

*Return to City Engineers Office
City Hall, San Diego, Cal.*

486

400

LEVEL

F.B. 486

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

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	12	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						
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

Crocker Quality

LEVEL BOOK

No. 400

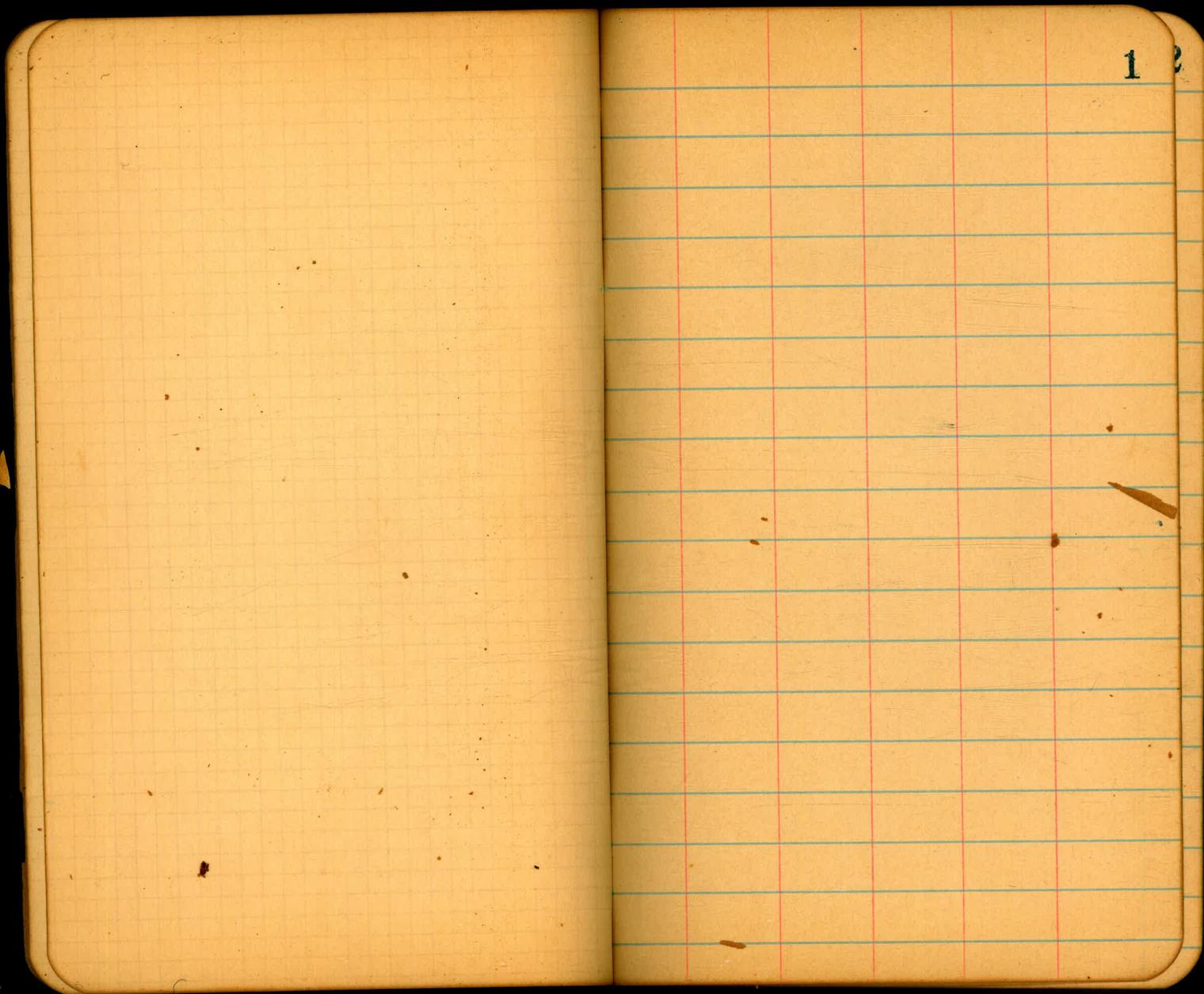


MANUFACTURED BY

A. S. Crocker Co.

SAN FRANCISCO

and
SACRAMENTO



Section G' 37 W.L. 42 to W.L. Atlantic
 6' 50" wide from 4th to E.L. Front St to 75' from W.L. Front St
 112' 57" to Atlantic
 B.M. 3.00 Brass Blg Third B "G" 17.45

B.M.	7.09	24.57	
			W.L. 4 th
N. curb		1.7	22.9
gutter		2.1	22.5
"		2.3	22.3
M		2.5	22.1
"		2.7	21.9
Gutter		3.0	21.6
S. curb		2.6	22.0
			0+25 W of 4 th
S. curb		3.1	21.5
gtc		3.7	20.9
"		2.8	21.8
M		2.6	22.0
"		2.5	22.1
gtc		2.8	21.8
N. curb		2.1	22.5

Note: Report side walk on S. side from 42 to Third.

29.57

0+50

2

N. curb		2.5	22.1
gtc		3.4	21.2
"		2.9	21.7
M		3.0	21.6
"		3.7	21.2
gtc		4.1	20.5
S. curb		3.4	21.2
			0+75
S. curb		3.9	20.7
gtc		4.8	19.8
"		3.7	20.9
M		3.3	21.5
"		3.3	21.3
gtc		3.7	20.9
N. curb		3.0	21.6

29.57

1+0

N. cab	3.7	21.2
gt	4.1	20.5
"	3.7	20.9
M	3.7	20.9
"	4.3	20.3
gt	5.2	19.4
S. cab	4.4	20.2

1+25

S. cab	4.8	19.8
gt	5.5	19.1
"	4.7	19.9
M	4.1	20.5
"	4.2	20.4
gt	4.5	20.1
N. cab	3.8	20.8

24.57

1+50

N. cab	4.2	20.4
gt	5.0	19.6
"	4.5	20.1
M	4.6	20.0
"	5.1	19.5
gt	4.9	19.7
S. cab	5.2	19.4

1+75

S. cab	5.7	18.9
gt	6.3	18.3
"	5.6	19.0
M	5.0	19.6
"	4.9	19.7
gt	5.3	19.3
N. cab	4.7	19.9

3

2457

270 = E. L. Third St 80'

N. crk	5.1	19.5
gt	5.7	18.9
"	5.6	19.0
N	5.6	19.0
"	6.0	18.6
gt	6.6	18.0
S. crk	6.1	18.5

E. CORNER LINE

S. gutter	6.7	17.9
S. CORNER	6.4	18.2
"	6.1	18.5
N	5.9	18.7
"	5.7	18.9
crk	5.6	19.0
N. L. gtr.	5.5	19.1

2457

E "4

4

N	5.3	19.3
crk	5.5	19.1
"	5.6	19.0
N	5.8	18.8
"	5.9	18.7
crk	6.2	18.4
S	6.5	18.1

+ 3.5 = 2 E of E. 1011 E TRACK

S	6.5	18.1
crk	6.3	18.3
"	6.0	18.6
N	5.9	18.7
"	5.8	18.8
crk	5.6	19.0
N	5.4	19.2

24.57

E. rail E track

N	5.5	19.1
col	5.7	18.9
"A	5.9	18.7
M	6.0	18.6
"A	6.2	18.4
col	6.3	18.3
S	6.5	18.1

center

S	6.7	17.9
col	6.9	18.2
"A	6.1	18.5
M	6.0	18.6
"A	6.0	18.6
col	5.7	18.9
N	5.5	19.1

24.57

+ 7.5 = w. rail w track

5

N	5.6	19.0
col	5.8	18.8
"A	6.0	18.6
M	6.2	18.6
"A	6.4	18.2
col	6.5	18.1
S	6.7	17.9

+ 9.5 = w. of w. rail

S	6.8	17.8
col	6.6	18.0
"A	6.2	18.4
M	6.1	18.5
"A	6.0	18.6
col	5.7	18.9
N	5.6	19.0

24.57

w. 1/4

N	5.6	19.0
cut	5.7	18.9
1/4	6.0	18.6
N	6.0	18.6
1/4	6.3	18.3
cut	6.6	18.0
S	6.8	17.8

w. curb

S	7.2	17.4
cut	7.3	17.3
1/4	6.8	17.8
N	6.5	18.1
1/4	6.4	18.2
cut	6.5	18.1
N	6.4	18.2

note: Asphalt side walk on S. side from Third to Second.

24.57

w. E. Third st

6

w. curb	6.2	18.4
gte	6.8	17.8
1/4	6.7	17.9
N	6.8	17.8
1/4	7.0	17.6
gte	7.5	17.1
S curb	7.1	17.5

2+25' N of Third

S curb	7.5	17.1
gte	7.9	16.7
1/4	7.4	17.2
N	7.1	17.5
1/4	7.2	17.6
gte	7.3	17.3
w. curb	6.6	18.0

29.57

2450

N. carb	7.0	17.6
gte	7.9	16.7
"A	7.5	17.1
M	7.3	17.3
"A	7.8	16.8
gte	8.3	16.3
S. carb	7.8	16.8

2775

S. carb	8.2	16.4
gte	8.8	15.8
"A	8.2	16.4
M	7.9	16.7
"A	7.7	16.9
gte	8.3	16.3
N. carb	7.4	17.2

29.57

170

7

N. carb	7.7	16.8
gte	8.6	16.0
"A	8.2	16.9
M	8.1	16.5
"A	8.5	16.1
gte	9.0	15.6
S. carb	8.5	16.1

1725

S. carb	8.9	15.7
gte	9.5	15.1
"A	8.8	15.8
M	8.5	16.1
"A	8.6	16.0
gte	8.9	15.7
N. carb	8.3	16.3

24.57

1450

N. curb	8.7	15.9
gte	9.2	15.4
"	8.9	15.7
M	8.9	15.7
"	9.0	15.3
gte	9.9	14.7
S. curb	9.2	15.4

1475

S. curb	9.6	15.0
gte	10.3	14.3
"	9.7	14.9
M	9.3	15.3
"	9.0	15.1
gte	9.5	15.1
N. curb	9.2	15.4

24.57

270 = E.L. Second St

8

N. curb	9.6	15.0		
gte	9.7	14.9		
"	9.8	14.8		
M	10.0	14.6		
"	10.3	14.3		
gte	10.9	14.2		
S. curb for grade 6" st	9.9	14.7	about drop in grade	
S. curb for grade on second st	10.6			
T.P.	4.64	13.58	10.62	13.94

