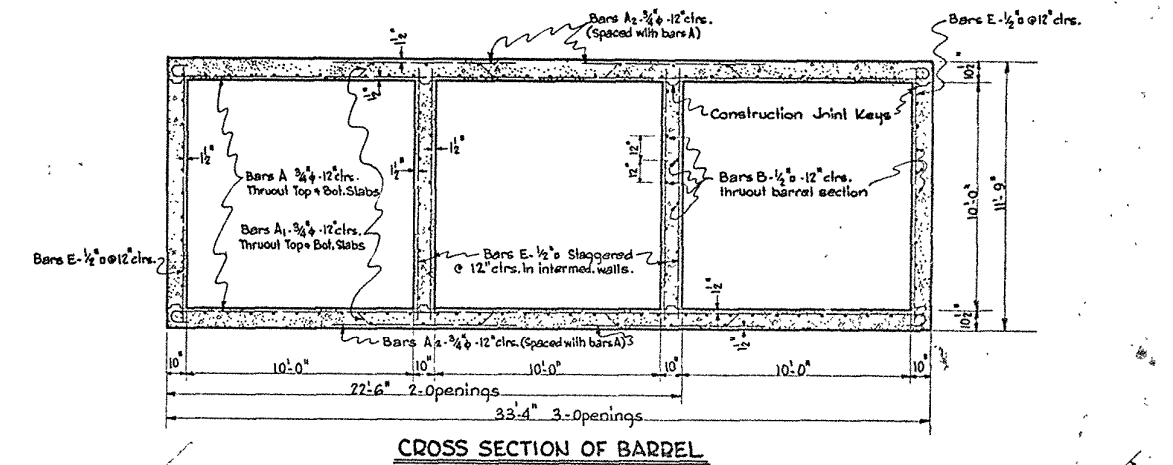
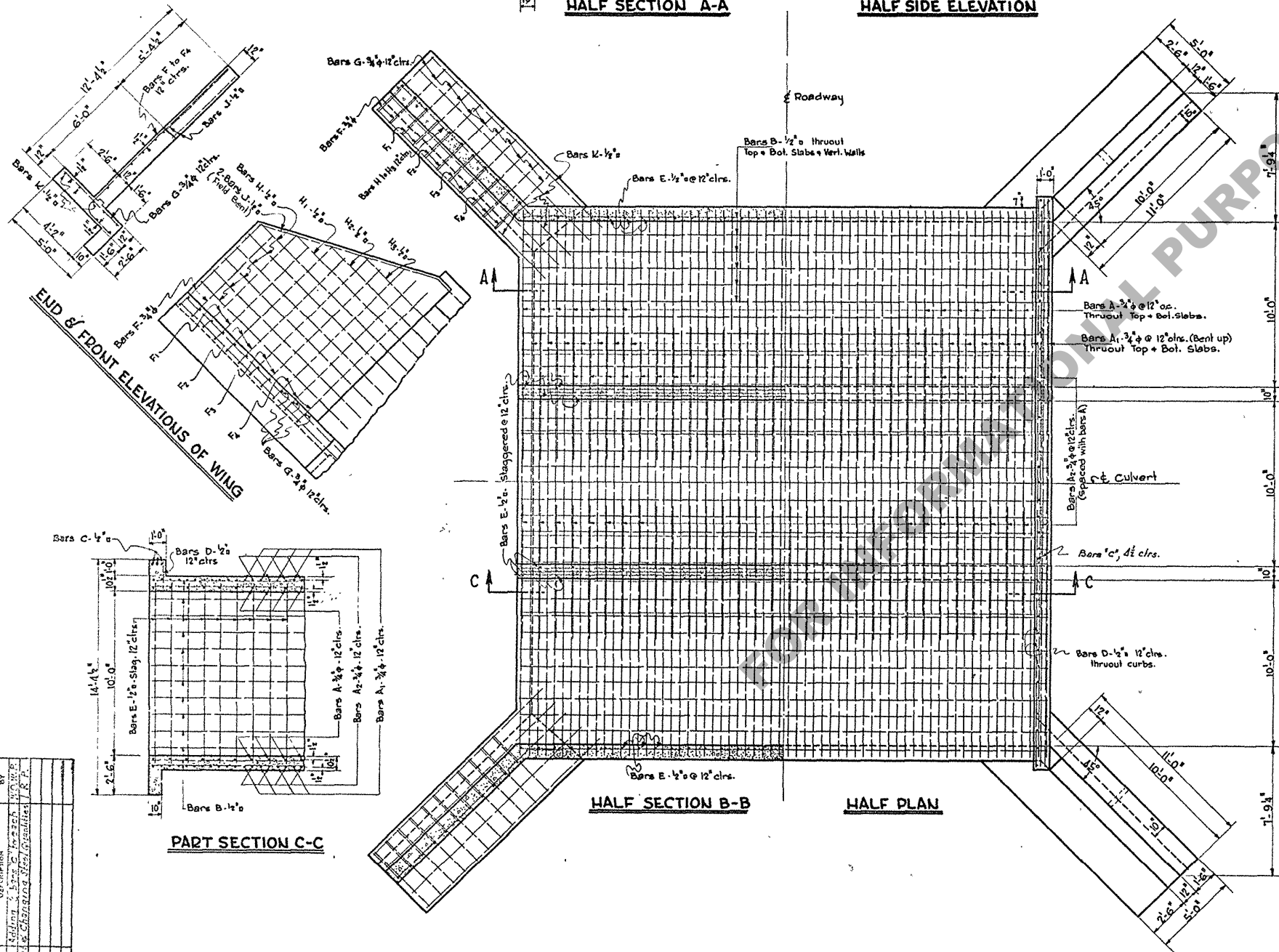
