

275

GENERAL NOTES  
1/1/51

275

LEVEL BOOK

75.3501

W275

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*ENGINEERING and DRAFTING SUPPLIES*

IRVING PARK STATION  
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CHICAGO, ILL.

JAN 11 1965



ORSD. 2<sup>nd</sup> Main Pipe Line

Page

Index

- 1-31 "A" Line Profile Levels.  
Sta. 0+00 (Otay Filter Plant) to  
Sta. 91+21. (Final Location.)
- 32-48 "P" Line Profile Levels. **Abandoned.**  
Sta. 2+40.2<sup>3</sup> to Sta. 87+98.9<sup>6</sup>
- 49-70 11<sup>th</sup> St alternate line, South from 7<sup>th</sup> St. Upas.
- 71-74 line revision of 11<sup>th</sup> St. alternate
- 74-76 profile " " " "



Elevations on U.S.G.S.  
Datum.  
"A" Line Profile Levels.

Note corrected for  
error of 10" made  
near Chollas res.

B.M. 1	0.18	400.74	391.44 City ✓
			400.56 U.S.G.S. ✓
		5.38	395.36 ✓
		1.20	399.59 ✓
		1.70	399.04 ✓
0+00	Flow Line =	1.72	399.02 ✓
	10/12/47 399.08 - (36.45' change) = 395.66 x 77.2		
0+00		1.66	399.08 ✓
0+01		1.96	398.78 ✓
0+01		6.45	392.29 ✓
T.P.		0.19	400.56 ✓
	4.17	405.03	
0+04		2.3	401.7 ✓
0+17.6		2.5	402.5 ✓
+27		1.9	403.1 ✓
+66.82		7.1	400.6 ✓
+57 (14'R)		7.1	397.9 ✓
+56		4.7	400.3 ✓
+56		3.6	401.7 ✓
+78 (4'R)		7.2	397.8 ✓
T.P.		7.47	400.56 ✓
	2.39	402.95	
0+78		6.8	396.2 ✓
0+97 (14'R)		4.4	398.6 ✓
1+00		10.1	392.9 ✓
+10		12.0	391.0 ✓
+19.5		12.6	390.4 ✓

7/18/29

Parker  
Converse  
Hill  
Elliot  
Simpson

Hot

Book 263 Pg. 144.

See Preliminary Levels, 1928 Williams & Converse.

Spike in Transomier Pole Stay Filter Plant  
Bot. of 48" steel outlet from tunnel  
Top " " " " "  
Top of cast iron wye branch  
" " 36" hor. gate valve  
" " flange of 36" gate valve (E face)  
" " 36" steel pipe  
" " floor under pipe

Top of concr wall

Top 24" cast iron pipe (at concr wall.)  
" 24" wood stave butter pipe  
" of ground  
" 16" cast iron pipe (connects with wood stave butter pipe)

ground

Top of wood stave pipe

Top of 8" cast iron to reservoir

" " " " " " " "

also ground

1" 0.00 1/1000  
XT.M



	402.95		
1+36		13.9	389.1 ✓
+50		13.7	89.6 ✓
+60		2.5	92.5 ✓
1+67.18		2.5	94.5 ✓
+70		2.1	95.6 ✓
+85		5.6	92.7 ✓
2+00		5.9	98.0 ✓
2+30		4.6	98.4 ✓
+50		2.0	701.0 ✓
+55		3.7	399.3 ✓
3		7.2	98.1 ✓
+25		7.0	95.0 ✓
+40		7.0	96.0 ✓
+50		7.0	98.7 ✓
+75		10.7	92.6 ✓
4+00		10.5	92.5 ✓
T.P.		10.8	392.77 ✓
	737	399.84	
+25		8.8	91.0 ✓
+50		8.8	90.0 ✓
5		9.2	89.9 ✓
+35		9.0	90.8 ✓
B.M. 2 (101 pcr.)		0.31	399.53 ✓
		3.4	96.4 ✓
5+90		9.3	90.5 ✓

Nail at 4+00

Tap air valve on R. 5+69  
" of pipe at valve

✓ r. p. 10/16  
h.

399.87

6+00	10.0	389.8	✓
+20	11.7	381	✓
+80	11.6	382	✓
7	11.3	385	✓
+65	12.7	371	✓
T.P.	12.73	387.11	✓

0.86 387.97

8	9.8	372	✓
+25	7.5	335	✓
+70	7.1	334	✓
+80	7.6	324	✓
9	9.8	382	✓
T.P.	12.35	375.62	✓

0.22 375.84

+20	6.5	343	✓
+50	9.6	322	✓
+65	12.8	310	✓
T.P.	12.84	363.00	✓

1.17 364.17

+55	7.7	345	✓
10	11.3	329	✓
+10	13.0	312	✓
T.P.	12.93	351.24	✓

0.13 351.67

10+50	10.5	312	✓
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20' R S42 E+00

Peg 9+12

Peg 9+65

Peg 10+10

✓ + sketch  
2



	351.67		
10+65		12.9	338.8 ✓
B.M.3		10.66	341.01 ✓
		12.77	338.90 ✓
10.10	349.00		
+75		12.5	336.5 ✓
+87		15.1	33.9 ✓
+93		15.0	31.0 ✓
11		13.0	36.0 ✓
+13		11.8	37.7 ✓
+25		10.7	38.3 ✓
+50		8.1	40.9 ✓
+75		5.4	43.6 ✓
12		3.4	45.6 ✓
+27		3.3	45.7 ✓
+44		4.3	44.7 ✓
+47		6.5	42.7 ✓
+55		5.0	43.7 ✓
+60		2.5	46.5 ✓
T.P.		0.14	348.86 ✓
12.86	361.72		
+73		11.7	50.0 ✓
+95		2.7	59.0 ✓
13		2.0	59.7 ✓
+10		1.5	60.2 ✓
T.P.		0.37	361.35 ✓

Nail in sill at center bent-trestle #2  
Peg 10+65

Water way span

Peg 12+69

no importance

Peg 13+13

v. plotted  
w

1	12.76	377.11		361.35	✓
13+30			7.2	669	✓
T.P.			0.16	373.95	✓
	12.92	386.87			✓
+60			2.5	77.7	✓
+75			5.0	81.9	✓
T.P.			0.36	386.51	✓
	12.51	399.02			✓
14			12.9	87.0	✓
+20			8.0	91.0	✓
+40			5.6	93.7	✓
+50			5.0	99.0	✓
+86			5.5	93.5	✓
T.P.			5.54	393.48	✓
	9.07	402.52			✓
15			10.0	392.5	✓
B.M. #4 (100)			0.37	402.15	✓
			4.3	398.2	✓
15+50			11.9	90.6	✓
T.P.			12.53	389.99	✓
	1.13	391.12			✓
16+00			2.6	88.5	✓
+50			6.0	85.1	✓

Page 13+50.

Page 13+98

Hub 14+86

Air valve 60' R 15+00

Top of pipe at air valve

Rock 15+61

v. plotted  
W



	391.12		
17+00		8.2	382.9
+50		12.3	78.8
T.P.		13.01	378.17
	1.55		379.66
18+00		3.6	76.1
+07		5.1	71.6
+38		9.1	70.6
+48		11.4	68.3
T.P.		12.85	366.87
	0.73		367.57
+60		4.0	63.5
+67		7.1	60.7
T.P.		13.07	354.50
	0.61		355.11
T.P.		12.79	342.32
	0.51		342.83
19		2.7	40.7
T.P.		12.79	330.04

Rock 1' Left of Sta. 17+58

Peg 18+48

Peg 18+77

Peg 18+96

Peg 19+20

v + plotted  
m

	0.50	330.51	330.01
T.P.			12.78 317.26
	0.72	318.48	
19+50			1.8 16.7
+75			12.0 06.5
T.P.			12.97 305.51
	0.90	306.41	
20			8.9 297.5
+15			13.5 92.9
+30			14.9 90.5
+65			16.9 89.5
+67			17.6 88.8
+79			17.1 89.3
+80			15.4 91.0
21			8.9 97.5
B.M. 5			12.93 293.18
+15			3.6 302.8
+30			0.5 05.9
T.P.			0.32 306.09
	12.92	319.01	
+50			3.8 15.2
T.P.			0.64 318.37
	12.80	331.17	
T.P.			0.23 330.94
	12.78	343.72	

Peg 19+48

Rock 19+78

Nail in Trastle sill Sta 20+80

Peg 21+30

Peg 21+57

Peg 21+84



		343.72			✓
22+00			5.6	338.1	✓
T.P.			0.31	343.41	✓
	12.55	355.96			✓
+18			10.7	345.3	✓
T.P.			0.17	355.79	✓
	12.61	368.10			✓
+50			7.2	61.2	✓
+62			3.24	65.2	✓
T.P.			0.10	368.30	✓
	12.53	380.83			✓
+72			8.0	72.8	✓
+80			6.0	71.8	✓
23			2.0	78.8	✓
T.P.			0.26	380.57	✓
	12.84	393.41			✓
+30			10.8	82.6	✓
+45			10.6	82.8	✓
+60			5.1	85.0	✓
			5.4	88.0	✓
24			<del>2.1</del>	<del>84.0</del>	✓
+25			1.0	89.4	✓
+60			2.0	91.7	✓
T.P.			1.67	391.74	✓
	9.43	401.17			✓
25			10.0	91.2	✓
+16			10.0	91.2	✓

Peg 22+13

Peg 22+10

Peg 22+04

Rock & L 23+04

Change Profile to new elev. G.W.G. 1/2/30

Peg 24+65

	701.17		
25+21		9.1	392.1 ✓
B.M. 6 (101)		0.23	700.94 ✓
		3.6	397.6 ✓
+50		8.8	92.4 ✓
+60		10.2	91.0 ✓
+75		10.8	90.4 ✓
26		11.0	90.2 ✓
+18		11.9	89.3 ✓
T.P.		12.97	388.80 ✓
	1.63	389.43	
+65		3.0	86.8 ✓
+80		2.4	87.4 ✓
27		5.7	84.1 ✓
T.P.		12.77	377.06 ✓
	0.34	377.40	
+60		4.5	72.9 ✓
+85		11.0	66.4 ✓
28		15.2	62.2 ✓
T.P.		12.75	369.65 ✓
	0.75	365.90	
+24		8.8	56.6 ✓
+50		12.7	52.7 ✓
T.P.		12.95	352.45 ✓
	0.07	352.52	
+70		5.0	47.5 ✓

(Air valve Sta. 25+25

→  
Top of pipe at air valve

Peg 27+30

Peg 15' L 28+00

Rock 8' R 28+50



	352.52		
29+00		11.9	40.6 ✓
+20		15.6	36.9 ✓
+24		17.1	35.4 ✓
+27		15.7	36.8 ✓
+50		13.8	38.7 ✓
B.M. 7		8.0	44.12 ✓
+80		9.9	42.6 ✓
30		6.4	46.1 ✓
+18		1.3	51.2 ✓
+26		9.7	51.8 ✓
T.P.		0.37	352.15 ✓
	1302	365.17	
+55		5.0	60.2 ✓
+69		0.4	64.8 ✓
T.P.		0.38	364.87 ✓
	1305	377.92	
31		6.1	71.9 ✓
+23		0.5	77.4 ✓
T.P.		0.47	377.45 ✓
	12.72	390.17	
+56		9.2	81.0 ✓
+80		9.5	80.7 ✓
32		11.6	78.6 ✓
T.P.		1301	377.16 ✓

40.6  
8.9  
49.5

10

about 8' clearance

Nail in sill at Trestle + Sta. 29+27

Peg 30+28

Peg 30+69

Peg 31+23

Peg 32+10

V.P.  
N

	390.17		
T.P. (to air valve)	0.15	390.22	
10.10	400.12		
BM <sup>#8</sup> ("100)	2.65	397.47	
	1.1	395.7	
		387.16	
	0.95	378.11	
32+25	3.8	74.3	
+10	6.1	72.0	
+60	11.2	66.9	
+68	12.8	65.3	
T.P.	12.81	365.30	
	4.31	369.61	
+75	7.0	62.6	
+93	11.1	58.5	
33	13.2	56.7	
+12	17.1	52.5	
+14	18.7	50.9	
+17	16.4	53.2	
+36	12.8	56.8	
BM <sup>#9</sup>	5.39	364.22	
	12.53	376.75	
+58	13.1	63.7	
+83	4.5	372.3	
		62.3	
+88	5.9	70.9	

