Street Centers – Park
and
Miscellaneous
Engineering, &c. &c.

TRANSIT BOOK

12

F.B. 485

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	2⅓	21	49	41	95⅔
2	4⅔	22	51⅓	42	98
3	7	23	53⅔	43	100⅓
4	9⅓	24	56	44	102⅔
5	11⅔	25	58⅓	45	105
6	14	26	60⅔	46	107⅓
7	16⅓	27	63	47	109⅔
8	18⅔	28	65⅓	48	112
9	21	29	67⅔	49	114⅓
10	23⅓	30	70	50	116⅔
11	25⅔	31	72⅓	51	119
12	28	32	74⅔	52	121⅓
13	30⅓	33	77	53	123⅔
14	32⅔	34	79⅓	54	126
15	35	35	81⅔	55	128⅓
16	37⅓	36	84	56	130⅓
17	39⅔	37	86⅓	57	133
18	42	38	88⅔	58	135⅓
19	44⅓	39	91	59	137⅔
20	46⅔	40	93⅓	60	140

MICROFILMED 1964

PUBLISHED BY

EDWARD DENNY & CO.

DRAWING PAPER & MATERIAL, MATHEMATICAL INSTRUMENTS, ETC.,

STATIONERS AND PRINTERS,

SAN FRANCISCO, 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.

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

485

1

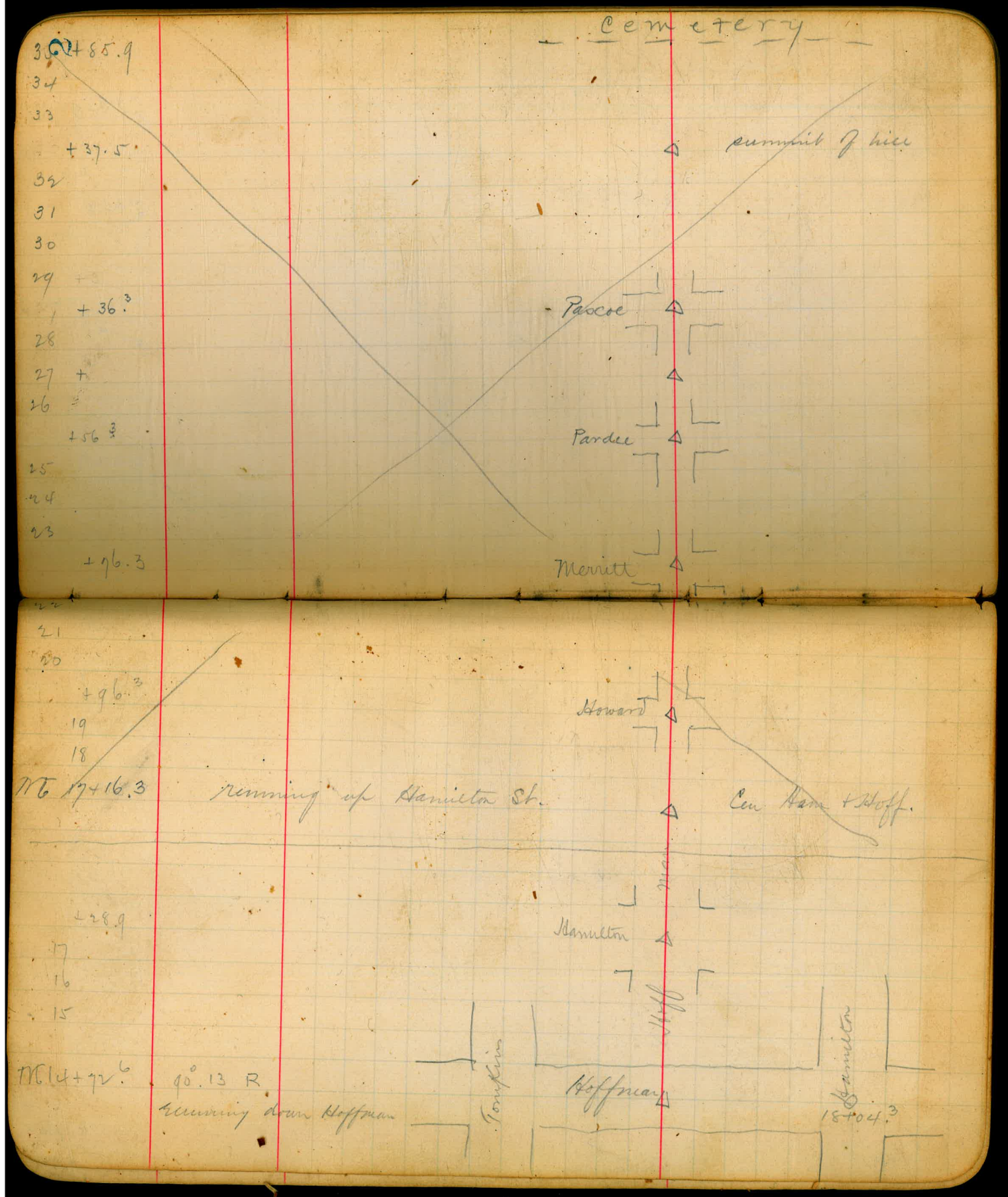
M +77.6
14
13
13 +90
12
11
10
9
8
7
6
M6 5

Hoffman's 56.28'
Fountains
Creek (dry)

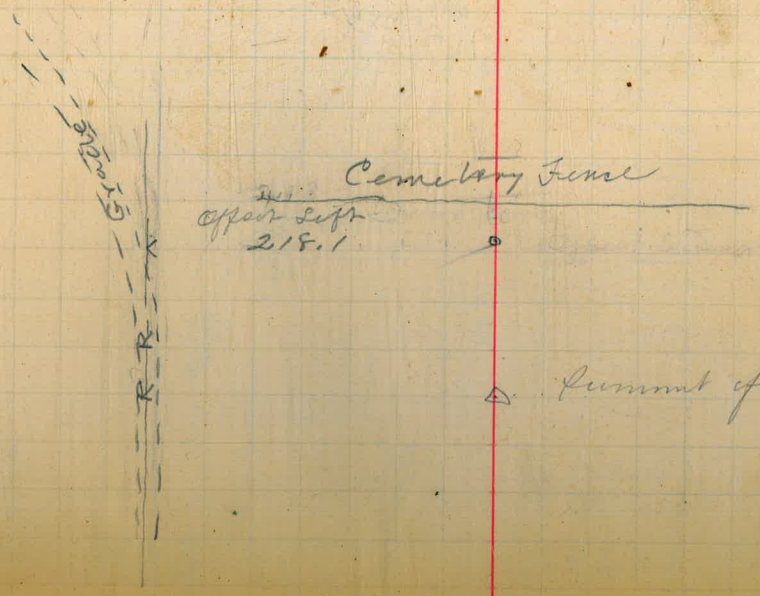
+77.4 = M4+77.4
4
3
2
1
A 0

M +77.35 44°49' R
4
4 +64
3 44°15' L
2
1
M 0

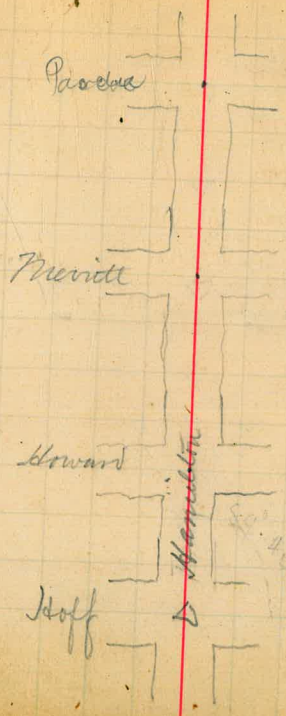
Road part
Gregory Springs
32nd St.
127.7
32nd St.
Fence
Gregory
Fence (Gregory)
32nd St.
Gregory St.
M7

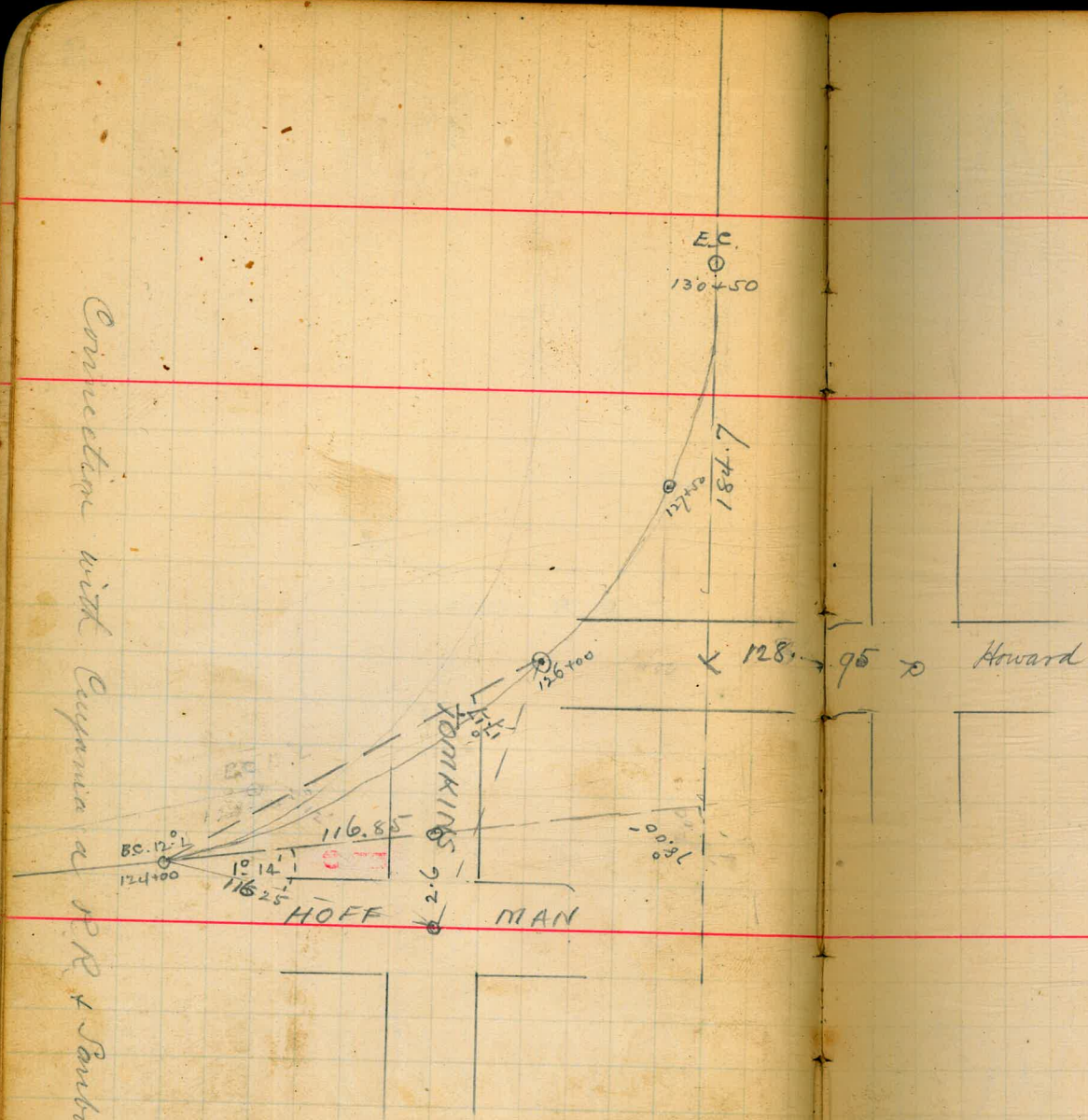

Cemetery
35 + 85.9
34
33
+ 37.5
summit of hill
32
31
30
29
+ 36.3
Pascoe
28
27
26
+ 56.3
Pardee
25
24
23
+ 96.3
Merritt
22
21
20
+ 96.3
Howard
19
18
17 + 16.3
running up Hamilton St.
Cen Ham + Hoff.
+ 28.9
Hamilton
17
16
15
14 + 92.6
90°.13 R
running down Hoffman
Tompkins
Hoff
Hoffman
Hamilton
18 + 04.3

+ 72.0
+ 07
36
35
34
+ 27
33
32
31
30



+ 24.0
29
28
27
+ 44.3
26
25
24
+ 64.3
23
22
21
+ 84.3
20
19
M. 18+04.3





Connection with Cayuga at PR & Sandom Allentown add.

