

478

TRANSIT

398

F.B. 478



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

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.

ANGLE	COR. IN LINKS	ANGLE	COR. IN LINKS	ANGLE	COR. IN LINKS	ANGLE	COR. IN LINKS
°		°		°		°	
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



27 & F. S.W. Cor. Pole 164.802

" " N.W. Cor Mon - 168.980

26 & B. S.W. Car Plug 196.925

27 & C. S.W. Cor spike Pole 201.125

B.M. = 29th B side end of curb 50' East  
of Bridge- Plug- 197.779

Sta No	25° 19'	Calculated Course	Mag C
0+00	25° 19'		N 27° 30' W
1+00			
2+00	N 60° R	35° 30' E	N. 35° 30' E
3+00			
4+00			
4+75 A	70° L	M. 06.45 94° 30' W	94° W
5+75 A	08° 30' L	63° W	N. 62° 30' W
6+00	25° 15' L	M. 50.8 N 50° 15' W	N 85° W
8+50	37° 45' L	S 54° W	S 55° W



Sta		Deflections		Azimuth Needle
		Right	Left	
0+00				
2+00	200'	40° 20'		
3+50	350	25° 10'		
5+00	500		10° 30'	
6+50	650		40° 00'	
7+50	750	10° 50'		
8+00		80° 30'		
10+00			40° 30'	

0+00		24° 20'	
2+00		30° 00'	
3+50		20° 10"	
5+50		10° 00'	
8+00		40°	
12+10		2°	



LINE FROM M.H. IN ALLEY BETWEEN LANGLEY & 27th WEST to GRANT HILL  
 H.L. Rod Ground Grade Cut [B.M. TEL. POLE 148.92]

0+00	151.79	11.2	141.6	137.0	4.6
0+25		8.4	143.4	138.51	4.9
0+50		5.3	146.5	140.03	6.5
0+75		2.8	149.0	141.55	7.5
1+00	161.38	9.4	152.0	143.07	8.9
1+25		8.1	153.3	144.59	8.7
1+50		7.1	154.8	146.10	8.2
1+54.1	16°44'L	7.0	154.4	146.35	8.0
1+75		5.7	155.7	147.62	8.1
2+00		4.6	156.8	149.14	7.7
2+22.3	16°44'R M.H.	4.9	155.5	150.5	5.0
2+25		4.9			
2+50		4.9	156.5	151.17	5.3
2+75		4.6	156.6	151.78	5.0
3+00		4.2	157.2	152.38	4.8
3+25		3.4	158.0	152.99	5.0
3+50		2.4	159.0	153.59	5.4
3+75		2.0	159.4	154.20	5.2
3+87.3	M.H.	1.3	160.1	154.8	5.6
4+00		0.5	160.9	155.75	5.1
4+25	173.70	11.4	162.3	158.23	4.1
4+50		9.2	164.5	160.71	8.8
4+75		7.0	166.7	163.18	3.5



	H.I	Rod	Ground	GRADE	Cut
5+00	173.70	3.2	170.5	165.66	4.8
5+25	184.30	10.4	173.9	168.14	5.8
5+37.7	M.H.	7.6	176.7	169.40	7.3



Alley line between Gungley & 27<sup>th</sup> St. & Sand K. Ste (South)

	H.I	Rod	Ground	Grade	cut
0+00	121.05	10.42	110.63	107.00	3.6
0+25		3.6	117.4	111.39	6.0
0+50	131.05	9.2	121.8	115.78	6.0
0+75		5.5	125.5	120.17	5.3
1+00		1.2	129.8	124.56	5.2
1+25	140.47	6.1	134.4	128.95	5.4
1+50		2.1	138.4	133.34	5.1
1+70.8	M.H.		141.60	137.0	4.6
1+75	151.04	9.8	141.2	137.35	3.8
2+00		6.6	144.4	139.46	4.9
2+25		3.9	147.1	141.58	5.5
2+30	M.H.	3.7	147.3	142.0	5.3



