F.B.458
IND

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

Table showing the difference of latitude and departure in running 80 chains at any course from 1 to 60 minutes.

458

MINUTES.	LKS.	MINUTES.	LKS.	MINUTES.	LKS.
1	2⅓	21	49	41	95⅔
2	4⅔	22	51⅓	42	98
3	7	23	53⅔	43	100⅓
4	9⅓	24	56	44	102⅔
5	11⅔	25	58⅓	45	105
6	14	26	60⅔	46	107⅓
7	16⅓	27	63	47	109⅔
8	18⅔	28	65⅓	48	112
9	21	29	67⅔	49	114⅓
10	23⅓	30	70	50	116⅔
11	25⅔	31	72⅓	51	119
12	28	32	74⅔	52	121⅓
13	30⅓	33	77	53	123⅔
14	32⅔	34	79⅓	54	126
15	35	35	81⅔	55	128⅓
16	37⅓	36	84	56	130⅓
17	39⅔	37	86⅓	57	133
18	42	38	88⅔	58	135⅓
19	44⅓	39	91	59	137⅔
20	46⅔	40	93⅓	60	140

TABLE FOR RUNNING ON SLOPES.

In the following table the first column shows the angle, the second the number of links to be added to a chain on the slopes, to make one chain, horizontal measurement.

MICROFILMED JAN 20 1965

ANGLE	COR. IN LINKS	ANGLE	COR. IN LINKS	ANGLE	COR. IN LINKS	ANGLE	COR. IN LINKS
		°		°		°	
	0.24	11	1.88	18	5.14	25	10.54
	0.38	12	2.24	19	5.76	26	11.26
	0.55	13	2.63	20	6.42	27	12.24
7	0.76	14	3.06	21	7.11	28	13.37
8	0.98	15	3.53	22	7.85	29	14.34
9	1.24	16	4.02	23	8.64	30	15.47
10	1.55	17	4.56	24	9.47	35	22.07

Crocker Quality

LEVEL BOOK

458

No. 400

458 W was filmed as 458 FB, make it 458 AW

COMMUNI CONSENSU PRIMO TRADE MARK

MANUFACTURED BY

H. S. Crocker Co.

SAN FRANCISCO
and
SACRAMENTO

Published by H
Materials, and

Table showing
running 80 c

MINUTES.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20

TAB

In th allowin
umber
chain.

ANGLE	CO H LIN
	0
	0
	0
7	0
8	0
9	1
10	1

MICROFILMED

J. Kubik 3 days at La Jolla.

B.M.

Hensley & H. S.E. Cor. R.R. spk. pole	65.14
Evans & N. S.E. Cor. Brass plg.	65.01
B.M. 29 & M. N.W. Cor. H & R.R. spk. pole	72.84
J & 25th N.E. Cor. Brass plg.	101.94
K & 25th N.E. Cor. " "	76.93
I & 25th N.E. " " "	130.67
H & 25th N.W. " " "	156.95
24th and I St. N.E. Cor. B. plg	111.50
24th and J. N.E. Cor. B. plg.	98.92
26th & E. N.W. Cor	187.99

Sewers East 925th & North
of N. street

mar 9/09 { Shields
Barber
Rogers

25th street line from K to N.

mar. 9/09 Childs Barber Rogers 2

Sta.		H.I.	Rod	Ground	Grade	cut
0+00	(108) M.H. center K	83.48	7.1	76.4	71.80	4.6
+50			8.5	75.0	70.30	4.7
1+00			10.1	73.4	68.80	4.6
+50			11.7	71.8	67.30	4.5
2+00	POSTED	71.06	0.7	70.4	65.80	4.6
+50			2.0	69.1	64.30	4.8
3+00			3.9	67.2	62.80	4.4
+50			5.2	65.9	61.30	4.6
+80.23	(109) M.H. center L		5.8	65.3	60.40	4.9
4+00			6.2	64.9	60.00	4.9
+50			7.0	64.1	59.00	5.1
5+00	2%		8.2	62.9	58.00	4.9
+50			9.1	62.0	57.00	5.0
6+00			10.2	60.9	56.00	4.9
+50			10.9	60.2	55.00	5.2
7+00			11.9	59.2	54.00	5.2

76.93 B.M. 25th + K
6.55
83.48 mar. 26/09

65.01
54.0
11.01
55.00
10.01
56.00
9.01
57.00
8.01
58.00
7.01
59.00
6.01
60.00
5.01

65.92
6.98
72.89
60.40
12.49
61.30
11.59
62.80
10.09
64.30
8.59
65.80
7.09
67.30
5.59
68.80
4.09
70.30
2.59

POSTED

76.93
4.71
81.64
71.80
9.84

Cont. - from page 2 and from 25th to Pueblo line, Childs, Barber, Rogers 3

on Crosby (North Main)

mar 9/09

Sta.		H.I.	Rod	Ground	Grade	cut
7+20.63	(110) M.H. no. line N. St.	71.06	12.0	59.1	53.60	5.5
+50		59.05	0.2	58.9	53.25	5.6
8+00			1.2	57.9	52.62	5.3
+50			1.9	57.2	52.00	5.2
9+00	1.23 %		2.4	56.7	51.38	5.3
+50			3.2	55.9	50.77	5.1
10+00	POSTED		3.8	55.3	50.15	5.2
+50			4.2	54.9	49.54	5.4
11+00			4.9	54.2	48.92	5.3
+43.88	(149) M.H. 43' So. of No. line of N. street		5.2	53.9	48.38	5.5
+50			5.3	53.8	48.34	5.5
12+00			6.2	52.9	47.99	4.9
+50			7.4	51.7	47.64	4.1
13+00			12.0	47.1	47.29	-0.2
+50			13.0	46.1	46.94	-0.8
14+00			11.4	47.7	46.59	1.1
+28.28	M.H. on North main + Crosby		9.8	49.3	46.39	2.9

54.32 / 4.73 / 59.05 B.M. 25th + N

54.32 / 4.82 / 59.14 / 50.15 / 8.99

54.32 / 3.03 / 57.35 / 9.58 / 47.77 / 1.40 / 46.37

58.94 / 12.12 / 71.06 B.M. 25th + M

49.3

9.58 / 1.41 / 10.99

46.41 / 10.94 — 46.59 / 10.76 — 48.38 / 8.97

47.29 / 10.06 — 46.94 / 10.41 — 48.92 / 8.43

47.64 / 9.71 — 47.99 / 9.36 — 49.54 / 7.81

58.94 / 65.91 / 2.85 / 68.76 / 50.77 / 7.99 — 61.79 / 50.77 / 11.02 — 52.00 / 9.79 mar 22/09

51.38 / 10.41 — 52.62 / 9.17

58.94 / 6.07 / 65.01 — 53.60 / 11.41 — 53.25 / 11.76

54.32 / 2.33 / 56.65 / 47.29 / 9.3

POSTED

46.95 / 9.70 — 35 / .140

25th north of K & alley bet J & K from 25th to 24th

mar. 10/09

Childs
Barber
Rogers

4

Sta.		H.I.	Rod	Ground	Grade	Cut
0+00	M.H. Center 25th & K	83.48	7.1	76.4	✓71.80	4.6
+50			5.8	77.7	✓73.30	4.4
1+00			2.1	81.4	✓74.80	6.6
+50		92.07	7.2	84.9	✓76.30	8.6
+90.3	M.H. center 25th & alley bet. J & K.		4.1	88.0	✓77.50	10.5
2+00			4.1	88.0	✓77.55	10.5
+50			4.1	88.0	✓77.80	10.2
3+00			4.8	87.3	✓78.05	9.3
+50			4.3	87.8	✓78.30	9.5
4+00			3.9	88.2	✓78.55	9.7
+50			5.3	86.8	✓78.80	8.0
+90.3	M.H.		6.3	85.8	✓79.00	6.8
5+00			6.2	85.9	✓79.05	6.9
+50			5.8	86.3	✓79.30	7.0
6+00			5.7	86.4	✓79.55	6.9
+50			5.0	87.1	✓79.80	7.3

POSTED

76.93
11.33
88.26
74.80
13.46
76.30
11.96
0.18
88.08 SP.
3.05
91.13
77.80
13.33

83.48
0.00
83.48 SP.
8.59
92.07
77.50
10.76
77.55
10.70
78.05
13.08
78.30
12.83
79.00
12.13

81.64
73.30
8.34

mar. 30/09

POSTED

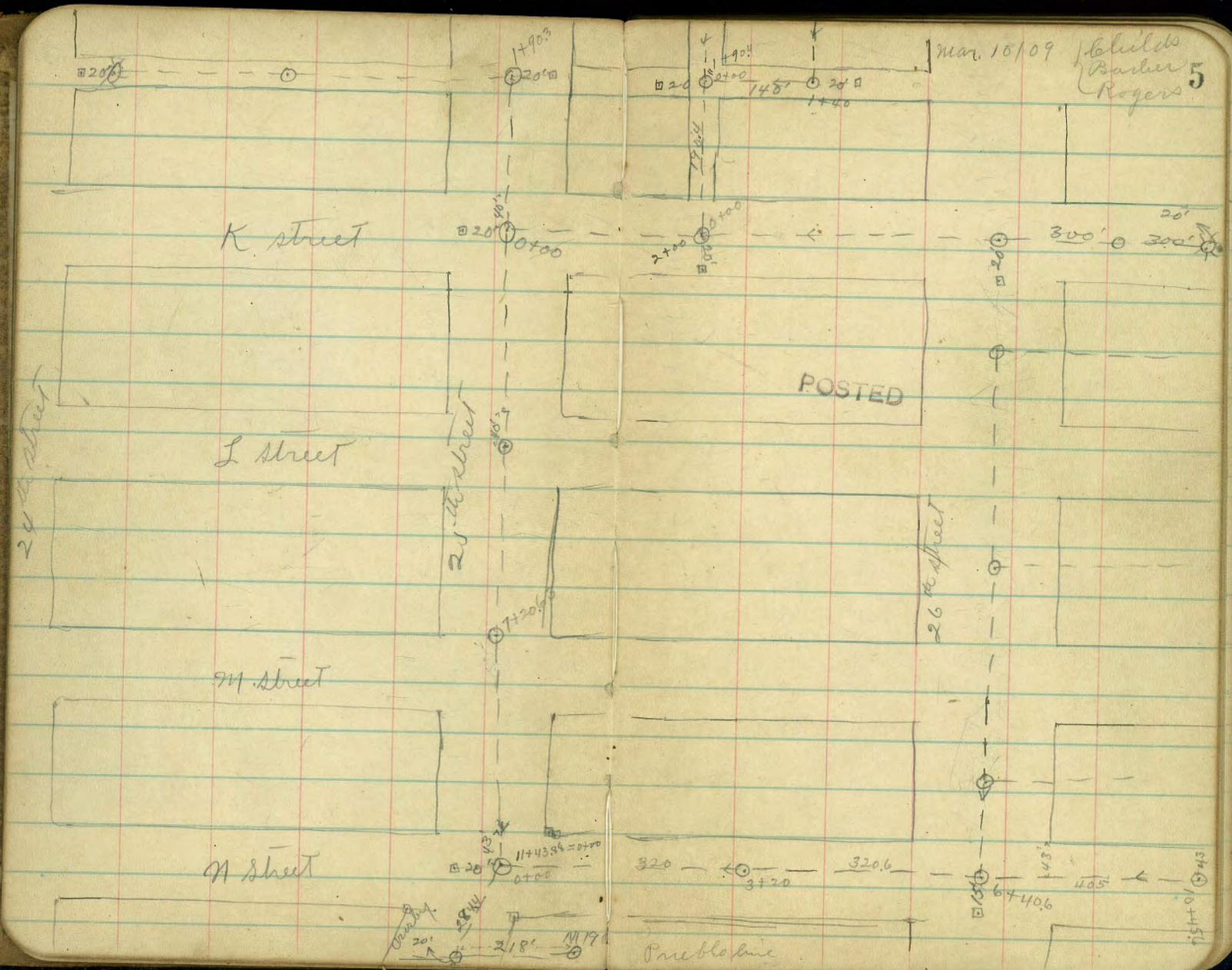
78.55
12.58
78.80
12.33
79.05
12.08

apr. 1/09

88.08
2.45
90.53
79.30
11.23

79.55
10.98
79.80
10.73

Mar. 10/09 Shields Barber Rogers



Cont. - from page 4

Mar. 10/09 {Childs, Barber, Rogers} 6

Sta.		H.I.	Rod	Ground	Grade	Cut
7+00		92.07	5.2	86.9	✓80.05	6.9
+50			5.4	86.7	✓80.30	6.4
8+00			5.7	86.4	✓80.55	5.9
+10.3	F.J. about 30' from 24th street,		6.2	85.9	✓80.60	5.3

apr. 1/09

90.53 ✓

80.05 / 10.48 ✓ 80.55 / 9.98 ✓

80.30 / 10.23 ✓ 80.60 / 9.93 ✓

POSTED

810.3
490.3
320.0

J. K street line from 25th to 27th (center K)

Mar. 12/09 { Fields, Barber, Rogers

Sta.		H.I.	Rod	Ground	Grade	cut
0+00	M.H center K & 25th streets.	87.10	10.7	76.4	71.80	4.6
+50			10.9	76.2	72.30	3.9
1+00			10.3	76.8	72.80	4.0
+50			9.7	77.4	73.30	4.1
2+00	M.H. center alley		9.0	78.1	73.80	4.3
+50			8.4	78.7	74.80	3.9
3+00			8.0	79.1	75.80	3.3
+50			7.5	79.6	76.80	2.8
4+00			6.9	80.2	77.80	2.4
+50			5.7	81.4	78.80	2.6
5+00			3.9	83.2	79.80	3.4
+50			1.9	85.2	80.80	4.4
6+00		99.85	12.5	87.4	81.80	5.6
+41.0	M.H center 26th		11.1	88.8	82.60	6.2
+50			10.6	89.3	83.00	6.3
7+00			8.1	91.8	85.00	6.8

76.93 B.M.
10.17
87.10
12.97
86.88
apr. 1/09 99.85
73.30
9.72
73.80
apr. 5/09 9.22
76.93
6.93
83.86
75.80
8.06
POSTED
apr. 8/09 7.5
86.88 91.9
5.75
92.13
80.80
11.33
98.13
85.00
13.13

76.93
11.33
88.26
76.93
6.09
83.02
72.30
10.72
72.80
10.22
74.80
8.22
76.80
7.06
78.80
5.06
77.80
6.06
79.80
4.06
86.88 B.M. 26th
12.57
99.39
13.4
86.0
11.25
98.13
81.80
10.33
83.00
9.13
82.60
9.53
apr. 9/09

Cont. - from page 7

Sta.		H.I.	Rod	Ground	Grade	cut
7+50		99.85	5.4	94.5	87.00	7.5
8+00			3.0	96.9	89.00	7.9
+50			1.0	98.9	91.00	7.9
9+00		110.20	10.1	100.1	93.00	7.1
+40.6	M.H.		9.1	101.1	94.60	6.5
+50			8.2	102.0	94.65	7.4
10+00			6.3	103.9	94.90	9.0
+50			5.1	105.1	95.15	10.0
11+00			4.8	105.4	95.40	10.0
+50			6.0	104.2	95.65	8.6
12+00			9.0	101.2	95.90	5.3
+40.6	F.J. Mar 27		7.6	102.6	96.10	6.5

Mar 15/09 {Childs, Barber, Rogers}

99.85
0.14
99.71 J.P.

apr. 9/09 10.49
110.20

98.13
87.00
11.13

91.00
7.13

1.29
95.84 J.P.
11.52
107.36

89.00
9.13

94.60
3.53

94.90
12.46

95.40
11.96

93.00
5.13

94.65
3.48

95.15
12.21

95.65
11.71

95.90
11.46

96.10
11.26

alley line between 25th & 26th from K to F.

