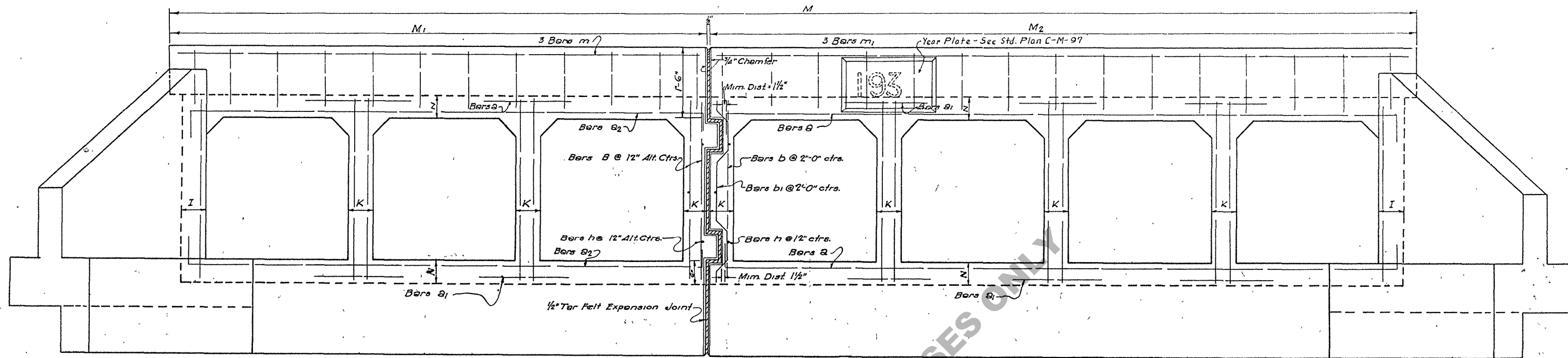
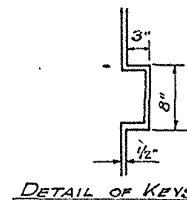




END ELEVATION SHOWING EXPANSION JOINT FOR STANDARD PLAN C-C-13-15
THIS PLAN TO BE USED WITH C-C-13-15



OPENINGS	UNIT LENGTHS
3' x 3'	0' - 10"
4' x 4'	1' - 10"
5' x 5'	2' - 10"
6' x 6'	3' - 0"
8' x 8'	6' - 4"

