

Bk 64 Dr. 16

OFFICE OF CO. REER
RAMSEY CO. M. N.

Plan Survey

Co Rd "E"

From Silver Lake Rd To Long Lake Rd

Road Acc't. No. 54

Date Filed 6-11-41

File

PLAN SURVEY

Co. R.D. "E"

from Fairchild Ave.
to Long Lake Rd.

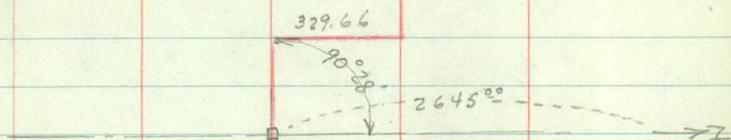
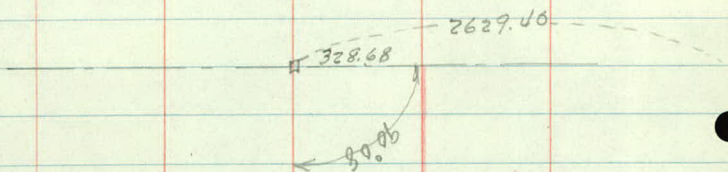
2/5/40

Party.
R.D.P.
HAW.
A.M.
L.G.
C.F.

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Plan Completed
11/19/40
H.C.

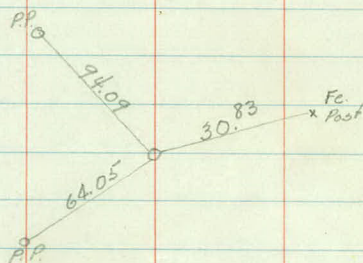
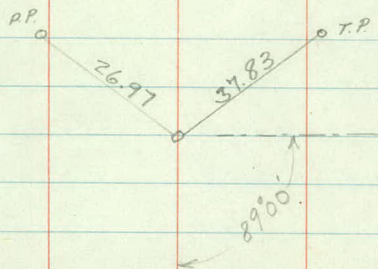


Transit Notes.

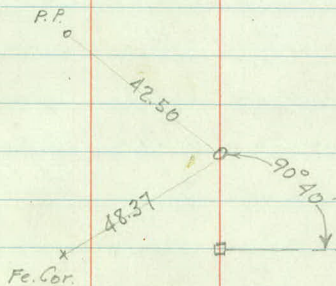
19+7430 P.O.T. E Oakwood Drive

10+00 P.O.T.

0+00 E Fairchild Ave. = (Sta. 52+31⁴⁷ - P.T.)



Spike



R.R. Spike

43+07.53

42+94.23 P.T.

92°10'

$\Delta = 89^{\circ}53'$ R.L.

67°

$D = 100^{\circ}$

42+56.98

41+29.23 P.I.

88.82

89°53'

$T = 65.14$

41+29.23

41+11.89

138.30

$\text{Arc} = 102.39$

41.94.84

P.C.

85.52

$R = 65.27$

$C = 92.21$

39+82.24

39+82.50 P.T.

$\Delta = 92^{\circ}00' = \Delta = 89^{\circ}50'$ L.L.

105°

$D = 100^{\circ}$

38+50.83

39+45.34 P.I.

89°50'

56.51

$T = 65.08$

38+94.32

87.62

$\text{Arc} = 102.24$

38+80.26 P.C.

54.57

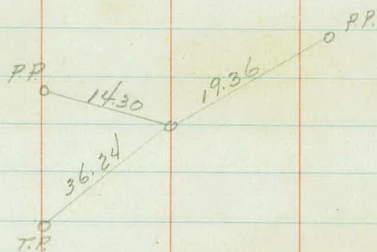
$R = 65.27$

$C = 92.17$

26+29.75

26+30.25 P.I.

0°47'



R.R. Spike.



Bolt Spike

S.W. Cor. Sec. 30.



Mon.

55+40.04

± Long Lake Rd.

51+57.65

P.O.T.

± S.T.H. # 8

51+36.32

Instrument Tie to S.T.H. # 8

~~51+33.85~~

~~P.O.T. Edge of Pavement~~

18' Oak

75.16

40.67

47.46

P.P.

T.P.

R.E. Spikes

Lumber Yd.
Sign Post.

61.06

40.60

57.44

P.P.

T.P.

D.H. 4/0/c

P.L.

$\Delta = 53^{\circ}39'$

$T = 362.4'$

$D = 8^{\circ}$

$56^{\circ}55'$

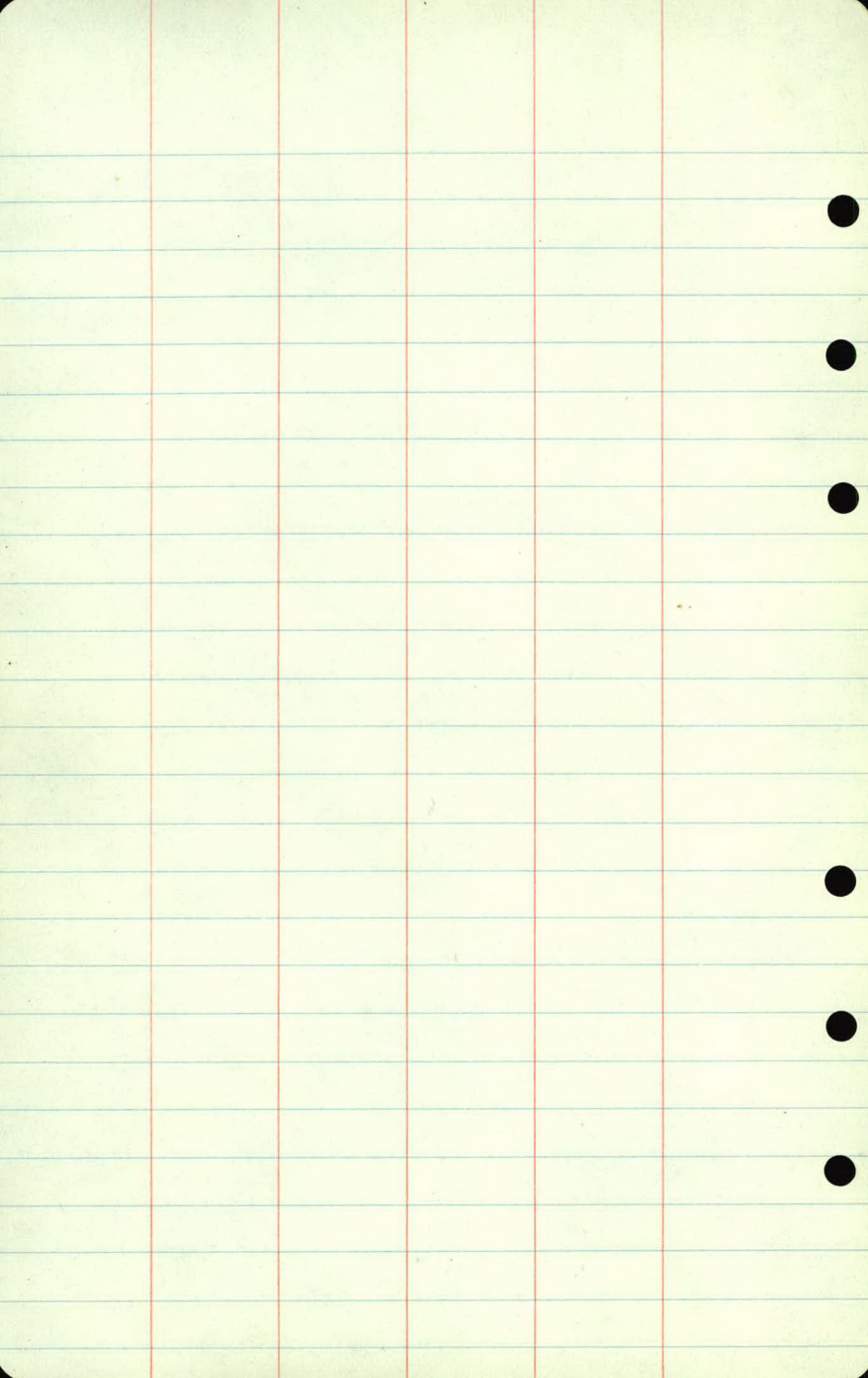
199.28

Drill Hole

62.14

51.34 T.P.

PP 14.23



6
Topography

CO. RD "E"

from

Fairchild Ave.

to

Long Lake Rd.

+18 14' Ent Lt

6 11 10

5 11 10

4 10 10

17' +88 - 15" x 44 C.M. Cross Drain 27'

+18 12' Ent Lt

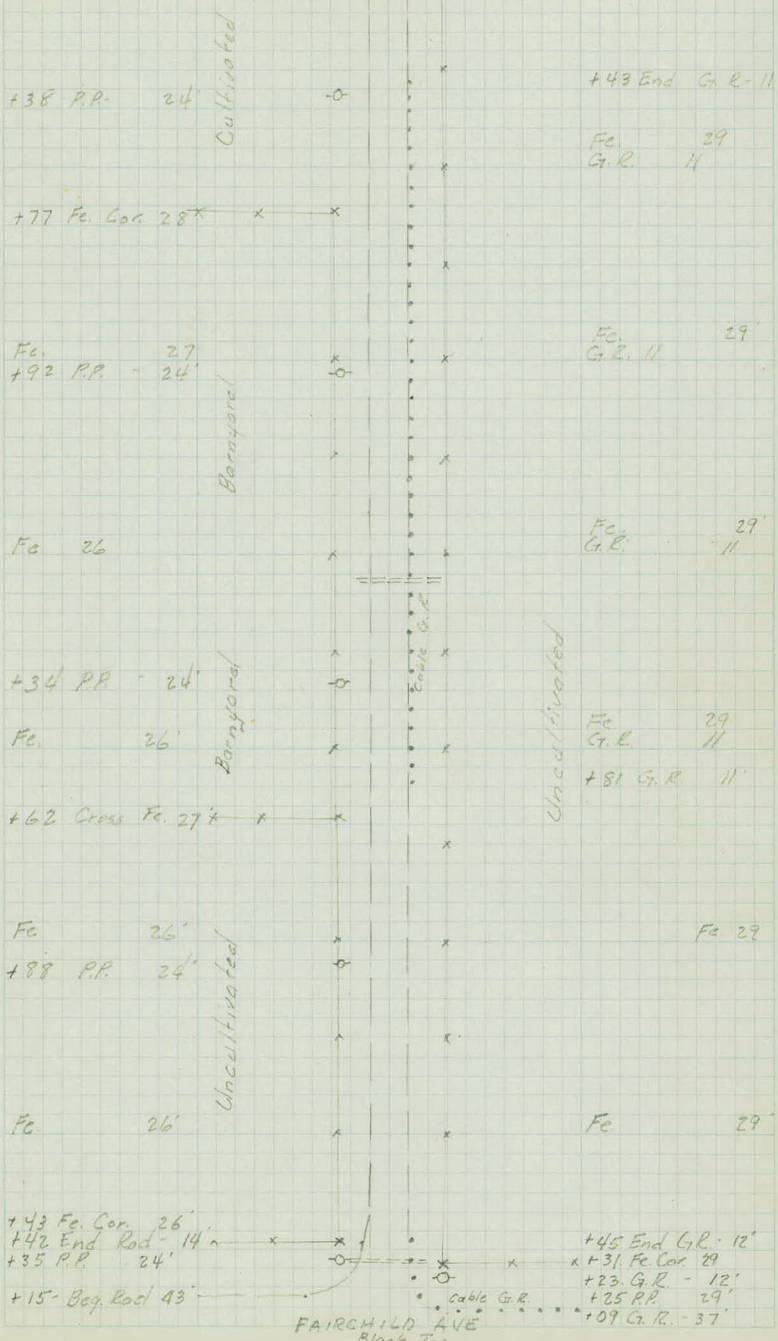
3 11 10

2 12 10'

1 12 11

21' +33 - 15" x 40' C.M. Cross Drain 19'

0



13

10

10

12

10

10

11

11'

11'

10

11'

10'

9

12

9

8

12'

9'

7

12'

+09 10' Ent Rt
8'

+80 P.P. 24'

Yard

+77 P.P. 26'

+36 Ent. (Busted)
12"x ? C.M. - 17'
+23 Trees 22-25-27-32
+17 Fe. Cor. 30'

Swamp - 200'

+81 G.R. 12'

Cable G.R.

+41 P.P. 25'

Cultivated

Fe. 30'

+91 P.P. 25'

Fe. 31'

+40 P.P. 24'

Fe. 30'

+81 P.P. 24'

Cultivated

Uncultivated

Fe. 30'

Fe. 30'

Fe. 30'

20

19

11

9

44' + 30' 15" x 74' C.M. Cross Drain

30'

18

11

9

17

11

9

16

11

9

+ 63 10' Ent Bl

15

11

9

14

10

10

+81 PP - 26'

+56 End G.R. 12'

G.R. 12'

+30 P.P. 26'

G.R. 12'

+60 Cross Fe. 35'
G.R. 12'

+78 PP 26'

+75 Swamp 300'
+50 Swamp 100'

Swamp 50'
G.R. 12'

+50 Swamp - 30'

+31 PP 25'

Swamp 50-300
G.R. 12'

+46 Cross Fe. 33'
+45 Swamp 50'

Swamp 125'
G.R. 12'

Cultivated

Swamp

Gable G.R.

n
nr
10

Oakwood
Drive

Yard

+91 Beg. Hedge - 25'
+80 Ent.

+66 Lilac - 25'
+50 3" Cedar - 29'
+33 3" Cedar - 28'
+17 3" Cedar - 28'
+07 3" Cedar - 28'
+02 T.P. - 26'
+00 End Road 10'

+84 Beg. Road - 39 37'
+71 Oakwood Dr. - 20'
24 x 48 CM - 20'
+58 End G.R. 30'

+39 G.R. 10'

G.R. 10'

+14 T.P. 26'
G.R. 10'

G.R. 10'

+74 T.P. - 26'

G.R. 10'

Uncultivated

Beg. G.R. 10'

End Yard +75

Yard

+61 Swamp 22'
+47 Twin Swamp 23'
+37 T.P. 27'
+32 Swamp 22'

+56 10' Ent Rt

27

12

12

+50 End Rad 12'

+36 Beg Rad 31

26

+08 End Rad 39'

12

12

+88 Beg Rad 12'

25

12'

12'

+75 10' Ent Lt

24

12

12

+37 10' Ent Lt

23

12'

11'

22

12

10

21

11

10'

+66 Cor. Fe. 31'
+52 Ent.

