PLANS SURVEY
CENTERVILLE ROAD
From North Ramsey Co. Line
To Centerville
ROAD % No 2

Office of Ramsey Co. Engineer
ST. PAUL, MINN.

Date Filed ....

File No. "4" ....

Centerville Road
from
Ramsey Co. Line North
to Centerville.-

Alignment	5 - Sheets
Topography	23 - "
Cross- Sections	16 - "
Culvert Notes	2 - "

Road # 7

File Nº 4

Office of Ramsey Co. Engineer
ST. PAUL, MINN.

Date Filed

File No. 4

Centerville Road

Centerville Road
from
Ramsey Co. Line No. to
Centerville.

Transit Location.

1922 -

Pages 1 - 5

(COPY)

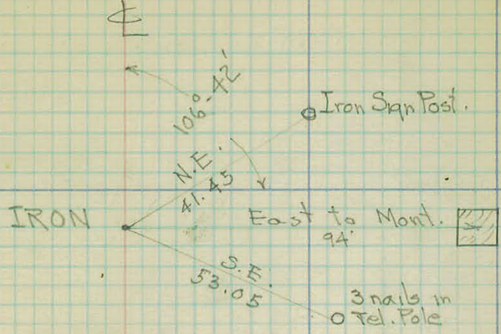
~~Proj. 23-03~~

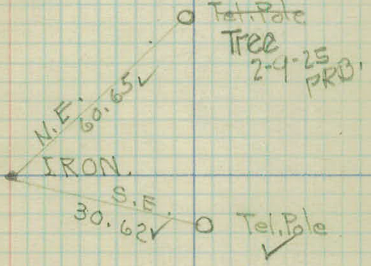
G. Reifler Inst.
W. MacDonald - Rod
R. Reiling - Chain
J. Carr - Chain

Centerville Road - from Ramsey Co.
Line North to Centerville.

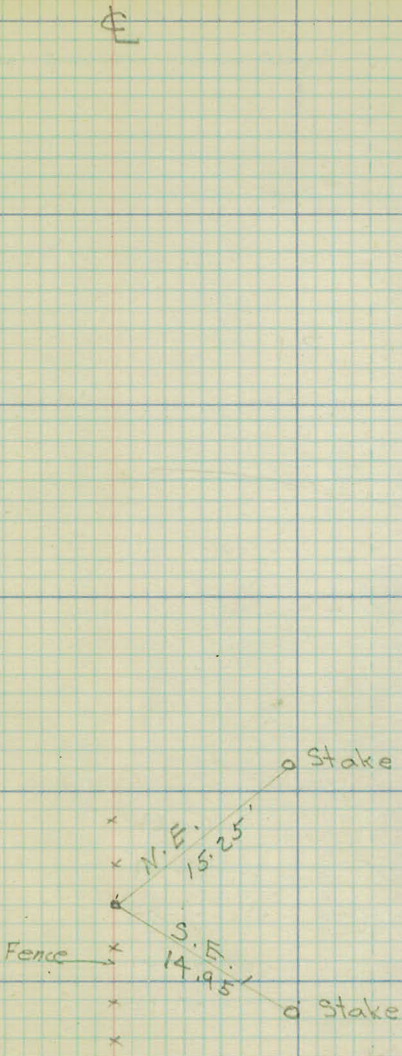
Station	Point.	L ℄ R	Calc. Bear.	Mag. Bear.
0+00	@ County Line.			
			N16°-42'W.	
0+16.6	P.C.	0°-02'		
1+00		0°-17'		
2+00		0-32'	0-30' C.	
3+00	P.I.	0-47'	Δ 2°-51' ✓	
4+00		1°-02'	P.I. 3+00	
5+00		1°-17'	S.T. 283.4 ✓	
5+83.4	P.T.	1°-30'	L.C. 566.8	
86.6 = 83.4			570	
			N.19°-33'W ✓ :	
14+06.4	P.O.T.	℄ of Anoka Co Line Rd.		
			N19°-33'W	

Harger & Bonney Curve Tables


℄
106°-42'
Iron Sign Post.
N.E.
41.45
IRON
East to Mont.
94'
S.E.
53.05
3 nails in
Tel. Pole

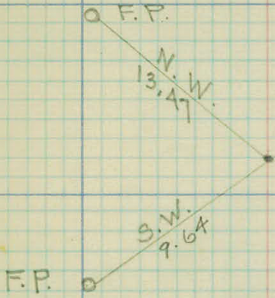

~~Tel. Pole~~
Tree
2-9-25
PRB
N.E.
60.65✓
IRON.
S.E.
30.62✓
Tel. Pole
✓

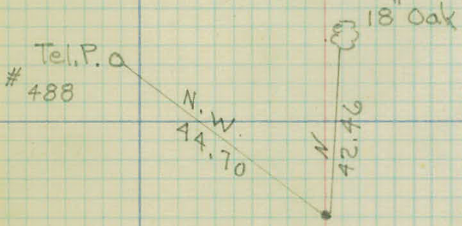
Station	Point	L	⊄ R	Calc. Bear.	Mag. Bear.
				N 19°-33' W.	
19+00	P.C.		5°-00		
+50			10°-00	20° C	
20+00			15°-00	Δ 40°-00'	
+04.02	P.I.			P.I. 20+04.02	
+50			20°-00	S.T. 104.02 .27	
21+00	P.T.			L.C. 200'	
				N 20°-27' E ✓	
+14.67					
25+14.62	P.C.	1°-17'			
26+00		2°-47'		3° C.	
27+00		4°-17'		Δ 14°-03'	
+50	P.I.			P.I. 27+50	
28+00		5°-47'		S.T. 235.33' ✓	
29+00		7°-01'		L.C. 464'	
+85.38	P.T.			468.33	
+ 83.00				N 6°-24' E ✓	


℄
Stake
N.E.
15.25'
S.E.
14.95'
Fence
Stake

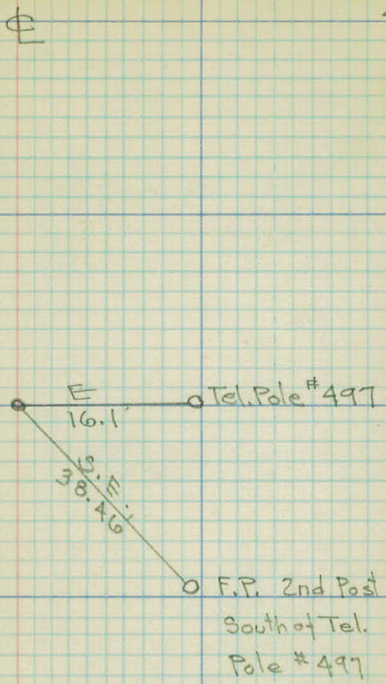
Station	Point	L & R	Calc. Bear.	Mag. Bear.
			N6°-24E :	
52.7				
32+52.44	P.C.	2°-51'		
33+00		5°-51'	12° C.	
+50		8°-51'	Δ 24°-29'	
33+56.3	P.I.		P.I. 33+56.3	
34+00		11°-51'	S.T. 103.86	103.68
+50		12°-00	L.C. 202.14 ✓	
+60.16	P.T.		[illegible]	
54.84			N 30°-53'E ✓.	
+04.34				
37+04.85	P.C.	1°-26'		
38+00		2°-56'	3°- C	
39+00		4°-26'	Δ 27°-52' L	
40+00		5°-56'	P.I. 41+78.2 86	
41+00		7°-26'	S.T. 473.35	
41+78.2	P.I.		L.C. 919.89	
42+00		8°-56'	928.89 ..	
43+00		10°-26'		
44+00		11°-56'		
45+00		13°-26'		
46+00		13°-56'		
46+51.55	P.T.	= 46+23.55 on Curve.		
+33.23				

