

W
573

1

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 $30.6 + (20 - 16) \times 2$ or 2 ft. added to $30.6 = 32.6$. For slopes of 1 on $1\frac{1}{2}$ see inside of back cover.
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City of San Diego Water Dept.
Room 268 Civic Center
Telephone Main 5161

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of a high grade 50% rag paper
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and is sewed with Bing Special
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MICROFILMED

JAN 13 1965

Sta. Defl.

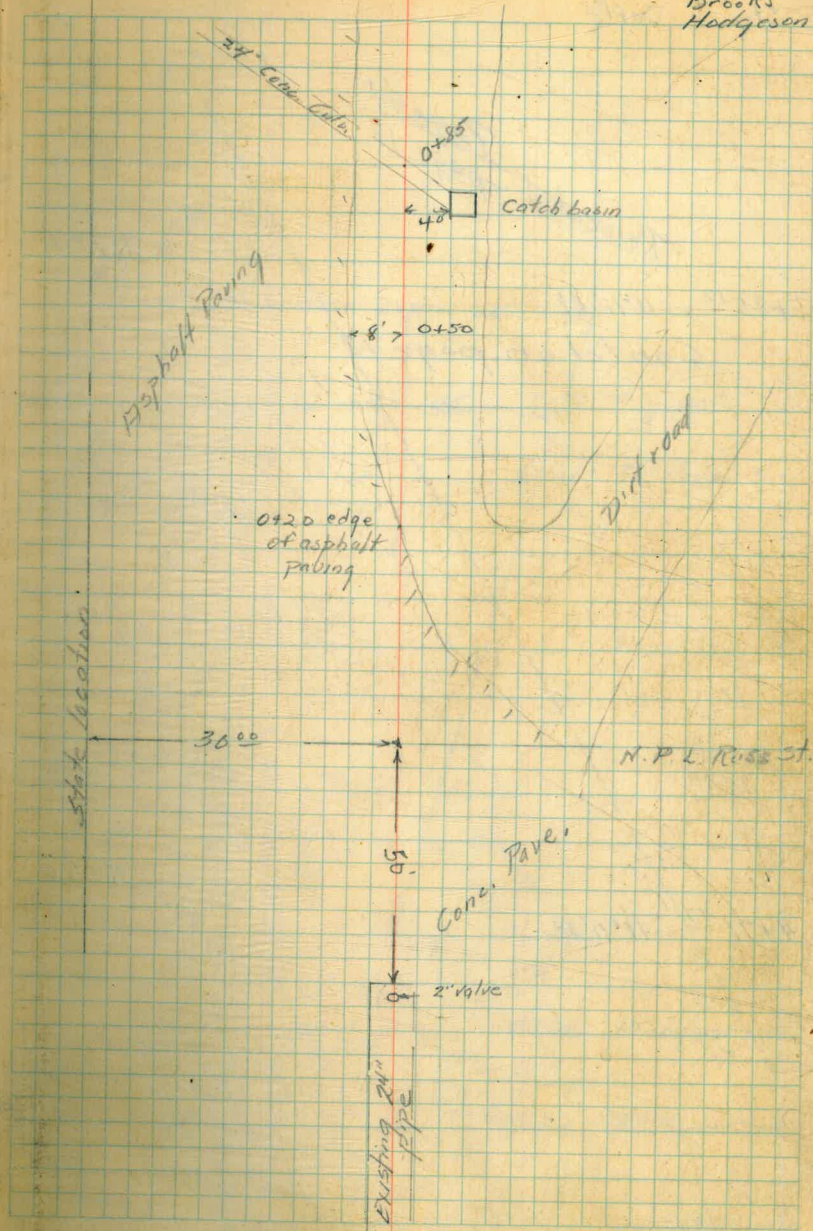
Mag.

(see Pg. 47)

0+00

N16°W

6/20/41
Super.
Brooks
Hodgeson



$\Delta = 14^{\circ}49'30'' \text{ Lt}$

$R = 2302$

$ST = 299.49$

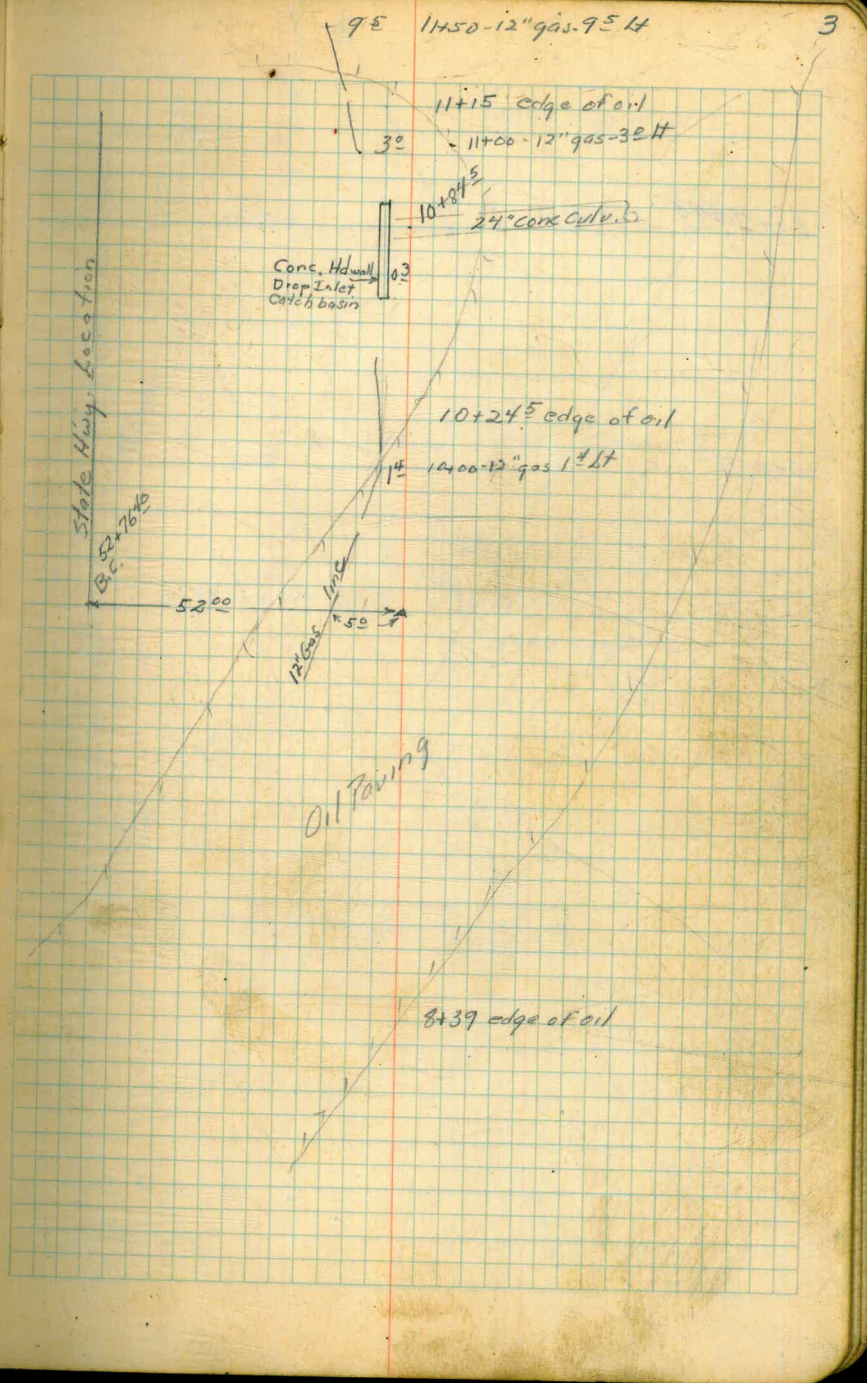
$L = 595.63$

$\text{defl. } 1' = 0.746$

$\text{defl. } 50' = 0^{\circ}37.30$

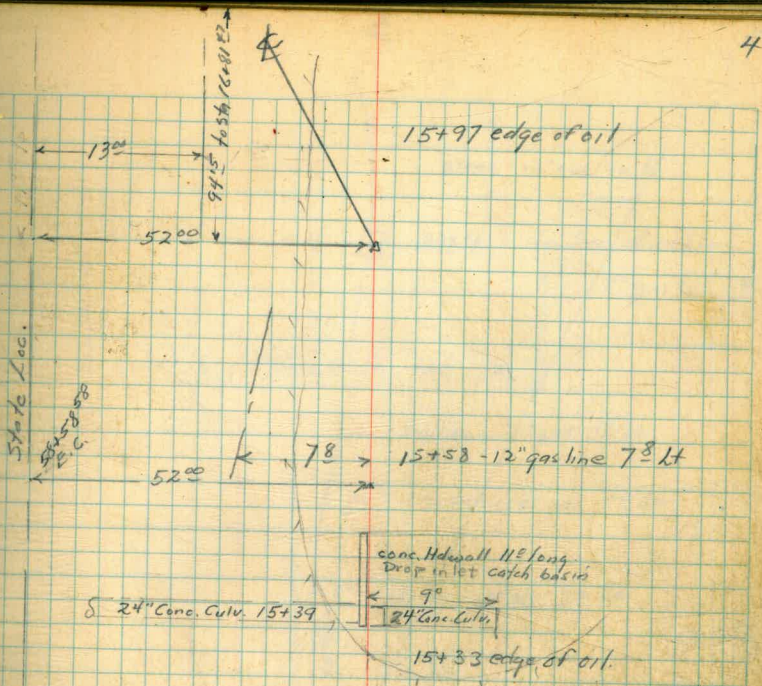
9+6187 B.C.

3



15+79⁴⁸ 22°32' Lt

15+57⁵⁰ E.C.



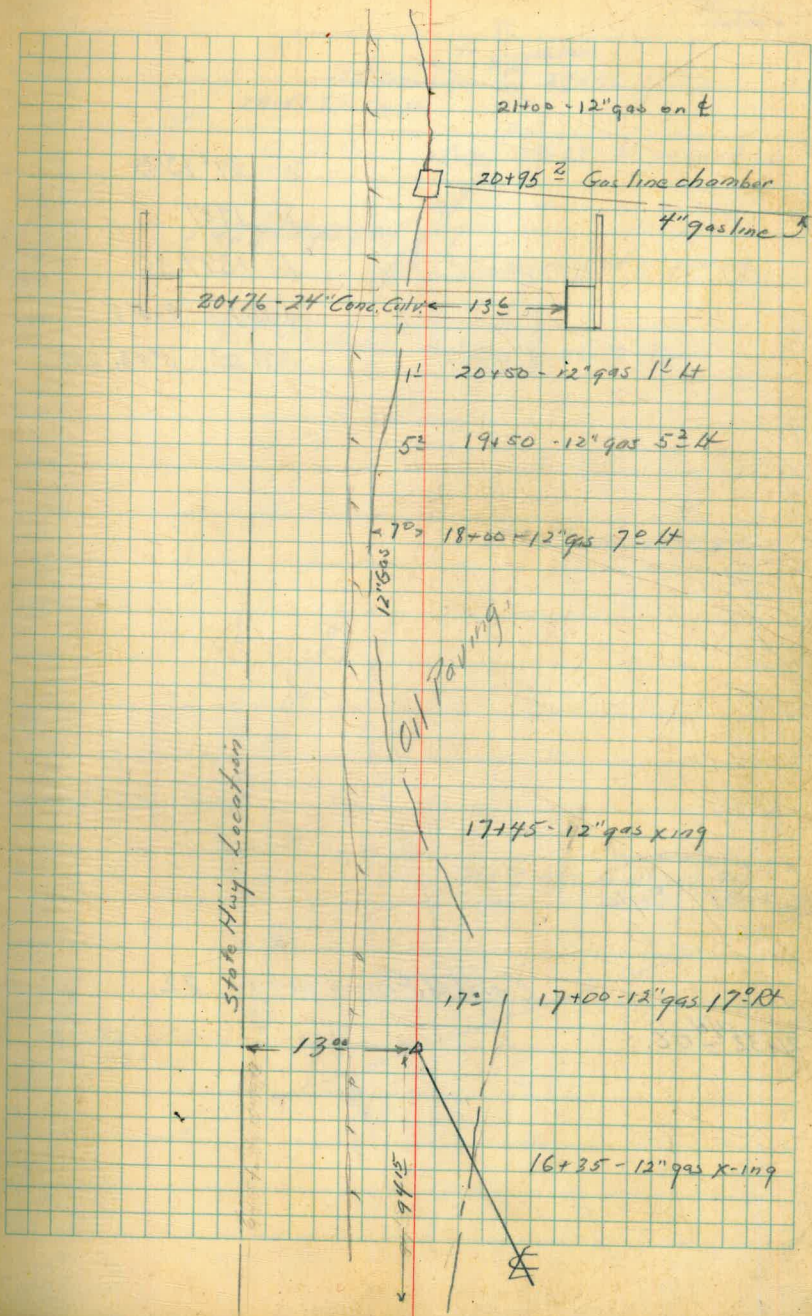
Oil Paving

15+60 - 24" Conc. Culv. 126

16+81⁴⁰ 22+31'RT

⊕

5



$\Delta = 39^{\circ}43'RT$
 $R = 1987'$
 $L = 1377.36$
 $defl. 1' = 0.865$
 $defl. 50' = 0^{\circ}43'.250$

22+50 Ahead
 22+51³⁵ Back

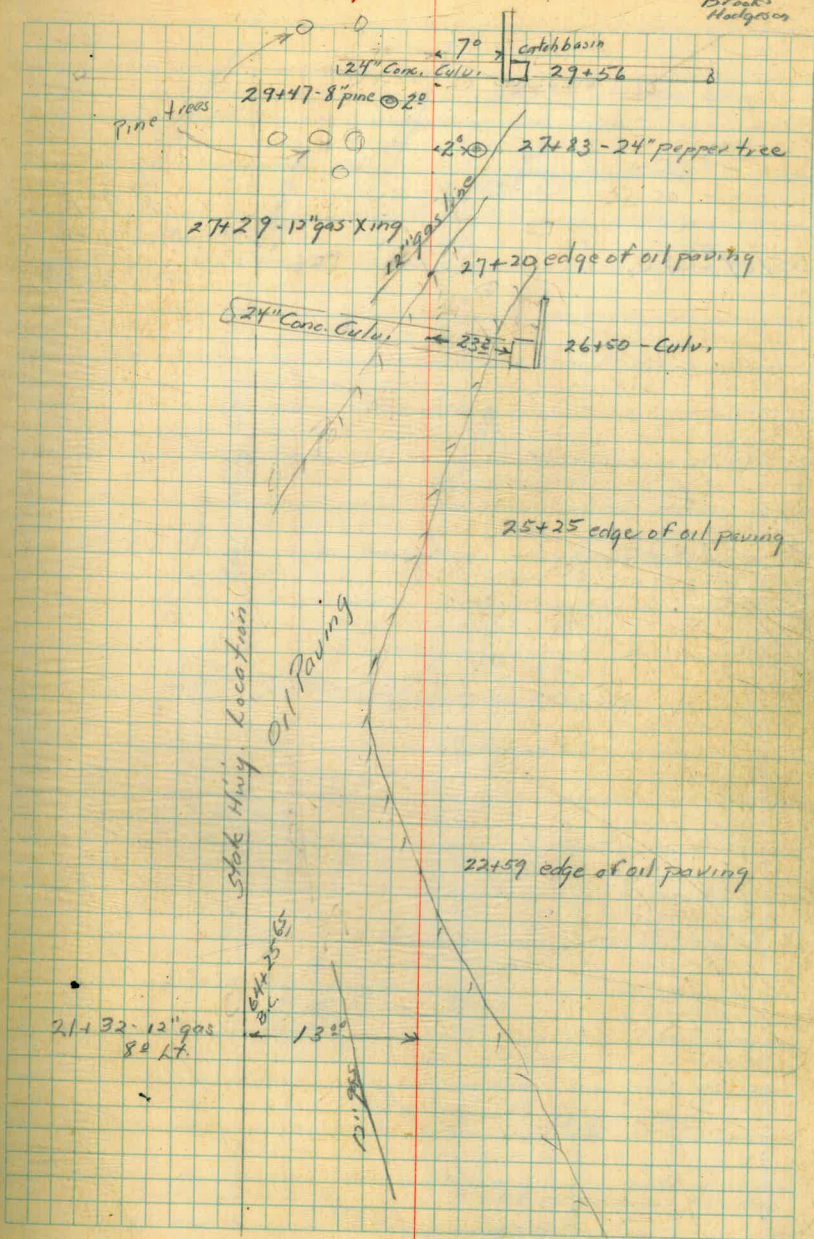
Cont'd from page 22

21+32⁴⁴ BC.

