

891

F.B. 891

LEVEL BOOK

373

KEUFFEL & ESSER CO.

DRAWING MATERIALS

AND

SURVEYING INSTRUMENTS.

NEW YORK.

CHICAGO. SAN FRANCISCO. ST. LOUIS.

MICROFILMED

TABLES FOR EXCAVATIONS AND EMBANKMENTS.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

ROADWAY 18 FEET WIDE. SIDE SLOPES 1 TO 1.

FOR SINGLE TRACK EXCAVATION.

"Copyright, 1895, by Keuffel & Esser Co."

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

Calculated by Julien A. Hall, M. Am. Soc. C. E.

7964 71 E. Cox. Harasity & India Affk

6829 1 E " Ghahmas. " " "

7796 71.0 " Winder " " "

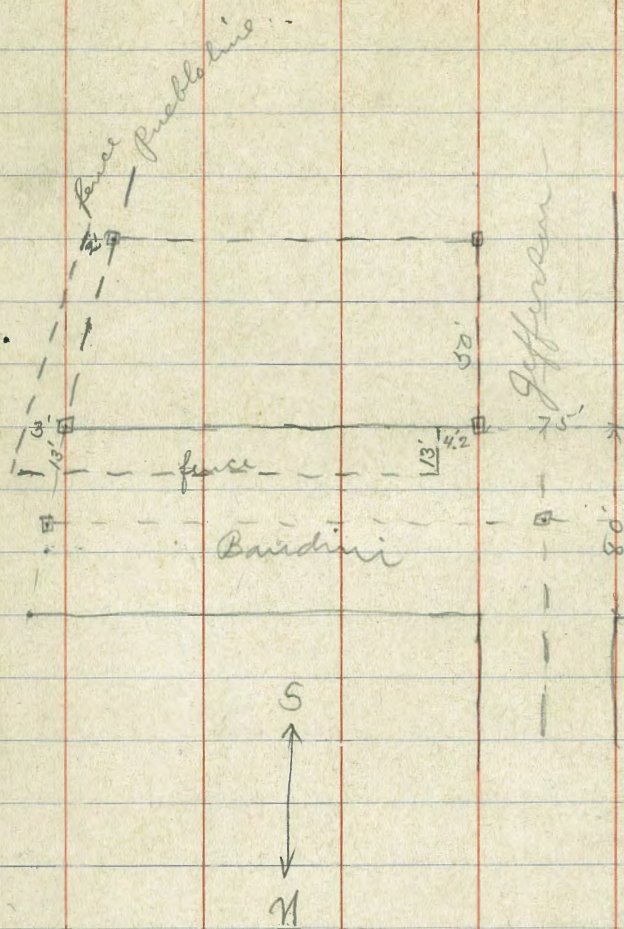
pole.

"

"

June 4/13

Chilid
Allen



	H.T.							
	11.82	89.78	77.96	B.M. N.W. cor. India	89.78	June 5/13	Chillico	
					under		attery	
					25' East		Bunka	
		East line	India	So. cl.			0.7	89.1
No line		9.3	80.5				1.3	88.5
		9.4	80.4	C			2.5	87.3
		9.3	80.5	C+9'			2.8	87.0
C		9.4	80.4	1/4			5.2	84.6
		9.4	80.4				5.6	84.2
		9.6	80.2	No line			7.2	82.6
No line		9.6	80.2		50' East			
		6' East		No line			3.2	86.6
No line		9.4	80.4				2.2	87.5
		8.8	81.0	no 1/4			0.5	89.3
		8.1	81.7	J.P.	1285.	H.L. 10246	0.17	88.61
C		5.4	84.4	C			12.0	90.5
		4.6	85.2				10.8	91.7
		2.7	87.1				9.4	93.1
No line		1.4	88.4	No line			8.2	94.3
					25' East			
				No line			11.6	90.9

PLOTTED

75' east

no line	5.3	97.2
	6.3	96.2
	7.5	95.0
C	8.9	93.6
	10.8	91.7
	11.5	91.0
no line	12.2	90.3
	96.3	east sect AB.
no line	9.4	93.1
	8.2	94.3
	6.9	95.6
C	5.7	96.8
	4.7	97.8
	3.6	98.9
no line	2.3	100.2

sect. AC (pueblo line)

C	2.4	100.1
	3.5	99.0
	7.5	95.0
no line going east.	8.1	94.4
no line " west.	9.3	93.2
		west line Columbia
no line.	7.87	94.69
no cb	6.5	96.0
point 20 in pueblo line	6.3	96.2
		west. cb.
no line	6.7	95.8
	5.1	97.4
	3.2	99.5
C	2.3	100.2
	2.1	100.4
no cb.	2.0	100.5

PLOTTED

West 1/4

no line + 4'	0.6	101.9	C
no cb.	1.3	101.2	
	1.1	101.4	
C	1.4	101.1	no line
	2.1	100.4	
	4.1	98.4	no line
no line	5.7	96.8	
			center
no line	4.9	97.6	no 1/4
	3.3	99.2	no. cb
	1.6	100.9	no line
C	0.7	101.8	J.P.
	0.3	102.2	
no cb.	0.4	102.1	no 1/4

PLOTTED

10246

6

E 1/4

	0.0	102.5	
	1.0	101.5	
	2.5	100.0	
	3.9	98.6	
			E cb
	3.3	99.2	
	2.0	100.5	
	0.5	102.0	
			E line
	1.1	101.4	
	3.3	99.2	
	12.84	113.71	H.E.
	1.59	100.87	sect A (preble line)
	10.9	102.8	
	9.1	104.6	
	8.40	105.3	
			West curb Colombia
no line	10.9	102.8	in preble line

West 1/4				East line	
Point C on public line	8.40	105.3	20 line	6.6	107.1
20 line	10.1	103.6	20 line + 4'	8.5	105.2
Center			cb	9.0	104.7
cb + 7'	10.8	102.9		9.2	104.5
20 line	9.1	104.6	C	9.6	104.1
24.8 20 of 20 line	7.7	106.0	no 1/4	10.4	103.3
E 1/4				25' east	
17' so. of 20 line	7.3	106.4	no line	12.4	101.3
20 line	8.5	105.2		10.7	103.0
20 line + 3'	10.0	103.7		8.3	105.4
cb	10.9	102.8	C	7.6	106.7
no 1/4	10.7	103.0		7.1	106.6
E cb.				6.8	106.9
C	10.4	103.3	cb + 6'	6.6	107.1
	10.0	103.7	20 line	5.3	108.4
	10.0	103.7			
cb + 6'	9.6	104.1			
20 line	7.7	106.0			
10' so. of 20 line	6.5	107.2			

113.71

8

50' east

no line	3.0	110.7
no line + 4'	4.4	109.3
	5.2	108.5
	5.2	108.5
C	5.6	108.1
	6.9	106.8
	8.7	105.0
no line	11.1	102.6
	11.8	101.9
	7.8	105.9
	4.6	109.1
C	3.7	110.0
	3.5	110.2
	2.9	110.8
cb + 5	2.6	111.1
no line	0.6	113.1

PLOTTED

100' east

no cb.

C

no line

no line

no 14

~~no 14~~

no line

J.P.

no line

0.6	113.1
1.4	102.3
1.6	112.1
3.0	110.7
7.2	106.5
10.9	102.8
	125' east
6.4	107.3
2.7	111.0
0.2	113.5
	150' east
1.4	112.3
12.71	126.27
0.15	113.56
	100' east
10.7	115.6

PLOTTED

125' east

C	12.6	113.7	no line
	11.5	114.8	
	11.1	115.2	
cb + s	10.2	116.1	C
soline	8.8	117.5	

150' east

soline	6.3	120.0	soline
soline + s	7.9	118.4	
cb	8.8	117.5	soline
	9.5	116.8	
C	9.7	116.6	
	10.2	116.1	C
no cb	11.7	114.6	

175' east

11.0	115.3
8.4	117.9
6.9	119.4
6.8	119.5
6.3	120.0
5.5	120.8
3.7	122.6

200' east (west line minus)

0.0	126.3
2.0	124.3
3.2	123.1
3.5	122.8
3.7	122.6
5.6	120.8
7.7	118.6
14.5	111.8

PLOTTED

126.27

10

W. cb.			Center			
20' no slope		13.7	112.6	20' no slope.	11.8	114.5
no line		6.1	120.2	no line	4.1	122.2
		3.9	124.4		1.7	124.6
		1.9	124.4		0.4	125.9
C		1.5	124.8	C	0.0	126.3
		1.6	124.7	E 1/4		
20 cb.		1.0	125.3	no 1/4	0.2	126.1
	W 1/4				1.1	125.2
20 cb		0.1	126.2	no line	2.9	123.4
		0.3	126.0	20' no slope.	9.6	116.7
C		0.7	125.6	E cb.		
		1.2	125.1	20' no. slope.	8.6	117.7
		2.4	123.9	no line	2.6	123.7
no line		5.2	121.1	no cb.	0.9	125.4
20' no slope.		12.8	113.5	E line		
				no cb.	0.2	126.1
				no line	2.24	124.1
				20' no. slope.	7.1	119.2

PLOTTED

June 5/13 ^{plotted} ^{atten} ^{Panel} 11

126.27

25' east

E line

20' no slope		4.0	122.3	soline		5.2	133.6
soline		0.6	125.7			7.5	131.3
S.P.	H.T. 13.09 138.84	0.52	125.75			8.7	130.1
	W curb.			C		9.9	128.9
soline		10.8	128.0	no 1/4		10.7	128.1
	W 1/4				25' east		
soline		9.8	129.0	no. cb.		9.2	129.6
	center					7.0	131.8
soline		8.6	130.2	C		5.9	132.9
		10.2	128.6			4.8	134.0
no 1/4		11.3	127.5			3.5	125.3
	E 1/4			soline		1.0	137.8
C		11.2	127.6				
		10.3	128.5				
		9.0	129.8				
soline		7.4	131.4				

PLOTTED

10.5

	138.84			
	50' east			
20 1/4		0.9	137.9	no line
C		1.4	137.4	
		2.3	136.5	
		4.6	134.2	C
no line		9.3	129.5	no 1/4
20 no. slope		14.0	124.8	
	75' east			
20 no. slope		9.3	129.5	
no line		4.6	134.2	C
no cb		1.2	137.6	
	100' east			
no line		0.6	134.2	no line
20 no. slope		4.9	133.9	
J.P.	12.95	^{H.I.} 151.14	0.65	138.19
	50' east			
no cb		11.7	139.4	
no line		8.8	142.3	

PLOTTED

June 6/13 { dechilds
Cutter
Bunker 12

	75' east			
		4.7	146.4	
		7.5	143.6	
		9.2	141.9	
		10.0	141.1	
		11.2	139.9	
	100' east			
		9.3	141.8	
		6.3	144.8	
		5.2	145.9	
		4.3	146.8	
		3.0	148.1	
		0.6	150.5	
	125' east			
		0.1	151.0	
		1.2	149.9	
		2.8	148.3	
		4.8	146.3	
		7.7	143.4	
		12.4	138.7	

no line
20 no. slope.

