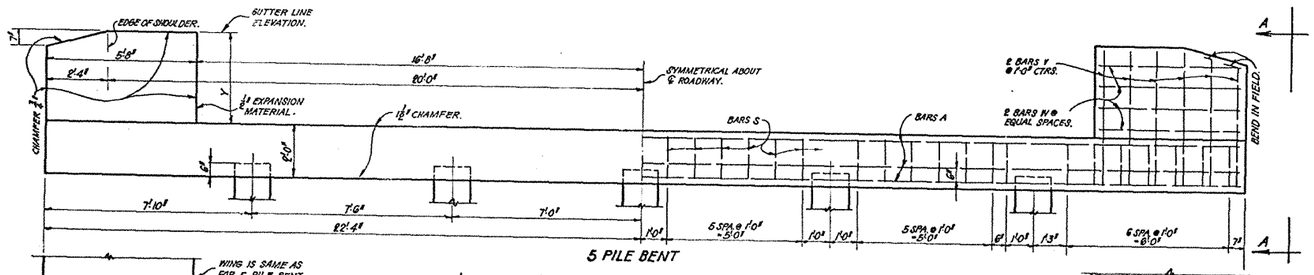
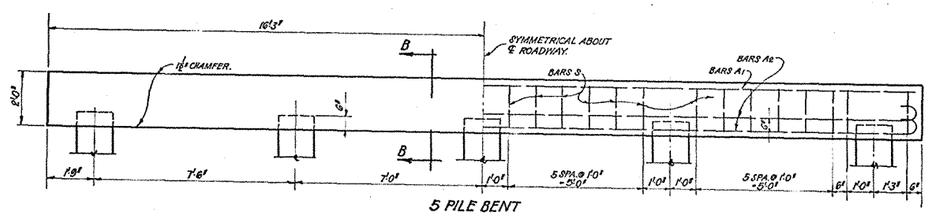
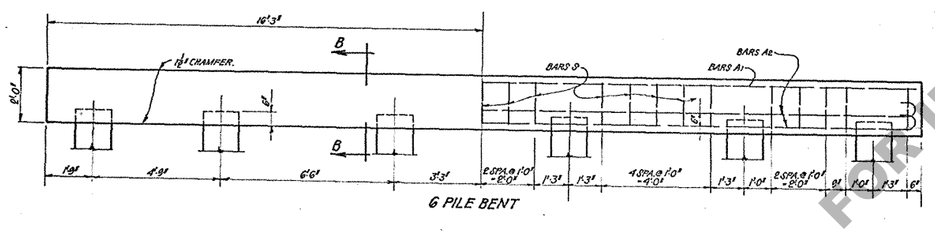
STATE PROJECT	PARISH	SHEET NO.