Mar. 15/09 { Childs Barber Rogers

Sta.		H.I.	Rod	Ground	Grade	cut
0+00	(107) N.H. center K	89.86	11.7	78.1	73.80	4.3
+50			8.2	81.7	75.80	5.9
1+00			6.1	83.8	77.80	6.0
+50			4.7	85.2	79.80	5.4 X
+90.4	(106) N.H. center alley bet. J & K.		3.1	86.8	81.40	5.4
2+00			2.7	87.2	81.90	5.3
+50			1.1	88.8	84.40	4.4
3+00		102.48	11.3	91.2	86.90	4.3
+50			10.1	92.4	89.40	3.0
4+00			6.6	95.9	91.90	4.0
+50			2.8	99.7	94.40	5.3
5+00		114.10	11.59	102.51	96.90	5.6
+50			8.8	105.3	99.40	5.9
+71	(98) N.H. center alley bet. J & I.		8.1	106.0	100.40	5.6
6+00			7.1	107.0	102.14	4.9
+50			4.9	109.2	105.14	4.1

76.93 BM. 25th & K
12.93
89.86
0.01
89.85 J.P.
12.63
102.48
0.26
102.22 J.P.
11.88
114.10
april 5/09
0.23
89.76 J.P.
12.71
102.47
89.40
13.07
91.90
10.57
94.40
8.07

81.40
8.59
84.40
5.59
86.90
3.09
96.90
5.57
99.40
3.07
100.40
2.07
102.14
0.33

83.02
75.80
7.22
76.93
13.06
89.99
77.80
12.19
79.80
10.19
81.90
8.09
0.10
102.37 J.P.
12.69
115.06
105.14
9.92
12.59

POSTED

J.P.

Cont. from page 9

Mar. 15/09 { Childs, Barber, Rogers

Sta.		H.I.	Rod	Ground	Grade	cut
7+00		114.10	2.6	111.5	✓108.14	3.4
+50		126.98	12.2	114.78	✓111.14	3.7
8+00			10.20	116.78	✓114.14	2.7
+50			5.2	121.8	✓117.14	4.7
9+00			2.4	124.6	✓120.14	4.5
+51.6	(97) M.H. center alley bet 9 & 14.		0.17	126.81	✓123.20	3.6
10+00		139.28	9.8	129.5	✓125.60	3.9
+50			7.3	132.0	✓128.10	3.9
11+00			5.26	134.02	✓130.60	3.4
+50		151.34	10.6	140.7	✓133.10	7.6
12+00			10.4	140.9	✓135.60	5.3
+22	(96) M.H. about 20' North H. Street.		9.5	141.8	✓136.70	5.1
+50			7.3	144.0	✓137.82	6.2
13+00			6.5	144.8	✓139.82	5.0
+50			3.9	147.4	✓141.82	5.6
14+00			2.6	148.7	✓143.82	4.9

April 5/09

0.01
114.09 J.P.
12.89
126.98 ✓
0.17
126.81 J.P.
12.46
139.27 ✓
0.37
138.90 J.P.
12.42
151.32

115.06 ✓
108.14
6.92
111.14
3.92
0.28
114.78
12.52
127.30 ✓
114.14
13.16 ✓
117.14
10.16 ✓
0.31
126.99 J.P.
11.93
138.92 ✓
128.10
10.82 ✓
130.60
8.32 ✓
133.10
5.82 ✓
137.82
10.34 ✓
139.82
8.34 ✓
141.82
6.34 ✓
143.82
4.34 ✓

J.P.
J.P.
12.89
127.67
114.14
13.53
120.14
7.16 ✓
123.20
4.10 ✓
125.60
1.70 ✓
J.P.

POSTED

apr. 7/09
135.60
3.32 ✓
1.90
137.02 J.P.
on rock
11.14
148.16 ✓
136.70
11.46 ✓

Cont. — from page 10

Mar. 17/09 { Childs, Barber, Rogers

Sta.		H.I.	Rod	Ground	Grade	cut		
14+50		151.34	1.30	150.04	✓145.82	4.2	11.85 / 162.39 ✓	J.P.
15+00			0.78	150.56	✓147.82	2.8	0.88 / 161.51 J.P.	J.P.
+42.5	(95) F.T. center G street	162.42	6.2	156.2	✓149.50	6.7	5.30 / 166.81 ✓ 8.56 / 158.25 J.P.	320/12.8
+50			5.7	156.7	149.70	7.0	8.35 / 166.60 ✓	apr. 7/09
16+00			7.1	155.3	150.95	4.4	156.95 / 9.65 / 9.69 / 166.64	
+50			5.4	157.0	152.20	4.8	148.16 ✓	
17+00			2.3	160.1	153.45	6.7	145.82 / 2.34 ✓	
+50			0.88	161.54	154.70	6.8	147.82 / 0.34 ✓	J.P.
18+00		166.81	4.7	162.1	155.95	6.2	150.04 / 12.47 / 162.51 ✓	
+50			3.0	163.8	157.20	6.6	149.50 / 13.01	
+62	(43) F.T. about 20' So. of F street		2.9	163.9	157.50	6.4		

N street line 25th East to 29th

Mar. 17/09 { Childs, Barber, Rogers

Sta.		H.I.	Rod	Ground	Grade	Out	apr. 12/09	B.M. 25th & N	
0+00	(149) M.H. 25th & N	62.37	8.5	53.9	48.38	5.5	54.32 / 8.05 / 62.37	54.32 / 4.51 / 58.83	
+50			8.1	54.3	48.68	5.6	48.98 / 9.85	48.68 / 10.15	50.70 / 8.13
1+00	3 POSTED		7.8	54.6	48.98	5.6	49.28 / 9.55	49.88 / 8.95	51.36 / 7.47
+50			7.8	54.6	49.28	5.3	49.58 / 9.25	50.30 / 8.53	52.03 / 6.80
2+00			7.5	54.9	49.58	5.3	50.18 / 8.65	53.36 / 5.47	54.02 / 4.81
+50			7.0	55.4	49.88	5.5	52.69 / 6.14		
3+00			6.6	55.8	50.18	5.6	63.92 / 0.79 / 64.71	54.84 / 9.87	
+20	M.H. (148)		7.3	55.1	50.30	4.8	54.55 / 10.16		
+50			6.3	56.1	50.70	5.4			
4+00			6.0	56.4	51.36	5.0			
+50			5.9	56.5	52.03	4.5			
5+00			5.5	56.9	52.69	4.2			
+50			4.9	57.5	53.36	4.1			
6+00			4.2	58.2	54.02	4.2			
+40.6	(147) M.H. center 26th		3.3	59.1	54.55	4.6			
+50			3.1	59.3	54.59	4.7			

Cont. from page 12

mar. 17/09 { Schields, Barber, Rogers

Sta.		H.I.	Rod	Ground	Grade	Cut			
7+00		62.37	3.2	59.2	54.84	4.4	apr. 15/09		
							63.92 / 0.86 / 64.78	65.01 / 6.04 / 71.05	B.M. Evans & M.
+50			2.9	59.5	55.09	4.4	55.09 / 9.69		
8+00	POSTED		2.5	59.9	55.34	4.6	55.34 / 9.44	55.59 / 9.19 / 54.84 / 8.94	56.09 / 8.69
+50			2.2	60.2	55.59	4.6	apr. 23/09		
9+00			1.7	60.7	55.84	4.9	56.56 / 11.07	65.01 / 2.62 / 67.63	
+50			1.4	61.0	56.09	4.9	56.58 / 11.05	56.34 / 11.29	57.58 / 10.05
10+00			0.8	61.6	56.34	5.3	56.83 / 10.80	57.18 / 10.45	57.83 / 9.80
+45.6	M.H. (146)		0.4	62.0	56.56	5.4	57.08 / 10.55	57.33 / 10.30	57.08 / 9.55
+50		71.05	9.2	61.9	56.58	5.3	april 12/09		
11+00			8.8	62.3	56.83	5.5			
+50			8.1	63.0	57.08	5.9			
+70.6	M.H. 145½		9.1	62.0	57.18	4.8			
12+00			8.1	63.0	57.33	5.7			
+50			7.9	63.2	57.58	5.6			
13+00			7.9	63.2	57.83	5.4			
+50			7.6	63.5	58.08	5.4			

Cont. from page 13.

apr. 12/09 {Child, Barber, Rogers

Sta.		H.I.	Rod	Ground	Grade	cut	
14+00		71.05	7.4	63.7	✓58.33	5.4	
+50			6.4	64.7	✓58.58	6.1	
+54.2	(145) M.H. center Evans		6.5	64.6	✓58.60	6.0	POSTED
15+00			7.2	63.9	✓58.83	5.1	
+50			6.5	64.6	✓59.08	5.5	
16+00			6.4	64.7	✓59.33	5.4	
+50			6.2	64.9	✓59.58	5.3	
17+00			6.0	65.1	✓59.83	5.3	
+34.25	(144) M.H. center Hensley Elev St. = 66.25		6.1	65.0	✓60.00	5.0	
+50			5.4	65.7	✓60.06	5.6	
18+00			5.1	66.0	✓60.26	5.7	
+50			4.9	66.2	✓60.46	5.7	
19+00			4.8	66.3	✓60.66	5.6	
+50			4.5	66.6	✓60.86	5.7	
20+00			4.1	67.0	✓61.06	5.9	
+50			3.9	67.2	✓61.26	5.9	

764.12 / 3.05 000 (399
229 236
757640
687708
699320

apr. 23/09

58.60 / 9.03 — 67.63 ✓ — 1454.2 / 640.6 / 813.6
58.33 / 9.30
58.83 / 8.80 ✓

apr. 28/09

15.75 / .004 / 6300

65.01 / 5.07 / 70.08 ✓ — 59.33 / 10.75 ✓
59.08 / 11.00 ✓
59.58 / 10.50 ✓
59.83 / 10.25 ✓ — 60.00 / 10.08 ✓

may 4/09

60.06 / 10.02 ✓ — 65.01 B.M. N. & Evans
6.02
71.03 ✓
60.46 / 10.57 ✓ — 60.26 / 10.77 ✓
60.66 / 10.37 ✓ — 60.86 / 10.17 ✓
65.14 / 5.18 / 70.92 H.I. — 61.06 ✓ / 9.86 — 61.26 / 9.66

Cont. - from page 14

Apr. 13/09 { Childs, Barber, Taylor

Sta.		H.I.	Rod	Ground	Grade	cut
21+00		71.05	3.7	67.4	✓61.46	5.9
+09	M.H. 143 St Grade 68.0		4.1	67.0	✓61.50	5.5
+50			3.4	67.7	✓61.66	6.0
22+00			3.3	67.8	✓61.86	5.9
+50			3.1	68.0	✓62.06	5.9
23+00			2.9	68.2	✓62.26	5.9
+50			2.6	68.5	✓62.46	6.0
24+00			2.4	68.7	✓62.66	6.0
+50			2.4	68.7	✓62.86	5.8
498.38	(142) M.H. Center 29th Elev 69.8 St.		1.7	69.4	✓63.05	6.4