Cemetery Fence

+84.6 △ Jack in fence

19

18

17

16

+16 Ravine

15

14 +5(?)

Boundary of addition

13 △

12

+76.3 △ Pascoe

11 △

10

9

+96.3 △ Pasbie

8

7 ST

+16.3 △ Merritt

6

5

4

+36.3 △ Howard

3 Gulley

2 TOMPKINS

1 Runner up Tompkins

+56.3 △ Hoffman

B.O. = M 14+75.6

Oct 29th/88

5+9.6
2.5
14+76.3
2.4+3
14+16.3

6.0
5.6.3
3.8.6.3

26				
25	△ 22° L		-2.5	-1.0
24		N 13° W Magnetic		N 0 33 E
23			-2.0	-20
22	△ 20° 30 R			
21				
20				N 19 57 W
+42	△ 21° L		-15	-3.0
19				
18				
17			00	-3.5
16				N 1 03 E
15			00	6.0 out -7.0
14				
13			+1.5	5.5 out -7.0
12				
11			+0.5	-3.0
+80	△ 3° L			
10				
9				
8				N 4 03 E
7				
6			-4.0	-1.0
+80	△ 5° 30' R			
5				
4			-3.5	-5.5
3				
2				N 1 27 W
1			150' wide	
0+20				
0	△ Initial Point		-5.5	-1.5

0 Initial Point
+0 Running North
dist 20

Oct 31/88 West Boulevard Line
Preliminary City Park

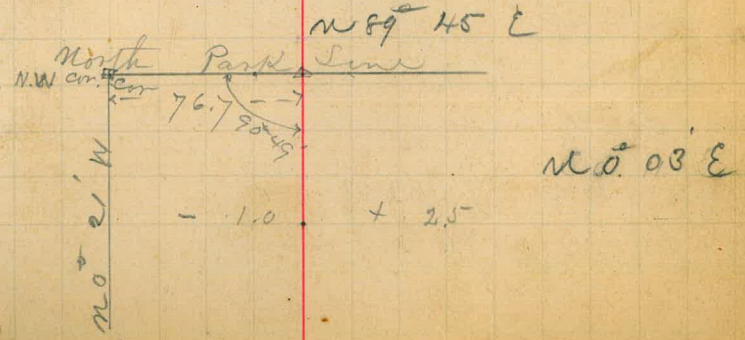
4					
3			00	00	
2					
1			+ 0.3	- 3.1	
50					
9			- 1.0	- 3.5	N 0° 03' E
8					
47	⊕		- 1.0	- 2.8	
6					
5					
4			00	00	
3					
2			0.0	+ 1.0	
1		N 13½ W			
40			- 0.5	- -1.0	
39					
38	△ 30° R	N 43½ W	- 1.0	- 3.5	
37					
36			+ 2.0	+1.0	N 29° 07' W
35					
34		N 8° W			
33	△ 35° 30' L		00	63 out - 7.0	
32					
31					N 5° 03' E
30	R		- 0.5	- 4.0	
29		N 35° W	0		
28	△ 27° R				
27			~~- 2.5~~	~~- 1.5~~	
					N 21° 27' W

+58	Δ 46° 44' R			
11				
10				N 47° 27' W
9			− 4.0	+ 0.5
8				
7	Δ 28° L		− 2.0	+ 3.0
6				
5				N 19 27' W
4		S 33½ E		
3	Δ 10° 30' L		+4.5	+ 4.0
2				
1				N 9 27' W
0	Δ Junction point 8° L	S 28° E		

Running South, To 9+ 85

55+09 Δ

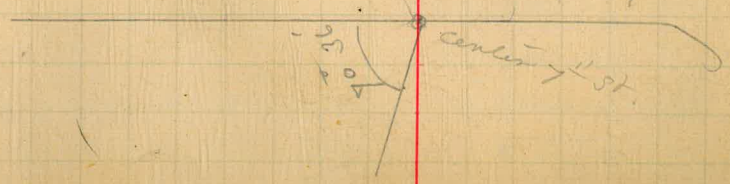
55−



− 1.0 + 2.5

70° 33'

Plugs (5) ft from property line South



+92 Δ
8
+20 Δ 18° 37 R.
7
6

A 5 Δ 4° 30' L
4
3
2
A 1
3 Δ 10° R

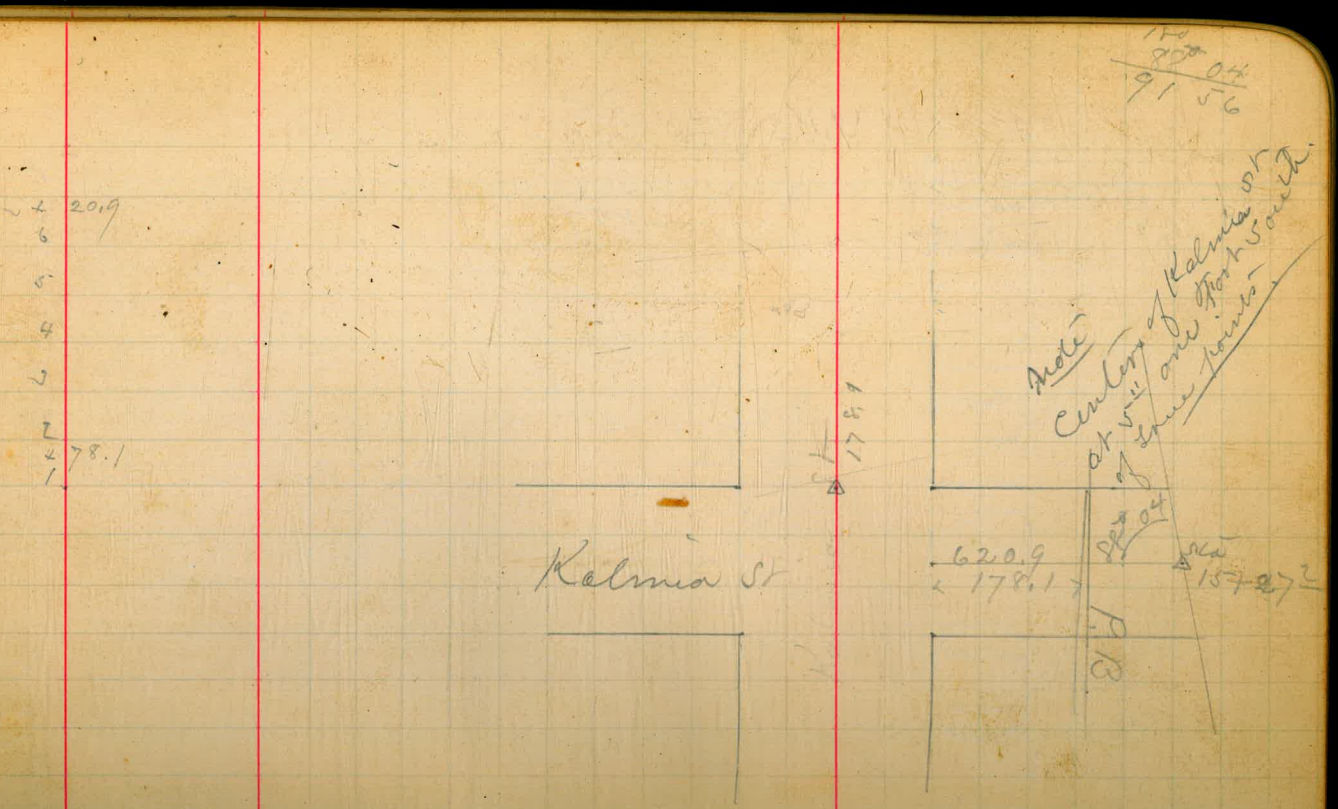
From Sta 3 on Line
from O to Head of 9th St
thence to " " 7 "
Running South.

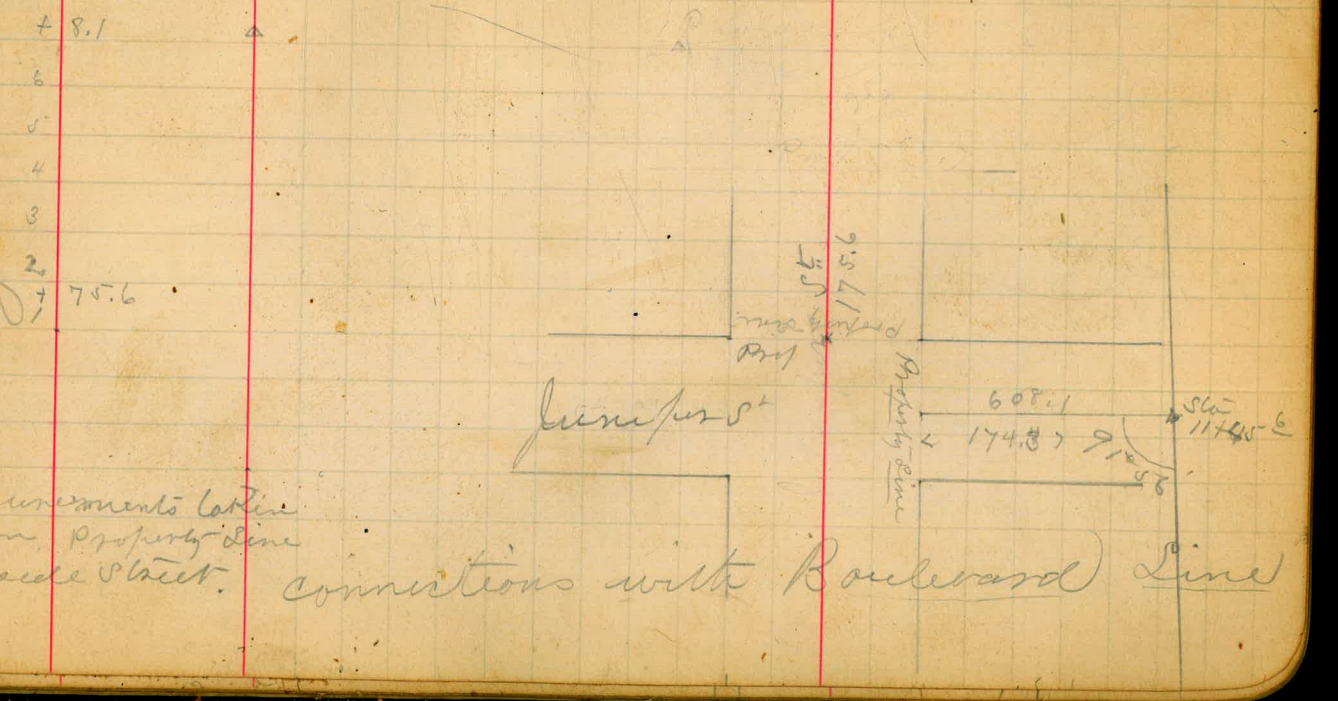
+30 Ft
13
12

Center 9th St

n 89° 47' W. Δ Line sidewalk South side street
South side pave
89° 30'

n 0° 43' W





Mar 21 1908

Measurements taken from Property Line East side Street.

