

UNIVERSITY HEIGHTS  
BETWEEN EL CAJON & UNIVTY AVE

GEORGIA ST.

FLORIDA "

ALABAMA "

MISSISSIPPI "

LOUISIANA "

TEXAS "

ARIZONA 100

LEVEL

F.B. 197



Table showing the difference of altitude 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 2/3
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.

Angle	COR. IN LINKS	Angle	COR. IN LINKS	Angle	COR. IN LINKS	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

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

338.68  
2.26  
329.54 ✓  
9.30  
320.24 ✓  
0.42  
320.66  
0.95  
334.07 ✓  
11.70  
323.32 -  
323.32  
3.72  
327.04 ✓  
5.84  
322.05  
3.87  
318.18 N.W. BCR. 00  
10.48  
334.07  
328.66  
8.64  
0.28  
342.71  
328.38  
7.11  
335.49  
1.16  
334.33  
7.29  
341.64 ✓



GEORGIA ST, EL CAJON AVE TO UNIV' AVE

Shields  
Gunn  
Munsell

1

May. 26 1905.

Cross Section Georgia St.  
El Cajon ave. to University ave.

H.I. 322.05 Rod Elev.

So. line El Cajon av.

W. line	8.5	313.6
cb	7.7	314.4
1/4	8.2	313.9
c	9.1	313.0
1/4	9.7	312.4
cb	9.7	312.4
E. line	10.1	312.0

## GEORGIA ST, EL CAJON AVE TO UNIV' AVE

May 26 1905  
12' So. Elcajon Rod Elev

E. line	10.5	311.6
cb	9.5	312.6
1/4	9.1	313.0
c	8.3	313.8
1/4	7.4	314.7
cb	6.2	315.9
W. line	5.7	316.4

37' So. Elcajon

W. line	4.8	317.3
cb	6.2	315.9
1/4	6.5	315.6
c	7.6	314.5
1/4	9.1	313.0
cb	9.4	312.7
E. line	9.2	312.9

62' So. Elcajon

E. line	8.7	313.4
cb	7.9	314.2
1/4	7.3	314.8
c	7.3	314.8
1/4	6.9	315.2
cb	5.7	316.4
W. line	4.8	317.3

87' So. Elcajon

W. line	4.0	318.1
cb	5.7	316.4
1/4	6.4	315.7
c	6.0	316.1
1/4	6.4	315.7
cb	8.0	314.1
E. line	7.9	314.2



## 112' So. Elcapiu

E. line	8.3	313.8
cb	7.9	314.2
1/4	7.4	314.7
c	6.4	315.7
1/4	5.4	316.7
cb	5.1	317.0
W. line	4.5	317.6

## 137' So. Elcapiu

W. line	4.0	318.1
cb	4.5	317.6
1/4	5.2	316.9
c	6.9	315.2
1/4	7.6	314.5
cb	8.0	314.1
E. line	8.8	313.3

## 162' So. Elcapiu

E. line	8.2	313.9
cb	7.1	315.0
1/4	6.4	315.7
c	6.9	315.2
1/4	6.2	315.9
cb	4.7	317.4
W. line	3.8	318.3

## 187' So. Elcapiu

W. line	4.1	318.0
cb	5.7	316.4
1/4	6.1	316.0
c	6.3	315.8
1/4	7.0	315.1
cb	7.8	314.3
E. line	8.6	313.5

212' So. Elcayun		
E. line	8.5	313.6
cb	7.8	314.3
1/4	7.2	314.9
C	6.6	315.5
1/4	5.8	316.3
cb	5.2	316.9
W. line	4.6	317.5

237' So. Elcayun		
W. line	5.0	317.1
cb	5.4	316.7
1/4	6.0	316.1
C	6.7	315.4
1/4	7.6	314.5
cb	8.4	313.7
E. line	9.3	312.8

262' So. Elcayun		
E. line	9.7	312.4
cb	8.5	313.6
1/4	6.8	315.3
C	5.6	316.5
1/4	5.2	316.9
cb	4.5	317.6
W. line	3.2	318.9

297' So. Elcayun		
W. line	3.1	319.0
cb	5.2	316.9
1/4	6.0	316.1
C	6.8	315.3
1/4	7.7	314.4
cb	8.6	313.5
E. line	8.5	313.6



3 1/2' So. Elayun

E. line	9.5	312.6
cb	7.9	314.2
1/4	6.2	315.9
c	5.5	316.6
1/4	4.5	317.6
cb	4.1	318.7
W. line	3.2	318.9

North line Howard St.

W. line	3.9	318.2
cb	5.9	316.2
1/4	6.7	315.4
c	7.5	314.6
1/4	7.6	314.5
cb	8.8	313.3
E. line	9.4	312.7

May 27 1905

Stehilds  
Sun 5  
Munson

H.I. 328.66

North cb.

E. line	15.4	313.3
cb	15.0	313.7
1/4	14.5	314.2
c	13.5	315.2
1/4	12.1	316.6
cb	12.2	316.5
W. line	11.0	317.7

North 1/4

W. line	9.2	319.5
cb	10.0	318.7
1/4	10.9	317.8
c	11.9	316.8
1/4	12.6	316.1
cb	13.7	315.0
E. line	14.7	314.0

## Center Howard

E line	14.2	314.5
cb	13.0	315.7
1/4	12.3	316.4
C	11.4	317.3
1/4	10.4	318.3
cb	9.7	319.0
W. line	8.6	320.1

## South 1/4

W. line	9.0	319.7
cb	10.1	318.6
1/4	11.0	317.7
C	11.8	316.9
1/4	12.7	316.0
cb	13.9	314.8
E. line	15.3	313.4

## South cb.

E line	13.8	314.9
cb	13.0	315.7
1/4	12.9	315.8
C	11.0	317.7
1/4	9.9	318.8
cb	8.7	320.0
W. line	7.5	321.2

## South line Howard

W. line	5.3	323.4
cb	8.2	320.5
1/4	9.3	319.4
C	10.5	318.2
1/4	11.7	317.0
cb	12.4	316.3
E. line	13.5	315.2



## 25' So. Howard

E line	13.2	315.5
cb	11.8	316.9
1/4	10.2	318.5
C	9.6	319.1
1/4	8.0	320.7
cb	6.1	322.6
cb+7'	5.6	323.1
W. line	2.1	326.6

## 50' So. Howard

W. line	2.1	326.6
W. line+8'	5.1	323.6
cb	5.9	322.8
1/4	7.0	321.7
C	8.1	320.6
1/4	9.6	319.1
cb	11.7	317.0
E. line	12.8	315.9

## 75' So. Howard

E. line	14.4	314.3
cb	13.0	315.7
1/4	11.2	317.5
C	9.1	319.6
1/4	6.9	321.8
cb	5.8	322.9
cb+6'	4.8	323.9
W. line	1.0	327.0

## 100' So. Howard

W. line	0.3	328.4
W. line+9'	6.0	322.7
cb	7.3	321.4
1/4	9.0	319.7
C	10.6	318.1
1/4	12.7	316.0
cb	14.4	314.3
E. line	15.8	312.9

## 125' So. Howard

E. line	15.8	312.9
cb	14.5	314.2
1/4	12.9	315.8
C	11.1	317.6
1/4	8.8	319.9
cb	8.0	320.7
W. line	4.1	324.6

## 150' So. Howard

W. line	HI 335.49	5.5	330.0
W. line + 6	HI 328.66	2.2	326.5
cb		2.7	326.0
1/4		3.7	325.0
C		6.7	322.0
1/4		7.9	320.8
cb		9.2	319.5
E. line		10.9	317.8

