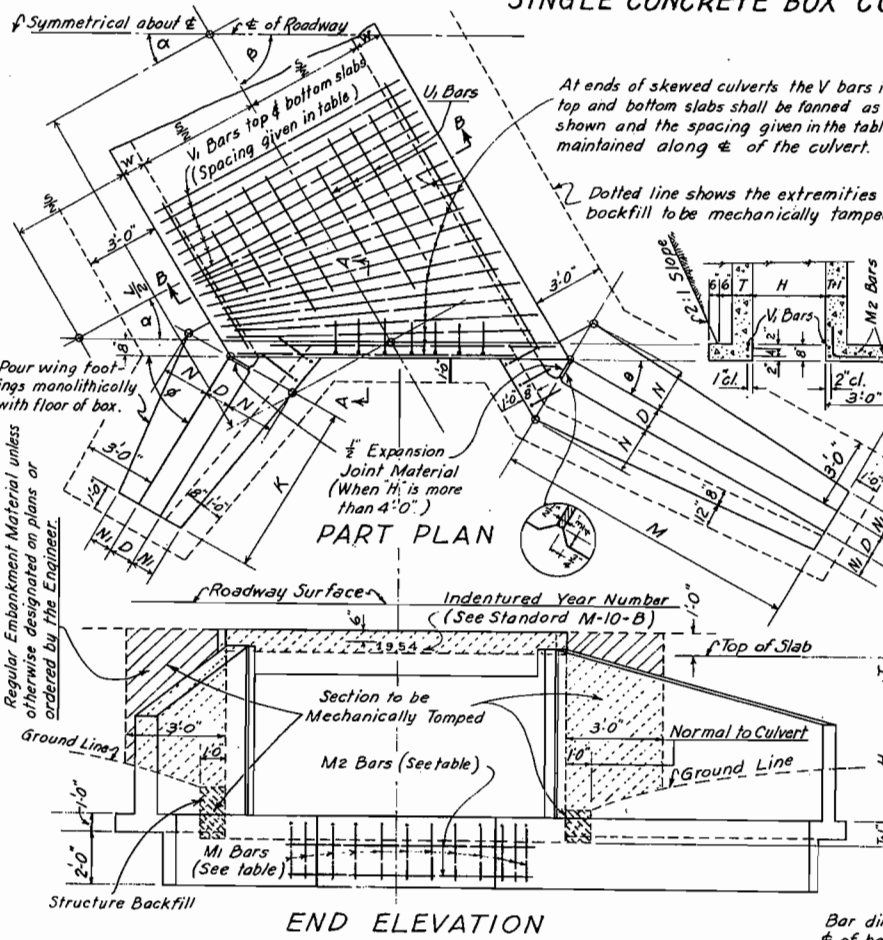


Dimensions & Quantities (see Standard M-50-AW for Wings)

Height of Fill Allowed	Type	Span S	Height H	Slab Wall T	Bar Size & Spacing		No. Bars Required	Quantities for One Lin. Ft. of Box		Quantities for Two Headwalls	
					V ₁ Size Spa.	V ₂ Size Spa.		Concrete Cu. Yds.	Steel Lbs.	Concrete Cu. Yds.	Steel Lbs.
35'-0"	2A	2'-0"	2'-0"	6"	8"	3/4"	12	0.232	17.5	1.30	81
30'-0"	3A	3'-0"	3'-0"	7"	8"	3/4"	12	0.299	26.3	1.90	112
20'-0"	4A	4'-0"	4'-0"	7 1/2"	8"	3/4"	12	0.362	31.8	2.30	150
16'-0"	5A	5'-0"	5'-0"	8"	8"	3/4"	12	0.461	37.3	2.10	153
20'-0"	5B	5'-0"	4'-0"	8 1/2"	8"	3/4"	12	0.481	45.3	2.20	157
14'-0"	6A	6'-0"	6'-0"	8 1/2"	8"	3/4"	12	0.654	58.1	2.85	184
20'-0"	6B	6'-0"	5'-0"	10"	8"	3/4"	12	0.753	64.9	3.30	192
12'-0"	7A	7'-0"	7'-0"	9"	9"	3/4"	12	0.776	71.9	3.25	212
15'-0"	7B	7'-0"	6'-0"	10"	9"	3/4"	12	0.887	81.0	3.05	227
20'-0"	7C	7'-0"	5'-0"	11"	9"	3/4"	12	0.887	91.1	3.10	257
10'-0"	8A	8'-0"	8'-0"	9 1/2"	10"	3/4"	12	0.937	101.0	3.50	268
16'-0"	8B	8'-0"	7'-0"	11 1/2"	10"	3/4"	12	1.025	105.9	3.70	297
20'-0"	8C	8'-0"	6'-0"	12 1/2"	10"	3/4"	12	1.146	126.5	3.95	304
7'-0"	9A	9'-0"	10'-0"	11"	11"	3/4"	12	1.174	131.9	4.10	327
14'-0"	9B	9'-0"	9'-0"	12"	11"	3/4"	12	1.244	146.1	4.50	342
20'-0"	9C	9'-0"	8'-0"	14"	11"	3/4"	12	1.377	156.9	4.40	408
5'-0"	10A	10'-0"	10'-0"	12 1/2"	12"	3/4"	12	1.444	163.4	4.70	416
10'-0"	10B	10'-0"	9'-0"	12"	12"	3/4"	12	1.518	178.6	5.00	423
16'-0"	10C	10'-0"	8'-0"	14"	12"	3/4"	12	1.665	190.3	6.05	449
5'-0"	11A	11'-0"	11'-0"	12"	12"	3/4"	12	1.593	156.6	5.10	456
9'-0"	11B	11'-0"	10'-0"	12 1/2"	12"	3/4"	12	1.741	162.5	5.40	464
13'-0"	11C	11'-0"	9'-0"	14"	12"	3/4"	12	1.830	170.7	5.70	467
5'-0"	12A	12'-0"	12'-0"	12"	12"	3/4"	12	1.904	181.8	6.45	478
10'-0"	12B	12'-0"	10'-0"	14"	12"	3/4"	12	2.009	203.3	6.65	522
4'-0"	13A	13'-0"	13'-0"	12 1/2"	12"	3/4"	12	2.043	190.7	6.95	528
8'-0"	13B	13'-0"	11'-0"	14"	12"	3/4"	12	2.123	209.4	6.70	543
4'-0"	14A	14'-0"	14'-0"	13 1/2"	12"	3/4"	12	2.198	214.4	7.05	549
8'-0"	14B	14'-0"	12'-0"	15"	12"	3/4"	12	2.270	219.4	7.40	595



