

Book-85-Dr 8

OFFICE OF COUNTY ENGINEER  
RAMSEY CO. MINN.

Drainage Survey

DITCH No. 3  
Near Foss Rd.  
From \_\_\_\_\_ To \_\_\_\_\_

Road Acc't. No. \_\_\_\_\_

Date Filed 1-6-36

File 8

11/26/35

Portell

Drainage Survey  
Ditch #3 near Foss Road

15+00	P.O.T.	Edge old Lake
11+66	P.O.T.	Beg 30" x 20" C.M. Culv.
11+38.00	P.O.T.	End 30" C.M. Culv.
9+88.42	P.I.	$\Delta$ 30° 53' Lt
8+03.5	P.O.T.	$\pm$ U.S. Hwy #8 (27' Conc Pave.)
6+63.9	P.O.T.	Beg 30" C.M. Pipe
6+03.1	P.I.	$\Delta$
3+55.7	P.I.	$\Delta$ 13° 40' Lt
0+00		

JONES  
(Dry) LAKE.

US Hwy 8  
27 Curve Data

ctr. Sec. 32

$30^{\circ}53'$

$93^{\circ}02'$

163.92

Foss. Road  
Gravel Surface

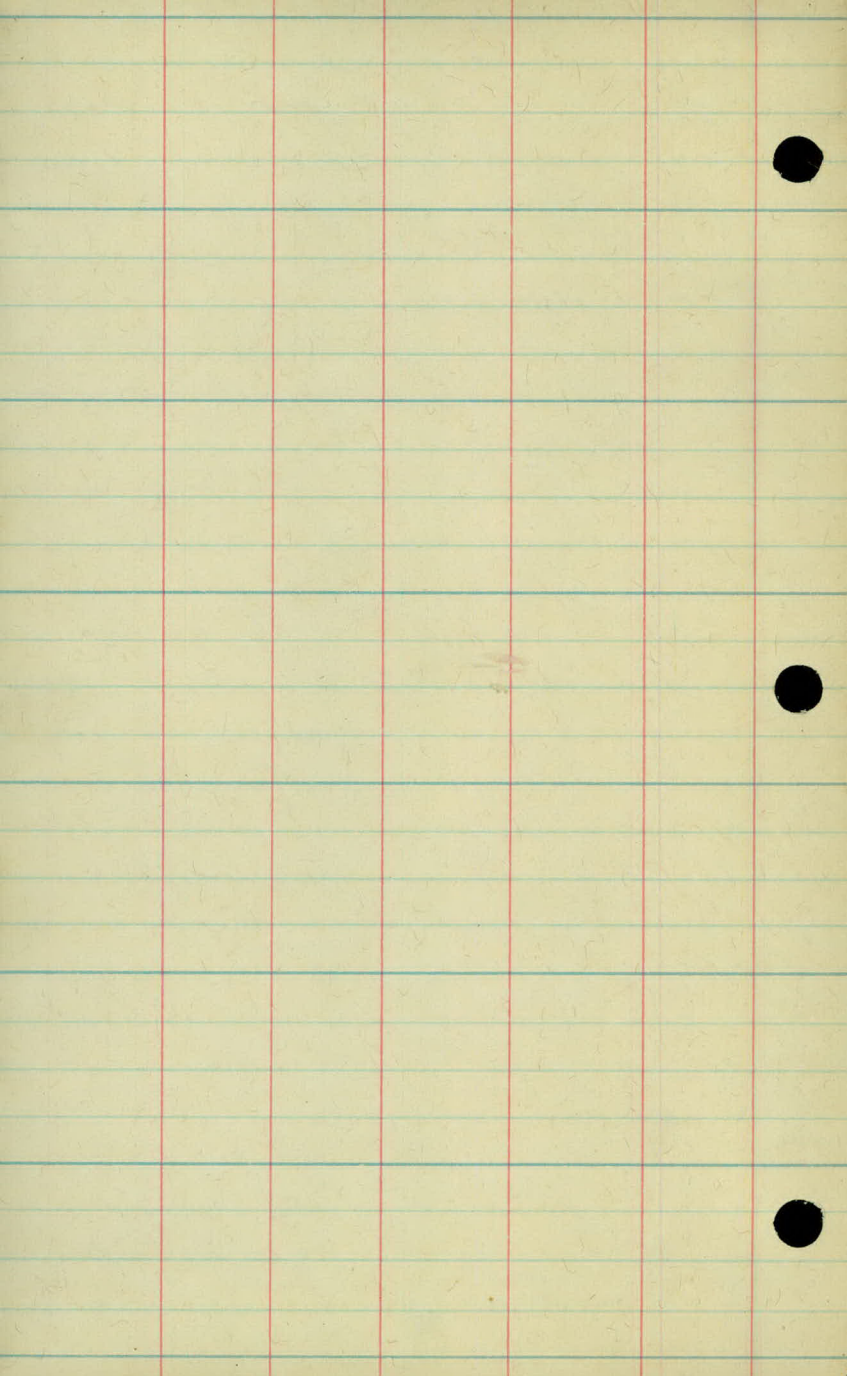
N

E = 3

355.7

199.46





8-2

X-Sections

r

Levels

Sta	+	-		
B.M.	1.29	913.98		912.69
18"X42' C.M. Culv 36' W. Ctr Sec 32				
12"X42' C.M. " 121' W. Ctr Sec 32				
0	1.20	901.83	13.35	900.63
0+00				940
1				94.2
+80		Brk Ice		
2				92.8
3				92.6
4				93.1
+20		End Ice		

## Top Pavement Ctr. Sec. 32

$08.74 \rightarrow$   
 $5.24 = \text{So End}$   
 $06.06 \rightarrow$   
 $7.92 = \text{So End}$

$07.80 \rightarrow$   
 $6.18 = \text{No End}$   
 $04.17 \rightarrow$   
 $9.81 = \text{No End}$

	$\frac{FCE}{55}$	$\frac{6.5}{4}$	$\frac{7.8}{1}$	$7.8$	$\frac{7.7}{1}$	$\frac{6.2}{6}$	$\frac{5.7}{45}$	$\frac{3.8}{100}$
$\frac{8.0}{100}$	$\frac{5.5}{50}$							