6/23/41

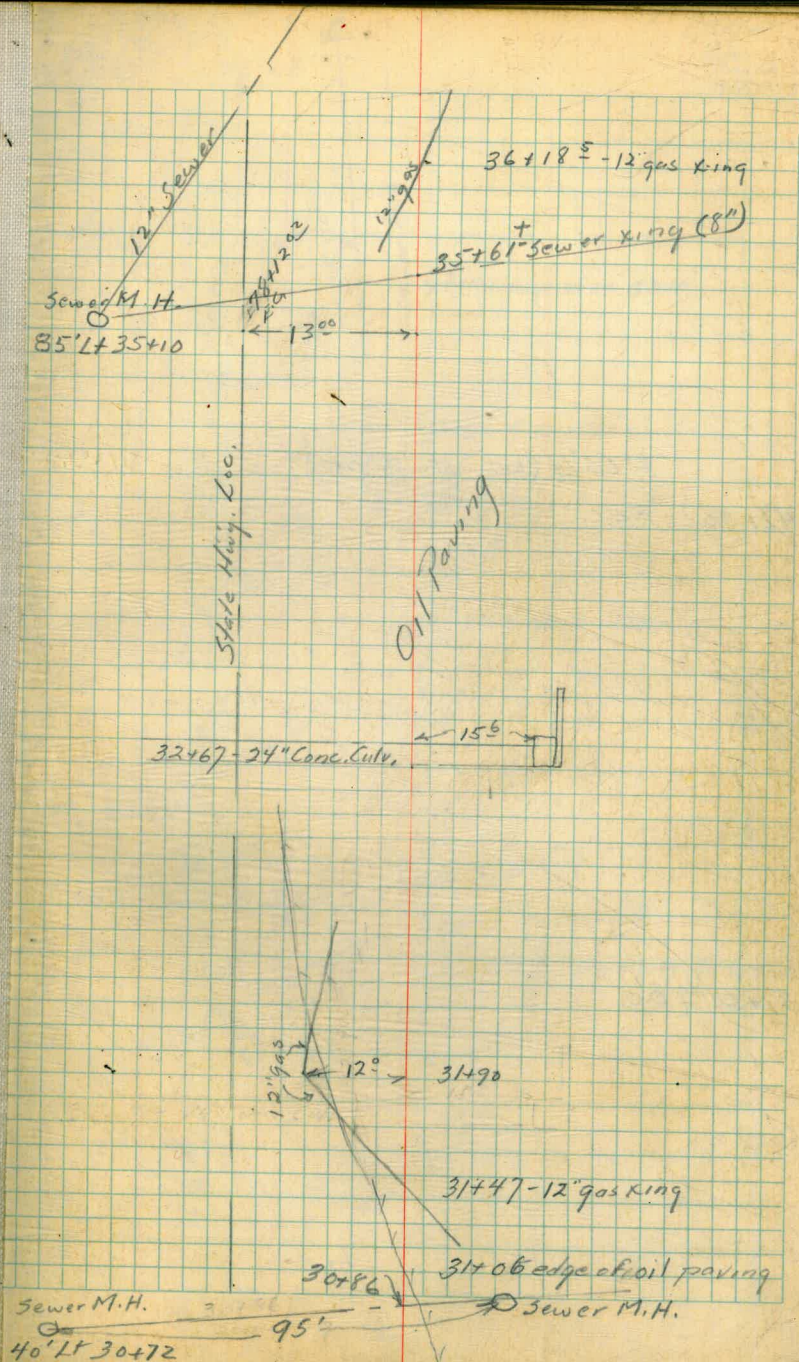
S. J. B. Hedges

6

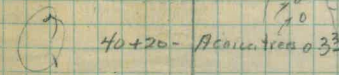
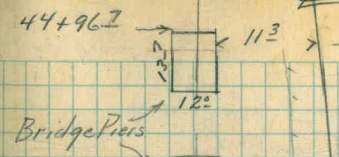
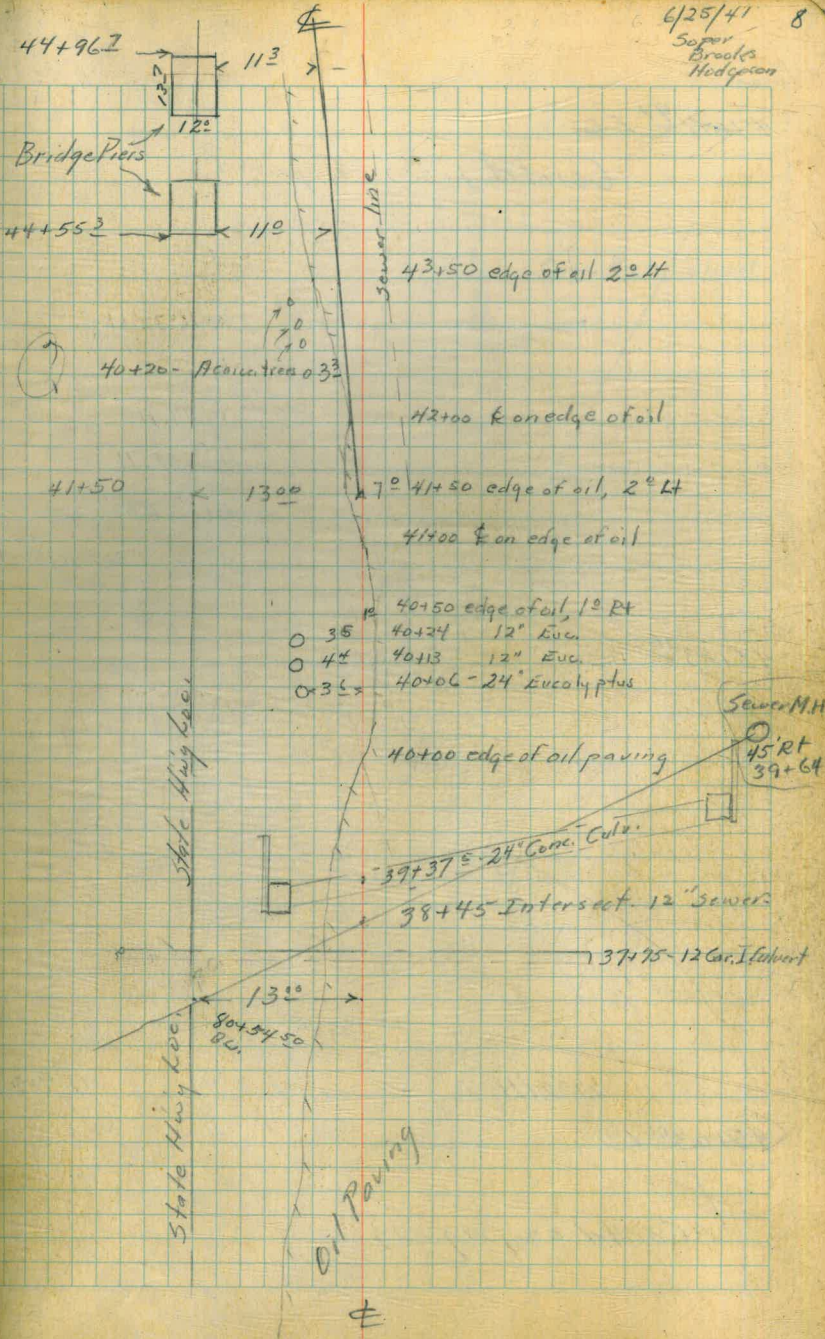


35+09.80 E.C.

N 9° E



6/25/41 8
 Super
 Brooks
 Hodgson



43+50 edge of oil 2° LT

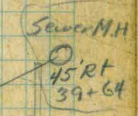
42+00 E on edge of oil



41+00 E on edge of oil

- 35 40+50 edge of oil, 1° RT
- 40 40+24 12" Euc.
- 41 40+13 12" Euc.
- 36 40+06 - 24" Euc. plus

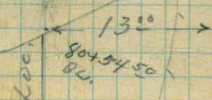
40+00 edge of oil paving



39+37° - 24" Conc. Curve

38+45 Intersect. 12" Sewer

37+75 - 12" Cur. Intersect



Oil Paving

⊕

8° 05' LT (backsight on sta 41+00)

N13°30'W

41+50 Δ P.O.C.

37+52.30 B.C.

N 55° W

47+41⁹⁷ E.C.

Cont'd from page 23

$$A = 1632' \text{ Lt}$$

$$R = 550'$$

$$T = 79.91$$

$$L = 158.71$$

$$\text{defl} = 0^{\circ} 03' .125$$

$$\text{def } 50' = 2^{\circ} 36' .261$$

45+83²⁶ B.C.

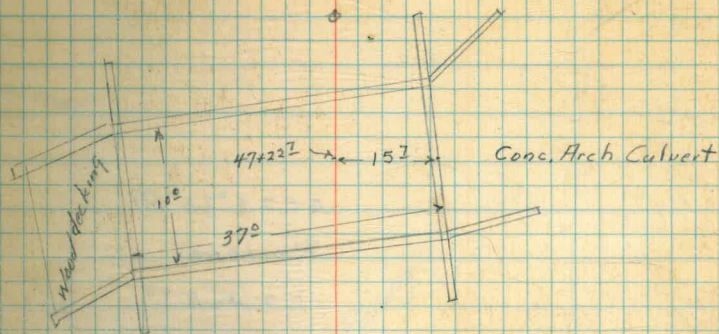
Relocated - page 23

21° 29' Lt

N 36° 30' W

45+03⁰⁰ L

Cont'd on page 23



6" sewer manhole

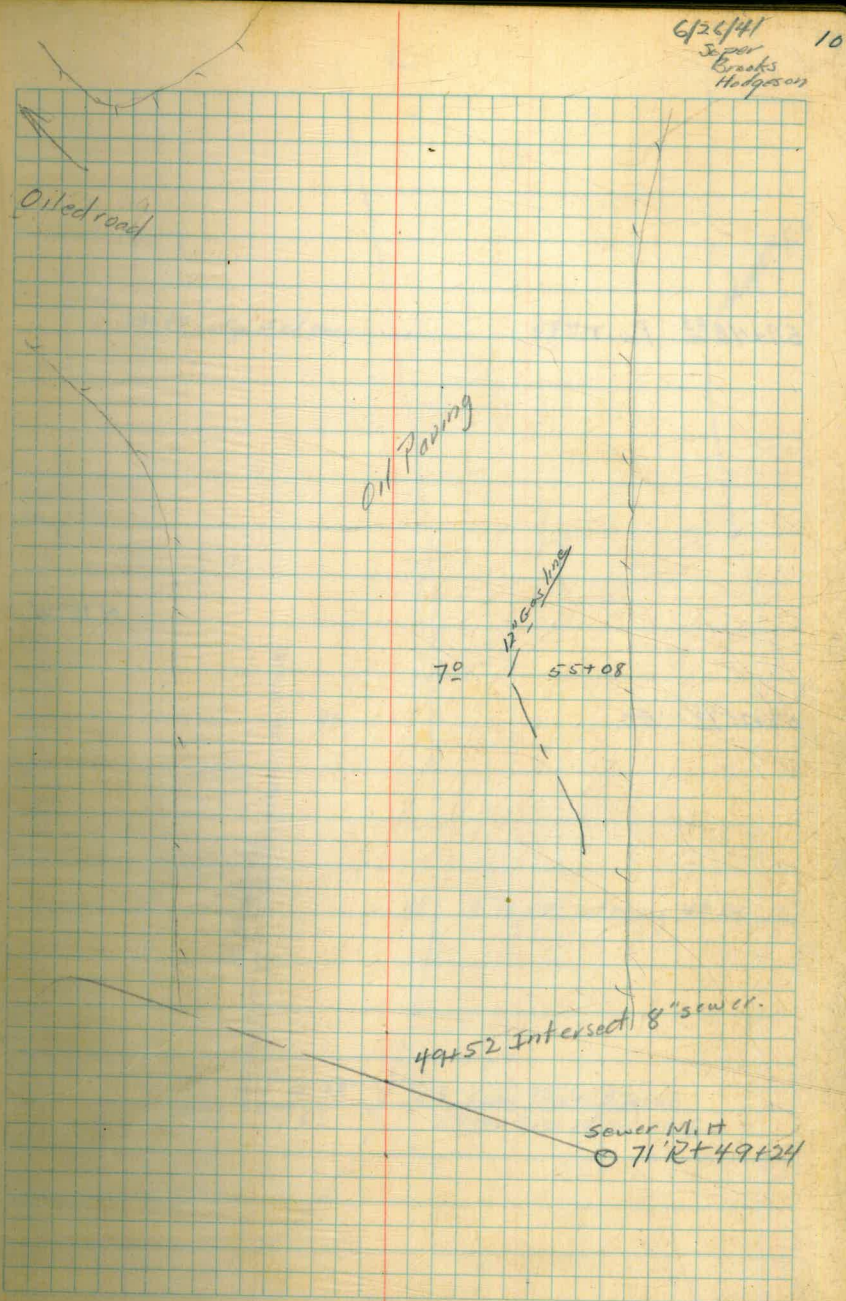
$$\begin{aligned} \Delta &= 23^{\circ}30' \text{ RT} \\ R &= 1000' \\ T &= 208.00 \\ L &= 410.15 \\ \text{defl. } \angle &= 01.719 \\ \therefore 50 &= 125.944 \end{aligned}$$

54+15⁸³ B.C.

50+94⁵⁷ E.C.

$$\begin{aligned} \Delta &= 15^{\circ}15' \text{ RT} \\ R &= 1120' \\ T &= 149.93 \\ L &= 298.10 \\ \text{defl. } \angle &= 1.534 \\ \therefore 50 &= 106.70 \end{aligned}$$

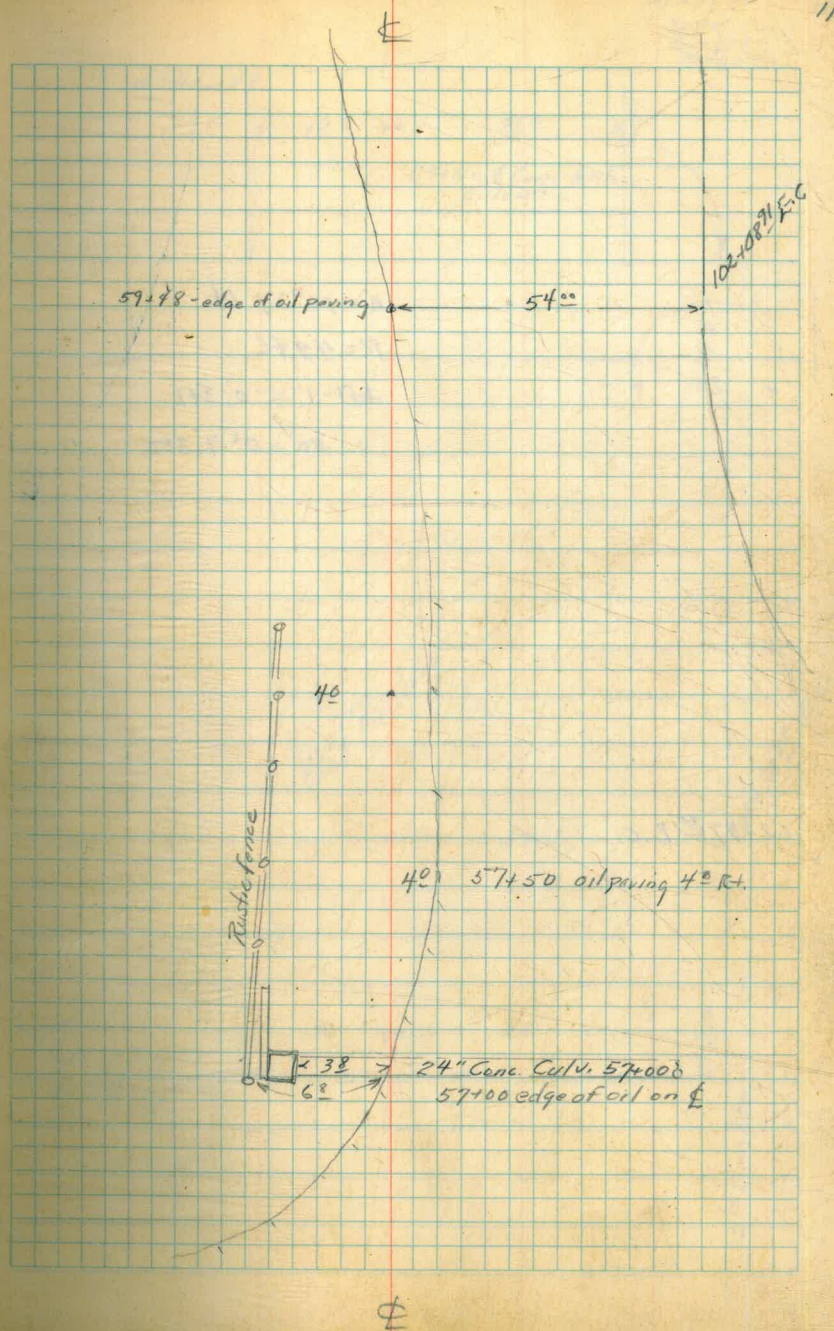
47+76⁴⁷ B.C.



59+48³³ P.O.T.

N 15° W

58+25⁹⁸ E.C.



$$A = 10^{\circ} 27' \text{ Lt}$$

$$R = 4946'$$

$$\text{defl } 1' = 0.347$$

$$\text{" } 50 = 0^{\circ} 17.350$$

62+77[±] B.C.

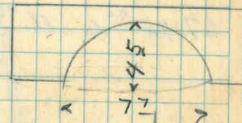
6/27/41 12

Sep
Brooks
Hedgeson

12" Hd. wall?

← 12' → ← 26' →

65+11 - 2 Conc. Arch
Culvert.



Oil Paving

← 5400 →

← 105+30[±] B.C. →

62+30 ± culv.
outlet or inlet
not found.

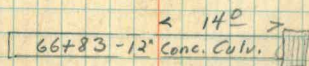
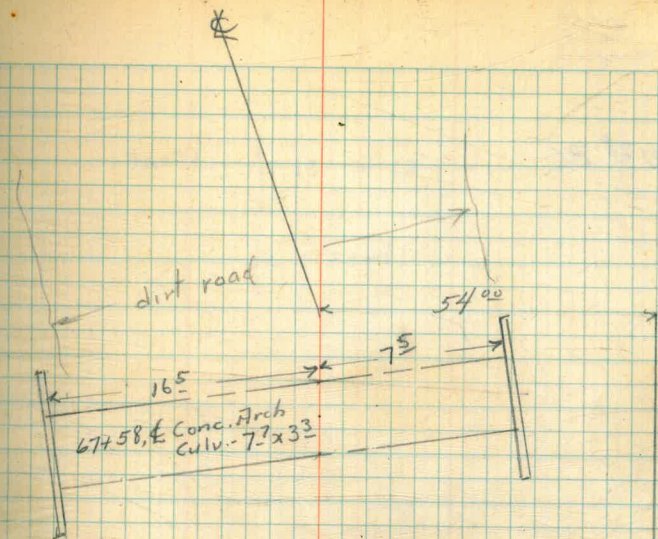
← 110 →

← 26' →

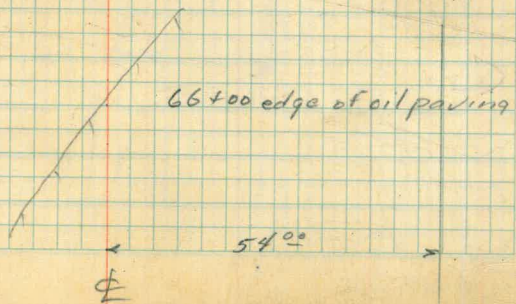
Sta Hwy Loc.

67+75⁰⁰ L 11°38' P.O.C. & Angle point.

67+75, - 2°53'



State Highway



70+71²⁸ BC.

69+95⁹⁰ L. 19°52' Rt.

