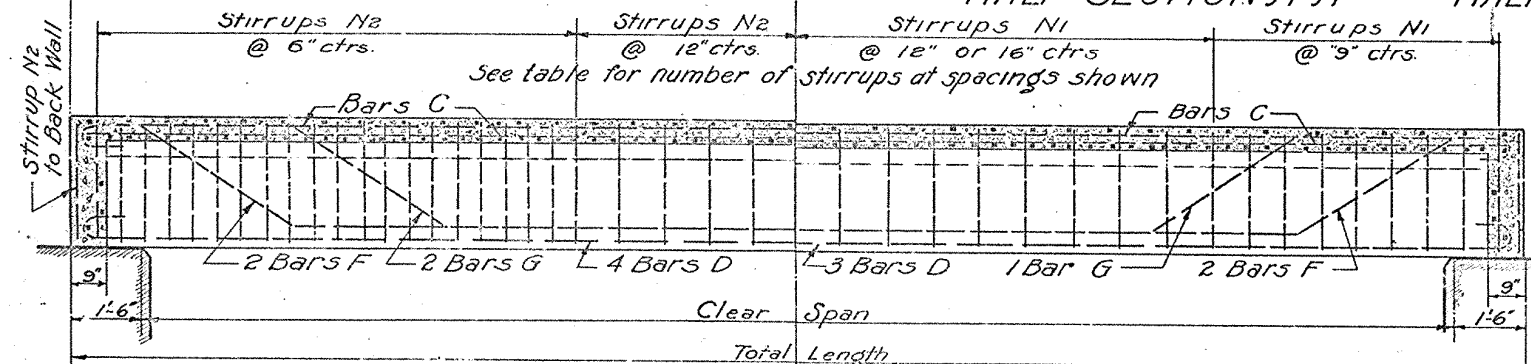
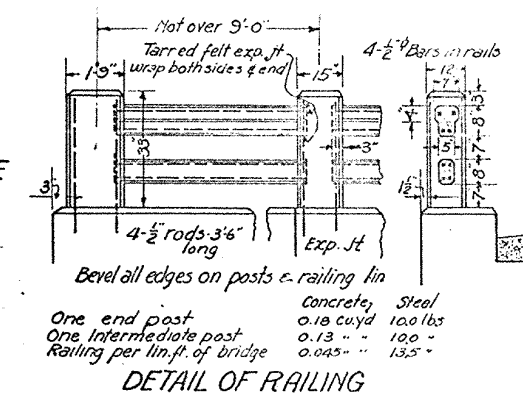
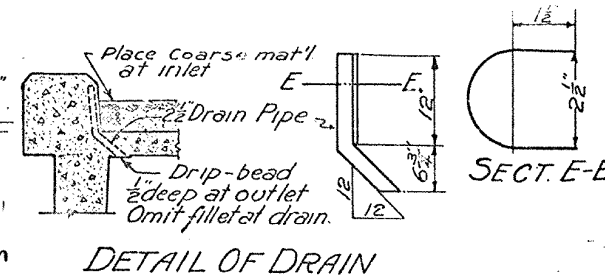
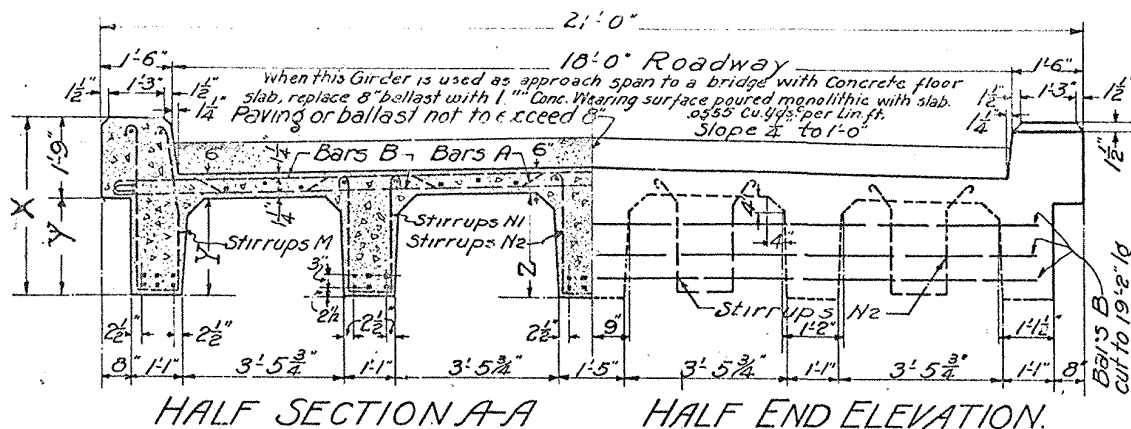
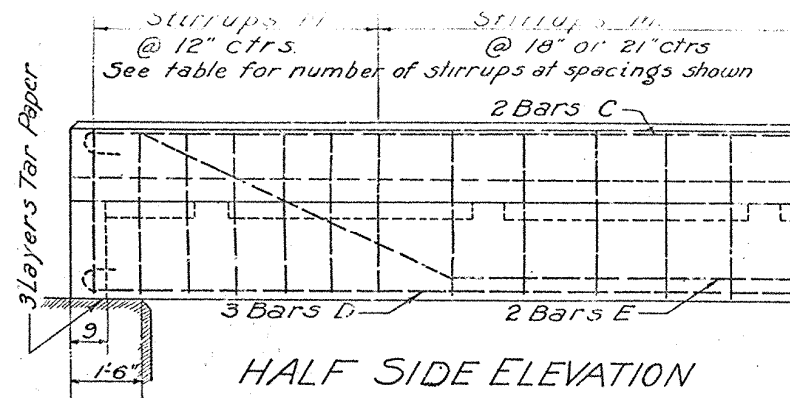