151.14

150' east

20' no. slope	7.8	143.3	no line
no line	2.3	148.8	
no cb.	0.0	151.1	

175' east

20' no. slope	6.0	145.1	
J.P.	13.04	163.68	0.50 150.64

125' east

no. cb	11.7	152.0	no line
no line	9.1	154.6	no 1/4

150' east

no line	6.1	157.6	
	7.9	155.8	
	9.2	154.5	no line
C	9.9	153.8	20' no. slope.
no 1/4	10.9	152.8	

PLOTTED

13

175' east

11.6	152.1
8.8	154.9
7.2	156.5

6.1 157.6

4.8 158.9

3.6 160.1

2.4 161.3

20' east (west line Horton)

0.7 162.0

1.9 161.8

3.2 160.5

4.6 159.1

7.3 156.4

14.5 149.2

				163.68			
West cb.				E 1/4		14	
20' no slope.	13.1	150.6	no cb.	0.2	163.5		
no line	5.3	158.4	no line	2.7	161.0		
	3.2	160.5	20' no slope	10.7	153.0		
	1.9	161.8					
C	0.4	163.3	20' no slope	10.7	153.0		
			no line	1.7	162.0		
no 1/4	0.8	162.9					
	2.4	161.3	no line	1.5	162.2		
no line	3.9	159.8	20' no. slope.	10.5	153.2		
20' no. slope.	12.9	150.8					
			20' no. slope.	10.5	153.2		
			J.P.	12.70	175.13	1.25	162.43
20' no slope.	12.0	151.7					
no line	3.4	160.3					
	1.6	162.1	no cb.	11.3	163.8		
no 1/4	0.0	163.7	no line	9.8	165.3		

PLOTTED

163.68

West cb.				E. cb.			
soline		7.4	167.7	soline		2.7	172.4
		9.6	165.5			4.0	171.1
so 1/4		11.0	164.1			5.5	169.6
	W. 1/4				C	7.2	167.9
C		10.9	164.2			8.8	166.3
		9.5	165.6		no cb.	10.3	166.8
		8.1	167.0				
soline		5.8	169.3		no cb.		
	center					9.4	165.7
soline		4.7	170.4		C	6.9	168.2
		6.5	168.6			5.4	169.7
		8.1	167.0			4.2	170.9
C		9.9	165.2		soline	2.6	172.5
	E 1/4					1.4	173.7
no 1/4		10.1	165.0		C		
C		8.3	166.8			1.8	173.3
		6.5	168.6			3.5	171.6
		5.0	170.1			6.2	168.9
soline		3.7	171.4		no line	10.2	164.9
	PLOTTED						

E. line Horton

25" east

50' east
 20' no. slope. 16.0 159.1
 no line 5.4 169.7
 no. cb. 1.2 173.9

75' east
 no line 4.2 170.9
 20' no slope. 15.4 159.7

100' east
 20' no slope. 15.5 159.6
 no line 6.0 169.1

125' east
 no line 6.7 168.4
 20' no. slope. 15.0 160.1

150' east
 20' no. slope. 15.4 159.7
 no line 0.8 174.3

175' east
 no line 1.0 174.1
 20' no slope. 13.8 161.3

PLOTTED

200' east (west line puterbaugh)
 20' no slope. 10.5 166.6
 no line 0.8 174.3

west cb.
 20' no slope. 9.8 165.3

W 1/4
 20' no slope 9.8 165.3

center
 20' no slope. 9.8 165.3

E 1/4
 20' no slope. 9.2 165.9

E cb.
 20' no slope. 10.2 164.9

E line
 20' no slope. 10.4 164.7

25' east
 20' no slope. 11.7 163.4

50' east
 20' no slope. 16.9 158.2

175.13

75' east

20' no slope.

8.0

167.1

no cb.

100' east

20' no slope.

0.2

174.9

C

S.P.

13.11

H.T.

188.05

0.19

174.94

25' east Horton

20' 1/4

13.6

174.5

20 line

12.3

175.8

20 line

10.9

177.2

20' 1/4

50' east

C

20 line

6.5

181.6

7.8

180.3

no cb.

9.3

178.8

C

10.4

177.7

no cb.

no 1/4

11.9

176.2

C

17

75' east

11.3

176.8

7.8

180.3

6.1

182.0

4.2

183.9

3.0

185.1

1.8

186.3

100' east

1.3

186.8

4.5

183.6

8.6

179.5

12.7

175.4

125' east

11.5

176.6

8.0

180.1

3.3

184.8

PLOTTED

PLOTTED

18895

18

center

150' east	no 1/4	2.1	186.0	no line	12.1	176.0
	no cb.	5.0	183.1		6.7	181.4

175' east

	no cb.	7.5	180.6	no 1/4	1.3	186.8
	no 1/4	1.1	187.0	no 1/4	0.7	187.4

200' east (west line putterbaugh)

	no 1/4	3.3	184.8	no line	5.6	182.5
	no cb.	7.9	180.2		12.2	175.9

west cb.

	no line	11.5	176.6	no line	11.9	176.2
		6.4	181.7		4.7	183.4
	no 1/4	0.3	187.8	no 1/4	0.1	188.0

	no 1/4	0.3	187.8	E. line putterbaugh.		
--	--------	-----	-------	----------------------	--	--

w 1/4

	no 1/4	0.3	187.8	no 1/4	+0.3	188.4
		7.1	181.0	no line	5.0	183.1
	no line	11.8	176.3		12.1	176.0

PLOTTED

188.05

25' east

no line

16.2 171.9

20' no slope.

6.7 181.5

10.8 177.3

no line

4.1 184.0

no 1/4

6.5 181.6

2.4 185.7

50' east

no 1/4

0.2 187.9

no 1/4

14.3 173.7

T.P.

H.I.
13.10 201.14 0.01 188.04

17.9 170.2

100' east of Horton

no line

21.9 166.2

no line

13.0 188.1

75' east

no line

11.1 190.0

no line

15.4 172.7

125' east

8.1 193.0

13.0 175.1

no line

9.6 191.5

no 1/4

10.4 177.7

no 1/4

12.2 188.9

100' east

no 1/4

5.5 182.6

150' east

11.9 189.2

7.4 180.7

C

8.8 192.3

no line

9.5 178.6

7.2 193.9

no line

6.0 195.1

PLOTTED

19

201.14

20

	175' east				E. line puterbaugh		
20' eb.		4.5	196.6	C		6.9	192.2
		6.1	195.0	20' 1/4		2.3	198.8
C		8.9	197.2		25' east		
	200' east (over line puterbaugh)			C		15.1	186.0
C		11.0	190.1			12.4	188.7
20' 1/4		4.6	196.5			9.5	191.6
	west eb.			20 line		5.6	195.5
20' 1/4		1.6	199.5		50' east		
C		6.0	195.1	20 line		12.4	188.7
	W 1/4					17.7	183.4
C		4.8	196.3			21.0	180.1
	center			C		24.3	176.8
C		3.9	197.2		75' east		
	E 1/4			C		21.2	179.9
C		4.8	196.3			18.8	182.3
	E eb.					15.3	185.8
C		5.0	196.1	20 line		10.6	190.6

PLOTTED

PLOTTED

June 6/13

Hahilda
letter
Number 21

	100' east		175' east
no line	4.6 196.5	20' no slope.	11.4 189.7
	9.3 191.8	no line	6.3 194.8
	13.2 187.9		4.1 197.0
C	16.3 184.8		2.3 198.8
	125' east	C	0.4 200.7
C	10.4 190.7		200' east (west line Torrence)
	7.0 184.1	no 1/4	0.2 200.9
no cb.	3.5 197.6		2.6 198.5
	150' east	no line	6.2 194.9
no 1/4	1.0 200.1	20' no slope.	13.0 188.1
C	4.5 196.6		west cb
	7.4 193.7	20' no slope.	13.7 187.4
	9.2 191.9	no line	7.9 193.2
no line	11.4 189.7		3.9 197.2
20' no slope.	13.4 187.7	no 1/4	0.6 200.5

PLOTTED

June 9/13
201.14
Helildo
atten
Bunker 22

W 1/4

E. ob.

no 1/4	1.1	200.0	20' no slope	17.4	183.7
	3.9	197.2	no line	8.7	193.4
no line	8.5	192.6		5.6	195.5
20' no slope.	15.5	185.6	no 1/4	1.6	199.5

center

E. line Torrence.

20' no slope.	15.8	185.3	no 1/4	1.7	199.4
no line	8.6	192.5		5.1	196.0
	5.1	196.0	no line	8.8	192.3
no 1/4	1.7	199.4	20' no slope.	17.4	183.7

E 1/4

J.P. low turn

no 1/4	1.7	199.4	J.P. High turn 12.89	213.73	0.30	200.84
	5.1	196.0	175' east of Horton.			
no line	8.8	192.3	no line	15.0	198.7	
20' no slope.	16.6	184.5	200' east (west line gutter bangle)			

40 line

11.6 202.1

20 ob.