connections with Boulevard Line

+ 89.5

4 At center Nutmeg St / Nutmeg St

3 angle 5' R Running South

2

1

+ 58.2

489.5

185.3

10°

96

Sta 26+95

Maple St

5

4 Maple St

3

2

1

+ 33.2

6

5

4

3

2 Laurel St

1

555.7

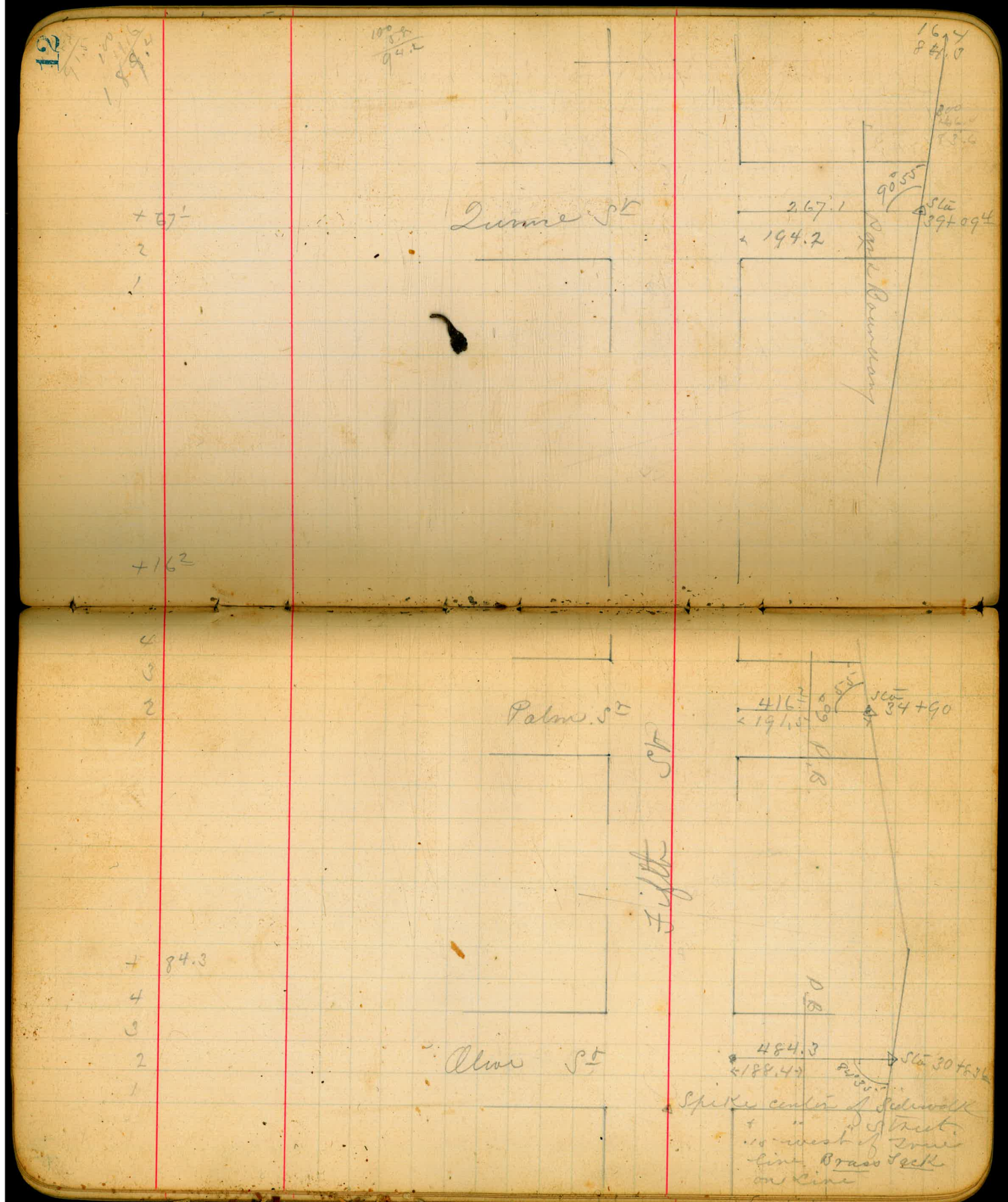
183.0

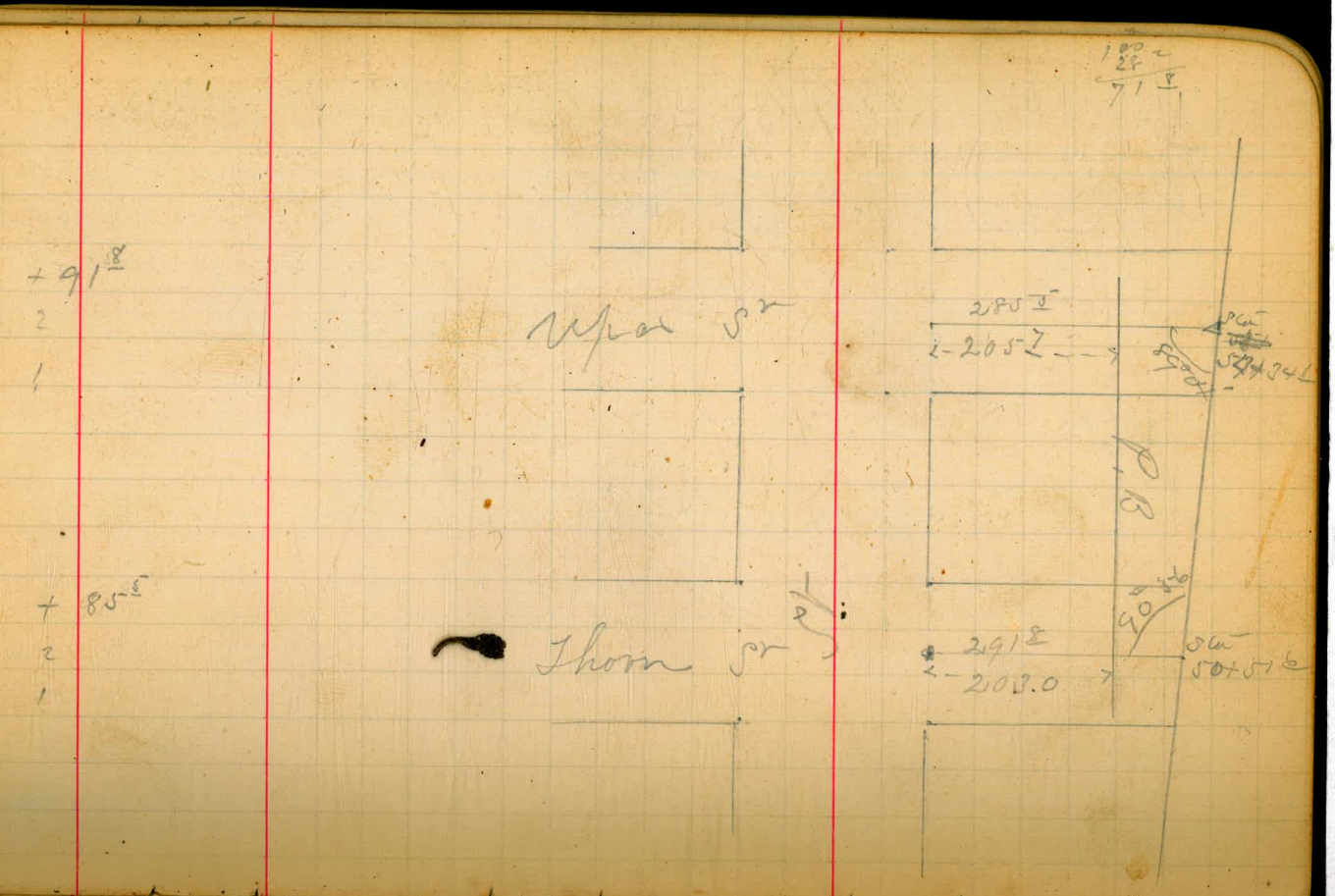
Sta 23+01.8

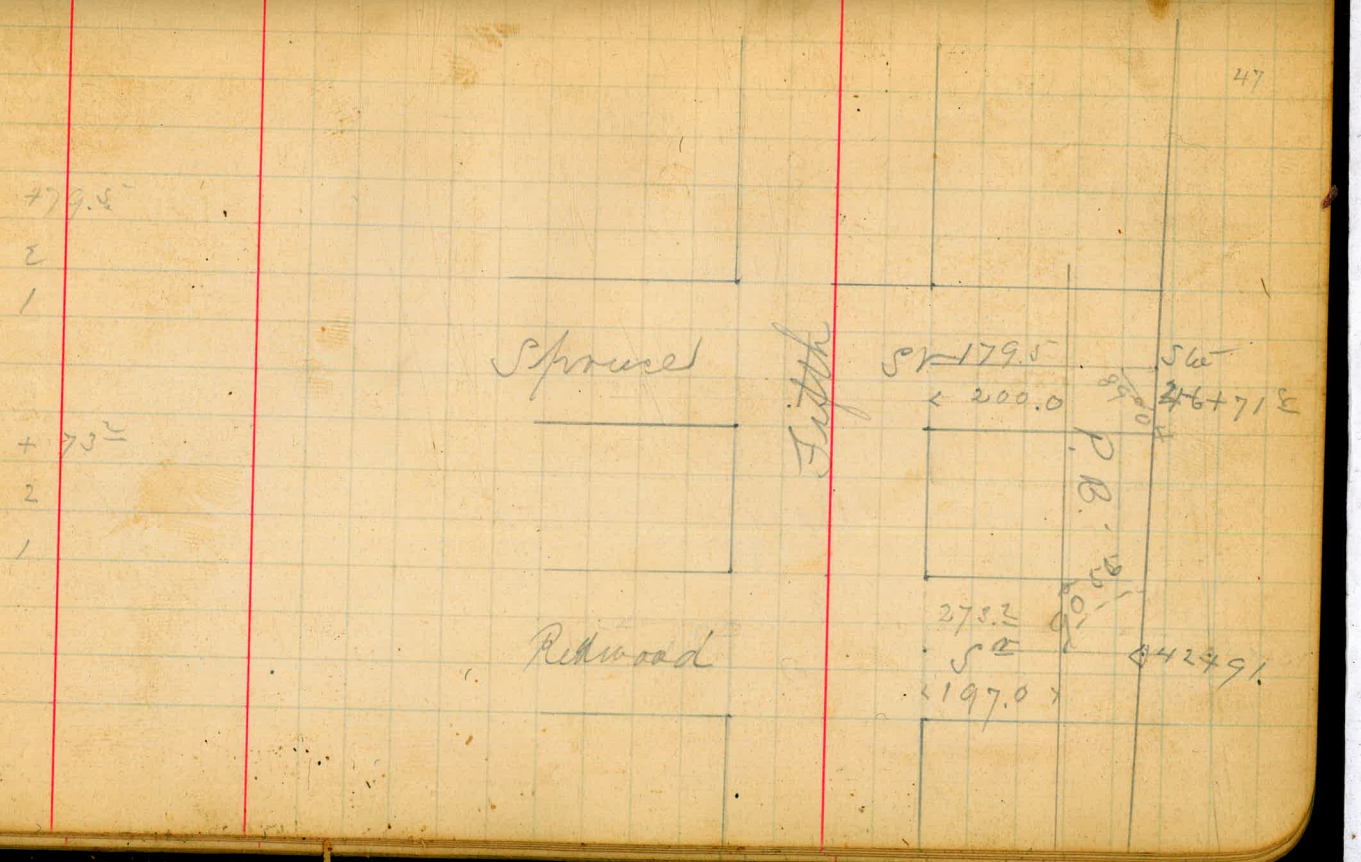
633.2

180.4

Sta 19+06.8


Lime St
Palm St
Olive St
Fight St
Paul Bunyan
267.1
194.2
90°55'
Sta 39+09
416.2
191.5
Sta 34+90
484.3
188.4
Sta 30+57
Spike center of Sidewalk
Brass Tack
on line

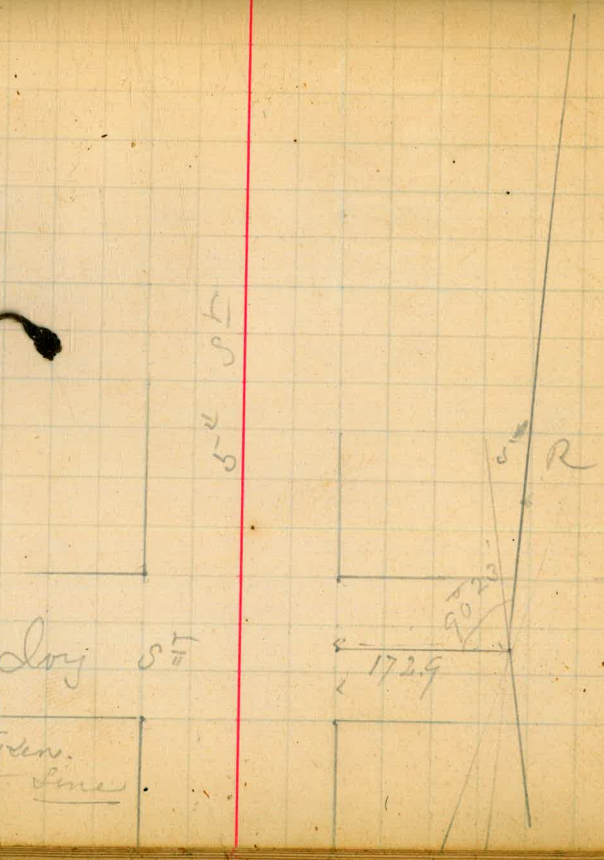

Upper St
Thorn St
285.5
205.2
291.8
203.0
50+51.6
P.B.


