

1110

DIETZGEN
 TRADE MARK

ENGINEERS'
FIELD BOOK
No. 404

EUGENE DIETZGEN CO.

DRAWING MATERIALS, MATHEMATICAL and
SURVEYING INSTRUMENTS

Chicago New York San Francisco New Orleans Pittsburg Toronto

Distances from Center of Roadway for Cross-Sectioning
Roadway 16 feet wide. Side Slopes 1 on 1.
For Single Track Embankment.

MICROFILMED

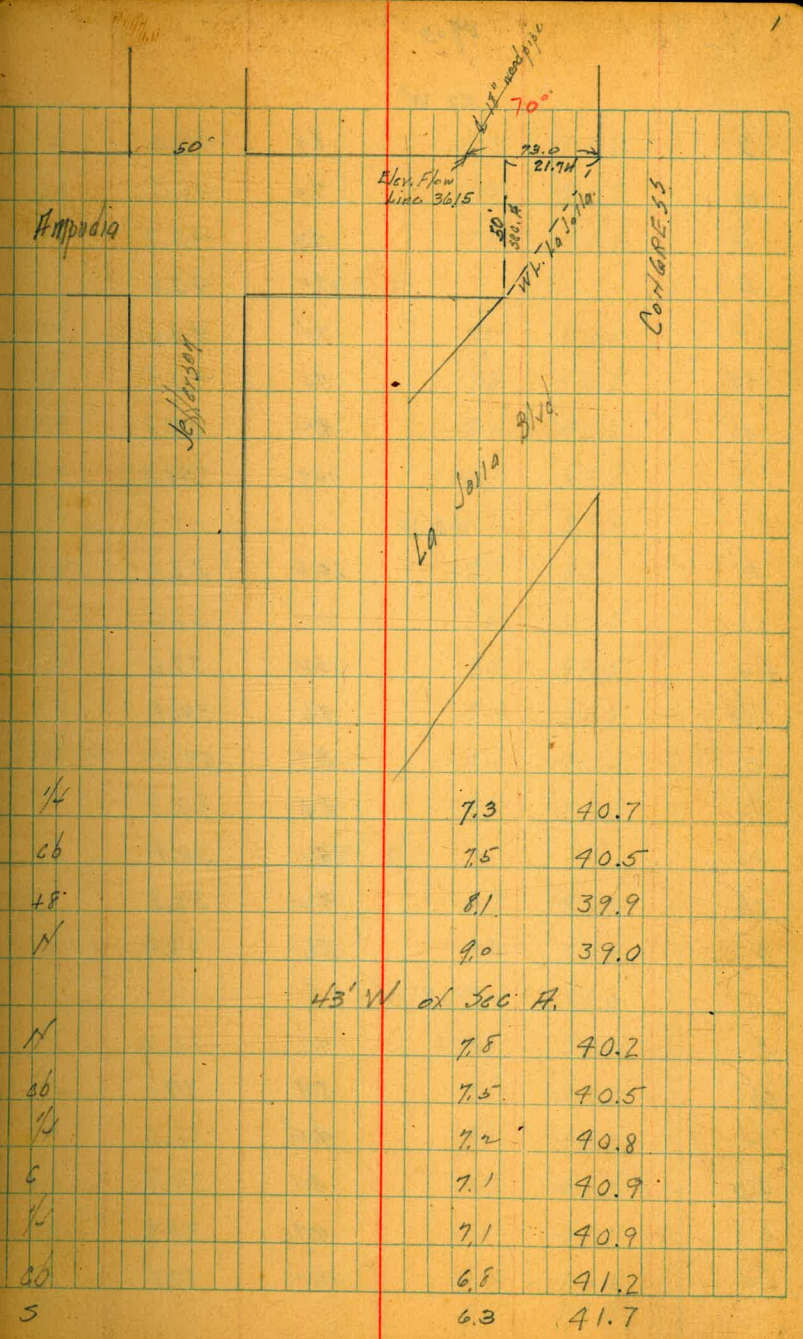
H	.1	.2	.3	.4	.5	.6	.7	.8	.9	H	
0	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	0
1	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	1
2	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	2
3	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	3
4	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	4
5	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	5
6	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	6
7	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	7
8	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	8
9	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	9
10	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	10
11	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	11
12	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	12
13	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	13
14	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	14
15	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	15
16	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	16
17	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	17
18	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	18
19	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	19
20	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	20
21	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	21
22	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	22
23	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	23
24	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	24
25	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	25
26	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	26
27	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	27
28	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	28
29	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	29
30	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	30
31	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	31
32	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	32
33	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	33
34	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	34
35	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	35
36	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	36
37	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	37
38	46.0	46.1	46.2	46.3	46.4	46.5	46.6	46.7	46.8	46.9	38
39	47.0	47.1	47.2	47.3	47.4	47.5	47.6	47.7	47.8	47.9	39
40	48.0	48.1	48.2	48.3	48.4	48.5	48.6	48.7	48.8	48.9	40

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 30.6. For same slopes but other widths of roadbed, correct above figures by one-half difference in width of roadbed; thus in example above, for 20 ft. roadbed distance will be $30.6 + (20 - 16) \div 2$ or 2 ft. added to 30.6 = 32.6. For slopes of 1 on 1 $\frac{1}{2}$ see inside of back cover.

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1/14/24 Gregory
 CROSS SECTION OF 50' wide
 AMPUDIA ST. 10' cbs
 from Congress to Nancock

on BM	4.94	4803	43.09	50' Ampud 10' cbs + Congress
			3.57	44.46 on Mon
		W.L. La Jolla Blvd.		
S		4.4	43.6	
cb		4.4	43.6	
1/4		4.8	43.2	
c		5.2	42.8	
1/4		5.5	42.5	
cb		5.5	42.5	
N		6.2	41.8	
		Sec. A		
N		8.2	39.8	
+4		6.7	41.3	
cb		6.5	41.5	
1/4		6.4	41.6	
c		5.5	42.5	
1/4		4.8	43.2	
cb		4.2	43.8	
S		4.4	43.6	
		25' W of Sec. A		
S		4.4	43.6	
+5		4.7	43.3	
cb		5.6	42.4	
1/4		7.1	40.9	
c		7.5	40.5	



4803

84' W

N	9.5	38.5
cb	7.7	40.3
+3	6.9	41.1
1/4	6.8	41.2
c	6.8	41.2
+5	7.0	41.0
1/4	7.7	40.3
cb	9.4	38.6
+2	7.7	40.3
S	7.0	41.0

100' W

S	7.5	40.5
cb	6.7	41.3
1/4	6.6	41.4
sc	6.5	41.5
1/4	8.0	40.0
cb	10.5	37.5
+6	10.6	37.4
N	9.6	38.4

104' W

N	9.9	38.1
+2	10.6	37.4
cb	10.7	37.3
1/4	10.2	37.8
+4.5	9.7	38.3

AMPUDIA

3

c	6.9	41.1
1/4	6.6	41.4
cb	6.6	41.4
S	7.0	41.0

119' W

S	6.4	41.6
cb	6.4	41.6
+3	6.4	41.6
1/4	9.0	39.9
+3	10.3	37.7
c	10.6	37.4
1/4	10.5	37.5
cb	10.7	37.3
+7	10.9	37.1
N	9.9	38.1

129' W

N	8.1	39.9
+5	7.7	40.3
cb	9.7	38.3
+3	10.8	37.2
1/4	10.8	37.2
c	10.4	37.6
1/4	10.4	37.6
cb	9.7	38.3
+4	7.1	40.9
S	7.3	40.7

48.03

138° W

S	9.6	38.4
cb	10.2	37.8
1/4	10.5	37.5
c	10.8	37.2
+3	10.8	37.2
1/4	9.4	38.6
cb	7.2	40.8
N	7.9	40.1

141° W

N	8.8	39.2
cb	8.0	40.0
1/4	8.0	40.0
c	10.7	37.3
1/4	10.6	37.4
cb	10.1	37.9
S	9.7	38.3

162° W

S	10.0	38.0
+6	10.0	38.0
cb	8.7	39.3
+4	7.5	40.5
1/4	7.5	40.5
c	7.8	40.2
1/4	8.1	39.9
cb	8.5	39.5

AMPUDIA

4

170° W

N	9.2	38.8
N	9.6	38.4
cb	8.7	39.3
1/4	8.5	39.5
c	8.5	39.5
1/4	7.6	40.4
cb	8.6	39.4
S	8.3	39.7

195° W

S	9.1	38.9
cb	9.4	38.6
1/4	9.5	38.5
c	10.0	38.0
1/4	9.9	38.1
cb	10.2	37.8
N	10.9	37.1

214° W

N	13.1	34.9
+3	13.7	34.3
cb	13.2	34.8
1/4	12.6	35.4
c	12.0	36.0
1/4	11.4	36.6
cb	10.8	37.2

4803
S 10.1 37.9

230' W
3 11.8 36.2

cb 12.5 35.5

TP. 205 37.78 12.90 35.13

1/4 2.7 35.1

c 3.2 34.6

1/4 3.7 34.1

cb 4.1 33.7

+6 4.3 33.5

N 3.0 34.8

278.26' W = EL. Jex/Jarson 50' wide 10' chs

N 5.8 32.0

cb 6.0 31.8

1/4 5.5 32.3

c 5.1 32.7

1/4 4.6 33.2

cb 4.0 33.8

S 3.0 34.8

E. Curb

S 3.6 34.2

cb 4.4 33.4

1/4 5.0 32.8

c 5.2 32.6

1/4 5.8 32.0

cb 6.1 31.7

N 6.5 31.3

+5 7.0 30.8

E 1/4

-5 7.4 30.4

N 7.1 30.7

cb 6.6 31.2

1/4 6.2 31.6

c 5.8 32.0

1/4 5.4 32.4

cb 4.3 33.5

S 3.7 34.1

Center

S 4.4 33.4

cb 4.7 33.1

1/4 5.5 32.3

c 6.5 31.3

1/4 6.9 30.9

cb 7.2 30.6

N 7.5 30.3

+10 7.9 29.9

3' W of Center

-10 8.2 29.6

-6 9.7 28.1

N 10.3 27.5

37.78

cb		9.4	28.4
1/4		9.2	28.6
c		8.3	29.5
1/4		6.7	31.1
cb		4.8	33.0
S		5.9	31.9
	W 1/4		
-5		5.1	32.7
S		5.7	32.1
+3		7.1	30.7
cb		7.4	30.4
1/4		7.6	30.2
c		8.5	29.3
1/4		9.5	28.3
cb		9.5	28.3
N		10.5	27.3
+10		11.9	25.9
	3' W. of W 1/4		
-10		11.6	26.2
N		9.1	28.7
+3		7.5	30.3
cb		6.8	31.0
1/4		6.5	31.3
c		5.7	32.1
1/4		4.8	33.0
cb		7.1	30.7

AMPUDIA

6

S		7.3	30.5
+8		5.4	32.4
	W. Curb		
-8		6.9	30.9
-3		6.9	30.9
S		4.8	33.0
cb		4.0	33.8
1/4		3.6	34.2
c		4.0	33.8
1/4		5.1	32.7
cb		6.6	31.2
N		7.6	30.2
+5		8.0	29.8
	3' W. of W. Curb		
-5		8.1	29.7
N		7.7	30.1
cb		6.4	31.4
1/4		4.7	33.1
c		3.5	34.3
1/4		3.3	34.5
cb		3.5	34.3
S		3.5	34.3
	W. L. Jefferson		
S		2.4	35.4
cb		2.4	35.4

37.98

1/4	2.5	35.3
C	3.0	34.8
1/4	3.7	34.1
cb	5.4	32.4
N	7.5	30.3
+5	8.2	29.6

477

47.86

43.09

NE
2m spike
Amputia Camp

TP

0.87

36.55

12.18

25.68

35' W

N	3.2	33.4
cb	2.6	34.0
1/4	2.1	34.5
C	1.7	34.9
1/4	1.4	35.2
cb	1.5	35.1
S	1.4	35.2

65' W

S	2.0	34.6
cb	2.3	34.3
1/4	2.5	34.1
C	2.9	33.7
1/4	3.2	33.4
cb	3.2	33.4
N	3.2	33.4

100' W

36.55

Amputia

7

N	3.9	32.7
cb	3.6	33.0
1/4	3.4	33.2
C	3.1	33.5
1/4	2.7	33.9
cb	2.5	34.1
S	2.2	34.4

150' W

S	2.8	33.8
cb	3.0	33.6
1/4	3.1	33.5
C	3.1	33.5
1/4	3.2	33.4
cb	3.3	33.3
N	3.7	32.9

200' W

N	4.2	32.4
cb	4.5	32.1
1/4	4.5	32.1
C	4.3	32.3
1/4	4.2	32.4
cb	4.0	32.6
S	3.9	32.7

250' W

S	5.4	31.2
cb	5.6	31.0

36.55

1/4	5.8	30.8
c	5.9	30.7
1/4	6.0	30.6
cb	6.1	30.5
N	6.2	30.4

300' W = El of Moore 50' W of 10' etc

N	8.3	28.3
cb	8.0	28.6
1/4	7.8	28.8
c	7.8	28.8
1/4	7.6	29.0
cb	7.6	29.0
S	7.5	29.1

E cb

S	7.7	28.9
cb	7.8	28.8
1/4	7.7	28.9
c	8.2	28.4
1/4	8.6	28.0
cb	8.4	28.2
N	8.7	27.9

