

BOOK # 7- DR. 14-A

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

PLAN

Survey

(ARIEL STREET)

N. ST. PAUL

W. CITY LIM.

From CASTLE AVE To Co. Rd. "C"

Road Acc't. No.

Date Filed. 1935

File

Plans Survey

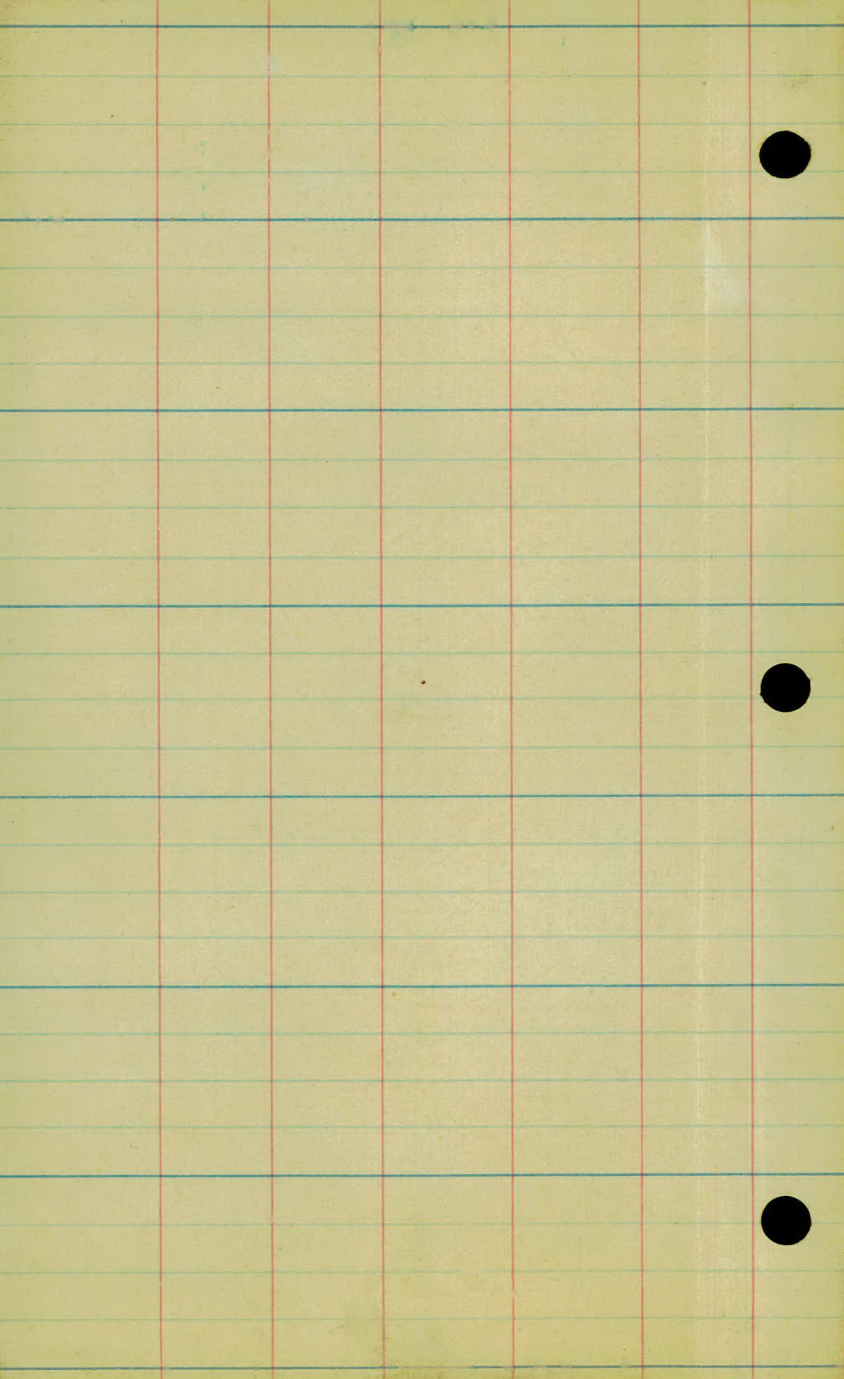
Proposed Road W. City Limits
of North St. Paul
From Castle Ave to Co. Road "C"

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Plans Complete
July 17

W. H. Carlson
July 2, 1935



Alignment

Sta. Point

32+87.92 Mon. $\pm$ Co. Rd'g

19+74.62 P.O.T. Iron Mon.

5+60.9 P.O.T. Mon.

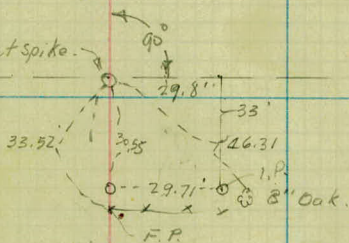
0+00 $\pm$ Castle Ave.

W.H.C.
 Wilke 6-1-35
 Hendrix
 Heine

Iron Maso.

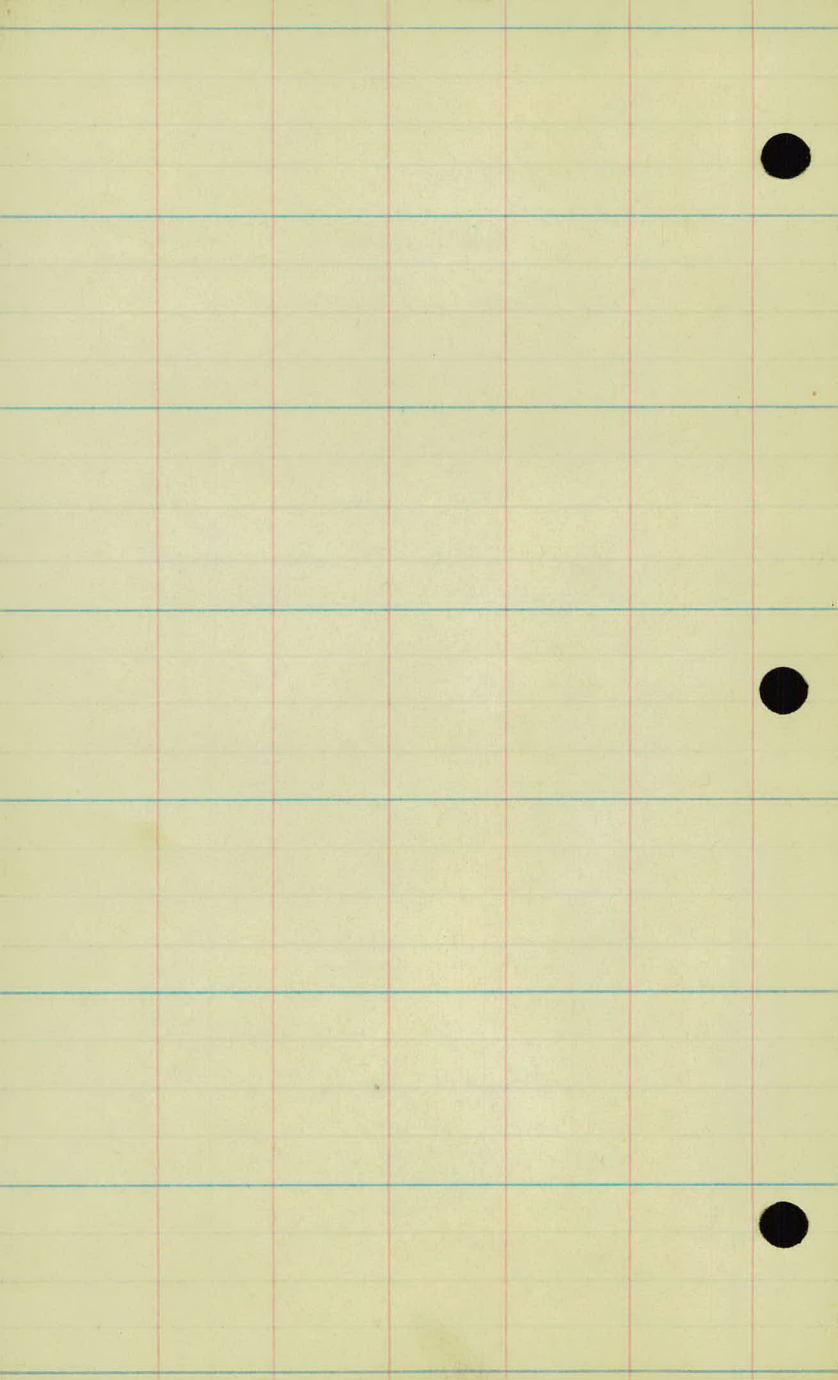
Center Sec. 11-29-22

Boat Spike.



Iron Pipe.

I.P.



Topography.

5

4

3

2

1

oto

Sandy Loam

Culv. 20

+80-7 } 8-Small oak 10'
 +65-7 }
 +58-8" oak 8'
 +44-6" oak 6'
 +38-6" oak 6'
 +08-4" 8" Bx E1-

+56-6" oak 8'
 +47-2-Small oak 8'
 +30 } 6-Small oak 8'
 +22 }
 +14-3-6" oak 57'
 +05-8" oak 7'

+122
 +65 } 4-Small
 oaks.

+82 } 4-Small oak 10'
 +76-7 }
 +55-E-Timber 10'
 +47-8" Pop 17

Culv. 20

Timber - 8-13

1" 3" oaks.