BILL OF STEEL

Clear Span Feet	Bars A-1/2"		Bars B-1/2"		Bars C-1/2"		Bars D		Bars E		Bars F		Bars G		Bars M-1/2"		Bars N-1/2"	
	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length
28	36	21'-10"	80	21'-2"	26	30'-6"	16	18'-0"	4	18'-0"	6	18'-0"	4	18'-0"	50	7'-10"	70	5'-0"
30	39	21'-10"	84	21'-2"	26	32'-6"	16	18'-0"	4	18'-0"	6	18'-0"	4	18'-0"	52	8'-4"	74	6'-2"
32	41	21'-10"	90	21'-2"	26	34'-6"	16	18'-0"	4	18'-0"	6	18'-0"	4	18'-0"	54	8'-10"	78	6'-8"
34	43	21'-10"	94	21'-2"	26	36'-6"	16	18'-0"	4	18'-0"	6	18'-0"	4	18'-0"	56	9'-4"	82	7'-2"
36	46	21'-10"	98	21'-2"	26	38'-6"	16	18'-0"	4	18'-0"	6	18'-0"	4	18'-0"	58	9'-6"	86	7'-4"
38	48	21'-10"	104	21'-2"	26	40'-6"	16	18'-0"	4	18'-0"	6	18'-0"	4	18'-0"	60	10'-0"	90	7'-10"
40	51	21'-10"	108	21'-2"	26	42'-6"	16	18'-0"	4	18'-0"	6	18'-0"	4	18'-0"	62	10'-6"	94	8'-4"

STEEL BENDING TABLE

Clear Span Feet	Bars D	Bars E					Bars F					Bars G					Bars M	Bars N1	Bars N2
		a	b	c	d	e	a	b	c	d	e	a	b	c	d	e	h	h	h
28	30'-6"	1'-3"	6'-6"	15'-0"	2'-8"	7'-0 ³ / ₄ "	1'-3"	3'-3"	21'-6"	1'-7"	3'-7 ³ / ₈ "	4'-6"	3'-3"	15'-0"	1'-7"	3'-7 ³ / ₈ "	3'-1"	2'-0"	2'-1"
30	32'-6"	1'-3"	7'-0"	16'-0"	2'-11"	7'-7"	1'-3"	3'-6"	23'-0"	1'-10"	3'-11 ³ / ₈ "	4'-9"	3'-5"	16'-0"	1'-10"	3'-11 ³ / ₈ "	3'-4"	2'-3"	2'-4"
32	34'-6"	1'-3"	7'-6"	17'-0"	3'-2"	8'-1 ³ / ₄ "	1'-3"	3'-9"	24'-6"	2'-1"	4'-3 ¹ / ₂ "	5'-0"	3'-9"	17'-0"	2'-1"	4'-3 ¹ / ₂ "	3'-7"	2'-6"	2'-7"
34	36'-6"	1'-3"	8'-0"	18'-0"	3'-5"	8'-8 ³ / ₈ "	1'-3"	4'-0"	26'-0"	2'-4"	4'-7 ⁵ / ₈ "	5'-3"	4'-0"	18'-0"	2'-4"	4'-7 ⁵ / ₈ "	3'-10"	2'-9"	2'-10"
36	38'-6"	1'-3"	8'-6"	19'-0"	3'-6"	9'-2 ¹ / ₄ "	1'-3"	4'-3"	27'-6"	2'-5"	4'-10 ³ / ₈ "	5'-6"	4'-3"	19'-0"	2'-5"	4'-10 ³ / ₈ "	3'-11"	2'-10"	2'-11"
38	40'-6"	1'-3"	9'-0"	20'-0"	3'-9"	9'-9"	1'-3"	4'-6"	29'-0"	2'-8"	5'-2 ³ / ₄ "	5'-9"	4'-6"	20'-0"	2'-8"	5'-2 ³ / ₄ "	4'-2"	3'-1"	3'-2"
40	42'-6"	1'-3"	9'-6"	21'-0"	4'-0"	10'-3 ³ / ₄ "	1'-3"	4'-9"	30'-6"	2'-11"	5'-6 ⁷ / ₈ "	6'-0"	4'-9"	21'-0"	2'-11"	5'-6 ⁷ / ₈ "	4'-5"	3'-4"	3'-5"