DIMENSIONS & QUANTITIES FOR 24'-0" STRUCTURE

SIZE SINGLE OPENING	FEET	OPENINGS		DIMENSIONS			QUANTITIES		TOTAL		
		No.	Clear Span	Area	M	M1	M2	Per Lin. Foot of Beam		Conc. Steel	
			Feet	Sq. Ft.	ft. Ins	ft. Ins	ft. Ins	Cu. Yds.	Lbs.	Cu. Yds.	Lbs.
3 x 3	7	21	63	26'-0"	11'-3"	14'-9"	1	1.472	170.8	45.69	4826
	8	24	72	29'-6"	14'-9"	14'-9"	1	1.661	194.1	51.16	5461
	9	27	81	33'-0"	14'-9"	18'-3"	1	1.850	217.4	56.62	6093
	10	30	90	36'-6"	18'-3"	18'-3"	2	2.040	240.7	62.11	6724
4 x 4	11	33	99	40'-0"	18'-3"	21'-9"	2	2.229	264.0	67.58	7358
	12	36	108	43'-6"	21'-9"	21'-9"	2	2.418	287.3	73.04	7991
	7	28	112	34'-0"	14'-8"	19'-3"	2	2.042	223.7	63.92	6336
	8	32	128	38'-7"	19'-3"	19'-3"	2	2.307	254.6	71.54	7172
5 x 5	9	36	144	43'-2"	19'-3"	23'-0"	2	2.573	285.4	79.17	8010
	10	40	160	47'-9"	23'-0"	23'-0"	2	2.839	316.3	86.81	8828
	11	44	176	52'-4"	23'-0"	28'-5"	3	3.104	347.1	94.42	9682
	12	48	192	56-11 1/4	28-5 1/4	28-5 1/4	3	3.370	378.0	102.06	10570
6 x 6	7	35	175	41'-7"	17-1 1/4	23'-7"	2	2.656	290.7	84.36	8159
	8	40	200	47-3 1/4	23-7 1/4	23-7 1/4	2	2.999	331.0	94.25	9241
	9	45	225	52-11 1/4	23-7 1/4	29-3 1/4	3	3.341	371.4	104.11	10322
	10	50	250	58-7 1/4	29-3 1/4	29-3 1/4	3	3.684	411.8	114.00	11402
8 x 8	11	55	275	64-3 1/4	29-3 1/4	34-1 1/4	4	4.026	452.2	123.86	12455
	12	60	300	69-11 1/4	34-1 1/4	34-1 1/4	4	4.369	492.5	133.75	13568
	7	42	252	48-7 1/4	20-1 1/4	27-7 1/4	3	3.427	368.1	107.16	10249
	8	48	288	55-3 1/4	27-7 1/4	27-7 1/4	3	3.872	419.6	120.64	11619
	9	54	324	61-11 1/4	27-7 1/4	34-3 1/4	4	4.318	471.1	133.14	12956
	10	60	360	68-7 1/4	34-3 1/4	34-3 1/4	4	4.763	522.7	145.82	14353
	11	66	396	75-3 1/4	34-3 1/4	40-1 1/4	5	5.208	574.2	158.60	15723
	12	72	432	81-11 1/4	40-1 1/4	40-1 1/4	5	5.654	625.8	171.21	17092
	7	56	448	63-2 1/4	27-2 1/4	35-1 1/4	5	5.550	590.5	172.47	16219
	8	64	512	71-1 1/4	35-1 1/4	35-1 1/4	6	6.067	671.8	192.89	18131
	9	72	576	80-8 1/4	35-1 1/4	44-8 1/4	6	6.935	759.7	212.24	20643
	10	80	640	89-4 1/4	44-8 1/4	44-8 1/4	7	7.702	843.4	232.87	22663
	11	88	704	98-2 1/4	44-8 1/4	53-2 1/4	8	8.420	927.9	253.04	25076
	12	96	768	106-11 1/4	53-2 1/4	53-2 1/4	9	9.137	1012.3	273.15	27293

GENERAL NOTES:

- This plan is a supplement of Standard Plan C-C-13-15 and is to be used in conjunction with it. This plan simply shows method of placing Expansion Joint and gives Bill of Material and Quantities for 7 to 12 openings of same structures as detailed on Standard Plan C-C-13-15.
- All dimensions not shown on this plan shall be as shown on Standard Plan C-C-13-15.
- All General Notes and Design Data as shown on Standard Plan C-C-13-15 shall apply to this Plan.
- No direct payment will be made for the Tar Felt Expansion Material. The cost of same shall be included in the unit bid price for Class 21 Concrete.
- Construction Specs: Latest Approved La. Hwy. Dept. Std. Specs.
- Design Specs: La. Hwy. Commission 1929

DISCARDED
3-4-57
CEA

7 TO 12 MULTIPLE
CONCRETE BOX CULVERTS
WITH EXPANSION JOINT
WITH SINGLE OPENINGS OF
3' x 3', 4' x 4', 5' x 5', 6' x 6', & 8' x 8'

This Plan is Supplement of C-C-13-15

LOUISIANA HIGHWAY COMMISSION
BATCH ROUGE
JULY 1952
C-C-13Exp-15

Revised 1-46 No.

