Levels for Boulevard from 3rd St. to University Ave. to City Limits.

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Levels for Boulevard from 3rd St. to Sycamore Avenue, also for Center St. between the two Forks.

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Levels for Road from First and Withers to California and North St.

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Levels on "D" St.

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Levels on "H" St.

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Levels on National Ave. from 3rd Street to City Limits.

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Levels on "K", 3rd St. and Cross Streets

F.B. 152

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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
16	96.13	27.56	96.00	27.98	95.88	28.40	95.76	28.82	73
17	95.63	29.24	95.50	29.65	95.37	30.07	95.24	30.49	72
18	95.11	30.90	94.97	31.32	94.83	31.73	94.69	32.14	71
19	94.55	32.56	94.41	32.97	94.26	33.38	94.12	33.79	70
20	93.97	34.20	93.82	34.61	93.67	35.02	93.51	35.43	69
21	93.36	35.84	93.20	36.24	93.04	36.65	92.88	37.06	68
22	92.72	37.46	92.55	37.86	92.39	38.27	92.22	38.67	67
23	92.05	39.07	91.88	39.47	91.71	39.87	91.53	40.27	66
24	91.35	40.67	91.18	41.07	91.00	41.47	90.81	41.87	65
25	90.63	42.26	90.45	42.66	90.26	43.05	90.07	43.44	64
26	89.88	43.84	89.69	44.23	89.49	44.62	89.30	45.01	63
27	89.10	45.40	88.90	45.79	88.70	46.17	88.50	46.56	62
28	88.29	46.95	88.09	47.33	87.88	47.72	87.67	48.10	61
29	87.46	48.48	87.25	48.86	87.04	49.24	86.82	49.62	60
30	86.60	50.00	86.38	50.38	86.16	50.75	85.94	51.13	59
31	85.72	51.50	85.49	51.88	85.26	52.25	85.04	52.62	58
32	84.80	53.00	84.57	53.36	84.34	53.73	84.10	54.10	57
33	83.87	54.49	83.63	54.83	83.39	55.19	83.15	55.56	56
34	82.90	55.92	82.66	56.28	82.41	56.64	82.16	57.00	55
35	81.92	57.36	81.66	57.71	81.41	58.07	81.16	58.42	54
36	80.90	58.78	80.64	59.13	80.39	59.48	80.13	59.83	53
37	79.86	60.18	79.60	60.53	79.33	60.88	79.07	61.22	52
38	78.80	61.57	78.53	61.91	78.26	62.25	77.99	62.59	51
39	77.71	62.93	77.44	63.27	77.16	63.61	76.88	63.94	50
40	76.60	64.28	76.32	64.61	76.04	64.94	75.76	65.28	49
41	75.47	65.61	75.18	65.93	74.90	66.26	74.61	66.59	48
42	74.31	66.91	74.02	67.24	73.73	67.56	73.43	67.88	47
43	73.14	68.20	72.84	68.52	72.54	68.84	72.24	69.15	46
44	71.93	69.47	71.63	69.78	71.33	70.09	71.02	70.40	45
45	70.71	70.71							
Degrees.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Degrees.
	DEGREES.		¾ DEGREE.		½ DEGREE.		¼ DEGREE.		

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

Return to City Engineers Office
City Hall, San Diego, Cal.
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289.88
2.69
292.57

11/12/01 Levels for Road from 6th and University to Old Town 1

Gurney Millward Ellen

B.M., spike, S.W. Fifth and University

Sta.	B.S.	H.I.	F.S.	Rod	Elev.
B.M.	2.69	292.57			289.88
Center 5th St.					
0				2.5	290.07
+50				2.6	289.97
1				2.8	289.77
+50				3.3	289.27
2				3.7	288.87
+50				4.3	288.27
3				4.9	287.67
+50				5.0	287.57
4				5.2	287.37
+50				5.5	287.07
5				5.4	287.17
+50				6.1	286.47
+75				5.6	286.97
6				6.5	286.07
+50				6.8	285.77
+80				7.7	284.87

Sta.	B.S.	H.I.	F.S.	Rod	Elev.
7				7.2	285.37
Contr. 3rd Lt. X +15				7.8	284.77
T.P.	△ 7.05	291.85	7.77		284.80
+32				7.6	284.25
+50				6.7	285.15
+60				6.2	285.65
+75				7.2	284.65
8				7.4	284.45
+38				8.6	285.25
+50				8.1	283.75
9				7.2	284.65
+36				6.5	285.35
+50				4.7	287.15
+65				4.2	287.65
+85				5.6	286.25
10				5.4	286.45
+41				5.3	286.55

Sta.	B.S.	H.I.	F.S.	Rod	Elev.
+50				4.1	287.75
+62				4.0	287.85
+76				5.8	286.05
11				5.5	286.35
+12				6.0	285.85
+26				5.2	286.65
+50				5.7	286.15
+90				4.9	286.95
12				4.0	287.85
+10				3.2	288.65
+32				4.6	287.25
+50				3.9	287.95
+68				2.6	289.25
+86				4.1	287.75
13				4.4	287.45
B.M. +27.2 △ X				4.14	287.79
+39				4.1	287.75

Sta.	+	⊙	−	Rod	Elev.
+50				3.0	288.85
+69				1.9	289.95
+85				4.0	287.85
14				4.2	287.65
+33				4.4	287.45
+50				3.9	287.95
+75				5.5	286.35
15				5.8	286.05
+30				6.3	285.55
+50				5.0	286.85
+77				7.8	284.05
+94				6.5	285.35
16				7.0	284.85
+25				8.7	283.15
+50				8.7	283.15
+70				7.5	284.35
17				7.4	284.45

T.P.	1.87	286.33	7.39		284.46
+50				1.8	284.53
18				2.6	283.73
+25				3.7	282.63
+50				3.7	282.63
19				4.8	281.53
+50				4.7	281.63
20				5.9	280.43
+40				8.3	278.03
T.P.	1.21	275.89	11.65		274.68
+73				8.6	267.29
+77				10.7	265.19
+79				10.6	265.29
+87				8.1	267.79
21				1.5	274.39
+02				0.3	275.59
T.P.	8.11	282.79	1.21		274.68
	11.19		20.25		

Sta	+	⊙	−	Rod	Elev
+35				2.5	280.29
+50				2.4	280.39
27				2.6	280.19
+33				1.6	281.19
+50				1.8	280.99
28				2.3	280.49
+50				3.4	279.39
24				5.1	277.69
+50				6.5	276.29
+80				6.0	276.79
25				6.7	276.09
+17				7.3	275.49
+50				8.3	274.49
+67				8.9	273.89
+83				7.4	275.39
+90				8.0	274.79
26				9.1	273.69

Sta.	+	⊙	−	Rod	Elev.
+12				11.0	271.79
T.P.	2.38	273.26	11.91		270.88
+50				3.0	270.76
+73				3.7	269.56
+83				3.2	270.06
27				4.8	268.46
+50				6.4	266.86
+62				5.9	267.36
+73				6.9	266.36
+81				8.5	264.76
28				8.5	264.76
+50				8.0	265.26
+75				7.2	266.06
29				6.5	266.76
+35				5.3	267.96
+50				5.5	267.76
30				6.6	266.66

Sta.	+	⊙ (273.26)	−	Rod	Elev.
+35				6.6	266.66
+50				7.4	265.86
31				8.0	265.26
+50				8.4	264.86
C.M. Plug +79				8.54	264.72
32				7.6	265.66
+28				5.1	268.16
+41				6.1	267.16
+50				6.1	267.16
+77				5.1	268.16
33				5.6	267.66
+35				4.5	268.76
+50				5.1	268.16
34				6.3	266.96
T. P.	3.16	270.40	6.02		267.24
+15				2.9	267.50
+35				3.9	266.50

Sta.	+	⊙	−	Rod	Elev.
+50				3.9	266.50
+58				3.6	266.80
+75				4.7	265.70
35				4.5	265.90
+25				5.7	264.70
+50				5.2	265.20
+41				5.8	265.10
36				4.5	265.90
+38				6.0	264.40
+50				5.8	264.60
37				5.3	265.10
+35				3.6	266.80
+50				3.9	266.50
+75				4.2	266.20
38				3.8	266.60
+50				3.1	267.30
+75				1.8	268.60

(10)

Sta.	+	⊙ (270.40)	−	Rod	Elev.
39+00				2.3	268.10
+50				1.6	268.80
40				1.2	269.20
+25				0.8	269.60
+50				1.3	269.10
T. P.	0.43	269.78	1.05		269.35
41				0.6	269.18
+28 (Stake in Cor. fence Post, Right B. M.)				2.2	267.58
				0.42	269.36
+50				2.4	267.38
+81				2.5	267.28
42				1.6	268.18
+21				3.3	266.48
+50				3.7	266.08
43				4.3	265.48
+50				5.6	264.18
+75				4.9	264.88

269.78
0.42
269.36

Sta.	+	⊙	−	Rod	Elev.
44				6.5	263.28
+29				8.5	261.28
+50				7.8	261.98
+67				8.8	260.98
45				7.5	262.28
+20				6.6	263.18
+50				7.3	262.48
46				6.9	262.88
+50				7.9	261.88
47				7.3	262.48
B.M. Plug +27.6	△ 11.54	274.23	7.09	7.1	262.69
+50				10.1	264.13
48				7.7	266.53
+50				5.8	268.43
+75				5.9	268.33
+91				4.2	270.03
49				4.7	269.53

Sta.	+	o	−	Rod	Elev.
+10				5.3	268.93
+50				4.5	269.73
+65				4.3	269.93
+73				3.4	270.83
+88				4.4	269.83
50				4.4	269.83
+10				4.4	269.83
+30				3.4	270.83
+50				3.8	270.43
+64				4.2	270.03
				3.0	271.23
51				3.6	270.63
+50				3.0	271.23
52				2.3	271.93
+50				2.2	272.03
53				2.1	272.13
+50				3.5	270.73

Sta	+	o	−	Rod	Elev.
54				4.4	269.83
T.P.	10.60	280.51	4.32		269.91
+50				10.1	270.41
55				9.1	271.41
+50				8.7	271.81
56				8.2	272.31
+50				6.4	274.11
57				5.4	275.11
+50				3.5	277.01
+92				2.7	277.81
58				3.2	277.31
+50				5.2	275.31
59				7.2	273.31
+16.8				7.6	272.91
+50				8.0	272.51
+90				7.7	272.81
60				7.0	273.51

Sta.	+	⊙	−	Rod	Elev.
+25				7.0	273.51
T.P.	7.77	281.21	7.07		273.44
+50				7.5	273.71
+65				6.6	274.61
+80				7.0	274.21
61				6.6	274.61
+25				6.9	274.31
+50				6.1	275.11
62				4.9	276.31
+50				3.9	277.31
B.M. Plug +67.7				3.77	277.44
63				4.5	276.71
+50				5.4	275.81
+69				4.5	276.71
+85				5.5	275.71
64				5.7	275.51
+20				5.4	275.81

Sta.	+	⊙	−	Rod	Elev.
+38				4.2	277.01
+50				4.7	276.51
+54				5.3	275.91
65				4.8	276.41
+50				4.8	276.41
66				4.9	276.31
+15				4.6	276.61
+50				5.8	275.41
67				6.8	274.41
+50				8.3	272.91
68				8.1	273.11
+50				7.1	274.11
69				6.2	275.01
+26				5.3	275.91
+50				4.9	276.21
70				4.5	276.71
+27				4.3	276.91

