

MINING
TRANSIT BOOK
No. 422F

735

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 to be 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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28.64

99.47.30

9239

26

55434
18478

2001 9010

3150

83.18

3076.82

199.28

98.73

197.44

38.49

435.21

13

52

7032

Please Return to
City of San Diego Water Dept.
Room 903 Civic Center

Water Dept
903 Civic Center

This Field Book is manufactured of a High Grade 50% Rag Paper having a WATER RESISTING SURFACE, and is sewed with Bing Special Enamel Waterproof thread.

Made in U. S. A.

Induced to P 31 - ~~msd~~ 6/8/48
" " 757 ~~msd~~ 7/26/48
End ~~msd~~ 12/25/48

TRAJAN AVE P.C.

	11
Realignment Octocoin St.	1-12
RE-PROFILE " "	12-21
ALIGNMENT 58 th & VALENAWAY TO 54 th	23-27
REALIGNMENT PAST 54 th (WEST) STA 163+20+	28
REALIGNMENT ALTA DENA TO ORANGE	29-31 ✓
Re profile Trojan Ave Pipeline from 113+55 ^{ss} to 157+28	32-46
Profile Trojan Ave. from sta 229+50 to 233+59 ^{ss} for construction	56
Profile Trojan Ave from 142+80 ^{ss} to 143+77 ^{ss}	57
Trojan Ave for construction (Grids) 56-58+61	
Sewer laterals King Trojan line sta 132+00 to 136+00	P62

Cactocin Drive
Realignment

1 1/2" water 5' 2" Pt. Sta. 53+08.25
1199' Sta. 53+03

4 pt. Sta. 58+71.59 11965' Lt.

23'

W. of fence of oak to white

Cactocin

Old Man Sta.

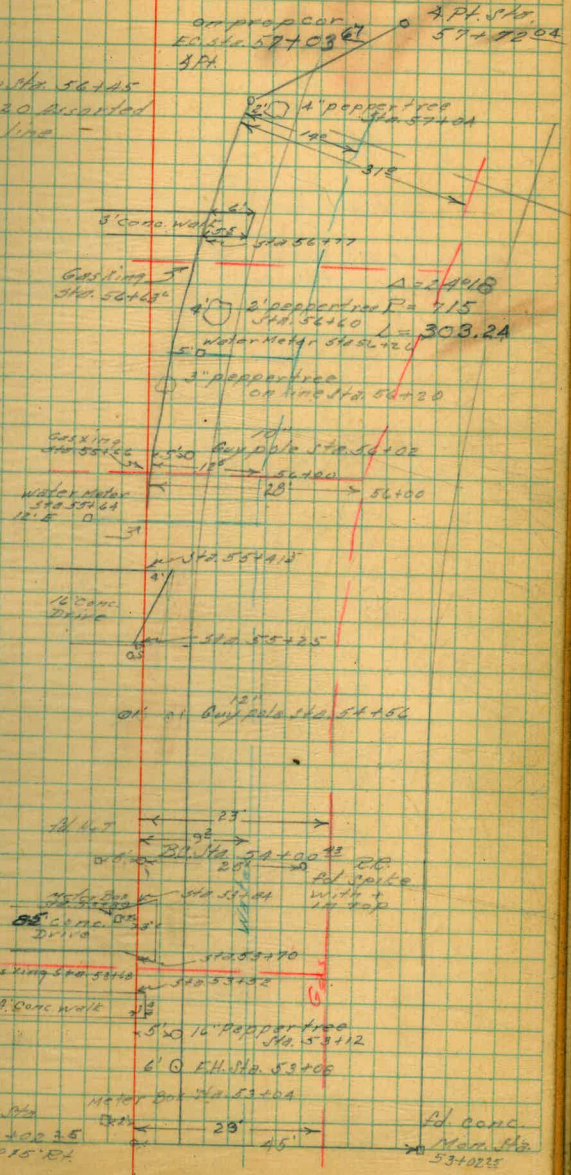
4 pt. Sta. 43+52.07
2°20' Lt.

P26 FB 701
Int. with old line Sta. 42+00
2 pt. 2°20' Rt.

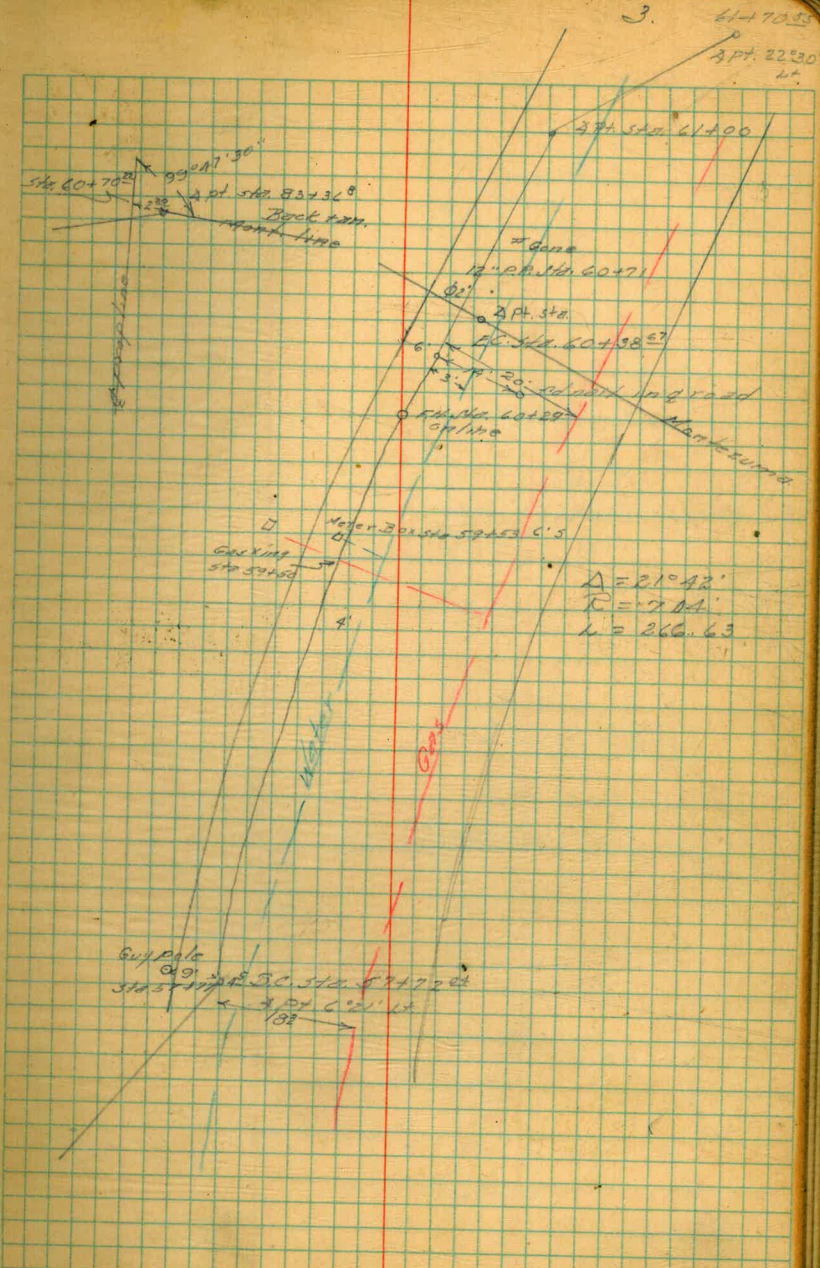
Note: From sta 5445
to sta 5420 recorded
shrubs on line

A = 24°18'
R = 715
T = 153.93
L = 303.26

GPS



Catocita Drive
 Realignment



Gas Xing Sta. 60+49

301865 H
PP Sta. 67+20

305892 H
PP Sta. 66+13

Water Xing Meter Box Sta. 65+80

Gas Xing Sta. 64+88

PP Sta. 64+88
6" x 12" Water Meter Box Sta. 64+26

426480
PP Sta. 62+53

Gas Xing Sta. 62+16
Water Xing Sta. 61+90
Water

21
PP Sta. 61+70.58

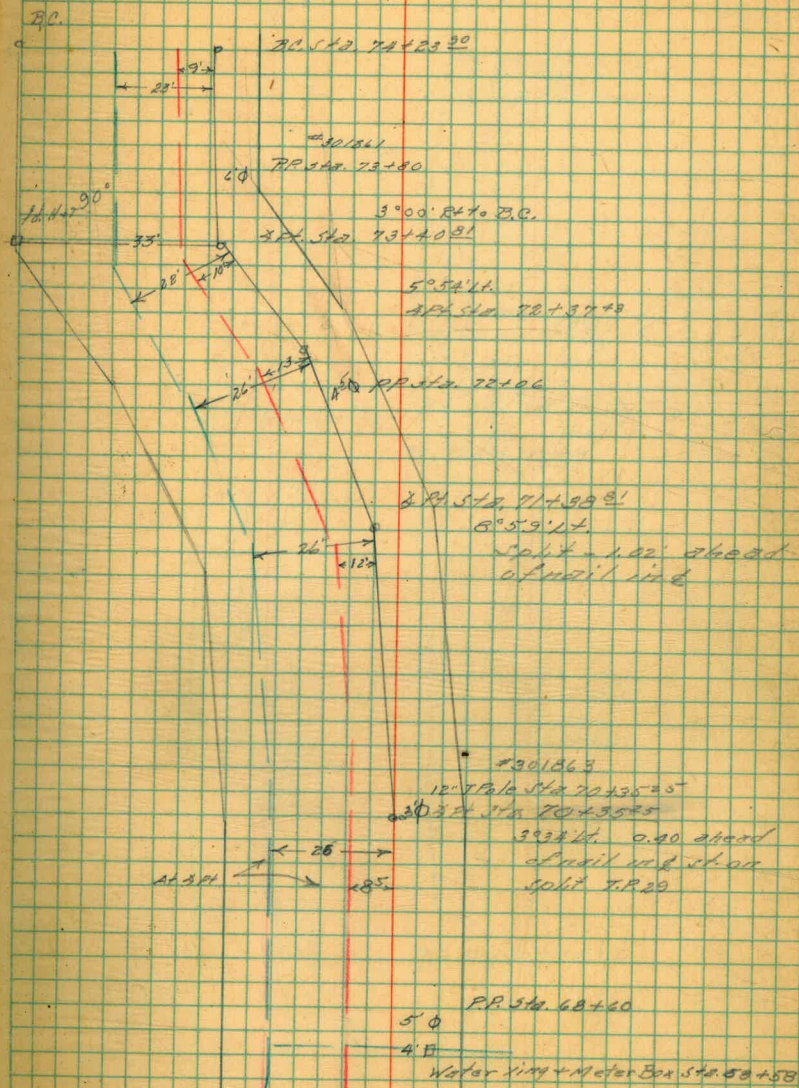
Gas Xing Sta. 61+54.5

Water Xing Sta. 61R

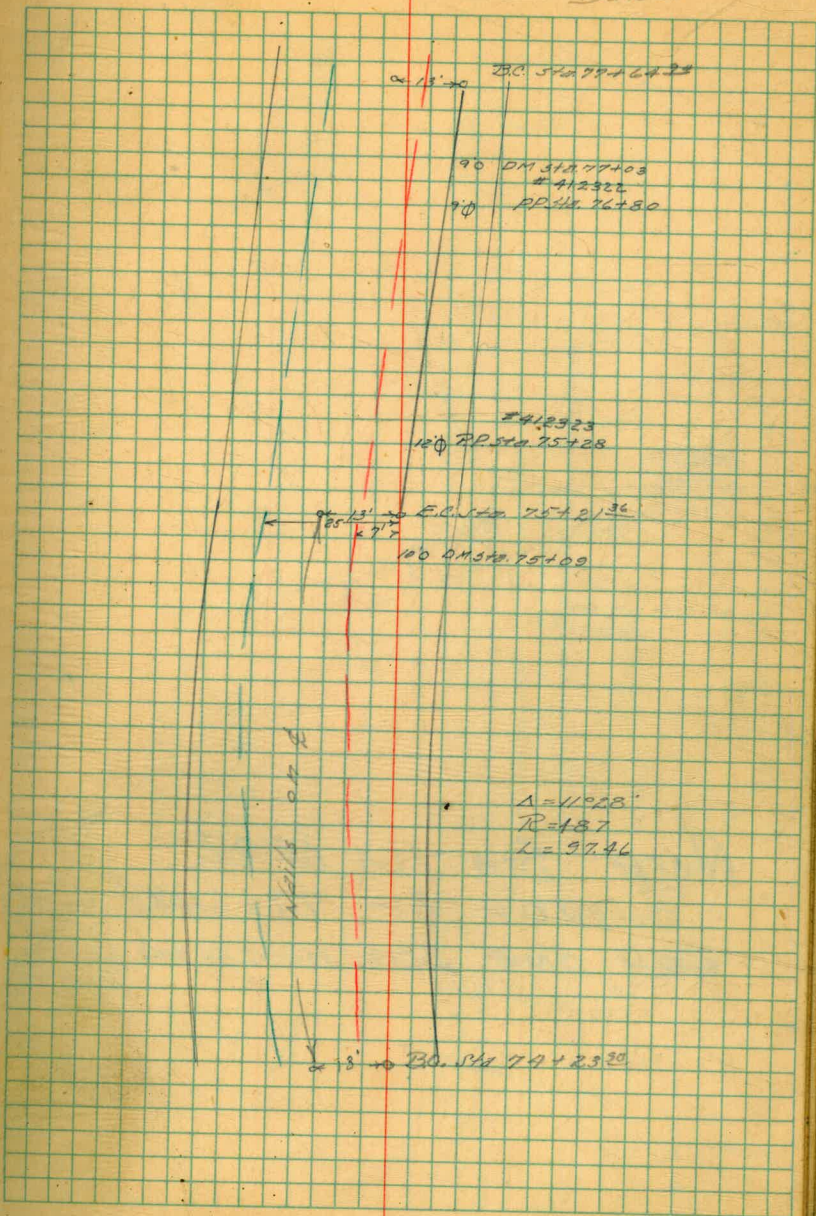
Water Meter
Cebu

Cactocin Drive Realignment

5.

