

Foundations and Rail

7-19-51

Measured level of top of foundation ring. Found to be 44" below top of building foundations

7-23-51

Level of top of foundation ring $4\frac{1}{2}$ " above top of center post used for tape measurements

$$1 - \cos \theta = \frac{1}{2} \sin^2 \theta, \quad \theta = \tan^{-1} \frac{4.5}{12.41} = \tan^{-1} .00915 = .53^\circ$$

$$1 - \cos \theta = \frac{.00915^2}{2} = 41.9 \cdot 10^{-6}$$

$$\text{error} = r(1 - \cos \theta) = 12.41 \cdot 41.9 \cdot 10^{-6} = .0206 \text{ inch radius is too short}$$

$$\text{error} = \frac{1}{50} \text{ inch approximately}$$

1 bag cement = 1 cu ft. = 95 lbs.

27 cu ft in yard, 1:2:4 mix

1 yard of gravel }
1/2 yard of sand } 30 cu ft.

6-7 bags cement

6 1/2 to 7 gallons / bag of cement

1 yard of concrete weighs 3900-4100# depending
on rock densities

4-30-51
5-27-51

If top of foundations is not more than
5 feet below top of building base the
center of ring may be 72' from N.E.
Wall of building. Turning clearance
will then be three feet from corner
of building.

scale 1" = 10'



Really about 40" above top of rail

Rail Height Measurements

9-28-51

Position

Feet

1	.104
2	.105
3	.107
4	.110
5	.111
6	.104
7	.099
8	.094
9	.100
10	.100
11	.105
12	.106
13	.110
14	.108
15	.104
16	.100
17	.101
18	.102
19	.099
20	.104
21	.102
22	.098
23	.096
24	.094
25	.096
26	.100

Position

27	.107
28	.110
29	.103
30	.109
31	.110
32	.106
33	.102
34	.097
35	.094
36	.095
37	.098
38	.101
39	.106
40	.105
41	.109
42	.112
43	.105
44	.102
45	.103
46	.104
47	.111
48	.108
49	.103
50	.103
51	.102
52	.103

Position # 1 was at west side of ditch. Numbers then went consecutively around westward.

Initial

9-26-51

Position

1	.536	27	.552
2	.542	28	.560
3	.545	29	.565
4	.542	30	.567
5	.541	31	.570
6	.533	32	.565
7	.522	33	.562
8	.533	34	.560
9	.540	35	.557
10	.548	36	.551
11	.544	37	.550
12	.540	38	.548
13	.530	39	.543
14	.530	40	.542
15	.535	41	.540
16	.535	42	.546
17	.540	43	.547
18	.543	44	.552
19	.548	45	.550
20	.543	46	.550
21	.543	47	.544
22	.550	48	.546
23	.548	49	.548
24	.555	50	.548
25	.549	51	.547
26	.548	52	.543