Sta.	+	⊙	−	Bd.	Elev.
Bldg. S.E. Cor. Lewis + Stephens B.M.	5.08	281.71	4.58		276.63
+50				5.3	276.41
+71.7				5.2	276.51
71				4.3	277.41
+50				3.1	278.61
72				2.9	278.81
+50				3.8	277.91
73				4.4	277.31
+50				5.2	276.51
74				6.4	275.31
+50				7.9	273.81
75				8.5	273.21
+50				8.4	273.31
76				8.2	273.51
+50				8.6	273.11
77				8.6	273.11
T.P.	6.24	279.42	8.53		273.18
	11.32		13.11		

Sta.	+	⊙	−	Bd.	Elev.
+50				5.1	274.32
78				3.4	276.02
+50				2.4	277.02
79				2.1	277.32
+50				2.0	277.42
80				2.8	276.62
+20				2.8	276.62
+50				5.0	274.42
81				9.9	269.52
T.P.	1.85	269.42	11.85		267.57
+50				2.9	266.52
82				5.3	264.12
+50				5.8	263.62
83				4.9	264.52
+30				10.5	258.92
+50				11.4	258.02
+63				12.4	257.02

Sta.	+	⊙	−	Rod	Elev.
84				9.4	260.07
+30				7.3	262.12
+50				8.2	261.22
+69.8 △				7.3	262.12
+86				6.2	263.22
85				5.7	263.72
				4.6	264.82
+50				4.7	263.72
86				4.4	265.02
+50				4.2	265.22
87				2.0	267.42
+50				1.4	268.02
T.P.	9.05	277.34	1.13		268.21
88				7.8	269.54
+50				5.9	271.44
89				4.9	272.44
+28 △				3.3	274.04
+50				3.4	273.94

Sta.	+	⊙	−	Rod	Elev.
+85				2.0	275.34
90				3.1	274.24
+50				4.4	272.94
+90				4.1	273.24
91				4.6	272.74
+30				5.6	271.74
+50				5.5	271.84
92				10.3	267.04
T.P.	0.18	265.81	11.71		265.63
+38				2.2	263.61
+50				2.3	263.51
+60				2.1	263.71
+80				5.7	260.11
93				6.8	259.01
+50				10.3	256.51
T.P.	0.91	255.03	11.69		254.12
94				1.3	253.73
	1.09		23.40		

11/18/16.

(20)

Sta.	+	⊙	−	Rod	Elev.
+50				3.5	∨51.53
No. 7					
B.M.				2.86	252.17
95				11.4	∨43.63
T. P.	1.12	244.79	11.36		243.67 ∨
+19				2.2	∨42.59
+36				6.9	∨37.89
T. P.	6.02	239.80	11.01		233.78
+59				11.4	228.40
2'x2'x10" +73				11.5	228.30
+87				6.9	232.90
96				5.0	234.80
Beginning of fill +20 △				0.2	∨39.60
+50				1.4	238.40
+80				2.0	∨37.80
97				4.1	∨35.70
+50				9.1	∨30.70
+60				9.9	229.90
	7.14		22.37		

255.93
2.76
252.17

Sta.	+	⊙	−	Rod	Elev.
T. P.	0.17	228.00	11.97		227.83
98				2.2	225.80
+50				3.9	∨24.10
99				2.7	∨25.30
+25				2.9	225.10
+50				5.3	∨22.70
100				11.6	∨16.40
T. P.	0.86	216.86	12.00		216.00
+50				2.6	∨14.26
B.M. +66 △				3.93	∨12.93
101				7.4	∨09.46
+50				9.3	∨07.56
+65				10.1	∨06.76
+85				12.2	∨04.66
+91				13.1	∨03.76
102 +09 △				11.7	∨05.16
T. P.	0.93	206.01	11.78		205.08
	1.96		35.75		

(22)

Sta.	+	⊙	−	Rod	Elev.
+50				3.7	204.31
+89				3.7	204.31
103				4.8	201.21
+45				12.4	193.61
+74				9.6	196.41
T.P.	0.42	194.58	11.85		194.16
104				2.2	197.38
Plug +03 △				3.27	191.31
+18				2.0	197.58
+50				3.9	190.68
+85				9.6	184.98
105				9.3	185.28
+19				8.8	185.78
+26				6.5	188.08
+50				9.4	185.18
T.P.	0.33	183.23	11.68		182.90
106				3.1	180.13
	0.75		23.53		

Sta.	+	⊙	−	Rod	Elev.
+30				3.1	180.13
+50				5.4	177.83
B.M. Plug +67 △				7.42	175.81
107				7.0	176.23
+50				15.5	167.73
+70				10.8	172.43
T.P	0.92	172.61	11.54		171.69
108				2.7	169.91
+50				6.5	166.11
Plug +65 △				10.10	162.51
109				10.3	162.31
T.P.	0.39	161.30	11.70		160.91
+50				0.9	160.40
+95				3.0	158.30
110+07				5.5	155.80
+50				6.6	154.70
Plug +68 △				9.48	151.82
	1.31		23.24		

(24)

Sta.	+	⊙	−	Rod	Elev.
111				10.0	151.30
T. P.	1.03	152.52	11.81		149.49
+50				3.0	149.52
112				5.8	146.72
+50				9.0	143.52
113				11.9	140.62
T. P.	1.07	140.00	11.59		138.93
+26				2.1	137.90
+50				3.6	136.40
Plug +62				5.88	134.12
+72				9.2	130.80
T. P.	2.25	130.39	11.86		128.14
+87				8.7	121.69
2"x2" Box +92				13.2	117.19
+97				9.3	121.09
114+22				0.4	129.99
T. P.	4.31	134.50	0.20		130.19
	8.66		35.46		

Sta.	+	⊙	−	Rod	Elev.
				0.5	134.00
+50				2.2	132.30
+85				3.5	131.00
115				7.7	126.80
+27				13.0	121.50
+50					122.86
T. P.	0.40	123.26	11.64	3.7	119.56
116				1.0	122.26
+42				2.2	121.06
+50				4.24	119.02
Plug +57				6.9	116.36
+75					111.56
T. P.	2.13	113.69	11.70	4.6	109.09
117				7.3	106.39
+12				3.6	110.09
+31				2.0	111.69
+50				6.3	107.39
118					
	7.53		23.34		

(26)

Sta.	+	⊙	−	Rod	Elev.
+25				9.2	104.49
+50				8.9	104.79
+71				8.9	104.79
+88				12.1	101.59
119				10.0	103.69
+18				10.3	103.39
T.P.	1.01	103.12	11.58		102.11
+38				4.1	99.02
+50				3.0	100.17
+70				1.8	101.37
Plug +98				5.50	97.67
120+21				11.6	91.57
T.P.	2.98	94.31	11.79		91.33
+32				9.4	84.91
+37				6.9	87.41
+50				4.7	89.61
+66				2.7	91.61
	3.99		23.37		

Sta.	+	⊙	−	Rod	Elev.
121				2.7	91.61
+50				−1.5	92.81
+85				6.7	87.61
Plug 122+09				7.67	86.64
T.P.	0.11	82.47	11.95		82.36
+50				3.1	79.37
123				9.2	73.27
+23				10.7	71.77
+50				9.8	72.67
124				9.1	73.37
T.P.	0.25	70.95	11.77		70.70
+50				1.5	69.45
125				5.3	65.65
+50				9.6	61.35
T.P.	2.95	63.89	10.01		60.94
Bottom Metal Pipe				Invert at 12.2	(51.69)
Bottom Inside Stringer				Invert at 11.1	(52.79)
	3.31		33.73		

Stephenson Cor fence post S. Cor. fence post and Twigg's (28)

Sta.	+	⊙	−	Rod	Elev.
B. M.				6.34	57.55
+74				1.4	62.49
126				2.6	61.29
+40				5.9	57.99
+58				10.3	53.59
127				10.7	53.19
T. P.	1.63	53.84	11.68		52.21
+30				2.7	51.14
+50				2.7	51.14
128				4.6	49.24
+50				8.5	45.34
T. P.	0.94	43.61	11.17		42.67
129				3.4	40.21
+41				3.1	40.51
+50				5.3	38.31
+58				4.3	39.31
+82				6.2	37.41
=20+21 – Davids line	2.57		22.85		

63.89
6.34
57.55

Sta.	+	⊙	−	Rod	Elev.
(57.41)					

11/26/06

Chas. Williams

Levels for Road from the Canon to Kalmia (30)

Sta.	B.M. +	Spk in Elec. pole o	—	Rod	Elev.
B.M.	6.33	291.02			284.69
T.P.	4.36	285.21	10.17		280.85
T.P. Cont. 3rd and Spruce	1.07	278.35	7.93		277.28
0				3.4	274.95
+50				2.5	275.85
1				3.1	275.25
+30				4.0	274.35
+50				3.4	274.95
2				3.5	274.85
+50				4.4	273.95
3				6.1	272.25
+25 Plug Nail 3rd and Oak on B.M.				7.2	271.15
				5.36	272.99
+50				9.4	268.95
T.P. Plug. Cent. 3rd and Redwood +80	0.57	267.07	11.85		266.50
				3.0	264.07
4				4.0	263.07
	12.33		29.95		

3rd and Spruce, thence down 3rd and Acacia and Walnut

Sta.	+	o	—	Rod	Elev.
+50				7.4	259.67
5				10.0	257.07
+39				8.3	258.77
T.P.	0.18	255.73	11.52		255.55
+50				1.6	254.13
+90				9.5	246.23
6				9.0	246.73
+26				4.6	251.13
+50				6.5	249.23
+73				11.8	243.93
+84				9.6	246.13
7				11.2	244.53
T.P.	1.50	245.69	11.54		244.19
+19				5.2	240.49
+32				2.7	242.99
+50				6.0	239.69
+62				4.5	241.19
	1.68		23.06		

(32)

Error in Marking Stakes, add 5.0' to each Station from this point

Sta.	+	⊙	−	Rod	Elev.
7 = +42 +92				6.0	239.69
= +50 8 etc.				6.6	239.09
(8+45) +95				12.8	232.89
Plug B.M. 8+13				8.07	237.67
(+63) +42				11.2	234.49
(+92) +59				9.8	235.89
(9+09) T.P.	1.49	235.18	12.00		233.69
(+77) +77				2.0	233.18
(9+44) +94				0.0	235.18
(+60) 9+10				2.5	232.68
T.P.	4.82	228.22	11.78		223.40
(+96) +46				10.2	218.02
Plug (10+18) +68				4.83	226.39
10+50				2.8	225.42
(+75) +25				6.1	222.12
(+87) +37				4.5	223.72
+50 = (11.00)				5.0	223.22
	6.31		23.78		

Sta.	+	⊙	−	Rod	Elev.
(11+32) +82				9.2	219.02
11+50				11.4	216.82
T.P.	4.49	220.75	11.96		216.26
(+78) +28				9.0	211.75
(12.00) +50				5.4	215.35
(+20) +70				0.9	219.85
(+30) +80				0.3	220.45
12+50				4.6	216.15
(+63) +13				7.8	212.95
T.P.	0.55	209.41	11.89		208.86
(+93) +43				9.5	199.91
(13+33) +83				2.3	207.11
(+47) +97				1.2	208.21
13+22 (+72)				4.5	204.91
+46 (+96)				10.0	199.41
+72 (14+22)				3.6	205.81
14+50				6.0	203.41
	5.04		23.85		