14.5 199.2

W. ob.

no ob

12.6 201.1

no line

10.4 203.3

PLOTTED

	W 1/4				125' east puterbaugh		
soline		9.4	204.3	soline		114	202.3
		10.6	203.1		150' east,		
so 1/4		12.5	207.2	soline		3.8	209.9
	Center			so cb.		8.7	205.0
so 1/4		12.1	201.6		175' east		
		9.6	204.1	so 1/4		9.2	204.5
soline		8.4	205.3			5.8	207.9
	E 1/4			soline		0.6	213.1
soline		7.6	206.1		200' east (west line Torrance)		
		8.9	204.8	so cb.		4.1	209.6
so 1/4		11.4	202.3			6.9	206.8
	E cb.			C		9.8	203.9
so 1/4		11.3	202.4		W cb.		
		8.7	205.0	C		8.8	204.9
soline		6.6	207.1			6.2	207.5
	E. line puterbaugh			so cb.		3.2	210.5
soline		6.3	207.38	so			
so cb		9.2	204.5				

PLOTTED

	W 1/4				25' east		
No. cb.		2.9	200.8	No 1/4		10.9	202.8
		5.8	207.9			7.6	206.1
C		8.9	204.8	No line		4.1	209.6
	Center				50' east		
C		9.4	204.3	No line		6.6	207.1
		6.4	207.3	No cb.		11.7	202.0
No. cb.		2.8	210.9		75' east		
	E 1/4			No. cb.		13.2	200.5
No. cb.		2.6	211.1	No line		7.1	206.6
		6.2	207.5		100' east		
C		9.7	204.0	No line.		0.5	208.2
	E. cb.					9.5	204.2
C		9.7	204.0	No 1/4		12.6	201.1
		5.5	208.2		114' east		
No. cb.		2.4	211.3	No 1/4		11.4	202.3
	E line Torrence					8.5	205.2
No. cb.		2.9	210.8	No. line		4.6	209.1
		5.6	208.1				
C	PLOTTED	9.8	203.9				

213.73

125' east

No line 4.1 209.6

8.3 205.4

No 1/4 11.6 202.1

150' east

No cb. 11.5 202.2

No line 7.1 206.6

175' east Torrence.

No line 9.9 203.8

East line Neale.

No line 7.25 206.48

No cb. 13.1 200.6

25' east

No cb. 13.0 200.7

No line 8.8 204.9

50' east.

No line 5.2 208.5

9.5 204.2

No 1/4 11.7 202.0

PLOTTED

213.73

25

75' east

" 13.3 200.4

10.9 202.8

8.0 205.7

100' east

No line 12.8 200.9

J.P. east turn 12.2 201.57

J.P. 6.62 ^{H.I.} 217.34 3.01 210.72

West line Torrence

No line 2.5 214.8

W cb. 2.3 215.0

W 1/4 1.6 215.7

Center 1.5 215.8

E 1/4 1.0 216.3

E cb. 0.4 216.9

No line

301.75

150' east

no. eb.	11.7	190.0	no line
	9.2	192.5	
C	6.6	195.1	
no 1/4	3.5	198.2	C

175' east

no eb.	1.7	200.0	no 1/4
	6.3	195.4	C
C	9.0	192.7	
no 1/4	11.3	190.4	

200' east (west line near) no line

no 1/4	12.9	188.8	
	10.1	191.6	no eb.
no line	6.4	195.3	

East line near.

no 1/4	4.8	196.9	
C	7.3	194.4	
	9.2	192.5	
	10.8	190.9	
no line	12.65	189.10	

PLOTTED

27

25' east

	8.6	193.1
	5.0	196.7
	3.6	198.1
	2.3	199.4
	1.6	200.1

50' east

	2.0	199.7
	4.9	196.8
	8.2	193.5
	12.1	189.6

75' east

	11.8	189.9
	8.6	193.1
	4.9	196.8

	201.75				June 9/13	Childs atten Bunker
	100' east				75' east	28
no. cb.		3.4	198.3	no. cb.		3.8 185.8
		6.0	195.7	no line		7.8 181.8
C		9.1	192.6	20' no. slope.		15.0 174.6
no. 1/4		12.2	189.5		100' east	
	125' east			20' no slope.		8.5 181.1
C		12.1	189.6		114' east	
		10.7	191.0	20' no slope.		5.7 183.9
		9.1	192.6		125' east	
no line		6.7	195.0	20' no slope.		5.4 184.2
	150' east.				150' east	
no line		12.9	188.8	20' no slope		9.0 180.6
	H.I.					
T.P.	0.49	189.59	189.10	no line		2.4 187.2
	95' east Torrence				175' east	
20' no. slope		7.6	184.0	no. cb.		2.5 187.1
	50' east			no line		6.2 183.4
20 no. slope		11.7	177.9	20' no slope.		14.6 175.0
no line		5.7	183.9			

PLOTTED

189.59				June 16/13 191.08			
200' east (west line meale)				125' east			
20' no. slope		16.4	173.2	no line		12.1	179.0
no line		11.8	177.8			8.1	183.0
		8.6	181.0	no 1/4		4.6	186.5
		6.2	183.4				
C		3.7	185.9	no cb.		4.5	186.6
	East line meale.					6.3	184.8
20' no. slope		4.7	184.9	C		7.6	183.5
	25' east					9.8	181.3
20' no slope.		5.0	184.6	no cb.		12.0	179.1
	50' east						
20' no slope.		8.4	181.2	no 1/4		13.5	177.6
	75' east					12.4	178.7
20' no slope.		11.4	178.2	no line		9.1	182.0
J.P.	H.I. 2.13 191.08	0.64	188.95	J.P.	H.I. 1.23 179.19	13.12	177.96
no-line		4.8	186.3				
	100' east						
no cb.		3.9	187.2	20' no. slope.		8.0	171.2
no line		7.4	183.7			12.4	166.8
20' no. slope	PLOTTED	17.3	173.8	no line		3.9	175.3

Bluffs
Bunker
29

179.19

175' east.

no line

8.7 170.5 no cb

6.7 172.5 no line

5.1 174.1

C

2.9 176.3 no line

200' east (west line Borne)

no line

2.37 176.82 no line

6.4 172.8 J.P.

9.6 169.6

C

11.9 167.3 20' no. slope.

west cb.

200' east (west line Borne)

C

15.2 164.0 20' no. slope.

11.8 167.4 no line

8.8 170.4

no line

5.2 174.0 no 1/4

w 1/4

west cb.

no line

6.8 172.4 no 1/4

10.5 168.7

no 1/4

14.9 164.3 no line

PLOTTED

179.19

30

center

13.3 165.9

8.4 170.8

E 1/4

9.2 170.0

E cb.

11.0 168.2

0.17 ⁴⁵ 167.12 12.24 166.95

175' east meale

5.3 161.8

13.2 153.9

6.33 160.8

3.4 163.7

2.1 165.0

5.3 161.8

6.8 160.3

9.9 157.2

W 1/4

16' east Boone.

No. cb.

9.0 158.1

no line

9.7 157.4

7.5 159.6

25' east

c

5.8 161.3

no line

10.8 156.3

center

J.P.

3.53 ^{HI} 168.42 12.23 154.89

So 1/4

5.4 161.7

W. cb. Boone.

c

8.3 158.8

20' no. slope.

7.1 151.3

E 1/4

W 1/4

c

10.9 156.2

20' no. slope

9.2 149.2

6.7 160.4

no line

6.3 152.1

So. cb.

2.9 164.2

Center

11.0 147.4

E cb.

no 1/4

6.2 152.2

So. cb.

4.6 162.5

6.4 152.0

So 1/4

9.7 157.4

no line

6.2 152.2

East line Boone.

20' no slope

11.0 147.4

So. cb.

8.0 159.1

13.4

no. line

3.51 163.6

50' no. slope

22.0

PLOTTED

W 1/4

	E 1/4				16' east		
20' 1/4		6.2	152.2	20' no. slope		15.6	142.8
		6.4	152.0	no. line		17.1	141.3
no line		9.6	148.8		bottom of draw.	19.2	139.2
20' no. slope		13.4	145.0			14.7	143.7
	E. Cb.			C		11.0	147.4
50' no. slope bottom of draw		22.0	136.4			6.2	152.2
no line		14.0	144.4	10' Cb.		5.9	152.5
		9.5	148.9		25' east		
		6.7	151.7	20' Cb.		5.9	152.5
C		6.0	152.4			8.7	149.7
	East line Bono.			C		12.6	145.8
20' 1/4		5.7	152.7			16.7	142.7
C		6.0	152.4		bottom of draw.	19.2	139.2
		10.0	148.4	no line		15.8	142.6
		14.0	144.4	20' no. slope.		14.1	144.3
no line	bottom of draw.	20.0	138.4				
30' no. slope		18.6	139.8				

PLOTTED

41' east

20' no. slope.	10.9	147.5
no line	14.0	144.4
bottom of draw	17.8	140.6
	15.7	142.7
C	13.1	145.3
	9.6	148.8
	5.1	153.3
no line	4.6	153.8

50' east

no line	4.1	154.3
	5.0	153.4
	9.3	149.1
C	13.0	145.4
	15.5	152.9
bottom of draw	17.5	140.9
no line	12.9	145.5
20' no. slope.	9.4	149.0

PLOTTED

75' east

20' no. slope	6.7	151.7
no line	12.1	146.3
	13.9	144.5
bottom of draw	16.0	142.4
C	11.0	147.4
	6.8	151.6
	3.9	154.5
no line	1.7	156.7

100' east

no line	0.0	158.4
	5.1	153.3
	8.2	150.2
C	10.7	147.7
	12.9	145.5
	13.5	144.9
cb+6' bottom of draw	15.2	143.2
no line	12.1	146.3
20' no.	7.5	150.9

June 16/13
 Lehigh
 34
 Bunker

112' east

20' no. slope.	8.7	149.7
no line bottom of draw.	14.5	143.9
	12.6	145.8
	12.0	146.4
C	10.6	147.8
	8.2	150.2
	5.9	152.5
no line	1.3	157.1
	125' east	
20' line	5.2	153.2
	7.6	150.8
	9.2	149.2
C	10.9	147.5
	12.7	145.7
	13.7	144.7
no line bottom of draw	11.6	146.8
20' no. slope.	6.8	151.6

PLOTTED

141' east

20' no. slope.	4.4	154.0
no line	8.5	149.9
	10.9	147.5
	10.8	147.6
C	11.0	147.4
	10.3	148.1
	10.9	147.5
	12.3	146.1
	6.3	152.1
	150' east.	
20' no. slope.	6.3	152.1
10' no. bottom of draw.	11.5	146.9
30' line	10.0	148.4
	9.6	148.8
	9.6	148.8
C	9.2	149.2
	8.8	149.6
	7.8	150.6
no line	6.6	151.8

158.42

175' east

no cb.