E 1/4

N	8.8	27.8
cb	8.8	27.8
1/4	8.7	27.9
c	8.6	28.0

36.55

Ampudia

8

1/4	8.3	28.3
cb	8.2	28.4
S	7.9	28.7
Center		
S	8.2	27.4
cb	8.6	28.0
1/4	8.7	27.9
c	8.7	27.9
1/4	8.7	27.9
cb	8.7	27.9
N	8.8	27.8
W 1/4		
N	8.8	27.8
cb	8.8	27.8
1/4	8.7	27.9
c	8.7	27.9
1/4	8.7	27.9
cb	8.6	28.0
S	8.5	28.1
W cb		
S	8.5	28.1
cb	8.6	28.0
1/4	8.7	27.9
c	8.8	27.8
1/4	8.8	27.8
cb	8.8	27.8

36.55

N	8.8	27.8
	W.L. Moore	
N	8.7	27.9
cb	8.8	27.8
1/4	8.7	27.9
c	8.8	27.8
1/4	8.7	27.9
cb	8.5	28.1
S	8.1	28.5
	50' W	
S	8.5	28.1
cb	8.7	27.9
1/4	8.8	27.8
c	8.7	27.9
1/4	8.8	27.8
cb	8.6	28.0
N	8.5	28.1
	100' W	
N	8.3	28.3
cb	8.1	28.5
1/4	8.3	28.3
c	8.2	28.4
1/2	8.2	28.4
cb	8.3	28.3
S	8.1	28.5
	150' W	

36.55

Amfudia

9

S		7.7	28.9
cb		7.9	28.7
1/4		8.0	28.6
c		8.0	28.6
1/4		8.0	28.6
cb		8.0	28.6
N		8.0	28.6
TP	321	27.60	12.16
			24.39
		200' W	
N		0.4	27.2
cb		0.3	27.3
1/4		0.3	27.3
c		0.4	27.2
1/4		0.4	27.2
cb		0.4	27.2
S		0.5	27.1
		240' W	
S		5.1	22.5
cb		5.0	22.6
1/4		5.0	22.6
c		5.1	22.5
1/4		5.4	22.2
cb		5.6	22.0
N		5.8	21.8
		272' W	
N		10.4	17.2

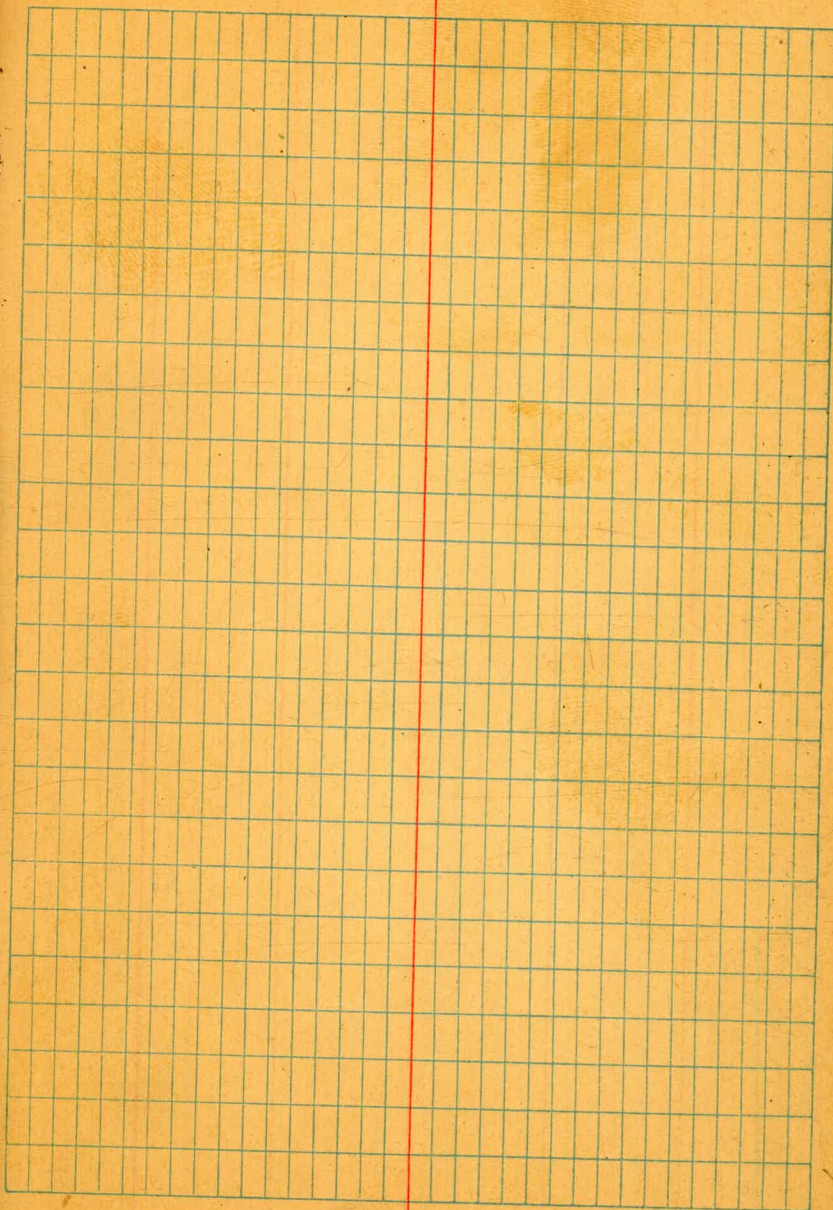
average dirt floor
4' N of NW

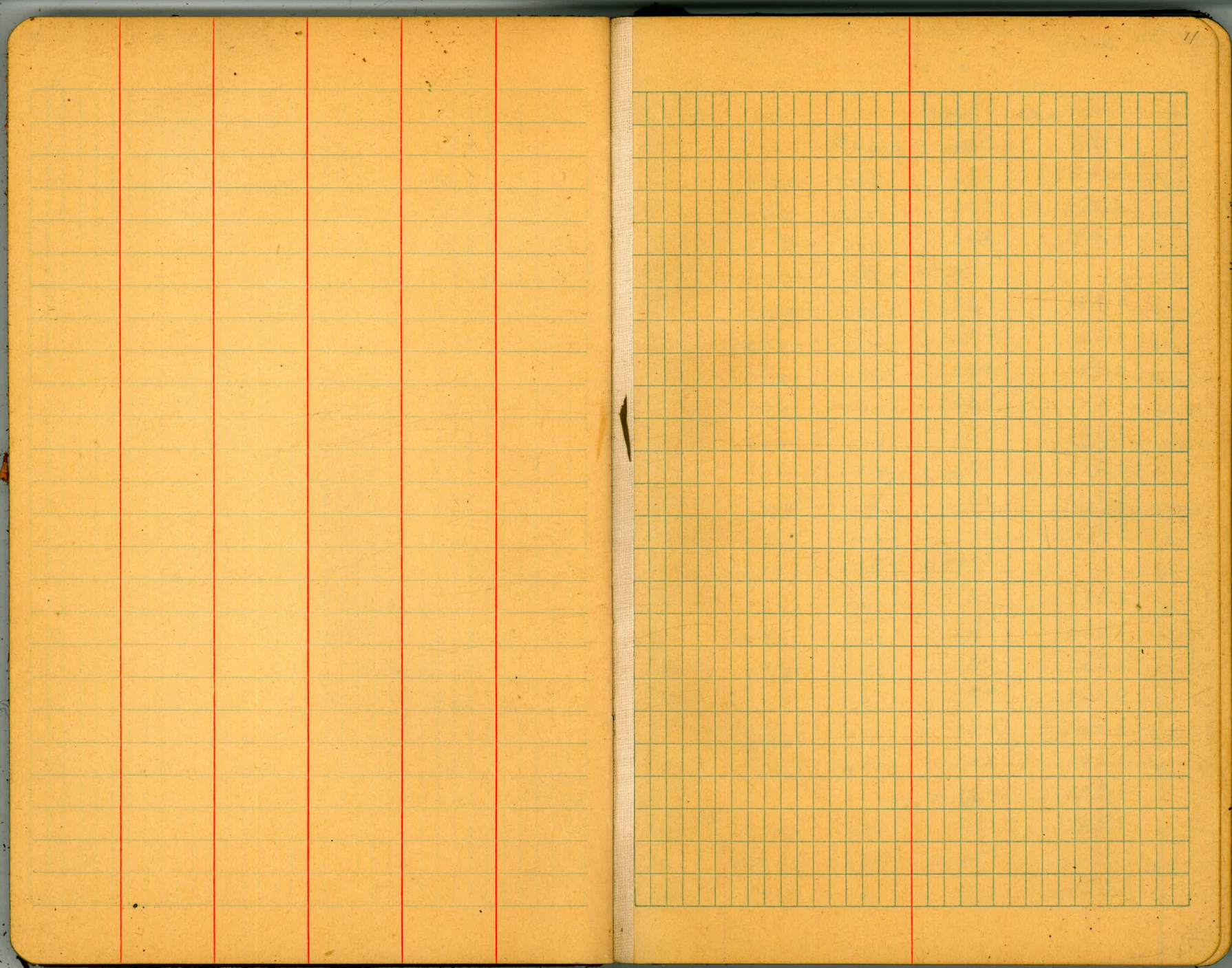
27.60

cb			9.8	17.8	
1/4			9.8	17.8	
c			9.7	17.9	
1/4			9.4	18.2	
cb			9.2	18.4	
S			9.1	18.5	
		298' W on the	North = El Santa Fe Rd.		
		300' W	South = El Handcock		
S			14.0	13.6	
cb			13.4	14.2	
1/4			14.5	13.1	
c			14.8	12.8	
1/4			15.3	12.3	
cb			15.7	11.9	
N			17.0	10.6	
T.P.	0.35	15.24	12.71	14.89	
		65' W of	El Handcock		
S			8.37	6.87	Q of Santa Fe
		50.8 W of Sta 298 on N.			
N			8.62	6.62	✓ ✓ ✓
T.P.	1.44	4.25	12.43	2.81	
			6.70	-2.45	3 in Max Kutz

Ampudia

10





1/15/24 Gregory. CROSS SECTION ON 80' ST
E STREET 14' OBS
from E.L. 28th to 100 E of E.L. 29th

	+	x	(-)	elev	Max NW 29 th E
	0.56	175.87		175.31	
		100' E of 29 th			
N			13.5	162.4	
cb			16.2	159.4	
1/4			18.8	157.1	
c			20.7	155.2	
1/4			22.6	153.3	
cb			24.4	151.5	
+13			27.2	148.7	
s			28.0	147.9	
+10 = house			28.6	147.3	
		90' E of 29 th			
-10 = house			26.3	149.6	
s			25.9	150.0	
+3			24.7	151.2	
cb			22.9	153.0	
1/4			20.5	155.4	
c			18.1	157.8	
1/4			15.6	160.3	
cb			13.4	162.5	
N			11.2	164.7	
		75' E of 29 th			
N			8.8	167.1	
cb			10.5	165.4	
1/4			12.6	163.3	

c	14.4	161.5
1/4	16.9	159.0
cb	19.7	156.2
s	22.7	153.2
+15	26.3	149.6
	55' E of 29 th	
-15	22.7	153.2
s	19.2	156.7
cb	16.3	159.6
1/4	13.8	162.1
c	11.2	164.7
1/4	9.5	166.4
cb	8.0	167.9
N	6.5	169.4
	35' E of 29 th	
N	5.1	170.8
cb	6.9	169.0
1/4	8.3	167.6
c	9.9	166.0
1/4	11.4	164.5
cb	13.3	162.6
s	16.6	159.3
+15	20.0	155.9
	10' E of 29 th	
-15	17.6	158.3

175.87

S	141	161.8
cb	10.7	165.2
1/4	9.6	166.3
C	8.3	167.6
1/4	7.0	168.9
cb	5.6	170.3
N	4.0	171.9

E.L. 29th st

N	3.5	172.4
cb	5.1	170.8
1/4	6.1	169.8
C	7.7	168.2
1/4	9.0	166.9
cb	10.1	165.8
S	13.1	162.8
+10	14.9	161.0

E. Corb.

-10	13.8	162.1
S	11.8	164.1
cb	9.5	166.4
1/4	8.4	167.5
C	7.0	168.9
1/4	5.7	170.2
cb	4.3	171.6
N	3.2	172.7

E 5T 13

E. 1/4

N	2.7	173.2
cb	4.2	171.7
1/4	5.2	170.7
C	6.4	169.5
1/4	7.8	168.1
cb	9.4	166.5
S	11.3	164.6
+10	13.0	162.9

Center 29th

-10	12.0	163.9
S	10.5	165.4
cb	8.8	167.1
1/4	7.2	168.7
C	6.0	169.9
1/4	4.9	171.0
cb	3.6	172.3
N	2.3	173.6

W. 1/4

N	2.1	173.8
cb	3.2	172.7
1/4	4.4	171.5
C	5.6	170.3
1/4	6.6	169.3
cb	8.2	167.7
S	9.6	166.3
+10	10.9	165.0

17587

W cb

-10		10.4	165.5
S		8.9	167.0
cb		7.4	168.5
1/4		6.6	169.3
c		5.1	170.8
1/4		4.0	171.9
cb		2.6	173.3
N		1.4	174.5

N.L. 29th

N		1.0	174.9
cb		2.4	173.5
1/4		3.3	172.6
c		4.5	171.4
1/4		5.8	170.1
cb		6.7	169.2
S		8.4	167.5

25' W

S		6.5	169.4	
cb		4.7	171.2	
1/4		3.1	172.8	
c		1.9	174.0	
1/4		0.8	175.1	
cb		0.0	175.9	
TP	12.05	187.36	0.56	175.31
N		10.3	177.1	

E 57

14

55' W

N		8.8	178.6
cb		9.4	178.0
1/4		10.3	177.1
c		10.9	176.5
1/4		12.0	175.4
cb		13.4	174.0
S		14.6	172.8

90' W

S		14.4	173.0 on path to house
cb		13.3	174.1
1/4		11.7	175.7
c		10.3	177.1
1/4		9.5	177.9
cb		8.7	178.7
N		7.6	179.8

