

Book # 57 - Dr. 8

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

Ditch Survey

Ditch No. 10

From _____ To _____

Road Acc't. No. Ditch 10

Date Filed 6/15/31

File D 10

Plpfs
Ex Done

Survey of
County Ditch
No 10

in vicinity of Wheelock Parkway
and Larp Ave. West of Rice St.

August 20 - 1928

Lubins

B.S. π F.I.S

0.70 853.93 853.23

$\frac{4}{2} \cdot 86$ 47.99 10.80 43.13

Sta 0+00 $\angle$ W. Hoyt Ave on Wood Bridge

$\angle$ Wood Bridge 7.05 840.92

1+20

1+70 $\angle$ So + West at So End Pond. 7.8 840.2

2+64 E. end 24" ^{Galv.} Culv. under Marion St

2+74 $\angle$ Marion St. 4.7 43.3

2+84 W end 24" Culv under Marion 44.0 invert

2+90 $\angle$ No + East.

7.70 854.89 0.80 47.19 T.P.

4+00

5+00 So End 24" City Culvert

5+00 So End 14" Vet. Culv invert 842.3

B.M. Top of Hydrant on N.E Cor of
Wheelock Pky. & Marion St.

T.P. Marion & W. Hoyt

$$\begin{array}{r} 40.2 \\ 13 \end{array} \quad \begin{array}{r} 37.8 \\ 0 \end{array} \quad \begin{array}{r} 40.2 \\ 13 \end{array}$$

$$\begin{array}{r} 40.0 \\ 15 \end{array} \quad \begin{array}{r} 40.0 \\ 1.5 \end{array} \quad \begin{array}{r} 39.7 \\ 1 \end{array} \quad \begin{array}{r} 39.6 \\ 8 \end{array} \quad \begin{array}{r} 39.7 \\ 1 \end{array} \quad \begin{array}{r} 40.0 \\ 1.5 \end{array} \quad \begin{array}{r} 39.9 \\ 15 \end{array}$$

W.S. in pond. Note No visible ditch from
1+70 to 2+64.

$$\begin{array}{r} 42.0 \\ 20 \end{array} \quad \begin{array}{r} 42.0 \\ 2 \end{array} \quad \begin{array}{r} \text{Top 41.4 Dirt} \\ \text{Culv 40.7 Invert} \\ 0 \end{array} \quad \begin{array}{r} 42.0 \\ 2 \end{array} \quad \begin{array}{r} 42.4 \\ 24 \end{array}$$

$$\begin{array}{r} 841.6 \\ 0 \end{array}$$

$$\begin{array}{r} 50.6 \\ 50 \end{array} \quad \begin{array}{r} 43.7 \\ 20 \end{array} \quad \begin{array}{r} 43.7 \\ 7 \end{array} \quad \begin{array}{r} 43.2 \\ 1.5 \end{array} \quad \begin{array}{r} 43.0 \\ 0 \end{array} \quad \begin{array}{r} 43.2 \\ 1.5 \end{array} \quad \begin{array}{r} 44.3 \\ 11 \end{array} \quad \begin{array}{r} 43.7 \\ 20 \end{array}$$

E Marion

$$\begin{array}{r} 51.4 \\ 35 \end{array} \quad \begin{array}{r} 43.9 \\ 1.5 \end{array} \quad \begin{array}{r} 43.8 \text{ Dirt} \\ 42.45 \text{ Invert} \\ 0 \end{array} \quad \begin{array}{r} 43.9 \\ 1.5 \end{array} \quad \begin{array}{r} 47.0 \\ 8 \end{array} \quad \begin{array}{r} 47.2 \\ 18 \end{array}$$

3

854.89

5+42.5 So Edge Wheelock Pkt. 5.1 49.8

5+92 No " " " 5.4 49.5

6+32 on Filled Shoulder 5.8 49.0

6+42 No End City 24" Culv.

6+42 Invert of County 14" Culv 12.7 42.2

6+54 " No End " " " 11.9 43.0

6+42

6+85

7+51 So End 24" Culv.

7+65 E Rd over Culv 9.3 45.6

7+79 No End Culv.