Air valve sta 31+83  
Top of pipe at air valve

Peg 32+10 (see page 10)

Peg 32+68

Nail in sill of Truss " Sta. 33+36

11  
P  
IN



		376.75		
T.P.	13.06	387.98	1.83	374.92
33+97			11.0	77.0
34			9.9	78.1
+10			7.5	80.5
+25			5.2	82.8
T.P.			0.99	386.99
	13.06	400.05		
+82			9.7	90.9
+72			3.7	96.4
+80			2.7	97.4
+85			2.2	97.9
T.P.			2.09	397.96
	14.09	409.05		
35			11.1	98.0
B.M. 10 ("99)			8.63	400.42
			11.6	397.5
+15			8.4	400.7
+90			7.2	401.9
+45			6.1	403.0
+63			6.6	402.5
+90			9.2	399.9
36			9.4	399.7
+10			9.4	399.7
+20			8.1	401.0
+30			7.9	401.2

Rock 3' L. 33+93

Peg 34+39

Peg 35+00

Air valve Sta. 35+10  
Top of pipe at valve

v r p

	409.05			
36+55		5.3	903.8	✓
+65		5.5	103.6	✓
+90		8.1	101.0	✓
37		8.5	100.6	✓
+11		10.6	398.5	✓
T.P.		12.83	396.22	✓
	0.59		396.81	✓
+37		7.9	88.9	✓
+55		9.1	87.7	✓
T.P.		12.67	384.14	✓
	0.57		384.71	✓
+75		4.7	82.0	✓
+90		13.0	71.7	✓
T.P.		12.86	371.85	✓
	0.45		372.30	✓
38		4.8	67.5	✓
T.P.		12.70	359.60	✓
	0.28		359.88	✓
+50		10.4	49.5	✓
T.P.		12.71	347.17	✓
	0.60		347.77	✓
+83		8.9	38.9	✓
T.P.		12.82	334.95	✓
	0.60		335.55	✓
39		1.5	34.1	✓

Peg 37+18

Peg 37+65

Peg 37+90

Peg 38+21

Peg 38+58

Peg 38+97

v r 8  
w



335.55

39+10		4.1	331.5	✓
+90		11.8	323.8	✓
T.P.		12.83	322.72	✓
	0.94	323.16		
+60		4.1	19.1	✓
+65		8.6	14.6	✓
+70		10.7	12.5	✓
+78		7.6	45.6	✓
40		12.1	11.1	✓
T.P.		12.56	310.60	✓
	0.52	311.12		
+17		3.2	07.9	✓
+35		7.6	03.8	✓
T.P.		12.84	298.28	✓
	0.70	298.98		
+34		2.8	96.2	✓
41		9.1	89.9	✓
T.P.		12.91	286.07	✓
	1.03	287.10		
+50		7.2	79.9	✓
+67		9.9	77.2	✓
T.P.		12.89	274.21	✓
	0.41	274.62		
+80		1.5	273.1	✓
+90		8.7	266.4	✓

Peg 3'L. 39+40

Bot. of wash

Rock R.R. 40+04

Peg 40+62

Peg 41+17

Peg 41+78

7/19/29.

Bottom Salt Canyon

+53

✓ T.P.  
W

274.62 ✓

42		8.4	266.2 ✓
B.M. #11		5.13	269.49 ✓
+31		8.4	266.2 ✓
+45		5.6	269.0 ✓
+50		5.0	269.6 ✓
43		4.6	270.0 ✓
T.P.		4.55	270.07 ✓
	5.75		275.82 ✓
+50		5.3	270.5 ✓
44		4.9	270.9 ✓
+50		4.7	271.1 ✓
+80		3.7	272.1 ✓
45		2.0	273.8 ✓
T.P.		0.43	275.39 ✓
	12.43		287.82 ✓
+50		8.8	279.0 ✓
46		4.2	283.6 ✓
T.P.		0.68	287.14 ✓
	12.73		299.87 ✓
+26		12.7	287.2 ✓
T.P.		1.04	298.83 ✓
	12.19		311.02 ✓
+71		12.2	298.8 ✓
+90		8.8	302.2 ✓
47		8.6	302.4 ✓

Converse  
Simpson  
Good body  
Satgado

7/19/29

15

Bottom Salt Canyon

Clear + Warm

Nail in sill of Trestle #6

Sta 41 to 71

Protect upstream site

41+90

42+70

42+30

On P.O.T. hub 43+00

Peg 45+13

Peg 46+26

Peg 46+71

v r p  
w



	311.02 ✓		
+25		4.5	306.5 ✓
+43		2.0	308.0 ✓
T.P.		2.32	307.70 ✓
1.87	309.57		
+58		1.2	308.4 ✓
+70		2.2	307.4 ✓
+90		4.2	305.4 ✓
48		6.2	303.4 ✓
+20		11.7	297.9 ✓
T.P.		12.82	296.75 ✓
3.50	300.25		
+50		5.3	295.0 ✓
+75		6.7	293.6 ✓
49		7.7	292.6 ✓
+25		8.4	291.9 ✓
+38		9.9	290.4 ✓
+40		8.0	292.3 ✓
+45		11.0	289.3 ✓
+50		7.5	292.8 ✓
+85		5.7	294.6 ✓
50		3.5	296.9 ✓
B.M. #14		5.28	294.97 ✓
T.P.		0.36	299.89 ✓
12.08	312.97		
+20		10.7	302.3 ✓

Peg 5' L. 47+58

Peg. 48+27

Bottom Canyon

Nail in Sill Trestle #7. 60'R. 49+85

Peg 50+12

V+P  
N

		312.97		
+40			6.6	306.4 ✓
+55			0.6	312.4 ✓
T.P.			0.62	312.35 ✓
	12.63	324.98		
+70			10.3	314.7 ✓
51			7.2	317.8 ✓
+15			4.0	321.0 ✓
+30			0.2	324.8 ✓
T.P.			0.26	324.72 ✓
	12.90	337.62		
+35			11.6	326.0 ✓
+45			11.2	326.4 ✓
+60			7.8	329.8 ✓
+90			1.0	336.6 ✓
T.P.			0.22	337.40 ✓
	12.63	350.03		
52			10.3	339.7 ✓
+08			8.1	341.9 ✓
+28			2.1	347.9 ✓
+36			1.6	348.4 ✓
T.P.			0.26	349.77 ✓
	12.88	362.65		
T.P.			0.58	362.07 ✓
	12.94	375.01		
+95			9.3	365.7 ✓

Peg. 50+56

Peg. 51+28

Drain ditch from wood store.

Peg. 51+95

Peg. 52+42

Peg. 52+82

v + P.  
W



375.01 ✓

53		9.2	365.8	✓
+05		8.7	366.3	✓
+30		2.4	372.6	✓
T.P.		0.73	374.78	✓

12.91 387.19 ✓

+45		9.0	378.2	✓
+55		7.4	379.8	✓
+60		6.3	380.9	✓
+70		5.5	381.7	✓
+75		5.3	381.9	✓
+85		5.1	382.1	✓

54.		3.1	384.1	✓
+20		1.5	385.7	✓
+25		0.8	386.4	✓
T.P.		0.78	386.41	✓

12.64 399.05 ✓

+50		11.0	388.0	✓
+75		10.1	388.9	✓
+90		10.0	389.0	✓

55		8.8	390.2	✓
+20		9.6	389.4	✓
+50		9.5	389.5	✓

56		9.9	389.1	✓
+35		9.8	389.2	✓
+50		8.0	391.0	✓

Page 53+37

Page 54+25

✓ + P.  
N

399.05 ✓

5 +60 3.6 390.4 ✓  
 +75 10.4 388.6 ✓  
 B.M. # 13 (# 97) 2.19 396.86 ✓  
 5.8 393.2 ✓  
 T.P. 9.88 389.17 ✓

4.60 393.77 ✓

+85 4.2 389.6 ✓  
 57 4.7 389.1 ✓

+50 6.1 387.7 ✓  
 +75 6.3 387.5 ✓

58 7.1 386.7 ✓  
 5 +75 7.8 386.0 ✓

+50 8.4 385.4 ✓  
 +75 9.0 384.8 ✓

+95 9.6 384.2 ✓  
 59 9.1 384.7 ✓

+10 9.0 384.8 ✓  
 +70 9.7 384.1 ✓

+33 12.7 381.1 ✓  
 T.P. 12.71 381.06 ✓

0.65 381.71 ✓

+40 4.1 377.6 ✓  
 +55 7.9 373.8 ✓

T.P. 12.57 369.14 ✓  
 0.19 369.33 ✓

Air Valve 56+72  
 Top W.S. Pipe  
 Peg. 56+75

$\frac{396.81}{.05}$

Peg 59+33

Peg 59+75

✓ P.  
N



		369.33 ✓		
T.P.			12.94	356.39 ✓
	0.50	356.89 ✓		
60			3.0	353.9 ✓
+18			10.4	346.5 ✓
T.P.			12.68	344.21 ✓
	5.07	349.28 ✓		
+48			10.7	338.6 ✓
+55			15.4	333.9 ✓
+61			12.8	336.5 ✓
B.M. #14			8.49	340.79 ✓
T.P.			0.57	348.71 ✓
	12.78	361.49 ✓		
61			9.6	351.9 ✓
+09			6.2	355.3 ✓
+20			1.3	360.2 ✓
T.P.			0.39	361.70 ✓
	12.87	373.97 ✓		
+33			11.0	363.0 ✓
+50			5.0	369.0 ✓
+59			2.1	371.9 ✓
T.P.			0.32	373.65 ✓
	12.93	386.58 ✓		
+83			11.1	375.5 ✓
62			6.6	390.0 ✓
+07			5.3	381.3 ✓

Peg. 59+92

Peg. 60+28

Nail in sill Trestle # 8 60'R sta. 60+76

Peg. 60+90

Peg. 61+24

Peg. 61+67

V.P.  
N

	386.58 ✓			
62 + 18		1.6	385.0 ✓	
T.P.		0.56	386.02 ✓	
	12.89			
	398.91 ✓			
+50		11.0	387.9 ✓	
+65		9.7	389.2 ✓	
+90		8.3	390.6 ✓	
63		7.7	391.2 ✓	
+23		7.1	391.8 ✓	
+34		6.2	392.7 ✓	
+50		6.5	392.4 ✓	
+74		7.1	391.8 ✓	
B.M. #15 (#96)		0.39	398.52 ✓ 398.58	
		2.7	396.2 ✓	
64		7.4	391.5 ✓	
+04		7.0	391.9 ✓	
+17		8.5	390.4 ✓	
T.P.		7.97	390.94 ✓	
	59			
	0.61			
	391.53 ✓			
+32		2.4	389.1 ✓	
+70		5.8	385.7 ✓	
+78		6.7	384.8 ✓	
65		10.8	380.7 ✓	
T.P.		12.90	378.63 ✓	
	0.19			
	378.82 ✓			
+27		4.6	374.2 ✓	

Peg. 62+27

Air Valve 63+96

Top. W.S. Pipe

on P.I. Hub 64+20<sup>70</sup>

Peg. 65+08

398.58  
- .04

✓ P  
IN



	378.84		
65+50		10.7	368.1 ✓
T.P.		12.59	366.23 ✓
0.63	366.86		
+66		4.0	362.9 ✓
+82		9.0	357.9 ✓
T.P.		12.78	354.08 ✓
0.48	354.56		
66		1.6	353.0 ✓
+23		9.4	345.2 ✓
+29		11.1	343.5 ✓
T.P.		12.50	342.06 ✓
0.45	342.51		
+41		5.9	336.6 ✓
+43		8.7	333.8 ✓
+48		10.2	332.3 ✓
T.P.		12.74	329.77 ✓
0.63	330.40		
+73		6.9	323.5 ✓
T.P.		12.70	317.70 ✓
2.67	320.37		
67		3.7	316.7 ✓
+35		7.3	313.1 ✓
+47		9.5	310.9 ✓
+56		13.6	306.8 ✓
B.M. #16		6.45	313.9 ✓