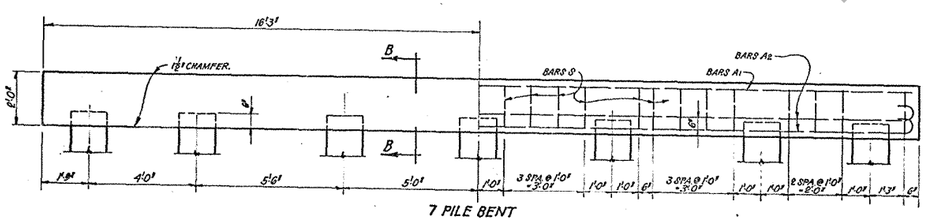


END BENTS · 30' TO 40' SPANS

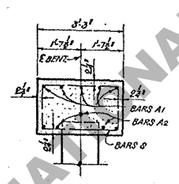
30' SPAN					32' SPAN					34' SPAN					36' SPAN					38' SPAN					40' SPAN				
BAR	NO.	SIZE	UNIT LENGTH	TOTAL LENGTH	BAR	NO.	SIZE	UNIT LENGTH	TOTAL LENGTH	BAR	NO.	SIZE	UNIT LENGTH	TOTAL LENGTH	BAR	NO.	SIZE	UNIT LENGTH	TOTAL LENGTH	BAR	NO.	SIZE	UNIT LENGTH	TOTAL LENGTH	BAR	NO.	SIZE	UNIT LENGTH	TOTAL LENGTH
S 5 PILE BENT	40	5/8	10'-0"	400'-0"	S 5 PILE BENT	40	5/8	10'-0"	400'-0"																				
S 6 PILE BENT	37	"	10'-0"	370'-0"	S 6 PILE BENT	37	"	10'-0"	370'-0"	S 6 PILE BENT	37	5/8	10'-0"	370'-0"	S 6 PILE BENT	37	5/8	10'-0"	370'-0"	S 6 PILE BENT	37	5/8	10'-0"	370'-0"	S 6 PILE BENT	37	5/8	10'-0"	370'-0"
7 PILE BENT	38	"	10'-0"	380'-0"	7 PILE BENT	38	"	10'-0"	380'-0"	7 PILE BENT	38	"	10'-0"	380'-0"	7 PILE BENT	38	"	10'-0"	380'-0"	7 PILE BENT	38	"	10'-0"	380'-0"	7 PILE BENT	38	"	10'-0"	380'-0"
V	24	"	5'-0"	120'-0"	V	24	"	5'-1"	122'-0"	V	24	"	5'-3"	126'-0"	V	24	"	5'-5"	130'-0"	V	24	"	5'-6"	132'-0"	V	24	"	5'-8"	136'-0"
W	16	"	5'-4"	85'-4"	W	16	"	5'-4"	85'-4"	W	16	"	5'-4"	85'-4"	W	16	"	5'-4"	85'-4"	W	16	"	5'-4"	85'-4"	W	16	"	5'-4"	85'-4"
TOTAL 5/8" BARS	5 PILE BENT 605'-4" = 404 #				TOTAL 5/8" BARS	5 PILE BENT 607'-4" = 406 #				TOTAL 5/8" BARS	6 PILE BENT 581'-4" = 388 #				TOTAL 5/8" BARS	6 PILE BENT 585'-4" = 391 #				TOTAL 5/8" BARS	6 PILE BENT 587'-4" = 392 #				TOTAL 5/8" BARS	6 PILE BENT 581'-4" = 395 #		
	6 PILE BENT 575'-4" = 384 #					6 PILE BENT 577'-4" = 386 #					7 PILE BENT 591'-4" = 395 #					7 PILE BENT 585'-4" = 398 #					7 PILE BENT 587'-4" = 399 #					7 PILE BENT 601'-4" = 408 #		
	7 PILE BENT 585'-4" = 391 #					7 PILE BENT 587'-4" = 392 #																							
A 5 PILE BENT	10	1 1/2	44'-4"	443'-4"	A 5 PILE BENT	10	1 1/2	44'-4"	443'-4"	A 5 PILE BENT	10	1 1/2	44'-4"	443'-4"	A 5 PILE BENT	10	1 1/2	44'-4"	443'-4"	A 5 PILE BENT	10	1 1/2	44'-4"	443'-4"	A 5 PILE BENT	10	1 1/2	44'-4"	443'-4"
A 6 PILE BENT	10	1	44'-4"	443'-4"	A 6 PILE BENT	10	1	44'-4"	443'-4"	A 6 PILE BENT	10	1	44'-4"	443'-4"	A 6 PILE BENT	10	1	44'-4"	443'-4"	A 6 PILE BENT	10	1	44'-4"	443'-4"	A 6 PILE BENT	10	1	44'-4"	443'-4"
A 7 PILE BENT	10	"	44'-4"	443'-4"	A 7 PILE BENT	10	"	44'-4"	443'-4"	A 7 PILE BENT	10	"	44'-4"	443'-4"	A 7 PILE BENT	10	"	44'-4"	443'-4"	A 7 PILE BENT	10	"	44'-4"	443'-4"	A 7 PILE BENT	10	"	44'-4"	443'-4"
TOTAL 1/10" BARS	5 PILE BENT 443'-4" = 1908 #				TOTAL 1/10" BARS	5 PILE BENT 443'-4" = 1908 #				TOTAL 1/10" BARS	6 PILE BENT 443'-4" = 1908 #				TOTAL 1/10" BARS	6 PILE BENT 443'-4" = 1908 #				TOTAL 1/10" BARS	6 PILE BENT 443'-4" = 1908 #				TOTAL 1/10" BARS	6 PILE BENT 443'-4" = 2355 #		
TOTAL 1/10" BARS	6 PILE BENT 443'-4" = 1507 #				TOTAL 1/10" BARS	6 PILE BENT 443'-4" = 1507 #				TOTAL 1/10" BARS	7 PILE BENT 443'-4" = 1908 #				TOTAL 1/10" BARS	7 PILE BENT 443'-4" = 1908 #				TOTAL 1/10" BARS	7 PILE BENT 443'-4" = 1908 #				TOTAL 1/10" BARS	7 PILE BENT 443'-4" = 2355 #		
	7 PILE BENT 443'-4" = 1507 #				TOTAL 1/10" BARS	7 PILE BENT 443'-4" = 1507 #																							
5 PILE BENT	CLASS "A" CONC. 11.94 CU.YDS.				5 PILE BENT	CLASS "A" CONC. 11.97 CU.YDS.																							
	REINF. STEEL 2312 LBS.					REINF. STEEL 2314 LBS.																							
6 PILE BENT	CLASS "A" CONC. 11.90 CU.YDS.				6 PILE BENT	CLASS "A" CONC. 11.94 CU.YDS.				6 PILE BENT	CLASS "A" CONC. 12.01 CU.YDS.				6 PILE BENT	CLASS "A" CONC. 12.08 CU.YDS.				6 PILE BENT	CLASS "A" CONC. 12.11 CU.YDS.				6 PILE BENT	CLASS "A" CONC. 12.18 CU.YDS.		
	REINF. STEEL 1891 LBS.					REINF. STEEL 1893 LBS.					REINF. STEEL 2296 LBS.					REINF. STEEL 2299 LBS.					REINF. STEEL 2300 LBS.					REINF. STEEL 2750 LBS.		
7 PILE BENT	CLASS "A" CONC. 11.87 CU.YDS.				7 PILE BENT	CLASS "A" CONC. 11.91 CU.YDS.				7 PILE BENT	CLASS "A" CONC. 11.98 CU.YDS.				7 PILE BENT	CLASS "A" CONC. 12.05 CU.YDS.				7 PILE BENT	CLASS "A" CONC. 12.08 CU.YDS.				7 PILE BENT	CLASS "A" CONC. 12.15 CU.YDS.		
	REINF. STEEL 1858 LBS.					REINF. STEEL 1899 LBS.					REINF. STEEL 2303 LBS.					REINF. STEEL 2306 LBS.					REINF. STEEL 2307 LBS.					REINF. STEEL 2757 LBS.		