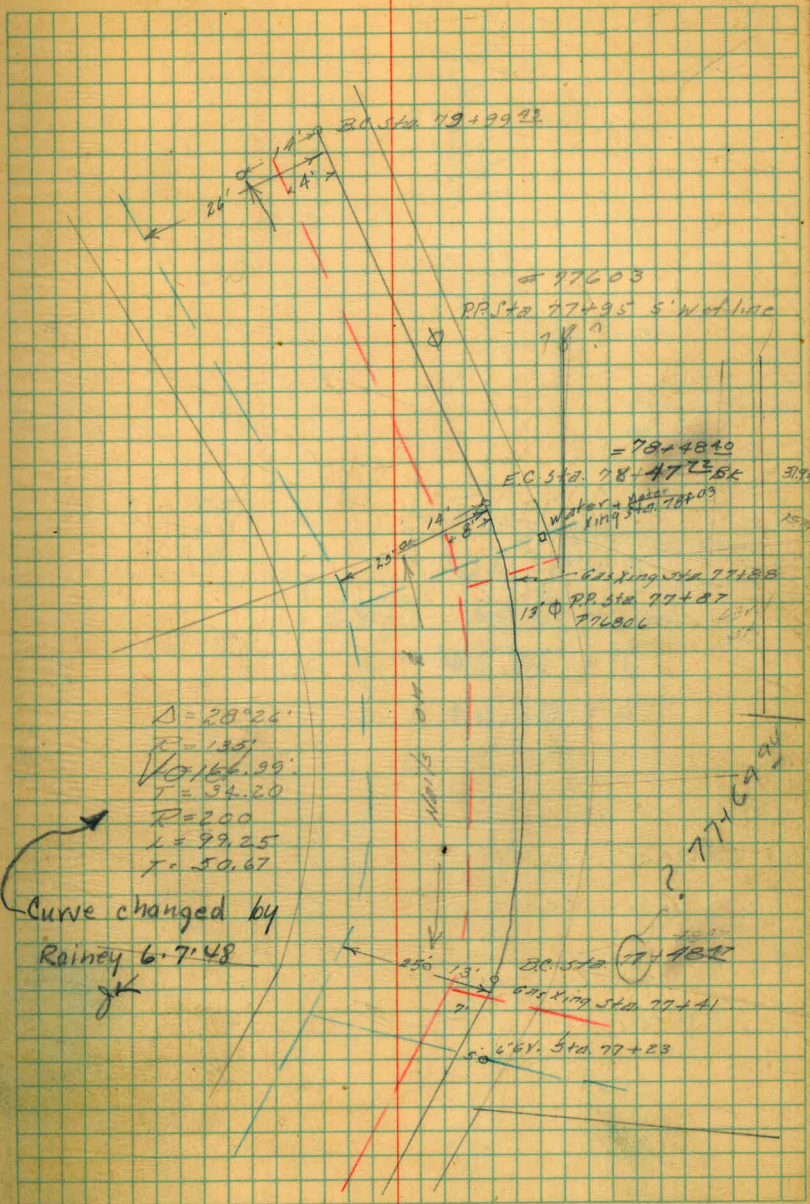


May 3, 1948 Rainey 6
King
Baker

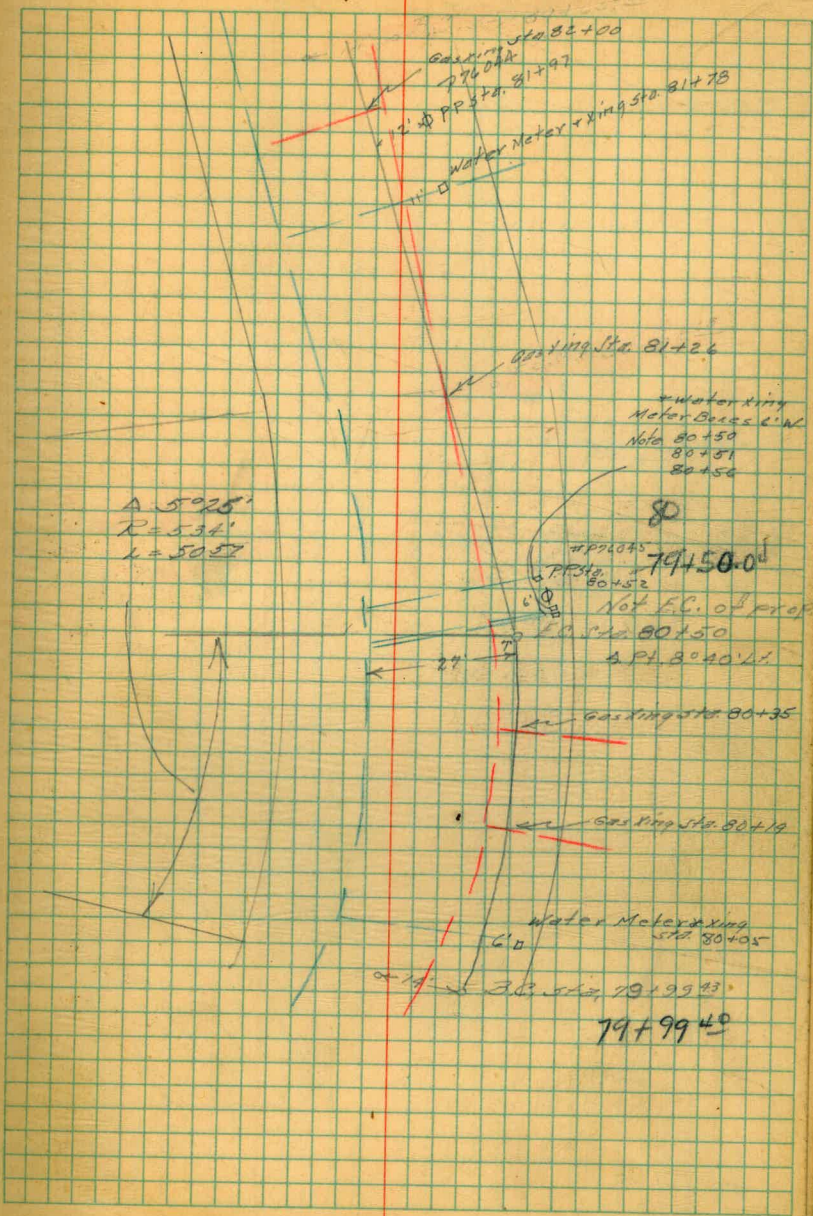


Cactocin Drive
Realignment

NOTE: STA 76+64.94
SHOULD BE 77+64.94 GR
ADD ONE STA. HERE ON.



$\Delta = 5^{\circ} 26'$
 $R = 534$ GRS
 $T = 25.34'$
 $L = 50.64$



$A = 50.25'$
 $R = 534'$
 $L = 50.57$

Realignment
Cactus Drive

9.

← 5' 2" ← P.O. Sta 5312272

← 11' 10" Meter Box & Water Line
Sta 52147

← 16' 5" 3" ← 1012' 21" 135° 5'
APL Sta on EC.
Sta 5213453

1 = 3000'
2 = 1000'
3 = 600'

$A = 30.37'$
 $R = 975'$
 $T = 30.79'$
 $L = 61.55'$

GPS

9.7
 85+4767
 11.0 PM 3506' 11.5
 Sta. 85+140
 P-76043
 11.0 PP Sta. 85+15

Meter Box
 Water King Sta. 83+87
 BC Sta. 83+84.26
 84.26

$A = 30.37'$
 $R = 975'$
 $L = 61.55'$

Gas King Sta. 82+63

PP Sta. 83+38
 13.0 Water Box Water King Sta. 83+87
 BC Sta. 83+84.26

Conf. BK 701 Page 43 W.N.

85.29

85129.92 =

86413.60 AHD

GRS

EL

CANYON

85.25

New Tol. Dist

Sta 84+70

85+70 W.N.

84147.67

L 35°16' 44"

GRS

May 12, 1948

Rainey
King
Baker
West

12.

B.M. conc. Men & Co. ⁴ ~~Barney~~ ^{Barney}

455.09

3.48 456.57 ✓

43+50 ⁵⁷ 3 FT

3.3 453.3 ✓

44+00

2.9 453.7 ✓

44+50

4.4 452.2 ✓

45+00

5.0 451.6 ✓

45+50

5.6 451.0 ✓

46+00

6.3 450.3 ✓

46+50

6.8 449.8 ✓

47+00

6.7 449.9 ✓

47+50

6.4 450.2 ✓

48+00

5.4 451.2 ✓

TP #1

5.19 451.38 ✓

6.28 457.66 ✓

	457.66 ✓		
48+50	6.0	451.7	✓
49+00	5.5	452.2	✓
49+50	4.8	452.9	✓
50+00	4.8	452.9	✓
50+50	4.6	453.1	✓
51+00	4.5	453.2	✓
51+50	4.4	453.3	✓
52+00	4.0	453.7	✓
52+50	3.8	453.9	✓
52+71 SPAPL	3.4	454.3	✓
53+02 ⁵ AP.	3.0	454.7	✓
53+50	2.8	454.9	✓

	457.66 ✓		
TP#2	3.21	454.45 ✓	
	2.32	456.77 ✓	
54+00 ¹³ B.C.	2.5	454.3 ✓	
54+50	2.4	454.4 ✓	
55+00	1.7	455.1 ✓	
55+03	1.7	455.1 ✓	
55+03	2.5	454.3 ✓	
55+50	2.2	454.6 ✓	
56+00	3.1	453.7 ✓	
56+50	3.6	453.2 ✓	
57+03 ⁵ E.C.	4.3	452.5 ✓	
57+50	5.3	451.5 ✓	
57+72 ⁴ B.C.	5.3	451.5 ✓	

8
456.77 ✓

58+00 5.5 451.3 ✓

58+50 5.6 451.2 ✓

59+00 5.4 451.4 ✓

IP#3 5.08 451.69 ✓

5.61 457.30 ✓

59+50 5.9 451.4 ✓

60+00 5.7 451.6 ✓

60+38⁵⁷ EC. 5.6 451.7 ✓

60+50 5.4 451.8⁹ ✓

61+00 APT. 5.5 451.8 ✓

61+33 & oil 4.8 452.5 ✓

61+70⁵⁵ APT. 5.2 452.1 ✓

	457.30 ✓		
62+00	5.1	452.2 ✓	
62+50	5.0	452.3 ✓	
63+00	4.9	452.4 ✓	
63+50	4.8	452.5 ✓	
64+00	4.7	452.6 ✓	
		1	
64+50	4.3	453.0 ✓	
65+00	4.1	453.2 ✓	
65+50	3.3	454.0 ✓	
T.P.#4	3.10	454.20 ✓	
	7.29	461.49 ✓	
66+00	7.2	454.3 ✓	
66+50	6.6	454.9 ✓	
67+00	6.5	455.2 ✓	

16

32+50
8th cut parity

453.4

3.4

455.8

3.9

449.9

4.2

445.7

5
461.49 ✓

67+50 5.9 455.6 ✓

68+00 5.5 456.0 ✓

68+50 4.9 456.6 ✓

69+00 3.9 457.6 ✓

69+50 3.8 457.7 ✓

70+00 3.4 458.1 ✓

70+35²⁵ APT. 3.6 457.9 ✓

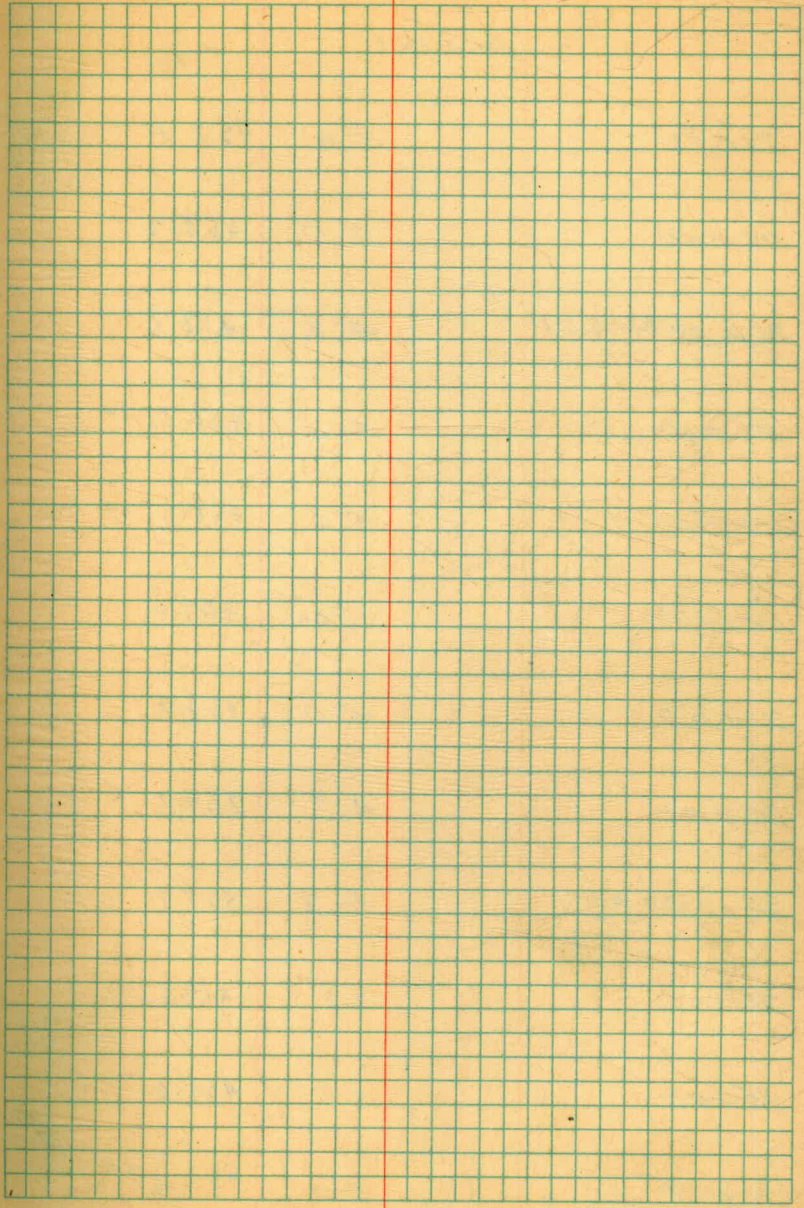
70+50 3.5 458.0 ✓

71+00 3.2 458.3 ✓

71+38⁸ APT. 3.3 458.2 ✓

TP⁵ 2.77 458.73 ✓

5.52 464.24 ✓



²
 464.24 ✓

71+50 5.8 458.4 ✓

72+00 6.0 458.2 ✓

72+37²³ APL 5.6 458.6 ✓

72+50 5.5 458.7 ✓

73+00 5.6 458.6 ✓

73+40⁸ 5.2 459.0 ✓

73+50 5.0 459.2 ✓

74+00 4.7 459.5 ✓

74+23²⁹ BC. 4.3 459.9 ✓

74+50 3.9 460.3 ✓

75+00 3.2 461.0 ✓

75+21³⁵ EC 3.0 461.2 ✓

4642A ✓

I.P. ON FH. SE. Cor ⁶	0.91	463.33 ✓
3.91	²⁴ 467.24	
75+50	5.9	461.3 ✓
76+00	5.6	461.6 ✓
76+50	5.4	461.8 ✓
77+00	4.8	462.4 ✓
77+50	4.3	462.9 ✓
77+64 ²⁴ BC.	4.3	462.9 ✓
78+00	4.5	462.7 ✓
78+31 ²³	4.4	462.8 ✓
78+50	4.1	463.1 ✓
79+00	4.2	463.0 ✓
79+50	4.1	463.1 ✓

	467.24 ✓		
79+99 th B.C.	3.9	463.3 ✓	
80+50 1st P.C.	3.4	463.8 ✓	
81+00	3.3	463.9 ✓	
7A th	3.39	463.85 ✓	
	5.65	463.50 ✓	
81+50	5.6	463.9 ✓	
82+00	5.2	464.3 ✓	
82+34 th E.C.	5.0	464.5 ✓	
82+50	5.0	464.5 ✓	
83+00	4.9	464.6 ✓	
83+22 th B.C.	4.8	464.7 ✓	
83+50	4.8	464.7 ✓	

469.50'

83+84⁹³ F.C.

4.5

465.0'

84+00

4.4

465.1'

84+50

4.3

465.2'

85+00

4.3

465.2'

85+47⁶² LPA

4.4

465.1'

E10010m

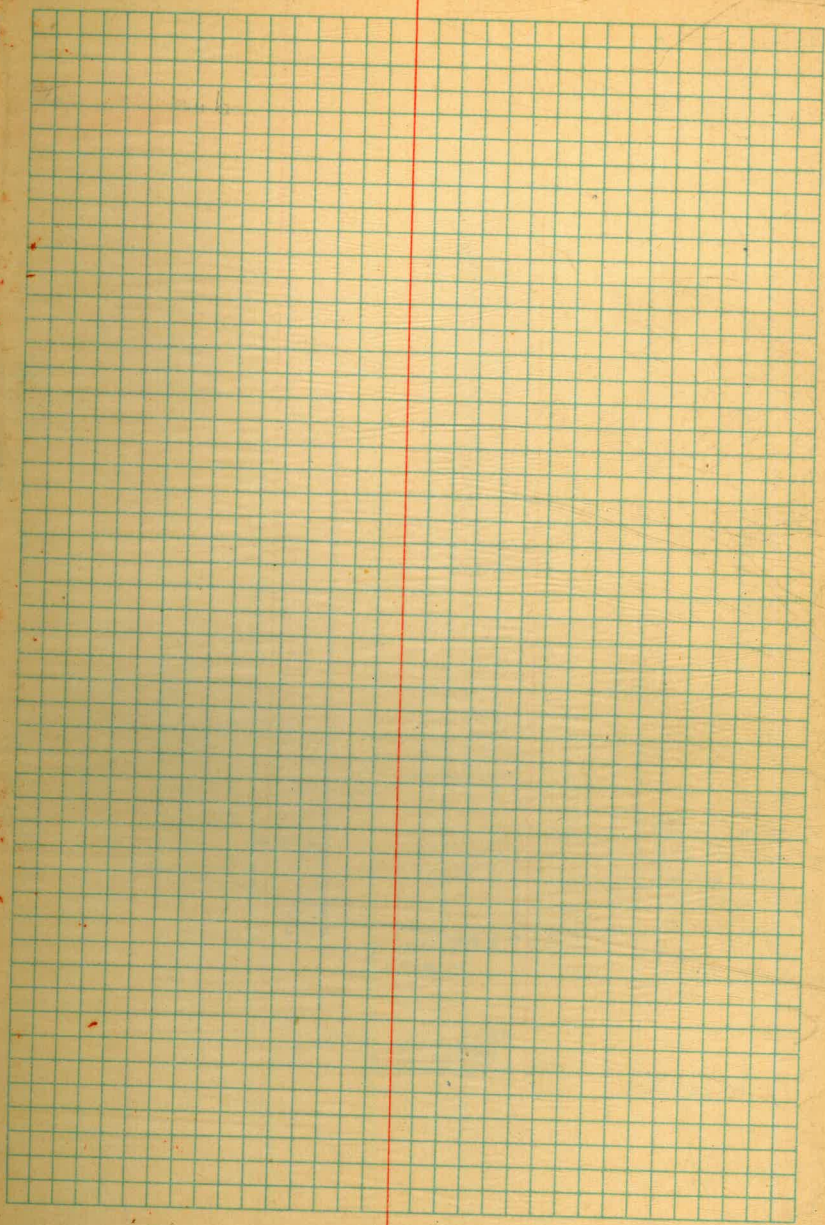
RM, BP, N.W. Cor. Catocin

4.76

465.34'

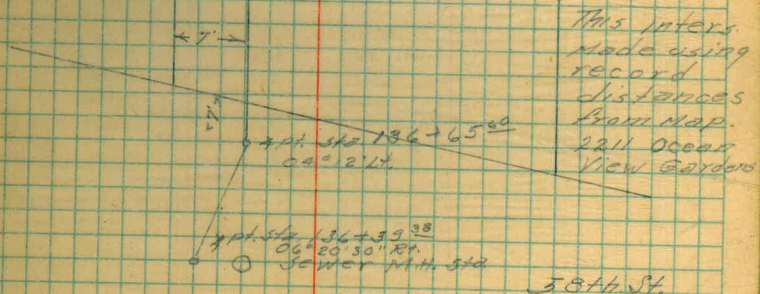
Corr.