## 175' So. Howard

E. line	9.1	319.6	
cb	6.8	321.9	
1/4	4.3	324.4	
C	2.7	326.0	
1/4	1.6	327.1	
cb	0.2	328.5	
W. line	HI 335.49	5.0	330.5

## HI 335.49

## 200' So. Howard

W. line	4.2	331.3
cb	5.7	329.8
1/4	7.0	328.5
C	8.5	327.0
1/4	10.0	325.5
cb	11.8	323.7
E. line	14.8	320.7



## 225' So. Howard

E. line	14.2	321.3
cb	11.6	323.9
1/4	9.5	324.0
C	7.2	328.3
1/4	5.7	329.8
cb	3.8	331.7
W. line	3.4	332.1

## 250' So. Howard

W. line	3.0	332.5
cb	3.6	331.9
1/4	4.5	331.0
C	5.8	329.7
1/4	7.6	327.9
cb	10.1	325.4
E. line	13.4	322.1

## 275' So. Howard

E. line	11.3	224.2
cb	8.6	226.9
1/4	6.9	228.6
C	5.0	330.5
1/4	3.7	331.8
cb	2.4	333.1
W. line	1.8	333.7

## 300' So. Howard

W. line	1.1	334.4
cb	1.5	334.0
1/4	2.8	332.7
C	4.2	331.3
1/4	6.4	329.1
cb	8.0	327.5
E. line	10.4	325.1

## 325' So. Howard

E. line	8.7	326.8
cb	7.0	328.5
1/4	4.4	331.1
c	3.0	332.5
1/4	1.8	333.7
cb	0.8	334.7
W. line	0.2	335.3

H.I. 341.62

## 350' So. Howard

W. line	5.8	335.8
cb	6.2	335.4
1/4	7.4	334.2
c	8.4	333.2
1/4	9.7	331.9
cb	11.3	330.3
E. line	14.0	327.6

## 375' So. Howard

E. line	12.6	329.0
cb	10.8	330.8
1/4	9.3	332.3
c	7.3	334.3
1/4	6.3	335.3
cb	5.9	335.7
W. line	5.6	336.0

## 400' So. Howard

W. line	4.3	337.3
cb	4.7	336.9
1/4	5.6	336.0
c	7.0	334.6
1/4	8.3	333.3
cb	10.1	331.5
E. line	11.9	329.7



425' So. Howard

E. line	9.9	331.7
cb	8.2	333.4
1/4	7.2	334.4
c	5.9	335.7
1/4	5.3	336.3
cb	5.2	336.4
W. line	4.8	336.8

450' So. Howard

W. line	4.7	336.9
cb	4.8	336.8
1/4	5.2	336.4
c	5.7	335.9
1/4	6.6	335.0
cb	7.8	333.8
E. line	9.4	332.2

475' So. Howard

E. line	7.9	333.7
cb	6.5	335.1
1/4	5.7	335.9
c	5.2	336.4
1/4	4.9	336.7
cb	4.2	337.4
W. line	3.8	337.8

500' So. Howard

W. line	4.4	337.2
cb	3.7	337.9
1/4	4.5	337.1
c	4.9	336.7
1/4	5.6	336.0
cb	5.8	335.8
E. line	7.0	334.6

## 525' So. Howard

E. line	6.1	335.5
cb	5.6	336.0
1/4	5.3	336.3
c	4.8	336.8
1/4	4.4	337.2
cb	4.3	337.3
w. line	4.4	337.2

## 550' So. Howard

w. line	4.3	337.3
cb	4.5	337.1
1/4	4.8	336.8
c	4.5	337.1
1/4	5.0	336.6
cb	5.0	336.6
E. line	5.8	335.8

## 575' So. Howard

E. line	5.6	336.0
cb	5.1	336.5
1/4	4.8	336.8
c	4.7	336.9
1/4	4.5	337.1
cb	4.6	337.0
w. line	4.4	337.2

## North. line Polk

w. line	4.12	337.50
cb	4.1	337.5
1/4	4.6	337.0
c	4.7	336.9
1/4	4.6	337.0
cb	4.8	336.8
E. line	5.5	336.1



51

June 1, 1905

H.I. 338.68

North curb

E. line	2.5	336.2
cb	2.3	336.4
1/4	1.9	336.8
c	1.9	336.8
1/4	1.5	337.2
cb	1.0	337.7
W. line	1.4	337.3

North 1/4

W. line	1.7	337.0
cb	1.6	337.1
1/4	1.9	336.8
c	2.2	336.5
1/4	2.3	336.4
cb	3.0	335.7
E. line	3.9	334.8

blinds

Gunn  
Munson

Center Polk St.

13

E. line	3.8	334.9
cb	2.8	335.9
1/4	2.0	336.7
c	1.6	337.1
1/4	1.4	337.3
cb	1.3	337.4
W. line	1.2	337.5

South 1/4

W. line	1.8	336.7
cb	1.9	336.8
1/4	1.8	336.9
c	2.1	336.6
1/4	2.3	336.4
cb	3.2	335.5
E. line	4.4	334.3

## South carb.

E. line	3.0	335.7
cb	2.2	336.5
1/4	2.0	336.7
c	1.5	337.2
1/4	1.0	337.7
cb	1.0	337.7
w. line	1.3	337.4

## South line Polk

w. line	1.2	337.5
cb	1.3	337.4
1/4	1.1	337.6
c	1.1	337.6
1/4	1.6	337.1
cb	2.1	336.7
E. line	3.2	335.2

## 25' So. Polk

E. line	3.4	<del>335.3</del> <del>337.3</del>
cb	2.3	336.4
1/4	1.9	336.8
c	1.8	336.9
1/4	1.7	337.0
cb	1.1	337.6
w. line	1.4	337.3

## 50' So. Polk

w. line	1.6	337.1
cb	1.6	337.1
1/4	1.4	337.3
c	1.2	337.5
1/4	2.5	336.2
cb	3.0	335.7
E. line	4.0	334.7



75' So. Polk			125' So. Polk		
E. line	4.3	334.4	E. line	5.5	333.2
cb	2.8	335.9	cb	3.3	335.4
1/4	2.3	336.4	1/4	3.1	335.6
c	1.7	337.0	c	2.1	336.6
1/4	1.6	337.1	1/4	2.1	336.6
cb	1.6	337.1	cb	2.0	336.7
w. line	1.5	337.2	w. line	1.8	336.9
100' So. Polk			150' So. Polk		
w. line	1.7	337.0	w. line	2.2	336.5
cb	1.8	336.9	cb	2.2	336.5
1/4	1.9	336.8	1/4	2.1	336.6
c	1.7	<del>337.0</del> 336.0	c	2.4	336.3
1/4	2.4	336.3	1/4	3.2	335.5
cb	3.5	335.2	cb	3.8	334.5
E. line	6.2	332.5	E. line	5.7	333.0

175' So. Polk		
E. line	6.2	332.5
cb	4.9	333.8
1/4	3.7	335.0
C	2.7	336.0
1/4	2.5	336.2
cb	2.8	335.9
W. line	2.3	336.4

200' So. Polk		
W. line	2.5	336.2
cb	2.8	335.9
1/4	2.4	336.3
C	2.9	335.9
1/4	4.0	334.7
cb	5.6	333.1
E. line	7.8	330.9

225' So. Polk		
E. line	9.9	328.8
cb	7.4	331.3
1/4	5.0	333.7
C	3.3	335.4
1/4	3.4	335.3
cb	3.3	335.4
W. line	2.9	335.8

250' So. Polk		
W. line	3.3	335.4
cb	3.5	335.2
1/4	4.0	334.7
C	4.0	334.7
1/4	6.6	332.1
cb	9.8	328.9
E. line	12.8	325.9



275' So. Polk

E. line	14.5	324.2
cb	11.3	327.4
1/4	8.3	330.4
c	5.2	333.5
1/4	4.0	334.7
cb	4.0	334.7
w. line	3.5	335.2

300' So. Polk

w. line	4.1	334.6
cb	4.6	334.1
1/4	5.9	332.6
c	8.1	330.6
1/4	10.7	328.0
cb	12.7	326.0
E. line	14.5	324.2

325' So. Polk

E. line	17.5	321.2
cb	14.2	324.5
1/4	12.6	326.1
c	10.2	328.7
1/4	8.1	330.6
cb	5.6	333.2
w. line	4.6	334.1

350' So. Polk

w. line	5.6	333.1
cb	7.9	330.8
1/4	10.6	328.1
c	12.8	325.9
1/4	4.9	324.6
cb	7.5	322.0
E. line	11.4	318.1

H.I. 329.54

375' So. Polk

E. line	H.I. 329.54	14.4	315.1
cb.		11.7	317.8
1/4		8.2	321.3
C	H.I. 338.68	14.7	324.0
1/4		12.9	325.8
cb		10.6	328.1
W. line		7.6	331.1

400' So. Polk

W. line	H.I. 329.54	0.9	328.6
cb		3.6	325.9
1/4		6.0	323.5
C		8.2	321.3
1/4		10.7	318.8
cb		13.5	316.0
E. line		18.2	311.3

425' So. Polk

E. line		16.3	313.2
cb		13.0	316.5
1/4		10.5	319.0
C		7.8	321.7
1/4		5.4	324.1
cb		3.9	325.6
W. line		2.0	327.5

450' So. Polk

W. line		3.7	325.8
cb		5.8	323.7
1/4		7.6	321.9
C		9.6	319.9
1/4		11.9	317.4
cb		14.3	315.2
E. line		17.6	312.9



## 475' So. Polk

E. line	H.I. 320.66	12.0	308.7
cb		8.6	312.1
1/4		6.0	314.7
C	H.I. 329.54	12.5	317.0
1/4		9.6	319.9
cb		8.0	321.5
W. line		5.8	323.7

## 500' So. Polk

W. line		5.8	323.7
cb		8.4	321.1
1/4		11.4	318.1
C		14.6	314.9
1/4	H.I. 320.66	8.7	312.0
cb		10.8	309.9
E. line		13.6	307.1

## 525' So. Polk

E. line		14.5	306.2
cb		11.0	309.7
1/4		9.2	311.5
C	H.I. 329.54	14.9	314.6
1/4		11.4	318.1
cb		7.8	321.7
W. line		5.9	323.6

## 550' So. Polk

W. line		4.7	324.8
cb		7.9	321.6
1/4		10.5	319.0
C		13.9	315.6
1/4	H.I. 320.66	8.1	312.6
cb		10.7	310.0
E. line		14.5	306.2

## 575' So. Polk

E. line		12.1	308.6
cb		8.6	312.1
1/4		5.9	314.8
C	H.I. 329.54	12.8	316.7
1/4		9.4	320.1
cb		6.9	322.6
W. line		3.7	325.8