+37-8" Small oak 10'

+10- Bl. To 10

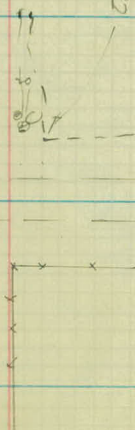
-0+11-E. Bl. To 10
 -0+34-1'

Meadow

Cult.

1. Pipe 0732.5

+17-P.P. 15'



12

11

10

9

8

7

7609 - Stone Man -

6

5

F-14

F-3

5

+64 - F. Lin. 28

Nuisery
Oak 15

+85-20" Stp 20'

+74-6" Oak 2'

+52-12" Stp 18'

+30-18" Stp 30'

+17-8" Oak 4'

+06-8" Oak-1'

+62 - F. Cor. 14

+80-6" Oak-2'

+70-6" Oak-2'

+63-12" Oak 3'

+63-12" Stp 20'

+06-2" Stp 20'

F-13'

F-13'

Meadow

Pasture

~~+63-12" Oak~~
+31-6" Oak 2'

F-2'

+89-10" Oak-2'

+74-7" Oak-5'

+67-8" Tw. Oak 4'

+04-8" Oak 6'

+02-18" Oak-5'

+24 - F. Cor. 13'

+83 - F. Cor. 5'

+83 - 2-10" Oak 10'

F-0

Pasture

Meadow

+31 - F. Cor. 0

Woven Wire

19

18

17

16

15

14

13

12

F-100

F-10' 6

+63-A in Feb 10'

~~100~~
+19-A F. 27'

F-441
E Trail - 23'

+48-F. Cor. 14

F-0
Trail / 50

F-14'

F-0
Trail / 5'

(11 oaks)
Scattered Oaks

Trail / 20

(21 oaks)

(8 oaks)

F-14

+19-F. Cor. 1'

F-1'
+05-10" oak 1'
+93-8" oak 15'
+81-8" oak 2'
+80-6" oak 24'
+38-4" oak 2'
+35-12" oak 3'
+06-8" oak 3'

+73 N.E. Cor. Nursery

Norway
Grounds

25

Stadia Distance of Creek

Inst. @ Sta. 20+40 - 14' Left.

24

Angle Dist.

109°-10' 125'

60°-24' 72'

16°-45' 46'

23

327°-05' 57'

326°-08' 83'

310°-30' 62'

295°-45' 81'

22

274°-11' 80'

263°-55' 102'

264°-13' 135'

259°-30' 156'

21

264°-15' 183'

269°-15' 199'

278°-57' 212'

279°-23' 227'

20

284°-55' 257'

19

+85-F. Cor. 0

+85-14" Sfp. 4'

+65-6" oak 20'

+32-24" Sfp. 4'

F-0

+51-T. P. 0

+95-6" oak 25'

F-0

+04-10" oak 23'

Meadow

+30-12" oak 15'

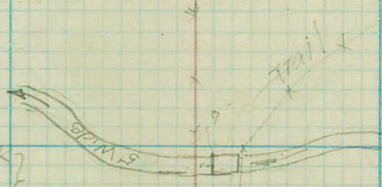
F-26

+90-E. Creek

+85-E. Creek

+87-8'x14' Shed

Iron 6" Conc. Cont. Archael



+89-Δ F. 18'

+15.6 F. 10'

+87.92 Mon

32

31

30

29

28

27

26

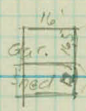
+70.5-12"x20" G.M. Bulb
20' - 0

Rd- 9'

Shldr. +73

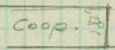
+57-T.P. 7'
+57-F. Cor. 2'x2' stone
+28-T.P. 1'
F-1'

+21-Cor. Apr. 38'
+15-ER+LT.
Rd. 9'



+93-Cor. Shed 38'

+41-F. Cor. 23'
+41-Cor. CHIC coop
37'



+72-T.P. 1'

F-1'

+60-F. Cor. 75'
+60 Rd= 10'

Rd- 2 32'

+08-T.P.-1'



F-1'

Garden 1'

Garden.

+48-T.P. 1'

F-1'

+29- S.E. Cor. Garden 3'

+11-T.P. 0

35

34

33

Cross-Sections

8

Check Levels

+	π	-	Elev	
0.30	1004.66		1004.36	B.M.
0.19	991.06	13.79	990.87	
0.19	978.14	13.11	977.95	
1.89	972.17	7.82	970.28	
1.89	966.78	7.38	964.79	
7.72	968.97	5.43	961.25	
4.48	968.29	5.16	963.81	
0.39	963.86	4.82	963.47	
0.20	952.52	11.54	952.32	
0.18	939.91	12.79	939.73	
2.13	933.70	8.34	931.57	
4.71	933.70	4.71	928.99	B.M.
3.79	933.70	3.79	929.91	B.M.
8.52	933.88	8.34	925.36	
6.11	935.01	4.98	928.90	
6.71	940.91	0.81	934.20	
2.75	941.08	2.58	938.33	B.M.
9.31	946.95	3.44	937.64	
13.21	959.27	0.89	946.06	
12.62	971.33	0.56	958.71	
13.04	984.44	0.07	971.40	
10.89	992.72	2.61	981.83	
		6.02	986.70	B.M.

6/27/35 Clear

W.B.
②
H.A.W.

Hyd N.E Cor Helen + Co Rd "C" LBH
P.H.

Top Mont. North $\frac{1}{4}$ COV. Sec 11-28-23

12" Oak N.E Cor.

8" Oak 60' Lt Sta ? 1000 ft. S. g.c

12" Oak on R (?) 18+00)

10" Oak 45' Rt Sta 0-31

+ H.I - Elev
992.72

0+00 84.8

0+12 84.4

0+20 * Rd Ditch 83.7

+26 Top Back Slope Castle Ave 87.9

+50 89.0

1+00 87.9

+50 87.3

2+0 85.6

+50 84.4

3+00 79.6

T.P 344 985.27 10.89 981.83

+50 79.3

4+0 77.6

+50 76.7

L+

*

R+

$$\begin{array}{r} 84.4 \\ \frac{8.8}{100} \quad \frac{8.3}{50} \end{array} \quad 7.9$$

$$\begin{array}{r} 85.0 \\ \frac{7.7}{50} \quad \frac{7.4}{100} \end{array}$$

$$\begin{array}{r} 84.2 \\ \frac{9.0}{100} \quad \frac{8.5}{50} \end{array} \quad 8.3$$

$$\begin{array}{r} 84.6 \\ \frac{8.1}{50} \quad \frac{7.9}{100} \end{array}$$

$$\left\{ \begin{array}{l} \text{Drains} \\ \text{East} \end{array} \right\} \begin{array}{r} 9.6 \\ 200 \end{array} \quad \begin{array}{r} 8.9 \\ 150 \end{array} \quad \begin{array}{r} 9.2 \\ 100 \end{array} \quad \begin{array}{r} 9.3 \\ 50 \end{array} \quad 9.0$$

$$\begin{array}{r} 82.7 \\ 10.0 \\ 50 \end{array} \quad \begin{array}{r} 10.5 \\ 100 \end{array} \quad \begin{array}{r} 12.7 \\ 150 \end{array} \quad \left\{ \begin{array}{l} \text{Drains} \\ \text{No. West} \end{array} \right\}$$

$$\begin{array}{r} 85.6 \\ \frac{7.1}{50} \quad \frac{6.0}{28} \quad \frac{5.4}{10} \end{array} \quad 4.8$$

$$\begin{array}{r} 86.0 \\ \frac{5.2}{8} \quad \frac{4.8}{13} \quad \frac{4.6}{22} \quad \frac{6.7}{50} \end{array}$$

$$\begin{array}{r} 86.5 \\ \frac{6.2}{50} \quad \frac{5.7}{33} \quad \frac{4.7}{15} \end{array} \quad 3.7$$

$$\begin{array}{r} 85.0 \\ \frac{3.5}{7} \quad \frac{4.3}{16} \quad \frac{6.3}{33} \quad \frac{7.7}{50} \end{array}$$

$$\begin{array}{r} 87.2 \\ \frac{5.7}{50} \quad \frac{5.7}{33} \quad \frac{5.3}{15} \end{array} \quad 4.8$$

$$\begin{array}{r} 85.8 \\ \frac{6.2}{18} \quad \frac{7.0}{33} \quad \frac{6.9}{50} \end{array}$$

$$\begin{array}{r} 87.5 \\ \frac{5.2}{50} \quad \frac{5.4}{33} \quad \frac{5.6}{15} \end{array} \quad 5.4$$

$$\begin{array}{r} 87.4 \\ \frac{5.8}{15} \quad \frac{6.0}{33} \quad \frac{5.3}{50} \end{array}$$

$$\begin{array}{r} 87.4 \\ \frac{5.3}{50} \quad \frac{5.7}{33} \quad \frac{5.8}{15} \end{array} \quad 7.1$$

$$\begin{array}{r} 85.1 \\ \frac{7.9}{15} \quad \frac{7.9}{33} \quad \frac{7.6}{50} \end{array}$$

$$\begin{array}{r} 85.6 \\ \frac{7.1}{50} \quad \frac{7.4}{33} \quad \frac{8.4}{15} \end{array} \quad 8.3$$

$$\begin{array}{r} 84.7 \\ \frac{8.5}{15} \quad \frac{8.4}{33} \quad \frac{8.0}{50} \end{array}$$

$$\begin{array}{r} 80.6 \\ \frac{12.1}{50} \quad \frac{12.4}{33} \quad \frac{13.3}{15} \end{array} \quad 13.1$$

$$\begin{array}{r} 82.1 \\ \frac{12.4}{15} \quad \frac{11.5}{33} \quad \frac{10.6}{50} \end{array}$$

$$\begin{array}{r} 77.1 \\ \frac{8.2}{50} \quad \frac{8.7}{33} \quad \frac{7.7}{15} \end{array} \quad 6.0$$

$$\begin{array}{r} 84.3 \\ \frac{4.5}{8} \quad \frac{3.5}{20} \quad \frac{3.7}{33} \quad \frac{3.0}{50} \end{array}$$

$$\begin{array}{r} 76.0 \\ \frac{9.3}{50} \quad \frac{9.6}{33} \quad \frac{8.7}{15} \end{array} \quad 7.7$$

$$\begin{array}{r} 81.6 \\ \frac{5.9}{15} \quad \frac{4.8}{33} \quad \frac{3.7}{50} \end{array}$$

$$\begin{array}{r} 75.3 \\ \frac{10.0}{50} \quad \frac{10.0}{33} \quad \frac{9.5}{15} \end{array} \quad 8.6$$

$$\begin{array}{r} 74.9 \\ \frac{8.3}{15} \quad \frac{7.7}{33} \quad \frac{6.4}{50} \end{array}$$