Peg. 65+57

Peg. 65+96

Peg. 66+32

Peg. 66+53

Peg. 66+97 1' R E

add 10' span on East side

Bottom of canyon

Nail in sill of Trestle # 9 - 60' R 67+56  
v.s.p. N



	320.37 ✓		
67+60		9.9	310.5 ✓
+69		6.6	313.8 ✓
T.P.		0.43	319.94 ✓
12.71	332.65 ✓		
+75		11.1	321.6 ✓
68		3.0	329.7 ✓
T.P.		0.36	332.29 ✓
12.87	345.16 ✓		
+22		4.4	340.8 ✓
+25		1.3	<del>343.9</del> ✓
T.P.		0.18	344.98 ✓
12.95	357.93 ✓		
+36		9.2	348.7 ✓
T.P.		0.20	357.73 ✓
12.87	370.60 ✓		
+70		8.5	362.1 ✓
69		0.8	369.8 ✓
T.P.		0.10	370.50 ✓
12.38	382.88 ✓		
+32		3.8	379.1 ✓
T.P.		0.48	382.40 ✓
12.52	394.94 ✓		
+52		11.2	383.7 ✓
+85		3.9	391.0 ✓
+89		3.2	391.7 ✓

Peq. 67+72

Peq. 68+05

Peq. 68+28

Peq. 68+57

Peq. 69+02

Peq. 69+46

✓ P.  
N



	394.97 ✓			
70		2.0	392.9 ✓	
B.M. #17 (#95)	T.F.	5.00	389.97 ✓	389.90
	7.49		397.36 ✓	
		9.8	387.6 ✓	
+25		2.0	395.4 ✓	
+50		2.2	395.2 ✓	
+64		3.2	394.2 ✓	
+75		5.2	392.2 ✓	
+84		7.1	390.3 ✓	
71		11.4	386.0 ✓	
T.P.		12.74	384.62 ✓	
	0.63		385.25 ✓	
+15		4.0	381.3 ✓	
+20		7.0	378.3 ✓	
T.P.		12.85	372.40 ✓	
	0.61		373.01 ✓	
+40		7.9	365.1 ✓	
+53		12.7	360.3 ✓	
T.P.		12.71	360.30 ✓	
	0.39		360.69 ✓	
+70		7.3	353.4 ✓	
+80		12.8	347.9 ✓	
		2.8	357.9 ✓	
T.P.		12.71	347.98 ✓	
	0.57		348.50 ✓	

Reheated  
 Dec  
 7/10/27  
 Page 67

7/20/29  
 Converse  
 Simpson  
 Good body  
 Salgado  
 Clear + Warm.  
 Sta. 71 to

Air Valve 60'R 70+45

Top of W.S. Pipe at Air Valve

Peg 71+04

Peg 71+28 - 2'R.

Peg 71+53

Top W.S. Pipe Center Trestle #10 72+20

✓ P.  
 M



	348.50		
72		8.6	339.9 ✓
+20		14.3	334.2 ✓
+25		15.4	333.1 ✓
+45		12.7	335.8 ✓
B.M. # 18		5.18	343.32 ✓
+50		12.4	326.1 ✓
+60		8.8	339.7 ✓
+80		0.0	348.5 ✓
T.P.		0.29	348.21 ✓
	12.88	361.09	
73		2.8	358.3 ✓
+05		1.2	359.9 ✓
T.P.		0.31	360.78 ✓
	12.357	373.13	
+15		10.7	362.4 ✓
+20		9.2	363.9 ✓
+35		3.7	369.4 ✓
+40		2.4	370.7 ✓
T.P.		0.62	372.51 ✓
	12.67	385.18	
+50		9.3	375.9 ✓
+60		6.9	378.3 ✓
+75		3.3	381.9 ✓
T.P.		0.32	384.86 ✓
	13.08	397.94	

for page 72  
rechecked

Bottom Canyon

Nail in Cross Brace Trestle # 10. 72+20

Peg 72+78

Peg 73+07

Peg 73+39

Peg 73+80

r p. n



73+95		4.6	393.3	✓
74		7.0	390.9	✓
+10		5.8	392.7	✓
+25		0.4	397.5	✓
T.P.		0.37	397.57	✓
	12.62	10.19		
+30		11.6	398.6	✓
+45		11.0	399.2	✓
+55		2.0	408.2	✓
+60		1.2	409.0	✓
+67		1.9	408.3	✓
+75		4.2	406.0	✓
+85		3.2	407.0	✓
T.P.		0.34	409.85	✓
	12.49	422.76		
75		11.6	410.7	✓
+10		9.4	412.9	✓
+20		8.9	413.4	✓
+30		7.1	415.2	✓
+40		6.2	416.1	✓
T.P.		3.08	419.18	✓
	5.38	424.56		
+60		3.4	421.2	✓
+70		1.8	422.8	✓
+80		4.4	420.2	✓

see page 70  
 68-69  
 see page 70  
 68-69  
 see page 70  
 68-69

Peg 74+26

Peg 74+95 - 1' L.

Peg 75+50

V.P.  
AV

	424.56		
+90		3.8	420.8 ✓
76		4.2	420.4 ✓
+30		5.0	419.6 ✓
+50		3.0	421.6 ✓
+60		4.6	420.0 ✓
+80		6.5	418.1 ✓
77		9.1	415.5 ✓
T.P.		12.60	411.96 ✓
	0.87	412.77	
+50		4.7	408.1 ✓
+60		5.4	407.4 ✓
+65		6.7	406.7 ✓
+90		8.3	404.5 ✓
78		12.5	400.2 ✓
T.P.		12.72	400.05 ✓
	1.19	401.24	
B.M.# 19 (#94)		2.10	399.14 ✓
		5.2	396.0 ✓
		7.2	394.0 ✓
+05		4.0	397.2 ✓
+10		4.3	396.9 ✓
+25		7.8	398.4 ✓
T.P.		12.67	388.57 ✓
	0.33	388.90	
+45		6.6	382.3 ✓

found section  
for val 290  
page 69 & 65

Peg 77+27

Peg 78+01

Top Air Valve 77+27 399.11  
 Top W.S. Pipe 00  
 Top W.S. Pipe Center Trestle #11. 78+00

Peg. 78+33

V.P. 27



	388.90 ✓		
+53		7.3	379.6 ✓
+65		12.7	376.2 ✓
T.P.		12.76	376.14 ✓
	0.24		376.38 ✓
+75		3.9	372.5 ✓
+95		11.6	364.8 ✓
T.P.		12.61	363.77 ✓
	1.15		364.85 ✓
79		2.0	362.9 ✓
+20		5.9	359.0 ✓
+40		5.2	359.9 ✓
+55		3.5	361.4 ✓
+75		3.8	361.2 ✓
80		6.0	358.9 ✓
+28		9.6	355.3 ✓
T.P.		12.06	352.83 ✓
	1.27		354.10 ✓
+60		6.1	348.0 ✓
T.P.		12.91	341.19 ✓
	1.61		342.80 ✓
81		3.8	339.0 ✓
+20		9.1	333.9 ✓
+45		13.7	329.1 ✓
B.M. #20		9.88	332.92 ✓
		+12.0	354.8 ✓

Removal location  
See Tol 270 Page 66

Peg 78+66

Peg 79+00 1'L

Bottom Short Draw  
not important

deep cut needed  
as side slope  
is great

Top Hub P.T. 80+36.66

Peg 80+91 1'R

Nail in Sill Trestle #12

Top W.S. Pipe Center Trestle #12

81+40

81+40 P.  
V & M



347.80

81+50	18.7	324.1	✓
+55	13.5	329.3	✓
+75	9.8	333.2	✓
82	3.5	339.3	✓
+10	0.5	342.3	✓
T.P.	0.47	342.33	✓

12.78 355.11

+25	9.3	345.8	✓
+50	0.0	355.1	✓
T.P.	0.24	354.87	✓

12.53 367.40

+75	4.7	362.9	✓
+85	2.2	365.2	✓
T.P.	0.44	366.96	✓

12.47 379.43

83	12.1	367.3	✓
+25	8.5	370.9	✓
+50	3.7	375.9	✓
T.P.	0.58	378.85	✓

12.86 391.71

+75	11.8	379.9	✓
84	8.4	383.3	✓
+25	4.8	386.9	✓
+50	2.8	388.9	✓
T.P.	2.83	388.88	✓

Bottom Canyon.

Peg 82+12

Peg 82+48

Peg 82+99

Peg 5' L. 83+75

Top

Peg 84+50

388.91 Elliott  
388.88 Simpson =

V.P.  
M



T.P.			388.88 ✓
	10.32 ✓	399.20 ✓	
+75		9.1	390.1 ✓
85		7.4	391.8 ✓
B.M.#21 (#73)		6.79	392.41 ✓
		8.5	390.7 ✓
+25		7.2	392.0 ✓
+50		6.2	393.0 ✓
+75		7.3	391.9 ✓
86		7.0	392.2 ✓
+25		6.8	392.4 ✓
+50		6.4	392.8 ✓
+75		7.3	391.9 ✓
87		7.2	392.0 ✓
+25		7.1	392.1 ✓
+50		7.3	391.9 ✓
+75		6.6	392.6 ✓
$\frac{87+98.96}{84+58.48}$	"A" Line =	6.9	392.3 ✓
	"P" Line =		
88+30		6.0	393.2 ✓
+50		6.7	392.5 ✓
89		6.6	392.6 ✓
+50		7.3	391.9 ✓
90		7.8	391.4 ✓
+25		8.4	390.8 ✓
+62		8.2	391.0 ✓

Top Air Valve. 84+20  
 Top W. S. Pipe.

✓ R.  
 W.

399.20 ✓

+74

10.3

388.9 ✓

91

11.8

387.4 ✓

+21

14.4

384.8 ✓

✓  
7/15/11

Continued in Book #276 Page #2

8 105-76 make deep cut to pass depression ahead

8 105-00 fix x ring like old Trestle straighten channel

110± unimportant

119+70± "

8 119-70± fix as 105±

129+20± unimportant

141±50± straighten channel by ring in East bank



Arroyo drains large area soil of fine loose sand  
Boxed in channel with wing walls

west side of



✓ m.



Profile of "P" Line  
U.S.G.S. Datum

Abandoned.

BM\*2.

399.53

2.52 402.05 ✓

2+29.76

P.C. "A" Line

3.6 398.4 ✓

+40.23

P.C. "P" "

1.6 400.4 ✓

+50

1.1 400.9 ✓

+75

3.1 398.9 ✓

3+00

4.7 397.3 ✓

+25

7.6 394.4 ✓

+50

9.9 392.1 ✓

+75

12.3 389.7 ✓

4+00

13.2 388.8 ✓

T.P.

13.00 389.05 ✓

0.88 389.93 ✓

4+25

3.2 386.7 ✓

4+54.40

P.C.

4.7 385.2 ✓

+77

5.0 384.9 ✓

5+00

6.4 383.5 ✓

+36

9.0 380.9 ✓

+64

9.3 380.6 ✓

6+00

12.9 377.0 ✓

T.P.

12.76 377.17 ✓

0.77 377.94 ✓

+50

4.7 373.2 ✓

7+00

6.5 371.4 ✓

July 19, 1929

32

Hill.

Elliott & Notes

Walton

Top of A.Y.