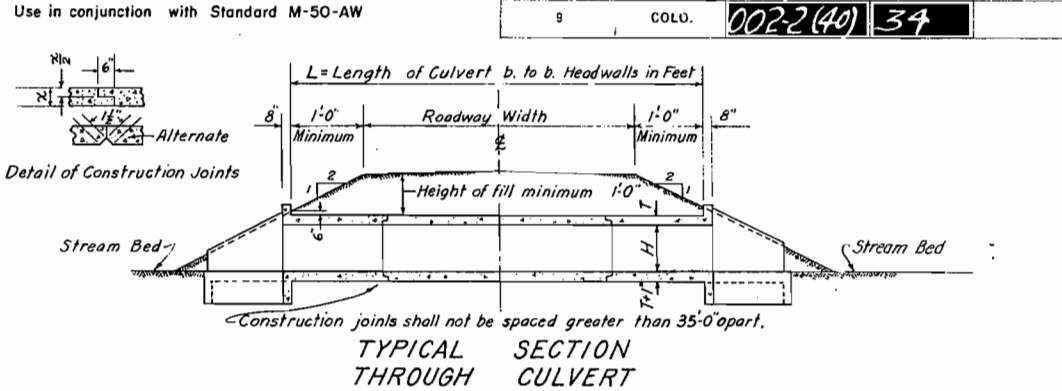
Bar List for Culvert & Headwalls (See Standard M-50-AW for Wings)

Mark	Size	No. Req'd.	Type	Length
V ₁	See table	10 + 24L/Spa.	I	S + 2W - 6
W ₁	See table	6 + 24L/Spa.	I	H + 2T - 5
U ₁	1/2"	See table	I	L + 1'0"
M ₁	1/2"	See table	II	3' - 6"
M ₂	1/2"	4	I	S + 2W - 6 / Cos α

Possible Combinations (Span & Height)

Span	Height
2' x 2'	5' x 5'
3' x 2'	7' x 4'
4' x 2'	6' x 5'
3' x 3'	8' x 4'
4' x 3'	7' x 5'
5' x 3'	6' x 6'
4' x 4'	8' x 5'
5' x 4'	6' x 7'
6' x 4'	7' x 6'
9' x 5'	10' x 7'
10' x 7'	11' x 8'
11' x 8'	11' x 10'
12' x 8'	13' x 9'
13' x 9'	12' x 10'
14' x 9'	14' x 9'
13' x 10'	13' x 10'
14' x 10'	14' x 10'
12' x 9'	12' x 9'

STANDARD M-50-A



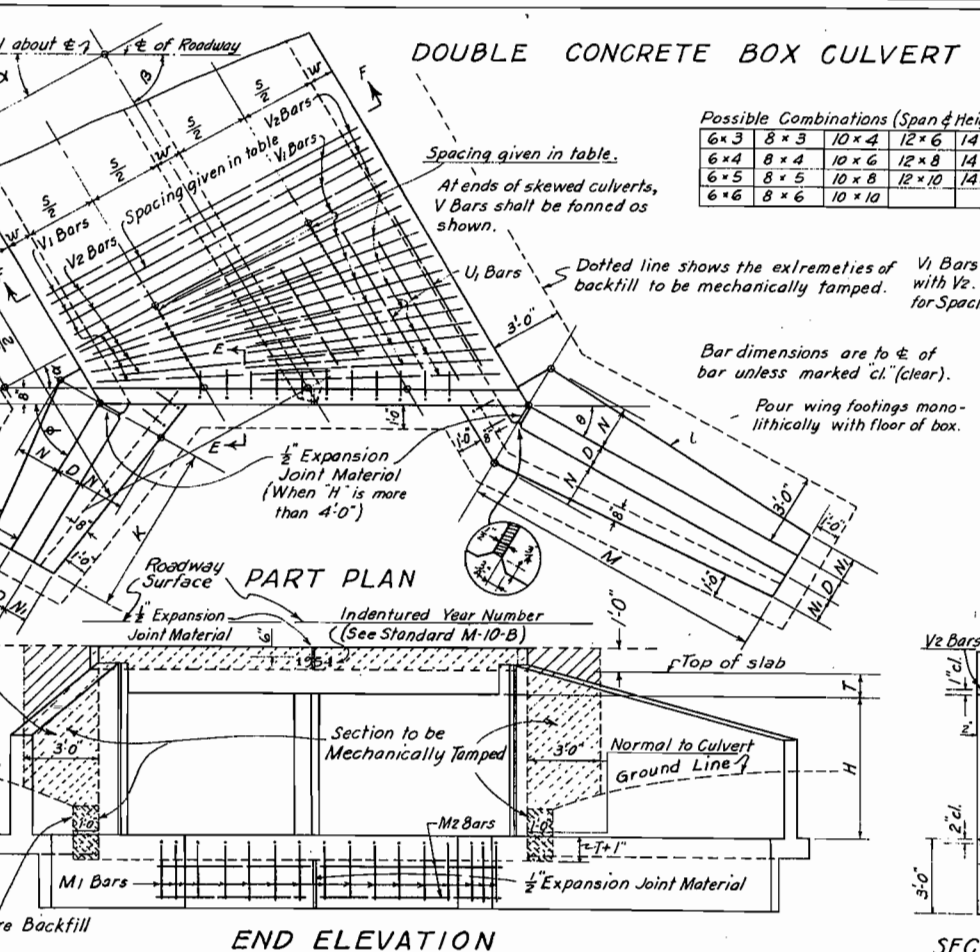
Bar List for Culvert & Headwalls (See Standard M-50-AW for Wings)

Mark	Size	No. Req'd.	Type	Length
V ₁	See table	10 + 24L/Spa.	I	S + 2W - 6
W ₁	See table	6 + 24L/Spa.	I	H + 2T - 5
U ₁	1/2"	See table	I	L + 1'0"
M ₁	1/2"	See table	II	3' - 6"
M ₂	1/2"	4	I	S + 2W - 6 / Cos α

FED. ROAD DIV. NO.	DISTRICT	SHEET NO.	TOTAL SHEETS
9	COLO.	002-2(40) 34	

Dimensions & Quantities (see Standard M-50-AW for Wings)