7+92 L. So + West. W.S. 17.39 43.5

8+10

9+00

10+70

4.66 850.23 T.P.

4

$$\begin{array}{r} 44.6 \text{ Dirt} \\ 43.6 \text{ invert} \\ \hline 0 \end{array}$$

0.5 mud in Culv.

$$\begin{array}{r} 46.5 \\ 40 \end{array} \quad \begin{array}{r} 45.3 \\ 16 \end{array} \quad \begin{array}{r} 46.5 \\ 12 \end{array} \quad \begin{array}{r} 45.0 \\ 2 \end{array} \quad \begin{array}{r} 44.6 \\ 0 \end{array} \quad \begin{array}{r} 45.0 \\ 2 \end{array} \quad \begin{array}{r} 47.0 \\ 8 \end{array} \quad \begin{array}{r} 48.8 \\ 18 \end{array}$$

$$\begin{array}{r} 44.7 \\ 24 \end{array} \quad \begin{array}{r} 46.2 \\ 10 \end{array} \quad \begin{array}{r} 43.0 \\ 1 \end{array} \quad \begin{array}{r} 42.9 \\ 0 \end{array} \quad \begin{array}{r} 43.0 \\ 1 \end{array} \quad \begin{array}{r} 47.1 \\ 13 \end{array} \quad \begin{array}{r} 46.5 \\ 23 \end{array}$$

$$\begin{array}{r} 45.7 \\ 30 \end{array} \quad \begin{array}{r} 45.4 \\ 7 \end{array} \quad \begin{array}{r} 42.0 \\ 1 \end{array} \quad \begin{array}{r} 42.8 \text{ Dirt} \\ 41.9 \text{ invert} \\ 0 \end{array} \quad \begin{array}{r} 42.0 \\ 1 \end{array} \quad \begin{array}{r} 45.4 \\ 7 \end{array} \quad \begin{array}{r} 45.7 \\ 21 \end{array} \quad \begin{array}{r} 45.4 \\ 35 \end{array}$$

$$\begin{array}{r} 47.3 \\ 27 \end{array} \quad \begin{array}{r} 47.3 \\ 9 \end{array} \quad \begin{array}{r} 43.0 \\ 1.5 \end{array} \quad \begin{array}{r} 42.8 \text{ Dirt} \\ 42.0 \text{ invert} \\ 0 \end{array} \quad \begin{array}{r} 43.0 \\ 1.5 \end{array} \quad \begin{array}{r} 45.2 \\ 10 \end{array} \quad \begin{array}{r} 44.0 \\ 18 \end{array} \quad \begin{array}{r} 45.0 \\ 30 \end{array}$$

$$\begin{array}{r} 46.0 \\ 25 \end{array} \quad \begin{array}{r} 47.3 \\ 10 \end{array} \quad \begin{array}{r} 43.0 \\ 1.5 \end{array} \quad \begin{array}{r} 42.8 \\ 0 \end{array} \quad \begin{array}{r} 43.0 \\ 1.5 \end{array} \quad \begin{array}{r} 46.5 \\ 10 \end{array} \quad \begin{array}{r} 45.3 \\ 30 \end{array}$$

$$\begin{array}{r} 46.4 \\ 25 \end{array} \quad \begin{array}{r} 47.0 \\ 15 \end{array} \quad \begin{array}{r} 46.4 \\ 10 \end{array} \quad \begin{array}{r} 43.0 \\ 1.5 \end{array} \quad \begin{array}{r} 42.8 \\ 1.5 \end{array} \quad \begin{array}{r} 43.0 \\ 1.5 \end{array} \quad \begin{array}{r} 46.5 \\ 9 \end{array} \quad \begin{array}{r} 45.8 \\ 13 \end{array} \quad \begin{array}{r} 45.8 \\ 40 \end{array}$$

to find

$$\begin{array}{r} 46.5 \\ 30 \end{array} \quad \begin{array}{r} 46.5 \\ 16 \end{array} \quad \begin{array}{r} 48.4 \\ 12 \end{array} \quad \begin{array}{r} 43.3 \\ 1.5 \end{array} \quad \begin{array}{r} 43.0 \\ 0 \end{array} \quad \begin{array}{r} 43.3 \\ 1.5 \end{array} \quad \begin{array}{r} 47.0 \\ 10 \end{array} \quad \begin{array}{r} 47.7 \\ 16 \end{array} \quad \begin{array}{r} 46.0 \\ 40 \end{array}$$

π

4.67 854.90

850.23 T.P.

10+92 L. Not East

10+92 w.s. 11.4 43.5

11+00

12+00

13+00

14+00

15+00 w.s. 11.3 43.6

16+00 w.s. 11.2 43.7

17+00 w.s. 11.2 43.7

5.76 52.81 7.85 47.05 T.P.