Start of "P" line

Peg 15' Rt. of Sta 4+25

Peg E at Sta 6+00

	377.94		
7+50		7.1	370.8 ✓
+72		7.4	370.5 ✓
8+00		12.1	365.8 ✓
+21		17.3	360.6 ✓
+62		9.0	368.9 ✓
9+00		8.3	369.6 ✓
+23		10.8	367.1 ✓
T.P.		12.96	364.98 ✓
	0.04	365.02	
+51		5.4	359.6 ✓
T.P.		12.94	352.08 ✓
	0.26	352.34	
T.P.		12.94	339.40 ✓
	1.23	340.63	
10+00		6.7	333.9 ✓
+21		18.0	322.6 ✓
+39		26.0	314.6 ✓
+51		30.0	310.6 ✓
+511 ✓		27.9	312.7 ✓
+71		25.4	315.2 ✓
+82		20.7	319.9 ✓
11+00		13.2	327.4 ✓
+33		2.8	337.8 ✓
T.P.		0.56	340.07 ✓
	12.36	352.43	

Gulley

Peg on  $\Phi$  at Sta 9+33Peg on  $\Phi$  at Sta 9+65Peg on  $\Phi$  at Sta 9+90Peg on  $\Phi$  at Sta 11+37✓  
JRM



	352.43 ✓		
T.P.		0.49	351.94 ✓
12.97	362.91 ✓		
+68		6.8	358.1 ✓
+80		3.2	361.7 ✓
T.P.		0.40	364.51 ✓
11.97	376.48 ✓		
12+00		10.7	365.8 ✓
+50		6.0	370.5 ✓
13+00		3.0	373.5 ✓
+50		2.7	373.8 ✓
T.P.		7.34	369.14 ✓
3.81	372.95 ✓		
14+00		0.3	372.7 ✓
+50		3.2	369.8 ✓
15+00		6.2	366.8 ✓
+50		8.2	364.8 ✓
16+00		8.8	364.2 ✓
+35		8.9	364.1 ✓
+53		11.3	361.7 ✓
+85		11.8	361.2 ✓
T.P.		12.82	360.13 ✓
0.35	360.48 ✓		
17+00		1.1	359.4 ✓
+21		4.3	356.2 ✓

Peg on  $\phi$  at Sta 11+54

Peg on  $\phi$  at Sta 11+95

Peg 6' Ht Sta 13+67

Peg  $\phi$  Sta 16+95

✓  
m

	360.48 ✓		
17+47		10.6	349.9 ✓
T.P.		12.97	347.51 ✓
1.23	348.74 ✓		
+67		6.6	342.1 ✓
+80		13.1	335.6 ✓
T.P.		12.99	335.75 ✓
0.70	336.45 ✓		
18+00		11.5	325.0 ✓
T.P.		12.90	323.55 ✓
0.96	324.51		
+32		13.3	311.2 ✓
T.P.		13.01	311.50 ✓
0.22	311.72		
T.P.		12.90	298.82 ✓
4.86	303.68		
BM #5		10.16	293.52 ✓ <sup>Record</sup> 293.48
19+00		15.9	287.8 ✓
+36		22.2	281.5 ✓
+39		23.4	280.5 ✓
+44		22.2	281.5 ✓
+56		20.1	283.6 ✓
20+00		5.8	297.9 ✓
T.P.		0.85	302.83 ✓
12.28	315.11		

Reg on & Sta 17+62

Reg on & Sta 17+80

Reg on & Sta 18+03

Reg on & Sta 18+32

Reg on & Sta 18+63

Spike in Trestle

Draw

Reg on & Sta 20+12

✓  
2



		315.11		
T.P.			0.24	314.87 ✓
	12.29	327.16 ✓		
20+67			0.2	327.0 ✓
T.P.			0.18	326.98 ✓
	12.32	339.30 ✓		
21+00			0.9	338.4 ✓
T.P.			0.32	338.98 ✓
	12.91	351.89 ✓		
+18			7.3	344.6 ✓
T.P.			0.38	351.51 ✓
	12.88	364.89 ✓		
+66			6.6	357.8 ✓
22+00			2.6	361.8 ✓
T.P.			0.53	363.86 ✓
	10.89	374.75 ✓		
+75			5.1	369.7 ✓
23+00			4.4	370.4 ✓
+50			6.5	368.3 ✓
+75			6.3	368.5 ✓
24+00			7.6	367.2 ✓
+50			8.3	366.5 ✓
25+00			6.9	367.9 ✓
+43			7.1	367.7 ✓

Peg # at Sta 20+40

" " " " 20+64

" " " " 21+02

Top of Rock Sta 21+43

Peg # 22+10

	374.75 ✓		
25+62		6.0	368.8 ✓
+80		7.5	367.3 ✓
26+00		7.3	367.5 ✓
+45		8.5	366.3 ✓
+75		7.2	367.6 ✓
27+00		7.9	366.9 ✓
+25		7.0	367.8 ✓
+50		5.3	369.5 ✓
+65		4.9	369.9 ✓
28+00		7.2	367.6 ✓
+26		11.6	363.2 ✓
+42		12.9	361.9 ✓
T.P.		12.86	361.89 ✓
	0.33	362.22 ✓	
+75		5.5	356.7 ✓
29+00		12.4	349.8 ✓
T.P.		12.98	349.24 ✓
	2.71	351.95 ✓	
B.M. #9		7.83	344.12 ✓
+50		12.7	339.2 ✓
		12.92	339.08 ✓
	1.13	340.16 ✓	
30+00		12.7	327.5 ✓
T.P.		13.08	327.08 ✓
	1.31	328.39 ✓	
+50		7.5	320.9 ✓

Peg in # at Sta 28+42

" " " " " 29+02

Spike in Trestle #4

Peg in # 29+50

" " " 30+04

Record  
344.12



		328.39 ✓		
+85			12.4	316.0 ✓
+96			16.2	312.2 ✓
31+00			14.3	314.1 ✓
+29			10.8	317.6 ✓
+63			9.1	319.3 ✓
32+00			10.8	317.6 ✓
+15			11.3	317.1 ✓
+21			12.7	315.7 ✓
+29			10.0	318.4 ✓
+50			5.2	323.2 ✓
TP			0.66	327.73 ✓
	12.44	340.17		
33+00			2.0	338.2 ✓
			0.21	339.96 ✓
	12.40	352.56		
+35			1.7	350.7 ✓
TP			0.52	351.84 ✓
	12.07	363.91		
+66			6.4	357.5 ✓
34+00			1.9	362.0 ✓
TP			0.52	363.39 ✓
	0.92	364.31		
+31			1.0	365.3 ✓

Draw

Draw

Begin at Sta 32+65

" " " " " 33+06

" " " " " 33+41

" " " " " 34+22

	364.31 ✓		
35+00		2.9	361.4 ✓
+61		5.0	359.3 ✓
36+00		7.5	356.8 ✓
+25		8.6	355.7 ✓
+40		10.5	353.8 ✓
+56		10.6	353.7 ✓
+82		12.4	351.9 ✓
T.P.		12.92	351.39 ✓
	1.22	352.61 ✓	
37+00		5.1	347.5 ✓
T.P.		12.90	339.71 ✓
	0.14	339.85 ✓	
T.P.		12.92	326.93 ✓
	1.93	328.86 ✓	
T.P.		12.91	315.95 ✓
	0.57	316.52 ✓	
38+00		3.7	312.8 ✓
T.P.		12.95	303.57 ✓
	1.23	304.80 ✓	
+50		5.7	299.1 ✓
T.P.		13.01	291.79 ✓
	0.82	292.61 ✓	
39+00		7.3	285.3 ✓
T.P.		13.04	279.57 ✓
	1.73	281.30 ✓	

Peg  $\pm$  at Sta 36+85

" " " " 37+95

Top of Rock at Sta 37+60

Peg  $\pm$  at Sta 37+92

" " " " 38+35

" " " " 38+75

Top of Rock  $\pm$  Sta 39+25



281.30 ✓

39+31 2.9 278.4 ✓

40+00 10.3 271.0 ✓

12.99 268.31 ✓

2.40 270.71 ✓

+50 3.7 267.0 ✓

41+00 5.0 265.7 ✓

+24 7.2 263.5 ✓

+31 10.2 260.5 ✓

+48 11.2 259.5 ✓

+60 10.8 259.9 ✓

+67 8.1 262.6 ✓

42+00 6.8 263.9 ✓

+50 5.5 265.2 ✓

43+00 4.2 266.5 ✓

+50 2.5 268.2 ✓

44+00 1.2 269.5 ✓

T.P. 0.87 269.84 ✓

11.29 281.13 ✓

+50 10.8 270.3 ✓

45+00 9.7 271.4 ✓

+50 6.0 275.1 ✓

46+00 3.7 277.4 ✓

T.P. 0.33 280.80 ✓

13.01 293.81 ✓

+50 10.6 283.2 ✓

Peg on  $\phi$  at Sta 40+32

Draw.

Peg  $\phi$  Sta 44+05.

" " " 46+31.

293.81 ✓

47+00 1.8 292.0 ✓

T.P. 0.35 293.46 ✓

13.04 306.50 ✓

+31 9.2 297.3 ✓

+61 1.8 304.7 ✓

T.P. 1.79 304.71 ✓

13.03 317.74 ✓

48+00 3.6 314.1 ✓

T.P. 0.40 317.34 ✓

13.03 330.37 ✓

+28 7.5 322.9 ✓

+60 0.5 329.9 ✓

T.P. 0.48 329.89 ✓

12.55 342.44 ✓

49+00 3.6 338.8 ✓

T.P. 0.60 341.84 ✓

12.30 354.14 ✓

+40 8.1 346.0 ✓

50+00 2.3 351.8 ✓

T.P. 0.14 354.00 ✓

3.73 357.73 ✓

+51 2.9 354.8 ✓

51+00 3.7 354.0 ✓

+25 5.6 352.1 ✓

+50 4.8 352.9 ✓

Peg on  $\phi$  Sta 47+06

Rock on  $\phi$  Sta 47+61.

Rock on  $\phi$  Sta 48+12

Rock on  $\phi$  Sta 48+60

Rock on  $\phi$  Sta 49+16

Rock 3'R 50+33.



357.73 ✓

52+00		5.2	352.5 ✓
+75		5.5	352.2 ✓
53+00		5.1	352.6 ✓
+75		5.7	352.0 ✓
54+00		6.0	351.7 ✓
+75		4.8	352.9 ✓
55+00		4.7	353.0 ✓
+75		5.5	352.2 ✓
56+00		5.3	352.4 ✓
+75		7.1	350.6 ✓
57+00		8.4	349.3 ✓
+31		10.3	347.4 ✓
+55		9.7	348.0 ✓
+73		10.9	346.8 ✓
T.P.		12.82	344.91 ✓
	0.85	345.76 ✓	
B.M. #14		4.99	340.77 ✓
58+00		2.5	343.3 ✓
+36		13.1	332.7 ✓
T.P.		13.07	332.69 ✓
	0.73	333.42 ✓	
T.P.		12.46	320.96 ✓
	0.17	321.13 ✓	
59+00		2.8	318.3 ✓

Point of Rock & 57+85. ✓

Spike in Trestle. ✓

Point of Rock & 58+36. ✓

" " " " 58+90. ✓

Record  
340.79



	321.13 ✓		
59+40		6.2	314.9 ✓
+80		11.6	309.5 ✓
T.P.		12.95	308.18 ✓
	0.23 308.41 ✓		
60+00		4.0	304.4 ✓
+26		10.3	298.1 ✓
+48		12.9	295.5 ✓
+83		19.4	289.0 ✓
+85		22.0	286.4 ✓
61+00		22.0	286.4 ✓
+10		21.2	287.2 ✓
+40		22.4	286.0 ✓
+73		26.0	282.4 ✓
+75		28.8	279.6 ✓
+83		23.3	285.1 ✓
62+00		18.2	290.2 ✓
+18		13.0	295.4 ✓
+50		3.3	305.1 ✓
T.P.		0.59	307.82 ✓
	12.79 320.61 ✓		
		1.02	319.59 ✓
	12.36 331.95 ✓		
63+00		9.7	322.2 ✓
T.P.		0.49	331.46 ✓
	12.18 343.64 ✓		

July 20, 1929.  
Hill  
Elliott & Notes  
Kaltom.

43

Rock on  $\&$  at Sta 59+85.

} Draw

Draw.

Peg on  $\&$  Sta 62+66.

Rock on  $\&$  Sta 62+93.

" " " " 63+23.



	343.64 ✓		
63+34		8.9	334.7 ✓
+65		3.7	339.9 ✓
64+00		1.5	342.1 ✓
T.P.		0.29	343.35 ✓
	12.76	356.11 ✓	
+23		10.4	345.7 ✓
+63		6.9	349.2 ✓
+91		2.1	354.0 ✓
65+00		1.0	355.1 ✓
T.P.		0.98	355.13 ✓
	12.88	368.01	
+38		9.2	358.8 ✓
66+00		5.9	362.1 ✓
+31		4.3	363.7 ✓
+68		3.8	364.2 ✓
67+00		2.3	365.7 ✓
+50		2.5	365.5 ✓
68+00		2.6	365.4 ✓
+55		3.8	364.2 ✓
69+00		6.0	362.0 ✓
+44		10.6	357.4 ✓
T.P.		12.75	355.26 ✓
	1.28	356.54 ✓	
+61		3.6	352.9 ✓

Peg on E Sta 64+10

" " " " 65+00

" " " " 69+54

		356.54 ✓		
T.P.			12.73	343.81 ✓
	0.86	344.67 ✓		
70+00			7.6	337.1 ✓
T.P.			12.74	331.93 ✓
	0.33	332.26 ✓		
+37			10.6	321.7 ✓
T.P.			12.90	319.36 ✓
	1.38	320.74 ✓		
+80			16.1	304.6 ✓
71+00			21.1	299.6 ✓
+08			22.0	298.7 ✓
+12			23.9	296.8 ✓
+17			21.3	299.4 ✓
+38			14.8	305.9 ✓
+73			0.5	320.2 ✓
TP.			0.52	320.22 ✓
	12.70	332.92 ✓		
72+00			2.2	330.7 ✓
T.P.			0.22	332.70 ✓
	13.09	345.79 ✓		
+20			7.3	338.5 ✓
+44			0.5	345.3 ✓
T.P.			0.52	345.27 ✓
	12.97	358.24 ✓		
TP.			0.29	357.95 ✓
	12.45	370.40 ✓		

Peg in & Sta 69+84

Rock on & Sta 70+11.