Sprucel
Redwood
Fifth
179.5
200.0
276+71.8
P.B.
273.2
197.0
44+24.91

14 172.9

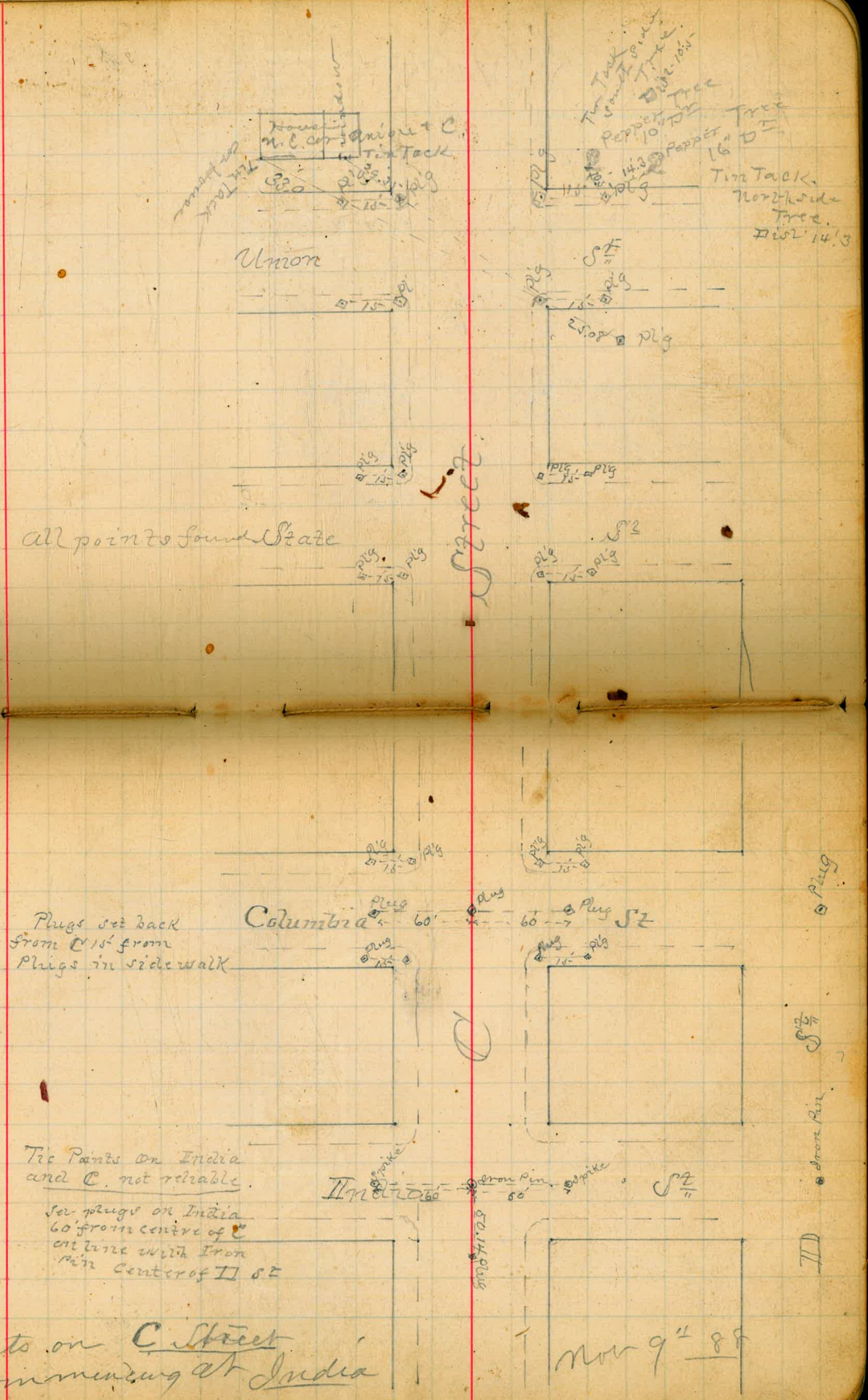
+ 172.9 0° 5' R

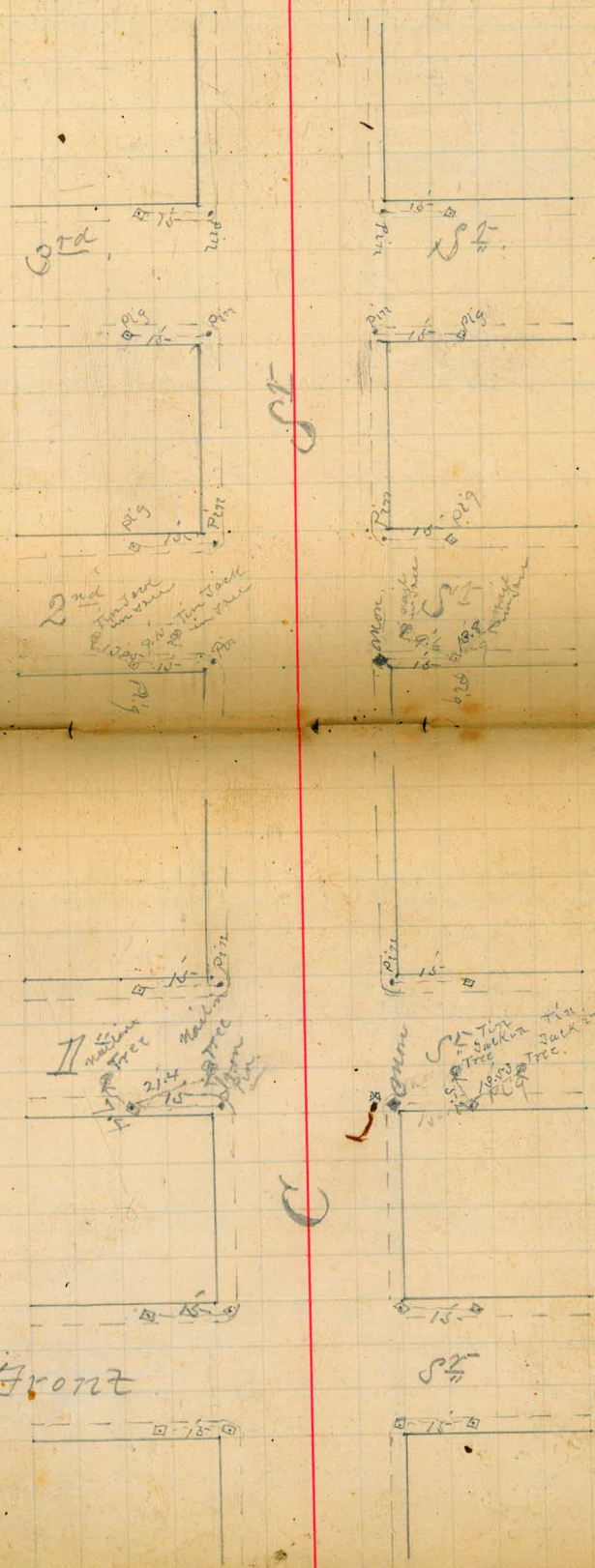
1

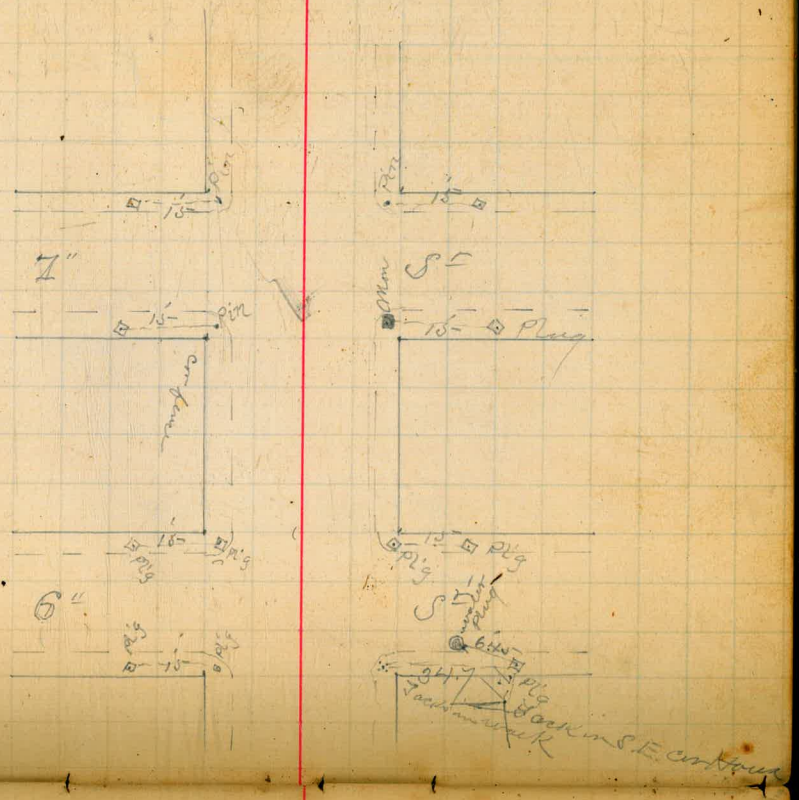


Log 5th St

Fractional Block. Measurement taken.
Bet 5th St + Park from East Property Line

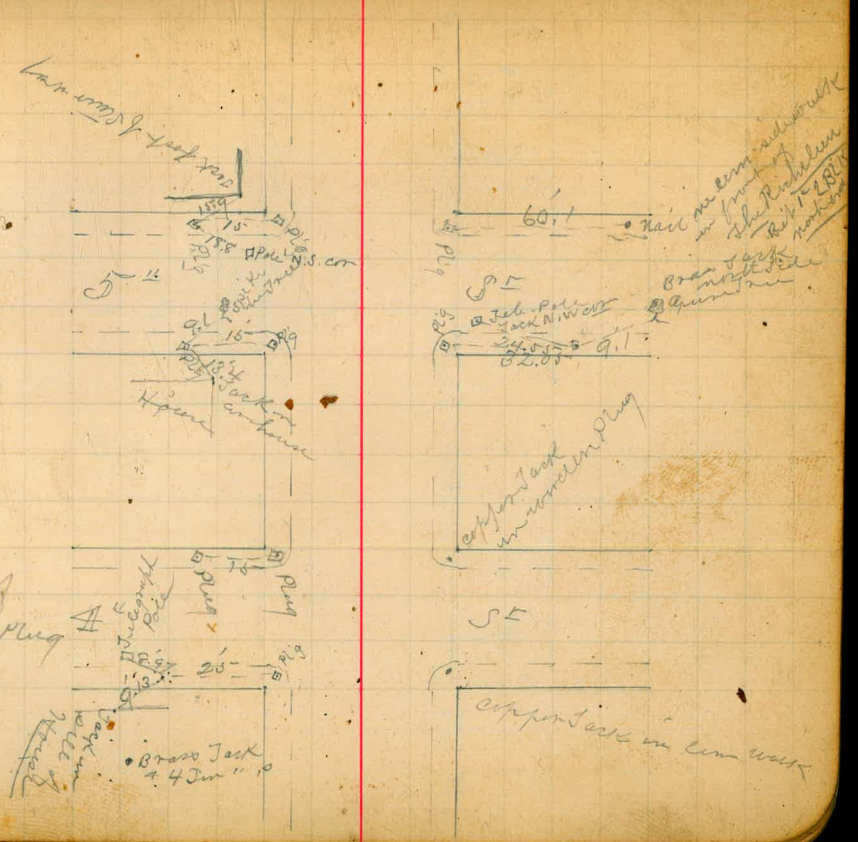

House
N.C. cor
Union + C.
Tin Tack
Tin Tack on house
Tin Tack
Small Tree
Tree
Pepper 10" Dia
Pepper 16" Dia
Tin Tack
North side Tree
Dia 14.3
Union
Spike
Plug
C Street
all points South State
Plugs set back from C 15' from Plugs in sidewalk
Columbia
60'
Plugs are Put in by taking sights on Plugs across C. St. & by and exact measurement of 15'. —
Tie Points on India and C. not reliable.
Iron Pin
India
Set plugs on India 60' from centre of C on line with Iron Pin Center of II St.
Tie Points on C Street commencing at India
Nov 9th 88


3rd
4th
2nd
Front
1st
Tin Jack in Tree
Tin Jack in Tree
Tin Jack in Tree



S. W. Cor 5th & C; 5th.
Large Plug under sidewalk
directly in front of door
entrance to Farnsworth & Curry's
Meat market.

