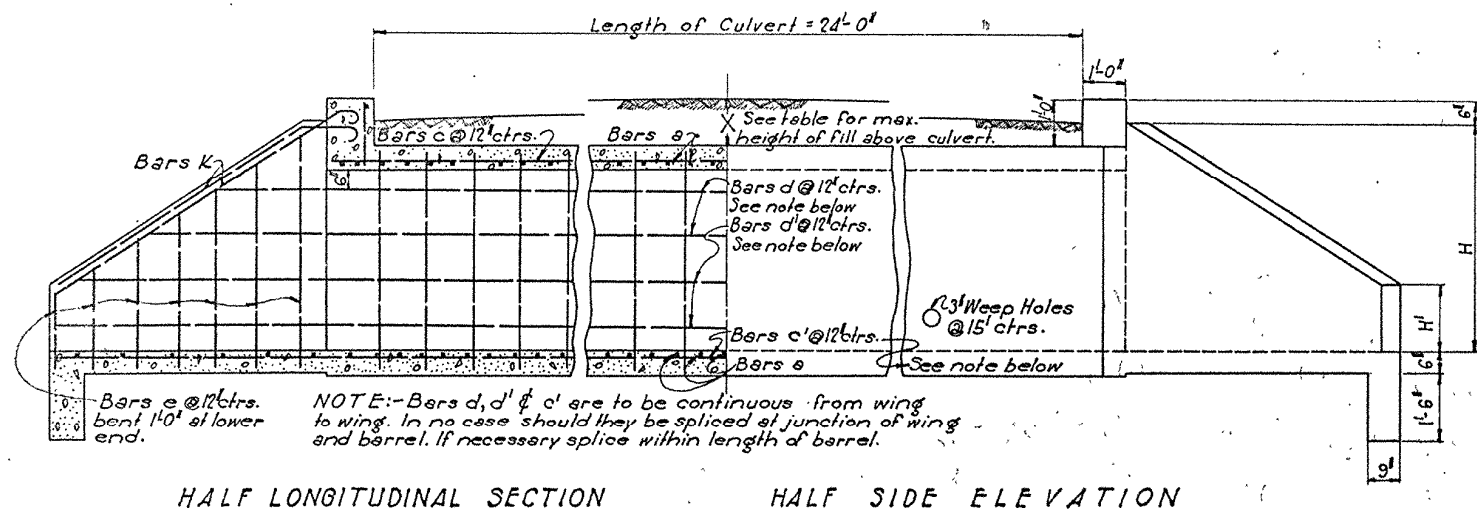
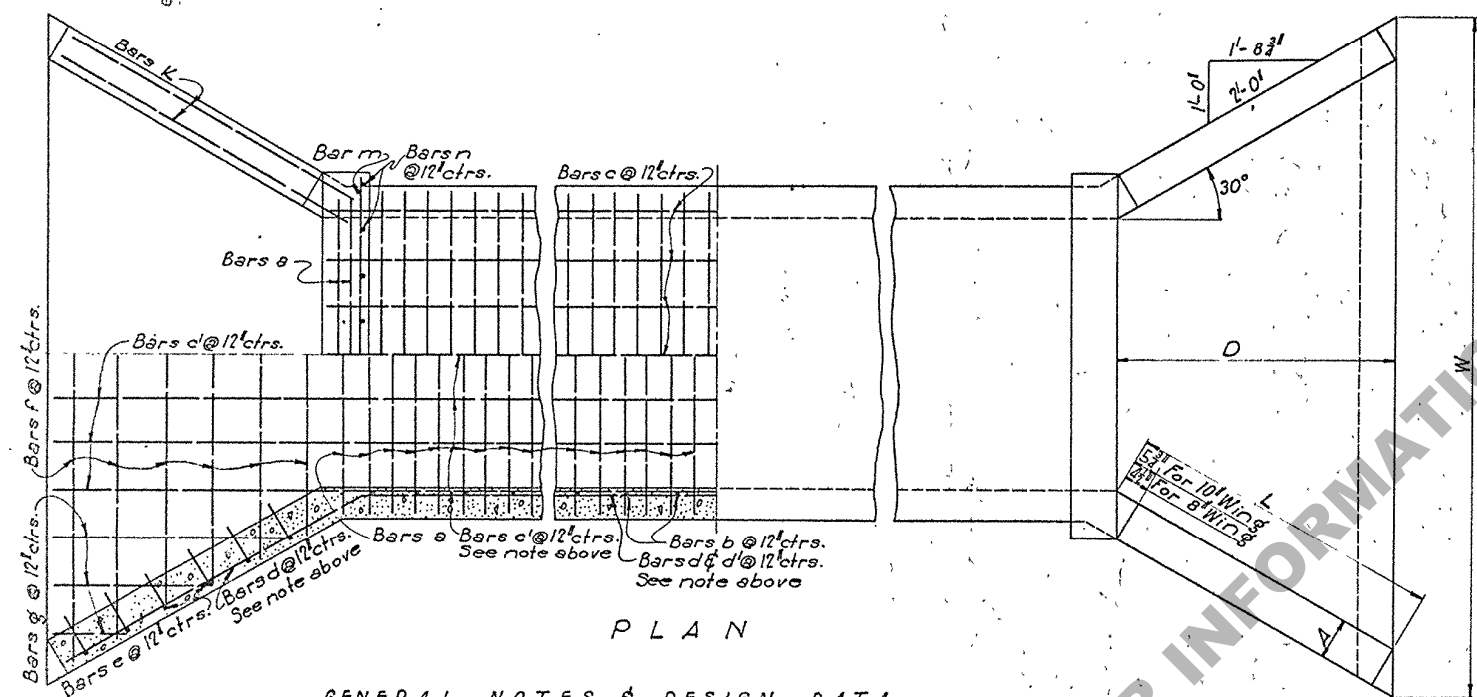