465.38'



Faint, illegible handwriting on the left page of the notebook. The page is ruled with horizontal lines and has two vertical red lines. The text is very light and difficult to read.

50. KENNEDY ST.

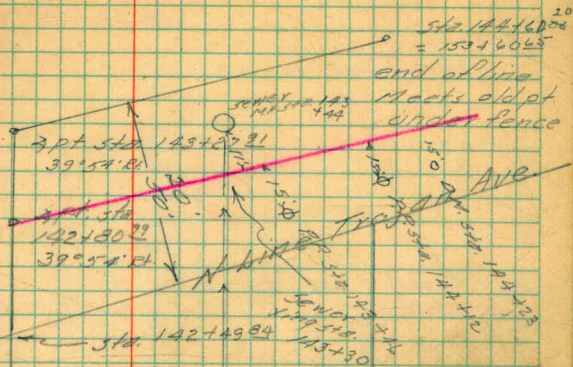


This inters.
 Made using
 record
 distances
 from map.
 2211 Ocean
 View Gardens

May 14, 1948

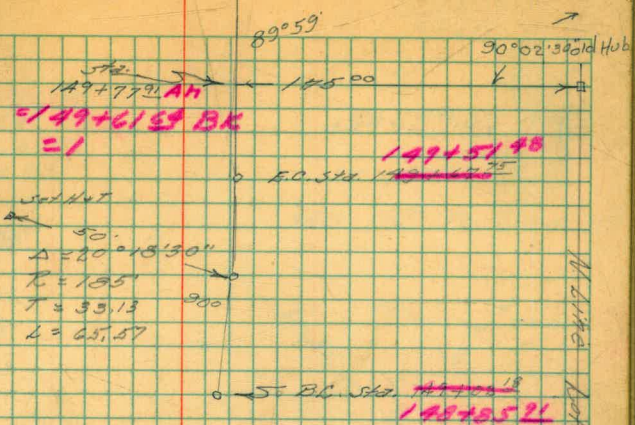
Rainey
King
Baker
West

24



← 1' →

60' Easement



90°

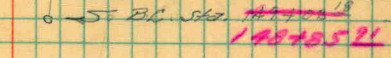
$\Delta = 20^\circ 15' 30''$

$R = 183'$

$T = 35.13$

$L = 65.57$

Changed
in office
J.P.R.



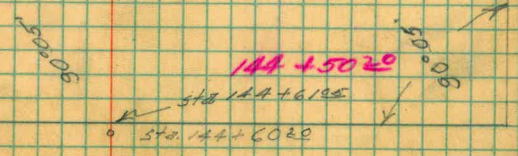
$\Delta = 20^\circ 18' 30''$

$R = 235'$

$T = 88.29$

$L = 48.09$

147+98.38



W. 1/4 Sec. 10-11, T. 24N, R. 11W

May 17, 1948 Rainey 26
King
Baker
West

$A = 28^{\circ}12'30''$
 $R = 265$
 $T = 66.65$
 $L = 130.43$

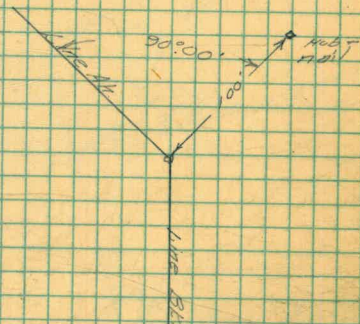
154+59.07 GRS

• P.O. Sta 154+59.07

This P.T. Referenced

$A = 28^{\circ}12'30''$
 $R = 265'$
 $T = 66.58'$
 $L = 130.47$

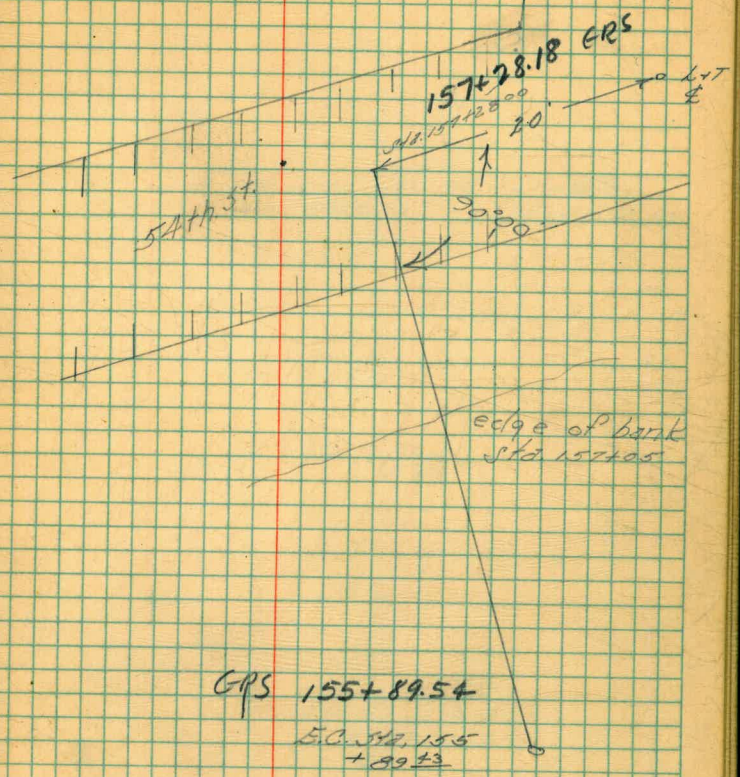
GRS.



• F.C. Sta 154+67.75

27

10/10/07
MS



May 22, 1948

Rainey 28
King
Baker
West

o Int. World Line Sta. 163+20.8K
3 Pt. 5°48' E. = 172+91.90 Alt.

T.P. 163+21
7 RT.

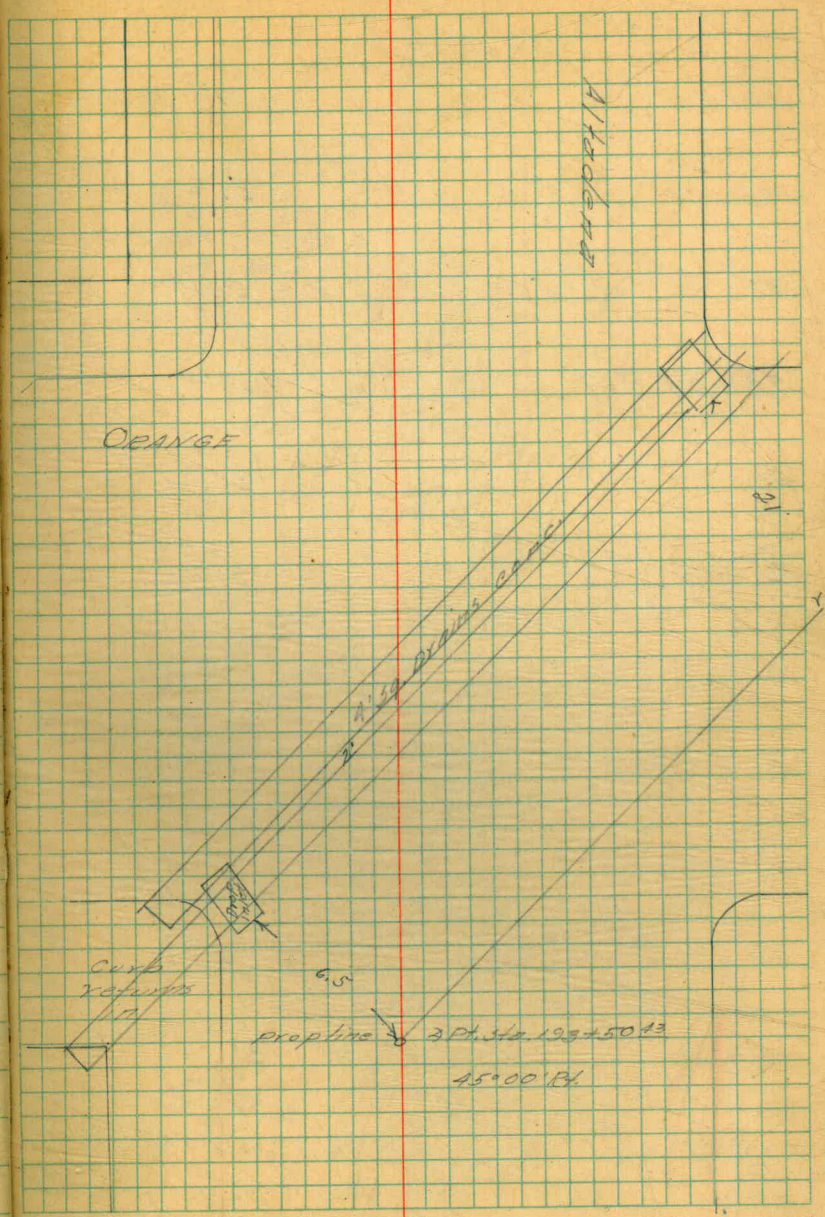
o 3 Pt. Sta. 162+80.75
6° 50' 30" Lt.

BP NW Cor 50th + Trojan		376.17
1.95		378.12
T.P.#1	12.16	365.96
0.35		366.31
187+44 ⁹⁵	3.7	362.6
188+00	12.2	354.1
T.P.#2	12.58	353.73
0.15	9	353.88
188+50	6.6	347.3
T.P.#3	12.72	341.16
0.13	3	341.29
189+00	0.9	340.4
189+50	5.5	335.8
190+00	10.3	331.0
190+50	13.0	328.3
T.P.	12.89	328.40
1.10		329.50

