

Trestles

216

398

F.B. 216

Table showing the difference of latitude and departure in running 80 chains at any course from 1 to 60 minutes.

MINUTES	LKS.	MINUTES	LKS.	MINUTES	LKS.
1	2 1/3	21	49	41	95 2/3
2	4 2/3	22	51 1/3	42	98
3	7	23	53 2/3	43	100 1/3
4	9 1/3	24	56	44	102 2/3
5	11 2/3	25	58 1/3	45	105
6	14	26	60 2/3	46	107 1/3
7	16 1/3	27	63	47	109 2/3
8	18 2/3	28	65 1/3	48	112
9	21	29	67 2/3	49	114 1/3
10	23 1/3	30	70	50	116 2/3
11	25 2/3	31	72 1/3	51	119
12	28	32	74 2/3	52	121 1/3
13	30 1/3	33	77	53	123 2/3
14	32 2/3	34	79 1/3	54	126
15	35	35	81 2/3	55	128 1/3
16	37 1/3	36	84	56	130 1/3
17	39 2/3	37	86 1/3	57	133
18	42	38	88 2/3	58	135 1/3
19	44 1/3	39	91	59	137 2/3
20	46 2/3	40	93 1/3	60	140

Return to City Engineers Office
 City Hall, San Diego, Cal.
 TABLE FOR RUNNING ON SLOPES.

In the following table the first column shows the angle, the second the number of links to be added to a chain on the slopes, to make one chain, horizontal measurement.

MICROFILMED

Angle	COR. IN LINKS						
0	0	0	0	0	0	0	0
4	0.24	11	1.88	18	5.14	25	10.54
5	0.38	12	2.24	19	5.76	26	11.26
6	0.55	13	2.63	20	6.42	27	12.24
7	0.76	14	3.06	21	7.11	28	13.37
8	0.98	15	3.53	22	7.85	29	14.34
9	1.24	16	4.02	23	8.64	30	15.47
10	1.55	17	4.56	24	9.47	35	22.07

Notes -
 Type: A
 B
 C
 D
 E
 3/4" - 5'-0"
 1/2" - 1'-3"
 1/4" - 1'-6"
 216
 1/4" - 2'-0"
 3/4" - 3'-6"

10
86

Trestle No 1.

BM. 154.50 S. Hub.

BM.	21.6	158.67		156.51
1			6.45	152.22
1	0.59	151.02	8.22	150.43
2			11.38	139.64
3			8.37	142.63

154.30 S. Hub.	154.62	152.22	
5.70	5.	7.98	
160.06	149.62	160.20	
149.62	160.06	199.62	
10.44	976	998	10.58 Red. 81
160.20	150.30	152.08	
3.58	95	152.72	
156.62	14	14	150.457
140.30	15.517		976
5.70	15		160.21
154.50	140.17 (R)		154.50
160.20	150.47		5.11
12.25	10.30		159.61
177.95			151.27
2.57			8.34
150.46			

Albatross

Ivy - Juniper -

Hub. at N end of trestle -

4.05	85.0	1.25	6.25	- 2.20
4.17	85.0	1.25	6.25	- 2.08
15.53	115.0	2.0	17.0	- 1.47
13.07	99.6	1.5	11.0	+ 2.07

D111.0" with type C foundation

154.50	151.045	155.72
2.205	140.17	11
156.505	10.595	144.72
719		
149.615	151.045	
103	144.72	
151.045	16.325	
156.29		
5		
151.77		

Trestle #2 (Univ Sewer)

Sta.	Bent	Elv	Grade
6+44	1	204.18	204.12
6+69	2	180.53	214.77 24.24
7+54	3	147.60	205.42 57.82
8+09	4	149.39	206.07 56.68
8+64	5	151.27	206.72 55.45
9+19	6	147.32	207.37 60.05
9+74	7	147.71	208.02 60.31
10+29	8	141.64	208.67 67.03
10+84	9	132.96	209.32 76.36
11+39	10	124.59	209.98 85.09
11+94	11	137.53	210.63 73.10
12+49	12	148.21	211.38 63.07
13+04	13	164.14	211.94 47.80
13+59	14	191.20	212.59 21.39
14+14	15	213.73	213.24
B.M.	NE angle of Front	214.84	Spt. = Pole
"	15' E of 10+45	139.78	
"	30' E of 14+25	220.14	

$\frac{14.5}{3} = 4.83$ $\frac{24}{1.2} = 20$ $21 \times 3.6 = 75.6$

11.0	(1.25 x 4.05)	(3.75 x 6.55)	
36.0	(4.2 x 7.2)	4.15 -	30.20
68.0	(8.2 x 11.2)	6.95 -	36.15
69.0	(8.3 x 11.3)	(7.0 -	36.20)
66.0	(7.95 x 10.95)	6.77 -	36.00
70.0	(8.4 x 11.4)	7.07 -	36.20
71.0	(8.6 x 11.6)	7.20 -	36.35
78.0	(9.4 x 12.4)	7.78 -	37.10
87.0	(10.55 x 13.55)	8.60 -	38.00
(87.0)	(11.75 x 14.75)	9.96 -	38.40
85.0	(10.3 x 13.3)	8.42 -	37.45
75.0	(9.05 x 12.05)	7.52 -	36.50
(65.0)	(7.0 x 10.0)	6.07 -	35.00
(31.0)	(3.6 x 6.60)	3.76 -	28.35
11.0	(1.25 x 4.05)	(3.75 x 6.55)	

5.83

7.33

2

211.28	211.94	212.57	212.89
69.67	17.67	0.66	30.77
146.61	164.27	212.58	191.82

220.12
 15.5
 221.49 HI
 12.76
 208.93
 0.49
 209.92
 12.56
 196.86
 0.365
 197.225 HI
 12.675
 189.580
 0.35
 184.93
 12.505
 172.425
 0.125
 172.560 HI
 12.48
 160.08
 0.295
 160.375
 12.44
 147.935
 97
 148.905 HI
 139.78 BM
 11.27
 151.05 HI

(11) 212.58
 9.11
 196.61
 2.045
 132.65
 152.95 ✓
 7.11
 151.05 ✓
 151.25
 203.75 ✓
 9.15
 139.75
 0.25
 140.06 HI
 11.58
 128.48
 6.03
 134.41 HI

(31) 191.82
 5.355
 138.96
 136.26
 12.645
 141.25
 141.25 ✓
 9.80
 147.40
 147.60 ✓
 5.16
 (55) 164.27
 8.19
 123.31
 123.46
 10.95 ✓
 147.35
 147.55 ✓
 3.50
 147.95
 147.95 ✓
 4.81
 (60) 147.70
 3.15
 179.10
 179.15 ✓
 10.13

210.63	209.98	209.32	208.67	208.02
74.67	86.64	76.67	67.67	60.67
135.96	123.31	132.65	141.00	147.35

207.27
 59.67
 147.70
 79.55
 213.765
 172
 8.47
 125
 139.78 BM
 129.8
 152.76 HI
 0.04
 152.72
 13.80
 165.52
 0.99
 164.53
 12.38
 176.91
 0.18
 176.73
 12.55
 189.28 HI
 0.60
 188.68
 12.71
 201.39
 0.14
 201.25
 11.35
 212.60 HI
 0.62
 211.98

206.72
 55.67
 151.05
 206.07
 58.67
 147.90
 205.42
 57.67
 147.75
 204.12
 64
 203.45
 212.58
 9.13
 68
 95
 70
 65
 55
 1000.18
 1489.05
 139.75
 159.05
 9.11
 139.195
 750
 0.015
 151.25
 1.51
 159.125
 9.11
 0.015
 211.98
 487
 216.85
 216.85
 214.84
 20.1
 26.85
 1.85
 218.85
 205
 219.815
 219.84
 215

67
15
82

58

939
919
0.20

200.14
8.00

209.79
5.30

223.14
12.41

214.79 NI

210.73
9.05

214.78 NI

213.24
75
213.99
8.79

212.59
82
218.91
1.37

211.94
82
212.76
2.02

8
210.14

10
210.80

11
211.45

211.28
82
212.10
2.68

210.63
82
211.75
3.33

209.98
82
218.80
3.98

12
212.10

13
212.76

14
213.41

209.37
82
210.19
4.64

208.67
82
209.49
5.29

208.07
82
208.89
5.94

15
213.99

207.37
82
208.19
6.59

206.77
82
207.59
7.24

206.07
82
206.89
7.89

16
204.87

17
206.59

205.42
82
206.24
8.54

204.77
82
205.59
9.19

204.17
82
204.87
9.91

Trestle # 3 (Univ Sewer)

17	1	214.13	216.63	2.5
17+55	2	207.45	217.28	9.83
18+10	3	190.40	217.93	27.53
18+65	4	177.95	218.58	40.63
19+20	5	175.36	219.28	43.87
19+75	6	199.70	219.88	20.18
20+30	7	220.82	220.54	

220.54	219.58	219.23	218.58	217.93
0.66	20.66	45.66	70.66	37.66
219.88 ✓	199.22 ✓	173.57	177.92 ✓	190.27 ✓
1.15	9.53	9.91	5.56	5.45

217.28	216.63
10.66	1.66
206.62 ✓	214.97 ✓
2.13	6.06

60	220.54	195.72
0.79	214.13	190.90
6.41	6.71	5.32

53	24
28	28
78	29

12° (1.38 x 4.2) (388 x 6.70)
 31° (2.38 x 5.32) 2.92 - 24°10'
 38° (4.42 x 7.42) 4.32 - 30°45'
 37° (6.05 x 9.05) 5.42 - 33°50'
 36° (6.65 x 9.65) 5.85 - 34°35'
 31° (3.53 x 6.60) 3.75 - 28°00'
 11° (1.25 x 4.05) (3.75 x 6.55)

219.73	221.03
6.90	12.63
221.03 HI	208.40
8.19	0.35
217.84	208.75 HI
	18.09
	195.71
	10.1
	195.72 HI
	12.95
	182.77
	0.71
	183.48 HI
	0.655
	182.825
	10.75
	193.675
	0.285
	193.390
	12.12
	205.51
	0.67
	204.84
	12.015
	216.855
	14.15
	214.740

2149.4
 857
 233.51
 36.43
 219.565

706
201
65

6

217.84
4.17
222.01 AI

216.63
67
217.30 ✓
4.71

217.28
67
217.95 ✓
4.06

217.93
67
218.60 ✓
3.71

218.58
67
219.25 ✓
2.74

219.23
67
219.90 ✓
2.11

219.88
67
220.55 ✓
1.46

220.54
67
221.21 ✓
0.80

7

Trestle #4 (Univ Sewer)

220	220	E	N
60	57	25	28
286	277	32	38
		57	66

BM 237.21 Spk Front of Spruce.