Height of Fill Allowed	Type	Span S	Height H	Slab Wall T	Bar Size & Spacing		No. Bars Required	Quantities for One Lin. Ft. of Box		Quantities for Two Headwalls	
					V ₁ Size Spa.	V ₂ Size Spa.		Concrete Cu. Yds.	Steel Lbs.	Concrete Cu. Yds.	Steel Lbs.
10'-0"	6'-6"-A	6'-0"	4'-0"	8 1/2"	8"	1/2"	12	1.073	117.7	4.60	335
15'-0"	6'-6"-B	6'-0"	4'-0"	9 1/2"	8"	1/2"	12	1.161	125.7	4.95	347
20'-0"	6'-6"-C	6'-0"	4'-0"	10 1/2"	8"	1/2"	12	1.247	135.4	4.75	339
10'-0"	8'-8"-A	8'-0"	6'-0"	10"	10"	3/4"	12	1.395	152.4	5.15	355
15'-0"	8'-8"-B	8'-0"	6'-0"	11"	10"	3/4"	12	1.477	174.4	5.80	50.6
20'-0"	8'-8"-C	8'-0"	6'-0"	12 1/2"	10"	3/4"	12	1.569	179.8	6.05	51.4
5'-0"	10'-10"-A	10'-0"	10'-0"	10"	12"	3/4"	12	1.777	197.4	6.40	52.4
10'-0"	10'-10"-B	10'-0"	10'-0"	12"	12"	3/4"	12	1.869	207.9	6.65	53.3
15'-0"	10'-10"-C	10'-0"	10'-0"	14"	12"	3/4"	12	1.961	218.3	6.90	54.2
5'-0"	12'-12"-A	12'-0"	12'-0"	12"	12"	3/4"	12	2.053	228.7	7.15	55.1
10'-0"	12'-12"-B	12'-0"	12'-0"	14"	12"	3/4"	12	2.145	239.1	7.40	56.0
15'-0"	12'-12"-C	12'-0"	12'-0"	16"	12"	3/4"	12	2.237	249.5	7.65	56.9
5'-0"	14'-14"-A	14'-0"	14'-0"	12"	12"	3/4"	12	2.329	259.9	7.90	57.8
10'-0"	14'-14"-B	14'-0"	14'-0"	14"	12"	3/4"	12	2.421	270.3	8.15	58.7
15'-0"	14'-14"-C	14'-0"	14'-0"	16"	12"	3/4"	12	2.513	280.7	8.40	59.6



Possible Combinations (Span & Height)

Span	Height
6' x 3'	8' x 3'
6' x 4'	8' x 4'
6' x 5'	8' x 5'
6' x 6'	8' x 6'
10' x 4'	10' x 4'
10' x 6'	10' x 6'
10' x 8'	10' x 8'
10' x 10'	10' x 10'
12' x 6'	12' x 6'
12' x 8'	12' x 8'
12' x 10'	12' x 10'
14' x 6'	14' x 6'
14' x 8'	14' x 8'
14' x 10'	14' x 10'

Bar List for Culvert and Two Headwalls (See Standard M-50-AW for Wings)

Mark	Size	Number Required	Type	Total Length
V ₁	See table	2(L+2)	I	S + 15W + 4'
V ₂	See table	Spacing	II	0.75S + 4'
W ₁	1/2"	2(L+2)	I	H + 2T - 4'
U ₁	1/2"	See table	I	L + 12"
M ₁	1/2"	See table	III	3' - 6"
M ₂	1/2"	8	I	S + 1.8W / Cos α

Quantities for one culvert shall be (quantity for one lin. ft. of box times L) plus (quantity for two headwalls) plus (quantities for four wings).
Note: This design not to be used when height of fill exceeds the allowed amount tabulated.

Quantities for one culvert shall be (quantity for one lin. ft. of box times L) plus (quantity for two headwalls) plus (quantities for four wings).

Designed by: W.W.D. Approved by: J.L. Kowalski
Made by: W.W.D. Bridge Engineer
Checked by: T.J.M. Date: Aug. 30, 1954

STANDARD M-50-AW

Use in conjunction with Standard M-50-A and M-55-A

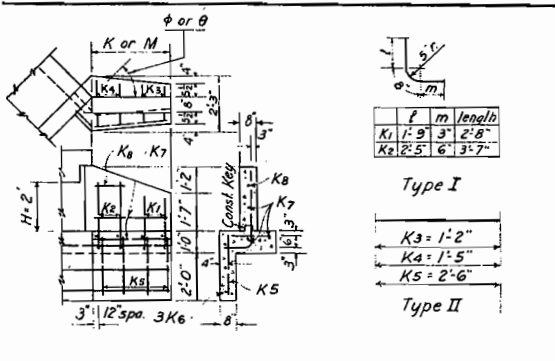
FED. ROAD DIV. NO.	DISTRICT	NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	002-2(40)	35	

Rev. 5-2-56, Deleted Finish Note, J.C.R.

TABLE SHOWING VALUES OF K AND M WHEN β AND H ARE GIVEN

β	α	φ	θ	H=2'-0"		H=3'-0"		H=4'-0"		H=5'-0"		H=6'-0"		H=7'-0"		H=8'-0"		H=9'-0"		H=10'-0"	
				K	M	K	M	K	M	K	M	K	M	K	M	K	M	K	M	K	M
45°	45°	67°30'	22°30'	2.4	6.2	3.7	8.7	4.0	11.7	5.1	14.2	6.1	16.5	7.9	18.8	8.8	20.1	9.8	23.2	10.7	25.5
60°	30°	60°	30°	2.9	4.9	3.1	6.7	3.5	8.1	4.0	10.1	4.5	12.0	5.1	13.2	5.8	15.0	6.5	17.0	7.2	19.6
75°	15°	52°30'	37°30'	3.0	3.1	4.2	5.5	5.7	7.3	6.1	8.1	8.1	10.4	7.1	10.4	11.9	13.2	11.4	12.7	13.9	13.9
90°	0°	45°	45°	3.4	3.4	4.8	4.8	6.3	6.3	7.8	7.8	8.1	10.4	8.1	10.4	11.9	13.2	11.4	12.7	13.9	13.9
105°	15°	37°30'	52°30'	3.1	3.0	5.5	4.2	7.3	5.7	9.1	6.7	11.9	9.1	13.2	11.9	13.2	11.4	12.7	13.9	13.9	13.9
120°	30°	30°	60°	4.9	2.9	6.7	3.1	8.1	3.5	10.1	4.0	12.0	4.5	14.0	5.1	16.0	6.5	18.0	7.2	20.0	25.5
135°	45°	22°30'	67°30'	6.2	2.4	8.7	3.7	11.7	4.0	14.2	5.1	16.5	7.9	18.8	8.8	20.1	9.8	23.2	10.7	25.5	25.5