## North line Lincoln Street,

W. line	H.I. 338.68	11.40	327.28
cb	H.I. 329.54	3.9	325.6
1/4		6.7	322.8
C		10.3	319.2
1/4	H.I. 320.66	4.3	316.4
cb		6.8	313.9
E. line		10.0	310.7

## North curb.

E. line	H.I. 329.54	16.3	313.2
cb		13.7	315.8
1/4		11.0	318.5
C	H.I. 329.54	9.8	319.7
1/4		6.8	322.7
cb		3.9	325.6
W. line		1.8	327.7

## North 1/4

W. line		1.6	327.9
cb		3.8	325.7
1/4		6.3	323.2
C		8.6	320.9
1/4		10.6	318.9
cb		12.6	316.9
E. line		15.4	314.1



## Center Lincoln Street.

E. line	14.5	315.0
cb	11.9	317.6
1/4	10.0	319.5
C	H.I. 329.54 7.9	321.6
1/4	5.3	324.2
cb	3.3	326.2
W. line	0.9	328.6

## South 1/4

W. line	1.5	328.0
cb	3.2	326.3
1/4	4.9	324.6
C	7.4	322.1
1/4	10.3	319.2
cb	12.4	317.1
E. line	15.4	314.1

## South curb

E. line	15.7	313.8
cb	H.I. 329.54 12.7	316.8
1/4	9.7	319.8
C	6.5	323.0
1/4	3.7	325.8
cb	1.4	328.1
W. line	H.I. 335.02 5.2	329.8

## South line Lincoln

W. line	H.I. 335.02 4.4	330.6
cb	H.I. 329.54 0.9	328.6
1/4	3.1	326.4
C	6.5	323.0
1/4	9.3	320.2
cb	12.6	316.9
E. line	15.7	313.8

## 25' So. Lincoln

E. line	H.I.	327.04	12.0	315.0
cb			9.7	317.3
1/4	H.I.	335.02	13.5	321.5
c			9.7	325.3
1/4			7.1	327.9
cb			5.2	329.8
W. line			3.0	332.0

## 50' So. Lincoln

W. line			1.6	333.4
cb			2.9	332.1
1/4			5.7	329.3
c			8.8	326.2
1/4			11.8	323.2
cb	H.I.	327.04	7.5	319.5
E. line			10.2	316.8

## 75' So. Lincoln

E. line			9.1	317.9
cb			5.2	321.8
1/4	H.I.	335.02	10.0	325.0
c			6.4	328.6
1/4			3.7	331.3
cb			2.3	332.7
W. line			1.4	333.6

## 100' So. Lincoln

W. line			0.4	334.6
cb			1.1	333.9
1/4			1.8	333.2
c			3.9	331.1
1/4			7.0	328.0
cb			9.8	325.2
E. line			13.8	321.2



## 125' So. Lincoln

E. line	10.6	334.4
cb	6.7	328.3
1/4	4.4	330.6
c	1.7	333.9
1/4	0.9	334.1
cb	H.I. 342.71 7.9	334.8
W. line	7.6	335.1

## 150' So. Lincoln

W. line	6.7	336.0
cb	7.3	335.4
1/4	7.8	334.9
c	8.3	334.4
1/4	9.2	333.5
cb	12.1	330.6
E. line	14.4	328.3

## 175' So. Lincoln

E. line	11.6	331.1
cb	9.1	333.6
1/4	7.7	335.0
c	7.1	335.6
1/4	6.9	335.8
cb	6.6	336.1
W. line	6.1	336.6

## 200' So. Lincoln

W. line	5.7	337.0
cb	5.5	337.2
1/4	5.5	337.2
c	6.1	336.6
1/4	6.8	335.9
cb	7.8	334.9
E. line	9.4	333.3

ES

225' So. Lincoln

E. line	7.8	334.9
cb	6.9	335.8
1/4	6.2	336.5
c	5.6	337.1
1/4	5.5	337.2
cb	5.5	337.2
W. line	5.4	337.3

250' So. Lincoln

W. line	5.2	337.5
cb	5.0	337.7
1/4	4.9	337.8
c	4.7	338.0
1/4	5.2	337.5
cb	6.2	336.5
E. line	6.2	336.5

275' So. Lincoln

E. line	6.0	336.7
cb	5.5	337.2
1/4	5.2	337.5
c	4.8	337.9
1/4	5.1	337.6
cb	4.9	337.8
W. line	5.0	337.7

300' So. Lincoln

W. line	5.1	337.6
cb	4.9	337.8
1/4	4.9	337.8
c	4.4	338.3
1/4	4.4	338.3
cb	4.7	338.0
E. line	5.7	337.0



## 325' So. Lincoln

E. line	5.3	337.4
cb	4.7	338.0
1/4	4.6	338.1
C	4.3	338.4
1/4	4.5	338.2
cb	4.7	338.0
W. line	5.0	337.7

## 350' So. Lincoln

W. line	5.3	337.4
cb	5.0	337.7
1/4	4.8	337.9
C	4.4	338.3
1/4	4.6	338.1
cb	3.7	339.0
E. line	3.9	338.8

## 375' So. Lincoln

E. line	4.4	338.3
cb	4.1	338.6
1/4	4.1	338.6
C	4.8	337.9
1/4	5.1	337.6
cb	5.2	337.5
W. line	5.4	337.3

## 400' So. Lincoln

W. line	5.8	336.9
cb	5.7	337.0
1/4	5.0	337.7
C	4.8	337.9
1/4	4.7	338.0
cb	3.9	338.8
E. line	4.0	338.7

425' So. Lincoln

E. line	3.8	338.9
cb	4.2	338.5
1/4	4.9	337.8
c	5.3	337.4
1/4	5.5	337.2
cb	5.9	336.8
W. line	6.0	336.7

450' So. Lincoln

W. line	6.0	336.7
cb	5.9	336.8
1/4	5.5	337.2
c	4.7	338.0
1/4	5.2	337.5
cb	4.6	338.1
E. line	4.2	338.5

475' So. Lincoln

E. line	4.5	338.2
cb	4.7	338.0
1/4	5.0	337.7
c	5.5	337.2
1/4	6.5	336.2
cb	6.5	336.2
W. line	6.4	336.3

500' So. Lincoln

W. line	6.9	335.8
cb	6.7	336.0
1/4	6.6	336.1
c	5.5	337.2
1/4	5.8	336.9
cb	5.4	337.3
E. line	5.0	337.7



525' So. Lincoln

E. line	4.3	338.4
cb	5.0	337.7
1/4	5.5	337.2
c	5.9	336.8
1/4	6.2	336.5
cb	6.7	336.0
W. line	7.0	335.7

550' So. Lincoln

W. line	6.3	336.4
cb	6.5	336.2
1/4	5.5	337.2
c	5.4	337.3
1/4	5.8	336.9
cb	5.1	337.6
E. line	4.6	338.1

575' So. Lincoln

E. line	4.6	338.1
cb	4.9	337.8
1/4	5.2	337.5
c	5.3	337.4
1/4	4.9	337.8
cb	5.3	337.4
W. line	5.8	336.9

North line University Ave.

W. line	5.4	337.3
cb	4.5	338.2
1/4	4.0	338.7
c	4.6	338.1
1/4	4.6	338.1
cb	4.3	338.4
E. line	4.07	338.64

Blk. cor.

Florida St - El Cajon

to University Ave

28

	$\phi$	El. C. of Florida BM - 296.46	West	Cor.	East			
2.30	298.76							
50. Line El. C.			0.4	298.4	1.2	297.6	4.0	294.8
6' 50	" "		4.4	294.4				
10 "	" "		6.5	292.3				
14			4.9	293.9				
25 "	" "		4.9	293.9	2.8	296.0	5.1	293.7
50 "	" "		3.8	295.0	3.6	295.2	6.3	292.5
75 "	" "		1.8	297.0	3.8	295.0	7.7	291.1
81							8.1	290.7
86							9.8	289.0
95							7.9	290.9
100			2.8	296.0	3.9	294.9	7.8	291.0
125			1.7	297.1	4.2	294.6	6.7	292.1
140							4.7	294.1
150			2.4	296.4	4.3	294.5	4.7	294.1
165							6.8	292.0
175	" "		3.2	295.6	4.7	294.1	5.7	293.1



6 Davis Florida St  
 Brooks  
 05 Haslam  $\phi$   
 298.76

200' So of El. Cajon

225 " " "

250 " " "

264 " " "

275 " " "

300 " " "

337' So. No Line Howard.

T.P. 7.99 298.55 8.20

290.56

Ctr of Howard.

So. Line Howard.