0.0 158.4

20' 20. slope.

6.1 164.5

1.6 156.8

center

C

2.4 156.0

20' 20. slope.

2.4 168.2

3.4 155.0

J.P.

12.97

H.I.
183.13

0.46 170.16.

3.2 155.2

West line Truffer

20 line

3.7 154.7

no line

13.5 169.6

20' 20. bottom of draw.

10.6 147.8

12.0 171.1

J.P.

H.I.
12.68 170.62

0.48 157.94

no line

8.90 174.2

200' east (West line Truffer)

w. cb.

20' 20. slope.

13.3 157.3

no line

3.5 179.6

20 line

7.42 163.2

5.2 177.9

6.1 164.5

7.2 175.9

5.0 165.6

C

9.4 173.7

C

3.7 166.9

11.6 171.5

w. cb.

no cb.

12.5 170.6

20 line

2.5 168.1

20' 20. slope.

9.5 161.1

PLOTTED

170.62 June 17/31

Jehilds
atten
Banks 35

w 1/4

W 1/4				E 1/4			
no line		12.2	170.9	20' 20' slope		9.8	173.3
		9.7	173.4	no line		5.0	178.1
		8.2	174.9			2.9	180.2
C		6.9	176.2			1.8	181.3
		4.6	178.5	C		1.0	182.1
		2.7	180.4		Ecb.		
no line		0.3	182.8	no cb.		0.9	182.2
	center			no line		2.3	180.8
no 1/4		1.4	181.7	20' 20' slope.		7.5	175.6
C		3.2	179.9		East line Snuffer.		
		4.7	178.4	20' 20' slope.		3.2	179.9
		6.0	177.1	S.P.	12.89	^{14.5} 195.26	0.76 182.37
no line		8.0	175.1		center of Snuffer		
20' 20' slope.		14.8	168.3	no line		10.0	185.3
				no cb.		12.3	183.0
					E 1/4		
				no line		7.5	187.8
						10.0	185.3
				no 1/4		10.9	184.4

PLOTTED

195.26

E. cb.

no 'ly

C

no line

no line

C

no line

20' 20. slope

no line

20' 20.

PLOTTED

11.4 183.9

9.5 185.8

8.5 186.8

7.1 188.2

5.3 190.0

East line Trupper

1.75 193.6

3.6 191.7

5.0 190.3

5.8 189.5

6.8 188.5

8.5 186.8

9.69 185.6

25' east

8.1 187.2

2.9 192.4

50' east

2.0 193.3

J.P.

no cb.

C

no line

no 'ly

C

no line

20' 20 slope.

no line

J.P.

37

12.32 ^{H.I.} 207.48 0.10 196.16

25' east Trupper

12.8 194.7

11.0 196.5

9.2 198.3

7.7 199.8

6.1 201.4

5.5 202.0

50' east

1.5 206.0

2.8 204.7

4.5 203.0

6.1 201.4

8.8 198.7

75' east

9.4 198.1

3.0 204.5

13.21 ^{H.F.} 220.34 0.35 207.13

T.S.J.

	50' east				125' east		
no. ch.		12.9	20 7.4	20' 1/4		0.3	220.0
no. line		11.5	20 8.8			2.8	217.5
	75' east			no. line		6.8	213.5
no. line		4.0	216.3	20' 20	slope.	15.3	205.0
		6.1	214.2				
		7.2	213.1	20' 20.	slope.	14.0	206.3
C		9.2	211.1	no. line		3.3	217.0
		10.9	209.4				
no. ch.		12.6	207.7	20' 20.	slope	13.9	206.4
	100' east				200' east (west line sublett)		
20' 20. slope.		17.0	203.3	20' 20.	slope.	17.5	202.8
no. line		10.8	209.5	J.P.		0.68	220.74
		7.4	214.9			0.28	220.06
		5.3	215.0	no. line			
C		2.7	217.6				
no 1/4		1.0	219.3	no. line		7.84	212.9
				no. ch.		3.5	217.2

PLOTTED

220,74

39

W. cb.				E. cb.			
20 1/4		0.5	220.2	no line		2.6	218.1
		4.3	216.4	20' no slope		2.2	218.5
no line		8.6	212.1	J.P.	13,09	^{H.I.} 233.15	220.06
20' 20. slope		17.0	203.7		100' east Trupper		
	W 1/4			no cb.		11.8	221.3
20' 20. slope		15.0	205.7	no line		9.3	223.8
no line		8.4	212.3		125' east		
		3.6	217.1	no line		3.4	229.7
20 1/4		0.0	220.7			5.6	227.5
	Center					8.7	224.4
no cb.		3.6	217.1	C		10.7	222.4
no line		7.7	213.0		150' east		
20' 20. slope		10.4	210.3	no cb.		10.3	222.8
	E 1/4					7.8	225.3
20' 20 slope		7.9	212.8	C		6.1	228.0
no line		5.7	215.0			2.9	220.2
no cb.		1.5	219.2	no cb.		0.5	222.6

PLOTTED

175' east

no 1/4	2.2	230.9	no cb.
C	4.5	228.6	
	8.2	224.9	C
no cb.	11.4	222.7	no 1/4

Foot east (west line Sublot)

no 1/4	12.0	221.1	no 1/4
C	8.0	225.1	C
	4.7	228.7	
no cb.	1.9	231.2	no cb.

W.cb.

no cb.	0.9	232.2	no 1/4
	5.1	228.0	C
C	7.7	225.4	

W 1/4

C	7.0	226.1	no cb.
	5.7	227.4	
no cb.	1.1	232.0	

n

PLOTTED

center

1.7	232.4
5.4	227.7
8.7	224.4
12.7	220.4

E 1/4

11.0	222.1
7.8	225.3
4.3	228.8
1.5	231.6

E.cb.

3.5	229.6
5.6	227.5
8.8	224.3
12.3	220.8

233.15

East line Sublett

20' so. slope.		11.9	221.2	no line	W. cb.	7.5	238.3
no line		10.96	222.1		W 1/4	7.7	
		8.8	224.3	no line		7.7	238.1
		6.0	227.1		Center		
C		3.1	230.0	no line		9.3	236.5
	25' east				E 1/4		
20' cb.		0.1	233.0	no line		9.3	236.5
no line		0.9	232.2		E. cb.		
20' so. slope.		2.9	230.2	no line		7.7	238.1
J.R	H.I. 12.92 245.75	0.32	232.83	no cb.		12.7	233.1
	150' east Truffer.				East line Sublett.		
no line		10.3	235.5	no 1/4		12.2	233.6
	175' east					8.7	237.1
no line		6.4	239.4	no line		4.35	241.5
no cb.		12.3	233.5				
	200' east (west line Sublett)						
no line		8.7	237.1				

PLOTTED

41

245.75

25' east

no cb.

3.2 242.6

no line

5.9 239.9

C

8.7 237.1

no line

no 1/4

10.1 235.7

50' east

20' so. slope.

12.0 233.8

C

no line

5.6 240.2

no 1/4

no cb.

2.1 243.7

66' east

no cb.

no line

0.8 245.0

20' so. slope.

9.6 236.2

C

75' east

20' so. slope.

8.7 237.1

88.9 east (queblo line)

no line

20' so. slope.

7.2 238.6

J.P.

13.28 ^{H.I.} 259.03 0.00 246.75

259.03

42

25' east (queblo line)

12.4 246.6

50' east

4.4 256.6

7.4 251.6

9.7 249.3

10.9 248.1

12.6 246.4

66' east

9.5 249.5

7.0 252.0

6.0 254.0

3.9 255.1

2.4 253.6

0.8 258.2

PLOTTED

75' east		(sect AB) 100' east or north to pueblo cor. on south	
noline	0.9 258.1	noline	2.6 256.4
	1.8 257.2		3.4 255.6
	3.2 255.8		4.5 254.5
C	4.6 254.4	C	5.8 253.2
	6.4 252.6		8.1 250.9
	8.6 250.4		10.3 248.7
Aoline	12.9 246.1		14.0 245.0
	88.9 east (pueblo cor on south)	Aoline	
Aoline	14.0 245.0	sect AC (pueblo cor on south to blk cor on north)	
	10.2 248.8	Aoline	14.0 245.0
	7.7 251.3		13.2 245.8
	5.3 253.7		15.5 243.5
C	3.9 255.1	C	17.4 241.6
	2.6 256.4		18.2 240.8
noline	15 257.5		17.5 241.5
		noline	17.5 241.5

PLOTTED

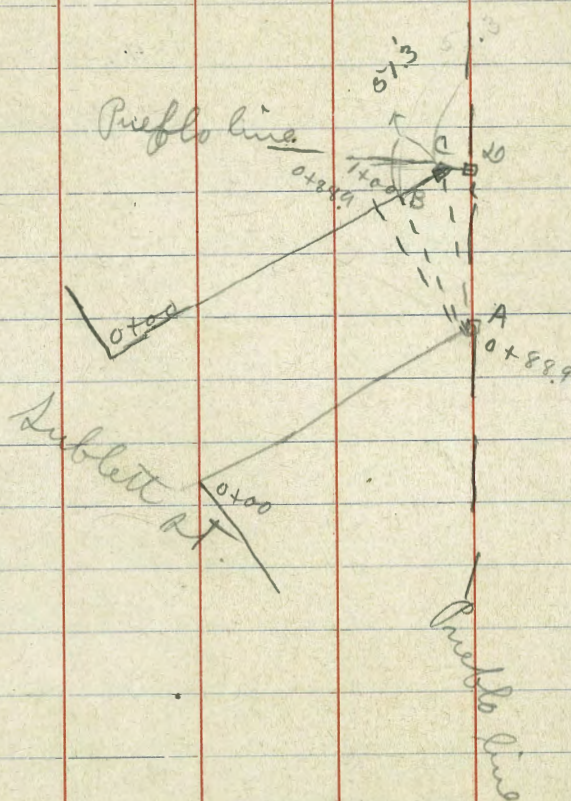
June 17/13

Childs
Allen 44
Bunker

Queblo line sect. A x D

no line	19.5	239.5
	19.0	240.0
	18.7	240.3
C	18.4	240.6
	16.2	242.8
	14.0	245.0
soline	14.0	245.0

checked on Bench at Torrance
+ Pringle



PLOTTED

PLOTTED

Xsect, 32nd street, from
Thom. 65' Street H.I.