LINE up Canon from "I" St. and alley bet Langley & 27<sup>th</sup> St

Main LINE

	H.I	Rod	Ground	Grade	Cut
0+00	111.87	1.24	110.63	99.5	
0+25		2.8	109.1	99.68	
0+50		5.7	106.2	99.87	
0+75		8.0	103.9	100.06	
1+00		9.6	102.3	100.24	
1+25		9.1	102.8	100.43	
1+50		7.0	104.9	100.62	
1+75		6.4	105.5	100.81	
2+00.85	M.H. & alley (72) BLK 2	5.1	106.8	101.0	
2+25	111.40	5.4		101.49	
2+50		4.7		101.98	
2+75		4.1		102.47	
3+00		4.0		102.97	
3+25		4.1		103.46	
3+50		3.8		103.95	
3+75		2.8		104.45	
4+00		2.4		104.95	
4+25		1.4		105.44	
4+33.75	M.H. @ "H. St" (71) & 27 <sup>th</sup>	1.19	110.21	105.6	
4+50	122.43	11.6			
4+75		8.7			
5+00		6.0			
		3.0			



Main Line up

CANON

H.T

5+25	122.43	3.0	
5+50		1.4	
5+75	127.53	5.0	
6+00		3.3	
6+25		1.3	
6+33.75	M.H. #27th (70) + ALLI	0.96	113.6
6+50		5.2	
6+75		9.8	
7+00			
7+25			
7+50			
7+75			
8+00			
8+13.75	M.H. (45)		
8+25			
8+50			
8+75			
9+00			
9+25			
9+50			
9+75			
10+00			
10+25			



29<sup>th</sup> STREET LINE up CANON

0+25

0+50

0+75

1+00

1+25

1+50

1+75

2+00

2+25

2+50

2+75

3+00

3+25

3+50

3+75

4+00

1



387.30  
375.  
12.30

387.3  
222.3  
165.0

4.00000000  
3800

102.424  
27.7

7000  
6600  
4000  
3300  
7000

16968  
16968  
4848  
8691448

.02424  
12120  
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160600

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123

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387.3  
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247650

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13536  
10400  
9024

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19812  
9906  
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155.7580  
2.4765

158.2345  
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143.1875

155.6640  
168.1405  
125.80  
169.3985



Curve at Sta. 00+00 = P.C. \* 398

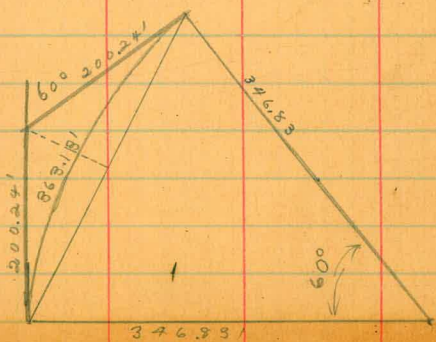
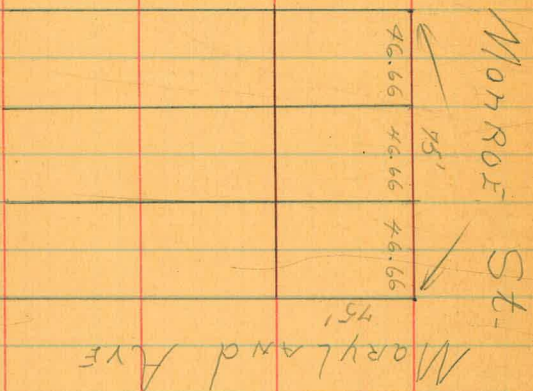
$$\Delta = 60^\circ$$

$$\text{Tan } O = 200.24'$$

$$D = 14^\circ 32'$$

$$R = 346.83$$

$$L = 363.13 = \text{arc } L = \text{St } 40+01.024 = P.T.$$





Published by H. S. CROCKER COMPANY, Stationers, Drawing  
Materials, Mathematical Instruments, etc., San Francisco.

TRAVERSE TABLE FOR TRANSIT BOOK.

From 1° to 90° for a distance of 100.