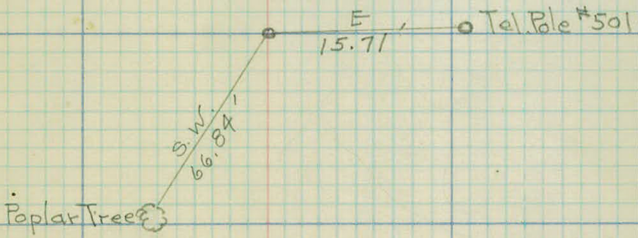
℄

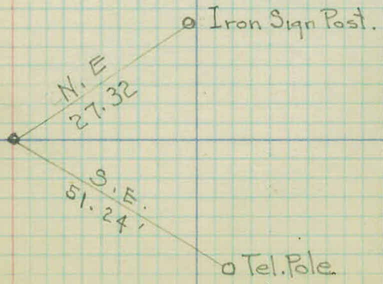

F.P.
N.W.
13.47
S.W.
9.64
F.P.


18" Oak
Tel. P.
488
N.W.
44.70
N
42.46

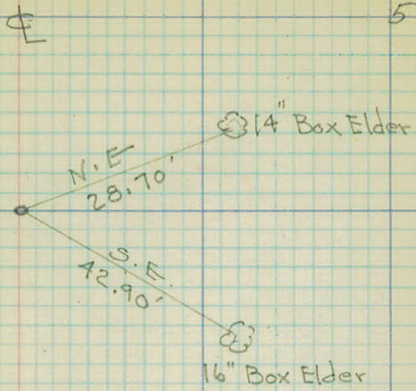
Station	Point	L	℄	R	Calc. Bear.	Mag. Bear.
					N3°-01'E ✓	
46+51.55	P.T.			Equation		
46+23.55	Sta. on Curve					
52+87.7	P.I.	2°-38'				
					N 0-23' E ✓	
57+90.95	P.I.	1°-08'				
					N 0°-45' W ✓	
82+33.95	P.O.T.					
					N 0°-45' W	

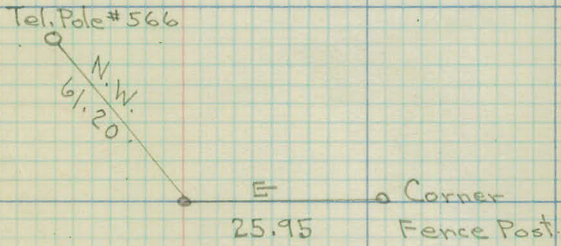

℄
E
16.1'
Tel. Pole #497
S.E.
38.46'
F.P. 2nd Post South of Tel. Pole #497


E
15.71'
Tel. Pole #501
S.W.
66.84'
Poplar Tree


Iron Sign Post.
N.E
27.32
S.E.
51.24'
Tel. Pole

Station	Point.	L	℄	R	Calc. Bear.	Mag. Bear
					N 0°-45'W.	
	A1.					
99+60.2	P.O.T.			0°-21'		
					N 1°-06'W	
					N.0°24'W	
					N.0°24'W.	
					N 1°-06'W	
135+20.35	P.O.T.		End of	Survey		


℄
14" Box Elder
N.E.
28.70'
S.E.
42.90'
16" Box Elder


Tel. Pole # 566
N.W.
61.20'
E
25.95
Corner
Fence Post

Topography
on Centerville Road
from Ramsey Co. Line
North to Centerville.

11-22-1923 to 12-4-1922

Book 110 - P. 22-40

Pages 1 to 23

(Copy)

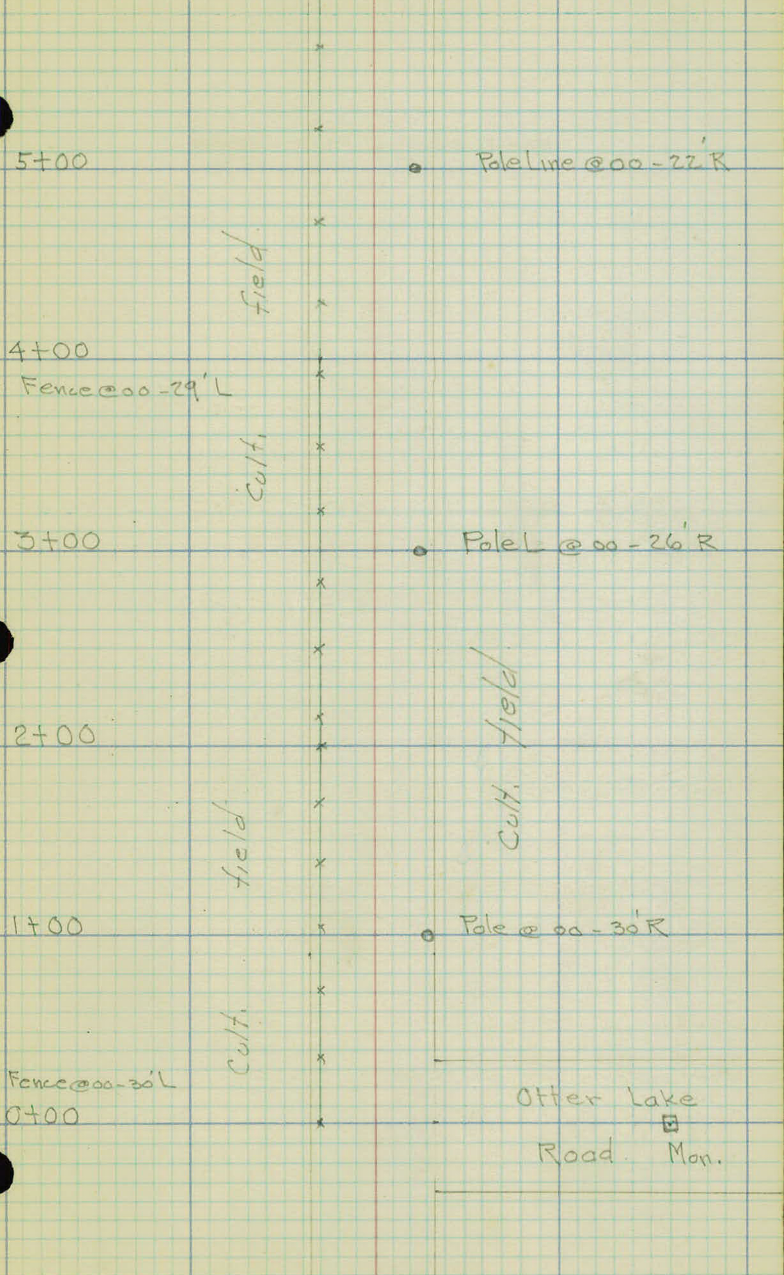
Proj. 23-03

Note

Light Sandy Soil thruout.