8/14/41
Super
Brooks
Hodgson

14

70+71 { 13 • 12'
← road →

← road →
69+95 { 6' x 17'

69+97 - 12" Crt. Culv. 23°
This end buried

69+00 { 12' x 9'
← road →

73+01⁰⁸ E.C.

$$L = 13010' \text{ LT}$$

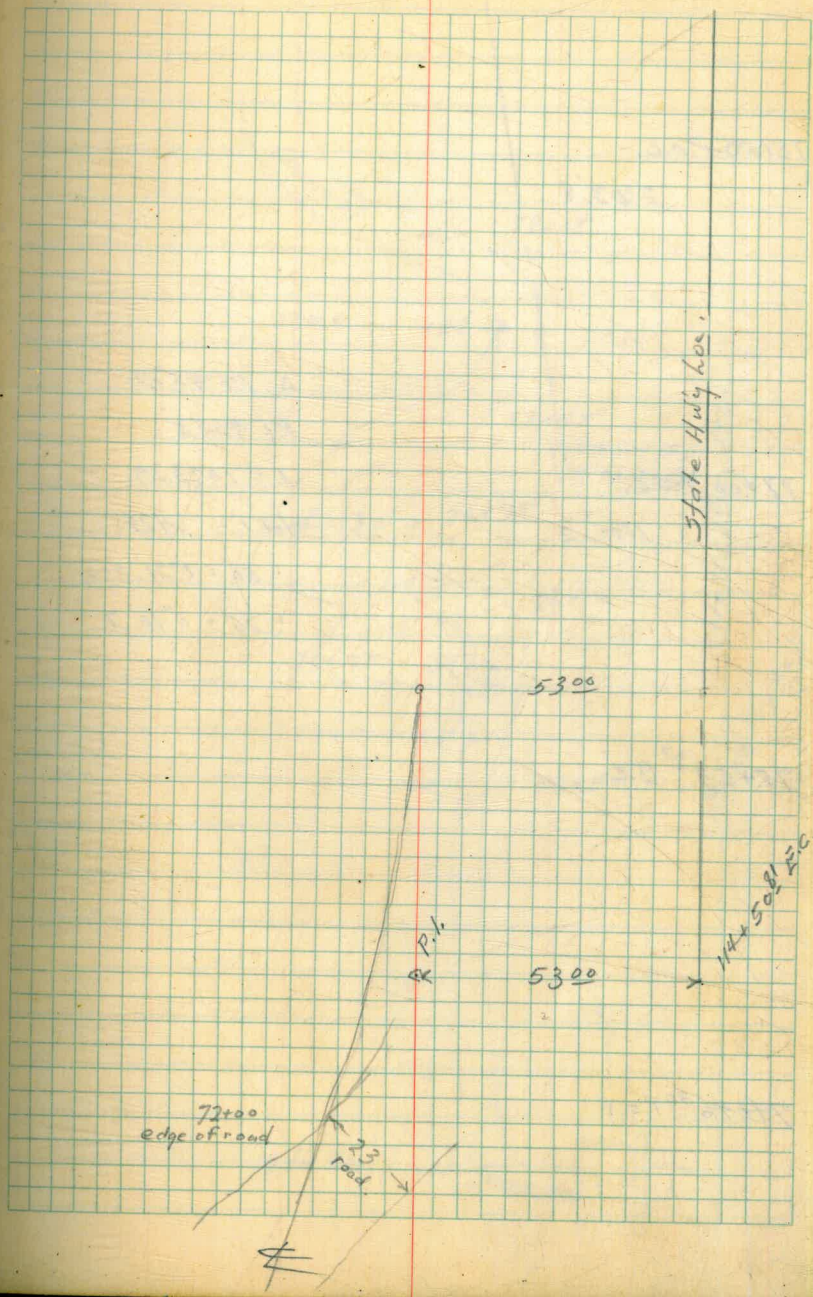
$$R = 1000'$$

$$T = 115.41$$

$$L = 227.80$$

$$\text{defl}' = 1.719$$

$$1.50' = 1.25' .944$$



78+50 P.O.C.

2°03.8

77+00 P.O.C.

1°00.2

75+57⁷⁷ B.C.

74+46³⁰ P.O.T.

A = 14°45'24"

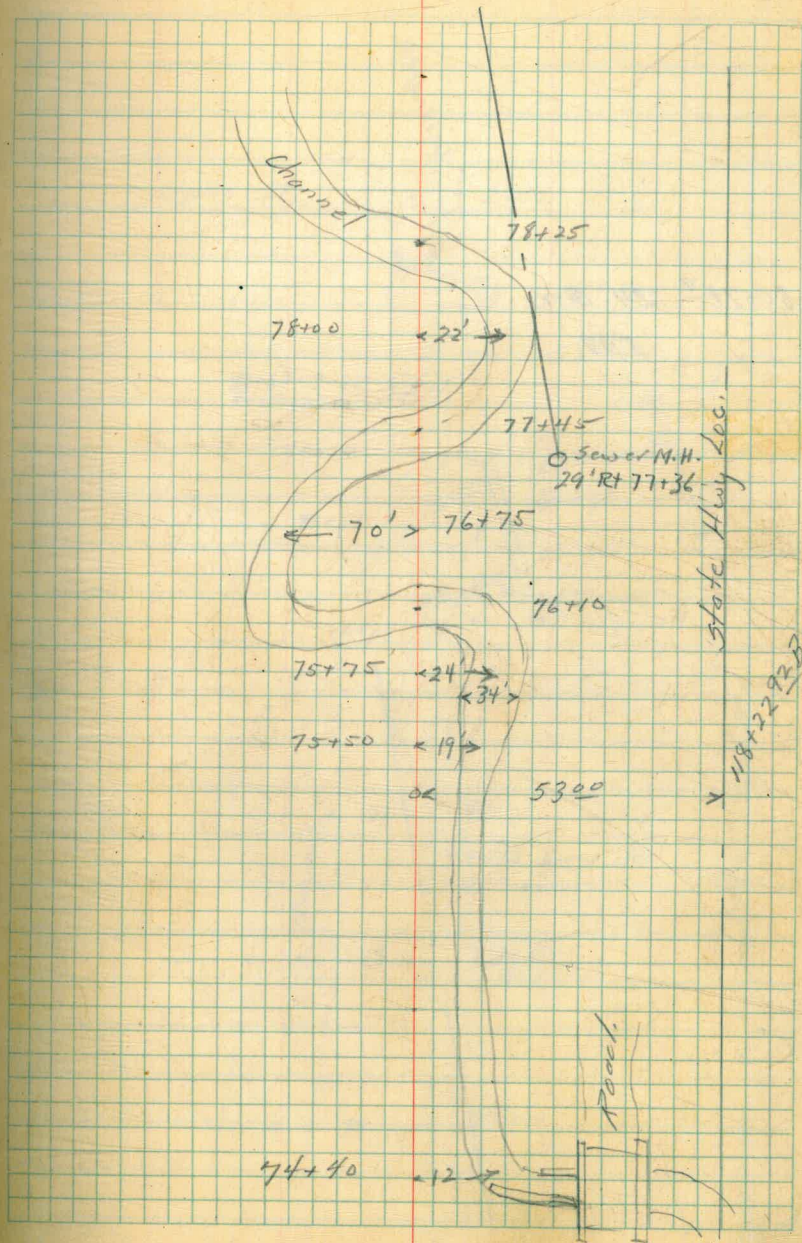
R = 4053'

L = 1043.39

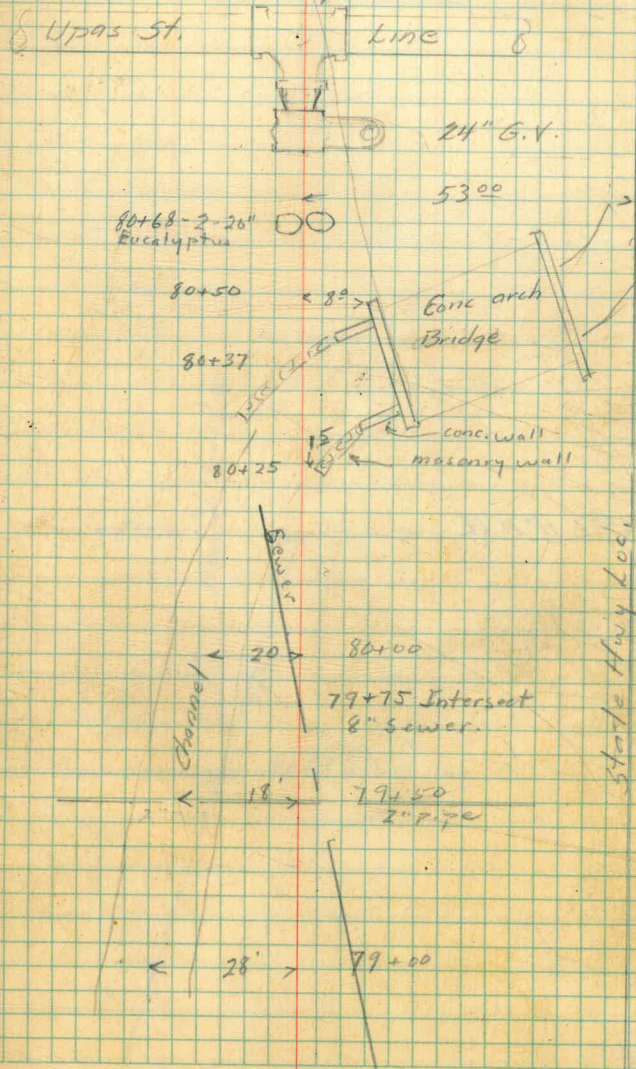
def i = .4240

" 50' = 0°21.200

" 25' = 0°10.7

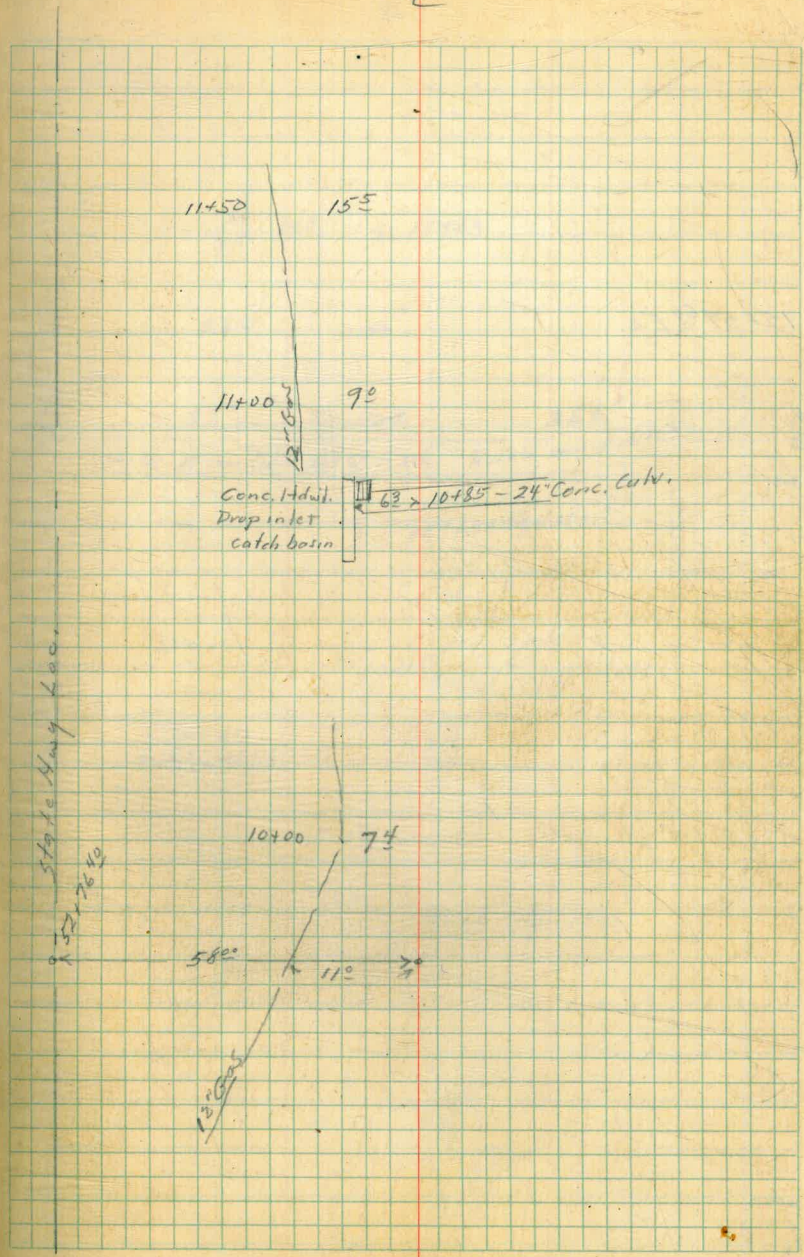


80+74.9 24" G.V.
3039'



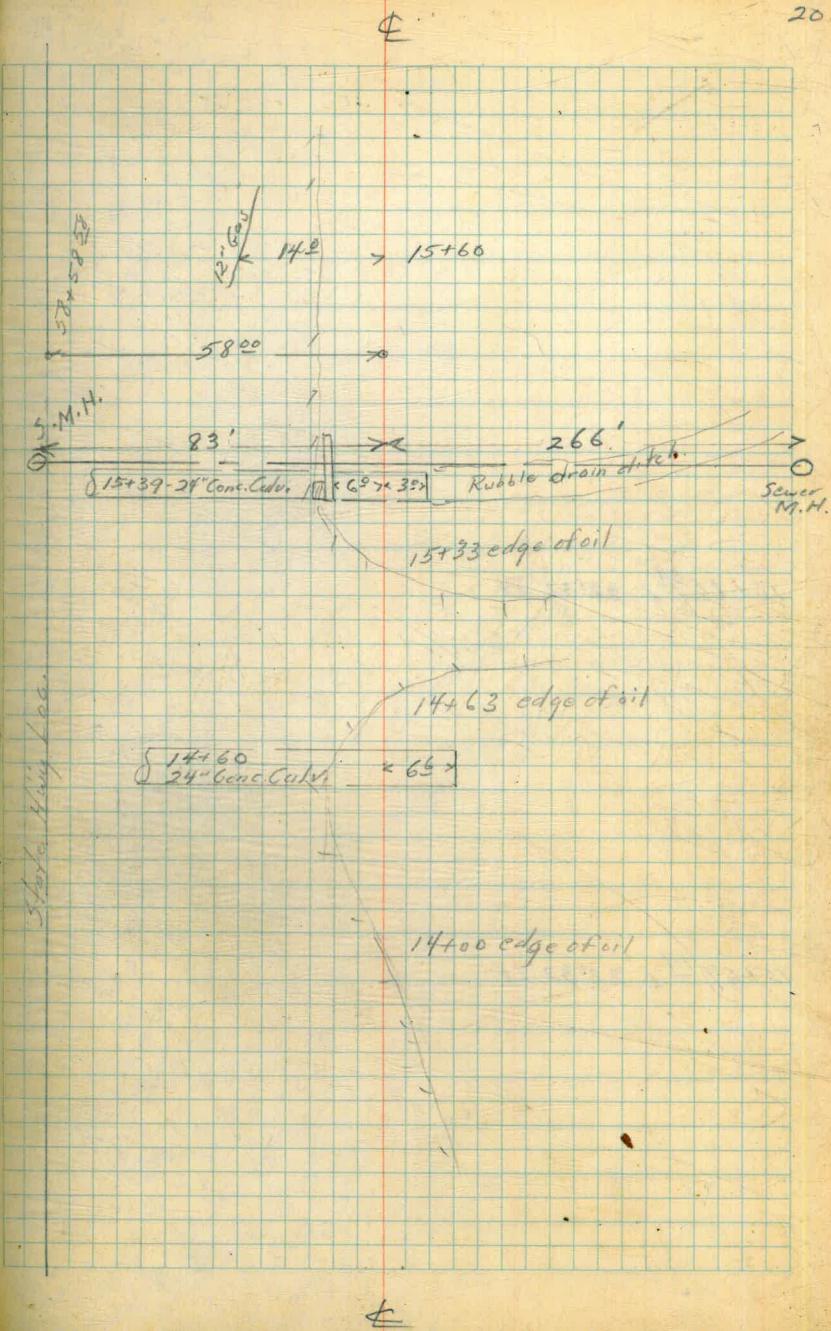
$\Delta = 14^{\circ}49'30''$ Lt.
 $R = 2308$
 $L = 597.20$
 $B.C. = 9+62.40$
 $E.C. = 15+59.60$
 $\text{def } 1' = 0.7447$
 $\text{def } 50' = 0^{\circ}37'.235$

9+62.40 B.C.



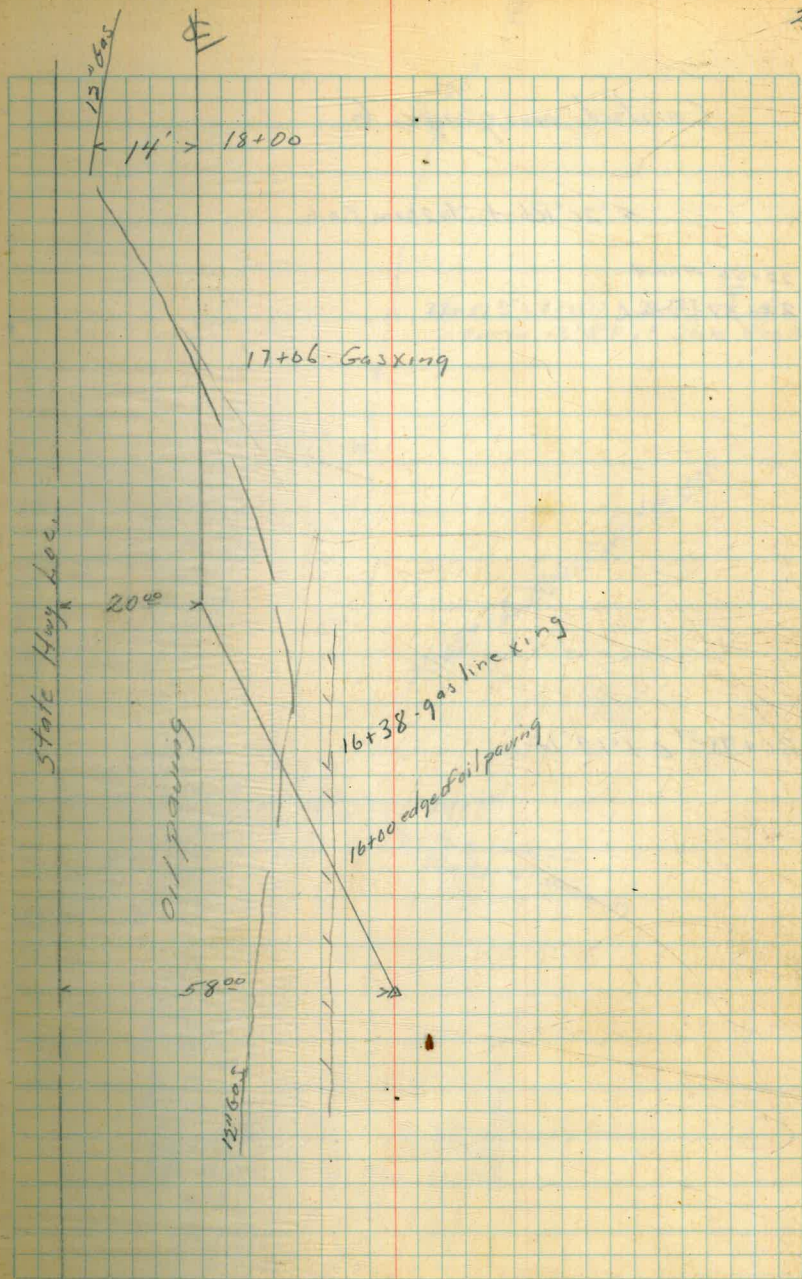
⊗

15+59⁶⁰ E.C.