+ H1 - Elev
985.27

540 75.5

+50 73.8

T.P. 1.86 975.95 11.18 974.09

640 71.0

+50 68.4

T.P. 1.86 974.09

740 66.6

0.35 974.44 974.09

7450 65.8

840 64.6

+40 64.8

+70 64.1

9 63.4

1.35 965.96 9.88 964.61

+30 63.3

1040 56.3

B.M.

0.22 953.44 7.14 958.82
12.74 953.22

Sta.	+	A	-	Elev.	
		953.44			
10+60				48.7	
11+0				46.4	
+40				44.8	
12				39.6	
T.R.					
	2.10	941.92	1362	939.82	
+50				36.7	
12				34.7	
+22				35.1	
T.P.	5.52	941.00	6.44	935.48	
+50				34.7	
14				34.2	
+50				32.2	
+80				30.2	
15+0				30.0	

51.1

$\frac{2.3}{50}$

$\frac{3.7}{21}$

$\frac{4.6}{13}$

$\frac{4.7}{-}$

$\frac{5.6}{12}$

$\frac{5.9}{33}$

46.8

$\frac{6.6}{50}$

48.7

$\frac{4.7}{50}$

$\frac{5.5}{29}$

$\frac{6.5}{14}$

$\frac{7.0}{-}$

$\frac{8.0}{33}$

44.4

$\frac{9.0}{50}$

45.4

$\frac{8.0}{50}$

$\frac{8.5}{38}$

$\frac{9.1}{18}$

$\frac{10.0}{13}$

$\frac{10.0}{2}$

$\frac{8.6}{-}$

$\frac{9.1}{33}$

43.1

$\frac{10.3}{50}$

39.3

$\frac{14.1}{50}$

$\frac{14.1}{37}$

$\frac{14.4}{23}$

$\frac{15.0}{13}$

$\frac{14.4}{1}$

$\frac{13.8}{-}$

$\frac{13.2}{2}$

$\frac{12.4}{33}$

59.6

$\frac{13.8}{50}$

34.1

Place Culv. Sta. 12+50-Drains

LT.

51.13 to 50.1 LT

$\frac{7.8}{50}$

$\frac{7.7}{37}$

$\frac{7.7}{26}$

$\frac{6.9}{14}$

$\frac{6.4}{1}$

$\frac{5.2}{-}$

$\frac{5.3}{33}$

$\frac{4.5}{50}$

$\frac{37.4}{-}$

32.0

$\frac{9.9}{50}$

$\frac{9.7}{33}$

$\frac{9.2}{23}$

$\frac{8.2}{13}$

$\frac{8.1}{1}$

$\frac{7.2}{-}$

$\frac{6.1}{6}$

$\frac{4.1}{18}$

$\frac{2.7}{33}$

$\frac{1.9}{50}$

40.0

31.8

$\frac{10.1}{50}$

$\frac{10.1}{33}$

$\frac{9.4}{20}$

$\frac{8.4}{14}$

$\frac{8.2}{2}$

$\frac{6.8}{-}$

$\frac{4.7}{16}$

$\frac{3.2}{33}$

$\frac{2.0}{50}$

39.9

31.0

$\frac{10.0}{50}$

$\frac{9.7}{33}$

$\frac{8.7}{20}$

$\frac{7.8}{13}$

$\frac{7.5}{4}$

$\frac{6.3}{-}$

$\frac{5.5}{1}$

$\frac{3.6}{25}$

$\frac{3.3}{33}$

$\frac{2.0}{50}$

39.9

30.1

$\frac{10.4}{50}$

$\frac{10.0}{33}$

$\frac{9.5}{28}$

$\frac{8.0}{13}$

$\frac{8.0}{3}$

$\frac{6.8}{-}$

$\frac{5.4}{19}$

$\frac{4.6}{33}$

$\frac{3.8}{50}$

37.2

29.8

$\frac{11.2}{50}$

$\frac{10.1}{34}$

$\frac{9.7}{28}$

$\frac{9.6}{13}$

$\frac{9.7}{5}$

$\frac{8.8}{3}$

$\frac{8.8}{-}$

$\frac{9.2}{8}$

$\frac{9.4}{28}$

$\frac{8.8}{33}$

$\frac{8.4}{50}$

32.6

28.4

$\frac{11.6}{50}$

$\frac{10.7}{33}$

$\frac{10.6}{14}$

$\frac{10.8}{-}$

$\frac{10.4}{33}$

$\frac{9.6}{50}$

31.4

29.0

$\frac{12.0}{50}$

$\frac{11.4}{33}$

$\frac{11.4}{14}$

$\frac{11.0}{-}$

$\frac{9.4}{33}$

$\frac{8.2}{50}$

33.8

15to P. Culv. Drains LT-

Sta.	+	π	-	Elev.	
		941.00			
15+50					32.2
16+0					34.8
T.P	5.85	940.47	6.38	934.62	
+45					34.9
175					33.4
17+0					36.4
			1.98	938.49	
+20					38.0
+40					34.7
+75					28.3
18					27.1
+18	± Drow				26.8
+50					29.0
19					33.1

Lt.

E

Rt.

14

28.6

$$\begin{array}{r} 12.4 \\ 50 \end{array}$$

$$\begin{array}{r} 12.0 \\ 33 \end{array}$$

$$\begin{array}{r} 10.8 \\ 14 \end{array}$$

$$\begin{array}{r} 10.9 \\ 5 \end{array}$$

$$\begin{array}{r} 28 \\ 5 \end{array}$$

$$\begin{array}{r} 6.6 \\ 17 \end{array}$$

$$\begin{array}{r} 5.2 \\ 33 \end{array}$$

36.9

$$\begin{array}{r} 4.1 \\ 50 \end{array}$$

29.5

$$\begin{array}{r} 11.5 \\ 50 \end{array}$$

$$\begin{array}{r} 10.4 \\ 33 \end{array}$$

$$\begin{array}{r} 10.0 \\ 21 \end{array}$$

$$\begin{array}{r} 8.7 \\ 15 \end{array}$$

$$\begin{array}{r} 8.5 \\ 6 \end{array}$$

62

$$\begin{array}{r} 5.0 \\ 16 \end{array}$$

$$\begin{array}{r} 2.7 \\ 33 \end{array}$$

40.3

$$\begin{array}{r} 0.7 \\ 50 \end{array}$$

30.5

$$\begin{array}{r} 10.0 \\ 50 \end{array}$$

$$\begin{array}{r} 9.1 \\ 33 \end{array}$$

$$\begin{array}{r} 7.4 \\ 14 \end{array}$$

$$\begin{array}{r} 7.2 \\ 3 \end{array}$$

56

$$\begin{array}{r} 4.4 \\ 13 \end{array}$$

$$\begin{array}{r} 0.8 \\ 33 \end{array}$$

40.7

$$\begin{array}{r} 10.2 \\ 50 \end{array}$$

32.3

$$\begin{array}{r} 8.2 \\ 50 \end{array}$$

$$\begin{array}{r} 7.9 \\ 33 \end{array}$$

$$\begin{array}{r} 7.0 \\ 14 \end{array}$$

71

$$\begin{array}{r} 6.3 \\ 33 \end{array}$$

34.2

$$\begin{array}{r} 6.3 \\ 50 \end{array}$$

33.9

$$\begin{array}{r} 6.6 \\ 50 \end{array}$$

$$\begin{array}{r} 5.2 \\ 33 \end{array}$$

$$\begin{array}{r} 4.1 \\ 14 \end{array}$$

$$\begin{array}{r} 4.1 \\ 5 \end{array}$$

$$\begin{array}{r} 5.5 \\ 15 \end{array}$$

$$\begin{array}{r} 7.6 \\ 33 \end{array}$$

31.4

$$\begin{array}{r} 9.1 \\ 50 \end{array}$$

Spike in on E 17+20

$$\begin{array}{r} 36.7 \\ 50 \end{array}$$

$$\begin{array}{r} 3.8 \\ 33 \end{array}$$

$$\begin{array}{r} 3.8 \\ 14 \end{array}$$

$$\begin{array}{r} 3.1 \\ 14 \end{array}$$

25

$$\begin{array}{r} 3.8 \\ 7 \end{array}$$

$$\begin{array}{r} 2.0 \\ 33 \end{array}$$

$$\begin{array}{r} 4.9 \\ 50 \end{array}$$

$$\begin{array}{r} 12.0 \\ 85 \end{array}$$

- E Draw

37.3

$$\begin{array}{r} 3.2 \\ 50 \end{array}$$

$$\begin{array}{r} 3.8 \\ 33 \end{array}$$

$$\begin{array}{r} 4.8 \\ 14 \end{array}$$

$$\begin{array}{r} 5.7 \\ 8 \end{array}$$

$$\begin{array}{r} 5.8 \\ 5 \end{array}$$

$$\begin{array}{r} 9.5 \\ 33 \end{array}$$

$$\begin{array}{r} 12.2 \\ 50 \end{array}$$

28.3

31.2

$$\begin{array}{r} 7.3 \\ 50 \end{array}$$

$$\begin{array}{r} 10.6 \\ 33 \end{array}$$

$$\begin{array}{r} 11.1 \\ 25 \end{array}$$

$$\begin{array}{r} 14.2 \\ 5 \end{array}$$

12.2

$$\begin{array}{r} 13.3 \\ 33 \end{array}$$

$$\begin{array}{r} 13.4 \\ 47 \end{array}$$

27.1

- E Draw.