(34)

Sta.	+	○	−	Rod	Elev.
B.M. Plug				8.52	700.89
+18					
(+68)					
T.P.	0.90	198.36	11.95		197.46
+50				2.5	195.86
=(15.00)					
+78				11.5	186.86
(+28)					
+89				12.5	185.86
(+39)					
15+50				10.4	187.96
+40				5.2	193.16
(+90)					
+50				5.7	192.66
=(16.00)					
+64				6.7	191.36
(167+4)					
T.P.	0.73	187.18	11.91		186.45
16+50				3.0	184.18
Plug (+67)					
+17				2.15	185.03
(+91)					
+41				5.8	181.38
(17+78)					
+78				5.1	182.08
17+50				7.1	180.08
(+70)					
+21				7.2	179.98
(+94)					
+44				10.2	176.98
	1.63		23.86		

Sta.	+	○	−	Rod	Elev.
18+50				9.7	177.48
(+70)					
+20				11.4	176.08
T.P.	0.52	175.95	11.75		175.43
+50				7.2	168.75
=(19.00)					
Plug					
+70				4.10	171.85
(+20)					
19+50				8.2	167.75
(+90)					
+40				6.0	169.95
+50				6.6	169.35
=(20.00)					
T.P.	0.60	164.55	12.00		163.95
20+50				5.3	159.25
(21.00)					
+50				8.7	155.85
(+41)					
+91				4.1	160.45
21+50				3.5	161.05
(+61)					
+11				3.2	161.35
Plug +67				9.34	155.71
=(32+17)					
22+50				11.5	153.05
(+73)					
+23				12.4	154.15
	1.12		23.75		

Sta.	+	⊙	−	Rod	Elev.
T. P.	1.08	153.74	11.89		152.66
+50 =(23.00)				6.3	147.44
+84 +(34)				10.7	143.04
23 +50				9.5	144.24
(+68) +18				8.9	144.84
(+91) +41				6.2	147.64
+50 =(24.00)				7.7	146.04
+67 (+17)				8.7	145.04
T. P.	0.92	142.74	11.92		141.82
24 +50				6.2	136.54
(+90) +40				16.4	126.34
+84 (25+34)				5.1	137.64
25 +50				3.2	139.54
(+68) +15				3.3	139.44
T. P.	1.01	132.14	11.61		131.13
+50 =(26.+00)				0.3	131.84
26 +50				7.1	124.44
	3.01		35.42		

Sta.	+	⊙	−	Rod	Elev.
(27+00) +50				7.7	124.44
Plug +59 (27+09)				7.72	124.42
27 +50				9.1	123.04
T. P.	0.95	121.11	11.98		120.16
(28+00) +50				6.2	114.91
(+23) +73				11.6	109.51
28 +50				12.4	108.71
(+86) +36				10.8	110.31
T. P.	3.07	112.63	11.55		109.56
(29+00) +50				4.5	108.15
(+46) +90				8.0	104.63
29 +50				7.7	104.93
(30+00) +50				6.2	106.43
30 +50				7.6	105.03
T. P.	2.36	103.24	11.75		100.88
(31.00) +50				3.8	99.44
Plug (+20) +70				6.58	96.66
	6.38		35.28		

Sta.	+	⊙	−	Rod	Elev.
31 + 50				4.8	98.44
(32+00)					
+ 50				1.8	101.44
(+25)					
+75				3.2	100.04
32 + 50				5.0	98.24
(+79)					
+29				7.5	95.74
(33+00)					
+ 50				11.7	91.54
T. P.	0.14	91.58	11.80		91.44
33 + 50				10.2	81.38
T. P.	0.44	80.19	11.83		79.75
(+65)					
+15				3.0	77.19
(+74)					
+24				8.9	71.29
2'x2' Box (34+00)					
+ 55				10.7	69.49
34 + 50				11.2	68.99
(+62)					
+12				11.6	68.59
T. P.	0.42	68.88	11.73		68.46
(+67)					
+17				2.6	66.28
(+95)					
+45				4.0	64.88
	1.00		35.36		

Sta.	+	⊙	=	Rod	Elev.
(35+00)					
+ 50				6.0	67.88
(+10)					
+60				7.9	60.98
6'x6' Culvert (+19)					
+69				11.8	57.08
(+31)					
+81				7.8	61.08
35 + 50				3.0	65.88
T. P.	9.44	77.97	0.35		68.53
(+64)					
+34				8.0	69.97
(36+00)					
+ 50				5.1	72.87
(+30)					
+80				1.2	76.77
36 + 50				1.3	76.67
B.M. Plug					
+38.8	4.51	79.93	4.55		73.42
(+88.8)					
+ 52				8.0	71.93
37 + 50				8.5	71.43
(38+00)					
+ 50				6.1	73.83
38 + 50				5.7	74.23
(39+00)					
+ 50				5.1	74.83
39 + 50				6.0	73.93
	15.95		4.90		

Sta.	+	⊙	−	Rod	Elev.
(40+00)					
+50				8.3	71.63
40+50				10.3	69.63
(+95)					
+45				11.6	68.33
(41+00)					
+50				10.8	69.13
41+50				11.2	68.73
T.P.	7.07	75.45	11.55		68.38
(42+00)					
+50				5.3	70.15
42+50				5.8	69.65
(43+00)					
+50				3.6	71.85
43+50				2.4	73.05
(+83)					
+33				0.8	74.65
(44+00)					
+50				2.5	74.95
44+50				7.9	67.95
(+72)					
+22				11.0	64.45
T.P.	2.28	66.47	11.26		64.19
1½ x 1½ BM (45+00)					
+50				8.6	57.87
(+19)					
+69				2.9	63.57
	9.35		22.81		

Sta.	+	⊙	−	Rod	Elev.
45+50				2.1	64.37
Cent. Salmon					
& Jordis					
+44.4				0.9	65.57
(+94.4)					
(46+00)				1.6	64.87
+50					
(+30)				4.5	61.97
+80					
46+50				4.1	62.37
(47+00)					
+50				9.0	57.47
T.P.	0.06	54.71	11.82		54.65
47+50				1.7	53.01
(48+00)					
+50				5.8	48.91
(+08)					
+58				6.6	48.11
(+11)					
+61				8.6	46.11
48+50				11.0	43.71
Cent. Jordis					
& Kalmia					
+19				10.9	43.81
(+69)					
B.M.			11.68		43.03
Spike in Electric Pole					
S.W. Jordis & Kalmia					
				T.P. 64.19	
				+8.83	
				73.02	
				2.65	
				70.37	(70.27)
					Iron Pin S.E.
					Kalmia & Columbia
	0.06		23.50		

Levels for Road from First and Whitneby to California and Noble

Sta.	+	⊙	−	Rod	Elev.
Bm. Centre	Hancock	and Northerly	side Whitneby	St.	(10.66)
B.M.	0.73	10.98			10.25
Bm. on E. side Whitneby					
0 Grade				8.0	2.98
+50				8.4	2.58
+83				7.9	3.08
1				8.2	2.78
T. P.	6.95	7.44	10.49		0.49
+50				9.0	- 1.56
+60				10.0	- 2.56
2				10.1	- 2.66
+22				9.4	- 1.96
+40				6.4	1.00
+50				5.9	1.59
+68				4.3	3.10
3				3.8	3.64
+50				3.3	4.14
4				3.4	4.04
+50				3.8	3.64
	7.68		10.49		

Sta.	+	⊙	−	Rod	Elev.
5				4.3	3.14
+50				4.4	3.04
6				4.5	2.94
+50				4.7	2.74
7				4.9	2.54
+50				4.7	2.74
T. P.	4.67	7.67	4.44		3.00
8				5.0	2.67
+50				4.9	2.77
9				4.8	2.87
+50				4.2	3.47
10				3.4	4.27
+50				3.1	4.57
11				2.6	5.07
+50				1.4	6.27
T. P.	6.33	13.27	0.73		6.94
12				5.4	7.87
	11.00		5.17		

Sta.	+	⊙	−	Rod	Elev.
+50				4.3	8.97
13				3.0	10.27
+50				3.1	10.17
14				3.4	9.87
+50				4.3	8.97
15				4.7	8.57
+50				3.8	9.47
16				2.5	10.77
+50				1.9	11.37
+59 △				1.9	11.37
T.P.	11.89	23.23	1.93		11.34
+79				11.2	12.03
+80				11.7	11.53
+87				10.7	12.53
On Rail (S.C.R.R.) (Center track ↓				9.65	13.58
+95				10.0	13.23
17				10.6	12.63
	11.89		1.93		

⊙ 27.93
− 2.00
25.93 Spike in cor fence
(26.30) post S.W. Hollow Stake

Sta.	+	⊙	−	Rod	Elev.
+05				11.5	11.73
+08				9.9	13.33
+50				8.6	14.63
18				6.4	16.83
+50				3.8	19.43
19				0.7	22.53
T.P.	5.34	27.93	0.64		22.59
+33.5 △				3.2	24.73
+50				3.2	24.73
20				3.0	24.93
+50				2.8	25.13
21				3.2	24.73
+50				3.4	24.53
22				3.4	24.53
+35				3.4	24.53
+30				2.5	25.43
+50				2.7	25.23
	5.34		0.64		

Sta.	+	⊙	−	Rod	Elev.
23				3.6	7H.33
+50				2.6	7 5.33
+59				4.1	7 3.83
+82				1.2	7 6.73
24				0.6	7 7.33
T. P.	6.76	33.64	1.05		26.88
+14				6.6	7 7.0H
+24				7.7	7 5.9H
+50				6.0	7 7.6H
25				6.1	7 7.5H
+50				6.6	7 7.0H
26				7.0	7 6.6H
+50				7.2	7 6.4H
27				6.8	7 6.8H
+50				7.0	7 6.6H
28				7.5	7 6.1H
+50				7.1	7 6.5H

Sta.	+	⊙	−	Rod	Elev.
29				6.8	7 6.8H
T. P.	11.61	38.51	6.74		26.90
+50				11.6	7 6.91
30				11.3	7 7.21
+50				10.6	7 7.91
B.M. Chis. +74.8 △				10.45	7 8.06
+85				9.8	7 8.71
+87				8.8	7 9.71
31				8.7	7 9.81
+50				5.8	3 7.71
32				2.7	35.81
T. P.	11.42	49.90	0.03		38.48
+50				10.2	39.77
33				5.7	HH.20
On Rail	P.R.R. & L. I. R.R.			0.54	Hq.36
Ends Track +50				0.6	Hq.30
T. P.	11.48	60.73	0.65		49.25
	34.51		7.42		

Sta.	+	0	−	Rod.	Elev.
34				7.8.	57.93
+50				3.9	56.83
35 cent. California and Clayton				0.2	60.52
+10.5				0.1	60.62

Pin center Hancock and Northerly line Whitney St.

B.M.	5.32	15.57		10.25
Plug			5.73	9.84

Center Concord and Southerly line Whitney St

10.25
9.84
0.41

Pin	10.66
Plug	10.25

1/23/03

Levels on B St.