0.45	225.49	
237.66	7.04	
12.17	227.53	
225.49 N End.	7.23	
	222.30 S End.	

-Grade-

22+02	1	209.69	222.59	12.90
22+57	2	188.48	223.23	39.75
23+12	3	177.38	223.87	46.49
23+67	4	198.09	224.52	26.43
24+22	5	220.56	225.16	4.60

30°	(2.7 × 5.7)	
50°	(5.95 × 8.95)	5.85 - 33°40'
57°	(6.8 × 9.8)	5.96 - 34°50'
37°	(4.3 × 7.3)	4.25 - 30°30'
16°	(1.8 × 4.7)	4.3 × 7.2

222.59	223.23	223.87	224.52
13.66 ✓	39.66 ✓	46.66 ✓	26.66 ✓
208.93	183.57	177.21	197.86

2(2.5 × 4.3 × 5.0) (2)

2(2.5 × 5.0 × 5.0) (1)

225.16	225.0	197.86	177.21	183.57 ✓
5.66 ✓	10.30 ✓	10.755 ✓	10.285 ✓	3.725 ✓
219.50				

229.53 NE
10.04

219.49
1.45
219.635
12.33

207.305
1.31
208.615 NE

10.75
197.865
0.585

198.450
11.155

187.295
0.2
187.495 NE

1.13
186.365 BM

186.365
11.79
198.255
0.215
198.040
12.705

210.745 NE
1.51

108.935
12.22
221.155

0.17
220.985
1.33

222.315
6.0

222.215
22.30
0.15

208.93 ✓
1.815 ✓

(5)

(1.25)

222.80
4.12
226.92 HT

222.59
67
223.26 ✓
3.16 ✓

223.23
67
223.90 ✓
2.52 ✓

223.87
67
224.54 ✓
1.88 ✓

224.52
67
225.19 ✓
1.23 ✓

225.16
67
225.83 ✓
0.57 ✓

Hotel
 9/23/15
 Prestle # 7

Sewer

275.57
 273.27
 2.31

				Elev.	Grade			
E. Hub.	1.05	279.17		278.12				
#1			5.96	273.21	277.87	4.66	5-0	(
#2	8.37	275.87	11.67	267.50	277.66	15.16	11-0	D (1.55 X 2.10)
3			11.03	264.84	277.44	12.60	12-0	D (1.68 X 2.23)
4			6.88	265.99	277.23	8.24	8-0	(1.18 X 1.75)
5			3.10	272.77	277.01	4.24	4-0	(0.66 X 1.20)
6			1.11	274.76	276.79	2.03	2-0	(0.45 X 0.91)
7			1.64	277.23	276.58	2.35	2-0	
8			5.27	270.60	276.36	5.76	5-0	(0.75 X 1.35)
9			8.39	267.48	276.15	8.67	8'-6"	C (1.23 X 1.82)
10			8.61	267.26	275.93	8.67	9'-6"	turn #6 (1.84 X 1.96)
Intersection			12.10	263.77	275.76	118.0		

$$\begin{array}{r} 263.23 \\ 12.29 \\ \hline 275.52 \end{array}$$

$$\begin{array}{r} 275.93 \\ 9.5 \\ \hline 266.43 \\ 9.09 \end{array}$$

$$\begin{array}{r} 276.15 \\ 8.5 \\ \hline 267.65 \\ 7.87 \end{array}$$

$$\begin{array}{r} 276.36 \\ 8 \\ \hline 271.36 \\ 4.16 \end{array}$$

$$\begin{array}{r} 276.58 \\ 2 \\ \hline 274.58 \\ 0.92 \end{array}$$

$$\begin{array}{r} 276.79 \\ 2 \\ \hline 274.79 \\ 0.78 \end{array}$$

$$\begin{array}{r} 277.01 \\ 2.51 \\ \hline 273.21 \end{array}$$

$$\begin{array}{r} 277.23 \\ 5.0 \\ \hline 269.23 \\ 6.29 \end{array}$$

$$\begin{array}{r} 277.44 \\ 12.0 \\ \hline 265.44 \\ 10.09 \end{array}$$

$$\begin{array}{r} 277.66 \\ 11.0 \\ \hline 266.66 \\ 8.86 \end{array}$$

$$\begin{array}{r} 277.87 \\ 5.0 \\ \hline 272.87 \\ 2.65 \end{array}$$

81

19

Trestle #8 (Sewer)

8/29/05 Hatch
Wanda
Melmore

20

				Elev.	Grad		
B.M.	770	309.66		301.96			
	0.68	309.49	5.85	303.81			
B.M.	694	305.93	55.0	298.99			
1	<u>306.83</u>	<u>306.73</u>	1.62	309.31	306.73	2.52	3'-0" from WT #4
2	<u>303.83</u>	<u>303.93</u>	2.63	303.30	306.43	3.13	3'-0" " #14
3	<u>306.03</u>	<u>305.62</u>	3.52	302.41	306.03	4.62	4'-0"
4	<u>302.03</u>	<u>300.62</u>	1.37	301.56	305.62	4.06	5'-0"
5	<u>305.22</u>	<u>304.81</u>	5.40	300.53	305.22	4.69	5'-0" from 10
6	<u>304.41</u>	<u>304.0</u>	6.24	299.69	304.81	5.12	5'-6" from WT #2
7	<u>297.71</u>	<u>297.5</u>	6.90	299.03	304.41	5.38	6'-6" from T 7
8	<u>303.71</u>	<u>303.41</u>	7.50	298.43	304.02	5.57	6'-6"
9	<u>296.71</u>	<u>295.41</u>	8.60	297.33	303.71	6.38	7'-0"
10	<u>302.81</u>	<u>302.52</u>	9.51	296.42	303.41	6.99	7'-0" from WT #1
11	<u>293.81</u>	<u>293.02</u>	10.26	295.67	303.14	7.44	8'-6"
12	<u>302.22</u>	<u>301.92</u>	10.91	295.02	302.81	7.79	9'-0"
13	<u>293.72</u>	<u>294.42</u>	11.39	294.54	302.52	7.98	9'-6"
14	<u>301.62</u>	<u>301.32</u>	11.37	294.56	302.22	7.66	8'-6"
15	<u>297.62</u>	<u>295.32</u>	10.98	294.95	301.92	6.94	7'-6"
16	<u>301.02</u>		10.57	295.36	301.62	6.26	7'-0" from #14
17	<u>296.52</u>		9.81	296.12	301.32	5.20	6'-0"
18			8.90	297.03	301.02	4.0	4'-6"

102155
 55 (110)
 470
 446
 378
 250
 16686
 3707
 30408766
 307.61766
 30722
 29456
 766
 105
 85
 1866

29899
 523
 30422 ✓

30383 ✓
 0.89 ✓

30343 ✓
 0.79 ✓

30203 ✓
 2.19 ✓

30062 ✓
 3.60 ✓

30022 ✓
 4.00 ✓

29981 ✓
 7.71 ✓

29791 ✓
 6.31 ✓

2975 ✓
 6.72 ✓

29671 ✓
 7.51 ✓

29571 ✓
 8.81 ✓

29461 ✓
 9.61 ✓

29381 ✓
 10.41 ✓

29302 ✓
 11.20 ✓

29372 ✓
 10.50 ✓

29422 ✓
 9.80 ✓

29762 ✓
 9.50 ✓

29522 ✓
 8.90 ✓

29452 ✓
 7.70 ✓

Trestle #9 (sewer)

BM	654	305.53	298.99				
1			0.27	End of pit	305.26		
			4.10		301.43	304.86	
2			5.13		300.40	304.75	
3			5.32		300.21	304.64	
4			5.46		300.07	304.53	
5			5.48		300.05	304.43	
6			5.94		299.59	304.32	
7			5.75		299.78	304.21	
8			5.96		299.57	304.11	
Intersection			7.0		298.53	304.0	

298.99 BM.
6.50
305.49 HI

	297.61	297.71	298.32
	7.88	7.78	7.17
		(5.90)	(6.17)
298.43	299.53	299.64	
7.06	5.96	5.85	
(6.06)	(5.76)	(5.33)	
300.75	300.86	304.96	
4.74	4.63	0.53	
30510			
39			

8/29 Hatch
Eriason
105 Melman

309.52
307.62

23

0.20

						304.86	307.75	304.64	
				3.43	4-0	4			
						300.86	300.75	299.64	
				4.35	4-0				
						304.53	304.43	300.32	
				4.43	5-0	5			
						299.53	298.43	298.32	
				4.46	5-0				
						304.21	304.11		
				4.38	6-0	6.5	6.5		
						297.71	297.61		
				4.73	6-0				
				4.43	6-6				
				4.54	6-6				
				5.47					

32

25

Trestle #10 Sewer

	9.85						
N. end	Sub.	303.66					
1	299.82	299.22	10.55	293.11	299.32		
2	6.5	10					
	292.82	289.22	12.88	290.78	299.22		
3	299.13		12.71	290.95	299.13		
	10						
	289.13						
	302.92 NI	292.82	289.22	289.13			
	10.10	10.10	10.56	10.65			
	192.82						
	6.96						
	199.78 NI						

