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

LEVEL BOOK

400

F.B. 412

H. S. CROCKER COMPANY

DRAWING MATERIALS AND SURVEYING INSTRUMENTS

SAN FRANCISCO

412

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 Kueffel & 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.

MICROFILMED
DEC 0 1964

N.E. Cor. Colima & Bayard.
Hd spk. pole Grd. 77.816

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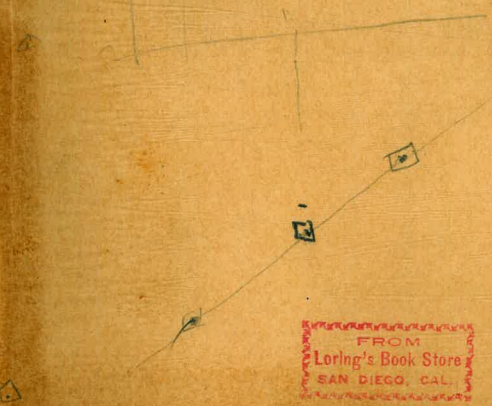
W. of Electric 2nd round pole
Hd spk grd 80.694

Atura bet. Allison & Bayard.
Burkie place S.E. Cor. fence
Hd. sp. grd. 83.15

Ostea Blvd. 2nd round pole
N of RR. Track Hd spk. grd. 86.51

N.E. Cor. Missouri & Bayard
Hd spk. pole grd 48.24



59.82
48.24
11.58

8657
8069
5.82

FROM
Loring's Book Store
SAN DIEGO, CAL.

Cross Sec. of Turnout at 2nd pole in of RR on Bird St. Nw.

B.M.	12.53	~~99.04~~ 93.22		~~86.57~~ 80.69	
Elevation of rail. N side			10.0	89.0	83.2
" " Ctr.			10.1	88.9	83.1
" " S. side			10.3	88.7	82.9
E. line Ry. Right of way.					
N			6.8	92.2	86.4
ch.			6.7	92.3	
1/4			6.5	92.5	
c.			6.3	92.7	86.9
1/4			8.2	90.8	
ch.			8.4	90.6	
S			6.3	92.7	86.9
6+77.8 R.△ From S. line St & RR. R.W.					
S			6.3	92.7	✓ 86.9
ch.			7.1		
1/4			6.9		
c			6.3	92.7	86.9
1/4			5.7		
ch.			5.5		
N			5.9	93.1	87.3

From R.R. R.W. to Cross St.

	6+50				
N		~~99.04~~ 93.22	4.9	94.1 ✓	88.3
ch.			4.8		
1/4			4.5		
c			5.7	93.3	87.5
1/4			5.3		
ch.			5.4		
S			4.7	94.3 ✓	88.5
	6+~~25~~ 35				
S			4.8	94.2	88.1
ch.			4.5		
1/4			4.3		
c			4.7	94.3	88.5
1/4			4.1		
ch.			4.1		
N			4.0	95.0	89.2 ✓

POSTED

	6+00				
N		99.04 93.22	3.2	95.8 ✓	90.0
ch.			3.2		
1/5			3.3		
c			3.8	95.2	89.4
1/5			3.4		
ch.			4.0		
S			4.1	95.9 ✓	89.1
		5+75			
S.			3.4	95.6 ✓	89.8
ch.			3.2		
1/4			2.9		
c			3.2	95.8	90.0
1/4			2.5		
ch.			2.3		
N			2.3	96.7	90.9

		5+50			
N		99.04 93.22	1.5	97.5 ✓	91.7
ch.			1.4		
1/4			1.6		
c			2.0	97.0	91.2
1/5			1.9		
ch.			2.5		
S			2.5	96.5 ✓	90.7
		5+25			
S.		99.04	1.7	97.3 ✓	91.5
ch.			1.5		
1/4			1.0		
c			1.3	97.7	91.9
1/4			0.7		
ch.			0.6		
N			0.6	98.4 ✓	92.6
T.P.	9.86	108.00 102.18	0.90	98.14 92.32	

	5+00				
N		~~108.0~~ 102.18	6.7	99.3 ✓	93.5
ch.			8.8	99.2	
1/4			8.8	99.2	
C.			8.4	99.6	93.8
1/4			9.2		
ch.			9.8		
S.			9.9	98.1 ✓	92.3
		4+95			
S.		108.0	9.1	98.9 ✓	93.1
ch.			8.6		
1/4			8.5		
C			8.7	99.3	93.5
1/4			7.9		
ch.			8.0		
N			7.7	100.3 ✓	94.5

	4+50				
N		~~108.0~~ 102.18	7.0	101.0 ✓	95.2
ch.			7.1		
1/4			7.4		
C			8.2	99.8	94.0
1/4			7.9		
ch.			8.3		
S.			8.7	99.3 ✓	93.5
	4+25				
S.			8.3	99.7 ✓	93.9
ch.			8.0		
1/4			7.4		
C			7.6	100.4	94.6
1/4			6.9		
ch.			6.7		
N			6.5	101.5 ✓	95.7

4+00				
N	~~108.0~~ 102.18	6.1	101.9	96.1
ch.		6.3		
1/2		6.5		
C		7.2	100.8	95.0
1/2		6.9		
ch.		7.4		
S.		7.5	100.5 ✓	94.7
3+75				
S		6.6	101.4 ✓	95.6
ch.		6.5		
1/4		6.1		
C.		6.4	101.6	95.8
1/4		5.7		
ch.		5.6		
N		5.5	102.5 ✓	96.7

3+50				
N	~~108.0~~ 102.18	4.5	102.5 ✓	97.7
ch.		4.6		
1/4		4.7		
C.		4.7	103.3	97.5
1/4		5.3		
ch.		5.7		
S.		5.9	102.1 ✓	96.3
3+25				
S		5.2	102.8 ✓	97.0
ch.		5.0		
1/4		4.6		
C		4.8	103.2	97.4
1/4		4.0		
ch.		3.7		
N		3.6	104.4 ✓	98.6

	3+00			
N	~~108.0~~ 102.18	2.9	105.1 ✓	99.3
cl.		3.0		
1/4		3.3		
c		4.4	103.6	97.8
1/4		4.1		
cl.		4.5		
S.		4.6	103.4 ✓	97.6
	2+75			
S		4.0	104.0 ✓	98.2
cl.		4.2		
1/4		4.1		
c		4.1	103.9	98.1
1/4		2.9		
cl.		2.8		
N		2.5	105.5 ✓	99.7

	2+50			
N	~~108.0~~ 102.18	1.9	106.1 ✓	100.3
cl.		2.3		
1/4		3.1		
c		3.6	104.4	98.6
1/4		3.8		
cl.		4.6		
S.		5.8	102.2 ✓	96.4
	2+25			
S.		5.3	102.7 ✓	96.9
cl.		4.5		
1/4		3.6		
c		3.6	104.4	98.6
1/4		2.5		
cl.		1.9		
N		1.6	106.4 ✓	100.6

		2+00			
H		~~108.0~~ 102.18	1.4	106.6	100.8
ch.			1.3	106.7	
1/4			1.8		
C			3.2	104.8	98.0
1/4			2.6		
ch.			4.0		
S.			4.3	103.7 ✓	97.9
		1+75			
S			4.2	103.8 ✓	98.0
ch.			5.3		
1/4			3.4		
C			3.4	104.6	98.8
1/4			2.4		
ch.			1.6		
N			0.4	107.6 ✓	101.8

		1+50			
N		~~108.0~~ 102.18	2.1	105.9 ✓	100.1
ch.			3.3		
1/4			4.2		
C			3.2	104.8	99.0
1/4			2.9		
ch.			4.1		
S			4.5	103.5 ✓	97.7
		1+25			
S.		108.00	3.4	104.6 ✓	98.8
ch.			2.9		
1/4			2.4		
C			2.8	105.2	99.4
1/4			3.0		
ch.			2.6		
N			-0.5	108.5	102.7
T.P.	7.72	113.37 107.55	2.35	105.65 99.83	

POSTED

	1+00				
	113.27				
	107.55				
N		4.1	109.3	103.5	
ch.		4.7			
1/4		5.5			
c		6.8	106.6	100.8	
1/4		7.3			
ch.		7.8			
S.		7.2	106.2 ✓	100.4	
	0+75				
S	113.4	5.5	107.9 ✓	102.0	
8'N.		5.5			
ch.		7.1			
1/4		6.7			
c.		6.8	106.6	100.8	
1/4		5.3			
ch.		4.2			
N		3.2	109.2 ✓	104.4	