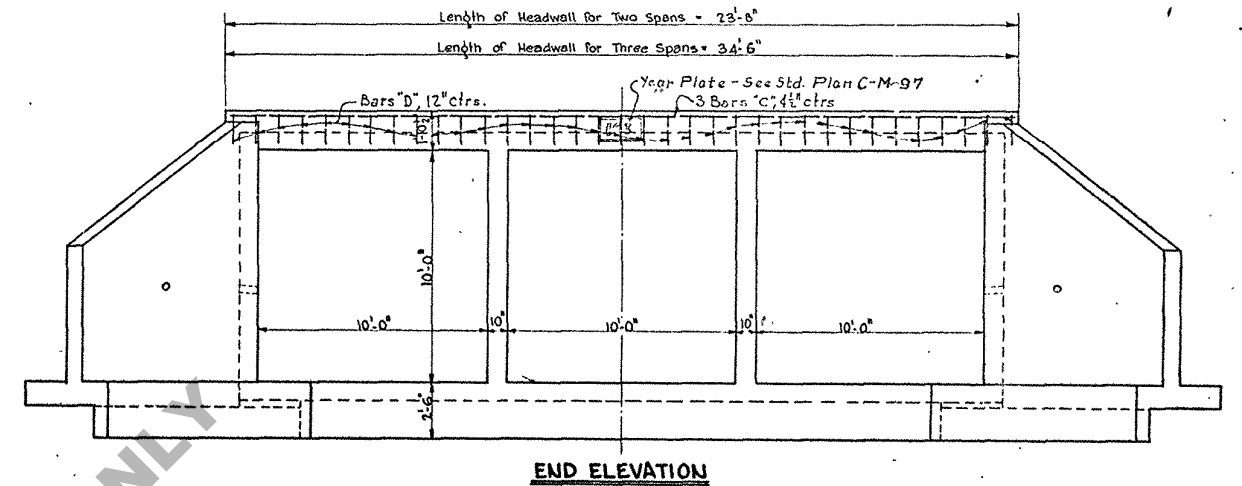
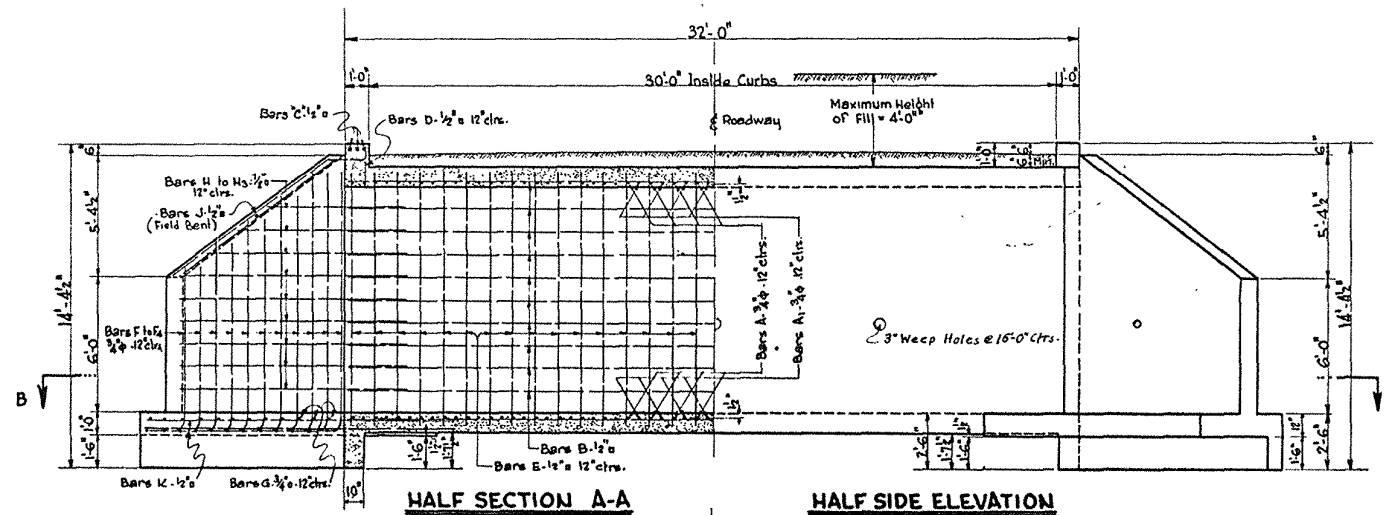