REINFORCEMENT FOR 24" CULVERT ALL 1/2" BARS FOR SPACING ETC. SEE C-C-13-15																																			
OPENING		BARREL REINFORCEMENT																WING and CURB REINFORCEMENT																	
SINGLE	NO	Bars a2		Bars a		Bars a1		Bars b		Bars b1		Bars c		Bars d				Bars d1		Bars h		Bars m		Bars m1		Bars n		Bars e				Bars f		Bars k	
		No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	Short Bar	Variation	Long Bar	No. Each	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	Short Bar	Variation	Long Bar	No. Each	No.	Length	No.	Length
FEET		Fe. Ins.		Fe. Ins.	Fe. Ins.		Fe. Ins.	Fe. Ins.		Fe. Ins.	Fe. Ins.		Fe. Ins.	Fe. Ins.	Fe. Ins.	Fe. Ins.	Fe. Ins.		Fe. Ins.	Fe. Ins.		Fe. Ins.	Fe. Ins.		Fe. Ins.	Fe. Ins.	Fe. Ins.	Fe. Ins.	Fe. Ins.		Fe. Ins.	Fe. Ins.		Fe. Ins.	Fe. Ins.
3x3	7	70	11-9	70	15-0	350	2-0	221	3-9	13	4-2	42	25-9	31-3	3-6	34-9	2	2	34-10	21	25-9	6	11-0	6	14-6	32	1-3	3-8	7	6-0	4	8	4-9	8	6-0
	8	70	15-3	70	15-0	420	2-0	247	3-9	13	4-2	48	25-9	31-3	3-6	34-9	2	2	34-10	24	25-9	6	14-6	6	14-6	60	1-3	3-8	7	6-0	4	8	4-9	8	6-0
	9	70	15-3	70	18-6	490	2-0	273	3-9	13	4-2	54	25-9	31-3	3-6	34-9	2	2	34-10	27	25-9	6	14-6	6	18-0	66	1-3	3-8	7	6-0	4	8	4-9	8	6-0
	10	70	18-9	70	18-6	560	2-0	299	3-9	13	4-2	60	25-9	31-3	3-6	34-9	2	2	34-10	30	25-9	6	18-0	6	18-0	72	1-3	3-8	7	6-0	4	8	4-9	8	6-0
	11	70	18-9	70	22-0	630	2-0	325	3-9	13	4-2	66	25-9	31-3	3-6	34-9	2	2	34-10	33	25-9	6	18-0	6	21-6	80	1-3	3-8	7	6-0	4	8	4-9	8	6-0
	12	70	22-3	70	22-0	700	2-0	351	3-9	13	4-2	72	25-9	31-3	3-6	34-9	2	2	34-10	36	25-9	6	21-6	6	21-6	88	1-3	3-8	7	6-0	4	8	4-9	8	6-0
4x4	7	70	15-0	70	19-4	350	2-9	221	4-9	13	5-2	56	25-9	31-3	3-6	34-9	2	4	37-0	28	25-9	6	14-5	6	19-0	68	1-3	4-3	7	7-2	4	8	5-10	8	7-5
	8	70	19-7	70	19-4	420	2-9	247	4-9	13	5-2	64	25-9	31-3	3-6	34-9	2	4	37-0	32	25-9	6	19-0	6	19-0	76	1-3	4-3	7	7-2	4	8	5-10	8	7-5
	9	70	19-7	70	23-11	490	2-9	273	4-9	13	5-2	72	25-9	31-3	3-6	34-9	2	4	37-0	36	25-9	6	19-0	6	23-7	86	1-3	4-3	7	7-2	4	8	5-10	8	7-5
	10	70	24-2	70	23-11	560	2-9	299	4-9	13	5-2	80	25-9	31-3	3-6	34-9	2	4	37-0	40	25-9	6	23-7	6	23-7	96	1-3	4-3	7	7-2	4	8	5-10	8	7-5
	11	70	24-2	70	28-6	630	2-9	325	4-9	13	5-2	88	25-9	31-3	3-6	34-9	2	4	37-0	44	25-9	6	23-7	6	28-2	104	1-3	4-3	7	7-2	4	8	5-10	8	7-5
	12	70	28-9	70	28-6	700	2-9	351	4-9	13	5-2	96	25-9	31-3	3-6	34-9	2	4	37-0	48	25-9	6	28-2	6	28-2	112	1-3	4-3	7	7-2	4	8	5-10	8	7-5
