1132

DIETZGEN

ENGINEERS

FIELD BOOK

No. 494

EUGENE DIETZGEN CO.

DRAWING MATERIALS, MATHEMATICAL and SURVEYING INSTRUMENTS

Chicago New York San Francisco New Orleans Pittsburg Toronto

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

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

Example—If point is 22.6 ft. above grade, how far should it be from center line the a slope stake point? Ans. from Table 30.6. For same slopes but other widths of roadbed, correct above figures by one-half difference in width of roadbed; thus in example above, for 20 ft. roadbed distance will be 30.6+(20—16)÷2 or 2 ft. added to 30.6 =32.6. For slopes of 1 on 1½ see inside of back cover.

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MICROFILMED

1138 BOYD

L_2 0+00 to 3+25.0	50-51
L_2 3+25.0 to 5+70.0	47
L_2 7+33.8 to 12+15.8	72-73
M_2 0+00 to 11+83.60	54-55
N_2 0+00 to 5+22.50	56
O_2 0+00 to 4+72.5	46-47
Q_2 0+00 to 3+82.27	42
R_2 0+00 to 3+15.0	42
S_2 0+00 to 2+30.0	43
T_2 0+00 to 3+01.05	40
U_2 0+00 to 1+22.5	40
V_2 0+00 to 1+62.9	33 & 35
V_2 1+62.9 to 10+38.4	52-53
W_2 0+00 to 5+95.5	53
X_2 0+00 to 5+75.7	34-35
X 0+00 to 3+30	18
Y 0+00 to 1+69.0	7
A_3 0+00 to 4+00	76
U 0+00 to 7+14	16

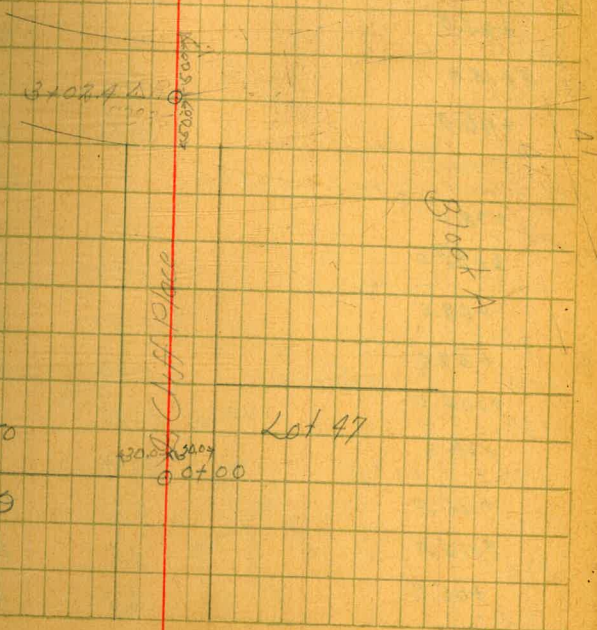
Normal Heights Sewers
Levels Cliff Pl. + Mission Dr
From So. Line Lot 49 to E Line 41 Bl. A

B-Lateral.

BM NE Cor. Cliff + Mission Dr	4.57	399.32		394.75
B 0+00 = Lot 49+50 Bl A			7.8	1.5
+50			7.3	2.0
1+00			6.7	2.6
+50			6.0	3.3
2+00			5.4	3.9
+50			5.0	4.3
B 3+02.4 = Δ 97°35' R			4.86	394.46 ?
A				
+50			5.0	
4+00			5.1	
+18.2 ⊙ ℄ Alley				
+50			4.9	
5+00			4.6	
+50			4.7	
6+00			4.8	
+50			4.8	
7+00			4.6	
+53.2 = Lot 41+43.2 Bl A			4.62	

7-21-25 3

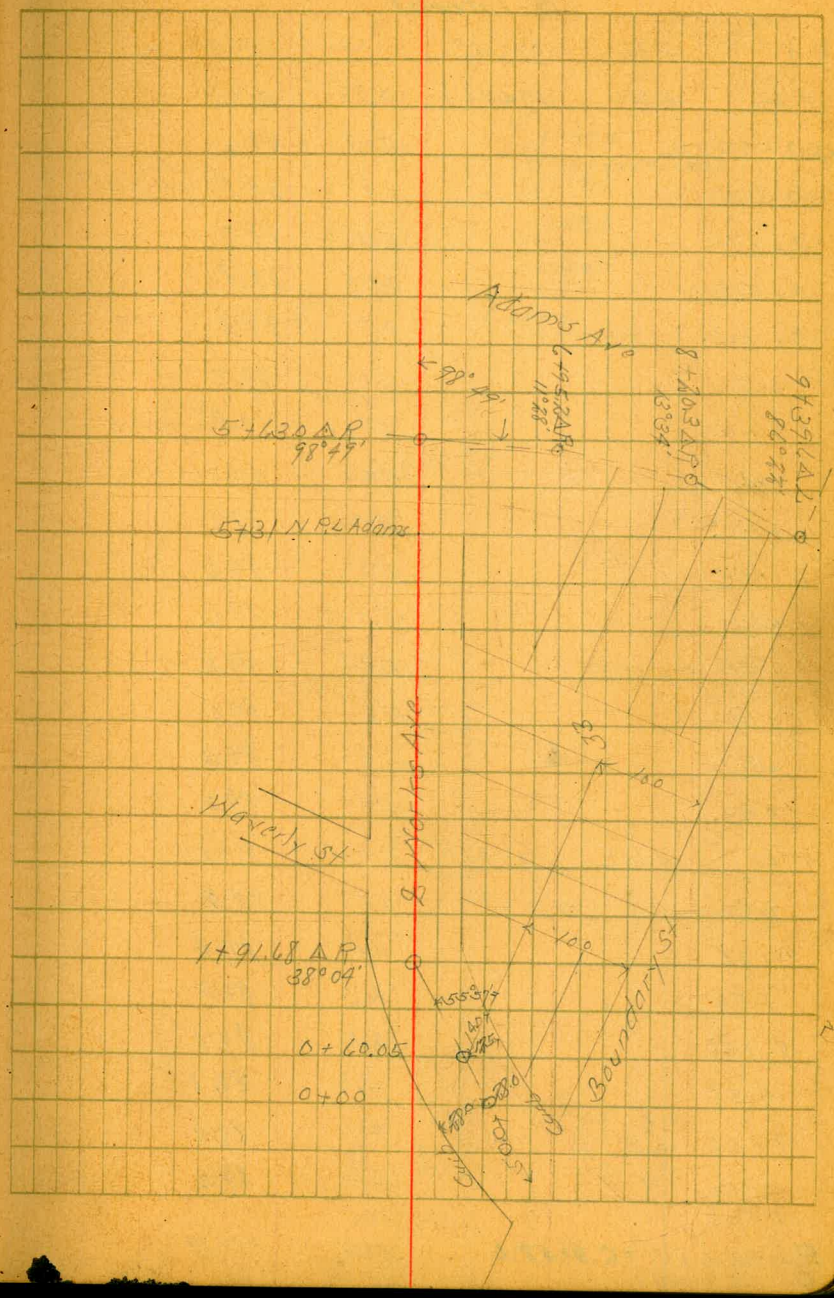
This 1' above A line



Normal Heights Sewers
Levels Morks Ave And Adams Ave
From Lot 15+16 B1.33 to Existing Man Hole

N.E Adams + Missouri Dr BM	1.75	390.84		389.09
T.P	5.19	388.67	7.36	383.48
V 0+15.0				
0+00			4.23	6.44
+65.0				
+50			3.1	5.6
1+15.0				
1+00			3.6	5.1
+65.0				
+50			4.0	4.7
2+06.68				
+91.68 ΔR 38°04			4.65	4.1
+15.0				
2+00			4.6	4.1
+65.0				
+50			5.0	3.7
3+15.0				
3+00			4.8	3.9
+65.0				
+50			4.2	4.5
4+15.0				
4+00			3.0	5.7
+65.0				
+50			1.9	6.8
5+15.0				
5+00			0.9	7.8
+46.0				
+31 Top Pav			0.36	8.3
S.E. Adams + Boundary BM	3.99	394.93		390.94 ?
+78.0				
+63			5.88	9.0
6+02.0				
+93.0 Top Pav			6.50	8.4
+08.5				
+93.5 " Curb			5.91	9.0
+59.0				
6+44 E End Conc Drive			5.40	9.5
7+04.0				
+89 " " "			5.22	9.7
+10.2				
+95.2 ΔR 11°28'			5.09	9.8
+65.0				
7+50			4.9	90.0
8+15.0				
8+00			4.6	90.3
+65.0				
+50			4.3	90.6

Cont Page 12



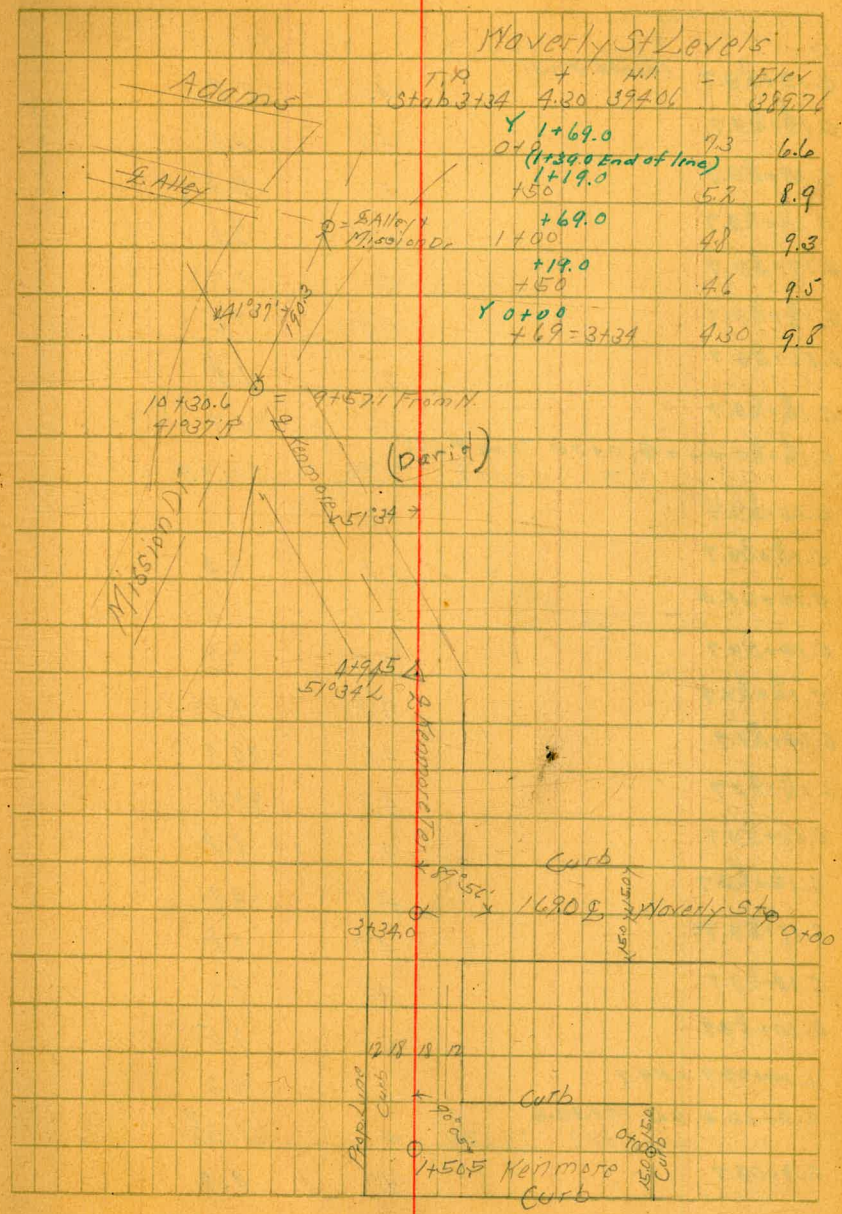
Normal Heights Sewers

Kenmore Terrace And Waverly St

From No. End Kenmore to Center Mission Dr

D-Laterol

N.E. Adams + Mission Dr.				
B.M.	4.39	393.48		389.09
T.P.	5.50	394.71	4.27	389.21
D 0+00 T.Cb.			5.08	89.6
+50			4.9	89.8
1+00			5.0	89.7
+50.5 △			4.92	89.8
2+00			4.8	89.9
+50			5.0	89.7
3+00			4.9	89.8
+34.0 ⊙			4.95	389.76
+50			5.0	89.7
4+00			5.1	89.6
+50			5.1	89.6
+94.5 △L 51°34'			5.24	89.5
5+00			5.2	89.5
+50			5.4	89.3
6+00			5.5	89.2
T.P.	4.46	393.67	5.50	389.21
+50			4.5	89.2
7+00			4.4	89.3
+50			4.2	89.5
8+00			4.5	89.2
+50			4.6	89.1
9+00			4.7	89.0
+50			4.4	89.3
10+00			10.6	
D/C +30.6 △R = C. 9+52.6 = 9+57.1			4.38	389.29



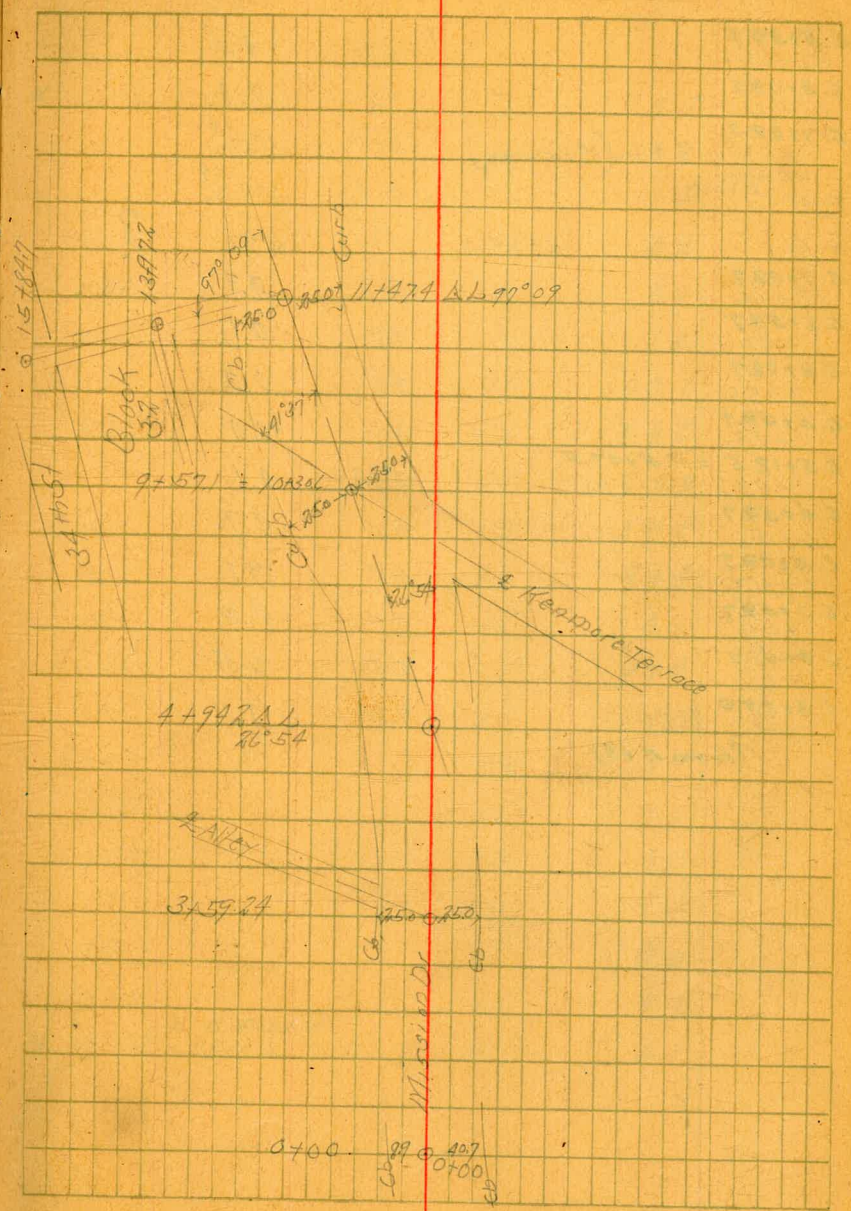
Waverly St Levels

T.P.	+	H.I.	−	Elev
Stub 3+34	4.30	394.06		389.76
Y 1+69.0 (1+39.0 End of line)				
0+0			7.3	6.6
1+19.0				
+50			5.2	8.9
+69.0				
1+00			4.8	9.3
+19.0				
+50			4.6	9.5
Y 0+00				
+69 = 3+34			4.30	9.8

Sewer Levels

Mission Dr. From Lot Line 34+35 Block "A"
Through Block 32 to Center 34 St.

S.E. McKinley + Mission Dr.				
BM	3.77	397.63		393.91
C.19+59.7 (contd. P. 7+)				
0+00				
C.18+59.7			48.5	2.8
+50				
C.18+59.7			48	2.8
1+00				
C.18+59.7			51	2.5
+50				
C.17+59.7			55	2.1
2+00				
C.17+59.7			59	1.7
+50				
C.16+59.7			58	1.8
3+00				
C.16+59.7			58	1.8
+50				
C.15+50.46 = G. 0+00 (See P. 29)			59	1.7
T.P. +59.40	2.75	394.58	58.8	391.75
C.15+59.7 ℄ Alley				
4+00			28	1.7
C.15+59.7				
+50			32	1.3
C.14+65.5				
+94.7 ΔL 26°54			32.4	1.3
C.14+59.7				
5+00			33	1.2
C.14+59.7				
+50			34	1.1
C.13+59.7				
6+00			42	90.3
C.13+59.7				
+50			42	90.3
C.12+59.7				
7+00			47	9.8
C.12+59.7				
+50			46	9.8
C.11+59.70				
8+00			47	9.8
C.10+59.7				
+50			48	9.7
C.10+59.7				
9+00			50	9.5
C.10+09.7 +59.7				
+50			52	9.3
C.9+52.6 = D. 10+30.6				
T.P. +57.1 = 10+30.6	3.93	393.25	57.0	389.32
C.9+09.7				
10+00			49	8.3



10 Mission Dr. Cont. From Page 8

		393.23			
C. 8+59.7					
10+50			4.5	8.4	
C. 8+09.7					
11+00			4.8	9.0	
C. 7+62.3					
+47.4	℄ Alley (Mission)		4.04	389.28	
N.E. Adams + Mission					
B.M.			4.14	389.28	
T.P.	5.82	395.03		389.21	?
C. 7+09.7					
12+00			5.3	9.7	
C. 6+59.7					
+50			4.9	0.1	
C. 6+09.7					
13+00			4.8	0.2	
C. 5+59.7					
+50			5.0	90.0	
C. 5+12.5	= H. 5+07.5				
+97.2	℄ Alley North		4.94	0.1	
C. 4+59.7					
14+50			5.3	9.7	
C. 4+09.7					
15+00			5.9	9.1	
C. 3+59.7					
+50			6.7	8.3	
C. 3+41.7					
+68			8.5	6.5	
C. 3+25.0					
+84.7	℄ 34th St.		7.90	7.1	
(From P. 68)					

Normal Hts. Servers

Levels Block 32 No. & So. Alley
From Lot 1+2 - 28+29 to ℄ E & W Alley

Sta.	+	H.I.	−	Elev.
		395.03		
H 0+00 - Lot 1+2 Blk 32			1.5	3.5
+50			2.3	2.7
1+00			3.6	1.4
+50			4.1	0.9
+65			4.1	0.9
+75			3.7	1.3
2+00			4.9	90.3
+50			5.8	89.8
+63			4.7	90.3
3+00			5.2	89.8
+67			4.2	90.8
+50			4.8	0.2
+63			5.8	89.8
+85			4.0	1.0
4+00			5.3	9.7
+15			5.8	9.2
+50			5.9	9.1
+70			5.6	9.4
+80			4.8	0.2
5+00			5.1	9.9
H +07.5	= C. 5+12.5 = 13+97.2 E & W		4.94	0.1

Sewer
Levels Works Ave Cont From Page 4

	394.93		
V 9+15.0			
9+00		4.10	90.8
+16.0			
+01	Top Curb	4.14	90.8
+16.5			
+01.5	" Pav	4.46	90.4
+54.6			
+39.64	" "	4.55	90.4
+87.0	Center Do Track		
+72	Top Rail	4.26	90.6
10+15.0			
10+00	Top. Pav	4.62	90.3
+27.0			
+12	So. Edge Paving	4.33	90.6
+51.2	Bot. Track		
+36.2	E Man Hole	8.62	86.3
	Flow Line	10.82	84.1