0+00	℄ of Otter Lake Rd. to East
0+00	Ramsey Co. Line (North)

R.C. Line | L | ℄ | R | 1

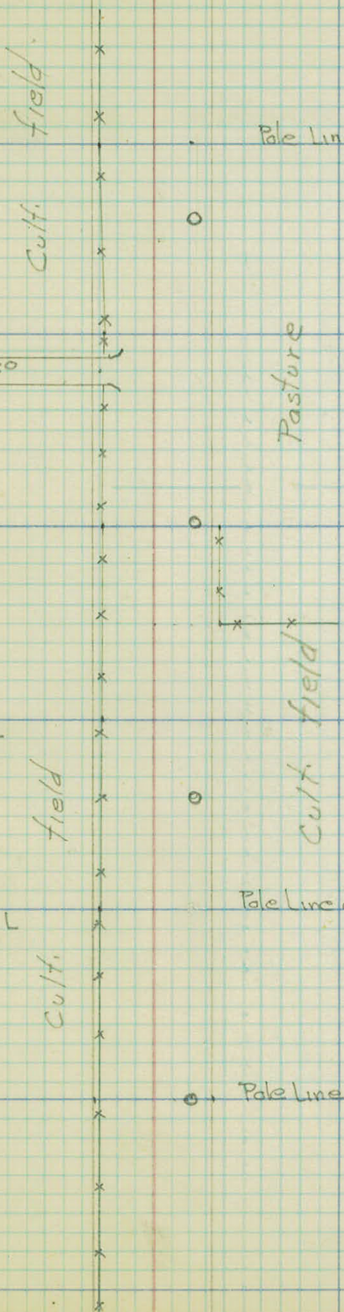

5+00
Pole Line @ 00 - 22' R
field
4+00
Fence @ 00 - 29' L
Cult.
3+00
Pole L @ 00 - 26' R
field
Cult.
2+00
field
1+00
Pole @ 00 - 30' R
Cult.
Fence @ 00 - 30' L
0+00
Otter Lake
Road
Mon.

R.C. Line L ℄ R 2

11+00 Pole Line @ 00 - 22 R.

10+00

Priv. Drive @ +80
Rl. - 18' - 15" Port.
Culv.



9+00
Fence @ 00 - 28 L

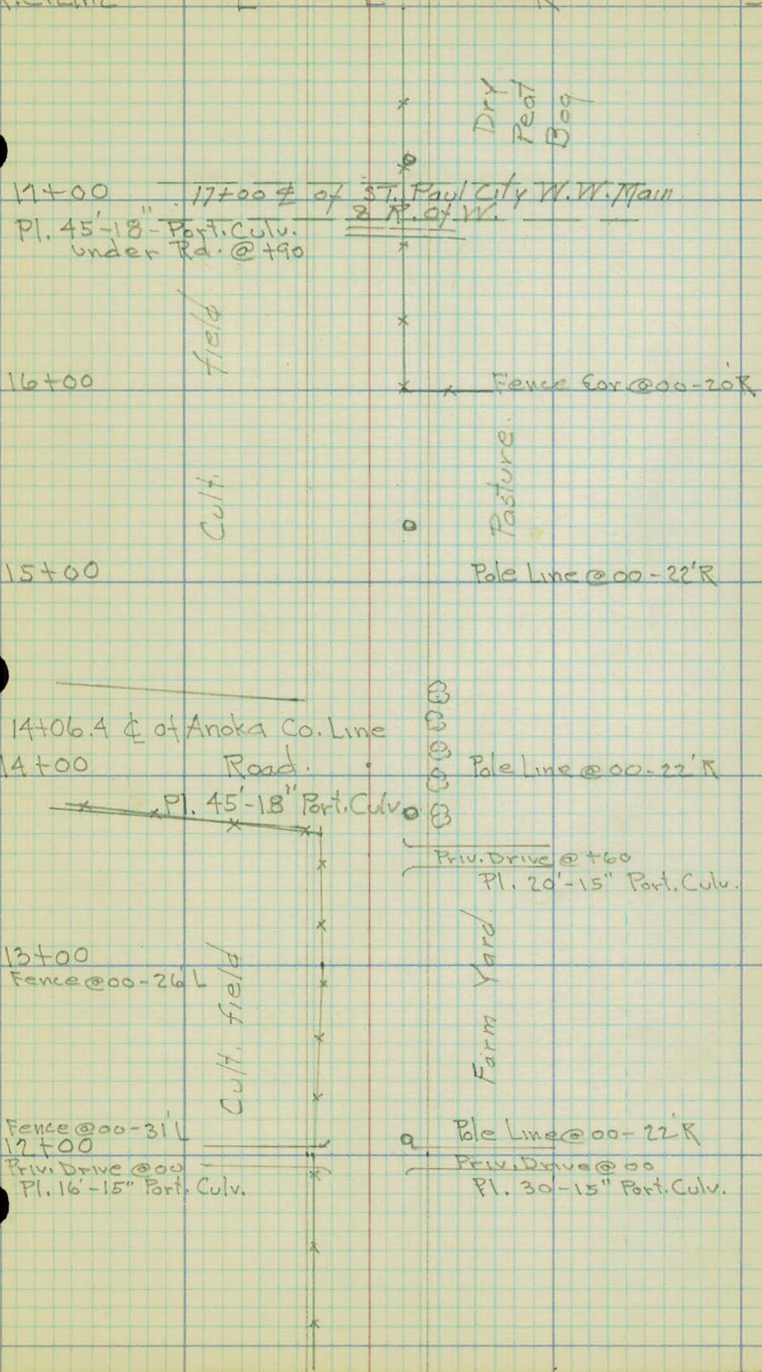
Fence Cor. @ +50
- 38' R

8+00
Fence @ 00 - 28 L

7+00 Pole Line @ 00 - 23' R
Fence @ 00 - 29 L

6+00 Pole Line @ 00 - 21 R

R.C. Line L ℄ R 3



Dry Peat Bog

17+00 17+00 ℄ of ST. Paul City W.W. Main & R. of W.

Pl. 45'-18"-Port. Culv. under Rd. @ +90

Cult. field

16+00 Fence Cor. @ 00-20 R

Pasture

15+00 Pole Line @ 00-22' R

14+06.4 ℄ of Anoka Co. Line Road.

14+00 Pole Line @ 00-22' R

Pl. 45'-18" Port. Culv.

Priv. Drive @ +60 Pl. 20'-15" Port. Culv.

13+00 Fence @ 00-26 L

Cult. field

Farm Yard

Fence @ 00-31' L

12+00 Pole Line @ 00-22' R

Priv. Drive @ 00 Pl. 16'-15" Port. Culv.

Priv. Drive @ 00 Pl. 30'-15" Port. Culv.

