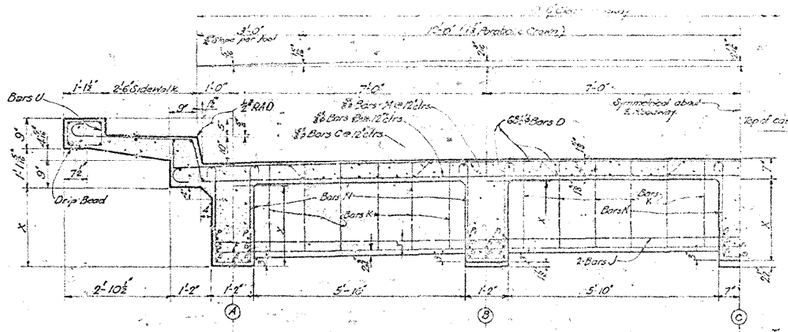
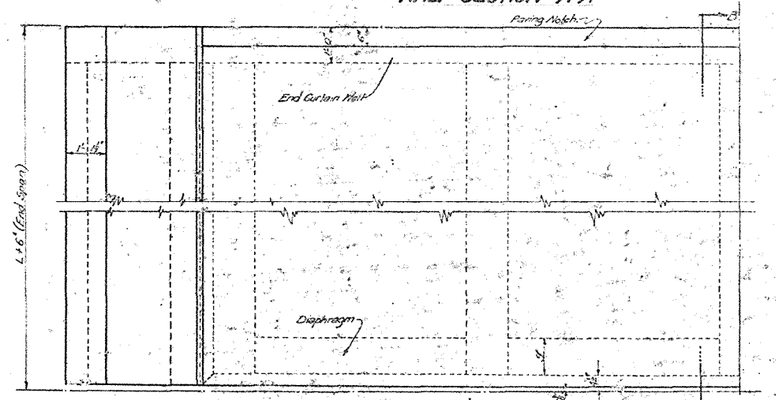
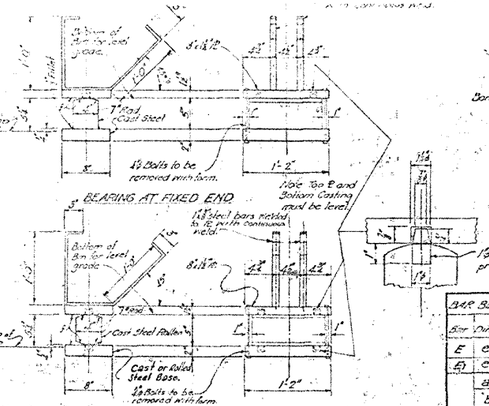