So. line myrtle to No. line } Shields
June 24/13 } 45
Bunker

6.36

333.94

327.58

RM

100' 20.

So. line myrtle

white

5.7 328.2

W. line

4.2 329.7

5.7 328.2

4.3 329.6

5.6 328.3

4.3 329.6

c

5.5 328.4

c

4.4 329.5

5.3 328.6

4.3 329.6

5.4 328.5

4.2 329.7

E line

5.6 328.3

E line

4.4 329.5

150' 20.

50' 20.

E line

5.9 328.0

E line

4.9 329.0

5.9 328.0

5.0 328.9

6.3 327.6

4.8 329.1

c

6.3 327.6

c

4.8 329.1

6.2 327.7

4.7 329.2

6.3 327.6

4.9 329.0

white

6.2 327.7

white

4.8 329.1

PLOTTED

33394 June 21/13 ^{blinds} alt 46
Bunker

300' 20.

300' 20. (no line upst)

White	6.9	327.0
	6.8	327.1
	6.7	327.2
C	6.7	327.2
	6.6	327.3
	6.6	327.3
Elvis	6.8	327.1

White	8.8	325.05
	8.7	325.2
	8.6	325.3
C	8.4	325.5
	8.3	325.6
	8.0	325.9
Elvis	7.9	326.0

250' 20.

J-P.

2.00 327.05

Elvis	7.1	326.5
	7.1	326.8
	7.2	326.7
C	7.5	326.4
	7.8	326.1
	7.8	326.1
White	8.0	325.9

PLOTTED

327.05 (30' street of or upas)

June 23/13

Builds
Gutter
47

Center upas.

50' 20.

White	2.5	324.6	White	3.8	323.3
	2.3	324.8		3.6	323.5
	2.2	324.9		3.4	323.7
C	1.8	325.3	C	3.2	323.9
	1.6	325.5		3.0	324.1
	1.4	325.7		2.7	324.4
Elms	1.3	325.8	Elms	2.7	324.4

Asoline upas.

100' 20.

Elms	1.5	325.6	Elms	3.8	323.3
	1.7	325.4		3.9	323.2
	1.9	325.2		4.0	323.1
C	2.2	324.9	C	4.2	322.9
	2.4	324.7		4.3	322.8
	2.6	324.5		4.5	322.6
White	2.6	324.5	White	4.8	322.3

PLOTTED

327.05

48

150' 20.

250' 20.

White

6.3 320.8

White

10.0 317.1

6.2 320.9

9.6 317.5

5.8 321.3

9.3 317.8

C

5.4 321.7

C

8.9 318.2

5.2 321.9

8.5 318.6

5.1 322.0

8.2 318.9

Eline

4.8 322.3

Eline

7.7 319.4

200' 20.

300' 20.

Eline

6.2 320.9

Eline

10.1 317.0

6.4 320.7

10.5 316.6

6.6 320.5

11.0 316.1

C

7.0 320.1

C

11.7 315.4

7.1 320.0

11.6 315.5

7.5 319.6

11.9 315.2

White

7.6 319.5

White

12.3 314.8

J.P.

1.56

H.I.
315.66

12.95 314.10

PLOTTED

315.66

350' RD.

white

3.4 312.3

2.9 312.8

2.4 313.3

C

2.1 313.6

1.8 313.9

1.4 314.3

Eline

1.1 314.6

375' RD.

Eline

1.9 313.8

2.1 313.6

3.1 314.6

C

3.6 312.1

4.3 311.4

7.0 308.7

white

9.5 306.2

PLOTTED

49

400' RD.

wcb.

14.6 301.1

10.1 305.6

5.5 310.2

C

4.0 311.7

3.6 312.1

Eline

3.1 312.6

425' RD.

Eline

4.2 311.5

4.5 311.2

5.0 310.7

6.0 309.7

W^{1/4}

10.9 304.8

450' 20.

w 1/4	8.4	307.3	white
C	7.1	308.6	
	6.0	309.7	
	5.3	310.4	C
E line	4.4	311.3	

475' 20.

E line	6.1	309.6	E line
	6.6	309.1	J.P.
	8.6	307.1	
C	11.6	304.1	white

500' 20.

E cb.	12.6	303.1	white
E line	8.6	307.1	w cb.

~~600' 20 (north line J)~~

w cb.

white

bottom of draw

bottom of draw

PLOTTED

315.66

50

600' north (north line J line)

9.2	306.5
9.7	306.0
11.0	304.7
11.3	304.4
11.0	304.7
10.3	305.4
10.4	305.3

0.83 ^{H.I.} 303.45 13.04 302.62

400' 20.

4.5 298.9

425' 20.

7.8 295.6

5.3 298.1

450' 20.

4.0 299.4

8.5 294.9

PLOTTED

475' 20.

white

6.2 297.2

eline

4.3 299.1

w/4

2.1 301.3

cb+4'

bottom of draw

500' 20.

E 1/4

4.0 299.4

c

c

6.8 296.6

8.7 294.7

white

10.1 293.3

white

10.4 293.0

white

520' 20.

white

11.6 291.8

bottom of draw.

11.9 291.5

c

11.9 291.5

c

11.1 292.3

9.6 293.8

eline

6.8 296.6

eline

3.1 300.3

550' 20.

7.8 295.6

13.2 290.2

15.2 288.2

14.4 289.0

12.9 290.5

12.4 291.0

11.0 292.4

4.5 298.9

57.5' 20.

3.2 300.2

8.8 294.6

12.1 291.3

13.6 289.8

14.9 288.5

15.2 288.2

bottom of draw.

9.7 293.7

PLOTTED

J'80'20.

Eline

10.8 292.6

11.4 292.0

12.4 291.0

C

12.6 290.8

11.0 292.4

7.8 295.6

White

2.5 300.9

PLOTTED

PLOTTE

Cross Section of 15' Alley bet 3rd & 4th from No line Walnut to So line Univ Ave

291.1

53

I } Davis
 L } Hancock
 13 } Herrick

327

141
 291.06

287.29 bet NW 1/4 Walnut Part.

100' N.

				W	4.8	284.3
		No Line Walnut		O	5.2	85.9
				+6	5.0	84.1
W		5.5	285.6	E	3.9	87.2
C		5.6	85.5			
+5		5.5	85.6	E	4.1	87.0
E		5.2	86.1	+3	4.5	86.4
		25' N.		O	4.8	81.3
E		4.8	86.3	W	4.7	86.4
C		5.1	86.0			
W		5.3	85.8	W	4.0	87.1
		50' N.		C	4.2	86.9
W		5.1	86.0	E	3.7	87.4
C		5.1	86.0			
E		4.9	86.2	E	2.6	87.5
		75' N.		C	4.1	87.0
E		4.0	87.1	W	3.9	87.2
+3		5.0	86.1			
C		5.2	85.9	W	2.9	87.2
W		4.9	86.2	O	3.8	87.3
				E	3.6	87.5

125' N.

150' N.

175' N.

200' N.

PLOTTED

H1
291.06
225' No Walnut

E		3.6	87.5
C		3.6	87.5
W		3.4	87.7

250' No

W		3.4	87.7
C		3.5	87.4
E		3.3	87.8

T.P	5.51	H1 293.16	3.41	87.65
-----	------	--------------	------	-------

275' No

E		5.3	87.9
C		5.3	87.9
W		5.1	88.1

300' No

W		5.1	88.1
C		5.2	88.0
E		4.9	88.3

325' No

E		4.4	88.8
C		4.9	88.3
W		5.3	87.9

PLOTTED

293.2

3150' No

54

W		5.0	88.9
C		4.9	88.3
E		4.5	88.7

375' No

E		4.5	88.7
C		4.8	88.4
W		4.8	88.4

400' No

W		4.6	88.4
C		4.6	88.4
E		4.4	88.8

425' No

E		3.9	89.3
C		4.4	88.8
W		4.6	88.6

450' No

W		4.3	88.9
C		4.2	89.0
E		4.2	89.0

171
293.16

475 No. Walnut

E		40	889.2
O		44	88.8
W		43	88.9

450 No.

W		49	88.3
O		53	87.9
E		49	88.3

525 No.

E		54	87.8
O		57	87.0
W		50	88.2

500 No.

W		70	86.2
O		68	86.4
E		60	87.2

T.P.	081	287.54	6.63	286.79
------	-----	--------	------	--------

575 No.

E		51	84.4
O		36	83.9
W		38	83.7
		30	84.5

PLOTTED

287.5

596 No.

W		41	283.4
		44	81.7

600 No. S.L. Brooks

W		58	81.7
O		60	81.5
E		58	81.4

Case 141

425

44

287.57

425

283.29

283.27 (B.M. No. 1076)

N.L. Brooks

E		67	80.9
O		69	80.7
W		69	80.7

25 No.

W		65	80.8
O		69	80.7
E		70	80.6

50 No.

E		72	80.4
O		71	80.5
W		72	80.3

55

147
287.57
75' No. Brooks

W			70	280.5
C			70	80.5
E			69	80.7

100' No

E			72	80.3
C			71	80.5
W			72	80.9
T.P	542	286.01	704	280.50

135' No

W			52	80.8
C			55	80.5
E			56	80.4

150' No

E			57	80.3
C			56	80.4
W			55	80.5

175' No

W			56	80.4
C			56	80.6
E			57	80.3

PLOTTED

286.0

200' No

E			57	280.3
C			54	80.6
W			55	80.5

212' No

W			55	81.5
W			54	80.6

225' No

W			56	80.4
C			55	80.5
E			56	80.4

250' No

E			53	80.7
C			55	80.5
W			54	80.6

275' No

W			55	80.5
C			51	80.9
E			52	80.8

56

286.01

300' N. Brooks

E	40	81.4
C Top MH	44 422	81.4
W	52	80.8

325' N.

