
114a	IM 2-101	-3+60 CROSSROAD	1'-6" x 1'-9"		R WHITE	RS BLUE	1	15'								1.13				
114b	IM 1-1-24(25)	-3+60 CROSSROAD	SHIELD 24" x 24"		"	RS RD & BLU	1	15'			15					4.00				
114c	M 2-1	-3+60 CROSSROAD	1'-9" x 1'-3"		SP BLACK	R WHITE	1	15'								2.19				
114d	M 1-2-24(87)	-3+60 CROSSROAD	24" x 24"		"	"	1	15'								4.00				
115	IM 7-1	14+90 NE-F	2' x 4'		R WHITE	RS GREEN	1	16'			16					8.00				
116	R-1	0+50 SE-F	OCTAGON 30° x 30°		"	RS RED	1	14'			14					6.25				
117	SPECIAL	2+80 CROSSROAD	6' x 5'		CO WHITE	P GREEN	2	17'			34					30.00				
118a	R-15	15+50 SE-R	2' x 2'		SP BLACK	R WHITE	1	14'								4.00				
118b	R-16-L	15+50 SE-R	3' x 1'		"	"	1	14'			14					3.00				
118c	R-16-R	15+50 SE-R	3' x 1'		"	"	1	14'								3.00				
119a	R-15	15+50 SE-R	2' x 2'		"	"	1	14'								4.00				
119b	R-16-L	15+50 SE-R	3' x 1'		"	"	1	14'			14					3.00				
119c	R-16-R	15+50 SE-R	3' x 1'		"	"	1	14'								3.00				
120	R-1	15+30 SE-R	OCTAGON 30° x 30°		R WHITE	RS RED	1	14'			14					6.25				
121	SPECIAL	13+00 SE-R	5' x 4'		CO WHITE	P GREEN	1	17'			17					20.00				
122	W-113	5+00 SE-F	DIAMOND 30° SIDES		SP BLACK	R YELLOW	1	16'			16					6.25				
123	W-113	10+50 SE-R	DIAMOND 30° SIDES		"	"	1	16'			16					6.25				
124	R-102-35	7+50 SE-F	2'-0"x2'-6"		"	R WHITE	1	14'			14					5.00				
125	IM 11-1-45	5+00 SE-R	4'x5' 6-1		"	R YELLOW	1	17'			17					20.00				
126	ID 6-1-60	130+50	6' x 5'		CO WHITE	P GREEN	2	17'			34					30.00				
127	R-102-45	15+30 SE-F	2'-0"x2'-6"		SP BLACK	R WHITE	1	14'			14					5.00				
128	ID 6-1-60	5+20 NW-R	6' x 5'		CO WHITE	P GREEN	2	17'			34					30.00				
129	IM 11-1-45	5+20 NW-R	4'x5' 6-1		SP BLACK	R YELLOW	1	17'			17					20.00				
130	W-113	10+50 NW-R	DIAMOND 30° SIDES		"	"	1	16'			16					6.25				
131	SPECIAL	12+00 NW-R	5' x 4'		CO WHITE	P GREEN	1	17'			17					20.00				

LARIMER CO.

TABULATION OF GROUND SIGNS

SIGN NO.	SIGN CODE	STATION	SIGN PANEL SIZE	SIGN PANEL MATERIAL	LEGEND AND BORDER	BACK-GROUND	NO OF POSTS	LENGTH OF POST	POST TYPE						SIGN PANEL MATERIAL SQ. FT. CLASS			CONCRETE FOOTING NO. TYPE				
									LIN. FT.						I	II	III	I-C	I	II	III	
									U-2	4"x4" TIMBER	6"x6" TIMBER	6 W F 20 BEAM	8 W F 20 BEAM	10 W F 25 BEAM								
190a	R-15	17+70 Crossroad	2'x2'	SP Black	R White										4.00							
190b	R-16-L	17+70 Crossroad	3'x1'	SP Black	R White		1	14'		14					3.00							
190c	R-16-R	17+70 Crossroad	3'x1'	SP Black	R White										3.00							
191a	R-15	18+50 Crossroad	2'x2'	SP Black	R White										4.00							
191b	R-16-L	18+50 Crossroad	3'x1'	SP Black	R White		1	14'		14					3.00							
191c	R-16-R	18+50 Crossroad	3'x1'	SP Black	R White										3.00							
192	JD8-1	16+50 Crossroad	4'x2'	CO White	P Green		1	*15'			15						8.00					
193	R-1	0+70 SW-F	Octagon 30"x30"	CO White	P Red		1	14'			14			6.25								
194	Special	18+40 Crossroad	5'x4'	CO White	P Green		1	*17'			17						20.00					
195	Special	19+00 Crossroad	4'x5'6"-I	Black & R White	Black & R Yellow		1	*17'			17			20.00								
196	W-113	5+20 SW-F	Diamond 30" Sides	SP Black	R Yellow		1	16'			16			6.25								
197	IR7-104	179+00	4'x3'	SP Black	R White		1	*15'			15			12.00								
198	IR7-104	183+00	4'x3'	SP Black	R White		1	*15'			15			12.00								
199	Deleted																					
200	Special	206+00	10'x5'	CO White	P Blue		2	*11'-11"			23.83						50.00	2				
201	W-106	Opp 222+50 Frontage Road	Diamond 30" Sides	SP Black	R Yellow		1	16'			16			6.25								
202	Special	218+00	14'x8'	CO White	P Green		2	*14'-11"			29.83						112.00	2				
203	R-102-60	Opp 228+00 Frontage Road	2'-0"x2'-6"	SP Black	R White		1	*14'			14			5.00								
204	R-21	Opp 230+30 Crossroad	1'-0"x1'-6"	SP Red	R White		1	12'	12.00					1.50								
205	Special	229+80	5'x3'	CO White	P Green		1	*16'			16						15.00					
206	Special	Opp 230+10 Frontage Road	5'x4'	CO White	P Green		1	*17'			17						20.00					
207	IM7-1	Opp 230+10 Frontage Road	2'x4'	R White	RS Green		1	*16'			16			8.00								
208	R-1	Opp 230+20 Crossroad	Octagon 30"x30"	R White	RS Red		1	14'			14			6.25								
209	Special	Opp 230+00 Crossroad	6'-0"x1'-6"	CO White	P Green		2	*14'			28						9.00					
TOTAL - LARIMER COUNTY										120	162	2,616	640.18	29.83	110.50	114764	26220	21	24	2		
Mileposts									8"x30"	R White	RS Green	50	7'	350	See Tabulation of Mileposts			83.50				
210	Special	Opp 231+30 Frontage Road	5'x4'	CO White	P Green		1	*17'			17						20.00					
211	Special	Opp 230+90 Crossroad	7'x4'	CO White	P Green		2	*16'			32						28.00					
212	R-1	Opp 230+90 Crossroad	Octagon 30"x30"	R White	RS Red		1	14'			14			6.25								
213	Special	231+10	6'x3'	CO White	P Green		2	*15'			30						18.00					
214	R-102-60	Opp 232+50 Frontage Road	2'-0"x2'-6"	SP Black	R White		1	*14'			14			5.00								
215	W-106	Opp 238+50 Frontage Road	Diamond 30" Sides	SP Black	R Yellow		1	16'			16			6.25								
216	Special	241+00	18'x5'	CO White	P Green		2	*11'-11"			23.83						90.00	2				
217	R-21	Opp 230+80 Crossroad	1'-0"x1'-6"	SP Red	R White		1	12'	12.00					1.50								
218	Special	Opp 231+00 Frontage Road	4'x5'	CO White	P Green		1	*18'			18						20.00					
219	Special	Opp 230+60 Crossroad	4'x5'6"-I	Black & R White	Black & R Yellow		1	*17'			17			20.00								
220 to 222	Deleted																					
223	IR2-1-70	251+00	4'x5'6"-I	SP Black	R White		1	*17'			17			20.00								
224a	IM6-101-N	261+00	2'-6"x1'-3"	R White	RS Blue									3.13								
224b	MI-1-36(25)	261+00	Shield 36"x36"	R White	RS Red and Blue		1	18'			18			9.00								
224c	MI-1-30(87)	261+00	Shield 35"x30"	SP Black	R White									7.29								
225	Special	264+00	14'x8'	CO White	P Green		2	*14'-11"			29.83						112.00	2				
226 to 230	Deleted																					
231	R-102-45	267+50	2'-0"x2'-6"	SP Black	R White		1	*14'			14			5.00								
232	IR1-2	9+00 NE-R	Triangle 60" Sides 6"-I	SP Black	R Yellow		1	16'			16			10.83								
233	R-102-35	4+50 NE-F	2'-0"x2'-6"	SP Black	R White		1	*14'			14			5.00								
234	IW3-4	274+00	Diamond 48" Sides 6"-I	SP Black	R Yellow		2	16'			32			16.00								
235	Special	9+50 NE-F	4'x4'	CO White	P Green		1	*17'			17						16.00					
236	W-113	7+00 NE-F	Diamond 30" Sides	SP Black	R Yellow		1	16'			16			6.25								
237	R-102-60	10+00 NE-F	2'-0"x2'-6"	SP Black	R White		1	*14'			14			5.00								
238	Special	9+30 Crossroad	9'x7'	CO White	P Green		2	*13'-11"			27.83						63.00	2				
239	R-1	12+00 NE-F	Octagon 30"x30"	R White	RS Red		1	14'			14			6.25								
240	Special	7+20 Crossroad	7'x8'	CO White	P Green		2	*14'-11"			29.83						56.00	2				
241	Special	5+00 Crossroad	7'x4'	CO White	P Green		2	*16'			32			28.00								
242a	IM2-101	2+00 Crossroad	1'-6"x0'-9"	R White	RS Blue									1.13								
242b	MI-1-24(25)	2+00 Crossroad	Shield 24"x24"	R White	RS Red & Blue		1	15'			15			4.00								
242c	M2-1	2+00 Crossroad	1'-9"x1'-3"	SP Black	R White									2.19								
242d	MI-2-24(87)	2+00 Crossroad	24"x24"	SP Black	R White									4.00								
243	M-102-60	3+50 Crossroad	2'x2'	SP Black	R White		1	13'		13				4.00								
244	Special	6+00 Crossroad	7'x2'	CO White	P Green		2	*14'			28						14.00					
245	Special	8+30 Crossroad	8'x6'	CO White	P Green		2	*12'-11"			25.83						48.00	2				

LARIMER CO.

WELD CO.

TABULATION OF OVERHEAD SIGNS

SIGN NO.	SIGN CODE	STATION	SIGN PANEL SIZE	SIGN PANEL MATERIAL	LEGEND AND BORDER	BACK-GROUND	NO. OF POSTS	TYPE OF POSTS	STRUCTURE TYPE	FRAME SIZE	STRUCTURE NO.	MET. PLATE TYPE OF INSTALLATION	GD. LIN. FT.
34A	SPECIAL	5+10	14'X8'-4"	ALUM.	CUTOUT WHITE	PLAIN GREEN	2	III-S	SIGN BRIDGE	50'X8'-10"	C-17-EN	I & II	37.5
34B	SPECIAL	5+10	14'X8'-4"	ALUM.	CUTOUT WHITE	PLAIN GREEN	2	III-S	SIGN BRIDGE	50'X8'-10"	C-17-EM	I & II	37.5
34C	SPECIAL	5+10	16'X8'-4"	ALUM.	CUTOUT WHITE	PLAIN GREEN	2	III-S	SIGN BRIDGE	50'X8'-10"	C-17-EM	I & II	37.5
59A	SPECIAL	20+00	14'X8'-4"	ALUM.	CUTOUT WHITE	PLAIN GREEN	2	III-S	SIGN BRIDGE	50'X8'-10"	C-17-EM	I & II	37.5
59B	SPECIAL	20+00	14'X8'-4"	ALUM.	CUTOUT WHITE	PLAIN GREEN	2	III-S	SIGN BRIDGE	50'X8'-10"	C-17-EM	I & II	37.5
59C	SPECIAL	20+00	14'X8'-4"	ALUM.	CUTOUT WHITE	PLAIN GREEN	2	III-S	SIGN BRIDGE	50'X8'-10"	C-17-EM	I & II	37.5
TOTAL												75.0	

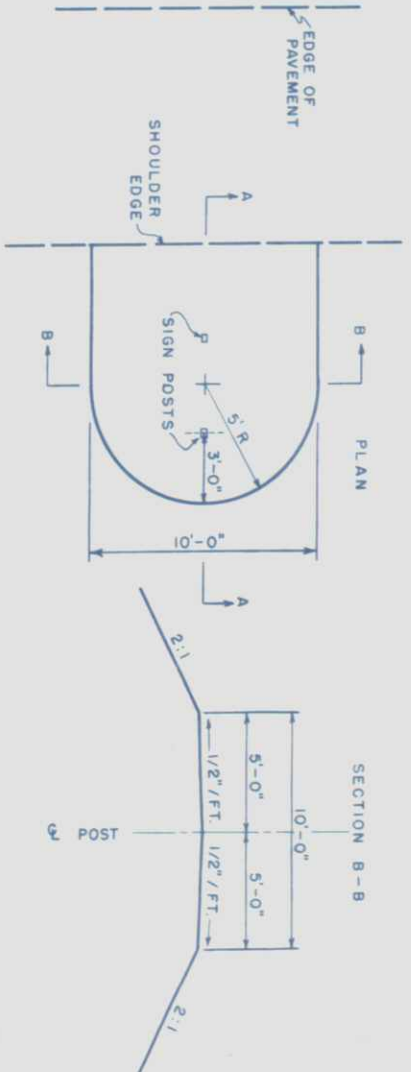
* EXTRUDED ALUMINUM OR LAMINATED ALUMINUM
** PORCELAIN ENAMEL

TABULATION OF MILEPOSTS

STATION	LENGTH (FEET)	MILEPOSTS	NO. RECD	STATION	LENGTH (FEET)	MILEPOSTS	NO. RECD
31+08.4	2628.1	258	2	664+58.5	5280.0	246	2
57+34.5	EQ.			717+38.5	5280.0	245	2
57+32.6	2651.9			770+18.5	5280.0	244	2
83+84.5	4313.5	257	2	822+98.5	5280.0	243	2
126+98.0	EQ.			875+78.5	5280.0	242	2
126+88.3	966.5			928+58.5	5280.0	241	2
136+54.8	5270.0	256	2	981+38.5	4280.3	240	2
189+24.8	2399.7	285	2	1024+68.8	EQ.		
213+24.5	EQ.			1024+05.2	999.7	239	2
213+62.2	2890.3	254	2	1034+04.9	5280.0	238	2
242+52.5	1422.6			1086+84.9	5280.0	237	2
256+75.1	EQ.			1139+64.9	5280.0	236	2
256+76.5	3857.4			1192+44.9	5280.0	235	2
295+33.9	5280.0	253	2	1245+24.8	5280.0	234	2
348+13.9	5280.0	252	2	1298+04.9	5280.0	233	2
400+93.9	1011.0	251	2	1350+84.9	5280.0	232	2
411+04.9	EQ.			1403+64.9	5280.0	231	2
410+69.5	4269.0			1456+44.9	3728.4		
453+38.5	5280.0	250	2	1493+73.3	EQ.		
506+18.5	5280.0	249	2	5+38.4	1551.6		
558+98.5	5280.0	248	2	20+90.0		230	2
611+78.5	5280.0	247	2				

FOR DETAILS OF MILEPOSTS SEE SHEET NO. 29
FOR LOCATION OF MILEPOSTS NO. 201 THROUGH NO. 230 SEE ALIGNMENT
FROM THE FOLLOWING PROJECTS: I-28-3191226-8-I-28-31211-244

DETAILS OF SIGN ISLAND



SECTION A-A: FILL SECTIONS

ALL ISLANDS TO BE FINISHED TO THIS ELEVATION BEFORE PLACING SIGN POSTS (EXCEPT AS NOTED BELOW.)

SIGNS REQUIRING UNFINISHED ISLANDS (TYPE I & TYPE II FOOTINGS) ARE TO BE CONSTRUCTED TO THIS LINE AND CONCRETE FOOTINGS POURED BEFORE REMAINING FILL IS PLACED

SECTION A-A: WIDENED CUT SECTIONS



SECTION A-A: NORMAL CUT SECTIONS



RECD 3 FLASHING AMBER UNITS (FOR LOCATION SEE SHEET NO. 25)

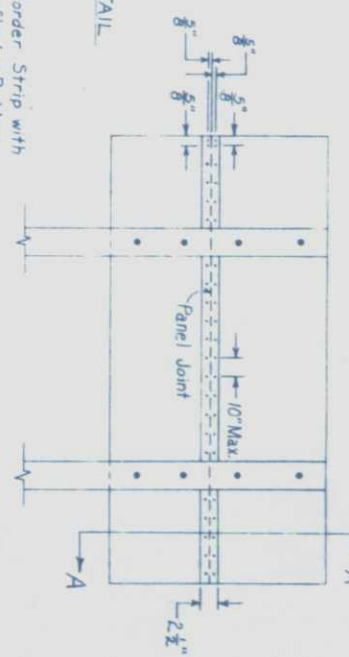
LARIMER COUNTY

SEE APPLICABLE SIGN STANDARD FOR DIMENSIONS.
FOR "W" SEE TABLE BELOW. SIGN ISLAND WIDTH "W"

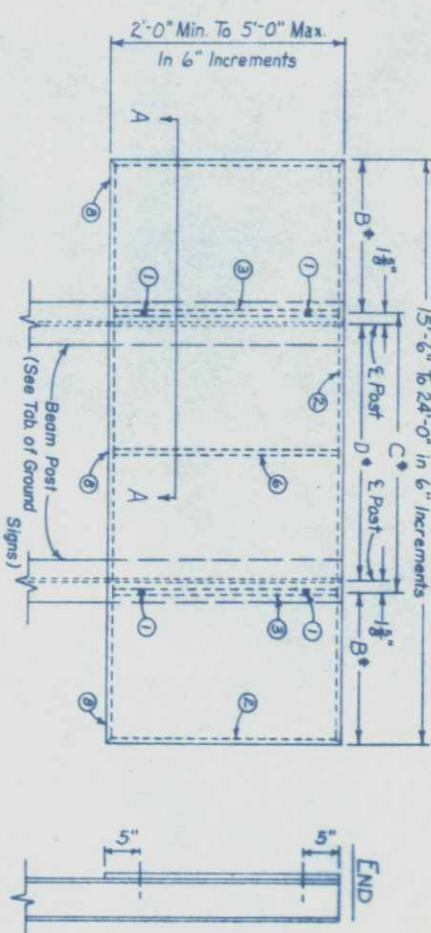
SIGN ISLAND NO.	FINISHED ISLAND	UNFINISHED ISLAND	SIGN ISLAND WIDTH "W"	FINISHED ISLAND NO.	FINISHED ISLAND	UNFINISHED ISLAND
1	9'-0"	11'-6"	117	126	10'-0"	10'-0"
2	11'-6"	14'-0"	126	127	10'-0"	10'-0"
3	11'-6"	14'-0"	128	128	10'-0"	10'-0"
4	9'-0"	11'-6"	142	129	11'-6"	11'-6"
5	9'-0"	11'-6"	148	130	9'-0"	9'-0"
6	9'-0"	11'-6"	153	131	14'-6"	14'-6"
7	11'-6"	14'-0"	154	132	14'-6"	14'-6"
8	11'-6"	14'-0"	154	133	13'-0"	13'-0"
9	11'-6"	14'-0"	154	134	14'-0"	14'-0"
10	11'-6"	14'-0"	154	135	14'-0"	14'-0"
11	11'-6"	14'-0"	154	136	14'-0"	14'-0"
12	11'-6"	14'-0"	154	137	14'-0"	14'-0"
13	11'-6"	14'-0"	154	138	14'-0"	14'-0"
14	9'-0"	11'-6"	175	139	14'-0"	14'-0"
15	9'-0"	11'-6"	183	140	14'-0"	14'-0"
16	9'-0"	11'-6"	185	141	14'-0"	14'-0"
17	9'-0"	11'-6"	185	142	14'-0"	14'-0"
18	9'-0"	11'-6"	185	143	14'-0"	14'-0"
19	9'-0"	11'-6"	185	144	14'-0"	14'-0"
20	9'-0"	11'-6"	185	145	14'-0"	14'-0"
21	9'-0"	11'-6"	200	146	14'-0"	14'-0"
22	9'-0"	11'-6"	202	147	14'-0"	14'-0"
23	9'-0"	11'-6"	211	148	14'-0"	14'-0"
24	9'-0"	11'-6"	213	149	14'-0"	14'-0"
25	9'-0"	11'-6"	213	150	14'-0"	14'-0"
26	9'-0"	11'-6"	216	151	14'-0"	14'-0"
27	9'-0"	11'-6"	216	152	14'-0"	14'-0"
28	9'-0"	11'-6"	216	153	14'-0"	14'-0"
29	9'-0"	11'-6"	216	154	14'-0"	14'-0"
30	9'-0"	11'-6"	216	155	14'-0"	14'-0"
31	9'-0"	11'-6"	216	156	14'-0"	14'-0"
32	9'-0"	11'-6"	216	157	14'-0"	14'-0"
33	9'-0"	11'-6"	216	158	14'-0"	14'-0"
34	9'-0"	11'-6"	216	159	14'-0"	14'-0"
35	9'-0"	11'-6"	216	160	14'-0"	14'-0"
36	9'-0"	11'-6"	216	161	14'-0"	14'-0"
37	9'-0"	11'-6"	216	162	14'-0"	14'-0"
38	9'-0"	11'-6"	216	163	14'-0"	14'-0"
39	9'-0"	11'-6"	216	164	14'-0"	14'-0"
40	9'-0"	11'-6"	216	165	14'-0"	14'-0"
41	9'-0"	11'-6"	216	166	14'-0"	14'-0"
42	9'-0"	11'-6"	216	167	14'-0"	14'-0"
43	9'-0"	11'-6"	216	168	14'-0"	14'-0"
44	9'-0"	11'-6"	216	169	14'-0"	14'-0"
45	9'-0"	11'-6"	216	170	14'-0"	14'-0"
46	9'-0"	11'-6"	216	171	14'-0"	14'-0"
47	9'-0"	11'-6"	216	172	14'-0"	14'-0"
48	9'-0"	11'-6"	216	173	14'-0"	14'-0"
49	9'-0"	11'-6"	216	174	14'-0"	14'-0"
50	9'-0"	11'-6"	216	175	14'-0"	14'-0"
51	9'-0"	11'-6"	216	176	14'-0"	14'-0"
52	9'-0"	11'-6"	216	177	14'-0"	14'-0"
53	9'-0"	11'-6"	216	178	14'-0"	14'-0"
54	9'-0"	11'-6"	216	179	14'-0"	14'-0"
55	9'-0"	11'-6"	216	180	14'-0"	14'-0"
56	9'-0"	11'-6"	216	181	14'-0"	14'-0"
57	9'-0"	11'-6"	216	182	14'-0"	14'-0"
58	9'-0"	11'-6"	216	183	14'-0"	14'-0"
59	9'-0"	11'-6"	216	184	14'-0"	14'-0"
60	9'-0"	11'-6"	216	185	14'-0"	14'-0"
61	9'-0"	11'-6"	216	186	14'-0"	14'-0"
62	9'-0"	11'-6"	216	187	14'-0"	14'-0"
63	9'-0"	11'-6"	216	188	14'-0"	14'-0"
64	9'-0"	11'-6"	216	189	14'-0"	14'-0"
65	9'-0"	11'-6"	216	190	14'-0"	14'-0"
66	9'-0"	11'-6"	216	191	14'-0"	14'-0"
67	9'-0"	11'-6"	216	192	14'-0"	14'-0"
68	9'-0"	11'-6"	216	193	14'-0"	14'-0"
69	9'-0"	11'-6"	216	194	14'-0"	14'-0"
70	9'-0"	11'-6"	216	195	14'-0"	14'-0"
71	9'-0"	11'-6"	216	196	14'-0"	14'-0"
72	9'-0"	11'-6"	216	197	14'-0"	14'-0"
73	9'-0"	11'-6"	216	198	14'-0"	14'-0"
74	9'-0"	11'-6"	216	199	14'-0"	14'-0"
75	9'-0"	11'-6"	216	200	14'-0"	14'-0"
76	9'-0"	11'-6"	216	201	14'-0"	14'-0"
77	9'-0"	11'-6"	216	202	14'-0"	14'-0"
78	9'-0"	11'-6"	216	203	14'-0"	14'-0"
79	9'-0"	11'-6"	216	204	14'-0"	14'-0"
80	9'-0"	11'-6"	216	205	14'-0"	14'-0"
81	9'-0"	11'-6"	216	206	14'-0"	14'-0"
82	9'-0"	11'-6"	216	207	14'-0"	14'-0"
83	9'-0"	11'-6"	216	208	14'-0"	14'-0"
84	9'-0"	11'-6"	216	209	14'-0"	14'-0"
85	9'-0"	11'-6"	216	210	14'-0"	14'-0"
86	9'-0"	11'-6"	216	211	14'-0"	14'-0"
87	9'-0"	11'-6"	216	212	14'-0"	14'-0"
88	9'-0"	11'-6"	216	213	14'-0"	14'-0"
89	9'-0"	11'-6"	216	214	14'-0"	14'-0"
90	9'-0"	11'-6"	216	215	14'-0"	14'-0"
91	9'-0"	11'-6"	216	216	14'-0"	14'-0"
92	9'-0"	11'-6"	216	217	14'-0"	14'-0"
93	9'-0"	11'-6"	216	218	14'-0"	14'-0"
94	9'-0"	11'-6"	216	219	14'-0"	14'-0"
95	9'-0"	11'-6"	216	220	14'-0"	14'-0"
96	9'-0"	11'-6"	216	221	14'-0"	14'-0"
97	9'-0"	11'-6"	216	222	14'-0"	14'-0"
98	9'-0"	11'-6"	216	223	14'-0"	14'-0"
99	9'-0"	11'-6"	216	224	14'-0"	14'-0"
100	9'-0"	11'-6"	216	225	14'-0"	14'-0"
101	9'-0"	11'-6"	216	226	14'-0"	14'-0"
102	9'-0"	11'-6"	216	227	14'-0"	14'-0"
103	9'-0"	11'-6"	216	228	14'-0"	14'-0"
104	9'-0"	11'-6"	216	229	14'-0"	14'-0"
105	9'-0"	11'-6"	216	230	14'-0"	14'-0"
106	9'-0"	11'-6"	216	231	14'-0"	14'-0"
107	9'-0"	11'-6"	216	232	14'-0"	14'-0"
108	9'-0"	11'-6"	216	233	14'-0"	14'-0"
109	9'-0"	11'-6"	216	234	14'-0"	14'-0"
110	9'-0"	11'-6"	216	235	14'-0"	14'-0"
111	9'-0"	11'-6"	216	236	14'-0"	14'-0"
112	9'-0"	11'-6"	216	237	14'-0"	14'-0"
113	9'-0"	11'-6"	216	238	14'-0"	14'-0"
114	9'-0"	11'-6"	216	239	14'-0"	14'-0"
115	9'-0"	11'-6"	216	240	14'-0"	14'-0"
116	9'-0"	11'-6"	216	241	14'-0"	14'-0"
117	9'-0"	11'-6"	216	242	14'-0"	14'-0"
118	9'-0"	11'-6"	216	243	14'-0"	14'-0"
119	9'-0"	11'-6"	216	244	14'-0"	14'-0"
120	9'-0"	11'-6"	216	245	14'-0"	14'-0"
121	9'-0"	11'-6"	216	246	14'-0"	14'-0"
122	9'-0"	11'-6"	216	247	14'-0"	14'-0"
123	9'-0"	11'-6"	216	248	14'-0"	14'-0"
124	9'-0"	11'-6"	216	249	14'-0"	14'-0"
125	9'-0"	11'-6"	216	250	14'-0"	14'-0"
126	9'-0"	11'-6"	216	251	14'-0"	14'-0"
127	9'-0"	11'-6"	216	252	14'-0"	14'-0"
128	9'-0"	11'-6"	216	253	14'-0"	14'-0"
129	9'-0"	11'-6"	216	254	14	