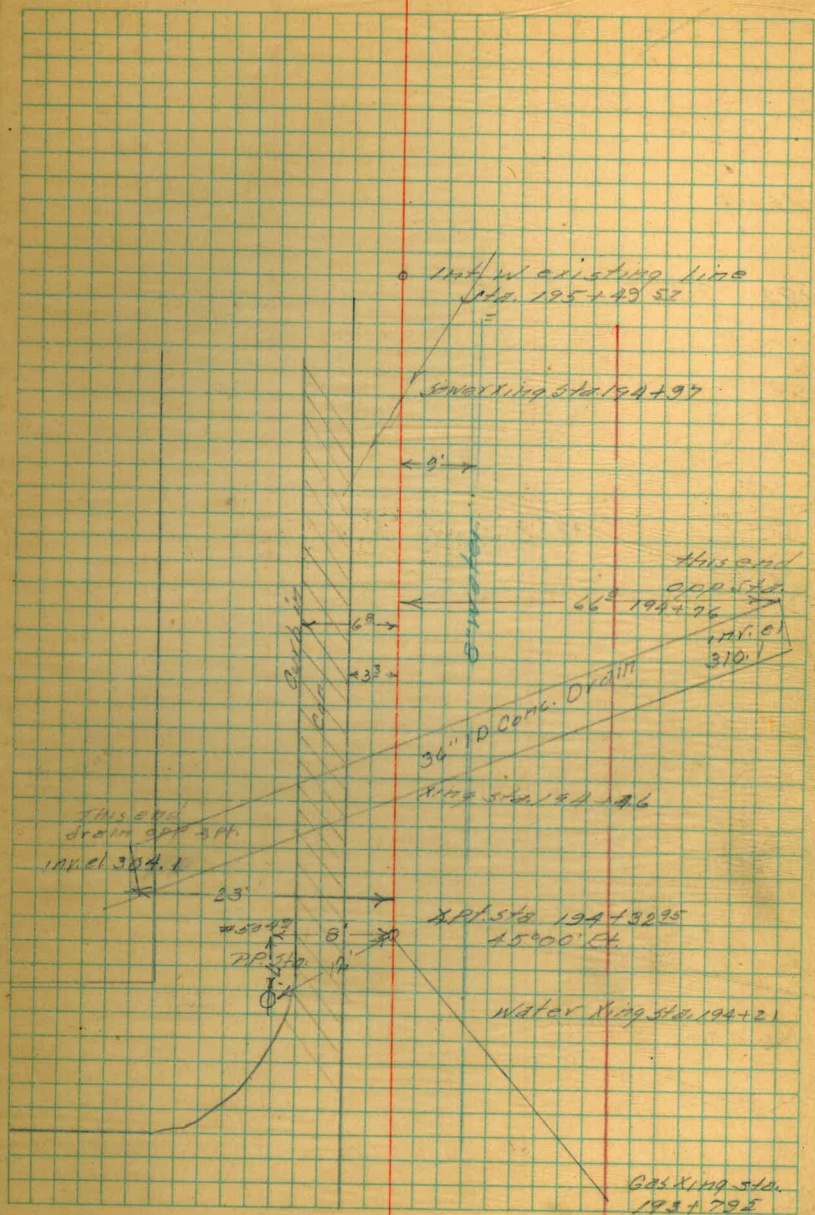
3 Trojan

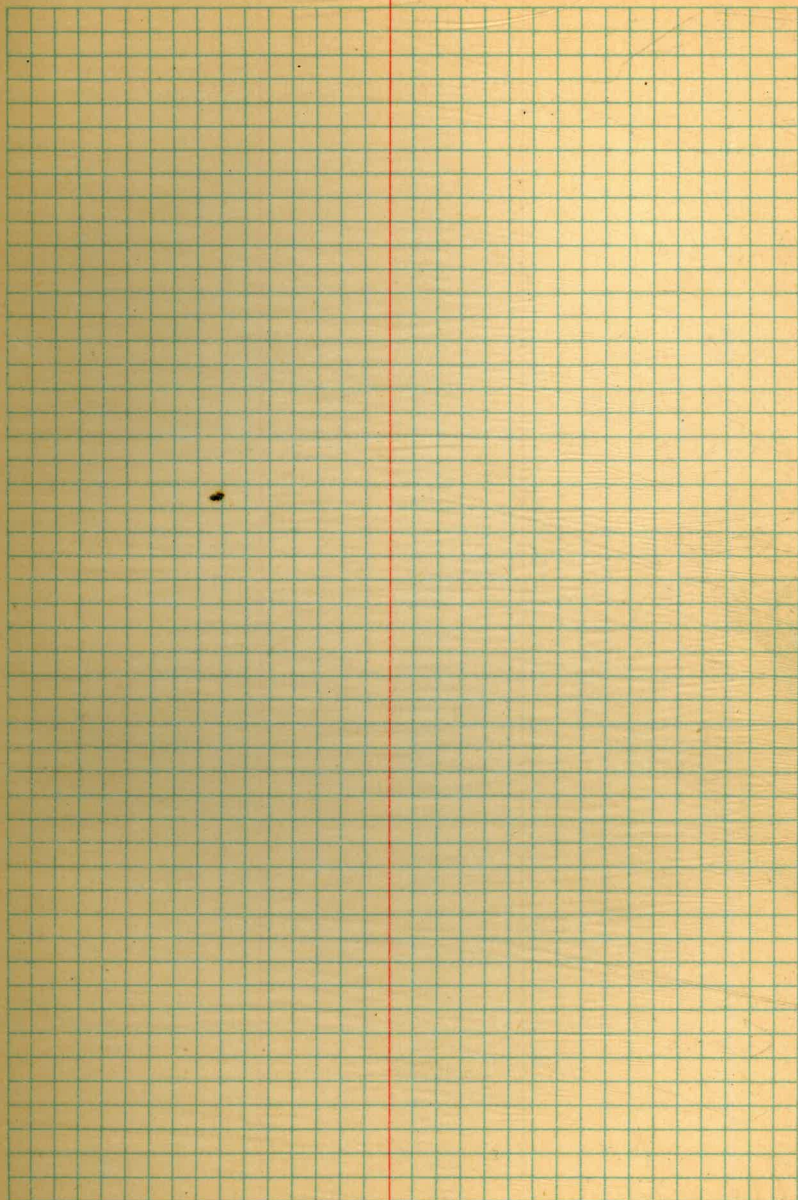
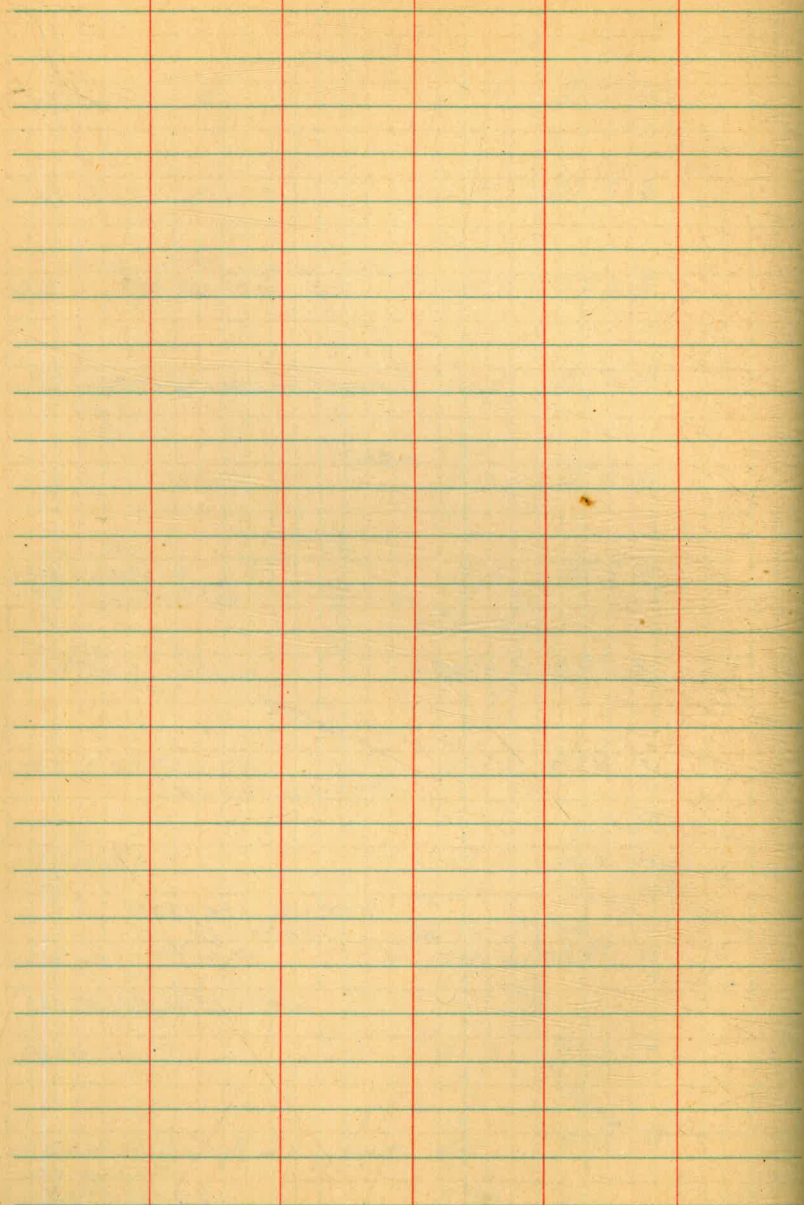
3rd Sta 187+44⁹⁵
89°59' 12.11

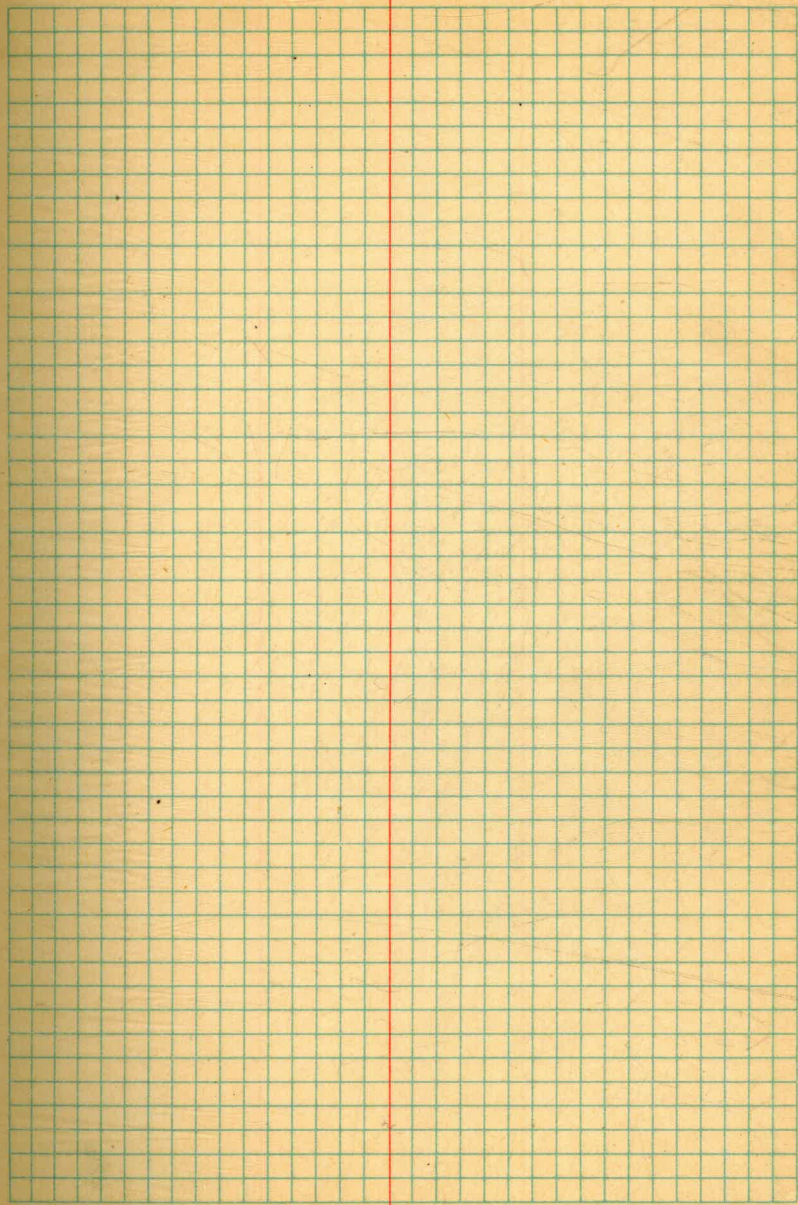
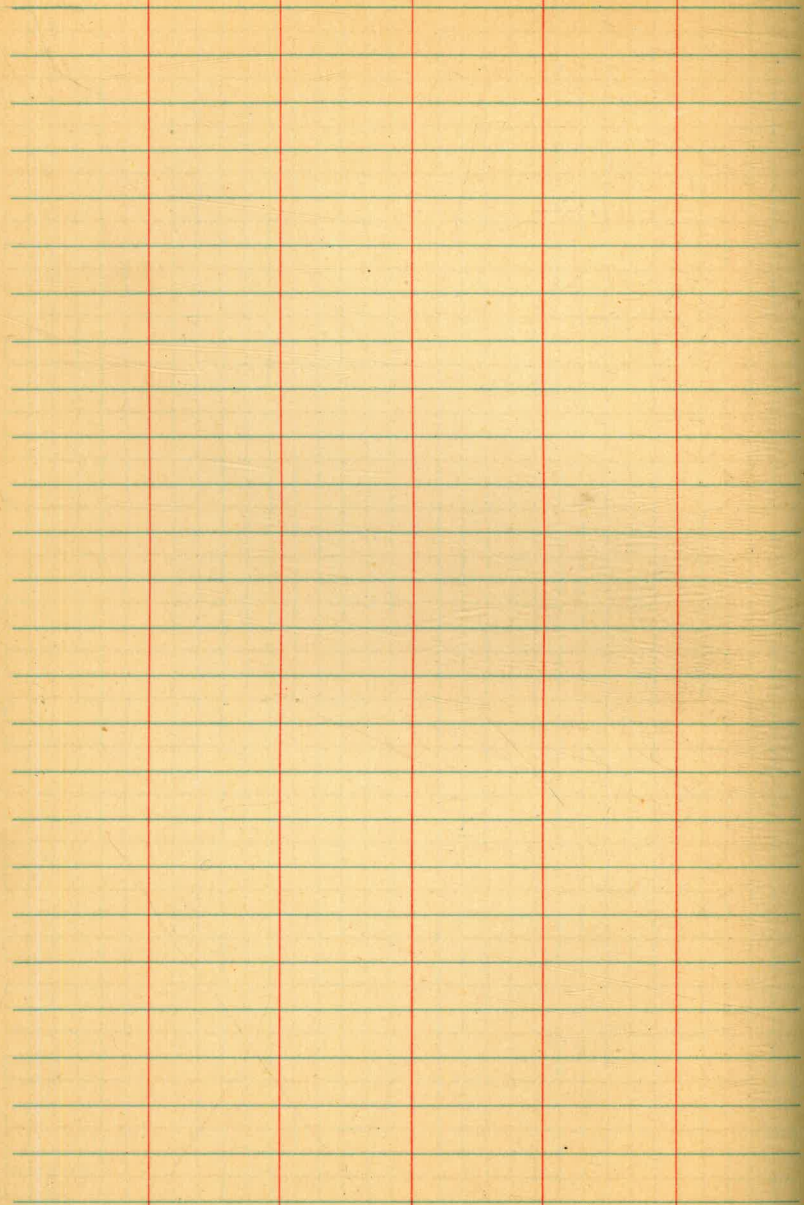
		329.50	
191+00		3.6	325.9
191+50		5.2	324.3
192+00		6.8	322.7
192+50		8.4	321.1
192+58		9.1	320.4
192+60		9.5	320.0
192+67		8.8	320.7
192+74		9.2	320.3
193+00		13.0	316.5
IP		12.92	316.58
	0.91	317.49	
193+00	5' RT.	+1.0	318.5
193+00	2' LT.	1.8	315.7
193+00	13' LT.	8.5	309.0

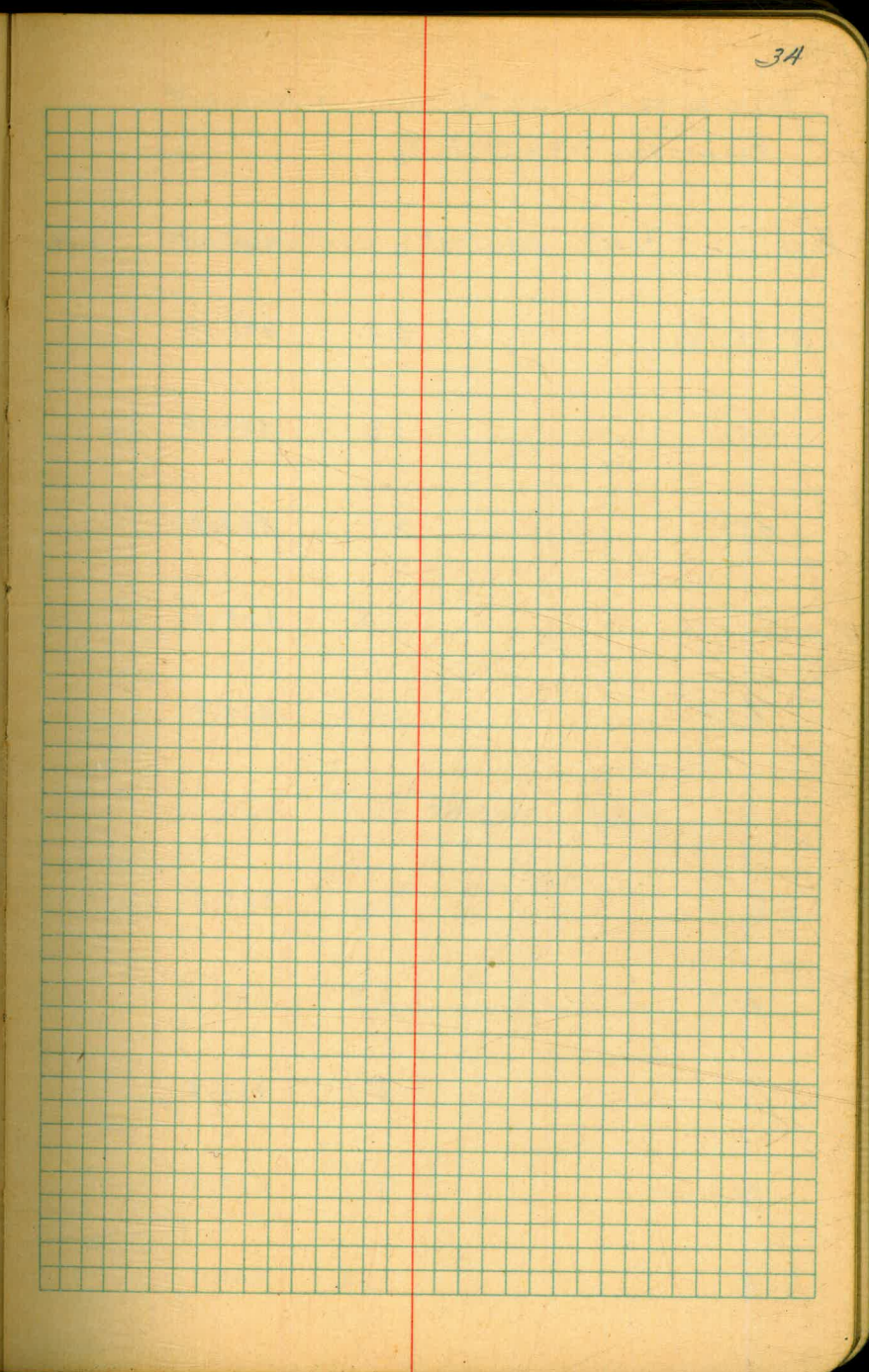
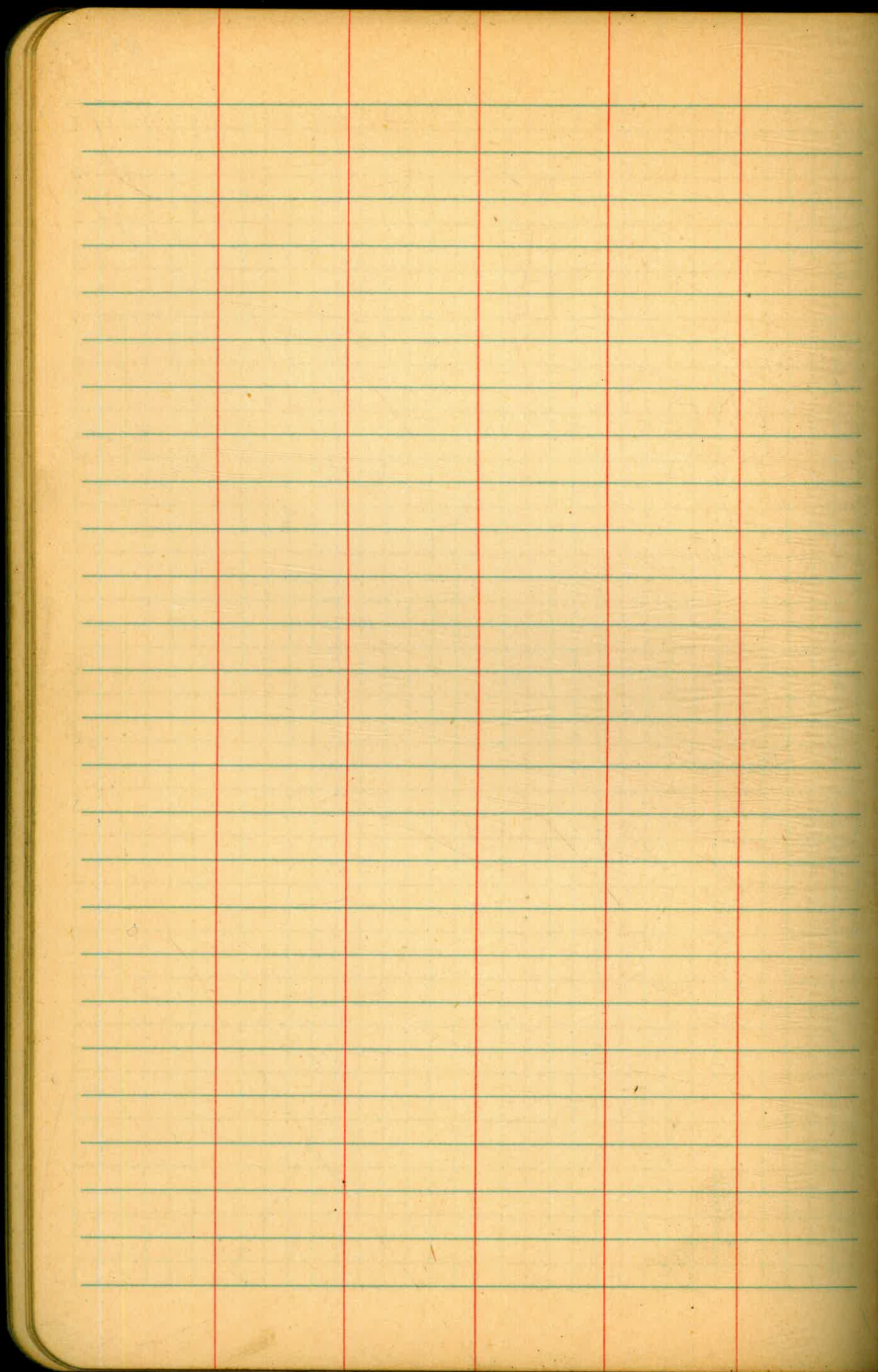