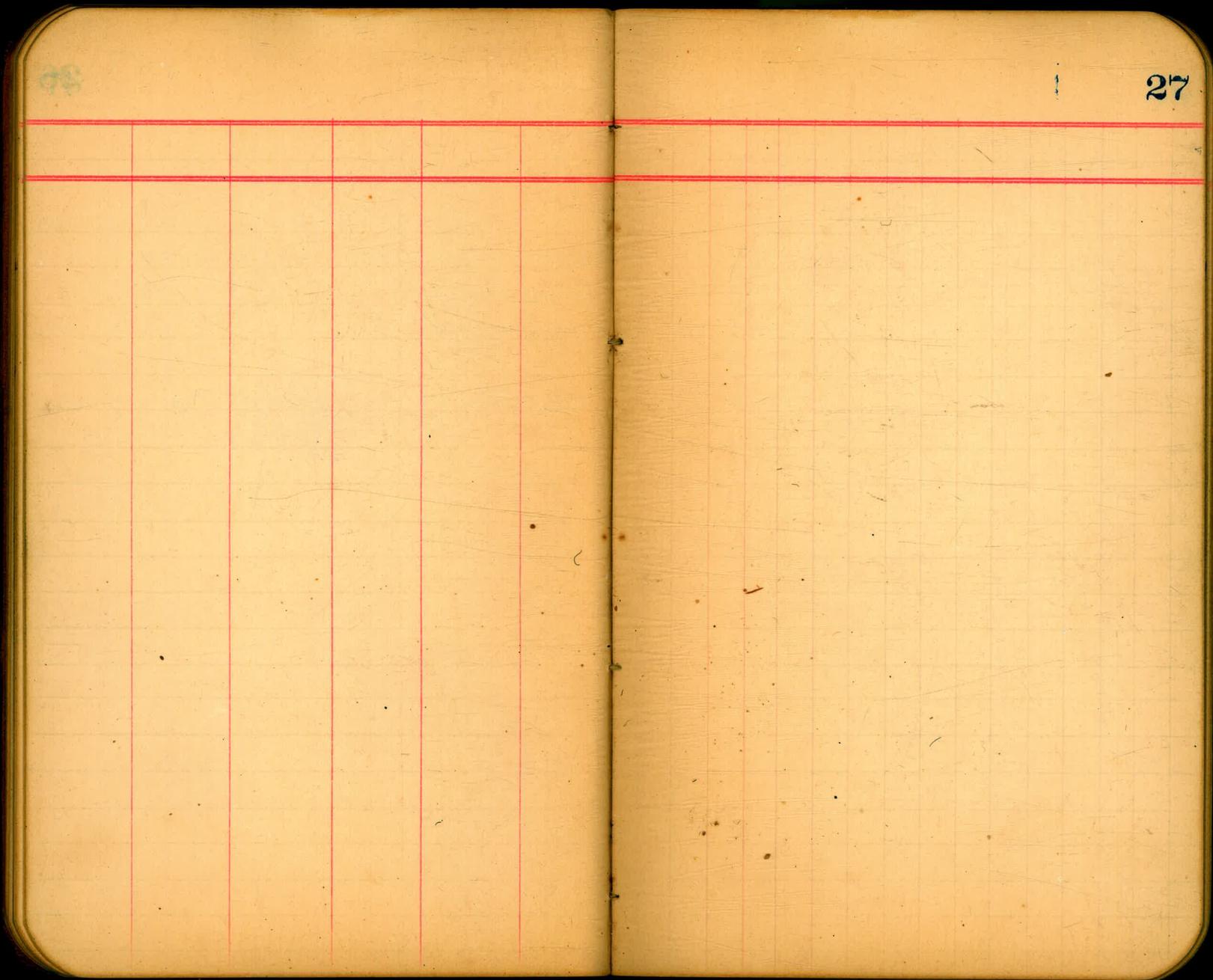
South

(front T#8.)

6.21	6-6
8.44	10-0
8.18	10-0

North

300.80
2.62
302.92
34.45
199.475



27

Serd Sub.					300.30		
Head Sub.	294.76				300.87		
1	300.38	300.47	0.00	299.76	300.38	5.62	5'-0"
2	<u>295.38</u>	290.47	6.36	288.40	300.47	12.07	10'-0"
3	300.56	300.65	11.76	283.00	300.56	17.56	15'-0"
4	<u>285.56</u>	283.65	12.34	282.42	300.65	18.23	17'-0"
5	300.74		4.84	289.92	300.74	10.82	9'-0"
	<u>291.74</u>						

300.30	295.38	292.47	285.56
12.1	6.13	11.04	8.18

301.51 HI
11.04

290.47
3.27

293.74 HI

283.65	291.74
10.09	2.00

9-0	1.30 x 1.88	5'-10"
10-0	1.42 x 1.98	(1/2 x 2 x)
15-0	2.02 x 2.61	
17-0	2.26 x 2.87	

291.74
10.875
202.613
1.75

300.865 check.

South.

(5'-0" from T#8)

north

08

31

Trestle #12 Sewer

8/23/05 Hatch
Wagon
Wellmore

32

W Hub	0.90	283.69		282.79	
1	7.47	282.44	8.72	274.97	283.05
2	274.97	283.05	12.04	270.40	283.23
E Hub.	286.97	275.05		283.48	
		283.23			
		13			
		270.22			

	274.97		
	5.36		
	280.33	275.05	270.23
	9.49	5.28 ✓	10.10 ✓
	270.39		

8.08 8-0 (C) (1.11 x 175)
12.83 13-0 (C) (1.77 x 241) (1/2" Bolt hole)

Extra Trestle (Front. St.)

S. end of Pipe.	231.54	231.34			
1	221.68 <u>9.86</u>	225.87	221.54	3.67	5'-0"
2	227.18 <u>8.64</u>	222.26	221.68	9.92	9'-6"
3	231.82 <u>4.64</u>	220.00	221.82	11.82	10'-0"
4	231.96 <u>9.16</u>	223.52	231.96	8.44	9'-6"
5	232.10 <u>9.14</u>	228.07	222.10	9.03	9'-0"
N. end of Pipe	232.10	232.26			

- 4 (.66 x 1.22)
- 5 (.75 x 1.35)
- 1 9-6 (1.35 x 2.0)
- 1 10-0 (1.42 x 2.0)

5-0 from #10
 9-6 " - #1
 10-0 " - #13
 9-6 " - #18
 4-0 " - #8

33

222.26			
15.35			
233.78			
8.55	228.10	222.46	221.82
225.240	1.35	7.02	7.66
4.29			
229.48			
222.18		226.54	
7.30		2.99	
		226.54	
		7.31	
		233.85	
		2.51	
		231.34	

(6 joints 8" Cast Pipe)

North end Hub.

Send Hub.

(95.95)

100.37

100 - assumed

1	100.3	100.22	0.22	95.73	100.30	4.57	4-0	(1.75 cut.)
2	$\frac{9}{96.3}$	$\frac{16.0}{84.22}$	10.27	85.68	100.22	14.54	16-0	
3	100.14	100.06	10.31	85.64	100.14	14.50	16-6	(2.22 x 2.50)
4	$\frac{16.5}{83.64}$	$\frac{4.8}{95.56}$	1.31	94.64	100.06	5.42	4-6	(2-0 cut) (0.72 x 1.25)

100.37
 174
 102.16 HI
 11.57
 90.59
 3.53
 94.12 HI

96.30
 5.86
 84.22
 9.90
 83.64
 10.78
 95.56
 6.60

North

84.22
 83.64
 58
 5.13
 5.71

8364
 890
 92.54
 8422
 882

8 - 1.3
 5 - 2.0

37

Trestle # 14 Sewer-

Wind guy Anchor $2\frac{1}{2} \times 2 \times 4$

End	"	$2\frac{1}{2} \times 2 \times 5$			
			253.53	253.85	
			247.53	238.10	
0+92	1	254.17	254.48	247.01	253.53 6.52
1+47	2	225.47	213.73	231.95	253.85 22.10
2+02	3	254.80	255.12	225.56	254.17 28.61
2+57	4	209.85	221.37	213.17	254.48 41.31
3+12	5	255.44		206.82	254.80 47.99
3+67	6	240.69		221.63	255.12 33.79
4+22	7	255.54		243.01	255.44 12.43
4+40 ³³	8	250.04		250.08	255.54 5.46
4+58 ⁴⁷	9			254.90	255.65 0.75

260.23 HI	215.10	501.37
12.70	15	12.63
247.53	225.25 HI	234.00
0.76	115.2	0.73
248.29	213.73	233.27
12.35	223	12.74
245.94	215.96 HI	246.01 HI
0.85		532
236.79 HI		240.67
11.62		10.99
225.17		251.18 HI
1.10		3.21
226.27 HI		247.97 - BM
1.17		
225.10 BM		

Assumed 6.83 | 85.71 S. end of 14 (1)
 92.54 HI 6.21 | 86.33 BM. 1st 4 Bwolo (2)
 6.31 | 86.23 " " " " Pale 38

66.2
 15.71
 6.2

253.40	(1) 253.40	
85.71	(2) 254.02	
+ 167.69	(3) 253.92	
16.0'	(1.80 x 4.70)	336.79
31.0'	(3.53 x 6.55)	282.85
39.0'	(4.50 x 7.50)	3.97
57.0'	(cat. 51°) (6.22 x 9.12)	251.15
58.0'	(6.90 x 9.90)	297.53
44.0'	(5.18 x 8.18)	3.55
25.0'	(2.82 x 5.78)	578
5'-6" from T ¹⁸		25

247.53	532.10	225.42	213.73
12.70	3.69	11.37	11.52
207.05	221.37	240.69	
8.91	3.88	8.32	
250.04	247.53		
1.14	9.97		
	257.00		

25700 HI

$\frac{253.53}{3.47}$ ✓	$\frac{253.85}{3.15}$ ✓	$\frac{254.17}{2.83}$ ✓
-------------------------	-------------------------	-------------------------

$\frac{254.98}{2.52}$ ✓	$\frac{254.80}{2.20}$ ✓	$\frac{255.12}{1.88}$ ✓
-------------------------	-------------------------	-------------------------

$\frac{255.44}{1.56}$ ✓	$\frac{255.54}{1.46}$ ✓	$\frac{255.65}{1.35}$ ✓
-------------------------	-------------------------	-------------------------

Stake - 255.65	$\frac{255.54}{5}$	$\frac{255.44}{5}$
	$\frac{256.04}{1.02}$ ✓	$\frac{255.94}{1.12}$ ✓

$\frac{255.12}{5}$	$\frac{254.80}{5}$	$\frac{254.48}{5}$
$\frac{255.62}{1.44}$ ✓	$\frac{255.30}{1.76}$ ✓	$\frac{254.98}{2.08}$ ✓

$\frac{254.17}{5}$	$\frac{253.85}{5}$	$\frac{253.53}{5}$
$\frac{254.67}{2.39}$ ✓	$\frac{254.35}{2.71}$ ✓	$\frac{254.03}{3.03}$ ✓

grade stake 247.53
at pvi 0+93

$\frac{247.53}{9.53}$
257.06 HI

Trestle # 15 (sewer)

526.97
1076
216.27 18.11 W of 48 tower
(Hub)

8+78	1	247.46	248.11	240.40	247.46	7.06
9+33	2	245.77	249.42	220.07	248.11	28.04
9+88	3	244.75	257.75	203.61	248.77	45.16
10+43	4	250.07	250.72	191.37	249.42	58.05
10+98	5	181.32	197.97	182.26	250.07	67.81
11+53	6	251.37	252.03	200.11	250.72	50.61
12+08	7	213.62	219.28	214.31	251.37	37.06
12+63	8	252.65	253.33	219.24	252.03	32.79
13+18	9	221.93	226.58	219.37	252.65	33.34
13+73	10	253.95	254.63	225.10	253.33	28.23
14+28	11	234.23	248.88	235.97	253.95	18.01
14+83	12	221.36		247.11	254.63	7.52
225.10 BM		1.51		197.97		242.54
226.97		8.025 (BM)		1.90		240.71
213.92 TR		190.67		181.32		11.53
222.87 HI		9.20		6.18		240.71
211.145		199.87		201.36		12.66
212.045 HI		187.22		233.61		253.37
199.425		187.22		1.28		6.29
199.87 X HI		187.22		232.33		253.13
		187.22		10.21		4.93
		187.22		272.54 HI		257.06
		187.22				4.02
		187.22				257.04 (BM)
		187.22				254.02