W	52	80.4
O	55	80.5
E	51	80.9

350' N.

E	50	81.0
O	52	80.4
W	52	80.8

375' N.

W	47	81.3
O	51	80.9
E	48	81.3

400' N.

E	45	81.5
O	47	81.3
N	46	81.4

PLOTTED

286.0

400' N.

57

W	41	81.9
O	42	81.8
E	42	81.8

400' N.

E	30	82.6
O	34	82.4
W	34	82.4

TP	5.28	227.87	342	282.59
----	------	--------	-----	--------

475' N.

W	48	83.3
O	52	82.7
E	50	82.9

500' N.

E	48	83.1
O	51	82.8
W	50	82.9

525' N.

W	57	82.2
O	53	82.4
E	54	82.5

287.87

55° N. Brakes

E	52	82.7
O	52	82.3
W	54	82.5

87° N.

W	52	82.7
O	58	82.4
E	54	82.8

60° N. S.L. Pa.

E	48	83.1
O	50	82.9
W	50	82.9

Cor. Ht.	2.49	287.84	2.49	285.28	150.504 N.H. Pa.
----------	------	--------	------	--------	------------------

N.L. Pa.

W	50	82.8
O	50	82.8
E	45	83.3

75° N.

E	46	83.2
O	48	83.0
W	48	83.0

PLOTTED

287.84

50° N.

W	47	83.1
O	47	83.1
E	44	83.4

74° N.

E	46	83.2
O	46	83.2
W	45	83.3

100° N.

W	46	83.2
O	44	83.4
E	42	83.6

TP	5.22	288.73	4.33	282.51
----	------	--------	------	--------

125° N.

E	53	83.4
O	52	83.5
W	52	83.5

150° N.

W	54	83.3
O	55	83.2
E	54	83.3

58

288.73

175 N. P₂

E	52	83.3
C	52	83.3
W	5.2	83.5

200 N.

W	5.3	83.4
C	5.5	83.3
E	5.3	83.4

225 N.

E	4.9	83.8
C	5.4	83.3
W	5.2	83.5

250 N.

W	5.0	83.7
C	5.3	83.4
E	5.2	83.5

275 N.

E	4.7	84.0
C	4.8	83.9
W	5.0	83.7

PLOTTED

288.73

175 N.

W	4.6	84.1
C	4.3 4.1	84.4
E	4.7	84.0

325 N.

E	4.6	84.1
C	4.7	84.0
W	4.7	84.0

350 N.

W	4.2	84.3
C	4.5	84.3
E	4.5	84.2

375 N.

E	4.4	84.3
C	4.5	84.2
W	4.5	84.2

400 N.

W	4.2	84.5
C	4.3	84.4
E	4.3	84.4

59

14
28673
125 N. P.

E 38 284.9
C 41 84.6
W 40 84.7

T.R. 6.64 291.31 406 284.67

45° N.

W 65 84.8
C 64 84.9
E 62 85.1

47° N.

E 61 85.2
O 62 85.1
W 62 85.1

50° N.

W 58 85.5
C 57 85.6
E 54 85.9

52.5 N.

E 50 86.3
C 52 85.7
W 55 85.8

PLOTTED

29131

500 N.

60

W 51 284.2
C 53 84.0
E 49 84.4

57.5 N.

E 45 84.8
C 49 84.4
W 44 84.9

60° N. St. Robinson

W 46 84.7
C 47 84.6
E 44 84.9

243

288.88

288.87 B.M. N. P.

N.L. Robinson

E 43 87.0
C 45 86.8
W 46 86.7

25° N.

W 33 88.0
C 40 87.3
C 39 87.4
E 34 87.9

291.81

50 N. Rakinsky

E	32	289.1
C	35	87.8
W	39	88.0

75 N.

W	27	88.4
C	29	88.4
E	29	88.4

100 N.

E	28	88.5
C	29	88.4
W	29	88.4

T.P.

4447

292.96

282

288.49

125 N.

W	45	88.5
C	45	88.5
E	46	88.4

150 N.

E	41	88.9
C	42	88.8
W	46	88.4

PLOTTED

292.96

175 N.

W	49	288.1
C	46	88.4
E	45	88.5

200 N.

E	48	88.2
C	47	88.3
W	46	88.4

225 N.

W	43	88.7
C	47	88.3
E	29	88.1

250 N.

E	47	88.3
C	47	88.3
W	45	88.5

275 N.

W	48	88.2
C	52	87.8
E	52	87.8

61

29296

300 N.

E	5.2	87.7
C	5.4	87.6
W	5.4	87.6

325 N.

W	5.4	87.6
C	5.5	87.5
E	5.3	87.7

350 N.

E	5.7	87.3
C	5.8	87.2
W	5.7	87.2
W	5.0	88.0

375 N.

W	5.6	87.4
C	5.7	87.1
E	5.9	87.1

400 N.

E	6.0	87.0
C	6.0	87.0
W	6.0	87.0

PLOTTED

29296

416 N. - S. Line Univ. Ave

62

W = Paving	6.07	88.89
C = Top F.T.	5.95	87.01
E = Paving	6.00	84.96

TP	4.75	291.77	5.94	288.02
----	------	--------	------	--------

4.75	287.02	287.01	287.01	287.01
------	--------	--------	--------	--------

Note: Paving at So. Univ. sets corners with Top of Curbs at alley lines.

PLOTTED

25
10
75

X side of 3125
rd Elm to S.L. Croker St

177m SE from
20' Elm

240.75

3125

63

263 259.86 257.23
0.70 247.46 231.0 246.76
612 240.75 1283 234.63

50' n of Elm - E

257.23
6.63
250.60
250.26
250.20
257.26
12.83
234.43
6.15
240.28
4.0
240.35
18.89
259.24

N. d. of Elm W on E + W(S)

E 9.6 331.3
9.0 31.8
8.4 32.6
6 8.0 32.8
7.6 33.2
7.2 33.6
W 6.9 33.9
20' N. d. of Elm at rd (80')
W 5.4 35.4
5.7 35.1
6.2 34.6
6.6 34.3
6.9 33.9
7.6 33.2
E 8.3 32.5

E 5.7 335.1
5.2 356
4.4 364
4.1 36.7
3.5 37.3
3.8 37.8
2.8 37.8

TP 10.9 250.64
10.0 250.64 0.40 249.35

100' n of Elm

W 8.5 42.1
9.0 41.6
9.2 41.4
9.8 40.8
10.2 40.4
10.7 39.9
11.1 39.5

PLOTTED

250.64

150

n of

Elm

55 245.1

50 45.6

44 46.8

6 40 46.0

36 47.0

37 46.9

38 46.8

200

n of

Elm

86 252.03

W TP

1174

261.75

87 53.3

87 53.1

90 52.8

94 52.4

94 52.4

98 52.0

105 51.3

PLOTTED

261.75

250

n of

Elm

52 256.6

50 56.8

6 48 57.0

48 57.0

50 56.8

47 57.1

46 57.2

300 = 52 Elm (60)

19 59.9

19 59.9

19 59.9

6 21 59.7

20 59.8

23 59.5

26 59.2

64

250.64

250.63

11.75

261.75

26175

S	ht	Feb 11	
E		20	259.8
		19	59.9
		16	60.2
L		16	60.2
		16	60.2
		14	60.4
W		13	60.5

S	ht	Feb 11	
W		09	60.9
		11	60.7
		11	60.7
L		11	60.7
		12	60.6
		14	60.4
E		14	60.4

584

26977

080

26095

PLOTTED

26979

5100

66

ht	Feb 11	
E	20	260.8
	88	61.0
	86	61.3
L	87	61.1
	87	61.1
	86	61.3
W	85	61.3

N	ht	Feb	
W		82	61.6
		81	61.7
		83	61.5
L		83	61.5
		82	61.6
		85	61.3
E		85	61.3

26175
 584
 26095
 584
 26979

	h	hb	Fin v
E			81 261.7
			80 61.8
			77 62.1
b			78 62.0
			78 62.0
			77 62.1
w			78 62.0

h 2 of Fin v

w			76 62.3
			72 62.6
			74 62.4
b			74 62.4
			73 62.5
			76 62.2
E			77 62.1

PLOTTED

	50	ng	Fin v
E			62 263.6
			60 63.8
			59 63.9
b			59 63.9
			57 64.1
			57 64.1
w			54 64.4

100 ng Fin v

w			41 65.7
			46 65.3
			48 65.0
b			47 65.1
			48 65.0
			51 64.7
E			52 64.6

26979

150

R f

Fin

E

30 264.8

44 65.4

44 65.4

b

41 65.7

43 65.5

39 65.9

W

33 66.5

200

R f

Fin

W

30 66.8

32 66.6

35 66.3

b

36 66.3

38 66.0

44 65.4

E

48 65.0

PLOTTED

26979

250

R f

Fin

E

38 266.0

34 66.4

30 66.8

b

25 67.3

27 67.1

23 67.5

W

24 67.6

TP

576

27426

129

26850

300

R f

Fin

W

57 68.6

56 68.7

62 68.1

b

61 68.3

63 68.0

65 67.8

E

67 67.6

68

26979
1.23
268.56
5.75
274.31

27426

347

n

70

E

50 269.3

47 69.6

57 69.2

46 69.7

48 69.5

54 68.9

n

58 68.5

350 m of S S bank - W (60E)