		317.49	
193+15	6'	311.4	
193+15	8' RT	314.6	
193+15	10' LT	306.8	
193+30	6'	317.4	
"	9' RT	313.6	
193+30	4' LT	311.9	
193+30	11' LT	308.3	
193+50	13' RT	312.4	
194+00		312.0	
194+32	25' SPT	301.2	
195+00		313.4	
195+49.52	INT. W. CR. 1.179	315.4	
		2.14	315.35
			315.36









Profile Trojan St. P.L. New alignment

From Sta 113+55.69 To

B.M. 4.49 445.12' 440.63 212

113+55.69 0.0 445.10

114 3.0 442.10

+50 6.5 438.6

115 9.9 435.2

+50 12.2 432.9

0.24 432.47' 12.91 432.21'

116 3.0 429.5

+50 6.7 425.8

117 8.7 423.8

+50 9.7 422.8

118 10.8 421.7

Hub Set BK698 Page 28

432.47 ✓
 T.P 1.87 423.87 10.47 422.00 ✓

B.C. 118+103^{3/4} 2.3 421.6

118+50 2.8 421.1

+61^{3/4} 2.77 421.1

119 3.5 420.4

+50 4.5 419.4

+85 5.04 418.83

E.C. 119+95^{8/16} 5.1 418.8

B.C. 120+50⁶³ 5.5 418.4

121+00 5.1 418.8

E.C. 121+48[?] 5.4 418.5

122+00 7.0 416.9

+50 8.5 415.4

Edge 0.1

Top M.H. 13'8"

	423.87 ✓		
123+80		9.6	414.3
+50		10.7	413.2
T.P.	0.71	414.55 ✓	10.03
			413.84 ✓
124		2.2	412.3
+50		3.3	411.3
125		4.2	410.4
+50		5.3	409.3
126		6.3	408.3
+50		7.3	407.3
127		8.3	406.3
+50		9.2	405.4
128		10.1	404.5
+50		11.1	403.5

		414.55 ✓		
T.P.	0.74	404.84 ✓	10.45	404.10 ✓
129			2.3	402.5
+50			3.4	401.4
130			4.4	400.4
+50			5.4	399.4
131			6.3	398.5
+50			7.3	397.5
Δ131+98.26			8.1	396.7
			8.45	396.4
132+50			8.4	396.4
133+00			8.4	396.4
133+50			8.8	396.0
T.P.			8.73	396.11 ✓
	0.85	396.96 ✓		

Edge Pav.

396.96 ✓

134+00 1.5 395.5

134+50 2.1 394.9

135+00 3.1 393.9

135+50 4.0 393.0

135+66³⁶ ~~37~~ 4.2 392.8

136+00 4.9 392.1

136+39³⁸ 5.0 392.0fewer ¹³⁶⁺⁴²
Ditch from ^{to} 136+46 13.8 383.2

136+47 4.7 392.3

136+56 7.6 389.4

136+65⁶⁴ ^{AD} 8.3 388.7

136+90 8.0 389.0

396.96 ✓

137+09 10.3 386.7

T.P. 10.44 386.52 ✓

3.59 390.11 ✓

137+50 4.9 385.2

138+00 6.2 383.9

138+36 5.7 384.4

138+50 6.4 383.7

139+00 7.5 382.6

139+50 9.3 380.8

139+60 8.6 381.5

139+77 7.5 382.6

140+00 7.5 382.6

140+50 8.9 381.2

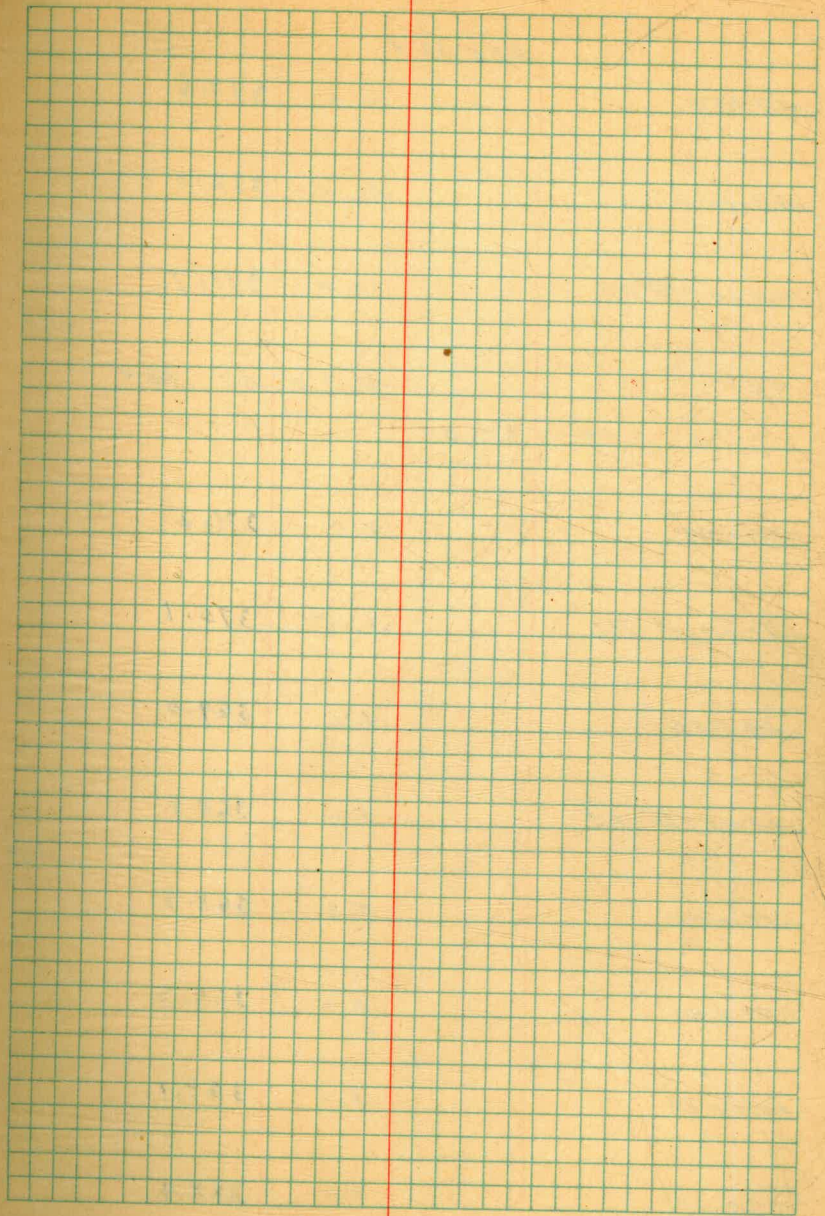
May 18, 1948

Rainey #1
King
Baker
West

	390.11 ✓		
141+00		11.1	379.0
141+27		10.0	380.1
141+50		10.7	379.4
142+00		14.8	377.3
T.P.		12.81	377.30 ✓
	5.19	382.49 ✓	
142+50		7.3	375.2
143+00		9.2	373.3
143+27 2/3 RT		10.0	372.5
143+50		10.4	372.1
143+89		10.9	371.6
144+00		10.7	371.8
144+33		9.3	373.2

382.49 ✓

1447602	7.2	375.3
145100	6.1	376.9
145108	6.0	376.5
145112	8.3	374.2
145116	9.1	373.4
145120	5.7	376.8
145150	4.6	377.9
146100	4.1	378.4
146136	4.4	378.1
146150	5.4	377.1
147100	7.2	375.3
147124 30	8.7	373.8

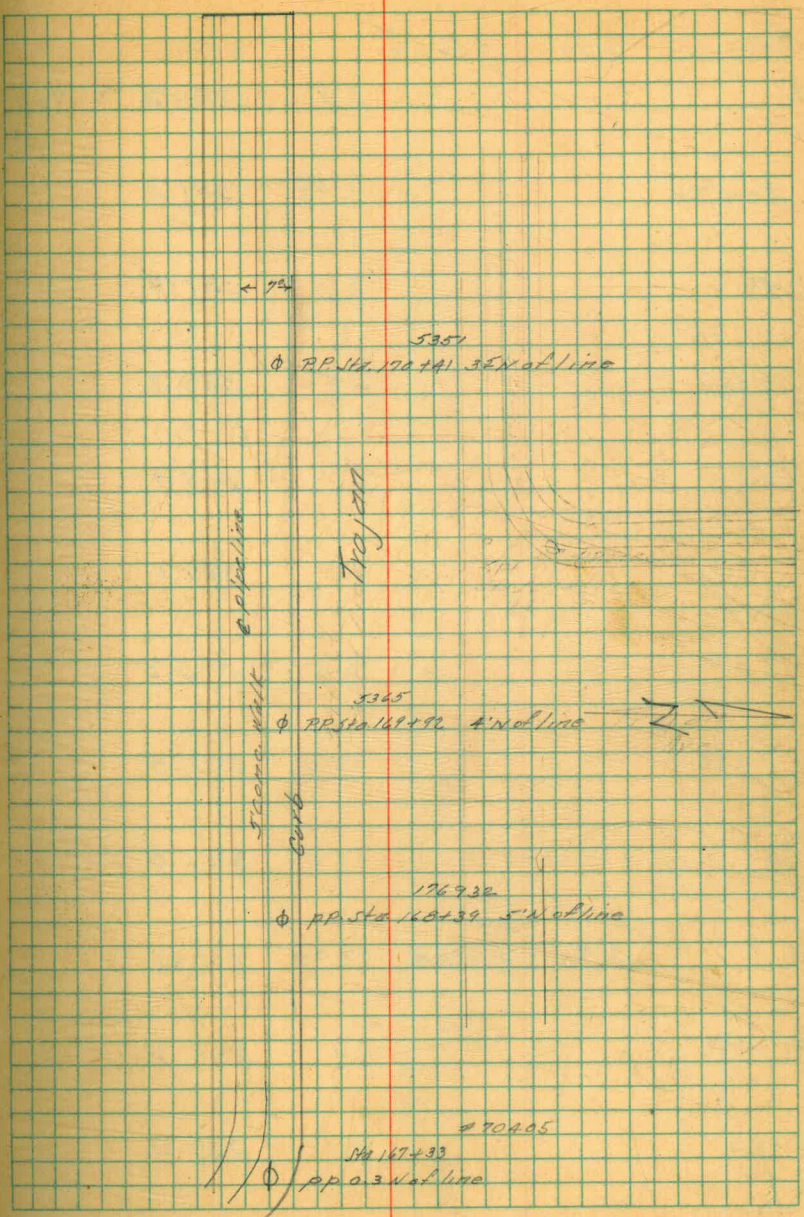


	382.49 ✓	
147+50	9.9	372.6
148+00	10.5	372.0
148+07 ⁴⁰ F.C.	10.8	371.7
TP	10.95	371.54 ✓
	2.03	373.57 ✓
148+50	2.4	371.2
149+02 ¹⁵ B.C.	3.5	370.1
149+50	4.6	369.0
149+67 ³⁵ F.C.	4.8	368.8
150+00	5.5	368.3
150+39	4.3	369.3
150+50	4.5	369.1
150+77	5.2	368.4

	373.57 ✓		
151+00		7.0	366.6
151+50		11.1	362.5
T.P.		12.28	361.29 ✓
	1.69	362.98 ✓	
152+74		4.0	359.0
151+94		4.4	358.6
152+00		5.1	357.9
152+12		6.8	356.2
152+50		6.8	356.2
152+62		6.9	356.1
153+00		5.4	357.6
153+50		4.9	358.1
153+85		4.1	358.9

	362.98 [✓]		
154+00		4.0	358.98
154+50		4.0	359.0
154+599 BC.		4.3	358.7
155+00		5.2	357.8
TR.		5.36	357.22 [✓]
	7.18	364.80 [✓]	
155+50		7.7	357.1
155+894 ² EC.		7.0	357.8
156+00		6.7	358.1
156+50		4.5	360.3
157+00		4.3	360.5
157+06		4.5	360.3

	364.80 ✓		
		10.42	354.38 ✓
108	356.06 ✓		
157415		5.0	351.1
157416 edge pipe		4.94	351.12
157428		1.74	351.3
L+T B.M. & 54th		4.32	351.74 351.70 ✓ CORR.



B.M.	2.34	35404 ✓	351.70
A		2.8	351.2
Edge pav.		2.68	351.3
158		2.6	351.4
+50		3.3	350.7
159		5.1	348.9
+50		6.7	347.3
160		8.8	345.2
+50		10.5	343.5
161		12.5	341.5
T.P.	1.94	34360	12.38 347.66
161 + 50		3.4	340.2
162		4.6	339.0

Ad T 2 548 To Jaw

343.60

142+2075		4.6	339.0
+50		4.4	339.0
+80		6.8	336.8
145+100		8.4	335.2
163+20 ⁹⁰ Back		12.1	331.5
=	Head		
T.P.	12.54	354.23	1.71
			2.73
			353.20

Left 343.60 Rt.

7.5	6.5	4.4	
<u>12</u>	<u>6</u>	<u>5</u>	
9.1	8.0	5.5	5.3
<u>10</u>	<u>3</u>	<u>5</u>	<u>10</u>
12.4	12.0	7.3	6.8
<u>10</u>	<u>5</u>	<u>2</u>	<u>10</u>
13.0	13.0	12.8	7.0
<u>10</u>	<u>5</u>	<u>2</u>	<u>5</u>

May 25, 1948 Rainey 49

King
Baker
West

BM. Hub Sta. 181+02.51 323.41

8.75 332.16

Cont'd. From F.B. 698-Pg. 45

181+15 7.8 324.1

181+28.4 9.9 323.3

bank starts 181+35

181+50 9.5 323.9

181+50 3'LT 11.1 321.1

181+50 10'LT 11.3 320.9

181+50 10'RT 9.8 328.4

182+00 7.2 325.0

182+00 4'LT 9.6 323.6

182+00 10'LT 9.8 323.4

182+00 12'RT 0.8 331.4

7.P 0.28 331.88

12.23 344.11

344.11

182+50 13.6 330.5

182+50 10' Lt. 15.0 329.1

182+50 13' Rt. 7.7 336.4

182+61 9.6 334.5

182+61 10' Lt. 11.7 332.4

182+61 13' Rt. 5.5 338.6

183+00 3.4 340.7

T.P. #2 .9 0.40 343.71

10.22 355.93

183+50 11.2 344.7

" 10' Lt. 13.2 342.7

" 7' Rt. 8.4 347.5

	355.93		
183+62	10.2	345.7	.
183+74	7.1	348.8	.
183+74 10'LT	9.2	346.7	
183+74 65'RT	5.8	350.1	
184+00	5.8	350.1	.
184+25	5.3	350.6	.
184+31 11'3rd	7.8	348.1	.
184+57	8.3	347.6	.
184+64	5.0	350.9	.
185+00	4.4	351.5	.
185+30	6.2	349.7	.
185+50	8.6	347.3	.