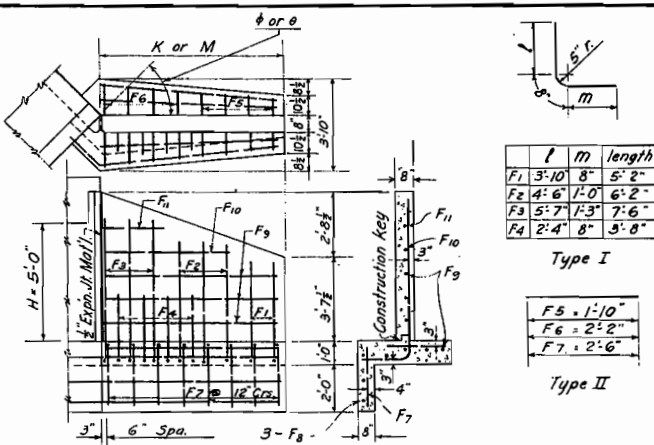
β EQUALS THE ANGLE BETWEEN β OF CULVERT AND α OF ROADWAY. α EQUALS THE ANGLE BETWEEN α OF CULVERT AND A NORMAL TO α OF ROADWAY.
φ AND θ ARE ANGLES BETWEEN THE WINGWALL AND A LINE PARALLEL WITH THE CENTER LINE OF ROADWAY.
EXAMPLE FOR USING THE ABOVE TABLE. SUPPOSE A STREAM MAKES AN ANGLE OF β = 65° WITH THE CENTER LINE OF ROADWAY. THEN, FROM THE TABLE, SELECT THE NEAREST ANGLE β = 60°. THEN α, φ AND θ EQUAL 30°, 60° AND 30° RESPECTIVELY. IF THE DESIRED HEIGHT "H" OF CULVERT IS 8'-0", THEN "K" AND "M" WILL BE 9'3" AND 16'-0". LOCATE THE WING DETAIL WHEN H = 8'-0" ON THIS SHEET.



BAR LIST & QUANTITIES FOR ONE WING WHEN H = 2'-0"

When φ or θ equals	Number of Bars Required						Length of Bars						Quantities for One Wing	
	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Cu. Yds.	Lbs.
22°30'	4	3	4	3	8	8	3-8	3-8	5-10	2-2	1-7	1.07	0.82	47
30°	3	2	3	2	6	6	6-2	4-5	4-5	1-2	1-2	0.68	40	
37°30'	2	2	2	2	6	5	5-0	3-7	3-7	1-2	1-2	0.57	36	
45°	2	2	2	2	5	4	4-4	3-0	1-2	1-2	1-2	0.52	33	
52°30'	2	2	2	2	4	4	4-0	2-8	1-2	1-2	1-2	0.48	28	
60°	2	1	2	1	4	3	3-6	2-5	1-0	1-0	1-0	0.48	28	
67°30'	2	1	2	1	4	3	3-0	2-0	1-0	1-0	1-0	0.40	26	

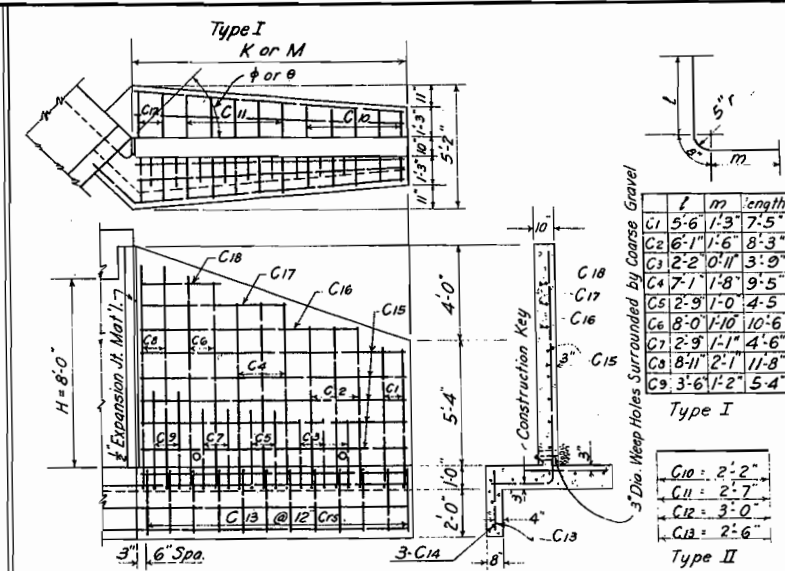
WING DETAIL WHEN H = 2'-0"



BAR LIST & QUANTITIES FOR ONE WING WHEN H = 5'-0"

When φ or θ equals	Number of Bars Required							Length of Bars							Quantities for One Wing	
	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Cu. Yds.	Lbs.		
22°30'	5	5	5	6	7	8	17	17-3	13-10	9-2	4-2	4-06	2.37			
30°	3	4	4	5	5	6	13	13-3	10-6	7-2	3-2	3-10	1.80			
37°30'	3	3	3	4	4	5	11	11-0	8-7	5-2	2-2	2-55	1.47			
45°	2	3	3	4	4	4	9	9-6	7-4	5-2	2-2	2-20	1.30			
52°30'	2	2	3	3	4	4	8	8-6	6-6	4-2	2-2	1-96	1.13			
60°	2	2	3	3	3	4	8	7-9	5-11	4-2	2-2	1-79	1.09			
67°30'	2	2	2	3	3	3	7	7-3	5-7	3-2	1-2	1.69	0.97			

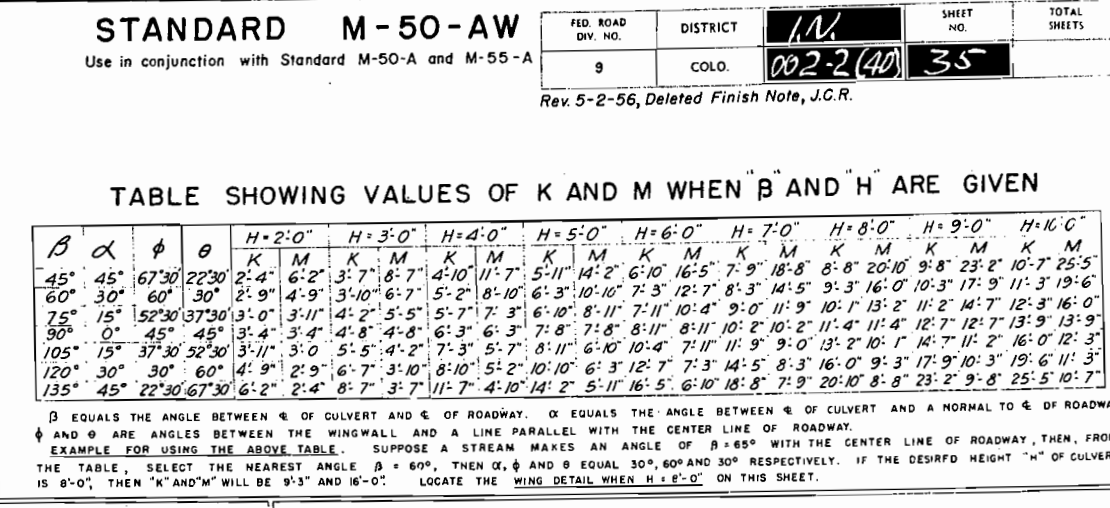
WING DETAIL WHEN H = 5'-0"