	$\frac{FCE}{85}$	$\frac{6.4}{6}$	$\frac{7.4}{3}$	$7.6$	$\frac{7.2}{3}$	$\frac{6.4}{6}$	$\frac{6.6}{58}$	$\frac{6.0}{100}$
$\frac{8.0}{100}$	$\frac{5.5}{85}$							

93.4-84 Top Ice

$\frac{6.5}{100}$	$\frac{7.2}{43}$	$\frac{7.4}{4}$	$\frac{8.1}{2}$	$9.0$	$\frac{8.3}{4}$	$\frac{7.6}{7}$	$\frac{7.7}{64-100}$
-------------------	------------------	-----------------	-----------------	-------	-----------------	-----------------	----------------------

$\frac{7.1}{100-50}$	$\frac{7.8}{5}$	$\frac{8.7}{3}$	$9.2$	$\frac{9.2}{4}$	$\frac{7.5}{8-100}$
----------------------	-----------------	-----------------	-------	-----------------	---------------------

$\frac{5.9}{100}$	$\frac{7.2}{7}$	$\frac{8.7}{3}$	$8.7$	$\frac{8.3}{4}$	$\frac{7.2}{5-54}$	$\frac{6.5}{100}$
-------------------	-----------------	-----------------	-------	-----------------	--------------------	-------------------



Sta	+	X		
		901.83		
5				93.7
6				94.2
+64	End Open Ditch Beg Cul		95.6 94.00 = FL.	
+68				98.0
7				97.9
+61				99.3
0	11.12	912.33	0.62	901.21
+67				900.7
+85	Shoulder			11.3

$$\frac{5.0}{100} \quad \frac{6.3}{38} \quad \frac{6.6}{8} \quad \frac{7.8}{4} \quad 8.1 \quad \frac{8.0}{5} \quad \frac{6.9}{11} \quad \frac{6.0}{67} \quad \frac{4.3}{100}$$

$$\frac{2.4}{100} \quad \frac{4.4}{68} \quad \frac{5.5}{11} \quad \frac{7.6}{5} \quad 7.6 \quad \frac{7.5}{4} \quad \frac{6.3}{6} \quad \frac{5.5}{10} \quad \frac{3.6}{66} \quad \frac{0.0}{100}$$

6.2 on Grd } 1.63 Silt in Culm Inlet  
F.L.D.