28.7

$$\begin{array}{r} 11.8 \\ 50 \end{array}$$

$$\begin{array}{r} 12.8 \\ 33 \end{array}$$

$$\begin{array}{r} 13.0 \\ 5 \end{array}$$

$$\begin{array}{r} 13.4 \\ 5 \end{array}$$

$$\begin{array}{r} 13.4 \\ 20 \end{array}$$

$$\begin{array}{r} 12.4 \\ 33 \end{array}$$

$$\begin{array}{r} 11.8 \\ 50 \end{array}$$

28.7

18418- place culvert Drains Lt

$$\begin{array}{r} 27.0 \\ 50 \end{array}$$

$$\begin{array}{r} 13.5 \\ 33 \end{array}$$

$$\begin{array}{r} 14.3 \\ 12 \end{array}$$

$$\begin{array}{r} 14.0 \\ 12 \end{array}$$

$$\begin{array}{r} 13.7 \\ 12 \end{array}$$

$$\begin{array}{r} 12.6 \\ 15 \end{array}$$

$$\begin{array}{r} 11.4 \\ 33 \end{array}$$

31.1

$$\begin{array}{r} 2.4 \\ 50 \end{array}$$

25.6

$$\begin{array}{r} 14.9 \\ 50 \end{array}$$

$$\begin{array}{r} 14.1 \\ 33 \end{array}$$

$$\begin{array}{r} 12.9 \\ 12 \end{array}$$

$$\begin{array}{r} 11.5 \\ 12 \end{array}$$

$$\begin{array}{r} 10.1 \\ 13 \end{array}$$

$$\begin{array}{r} 7.7 \\ 33 \end{array}$$

$$\begin{array}{r} 5.2 \\ 50 \end{array}$$

35.3

$$\begin{array}{r} 5.2 \\ 50 \end{array}$$

E-Draw = 50

Drain to Creek N.W.

28.5

$$\begin{array}{r} 12.0 \\ 50 \end{array}$$

$$\begin{array}{r} 11.0 \\ 33 \end{array}$$

$$\begin{array}{r} 10.3 \\ 21 \end{array}$$

$$\begin{array}{r} 9.2 \\ 12 \end{array}$$

74

$$\begin{array}{r} 5.9 \\ 11 \end{array}$$

$$\begin{array}{r} 2.7 \\ 33 \end{array}$$

38.9

$$\begin{array}{r} 1.6 \\ 50 \end{array}$$

Sta.	+	π	-	Elev.
		940.47		
19+30				34.7
+75				33.6
20+0				32.1
T.P.	3.34	931.44	12.37	928.10
+50				26.4
+90	8 Creek	(Pl. Large Culvert or Box Cuv. Drains Lt.)		21.0
21				24.2
+25				25.8
+65				26.8
22				22.5 - 28.8
T.P.	10.74	940.93	1.25	930.19
+50				32.0
23				34.2
+50				33.2 ^{33.6}

29.9

$\frac{106}{50}$

$\frac{9.7}{33}$

$\frac{8.5}{24}$

$\frac{7.2}{7}$

$\frac{5.8}{12}$

$\frac{4.8}{12}$

$\frac{3.3}{33}$

37.7

$\frac{2.8}{50}$

30.8

$\frac{9.7}{50}$

$\frac{9.3}{33}$

$\frac{8.9}{26}$

$\frac{7.9}{7}$

$\frac{6.9}{20}$

$\frac{6.1}{33}$

$\frac{5.8}{33}$

24.7

$\frac{5.6}{50}$

28.3

$\frac{12.2}{50}$

$\frac{12.0}{33}$

$\frac{10.5}{25}$

$\frac{8.8}{12}$

$\frac{8.4}{18}$

$\frac{7.3}{33}$

$\frac{6.8}{50}$

34.0

$\frac{6.5}{50}$

24.1

$\frac{7.3}{50}$

$\frac{6.7}{33}$

$\frac{5.4}{13}$

$\frac{5.0}{8.0}$

$\frac{5.4}{22}$

$\frac{6.1}{33}$

$\frac{6.1}{50}$

25.3

$\frac{8.0}{56}$

$\frac{9.5}{66}$

$\frac{9.0}{W.S.}$

B.H.Cr. = $\frac{10.1}{33}$

$\frac{10.4}{W.S.}$

$\frac{9.9}{33} = B.H.Cr. \frac{9.4}{W.S.}$

22.0

$\frac{9.4}{50}$

$\frac{9.0}{33}$

$\frac{7.2}{33}$

$\frac{7.7}{33}$

$\frac{7.8}{50}$

23.6

26.4

$\frac{5.0}{50}$

$\frac{5.8}{33}$

$\frac{5.6}{33}$

$\frac{5.0}{33}$

26.5

$\frac{4.9}{50}$

25.9

$\frac{5.5}{50}$

$\frac{5.4}{33}$

$\frac{5.3}{20}$

$\frac{4.6}{33}$

$\frac{3.8}{33}$

28.0

$\frac{3.4}{50}$

26.1

$\frac{5.3}{50}$

$\frac{4.5}{33}$

$\frac{3.6}{13}$

$\frac{2.6}{33}$

$\frac{2.2}{33}$

29.4

$\frac{2.0}{50}$

27.1

$\frac{13.8}{50}$

$\frac{12.0}{33}$

$\frac{10.3}{15}$

$\frac{8.9}{33}$

$\frac{8.7}{33}$

31.9

$\frac{9.0}{50}$

28.1

$\frac{12.8}{50}$

$\frac{10.5}{33}$

$\frac{8.1}{13}$

$\frac{6.7}{20}$

$\frac{5.1}{33}$

35.7

$\frac{5.2}{50}$

30.1

$\frac{10.8}{50}$

$\frac{9.6}{33}$

$\frac{8.6}{13}$

$\frac{7.8}{15}$

$\frac{6.0}{33}$

$\frac{4.7}{33}$

37.2

$\frac{3.7}{50}$

Sta.	+	π	-	Elev.
		94093		
24				31.7
+50				30.0
T.P.	4.52	934.37	11.04	929.89
B.M.	5.37		5.37	929.00
25				28.9
+50				28.8
26				27.8
+50				26.1
27				25.6
+50				24.8
28				23.4
+50				22.8
29				23.5
T.P.	9.43	933.88	9.94	924.43