15"x30' C.M. 20'
+35 Cor. Fe. for Hedge 32'
+31 P.P. 20'

Fe and Hedge 32'

Yard

Bag. Hedge
+30 Cross Fe. 31'

+14 Field Ent
Fe 28'
+90 P.P. 27'

Fe. 30'

+67 P.P. 27'

Fe 28'

Cultivated

Fe 31'

+79 P.P. 26

Fe 3

+75 Fe. Cor. 50'

+17 P.P. 26

+36 T.P. 24'

+30 Bag. Fe. 33'

+98 T.P. 25'

+51 4" Pop 41'

+38 Ent
12"x18' C.M. 17'
+24 4" Pop 41'

+91 4" Elm 36'

+68 T.P. 25'
+66 4" Ash 36'

+43 4" Elm 35'

+18 4" Elm 35'

+94 Elm 35'

Uncultivated

+08 T.P. 25'

+00 Cross Fe 35'

+60 End Yard
+59 End Hedge 25'
+55 Plum 33
+48 T.P. 26'
+33 Plum 33

+09 3" Plum 33'

34
+ 97 4" Oak 31
+ 90 4" Oak 36
+ 78 Brush 23
+ 50 Brush 35

10

33 10

9

+ 91.6" Oak 37

+ 89.6" Pop 23

32 11

10

+ 82.4" Pop 34

31 11

10

30 11

10

29 12

12

28 12

12

+ 93 6" Oak 32
 + 53 2 Oaks 30
 + 72 PP 40
 + 51 7 Oaks - 30
 + 67
 + 25 Brush 17
 + 20 Beg. G.R. 11
 + 03 4" Oak 37
 + 72 Ent.
 + 62 4" Oak 32
 + 59 4" Oak 32
 + 27 2" Oak 41
 + 25 PP 38
 + 21 2" Oak 36
 + 16 2" Oak 42
 + 02 2" Oak 43
 + 00 Trees 51
 + 00 Brush 35

Wooded - Oaks - Brush

+ 85 Fe. Cor. - 39

+ 110 7x6x8 Rock 21

Fe 37

+ 74 PP 36

Fe 36

+ 41 PP 34

Fe 35

102 PP 31
Fe 33

Fe 31

+ 64 PP 20

+ 13 Fe Cor. - 44

+ 96 Beg. G.R. 11

+ 16 T.P. 21

+ 86 6" Oak 37
 + 77 Twin Oak 36
 + 68 4" Oak 41
 + 59 12" Oak 47
 + 51 12" Oak 47
 + 33 12" Oak 44
 + 29 12" Oak 40
 + 24 15" Oak 40
 + 04 End Wedge 28
 + 00 2" Pop 34
 + 96 2" Pop 34
 + 76 T.P. 21
 + 70 Cor Wedge 27
 + 61 Rgc Fire Ent
 + 57 Ent
 15" x 20" C.M. - 19

Cultivated

Yard

Cultivated

+ 15 T.P. 22

+ 82 T.P. 24
 + 70 Pot Hole 30-60

+ 36 Pot Hole 25-60

Pot Hole 30-60
 End Fe 30

+91 8 10 +91

41 10 9
+75 End Woods

40 10 12
+80 G.R. 11 10 16 +80
+60 G.R. 8 7 15 +60
+40 G.R. 5 4 16 +40
+20 G.R. 5 - 4 +36 P.T. Ent R. 20 +20 G.R. 21
39 9 14
+80 9 16 +80
+80 G.R. 10 9 +80-G.R. 12

38 +99 cl Oak 36
97 2" Oak 40
+96 2" Oak 34
+92 2" Oak 34

37 10 10
+91 2 Oak 27-33
+82 Twin Oak 31
+81 End Brush 34

36 +00 Brush 34

35 10 10

+91 End Yard
+80 Ent

Yard

+09 Ent
 +76 2" Oak 33
 +67 4" Oak 40
 +62 6" Oak 33
 +54 6" Oak 32
 +46 T.P. 20
 +38 12" Oak 39
 +18 4" Oak 46
 +10 8" Oak 32
 +05 6" Oak 35
 +02 4" Oak 35
 +93 End G.R. 11'
 +75 6" Oak 33
 +64 4" Oak 33
 +60 6" Oak 38'
 +42 2" Oak 45

G.R. 10

+96 4" Oak 33
 +85 2 1/2" Oak 35
 +71 4" Oak 34
 +61 6" Oak 28
 +42 6" Oak 30
 +20 4" Oak 30
 +12 4" Oak 35
 +06 6" Oak 27
 +89 6" Oak 28
 +86 4" Oak 32
 +86 P.P. 44
 +81 4" Oak 38
 +76 Turn Oak 31

+23 2" B.E. 16'
 +01 3" Oak 28'

G.R. 11
 +76 4" Oak 32
 +73 4" Oak 32
 +68 6" Oak 26
 +28 P.P. 42
 +27 4" Oak 39
 +22 6" Oak 36
 +19 4" Oak 32
 +14 6" Oak 31
 +09 4" Oak 31
 +08 4" B.E. 21

+81 4 Willows 28

+51 4" Oak 31

+39 4" Oak 31

G.R. 11

Wooded - Oaks

Brush

Uncultivated

+12 P.P. 20

+70 P.P. 23'

+134 End G.R. 24'
 +33 Cross Fe. 30'
 on sea line
 +17 T.P. 28'
 G.R. 15'

Fe. 17'

+76 T.P. 17'
 +67 Cross Fe. 17'

G.R. 11
 +92 4" Willows 22'

old Wagon
 Bridge
 No Good

+69 4" Willow 17'
 +51 Bridge 24-27
 +41 Wagon Bridge 22'
 +25 T.P. 18'

Uncultivated

+84 Fe. Cor. 44

Fe. 44'
 G.R. 11'

48	2	19	
26	+39-36"x76' C.M. Cross Drain		
47	2	19	50'
46	3	19	
45	0	20	
44	0	20	
43	0	19	
+80	3'	19'	
+60	9'	17'	
+40	10'	14'	
+20	19	12	
42	+103	10' Ept Lt	11
	10		

+44 End G.R. 3'

+06 P.P. 13'
G.R. 3

+54 Fe Cor. 16'

+33 End 36" C.M. 25'
+33 Ditch 85'

G.R. 3

+75 P.P. 12'

+56 Fe Cor. 15'

G.R. 4

+70 Beg. G.R. 4'

+29 P.P. 9'

+84 P.P. 8'

+26 15" Oak - 18'

+40 Ent. 34'
+54 P.P. 21

+35 G.P. 35'

+40 G.R. Ends 44'

+16 T.P. 27'

+12 4" Oak 37'

+06 2" Oak 32'

Beg. G.R. 13'
+92 Rac Tie En 7'

Uncultivated

Uncultivated

Uncult.

Cultivated

Uncultivated

+83 End G.R. 20

+57 T.P. 29

G.R. 20

+69 End 36" C.M. 43

+28 Rac Tie Ditch

+01 T.P. 29
G.R. 20

+57 Beg. Cult. 5'

+29 - 18" Oak - 4'

G.R. 20

+70 Beg. G.R. 20

+38 T.P. 29

+74 T.P. 29

+51 slider K2 E

+28 slider K2 E

55	4	18
----	---	----

54	2	20
----	---	----

53	4	18
----	---	----

52	2	17
----	---	----

+ 92'-15"-38' C.M. Cross Drains

51	0	19
----	---	----

50	0	20
----	---	----

49	2	18
----	---	----

Long Lake Rd.

+15 T.P. 24
+05 P.P. 21

○
○

○

+15 T.P. - 41

Cult.

Yard

+69 T.P. - 29

+92 - P.P. 20
+75 Ent

○

+88 Ent

+51 T.P. 29

Uncultivated

Uncultivated

+161 P.P. - 18'

○

- 7

+97 Ent 15' C.M. 8'

○

+86 - T.P. - 29
+79 Ent 15' C.M. - 2

+02 - P.P. - 16

○

+38 T.P. - 29

+36 P.P. 14

○

○



Bench Levels

Co. RD. "E"

Fairchild Ave - to

Long Lake Rd.

Pt.	+	π	-	Elev.
B.M.	6.37	942.23		935.86
T.P.	8.11	942.56	7.78	934.45
T.P.	4.06	944.99	1.63	940.93
B.M.	6.97		6.97	938.02
T.P.	2.08	934.80	12.27	932.72
T.P.	9.99	944.48	0.31	934.49
B.M.	7.52		7.52	936.96
T.P.	3.71	947.57	0.62	943.86
B.M.	0.23	939.88	7.92	939.65
T.P.	2.09	929.53	12.44	927.44
T.P.	1.35	918.16	12.72	916.81
T.P.	0.46	905.49	13.17	904.99
B.M.	3.13	903.10	5.52	899.97
T.P.	0.67	898.10	5.67	897.43
T.P.	1.45	888.10	11.45	886.65
B.M.	9.25	896.16	1.19	886.91
T.P.	6.09	901.41	0.84	895.32
B.M.			3.12	898.29

39+22-23 (10)
Top Spike in Fe. Cor. S.E. Cor Fairchild

Spike R.P. 25' Lt. 12+41

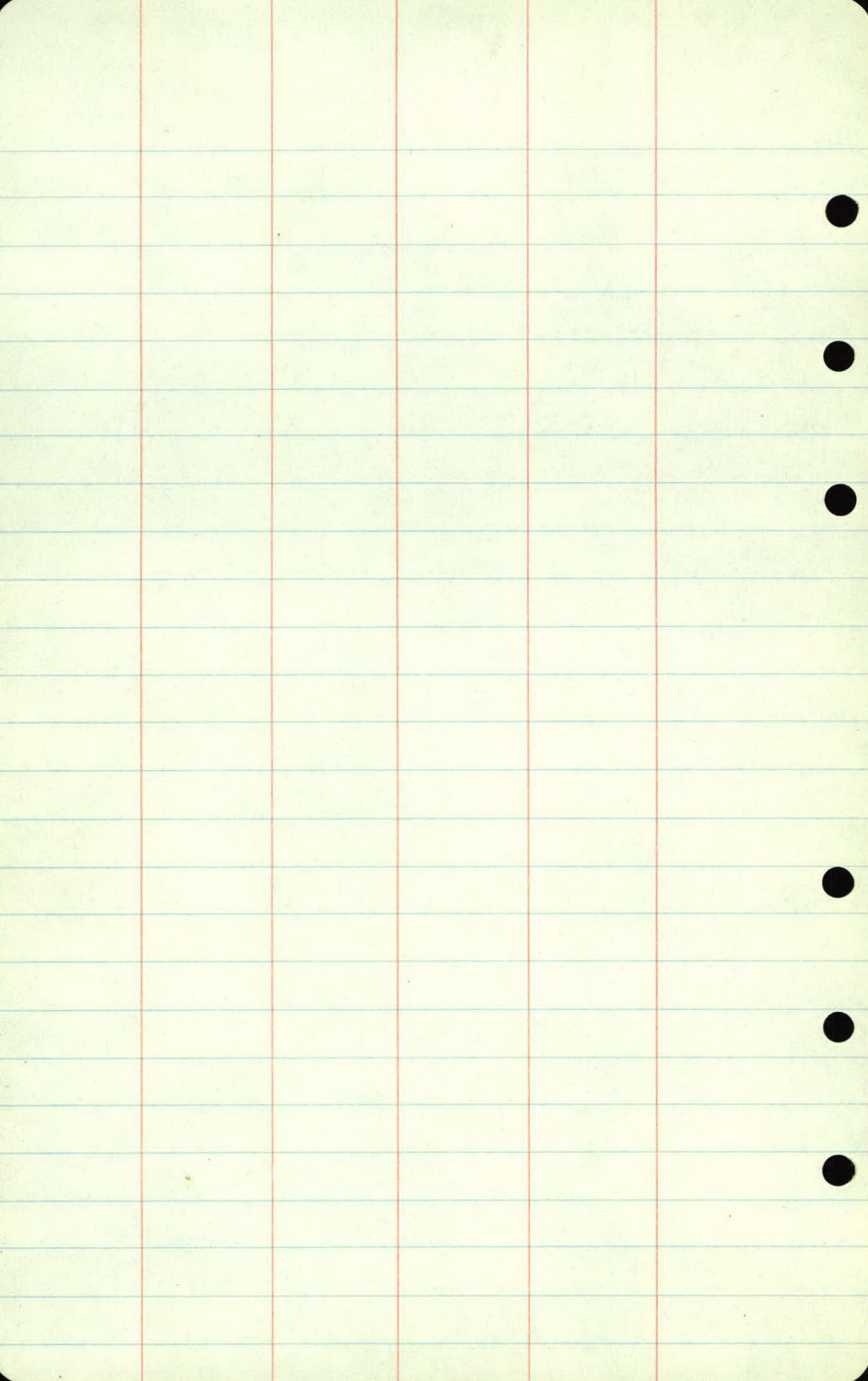
Spike R.P. 26' Lt. 19+81 (check - same R.M.)
Oakwood Drive

Top Mon. Sta. 26+30.25 ✓

Spike 18" Oak 50' Rt. 39+32

Spike T.P. 29' Rt. Sta. 50+38

Spike T.P. 41' Rt. 55+15



Cross Sections

Co. RD. "E"

from Fairchild Ave.

to Long Lake Rd.

Sta.	+	π	-	Elev.
B.M.	13.28	949.14		935.86
0+00			9.9	39.2
+10			9.8	39.3
+20			9.8	39.3
+33	Sec. thru	15" C.M.	9.9	39.2
+50			10.1	39.0
1			10.9	38.2
+23			11.1	38.0
+50			11.5	37.6
+78			12.0	37.1
2			12.2	36.9
+50			13.0	36.1
T.P.	1.19	939.25	11.68	938.06
+77			3.5	35.8

Spike Fe. Cor. S.E. Cor. Fairchild Ave. - Co. Rd. E.

$\frac{6.1}{50}$ 9.9 $\frac{14.3}{50}$

$\frac{6.3}{50}$ 9.8 $\frac{14.5}{50}$

$\frac{6.3}{50}$ $\frac{7.6}{38}$ $\frac{8.0}{28}$ 9.8 $\frac{11.0}{12}$ $\frac{13.1}{22}$ $\frac{15.8}{33}$ $\frac{18.0}{50}$

39.05

F.L.

FL 36.11

$\frac{6.0}{50}$ $\frac{6.5}{41}$ $\frac{7.7}{39}$ $\frac{8.9}{29}$ $\frac{9.6}{21}$ $\frac{10.09}{20}$ $\frac{9.1}{16}$ 9.9 $\frac{10.5}{12}$ $\frac{13.03}{20}$ $\frac{12.9}{21}$ $\frac{14.8}{28}$ $\frac{16.8}{50}$

$\frac{4.6}{50}$ $\frac{5.5}{44}$ $\frac{5.4}{41}$ $\frac{4.4}{38}$ $\frac{4.6}{33}$ $\frac{5.9}{28}$ $\frac{10.1}{20}$ $\frac{9.8}{18}$ $\frac{10.8}{15}$ $\frac{13.9}{10.1}$ $\frac{14.8}{11}$ $\frac{19.0}{20}$ $\frac{16.8}{28}$ $\frac{16.8}{50}$

$\frac{3.7}{50}$ $\frac{4.0}{47}$ $\frac{5.3}{43}$ $\frac{5.3}{46}$ $\frac{4.6}{38}$ $\frac{5.1}{33}$ $\frac{5.9}{30}$ $\frac{11.5}{20.17}$ $\frac{11.0}{15}$ $\frac{11.3}{12}$ $\frac{12.6}{16}$ $\frac{12.4}{19}$ $\frac{10.6}{21}$ $\frac{11.7}{28}$ $\frac{15.8}{50}$

$\frac{4.8}{50}$ $\frac{5.2}{34}$ $\frac{11.8}{19}$ $\frac{11.2}{16}$ $\frac{11.5}{11}$ $\frac{12.9}{15}$ $\frac{12.8}{18}$ $\frac{10.5}{20}$ $\frac{11.5}{28}$ $\frac{15.8}{50}$

$\frac{4.4}{50}$ $\frac{6.1}{34}$ $\frac{7.2}{30}$ $\frac{12.0}{22}$ $\frac{11.6}{17}$ $\frac{11.5}{13}$ $\frac{11.9}{12}$ $\frac{13.4}{15}$ $\frac{12.6}{20}$ $\frac{13.5}{28}$ $\frac{15.6}{50}$

$\frac{4.4}{50}$ $\frac{4.5}{45}$ $\frac{6.0}{31}$ $\frac{12.7}{19}$ $\frac{12.0}{16}$ $\frac{12.0}{12}$ $\frac{12.3}{11}$ $\frac{16.0}{20}$ $\frac{17.0}{28}$ $\frac{19.6}{50}$

$\frac{4.3}{50}$ $\frac{5.1}{41}$ $\frac{6.4}{30}$ $\frac{13.2}{19}$ $\frac{12.4}{16}$ $\frac{12.2}{12}$ $\frac{12.9}{12}$ $\frac{16.7}{19}$ $\frac{17.8}{28}$ $\frac{20.7}{50}$

$\frac{6.9}{50}$ $\frac{9.0}{33}$ $\frac{14.5}{19}$ $\frac{13.2}{16}$ $\frac{13.0}{12}$ $\frac{13.6}{12}$ $\frac{16.0}{18}$ $\frac{17.0}{28}$ $\frac{19.2}{50}$

Top G.R.