70.92 H.I.
9.42
61.50
10.86
72.36 H.I.

61.46 / 9.46 — 61.50 / 9.42 — 61.66 / 9.26

61.86 / 10.50 — 62.06 ✓ / 10.30 — 62.26 ✓ / 10.10

62.46 / 9.90 — 036

POSTED

B.M. 65.14
6.93
72.07 H.I.
3.68

T.P. 68.39
5.00
73.39
3.73

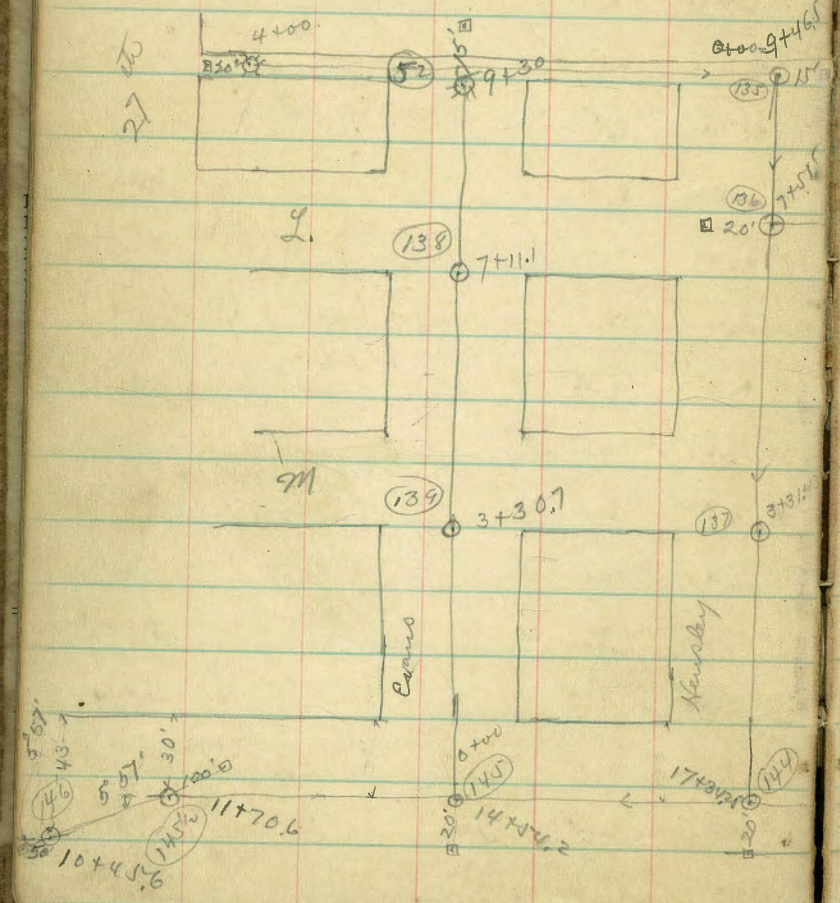
T.P. 69.66
4.37
74.03

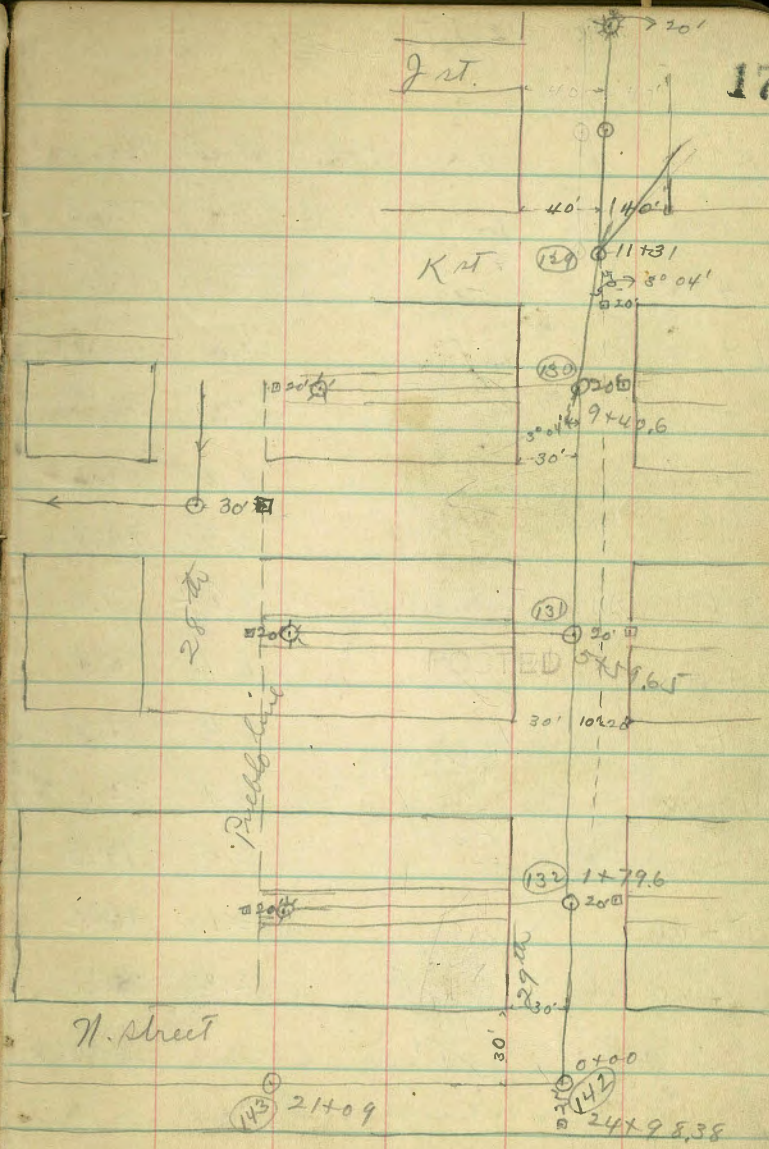
62.66 / 10.73 — 62.86 — 63.05

62.46 / 10.93

68.39
5.47
73.86 H.I.

Bottom stakes 5-10-05 — 62.46 / 11.40 — 62.66 / 11.20 — 62.86 / 11.00 — 63.05 / 10.81


27th
4+00
52
9+30
135
9+46.5
15'
136
7+57.5
20'
L.
138
7+11.1
M
139
3+30.7
137
3+31.4
Evans
Hensley
146
145½
11+70.6
10+45.6
145
0+00
14+54.2
144
17+34.25


J st.
20'
40'
140'
K st
129
11+31
3° 04'
130
9+40.6
30'
28th
131
5+59.65
30'
10+28
Pebble line
132
1+79.6
29th
N. Street
143
21+09
142
0+00
24+98.38

K Street 24th to 25th + alley bet. 24th + 25th So of K. Apr. 5/09 { Childs Barber Taylor.

Sta.		H.I.	Rod	Ground	Grade	Cut
0+00	35' west of 25th	79.33	4.0	75.3	71.05	4.2
+50			5.3	74.0	70.05	3.9
1+00			6.4	72.9	69.05	3.8
+50	2%		7.5	71.8	68.05	3.7
2+00			8.2	71.1	67.05	4.0
+50			9.3	70.0	66.05	3.9
+65	N.H. Centre alley		9.67	69.66	65.75	3.9
3+00			8.9	70.4	66.63	3.8
+50			8.2	71.1	67.88	3.2
4+00	2½%		6.7	72.6	69.13	3.5
+50			5.0	74.3	70.38	3.9
5+00			3.1	76.2	71.63	4.6
+30	about 35' East 24th		2.2	77.1	72.38	4.7

Continued page 19

Apr. 9/09 76.93
76.93
1.51
78.44
65.75
12.69
69.05
9.39
66.05
12.39
69.13
9.31

76.93
2.40
79.33
71.05
7.39
70.05
8.39
66.63
11.81
70.38
8.06

68.05
10.39
67.05
11.39
67.88
10.56
71.63
6.81
72.38
6.06

POSTED

Cont. Page 18

Apr. 12/09 { Childs, Barber, Taylor

Sta		H.I.	Rod	Ground	Grade	cut
0+00	M.H. center alley	73.52	3.86	69.66	65.75	3.9
+50			4.4	69.1	64.50	4.6
1+00			4.6	68.9	63.25	5.6
+50			5.4	68.1	62.00	6.1
+90	M.H. constructed		7.2	66.3	61.00	5.3

76.93
145
78.38
8.85
69.53 I.P.
4.02
73.55
64.50
9.05

63.25
10.30
62.00
11.55
61.00
12.55

26th Street Sewer N to alley bet L & K. Apr. 7/09 Childs Barber Taylor 20

Sta.		H.I.	Rod	Ground	Grade	Cut	
0+00	M.H. N Street	68.21	9.1	59.1	54.55	4.6	apr. 13/09
+50			8.9	59.3	54.75	4.5	
1+00	3		8.3	59.9	54.96	4.9	
+50			7.8	60.4	55.16	5.2	
+93.4	M.H. center alley bet N & M.		7.0	61.2	55.35 / 56.35	5.9	
2+00			7.0	61.2	56.40	4.8	
+50			6.4	61.8	56.80	5.0	
3+00	0.79 %		6.1	62.1	57.19	4.9	
+50			5.5	62.7	57.59	5.1	
4+00			4.7	63.5	57.98	5.5	apr. 16/09
+50			4.1	64.1	58.38	5.7	
5+00			3.1	65.1	58.77	6.3	
+50			2.1	66.1	59.17	6.9	
+73.6	M.H. center alley bet. M & L.		1.6	66.6	59.35	7.3	
6+00			1.1	67.1	60.01	7.1	
+50			-0.1	68.3	61.26	7.0	

63.92 B.M. 26th & M.
4.29
68.21 ✓ 64.71 ✓

63.92
2.14 ✓
66.06
9.76
56.30
55.55
.75
56.40
9.66 ✓

54.81
9.90 ✓

54.96
11.10 ✓ 9.0

55.16
10.90 ✓ 9.1

55.35
10.71 ✓ 9.2
56.9
57.1
57.0

drop M.H.

63.92
2.01 ✓
65.93 ✓
56.80
9.13

57.19
8.74 ✓ 38.0 apr. 15/09

63.92
3.85 ✓
67.77 ✓
57.59
10.18 ✓

57.98
9.79 ✓

58.38
9.39 ✓

58.77
9.00 ✓

63.92
6.67 ✓
70.59 ✓
60.01
10.58 ✓

59.17
11.42 ✓
70.58 ✓
59.17
11.41 ✓

59.35
11.23 ✓
apr. 20/09

POSTED

63.92
9.29
73.21 ✓
61.26
11.95

Cont. from page 20.

apr. 7/09 {Childs, Barber, Taylor

21

Sta.		H.I.	Rod	Ground	Grade	cut
7+00		76.73	7.5	69.2	✓62.51	6.7
+50			7.0	69.7	✓63.76	5.9
8+00			6.1	70.6	✓65.01	5.6
+50			5.2	71.5	✓66.26	5.2
9+00			4.2	72.5	✓67.51	5.0
+50			3.0	73.7	✓68.76	4.9
+53.6	M.H. center alley bet. L + K.		2.9	73.8	✓68.85	5.0

70.87 BM. 26th + L.
5.86
76.73 ✓

apr. 20/09

~~11.95~~ ✓ 73.21 ✓
63.76 62.51
POSTED 10.70 ✓
9.45 ✓

65.01 66.26
8.20 ✓ 6.95 ✓

67.51 6.69
5.70 ✓ 70.87
77.56 ✓

68.76 68.85
8.80 ✓ 8.71 ✓

alley line bet M + M from 26th to 27th

apr. 8/09 { Childs, Barber, Taylor

Sta.		H.I.	Rod	Ground	Grade	cut
0+00	(157) M.H. center 26th	66.14	4.9	61.2	55.35	5.9
+50			5.0	61.1	55.50	5.6
1+00			6.4	59.7	55.65	4.0
+50			7.1	59.0	55.80	3.2
2+00			7.3	58.8	55.95	2.9
+50			7.0	59.18	56.10	3.0
3+00	M.H. 141		7.3	58.8	56.25	2.6
+50			7.0	59.1	56.63	2.5
4+00			5.8	60.3	57.02	3.3
+50			4.8	61.3	57.40	3.9
5+00			4.5	61.6	57.79	3.8
+50			4.8	61.3	58.17	3.1
6+00	(57) F.S. about 30' from 27th		3.0	63.1	58.55	4.6

0.3%

0.768%

apr. 13/09

63.92 BM - M.
222
66.14

66.06 56.4
55.50
10.56

55.65 56.6
10.41

55.80 55.95 56.25
10.26 10.11

59.18
5.93
65.11
56.25
8.86

56.10 6.88
9.96 59.18

56.63
8.48

57.02
8.09

57.79
7.32

57.40
7.71

58.17
6.94

58.55
6.56

POSTED

4.0

alley line bet. M & L. 26th to 27th Street. apr. 8/0.9 { Childs, Barber, Taylor

Sta.		H.I.	Rod	Ground	Grade	Cut	apr. 16/09
0+00	(156) M.H. Center 26th	71.87	5.3	66.6	59.35	7.3	63.92 / 7.95 / 71.87 ✓ — 7.96 / 63.92 / 71.88 ✓
+50			4.9	67.0	59.60	7.4	59.85 / 12.03 ✓ — 59.60 / 12.28 ✓
1+00			6.0	65.9	59.85	6.1	60.10 / 11.78 ✓ — 60.35 / 11.53 ✓
+50			8.6	63.3	60.10	3.2	60.60 / 11.28 ✓ — 60.85 / 11.03 ✓
2+00			7.7	64.2	60.35	3.9	61.10 / 10.78 ✓ — 61.35 / 10.53 ✓
+50			6.8	65.1	60.60	4.5	61.60 / 10.28 ✓ — 61.85 / 10.03 ✓
3+00	M.H. 140		7.1	64.8	60.85	4.0	62.10 / 9.78 ✓ — 62.35 / 9.53 ✓
+50			5.8	66.1	61.10	5.0	
4+00			4.5	67.4	61.35	6.1	
+50			4.7	67.2	61.60	5.6	
5+00			5.2	66.7	61.85	4.9	
+50			4.6	67.3	62.10	5.2	
6+00	F.J. 54 30' from 27th		3.7	68.2	62.35	5.9	

12) 69 / 60 / 91 (5.8

5.8

11.6 / 60 / 27) 696.00 (257.8 / 54 / 156 / 135 / 210

POSTED

Alleyline bet. L & K from 26th to 27th

Apr. 8/09 { Childs Barber Taylor

Sta.			H.I.	Rod	Ground	Grade	cut	
0+00	M.H.	(155) center 26th	83.90	10.1	73.8	68.85	5.0	71.0
+50				8.9	75.0	69.85	5.2	
1+00	B.M. 26th & K.		S.W. Cor. 86.88	7.0	76.9	70.85	6.1	
+50	" " 26th & L		N.W. Cor 70.87	4.9	79.01	71.85	7.2	
2+00				3.6	80.3	72.85	7.5	
+50				1.13	82.77	73.85	9.0	
3+00	M.H.	154	88.99	5.4	83.6	74.85	8.8	
+50				4.3	84.7	75.35	9.4	
4+00		150		4.4	84.57	75.85	8.8	
+50			81.90 76.4 5.5	3.9	85.1	76.35	8.8	
5+00				2.7	86.3	76.85	9.5	
+50				1.4	87.6	77.35	10.3	
6+00	F.J.	53		1.6	87.4	77.85	9.6	77.5

30' from 27th

70.87
9.03
79.90
10.66
79.24
10.46
89.70 H.I.