DETAILS OF LAMINATED SIGN PANELS

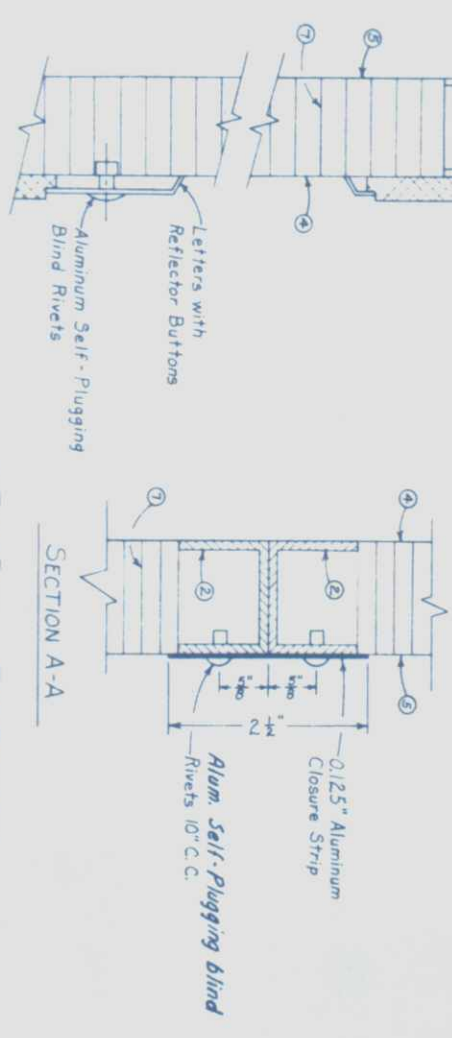
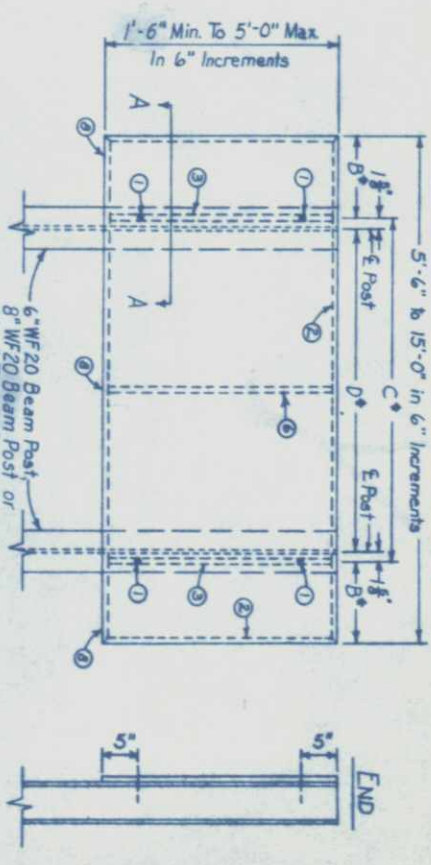
CLOSURE STRIP DETAIL
BACK ELEVATION
(TYPICAL 2 PANEL SIGN)



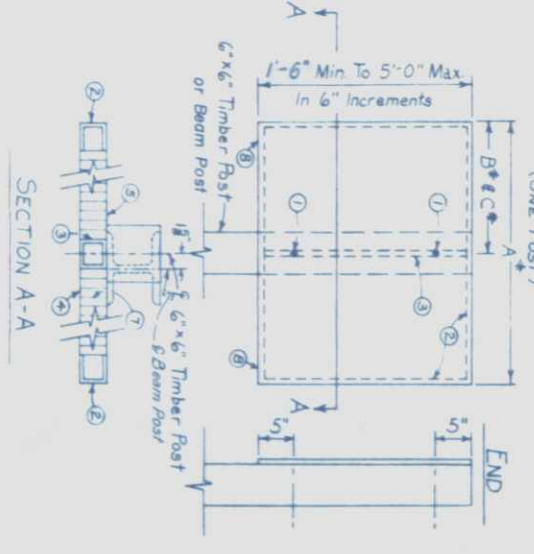
2.5\"/>



1\"/>



1\"/>

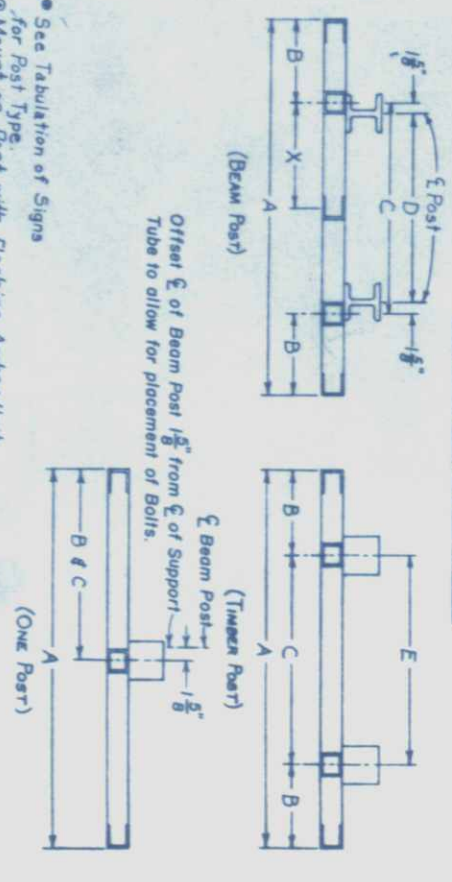


GENERAL NOTES

A Stainless Steel Washer with Neoprene Seal is to be placed between the bolt head and the face of the sign. Use a galvanized plate washer under the nut on back of post.
Dip bolt heads to match color of background on the face side of sign.
See Sheet No. 35 & 36 for mounting height of signs and footing details.

- 1 Bolts: 1\"/>
 - 1\"/> Thick Panels: $\frac{1}{2}$ \"/> ϕ Bolts Δ (Average 20 sq. ft. of sign area per bolt, min. 4 bolts per panel).
 - 2.5\"/> Thick Panels: $\frac{3}{8}$ \"/> ϕ Bolts Δ (Average 25 sq. ft. of sign area per bolt, min. 4 bolts per panel).
 - Δ Bolts conforming to 2024 T4 and American Standard B182.
 - Δ Min. 2 bolts Δ per panel for one post installation.
- 2 Perimeter Frame: 1\"/> \times 1\"/> \times $\frac{1}{2}$ \"/> Extruded Aluminum Channel.
2.5\"/> " " : 2.5\"/> \times 1\"/> \times 0.080\"/> Extruded Aluminum Channel.
- 3 Support Tube: 1\"/> \times 1\"/> \times $\frac{1}{2}$ \"/> Square Extruded Aluminum Tubing.
2.5\"/> " " : 1\"/> \times 2.5\"/> \times 0.080\"/> " " "
- 4 Face Sheet: 1\"/> \times 2.5\"/> Thick Panels: 0.064\"/> Aluminum Porcelain Enameling Sheet.
- 5 Back Sheet: 1\"/> \times 2.5\"/> Thick Panels: 0.040\"/> Aluminum Sheet.
- 6 Extra Tube: 1\"/> \times 1\"/> \times $\frac{1}{2}$ \"/> Square Extruded Aluminum Tubing (See Post Spacing Table for location).
2.5\"/> " " : 1\"/> \times 2.5\"/> \times 0.080\"/> Extruded Aluminum Channel (See Post Spacing Table for location).
- 7 Core: 1\"/> Thick Panels: 1\"/> Honeycomb Core.
2.5\"/> " " : 2.5\"/> " " "
- 8 Weep holes.

POST SPACING TABLE



PANEL THICK.	LENGTH OR SIGN	NO. OR POSTS	OVERLAP	SUPPORT TUBE SPACING	BEAM POST SPACING	TIMBER POST	EXTRA TUBE
1\"/>	2'-0\"/>	1	1'-0\"/>	1'-0\"/>	-	-	-
1\"/>	4'-0\"/>	1	2'-0\"/>	2'-0\"/>	-	-	-
1\"/>	4'-0\"/>	2	2'-0\"/>	2'-0\"/>	-	-	-
1\"/>	5'-0\"/>	1	4'-0\"/>	2'-6\"/>	-	-	-
1\"/>	6'-0\"/>	2	4'-0\"/>	2'-6\"/>	-	-	-
1\"/>	6'-0\"/>	2	1'-3\"/>	4'-0\"/>	3'-0 3/4\"/>	4'-0\"/>	-
1\"/>	8'-0\"/>	2	1'-6\"/>	4'-6\"/>	4'-2 1/4\"/>	4'-6\"/>	-
1\"/>	8'-0\"/>	2	1'-10\"/>	5'-0\"/>	4'-6 3/4\"/>	5'-0\"/>	-
1\"/>	10'-0\"/>	2	1'-10\"/>	5'-4\"/>	5'-0 1/4\"/>	5'-4\"/>	-
1\"/>	10'-0\"/>	2	2'-0\"/>	6'-0\"/>	5'-8 3/4\"/>	-	-
1\"/>	11'-0\"/>	2	2'-0\"/>	7'-0\"/>	6'-8 3/4\"/>	-	-
1\"/>	12'-0\"/>	2	2'-6\"/>	7'-0\"/>	6'-8 3/4\"/>	-	-
1\"/>	13'-0\"/>	2	2'-6\"/>	8'-0\"/>	7'-8 3/4\"/>	-	-
1\"/>	14'-0\"/>	2	2'-6\"/>	8'-0\"/>	8'-8 3/4\"/>	-	-
2.5\"/>	18'-0\"/>	2	3'-6\"/>	11'-0\"/>	10'-8 3/4\"/>	-	5'-6\"/>

STANDARD S-521-A

TYPICAL SIGN INSTALLATIONS FOR FLANGED CHANNEL AND TIMBER POSTS

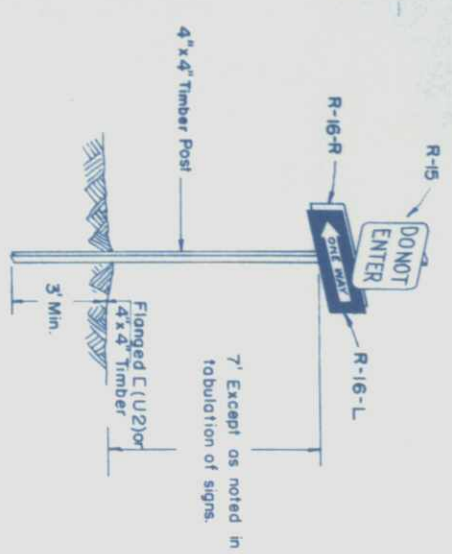
L - STOP SIGN

REVISED FOR THIS PROJECT

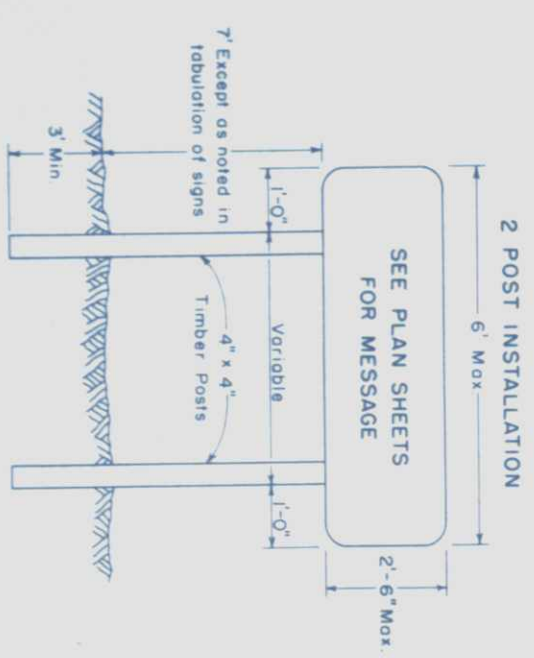
FED. ROAD REG. NO.	DIVISION	PROJECT NO.	SHEET NO.
9	COLO.	I 25-3(28) 251	33

REVISIONS

No.	Date	Description
1		As Shown



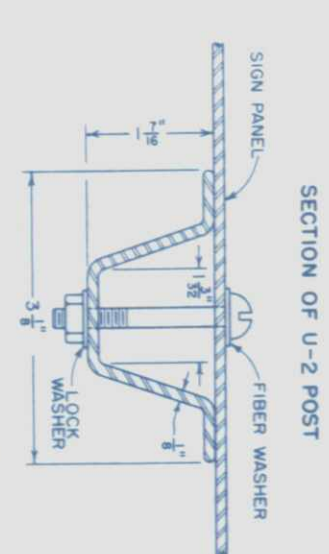
Ramp Terminal Installation



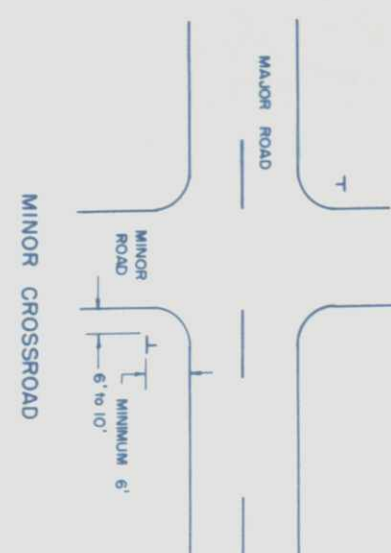
Sign Placement For All Ground Signs
 (Plain Background with Reflective Letters and Full Reflective Background)

NOTES

1. Fasten sign to flanged channel posts with 2-1/4" rust resistant stove bolts.
2. Drill Timber Posts for and fasten sign with 2-3/8" rust resistant bolts.
3. A plastic fiber washer is to be placed between the bolt head and the face of metal signs. Use galvanized plate washer under the nut on back of timber post.
4. Bolt heads and washers to be painted or reflectorized to match background on the face side of the sign.
5. Timber Posts to be untreated Douglas Fir (S4S). Dip or paint portion of post below ground with Hot Creosote Oil.
6. U2 post are to be driven into undisturbed earth.
7. Timber posts shall be set in drilled or excavated holes, placed plumb and firmly tamped in place.



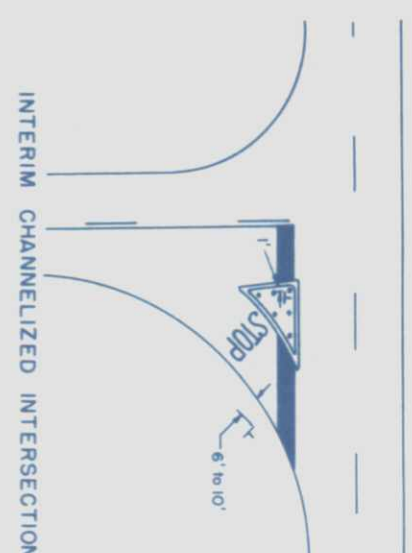
SECTION OF U-2 POST



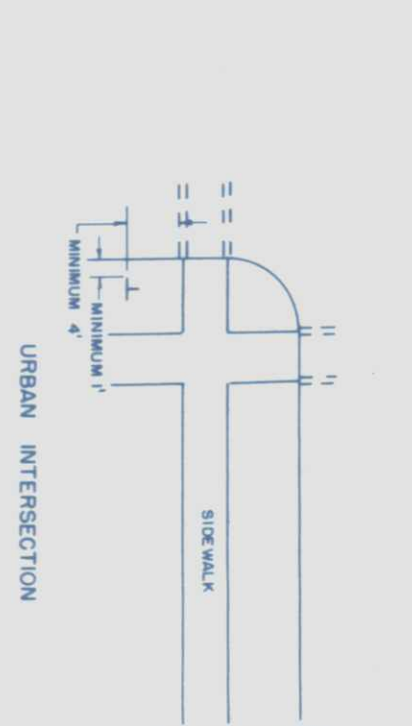
MINOR CROSSROAD



WIDE THROAT INTERSECTION



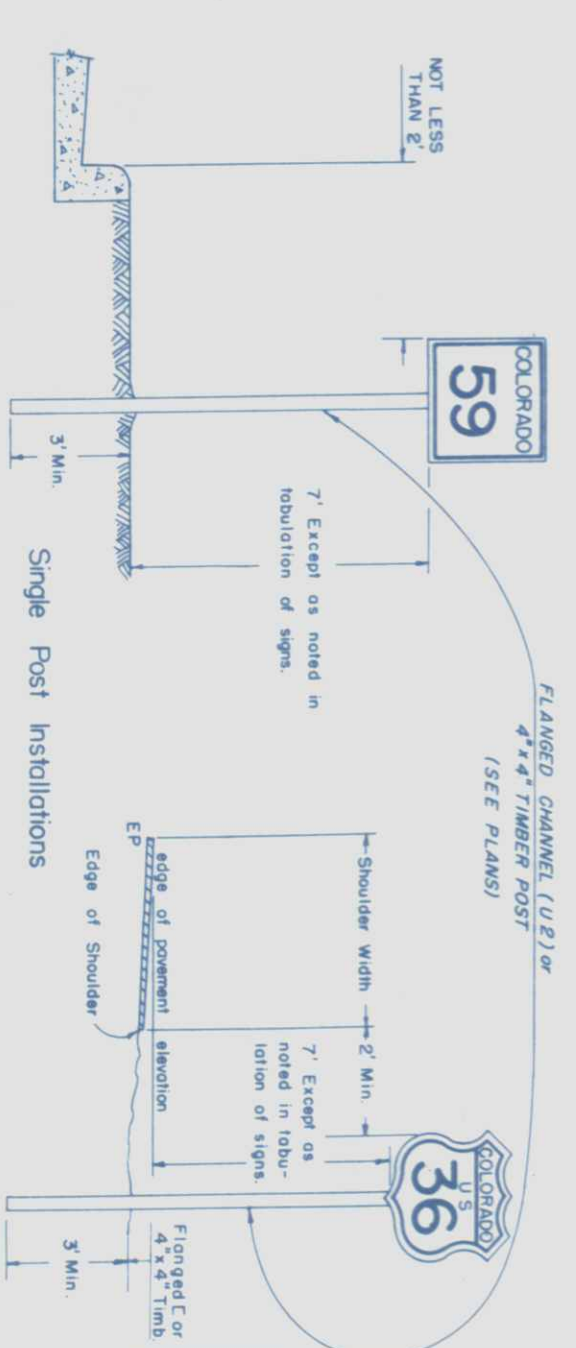
INTERIM CHANNELIZED INTERSECTION



URBAN INTERSECTION

NOTE
 CLASS 1 SIGN PANELS SHALL BE STEEL IN CONFORMANCE WITH THE COLO. MANUAL REFERRED TO BELOW OR ALUMINUM ALLOY 0.080 INCHES THICK FOR MILEPOST PLACARDS OR ALUMINUM ALLOY 0.100 INCHES THICK FOR ALL OTHERS.

Typical Stop Sign Installations



Single Post Installations

NOTE Refer to Colo. Manual on Uniform Traffic Control Devices for Streets and Highways for all Signs prefixed with the letters "R," "M," "W" or "D."

DEPARTMENT OF HIGHWAYS
 COLORADO
 GROUND SIGN STRUCTURE
 CLASS I

Designed by: [Name]
 Made by: [Name]
 Checked by: [Name]
 Date: 12/2/59

STANDARD S-523-A

SHEET ONE OF TWO

REVISED FOR THIS PROJECT

STD. ROAD	DIVISION	PROJECT NO.	SHEET NO.
9	COLO.	I 25-3 (28) 251	35

DIMENSIONS OF SIGN (REFER TO ELEVATION OF SIGN)

Height of Sign	For K x 20' Post	For K x 10' Post	For K x 5' Post	For K x 2 1/2' Post	For K x 1 1/2' Post	For K x 3/4' Post	For K x 1/2' Post
17'-6"	18'-5"	24'-2"	15'-5"	23'-2"	14'-4"	4'-0"	1'-1 1/2"
17'-0"	16'-3"	23'-1"	15'-3"	22'-1"	14'-3"	3'-9"	1'-1 1/4"
16'-0"	15'-9"	22'-5"	14'-9"	21'-5"	14'-3"	3'-9"	1'-1 1/4"
15'-0"	15'-3"	21'-5"	14'-3"	20'-5"	14'-0"	4'-0"	1'-1 1/4"
14'-0"	14'-9"	20'-1"	13'-9"	19'-1"	14'-0"	4'-0"	1'-1 1/4"
13'-0"	14'-3"	19'-5"	13'-9"	18'-5"	14'-0"	4'-0"	1'-1 1/4"
12'-0"	13'-9"	18'-5"	13'-3"	17'-5"	14'-0"	4'-0"	1'-1 1/4"
11'-0"	13'-3"	17'-5"	12'-3"	16'-5"	14'-0"	4'-0"	1'-1 1/4"
10'-0"	12'-9"	16'-5"	11'-9"	15'-5"	14'-0"	4'-0"	1'-1 1/4"
9'-0"	12'-3"	15'-5"	11'-3"	14'-1"	14'-0"	4'-0"	1'-1 1/4"
8'-0"	11'-9"	14'-1"	10'-9"	13'-1"	14'-0"	4'-0"	1'-1 1/4"
7'-0"	11'-3"	13'-5"	10'-3"	12'-5"	14'-0"	4'-0"	1'-1 1/4"
6'-0"	10'-9"	12'-1"	9'-9"	11'-1"	14'-0"	4'-0"	1'-1 1/4"
5'-0"	10'-3"	11'-1"	9'-3"	10'-1"	14'-0"	4'-0"	1'-1 1/4"
4'-0"	9'-9"	10'-1"	8'-9"	9'-1"	14'-0"	4'-0"	1'-1 1/4"
3'-0"	9'-3"	9'-5"	8'-3"	8'-5"	14'-0"	4'-0"	1'-1 1/4"
2'-6"	9'-0"	9'-2"	8'-0"	8'-2"	14'-0"	4'-0"	1'-1 1/4"
2'-0"	8'-9"	8'-11"	7'-9"	7'-11"	14'-0"	4'-0"	1'-1 1/4"
1'-6"	8'-6"	8'-8"	7'-6"	7'-8"	14'-0"	4'-0"	1'-1 1/4"