	0+50				
N	113.4	2.7	110.7	104.9	
	107.55				
ch.		3.7	109.7		
1/4		4.6			
c.		5.4	108.0	102.2	
1/4		6.1			
ch.		6.3			
15 ch.		4.7			
S.		4.7	108.7 ✓	102.9	
	0+25				
S.		4.1	109.3 ✓	103.5	
8'N.		3.7			
ch.		5.6			
1/4		5.4			
c		4.7	108.7	102.9	
1/4		4.2			
ch.		3.3			
N		1.9	111.5 ✓	105.7	

W. Line Crocker St.

N	113.4 107.55	1.3	112.1	106.3
ch.		3.0	110.4	
1/4		3.7	109.7	
c		3.8	109.6	103.8
2'S. ctr.		5.0		
1/4		5.2		
ch.		5.4		
2'S. ch.		2.7		
S.		3.8	109.6	103.8

W. ch. Crocker St

S		3.6	109.8	
2'S. ch.		2.4		
ch.		5.1		
1/4		5.0		
2'S. ctr.		4.7		
c.		2.7	110.7	
1/4		3.0		
ch.		2.8		
N		0.9	112.5	

W. 1/4 Crocker St.

N	113.4 107.55	0.5	112.9	
ch.		2.1		
1/4		2.7		
c.		2.4	111.0	
2'S. ctr.		4.8		
1/4		5.0		
ch.		4.8		
S.		1.9 2.7	110.7	

Center Crocker.

S.	113.37 107.55	2.8	110.6	104.8
2'S ch.		1.5		
ch.		4.5		
1/4		4.7		
1'S ctr.		4.7		
c		~~4.6~~ 2.7	110.7	104.9
1/4		2.2		
ch.		1.7		
N.		0.0	113.4	107.6
				E end.
T.P. BM	7.25	~~119.17~~ 113.30	1.50	~~111.82~~ 106.05	S. rail Bridge
T.P.	3.68	~~105.63~~ 99.81	1.42	~~101.95~~ 96.13

E 1/4 Crocker St.

N	~~119.12~~	5.4	113.7	
cb.		6.6		
1/4		7.8		
7.5. 1/4 c.		73 10.3	108.8	
1/4		10.4		
cb.		10.1		
2.5 cb. S.		69 8.4	110.7	

E cb.

S.	~~119.12~~	10.4	108.7	
3.5 cb. cb.		79 10.2		
1/4		10.3		
2.5 cb. c		95 7.5	111.6	
1/4		7.3		
cb.		6.8		
N		4.9	114.2	

E. line Crocker St.

N	~~119.12~~ 113.30	4.6	114.5 ✓	108.7
cb		5.7		
1/4		7.8		
c		9.6	109.5	103.7
1/4		10.3		
cb.		10.9		
S.		13.3	105.8 ✓	100.0

25' E. Crocker St.

S.	~~119.12~~ 113.30	19.0	100.1 ✓	94.3
cb.		13.3		
1/4		10.5		
c		9.8	109.3	103.5
1/4		9.1		
cb.		8.1		
N		9.0	110.1 ✓	104.3

50' S. Crocker St.

N	~~105.62~~ 99.81	3.4	102.2	96.4
ch.		3.6		
1/4		4.0		
c		4.8	100.8	95.0
1/4		5.5		
ch.		6.0		
S		6.2	99.4	93.6

1+00 S.

N	~~119.12~~ 113.30	17.6	101.0	95.7
ch.		17.2		
1/4		16.6		
c.		10.9	108.2	102.4
1/4		10.5		
ch.		12.8		
S.		17.1	102.0	96.2

1+00 S. Crocker St.

N	~~119.12~~ 113.30	16.3	102.8	97.0
ch.		15.2	103.9	
1/4		15.2		
c.		9.9	109.2	103.4
1/4		9.3		
ch.		9.6		
S.		10.7	108.4	102.6

1+25

S	119.12	2.9	116.2	110.4
6' N line		4.1		
ch.		7.3		
1/4		7.5		
c.		7.7	111.4	105.6
1/4		6.4		
ch.		6.2		
N		7.5	111.6	105.8

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	1+50				
N		119.12 113.30	10.5	108.6 ✓	102.8
ch.			8.9		
1/4			6.0		
6'S. 1/4 C			2.1 6.9	112.2	106 ↓
1/4			6.1		
ch.			5.9		
3'S. ch. S.			1.1 1.3	117.8 ✓	112.0
	1+75				
S.		~~119.12~~	0.2	118.9 ✓	113.1
3'S ch. ch.			0.3 4.2		
~~1/4~~			4.3		
C. 4'N ctr.			4.6	114.5	108.7
1/4			3.1 4.5		
ch.			6.3		
N			7.8	111.3 ✓	105.5
T.P	1241	~~128.96~~ 123.14	2.57	~~116.55~~ 110.73	

	2+00				
N		~~128.96~~ 123.14	13.1	115.9 ✓	110.1
ch.			13.4		
1/4			13.0		
C.			13.1	115.9	110.1
1/4			13.0		
ch.			12.8		
3'S. ch. S.			9.1 9.2	118.8 ✓	113.9
	2+25 S. Crock				
S.		~~120.10~~	8.4	120.6 ✓	114.7
3'S ch. ch.			8.5 11.2		
1/4			11.6		
C. 3'N ctr.			12.0	117.0	111.1
1/4			8.6 8.1		
ch.			8.6		
N			10.1	118.9 ✓	113.0

2+50.				
N	~~129.0~~ 123.14	15.1	113.9	108.0
ch.		11.2		
1/4		7.9		
5'5.1/4 c		7.4 11.5	117.5	111.6
1/4		10.5		
c.v.		9.9		
2'5 ch. 5.		8.4 8.1	120.9	115.0
2+75				
5.		7.7	121.3	115.4
2'5. ch. ch.		7.5 9.2		
1/4		9.0		
c 2'5 ch. otr. 1/4		10.2 6.9 7.8	118.8	112.9
ch.		11.8		
N		13.5	111.5	105.6

3+00				
N	~~129.0~~ 123.14	14.4	114.6	108.7
ch.		12.6		
1/4		6.8		
c 5'5 ch 1/4		6.7 9.2 8.3	122.3	116.4
ch.		8.4	6	
5.		7.6	121.4	115.5
3+25				
5.		6.3	122.7	116.8
ch.		6.3		
1/4		6.0		
c		5.9	123.1	117.2
1/4		5.6		
ch.		6.4		
N		7.2	121.8	115.9

3+50				
N.	~~129.0~~ 123.14	4.9	124.1	118.2
ch.		4.9		
1/4		4.9		
c		5.7	123.3	117.4
1/4		5.5		
ch.		5.8		
S.		5.7	123.3	117.4
3+75				
S.		5.6	123.4	117.5
ch.		5.5		
1/4		4.9		
c		4.8	124.2	118.3
1/4		4.4		
ch.		4.3		
N		4.1	124.9	119.0

4+00				
N	~~129.0~~ 123.14	3.4	125.6	119.7
ch.		3.6		
1/4		3.8		
c		4.5	124.5	118.6
1/4		4.3		
ch.		5.1		
S.		5.1	123.9	118.0
4+25				
S.		4.5	124.5	118.6
ch.		4.5		
1/4		3.6		
c		4.0	125.0	119.1
1/4		3.3		
ch.		3.1		
N		2.9	126.1	120.2

		4+50			
Δ		~~129.0~~ 123.14	2.5	126.5	120.6
ch.			2.9		
1/2			3.1		
c			3.6	125.4	119.5
1/2			3.5		
ch.			4.4		
S.			4.5	124.5	118.6
		4+75			
S.			4.4	124.6	118.7
ch.			3.7		
1/2			3.1		
c			3.3	125.7	119.8
1/4			2.6		
ch.			2.1		
N			2.0	127.0	121.1

		5+00			
H.		~~129.0~~ 123.14	0.8	128.2	122.3
ch.			1.7		
1/4			2.1		
c			2.8	126.2	120.3
1/2			2.9		
ch.			3.5		
S.			3.8	125.2	119.3
		5+25			
S.		~~128.96~~	2.9	126.1	120.2
ch.			2.6		
1/4			2.3		
c.			2.1	126.9	121.0
1/2			1.2		
ch.			1.0		
N			0.8	128.2	122.3
T.P.	10.88	~~139.39~~ 133.56	0.46	~~128.50~~ 122.68	