29.2

$$\begin{array}{r} 11.7 \\ 50 \end{array}$$

$$\begin{array}{r} 11.2 \\ 33 \end{array}$$

$$\begin{array}{r} 9.9 \\ 10 \end{array}$$

9.2

$$\begin{array}{r} 8.4 \\ 15 \end{array}$$

$$\begin{array}{r} 6.6 \\ 33 \end{array}$$

35.0

$$\begin{array}{r} 5.9 \\ 50 \end{array}$$

28.0

$$\begin{array}{r} 12.9 \\ 50 \end{array}$$

$$\begin{array}{r} 12.2 \\ 33 \end{array}$$

$$\begin{array}{r} 11.7 \\ 15 \end{array}$$

$$\begin{array}{r} 10.9 \\ 15 \end{array}$$

$$\begin{array}{r} 10.1 \\ 15 \end{array}$$

$$\begin{array}{r} 9.7 \\ 33 \end{array}$$

31.5

$$\begin{array}{r} 9.4 \\ 50 \end{array}$$

spike 8' oak 47' Lt. Sta. 24 + 56

26.8

$$\begin{array}{r} 7.6 \\ 50 \end{array}$$

$$\begin{array}{r} 6.9 \\ 33 \end{array}$$

$$\begin{array}{r} 6.4 \\ 20 \end{array}$$

$$\begin{array}{r} 5.5 \\ 18 \end{array}$$

$$\begin{array}{r} 5.1 \\ 33 \end{array}$$

$$\begin{array}{r} 4.6 \\ 50 \end{array}$$

30.1

26.2

$$\begin{array}{r} 8.2 \\ 50 \end{array}$$

$$\begin{array}{r} 7.5 \\ 33 \end{array}$$

$$\begin{array}{r} 6.6 \\ 11 \end{array}$$

5.6

$$\begin{array}{r} 5.2 \\ 15 \end{array}$$

$$\begin{array}{r} 5.0 \\ 33 \end{array}$$

29.8

$$\begin{array}{r} 4.6 \\ 50 \end{array}$$

26.9

$$\begin{array}{r} 7.5 \\ 50 \end{array}$$

$$\begin{array}{r} 7.5 \\ 33 \end{array}$$

$$\begin{array}{r} 7.6 \\ 15 \end{array}$$

4.6

$$\begin{array}{r} 6.3 \\ 15 \end{array}$$

$$\begin{array}{r} 5.3 \\ 33 \end{array}$$

29.7

$$\begin{array}{r} 4.7 \\ 50 \end{array}$$

27.8

$$\begin{array}{r} 6.6 \\ 50 \end{array}$$

$$\begin{array}{r} 7.4 \\ 33 \end{array}$$

$$\begin{array}{r} 8.3 \\ 18 \end{array}$$

$$\begin{array}{r} 8.3 \\ 15 \end{array}$$

$$\begin{array}{r} 8.7 \\ 15 \end{array}$$

$$\begin{array}{r} 7.7 \\ 33 \end{array}$$

27.6

$$\begin{array}{r} 6.8 \\ 50 \end{array}$$

30.7

$$\begin{array}{r} 8.7 \\ 50 \end{array}$$

$$\begin{array}{r} 6.9 \\ 33 \end{array}$$

$$\begin{array}{r} 8.5 \\ 20 \end{array}$$

$$\begin{array}{r} 8.8 \\ 15 \end{array}$$

$$\begin{array}{r} 9.8 \\ 15 \end{array}$$

$$\begin{array}{r} 9.7 \\ 33 \end{array}$$

26.5

$$\begin{array}{r} 7.9 \\ 50 \end{array}$$

30.2

$$\begin{array}{r} 4.2 \\ 50 \end{array}$$

$$\begin{array}{r} 7.5 \\ 33 \end{array}$$

$$\begin{array}{r} 8.7 \\ 20 \end{array}$$

9.6

$$\begin{array}{r} 10.4 \\ 15 \end{array}$$

$$\begin{array}{r} 9.9 \\ 33 \end{array}$$

25.4

$$\begin{array}{r} 7.0 \\ 50 \end{array}$$

26.3

$$\begin{array}{r} 8.1 \\ 50 \end{array}$$

$$\begin{array}{r} 9.5 \\ 33 \end{array}$$

$$\begin{array}{r} 10.5 \\ 13 \end{array}$$

$$\begin{array}{r} 11.0 \\ 15 \end{array}$$

$$\begin{array}{r} 11.1 \\ 15 \end{array}$$

$$\begin{array}{r} 10.2 \\ 33 \end{array}$$

25.0

$$\begin{array}{r} 9.4 \\ 50 \end{array}$$

24.1

$$\begin{array}{r} 10.3 \\ 50 \end{array}$$

$$\begin{array}{r} 16.2 \\ 33 \end{array}$$

$$\begin{array}{r} 11.3 \\ 17 \end{array}$$

$$\begin{array}{r} 11.6 \\ 15 \end{array}$$

$$\begin{array}{r} 12.2 \\ 6 \end{array}$$

$$\begin{array}{r} 11.7 \\ 20 \end{array}$$

24.2

$$\begin{array}{r} 11.1 \\ 33 \end{array}$$

$$\begin{array}{r} 19.0 \\ 50 \end{array}$$

25.0

$$\begin{array}{r} 9.4 \\ 50 \end{array}$$

$$\begin{array}{r} 9.6 \\ 33 \end{array}$$

$$\begin{array}{r} 10.6 \\ 33 \end{array}$$

$$\begin{array}{r} 11.3 \\ 15 \end{array}$$

$$\begin{array}{r} 10.9 \\ 15 \end{array}$$

$$\begin{array}{r} 12.0 \\ 5 \end{array}$$

$$\begin{array}{r} 11.1 \\ 20 \end{array}$$

24.6

$$\begin{array}{r} 10.6 \\ 33 \end{array}$$

$$\begin{array}{r} 9.8 \\ 50 \end{array}$$

Sta.	+	π	-	Elev.
		933.88		
29	+50			24.0

30				24.5
	+50			24.2

31				24.3
	+50			25.8

32				26.7
	+50			26.9

+74	S. Sh. br. of Co. Rd. C			28.7
-----	-------------------------	--	--	------

+87.92	E. Co. Rd. C			
--------	--------------	--	--	--

483	929.05
-----	--------

3.92	929.96
------	--------

Lt.

Z

Rt.

17

25.0

$$\begin{array}{r} 89 \\ 50 \end{array}$$

$$\begin{array}{r} 9.2 \\ 33 \end{array}$$

$$\begin{array}{r} 10.0 \\ 15 \end{array}$$

$$\begin{array}{r} 9.9 \\ 15 \end{array}$$

$$\begin{array}{r} 10.3 \\ 15 \end{array}$$

$$\begin{array}{r} 9.7 \\ 33 \end{array}$$

24.6

$$\begin{array}{r} 9.3 \\ 50 \end{array}$$

24.9

$$\begin{array}{r} 9.0 \\ 50 \end{array}$$

$$\begin{array}{r} 9.0 \\ 33 \end{array}$$

$$\begin{array}{r} 8.9 \\ 23 \end{array}$$

$$\begin{array}{r} 9.6 \\ 13 \end{array}$$

$$\begin{array}{r} 9.4 \\ 18 \end{array}$$

$$\begin{array}{r} 9.4 \\ 33 \end{array}$$

$$\begin{array}{r} 9.4 \\ 33 \end{array}$$

24.5

$$\begin{array}{r} 9.4 \\ 50 \end{array}$$

23.6

$$\begin{array}{r} 10.3 \\ 36 \end{array}$$

$$\begin{array}{r} 9.9 \\ 15 \end{array}$$

$$\begin{array}{r} 9.7 \\ 15 \end{array}$$

$$\begin{array}{r} 9.7 \\ 15 \end{array}$$

$$\begin{array}{r} 9.6 \\ 33 \end{array}$$

24.2

$$\begin{array}{r} 9.7 \\ 50 \end{array}$$

Bldg =

23.9

$$\begin{array}{r} 10.0 \\ 37 \end{array}$$

$$\begin{array}{r} 10.3 \\ 12 \end{array}$$

$$\begin{array}{r} 9.6 \\ 15 \end{array}$$

$$\begin{array}{r} 9.6 \\ 15 \end{array}$$

$$\begin{array}{r} 8.9 \\ 33 \end{array}$$

25.3

$$\begin{array}{r} 8.6 \\ 50 \end{array}$$

24.7

$$\begin{array}{r} 9.0 \\ 50 \end{array}$$

$$\begin{array}{r} 8.9 \\ 33 \end{array}$$

$$\begin{array}{r} 9.1 \\ 15 \end{array}$$

$$\begin{array}{r} 8.1 \\ 15 \end{array}$$

$$\begin{array}{r} 8.1 \\ 15 \end{array}$$

$$\begin{array}{r} 7.7 \\ 33 \end{array}$$

26.5

$$\begin{array}{r} 7.4 \\ 50 \end{array}$$

25.0

$$\begin{array}{r} 8.9 \\ 50 \end{array}$$

$$\begin{array}{r} 8.3 \\ 33 \end{array}$$

$$\begin{array}{r} 8.1 \\ 15 \end{array}$$

$$\begin{array}{r} 7.0 \\ 15 \end{array}$$

$$\begin{array}{r} 6.6 \\ 15 \end{array}$$

$$\begin{array}{r} 6.3 \\ 33 \end{array}$$

28.1

$$\begin{array}{r} 5.8 \\ 50 \end{array}$$

25.9

$$\begin{array}{r} 8.0 \\ 50 \end{array}$$

$$\begin{array}{r} 7.5 \\ 33 \end{array}$$

$$\begin{array}{r} 7.6 \\ 15 \end{array}$$

$$\begin{array}{r} 7.0 \\ 15 \end{array}$$

$$\begin{array}{r} 6.3 \\ 15 \end{array}$$

$$\begin{array}{r} 5.5 \\ 33 \end{array}$$

29.3

$$\begin{array}{r} 4.6 \\ 50 \end{array}$$

(70.5 - No. culv. Required)

