



DETAIL OF SHEET METAL COVER OVER TOPS OF ALL PILES

LONGITUDINAL SECTION

SIDE ELEVATION

HALF SECTION A-A

HALF SECTION B-B

DESIGN DATA AND GENERAL NOTES -

One typical 10 or 15 ton truck.
Impact allowance, 30%
Stress in extreme fibre structural timber 1600 lbs. per sq. in.
3 pile bents may be substituted for the 4 pile bents shown only for the 10 ton truck design for panel lengths not to exceed 20 feet.
All structural timber to be durable and of first quality of the following species: - Largesleaf Shortleaf or Cuban Pine, White, Tambaik or Spanish Oak.
All piles to be straight sound trees of durable quality and peeled. Butt to be not less than 14 in. diam. and tip not less than 9 in. diam. for piles less than 30 ft., nor less than 8 in. for piles over 30 ft. Each pile shall have a bearing capacity of 10 tons as determined by the following formulas: - When drop hammer is used
 $P = \frac{WS}{H}$
When steam hammer is used,
 $P = \frac{WS}{5H}$
Where
P = safe bearing capacity of pile in pounds.
W = weight of striking part of hammer in pounds.
H = fall of hammer in feet.
S = average penetration in inches of pile for each of the last 20 blows of drop hammer, or the last 20 blows of steam hammer.
Piles shall have a minimum penetration of 12 ft. in firm material and 30 ft. in soft material.
Paint: - Railing, 2 coats of white lead and linseed oil.
Tops of piles and caps, the surface of bulk-surfaces of joists, and the rear surface of bulk-head, 1 coat of salt coal tar pitch or asphaltic paint.

DIMENSIONS AND QUANTITIES FOR SUPERSTRUCTURE CAPACITY 10 TON TRUCK

DIMENSIONS AND QUANTITIES FOR SUPERSTRUCTURE CAPACITY 15 TON TRUCK

PANEL LENGTH (L) FEET	JOISTS INCHES	INTERMEDIATE JOISTS FT. B.M.	FLOOR BEAMS FT. B.M.	TOTAL LUMBER SPICES	WEIGHT POUNDS
10	4x12	400	800	1390	80
11	3x14	350	840	1300	80
12	4x12	430	700	1130	90
13	3x14	380	740	1120	90
14	4x12	410	800	1210	90
15	3x14	350	810	1160	90
16	4x12	430	860	1290	100
17	3x14	380	910	1390	100
18	4x12	410	930	1360	120
19	3x14	350	970	1440	120
20	4x12	430	990	1480	130
21	3x14	380	1030	1560	130
22	4x12	410	1070	1640	140
23	3x14	350	1110	1720	140
24	4x12	430	1150	1800	150
25	3x14	380	1190	1880	150
26	4x12	410	1230	1960	160
27	3x14	350	1270	2040	160
28	4x12	430	1310	2120	170
29	3x14	380	1350	2200	170
30	4x12	410	1390	2280	180

PANEL LENGTH (L) FEET	JOISTS INCHES	INTERMEDIATE JOISTS FT. B.M.	FLOOR BEAMS FT. B.M.	TOTAL LUMBER SPICES	WEIGHT POUNDS
10	4x12	400	800	1390	80
11	3x14	350	840	1300	80
12	4x12	430	700	1130	90
13	3x14	380	740	1120	90
14	4x12	410	800	1210	90
15	3x14	350	810	1160	90
16	4x12	430	860	1290	100
17	3x14	380	910	1390	100
18	4x12	410	930	1360	120
19	3x14	350	970	1440	120
20	4x12	430	990	1480	130
21	3x14	380	1030	1560	130
22	4x12	410	1070	1640	140
23	3x14	350	1110	1720	140
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28	4x12	430	1310	2120	170
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30	4x12	410	1390	2280	180

DIMENSIONS AND QUANTITIES - SUBSTRUCTURE

GRADE TO GROUND	SWAY BRACES	INTERMEDIATE BRACES	HEAD-ENDBR TO GROUND	SPICES	WEIGHT POUNDS
10-12	1	18	90	35	5
12-15	1	20	100	35	5
15-18	1	22	110	35	5
18-23	2	18	20	190	60
23-26	2	20	200	60	60
ONE CAP 10x12x17-0"	170	170	170	170	170

PLAN OF TYPICAL TIMBER TRESTLE SPANS 10 TO 29 FT. 15'-1" CLEAR ROADWAY

PANEL LENGTH (L) FEET	JOISTS INCHES	INTERMEDIATE JOISTS FT. B.M.	FLOOR BEAMS FT. B.M.	TOTAL LUMBER SPICES	WEIGHT POUNDS
10	4x12	400	800	1390	80
11	3x14	350	840	1300	80
12	4x12	430	700	1130	90
13	3x14	380	740	1120	90
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29	3x14	380	1350	2200	170
30	4x12	410	1390	2280	180

LOUISIANA HIGHWAY COMMISSION

Scale: 1/4" = 1'

DESIGNED BY: P. H. BOWMAN
 CHECKED BY: D. G. H. Q.
 DATE: NOV. 30, 1917

DEPARTMENT OF STATE ENGINEERS
 NEW ORLEANS, LA.

TRACED BY: P. H. BOWMAN
 CHECKED BY: D. G. H. Q.
 DATE: MARCH 19, 1940

IN CHARGE OF: T. H. H.
 BRIDGE DESIGNING ENGINEER

REVISIONS:

NO. 1: [] BY: [] DATE: []

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