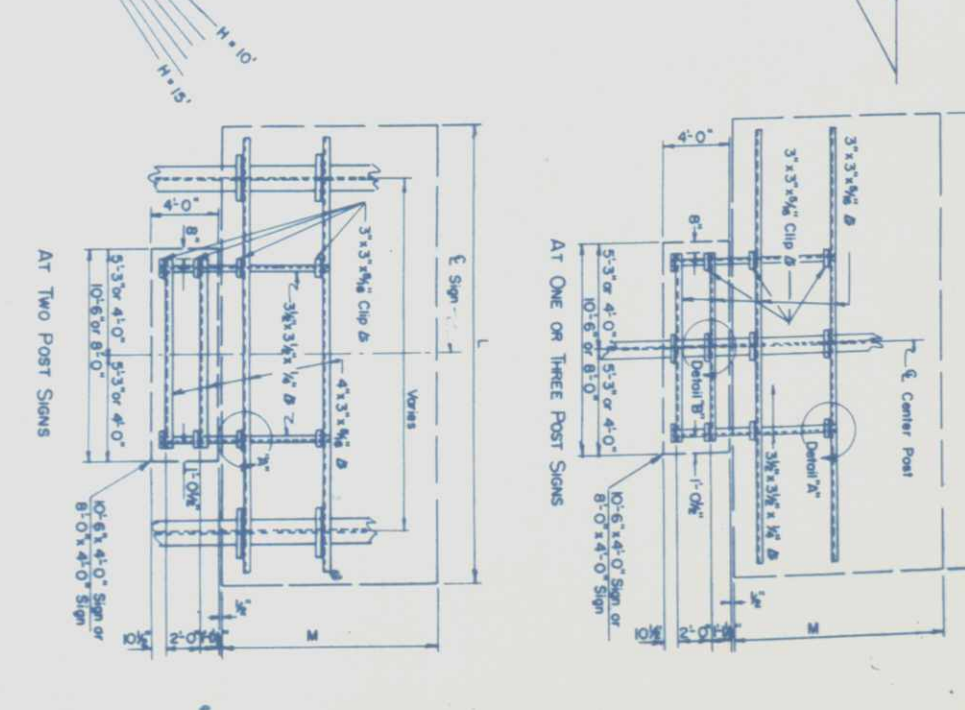
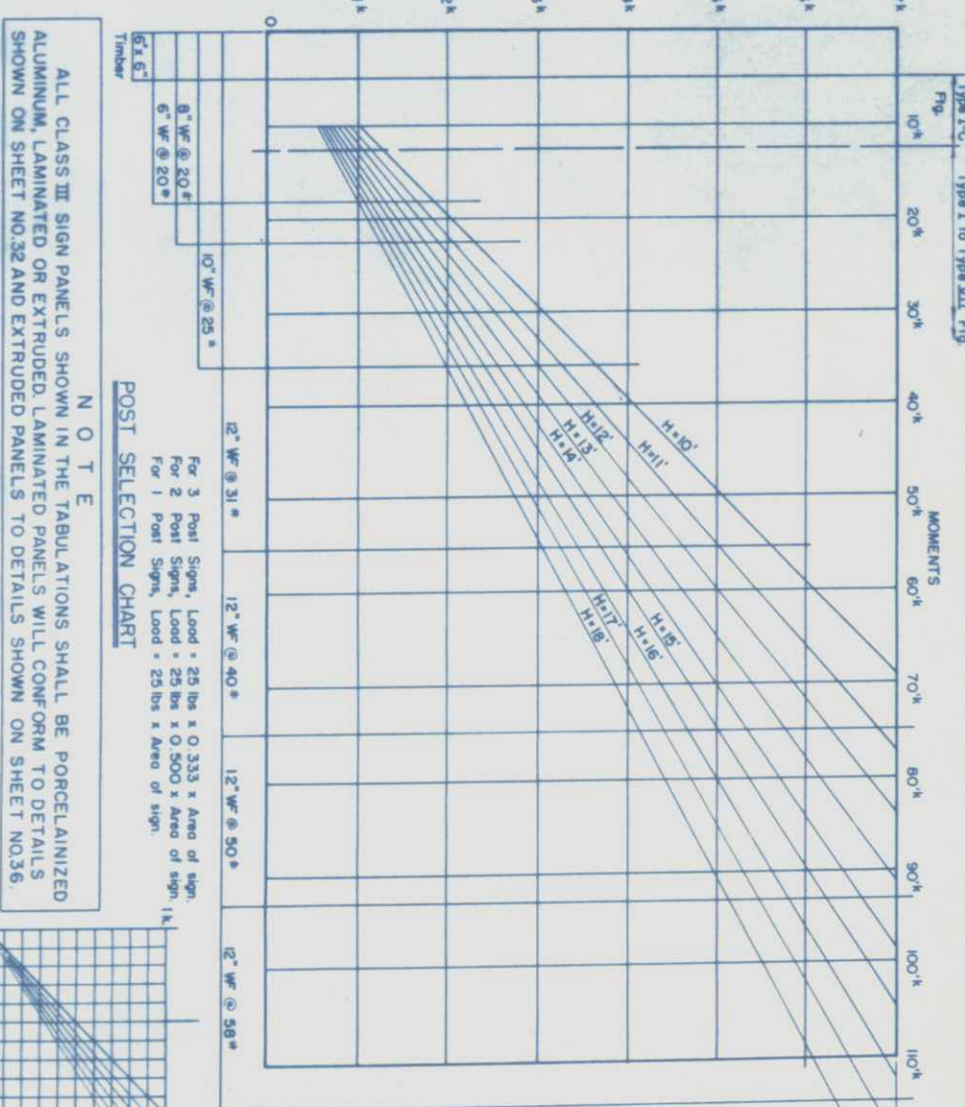
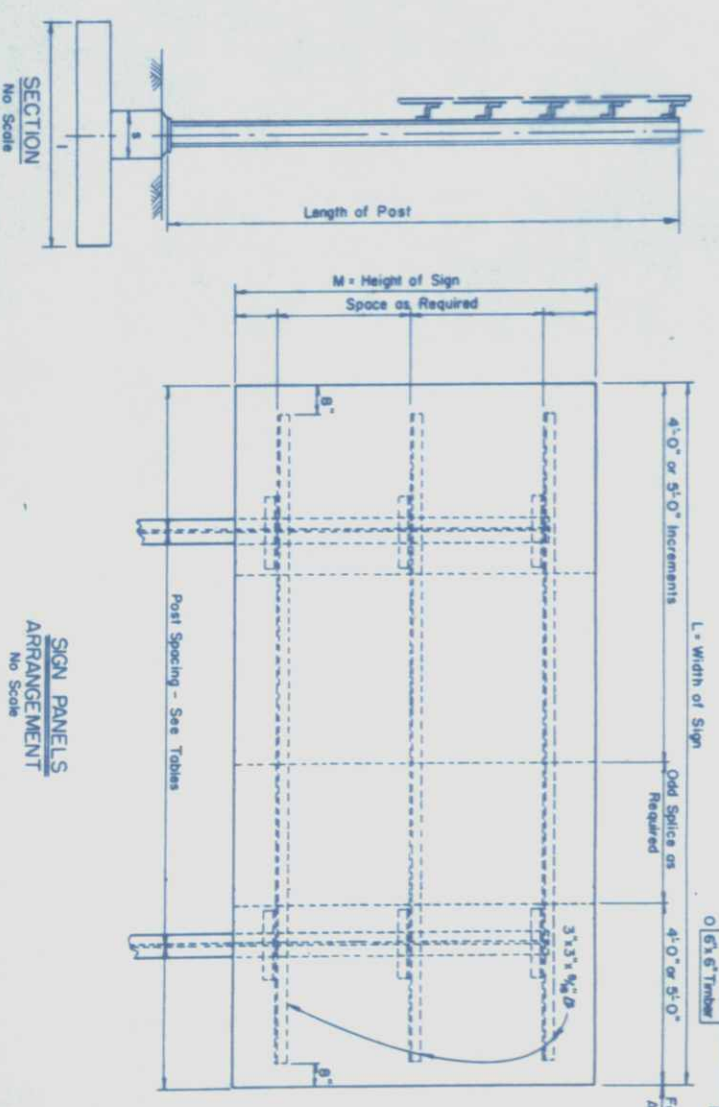
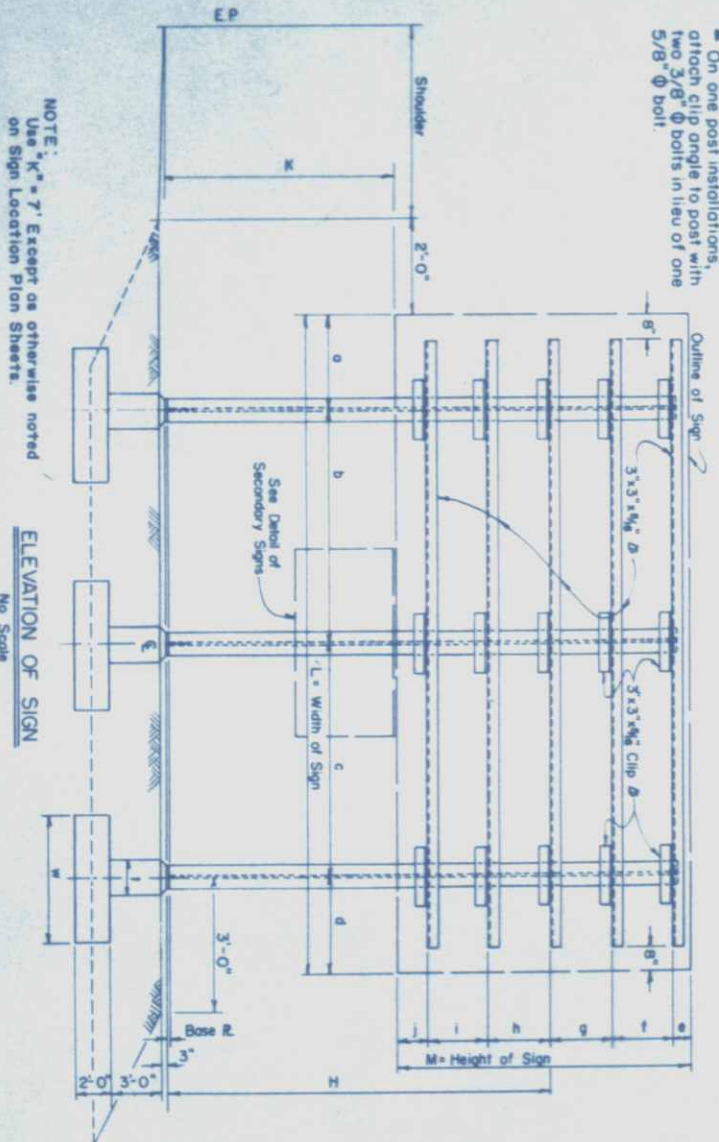
Length of posts for Timber Posts shall be "L" of post plus depth post is embedded in ground (4"x4" Timber Posts shall be embedded a Min. of 3'-0" in ground and 6"x6" Timber Posts a Min. of 5'-0")
 NOTE: For Extruded Aluminum Sections or Laminated Aluminum Panels increase Post Length by Dimension "a" minus 1/2" (Inches).

TABLE OF ALTERNATE POSTS PERMITTED

Section	Alternate Permitted
6" Wf @ 20"	8" I @ 18.4"
8" Wf @ 20"	8" I @ 23.5"
10" Wf @ 25"	10" I @ 30.0" or 10" I @ 35.0"
12" Wf @ 31"	12" I @ 40.8"
12" Wf @ 40"	12" I @ 50.0"
12" Wf @ 50"	12" I @ 50.0"
12" Wf @ 58"	12" I @ 60.8"

NOTE
 BACKING ANGLES SHOWN ARE NOT APPLICABLE TO CLASS III SIGNS. INFORMATION IS SHOWN FOR MOUNTING HEIGHT OF SIGNS. IF EXTRUDED PANELS ARE USED, POST SPACING CAN BE FOUND ON CHART.

Height of Sign	Post	a	b	c	d	Length of Posts
37'-0"	3	5'-6"	12'-10"	12'-0"	5'-8"	35'-8"
36'-0"	3	5'-6"	12'-6"	12'-6"	5'-6"	34'-8"
35'-0"	3	5'-4"	12'-2"	12'-2"	5'-4"	33'-8"
34'-0"	3	5'-2"	11'-10"	11'-10"	5'-2"	32'-8"
33'-0"	3	5'-0"	11'-6"	11'-6"	5'-0"	31'-8"
32'-0"	3	4'-11"	11'-1"	11'-1"	4'-11"	30'-8"
31'-0"	3	4'-9"	10'-9"	10'-9"	4'-9"	29'-8"
30'-0"	3	4'-6"	10'-0"	10'-0"	4'-6"	28'-8"
29'-0"	3	4'-4"	9'-8"	9'-8"	4'-4"	27'-8"
28'-0"	3	4'-2"	9'-4"	9'-4"	4'-2"	26'-8"
27'-0"	3	4'-0"	9'-0"	9'-0"	4'-0"	24'-8"
26'-0"	3	3'-10"	8'-8"	8'-8"	3'-10"	23'-8"
25'-0"	3	3'-8"	8'-4"	8'-4"	3'-8"	22'-8"
24'-0"	3	3'-6"	8'-0"	8'-0"	3'-6"	21'-8"
23'-0"	3	3'-4"	7'-8"	7'-8"	3'-4"	20'-8"
22'-0"	3	3'-4"	7'-8"	7'-3"	3'-3"	19'-8"
21'-0"	3	3'-3"	7'-3"	7'-3"	3'-3"	18'-8"
20'-0"	2	3'-0"	10'-0"	10'-0"	3'-0"	17'-8"
19'-0"	2	4'-9"	9'-6"	9'-6"	4'-9"	17'-8"
18'-0"	2	4'-6"	9'-6"	9'-6"	4'-6"	16'-8"
17'-0"	2	4'-3"	8'-6"	8'-6"	4'-3"	15'-8"
16'-0"	2	4'-0"	8'-6"	8'-6"	4'-0"	14'-8"
15'-0"	2	3'-9"	7'-6"	7'-6"	3'-9"	13'-8"
14'-0"	2	3'-9"	7'-6"	7'-6"	3'-9"	12'-8"
13'-0"	2	3'-6"	6'-6"	6'-6"	3'-6"	11'-8"
12'-0"	2	3'-0"	6'-6"	6'-6"	3'-0"	10'-8"
11'-0"	2	2'-9"	5'-6"	5'-6"	2'-9"	9'-8"
10'-0"	2	2'-6"	5'-0"	5'-0"	2'-6"	8'-8"
9'-0"	2	2'-3"	4'-6"	4'-6"	2'-3"	7'-8"
8'-0"	2	2'-0"	4'-0"	4'-0"	2'-0"	6'-8"
7'-0"	2	1'-9"	3'-6"	3'-6"	1'-9"	5'-8"
6'-0"	2	1'-6"	3'-0"	3'-0"	1'-6"	4'-8"
5'-0"	2	2'-6"	3'-0"	2'-6"	2'-6"	3'-8"
4'-0"	1	2'-0"	1'-6"	1'-6"	2'-0"	2'-8"
3'-0"	1	1'-6"	1'-6"	1'-6"	1'-6"	1'-8"
2'-0"	1	1'-0"	1'-0"	1'-0"	1'-0"	1'-8"



REVISIONS

REVISION	REASON	DATE

COLORADO DEPARTMENT OF HIGHWAYS
GROUND SIGN STRUCTURE CLASS III

Designed by EFS
 Made by HRA
 Checked by HRA
 Date: 11-2-59

STANDARD S-523-A

SHEET TWO OF TWO

REVISED FOR THIS PROJECT

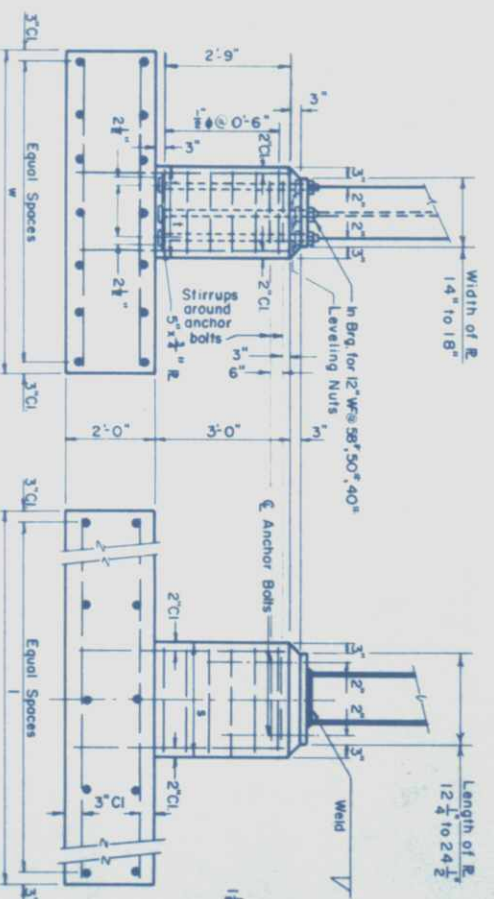
FED. ROAD DIST. NO.	DIVISION	PROJECT NO.	SHEET NO.
9	COLO.	1 25 - 3 (281 251	36

PEDESTAL S & FOOTINGS FOR VARIOUS COLUMNS

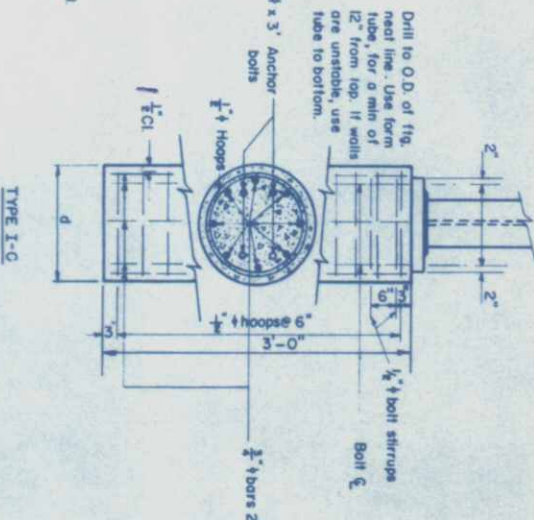
Post	Maximum Allowable Moment	Weld Post to Base E	Base Plate	Anchor Bolts		Vertical Bases in Pedestal		Footings		Longitudinal Footing Bors		Transverse Footing Bors		Stirrups Around Anchor Bolts
				Anchor Bolts	Base	Type	w	d	Top	Bottom	Top	Bottom		
12" W @ 58°	112.3k	Filler	18" x 12" x 2" C.I.	6-1 1/4"	2-7"	2-0"	6-1 1/4" (40#-1-8")	III	8'-0"	12'-9"	12"	12" x 12" x 3"	7-1 1/2" x 7-6"	2-1 1/4"
12" W @ 50°	91.0k	Filler	16" x 12" x 1 1/2" C.I.	6-1 1/4"	2-6"	1-10"	6-1 1/4" (40#-1-8")	III	7'-0"	12'-6"	10"	12" x 12" x 3"	7-1 1/2" x 6-6"	2-1 1/4"
12" W @ 40°	73.0k	Filler	16" x 12" x 1 1/2" C.I.	6-1 1/4"	2-4"	1-10"	6-1 1/4" (40#-1-8")	III	6'-3"	12'-3"	8"	12" x 12" x 3"	7-1 1/2" x 5-6"	2-1 1/4"
12" W @ 31°	53.4k	Filler	14" x 12" x 1 1/2" C.I.	4-1 1/4"	3-5"	2-2"	6-1 1/4" (40#-1-8")	III	5'-6"	11'-6"	7"	12" x 12" x 3"	6-1 1/2" x 5-6"	2-1 1/4"
10" W @ 28°	34.8k	Filler	14" x 12" x 1 1/2" C.I.	4-1 1/4"	3-5"	1-11"	6-1 1/4" (40#-1-8")	III	4'-6"	10'-3"	5"	12" x 12" x 3"	6-1 1/2" x 4-0"	2-1 1/4"
8" W @ 20°	21.8k	Filler	14" x 12" x 1 1/2" C.I.	4-1 1/4"	3-5"	1-8"	6-1 1/4" (40#-1-8")	III	4'-0"	8'-6"	5"	12" x 12" x 3"	5-1 1/2" x 3-6"	2-1 1/4"
6" W @ 20°	17.8k	Filler	14" x 12" x 1 1/2" C.I.	4-1 1/4"	3-5"	1-7"	6-1 1/4" (40#-1-8")	III	3'-6"	8'-3"	3"	12" x 12" x 3"	5-1 1/2" x 3-0"	2-1 1/4"
6" W @ 20°	12.5k	Filler	14" x 12" x 1 1/2" C.I.	4-1 1/4"	3-0"	—	—	—	—	—	—	—	—	—
6" x 6" Timber	5.0k	—	—	—	—	—	—	—	—	—	—	—	—	—

Note: When footings overlap use one footing of the length shown, and of width equal to the distance between post plus the width of one footing shown.

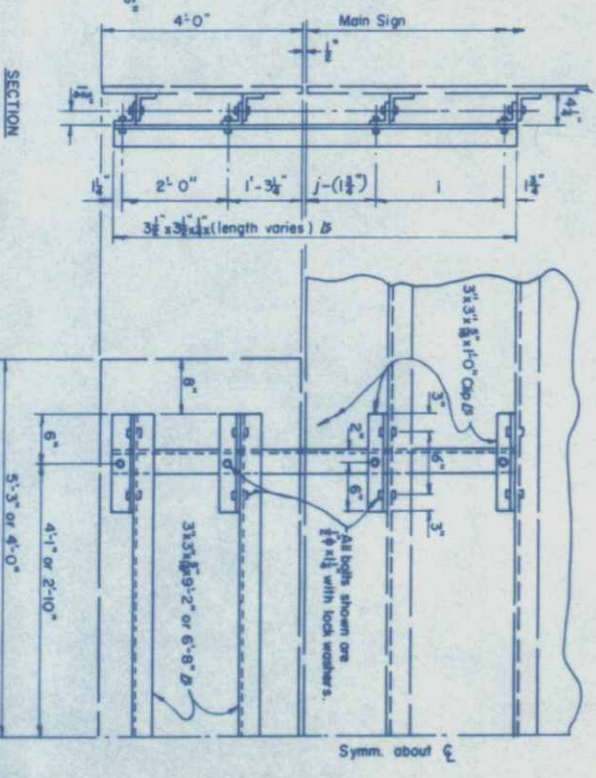
- 1 For notes pertaining to Timber Posts see Sheet No. 34
- 2 Anchor bolt to project above pedestal 4" plus base plate thickness plus bolt diameter.
- 3 Thread upper portion - projection plus 2 ±. Galvanize upper portion - projection plus 4 ±.



TYPE I-III
DETAILS OF FOOTINGS AND PEDESTALS
No Scale

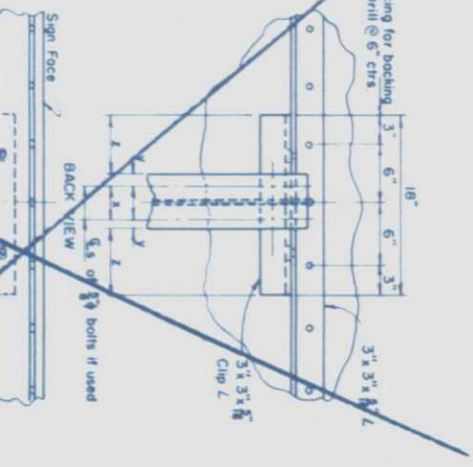


TYPE I-C

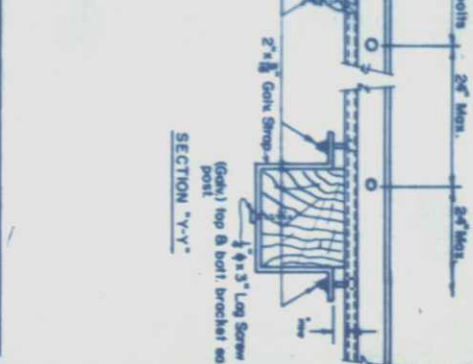
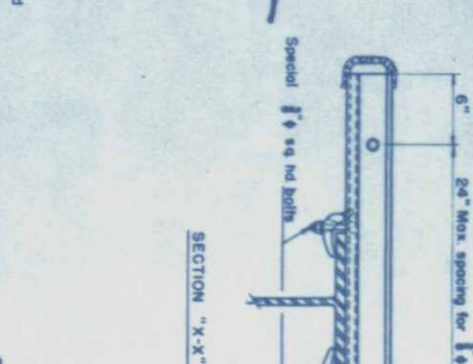
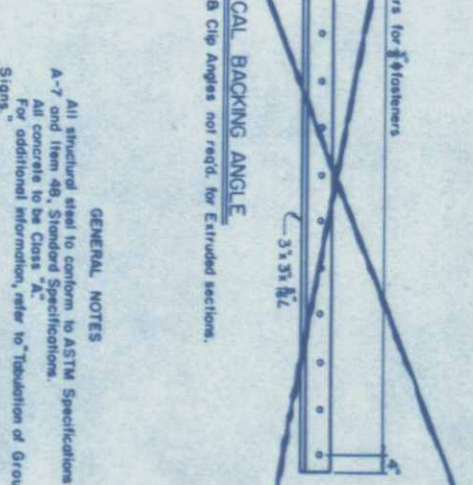
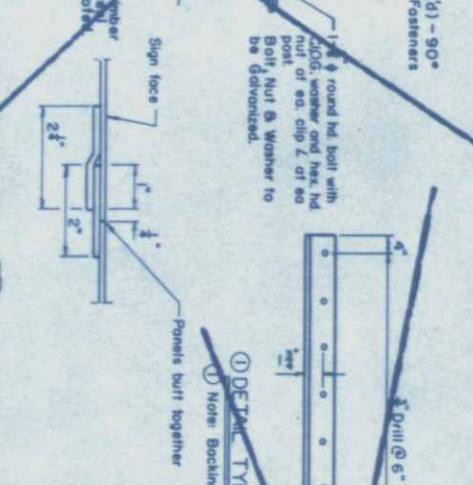
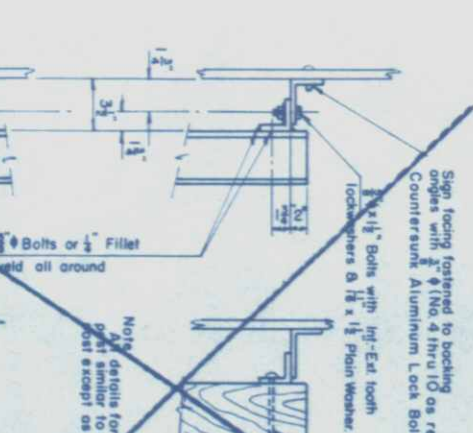


DETAIL S of CONNECTION
Note: Backing angles for Secondary Signs will be 1/2\"/>

Post	x	y	z
6" W @ 20°	3	1	6"
8" W @ 20°	2	1	6"
10" W @ 28°	2	1	6"
12" W @ 31°	3	1	6"
12" W @ 40°	5	1	6"
12" W @ 50°	5	1	6"
12" W @ 58°	5	1	6"



DETAILS OF CLIP ANGLE ATTACHMENTS



GENERAL NOTES
All structural steel to conform to ASTM Specifications A-7 and Item 48, Standard Specifications.
All concrete to be Class "A".
For additional information, refer to "Rehabilitation of Ground Signs."