37 -	0.05	240.70	247.11
55 -	0.10	251.54	247.46
69 -	0.20	4.08 HI	467 HI
79 -	0.25	175	2.64
63 -	0.20		7.30
48 -	0.10		2
43 -	0.10		
41 -	0.08		
17.0	A	(195 x 4.50)	(4.45 x 7.30)
37.0		(4.3 x 7.3)	4.25 - 30° 30'
55.0		(6.55 x 9.55)	5.80 - 34° 30'
69.0		(8.3 x 11.3)	7.0 - 36° 20'
79.0		(9.55 x 12.55)	7.90 - 38° 20'
63.0		(7.55 x 10.55)	6.50 - 35° 30'
48.0		(5.65 x 8.65)	5.15 - 33° 16'
43.0		(5.05 x 8.05)	4.70 - 32°
41.0		(4.80 x 7.80)	4.58 - 31° 40'
37.0		(4.30 x 7.30)	4.25 - 30° 30'
30.0		(3.45 x 6.45)	3.66 - 28° 10'
16.0	A	(180 x 4.70)	(4.30 x 7.20)
216.27		219.38	222.0
221.71 HI		2.53	6.56
213.72		207.30	234.28
8.19		119.5	5.08
219.38		239.28 HI	222.78
9.18		50.1	
228.56 HI		234.27	248.58
		12.58	0.589
		246.90	248.58
		0.65	12.58
12.6 BM		247.12	261.38
207.30		8.65	6.51
		254.77 HI	259.57

247.12 Sand stone
 11.10
 258.22 NT
 3.36 3
 254.86 262.89
 247.12
 7.77

247.46
 5
 247.96 ✓
 10.26

249.42
 5
 249.92 ✓
 8.30

251.37
 5
 251.87 ✓
 6.35

253.32
 5
 253.82 ✓
 4.39

248.11
 5
 248.61 ✓
 9.61

250.07
 5
 250.57 ✓
 7.65

252.03
 5
 252.53 ✓
 5.69

253.98
 5
 254.48 ✓
 3.74

248.77
 5
 249.27 ✓
 8.95

250.72
 5
 251.22 ✓
 7.00

252.68
 5
 253.18 ✓
 5.04

254.63
 5
 255.13 ✓
 3.09

223
 1.2
 496
 223
 2676
 25463
 257.88

244
 260

Trestle #1 (water)

Bm 6479 - Columbia & Juniper

3.25		Bm. 6479	
- West -	68.04142	Elev	Grade
1	$\frac{62.91}{2} \frac{63.24}{3.5}$ 6.78	61.26	62.91 1.65
2	$\frac{60.91}{5} \frac{59.74}{5.5}$ 8.26	59.78	63.24 3.46
3	$\frac{63.57}{5} \frac{63.90}{5.5}$ 9.22	58.82	63.57 4.75
4	$\frac{64.22}{7} \frac{64.55}{7.5}$ 10.25	57.79	63.90 5.11
5	$\frac{57.22}{8} \frac{57.05}{9}$ 11.50	56.54	64.22 7.68
6	$\frac{64.88}{8.5} \frac{65.21}{9}$ 11.41	56.63	64.55 7.92
7	$\frac{56.38}{8} \frac{56.21}{8}$ 12.00	56.04	64.88 8.84
8	$\frac{65.54}{8} \frac{65.86}{8}$ 12.29	55.75	65.21 9.46
9	$\frac{57.54}{8} \frac{57.86}{8}$ 11.41	56.63	65.54 8.91
10	$\frac{66.19}{7} \frac{66.52}{6.5}$ 10.30	57.74	65.86 8.12
11	$\frac{59.19}{5} \frac{60.02}{4}$ 9.02	59.02	66.19 7.17
12	$\frac{66.85}{5.5} \frac{67.18}{4}$ 7.75	60.29	66.52 6.23
13	$\frac{61.35}{5} \frac{63.18}{4}$ 6.22	61.82	66.85 5.03
14	$\frac{67.51}{5} \frac{67.18}{4}$ 4.28	63.76	67.18 3.42
15	$\frac{65.51}{5} \frac{65.51}{4}$ 1.88	66.16	67.51 1.35
64.79 B.M.		- 67.83 -	
$\frac{65.96}{3.45}$	$\frac{65.51}{5.78}$	$\frac{63.18}{7.61}$	$\frac{61.35}{8.94}$

$\frac{59.19}{9.77} \frac{57.86}{11.10} \frac{57.54}{11.42} \frac{56.21}{12.75} \frac{56.38}{12.58}$

$\frac{57.05}{11.91} \frac{57.22}{11.74} \frac{58.40}{10.56} \frac{58.57}{10.39} \frac{59.74}{9.22}$

Juniper

7.10
5.18
1.96
6.74
6.82
7.14
5.10
2.79
2.39
66.16
67.76
2.90

44

Force Post. Columbia & Juniper

2-0	B	1.25	3.25	- 1.60	(0.45 X 1.18)
3-6	B	1.25	4.75	- 1.29	(0.61 X 1.28)
5-0	B.	1.25	6.25	- 1.50	(0.78 X 1.38)
5-6	C	1.50	6.75	- 1.64	(0.88 X 1.53)
7-0	C		8.50	- 0.82	(1.05 X 1.72)
7-6	C		9.00	- 1.08	(1.12 X 1.75)
8-6	C		10.00	- 1.16	(1.23 X 1.85)
9-0	C		10.50	- 1.04	(1.28 X 1.90)
8-0	C		9.50	- 0.59	(1.18 X 1.78)
8-0	C		9.50	- 1.35	(1.18 X 1.78)
7-0	C		8.50	- 1.33	(1.05 X 1.72)
6-6	C		8.00	- 1.77	(1.0 X 1.66)
5-6	C	1.50	7.00	- 1.97	(0.88 X 1.55)
4-0	B	1.25	5.25	- 1.83	(0.66 X 1.32)
2-0	C	1.25	3.25	- 1.90	(0.45 X 1.18)

$\frac{60.91}{8.05}$ ✓

46

Trestle #2 (Water)

B.M. 212.68 Spk. in Pole at E end of Trestle

			Elev.	Grade							
1	207.88 4.5 203.38	207.99 11.50 196.49	203.56	207.88	4.32	4'-6"	B	1.25	5.75	-1.43	(Approx.) (22" x 30")
2	208.09 15 193.09	208.19 21.50 186.69	197.02	207.99	10.97	11'-6"	D	2.0	13.50	-2.53	(42" x 48")
3	208.29 24.50 183.79	208.49 31 177.40	186.60	208.19	21.59	21'-6"	E	3.5	25.0	-3.40	(50" x 50")
4	208.50 33.5 175.00	208.60 34.50 174.10	177.65	208.40	30.75	31'-0"	E	3.5	34.50	-3.75	(50" x 56")
5	208.71 36 172.71	208.81 31 177.81	174.19	208.60	34.41	34'-6"	E	3.5	38.0	-3.60	(53" x 60")
6	208.91 30.5 178.41	209.02 36.5 178.52	174.14	208.71	34.57	36'-0"	E	3.5	39.50	-4.90	(6.5 x 7.2)
7	209.12 29.50 179.62	209.22 34 185.22	176.53	208.81	33.28	31'-0"	E	3.5	34.50	-1.20	(6.1 x 6.75)
8	209.33 14.5 194.83	209.43 8.5 200.93	176.97	209.02	32.94	30'-6"	E	3.5	34.0	-1.50	(6.0 x 6.7)
9	198.29 5.50 203.79	203.79 7.30 196.49	180.22	209.12	28.90	30'-6"	E	3.5	34.0	-2.00	(6.0 x 6.7)
10	198.31 190.69 8.22	198.31 11.62 186.69	185.69	209.22	23.53	29'-6"	E	3.5	33.0	-4.10	(5.9 x 6.55)
11	198.31 190.69 8.22	200.93 15.23 185.70	193.53	209.33	15.80	27'-6"	E	3.5	27.5	-4.0	
12	198.29 5.50 203.79	203.79 7.30 196.49	202.15	209.43	7.28	17'-6"	D	2.0	16.50		(3.95 x 4.5)
13	198.29 5.50 203.79	203.79 7.30 196.49	209.43	209.43	7.28	8'-6"	C	1.5	10.0	-2.70	(285 x 222)

198.29 20379
 5.50 196.49
 203.79 7.30
 203.38 0.41
 198.31 11.62
 190.69 8.22
 8.22
 15.23
 187.23
 177.20
 7.83
 177.23
 175.23

186.69
 192
 188.11
 182.07
 6.00
 15.11
 15.77
 4.32
 186.69
 1273
 194.42
 145.20
 7.72

Juniper

13	209.12 29.50 179.62	209.22 34 185.22	180.22	209.12	28.90	29'-6"	E	3.5	33.0	-4.10	(5.9 x 6.55)
14	209.33 14.5 194.83	209.43 8.5 200.93	193.53	209.33	15.80	27'-6"	E	3.5	27.5	-4.0	
15	198.29 5.50 203.79	203.79 7.30 196.49	202.15	209.43	7.28	8'-6"	C	1.5	10.0	-2.70	(285 x 222)
16	198.29 5.50 203.79	203.79 7.30 196.49	209.43	209.43	7.28	8'-6"	C	1.5	10.0	-2.70	(285 x 222)

17'-6"
 18'-0"
 14'-6"
 24'-0"
 5'-6"
 25'-0"
 3'-0"

to go to Trestle #5 2.52 - 1.95

	N	S		N	S
1	10 ⁻	10 ⁺	9	10	29 ⁹
2	10	10 ⁺	10	9 ⁹	20 ⁻
3	15	13 ⁻	11	10 ⁻	20
4	14 ⁹	15 ⁻	12	20 ³	20
5	15	10 ⁺	13	5 ²	36 ⁸
6	15	10 ⁺	14	47 ⁸	32
7	20	10 ⁻	15	35	28 ⁹
8	15	20	16	29 ⁵	20

1820.1	182.01	182.77	182.77	
067	076	1727	174.10	177.51
182.65	182.77	10.06	8.67	496
177.90	170	1820.1	1820.1	
5.28	7.77	1.72	3.51	
152.77	152.77	183.43	185.52	
175.47	178.52	8.2	185.22	
4.36	4.25	175.23	0.30	
1796.2	183.43			
3.5	1796.2			
176.12	3.81			
175.2				
0.9	185.22			
182.01	196.595			
7.39	194.83			
189.40	1.765			
4.17				
185.23	3.35			
11.365	1.5			
196.575	4.85			