R.C. Line L ℄ R 4

23+00 Fence @ 00 - 19' R
Pole Line @ 00 - 22' R

22+00 Fence @ 00 - 22' R

21+00 Fence @ 00 - 22' R

20+00 Fence @ 00 - 24' R

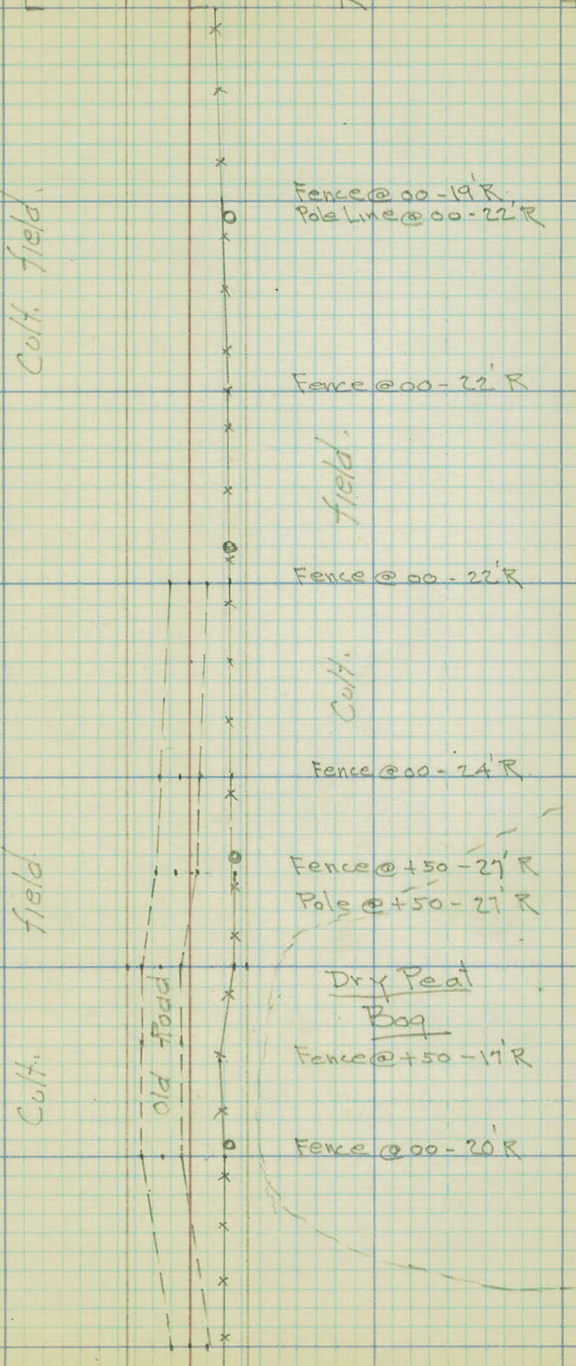
Fence @ +50 - 27' R
Pole @ +50 - 27' R

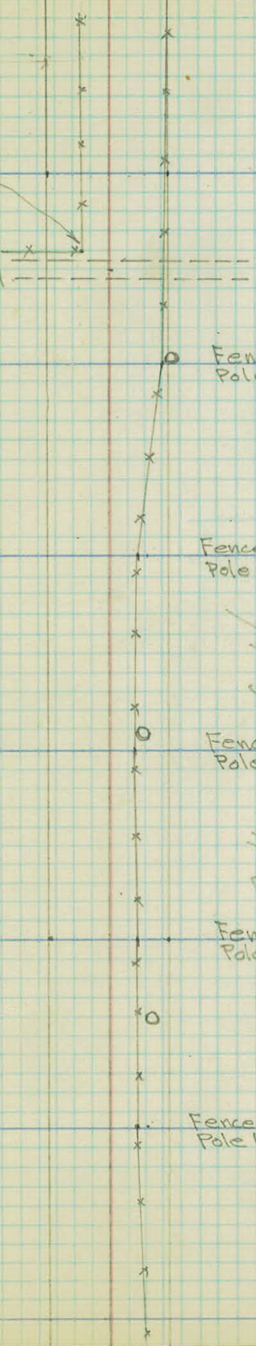
19+00

Dry Peat Bog

Fence @ +50 - 17' R

18+00 Fence @ 00 - 20' R





29+00

Fence Cor. @+60 - 15' L

30' - 24" Vit. Pipe
in place - Should
be replaced
with W 33' Culvert

@+50
Drainage Ditch.

28+00

Fence @ 00 - 30' R.
Pole Line @ 00 - 30' R

27+00

Fence @ 00 - 15' R
Pole Line @ 00 - 25' R

field *field*

26+00

Fence @ 00 - 14' R
Pole Line @ 00 - 17' R

Cult. *Cult.*

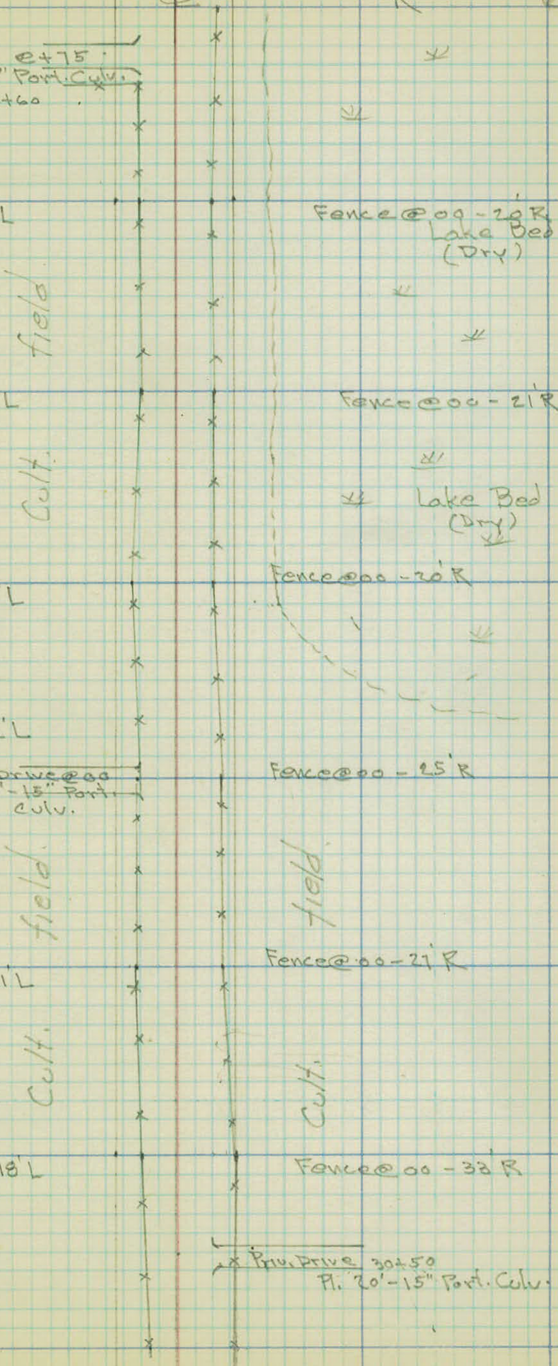
25+00

Fence @ 00 - 16' R
Pole Line @ 00 - 19' R

24+00

Fence @ 00 - 16' R
Pole Line @ 00 - 19' R

R.C. Line L ℄ R 6



Priv. Drive @+75
Pl. 20'-15" Port. Culv.
End fence @+60

35+00
Fence @00-20 L
Fence @00-20 R
Lake Bed
(Dry)