BILL OF MATERIAL FOR 30'-0" CULVERTS										
Mark	Size	2-OPENINGS			3-OPENINGS			Location		
		No.	UNIT LENGTH	TOTAL INCHES	No.	UNIT LENGTH	TOTAL INCHES			
A	3/4"	64	23'-10"	1575.4	239.05	64	34'-3"	2218.8	2332.44"	Top + Sol. Slabs Transverse
A ₁	3/4"	64	24'-5"	1567.8	234.13	64	35'-9"	2283.0	2346.58	
A ₂	3/4"	64	8'-0"	512.0	769.02	128	8'-0"	1024.0	1538.05	Vertical in Wings
F	3/4"	8	8'-11"	71.4	107.14	8	8'-11"	71.4	107.14	
F ₁	3/4"	8	10'-0"	80.0	120.16	8	10'-0"	80.0	120.16	Vertical in Wings
F ₂	3/4"	8	11'-1"	88.8	133.18	8	11'-1"	88.8	133.18	
F ₃	3/4"	8	12'-2"	97.4	146.19	8	12'-2"	97.4	146.19	Vertical in Wings
F ₄	3/4"	12	13'-3"	159.0	238.82	12	13'-3"	159.0	238.82	
G	3/4"	44	4'-10"	212.8	319.43	44	4'-10"	212.8	319.43	Transverse Top Wing Footings
Total 1/2 Bars		4309.0	6472'	4711.2	6239.8	4312.0	6239.8	9312'		
B	1/2"	78	31'-9"	2476.6	2105.03	116	31'-9"	3682.0	3130.55	Longit. Thruout Slabs & Walls
C	3/4"	6	78'-4"	470.4	119.00	6	32'-3"	205.5	191.68	
D	3/4"	48	1'-8"	80.0	68.00	70	1'-8"	116.8	99.71	Top of Curbs Horiz.
E	3/4"	96	11'-6"	1104.0	938.40	128	11'-6"	1472.0	1751.20	
H	3/4"	24	13'-4"	320.0	212.00	24	13'-4"	320.0	212.00	Vertical in Walls
H ₁	3/4"	4	11'-3"	45.0	38.75	4	11'-3"	45.0	38.75	
H ₂	3/4"	4	9'-4"	37.4	31.73	4	9'-4"	37.4	31.73	Horizontal in Wings
H ₃	3/4"	4	7'-5"	29.8	25.22	4	7'-5"	29.8	25.22	
J	3/4"	8	12'-9"	102.0	86.70	8	12'-9"	102.0	86.70	Top of Wing Slope
K	1/2"	28	14'-6"	406.0	345.10	28	14'-6"	406.0	345.10	
Total 1/2 Bars		1720.0	2472.6	4029.3	3411.2	2160.0	3411.2	5655.5		
Total Weights		10501#			14827#					
STEEL		10501 Lbs.			14827 Lbs.					
CONCRETE		103.9 Cu.Yos.			138.1 Cu.Yos.					
STEEL PER BAR		264.60 Lbs.			397.80 Lbs.					
CONC. PER BAR		2.38 Cu.Yos.			3.38 Cu.Yos.					

GENERAL NOTES:
 Specifications: Louisiana Highway Commission 1929
 Assumed Live Load - 2 Typical 15 Ton Trucks
 Maximum Height of Fill = 4'-0"
 Concrete to be Class "A" thruout
 All reinforcing to be deformed.
 Square twisted bars not to be considered as deformed.
 Where splicing of bars is necessary, they shall be lapped a minimum of 40 diameters.
 All exposed corners shall be chamfered 3/4".
 Exposed surfaces of curbs and wingwalls shall be given a smooth "rubbed finish".
 Place about One (1) Cu. Ft. of large size gravel or loose rock behind and around each weep hole.

STANDARD PLAN
10'x10' REINF. CONCRETE BOX CULVERT
TWO OR THREE OPENINGS
LOUISIANA HIGHWAY COMMISSION
 Baton Rouge, La.

Scale: 1/4" = 1'-0"
 May 1931
 66-19-15

VOID 12-20-45