REVISIONS

NO.	DESCRIPTION	DATE

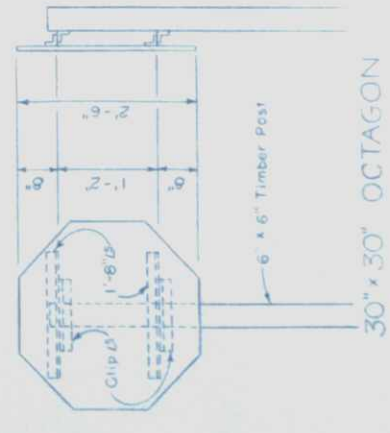
REVISIONS

NO.	DESCRIPTION	DATE

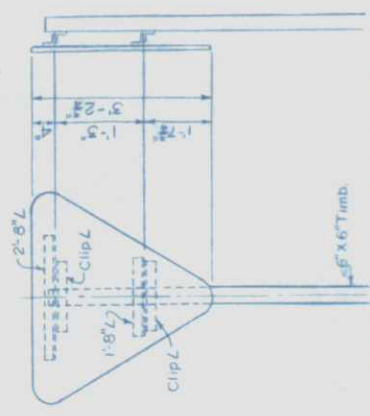
COLORADO
DEPARTMENT OF HIGHWAYS
GROUND SIGN STRUCTURE
CLASS III

Designed by EFS
Made by RRA
Checked by
Approved by
Date: March 9, 1999

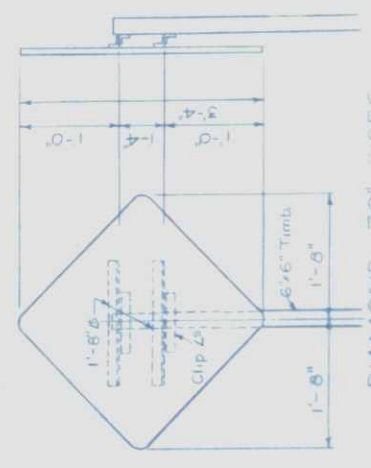
DETAILS OF MISCELLANEOUS CLASS II SIGNS



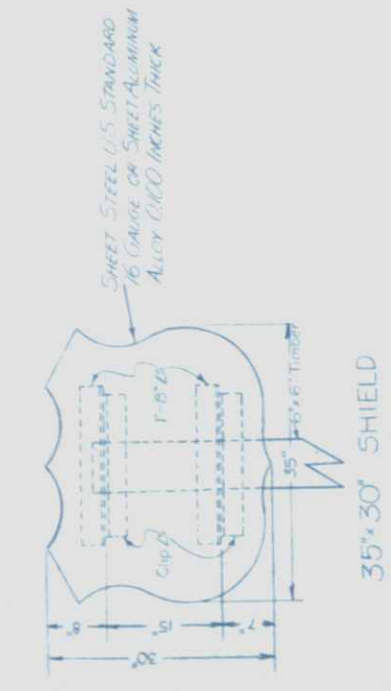
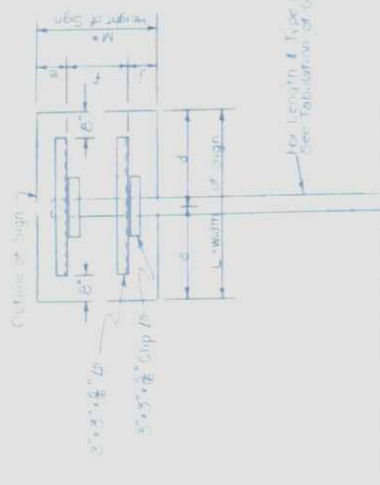
30" x 30" OCTAGON



TRIANGLE 48" SIDES



DIAMOND 30" SIDES



35" x 30" SHIELD

▲ All angles 3" x 3" x 3/8"

SIGN TYPE	CLIP ANGLES		BACKING ANGLES		3/8" φ BOLTS	3/8" φ RIVETS
	NO.	LENGTH	NO.	LENGTH		
30" x 30" OCTAGON	2	1'-6"	2	1'-6"	4	6
DIAMOND 30" SIDES	2	1'-6"	2	1'-6"	4	6
TRIANGLE 48" SIDES	2	1'-6"	1	2'-6"	4	8
35" x 30" SHIELD	2	1'-6"	2	1'-6"	4	6

- NOTES
1. ALL SIGNS SHOWN AS CLASS II IN TABULATION OF GROUND SIGNS, AND FABRICATED WITH THE LETTERS "A" OR "W" SHALL BE EITHER SHEET STEEL U.S. STANDARD 16 GAUGE OR SHEET ALUMINUM ALLOY 0.060 INCHES THICK AND SHALL HAVE BACKING ANGLES.
 2. FOR NOTES PERTAINING TO TIMBER POSTS, MOUNTING DETAILS FOR CLIP AND BACKING ANGLES AND SIGN PLACEMENT DETAILS, SEE SHEET AC 34.

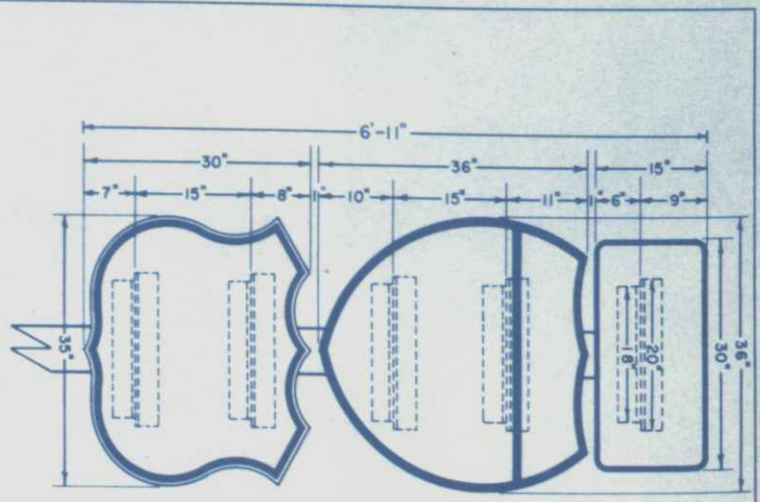
DIMENSIONS OF SIGN

M* HEIGHT OF SIGN	a	b	c	d	e	f	g	h	No. of Backing ANGLES REQU.	J
4'-0"			1'-1 1/2"			2'-0"			2	0'-10 1/2"
3'-0"			1'-7 1/2"						1	1'-4 1/2"
2'-6"			1'-4 1/2"						1	1'-1 1/2"

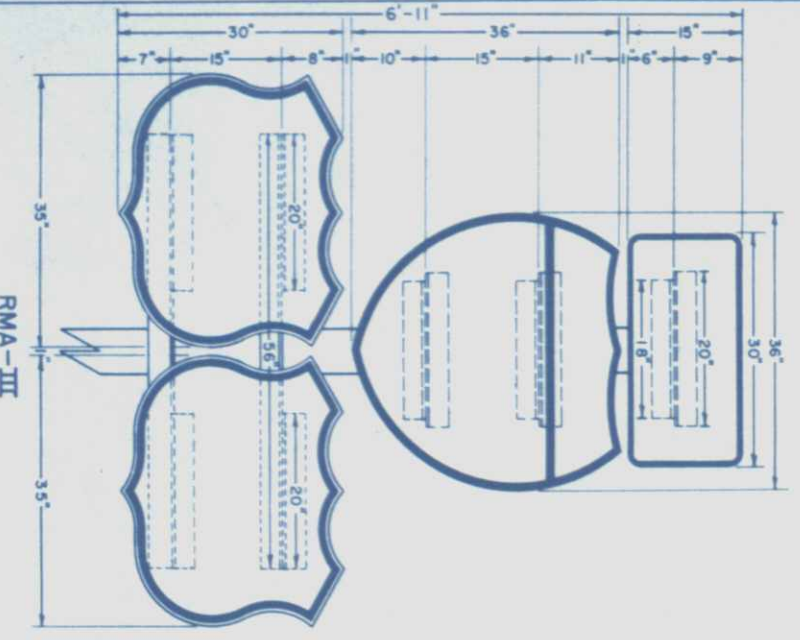
L* WIDTH OF SIGN	No. of Posts	a	d	LENGTH OF BACKING ANGLES
4'-0"	1	2'-0"		2'-6"
2'-0"	1	1'-0"		1'-6"

4' x 3' OR 2' x 2' 6" SIGN SHALL BE EITHER SHEET STEEL U.S. STANDARD 16 GAUGE OR SHEET ALUMINUM ALLOY 0.060 INCHES THICK AND SHALL HAVE BACKING ANGLES.

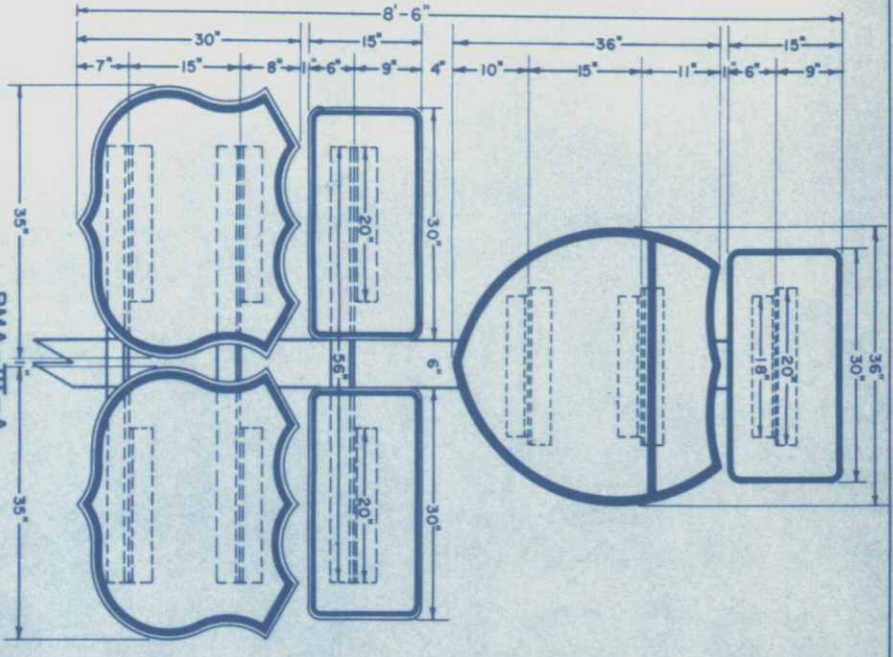
2' x 4' SIGNS SHALL BE EITHER SHEET STEEL U.S. STANDARD 16 GAUGE OR SHEET ALUMINUM ALLOY 0.060 INCHES THICK AND SHALL HAVE BACKING ANGLES.



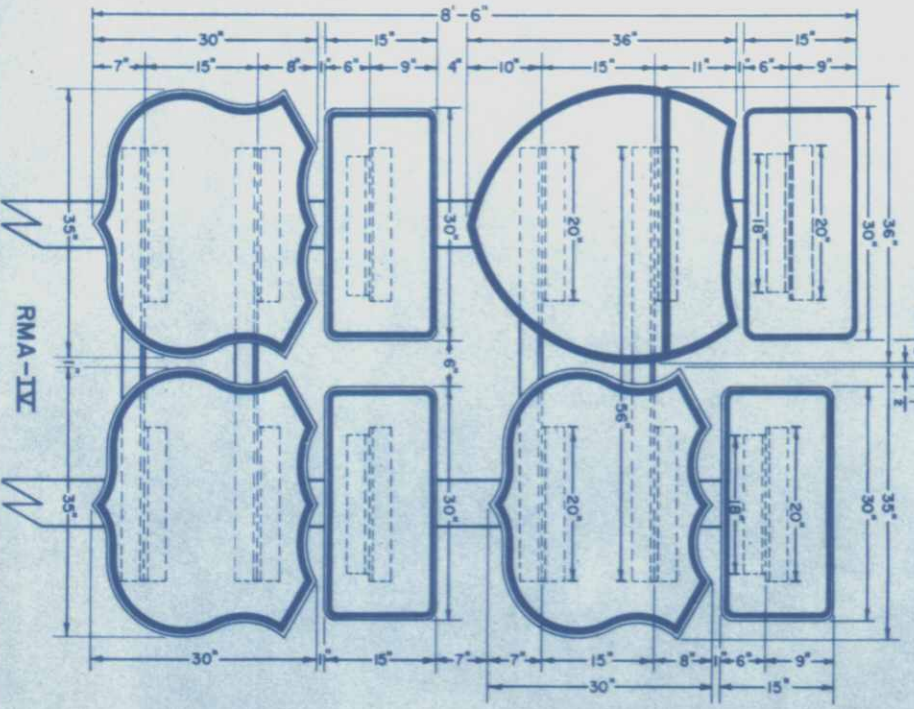
RMA-II
SIGN NOS. 88, 98, 224, 278, & 299



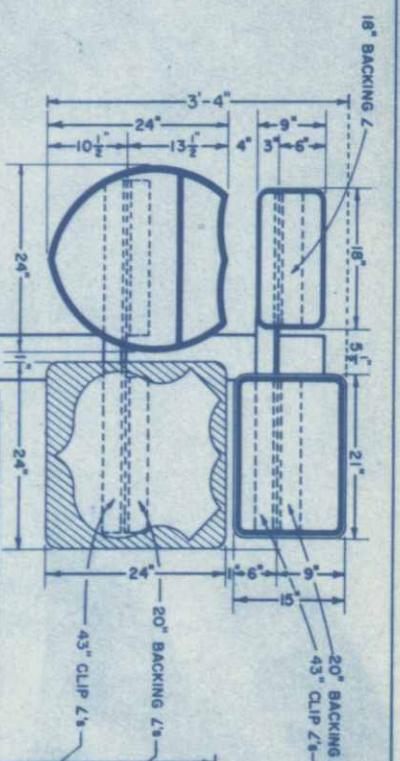
RMA-III



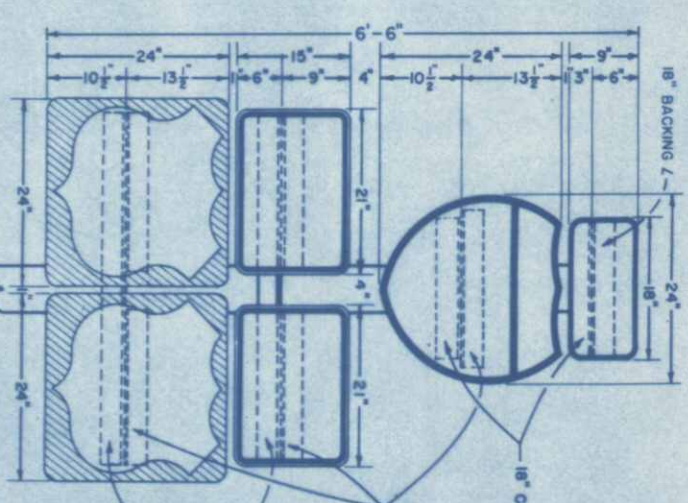
RMA-III-A



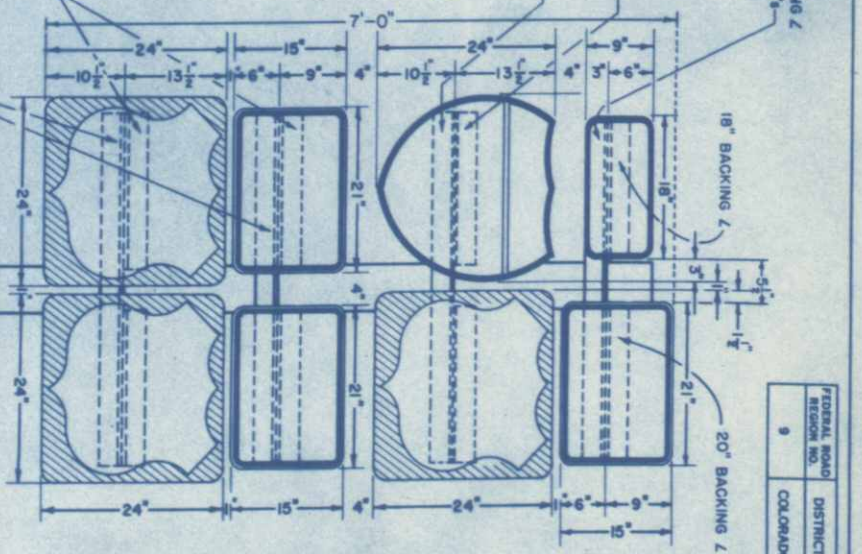
RMA-IV



JMA-II



JMA-III

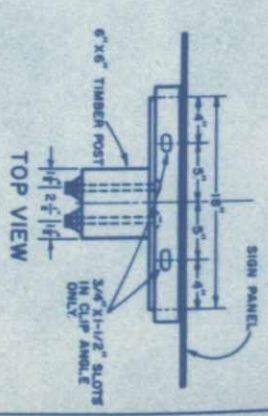
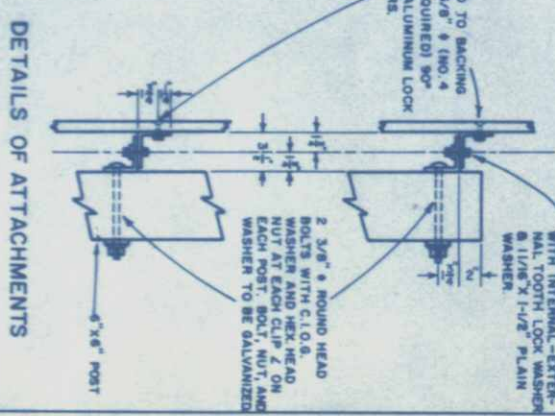
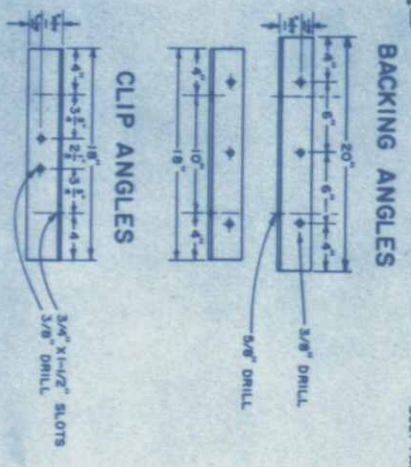
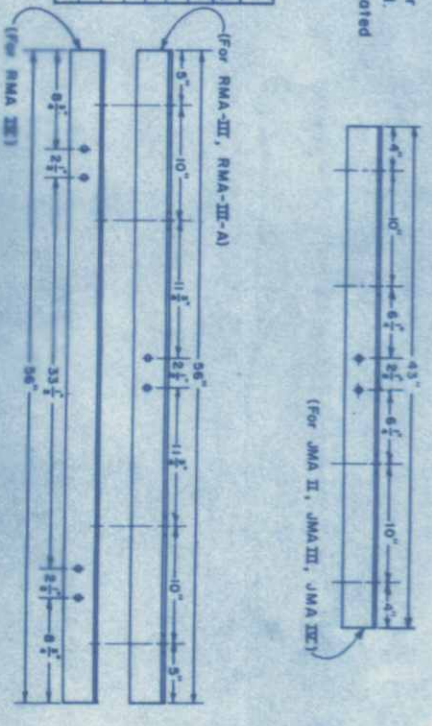


JMA-IV

- NOTES:**
1. Mounting height is 6' minimum from pavement edge elevation to the bottom of the lower pique.
 2. Lateral clearance is 2' minimum from nearest edge of sign to shoulder edge or to the face of an unmountable curb.
 3. Sign posts are to be 6061-T6 Aluminum Alloy, minimum thickness is 0.100" for RMA installations & 0.080" for JMA installations.
 4. Posts are to be 6" x 6" S4S untreated Douglas Fir. Dip or point portion of post below ground with hot creosote oil.
 5. Posts shall be set in 5' minimum depth drilled or excavated holes, placed plumb and firmly tamped in place.
 6. Backing angles and clip angles 3" x 3" x 5/16"

CODE	POSTS	NUMBER OF NUMBER OF CLIP ANGLES
NO.	LENGTH	AS
RMA-II	18"	5 5 5
RMA-III	18"	7 3 3
RMA-III-A	20"	9 3 3
RMA-IV	20"	12 4 4
JMA-II	15"	3 3 2
JMA-III	18"	5 2 2
JMA-IV	18"	7 4 4

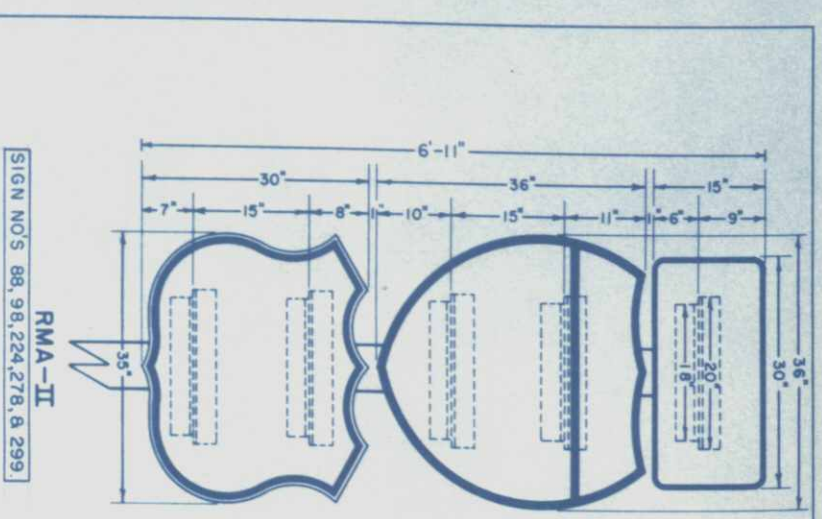
STRUCTURAL ELEMENTS



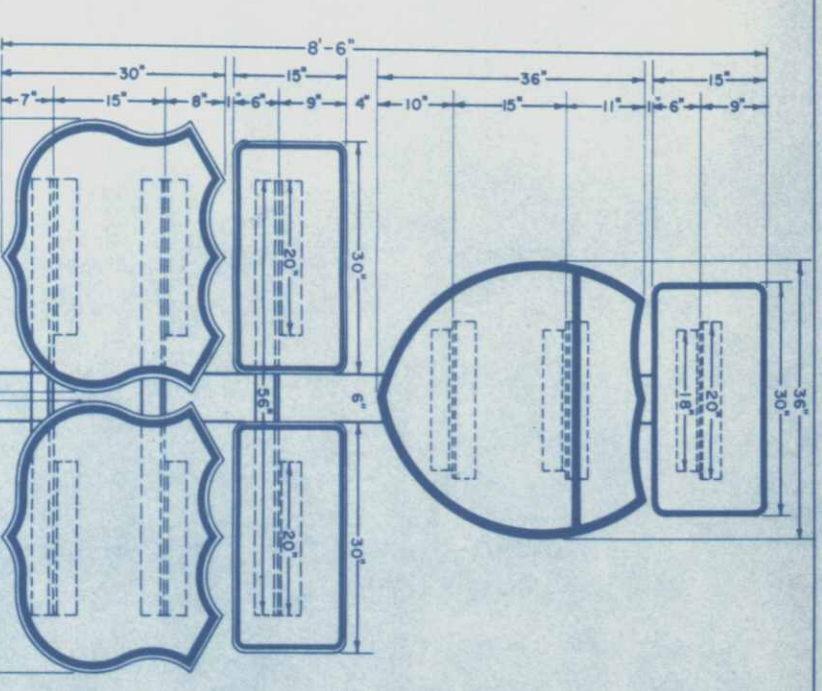
FEDERAL ROAD DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9 COLORADO	I 25 - 3(28)281	38	1

COLORADO
DEPARTMENT OF HIGHWAYS
TYPICAL MARKER
ASSEMBLY
INSTALLATIONS

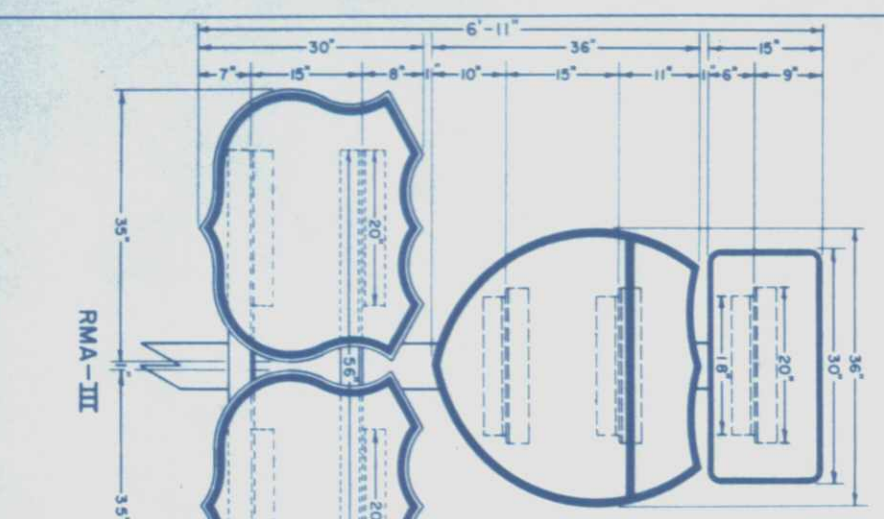
Designed by _____
Made by _____
Checked by _____
Approved by _____
Date _____
1961