POSTED

5+50 E Crocker St				
FI	~~139.4~~ 133.56	10.3	129.1	123.3
ch.		10.4		
1/4		10.7		
c.		11.8	127.6	121.8
1/4		11.6		
ch.		12.4		
S.		12.4	127.0	121.2
5+75				
S.		11.4	128.0	122.2
ch.		11.0		
1/4		10.8		
C		10.7	128.7	122.9
1/4		10.0		
ch.		9.9		
N		9.5	129.9	124.1

6+00				
FI	~~139.4~~ 133.56	8.5	130.9	125.1
ch.		8.8		
1/4		9.0		
C		10.1	129.8	123.5
1/4		10.0		
ch.		10.3		
S.		10.7	128.7	122.9
6+25				
S.		9.8	129.6	123.8
ch.		9.6		
1/4		9.0		
C.		9.4	130.0	124.2
1/4		8.3		
ch.		8.0		
N		7.7	131.7	125.9

		6+50			
N		~~+39.4~~ 133.56	7.0	132.4	126.6
ch.			7.6		
1/4			7.9		
c.			8.6	130.8	125.0
1/4			8.5		
ch.			9.1		
S.			9.2	130.2	124.4
		6+75			
S.		6	8.7	130.7	124.9
ch.			8.4		
1/4			8.1		
c.			7.9	131.5	125.7
1/4			7.5		
ch.			7.1		
N			6.3	133.1	127.3

		7+00 = N. side Bayard St. 60' St.			
N		~~+39.4~~ 133.56	6.0	133.4	127.6
ch			6.2		
1/4			6.5		
c			7.0	132.4	126.6
1/4			7.4		
ch.			8.2		
S.			8.3	131.1	125.3
		N. ch. Bayard St.			
S.			8.4	131.0	
ch.			7.9		
1/4			7.4		
c.			6.9	132.5	
1/4			6.4		
ch.			6.2		
N.			5.5	133.9	

W. 1/4 Bayard St.

N	~~139.4~~ 133.56	5.4	134.0	
ch		6.0		
1/4		6.1		
c.		6.4	133.0	
1/4		6.9		
ch.		7.5		
S.		7.9	131.5	

Center Bayard St.

S.		7.9	131.5	125.7
ch.		7.6		
1/4		6.9		
c		6.3	133.1	127.3
1/4		6.0		
ch.		6.1		
N		5.2	134.2	128.4

E. 1/4 Bayard St.

N	~~139.4~~ 133.56	5.1	135.3
ch.		6.0.	
1/4		5.8	
c		5.7	133.7
1/4		6.7	
ch.		7.3	
S.		7.6	131.8

E curb

S		7.4	132.0
ch.		7.2	
1/4		6.3	
c		5.2	134.2
1/4		5.8	
ch		5.9	
N		5.2	134.2

E line Bayard. 60' pride

N	~~139.4~~ 133.56	4.9	134.5	128.7
ch.		5.8		
1/4		5.4		
C		5.2	134.2	128.4
1/4		6.6		
ch		6.7		
S		7.3	132.1	126.3

25' East Bayard St.

S.		6.5	132.9	127.1
ch.		6.9		
1/4		6.0		
C		5.5	133.9	128.1
1/4		5.2		
ch.		5.4		
N		4.3	135.1	129.3

50' E. Bayard St.

N	~~139.4~~ 133.56	3.8	135.6	129.8
ch.		4.9		
1/4		4.4		
C		4.6	134.8	129.0
1/4		5.4		
ch.		6.6		
S.		6.2	133.2	127.4

75' E. Bayard St.

S		6.5	132.9	127.1
ch.		6.7		
1/4		5.6		
C.		4.7	134.7	128.9
1/4		4.7		
ch.		5.3		
N		4.6	134.8	129.0

POSTED

	1+00 E				
N		~~139.4~~ 133.56	5.0	134.4	128.6
ch.			5.5		
1/4			5.2		
C			5.4	134.0	128.2
1/4			6.1		
ch.			6.3		
S.			6.7	132.7	126.9
	1+25 E				
S.			5.6	133.8	128.0
ch.			6.1		
1/4			5.2		
C			4.5	134.9	129.1
1/4			4.7		
ch.			4.7		
N			4.5	134.9	129.1

		1+50 E.				
N		~~139.4~~ 138.56	2.6	136.8	131.0	
ch.			3.6			
1/4			3.0			
C			2.7	136.7	130.9	
1/4			3.4			
ch.			4.3			
S.			4.0	135.4	129.6	
		1+75 E				
S.		~~137.38~~	3.4	136.0	130.2	
ch.			3.5			
1/4			1.9			
C			0.8	138.6	132.8	
1/4			1.3			
ch.			2.3			
N			1.2	138.2	132.4	
T.P.	854	~~146.44~~ 140.59	1.51	~~137.84~~ 132.05	Top ⊕ gas pipe	
B.M.			7.93	~~131.45~~ 125.63	Sw. Cor. Bayards Turquoise	

	2+00				
N		~~146.41~~ 140.59	7.3	139.1	133.8
ch.			8.6		
1/4			8.0		
c			8.0	138.4	132.6
1/4			9.1		
ch.			9.9		
S.			10.1	136.3	130.5
	2+25				
S.			9.9	136.5	130.7
ch.			10.0		
1/4			8.8		
c			7.7	138.7	132.9
1/4			7.7		
ch.			8.2		
N			7.0	139.4	133.6

	2+50				
N		~~146.4~~ 140.59	6.5	139.9	134.1
ch			7.6		
1/4			7.3		
c			7.4	139.0	133.2
1/4			8.6		
ch.			9.6		
S.			9.6	136.8	131.0
	2+75				
S			9.3	137.1	131.3
ch.			9.1	137.3	
1/4			7.7		
c			6.7	139.7	133.9
1/4			6.9		
ch.			7.1		
N			5.9	140.5	134.7

	3+00			
N	~~146.4~~ 140.59	5.3	141.1	135.3
ch.		6.4		
1/4		5.9		
C		5.8	140.6	134.8
1/4		6.7		
ch.		8.3		
S		8.5	137.9	132.1
	3+25			
S				
ch.				
1/4				
C				
1/4				
ch.				
N				

	3+75			
S.	~~146.4~~ 140.59	7.6	136.8	133.0
ch.		7.9		
1/4		6.7		
C		5.6	140.8	135.0
1/4		5.6		
ch.		6.0		
N		4.8	141.6	135.8
	3+58 - 11 Line Cross St			
N		4.1	142.3	136.5
ch.		5.6		
1/4		5.3		
C		4.9	141.5	135.7
1/4		5.7		
ch.		6.8		
S		6.8	139.6	133.8

W. Curb Cass St.

S	~~146.4~~ 140.59	6.1	140.3	134.5
cb.		6.0		
1/4		5.0		
C		4.5	141.9	136.1
1/4		4.6		
cb.		4.7		
N		3.7	142.7	136.9

W 1/4 Cass St.

N		3.1	143.3	137.5
cb.		3.9		
1/4		4.0		
C		3.8	142.6	136.8
1/4		4.4		
cb.		5.4		
S		5.3	141.1	135.3

Center Cass St.

S.	~~146.4~~ 140.59	5.2	141.2	135.4
cb.		5.0		
1/4		4.3		
C		3.6	142.8	137.0
1/4		3.6		
cb.		3.7		
N		3.0	143.4	137.6

E. 1/4 Cass St.

N		3.2	143.2	137.4
cb.		3.8		
1/4		3.5		
C		3.6	142.8	137.0
1/4		4.3		
cb.		5.1		
S		5.6	140.8	135.0

E Curb Cass 57

S.	~~146.4~~ 140.59	4.9	141.5	135.7
ch.		5.0		
1/4		4.0		
C		3.0	143.4	137.6
1/4		3.4		
ch.		3.8		
N		2.6	143.8	138.0

E line Cass 57.

N	~~146.44~~ 140.59	2.5	143.9	138.1
ch.		3.6		
1/4		3.2		
C		3.0	143.4	137.6
1/4		3.9		
ch.		4.8		
S		4.8	141.6	135.8
B.M.		4.80	~~141.61~~ 135.79	Hub 5 E Cor Cass & Turquoise

POSTED

Cross Sections Cass 57 from Turquoise - South -

		H.I.			
BM	0.98	136.77		135.79 ~~H.I.~~ 61	
S. side Turquoise st.					
E			1.0	135.8	
ch.			0.4		
½			1.4		
c			1.3	135.5	
½			1.4		
ch.			2.4		
W.			2.6	134.2	
25' S. turquoise st.					
W			3.6	133.2	
ch.			3.5		
½			3.1		
c			2.4	134.4	
½			2.7		
ch.			2.3		
E			1.9	134.8	

50' S.