Levels on Servers
41 St + Mason Place + Mission Dr.
From Lot 114 + 115 B1 A to P.I. E + W Alley Bl. 13 + Mission Dr

S.H. Mission Dr + 41 St.				
BM	3.56	398.98		395.42
T.P	3.39	394.18	8.19	390.79
0+00			9.2	5.0
+50			8.5	5.7
1+00			7.8	6.4
+50			7.4	6.8
2+00			6.8	7.4
+50			6.2	8.0
3+00			5.5	8.7
+10.0 ΔL 51°15'			5.39	8.8
+50			5.1	9.1
4+00			4.7	9.5
+50			4.2	90.0
5+00			3.6	0.6
+50			3.2	0.9
6+00			2.9	1.3
T.P.	7.76	399.21	2.73	391.45
+50			7.6	1.6
7+00			7.0	2.2
+50			6.6	2.6
8+00			6.1	3.1
+50			5.5	3.7
9+00			5.1	4.1
+50			4.8	4.4
10+00			4.3	4.9

+7.23.25

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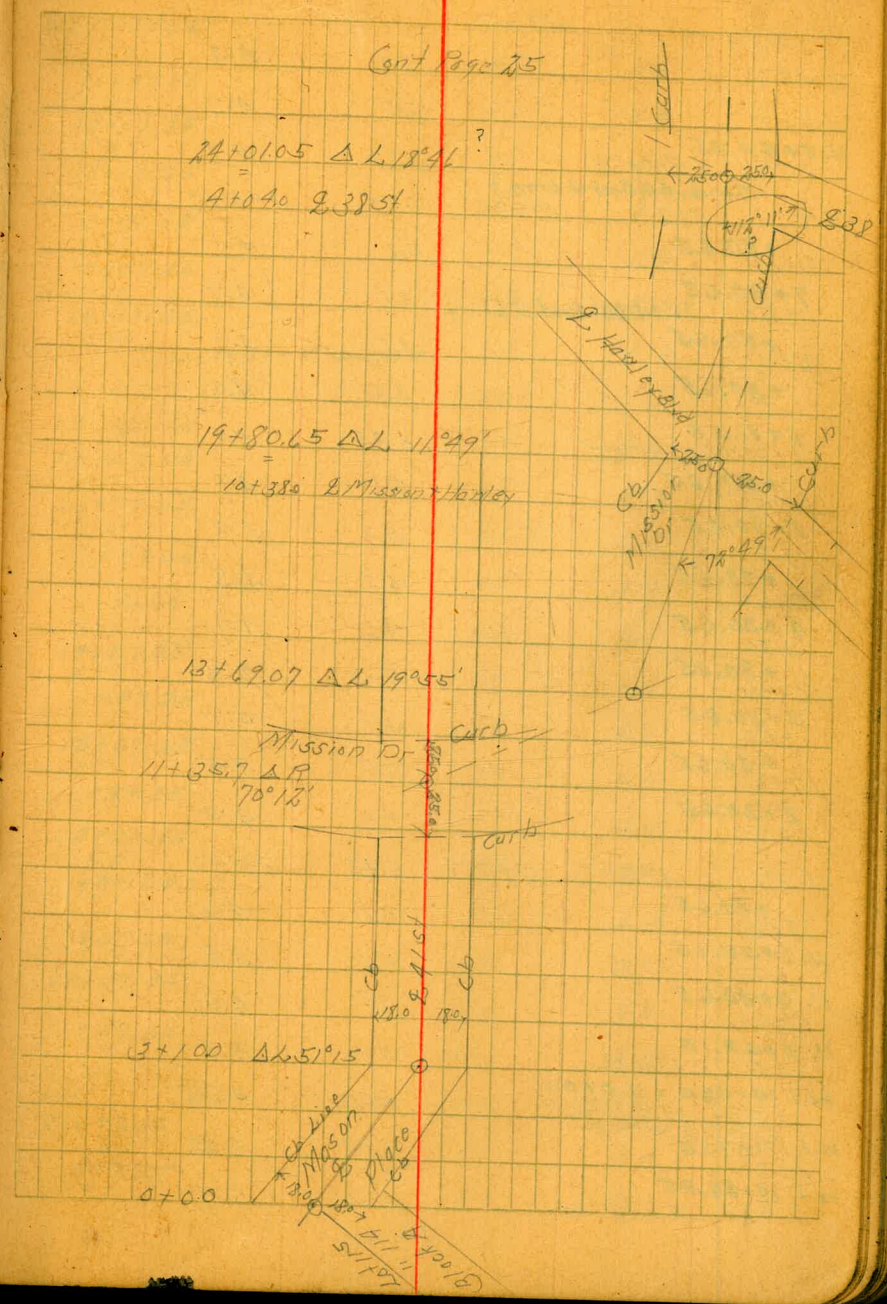

Sewer Levels

Mission Dr. Con't From Page 14

		399.21		
10+50			3.9	5.3
11+00			3.5	5.7
U. 8+44.95 +35.7 ΔR 70°12'			3.37	5.8
~~7+14.00 (End U. Line)~~				
T.P.	3.92	399.34	3.79	395.42
+80.65 12+00			4.2	5.1
7+30.65 +50	7+14.00 (End U. Line)		4.6	4.7
+80.65 13+00			4.6	4.7
+30.65 +50			4.4	4.9
6+11.58 +69.07 ΔL 19°55'			4.34	5.0
+80.65 14+00			4.6	4.7
5+30.65 +50			4.3	5.0
+80.65 15+00			4.5	4.8
4+30.65 +50			4.6	4.7
+80.65 16+00			5.0	4.3
3+30.65 +50			5.6	3.7
+80.65 17+00			5.8	3.5
2+30.65 +50			6.0	3.3
T.P.	4.85	398.77	5.42	393.92
+80.65 18+00			5.2	3.6
U. 1+30.65 +50			5.0	3.8
U. 0+80.65 19+00			4.8	4.0
U. 0+42.15 +38.5 E Edge Pav.			5.0	3.8
W.I. 10+38.0 = U. 0+00 +80.65 ΔL (19°55) ? = 10+38 S Hanley Blv.			4.95	3.82
W.I. 10+57.35 20+00			4.95	3.82
W.I. 10+84.35 +27 W Edge Pav.			5.10	3.7

Mission Drive Con't

		398.77		
W.I. 11+07.35 20+50			4.7	4.1
11+57.35 21+00			5.0	3.8
12+07.35 +50			4.8	4.0
12+57.35 22+00			4.7	4.1
13+07.35 +50			4.3	4.5
13+57.35 23+00			3.8	5.0
14+07.35 +50			3.5	5.3
T.P. on Stab 14+58.49 = T. 4+04.0				
24+01.05 ΔL 3.44 = 4+04 238.54		399.12	3.09	395.68
15+07.35 +50			3.5	5.6
15+57.35 25+00			3.8	5.3
16+07.35 +50			4.1	5.0
+57.35 26+00			4.2	4.9
+86.45 +29.1 ΔL 14°00'			4.28	4.8
17+07.35 +50			4.2	4.9
+57.35 27+00			4.4	4.7
18+07.35 +50			4.7	4.4
+57.35 28+00			4.7	4.4
19+07.35 +50			4.9	394.22
+80.20 = J. +72.85 ΔL 12°39'			5.02	4.10
+57.35 29+00			5.2	3.9
20+07.35 +50			5.3	3.8
+57.35 30+00			5.6	3.5
B.M. N.E. Arthur + Mission T.P.	3.85	397.34	5.63	393.49
21+07.35 +50			4.0	3.3
+57.35 31+00			4.2	3.1

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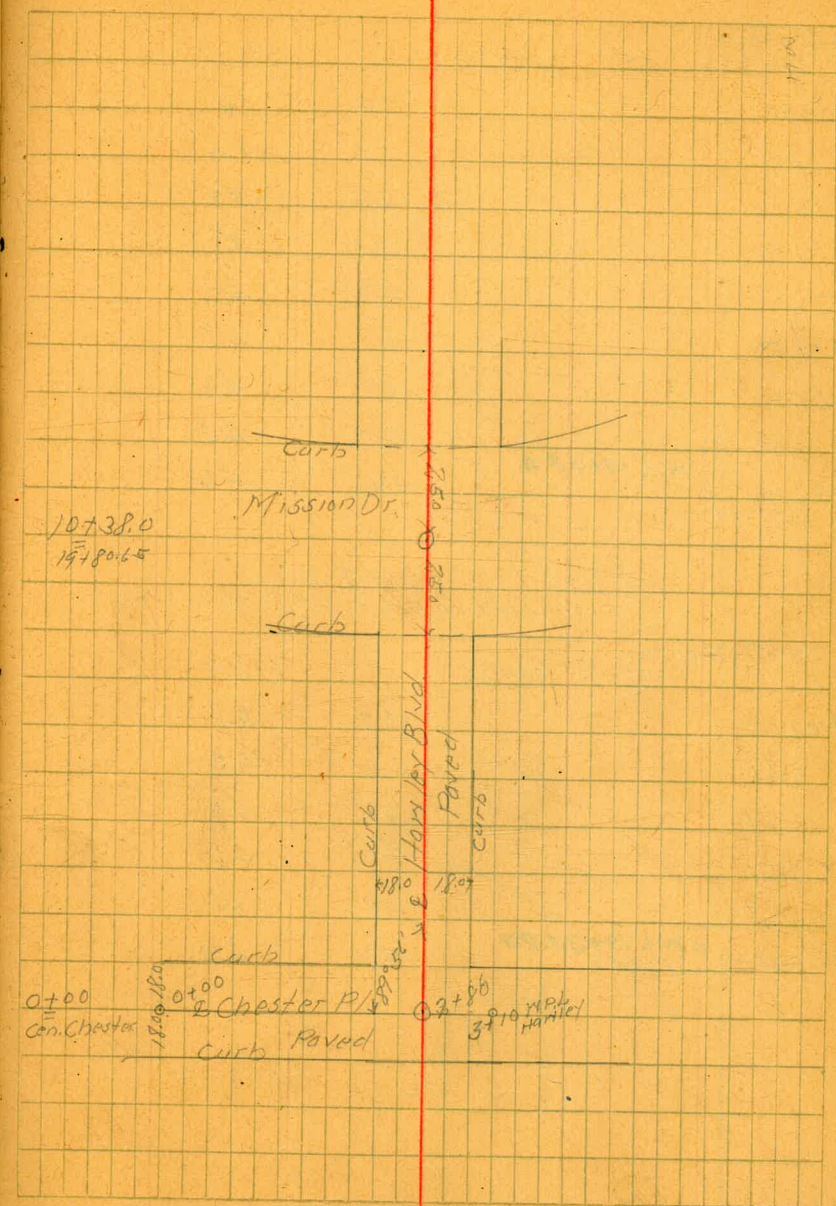
Sewer Levels

Chester Place		From East End to W.P. Line of Harley Blvd.		Note: Harley Blvd & Chester Place is Paved
S.W. Mission & Harley Blvd.				
B.M.	3.85	397.86		394.01
T.P.	4.63	397.59	4.90	392.96
T.P. = E End Chester Place	4.85	397.03	5.41	392.18
X 0+00 Top Pav			4.6	2.4
1+00 " "			4.9	2.1
2+00 " "			5.1	1.9
+80 = 0+00 ℄ Harley			5.23	1.8
X 3+10 = W.P.L. Harley			5.4	1.6
(X 3+30 End of line)				

Harley Blvd		From Center Chester Pl to Center Mission Dr.		
		397.03		
W.I. 0+0 = 2+90 Chester Pl			5.23	91.8
1+00			5.0	2.0
2+00			4.7	2.3
3+00			4.5	2.5
4+00			4.4	2.6
T.P.	5.75	398.17	4.61	392.42
5+00			5.3	2.9
6+00			5.1	3.1
7+00			5.0	3.2
8+00			4.8	3.4
9+00			4.6	3.6
10+00			4.5	3.7
W.I. 10+38.0 = 19+80.65 ⊥ ℄ Mission Dr			4.35	3.82

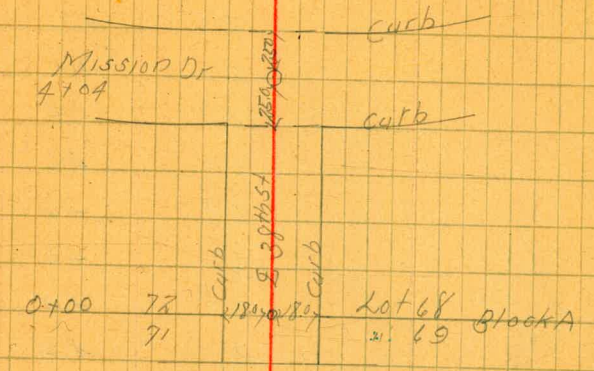


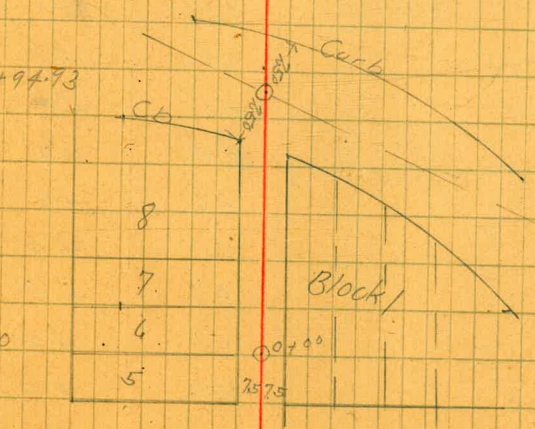
38th St. Levels Sewers
or Flora Place From Lot Line 68+69 to Center Mission Dr.

T.P. stub @ 24+01.05 ΔL	3.46	399.14		395.68
✓ T. 0+00			7.5	1.6
+50			6.7	2.4
1+00			5.9	3.2
+50			5.3	3.8
2+00			4.9	4.2
+50			4.6	4.5
3+00			4.5	4.6
+50			4.3	4.8
= W.I. 14+58.4				
T. 4+04 = 24+01.05 ΔL			3.46	5.6

Block 1 Levels & Alley
From Lot Line 5+6 to Center Mission Dr.

stub @ 28+72.85 T.P.	5.70	399.30		394.10
✓ J 0+00			3.2	6.1
+50			3.0	6.3
1+00			2.4	6.9
+50			4.7	4.6
+68			5.8	3.5
= W.I. 19+30.20				
✓ +94.93 = 28+72.85			5.70	4.10





22 Sewer Levels

North & South Alley Block 11

From Lot Line 1 & 2 to Center E & W Alley

~~N.E. Arthur & Mission Dr.~~				
BM	385	397.35		393.50
L. 0+00			2.0	5.3
+50			2.6	4.7
1+00			2.9	4.4
+50			2.9	4.4
2+00			2.7	4.6
+50			2.9	4.4
3+00			2.8	4.5
+50			3.0	4.3
4+00			3.1	4.2
T.P. L. K. +11.0 = 1+27.5 From East	℄ E & W Alley 4.56	399.27	2.64	394.71

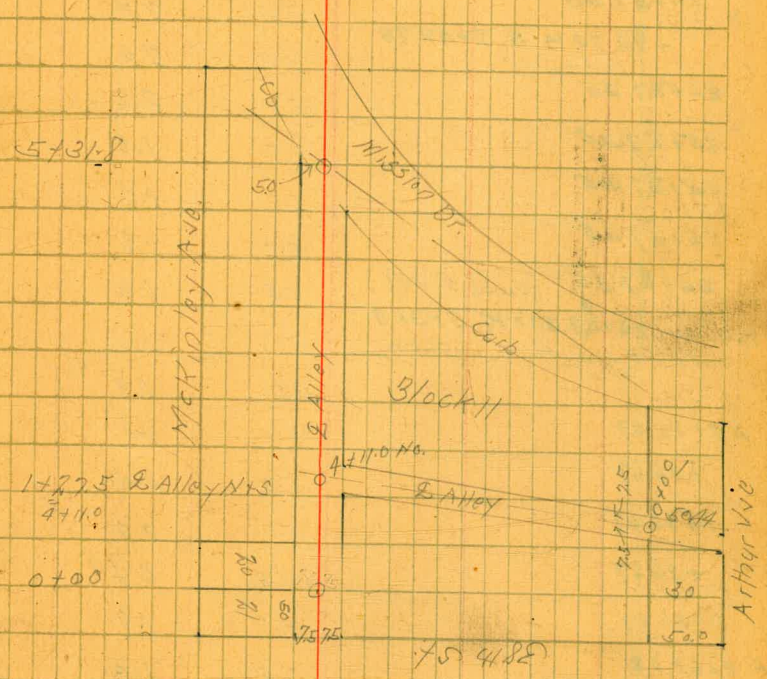
East & West Alley Block 11

From Lot Line 20 & 21 to Mission Dr.

399.27

K 0+00			4.2	95.1
+50			4.5	4.8
1+00			4.4	4.9
+27.5 ⊙ = 4+11.0			4.56	4.7
+50			4.6	4.7
2+00			5.0	4.3
+50			4.9	4.4
3+00			5.1	4.2
+50			5.7	3.6
4+00			5.5	3.8
+50			6.5	2.8
5+00			7.6	1.7
K +31.8 △ = 26+41.95	= W.L. 26+49.30		7.81	1.5

Normal Heights 7-24-25 23

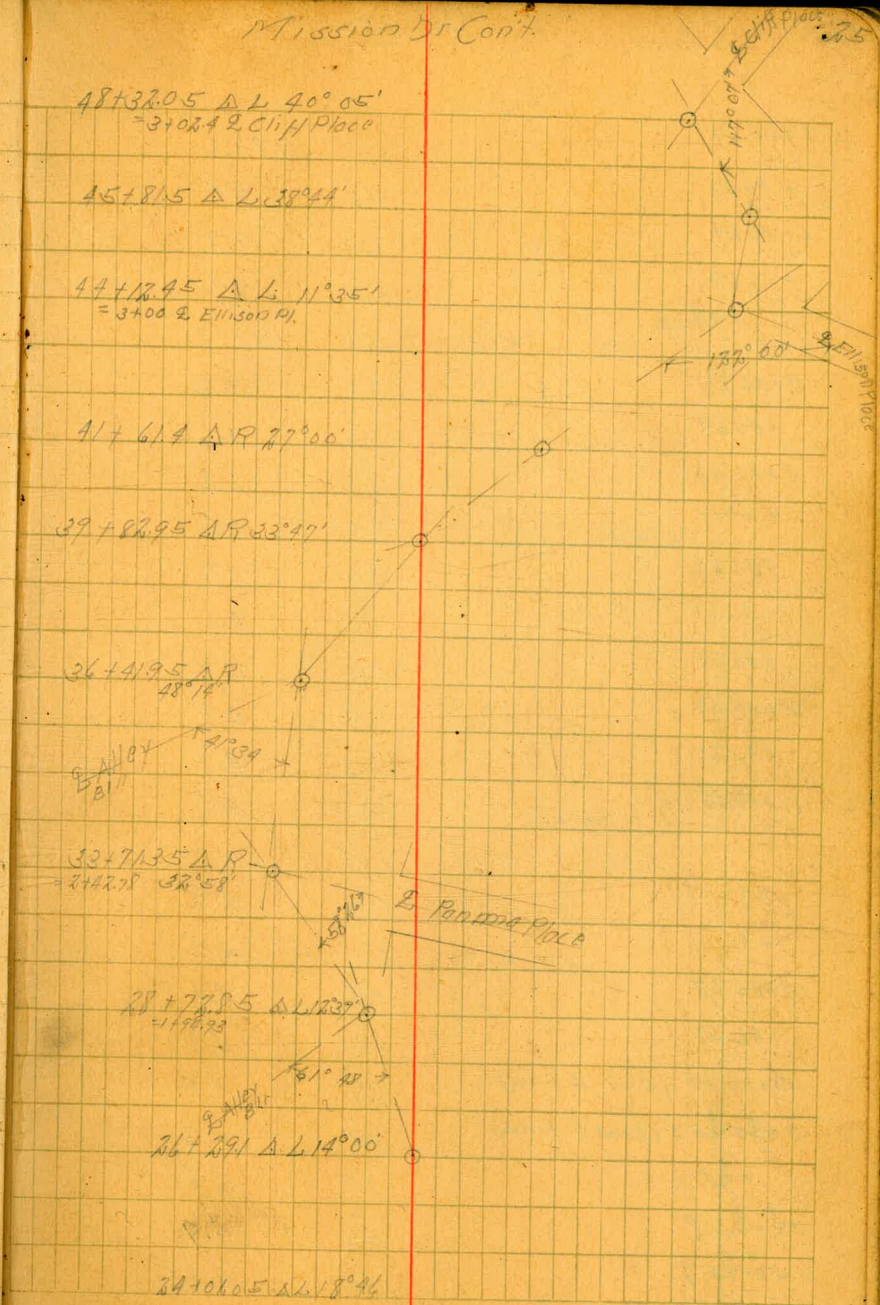


Mission Drive Cont From Page 17

(From P.17)