16+66⁵⁴ 22°32' RT

15+67¹⁴ 22°32' LT

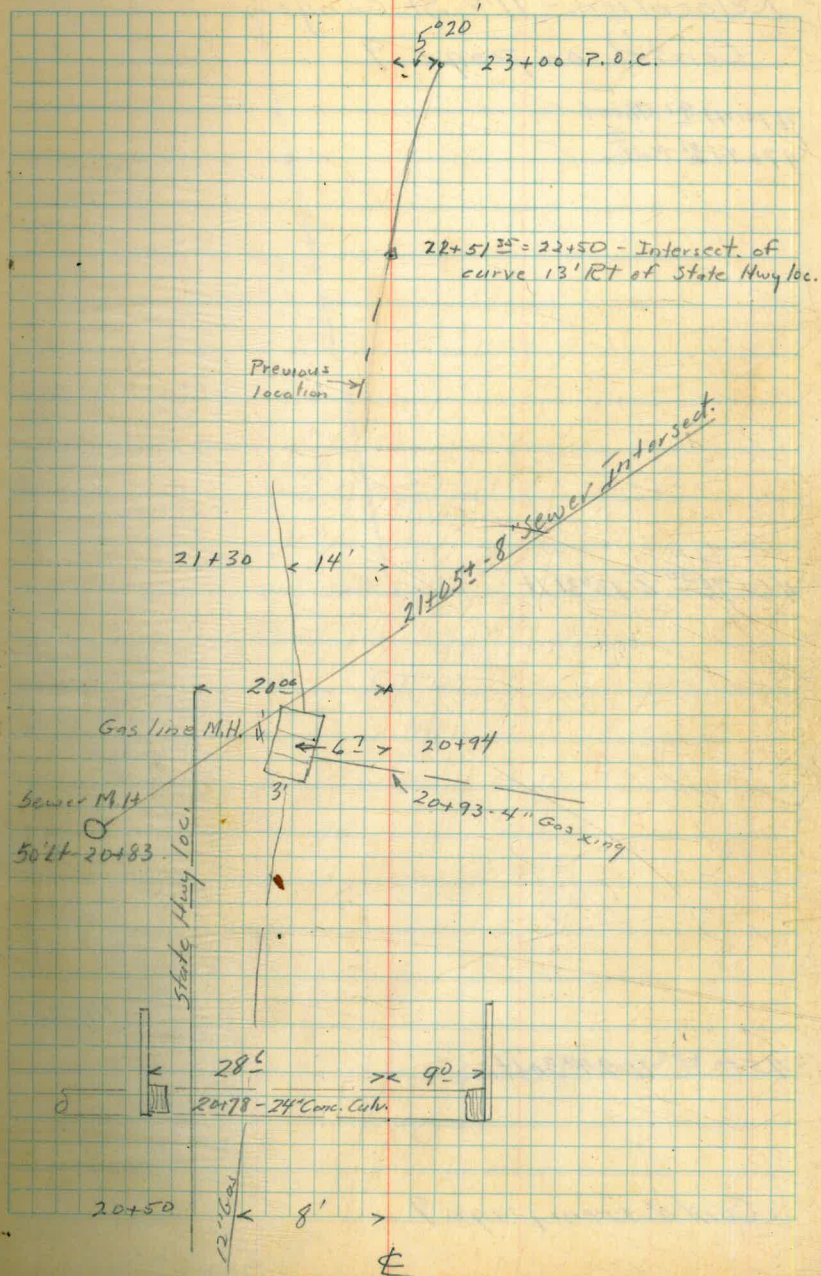


Cont'd. on page 6

5°20' RT - to Sta 23+00 P.O.C.

22+50 Ahead
22+51³⁵ Back

20+98³⁷ ← 1°19' LT



Relocation - 11th St. Canyon

Cont'd on page 9

47+41.97 Ahead

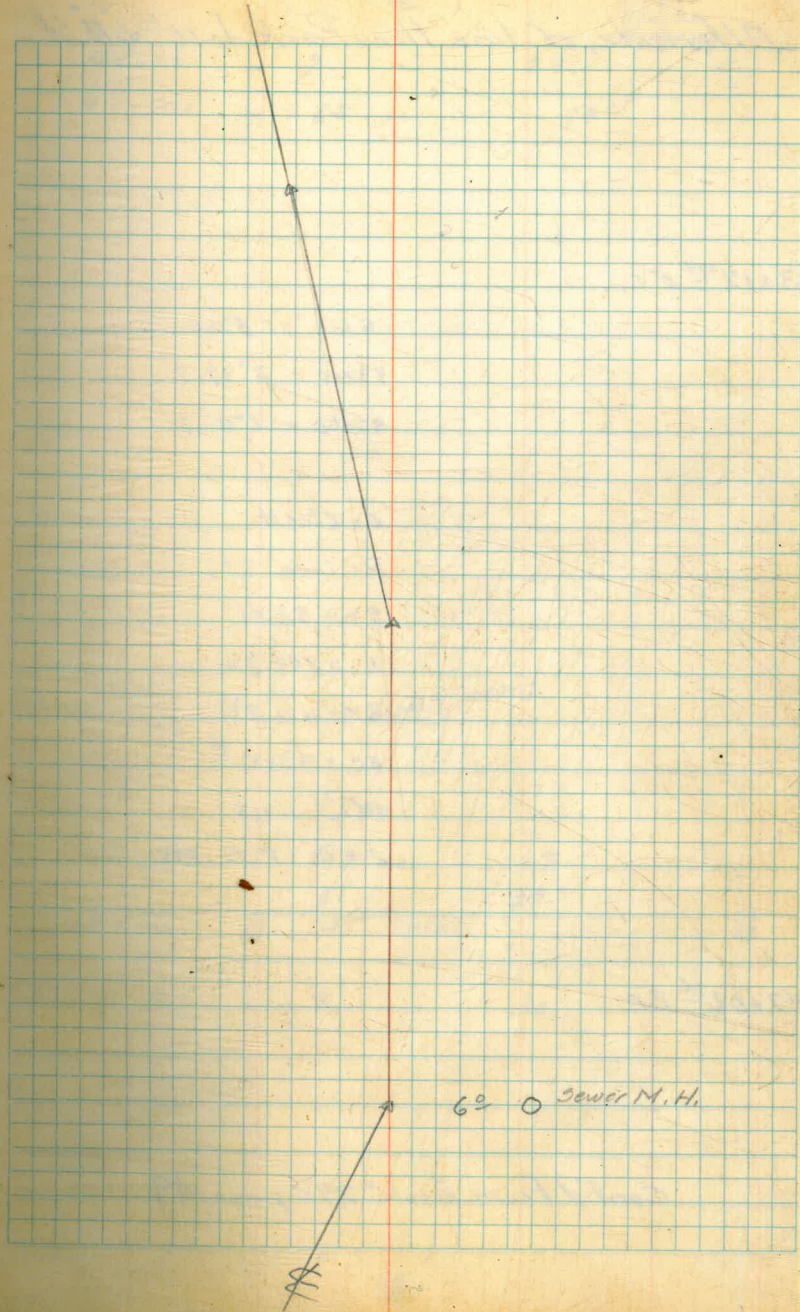
47+41.81 Back

46+98.20 L. 13°31' lt

45+03.00 L. 24°30' lt.

N13°30'W

Cont'd from page 9



Alternate, of line thru Park to 10th & H St

43+12⁹⁸ E.C.

E.C. - 3°00'

43+00 - 2°37.7'

42+50 - 1°11.7'
B.C.

$L = 6°00'$

$R = 1000$

S.T. = 52.41

$L = 104.72$

B.C. = 42+08²⁶

E.C. = 43+12⁹⁸

def 1' = 1.719

def 50' = 1°25'.944

42+08²⁶ B.C.

Cont'd from Book # 275 page 49

10/17/41
Saper
Brooks
Hodgeson

24

44+00 - 7' - 28'
43+50 - 65' - 39'

1" asphalt paving

42+50 - 8' - 29'
42+26 - 5' - 28' 12" curv.
B.C. - 7' - 30'

49+12⁴² E.C.

Test hole 6" thru Park, 7' LT 47+23

	49+12 ⁴²	8°37.5
	49	8°16.1
L = 17°15' RT	+50	6°50.2
R = 1000'	48	5°24.3
S.T. = 151.68	+50	3°58.3
L = 301.07	47	2°32.4
B.C. = 46+11 ³⁵	+50	1°06.4
E.C. = 49+12 ⁴²	46+11 ³⁵	
def 1' = 1.719		
def 50' = 1°25'.944		

46+11³⁵ B.C.

49+12⁴² 9' 20' 12' Corr. I. C. U. V. 26'

E.C. 8' 26' >

48+00 7' 27' >

47+00 7' 27' >

B.C. 7' 26' >

45+50 8' 26' >

edge of paving

edge of paving

54+95⁷⁰ E.C.

$R = 16^{\circ}14'44''$	54+95 ⁷⁰	8'07.2
$R = 1000'$	+SD	6'48.4
$ST = 142.62$	54	5'22.5
$L = 283.32$	+50	3'56.1
B.C. 52+12 ³⁸	53	2'30.6
E.C. 54+95 ⁷⁰	52+50	1'04.7
def. 1 = 1.719	B.C.	
cl. P. 50' 1025' 944		

52+12³⁸ B.C.

7/18/41
Super.
Brick's
Hodgeson 26

6' 28'

54+00 8' 26'

53+00 8' 26'

52+40 8' 26' 12" corr. Iron Culv.

B.C. 8' 26'

51+00 8' 25'

barrel top

edge of paving

⊕

57+71⁴⁰ L: 8°15' Lt

56+20¹⁰ L: 20°30' Lt

Test hole "H" thru Park 10' Lt 55+50

27

59+00 ← 8.5 29' →

57+71⁴⁰ ← 10 28' →

57+46  6' →
6' Corr. Iron Culv.  57+27
← 29' →

57+00 ← 6' 31' →

56+20¹⁰ ← 14' 21' →

56+00 ← 11' 26' →

edge of parking

edge of parking

⊕

E

62+50

← 3'

13'

→

8th St →

61+58° L. 13° 30' Lt

61+31

→

4'

→

12" CORR. 2' CULVERT

29'

→

61+24

61+00

edge of paving

85

295

→

60+50

←

105

27

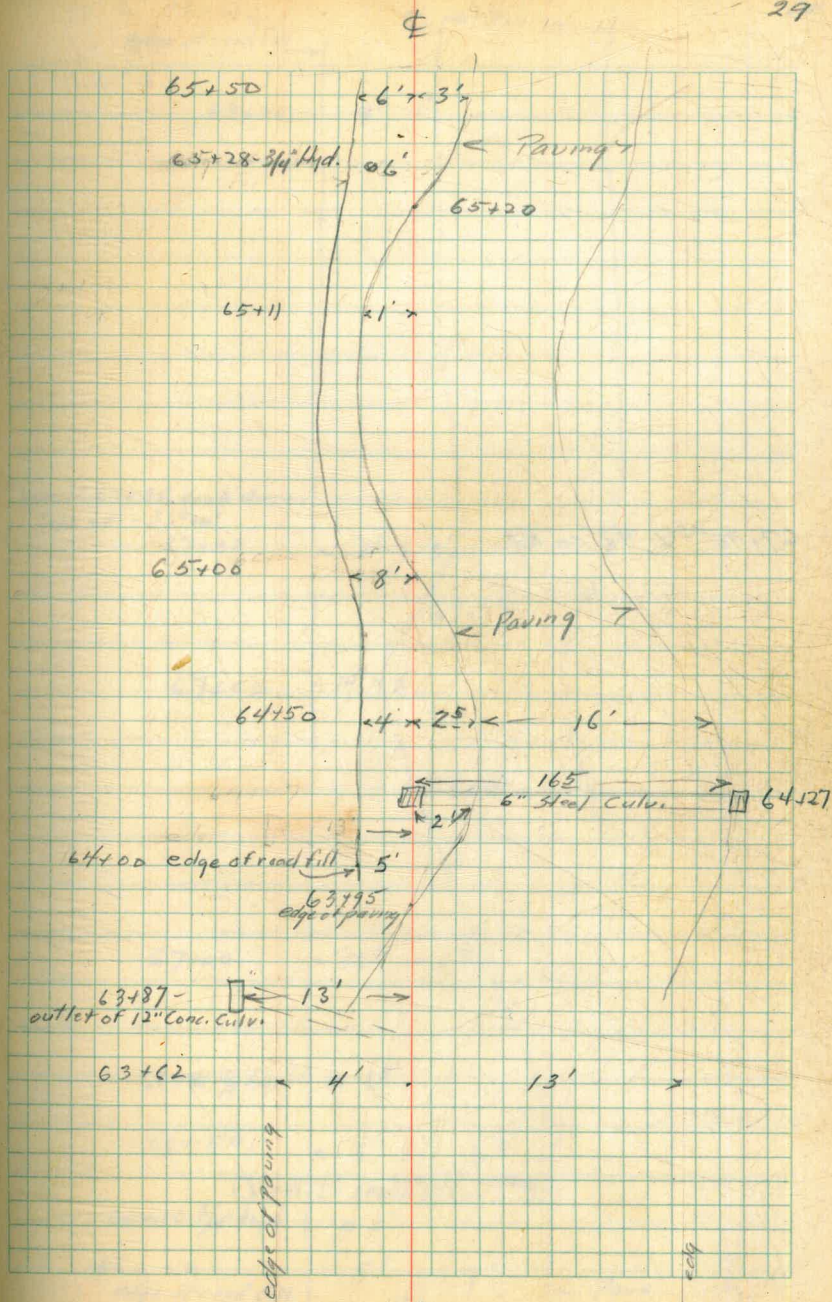
→

E

65+11.00 \angle 13°45' Lt

63+62.00 18°00' Lt

Test hole "I" thru Park, 15' Rt 63+20



66+34 6' Rt
12' Lt
6' I.

67+95 \angle 42° 00' Rt

30

edge of road fill

Paving

68+25

9'

1°

Note. at 67+95, bank drops
to Lt at -33° 00'

67+95

5' 5'

67+72

67+50

14' 2'

67+10

67+00

10' 5' 15'

66+86 $\frac{3}{4}$ hyd. \odot 6.5

66+50

5' 6.5'

66+34 12' 6" steel Culvert

66+10 $\frac{3}{4}$ hyd. \odot 4'

66+00

5'

7'

edge of road fill

Pave

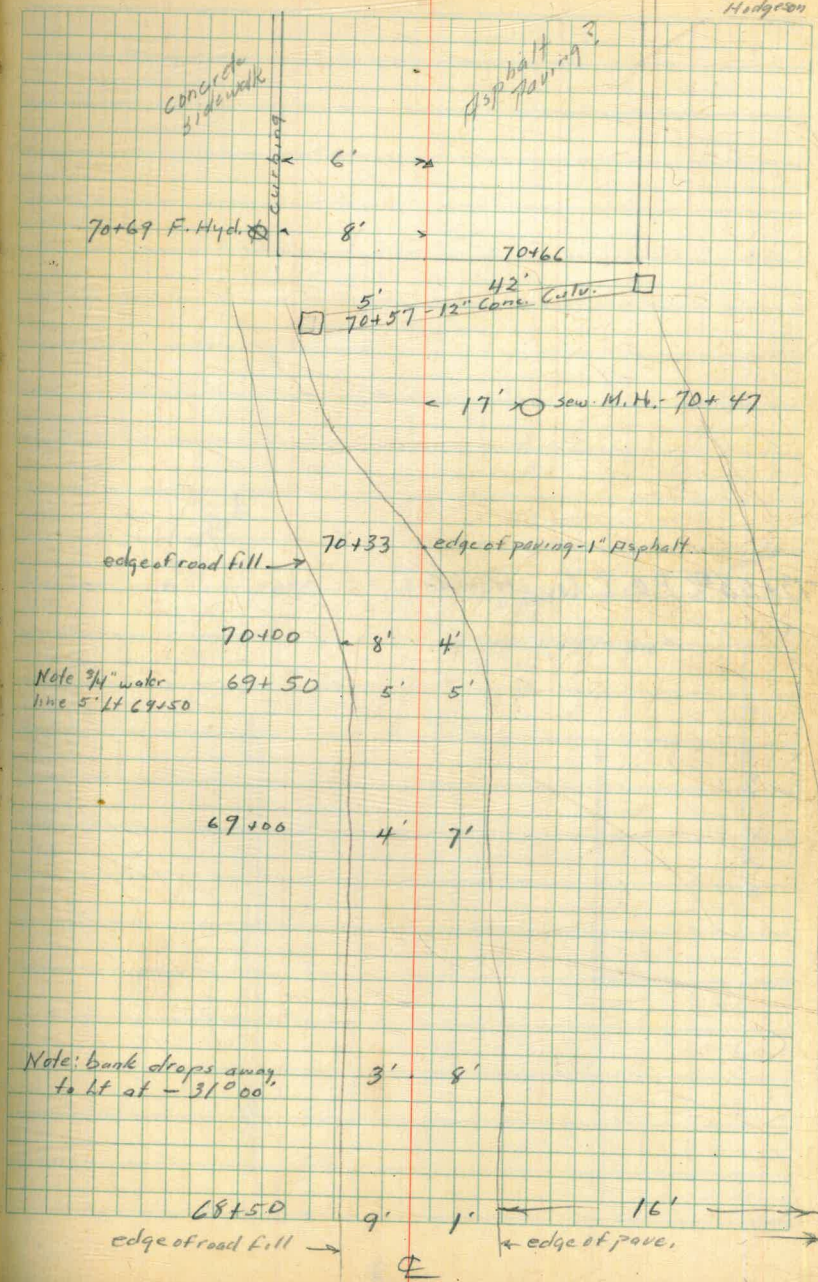
70+78¹⁸ L: 6°18' RT

Test hole "J" Thru Park, 71st 70+51

68+84⁰⁰ L: 21°13' RT

10/21/41 31

30 ppc
Brooks
Haugson



73+53⁵⁵ P.O.T. (on offset line)

£

32

1300

5300

8' → 73+49 - G.V.

N.P.L. Cedar

N.P.L. 10th St

6'

£

E

78+09-F.Hyd. @ 7' → 5' ^{G.V.} @
 = 20' → 78+08 Sew. M.H.

8' @ 77+27-G.V.