100' W

N		7.3	180.1
cb		8.5	178.9
1/4		9.1	178.3
c		10.3	177.1
1/4		11.8	175.6
cb		13.1	174.3
S		13.9	173.5 on lawn

135' W

S		13.5	173.9
---	--	------	-------

18736

cb		127	174.7	
1/4		12.0	175.4	
c		11.1	176.3	
+G		9.6	177.8	
1/2		9.7	177.7	
cb		8.6	178.8	
N		7.1	180.3	on land
150' W				
N		6.9	180.5	on land
cb		8.0	179.4	
1/2		9.6	177.8	
c		10.0	177.4	
1/4		11.8	175.6	
cb		12.3	175.1	
S		12.9	174.5	on land
160' W				
S		10.7	176.7	✓ ✓
+1.5		11.7	175.7	
cb		11.7	175.7	
1/4		11.1	176.3	
c		9.8	177.6	
1/2		8.4	179.0	
cb		7.1	180.3	
N		6.3	181.1	✓
200' W				
N		3.1	184.3	✓

E 5T

15

cb		3.5	183.6	
1/4		4.5	182.6	
c		5.9	181.5	
+E		7.9	179.5	
1/2		7.9	179.5	
cb		8.5	178.9	
S		9.1	178.3	on land
215' W				
S		7.3	180.1	
cb		6.8	180.6	
1/4		6.5	180.9	
c		4.6	182.8	
1/2		3.7	183.7	
cb		2.8	184.6	
N		1.9	185.5	✓
232' W				
N		1.4	186.0	✓
cb		2.2	185.2	
1/2		2.9	184.5	
c		3.4	184.0	
1/4		5.0	182.4	
cb		5.8	181.6	
S		6.1	181.3	✓
250' W				
S		5.2	182.2	✓

187.36

cb	5.2	182.2
1/4	4.3	183.1
c	3.7	183.7
1/4	3.0	184.4
cb	2.3	185.1
+12	2.1	185.3
N	1.1	186.3

290° W

N	1.7	185.7
cb	2.1	185.3
1/4	2.5	184.9
c	3.0	184.4
1/4	3.2	184.2
cb	3.4	184.0
S	3.3	184.1

320° W

S on walk to house	3.53	183.83
cb	2.1	185.3
1/4	1.8	185.6
c	1.5	185.9
1/4	1.2	186.2
cb	1.2	186.2
N	1.1	186.3

355° W

N	0.6	186.8
cb	0.9	186.5

E ST.

16

1/4	0.9	186.5
c	1.2	186.2
1/4	1.6	185.8
cb	1.8	185.6
S	2.2	185.2
chk BM	2.64	184.72 ^{M.} = .69

390° W

S	3.2	184.2
cb	3.5	183.9
1/4	3.4	184.0
c	3.2	184.2
1/4	3.1	184.3
cb	2.8	184.6
N	2.4	185.0

430° W

N	5.4	182.0
cb	5.7	181.7
1/4	6.7	180.7
c	7.1	180.3
1/4	6.8	180.6
cb	6.9	180.5
S	6.1	181.3

460° W

S	9.8	177.6
cb	10.8	176.6

187.36

1/4			11.3	176.1
c			11.3	176.1
1/4			10.6	176.8
cb			10.4	177.0
N			9.9	178.5
T.P.	0.10	174.76	12.70	174.66
		485' W		
N			0.7	174.1
cb			1.7	173.1
1/4			2.4	172.4
c			3.1	171.7
1/4			2.9	171.9
cb			2.7	172.1
S			1.9	172.9
		505' W		
S			6.3	168.5
cb			6.5	168.3
1/4			6.5	168.3
+8			6.0	168.8
c			6.7	168.1
1/4			5.9	168.9
cb			4.5	170.3
N			2.7	172.1
		530' W		
N			7.2	167.6
cb			9.0	165.8

E ST.

17

1/4			10.2	164.6
+6			11.6	163.2
c			11.9	162.9
1/4			12.7	162.1
cb			12.8	162.0
S			11.8	163.0
T.P.	266	164.62	12.80	161.96
		555' W		
S			6.8	157.8
cb			6.2	158.4
1/4			6.3	158.3
c			6.0	158.6
1/4			5.4	159.2
cb			3.1	161.5
N			0.8	163.8
		560.6' W =		
N			5.2	159.4
cb			5.8	158.8
1/4			6.0	158.6
c			6.3	158.3
1/4			6.5	158.1
cb			6.4	158.2
S			6.9	157.7
chk	prop. grade	SE 28th	6.4	158.22

1/29/24 Moore

Cross Section of
33d St
from N.L. Upas to G.L. Myrtle

65' St
10' cks

SWBP
33d Total

	8.05	322.85	314.80
T.P.	7.81	326.26	318.45
N.L. Upas			
w		7.0	319.3
cb		6.9	19.4
1/4		7.8	18.5
c		8.1	19.2
1/4		8.5	17.8
cb		8.7	17.6
E		8.6	17.7
√ 35' N			
E		8.3	18.0
cb		8.0	18.3
1/4		7.7	18.6
c		7.2	18.9
1/4		7.2	19.1
cb		6.7	19.6
w		6.8	19.5
70' N			
w		6.0	20.2
cb		6.3	20.0
1/4		6.7	19.6
c		6.8	19.5
1/4		7.1	19.2
cb		7.6	18.7

Profile & Sections plotted by CAT 2-5-24

326.26

33d St 18

	8.2	18.1
100' N		
E	7.0	319.3
cb	6.6	19.7
1/4	5.9	20.4
c	5.4	20.9
1/4	5.4	20.9
cb	5.3	21.0
w	5.0	21.3
√ 150' N		
w	3.5	22.8
cb	4.1	22.2
1/4	4.6	21.7
c	4.6	21.7
1/4	5.1	21.2
cb	5.6	20.7
E	5.9	20.4
√ 200' N		
E	5.1	21.2
cb	4.5	21.8
1/4	3.8	22.5
c	3.4	22.9
1/4	3.4	22.9
cb	2.8	23.5
w	2.3	24.0

32626

250' N ✓

w/	1.6	24.7
cb	2.3	24.0
1/2	3.1	23.2
c	3.0	23.3
1/4	3.2	23.1
cb	3.5	22.8
E	3.9	22.6

275' N ✓

E	3.8	22.5
cb	3.3	23.0
1/2	2.9	23.4
c	2.5	23.8
1/2	2.3	24.0
cb	1.4	24.8
w/	0.9	25.4

298' N ✓

w/	1.1	25.2
cb	1.5	25.7
1/4	2.5	23.8
c	2.7	23.6
1/4	3.0	23.3
cb	3.1	23.2
E	3.5	22.8

32626

33 d st 19

300' N = SL Myrtle Graded

E	4.8	321.5
cb	4.5	21.8
1/2	3.8	22.5
c	3.5	22.8
1/2	3.4	22.9
cb	3.6	22.7
w/	3.4	22.9

Set B/M EP NW 23d 4 pas

7.82 • 318.44 ✓

1/29/41 Moore

Cross Section of
33d St. from
N.L. Landis N. to Old City Line

65' wide
10' cbs

#04

342.51 ✓

338.47

NW 25
33d + Landis

N.L. Landis

W	4.6	337.9
cb	4.7	337.8
1/4	5.1	37.4
c	4.7	37.9
1/4	5.2	37.3
cb	5.2	37.3
E	5.2	37.3
↓ 50' N		
E	5.2	37.3
ct	4.9	37.0
1/4	4.6	37.9
c	4.4	38.1
1/2	4.8	37.7
cb	4.3	38.2
W	4.3	38.2
↓ 100' N		
W	3.9	38.6
ct	3.9	38.6
1/4	4.4	38.1
c	4.2	38.3
1/4	4.7	37.8
cb	5.2	37.3
E	5.3	37.2

342.51

33d 20

↓ 130' N

E	5.1	327.4
cb	4.8	37.7
1/4	4.5	38.0
c	3.7	38.8
1/2	4.0	38.5
cb	3.7	38.8
W	3.6	38.9
↓ 200' N		
W	3.2	39.3
cb	3.6	38.9
1/2	4.0	38.5
c	3.5	39.0
1/4	4.0	38.5
ct	4.3	38.2
E	4.6	37.9
↓ 250' N		
E	4.4	38.1
cb	3.9	38.6
1/2	3.8	38.7
c	3.0	39.5
1/4	3.7	38.8
cb	3.3	39.2
W	3.0	39.5
300' N		
W	2.1	40.4

342.51

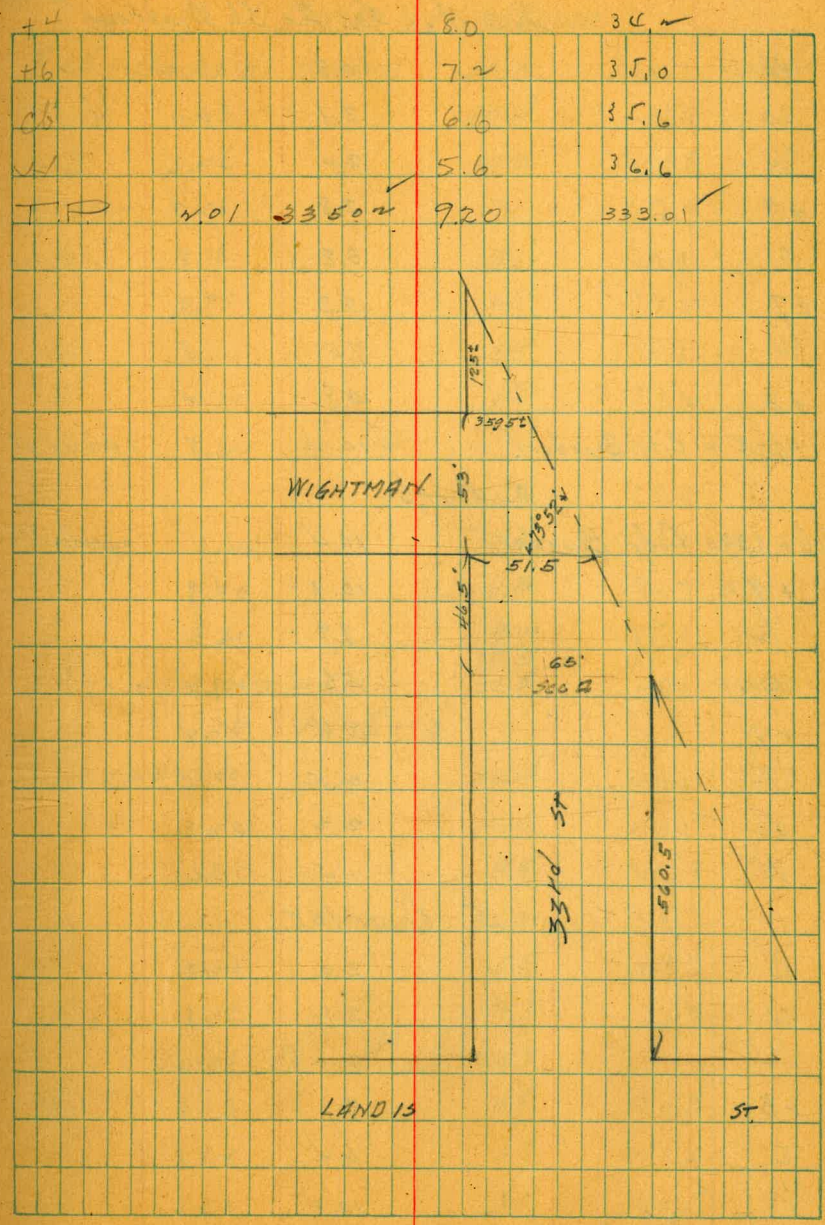
cb		2.3	340.2
+5		2.9	39.6
1/4		3.1	39.2
c		3.1	39.4
1/4		3.7	38.8
cb		4.1	38.4
E		4.3	38.2
	√ 350' N		
E		4.3	38.2
cb		4.0	38.5
1/4		3.5	39.0
+6		3.2	39.3
c		2.6	39.9
1/4		2.9	39.6
+5		3.0	39.5
+7		2.3	40.2
cb		2.2	40.3
w		1.9	40.6
T.P	2.82	342.21	3.12 339.39
		400' N	
w		1.5	40.7
cb		1.9	40.3
+4		2.0	40.2
+6		3.0	39.2
1/4		3.0	39.2
e		2.7	39.5

342.21

332 21

1/4		3.6	38.6
cb		4.1	38.1
E		4.9	37.3
	√ 445' N		
E		5.8	36.4
cb		5.0	37.2
1/4		4.2	38.0
c		3.5	38.7
1/4		3.7	38.5
+4		3.5	38.7
+6		2.8	39.4
cb		2.4	39.8
w		2.0	40.2
	√ 500' N		
w		3.4	38.8
cb		4.0	38.2
+4		4.4	37.8
+6		5.4	36.8
1/4		5.4	36.8
c		5.2	37.0
1/4		6.6	35.6
cb		8.2	34.0
E		8.6	33.6
	525' N		
E		9.5	32.7
cb		8.6	33.6

1/2	7.8	350.4
C	6.7	35.5
1/2	6.2	36.0
+5	6.1	36.1
+7	5.1	37.1
cb	4.9	37.3
W	4.4	37.8
550' N		
W	5.3	31.9
cb	6.2	36.0
+4	6.6	35.6
+6	7.5	34.7
1/4	7.6	34.6
C	8.0	34.2
+2	8.5	32.7
1/2	9.3	32.9
cb	10.6	31.6
+6	11.5	30.7
E	13.0	29.2
Pl. El 33' + Boundary 560.5' N = 366.4		
E WL Roadway on Boundary	17.7	24.5
+1	14.0	28.2
cb	10.9	31.6
1/4	10.0	32.2
C	8.5	33.7
1/4	8.3	33.9



