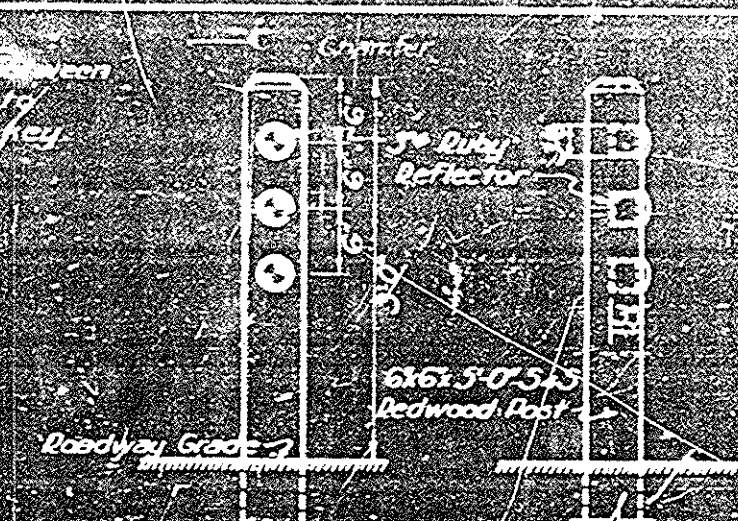
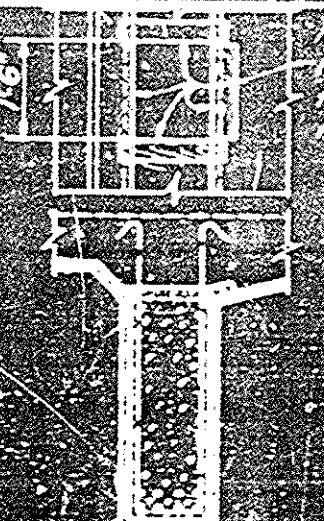
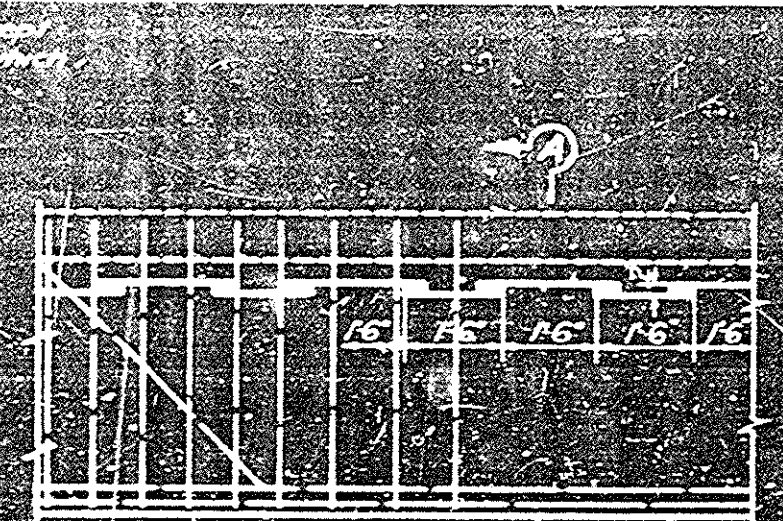
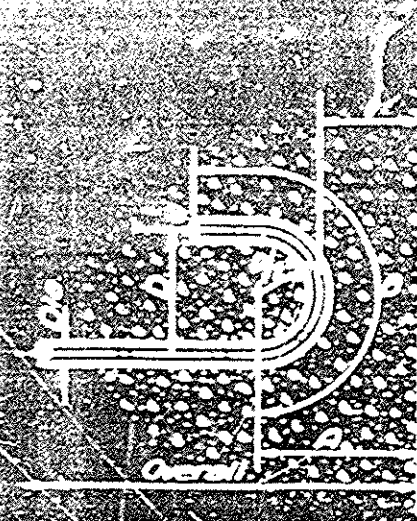




1939

DATE
Scale 3"=1'-0"