Peg on & 70+42.

Draw

Peg on & Sta 71+73.

Peg on & Sta 72+05

" " " " 72+44.



	370.40		
+90		9.2	361.2 ✓
73+00		7.6	362.8 ✓
+16		3.2	367.2 ✓
T.P.		0.94	369.46 ✓
	13.04	382.50 ✓	
+73		6.7	375.8 ✓
74+00		4.7	377.8 ✓
+50		2.4	380.1 ✓
75+00		1.8	380.7 ✓
+60		1.7	380.8 ✓
76+00		4.8	377.9 ✓
+14		8.0	374.5 ✓
T.P.		12.84	369.66 ✓
	0.18	369.84 ✓	
T.P.		12.92	356.92 ✓
	1.19	358.11 ✓	
T.P.		13.09	345.02 ✓
	0.33	345.35 ✓	
+68		8.1	337.2 ✓
+81		8.2	337.1 ✓
T.P.		12.76	332.59 ✓
	0.98	333.57 ✓	
77+00		3.2	330.4 ✓
+41		12.0	321.6 ✓

Top of Rock Sta 73+30.

Peg 5' ht Sta 76+23.

Peg on E Sta 76+40

Peg 6' ht of Sta 76+55.

Peg E Sta 76+95.

333.57 ✓

+75		23.2	310.4 ✓
+98		28.1	305.5 ✓
78+00		32.7	300.9 ✓
+04		32.7	300.9 ✓
+09		26.0	307.6 ✓
+51		11.4	322.2 ✓
T.P.		0.36	333.21 ✓
12.91	346.12 ✓		
79+00		7.9	338.2 ✓
T.P.		0.48	345.64 ✓
12.87	358.51 ✓		
+50		6.4	352.1 ✓
T.P.		0.43	358.08 ✓
12.53	370.61 ✓		
80+00		4.4	366.2 ✓
T.P.		0.28	370.33 ✓
12.29	382.62 ✓		
+32		7.6	375.0 ✓
+60		3.4	379.2 ✓
T.P.		0.85	381.77 ✓
12.50	394.27 ✓		
81+00		11.3	383.0 ✓
+25		10.0	384.3 ✓
+50		8.8	385.5 ✓
+75		8.4	385.9 ✓

} Wash

Peg on Sta 78+84

Peg on Sta 79+29

" " " " " 79+92

" " " " " 80+16

" " " " " 80+85



394.27 ✓

"P" 82+00	7.5	386.8 ✓
+25	6.7	387.6 ✓
+50	5.1	389.2 ✓
"P" 83+00	4.5	389.8 ✓
+50	2.8	391.5 ✓
"P" 84+00	2.5	391.8 ✓
84+58.48 = "P" = 87+98.96 A.P.T. Equation	2.0	392.3 ✓
"A" 88+30	1.1	393.2 ✓
"A" 88+50	1.8	392.5 ✓
89+00	1.7	392.6 ✓
+50	2.4	391.9 ✓
90+00	2.9	391.4 ✓
+25	3.5	390.8 ✓
+62	3.3	391.0 ✓
+74	5.4	388.9 ✓
91+00	6.9	387.4 ✓
+21	9.5	384.8 ✓
	5.36	388.91 ✓

End of "P" Line

Peg at Sta 84+50 "A" Line Simpson 388.88

.03



Alignment - from 7<sup>th</sup> + Upas, South thru Park

$\Delta = 20^{\circ} 55' 14''$	3+28 <sup>40</sup> E.C.	10+27.5
R = 850	3+00	9+30.0
St. = 15690	2+50	7+48.9
L = 31030	2+00	6+07.8
B.C. = 0+18 <sup>0</sup>	1+50	4+26.7
E.C. = 3+28 <sup>40</sup>	1+00	2+45.6
def. 1' = 2.022	0+50	1+04.5
def. 50' = 1041.11	0+18 <sup>0</sup> B.C.	

0+18<sup>0</sup> B.C.

Test hole "A" - 150' at 0+07 (thru Park)

0+00 =  $\epsilon$  of Upas St. line, Sta 90+80

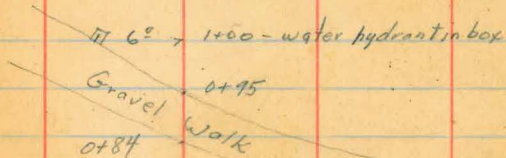
$\epsilon$

10/8/41

49

Soper  
Brooks  
Hedgeson

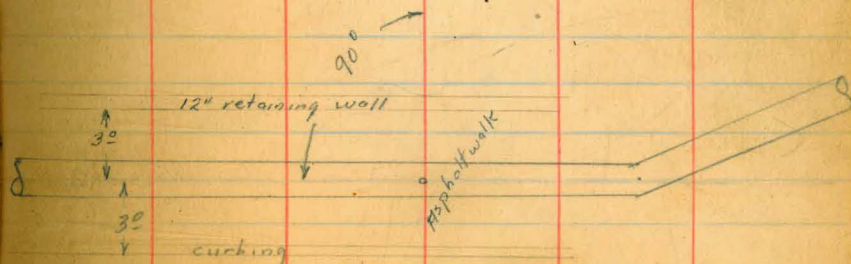
Lawn  
Sprinkling system



Lawn  
Sprinkling system in lawn

13'  $\circ$  0+60 - 24" Tree

21'  $\circ$  0+12 - 40" Cypress

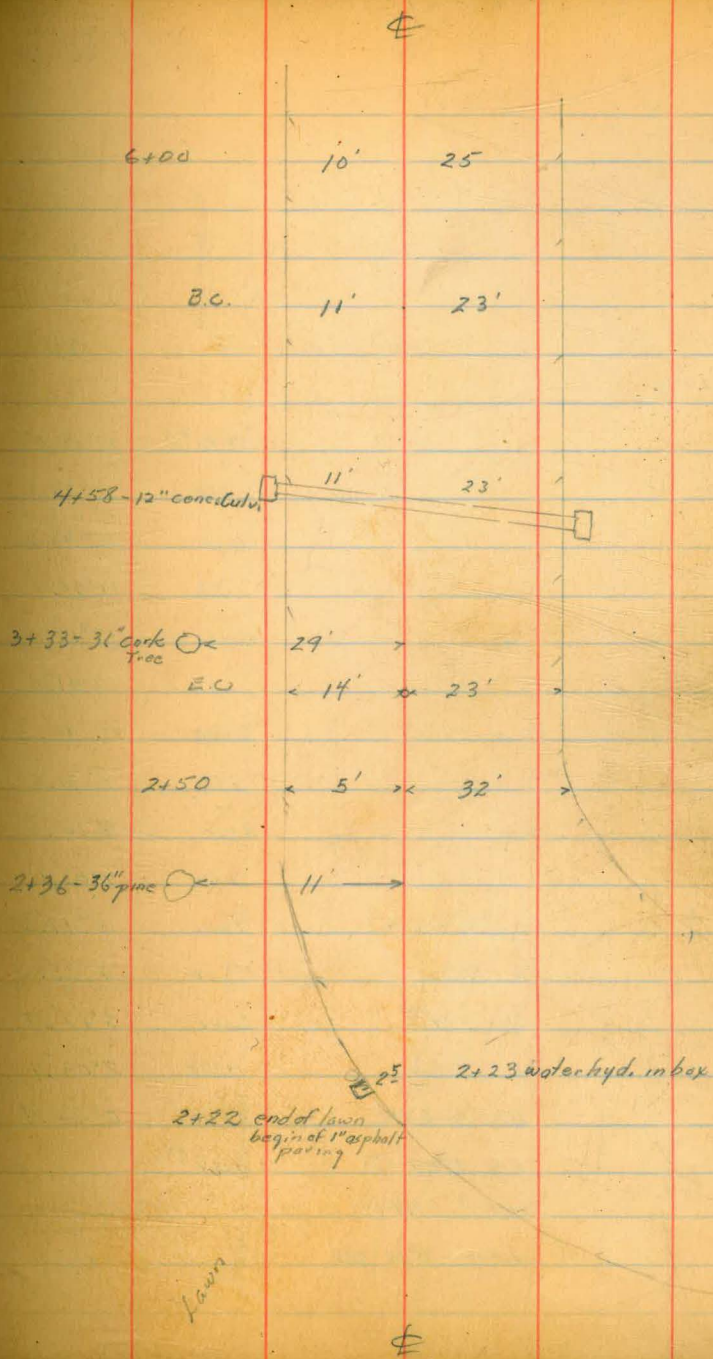




Test hole "B", 28 Feb 4+74 (Thru Park)

4+67<sup>60</sup> B.C.

3+28<sup>40</sup> E.C.



11+91<sup>20</sup> E.C.

$\Delta = 36^{\circ}03'84$   
 $R = 1150$   
 $St. = 374^2$   
 $L = 723^2$   
 $B.C. = 4+67^60$   
 $E.C. = 11+91^{20}$   
 $def-1 = 1+95$   
 $def-50 = 1^{\circ}14.935$

11+91 <sup>20</sup>	18°01.5
+50	16°59.9
11+00	15°45.2
+50	14°30.5
10+00	13°15.7
+50	12°01.0
9+00	10°46.3
+50	9°31.5
8+00	8°16.8
+50	7°02.1
7+00	5°47.3
+50	4°32.6
6+00	3°17.9
+50	2°03.1
5+00	0°48.4
4+67 <sup>60</sup>	

11+98

11+50 ← 9' 26' →

9+50 ← 10' 24' →

8+72 [ 10' 23' ]  
 12" Corr. I. Curve

7+50 ← 10' 24' →

Post lined path

edge of paving

edge of paving



$\Delta = 15^{\circ} 23' 14''$	16+53 <sup>59</sup>	7°41'.5
$R = 1000'$	150	7°35'.3
$St. = 135^{\circ} 06'$	16+00	6°09'.3
$L = 268.49$	150	4°43'.4
B.C. = 13+85 <sup>10</sup>	15+00	3°17'.5
E.C. = 16+53 <sup>59</sup>	150	1°51'.5
def 1' = 1.719	14+00	0°25'.6
def 50' = 1°25'.944	13+85 <sup>10</sup>	

15+50      10'      24'      >

15+40 →

Hedge

Test hole "C" 12' H 13+96 (thru Park)

14+00 →      8'

13+85<sup>10</sup> B.C.

B.C.      8'      27'      >

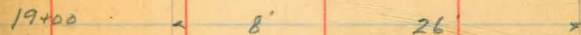
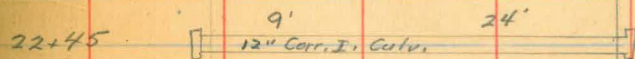
13+79      10'      >

mark inculcated  
Edge of paving

12+76      7'      12° Corr. I. Culv.      25'      >

Edge of paving

Test hole "D" 14' H 22+68 (thru Park)



16+53<sup>59</sup> E.C.

Quince St →





Test hole "E" - 17' (+ 31+09 (thru Park)

29+38<sup>35</sup> B.C.

27+94<sup>11</sup> E.C.

$A = 18^{\circ}55'14''$	27+94 <sup>11</sup>	$9^{\circ}27'.5$
$R = 1000'$	+50	$8^{\circ}11'.7$
$S.T. = 166^{\circ}40'$	27+00	$6^{\circ}45'.8$
$L = 330^{\circ}16'$	+50	$5^{\circ}19'.8$
$B.C. = 24+63^{\circ}95'$	26+00	$3^{\circ}53'.8$
$E.C. = 27+94^{\circ}11'$	+50	$2^{\circ}27'.9$
$defl = 1.719$	25+00	$1^{\circ}01'.9$
$defl 50' = 1^{\circ}25'.944$	24+63 <sup>95</sup>	

24+63<sup>95</sup> B.C.