24"

10"

14"

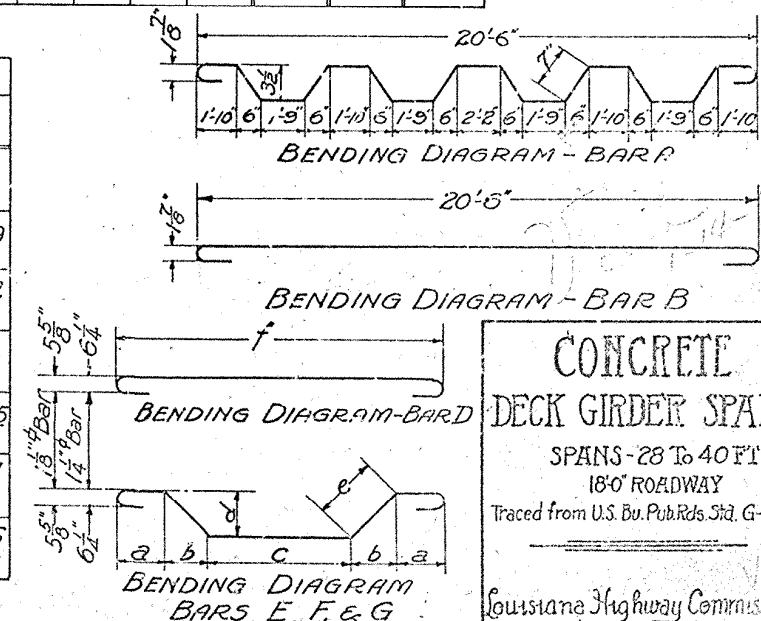
BARS M E N

BENDING DIAGRAM

BARS M E N

DIMENSIONS & QUANTITIES

Clear Span Feet	Total Length Ft.	Dimensions			Stirrup Spacing			Quantities	
		X	Y	Z	Exterior Beam	Interior Beam	Interior Beam	Concrete Cu Yds	Steel Lbs
28	31'-0"	3'-5"	1'-8"	1'-10"	6.5 pcs @ 12"	8 pcs @ 9"	20 pcs @ 6"	30.2	7541
30	33'-0"	3'-8"	1'-11"	2'-4"	6 " " 12"	8 " " 9"	20 " " 6"	34.1	8059
32	35'-0"	3'-11"	2'-2"	2'-4"	6 " " 12"	8 " " 9"	20 " " 6"	38.1	8632
34	37'-0"	4'-2"	2'-5"	2'-7"	10 " " 12"	10 " " 9"	20 " " 6"	42.5	9136
36	39'-0"	4'-3"	2'-6"	2'-8"	10 " " 12"	10 " " 9"	20 " " 6"	45.5	10885
38	41'-0"	4'-6"	2'-9"	2'-11"	11 " " 12"	10 " " 9"	21 " " 6"	50.1	11527
40	43'-0"	4'-9"	3'-0"	3'-2"	11 " " 12"	10 " " 9"	22 " " 6"	55.0	12166



QUARTER PLAN.

GENERAL NOTES AND DESIGN DATA

Specifications B.P.R 1918
Concentrated load Typical 15 Ton truck.
Impact allowance 30 per cent
Paving or ballast - Not to exceed 80 lbs per sq. ft.
Steel in tension 16000 " " Sq. in.
Concrete in Compression 650 " " " "
Reinforced concrete in shear 110 " " " "
The table is based on the net area of bars as follows:
3/8" = 0.1406 sq. in. 1/2" = 0.25 sq. in.
5/8" = 0.2656 sq. in. 3/4" = 0.5625 sq. in.

Concrete to be a 1:2:4 mixture.
Maximum size of aggregate - 1 1/2".
All reinforcing steel shall be deformed bars.
(Square twisted bars not to be considered as deformed)
All dimensions relating to reinforcement are to centers of bars.
Where splicing of reinforcement is necessary, bars are to be lapped 40 diameters.
All exposed corners (except as indicated) to be chamfered thus:
Railings designed to suit local conditions to be placed on curbs where necessary, and provision made therefore when pouring curb. For types of railing, see Drawing No. G-211.
Curbs, slab and beam - stems must be poured at same time, allowing no time for initial set to take place between them.

Note: Quantities exclusive of Posts & railing
Small figures below give quantities in posts and railing for one panel complete.

CONCRETE DECK GIRDER SPANS
SPANS - 28 To 40 FT
18'-0" ROADWAY
Traced from U.S. Bur. Pub. Rds. Std. G-264.
Louisiana Highway Commission
Baton Rouge, La.
Jan. 1923
Approved
Slate Highway Engineer

Revised July 22, 26.