$\frac{+1.6}{50}$ $\frac{3.0}{33}$ $\frac{2.8}{27}$ $\frac{5.1}{19}$ $\frac{3.8}{17}$ $\frac{3.5}{13}$ $\frac{4.0}{11}$ $\frac{6.2}{18}$ $\frac{7.2}{28}$ $\frac{9.4}{50}$

Sta.	+	⌈	-	Elev.
		939.25		
3			3.8	35.5
	+50		4.5	34.8
	+88	Sec. Iron 15" C.M.	4.9	34.4
4			4.9	34.4
	+50		4.8	34.5
5			4.8	34.5
	+33		4.6	34.7
	+80		4.0	35.3
T.P.	7.30	944.46	2.09	937.16
6	+13		8.5	36.0
	+54		7.9	36.6
7			6.9	37.6
	+55		5.7	38.8

0.0 1.6 5.3 4.2 4.3 7.6 8.5 11.2
50 33 20 -17 12 3.8 11 18 28 50

15 4.5 5.8 4.8 5.3 12.7 13.7 16.6
50 27 17.15 12 4.5 11 23 28 50

FL 31.39 FL 26.27
4.5 6.5 7.8 7.8 7.0 5.0 5.2 (12.98) 15.3 17.6
50 28 18 17 15 12 4.9 11 28 50

5.7 6.4 6.9 7.4 5.2 5.1 14.9 17.5
50 36 29 18 13 4.9 11 28 50

4.8 6.1 6.9 6.9 5.3 5.5 13.9 17.5
50 27 20 17 13 4.8 11 28 50

3.4 5.4 6.2 6.4 5.4 5.7 11.7 13.8 17.3
50 28 24 19.17 14 4.8 11 20 28 50

2.6 4.2 5.8 6.5 5.9 5.0 5.6 11.0 12.5 16.0
50 32 26 20 16 13 4.6 11 21 28 50

+1.0 0.9 0.3 3.8 4.2 4.2 4.5 8.5 9.3 12.4
50 41 36 26 21-15 12 4.0 11 22 28 50

5.4 6.7 8.8 9.0 8.7 9.1 13.8 13.2 15.3
50 31 21 17 10 8.5 11 20 29 50

4.8 6.6 8.2 8.8 8.4 8.5 11.8 13.1 14.9
50 30 24 20 13 7.9 11 21 29 50

5.1 5.6 8.1 7.5 7.1 7.3 9.8 11.1 13.9
50 27 19 15 11 6.9 10 17 30 50

1.6 1.6 0.6 6.7 6.4 5.8 6.0 2.3 7.5 3.8 4.7 7.1
50 35 28 18 16 12 5.0 10 12 15 20 30 50

Sta.	+	π	-	Elev.
		944.46		
8			5.2	39.3
	+ 50		4.3	40.2
	+ 84		4.1	40.4
9			3.9	40.6
	+ 42		3.4	41.1
✓	+ 84		3.0	41.5
10			2.9	41.6
	+ 33		2.8	41.7
	+ 88		3.1	41.4
11	+ 06		3.4	41.1
T.P.	10.12	952.18	2.40	942.06
	+ 84			41.5
10				41.6

$\frac{0.7}{50}$ $\frac{1.0}{42}$ $\frac{0.6}{28}$ $\frac{6.4}{18}$ $\frac{5.9}{12}$ $\frac{5.9}{52}$ $\frac{7.3}{11}$ $\frac{7.3}{16}$ $\frac{5.2}{18}$ $\frac{5.7}{21}$ $\frac{6.1}{30}$ $\frac{6.1}{50}$

$\frac{2.9}{50}$ $\frac{3.3}{39}$ $\frac{3.1}{27}$ $\frac{4.5}{22}$ $\frac{5.4}{17}$ $\frac{4.9}{13}$ $\frac{4.8}{43}$ $\frac{5.5}{11}$ $\frac{5.9}{14}$ $\frac{3.1}{17}$ $\frac{2.1}{23}$ $\frac{3.5}{30}$ $\frac{3.5}{50}$

$\frac{2.6}{50}$ $\frac{2.9}{44}$ $\frac{2.8}{28}$ $\frac{4.9}{20}$ $\frac{4.9}{15}$ $\frac{6.4}{12}$ $\frac{4.4}{41}$ $\frac{5.5}{13}$ $\frac{5.1}{15}$ $\frac{2.7}{19}$ $\frac{3.1}{24}$ $\frac{3.3}{30}$ $\frac{3.3}{50}$

$\frac{1.9}{50}$ $\frac{2.7}{38}$ $\frac{2.5}{27}$ $\frac{3.4}{20}$ $\frac{4.5}{18}$ $\frac{4.2}{14}$ $\frac{4.2}{39}$ $\frac{5.6}{11}$ $\frac{5.4}{14}$ $\frac{3.8}{19}$ $\frac{4.0}{23}$ $\frac{4.1}{30}$ $\frac{4.1}{50}$

$\frac{1.2}{50}$ $\frac{2.3}{28}$ $\frac{4.0}{22}$ $\frac{4.4}{14}$ $\frac{3.9}{11}$ $\frac{3.4}{34}$ $\frac{4.0}{13}$ $\frac{7.3}{21}$ $\frac{8.2}{30}$ $\frac{8.2}{50}$

$\frac{1.5}{30}$ $\frac{3.7}{21}$ $\frac{4.1}{17}$ $\frac{3.3}{12}$ $\frac{3.0}{3.0}$ $\frac{3.7}{12}$ $\frac{4.1}{21}$ $\frac{7.3}{30}$ $\frac{7.5}{50}$

$\frac{1.2}{28}$ $\frac{2.2}{23}$ $\frac{3.3}{21}$ $\frac{3.1}{11}$ $\frac{2.9}{2.9}$ $\frac{3.9}{14}$ $\frac{6.1}{23}$ $\frac{7.3}{30}$ $\frac{8.1}{50}$

$\frac{3.1}{19}$ $\frac{3.0}{11}$ $\frac{2.8}{2.8}$ $\frac{3.5}{12}$ $\frac{4.6}{15}$ $\frac{4.9}{22}$ $\frac{5.1}{28}$ $\frac{6.1}{30}$ $\frac{7.8}{50}$

$\frac{2.2}{20}$ $\frac{3.4}{15}$ $\frac{3.6}{11}$ $\frac{3.1}{3.1}$ $\frac{3.7}{14}$ $\frac{4.4}{16}$ $\frac{3.6}{20}$ $\frac{0.6}{28}$ $\frac{0.2}{30}$ $\frac{5.2}{50}$

$\frac{3.7}{15}$ $\frac{3.9}{11}$ $\frac{3.4}{3.4}$ $\frac{4.1}{13}$ $\frac{4.5}{15}$ $\frac{4.0}{21}$ $\frac{1.9}{30}$ $\frac{5.7}{50}$

$\frac{8.6}{50}$ $\frac{9.2}{34}$ 10.7

$\frac{8.1}{50}$ $\frac{8.8}{41}$ $\frac{8.7}{33}$ 10.6

Sta	+	π	-	Elev
		952.18.		
10+33				41.7
+88				41.4
11+06				41.1
+50			12.4	39.8
12				38.3
+30				37.3
T.P	2.05	943.38.	10.85	941.33.
11+50			3.6	39.8.
12+10			5.1	38.3
+30			6.1	37.3.
+62			7.0	36.4.
+90			7.8	35.6
13			8.1	35.3.
B.M.	0.66	938.68.	5.39	937.99. (938.02)

$$\begin{array}{r} 6.6 \\ 50 \end{array} \quad \begin{array}{r} 7.3 \\ 39 \end{array} \quad \begin{array}{r} 4.3 \\ 30 \end{array} \quad \begin{array}{r} 2.7 \\ 25 \end{array} \quad (10.5)$$

$$\begin{array}{r} 4.1 \\ 50 \end{array} \quad \begin{array}{r} 3.8 \\ 41 \end{array} \quad \begin{array}{r} 2.8 \\ 32 \end{array} \quad (10.8)$$

$$\begin{array}{r} 3.5 \\ 50 \end{array} \quad \begin{array}{r} 2.1 \\ 33 \end{array} \quad (11.1)$$

$$\begin{array}{r} 5.0 \\ 50 \end{array} \quad \begin{array}{r} 2.7 \\ 38 \end{array} \quad \begin{array}{r} 2.6 \\ 32 \end{array} \quad \begin{array}{r} 1.0 \\ 23 \end{array} \quad \begin{array}{r} 12.8 \\ 16 \end{array} \quad \begin{array}{r} 12.7 \\ 11 \end{array} \quad 12.4$$

$$\begin{array}{r} 8.9 \\ 50 \end{array} \quad \begin{array}{r} 6.5 \\ 37 \end{array} \quad \begin{array}{r} 6.2 \\ 31 \end{array} \quad \begin{array}{r} 12.5 \\ 24 \end{array} \quad (13.9)$$

$$\begin{array}{r} 13.6 \\ 50 \end{array} \quad \begin{array}{r} 11.6 \\ 38 \end{array} \quad \begin{array}{r} 11.2 \\ 30 \end{array} \quad \begin{array}{r} 11.7 \\ 27 \end{array} \quad (14.9)$$

$$\begin{array}{r} 4.2 \\ 3.6 \end{array} \quad \begin{array}{r} 4.8 \\ 11 \end{array} \quad \begin{array}{r} 4.4 \\ 15.17 \end{array} \quad \begin{array}{r} 5.9 \\ 21 \end{array} \quad \begin{array}{r} 4.6 \\ 27 \end{array} \quad \begin{array}{r} 7.2 \\ 30 \end{array} \quad \begin{array}{r} 6.8 \\ 37 \end{array} \quad \begin{array}{r} 6.8 \\ 50 \end{array}$$

$$\begin{array}{r} 3.1 \\ 21 \end{array} \quad \begin{array}{r} 5.9 \\ 19-16 \end{array} \quad \begin{array}{r} 5.5 \\ 12 \end{array} \quad \begin{array}{r} 5.6 \\ 5.1 \end{array} \quad \begin{array}{r} 6.2 \\ 10 \end{array} \quad \begin{array}{r} 7.1 \\ 15 \end{array} \quad \begin{array}{r} 8.0 \\ 17-21 \end{array} \quad \begin{array}{r} 8.6 \\ 25 \end{array} \quad \begin{array}{r} 9.3 \\ 30 \end{array} \quad \begin{array}{r} 7.7 \\ 36 \end{array} \quad \begin{array}{r} 5.5 \\ 40 \end{array} \quad \begin{array}{r} 5.5 \\ 50 \end{array}$$

$$\begin{array}{r} 7.0 \\ 22 \end{array} \quad \begin{array}{r} 7.6 \\ 19-16 \end{array} \quad \begin{array}{r} 6.5 \\ 12 \end{array} \quad \begin{array}{r} 6.6 \\ 6.1 \end{array} \quad \begin{array}{r} 6.9 \\ 9 \end{array} \quad \begin{array}{r} 8.4 \\ 12 \end{array} \quad \begin{array}{r} 9.0 \\ 16 \end{array} \quad \begin{array}{r} 9.1 \\ 22 \end{array} \quad \begin{array}{r} 8.7 \\ 30 \end{array} \quad \begin{array}{r} 5.6 \\ 34 \end{array} \quad \begin{array}{r} 5.6 \\ 50 \end{array}$$

$$\begin{array}{r} 10.3 \\ 50 \end{array} \quad \begin{array}{r} 8.6 \\ 37 \end{array} \quad \begin{array}{r} 9.1 \\ 26 \end{array} \quad \begin{array}{r} 9.5 \\ 21 \end{array} \quad \begin{array}{r} 9.4 \\ 18-16 \end{array} \quad \begin{array}{r} 8.1 \\ 14 \end{array} \quad \begin{array}{r} 7.4 \\ 11 \end{array} \quad \begin{array}{r} 7.0 \\ 7.0 \end{array} \quad \begin{array}{r} 7.6 \\ 10 \end{array} \quad \begin{array}{r} 8.7 \\ 14 \end{array} \quad \begin{array}{r} 9.3 \\ 17-20 \end{array} \quad \begin{array}{r} 7.5 \\ 25 \end{array} \quad \begin{array}{r} 6.9 \\ 30 \end{array} \quad \begin{array}{r} 5.8 \\ 33 \end{array} \quad \begin{array}{r} 4.0 \\ 42 \end{array} \quad \begin{array}{r} 2.2 \\ 50 \end{array}$$

$$\begin{array}{r} 15.7 \\ 50 \end{array} \quad \begin{array}{r} 13.1 \\ 34 \end{array} \quad \begin{array}{r} 12.1 \\ 19 \end{array} \quad \begin{array}{r} 8.4 \\ 13 \end{array} \quad \begin{array}{r} 7.8 \\ 10 \end{array} \quad \begin{array}{r} 8.5 \\ 17 \end{array} \quad \begin{array}{r} 8.9 \\ 20 \end{array} \quad \begin{array}{r} 7.4 \\ 24 \end{array} \quad \begin{array}{r} 4.4 \\ 30 \end{array} \quad \begin{array}{r} 3.7 \\ 37 \end{array} \quad \begin{array}{r} 2.8 \\ 37 \end{array} \quad \begin{array}{r} 2.4 \\ 50 \end{array}$$

$$\begin{array}{r} 17.4 \\ 50 \end{array} \quad \begin{array}{r} 15.3 \\ 35 \end{array} \quad \begin{array}{r} 13.0 \\ 26 \end{array} \quad \begin{array}{r} 12.9 \\ 19 \end{array} \quad \begin{array}{r} 8.6 \\ 11 \end{array} \quad \begin{array}{r} 8.1 \\ 8.1 \end{array} \quad \begin{array}{r} 8.6 \\ 9 \end{array} \quad \begin{array}{r} 8.6 \\ 12 \end{array} \quad \begin{array}{r} 9.2 \\ 15 \end{array} \quad \begin{array}{r} 8.0 \\ 19 \end{array} \quad \begin{array}{r} 4.7 \\ 24 \end{array} \quad \begin{array}{r} 3.9 \\ 30 \end{array} \quad \begin{array}{r} 3.4 \\ 35 \end{array} \quad \begin{array}{r} 3.2 \\ 45 \end{array} \quad \begin{array}{r} 3.4 \\ 50 \end{array}$$

Spike R.P. 25' Lt 12+41

Sta.	+	π	-	Elev.
		738.68,		
13+27			4.0	34.7.
+46			4.4	34.3.
+55			4.6	34.1.
14			5.3	33.4.
+50			6.3	32.4.
15			7.4	31.3.
T.P	4.01	935.25.	7.44	931.24.
+45			4.7	30.6
+75			5.0	30.3.
16+20			5.3	30.0.
+50			5.5	29.8.
17			5.3	30.0.
+50			4.7	30.6.

$$\frac{14.3}{50} \quad \frac{14.1}{42} \quad \frac{11.5}{22} \quad \frac{4.5}{12} \quad 4.0 \quad \frac{4.0}{13} \quad \frac{2.9}{33} \quad \frac{2.1}{50}$$

Entrance

$$\frac{14.8}{50} \quad \frac{14.0}{36} \quad \frac{11.3}{22} \quad \frac{5.0}{12} \quad 4.4 \quad \frac{4.7}{15} \quad \frac{2.6}{33} \quad \frac{2.1}{50}$$

$$\frac{15.0}{50} \quad \frac{15.4}{40} \quad \frac{13.3}{25} \quad \frac{5.2}{12} \quad 4.6 \quad \frac{5.0}{11} \quad \frac{5.4}{13} \quad \frac{5.1}{26} \quad \frac{0.7}{43} \quad \frac{+0.2}{50}$$

$$\frac{16.5}{50} \quad \frac{14.0}{34} \quad \frac{12.6}{24} \quad \frac{5.6}{13} \quad 5.3 \quad \frac{5.8}{11} \quad \frac{6.5}{14} \quad \frac{+0.2}{25} \quad \frac{+5.5}{50}$$

$$\frac{17.5}{50} \quad \frac{16.8}{4} \quad \frac{14.7}{27} \quad \frac{6.4}{12} \quad 6.3 \quad \frac{6.6}{12} \quad \frac{6.6}{14} \quad \frac{4.6}{17} \quad \frac{+0.7}{21} \quad \frac{+4.5}{50}$$

$$\frac{21.8}{50} \quad \frac{20.5}{38} \quad \frac{16.8}{26} \quad \frac{7.9}{12} \quad 7.4 \quad \frac{7.7}{11} \quad \frac{9.3}{13} \quad \frac{4.0}{16} \quad \frac{1.5}{25} \quad \frac{0.5}{31} \quad \frac{50}{50}$$

$$\frac{19.6}{50} \quad \frac{18.2}{37} \quad \frac{14.1}{25} \quad \frac{5.2}{12} \quad 4.7 \quad \frac{4.8}{10} \quad \frac{7.3}{15} \quad \frac{7.5}{19} \quad \frac{4.2}{23} \quad \frac{1.1}{37} \quad \frac{+0.3}{50}$$

$$\frac{19.3}{50} \quad \frac{16.5}{32} \quad \frac{12.8}{24} \quad \frac{5.6}{12} \quad 5.0 \quad \frac{5.0}{11} \quad \frac{7.5}{16} \quad \frac{8.5}{24-26} \quad \frac{6.7}{32} \quad \frac{4.6}{50}$$

$$\frac{18.8}{50} \quad \frac{15.5}{28} \quad \frac{5.8}{12} \quad 5.3 \quad \frac{5.5}{11} \quad \frac{9.7}{19} \quad \frac{9.4}{29} \quad \frac{7.7}{33} \quad \frac{5.8}{50}$$

$$\frac{20.2}{50} \quad \frac{16.1}{29} \quad \frac{5.8}{12} \quad 5.5 \quad \frac{5.7}{11} \quad \frac{8.9}{16} \quad \frac{9.7}{21} \quad \frac{9.7}{30} \quad \frac{7.4}{43} \quad \frac{6.2}{50}$$

$$\frac{19.3}{50} \quad \frac{17.3}{34} \quad \frac{5.7}{12} \quad 5.3 \quad \frac{5.4}{11} \quad \frac{11.1}{20} \quad \frac{11.2}{28} \quad \frac{9.3}{42} \quad \frac{7.7}{50}$$

$$\frac{19.7}{50} \quad \frac{18.0}{34} \quad \frac{5.1}{12} \quad 4.7 \quad \frac{5.1}{11} \quad \frac{13.1}{27} \quad \frac{13.2}{34} \quad \frac{10.4}{50}$$