28.3

$$\begin{array}{r} 5.6 \\ 50 \end{array}$$

$$\begin{array}{r} 5.6 \\ 33 \end{array}$$

$$\begin{array}{r} 5.4 \\ 15 \end{array}$$

$$\begin{array}{r} 5.2 \\ 15 \end{array}$$

$$\begin{array}{r} 4.9 \\ 15 \end{array}$$

$$\begin{array}{r} 5.1 \\ 33 \end{array}$$

29.0

$$\begin{array}{r} 4.9 \\ 50 \end{array}$$

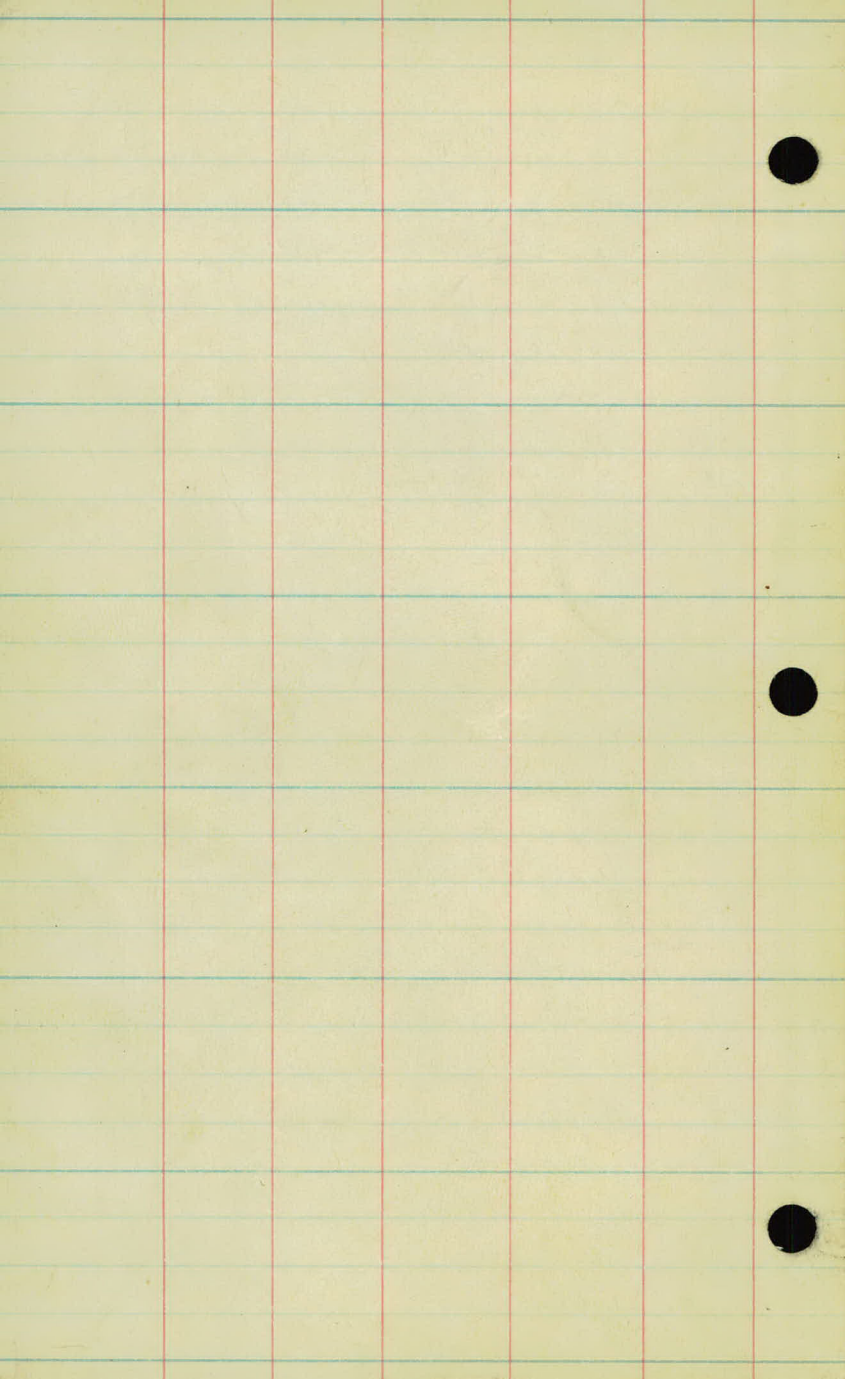
$$\begin{array}{r} 5.7 \\ 150 \end{array} \quad \begin{array}{r} 5.5 \\ 100 \end{array} \quad \begin{array}{r} 5.3 \\ 50 \end{array}$$

$$\begin{array}{r} 4.4 \\ 50 \end{array} \quad \begin{array}{r} 3.9 \\ 100 \end{array} \quad \begin{array}{r} 3.2 \\ 150 \end{array}$$

Top Mon. & co. rd. 'C'

(State High Elev. 92948 - Adj. 92900)

Spike 12" Oak. N.E. of Mon.



Proposed Offtake Ditch.

	4.55	933.60		929.05
30+50			9.7	23.9

31+0

31+60

30+00

T.P.	4.32	929.33	8.59	925.01
------	------	--------	------	--------

28+60

$$\begin{array}{r} 23.6 \\ \hline 10.0 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 8.2 \\ \hline 175 \end{array}$$

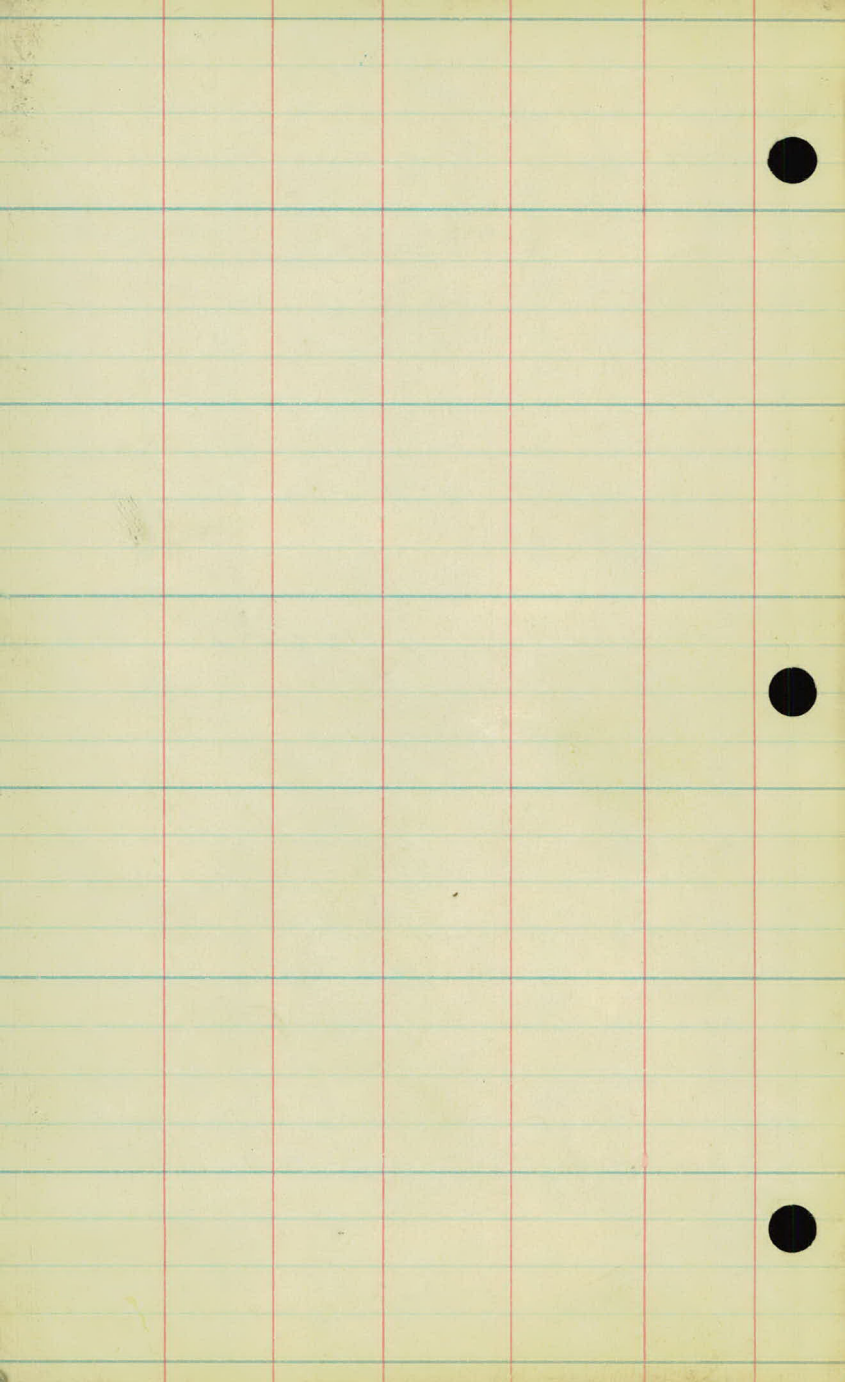
$$\begin{array}{r} 22.4 \\ \hline 11.2 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 20.3 \quad 22.2 \\ \hline 13.3 \quad 11.4 \\ \hline 100 \quad 100 \end{array}$$

Prop. Off Take Ditch.