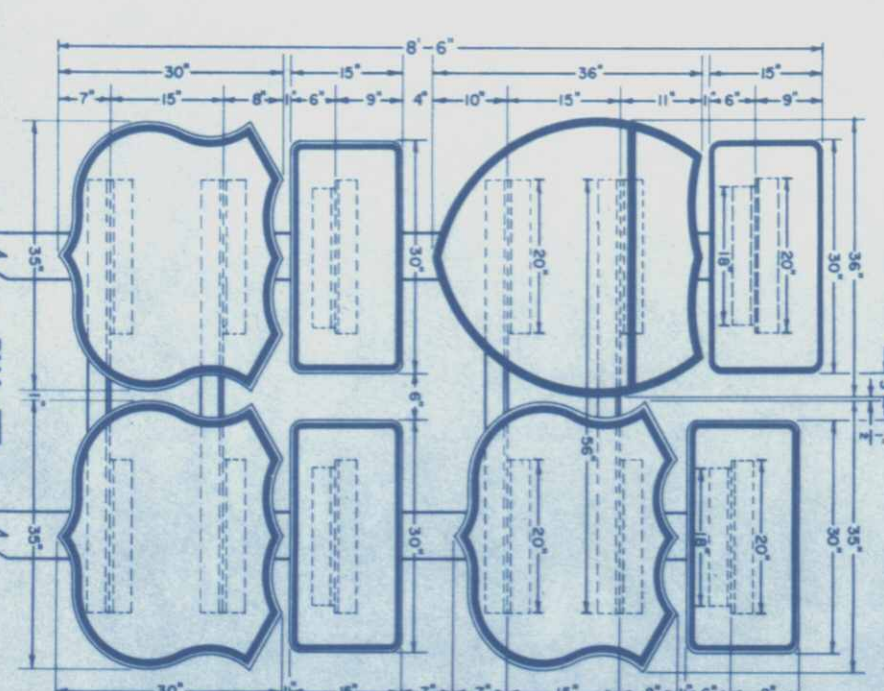
RMA-II
SIGN NOS. 88, 98, 224, 278, & 299



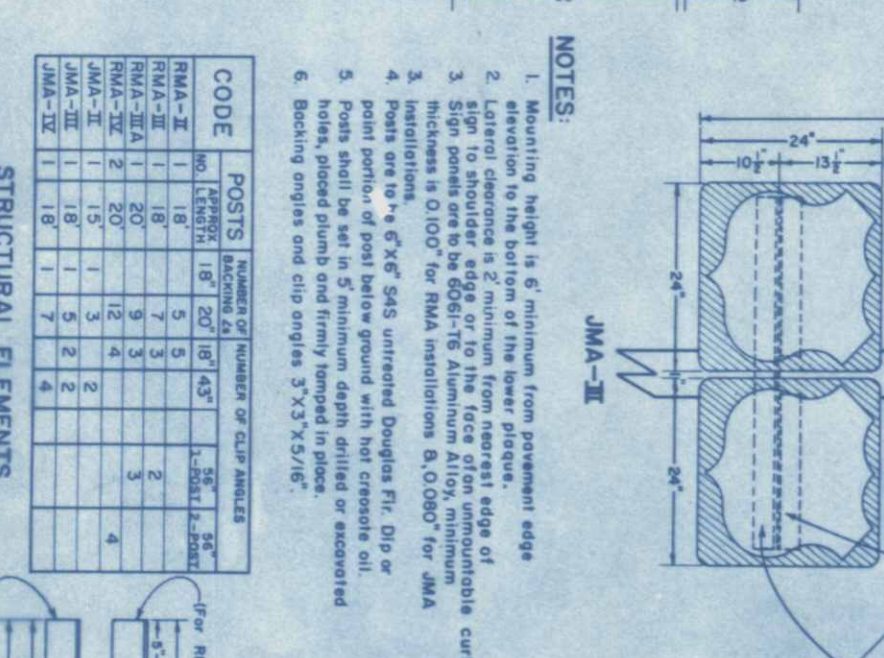
RMA-III-A



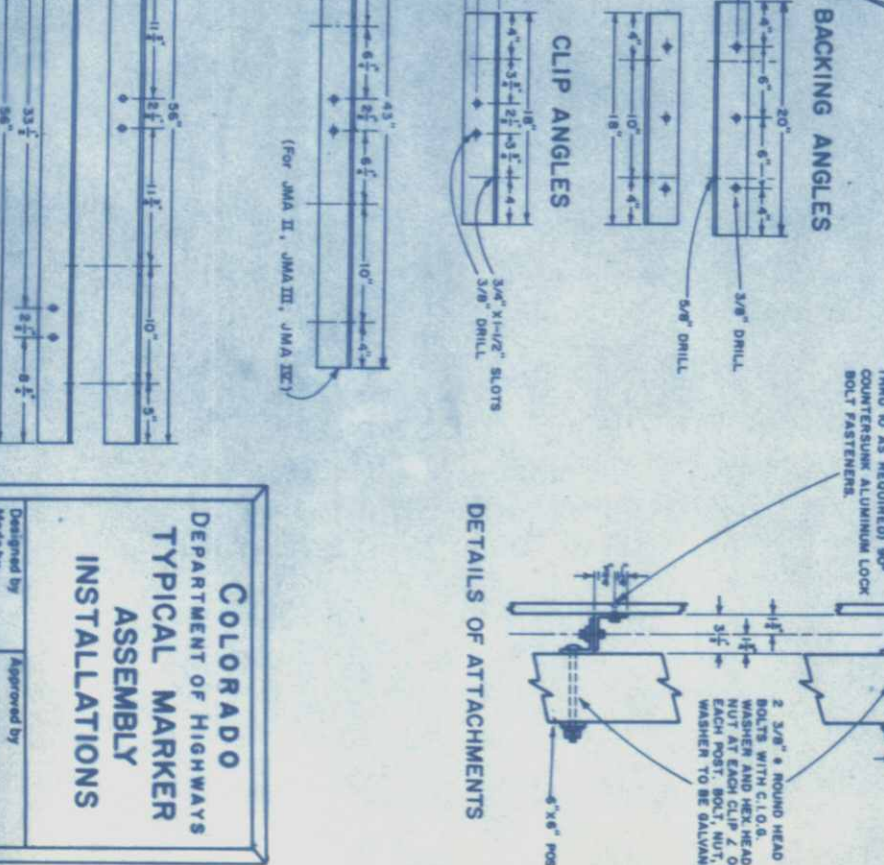
RMA-III



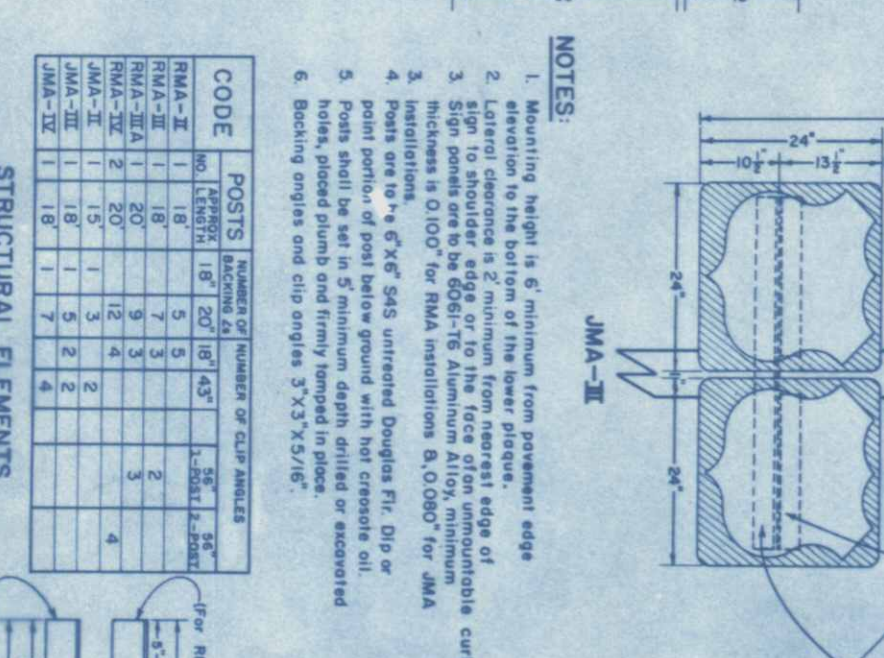
RMA-IV



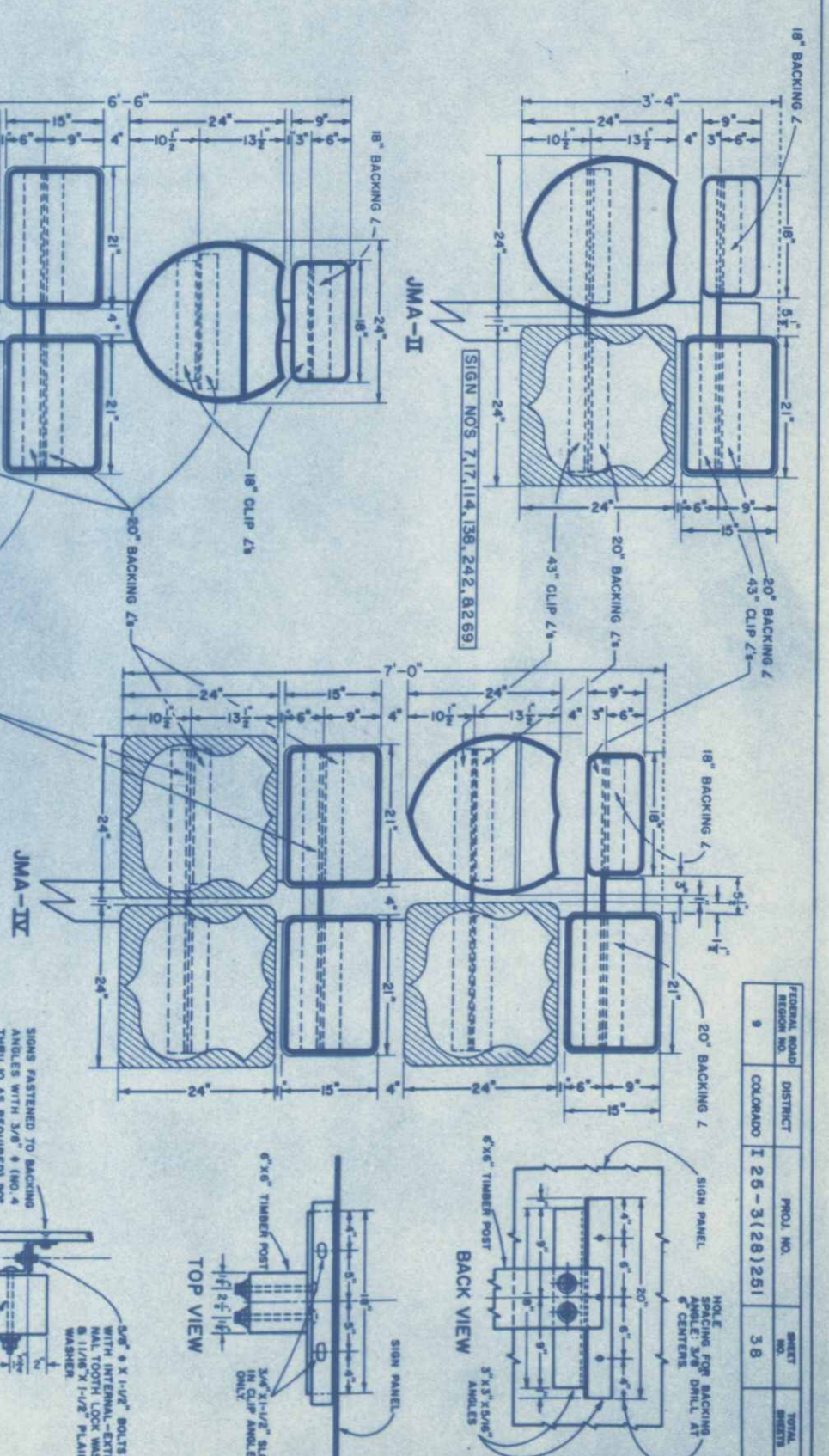
JMA-II



JMA-III



JMA-IV

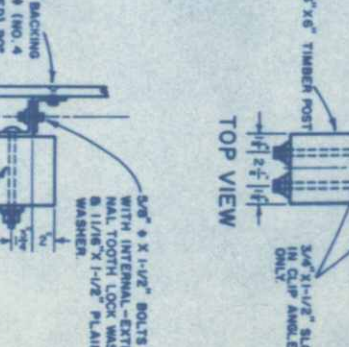


NOTES:

1. Mounting height is 6' minimum from pavement edge elevation to the bottom of the lower plaque.
2. Lateral clearance is 2' minimum from nearest edge of sign to shoulder edge or to the face of an unmountable curb.
3. Sign posts are to be 6061-T6 Aluminum Alloy, minimum thickness is 0.100" for RMA installations & 0.080" for JMA installations.
4. Posts are to be 6" X 6" S4S untreated Douglas Fir. Dip or point portion of post below ground with hot creosote oil.
5. Posts shall be set in 5' minimum depth drilled or excavated holes, placed plumb and firmly tamped in place.
6. Backing angles and clip angles 3" X 3" X 5/16"

STRUCTURAL ELEMENTS

CODE	POSTS	NUMBER OF BACKING L	NUMBER OF CLIP ANGLES
RMA-II	1 18"	5 18"	5 43"
RMA-III	1 18"	7 18"	7 43"
RMA-III-A	1 20"	9 20"	9 43"
RMA-IV	2 20"	12 20"	12 43"
JMA-II	1 18"	3 18"	3 43"
JMA-III	1 18"	5 18"	5 43"
JMA-IV	1 18"	7 18"	7 43"

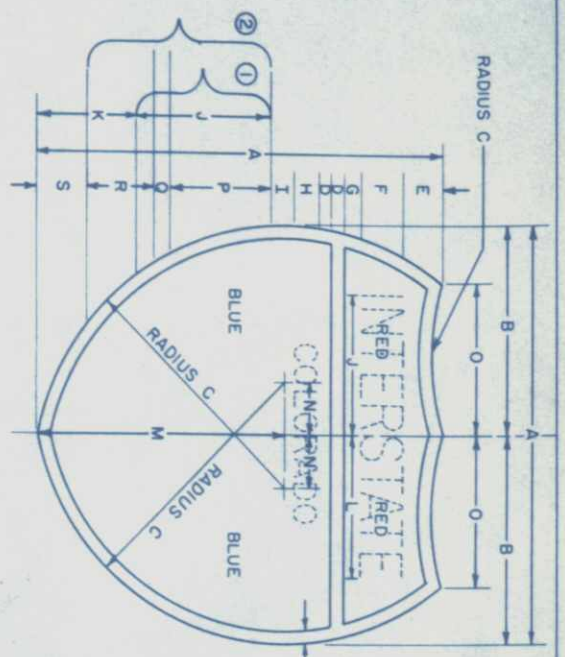


FEDERAL ROAD DISTRICT	POOL NO.	SHEET NO.	TOTAL SHEETS
9 COLORADO	I 26 - 3 (28) 251	38	

COLORADO
DEPARTMENT OF HIGHWAYS
TYPICAL MARKER
ASSEMBLY
INSTALLATIONS

Designed by: _____
Checked by: _____
Approved by: _____
Date: _____
1961

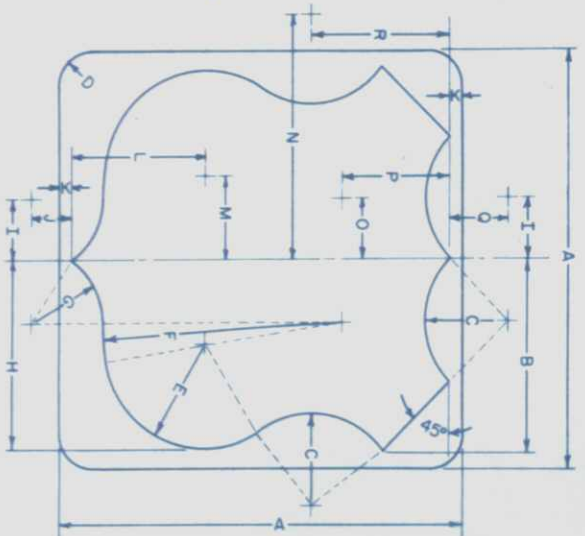
INTERSTATE ROUTE MARKER



- NOTES:
- Spacing "j" for route numerals "25" & "70".
 - Spacing "p", "o", & "r" for route numeral "90".
 - Letters, numerals, and border to be reflectorized white.
 - The word "INTERSTATE" is to be Series "C" letters. All numerals and the state name shall be Series "D".
 - Background areas designated as RED and BLUE shall be "INTERSTATE RED" and "INTERSTATE BLUE", reflectorized.
 - Reversed screen process on reflectorized sheeting.

CODE	SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
IM1-1-18	18"	18	9	11 1/4	9 1/16	10 3/32	1 7/8	3/4	1 1/8	1 1/32	6	4 5/16	6 1/4	10 3/32	2 1/4	6 9/16	4 1/2	3 1/4	3	2 1/16
IM1-1-24	24"	24	12	15	3/4	2 3/8	2 1/2	1	1 1/2	1 3/8	8	5 3/4	8 1/4	14 5/8	3	8 3/4	6	1	4	2 3/4
IM1-1-36	36"	36	18	22 1/2	1 1/8	3 9/16	3 3/4	1 1/2	2 1/4	2 1/16	12	8 5/8	12 1/2	21 1/16	4 1/2	13 1/8	9	1 1/2	6	4 1/8
IM1-1-48	48"	48	24	30	1 1/2	4 3/4	5	2	3	2 3/4	16	11 1/2	16 1/2	29 1/4	6	17 1/2	12	2	8	5 1/2

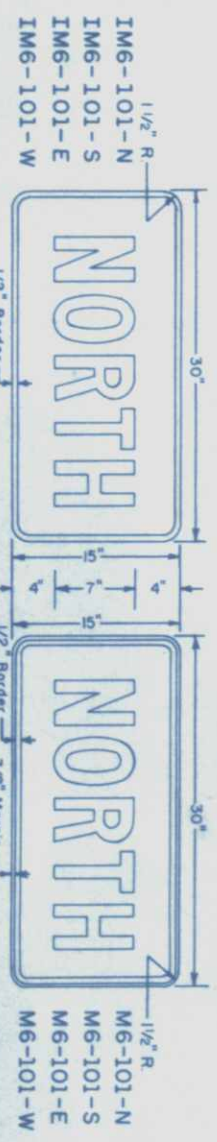
U.S. ASSEMBLY ROUTE MARKER



- NOTES:
- Border area and legend are stencil block.
 - Numerals are Series "D".
 - Shield background is reflectorized white.
 - Reversed screen process on reflectorized sheeting.

CODE	SIZE(WxH)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	ROUTE NUMERALS
M1-2-18	18 X 18	18	8 5/8	3 21/32	1 1/2	4 1/2	10 29/32	3 9/16	8 7/16	2 1/8	14 7/8	9 1/16	6	3 29/64	10 1/2	2 37/64	4 1/16	2 17/32	6 19/32	7" "D"
M1-2-24	24 X 24	24	11 1/2	4 7/8	1 1/2	6	14 3/8	4 3/16	10 3/16	3 1/2	2 5/16	8	4 13/16	14	3 7/16	6 1/4	3 3/8	8 5/8	10" "D"	
M1-2-36	36 X 36	36	17 1/4	7 5/16	2	9	21 9/16	6 7/32	16 7/32	5 1/4	3 19/32	1 1/8	12	7 7/32	21	5 9/32	9 3/8	5 1/16	12 15/16	14" "D"

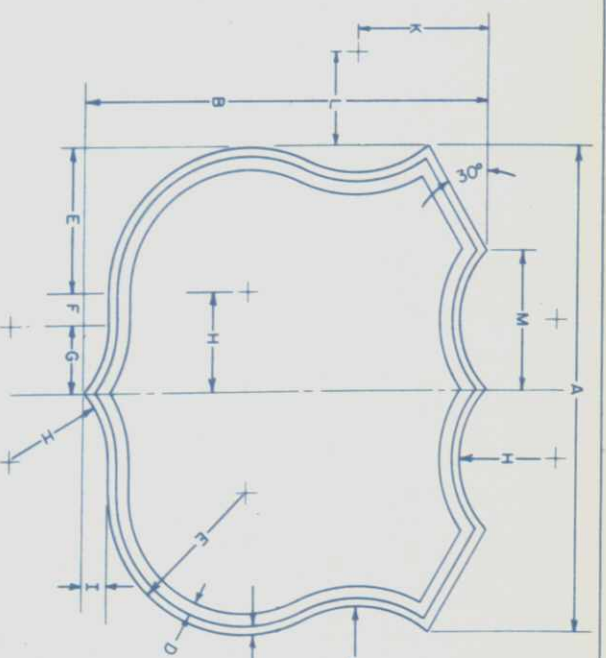
CARDINAL DIRECTION MARKERS



GENERAL NOTES

- Route markers for use on guide signs and for assembly installations are cutout plaques of 6061-T6 aluminum alloy, 0.080" minimum thickness for route markers 24" or less in height and 0.100" minimum thickness for route markers more than 24" in height.
- Auxiliary markers are plaques of the same material and thickness as the companion route marker plaques.
- Milepost plaques are 6061-T6 aluminum alloy, 0.080" thick.
- All dimensions shown are inches.
- Radius shown for connecting arcs may need a slight adjustment to achieve a perfect fit.
- Stencil block route numerals are to be visually centered in the available background area.

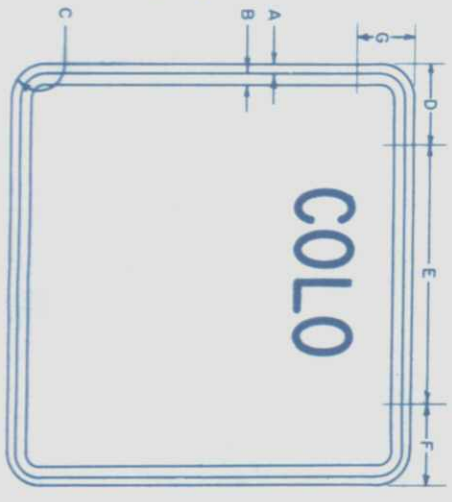
U.S. ROUTE MARKER



- NOTES:
- Stencil block border and legend.
 - Reflectorized white background.
 - Numerals are Series "D" with modified stroke width of 0.2 X letter height.

CODE	SIZE(WxH)	A	B	C	D	E	F	G	H	I	J	K	L	M	ROUTE NUMERALS
M1-1-18	21 X 18	21	18	3/8	1/2	6 3/16	11 3/32	2 9/32	4 5/16	1 1/8	5 1/16	5 29/32	3 9/16	6	8" "D" Mod.
M1-1-24	28 X 24	28	24	3/8	5/8	8 1/4	1 7/8	3 1/8	5 3/4	1 1/2	6 3/4	7 9/16	5 1/4	8	10" "D" Mod.
M1-1-30	35 X 30	35	30	1/2	3/4	10 9/16	2 1/32	4 27/32	7 3/16	1 7/8	8 7/16	9 17/32	6 9/16	10	14" "D" Mod.
M1-1-36	42 X 36	42	36	5/8	7/8	12 3/8	2 13/16	5 3/16	8 5/8	2 1/4	10 1/8	11 7/16	7 7/8	12	16" "D" Mod.

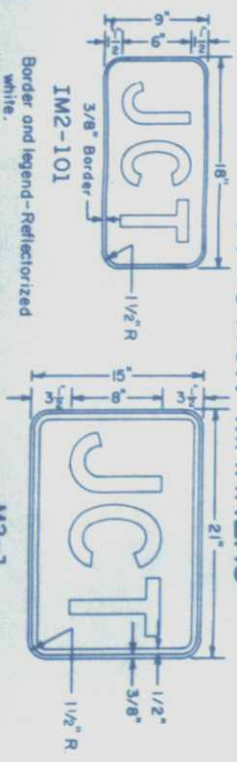
COLORADO ROUTE MARKER



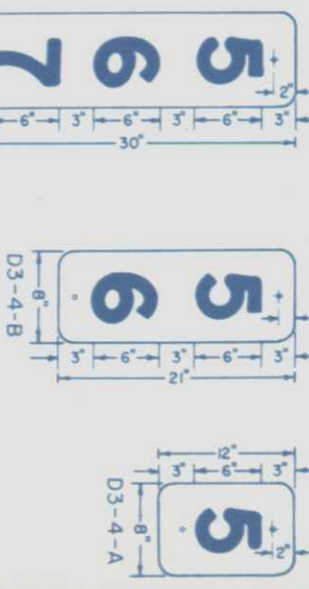
- NOTES:
- Stencil block border and legend.
 - Reflectorized white background.
 - Route numerals are Series "D" with modified stroke width of 2 X letter height.
 - The state name, "COLORADO" shall be the following sizes:
18" X 18" marker 3" Series "E"
24" X 24" marker 4" Series "E"
30" X 30" marker 5" Series "E"
36" X 36" marker 6" Series "E"

CODE	SIZE(WxH)	A	B	C	D	E	F	G	ROUTE NUMERALS
M1-3-18	18 X 18	3/8	1/2	1 1/2	3 1/2	11	3 1/2	2 1/2	8" "D" Mod.
M1-3-24	24 X 24	3/8	5/8	1 1/2	4 3/4	14 1/2	4 3/4	3 1/2	10" "D" Mod.
M1-3-30	30 X 30	1/2	3/4	1 7/8	5 7/8	18 1/4	5 7/8	4 1/2	12" "D" Mod.
M1-3-36	36 X 36	5/8	7/8	2	7	22	7	5 1/2	16" "D" Mod.

JUNCTION MARKERS



MILEPOST PLAQUES



- NOTES:
- Series "D" white reflectorized numerals on reflectorized green background, no border. Reversed screen process.
 - Mount "Z" beyond the edge of the roadway shoulder or the face of an unmountable curb, or in the line of the guard rail. The top of the plaque to be approximately 4" above the grade of the pavement edge.
 - For installation details see Sheet No. 33.