⊕

9/9/41  
Saper  
Brooks  
Hedgeson

54

30+50 ← 15 19 →

29+00 ← 10' 23 →

27+96. 

27+00 ← 6' 26' →

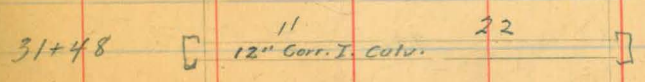
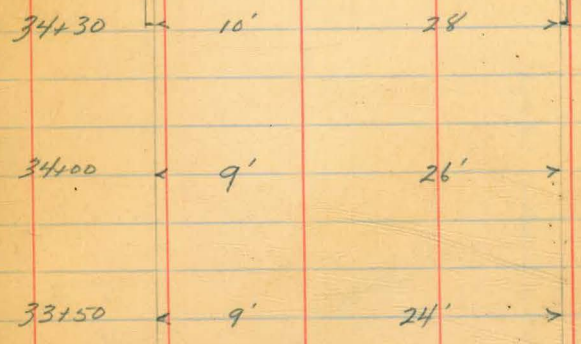
26+00 ← 7' 25' →

B.C. ← 8' 24' →

⊕

32+36<sup>01</sup> EG

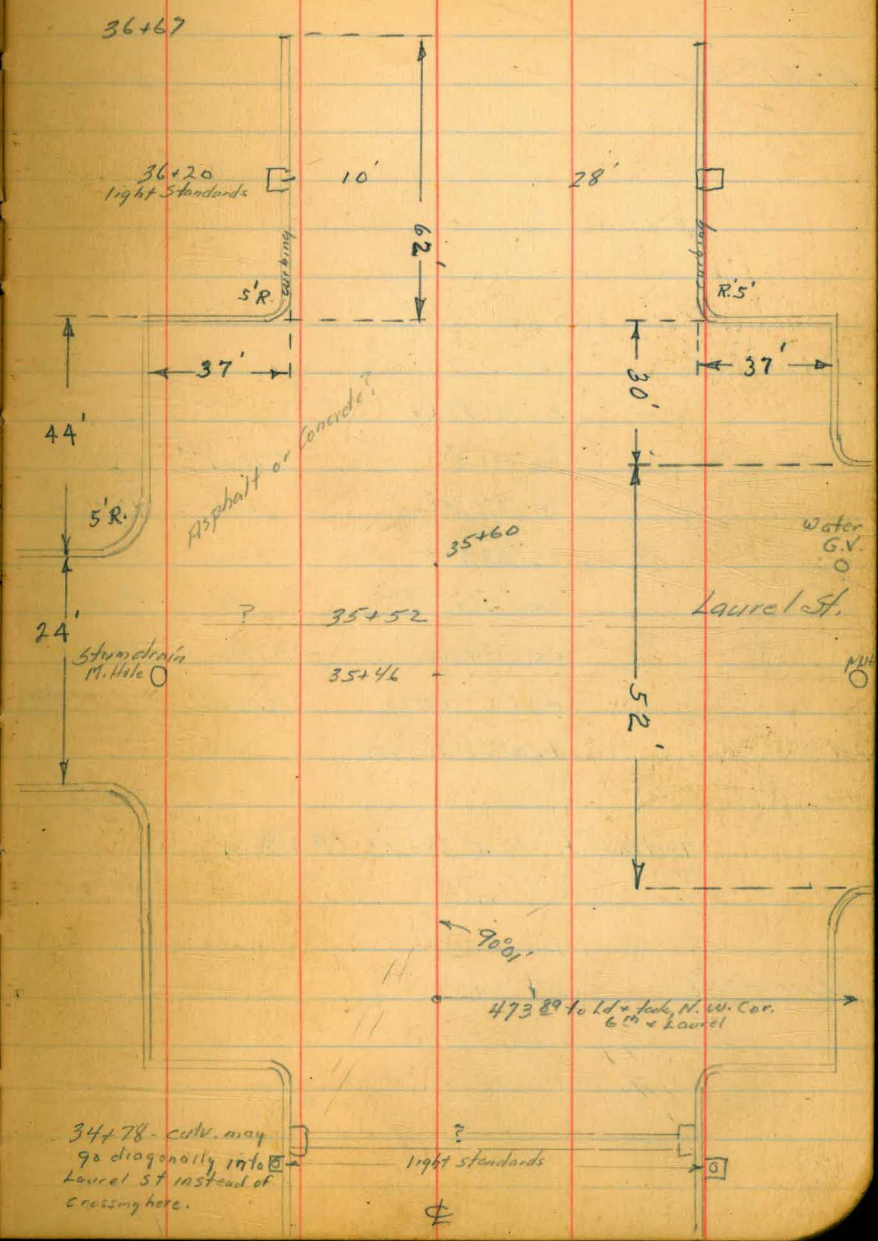
$\Delta = 18^{\circ}57'18''$	32+36 <sup>01</sup>	9 <sup>028.5</sup>
R = 900'	32+60	8 <sup>79.7</sup>
st. 150 <sup>30</sup>	+50	6 <sup>044.2</sup>
L = 297 <sup>66</sup>	31+00	5 <sup>088.7</sup>
B.C. = 29+38 <sup>35</sup>	+50	3 <sup>033.2</sup>
EC = 32+36 <sup>01</sup>	30+00	1 <sup>057.7</sup>
del = 1.910	+50	0 <sup>022.2</sup>
del 50' = 1 <sup>035.493</sup>	29+38 <sup>35</sup>	



⊕

⊕





35+14<sup>92</sup> P.O.T (on line produced from I.d + J. + N.W. Cor. of 6th & Laurel and N.E. Cor. of 5th & Laurel)

34+78 - cutv. may go diagonally into Laurel St instead of crossing here.

light standards



39+87<sup>23</sup> B.C.

39+01<sup>23</sup> E.C.

$\Delta = 12^{\circ}49'21''$

R = 1000'

Sf = 112.32

L = 223.69

B.C. = 36+77<sup>54</sup>

E.C. = 39+01<sup>23</sup>

defl = 1.719

def 50' =  $1^{\circ}25'94''$

39+01<sup>23</sup> 6°24'.5

+50 4°56'.4

38+00 3°30'.5

+50 2°04'.5

37+00 0°38'.6

36+77<sup>54</sup>

Test hole "F" - 11 ft 38+79 ( thru Park )

36+77<sup>54</sup> B.C.

40+00

9'

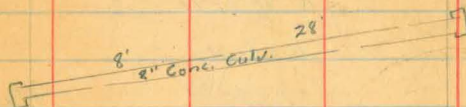
26'

E.C.

8'

25'

37+86



B.C.

10'

27'

edge of paving



42+35<sup>00</sup> L 47° 30' H

41+84" E.C.

$\Delta = 11^{\circ} 17' 14''$

$R = 1000'$

St. = 98.79

$L = 196.93$

B.C. = 39+87<sup>18</sup>

E.C. = 41+84"

def. 1 = 1.719

def 50 = 1° 25' 944

41+84" 5° 38'.5

+ 50 4° 39'.8

41+00 3° 13'.9

150 1° 48'.0

40+00 0° 22'.0

39+87<sup>18</sup>

42+27



E.C.

7

31

⊕

9/10/41  
Soper  
Brooks  
Hedgerson

59

43+50

5'

22'

43+40

POWING

Lawn

43+36  
24" Eucalyptus

○ ← 8' →

Testhole "A" - Via Juniper St - 36' RT 43+33

← 11' 5" → ○ 43+02  
30" Eucalyptus

42+76  
24" Eucalyptus

○ ← 18' →

← 7' → ○ 42+69  
12" Eucalyptus

42+61  
30" Eucalyptus

○ ← 7' 6" →

Lawn

42+48

edge of powing

⊕



46+58<sup>77</sup> L. 11°15' RT

45+49<sup>39</sup> L. 11°15' RT

44+74<sup>00</sup> L. 24°00' RT

47+00 < 7' 14' >

bisect. L. < 4' 17' >

46+00 < 5' 15' >

bisect. L. < 3' 18' >

45+00 < 6' 17' >

bisection of angle < 5' 19' >

44+50 < 12' 12' >

44+00 < 15' 7' >

43+86  
catch basin, could not  
find other end.

□ < 14' >

edge paving

edge of paving

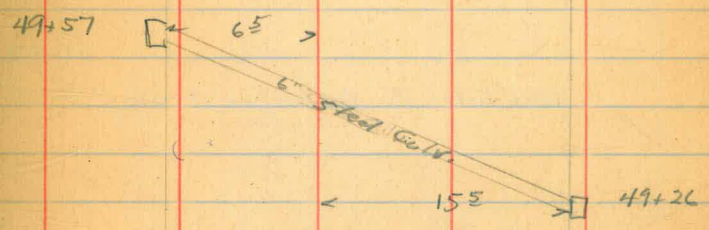
⊥

60

⊥

⊕

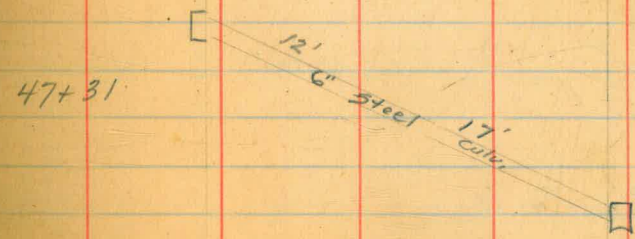
50+00 ← 5' 15' →



49+00 ← 5' 14' →

biscch. 4 ← 3' 18' →

47+50 ← 7' 13' →



⊕

47+87<sup>31</sup> ∠ 12° 45' Rt



Test hole "B" Via Juniper St route, 7 Lt, 52+95

53+00 < 5' 16' >

52+05 □ < 26' 6" steel culv. 16' > □

52+00 < 5' 16' >

51+39 3/4" waterline

bisect L. < 7' 13' >

50+84 □ 6" 14" steel culv. 17' □

bisect L. < 8' 12' >

edge of paving

edge of paving

51+20<sup>45</sup> L. 11°30' Lt

50+41<sup>98</sup> L. 11°01' Lt

7/11/41

Soper  
Braks  
Hedgeson

63

57+50 ← 10' → 16' →

57+00 ← 5' → 17' →

56+90 ← 6' →

56+61 ← 4' →

6" Steel Curbs

← 18' → 56+22

E.C. ← 20' → 17' →

55+50 ← 05' → 175' →

55+00 ← 05' → 175' →

54+50 ← 20' → 17' →

← 35' → 16' →

edge of paving

edge of paving

Note: Trees + shrubs are about 10' back from edge of road  
between stations 54+00 & 57+00, so line was kept  
close to left side

55+81<sup>48</sup> E.C.