BAR LIST & QUANTITIES FOR ONE WING WHEN H = 8'-0"

When φ or θ equals	Number of Bars Required										Length of Bars										Quantities for One Wing	
	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Cu. Yds.	Lbs.				
22°30'	4	4	5	5	4	4	4	4	9	9	3	25	24-8	20-6	12-2	7-2	9.00	526				
30°	3	3	4	4	3	3	3	3	7	6	3	19	19-0	15-8	12-2	9-2	6.91	402				
37°30'	2	3	3	3	3	3	3	3	5	5	2	16	16-0	12-10	10-2	7-2	5.69	330				
45°	2	3	3	3	2	2	2	2	5	5	2	14	13-8	11-0	9-2	6-2	4.89	287				
52°30'	2	2	3	2	2	2	2	2	4	4	2	13	12-2	9-9	7-2	5-2	4.35	257				
60°	1	2	3	2	2	2	2	2	4	4	2	12	11-0	8-11	7-2	5-2	3.99	242				
67°30'	1	2	2	2	2	2	2	2	4	3	2	10	10-3	8-4	6-9	4-6	3.74	228				

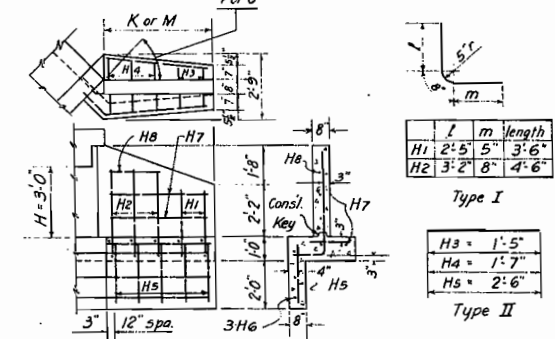
WING DETAIL WHEN H = 8'-0"



BAR LIST & QUANTITIES FOR ONE WING WHEN H = 10'-0"

When φ or θ equals	Number of Bars Required											Length of Bars											Quantities for One Wing	
	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Cu. Yds.	Lbs.						
22°30'	6	6	5	5	8	7	6	6	7	25	27-7	22-10	17-2	11-2	4-2	11.56	666							
30°	5	4	4	4	5	6	4	3	4	5	6	20	21-2	17-5	13-2	8-2	8.86	510						
37°30'	3	3	4	4	4	5	4	3	3	4	5	17	17-4	14-3	11-2	7-2	7.27	427						
45°	3	3	3	3	4	4	3	3	3	4	5	15	15-0	12-3	9-2	6-2	6.28	370						
52°30'	3	3	3	3	3	3	3	3	3	4	4	14	13-4	10-10	7-2	5-2	5.57	322						
60°	3	3	2	2	3	3	3	2	2	3	3	13	12-3	9-11	6-2	4-2	5.11	294						
67°30'	3	2	2	2	3	3	2	2	2	3	3	12	11-6	9-4	6-2	4-2	4.82	279						

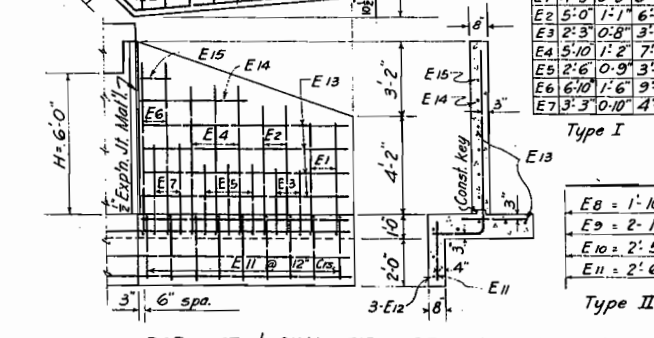
WING DETAIL WHEN H = 10'-0"



BAR LIST & QUANTITIES FOR ONE WING WHEN H = 3'-0"

When φ or θ equals	Number of Bars Required					Length of Bars					Quantities for One Wing	
	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Cu. Yds.	Lbs.
22°30'	4	4	5	11	10-10	8-3	4-2	1-78	9-9			
30°	3	4	4	8	8-4	6-3	3-2	1-36	7-6			
37°30'	3	3	3	7	6-8	5-1	2-2	1-12	6-3			
45°	2	3	3	6	5-10	4-4	2-2	0-97	5-4			
52°30'	2	2	3	6	5-4	3-10	2-2	0-86	5-2			
60°	2	2	2	5	4-10	3-6	1-2	0-79	4-4			
67°30'	2	2	2	5	4-8	3-3	1-2	0-74	4-3			

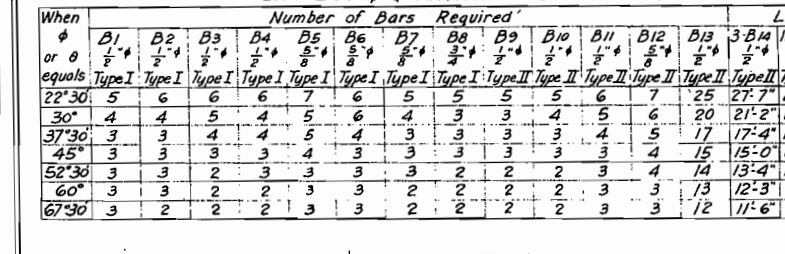
WING DETAIL WHEN H = 3'-0"



BAR LIST & QUANTITIES FOR ONE WING WHEN H = 6'-0"