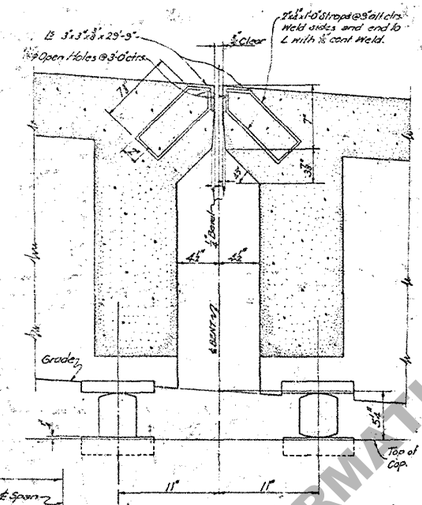
HALF SECTION A-A



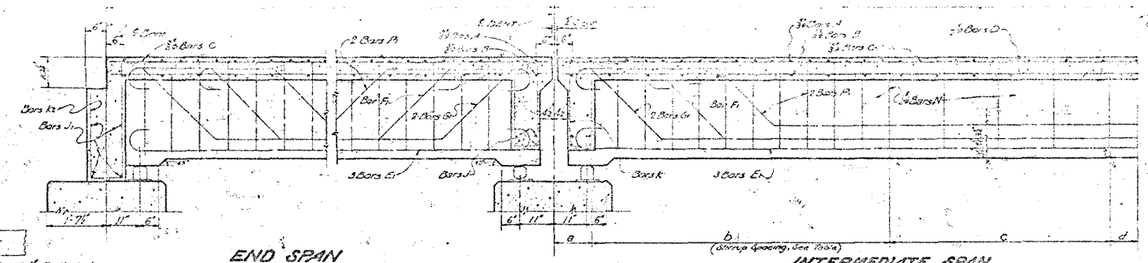
HALF PLAN END SPAN



BEARING AT EXPANSION END



EXPANSION JOINT



END SPAN

SECTION B-B

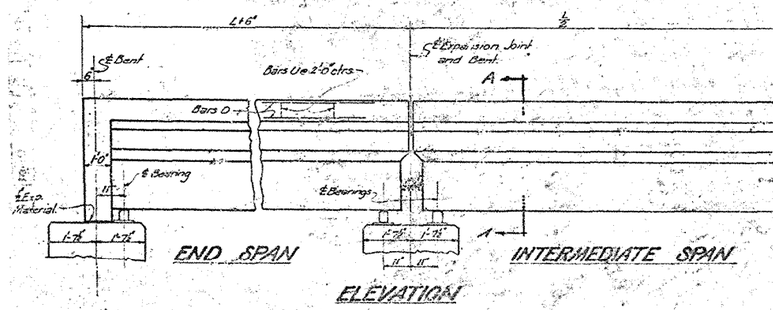
INTERMEDIATE SPAN

BAR BENDING TABLE-BARS E, E1, F, F1, G-G1, P-P1							
Bar	Dim	30' SPAN	32' SPAN	34' SPAN	36' SPAN	38' SPAN	40' SPAN
E	c	28'-1"	30'-1"	32'-1"	34'-1"	36'-1"	38'-1"
E1	c	28'-1"	30'-1"	32'-1"	34'-1"	36'-1"	38'-1"
G	a	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"
	b	2'-0⅝"	2'-1⅝"	2'-3⅝"	2'-5⅝"	2'-6⅝"	2'-8⅝"
	c	23'-6"	25'-5"	27'-0"	28'-8"	30'-6"	32'-2"
	d	2'-10⅝"	3'-0"	3'-2⅝"	3'-5⅝"	3'-7⅝"	3'-10"
	e	28'-1"	30'-1"	32'-1"	34'-1"	36'-1"	38'-1"
F	a	2'-0"	2'-0"	2'-2"	2'-4"	2'-5"	2'-6"
	b	2'-0⅝"	2'-1⅝"	2'-3⅝"	2'-5⅝"	2'-6⅝"	2'-8⅝"
	c	20'-0"	21'-10"	23'-2"	24'-6"	25'-2"	27'-8"
	d	2'-10⅝"	3'-0"	3'-2⅝"	3'-5⅝"	3'-7⅝"	3'-10"
	e	28'-1"	30'-1"	32'-1"	34'-1"	36'-1"	38'-1"
P	a	1'-9"	1'-9"	1'-11"	2'-1"	2'-2"	2'-3"
	b	1'-8½"	1'-9½"	1'-11½"	2'-1½"	2'-2½"	2'-4½"
	c	17'-2"	19'-0"	20'-0"	21'-0"	22'-6"	23'-10"
	d	2'-5"	2'-6⅝"	2'-9⅝"	3'-0"	3'-1½"	3'-4½"
	e	28'-1"	30'-1"	32'-1"	34'-1"	36'-1"	38'-1"
G1	a	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"	0'-3"
	b	2'-0⅝"	2'-1⅝"	2'-3⅝"	2'-5⅝"	2'-6⅝"	2'-8⅝"
	c	23'-6"	25'-5"	27'-0"	28'-8"	30'-6"	32'-2"
	d	2'-10⅝"	3'-0"	3'-2⅝"	3'-5⅝"	3'-7⅝"	3'-10
	e	28'-1"	30'-1"	32'-1"	34'-1"	36'-1"	38'-1"
F1	a	2'-0"	2'-0"	2'-2"	2'-4"	2'-5"	2'-6"
	b	2'-0⅝"	2'-1⅝"	2'-3⅝"	2'-5⅝"	2'-6⅝"	2'-8⅝"
	c	20'-0"	21'-10"	23'-2"	24'-6"	25'-2"	27'-8"
	d	2'-10⅝"	3'-0"	3'-2⅝"	3'-5⅝"	3'-7⅝"	3'-10"
	e	28'-1"	30'-1"	32'-1"	34'-1"	36'-1"	38'-1"
P1	a	1'-9"	1'-9"	1'-11"	2'-1"	2'-2"	2'-3"
	b	1'-8½"	1'-9½"	1'-11½"	2'-1½"	2'-2½"	2'-4½"
	c	17'-2"	19'-0"	20'-0"	21'-0"	22'-6"	23'-10"
	d	2'-5"	2'-6⅝"	2'-9⅝"	3'-0"	3'-1½"	3'-4½"
	e	28'-1"	30'-1"	32'-1"	34'-1"	36'-1"	38'-1"