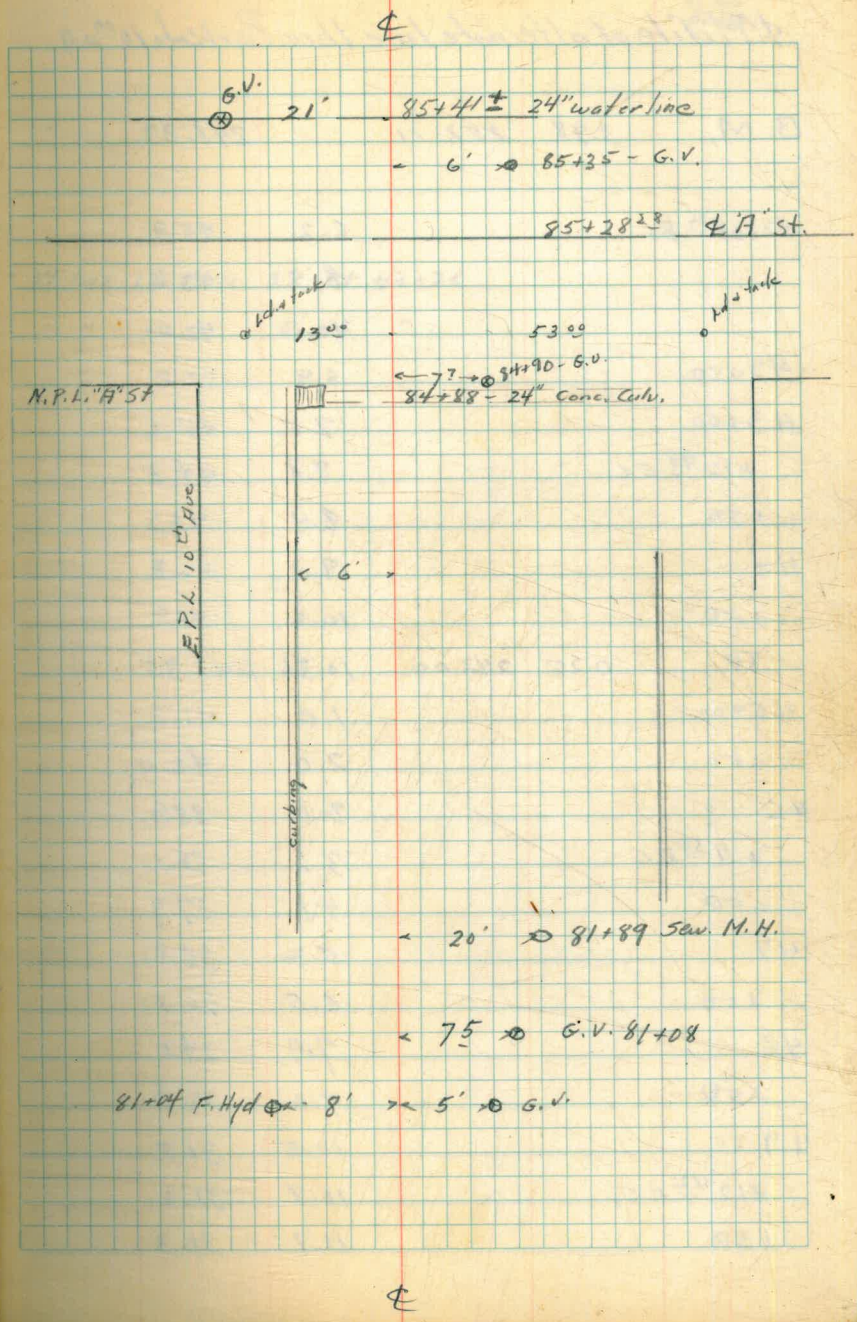
E

75+29⁷⁵ P.O.T.

74+31-F.Hyd. @ 8' ← 5' ^{G.V.} @ 15' @ Sew. M.H.

84+95²⁸ P.D.T. (end offset line)

Test hole K' thru Park 45' Lt 81+77



⊕

⊕

Profile of alternate line thru Park to 10th & A

B.M.	3.78	252.11		248.33
42+08 ²⁶ B.C.			6.2	45.9
			8.5	43.6
			10.1	42.0
42+50			6.9	45.2
43+00			7.5	44.6
+12 ⁹⁸ E.C.			7.8	44.3
+50			8.4	43.7
44			9.3	42.8
+50			10.2	41.9
TP	0.25	242.00	10.36	241.75
45+00			1.0	41.0
+50			2.0	40.0
46			3.1	38.9
+11 ³⁵ B.C.			3.3	38.7
+50			4.1	37.9
47			5.2	36.8
+50			6.5	35.5
48			7.9	34.1
+50			9.2	32.8
49			10.5	31.5
+12 ⁴² E.C.			10.8	31.2
+50			11.7	30.3

10/21/41 35
Super
Brooks

Fl line 12" Cule. 28' RT 42+26

" " " " 5' LT "

		242.00		
TP	0.29	229.68	12.61	229.39
			2.5	27.2
			3.5	26.2
50+00			0.5	29.2
+50			1.7	28.0
51			3.0	26.7
+50			4.2	25.5
52			5.5	24.2
+12 ³ B.C.			5.7	24.0
			9.9	19.8
			8.6	21.1
52+50			6.5	23.2
53			7.8	21.9
+50			8.9	20.8
54			10.1	19.6
+50			11.3	18.4
+95 ¹⁰ E.C.			12.4	17.3
55+00			12.5	17.2
TP	0.50	217.59	12.59	217.09
55+50			1.5	16.1
56			2.4	15.2
+20 ¹⁰ L			2.7	14.9
+50			3.7	13.9
57			5.5	12.1

Fl. line 12" Corr. I Culv. 26' RT 49+94²

" " " " " " 9' LT "

Fl. line 12" Corr. I Culv. 26' RT 52+40

" " " " " " 8' LT "

21759

			8.0	209.6
			9.8	207.8
57+50			8.1	209.5
+71 ⁴⁰ L			9.4	208.2
58			11.6	206.0
TP	0.40	205.17	12.82	204.77
58+50			2.9	202.3
59			6.4	198.8
+50			9.8	95.4
60			12.8	92.4
TP	0.47	192.54	13.10	192.07
60+50			3.2	89.3
61			6.1	86.4
			9.9	82.6
			10.8	81.7
61+50			8.4	84.1
+58 ⁰⁰ L			8.7	83.8
62+00			10.8	81.7
TP	0.20	180.13	12.61	179.93
62+50			1.6	78.5
63			5.0	75.1
+50			7.7	72.4
+62 ⁰⁰ L			8.4	71.7
64+00			10.4	69.7
			13.3	66.8

Fl. line 6" Corr. I Culv. 29' RT 57+27

" " " " " " " " 6' LT 57+46

Fl. line 12" Corr. I Culv. 29' RT 61+24

" " " " " " " " 4' LT 61+31

Fl. line 12" Conc. Culv. 13' LT 63+87 (could not find other end)

180.13

			12.7	167.4
			13.0	67.1
64+50			12.2	67.9
TP	0.33	167.48	12.98	167.15
65+00			2.9	64.6
+11 ⁰⁰ L			3.6	63.9
+50			4.7	62.8
66+00			7.2	60.3
			11.0	56.5
			12.4	55.1
66+50			9.5	58.0
67			11.3	56.2
TP	0.42	155.35	12.55	154.93
67+50			3.2	52.2
67+95 ⁰⁰ L			5.4	50.0
68+50			9.6	45.8
+84 ⁰⁰			13.1	42.3
TP	0.20	142.56	12.99	142.36
69+00			1.5	41.1
+50			5.2	37.4
70			9.4	33.2
+15			10.9	31.7
+33			13.3	29.3
TP	0.58	130.28	12.86	129.70

38

Fl. line 6" Steel Culv. 16⁵ RT 64+27" " " " " on $\frac{1}{2}$ "

Fl. line 6" Culv. 6' RT 66+34

" " " " " 12' LT "

130.28

70+50			2.5	127.8
			5.4	24.9
			3.4	26.9
			1.4	28.9
70+78 ¹⁸ ₂			4.0	26.3
71			4.4	25.9
+50			5.2	25.1
72			5.9	24.4
+50			7.1	23.2
73			7.6	22.7
+50			8.2	22.1
TP	1.66	124.49	7.45	122.83
74+00			1.9	22.6
74+50			2.3	22.2
			1.0	23.5
75			2.0	22.5
+30			2.2	22.3
+50			3.6	20.9
76			7.2	17.3
+50			11.1	13.4
R	0.40	112.10	12.79	111.70
77			2.4	109.7
+50			4.3	107.8
78			6.9	105.2
Set B.M.			4.86	107.24

39

Fl. line 12" Conc. Culv. 5' Lt 70+57

" " " " " 42' Rt "

Rim of Sewer M.H. 17' Rt 70+47

Rim of Sewer M.H. 20' Rt 74+31

Top of Fire Hyd 7' Lt 78+09 - S.E. Cor 10th x Beech

112.10

			5.8	106.3
78+50			10.7	101.4
TP	0.32	99.4	13.01	99.09
79			2.1	97.3
+50			6.3	93.1
80			10.4	89.0
TP	0.11	86.94	12.58	86.83
80+50			2.3	84.6
81			6.3	80.6
+50			8.1	78.8
			8.0	78.9
82			9.4	77.5
+50			10.2	76.7
83			11.2	75.7
+50			11.9	75.0
TP	3.62	78.91	11.65	75.29
84			4.4	74.5
+50			4.8	74.1
85			4.9	74.0
85+41			4.6	74.3
			9.5	69.4
			9.7	69.2
TP	11.93	89.07	1.77	77.14
			4.61	84.46

40

Rim of Sewer M.H. 20' Rt 78+08

Rim of sewer M.H. 20' Rt 81+89

± horizontal 24" G.V. (Note: chamber full of water, elev
 = 21' 2" Rt 85+41 should be checked later after
 water is out)

H. line 24" Conc. Culv. 5' Lt 84+88

B.P. K.W. Cor 11th & A St Rec 84.39

11th St. Relocation 0+90-11+53 ^{25.86}

1423⁷⁷ 4. 22°30'N

0+90⁰⁰ 4. 22°30'N

12/2/41 41

Soper
Brooks
Hodgeson
Davis

1450 end of shrubs

Shrubs

43⁰⁰

12 1421-10⁰⁰ tree

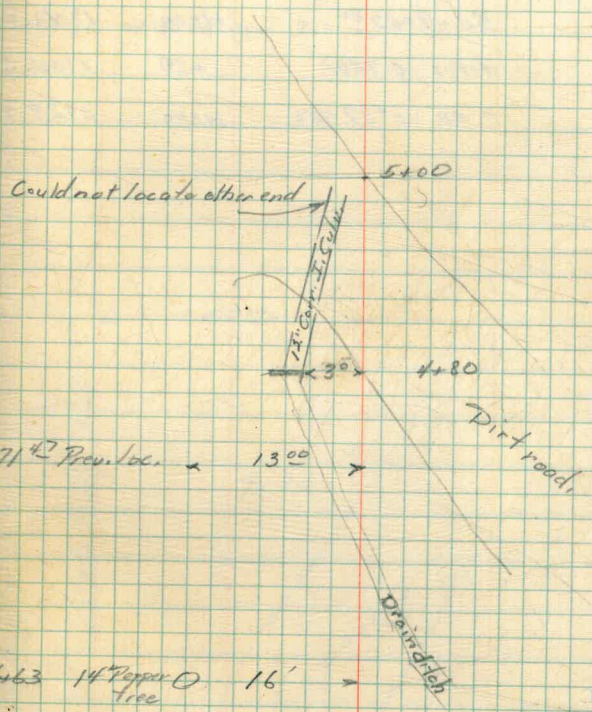
30⁰⁰

State Hwy. Sec.

⊕

5475 guypole \circ 9' \rightarrow 15' 5476 brace for guypole

5465 30" Pepper tree \circ 15' \rightarrow



4474⁴⁵ P.O.T.

4463 14" Pepper tree \circ 16' \rightarrow

4459 18" Pepper tree \circ 13' \rightarrow

Φ

$\Delta = 14^{\circ}49'30''$

$R = 2293'$

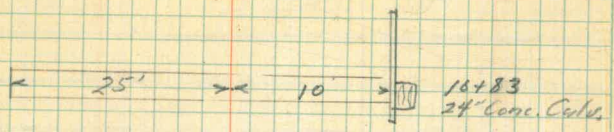
$L = 593.34$ $+50$ $2^{\circ}20.2$

$BC = 9+62.80$ $11+00$ $1^{\circ}42.8$

$def. 1' = 0.7491$ $+50$ $1^{\circ}05.3$

$" 50' = 0^{\circ}37.455$ $10+00$ $0^{\circ}27.9$

$9+62.80 BC$



$10+78$ 14" tree $\odot = 7'$

43.00

State Hwy. Loc.

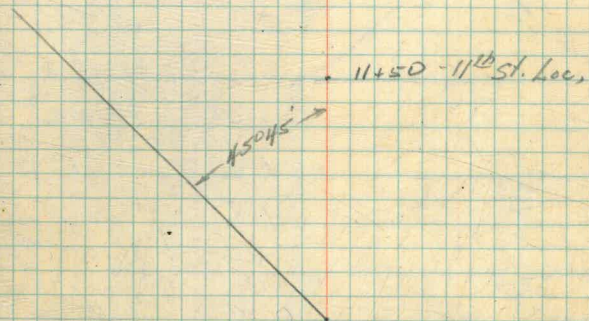
$9+50$

Oil Pumping

$7+88$

72+53.41 =
11425.86

45°45'11" - Intersection of line thru Park
with chord between 11400 & 11450
deflect. from 11450



Profile 11th St. Relocation

B.M.	7.03	90.01	82.98	✓
ck on 0100			7.1	82.9 ✓
0+90	See book	?	6.6	83.4 ✓
1+00			5.7	84.3 ✓
+13			5.1	84.9 ✓
+2397			2.1	87.7 ✓
+50			1.8	88.2 ✓
2+00			1.5	88.5 ✓
+50			1.6	88.4 ✓
3+00			1.8	88.2 ✓
+50			2.7	87.3 ✓
4+00			+0.4	90.4 ✓
+20			+0.7	90.7 ✓
+42			+4.5	94.5 ✓
+74 ^E			0.2	89.6 ✓
R	5.70	92.78	2.93	87.08 ✓
			5.0	87.8 ✓
5+00			3.9	88.9 ✓
+28			2.7	90.1 ✓
+50			3.1	89.7 ✓
+71			7.5	85.3 ✓
6+00			7.2	85.6 ✓
+50			6.3	86.5 ✓

12/3/41
Sper
Brooks
Madgeson
Davis

Nail in pole 11th & Russ

LT	RT
-0.8 12	+1.3 9
-4.1 19	-3.1 7
-3.5 15	-3.0 8
-2.5 10	+3.9 10
-3.3 10	-2.0 6
-3.3 10	+3.3 10
-3.5 15	-3.4 10
-7.5 20	-7.4 17
-2.0 15	-0.6 6
	-2.0 10
	+3.0 10
	+4.3 8
	+4.6 10
	-0.1 10
	+1.2 10

Fl. 195 12" Carr. 5' Cul. 3.96 4+80

-0.6 10	+1.3 10
-2.5 15	-2.0 12
	-1.3 10
+3.3 15	+3.5 13
	+0.2 4
	0.0 6
	+5.2 10
	+0.8 8
	+5.0 10
	+0.6 10

92.78

7+00		4.3	88.5	✓	
+40		1.8	91.0	✓	
+50		1.7	91.1	✓	
IT	7.55	97.94	2.39	90.39	✓
ck on B.M.		9.25	88.69	✓	
8+00		7.0	90.9	✓	
+50		6.4	91.5	✓	
9+00		6.1	91.8	✓	
+50		6.1	91.8	✓	
+62 ⁸⁰ BC.		5.8	92.1	✓	
10		5.5	92.4	✓	
+50	Book 574-37	5.3	92.6	✓	
		9.7	88.2	✓	
		11.3	86.6	✓	
11		3.7	94.2	✓	
11+25 ⁸⁶		3.7	94.2	✓	
72+53 ⁴²					

46

Rec. elev. 88.73

$$\begin{array}{r} -56 \\ 14 \end{array} \quad \begin{array}{r} 0.0 \\ 6 \end{array} \quad \begin{array}{r} +0.3 \\ 10 \end{array}$$

$$\begin{array}{r} -59 \\ 15 \end{array} \quad \begin{array}{r} -50 \\ 12 \end{array} \quad \begin{array}{r} +0.2 \\ 10 \end{array}$$

$$\begin{array}{r} -36 \\ 15 \end{array} \quad \begin{array}{r} +10 \\ 3 \end{array} \quad \begin{array}{r} +0.2 \\ 10 \end{array}$$

Fl. line 24" Comp. Curv., 10' RT 10+83

$$\begin{array}{r} -13 \\ 10 \end{array} \quad \begin{array}{r} 25' Lt \\ 8 \end{array} \quad \begin{array}{r} -0.2 \\ 8 \end{array} \quad \begin{array}{r} -10 \\ 11 \end{array} \quad \begin{array}{r} -0.6 \\ 15 \end{array}$$

$$\begin{array}{r} -0.2 \\ 10 \end{array} \quad \begin{array}{r} -0.3 \\ 10 \end{array}$$

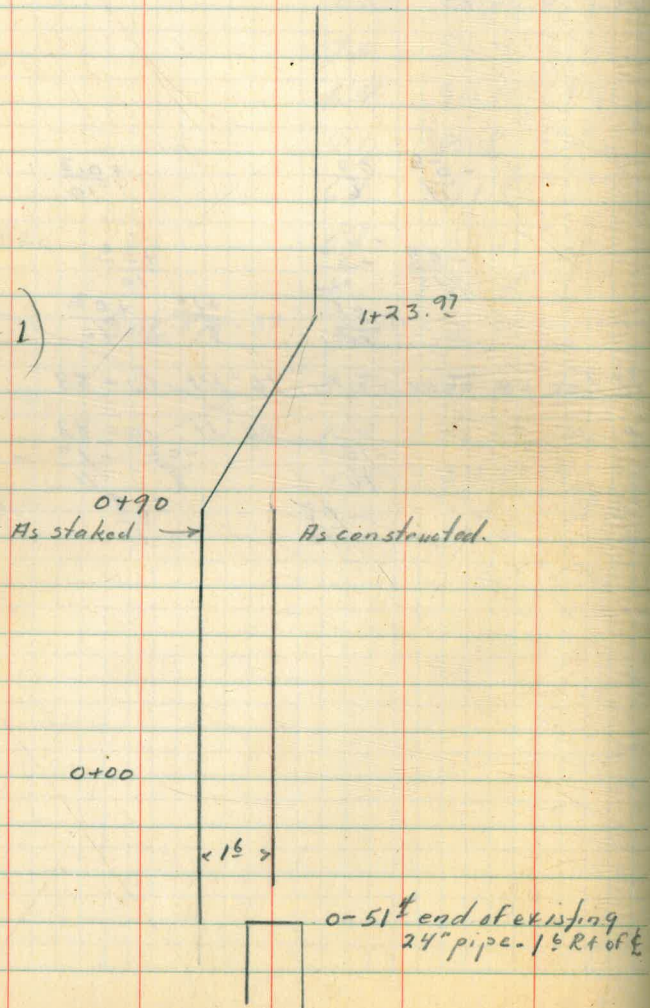
Line revision, 11th & Russ

3/19/42

47

Saper
Bowlin
Davis

(See Page 1)



ELEV'S OF PIPE AT UPAS & CANYADA WAY

SKETCH ON PAGE 49

B.M.	2.70	190.21 ✓	187.51
		10.15	180.06 ✓
SET TP		3.78	186.43 ✓
		7.20	183.01 ✓
TP ABOVE	7.47	193.90 ✓	186.43
		2.80	191.10 ✓
TP	4.61	191.04 ✓	186.43
		10.8	180.2 ✓
		12.5	178.5 ✓

JAN 18, 1946 SOPER
WADELL
PHILLIPS

48.