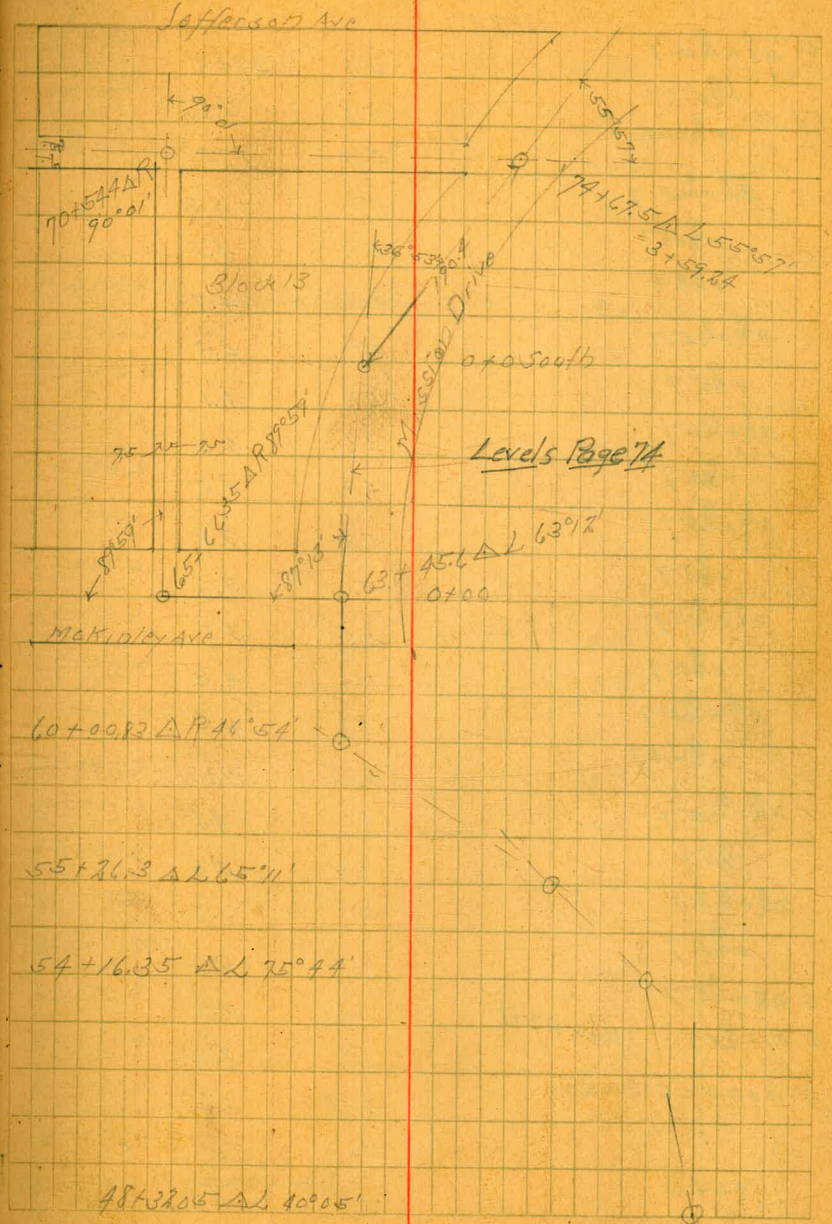
W.I. 22+07.35		397.34		
31+50			4.4	392.9
22+57.35				
32+00			5.0	2.3
23+57.35				
+50			5.2	2.1
23+57.35				
33+00			5.0	2.3
24+57.35				
+50			5.0	2.3
+78.70 = S. 2+42.78				
+71.35 ΔR 32°58'			5.01	2.3
24+57.35				
34+00			5.1	2.2
25+57.35				
+50			5.5	1.8
25+57.35				
35+00			5.6	1.7
26+57.35				
+50			5.5	1.8
26+57.35 (Contd P. 65)				
36+00			5.4	1.9
T.P. stab 26+49.30 = K. 5+31.8				
+41.95 ΔR 48°14'	425	395.72	5.87	391.47
37+00			3.8	1.9
A 0+36.67				
+50			4.7	1.0
+86.67				
38+00			5.3	0.4
1+36.67				
+50			5.7	0.0
+86.67				
39+00			5.3	0.4
2+36.67				
+50			4.7	1.0
A 2+69.62				
+82.95 ΔR 33°47'			4.41	1.3
+86.67				
40+00			4.7	1.0
3+36.67				
+50			5.1	0.6
+86.67				
41+00			5.1	0.6
4+36.67				
+50			5.1	0.6
+48.07				
+61.4 ΔR 27°00'			5.18	1.5
+86.67				
42+00			5.6	0.1

Mission Dr Cont.



Mission Drive Cont.

		395.72		
A 5+36.67				
42+50			6.1	389.6
+86.67				
43+00			6.2	9.5
6+36.67				
+50			6.0	9.7
+86.67				
44+00			5.8	9.9
T.P. stub +99.12				
44+12.45 ΔL 11°35	7.30	397.21	5.81	389.91
7+36.67				
+50			7.0	90.2
+86.67				
45+00			6.6	0.6
8+36.67				
+50			6.0	1.2
+68.17 ✓				
+81.5 ΔL 38°44'			5.69	1.52
+86.67				
46+00			5.4	1.8
9+36.67				
+50			5.1	2.1
+86.67				
47+00			5.0	2.2
10+36.67				
+50			4.4	2.8
+86.67				
48+00			3.3	3.9
× 11+~~19.17~~ 18.72 ✓			2.75	94.46 See Page 2
+32.05 ΔL ℄ Cliff Place			3.75	3.5
B.M.	4.74	399.49	2.46	394.75
+36.67				
49+00			5.3	4.2
+86.67				
+50			5.3	4.2
12+36.67				
50+00			4.8	4.7
+86.67				
+50			4.8	4.7
13+36.67 (End A line)				
51+00			4.7	4.8
× C 3~~3~~2+~~4~~9 5.7 (End C. line)				
+50			4.9	4.6
+~~9~~4 5.7				
52+00			4.7	4.8
3~~2~~1+~~4~~3 5.7				
+50			4.6	4.9
C. 3~~1~~0+~~2~~4 5.7				
53+00			4.9	4.6



C. 3+45.7	399.49		
53+50		5.4	394.1
+45.70			
54+00		5.0	4.5
+39.35 431			
T.P. on stob			
+16.35 Rt 75°44'	399.19	4.60	394.89
30+45.7			
+50		4.9	4.3
+45.7			
55+00		5.1	4.1
+39.4			
+26.3 Rt 65°11'		4.52	4.7
25+45.7			
+50		4.9	4.3
+45.7			
56+00		5.1	4.1
25+45.7			
+50		4.6	4.6
+45.7			
57+00		4.9	4.3
25+45.7			
+50		5.3	3.9
+45.7			
58+00		5.6	3.6
25+45.7			
+50		5.4	3.8
+45.7			
59+00		5.0	4.2
25+45.7			
+50		4.9	4.3
T.P. Stob +44.87			
60+00 83 Rt 5.09	398.91	5.38	393.82
25+45.7			
+50		4.8	4.1
+45.7			
61+00		5.3	3.6
25+45.7			
+50		5.7	3.2
+45.7			
62+00		6.2	2.7
C 25+45.7			
+50		6.0	2.9
C 21+95.7 (From P.7+)			
63+00		5.7	3.2
E. 0+00 = C. 21+50.1			
+45.6 Rt		5.28	3.6
S.E. Missouri & McKinley			
B.M.		5.03	393.88
+54.4			
64+00		5.0	3.9

15+04.4	398.91		
64+50		5.1	393.8
15+54.4			
65+00		5.2	3.7
T.P. on stob			
E 86+20.75 =			
Also 7 Rt 35 Rt 5.21	398.78	5.36	393.55
87°37'			
+84		5.6	3.2
66+00		4.6	4.2
F. 4+44.4 (F. 4+08.00 End of line)		3.5	5.3
+50			
F 4+04.4		3.3	5.5
+50			
F. 3+54.4			
67+00		3.6	5.2
F. 3+04.4			
+50		3.7	5.1
F. 2+54.4			
68+00		3.8	5.0
F. 2+04.4			
+50		4.1	4.7
F. 1+54.4			
69+00		4.4	4.4
F. 1+04.4			
+50		4.5	4.3
F. 0+54.4			
70+00		5.3	3.5
F. 0+00 = G. 4+13.1			100 Foot R 6.0 = 93.8
+54 Rt 23 Alleys		4.65	4.1
500'			
G. 3+67.5			
71+00		5.0	3.8
G. 3+17.5			
+50		4.6	4.2
G. 2+67.5			
72+00		4.9	3.9
G. 2+17.5			
+50		4.6	4.2
G. 1+67.5			
73+00		4.3	4.5
G. 1+17.5			
+50		4.7	4.1
G. 0+77.5			
+90		5.1	3.7
G. 0+67.5			
74+00		6.1	2.7
G. 0+27.5			
+40		7.7	1.1
G. 0+00 = C. ~~16+00.46~~ 15+50.46			
+67.5 Rt 55°57'		7.00	1.8 (= 91.75 pB)
= 3+59.24			

Levels

Panama Place & Ellison Place

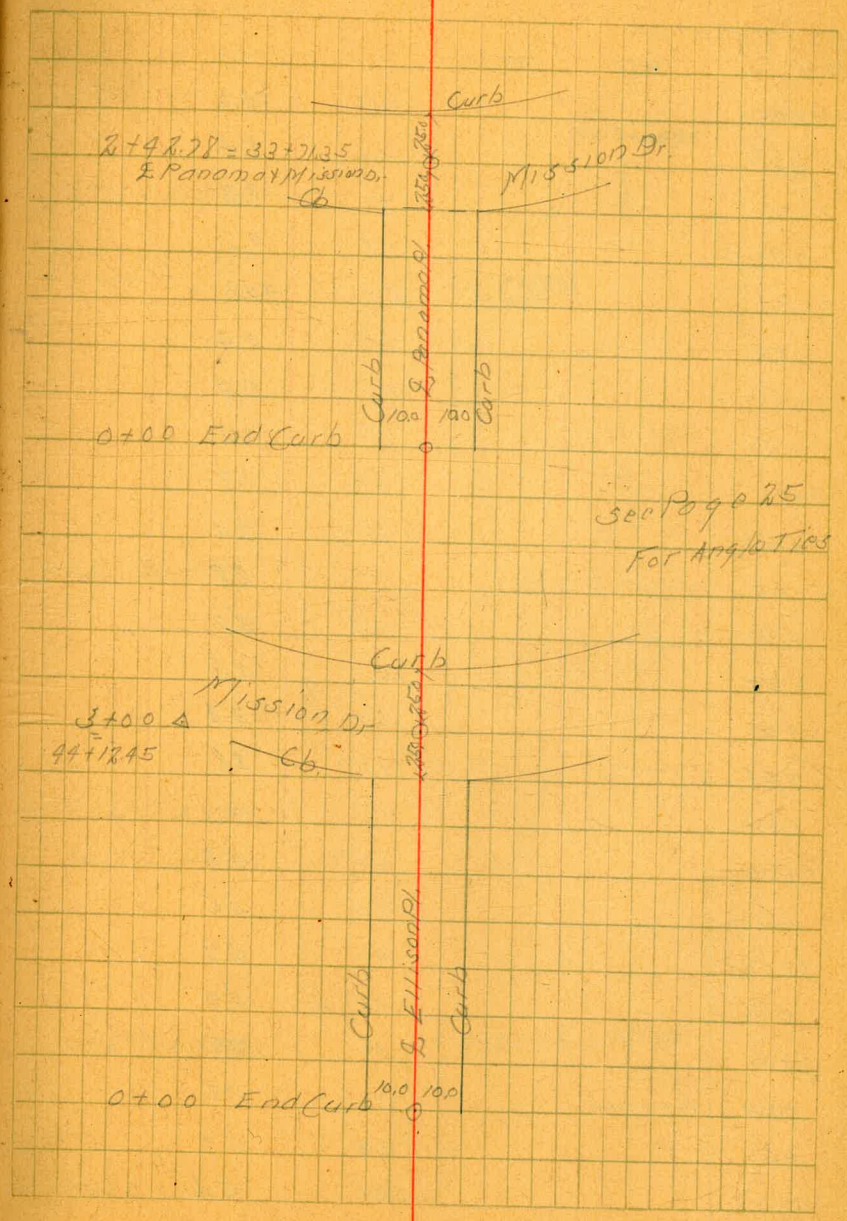
H.I. 397.34

S. 0+00			6.3	91.0
+50			6.1	1.2
1+00			5.9	1.4
+50			5.8	1.5
2+00			5.4	1.9
S. +42.78 = 33+71.35	= W.I. 23+79.7		5.01	2.3

Levels

Ellison Place

T.P. Stub 44+12.45	4.87	394.78		389.91
R. 0+00			6.6	8.2
+50			6.6	8.2
1+00			6.2	8.6
+50			6.0	8.8
2+00			5.6	9.2
+50			5.6	9.2
R. 3+00 = 44+12.45	= A. 6+99.12		4.87	9.9



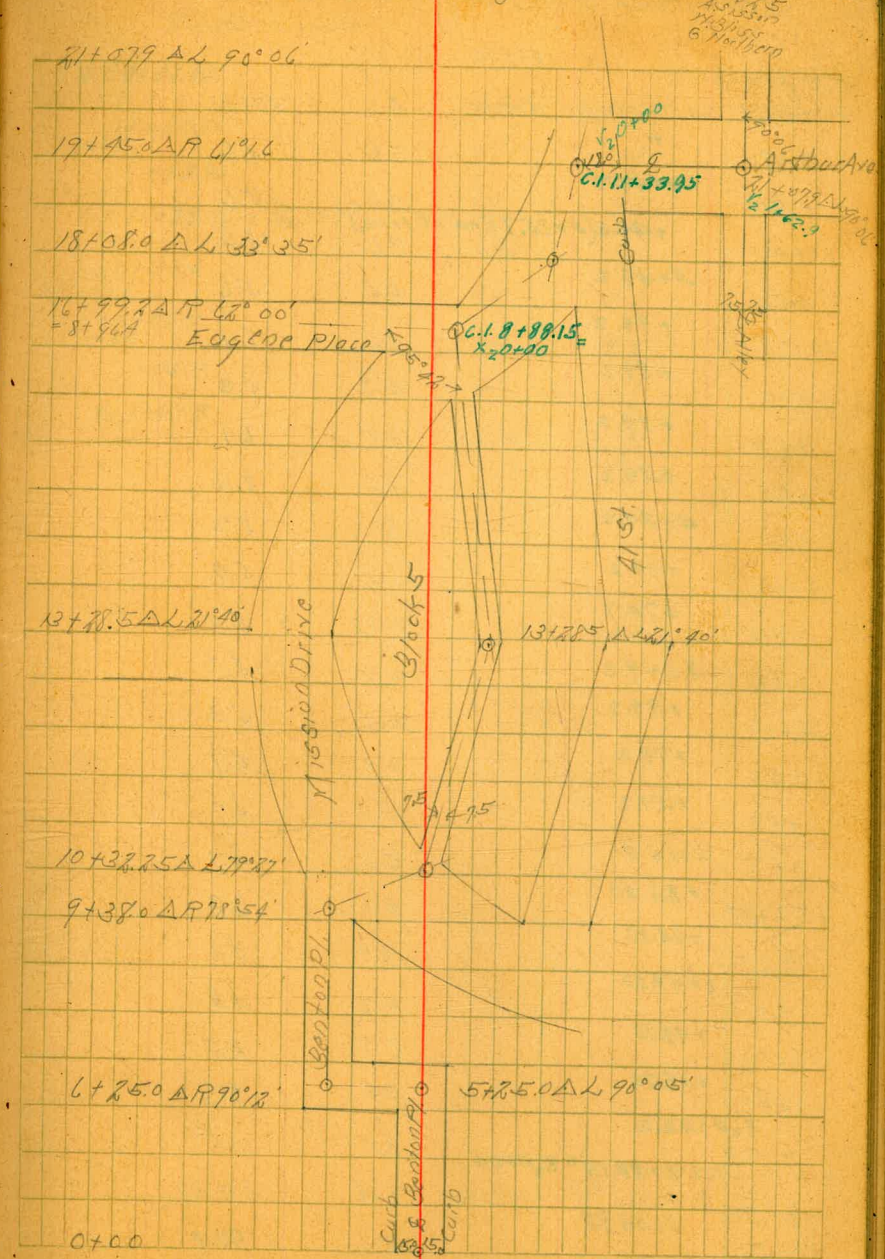
See Page 25 For Angle Ties

Normal Heights Sewers

Benton Place & Alley Block 5 Mission Dr. & Arthur Ave.

SW 41st & Mission Dr.

B.M.	3.42	398.84		395.42
0+00			10.8	88.0
+50			10.4	8.4
1+00			9.8	9.0
+50			9.2	9.6
2+00			8.8	90.0
+50			8.4	0.4
3+00			7.9	0.9
+50			7.4	1.4
4+00			6.9	1.9
+50			6.4	2.4
5+00			6.0	2.8
+25.0 ΔL 90°05			5.82	3.0
+50			5.5	3.3
6+00			5.0	3.8
+25.0 ΔR 90°12'			4.97	3.8
+50			4.7	4.1
7+00			4.5	4.3
+50			4.3	4.5
8+00			4.1	4.7
+50			3.9	4.9
9+00			3.8	5.0
+38.0 ΔR 78°54'			3.61	5.2
+50			3.9	4.9
10+00			3.4	5.4



Levels
Benton Place Alley Block 5 Mission Dr Cont.

Location Page 33

		398.84		
T.P. on Stub				
10+32.25	△L 79°27' 5.17	400.00	4.01	394.83
+38	+		5.4	4.6
+50	~~6+49.2~~		4.4	5.6
11+00	~~+99.2~~ (5+75.7 End of line)		4.6	5.4
+50	5+49.2		4.4	5.6
12+00	+99.2		4.6	5.4
+10	+89.2		4.7	5.3
+20	+79.2		3.9	6.1
+40	+59.2		4.6	5.4
+60	4+39.2		4.8	5.2
13+00	+99.2		5.0	5.0
+28.5	+70.7 △L 21°40'		5.02	5.0
+50	3+49.2		5.0	5.0
14+00	+99.2		5.0	5.0
+20	+79.2		4.3	5.7
+40	+59.2		5.3	4.7
+85	2+14.2		5.3	4.7
15+15	+84.20		4.0	6.0
+35	+64.20		4.9	5.1
+50	1+49.20		5.2	4.8
16+00	+99.20		6.7	3.3
+40	+59.20		7.4	2.6
+53	$X_2$0+46.2		8.5	1.5
T.P. Stub	C.I. 8+88.15 = $X_2$0+00			
+99.2 = 8+96.4	△R 62°00' 5.19	396.55	8.64	391.36
17+50	9+38.95		5.6	90.9

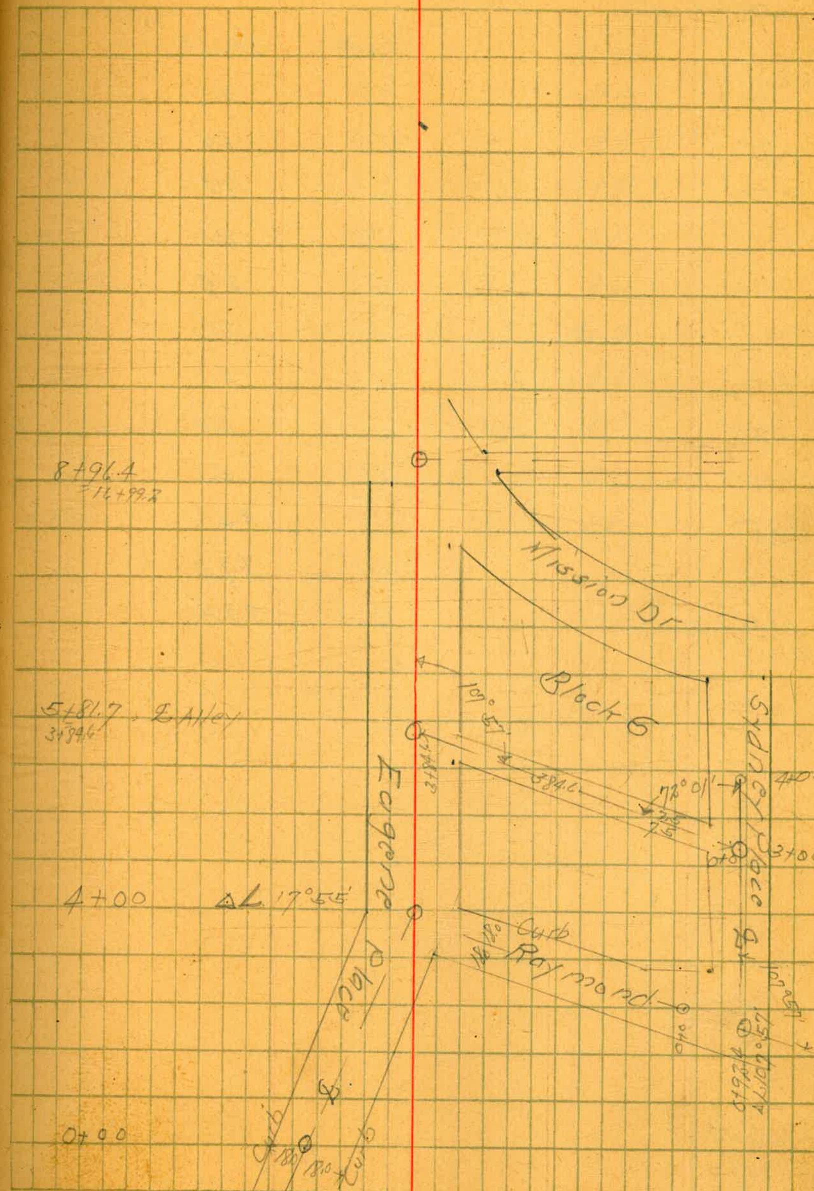
	396.55		
C.I. 9+96.95			
18+08		4.90	91.6
10+38.95			
+50		4.70	1.8
+88.95			
19+00		4.4	2.1
C.I. 11+33.95 = $V_2$0+00			
+45.0 △R 61°16		4.42	2.1
$V_2$0+55.0			
20+00		4.4	2.1
1+05.0			
+50		4.2	2.3
+55.0			
21+00		3.9	2.6
V_2 1+62.9			
+07.9 △ 90°06		3.77	392.78

Levels

Eugene Place
From Lot 139 to Center Mission Dr.