Sta.	+	π	-	Elev.
		935.25 ✓		
18			3.8	31.5
+31	Sec thru	15" C.M.	3.2	32.1
19			1.4	33.9
T.P.	7.97	942.06	1.14	934.11
B.M.	7.82	944.78 ✓	5.13	936.95 (936.96)
+38			9.5	35.3
+50			9.1	35.7
+61			8.7	36.1
+85			7.9	36.9
+92			7.6	37.2
20			7.3	37.5
+50			5.5	39.3
+81			4.6	40.2
21			4.0	40.8

125
13.15
$$\begin{array}{r} 19.2 \quad 18.2 \quad 4.2 \quad 4.1 \quad 13.4 \quad 13.5 \quad 10.3 \\ 50 \quad 37 \quad 12 \quad 3.8 \quad 11 \quad 30 \quad 35 \quad 50 \\ \hline 17.98 \end{array}$$

$$\begin{array}{r} \text{F.L.} \quad \text{F.L. 20.81} \\ 18.3 \quad (17.27) \quad 18.7 \quad 14.3 \quad 3.6 \quad 3.4 \quad (14.44) \quad 13.9 \quad 12.9 \quad 13.8 \\ 50 \quad (44) \quad 44 \quad 29 \quad 12 \quad 3.2 \quad 10 \quad (30) \quad 31 \quad 40 \quad 50 \\ \hline \end{array}$$

$$\begin{array}{r} 16.4 \quad 16.2 \quad 6.2 \quad 1.6 \quad 1.7 \quad 7.2 \quad 7.3 \quad 1.2 \\ 50 \quad 44 \quad 23 \quad 12 \quad 1.4 \quad 11 \quad 21 \quad 31 \quad 50 \\ \hline \end{array}$$

Spike in P.P. 19+81-26 Lt.

$$\begin{array}{r} 19.0 \quad 18.3 \quad 9.8 \quad 9.8 \quad 11.4 \quad 9.5 \quad 9.5 \\ 50 \quad 29 \quad 12 \quad 9.5 \quad 11 \quad 21-24 \quad 31 \quad 50 \\ \hline \end{array}$$

$$\begin{array}{r} 16.6 \quad 16.4 \quad 14.6 \quad 12.1 \quad 9.4 \quad 9.2 \quad 9.0 \quad 9.6 \quad 9.2 \\ 50 \quad 35 \quad 23 \quad 17 \quad 12 \quad 9.1 \quad 11 \quad 23 \quad 25 \quad 50 \\ \hline \end{array}$$

$$\begin{array}{r} 13.8 \quad 14.5 \quad 13.6 \quad 9.0 \quad 8.1 \quad 7.7 \\ 50 \quad 38 \quad 29 \quad 11 \quad 8.7 \quad 27 \quad 50 \\ \hline \end{array}$$

Oakwood Drive

$$\begin{array}{r} 1.6 \quad 8.3 \quad 8.8 \quad 9.5 \quad 8.2 \quad 7.8 \quad 7.6 \\ 50 \quad 26 \quad 25 \quad 17 \quad 13 \quad 7.9 \quad 25 \quad 50 \\ \hline \end{array}$$

$$\begin{array}{r} 10.7 \quad 7.0 \quad 8.4 \quad 8.9 \quad 7.7 \quad 7.9 \quad 9.4 \quad 9.1 \quad 8.7 \\ 50 \quad 28 \quad 24 \quad 16 \quad 12 \quad 7.6 \quad 10 \quad 16 \quad 30 \quad 50 \\ \hline \end{array}$$

$$\begin{array}{r} 10.3 \quad 5.9 \quad 7.5 \quad 8.7 \quad 7.8 \quad 7.9 \quad 8.0 \quad 4.3 \quad 3.0 \\ 50 \quad 29 \quad 24 \quad 17 \quad 14 \quad 7.3 \quad 11 \quad 16 \quad 25 \quad 50 \\ \hline \end{array}$$

$$\begin{array}{r} 7.5 \quad 4.6 \quad 6.5 \quad 5.9 \quad 6.0 \quad 5.3 \quad 2.4 \quad 0.2 \\ 50 \quad 25 \quad 17 \quad 12 \quad 5.5 \quad 11 \quad 17 \quad 27 \quad 50 \\ \hline \end{array}$$

$$\begin{array}{r} 6.3 \quad 5.0 \quad 5.2 \quad 5.0 \quad 4.7 \quad 3.1 \quad 1.1 \\ 50 \quad 20 \quad 17 \quad 12 \quad 4.6 \quad 10 \quad 25 \quad 50 \quad \text{Ent.} \\ \hline \end{array}$$

$$\begin{array}{r} 4.1 \quad 3.1 \quad 2.9 \quad 4.3 \quad 6.5 \quad 4.2 \quad 4.3 \quad 2.2 \quad 0.5 \\ 50 \quad 28 \quad 23 \quad 20 \quad 12 \quad 4.0 \quad 12 \quad 18 \quad 22 \quad 50 \\ \hline \end{array}$$

Sta	+	π	-	Elev
		944.78		
21+60			2.2	42.6
+80			1.8	43.0
22			1.6	43.2
+50			1.1	43.7
T.P.	8.36	952.21	0.93	943.85
23			8.0	44.2
+50			8.1	44.1
T.P.	10.97	961.83	1.35	950.86
21+60				42.6
+80				43.0
22				43.2
+50				43.7
23				44.2
T.P.	1.99	952.85	10.97	950.86
24			9.2	43.7

$$\frac{2.0}{20} \quad \frac{2.7}{16} \quad 2.2 \quad \frac{2.9}{12} \quad \frac{2.0}{17} \quad \frac{0.2+0.3}{21} \quad \frac{0.3}{50}$$

$$\frac{3.5}{26} \quad \frac{3.1}{16} \quad \frac{2.6}{14} \quad 1.8 \quad \frac{2.5}{14} \quad \frac{2.0}{17} \quad \frac{0.8+1.2}{28} \quad \frac{1.2}{36}$$

$$\frac{1.4}{26} \quad \frac{2.0}{15} \quad 1.6 \quad \frac{2.3}{14} \quad \frac{2.2}{17} \quad \frac{1.4}{20}$$

$$\frac{0.8}{20} \quad \frac{1.3}{17} \quad 1.1 \quad \frac{1.6}{15} \quad \frac{1.7}{20}$$

$$\frac{4.7}{50} \quad \frac{4.7}{34} \quad \frac{4.8}{30} \quad \frac{6.8}{23} \quad \frac{8.0}{22} \quad \frac{8.6}{17} \quad 8.0 \quad \frac{8.5}{15} \quad \frac{7.8}{19} \quad \frac{2.1}{22}$$

$$\frac{5.0}{50} \quad \frac{4.4}{31} \quad \frac{7.7}{22} \quad \frac{9.3}{18} \quad \frac{9.0}{16} \quad 8.1 \quad \frac{8.9}{15} \quad \frac{7.7}{22} \quad \frac{2.3}{29} \quad \frac{2.2}{50}$$

$$L.O \quad \frac{9.0}{50} \quad \frac{8.5}{40} \quad \frac{15.1}{27}$$

$$(19.2)$$

$$L.O \quad \frac{3.7}{50} \quad \frac{9.7}{48}$$

$$(18.8) \quad \frac{9.4}{50} \quad \frac{6.2}{55} \quad L.O$$

$$L.O \quad \frac{2.8}{50} \quad \frac{2.2}{46} \quad \frac{10.2}{44}$$

$$(18.6) \quad \frac{14.3}{27} \quad \frac{9.6}{37} \quad \frac{5.8}{50} \quad \frac{3.8}{34} \quad L.O$$

$$\frac{6.8}{50} \quad \frac{6.1}{46} \quad \frac{10.5}{44}$$

$$(18.1)$$

$$\frac{6.6}{33} \quad \frac{4.0}{50} \quad L.O$$

$$(17.6)$$

$$\frac{6.1}{35} \quad \frac{6.3}{50}$$

$$\frac{6.4}{50} \quad \frac{7.5}{26} \quad \frac{10.3}{17} \quad \frac{10.0}{13} \quad 9.2 \quad \frac{9.7}{13} \quad \frac{10.4}{17} \quad \frac{5.5}{26} \quad \frac{5.4}{50}$$

Sta	+	↑	-	Elev
		952.85		
24+50			9.8	43.1
25			10.5	42.4
+50			11.5	41.4
26			12.5	40.4
+50				39.1
+80				38.1
27				37.4
B.M.	1.64	941.29	13.20	939.65
26				40.4
+50			2.2	39.1
+80			3.2	38.1
27			3.9	37.4
+45			5.1	36.2

$$\begin{array}{r} 8.0 \\ 50 \end{array} \quad \begin{array}{r} 7.0 \\ 29 \end{array} \quad \begin{array}{r} 10.7 \\ 23 \end{array} \quad \begin{array}{r} 10.6 \\ 16 \end{array} \quad 9.8 \quad \begin{array}{r} 10.4 \\ 12 \end{array} \quad \begin{array}{r} 10.3 \\ 30 \end{array} \quad \begin{array}{r} 6.0 \\ 28 \end{array} \quad \begin{array}{r} 5.0 \\ 50 \end{array}$$

$$\begin{array}{r} 8.0 \\ 50 \end{array} \quad \begin{array}{r} 7.7 \\ 38 \end{array} \quad \begin{array}{r} 7.3 \\ 29 \end{array} \quad \begin{array}{r} 11.9 \\ 21 \end{array} \quad \begin{array}{r} 11.2 \\ 14 \end{array} \quad 10.5 \quad \begin{array}{r} 11.2 \\ 13 \end{array} \quad \begin{array}{r} 11.5 \\ 19 \end{array} \quad \begin{array}{r} 11.0 \\ 21 \end{array} \quad \begin{array}{r} 6.4 \\ 30 \end{array} \quad \begin{array}{r} 5.3 \\ 50 \end{array}$$

$$\begin{array}{r} 10.2 \\ 50 \end{array} \quad \begin{array}{r} 9.5 \\ 41 \end{array} \quad \begin{array}{r} 8.7 \\ 27 \end{array} \quad \begin{array}{r} 11.5 \\ 22 \end{array} \quad \begin{array}{r} 12.0 \\ 14 \end{array} \quad 11.5 \quad \begin{array}{r} 11.6 \\ 12 \end{array} \quad \begin{array}{r} 11.7 \\ 18 \end{array} \quad \begin{array}{r} 10.3 \\ 22 \end{array} \quad \begin{array}{r} 7.6 \\ 29 \end{array} \quad \begin{array}{r} 6.2 \\ 50 \end{array}$$

$$12.5 \quad \begin{array}{r} 13.1 \\ 14 \end{array} \quad \begin{array}{r} 13.1 \\ 19 \end{array} \quad \begin{array}{r} 7.1 \\ 29 \end{array} \quad \begin{array}{r} 6.8 \\ 50 \end{array}$$

$$\textcircled{13.7}$$

$$\begin{array}{r} 4.1 \\ 33 \end{array} \quad \begin{array}{r} 4.8 \\ 50 \end{array}$$

$$\textcircled{14.7}$$

$$\begin{array}{r} 3.5 \\ 37 \end{array} \quad \begin{array}{r} 3.8 \\ 50 \end{array}$$

$$\textcircled{15.4}$$

$$\begin{array}{r} 6.7 \\ 31 \end{array} \quad \begin{array}{r} 6.0 \\ 50 \end{array}$$

Top Men.

$$\begin{array}{r} 54.1 \\ 50 \end{array} \quad \begin{array}{r} 26.1 \\ 28 \end{array} \quad \begin{array}{r} 20.2 \\ 22 \end{array} \quad \begin{array}{r} 25.1 \\ 16 \end{array} \quad \begin{array}{r} 0.9 \\ 10 \end{array}$$

$$\begin{array}{r} 6.3 \\ 50 \end{array} \quad \begin{array}{r} 3.4 \\ 30 \end{array} \quad \begin{array}{r} 3.0 \\ 22 \end{array} \quad \begin{array}{r} 2.9 \\ 17 \end{array} \quad 2.2 \quad \begin{array}{r} 2.9 \\ 15 \end{array} \quad \begin{array}{r} 2.2 \\ 18 \end{array}$$

$$\begin{array}{r} 6.9 \\ 50 \end{array} \quad \begin{array}{r} 4.0 \\ 30 \end{array} \quad \begin{array}{r} 3.9 \\ 24 \end{array} \quad \begin{array}{r} 3.9 \\ 19 \end{array} \quad 3.2 \quad \begin{array}{r} 3.9 \\ 14 \end{array} \quad \begin{array}{r} 2.8 \\ 19 \end{array}$$

$$\begin{array}{r} 6.7 \\ 50 \end{array} \quad \begin{array}{r} 4.8 \\ 30 \end{array} \quad \begin{array}{r} 4.4 \\ 25 \end{array} \quad \begin{array}{r} 4.1 \\ 21 \end{array} \quad \begin{array}{r} 4.5 \\ 16 \end{array} \quad 3.9 \quad \begin{array}{r} 4.5 \\ 13 \end{array} \quad \begin{array}{r} 3.4 \\ 21 \end{array}$$

$$\begin{array}{r} 6.1 \\ 50 \end{array} \quad \begin{array}{r} 5.5 \\ 33 \end{array} \quad \begin{array}{r} 5.8 \\ 15 \end{array} \quad 5.1 \quad \begin{array}{r} 5.6 \\ 10 \end{array} \quad \begin{array}{r} 5.9 \\ 14 \end{array} \quad \begin{array}{r} 5.8 \\ 20 \end{array} \quad \begin{array}{r} 4.7 \\ 22 \end{array} \quad \begin{array}{r} 4.3 \\ 31 \end{array} \quad \begin{array}{r} 4.5 \\ 42 \end{array} \quad \begin{array}{r} 4.1 \\ 50 \end{array}$$

Sta	+	π	-	Elev
		941.29		
27+68			6.0	35.3
28			7.0	34.3
+36			8.1	33.2
+78			9.3	32.0
29			10.0	31.3
+50			11.3	30.0
30			12.9	28.4
+50				26.2
T.P	6.58	936.12	11.75	929.54
30+50			9.9	26.2
31			11.7	24.4
+40			13.4	22.7
+50			13.9	22.2

ht

£

pt

$$\frac{7.4}{50} \frac{8.0}{30} \frac{7.6}{20} \frac{6.6}{15} 6.0 \frac{6.5}{12} \frac{8.0}{17} \frac{8.8}{31} \frac{8.8}{50}$$

$$\frac{11.2}{50} \frac{11.8}{32} \frac{11.4}{22} \frac{7.9}{15} 7.0 \frac{7.6}{11} \frac{12.3}{19} \frac{12.7}{22} \frac{13.1}{30} \frac{14.1}{50}$$

$$\frac{12.8}{50} \frac{12.4}{32} \frac{12.3}{22} \frac{8.7}{14} 8.1 \frac{8.8}{12} \frac{14.6}{25} \frac{16.0}{50}$$

$$\frac{13.3}{50} \frac{13.1}{33} \frac{12.7}{29} \frac{11.7}{24} \frac{9.8}{16} 9.3 \frac{9.8}{14} \frac{9.9}{20} \frac{12.0}{25} \frac{12.4}{33} \frac{13.0}{50}$$

$$\frac{11.6}{50} \frac{12.1}{39} \frac{11.1}{36} \frac{10.7}{27} \frac{10.2}{20} \frac{10.3}{15} 10.0 \frac{10.6}{13} \frac{9.4}{20} \frac{10.6}{30} \frac{11.5}{50}$$

$$\frac{6.1}{50} \frac{5.5}{36} \frac{5.0}{27} \frac{10.1}{21} \frac{11.5}{18} 11.3 \frac{11.8}{13} \frac{11.0}{18} \frac{6.0}{24} \frac{8.2}{50}$$

$$\frac{4.1}{75} \frac{4.1}{50} \frac{4.2}{42} \frac{3.4}{35} \frac{12.5}{22} \frac{13.3}{19} 12.9 \frac{13.7}{15} \frac{4.5}{29} \frac{5.8}{42} \frac{6.3}{50} \frac{6.6}{75}$$

$$\frac{7.2}{75} \frac{7.2}{50} \frac{6.0}{36} \frac{12.2}{25} 15.1 \frac{6.6}{32} \frac{8.0}{50} \frac{7.8}{75}$$

$$\frac{7.9}{26} \frac{9.8}{23} \frac{10.2}{16} 9.9 \frac{10.9}{14} \frac{9.0}{20}$$

$$\frac{8.0}{75} \frac{7.6}{50} \frac{7.2}{39} \frac{6.8}{30} \frac{11.0}{21} \frac{12.2}{17} 11.7 \frac{12.5}{14} \frac{13.0}{19} \frac{5.6}{33} \frac{6.2}{50} \frac{6.4}{75}$$

$$\frac{9.3}{50} \frac{9.8}{38} \frac{10.2}{30} \frac{13.7}{23} \frac{14.4}{15} \frac{13.9}{11} 13.4 \frac{14.0}{14} \frac{14.5}{22} \frac{10.0}{30} \frac{11.0}{50}$$

$$\frac{9.4}{50} \frac{9.8}{38} \frac{10.2}{30} \frac{12.8}{26} \frac{14.0}{22} \frac{14.3}{12} 13.9 \frac{14.3}{14} \frac{12.6}{18} \frac{14.4}{25} \frac{13.6}{28} \frac{12.8}{50}$$