(W.O. AR 2899)

STATE HWY BM #12 - RR SPIKE IN 24" OAK (CITY DATUM)

TOP OF 30" C.I.P. AT STA 84+00 ± SET LATH ON PIPE - 6.19 LONG

SET TP ON N.E. COR OF CONC. BRIDGE HEADING ON WEST EDGE OF ROAD

TOP OF 30" C.I.P. AT STA 84+30 ± SET LATH ON PIPE - 2.84 LONG
SEE SKETCH - NEXT PAGE

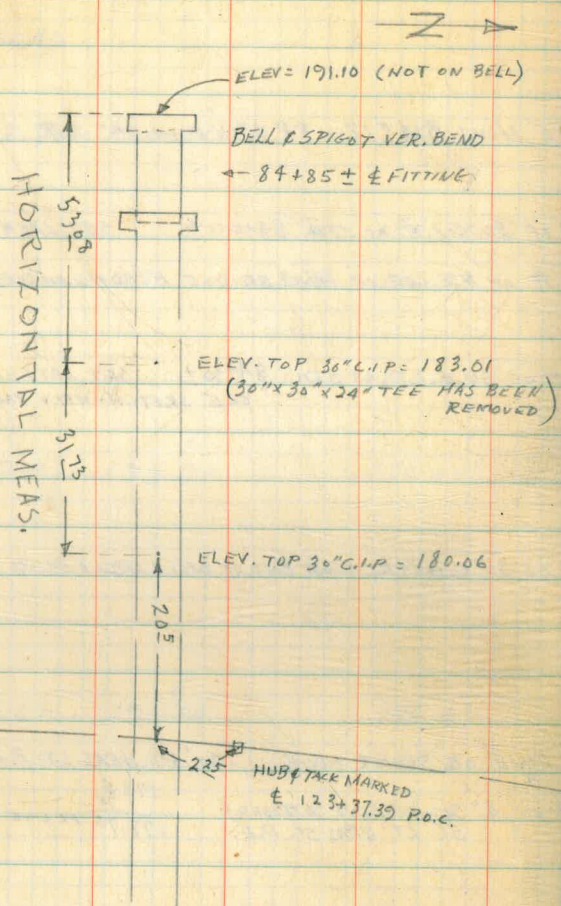
TOP OF 30" C.I.P. AT WEST END OF BELL & SPIGOT BEND STA 84+85

FL. LINE OF SEWER M.H. 1 40' RT UPAS ST. P.K.

TOP OF 8" SEWER LINE (EXPOSED)
56' LT UPAS ST. P.K.

178.5
- 7.75
177.75 FL. LINE

JAN. 18, 1946 49
SEPER
WARDEN
PHILLIPS

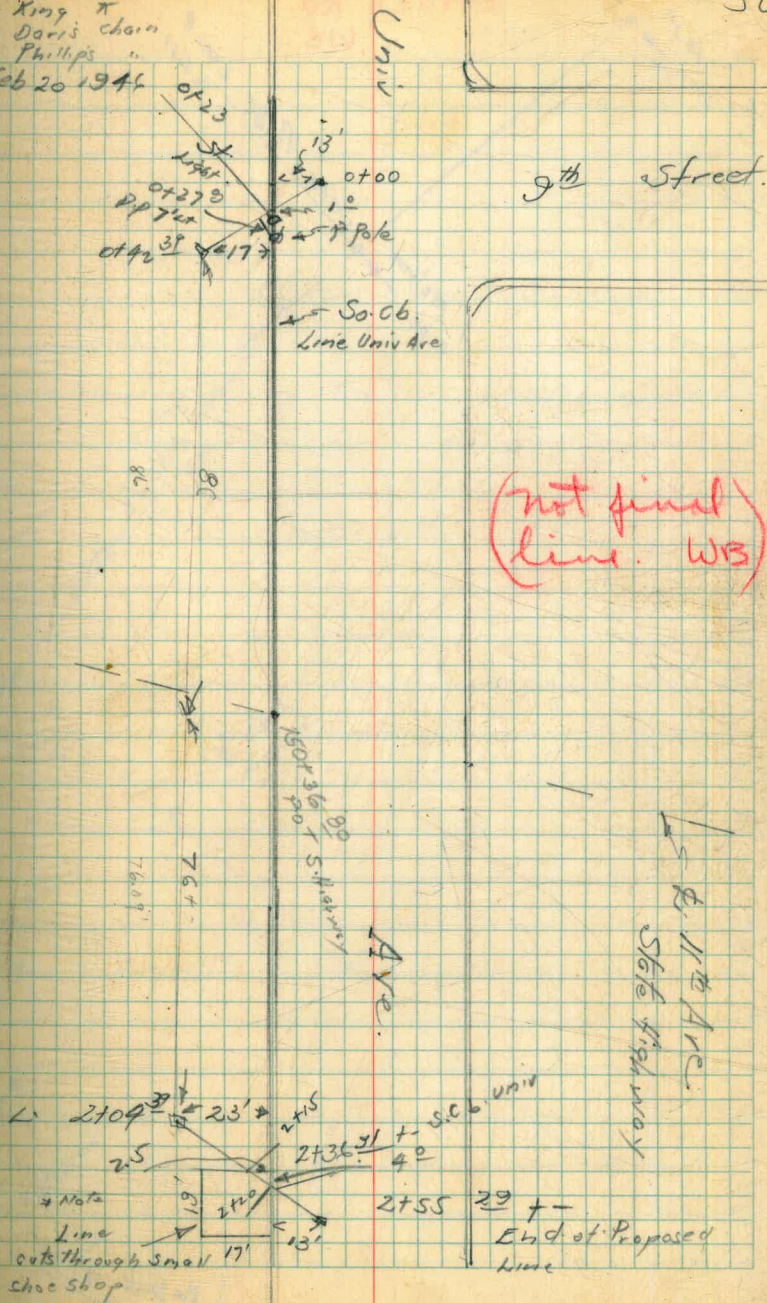


Profile Levels for proposed
Pipe line between 9th + 10th on Univ Ave

BM	420	287.96	283.76	NW BP 2 nd Univ
0100		4.8	283.2	
+18 ²	Gutter	5.3	282.7	
"	Top Curb	4.7	283.3	
+42 ³⁹	L.	5.2	282.8	
+50		4.9		
110		5.0		
+50		4.7		
2+04 ³⁹		5.1	282.9	
2+36 ⁹¹	Top cb.	5.5	282.5	
"	Gutter	6.1	281.9	
2+55 ³⁹	End.	5.5	282.5	
Check BM		5.90	282.06	SW BP 10 th Univ
			282.02	Revised
			0.0444	

Class Notes
King &
Davis chain
Phillips
Feb 20 1944

50.



12" 2" PL
iron pipe

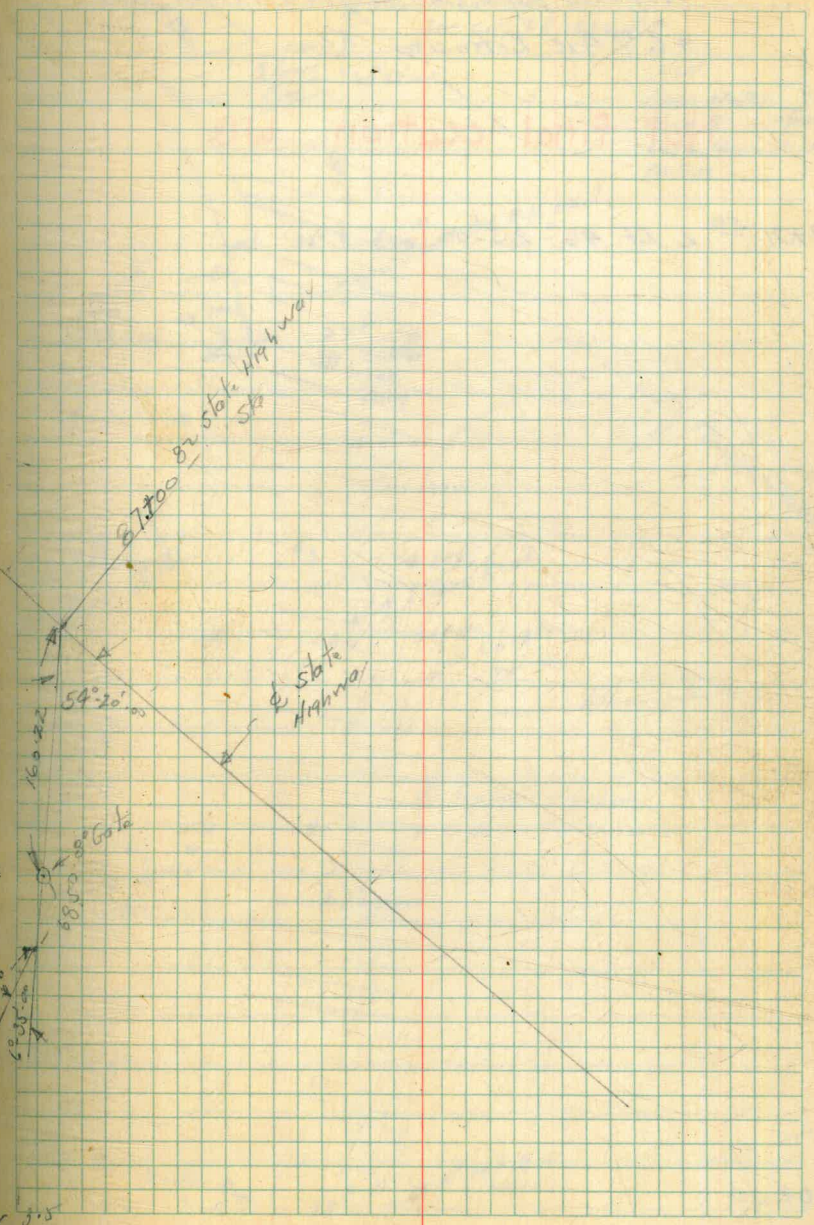
Friar's Rd.
WB

12" iron
pipe

90150 77 BC - 2000 R
To left

160.22
6850

51



87100 82.50% Highway
Sta

6" 50%
Hanna

54° 30''

160.22

6850
Gate

(No Dist.
M.H.?)

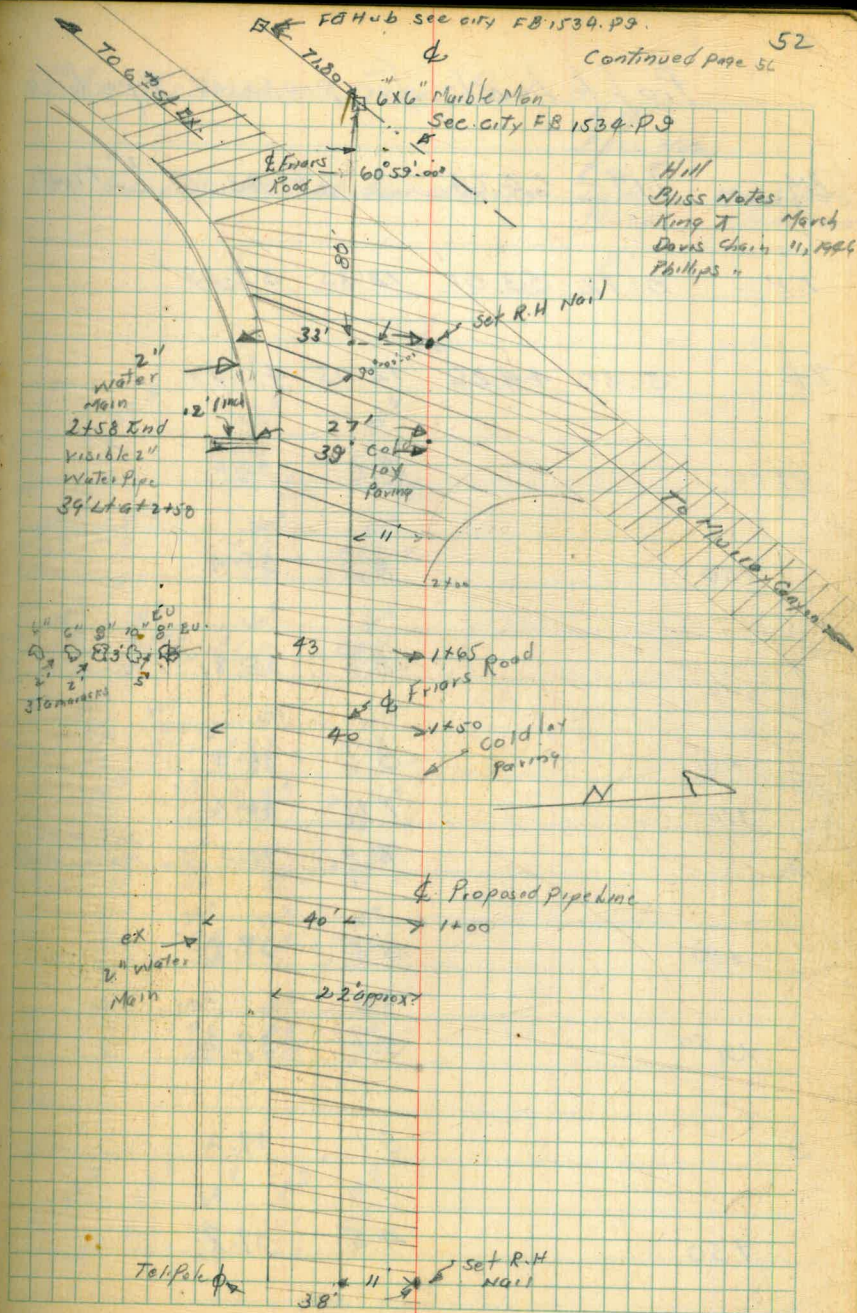
3.5
4 Meter

Proposed pipe line location Friars Road
 + 6th Arc Extension 'A' Line

Not final location. WB

2791.50 L. Lt 46°-25'-00"

0+00



Profile Levels for proposed Pipe Line

BM. 1.19 64.64 63.45 1" Pipe

T.P. 0.72 53.01 12.35 52.29 ✓

T.P. 3.30 44.26 12.05 40.96 ✓

0+00 9.1 35.2

+50 8.9 35.4

1 8.5 35.8

+50 8.0 36.3

170 1.7 36.6

2. 6.8 37.5 *Curve to Murray Road*

+50 5.5 38.8

+91.50 5.1 39.2

3 5.1 39.2

+50 4.5 39.8

6th Ave Extension + Friars Road

State Highway BM # 81.400 - Lt 88+89

H.I.I
Bliss Notes
King T
Davis
Phillips
Marshall-46
Cloudy 1000

27.2
Level out 100
-8.0
43
+0.3
30 Edge
35.5
35.2
00
21 SE Edge

27.3
Level out 100
-8.1
43
+1.0
28
+0.3
36.4
35.7

28.0
Level out 100
-7.8
42
+1.0
30
+0.3
31.3
36.8
36.1

28.3
Level out 100
-8.0
43
+0.8
30
+0.3
30.3
37.1
36.6

28.3
Level out 100
-8.5
45
+0.8
30
+0.2
31.3
37.4
36.9
38.1
38.7

28.3
Level out 100
-5.5
60
+0.4
38
+0.2
39.2
38.7

28.3
Level out 100
-5.7
81
+0.6
46
+0.3
38
+0.4
39.2
38.8
37.1

28.3
Level out 100
-6.3
100
+0.1
36
+0.1
39.0
39.8
37.1

π
44.26 ✓

4+0 42 40.1 Edge Parking

+50 2.8 41.5

51 1.3 43.0

T.P. 3.88 46.37 1.77 42.49 ✓

+50 3.6 42.8

3.0 43.4 int 16 N. side

2.9 43.5 Edge Par

6 2.4 44.0

2.2 44.2 Edge Parking

124⁴⁸ - L.R.T 3.0 43.4 sph + sample

1.7 44.7 Edge Parking To Lindell Ave

+50 2.3 44.1

54.

L

4

R

34.10 35.0 36.5 36.8 40.1 40.0
 -6.0 -5.1 -3.6 -3.3 0.0 -0.1
 85 55 49 37 31 23'S Edge Parking
 39.4 35.4 41.5 41.0 40.6
 -7.1 -6.1 0.0 -0.5 -0.3 N Edge Parking
 100 65 45 32'S Edge Parking
 34.7 35.9 41.7 42.0 41.0 40.0
 -8.3 6.1 -7.3 -7.0 -2.0 0.0
 104 75 60 39 5' N Edge 4'

38.4 38.7 42.3 41.8
 9.4 -9.1 -0.5 -1.0
 106 76 4'S Edge oil P. 10' N Edge oil P.