E	136.77	2.9	133.9	
ch.		3.2		
½		3.8		
c		3.3	133.5	
½		4.0		
ch.		4.2		
W		4.6	132.2	
75' S.				
W		5.6	131.2	
ch.		5.8		
½		4.5		
c		4.4	132.4	
½		5.0		
ch.		4.2		
E		3.8	133.0	

POSTED

POSTED

1+00 S.

E	136.77	5.0	131.8
ch.		5.2	
1/4		5.9	
c.		5.5	131.3
1/4		5.6	
ch.		6.7	
W.		6.7	130.1

1+25 W = N line alteq.

POSTED

W.		7.8	129.0
ch.		7.6	
1/4		6.6	
c		6.3	130.5
1/4		6.9	
ch.		6.2	
E		5.9	130.9

1+50

E	136.77	6.6	130.2
ch.		7.0	
1/4		7.6	
c		7.5	129.3
1/4		7.2	
ch.		8.4	
W.		8.7	128.1

1+75

POSTED

W		7.9	127.1
ch.		9.6	
1/4		8.9	
c		8.1	128.7
1/4		8.2	
ch.		7.4	
E		7.0	129.8

		2+00			
E		136.77	7.8	129.0	
ch.			8.2		
1/4			8.9		
c			9.1	127.7	
1/4			9.5		
ch.			10.3		
W.			10.5	126.3	
	2+25				
W.			11.5	125.3	
ch.			11.3		
1/4			10.3		
c			10.2	126.6	
1/4			10.0		
ch.			9.2		
E			9.0	127.8	

		2+55 = R line 39 p b in rve St			
E		136.77	10.7	126.1	
ch.			10.8		
1/4			11.2		
c			11.1	125.7	
1/4			11.3		
ch.			12.5		
W			12.7	124.1	
T.P.	1.52	125.59	12.9	~~124.89~~ 124.09	this N.W. cor.
	N. Curb				
W.			2.1	123.5	
ch			1.6		
1/4			1.2		
c			1.0	124.6	
1/4			1.1		
ch.			0.4		
E			0.3	125.3	

N ¼.

E	125.59	0.6	125.0
ch.		0.8	
¼		1.4	
c		1.6	124.0
¼		1.6	
ch.		2.3	
W.		2.4	123.2

Center.

W.	125.59	2.9	122.7
ch.		2.9	
¼		2.8	
c		2.2	123.4
¼		2.4	
ch.		5.5	
E.		1.6	124.0

S. ¼

E	125.59	2.4	123.2
ch.		2.5	
¼.		3.6	
c		3.1	122.5
¼		3.6	
ch.		3.7	
W.		3.1	122.5

S. curb.

W.		3.7	121.9
ch.		4.5	
¼		4.5	
c		4.1	121.5
¼		4.4	
ch.		3.5	
E.		3.3	122.3

5. Line

E	125,59	3.9	121.7	
ch.		4.3		
1/4		4.9		
c		5.0	120.6	
1/4		4.9		
ch.		5.8		
W.		5.1	120.5	
	25.5. off			57.
W.		7.6	118.0	
ch.		7.2		
1/4		7.2		
c		6.8	118.8	
1/4		7.0		
ch.		6.8		
E		5.8	119.8	

POSTED

50 5.

E	125,59	7.0	118.6
ch.		7.3	
1/4		8.0	
c		8.0	117.6
1/4		8.5	
ch.		9.2	
W.		9.2	116.4
	75 05.		
W.		10.3	115.3
ch.		10.2	
1/4		9.8	
c		9.0	116.6
1/4		8.9	
ch.		8.1	
E		7.8	117.8

POS

	1+00 S.			
E	125.59	8.0	117.6	
ch.		8.6		
1/4		9.1		
c		9.6	116.0	
1/4		10.0		
ch.		10.7		
W		11.0	114.6	
	1+75 S			
W		11.2	114.4	
ch.		11.0		
1/4		10.5		
c.		9.7	115.9	
1/4		9.7		
ch.		8.8		
E		8.4	117.2	

	1+50 S.			
E	125.59	9.5	116.1	
ch.		9.8		
1/4		10.3		
c		10.1	115.5	
1/4		10.3		
ch.		11.1		
W		11.5	114.1	
	1+75 S.			
W		12.0	113.6	
ch.		11.8		
1/4		10.7		
c		10.3	115.3	
1/4		10.7		
ch.		10.3		
E		9.6	116.0	

		2+00		
E		125.59	10.3	115.3
ch.			10.8	
1/4			11.1	
c			10.9	114.7
1/4			11.7	
ch.			12.3	
W.			12.7	112.9
T.P.	0.97	115.20	11.36	114.23
		2+25.5		
W.		121.02	2.8	112.4
ch.			2.4	
1/4			2.1	
c			1.4	113.8
1/4			1.6	
ch.			1.0	
E			0.7	114.5

POSTED

		2+50.5		
E		115.20	1.6	113.6
ch.			1.5	
1/4			1.6	
c			1.9	113.3
1/4			2.4	
ch.			2.5	
W			2.6	112.6
		2+65 = H line Tourmaline 51.		
W.			3.0	112.2
ch.			3.0	
1/4			2.9	
c			2.3	112.9
1/4			2.4	
ch.			2.0	
E			2.1	113.1

POS

N curb

115.20

E.	2.4	112.8
ch.	2.2	
1/4	2.4	
c	2.3	112.9
1/4	2.8	
ch.	3.3	
W.	3.5	111.7

N 1/4

W.	3.7	111.5
ch.	3.5	
1/4	3.3	
c	2.5	112.7
1/4	2.8	
ch.	2.7	
E	2.8	112.4

POSTLP

Center.

115.20

E	2.9	112.3
ch.	3.0	
1/4	3.2	
c	2.9	112.3
1/4	3.5	
ch.	3.7	
W.	3.8	111.4

S 1/4

W.	4.2	111.0
ch.	4.4	
1/4	4.1	
c	3.7	111.5
1/4	3.7	
ch.	3.6	
E	3.4	111.8

Pr[illegible]

	5 curb			
E	115.20	3.8	111.4	
cl.		4.0		
1/4		4.2		
c		4.1	111.1	
1/4		4.5		
cl.		5.0		
rv.		4.6	110.6	
	5 line		57.	
rv.		4.9	110.3	
cl		5.3		
1/4		4.8		
c		4.5	110.7	
1/4		4.5		
cl.		4.2		
E		4.1	111.1	

POSTED

	25' 5			5.7
E	115.20	4.8	110.4	
cl.		5.1		
1/4		5.3		
c		5.3	109.9	
1/4		5.0		
cl.		5.3		
rv.		5.5	109.7	
	50' 5.			
rv		6.1	109.1	
cl.		6.1		
1/4		6.0		
c		5.8	109.4	
1/4		6.0		
cl.		5.7		
E		5.6	109.6	

	75 S.			
E	115.20	6.0	109.2	
ch.		6.4		
1/4		6.5		
c		6.4	108.8	
1/4		6.4		
ch.		7.0		
rv.		6.5	108.7	
	1+00			
rv.		7.0	108.2	
ch.		7.7		
1/4		7.1		
c		6.9	108.3	
1/4		7.4		
ch.		7.1		
E		6.9	108.3	

	1+25			
E	115.20	7.3	107.9	
ch.		7.6		
1/4		8.2		
c		7.8	107.4	
1/4		7.6		
ch.		8.5		
rv.		8.2	107.0	
	1+50			
rv.		8.9	106.3	
ch.		8.9		
1/4		8.8		
c		8.3	106.9	
1/4		8.7		
ch.		8.3		
E		8.0	107.2	

		1+75			
E		115.20	8.7	106.5	
ch.			8.6		
1/4			8.6		
c			9.1	106.1	
1/4			9.3		
ch.			9.6		
r.			9.5	105.7	
		2+00			
r.			10.5	104.7	
ch.			10.3		
1/4			10.2		
c			9.8	105.4	
1/4			10.0		
ch.			9.7		
E			9.6	105.6	

POSTED

		2+25			
E		115.20	10.5	104.7	
ch.			10.7		
1/4			11.1		
c			10.8	104.4	
1/4			10.9		
ch.			11.4		
r.			11.3	103.9	
T.P.	1.27	104.5	+1.97		
		2+50			
r.			1.3	103.2	
ch.			1.0		
1/4			1.0		
c			0.8	103.7	
1/4			1.2		
ch.			0.9		
E			0.9	103.6	