17+17 L. Ditch N.W. and So.

$$\frac{47.2}{50} \quad \frac{47.2}{12} \quad \frac{47.0}{6} \quad \frac{43.3}{1.5} \quad \frac{43.0}{0} \quad \frac{43.3}{1.5} \quad \frac{47.1}{6} \quad \frac{47.2}{12}$$

Top
W Bank
200

$$\frac{46.2}{60} \quad \frac{46.3}{10} \quad \frac{46.0}{8} \quad \frac{43.4}{1.5} \quad \frac{43.1}{0} \quad \frac{43.4}{1.5} \quad \frac{46.6}{6} \quad \frac{47.2}{12} \quad \frac{46.6}{16} \quad \frac{46.6}{50}$$

$$\frac{46.4}{60} \quad \frac{47.6}{16} \quad \frac{47.2}{10} \quad \frac{43.4}{1.5} \quad \frac{43.1}{0} \quad \frac{43.4}{1.5} \quad \frac{47.5}{8} \quad \frac{48.2}{16} \quad \frac{46.8}{22} \quad \frac{46.6}{50}$$

$$\frac{47.4}{60} \quad \frac{49.7}{25} \quad \frac{49.5}{15} \quad \frac{48.5}{10} \quad \frac{43.4}{1.5} \quad \frac{43.1}{0} \quad \frac{43.4}{1.5} \quad \frac{47.2}{10} \quad \frac{49.2}{13} \quad \frac{47.0}{23}$$

$$\frac{47.4}{50} \quad \frac{47.4}{17} \quad \frac{49.5}{13} \quad \frac{48.0}{10} \quad \frac{44.0}{1.5} \quad \frac{43.6}{0} \quad \frac{44.0}{1.5} \quad \frac{49.2}{10} \quad \frac{50.4}{16} \quad \frac{48.4}{20} \quad \frac{47.0}{50}$$

$$\frac{47.0}{50} \quad \frac{47.0}{30} \quad \frac{46.4}{20} \quad \frac{47.0}{10} \quad \frac{44.0}{1.5} \quad \frac{43.6}{0} \quad \frac{44.0}{1.5} \quad \frac{47.9}{9} \quad \frac{47.5}{14} \quad \frac{47.0}{16} \quad \frac{46.4}{50}$$

$$\frac{47.3}{50} \quad \frac{47.3}{30} \quad \frac{49.3}{20} \quad \frac{47.1}{10} \quad \frac{42.9}{1.5} \quad \frac{42.7}{0} \quad \frac{42.9}{1.5} \quad \frac{47.5}{10} \quad \frac{48.7}{15} \quad \frac{47.9}{22} \quad \frac{48.0}{50}$$

1

~~52.81~~

17+40 £ 12x12 wood Bridge
17+40

5.9 46.9

18+00 w.s.

8.9 43.9

19+00

20+00

21+00 w.s. 43.9

22+00

23+00

~~24+00~~

23+64 £ 12x14 wood Bridge Floor 847.58 T.P.
5.70 853.28

24+00

24+28 1x85. Fence

25+00 w.s. 43.9

26+00

27+00

8

Floor Bridge

$$\frac{46.9}{50} \quad \frac{47.9}{20} \quad \frac{46.9}{8} \quad \frac{43.5}{1.5} \quad \frac{43.3}{0} \quad \frac{43.5}{1.5} \quad \frac{46.9}{8} \quad \frac{46.3}{39}$$