When φ or θ equals	Number of Bars Required								Length of Bars								Quantities for One Wing	
	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Cu. Yds.	Lbs.		
22°30'	4	4	4	5	4	4	5	6	20	19-9	16-7	8-7	3-2	5.21	317			
30°	3	3	3	4	4	3	3	5	4	4	15	15-0	12-3	6-2	3.99	243		
37°30'	2	3	3	3	3	3	3	4	4	4	13	12-6	10-0	5-2	2-2	3.28	203	
45°	2	2	2	3	2	2	3	3	3	3	11	10-9	8-7	4-2	1-2	2.83	171	
52°30'	1	2	2	3	2	2	2	3	3	3	10	9-8	7-7	4-2	1-2	2.51	156	
60°	2	2	2	2	2	2	2	3	3	3	9	8-9	6-11	3-2	1-2	2.30	145	
67°30'	1	2	2	2	2	2	2	3	3	2	8	8-3	6-6	3-2	1-2	2.17	134	

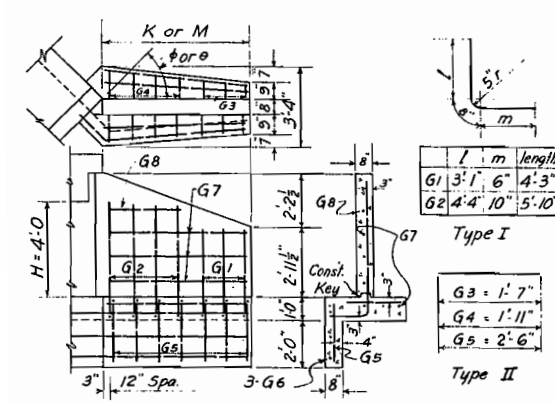
WING DETAIL WHEN H = 6'-0"



BAR LIST & QUANTITIES FOR ONE WING WHEN H = 9'-0"

When φ or θ equals	Number of Bars Required										Length of Bars										Quantities for One Wing	
	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Cu. Yds.	Lbs.				
22°30'	4	4	5	4	4	4	5	6	20	19-9	16-7	8-7	3-2	5.21	317							
30°	3	3	3	4	4	3	3	5	4	4	15	15-0	12-3	6-2	3.99	243						
37°30'	2	3	3	3	3	3	3	4	4	4	13	12-6	10-0	5-2	2-2	3.28	203					
45°	2	2	2	3	2	2	3	3	3	3	11	10-9	8-7	4-2	1-2	2.83	171					
52°30'	1	2	2	3	2	2	2	3	3	3	10	9-8	7-7	4-2	1-2	2.51	156					
60°	2	2	2	2	2	2	2	3	3	3	9	8-9	6-11	3-2	1-2	2.30	145					
67°30'	1	2	2	2	2	2	2	3	3	2	8	8-3	6-6	3-2	1-2	2.17	134					

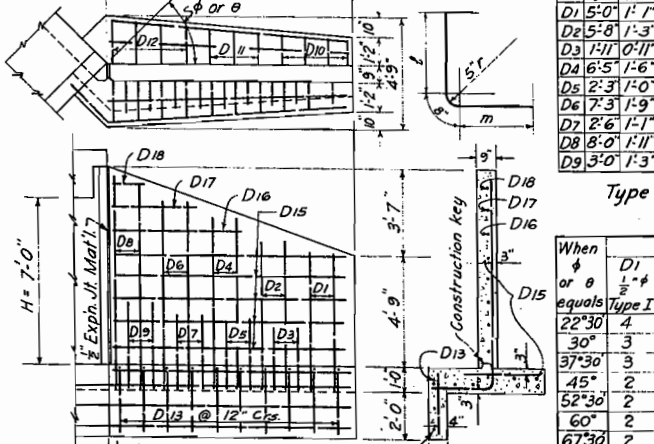
WING DETAIL WHEN H = 9'-0"



BAR LIST & QUANTITIES FOR ONE WING WHEN H = 4'-0"

When φ or θ equals	Number of Bars Required					Length of Bars					Quantities for One Wing	
	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Cu. Yds.	Lbs.
22°30'	6	6	6	14	14-3	11-3	5-2	2-89	16-4			
30°	4	5	4	11	10-9	8-6	4-2	2-21	12-5			
37°30'	3	4	3	9	8-9	6-11	3-2	1-81	10-1			
45°	3	4	3	8	7-8	5-11	3-2	1-56	9-2			
52°30'	3	3	3	7	6-9	5-3	2-2	1-40	7-9			
60°	3	3	3	7	6-4	4-10	2-2	1-29	7-7			
67°30'	2	3	2	6	6-0	4-6	2-2	1-21	6-9			

WING DETAIL WHEN H = 4'-0"



WING DETAIL WHEN H = 7'-0"



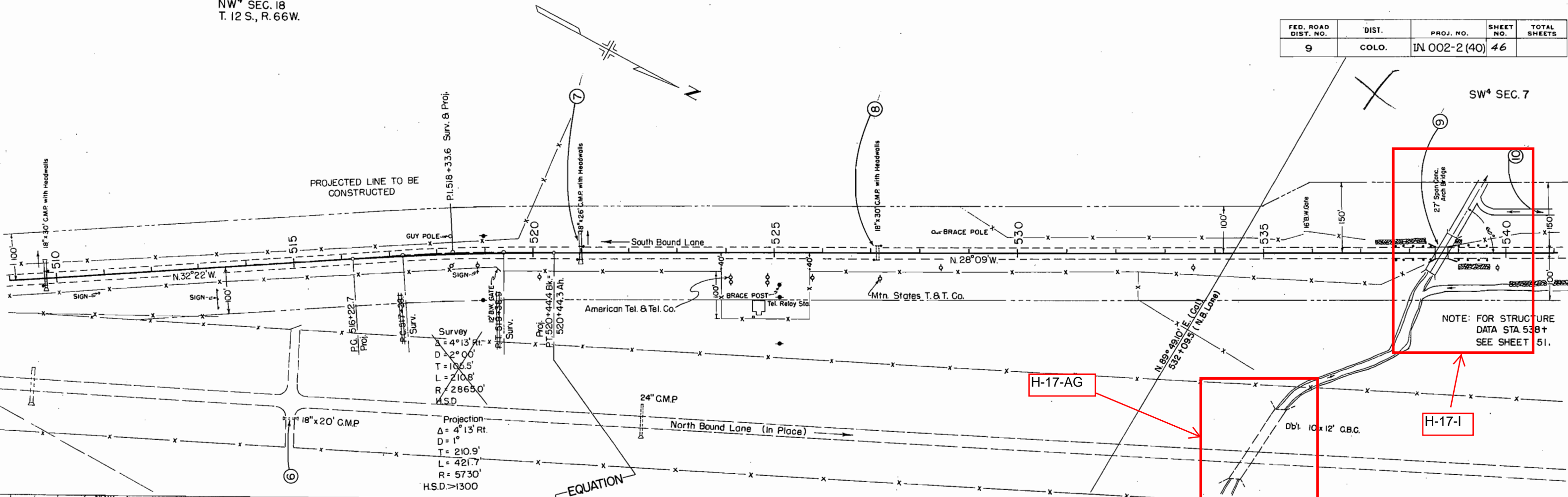
BAR LIST & QUANTITIES FOR ONE WING WHEN H = 7'-0"