E. curb Second st

S. curb	5.1	13.5
curb	4.8	13.8
"	4.1	14.5
M	4.1	14.5
"	3.9	14.7
curb	3.9	14.7
N.L.	3.8	14.8

18.58

E 1/4

N	3.5	15.1
cut	3.7	14.9
1/4	3.7	14.9
M	3.9	14.7
1/4	4.1	14.5
cut	4.4	14.2
S	4.7	13.9

Center

S	4.2	14.4
cut	4.2	14.4
1/4	4.0	14.6
M	3.8	14.8
1/4	3.6	15.0
cut	3.5	15.1
N	3.4	15.2

18.58

W 1/4

9

N	3.6	15.0
cut	3.6	15.0
1/4	3.6	15.0
M	3.8	14.8
1/4	4.1	14.5
cut	4.4	14.2
S	4.6	14.0

W 1/4

S	5.0	13.6
cut	5.0	13.6
1/4	4.2	14.4
M	4.0	14.6
1/4	3.9	14.7
cut	4.0	14.6
N	3.8	14.8

1858

No. 5th of 5th

x.crb	3.6	15.0
gte	4.0	14.6
"	3.9	14.7
M	4.1	14.5
"	4.5	14.1
gte	5.1	13.5
s.crb	4.6	14.0

0+25th of Second.

s.crb	4.7	13.9
gte	5.4	13.2
"	4.5	14.1
M	4.0	14.6
"	3.9	14.7
gte	4.3	14.3
x.crb	3.8	14.8

1858

0+50

10

x.crb	4.0	14.6
gte	4.5	14.1
"	4.2	14.7
M	4.2	14.4
"	4.6	14.0
gte	5.4	13.2
s.crb	4.7	13.9

0+75

s.crb	4.8	13.8
gte	5.4	13.2
"	4.7	13.9
M	4.4	14.2
"	4.3	14.3
gte	4.7	13.9
x.crb	4.2	14.4

18.58

170

n.cab	4.4	14.2
gte	5.0	13.6
"	4.4	14.2
M	4.5	14.1
"	4.7	13.9
gte	5.3	13.3
s.cab	4.9	13.7

1725

s.cab	5.0	13.6
gte	5.6	13.0
"	4.8	13.8
M	4.7	13.9
"	4.6	14.0
gte	5.1	13.5
n.cab	4.6	14.0

18.58

1750

11

n.cab	4.8	13.8
gte	5.4	13.2
"	4.8	13.8
M	4.8	13.8
"	5.0	13.6
gte	5.6	13.0
s.cab	5.1	13.5

1775

s.cab	5.2	13.4
gte	5.6	13.0
"	5.1	13.5
M	4.9	13.7
"	4.9	13.7
gte	5.5	13.1
n.cab	5.0	13.6

19.58
210 = F.L. 1st 3180'

N. cab	5.2	13.4
gte	5.3	13.3
"4	5.2	13.4
M	5.3	13.3
"4	5.3	13.3
gte	5.6	13.0
S cab	5.2	13.4

E. curb

S	5.7	12.9
cab	5.5	13.1
"4	5.3	13.3
M	5.3	13.2
"4	5.1	13.5
cab	5.4	13.2
N	5.3	13.3

18.58

E "4

12

N	4.8	13.8
cab	4.9	13.7
"4	4.7	13.9
M	4.6	14.0
"4	4.7	13.9
cab	4.8	13.8
S	4.9	13.7

+3.5 = 2'E of F rail

S	4.8	13.8
cab	4.7	13.9
"4	4.7	13.9
M	4.6	14.0
"4	4.6	14.0
cab	4.7	13.9
N	4.8	13.8

18.58

+5.5 = E. Tail

N	4.6	14.0
crk	4.6	14.0
"A	4.6	14.0
M	4.6	14.0
"A	4.5	14.1
crk	4.5	14.1
S	4.5	14.1

center = 2' W. of W. Tail

S	4.7	13.9
crk	4.7	13.9
"A	4.6	14.0
M	4.6	14.0
"A	4.6	14.0
crk	4.6	14.0
N	4.7	13.9

18.58

W. Tail

13

N	4.4	14.2
crk	4.7	13.9
"A	4.3	14.3
M	4.3	14.3
"A	4.4	14.2
crk	4.4	14.2
S	4.5	14.1

W. Curve

S	5.1	13.5
crk	4.8	13.8
"A	4.2	14.4
M	4.1	14.5
"A	4.2	14.4
crk	4.5	14.1
N	4.7	13.9

18.58
n. h. 1st st

x. cab	4.1	14.5
gte	4.6	14.0
"4	4.1	14.5
M	3.9	14.7
"4	4.1	14.5
gte	2.5	14.1
S. cab	4.1	14.1

0+25 W of 1st

S. cab	3.9	14.7
gte	4.6	14.0
"4	3.9	14.7
M	3.6	15.0
"4	3.7	14.9
gte	4.3	14.3
x. cab	3.8	14.8

18.58

0+50

14

x. cab	3.4	15.2
gte	4.0	14.6
"4	3.4	15.2
M	3.3	15.3
"4	3.5	15.1
gte	4.1	14.5
S. cab	3.6	15.0

0+75

S. cab	3.9	15.2
gte	4.0	14.6
"4	3.2	15.4
M	3.0	15.6
"4	3.0	15.6
gte	3.8	14.8
x. cab	3.0	15.6

18.58

140

s. carb	2.6	16.0
gte	3.3	15.3
"	2.8	15.8
M	2.7	15.9
"	3.1	15.5
gte	3.4	15.2
s. carb	3.1	15.5

1425

s. carb	2.9	15.7
gte	3.3	15.3
"	2.7	15.9
M	2.9	16.2
"	2.6	16.0
gte	2.9	15.7
s. carb	2.2	16.4

18.58

1450

s. carb	1.9	16.7
gte	2.7	15.9
"	2.9	16.2
M	2.3	16.3
"	2.5	16.1
gte	3.1	15.5
s. carb	2.6	16.0

1475

s. carb	2.9	16.2
gte	2.9	15.7
"	2.9	16.2
M	2.0	16.6
"	2.0	16.6
gte	2.9	16.2
s. carb	1.5	17.1

15

Note - Front st is 55.5' ^{18.58} bet curbs on S. side & 54.9' on N. side

210 = E.L. Front st 83.3' on S. 82.9' on N.

N		1.1	17.5
gtc		1.9	16.7
"A		1.5	17.1
M		1.7	16.9
"A		2.3	16.3
gtc		2.6	16.0
S		2.1	16.5

T.P. 4.59 21.02 2.15 16.93

E. curb

S		5.2	15.8
curb		4.8	16.2
"A		4.3	16.7
M		3.9	17.1
"A		3.8	17.2
curb		4.3	16.7
N		4.3	16.7

21.02

E "A

N		3.6	17.9
curb		3.5	17.5
"A		3.7	17.3
M		4.0	17.0
"A		4.1	16.9
curb		4.9	16.6
S		4.6	16.4

Center

S		4.9	16.6
curb		4.3	16.7
"A		4.1	16.9
M		3.8	17.2
"A		3.5	17.5
curb		3.6	17.4
N		3.5	17.5

21.02

N "A

N	3.6	17.4
calc	3.7	17.3
"A	3.7	17.3
M	3.5	17.2
"A	4.2	16.8
calc	4.4	16.6
S	4.7	16.3

N. calc

S	5.1	15.9
calc	4.7	16.3
"A	4.2	16.8
M	3.9	17.1
"A	3.8	17.2
calc	4.2	16.8
N	3.9	17.1

21.02

N. Front st

17

N. calc	3.6	17.4
gtc	4.2	16.8
"A	3.9	17.1
M	3.9	17.1
"A	4.3	16.7
gtc	4.9	16.1
S. calc	4.6	16.4

0+25 w of Front

S. calc	4.6	16.4
gtc	5.2	15.8
"A	4.3	16.7
M	3.9	17.1
"A	4.0	17.0
gtc	4.4	16.6
N. calc	3.7	17.3

21.02

0+50

N. carb	3.7	17.3
gte	3.7	17.3
"A	4.1	16.9
M	4.1	16.9
"A	4.5	16.5
gte	5.4	15.6
S. carb	4.7	16.3

0+75

S. carb	4.8	16.2
gte	5.4	15.6
"A	4.6	16.4
M	4.3	16.7
"A	4.1	16.9
gte	4.5	16.5
N. carb	3.8	17.2

21.02

1+0

N. carb	3.8	17.2
gte	4.6	16.4
"A	4.3	16.7
M	4.3	16.7
"A	4.7	16.3
gte	5.4	15.6
S. carb	4.8	16.2

1+25

S. carb	4.9	16.1
gte	5.4	15.6
"A	4.7	16.3
M	4.6	16.4
"A	4.4	16.6
gte	4.0	17.0
N. carb	3.9	17.1

18

21.02

1+50

N. curb	4.0	17.0
gte	4.5	16.5
"A	4.5	16.5
M	4.6	16.4
"A	4.8	16.2
gte	5.0	15.6
S. curb	5.0	16.0

1+75

S. curb	5.1	15.9
gte	5.5	15.5
"A	4.9	16.1
M	4.5	16.5
"A	4.5	16.5
gte	3.9	17.1
N. curb	4.1	16.9

21.02

2+0 = F.L. Union 75' wide

19

N. curb	4.1	16.9
gte	4.8	16.2
"A	4.5	16.5
M	4.6	16.4
"A	5.0	16.0
gte	5.6	15.4
S. curb	5.1	15.9

F. curb

S. L.	5.7	15.3
curb	5.7	15.3
"A	5.0	16.0
M	4.6	16.4
"A	4.6	16.4
curb	5.0	16.0
N. L.	4.8	16.2

N.L.	4.6	16.4
crk	5.1	15.9
1/4	4.7	16.3
M	4.7	16.3
1/4	4.9	16.1
crk	5.5	15.5
S.L.	5.9	15.6
Center		
S.L.	5.3	15.7
crk	5.3	15.7
1/4	4.9	16.1
M	4.6	16.4
1/4	4.7	16.3
crk	5.3	15.7
N.L.	4.6	16.4

N.L.	4.7	16.3
crk	5.3	15.7
1/4	4.7	16.3
M	4.6	16.4
1/4	5.2	15.8
crk	5.7	15.3
S.L.	5.8	15.2
Center		
S.L.	6.1	14.9
crk	6.0	15.0
1/4	5.3	15.7
M	4.8	16.2
1/4	4.9	16.1
crk	5.5	15.5
N.L.	4.8	16.2

