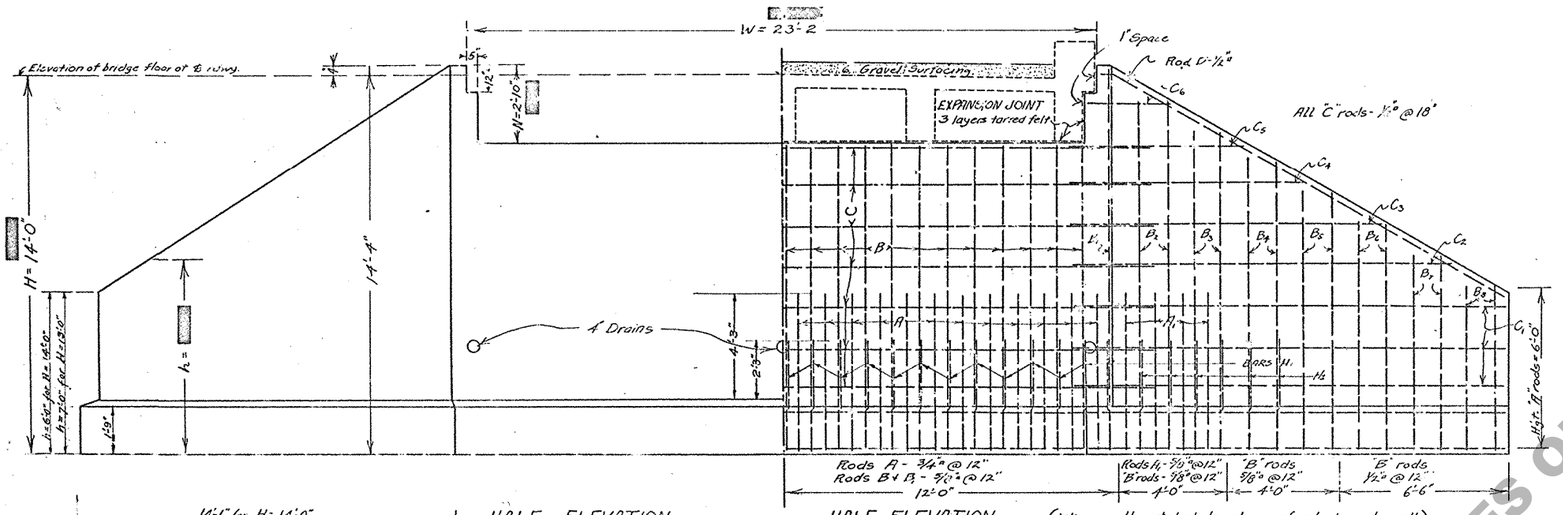

TABLE I

ABUTMENT STEEL SCHEDULE

H = 14'-0", 30' Girder, 20' Rdwy. W = 23'-2", N = 2'-10"

Location	Mk.	Size	Spcg.	No.	Length	Wgt.	Bending
Rear Vert.	A	3/4"	12"	2	21'-6"	77.3	a = 3'-0"
" "	B	5/8"	12"	24	10'-0"	368	do.
" "	B1	5/8"	12"	2	12'-0"	32	do.
" hor.	C	½"	18"	7	23'-6"	170	a = 1'-0" (both ends)
Top (bot)	E	5/8"	12"	24	5'-0"	160	straight
" (top)	F	½"	12"	25	5'-0"	106	do.
" long.	G	½"	—	6	5'-0"	127	do.
" Vert	H	5/8"	12"	26	7'-0"	243	a = 3'-0"
TOTAL							19.0 Cu.yds. Conc. 1,355 Lbs. Steel
For pile ftg. add							5.6 Cu.yds. Conc. 18 piles

STEEL IN TWO WINGS

H = 14'-0" h = 6'-0" L = 14'-6"