$$\frac{2.0}{64} \quad \frac{3.4}{6} \quad \frac{6.0}{3} \quad 7.83 \quad \frac{6.5}{4} \quad \frac{4.0}{8} \quad \frac{4.2}{17} \quad \frac{2.8}{24} \quad \frac{0.3}{100}$$

$$\frac{2.0}{64} \quad 3.8 \quad \frac{3.8}{8} \quad \frac{0.0}{100}$$

$$\frac{55}{100} \quad \frac{0.0}{80} \quad \frac{2.9}{28} \quad 3.9 \quad \frac{2.3}{43} \quad \frac{+0.5}{100}$$

$$\frac{0.0}{62} \quad \frac{1.9}{8} \quad 2.5 \quad \frac{0.3}{49} \quad \frac{0.2}{68}$$

$$\frac{9.2}{60} \quad 11.6 \quad \frac{10.7}{48}$$

$$\frac{1.6}{100} \quad \text{Spillway} \quad \frac{1.75}{26} \quad 1.0 \quad \frac{0.5}{57}$$

Sta

+

x

-

912.33

8+03.5

± U.S. #8 Top Pavement 11.28

+21

Shoulder

11.6

①

5.18

905.17

12.34

899.99

+42

99.9

9

99.2

+06

"Cave In"

93.97

+68

"Cave In"

93.40

Culv. Joint Opened  
No Culv. Band

+68.9

" "

93.75

10

78.6

195

$$\begin{array}{r}
 \text{Spillway} \\
 \frac{1.37}{98} \quad \frac{1.55}{24} \quad 0.7 \quad \frac{0.4}{72}
 \end{array}$$

$$\frac{2.8}{75} \quad \frac{4.2}{20} \quad 5.3 \quad \frac{1.4}{44} \quad \frac{0.8}{73} \quad +.2$$

$$\frac{0.4}{28} \quad \frac{2.5}{17} \quad \frac{5.7}{5} \quad 6.0 \quad \frac{2.9}{18} \quad \frac{2.2}{48} \quad \frac{+1.1}{74}$$

11.20 FL.

11.77 FL.

11.42 FL.

$$\frac{+1.1}{94} \quad \frac{3.3}{19} \quad \frac{6.6}{4} \quad 6.6 \quad \frac{3.3}{19} \quad \frac{1.8}{48} \quad \frac{+1.1}{65}$$



Sta

+

π

-

905.17

11

97.5

+55

Inlet 30" x 20' CM

97.1

+57

End 30" CM

97.1

⊙

4.66

900.24.

959

895.58.

+35

Inlet 30" x 20' CM

97.0

+38

End 30" CM - Beg Open Ditch

94.4

93.08.

+66

Inlet 30" x 20' CM

93.01

+76

1/2 Farm Xing over Culv

97.3

+86

Outlet 30" x 20' CM

93.04.

$$\frac{2.1}{100} \quad \frac{6.0}{15} \quad 7.7 \quad \frac{5.2}{26} \quad \frac{5.7}{40} \quad \frac{2.7}{70} \quad \frac{+0.3}{100}$$

W. End 30" x 20' C.M. Sta 11+66

$$\frac{2.3}{58} \quad \frac{1.2}{12} \quad 3.2 \quad \frac{1.0}{8} \quad \frac{0.2}{34} \quad \frac{0.6}{43} \quad \frac{0.0}{64}$$

1.33 Silt in end of Pipe

$$\left. \begin{array}{l} \frac{0.2}{58} \quad \frac{1.7}{7} \quad \frac{5.2}{2} \quad 5.8 \\ 7.6 \text{ FL} \end{array} \right\} \frac{5.2}{2} \quad \frac{0.8}{7} \quad \frac{0.2}{24-37} \quad \frac{0.6}{44} \quad \frac{0.0}{62}$$

7.23 FL.

2.9

7.20 FL.

Sta

+

$\pi$

-

900.24

12

94.5

13

92.4

14

91.5

15

91.3

$$\frac{0.9}{100} \quad \frac{3.3}{19} \quad \frac{3.2}{8} \quad \frac{5.7}{2} \quad 5.7 \quad \frac{5.7}{2} \quad \frac{3.5}{5-10} \quad \frac{3.0}{12} \quad \frac{4.8}{67}$$

$$\begin{array}{r} 7.1 \quad 7.2 \\ 3 \quad 6 \\ 4 \\ \hline \frac{8.0}{61} \quad \frac{7.4}{3} \quad \frac{7.5}{3} \quad 7.8 \quad \frac{6.4}{22} \quad \frac{8.3}{71} \end{array}$$

$$\frac{9.6}{45} \quad 8.7 \quad \frac{9.2}{46}$$

$$\frac{9.0}{50} \quad 8.7 \quad \frac{9.0}{50}$$