BAR	LOCATION	30 FT SPAN			32 FT SPAN			34 FT SPAN			36 FT SPAN			38 FT SPAN			40 FT SPAN		
		No.	Size	Unit Length	Total Length	No.	Size	Unit Length	Total Length	No.	Size	Unit Length	Total Length	No.	Size	Unit Length	Total Length	No.	Size	Unit Length	Total Length
A	Top of Slab	30	⅝"	32'-10"	985'-0"	32	⅝"	32'-10"	1050'-8"	34	⅝"	32'-10"	1116'-4"	36	⅝"	32'-10"	1182'-0"	38	⅝"	32'-10"	1247'-8"	40	⅝"	32'-10"	1313'-4"
B	Bottom of Slab	30	"	40'-0"	1200'-0"	32	"	40'-0"	1280'-0"	34	"	40'-0"	1360'-0"	36	"	40'-0"	1440'-0"	38	"	40'-0"	1520'-0"	40	"	40'-0"	1600'-0
C	Bend in Slab	29	"	33'-5"	969'-1"	31	"	33'-5"	1035'-11"	33	"	33'-5"	1102'-9"	35	"	33'-5"	1169'-7"	37	"	33'-5"	1236'-5"	39	"	33'-5"	1303'-3"
D	Cont. in Slab	68	1⅛"	39'-8"	2701'-4	68	1⅛"	31'-8"	2153'-4	68	1⅛"	33'-8"	2289'-4	68	1⅛"	35'-8"	2425'-4	68	1⅛"	37'-8"	2561'-4	68	1⅛"	39'-8"	2697'-4
N	Beam Stirrups	150	"	6'-10⅝"	1031'-3	160	"	7'-0½"	1126'-8"	160	"	7'-4½"	1180'-0"	170	"	7'-8⅝"	1306'-3"	180	"	7'-10½"	1417'-6"	190	"	8'-2½"	1553'-7"
J	Diaph.	4 End	"	28'-10"	115'-4"	4 End	"	28'-10"	115'-4"	4 End	"	28'-10"	115'-4"	4 End	"	28'-10"	115'-4"	4 End	"	28'-10"	115'-4"	4 End	"	28'-10"	115'-4"
		8 Int			230'-8"	8 Int			230'-8"	8 Int			230'-8"	8 Int			230'-8"	8 Int			230'-8"	8 Int			230'-8"
J1	End Span	4	"	36'-11"	147'-8"	4	"	36'-11"	147'-8"	4	"	36'-11"	147'-8"	4	"	36'-11"	147'-8"	4	"	36'-11"	147'-8"	4	"	36'-11"	147'-8"
K	Diaph.	24 End	"	6'-6⅝"	157'-0"	24 End	"	6'-8⅝"	161'-0"	24 End	"	7'-0½"	169'-0"	24 End	"	7'-4½"	177'-0"	24 End	"	7'-6½"	181'-0"	24 End	"	7'-10½"	189'-0
		48 Int	"		314'-0	48 Int	"		322'-0"	48 Int	"		338'-0"	48 Int	"		354'-0"	48 Int	"		362'-0	48 Int	"		378'-0
K1	End Span	8	"	9'-1½"	73'-0"	8	"	9'-3½"	74'-4"	8	"	9'-7½"	77'-0"	8	"	9'-11½"	79'-8	8	"	10'-1½"	81'-0"	8	"	10'-5½"	83'-8"
K2	End Span	24	"	6'-8⅝"	161'-0"	24	"	6'-10⅝"	165'-0"	24	"	7'-2½"	173'-0	24	"	7'-6½"	181'-0"	24	"	7'-8½"	185'-0"	24	"	8'-0½"	193'-0"
U	Curb	30	"	3'-5"	102'-5"	32	"	3'-5"	109'-4"	34	"	3'-5"	116'-2"	36	"	3'-5"	123'-0"	38	"	3'-5"	129'-10"	40	"	3'-5"	136'-8"
TOTAL INTERMEDIATE SPAN		⅝" Bars = 3154'-1" = 3290 #				⅝" Bars = 3360'-7" = 3511 #				⅝" Bars = 3579'-1" = 3733 #				⅝" Bars = 3791'-7" = 3955 #				⅝" Bars = 4001'-1" = 4176 #				⅝" Bars = 4216'-7" = 4398 #			