50

Sta.	+	⊙	−	Rod	Elev.
Mouth Hydrant 25th and B					
B.M.	4.10	192.44			188.34
T. P.	0.43	190.08	2.79		189.65
Center 26th and B					
0 Grade				0.5	189.6
+30				0.6	189.5
+45				1.5	188.6
+50				3.1	187.0
T. P.	0.14	178.65	11.57		178.51
1				2.5	176.2
+50				10.2	168.5
T. P.	0.62	167.63	11.64		167.01
2				6.2	161.4
T. P.	0.90	156.62	11.91		155.72
+50				1.9	154.7
+75				3.5	153.1
3				11.5	145.1
+15				10.5	146.1
+27				5.7	150.9
	6.19		37.91		

51

Sta.	+	⊙	−	Rod	Elev.
+50				2.3	154.3
T. P.	11.78	167.59	0.81		155.81
4				7.8	159.8
T. P.	11.72	178.37	0.94		166.65
+50				6.2	172.2
+75				0.5	177.9
T. P.	11.72	189.56	0.53		177.84
5				8.7	180.9
+50				1.5	188.1
T. P.	11.75	201.14	0.17		189.39
6				8.2	192.9
+25				5.5	195.6
+50				4.3	196.8
7				1.7	199.4
T. P.	4.38	204.84	0.68		200.46
+50				2.8	202.0
8				1.7	203.1
	51.35		3.13		

52

D. H.

Sta.	+	○	−	Rod	Elev.
+50				4.3	206.3
9				9.8	195.3
T. P.	0.50	193.52	11.82		193.02
+50				3.9	189.6
10				8.0	185.5
+50				11.8	181.7
T. P.	0.40	182.35	11.57		181.95
11				7.7	174.7
T. P.	0.59	171.67	11.27		171.08
+50				6.2	165.5
T. P.	1.37	161.65	11.39		160.28
12				8.2	153.5
T. P.	0.18	150.12	11.71		149.94
+50				7.0	143.1
+94				13.5	136.6
13				12.5	137.6
T. P.	11.55	161.50	0.17		149.95
	14.59 ✓		57.93 ✓		

53

Sta.	+	○	−	Rod	Elev.
+50				10.6	150.9
T. P.	11.35	172.41	0.44		161.06
14				8.9	163.5
T. P.	11.73	183.71	0.43		171.98
+50				9.6	174.1
15				5.1	178.6
T. P.	9.77	192.93	0.55		183.16
+50				9.4	183.5
16				4.4	188.5
T. P.	4.78	197.18	0.53		192.40
+50				4.6	192.6
17				2.8	194.4
+50				3.1	194.1
18				4.4	192.8
+50				6.8	191.4
19				7.3	189.9
+50				8.5	188.7
	37.63 ✓		1.95 ✓		

54

Sta.	+	⊙	−	Ord	Elev.
20				8.7	188.5
+50				9.6	187.1
T. P.	1.74	187.14	11.78		185.40
21				2.9	184.2
+25				8.0	179.1
T. P.	0.49	175.97	11.66		175.48
+50				5.7	170.3
T. P.	1.14	165.37	11.74		164.23
+75				3.3	162.1
22				11.2	154.2
T. P.	0.00	153.81	11.56		153.81
+25				10.2	143.6
+40				13.6	140.2
+50				12.2	141.6
23				8.3	145.5
+50				1.8	152.1
T. P.	11.46	164.34	0.93		152.88
	14.83 ✓		47.67 ✓		

53

Sta.	+	⊙	−	Ord	Elev.
24+00				5.0	159.3
T. P.	11.94	174.39	1.89		162.45
+50				6.3	168.1
T. P.	11.98	185.76	0.61		173.78
25				7.9	177.9
+50				0.9	184.9
T. P.	11.56	195.68	1.64		184.12
26				7.4	188.3
℄ +50 Point S.E. Cor 30th and D				5.8	189.9
B.M.				1.01	194.67
27				2.0	193.7
T. P.	8.93	203.82	0.79		194.89
+50				6.3	197.5
28				4.7	199.1
+50				3.6	200.2
29				3.7	200.1
+50				4.3	199.5
	44.41 ✓		4.93 ✓		

Sta	+	⊙	−	Rod	Elev.
30				7.3	196.5
T. P.	0.33	192.77	11.38		192.44
+50				6.7	186.1
T. P.	0.91	181.70	11.98		180.79
31				2.0	179.7
+50				11.7	170.0
T. P.	0.47	170.16	12.01		169.69
T. P.	0.29	158.59	11.86		158.30
32				3.3	155.3
T. P.	0.21	147.15	11.65		146.94
+50				8.4	138.8
+62				10.2	137.1
+75				15.0	132.2
33				11.6	135.5
T. P.			0.00		147.15 ✓

Levels in A St.

Sta.	+	⊙	−	Rod	Elev.
Nozzle hydrant 25th + Q					
B.M.	7.43	195.77			188.34
T.P.	10.59	205.23	1.13		194.64
Centre 25th					
0				4.0	201.2
+50				2.9	202.3
+51				2.0	203.2
1				0.7	204.5
T.P.	11.00	215.60	0.63		204.60
+50				9.1	206.5
2				7.6	208.0
+50				5.0	210.6
3				4.8	210.8
+50				2.8	212.8
4				1.5	214.1
+50				6.3	209.3
5				9.7	205.9
+50				11.4	204.2
T.P.	7.37	211.76	11.21		204.39
	36.39		12.97		

Sta.	+	⊙	−	Rod	Elev.
6				8.7	203.1
+50				8.3	203.5
7				8.0	203.8
+50				7.0	204.8
8				6.3	205.5
+50				5.5	206.3
9				4.1	207.7
+50				3.4	208.4
10				2.6	209.2
+50				1.5	210.3
T.P.	4.10	215.20	0.66		211.10
11				3.7	211.5
+50				2.1	213.1
12				1.6	213.6
+50				2.8	212.4
13				4.4	210.8
+50				7.9	207.3

A St.

Sta.	+	⊙	−	Rod	Elev.
T. P.	0.53	204.05	11.68		203.52
14				5.4	198.7
T. P.	0.02	192.12	11.95		192.10
+50				1.6	190.5
15				6.5	185.6
T. P.	0.39	180.79	11.72		180.40
+50				3.0	177.8
16				13.2	167.6
+27				3.0	177.8
T. P.	10.74	190.55	0.98		179.81
+50				8.9	181.65
17				4.8	185.65
T. P.	11.51	200.77	1.29		189.26
+50				9.9	190.87
18				4.2	196.57
T. P.	10.41	210.75	0.43		200.34
+50				9.0	201.8
	33.60		38.05		

Sta.	+	⊙	−	Rod	Elev.
19				6.1	204.7
+50				4.6	206.2
20				3.4	207.4
+50				1.7	209.1
21				1.9	208.9
+50				2.7	208.1
22				2.9	207.9
+50				3.4	207.4
23				4.3	206.5
+50				5.8	205.0
24				10.5	200.3
T. P.	0.63	201.17	10.21		200.54
T. P.	0.47	189.64	12.00		189.17
+50				2.4	187.2
T. P.	3.03	181.13	14.54		178.10
+90				9.8	171.3
25				8.5	172.6
	4.13		33.75		

A A'

Sta.	+	⊙	−	Rod	Elev.
T. P.	11.75	192.47	0.41		180.72
+50				8.0	184.5
26				0.8	192.2
T. P.	8.02	199.51	0.98		191.49
+50				3.9	195.6
27				4.9	194.6
+50				4.8	194.7
28				8.9	190.6
BT +25				9.9	189.6
+50				5.4	194.1
T. P.	11.89	210.52	0.88		198.63
29				2.2	208.3
T. P.	11.65	221.05	1.12		209.40
+50				4.7	216.4
30				2.8	218.3
T. P.	10.98	230.68	1.35		219.70
+50				9.4	221.3
	54.29		4.74		

Sta.	+	⊙	−	Rod	Elev.
31				7.2	223.5
+50				6.1	224.6
32				5.3	225.4
+50 Spk in post SW cor. Bottom of A B.M.				3.5	227.2
				3.82	226.86
33+00				3.4	227.3
+50				3.4	227.3
34				2.5	228.2
+50				1.9	228.8
35				1.7	229.0
+50				1.9	228.8
36				4.0	224.7
+50				11.2	219.5
T. P.	4.25	224.10	10.83		219.85
37				13.8	210.3
+03				14.6	209.5
+50				8.2	215.9

A. St.

Sta.	+	−	Rod	Elev.
38			5.0	219.1
+50			3.5	220.6
39			1.1	223.0
T. P.	8.84	232.17		223.33
+50			6.9	225.3
40			5.8	226.4
+50			5.1	227.1
41			4.0	228.2
+50			3.6	228.6
42			2.9	229.3
+50			2.4	229.8
43			2.5	229.7
+50			4.6	227.6
Peg		4.29		227.88

Continued on Page 137

1/30/02

Levels on National Ave. from 31st to City Limits

Sta.	+	o	−	Rod	Elev.
Bridge Hydrant 31st + National B.M.	2.32	74.29			71.97
31st line 31st					
0				3.1	71.2
+50				2.8	71.5
1				3.6	70.7
+50				4.2	70.1
+80				4.2	70.1
2				3.7	70.6
+50				5.1	69.2
3				5.8	68.5
+50				6.0	68.3
4				6.4	67.9
+50				7.8	66.5
5				8.6	65.7
+50				9.6	64.7
6				11.3	63.0
T.P.	1.17	64.35	11.11		63.18
+50				3.0	61.4
	3.49		11.11		

Sta.	+	o	−	Rod	Elev.
7				4.4	60.0
+50				5.1	59.3
8				5.5	58.9
+50				6.5	57.9
9				9.5	54.9
T.P.	0.66	53.01	12.00		52.35
+24				2.9	50.1
+39				8.8	44.2
T.P.	0.62	42.29	11.34		41.67
+44				3.8	38.5
+50				5.2	37.1
+80				11.4	30.9
T.P.	0.31	31.10	11.50		30.79
10				9.1	22.0
T.P.	0.79	20.35	11.54		19.56
+50				6.9	13.5
11				11.3	9.1
	2.38		46.38		

National Ave

Sta.	+	o	−	Rod	Elev.
T. P.	1.00	10.15	11.20		9.15
+50				4.6	5.6
12				8.7	1.5
+50				8.7	1.5
13				8.1	2.1
+50				7.6	2.6
T. P.	4.41	7.12	7.44		2.71
14				4.6	2.5
+50				4.3	2.8
15				4.7	2.4
W. bank Chollo creek					
+25				5.4	1.7
+33				6.8	0.3
+50				6.6	0.5
+62				6.7	0.4
E. bank					
+65				5.0	2.1
16				4.3	2.8
+50				4.1	3.0
	5.41		18.64		

Sta.	+	o	−	Rod	Elev.
17				4.4	2.7
+50				4.9	2.2
18				4.7	2.4
+50				4.8	2.3
19				5.6	1.5
T. P.	9.58	11.55	5.15		1.97
+24				9.7	1.9
+26				11.0	0.6
+50				11.2	0.4
+62				7.7	3.9
on Rail				6.9	4.7
Center track (C.R.R.)					
+64.6				7.2	4.4
+68				7.8	3.8
+75				9.6	2.0
+87				10.7	0.9
+88				9.8	1.8
20				9.9	1.7

74 National ave.

Sta.	+	o	-	Rod	Elev.
+25				7.5	4.1
T. P.	10.96	21.92	0.59		10.96
+50				7.9	14.0
T. P.	11.69	32.64	0.97		20.95
+75				9.6	23.0
+85				5.2	27.4
21				3.0	29.6
+50				0.4	32.2
T. P.	10.99	43.03	0.60		32.04
22				8.2	34.8
+50				6.6	36.4
23				4.9	38.1
+50				3.9	39.1
24				3.0	40.0
+50				1.6	41.4
25				1.8	41.2
T. P	11.80 45.44	54.11	0.72 2.88		42.31

75

Sta.	+	o	-	Rod	Elev.
+50				10.5	43.6
26				9.6	44.5
Plug N.L. Cor 35th & National					
B.M.				6.94	47.17
+50				8.0	46.1
27				7.6	46.5
+50				7.0	47.1
28				4.4	49.7
+50				2.5	51.6
29				2.4	51.7
+50				2.0	52.1
30				0.3	53.8
T. P.	5.28	58.74	0.65		53.46
+50				3.4	55.3
31				2.6	56.1
+2.5				2.0	56.7
+50				3.3	55.4
32				9.2	49.5

National Ave.