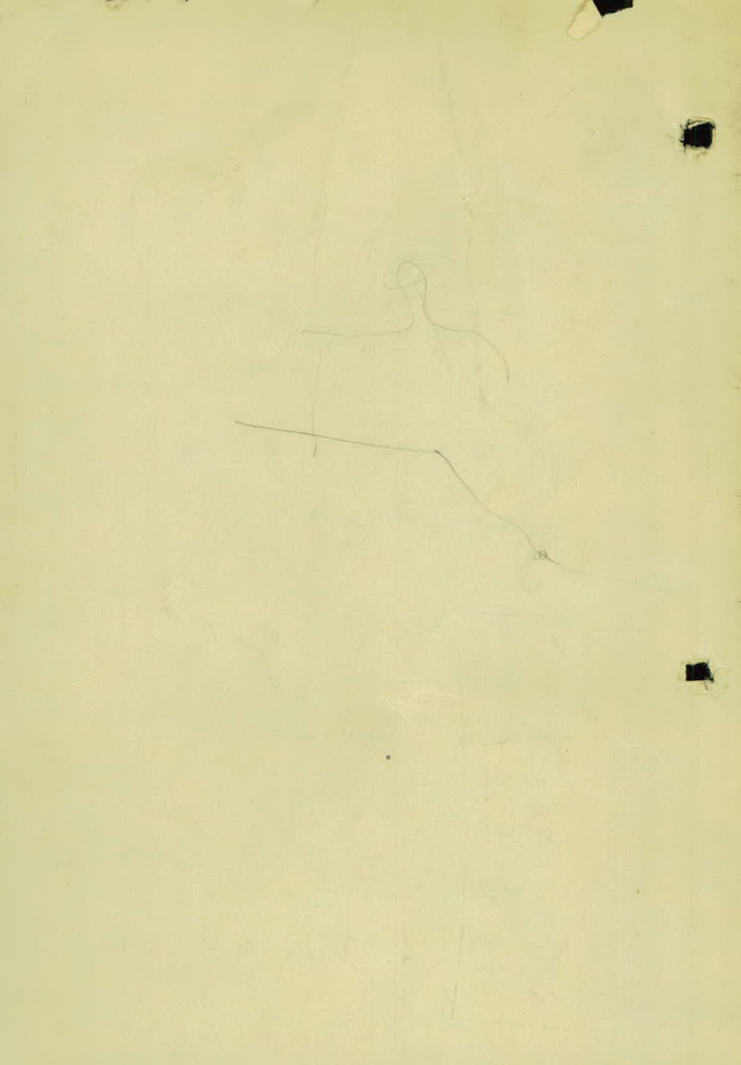
$$\begin{array}{r} 20.7 \quad 92.7 \quad 92.30 \quad 21.1 \quad 22.4 \\ \hline 9.1 \quad 86 \quad 6.3 \quad 4.2 \quad 4.5 \quad 6.7 \quad 6.9 \\ \hline 225 \quad 155 \quad 95 \quad 65 \quad 50 \quad 20 \quad 0 \end{array}$$

$$\begin{array}{r} 29.3 \\ 8.7 \\ \hline 10.6 \end{array}$$



HAND TO CARLY
To - Carly
Find area of
large culvert.
——— H ———
Check condition
at 28 to 30
——— H ———

0+17	- No Culv. Regd.
7+50 42'	- Ditch Grade on Left.
12+50 66	Pl. 24"
15+00 54	Pl. 24"
18+18 84	- Pl. 24" @ 45° N.W. & S.E.
20+85 84	- N. L. P.
28+50 48	See Page 19 - Pl. 24"
32+70	- no Culv. Regd.



FLANDERS WOOD

SCALE 100 FEET PER INCH

MAPLEWOOD
ADD. TO N. ST. PAUL

13TH ST.

33 33

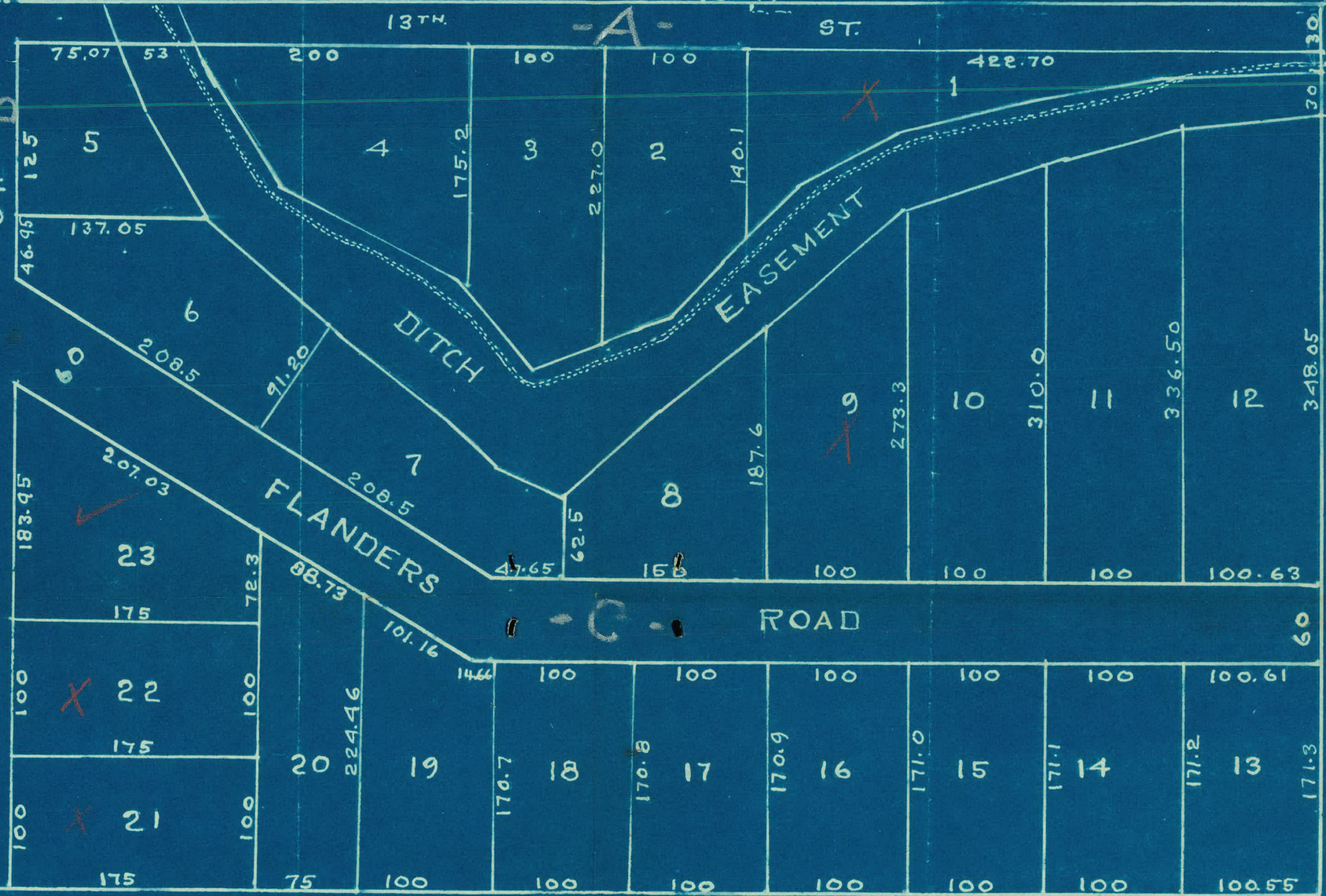
1279.2
to - ex Rd

ST. B

656.10

ARIEL

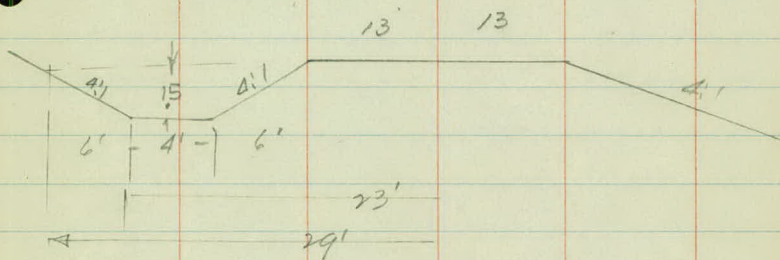
33



983.55

657.05

Slope stakes
Ariel St. or
W. Limits N. St. Paul.
Sta. 13+19 to Co. rd "C"



Jan. 1937

Sta.	+	-	Grade
B.M. ^{46 m}	1.02	939.54	938.49
B.M.		3.72	935.79

13+20			37.8
-------	--	--	------

+50			36.8
-----	--	--	------

14			35.4
----	--	--	------

+50			34.4
-----	--	--	------

+80			34.0
-----	--	--	------

15			33.8
----	--	--	------

+50			33.5
-----	--	--	------

16			33.3
----	--	--	------

+45			33.2
-----	--	--	------

+75			33.1
-----	--	--	------

B.M.			935.79
------	--	--	--------

9. Bod Lt. 2 Rt.

spike 12" oak on center 8 1/2" H 20

Nail in 12" oak. 55' Rly. 1670

$$1.7 \quad 33.0 \overline{) 77} \quad 48 \quad \begin{array}{r} \times \\ 24 \\ 12 \end{array} \quad \begin{array}{r} 06 \\ 111 \end{array} / 33.4$$

$$2.7 \quad 38.0 \overline{) 82} \quad 47 \quad \begin{array}{r} \times \\ 79 \\ 12 \end{array} \quad \begin{array}{r} 18 \\ 109 \end{array} / 32.6$$

$$4.1 \quad 27.4 \overline{) 77} \quad 56 \quad \begin{array}{r} \times \\ 24 \\ 13 \end{array} \quad \begin{array}{r} 21 \\ 110 \end{array} / 33.0$$

$$5.1 \quad 25.0 \overline{) 81} \quad 72 \quad \begin{array}{r} 70 \\ -20 \end{array} / 22.2$$

$$5.5 \quad 27.4 \overline{) 91} \quad 91 \quad \begin{array}{r} 90 \\ -26 \end{array} / 27.0$$

$$5.7 \quad 29.0 \overline{) 97} \quad 95 \quad \begin{array}{r} 96 \\ -28 \end{array} / 27.0$$

$$6.0 \quad 29.0 \overline{) 100} \quad 75 \quad \begin{array}{r} \times \\ 61 \\ 13 \end{array} \quad \begin{array}{r} 20 \\ 120 \end{array} / 41.0$$

$$6.2 \quad 28.0 \overline{) 84} \quad 55 \quad \begin{array}{r} 55 \\ 107 \end{array} \quad / 45 \text{ top slope}$$

$$6.3 \quad 24.0 \overline{) 70} \quad 52 \quad \begin{array}{r} 50 \\ 103 \end{array} / 45 \quad " \quad "$$

$$6.4 \quad 29.0 \overline{) 64} \quad 58 \quad \begin{array}{r} 58 \\ 109 \end{array} / 31.8$$

same as above

Sta.	+	π	-	Grade
		939.52		
17				33.1
	0.98	939.47		938.49
+20				33.1
+40				33.0
+75				32.9
18				32.9
+18				32.9
+50				32.7
19				32.5
+30				32.4
+75				32.1
20+0				32.0

Lt

Σ

Rt.