204.18
591
198.27

193.285

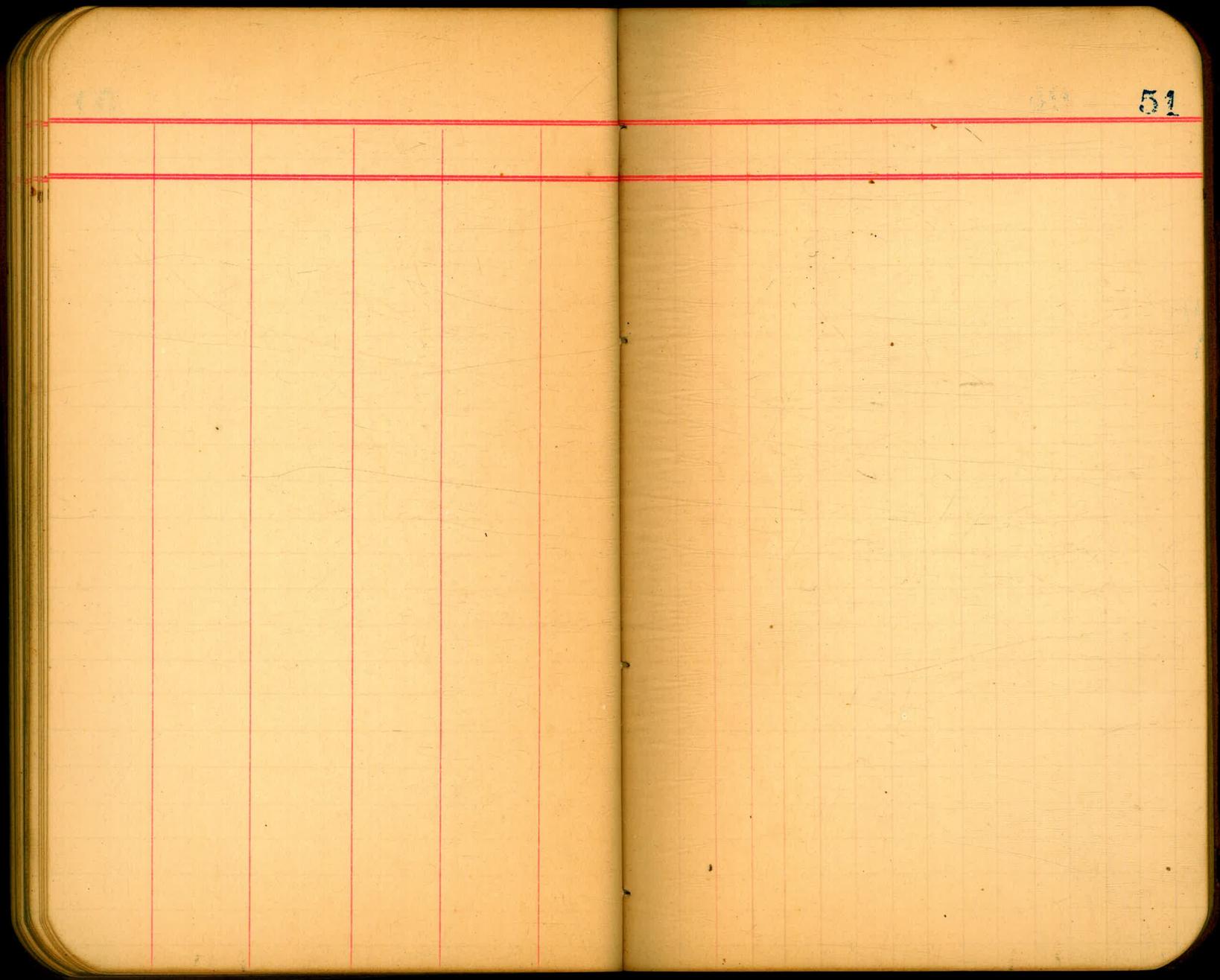
204.18
194.83
9.35
N

204.18
200.93
3.25
N

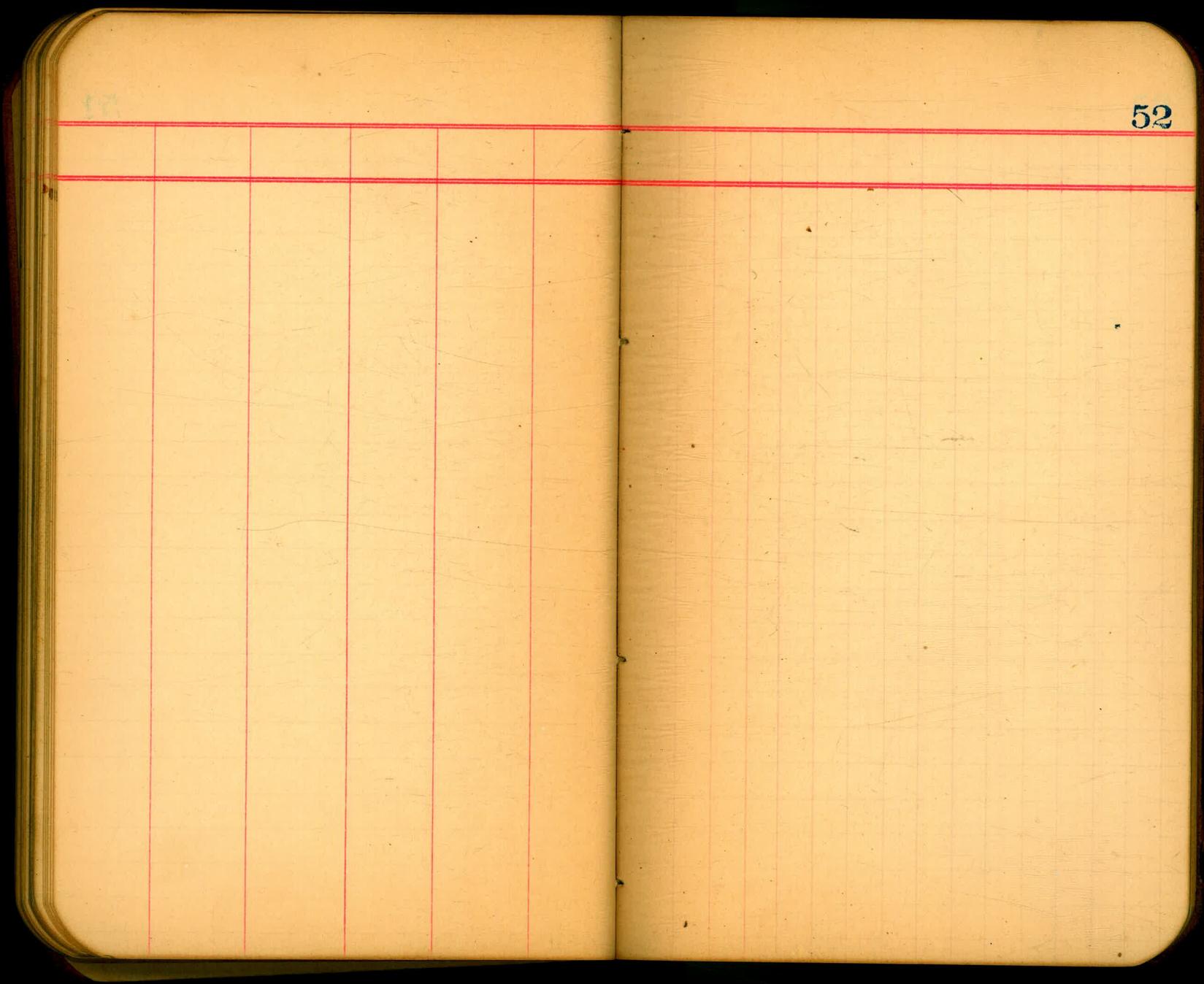
Trestle # 3 (Water)

Grand Ave

50



51



Trestle #4 Water

Grand Ave.

58

Trestle # 5 (Water)

27th

28th

56

Tie-out Pts. (10')

B.M.

			172.04 East.		
1	180. 2.5	180. 5.5	176.89	180.0	3.11
2	177.50	174.5	173.67		6.33
3	180 12	180 9	167.92		12.08
4	180.0 7.0	180 4	167.91		12.09
5	172.0	176.0	169.75		10.25
6			172.63		7.37
7			175.55	180.0	4.12

172.04	176.0	172.0	171.5	165.0	174.5
6.33	2.37	6.37	7.87	10.37	13.87
177.37					

177.5
0.87

2-6
4-0
5-6
8-0
9-0
12-0
8-6
6-0

(0.42 x 0.8)
(0.53 x 0.97)
(0.9 x 1.31)
(1.15 x 1.68)
(1.3 x 1.84)
(1.67 x 1.96)
(1.23 x 1.78)
(.95 x 1.40)

Spk in Top of Cor. Post.

2-6	125	3.75	-0.64
5-6	125	6.75	-1.40
12-0	200	14.00	-1.90
12-0	200	14.00	-1.90
9-0	250	10.50	
8-0	150	9.50	
4-0	125	5.25	