Sta.	+	⊙	−	Add	Elev.
T. P.	0.55	47.67	11.62		47.12
+50				3.0	44.7
33				10.3	37.4
T. P.	5.20	41.25	11.62		36.05
2×2 Bot. +50				10.6	30.7
34				11.6	29.7
+50				7.8	33.5
+85				1.6	39.7
35				0.8	40.5
+25				0.8	40.5
+50				5.2	36.1
36				10.9	30.4
2×2 Bot. +25				11.6	29.7
+50				8.1	33.2
T. P.	11.12	51.50	0.87		40.38
37				8.6	42.9
+50				6.8	44.7
	16.87		24.11		

Sta.	+	⊙	−	Add	Elev.
38				7.6	43.9
+50				4.1	47.4
39				0.8	50.7
T. P.	7.31	58.02	0.79		50.71
+50				3.4	54.6
40				7.0	51.0
2×2 Bot. +50				10.6	47.4
41				8.6	49.4
+50				4.5	53.5
T. P.	10.84	68.86	0.00		58.02
42				7.8	61.1
+50				6.0	62.9
43				1.1	67.8
T. P.	11.28	78.74	1.40		67.46
+50				7.4	71.3
44				5.1	73.6
+50				6.0	72.7
	29.43		2.19		

National Ave.

Sta.	+	⊙	−	Rod	Elev.
45				5.0	73.7
+50				3.7	75.0
+70				1.1	77.6
46				0.8	77.9
T.P.	8.04	85.94	0.84		77.90
+50				6.5	79.4
47				5.2	80.7
+50				3.5	82.4
Plug +60	7.20	89.77	3.37		82.57
48				8.3	81.5
+50				9.5	80.3
49				8.9	80.9
1+½ Brk +50				11.0	78.8
50				9.5	80.3
+20				7.4	82.4
+50				5.8	84.0
+75				4.3	85.5
	15.24		4.21		

Sta.	+	⊙	−	Rod	Elev.
51				4.7	85.1
+50				5.2	84.6
52				6.4	83.4
+50				6.1	83.7
53				7.0	82.8
+50				10.2	79.6
54				12.2	77.6
T.P.	1.04	79.10	11.71		78.06
+50				3.6	75.5
55				3.5	75.6
+50				4.3	74.8
56				6.1	73.0
+50				7.4	71.7
57				9.0	70.1
+50				11.5	67.6
T.P.	0.70	68.34	11.46		67.64
58				3.6	64.7
	1.74		23.17		

National Ave

Sta.	+	⊙	−	Rod	Elev.
+50				5.4	62.9
59				4.4	63.9
+10 △				4.5	63.8
+50				9.4	58.9
60				12.4	55.9
T. P.	0.52	57.29	11.57		56.77
+50				2.4	54.9
61				3.0	54.3
+50				4.8	52.5
62				7.2	50.1
+50				8.9	48.4
Center 40th and W ↘ +84 △				10.7	46.6
63				11.2	46.1
T. P.	0.67	46.79	11.17		46.12
+50				3.0	43.8
64				5.0	41.8
+50				6.3	40.5
	1.19		22.74		

Sta.	+	⊙	−	Rod	Elev.
65				7.5	39.3
+50				9.0	37.8
66				11.6	35.2
12+73.84 T. P.	0.82	36.37	11.24		35.55
+50				5.0	31.4
67				6.8	29.6
+50				6.8	29.6
68				10.0	26.4
+50				11.0	25.4
69				11.1	25.3
T. P.	9.34	35.03	10.68		25.69
+25				11.1	23.9
+50				9.7	25.3
70				8.7	26.3
+50				8.3	26.7
71				7.9	27.1
+50				6.9	28.1
	10.16		21.92		

National Ave.

Sta.	+	o	−	Rod	Elev.
72				3.8	31.2
Floor bridge				4.1	30.9
+50				4.7	30.3
Cy Line ↘ +95				6.4	28.6
B.M.			4.14		30.89

Cap. Tack top of end plank foot of N.W. cor rail

1/2 62 Levels on K, 32nd, and F St. and thence to City Limits

Sta.	+	⊙	−	Rod	Elev.
Nozzle Hydrant 30th and M					
B.M.	2.66	79.23			76.57
T.P.	6.50	83.84	1.89		77.34
M. Line 31st					
0				6.3	77.54
+50				5.3	78.54
1				5.1	78.74
+50				4.8	79.04
2				4.5	79.34
+50				5.4	78.44
3				5.2	78.64
+50				3.9	79.94
4				4.0	79.84
+50				1.8	82.04
5				2.7	81.14
+50				2.5	81.34
6				2.7	81.14
T.P.	7.09	88.42	2.51		81.33
+50				7.5	80.92
	16.25		4.40		

Sta.	+	⊙	−	Rod	Elev.
Cut. 32nd & K					
K +90				7.4	81.02
Cut Table in 4" X 4" Post Mon S.E. cor 32 & K B.M.				4.97	83.45
7				7.3	81.17
8				7.0	81.47
9				6.8	81.67
10				7.0	81.47
11				7.0	81.47
12				7.0	81.47
13				7.1	81.37
14				6.9	81.57
T.P.	6.07	87.69	6.90		81.62
15				6.3	81.39
16				6.5	81.19
+20				6.6	81.09
+30				5.3	82.39
17				5.1	82.59
18				5.0	82.69

Sta.	+	⊙	−	Rod	Elev.
19				4.7	82.99
20				3.6	84.09
+50				3.4	84.29
21				5.0	84.69
+50				7.5	80.19
T. P.	9.66	90.30	7.05		80.64
22				11.3	79.00
+50				10.5	79.80
23				9.7	80.60
+50				8.2	82.10
24				7.9	82.40
+50				5.7	84.60
25				3.0	87.30
T. P.	5.83	94.44	1.69		88.61
+50				3.6	90.84
Cont. 31st + 5					
26 + 07				0.3	94.14
+50				4.2	90.24
	15.49		8.74		

Sta.	+	⊙	−	Rod	Elev.
27				10.6	83.84
T. P.	2.23	84.87	11.80		82.64
+50				4.9	79.97
28				7.1	77.77
+50				8.7	76.17
29				9.9	74.97
+50				10.1	74.77
30				8.2	76.67
+25				5.1	79.77
31				4.8	80.07
+50				5.0	79.87
32				4.9	79.97
+50				4.0	80.87
T. P. Point on Ont. Con. 33rd + 7 B. M.	10.93	94.46	1.34		83.53
				5.37	89.09
33				5.4	89.06
+50				5.6	88.86
	13.16		13.14		

Sta.	+	⊙	−	Rod	Elev.
+68				5.7	88.76
34				9.3	85.16
T. P.	0.77	83.56	11.67		82.79
+50				4.1	79.46
35				9.3	74.26
+50				12.1	71.46
T. P.	0.68	72.46	11.78		71.78
36				2.8	69.66
+50				5.3	67.16
37				6.9	65.56
+50				7.8	64.66
+63				7.8	64.66
T. P.	0.44	61.41	11.49		60.97
+81				1.7	59.71
38				7.6	53.81
T. P.	1.36	52.45	10.32		51.09
+25				6.1	46.35
	3.25		45.26		

Sta.	+	⊙	−	Rod	Elev.
+50				7.5	44.95
39				8.3	44.15
40				8.0	44.45
41				7.4	45.05
42				6.5	45.95
43				5.8	46.65
T. P.	5.07	51.74	5.78		46.67
44				4.5	47.2
45				4.9	46.8
46				4.6	47.1
+50				4.8	46.9
+75				4.6	47.1
47	48.08 = High Water Mark (approx)			6.4	45.3
+25				4.8	46.9
+50				5.4	46.3
+75				7.3	44.4
48				7.1	44.6
+08				6.0	45.7

Sta.	+	⊙	−	Rod	Elev.
+09				3.7	48.0
Plug +20 △	8.59	57.76	2.57		49.17
+25 △				7.2	50.56
+50				5.6	52.16
49				5.3	52.46
+50				4.3	53.46
50				2.0	55.76
T.P.	6.53	63.73	0.56		57.20
50+50				3.4	60.33
51				2.7	61.03
+14 △				4.2	59,53
+50				1.0	62.73
+58				0.4	63.33
52				7.6	56.13
2"×2" Bot +12				8.8	54,93
+50				6.8	56.93
53				1.5	62.43
	15.12		3.13		

Sta.	+	⊙	−	Rod	Elev.
T.P.	4.76	67.03	1.46		62.27
Plug +28 △				2.91	64.12
+50				5.4	61.63
52				10.3	56.73
+50				7.3	57.73
55				7.5	59.53
+50				8.9	59.13
56				7.6	59,43
+50				6.7	60,33
57				6.4	60.63
T.P.	3.91	64.64	6.30		60.73
+50				4.8	59.84
58				6.1	58,54
2"×2" Bot +50				6.8	57,84
59				7.1	57,54
+50				6.5	58.14
60				6.0	58,64
	8.67		7.76		

Sta.	+	⊙	−	Rod	Elev.
+50				4.5	60.14
61				1.4	63.74
T. P.	5.57	68.90	1.81		63.33
+50				3.3	65.60
+65 △				3.5	65.40
62				4.8	64.10
+50				6.6	62.30
63				5.1	63.80
+50				3.1	65.80
+62				2.3	66.60
+91				7.2	61.70
64				7.2	61.70
+50				6.5	62.40
65				6.0	62.90
T. P.	9.62	73.06	5.46		63.44
+50				9.6	63.46
66				9.3	63.76
	15.19		6.77		

Sta.	+	⊙	−	Rod	Elev.
+50				8.2	64.86
67				7.5	65.56
+50				7.0	66.06
68				6.1	66.96
+50				5.6	67.46
69				4.7	68.36
+50				4.6	68.46
70				3.8	69.26
+50				3.8	69.26
71+02 △				3.4	69.66
B.M. Stake at foot of iron sign post, North of Cafe road, near city limit			3.14		69.92 ✓

2/8/02

94

Levels on Main St. 26th to 31st

Sta.	+	⊙	−	Rod	Elev.
N. Hwy Systems Logan 4/26th	1.63	67.94			66.31
T. P.	0.88	57.40	11.42		56.52
T. P.	0.87	46.86	11.41		45.99
T. P.	2.41	38.97	10.30		36.56
11	4.01	33.42	9.56		29.41
Cente 26th + Main					
0				8.9	24.5
+50				6.8	26.6
1				6.8	26.6
+50				6.7	26.7
T. P.	4.83	31.97	6.28		27.14
2				5.5	26.5
+50				6.0	26.0
3				5.9	26.1
+50				5.7	26.9
4				4.9	27.1
+50				4.2	27.8
5				2.9	29.1
	14.63		48.97		

95

Sta.	+	⊙	−	Rod	Elev.
+50				7.7	24.3
T. P.	1.64	32.36	11.25		30.72
6				5.3	17.1
+50				7.8	14.6
7				12.0	10.4
26th East +35				11.5	10.9
+50				9.9	12.5
T. P.	11.23	33.20	0.39		21.97
8				9.0	24.2
+25				4.8	28.4
+50				2.5	30.7
9				1.1	32.1
+50				0.2	33.0
T. P.	3.15	35.97	0.38		32.82
10				2.0	34.0
+50				1.3	34.7
11				2.3	33.7
	16.02		12.02		

Main St.