$$\frac{46.7}{50} \quad \frac{46.7}{24} \quad \frac{47.7}{14} \quad \frac{47.3}{8} \quad \frac{43.8}{1.5} \quad \frac{43.3}{0} \quad \frac{43.8}{1.5} \quad \frac{46.6}{8} \quad \frac{46.8}{50}$$

$$\frac{46.3}{50} \quad \frac{46.3}{22} \quad \frac{47.1}{18} \quad \frac{46.9}{8} \quad \frac{43.9}{1.5} \quad \frac{43.5}{0} \quad \frac{43.9}{1.5} \quad \frac{46.6}{8} \quad \frac{46.2}{12} \quad \frac{46.2}{50}$$

$$\frac{46.2}{50} \quad \frac{46.2}{22} \quad \frac{47.1}{13} \quad \frac{46.7}{8} \quad \frac{43.9}{1.5} \quad \frac{43.5}{0} \quad \frac{43.9}{1.5} \quad \frac{46.7}{8} \quad \frac{46.0}{14} \quad \frac{46.2}{50}$$

$$\frac{46.3}{50} \quad \frac{46.2}{20} \quad \frac{47.3}{13} \quad \frac{46.6}{8} \quad \frac{43.4}{1.5} \quad \frac{43.4}{0} \quad \frac{43.4}{1.5} \quad \frac{46.2}{8} \quad \frac{46.0}{12} \quad \frac{46.0}{40}$$

$$\frac{46.2}{50} \quad \frac{46.1}{26} \quad \frac{47.7}{14} \quad \frac{46.4}{6} \quad \frac{43.4}{1.5} \quad \frac{43.3}{0} \quad \frac{43.4}{1.5} \quad \frac{46.7}{7} \quad \frac{47.8}{18} \quad \frac{47.6}{40}$$

$$\frac{47.3}{40} \quad \frac{47.2}{22} \quad \frac{48.4}{16} \quad \frac{47.6}{7} \quad \frac{43.9}{1.5} \quad \frac{43.7}{0} \quad \frac{43.8}{1.5} \quad \frac{47.0}{10} \quad \frac{47.2}{21} \quad \frac{47.6}{40}$$

0

$$\frac{46.4}{30} \quad \frac{47.0}{16} \quad \frac{46.7}{7} \quad \frac{43.5}{1.5} \quad \frac{43.3}{0} \quad \frac{43.5}{1.5} \quad \frac{47.0}{10} \quad \frac{47.6}{22} \quad \frac{47.0}{30} \quad \frac{47.2}{60}$$

$$\frac{44.6}{36} \quad \frac{44.7}{8} \quad \frac{43.5}{1} \quad \frac{43.3}{0} \quad \frac{43.5}{1} \quad \frac{44.2}{8} \quad \frac{44.6}{40}$$

$$\frac{44.2}{50} \quad \frac{44.2}{5} \quad \frac{43.5}{1.5} \quad \frac{43.2}{0} \quad \frac{43.5}{1.5} \quad \frac{44.2}{5} \quad \frac{44.2}{50}$$

$$\frac{44.2}{60} \quad \frac{44.2}{5} \quad \frac{43.5}{1.5} \quad \frac{43.0}{0} \quad \frac{43.5}{1.5} \quad \frac{44.2}{5} \quad \frac{44.3}{60}$$

9

~~853.28~~

28+00

29+00

30+00

31+00

31+68 Cor of So + West Fence

31+75 $\angle$ in Ditch

31+88 $\pm$ 10x10 Farm Bridge ^{8.78}

844.50 TP

6.44 850.94

32+00

33+00

34+00

35+00

36+00

37+00

37+90

$$\frac{44.2}{50} \quad \frac{44.2}{7} \quad \frac{43.5}{1.5} \quad \frac{42.8}{0} \quad \frac{43.5}{1.5} \quad \frac{44.2}{7} \quad \frac{44.2}{50}$$

$$\frac{44.2}{60} \quad \frac{44.1}{6} \quad \frac{43.6}{1.5} \quad \frac{42.7}{0} \quad \frac{43.6}{1.5} \quad \frac{44.2}{6} \quad \frac{44.2}{60}$$

$$\frac{44.4}{40} \quad \frac{44.4}{4} \quad \frac{42.9}{1.5} \quad \frac{42.5}{0} \quad \frac{42.8}{1.5} \quad \frac{44.4}{4} \quad \frac{44.4}{40}$$

$$\frac{44.9}{50} \quad \frac{44.6}{4} \quad \frac{43.3}{2} \quad \frac{42.5}{0} \quad \frac{43.3}{2} \quad \frac{44.6}{4} \quad \frac{44.9}{50}$$

