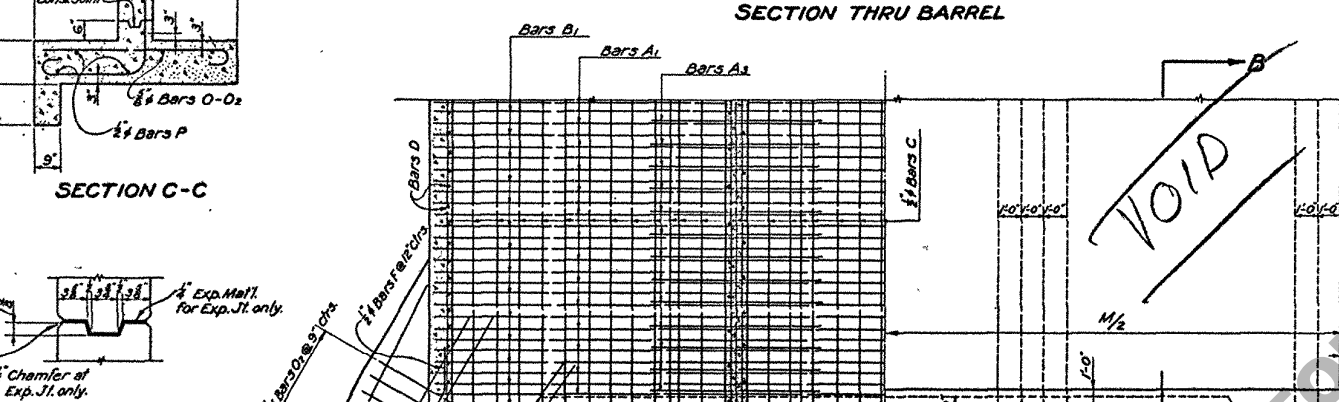
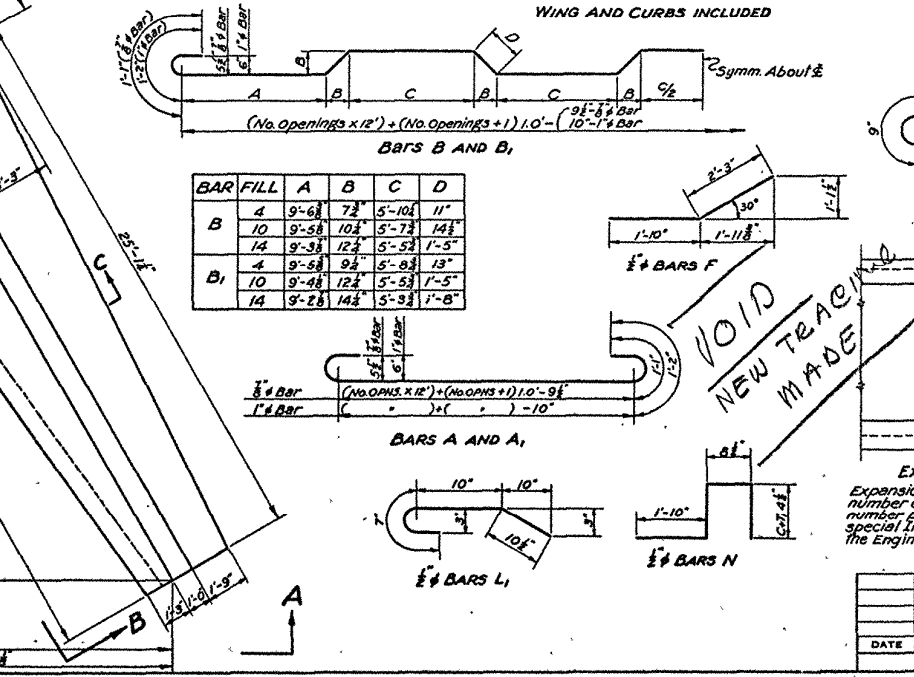
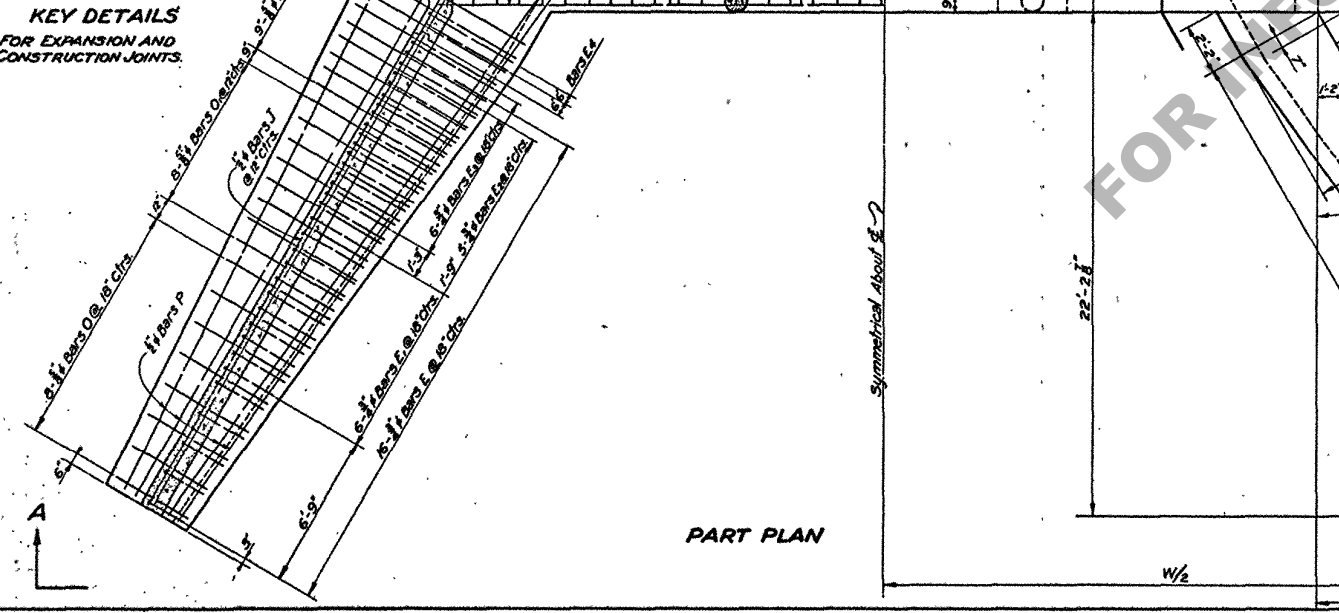