S.W. Arthur + 41 St.

BM	3.33	395.13		391.80
T.P. =5+81.7	3.35	393.75	4.73	390.40
0+00			10.2	83.5
+50			8.0	5.7
1+00			6.6	7.1
+50			6.0	7.7
2+00			5.6	8.1
+50			5.2	8.5
3+00			4.8	8.9
+50			4.6	9.1
4+00 ΔL 17°55'			4.3	9.6
+50			4.0	9.7
5+00			3.8	9.9
+50			3.6	90.1
T.P. +81.7 =3+84.6 ℄ Alley	8.13	398.53	3.35	390.40
6+00			8.1	0.4
+50			8.1	0.4
7+00			8.0	0.5
+50			8.0	0.5
8+00			7.7	0.8
+50			7.5	1.0
+96.4 = 14+99.2			7.19	1.3



Levels

Alley Block 6

From Center Sydney Pl. to Center Eugene Pl. 398.53

Location Page 37

0+00 = 3+00 Sydney Pl.			7.09	391.44
+18			7.8	0.7
+25			6.9	1.6
+50			7.0	1.5
1+00			6.4	2.1
+50			5.6	2.9
2+00			4.7	3.8
+50			3.4	5.1
+75			3.1	5.4
3+00			4.4	4.1
+37			4.4	94.1
+65			8.6	89.9
+84.6 = 5+81.7	⊙		8.13	90.4

Sewer Levels

Sydney Place

Location Page 37

3+00 0+00 Alley T.P.	5.33	396.77		391.44
0+00			7.9	88.9
+50			7.9	8.9
+92.4 △ L 107°57'			7.98	8.8
1+00			7.7	9.1
+50			7.2	9.6
2+00			6.6	90.2
+50			6.0	0.8
3+00 = 0+0 ⊙ 2 Alley			5.33	1.5
+50			4.6	2.2
4+00			4.0	2.8

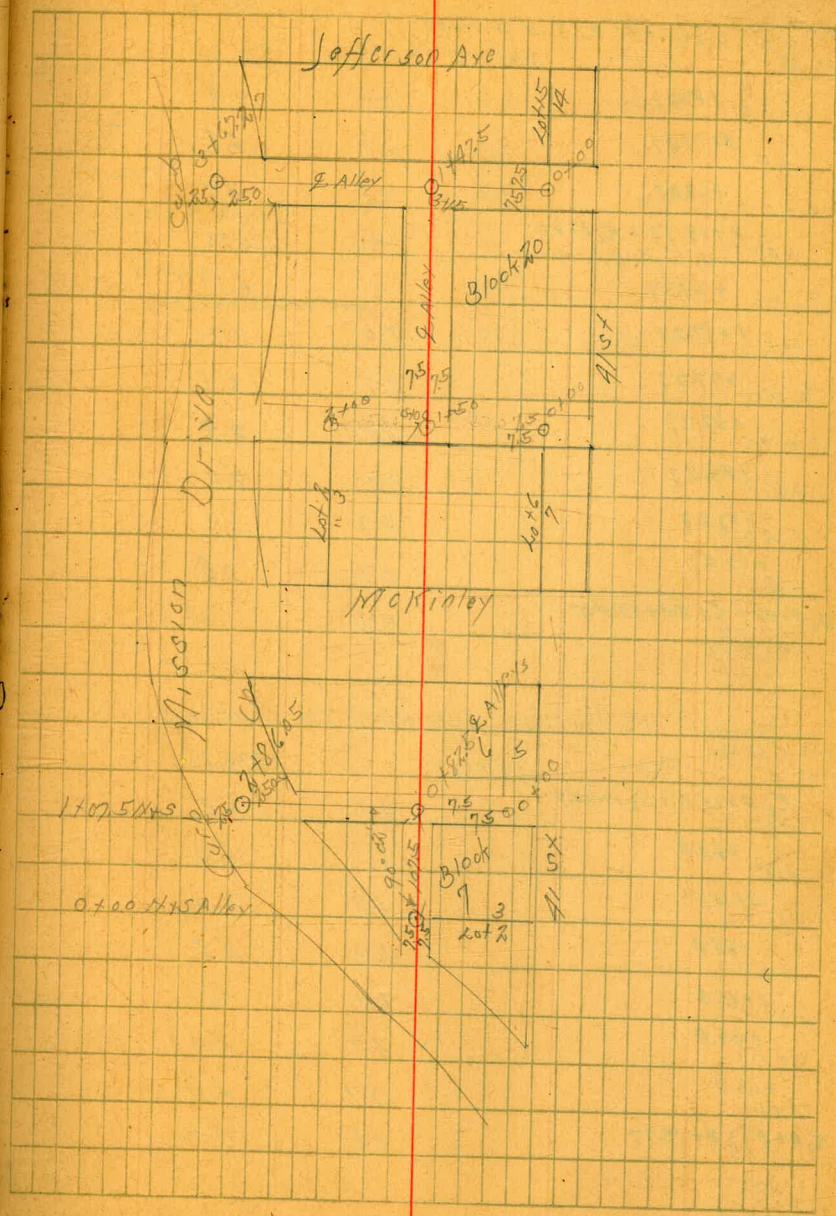
North & South Alley Block 7
From Lot Line 2+3 to Center E&W Alley

S.W. Arthur 41st. (U_2 1+22.5 = End of line)

BM	6.83	398.63		391.80
U_2 1+07.5 0+00			2.4	6.2
+50 +57.5			2.6	6.0
+70 +37.5			2.9	5.7
+80 +27.5			1.9	6.7
+95 +12.5			3.3	5.3
U_2 0+00 = T_2 2+03.55 1+0.75 = ⊙ = 0+82.5 ℄ E&W Alley			3.47	5.1

East & West Alley Block 7
From Lot Line 5+6 to Center Mission Dr.
(T_2 3+01.05 = End of line) 398.63

0+00 +86.05			1.3	97.3
+15 +71.05			2.8	5.8
+35 +51.05			3.5	5.1
T_2 2+03.55 = U_2 0+00 +82.5 ⊙ = 1+07.5			3.47	5.1
1+00 1+86.05			3.0	5.6
+20 +66.05			2.1	6.5
+50 1+36.05			2.9	5.7
2+00 +86.05			3.1	5.5
+08 +78.05			3.4	5.2
+30 +56.05			5.9	2.7
+50 +36.05			6.9	1.7
+55 +31.05			7.3	1.3
T_2 0+00 = C.I. 17+58.58 +86.05 ⊙ = 2+49.88			6.61	392.02 = 2.02



Sewer Levels

South East & West Alley Block 20
From Lot Line 14+15 to Center Mission Dr.

S.W. Jefferson + Mission Q2 (Q3+82.27 End of line) Location Page 41

B.M.	4.35	395.72		391.37
0+00	+67.27		0.8	4.9
+50	3+17.27		0.9	4.8
1+00	+67.27		1.2	4.5
+47.5	2+19.77 = R2 0+00 ⊙ 2 N+S Alley		1.46	394.26
2+00	+67.27		1.6	4.1
+50	1+17.27		2.0	3.7
+90	+77.27		2.3	3.4
3+00	+67.27		2.8	2.9
+28	+39.27		3.7	2.0
+40	+27.27		4.0	1.7
+45	+22.27		4.9	0.8
Q2 0+00 = C.I. 24+35.45 +67+27 = 9+26.75			4.12	1.60

Levels North & South Alley Block 20 Location Page 41

Stub 1+47.5

T.P.	4.87	399.13		394.26
R2 3+15.0 = S2 1+65.0 0+00			4.1	5.0
+50	+65.0		4.8	4.3
1+00	2+15.0		4.9	4.2
+50	+65.0		5.3	3.8
2+00	1+15.0		4.9	4.2
+50	+65.0		4.7	4.4
3+00	+15.0		4.7	4.4
R2 0+00 = 2+19.77 +15 = 1+47.5 ⊙			4.87	4.2

Levels

North East & West Alley Block 20
From Lot Line 6+7 to Lot Line 2+3

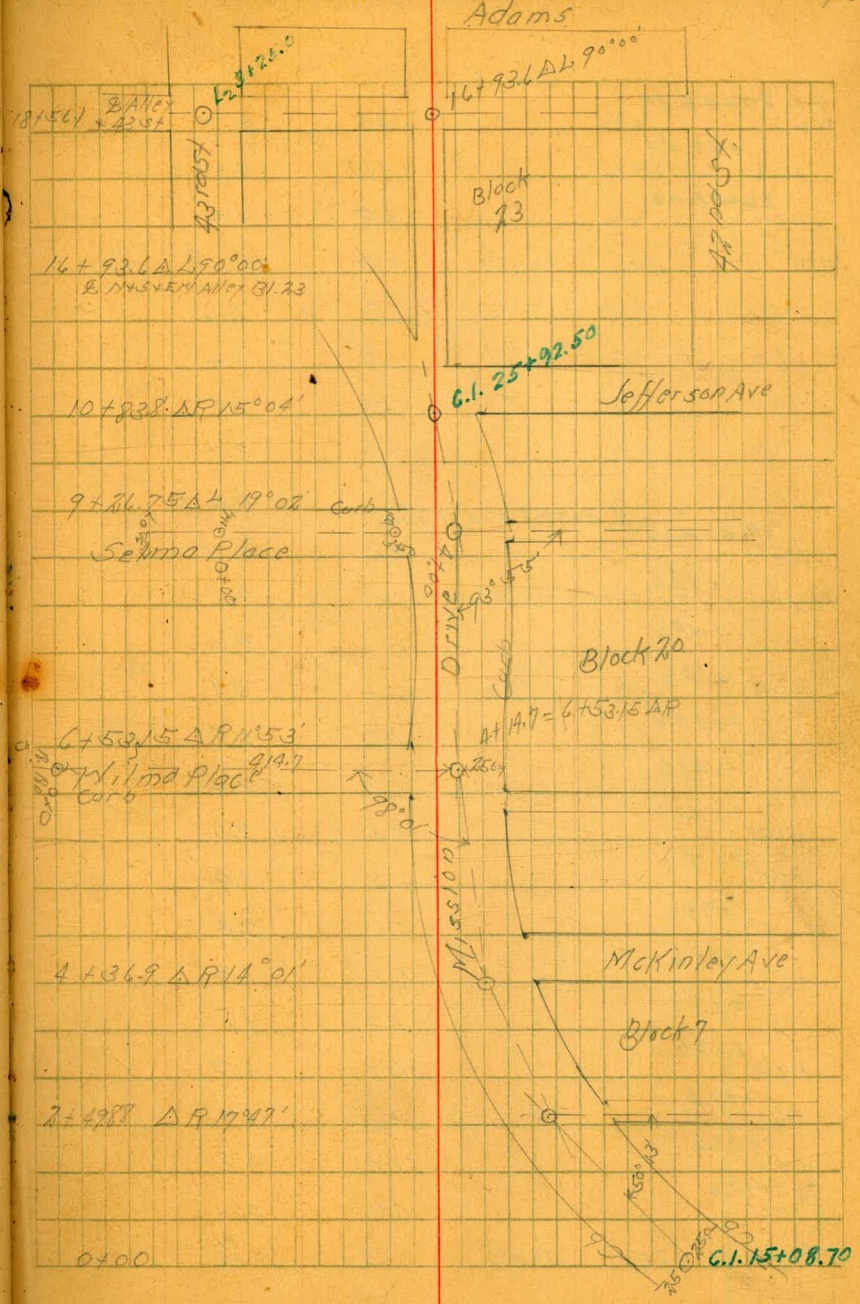
Location Page 41

	399.13		
S2 0+15.0 0+00		4.2	94.9
0+65.0 +50		4.2	4.9
1+15.0 1+00		4.4	4.7
1+65.0 = R2 3+15.0 +50 ⊙ 0+00 N+S		4.1	5.0
2+15.0 2+00		3.9	5.2
Stub (2+30.00 End of line) T.P. 6+53.15		8.92	390.21

Sewer Levels

Mission Drive N+S-E+W Alley Block 23
From Lot Line 150-151 Block B to Center 43rd St.

S.W. Alley 4+56				
B.M.	6.83	398.63		391.80
C.I. 15+08.70				
0+00			5.80	2.8
+58.70				
+50			5.8	2.8
16+08.70				
1+00			6.0	2.6
+58.70				
+50			6.2	2.4
17+08.70				
2+00			6.4	2.2
T.P.	3.76	395.97	6.46	392.21
+58.58				
+49.88 Δ R 17°47'			3.95	2.0
18+08.70				
3+00			4.2	1.8
+58.70				
+50			4.3	1.7
19+08.70				
4+00			4.5	1.5
+45.60				
+36.9 Δ R 14°01'			4.65	1.4
S.W. Corner Mission				
B.M.			4.81	391.16 = 391.15
20+08.70				
5+00			5.2	0.8
+58.70				
+50			5.6	0.4
21+08.70				
6+00			5.8	0.2
T.P. +61.85	6.01			
+53.15 Δ R 11°53'		396.23	5.75	390.22
= 4+14.7 Wilma Pl.				
7+00 22+08.70			5.9	0.3
+58.70				
+50			5.5	0.7
23+08.70				
8+00			5.4	0.8
+58.70				
+50			5.0	1.2
24+08.70				
9+00			4.9	1.3
+35.45				
+26.75 Δ L 19°02'			4.62	1.61
= 3+67.27				
+58.70			4.7	1.5
+50				
25+08.70			4.8	1.4
10+00				



		396.23			
C.L. 25+58.70					
10+50			4.5	91.7	
+92.50					
+83.8 ΔR 15°04'			4.62	1.61	
26+08.70					
11+00			4.5	1.7	
S.W. Jefferson & Mission Dr.					
B.M.	6.06	397.43	4.85	391.38	391.87
+40			6.8	0.6	
+60			6.0	1.4	
+85			5.9	1.5	
+95			3.7	3.7	
12+00			3.0	4.4	
O_2 4+43.6 (O_2 4+72.5 End of line)					
+50			3.2	4.2	
+93.6					
13+00			3.9	3.5	
+43.6					
+50			5.1	2.3	
+13.6					
+80			5.3	2.1	
3+03.6					
+90			4.6	2.8	
+93.6					
14+00			5.0	2.4	
+43.6					
+50			5.4	2.0	
2+08.6					
+85			5.5	1.9	
+93.6					
15+00			5.1	2.3	
+68.6					
+25			6.1	1.3	
+43.6					
+50			6.3	1.1	
+33.6					
+60			6.7	0.7	
+13.6					
+80			5.7	1.7	
1+03.6					
+90			6.6	0.8	
O_2 0+93.6					
16+00			6.7	0.7	
T.P.	3.45	395.26	5.62	391.81	

	395.26		
O_2 0+43.6			
16+50		4.9	90.4
L_2 4+87.5 = O_2 0+00			
+93.6 Δ∠ 90°00'		4.86	0.40
+81.1			
17+00		4.5	0.8
4+31.1			
+50		5.0	0.3
+81.1			
18+00		5.4	89.7
+61.1			
+20		5.5	9.8
+51.1			
+30		6.3	9.0
+43.1			
+38		7.1	8.2
L_2 3+25.0			
+56.1 ℄ 43rd St		6.58	8.68

Levels East + West Alley Block 23
West Center N+S Alley

L_2 5+70.0	395.26		
0+00		4.5	90.8
5+20.0			
+50		4.7	0.7
L_2 4+87.5			
+82.5 ℄ Alleys		4.86	0.40
16+93.6			

Selma Place

From Lot 47 & 48 Block C to Center Mission Dr — Location Page 45

S.W. Jefferson & BM Mission Dr	4.35	89.52		391.37
0+00			12.2	83.5
+50			10.8	4.9
1+00			9.6	6.1
+50			8.4	7.3
2+00			7.3	8.4
+50			6.4	9.3
3+00			5.4	90.3
+50			4.6	1.1
4+00 ⊙ 9+26.75			4.12	1.60

Levels Wilma Place

Stub 6+53.15 From Lot 160 B.B. to Center Mission Dr — Location Page 45

T.P.	1.83	392.05		390.22
0+00 ⊙ -1 Drop 20.0			11.5	80.5
+50			9.8	2.2
1+00			8.8	3.2
+50			7.7	4.3
2+00			6.5	5.5
+50			5.3	6.7
3+00			4.1	7.9
+50			3.0	9.0
4+00			2.0	90.0
+14.70 ⊙ 6+53.15			1.83	90.22

Levels North & South Alley Block 21

From Lot Line 1 & 2 to Center East & West Alley

S.E. Adams & BM	4.45	390.23		385.78
0+00			9.1	81.1
+50			9.0	1.2
+85			7.9	2.3
1+00			7.1	3.1
+57.5 ⊙ E & W Alley = 2+57.5			7.1	3.1

Levels North & South Alley Block 22

From Lot Line 1 & 2 to Center East & West Alley

		H.I. 394.59 ?		?
0+00				
+30				
+50				
1+00				
+50				
+55				
2+00				
+57.5 ⊙ E & W Alleys = 5+97.5				

Levels
East & West Alley Block 21-22
From Lot Line 12 & 13 Bl. 21 to Center 43rd St.

S.E. Adam & Ave 44th St.