Sta.	+	⊙	−	Rod	Elev.
+50				10.4	25.6
T.P.	0.21	24.85	11.33		24.64
12				10.3	14.6
2x4 Bot					
+25				12.4	12.5
+50				10.9	14.0
+75				6.8	18.1
T.P.	11.48	35.63	0.70		24.15
+88				9.8	25.8
13				9.3	26.3
+50				8.9	26.7
T.P.	5.24	39.54	1.33		34.30
+53				3.6	35.9
14				3.2	36.3
+50				3.3	36.2
15				2.8	36.7
+25				3.6	35.9
+50				6.9	32.6
	16.93		13.36		

Sta.	+	⊙	−	Rod	Elev.
16				12.2	27.3
1x4 Bot					
+12				13.2	26.3
+50				10.1	29.4
17				4.0	35.5
+20				2.6	36.9
+50				3.6	35.9
18				3.2	36.8
+50				1.6	37.9
T.P.	6.68	45.01	1.21		38.33
19				6.4	38.6
+50				5.2	39.8
20				5.1	39.9
+50				4.9	40.1
21				6.1	38.9
+50				6.1	38.9
22				5.8	39.2
+50				4.9	40.1

Main St

No.	+	⊙	−	Rod	Elev.
23				5.0	40.0
+50				5.9	39.1
T.P.	2.25	35.70	11.56		33.45
24				11.9	23.8
T.P.	4.21	28.16	11.75		23.95
+25				11.2	17.0
3rd 4th cut +45				13.7	14.5
+50				13.2	15.0
25				2.4	25.8
T.P.	11.39	38.69	0.86		27.30
"	9.49	46.59	1.59		37.10
+50				7.4	39.2
26				5.6	41.0
Center 30th ↘ +45				4.9	41.7
B.M. Bldg. N.E. corner 30th				3.14	43.45
+50 △				4.9	41.7
27				4.6	42.0
+50				4.7	41.9
	27.34		25.76		

28				4.1	42.5
+50				5.0	41.6
29				4.3	42.3
+50				4.1	42.5
30				3.7	42.9
+50				3.8	42.8
31				2.9	43.7
+50				3.1	43.5
32				5.4	41.2
T.P.	4.87	46.32	5.14		41.45
+50				7.9	38.4
33				12.0	34.3
+15				11.3	35.0
+34				2.1	44.2
+45				1.5	44.8

Cradel road, East side 31st.

2/26/02

Levels on 30th St., etc. from Main St. to Cal...

Ken Dapin

Sta.	+	o	−	Rod	Elev.
Plug N.E. Main + 30th	8.98	52.43			43.45
o = Cent. Main St.				10.8	41.6
+50				9.4	43.0
1				7.6	44.8
+50				5.7	46.7
2				3.2	49.2
+50				1.5	50.9
3				0.6	51.8
T.P.	2.34	54.41	0.36		52.07
+35				3.8	50.6
+50				8.0	46.4
+65				11.5	42.9
4				13.0	41.4
+50				5.6	48.8
+75				3.2	51.2
5				3.1	51.3
+50				1.8	52.6
	11.32		0.36		

T.P.	8.88	62.00	1.29		53.12
6				7.3	54.7
+50				6.6	55.4
7				6.1	55.9
+50				6.0	56.0
+51				7.0	55.0
R.R. Rail				6.9	55.1
8				6.6	55.4
+50				5.4	56.6
9				4.6	57.4
+50				3.6	58.4
10				2.0	60.0
+50				0.5	61.5
T.P.	8.83	70.29	0.54		61.46
11				7.1	63.2
Hinge Hydrant 30th and Natrona B.M.				4.44	65.85 (65.74)
Cent. Car track				5.7	64.6
+33					
	17.71		1.83		

30th St. Road

Sta.	+	○	−	Rod	Elev.
+50				6.0	64.3
12				5.2	65.1
+50				3.6	66.7
13				2.5	67.8
+50				1.7	68.6
14				1.3	69.0
+50				0.9	69.4
15 10/2/02				0.5	69.8
B.M	8.22	73.96			65.74
+50				3.4	70.6
16				2.6	71.4
+50				1.8	72.2
17				0.9	73.1
+50				0.0	74.0
T.P.	6.90	80.04	0.82		73.14
18				5.0	75.8
+50				4.5	75.5
	15.72		0.82		

Sta.	+	○	−	Rod	Elev.
19				4.9	75.1
+50				5.2	74.8
20				4.7	75.3
+50				5.2	74.8
21				5.4	74.6
+50				6.4	73.6
22				6.7	73.3
+50				7.3	72.7
23				10.7	69.3
T.P.	6.32	74.67	10.69		68.35
+50				9.1	65.6
+81				10.7	64.0
1'x1½'pvt +87				13.4	61.3
24				11.1	63.6
+50				7.5	67.2
25				3.3	71.4
+50				1.3	73.4

30th St. Road

Sta.	+	⊙	−	Rod	Elev.
26				0.3	74.4
T. P.	11.26	85.18	0.75		73.92
+50				8.7	76.5
27				7.4	77.8
+50				5.6	79.6
28				2.3	82.9
T. P.	8.39	92.54	1.03		84.15
+50				5.9	86.6
29				5.2	87.3
+50				5.4	87.1
+96				5.1	87.4
30 +50				5.0	87.5
+76				4.3	88.2
31				3.1	89.4
+50				3.8	88.7
32				6.1	86.4
+50				7.7	84.8
	19.65		1.78		

Sta.	+	⊙	−	Rod	Elev.
33				9.6	82.9
+50				9.6	82.9
34				8.4	84.1
+50				8.3	84.2
T. P.	3.70	87.57	8.67		83.87
35				3.7	83.9
+50				4.6	83.0
36				8.6	79.0
+50				10.2	77.4
T. P.	3.12	79.06	11.63		75.94
37				4.0	75.1
+50				5.0	74.1
38				6.6	72.5
15x22 Bot +18				9.2	69.9
+50				8.7	70.4
39				5.7	73.4
+50				5.1	74.0
	6.82		20.30		

30th St. Road

Sta.	+	⊙	−	Rod	Elev
40				5.4	73.7
+50				6.0	73.1
41				5.4	73.7
+50				7.2	71.9
42				7.4	71.7
+50				7.8	71.3
43				7.4	71.7
+50				6.8	72.3
T. P.	4.90	76.79	7.17		71.89
44				4.9	71.9
+50				5.0	71.8
45				5.3	71.5
+31				5.1	71.7
On S. Pail C.R.R.					
+36				2.9	72.9
+50				4.1	72.7
N. Pail S.D.C.R.R.					
+57				3.4	73.4
+65				5.1	71.7

Sta.	+	⊙	−	Rod	Elev
46				5.0	71.8
+50				4.5	72.3
47				4.0	72.8
+50				3.0	73.0
48				1.9	74.7
+50				1.5	76.3
49				1.6	75.2
+50				2.1	74.7
T. P.	3.87	~~78.67~~ 78.77 Corrected	1.99		94.80
Temple Hydrant 30th and M				2.20	76.47 (76.57)
50				4.4	74.4
+50				5.0	73.8
51				5.6	73.2
+50				5.8	73.0
52				6.1	72.7
+50				5.9	72.9
53				5.8	73.0

30th St. Road

Sta.	+	⊙	−	Road	Elev.
T. P.	4.34	77.37	5.74		73.03
+50				4.3	73.1
54				4.3	73.1
+50				4.2	73.2
55				5.3	72.1
+50				5.6	71.8
56				5.9	71.5
+50				5.7	71.7
S. Line K St. +57 Spike in Road S.E. 30ft. +K B. M.	4.87	76.92	5.32	5.6	71.8
Auth +97				4.4	72.5
57 + 50				4.2	72.7
58				5.4	71.5
+50				5.9	71.0
59				6.3	71.6
+07				5.9	71.0
+50				5.2	71.7

Sta.	+	⊙	−	Road	Elev.
60				5.1	71.8
+50				4.8	72.1
61				4.5	72.4
+50				3.7	73.2
62				3.0	73.9
+50				1.6	75.3
63				0.2	76.7
T. P.	12.00	88.18	0.74		76.18
+50				9.1	79.1
64				6.9	81.3
+50				2.0	86.2
T. P.	11.61	99.07	0.72		87.46
65				8.5	90.6
+50				2.8	96.3
T. P.	11.62	110.00	0.69		98.38
66				7.7	102.3
+50				0.6	109.4
	35.23		2.15		

30th St. Road

Sta.	+	⊙	−	Rod	Elev.
T. P.	11.68	121.05	0.63		109.37
67				5.1	116.0
+25				0.8	120.2
T. P.	11.89	132.07	0.87		120.18
+50				7.9	124.2
+75				1.9	130.2
T. P.	11.58	143.28	0.37		131.70
68				9.0	134.3
T. P.	11.64	154.06	0.86		142.42
+50				10.2	143.9
+70				5.3	148.8
69				1.9	152.2
T. P.	11.92	165.55	0.43		153.63
+50				7.6	158.0
70				5.2	160.4
Plug +57				5.72	159.83
71				5.2	160.4
	58.71		3.96		

Sta.	+	⊙	−	Rod	Elev.
				5.4	160.2
+50				5.4	160.2
72				5.8	157.8
+50				6.0	159.6
73				6.9	158.7
+32.5				4.89	160.66
O.M. Cap, rock top 8"x4" Post				7.2	158.4
+50				9.5	156.1
74					155.16
T. P.	9.70	164.86	10.99	11.5	153.4
+50				11.0	153.9
75				9.0	155.9
+50				8.1	156.8
76				7.6	157.3
+50				6.6	158.3
77				5.0	159.9
+50				2.0	162.9
78					

South St. Road

Sta.	+	⊙	−	Rod	Elev.
T. P.	11.86	176.03	0.69		164.17
+50				10.2	163.8
79				7.4	168.6
+50				5.0	171.0
80				2.9	173.1
+50				0.9	175.1
T. P.	11.68	187.05	0.66		175.37
81				10.1	177.0
+50				7.7	179.4
82				5.2	181.9
+50				3.3	183.8
83				1.9	185.2
T. P.	11.00	197.43	0.62		186.43
+50				10.0	187.4
84				7.8	189.6
+50				5.8	191.6
85				3.8	193.6
	34.54		1.97		