Location	Mk.	Size	Spcg.	No.	Length	Wgt.	Bending
Rear. Vert	B1	5/8"	12"	8	8'-6"	91	a = 2'-6"
"	B2	5/8"	12"	4	11'-0"	58	do.
"	B3	5/8"	12"	4	10'-9"	53	do.
"	B4	5/8"	12"	4	9'-0"	48	do.
"	B5	5/8"	12"	4	12'-0"	64	do.
"	B6	½"	12"	4	10'-10"	37	do.
"	B7	½"	12"	4	9'-8"	33	do.
"	B8	½"	12"	4	8'-6"	29	do.
Rear. hor.	C1	½"	18"	6	16'-5"	85	a = 1'-0"
"	C2	½"	18"	2	14'-0"	25	do.
"	C3	½"	18"	2	12'-3"	21	do.
"	C4	½"	18"	2	9'-6"	16	do.
"	C5	½"	18"	2	7'-3"	12	do.
"	C6	½"	18"	2	5'-0"	5	straight
Top of wing	D	½"	—	2	17'-0"	29	do.
Ftg. (bot.)	F1	½"	12"	32	4'-0"	102	do.
" (top)	F1	½"	12"	12	5'-0"	31	do.
"	F2	½"	12"	10	9'-0"	47	do.
" long.	G	½"	—	12	14'-0"	163	do.
" Vert.	H	⅝"	12"	12	6'-6"	104	a = 2'-6"
TOTAL							12.8 Cu.yds. Conc. 1095 Lbs. Steel
For pile ftg. add							5.9 Cu.yds. Conc. 14 piles

TOTAL ONE ABUT.	FOOTING	CU.YDS. CONC.	LBS. STEEL	PILING
	Sprd.	31.8	2660	—
	Pile	50.3	2660	32 @ 30° = 960'

TABLE II

ABUTMENT STEEL SCHEDULE

H = 13'-0", 30' Girder, 20' Rdwy. W = 23'-2", N = [illegible]

Location	Mk.	Size	Spcg.	No.	Length	Wgt.	Bending
Rear Vert	A	3/4"	16"	26	21'-6"	413	Strt. [illegible]
" "	B	5/8"	12"	21	9'-0"	237	do.
" "	B1	5/8"	12"	2	11'-0"	29	do.
" Hor.	C	½"	18"	6	23'-6"	125	a = 1'-0"
Foot Bolt	E	5/8"	12"	24	5'-0"	160	Strt. [illegible]
" Top	F	½"	12"	25	5'-0"	106	"
" long.	G	½"	—	6	25'-0"	127	"
" Vert	H	5/8"	12"	26	7'-0"	243	a = 3'-0"
TOTAL							18.11 cu.yds. Conc. 1498 Lbs. Steel
For pile ftg. add							5.6 Cu.yds. Conc. 18 piles

STEEL IN TWO WINGS

H = 13' h = 7'-0" L = 11'-0"

Location	Mk.	Size	Spcg.	No.	Length	Wgt.	Bending
Rear. Vert.	B1	5/8"	16"	8	8'-6"	91	a = 2'-6"
" "	B2	5/8"	12"	4	11'-0"	58	Strt. [illegible]
" "	B3	5/8"	12"	4	10'-9"	53	"
" "	B4	5/8"	12"	4	9'-0"	48	"
" "	B5	5/8"	12"	4	11'-3"	59	a = 2'-6"
" "	B6	½"	12"	4	10'-0"	34	"
" "	B7	½"	12"	2	9'-3"	16	"
Rear Hor.	C1	½"	18"	6	13'-3"	60	a = 1'-0"
" "	C2	½"	18"	2	13'-3"	23	"
" "	C3	½"	18"	2	12'-6"	21	"
" "	C4	½"	18"	2	9'-0"	15	"
" "	C5	½"	18"	2	7'-0"	12	"
" "	C6	½"	18"	2	5'-0"	5	Strt. [illegible]
Top of Wing	D	½"	—	2	18'-6"	23	"
Footing (bottom)	E1	½"	12"	26	4'-0"	88	"
" Top	F1	½"	12"	12	5'-0"	31	"
" "	F2	½"	12"	12	4'-0"	41	"
" Long	G1	½"	"	12	13'-0"	133	"
" Vert.	H1	5/8"	12"	12	6'-6"	104	a = 2'-6"
TOTAL							15.50 Cu.yds. Conc. 942 Lbs. Steel
For pile ftg. add							4.8 Cu.yds. Conc. 10 piles