When φ or θ equals	Number of Bars Required										Length of Bars										Quantities for One Wing	
	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Type I	Type II	Cu. Yds.	Lbs.				
22°30'	4	4	5	4	4	4	5	6	20	19-9	16-7	8-7	3-2	5.21	317							

NW⁴ SEC. 18
T. 12 S., R. 66 W.

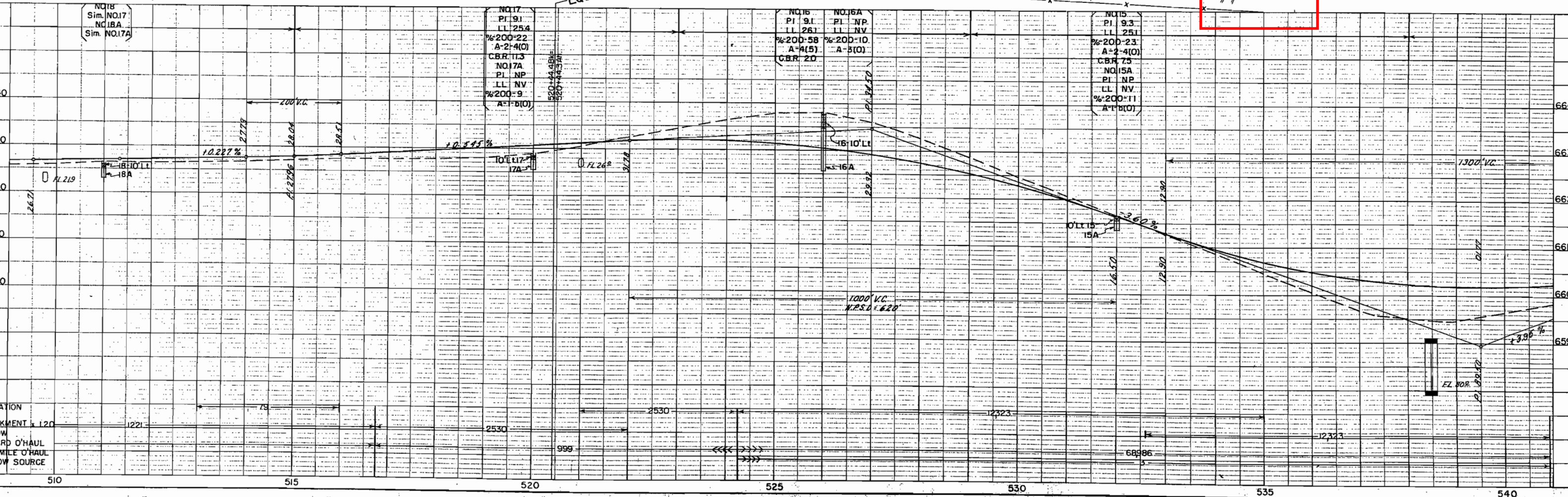
FED. ROAD DIST. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	IN. 002-2 (40)	46	