21.02

r. 2. Union

x. cab	4.6	16.7
gtc	5.5	15.5
"	5.0	16.0
M	5.0	16.0
"	5.5	15.5
gtc	6.1	14.9
s. cab	5.5	15.5

0+25 refusion

s. cab	5.5	15.2
gtc	6.4	14.6
"	5.4	15.6
M	5.2	15.8
"	5.2	15.8
gtc	5.7	15.3
x. cab	4.9	16.1

21.02

0+50

mod	5.0	16.0
gtc	5.9	15.1
"	5.4	15.6
M	5.4	15.6
"	5.6	15.4
gtc	6.1	14.6
s. cab	6.0	15.0

0+75

s. cab	6.2	14.8
gtc	6.9	14.1
"	5.9	15.1
M	5.5	15.5
"	5.5	15.5
gtc	5.9	15.1
x. cab	5.2	15.8

21.22

17.0

N. cal.		5.3	15.7
gtr		6.2	14.8
"		5.7	15.3
M		5.6	15.4
"		6.1	14.9
gtr		7.0	14.0
S. cal.		6.8	14.7
T.P.	2.03	17.97	5.56 15.96

17.25

S. cal.		3.0	14.5
gtr		3.5	14.0
"		2.8	14.7
M		2.4	15.1
"		2.4	15.1
gtr		2.5	14.7
N. cal.		2.0	15.5

17.49

17.50

N. cal.		2.2	15.3
gtr		2.5	14.7
"		2.5	15.0
M		2.5	15.0
"		2.7	14.8
gtr		3.4	13.6
S. cal.		3.2	14.3

17.25

S. cal.		3.4	14.1
gtr		3.9	13.6
"		3.1	14.4
M		2.4	15.1
"		2.7	14.8
gtr		3.2	14.3
N. cal.		2.4	15.1

17.99

210 E. W. State St '75'

scrub	2.5	15.0
gtu	3.1	14.9
"4	2.8	14.7
M	2.6	14.9
"4	3.4	14.1
gtu	4.1	13.4
S scrub	3.6	13.9

E. G. W. H.

S	4.1	13.4
scrub	3.7	13.6
"4	3.3	14.2
M	2.8	14.7
"4	2.7	14.8
scrub	3.3	14.2
N	3.3	14.2

17.99

E "4

N	2.7	14.6
scrub	3.0	14.5
"4	2.8	14.7
M	2.7	14.6
"4	3.3	14.2
scrub	3.5	14.0
S	3.6	13.9

+ 3.2 = 2E1/E211

S	3.7	13.8
scrub	2.4	15.1
"4	3.3	14.2
M	3.0	14.5
"4	3.0	14.5
scrub	2.9	14.6
N	2.9	14.6

17.49

+15.22 E. tail

N	2.7	14.8
col	2.9	14.6
"4	3.0	14.5
M	3.3	14.2
"4	3.4	14.1
col	3.5	14.0
S	2.7	13.8

+12.22 E. tail

S	3.6	13.9
col	3.4	14.1
"4	3.2	14.3
M	3.1	14.4
"4	3.0	14.5
col	3.0	14.5
N	2.8	14.7

17.49

center

24

N	2.8	14.7
col	3.0	14.5
"4	3.0	14.5
M	3.1	14.4
"4	3.2	14.3
col	3.4	14.1
S	3.6	13.9

N "4

S	4.0	13.5
col	3.7	13.8
"4	3.3	14.2
M	3.1	14.4
"4	3.0	14.5
col	3.3	14.2
N	3.3	14.2

17.49

W. side

N	3.6	13.9
erb	3.7	13.8
"	3.2	14.3
N	3.3	14.2
"	3.6	13.9
erb	4.2	13.3
O	4.6	12.9

W. side State

S	4.0	13.5
gte	4.9	13.1
"	4.0	13.5
N	3.5	14.0
"	3.5	14.0
gte	3.8	13.7
N	3.1	14.4

17.49

0+25W of state

25

N. side	3.5	14.0
gte	4.5	13.0
"	4.0	13.5
N	3.9	13.6
"	4.3	13.2
gte	5.1	12.4
S. side	4.4	13.1

0+50

S. side	4.8	12.7
gte	5.5	12.0
"	4.6	12.9
N	4.3	13.2
"	4.4	13.1
gte	4.9	12.6
N. side	3.9	13.6

17.49

0.15

N. carb		4.3	13.2
gla		5.2	12.3
"		4.9	12.6
M		4.8	12.7
"		5.2	12.3
gla		5.9	11.6
S. carb		5.2	12.3

14.0

S. carb		5.5	12.0
gla		6.1	11.4
"		5.2	12.3
M		5.2	12.3
"		5.9	12.1
gla		5.7	11.6
N. carb		4.8	12.7

17.49

1.25

N. carb		5.3	12.2
gla		6.2	11.3
"		5.6	11.9
M		5.5	12.0
"		5.7	11.8
gla		6.5	11.0
S. carb		5.9	11.6

14.50

S. carb		6.3	11.2
gla		6.9	10.6
"		6.1	11.4
M		5.5	11.7
"		5.8	11.7
gla		6.4	11.1
N. carb		5.7	11.8

1175

N. carb	6.2	11.3
gtc	6.8	10.7
"	6.2	11.3
"	6.3	11.2
"	6.6	10.9
glt	7.2	10.3
s. carb	6.6	10.9

710 - E.L. Columbia 75' wide

s. carb	7.0	10.5
gtg	7.7	9.8
"	7.0	10.5
"	6.6	10.9
"	6.6	10.9
glt	7.3	10.2
N. carb	6.5	11.0

T

E. C. U. H.

N	7.0	10.5
carb	7.3	10.2
"	6.8	10.7
"	6.7	10.8
"	7.0	10.5
carb	7.8	9.7
S	7.8	9.7

F 119

S	7.8	9.7
carb	7.7	9.8
"	7.0	10.5
"	6.9	10.6
"	6.9	10.6
carb	7.2	10.3
"	7.1	10.4

17.49

Center

IV	7.2	10.3
Col	7.5	10.0
1/4	6.9	10.6
M	6.9	10.6
1/4	7.2	10.3
Col	8.1	9.4
S	7.5	10.0

W 1/4

S	8.4	9.1
Col	8.2	9.3
1/4	7.4	10.1
M	7.2	10.3
1/4	7.2	10.3
Col	7.6	9.9
IV	7.4	10.1

17.49

W. Corb

X	7.9	9.6
Col	7.8	9.7
1/4	7.4	10.1
M	7.5	10.0
1/4	8.0	9.5
Col	8.5	9.0
S	8.6	8.9

W. L. Columbia

S	8.2	9.3
Col	8.7	8.8
1/4	8.1	9.4
M	7.7	9.8
1/4	7.6	9.9
Col	8.1	9.4
N	7.6	9.9

T.P. 2.4 11.49 8.14 9.35

11.49

0.450 of Columbia

N. Cole	2.0	9.5
gls	2.6	8.9
"	2.1	9.4
"	2.2	9.3
"	2.9	9.1
gls	3.2	8.5
S. Cole	2.5	9.0

0.450

S. Cole	2.9	8.6
gls	3.4	8.1
"	2.7	8.8
"	2.9	9.1
"	2.9	9.1
gls	2.9	8.6
N. Cole	2.2	9.3

11.49

0.475

29

N. Cole	2.7	8.8
gls	3.3	8.2
"	2.8	8.7
"	2.8	8.7
"	3.1	8.4
gls	4.0	7.5
S. Cole	3.3	8.2

1.40

S. Cole	3.6	7.9
gls	4.3	7.2
"	3.5	8.0
"	3.1	8.4
"	3.2	8.3
gls	3.6	7.9
N. Cole	3.0	8.5

28

11.49

1425

N. oak	3.7	8.1
gtw	4.2	7.3
"	3.7	8.1
M	3.5	8.0
"	3.8	7.7
gtw	4.6	6.9
S. oak	4.0	7.5

1450

S. oak	4.4	7.1
gtw	5.2	6.3
"	4.2	7.3
M	4.0	7.5
"	3.9	7.6
gtw	4.5	7.0
N. oak	3.7	7.8

11.49

1475

30

N. oak	4.2	7.3
gtw	4.8	6.7
"	4.3	7.2
M	4.3	7.2
"	4.5	7.0
gtw	5.3	6.2
S. oak	4.8	6.7

240 = E.L. India st 75' wide

S. oak	5.1	6.4
gtw	5.4	6.1
"	5.0	6.5
M	4.6	6.9
"	4.6	6.9
gtw	4.8	6.7
N. oak	4.5	7.0

11.49

E. cork

W	4.9	6.6
W	4.9	6.6
"	4.6	6.9
M	4.7	6.8
"	5.1	6.4
W	5.4	6.1
S	5.6	5.9

F "4

S	5.2	6.3
W	5.1	6.4
"	4.9	6.6
M	4.6	6.9
"	4.6	6.9
W	5.0	6.5
N	4.8	6.7

11.49

Center

31

N	4.8	6.7
W	5.2	6.3
"	4.8	6.7
M	4.8	6.7
"	5.1	6.4
W	5.2	6.3
S	5.3	6.2

N "4

S	5.6	5.9
W	5.6	5.9
"	5.2	6.3
M	5.1	6.4
"	5.2	6.3
W	5.5	6.0
N	5.2	6.3

Note - No curb or side walk on E. L. St from Sta 142 to E. L. 143

11.49

N curb

14	5.7	5.8
14	5.9	5.6
14	5.5	6.0
M	5.5	6.0
14	5.5	6.0
curb	6.0	5.5
S	6.2	5.3

W. L. India st. - 040

S curb	5.6	5.9
gte	6.1	5.4
14	5.2	5.7
M	5.6	5.9
14	5.5	6.0
gte	5.2	5.7
N curb	5.1	6.4

11.49

0+25' W. of India

32

N curb	5.5	6.0
gte	6.2	5.3
14	6.0	5.5
M	5.8	5.7
14	6.0	5.5
gte	6.6	4.9
S curb	5.9	5.6

0+50

S curb	6.1	5.4
gte	6.9	4.6
14	6.3	5.2
M	6.1	5.4
14	6.1	5.4
gte	6.4	5.1
N curb	5.7	5.8