X	CURB REINFORCING										BARREL REINFORCING										X																						
	NO. OPENINGS		BARS M		BARS N		BARS A		BARS A <sub>1</sub>		BARS A <sub>2</sub>		BARS B		BARS B <sub>1</sub>		BARS C		BARS D			NO. OPENINGS	FILL HEIGHT FEET																				
	NO.	HEIGHT	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH																							
2	4	27	0	54	6	5 1/2	12	8 1/2	23	28	4 1/2	16	8 1/2	29	28	4 1/2	13	8 1/2	52	8	7	13	8 1/2	24	28	11	16	8	30	29	0	13	90	31	9	12	8 1/2	84	13	7 1/2	14	2	4
4	3	4	40	0	80	6	5 1/2	-	-	46	22	4	-	58	22	4	-	104	8	7	-	-	-	48	22	10 1/2	-	60	22	11 1/2	-	130	31	9	-	-	112	13	7 1/2	-	3	4	
10	3	4	27	5	106	6	5 1/2	-	-	46	29	1 1/2	-	58	29	1 1/2	-	156	8	7	-	-	-	48	29	8	-	60	29	9 1/2	-	170	31	9	-	-	40	13	7 1/2	-	4	10	
14	3	4	27	5	106	6	5 1/2	-	-	62	22	4	-	76	22	4	-	138	8	7	-	-	-	64	23	0 1/2	-	78	23	1 1/2	-	150	31	9	-	-	172	14	2	-	3	10	
14	3	4	27	5	106	6	5 1/2	-	-	62	29	1 1/2	-	76	29	1 1/2	-	207	8	7	-	-	-	64	29	11	-	78	30	0	-	170	31	9	-	-	215	14	2	-	4	10	
14	3	4	27	5	106	6	5 1/2	-	-	54	22	5	-	62	22	5	-	116	9	0	-	-	-	56	23	5	-	64	23	7	-	130	31	9	-	-	164	14	6	-	2	14	
14	4	3	27	5	106	6	5 1/2	-	-	54	28	11	-	62	28	11	-	174	9	0	-	-	-	56	30	3 1/2	-	64	30	6 1/2	-	170	31	9	-	-	205	14	6	-	4	14	