Sta.	+	⊙	−	Rod	Elev.
+50				1.8	195.6
86				1.0	196.4
+50				3.6	193.8
Spk in Post Rec. South of B.M.				2.80	194.63
87				9.3	188.1
T. P.	1.92	187.52	11.83		185.60
+50				2.2	185.3
88				2.6	184.9
+50				5.4	182.1
89				8.5	179.0
+50				13.8	173.7
2x2' Post +65				13.7	173.8
90				8.1	179.4
+50				3.8	183.7
+65				2.8	184.7
T. P.	11.72	198.32	0.92		186.60
91				4.0	194.3
	13.64		12.75		

30th St. Road

Sta.	+	⊙	−	Rod	Elev.
T. P.	11.46	209.12	0.66		197.66
+50				7.1	202.0
92				1.0	208.1
T. P.	11.78	220.24	0.66		208.46
+50				7.4	212.8
93				4.3	215.9
+50				2.7	217.5
T. P.	10.70	229.96	0.98		219.26
94				11.5	218.5
+50				10.3	219.7
95				8.8	221.2
+50				8.8	221.2
96				6.6	223.4
+50				5.2	224.8
97				4.6	225.4
+50				3.1	226.9
98				3.0	227.0
	33.94		2.30		

Sta.	+	⊙	−	Rod	Elev.
+28 △ Cpk in Post NW Cor. 30th + A B.M.				3.0	227.0 chk ✓
	9.58	236.43	3.11		226.85
+50				8.5	227.9
99				7.9	228.5
+50				7.2	229.2
+70 △				6.8	229.6
100				6.6	229.8
+50				5.7	230.7
101				5.0	231.4
+50				3.7	232.7
102				3.5	232.9
+50				2.9	233.5
103				1.3	235.1
+50				1.4	235.0
T. P.	2.49	238.73	1.19		235.24
104				3.0	235.7
+50				2.8	235.9
	13.07		4.30		

30th St. Road

Sta.	+	⊙	−	Rod	Elev.
105				2.9	235.8
+50				3.3	235.4
106				4.2	234.5
+50				5.0	233.7
107				5.8	232.9
+50				5.8	232.9
108				6.1	232.6
+50				6.6	232.1
109				7.9	230.8
+50				9.4	229.3
110				10.3	228.4
T.P.	3.56	232.05	10.24		228.49
+50				4.4	227.7
Plug +70				4.41	227.64
111				4.7	227.4
+50				6.0	226.1
112				7.0	225.1

Sta.	+	⊙	−	Rod	Elev.
+50				7.0	225.1
+87.4				6.2	225.9
113				5.6	226.5
+50				3.3	228.8
T.P.	11.77	242.62	1.30		230.85
114				10.1	232.5
+50				7.3	235.3
115				4.4	238.2
+50				2.7	239.9
116				1.4	241.2
T.P.	10.93	252.72	0.83		241.79
+50				9.3	243.4
117				6.6	246.1
+50				4.9	247.8
118				6.5	246.2
+50				8.7	244.0
119				9.6	243.1
	22.70		2.03		

30th St. Road

Sta.	+	⊙	−	Rod	Elev
+50				8.3	244.4
+85				9.8	242.9
120				6.7	246.0
+50				1.8	250.9
T.P.	11.69	263.75	0.66		252.06
121				10.1	253.7
+50				6.9	256.9
122				4.8	259.0
+50				2.4	261.4
123				0.9	262.9
T.P.	11.76	274.86	0.65		263.10
+50				10.3	264.6
124				9.0	265.9
+50				7.3	267.6
125				6.2	268.7
+56				5.0	269.9
+94				4.3	270.6
	23.45		1.31		

Sta.	+	⊙	−	Rod	Elev
Spike in Post B.M. SW. Cor. Fem + Koth Ave				3.07	271.79
126+50				2.6	272.3
127+02.8 △				0.2	274.7
T.P.	6.95	281.28	0.53		274.33
+50				5.9	275.4
128				5.8	275.5
+50				5.7	275.6
129				5.5	275.8
+50				5.8	275.5
130				6.2	275.1
+50				6.1	275.2
131				5.9	275.4
+50				5.0	276.3
132				4.1	277.2
+50				3.7	277.6
133				2.0	279.3
+50				0.7	280.6

30 ft St. Road

Sta.	+	○	−	Rod	Elev.
T. P.	7.82	287.93	0.67		280.61
134				6.6	281.3
+50				6.3	281.6
135				5.3	282.6
+50				5.0	282.9
136				4.8	283.1
+50				5.2	282.7
137				5.3	282.6
+50				4.9	283.0
138				4.1	283.8
+40.3				3.6	284.3
Spike in Post S.E. cor Wm. and H. Biddle B.M.	6.55	289.95	4.53		283.40
139				6.9	283.1
+50				6.5	283.5
140				6.1	283.9
+50				5.1	284.9
141				6.4	283.6
	13.87		8.20		

Sta.	+	○	−	Rod	Elev.
+50				6.8	283.2
142				5.7	284.3
+50				4.1	285.9
143				4.0	286.0
+50				3.4	286.6
T.P.	5.75	292.24	3.46		286.49
144				5.5	286.7
+50				5.3	286.9
145				5.2	287.0
+50				4.6	287.6
146				4.7	287.5
+50				4.3	287.9
147				4.4	287.8
+50				3.9	288.3
148				4.1	288.1
+50				6.4	285.8
+64				7.9	284.3

South St. Road

Sta.	+	o	−	Rod.	Elev.
1½ x 2 bot					
+78				13.0	279.2
149				6.8	285.4
+50				3.8	288.4
T. P.	11.22	299.83	3.63		288.61
150				9.7	290.1
+50				8.7	291.1
151				8.1	291.7
+50				7.5	292.3
152				6.8	293.0
Plug +14				6.58	293.25
+50				6.0	293.8
153				4.9	294.9
+50				4.3	295.5
154				3.7	296.1
+50				3.2	296.6
155				2.4	297.4
T. P.	7.06 - 18.28	304.48	2.41 6.04		297.42

Sta.	+	o	−	Rod.	Elev.
+50				6.4	298.1
156				5.5	299.1
+50				5.1	299.4
157				4.9	299.6
+50				4.9	299.6
158				4.8	299.7
+50				4.9	299.6
159				5.3	299.2
+50				5.3	299.2
160				5.0	299.5
+50				4.3	300.2
161				2.8	301.7
T. P.	4.81	306.75	2.54		301.94
+50				3.4	303.4
162				2.7	304.1
+50				2.4	304.4
163				1.8	305.0

30th St. Road

Sta.	+	⊙	−	Rod	Elev.
+50				3.2	303.1
164				6.4	310.9
T.P.	0.90	295.67	11.98		294.77
+50				1.5	294.2
165				4.8	290.9
+50				8.3	287.4
T.P.	2.12	285.89	11.90		283.77
166				3.7	282.2
+50				5.2	285.7
+75				7.4	278.5
T. +90				12.4	273.5
T.P.	2.40	276.89	11.40		274.49
Bridge 167+10				11.8	265.1
T.P.	10.93	287.07	0.75		276.14
+45				8.0	279.1
T.P.	11.44	298.14	0.37		286.70
168				9.4	288.7
	27.79		36.40		

Sta.	+	⊙	−	Rod	Elev.
+50				4.8	293.3
169				2.4	295.7
+50				2.3	295.8
170				3.3	294.8
+50				1.4	296.7
T.P.	11.86	308.94	1.06		297.08
171				10.4	298.5
+50				8.6	300.3
172				6.7	302.2
+50				4.0	304.9
173				1.4	307.5
+50				1.6	307.3
174				3.5	305.4
+50				4.5	304.4
175				4.5	304.4
+50				5.3	303.6
176				6.3	302.6

30th St. Road

Sta	+	⊙	−	Rod	Elev.
T. P.	0.96	303.73	6.17		302.77
+50				1.2	302.5
177				1.9	302.8
+50				3.2	300.5
178				4.9	298.8
+50				6.0	297.7
179				6.6	297.1
+30				8.1	295.6
+50				11.8	291.9
180				11.4	292.3
+30				6.8	296.9
+50				6.3	297.4
181				5.5	298.2
+50				4.2	299.5
182				3.2	300.5
Plug +25	△ 6.30	306.47	3.56		300.17
+50				5.9	300.6
	7.26		9.73		

Sta.	+	⊙	−	Rod	Elev.
183				4.5	302.0
+50				3.7	302.6
184				3.3	303.2
+50				3.5	303.0
185				4.2	302.3
+50				5.8	300.7
+75				7.2	299.3
Plug +88	△ 0.82	295.82	11.47		295.00
186				4.9	290.9
Bridge +30				13.0	282.8
+50				6.3	289.5
+60				5.7	290.1
+62				3.0	292.8
T. P.	11.30	306.57	1.55		294.27
+81				7.1	298.5
187				5.8	299.8
+50				4.9	300.7
	17.17		13.27		

30th St. Road

Sta.	+	⊙	−	Rod	Elev.
188				2.9	303.1
T. P.	11.33	316.57	0.33		305.24
+50				10.6	306.0
189				7.0	309.6
+50				5.9	310.7
190				4.8	311.8
+50				2.6	314.0
191				1.4	315.2
Plug +23	11.47	327.21	0.83		315.74
+50				10.3	316.9
192				8.0	319.2
+50				6.8	320.9
193				5.1	322.1
+50				4.0	323.2
194				2.6	324.6
+50				1.7	325.5
195				0.8	326.4
	22.80		1.16		

Sta.	+	⊙	−	Rod	Elev.
T. P.	8.53	335.02	0.72		326.49
+50				7.9	327.1
196				7.5	327.5
+50				6.5	328.5
197				5.8	329.2
+50				5.5	329.5
+82.3 Sta. on Conc. S.E. Mark of Conc. B.M.				5.2	329.8
				3.43	331.57
198				4.8	331.2
+50				3.6	331.4
199				2.9	332.1
+50				2.2	332.8
200				1.8	333.2
+50				1.1	333.9
T. P.	7.41	341.32	1.11		333.91
201				7.5	333.8
+50				6.9	334.4
	15.94		1.83		

30th. St. Road

Sta.	+	⊙	−	Rod	Elev.
202				6.2	335.1
+50				6.1	335.2
203				6.0	336.3
+50				5.6	335.7
204				4.6	336.7
+50				4.6	336.7
205				4.0	337.3
+50				3.6	337.7
206				3.5	337.8
+50				3.3	338.1
207				3.0	338.3
+50				3.0	338.3
T.P.	4.28	342.75	2.85		338.47
208				4.5	338.3
+50				4.0	338.8
209				5.0	337.8
+50				5.0	337.8

Sta.	+	⊙	−	Rod	Elev.
210				4.6	338.2
+50				5.1	337.7
211				4.8	338.0
+50				4.2	338.6
212				3.3	339.5
+50				2.9	339.9
213				2.2	340.6
+50				1.8	341.0
214				0.9	341.9
T.P.	9.04	350.92	0.87		341.88
+50				8.7	342.2
215				8.2	342.7
+50				7.5	343.4
216				6.1	344.8
+50				5.9	345.0
217				5.2	345.7
+50				4.3	346.6