34+00
Fence @00-19' L
Fence @00-21' R
Lake Bed
(Dry)

33+00
Fence @00-23' L
Fence @00-20' R

Fence @00-22' L

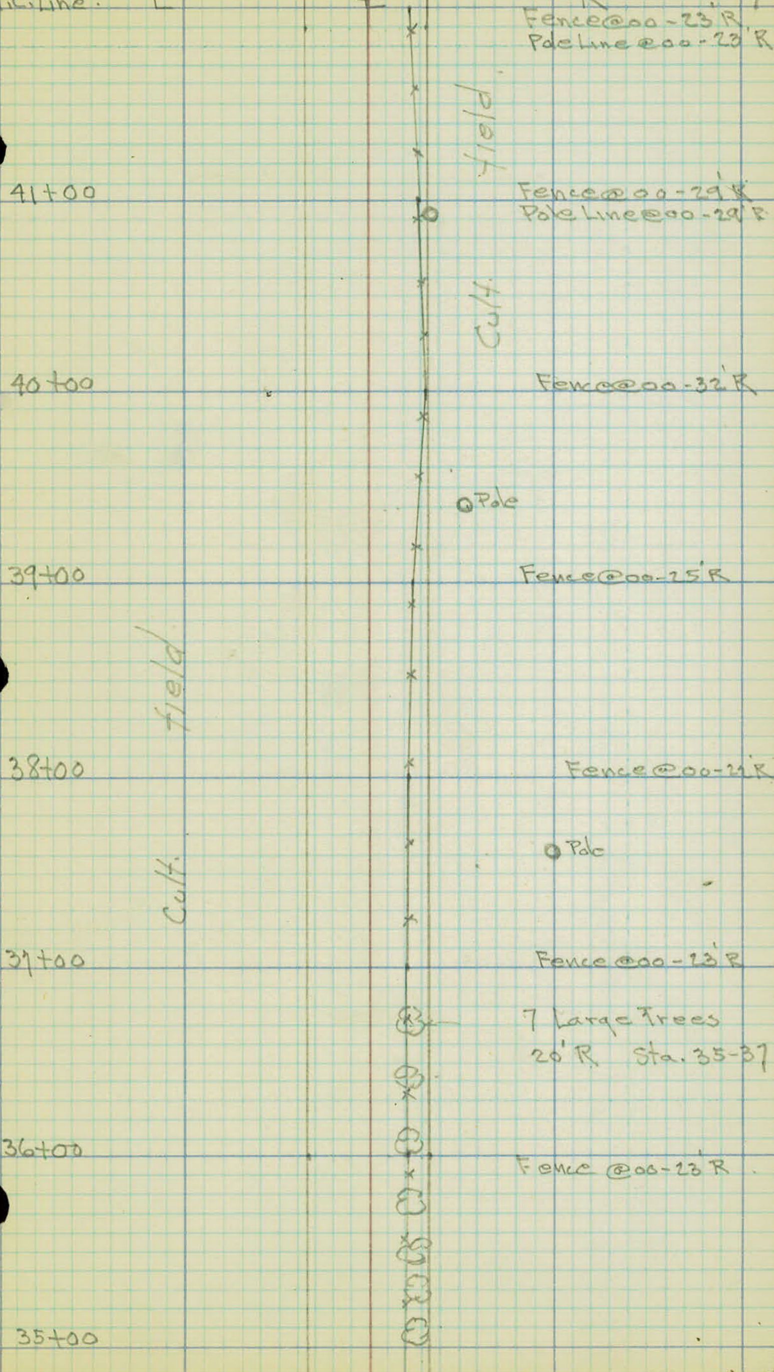
32+00 Priv. Drive @00
Pl. 20'-15" Port.
Culv.
Fence @00-25' R

31+00
Fence @00-21' L
Fence @00-21' R

30+00
Fence @00-18' L
Fence @00-33' R

Priv. Drive 30+50
Pl. 20'-15" Port. Culv.

29+00



Fence @ 00 - 23' R
Pole Line @ 00 - 23' R

41+00

Fence @ 00 - 29' R
Pole Line @ 00 - 29' R

40+00

Fence @ 00 - 32' R

39+00

Fence @ 00 - 25' R

38+00

Fence @ 00 - 21' R

37+00

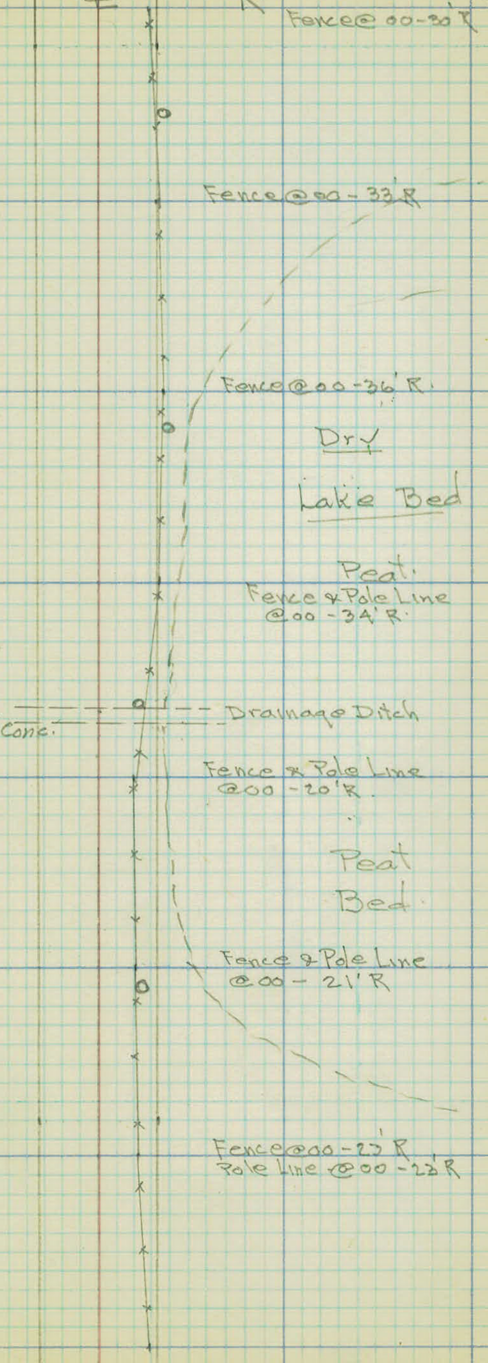
Fence @ 00 - 23' R

7 Large Trees
20' R Sta. 35-37

36+00

Fence @ 00 - 23' R

35+00



Fence @ 00-30' R

47+00 Fence @ 00 - 33' R

Cult. Field

46+00 Fence @ 00 - 36' R

Dry

Lake Bed

45+00 Peat

Fence & Pole Line
@ 00 - 34' R

@ +33 Old Wood box Culvert. Pl. 40'-18" Conc.