SW⁴ SEC. 7

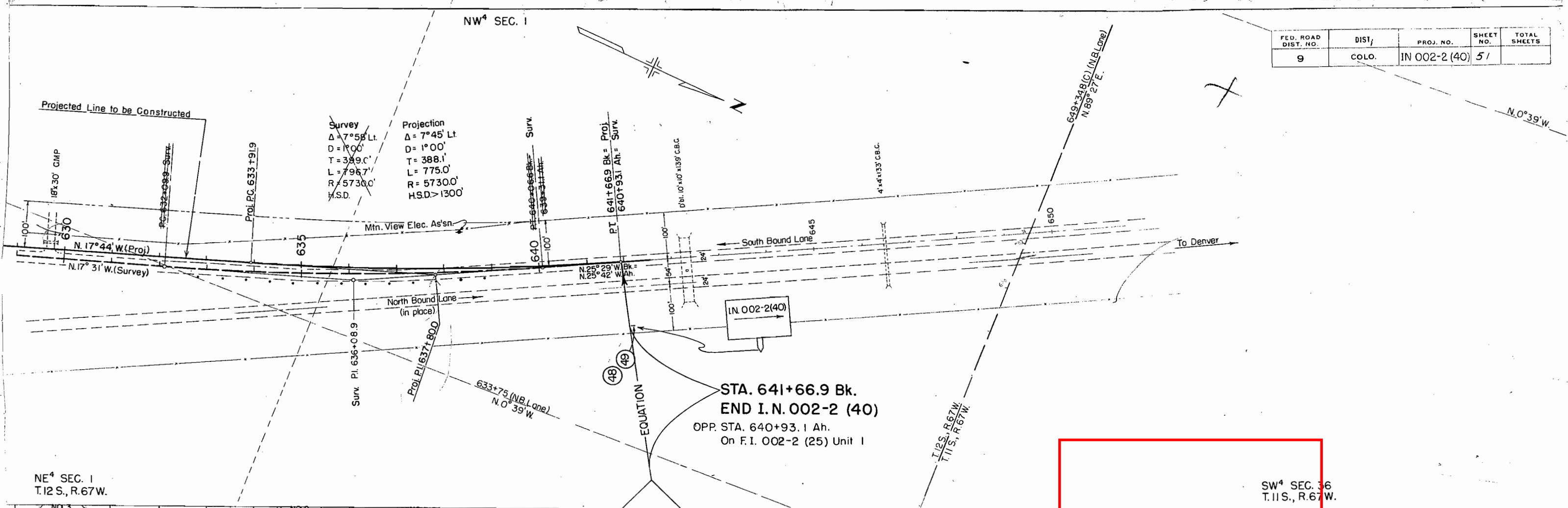


H-17-AG

H-17-1



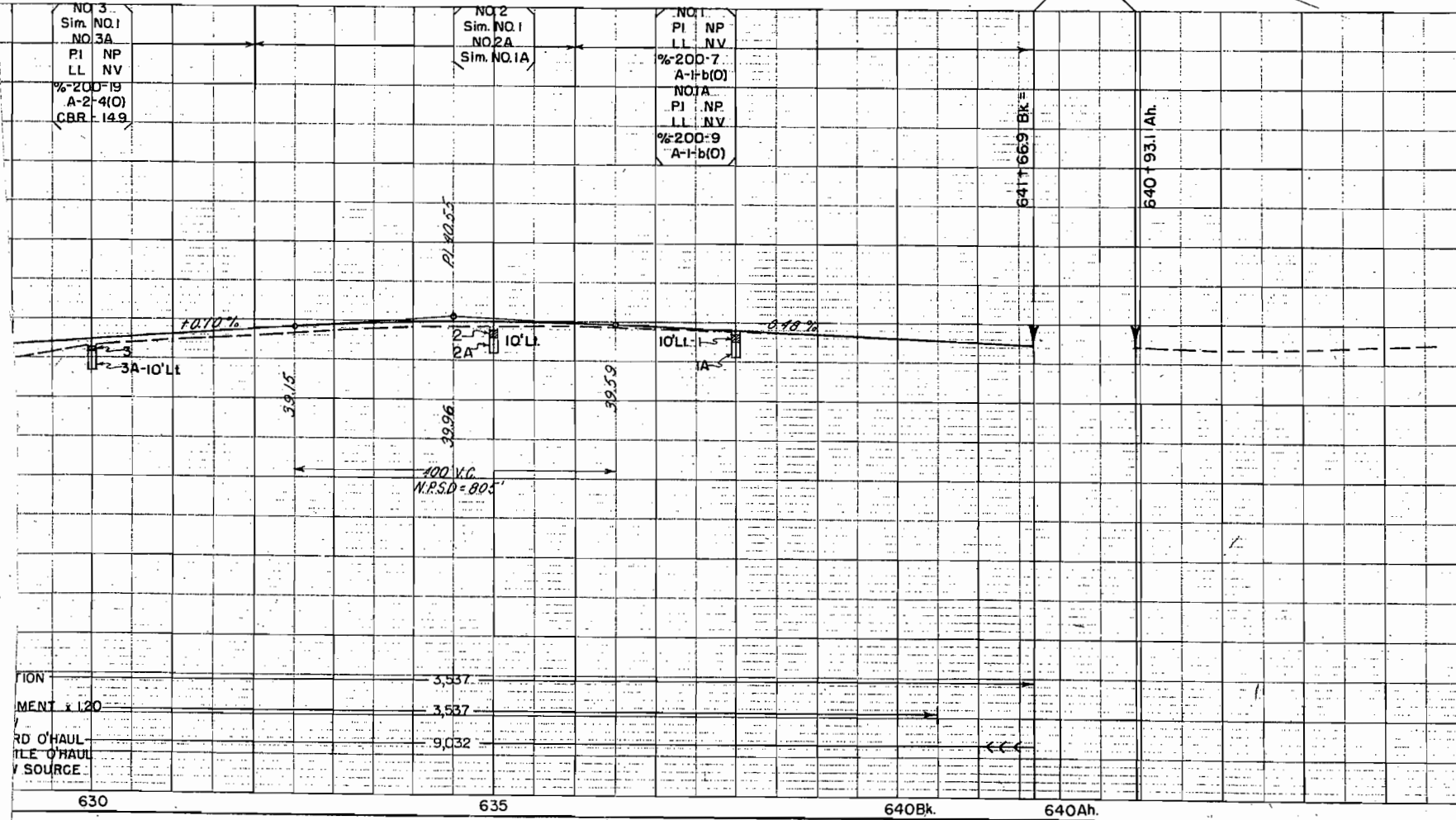
FED. ROAD DIST. NO.	DIST.	PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	IN 002-2 (40)	51	



NE⁴ SEC. 1
T.12 S., R.67 W.

SW⁴ SEC. 36
T.11 S., R.67 W.

STA. 641+66.9 Bk.
END I.N. 002-2 (40)
OPP. STA. 640+93.1 Ah.
On F.I. 002-2 (25) Unit 1



PROPOSED STRUCTURES	STRUCTURE DATA			
	Sta. 538 + 544 - 538 + 856	Sta. 577 + 085 - 577 + 31.5	Sta. 585 + 433 - 587 + 32.1	Sta. 585 + 16.75 - 587 + 03.25
STRUCTURE NUMBERS	H-17-I	H-17-AG	H-17-BC (So. Bound Lane)	H-17-BD (No. Bound Lane)
PROPOSED STRUCTURE: POSITION REFERRED TO PRESENT STRUCTURE- SPAN- CLEAR ROADWAY- CLEAR WATERWAY- TYPE OF SUPERSTRUCTURE- TYPE OF SUBSTRUCTURE- DETOUR STRUCTURE REQUIREMENTS- R.R. SIDING- HAUL TO BRIDGE SITE-	Some Double 12x10 C.B.C. 2-24' Lanes 240" Conc. Box Culvert Conc. Box Culvert	100' ± Upstream Double 10x10 C.B.C. 2-24' Lanes 196" Conc. Box Culvert Conc. Box Culvert	2 of 92'-0" C.to.C. Brngs 54'-0" Conc. Slab on Prestr. Gird Abuts. - Conc. Semi Grov -ity Pier - 2 Col. Conc. Husted 1/2 Mi.	2 of 92'-0" C.to.C. Brngs 54'-0" Conc. Slab on Prestr. Gird Abuts. - Conc. Semi Grov -ity Pier - 2 Col. Conc. Husted 1/2 Mi.
NEARBY STRUCTURES ON SAME STREAM: WATERWAY- RECORD DURING FLOODS- LOCATION-				
PRESENT STRUCTURES				
PRESENT STRUCTURE SPAN- CLEAR ROADWAY- CLEAR WATERWAY- TYPE OF SUPERSTRUCTURE- TYPE OF SUBSTRUCTURE- REQUIREMENTS AS TO REMOVAL-	1 of 24'-0" Clear 20'-0" 250" Conc. Arch CU To Be Removed	2-10'x10' C.B.C. x 48' Long 28'-0" 196" Conc. Box Culvert Conc. Box Culvert To Be Removed		
STREAM DATA DRAINAGE AREA IN SQ MILES- VELOCITY DURING HIGH WATER- ELEVATION OF: MAXIMUM HIGH WATER- NORMAL STAGE- LOW WATER- DRIFT- STREAM BED- SCOUR-	2 1/2 Mi. Light Drift No Ice	Dry Light Drift No Ice		