(33502)

46.5 N. of Sec. A = S.L. Wightman

53.5 ST
10' cbs

W	0.8	330.2	
cb	2.1	32.9	
1/4	2.4	32.6	
+7	2.8	32.8	
C	3.8	31.8	
+7	5.3	29.8	
1/4	7.5	27.5	
+3	9.8	25.4	
+7.75 = City Boundary	10.2	25.8	= graded st
S. Curb			
Ecb + 6.39 = City Boundary	10.4	24.6	= graded st
+9.0	10.1	24.9	
1/4	8.7	26.3	
C	5.6	29.4	
+7	2.6	32.4	
1/4	2.5	32.5	
cb	2.2	32.8	
W	1.4	33.6	
S. Quarter			
W	2.0	33.0	
cb	2.1	32.9	
1/4	2.4	32.6	
+3	3.1	31.9	
C	6.4	28.6	
1/4	10.4	23.6	
+2.45 = City Boundary	10.3	24.7	

43.7
2.144.5
11.251.1
53.7

33rd

23

Center Wightman

Ecb + 11.0 = City Boundary	18.3	326.7	= graded st
1/4	10.4	24.6	
+2	10.2	24.8	
Center	7.1	27.9	
+6	3.1	31.9	
1/4	2.8	32.2	
cb	1.9	33.1	
W	1.8	33.2	
N. 1/4			
W	1.3	33.7	
cb	2.0	33.0	
1/4	4.3	30.7	
C	9.2	25.8	
+6.0	10.5	24.5	
+9.0 = city boundary	10.3	24.7	= graded st
N. Curb			
Ecb + 4.65	10.4	24.6	
+8	10.5	24.5	
C	9.3	25.7	
1/4	6.3	28.7	
cb	5.5	29.5	
W	2.1	32.9	
N. L. Wightman			
W	4.7	30.3	
cb	5.7	29.3	
+8	5.5	29.5	

1/2	7.4	327.6	
C	10.6	24.2	
+ 3.45 [±] = City Boundary	10.5	24.5	graded St.
↓ 25' N.			
C + 3.6 = City Boundary	10.7	24.3	
C + 7.5	12.3	22.7	
W. 1/4	11.5	23.5	
W. cb	8.2	26.8	
W. Line	6.1	28.9	
↓ 50' N.			
W.	10.2	24.8	
cb	12.2	22.8	
+ 8	12.9	22.1	
1/4 ≠ City Boundary	10.9	24.1	= graded St.
+ 1	10.7	24.3	= v v
↓ 75' N.			
W 1/4 + 7.00	10.6	24.4	= v v
W cb	13.0	22.0	
+ 5	12.9	22.1	
W	12.3	22.7	
+ 5	11.1	23.9	
↓ 100' N.			
- 10	12.6	22.4	
W.	12.9	22.1	
+ 2	12.8	22.5	
+ 7.20 = City Boundary	10.1	24.9	= graded St.

125' N.			
W.L. = City Boundary	9.6	25.4	
chk. B.M. 13 Mon Wrightman	11.01	324.01	= .00

1/29/44 Gregory

CROSS SECTION of
1st St
80' wide 14' cbs
from N.L. Nutmeg to 180' S of Nutmeg.

237.84

1st

25

	885	232.84		223.99
				80' NW 1st Maple
				NL Nutmeg = 80' wide 14' cbs
E	+5	30.25	2.2	30.6
cb	+20	30.00	2.3	30.5
1/4	+30	29.75	2.2	30.6
C	+40	29.00	2.7	30.1
1/4	+50	28.25	3.2	29.6
cb	+60	28.00	4.2	28.6
W	+80	28.25	4.7	28.1
+5			5.2	27.6
				4 N. Curb.
-5			5.6	27.2
W		28.00	5.5	27.3
cb	+15	28.00	4.5	28.3
1/4	+29	28.18	3.7	29.1
C	+40	28.22	3.2	29.6
1/4	+51	29.07	2.7	30.1
cb	+61	30.00	2.4	30.4
E	+80	30.00	3.0	29.8
on cement curb			2.77	30.07
				27 N. 1/4
E	on paving	29.50	3.1	29.7
cb	+19	29.75	2.8	30.0
1/4	+29	28.91	2.8	30.0
C	+40	28.60	3.7	29.1

Plotted Feb 13, 1924
H.P.B.

1/4	+51	28.12		4.3	28.5
cb	+62	27.62	+65 = 27.00 End	5.2	27.6
W		27.50		6.4	26.4
+5				5.8	27.0
			40	Center Nutmeg	
-5				7.3	25.5
W		27.54		7.2	25.6
cb		27.60	+15 = 27.5 End +17 = cb 27.6	5.7	27.1
1/4		28.05	+28	5.1	27.7
C		28.50	+40	3.6	29.2
1/4		28.75	+52	3.0	29.8
cb		29.50	+63	3.0	29.8
E		29.50	+80	3.1	29.7
			53	5. 1/4	
E		29.20		3.5	29.3
cb		29.25	+16	2.8	30.0
1/4		28.59	+28	2.9	29.9
C		28.34	+40	4.0	28.8
1/4		27.87	+52	4.4	28.4
+5				3.9	28.9
cb		27.25	+66 End	4.5	28.3
W		27.0		7.3	25.5
+20				15.7	17.1

✓

23284

66 J. Curb

-20			19.7	131
W			13.0	19.8
cb			7.7	25.1
1/4	+14 2760	End of grading +54	5.3	27.5
C	28 ¹⁸	+40	4.4	28.4
1/2	28 ⁴³	+27	3.3	29.5
cb	29 ⁰	+15	3.2	29.6
E	29 ⁰		3.8	29.0

50 J.L. Nutmeg

E	29 ²⁵		3.6	29.2
cb	29 ⁰⁰		3.8	29.0
+11			4.0	28.8
1/4	28 ²⁵		6.3	26.5
T.P.	169	228.20	6.33	226.51
C	28 ⁰⁰	+40 End.	4.5	23.7
1/4			7.3	20.9
+5			9.3	18.9
cb			9.5	18.7
W			11.7	16.5
+10			17.3	10.9

10 J.

-25			228	05.4
W	226.55		15.4	12.8
cb	226.3		13.1	15.1
1/4	26.55		14.3	15.9

✓

22820

157

26

+8			123	159
C	27.3		11.0	17.2
+8			4.6	23.6
1/4	27.55		3.8	24.4
+7			2.8	25.4
+8			0.1	28.1
cb	228.3		0.0	28.2
E	228.55		+0.3	223.1 28.5

40 J

E	26.45		1.2	27.0
cb	226.2		1.7	26.5
+5			2.0	26.2
+7			5.0	23.2
1/4	25.45		5.3	22.9
+2			5.4	22.8
C	225.2		13.4	14.8
1/4	24.45		2.50	03.2
cb	224.2		24.2	04.0
W	24.45		24.7	120.35
+35			30.2	198.0

50 J

-50			40.5	187.7
-70			29.8	198.4
W	223.75		28.5	199.7
cb	223.5		28.9	199.3

✓

728.70

+8		28.0	2002
1/4	2375	24.3	2039
C	245	13.7	2145
+11		5.5	2227
1/4	2475	5.4	22.8
+5		53	229
+8		2.5	25.7
cb	2255	2.1	26.1
E	2575	1.8	26.4
65' 5			
E		2.2	26.0
cb	2457	2.6	25.6
+9		3.0	25.2
+11		5.8	22.4
1/4	2382	5.8	22.4
+4		6.1	22.1
C	2357	13.7	14.5
1/4	2282	23.7	04.5
+3		26.5	01.7
cb	2259	30.7	1975
W	2282	33.2	1950
+50		40.0	1882
80' south $w = 2219$ $E = 222.9$ 95' 5			
-40		32.3	1959
W	22207	29.8	198.4
cb	22182	29.0	199.2

✓

126
157
283

728.70

1st 27

+8		28.3	1999
1/4	22207	24.1	2041
C	22282	12.4	2158
+7		6.4	221.8
+11		6.3	21.9
1/4	223.07	4.9	23.3
+1		3.7	24.5
cb	223.82	3.4	24.8
E	224.07	3.4	24.8
120' 5			
E	22427	4.0	24.2
cb	22402	3.5	24.7
1/4	223.27	4.2	24.0
+2		4.2	24.0
+4		5.2	23.0
C	22302	10.0	18.2
1/4	22227	18.6	09.6
cb	22202	20.4	07.8
W	22227	21.0	07.1
+25		22.8	05.4
130' 5			
-25		20.4	07.8
W	22238	17.9	10.3
cb	22213	17.3	10.9
1/4	22238	16.3	11.9

✓

278.70

C	22313	9.0	19.2
+5		5.5	22.7
1/4	22338	4.2	24.0
cb	22413	4.1	24.1
E	22438	3.8	24.4
138'5			
E	22447	3.5	24.7
cb	22432 on cement	4.13	24.07
1/4	22347	4.1	24.1
+4		4.2	24.0
C	22322	7.5	20.7
+8		13.1	15.1
1/4	22247	13.3	14.9
cb	22222	14.3	13.9
+13		13.6	14.6
W	22247	15.7	12.5
+25		17.7	10.5
142'5			
-10		12.3	15.9
W	22251	11.7	16.5
cb	22224	10.2	18.0
+8		10.3	17.9
1/4	22251	11.2	17.0
+6		11.3	16.9
C	22316	6.4	21.8
+8		4.0	24.2

✓

278.70

28

1/4	22351	4.3	23.9
cb	22426	4.4	23.8
E	22451	3.5	24.7
150'5			
E	22460	3.3	24.9
cb	22435 on cement	4.05	24.15
cb	in gutter	4.7	23.5
1/4	22360	4.2	24.0
+9		4.0	24.2
C	22335	6.1	22.1
+3		8.6	19.6
1/4	22260	9.0	19.2
cb	22235	10.4	17.8
W	22260	11.4	16.8
+10		12.3	15.9
156'5			
-10		9.8	18.4
W		11.0	17.2
cb		10.2	18.0
1/4		8.7	19.5
+5		8.3	19.9
C		5.8	22.4
+3		4.4	23.8
1/4		4.4	23.8
cb in gutter		4.7	23.5

✓

24820

cb on cement	4.00	242
E	3.1	251

157'5

E	3.1	25.1
cb on cement	4.02	24.18
cb in gutter	4.7	23.5
1/4	4.4	23.8
+10	4.4	23.8
C	5.8	22.4
+8	8.3	19.9
1/4	8.6	19.6
+12.7	9.2	19.0
cb	6.0	222
E W	6.0	222

165'5

E	6.1	22.1
cb on cement	5.82	22.38
✓ in gutter	6.9	21.3
1/4	7.0	21.2
+1	8.0	20.2
C	7.1	21.1

180'5

C	6.0	22.2
1/4	6.4	21.8
cb in gutter	6.2	22.0
✓ on cement.	5.65	22.55
E		✓

see page 33
for sketch

Cross Section of Intersection
Bancroft + Nutmeg
Bancroft N. 50' wide
10' sidewalks
Nutmeg 75' wide
12' sidewalks
Bancroft S. 20' wide
20' sidewalks
Railroad

2.85	314.46		311.61
0.53	305.14	9.85	304.61
3.25	297.43	11.06	294.08
El Bancroft from N. = Sec. A.			
N	297.43	3.2	94.2
+10	Cement Return	3.36	94.07
cb		3.5	93.9
1/4		3.2	94.2
c		4.0	95.4
+2		0.9	96.5
1/4		0.4	97.0
cb		0.3	97.1
S		0.3	97.1
E of Bancroft N.			
S		0.7	96.7
cb		0.7	96.7
1/4		0.9	96.5
+11		1.3	96.1
c		2.5	94.9
1/4		2.3	94.1
cb		2.5	93.9
N	Cement curb	3.37	94.06
E 1/4 Bancroft N.			
N		3.1	94.3
cb		3.5	93.9

29743

Nutmeg 30

1/4	33	94.1
c	2.0	95.4
1/4	1.4	96.0
cb	1.1	96.3
S	1.0	96.4
E Bancroft N.		
S	1.5	95.9
cb	1.5	95.9
1/4	1.9	95.5
c	2.7	94.7
1/4	3.3	94.1
cb	3.5	93.9
N	3.1	94.3
E of Bancroft from S.		
N	3.1	94.3
cb	3.5	93.9
1/4	3.4	94.0
c	2.9	94.5
1/4	2.3	95.1
cb	2.0	95.4
S	1.9	95.5
W 1/4 Bancroft N.		
S	2.0	95.4
cb	2.1	95.3
1/4	2.4	95.0
1/4	3.0	94.4

297.43

1/4		3.4	94.0
cb		3.6	93.8
N		3.1	94.3
W. of Bancroft N			
N		3.4	94.0
cb		3.8	93.6
1/4		3.5	93.9
C		3.6	93.8
W		3.2	94.2
cb		2.5	94.9
S		2.2	95.2
W of Bancroft N			
S		2.6	94.8
N		3.5	93.9
1/4		3.8	93.6
0		4.2	93.2
1/2		4.0	93.7
cb		4.0	93.4
N		3.9	93.5
E of Bancroft S = 20° W. of E.L. Bancroft S			
N		3.9	93.5
cb		4.0	93.4
1/2		4.0	93.4
C		4.2	93.2
1/4		3.8	93.6
cb		3.5	93.9

297.43

Noting

31

		2.6	94.8
S	E 1/4 Bancroft S	10' W. of E. Cb	
S		3.3	94.1
cb		3.9	93.5
1/4		4.6	92.8
0		4.7	92.9
1/4		4.5	92.9
cb		4.3	93.1
N		4.3	93.1
		4.9	92.5
		4.9	92.5
		4.9	92.5
		5.1	92.3
		5.1	92.3
		4.8	92.6
		4.4	93.0
		4.9	92.5
		5.1	92.5
		5.3	92.1
		5.3	92.1
		5.2	92.2
		5.4	92.0
		5.4	92.0

29743

w of Bancroft S

N	5.9	915
cb	5.9	915
1/4	5.7	917
c	5.7	917
1/4	5.8	916
cb	5.3	921
S	5.1	923

6' w of w cb

S	5.1	923
cb	5.3	921
1/4	6.1	913
c	5.9	915
1/4	5.7	917
cb	5.9	915
N	6.2	912
+15	12.7	84.7

TP 8.20 29295 12.68 284.15

20' west of w L Bancroft S = sec. B.