53 .548

54 .552

55 .558

56 .560

57 .552

58 .550

59 .552

60 .550

61 .548

62 .548

63 .551

64 .553

65 .553

66 .549

67 .548

68 .550

69 .550

70 .551

71 .550

72 .547

73 .530

74 .525

75 .520

76 .528

77 .536

78 .540

79 .540

80 .542

81 .539

82 .531

83 .535

84 .540

85 .543

86 .542

87 .544

88 .541

89 .540

90 .542

91 .538

92 .538

93 .530

94 .530

95 .530

96 .538

97 .538

98 .540

99 .540

100 .530

101 .528

102 .528

103 .528

104 .528

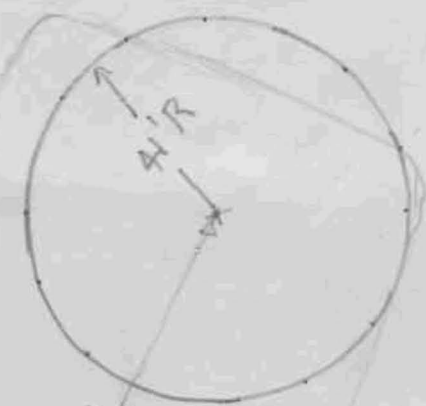
scale of sketch about 93' / inch



4-30-51

Top of Kale Kale

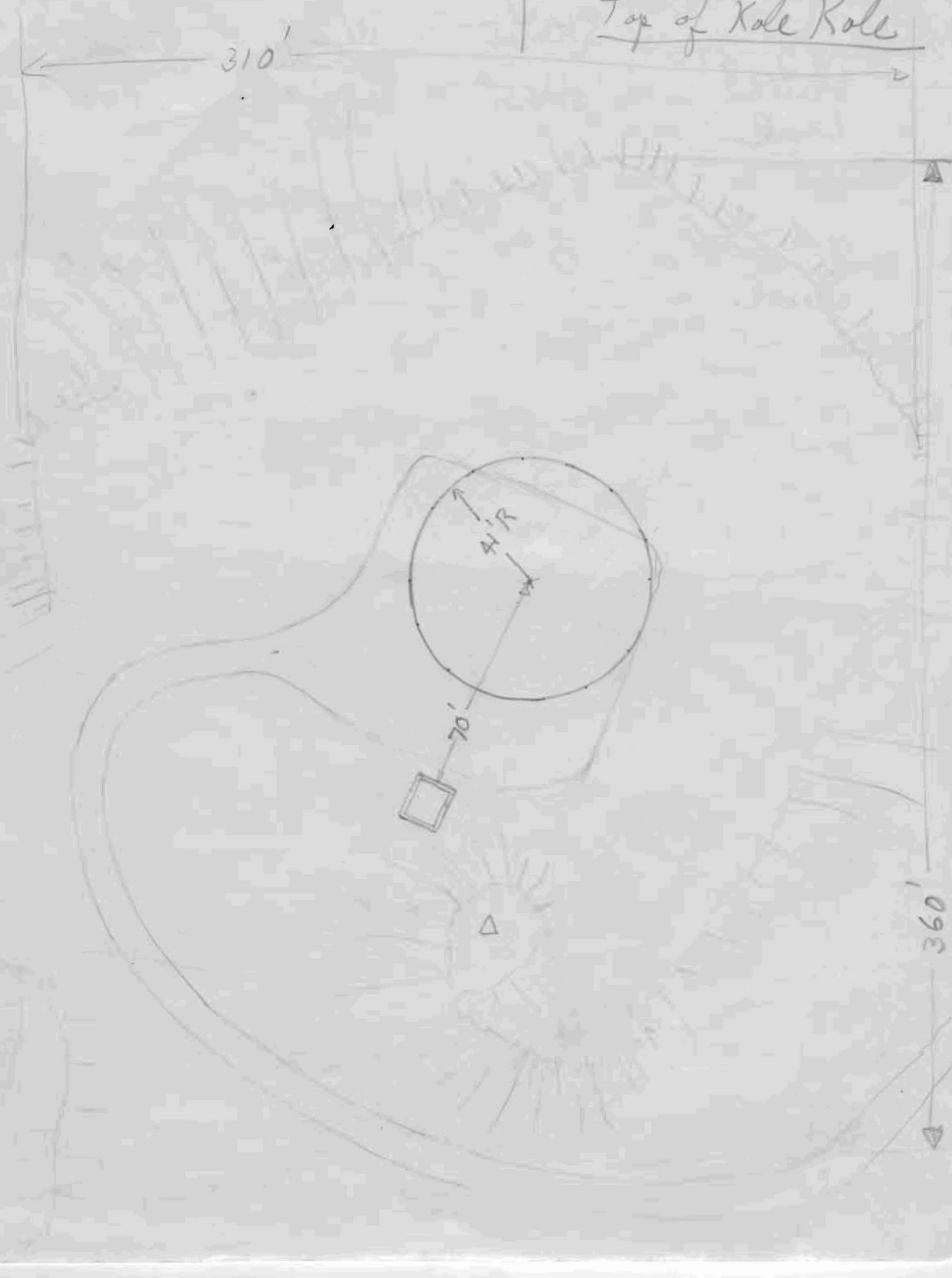
310'



70'



360'



	Static	Wind 80 mph	Total
Vertical Load.	5065#	1919#	6984#

Horizontal Load.	0#	5403#	5403#
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