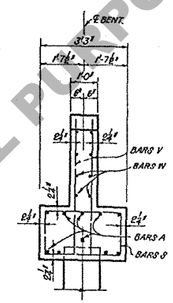




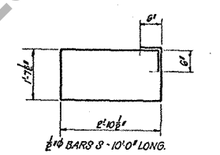
INTERMEDIATE BENTS



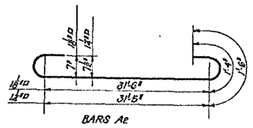
SECTION B-B



VIEW A-A



1/2" ⌀ BARS S - 10'-0" LONG.



BARS A2

SPAN	Y
30 FT.	3'-4"
32 FT.	3'-5"
34 FT.	3'-7"
36 FT.	3'-9"
38 FT.	3'-10"
40 FT.	4'-0"

INTERMEDIATE BENTS

BAR	SIZE	NO.	UNIT LENGTH	TOTAL LENGTH	LOCATION
5 PILE BENT					
S	5/8 ⌀	28	10'-0"	280'-0"	HOOPS IN CAP
TOTAL 5/8 ⌀ BARS				280'-0" = 187 LBS.	
A1	1 1/2 □	5	32'-2"	160'-10"	CAP.
A2	"	5	34'-2"	170'-10"	CAP.
TOTAL 1 1/2 □ BARS				331'-8" = 1427 LBS.	
CLASS "A" CONCRETE					7.66 CU. YDS.
REINFORCING STEEL					1614 LBS.
6 PILE BENT					
S	5/8 ⌀	25	10'-0"	250'-0"	HOOPS IN CAP.
TOTAL 5/8 ⌀ BARS				250'-0" = 167 LBS.	
A1	1 1/2 □	5	32'-2"	160'-10"	CAP.
A2	"	5	34'-5"	172'-11"	CAP.
TOTAL 1 1/2 □ BARS				332'-11" = 1769 LBS.	
CLASS "A" CONCRETE					7.63 CU.YDS.
REINFORCING STEEL					1936 LBS.
7 PILE BENT					
S	5/8 ⌀	26	10'-0"	260'-0"	HOOPS IN CAP.
TOTAL 5/8 ⌀ BARS				260'-0" = 174 LBS.	
A1	1 1/2 □	5	32'-2"	160'-10"	CAP.
A2	"	5	34'-5"	172'-11"	CAP.
TOTAL 1 1/2 □ BARS				332'-11" = 1769 LBS.	
CLASS "A" CONCRETE					7.59 CU.YDS.
REINFORCING STEEL					1943 LBS.