25' So of Howard

50' " " "

75' " " "

100' " " "

125' " " "

150' " " "

175' " " "

West

Ctr

East

3.2 295.6 5.1 293.7 6.2 292.6

3.7 295.1 5.3 293.5 6.2 292.6

3.7 295.1 5.7 293.1 7.6 291.2

4.5 294.3

3.0 295.8 5.9 292.9 7.5 291.3

3.9 294.9 6.4 292.4 8.1 290.7

5.2 293.6 6.6 292.2 9.2 289.6

5.0 293.6 6.6 292.0 8.6 290.0

5.1 293.5 6.2 292.4 10.9 287.7

3.6 295.0 5.6 293.0 10.9 287.7

2.9 295.7 4.9 293.7 8.9 289.7

2.3 296.3 4.4 294.2 8.4 290.2

2.8 295.8 3.7 294.9 7.1 291.5

3.3 295.3 4.0 294.6 6.2 292.4

5.1 293.5 4.7 293.9 6.2 292.4

6.3 292.3 6.3 292.3 6.6 292.0

Florida St

φ  
298.55

200' So of Howard

225 " "

250 " "

275 " "

300 " "

T.P. 121 286.85 12.91

285.64

325 So Howard

350 " "

375 " "

400 " "

425 " "

450 " "

475 " "

500 " "

525 " "

550 " "

575 " "

30

West

Ctr

East

7.8 290.8 7.7 290.9 7.7 290.9

8.6 290.0 8.9 289.7 8.9 289.7

8.7 289.9 10.2 288.4 10.7 287.9

10.1 288.5 11.6 287.0 11.7 286.9

12.2 286.4 12.4 286.2 13.8 284.8

1.6 285.3 2.2 284.7 3.7 283.2

2.4 284.5 3.3 283.6 5.2 281.7

4.1 282.8 4.6 282.3 5.3 281.6

4.1 282.8 6.5 280.4 7.2 279.7

3.9 283.0 6.6 280.3 8.9 278.0

3.8 283.1 7.6 279.3 9.5 277.4

3.3 283.6 8.1 278.8 10.4 276.5

3.4 283.5 8.5 278.3 12.1 274.8

3.1 283.8 8.9 278.0 14.0 272.9

4.0 282.9 9.4 277.5 14.4 272.5

4.8 282.1 10.1 276.8 14.5 272.4



Florida St

31

286.85  
 600' S of No line Polk  
 T.P. 5.72 281.38 11.19  
 24' 50" of No Line Polk  
 35 " " " " "  
 Ctr of Polk  
 13' 50" of Ctr "  
 50 line "  
 25' 50 " "  
 40 " "  
 50 " "  
 75 " "  
 100 " "  
 125 " "  
 150 " "  
 175 " "  
 200 " "  
 225 " "

275.66

West		Ctr		East	
5.2	281.7	10.9	276.0	14.3	272.6
				11.1	270.3
				7.9	273.5
1.2	280.2	5.8	275.6	7.5	273.9
				9.0	272.4
2.8	278.6	7.0	274.4	9.7	271.7
2.6	278.8	7.4	274.0	10.9	270.5
				12.1	269.3
3.3	278.1	7.7	273.7	11.3	270.4
3.4	278.0	8.1	273.3	11.4	270.0
4.0	277.7	8.0	273.4	11.7	269.7
4.2	277.2	8.3	273.1	11.6	269.8
4.3	277.1	8.4	273.0	11.7	269.7
5.9	275.5	9.7	271.7	11.7	269.7
7.2	274.2	10.1	271.3	12.3	269.1
8.5	272.9	10.4	271.0	13.5	267.8

## Florida St

φ  
281.38

255' So of Polk

275' " " "

300' " " "

T.P. 0.93 273.00 9.31

544' (300' So Polk W. Side)

272.07

325' So of Polk

350' " " "

363' " " "

375' " " "

400' " " "

425' " " "

450' " " "

475' " " "

500' " " "

525' " " "

531' " " "

550' " " "

575' " " "

West

CTR

East

9.2 272.2 10.6 270.8 13.9 267.5

10.0 271.4 11.9 269.5 12.3 269.1

9.5 271.9 13.2 268.2 14.1 267.3

2.0 271.0 5.1 267.9 7.2 265.8

3.5 269.5 6.5 266.5 9.0 264.0

10.5 262.5

4.2 268.9 7.8 264.2 9.0 264.0

5.8 267.2 8.6 264.4 5.0 268.0

4.9 268.1 11.1 261.9 4.1 268.9

6.2 266.8 9.1 263.9 4.6 264.4

9.3 263.7 8.8 264.2 5.2 267.8

10.7 262.3 8.9 264.2 5.6 267.4

12.1 260.9 9.2 263.8 6.2 266.8

10.3 262.7 6.7

10.4 262.6 10.5 262.5 6.7 266.3

10.9 262.1 11.3 261.7 8.0 265.0



Florida St

φ  
273.00

600' 50" No. line of Lincoln

25' 50" of No. line "

28' " " " " "

Ctr of " "

50' line " "

25' 50' " " "

T.P. 5.97 266.17 12.80

260.20

50' 50" of Lincoln

75' " " " "

100' " " " "

125' " " " "

150' " " " "

175' " " " "

200' " " " "

225' " " " "

250' " " " "

264' " " " "

West		ctr		East.	
12.9	260.1	11.6	261.4	8.7	264.3
		14.5	258.5		
		15.8	257.2		
9.0	264.0	12.2	260.8	9.2	263.8
9.3	263.7	13.3	259.7	11.0	262.0
8.7	264.3	13.8	259.2	12.7	260.3
11.4	264.8	7.2	259.0	6.6	259.6
1.8	264.4	6.2	260.0	6.7	259.5
2.4	263.8	7.2	259.0	7.5	258.7
6.1	260.1	8.3	257.9	7.9	258.3
8.1	258.1	9.8	257.4	7.7	258.5
9.0	257.2	9.8	256.4	6.6	259.6
9.4	256.8	11.7	254.5	8.0	258.2
10.3	255.9	13.9	252.3	11.1	255.1
11.1	255.1	13.6	252.2	11.5	254.7
18.0	256.2				





Florida St

290.09

450 So of Lincoln

475 "

500 "

525 "

550 "

575 "

600 " No Line. Univ Ave.

West

CTR

East

8.2 281.9

6.1 284.0

4.9 285.2 10.2 279.9 15.0 275.1

3.0 287.1 7.7 282.4 12.4 277.7

1.4 288.7 6.9 283.2 11.4 278.7

0.6 289.5 6.4 283.7 11.5 278.6

0.3 289.8 5.9 284.2 11.0 279.1

Ch. R 1370 H. N. E. C. H.

137m = 279.09 }  
10.95 279.14 } 15 dif

Alabama St -

El Cajon to Union Ave <sup>6</sup>/<sub>20</sub> } <sup>Dans</sup> } <sup>36</sup> }  
<sub>55</sub> } <sup>W. H. H. H.</sup> } <sup>W. H. H. H.</sup> }

1.36	308.10	306.74
50' S. Line El Cajon		
25' 50' of "	"	
50' " " "	"	
57' "		
75' "		
100' "		
125' "		
150' "		
175' "		
200' "		
225' "		
250' "		
275' "		
T.P.	1.99 298.45 11.64	294.46
300' S. of E.I.C.		
320' " " "		
337' " " No line toward		

West		CTR		EAST	
		7.0			
8.0	300.1	7.0	301.1	5.5	302.6
8.9	299.2	6.3	301.8	4.7	303.4
7.6	300.5	8.2	299.9	6.2	301.9
7.0				7.0	301.7
10.6	297.5	7.3	300.8	5.4	302.7
10.3	297.8	9.1	299.0	7.3	300.8
10.7	297.4	8.6	298.5	6.1	302.0
11.4	296.7	9.1	299.0	8.1	300.0
12.2	295.9	9.6	298.5	7.8	300.3
11.2	296.9	10.9	297.2	8.7	299.4
13.0	295.1	11.2	296.9	8.0	300.1
13.3	294.8	11.8	296.3	9.3	298.8
14.4	293.7	12.7	295.4	10.7	297.4
5.0	293.4	4.3	294.1	3.1	295.7
				2.4	296.0
4.9	293.5	4.4	294.0	3.5	295.9



		298.45	West	CTR	East			
	Ctr of Howard		6.8	291.7	6.8	291.7	5.0	293.0
	Si. 1174	"	9.2	289.3	7.4	291.7	5.6	292.8
45'	Si		9.6	288.9	8.2	290.3	5.9	292.6
50'	"		8.7	289.3	7.6	290.9	5.9	292.6
63	"		6.0	292.5				
75	"		6.3	292.2	9.0	289.5	6.2	292.3
93	"		10.6	287.9				
100	"		11.1	287.4	8.7	289.8	7.1	291.4
125	"		11.5	287.0	8.3	290.2	6.7	291.8
150	"		11.5	287.0	6.7	291.8	6.2	292.3
175	"		11.6	286.9	5.9	292.6	7.3	291.2
200	"		11.5	287.0	6.0	292.5	7.0	291.5
225	"		11.7	286.8	6.2	292.3	7.4	291.1
250	"		11.9	286.6	6.1	292.4	7.8	290.7
275	"		12.0	286.5	6.1	292.4	8.2	290.3
300	"		11.9	286.6	6.1	292.4	8.1	290.4

## Alabama St

38

	298.45		290.43	West	CTR	East	
T.P 6.25	296.68	8.02					
325' So of Howard				11.0	285.7	4.3	292.4 6.1 290.6
350 "				11.1	285.6	4.4	292.3 6.1 290.6
375 "				11.0	285.7	4.4	292.3 6.2 290.5
400 "				11.2	285.5	4.3	292.4 5.7 291.0
425 "				10.9	285.8	4.5	292.2 5.5 291.2
450 "				10.9	285.8	4.5	292.2 4.1 292.6
475 "				10.9	285.8	4.4	292.3 3.9 292.8
500 "				10.0	286.7	4.6	292.1 4.2 292.5
5.25 "				9.1	287.6	4.4	292.3 2.5 294.2
550 "				8.8	287.5	4.1	292.6 2.0 294.7
575 "				8.8	287.9	4.2	292.5 2.3 294.4
600 - No Line Polk				8.8	287.5	4.2	292.5 2.4 294.3
CTR				8.1	288.6	4.2	292.5 1.6 295.0
So. line				7.4	289.3	4.1	292.6 2.1 294.6

Note - R.R embt in ctr of Ala from Howard to Polk from Sta 1 to 4  
 average about 5' fill; from 4 to 5 about 3 to 4' fill - from 5 to " about 1 to 3' fill.