HOOKE BAR DATA

FOR BRIDGES ALL BARS FOR BENDING

Bar Size	Bar Length	Bar Weight	Bar Quantity	Bar Weight Total
1/2"	10'	0.17	10	1.7
3/4"	10'	0.26	10	2.6
1"	10'	0.36	10	3.6
1 1/4"	10'	0.62	10	6.2
1 1/2"	10'	0.83	10	8.3
2"	10'	1.34	10	13.4
2 1/2"	10'	2.07	10	20.7
3"	10'	2.97	10	29.7
3 1/2"	10'	4.10	10	41.0
4"	10'	5.40	10	54.0
4 1/2"	10'	6.80	10	68.0
5"	10'	8.33	10	83.3
5 1/2"	10'	10.00	10	100.0
6"	10'	11.80	10	118.0
6 1/2"	10'	13.70	10	137.0
7"	10'	15.80	10	158.0
7 1/2"	10'	18.00	10	180.0
8"	10'	20.30	10	203.0
8 1/2"	10'	22.70	10	227.0
9"	10'	25.20	10	252.0
9 1/2"	10'	27.80	10	278.0
10"	10'	30.50	10	305.0
10 1/2"	10'	33.20	10	332.0
11"	10'	36.00	10	360.0
11 1/2"	10'	38.90	10	389.0
12"	10'	41.80	10	418.0
12 1/2"	10'	44.80	10	448.0
13"	10'	47.90	10	479.0
13 1/2"	10'	51.00	10	510.0
14"	10'	54.20	10	542.0
14 1/2"	10'	57.40	10	574.0
15"	10'	60.70	10	607.0
15 1/2"	10'	64.00	10	640.0
16"	10'	67.40	10	674.0
16 1/2"	10'	70.80	10	708.0
17"	10'	74.30	10	743.0
17 1/2"	10'	77.80	10	778.0
18"	10'	81.40	10	814.0
18 1/2"	10'	85.00	10	850.0
19"	10'	88.70	10	887.0
19 1/2"	10'	92.40	10	924.0
20"	10'	96.20	10	962.0
20 1/2"	10'	100.00	10	1000.0
21"	10'	103.90	10	1039.0
21 1/2"	10'	107.80	10	1078.0
22"	10'	111.80	10	1118.0
22 1/2"	10'	115.80	10	1158.0
23"	10'	119.90	10	1199.0
23 1/2"	10'	124.00	10	1240.0
24"	10'	128.20	10	1282.0
24 1/2"	10'	132.40	10	1324.0
25"	10'	136.70	10	1367.0
25 1/2"	10'	141.00	10	1410.0
26"	10'	145.40	10	1454.0
26 1/2"	10'	149.80	10	1498.0
27"	10'	154.30	10	1543.0
27 1/2"	10'	158.80	10	1588.0
28"	10'	163.40	10	1634.0
28 1/2"	10'	168.00	10	1680.0
29"	10'	172.70	10	1727.0
29 1/2"	10'	177.40	10	1774.0
30"	10'	182.20	10	1822.0
30 1/2"	10'	187.00	10	1870.0
31"	10'	191.90	10	1919.0
31 1/2"	10'	196.80	10	1968.0
32"	10'	201.80	10	2018.0
32 1/2"	10'	206.80	10	2068.0
33"	10'	211.90	10	2119.0
33 1/2"	10'	217.00	10	2170.0
34"	10'	222.20	10	2222.0
34 1/2"	10'	227.40	10	2274.0
35"	10'	232.70	10	2327.0
35 1/2"	10'	238.00	10	2380.0
36"	10'	243.40	10	2434.0
36 1/2"	10'	248.80	10	2488.0
37"	10'	254.30	10	2543.0
37 1/2"	10'	259.80	10	2598.0
38"	10'	265.40	10	2654.0
38 1/2"	10'	271.00	10	2710.0
39"	10'	276.70	10	2767.0
39 1/2"	10'	282.40	10	2824.0
40"	10'	288.20	10	2882.0
40 1/2"	10'	294.00	10	2940.0
41"	10'	299.90	10	2999.0
41 1/2"	10'	305.80	10	3058.0
42"	10'	311.80	10	3118.0
42 1/2"	10'	317.80	10	3178.0
43"	10'	323.90	10	3239.0
43 1/2"	10'	329.90	10	3299.0
44"	10'	336.00	10	3360.0
44 1/2"	10'	342.10	10	3421.0
45"	10'	348.30	10	3483.0
45 1/2"	10'	354.50	10	3545.0
46"	10'	360.70	10	3607.0
46 1/2"	10'	367.00	10	3670.0
47"	10'	373.40	10	3734.0
47 1/2"	10'	379.80	10	3798.0
48"	10'	386.30	10	3863.0
48 1/2"	10'	392.80	10	3928.0
49"	10'	399.40	10	3994.0
49 1/2"	10'	406.00	10	4060.0
50"	10'	412.70	10	4127.0
50 1/2"	10'	419.40	10	4194.0
51"	10'	426.20	10	4262.0
51 1/2"	10'	433.00	10	4330.0
52"	10'	439.90	10	4399.0
52 1/2"	10'	446.80	10	4468.0
53"	10'	453.80	10	4538.0
53 1/2"	10'	460.80	10	4608.0
54"	10'	467.90	10	4679.0
54 1/2"	10'	475.00	10	4750.0
55"	10'	482.20	10	4822.0
55 1/2"	10'	489.40	10	4894.0
56"	10'	496.70	10	4967.0
56 1/2"	10'	504.00	10	5040.0
57"	10'	511.40	10	5114.0
57 1/2"	10'	518.80	10	5188.0
58"	10'	526.30	10	5263.0
58 1/2"	10'	533.80	10	5338.0