Plug under 14" board
from South end of sidewalk
7 Tin Jacks driven in board over Plug
In side walk
25' North of Plug
89.7



14+48 = +49 E.C. 4° L

Tang 175.9
out ch 1.1
" Def 0 01
Length of curve 350
Def 1°

4° L

12 +78.9 P.I. 14° L

N 15 3/4 W

11
+98 B.C. 4° L
+76.6 E.C 30° R

30° Curve

Tang 140.6
out ch 15.4
" Def 2° 20
" 7 30
out ch 26.6
" Def 2° 58

N 1 3/4 W

10 +72.5 34° R.

9+75 T.P.

9

N 74 1/4 W

8 +34.5 B.C 30° R
8 +72.5 E.C 20° L

P.I 7 +56 L

20° curve

Tang 152.5
B.C. 5+47.5
out chord 2.5
out def 0 15
" 5 00
E.C 7+27.5

6

5+47.5 B.C 20° L

4

3

From west 86° north.

2

Mag N 18 1/4 W

Sta 1 86° R.

Center of 8th St.

N 89° 47' W

South Park Line.

Park Boulevard
Nov 12th 98

3.15624
9.119429
2.275675

18
17761.4
38.6
5.2
772
386
46.32

18		
+50	1	46
19	2	46
+50	3	46
20	4	46
+50	5	46
21	6	46

+047 E C 1° 20' L

310

+50

30

1°20' L

Tang't 150

P.I. 30 4 L

29 B.C. 1° 20 L

+34 E.C. 5° R

+29

28

+50

27

+50

5°

Tang't 243.6
sub ch. 50.5
" def 1° 16
" 1° 15 50 ch

P.I 26+014 27 R.

25

+50

24

+49 B.C. 5° R

+34 E.C 10 L

28

+50

10° L

Tang't 143
sub ch 43
" def 2° 00
" 2 30
" " 37
" def 1° 51

n 28 3/4 W

P.I. 22+ 28° L

21

+54 B.C 10° L

+36 E.C 4° L

20

+50

n 3/4 W

19

P.I +50 15° R.

18

+50

17

16 +61 4 B.C. 4° R

16

15

4° R.

Tang't 188.6
sub chord 25.9
def 0° 31

	0	31
+50	1	31
19	2	31
+50	3	31
20	4	31
+50	5	31
21	6	31

44° 40' 359.7
38 22

+49 E.C. 12° L
46
+50
47
+50 44° 40' L
44 P.I. 44+79.8
+50 sum Tang 196.3
43
+76.8 B.C 12°
+71.7 E.C.
+50
42
+50 Sum Tang P.I. 41+30
41 148.4 29° R
+50
40
39+81.7 B.C. 10° L & 10° R

sub ch 23.2
sub def - 1° 23' - 43
3
4 23 + 59
3
7 23 - 44
3
10 23 + 50
3
13 23 + 46
3
16 23 + 50
3
19 23 + 46
2 37 + 49
22 20

~~4222 30° R = P.I Tang 437.22~~
~~43~~
+50
42
+50
41
+50
40
~~39+81.7 E.C 10° L & B.C. 5° R~~
+50
39

Tang 307.2
~~sub. chord 35~~
~~" def 0° 52'~~
5° R

P.I. +72 28° L
+50
38
+50
37+01.7 E.C. 18 R + B.C. 10° L
3

10° L
Tang 143.0

P.I. +86 28° R.
+50
35
+50

34+21.7 E.C. + B.C.
10° L + R
34
+50
P.I. 33 28° L.
+50
32
31+41.7 B.C. 10° L

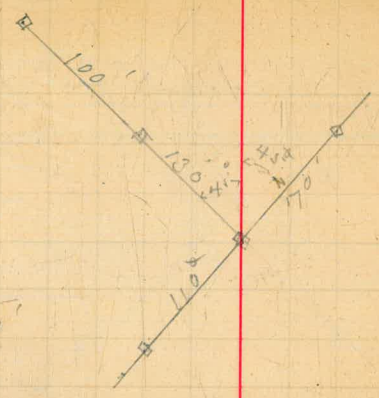
10° L
Tang 143.0
sub ch 43.0
" def 2°
" 2° 30 ch 50

+46.7 △ north line of Park

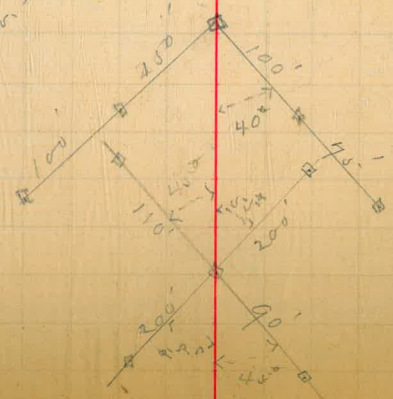
67
66
65
64
63
62
61
60
+20 △
59
58
57
56
55
54
+06.9 △ E.C.
53
+50
52

Mill Pond
Mill Dam
Mill Pond
Mill Dam
Mill Pond
Mill Dam

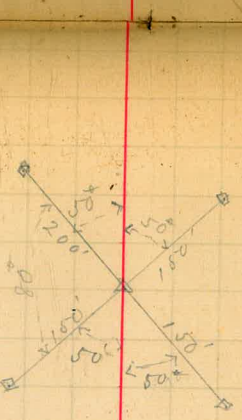
Sta 10+76 E.C. 30° R Δ R. 45° – 170'
L. " – 110'
" 45° – 130' – 100'



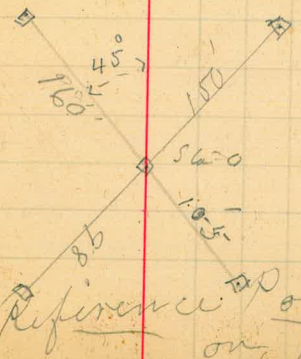
Sta 8+34 B.C. 30° R Δ R – 40° – 100' – 75'
L. –



Sta 8+27 E.C. 20° L Δ R. – 45° – 110'
" 55° – 200'
L. 55° 200'
" 45° – 90'



Sta 5+47 B.C. 20° L Δ R. from P.I. 50° – 100'
" 50° 150
L. 50° 200'
" " 150'



Sta 0
Park Line

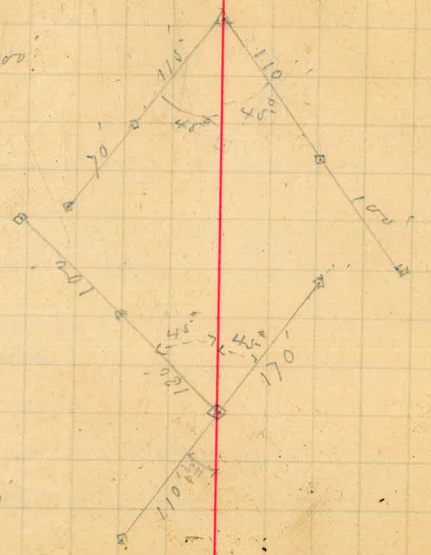
45° from Tang't. Right 45° – 150° – 105'
Plug + Tacks. Left " 160' – 98'
distance to Plug
only approximate

Reference Points
on Park Boulevard Line

20+36 E.C. 4° L R - 45° - 125' - 150'
L - 175' - 185'

Sta 16+61 B.C. 4° R R - 45° - 120' - 110'
" - " - 115' - 40

Sta 14+48 E.C. 4° L R - 45° 110' -
L. " - 115' - 70' - 100'

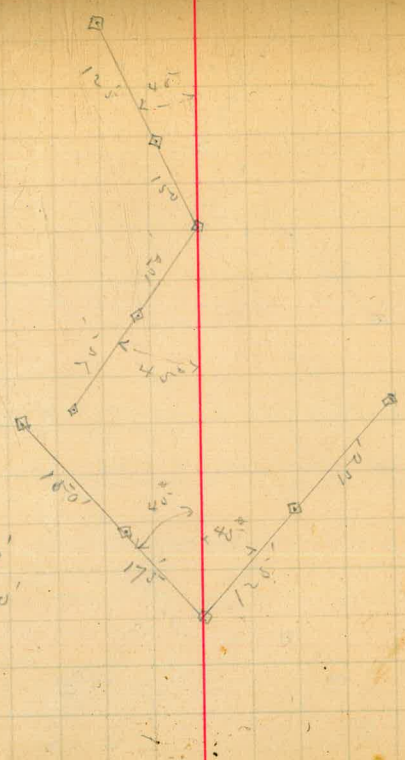


Sta 10+98 B.C. 4° L R - 45° - 170'
L. " - 110'
" - 150' - 100'

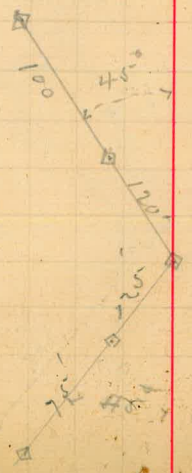
Sta 28+29 E.C. 5° R. L.– 45° 120' – 100'
" – " – 150 – 75'

Sta 23+49 B.C. 5 R L – 45° – 150' – 125'
" – " 150 – 75'

23+34 E.C. 10° L L – 45° – 150' – 125'
" " – 150' – 75'