## Alabama St

296.68

39

25' 50 of Polk

36 "

50 "

63 "

75 "

100 "

125 "

150 "

175 "

T.P. 8.25 299.44 5.49

291.19

200 "

225 "

250 "

275 "

300 "

325 "

350 "

West

Chr

East

7.1 289.6 4.1 292.6 2.1 294.6

2.9 293.8

6.9 289.8 4.1 292.6 0.9 295.8

0.0 296.7

6.6 290.1 3.9 292.8 1.2 295.5

6.4 290.3 4.0 292.7 2.4 294.3

6.1 290.6 4.0 292.7 2.1 294.6

5.7 291.0 4.0 292.7 2.2 294.5

5.6 291.1 4.0 292.7 2.0 294.7

8.9 290.6 6.7 292.8 4.8 294.7

9.4 290.1 6.3 293.2 5.3 294.2

9.1 290.4 6.7 292.8 4.4 295.1

8.6 290.9 6.4 293.1 4.1 295.4

8.9 290.6 6.1 293.4 4.0 295.5

8.8 290.7 5.9 293.6 3.6 295.9

9.0 290.5 5.6 293.9 3.6 295.9

# Alabama St

299.44

375" So of Polk.

400' "

425' "

450' "

475' "

500' "

525' "

550' "

575' "

600' No Line Lincoln

T.P 1.12 290.47 10.09

CTR of Lincoln

50' L. 170 "

25' So

50' "

T.P 0.05 278.11 12.41

75' "

West

CTR

East

8.7 290.8 5.3 294.2 4.1 295.4

8.7 290.8 5.9 293.6 3.1 296.4

9.0 290.5 6.4 293.1 4.6 294.9

9.0 290.5 6.5 293.0 4.6 294.9

9.5 290.6 7.1 292.4 5.3 294.2

9.6 289.9 7.7 291.8 4.0 295.5

10.3 289.2 8.3 291.2 6.6 292.9

11.0 288.5 9.4 290.1 7.4 292.1

12.1 287.4 10.5 289.0 9.0 290.5

12.9 286.6 11.6 287.9 10.1 289.4

6.1 284.4 4.4 286.1 3.3 287.2

8.7 281.8 7.8 282.7 6.3 284.2

11.5 279.0 10.3 280.3 8.9 281.6

14.0 276.5 13.7 276.8 11.8 278.7

10.2 267.9 8.4 269.7 3.6 274.5

289.35

278.06



## Alabama St

278.11

85' S of Lincoln

97' "

100 "

105 "

107 "

123 "

125 "

132

150

175' "

T.P.

9.58

285.80

1.89

276.22

200' "

225' "

250' "

275' "

300' "

325' "

350' "

375' "

West

Cts

East

13.9

264.2

14.6

263.5

14.6

363.5

16.0

262.1

11.5

266.6

5.5

272.6

8.4

277.4

6.7

278.1

6.4

279.4

6.6

279.2

7.2

278.6

8.3

277.5

9.3

276.5

11.0

274.8

13.8

264.3

16.6

261.5

14.1

264.0

9.2

268.9

4.1

274.0

6.6

278.2

6.2

280.6

4.2

281.6

4.4

281.4

4.7

281.1

5.5

280.3

6.2

279.6

7.5

278.3

9.9

268.2

12.9

265.2

14.3

263.8

13.1

265.0

14.2

263.9

12.4

265.7

2.9

275.2

4.2

281.6

2.8

283.0

2.7

283.1

2.9

282.9

2.8

283.0

3.4

282.4

4.2

281.6

4.8

281.0

## Alabama St

42

d  
285.80

				West	CTR	East			
400 So Lincoln				14.1	271.7	8.5	277.3	5.9	279.5
T.P.	0.65	279.49	6.96						
425 "				9.1	270.4	3.4	276.1	6.0	273.5
450 "				10.3	269.2	4.2	275.3	1.5	278.0
475 "				11.1	268.4	5.3	274.2	2.6	276.9
500 "				12.1	267.4	6.3	273.2	3.5	276.0
525 "				12.8	266.7	7.1	272.4	5.1	274.4
550 "				12.9	266.0	8.3	271.2	6.6	272.9
575 "				13.7	265.8	9.3	270.2	8.2	271.3
600 Noline Univ. Ave.				16.1	263.4	10.9	268.5	9.2	270.3

9.24

270.25 = B.M. H46 N.E. Ala. Univ.



60 Mississippi  
20 Davis  
65 Brooks  
15 Haslam

St

3.02 330.51

327.49

So. line El. C.

25' 50 "

50 "

75 "

80 "

88 "

100 "

114 "

125 "

150 "

175 "

200 "

217 "

225 "

250 "

275 "

300 "

El Cajon to Univ Ave

43

West

ctr

East

11.0 319.5 8.4 322.1 6.4 324.1

10.9 319.6 8.8 321.7 7.0 323.5

9.5 321.0 9.3 321.2 6.9 323.6

11.2 319.3 9.8 320.7 7.2 322.3

11.9 318.6

11.2 319.3

11.5 319.0 9.4 321.1 7.2 323.3

10.7 319.8

11.4 319.1 10.1 320.4 6.8 323.7

12.3 318.2 9.6 320.9 6.9 323.6

13.1 317.4 9.9 320.6 7.2 323.3

12.4 318.1 10.0 320.5 7.7 322.8

217 = 13.6 316.9

12.6 317.9 10.6 319.9 8.6 321.9

13.0 317.0 11.6 318.9 9.3 321.2

14.5 316.0 12.4 318.1 9.9 320.6

14.6 315.9 13.0 317.5 11.9 318.6

Mississippi

57

330.51

322' So of E.H.C.

337' No line Howard

128 321.89 9.90

3 20.61

Ctr of Howard.

S. Line "

19' S<sub>0</sub>25' S<sub>1</sub>

38' "

50' "

75' "

81' "

100' "

125' "

150' "

175' "

200' "

225' "

250' "

275' "

44

West

Ctr

East

14.2 316.2

16.3 315.2 12.0 318.5 9.9 320.6

B. M. Plg N.E. Cor Howard &amp; Miss.

6.0 315.9 5.0 316.9 3.0 318.9

6.2 315.7 5.0 316.9 4.2 317.7

9.1 313.9 6.8 315.7 5.0 316.9

5.4: 19' S<sub>0</sub>

8.5 313.4 6.2 315.7 5.0 316.9

7.5 314.4

8.4 313.5 6.8 315.1 5.2 316.7

8.1 313.8 8.3 313.6 5.8 316.1

10.2 311.7 8.4 313.5 6.1 315.8

8.1 312.8 7.4 314.5 5.8 316.1

9.7 312.2 7.3 314.6 7.6 314.3

10.3 311.6 8.8 313.1 7.7 314.2

9.3 312.6 9.7 312.2 7.2 314.7

10.5 311.4 9.3 312.6 7.9 314.0

10.6 311.5 8.5 313.4 8.1 313.8



Mississippi St

321.89

300' So of Howard.				
325 "				
350 "				
375 "				
400 "				
425 "				
T.P.	5.31	315.05	12.15	309.74
	3.49	315.16	3.38	311.67
450 "				
475 "				
500 "				
525 "				
528 "				
550 "				
575 "				
No line Polk				
Ctr "				
So. line "				

West		Ctr		East	
11.3	310.6	8.4	312.5	7.8	314.1
11.1	310.8	9.9	312.0	9.0	312.9
11.8	310.1	10.4	311.5	7.7	314.2
11.3	310.6	10.3	311.6	8.8	313.1
11.4	310.5	9.6	312.3	8.7	313.2
12.2	309.7	10.7	311.2	9.4	312.5
- B.M. P19 NE Polk & Miss.					
5.6	309.6	4.3	310.9	1.5	313.7
4.0	311.2	4.2	311.0	2.9	312.3
5.3	309.9	4.4	310.8	1.6	313.6
4.1	311.1	4.0	311.2	3.3	311.9
3.6	311.6				
5.5	309.7	4.5	310.7	3.7	311.5
6.5	308.7	3.2	312.0	4.2	311.0
6.2	309.0	5.5	309.7	3.5	311.7
7.1	308.1	5.5	309.7	4.4	310.8
7.4	307.8	5.1	310.1	4.4	310.8

Mississippi St

315.16

25'50 of Polk.