X	DIMENSIONS				QUANTITIES				NO. OPENINGS	FILL HEIGHT FEET	
	NO.	AREA SQ. FT.	T IN.	T <sub>1</sub> IN.	M FT. IN.	W FT. IN.	C FT. IN.	C <sub>1</sub> FT. IN.			STEEL LBS.
2	286	13	11 1/2	40	4	1-4 1/2	10 1/2	357.17	3.4490	2	4
4	429	13	11 1/2	40	4	1-4 1/2	10 1/2	550.61	4.9135	3	4
10	429	16	14	40	4	1	2	723.48	6.3780	4	10
14	429	16	14	40	4	1	0	727.05	5.5926	3	14
14	429	18	16	40	4	1	0	973.80	7.2778	4	14
14	429	18	16	40	4	1	0	558.46	4.2408	2	14
14	429	18	16	40	4	1	0	827.13	6.0864	3	14
14	429	18	16	40	4	1	0	1080.67	7.9320	4	14

WING REINFORCING (2 HEADWALLS)				
MARK SIZE	NO.	SHORT BAR	LONG BAR	TOTAL LENGTH
E <sub>1</sub>	64	9'-9 1/2"	7 1/2"	18'-10 1/2"
E <sub>2</sub>	24	10'-10 1/2"	2"	11'-8 1/2"
E <sub>3</sub>	20	11'-10 1/2"	2"	12'-6 1/2"
E <sub>4</sub>	24	8'-11"	2"	9'-9"
E <sub>5</sub>	8	19'-9"	-	158'-0"
Total # Bars = 1494'-6" = 2245 Lbs.				
F	32	4'-2"	3"	5'-11"
O <sub>1</sub>	32	6'-1"	2"	7'-2"
O <sub>2</sub>	36	7'-3 1/2"	1 1/2"	8'-1 1/2"
Total # Bars = 650'-9 1/2" = 679 Lbs.				
J	52	4'-1"	-	212'-4"
K	28	23'-10"	-	667'-4"
L	24	3'-9"	3'-4 1/2"	20'-7 1/2"
M	8	24'-10"	-	198'-8"
N	8	2'-3 1/2"	-	18'-4"
P	20	30'-0"	-	600'-0"
Total # Bars = 1989'-2" = 1329 Lbs.				
TOTAL REINFORCING STEEL = 4253 LBS				



**GENERAL NOTES:**  
 Specifications: Latest approved La. Dept. of Hwy. Std. Specs. Design Specifications: A.A.S.H.O. 1944. Revised. Loading H20-S16-N20-M15.  
 All concrete to be Class A.  
 Reinf. Steel to be Intermediate Grade.  
 Dimensions Reinforcing Steel are to Bar Centers.  
 All exposed Corners to be chamfered 1/4".  
 Place approx. one Cu. Ft. of large size Gravel or loose Rock behind and around each Weep Hole.  
 When Culvert is located at a site subject to scour, the Curbin Walls shall be made deeper or Rip Rap placed around inside face of Curbin Walls to prevent scouring.

**STANDARD PLAN**  
**MULTIPLE 12"x12" OPENINGS**  
**REINFORCED CONCRETE BOX CULVERTS**  
**3:1 SLOPE.**

DESIGNED BY: *S. P. B.*  
 CHECKED BY: *S. P. B.*  
 DATE: *Sept. 1946*

STATE OF LOUISIANA  
 DEPARTMENT OF HIGHWAYS

NO.	DATE	DESCRIPTION	BY	CHECKED