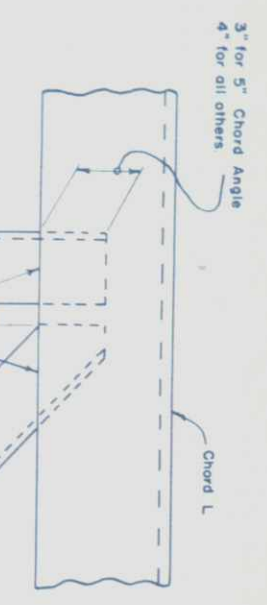
COLORADO
DEPARTMENT OF HIGHWAYS
ROUTE MARKERS
AND
AUXILIARIES

Designed by _____
Made by _____
Checked by _____
Approved by _____
Date _____

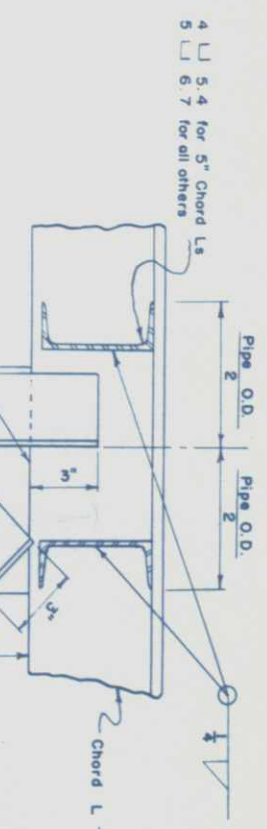
FEDERAL ROAD REGION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	I 25-3(28)261	39	

STANDARD S-502-A

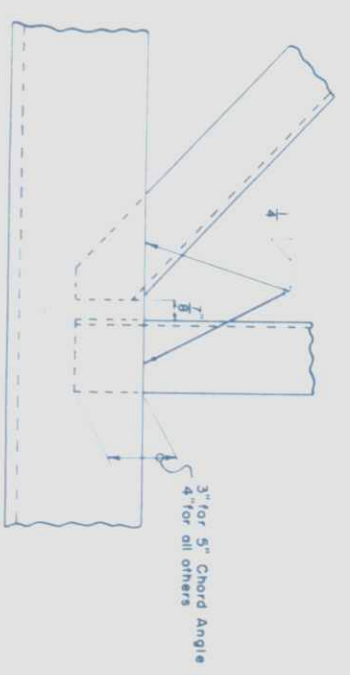
FED. ROAD REQ. NO.	DIVISION CALO.	PROJECT NO.	SHEET NO.
9		I-25-3(28)257	40



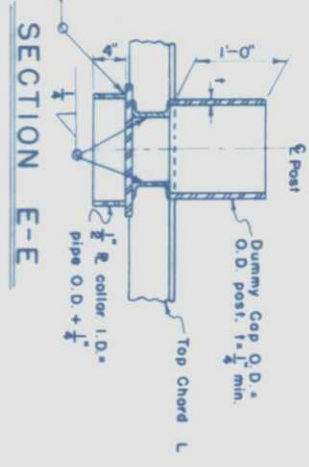
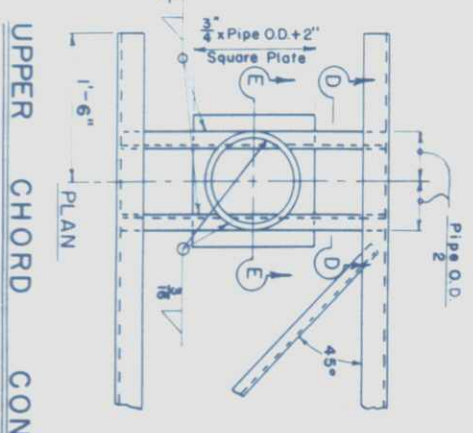
DETAIL "A"



TYPICAL CHORD SPLICE

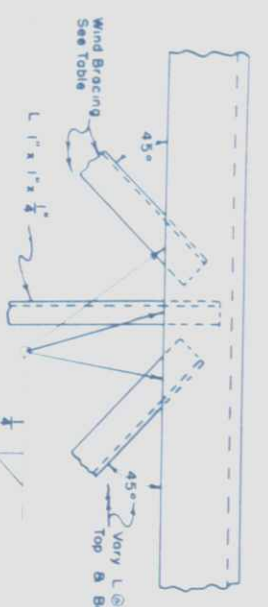


DETAIL "B"

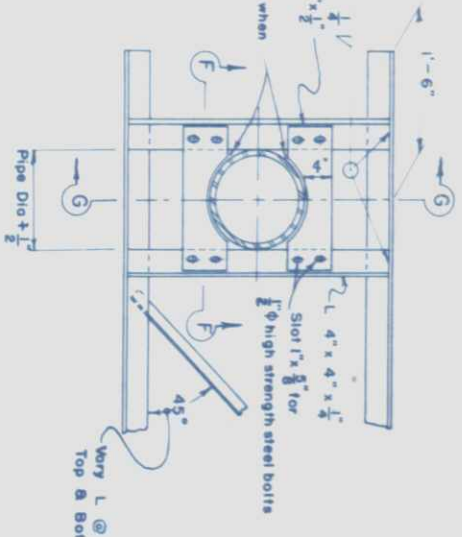


TYPICAL VIEW ASSEMBLED MEMBERS

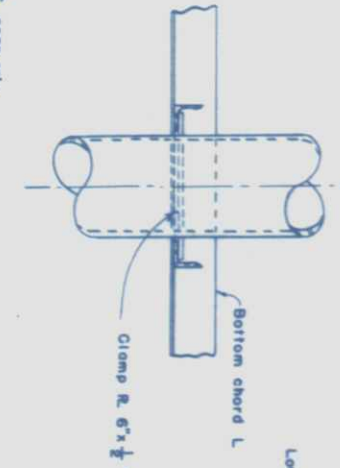
- LEGEND
- B - Wind Bracing (See Table)
 - D - Diagonal Angles
 - V - Vertical Angles
 - Z - 3" x 2" x 1/4" Ls For all sign heights
 - H - 1" x 1" x 1/4" Ls for all sign heights (Note: Does not necessarily coincide with V.)



LOWER CHORD CONNECTION TO POST



SECTION F-F



SECTION G-G

STRUCTURE NO.

COLORADO
 DEPARTMENT OF HIGHWAYS
 STANDARD SIGN BRIDGES
 MISCELLANEOUS DETAILS

Designed by
 Made by
 Checked by

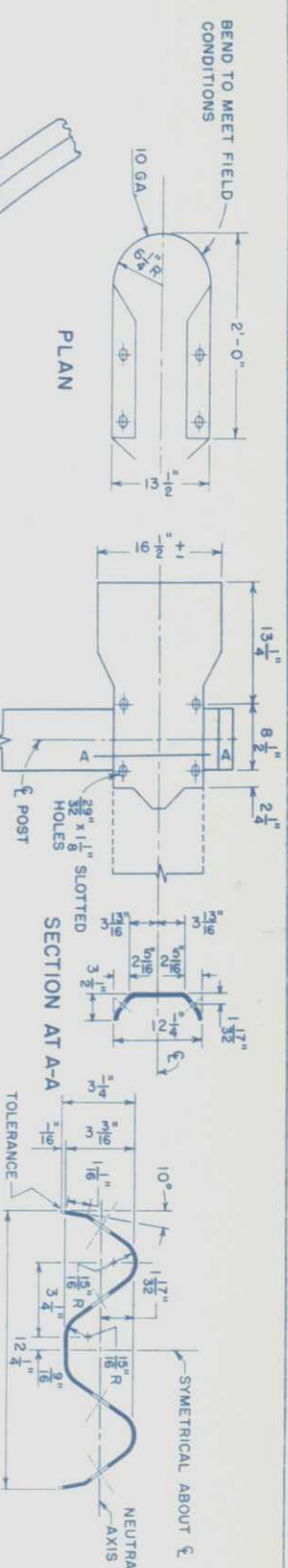
Sec. 1 R.
 Approved by
 Date: Mar 2, 1957

STANDARD S-520-A

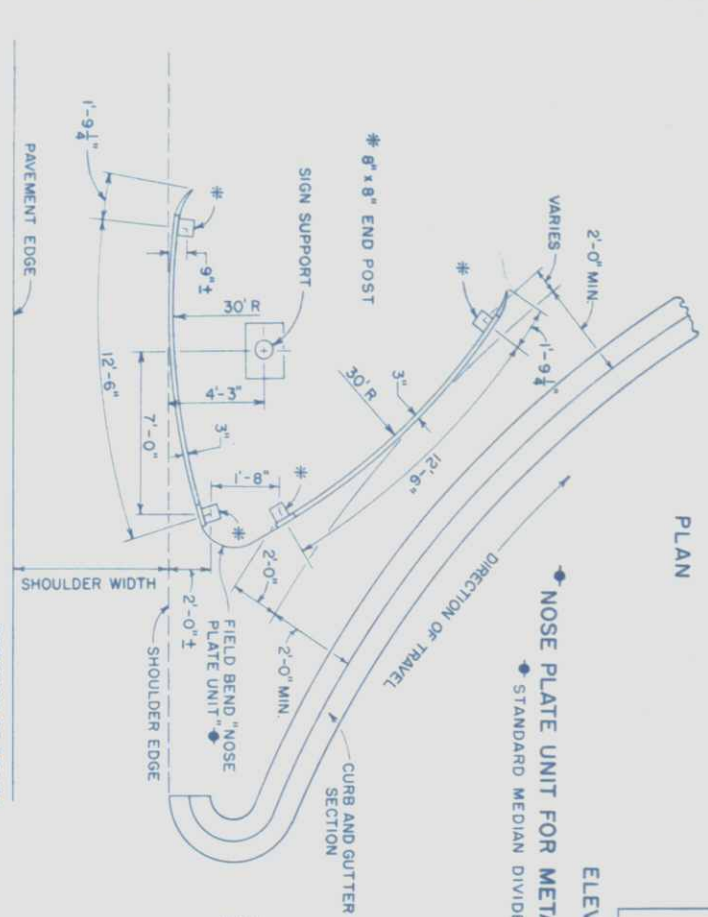
FEDERAL ROAD DISTRICT	9	9	9
DIVISION NO.	9	9	9
PROJECT NO.	9	9	9
SHEET NO.	9	9	9

REVISIONS

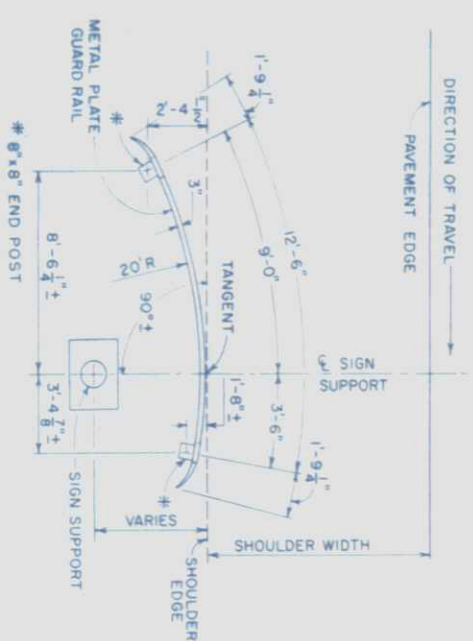
1	2	3	4



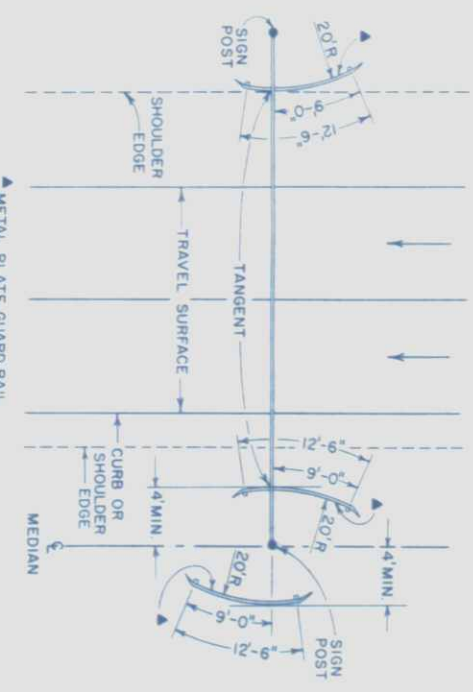
NOSE PLATE UNIT FOR METAL PLATE GUARD RAIL
STANDARD MEDIAN DIVIDER OR BARRIER END



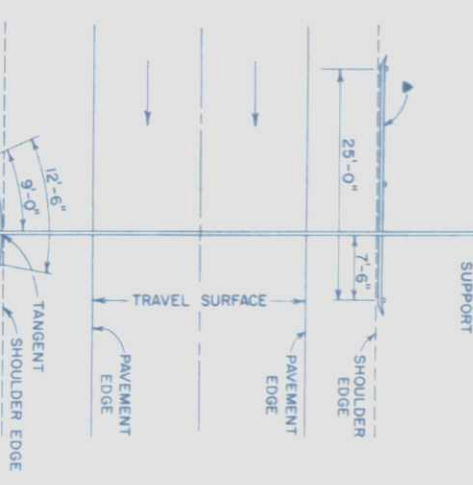
TYPE I INSTALLATION



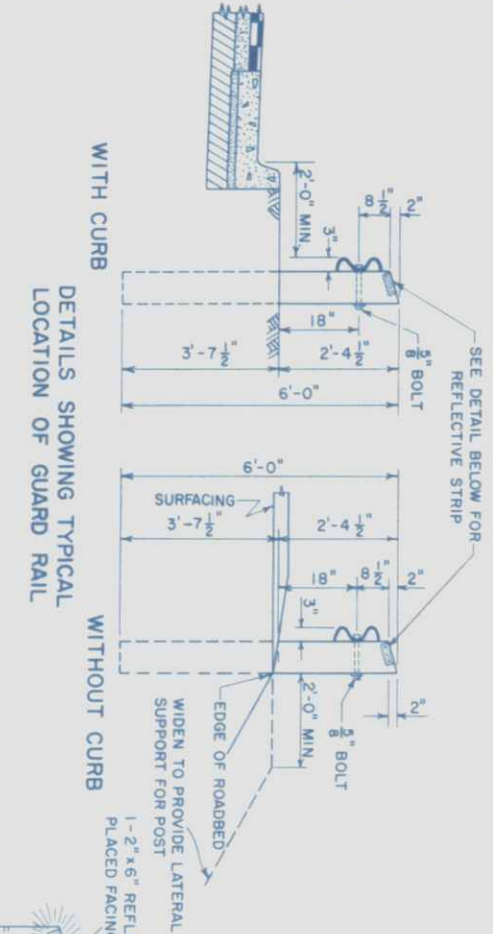
TYPE II INSTALLATION



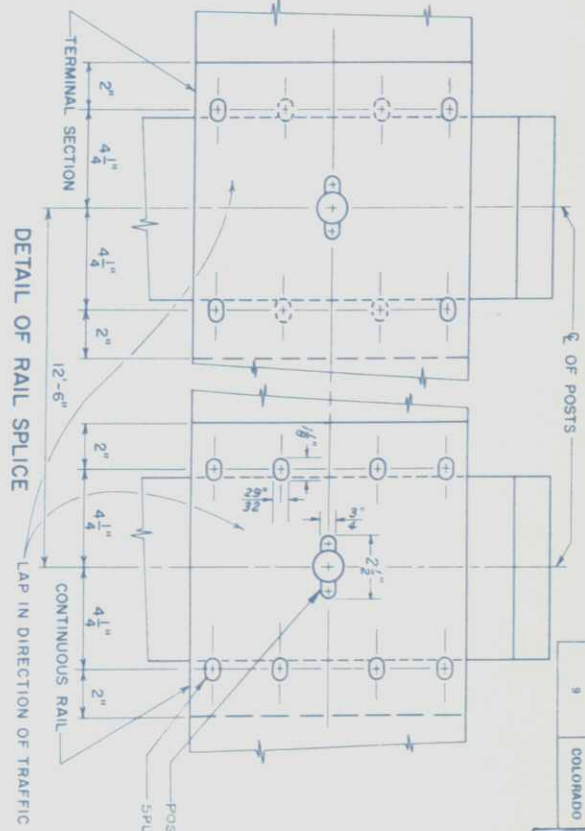
TYPE III INSTALLATION



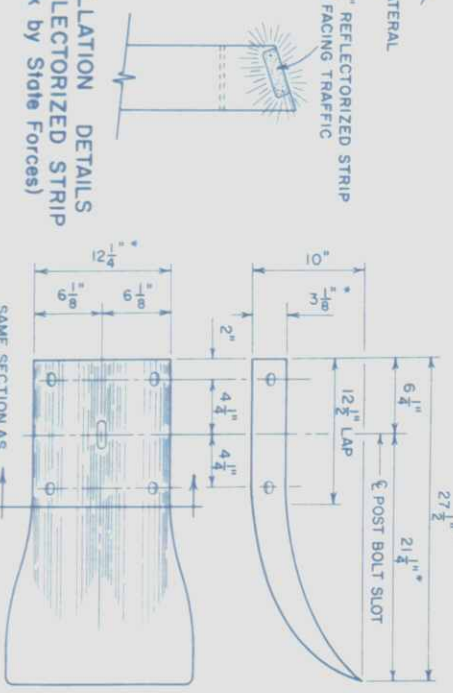
TYPE IV INSTALLATION



DETAILS SHOWING TYPICAL LOCATION OF GUARD RAIL



DETAIL OF RAIL SPLICE



INSTALLATION DETAILS OF REFLECTORIZED STRIP (Work by State Forces)

DETAIL OF TERMINAL SECTION

GENERAL NOTES

All work shall be done according to the Standard Specifications of the Colorado Department of Highways, applicable to the project. All wood posts shall be close grained Douglas Fir of the Coast Region, Dense Longleaf or Shortleaf Southern Pine or Lodgepole Pine. All wood posts shall be square edged, full sawn, with tops beveled as shown. All bolt holes are to be drilled 1/8 inch larger than the diameter of bolt before treatment is applied. All wood posts shall be pressure treated for the full length of the posts as provided for in the specifications. Timber posts fabricated from Douglas Fir or Southern Pine shall be 8" x 8" square. Timber posts fabricated from Lodgepole Pine shall be 8" x 10" and shall be installed with the "b" face parallel to the centerline of the roadway or as directed by the Engineer. All wood posts shall be set and tamped in plumb and firm to the lines and grades as directed by the Engineer.

METAL PLATE GUARD FENCE (STEEL) SPECIFICATIONS

Metal plate guard rail shall be painted in accordance with standard specifications.

Metal plate guard rail galvanized in accordance with Table I of ASTM A-93 may be furnished in lieu of painting requirements.

Metal plates shall not be lighter than No. 12 U.S. standard gauge.

Standard galvanized wrought steel washers shall be used under all bolt heads and nuts coming in contact with wood posts.

METAL PLATE GUARD FENCE (ALUMINUM) SPECIFICATIONS

Aluminum plates shall have a nominal thickness of not less than 0.125 inches.

No painting of the aluminum guard rail elements, end sections or fasteners will be required.

MATERIAL SPECIFICATIONS: The following members shall be of the alloy and temper specified, and shall conform to the ASTM specification listed below.

Member	Alloy	ASTM Specification
Rail Elements		
Terminal sections	2024-T3	B 209
Bolts	2024-T42	B 209
Nuts	2024-T4	B 211
Washers	6061-T6	B 211
	2024-T4	B 211

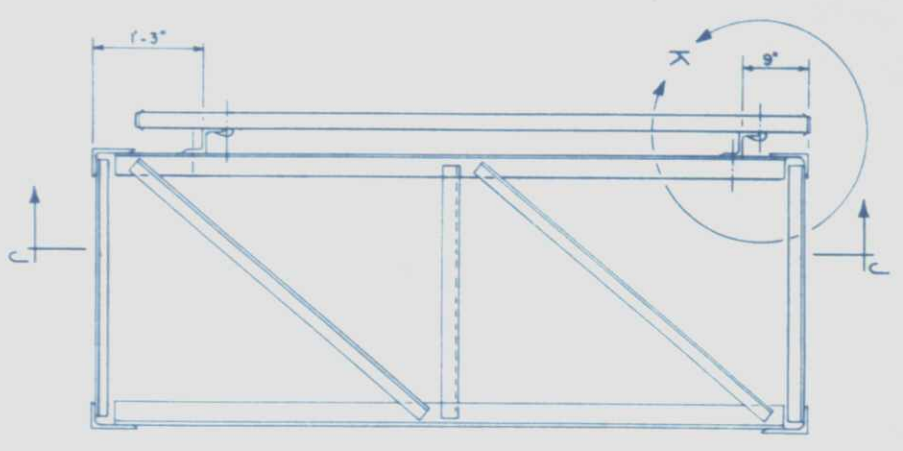
Dimensions marked by (x) may vary by no more than 1/2 inch

COLORADO
DEPARTMENT OF HIGHWAYS
STANDARD
GUARD RAIL PROTECTION FOR
OVERHEAD SIGN SUPPORTS

Designed by V.H.
Made by T.E.F.
Checked by E.E.O.
Approved by [Signature]
Date 7-5-58

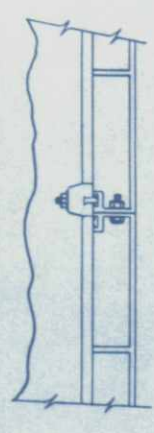
ATTACHMENT DETAILS FOR OVERHEAD SIGN PANELS

EXTRUDED ALUMINUM SIGN PANELS

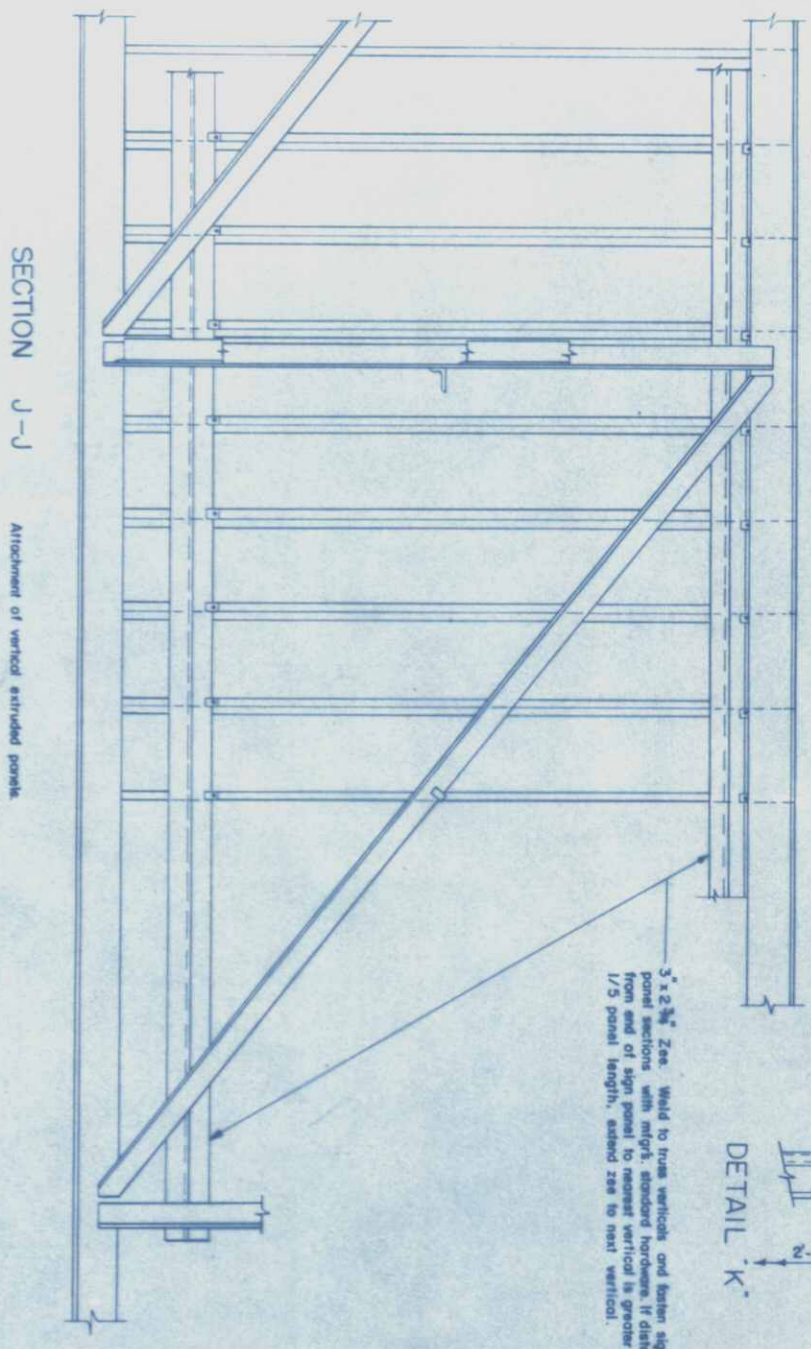


Note: Sign panel to be built from extruded sections. Use clips, fasteners and other accessories as furnished by manufacturer.

Panels to be 6063-T6 aluminum alloy and the minimum section modulus shall be 0.600 in³ for 12" panels.