		½" Bars = 3695'-9" = 2463 #				½" Bars = 3942'-0" = 2628 #				½" Bars = 4194'-2" = 2796 #				½" Bars = 4443'-5" = 2962 #				½" Bars = 4701'-4" = 3140 #				½" Bars = 5602'-3" = 3342 #			
TOTAL END SPAN		⅝" Bars = 3154'-1" = 3290 #				⅝" Bars = 3360'-7" = 3511 #				⅝" Bars = 3579'-1" = 3733 #				⅝" Bars = 3791'-7" = 3955 #				⅝" Bars = 4001'-1" = 4176 #				⅝" Bars = 4216'-7" = 4398 #			
		½" Bars = 3105'-1" = 2542 #				½" Bars = 3308'-5" = 2707 #				½" Bars = 3521'-6" = 2881 #				½" Bars = 3734'-8" = 3056 #				½" Bars = 3948'-0" = 3230 #				½" Bars = 4162'-3" = 3406 #			
E	Bm A	6	1⅛"	30'-9"	184'-6"	6	1⅛"	32'-9"	196'-6"	6	1⅛"	34'-9"	208'-6"	6	1⅛"	36'-9"	220'-6	6	1⅛"	38'-9"	232'-6"	6	1⅛"	41'-1"	246'-6"
E1	Bm B & C	9	1⅛"	32'-9"	276'-9"	9	1⅛"	32'-9"	294'-9"	9	"	34'-9"	312'-9"	9	1⅛"	37'-1"	333'-9"	9	1⅛"	39'-1"	351'-9"	9	1⅛"	41'-1"	369'-9"
G	Bm A	4	1⅛"	32'-1"	128'-4"	4	1⅛"	34'-6"	138'-0"	4	1⅛"	36'-7"	146'-4"	4	1⅛"	38'-7"	154'-8"	4	1⅛"	41'-2"	164'-8"	4	1⅛"	43'-4"	173'-4"
F	Bm A	2	"	32'-1"	64'-2"	2	1⅛"	34'-2"	68'-4"	2	1⅛"	36'-7"	73'-2"	2	1⅛"	38'-9"	77'-6"	2	1⅛"	40'-10"	81'-8"	2	1⅛"	43'-2"	86'-4"
P	Bm A	4	"	27'-10"	111'-4"	4	"	29'-10"	119'-4"	4	1⅛"	31'-8"	126'-8"	4	1⅛"	33'-10"	135'-4"	4	1⅛"	36'-0"	143'-0"	4	1⅛"	38'-2"	150'-8"
G1	Bm B & C	6	"	32'-1"	192'-6"	6	1⅛"	34'-6"	207'-0"	6	1⅛"	36'-7"	219'-6"	6	1⅛"	38'-9"	232'-6"	6	1⅛"	41'-2"	247'-0"	6	1⅛"	43'-4"	260'-0"
F1	Bm B & C	3	"	32'-1"	96'-3"	3	"	34'-6"	103'-6"	3	"	36'-7"	109'-9"	3	"	38'-9"	116'-3"	3	"	41'-2"	123'-6"	3	"	43'-4"	130'-0"
P1	Bm B & C	6	"	27'-10"	167'-0"	6	"	30'-2"	181'-0"	6	"	32'-0"	192'-0"	6	"	33'-10"	203'-0"	6	1⅛"	35'-8"	214'-6"	6	"	38'-0"	228'-0"
TOTAL INTERMEDIATE SPAN		⅝" Bars = 759'-7" = 2583 #				⅝" Bars = 187'-8" = 638 #				⅝" Bars = 126'-8" = 431 #				⅝" Bars = 985'-4" = 4239 #				⅝" Bars = 439'-2" = 1890 #				⅝" Bars = 150'-8" = 648 #			
		½" Bars = 461'-3" = 1385 #				½" Bars = 1120'-9" = 4123 #				½" Bars = 1262'-0" = 4430 #				½" Bars = 490'-1" = 2601 #				½" Bars = 1121'-6" = 5958 #				½" Bars = 1434'-3" = 7939 #			
TOTAL END SPAN		⅝" Bars = 759'-7" = 2583 #				⅝" Bars = 187'-8" = 638 #				⅝" Bars = 126'-8" = 431 #				⅝" Bars = 985'-4" = 4239 #				⅝" Bars = 439'-2" = 1890 #				⅝" Bars = 150'-8" = 648 #			
		½" Bars = 461'-3" = 1385 #				½" Bars = 1120'-9" = 4123 #				½" Bars = 1262'-0" = 4430 #				½" Bars = 490'-1" = 2601 #				½" Bars = 1121'-6" = 5958 #				½" Bars = 1434'-3" = 7939 #			