34.7 38.9 41.5 43.2 43.0 43.1
 -6.3 -5.1 -2.5 -0.8 -1.0 -0.9
 112 87 56 52 40'S Edge 4'

39.5 39.1 42.1 42.1 42.8
 -5.3 -4.3 -1.3 -1.3 -0.5
 110 68 62 52'S Edge 25'

38.8 40.7 42.7
 -5.3 -3.4 -1.4
 100 60 25'

46.37 ✓

	3.5	42.9	Edge Paring
7+0	2.2	44.2	
	1.7	44.7	Edge Paring
	2.3	44.1	Edge Con Slope
+50	2.8	43.6	
	3.9	42.5	Edge Con Paring
8	4.7	41.7	
+53.34 L	7.0	39.4	2x L 7.0 For 7.0
9	8.4	38.0	
+50	10.0	36.4	
10	12.0	34.4	
+50	13.2	33.2	
T.P.	12.72	58.67	0.42 ✓ 45.95 ✓
T.P.	9.53	66.74	✓ 1.46 57.21 ✓

check BM starting

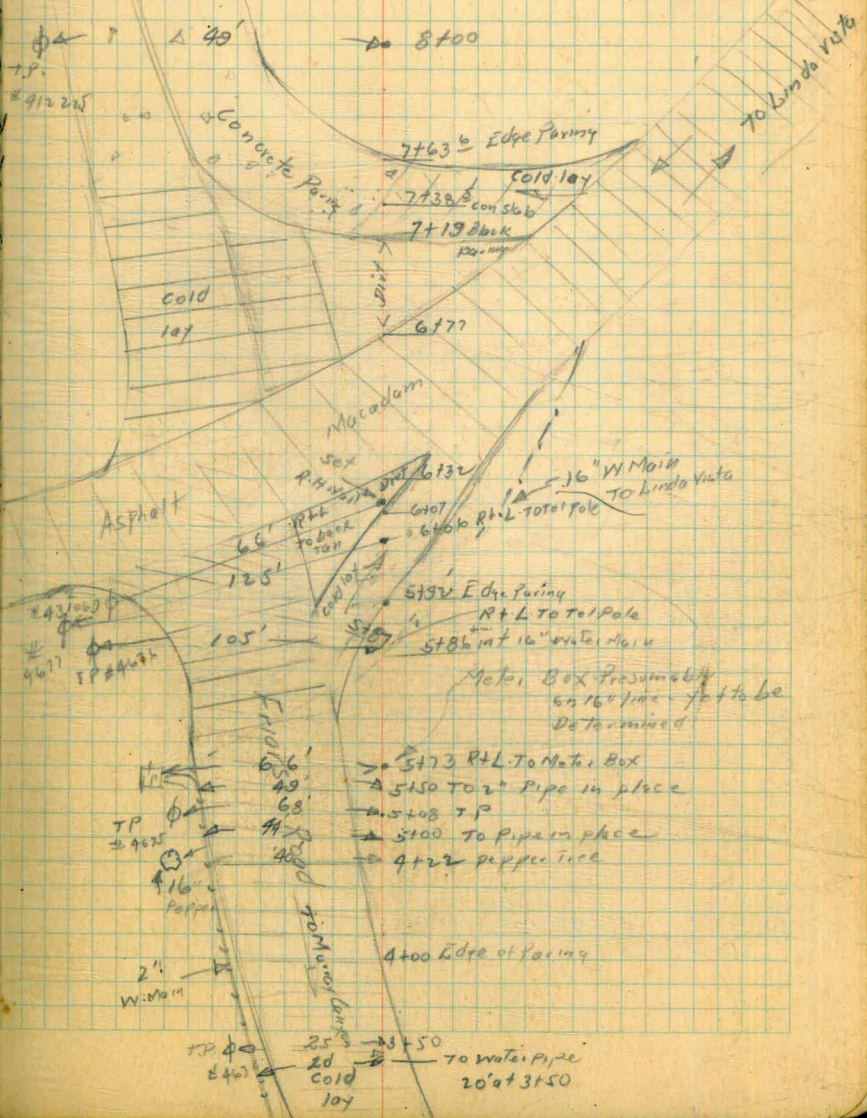
	36.9	38.5	40.4	41.5
	-6.0	-9.4	-2.5	-1.9
	110	90	45	25
53	37.8	37.4	42.7	42.7
	6.4	-4.8	-1.5	-1.5
	90	60	53	43.4
			93.5 Edge	43 N edge

	36.9	39.2	43.3	43.6
	-6.7	-4.4	-0.3	0.0
	90	55	45	35

	35.5	38.2	41.7	42.0	41.3
	-6.2	-3.5	0.0	+0.3	-0.4
	90	68	45	33	8 N Edge

	32.4	37.1	39.3	39.0
	-7.0	-0.3	-0.2	-0.9
	90	44	27.5 Edge	7 N Edge

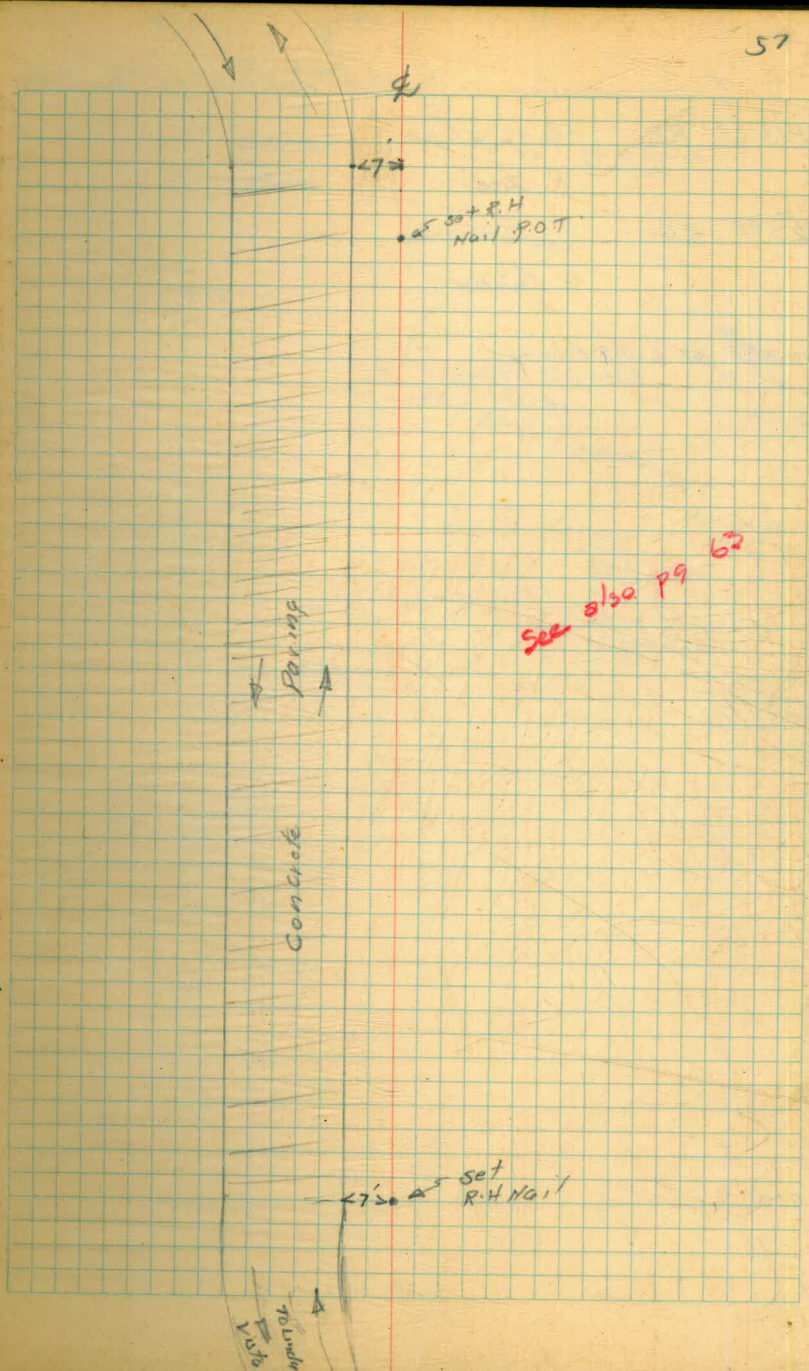
6+24³⁸ L R + 9°-18'-00



10450 ... End approx. E.C. old 6th St Paring

8459 2^d L. Rt 3° 14' 00". Approx. B.C. old 6th St

57



"B" Line Location for Pipeline. Friars Road & 6th Ave. Extension

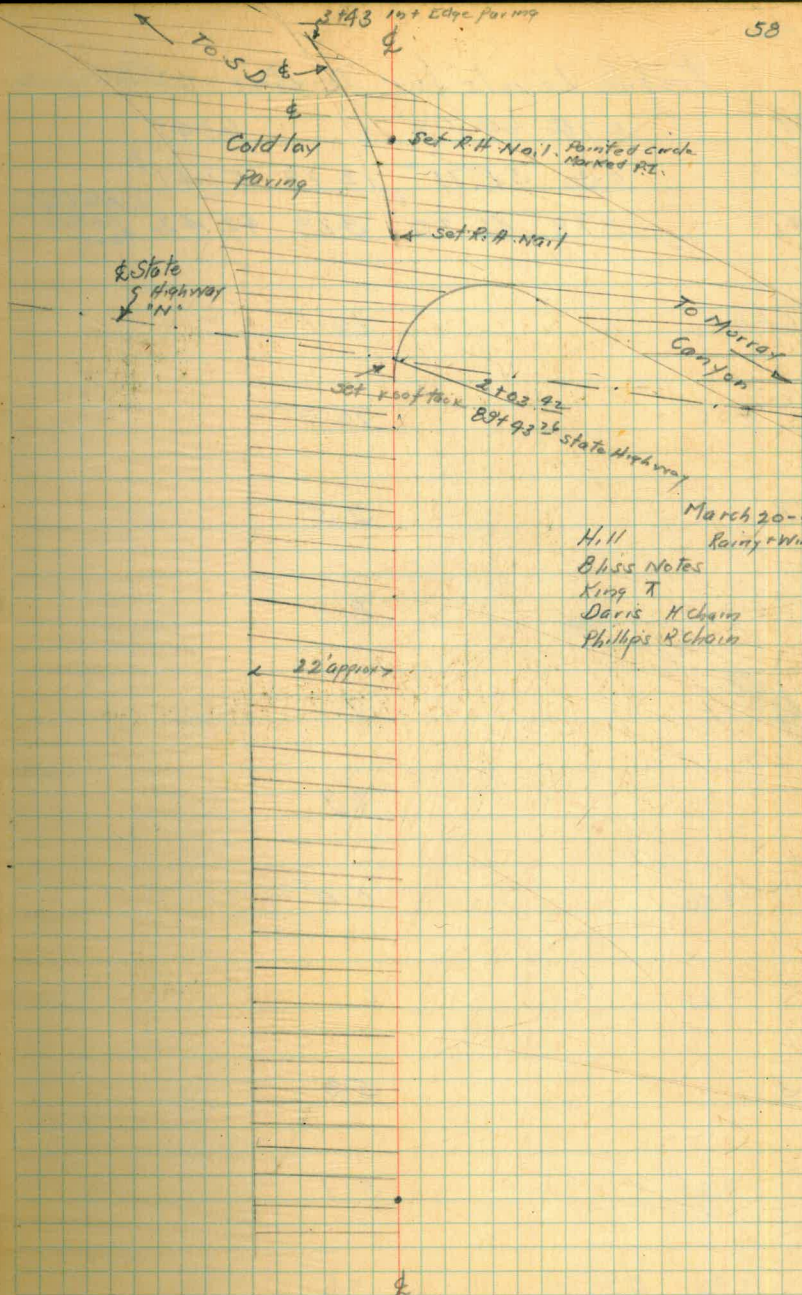
3+13.91 P.I. $\Delta 96^{\circ}25'00$

R. 200'

2+29.22 B.C. T 85.75

L. 162.02

2+03.92 Int. of State Highway
89+93.76 "H" Line.



Profile levels for "B" Line 6th St

BM	0.74	64.19		63.45
TP	0.30	51.71	12.78	51.41
TP	2.78	45.20	9.29	42.42

No. 1 in
7th Pile
#2675

0+00 10.1

+50 10.0

1 9.5

+50 8.8

2 7.7

B.C. 6.9

+50 6.4

+75 6.1

3 5.9

+25 5.7

+43 E.Paving 5.6

and Friars Road

59

70' + 17 Stuo

π
9520

3 +50	5.6	
+70	6.0	
+75	9.3	
+91 ²⁰	2.0	
4	2.7	
+25	5.5	39.7
+50	5.0	40.2
5	4.0	41.2
+50	3.9	41.3
+62	3.5	41.7
+71	0.8	44.4
6+00	0.5	44.7
+02 Edge paving	0.3	44.9

60

	$\frac{-0.1}{4}$	$\frac{-2.0}{6}$	$\frac{+4.2}{12}$		
	$\frac{-1.0}{14' \text{ pipe}}$	$\frac{-0.4}{8}$	$\frac{-1.9}{3}$	$\frac{+3.7}{4}$	$\frac{+6.3}{11}$
	$\frac{-3.0}{19' \text{ pipe}}$	$\frac{-2.2}{12}$	$\frac{-4.0}{5}$	$\frac{+2.3}{12}$	
		$\frac{+1.7}{12}$	$\frac{+0.6}{8}$	$\frac{+1.3}{4}$	$\frac{+1.8}{9}$ $\frac{+9.5}{15}$
		$\frac{+1.3}{10}$	$\frac{+0.5}{5}$	$\frac{+1.1}{11}$	
	$\frac{2.0}{14}$	$\frac{+2.2}{5}$	$\frac{0.0}{2}$	$\frac{0.0}{10}$	
			$\frac{-0.8}{10}$	$\frac{+0.3}{9}$	$\frac{-2.1}{17}$

(Top of 16" C.I. Pipe is 6.3' below ground
at sta. 6+00. This Information by
L. Hill Mar. 25, 1946 (m.H.)

7520

T.P.	2.05	46.54'	0.71	44.93'
6+16 25	BC		1.3	45.2
+18	Edge Paring		1.1	45.4
+29	Edge Paring		0.8	45.7
+50			2.1	44.4
+67	Edge block paring		2.9	43.6
7+6	Approx. Edge block paring		1.5	45.0
+37 ⁶	Con. Paring Edge see sketch p. 23		2.6	43.9
+47	Con Paring Edge		3.2	43.3
+50			3.4	43.1
8			4.6	41.9
+50			5.3	41.2
+64			5.8	40.7

$$\frac{-1.8}{10} \quad \frac{-0.4}{4} \quad \frac{+0.8}{8} \quad \frac{+2.2}{13}$$

$$\frac{-1.7}{9} \quad \frac{+1.3}{8} \quad \frac{+6.0}{13}$$

X
46.54

62

8+76	7.3	39.2	
9	7.7	38.8	
+22	6.9		
+39 ⁷² E.C.	8.4		
+50	9.6		
+75	10.7		
10	12.1		
+50	13.6		
+88	14.6		
Check Pairing 7° L + 8 + 59 ⁹⁹ "A"	7.4	39.1	39.0

Line this Book page 55

$$\frac{-1.0}{12} \quad \frac{-0.3}{2} \quad \frac{+0.5}{6} \quad \frac{+3.0}{15}$$

$$\frac{-1.3}{11} \quad \frac{-1.1}{7} \quad \frac{+1.5}{3} \quad \frac{+12.1}{15}$$

$$\frac{-3.2}{11} \quad \frac{-2.6}{6} \quad \frac{+1.0}{2} \quad \frac{+12.5}{15}$$

$$\frac{-2.0}{11} \quad \frac{-1.5}{5} \quad \frac{+1.5}{2} \quad \frac{+15.1}{16}$$

$$\frac{-1.1}{11} \quad \frac{-0.6}{5} \quad \frac{+0.5}{3} \quad \frac{+17.0}{21}$$

$$\frac{-0.7}{11} \quad \frac{+0.8}{5} \quad \frac{+5.5}{12}$$

Line Change $1/6$ " Ave ext + Friars Road
4+74 24 " C" = 4+05.13 8 " line

3+60 33 PI.