11.49

1125

N. cr.	6.1	5.4
gt	6.8	4.7
"	6.3	5.2
"	6.9	5.1
"	6.6	4.9
gt	7.0	4.5
S. cr.	6.4	5.1

1150

S. cr.	6.6	4.9
gt	7.2	4.3
"	6.8	4.7
"	6.5	5.0
"	6.4	5.1
gt	6.9	4.6
N. cr.	6.3	5.2

11.49

1125

33

N. cr.	6.7	4.8
gt	7.2	4.3
"	6.4	5.1
"	6.6	4.9
"	6.9	4.6
gt	7.8	3.7
S. cr.	6.9	4.6

1150

S. cr.	7.4	4.1
gt	7.4	4.1
"	7.1	4.4
"	7.2	4.3
"	7.4	4.1
gt	7.5	4.0
N. cr.	7.0	4.5

11.99

1475

1/2 Sample
7/09 Shum
Bryal

N. L.		7.3	4.2
col		7.6	3.9
"		7.4	4.1
M		7.5	4.0
"		7.4	4.1
col		7.4	4.1
S. L.		7.1	3.6
T.P.	2.85	5.84	8.53

2.10 - E. of Artic. 75'

S. L.		2.7	3.1
+ 3.5 - E. rail Santa Fe		2.9	3.4
col		2.8	3.0
"		2.3	3.5
M		2.2	3.6
"		2.1	3.7
gtc		2.7	3.1
N. L.		2.0	3.8

Note - for intersection of E & Artic see book A89 P 14
No. carb. or sidewalk in N. side from Artic to California.
5-84
N. L. Artic

N. L.		2.7	3.1
col		3.6	2.2
"		3.2	2.6
M		3.2	2.6
"		3.1	2.4
gtc		3.1	2.4
S. Col		2.9	2.9

0+25 N of Artic

S. Col		3.2	2.6
gtc		3.2	2.0
"		3.5	2.3
M		3.5	2.3
"		3.6	2.2
col		3.3	2.5
N. L.		3.0	2.8

5.89

0+50

N.L.	3.3	2.5
erb	4.1	1.7
"	4.1	1.7
M	4.0	1.8
"	3.8	2.0
gtc	4.1	1.7
S. erb	3.6	2.2

0+75

S. erb	3.5	2.0
gtc	4.5	1.3
"	3.8	2.0
M	3.7	1.9
"	4.0	1.8
erb	4.5	1.3
N.L.	3.8	2.0

5.89

1+0

34

N.L.	4.1	1.7
erb	4.7	1.1
"	4.0	1.8
M	4.0	1.8
"	4.1	1.7
gtc	4.6	1.2
S. erb	4.2	1.6

1+25

S. erb	4.5	1.3
gtc	5.0	0.8
"	4.3	1.5
M	4.1	1.7
"	4.2	1.6
erb	4.7	1.1
N.L.	3.9	1.9

5.84

1+50

N.L.	4.4	1.4
crk	4.8	1.0
"A	4.5	1.3
M	4.5	1.3
"A	4.5	1.3
gtr	5.3	0.5
S. Crk	4.8	1.0

1+75

S. Crk	5.1	0.7
gtr	5.8	0.0
"A	5.0	0.8
M	4.9	0.9
"A	4.9	0.9
crk	4.9	0.9
N.L.	4.9	0.9

5.84

2+0 = E.L. California 75' wide

N.L.	5.0	0.8
crk	5.1	0.7
"A	5.0	0.8
M	5.0	0.8
"A	5.6	0.2
gtr	6.0	-0.2
S. Crk	5.9	0.4

T.P. 4.37 4.80 5.91 0.93

E. Crk

S. Crk	5.0	-0.2
crk	4.9	-0.1
"A	4.4	0.4
M	4.3	0.5
"A	4.2	0.6
crk	4.3	0.5
N.L.	4.3	0.5

4.80

E 1/4 = 2 E of E 1/4 of section 17, 23, 29, 35

N.L.	3.8	1.0
crk	3.8	1.0
1/4	3.5	1.0
M	2.8	1.0
1/4	3.9	0.9
crk	4.3	0.5
S.L.	4.5	0.3

1/4 + 2 = E 1/2

S.L.	4.0	0.8
crk	3.9	0.9
1/4	3.8	1.0
M	3.8	1.0
1/4	3.7	1.1
crk	3.6	1.2
N.L.	3.6	1.2

4.80

Center

36

N.L.	3.7	1.1
crk	4.3	0.5
1/4	4.1	0.7
M	4.0	0.8
1/4	4.5	0.3
crk	4.7	0.1
S.L.	4.3	0.5

N 1/4

S.L.	4.9	-0.1
crk	4.9	-0.1
1/4	4.7	0.1
M	4.2	0.6
1/4	4.2	0.6
crk	4.9	0.9
N.L.	3.8	1.0

4.80

w curb

N.L.	3.8	1.0
crk	4.5	0.3
"	4.9	0.9
M	4.9	0.9
"	4.9	-0.1
Crk	4.8	0.0
S.L.	4.7	0.1

w.L. California

S.L.	4.6	0.2
crk	4.7	0.1
"	4.7	0.1
M	4.5	0.3
"	4.4	0.4
Crk	4.6	0.2
N.L.	4.9	0.4

Note - no curb or side walk between California & Atlantic

4.80

0+25 W of California

37

N	4.5	0.3
crk	4.7	0.1
"	4.5	0.3
M	4.9	0.4
"	4.7	0.1
Crk	4.8	0.0
S	4.5	0.0

0+50

S	4.8	0.0
crk	4.7	0.1
"	4.8	0.0
M	4.6	0.2
"	4.5	0.3
crk	4.6	0.2
N	4.4	0.4

9.80

0+75

N	4.5	0.3
col	4.7	0.1
"	4.7	0.1
M	4.9	-0.1
"	4.9	-0.1
col	4.7	0.1
S	4.7	0.1

1+0

S	4.9	-0.1
col	4.9	-0.1
"	4.9	-0.1
M	4.9	-0.1
"	4.9	-0.1
col	5.3	-0.5
N	4.9	-0.1

4.80

1+25

38

N	5.2	-0.4
col	5.3	-0.5
"	5.1	-0.3
M	4.6	0.2
"	4.6	0.2
col	4.3	0.5
S	4.3	0.5

1+50

S	4.1	0.7
col	4.1	0.7
"	4.5	0.3
M	4.6	0.2
"	5.2	-0.4
col	5.4	-0.6
N	5.2	-0.4

4.80

1.75

N	5.5	-0.7
col	5.1	-0.3
1/4	5.0	-0.2
M	4.6	0.2
1/4	4.6	0.2
col	4.7	0.1
S	4.5	0.3

2 + 0 - Fl. Atlantic st. 100 wide

S	4.8	0.0
col	4.8	0.0
1/4	5.2	-0.4
M	5.2	-0.4
1/4	5.2	-0.4
col	5.0	-0.2
N	5.0	-0.2

T.P.

1.75

4.59

1.76

2.84

4.59

39

0 + 0' - 2' Fl. E. of E. of A.T. S. F. Smith

N	5.2	-0.6
col	5.4	-0.8
1/4	5.0	-0.4
M	5.0	-0.4
1/4	5.1	-0.5
col	5.2	-0.6
S	5.3	-0.7

0 + 0' - E. of E. of

S	5.0	-0.4
col	5.0	-0.4
1/4	5.0	-0.4
M	5.0	-0.4
1/4	5.0	-0.4
col	5.0	-0.4
N	5.1	-0.5

4.59

2' m of
E. Curbs = 17' rail

N	5.4	-0.8
erle	5.4	-0.8
14	5.2	-0.6
M	5.1	-0.5
14	5.0	-0.4
erle	5.2	-0.6
S	5.1	-0.8

0706 = 2' E of E rail

S	4.9	-0.3
erle	4.9	-0.3
14	5.0	-0.5
M	4.9	-0.3
14	4.8	-0.2
erle	4.8	-0.2
N	4.8	-0.2

4.59

0708 = E rail

N	4.7	-0.1
erle	4.7	-0.1
14	4.7	-0.1
M	4.6	0.0
14	4.5	0.1
erle	4.4	0.2
S	4.4	0.2

0715 = 2' m of 17' rail

S	4.7	-0.1
erle	4.6	0.0
14	4.6	0.0
M	4.6	0.0
14	4.7	-0.1
erle	4.9	-0.3
N	5.2	-0.6

40

4.59

E 11A

N	5.1	-0.5
Crk	4.8	-0.2
11A	4.7	-0.1
M	4.7	-0.1
11A	4.7	-0.1
Crk	4.5	0.1
S	4.6	0.0

0.04 = 2' E of E. 12.1

S	4.6	0.0
Crk	4.6	0.0
11A	4.7	-0.1
M	4.7	-0.1
11A	4.8	-0.2
Crk	5.0	-0.4
N	5.2	-0.6

4.59

0.06 = F. 12.1

41

N	4.8	-0.2
Crk	4.8	-0.2
11A	4.7	-0.1
M	4.6	0.0
11A	4.6	0.0
Crk	4.6	0.0
S	4.6	0.0

0.13 = 2' W of W. 12.1

S	4.7	-0.1
Crk	4.7	-0.1
11A	4.7	-0.1
M	4.7	-0.1
11A	4.7	-0.1
Crk	5.0	-0.4
N	5.0	-0.4

4.59
center

x	4.7	-0.1
crk	4.7	-0.1
114	4.6	0.0
114	4.7	-0.1
114	4.6	0.0
crk	4.6	0.0
S.	4.6	0.0

114

S	4.4	0.2
crk	4.4	0.2
114	4.3	0.3
114	4.2	0.4
114	4.3	0.3
crk	4.6	0.0
114	4.6	0.0

4.59

$0+0.3^3 = 2^1$ E of E. rail

42

x	4.6	0.0
crk	4.5	0.1
114	4.3	0.2
114	4.3	0.2
114	4.1	0.5
crk	4.3	0.3
S	4.4	0.2

$0+0.3^3 = E$ rail

S	4.0	0.6
crk	4.1	0.5
114	4.1	0.5
114	4.1	0.5
114	4.1	0.5
crk	4.2	0.4
114	4.2	0.4

4.59

410³ = 2 W. of N rail

N	45	0.1
erb	44	0.2
14	42	0.4
M	41	0.5
14	43	0.3
erb	44	0.2
S	45	0.1

N. curb

S	45	0.1
erb	46	0.0
14	41	0.5
M	40	0.6
14	40	0.6
erb	44	0.2
N	45	0.1

4.59

N. L. Atlantic ST

43

N	38	0.8
erb	38	1.1
14	33	1.3
M	30	1.6
14	36	1.0
erb	40	0.6
S	47	-0.1

1-section 4th St bet Walnut & University of Dunlap
 " 70' wide R.R. 45' bet curbs of Shaw