0

$$\frac{44.5}{50} \quad \frac{45.5}{7} \quad \frac{44.0}{1.5} \quad \frac{43.4}{0} \quad \frac{44.0}{1.5} \quad \frac{45.2}{7} \quad \frac{45.2}{50}$$

$$\frac{44.9}{38} \quad \frac{44.9}{13} \quad \frac{46.2}{10} \quad \frac{44.2}{3} \quad \frac{44.0}{1.5} \quad \frac{43.6}{0} \quad \frac{44.0}{1.5} \quad \frac{46.2}{12} \quad \frac{45.3}{18} \quad \frac{45.3}{50}$$

$$\frac{45.5}{15} \quad \frac{46.3}{10} \quad \frac{44.8}{3} \quad \frac{44.3}{1.5} \quad \frac{44.0}{0} \quad \frac{44.3}{1.5} \quad \frac{44.8}{3} \quad \frac{46.1}{10} \quad \frac{45.2}{15}$$

$$\frac{46.1}{38} \quad \frac{46.1}{16} \quad \frac{46.7}{10} \quad \frac{45.1}{4} \quad \frac{44.5}{1.5} \quad \frac{44.1}{0} \quad \frac{44.5}{1.5} \quad \frac{45.0}{4} \quad \frac{46.7}{12} \quad \frac{45.3}{18}$$

$$\frac{45.8}{50} \quad \frac{45.8}{15} \quad \frac{46.8}{10} \quad \frac{45.3}{3} \quad \frac{44.9}{1.5} \quad \frac{44.4}{0} \quad \frac{44.9}{1.5} \quad \frac{45.2}{3} \quad \frac{47.0}{12} \quad \frac{46.0}{18}$$

$$\frac{45.9}{44} \quad \frac{45.8}{16} \quad \frac{46.7}{10} \quad \frac{45.2}{3} \quad \frac{44.8}{1.5} \quad \frac{44.4}{0} \quad \frac{44.8}{1.5} \quad \frac{45.4}{3} \quad \frac{47.2}{12} \quad \frac{46.6}{18} \quad \frac{46.6}{50}$$

$$\frac{45.2}{15} \quad \frac{45.4}{10} \quad \frac{45.3}{3} \quad \frac{45.0}{1.5} \quad \frac{44.6}{0} \quad \frac{45.0}{1.5} \quad \frac{45.4}{3} \quad \frac{47.2}{12} \quad \frac{46.2}{18}$$

aug 22

Needle $8^{\circ}-05'$ E of N.
 $180^{\circ} = N.$

Magnetic Setup.