Sta	+	Δ	-	Elev
		936.12		
31+75				21.1
32				19.9
T.P.	1.34	925.70	11.76	924.36
31+75			4.6	21.1
32			5.8	19.9
+50			4.8	17.9
33			10.1	15.6
T.P.	0.07	916.29	9.48	916.22
+50			3.0	13.3
34			5.3	11.0
+50			7.2	09.1
35			9.2	07.1
T.P.	1.31	906.28	11.32	904.97
35				07.1
+50			1.3	05.0

Lt

X

Rt

$$\frac{10.4}{50} \quad \frac{10.1}{43} \quad \frac{10.1}{31} \quad \textcircled{15.0} \quad \frac{3.5}{27} \quad \frac{13.0}{50}$$

$$\frac{11.9}{50} \quad \frac{11.6}{37} \quad \frac{12.0}{31} \quad \textcircled{16.2} \quad \frac{13.5}{27} \quad \frac{13.1}{50}$$

$$\frac{5.3}{21} \quad \frac{4.8}{12} \quad 4.6 \quad \frac{4.9}{13} \quad \frac{5.0}{19}$$

$$\frac{6.5}{19} \quad \frac{6.4}{16} \quad \frac{5.9}{12} \quad 5.8 \quad \frac{6.0}{14} \quad \frac{6.5}{19}$$

$$\frac{3.5}{50} \quad \frac{4.4}{31} \quad \frac{7.2}{26} \quad \frac{8.7}{22} \quad \frac{8.6}{17} \quad \frac{7.9}{12} \quad 7.8 \quad \frac{8.4}{13} \quad \frac{8.8}{18} \quad \frac{8.8}{20} \quad \frac{4.5}{27} \quad \frac{3.7}{50}$$

$$\frac{7.9}{50} \quad \frac{7.7}{34} \quad \frac{7.8}{29} \quad \frac{10.0}{24} \quad \frac{11.5}{19} \quad \frac{10.7}{12} \quad 10.1 \quad \frac{10.6}{12} \quad \frac{10.7}{17} \quad \frac{10.6}{23} \quad \frac{7.4}{31} \quad \frac{9.1}{50}$$

$$\frac{2.5}{50} \quad \frac{2.6}{27} \quad \frac{3.8}{22} \quad \frac{3.8}{20} \quad \frac{3.4}{16} \quad 3.0 \quad \frac{3.4}{11} \quad \frac{4.4}{15} \quad \frac{5.1}{23} \quad \frac{5.4}{50}$$

$$\frac{5.7}{50} \quad \frac{6.6}{23} \quad \frac{6.5}{15} \quad \frac{5.4}{13} \quad 5.3 \quad \frac{5.9}{11} \quad \frac{8.6}{17} \quad \frac{9.2}{32} \quad \frac{9.0}{50}$$

$$\frac{9.5}{50} \quad \frac{10.7}{30} \quad \frac{10.5}{18} \quad \frac{7.5}{12} \quad 7.2 \quad \frac{7.6}{11} \quad \frac{11.8}{20} \quad \frac{11.9}{50}$$

$$\frac{9.6}{12} \quad 9.2 \quad \frac{9.6}{12} \quad \frac{17.4}{22} \quad \frac{18.4}{30} \quad \frac{17.3}{35} \quad \frac{16.7}{50}$$

$$\frac{7.8}{50} \quad \frac{6.9}{24} \quad \textcircled{10.8}$$

$$\frac{14.6}{50} \quad \frac{12.3}{28} \quad \frac{11.6}{11} \quad 11.3 \quad \frac{2.0}{10} \quad \frac{11.8}{26} \quad \frac{11.8}{36} \quad \frac{14.0}{44} \quad \frac{14.2}{50}$$

Sta	+	Δ	-	Elev
		906.28		

36			3.0	03.3
----	--	--	-----	------

+50			4.3	02.0
-----	--	--	-----	------

+80			5.1	01.2
-----	--	--	-----	------

37			5.5	00.8
----	--	--	-----	------

+25			6.0	00.3
-----	--	--	-----	------

+40			6.2	00.1
-----	--	--	-----	------

+80			6.9	99.4
-----	--	--	-----	------

B.M	3.86	903.79 903.83	6.36	899.92 - 899.97
-----	------	------------------	------	-----------------

38			4.8	99.0
----	--	--	-----	------

+50			5.4	98.4
-----	--	--	-----	------

P.C. +80			5.7	98.1
----------	--	--	-----	------

39			6.7	97.1
----	--	--	-----	------

+30			5.8	98.0
-----	--	--	-----	------

Lt

Z

Rt

$$\frac{16.7}{50} \quad \frac{14.3}{28} \quad \frac{3.3}{11} \quad 3.0 \quad \frac{3.5}{11} \quad \frac{13.0}{27} \quad \frac{14.9}{50}$$

$$\frac{15.2}{50} \quad \frac{12.4}{22} \quad \frac{4.7}{11} \quad 4.3 \quad \frac{4.8}{11} \quad \frac{11.2}{21} \quad \frac{14.0}{31} \quad \frac{14.2}{40} \quad \frac{14.0}{50}$$

$$\frac{11.2}{50} \quad \frac{9.1}{19} \quad \frac{5.6}{11} \quad 5.1 \quad \frac{5.7}{12} \quad \frac{9.0}{16} \quad \frac{11.6}{24} \quad \frac{14.7}{31} \quad \frac{15.6}{50}$$

$$\frac{8.8}{50} \quad \frac{7.9}{30} \quad \frac{10.1}{25} \quad \frac{10.7}{19} \quad \frac{5.9}{10} \quad 5.5 \quad \frac{6.1}{11} \quad \frac{9.5}{16} \quad \frac{10.8}{24} \quad \frac{14.7}{32} \quad \frac{16.0}{50}$$

$$\frac{5.8}{50} \quad \frac{5.7}{44} \quad \frac{10.2}{34} \quad \frac{12.1}{29} \quad \frac{11.8}{21} \quad \frac{6.6}{10} \quad 6.0 \quad \frac{6.4}{11} \quad \frac{10.0}{17} \quad \frac{9.9}{21} \quad \frac{9.6}{27} \quad \frac{15.5}{38} \quad \frac{15.1}{50}$$

$$\frac{4.6}{50} \quad \frac{4.5}{46} \quad \frac{7.5}{40} \quad \frac{12.4}{30} \quad \frac{12.5}{22} \quad \frac{6.7}{11} \quad 6.2 \quad \frac{6.6}{11} \quad \frac{9.9}{17} \quad \frac{10.8}{21} \quad \frac{8.2}{25} \quad \frac{6.0}{37} \quad \frac{6.2}{50}$$

$$\frac{6.5}{50} \quad \frac{7.3}{32} \quad \frac{9.4}{21} \quad \frac{9.4}{17} \quad \frac{7.4}{11} \quad 6.9 \quad \frac{7.5}{12} \quad \frac{12.5}{24} \quad \frac{14.0}{50}$$

Sph 17 18' Oak 50' Rt Sta 39+32

$$\frac{8.0}{50} \quad \frac{9.3}{25} \quad \frac{8.9}{18} \quad \frac{5.2}{11} \quad 4.8 \quad \frac{5.5}{11} \quad \frac{11.1}{21} \quad \frac{13.6}{50}$$

$$\frac{13.9}{50} \quad \frac{12.3}{22} \quad \frac{5.7}{11} \quad 5.4 \quad \frac{5.6}{12} \quad \frac{11.9}{23} \quad \frac{13.8}{50}$$

$$\frac{14.0}{50} \quad \frac{13.3}{50} \quad \frac{12.3}{28} \quad \frac{10.7}{20} \quad \frac{6.0}{11} \quad 5.7 \quad \frac{5.9}{12} \quad \frac{10.4}{20} \quad \frac{11.7}{30} \quad \frac{13.9}{50}$$

$$\frac{12.8}{50} \quad \frac{11.2}{29} \quad \frac{9.8}{18} \quad \frac{6.1}{10} \quad 6.7 \quad \frac{5.7}{16} \quad \frac{9.2}{21} \quad \frac{10.9}{26} \quad \frac{11.1}{35} \quad \frac{12.7}{50}$$

$$\frac{12.6}{50} \quad \frac{10.4}{25} \quad \frac{9.1}{13} \quad \frac{6.2}{5} \quad 5.8 \quad \frac{5.2}{19} \quad \frac{6.3}{30} \quad \frac{7.1}{50}$$

Sta	+	Σ	-	Elev
		903.79 903.83		
39+50			5.5	98.3
PT + 82			5.2	98.2
40		906.59	5.1	98.7
T.P.	7.93	906.63	5.13	898.66 898.70
+50			8.1	98.5
41			8.3	98.3
+50			8.4	98.2
PC + 91.84			8.7	97.9
T.P.	8.29	905.68 905.72	9.22	897.37 897.41
42			7.9	97.8
+20			8.3	97.4
+30			8.4	97.3
+40			8.6	97.1

Profile Road North

42+56.00 0+00 Forward Tangent

Lt

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Rt

$$\frac{12.6}{50} \quad \frac{10.3}{18} \quad \frac{5.9}{8} \quad 5.5 \quad \frac{5.1}{17} \quad \frac{5.9}{22} \quad \frac{6.0}{25} \quad \frac{4.3}{34} \quad \frac{3.5}{50}$$

$$\frac{14.0}{65} \quad \frac{12.7}{50} \quad \frac{10.1}{25} \quad \frac{9.6}{17} \quad \frac{5.7}{11} \quad 5.2 \quad \frac{5.3}{18} \quad \frac{3.7}{47} \quad \frac{1.8}{50}$$

$$\frac{13.5}{50} \quad \frac{9.7}{24} \quad \frac{8.6}{17} \quad \frac{6.0}{12} \quad 5.1 \quad \frac{5.2}{20} \quad \frac{3.8}{25} \quad \frac{3.1}{34} \quad \frac{1.7}{50}$$

$$\frac{14.2}{50} \quad \frac{11.6}{27} \quad \frac{9.1}{13} \quad \frac{8.7}{10} \quad 8.1 \quad \frac{8.6}{12} \quad \frac{9.0}{18} \quad \frac{8.5}{23} \quad \frac{7.5}{27} \quad \frac{2.7}{35} \quad \frac{3.9}{42} \quad \frac{3.0}{50}$$

$$\frac{12.0}{50} \quad \frac{11.0}{33} \quad \frac{10.2}{22} \quad \frac{9.0}{13} \quad 8.3 \quad \frac{8.9}{9} \quad \frac{9.6}{15} \quad \frac{9.3}{18} \quad \frac{7.8}{20} \quad \frac{3.4}{27} \quad \frac{2.4}{31} \quad \frac{3.2}{35} \quad \frac{2.0}{50} \quad \frac{1.3}{75}$$

$$\frac{10.5}{50} \quad \frac{10.5}{36} \quad \frac{10.4}{19} \quad \frac{8.9}{12} \quad 8.4 \quad \frac{8.6}{10} \quad \frac{9.6}{13} \quad \frac{9.9}{17} \quad \frac{5.2}{24} \quad \frac{5.9}{32} \quad \frac{4.5}{50} \quad \frac{3.4}{75}$$

$$\frac{14.0}{50} \quad \frac{10.9}{19} \quad \frac{8.5}{9} \quad 8.7 \quad \frac{9.2}{10} \quad \frac{9.8}{14} \quad \frac{9.9}{17} \quad \frac{6.7}{23} \quad \frac{7.3}{28} \quad \frac{6.6}{50} \quad \frac{5.6}{65}$$

$$\frac{13.6}{50} \quad \frac{12.0}{25} \quad \frac{8.2}{13} \quad 7.9 \quad \frac{8.7}{13} \quad \frac{9.2}{15} \quad \frac{8.8}{19} \quad \frac{6.2}{22} \quad \frac{6.6}{28} \quad \frac{5.9}{50} \quad \frac{4.8}{65}$$

$$\frac{16.7}{50} \quad \frac{16.9}{45} \quad \frac{8.8}{26} \quad 8.3 \quad \frac{9.0}{8} \quad \frac{9.8}{16} \quad \frac{9.6}{18} \quad \frac{6.9}{22} \quad \frac{6.1}{50}$$

$$\frac{18.6}{60} \quad \frac{15.6}{50} \quad \frac{9.3}{37} \quad 8.4 \quad \frac{9.1}{10} \quad \frac{10.1}{17} \quad \frac{9.9}{19} \quad \frac{7.1}{25} \quad \frac{5.9}{50}$$

$$\frac{18.2}{72} \quad \frac{11.6}{57} \quad \frac{9.8}{33} \quad \frac{8.7}{22} \quad 8.6 \quad \frac{9.4}{10} \quad \frac{10.3}{19} \quad \frac{9.9}{22} \quad \frac{7.6}{28} \quad \frac{6.2}{34} \quad \frac{6.0}{50}$$

$$\frac{6.8}{200} \quad \frac{10.5}{180} \quad \frac{12.5}{100} \quad \frac{12.3}{50} \quad \frac{9.0}{00}$$

Sta	+	Σ	-	Elev
		905.28 905.72		
42 + 50			8.8	96.9
42 + 94.23			10.1	95.2
43 + 50			11.3	94.4
44			12.4	93.3
+ 50				91.8
45				90.2
T.P.		896.58		892.55
T.P.O	3.99	896.62	13.09	892.63
44 + 50			4.8	91.8
45			6.4	90.2
+ 50			9.2	88.4
T.P.	0.20	889.38 889.42	7.46	889.18 889.22
46			2.8	86.6
+ 50			4.2	85.2

Lt

L

Rt

$$\frac{126}{89} \frac{12.5}{72} \frac{15.8}{61} \frac{15.9}{60} \frac{13.8}{34} \frac{120}{22} \frac{8.9}{11} 8.8 \frac{9.6}{12} \frac{10.5}{21} \frac{10.5}{23} \frac{10.3}{26} \frac{2.6}{36} \frac{2.6}{40} \frac{5.9}{50}$$

$$\frac{8.9}{75} \frac{9.6}{50} \frac{10.2}{35} \frac{9.8}{13} \frac{10.2}{6} 10.1 \frac{10.1}{12} \frac{10.3}{24} \frac{11.1}{25} \frac{10.9}{29} \frac{70}{35} \frac{5.6}{39} \frac{5.8}{50} \frac{4.3}{75}$$

$$\frac{4.0}{75} \frac{4.1}{50} \frac{4.1}{21} \frac{8.8}{13} \frac{11.5}{7} 11.3 \frac{10.9}{16} \frac{11.1}{25} \frac{11.3}{28} \frac{8.2}{33} \frac{40}{40} \frac{3.1}{50} \frac{2.5}{75}$$

$$\frac{5.2}{75} \frac{4.7}{50} \frac{3.8}{39} \frac{2.4}{26} \frac{9.6}{17} \frac{12.0}{11} \frac{12.6}{7} 12.4 \frac{12.5}{25} \frac{12.0}{30} \frac{10.0}{39} \frac{1.3}{53} \frac{2.0}{75}$$

$$\frac{3.4}{75} \frac{3.2}{50} \frac{3.4}{26}$$

(139)

$$\frac{1.0}{52} \frac{0.2}{75}$$

$$\frac{70}{75} \frac{7.0}{50} \frac{7.3}{22}$$

(155)

$$\frac{4.5}{41} \frac{3.9}{50} \frac{1.6}{75}$$

$$\frac{2.0}{15} \frac{4.7}{11} \frac{5.2}{7} 4.8 \frac{4.4}{11} \frac{5.2}{25} \frac{5.2}{29} \frac{3.5}{32} \frac{3.2}{35}$$

$$\frac{4.6}{13} \frac{7.0}{10} \frac{6.8}{6} 6.4 \frac{6.0}{11} \frac{6.8}{24} \frac{7.4}{26} \frac{4.6}{36}$$

$$\frac{5.4}{50} \frac{5.8}{33} \frac{6.1}{17} \frac{9.8}{12} \frac{9.6}{9} \frac{8.7}{6} 8.2 \frac{7.8}{10} \frac{8.5}{22} \frac{8.9}{24} \frac{9.6}{26} \frac{8.5}{28} \frac{2.8}{35} \frac{1.7}{46}$$

$$\frac{0.7}{75} \frac{3.7}{53} \frac{3.1}{50}$$

$$\frac{6.8}{50} \frac{7.9}{30} \frac{7.3}{12} \frac{3.1}{5} 2.8 \frac{2.3}{9} \frac{2.9}{20} \frac{5.9}{27} \frac{5.6}{32} \frac{4.2}{43} \frac{4.1}{50}$$

$$\frac{11.3}{50} \frac{12.2}{34} \frac{12.2}{18} \frac{4.6}{4} 4.2 \frac{3.8}{8} \frac{4.5}{20} \frac{9.8}{30} \frac{9.2}{50} \frac{9.2}{50}$$