at house

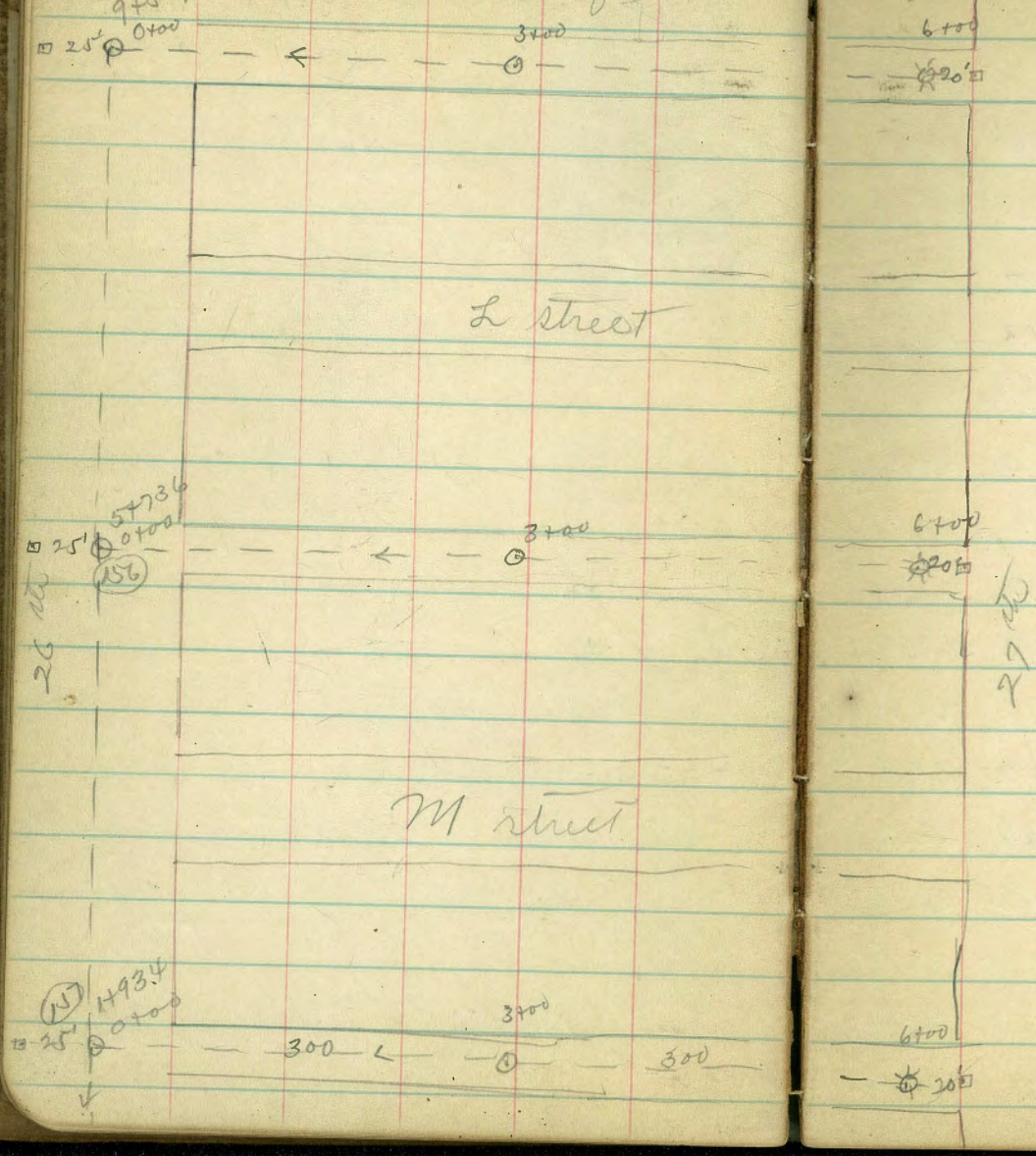
4.8 = grd 84.9
8.7 = " 81.9
3.9
20

70.87 BM 26 & L.
13.03
83.90
6.22
88.99
12.3
76.7
5.30
82.77
88.07
10.4
77.7
76.3
1.4
1.70
79.01 J.P.
apr. 21/09
70.87
9.84
80.71
69.85
10.86
71.85
8.86
72.85
7.86
70.85
9.86
79.01
7.36
86.37
J.P.
74.85
11.52
73.81
12.52
75.35
11.02
75.85
10.52
1.80
84.57
5.1
84.57
4.61
89.18
76.85
12.33
76.35
12.83
77.35
11.83
77.85
11.33
9.9
8.8
9.5
8.9
6.8
6.2
8.8
17.6
6.4
27 | 10560 | 391.1
81
246
243
30

Plat of sewer from

Page 20 to 24

apr. 8/09 { Childs Barber Taylor



POSTED

Evans Street line

Apr. 14/09 { Childs, Barber, Taylor

Sta.		H.I.	Rod	Ground	Grade	cut
0 +00	(145) M.H. 30' So. of no. line of N.	72.95	8.4	64.6	✓58.60	6.0
+50			8.3	64.7	✓59.10	5.6
1+00			8.0	65.0	✓59.60	5.4
+50			7.3	65.7	✓60.10	5.6
2+00	1%		6.8	66.2	✓60.60	5.6
+50			6.5	66.5	✓61.10	5.4
3+00			6.1	66.9	✓61.60	5.3
+30.7	(139) M.H. So. line M.		5.6	67.4	✓61.91	5.5
+50			5.4	67.6	✓62.38	5.2
4+00			4.9	68.1	✓63.61	4.5
+50			6.2	66.8	✓64.84	2.0
5+00	2.46%		4.8	68.2	✓66.07	2.1
+50			4.2	68.8	✓67.30	1.5
6+00			2.10	70.85	✓68.53	2.3
+50		83.83	10.7	73.1	✓69.76	3.3
7+00			9.6	74.2	✓70.99	3.2

67.63 ✓
59.10
8.53

65.01
7.94
72.95 ✓

B.M. N & Evans
70.85
12.98
83.83

Apr. 26/09 599.3) 14.740 (2.46
11986
27540
23972

68.57 B.M. Evans & M.
3.00
71.57 ✓

59.60 60.10 60.60
11.97 ✓ 11.47 ✓ 10.97 ✓

61.10 61.60 61.91 62.38
10.47 ✓ 9.97 ✓ 9.66 ✓ 9.19

63.61 64.84 66.07 67.30
7.96 ✓ 6.73 ✓ 5.50 ✓ 4.27 ✓

68.53 69.76 70.99
3.04 ✓ 1.81 ✓ 0.58 ✓

POSTED

J.P.

Cont. - from page 26

apr. 14/09 { Childs, Barber, Taylor

Sta.			H.I.	Rod	Ground	Grade	cut
7+11.1	(138) M.H. So. line L.		83.83	9.2	74.6	✓71.26	3.3
+50				8.3	75.5	✓72.22	3.3
8+00				6.6	77.2	✓73.45	3.7
+50				4.5	79.3	✓74.68	4.6
9+00				1.80	82.03	✓75.90	6.1
+30	F.J.	52	85.37	1.3	84.1	✓76.65	7.5

apr. 26/09

68.57
11.96
80.53 ✓
71.26
9.27 ✓

72.22
8.31 ✓

73.45
7.08 ✓

74.68
5.85 ✓

78.82 B.M.
8.25
87.07 ✓
75.90
11.17 ✓
76.65
10.42 ✓

2454
80
196320

2454
11.1
2454
2454
2454
222394
3.34
85.37

8.53
3.9
72.0

2.46
9
2214

J.P.

POSTED

Hensley St. line

apr. 15/09 { Childs, Barber, Taylor

Sta		H.I.	Rod	Ground	Grade	cut
0+00	(144) M.H. 10' No. center of ~~M.~~ Commercial St	76.15	11.2	65.0	✓60.00	5.0
+50			8.6	67.6	✓60.76	6.8
1+00	3		7.1	69.1	✓61.51	7.6
+50			6.9	69.3	✓62.27	7.0
2+00			6.3	69.9	✓63.03	6.9
+50			5.3	70.9	✓63.79	7.1
3+00			4.7	71.5	✓64.54	7.0
+31.43	(137) M.H. So. line ~~M.~~ Imperial Ave		5.8	70.4	✓65.01	5.4
+50			6.2	70.0	✓65.25	4.8
4+00			5.4	70.8	✓65.93	4.9
+50			3.6	72.6	✓66.61	6.0
5+00			4.2	72.0	✓67.29	4.7
+50			3.7	72.5	✓67.97	4.5
6+00			5.2	71.0	✓68.65	2.4
+50			1.61	74.54	✓69.33	5.2
7+00		87.03	10.0	77.0	✓70.00	7.0

10.0

6.3

66.2

apr. 28/09

31.43

70.08 ✓

60.76

9.32

63.03

11.81

62.27

12.57

63.79

11.06

64.54

10.30

POSTED

71.93

4.79

76.72

65.25

11.47

may 3/09

68.65

8.07

65.93

10.79

66.61

10.11

7193 B.M. Hensley & ~~M.~~ Imperial

4.22

76.15 ✓

751.5 / 11.400 (1.51

7515

38850

37575

18750

apr. 30/09

71.93

2.91

74.84 ✓

61.51

13.33

65.01

9.83

67.29

9.43

67.97

8.75

79.28 B.M. 28th & L.

3.59

82.87 ✓

69.33

13.54

70.00

12.87

T.P.

Cont. - from page 28

apr. 15/09 { Childs, Barber, Taylor

Sta.		H.I.	Rod	Ground	Grade	cut
7+51.5	(136) M.H. Center L.	87.03	9.1	77.9	✓70.70	7.2
8+00			8.2	78.8	✓71.38	7.4
+50			7.5	79.5	✓72.06	7.4
9+00			8.9	78.1	✓72.73	5.4
+46.5	(135) M.H. center alley bet. L + K		8.7	78.3	✓73.35	5.0

74.54
12.49
87.03

may 3/09
82.88 ✓
70.70
12.18

72.73
10.15 ✓
73.35
9.53 ✓

72.06
10.82 ✓
71.38
11.50 ✓

.51.5
.01.51
51.5
2.75
1.5
79.65
1.36
18.5
680
1088
136
.25160

51.5
1.34
3090
1545
515
.70040

46.5
1.36
2790
1395
465
.63240

70.7
65
4.20 / 5.70 (1.36
4.20
1500
1260
2400
2100
300

115 / 265 (1.3
125
750
515
1150

48.5
.01.36
2910
1355
485
.64960

POSTED

Alley line bet L & K from Hensley to 27th

Apr. 15/09 { Childs, Barlow, Taylor

Sta.		H.I.	Rod	Ground	Grade	cut
0+00	(135) M.H. center Hensley	87.03	8.7	78.3	✓73.35	5.0
+50			8.4	78.6	✓74.10	4.5
1+00			7.9	79.1	✓74.85	4.3
+50			5.0	82.0	✓75.60	6.4
2+00			3.4	83.6	✓76.35	7.3
+50			2.20	84.83	✓77.10	7.7
3+00		89.32	4.1	85.2	✓77.85	7.4
+50			3.8	85.5	✓78.60	6.9
4+00	F.J. (51) near 27th		3.1	86.2	✓79.35	6.9

84.83
4.49
89.32
May 3/09

82.88
4.29
78.59 J.P.
5.34
83.93 ✓

74.85
9.08 ✓

74.10
9.83 ✓

75.60
8.33 ✓

May 4/09

84.83
4.87
89.70 ✓

POSTED

76.35
13.35 ✓

77.10
12.60 ✓

78.60 J.P.
11.10 ✓

77.85
11.85 ✓

79.35
10.35 ✓

1 L + 28th Street Line

Apr. 20/09 { Clifford, Barber, Taylor

Sta.		H.I.	Rod.	Ground	Grade	Cut				
									79.28 BM. 28th	
0+00	M.H. center Hensley + L.	88.98	11.1	77.9	70.70	7.2			9.70 + L.	
+25		82.13	4.5	77.6	70.73	6.9			88.98	
+50			13.3	75.7	70.75	5.0				
+75		82.13	8.5	73.6	70.77	2.8				
1+00			14.0	75.0	70.80	4.2				
+25		82.13	6.5	75.6	71.30	4.3				
+50			13.0	76.0	71.80	4.2				
+75		82.13	5.6	76.5	72.30	4.2				
2+00			11.2	77.8	72.80	5.0				
+15.38	(134) M.H. center 28th + L		10.9	77.7	73.10	5.0				
+50			10.5	78.5	73.27	5.2				
+75		82.13	3.8	78.3	73.40	4.9				
3+00			10.9	78.1	73.52	4.6				
+25		82.13	4.5	77.6	73.64	4.0				
+50			11.9	77.1	73.77	3.3				
+75		82.13	4.9	77.2	73.90	3.3				
4+00			11.1	77.9	74.02	3.9				
+25		82.13	4.1	78.0	74.15	3.9				
+50			11.5	77.5	74.27	3.2				
+75		82.13	3.6	78.5	74.40	4.1				
5+00			9.6	79.4	74.52	4.9				
+25		82.13	2.1	80.0	74.65	5.4				
+50			9.2	79.8	74.77	5.0				
+75		86.75	6.6	79.9	74.90	5.0				
+95.35	(121) M.H. center K.		8.9	80.1	75.00	5.1				
6+00			8.6	80.4	75.09	5.3				
125		86.75	5.9	80.8	75.55	5.3				
+50			7.7	81.3	76.01	5.3				

465 / 184 / 1860 / 3720 / 465 / 185560

215.4 / 173.10 / 3.39 / 6462 / 8480 / 6462 / 20180 / 2400 / 1.54 / 41 / 2460 / 2154 / 3060

79.28 BM. / 2.85 / 82.13 H.I. / 2.04 / 80.09 = B.M. / 6.70 / 86.75 H.I.

79.28 BM / 2.16 / 81.44 H.I.

7.0 / 1.54 / 1.54 / 1.54 / 17090

7073 / 0.71 — 7075 / 10.69 — 7077 / 10.67 — 7080 / 10.64

71.30 / 10.14 — 71.80 / 9.64 — 72.30 / 9.14 — 72.80 / 8.64 — 73.10 / 8.34

73.40 / 8.04 — 73.52 / 7.92

B.M.

80.05 BM / 2.44 / 82.49 H.I.

73.27 / 9.22 — 73.52 / 8.97 — 73.46 / 9.09

73.64 / 8.85 — 73.77 / 8.72 — 73.90 / 8.59 — 74.07 / 8.47 — 74.15 / 8.34

74.27 / 8.22 — 74.40 / 8.09 — 74.52 / 7.97 — 74.65 / 7.84

74.77 / 7.72 — 74.90 / 7.59 — 75.00 / 9.44

80.05 / 4.39 / 84.44

7.28 / 3.75 / 82.53 / 7.70 / 4.83

75.55 / 10.76

76.01 / 10.30

80.05 / 6.26 / H.I. 86.31

Cont. - from page 31

BM 92.81 spk in pole 11+50

Apr. 20/09 { Clinton, Barber, Taylor

Sta.		H.I.	Rod	Ground	Grade	cut
6+75		86.75	5.3	81.4	76.47	4.9
7+00		88.98	7.8	81.2	76.93	4.3
+25		86.75	6.5	80.2	77.39	2.8
+50		89.0	6.2	82.8	77.85	5.0
+75		86.75	2.4	84.3	78.31	6.0
8+00			4.1	84.9	78.77	6.1
+25		86.75	2.0	84.7	79.23	5.5
+50			6.4	82.6	79.69	2.9
+75	1.84 %	86.75	3.0	83.7	80.15	3.6
9+00			4.0	85.0	80.61	4.4
9+25		86.75	1.1	85.6	81.07	4.5
+50			2.9	86.1	81.54	4.6
+74.5	(123) M.H. Center J.		2.4	86.6	82.00	4.6
10+00			1.6	87.4	82.41	5.0
+50			1.90	87.08	83.23	3.9
11+00		100.00	9.3	90.7	84.04	6.7
+50			7.3	92.7	84.45 / 84.86	7.8
+75	1.63 %	99.02	6.0	93.0	85.27	7.7
12+00			5.8	94.2	85.67	8.5
+25					86.08	
+50			3.4	96.6	86.49	10.1
+75					86.90	
13+00			0.99	99.01	87.30	11.7
+25					87.71	
+50		105.78	4.8	101.0	88.12	12.9
+55.15	(78) M.H. Center I		4.2	101.6	88.20	13.4
					88.79	

87.08 / 12.92 / 100.00

99.01 / 6.77 / 105.78 ✓ 46

86.75 H.I.

99.01 T.P.
92.81
6.21
99.02
2.50
96.52
4.43
100.95

85.67 / 13.35 — 86.08 / 12.94 — 86.49 / 12.53

86.90 / 12.12 — 87.30 / 13.65 — 87.71 / 13.24

0.07

76.47 / 11.88 — 76.93 / 11.42 — 77.39 / 10.96

80.05 BM
8.30
88.35 H.I.
1.05
87.30
8.14
H.I. 95.44
2.46
92.98

77.85 / 10.50 — 78.31 / 10.04 — 78.77 / 9.58 — 79.69 / 8.66

80.61 / 7.74 — 81.54 / 6.81 — 82.00 / 6.35 — 82.41 / 5.94

83.23 / 12.21 — 84.04 / 11.40 — 84.45 / 10.99 — 85.27 / 10.17

88.20 / 15.31

T.P.
92.81
10.70
H.I. 103.51

92.81
12.58
105.31

T.P.