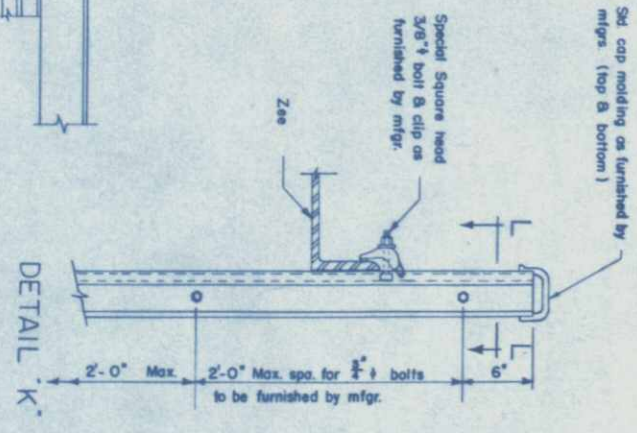


SECTION L-L



SECTION J-J

Attachment of vertical extruded panels



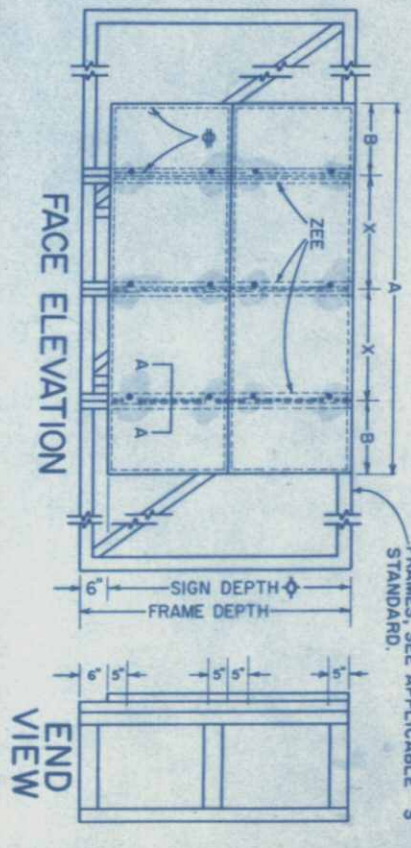
3" x 2 1/2" Zee. Weld to true verticals and bottom edge panel sections with mfg's standard hardware. If distance from end of sign panel to nearest vertical is greater than 1/3 panel length, extend zee to next vertical.

Std. cap molding as furnished by mfgs. (top & bottom)

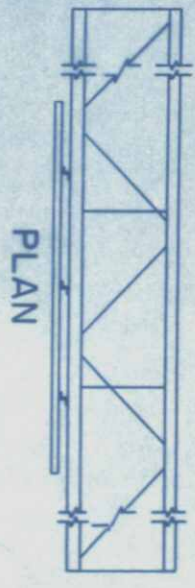
Special square head 3/8" bolt & clip as furnished by mfg.

Note: Detail "K" is to be used when sign panels are made from extruded aluminum sections.

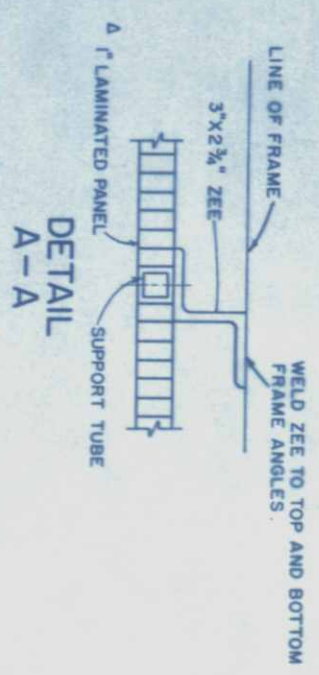
LAMINATED ALUMINUM SIGN PANELS



FOR DETAILS OF OVERHEAD SIGN FRAMES, SEE APPLICABLE STANDARDS.



PLAN



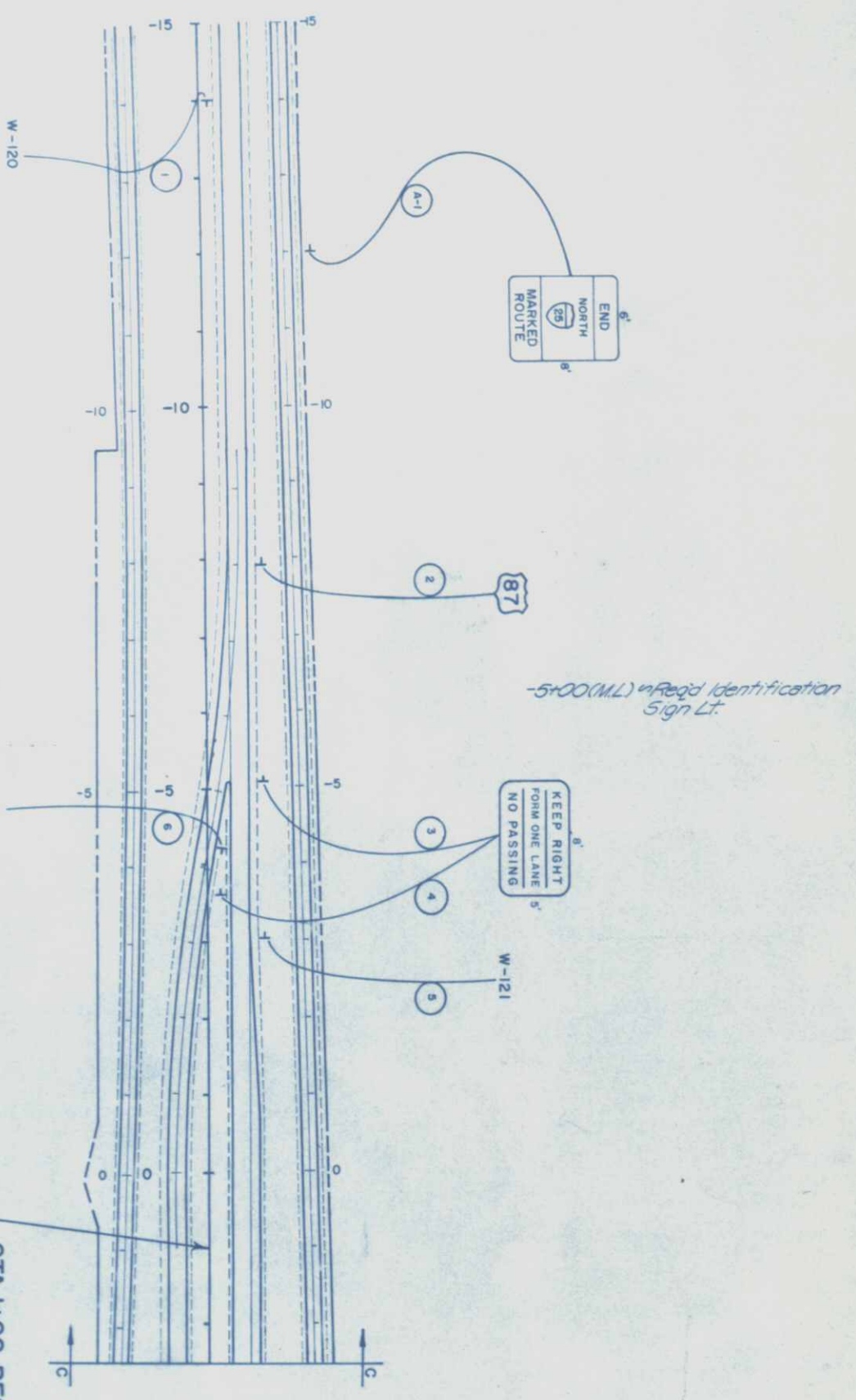
DETAIL A-A

LENGTH OF SIGN	OVERHANG	EXTRA TUBE
A	B	X
14'-0"	2'-6"	4'-6"
16'-0"	3'-3"	4'-9"

◆ SEE TABULATION OF OVERHEAD SIGNS
 ◆ DOTTED LINES INDICATE CHANNEL FRAME AND I" SQUARE TUBES LAMINATED INTO PANELS.
 ▲ FOR DETAILS OF LAMINATED PANEL, SEE SHEET NO. 32

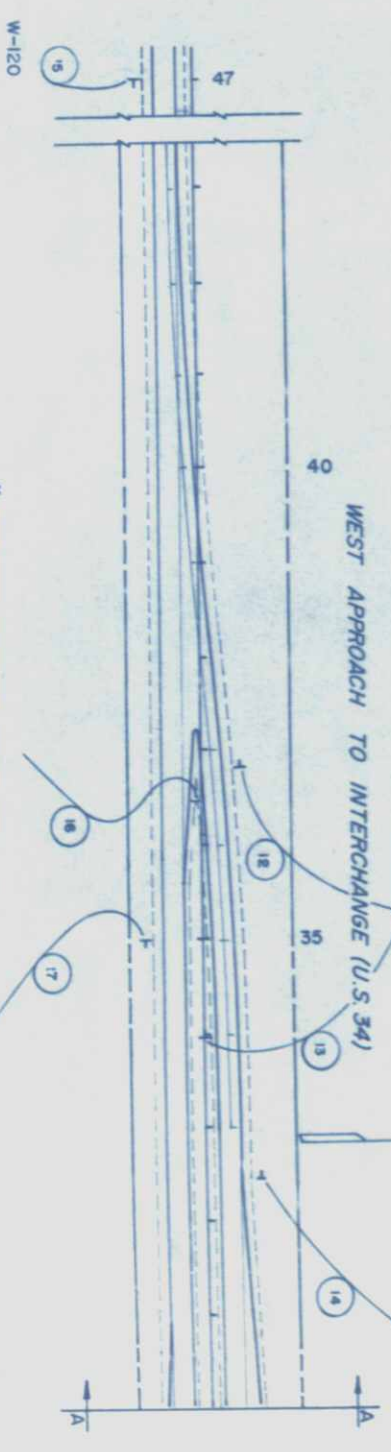
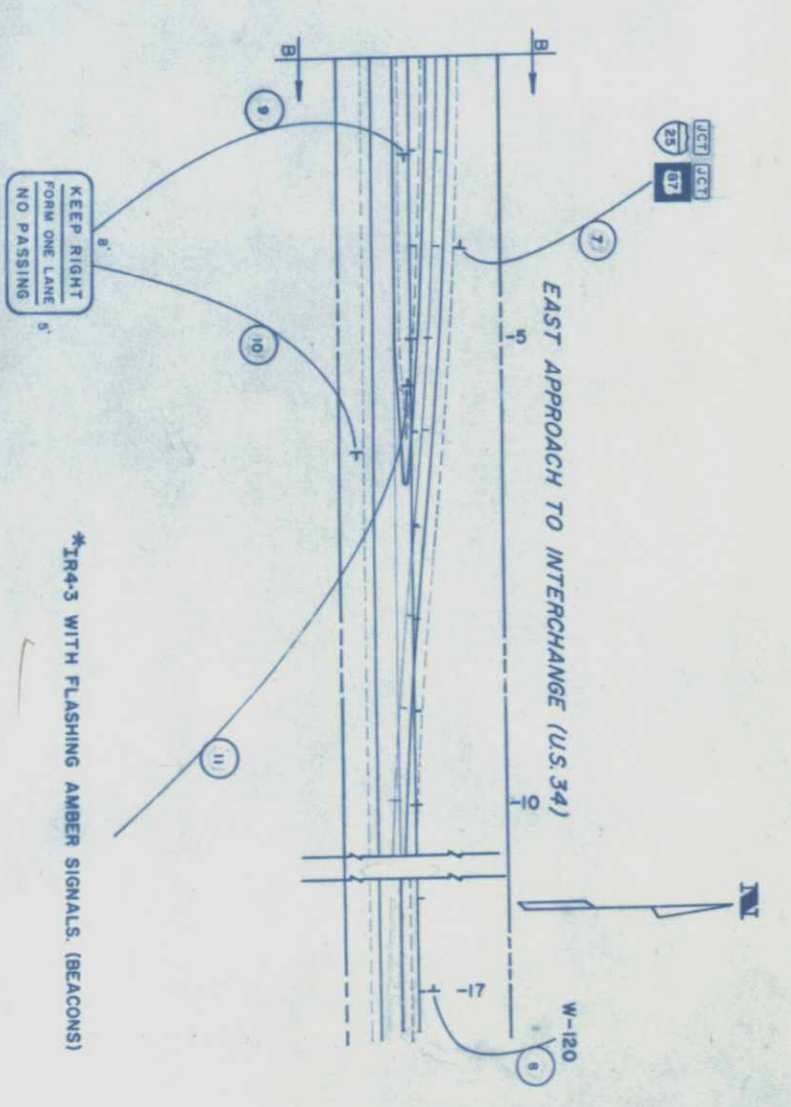
FED. MOLD	REVISED	PROJ. NO.	SHEET	TOTAL
REV. NO.	NO.		NO.	SHEETS
9		COLO. I 25-3(28)251	44	

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	I-25-3(28)251	50	



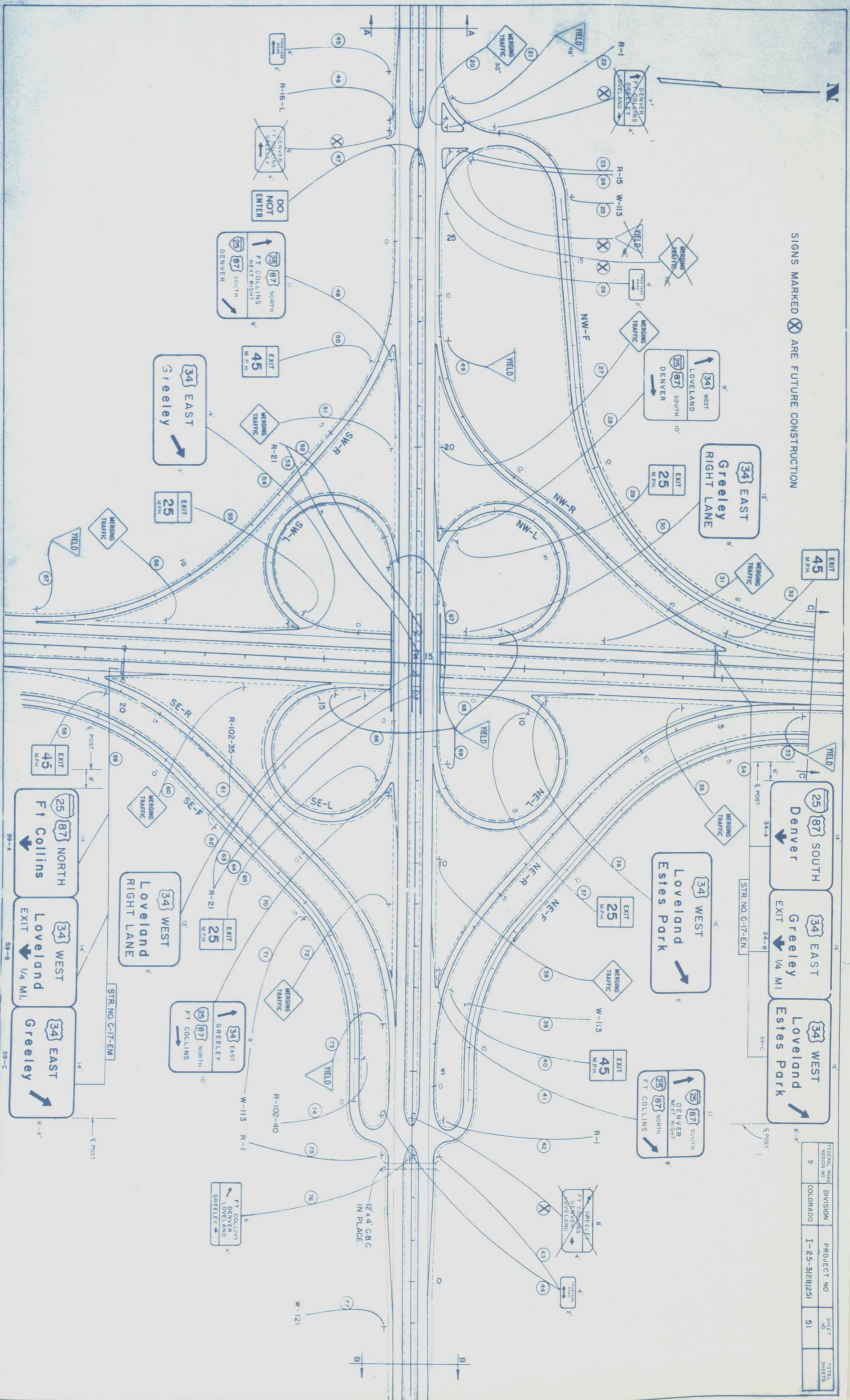
*IR4-3 WITH FLASHING AMBER SIGNALS. (BEACONS)
 *(SEE SHEET NO.42 FOR DETAILS OF FLASHING AMBER UNIT)

STA. 1+00 BEGIN I-25-3(28)251
 BEGIN I-25-3(27)251



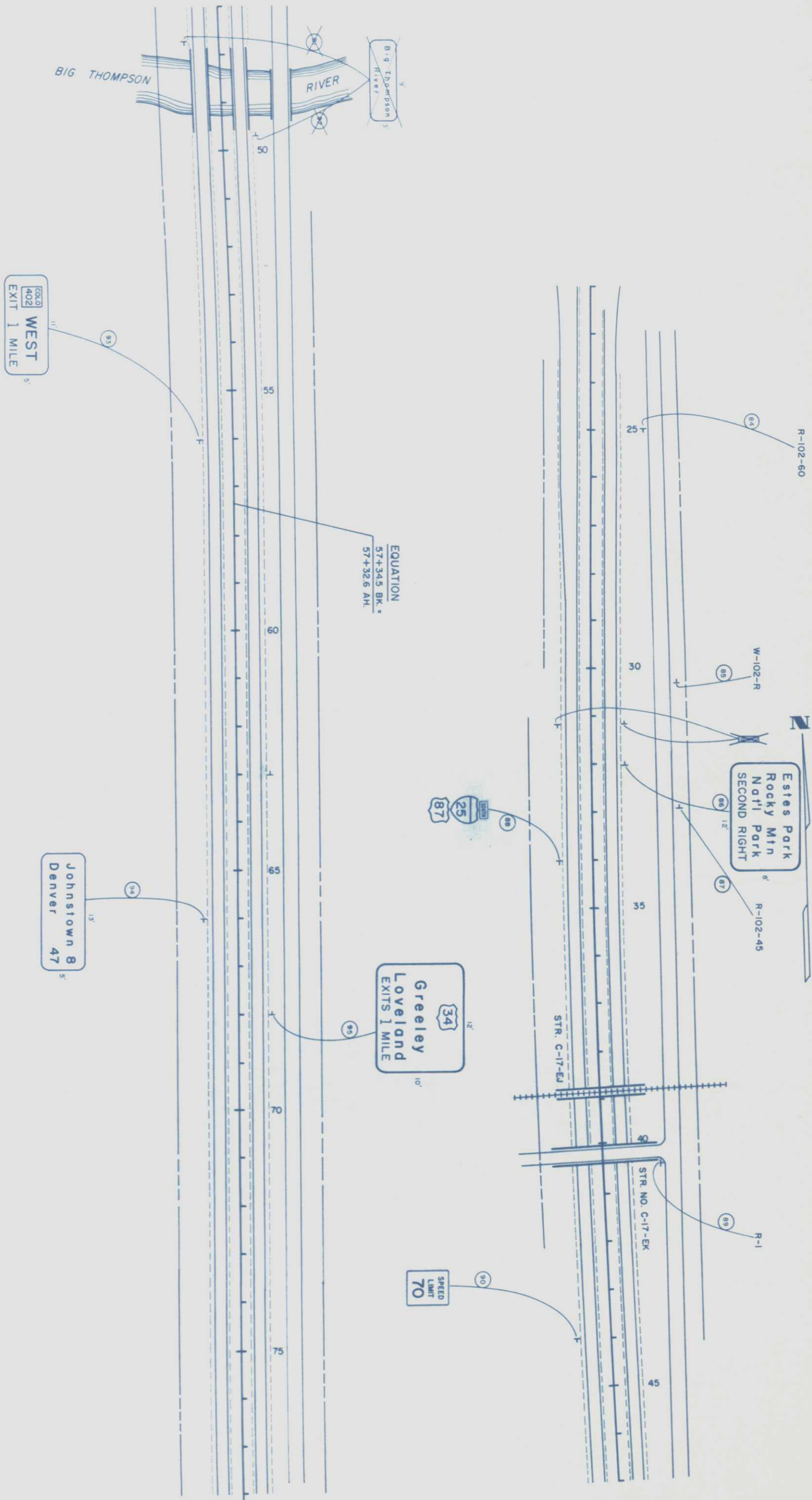


SIGNS MARKED X ARE FUTURE CONSTRUCTION



FEDERAL ROAD RECORD NO. 9	DIVISION COLORADO	PROJECT NO. I-25-31281251	SHEET NO. 51	TOTAL SHEETS
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FEDERAL ROAD DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	I 25-3(28)261	52	



EQUATION
 57+34.5 BK. =
 57+32.6 AH.

WEST
 EXIT 1 MILE

Johnstown 8
 Denver 47

Greeley
 Loveland
 EXITS 1 MILE

SPEED
 LIMIT
 70

N

N

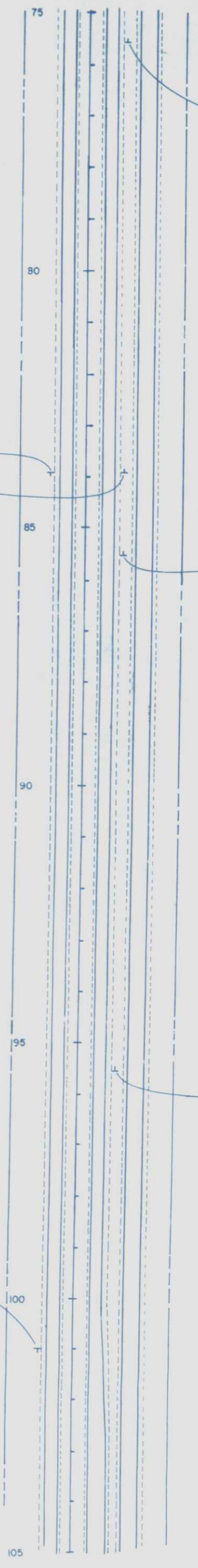
FEDERAL ROAD REGION NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	I-25-3(28)251	53	

16'
~~Windsor 11~~
~~Casper Wyo 229~~
 5'

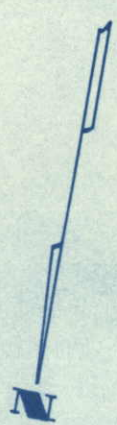
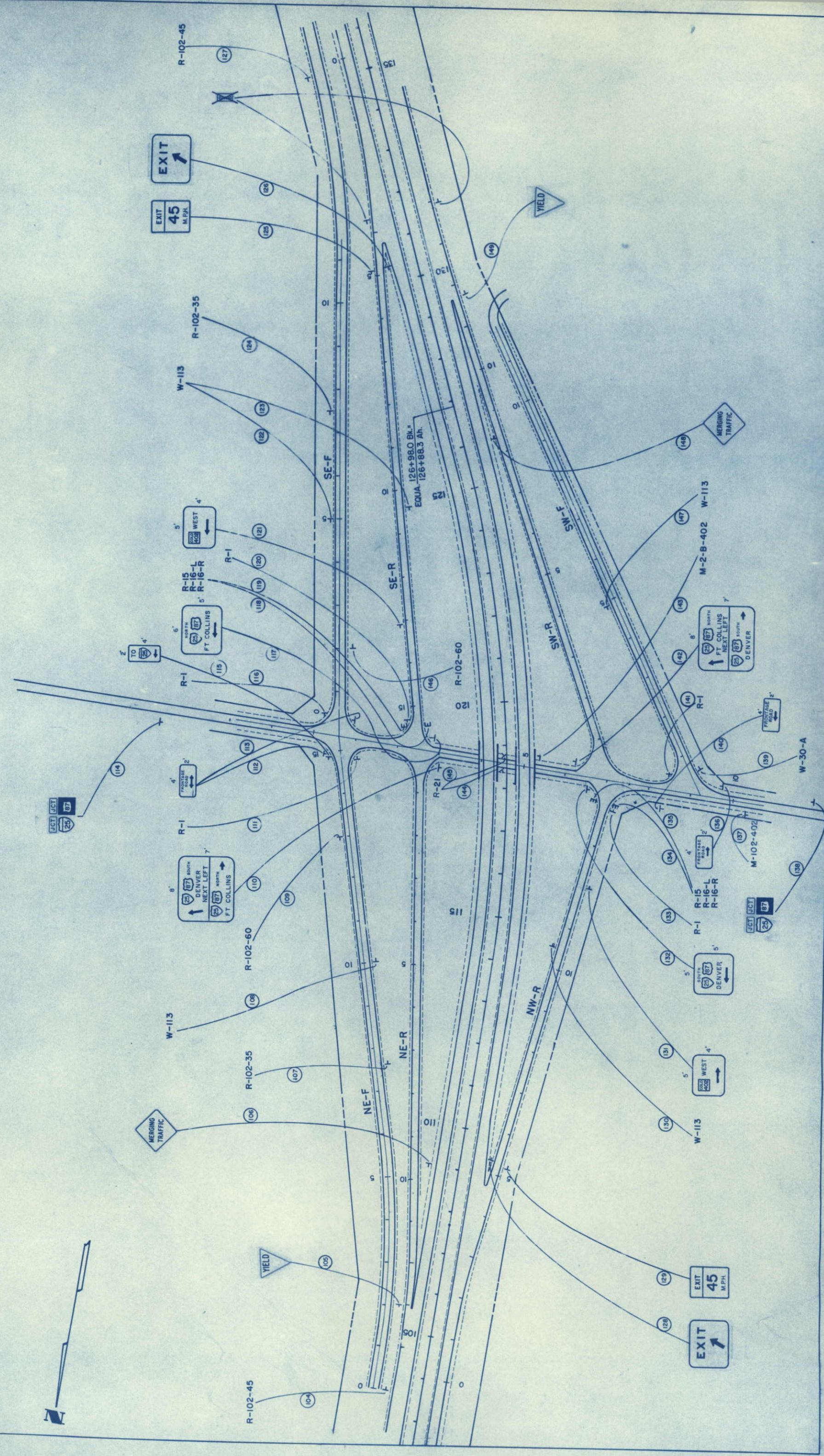
SPEED
LIMIT
70

25
87
98

12'
 GOLD WEST
 402
 RIGHT LANE
 6'



FEDERAL ROAD DISTRICT NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	I-25-3(28)25I	54	54