Drainage Ditch

44+00 Fence & Pole Line
@ 00 - 20' R

Peat

Bed

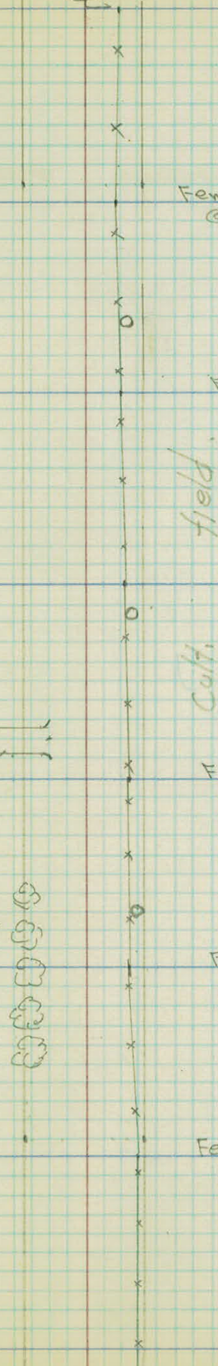
Cult. Field

43+00 Fence & Pole Line
@ 00 - 21' R

42+00 Fence @ 00 - 23' R
Pole Line @ 00 - 22' R

41+00

R.C. Line | L | ℄ | R



53+00 — Fence & Pole Line @00 - 18' R

52+00 — Fence & Pole Line @00 - 20' R

Pasture

51+00 — Fence & Pole Line @00 - 22' R

Priv. Drive @ +20
Pl. 32'-15" Port. Culv.

50+00 — Fence & Pole Line @00 - 24' R

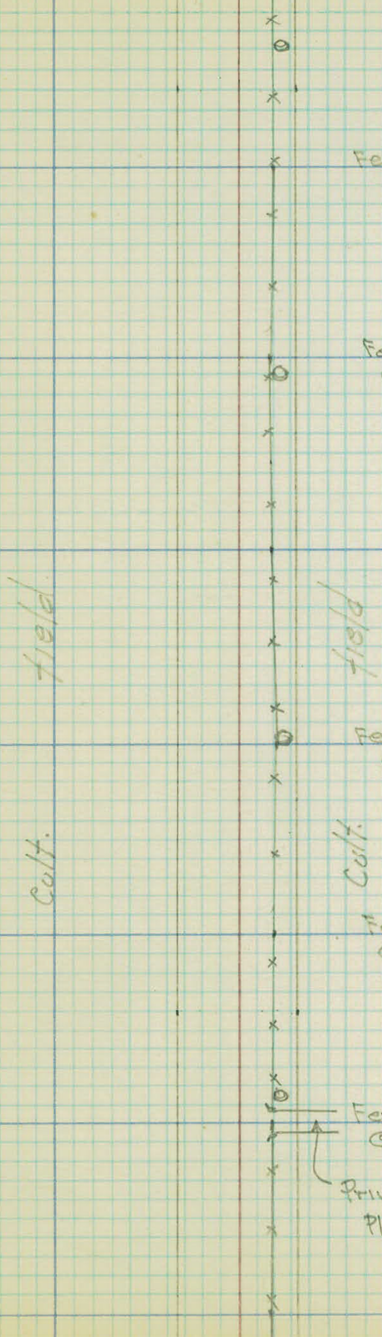
Farm Yard

5 - 24"
Trees - 28' Left

49+00 — Fence & Pole Line @00 - 27' R

48+00 — Fence & Pole Line @00 - 30' R

47+00



59+00
Fence & Pole Line
@ 00 - 20' R.

58+00
Fence & Pole Line
@ 00 - 18' R

57+00
Fence & Pole Line
@ 00 - 19' R

56+00
Fence & Pole Line
@ 00 - 21' R

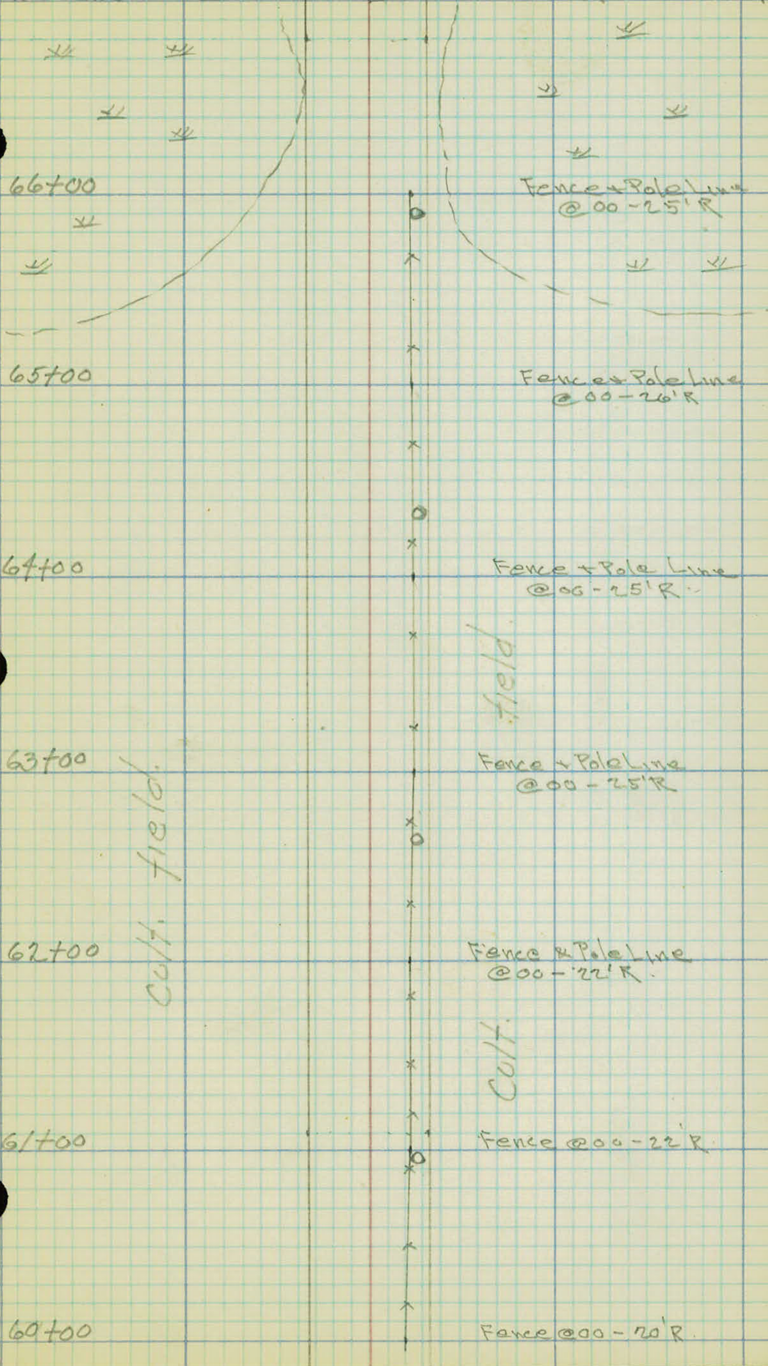
55+00
Fence & Pole Line
@ 00 - 20' R.

54+00
Fence & Pole Line
@ 00 - 19' R

Priv. Drive @ 54+00
Pl. 16 - 15" Part. Culv.