B.M.	4.45	390.23		385.78
0+00			13.3	76.3
+25			13.6	6.6
+50			13.9	6.3
1+00			14.1	6.1
+30			13.9	6.3
+50			12.0	8.2
2+00			9.3	80.9
+52.5 @ & Alley			7.1	3.1
1+57.5 +70			6.3	3.9
+80			5.5	4.7
3+00			5.0	5.2
+25			4.0	6.2
+50			4.1	6.1
+85			3.9	6.3
4+00			4.8	5.4
+13			5.7	4.5
L_2 0+00 = C.I. 34+73.00				
+30 @ & 44th St			4.7	5.5
+47 +17.0			5.1	5.1
+60 +30.0			4.3	5.9
+90 +60.0			1.8	8.4
5+00 +70.0			1.5	8.7
T.P.	7.18	394.59	2.82	387.41
1+20.0 +50			5.0	9.6
+62.5 = P_2 +925 @ & Alleys			4.9	9.7

394.59

L_2 P+20.0 6+50	4.3	90.3
7+00 +70.0	4.2	0.4
+10 +80.0	4.4	0.2
8+07.0 +37	6.9	87.7
+25.0 +55.0 @ & 43 St. = 18+56.1	5.94	88.65

Levels Blocks 4-8-19-25

Between 40th + 41st St From Lot 31+32 Block 4 to Center E + W Alley Block 25

S.W. Mission D + 41st (V_2 10+38.4 = End of line)

BM		4.55	399.97		395.42
0+00	+23.4			2.6	7.4
+18	10+05.4			4.1	5.9
+40	+83.4			4.4	5.6
+55	+68.4			3.5	6.5
+78	+45.4			4.8	5.2
1+00	+23.4			4.3	5.7
+12	+11.4			4.0	6.0
+22	9+01.4			4.5	5.5
+35	+88.4			4.3	5.7
+45	+78.4			3.5	6.5
+80	+43.4			5.1	4.9
+95	+28.4			4.8	5.2
2+10	8+13.4			3.8	6.2
+30	+93.4			4.8	5.2
T.P. +53.1	+70.3 ΔL	4.44	399.68	4.73	395.24
3+00	+23.4			4.4	5.3
+50	+73.4			4.1	5.6
4+00	6+23.4			4.2	5.5
+50	+73.4			4.6	5.1
5+00	5+23.4			4.9	4.8
+50	+73.4			4.7	5.0
6+00	4+23.4			4.8	4.9
+50	+73.4			4.7	5.0
V_2 3+40.4 +83				4.6	5.1

Sewer Levels Normal Heights

Alley Blocks 4-8-19-25 Cont.

			399.68		
7+20	V_2 3+03.4			3.3	96.4
+50	+73.4			3.2	6.5
8+00	+23.4			3.2	6.5
T.P.		3.81	400.37	3.15	396.53
+23	2+00.4			5.4	5.0
+43	+80.4			8.5	1.9
V_2 1+62.9 = W_2 0+00 +60.5 ℄ Arthur Ave.				7.61	2.76
=21+079 +78	W_2 0+17.5			8.1	2.3
9+00	+39.5			5.3	5.1
+50	+89.5			4.7	5.7
10+00	1+39.5			4.4	6.0
+50	+89.5			4.4	6.0
11+00	2+39.5			4.8	5.6
+50	+89.5			4.4	6.0
12+00	3+39.5			4.1	6.3
+50	+89.5			4.7	5.7
13+00	4+39.5			4.4	6.0
+50	+89.5			4.6	5.8
14+00	5+39.5			4.1	6.3
T.P.		3.69	399.80	4.26	396.11
+50	+89.5 (W_2 5+95.5 = End of line)			4.2	5.6
15+03				6.0	3.8
+21 ℄ McKinley				5.3	4.5
+39				6.0	3.8
~~W_2 12+19.60~~ +50				5.0	4.8

Levels Alley Blocks 4-8-19-25 Cont.

(M2 11+83.6 End of line)

		399.80		
M2 11+69.6				
16+00			4.5	95.3
+50	11+19.6			
			4.8	5.0
	+69.6			
17+00			5.1	4.7
+50	10+19.6			
			5.0	4.8
	+69.6			
18+00			4.5	5.3
+50	9+19.6			
			4.8	5.0
	+69.6			
19+00			5.1	4.7
+50	8+19.6			
			5.4	4.4
	+69.6			
20+00			5.5	4.3
T.P.	4.36	398.70	5.46	394.34
+50	7+19.6			
			4.4	4.3
	+69.6			
21+00			3.8	4.9
+30	+39.6			
			3.8	4.9
+50	+19.6			
			4.8	3.9
+64	6+05.6			
			5.8	2.9
+82	+87.6			
			5.2	3.5
	℄ Jefferson			
22+00	+69.6			
			5.8	2.9
+06	+63.6			
			5.1	3.6
+50	5+19.6			
			4.7	4.0
23+00	+69.6			
			5.3	3.4
+50	4+19.6			
			5.4	3.3
24+00	+69.6			
			5.7	3.0
+50	3+19.60			
			5.9	2.8
M2 25+00	2+69.60			
			6.1	2.6
T.P.	5.40	397.52	6.58	392.12

730 25

		397.52		
M2 2+19.60				
25+50			5.0	92.5
	+69.60			
26+00			5.3	2.2
+50	1+19.60			
			5.1	2.4
	+69.9			
27+00			5.1	2.4
+50	+19.6			
			4.7	2.8
M2 0+00 = L2 11+21.3				
+69.6 ℄ E+W Alley			4.54	2.98
T.P.	4.58	396.04	6.06	391.46
B.M.			5.95	390.09 390.07 ℄ Adams & 42

Sewer Levels

N+S Alley Block 24
From Lot 1+2-26+27 to E+W Alley

BM	5.95	396.02		390.07	S.E. Cor Adams+42
	(N_2 5+22.5 End of line)				
T.P.	5.43	396.69	4.76	391.26	
Opp. Lot 1+2-26+27					
0+00	5+07.5		2.3	4.4	
+15	+92.5		3.1	3.6	
+50	+57.5		3.2	3.5	
1+00	4+07.5		3.4	3.3	
+50	+57.5		3.7	3.0	
+80	+27.5		4.1	2.6	
2+00	3+07.5		3.0	3.7	
+20	+87.5		4.6	2.1	
+50	+57.5		5.2	1.5	
3+00	2+07.5		5.0	1.7	
+50	+57.5		5.6	1.1	
4+00	1+07.5		6.0	90.7	
+50	+57.5		5.4	1.3	
5+00	+07.5		5.4	1.3	
N_2 0+00 = L_2 8+12.50					
+07.5 ℄ E+W Alley			5.5	1.2	

Sewer Levels

Alley Blocks 3-9-18-26 From Lot Line 2+3-26+27 B/3

	~~(27+08 End Q line)~~				
B.M.	5.42	399.43		394.01	S.W. Cor Hawley+Mission Dr
	U. 1+91.93 = ~~+93.0~~	W. 1+90.00			
0+0			4.1	5.3	
+50	~~+43.0~~	2+40.0	4.0	5.4	
+60	~~26+33.0~~	+50.0	4.6	4.8	
1+00	~~+93.0~~	+90.0	4.1	5.3	
+50	~~25+43.0~~	3+40.0	4.1	5.3	
2+00	~~+93.0~~	+90.0	3.6	5.8	
+50	~~24+43.0~~	4+40.0	3.7	5.7	
3+00	~~+93.0~~	+90.0	3.7	5.7	
T.P.	4.00	399.80	3.63	395.80	
+50	~~23+43.0~~	5+40.0	3.8	6.0	
4+00	~~+93.0~~	+90.0	3.5	6.3	
+50	~~22+43.0~~	6+40.0	3.0	6.8	
5+00	~~+93.0~~	+90.0	2.7	7.1	
+50	~~+43.0~~	7+40.0	2.5	7.3	
		(W 7+55.0 End of line)			
+75	Q 21+18.0		2.6	7.2	
6+05	+88.0		5.0	4.8	
+13	+80.0		5.9	3.9	
+30.0 ℄ Arthur St	+63.0		5.4	4.4	
+48	+45.0		5.7	4.1	
+55	+38.0		5.3	4.5	
+85	20+08.0		3.1	6.7	
7+00	+93.0		2.8	7.0	
+50	19+43.0		2.8	7.0	
Q 8+00	18+93.0		3.4	6.4	

Alley Blocks 3 9-18-26 Cont.

		399.80		
Q. 8+50	18+43.0		3.5	96.3
9+00	+93.0		3.6	6.2
T.P.	2.75	399.44	3.11	396.69
+50	17+43.0		3.6	5.8
10+00	+93.0		4.0	5.4
+50	16+43.0		4.1	5.3
11+00	+93.0		4.1	5.8
+50	15+43.0		4.3	5.1
12+00	+93.0		4.5	4.9
+50	+43.0		4.9	4.5
+64	29.0 ~~+45.0~~		5.0	4.4
+74	19.0 ~~+35.0~~		6.0	3.4
+90.0	~~+19.0~~ 14+03.0 ℄ McKinley		5.2	4.2
13+08	~~14+01.0~~ +85.0		6.0	3.4
+15	+78.0		5.2	4.2
+50	13+43.0		5.1	4.3
14+00	+93.0		4.9	4.5
+50	12+43.0		5.0	4.4
15+00	+93.0		5.4	4.0
+50	11+43.0		5.4	4.0
16+00	+93.0		5.3	4.1
T.P.	4.17	397.59	6.02	393.42
+50	10+43.0		3.7	3.9
17+00	+93.0		3.8	3.8
Q. +50	9+43.0		3.8	3.8

		397.59		
Q. 18+00	+93.0		3.8	93.8
+50	8+43.0		3.7	3.9
19+00	+93.0		4.1	3.5
+25	+~~72~~ 68.0		4.5	3.1
+34	+~~63~~ 59.0		5.4	2.2
+51.0	+~~46~~ 42.0 ℄ Jefferson Ave.		4.6	3.0
+68	+~~29~~ 25.0		5.2	2.4
+77	7+~~20~~ 16.0		4.5	3.1
20+00	+93.0		4.3	3.3
+50	6+43.0		3.8	3.8
21+00	+93.0		3.5	4.1
+50	5+43.0		3.4	4.2
Q. 22+00	+93.0		3.3	4.3
T.P.	4.89	398.48	4.00	393.59
+50	+43.0		4.5	4.0
Q 4+04.5	+88.5 ℄ Ex N Alley Bl. 26		4.8	3.7
T.P.	5.55	397.57	6.46	392.02

Sewer Levels
℄ N+S Alley Blocks 27-17-10-2
From ℄ E+W Alley Bl. 27 to Lot Line 1+2 - 21+22 Block 2

		397.57		
P. ~~22+37.5~~ 0+00 = ℄ E+W Alley Bl. 27	4+04.5		4.9	92.7
~~+87.5~~ +50	+54.5		4.8	2.8
~~21+37.5~~ 1+00	5+04.5		4.9	2.7
~~+87.5~~ +50	+54.5		4.1	3.5
~~20+37.5~~ 2+00	6+04.5		3.2	4.4
~~+87.5~~ +50	+54.5		2.4	5.2
~~+55.5~~ +82	+86.5		3.1	4.5
~~+37.5~~ 3+00	7+04.5		4.7	2.9
T.P.	5.61	398.60	4.58	392.99
~~+27.5~~ +10	+14.5		6.8	1.8
~~+18.5~~ +19	+23.5		7.7	90.9
~~19+00.0~~ +37.5 ℄ Jefferson Ave.	+42.0		7.0	1.6
~~+83.5~~ +54	+58.5		7.5	1.1
~~+75.5~~ +62	+66.5		6.8	1.8
~~+62.5~~ +75	+79.5		5.6	3.0
~~18+37.5~~ 4+00	8+04.5		4.6	4.0
~~+87.5~~ +50	+54.5		4.5	4.1
~~17+37.5~~ 5+00	9+04.5		4.7	3.9
~~+87.5~~ +50	+54.5		4.6	4.0
~~16+37.5~~ 6+00	10+04.5		4.4	4.2
~~+87.5~~ +50	+54.5		4.6	4.0
~~15+37.5~~ 7+00	11+04.5		4.8	3.8
~~+87.5~~ +50	+54.5		4.6	4.0
~~14+37.5~~ 8+00	12+04.5		4.9	3.7
P. ~~13+87.5~~ +50	+54.5		4.9	3.7

Sewer Levels
N+S Alley Blocks 27-17-10-2

		398.60		
P. ~~13+37.5~~ 9+00	13+04.5		4.5	94.1
~~+87.5~~ +50	+54.5		4.4	4.2
~~+74.5~~ +63	+67.5		4.7	3.9
~~+64.5~~ +73	+77.5		5.8	2.8
~~+56.5~~ +81	+85.5		6.2	2.4
~~+40.0~~ +97.5 ℄ McKinley Ave	14+02.00		5.8	2.8
T.P.	6.35	399.23	5.72	392.88
~~+22.5~~ 10+15	+19.5		6.7	3.0
~~12+12.5~~ +25	+29.5		6.0	3.2
~~+87.5~~ +40	+44.5		5.1	4.1
~~+87.5~~ +50	+54.5		5.1	4.1
~~11+37.5~~ 11+00	15+04.5		5.0	4.2
~~+87.5~~ +50	+54.5		5.2	4.0
~~10+37.5~~ 12+00	16+04.5		5.1	4.1
~~+87.5~~ +50	+54.5		5.0	4.2
~~9+37.5~~ 13+00	17+04.5		5.0	4.2
~~+87.5~~ +50	+54.5		4.7	4.5
~~+72.5~~ +65	+69.5		4.0	5.2
~~+57.5~~ +80	+84.5		4.3	4.9
~~+37.5~~ 14+00	18+04.5		4.2	5.0
~~+20.5~~ +17	+21.5		3.4	5.8
~~8+34.5~~ +33	+37.5		4.4	4.8
~~+87.5~~ +50	+54.5		4.5	4.7
~~7+37.5~~ 15+00	19+04.5		3.9	5.3
P. ~~6+87.5~~ +50	+54.5		3.2	6.0

Sewer Levels
N+S Alley Blocks 27-17-10-2

		399.23			
P. ~~6+37.5~~	20+04.5				
16+00			3.2	96.0	
~~6+37.5~~	+34.5				
+30			4.6	4.6	
~~+97.5~~	+44.5				
+40			5.3	3.9	
~~+80.0~~	+62.0				
+57.5	℄ Arthur Ave.		4.7	4.5	
~~+62.5~~	+79.5				
+75			5.1	4.1	
			~~(W. 7+55.0 End W. line)~~		
T.P.	7.20	401.8X	4.61	394.6X	
~~+55.5~~	~~+86.5~~	~~W 7+45.5~~			
+82			7.1	4.7	
~~+37.5~~	~~21+04.5~~	~~+27.5~~			
17+00			5.9	5.9	
~~5+15.5~~	~~+26.5~~	~~7+05.5~~			
+22			4.7	7.1	
~~+87.5~~	~~+54.5~~	~~+77.5~~			
+50			4.8	7.0	
~~4+37.5~~	~~22+04.5~~	~~6+27.5~~			
18+00			5.0	6.8	
~~+87.5~~	~~+54.5~~	~~+77.5~~			
+50			4.9	6.9	
~~3+37.5~~	~~23+04.5~~	~~5+27.5~~			
19+00			4.9	6.9	
~~+87.5~~	~~+54.5~~	~~+77.5~~			
+50			4.8	7.0	
~~+37.5~~	~~24+04.5~~	~~4+27.5~~			
20+00			4.9	6.9	
~~2+32.5~~	~~+39.5~~	~~+92.5~~			
+35			5.1	6.7	
~~+89.5~~	~~+52.5~~	~~+79.5~~			
+48			5.8	6.0	
~~1+37.5~~	~~25+04.5~~	~~3+27.5~~			
21+00			6.0	5.0	
~~+87.5~~	~~+54.5~~	~~+77.5~~			
+50			5.9	5.9	
~~+37.5~~	~~26+04.5~~	~~W 2+27.5~~			
22+00			6.6	5.2	
P. ~~0+00~~	~~+42.0~~	~~W 1+90.00~~			
+37.5	Opp Lot Line		6.8	5.0	
	~~(+57.0 End P line)~~				
T.P.	4.13	398.6X	7.27	394.5X	
B.M.			4.62	394.0X	S.W. Cor. Hawley & Mission 394.01

~~W 0+00 =~~
~~W.1. U 1+91.03~~

2237.5
560
1672.5

Sewer Levels
N+S Alley Blocks 16+28
From Lot Line 1+2 - 23+24 Block 16 to E+W Alley Block 28

	13+37.0 (End "O" line)				
B.M.	6.78	398.91		392.13	S.E. McKinley +38 to 54
"O" Lot Line 1+2 = 31.16					
0+00	13+22.0		4.5	4.4	
+50	+72.0		5.0	3.9	
1+00	12+22.0		5.5	3.4	
+50	+72.0		5.5	3.4	
2+00	11+22.0		5.2	3.7	
+50	+72.0		5.0	3.9	
3+00	10+22.0		5.0	3.9	
+50	+72.0		5.0	3.9	
4+00	9+22.0		5.0	3.9	
T.P.	3.35	397.31	4.95	393.96	
+50	+72.0		3.4	3.9	
+80	+42.0		2.5	4.8	
5+00	+22.0		2.8	4.5	
+20	8+02.0		3.0	4.3	
+55	+67.0		6.3	1.0	
+65	+57.0		7.2	0.1	
+80	+42.0 ℄ Jefferson Ave		6.6	90.7	
+97	+25.0		7.3	0.0	
6+06	7+16.0		6.6	0.7	
+35	+87.0		4.8	2.5	
+50	+72.0		4.6	2.7	
7+00	6+22.0		4.9	2.4	
+50	+72.0		5.0	2.3	
8+00	5+22.0		5.1	2.2	

Block 16+28 Cont

		397.31		
8+50 +72.0			5.2	92.1
9+00 +22.0			5.3	2.0
"0" 4+04.5				
0. +17.5	℄ E+W Alley Block 28			
T.P.	5.86	396.16	7.01	390.30

Sewer Levels Alley Block 15 — From ℄ Jefferson Ave to Lot Line 1+2-23+24 Bl 15

N. ~~5+80.0~~ 7+87.5		396.16		
0+00 = ℄ Jefferson			6.2	89.96
+18 ~~+62~~ 8+05.5			6.5	9.7
+25 ~~+55~~ +12.5			6.0	0.2
+43 ~~+37~~ +30.5			4.7	1.5
~~5+00~~ +67.5			3.6	2.6
+80 ~~+80~~ +87.5			3.4	2.8
1+00 ~~4+30~~ 9+37.5			3.3	2.9
+50 ~~+80~~ +87.5			3.3	2.9
2+00 ~~3+30~~ 10+37.5			2.9	3.3
+50 ~~+80~~ +87.5			2.5	3.7
3+00				
T.P.	5.45	399.09	2.52	393.64
~~2+30~~ 11+37.5			5.1	4.0
+50 ~~1+80~~ +87.5			5.5	3.6
4+00 ~~1+30~~ 12+37.5			5.4	3.7
+50 ~~0+80~~ +87.5			4.8	4.3
5+00 ~~0+40~~ 13+27.5			4.6	4.5
+40 N. ~~0+00~~ +67.5			4.6	4.5
+80 = Lot Line 1+2 +82.5 (End N line)				
B.M.			8.02	391.07 — S.E. McKinley +36th St

Sewer Levels Alley Block 14+30 — From Lot Line 1+2-23+24 Bl. 14 to ℄ E+W Alley Bl. 30

B.M.	7.36	398.43		391.07 S.E. McKinley +36th St
W.I. 31+95.68				
0+00			4.2	4.2
32+45.68				
+50			4.8	3.6
+95.68				
1+00			5.3	3.1
33+45.68				
+50			5.5	2.9
+95.68				
2+00			5.8	2.6
34+45.68				
+50			5.4	3.0
+95.68				
3+00			5.2	3.2
T.P.	1.94	395.23	5.14	393.29
35+45.68				
+50			2.3	2.9
+95.68				
4+00			2.2	3.0
36+45.68				
+50			2.5	2.7
+95.68				
5+00			2.6	2.6
37+12.68				
+17			2.8	2.4
+50.68				
+55			5.3	89.9
+59.68				
+64			6.1	9.1
+75.68				
+80 ℄ Jefferson Ave			5.6	9.6
+93.68				
+98			6.3	8.9
38+01.68				
6+06			5.6	9.6
+35.68				
+40			4.0	91.2
+45.68				
+50			4.0	1.2
+95.68				
7+00			4.5	0.7
39+45.68				
+50			5.1	0.1
+95.68				
8+00			5.7	89.5
40+45.68				
+50			5.9	9.3

Block 14 & 30 Cont.