(80W)

n

70 67.3

65 67.8

70 67.3

6

64 67.9

58 68.5

57 69.2

E

52 69.1

PLOTTED

27426

350 m of W } S S bank
365 m of E

31 11

69

E

61 268.2

65 67.8

66 67.7

6

70 67.3

70 67.3

70 67.3

n

70 67.3

bank BM

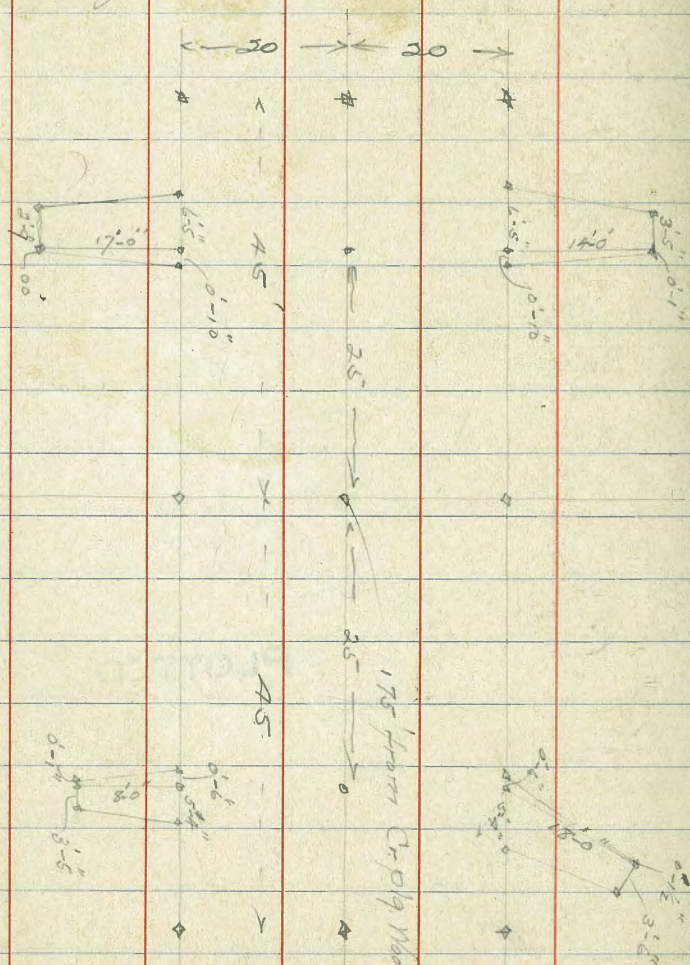
421 270.05

See Encl B 66

PLOTTED

7/14/13 Hatch
Moore
Hall
Stakes for excavation Woolman
Ave Bridge

B.M. Mon 302 18.88 1386
NE Feltan - Woolman
top of Footing block 1252 6.36
Near Cr. of Bridge



Note - Cr. Hub at Feltan should be
used only for measurement.

For line use
13 pt

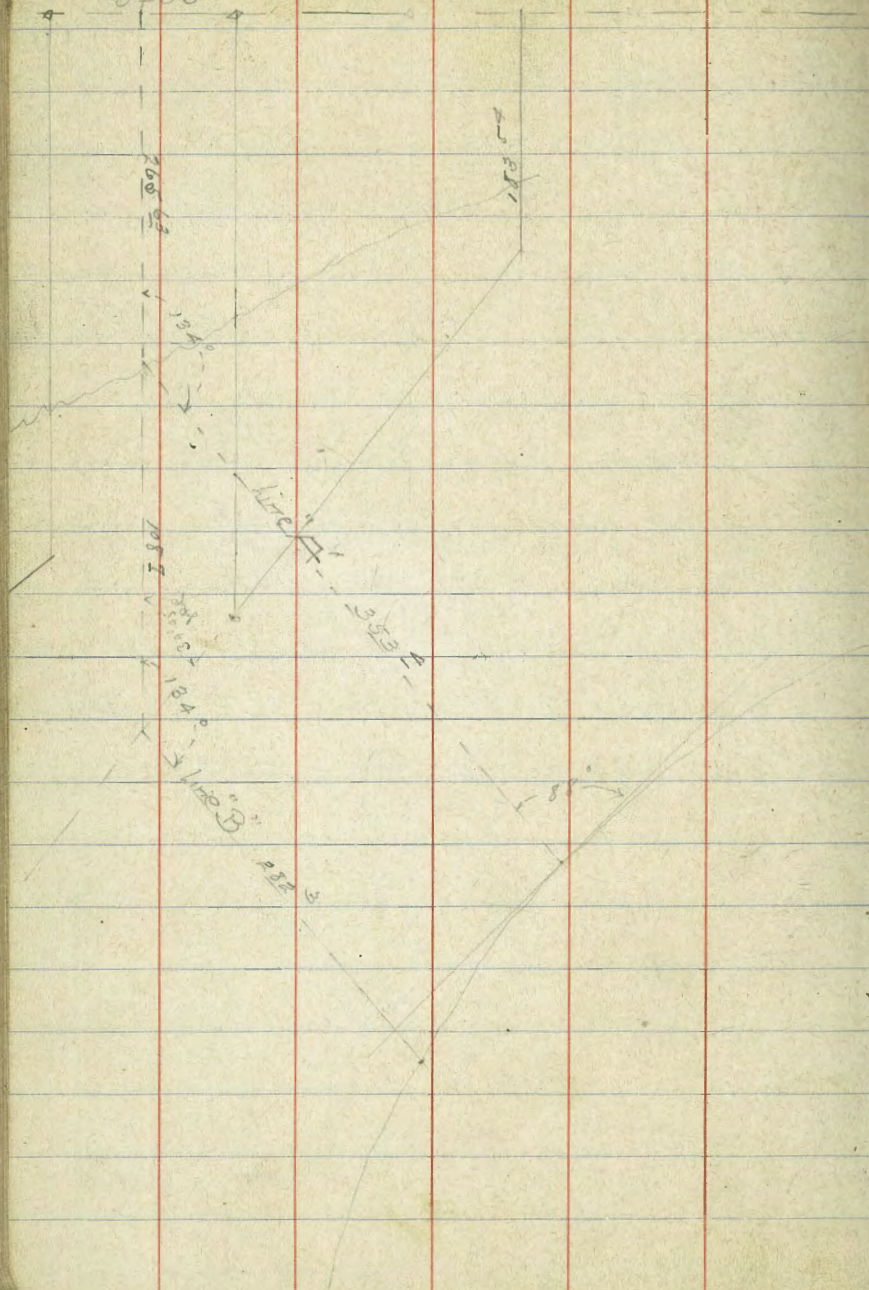
7/15/13 Hatch
113
Checked depth of excavation -
Grade stakes for foundations of wing walls

70

143	18.29	1386	
359	11.51	10.37	7.92
		11.01	2.5
		9.01	2.5
NE. H	Spike in pole 9.5 at SE wing	1.01	10.5 7'
SE	Spike in pole	20.1	9.5 6'
SW	Trap pit	5.01	6.5 3'
NW	Stake	20.1	9.5 6'
<hr/>			
	Spike SE Cor. 14.64	20.14	9.5
	E Cor. studs marked this Elev.	2.90	17.24 19.24 (2.1)
	Elev. top of form at Cr. of each	243	17.71 (3.58 mpts of lower)
	Elev. top wall West end	+320	23.34

1/15/13 Hatch Survey for bridge - City Gardens

0+88



1

	380	16.0		12.2
Top of W. Rail				
	330	18.95	535	10.65
	513	9.43	965	4.30
Nail in Tol. W. S. side of River			422	5.21
0+00			5.7	3.2
+50			5.6	3.8
			5.1	4.3
+50			5.0	4.4
			4.5	4.9
+50			3.9	5.5
+65 ⁶³ angle			3.8	5.8
+80			8.5	0.9
6			12.5	- 3.1
+82			12.8	- 3.4
+50			11.3	- 1.9
+85			11.7	- 2.3
+90			10.4	- 1.0
4			9.9	- 0.5
+20			10.4	- 1.0
+23			11.3	- 1.9

+46		11.5	-2 ¹
+65		2.9	+5 ⁰
5		5.6	+3 ⁸
+50		5.8	+3 ⁸
6		6.1	+3 ³
+10		0.7	+8 ⁷
+19	⊕ Dyke	0.7	8 ⁷
2+80	line "B"	7.7	1 ²
+95		10.4	-1 ⁰
3		10.3	-0 ⁹
+9		11.0	-1 ⁶
+13		12.9	-3 ⁵
+38		12.6	-3 ²
+63		12.5	-3 ¹
+74 ²³	angle	11.7	-2 ²
4		10.6	-1 ²
+33		10.4	-1 ⁰
+38		13.0	-3 ⁸
+60		13.0	-3 ⁶

+72		11.6	-2 ²
+80		5.8	+3 ⁶
+90		4.1	5 ³
5		4.3	5 ¹
+50		5.5	3 ⁹
6		6.1	3 ²
+40		6.3	3 ¹
+49		1.1	8 ³
+58 ⁵		1.0	8 ⁴

2
26
5

Blount
Twp
45

X Sec f Zm ⁽⁶⁰⁾ Ed 34 to Wd or

Bm 5 W St
31st St

Bm	218	27220	27005
7P	040	<u>26450</u>	26460
Ed	31 st		
n		29	242.1
		34	41.4
		37	41.3
b		42	40.8
		46	40.4
		51	59.9
S		57	59.3
	25	Ed	31 st
S		74	57.4
		69	58.1
		59	59.1
b		53	59.7
		48	40.2
		44	40.1
n		40	41.0

265^W

Zm

73

	50	Ed	31 st	
n			70	258.0
			76	57.4
			81	56.9
b			88	56.2
			93	55.7
			103	54.7
S			107	54.1
TP	83 ^W	<u>25472</u>	1260	25240
	75 ^W	Ed	31	51.6
S			47	50.0
			37	51.0
			35	51.2
b			24	52.3
			18	52.9
			10	53.7
n			00	54.7

27005
218
27220
26450
26460
26500
26500
1260
25240
25472

25472

24207

70

242.1
E 8

150

31

74

	100	E 8	31.25		n		116	230.5	25472 1205 242.1
2			4.8	249.9			104	31.7	
			5.8	48.9			113	30.8	
			6.0	48.7		b	128	29.3	
b			6.5	48.2			136	28.5	
			7.0	47.7			152	26.9	
			7.6	47.1		S	123	24.8	
S			8.5	46.2			120	E 8	31.25
	125	E 8	31.25			S	178	25.1	
S			11.6	43.1			178	24.3	
n			11.1	43.5			160	26.1	
4			10.1	44.6		b	155	26.6	
	125	E 8	31.25				146	27.5	
S			162	38.5			140	27.1	
			15.0	39.7		n	135	28.6	
			13.8	40.9					
b			11.0	43.7					
			10.0	44.7					
			9.4	45.3					
n			9.0	45.7					
TP	00	24207	12.65	242.07					