53+00

R.C. Line L ℄ R



66+00 Fence + Pole Line @ 00 - 25' R

65+00 Fence + Pole Line @ 00 - 26' R

64+00 Fence + Pole Line @ 00 - 25' R

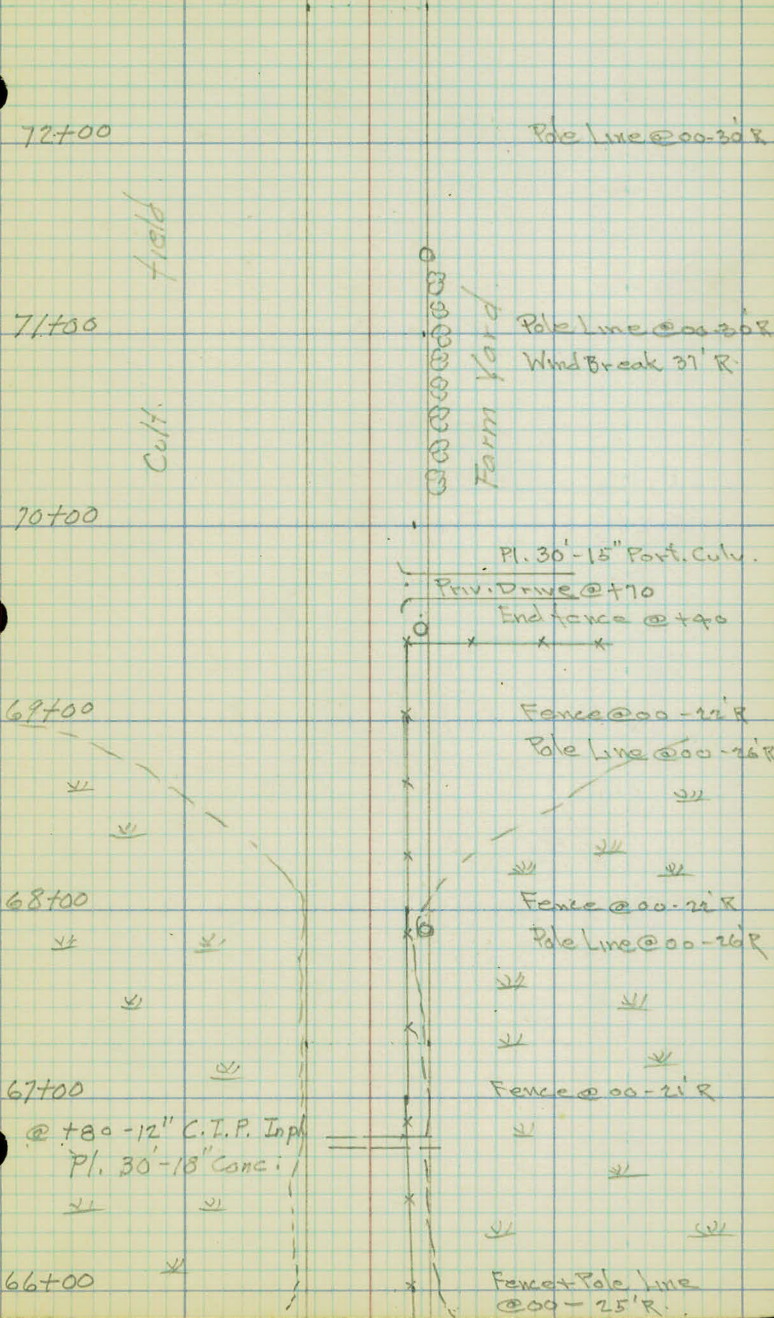
63+00 Fence + Pole Line @ 00 - 25' R

62+00 Fence & Pole Line @ 00 - 22' R

61+00 Fence @ 00 - 22' R

60+00 Fence @ 00 - 20' R

R.C. Line | L | ℄ | R



72+00 Pole Line @00-30' R.

71+00 Pole Line @00-30' R.
Wind Break 37' R

70+00 Pl. 30'-15" Port. Culv.
Priv. Drive @+70
End fence @+90

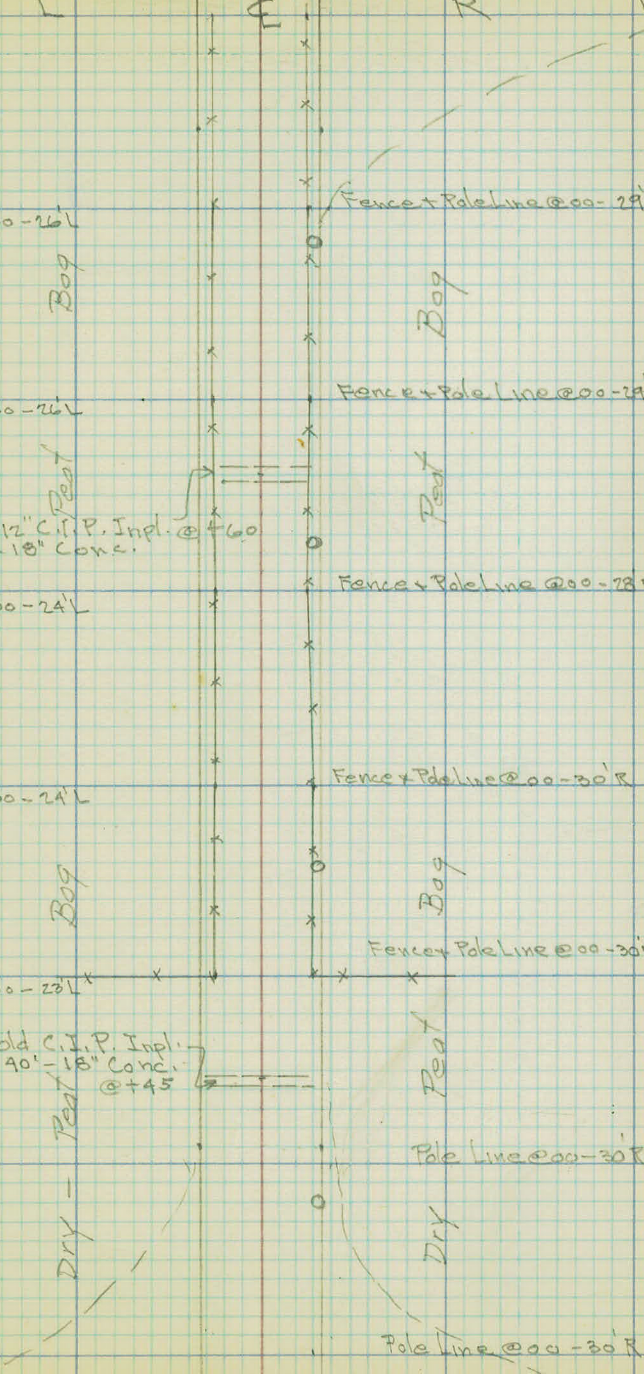
69+00 Fence @00-22' R
Pole Line @00-26' R

68+00 Fence @00-22' R
Pole Line @00-26' R

67+00 Fence @00-21' R

@ +80 - 12" C.I.P. Inpl
Pl. 30'-18" Conc.

66+00 Fence + Pole Line
@00 - 25' R.