6.4

↑

$$33 \overline{) \frac{43}{27}}$$

$$\frac{76}{+28}$$

$$\frac{28}{\cancel{40.1}} / 29.4$$

6.4

19
Slope 33' 60"

$$33 \overline{) \frac{27}{+3.7}}$$

$$\frac{1.6}{+48}$$

$$\frac{6.5}{\cancel{20.1}} / 28.6$$

6.5

$$33 \overline{) \frac{27}{+3.8}}$$

$$\frac{47}{+18}$$

$$\frac{6.5}{\cancel{20.9}} / 28.4$$

6.6

$$33 \overline{) \frac{29}{+3.3}}$$

$$\frac{109}{-3.3}$$

$$\frac{110}{\cancel{5.4}} / 34.6$$

6.6

$$33 \overline{) \frac{11.7}{5.1}}$$

$$\frac{12.2}{5.6}$$

$$\frac{11.3}{\cancel{4.7}} / 31.8$$

6.8

6.8

8.3

$$33 \overline{) \frac{13.1}{-6.3}}$$

$$\frac{10.4}{-3.6}$$

$$\frac{7.8}{\cancel{20.5}} / 25.0$$

7.0

8.5

$$33 \overline{) \frac{24}{-2.4}}$$

$$\frac{6.1}{+10.9}$$

$$+6.5 / 55.0$$

7.1

8.6

$$33 \overline{) \frac{27}{+10.9}}$$

$$\frac{47}{+2.4}$$

$$+5.1 / 49.4$$

7.4

$$33 \overline{) \frac{28}{+20.1}}$$

$$\frac{59}{+1.5}$$

$$\frac{4.3}{+1.6} / 39.4$$

7.5

$$33 \overline{) \frac{8.7}{-1.2}}$$

$$\frac{7.1}{+10.1}$$

$$\frac{6.2}{+1.3} / 34.3$$

Sta.	+	π	-	Grade
	8.11	937.11		929.00
20+50				31.7
21				31.4
+25				31.2
+65				31.0
22				30.7
+50				30.3
23				29.9
	9.47	938.47	8.11	929.00
+50				29.5
24				29.1
+50				28.7
25				28.3

9. Root

d

d

R.

5.4	⊕ $41 \overline{) 124} \left \begin{array}{r} 124 \\ -70 \\ \hline 54 \end{array} \right \begin{array}{r} 108 \\ -54 \\ \hline \end{array}$	$124 \overline{) 41}$
5.7	⊕ $49 \overline{) 147} \left \begin{array}{r} 147 \\ -98 \\ \hline \end{array} \right \begin{array}{r} 121 \\ -72 \\ \hline \end{array}$	$127 \overline{) 41}$
5.9	⊕ $35.4 \overline{) 115} \left \begin{array}{r} 115 \\ -56 \\ \hline \end{array} \right \begin{array}{r} 100 \\ -51 \\ \hline \end{array}$	$106 \overline{) 31.8}$
6.1	$23.0 \overline{) 111} \left \begin{array}{r} 111 \\ -50 \\ \hline \end{array} \right \begin{array}{r} 103 \\ -72 \\ \hline \end{array}$	$7.6 \overline{) 27.0}$
6.4	$76.6 \overline{) 98} \left \begin{array}{r} 98 \\ -76 \\ \hline \end{array} \right \begin{array}{r} 80 \\ -76 \\ \hline \end{array}$	$83 \overline{) 206}$
6.8	$76.2 \overline{) 75} \left \begin{array}{r} 75 \\ -50 \\ \hline \end{array} \right \begin{array}{r} 49 \\ -39 \\ \hline \end{array}$	$45 \overline{) 38.2}$
7.2	$31 \overline{) 67} \left \begin{array}{r} 67 \\ -62 \\ \hline \end{array} \right \begin{array}{r} 30 \\ -24 \\ \hline \end{array}$	$1.7 \overline{) 51.0}$
9.0	× $25.8 \overline{) 73} \left \begin{array}{r} 73 \\ -41 \\ \hline \end{array} \right \begin{array}{r} 50 \\ +40 \\ \hline \end{array}$	$11 \overline{) 77.9} \left \begin{array}{r} 77.9 \\ -66 \\ \hline \end{array} \right \begin{array}{r} 11 \\ +7.9 \\ \hline \end{array}$
9.4	$32.2 \overline{) 86} \left \begin{array}{r} 86 \\ -64 \\ \hline \end{array} \right \begin{array}{r} 67 \\ -67 \\ \hline \end{array}$	$35 \overline{) 526}$
9.8	$31 \overline{) 98} \left \begin{array}{r} 98 \\ -98 \\ \hline \end{array} \right \begin{array}{r} 84 \\ -84 \\ \hline \end{array}$	$7.1 \overline{) 29.8}$
10.2	$31 \overline{) 109} \left \begin{array}{r} 109 \\ -96 \\ \hline \end{array} \right \begin{array}{r} 26 \\ +26 \\ \hline \end{array}$	$88 \overline{) 358}$

Sta	+	Σ	-	Grade
		938.47		
25+50				27.9
26				27.5
+50				27.1
27				26.7
B.M.	0.30	929.30	9.47	929.00
+50				26.3
T.P.				
28				25.9
+50				25.4 22.0
29				25.0 22.2
+50				24.6 22.5
30				24.4 22.8
+50				24.6 23.0
T.P. ✓	1.78	933.90	3.18	926.12

L1

L

L2

$$10.6 \quad 31 \overline{) 11.5}$$

$$31 \overline{) 11.5}$$

$$\frac{96}{11.0}$$

$$\frac{89}{11.7} / 35.8$$

$$11.0$$

$$31 \overline{) 11.3}$$

$$\frac{186}{10.6}$$

$$\frac{92}{11.8} / 36.2$$

$$11.4$$

$$31 \overline{) 11.8}$$

$$\frac{122}{10.8}$$

$$\frac{121}{11.8} / 31$$

$$11.8$$

$$31 \overline{) 12.5}$$

$$\frac{129}{11.1}$$

$$\frac{138}{12.0} / 21.0$$

$$12.2$$

$$31 \overline{) 11.6}$$

$$\frac{136}{11.4}$$

$$\frac{142}{12.0} / 21.8$$

~~Top of State 2860~~

$$34$$

$$31 \overline{) 4.8}$$

$$\frac{53}{1.9}$$

$$\frac{58}{2.4} / 24.0$$

$$29$$

$$7.3$$

$$31 \overline{) 21.4}$$

$$\frac{56}{2.1}$$

$$\frac{65}{2.3} / 23.4$$

$$\frac{62}{2.1} / 31$$

$$13$$

$$71$$

$$31 \overline{) 56}$$

$$\frac{50}{0.7}$$

$$\frac{60}{1.7} / 19.8$$

$$\frac{57}{1.4} / 31$$

$$47$$

$$6.8$$

$$31 \overline{) 4.7}$$

$$\frac{46}{0.5}$$

$$\frac{5.6}{0.9} / 16.6$$

$$\frac{50}{1.8} / 31$$

$$4.9$$

$$6.5$$

$$31 \overline{) 4.6}$$

$$\frac{48}{1.1}$$

$$\frac{45}{1.0} / 31$$

$$4.7$$

$$6.3$$

$$31 \overline{) 5.2}$$

$$\frac{51}{0.4}$$

$$\frac{50}{0.9} / 14.2$$

$$\frac{49}{1.1} / 31$$

983.90

31

25.1

+50

26.0

32

27.7

+50

28.2

+74

+87.92

92899

$$8.8 \quad 103 \quad 182 \overline{) 101} \quad \frac{76}{-0.8} \quad \frac{7.5}{-0.7} / 58 \quad \frac{90}{12/3} / 31$$

$$7.9 \quad 17.4 \overline{) 90} \quad \frac{81}{-0.1} \quad \frac{80}{-0.1} \quad \frac{7.7}{+0.2} / 31$$

$$6.8 \quad 17.8 \overline{) 8.0} \quad \frac{6.9}{-0.1} \quad \frac{6.2}{+0.6} / 31$$

$$5.7 \quad 20.6 \overline{) 7.6} \quad \frac{6.9}{-0.7} \quad \frac{5.2}{+0.5} / 31$$

mon.

$$\begin{array}{r} 20 \\ 125 \\ 47 \\ \hline 202 \end{array}$$

$$\begin{array}{r} 32187.92 \\ 13112.26 \\ \hline 19475.66 \\ 202 \\ \hline 17473.66 \end{array}$$

Med. Aet. - 86 or 82

0
- - -

17+73.66

17+72.72

17+73.66

28.49

17+38.17

17+01.74

8691

57° 42'