PLOTTED

242.07
242.1

254.85
254.9

74

75

775' E 8 31.2

240 E-W 2 Sda 31 (10)

n 6.0 236.1

n 0.2 254.7

9.5 32.6

0.2 54.7

10.5 31.4

0.5 54.4

6 10.5 31.4

6 0.6 54.3

11.0 31.1

1.0 53.9

9.0 33.1

1.5 53.4

S 6.8 35.3

S 1.8 53.1

12.77 254.9
254.85 + 0.01 242.08

TP 12.47 244.7
246.0 254.2

190 E 10.2

W 11.3 Sda

S 10.2 44.7

S 11.3 55.4

200 E 8 51 51.8

11.3 55.4

S 8.4 46.5

11.2 55.5

7.5 47.4

6 11.0 55.7

7.4 47.5

10.8 55.9

6 7.6 47.3

10.7 56.0

7.6 47.3

n 10.7 56.0

7.3 47.6

n 6.6 48.3

PLOTTED

242.08
12.77
254.85
6.3
254.85
11.40
260.69

266.09
266.7

266.89

70

70

	W	1/4 f	Ida	
n			90	257.7
			93	57.4
			96	57.1
b			98	54.9
			97	57.0
			98	54.9
s			102	54.5
		center of	Ida 11	
s			89	57.8
			87	58.0
			86	58.1
b			84	58.3
			85	58.5
			80	58.7
n			77	59.0

	E	1/4 f	Ida	
n			67	260.0
			70	59.7
			73	59.4
b			75	59.2
			74	58.9
			78	58.9
s			80	58.7
		center of	Ida	
s			69	59.8
			68	59.9
			65	60.2
			63	60.4
			59	60.8
			55	61.2
n			50	61.7

PLOTTED

26669

26669

For

77

	E 2	of	Ida	4
n			34	263.3
			40	42.7
			45	42.2
b			48	41.9
			52	41.5
			55	41.2
s			58	40.9

n

b

s

25' E 8

			Ida
s			33 43.4
			30 43.7
			28 43.9
b			23 44.4
			19 44.8
			16 45.1
n			15 45.2

s

b

n

50

E 8

Ida

75'

E 8

Ida

			01 266.6
			04 44.3
			07 44.0
			10 45.7
			12 45.5
			16 45.1
			18 44.9
			35 43.2
			30 43.7
			26 44.1
			20 44.7
			14 45.3
			10 45.7
			05 46.2

PLOTTED

266.69

258.94
258.9

7th

8

100	E f	Ida	
n		24	264.5
		28	43.9
		38	42.9
b		45	42.2
		50	41.7
		57	41.0
s		68	59.9
125	E f	Ida	
s		132	53.5
		118	54.9
		84	58.3
b		90	57.7
		100	56.7
		92	57.5
n		90	57.7

7P 213 258.94 9.88 258.81

PLOTTED

150	E f	Ida	
n		95	249.4
		110	47.9
		117	47.2
b		126	46.3
		130	45.9
		130	45.9
s		148	44.1
160	E f	Ida	
s		158	43.1
		142	44.7
		132	45.7
b		128	46.1
		118	47.1
		110	47.9
n		100	48.9

266.69
9.88
258.81
2.13
258.94

258.94
258.9

775

sf

Ida

n	46	254.3
	45	54.4
	7.0	51.9
l	9.0	49.9
	9.0	49.9
	10.6	48.3
s	11.2	47.7

200

sf

Ida

s	28	56.1
ll	17	57.2
TP	11.31	219.4
		229.39
	0.86	258.09
y	10.8	58.5
b	9.8	59.5
	9.0	60.4
	9.2	60.2
n	6.9	62.5

PLOTTED

289.39
269.4

285

sf

Ida

n	36	265.8
	46	64.8
	50	64.4
b	59	63.5
	64	63.0
	74	62.0
s	84	61.0

260

sf

Ida

s	61	63.3
	53	64.1
	47	64.7
b	40	65.4
	32	66.2
	25	66.9
n	20	67.4

79

258.94
26
258.09
12.31
269.39

289.39

249.4

70

285

S = 242

32nd

25

n

20

247.4

27

44.7

33

44.1

l

40

65.4

47

44.7

55

63.9

s

64

63.0

TD

1113

280.52

0.20

289.19

5 W Smith

330

277.00

324 Smith

PLOTTED

Level on floor at N.W. cor. of

Praterbanger & Harasich.

J.P.	246	^{H.I.} 177.401	174.94
------	-----	-------------------------	--------

level of floor.	6.6	170.8	
-----------------	-----	-------	--

Sept. 27/13

} behind
Ottew
Bunker

(81)

170.4

217.39 NW 4th Walnut 0+16
 218.32 NW 4th Birch 0+41
 215.35 NW Pq. Hill 1+41
 211.87 NW Ridge Hill
 217.01 NW Spruce Hill

344.25
 183.54
 160.71
 345

199.90
 9.19
 200.02
 187.04
 13.98
 205.48
 4.22
 209.70 H.I.
 9.86
 199.84

89.61
 10.46
 101.07

177.4
 101.36 H.I.
 6.76
 94.59
 0.48
 100.87

173.91
 161.43
 12.48
 0.28
 161.71 H.I.
 149.60
 12.07
 0.35
 149.99 H.I.
 137.19
 12.80
 0.04
 137.63 H.I.
 124.76
 12.88
 13.14
 124.49 H.I.
 0.15
 124.64 H.I.
 1.62
 123.02
 112.56
 12.08
 0.33
 112.89 H.I.
 99.87
 13.02
 0.20
 100.07 H.I.
 89.61
 10.46

344.13
 374.35
 265.63
 108.72

636
 86
 265.63
 108.72
 374.35

231.1

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

ROADWAY 14 FEET WIDE. SIDE SLOPES 1 1/2 TO 1.

FOR SINGLE TRACK EMBANKMENT.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	7.0	7.2	7.3	7.5	7.6	7.8	7.9	8.1	8.2	8.4	0
1	8.5	8.7	8.8	9.0	9.1	9.3	9.4	9.6	9.7	9.9	1
2	10.0	10.2	10.3	10.5	10.6	10.8	10.9	11.1	11.2	11.4	2
3	11.5	11.7	11.8	12.0	12.1	12.3	12.4	12.6	12.7	12.9	3
4	13.0	13.2	13.3	13.5	13.6	13.8	13.9	14.1	14.2	14.4	4
5	14.5	14.7	14.8	15.0	15.1	15.3	15.4	15.6	15.7	15.9	5
6	16.0	16.2	16.3	16.5	16.6	16.8	16.9	17.1	17.2	17.4	6
7	17.5	17.7	17.8	18.0	18.1	18.3	18.4	18.6	18.7	18.9	7
8	19.0	19.2	19.3	19.5	19.6	19.8	19.9	20.1	20.2	20.4	8
9	20.5	20.7	20.8	21.0	21.1	21.3	21.4	21.6	21.7	21.9	9
10	22.0	22.2	22.3	22.5	22.6	22.8	22.9	23.1	23.2	23.4	10
11	23.5	23.7	23.8	24.0	24.1	24.3	24.4	24.6	24.7	24.9	11
12	25.0	25.2	25.3	25.5	25.6	25.8	25.9	26.1	26.2	26.4	12
13	26.5	26.7	26.8	27.0	27.1	27.3	27.4	27.6	27.7	27.9	13
14	28.0	28.2	28.3	28.5	28.6	28.8	28.9	29.1	29.2	29.4	14
15	29.5	29.7	29.8	30.0	30.1	30.3	30.4	30.6	30.7	30.9	15
16	31.0	31.2	31.3	31.5	31.6	31.8	31.9	32.1	32.2	32.4	16
17	32.5	32.7	32.8	33.0	33.1	33.3	33.4	33.6	33.7	33.9	17
18	34.0	34.2	34.3	34.5	34.6	34.8	34.9	35.1	35.2	35.4	18
19	35.5	35.7	35.8	36.0	36.1	36.3	36.4	36.6	36.7	36.9	19
20	37.0	37.2	37.3	37.5	37.6	37.8	37.9	38.1	38.2	38.4	20
21	38.5	38.7	38.8	39.0	39.1	39.3	39.4	39.6	39.7	39.9	21
22	40.0	40.2	40.3	40.5	40.6	40.8	40.9	41.1	41.2	41.4	22
23	41.5	41.7	41.8	42.0	42.1	42.3	42.4	42.6	42.7	42.9	23
24	43.0	43.2	43.3	43.5	43.6	43.8	43.9	44.1	44.2	44.4	24
25	44.5	44.7	44.8	45.0	45.1	45.3	45.4	45.6	45.7	45.9	25
26	46.0	46.2	46.3	46.5	46.6	46.8	46.9	47.1	47.2	47.4	26
27	47.5	47.7	47.8	48.0	48.1	48.3	48.4	48.6	48.7	48.9	27
28	49.0	49.2	49.3	49.5	49.6	49.8	49.9	50.1	50.2	50.4	28
29	50.5	50.7	50.8	51.0	51.1	51.3	51.4	51.6	51.7	51.9	29
30	52.0	52.2	52.3	52.5	52.6	52.8	52.9	53.1	53.2	53.4	30
31	53.5	53.7	53.8	54.0	54.1	54.3	54.4	54.6	54.7	54.9	31
32	55.0	55.2	55.3	55.5	55.6	55.8	55.9	56.1	56.2	56.4	32
33	56.5	56.7	56.8	57.0	57.1	57.3	57.4	57.6	57.7	57.9	33
34	58.0	58.2	58.3	58.5	58.6	58.8	58.9	59.1	59.2	59.4	34
35	59.5	59.7	59.8	60.0	60.1	60.3	60.4	60.6	60.7	60.9	35
36	61.0	61.2	61.3	61.5	61.6	61.8	61.9	62.1	62.2	62.4	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.

MADE IN GERMANY.