-18	13.4	796
N	9.2	838
cb	3.7	89.3
+5	1.9	91.1
1/4	1.7	91.3
v	1.8	91.2
1/4	2.2	90.8

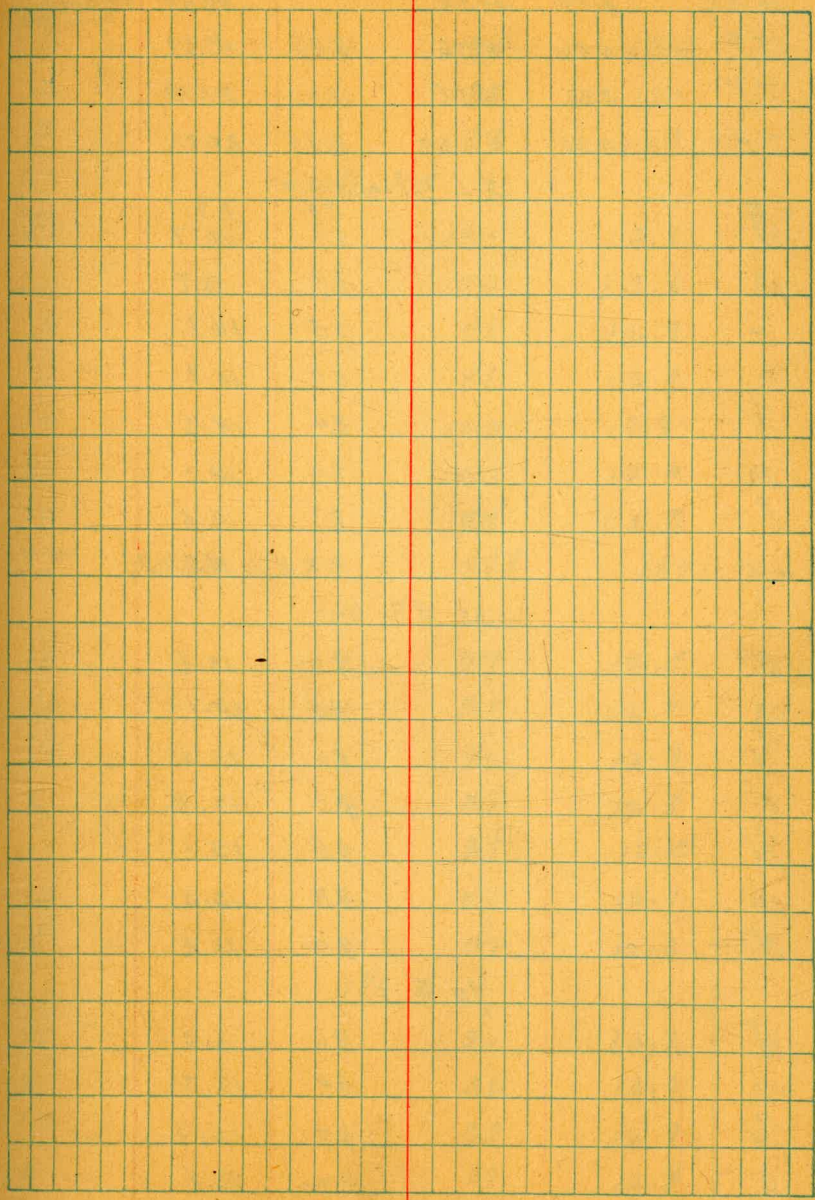
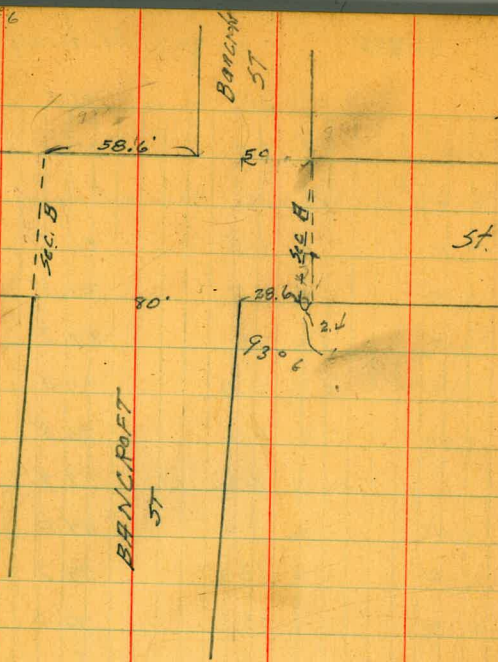
29295

Nutmeg

32

cb	1.7	91.3
S	1.0	92.9
10' w of w L Bancroft S		
S	1.5	91.5
cb	2.5	90.5
1/4	3.3	89.2
c	2.0	91.0
+8	2.2	90.8
1/4	3.6	89.7
cb	9.0	84.0
N	13.3	79.7
+18	13.7	79.3
30' w of w L Bancroft S		
-10	10.6	82.4
N	14.9	78.1
cb	15.0	78.0
1/4	11.6	81.4
c	9.0	84.0
1/4	5.6	87.4
cb	3.8	89.2
S	2.6	90.4

Not meq



2/13/21 6:00 PM CROSS SECTION OF 33rd ST
 from Woolman South
 60' wide 10' cbs

ev. B.M.	0.25	60.65		60.40	314 38 m at Woolman Top of 1/4
T.P.	0.06	47.75	12.96	47.69	
T.P.	0.35	35.08	13.02	34.73	
T.P.	0.36	22.59	12.85	22.23	

S. L. Woolman

-5			8.9	13.7	
W			8.9	13.7	
cb			8.9	13.7	
1/4			8.5	14.1	
c			8.7	13.9	
1/4			8.4	14.2	
cb			8.3	14.3	
E			8.1	14.5	
+5			8.1	14.5	

35' 5"

E			9.2	13.4	
cb			9.5	13.1	
1/4			9.0	13.6	
c			9.1	13.5	
1/4			9.5	13.1	
cb			9.3	13.3	
W			9.2	13.4	

70' 5"

W			9.6	13.0	
cb			9.9	12.7	
1/4			9.7	12.9	
c			9.2	13.4	

33rd 34

1/4			9.4	13.2	
cb			9.5	13.1	
E			9.7	12.9	
		100' 5"			
E			10.4	12.2	
cb			10.0	12.6	
1/4			9.8	12.8	
c			9.8	12.8	
1/4			10.0	12.6	
cb			10.0	12.6	
W			9.9	12.7	
T.P.	3.51	16.22	9.88	12.71	
		140' 5"			
W			3.7	12.5	
cb			3.8	12.4	
1/4			4.0	12.2	
c			3.8	12.4	
1/4			3.7	12.5	
cb			4.1	12.1	
E			4.2	12.0	
		180' 5"			
E			3.0	13.2	
cb			3.2	13.0	
1/4			3.3	12.9	
c			3.8	12.4	

1672

1/2		3.7	12.5	
cb		4.0	12.2	
W		3.7	12.5	
	200' S			
W		3.9	12.3	
cb		3.9	12.3	
1/2		3.8	12.4	
C		3.5	12.7	
1/2		3.2	13.0	
cb		2.9	13.3	
E		3.0	13.2	
	250' S			
E		3.2	13.0	
cb		3.1	13.1	
1/2		2.9	13.3	
C		2.8	13.4	
1/2		3.7	12.5	
cb		3.8	12.4	
W		4.0	12.2	
	300' S			
W		3.9	12.3	
cb		4.1	12.1	
1/2		3.7	12.5	
C		3.5	12.7	
1/2		3.6	12.6	
cb		3.6	12.6	
E		3.6	12.6	

33rd

35

350' S

E		3.8	12.4	
cb		3.8	12.4	
1/2		3.8	12.4	
C		3.7	12.5	
1/2		4.1	12.1	
cb		4.5	11.7	
W		4.0	12.2	
	400' S			
W		4.4	11.8	
cb		4.7	11.5	
1/2		4.7	11.5	
C		4.2	12.0	
1/2		4.2	12.0	
cb		4.2	12.0	
E		4.2	12.0	
	450' S			
E		4.8	11.4	
cb		4.8	11.4	
1/2		4.7	11.5	
C		4.7	11.5	
1/2		5.4	10.8	
cb		5.0	11.2	
W		4.8	11.4	
	500' S			
W		5.5	10.7	

cb	5.6	10.6	
1/4	5.6	10.6	
c	5.3	10.9	—
1/4	5.3	10.9	
cb	5.6	10.6	
E	5.6	10.6	✓
550 5			
E	6.2	10.0	—
cb	6.1	10.1	
1/4	6.1	10.1	
c	6.1	10.1	—
1/4	6.5	9.7	
cb	6.2	10.0	
W	5.9	10.3	
575 5 = N.L. of 50' 5" 10 cbs			
W	6.6	9.6	—
cb	6.7	9.5	
1/4	6.6	9.6	
c	6.4	9.8	✓
1/4	6.3	9.9	
cb	6.2	10.0	
E	6.2	10.0	
N. Curb			
E	6.3	9.9	
cb	6.3	9.9	
1/4	6.2	10.0	

c	6.3	9.9	
1/4	6.5	9.7	
cb	6.5	9.7	
W	6.6	9.6	—
N 1/4			
W	6.6	9.6	—
cb	6.7	9.5	
1/4	6.8	9.4	
c	6.5	9.7	
1/4	6.4	9.8	
cb	6.3	9.9	
E	6.5	9.7	
Center			
E	6.5	9.7	
cb	6.4	9.8	
1/4	6.3	9.9	
c	6.4	9.8	—
1/4	6.8	9.4	
cb	6.7	9.5	
W	6.7	9.5	
S 1/4			
W	6.9	9.3	
cb	6.8	9.4	
1/4	7.0	9.2	
c	6.6	9.6	

16.22

1/4		6.6	9.6	
cb		6.5	9.7	
E		6.5	9.7	
	5. Curb.			
E		6.5	9.7	
cb		6.5	9.7	
1/4		6.5	9.7	
c		6.6	9.6	
1/4		7.1	9.1	
cb		7.0	9.2	
W		7.0	9.2	
	5. L. of " 51			
W		7.0	9.2	
cb		7.1	9.1	
1/4		7.2	9.0	
c		6.9	9.3	✓
1/4		6.6	9.6	
cb		6.7	9.5	
E		6.6	9.6	
	50.5			
E		7.2	9.0	✓
cb		7.0	9.2	
1/4		7.0	9.2	
c		7.1	9.1	✓
1/4		7.4	8.8	
cb		7.2	9.0	
W		6.9	9.3	✓

33rd

37

100.5

W		7.3	8.9	✓
cb		7.3	8.9	
1/4		7.5	8.7	
c		7.4	8.8	✓
1/4		7.4	8.8	
cb		7.4	8.8	
E		7.6	8.6	✓
	150.5			
E		7.7	8.5	✓
cb		7.6	8.6	
1/4		7.4	8.8	
c		7.5	8.7	✓
1/4		7.7	8.5	
cb		7.4	8.8	
W		6.8	9.4	✓
	200.5			
W		7.2	9.0	✓
cb		7.5	8.7	
1/4		7.7	8.5	
c		7.5	8.7	✓
1/4		7.5	8.7	
cb		7.5	8.7	
E		7.7	8.5	✓
	250.5			
E		7.2	9.0	✓

1622

cb		7.3	8.9	
1/4		7.3	8.9	
c		7.4	8.8	—
1/4		7.7	8.5	
cb		7.5	8.7	
W		7.3	8.9	—

300' S

W		7.0	9.2	—
cb		7.0	9.2	
1/4		7.8	8.4	
c		7.6	8.6	—
1/4		7.2	9.0	
cb		7.2	9.0	
E		7.4	8.8	—

330' S

E		7.5	8.7	—
cb		7.4	8.8	
1/4		7.3	8.9	
c		7.3	8.9	—
1/4		7.9	8.3	
cb		7.9	8.3	
W		7.4	8.8	—

T.P	2.33	12.18	6.37	9.85
-----	------	-------	------	------

400' S

W		3.5	8.7	—
cb		3.9	8.3	

33rd

38

1/4		4.3	7.9	
c		4.3	7.9	—
1/4		4.0	8.2	
cb		4.0	8.2	
E		3.8	8.4	—

450' S

E		3.9	8.3	—
cb		3.8	8.4	
1/4		4.0	8.2	
c		4.5	7.7	—
1/4		4.5	7.7	
cb		4.2	8.0	
W		3.7	8.5	—

500' S

W		4.1	8.1	—
cb		4.5	7.7	
1/4		4.9	7.3	
c		4.9	7.3	—
1/4		4.6	7.6	
cb		4.5	7.7	
E		4.3	7.9	—