	355.93		
185463	8.2	347.7	
185483	2.6	353.3	
186400	2.2	353.7	
RP	0.23	355.70	
	12.34	368.04	
186413	12.5	355.7	
186450	7.4	360.6	
187401	6.4	⁶ 381.6	
187441	3.5	⁶ 384.5	
187444	4.3	⁶ 383.7	
187446 ² 4PT	4.3	⁶ 383.7	
001.P.P	2.12	365.92	CIVE 365.96

CONT'D. F.B. 698, pg. 47

total slope
of bank from
53rd. West to

on fill in front of house to be moved

June 7, 1945 ^{Rainey} Baker 1.
West

P.M. B.P.N.W. Cor. Orange & Maple 349.35

8.67 358.02

226+08/25 A.P. 6.9 351.1

227+02/15 A.P. 6.8 351.2

227+50 7.4 350.6

228+00 7.1 350.9

228+50 6.8 351.2

229+00 6.6 351.4

229+50 6.5 351.5

T.P.#1 6.34 351.68

6.90 358.58

230+00 6.8 351.8

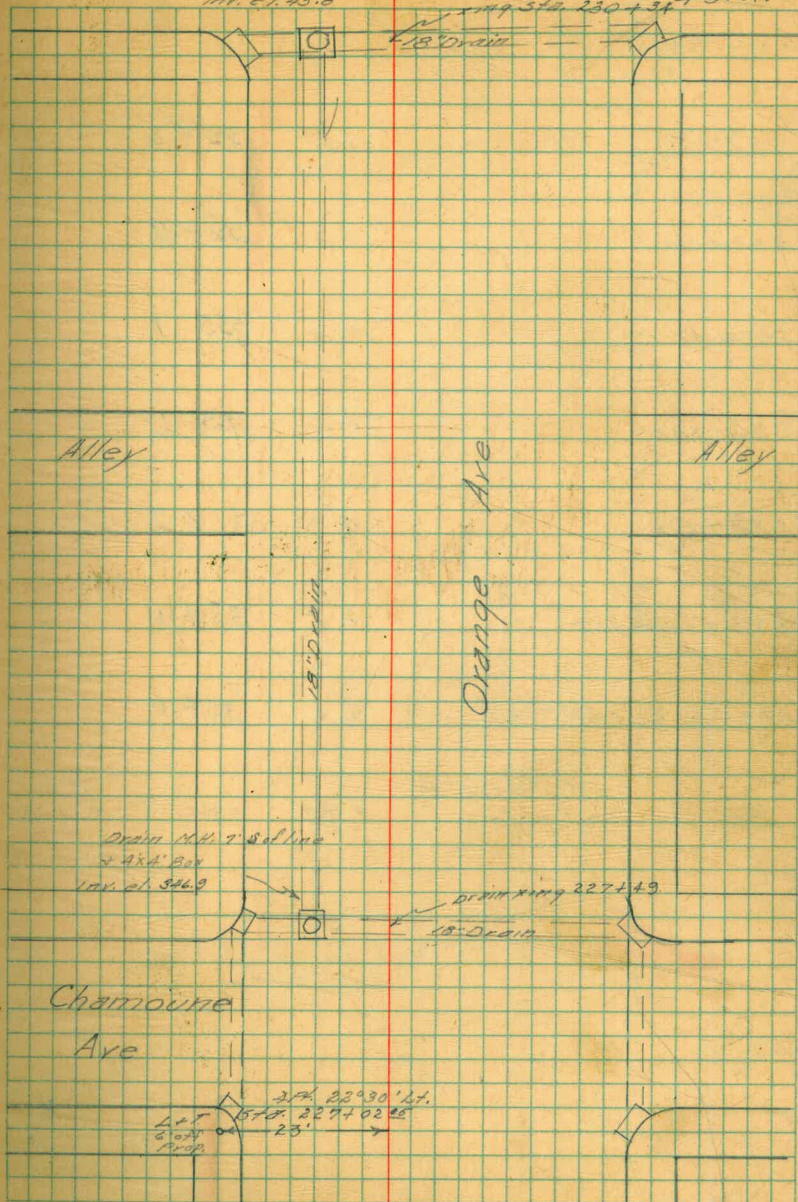
230+50 6.5 352.1

231+00 6.2 352.4

53

Drain Manhole + 2' x 2' Box 75' of line
Inv. of 345.8

18" Drain
18" Drain
45 ft.



358.58

231+50 6.0 357.6

232+00 5.8 352.8

232+50 5.5 353.1

233+00 5.0 353.6

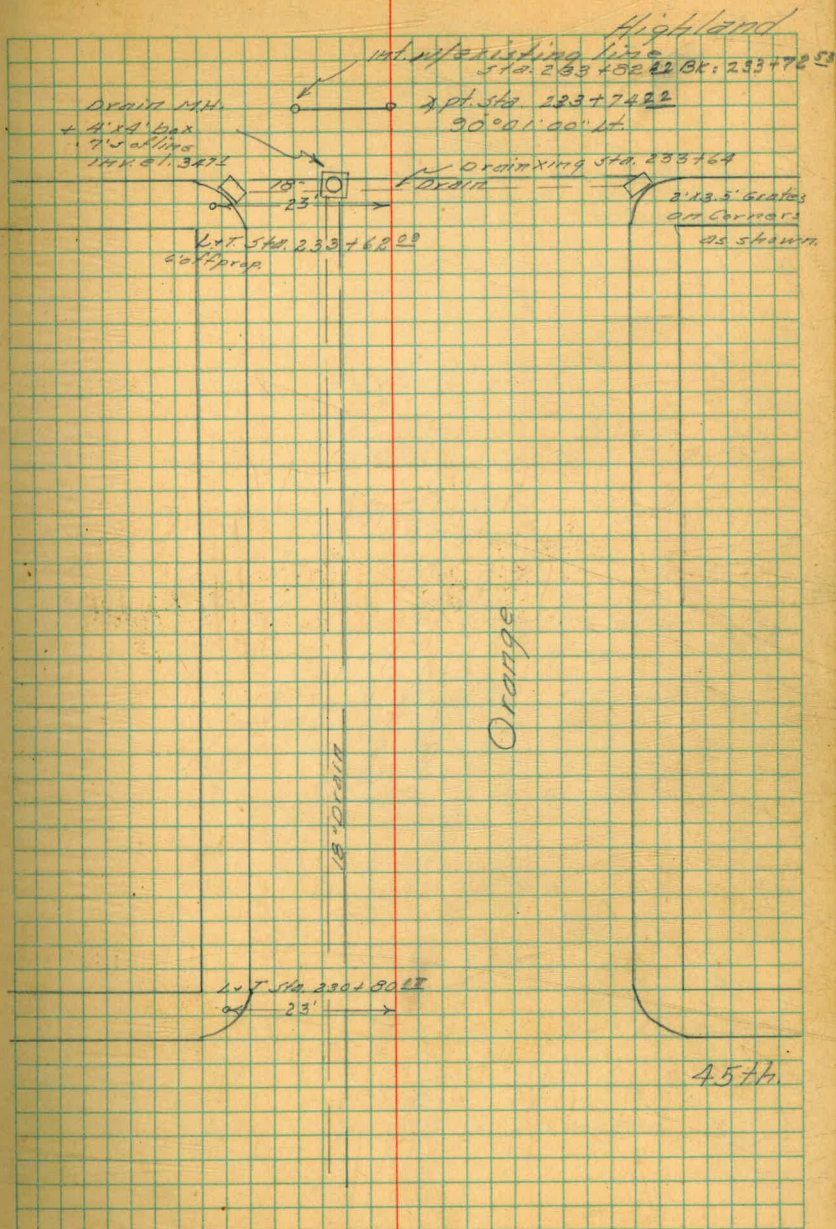
233+50 4.9 353.7

233+7422 apt 4.5 354.1

233+8222 = 233+7253 4.6 354.0

Orange + Trajan
BPNW Cor. Highland 4.43 354.15 354.13

54

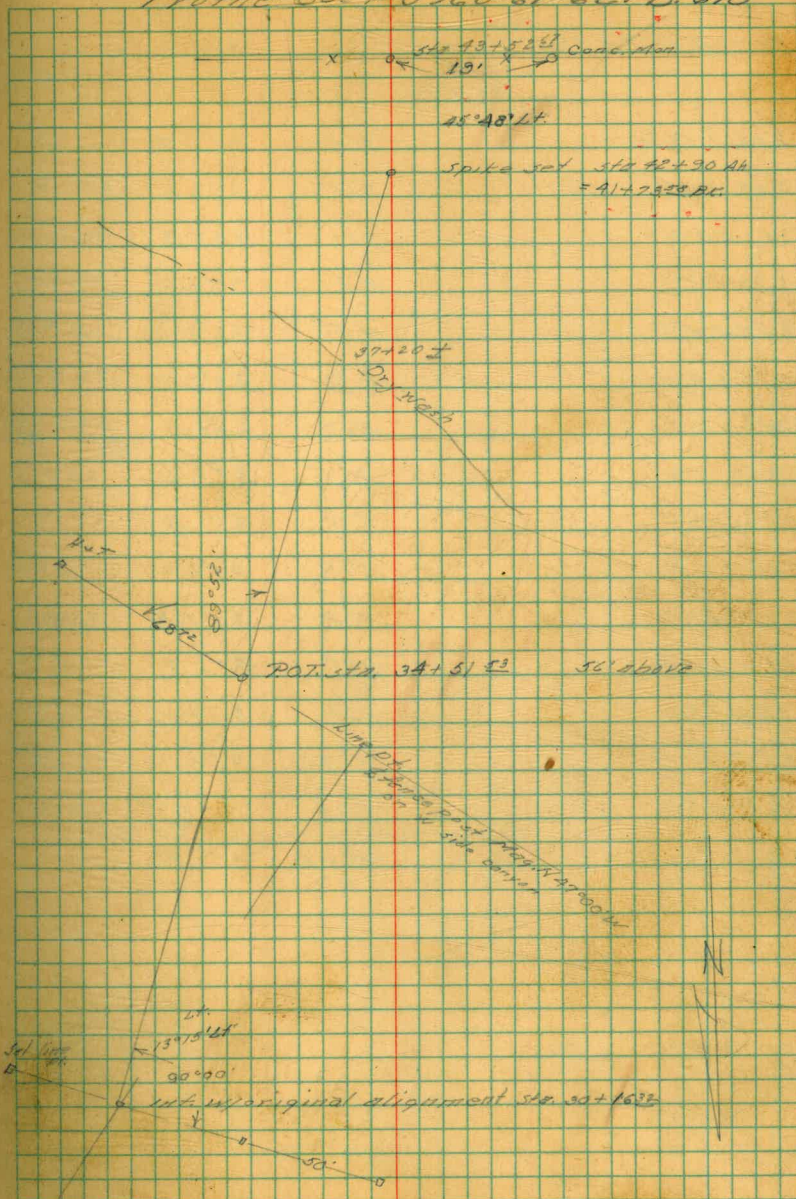


July 22, 1948²¹
Rainey
King
West

Realignment Trojan Ave
Pipeline

55

Profile see P. 5940-61-62 FB 698



	+ Highland			
B.M. B.P.M.W. Cor. Orange			354.13	
	2.98	357.11		
233+59 ⁰⁵	3.4	353.7	340.4	
233+50	3.5	353.6	340.4	
233+00	3.8	353.3	340.3	
232+50	4.1	353.0	340.2	
232+00	4.5	352.6	340.0	
231+50	4.9	352.2	339.9	
231+00	5.2	351.9	339.8	
230+50	5.5	351.6	339.6	
230+25	5.7	351.4	339.5	
230+00	5.8	351.3	339.5	
229+50	5.8	351.3	339.5	
229+00	5.9	351.2	339.5	
228+50	6.1	351.0	339.5	
228+00	6.2	350.9	339.5	
227+50	6.6	350.5	339.5	
Set TBM	5.25	351.86		

133
132
130
128
126
123
122
120
119
118
118
117
115
114
110
Lat @ 56 Orange + Champaign

Profile new alignment
Trojan Ave Pipeline

July 26, 1948 Rainey
King
West

57

143+272 ²⁸ BC.		372.50
	10.80	383.30
144+80 ²⁸ BC.	9.3	374.0
143+00	10.9	372.4
143+06	10.6	372.7
143+50	10.7	372.6
143+77	9.5	373.8
144+00	7.4	375.9
144+15	6.7	376.6
144+20	7.2	376.1
144+50	5.0	378.3
144+95	4.3	379.0
144+99	8.2	375.1
145+04	8.3	375.0
145+05	4.1	379.2
145+50	3.9	379.4
146+00	5.1	378.2
146+50	6.3	377.0
147+00	8.4	374.9
147+50	9.9	373.4
147+91 ²⁸ BC.	10.9	372.4
148+50	11.9	371.4
148+77.59	12.9	370.4
ck to old BC. 140+02 ¹⁸	13.2	370.1

			348.42	
	1.96	350.38		
207+03 ²⁵		4.5	345.9	333.8
207+50		4.8	345.6	333.9
208+00		4.3	346.1	333.9
208+50		5.3	345.1	333.9 ^{4.0}
209+00		6.1	344.3	334.0
209+50		6.4	344.0	334.1
210+00		6.8	343.4	334.2
210+50		7.7	342.7	334.3
211+00		7.2	343.2	334.4

Estrella + Orange

B.M. on step of church

348.42

	0.69	349.11		
211+50		5.4	343.7	334.8
211+68 ⁴⁵		5.2	343.9	334.95
212+00		5.3	343.8	335.7
212+16 ⁵⁴		5.2	343.9	336.25
212+32 ⁵⁴		5.0	344.1	336.5
212+62 ⁵⁰		4.4	344.7	336.5
213+00		2.9	346.2	337.7
T.P.		0.91	348.20	
	9.44	357.64		
213+50		9.4	348.2	339.2
214+00		7.1	350.5	340.7

12.1

11.7

12.2

11.1

10.3

9.9

9.4

8.4

8.8

8.9

9.0

8.1

7.7

7.6

8.2

8.5

9.0

9.8

35764

214+50	6.6	351.0	342.1	8.9
215+00	5.1	352.5	343.5	9.0
215+50	3.5	354.1	345.0	9.1
216+00	2.8	354.8	345.4	9.4
216+50	3.1	354.5	345.7	8.8
216+80 ⁵⁰	2.7	354.9	345.9	9.0
217+12 ⁵⁰	3.1	354.5	345.8	8.7
217+50	4.0	353.6	345.0	8.3
NW. B.P. Euclid + Orange	6.90	350.74	350.75	

B.M. B.P. NW. Cor. Orange + Morilo 349.35

5.69 355.04

218+00	1.7	353.3	344.1	9.2
218+40 ⁵⁰	2.4	352.6	343.3	9.3
218+88 ⁴	3.8	351.2	339.7	11.5
219+00	3.8	351.2	339.7	11.5
219+50	4.4	350.6	339.7	9.9
220+00	5.4	349.6	339.6	10.0
220+50	6.4	348.6	339.6	9.0
221+00	5.9	349.1	339.5	9.6
221+50	5.6	349.4	339.5	9.9
222+62 ⁵⁰	4.9	350.1	339.5	10.6
222+00	4.4	350.6	338.7	11.9
222+12 ⁵⁰	4.2	350.8	338.4	12.4
TP	4.16	350.88		

6.90 357.78

352.78

222+375	6.7	351.1	338.4
222+750	5.5	352.3	339.5
223+00	5.0	352.8	339.5
223+50	4.0	353.8	339.5
224+00	4.3	353.5	339.5
224+50 No stake			
225+00	4.3	353.5	339.5
225+50	4.8	353.0	339.5
226+00	6.1	351.7	339.5
226+40 ²⁹	5.7	352.1	339.5
CK to TBM.	5.92	351.86	351.86

4.60 356.46

227+00	5.2	351.3	339.5
227+36 ⁰⁴	5.7	350.8	339.5

T.M.B.P. Km. cor. Highland + orange 354.13

4.33 359.46

233+81 ⁶⁵	4.7	353.8	342.6
234+13 ⁵³	4.2	354.3	345.0
234+50	4.3	354.2	345.0
235+00	4.4	354.1	345.0
235+50	4.5	354.0	345.0
236+00	4.6	353.9	345.0
236+50	4.8	353.7	345.0
237+00	4.9	353.6	345.0