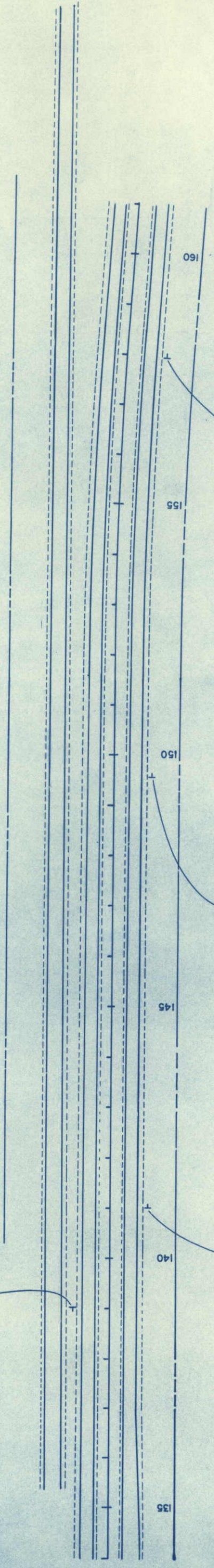
FEDERAL ROAD REGION NO.	DIVISION	PROJECT NO	SHEET NO.	TOTAL SHEETS
9	COLORADO	I-25-3(28)25I	55	

12' WEST
COLO 402
 RIGHT LANE

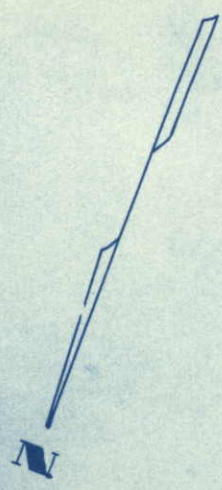
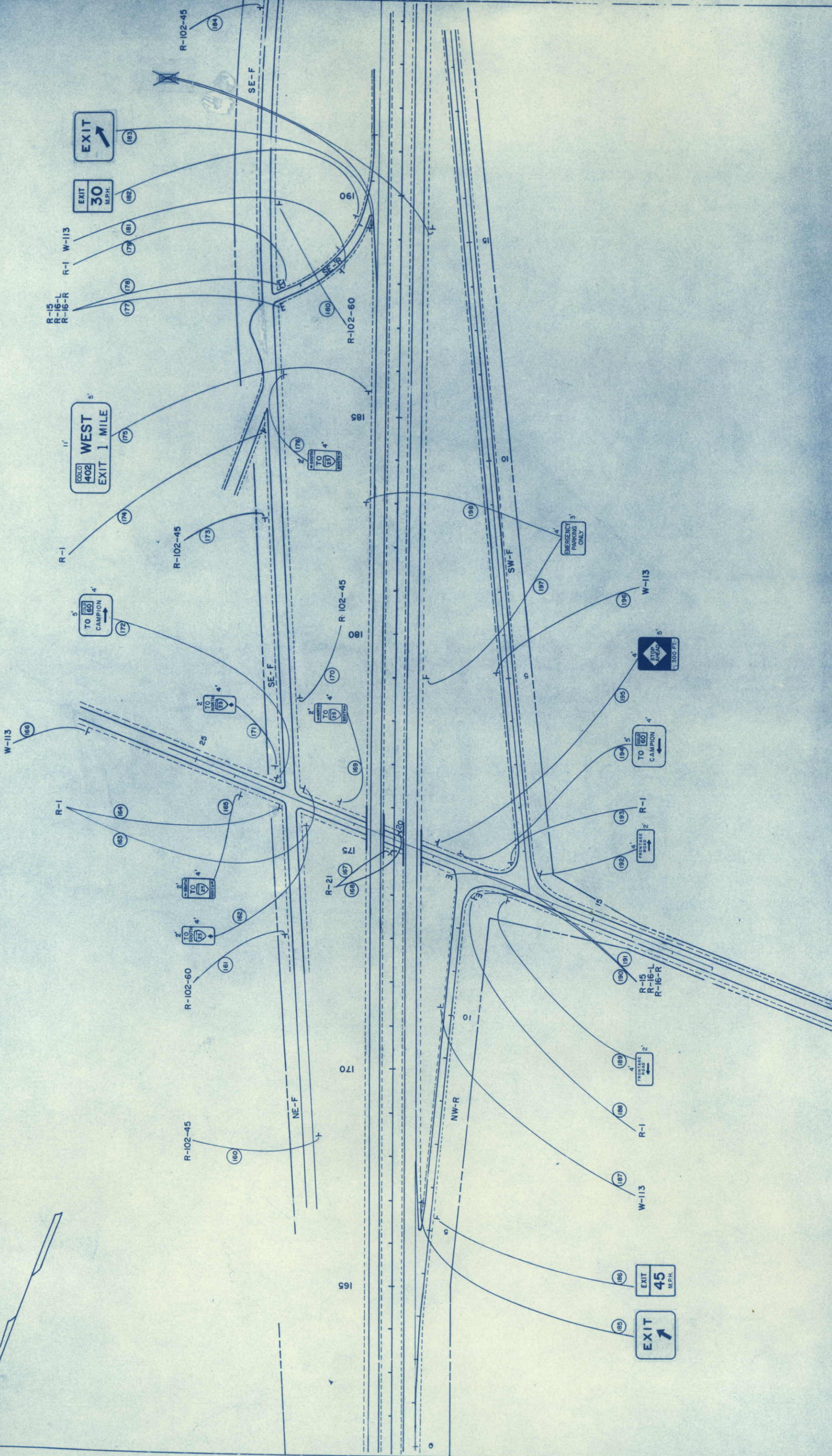
12' WEST
COLO 60
 Campion
 EXIT 1/2 MILE

10' GAS - FOOD
 LODGING
 NEXT RIGHT

12' WEST
COLO 60
 Campion
 RIGHT LANE



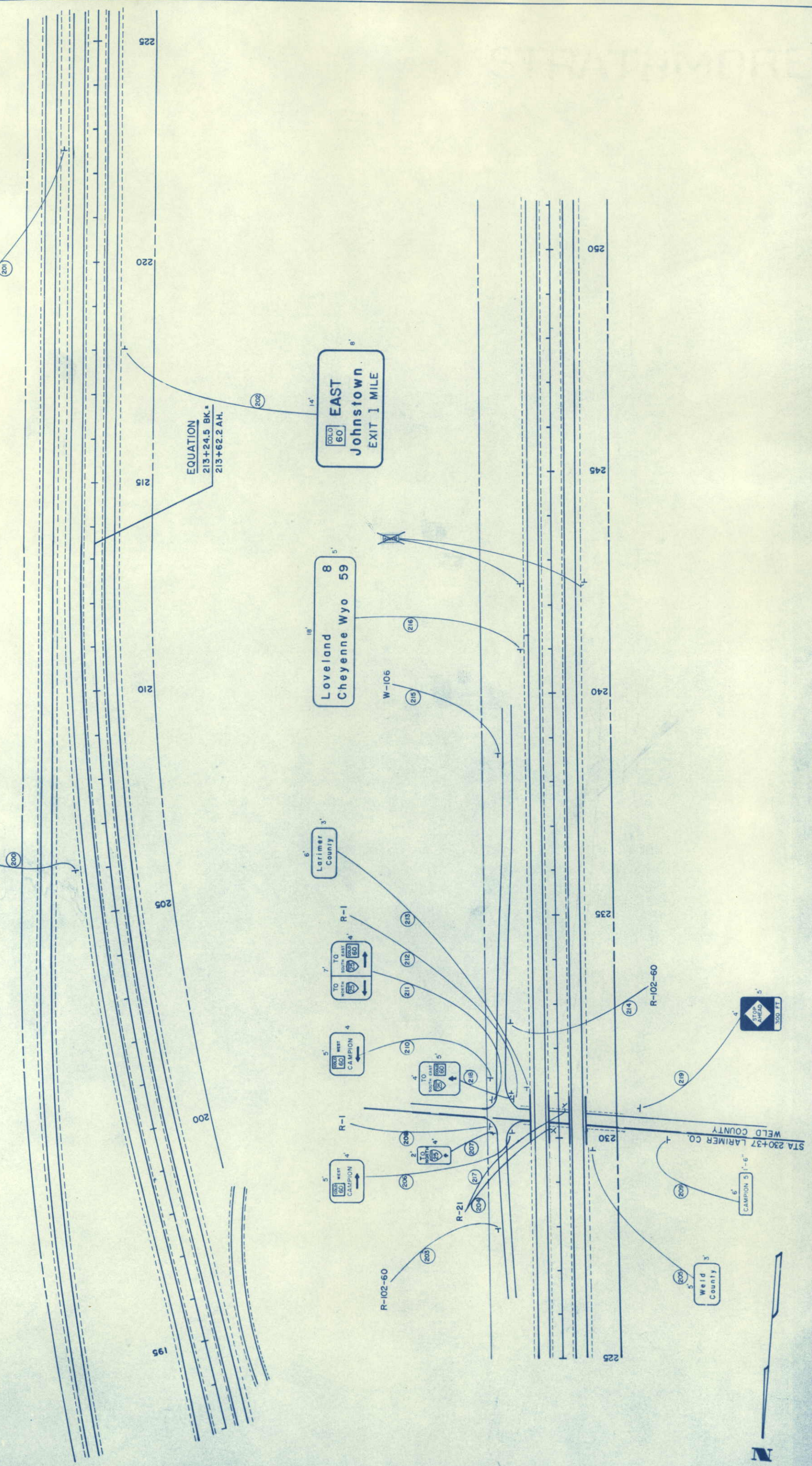
FEDERAL ROAD DISTRICT NO.	9
DIVISION	COLORADO
PROJECT NO.	I-25-3(28)25I
SHEET NO.	56
TOTAL SHEETS	



FEDERAL ROAD REGION NO.	DIVISION	PROJECT NO	SHEET NO.	TOTAL SHEETS
9	COLORADO	1-25-3(28)251	57	57

W-106

10'
GAS - FOOD
LODGING
RIGHT LANE



EQUATION
213+24.5 BK.
213+62.2 AH.

6'
EAST
Johnston
EXIT 1 MILE

18'
Loveland
Cheyenne Wyo 59

9'
Larimer
County

WELD COUNTY
LARIMER CO.
STA 230+37

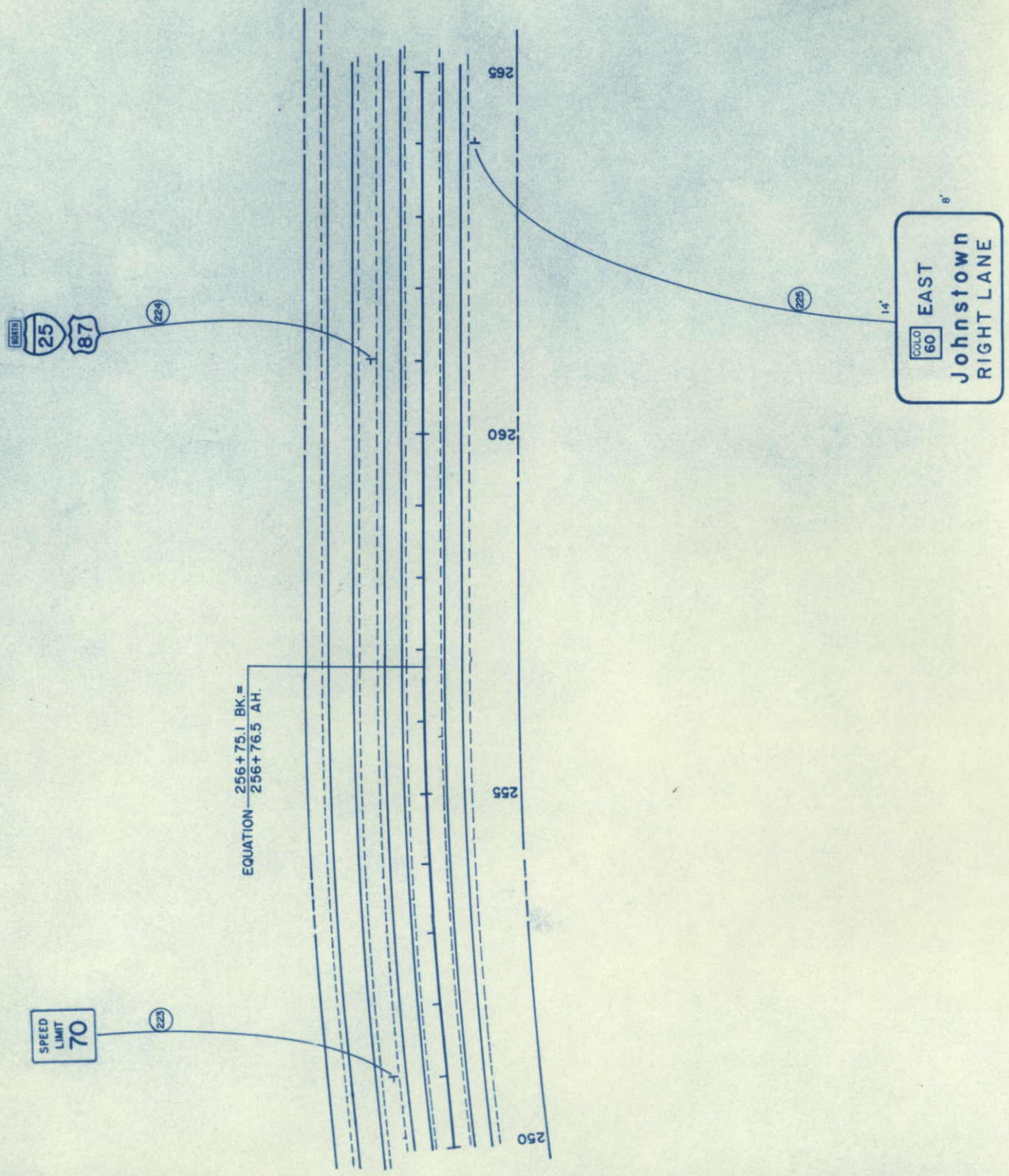
5'
Weld
County

6'
CAMPION

5'
STOP
AHEAD
300 FT



FEDERAL ROAD REGION NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	1-25-3(28)251	58	



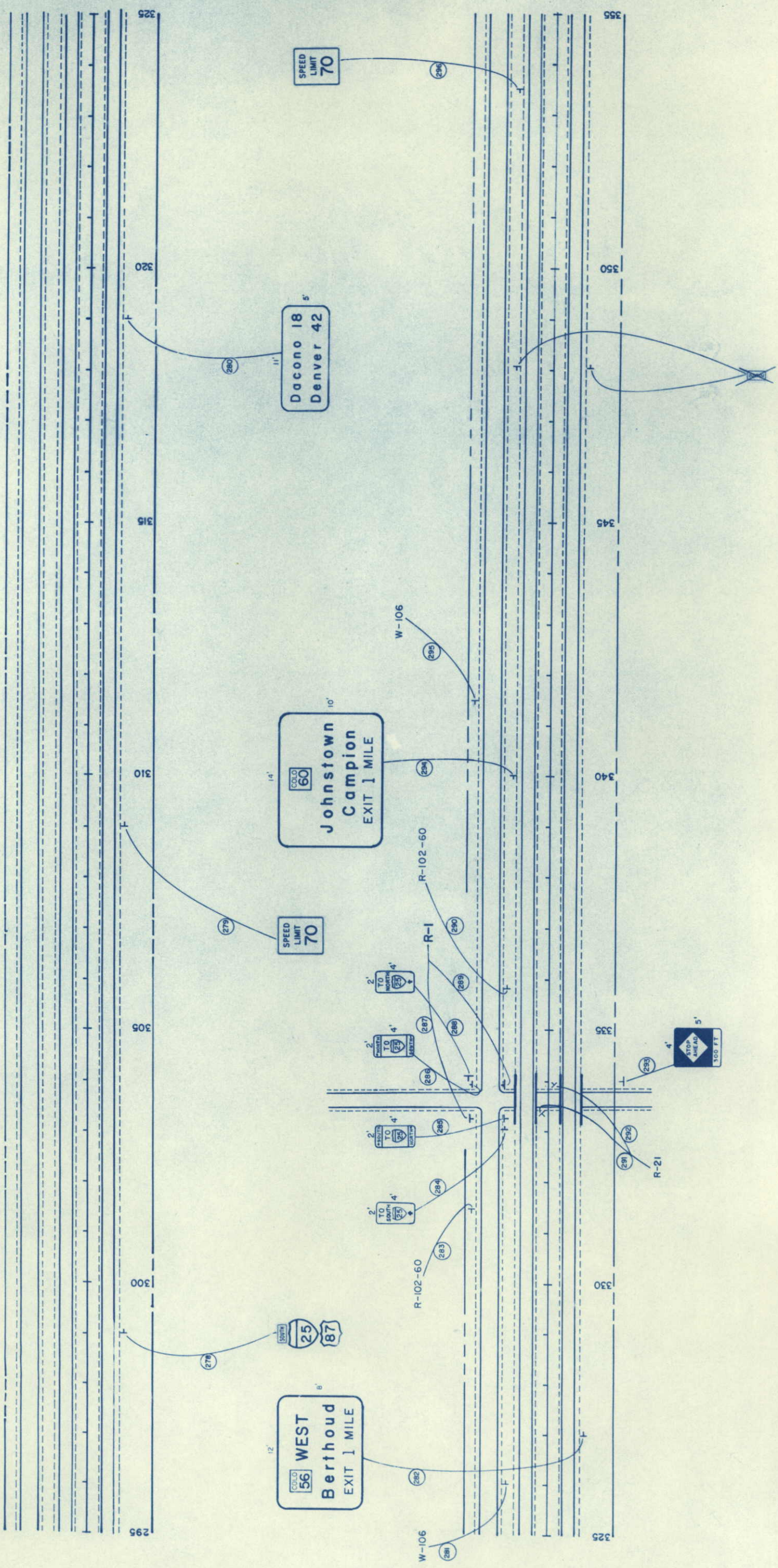
EQUATION - 256+75.1 BK =
256+76.5 AH.

SPEED LIMIT 70

25 87

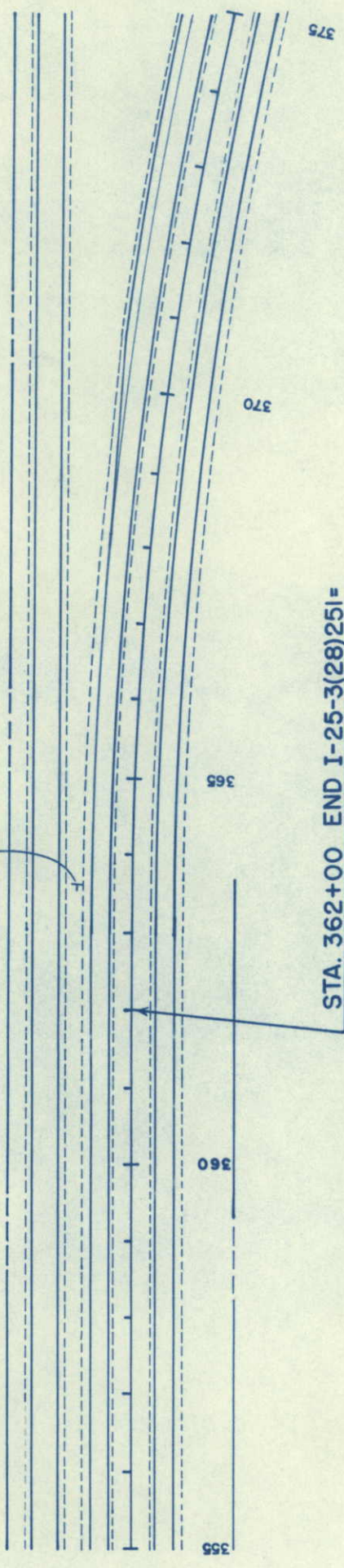
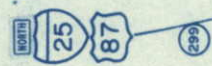
EAST Johnston RIGHT LANE

FEDERAL ROAD REGION NO.	9	DIVISION	COLORADO	PROJECT NO	1-25-3(28)251	SHEET NO.	60	TOTAL SHEETS	60
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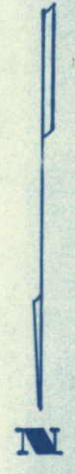


FEDERAL ROAD REGION NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	I-25-3(28)251	61	

362+00' Req'd Identification Sign Lt.

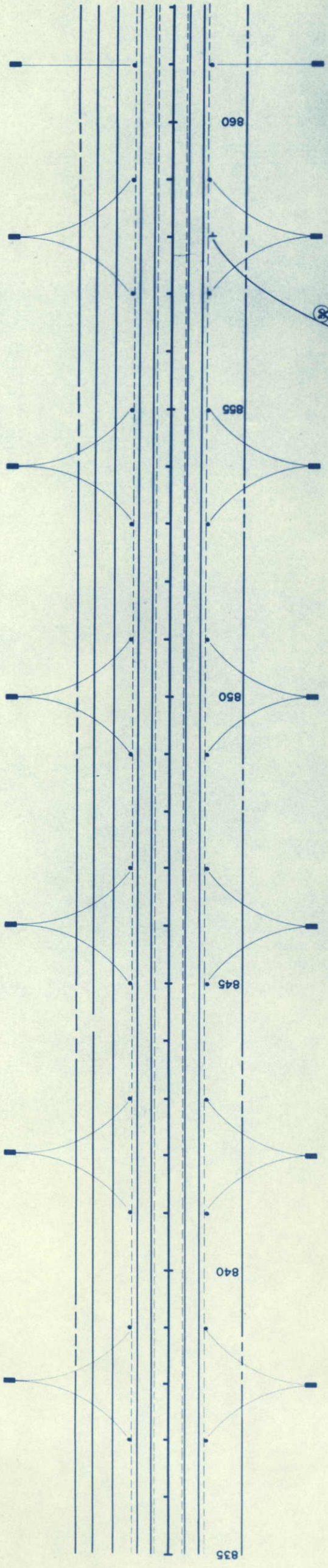


STA. 362+00 END I-25-3(28)251 =
END I-25-3(27)251





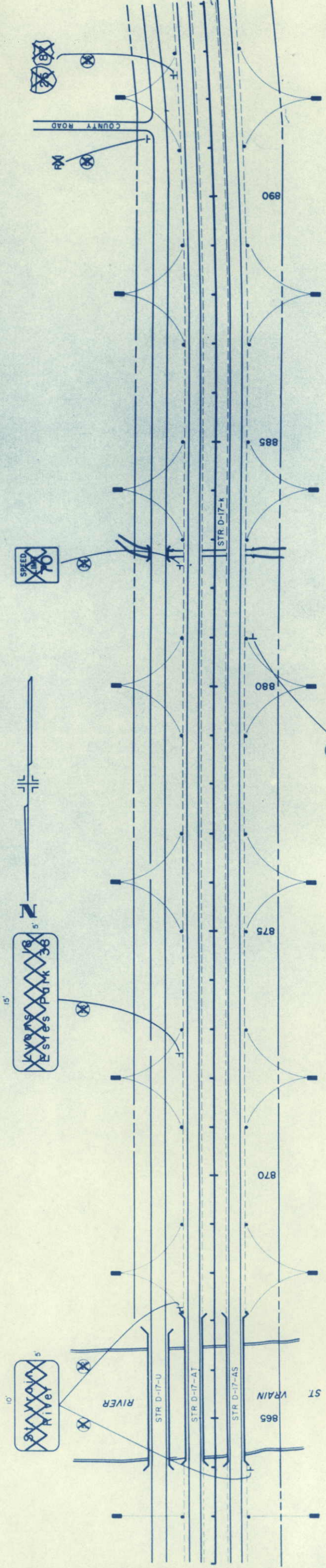
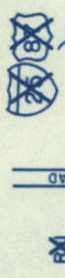
FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	I 25-3(28) 251	62	62



SIGNS CROSSED OUT ARE IN PLACE.

NOTE:

ALL DELINEATORS SHOWN ARE TO BE PLACED UNDER FUTURE CONSTRUCTION. FOR LEGEND SEE TITLE SHEET.

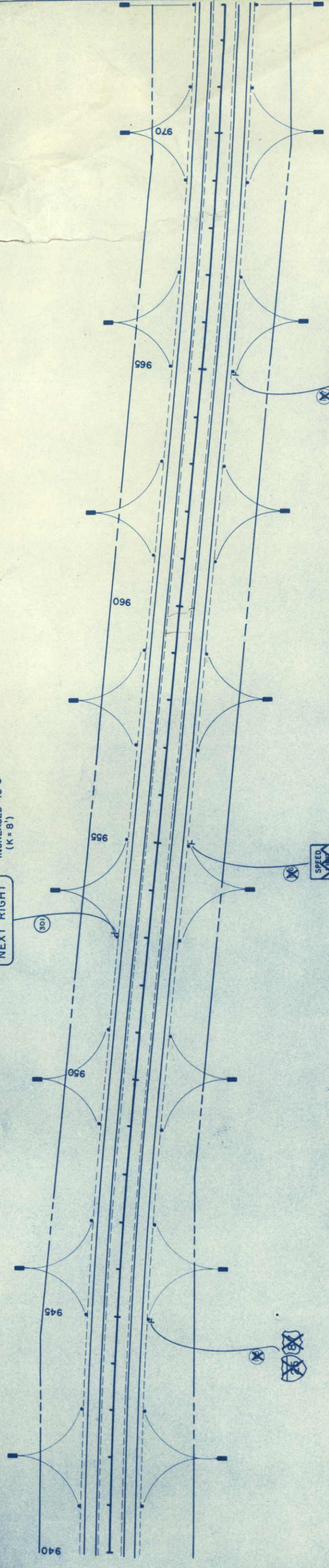


MOUNTING HEIGHT IS INCREASED TO 8' (K=8')

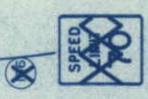
FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLORADO	1 25-3 (28) 251	64	



10' GAS - FOOD NEXT RIGHT
 4' MOUNTING HEIGHT IS INCREASED TO 8' (K = 8')



NOTE:
 ALL DELINEATORS SHOWN ARE TO BE PLACED UNDER FUTURE CONSTRUCTION. FOR LEGEND SEE TITLE SHEET.



SIGNS CROSSED OUT ARE IN PLACE