550' S

E		4.6	7.6	—
cb		4.8	7.4	
1/4		5.1	7.1	

12.18

C		5.1	6.8	-
1/4		5.3	6.9	-
cb		4.8	7.4	-
W		4.6	7.6	-
	600' S			
W		5.2	7.0	-
cb		5.2	7.0	-
1/4		5.4	6.8	-
C		5.6	6.6	-
1/4		5.6	6.6	-
cb		5.6	6.6	-
E		5.3	6.9	-
	657' S			
E		4.6	7.6	-
cb		4.6	7.6	-
1/4		4.7	7.5	-
C		4.7	7.5	X-
1/4		4.8	7.4	-
cb		4.9	7.3	-
W		4.8	7.4	-
	660' S			
W		3.0	9.2	-
cb		3.0	9.2	-
1/4		3.0	9.2	-
C		2.8	9.4	-
1/4		2.8	9.4	-

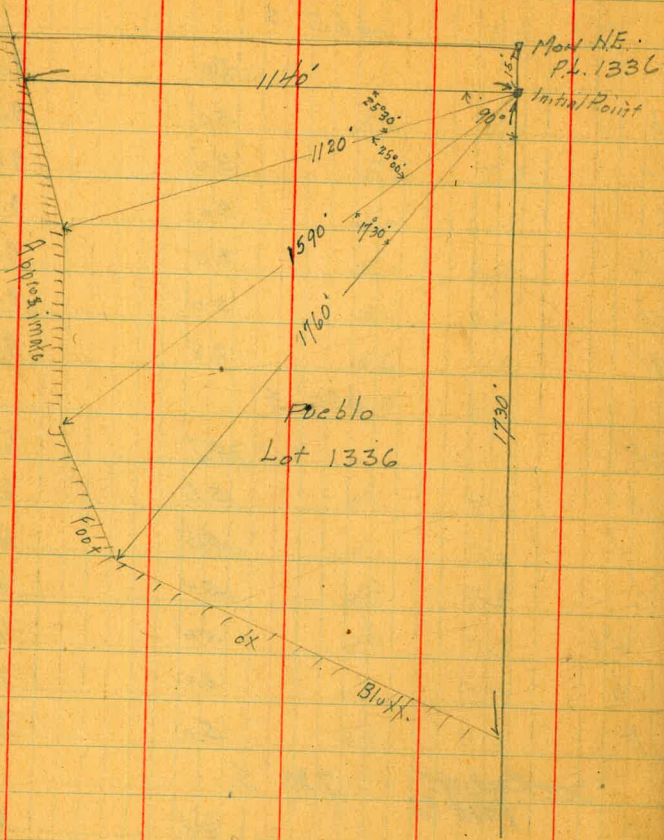
33rd

39

cb		2.8	9.4	-
E		2.9	9.3	-
	665' S			
E		3.0	9.2	-
cb		3.0	9.2	-
1/4		3.0	9.2	-
C		3.0	9.2	-
1/4		3.0	9.2	-
cb		3.0	9.2	-
W		2.8	9.4	-
	680' S			
W		5.7	6.5	-
cb		5.6	6.6	-
1/4		5.5	6.7	-
C		5.4	6.8	-
1/4		5.4	6.8	-
cb		5.2	7.0	-
E		5.0	7.2	-
	730' S			
E	See Book 91 Page 61	6.1	6.1	-
cb	See Tie point Book	6.5	5.7	-
1/4	East of 32nd St	6.9	5.3	-
C	page 17	7.2	5.0	-
1/4		7.2	5.0	-
cb		7.3	4.9	-
W		7.3	4.9	-
	5.95 17.48	0.65	11.53	
		0.33	17.15 = 17.24	

5/12/21 Gregory

Location of Foot of
Bluff in PL 1336
for Describing Land to be
deeded to Park.



1300	1340
80	80
1220	1260

1300
500
800

1300
120
1180

40

7/11/41
Moore
Mg
Sands

Cross Section of Hamilton 80' wide
Univ. Ave N. to El Cajon 20' - 20' W

on BM	10.82	317.22	306.40	SEBP Arnold + Univ
N. L. Univ				
E		5.8	311.4	
+14		6.37	310.85	cement ob Return
+15		7.1	310.1	
cb		7.1	310.1	
1/2		7.1	310.1	
C		7.3	309.9	
1/4		7.8	309.4	
cb		8.4	308.8	
+5		8.9	308.3	
+6		8.31	308.91	cement ob Return
W		8.1	309.1	
25' N				
W		7.2	310.0	
+12		7.8	309.4	
+13		8.4	308.8	
cb		7.3	309.9	
1/2		6.5	310.7	
C		6.5	310.7	
1/4		6.1	311.1	
cb		5.8	311.4	
+6		5.2	312.0	
E		4.7	312.5	

38' N + 10' W of Large Eucalyptus Tree 3' diam
✓ - 10' E of WL - ✓ - 16" ✓

50' N

E	3.7	313.5
+12	4.3	312.9
cb	4.9	312.3
1/2	5.2	312.0
C	5.7	311.5
1/4	6.0	311.2
cb	6.8	310.4
+7	7.8	309.4
+8	7.1	310.1
W	6.8	310.4
75' N		
W	6.5	310.72
+9	6.6	310.6
+14	7.1	310.1
cb	6.1	310.1
+5	5.5	311.7
1/4	5.3	311.9
C	5.1	312.1
1/2	4.8	312.4
cb	4.3	312.9
+4	4.2	313.0
+10	2.9	314.3
E	3.0	314.2
100' N		
E	1.9	315.3

E of Garage
on line

317.22

+8	2.4	314.8
+15	3.6	313.6
cb	3.5	313.7
1/4	4.1	313.1
0	4.5	312.7
1/4	5.2	312.0
cb	5.9	311.3
+7	6.7	310.5
+11	6.0	311.2
w	6.2	311.0

113' N 10' E of well Large Eucalyptus tree 16" Dia

125' N

-5	5.9	311.3
w	5.8	311.4
+8	5.5	311.7
+13	6.2	311.0
cb	5.3	311.9
1/4	4.7	312.5
0	4.0	313.2
1/4	3.7	313.5
cb	3.2	314.0
+5	3.1	314.1
+10	2.1	315.1
E	1.5	315.7

150' N

E	1.5	315.7
---	-----	-------

317.22

Hamilton

42

+10	1.9	315.3
+15	2.7	314.5
cb	2.8	314.4
1/4	3.5	313.7
0	3.7	313.5
1/4	4.3	312.9
cb	4.9	312.3
+7	5.6	311.6
+12	5.0	312.2
w	5.2	312.0
+5	5.3	311.9

175' N

w	4.3	312.9
+8	4.2	313.0
+11	5.1	312.1
cb	4.3	312.9
1/4	3.6	313.6
0	3.3	313.9
1/4	3.0	314.2
cb	2.2	315.0
+3	2.3	314.9
+10	1.0	316.2
E	0.7	316.5
TP	10.95	326.49
E	1.68	315.54
E	9.3	317.2
+10	9.6	316.9

200' N

326.49

+14	10.5	316.0
cb	10.7	315.8
1/4	11.4	315.1
c	11.8	314.7
1/4	12.4	314.1
cb	12.9	313.6
+5	13.6	312.9
+12	12.8	313.7
w	12.8	313.7
+5	12.6	313.9

187' N 10' E of WL Large Eucalyptus tree 16" Diam

275' N

-5	12.1	314.4
w	12.2	314.3
+7	12.4	314.1
+11	13.2	313.3
cb	12.4	314.1
1/4	11.6	314.9
c	11.6	315.5
1/4	10.5	316.0
cb	10.0	316.5
+5	10.0	316.5
+10	8.7	317.8
E	8.3	318.2
	250 N	
E	7.8	318.7

326.49

Hamilton

43

+10	8.2	318.3
+15	9.5	317.0
cb	9.4	317.1
1/4	9.7	316.8
c	10.0	316.5
1/4	10.8	315.7
cb	11.8	314.7
+6	12.4	314.1
+12	11.6	314.9
w	11.5	315.0
+5	11.4	314.9

238' N 10' E of WL Large Eucalyptus 16" Diam

275' N

-5	11.1	315.4
w	11.0	315.5
+8	10.8	315.7
+15	11.8	314.7
cb	11.1	315.4
1/4	10.5	316.0
c	9.8	316.7
1/4	9.0	317.5
1/4	8.5	318.0
+7	8.5	318.0
+10	7.6	318.9
E	7.1	319.4

288' N 10' W of WL Large Eucalyptus 16" Diam

326.49

300' N/

E	6.6	319.9
+10	7.1	319.4
cb	7.9	318.6
1/4	8.5	318.0
c	8.8	317.7
1/4	9.5	317.0
cb	10.3	316.2
+10	10.7	315.8
+13	10.3	316.2
w/	10.3	316.2
+5	10.6	315.9

325' N/

-5	9.8	316.7
w/	9.7	316.8
cb	9.2	317.3
1/4	8.7	317.8
c	8.3	318.2
1/4	8.2	318.3
cb	7.5	319.0
+10	6.4	320.1
E	6.0	320.5

350' N/

E	5.1	321.4
+10	5.7	320.8
cb	7.0	319.5
1/4	7.7	318.8

326.49

1-hann. How

22

E	7.8	318.7
1/4	8.4	318.1
cb	8.8	317.7
w/	8.9	317.6
+5	9.1	317.4
324' N 10' E of WL Large Eucalyptus 16" Diam		
375' N/		
-5	8.3	318.2
w/	8.3	318.2
cb	8.0	318.5
1/4	7.8	318.7
c	7.4	319.1
1/4	7.1	319.4
cb	6.4	320.1
+10	5.3	321.2
E	5.0	321.5
400' N/		
E	4.7	321.8
+9	4.9	321.6
+12	5.8	320.7
cb	5.8	320.7
1/4	6.5	320.0
c	6.9	319.6
1/4	7.1	319.4
cb	7.6	318.9
+7	8.2	318.3

32649

W	7.8	318.7
+5	7.9	318.6
412' N 10' E of WL Large Eucalyptus 12" diam		
✓ ✓ 10' W of EL	✓	✓
425' N		
-5	7.3	319.2
W	7.3	319.2
+7	7.4	319.1
+11	7.9	318.6
cb	7.3	319.2
1/4	6.6	319.9
c	6.6	319.9
1/4	6.2	320.3
cb	5.7	320.8
+8	5.3	321.2
+12	4.6	321.9
E	4.2	322.3
437' N 10' W of EL Large Eucalyptus 16" diam		
450' N		
E	3.8	322.7
+8	4.3	322.2
+12	5.0	321.5
cb	5.3	321.2
1/4	5.8	320.7
c	6.2	320.3
1/4	6.4	320.1

32649

Hamilton

45

cb	7.0	319.5
+10	7.6	318.9
+15	7.0	319.5
W	7.0	319.5
+5	6.9	319.6
463' N 10' E of WL Large Eucalyptus 16" diam		
500' N		
-5	6.2	320.3
W	5.9	320.6
+8	5.9	320.6
+13	6.4	320.1
cb	5.8	320.7
1/4	5.3	321.2
c	5.2	321.3
1/4	5.0	321.5
cb	4.6	321.9
+8	4.4	322.1
+10	3.7	322.8
E	3.3	323.2
537' N 10' W of EL Large Eucalyptus 12" diam		
550' N		
E	2.1	324.4
+10	2.6	323.9
+15	3.4	323.1
cb	3.7	322.8
1/4	3.9	322.6

326.49

c	4.0	322.5
1/4	4.2	322.3
cb	4.9	321.6
w	5.0	321.5
+5	5.4	321.1

575' N

-5	4.9	321.6
w	4.5	322.0
+6	4.4	322.1
+15	4.6	321.9
cb	4.2	322.3
1/4	3.6	322.9
c	3.5	323.0
1/4	3.2	323.3
cb	2.9	323.6
+10	2.5	324.0
E	2.0	324.5

587' N 10' W of EL Large Eucalyptus 18" diam

✓ ✓ 10' E of WL ✓ ✓ 16" ✓

597' N

E	1.4	325.1
cb	2.1	324.4
1/4	2.2	324.3
c	2.5	324.0
1/4	3.1	323.4
cb	3.7	322.8

326.49

Hamilton

4.6

+12	3.5	323.0		
w	3.5	323.0		
+5	3.6	322.9		
	600' N - st. Linearly			
w	2.0	324.5		
+14 Cement Return	2.28	324.21		
+15	3.3	323.2		
cb	2.9	323.6		
1/4	2.3	324.2		
c	1.8	324.7		
1/4	1.5	325.0		
cb	1.5	325.0		
+5	1.3	325.2		
+6 Cement Return	0.37	326.12		
E	0.0	326.5		
TP 711	331.32	2.28	324.21	Saw Return
				4-14" x 14" Con Returns in
				Intersection graded
w on Con Return	7.5	324.17		
w gutter	7.9	323.4		
cb	7.5	323.8		
1/4	7.0	324.3		
c	6.5	324.8		
1/4	6.4	324.9		
cb	6.2	325.1		
E gutter	5.8	325.5		
E Con Return	5.15	326.17		

S 1/4

13' 1/4 S

E	5.2	326.1
cb	5.9	325.4
1/4	6.2	325.1
C	6.4	324.9
1/4	6.6	324.9
cb	6.8	324.5
w	7.3	324.0
Center		
w	6.7	324.6
cb	6.3	325.0
1/4	6.1	325.2
C	5.9	325.4
1/4	5.8	325.8
cb	5.1	326.2
E	4.5	326.8
N 1/4		
E	4.7	326.6
cb	5.5	325.8
1/4	5.7	325.6
C	6.1	326.2
1/4	6.3	325.0
cb	6.5	324.8
w	6.9	324.4
Net		
w Corn Return	6.18	325.14