50 "

75 "

100 "

150 "

200 "

250 "

300 "

T.P. 1.54 304.00 12.70

350 "

400 "

450 "

500 "

550 "

T.P. 1.50 292.79 12.71

575 "

No. line Lincoln

5.47

302.46

291.29

West

CTR

East

7.0 308.2 6.2 309.0 5.5 309.7

7.0 308.2 6.2 309.0 5.8 309.4

7.4 307.8 6.4 308.8 6.2 309.0

7.6 307.6 6.9 308.3 6.4 308.8

8.8 306.4 8.4 306.8 8.0 307.2

10.2 305.0 9.9 305.3 9.2 306.0

11.4 303.8 11.6 303.6 11.7 303.5

13.2 302.0 13.8 301.4 14.5 300.7

4.5 299.5 5.7 298.0 5.2 298.8

6.6 297.4 7.4 296.6 6.9 297.1

9.1 294.9 9.9 294.1 8.7 295.3

11.8 292.2 11.8 292.2 10.6 293.4

14.3 289.7 13.7 291.3 13.4 290.6

4.1 288.7 4.3 288.5 3.6 289.2

5.5 287.3 6.6 286.2 5.5 287.3

5.47 287.32 = 5.47 NW Lincoln & MISS



MISSISSIPPI St

14' S. of No 1176	292.79		
26' " " " "			
CTR Lincoln			
T.P. 1.74	282.60	11.93	280.56
CTR Lincoln			
15' 50 of CTR			
18' " " "			
20' " " "			
30' " " "			
S. of 1176 Lincoln			
14' 50			
16 "			
24 "			
T.P. 9.32	291.58	0.34	282.24
25 "			
33 "			
50 "			
75 "			
100 "			
125 "			
150			
T.P. 3.01	294.37	0.32	291.22

West	CTR	East
9.5	283.3	8.6 284.2
1.2	<del>291.8</del> 281.4	9.3 <del>283.5</del> 273.0
6.2	<del>286.6</del> 276.4	9.6 <del>283.2</del> 273.0
8.5	<del>284.8</del> 273.0	
10.5	<del>272.1</del>	
11.2	271.4	
18.2	273.4	9.4 286.2
13.4	278.2	6.7 284.9
11.7	279.9	4.8 286.8
8.4	283.2	4.0 287.6
6.3	285.3	2.9 288.7
5.6	286.0	1.6 290.0
4.7	286.9	4.7 286.9
		2.7 288.9
		2.0 289.6
		1.5 290.1
		0.4 291.2

## Mississippi St

48

29427

150 So Lincoln

200 " "

225 "

250 "

300 "

350 "

400 "

450 "

500 "

525 "

550 "

T.P 0.38 285.39 9.26

575 "

No 1170 Univ Ave

West

CTR

East

2.6 291.7

6.5 287.8 4.6 289.7 2.5 291.8

6.6 287.7

5.5 288.8 4.0 290.3 3.2 291.1

6.4 287.9 5.1 289.2 4.0 290.2

7.0 287.3 5.5 288.8 4.6 289.7

7.8 286.5 6.3 288.0 5.4 288.9

8.7 285.6 7.3 287.0 6.5 287.8

10.5 283.8 9.4 284.9 7.6 286.7

11.3 283.0 13.3 281.0 8.2 286.1

14.2 280.1 12.8 281.5 8.8 285.5

285.11 B.M N.E Plg Miss &amp; Univ Ave.

11.2 274.2 3.7 281.7 0.3 285.1

6.9 278.5 3.8 281.6 0.4 285.0



Louisiana

St

El Cajon to UNIV

4/23 } Davis  
85 } Brooks 49  
Hansen

West

CTR

East

Distance	West	CTR	East
11.44 337.89	326.45		
So. line El Cajon			
25' 50 "	3.2 334.7	7.5 330.4	11.1 326.5
50 "	3.1 334.8	6.9 331.0	10.9 327.0
62 "	2.2 335.7	5.1 332.8	9.9 328.0
65 "			8.7-12.5 329.2
75 "	2.9 335.0		
100 "	2.2 335.7	4.7 333.2	9.3 328.6
125 "	1.9 336.9	3.3 334.6	8.7 328.2
150 "	1.0 336.9	3.6 334.3	8.3 328.6
163 "	2.0 335.9	3.2 334.7	7.7 330.2
175 "	0.9 337.0		
200 "	2.0 335.9	2.8 335.1	7.3 330.6
225 "	2.6 335.3	2.6 335.3	6.6 331.3
250 "	2.9 335.0	3.1 334.8	6.4 331.5
275 "	3.2 334.7	3.1 334.8	5.6 332.3
300 "	3.3 334.6	2.6 335.3	5.8 332.1
	3.2 334.7	3.6 334.3	5.1 332.8

## Louisiana St.

50

338' So. No. 1170 Howard.

T.P. 2.495 335.435 4.95

CTR Howard.

Sr. line "

25' So. "

50 "

75 "

100 "

150 "

200 "

250 "

T.P. 0.50 323.32 12.615

250 "

300 "

350 "

400 "

T.P. 1.77 312.56 12.53

West

Ctr

East

4.5 333.4 3.6 334.3 5.0 332.9

332.94 = B.M. P19 NE Cor Louisiana St Howard.

2.3 333.1 1.8 332.6 2.5 332.9

4.1 331.3 2.6 332.8 3.3 332.1

4.2 331.2 2.9 332.5 3.7 331.7

5.1 330.3 3.6 331.8 4.7 330.7

4.6 331.8 4.4 331.0 5.3 330.1

5.3 333.1 4.2 331.2 6.3 329.1

6.8 328.6 6.4 329.0 8.9 326.5

8.2 327.2 9.0 326.4 12.8 322.6

11.1 324.3 12.7 322.7

322.82

5.3 518.0

2.4 320.9 4.7 318.6 9.3 314.0

4.8 318.5 9.8 313.5 13.6 309.7

7.7 315.6 12.6 310.7

310.79



Louisiana

St

312.56

400' So of Howard

450 "

475 "

488 "

500 "

550 "

555 "

575 "

600 " - No line P.I.K.

12.22

Ctr

"

3.62 303.96

So. line P.I.K.

15' 50 "

25 "

40 "

50 "

63 "

West

Ctr

East

1.1

311.5

4.6

308.0

5.3

307.5

9.8

302.8

12.0 - CTR 300.6

12.4 - 488 300.2

3.7

308.9

7.7

304.9

11.7

300.9

6.2

306.4

12.0

300.6

11.9

300.7

13.7

298.9

6.7

305.9

14.0

298.6

12.1

300.5

8.3

304.3

14.6

298.0

12.2

300.4

B.M. P.I. N.E. Cor Louisiana &amp; P.I.K.

9.6

303.0

14.2

298.4

12.4

300.2

300.34

300.34

2.5

301.5

7.9

296.1

2.9

301.1

9.0

295.0

4.4

299.6

8.4

295.6

3.2

300.8

6.2

297.8

8.2

295.8

5.2

298.8

3.1

300.9

10.7

293.3

51

313.96

75'50 Polk

100 "

125 "

157 "

200 "

250 "

300 "

336 "

350 "

T.P. 5.31 306.36 2.95

400 "

450 "

500 "

550 "

600 No line Lincoln

4.01

29'50 " " "

36' " " "

West

CTR

East

9.3 294.7 5.0 299.0 2.9 301.1

10.0 294.0 5.4 298.6 2.6 301.4

11.4 292.6

11.3 292.7 5.9 298.1 2.1 301.9

9.6 294.4 5.6 298.4 2.2 301.8

7.3 296.7 6.1 297.9 2.7 301.3

7.5 296.5 6.1 297.9 3.9 300.1

9.1 294.9

8.7 295.3 6.1 297.9 3.4 300.6

301.01

10.5 295.9 7.9 298.5 5.1 301.3

9.8 296.6 7.6 298.8 5.2 301.2

9.0 297.4 7.2 296.2 4.8 301.6

8.9 297.5 6.8 296.6 4.1 302.3

8.6 297.8 6.7 296.7 4.0 302.4

302.35 - B.M. PINE Cor Lincoln &amp; La.