HALF LONGITUDINAL SECTION

HALF SIDE ELEVATION

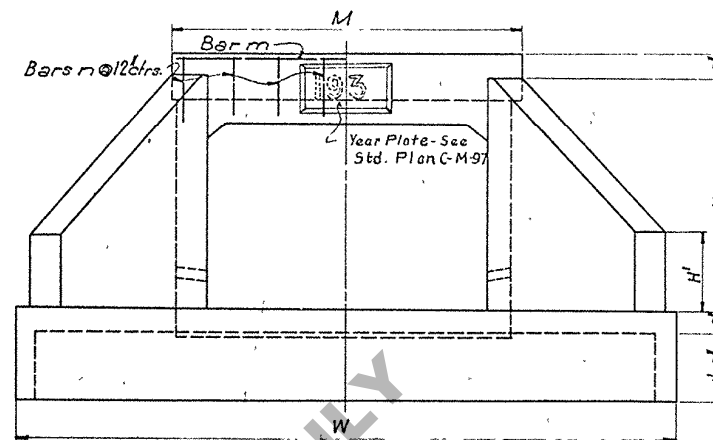


PLAN

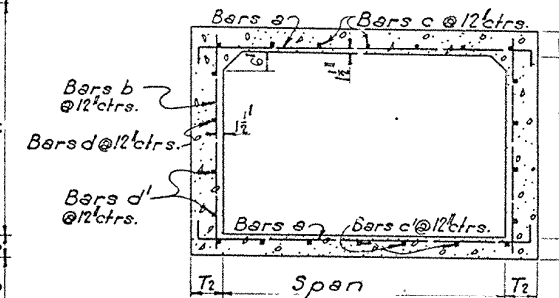
GENERAL NOTES & DESIGN DATA

Construction Specs: Latest Approved La. Hwy. Dept. Std. Specs.
Concrete: All class A₁-1:6 Mix.
Steel: Deformed bars.
All exposed corners to be chamfered 3/4".
All exposed surfaces to be given a smooth finish.
Reinforcing bars should be wired at intersections and properly secured against displacement during depositing of concrete.
Design Specs: La. Highway Commission Feb. 1929.
Concentrated load-15 Ton typical truck with 30% impact allowance.
Entire weight of fill above culvert assumed as acting on culvert.
Horizontal component of earth pressure taken as 30 lbs. per sq. ft.
Steel in tension-16000 lbs. Concrete in compression 650 lbs.
Fill above slab of culvert is not to exceed the maximum height X as given in table.
All dimensions relating to bars are to centers of bars.
Bars at splices are to be lapped 24" and separated 2'.

Place about One (1) Cu Ft. of large size gravel or loose rock behind and around each Weep Hole.