DIMENSIONS and QUANTITIES													
SPAN "L" IN FEET	X	STIRRUP SPACING-BARS N				CONCRETE CLASS		Neoprene Pads		Pounds		STRUCT. STEEL, Lbs.	
		a	b	c	d	EXP. SPAN	INT. SPAN	EXP. SPAN	INT. SPAN	EXP. SPAN	INT. SPAN	EXP. SPAN	INT. SPAN
30	2'-4"	0'-9"	10@3"=7'-6"	4@12"=6'-0"	0'-3"	46.00	43.55	10400	10327	2200	2482
32	2'-5"	1'-0"	11@3"=8'-3"	4@12"=6'-0"	0'-3"	49.67	46.94	11070	11008	2200	2482
34	2'-7"	1'-3"	10@3"=7'-6"	5@12"=7'-6"	0'-3"	53.34	51.13	10745	12369	2200	2482
36	2'-9"	0'-9"	10@3"=7'-6"	6@12"=9'-0"	0'-3"	56.43	55.47	13944	13766	2200	2482
38	2'-10"	1'-0"	11@3"=8'-3"	6@12"=9'-0"	0'-3"	62.19	59.00	15253	15163	2200	2482
40	3'-0"	1'-3"	12@3"=9'-0"	6@12"=9'-0"	0'-3"	66.38	63.15	16407	16327	2200	2482