	2+65	N line Hyacinth St.			
E		104.5	1.7	102.8	
ch.			1.5		
1/4			1.9		
c			1.4	103.1	
1/4			1.2		
ch.			1.4		
W.			1.68	102.82	Hub Hydrant BM.
	N curb				
W.			2.3	102.2	
ch.			2.3		
1/4			1.7		
c			1.7	102.8	
1/4			2.1		
ch.			2.3		
E			2.4	102.1	

POSTED

		N 1/4			
E.		104.5	2.9	101.6	
ch.			2.6		
1/4			2.5		
c			2.0	102.5	
1/4			2.2		
ch.			2.4		
W.			2.3	102.2	
		center			
W			2.4	102.1	
ch			2.4		
1/4			2.4		
c			2.5	102.0	
1/4			2.9		
ch			2.7		
E			3.3	101.2	

S 1/4

E	104.5	4.5	100.0	
ch.		3.9		
1/4		3.6		
c		3.0	101.5	
1/4		3.2		
ch.		3.5		
W.		3.3	101.2	

S. curb.

W.		3.5	101.0	
ch.		3.7		
1/4		3.5		
c		3.5	101.0	
1/4		4.2		
ch.		4.3		
E		4.8	99.7	

POSTED

S. line

E			5.3	99.2
ch.			4.8	
1/4			4.7	
c			3.6	100.9
1/4			3.7	
ch.			4.2	
W.			3.9	100.6
B.M.	2.11	4.7 104.93		102.82

75' S. of Hyacinth St.

W.			5.3	99.6
ch.			5.3	
1/4			5.3	
c			5.2	99.7
1/4			6.0	
ch.			6.2	
E			6.2	98.7

POSTED

50' S of Hyacinth St.

E	104.93	6.7	98.2
cb.		6.8	
1/4		7.0	
C		6.1	98.8
1/4		6.4	
cb		6.1	
W		6.0	98.9

0 + 75

W		6.8	98.1
cb		6.9	
1/4		7.1	
C		6.8	98.1
1/4		7.7	
cb		7.4	
E		7.2	97.7

POSTED

1 + 00

E	104.93	7.6	97.3
cb		7.7	
1/4		7.7	
C		7.5	97.4
1/4		7.5	
cb		7.5	
W		7.5	97.4

1 + 25

W		8.3	96.6
cb		8.3	
1/4		8.3	
C		8.1	96.8
1/4		8.6	
cb		8.0	
E		8.0	96.9

	1 + 50			
E	104.93	8.5	96.4	
cb		8.6		
1/4		9.1		
c		8.4	96.5	
1/4		9.1		
cb		9.0		
W		9.1	95.8	
	1 + 75			
W		10.2	94.7	
cb		9.7		
1/4		9.3		
c		8.9	96.0	
1/4		9.8		
cb		9.2		
E		9.1	95.8	

POSTED

	2 + 00			
E	104.93	9.5	96.4	
cb		9.7		
1/4		10.1		
c		9.5	95.4	
1/4		10.0		
cb		10.6		
W		10.9	94.0	
	2 + 25			
W		11.4	93.5	
cb		10.9		
1/4		10.6		
c		10.2	94.7	
1/4		10.8		
cb		10.2		
E		10.2	94.7	

POSTED

	2 + 50			
E	104.93	10.9	94.0	
cb		10.9		
1/4		11.5		
c		10.6	94.3	
1/4		11.3		
cb		11.7		
W		12.1	92.8	
2+65 N. LINE LORING AVE				
W		12.5	92.4	
cb		11.8		
1/4		11.6		
c		11.2	93.7	
1/4		11.9		
cb		11.4		
E		11.3	93.6	

T.P.	1.13	PI 94.75	11.31	99.44
	N. Curb			
E			1.7	93.1
cb			1.7	
1/4			2.5	
c			1.8	93.0
1/4			2.2	
cb.			2.5	
W			2.7	92.1
	N 1/4			
W			3.3	91.5
cb			3.2	
1/4			3.1	
c			2.5	92.3
1/4			2.5	
cb			2.5	
E			2.3	92.5

	Center		
E	94.75	2.6	92.2
cb		3.0	
1/4		3.1	
c		3.0	91.8
1/4		3.5	
cb		3.7	
W		3.9	90.9
	S 1/4		
W		4.7	90.1
cb		4.4	
1/4		3.8	
c		3.5	91.3
1/4		4.0	
cb		3.5	
E		3.4	91.4

POSTED

	S. Curb		
E	94.75	3.6	91.2
cb		3.6	
1/4		4.1	
c		3.8	91.0
1/4		4.5	
cb		4.7	
W		5.1	89.7
	S. Line Loring		
W		5.3	89.5
cb		5.0	
1/4		5.2	
c		4.6	90.2
1/4		4.6	
cb		4.4	
E		4.2	90.6

POSTED

	25' South Boring		
E	94.75	4.9	89.9
cb		4.8	
1/4		5.7	
c		4.8	90.0
1/4		5.3	
cb		5.5	
W		5.7	89.1
	0 + 50		
W		6.3	88.5
cb		6.0	
1/4		6.4	
c		5.6	89.2
1/4		5.6	
cb		5.6	
E		5.3	89.5

	0 + 75		
E	94.75	6.0	88.8
cb		6.2	
1/4		6.6	
c		6.1	88.7
1/4		6.6	
cb		6.9	
W		6.9	87.9
	~~0 +~~ 1 + 00		
W		7.7	87.1
cb		7.4	
1/4		8.0	
c		6.9	87.9
1/4		7.7	
cb		6.8	
E		6.8	88.0

	1+25		
E	94.75	7.6	87.2
cb		7.5	
1/4		8.1	
c		7.6	87.2
1/4		8.9	
cb		8.2	
W		8.4	86.4
	1+50		
W		9.2	85.6
cb		8.8	
1/4		9.4	
c		8.6	86.2
1/4		8.4	
cb		8.8	
E		8.4	86.4

POSTED

	1+75		
E	94.75	9.4	85.4
cb		9.1	
1/4		9.3	
c		8.9	85.9
1/4		9.8	
cb		9.4	
W		9.9	84.9
	2+00		
W		10.4	84.4
cb		10.0	
1/4		10.5	
c		9.7	85.1
1/4		9.9	
cb		9.8	
E		9.8	85.0

POSTED

		2+25			
E			10.6	84.2	
cb			10.2		
1/4			10.5		
c			10.3	84.5	
1/4			11.0		
cb			10.7		
W			10.9	83.9	
		2+50			
W			11.7	83.1	
cb			11.3		
1/4			11.9		
c			11.0	83.8	
1/4			10.9		
cb			10.5		
E			11.3	83.5	

2+70	N LINE Wilbur Ave				
E		94.75	11.9	82.9	
cb			11.4		
1/4			11.7		
c			11.2	83.6	
1/4			12.0		
cb			11.9		
W			12.3	82.5	
T.P.	1.85 N. Curve	H.I. 84.60	12.0		Sub N.E. Cor Wilbur
W			2.4	82.2	
cb			2.1	82.5	
1/4			2.3	82.3	
c			1.4	83.2	
1/4			2.1	82.5	
cb			1.7	82.9	
E			2.0	82.6	

N. 1/4

E	84.6	2.2	82.4
cb		2.3	82.3
1/4		2.3	82.3
c		1.7	82.9
1/4		2.4	82.2
cb		2.2	82.4
W		2.7	81.9

Center

W		2.9	81.7
cb		2.7	81.9
1/4		3.1	81.5
c		2.6	82.0
1/4		2.[illegible]	81.9
cb		2.1	82.5
E		1.9	82.7

POSTED

S 1/4

E	84.6	2.9	81.7
cb		2.9	81.7
1/4		2.7	81.9
c		2.6	82.0
1/4		3.3	81.3
cb		2.9	81.7
W		3.3	81.3

S. cb

W		3.6	81.0
cb		3.2	81.4
1/4		3.7	80.9
c		3.0	81.6
1/4		2.8	81.8
cb		2.8	81.8
E		2.7	81.9