7.5 298.9 6.3 300.1 3.7 302.7

3.2 303.2 2.5 303.9 1.2 305.2



52

Louis 1979

St

306.36

Ctr Lincoln

4' 50 of CTR

12' " " "

50' 1108 Lincoln

50' 50 "

T.P. 3.54 306.34 3.56

100' "

150' "

200' "

250' "

300' "

350' "

400' "

450' "

500' "

550'

600' - No line Univ

577  
577

302.80

West

CTR

East

3.2	303.2	2.2	304.2	1.1	305.3
3.2	308.2	2.3	304.1	1.1	305.3
7.6	298.8	5.5	300.9	3.3	303.1
7.0	299.4	5.3	301.1	3.3	303.1
6.3	300.1	4.9	301.5	2.9	303.5
6.6	299.8	5.1	301.3	3.4	303.0
7.0	299.8	5.6	300.8	4.1	302.5
7.0	299.4	5.8	300.6	3.8	302.6
7.9	298.5	5.9	300.5	3.7	302.7
7.8	298.6	5.5	300.9	3.6	302.8
7.7	298.7	5.8	300.6	3.6	302.8
8.3	298.1	6.3	300.1	4.3	302.1
8.7	297.7	6.8	299.6	4.4	302.0
8.8	297.6	7.2	299.2	4.7	301.7
9.6	296.8	9.0	298.8	5.4	301.0
9.5	296.9	7.9	298.5	5.8	300.6

53

Texas St - El Cajon to University

$\frac{6}{26}$  } Dams  
 $\frac{05}{05}$  } Basins  
 Waalam

54

				West	Ctr	East			
1.54	326.51		324.97						
St. 1178	El Cajon			4.6	321.9	3.3	323.2	2.8	323.7
15' 50"				3.6	322.9				
50' 50"				5.5	321.0	4.1	322.4	3.6	322.9
100' "				5.6	320.9	5.0	321.5	4.3	322.2
150' "				7.8	318.7	5.9	320.6	5.3	321.2
180' "				7.0	319.5				
200' "				7.8	318.7	6.7	319.8	5.7	320.8
250' "				8.1	318.4	7.5	319.0	6.6	319.9
300' "				9.2	317.2	8.2	318.3	7.0	319.5
338' "	No. line Howard			10.2	316.3	8.5	318.0	7.3	319.2
		10.22	316.29	- BM. P19 N.W. Texas & Howard.					
ctr of	"			11.4	315.1	9.1	317.4	7.2	319.3
50' 1170"	"			9.9	316.6	9.4	317.1	7.5	319.0
17' 50"	"			11.5	315.0				
50' "				11.4	315.1	9.1	317.4	7.1	319.4
T.P.	6.64	323.28	8.87			5.7			
100' "				7.3	316.0	5.7	317.6	3.4	319.9
150' "				6.0	317.3	5.3	318.0	2.4	320.9
200' "				7.7	315.6	4.7	318.6	1.8	321.5



TEXAS

54

323.28

250' So of Howard.

300 "

350 "

400 "

440 "

T.P. 7.18 329.27 1.19

450 "

500 "

550 "

600 No line Polk

P

Ctr of "

50 line "

50 So

100 "

150 "

200 "

5.72

323.53 = B.M. Plg N.W. TEXAS &amp; Polk.

55

W

CTR

E

6.5 316.8 4.6 318.7 1.7 221.6

6.3 317.0 4.6 318.7 2.3 321.0

6.8 316.5 4.1 319.2 2.0 326.3

4.0 318.3 2.9 320.4 0.2 323.1

4.9 318.4

9.8 319.5 7.7 321.6 5.0 324.3

8.8 320.5 5.9 323.4 4.3 325.0

6.5 322.8 4.7 324.6 3.5 325.8

5.7 323.6 4.4 324.9 3.8 325.5

5.9 323.4 4.4 324.9 3.7 325.6

6.7 322.6 4.6 324.7 3.9 325.4

6.3 323.0 4.6 324.7 3.6 325.7

7.3 322.0 4.8 324.5 3.6 325.7

8.3 321.0 5.5 323.8 3.3 326.0

8.6 320.7 5.8 323.5 3.5 325.8

66 TEXAS

St

329.27

250' So of Polk

T.P. 2.13 325.29 6.11

323.16

300 "

350 "

400 "

450 "

500 "

550 "

No. 1170 Lincoln

30' So of No 1170

35 "

Ctr of Lincoln

6' So of Ctr "

8 "

10 " " "

12 "

So. 1170 Lin coln

4.51 320.88 8.92

314.37

W

Chr

E.

56

8.3 321.0 5.8 323.5 4.4 324.9

4.3 321.0 2.4 322.9 1.0 324.3

4.8 320.8 3.2 322.1 1.5 323.8

6.4 318.9 4.3 321.0 2.9 322.4

5.9 319.4 5.4 219.9 4.3 321.0

7.1 318.2 5.8 319.5 5.5 319.8

7.5 317.8 6.4 318.5 6.3 319.0

7.8 317.5 7.6 317.7 4.7 318.6

8.7 316.6 6.5 318.8

13.0 312.3 7.9 317.4 10.2 315.1

8.2 317.1 9.6 315.7

12.4 312.9 6.6 318.7

8.2 317.1

8.9 316.4 8.3 317.0 7.4 317.9

B.M. Pig S.W. Cor Texas & Lincoln.



## Texas St

320.88

50' So of Lincoln.

100 "

150 "

200 "

250 "

300 "

350 "

400 "

450 "

500 "

550 "

600 " No line Univ

5.09

315.71 P.M.

315.79 VBM NE Tex &amp; Univ

57

W		CTR		E.	
5.3	315.6	4.1	316.8	3.4	317.5
5.4	315.5	4.5	316.4	4.1	316.8
5.9	315.0	4.6	316.3	4.2	316.7
6.1	314.8	4.9	316.0	4.0	316.9
5.8	315.1	4.7	316.2	4.7	316.2
5.1	315.8	4.2	316.7	3.9	317.0
5.1	315.8	3.8	317.1	3.5	317.4
4.8	316.1	3.8	317.1	3.9	317.0
5.0	315.9	4.0	316.9	4.5	316.4
5.3	315.6	4.4	316.5	4.7	316.2
5.7	315.2	4.7	316.2	5.1	315.8
6.1	314.8	5.1	315.8	5.1	315.8

6 Dams  
26 Brooks  
15 Haslam  
ARIZONA ST

1.16 341.10

So. line El Cayan

24 S.

50 50 "

+80

100 "

150 "

200 "

250 "

300 "

338 " N. line Howard.

1.56 324.53 8.16

CTR of Howard.

So. line "

50 S. "

100 "

150 "

200 "

250 "

300 "

339.97

West

CTR

East

8.5	332.6	6.2	334.9	3.2	337.9
			20' 4.2		336.9
8.9	332.2	6.3	334.8	3.2	337.9
			80' 3.5		337.6
9.4	331.7	7.4	333.7	4.8	336.3
10.1	301.0	8.2	332.9	4.8	336.3
10.5	330.6	8.7	332.4	6.0	335.1
11.3	329.8	9.6	331.5	6.6	334.5
11.9	329.2	10.2	330.9	8.3	332.8
11.6	329.5	10.6	330.5	8.2	332.9

332.97

B.M. Stake NE Arizona & Howard

5.4	329.1	3.9	330.6	2.1	332.4
6.0	328.5	4.3	330.2	2.7	331.8
5.7	328.8	4.5	330.0	3.4	331.1
5.6	328.9	4.6	329.9	3.5	331.0
5.4	329.1	4.6	329.9	4.0	330.5
5.5	329.0	4.8	329.7	3.7	330.8
5.2	329.3	4.6	329.9	4.2	330.3
5.2	329.3	4.6	329.9	4.1	330.4

341

EL Cayan to University

58



Arizona St

334.53

350 S Howard

400 "

450 "

500 "

550 "

No line Park

2.73

333.37

3.89

Chr Line Park

50 " "

5' 50 "

50 "

100 "

150 "

180 "

200 "

250 "

300 "

350 "

59

W		Chr		E	
5.6	328.9	4.7	329.8	3.8	330.7
5.9	328.6	5.2	328.3	4.7	329.8
6.1	328.4	5.5	329.0	5.1	329.4
5.6	328.9	5.5	329.0	4.9	329.6
5.9	328.6	5.3	329.2	4.6	329.9
5.8	328.7	5.5	329.0	3.9	330.6
B.M. STARK NE. Cor Park & Arizona					
4.9	328.5	4.3	329.1	4.2	329.2
5.2	328.2	5.0	328.4	3.5	329.9
				105 = 2.6	330.8
4.5	328.9	5.1	328.3	5.1	328.3
5.9	327.5	5.3	328.1	5.5	327.9
5.0	328.4	6.2	327.2	5.2	328.2
6.8	326.6				
6.5	326.9	4.7	326.7	6.7	326.7
6.6	326.8	7.2	326.2	7.0	326.4
7.1	326.3	6.5	326.9	7.1	326.3
8.3	325.1	8.6	324.8	8.0	325.4

330.67

ARIZONA ST

60

	333.27			W.		CTR		E	
	283	327.05	9.15						324.22
400' So Paik				2.8	324.3	3.1	324.0	3.0	324.1
450 "				4.3	322.8	4.2	322.9	3.8	323.3
500 "				5.4	321.7	5.6	321.5	5.3	321.8
550 "				7.0	320.1	7.0	320.1	6.5	320.6
No. line Lincoln				8.1	319.0	8.2	218.9	8.1	319.1
		8.1.0			218.95	B.M. PAIK NW Cor ARIZONA & Lincoln			
28' So of No line				8.1	319.0	8.1	319.0	7.9	319.2
36' " " "				6.0	321.1	5.1	322.0	4.5	322.6
CTR Line Lincoln				6.0	321.1	5.1	322.0	4.4	322.7
5' So of CTR "				6.1	321.0	5.1	322.0	4.8	322.3
10' " "				8.5	318.6	8.6	318.5	7.8	319.8
Soil line Lincoln				9.3	317.8	8.9	318.2	8.4	318.7
50' So				11.0	316.1	10.2	316.9	9.8	317.3
T.P.	1.94	317.95	11.04						316.01
100' So				2.8	315.2	2.2	315.8	1.7	316.3
150 "				3.8	314.2	3.4	314.6	3.3	314.7



Arizona St

317.95

200' So Lincoln

250 "

300 "

350 "

400 "

2.01

307.99

11.97

305.98

450 "

500 "

550 "

No line Univ.