Hamilton

w gutter	7.0	324.3
cb	6.6	324.7
1/4	6.4	324.9
C	6.1	325.2
1/4	5.8	325.5
cb	5.6	325.7
E gutter	4.9	326.5
E cement Return	4.18	327.14
N.L. line code = 0000		
EL	3.8	327.5
+14 Cement Return	4.6	327.16
+15 gutter	4.9	326.4
cb	5.3	326.0
1/4	5.2	326.1
C	5.4	325.9
1/4	6.0	325.3
cb	6.6	324.7
+15 gutter	6.7	324.6
+16 W Cement Return	6.27	325.25
w	5.8	325.5
2' N		
w	6.4	324.9
+10	6.2	325.1
+14	6.8	324.5
cb	6.6	324.8
1/4	5.9	325.4

33132

C	5.5	325.8
1/4	5.2	326.1
cb	5.2	326.1
+10	4.5	326.8
E	4.0	327.3

12' N 10' W of EL Eucalyptus 12" diam

25' N

E	3.7	327.6
cb	4.7	326.6
1/4	5.0	326.3
C	5.1	326.2
1/4	5.5	325.8
cb	6.0	325.3

W Sedge Com walk 4' wide 6.60 324.72 to residence

+5	6.5	324.8
----	-----	-------

37' N 10' E of WL Eucalyptus 14" diam

✓ ✓ ✓ W of EL ✓ ✓ ✓

50' N

-5	5.9	325.4
W	5.9	325.4
+11	5.8	325.5
cb	5.7	325.6
1/4	5.2	326.1
C	4.6	326.7
1/4	4.4	326.9
cb	4.4	326.9

33132

Hamilton

48

F	2.9	328.4
---	-----	-------

75' N

E	1.8	329.5
+15	3.3	328.0
cb	3.4	327.9
1/4	3.7	327.6
C	3.9	327.4

1/4	4.6	326.7
-----	-----	-------

cb	4.9	326.4
----	-----	-------

W Sedge walk to residence	5.2	326.1
---------------------------	-----	-------

4' wide

+5	5.2	326.1
----	-----	-------

88' N 10' E of WL Eucalyptus 16" diam

✓ ✓ ✓ W of EL ✓ ✓ ✓ 18" ✓

100' N

-5	5.0	326.3
----	-----	-------

W	4.8	326.5
---	-----	-------

+10	4.5	326.8
-----	-----	-------

+13	4.9	326.4
-----	-----	-------

cb	4.5	326.8
----	-----	-------

1/4	4.1	327.2
-----	-----	-------

C	3.7	327.6
---	-----	-------

1/4	3.2	328.1
-----	-----	-------

cb	2.6	328.7
----	-----	-------

E	1.4	329.9
---	-----	-------

113' N 10' E of WL Eucalyptus 12" diam

331.32

125' N

E	0.7	330.6
cb	1.9	329.4
1/4	2.6	328.7
C	3.0	328.3
1/4	3.5	327.8
cb	4.0	327.3
+8	4.5	326.8
+12	4.0	327.3
W	4.6	326.7
+5	5.0	326.3

137' N 10' E of WH Eucalyptus 16" diam

150' N

-5	4.5	326.8
W	3.8	327.5
+7	3.5	327.8
+12	3.8	327.5
cb	3.1	328.2
1/4	2.5	328.8
0	2.0	329.3
1/4	1.4	329.9
cb	0.8	330.5

T.P. 9.15 340.30 0.17 331.15

E 8.4 331.9

142' N E 12' Garage on E 8.9 331.4 3 IN street

163' N 10' W of EL Eucalyptus 18" diam

340.30

175' N

Hamilton

49

E	6.7	333.6
cb	8.8	331.5
1/4	9.5	330.8
C	10.0	330.3
1/4	10.8	329.5
cb	11.5	328.8
+10	11.6	328.7
W	12.2	328.1
+5	12.6	327.7

187' N 10' W of EL Eucalyptus 12" diam

200' N

-5	12.1	328.2
W	11.8	328.5
+15	11.4	328.9
cb	10.9	329.4
1/4	10.2	330.1
C	9.3	331.0
1/4	8.7	331.6
cb	8.2	332.1
E	6.6	333.7

213' N 10' E of WH Eucalyptus 6" diam

225' N

E	5.7	334.6
cb	7.3	333.0
1/4	8.0	332.3
C	8.8	331.5

34030

1/4	9.4	330.9
cb	10.0	330.3
w	10.0	329.4
+5	11.4	328.9
	250' N	
-10	11.5	328.8
w	10.3	330.0
cb	9.1	331.2
1/4	8.6	331.7
c	7.9	332.4
1/4	7.3	333.0
cb	6.3	334.0
E	4.9	335.4
	275' N	
E	3.9	336.4
cb	5.6	334.7
1/4	6.2	334.1
c	6.7	333.6
1/4	7.5	332.8
cb	8.5	331.8
w	9.4	330.9
+10	10.6	329.7
	300' N	
-10	9.6	330.7
w	7.8	332.5
+10	8.2	332.1

34030

Hamilton

50

cb	7.3	333.0
1/4	6.6	333.7
c	6.2	334.1
1/4	5.5	334.8
cb	4.6	335.7
E	2.9	337.4
	325' N	
E	1.4	338.9
cb	3.3	337.0
1/4	4.5	335.8
c	5.1	335.2
1/4	6.0	334.3
cb	6.7	333.6
+10	7.4	332.9
w	7.0	333.3
+5	7.2	333.1
	350' N	
-10	7.7	332.6
w	6.8	333.5
cb	5.5	334.8
1/4	4.5	335.8
c	3.9	336.4
1/4	3.0	337.3
1/4	2.1	338.2
E	0.3	340.0
	364' N 10' E of w/L	
	Eucalyptus	14" diam

T.P. 7.42 347.64 0.08 340.22

375' N

E	6.0	341.6
+15	8.0	339.6
cb	8.1	339.5
114	8.8	338.8
c	10.3	337.3
114	11.1	336.5
cb	11.8	335.8
+9	13.0	334.6
w	13.1	334.5
+10	14.4	333.2

388' N 10' E of WL Eucalyptus 14" diam

400' N

-10	13.7	333.9
w	12.6	335.0
+15	12.1	335.5
cb	11.2	336.4
114	10.2	337.4
c	9.3	338.3
114	7.9	339.7
cb	7.2	340.4
E	5.1	342.5

412' 10' W of EL Eucalyptus 16" diam

413' E of WL 14" ✓

347.64

Hamilton

51

425' N

E	3.8	343.8
cb	6.0	341.6
114	6.8	340.8
c	8.4	339.2
114	9.4	338.2
cb	10.4	337.2
+10	11.5	336.1
w	11.8	335.8
+3	13.0	334.6
+10	13.2	334.4

450' N

-10	12.2	335.4
-7	11.8	335.8
w	11.6	336.0
cb	9.7	337.9
114	8.5	339.1
c	7.8	339.8
114	6.5	341.1
cb	5.3	342.3
E	3.3	344.3

462' N 10' W of EL Eucalyptus 16" diam

475' N

E	2.7	344.9
cb	4.6	343.0
114	5.5	342.1

34764

C		6.8	340.8
114		7.8	339.8
cb		8.8	338.8
+10		9.9	337.7
W		10.2	337.4
+10		10.9	336.7
	488' N 10' E of WL	Eucalyptus	18" diam
	485' ✓ 10' W of EL	✓	12" ✓
	500' N		
-10		10.8	336.8
W		9.7	337.9
+10		8.5	339.1
cb		7.6	340.0
114		6.8	340.8
c		6.0	341.6
114		5.1	342.5
cb		4.0	343.6
E		2.0	345.6
	512' N 10' W of EL	Eucalyptus	14" diam
	525' x 1		
E		1.6	346.0
cb		3.2	344.4
114		3.9	343.7
c		4.7	342.9
114		5.6	342.0
cb		6.8	340.8

34764

Hamilton

50

+9		7.7	339.9
W		7.9	339.7
+5		9.3	338.3
+10		10.1	337.5
	536' N 10' W of EL	Eucalyptus	14" diam
	550' N		
-10		9.8	337.8
-5		9.1	338.5
W		7.4	340.2
cb		5.4	342.2
114		4.6	343.0
E		3.8	343.8
114		3.2	344.4
cb		2.8	350.4
E		-0.8	348.4
	561' N 10' W of EL	Eucalyptus	16" diam
	562' N 10' E of WL	✓	✓
	575' N		
E		+0.5	347.1
cb		-2.0	349.6
114		3.0	344.6
E		3.5	344.1
114		4.0	343.6
cb		4.9	342.7
W		7.2	340.4
+7		8.7	339.9
+10		9.0	338.6

34764

600 N = SL Polk

-10			8.5	339.1
W			7.5	340.1
+10			5.8	341.8
cb			4.9	342.7
1/4			3.8	343.8
c			2.8	344.8
1/4			2.1	345.5
cb			1.3	346.3
T.P	7.11	35446	0.29	347.35
E			5.9	348.6

S db Polk

E			6.0	348.5
cb			7.4	347.1
1/4			8.5	346.0
c			9.1	345.4
1/4			10.3	344.2
cb			11.7	342.8
+10			13.0	341.5
W			13.9	340.6
+10			14.8	339.7

S 1/4

-10			14.6	339.9
W			13.5	341.0
cb			11.4	343.1
1/4			10.3	344.2

80' width

12' S/Ws
13' 1/4

35446

Hamilton

53

c			9.2	345.3
1/4			8.5	346.0
cb			7.5	347.0
E			5.6	348.9
		Center		
E			5.1	349.4
cb			7.0	347.5
1/4			7.8	346.7
c			8.7	345.8
1/4			9.8	344.7
cb			10.6	343.9
W			13.0	341.5
+10			13.7	340.8
		N 1/4		
-10			13.8	340.7
W			13.1	341.4
cb			10.3	344.2
1/4			9.1	345.4
c			8.0	346.5
1/4			7.0	347.5
cb			6.7	347.8
E			4.6	349.9
		N db		
E			4.2	350.3
cb			6.5	348.0
1/4			7.2	347.3

354.46

c	7.9	346.6
1/4	9.0	345.5
cb	10.0	344.5
w	12.8	341.7
+10	13.6	340.9

NL Polk = 0.00

-10	13.2	341.3
w	12.1	342.4
cb	9.7	344.8
1/4	8.7	345.8
c	7.6	346.9
1/4	6.8	347.7
cb	6.2	348.3
+5	6.0	348.5
E	4.2	350.3

25' N

E	3.8	350.7
cb	5.1	349.4
1/4	5.7	348.8
c	7.1	347.4
1/4	8.0	346.5
cb	9.2	345.1
w	11.5	343.0
+10	12.2	342.3

50' N

-10	12.0	342.5
-----	------	-------

35446

Hamilton

54

w	10.6	343.9
cb	8.1	346.4
1/4	7.8	346.7
c	7.0	347.5
1/4	6.1	348.4
cb	4.8	349.7
E	3.1	351.4
	75' N	
E	2.1	352.4
cb	4.5	350.0
1/4	5.1	349.4
c	6.6	347.9
1/4	7.6	346.9
cb	8.6	345.9
w	10.3	344.2
+10	11.3	343.2
	100' N	
-10	10.7	343.8
w	9.3	345.2
cb	7.5	347.0
1/4	6.3	348.2
c	4.7	349.8
1/4	3.7	350.8
cb	3.5	351.0
E	1.4	353.1
T.P.	89/ 360.32	3.05 351.41

360.32

125' N

E	6.5	353.8
cb	8.3	352.0
1/4	8.9	351.4
c	10.0	350.3
1/4	11.2	349.1
cb	12.2	348.1
w	15.0	345.3
+10	16.0	344.3

150' N

-10	15.6	344.7
w	12.3	347.0
cb	11.8	348.5
1/4	10.2	350.0
c	9.0	351.3
1/4	8.6	351.7
cb	7.6	352.7
E	5.7	354.6

170' N

E	5.9	354.4
cb	7.3	353.0
1/4	7.9	352.4
c	8.8	351.5
1/4	9.5	350.8
cb	10.7	349.6
w	12.5	347.8

360.32

Hamilton 55

141 346.2

185' N

+10	14.3	346.0
w	12.6	347.7
cb	10.2	350.1
1/4	9.4	350.9
c	8.4	351.9
1/4	7.9	352.4
cb	7.2	353.1
+10	6.4	353.9
E	5.0	355.3

200' N

E	5.3	355.0
cb	6.2	354.1
1/4	7.8	352.5
c	8.1	352.3
1/4	9.3	351.0
cb	10.1	350.2
w	12.6	347.7
+10	13.6	346.7

213' N

+10	13.3	347.0
w	12.3	348.0
cb	10.1	350.2
1/4	9.2	351.1
c	8.4	351.9

36032

1/4	7.8	352.5
cb	6.6	353.7
E	5.6	354.7
225' N		
E	5.3	355.0
cb	6.9	353.4
1/4	8.0	352.3
e	8.1	352.2
1/4	8.3	352.0
cb	9.7	350.6
w	11.6	348.7
+10	13.0	347.3
250' N		
-10	12.8	347.5
w	11.5	348.8
cb	9.1	351.2
1/4	8.1	352.2
e	7.4	352.9
1/4	6.7	353.6
cb	6.0	354.3
E	4.2	356.1
275' N		
E	3.7	356.6
cb	5.4	354.9
1/4	6.4	353.9
e	6.8	353.5

36032

Hamilton

56

1/4	7.4	352.9
1/4	8.5	351.8
w	11.1	349.3
+10	11.7	348.6
300' N		
-10	11.6	348.7
w	10.8	349.5
cb	8.8	351.5
1/4	8.0	352.3
e	6.3	354.0
1/4	5.8	354.5
cb	4.5	355.8
E	2.5	357.8
325' N		
E	2.0	358.3
cb	4.5	355.8
1/4	5.3	355.0
e	6.2	354.1
1/4	6.6	353.7
cb	7.2	353.1
1/4	9.3	351.0
+10	10.3	350.0
350' N		
-10	9.8	350.5
w	8.4	351.9
1/4	7.1	353.2