Sta	+	889.38 889.42	-	Elev
47			5.9	83.5
+28			6.2	83.2
+37			6.3	83.1
+41		Profile	6.4 Ditch	83.0 36"
+56			6.5	82.9
+74			6.6	82.8
48		890.54	6.6	82.8
T.P.	4.09	890.58	5.93	883.45 883.49
+50			7.7	82.8
49			7.2	83.3
+50			6.5	84.0
50		895.32	6.0	84.5
B.M.	895.36	8.45	3.67	886.87 886.91
+5				886.91

Lt

Z

Rt

$$\frac{15.2}{50} \quad \frac{14.9}{24} \quad \frac{13.8}{74} \quad \frac{6.4}{4} \quad 5.9 \quad \frac{5.2}{9} \quad \frac{5.6}{20} \quad \frac{12.7}{34} \quad \frac{12.9}{39} \quad \frac{12.6}{50}$$

$$\frac{15.7}{50} \quad \frac{16.2}{20}$$

$$\frac{6.5}{4} \quad 6.2 \quad \frac{5.7}{9} \quad \frac{6.1}{20} \quad \frac{14.0}{36} \quad \frac{14.3}{41} \quad \frac{13.7}{50}$$

$$\frac{14.4}{50} \quad \frac{17.0}{37} \quad \frac{17.0}{17} \quad \frac{6.7}{4} \quad 6.3 \quad \frac{5.9}{9} \quad \frac{6.4}{20} \quad \frac{14.3}{38} \quad \frac{14.2}{41} \quad \frac{14.0}{50}$$

$$\frac{19.4}{150} \quad \frac{19.0}{100} \quad \frac{18.5}{50} \quad \left(\frac{18.9}{27} \right) \quad \frac{19.7}{FL} \quad \frac{6.7}{3} \quad \frac{6.0}{10} \quad \frac{6.6}{23} \quad \frac{14.9}{40} \quad \frac{19.7}{FL} \quad \frac{18.7}{50} \quad \frac{19.2}{100} \quad \frac{18.2}{150}$$

$$\frac{13.6}{50} \quad \frac{13.4}{26} \quad \frac{15.3}{20} \quad \frac{15.3}{18} \quad \frac{6.9}{4} \quad 6.5 \quad \frac{6.1}{9} \quad \frac{6.6}{20} \quad \frac{14.7}{37} \quad \frac{14.7}{50}$$

$$\frac{12.9}{50} \quad \frac{12.9}{23} \quad \frac{12.7}{17} \quad \frac{12.5}{15} \quad \frac{11.8}{11} \quad \frac{7.1}{3} \quad \frac{6.2}{9} \quad \frac{6.8}{24} \quad \frac{14.0}{33} \quad \frac{15.7}{50} \quad \frac{18.1}{54} \quad \frac{18.3}{58} \quad \frac{14.7}{65}$$

$$\frac{11.2}{60} \quad \frac{11.9}{24} \quad \frac{11.1}{12} \quad \frac{7.0}{3} \quad 6.6 \quad \frac{6.3}{9} \quad \frac{7.0}{20} \quad \frac{14.0}{35} \quad \frac{14.3}{50}$$

$$\frac{8.2}{50} \quad \frac{9.5}{22} \quad \frac{9.8}{16} \quad \frac{10.4}{9} \quad \frac{8.0}{3} \quad 7.7 \quad \frac{7.3}{11} \quad \frac{7.9}{20} \quad \frac{13.2}{33} \quad \frac{13.8}{43} \quad \frac{14.0}{50}$$

$$\frac{6.0}{50} \quad \frac{7.0}{30} \quad \frac{6.7}{18} \quad \frac{7.1}{13} \quad \frac{8.8}{10} \quad \frac{9.0}{57} \quad \frac{7.6}{4} \quad 1.2 \quad \frac{6.8}{10} \quad \frac{7.5}{19} \quad \frac{10.2}{29} \quad \frac{10.5}{34} \quad \frac{12.2}{50}$$

$$\frac{5.4}{50} \quad \frac{5.6}{17} \quad \frac{5.6}{13} \quad \frac{7.6}{9} \quad \frac{7.2}{5} \quad \frac{6.7}{3} \quad 6.5 \quad \frac{5.9}{11} \quad \frac{6.6}{21} \quad \frac{7.9}{33} \quad \frac{9.1}{50}$$

$$\frac{3.6}{50} \quad \frac{3.1}{26} \quad \frac{4.5}{19} \quad \frac{4.8}{11} \quad \frac{6.1}{9} \quad \frac{6.3}{6} \quad 6.0 \quad \frac{5.0}{10} \quad \frac{5.5}{21} \quad \frac{6.1}{25} \quad \frac{6.3}{33} \quad \frac{7.2}{50}$$

Spk in P.P 29 Rt 5ta 50+38

Sta	+	π 895.36	-	ther
-----	---	-----------------	---	------

50+50			9.0	86.3
-------	--	--	-----	------

51			7.3	88.0
----	--	--	-----	------

+12			6.5	88.8
-----	--	--	-----	------

+22			5.7	89.6
-----	--	--	-----	------

+30			5.0	90.3
-----	--	--	-----	------

+42	Edge Pav.		4.30	91.02
-----	-----------	--	------	-------

+57.65	Δ Pav.		5.33	89.99
--------	---------------	--	------	-------

+73	Edge Pav.		6.21	89.11
-----	-----------	--	------	-------

+80			6.0	89.3
-----	--	--	-----	------

+90	Flow Lite Culvert			
-----	-------------------	--	--	--

52			6.1	89.2
----	--	--	-----	------

+08			6.0	89.3
-----	--	--	-----	------

Lt

2

Rt

$$\frac{7.5}{50} \frac{8.0}{25} \frac{8.1}{12} \frac{9.7}{9} \frac{9.5}{6} 9.0 \quad \frac{8.7}{11} \frac{9.6}{23} \frac{10.0}{32} \frac{10.3}{50}$$

$$\frac{6.3}{50} \frac{7.1}{24} \frac{7.2}{13} \frac{7.9}{11} \frac{8.7}{8} \frac{8.4}{5} 7.3 \quad \frac{6.8}{11} \frac{8.1}{23} \frac{8.4}{37} \frac{8.6}{50}$$

$$\frac{6.3}{50} \frac{7.2}{23} \frac{7.1}{14} \frac{8.4}{11} \frac{8.1}{8} \frac{7.1}{6} 6.5 \quad \frac{5.8}{9} \frac{6.2}{21} \frac{8.0}{27} \frac{7.5}{38} \frac{5.6}{48}$$

$$\frac{6.0}{50} \frac{6.9}{24} \frac{7.5}{18} \frac{7.1}{11} \frac{6.8}{7} 5.7 \quad \frac{5.2}{13} \frac{5.3}{30} \frac{5.7}{50} \frac{5.9}{57} \text{E.Pav.}$$

$$\frac{5.8}{50} \frac{6.8}{36} \frac{7.9}{28} \frac{7.7}{18} \frac{6.8}{11} \frac{5.3}{6} 5.0 \quad \frac{4.5}{13} \frac{5.3}{32} \frac{6.0}{32} \frac{7.8}{50} \frac{7.8}{84} \text{R.Pav.}$$

$$\frac{7.6}{50} \frac{7.4}{35} \frac{6.3}{25} \frac{4.5}{15} 4.30 \quad \frac{6.24}{31} \text{E.Pav} \quad \frac{7.32}{50} \frac{8.21}{67} \frac{7.58}{68} \text{Top Curb}$$

$$\frac{5.1}{62} \frac{3.0}{78} \frac{3.38}{32} \text{E.P.} 5.33 \quad \frac{7.35}{36} \text{E.P.} \quad \frac{7.12}{38} \text{Top Curb} \quad \frac{7.5}{50}$$

$$\frac{2.32}{76} \text{E.P.} \frac{4.12}{39} \text{R.Pav.} 6.21 \quad \frac{6.17}{19} \frac{6.9}{27} \frac{8.3}{41} \frac{8.1}{50}$$

$$\frac{2.22}{81} \text{E.P.} \frac{3.91}{50} \text{R.P.} \frac{5.81}{16} \text{E.P.} 6.0 \quad \frac{6.8}{19} \frac{7.1}{26} \frac{6.9}{31} \frac{6.1}{33} \frac{6.4}{50}$$

$$\frac{87.43}{7.89} \text{Inv}$$

$$\frac{9.07}{7.89} \text{Inv}$$

$$\frac{4.8}{50} \frac{5.8}{44} \frac{7.1}{36} \frac{6.7}{25} \frac{7.8}{12} \frac{6.2}{7} 6.1 \quad \frac{6.5}{18} \frac{6.4}{21} \frac{6.0}{34} \frac{6.2}{50}$$

$$\frac{4.9}{61} \frac{7.0}{51} \frac{7.4}{40} \frac{6.4}{30} \frac{4.2}{17} \frac{4.2}{15} \frac{6.1}{10} 6.0 \quad \frac{6.2}{20} \frac{6.1}{26} \frac{6.0}{34} \frac{6.2}{50}$$

Sta	+	π 895.34 895.36	-	Elev
52+50			4.1	90.7.
53			2.8	92.5.
T.P.	8.30	900.81 900.85	2.81	892.51. 892.55
+50			7.0	93.8.
54			5.8	95.0.
55			3.7	97.1.
+15			3.2	97.6.
+20			3.1	97.7.
+28			2.8	98.0.
+46			2.8	98.0.
56			3.8	97.0.
+50			4.2	96.6.

Lt.

Z

Rt.

$$\frac{24}{50} \frac{3.0}{26} \frac{3.3}{13} \frac{4.5}{11} \frac{5.1}{8} 46 \frac{4.7}{21} \frac{4.2}{25} \frac{4.6}{50}$$

$$\frac{1.4}{50} \frac{1.5}{27} \frac{1.5}{13} \frac{3.6}{8} \frac{3.9}{5} 28 \frac{2.5}{8} \frac{3.3}{23} \frac{2.6}{34} \frac{2.9}{50}$$

$$\frac{6.1}{50} \frac{6.1}{27} \frac{6.0}{12} \frac{7.8}{8} \frac{7.9}{5} 70 \frac{6.7}{10} \frac{6.8}{22} \frac{6.1}{26} \frac{6.4}{50}$$

$$\frac{5.1}{50} \frac{5.0}{31} \frac{4.9}{12} \frac{6.1}{9} \frac{6.5}{6} 58 \frac{5.5}{10} \frac{5.5}{21} \frac{5.9}{28} \frac{4.9}{35} \frac{5.0}{50}$$

$$\frac{4.2}{50} \frac{3.8}{33} \frac{3.5}{13} \frac{5.6}{8} \frac{5.2}{6} 48 \frac{4.5}{8} \frac{5.2}{21} \frac{5.6}{25} \frac{5.6}{28} \frac{4.4}{32} \frac{4.0}{50}$$

$$\frac{3.6}{50} \frac{3.3}{34} \frac{3.2}{16} \frac{4.3}{12} \frac{4.6}{8} \frac{3.8}{3} 37 \frac{3.6}{8} \frac{3.9}{20} \frac{4.4}{25} \frac{4.5}{29} \frac{3.7}{32} \frac{3.7}{50}$$

$$\frac{4.0}{50} \frac{2.9}{23} \frac{3.9}{19} \frac{4.0}{14} \frac{3.6}{12} 32 \frac{3.4}{20} \frac{4.1}{25} \frac{4.1}{29} \frac{3.6}{33} \frac{3.7}{50}$$

$$\frac{4.8}{50} \frac{4.6}{24} \frac{3.8}{19} \frac{3.5}{10} 31 \frac{3.2}{15} \frac{3.4}{26} \frac{4.0}{32} \frac{4.1}{50}$$

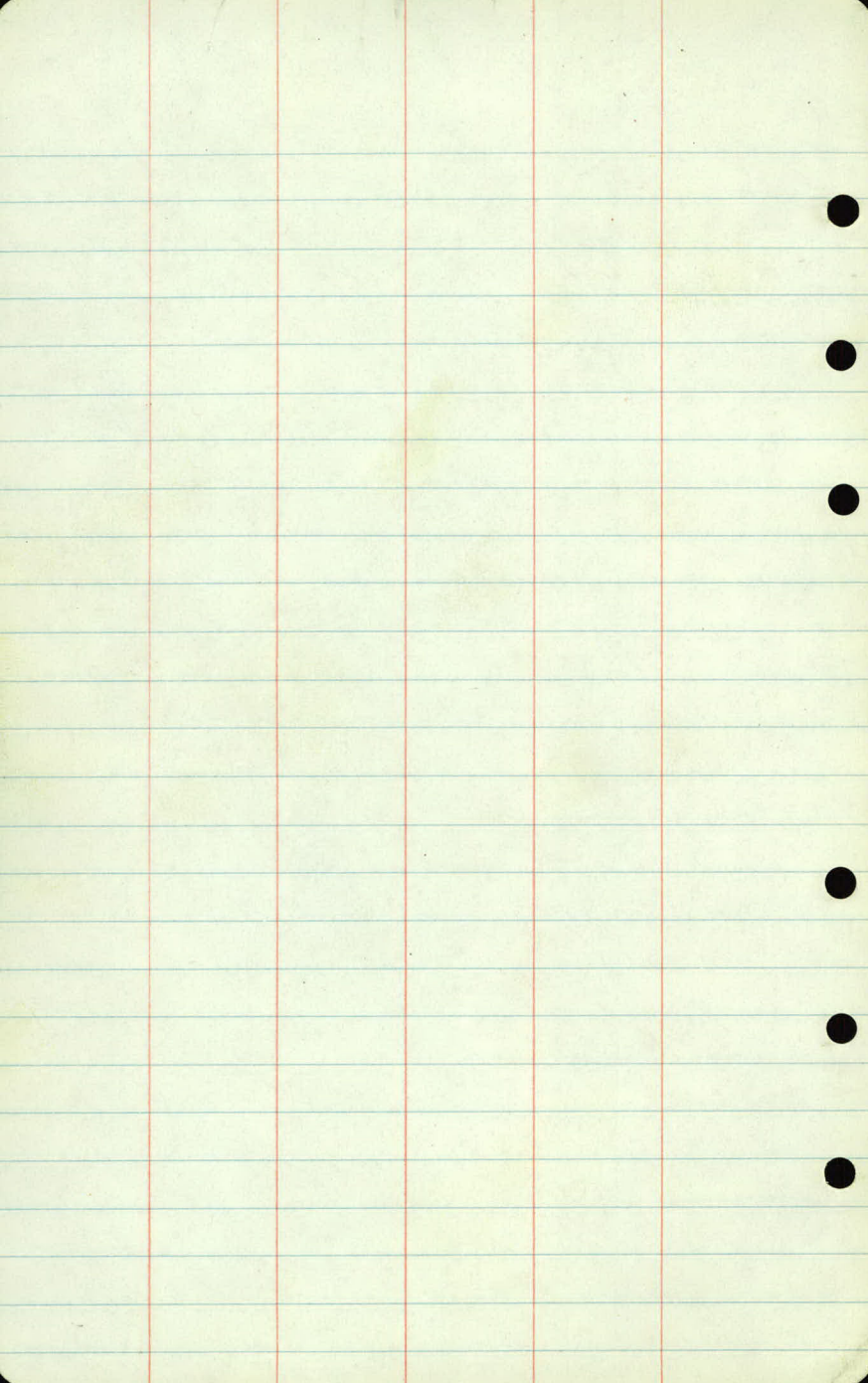
$$\frac{3.8}{50} \frac{3.8}{43} \frac{3.2}{17} 28 \frac{3.0}{21} \frac{3.3}{50}$$

$$\frac{4.3}{100} \frac{3.7}{50} 28$$

$$\frac{2.9}{50} \frac{3.3}{100}$$

Sta	+	Σ	-	Elev
57		900.81 900.85	44	96.4
B.M			2.57	898.24 898.28
				898.25 898.29

SpK in P.P 41 'R1 Stg 55410-



Profile

Sta 38 to Sta 51+33.85

Co. Rd. "E"

Silver Lake Rd.
to Hwy. #8

9 pages

Misc. notes for bituminous surfacing

S. A. P.

Drawn up June 1953

Platted

Sta	+	T	-	Elev.
B. M	3.46	903.39		899.93
38+00				98.9 ✓

+50				98.4 ✓
-----	--	--	--	--------

39				98.1 ✓
----	--	--	--	--------

+20				98.4
-----	--	--	--	------

+40				98.7
-----	--	--	--	------

+60				98.8
-----	--	--	--	------

+82				98.7
-----	--	--	--	------

40				98.8
----	--	--	--	------

10 June 1953
L.C.
M.Mc

Clear 95°

2

£

spt. in 18" oak 50' Rt sta 39+32

4.5

5.0

5.3

5.0

4.7

4.6

4.7

4.6

Sta + π - Elev

903.39

40 + 50

98.6

41

98.3

+50

98.2

42

97.8

+25

96.9

+50

96.0

+75

95.9

T.P.