1025
6.92

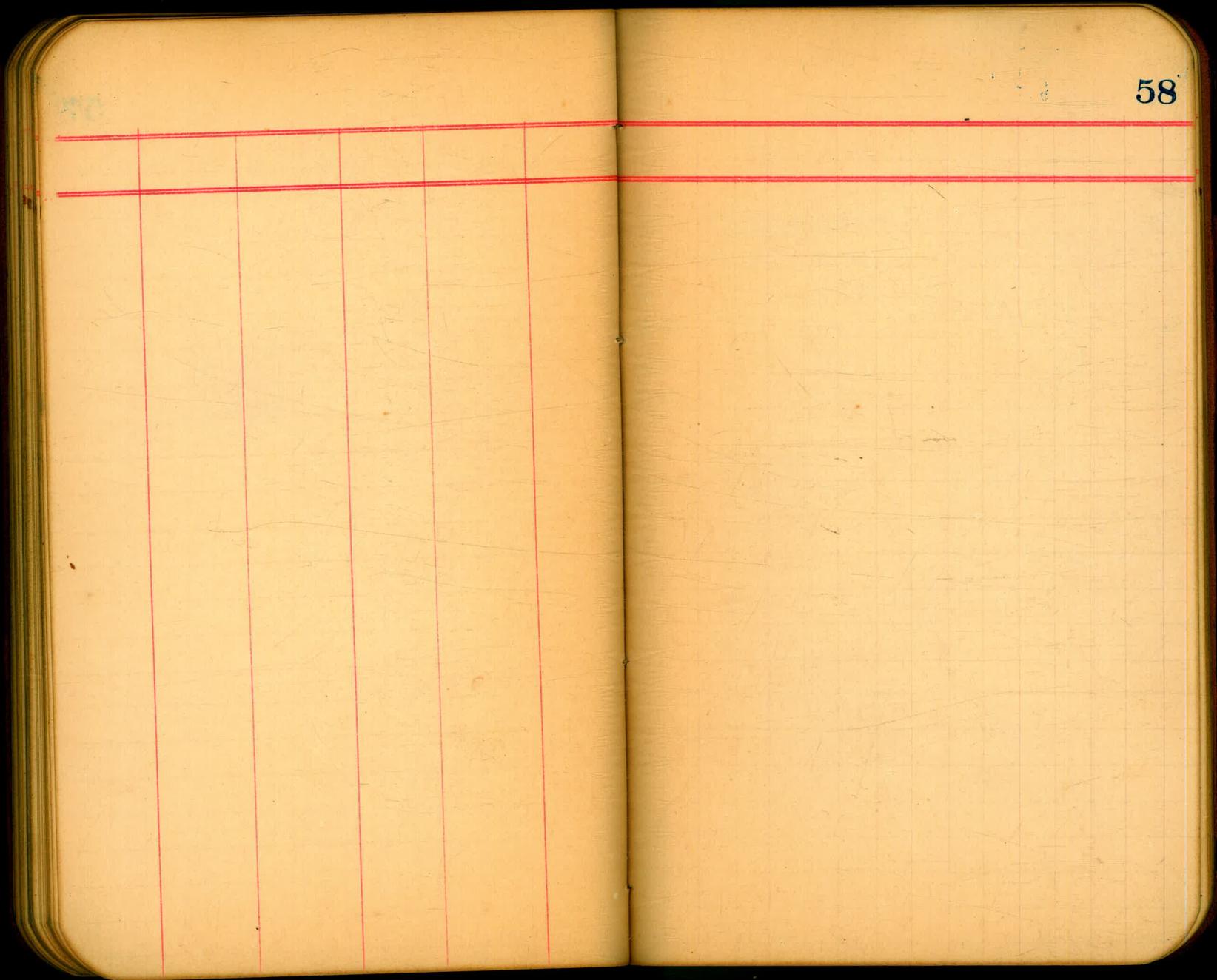
17537
4.70
173.67

17537
1.26
176.91

470
1.26

(1.67 x 1.96)

(1.15 x 1.68)



Trestle # 6 water-

88

Pm.	150	150	189.64	East.
1	$\frac{25}{177.5}$	$\frac{5}{177.0}$	175.45	150.0 4.55
2	$\frac{85}{171.5}$	$\frac{6}{174.0}$	173.07	6.93
3			171.51	8.39
4	$\frac{4}{176.0}$		172.29	7.71
5			177.04	180.0 2.96

189.64							
6.05							
189.72	HI	177.5	172.0	171.5	174.0	176.0	
12.22		12.22	9.54	10.04	7.54	5.54	
177.50							
9.09							
181.54	HI						

A St.

28-

29th

189.64
177.5
12.67

404

2.5

1.54

59

Tie-out Pts. (10')

Spk in Cov fence Post

4'-0"

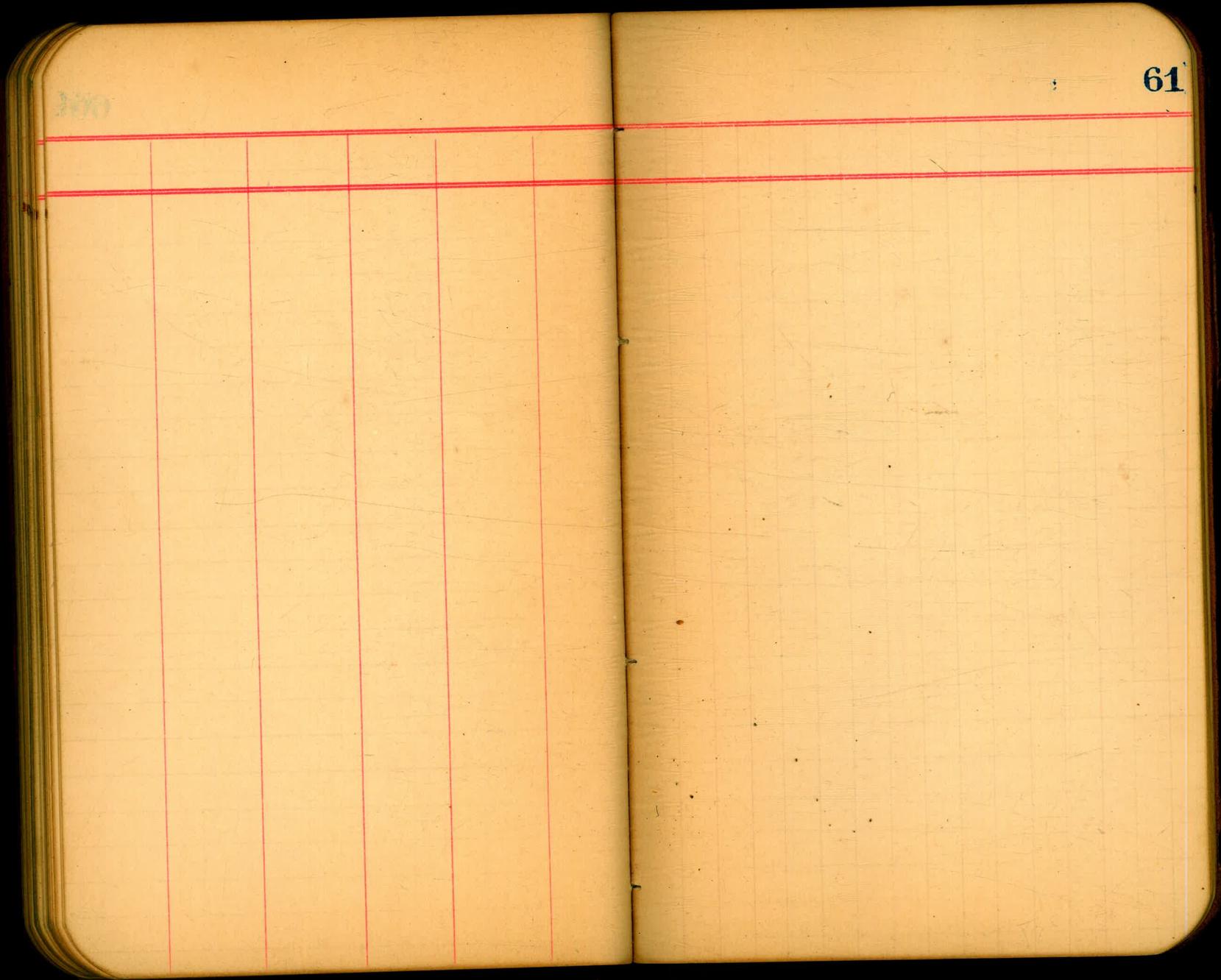
6'-0"

8'-6"

8'-0"

2'-6"

60



Trestle #1 (9th ward)

W	4504	4514			
11+33	<u>4</u>	<u>6</u>	41.96	45.04	3.08
	41.04	39.14			
11+51 ³³	<u>4524</u>	<u>4534</u>	39.35	45.14	5.79
	<u>6</u>	<u>6</u>			
11+69 ⁶⁶	39.24	39.34	38.69	45.24	6.55
	<u>6</u>	<u>6</u>			
11+88 ²	4544	4554	38.81	45.34	6.53
	<u>5</u>	<u>3</u>			
12+06 ³³	40.44	42.54	41.35	45.44	4.09
	<u>6</u>	<u>6</u>			
12+24 ⁶⁶			43.86	45.54	1.68

E	41.96	41.04	39.14	39.24
	<u>4.57</u>	<u>5.79</u>	<u>7.69</u>	<u>7.59</u>
	46.53 HI			
		39.34	40.44	42.54
		<u>7.49</u>	<u>6.39</u>	<u>4.29</u>

Alley
National - Grand

27th 28th

787
798

761

62

4196
3925
261

4.0'	1.25	5.25	-2.16	(0.66 x 1.20)
6.0'	1.50	7.50	-1.70	
6.0'	1.50	7.50	-1.95	
6.0'	1.50	7.50	-1.00	
5.0'	1.25	6.25	-2.16	
3.0'	1.25	4.25	-2.57	(0.55 x 1.05)

The image shows an open notebook with two pages. The left page is ruled with vertical red lines, creating a series of columns. The right page is ruled with horizontal red lines, creating a series of rows. The number 63 is printed in the top right corner of the right page. The pages are yellowed and show signs of wear, including some smudges and discoloration. The notebook is bound in the center, and the edges of the pages are rounded.

180

64

The image shows an open notebook with two pages. The left page is ruled with vertical red lines, creating a series of columns. The right page is ruled with horizontal red lines, creating a series of rows. The pages are yellowed and show signs of wear, including some smudges and discoloration. The notebook is bound in the center, and the pages are slightly curved. The background is black.

Trestle #2 (9th Ward)

- Alley -
Grand - Boston
28th

65

			Dev. Grade								
W	9+00	37.75	37.87	32.25	37.75	5.50	5.5'	1.25	6.75	-1.25	142 x 9.
	9+17 ³³	<u>5.6</u> 32.25	<u>9</u> 30.87	30.12	37.87	7.75	7.0'	1.50	8.50	-0.75	
	9+36 ⁶⁶	<u>7</u> 37.29	<u>6</u> 37.11	30.21	37.99	7.78	7.0'	1.50	8.50	-0.75	
	9+55 ⁰	<u>7</u> 30.99	<u>6</u> 35.11	32.17	38.11	5.97	6.6'	1.50	7.50	-1.50	
	9+73 ³³	<u>4</u> 38.23	<u>6</u> 34.79	38.23	34.4		4.0'	1.25	5.25	-1.90	(1.2 x .66)
E		<u>4</u> 34.23									

35.28	32.25	30.87	30.99	32.11
<u>9.03</u>	<u>6.25</u>	<u>7.63</u>	<u>7.51</u>	<u>6.39</u>
44.30				
<u>6.67</u>				
37.63	34.23			
<u>0.87</u>	<u>4.27</u>			
38.50				

4'-0" (0.66 x 1.2)
5'-6" (0.8 x 1.42)

66

67

Trestle # 3 (9th Ward)

W	14+76 ⁵	41.55	41.67	37.08	41.55	4.47
	14+95 ¹³	36.55	35.67	35.63	41.67	6.04
	15+13 ⁶	41.79	41.91	35.32	41.79	6.47
	15+31 ⁸	35.79	34.91	33.71	41.91	8.20
	15+50 ¹³	42.03		37.07	42.03	4.96