END ELEVATION



SECTION OF BARREL

OPENING		BARREL REINFORCEMENT										WING WALL & FLOOR REINFORCEMENT																ALL 2" BARS										
CLEAR	CLEAR	BAR S		BAR S		BAR S		BAR S		BAR S		BAR S		BAR S		BAR S		BAR S		BAR S		BAR S		BAR S		BAR S		BAR S		BAR S		BAR S		BAR S		BAR S		
SPAN	HEIGHT	NO	SIZE	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH	NO	LENGTH
FT.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	
6	2-0	124	1/2	8-1	5	50	3-1	7	25-9	7	32-11	31-10	—	—	2	2-4	7	4-1	4	8-0	1-2	11-6	2	—	—	3-0	4	8	5-9	2	7-3	16	1-5	2	33-6			
	2-6	124	1/2	8-1	5	50	3-7	7	25-9	7	33-11	31-10	—	—	2	2-6	7	4-10	4	8-0	1-2	11-6	2	1-9	1-9	3-6	4	8	6-6	2	7-3	16	1-5	2	34-10			
	3-0	124	1/2	8-1	5	50	4-1	7	25-9	7	34-11	31-10	3-6	35-4	2	2-8	7	5-0	4	8-0	1-2	12-8	2	2-3	1-9	4-0	4	8	7-2	2	7-3	16	1-5	2	36-0			
	4-0	124	1/2	8-1	5	50	5-1	7	25-9	7	37-1	31-10	3-6	35-4	2	3-0	7	5-11	4	8-0	1-2	13-10	2	1-8	1-9	5-2	4	8	8-6	2	7-8	16	1-5	4	38-2			
	5-0	124	1/2	8-1	5	50	6-1	7	25-9	7	39-7	31-10	3-6	38-10	2	3-2	7	7-3	4	8-0	1-2	15-0	2	3-0	1-9	6-6	4	8	10-3	2	7-8	16	1-5	4	41-0			
8	2-0	104	3/4	10-1	6	50	3-4	9	25-9	9	33-3	32-3	—	—	2	2-4	7	4-1	4	10-0	1-2	13-6	2	—	—	3-3	4	8	6-0	2	9-3	20	1-6	2	34-2			
	2-6	104	3/4	10-1	6	50	3-10	9	25-9	9	34-3	32-3	—	—	2	2-6	7	4-10	4	10-0	1-2	13-6	2	2-0	1-9	3-9	4	8	6-9	2	9-3	20	1-6	2	35-4			
	3-0	104	3/4	10-1	6	50	4-4	9	25-9	9	35-3	32-3	3-6	35-9	2	2-8	7	5-0	4	10-0	1-2	14-8	2	2-6	1-9	4-3	4	8	7-3	2	9-3	20	1-6	2	36-6			
	4-0	104	3/4	10-1	6	50	5-4	9	25-9	9	37-5	32-3	3-6	35-9	2	3-0	7	6-8	4	10-0	1-2	15-10	2	1-10	1-9	5-4	4	8	8-10	2	9-8	20	1-6	4	38-8			
	5-0	104	3/4	10-1	6	50	6-4	9	25-9	9	39-11	32-3	3-6	39-3	2	3-2	7	7-3	4	10-0	1-2	17-0	2	3-0	1-9	6-6	4	8	10-6	2	9-8	20	1-6	4	41-6			
10	2-0	88	3/4	12-1	7	50	3-7	11	25-9	11	33-9	32-8	—	—	2	2-4	7	4-8	4	12-0	1-2	15-6	2	1-9	1-9	3-6	4	8	6-3	2	11-3	24	1-8	2	32-4			
	2-6	88	3/4	12-1	7	50	4-1	11	25-9	11	34-9	32-8	—	—	2	2-6	7	4-10	4	12-0	1-2	15-6	2	2-3	1-9	4-0	4	8	7-0	2	11-3	24	1-8	2	35-6			
	3-0	88	3/4	12-1	7	50	4-7	11	25-9	11	35-9	32-8	3-6	36-2	2	2-8	7	5-7	4	12-0	1-2	16-8	2	2-9	1-9	4-6	4	8	7-8	2	11-3	24	1-8	2	36-8			
	4-0	88	3/4	12-5	7	50	5-7	11	25-9	11	37-9	32-8	3-6	36-2	2	3-0	7	6-6	4	12-0	1-2	17-10	2	2-0	1-9	5-6	4	8	9-0	2	11-8	24	1-8	4	39-0			
	5-0	88	3/4	12-5	7	50	6-7	11	25-9	11	40-3	32-8	3-6	39-8	2	3-2	7	7-3	4	12-0	1-2	19-0	2	1-6	1-9	6-9	4	8	10-8	2	11-8	24	1-8	4	42-0			
12	2-0	104	3/4	14-5	6	50	4-0	13	25-9	13	34-3	33-6	—	—	2	2-4	7	4-8	4	14-0	1-2	17-6	2	2-0	1-9	3-9	4	8	6-8	2	13-3	28	1-10	2	35-0			
	2-6	104	3/4	14-5	6	50	4-6	13	25-9	13	35-3	33-6	—	—	2	2-6	7	4-10	4	14-0	1-2	18-8	2	2-6	1-9	4-3	4	8	7-3	2	13-3	28	1-10	2	36-2			
	3-0	104	3/4	14-5	6	50	5-0	13	25-9	13	36-3	33-6	3-6	37-0	2	2-8	7	5-7	4	14-0	1-2	18-8	2	3-0	1-9	4-9	4	8	8-0	2	13-3	28	1-10	2	37-4			
	4-0	104	3/4	14-5	6	50	6-0	13	25-9	13	38-5	33-6	3-6	37-0	2	3-0	7	6-6	4	14-0	1-2	19-10	2	2-4	1-9	5-10	4	8	9-6	2	13-8	28	1-10	4	39-8			
	5-0	104	3/4	14-5	6	50	7-0	13	25-9	13	40-11	33-6	3-6	40-6	2	3-2	7	7-10	4	14-0	1-2	22-2	2	1-9	1-9	7-0	4	8	11-0	2	13-8	28	1-10	4	42-6			