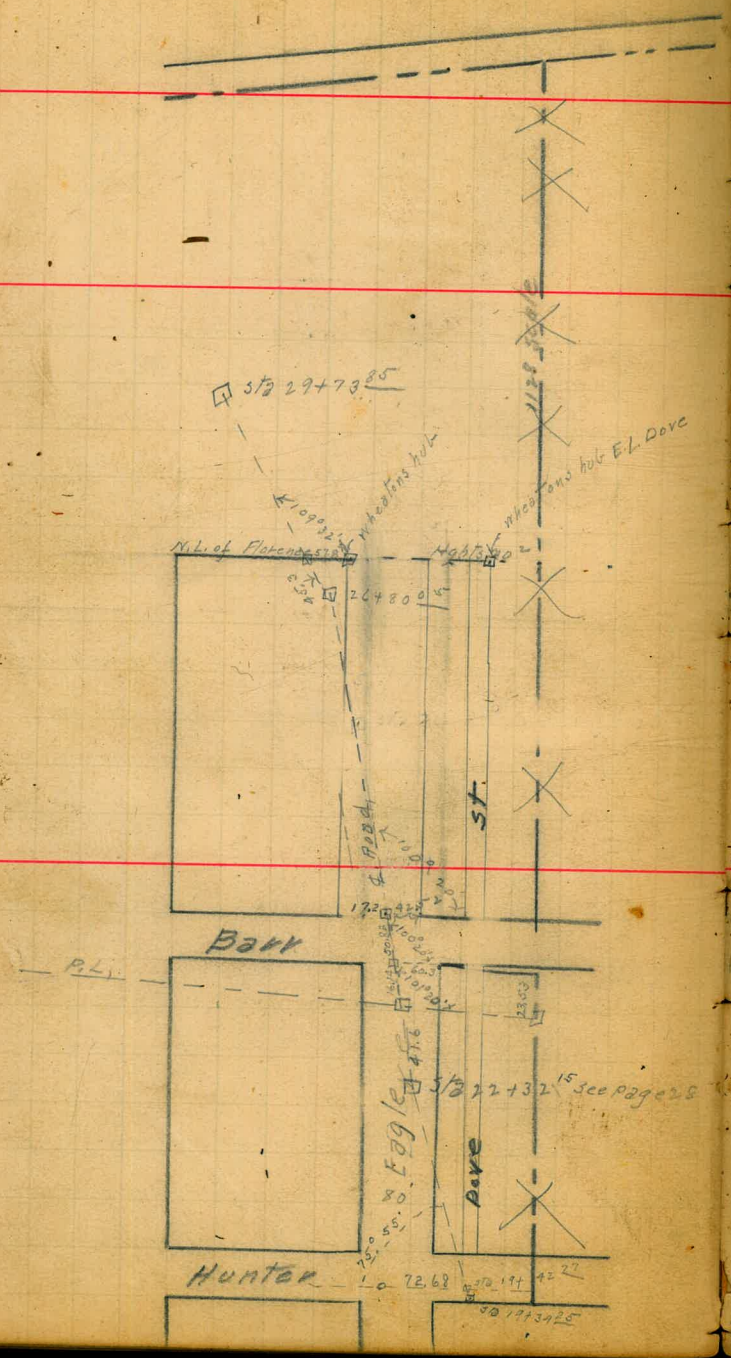


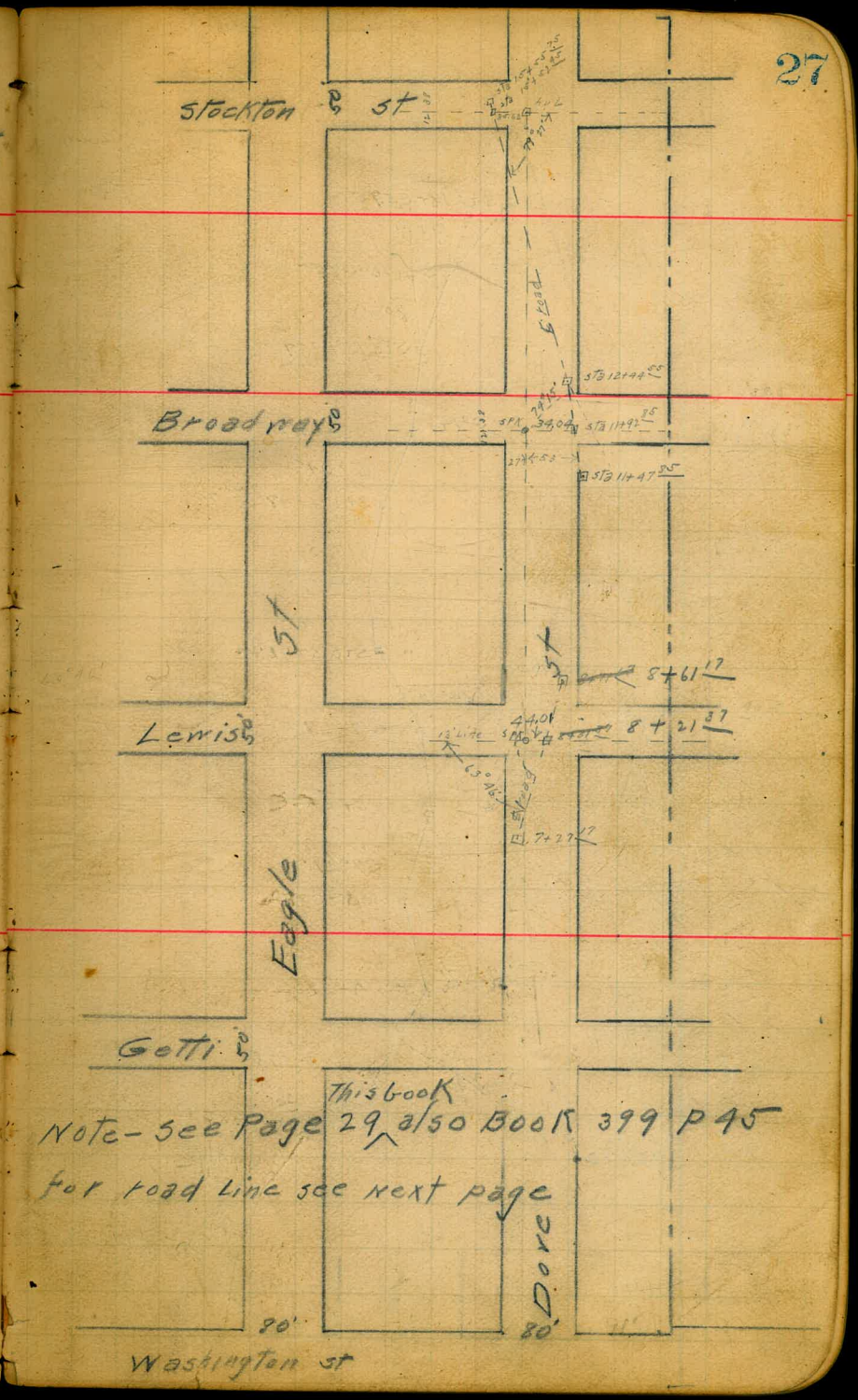
20+54 E.C. 10° L L – 45° – 175 – 150'
R. – " – 125 – 150'