$$A = 10^{\circ}03'RT$$

$$R = 1000'$$

$$ST = 8792$$

$$L = 175.40$$

$$B.C. 54+06.08$$

$$E.C. 55+81.48$$

$$\text{def } i = 1.719$$

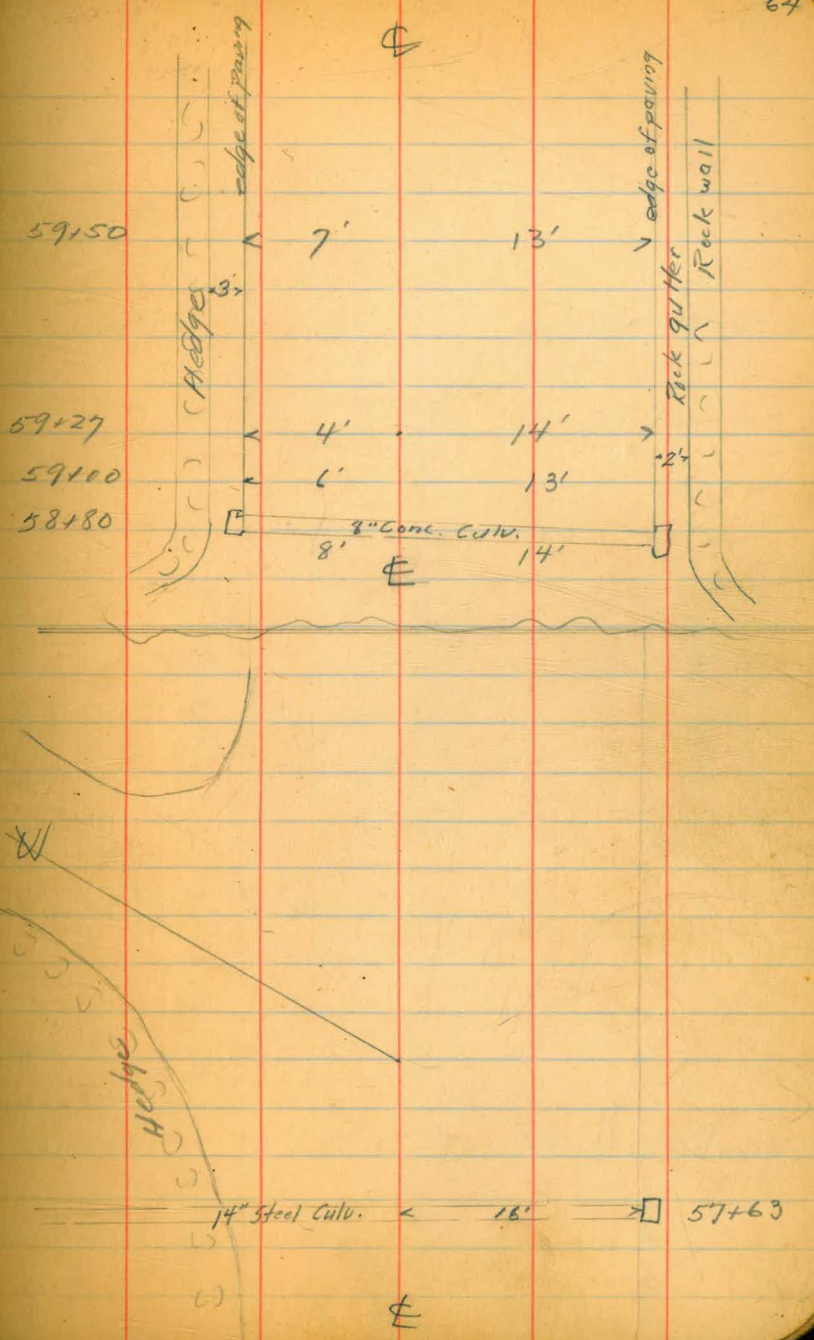
$$\text{def } 50 = 1^{\circ}25'.944$$

54+06.08 B.C.



59+27° L 13°06' RT

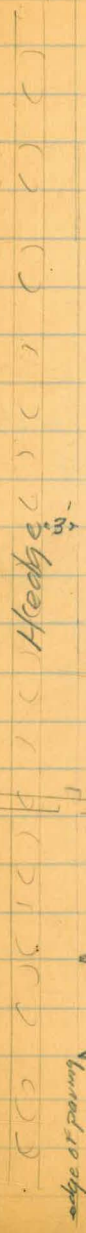
57+76<sup>50</sup> L 75°06' Lt



61+45° L. 12°00' RT

61+45

3' 17'



60+75

23' 14'  
8" Cover Culti.

60+50

7' 13'

60+00

5' 15'

60+00° L. 10°00' RT

edge of paving

edge of paving

⊕



63+37<sup>00</sup> L 10°00' Rt

Test hole "C" - via Juniper St. - 5' - Lt 63+25

62+40<sup>00</sup> L 13°00' Rt

63+37

63+07

63+00

62+46

62+00

Hedge

3'

Rock wall

Rock gutter

4 16'

4' 14'  
8" Cent. Culver

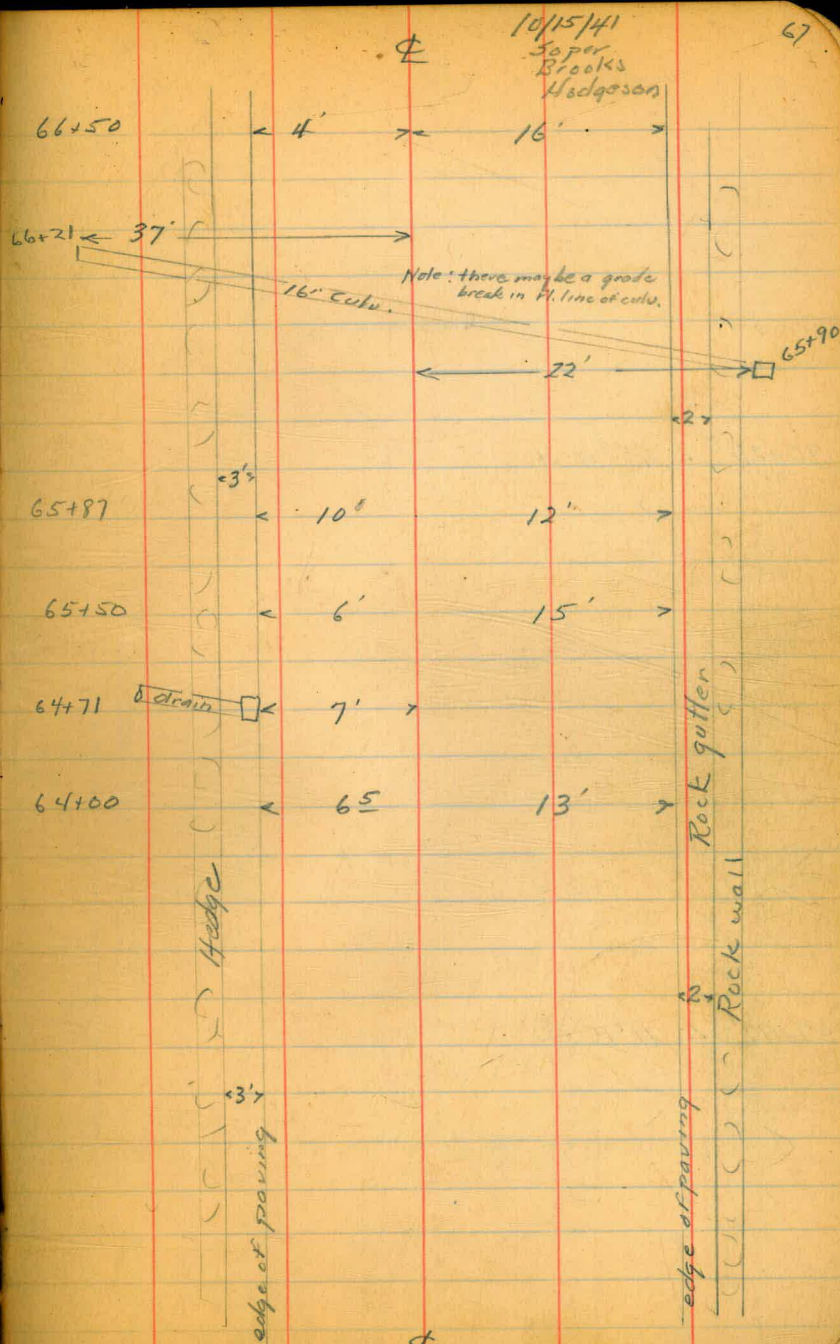
7' 13'

5' 15'

7' 13'

65+87<sup>00</sup> L 18° 30' L<sub>H</sub>

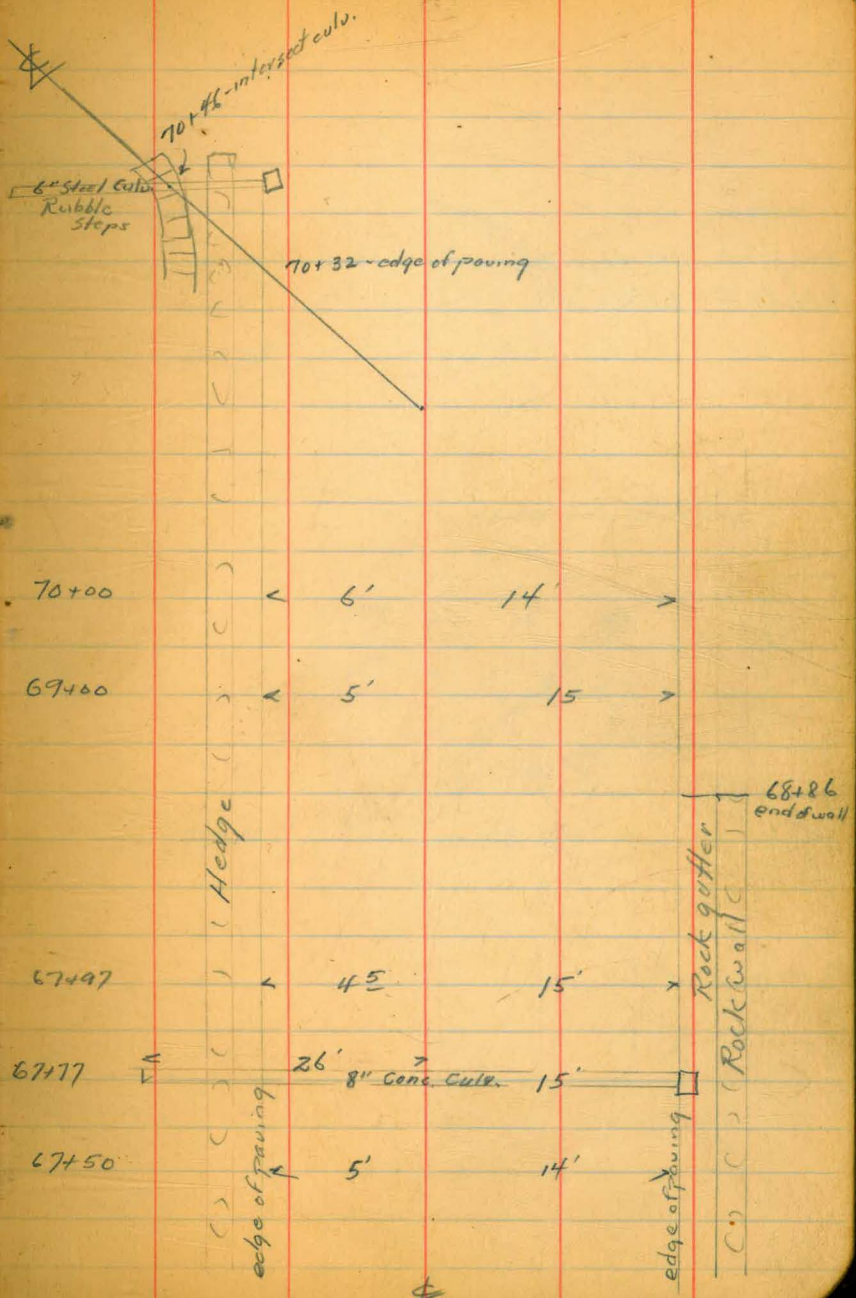
Cont'd on page 71. this book.



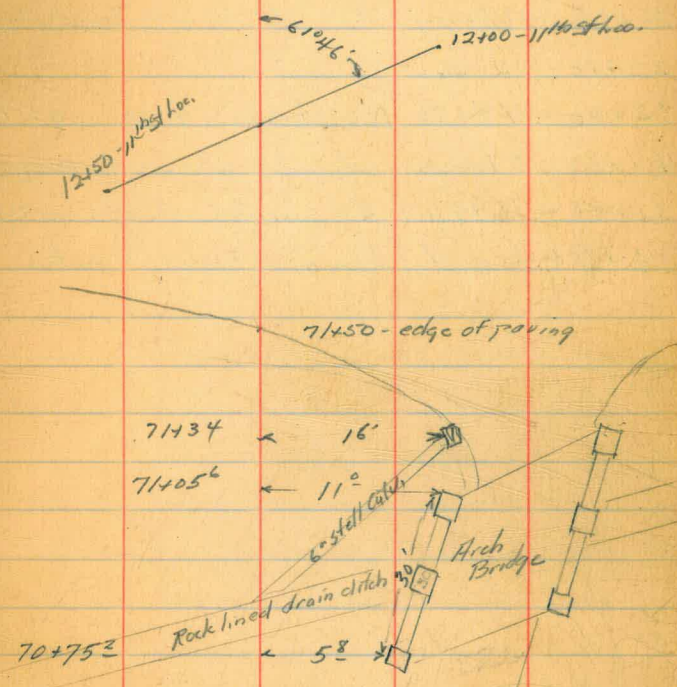


~~70+21<sup>00</sup> L. 45°00' Lt.~~

~~67+97<sup>00</sup> L. 11°15' Rt.~~



12+2297 - 11th St loc. Intersect with chord on curve  
71+88<sup>15</sup> 61°46' RT





Trees & shrubs near line - 7<sup>th</sup> & 4<sup>th</sup> - thru Park

- 3+50 - 16+00 - Shrubs & trees to edge of road.  
 16+00 - 22+00 " " " " " " " - Trees hang over road.  
 22+00 - 32+00 " " " " " " "  
 32+00 - 44+50 No shrubs - trees set back  
 44+50 51+00 - Shrubs & trees to edge of road - Trees hang over  
 51+00 - 56+90 - No shrubs - trees back 10' from edge  
 56+90 to end shown in Transit notes.