Cont. from page 32

Apr. 20/09 { Childs, Barber, Taylor

Sta.		H.I.	Rod	Ground	Grade	cut		
14+00		105.78	2.0	103.8	89.54	14.3		
+50			5.5	100.3	91.04	9.3	91.04 / 14.87	
15+00			4.4	101.4	92.54	8.9	14.12 / 13.37	93.29 / 12.62
+45.5	(77) M.H. center alley		2.6	103.2	93.9	9.3	93.90 / 12.01	
+50			2.9	102.9	94.00	8.9	94.40 / 14.47	
+70					94.4			
16+00			1.4	104.4	95.00	9.4	95.00 / 13.91	
+30					95.60			
+50			0.6	105.2	96.00	9.2	95.60 / 13.31	
+75					96.50			
17+00			1.6	104.2	97.00	7.2	96.00 / 12.91	96.50 / 12.41
+45.88	(68) M.H. center H		3.0	102.8	97.90	4.9		97.00 / 11.91
							97.90 / 11.01	

8" Sewer from I to H

0.46
103.05
88.79
14.26

89.54
15.85

T.P. 92.81 = B.M.
1310
H.I. 105.91

103.5141

105.39

87
34
12
62
1487
7337
28.24
14.12

92.54
91.00
1.50
75
89.54
75
88.79

H.I. 108.87
0.04
108.91

1745.88
1355 15
390 73

9790
88.20
9.7

88.20
1.11
89.31
1.24
90.55
91.79
93.03
94.27
95.51
96.75
1.14
97.89

9.700
7814
18860
15628
32320
31256
10640

3907
2.482
1.241

2482
45
12410
9928
111690

979
939
400 | 200
.02
5
.10

I 29th Street line N to bet. I & J. apr. 26/09 { Childs Barber Taylor

Sta.		H.I.	Rod	Ground	Grade	Cut
0+00	(142) M.H. 10' No. of center of N. street	76.12	6.7	69.4	✓63.05	6.4
+50			5.4	70.7	✓63.31	7.4
1+00			4.8	71.3	✓63.58	7.7
+50			5.0	71.1	✓63.84	7.3
+79.6	(132) M.H. center alley bet. M & N.		6.2	69.9	✓64.00	5.9
2+00			6.9	69.2	✓64.28	4.9
+50			5.7	70.4	✓64.97	5.4
3+00			2.9	73.2	✓65.65	7.6
+50			4.7	71.4	✓66.34	5.1
4+00			3.6	72.5	✓67.02	5.5
+50			2.2	73.9	✓67.71	6.2
5+00			1.5	74.6	✓68.39	6.2
+50			0.82	75.30	✓69.08	6.2
+59.65	(131) M.H. center alley bet M & L.	80.05	4.8	75.2	✓69.20	6.0
6+00			4.2	75.8	✓69.55	6.3
+50			3.5	76.5	✓69.98	6.5

179.6 | 9500 | .52
72.84 B.M. M 8980
3.28
76.12 ✓
5200
3592
1608
380 | 5.2 | 13
75.30
4.75
80.05 ✓
3.90
1400
1140
3000
20.6
1.38
1648
618
206
28428
138
9.6
824
1342
12248
73.86 H.I.
63.31 / 10.55
63.58 / 10.28
63.58 / 11.11
63.84 / 10.85
64.00 / 10.69
72.84
1.85
74.69 H.I.
64.28 / 10.41
72.84
4.44
77.28
3.34
73.94
72.84
2.00
74.84
63.58
11.26
64.97 / 12.31
65.65 / 11.63
66.34 / 10.94
64.28 / 10.56
64.97 / 9.87
67.02 / 10.26
67.71 / 9.57
T.P. 73.94
6.72
80.66 T.P.
68.39 / 12.27
80.66
69.20 / 11.46
69.08 / 11.58
B.M. - 79.28
4.30
H.I. 83.58
5.97
T.P. 77.61
4.30
H.I. 81.91
69.98 / 11.93
69.55 / 12.36

Cont. from page 39

May 3/09 { Schilds Barber Taylor

Sta.		H.I.	Rod	Ground	Grade	cut
7+00		80.05	2.8	77.2	70.42	6.8
+50			2.5	77.5	70.85	6.7
8+00			2.1	77.9	71.29	6.6
+50			2.0	78.0	71.72	6.3
9+00			1.5	78.5	72.15	6.4
+40.6	(130) M.H. center alley bet. L & K.		1.6	78.4	72.50	5.9
+50		87.45	8.8	78.7	72.57	6.1
10+00			8.6	78.9	72.96	5.9
+50	0.78+%		8.6	78.9	73.35	5.6
11+00			8.0	79.5	73.75	5.8
+31	(129) M.H. center K St 29 lts		7.3	80.2	74.00	6.2
+50			7.4	80.1	74.66	5.4
12+00			7.4	80.1	76.39	3.7
+50	3# 6%		5.7	81.8	78.12	3.7
13+00			3.4	84.1	79.85	4.3
+50			1.19	86.26	81.58	4.7

190.4 / 1.5000 .78
1.6720 .87
31.2
702
07332
274
2218
H.I. 81.91
70.42 / 11.49
70.85 / 11.06
71.29 / 10.62
71.72 / 10.19
72.15 / 9.76
72.50 / 9.41
7774 298L.
84.21 441
72.15 / 72.06
72.72 / 72.49
72.50 / 11.7
72.57 / 11.64
72.96 / 11.25
73.35 / 10.86
73.75 / 10.46
17.23
B.M. 83.94
2.04
H.I. 85.98
73.75 / 13.23
8598
786
78.12
12.50
H.I. 90.62
74.66 / 11.32
76.39 / 9.59
78.12 / 7.86
79.85 / 10.77
81.58 / 9.04
7466 T.P.
1056
8522
7400
11.22
T.P. 86.26
963
95.89

J.P.

Cont. from page 40.

May 3/09 { Childs, Barber, Taylor

Sta.		H.I.	Rod	Ground	Grade	cut
13+91	M.H. (128)	99.26	9.7	89.6	83.00	6.6
14+00			8.4	90.9	84.41	6.5
+25		104.16	11.3	92.9	88.33	4.6
+50			2.34	96.92	92.24	4.7
+75			1.9	102.3	96.16	6.1
15+00		111.94	4.52	107.42	100.08	7.3
+25		115.63	3.6	112.0	103.99	8.0
+50		124.77	6.99	117.78	107.91	9.9
+75		127.68	5.5	122.2	111.82	10.4
16+00		136.46	10.2	126.3	115.74	10.6
+25		138.23	8.0	130.2	119.65	10.6
+50			2.53	133.93	123.58	10.3
+75	(45)	145.99	7.5	138.5	127.49	11.0
+91	F.S. bet. J+S	143.22	2.4	140.8	130.00	10.8
20' No. of F.T. B.M. of tie out hub			2.51	140.71		

15.666 %

133.91 T.P.
566
139.57
115
138.42
394
142.36 H.I.
130.00
12.36

130.52
0.35
130.17
4.99
135.16 H.I.
1.25
133.91
5.47
139.38
0.96
138.42

260) 9.00 (3.46
780
1200
1040
1600
1560
400

86.26
13.00
99.26
0.43
98.83 T.P.
13.11
111.94
0.25
111.69 T.P.
13.08
124.77
0.49
124.28 T.P.
12.18
136.46
133.93
9.29
143.22

300) 4.70
15.67

15.67
9
1.41 03 T.P.

3.46
41
346
1384
14186

7.83

15.67 T.P.
41
15.67
6268
6.4247 T.P.

96.92 B.M.
7.24
104.16 H.I.
0.57
103.59
12.04
115.63 H.I.
0.24
115.39
12.29
127.68 H.I.
1.37
126.31
11.92
138.23 H.I.
1.68
136.55
9.44
145.99 H.I.
5.26
140.73

95.89 H.I.
3.43
92.46
12.83
105.29
3.10
102.19
9.45
111.64
0.64
111.00
9.80
120.80
3.02
117.78
7.51
125.29 H.I.
3.17
122.12
6.62
128.74 H.I.
2.48
126.26
4.26
130.52

130.52 H.I.
119.65
10.87
139.38 H.I.
127.49
11.89

135.16 H.I.
123.58
11.58

95.89 H.I. T.P.

83.00
12.89

84.41
11.48

88.33
7.56

92.24
3.65

92.24
13.05

96.16
9.13

111.64 H.I.
100.08
11.56
120.80 H.I.

103.99
7.65

107.91
12.89
125.29

111.82
13.37

128.74 H.I.
115.74
13.00

alley line bet. M + N from 29th to Pueblo line near 28th

Apr. 29/09 { Childs, Barber, Taylor

Sta.		H.I.	Rod	Ground	Grade	cut
0+00	M.H. center 29th	76.12	6.2	69.9	✓64.00	5.9
+50			6.6	69.5	✓64.20	5.3
1+00			6.5	69.6	✓64.40	5.2
+50			6.5	69.6	✓64.60	5.0
2+00	0.4%		5.4	70.7	✓64.80	5.9
+50			4.7	71.4	✓65.00	6.4
3+00			4.3	71.8	✓65.20	6.6
+50			4.6	71.5	✓65.40	6.1
4+00			5.1	71.0	✓65.60	5.4
+50			5.6	70.5	65.80	4.7
5+00	F.J.		6.2	69.9	66.00	3.9

H.I. 74.03

4.51
5.3
9.81

64.20 / 9.83 — 64.40 / 9.63 — 64.60 / 9.43 — 75.49 / 5.82 / 69.67

64.80 / 9.23

B.M. 72.84 / 2.65 / 75.49

10.89

64.80 / 10.69 — 65.00 / 10.49 — 65.20 / 10.29 — 65.40 / 10.09

65.60 / 9.94 — 65.80 / 9.74 — 66.00 / 9.54

75.49
3.59
71.90
3.64
75.54

8 Alley line bet. M & L. from 29th to Pueblo line near 28th

apr. 29/09 Childs Barber Taylor

Sta		H.I.	Rod	Ground	Grade	Cut
0+00	M.H. center 29th	80.05	4.8	75.2	✓69.20	6.0
+50			4.0	76.0	✓69.40	6.6
1+00			3.6	76.4	✓69.60	6.8
+50			3.3	76.7	✓69.80	6.9
2+00	0.40%		3.1	76.9	✓70.00	6.9
+50			3.4	76.6	✓70.20	6.4
3+00			3.2	76.8	✓70.40	6.4
+50			3.4	76.6	✓70.60	6.0
4+00			3.9	76.1	✓70.80	5.3
+50			4.6	75.4	✓71.00	4.4
5+00	F.J.		5.3	74.7	✓71.20	3.5

80.66 H.I.
76.41

6940 / 11.26 — 6960 / 11.06 — 6980 / 10.86 — 70.00 / 10.66

7020 / 10.46 — 7040 / 10.26

7928 = B.M. 28th & L. 1.13 / 80.41 H.I. — 7020 / 10.21

6980 / 10.61 — 7040 / 10.01 — 70.60 ✓ / 9.81 — 70.80 ✓ / 9.61

71.00 / 9.41 — 71.20 / 9.21

Alley line bet. L & K from 29th to Pueblo line near 28th

Apr. 30/09 { Childs, Barber, Taylor

Sta.		H.I.	Rod	Ground	Grade	cut
0+00	M.H. center 29th	87.45	9.0	78.4	✓72.50	5.9
+50			7.7	79.8	✓72.75	7.1
+75					✓72.87	
1+00			6.0	81.5	✓73.00	8.5
+25					✓73.13	
+50			4.9	82.6	✓73.25	9.4
+75					✓73.38	
2+00			4.4	83.1	✓73.50	9.6
+25					✓73.63	
+50			4.0	83.5	✓73.75	9.8
+75					✓73.88	
3+00			4.0	83.5	✓74.00	9.5
+25					✓74.13	
+50			5.0	82.5	✓74.25	8.3
+75					74.38	
4+00			5.9	81.6	74.50	7.1
+10 +25					74.55	
+50			7.1	80.4	74.75	5.7
5+00	F.S.		8.4	79.0	75.00	4.0

B.M. 83.94 spk in 2nd pole W of 29th St.

77.74 BM 29th & L.

9.71 / 87.45 ✓ H.I. 81.91

77.74 - BM
7.40
85.14 H.I.

72.50 / 12.64 — 72.75 / 12.39 — 72.87 / 12.27 — 73.00 / 12.14 — 73.13 / 12.01

73.25 / 11.89 — 73.38 / 11.76 — 73.50 / 11.64

85.14
1.20
83.94
2.51
86.45 H.I.

73.63 / 12.82 — 73.75 / 12.70 — 73.88 / 12.57 — 74.00 / 12.45 — 74.13 / 12.32

74.25 / 12.20 — 74.38 / 12.07

83.94
2.72
86.66 H.I.

74.55 / 12.11 — 74.75 / 11.91 — 75.00 / 11.66

Line bet. 25th & 26th and "K" & "D" St.

24+25 F.T.