5x5	7	78	18-4	78	23-9	380	3-3	221	5-9	13	6-2	70	25-9	31-3	3-6	38-3	2	4	39-8	35	25-9	6	17-8	6	23-4	84	1-3	4-9	7	8-3	4	8	7-0	8	8-9
	8	78	24-0	78	23-0	456	3-3	247	5-9	13	6-2	80	25-9	31-3	3-6	38-3	2	4	39-8	40	25-9	6	23-4	6	23-4	96	1-3	4-9	7	8-3	4	8	7-0	8	8-9
	9	78	24-0	78	27-5	532	3-3	273	5-9	13	6-2	90	25-9	31-3	3-6	38-3	2	4	39-8	45	25-9	6	23-4	6	29-0	106	1-3	4-9	7	8-3	4	8	7-0	8	8-9
	10	78	29-8	78	29-5	608	3-3	299	5-9	13	6-2	100	25-9	31-3	3-6	38-3	2	4	39-8	50	25-9	6	29-0	6	29-0	116	1-3	4-9	7	8-3	4	8	7-0	8	8-9
	11	78	29-8	78	35-1	684	3-3	325	5-9	13	6-2	110	25-9	31-3	3-6	38-3	2	4	39-8	55	25-9	6	29-0	6	34-8	128	1-3	4-9	7	8-3	4	8	7-0	8	8-9
	12	78	35-4	78	35-1	760	3-3	351	5-9	13	6-2	120	25-9	31-3	3-6	38-3	2	4	39-8	60	25-9	6	34-8	6	34-8	140	1-3	4-9	7	8-3	4	8	7-0	8	8-9
6x6	7	88	21-4	88	27-9	430	3-9	221	6-11	13	7-4	84	25-9	31-6	3-6	38-6	2	6	41-6	42	25-9	6	20-8	6	27-4	98	1-4	5-3	7	9-4	4	8	8-0	8	10-4
	8	88	28-0	88	27-9	516	3-9	247	6-11	13	7-4	96	25-9	31-6	3-6	38-6	2	6	41-6	48	25-9	6	27-4	6	27-4	112	1-4	5-3	7	9-4	4	8	8-0	8	10-4
	9	88	28-0	88	34-5	602	3-9	273	6-11	13	7-4	108	25-9	31-6	3-6	38-6	2	6	41-6	54	25-9	6	27-4	6	34-0	124	1-4	5-3	7	9-4	4	8	8-0	8	10-4
	10	88	34-8	88	34-5	688	3-9	299	6-11	13	7-4	120	25-9	31-6	3-6	38-6	2	6	41-6	60	25-9	6	34-0	6	34-0	136	1-4	5-3	7	9-4	4	8	8-0	8	10-4
	11	88	34-8	88	41-1	774	3-9	325	6-11	13	7-4	132	25-9	31-6	3-6	38-6	2	6	41-6	66	25-9	6	34-0	6	40-8	150	1-4	5-3	7	9-4	4	8	8-0	8	10-4
	12	88	41-4	88	41-1	860	3-9	351	6-11	13	7-4	144	25-9	31-6	3-6	38-6	2	6	41-6	72	25-9	6	40-8	6	40-8	164	1-4	5-3	7	9-4	4	8	8-0	8	10-4
8x8	7	122	27-9	122	36-3	600	5-0	221	9-3	13	9-8	112	25-9	32-0	3-6	46-0	2	6	46-8	56	25-9	6	26-11	6	35-8	126	1-6	6-3	7	11-6	4	8	10-6	8	13-0
	8	122	36-6	122	36-3	720	5-0	247	9-3	13	9-8	128	25-9	32-0	3-6	46-0	2	6	46-8	64	25-9	6	35-8	6	35-8	144	1-6	6-3	7	11-6	4	8	10-6	8	13-0
	9	122	36-6	122	45-0	840	5-0	273	9-3	13	9-8	144	25-9	32-0	3-6	46-0	2	6	46-8	72	25-9	6	35-8	6	44-5	162	1-6	6-3	7	11-6	4	8	10-6	8	13-0
	10	122	45-3	122	45-0	960	5-0	299	9-3	13	9-8	160	25-9	32-0	3-6	46-0	2	6	46-8	80	25-9	6	44-5	6	44-5	180	1-6	6-3	7	11-6	4	8	10-6	8	13-0
	11	122	45-3	122	53-9	1080	5-0	325	9-3	13	9-8	176	25-9	32-0	3-6	46-0	2	6	46-8	88	25-9	6	44-5	6	53-2	198	1-6	6-3	7	11-6	4	8	10-6	8	13-0
	12	122	54-0	122	53-9	1200	5-0	351	9-3	13	9-8	192	25-9	32-0	3-6	46-0	2	6	46-8	96	25-9	6	53-2	6	53-2	216	1-6	6-3	7	11-6	4	8	10-6	8	13-0