DESIGN LOAD · NUMBER AND SIZE OF PILES

SPAN STANDARD C-S-12-20	END BENT		INTERMEDIATE BENT	
	TOTAL DESIGN LOAD IN TONS.	MIN. SIZE AND NO. OF PILES AND AV. PILE LOAD IN TONS.	TOTAL DESIGN LOAD IN TONS.	MIN. SIZE AND NO. OF PILES AND AV. PILE LOAD IN TONS.
30'	172.6	14" □ 7 @ 24.7 TONS 16" □ 6 @ 28.8 TONS 18" □ 5 @ 34.5 TONS	172.6	14" □ 7 @ 24.7 TONS 16" □ 6 @ 28.8 TONS 18" □ 5 @ 34.5 TONS
32'	181.0	14" □ 7 @ 25.9 TONS 16" □ 6 @ 30.2 TONS 18" □ 5 @ 36.0 TONS	181.0	14" □ 7 @ 25.9 TONS 16" □ 6 @ 30.2 TONS 18" □ 5 @ 36.0 TONS
34'	190.7	14" □ 7 @ 27.3 TONS 16" □ 6 @ 31.8 TONS 18" □ 6 @ 31.8 TONS	190.7	14" □ 7 @ 27.3 TONS 16" □ 6 @ 31.8 TONS 18" □ 6 @ 31.8 TONS
36'	200.6	16" □ 7 @ 28.7 TONS 18" □ 6 @ 33.4 TONS	200.6	16" □ 7 @ 28.7 TONS 18" □ 6 @ 33.4 TONS
38'	209.0	16" □ 7 @ 29.9 TONS 18" □ 6 @ 34.8 TONS	209.0	16" □ 7 @ 29.9 TONS 18" □ 6 @ 34.8 TONS
40'	219.1	16" □ 7 @ 31.3 TONS 18" □ 6 @ 36.0 TONS	219.1	16" □ 7 @ 31.3 TONS 18" □ 6 @ 36.0 TONS

Max. Pile Loads Unless Otherwise Instructed By Br. Des. Sec.
14" □ R.C. Piles = 28 Tons Per Pile.
16" □ R.C. Piles = 32 Tons Per Pile.
18" □ R.C. Piles = 36 Tons Per Pile.

** TO PROVIDE FOR FUTURE EXTENSION OF BRIDGE THE END BENTS ARE DESIGNED FOR SAME LOAD AS INTERMEDIATE BENTS.

NOTE:
FOR DETAILS OF CONCRETE PILES SEE STANDARD PLAN C-S-14D.

GENERAL NOTES:
CONSTRUCTION SPECIFICATIONS: LATEST APPROVED LA. HWY. DEPT. STD. SPECIFICATIONS.
DESIGN SPECIFICATIONS: AAS. HO. 1944.
LIVE LOAD H20S16 1944.
ALL CONCRETE TO BE CLASS "A".
ALL DIMENSIONS TO REINFORCING STEEL ARE TO BAR CENTERS.
QUANTITIES COMPUTED ASSUMING USE OF 18" □ PILING.
COST OF EXPANSION MATERIAL TO BE INCLUDED IN PRICE BID FOR OTHER ITEMS.

DATE	DESCRIPTION	BY
7-8-49	Note covering Max. Pile loading	J.B.D.
6-22-48	Reference to pile tips omitted	G.H.
3-6-46	DIMENS. PILE TIPS & PILE END BENT	TAB/CEA

REVISIONS

STANDARD PLAN

REINFORCED CONCRETE PILE BENTS
FOR R.C.D.G. SPANS · H20 S16 · 1944 · LOADING
28'-0" CLEAR ROADWAY · 1'-6" SIDEWALKS
TO BE USED WITH STD PLAN C-G-12-20

DATED FEB. ....., 1946

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

DESIGNED J.B.D.	DETAILED J.B.D.	TRACED C.E.M.
CHECKED Huey	CHECKED Huey	CHECKED J.B.D.
IN CHARGE OF J.A. Brown	HEAD BRIDGE DRAFTSMAN	

C-S-12-20

FOR INFORMATIONAL PURPOSES ONLY