POSTED

S LINE

E	84.6	3.3	81.3
cb		3.4	
1/4		3.5	
c		3.1	81.5
1/4		4.1	
cb		3.6	
W		4.0	80.6

25' S. WILBUR

W		4.7	79.9
cb		4.3	
1/4		4.5	
c		3.8	80.8
1/4		4.2	
cb		4.2	
E		3.9	80.7

0 + 50

E	84.6	4.4	80.2
cb		4.3	
1/4		5.1	
c		4.4	80.2
1/4		5.1	
cb		4.8	
W.		5.2	79.4

0 + 75

W		5.8	78.8
cb		5.4	
1/4		5.8	
c		4.9	79.7
1/4		5.0	
cb		5.0	
E		4.8	79.8

	1+00		
E	84.6	5.5	79.1
cb		5.7	
1/4		6.0	
c		5.6	79.0
1/4		6.4	
cb		6.0	
W		6.4	78.2
	1+25		
W		7.0	77.6
cb.		6.9	
1/4		7.3	
c		6.6	78.0
1/4		6.8	
cb		6.2	
E		6.1	78.5

	1+50		
E	84.6	6.6	78.0
cb		6.8	
1/4		7.8	
c		7.0	77.6
1/4		8.0	
cb		7.7	
W		8.0	76.6
	1+75		
W		9.0	75.6
cb		8.7	
1/4		8.9	
c		7.8	76.8
1/4		8.4	
cb		7.8	
E		7.3	77.3

	2 + 00		
E	84.6	7.4	77.2
cb		8.2	
1/4		9.2	
c		8.9	75.7
1/4		9.6	
cb		9.5	
W.		10.1	74.5
	2 + 25		
W		10.8	73.8
cb		10.5	
1/4		10.5	
c		9.8	74.8
1/4		10.0	
cb		8.6	
E		7.6	77.0

POSTED

	2 + 50		
E	84.6	9.0	75.6
cb		9.7	
1/4		10.2	
c		10.2	74.4
1/4		11.3	
cb		11.0	
W		11.4	73.2
	2 + 70 N. Line Beryl		
W		11.7	72.9
cb		11.4	
1/4		11.7	
c		10.4	74.2
1/4		10.6	
cb		9.8	
E		9.4	75.2

POSTED

N. ~~1/4~~ cb Beryl

T.P.	2.06	75.13	11.53	78.89
E			0.0	75.1
cb			0.7	
1/4			1.5	
c			1.3	73.8
1/4			2.4	
cb			2.1	
W.			2.4	72.7
N. 1/4				
W			2.6	72.5
cb			2.4	
1/4			2.7	
c			1.3	73.4
1/4			1.6	
cb			1.0	
E			0.4	74.7

Center

E		75.13	0.9	74.2
cb			1.5	
1/4			2.0	
c			1.8	73.3
1/4			2.5	
cb			2.6	
W.			2.9	72.2
S 1/4				
W			3.2	71.9
cb			2.9	
1/4			3.4	
c			2.4	72.7
1/4			2.3	
cb			2.0	
E			1.5	73.6

PC
PTED

S curb

E	75.13	2.0	73.1
cb		2.3	
1/4		2.9	
c		2.6	72.5
1/4		3.2	
cb		3.1	
W		3.3	71.8

S LINE Beryl

W		3.7	71.4
cb		3.6	
1/4		3.5	
c		2.8	72.3
~~cb~~ 4		3.6	
cb		3.0	
E		2.5	72.6

25' - S

E	75.13	3.3	71.8
cb		3.9	
1/4		4.5	
c		3.8	71.3
1/4		4.3	
cb		4.1	
W.		4.3	70.8

50' S.

W		4.8	70.3
cb		4.4	
1/4		4.8	
c		4.3	70.8
1/4		4.6	
cb		4.6	
E		4.6	70.5

	0 + 75		
E	75.13	5.0	70.1
cb		5.0	
1/4		5.1	
c		4.6	70.5
1/4		5.0	
cb		4.8	
W		5.1	70.0
	1 + 00		
W		5.5	69.6
cb		5.1	
1/4		5.2	
c		5.0	70.1
1/4		5.2	
cb		5.3	
E	POSTED	5.3	69.8

	1 + 25		
E	75.13	5.5	69.6
cb		5.4	
1/4		5.4	
c		5.0	70.1
1/4		5.4	
cb		5.4	
W		5.8	69.3
	1 + 50		
W		6.0	69.1
cb		5.6	
1/4		5.5	
c		5.1	70.0
1/4		5.5	POST
cb		5.5	
E		[illegible].6	69.5

	1+75		
E	75.13	5.7	69.4
cb		5.6	
1/4		5.7	
c		5.4	69.7
1/4		6.0	
cb		5.8	
N		6.3	68.8
	2+00		
N		6.6	68.5
cb		6.1	
1/4		6.2	
c		5.6	69.5
1/4		5.9	
cb		5.7	
E		5.7	69.4

	2+25		
E	75.13	5.7	69.4
cb		5.9	
1/4		6.1	
c		6.0	69.1
1/4		6.6	
cb		6.0	
N		6.9	68.2
	2+50		
N		7.4	67.7
cb		6.9	
1/4		6.9	
cb		6.2	68.9
1/4		6.4	
cb		6.2	
E		6.0	69.1

2+70 N LINE LAW

E	75.13	6.2	68.9
cb		6.4	
1/4		6.6	
c		6.5	68.6
1/4		7.3	
cb		7.2	
W.		7.7	67.4
T.P.	2.14 H.I. 69.92	7.35	73.60

N. cb.

W		2.5	67.4
cb		2.2	
1/4		2.2	
c		1.6	68.3
1/4		1.6	
cb		1.3	
E		1.2	68.7

N 1/4 LAW

E	69.92	1.3	68.6
cb		1.5	
1/4		1.9	
c		1.7	68.2
1/4		2.4	
cb		2.5	
W		2.8	67.1

Center

W		3.1	66.8
cb		2.7	
1/4		2.8	
c		2.1	67.8
1/4		2.2	
cb		1.7	
E		1.3	68.6

S 1/4

E	69.92	1.6	68.3
cb		2.0	
1/4		2.4	
c		2.2	67.7
1/4		3.0	
cb		3.0	
W		3.3	66.6

S. cb

W		3.0	66.3
cb		3.2	
1/4		3.4	
c		2.6	67.3
1/4		2.5	
cb		2.2	
E		2.0	67.9

POSTED

S L 1 W E

E	69.92	2.2	67.7
cb		2.4	
1/4		2.8	
c		2.8	67.1
1/4		3.5	
cb		3.4	
W.		3.8	66.1

25' South

W		4.1	65.8
cb		3.7	
1/4		3.7	
c		3.1	66.8
1/4		3.3	
cb		2.6	
E		2.5	67.4

	50' S			
E	69.92	2.9	67.0	
cb		3.2		
1/4		3.6		
c		3.4	66.5	
1/4		4.3		
cb		4.2		
W		4.6	65.3	
	0+75			
W		5.0	64.9	
cb		4.7		
1/4		4.9		
c		4.1	65.8	
1/4		3.9		
cb		3.6		
E		3.3	66.6	

POSTED

	1+00			
E	69.92	3.8	66.1	
cb		4.1		
1/4		4.6		
c		4.5	65.4	
1/4		5.1		
cb		5.1		
W		5.4	64.5	
	1+25			
W		5.8	64.1	
cb		5.5		
1/4		5.9		
c		5.0	64.9	
1/4		5.2		
cb		4.8		
E		4.5	65.4	

	1 + 50			
E	69.92	5,2	64.7	
cb		5,4		
1/4		5.6		
c		5,7	64.2	
1/4		6,1		
cb		6,1		
N		6,4	63.5	
	1 + 7.5			
N		7,0	62.9	
cb		6,6		
1/4		6,7		
c		6,2	63.7	
1/4		6.0		
cb		5,7		
E		5.5	64.4	

	2 + 00			
E	69.92	6,0	63.9	
cb		6,2		
1/4		6,5		
c		6,4	63.5	
1/4		7,2		
cb		7,0		
N		7,3	62.6	
	2 + 25			
N		7,8	62.1	
cb		7,5		
1/4		7,5		
c		6,8	63.1	
1/4		7,1		
cb		6,7		
E		6.5	63.4	

		2 + 50			
E		69.92	7.0	62.9	
cb			7.2		
1/4			7.8		
c			7.4	62.5	
1/4			8.2		
cb			7.7		
W			8.3	61.6	
	N. Line Chalcedony				
W			9.0	60.9	
cb			8.3		
1/4			8.5		
c			7.7	62.2	
1/4			8.2		
cb			7.6		
E			7.5	62.4	

T.P.	1.40	H.S. 63.78	7.54	68.20	Hub N.F. Cor (Chal
	N. cb				
E			1.7	62.1	
cb			1.8		
1/4			2.5		
c			1.9	61.9	
1/4			3.0		
cb			2.7		
W			3.1	60.7	
	N 1/4				
W			3.4	60.4	
cb			3.1		
1/4			3.2		
c			2.2	61.6	
1/4			2.8		
cb			2.2		
E			2.1	61.7	