		395.23		
W.I. 40+95.68				
9+00			5.9	89.3
41+25.68				
+30			6.7	8.5
+45.68				
+50			6.8	8.4
+70.68				
+75			6.2	9.0
+80.68				
+85			6.6	8.6
+95.68				
10+00			6.7	8.5
T.P.	3.71	392.23	6.71	388.52
42+45.68				
+50			4.2	8.0
+95.68				
11+00			4.4	7.8
43+45.68				
+50			4.9	7.3
+63.18 (Contd. P. 68)				
+67.5 ℄ E&W Alley 31.30			4.9	7.3
T.P.	7.57	394.32	5.48	386.75

Sewer Levels

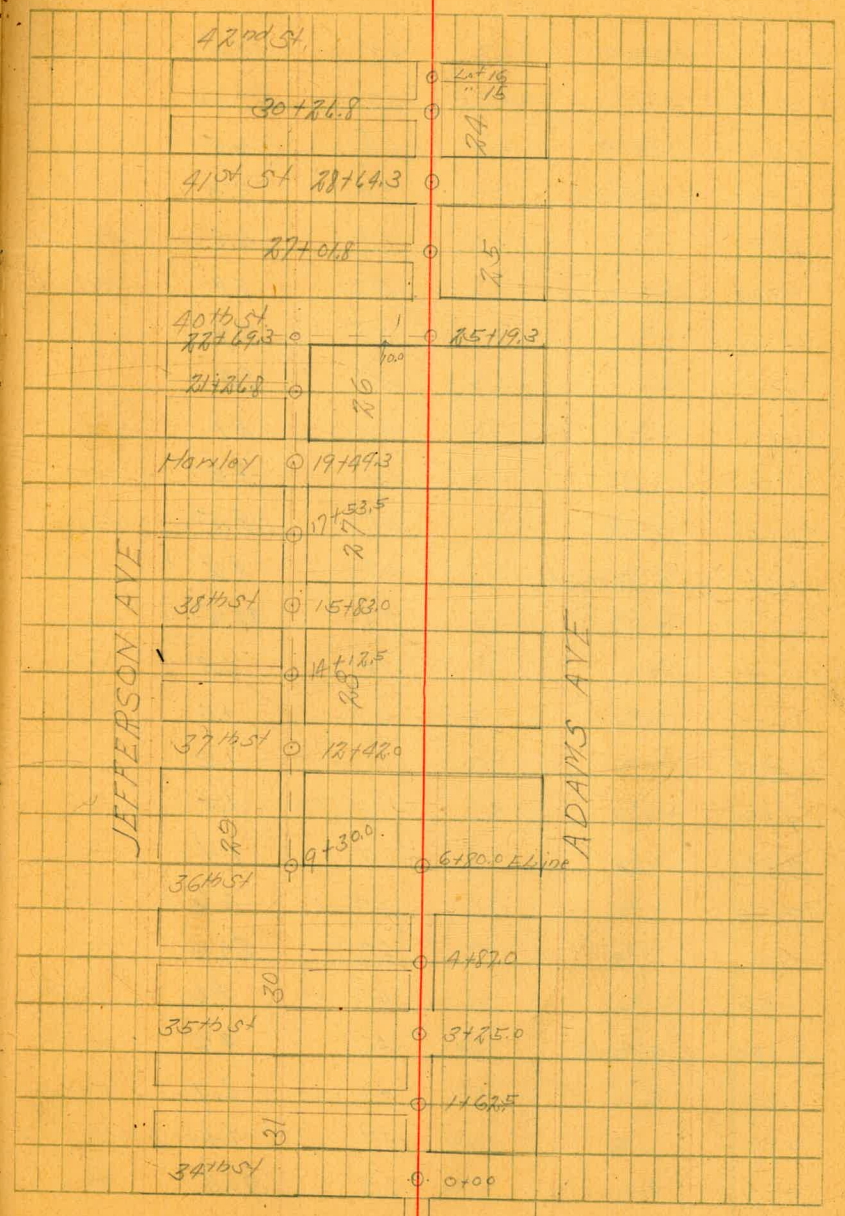
N&S Alley Block 31 From ℄ E&W Alley to Lot Line 42-26&27

394.32

I 0+00	7.6	86.7
I +15	6.8	7.5
+30	7.5	6.8
+50	6.9	7.4
1+00	6.8	7.2
+35	6.5	7.8
+45	5.2	9.1
+70	5.5	8.8
2+00	5.3	9.0
+50	4.9	9.4
3+00	4.1	90.2
+50	4.4	89.9
4+00	3.9	90.4
+50	3.3	1.0
5+00	2.6	1.7
I +07.5	2.6	1.7

Sewer Levels
East + West Alley North of Adams Ave
From ℄ 34th St to 42nd St

B.M.	6.44	⊙ 92.04			S.E. Adams + 34th St
C.3+25.0	(could P.10)				
0+00	℄ 34th St		4.93	87.11	
C.3+07.0			5.7	6.3	
+18					
C.3+00			4.9	7.1	
+25					
C.2+75.0			4.5	7.5	
+50					
C.2+60.0			4.1	7.9	
+65					
C.2+35.0			5.5	6.5	
+90					
C.2+25.0			5.3	6.7	
1+00					
C.1+75.0			5.3	6.7	
+50					
C.1+62.5 = I.0+00			5.27	386.77	on stub
+62.5 ⊥ N+S Alley					
C.1+25.0			5.4	6.6	
2+00					
C.0+75.0			4.9	7.1	
+50					
C.0+50.0			5.1	6.9	
+75					
C.0+25.0			5.9	6.1	
3+00					
C.0+17.0			6.9	5.1	
+08					
C.0+00 = W.1.45+25.18			6.0	6.0	
+25	℄ 35th St				
W.1 45+06.18	(Contd 1133/20)		6.9	5.1	
+44					
45+00.18			6.0	6.0	
+50					
+80.18			4.6	7.4	
+70					
44+50.18			4.5	7.5	
4+00					
W.1. 43+91.18			4.1	7.9	
+59					
W.1.42+63.18	1+69.5		4.7	7.3	
+87.0 ℄ Alley					
5+00	+56		4.6	7.4	
+30	1+26		3.6	8.4	
+50	+06+		3.6	8.4	



Sewer Levels
Alley North Adams Ave Cont

		392.04		
6+00	0+56		3.6	88.4
T.P.	6.10	393.35	4.79	387.25
+33	0+23		6.8	6.5
+50	1+04 ℄ 36th St		6.0	7.3
+67			6.8	6.5
+80.0	℄ Line 36 St		5.5	7.8
7+00			5.4	7.9
+50			5.3	8.0
8+00			5.2	8.1
+50			5.0	8.3
9+00			4.8	8.5
+30	℄ E+W Alley		4.8	8.5
+64			2.8	90.5
10+00			2.4	0.9
+50			2.3	1.0
11+00			2.1	1.2
+50			1.8	1.5
+88			1.9	1.4
12+00			2.7	0.6
+13			4.0	89.3
+25			4.7	8.6
+42.0	℄ 37th St.		4.1	9.2
+60			4.6	8.7
+79			3.9	9.4
+90			2.3	91.0

		393.35		
13+00			2.0	91.3
T.P.	5.90	396.61	2.64	390.71
+50			4.5	2.1
14+00			4.6	2.0
+12.5	℄ N+S Alley		4.5	2.1
+50			4.9	1.7
15+00			4.6	2.0
+30			4.8	1.8
+54			6.0	0.6
+66			6.9	89.7
+83.0	℄ 38th St		6.2	90.4
16+02			6.9	89.7
+13			6.2	90.4
+32			4.8	1.8
+56			4.6	2.0
17+00			4.2	2.4
+53.5	℄ N+S Alley		4.0	2.6
+90			3.1	3.5
18+00			3.1	3.5
+50			2.9	3.7
+75			3.1	3.5
19+00			4.2	2.4
+20			5.4	1.2
+49.3	℄ Hornley Blvd		4.5	2.1
+70			5.3	1.3

Sewer Levels
Alley North Adams Ave Cont.

		396.61		
19+95			4.1	92.5
20+00			3.2	3.4
T.P.	4.41	396.72	4.30	392.31
+50			2.8	3.9
21+00			2.8	3.9
+26.8	℄ NYS Alley		3.0	3.7
+50			3.4	3.3
22			3.5	3.2
+50			3.7	3.0
+69.3	10' E N Line 40th St.		4.4	2.3
23+00			4.2	2.5
+50			4.3	2.4
24+00			4.2	2.4
+50			4.2	2.5
25+00			4.3	2.4
+19.3	△ ℄ E N Alley Prod.		4.4	2.3
+21			5.0	1.7
+39.3	℄ 40th St		4.5	2.7
+57			4.6	2.1
+70			4.3	2.4
+72			3.3	3.4
T.P.	3.72	396.78	3.67	393.05
26+00			3.6	3.2
+50			3.8	3.0
27+00	℄ Alley N+S		3.79	2.99

(L2 12+~~15.8~~ 32.0 End of Line)
+89.30
L2 11+~~37.5~~ 37.5

8-1-25

		396.78		
L2 10+89.3 27+50			3.7	93.1
28+00 +39.3			4.6	2.8
+39 +05.3			4.5	2.3
10+04.3 +35			4.8	2.0
+92.3 +49			5.3	1.5
+75.0 +64.3	℄ 41st St.		4.8	2.0
+57.3 +82			5.4	1.4
+43.3 +96			5.0	1.8
9+39.3 29+00			4.8	2.0
+94.3 +45			4.8	2.0
+71.3 +68			3.8	3.0
+39.3 30+00			4.8	2.0
+29.3 +18			5.5	1.3
8+12.50 +26.8	℄ N+S Alley		5.1	1.2
+89.3 +50			5.5	1.3
+39.3 31+00			5.1	1.7
L2 7+33.0 +06.3	Lot Line N of 41st St.		5.3	1.5

Sewer Levels Mission Dr.

From ℄ McKinley to 0+0 Lot Line 34+35 Block A

Location Page 27

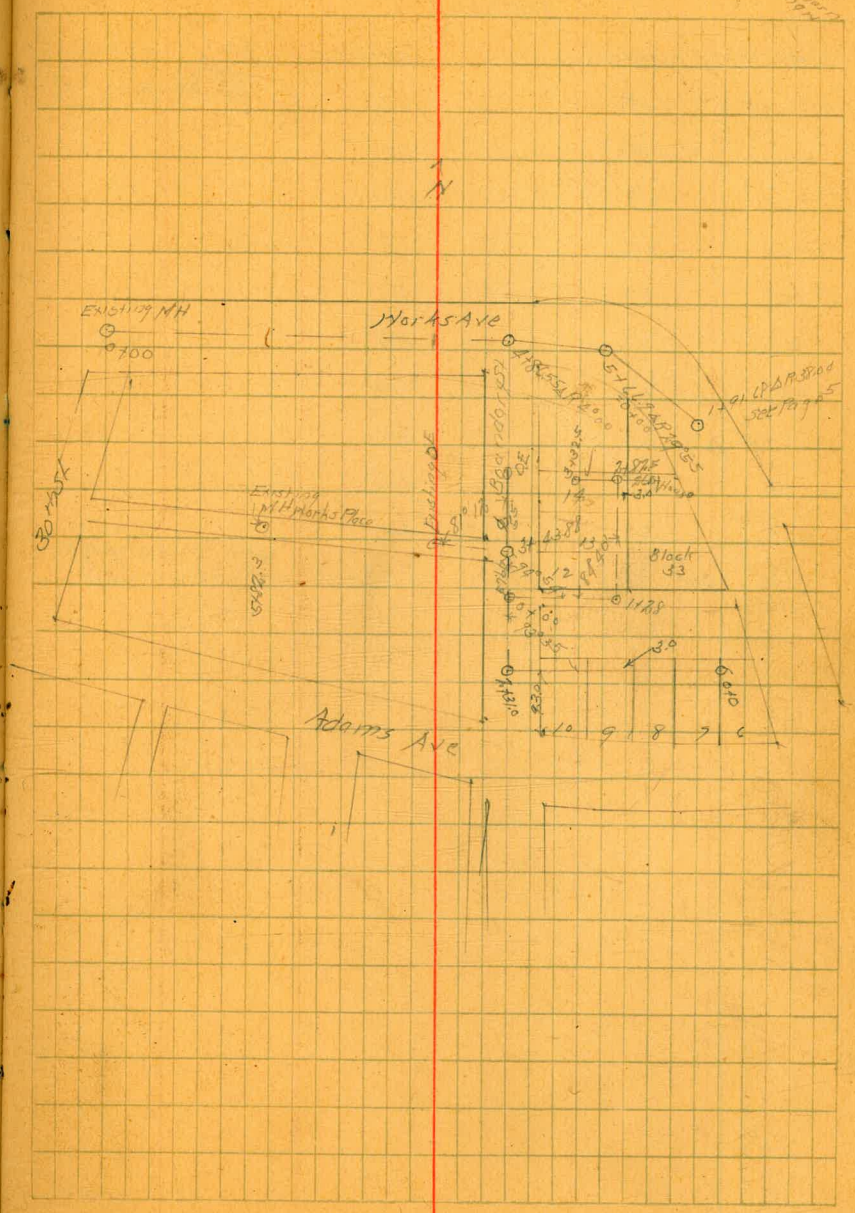
	3.87	397.78		393.91	S.E. Mission + McKinley
C. ~~19+59.7~~	(From P. 8) 21+50.1				
0+00 ℄ McKinley			4.13	3.7	
= 63+45.1 ~~20+09.7~~	20+50.1		4.4	3.4	
+50 ~~+59.7~~	20+50.1		4.7	3.1	
1+00 ~~21+09.7~~	19+50.1		4.8	3.0	
+50 ~~+50.10~~	19+59.7		5.03	2.75	
+90.4 = Lot Line 34+35 B/A					
0+00 South					

[see page 26]

Sewer Levels

Boundary St. Across Lot 6-7-8-9-10 Block 33 Normal Hights.

B.M.	3.79 +82.0	394.73		390.94	S.E. Cor Adams + Boundary.
	~~3+90.3~~ (~~4+00~~ End of line) +72.50				
0+0 = Lot Line 6+78 1/4 33			5.6	89.1	
	~~3+40.3~~ 8+22.50				
+50			5.5	9.2	
	~~+90.30~~ +72.50				
1+00			5.2	9.5	
	~~2+40.30~~ 7+22.50				
+50			5.1	9.6	
	~~+90.30~~ +72.50				
2+00			4.5	90.2	
	~~1+59.30~~ = ~~B3 0+00~~ 6+41.5				
+310	△ M.H.		4.81	89.9	on Stob
	~~+90.30~~ +72.50				
3+00			4.7	90.0	
	~~+46.42~~ +28.62 = B_3				
T.P. +4388	△ 4.95	394.57	5.11	389.62	
	~~+34.8~~ +16.5				
+56			5.5	9.1	
A_3	~~0+25.3~~ 5+07.5				
+65			5.0	9.6	
	4+72.5				
4+00			4.8	9.8	
	3+72.5				
5+00			4.6	90.0	
A_3	2+90.0				
1+82.3	Top Rim Existing M.H. 2 Mort. S.P. & B. Alley		5.12	89.4	
	Flow Line		11.40	83.17	
T.P.	0.98	394.75 (5.55)	4.80	389.77	
		394.73			
B_3 0+00 = 2+43.88	M.H.		5.11	89.62	
0+55 Lot Line 8+78 1/4 33			5.4	9.3	
+70 End of line.					



Sewer Levels Works Ave.

From Existing M.H. & 30th St + Works to Lot Line 15+16 Blk 33

Normal Hgts.

390.75

0+00	M.H. & 30th + Works	3.36		Top Rim
	Flow Line	10.61		
1+00	Top Paving	3.7		
2+00	" "	4.0		
3+00	" "	4.2		
4+00		4.6		
+66		4.2		
+76		5.5		
+86.55	△R	4.9		
5+00		4.5		
+16		4.0		
+66.9 =0+00	△R	4.33	386.42	on Stub 386.44

Sewer Levels

E+W Alley Block 33 Across Lot 12-13-14 Blk 33

See Sketch Page 77

4.45	394.07		389.62	on Stub @ 3+43.88
C_3 0+00 = A_3 5+78.25 ~~96.05~~		4.02	90.1	on Hub
& Boundary + Alley Blk 33 +15		5.0	89.1	
+20		4.6	9.4	
+50		4.8	9.3	
1+00		5.2	8.9	
+28 △		5.6	8.5	on Stub
+50		5.9	8.2	
2+00		6.5	7.6	
+50		6.5	7.6	
+82.5 △		6.7	7.4	26' E Edge Ho. R. 7.1
(+85.5 End of line) 3+32.5 = Lot Line 15+16 Blk 33		6.1	8.0	

Sewer Levels Across Lot 1 Block 1, West Teralta
From ℄ Monroe Ave to Lot Line 1+2 Blk 1
℄ Alley Block 60 Produced South

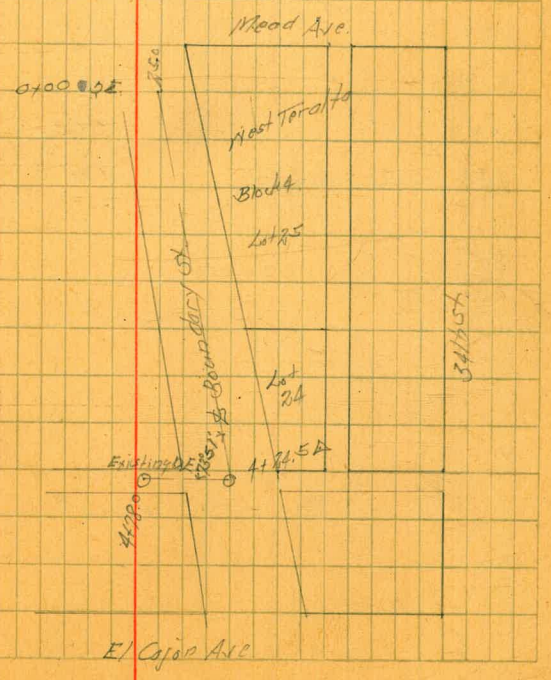
B.M.	4.97	390.18		385.21	S.E. Cor Monroe & Boundary
ES BS 0+00 = K. 13+28.03 = ℄ Monroe & Alley Blk 60			5.38	4.8	on Stub
+18 Gutter			6.3	3.9	
Top CB			5.6	4.6	
+30			5.5	4.7	
+32			4.9	5.3	
+88.5 O.E. = Lot Line 1+2 Block 1 West Teralta			4.8	5.4	

Sewer Levels

Boundary St. From 25' S.S.L. Mead Ave to ℄ Alley N El Cajon

	+	H.I.	−	Elev	
T.P.	4.02	386.17		382.15	on Stub ℄ Mead x 33 rod St.
5 0+00 = 25' S.S.L. Mead			3.0	3.2	
+40			3.6	2.6	
+55			4.3	1.9	
+70			4.5	1.7	
+80			3.8	2.4	
1+00			4.0	2.2	
+50			5.0	1.2	
+60			5.0	1.2	
+70			4.1	2.1	
+85			5.2	1.0	
2+00			5.2	1.0	
+35			4.8	1.4	
+50			5.7	0.5	
+80			5.7	0.5	
3+00			4.9	1.3	
+30			5.6	0.6	
+42			6.7	79.5	
4+00			7.3	8.9	
T.P. +24.5	ΔR 44'	383.56	7.02	9.2	on Stub
+35			4.0	9.6	
+40			4.4	9.2	
+50			4.2	9.4	
+60			3.7	9.9	
+78	Existing DE.		3.6	80.0	

8-31-25

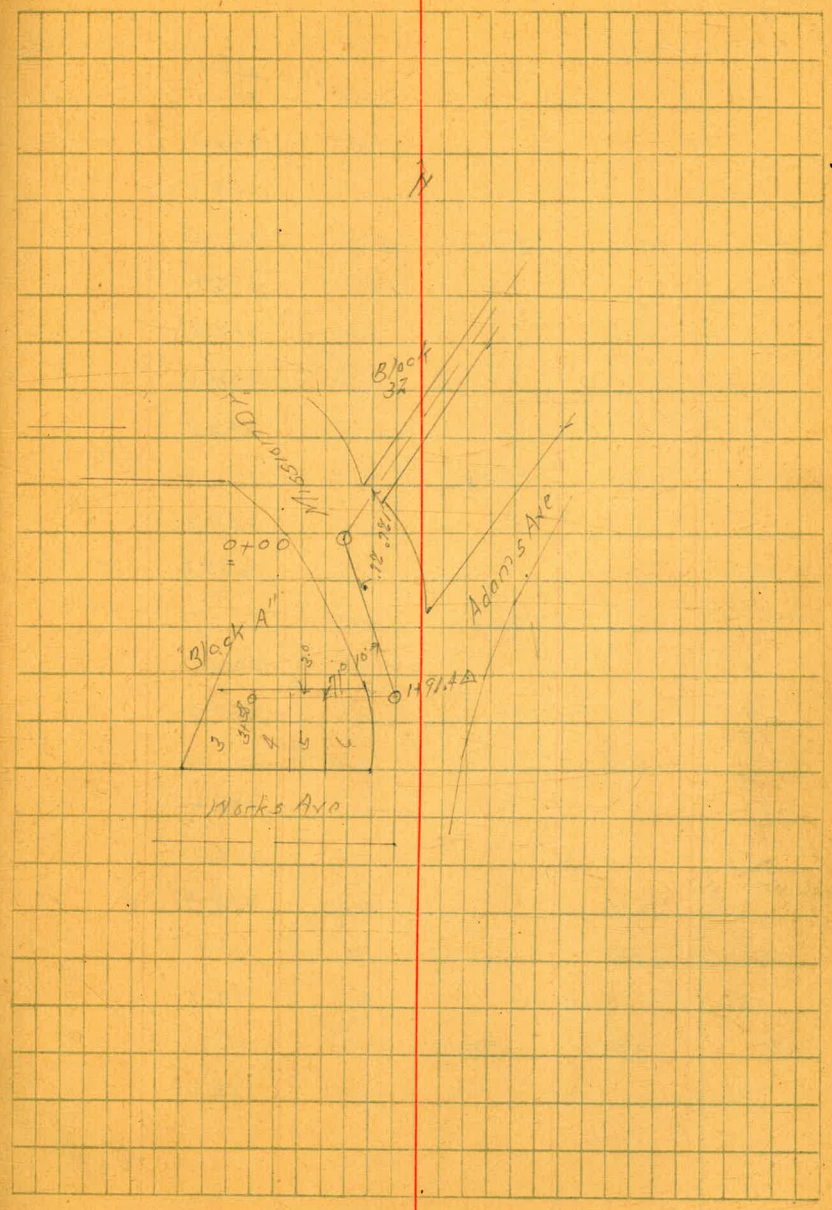


Sewer Levels

Mission Drive & Across Lots 3-4-5-6 Block A" Norma Heights.