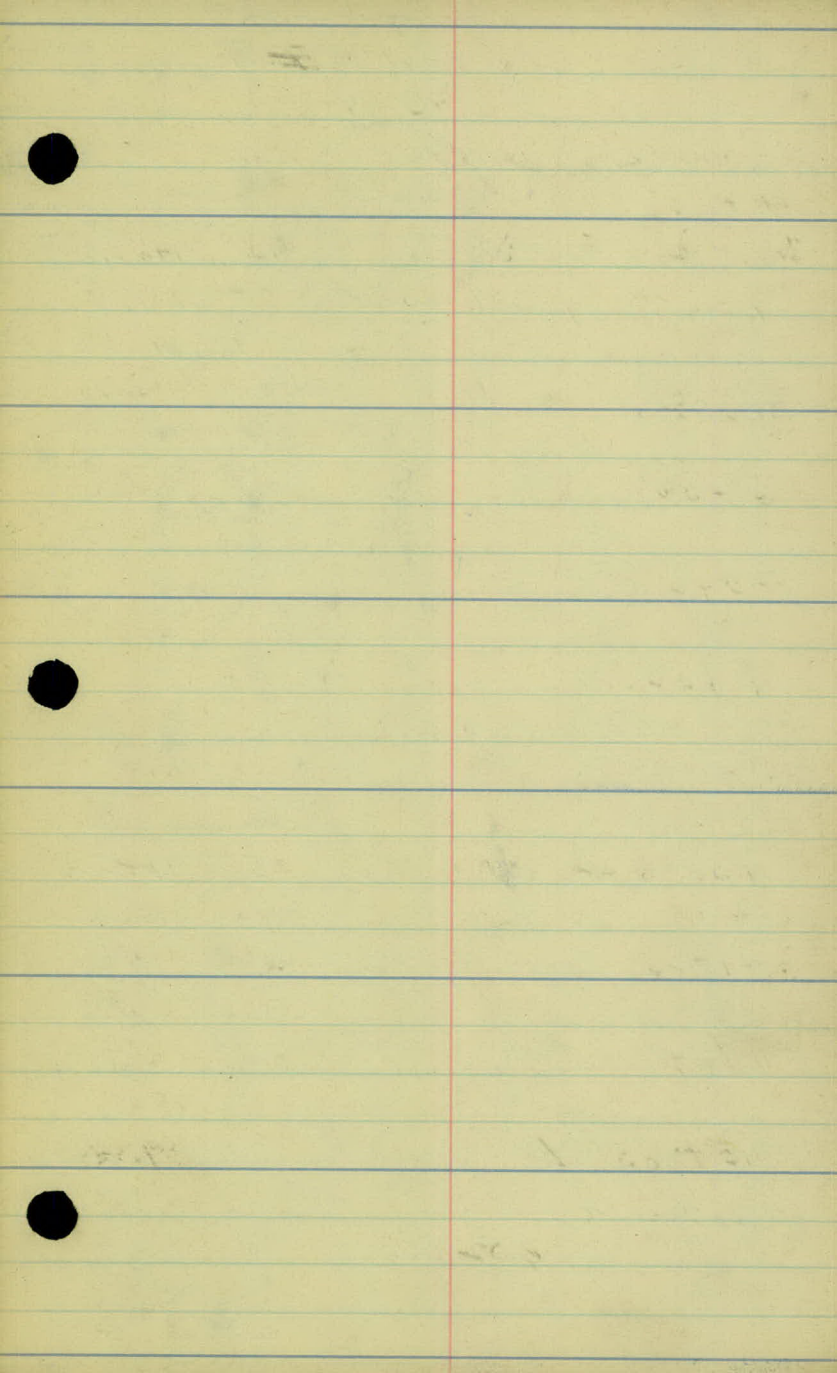
At 0 1 Cor Marion + W Hoyt.

To 0 2	510	$180^{\circ}-00'$
E Wood Bridge on Hoyt.	155	$267-45'$
Note Bridge ϕ is $8'$ No. of E Street		
Sta 5+00 So End Culv.	390	$178-15'$
" 1+70 $\angle$ So + W	208	$211-12'$
" 2+90 $\angle$ N. to E.	180	$176-10'$

Voice

At 02

To 01	510	$0^{\circ}-00'$
S.W. Cor Canals.	90	$16-45'$
SE " "	68	$346-36'$
N.E	31	$279-10'$
N.W " "	30	$24-15'$
6+42 N. and Culv.	23	$155-30'$
$\angle$ Ditch W + So.	170	$173-45'$
N.W Cor Ho.	140	$339-00'$
03	338	$119-52'$
N.E Cor Ho	287	$8^{\circ}-35'$
" " " Barn	297	$18-10'$
N.E. Cor Ho X		$90-35'$
Angle of wheelock.		$245^{\circ}-00'$
S.W Cor Barn X		$213-00'$
" " " Ho. X		$221-00'$



850.94

38+00 L in Ditch

38+12 E Fann Bridge Floor, 4.50 846.44 TIT
8.41 854.85

38+25

39+00

40+00

41+00

42+00

43+00

44+26 Cor of E-W & SO Fence

44+40 L

45+85 L in Ditch, 7.09 847.16 TP

6.52 ~~853.94~~

45+85

8.74 845.20

$\frac{45.4}{28}$ $\frac{46.0}{7}$ $\frac{44.9}{2.0}$ $\frac{44.4}{0}$ $\frac{44.9}{2.0}$ $\frac{46.4}{6}$ $\frac{45.9}{12}$