61

W

CTR

E

4.7 313.3 5.1 312.9 4.3 312.7

6.3 311.7 6.6 311.4 5.8 312.2

8.1 309.0 8.4 309.6 7.8 310.2

10.5 307.5 9.9 308.1 9.2 308.4

12.4 305.6 11.5 306.5 10.6 307.4

4.2 303.8 3.0 305.0 2.2 305.8

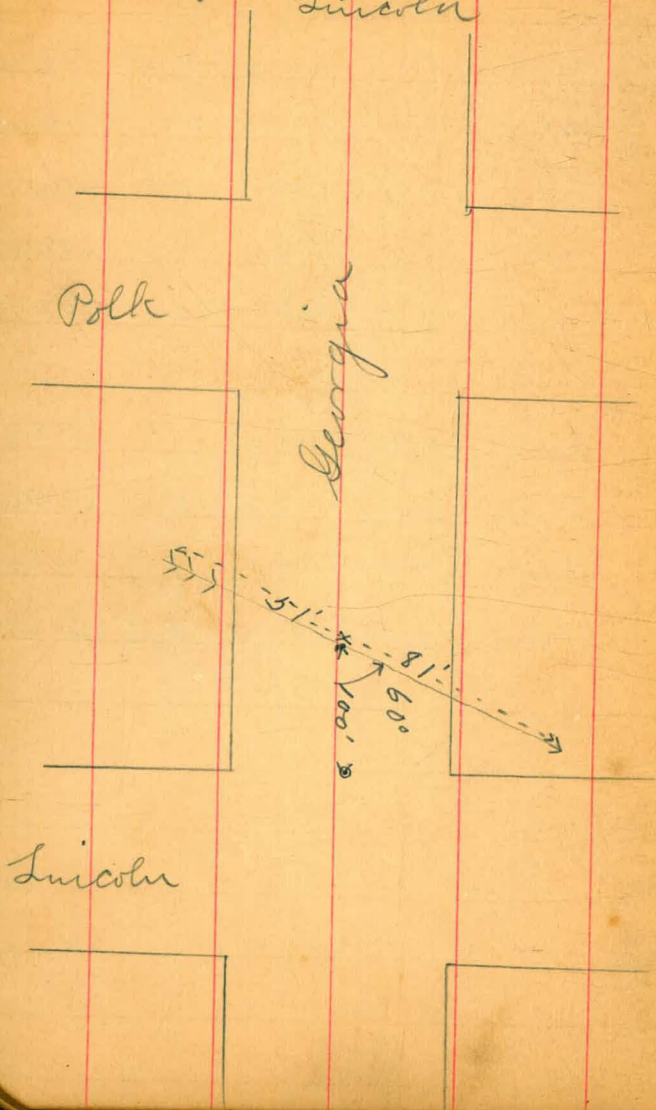
5.5 302.5 4.3 303.7 3.5 304.5

7.0 308.0 5.4 302.4 4.6 303.4

8.0 300.0 6.5 301.5 5.5 302.5

Sept. 25, 1905

100 Georgia St. bet Polk &  
Lincoln



Childs  
Brooks 62  
Hawkins



50

63

63

64



60

65

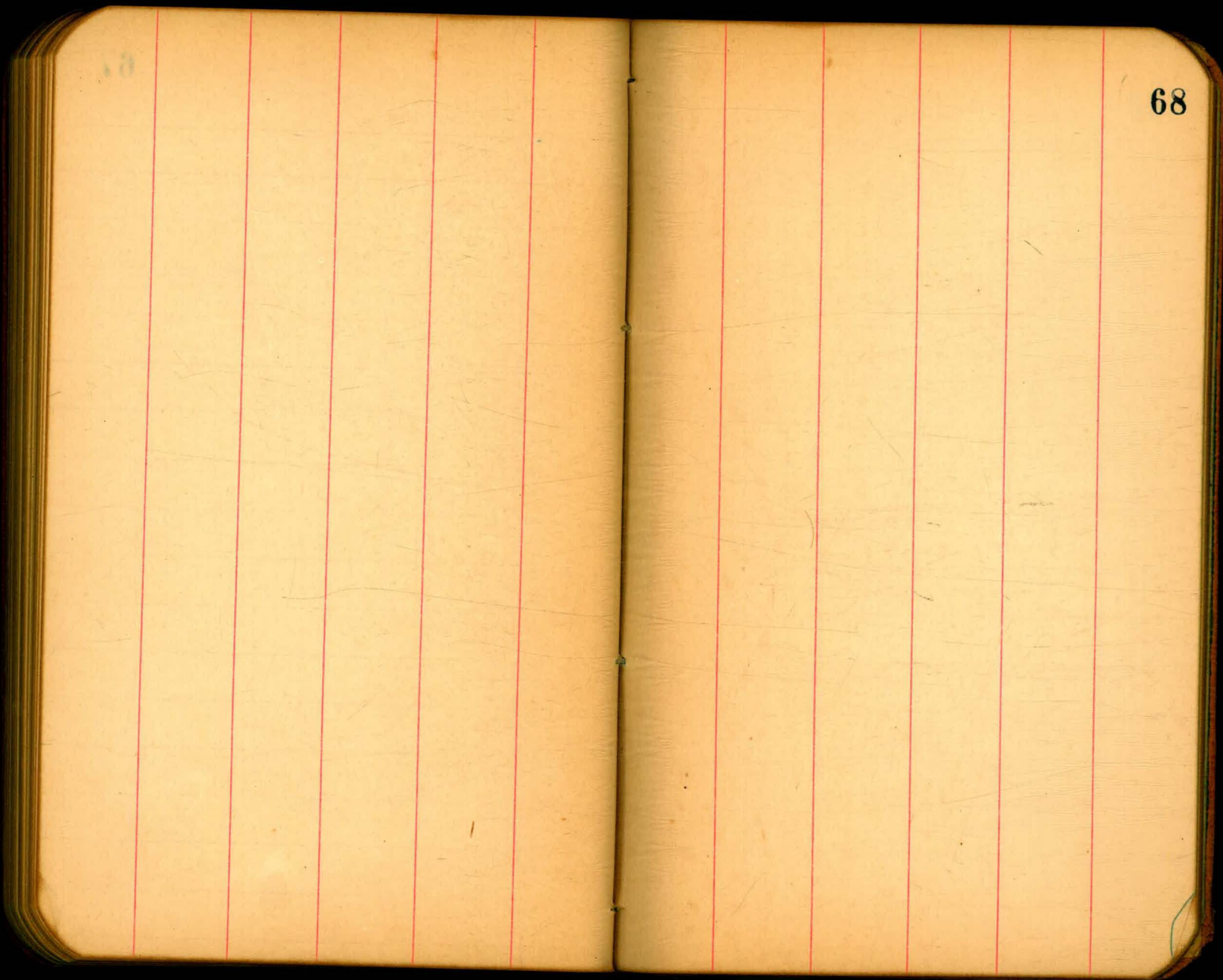
60

66



66

67



68



68

69

69

70



67

71

71

72



57

73

67

74



47

75

63

76



$\frac{264.94}{11.25} = 23.54$   
 $\frac{271.8}{26} = 10.45$   
 $\frac{276.11}{1.1} = 251.0$   
 $\frac{277.6}{81} = 3.42$   
 $\frac{279.3}{4.5} = 62.07$   
 $\frac{272.48}{4.2} = 64.88$   
 $\frac{268.3}{10.5} = 25.55$   
 $\frac{262.0}{262.0} = 1.0$

Howard  
 Polk  
 Lincoln  
 Union

264.94  
 271.8  
 276.11  
 277.6  
 279.3  
 272.48  
 268.3  
 262.0

11.25  
 26  
 1.1  
 81  
 4.5  
 4.2  
 10.5  
 262.0

271.8 = 300  
 1.1  
 277.6 = 400  
 279.3 = 400  
 272.48 = 400  
 268.3 = 400

306.36  
 258.5  
 214.75  
 19.5

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	5.07	99.81	6.10	99.79	6.54	86
4	99.76	6.98	99.73	7.41	99.69	7.55	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	10.59	99.36	11.32	99.31	11.75	83
7	99.25	12.19	99.30	12.62	99.14	13.05	99.00	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	18.23	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	97.73	20.94	97.63	21.37	97.53	22.07	77
13	97.44	22.50	97.34	22.37	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	28.52	73
17	95.63	29.24	95.50	29.65	95.37	30.07	95.24	30.42	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	91.25	40.67	91.18	41.07	91.00	41.47	90.81	41.87	65
25	90.33	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	50.88	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							

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