12.7
12.8
13.3
14.3
14.0
14.0
13.5
12.2
12.6

11.8
11.3

11.2
9.3
9.2
9.1
9.0
8.9
8.7
8.6

358.46

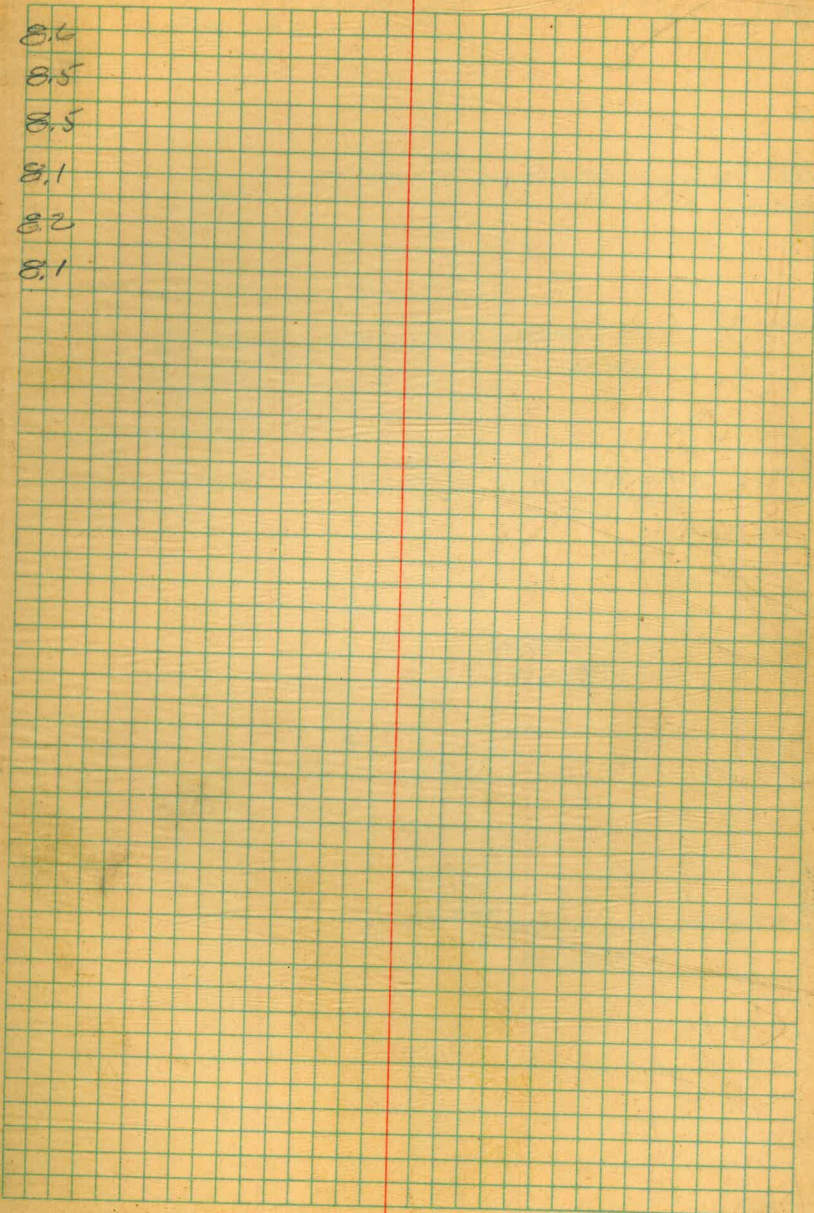
237+50	4.9	353.6	345.0
238+00	5.0	353.5	345.0
238+45 ¹⁰ A.P.H.	5.0	353.5	345.0
239+00	5.4	353.1	345.0
239+25 ⁰⁶	5.3	353.2	345.0
239+40 ²⁸	5.4	353.1	345.0

343.9
334.95

4.21 348.1
339.16

10" sewer top	11.4	336.7
bottom of water	7.4	

61



Sewer Laterals King Trojan Pipeline
Sta 132 - 135

Sewer King Sta 132+75
23' stub 6.2 deep

Sewer King Sta 133+27
13' stub 6.6 deep

Sewer King Sta 133+83
#6' stub
7.0 deep

Sewer King Sta 134+59
15' stub
7.0 deep

7.2 deep
Sewer King 135+28
32' stub

1/2" way

Trojan Ave. for Const.

Rainey

63

Aug. 19, 1948

King

West

Admitt

Orange + Estrella					
BM. at Church Step		348.42			
1.01	349.43				
206+50	4.0	345.4	333.8		
206+0725	4.9	344.5	333.8		
205+9125	5.6	343.8	333.5		
205+592E	7.7	341.7	332.3		
205+2784	10.0	339.4	330.3		
205+00	12.1	337.3	328.3		
T.P.	12.57	336.86			
1.11	332.97				
204+472	4.0	334.0	324.9		
204+1581	5.6	332.4	323.8		
204+00	5.9	332.1	323.5		
203+50	6.3	331.7	322.5		
203	7.3	330.7	321.5		
202+50	8.5	329.5	320.5		
T.P.	8.88	329.09			
3.08	332.17				
202+25	3.3	328.9	320.0		
202+00	3.5	328.7	319.8		
201+50	4.1	328.1	319.3		
201	5.3	326.9	318.8		
200+50	4.7	327.5	317.3		
200	6.1	326.1	315.9		
199+50	6.8	325.4	313.3		

11.6

10.7

10.3

9.4

9.1

9.0

9.1

8.6

8.6

9.2

9.2

9.0

8.9

8.9

8.8

8.1

10.2

10.2

12.1

332.17

199+25	7.6	324.6	312.0
199+00	7.9	324.3	312.0
198+50	9.0	323.2	312.0

T.P.	11.33	320.84	
199+3522		324.9	312.70
199+1955		324.4	312.2
B.M.B.P.		320.86	

4.63 325.49

198+3020	7.7	2.9	322.6	312.0
198+3020	10	2.7	322.8	312.0
198+00	7	3.3	322.2	312.0
197+50	7	4.6	320.9	312.0
197+3020	7	5.1	320.4	311.3
197+00	7	5.3	320.2	311.0
196+50		7.2	318.3	309.0
196+00		8.0	316.6	307.0
195+83 ¹⁹	19	10.35	315.74	306.9

T.P. 8.53 323.67

195+022 ¹		9.6	314.1	305.1
194+86 ²³		10.2	313.5	304.5
194+70 ²³		10.7	313.0	303.8
194+54 ¹⁶		11.1	312.6	303.3
194+38 ⁰⁸		11.7	312.0	303.0

12.6
12.3
11.2
13.2
12.2
10.6
10.8
10.2
8.9
9.1
9.2
9.3
9.6
8.8
9.0
9.0
9.2
9.3
9.0

323.67

194+329 ⁵ Ahead	11.9	311.8	303.0
194+329 ⁵ Back	12.1	311.6	303.0
194+272 ⁵		310.8	303.0
194+00	11.9	311.8	303.0
193+339 ⁵	12.1	311.6	303.0
193+304 ³ ahead	11.3	312.4	303.0
193+304 ³ BK.	11.8	311.9	303.0
193+454 ⁴	12.0	311.7	303.2
192+75	6.2	317.5	306.6
192+50	4.7	319.0	307.8
192+00	2.7	321.0	310.0
191+50	1.3	322.4	312.6
T.P.	12.25	335.55	0.87
191+00	10.5	325.1	315.0
190+50	7.7	327.9	317.5
190+00	4.5	331.1	320.0
T.P.	11.41	346.58	0.38
189+50	10.7	335.9	323.5
189+439 ⁶	7.8	338.8	326.0
188+979 ³	6.4	340.2	327.4
188+50	1.2	345.4	336.0
T.P.	13.64	358.91	0.71
		345.87	

25

8.8	(7)
8.6	start
8.8	10' off
8.8	
8.6	
9.4	
8.9	
8.5	
10.9	
11.2	
11.0	
9.8	
10.1	
10.4	
11.1	
12.4	
12.8	
12.8	
9.4	

Aug. 30, 1948 Rainey

66

Rainey
King
Addms

King
West
Addms

7.8

6.9

7.4

7.7

8.8

9.6

on Hub S.W. Cor. Alford + Trejon

364.76

351.09

364.83 13.67

353.12.60

368.36

4.36

364.00

El.
Box

No. 187+41 364.00

11.5

10.0

10.6

10.4

12.2

9.8

11.6

7.7

10.0

6.0

348.57
351.09

on Hub 7.1/2 SE. Cor. Trejon
51st

358.91

188+99.5 10.1 348.8 341.4

188+037 7.9 351.0 344.1

187+87.5 5.0 353.9 346.5

187+71.6 2.6 356.3 348.6

T.P. 110.02 368.91 0.62 358.29

187+55.0 8.9 359.4 350.6

187+48.1 7.6 360.7 351.1

T.P. 3.48 364.83

12.58 377.41 1.82 376.19 376.17

T.P. 3.59 368.42 364.83

187+95.0 4.9 363.5 352.0

187+83.0 6.4 362.0 352.0

186+87.0 7.3 361.1 350.5

186+79.5 8.2 360.2 349.8

186+50 9.4 359.0 346.8

187+44 ⁴⁴AK = 187+56.2 BK 361.8 352.0

T.P. 2.90 359.30 12.02 356.40

186 6.5 352.8 341.2

185+50 10.7 348.6 340.9

185 8.7 350.6 340.6

184+50 13.0 346.3 340.3

T.P.M. set 10.66 348.6A

	359.30			
J.P.		1.90	356.40	
	11.76		368.16	
ck. to B.M.		3.33	364.83	
			348.64	
	2.66		351.30	
182+99⁹³		1.5	348.8	340.00
183+84⁴²		2.8	348.5	338.6
183+52⁶³		6.3	345.0	334.9
183+20³²		9.2	342.1	330.1 ₂
J.P.		12.73	338.57	
	1.02		339.59	
182+89 ⁴²		1.8	337.8	324.9
182+73 ⁵²		4.7	334.9	322.5
182+57 ⁴²		6.7	332.9	321.7
182+00		12.69	326.90	
	4.70		331.69	
182+00		6.3	325.4	319.1
181+45 ⁶²		9.4	322.3	316.5
181+37 ⁶¹		9.5	322.2	316.2
	5 nd			
Rim M.H. 60's 6		7.75	323.94	
	4.02		327.96	
181+25 ⁰⁰		6.1	321.9	315.6
181+09 ⁰⁰		4.6	323.4	315.6
181+00 ⁰⁰		5.5	322.5	315.6

Diff. J.F. Car 5th + 4th Trojans 384.64

8.8

9.5

10.1

11.9

12.9

12.4

11.2

6.4

5.8

6.0

6.3

7.8

6.9

327.96

180+50	6.4	321.6	314.8
180+20.97	6.5	321.5	314.3
180+04.95	5.5	322.5	314.2
179+87.98	5.3	322.7	314.2
179+50	5.3	322.7	314.8

R.M. M.H. 323.94
 8.15 332.09

179+60	9.0	323.1	315.6
+50	7.4	324.7	316.4
178	8.2	323.9	317.2
+50	7.4	324.7	318.0
177	6.9	325.2	318.8
+50	6.4	325.7	319.4
176	6.3	325.8	320.4
+50	5.7	326.4	321.2
175	4.6	327.5	322.0
+50	2.5	329.6	323.3

T.P. 8.79 338.96 1.92 330.17

174	9.2	329.8	324.6
+50	9.5	329.5	325.9

T.P. top F.H. 531.54 154 337.42

68
70
83
8.5
7.9

7.5
8.3
6.7
6.7
6.4
6.1
5.4
5.2
5.5
6.3

5.2
3.6

128.0

445.5

2.62 448.08

113 + 40.81

114 + 16.59

7.2 440.8 426.7

114 + 00

6.3 441.7 427.0

113 + 68.60

4.4 443.6 427.8

436.8

5.4 442.2

109 + 00

6.2 436.0 428.0

108 + 50

2.2 440.0 431.5

6.2 471.0

464.8

101 + 69.46

6.3 464.7 454.2

101 + 50

6.3 464.7 454.3

101 + 00

5.8 465.2 454.5

100 + 50

5.4 465.6 454.8

100 + 00

5.0 466.0 455.0

99 + 50

4.5 466.5 455.2

99 + 00

4.6 466.4 455.5

98 + 50

4.5 466.5 455.5

98 + 00

4.3 466.7 455.5

97 + 45.46

4.8 466.2 455.5

CR to 2

4.9

229.50

12.78

452.1

Rainey

King

Baker

Adams

Rogers

69

6.05

18.83

14.1

14.7

15.8

18.0

18.5

434.7

10.5

10.4

10.7

10.8

11.0

11.3

10.9

11.0

11.2

10.7

B.C. Guineas

464.80

6.25 471.07

97+8908

97+1798

4.6 466.5 455.8

10.7

96+75

4.7 466.4 457.0

9.4

96+50

4.9 466.2 456.9

9.3

96+00

4.9 466.2 456.9

9.3

95+50

5.1 466.0 456.9

9.1

95+00

6.0 465.1 456.9

8.2

94+76.27

5.8 465.3 456.9

8.4

94+61.92

5.8 465.3 456.9

8.4

94+50

5.9 465.2 456.9

8.3

94+00

5.8 465.3 456.9

8.4

93+50

5.6 465.5 456.8

8.7

T.P.

5.64 465.43

5.51 470.94

93+00

5.2 465.7 456.8

8.9

92+50

5.6 465.3 456.8

8.5

92+00

5.1 465.8 456.8

9.0

91+50

5.5 465.4 456.8

8.6

91+00

5.7 465.2 456.8

8.4

90+50

5.7 465.2 456.8

8.4

90+00

5.4 465.5 456.7

8.8

89+50

5.2 465.7 456.7

9.0

89+00

5.4 465.5 456.6

8.9

T.P.M.

5.36 465.58 GINNEY 89

Oct 21, 1948

Rainey
King
Baker
Adams
Rogers

2

9.1

3

Grass Plot N.W. corner of canyon + Control st.
 Hill (Quinea Sta. 89+00) 465.38

3.83 469.21

85+57.2	4.0	465.2	454.0
+83.77	4.1	465.1	453.8
85+91.82	4.0	465.2	453.0 454.1
86+07.87	3.9	465.3	454.0
(123.91)	4.5	464.7	451.6
21.30	4.1	465.1	455.40
21.30	4.1	465.7	453.2
86+45.29	3.6	465.6	456.2
61.29	3.9	465.3	456.4
77.29	4.0	465.2	456.5
87+00	4.2	465.0	456.8
+150	3.8	465.4	456.6
89+00	3.7	465.5	456.7
+150	3.2	466.0	456.7
CR 89+00 Quinea	3.64	465.77	455.52

B.M. 4.74 468.07 463.33 Top F.H. Hvt 51

79+00	4.7	463.4	452.1
79+50	4.6	463.5	452.4
80+15.75	4.4	463.7	452.8
80+31.55	4.3	463.8	452.9
80+47.63	4.2	463.9	453.0
80+63.43	4.2	463.9	453.1

Oct. 25, 1946 Rainey King Baker Adams Rogers 71

11.2		
11.25		
11.6		
11.3		
10.9	453.9	
10.1		
8.8	454.4	85+99.87
9.9		
9.9		
9.4	9.5	
8.9		
8.7		
8.4		
8.8		
8.8		
9.3		
11.3		
11.1		
10.9		
10.9		
10.9		
10.8		