36032

1/4			W	354.2
e			5.1	355.2
1/4			4.2	356.0
cb			3.3	357.0
E			1.0	358.9
			375' N	
E			0.9	359.4
cb			2.1	358.2
1/4			2.8	357.5
L			4.0	355.9
1/4			5.7	354.6
cb			6.3	354.0
W			8.1	352.2
+10			8.7	351.6
			400' N	
-10			8.1	352.2
W			7.5	352.8
cb			6.0	354.3
1/4			4.7	355.6
L			3.7	356.6
1/4			3.1	357.2
cb			2.4	357.9
E			0.3	360.0
TP	9.20	368.07	1.45	358.87
			425' N	
E			7.6	360.5

36807

Hamilton

57

cb			9.2	358.9
1/4			9.8	358.3
e			10.7	357.4
1/4			11.7	356.4
cb			12.8	355.3
W			14.6	353.5
+10			15.3	352.8
			450' N	
-10			13.9	354.2
W			13.5	354.6
cb			12.6	355.5
1/4			11.2	356.9
L			10.5	357.6
1/4			9.3	358.8
cb			8.2	359.9
E			6.4	361.7
			475' N	
E			5.9	362.2
cb			7.6	360.5
1/4			8.6	359.5
e			9.4	358.7
1/4			10.5	357.6
cb			10.9	357.2
W			12.9	355.2
+10			14.2	353.9

36807

500' N

-10	12.4	355.2
W	12.5	355.6
cb	10.3	357.8
1/4	8.9	359.2
C	7.7	360.4
1/4	7.3	360.8
cb	6.8	361.3
E	4.9	363.2

525' N

E	4.3	363.8
cb	6.2	361.9
1/4	6.8	361.3
C	7.1	361.0
1/4	8.1	359.7
cb	9.8	358.3
W	11.4	356.7
+10	12.2	355.9

550' N

-10	11.2	356.9
W	10.4	357.7
cb	8.3	359.8
1/4	6.6	361.5
C	6.1	362.0
1/4	6.1	362.0
cb	5.5	362.6

36807

Hamilton

E8

3.6

364.5

575' N

E	2.6	365.5
cb	4.7	363.4
1/4	5.5	362.6
C	5.7	362.4
1/4	6.5	361.6
cb	7.7	360.4
W	9.7	358.4
+10	10.4	357.7

600' N = S L Howard

80' wide

-10	9.3	358.8
W	8.9	359.2
cb	6.3	361.8
1/4	5.2	362.9
C	4.8	363.3
1/4	4.5	363.6
cb	3.7	364.4
E	2.4	365.7

14' SW

13' 1/4 S

S cb

E	2.7	365.4
cb	3.7	364.4
1/4	3.8	364.3
C	4.9	363.2
1/4	5.6	362.5
cb	5.7	362.4

368.07

w	8.1	360.0
+10	8.5	359.6
	S 1/4	
-10	8.4	359.7
w	7.6	360.5
cb	5.2	362.9
1/4	5.0	363.1
c	4.4	363.7
1/4	3.9	364.2
cb	3.4	364.7
E	2.8	365.3
	Center	
E	2.3	365.8
cb	2.0	366.1
1/4	3.0	365.1
c	4.1	364.0
1/4	4.5	363.6
cb	4.8	363.3
w	7.0	361.1
+10	8.2	359.9
	N 1/4	
-10	7.3	360.8
w	6.2	361.9
cb	4.4	363.7
1/4	4.1	364.0
c	3.3	364.8

368.07

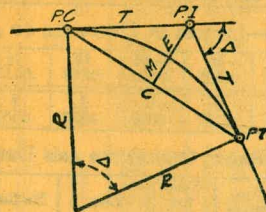
Hanniston

59

1/4	2.7	365.4
cb	2.3	365.8
E	1.6	366.5
TD 740	37392	1.55 366.52
	N 1/4	
E	7.0	361.1
cb	8.3	359.8
1/4	8.8	359.3
c	9.3	358.8
1/4	9.7	358.4
cb	10.4	357.7
w	12.1	356.0
+10	13.3	354.8
	NA	Howard
-10	12.2	355.9
w	11.1	357.0
cb	9.7	358.4
1/4	9.4	358.7
c	8.7	359.4
1/4	8.7	359.4
cb	8.0	360.1
E	6.2	361.9
checked on B.M. El Capitan + Hann.	5.67	368.25 368.35
	Cont'd BK 994-42	

DIETZGEN'S RAILROAD CURVE AND REDUCTION TABLES

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CURVE FORMULAS

Radius= $R = \frac{50}{\sin \frac{D}{2}}$ (1) Degree of Curve= D and $\sin \frac{D}{2} = \frac{50}{R}$ (2)

Tangent= $T = R \tan \frac{\Delta}{2}$ (3) Length of Curve= $L = 100 \frac{\Delta}{D}$ (4)

Middle ordinate= $M = R(1 - \cos \frac{\Delta}{2}) = R \text{vers} \frac{\Delta}{2}$ (6)

External= $E = T \tan \frac{\Delta}{4} = R \div \cos \frac{\Delta}{2} - R$ (8) $= R \text{exsec} \frac{\Delta}{2}$ (9)

Long Chord= $C = 2 R \sin \frac{\Delta}{2}$ (10) $\Delta = \text{Central Angle}$

EXPLANATION AND USE OF TABLES

Stations.—Given P. I.—Sta. 161 + 60.35 to find Sta. of P. C. and P. T. $\Delta = 62^\circ 10'$ $D = 8^\circ 20'$. From Table IV for 1° curve $T = 3454.1$ and $+8\frac{1}{2} = 414.49$ ft. From Table V correction = .36 or $T = 414.85$ ft. P. C. = Sta. P. I. — $T = 157 + 45.50$. Also from (4) $L = 746.00$ and P. T. = Sta. P. C. + $L = 164 + 91.50$.

Offsets.—Tangent offsets vary (approximately) directly with D and with square of the distance. Thus tangent offset for Sta. 158 on above curve is 2.16 ft. found as follows. From Table III tangent offset for 100 ft. = 7.27 ft. Distance = 158 — Sta. P. C. = 54.50, hence offset = $7.27 (54.50 \div 100)^2 = 2.16$ ft. Also square of any distance divided by twice the radius equals (approximately) the distance from tangent to curve. Thus $(54.50)^2 \div (2 \times 688.26) = 2.16$ ft.

Deflections.—Deflection angle = $\frac{1}{2} D$ for 100 ft., $\frac{1}{4} D$ for 50 ft., etc. For c ft. = (in minutes) $.3 \times C \times D^\circ$ or = defl. for 1 ft. from Table III $\times C$. For Sta. 158 of above curve = $.3 \times 54.5 \times 8\frac{1}{2} = 136.2'$ or $2^\circ 16.2'$, or = $2.50 \times 54.5 = 136.2'$ from Table III. For Sta. 159 deflection angle = $2^\circ 16.2' + 8^\circ 20' \div 2 = 6^\circ 26.2'$, etc.

Externals.—May be found in similar manner to tangents. Thus E for curve above is 91.37. For from Table IV for 1° curve $E = 960.6$ for $8^\circ 20' = 960.6 \div 8\frac{1}{2} = 91.27$ and from Table V correction = .10 or $E = 91.37$ ft. Or suppose $\Delta = 32^\circ$ and E is measured and found to be 42 ft. What is D ? From Table IV $E = 230.9$ and $+42 = 5.5$ or $D = 5^\circ 30'$.

Handwritten notes and calculations on the left page of the notebook, including a vertical list of numbers (25, 43, 52, 63, 68, 84, 100, 119, 129, 138, 141, 145, 154, 170, 198, 230) and various mathematical operations and diagrams. The diagrams show a cross-section of a roadway with a center line and side slopes, with labels like "1st block" and "2nd block".

Vertical list of numbers (left side):
 25
 43
 52
 63
 68
 84
 100
 119
 129
 138
 141
 145
 154
 170
 198
 230

Vertical list of numbers (right side):
 25
 43
 52
 63
 68
 84
 100
 119
 129
 138
 141
 145
 154
 170
 198
 230

Handwritten calculations and notes:
 56.5
 57.5
 54.5
 53.0
 50.0
 46.0
 44.0
 42.0
 40.0
 38.5
 36.5
 34.5
 32.0
 30.0
 28.0
 26.0
 24.0
 22.0
 20.0
 18.0
 16.0
 14.0
 12.0
 10.0
 8.0
 6.0
 4.0
 2.0
 0.0

Handwritten calculations:
 32.5
 28.9
 36
 32.5
 45.2
 36
 48.0
 46
 44
 42
 40
 38
 36
 34
 32
 30
 28
 26
 24
 22
 20
 18
 16
 14
 12
 10
 8
 6
 4
 2
 0

Handwritten notes:
 1st block
 2nd block
 43.75
 55
 41
 35.9
 71.0 E S to E of N
 68.6

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

Roadway 16 feet wide. Side Slopes 1 on 1 1/2.
 For Single Track Embankment.

H	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	H
0	8.0	8.2	8.3	8.5	8.6	8.8	8.9	9.1	9.2	9.4	0
1	9.5	9.7	9.8	10.0	10.1	10.3	10.4	10.6	10.7	10.9	1
2	11.0	11.2	11.3	11.5	11.6	11.8	11.9	12.1	12.2	12.4	2
3	12.5	12.7	12.8	13.0	13.1	13.3	13.4	13.6	13.7	13.9	3
4	14.0	14.2	14.3	14.5	14.6	14.8	14.9	15.1	15.2	15.4	4
5	15.5	15.7	15.8	16.0	16.1	16.3	16.4	16.6	16.7	16.9	5
6	17.0	17.2	17.3	17.5	17.6	17.8	17.9	18.1	18.2	18.4	6
7	18.5	18.7	18.8	19.0	19.1	19.3	19.4	19.6	19.7	19.9	7
8	20.0	20.2	20.3	20.5	20.6	20.8	20.9	21.1	21.2	21.4	8
9	21.5	21.7	21.8	22.0	22.1	22.3	22.4	22.6	22.7	22.9	9
10	23.0	23.2	23.3	23.5	23.6	23.8	23.9	24.1	24.2	24.4	10
11	24.5	24.7	24.8	25.0	25.1	25.3	25.4	25.6	25.7	25.9	11
12	26.0	26.2	26.3	26.5	26.6	26.8	26.9	27.1	27.2	27.4	12
13	27.5	27.7	27.8	28.0	28.1	28.3	28.4	28.6	28.7	28.9	13
14	29.0	29.2	29.3	29.5	29.6	29.8	29.9	30.1	30.2	30.4	14
15	30.5	30.7	30.8	31.0	31.1	31.3	31.4	31.6	31.7	31.9	15
16	32.0	32.2	32.3	32.5	32.6	32.8	32.9	33.1	33.2	33.4	16
17	33.5	33.7	33.8	34.0	34.1	34.3	34.4	34.6	34.7	34.9	17
18	35.0	35.2	35.3	35.5	35.6	35.8	35.9	36.1	36.2	36.4	18
19	36.5	36.7	36.8	37.0	37.1	37.3	37.4	37.6	37.7	37.9	19
20	38.0	38.2	38.3	38.5	38.6	38.8	38.9	39.1	39.2	39.4	20
21	39.5	39.7	39.8	40.0	40.1	40.3	40.4	40.6	40.7	40.9	21
22	41.0	41.2	41.3	41.5	41.6	41.8	41.9	42.1	42.2	42.4	22
23	42.5	42.7	42.8	43.0	43.1	43.3	43.4	43.6	43.7	43.9	23
24	44.0	44.2	44.3	44.5	44.6	44.8	44.9	45.1	45.2	45.4	24
25	45.5	45.7	45.8	46.0	46.1	46.3	46.4	46.6	46.7	46.9	25
26	47.0	47.2	47.3	47.5	47.6	47.8	47.9	48.1	48.2	48.4	26
27	48.5	48.7	48.8	49.0	49.1	49.3	49.4	49.6	49.7	49.9	27
28	50.0	50.2	50.3	50.5	50.6	50.8	50.9	51.1	51.2	51.4	28
29	51.5	51.7	51.8	52.0	52.1	52.3	52.4	52.6	52.7	52.9	29
30	53.0	53.2	53.3	53.5	53.6	53.8	53.9	54.1	54.2	54.4	30
31	54.5	54.7	54.8	55.0	55.1	55.3	55.4	55.6	55.7	55.9	31
32	56.0	56.2	56.3	56.5	56.6	56.8	56.9	57.1	57.2	57.4	32
33	57.5	57.7	57.8	58.0	58.1	58.3	58.4	58.6	58.7	58.9	33
34	59.0	59.2	59.3	59.5	59.6	59.8	59.9	60.1	60.2	60.4	34
35	60.5	60.7	60.8	61.0	61.1	61.3	61.4	61.6	61.7	61.9	35
36	62.0	62.2	62.3	62.5	62.6	62.8	62.9	63.1	63.2	63.4	36
37	63.5	63.7	63.8	64.0	64.1	64.3	64.4	64.6	64.7	64.9	37
38	65.0	65.2	65.3	65.5	65.6	65.8	65.9	66.1	66.2	66.4	38
39	66.5	66.7	66.8	67.0	67.1	67.3	67.4	67.6	67.7	67.9	39
40	68.0	68.2	68.3	68.5	68.6	68.8	68.9	69.1	69.2	69.4	40

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 41.9. For same slopes but other widths of roadbed correct above figures by one-half difference in width of roadbed; thus in example above for 20 ft. roadbed distance will be 41.9 + (20 - 16) * 2 or 2 ft. added to 41.9 = 43.9. For slopes of 1 on 1 see inside of front cover.