* NOTE: To obtain lengths of intermediate bars use variation as increment between short and long bars.

DIMENSIONS & QUANTITIES FOR														24'-0" CULVERT													
OPENING BARREL WINGS AND FLOOR														PER LIN. FT. TOTAL TWO													
CLEAR SPAN		CLEAR HEIGHT	AREA	T ₁	T ₂	M	H	H'	L	A	W	D	X	BARREL QUANTITIES				HEADWALLS									
															STEEL	CONC.	STEEL	CONC.	STEEL	CONC.	STEEL	CONC.					
FT.		FT. IN.	SQ. FT.	IN.	IN.	FT. IN.	FT. IN.	FT. IN.	FT. IN.	IN.	FT. IN.	FT. IN.	FT.	POUNDS	CU. YDS.	POUNDS	CU. YDS.	POUNDS	CU. YDS.	POUNDS	CU. YDS.						
6	2-0	12-0	8	8	7-6	3-2	1-0	4-2	8	11-8	3-7	4	53.52	4702	1634	15.79	349	450									
	2-6	15-0	8	8	7-6	3-8	1-2	4-9	8	12-3	4-1	4	54.37	4949	1695	16.97	390	509									
	3-0	18-0	8	8	7-6	4-2	1-4	5-4	8	12-10	4-7	4	56.92	5195	1816	18.20	450	573									
	4-0	24-0	8	8	7-11	5-2	1-8	6-7	10	14-6	5-8	4	60.32	5689	2013	21.58	565	793									
	5-0	30-0	8	8	7-11	6-2	1-10	8-0	10	15-11	6-11	4	63.72	6183	2248	24.84	719	1000									
8	2-0	16-0	9 1/2	9 1/2	8-9	3-3	1-0	4-5	8	13-11	3-9	4	84.94	6554	2498	21.37	459	564									
	2-6	20-0	9 1/2	9 1/2	8-9	3-9	1-2	5-0	8	14-6	4-3	4	85.79	6800	2561	22.60	502	628									
	3-0	24-0	9 1/2	9 1/2	8-9	4-3	1-4	5-7	8	15-1	4-9	4	88.34	7047	2687	23.89	567	697									
	4-0	32-0	9 1/2	9 1/2	8-9	5-1	1-8	6-10	10	16-9	5-10	4	91.74	7541	2915	27.42	714	932									
	5-0	40-0	9 1/2	9 1/2	8-9	6-3	1-10	8-3	10	18-2	7-1	4	95.14	8035	3134	30.81	851	1152									
10	2-0	20-0	11	10	11-6	3-5	1-0	4-7	8	16-1	4-0	4	112.87	8776	3287	27.95	577	689									
	2-6	25-0	11	10	11-6	3-11	1-2	5-5	8	16-8	4-6	4	113.72	9073	3331	29.24	602	758									
	3-0	30-0	11	10	11-6	4-5	1-4	5-9	8	17-3	5-0	4	116.27	9270	3483	30.57	691	832									
	4-0	40-0	11	10	11-11	5-5	1-8	7-0	10	18-11	6-0	4	122.01	10484	3750	36.02	830	1086									
	5-0	50-0	11	10	11-11	6-5	1-10	8-5	10	20-4	7-3	4	125.41	11101	3992	39.04	983	1320									
12	2-0	24-0	13	10	13-8	3-7 1/2	1-0	4-11	8	18-5	4-3	4	150.17	12716	4312	32.12	708	861									
	2-6	30-0	13	10	13-8	4-1 1/2	1-2	5-6	8	19-0	4-9	4	151.02	13075	4388	40.63	763	937									
	3-0	36-0	13	10	13-8	4-7 1/2	1-4	6-1	8	19-7	5-3	4	153.57	13333	4515	42.18	829	1018									
	4-0	48-0	13	10	13-11	5-7 1/2	1-8	7-4	10	21-3	6-4	4	156.97	13951	4742	46.31	975	1203									
	5-0	60-0	13	10	13-11	6-7 1/2	1-10	8-9	10	22-8	7-7	4	160.37	14568	5047	50.28	1199	1532									