Degrees.	DEGREES.		½ DEGREE.		½ DEGREE.		½ DEGREE.		Degrees.
	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	
0			100.00	0.44	100.00	0.87	99.99	1.31	89
1	99.98	1.75	99.98	2.18	99.97	2.62	99.95	3.05	88
2	99.94	3.49	99.92	3.93	99.91	4.36	99.88	4.80	87
3	99.86	5.23	99.84	5.67	99.81	6.10	99.79	6.54	86
4	99.76	6.98	99.73	7.41	99.69	7.85	99.66	8.28	85
5	99.62	8.72	99.58	9.15	99.54	9.58	99.50	10.02	84
6	99.45	10.45	99.41	10.89	99.36	11.32	99.31	11.75	83
7	99.25	12.19	99.20	12.62	99.14	13.05	99.09	13.49	82
8	99.03	13.92	98.97	14.35	98.90	14.78	98.84	15.21	81
9	98.77	15.64	98.70	16.07	98.63	16.50	98.56	16.93	80
10	98.48	17.36	98.40	17.79	98.33	18.22	98.25	18.65	79
11	98.16	19.08	98.08	19.51	97.99	19.94	97.90	20.36	78
12	97.81	20.79	97.72	21.22	97.63	21.64	97.53	22.07	77
13	97.44	22.50	97.34	22.92	97.24	23.34	97.13	23.77	76
14	97.03	24.19	96.92	24.62	96.81	25.04	96.70	25.46	75
15	96.59	25.88	96.48	26.30	96.36	26.72	96.25	27.14	74
16	96.13	27.56	96.00	27.98	95.88	28.40	95.76	28.82	73
17	95.63	29.24	95.50	29.65	95.37	30.07	95.24	30.49	72
18	95.11	30.90	94.97	31.32	94.83	31.73	94.69	32.14	71
19	94.55	32.56	94.41	32.97	94.26	33.38	94.12	33.79	70
20	93.97	34.20	93.82	34.61	93.67	35.02	93.51	35.43	69
21	93.36	35.84	93.20	36.24	93.04	36.65	92.88	37.06	68
22	92.72	37.46	92.55	37.86	92.39	38.27	92.22	38.67	67
23	92.05	39.07	91.88	39.47	91.71	39.87	91.53	40.27	66
24	91.35	40.67	91.18	41.07	91.00	41.47	90.81	41.87	65
25	90.63	42.26	90.45	42.66	90.26	43.05	90.07	43.44	64
26	89.88	43.84	89.69	44.23	89.49	44.62	89.30	45.01	63
27	89.10	45.40	88.90	45.79	88.70	46.17	88.50	46.56	62
28	88.29	46.95	88.09	47.33	87.88	47.72	87.67	48.10	61
29	87.46	48.48	87.25	48.86	87.04	49.24	86.82	49.62	60
30	86.60	50.00	86.38	50.38	86.16	50.75	85.94	51.13	59
31	85.72	51.50	85.49	51.88	85.26	52.25	85.04	52.62	58
32	84.80	52.99	84.57	53.36	84.34	53.73	84.10	54.10	57
33	83.87	54.46	83.63	54.83	83.39	55.19	83.15	55.56	56
34	82.90	55.92	82.66	56.28	82.41	56.64	82.16	57.00	55
35	81.92	57.36	81.66	57.71	81.41	58.07	81.16	58.42	54
36	80.90	58.78	80.64	59.13	80.39	59.48	80.13	59.83	53
37	79.86	60.18	79.60	60.53	79.34	60.88	79.07	61.22	52
38	78.80	61.57	78.53	61.91	78.26	62.25	77.99	62.59	51
39	77.71	62.93	77.44	63.27	77.16	63.61	76.88	63.94	50
40	76.60	64.28	76.32	64.61	76.04	64.94	75.76	65.28	49
41	75.47	65.61	75.18	65.93	74.90	66.26	74.61	66.59	48
42	74.31	66.91	74.02	67.24	73.73	67.56	73.43	67.88	47
43	73.14	68.20	72.84	68.52	72.54	68.84	72.24	69.15	46
44	71.93	69.47	71.63	69.78	71.33	70.09	71.02	70.40	45
45	70.71	70.71							
Degrees.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Degrees.
	DEGREES		½ DEGREE.		½ DEGREE.		½ DEGREE.		