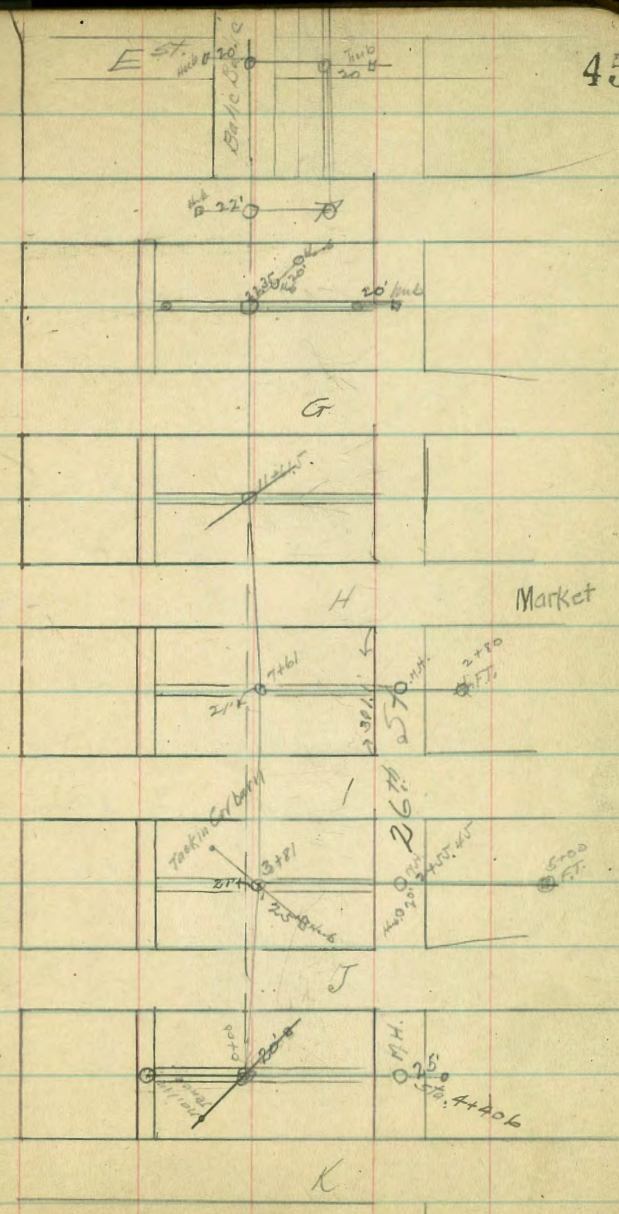
11+61.5 M.H. ℄ alley.

7+61 M.H. ℄ alley.

3+81 △ M.H. 3°06'30" N.F. center line alley

0+00 =

0+00 = Pt for manhole in alley in Blk 20



Balic Balic & South

		H.I.	Rod	Ground	Grade	Cut
0+00	Manhole in Blk. 20	96.42	7.9	88.5	83.90	4.6
0+25		99.75	9.0	90.7	✓ 84.52	6.2
0+50		96.42	5.2	91.2	✓ 85.15	6.1
0+75		99.75	6.8	92.9	✓ 85.77	7.1
1+00		96.42	1.3	95.1	✓ 86.39	8.7
1+25		99.75	4.5	95.2	✓ 87.01	8.2
1+50		96.42	0.3	96.1	✓ 87.64	8.5
1+75		99.75	2.8	96.9	✓ 88.26	8.6
2+00		103.36	6.0	97.4	✓ 88.88	8.5
2+25		99.75	1.8	97.9	✓ 89.51	8.4
2+50		103.36	4.7	98.7	✓ 90.13	8.6
2+75		105.74	6.3	99.4	✓ 90.75	8.7
3+00		103.36	3.6	99.8	✓ 91.38	8.4
3+25		105.74	5.8	99.9	✓ 92.00	7.9
3+50		103.36	3.5	99.9	✓ 92.62	7.3
3+75		105.74	6.7	99.0	93.24	5.8
3+81	M.H. Alley Blk. 21	103.36	3.8	99.6	✓ 93.40	6.2

91.20 = B.M. 28 N.E. Manhole

B.M. 76.93 — 2 Sta 4 Est.
9.23
86.16
0.17
T.P. 85.99 — 85.99
10.43 — 10.12
H.I. 96.42 — 96.11
0.35 — 5.96
T.P. 96.07 — BM. 90.15 – Hub 20' East of M.H. Sta 0+00
7.29
H.I. 103.36
2.33
T.P. 101.03
6.92
H.I. 107.95

101.03
7.18
108.21
5.04
BM. 103.17
20' East of M.H. Sta 3+81

B.M. 91.20
6.76
97.96 H.I.
85.15 / 12.81
85.77 / 12.19
86.39 / 11.57
87.01 / 10.95
87.64 / 10.32
88.26 / 9.70
102.08 H.I. 88.26 / 13.82
88.88 / 13.20
89.51 / 12.57
90.13 / 11.95
90.75 / 11.33
91.38 / 10.70
92.00 / 10.08
92.62 / 9.46
93.24 / 8.84
93.40 / 8.68

B.M. 90.15
9.60
H.I. 99.75
3.03
T.P. 96.72
9.02
105.74

97.96
1.81
96.15
5.93
102.08 H.I.

	H.I.	Rod	Ground	Grade	Cut
4+00	107.95			94.15	
4+25	105.74	7.2	98.5	✓94.90	3.6
4+50	107.95	9.5	98.4	✓95.65	2.8
4+75	105.74	5.9	99.8	✓96.40	3.4
5+00	107.95	5.8	102.1	97.15	5.0
5+25	105.74	2.3	103.4	✓97.90	5.5
5+50	107.95	5.3	102.6	98.65	4.0
5+75	105.74	1.7	104.0	✓99.40	4.6
6+00	107.95	2.9	105.0	✓100.15	4.9
6+25	109.45	5.9	103.5	✓100.90	2.6
6+50	111.04	6.7	104.3	✓101.65	2.7
6+75	109.45	3.7	105.7	✓102.40	3.3
7+00	111.04	4.1	106.9	✓103.15	3.8
7+25	109.45	1.6	107.8	✓103.90	3.9
7+50	114.30	6.2	108.1	✓104.65	3.5
7+61 M.H.	Blk 2✓	114.21	6.9	107.3	✓104.80	2.5

104.58 B.M.
15
106.09 H.I.
0.98
105.11

94.90
✓11.19
✓96.40
9.69
✓97.90
8.19
✓100.15
5.94

H.I.
109.29
✓101.65 ✓102.40
7.64 ✓6.89
103.15 103.90
✓6.14 ✓5.39
104.65
✓4.64

105.11
4.18
109.29

95.65
✓10.44
97.15
8.94
98.65
7.44
✓100.15
5.94
100.90
5.39
104.80
✓4.49
106.65
5.90
112.55

H.I. 107.95
3.95
104.00
7.04
H.I. 111.24
2.18
108.86
5.35
114.21
7.42
B.M. 106.79 on Hub 15' East of M.H. Sta. 7+61.
99.40
6.69

H.I. 105.74
1.73
T.P. 104.01
5.44
H.I. 109.45
0.60
T.P. 108.85
5.45
114.30
7.52
B.M. 106.78

1.23
108.06
104.80
3.26

400.5 dwt 1148

	H.I.	Rod	Ground	Grade	Cut
7+75	117.39	9.5	107.9	105.15	2.8
8+00	117.39	9.1	108.3	105.77	2.5
8+25	117.39	8.5	108.9	106.40	2.5
8+50	117.39	7.1	110.3	107.02	3.3
8+75	117.39	5.3	112.1	107.65	4.5
9+00	117.39	3.8	113.6	108.27	5.3
9+25	117.39	2.9	114.5	108.90	5.6
9+50	117.39	2.6	114.8	109.52	5.3
9+75	117.39	2.6	114.8	110.15	4.7
10+00	117.39	1.9	115.5	110.77	4.7
10+25	117.39	0.8	116.6	111.40	5.2
10+50	123.27	5.8	117.5	112.02	5.5
10+75	123.27	4.9	118.4	112.65	5.8
11+00	123.27	3.4	119.9	113.27	6.6
11+25	123.27	2.3	121.0	113.90	7.1
11+50	123.27	1.4	121.9	114.52	7.4
11+61.5 M.H.	123.27	1.6	121.7	114.80	6.9

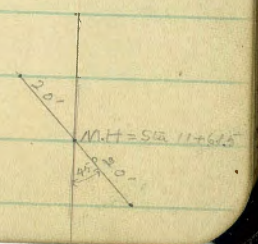
B.M. 106.79
10.60
117.39
0.76
T.P. 116.63
6.64
123.27

B.M. 106.65
10.25
H.I. 116.90

~~H.I. 112.55~~
105.15 / 7.40
105.77 / 6.78
106.40 / 10.50
107.02 / 9.48
107.65 / 9.25
108.27 / 8.63
108.90 / 8.00
109.52 / 7.38
110.15 / 6.75
110.77 / 6.13
111.40 / 5.50

T.P. 116.63
7.86
124.49

111.40 / 13.09
112.02 / 12.47
112.65 / 11.84
113.27 / 11.22
113.90 / 10.59
114.52 / 9.97
114.80 / 9.69



	H.I.	Rod	Ground
11+75	133.67	11.3	122.4
12+00		10.7	123.0
12+25		9.4	124.3
12+50		9.5	124.2
12+75		10.0	123.7
13+00		9.2	124.5
13+25		7.5	126.2
13+50		3.9	129.8
13+75	143.01	9.9	133.1
14+00		6.8	136.2
14+25		4.8	138.2
14+50		4.5	138.5
14+75		5.2	137.8
15+00		5.5	137.5
15+25			
15+42 M.H.-T.P-	144.6	12.59	135.59
15+50	144.41	7.0	137.4

15+42

Grade	Cut
✓115.38	7.1
✓116.32	6.7
✓117.31	7.0
✓118.30	5.9
✓119.29	4.4
✓120.28	4.2
✓121.27	4.9
✓122.26	7.5
✓123.25	9.9
✓124.24	12.0
125.23	13.0
✓126.22	12.3
✓127.21	10.6
✓128.20	9.3
129.19	
V130.0	5.6
130.50	6.9

B.M. 124.39
9.28
133.67
0.97
132.70
10.31
143.01
1.35
141.66
6.32
148.18

B.M. 124.39
4.07
128.46

115.38 / 13.13
116.32 / 12.14
117.31 / 11.15
118.30 / 10.16
119.29 / 9.17
120.28 / 8.18
121.27 / 7.19
122.26 / 6.20
123.25 / 12.62
124.24 / 13.63
126.22 / 13.07
127.21 / 12.08
125.23 / 12.86
128.20 / 11.77
130.0 / 10.84

128.46
2.28
T.P. 126.18
9.69
135.87

126.18
10.69
136.87
0.64
136.23
3.06
139.29

136.23
3.74
139.97

B.M. 135.57
5.27
140.84

136.23
1.16
137.39
143.23
4.16

	Hi	Rod	Ground	Grade	Cut
15+75	144.41	6.3	138.1	132.0	6.1
16+00		5.1	139.3	133.5	5.8
16+25		4.0	140.4	135.0	5.4
16+50		3.0	141.4	136.5	4.9
16+75		2.6	141.8	138.0	3.8
17+00	152.53	5.7	146.8	139.5	7.3
17+25		5.1	147.4	141.0	6.4
17+32 Pt. of P.T.		5.0	147.5	141.4	6.1
17+50		4.8	147.7	142.0	5.7
17+75		4.1	148.4	142.80	5.6
18+00		3.1	149.4	143.60	5.8
18+25		2.3	150.2	144.40	5.8
18+50		1.4	151.1	145.20	5.9
18+75		0.8	151.7	146.00	5.7
19+00 = B.M. on Hub		0.32	152.21	146.80	5.4
19+25	163.83	10.9	152.9	147.60	5.3
19+50		10.4	153.4	148.40	5.0

B.M. 135.59
8.82
144.41
1.21
T.P. 143.20
9.83
H.I. 152.53
2.20
T.P. 150.33 Prof.
152.53
0.32
T.P. 152.21
11.62
H.I. 163.83

132.00 / 8.84
133.50 / 7.34
135.00 / 8.89
136.50 / 7.89
138.0 / 5.89
141.0 / 9.51
141.4 / 9.11
142.0 / 8.51
142.80 / 7.71
143.60 / 11.86
144.40 / 11.06
145.20 / 10.26
146.00 / 9.46
146.80 / 8.66
147.60 / 7.86
148.40 / 7.06

H.I. 140.84
1.04
T.P. 139.80
4.59
143.89
2.08
141.81
8.70
150.51
2.03
T.P. 148.48
6.98
155.46

19+75	163.83	9.7	154.1	149.20	4.9	149.20 / 6.26		163.83 / 0.80 / 163.03 / 12.36 / 175.39	
20+00		8.9	154.9	150.00	4.9	150.00 / 12.21			H.I. 155.46 / 1.81 / T.P. 154.15 / 8.06 / H.I. 162.21
20+25		8.1	155.7	150.80	4.9	150.80 / 11.41	151.60 / 10.61		
20+50		7.4	156.4	151.60	4.8	152.40 / 9.81	153.20 / 9.01		
20+75		6.5	157.3	152.40	4.9	154.12 / 8.09	153.60 / 8.61	155.12 / 7.09	
21+00		5.8	158.0	153.20	4.8	156.12 / 6.09	157.12 / 4.73		
21+12.7 M.H. & "E" St.		5.6	158.2	153.60	4.6	158.12 / 10.78	159.12 / 9.73	175.29 = T.P. / 0.70 / 175.99 = H.I.	
21+25		5.2	158.6	154.12	4.5	160.12 / 8.73	161.12 / 7.73	9.94 / 166.05 = T.P. / 2.80	
21+50		4.5	159.3	155.12	4.2	162.12 / 6.73		168.85 H.I. / 0.95 / 167.90 / 4.45 / 172.05 H.I.	
21+75		3.3	160.5	156.12	4.4	163.12 / 8.93			
22+00		2.0	161.8	157.12	4.7				
22+25		0.8	163.0	158.12	4.9				
22+50	175.39	11.3	164.1	159.12	5.0				
22+75		9.9	165.5	160.12	5.4				
23+00		8.8	166.6	161.12	5.5				
23+25		7.5	167.9	162.12	5.8				
23+50		6.2	169.2	163.12	6.1				

H.I. 175.39
0.1
T.P. 175.29 Rock

23+75	175.39	5.4	170.0	164.12	5.9	
24+00 F.T.		3.7	171.7	165.12	6.6	
~~24+25~~		1.0	174.4	166.12	8.3	

Q

4 Wet 112 B1K20 bet 25-26 - S.K.

B.M. on Tie out hub 91.20.
20' N.E of manhole.