46807

81+00	4.2	4 639	453.2
81+50	4.1	4 640	453.3
82+00	4.0	4 641	453.4

T.P.	5.76	469.74	4.09	463.98
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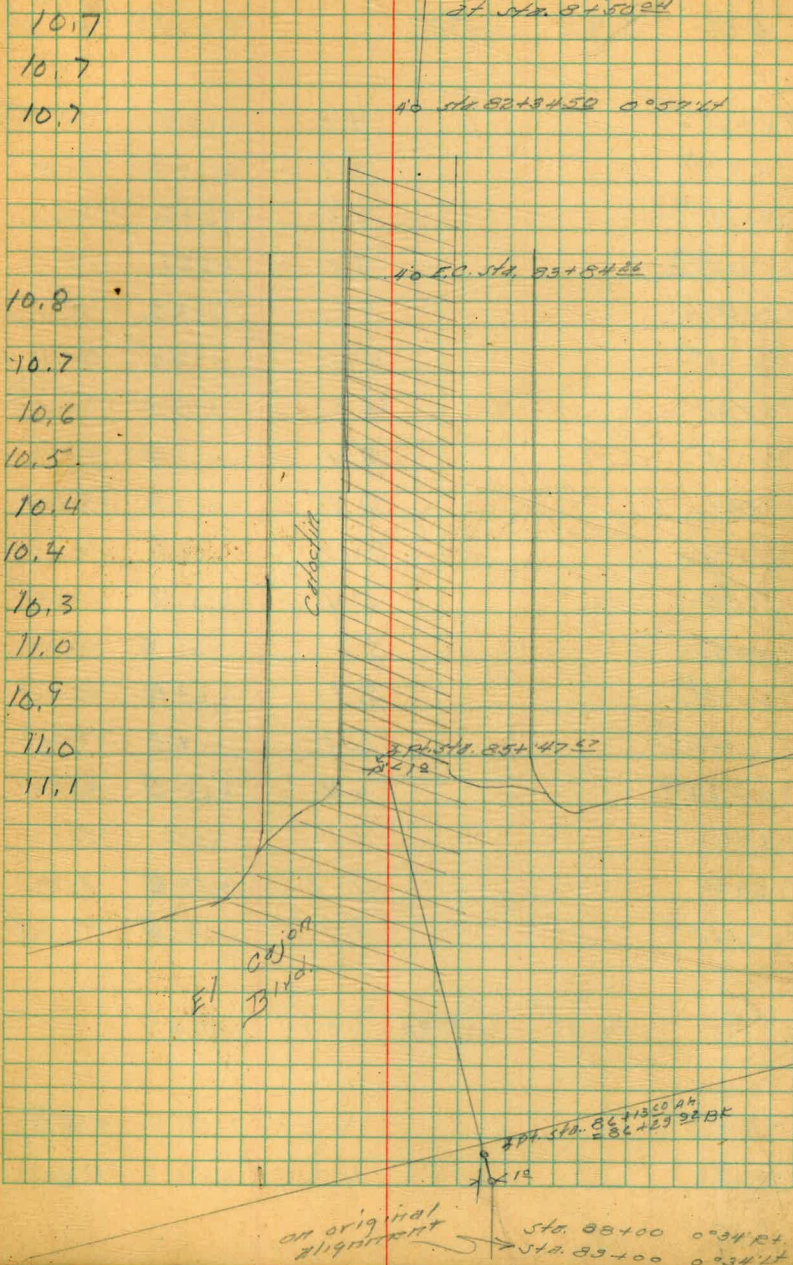
82+39.41	5.4	4 643	453.5
+50	5.4	4 643	453.6
83+00	5.4	4 643	453.7
83+22.1	5.4	4 643	453.8
83+50	5.4	4 643	453.9
83+75	5.4	4 643	453.9
83+84.29	5.4	4 643	454.0
84+00	5.2	4 645	454.0
84+50	4.8	4 649	454.0
85+00	4.7	4 650	454.0
85+43.67	4.6	4 651	454.0

B.M.	4.38	463.6	B.P. 465.8 E.I.C. 36
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Oct 25, 1948

 Rainey Adams
 King Rogers
 Baker

72

meets original alignment
at Sta. 82+60.24
 on original alignment
 Sta. 88+00 0°34'24"
 Sta. 89+00 0°34'24"

P.M.	3.95	467.28	463.33	Top FH. Ht + 28	
78+55 ⁸⁰			463.3	451.9	11.4
78+3907			463.7	451.8	11.4
78+2324			463.7	451.7	11.5
78+0743			463.7	451.5	11.7
77+9162			463.2	451.5	11.7
77+7501			463.2	451.4	11.8
77+60			463.1	451.3	11.8
77+2821			462.9	451.2	11.7
77+00			462.8	451.1	11.7
76+50			462.3	451.0	11.3
76+00			461.9	450.5	11.4
75+50			461.5	450.0	11.5
75+2819			461.4	449.7	11.6
74+7229			461.1	449.2	11.9
74+2446			460.5	448.7	11.8
74+00			460.2	448.5	11.7
73+50			459.6	448.0	11.6
73+4455			459.6	447.9	11.7
T.P.	4.45	463.88	7.85	459.43	
73+2838			459.5	447.8	11.8
73+00			459.3	447.5	11.8

463.88

724862	4.8	459.1	447.4
7243270	5.0	458.9	447.4
72400	5.1	458.8	447.3
71452 ⁸⁷	5.4	458.5	447.3
7142104	5.5	458.4	447.2
71400	5.5	458.4	447.2
70450	5.6	458.3	447.1

T.P.	2.85	461.12	5.61	458.27
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70425 ³⁰	2.9	458.2	447.0
70400	2.9	458.2	447.0
69450	3.1	458.0	446.6
69400	3.4	457.7	446.1
68450	4.0	457.1	445.6
68400	4.7	456.4	445.2
67450	5.0	456.1	444.7
67400	5.4	455.7	444.3
66450	5.9	455.2	443.8
66400	6.5	454.6	443.4
65450	6.9	454.2	442.9
65400	7.4	453.7	442.5
64450	7.8	453.3	442.2
64400	7.9	453.2	442.0
63450	8.1	453.0	441.7

11.7

11.5

11.5

11.2

11.2

11.2

11.2

11.2

11.2

11.4

11.6

11.5

11.2

11.4

11.4

11.4

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11.3

11.2

11.1

11.2

11.3

6.1

200. ¹⁰⁰/₁₅

200
200

		461.12		
T.P.	4.84	457.25	8.71	452.41
63+00			4.4	452.8 441.5
62+50			4.9	452.5 441.2
62+00			5.5	451.8 441.0
61+77 ³³			5.7	451.6 440.9
61+67 ³⁰			5.8	451.5 440.8
61+03 ³⁰			4.8	452.5 440.5
60+88 ¹⁷			4.7	452.6 440.0
60+79 ⁵⁷			4.9	452.4 439.8
60+47 ⁸⁵			5.2	452.1 439.1
60+31 ⁸⁹			5.3	452.0 438.6
59+84 ⁰²			6.0	451.3 437.2
59+68 ¹⁵			7.0	450.3 436.5
59+52 ¹⁰			7.3	450.0 436.6
59+36 ⁰⁵			10.4	446.9 436.6
58+88 ²¹			10.5	446.8 436.7
58+56 ³⁶			10.4	446.9 436.8
58+40 ³⁹			6.1	451.2 436.8
				308
T.P.			10.42	446.83 58256 ³⁶

11.4
11.3
10.8
10.7
10.7
12.0
12.6
12.6
13.0
13.4
14.1
13.8
13.4
10.3
10.1
10.1
14.4

4.8
3
4

451.3
454.34

input & m4
back

Nov. 12, 1948

Rainey S. S.
King
Baker
Adams
Boyers

42	469.6		465.38	
85+83 ²⁷		16.6	453.0	
85+7182		16.5	453.1	
86+0722		16.0	453.6	
+ La Mesa Colony				
B.M. Cont. Mamm. Collectin			453.09	
	2.90		455.99	
42+98 ²¹		5.7	450.3	439.5
41+64 ⁸²		6.6	449.7	439.5
41+49 ²⁴		8.0	448.0	439.5
41+33 ³³		9.4	446.6	437.9
41+01 ⁵³		12.6	443.4	434.3
T.P.		12.25	443.74	
	0.26		444.00	
40+85 ⁴⁴		3.1	440.9	432.2
40+69 ²¹		5.6	438.4	430.0
40+50		9.0	435.0	427.0
T.P.		12.22	431.78	
	0.92		432.70	
40+00		5.1	427.6	419.4
39+74 ³⁴		8.5	424.2	415.5
39+59 ¹³		11.0	421.7	412.9
T.P.		10.97	421.73	
	0.71		422.44	
39+43 ³⁵		3.2	419.2	410.2

10.8

9.9

8.5

8.7

9.1

8.7

8.4

8.0

8.2

8.7

8.8

9.0

421.44

39+27 ⁰⁰	6.7	415.7	407.4
39+12 ¹²	9.5	412.9	403.6
38+96 ⁹⁶	12.9	409.5	400.5
T.P.	12.76	409.68	
1.10	410.78		
38+81 ⁸²	4.8	406.0	396.5
38+66 ¹⁹	9.1	401.7	391.7
38+50 ⁸⁰	13.8	397.0	387.8
T.P.	13.04	397.74	
0.66	398.40		
38+35 ²⁸	6.7	391.7	383.8
38+12 ¹⁰	13.6	384.8	377.3
T.P.	12.03	386.37	
0.62	386.99		
38+00 ⁰⁰	6.6	380.9	373.5
37+94 ⁸⁷	8.3	378.7	371.0
T.P.	12.44	374.55	
0.56	375.11		
T.P.	12.73	362.38	
0.97	363.35		
37+44 ²⁵	5.9	357.5	347.6
37+28 ⁸¹	8.7	354.7	342.7
37+21 ⁰⁰	10.0	353.4	341.5
37+04 ⁸²	10.4	353.0	341.6
36+88 ⁸⁴	11.1	352.3	341.8

8.3

9.3

9.0

9.5

10.0

9.2

-10.8

7.9

-8.9

7.5

6.8

7.7

9.9

10.0

11.9

11.4

12.5

	363.35			
36+4022		11.3	352.1	343.3
36+42122		9.3	354.1	345.1
36+0923		6.0	357.4	347.8
35+9967		0.9	362.5	351.6
T.P.		0.87	368.48	

13.07 375.55

35+7838		8.0	367.6	356.3
35+6335		4.0	371.6	361.8
T.P.		0.73	374.80	

12.88 387.70

35+50		11.8	375.9	366.6
T.P.		0.79	386.91	

12.84 399.75

35+1222		8.8	391.0	378.3
35+1024		8.4	391.4	381.0
34+9566		3.8	396.0	384.9
34+8023		0.1	399.7	387.5
T.P.		0.06	399.69	

6.12 405.81

34+6424 T.P.		5.19	400.62	388.7
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9.95 456.78 446.83

58+2447		5.1	451.7	437.1
57+9245		5.6	451.2	437.8

8.8

9.0

9.6

10.9

11.3

9.8

9.3

12.7

10.4

11.1

12.2

11.9

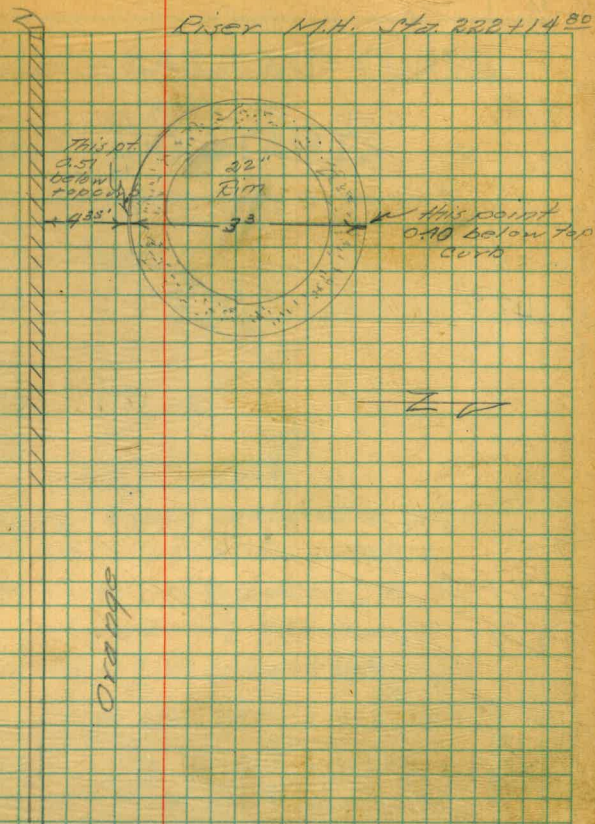
4.6

4.4

	456.78			
57+76 ⁵¹		5.4	451.4	438.2
57+60 ⁷⁴		5.1	451.7	438.6
57+28 ⁸¹		4.8	452.0	439.3
57+12 ⁸⁸		4.3	452.5	439.7
56+97 ⁰⁶		4.1	452.7	440.1
56+71 ²⁶ A.H.		4.0	452.8	440.2
56+81 ⁰⁴ B.K.				
56+33 ³⁶		3.4	453.4	440.7
55+85 ⁴²		2.2	454.6	441.2
55+37 ⁵⁸		2.3	454.5	441.5
55+05 ⁷⁴		2.5	454.3	441.6
54+89 ¹⁴		2.1	454.7	441.6
54+41 ⁹⁰		2.1	454.7	441.8
53+94 ⁰⁶		2.1	454.7	441.9
53+46 ¹²		2.1	454.7	442.0
53+30 ³⁰		2.1	454.7	442.1
53+14 ⁴⁷		2.0	454.8	442.2
T.P.		1.39	455.39	

Water Pipe -	456.78			
Sta. 54+19 ⁰⁶		4.71	452.07	
T.P. 34+16 ⁷⁸	3.32	403.94	400.62	387.7
24+57 ¹⁴		2.9	401.0	
34+41 ⁶⁴		3.7	400.2	387.2

13.2
13.1
12.7
12.8
12.6
12.6
12.7
13.4
13.0
12.7
13.1
12.9
12.8
12.7
12.6
12.6



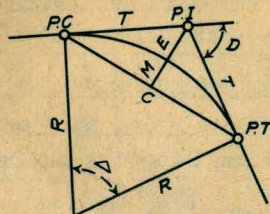
12.3
13.0

403.94

34+26 ³²			6.5	397.4	384.1
T.P.	0.48	392.13	12.29	391.65	
57+39+9494			2.2	389.9	377.9
57+33+79 ⁰⁵			4.0	388.1	376.0
57+37+63 ¹⁰			6.6	385.5	374.7
57+33+47 ³²			8.5	383.6	373.0
56+33+31 ⁵⁰			9.1	383.0	370.8
T.P.	0.50	380.50	12.13	380.00	
56+33+00			2.70	377.8	367.8
56+32+53 ³²			19.0	367.5	355.6
T.P.	0.40	367.95	12.95	367.55	
55+32+21 ⁵⁰			5.2	362.7	352.3
54+31+50			12.4	355.3	345.9
T.P.	0.99	356.35	12.57	353.38	
53+31+00			5.5	350.9	341.5
53+30+93 ⁸⁴			6.1	350.3	341.0
53+30+77 ⁹⁰			7.9	348.5	339.6
53+30+62 ³²			8.8	347.6	337.3
T.P.			10.2	346.2	336.2
30+38 ⁴³			12.6	343.8	335.1
T.P. ON 30+38 ⁴³			12.65	343.70	

DIETZGEN'S RAILROAD CURVE AND REDUCTION TABLES

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CURVE FORMULAS

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

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

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

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

$$\text{Long Chord} = C = 2 R \sin \frac{\Delta}{2} \quad (10) \quad \Delta = \text{Central Angle}$$

EXPLANATION AND USE OF TABLES

Stations.—Given P. I.—Sta. 161+60.35 to find Sta. of P. C. and P. T. $\Delta = 62^\circ 10'$ $D = 8^\circ 20'$. From Table IV for 1° curve $T = 3454.1$ and $\div 8\frac{1}{2} = 414.49$ 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 = $158 - \text{Sta. P. C.} = 54.50$, hence offset = $7.27 (54.50 \div 100)^2 = 2.16$ ft. Also square of any distance divided by twice the radius equals (approximately) the distance from tangent to curve. Thus $(54.50)^2 \div (2 \times 688.26) = 2.16$ ft.

Deflections.—Deflection angle = $\frac{1}{2} D$ for 100 ft., $\frac{1}{4} D$ for 50 ft., etc. For c ft. = (in minutes) $.3 \times C \times D^\circ$ or = defl. for 1 ft. from Table III $\times C$. For Sta. 158 of above curve = $.3 \times 54.5 \times 8\frac{1}{2} = 136.2'$ or $2^\circ 16.2'$, or = $2.50 \times 54.5 = 136.2'$ from Table III. For Sta. 159 deflection angle = $2^\circ 16.2' + 8^\circ 20' \div 2 = 6^\circ 26.2'$, etc.

Externals.—May be found in similar manner to tangents. Thus E for curve above is 115.37. For from Table IV for 1° curve $E = 960.6$ for $8^\circ 20' = 960.6 \div 8\frac{1}{2} = 115.27$ and from Table V correction = .10 or $E = 115.37$ ft. Or suppose $\Delta = 32^\circ$ and E is measured and found to be 42 ft. What is D ? From Table IV $E = 230.9$ and $\div 42 = 5.5$ or $D = 5^\circ 30'$.

3.04
15.00

Bm	607	47.88	HI	-	510	510
452.1		+	4.30	456.40		452.1
ESE corner					4.02	
SSE					4.11	
SSW					4.13	
WSW					3.88	

10.17

Please Return to
City of San Diego Water Dept.
Room 903 Civic Center

Top of Air Valve - 453.96

456.78	556.78	- 452.07	inside
- 2.82	4.71	54.54	1985
453.96	452.07		

472	4.78
454.7	454.7
459.4	2
459.48	459.48
459.4	
433	454.8
3.113.0	46
	459.4
4	

459.433