0.37

895.44

8.32

895.07

43

95.3

~~4~~

4.8

5.1

5.2

5.6

6.5

7.4

7.5

- 0.1

sta + ~~8~~ - Elev.
895.44

43 +50

94.7

44

93.5

+50

92.0

45

90.4

+50

88.6

46

86.8

+50

85.3

47

84.1

A

$\pm$

0.7

1.9

3.4

5.0

6.8

8.6

10.1

11.3

Sta + π - Elev

895.44

47 + 50

83.1

48

83.0

+50

83.2

49

83.8

+50

84.6

50

85.6

+50

86.7

51

88.8

+33.85

90.7

B.M.

5.43

890.01

899.99

~~£~~

12.3

12.4

12.2

11.6

10.8

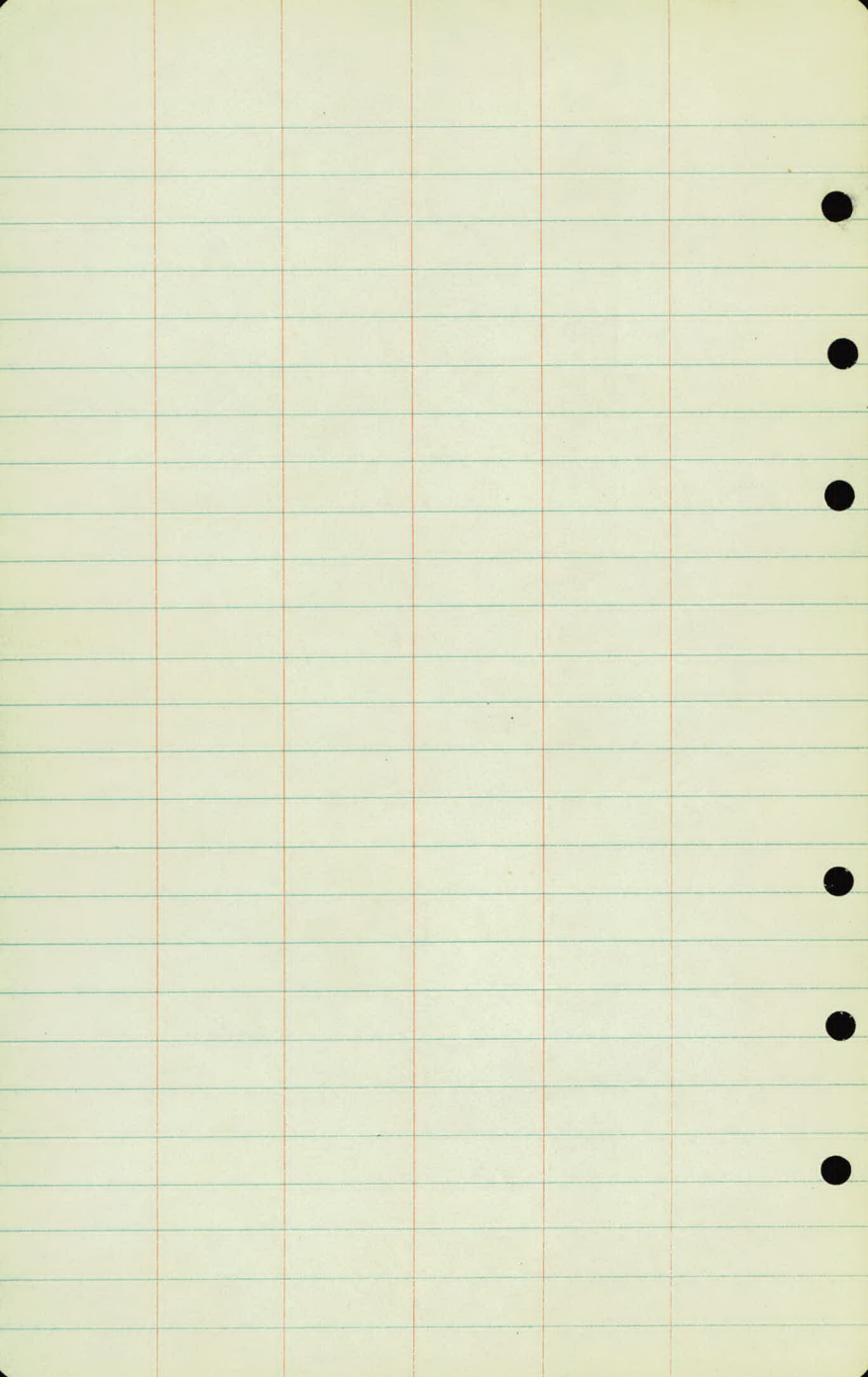
9.8

8.7

6.6

4.7

Drill Hole & Pavement #8



Topography
Sta 33 to Sta 51+33.85

10 June 1953

FA
AM
PM

	G.R.			
+81.94	15	12	7	
+70	16	13	6	
+50	14	12	6	
+30	12	11	7	+30 End GR 16
+20	12			12
39	11			

+50	10	12
38	10	12

27	10	11
----	----	----

26	11	12
----	----	----

25	11	11
----	----	----

+50 Beg GR 10

24	+94 Beg GR	12
----	------------	----

39

+13 Beg GR 12
 44 8 8 12
 +86 25' End LT
 +64 Beg GR 12

45 9 10

44 10 9

43 +07.53
 8 9
 10

+25 14 10 9
 +60 23
 +50 43 11 10
 +45 42

125 22 11 10

42 10 12

+69.23 9 12

41 11 10

+25 End GR 10 10

40 15 11 8

8

+33.85' End Rad 49

+19 17 End Rad 44

51 12 11

11' ← +90 Deg Radi → 8'

50 8 10

+96 12' End Lt

49 9 9

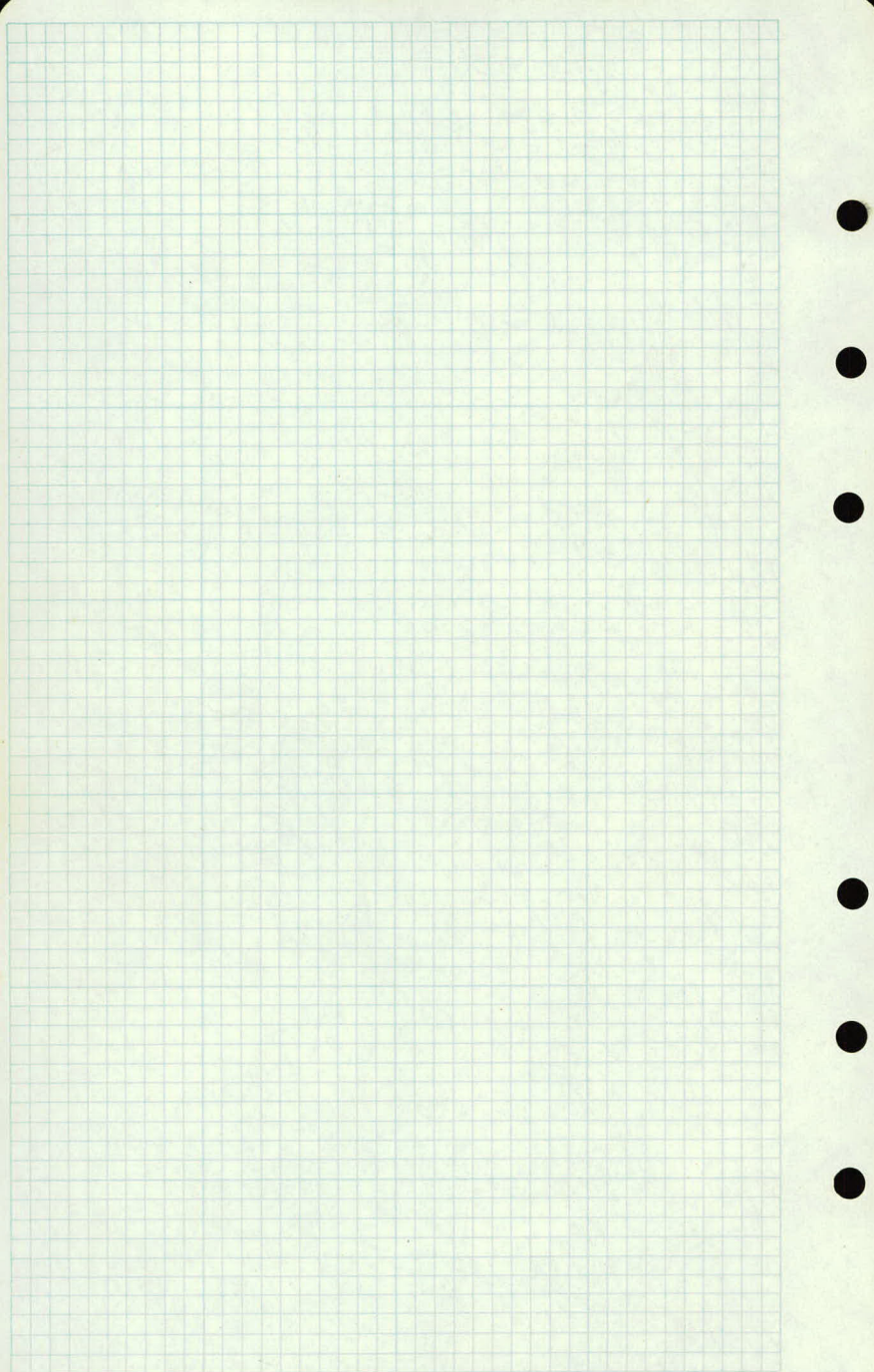
+78 End CR 12

+40 End CR 12'

48 11 9 8 12

47 12 8 9 12

CR



Co. Rd. "E" CURVE REVISION

Silver Lake Road

to

State Trunk Highway #8

Plan Survey

11 pages

1952

1953



Alignment

Curve Revisions

Sta	Point	ΔL	ΔR
45+93.33	PT	26° 03' 1/2"	?
+50		22° 51'	
45		19° 06'	$\Delta = 52° 11'$? Pt
+50		15° 21'	$D = 15° 00'$? Pt
44+32.99	PI		$T = 187.53$
44		11° 36'	$L = 347.89$
+50		7° 51'	$R = 383.07$
43		4° 06'	
+50		0° 20.5'	
42+45.44	PC	0° 00'	
41.99.27	PT	26° 00'	
+50		22° 17'	$\Delta = 52° 00'$
41		18° 32'	$D = 15° 10'$
+50		14° 47'	$T = 186.84$
40+39.44			$L = 346.67$
40		11° 02'	$R = 383.065$
+50		7° 17'	
39		3° 32"	
38+52.60	PC	0° 00'	
22.90			

12 June 1953

Clear Alt 80°

2

FK
AM
M.Mc
PM
HAW

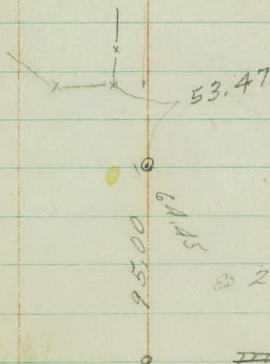
£

H40

8.20
8.20
8.20

Perch 19.82
Hole
W. C. 19.82
P.P.O 5A.70

T.P.O



Iron

Sta Point ΔL ΔR

49 + 61.70 P.O.T.

ϕ

Drill Hole

TP

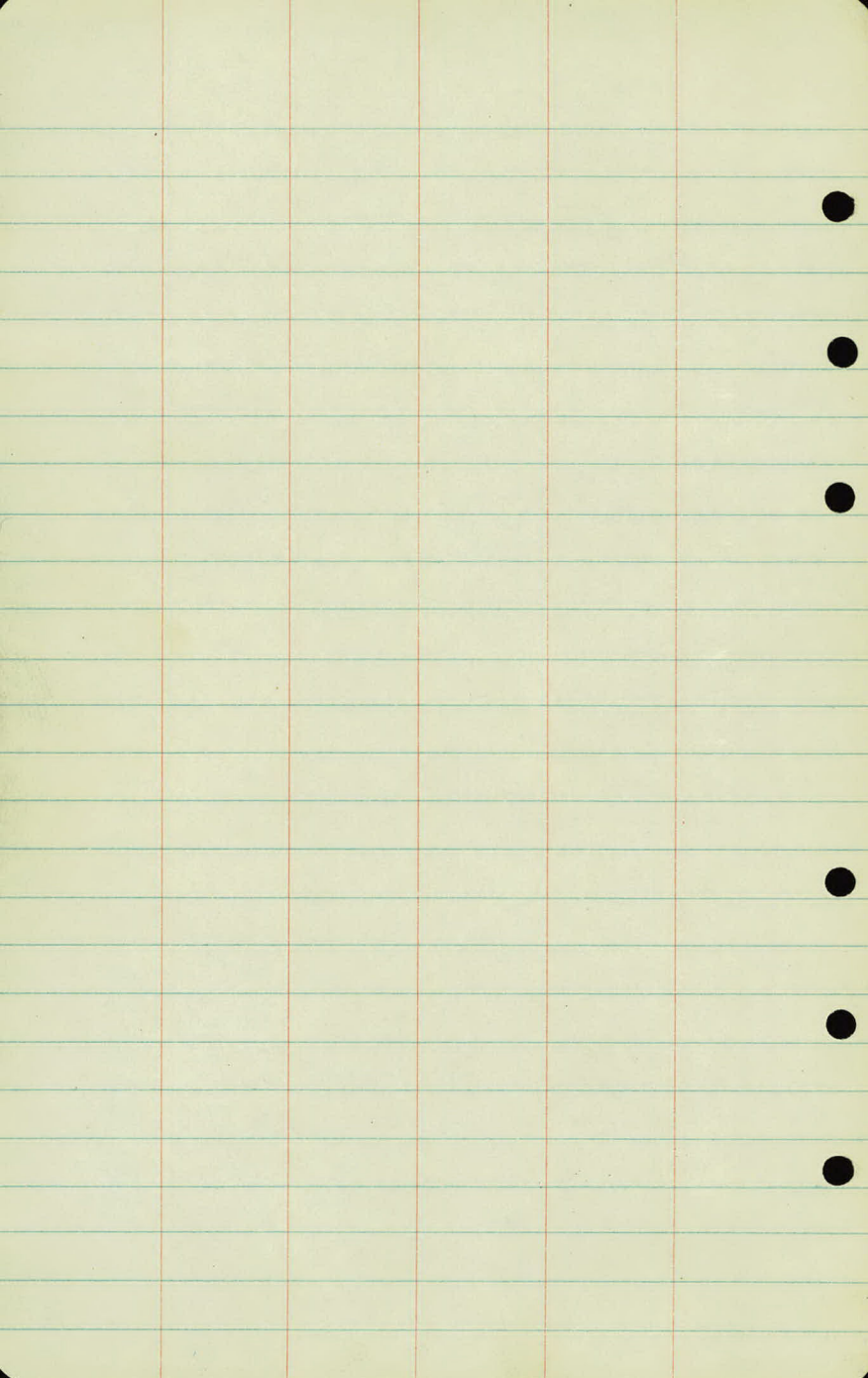
21.04

51.3A

Spk at Edge Pavement

AA.23

PP



TOPOGRAPHY

+77 TP 48

+50 101 + 80

43

42

41

+50 Fe 58

40

+00 Beg Grand Pit
100 + 78

Fe 31

+83

Fe 27

+67

24 Oak 28

+61

24 Oak 19

Fe Lat Rt

25

+77 PP 28

+50

37

34 + 12

+92

18

16

2

End 68 12

24

39

9

6

9

16

22

+50

10

7

10

13

Fe 19

38

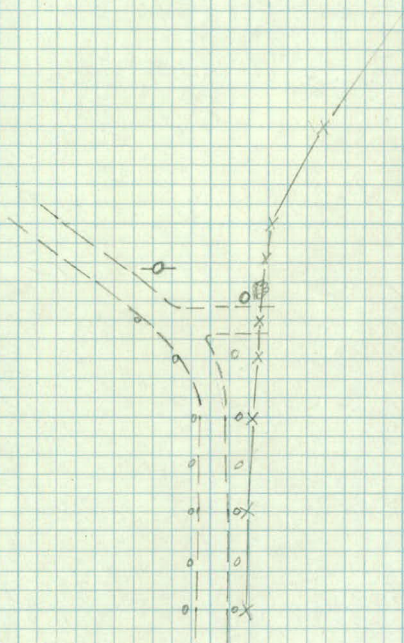
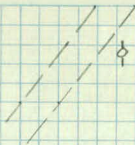
12