		H.I.	Rod.	Ground	Grade.	Cut
0+00 M.H. int. of alleys B1K20		96.29			81.40	
0+25		96.29	10.2	86.1	✓ 81.85	4.3
0+50	5		10.5	85.8	✓ 82.29	3.5
0+75			10.4	85.9	✓ 82.74	3.2
1+00			10.0	86.3	✓ 83.18	3.1
1+25			9.5	86.8	✓ 83.63	3.2
1+40 M.H.			7.8	88.5	✓ 83.90	4.6
1+50			6.8	89.5	✓ 84.75	4.8
1+75			4.2	92.1	✓ 86.87	5.2
2+00			1.8	94.5	✓ 89.00	5.5
2+25		107.59	10.3	97.3	✓ 91.12	6.2
2+50			8.6	99.0	✓ 93.25	5.8
2+75			6.8	100.8	✓ 95.37	5.4
3+00			4.5	103.1	✓ 97.50	5.6
3+25			3.0	104.6	✓ 99.62	5.0
3+50			0.8	106.8	✓ 101.75	5.1
3+75		115.55	6.0	109.6	✓ 103.87	5.7

2.78%
1.28%

7.5%

90.15 on. B.M. 90.15
5.59
95.74 H.I.
4.54
91.20

6.14
96.29
1.09
I.P. 95.20
12.39
107.59
0.82
106.77 = B.M. Sta 3+40
8.78
115.55

91.20 B.M.
2.03
93.23 H.I.
1.07
92.16
8.95
TOT. 101.11 H.I.
93.23 H.I.

✓ 81.85 — 11.38
82.29 — 10.94
82.74 — 10.49
83.18 — 10.05

8363 — 9.60
8390 — 9.33
8475 — 8.48
8687 — 6.36

101.11 H.I.
1.99
99.12
8.27
107.39 H.I.
2.70
104.69
8.75
113.44 H.I.

8900 — 12.11
9112 — 9.99
9325 — 7.86
9537 — 12.02
9750 — 9.89
9962 — 7.77
10175 — 11.89
10387 — 9.57

Continued from Page 53.

	H.I.	Rod	Ground	Grade	Cut
4+00	115.55	3.9	111.7	106.00	5.7
4+25				108.12	
4+40.6 P.H.		2.4	113.2	109.40	3.8

113.44 H.I.

$\frac{106.00}{7.44}$ $\frac{108.12}{5.32}$

$\frac{109.40}{4.04}$

Alley bet I and J - 25th & 26th

B.M. 104.58 on tie out Hub 25 S.E. of Sta 3+81

		H.I.	Rod	Ground	Grade	
	146.23					
0+00		113.67		99.6	93.4	6.2
0+25			9.9	103.8	✓97.27	6.5
0+50			5.5	108.2	✓101.15	7.1
0+75		124.53	10.2	114.3	✓105.03	9.3
1+00			4.7	119.8	✓108.91	10.9
1+25			2.3	122.2	✓112.78	9.4
1+50		136.32	9.8	126.5	✓116.66	9.8
1+75			4.2	132.1	✓120.54	11.6
2+00			2.1	134.2	✓124.41	9.8
2+25		146.14	7.2	138.9	✓128.29	10.6
2+50			4.8	141.3	132.17	9.1
2+80.45 M.H.			3.5	142.6	✓136.9	5.7
3+00			2.6	143.5	✓139.79	3.7
3+25		157.47	4.4	153.1	✓143.50	9.6
3+50	T.P.		0.47	157.00	✓147.20	9.8
3+75		169.90	8.2	161.7	150.91	10.8

10317 B.M.
1050
113.67 H.I.
9.09
104.58 B.M. transferred

113.67
1.07
112.60
11.93
124.53
0.71
123.82
12.50
136.32
1.00
135.32
10.82
146.14

148.32 H.I.
0.92
147.40
10.07
157.47
0.47
157.00
12.90
169.90

120.54
13.48

124.41
9.61

128.29
12.96

132.17
12.19

136.90
7.46

163.38 H.I.
1.72
161.66
4.93
166.59 H.I.

139.79
4.57
143.50
11.66

97.27
12.55

101.15
8.67
105.03
11.45

108.91
12.16

112.78
12.04

116.66
11.96

155.73
2.57
153.16
147.20
5.96

157.00
2.56
159.56
147.20
12.36

157.00
6.38
163.38 H.I.
150.91
12.47

102.08 H.I.

104.58 B.M.
5.24
109.82 H.I.
1.66
108.16
8.32
116.48 H.I.
2.20
114.28
6.79
121.07 H.I.
1.27
119.80
5.02
124.82
2.63
122.19
6.43
128.62
2.08
126.54
7.48
H.I. 134.02
0.42
133.60
7.65
H.I. 141.25
2.35
138.90
5.46
H.I. 144.36
0.79
143.57
11.59
H.I. 155.76

143.57
12.16
155.73

147.40
12.16
159.56

4406
280.45
160.75

5+00 173.15

	H.I.	Rod	Ground	Grade	
4+00	169.90	5.8	164.1	✓154.62	9.9
4+25	1	2.7	167.2	✓158.33	8.9
4+50	181.45	9.7	171.7	✓162.03	9.7
4+75		7.2	174.2	165.74	8.5
5+00		3.4	178.0	✓169.45	8.5
5+25 F.T.		0.9	180.5	✓173.15	7.4

179.39 = B.M. nail in post opp.
sta 5+10

169.90 H.I.
0.84
169.06
12.39
181.45
2.06
179.39

166.59 H.I.
2.55
164.04
5.55
169.59
2.36
167.23
7.57
174.80
0.53
179.27
7.34
181.61 H.I.

154.62
11.97
158.33
11.26
162.03
12.77
169.45
12.16

173.15
8.46

Alley bet. H and I - 25th & 26th Sts

East on alley from M.H.

	Ht.		
0+00 M.H.	119.18	11.8	107.4
0+25		12.4	106.8
0+50 M.H.		6.7	112.4
0+75		2.4	116.7
1+00	130.62	10.2	120.4
1+25		6.9	123.7
1+50		3.1	127.5
1+75	142.32	9.5	132.8
2+00		4.3	138.0
2+25	153.66	11.1	142.6
2+50		4.6	149.1
2+75		4.0	149.7
2+80 ℄ 26th			
3+00		2.2	151.54
3+25	163.84	4.1	159.7
3+50	175.63	10.8	164.8
3+75		7.7	167.9

Grade	Cut
104.8	2.6
105.15	1.7
105.50	6.9
109.68	7.0
113.86	6.5
118.04	5.7
122.22	5.3
126.40	6.4
130.58	7.4
134.76	7.8
138.94	10.2
143.12	6.6
147.30	4.2
151.48	8.2
155.66	9.1
159.84	8.1

B.M. 106.78
7.48
Ht. 114.27
7.62
106.65 B.M. on Fence Post

106.65 B.M.
10.55
117.20 Ht.
0.39
116.81
9.50
126.31 Ht.
2.63
123.68
11.00
134.68 Ht.
1.88
132.80
11.20
144.00 Ht.
1.48
142.52
12.19
154.71 Ht.
3.17
151.54
12.87
164.41 Ht.
0.29
164.12
6.31
170.43 Ht.

105.15
12.05
105.50
11.70
109.68
7.52
113.86
12.45
118.04
8.27
122.22
12.46
126.40
8.28
130.58
13.42
134.76
9.24
143.12
11.59
147.30
7.41
151.48
12.93
155.66
8.75
159.84
10.59

106.79
12.39
119.18
0.59
T.P. 118.59
12.03
Ht. 130.62
0.43
T.P. 130.19
12.13
Ht. 142.32
0.53
T.P. 141.79
11.87
153.66
2.02
151.54 = B.M. on Sta. 3+00
12.30
163.84
0.31
163.53
12.10
175.63
2.31
173.32 = B.M. on pole

Ht. 112.55
105.15
7.80

105.50
7.05

B.M. Nail in tel. post 50' E Sta 4+00 = 173.32

4+00. F.T.		175.63	5.6	170.0	164.00	6.0		173.32	
					9.84			1.86	
					4.16			175.18 H.I.	
								164	
								11.18	

6

From M.H.# West. & alley

between H and I St.

								H.I. 114.27	
								0.47	
								T.P. 113.80	
						Cut		10.33	
0+00		H.I.	Rod		√104.00			H.I. 124.13	
0+25		114.27	4.0	110.3	√106.80	3.5	106.65 BM		
							9.70		
0+50			0.5	113.8	√109.60	4.2	116.35 H.I.		
							3.95	106.80	109.60
							112.40	9.55	6.75
0+75		124.13	7.8	116.3	√112.40	3.9	9.39		
							121.79 H.I.	112.40	115.20
								3.95	6.59
1+00			4.7	119.4	√115.20	4.2		118.00	
								3.79	
1+25			1.6	122.5	√118.00	4.5			

1 Alley bet G and H. A. 25th & 26th

		H.I.	Rod	Ground	Grade	Cut
Line E of M.H.						
0+00	M.H.	127.73	6.0	121.7	✓ 114.80	6.9
0+25			8.8	118.9	✓ 115.33	3.6
0+50			6.0	121.7	✓ 115.87	5.8
0+75	M.H.		4.0	123.7	✓ 116.40	7.3
1+00		139.82	12.1	127.7	✓ 121.99	5.7
1+25			7.6	132.2	✓ 127.57	4.6
1+50			0.5	139.3	✓ 133.16	6.2
1+75		151.20	6.7	144.5	✓ 138.74	5.8
2+00			0.3	150.9	✓ 144.33	6.6
2+25		161.75	6.5	155.2	✓ 149.91	5.3
2+50	F.T.		1.2	160.5	✓ 155.50	5.0
Line West of M.H. in alley						
0+00	M.H.	127.73	6.0	121.7	114.80	6.9
0+25			0.9	126.8	✓ 119.80	7.0
0+50		139.82	8.6	131.2	✓ 124.80	6.4
0+75			4.2	135.6	129.80	5.8
1+00		151.20	10.9	140.3	✓ 134.8	5.5

Elev. on Sta 10+25 = 116.63
11.10
H.I. 127.73
3.34
B.M. 124.39 on R.P.

H.I. 124.49
2.74
T.P. 121.75
6.69
128.44
4.05
124.39 elev. on B.M.

115.33 / 9.16 — 115.87 / 8.62

116.40 / 12.04 — H.I. 128.44
121.99 / 6.45

128.44
0.72
T.P. 127.72
9.86
H.I. 137.58
0.87
127.57 / 10.01 — 136.71
9.80
146.51

133.16 / 13.35 — 138.74 / 7.77

146.51
2.06
T.P. 144.45
11.90
H.I. 156.35

144.33 / 12.02 — 149.91 / 6.44

127.73
0.18
127.55
12.27
139.82
0.52
T.P. 139.30
11.90
151.20
0.34
T.P. 150.86
10.89
H.I. 161.75
1.06
160.69 = B.M. West End Stone Wall

161.75
5.59
156.16

146.51
7.22
139.29
133.16
6.13

156.35
1.09
155.26
7.05
162.31
1.64
160.67

124.39
2.04
126.43
114.80
11.63

119.80 / 12.20

124.80 / 7.20

B.M. 124.39
7.61
132.00

137.53
1.90
135.63
6.16
141.79

134.80 / 6.99

124.80
12.73
137.53

X Alley between F. and G. 25th-26th

B.M. 135.57 on tie out Hub 42.35 N.E. M.H.

143.51
7.94
135.57

Line E. from M.H.

		H.I.	Rod	Ground	Grade	Cut			
0+00	M.H.	145.07			✓130.00		141.66 T.P.		141.66
							9.52		1.0.91
							151.18 H.I.		152.57
0+25			11.1	134.0	✓130.375	3.6	0.16		8.98
							151.02		143.59
0+50			11.3	133.8	✓130.75	3.1	5.16		4.1
							156.18		147.70
							143.51 = H.I.		12.11
0+75			8.1	137.0	✓131.125	5.9	130.38	130.75	135.59
							13.13	12.76	8.82
									144.41
1+00	M.H.		4.7	140.4	✓131.500	8.9	131.13	131.50	0.11
							12.38	12.01	T.P. 144.30
1+25			1.8	143.3	✓137.500	5.8	137.50		12.58
							6.01	143.50	156.88
								11.09	0.23
1+50		157.26	9.6	147.7	✓143.500	4.2	149.50		T.P. 156.65
							5.09		12.11
									168.76
1+75			2.7	154.6	✓149.50	5.1	155.50		2.09
							11.85		T.P. 166.67 = B.M. Hub
									11.32
2+00		168.07	7.2	160.9	✓155.50	5.4	161.50		177.99
							5.85		2.12
									175.87
2+25			1.3	166.8	✓161.50	5.3			143.23
									1.84
									145.07
2+50	F.T.	178.57	5.5	173.1	✓167.50	5.6			0.77
									144.30
									12.96
									157.26
									0.51
									T.P. 156.75
									11.32
									H.I. 168.07
									10.82
									167.25
									11.32
									H.I. 178.57
									2.67
									175.90

Line W. from M.H.

0+00		151.18			✓130.00		135.57		143.23
							8.68		0.28
							144.25		H.I. 143.51
							131.50		0.25
							✓12.75		143.26
									11.33
									H.I. 154.59
									0.06
									154.53
									12.82
									167.35
0+25			7.95	143.23	✓135.00	8.2	✓135.0		
							12.95		
0+50			4.3	146.9	✓140.00	6.90	✓140.00		
							7.95		
0+75			0.16	151.02	✓145.00	6.0	145.00		
							11.08		
									147.95
									1.11
									146.89
									9.24
									156.08
1+00		156.18	1.1	155.1	✓150.00	5.1	150.00	4.72	
							6.08	143.23	
								H.I. 147.95	

166.67
6.96
173.63
167.50
✓ 6.13

"F" St. from M.H. center Balic Balic to alley East and in alley between Balic Balic & 26th St.

℄ F & Balic Balic.

0+00 = M.H.				✓141.40			150.33
							9.83
							160.16
							0.70
0+25		160.16	13.3	146.8	143.40	3.4	T.P. 159.46
							10.71
0+50			12.2	147.9	✓145.40	2.5	H.I. 170.17
							5.19
0+75			9.0	151.1	✓147.40	3.7	164.98 = B.M. on Pole Sta 2+50
							145.40 / 10.09
1+00			5.6	154.5	✓149.40	5.1	147.40 / 8.09
							170.17 / 0.97
1+25			2.4	157.7	✓151.40	6.3	T.P. 169.20 / 8.79
							149.40 / 6.09
1+50.5 M.H.		170.17	9.2	161.0	✓153.40	7.6	151.40 / 12.45
							177.99 / 0.67
1+75			9.3	160.9	✓154.74	6.2	153.40 / 10.45
							177.32 / 11.68
2+00			8.4	161.8	✓156.12	5.7	154.74 / 9.11
							189.00 / 1.01
2+25			8.1	162.1	✓157.49	4.6	156.12 / 7.73
							187.99 = B.M. 26+2
2+50			6.1	164.1	✓158.87	5.2	157.49 / 6.36
							T.P. 152.21 / 3.28
2+75			4.8	165.4	✓160.24	5.2	158.87 / 13.07
							H.I. 155.49 / 0.98
3+00			3.5	166.7	✓161.62	5.1	161.62 / 10.12
							160.24 / 11.50
3+25			2.3	167.9	✓162.99	4.9	162.99 / 8.75
							164.37 / 7.37
3+50			1.1	169.1	✓164.37	4.7	165.74 / 6.00
							167.12 / 10.99
3+75		177.99	7.2	170.8	✓165.74	5.1	153.40 / 11.79
4+00			6.6	171.4	✓167.12	4.3	

T.P. 154.56 / 9.29 / 163.85 H.I.