B.M. N.W. 4th & Walnut, 287.39 bench

B.M. 5.01 292.90
 N.E. Walnut, lot curb

E. curb 5.0 287.4 287.5

gtr 5.5 286.9

" 5.1 287.3

M 5.0 287.4

+ 3.5 = ctr. c.c. foundt 5.0 287.4

" 5.0 287.1

gtr 5.5 286.9

W. curb 5.0 287.4 287.5

0+25 N of Walnut

W. curb 5.0 287.4 287.58

gtr 5.7 286.7

" 5.2 287.2

+ 5.7 foundt 5.0 287.4

M 5.0 287.4

" 5.0 287.4

gtr 5.5 286.9

E. curb 5.0 287.4 287.58

no. concrete foundation for old cable car line on 4th from
 Walnut to University - foundation is 3.5' wide all distances taken
 to center of foundation - all + distances = center. c.c. foundt
 0+50

44

E. curb 4.9 287.5 287.67

gtr 5.6 286.8

" 5.1 287.3

M 5.0 287.4

" 5.0 287.4

" 5.1 287.3

gtr 5.7 286.7

W. curb 4.9 287.5 287.67

0+75

W. curb 4.8 287.6 287.75

gtr 5.5 286.9

" 5.2 286.2

" 4.8 287.6

" 4.9 287.5

" 4.9 287.5

gtr 5.9 287.0

E. curb 4.8 287.6 287.75

~~Posted~~

29240

170

F. cab	4.7	287.7	287.83
gtu	5.2	287.2	
"a	4.8	287.6	
M	4.8	287.6	
+ 5.5	4.7	287.7	
"a	5.1	287.3	
gtu	5.5	286.9	
M. cab	4.7	287.7	287.83

1725

M. cab	4.6	287.8	287.92
gtu	5.2	287.2	
"a	5.0	287.4	
+ 5.7	4.8	287.6	
M	4.7	287.7	
"a	5.0	287.4	
gtu	5.0	287.4	
F. cab	4.7	287.7	287.92

29240

1750

45

F. cab	4.6	287.8	288.0
gtu	5.1	287.3	
"a	4.9	287.5	
M	4.7	287.7	
+ 5.5	4.7	287.7	
"a	5.0	287.4	
gtu	5.4	287.0	
M. cab	4.6	287.8	288.0

1775

M. cab	4.5	287.9	288.06
gtu	5.2	287.2	
"a	4.8	287.6	
+ 5.7	4.5	287.9	
M	4.5	287.9	
"a	4.7	287.7	
gtu	5.1	287.3	
F. cab	4.5	287.9	288.06

	2120	242.40	unt
E. cab	4.4	288.0	288.17
gtc	4.9	287.5	
"4	4.4	288.0	
M	4.4	288.0	
+5.5	4.5	287.9	
"4	4.8	287.6	
gtc	5.3	287.1	
W. cab	4.4	288.0	288.17
	2125		
W. cab	4.4	288.0	288.25
gtc	5.2	287.2	
"4	4.7	287.7	
+7.5	4.4	288.0	
M	4.3	288.1	
"4	4.6	287.8	
gtc	4.9	287.5	
E. cab	4.3	288.1	288.25

	242.40	46
F. cab	4.2	288.33
gtc	4.7	287.7
"4	4.4	288.0
M	4.2	288.2
+5.5	4.2	288.2
"4	4.5	287.9
gtc	4.9	287.5
W. cab	4.2	288.33
	2175	
W. cab	4.1	288.33
gtc	4.9	282.5
"4	4.4	288.0
+7.5	4.1	288.3
M	4.1	288.3
"4	4.4	288.0
gtc	4.6	287.8
E. cab	4.1	288.33

24240

3+0

E. cab	4.0	288.4	288.50
gtc	4.8	287.6	
"	4.6	287.8	
M	4.1	288.3	
+5.5	4.0	288.4	
"	4.5	287.9	
gtc	5.0	287.4	
M. cab	4.0	288.4	288.5

3+25

M. cab	4.5	287.9	288.08
gtc	5.3	287.1	
"	4.8	287.6	
+5.7	4.5	287.9	
M	4.5	287.9	
"	4.8	287.6	
gtc	5.1	287.3	
E. cab	4.5	287.9	288.08

24240

3+50

47

E. cab	4.9	287.5	287.67
gtc	5.3	287.1	
"	5.2	287.2	
M	5.0	287.4	
+5.5	5.0	287.4	
"	5.4	287.0	
gtc	5.7	286.7	
M. cab	4.9	287.5	287.67

3+75

M. cab	5.4	287.0	287.26
gtc	6.1	286.3	
"	5.7	286.7	
+5.7	5.4	287.0	
M	5.3	287.1	
"	5.5	286.9	
gtc	5.6	286.8	
E. cab	5.3	287.1	287.26

29240

4+0

Fish	5.7	286.7	286.83
gtc	6.1	286.3	
"	5.8	286.6	
"	5.6	286.8	
+5.5	5.8	286.6	
"	6.0	286.4	
gtc	6.4	286.0	
m.m.	5.7	286.7	286.83

4+25

Fish	6.2	286.2	286.42
gtc	6.9	285.5	
"	6.4	286.0	
+5.7	6.2	286.2	
"	6.1	286.3	
"	6.2	286.2	
gtc	6.7	285.7	
Fish	6.2	286.2	286.42

29240

4+50

48

Fish	6.5	286.9	286.00
gtc	7.2	285.2	
"	6.9	286.5	
"	6.6	285.8	
+5.5	6.6	285.8	
"	7.0	285.4	
gtc	7.1	285.3	
m.m.	6.6	285.6	286.00

4+75

Fish	7.0	285.4	285.58
gtc	7.6	284.8	
"	7.2	285.2	
+5.7	7.0	285.4	
"	7.2	285.2	
"	7.5	284.9	
gtc	7.7	284.7	
Fish	7.0	285.4	285.58

292.40

5+0

Eich	7.9	285.0	285.17
gt	8.2	284.2	
1/4	8.1	284.3	
M	7.5	284.9	
+5.5	7.4	285.0	
1/4	7.7	284.7	
gt	8.0	284.4	
mark	7.4	285.0	285.17

5+25

mark	7.8	284.6	284.75
gt	8.4	284.0	
1/4	8.2	284.2	
+5.7	7.9	284.5	
M	8.0	284.1	
1/4	8.4	284.0	
gt	8.6	283.8	
Eich	7.8	284.6	284.75

292.40

5+50

49

Eich	8.2	284.2	284.33
gt	8.9	283.5	
1/4	8.7	283.7	
M	8.6	283.8	
+5.5	8.2	284.2	
1/4	8.7	283.7	
gt	8.8	283.6	
mark	8.2	284.2	284.33

5+75

mark	8.6	283.8	283.92
gt	9.2	283.2	
1/4	9.0	283.4	
+5.7	8.7	283.7	
M	8.9	283.5	
1/4	9.0	283.4	
gt	9.3	283.1	
Eich	8.6	283.8	283.92

292.40

6 + 0 = 5 L Brooks 60 with 12.5' side marks

E. side	9.0	283.4	283.6
gt	9.4	283.0	
"	9.0	283.4	
M	9.1	283.3	
+ 5.5	9.1	283.3	
"	9.3	283.1	
gt	9.6	282.8	
W. side	9.0	283.4	283.5

5.23 288.55 9.08 283.32

5.000 Line Brooks

W. side	5.9	282.7	
side	5.7	282.9	
"	5.5	283.1	
M	5.3	283.3	
"	5.2	283.4	
side	5.6	283.0	
E. side	5.7	282.9	

5 "4

50

E. side	5.6	283.0	
side	5.4	283.2	
"	5.2	283.4	
M	5.4	283.2	
"	5.5	283.1	
side	5.4	283.2	
W. side	5.8	282.8	

Center

W. side	5.5	283.1	
side	5.6	283.0	
"	5.6	283.0	
+ 5.7	5.3	283.3	
M	5.4	283.2	
"	5.2	283.4	
side	5.3	283.3	
E. side	5.2	283.4	

288.55

N¹/₄

E.L.	5.6	283.0
cut	5.3	283.3
"A	5.2	283.4
M	5.4	283.2
"A	5.5	283.1
cut	5.5	283.1
N.L.	5.7	282.7

N curve

N.L.	5.9	282.7
cut	5.8	282.8
"A	5.6	283.0
M	5.4	283.2
"A	5.3	283.3
cut	5.7	282.9
E.L.	5.5	282.8

288.55

N.L. Brooks

51

E. cut	5.2	283.4	283.5
gt	5.8	282.8	
"A	5.4	283.2	
M	5.4	283.2	
+5.5	5.2	283.4	
"A	5.6	283.0	
gt	5.8	282.8	
N. cut	5.2	283.4	283.50

+2.5 N of Brooks

N. cut	5.1	283.5	283.58
gt	5.7	282.9	
"A	5.7	282.9	
+5.7	5.2	283.4	
M	5.4	283.2	
"A	5.5	283.1	
gt	5.7	282.9	
E. cut	5.1	283.5	283.58

51

0+50

F. cab	5.0	283.6	283.67
gt	5.6	283.0	
"4	5.5	283.1	
M	5.3	283.3	
+5.5	5.0	283.6	
"4	5.6	283.0	
gt	5.7	282.9	
M. cab	5.0	283.6	283.67

0+75

M. cab	5.0	283.6	283.75
gt	5.6	283.0	
"4	5.4	283.2	
+5.7	5.0	283.6	
M	5.1	283.5	
"4	5.4	283.2	
gt	5.5	283.1	
E. cab	5.0	283.6	283.75

52

1+0

E. cab	4.9	283.7	283.83
gt	5.4	283.2	
"4	5.0	283.6	
M	5.0	283.6	
+5.5	5.0	283.6	
"4	5.1	283.5	
gt	5.4	283.2	
M. cab	4.9	283.7	283.83

1+25

M. cab	4.5	283.8	283.92
gt	5.3	283.3	
"4	5.0	283.6	
+5.7	4.8	283.8	
M	5.0	283.6	
"4	5.1	283.5	
gt	5.3	283.3	
E. cab	4.8	283.8	283.92

1+50

E. cab	4.7	283.9	284.0
gtw	5.4	283.2	
1/4	5.1	283.5	
M	4.8	283.8	
+5.5	4.8	283.8	
1/4	5.1	283.5	
gtw	5.4	283.2	
M. cab	4.7	283.9	284.0