59"	10'	541.40	10	5414.0
59 1/2"	10'	549.00	10	5490.0
60"	10'	556.70	10	5567.0
60 1/2"	10'	564.40	10	5644.0
61"	10'	572.20	10	5722.0
61 1/2"	10'	580.00	10	5800.0
62"	10'	587.90	10	5879.0
62 1/2"	10'	595.80	10	5958.0
63"	10'	603.80	10	6038.0
63 1/2"	10'	611.80	10	6118.0
64"	10'	619.90	10	6199.0
64 1/2"	10'	628.00	10	6280.0
65"	10'	636.20	10	6362.0
65 1/2"	10'	644.40	10	6444.0
66"	10'	652.70	10	6527.0
66 1/2"	10'	661.00	10	6610.0
67"	10'	669.40	10	6694.0
67 1/2"	10'	677.80	10	6778.0
68"	10'	686.30	10	6863.0
68 1/2"	10'	694.80	10	6948.0
69"	10'	703.40	10	7034.0
69 1/2"	10'	712.00	10	7120.0
70"	10'	720.70	10	7207.0
70 1/2"	10'	729.40	10	7294.0
71"	10'	738.20	10	7382.0
71 1/2"	10'	747.00	10	7470.0
72"	10'	755.90	10	7559.0
72 1/2"	10'	764.80	10	7648.0
73"	10'	773.80	10	7738.0
73 1/2"	10'	782.80	10	7828.0
74"	10'	791.90	10	7919.0
74 1/2"	10'	801.00	10	8010.0
75"	10'	810.20	10	8102.0
75 1/2"	10'	819.40	10	8194.0
76"	10'	828.70	10	8287.0
76 1/2"	10'	838.00	10	8380.0
77"	10'	847.40	10	8474.0
77 1/2"	10'	856.80	10	8568.0
78"	10'	866.30	10	8663.0
78 1/2"	10'	875.80	10	8758.0
79"	10'	885.40	10	8854.0
79 1/2"	10'	895.00	10	8950.0
80"	10'	904.70	10	9047.0
80 1/2"	10'	914.40	10	9144.0
81"	10'	924.20	10	9242.0
81 1/2"	10'	934.00	10	9340.0
82"	10'	943.90	10	9439.0
82 1/2"	10'	953.80	10	9538.0
83"	10'	963.80	10	9638.0
83 1/2"	10'	973.80	10	9738.0
84"	10'	983.90	10	9839.0
84 1/2"	10'	994.00	10	9940.0
85"	10'	1004.20	10	10042.0
85 1/2"	10'	1014.40	10	10144.0
86"	10'	1024.70	10	10247.0
86 1/2"	10'	1035.00	10	10350.0
87"	10'	1045.40	10	10454.0
87 1/2"	10'	1055.80	10	10558.0
88"	10'	1066.30	10	10663.0
88 1/2"	10'	1076.80	10	10768.0
89"	10'	1087.40	10	10874.0
89 1/2"	10'	1098.00	10	10980.0
90"	10'	1108.70	10	11087.0
90 1/2"	10'	1119.40	10	11194.0
91"	10'	1130.20	10	11302.0
91 1/2"	10'	1141.00	10	11410.0
92"	10'	1151.90	10	11519.0
92 1/2"	10'	1162.80	10	11628.0
93"	10'	1173.80	10	11738.0
93 1/2"	10'	1184.80	10	11848.0
94"	10'	1195.90	10	11959.0
94 1/2"	10'	1207.00	10	12070.0
95"	10'	1218.20	10	12182.0
95 1/2"	10'	1229.40	10	12294.0
96"	10'	1240.70	10	12407.0
96 1/2"	10'	1252.00	10	12520.0
97"	10'	1263.40	10	12634.0
97 1/2"	10'	1274.80	10	12748.0
98"	10'	1286.30	10	12863.0
98 1/2"	10'	1297.80	10	12978.0
99"	10'	1309.40	10	13094.0
99 1/2"	10'	1321.00	10	13210.0
100"	10'	1332.70	10	13327.0

Amount to be added to overall dimension of concrete member to give the length of the hooked reinforcing bars hooked at each end.

Where girder stems and slabs are poured separately, raised keys shall be used. The 1'-6" dimension is to be approximated as closely as shims will permit. After concrete in stem is poured, key forms of 2"x4" lumber cut to fit shall be placed immediately and keys poured. Concrete surfaces shall all be thoroughly cleaned by wire brush or air and water pressure jets. This shall be done as soon as the concrete has hardened sufficiently to allow removal of the surface slickings and to expose clean aggregate.

KEYS - SLAB TO GIRDER

Clearance Markers to be set on right hand side of roadway as structure is approached with clearances as shown on Sheet No. 1

STANDARD 3 LIGHT CLEARANCE MARKER

2 Required
Scale 1"=1'-0"

JCM
March 10, 1939