Center

E	63.78	2.5	61.3
cb		2.6	
1/4		3.2	
c		2.5	61.3
1/4		3.4	
cb		3.4	
W		3.7	60.1

S 1/4

W		4.0	59.8
cb		3.8	
1/4		3.4	
c		2.9	60.9
1/4		3.6	
cb		2.9	
E		2.8	61.0

S. cb

E	63.78	3.4	60.4
cb		3.5	
1/4		3.9	
c		3.3	60.5
1/4		4.0	
cb		4.1	
W		4.3	59.5

S LINE

W		4.8	59.0
cb		4.6	
1/4		4.4	
c		3.7	60.1
1/4		4.4	
cb		3.9	
E		3.8	60.0

25' S.			
E	63.78	4.5	59.3
cb		4.6	
1/4		4.8	
c		4.2	59.6
1/4		5.3	
cb		5.1	
W		5.4	58.4
50' S			
W		6.0	57.8
cb		5.8	
1/4		6.0	57.8
c		4.9	58.9
1/4		5.5	
cb		5.3	
E		5.2	58.6

0 + 75			
E	63.78	5.6	58.2
cb		5.8	
1/4		6.1	
c		5.9	57.9
1/4		6.9	
cb		6.5	
W		6.9	56.9
1 + 00			
W		7.5	56.3
cb		7.0	
1/4		7.1	
c		6.2	57.6
1/4		6.5	
cb		6.1	
E		6.0	57.8

	1+25		
E	63.78	6,3	57.5
cb		6.6	
1/4		7,1	
c		6,9	56.9
1/4		8.0	
cb		7,6	
W		7,8	56.0
	1+50		
W		8.4	55.4
cb		8,3	
1/4		7.8	
c		7,2	56.6
1/4		7,6	
cb		7.0	
E		6.8	57.0

POSTED

	1+75		
E	63.78	7,4	56.4
cb		7,7	
1/4		8,3	
c		8,0	55.8
1/4		8,4	
cb		8,8	
W		9,0	54.8
	2+00		
W		9,5	54.3
cb		9,3	
1/4		9,1	
c		8,4	55.4
1/4		9.1	
cb		8.4	
E		8.2	55.6

POSTED

	2 + 25		
E	63.78	9.0	54.8
cb		9.0	
1/4		9.6	
c		9.0	54.8
1/4		9.3	
cb		9.9	
W		9.9	53.9
	2 + 50		
W		10.6	53.2
cb		10.5	
1/4		10.4	
c		9.7	54.1
1/4		10.3	
cb		9.6	
E		9.5	54.3

	2 + 70 N. LINE Nuisance		
E	63.78	10.1	53.7
cb		10.2	
1/4		10.7	
c		10.2	53.6
1/4		10.5	
cb		10.9	
W		11.1	52.7
	N. Curb		
W		11.3	52.5
cb		11.2	
1/4		11.2	
c		10.8	53.0
1/4		11.0	
cb		10.7	
E		10.4	53.4

N 1/4

E	63.78	10.5	53.3
cb		10.7	
1/4		11.4	
c		10.9	52.9
1/4		11.3	
cb		11.5	
W		11.5	52.3

Center

W		11.9	51.9
cb		11.9	
1/4		12.0	
c		11.2	52.6
1/4		11.8	
cb		10.2	
E		10.3	53.5

S 1/4

E	63.78	10.4	53.4
cb		10.5	
1/4		12.1	
c		11.4	52.4
1/4		12.2	
cb		12.1	
W		12.3	51.5

S cb

W		12.6	51.2
cb		12.6	
1/4		12.5	
c		11.7	52.1
1/4		12.3	
cb		11.4	
E		11.3	52.5

S LINE

E		63.78	11.8	52.0	
cb			12.1		
1/4			12.7		
c			12.1	51.7	
1/4			12.5		
cb			13.0		
W.			13.0	50.8	
T.P.	2.63	H.I. 54.00	12.41	57.19	
	25'	S	~~3.7~~		
W			3.7	50.3	
cb			3.6		
1/4			3.6		
c			3.1	50.9	
1/4			3.1		
cb			2.9		
E			2.6	51.4	

0 + 50

E		54.00	3.2	50.8	
cb			3.6		
1/4			4.1		
c			3.5	50.5	
1/4			3.4		
cb			4.2		
W			4.1	49.9	
0 + 75					
W			4.9	49.1	
cb			4.8		
1/4			4.8		
c			4.0	50.0	
1/4			4.6		
cb			3.9		
E			4.0	50.0	

	1+00		
E	54.00	4.7	49.3
cb		4.7	
1/4		5.4	
c		4.6	49.4
1/4		5.2	
cb		5.5	
W		5.5	48.5
	1+25		
W		6.1	47.9
cb		6.5	
1/4		6.2	
c		5.2	48.8
1/4		6.1	
cb		5.5	
E		5.3	48.7

POSTED

	1+50		
E	54.00	5.9	48.1
cb		6.0	
1/4		6.4	
c		5.9	48.1
1/4		6.7	
cb		7.0	
W		6.8	47.2
	1+75		
W		7.2	46.8
cb		7.3	
1/4		7.2	
c		6.5	47.5
1/4		7.1	
cb		6.4	
E		6.4	47.6

POSTED

	2 + 00		
E	54.00	6.8	47.2
cb		7.0	
1/4		7.4	
c		7.1	46.9
1/4		7.9	
cb		8.0	
W		8.0	46.0
	2 + 25		
W		8.5	45.5
cb		8.4	
1/4		8.3	
c		7.4	46.6
1/4		8.0	
cb		7.4	
E		7.3	46.7

	2 + 50		
E	54.00	8.0	46.0
cb		8.1	
1/4		8.8	
c		8.0	46.0
1/4		9.0	
cb		9.1	
W		9.0	45.0
	W Line Diamond		
W		9.3	44.7
cb		9.3	
1/4		9.2	
c		8.4	45.6
1/4		9.1	
cb		8.4	
E		8.0	46.0

	N Curb			
E	54.00	8,4	45.6	
cb		8,8		
1/4		9,4		
c		8,8	45.2	
1/4		9,7		
cb		9.5		
W		9,7	44.3	
	N 1/4			
W		9,8	44.2	
cb		9.5		
1/4		9,9		
c		8,9	45.1	
1/4		9,4		
cb		8,7		
E		8.0	46.0	

	Center			
E	54.00	8,6	45,4	
cb		8,8		
1/4		9,2		
c		9,4	44.6	
1/4		9,5		
cb		9,5		
W		9,6	44.4	
	S 1/4			
W		[illegible]	43.9	
cb		10,0		
1/4		10,5		
c		9,6	44-4	
1/4		9,9		
cb		9,4		
E		9,2	44.8	

POSTED

				10.90
	S cl			
E	5400	9,5	44.5	
cl		9.5		
1/4		10.1		
c		9,7	44.3	
1/4		10,2		
cl		10,6		
W		10,6	43.4	
	S Line			
W		10,9	43.1	
cl		11,5		
1/4		11,2		
c		10.1	43.9	
1/4		10.4		
cl		10,0		
E		9,7	44.3	
	POSTED			
T.P.		10.90	43.10	14 rd SW cor Diamond

X sect. alley bet. 28 & 29 & fractn. B to E so 2 N 4

		H.I.			
	5.58	202.54		196.96	B.M. 28th & B
		So. line B.			
W. line			5.2	197.3	
C			5.6	196.9	
E line			5.6	196.9	
		2' So			
E line			0.6	201.9	
C			−0.1	202.6	
W line			−0.4	202.9	
		50 So.			
W line			0.9	201.6	
C			0.8	201.7	
E line			1.1	201.4	
		100' So.			
E line			2.1	200.4	
C			2.0	200.5	
W line			1.8	200.7	

	140' So.	(no. line alley)	
W line		2.0	200.5
C		2.2	200.3
E line		2.6	199.9
	160' So.	(So line alley)	
E line		2.8	199.7
C		2.5	200.0
W line		2.5	200.0
	200' So		
W line		2.8	199.7
C		2.8	199.7
E line		2.8	199.7
	250' So.		
E line		3.2	199.3
C		3.8	198.7
W line		3.9	198.6
	No. line C		
W line		4.8	197.7
C		4.5	198.0
E line		4.2	198.3