Δ 46°-25'-00

R. 300

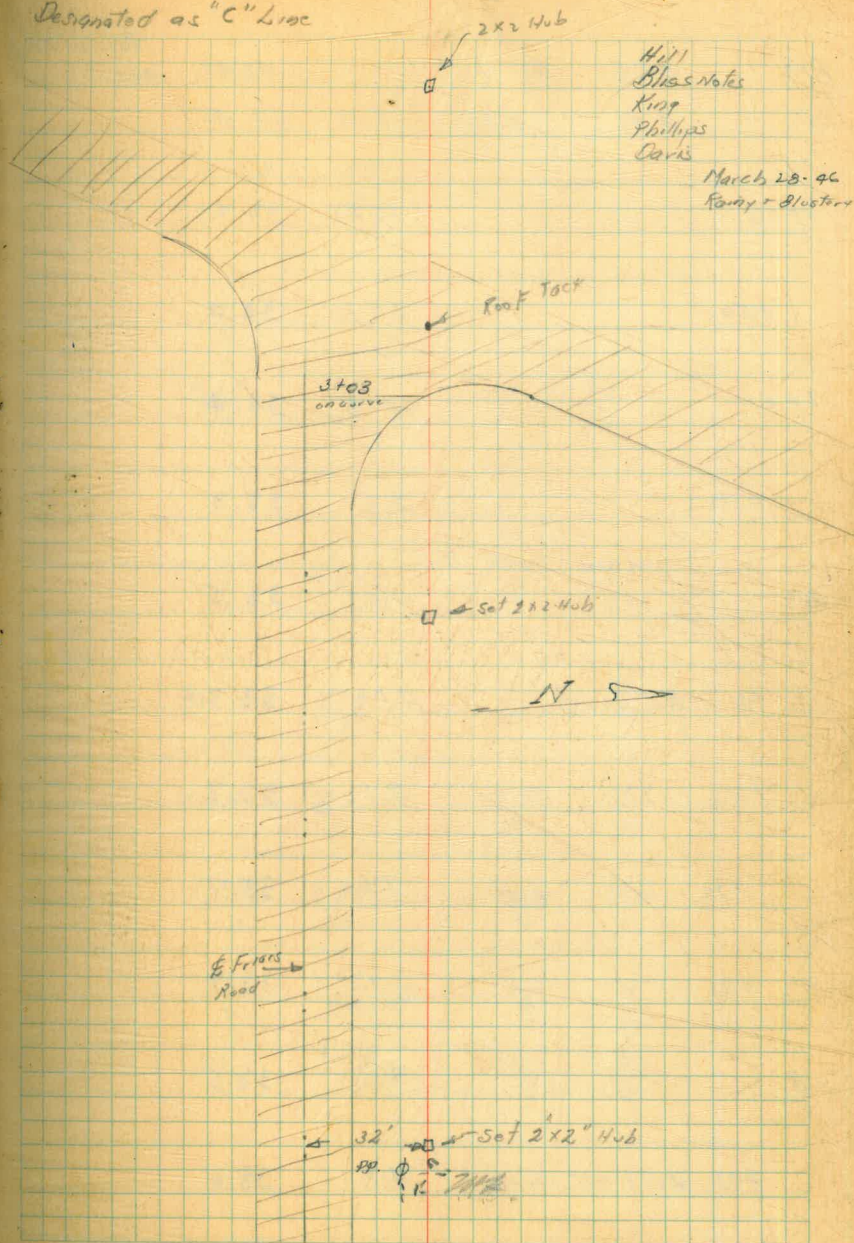
T 128.63 ✓

L 243.04 ✓

2+31 70 BC Lt

0+00

Designated as "C" Line



$9+39.72$
 $8+40.87$ Begin Pipe

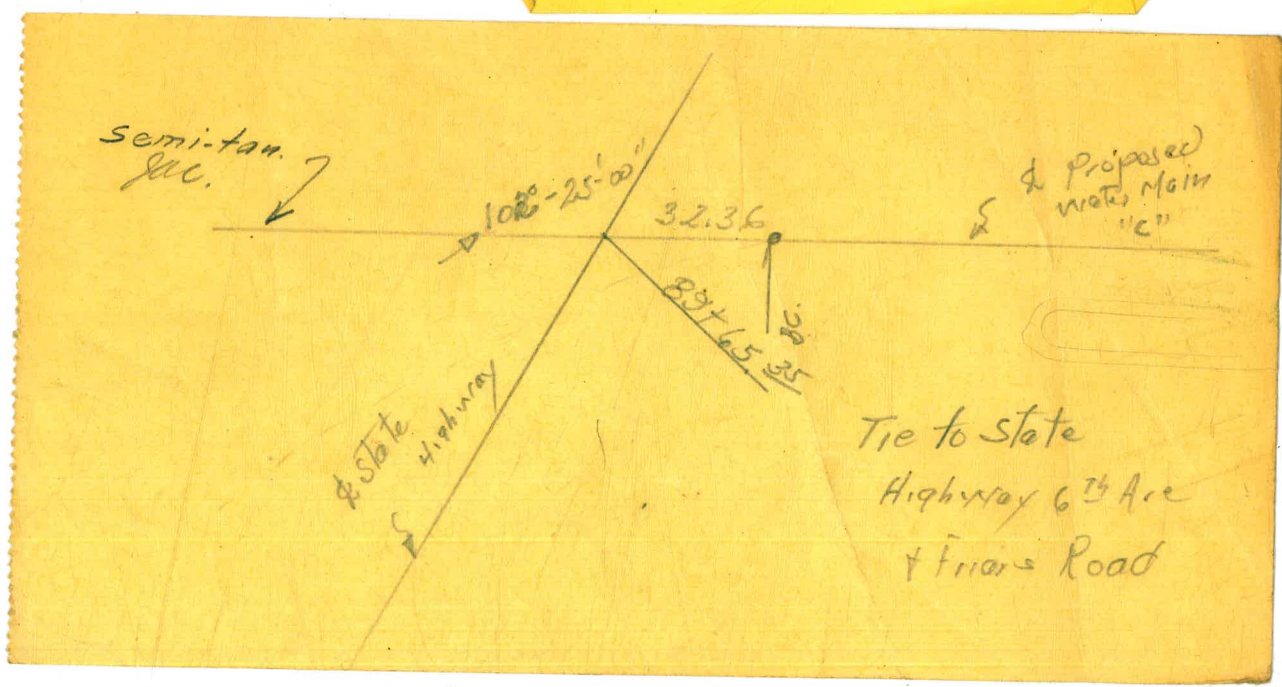
 98.85

$8+40.87$ End Pipe. $2^{\circ}50'$
 $8+00$ ——— $4^{\circ}00'$
 $+50$ ——— $5^{\circ}26'$
 $7+00$ ——— $6^{\circ}52'$
 $+50$ ——— $8^{\circ}19'$
 $6+16.25$ BC. $9^{\circ}16'$

$4+05.13$ AH EC
 $4+74.72$ BK EC
 $+50$ — $2^{\circ}21\frac{1}{2}'$ 200' RAD
 $4+00$ — $7^{\circ}08'$
 $+50$ — $11^{\circ}54'$
 $3+00$ — $16^{\circ}40'$
 $2+50$ — $21^{\circ}26'$
 $2+31.70$ BC $23^{\circ}12'30''$

0.831600

 49.86000



BM	3-03	45.45		42.42	Nail in T-Pole #2675
T.P.	2.41	42.76	510	40.35	
0400			1055	32.21	
+50			10.8	32.0	
140			10.4	32.4	
+50			9.5	33.3	
2			9.3	33.5	
+31 ² B.C. on Hub.			9.06	33.70	
+50			9.1	33.7	
+75			7.1	35.7	
+93			3.9	38.9	
3			4.3	38.5	
+03 Edge oil pump			4.8	38.0	

LT

E

RT

65

$$+2.9 \quad \frac{05}{8} \quad \frac{00}{5} \quad \frac{-2.4}{10}$$

$$+3.9 \quad \frac{00}{9} \quad \frac{00}{7} \quad \frac{-21}{10}$$

$$\text{Top } +31 \quad \text{In } +10 \quad +01 \quad -0.8$$

$$\frac{12}{12} \quad \frac{6}{6} \quad \frac{5}{5} \quad \frac{10}{10}$$

$$+2.8 \quad +1.1 \quad -0.2 \quad -1.1$$

$$\frac{13}{13} \quad \frac{5}{5} \quad \frac{4}{4} \quad \frac{10}{10}$$

$$+3.8 \quad \frac{0.6}{5} \quad -0.4 \quad -1.1$$

$$\frac{11}{11} \quad \frac{5}{5} \quad \frac{5}{5} \quad \frac{10}{10}$$

$$+4.0 \quad +4.0 \quad -0.9 \quad -1.5$$

$$\frac{10}{10} \quad \frac{5}{5} \quad \frac{2}{2} \quad \frac{10}{10}$$

$$-0.9 \quad -0.9 \quad -1.7 \quad -3.7$$

$$\frac{12}{12} \quad \frac{4 \text{ Edge oil}}{4} \quad \frac{6}{6} \quad \frac{10}{10}$$

$$00 \quad -0.4 \quad +0.1 \quad 3.8$$

$$\frac{10}{10} \quad \frac{2 \text{ Edge oil}}{2} \quad \frac{7}{7} \quad \frac{11}{11}$$

+25 3.8 39.0

+50 3.6 39.2

+62 * Mark. Finder Shows
a depth of
14" Gas Margin 5"
Below Surface 3.5 39.3

+75 3.4 39.4

4 3.2 39.6

+09 edge of oil paring 3.2 39.6

+25 3.3 39.5

+32 3.8 39.0

+42 3.5 39.3

+50 0.5 42.3

eg.
474 78" 6" 1.1 41.7

= 474 + 5 1/2" 8"

T.P. 550 45.52 2.74 40.02 ✓

starting
check B.M. 3.08 42.44 ✓

+0.3 +0.5 -0.4 +97
8 Edgeoil 3 4 11

+0.7 +1.5 00 +5.2 +7.1
114 Edge 8 3 6 10
oil

-1.2 -1.4 3.0 -3.0 2.7 +97
12 9 7 9 2 10

-1.3 -2.0 +3.2 +4.5
10 5 5 12

Location of Air Valve, M.H. on
11th St. Pipe Line

Bliss
King
Phillips
Davis

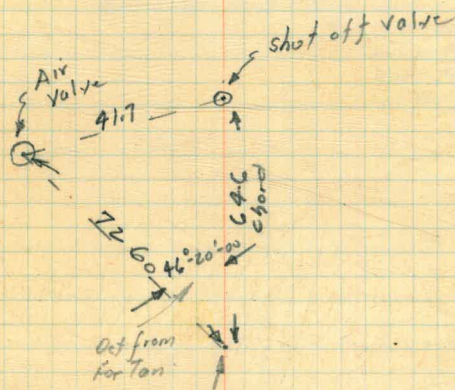
72+58.1 sta shot off valve +

73+23.14 E.C. Def 11°-45'-00" to shot off valve

10+05.91 Back 73+33.12 eq.

9+62.80

99.8
43.11



52+76.40
State E.C.

43'

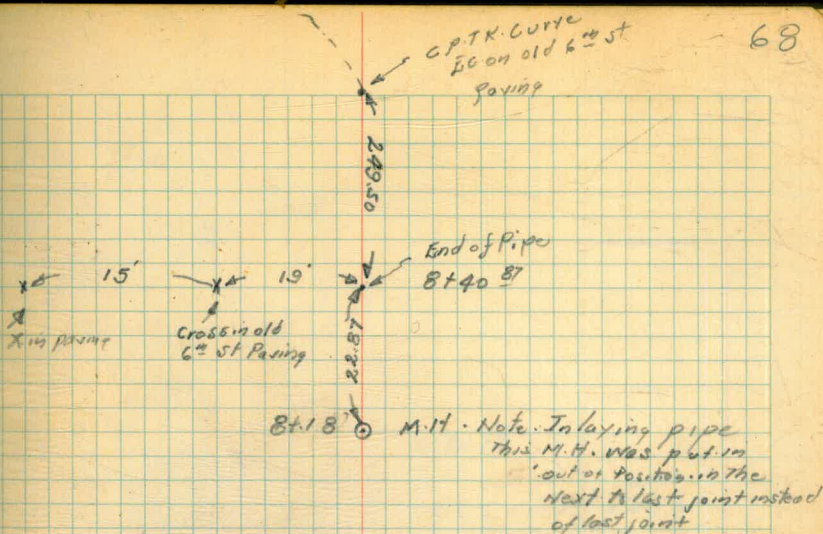
53.09

End of pipe as per plan
E.C. L.
Actually pipe is not
quite in position as
shown on this plan

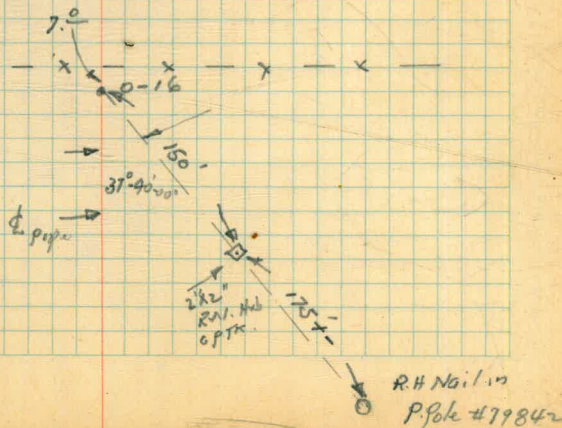
R. Points West End 6th Friars Road Pipe

Bliss
King
Phillips
Davis
7/9/46

68



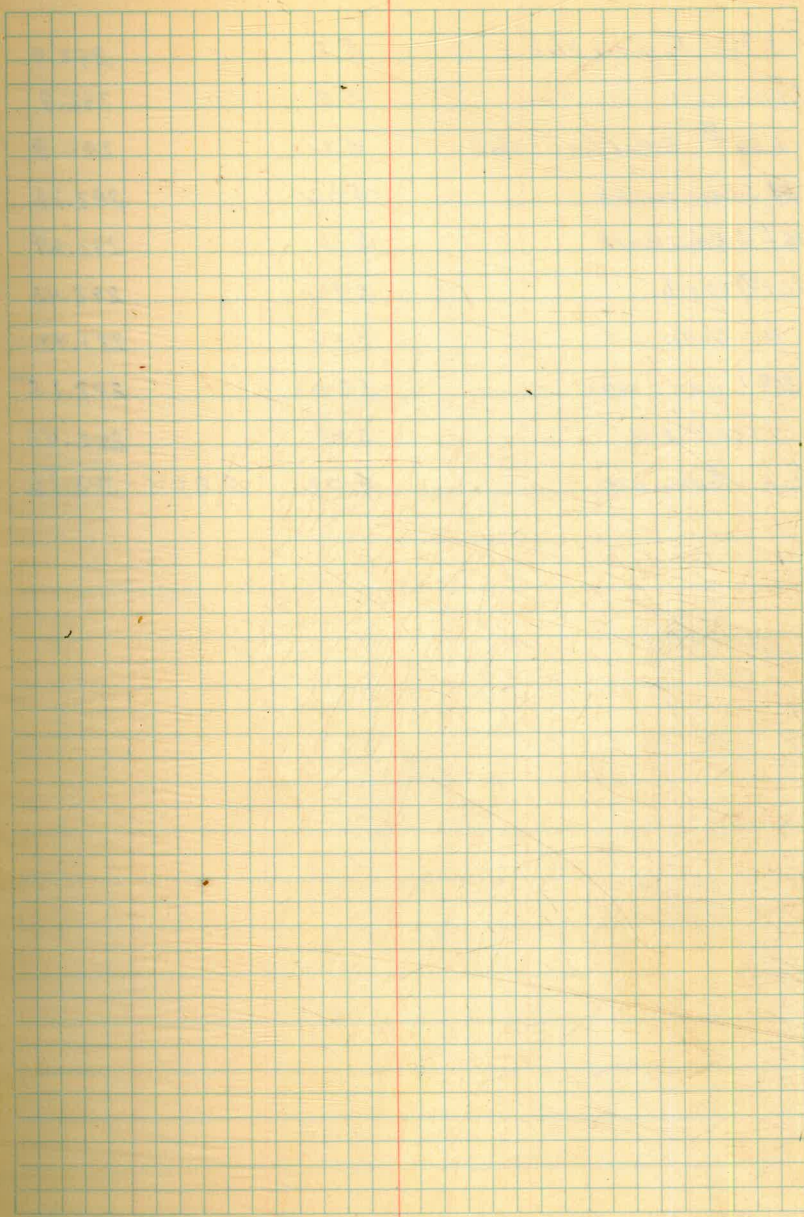
R.P. East End of Friars Road Pipe
Lime



B1150
7/17/46

Profile levels for proposed P.C.
Univ. Ave. between 9th & 10th

	409	287.85	283.76
0+00		4.68	283.17
+15.3~ Gutter		5.12	282.73
+ " " Top cb		4.62	283.23
+19.67 N Edge walk		4.65	283.20
+25.82 " "		4.52	283.33
+36.56 L		5.1	282.8
+53. " "		4.8	283.1
" 4' RT		5.1	282.8
" 15 "		8.5	279.4
0+69.96		4.9	283.0
" 3' RT		5.0	282.9
" 15 "		15.7	272.2
0+75 Top 6" cur wall		2.5	285.4
1+00		5.2	282.7
" 10' RT Top cut bank		5.5	282.4
1+24 Ground.		5.2	282.7
" " Top cor foundation wall 6"		4.3	283.6
" " " floor		4.7	283.2
1+50 " "		4.7	283.2
+67.01 L " "		4.6	283.3
+73 " "		4.6	283.3
+76 Top 6" Ed wall		5.0	282.9



+76 Top. con slab	5.2	282.9
2100 " " "	5.2	282.9
+06 ¹⁷ Estly. Edge of slab	5.2	282.9
+14 S. Edge con slab	5.06	282.79
+16 ⁷ S. Edge waik	5.14	282.69
+27 ² Top c b	5.92	282.43
+ 11 Gutter	4.12	281.73
+36 ³ Top Gas Valve	5.60	282.25
+ 2+44 ²⁷ End	5.45	282.40
check starting Brn	4.09	283.76 - 283.76

Sept 4, 46
 Bliss Notes Location Survey for Cathodic
 King & Phillips Installation on El Capitan Pipe
 Davis Line East of El Monte Pump Station

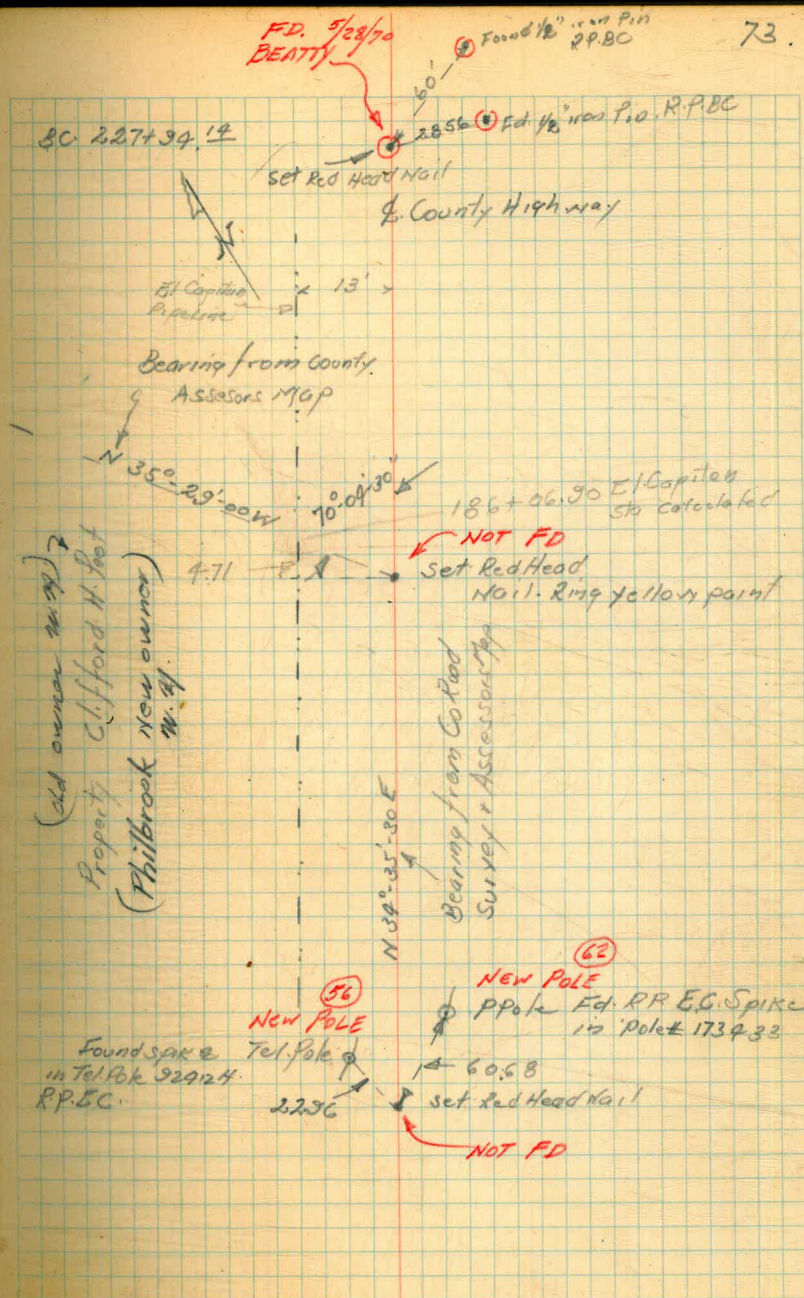
288.14

225+10

208.39

N 34° 35' 30" E

223+01.61 EC. County Highway location 606



nd P 1000 R: 1' = 1.719
50' = 1.25', 944

Nail in eucaly.
7' above P line
24' G.V.
52.85 to hub

10.5
180.2
70
23.7

3+68 S.M.H.
Rim 3.30 below 47+00
S.Hwy.

84+00 TOP VERT BEND
84+30 TEE
84+48 SEWER
84+85 TOP BER. BEND

89 59 60
70+04 30
19 55.30

26 - 3 - 5
83
123+37.79
2.20
135 54
20.5

Please Return to
City of San Diego Water Dept.
Room 268 Civic Center
Telephone Main 5161

DISTANCES FROM CENTER OF ROADWAY FOR
CROSS-SECTIONING.

Roadway 16 feet wide. Side Slopes 1 on 1 1/2
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	26.2	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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