8

9

12

Fe 19



+70 Edge Pave 27'
 +62 End Rad 16.7 Edge Pave R
 +56 Rad 22
 +42 Rad 15
 +27 Beg Rad 11
 +26 DP 26
 +46 End Rad 32
 +42 Edge Pave 37
 +42 Rad 21
 +24 Beg Rad 9

49 10 9

+59 TP 20'

+23 Ent 15" x 20" CM 16'

48 8 10

+80 PP 24'

+106 End CR 12
12

47 9 9

+68 End CR 12

+79 TP 21

+30 PP 21

46 11 8 9 12

+65 NE 1/4 36" CM 32' +86 50' 5" 36" CM 32

+50 15 11 7 +20 10
10 TP 14

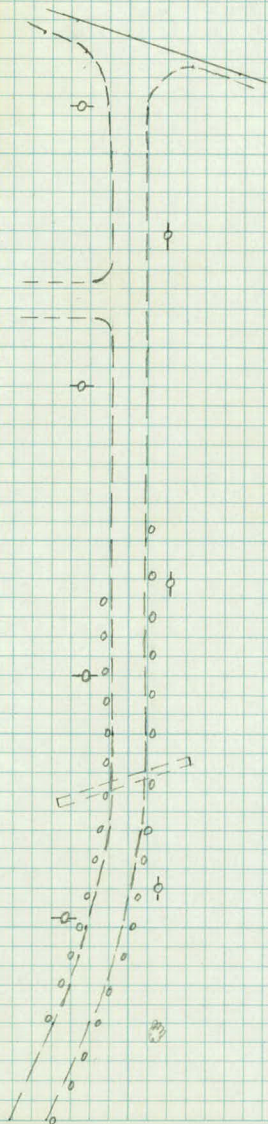
+106 PP 32 +16 Edge Rad R

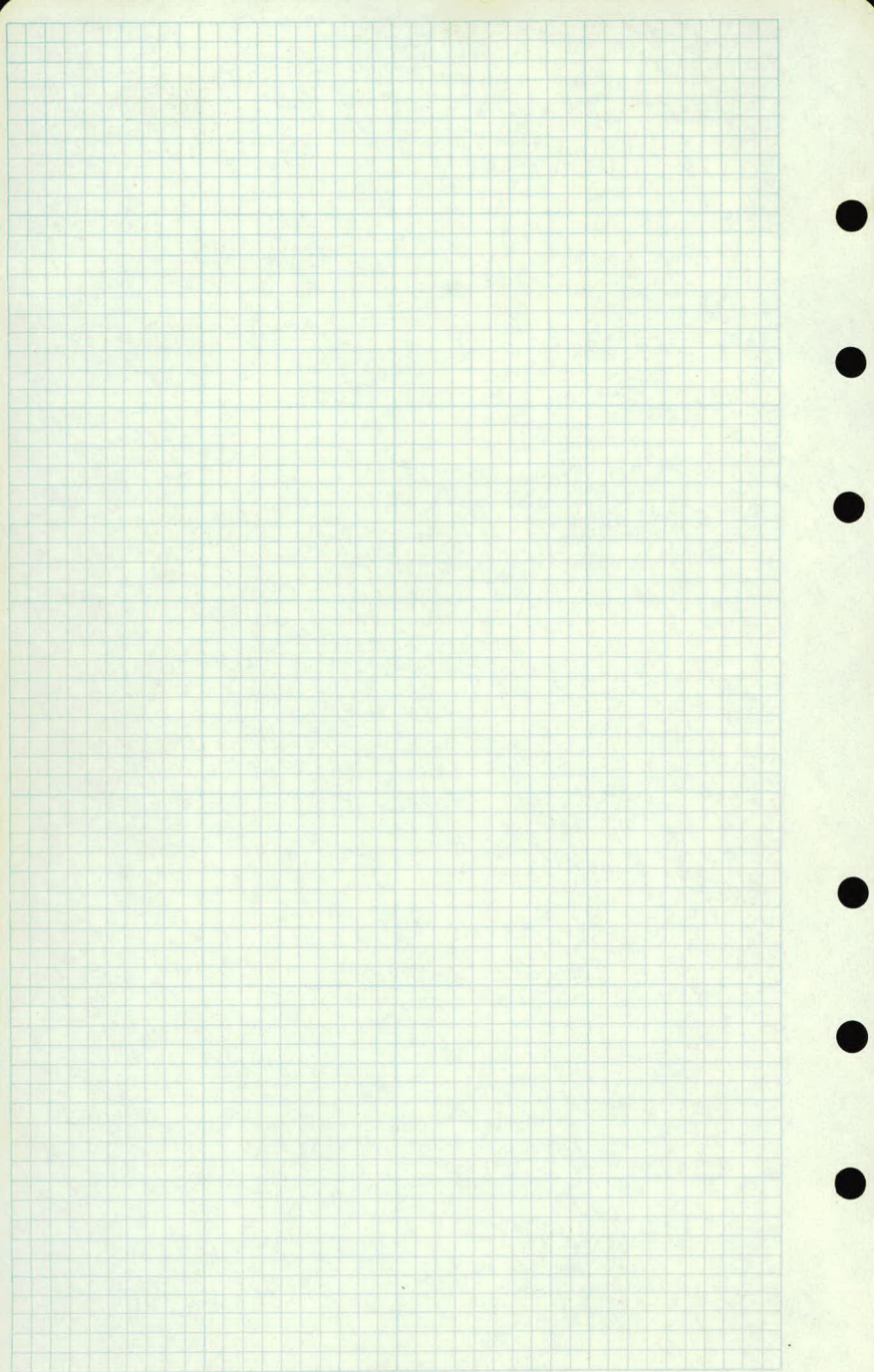
45 25 21 8 3 1

+52 Beg GG 41
16 39 +20

+45 36" Oak 7'

44 +100 Beg GR 38
61 +42





X-SECTIONS

Sta	+	π	-	Elev
BM	2.06	901.99		899.93

38

+52

39

+30

+50

+90

40

+18

15 June 1933

80° Clear

8

FK
AM
MMc

Lt.

L

Rt.

Sph. in 18" Oak 50 Rt 39 + 32

97.4	97.0	94.7	85.4	98.6	98.89	98.3	93.6	92.0	90.3
46	50	73	66	34	3.10	3.7	8.4	10.0	11.7
50	46	23	16	10		11	19	26	50

89.3	90.6	92.6	97.9	98.33	98.2	93.1	91.7	89.9
12.7	11.4	9.4	4.1	3.66	3.8	8.9	10.3	12.1
50	28	19	9		11	20	29	50

91.3	92.5	94.3	97.3	97.6	98.0	98.5	94.2	93.0	92.5	90.9	90.1
10.7	9.5	7.7	4.7	4.4	4.0	3.5	7.8	9.0	9.5	11.1	11.9
50	32	17	11	6		14	21	24	33	45	50

92.4	92.6	94.9	97.3	98.0	98.7	98.9	97.2	95.4	93.9	92.9	91.3
9.6	9.4	7.1	4.7	4.0	3.3	3.1	4.8	6.6	8.1	9.1	10.7
50	43	24	17	12		13	18	24	27	35	50

94.1	97.6	97.8	98.7	99.1	99.1	98.5	97.0	95.0	94.7	94.1
7.9	4.4	4.2	3.3	2.9	2.9	3.5	5.0	7.0	7.4	7.9
54	40	35	20	7		10	21	30	41	50

98.5	98.7	98.3	98.7	98.5	98.6	90.6	90.5	99.4	99.5
3.5	3.3	3.7	3.3	3.5	3.4	1.4	1.5	2.6	3.5
50	24	14		7	18	20	27	40	50

98.5	98.1	94.6	94.4	95.8	98.1	98.5	98.3	98.0	91.2	91.7	90.5	99.5
3.5	3.9	7.4	7.6	6.2	3.9	3.5	3.7	4.0	0.8	0.3	1.5	2.5
50	37	29	17	9	5		7	20	26	30	41	50

87.9	88.0	91.6	92.0	91.4	92.5	97.0	97.0	98.3	97.7	97.1	98.0	92.8	92.6	91.6
14.1	14.0	10.4	10.0	10.6	9.5	5.0	5.0	3.7	4.3	4.9	4.0	10.8	10.6	10.4
50	43	36	28	15	8	4	7	14	24	24	27	36	45	50

Sta + π - Elev

901.99

40+50

TP 4.66 899.69 6.96 895.03

41

+50

42

+45

43

+50

+50

TP 1.58 890.51 10.76 888.93

90.4	91.6	92.7	93.5	95.3	95.0	95.7	96.5	97.1	97.4
11.6	10.4	9.3	8.5	6.7	7.0	6.3	5.5	5.1	5.5
50	36	12	19	26	40	48	67	77	
Rock 3' 8" sta 40+50									
92.6	92.8	93.3	94.6	94.8	95.2	96.1	97.2		
7.1	6.9	6.4	5.1	4.9	4.5	3.6	2.5		
50	40	24	15	8	18	30	50		
93.4	93.3	93.9	94.3	94.6	95.7	96.5	96.3	95.2	94.9
6.3	6.4	5.8	5.4	5.1	4.0	3.6	3.2	4.5	4.8
50	42	28	17	9	8	15	30	32	50
93.0	93.6	94.1	94.4	94.3	94.4	94.1	93.8		
6.7	6.1	5.6	5.3	5.4	5.3	5.6	5.9		
50	42	26	13	10	30	50			
92.1	92.3	91.8	90.9	91.5	92.2	92.4	91.8	91.8	
7.6	7.4	7.9	8.8	8.2	7.5	7.3	7.9	7.9	
50	41	26	19	9	10	22	38	50	
88.9	88.6	89.0	89.1	89.1	88.9	89.2			
10.8	11.1	10.7	10.6	10.6	10.8	10.5			
50	30	12	18	38	50				
90.2	92.9	97.2							
95	6.8	2.5							
33	56	60							

Sta + K - Elev
890.51

44

+50

+72

+72

45

TP 1.54 886.72 5.33 885.18

+50

+65

+85

14

2

21

88.1	87.6	87.2	88.2	87.7	87.6	85.6	87.5	86.9	87.4	88.7	90.7
2.4	2.9	3.3	2.3	2.8	2.9	4.9	3.0	3.6	3.1	1.8	10.2
50	40	32	27	23	23	23	9	18	34	50	50
86.8	86.2	86.4	85.7	80.5	80.5	80.5	81.6	81.2	81.4	81.8	81.8
3.7	4.3	4.1	4.8	10.0	10.0	8.9	9.3	9.1	8.7	8.7	8.7
50	40	31	18	6	14	23	42	50	50	50	50
85.5	85.8	85.2	85.0	81.1	80.3	80.4	79.9	80.1	77.1	77.1	77.1
50	47	53	55	94	10.2	10.1	10.6	10.4	11.4	11.4	11.4
34	23	13	9	2	5	10	23	50	50	50	50

79.3
11.2
50

79.2
11.3
47

83.6
6.9
40

77.3	77.4	83.3	84.5	84.9	84.3	84.1	83.1	78.4	78.6	77.9
13.2	13.1	2.2	6.0	5.6	6.2	6.4	7.4	12.1	11.9	12.6
50	36	27	23	12	4	2	12	29	50	50

73.7	73.2	74.1	77.0	82.9	83.2	83.6	73.3	82.8	76.1	75.1	75.1
13.0	13.5	12.6	9.7	3.8	2.5	3.1	12.4	2.9	10.6	11.6	11.5
50	38	30	23	15	10	8	11	24	42	50	50

70.13
16.59
FL
36" CM
37

70.52
16.20
FL
36" CM
32

135

Sta	+	X	-	Elev
		886.72		

46

46

+50

47

7.31	891.35	268	884.04
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+50

48

1.35	890.00	889.99
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Lt

Rt

Rt

83.1

10.3	10.2	8.6	4.0	3.6	4.2	4.5	11.1	14.0	15.5
50	27	18	10		11	14	24	31	36

17.0	17.0
46	50
27.4	

83.1

7.3	8.1	7.7	7.2	4.8	4.2	3.6	4.0	4.3	10.2	11.7	12.0
50	41	29	18	12	10		8	12	24	40	50

83.5

3.9	4.2	4.6	5.8	5.8	3.8	3.2	3.9	5.5	8.1	9.0	9.7
50	34	23	17	15	10		10	14	24	40	50

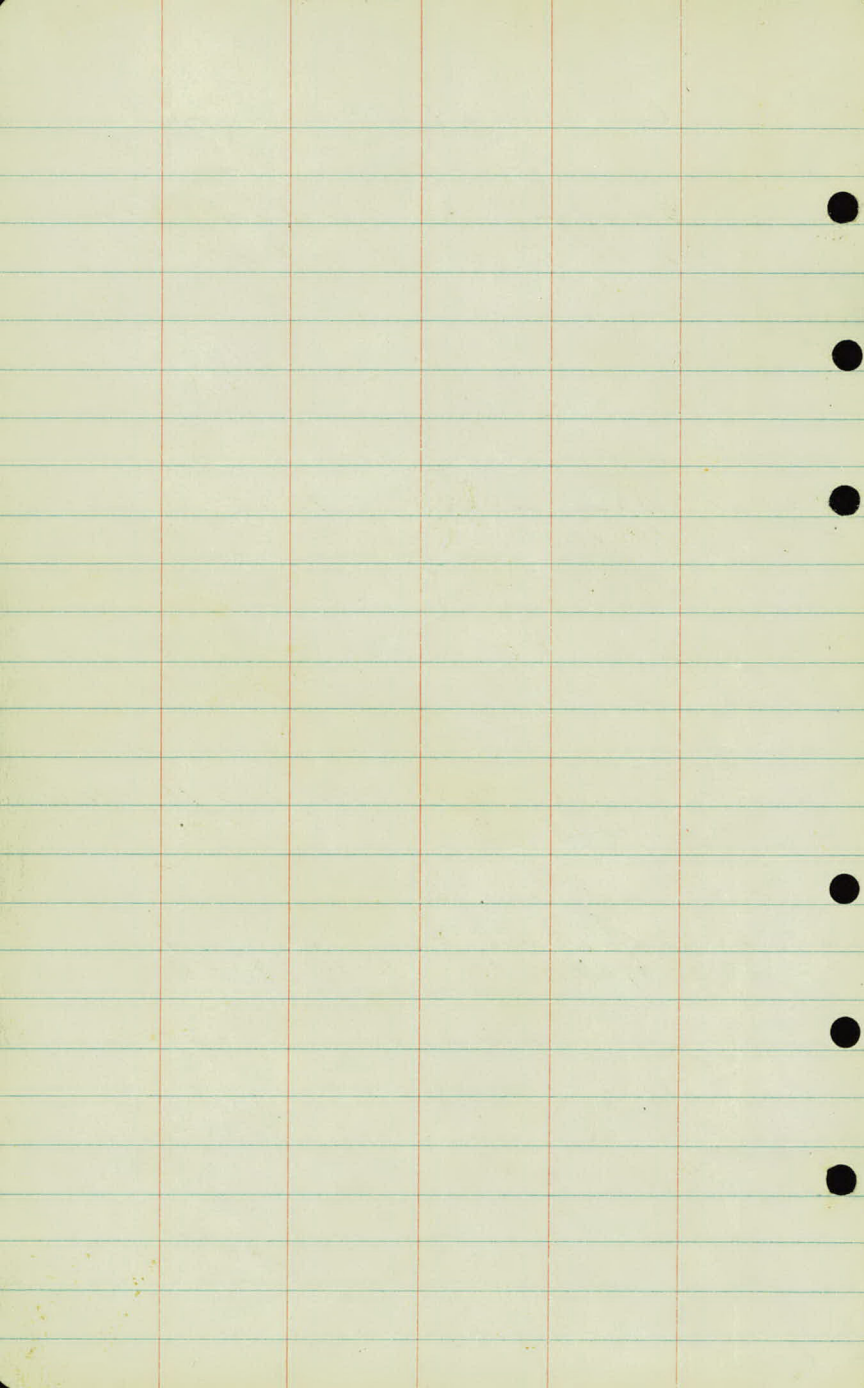
84.3

5.7	6.7	7.0	8.6	8.6	7.6	7.1	7.8	9.0	10.3	11.1	11.6
50	33	20	17	15	10		10	15	23	41	50

85.2

3.8	4.5	6.0	6.2	7.5	7.5	6.8	6.2	6.8	7.6	8.1	8.6
50	34	28	21	17	15	10		10	15	32	50

Pavement at Mill Hole



Survey to replace iron of the N.W. cor. of E 1/2 of Lot 1
Mound View Acres.