$\frac{46.2}{15}$ $\frac{46.0}{7}$ $\frac{45.3}{4}$ $\frac{45.0}{1.5}$ ~~$\frac{44.4}{1.5}$~~ $\frac{45.2}{1.5}$ $\frac{45.5}{4}$ $\frac{46.3}{8}$ $\frac{45.9}{15}$

$\frac{46.0}{18}$ $\frac{47.4}{14}$ $\frac{46.8}{8}$ $\frac{46.0}{3}$ $\frac{45.1}{1}$ $\frac{45.0}{0}$ $\frac{45.1}{1}$ $\frac{46.0}{3}$ $\frac{47.1}{10}$ $\frac{46.0}{15}$

$\frac{46.4}{40}$ $\frac{46.4}{4}$ $\frac{44.8}{1}$ $\frac{44.7}{0}$ $\frac{44.8}{1}$ $\frac{46.0}{5}$ $\frac{46.1}{9}$ $\frac{46.2}{50}$

$\frac{46.8}{50}$ $\frac{46.8}{6}$ $\frac{45.6}{3}$ $\frac{45.3}{1}$ $\frac{45.0}{0}$ $\frac{45.2}{1}$ $\frac{45.5}{3}$ $\frac{46.0}{6}$ $\frac{46.7}{8}$

$\frac{46.8}{50}$ $\frac{46.8}{6}$ $\frac{45.5}{3}$ $\frac{45.3}{1}$ $\frac{45.1}{0}$ $\frac{45.1}{1}$ $\frac{45.6}{3}$ $\frac{46.0}{6}$ $\frac{46.7}{50}$

$\frac{46.5}{17}$ $\frac{48.0}{7}$ $\frac{45.7}{2}$ $\frac{45.5}{0}$ $\frac{45.7}{2}$ $\frac{51.1}{9}$ $\frac{50.0}{13}$ $\frac{47.0}{50}$

$\frac{51.5}{26}$ $\frac{50.5}{10}$ $\frac{46.4}{1.5}$ $\frac{45.9}{0}$ $\frac{46.3}{1.5}$ $\frac{52.8}{18}$ $\frac{46.6}{40}$

North End 30" Con Sule under warp.

Invert of 30" Sule.

13

 π
 853.94

45+85		846.0
46+02		0.14 853.80
46+32		0.3 853.6
46+46		8.09 845.85
46+46		7.74 846.20
47+68	W.S.	7.94 846.0
47+68		8.34 845.60
49+53		
49+53		9.1 844.8
51+00		8.9 845.0
51+89		

Section Taken from
 Sta 44+40 Due South through
 Rd. Fill to Sta 47+68.

	9.85	857.27	847.42
Sta 0+00 = 44+40	11.4		845.9
Sta 0+10	8.4		848.9
Sta 0+21	1.4		855.9
Sta 0+51	1.4		855.9
" 0+60	5.5		851.8
" 0+70	8.2		849.1
" 0+78 = 47+68	11.7		845.6

Dirt Level in Culvert.

North Shoulder of Ramp Ave.

So " " " "

Invert So End of 30" Con Culu under Ramp.

Dirt Level in Culu

L in ditch

Bottom of Ditch at L

Branch Ditch to West,

Bottom at intersection

" of Main Ditch

48.8	45.7	48.8	48.6
20	0	20	100

T.P Top of No End of 30" Con Culu.

Toe Rd Fill & Ditch at L.

on Rd Fill

Top on No. Shoulder.

Top on So "

on Slope Rd fill

" " " "

Bottom & Ditch at L.

Soundings
from 44+40 to 47+68
Through Road fill

Sta 0+00	10'-9" Sand 8' plus Compact Peat
0+10	15'-8" Sand 5' plus Compact Peat.
0+21	25'-8" Sand 5' plus peat Below but little if any
0+51	26'-00" Sand and Trace of peat.
0+60	20'-0" Sand 4' plus Peat
0+70	17'-0" Sand 5' plus peat
0+78	10' Peat 3' Sand 8' plus Peat.