POSTED

		192.20		
		160' So. (So. line alley)		
E line			4.1	188.1
C			5.2	187.0
W line			6.1	186.1
		200 So.		
W line			9.0	183.2
C			7.3	184.9
E line			5.9	186.3
E		250' So.		
E line			5.9	186.3
C			7.2	185.0
W line			8.1	184.1
		280' So.		
W line			7.2	185.0
C			6.1	186.1
E line			5.2	187.0

POSTED

		202.54		
		So. line C		
E line			5.1	197.4
C			5.5	197.0
W line			5.8	196.7
		50' So.		
W line			7.6	194.9
C			7.2	195.3
E line			6.7	196.8
		100' So.		
E line			10.2	192.3
C			10.7	191.8
W line			10.7	191.8
		140' So.	(no. line alley)	
J.P.	2.57	H.I. 192.20	12.91	189.63
W line			4.6	187.6
C			3.8	188.4
E line			2.9	189.3

192.20

	No. line do.		
E line		5.7	186.5
C		6.8	185.4
W line		7.6	184.6
	So. line do		
W line		11.5	180.7
C		10.0	182.2
E line		8.7	183.5
	50' so.		
E line		6.2	186.0
C		6.9	185.3
W line		8.1	184.1
	100' so.		
W. line		4.8	187.4
C		4.2	188.0
E line		3.6	188.6

192.20

	140' so. (No. line alley)		
E line		3.2	189.0
C		3.6	188.6
W line		3.9	188.3
	160' so. (So. line alley)		
W line		4.3	187.9
C		3.8	188.4
E line		3.2	189.0
	200' so.		
E line		4.6	187.6
C		5.0	187.2
W line		5.4	186.8
	250' so.		
W line		7.5	184.7
C		6.9	185.3
E line		6.1	186.1
	No. line E		
E line		7.9	184.3
C		8.8	183.4
W line		9.4	182.8

POSTED

Levels on 8 Pipe line for Turquoise St. Culvert

page 8

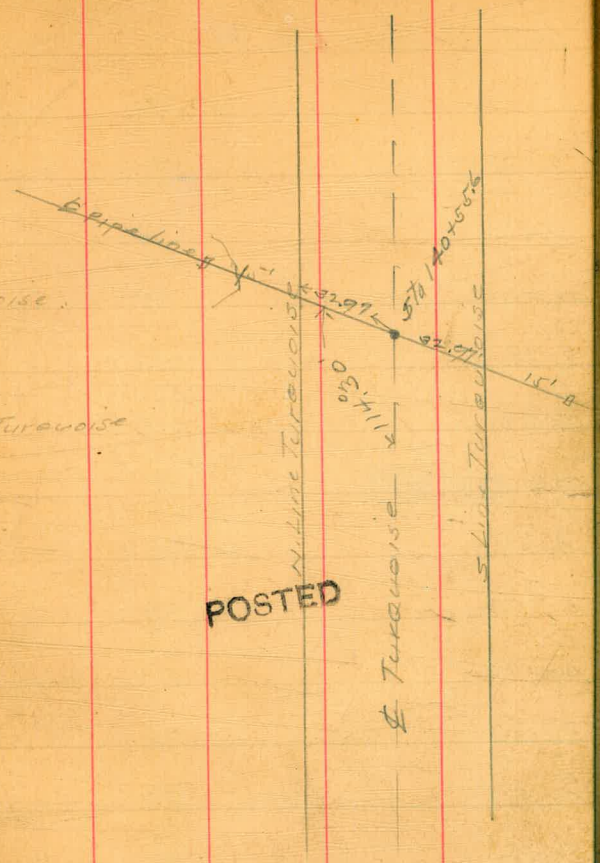
41.

105.63

155. S line	7.3	
S line	6.2	99.4
0+20 S.	5.8	
0+00 = ℄ Turquoise	6.3	99.x3
0+20 N	4.7	
N Line	3.8	101.8
15' N. N line	3.2	

POSTED

Culvert on Turquoise St.



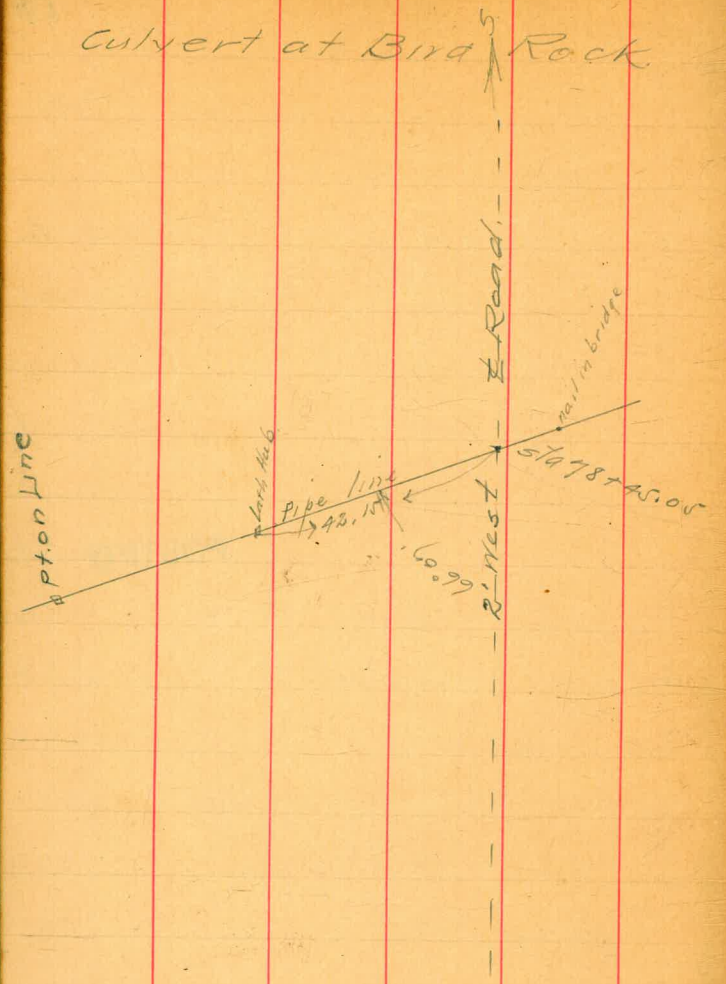
POSTED

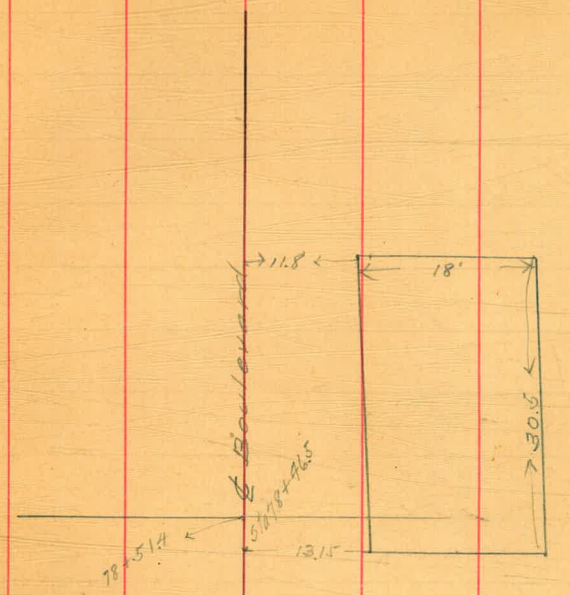
Levels for Culvert at Bird Rock City

		H.I.			
BM.	2.50	80.72		78.22	
	0.12	73.04	7.80	72.92	
0+59.15			10.9		= Pt at bottom Gulch 59.15' N. of line 2W. ℄
0+52.15			2.0		
0+42.15			8.0		
0+29.15			10.6		
0+22.15			13.8		
0+7.15			14.7		
0+00			7.8		= line 2' N. ℄ Blvd.
0+5.8			6.0		= center Water pipe
0+12.0			5.6		= N line bridge
0+33			18.1		= bottom ditch. S side bridge
0+37			9.7		= Pt. projecting into line
0+47			19.0		= bottom ditch on line
0+52.6			7.6		Pt on line

POSTED

Culvert at Bird Rock





Road

1028
50
82.240

360

Beryl
Law
Chalcedony
Missouri 110.75
11.31
Diamond 99.44

Cassin J. E.

B.M. 69.91

T.B.

80.95
7.35
73.60

90.42
11.53
78.89

75.74
7.54
68.20

69.68
12.41
57.19

48.24
5.81
54.05

59.82
4.91
54.91
5.41
140 60.32
6.27
54.05

54.05
48.24
589

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

For Single Track Embankment.

Roadway 14 feet wide. Side Slopes 1½ to 1.

	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	27
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.