From ℄ Mission Dr & Alley Blk 32 to Lot Line 3 & 4 Blk A

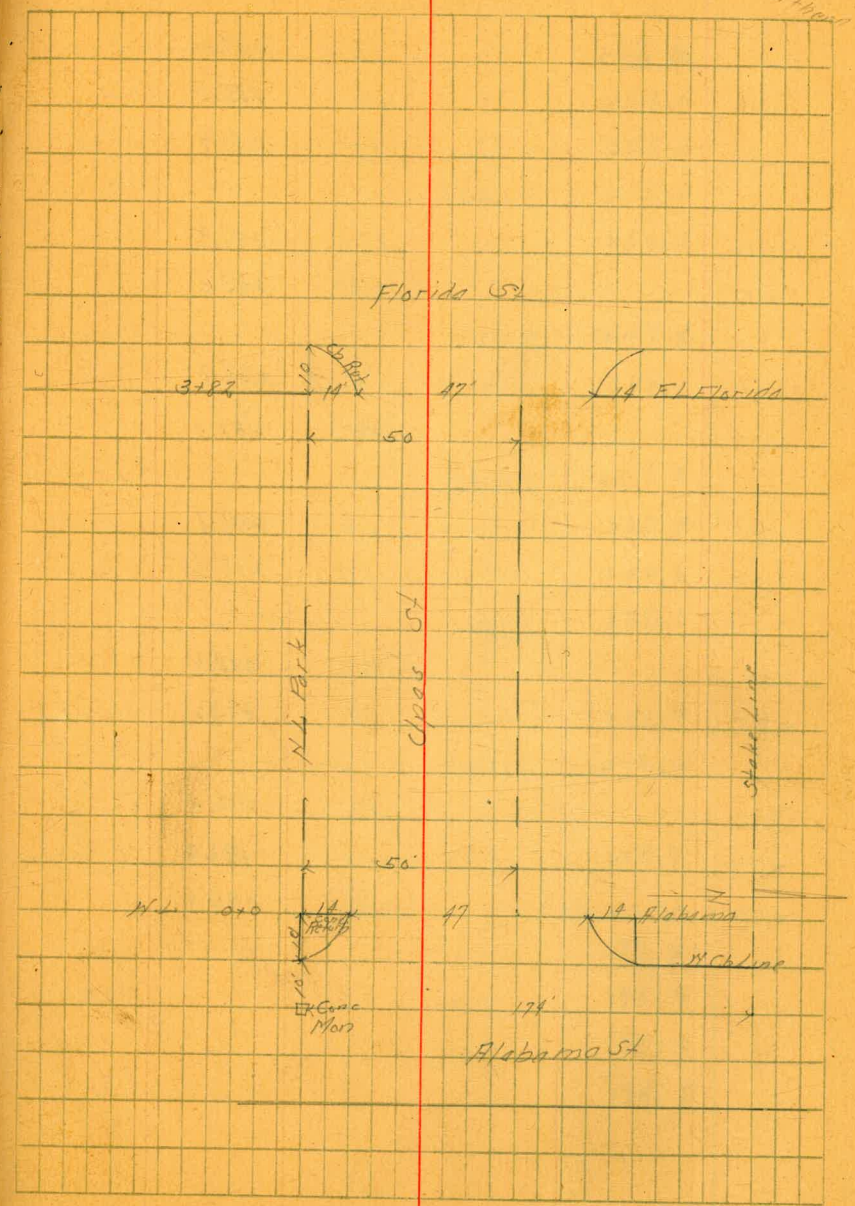
B.M.	4.14	393.23		389.09	N.E. Cor Adams & Mission Dr.
D_3 0+00 = 0+62.3 = ℄ Mission Dr & Alley Blk 32			4.05	9.2	on Stob
+50			4.3	8.9	
1+00			4.5	8.7	
+14.5	Top Paving		4.71	8.5	N. Edge Paving
+50	"	"	4.8	8.4	
+91.4	"	" △	4.7	8.5	
2+00	"	"	5.1	8.1	
+9	Gutter		5.6	7.6	
+9	Top Curb		5.1	8.1	
+50			4.9	8.3	
+57			4.7	8.5	
+65			5.4	7.8	
3+00			7.0	6.2	
+58	= Lot Line 3+4 Blk A		9.0	4.2	



Levels S.L. Upas
From Alabama to Florida

	4.56	264.06		259.50 264.1	NW Upas + Alabama
0+0 = W.L. Alabama			3.98	260.0	on Cent Return
+10			7.8	256.3	
+50			10.9	253.2	
TP	2.27	255.53	10.80	253.26	
1+00			5.1	250.4	
+50			9.5	246.0	
+70			13.5	242.0	
+80			13.4	242.1	
TP	2.57	245.26	12.84	242.69	
2+00			6.0	239.3	
+25			12.2	233.1	
TP	1.00	233.29	12.97	232.29	
+50			6.8	226.5	
+75			13.1	220.2	
TP	1.74	222.02	13.01	220.28	
3+00			6.6	215.4	
+25			11.9	210.1	
+57			17.1	204.9	
TP	0.44	209.53	12.93	209.09	
+82 = E.L. Florida			15.2	194.3	
TP	1.02	199.07	11.48	198.05	
on N End Curb Return			4.99	194.1	

4-15-26
Sisson
Bliss
Northern



Levels & Upas
From Alabama to Florida

	264.06		
0+0 = H.L. Ala		4.7	259.4
+10		8.3	255.8
+50		12.2	251.9
	255.53		
1+00		7.6	247.9
+50		10.4	245.1
	245.26		
2+00		6.5	238.8
+25		14.2	231.1
	233.29		
+50		8.5	224.8
+75		14.7	218.6
	222.02		
3+00		8.8	213.2
+25		14.8	207.2
	209.53		
+50		13.1	196.4
+57		13.1	196.4
+82 = E.L. Florida		15.3	194.2

Levels H.L. Upas
From Alabama to Florida

	264.06		
0+0 = H.L. Alabama		4.3	259.8
+10		6.8	257.3
+30		8.5	255.6
+40		10.9	253.4
+50		12.3	252.8
	255.53		
1+00		8.1	247.4
+50		13.4	242.1
	245.26		
+75		5.9	239.3
2+00		9.8	235.5
+15		12.7	232.6
+25		17.2	228.1
	233.29		
+50		12.4	220.9
+75		17.1	216.2
	222.02		
3+00		12.3	209.7
	209.53		
+25		9.9	199.6
+35		13.0	196.5
+57		14.2	195.3
+82 = E.L. Florida		15.0	194.5

90 Sewer Levels ℄ Alley Block I Teralta
Between Monroe - Madison 38th + 39th

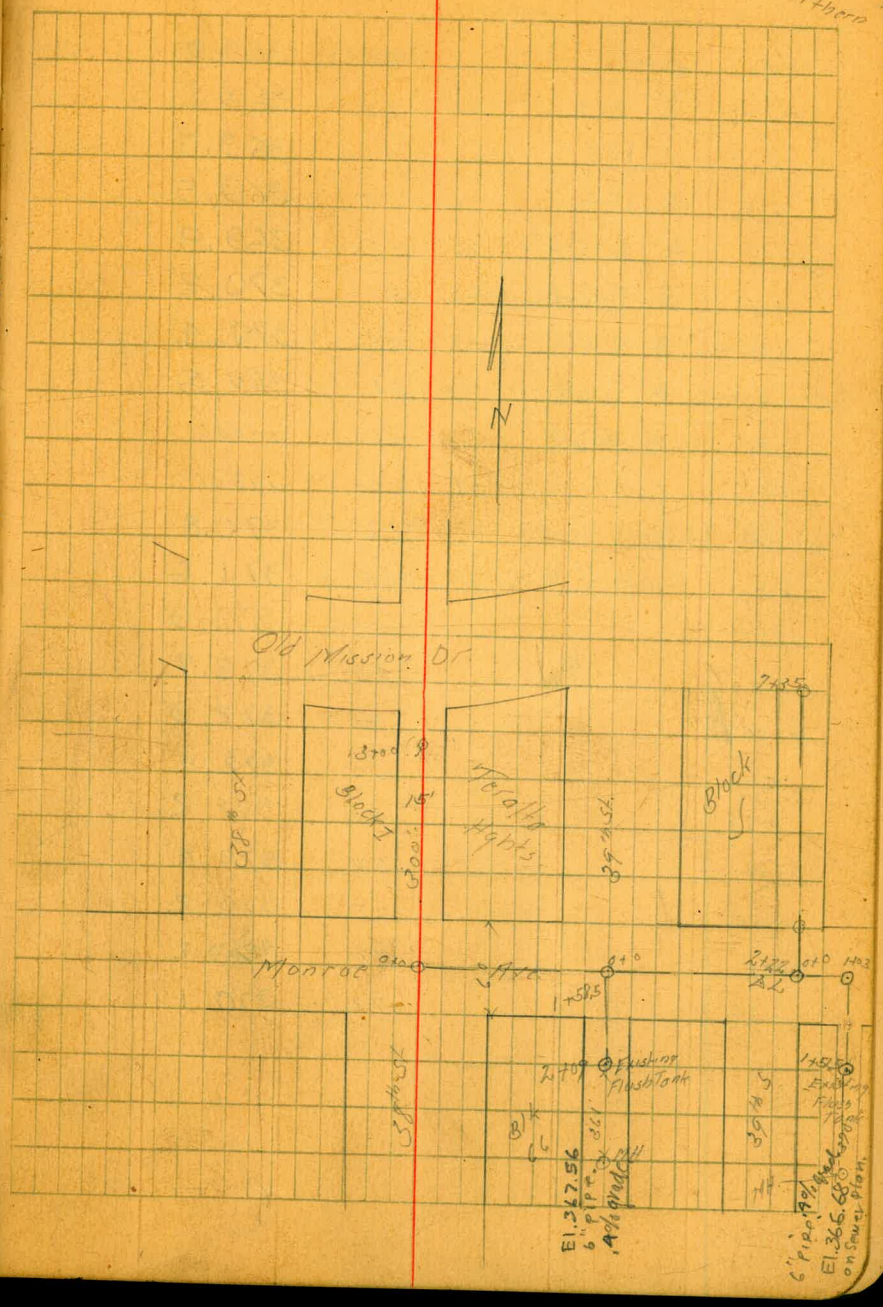
BM	2.48	389.16		386.68	BP SE Cor Monroe + 44th
TP	0.05	379.64	9.57	379.59	
0+0	℄ Monroe		5.5	374.1	
+18			6.0	373.6	
+25	Top Walk		5.37	374.27	
+35			6.3	373.3	
+50			6.0	373.6	75'E 8.3 371.3
1+00			6.8	372.8	
+50			8.5	371.1	
2+00			9.0	370.6	75'E 11.5 368.1
+50			9.3	370.3	
3+00			10.0	369.6	75'E 11.8 367.8

Sewer Levels ℄ Monroe
From ℄ Alley Blk I to Flush Tank Blk 66

BM	1.56	376.06		374.50	SW Monroe + 38
0+0	℄ Alley Blk I And Monroe		1.9	374.1	
+50			3.3	372.7	
1+00			4.7	371.3	
+58.5	℄ Alley		6.1	369.9	
+75			6.5	369.5	
+87			5.7	370.3	
2+00			4.0	372.0	
+09	℄ Flush Tank		3.67	372.4	Rim Tank
			8.93	367.1	Bottom Conc. Tank
			10.03	366.0	Flow Line

(E.S.D. Profile shows 367.56 Flow Line
6" Pipe on 0.4% Grade)

91
4-15-26
Sisson
Bliss
Northern



Sewer Levels ℄ Alley Block S Teralta
From ℄ Monroe + Alley Blk 66 to

376.06

0+00	= ℄ Alley + Monroe Blk 66		6.1	369.9
0+50			6.8	369.2
1+00			7.0	369.0
+50			6.5	369.5
2+00			6.2	369.8
+22	ΔL = ℄ Alley Blk S		5.8	370.2
+33			5.6	370.4
+40			6.4	369.6
+46	Top Walk		5.60	370.46
TP	6.97	377.43	5.60	370.46
3+00			6.6	370.8
+50			5.8	371.6
4+00			5.5	371.9
+50			4.7	372.7
5+00			4.5	372.9
+50			5.0	372.4
+60			5.2	372.2
6+00			7.0	370.4
+50			7.2	370.2
7+00			7.2	370.2
+35			7.3	370.1

Sewer Levels ℄ Monroe
From ℄ Alley Blk 3 Blk S to Flush Tank Blk 65

TP	5.13	375.59	370.46	Top Walk
0+00 = ℄ Alley Blk S ℄ Monroe			5.3	370.3
+50			4.5	371.1
1+02 ℄ Alley Blk 65 ℄ P			4.1	371.5
+21			4.8	370.8
+40			3.4	372.2
+51.5 ℄ Flush Tank			2.98	372.6 Rim Tank
			9.21	366.4 Bottom Cone Tank
			10.80	364.8 Flow Line

(E.S.D. Profile shows 366.68 Flow line
6" Pipe on 0.4 % Grade)

94

Sewer Levels Alley Block 66 W.P. Herberts Sub.
Between 38th & 39th St. From Flush Tank S Monroe 361's to Existing M.H.

See Sketch Page 91

B.M.	1.88	376.38		374.50	S.W. BP. Monroe & 38th
0+0	Flush Tank		9.24	367.14	Conc. Bottom Tank
			10.94	365.44	Flow Line
			4.04	372.34	Rim Top
TP	5.94	379.25	3.07	373.31	
100's			5.1	374.2	
200's			5.0	374.3	
300's			5.5	373.8	
361's	= M.H. Top Rim		6.01	373.24	Rim
	Flow Line		13.37	365.88	
TP	5.11	377.58	6.78	372.47	

E.S.D. Profile shows 366.12
sheet 50

95

6-22-26

Sewer Levels Alley Block 65 W.P. Herberts Sub.
Between 39th & 40th St. From Flush Tank S. Monroe 370's to Existing M.H.

377.58 See Sketch Page 91

0+0	Flush Tank Top Rim	5.01	372.57 ✓	Sisson Bliss Northern
	Conc. Bottom Tank	11.24	366.34 ✓	
	Flow Line	12.81	364.77 ✓	1.57
100's		5.2	372.4	
200's		5.4	372.2	
300's		5.3	372.3	
370's	M.H. Rim	5.79	371.79	
	Flow Line	12.60	364.98	

E.S.D Profile shows 365.20

Levels for Proposed Drain
& Alley Blk 2 Frary Hgts. Upas to Thorn
Bet Grim & 31st.

9/28/26
miller

BM	2.25	331.24		328.99	N.W. Upas & 31st St.
00=S. Line Upas			4.70	326.54	Paving
0+20			6.3	324.9	
0+50			7.2	324.0	
0+90			8.0	323.2	
1+05			9.0	322.2	
1+50			9.8	321.4	
2+00			11.0	320.2	
2+50			11.8	319.4	
3+00			12.6	318.6	
T.P.	2.66	321.37	12.53	318.71	
3+50			3.1	318.3	
4+00			4.0	317.4	
+50			4.7	316.7	
+75			5.3	316.1	
5+00			6.6	314.8	
+25			7.0	314.4	
+50			6.6	314.8	
12' W of above			11.1		Bottom Wash
+75			6.1	315.3	
+98			5.9	315.5	
6+00=N. Line Thorn			6.16	315.21	Paving
T.P.	5.81	321.48	5.70	315.67	

98 60' wide
10' cls
10' 1/4s

Boundary St. X See
Works Ave to Madison Ave

10/2/26
Miller

B.M.	3.19	394.15		390.96	S.E. Adams + Boundary
	00 = S. Line Works Ave				
E			7.1	387.05	
el			7.38	386.77	emt el
1/4			7.6	386.55	
e			7.5	386.65	
1/4			7.9	386.25	
el			7.74	386.41	emt el
w			7.5	386.65	
		2' S			
w			7.2	386.95	
el			7.7	386.45	
1/4			7.8	386.35	
e			7.6	386.55	
1/4			7.6	386.55	
+6			7.7	386.45	
el			6.7	387.45	
E			6.6	387.55	
		25' S			
E			6.5	387.65	
el			6.6	387.55	
1/4			6.9	387.25	
e			6.3	387.85	
1/4			6.9	387.25	
el			6.7	387.45	
w			6.3	387.85	

Plotted 6-1-27 J.L.M.

99

⊼ = 394.15

			Elv
	50' S		
w		6.0	388.15
el		6.4	387.75
1/4		6.1	388.05
e		6.0	388.15
1/4		6.6	387.55
+6		6.7	387.45
el		6.2	387.95
E		5.9	388.25
	100' S		
E		5.8	388.35
el		5.8	388.35
+4		6.3	387.85
1/4		6.0	388.15
e		5.5	388.65
1/4		5.6	388.55
el		6.2	387.95
w		5.5	388.65
	150' S		
w		5.0	389.15
el		5.4	388.75
1/4		5.0	389.15
e		4.8	389.35
1/4		5.4	388.75
+5		5.8	388.35
el		5.3	388.85
E		5.3	388.85

394.15

200' S

e	5.0	389.15
cb	5.0	389.15
+5	5.5	388.65
1/4	5.3	388.85
e	4.6	389.55
1/4	5.0	389.15
+5	5.2	388.95
cb	4.7	389.45
W	4.6	389.55

250' S

w	4.2	389.95
cb	4.3	389.85
+4	4.7	389.45
1/4	4.4	389.75
e	4.1	390.05
1/4	4.7	389.45
+4	5.0	389.15
cb	4.6	389.55
e	4.8	389.35

300' S

E	3.9	390.25
cb	4.2	389.95
+5	4.7	389.45
1/4	4.4	389.75
e	4.1	390.05
1/4	4.6	389.55

$\overline{\Lambda}$ = 394.15

E/r.

cb	4.4	389.75
w	4.3	389.85

350' S

w	4.2	389.95
cb	4.0	390.15
1/4	4.4	389.75
e	3.9	390.25
1/4	4.2	389.95
+5	4.8	389.35
cb	4.0	390.15
E	4.1	390.05

400's = N. Line Adams on w

e	3.8	390.35
cb	3.8	390.35
+6	4.3	389.85
1/4	3.8	390.35
e	3.6	390.55
1/4	4.0	390.15
cb	3.8	390.35
w	3.5	390.65

400's on w
414's " E = N. Line Adams on diagonal

w	3.5	390.65
cb	3.40	390.75 crat cb no yardage
cb	3.8	390.35
1/4	3.6	390.55
e	3.4	390.75

		394.15			
		N. Line Adams (con)			
1/4			3.6	390.55	
cb			3.41	390.74	cmt cb no yardage
cb			3.6	390.55	
E			3.5	390.65	
T.P.	3.65	394.61	3.19	390.96	
		S. Line Adams on diagonal			
W			4.0	390.61	
cb			4.1	390.51	
1/4			3.8	390.81	
c			3.7	390.91	
1/4			3.9	390.71	
cb			3.81	390.80	cmt cb
E			3.7	390.91	
S. Line Adams on E					
14' S. of " " " " W = 00 = 90°-00'					
E			3.7	390.91	
cb			3.9	390.71	
1/4			4.3	390.31	
c			4.2	390.41	
1/4			4.4	390.21	
cb			4.5	390.11	
W			4.4	390.21	
		50' S			
W			4.5	390.11	
cb			4.5	390.11	
1/4			4.6	390.01	
c			4.3	390.31	