1+75

M. cab	4.6	284.0	284.05
gtw	5.4	283.2	
1/4	5.1	283.5	
+5.7	4.6	284.0	
M	4.8	283.8	
1/4	5.0	283.6	
gtw	5.4	283.2	
E. cab	4.6	284.0	284.05

2+0

E. cab	4.5	284.1	284.17
gtw	5.2	283.4	
1/4	4.9	283.7	
M	4.7	283.9	
+5.5	4.6	284.0	
1/4	5.0	283.6	
gtw	5.3	283.3	
M. cab	4.5	284.1	284.17

2+25

M. cab	4.4	284.2	284.25
gtw	5.2	283.6	
1/4	4.8	283.8	
+5.7	4.5	284.1	
M	4.7	283.9	
1/4	4.9	283.7	
gtw	5.2	283.4	
E. cab	4.4	284.2	284.25

2+50

Ecch	4.3	284.3	284.33
gtc	5.0	283.6	
"	5.0	283.6	
M	4.6	284.0	
+5.5	4.4	284.2	
"	4.9	283.7	
gtc	4.9	283.7	
mat	4.3	284.3	284.33

2+75

mat	4.3	284.3	284.42
gtc	4.9	283.7	
"	4.8	283.8	
+5.7	4.4	284.2	
M	4.5	284.1	
"	4.9	283.7	
gtc	4.9	283.7	
Ecch	4.2	284.4	284.42

3+0

Ecch	4.2	284.4	284.50
gtc	4.9	283.7	
"	4.7	283.9	
M	4.4	284.2	
+5.5	4.5	284.1	
"	4.7	283.9	
gtc	4.9	283.7	
mat	4.2	284.4	284.50

3+25

mat	4.1	284.5	284.56
gtc	4.8	283.8	
"	4.6	284.0	
+5.7	4.1	284.5	
M	4.4	284.2	
"	4.6	284.0	
gtc	4.8	283.8	
Ecch	4.1	284.5	284.56

3+50

F. ch	4.0	284.6	284.66
gtw	4.7	283.9	
"	4.5	284.1	
M	4.3	284.3	
+5.5	4.2	284.4	
"	4.6	284.0	
gtw	4.6	284.0	
M. ch	4.0	284.6	284.66

3+75

m. ch	4.0	284.6	284.75
gtw	4.5	284.1	
"	4.5	284.1	
+5.7	4.1	284.5	
M	4.2	284.4	
"	4.4	284.2	
gtw	4.7	283.9	
F. ch	3.9	284.7	284.75

4+0

F. ch	3.9	284.7	284.83
gtw	4.5	284.1	
"	4.3	284.3	
M	4.1	284.4	
+5.5	3.9	284.7	
"	4.4	284.2	
gtw	4.5	284.1	
M. ch	3.9	284.7	284.83

4+25

m. ch	3.8	284.8	284.91
gtw	4.9	284.2	
"	4.2	284.4	
+5.7	3.8	284.8	
M	4.0	284.6	
"	4.2	284.4	
gtw	4.6	284.0	
F. ch	3.8	284.8	284.91

4+50

F. ch	3.7	284.9	285.0
gtu	4.5	284.1	
"	4.1	284.5	
M	3.9	284.7	
+ 5.5	3.7	284.9	
"	4.1	284.5	
gtu	4.3	284.3	
w. ch	3.7	284.9	285.0

4+75

w. ch	3.6	285.0	285.08
gtu	4.2	284.4	
"	4.0	284.6	
+ 5.7	3.6	285.0	
M	3.7	284.9	
"	4.0	284.6	
gtu	4.9	284.2	
F. ch	3.6	285.0	285.08

5+0

F. ch	3.5	285.1	285.16
gtu	4.2	284.4	
"	3.9	284.7	
M	3.7	284.9	
+ 5.5	3.6	285.0	
"	3.9	284.7	
gtu	4.1	284.5	
w. ch	3.5	285.1	285.16

5+25

w. ch	3.9	285.2	285.25
gtu	4.2	284.4	
"	3.8	284.8	
+ 5.7	3.9	285.2	
M	3.6	285.0	
"	3.8	284.8	
gtu	4.2	284.4	
F. ch	3.5	285.1	285.25

56

288.55

5150

F. col	3.9	285.2	285.33
gtc	4.1	284.5	
"	3.8	284.8	
M	3.7	285.2	
+5.5	3.4	285.2	
"	3.6	285.0	
gtc	4.1	284.5	
W. col	3.4	285.2	285.33

5175

W. col	3.3	285.3	285.41
gtc	4.2	284.4	
"	3.7	284.9	
+5.7	3.4	285.2	
M	3.5	285.1	
"	3.7	284.9	
gtc	4.0	284.6	
F. col	3.8	285.3	285.41

57

6+0=5.1 Penna. 60' wide 12.5' sidewalk

F. col	3.2	285.4	285.5
gtc	3.9	284.7	
"	3.7	284.9	
M	3.4	285.2	
+5.5	3.2	285.0	
"	3.7	284.9	
gtc	3.9	284.7	
W. col	3.2	285.4	285.5

T.P. 517 290.52 3.20 285.35

5216

W. col	5.9	284.6	
col	6.1	284.4	
"	5.8	284.7	
M	5.4	285.1	
"	5.6	284.9	
col	5.9	284.6	
F. L	6.0	284.5	

S¹⁴

E.L.	5.7	284.8
erb	5.9	284.6
1/4	5.7	284.8
M	5.4	285.1
1/4	5.6	284.9
erb	6.1	284.4
rr.L.	5.8	284.7

center

rr.L.	5.6	284.9
erb	5.9	284.6
1/4	5.5	285.0
+5.7	5.7	284.8
M	5.4	285.1
1/4	5.6	284.9
erb	5.8	284.7
E.L.	5.4	285.1

N¹⁴

E.L.	5.3	285.2
erb	5.6	284.9
1/4	5.5	285.0
M	5.3	285.2
1/4	5.4	285.1
erb	5.8	284.7
rr.L.	5.8	284.7

N.CURVE

rr.L.	5.9	284.6
erb	5.8	284.7
1/4	5.5	285.0
M	5.4	285.1
1/4	5.6	284.9
erb	5.6	284.9
E.L.	5.8	284.7

106-41 + distances - Center Cable Car foundation 3.5 m. l. c.

10.52

N. L. Penna

F. cab	5.2	286.3	285.5
gtc	5.7	284.8	
"4	5.6	284.9	
M	5.5	285.0	
+5.5	5.1	285.4	
"4	5.8	284.7	
gtc	5.8	284.7	
N. cab	5.2	286.2	285.5

0 + 25 N of Penna

N. cab	5.0	285.5	285.65
gtc	5.7	284.8	
"4	5.4	285.1	
+5.7	5.0	285.5	
M	5.2	285.3	
"4	5.5	285.0	
gtc	5.8	284.7	
F. cab	5.0	285.5	285.65

59

0 + 50

F. cab	4.9	285.6	285.79
gtc	5.6	284.9	
"4	5.3	285.2	
M	5.2	285.3	
+5.5 = cable car found.	4.9	285.6	
"4	5.3	285.2	
gtc	5.6	284.9	
N. cab	4.9	285.6	285.79

0 + 75

N. cab	4.8	285.7	285.94
gtc	5.4	285.1	
"4	5.2	285.3	
+5.7 = cable car found	4.8	285.7	
M	4.9	285.6	
"4	5.3	285.2	
gtc	5.5	285.0	
F. cab	4.8	285.7	285.94

E. cab	4.6	285.9	286.08
gte	5.3	285.2	
"	5.1	285.4	
M	4.9	285.6	
+5.5 = cable car foundation	4.7	285.8	
"	5.0	285.5	
gte	5.3	285.2	
w. cab	4.6	285.9	286.08

w. cab	4.5	286.0	286.23
gte	5.1	285.4	
"	4.9	285.6	
+5.7 = cable car foundation	4.5	285.0	
M	4.7	285.8	
"	4.9	285.6	
gte	5.1	285.4	
E. cab	4.5	286.0	286.23

T. P 6.00 291.38 5.17 285.35

E. cab	5.2	286.2	286.37
gte	5.9	285.5	
"	5.6	285.8	
M	5.3	286.1	
+5.5 = dr. C.C.F.	5.2	286.2	
"	5.5	285.9	
gte	5.6	285.8	
w. cab	5.2	286.2	286.37

w. cab	5.1	286.3	286.52
gte	5.6	285.8	
"	5.5	285.9	
+5.7 = dr. C.C.F.	5.1	286.3	
M	5.1	286.3	
"	5.6	285.8	
gte	5.9	285.5	
E. cab	5.1	286.3	286.52

271.38

270

E. cab	4.9	286.5	286.67
gte	5.9	286.5	
"	5.4	286.0	
M	5.0	286.4	
+5.5 = etc. C.C.F.	4.9	286.5	
"	5.4	286.0	
gte	5.5	285.9	
W. cab	4.9	286.5	286.67

272.5

W. cab	4.8	286.6	286.81
gte	5.4	286.0	
"	5.1	286.3	
+5.7 = etc. C.C.F.	4.8	286.6	
M	4.8	286.6	
"	5.2	286.2	
gte	5.6	285.8	
E. cab	4.8	286.6	286.81

275.0

E. cab	4.6	286.8	286.96
gte	5.4	286.0	
"	5.0	286.4	
M	4.9	286.5	
+5.5 = etc. C.C.F.	4.7	286.7	
"	5.0	286.4	
gte	5.2	286.2	
W. cab	4.6	286.8	286.96

277.5

W. cab	4.4	287.0	287.10
gte	5.0	286.4	
"	4.8	286.6	
+5.7 = C.C.F.	4.5	286.9	
M	4.6	286.8	
"	4.9	286.5	
gte	5.4	286.0	
E. cab	4.4	287.0	287.10

3+0

E. cab	4.3	287.1	287.25
gtr	5.1	286.3	
"	4.8	286.6	
M	4.5	286.9	
+5.5 gtr Cable Car foundation	4.3	287.1	
"	4.3	286.7	
gtr	4.7	286.5	
W. cab	4.3	287.1	287.25

3+25

W. cab	4.1	287.3	287.40
gtr	4.8	286.6	
"	4.5	286.9	
+5.7 ch Cable Car foundation	4.2	287.2	
M	4.4	287.0	
W. cab			
"	4.6	286.8	
gtr	4.9	286.5	
E. cab	4.1	287.3	287.40