L. — 45° — 120 — 100

S.C. 28+84 ⊡ B.C. 120 L — " — " — 125 —

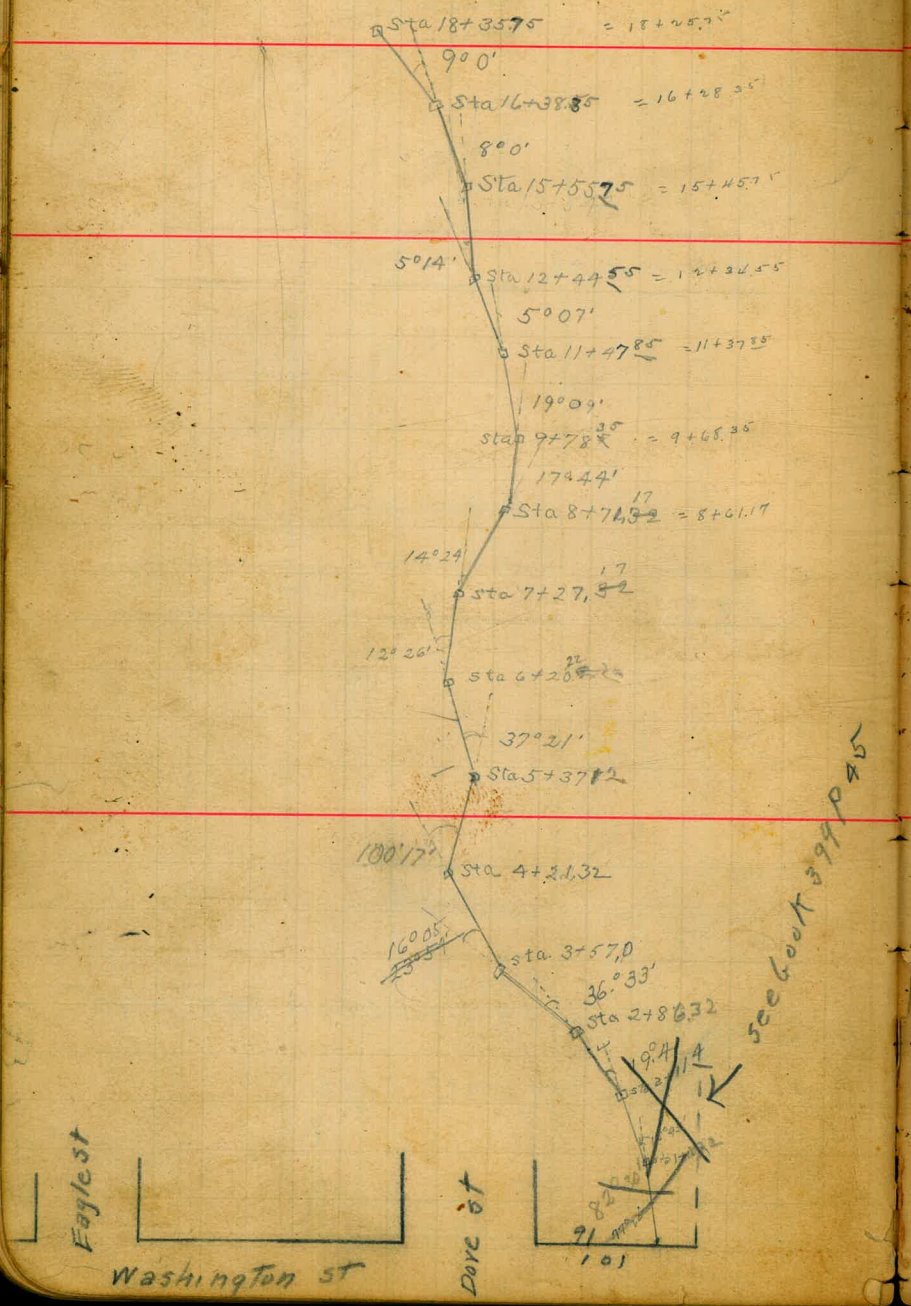




Note - See Page 29 this book also Book 399 P 45

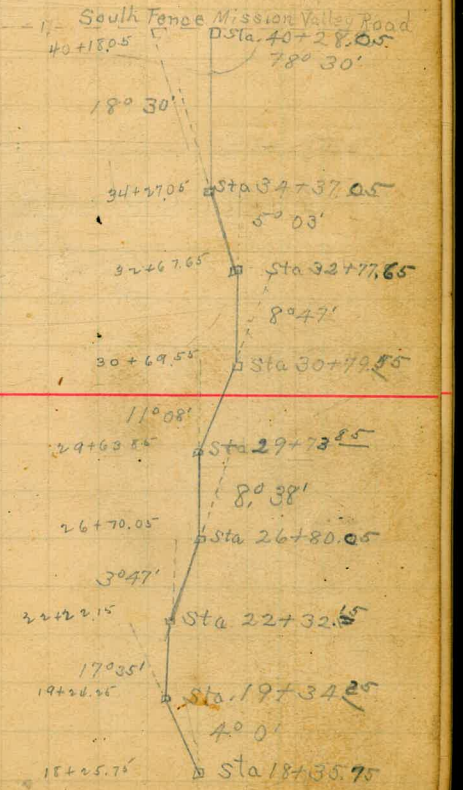
for road line see next page

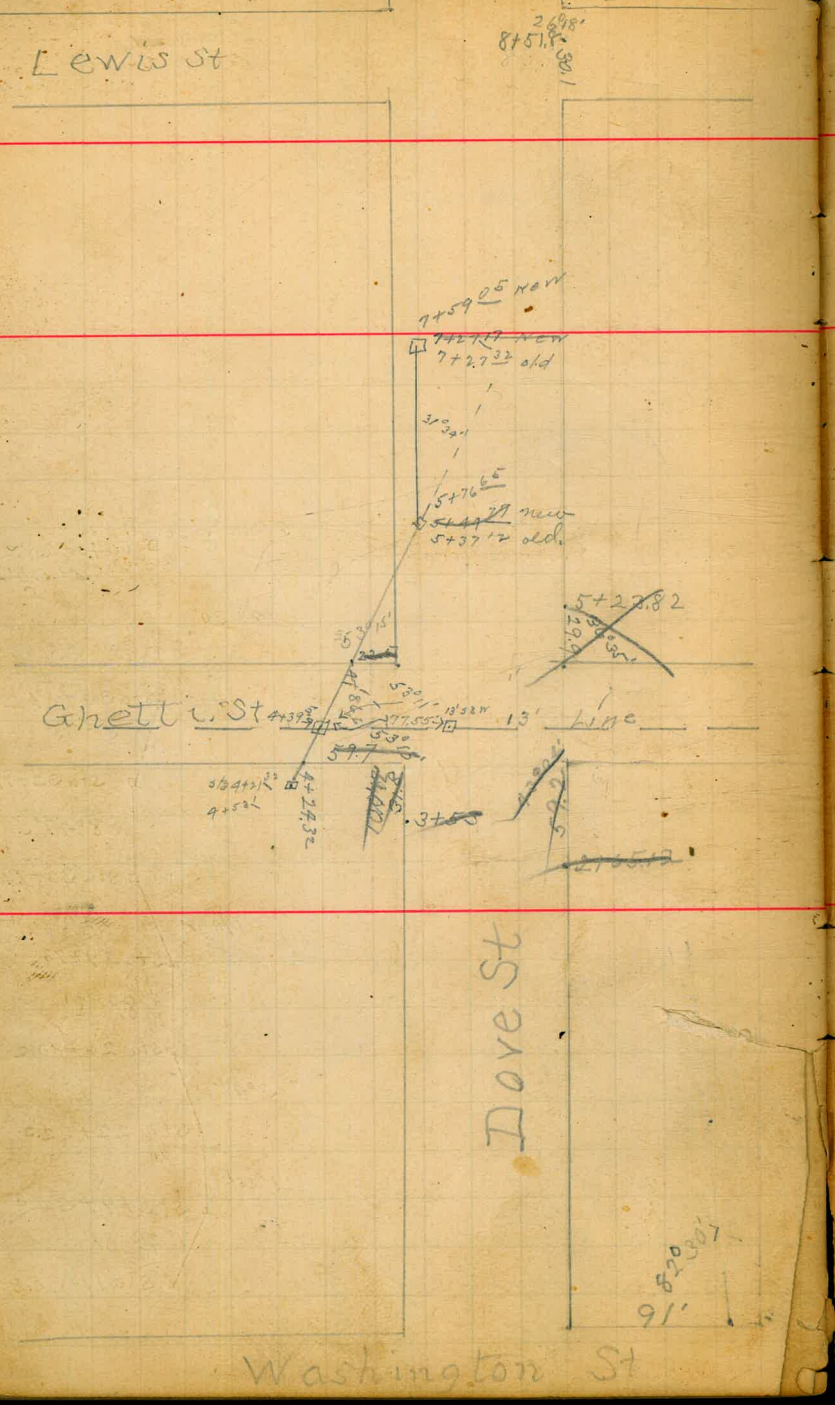
11/17/10
Shaw
Evans
Butler



245.1
5.4
247'

11/18/10
Shaw
Evans
Moore




Lewis St
8+51.8
7+59.05 new
7+27.32 old
5+76.65
5+37.12 old
5+23.82
Ghetti St
13' Line
Dove St
Washington St

65° 04' to sta 2+65.12
39° 16' to sta 5+37.12

(Nov 17 17)
Boulevard Sewer
West Side Pond

Commencing at Stake + 9" S 100/11

Sta	B.S.	H.I.	Inter	F.S.	Elev
	983	168.96			159.13 B.M. Iron Pin S. W. cor Stake + 9" S.E.
13+50 8 △			142		1547
13			101		1588
12			38		1651
11+58 5 △			12		1677
T.P.	715	175.45		066	168.30
11			67		1687
10			52		1702
9			31		1723
T.P.	955	184.47		053	174.92
8			75		1770
7			39		1806
T.P.	1174	195.68		053	183.94
6			105		1852
5			39		1918
T.P.	1179	206.85		062	195.06
4			97		1971
3			24		2044
T.P	1189	218.13		061	206.24
2			70		2111
				057	217.56 = 4' S. of Sta 1 On Rock

* dist Bet Sta 1 + Sta 0 Running South = 100'
dist Bet Sta 0 + 0 Running North = 20' (Initial Point)

	970	227.26			217.56
1			96		2177
* 0+80			63		2216 Initial Point
1			48		2225
2			28		2245
3			10		2263
T.P.	1006	236.28		104	226.22
4			84		2279
5			67		2296
6 △			47		2316
7			24		2339
T.P.	1049	245.90		087	235.41
8			82		2377
9			73		2386
10			47		2412
11			28		2431
12			15		2444
13			17		2442
T.P.	1085	255.04		071	245.19
14			84		2466
15			73		2477

		25504			
16			42		25.08
17			41		25.09
18			30		25.20
19			16		25.34
T.P.	964	26385		083	25421
42 △			85		25.53
20			80		25.58
21			65		25.73
22			47		25.91
23			41		25.97
24			42		25.96
25			26		26.12
T.P.	615	26878		122	26263
26			61		26.27
27			54		26.34
28 △			50		26.38
29			44		26.44
30			27		26.61
31			13		26.75
T.P.	1032	27850		060	26818
32			84		27.01
33 △			65		27.20
34			49		27.36
35			49		27.36
36			64		27.21
37			37		27.48

Sta		27850			
	8.77	286.77	0.5		278.00
38			77		279.0
39			62		280.2
40			53		281.8
41			47		282.1
42			39		282.9
43			31		283.7
44			19		284.9
T.P.	728	29215		190	284.87
45			63		285.8
46			54		286.7
47			59		286.2
48			48		287.8
49			41		288.0
50			40		288.1
T.P.	607	29420		402	288.13
51			59		288.3
52			55		288.7
53			54		288.8
54			61		288.1
55			55		288.7
709 5 △			55		288.7
			754		286.66 Check on B.M. N.E. cor 5th & Upton

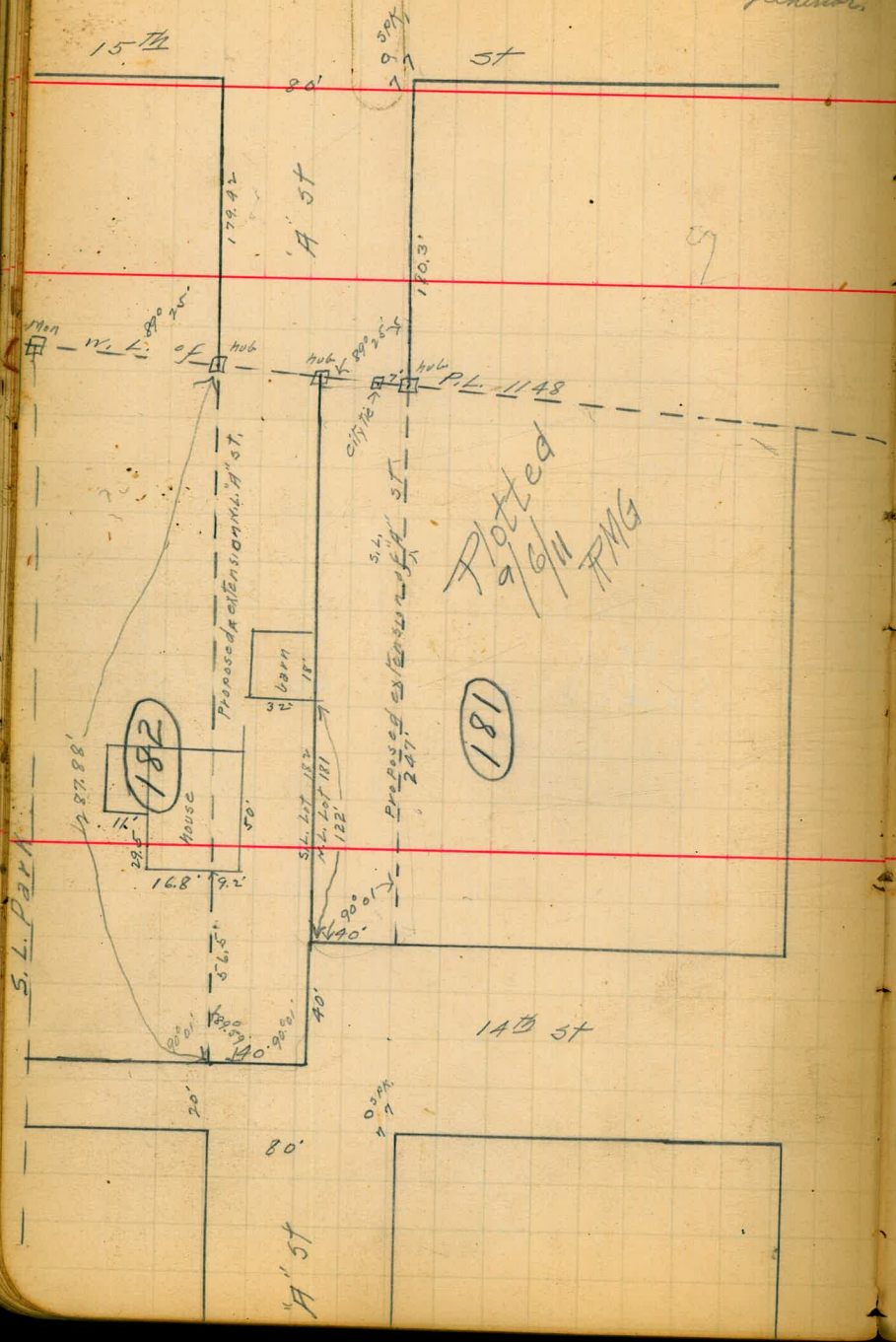
A Line

From Sta 3 on Line from Initial Point to center of 9th St
To center of 7th St

	819	16766			159.47
8+92 3			111		156.6
8			108		156.9
7 △			49		162.8
T.P.	1087	17799		054	167.12
6			98		167.2
5 △			50		173.0
4			07		176.3
T.P.	1172	18912		059	177.40
3			59		173.2
T.P.	1068	19901		079	188.38
2			74		191.6
T.P	1171	21020		052	199.49
1+3			58		204.4

Survey for Proposed opening of "A" from 14th St East to W.L. of P.L. 1148

5/22/11 Dunkle, Evans, Nichols.



Line M Continued from Cen-
Hoffman and Hamilton running up
Hamilton.

Sta	B.S.	Hgt	Int	F.S.	Elev.	
T.P.	4.75	56.35			51.60	on Sta. M 14+72.6
T.P.	9.14	56.44		9.05	47.30	
17+16.3			13.6		42.8	
+5			10.0		46.4	
18			7 8		48.6	
+5			9 8		46.6	
+65			12 5		43.9	
19			8 8		47.6	
+96.3			6 2		50.2	on plug
+80			4 9		51.5	
	10 37	66.31		0 56	55.94	
21			13 4		54.9	
+50			7 6		58.7	
+75			3 0		63.3	
22			5 8		60.5	
+15			16 0		50.3	
+76.3			13 5		52.8	
23			13 1		53.2	
24			11 2		55.1	
+50			13 0		53.3	

Sta	B.S.	Hgt	Int	F.S.	Elev.
		66.31			
24			11 0		55.3
+75			5 9		60.4
+50			3 7		62.6
+57.3			3 2		63.1
	11 82	77.24		0 89	65.42
26			10 8		66.4
+50			1 8		75.4
	11 07	78.90		9.41	67.83
+70			1 7		77.2
+80			1 7		77.2
27			7 8		71.1
+50			17 0		61.9
+60			19 0		59.9
28			15 4		63.5
29			13 7		65.2
+70			15 0		63.9
30			12 3		66.6
T.P.	12 40	90.80		0 50	78.40
31			9 4		91.4
T.P.	11 94	102.18		0 50	90.24

Sta	B.S.	Hgt	Int	F.S.	Elev.	
		102.18	0.15	0.15		
T.P.	11.50	123.50	12.35	0.15	102.03	
32			2.1		121.4	
T.P.	6.66	124.76	12.76	0.43	123.10	
+37.5			1.7		118.1	
T.P.	5.09	123.34		11.51	118.25	
33			1.4		121.9	
+43			9.0		114.3	
T.P.	.52	112.05		11.81	111.53	
T.P.	.79	101.06		11.78	100.27	
34			4.2		96.94	
+35			7.3		93.7	
35			9.0		91.1	
5ft left of 35			18.3		82.7	
+5			15.0		86.1	
+85.9			14.2		86.9	
BM				6.54	94.52	on Post Cemetery fence 27 feet from Gateway

Line M6 Continued from Center Hoffman & Hamilton running of Hamilton line 8 feet South of previous one.