1.81 / 162.04 / 9.70 / 171.74 H.I. / 0.95 / 170.79 / 7.32 / 178.11 H.I.

164.98 B.M. / 0.21 / 165.19 H.I.

4+25		177.99	4.9	173.1	168.50	4.6	168.50 / 9.61	178.11	
4+50	F.T.		3.3	174.7	169.87	4.8	169.84 / 8.24		
4+75			3.5	174.5	171.25	3.3			
5+00			5.3	172.7	172.63	0.1			
5+25			5.3	172.7	174.01	.7			
5+30									
5+50									
5+75									
6+00									
6+25									
6+50									
6+75									
7+00									
7+25									

Alley between I and J St and 24th & 25th

	H.I.	Rod.	Ground.	Grade	Cut.
0+00 = inter. Ealley & E 24th St.	109.27	4.05	105.22	99.00	6.2
0+25		4.03	105.24	✓ 99.31	5.9
0+50		1.9	107.4	✓ 99.61	7.8
0+75		1.5	107.8	✓ 99.92	7.9
1+00		0.9	108.4	✓ 100.22	8.2
1+25		0.3	109.0	✓ 100.53	8.5
1+50	117.67	8.5	109.2	✓ 100.84	8.4
1+75		8.1	109.6	✓ 101.14	8.5
2+00		7.6	110.1	✓ 101.45	8.7
2+25		6.5	111.2	✓ 101.75	9.5
2+50		5.4	112.3	✓ 102.06	10.2
2+75		3.8	113.9	102.36	11.5
3+00 N.H.		2.8	114.9	✓ 102.66	12.2
3+25		2.0	115.7	✓ 102.96	12.8
3+50		1.5	116.2	✓ 103.26	12.9
3+75		1.8	115.9	✓ 103.56	12.3
4+00		1.3	116.4	✓ 103.87	12.5

99.00 / 10.88 — 99.31 / 10.57
99.61 / 10.27 — 99.92 / 9.96
100.22 / 12.58 — 100.53 / 12.27
100.84 / 11.96 — 101.14 / 11.66
101.45 / 11.35 — 101.75 / 11.05
102.06 / 13.30
102.66

B.M. 98.92
10.33
109.27
0.27
T.P. 109.00
8.67
117.67

98.92 B.M.
10.91
109.83 H.I.
2.13
107.75
5.05
112.80 H.I.
1.61
111.19
4.17
115.36 H.I.

111.19 = T.P.
7.65
118.84 = H.I.

111.19
9.24
120.43
4.23
116.20
103.26
12.94
4.37
118.06
103.56
12.50

118.84
3.68
115.16
102.66
12.50

3.05
115.79
102.96
12.83

120.43
3.70
116.73
103.87
12.86

120.43
3.72
116.71
104.17
12.54

		H.I.				
4+25	T.P.	117.67	1.04	116.63	✓104.17	12.4
4+50		119.75	2.9	116.9	104.48	12.4
4+75			2.6	117.2	✓104.79	12.4
5+00			2.4	117.4	✓105.10	12.3
5+25			1.3	118.5	✓105.40	13.1
5+50			2.5	117.3	✓105.70	11.6
5+75	F.T.		2.9	116.9	✓106.00	10.9

120.43 H.I.
3.17
117.26
104.79
12.47

120.43
2.89
117.54
105.10
12.44

H.I. 117.67
1.04
T.P. 116.63
3.12
119.75
12.24
107.51
2.75
110.26
8.31
101.95
B.M. 101.94

120.43
1.75
118.68
105.40
13.28

120.43
3.49
116.94
106.00
10.94

120.43
3.06
117.37
105.70
11.67

Alley between 24th & 25th and D & E Sts.

0+00 M/H. Inter ℄ alley & ℄ 24th St.

0+25

0+50

0+75

1+00

1+25

1+50

1+75

2+00

2+25

2+50

2+75

3+00 M/H

Alley bet. 1 and J. and 24 & 25th. to 50' of prop line 25

0+00 M.H. 99 - 24th St.

Elev 24th = 99.0

M.H. Center

end = 106.0

99

7000
575
1250
1150
1000
575
4250

575
4(1.2)
.306

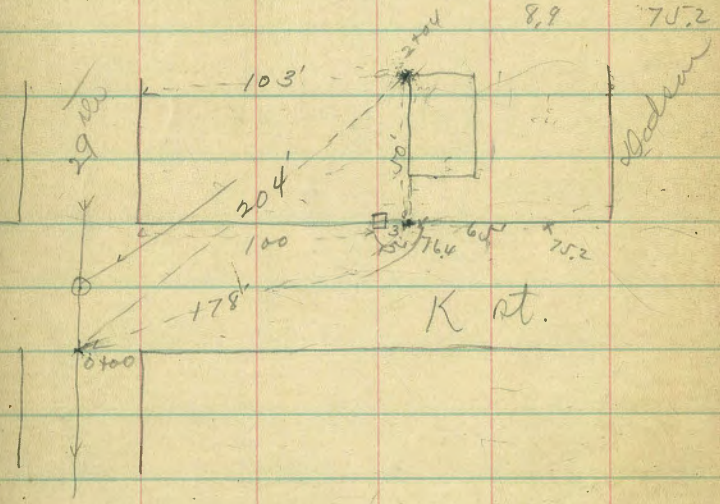
99.00
.306
99.306
99.612
99.918
100.224 —
100.530
100.836
101.142
101.448 —
101.754
102.060
102.366
102.672 —
102.978
103.284
103.590
103.896 —
104.202
104.508
104.814
105.120 —
105.426
105.732
106.038

Preliminary Levels for Sewer at 29th + K

Apr. 17/09 { Childs, Barber, Taylor

79

Sta.		H.I.	Rod.	Elev.	Grade	Cut
0+00	POST	84.56	4.8	79.8	75.0	4.8
2+04			8.0	76.6		
		84.07	7.7	76.4		
			8.9	75.2		



77.74
6.33
84.07 ✓
7.7
76.4

8.9
75.2

5.5
78.6
76
2.6

80

Preliminary Sewer on K

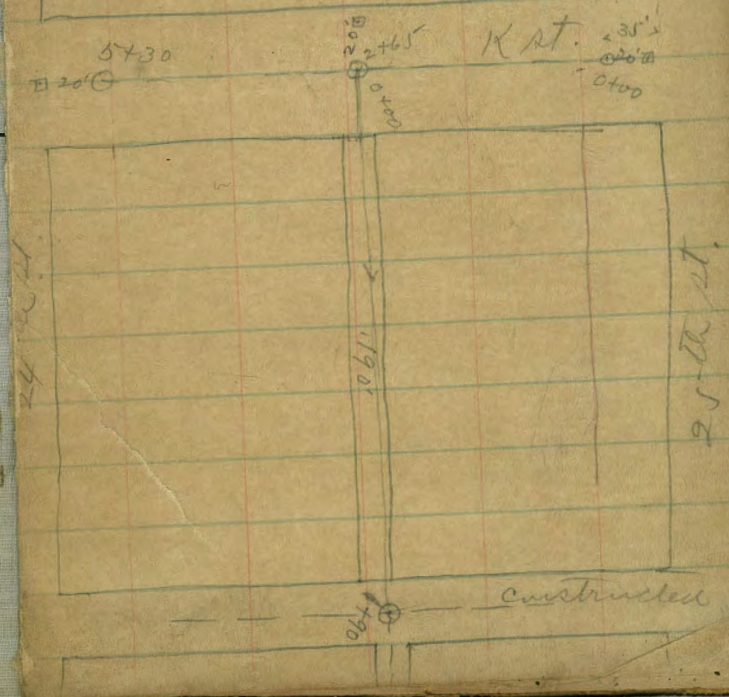
Sta.		H.I.	Rod
0+00	35' west 25th St.	79.35	4.0
+50			5.3
1+00			6.4
+50			7.5
2+00			8.2
+50			9.3
+65	M.H.		9.6
3+00			8.9
+50			8.2
4+00			6.7
+50			5.0
5+00			3.2
+30	about 35' from 24th		2.2

POSTED

Apr. 3/09 {Schilds, Barber, Lambert}

Set. 24 & 25th from K south

Sta		H.I.	Rod	Elev.
+00		72.91	3.25	69.66
+50			4.5	68.4
+00			5.0	67.9
+50			5.1	67.8
+90	M.H. constructed		6.6	66.3



1400
1480

105.72
62
99.5
93.4
61
45.8
.005
2290

213
.0237
1491
639
426
50481

.20
.07
40

881
761

6 36

#400

761
400
125
300
450
380
2416

135
114.8
20.2

85
25
420
170
212.5

2425
440.6
525.0
525.0
350
350
500
5115.6

1.41421
2.82842

134
121.7
4)12.3
3.075

121.70
3.075
124.775
127.850
130.925
134.000

193.4) .8000 (.413
7736
2640 76.93 BM
1934
7060 2.42
79.35

4)6 (1.5
4
20

193.4) 10000 (79.35
9670 .57
3300 69.66
3.25
72.91

280) 1.400 (5
1.480

101.3) 14.760 (2.43
12026
27340
24082
32880
20065
32815 3.6
3.079
6624
5152
6.6 .144
.01
.066

380.2)

265
.02
5.30

105.72
.62
99.5
93.4
6
45.8
.005
2.290

60.13
1560) 14.250
2.375
12026
38 22240
18639
42019
42091

2.37
23.45

76.05
2.50

9.50
760
1900
1900

213
.0237
1491
639
426
50481

671
3

15 260
7
18.20

26.4
.025
1320
528
.6600

3.6
25
180
72
900

37

278.20
.07
19.4740
278.20
297.67
.07
20.8369
3.306
300.98

813.6) 40500 (497
32544
79568
73224
63360

380) 3000 (789
2660
3400
3040
3600

6.6
.079
594
462
.05214

1.0
6.6
1.8
1.9

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TRAVERSE TABLE FOR TRANSIT BOOK.

From 1° to 90° for a distance of 100.

Degrees.	DEGREES.		¼ DEGREE.		½ DEGREE.		¾ DEGREE.		Degrees.
	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	
0			100.00	0.44	100.00	0.87	99.99	1.31	89
1	99.98	1.75	99.98	2.18	99.97	2.62	99.95	3.05	88
2	99.94	3.49	99.92	3.93	99.91	4.36	99.88	4.80	87
3	99.86	5.23	99.84	5.67	99.81	6.10	99.79	6.54	86
4	99.76	6.98	99.73	7.41	99.69	7.85	99.66	8.28	85
5	99.62	8.72	99.58	9.15	99.54	9.58	99.50	10.02	84
6	99.45	10.45	99.41	10.89	99.36	11.32	99.31	11.75	83
7	99.25	12.19	99.20	12.62	99.14	13.05	99.09	13.49	82
8	99.03	13.92	98.97	14.35	98.90	14.78	98.84	15.21	81
9	98.77	15.64	98.70	16.07	98.63	16.50	98.56	16.93	80
10	98.48	17.36	98.40	17.79	98.33	18.22	98.25	18.65	79
11	98.16	19.08	98.08	19.51	97.99	19.94	97.90	20.36	78
12	97.81	20.79	97.72	21.22	97.63	21.64	97.53	22.07	77
13	97.44	22.50	97.34	22.92	97.24	23.34	97.13	23.77	76
14	97.03	24.19	96.92	24.62	96.81	25.04	96.70	25.46	75
15	96.59	25.88	96.48	26.30	96.36	26.72	96.25	27.14	74
	96.13	27.56	96.00	27.98	95.88	28.40	95.76	28.82	73
	95.63	29.24	95.50	29.65	95.37	30.07	95.24	30.49	72
	95.11	30.90	94.97	31.32	94.83	31.73	94.69	32.14	71
	94.55	32.56	94.41	32.97	94.26	33.38	94.12	33.79	70
	93.97	34.20	93.82	34.61	93.67	35.02	93.51	35.43	69
	93.36	35.84	93.20	36.24	93.04	36.65	92.88	37.06	68
	92.72	37.46	92.55	37.86	92.39	38.27	92.22	38.67	67
	92.05	39.07	91.88	39.47	91.71	39.87	91.53	40.27	66
	91.35	40.67	91.18	41.07	91.00	41.47	90.81	41.87	65
	90.63	42.26	90.45	42.66	90.26	43.05	90.07	43.44	64
	89.88	43.84	89.69	44.23	89.49	44.62	89.30	45.01	63
	89.10	45.40	88.90	45.79	88.70	46.17	88.50	46.56	62
	88.29	46.95	88.09	47.33	87.88	47.72	87.67	48.10	61
	87.46	48.48	87.25	48.86	87.04	49.24	86.82	49.62	60
	86.60	50.00	86.38	50.38	86.16	50.75	85.94	51.13	59
	85.72	51.50	85.49	51.88	85.26	52.25	85.04	52.62	58
	84.80	52.99	84.57	53.36	84.34	53.73	84.10	54.10	57
	83.87	54.46	83.63	54.83	83.39	55.19	83.15	55.56	56
	82.90	55.92	82.66	56.28	82.41	56.64	82.16	57.00	55
	81.92	57.36	81.66	57.71	81.41	58.07	81.16	58.42	54
	80.90	58.78	80.64	59.13	80.39	59.48	80.13	59.83	53
	79.86	60.18	79.60	60.53	79.34	60.88	79.07	61.22	52
	78.80	61.57	78.53	61.91	78.26	62.25	77.99	62.59	51
	77.71	62.93	77.44	63.27	77.16	63.61	76.88	63.94	50
	76.60	64.28	76.32	64.61	76.04	64.94	75.76	65.28	49
	75.47	65.61	75.18	65.93	74.90	66.26	74.61	66.59	48
	74.31	66.91	74.02	67.24	73.73	67.56	73.43	67.88	47
	73.14	68.20	72.84	68.52	72.54	68.84	72.24	69.15	46
	71.93	69.47	71.63	69.78	71.33	70.09	71.02	70.40	45
	70.71	70.71							
	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	
	DEGREES		¾ DEGREE.		½ DEGREE.		¼ DEGREE.		Degrees