3+0

E. cab	4.0	287.4	287.54
gtr	4.8	286.6	
"	4.4	287.0	
M	4.2	287.2	
+5.5	4.0	287.4	
"	4.4	287.0	
gtr	4.5	286.9	
W. cab	3.9	287.5	287.54

3+75

W. cab	3.8	287.6	287.69
gtr	4.4	287.0	
"	4.2	287.2	
+5.7	3.9	287.5	
M	4.0	287.4	
"	4.2	287.2	
gtr	4.5	286.9	
E. cab	3.8	287.6	287.69

F.ck	3.7	287.7	287.83
gt	4.4	287.0	
"	3.7	287.5	
M	3.8	287.6	
+5.5	3.7	287.7	
"	3.9	287.5	
gt	4.2	287.2	
m.ck	3.7	287.7	287.83

m.ck	3.5	287.9	287.98
gt	4.0	287.4	
"	3.7	287.7	
+5.7	3.6	287.8	
M	3.7	287.7	
"	3.8	287.6	
gt	4.3	287.1	
F.ck	3.5	287.9	287.98

F.ck	3.3	288.1	288.13
gt	4.0	287.4	
"	3.7	287.7	
M	3.5	287.9	
+5.5	3.5	287.9	
"	3.6	287.8	
gt	3.9	287.5	
m.ck	3.4	288.0	288.13

m.ck	3.2	288.2	288.27
gt	3.7	287.7	
"	3.4	288.0	
+5.7	3.3	288.1	
M	3.3	288.1	
"	3.5	287.9	
gt	3.7	287.7	
F.ck	3.2	288.2	288.27

291.38

5+0

E. col	3.0	288.4	288.42
gte	3.6	287.8	
"	3.3	288.1	
M	3.1	288.3	
+5.5	3.2	288.2	
"	3.2	288.2	
gte	3.6	287.8	
m. col	3.1	288.3	288.42

5+25

m. col	2.9	288.5	288.56
gte	3.3	288.1	
"	3.1	288.3	
+5.7	3.0	288.4	
M	3.0	288.4	
"	3.3	288.1	
gte	3.6	287.8	
E. col	2.9	288.5	288.56

5+50

E. col	2.7	288.7	288.71
gte	3.0	288.1	
"	3.0	288.4	
M	3.0	288.4	
+5.5	2.9	288.5	
"	3.1	288.3	
gte	3.3	288.1	
m. col	2.8	288.6	288.71

5+75

m. col	2.7	288.7	288.86
gte	3.2	288.2	
"	2.8	288.6	
+5.7	2.8	288.6	
M	2.7	288.7	
"	2.9	288.5	
gte	3.2	288.2	
E. col	2.6	288.8	288.86

271.38

6+0 = 3 L. Robinson 60' wide 12.5' side marks

E. L.		2.9	289.0	289.0
gt		2.9	288.5	
"		2.8	288.6	
M		2.7	288.7	
+5.5		2.6	288.8	
"		2.6	288.8	
gt		2.8	288.6	
M. C.		2.5	288.9	289.0
T.P.	3.53	292.40	2.51	288.57

S. C. Robinson

W. L.		4.1	288.3	
erb		3.9	288.5	
"		3.6	288.8	
M		3.7	288.7	
"		3.8	288.6	
erb		4.0	288.4	
E. L.		4.10	288.3	

65

51 1/4

E. L.		3.8	288.6	
erb		3.7	288.7	
"		3.6	288.8	
M		3.5	288.9	
"		3.6	288.8	
erb		3.7	288.7	
W		4.0	288.4	

center

M. L.		3.9	288.5	
erb		3.7	288.7	
"		3.6	288.8	
+5.7		3.6	288.8	
M		3.9	288.9	
"		3.5	288.9	
erb		3.6		
E. L.		3.6		

292.40

N 1/4

E.L.	3.7
cut	3.7
1/4	3.6
M	3.6
1/4	3.6
cut	3.8
W.L.	3.9

N. Curve

W.L.	4.0
cut	3.8
1/4	3.7
M	3.6
1/4	3.7
cut	4.0
E.L.	4.0

292.4

N. of Robinson

66

E.L.	3.5	288.9	289.0
cut	4.0		
1/4	3.7		
M	3.5		
+5.5	3.6		
1/4	3.6		
cut	4.0		
W.L.	3.6	288.8	289.0

0+25 N of Robinson

W.L.	3.7	288.7	288.91
cut	4.1		
1/4	3.8		
+5.7	3.7		
M	3.5		
1/4	3.9		
cut	4.2		
E.L.	3.6	288.8	288.91

292.40

0+50

E.erb

3.7

2887 288.91

gta

4.2

"4

3.8

M

3.6

+5.5

3.8

"4

3.7

gta

4.3

M.erb

3.7

2887 288.81

0+75

M.erb

3.8

2886 288.74

gta

4.3

"4

3.8

+5.7

3.9

M

3.9

"4

4.0

gta

4.3

E.erb

3.8

2886 288.74

292.4

1+0

67

E.erb

3.8

2886 288.63

gta

4.4

"4

3.9

M

3.8

+5.5

4.1

"4

3.9

gta

4.3

M.erb

3.8

2886 288.63

1+25

M.erb

3.9

2885 288.54

gta

4.3

"4

4.0

+5.7

4.0

M

4.0

"4

4.1

gta

4.5

E.erb

4.0

2884 288.54

224

1750

E. cab	4.1	2883	288.45
gte	4.6		
"	4.1		
M	3.7		
+5.5	4.1		
"	4.1		
gte	4.6		
W. cab	4.0	2884	288.45

1775

W. cab	4.1	2883	288.35
gte	4.7		
"	4.2		
+5.7	4.3		
M	4.1		
"	4.3		
gte	4.7		
E. cab	4.2	2882	288.35

224

2+0

68

E. cab	4.3	288.1	288.26
gte	4.8		
"	4.3		
M	4.2		
+5.5	4.3		
"	4.5		
gte	4.8		
W. cab	4.3	288.1	288.26

225

W. cab	4.4	288.0	288.17
gte	4.7		
"	4.4		
+5.7	4.4		
M	4.3		
"	4.0		
gte	5.0		
E. cab	4.4	288.0	288.17

292.4

2150

Flak	4.4	2880	288.08
gtc	4.9		
"	4.5		
M	4.3		
+5.5	4.6		
"	4.5		
gtc	5.0		
w.cab	4.5	2899	288.08

2775

w.cab	4.6	2898	287.99
gtc	5.1		
"	4.6		
+5.7	4.6		
-M	4.4		
"	4.6		
gtc	5.1		
Flak	4.6	2898	287.99

292.4

340

69

Flak	4.7	2877	287.90
gtc	5.1		
"	4.7		
M	4.4		
+5.5	4.7		
"	4.7		
gtc	5.0		
w.cab	4.7	2877	287.90

3+25

w.cab	4.7	2877	287.81
gtc	5.1		
"	4.8		
+5.7	4.8		
M	4.5		
"	4.8		
gtc	5.3		
Flak	4.8	2896	287.91

	292.40			
	3+50			
E. cab	4.8	287.6	287.71	
gte	5.3			
"	4.9			
M	4.6			
+5.5	4.8			
"	4.8			
gte	5.4			
M. cab	4.8	287.6	287.71	

	3+75			
M. cab	4.9	287.5	287.62	
gte	5.4			
"	5.0			
+5.7	4.9			
M	4.6			
"	4.9			
gte	5.5			
E. cab	4.9	287.5	287.62	

	292.4			70
	4+0			
E. cab	5.0	287.4	287.53	
gte	5.5			
"	5.0			
M	4.8			
+5.5	5.2			
"	5.2			
gte	5.5			
M. cab	5.0	287.4	287.53	

	4+16 = S.L. University			
M. cab	5.1	287.3	287.50	
gte	5.5			
"	5.2			
+5.7 - ch. cable car foundation	5.4			
M	5.1			
"	5.2			
gte	5.3			
E. cab	5.0	287.4	287.50	

71

1. section intersection of Hunter & Jackdaw $\frac{9}{10}$ Double
 Jackdaw & Hunter 50' wide 5' 4" 3/4
 Evans.

B.M. 594 Lewis & Jackdaw 273.72

B.M. 596 279.18

T.P. 2.76 275.17 6.77 272.41

S.L. Hunter

E 6.5 268.7

crk 6.7 268.5

+1 7.3 267.9

" 7.0 268.2

M 6.5 268.7

" 6.7 268.5

+1 7.2 268.0

crk 6.2 269.0

W 6.0 269.2

S. curb

W 6.4 268.8

crk 6.8 268.4

" 6.8 268.4

M 6.7 268.5

" 7.0 268.2

crk 7.3 267.9

E 6.6 268.6

5' 4"

E 275.17 6.8 268.4

crk 7.0 268.2

" 7.2 268.0

M 7.0 268.2

" 7.0 268.2

crk 7.0 268.2

W 7.7 267.5

center

W 8.0 267.2

crk 7.8 267.4

" 7.6 267.6

M 7.6 267.6

" 7.9 267.3

crk 7.8 267.4

E 7.2 268.0

N. "A

E	275.17	8.2	267.0
crk		8.3	266.9
"A		8.5	266.7
M		8.3	266.9
"A		8.4	266.8
crk		8.3	266.9
W		8.5	266.7

N. curb

W		8.9	266.3
crk		8.8	266.4
"A		8.5	266.7
M		8.5	266.7
"A		8.6	266.6
crk		8.7	266.5
E		8.5	266.7

N.L. Hunter

E	275.17	9.2	266.0
crk		9.4	265.8
"A		9.3	265.9
M		9.1	266.1
"A		9.2	266.0
crk		9.3	265.9
W		9.4	265.8

Curb and Gutter Levels of Alley W. side 4th St bet D&E Sts

1.30 H-1 42.21 35.91 B.M. S.W. 4th St E. Pkg.

W. Ct line 4th St

No line Alley Ct	3.93	38.28
" " " Gutr	4.72	37.49
So line Alley Gutr	5.16	37.05
" " " Ch	4.47	37.74

W. Line 4th St

No line Alley Ct	3.74	38.47
" " " Gutr	4.63	37.58
So line Alley "	4.89	37.32
" " " Ch	4.19	38.02