Line revision - 11<sup>th</sup> St. alternate 65+87 - 72+74

67+53<sup>65</sup> L 21° 12' Rt.

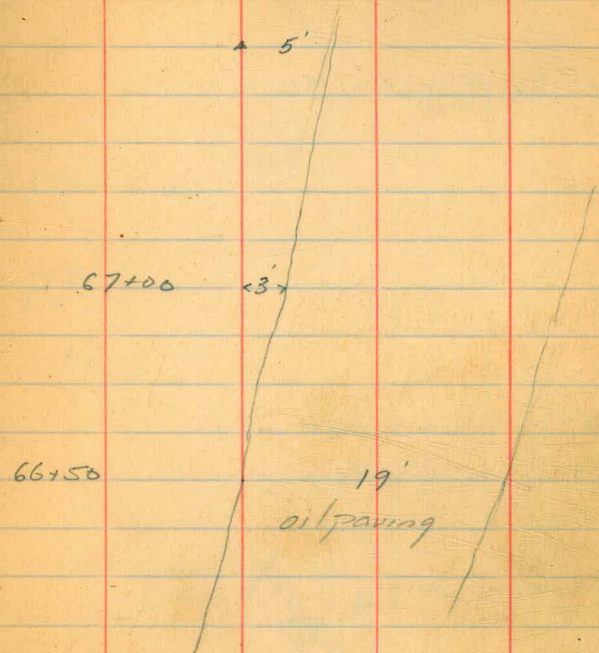
65+87<sup>00</sup> L 22° 00' Lt

63+37 L 10° 00' Rt

11/24/41

Soper  
Hedgeson  
Davis

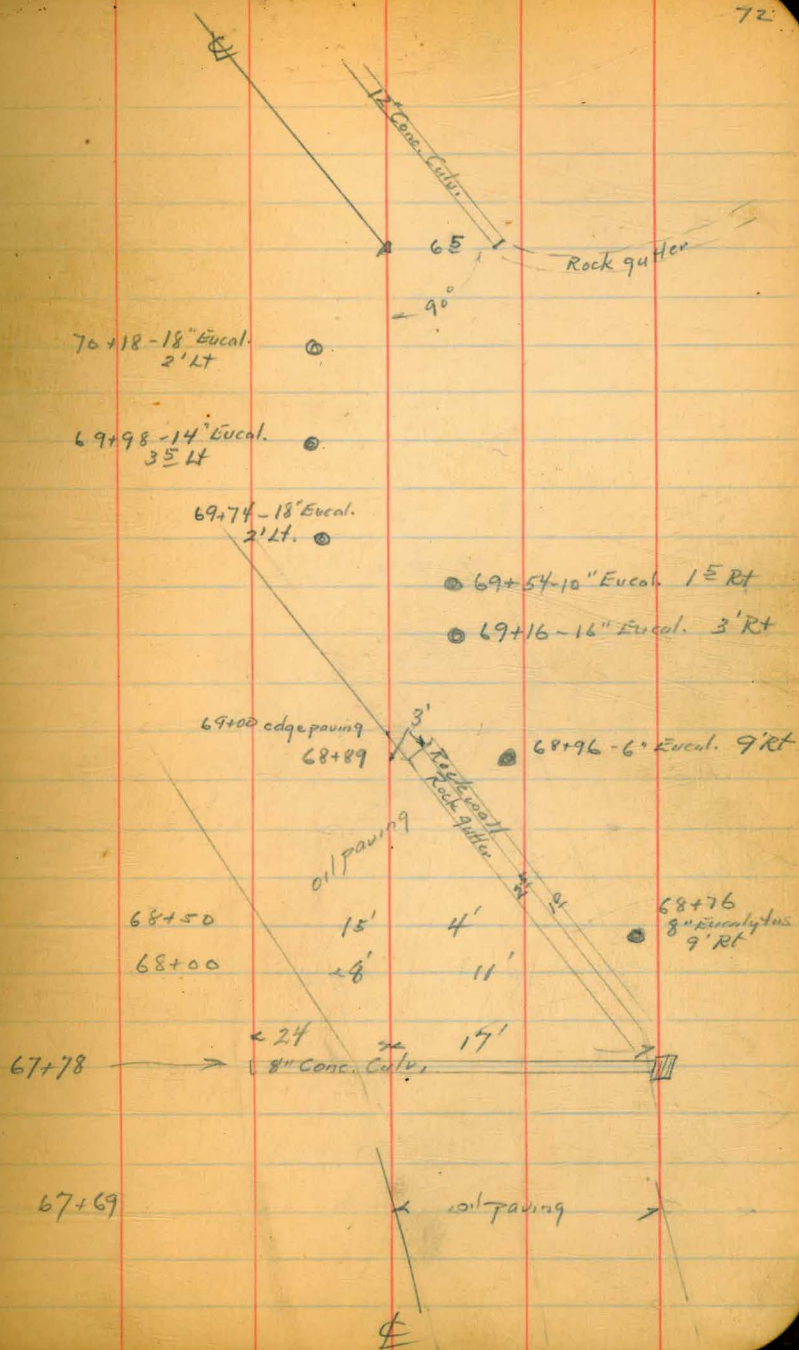
71



Note: culvert x-ing shown on page 67



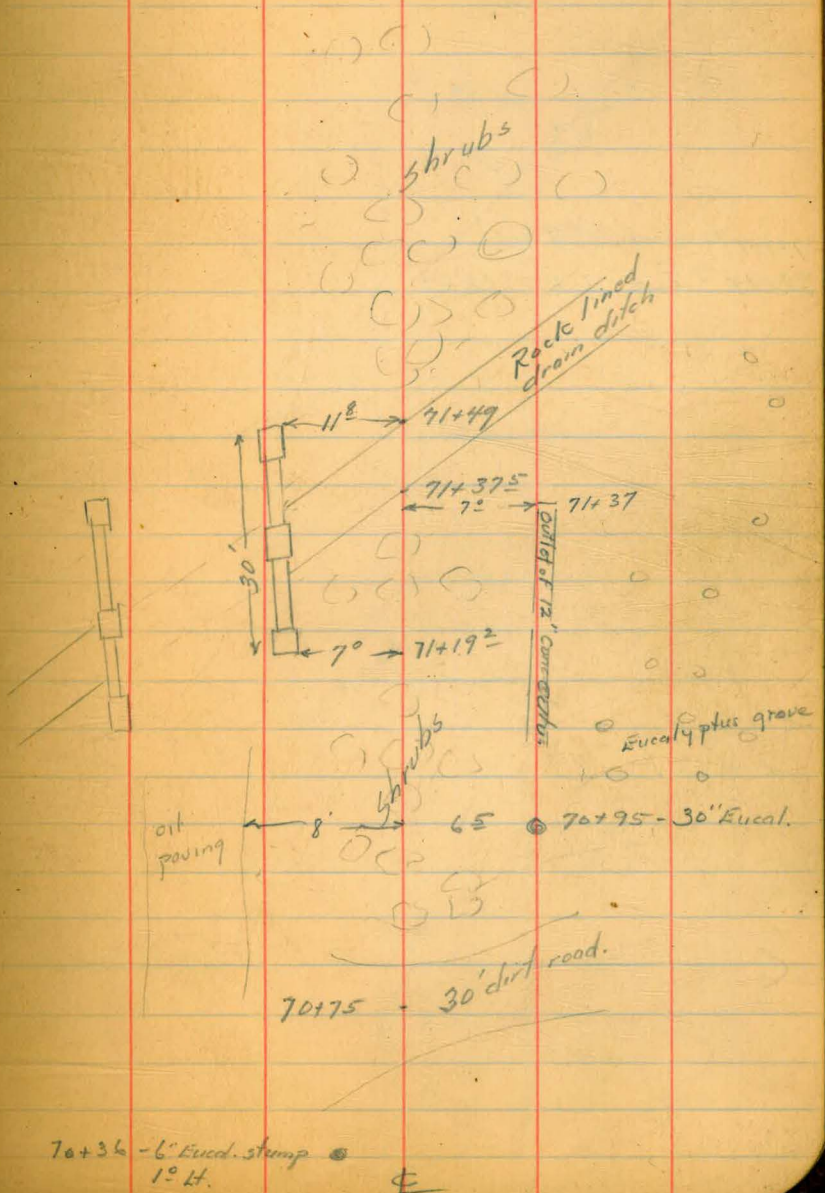
70+22.7° L 33° 00' LT



11/25/41

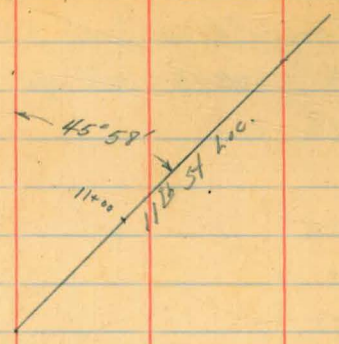
73

Sgt  
Hedgson  
Dallas





11+11.90 ahead (11<sup>th</sup> St loc)  
72+74<sup>30</sup> back L. 45° 58' Rt.



oil paving  
72+67 edge of oil paving

72+61

Dirt path  
72+50

Shrubs

⊕

Profile, line revision 65+87-72+74  
Const'd from book 574 page 31

B.M.	4.48	124.75		120.27	✓
65+87			2.3	122.5	✓
66			3.3	121.5	✓
+50			6.8	118.0	✓
67			9.3	115.5	✓
+50			12.3	112.5	✓
+53.65			12.4	112.4	✓
TP	0.11	112.10	12.76	111.99	✓
			4.2	107.9	✓
			6.6	105.5	✓
68			2.9	109.2	✓
+50			6.2	105.9	✓
69			9.2	102.9	✓
+50			11.3	100.8	✓
70			12.6	99.5	✓
TP	1.46	100.46	13.10	99.00	✓
70+22 <sup>10</sup>			1.6	98.9	✓
			3.9	96.6	✓
70+50			3.2	97.3	✓
71			4.8	95.7	✓
+18			5.9	94.6	✓
71+37 <sup>5</sup>			13.3	87.2	✓
			12.1	88.4	✓
71+37.5			18.3	82.2	✓

Book 574-39

Stake in ground west end of culv. hd wall Book 574-32

Fl. line 8" Conc. Culv. 17' Rt 67+78  
" " " " 24' Lt "

Fl. line 12" Conc. Culv. 6' Rt 70+22

Top of rock wall  
Fl. line 12" Conc. Culv. 7' Rt 71+37  
In drain ditch



100.46

71449			18.3	82.2	✓
71449			13.3	87.2	✓
+70			8.3	92.2	✓
72			6.6	93.9	✓
TP	2.60	97.77	5.29	95.17	✓
+50			3.4	94.4	✓
$\frac{72474}{11+1190} = 30$			4.1	93.7	✓

In drain ditch  
Top of rock wall

ck on B.M.

9.00 88.77 (Rec. 88.73)

Culv. bed wall 50' Lt 5+50 (11<sup>th</sup> st loc.)







DIRECTIONS FOR USE OF TABLES

TABLE No. 1.

Distance of slope stake from side or shoulder stake for any width roadway, slope 1 1/2 to 1. If ground is nearly level, the cut or fill at side stake is located by the double entry method in left column and top row. The number in body

of table in same row and column gives distance from side stake to slope stake. If ground is not

**IMPROVED TABLES**  
**AND**  
**INFORMATION**

TABLE No. 2.

To find Tangent and External for curve of any other degree, divide by degree of curve and add correction found in column of corrections. Degree of curve with a given T may be found by dividing tangent (or external) opposite T by given tangent (or external).

The distance from a point on the tangent to the curve is very nearly the square of the tangent length divided by twice the radius.



14600  
-05  
43800

3956  
44  
012

Change Profile. 7141390

24+00

33+83

14 15

71 2805

38 10

71 5815

40503  
397.85  
7.15  
18

48

71+49

71+325

70

71+192

45+7220

7400

4980

44+2808

2280

4592