E	37.03		45.09 BM			
5 - (.75 x 1.35)			5.51			
6 - (.95 x 1.50)			50.60			
7 - (1.08 x 1.63)			8.96			
			42.17			
			1.56			
			42.70			
	37.03	34.91	35.79	35.67	36.55	
	5.67	7.79	6.91	7.03	6.16	

175 x 235
1'-9" x 2'-4"

Grand - Alley - Boston

25th - 29th

68

5.0	1.25	6.25	-1.78	(1.75 x 2.35)
6.0	1.50	7.50	-1.45	(1.95 x 2.50)
6.0	1.50	7.50	-1.00	(1.95 x 2.50)
7.0	1.50	8.50	-0.30	(2.08 x 2.63)
5.0	1.25	6.25	-1.25	(1.75 x 2.35)

Top of Big staho at E. end -

Trestle #4 (9th Ward)

24+80	$\frac{46.55}{5}$	$\frac{46.92}{8}$	41.80	46.55	5.05
24+98 ³³	$\frac{41.55}{8}$	$\frac{38.92}{8}$	38.40	46.92	8.52
25+16 ⁶⁶	$\frac{47.00}{8}$	$\frac{47.07}{6}$	37.96	47.00	9.04
25+35 ⁰	$\frac{39.00}{8}$	$\frac{41.07}{6}$	39.75	47.07	7.32
25+53 ³³	$\frac{47.15}{8}$		41.79	47.15	5.86

5 (2.77 x 1.35)

8 (1.18 x 1.77)

6 (0.95 x 1.50)

$\frac{42.15}{11.54}$

$\frac{42.15}{3.55}$
75.70 HI

49.24 BM 30th & B. St.

$\frac{44.5}{53.69}$ HI

$\frac{41.57}{4.63}$ $\frac{39.00}{6.76}$ $\frac{38.92}{6.78}$

$\frac{41.55}{3.55}$

- Alley -
Grand - Boston
29th - 30th

71

5.0'	1.25	6.25	- 1.20	(1.75 x 2.35)
5.0'	1.50	9.50	- 1.00	(2.18 x 2.77)
5.0'	1.50	9.50	- 0.95	(2.18 x 2.77)
6.0'	1.50	7.50	- 0.20	(1.95 x 2.50)
5.0'	1.25	6.25	- 0.90	(1.75 x 2.35)

$\frac{5.97}{39.73}$

	E		W	
36	26.5	37.4	25.5	36.0
68	52.5	74.4	58.5	82.6
69	76.0	65.0	83.0	117.5
70	42.5	60.0	79.0	110.3
71	95.5	64.5	82.0	116.0
78	42.5	60.0	93.5	132.0
87	53.0	75.0	95.5	135.0
97	64.5	91.3	90.5	128.0
85	79.5	112.5	84.3	119.5
75	81.5	115.0	67.5	95.5
58	68.5	97.0	57.5	81.5
34	47.5	67.2	48.5	68.5
	22.5	31.8	33.5	47.4
		31		38
		48		66
		90		120
		95.1		126.98
				95.1
				78
				2298.9

(2) SE
95222
17
666554
93222
1618774
(16.2)

(2) SW
95222
22
190444
190444
2094884
(21) 77.5

83
75
77
753
187

59 90 59
18 18
72 76
13 06
88 46
9.7 43
75.3 42.3
57.5
51.8
5.7

51.8 HI

770
1540
22989
3838.9

13
6
78

Temp - 2299
Logget 1540

50
120

Trestle #5 (9th Ward)

W	25.97	26.09				
8+99 ⁺	20.97	7.50	21.14	25.97	4.83	
		18.59				
9+12 ²³	26.22	26.34	18.66	26.09	7.43	
	7.50	7.00				
9+31 ⁰⁶	19.72	19.34	18.49	26.22	7.73	
9+49 ⁺	26.47	26.59	18.65	26.34	7.69	
	4.5	5				
9+67 ⁷³	19.97	21.59	19.57	26.47	6.90	
9+86 ⁰⁶	26.72		21.23	26.59	5.36	
	3.5					
10+04 ⁺	23.22		22.85	26.72	3.84	
E						
28.84		5	(.77 x 1.35)			
1.31		7.5	(1.10 x 1.72)			
28.15) I		7.0	(1.06 x 1.62)			
		6.5	(1.0 x 1.57)			
		3.5	(.68 x 1.13)			
50.97	18.59	18.72	19.34	19.97	21.59	
7.84	9.56	9.43	6.84	8.18	6.56	
23.22						
4.93						

Boston - Alex - Main

27th - 28th

20.57
25.88
1.10

74

	5.0' B	1.25	6.25	-1.42
	7.5' C	1.50	9.00	-1.57
	7.5' C	1.50	9.00	-1.57
	7.0' C	1.50	8.50	-0.81
	6.5' C	1.50	8.00	-1.10
	5.0' B	1.25	6.25	-0.90
	3.5' B	1.25	4.75	-0.90

26.52
2.12
1.12

28.15
22.58
3.27

$$\begin{array}{r} 885 \\ 71 \\ \hline 94 \end{array}$$

$$\begin{array}{r} 905 \\ 26 \\ \hline 143 \end{array}$$

87 $\frac{87.5}{75}$ | $\frac{75.8}{77}$ HI $\frac{47.5}{76}$ $\frac{79.5}{97}$ $\frac{79.5}{97}$ 16
 $\frac{112}{75.8}$ HI $\frac{75}{83}$ | $\frac{77}{76}$ $\frac{47.5}{76}$ $\frac{63.5}{76}$

$\frac{68}{13.1}$ HI $\frac{78}{64}$ HI $\frac{52}{64}$ $\frac{96.5}{94}$ $\frac{99.5}{81}$
 $\frac{81.1}{47.5}$ HI $\frac{53}{98}$ $\frac{36.5}{85}$ $\frac{92.5}{107}$

$\frac{68}{13}$	$\frac{61}{129}$	$\frac{14}{43.3}$	$\frac{61}{13}$	$\frac{72.5}{86.2}$	$\frac{41.9}{06}$
$\frac{55}{1}$	$\frac{48.5}{48.5}$	$\frac{43.3}{43.3}$	$\frac{7.90}{63}$	$\frac{67.5}{67.5}$	
$\frac{56}{9}$	$\frac{98.6}{6.7}$		$\frac{73.5}{13}$ HI	$\frac{93.5}{86.2}$	
$\frac{48}{48}$	$\frac{41.9}{41.9}$		$\frac{86.5}{3}$	$\frac{73}{73}$	

$\frac{60}{13}$ $\frac{73}{13}$ $\frac{86}{36}$ $\frac{82.4}{5}$ $\frac{82.9}{6.5}$ $\frac{76.4}{12.6}$ $\frac{43.4}{43.4}$ $\frac{26}{16}$ $\frac{24.4}{20}$

$\frac{60}{13}$ $\frac{255}{244}$ $\frac{45.5}{21}$ $\frac{47.5}{26.5}$ $\frac{42.5}{25}$ $\frac{77}{5}$ $\frac{77}{8}$ $\frac{36}{13}$ $\frac{69}{14}$ $\frac{21.5}{24.7}$ $\frac{24.5}{22.5}$

77.5 $\frac{28.5}{2}$ $\frac{60}{26}$ $\frac{52}{58}$ $\frac{58}{49}$ $\frac{18}{18}$

$\frac{38}{12}$ $\frac{43}{10}$ $\frac{74.5}{37}$ $\frac{23}{23}$ $\frac{24}{22}$ $\frac{58}{42.7}$

$\frac{25}{17}$ $\frac{33}{45}$ HI $\frac{129}{20.1}$ HI $\frac{22}{22}$ $\frac{58}{42.7}$

$\frac{31}{13}$ $\frac{232}{235}$ $\frac{27}{27}$ $\frac{42.7}{42.7}$ $\frac{55}{42}$ $\frac{13.3}{12.7}$

$\frac{31}{13}$ $\frac{48}{8.3}$ $\frac{28}{28}$ $\frac{38}{77}$ $\frac{36}{34}$

$\frac{27}{12.6}$ $\frac{27}{13}$ HI $\frac{28}{45}$ $\frac{167.5}{62.2}$ $\frac{4}{4}$

$\frac{14.4}{40}$ $\frac{49.2}{37.8}$ HI $\frac{37.8}{72}$ $\frac{186.8}{52}$

$\frac{20}{13.2}$ $\frac{6.8}{6.8}$ $\frac{18}{6.5}$ $\frac{26.7}{12.5}$ $\frac{22.5}{15.8}$ $\frac{50}{42}$ $\frac{59.5}{3.5}$

$\frac{20}{20.7}$ HI $\frac{21}{17.5}$ $\frac{17.5}{17.5}$ $\frac{46.5}{42}$

$\frac{18}{6}$ $\frac{6.5}{6.1}$ $\frac{6.5}{52}$ HI $\frac{67.5}{65.7}$

$\frac{42}{75}$ $\frac{61}{75}$ $\frac{75}{44}$ HI $\frac{82.5}{75}$

$\frac{75}{9.3}$ $\frac{65.7}{65.7}$ HI $\frac{75}{75}$

98
35
63
73
663
67

78
66
117

8
25
23
23
52
40
50
962
85
68

98' out

121
46.2
38
50.0
15N
E 28.5
95222
476110
761776
190444
27.138870

15N
W 26
95222
571332
190444
27.75772

30542
26
61084
153252
794092

69
18
56
53
116
41.4

75
64.5
50
10.5
52.5
62
47.6
75
62.5
52
71.5
57.2
43

67.5 64.5
56 56
111 85
48.5
41.4
6.1
47.5

53
1.0
52.0
13.1
63.1
7.9
57.2

75
64.2
55
7.5
57.2
62.5
8.9
65.6
75
74.5
57.2
75
59.5
5
77.5
54.2
65
75
70.5
72.5
69.5
73
153
59.5

38
12.4
30.4
2.8
47.6

75
35.5
50.5
53.5
47.6
65.5
5436
65.1
70
67.5
5
55.5
47.8
5
70.5
72.5
69.5
73
153
59.5

138

SE R 308 SW R

95222
666554
95222
16.18779
32
95222
190444
209488
110
6.7
30542
17

30542
22
61084
61084
671924

76

35E 35W
95222 95222
26.5 29.5
110
5.2
476110 476110
571332 856998
90444 190444
2529383 28.09049

30542
17
213794
30542
519214

17
26
12.4
26
41
136
12.0
13.9
69
2.9
30542
26
183252
61084
7.94092

E 22
W 22
30542 30542
26.5 29.5
152710 152710
183252 183252
61084 61084
8093630 9009890

20
13
14.0
28
0.5
26.5
13.2
31.7

95222
26
571332
792224
24.75772

95222
33.5
476110
385666
285666
31899370
15SW 448
329

30542
26
183252
61084
7.94092
17
9.1

30542
26
152710
91626
10.689
17
6.3

15SE
15SW
16.7
32
10.7
18
339
92
43.1
31
28.3
20.5
31

27
26.5
12.2
39.7
48
33.9

20.5
17.3
45
0.9
49.1
13
56.1
0.7
55.4
12.6
68.0
17.6

79
80
67.6
12.4
95
75
67.6
17

Trestle #6 (9th Ward)