Sta	B.S.	Hgt	Int.	F.S.	Elev.
M14+72.6	4.75	56.35			51.60
T.P.	9.99	57.29		9.05	47.30
18+04.3			14.2		43.1
+35			13.5		43.8
+40			9.6		47.7
19			8.6		48.7
+50			11.6		45.7
+60			13.2		44.1
20			8.3		49.0
21			7.1		50.2
+70			5.5		51.8
22			2.2		55.1
T.P.	9.87	66.24		.92	56.37
+50			1.7		64.5
+80			.5		65.7
23			8.2		58.0
+15			16.0		50.2
24			13.8		52.4
25			10.0		56.2
+50			8.8		57.4
+70			10.7		55.5

Sta	B.S.	H.I.	Int	F.S.	El.
26		66.24	4.6		51.6
+5			1.2		55.1
T.P.	10.43	76.16		.51	65.73
27			6.5		69.7
T.P.	7.40	81.72	1.84	1.84	74.32
+50			1.8		79.9
+70			1.8		79.9
T.P.	2.40	72.93		10.99	70.73
28			1.8		71.1
+40			10.5		62.4
+70			13.8		59.1
29			10.0		62.9
30			7.5		65.4
+52			9.2		63.7
31			4.4		68.5
T.P.	12.06	84.19		.80	72.13
+50			9.6		74.6
T.P.	11.85	95.46		.58	83.61
32			10.5	.51	85.0
T.P.	10.89	105.84		.51	94.95
+50			7.5		98.3

Sta	B.S.	H.I.	Int	F.S.	Elev.	
T.P.	10.92	116.21		.55	105.29	
33			2.3		113.9	
T.P.	4.56	119.66		1.11	115.10	
+27			1.7		118.0	
34			9.0		110.7	
			2.10		117.56	(ruling 32+37?)
T.P.	0.82	108.60		11.88	107.78	
T.P.	1.54	98.39		11.75	96.85	
	1.05	88.49		11.28	87.11	
35			2.2		86.3	
+20			3.9		84.6	
36			4.4		84.1	
+20			3.9		84.6	
+55			10.1		78.4	
+72.5			9.3		79.2	
			4.33		84.16	B.M. on Post 27" Post from Gateway

Sta	B.S.	Hgt	Int	FS	Elev.	
	11 62	63.22		.55	1051.60	Sta M 14+26
H.P. 3.35			47		585	Center H 13+00
T.P	11 47	73.94		0.75	62.47	
1			79		66.0	
T.P	11 42	84.76		0.60	72.24	
+56			34		806	
T.P.	4 22	86.02		2.96	81.80	Zone Measured partly around and beyond
+70			28		834	
2			31		831	
3			14		722	
+50					807	
+75			41		821	
4			84		778	
+75			150		712	
5			92		770	
T.P.	11 44	96.83		0.63	85.39	
+50			71		899	
6			35		935	
5 1/2 m			36		934	
7			27		943	
T.P.				1.48	9535	

Sta	BS	HS	Int	FS	Elev
+50	6.40	101.95			95.35
8			37		982
+96			76		943
9			74		945
10			63		958
+50			95		924
11			46		973
T.P.	5.59	104.54		2.80	98.95
12			76		971
13			49		998
14			74		971
T.P.	0.05	92.65		11.94	92.60
15			50		963
+16			190		928
16			33		855
T.P.	11.42	102.69		1.38	91.27
+58			62		947
17			25		984
18			38		971
T.P.				5.67	97.02

gullies

Levels on 32nd (South)
commencing at cor 32nd + MC St
Elev between 100'
no stakes driven

Sta.	BS.	H.I.	Inter.	FS	Elev.	
	6 17	156 17			150.00	B.MC. cor MC + 32nd St
1			77		1485	
2			94		1468	
3			82		1480	
4			48		1514	
T.P.	11 44	166 61		100	155 17	
5			63		1603	
6			17		1649	
T.P.	3 24	169 20		5 65	165 96	
7			47	4	1645	
8			89		1603	
9			105		1587	
10			127		1565	
T.P.	11 19	158 46		11 93	1557 27	
11			29		1556	
12			48		1537	
13			70		1515	
14			69		1516	
15			91		1494	
16			111		1474	
T.P.			70	10 81	1476 65	
	22 04			24 39		

Over 32nd St

160
128
288

128
900
240

1500
1111

Oct 20th

Sta.	B.S.	H.I.	Incl.	F.S.	Elev	
	208	96.14			9406	BM. NC
26			37		924	
27			74		887	
28			75		886	
T.P.	435	92.84		765	8849	
29			49		879	
30			68		860	
31			39		889	
32			35		893	
T.P.	1055	102.81		058	9226	
33			70		958	
T.P.	1200	114.25		056	10225	
34			68		1074	
T.P.	1190	125.58		057	113.88	
35			67		1189	
T.P.	1167	136.57		068	12490	
36			43		1323	
T.P.	1125	147.18		064	13593	
37			53		1429	
				065	14653	
	6380			1133		

On R.S.

	101.148.66			147.65
17		20		1466
18		50		1436
19		154		1333 = Con 324 + R 65
20		135		1352
T.P.	151128.30		1187	13679
T.P.	077127.73		1134	12696
21		35		1242
22		92		1185
T.P.	075 116.57		1191	11582
23		64		1192
T.P.	120105.86		1191	10466
24	524	46		1013
25		106		953
B.M.C.			1180	9406
			5883	
			5.24	
			53.59	

On R.S.

Center of Bridge Jack in S.E. corner Bridge on R.S.

134
84
150
184.1

Sta	B.S.	H.I.	Inter	F.S.	Elev	
	1030	156.83			146.53	
3.8			86		148.2	
480			51		151.7	Cor 36th & R St.
1-39			50		151.8	
2-40			71		149.7	
3-41			68		150.0	
4-42			88		150.0	
T.P.	541	154.95		729	149.54	
5-43			52		149.7	
6			71		149.8	
7			71		149.8	
8			90		145.9	
9			61		148.8	
T.P.	891	154.68		918	145.77	
10			96		145.1	
11			87		146.0	
12			83		146.4	
13			88		145.9	
720			89		145.8	Plug centre Merritt St on Pueblo Line
14			34		151.3	
T.P.				092	153.76	Running East
	1462			1739		

Cor. 3rd St.

Sta	B.S.	H.I.	Inter	F.S.	Elev	
	957	164.33			153.76	
15			78		155.5	
16			17		161.6	
T.P.	1013	172.71		075	162.58	
17			34		169.3	
T.P.	706	179.24		053	172.18	
18			30		176.2	
19			115		167.7	
20			74		171.8	
21			52		174.0	
22			52		174.0	
T.P.	294	176.94		524	174.00	
23			29		174.6	
24			54		171.5	
25			34		173.5	
470			34		173.5	
				296	178.98	B.M. on Plug on Cumberland Sewer
T.P.	174	166.97		1171	165.23	
T.P.	138	156.21		1184	155.23	
	357	148.06		1153	145.09	
	222	139.28		1160	137.06	
				508	134.20	

Running East on Pueblo Line

Levels on Downtown
Oct 30/81
B Line

Sta	B.S.	H.I.	Inter	F.S.	Elev	
X.0	1167	63.27			51.60	
+ 56.3			47		586	Cambie St
T.P.	1177	74.22		052	62.45	
1			82		660	
T.P.	1118	84.14		120	7296	
+ 56			28		813	
T.P.	256	86.05		065	8349	
2			31		829	
3			144		716	Gulley
+ 36.3 △			70		790	Howard St
+ 50			57		803	
4			50		810	
+ 75			155		705	
5			93		767	
T.P.	1185	97.22		068	8537	
+ 50			76		896	
6			38		834	
+ 16.3 △			38		824	Merritt St
7			29		843	
T.P.				123	9599	

X. Error of 4.2 ft on account of taking wrong B.M.

Sta	B.S.	H.I.	Inter	F.S.	Elev	
St	543	101.42			9599	
8			46		968	
+ 96.3 △			66		948	Pardee St
9			69		945	
10			58		956	
+ 50			95		919	
11			41		973	
+ 76.3 △			51		963	Pasco St
12			42		972	
T.P.	381	102.94		229	9913	
13			30		999	
14			58		971	
T.P.	060	91.64		1190	9104	
15			140		976	
+ 15			175		741	Ravine
16			16		756	
T.P.	1175	102.64		075	9089	
+ 50			56		970	
17			18		1008	
18			30		990	

91.81
4.15
7.65

58.20
4.4
73.8

Sta	B.S.	H.I.	Incr	F.S.	Elev	
	737	58.97			51.60	Sta M 14+72.5
			47		54.3	
	747	69.92		082	58.15	

102.64.

19.
+84.5
B.M.
Plug

3.9
7.0

987
956
703 9561

Jordan
Jones El
Lattimore
Ground

191 92.81

11.74 90.96
4.61 88 20

+ 028 − 1126
+ 138 − 1108
+ 128 − 1169
+ 273 − 859
567 4257
567
3690

+ 1027
597
430

M. Line

Sta	B.S.	Hof I	Int	F.S.	El.	
	6.34	56.34			50.0	BM Cor M + 32nd
B.M.	3.52	103.52			100.00	
M 0			2.23		101.3	
1			2.7		100.8	
2			4.2		99.3	
T.P.	1.82	93.46		11.88	91.64	
3			5.18		88.3	
+26			9.2		84.3	
T.P.	.77	82.41		11.82	81.64	
+40	.77		6.6		75.8	
+60			10.4		72.0	
T.P.	.67	71.33		11.75	70.66	
+80			7.1		64.2	
+90			3.0		68.3	
4			3.6		67.7	
+60			11.0		60.3	
T.P.				11.91	59.42	

Line A from a point 127.7 feet North of Center of M + 32nd Streets running thence E.

Sta	B.S.	Hof I	Int	F.S.	Elevation	
ABM	2.83	102.83			100.0	SE Cor M + 32nd
A 0			.89		101.9	
+5			9.0		93.8	
1			10.5		92.3	
+30			11.8		91.0	
+40			8.3		94.5	
2			9.1		93.7	
T.P.	.33	91.43		11.73	91.10	
+5			5.0		86.4	
3			6.0		85.4	
+37			7.5		83.9	
+53			9.0		82.4	
	0.00	79.50		11.93	79.50	
	1.0	68.00		12.50	67.00	
	.50	58.10		10.40	57.60	
4+27.4	2.13	54.09		6.14	51.96	
5			2.10			

Continuation of Line M.

Sta	B.S.	Hot'g	Int	F.S.	El.	
M 4+77.4	2.13	54.09			51.96	
" 5			2.1		52.0	
+5			4.		50.1	
6			5.7		48.4	
+5			5.1		49.0	
7			4.8		49.3	
+5			5.7		48.4	
8			5.2		48.9	
9			4.3		49.8	
10			4.5		49.6	
11			4.5		49.6	
12			5.0		49.1	
+5			8.5		45.6	
13			6.8		47.3	
14	10.43	60.01	4.5	4.51	49.58	
+72.6			8.40		51.6	on plug
T.P.				5.04	54.97	on plug cen. Tomlin & Hoff.

Sta	B.S.	Hot'g	Int	F.S.	El.	
T.P.	4.75	56.35			51.6	
	11.92	59.22		9.05	47.30	
Plug			17.50		41.72	Cen Hamilton & Hoff —
+5			11.0			
1			10.5			
+5			13.9			
2			10.1			
+5			9.5			
+80			9.0			Cen. Hamilton & Howard
1			7.2			
T.P.				.38		

84.20
57.60
26.60

Stake 7" S.E. cor Iron Pin 10's cor
Elev 159.47

Stake 9" S.E. cor Spikemor cor
Elev 159.18

N.E. 286.74
5" Upao.

11.12
10.92
.20

94.4

278.50

294.20
286.74
7.46

727.17
94.00
~~24.77~~
721.17

101.0
12.15
88.15

871.17
727.17
144.00

727.17
134.18
861.17

TRAVERSE TABLE FOR TRANSIT BOOK,

From 1° to 90° for a distance of 100.

Degrees.	DEGREES.		¼ DEGREE.		½ DEGREE.		¾ 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	70.39	45
45	70.71	70.71							
Degrees.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Degrees.
	DEGREES.		¾ DEGREE.		½ DEGREE.		¼ DEGREE.		

Published by Edward Denny & Co., Stationers, Drawing Materials, Mathematical Instruments, Etc., San Francisco.