30th St. Road

Sta.	+	⊙	−	Rod	Elev
218				3.8	347.1
+50				3.1	347.8
219				2.7	348.2
+50				2.0	348.9
220				1.4	349.5
+50				0.7	350.2
T. P.	7.10	357.26	0.76		350.16
221				6.3	351.1
Plug +52.8 △				5.62	351.64
222				4.8	352.5
+50				5.0	352.3
223				5.2	352.1
+50				4.6	352.7
224				4.3	353.0
+50				4.1	353.2
225				3.0	354.3
T. P.	8.42	362.69	3.99		354.27
	15.52		3.75		

Sta.	+	⊙	−	Rod	Elev
+50				7.3	355.4
Cor. Avon & University +93.4 △				6.83	355.86
226 +50				6.2	356.5
227				6.0	356.7
+50				5.9	356.8
228				5.4	357.3
+50				5.0	357.7
229				4.3	358.4
+50				4.5	358.2
230				3.5	359.2
T. P.	7.77	366.87	3.09		359.60
+50				7.0	359.9
231				6.6	360.3
+50				6.0	360.9
232				5.7	361.2
+50				5.2	361.7
+60				4.7	362.2

30th St. Road

Sta.	+	⊙	−	Rod	Elev.
Old R.R. Cut					
+64				7.1	359.8
+77				7.1	359.8
+81				4.8	362.1
233				4.9	362.0
+50				5.1	361.8
234				4.7	362.2
+50				4.8	362.1
235				4.5	362.4
T.P.	5.42	368.10	4.19		362.68
+50				5.7	362.4
236				6.0	362.1
+50				5.4	362.7
237				5.9	362.2
+50				6.6	361.5
238				8.3	359.8
+50				9.4	358.7
239				10.3	357.8

Sta.	+	⊙	−	Rod	Elev.
+50				10.5	357.6
240				11.2	356.9
T.P.	5.80	362.92	10.98		357.12
+50				5.8	357.1
241				7.4	355.5
Ex. Ex. Bot. +50				7.5	355.4
242				7.7	355.2
+50				5.8	357.1
243				4.7	358.2
+50				4.8	358.1
244				4.1	358.8
+50				3.5	359.4
T.P.	12.85	370.40	3.37		359.55
245				10.5	359.9
+50				9.8	360.6
246				9.2	361.2
+50				8.6	361.8
	16.65		14.35		

30th St. Road

Sta.	+	⊙	−	Rod	Elev.
247				7.7	362.7
+50				6.2	364.2
248				5.6	364.8
+50				3.9	366.5
T. P.	10.71	378.73	2.38		368.02
249				9.3	369.4
+50				9.0	369.7
250				6.4	372.3
+50				5.6	373.1
Cent. Cyn. & Iowa					
+86				4.0	374.7
B.M.					
Pkg. S.W. Iowa					
& Cyn. Ave.			7.07		371.66
					(371.77)
					Levels Nov.
	10.71		9.45		

9/3/02 Levels for Road, from a point on A St., near 32nd St., to 33rd and F Sts.

Survey Dan. Bown

Sta.	+	⊙	−	See Page 68
Peg	1.75	229.63		227.88
Pkg 43+90 △			4.92	224.7
44+50			8.1	221.5
45			11.1	218.5
T. P.	0.93	218.96	11.60	218.03
+50			3.7	215.3
Pkg +83 △			6.55	212.41
46			6.8	212.2
+50			9.7	209.3
47			11.7	207.3
T. P.	0.96	207.96	11.96	207.00
+50			3.6	204.4
48+03 △			7.5	200.5
+50			12.2	195.8
T. T.	0.47	197.07	11.36	196.60
49			3.5	193.6
+50			6.2	190.9
	4.11		34.92	

Sta.	+	⊙	−	Rod	Elev.
50				8.1	189.0
+50				10.0	187.1
T. P.	2.47	187.54	12.00		185.07
+59 △				3.0	184.5
51				3.9	183.6
+50				6.1	181.4
52				8.7	178.8
+50				9.6	177.9
+67				9.6	177.9
T. P.	0.96	176.80	11.70		175.84
53				3.9	172.9
+50				7.9	168.9
Plug +90 △	0.52	168.03	9.29		167.51
54 +16				10.4	157.6
+38				12.2	155.8
+50				11.1	156.9
+90 △				2.4	165.6
	3.95		32.99		

3+6 left

Sta.	+	⊙	−	Rod	Elev.
55				2.3	165.7
+35				0.2	167.8
+50				2.9	165.1
56				8.2	159.8
1/2 23 Apt +30				11.4	156.6
+50				8.6	159.4
57				3.6	164.4
+50				3.5	164.5
58				5.8	162.2
+19				6.6	161.4
+50				13.8	154.2
Plug +74 △	3.31	164.66	6.68		161.35
59				3.3	161.4
+50				5.7	159.0
60				6.4	158.9
+50				6.0	158.7
+68				7.2	157.5

Sta.	+	⊙	−	Rod	Elev.
T. P.	0.28	153.35	11.59		153.07
61				4.0	149.4
+15				6.9	146.5
+50				8.5	144.9
62				10.6	142.8
+17				10.3	143.1
+50				6.1	147.3
Plug +90 △				3.80	149.55
63				3.0	150.4
+30				1.5	151.9
+50				9.0	144.4
T. P.	5.75	147.67	11.43		141.92
+62				8.1	139.6
64				9.7	138.0
+40				1.3	144.4
+50				1.0	146.7
+75				5.0	142.7
	6.03		23.02		

Sta.	+	⊙	−	Rod	Elev.
Plug +99 △				3.43	144.24
65+21				9.4	138.3
+50				7.4	140.3
66				9.4	138.3
+50				10.9	136.8
+75				13.4	134.3
67				12.0	135.7
+23				9.5	138.2
+50				10.9	136.8
68				12.4	135.3
T. P.	2.18	137.98	11.87		135.80
+50				2.8	135.2
69				4.4	133.6
Plug +10 △				4.39	133.59
+50				5.4	132.6
70				7.4	130.6
+50				9.4	128.6

Sta.	+	⊙	−	Rod	Elev.
71				9.6	128.4
+50				11.6	126.4
T. P.	1.33	127.50	11.81		126.17
72				4.2	123.3
+50				8.9	118.6
+75				9.5	118.0
T. P.	4.97	120.69	11.78		115.72
73				8.3	112.4
2'+2' Brk +15				12.2	108.5
+50				5.2	115.5
T. P.	6.34	124.84	2.19		118.50
74				2.8	122.0
+30				1.9	122.9
+50				3.0	121.8
75				6.4	118.4
+50				8.4	116.4
76				9.1	115.7
	17.64		25.78		

Sta.	+	⊙	−	Rod	Elev.
+50				11.0	113.8
Brg +63.5	0.85	114.02	11.67		113.17
77				3.3	110.7
+50				4.2	109.8
78				4.1	109.9
+50				5.8	108.2
79				7.3	106.7
+50				8.3	105.7
80				9.1	104.9
+50				10.7	103.3
T. P.	0.70	103.01	11.71		102.31
81				3.0	100.0
+50				7.4	95.6
82				9.2	93.8
+50				10.6	92.4
83				11.1	92.9
+50				11.4	91.6
	1.55		23.38		

Sta.	+	○	−	Rod	Elev.
T. P.	3.96	95.70	11.27		91.84
84				4.6	91.1
+50				4.2	91.5
85				4.1	91.6
+50				4.6	91.1
86				5.7	90.0
+50				8.1	87.6
Ante 4th Md 33rd (approx)					
↓ +76				8.7	87.0
Spike in post N.W. Cor. 33rd/4			6.61		89.09 chk

BM 51,51
+ 0.80
H.I. = 51.81
− 10.03
41.78
+ 3.76
H.I. 45.54
6.51
T.P. 39.03
5.11
44.14

51,51
2.09
53.60
11.42
42.18
2.54
44.72
4.92
39.80

℄ 44.72
− 5.07
T.P. 39.65
+ 4.00
H.I 43.65
− 0.85
T.P. 42.80
8.74
℄ 51.54

44.81
44.72
.09

51,54
47.50
4.04

51.75
51.54
21

51,81
48.25
3.56

51.81
47,
X81

45.54
44.37
1.17

51.81
47.62
4.19

45.54
44.81
.73

44.14
43.87
.27

44.14
43.25
.89

43.87
43.65
22

44.19
43.65
.54

43,65
43.25
40

Pipe Line, K St. Ext.

30th and 33rd Sts

Sta.	+	⊙	−	Cut	Elev. Nozzle Hydrant 30th + M. 76.57	Grade	Cut
B.M.	1.50	78.07					
T.P. W. line 30th	5.63	78.18	5.52				
−60				6.3	71.9	66.53	5.4
Cente −30				5.9	72.3	66.53	5.8
E. line 30th 0				6.2	72.0	66.53	5.5
+50				5.9	72.3	67.17	5.1
1				5.7	72.5	67.81	4.7
+50				5.5	72.7	68.45	4.2
2				5.1	73.1	69.09	4.0
+50				4.5	73.7	69.74	4.0
3				4.1	74.1	70.38	3.7
+50				3.5	74.7	71.02	3.7
4				3.1	75.1	71.66	3.4
+50				1.6	76.6	72.30	4.3
5				0.9	77.3	72.94	4.4
+50				0.5	77.7	73.58	4.1
W line 31st 6				0.5	77.7	74.22	3.5

76.57
1.50
78.07
5.52
72.55
5.63
78.18

54.53 Off in tel. pole S.E. Milton + 26th
40.02 " " pole N.E. Newton + 26th
66.31 N. Hinge Hydrant Logan + 26th
55.20 N. " " National + 27th
43.11 N.E. Plug Topeka + 30th
65.74 S.E. N. Hinge Hydt, National + 30th

B.M.	Fifth and University, Spike
	S.W. Cor. 289.88
11.98	Cop. Tack in E. Pier, South end of Iron Bridge
269.75	Fourth and Redwood, N.E. tacks in Water Table
272.96	Third and Redwood N.W. Cor.
37.98	India Rd Palmira Spk in Elec Pole N.W. cor
No 7	Spike in cor post East side of Hickory
252.17	and Southerly Boundary of Old Town
284.69	Fifth and Walnut Spk in Elec Pole S.W. Cor.
106.90	Chy N.W. cor 33rd + K
109.50	" S.E. " " " "
71.97	(S.W. Cor.) Hydrant (31 ft Nat)
11.98	Cop. Tack in Pier of Bridge (Old Town)
96.11	Spk in fence post N.E. cor 26th + K
103.46	Cop. Tack Top fence post N.W. 22nd + K

57-41

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

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

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City Hall, San Diego, Cal.

TABLE FOR RUNNING ON SLOPES.

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

Angle	Cor. in Links	Angle	Cor. in Links	Angle	Cor. in Links	Angle	Cor. in Links
o		o		o		o	
4	0.24	11	1.88	18	5.14	25	10.54
5	0.38	12	2.24	19	5.76	26	11.26
6	0.55	13	2.63	20	6.42	27	12.24
7	0.76	14	3.06	21	7.11	28	13.37
8	0.98	15	3.53	22	7.85	29	14.34
9	1.24	16	4.02	23	8.64	30	15.47
10	1.55	17	4.56	24	9.47	35	22.07

Levels on Main St. from 26th. to 31st Streets.
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Levels on 30th St. from Main St. to Cajon Ave.
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Levels for Road, from a Point on "A" St. near 32nd. to 33rd and F. "St.
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Pipe Line on "K" St. between 30th. and 32nd St.
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