TOTAL ONE ABUT.	FOOTING	CU.YDS. CONC.	LBS. STEEL	PILING
	Sprd.	33.6	2440	—
	Pile	44.0	2440	28

TABLE III

QUANTITIES FOR 14' & 13' HEIGHTS & VARIOUS WING LENGTHS
30' Girder, 20' Rdwy, N = 2'-10", W = 23'-2"

H	h	L	B	Conc.	Steel	No. Piles	Wgt. Piling
14'-0"	6'-0"	16'-0"	4'-6"	52.1			350
"	6'-0"	16'-3"	4'-6"	40.4			526
"	6'-0"	14'-6"	4'-6"	38.8	2650	32	503
"	7'-0"	12'-0"	4'-9"	37.0			480
"	8'-0"	11'-0"	5'-0"	35.3			457
"	9'-0"	10'-3"	5'-0"	33.2			428
"	10'-0"	9'-6"	5'-3"	31.0			400
13'-0"	5'-0"	16'-3"	4'-6"	38.3			505
"	6'-0"	14'-6"	4'-6"	36.6			483
"	6'-0"	12'-0"	4'-9"	35.2			462
"	7'-0"	11'-0"	5'-0"	33.6	2440	28	440
"	8'-0"	9'-3"	5'-0"	31.6			412
"	9'-0"	7'-6"	5'-3"	29.5			385
"	10'-0"	3'-9"	5'-6"	[illegible]			

TABLE IV

QUANTITIES TO BE ADDED TO TABLE III FOR VARIOUS GIRDER SPANS & ROADWAY WIDTHS. ALSO VALUES OF W & N

SPAN	20' Roadway N	20' Roadway W	20' Roadway Conc.	20' Roadway Steel	Roadway N	Roadway W	Roadway Conc.	Roadway Steel	Roadway N	Roadway W	Roadway Conc.	Roadway Steel
16'	2'-0"	23'-2"	0.66									
18'	2'-2"	"	0.53									
20'	2'-4"	"	0.40									
22'	2'-5"	"	0.33									
24'	2'-6"	"	0.26									
26'	2'-7"	"	0.20									
28'	2'-8"	"	0.13									
30'	2'-10"	"	0.00	0								

GENERAL NOTES & DESIGN DATA

General Spec. - La. State Highway Dept.

All concrete to be class "A" (1:2:4)

All reinforcing bars to consist of deformed bars, having an effective area equal to that of the bars noted on plan.

All exposed corners to be given a ¾" chamfer, except where noted otherwise.

Design as shown on plan is for 30' girder, with 20' roadway. For other girder spans and roadway widths, see table IV. For 13' height and various wing lengths, see table III.

Construction joint between ftg. and wall to be keyed as shown on plan.

All dimensions relating to reinforcing bars, refer to centers of bars.

NOTATION:-
H = height, taken as distance from bridge floor at E. to bottom of spread ftg. - and to top of piling for pile ftg.
h = height of wing-wall at end, as shown.
L = length of wing-wall, as shown.
B = width of footing at end of wing-wall.
N = depth of notch for girder. W = width of notch.

Values of N and W for different girder spans and roadway widths are given in table IV.

Lateral earth pressure taken as equal to that of a fluid weighing 25 lbs. per cu.ft. and having a depth equal to that of the earth fill.

$f_c = 650^{\#}$, $f_s = 16000^{\#}$. Wgt. earth = $100^{\#}$/cu.ft.

Expansion joint between girder and abutment to be constructed at one end only, - the other end of girder to be anchored to abutment.

Station	Spn.	Rdwy.	Plan	H	h	Quantities - 2 Abut's. Conc.	Steel	Piling	Remarks

13FT & 14FT

CONCRETE ABUTMENT

FOR CONC. GIRDER BRIDGES, 16' to 30' SPANS
16', 18' & 20' ROADWAYS

Louisiana State Highway Department
State Board of Engineers

NEW ORLEANS, LA. Scale - ⅜ in. = 1 ft. JUNE 1921.

APPROVED:-
STATE HIGHWAY ENGINEER

Designed by: R.F.J. 6/20/21.
Drawn by: R.F.J. 7/2/21.
Traced by: R.F.J. 7/11/21.
Checked by:
Revisions:-

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