394.61

Boundary 102

			Elr.
1/4		4.5	390.11
cb		4.4	390.21
E		4.0	390.61
	100' S		
E		4.2	390.21
cb		4.3	390.31
1/4		4.6	390.01
c		4.5	390.11
1/4		4.7	389.91
cb		4.4	390.21
W		4.3	390.31
	150' S		
W		4.3	390.31
cb		4.3	390.31
1/4		4.5	390.11
c		4.3	390.31
1/4		4.5	390.11
cb		4.4	390.21
E		4.1	390.51
	200' S		
E		4.3	390.31
cb		4.4	390.21
1/4		4.5	390.11
c		4.4	390.21
1/4		4.5	390.11
cb		4.4	390.21
W		4.2	390.41

394.61

250' S

W	3.7	390.91
cl	4.4	390.21
1/4	4.8	389.81
C	4.5	390.11
1/4	4.6	390.01
cl	4.3	390.31
E	4.2	390.41

300' S

E	4.7	389.91
cl	4.7	389.91
1/4	4.9	389.71
C	4.5	390.11
1/4	4.8	389.81
cl	4.5	390.11
W	4.3	390.31

350' S

W	4.5	390.11
cl	4.7	389.91
1/4	4.9	389.71
C	4.7	389.91
1/4	5.2	389.41
cl	4.8	389.81
E	4.6	390.01

400' S

E		
cl		

1/4	5.0	38.961
C	5.0	389.61
1/4	5.4	389.21
cl	4.8	389.81
W	5.1	389.11

450' S

W	5.0	389.61
cl	5.1	389.51
1/4	4.9	389.71
C	4.8	389.81
1/4	5.4	389.21
cl	5.2	389.41
E	5.2	389.41

487' S = P.I. W. Line Boundary with W Line Illinois

E	5.3	389.31
cl	5.1	389.51
1/4	5.3	389.31
C	5.1	389.51
1/4	5.2	389.41
cl	5.2	389.41
W	5.4	389.21

550' S

W Line Ill	5.3	389.31
W	5.4	389.21
cl	5.5	389.11
1/4	5.4	389.21
C	5.2	389.41

	394.61			
1/4		5.6	389.01	
cl		5.4	389.21	
E		5.2	389.41	
608' S on W 622 S. E = N Line Madison on diagonal				
E		5.0	389.61	
cl		4.74	389.87	emt el no yardage
cl		5.2	389.41	
1/4		5.6	389.01	
E		5.3	389.31	
1/4		5.3	389.31	
cl		5.0	389.61	
W		5.1	389.51	
W cl Line Illinois		4.86	389.75	emt el

20' wide Alley. Blk 4 City Hgts Annex #I 10/4/21
Univ to Klaubert Bet Fairmount Miller
& 44th (Colonial)

B.M.	2.55		N.W. Univ & Farmount
	00 = S. Line Univ Ave		
W		4.63	cmt cb
W		4.82	Pavement
C		4.6	ground cmt cb +
E.		4.77	Pavement
	25' S. garage on W cmt floor on Line		
E		4.4	
C		4.4	
W		4.22	floor
	40' S garage on E cmt floor on line		
E		4.61	floor
	60' S		
W		4.2	
C		4.5	
E		4.6	
	105' S. garage on W cmt floor 0.3 in Alley		
E		5.2	
C		4.8	
W		4.4	floor
	140' S garage on E dirt floor 7.4 Back		
W		4.8	
C		4.8	
E		5.1	
+7.4		5.0	floor

160' S garage on E. wood floor 1.4 Back
" " W cmt " 5.7 "

E -1.4	4.8	floor
E	5.1	
C	4.8	
W	4.9	
W + 5.7	4.7	floor
	191' S. garage on W cmt floor 5.2 Back	
W-5.2	4.7	floor
W	4.8	
C	4.9	
E	5.2	
T.P. 4.47	5.04	
	207' S garage on E wood floor 2.0 Back	
E	4.5	floor
C	4.6	
W	4.3	
	240' S	
W	4.3	
C	4.3	
E	4.6	
	270' S	
E	4.6	
C	4.7	
W	5.1	

300'S

W 5.1

C 4.7

E 4.8

336'S to 349'S Shack on E 1.0 in Alley

360'S

E 4.8

C 4.7

W 4.9

392'S. to 400'S. Shack on E 0.7 in Alley

garage on W dirt floor 6.5 Back

408'S " " E cmt " 4.5 "

W 5.0 floor

C 4.7

E 4.5 floor

430'S

E 4.8

C 4.6

W 4.4

450'S

W 5.0

C 5.1

E 5.1

457'S garage on W dirt floor 7.1 Back

W-7.1 4.8 floor

480'S

E 4.3

C 4.2

W 4.5

Alley Blk 4 City Hts 106
Annex #1

508'S. garage on W cmt floor 5.2 Back

W-5.2 5.1 floor

W 5.3

C 5.2

E 5.1

544'S garage on W cmt floor 4.5 Back

E 5.0

C 5.1

W 5.3

+4.5 5.0 floor

557'S garage on W cmt floor 4.8 Back

W-4.8 5.1 floor

W 5.2

C 5.2

E 5.0

585'S

E 5.2

C 5.7

W 5.7

600'S = N. Line Klauber

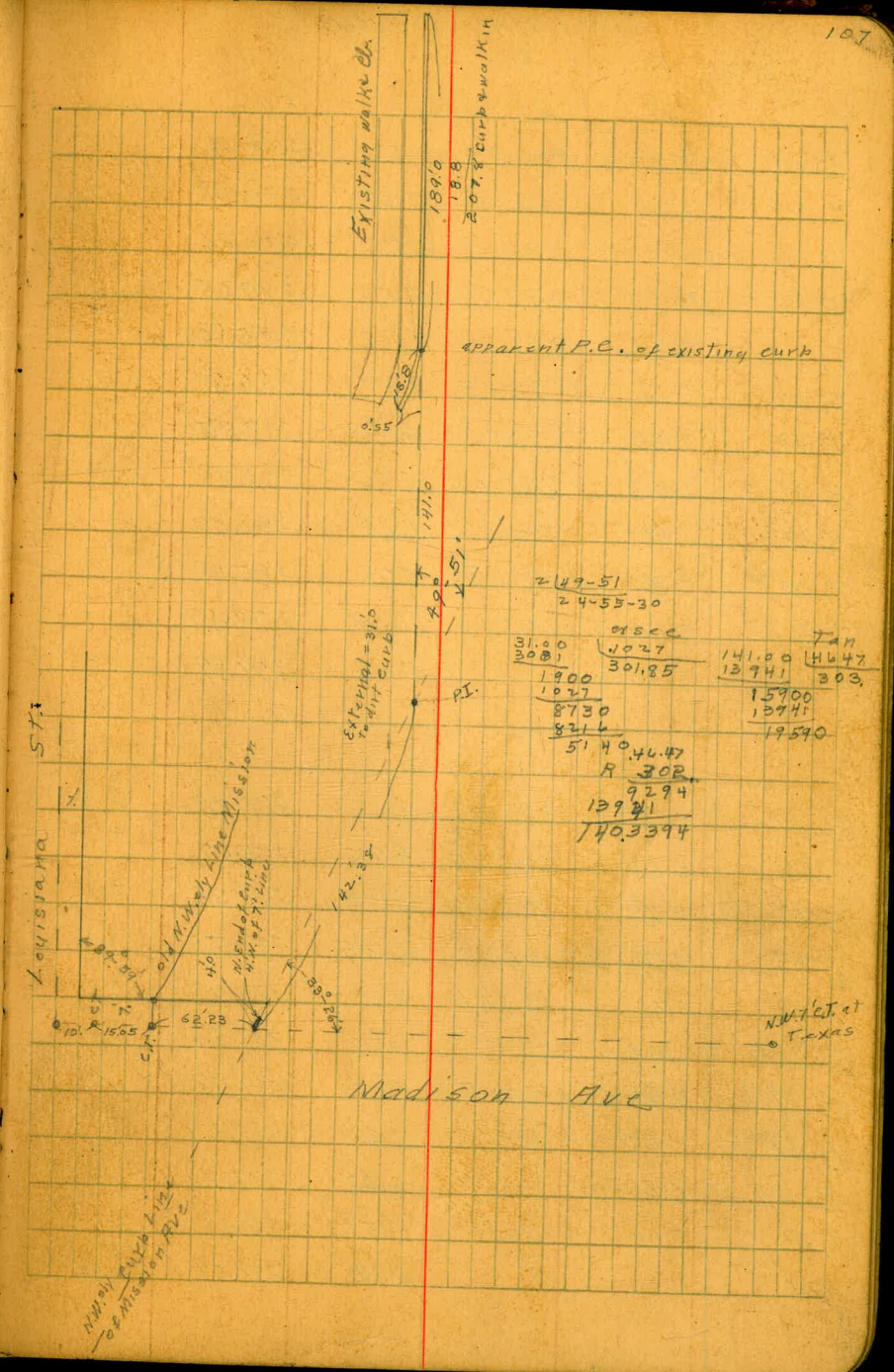
W 6.41 cmt cl

C 6.6

E 6.42 " "

Survey of Mission Ave from Madison North

10/4/26 Miller



2 | 49-51
24-55-30

31.00		141.00	Tan
3081	.1027	13941	4647
1900	301.85	15900	303
1027		13941	
8730		19590	
8216			
5140			

R .46.47
302
9294
13941
140.3394

Normal Heights
Bench Marks

	+	H.I.	−	Elev	
B.M.	5.27	394.31		389.04	
T.P.	3.90	394.64	3.57	390.74	
B.M.			3.70	390.94	
B.M.	3.08	392.17	5.55	389.09	
B.M.	4.31	390.11	6.37	385.80	
B.M.	7.04	393.75	3.40	386.71	
B.M.	7.46	396.71	4.50	389.25	
B.M.	3.53	396.31	3.93	392.78	
B.M.	2.49	392.56	6.24	390.07	
B.M.	0.30	386.08	6.78	385.78	
T.P.	3.04	377.93	11.19	374.89	
B.M.			7.06	370.87	
B.M.	4.24	390.02		385.78	
T.P.	5.68	390.75	4.95	385.07	
B.M.	7.22	393.90	4.05	386.68	
B.M.	4.64	396.15	2.39	391.51	
T.P.	3.68	393.66	6.17	389.98	
B.M.	0.63	388.99	5.30	388.36	
B.M.	4.56	384.85	8.70	380.29	
B.M.	6.25	388.64	2.46	382.39	
B.M.	6.56	391.77	3.43	385.21	
T.P.	5.60	394.81	2.56	389.21	
B.M.			3.85	390.96	390.94

7/20/25
A. Sisson
W. Bliss

B.P. S.E. Cor. Adams Ave. + 30th St.

" " " " " Adams Ave + Boundary

" " N.E. " " " + Mission Dr. (W)

" " S.E. " " " + 34th St.

" " " " " " " + 36th "

" " S.W. " " " + 38th "

" " S.E. " " " + 40th "

" " " " " " " + 42nd "

" " " " " " " + 44th " Ch.

" " " " " " " + Osborn Place

B.P. S.E. Cor. Adams Ave + 44th St.

B.P. S.E. Cor. Monroe Ave + ~~44th St.~~ Cherokee

" " " " " " " + ~~42nd St.~~ Wilson

" " " " " " " + ~~Perfect~~ 34th

" " " " " " " + ~~First~~ 33rd

" " " " " " " + ~~34~~ 32nd

" " " " " " " + Boundary

" " " " " Adams " + "

	+	H.I.	−	Elev.	
B.M.	4.51	393.60		389.09	
T.P.	6.97	396.75	3.82	389.79	
T.P.	5.92	398.82	3.85	392.90	
B.M.			4.91	393.91	
T.P.	3.79	396.87	5.74	393.08	
B.M.	6.24	397.31	5.80	391.07	
B.M.	6.47	398.60	5.18	392.13	
B.M.	4.45	399.28	3.77	394.83	
T.P.	4.25	396.69	6.74	392.54	
B.M.	4.22	395.37	5.54	391.15	
T.P.	3.94	395.11	4.22	391.15	
B.M.			3.74	391.37	
T.P.	3.72	392.42	6.41	388.70	
B.M.			6.61	385.81	385.78
BM	6.08	397.23		391.15	
T.P.	2.81	396.54	3.50	393.73	
B.M.			4.74	391.80	
T.P.	6.46	399.86	3.14	393.40	
B.M.	3.76	399.18	4.44	395.42	
T.P.	5.10	399.24	5.04	394.14	
B.M.			5.23	394.01	
T.P.	3.88	398.10	5.02	394.22	
B.M.			4.60	393.50	

7-21-25

B.P. N.E. Cor. Adams Ave & Mission Dr. (W)

B.P. S.E. Cor. McKinley Ave & Mission Dr. (W)

" " " " " " " " & 36th St

" " " " " " " " & 38th "

" " " " " " " " & 40 " "

" " S.W. " " " " & Mission Dr (W)

" " " " " Jefferson " & " " (W)

" " S.E. " Adams Ave & 44th St

" " S.W. " McKinley Ave & Mission Dr

" " " " " Arthur " & 41 St

" " " " " Mission Dr & 41 St

" " " " " " " & Hawley Ave

" " N.E. " " " & Arthur Ave (E)

	+	H.I.	−	Elev.	
		398.10			
T.P.	4.06	396.36	5.80	392.30	
B.M.			3.98	392.38	
T.P.	7.06	396.59	6.83	389.53	
B.M.	6.01	400.76	1.84	394.75	
T.P.	4.33	398.81	6.28	394.48	
B.M.			4.93	393.88	393.91

B.P. S.W. Cor Mission Dr + 3rd St

" " N.E " " " + Cliff Place

" " S.E " " " + McKinley Ave

DIETZGEN'S RAILROAD CURVE AND REDUCTION TABLES

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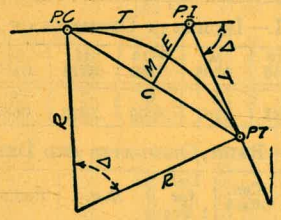

CURVE FORMULAS

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

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

Middle ordinate$=M=R(1-\cos. \frac{\Delta}{2})$ (5) $=R\text{vers}\frac{\Delta}{2}$ (6)

External$=E=T\tan\frac{\Delta}{4}$ (7) $=R\div\cos.\frac{\Delta}{2}-R$ (8)$=R\text{exsec}\frac{\Delta}{2}$ (9)

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

EXPLANATION AND USE OF TABLES

Stations.—Given P. I.=Sta. 161 +60.35 to find Sta. of P. C. and P. T. $\Delta=62°\ 10'$ $D=8°\ 20'$. From Table IV for 1° curve T=3454.1 and ÷8⅓=414.49 ft. From Table V correction=.36 or T=414.85 ft. P. C.=Sta. P.I.—T=157 +45.50. Also from (4) L=746.00 and P. T.=Sta. P. C. +L=164 +91.50.

Offsets.—Tangent offsets vary (approximately) directly with D and with square of the distance. Thus tangent offset for Sta. 158 on above curve is 2.16 ft. found as follows. From Table III tangent offset for 100 ft.=7.27 ft. Distance=158—Sta. P. C.=54.50, hence offset=7.27 $(54.50\div100)^2$=2.16 ft. Also square of any distance divided by twice the radius equals (approximately) the distance from tangent to curve. Thus $(54.50)^2\div(2\times688.26)$=2.16 ft.

Deflections.—Deflection angle=½ D for 100 ft., ¼ D for 50 ft., etc. For c ft.=(in minutes) .3 x C x D° or=defl. for 1 ft. from Table III x C. For Sta. 158 of above curve=.3 x 54.5 x 8⅓=136.2′ or 2° 16.2′, or=2.50 x 54.5=136.2′ from Table III. For Sta. 159 deflection angle=2° 16.2′ +8° 20′ ÷2=6° 26.2′, etc.

Externals.—May be found in similar manner to tangents. Thus E for curve above is 91.37. For from Table IV for 1° curve E=960.6 for 8° 20′=960.6÷8⅓=91.27 and from Table V correction=.10 or E=91.37 ft. Or suppose $\Delta=32°$ and E is measured and found to be 42 ft. What is D? From Table IV E=230.9 and ÷42=5.5 or D=5° 30′.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

Roadway 16 feet wide. Side Slopes 1 on 1½.

For Single Track Embankment.

H	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	H
0	8.0	8.2	8.3	8.5	8.6	8.8	8.9	9.1	9.2	9.4	0
1	9.5	9.7	9.8	10.0	10.1	10.3	10.4	10.6	10.7	10.9	1
2	11.0	11.2	11.3	11.5	11.6	11.8	11.9	12.1	12.2	12.4	2
3	12.5	12.7	12.8	13.0	13.1	13.3	13.4	13.6	13.7	13.9	3
4	14.0	14.2	14.3	14.5	14.6	14.8	14.9	15.1	15.2	15.4	4
5	15.5	15.7	15.8	16.0	16.1	16.3	16.4	16.6	16.7	16.9	5
6	17.0	17.2	17.3	17.5	17.6	17.8	17.9	18.1	18.2	18.4	6
7	18.5	18.7	18.8	19.0	19.1	19.3	19.4	19.6	19.7	19.9	7
8	20.0	20.2	20.3	20.5	20.6	20.8	20.9	21.1	21.2	21.4	8
9	21.5	21.7	21.8	22.0	22.1	22.3	22.4	22.6	22.7	22.9	9
10	23.0	23.2	23.3	23.5	23.6	23.8	23.9	24.1	24.2	24.4	10
11	24.5	24.7	24.8	25.0	25.1	25.3	25.4	25.6	25.7	25.9	11
12	26.0	25.2	26.3	26.5	26.6	26.8	26.9	27.1	27.2	27.4	12
13	27.5	27.7	27.8	28.0	28.1	28.3	28.4	28.6	28.7	28.9	13
14	29.0	29.2	29.3	29.5	29.6	29.8	29.9	30.1	30.2	30.4	14
15	30.5	30.7	30.8	31.0	31.1	31.3	31.4	31.6	31.7	31.9	15
16	32.0	32.2	32.3	32.5	32.6	32.8	32.9	33.1	33.2	33.4	16
17	33.5	33.7	33.8	34.0	34.1	34.3	34.4	34.6	34.7	34.9	17
18	35.0	35.2	35.3	35.5	35.6	35.8	35.9	36.1	36.2	36.4	18
19	36.5	36.7	36.8	37.0	37.1	37.3	37.4	37.6	37.7	37.9	19
20	38.0	38.2	38.3	38.5	38.6	38.8	38.9	39.1	39.2	39.4	20
21	39.5	39.7	39.8	40.0	40.1	40.3	40.4	40.6	40.7	40.9	21
22	41.0	41.2	41.3	41.5	41.6	41.8	41.9	42.1	42.2	42.4	22
23	42.5	42.7	42.8	43.0	43.1	43.3	43.4	43.6	43.7	43.9	23
24	44.0	44.2	44.3	44.5	44.6	44.8	44.9	45.1	45.2	45.4	24
25	45.5	45.7	45.8	46.0	46.1	46.3	46.4	46.6	46.7	46.9	25
26	47.0	47.2	47.3	47.5	47.6	47.8	47.9	48.1	48.2	48.4	26
27	48.5	48.7	48.8	49.0	49.1	49.3	49.4	49.6	49.7	49.9	27
28	50.0	50.2	50.3	50.5	50.6	50.8	50.9	51.1	51.2	51.4	28
29	51.5	51.7	51.8	52.0	52.1	52.3	52.4	52.6	52.7	52.9	29
30	53.0	53.2	53.3	53.5	53.6	53.8	53.9	54.1	54.2	54.4	30
31	54.5	54.7	54.8	55.0	55.1	55.3	55.4	55.6	55.7	55.9	31
32	56.0	56.2	56.3	56.5	56.6	56.8	56.9	57.1	57.2	57.4	32
33	57.5	57.7	57.8	58.0	58.1	58.3	58.4	58.6	58.7	58.9	33
34	59.0	59.2	59.3	59.5	59.6	59.8	59.9	60.1	60.2	60.4	34
35	60.5	60.7	60.8	61.0	61.1	61.3	61.4	61.6	61.7	61.9	35
36	62.0	62.2	62.3	62.5	62.6	62.8	62.9	63.1	63.2	63.4	36
37	63.5	63.7	63.8	64.0	64.1	64.3	64.4	64.6	64.7	64.9	37
38	65.0	65.2	65.3	65.5	65.6	65.8	65.9	66.1	66.2	66.4	38
39	66.5	66.7	66.8	67.0	67.1	67.3	67.4	67.6	67.7	67.9	39
40	68.0	68.2	68.3	68.5	68.6	68.8	68.9	69.1	69.2	69.4	40

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

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