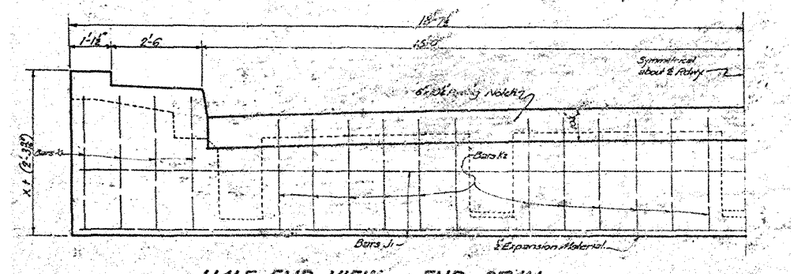
FOR DETAILS OF HANDRAIL AND HANDRAIL BRACKETS SEE STANDARD PLAN C.M.103.



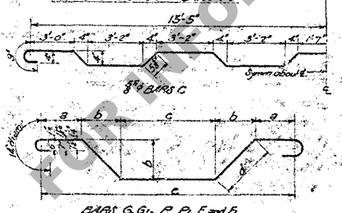
END SPAN

INTERMEDIATE SPAN

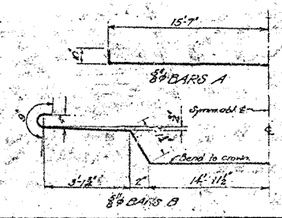
ELEVATION

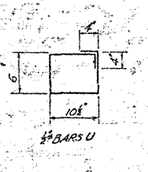


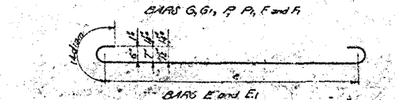
HALF END VIEW - END SPAN



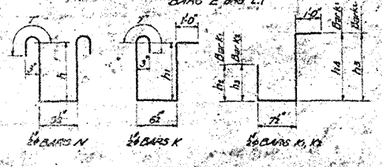
BARS G, G1, P, P1, F and F1







BAR BENDING TABLE-BARS N, K, K1, K2							
SPAN	h	h1	h2	h3	h4	h5	h6
30'	2'-6⅝"	2'-2⅝"	3'-9"	2'-1½"	3'-9"	2'-4½"	
32'	2'-8⅝"	2'-3⅝"	3'-10"	2'-2½"	3'-10"	3'-0⅝"	
34'	2'-8⅝"	2'-3⅝"	4'-0"	2'-4½"	4'-0"	3'-2½"	
36'	2'-10⅝"	2'-5⅝"	4'-2"	2'-6½"	4'-2"	3'-4½"	
38'	2'-11⅝"	2'-6⅝"	4'-3"	2'-7½"	4'-3"	3'-5½"	
40'	3'-1⅝"	2'-10½"	4'-5"	2'-9½"	4'-5"	3'-7½"	



GENERAL NOTES:
Construction Specs. Latest Approved La. Hwy. Dept. Std. Specs.
Design Specifications: AASHO, 1941.
Live Load: H20-S16.
Dead Load: Calculated weight of concrete plus 15 lbs. per sq.ft. future wearing surface.
All concrete to be Class "A".
Dimensions to reinforcing steel are to bar centers.
Exposed corners to have ¾" chamfer unless otherwise noted.

DATE	DESCRIPTION	BY
11-24-43	K1 & on Base "A"	
1-45	Per Std. Rev. Gen. Notes	
6-45	Bars O & Rockers	J.T.H.

REVISIONS

STANDARD PLAN

R.C. DECK GIRDER SPANS H20-S16 LOADING
30'-0" CLEAR ROADWAY-2'-6" SIDEWALKS
30'-0" TO 40'-0" SPANS
TO BE USED WITH STD. PLAN CS-10-20

DATED March, 1945

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

DESIGNED | DETAILED | TRACED
CHECKED | CHECKED | CHECKED
IN CHARGE OF

(old-CS-23)

C-S-20-20

DISCARDED
RETRACED
FOR INFORMATIONAL ONLY