7/19 Hatch
Trench
110' Hall

Alle Springs St

		317.27		
1274	1265	317.67	304.62	
	1177	326.61	314.34	314.40
		326.21		
				East end of street
s		9.2	317.0	
cb		9.3	316.9	
1/2		9.3	316.9	
c		9.3	316.9	
1/2		9.9	316.3	
cb		9.8	316.4	
1/2		9.1	317.1	
				15' W
1/2		8.3	317.9	
cb		8.9	317.3	
1/2		8.5	317.7	
c		8.8	317.4	
1/2		8.9	317.3	
cb		8.8	317.4	
s		8.7	317.5	

1/2 in top of bl.
at hydrant
30' - Palmer

314.40

s		9.4	316.8	
cb		9.0	317.2	
1/2		8.8	317.4	
c		8.7	317.5	
1/2		8.4	317.8	
cb		8.1	318.1	
x		7.9	318.3	
				75' W
1/2		8.1	318.1	
cb		8.4	317.8	
1/2		8.7	317.5	
c		8.7	317.5	
1/2		8.9	317.3	
cb		9.1	317.1	
s		9.4	316.8	
				100' W
s		9.9	316.3	
cb		10.0	316.2	
1/2		9.5	316.7	
c		9.5	316.7	
1/2		9.4	316.8	
cb		9.2	317.0	
x		9.1	317.1	
				125' W
1/2		9.1	317.1	
cb		9.1	317.1	
1/2		9.1	317.1	
c		8.9	317.3	
1/2		8.9	317.3	
cb		8.9	317.3	
s		8.9	317.3	

326.21
326.61
50 W

326.21

326.61

150' W

s	85	317.7
cb	85	317.7
1/2	8.8	317.4
c	8.5	317.7
1/2	8.3	317.9
cb	8.3	317.9
N	86	317.6

175' W

s	7.5	318.7
cb	7.5	318.7
1/2	8.2	318.0
c	8.5	317.7
1/2	8.1	318.1
cb	8.1	318.1
s	7.9	318.3

200' W

s	6.7	319.5
cb	6.9	319.3
1/2	6.9	319.3
c	7.1	319.1
1/2	6.7	319.5
cb	6.8	319.4
N	6.7	319.5

225' W

s	5.7	320.5
cb	5.6	320.6
1/2	5.8	320.4
c	5.8	320.4
1/2	5.7	320.5
cb	5.5	320.7
s	5.4	320.8

326.21

326.61

150' W

s	4.5	321.7
cb	4.5	321.7
1/2	4.6	321.6
c	4.7	321.5
1/2	4.7	321.5
cb	4.8	321.4
N	4.9	321.3

175' W

s	4.1	322.1
cb	3.9	322.3
1/2	3.5	322.7
c	3.4	322.8
1/2	3.6	322.6
cb	3.7	322.5
c	3.5	322.7

200' W

s	1.7	324.5
cb	2.2	324.0
1/2	2.9	323.3
c	3.1	323.1
1/2	2.9	323.3
cb	3.0	323.2
N	3.0	323.2
TR	3.0	323.20

330.06

330.06

225' W

s	6.3	323.8
cb	6.2	323.9
1/2	6.0	324.1
c	6.0	324.1
1/2	6.0	324.1
cb	6.3	323.8
s	6.4	323.7

76

530.06			
330.06			
350' W			
s	6.1	324.0	
cb	6.2	323.9	
1/2	6.0	324.1	
c	6.1	324.0	
1/6	5.9	324.2	
cb	5.7	324.2	
w	5.3	324.8	
375' W			
w	5.1	325.0	
cb	5.6	324.5	
1/6	6.0	324.1	
a	5.9	324.2	
1/6	5.9	324.7	
cb	4.9	325.2	
s	5.5	324.6	
400' W			
s	6.2	323.9	
cb	6.1	324.0	
1/6	6.1	324.0	
a	6.2	323.9	
1/6	6.0	324.1	
cb	6.1	324.0	
w	5.7	324.4	
425' W			
w	5.8	324.3	
cb	6.0	324.1	
1/6	6.2	323.9	
c	6.2	323.9	
1/6	6.4	323.7	
a	6.6	323.5	
s	6.7	323.4	

330.06			
330.06			
450' W			
s	5.9	324.2	
cb	5.7	324.4	
1/6	5.4	324.7	
c	5.2	324.9	
1/6	6.2	323.9	
cb	6.2	323.9	
w	6.1	324.0	
475' W			
w	6.1	324.0	
cb	6.4	323.7	
1/6	6.4	323.7	
c	6.6	323.5	
1/6	6.7	323.4	
cb	6.8	323.3	
s	6.8	323.3	
500' W			
s	6.7	323.4	
cb	6.7	323.4	
1/6	6.7	323.4	
c	6.6	323.5	
1/6	6.2	323.9	
cb	6.5	323.6	
w	6.2	323.9	
525' W			
w	6.3	323.8	
cb	6.2	323.9	
1/6	6.3	323.8	
c	6.5	323.6	
1/6	6.7	323.4	
cb	6.8	323.3	
s	6.9	323.2	

77

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330.06
330.46

550' W

s	6.9	323.2
cb	7.0	323.1
1/2	6.9	323.2
c	7.1	323.0
1/2	6.9	323.2
cb	6.4	323.7
N	6.1	324.0

575' W

N	6.9	323.2
cb	6.3	323.8
1/2	6.7	323.4
c	7.4	322.7
1/2	7.4	322.7
cb	7.3	322.8
s	7.2	322.9

600 W = Ek. Grenada

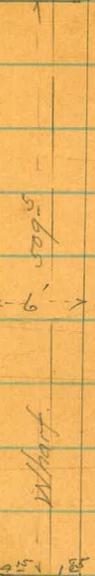
s	7.4	322.7
cb	7.3	322.8
1/2	7.6	322.5
c	7.7	322.4
1/2	7.7	322.4
cb	7.1	323.0
N	7.6	322.5

check. Curb stake 9.51 320.55
SE cor Spruce - Grenada = 320.59

78

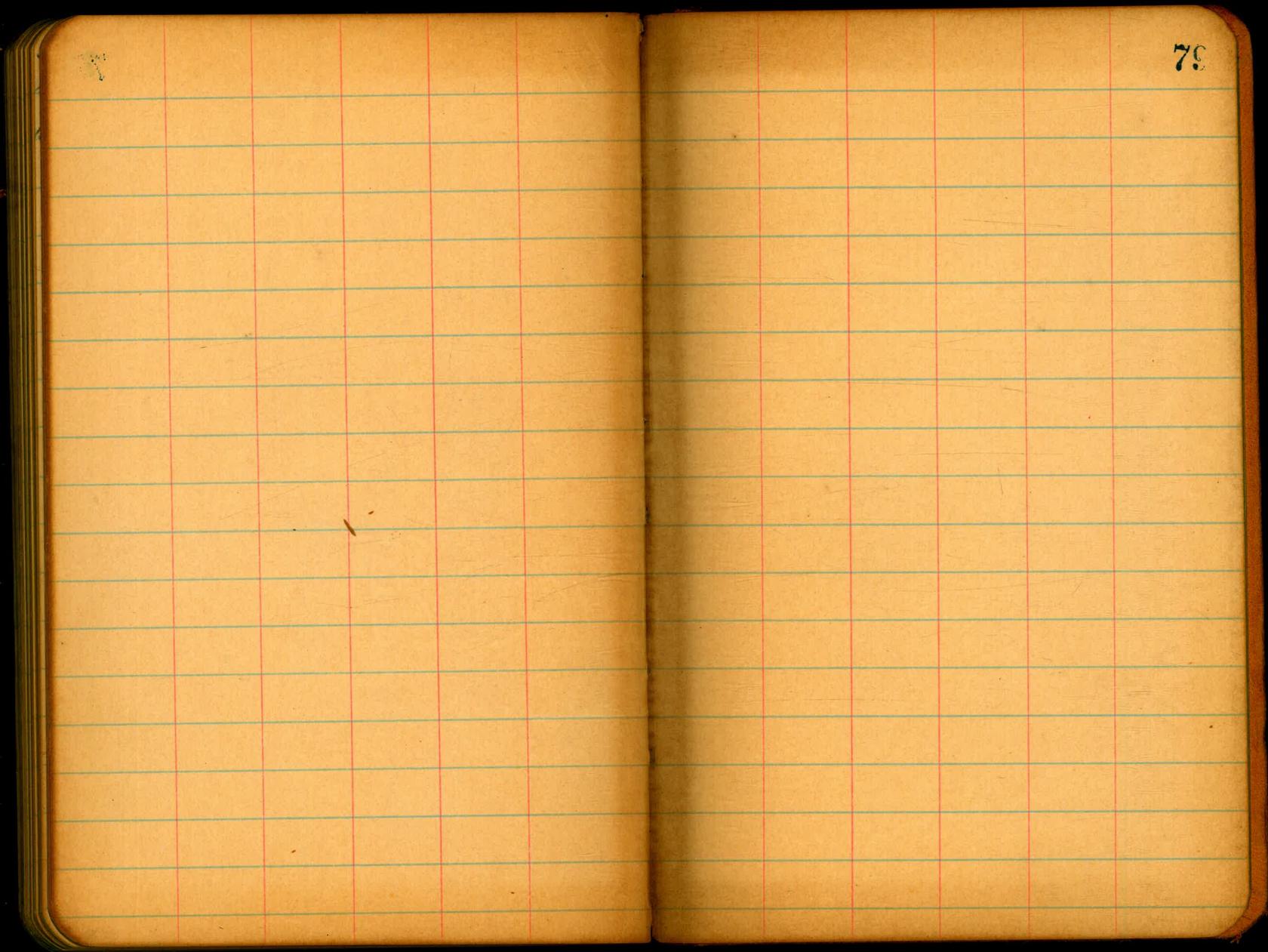
1/24 Hatch Moore Hall
Location of Wharf on Hawthorn St.

A 30 120



East line California St

248.50
N. 7 line of Hawthorn St



78

79

#450

0+0.515
10 = 5.20 - 0.05
20 = 5.46 - 0.26
30 = 5.57 - 0.11
40 = 5.93 - 0.36
50 = 6.29 - 0.36
60 = 6.87 - 0.58
80 = 8.04 1.17

50
5702.00
37.27

5.415
78
251.22
2177.25
3295.045
61.2

5
39
136
78

269.5
258.5
202 | 11.00 | 54
1010
900
115.5
96.8

5.15
468
55
220

203.0

TRAVERSE TABLE FOR TRANSIT BOOK.
From 1° to 90° for a distance of 100.

Degrees.	DEGREES.		½ DEGREE.		¼ DEGREE.		¼ 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							

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