Boston - Alley - Main

29th - 30th

77

			Elev	Grade							
W	40.36	40.35									
25+16 ⁷	<u>35.36</u>	<u>38.25</u>	33.12	39.83	6.71	7.0	C	1.5	8.50	-1.79 (1.5)	(2.05 x 2.62)
25+34 ^{7.5}	<u>40.15</u>	<u>40.04</u>	26.91	39.94	13.03	13.0	D	2.0	15.0	-2.00 (2.5)	(3.78 x 4.35)
25+53 ¹⁰	<u>25.15</u>	<u>24.04</u>	23.89	40.04	16.15	16.0	D	2.0	18.0	-1.85 (2.5)	(4.15 x 4.75)
25+71 ⁷	<u>39.94</u>	<u>39.83</u>	24.52	40.15	15.63	15.0	D	2.0	17.0	-1.37 (1.5)	(4.02 x 4.62)
25+89 ^{7.5}	<u>13</u>	<u>32.82</u>	27.98	40.25	12.27	12.0	D	2.0	14.0	-1.73 (1.5)	(3.67 x 4.02)
26+05 ^{2.5}	<u>26.94</u>		34.34	40.36	5.02	6.5	E	1.25	7.25	(8 cut down same base)	(2.18 x 2.75)
E											

16 - 2.15 x 2.75	23.89	35.73	35.73	24.04
15 - 2.02 x 2.62	11.84	25.25	25.15	19.85
12 - 1.67 x 2.22	35.73	7.48	10.58	
13 - 1.78 x 2.35	35.36	26.94	30.83	
7 - 1.05 x 1.62	0.37	7.98	2.09	
6 - 1.18 x 1.75				91.65

25.15
9.77
34.92

53 | 91.65
10.53 | 458.25 | .57 | 9 | 4
71.750 | 17 | 14
0.14 above Sta
24+50

30542
21
122168
61084
7.32008

30542
323
152710
61084
91626
9926150

16
16
7.3
8.82

6. - } above
16 } pier
7.3 }
8.82 }

10 -
7.3 below top of tower

Trestle # 2.

Tower	1/2	5/8	3/4	7/8	1"
36'	74				
68'			160		
69'			160		
66'			160		
76'				170	
71'				170	
78'					190
87'					220
97'					220
85'					212
75'					184
65'			156		
51'			116		
Horizontal		1500			
		Trestle # 3.			
31'	60				
38'	90				
51'		130			
56'			150		
Horizontal		550			

Trestle # 4

	1/2	5/8	3/4	7/8	1"
37'	90				
50'		130			
57'			156		
Horizontal			440		
			Trestle # 14 -		
31'	60				
39'	90				
44'			110		
51'					120
57'					140
Horizontal			700		
			Trestle # 15 -		
37'	76				
55'			128		
69'					166
79'					
63'					150
48'			108		
48'			94		
41'			84		
37'	76				
30'	56				
			Horizontal (1210 1/2)		

98
 107
 1188
 1210
 200 2348

$$\begin{array}{r} 67 \\ \hline 21.4 \end{array}$$

$$\begin{array}{r} 24 \\ 26 \\ \hline 28.0 \end{array}$$

$$\begin{array}{r} 18 \\ 26 \\ \hline 15.9 \end{array}$$

$$\begin{array}{r} 18 \\ \hline 15.1 \end{array}$$

16.3

19

$$\begin{array}{r} 19 \\ \hline 16.1 \end{array}$$

$$\begin{array}{r} 26 \\ \hline 16.7 \end{array}$$

$$\begin{array}{r} 70 \\ 37 \\ \hline 33 \end{array}$$

$$\begin{array}{r} 35 \\ 36 \\ \hline 32.9 \end{array}$$

$$\begin{array}{r} 37 \\ \hline 39.2 \end{array}$$

$$\begin{array}{r} 39 \\ 26 \\ 41 \\ \hline 36.4 \end{array}$$

$$\begin{array}{r} 39 \\ \hline 39.4 \end{array}$$

37.4

$$\begin{array}{r} 20 \\ 53 \\ \hline 14.7 \end{array}$$

$$\begin{array}{r} 58 \\ \hline 19.2 \end{array}$$

$$\begin{array}{r} 56 \\ 26 \\ \hline 53.7 \end{array}$$

$$\begin{array}{r} 108 \\ 29.2 \\ \hline 48.3 \end{array}$$

$$\begin{array}{r} 40 \\ 132 \\ \hline 26.5 \end{array}$$

$$\begin{array}{r} 22 \\ 27.4 \\ \hline 25.3 \end{array}$$

$$\begin{array}{r} 30 \\ 26 \\ \hline 27.4 \end{array}$$

$$\begin{array}{r} 40 \\ 0.9 \\ \hline 39.1 \end{array}$$

$$\begin{array}{r} 20 \\ 0.2 \\ \hline 20.2 \end{array}$$

$$\begin{array}{r} 12.4 \\ 10.7 \\ \hline 22.1 \end{array}$$

$$\begin{array}{r} 34.2 \\ 26 \\ \hline 31.8 \end{array}$$

$$\begin{array}{r} 40 \\ 26.5 \\ \hline 31.8 \end{array}$$

$$\begin{array}{r} 27.4 \\ 26 \\ \hline 26.6 \end{array}$$

$$\begin{array}{r} 12.6 \\ 51.7 \\ \hline 32 \end{array}$$

$$\begin{array}{r} 13.2 \\ 33.5 \\ \hline 17 \end{array}$$

$$\begin{array}{r} 12.4 \\ 22.1 \\ \hline 31.8 \end{array}$$

$$\begin{array}{r} 34.2 \\ 26 \\ \hline 31.8 \end{array}$$

$$\begin{array}{r} 40 \\ 26.5 \\ \hline 31.8 \end{array}$$

$$\begin{array}{r} 27.4 \\ 26 \\ \hline 26.6 \end{array}$$

$$\begin{array}{r} 32 \\ 49.5 \\ \hline 31.8 \end{array}$$

$$\begin{array}{r} 13.2 \\ 33.5 \\ \hline 17 \end{array}$$

$$\begin{array}{r} 12.4 \\ 22.1 \\ \hline 31.8 \end{array}$$

$$\begin{array}{r} 34.2 \\ 26 \\ \hline 31.8 \end{array}$$

$$\begin{array}{r} 40 \\ 26.5 \\ \hline 31.8 \end{array}$$

$$\begin{array}{r} 27.4 \\ 26 \\ \hline 26.6 \end{array}$$

$$\begin{array}{r} 30 \\ 126 \\ \hline 79 \end{array}$$

$$\begin{array}{r} 15 \\ 26 \\ \hline 13.1 \end{array}$$

$$\begin{array}{r} 12.4 \\ 74 \\ \hline 5.0 \end{array}$$

$$\begin{array}{r} 74 \\ \hline 5.0 \end{array}$$

Trestle #15

37	10'	E 18.0	W 40.0
55	10	E 31.0	W 78
69	10	E 50	W 73
79	10	E 64.0	W 66.5
63	10	E 65.5	W 47.5
48	10	E 59.5	W 30-
43	10	E 58.0	W 22
41	10	E 50-	W 23
37	10	E 55	W 22.6
30	10	E 32	W 12.5

Trestle #2

36'	E 26.5 (37.5)	W 25.5 (36)
68	E 52.5 (74.5)	W 58.5 (82)
69	E 46.0	W 83
66	E 42.5	W 78
20	E 45.5	W 82
71	E 42.5	W 93.5
78	E 53-	W 95.5
87	E 64.5	W 90.5
97	E 79.5	W 84.3
85	E 81.5	W 67.5
75	E 68.5	W 57.5
65 (cut to)	E 47.5	W 48.5
57 (cut to)	E 22.5	W 33.5

$$\begin{array}{r} 74 \\ 480 \\ 390 \\ 190 \\ 990 \\ 212 \\ 189 \\ \hline 272 \\ \hline 219.2 \\ 15.0 \\ \hline 36.92 \end{array}$$

$$\begin{array}{r} 28.5 \\ 1.5 \\ \hline 27.0 \\ 5.8 \\ \hline 32.7 \end{array}$$

$$\begin{array}{r} 194 \\ 135 \\ \hline 329 \\ 273 \\ \hline 602 \end{array}$$

20

T #14. Anchor Pts below top

14. 31' 10.5 E 33.2, W 15.0
 40. 39' 19.0 E 33.0, W 14.2
 12.6 31' 19.0 E 37.9, W 26.4
 51.7 58' 18.0 E 32.7, W 44.2
 32 44' 14.0 E 25.4, W 40.2

30

T #4

37 17.0 E 18.2 W 27.2
 57 17.0 " 34.7 " 46.2
 50 20.0 " 26.2 " 32.2

37

T #3

55 31' 11.0 E 21.4 W 16.4
 69 38' 18.0 E 12.9 W 37.9
 79 57' 11.0 E 27.4 W 53.4
 63 56' 16.0 E 39.0 W 31.4

48

43

41

37

30

$$\begin{array}{r} 296 \\ 15 \\ \hline 311 \\ 5076 \\ \hline 5387 \\ 115 \\ \hline 5502 \end{array}$$

Angle 17.27 - 95.222
 $28.5 \times 95.222 = 27.14$ (S.E. of 14)

Sin 17.17 = .30542

$$\begin{array}{r} 222 \\ 25 \\ \hline 247 \\ 160370 \\ 356572 \\ 69198 \\ \hline 924101 \end{array}$$

Tan 17.97 = .32074

$$\begin{array}{r} 32074 \\ 40 \\ \hline 1282960 \\ 23 \\ \hline 12.2 \end{array}$$

4, SE - 45, W - ①

$$\begin{array}{r} 26.5 \\ 29.5 \\ \hline 56.0 \\ 53.0 \\ \hline 109.0 \end{array}$$

14.8 (3 NE - NW -)

$$\begin{array}{r} 195444 \\ 190444 \\ \hline 2094884 \end{array}$$

$$\begin{array}{r} 148 \\ 122 \\ 26 \\ \hline 296 \\ 609 \\ 696 \\ \hline 144 \end{array}$$

$$\begin{array}{r} 800 \\ 516 \\ 658 \\ \hline 756 \\ 7642.96 \\ 74950486 \\ \hline 100 \\ 999904 \end{array}$$

1720