78+00
Fence @ 00 - 26' L
Fence + Pole Line @ 00 - 29' R

77+00
Fence @ 00 - 26' L
Fence + Pole Line @ 00 - 29' R

{ 20' - old 12" C.I.P. Inpl. @ +60
{ Pl. 30' - 18" Conc.

76+00
Fence @ 00 - 24' L
Fence + Pole Line @ 00 - 28 R

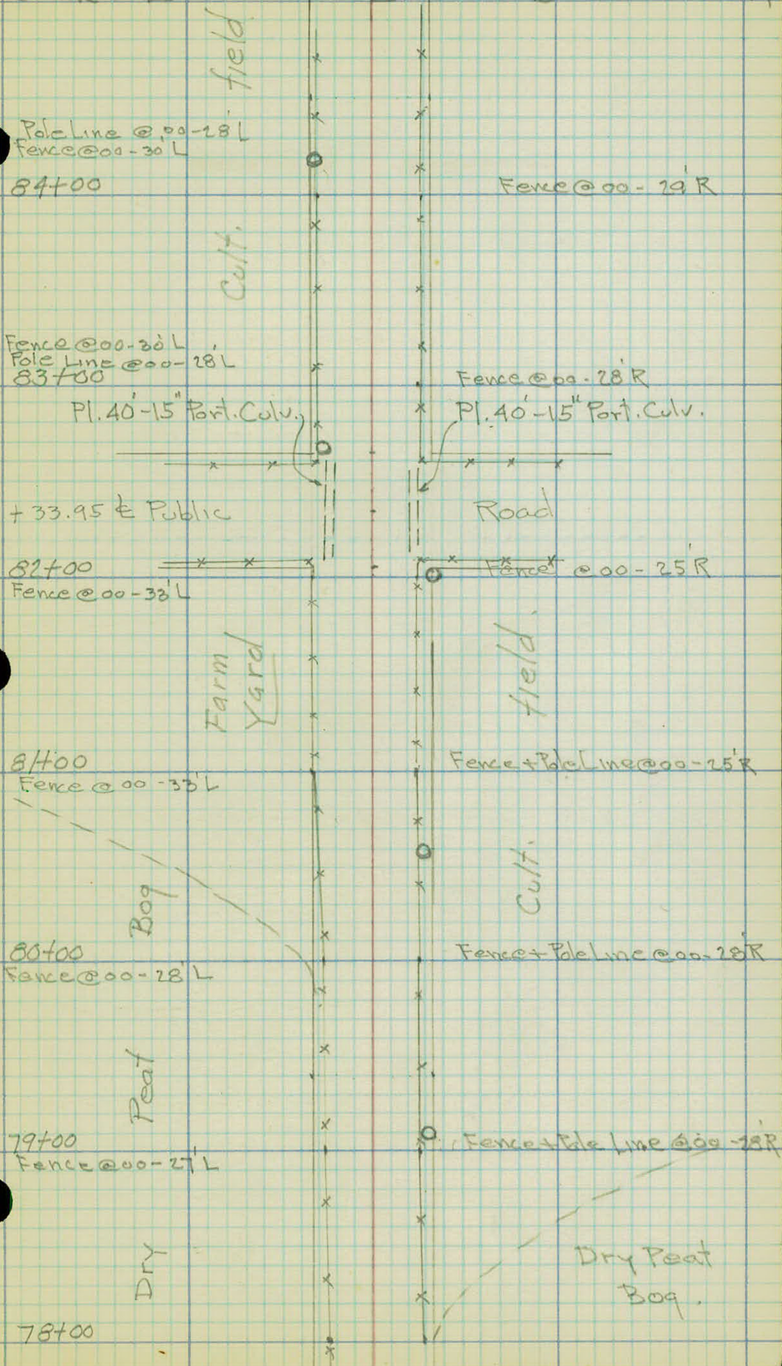
75+00
Fence @ 00 - 24' L
Fence + Pole Line @ 00 - 30' R

74+00
Fence @ 00 - 23' L
Fence + Pole Line @ 00 - 30' R

{ 30' - old C.I.P. Inpl.
{ Pl. 40' - 18" Conc.
@ +45

73+00
Pole Line @ 00 - 30' R

72+00
Pole Line @ 00 - 30' R


field
Pole Line @ 00-28' L
Fence @ 00-30' L
84+00
Fence @ 00-29' R
Cult.
Fence @ 00-30' L
Pole Line @ 00-28' L
83+00
Fence @ 00-28' R
Pl. 40'-15" Port. Culv.
Pl. 40'-15" Port. Culv.
+33.95 ℄ Public
Road
82+00
Fence @ 00-25' R
Fence @ 00-33' L
Farm Yard
field
81+00
Fence @ 00-33' L
Fence + Pole Line @ 00-25' R
Bog
Cult.
80+00
Fence + Pole Line @ 00-28' R
Fence @ 00-28' L
Peat
79+00
Fence + Pole Line @ 00-28' R
Fence @ 00-27' L
Dry
Dry Peat Bog.
78+00

R.C. Line L ℄ R

Pole Line @ 00 - 27' L

90+00 @+10 Priv. Drive

Pl. 30' - 15" Port Culv.

Fence @ 00 - 29' R

89+00

Fence @ 00 - 30' R

Pl. 18'-15" Port Culv.

88+00 +00 - ℄ Priv. Drive

Fence @ 00 - 30' R

End fence +95

Fence @ 00 - 28' L

87+00

Fence @ 00 - 29' R

Fence @ 00 - 30' L

Pole Line @ 00 - 28' L

86+00

Fence @ 00 - 29' R

Fence @ 00 - 30' L

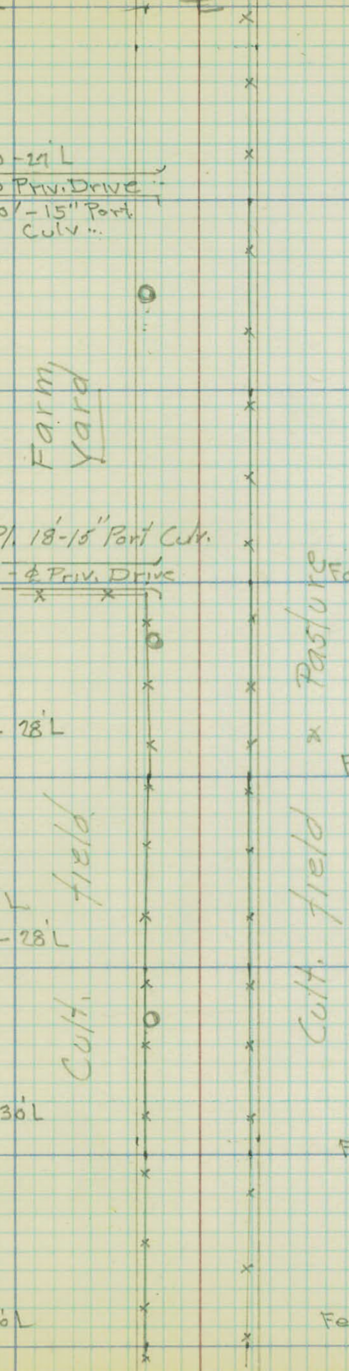
85+00

Fence @ 00 - 29' R

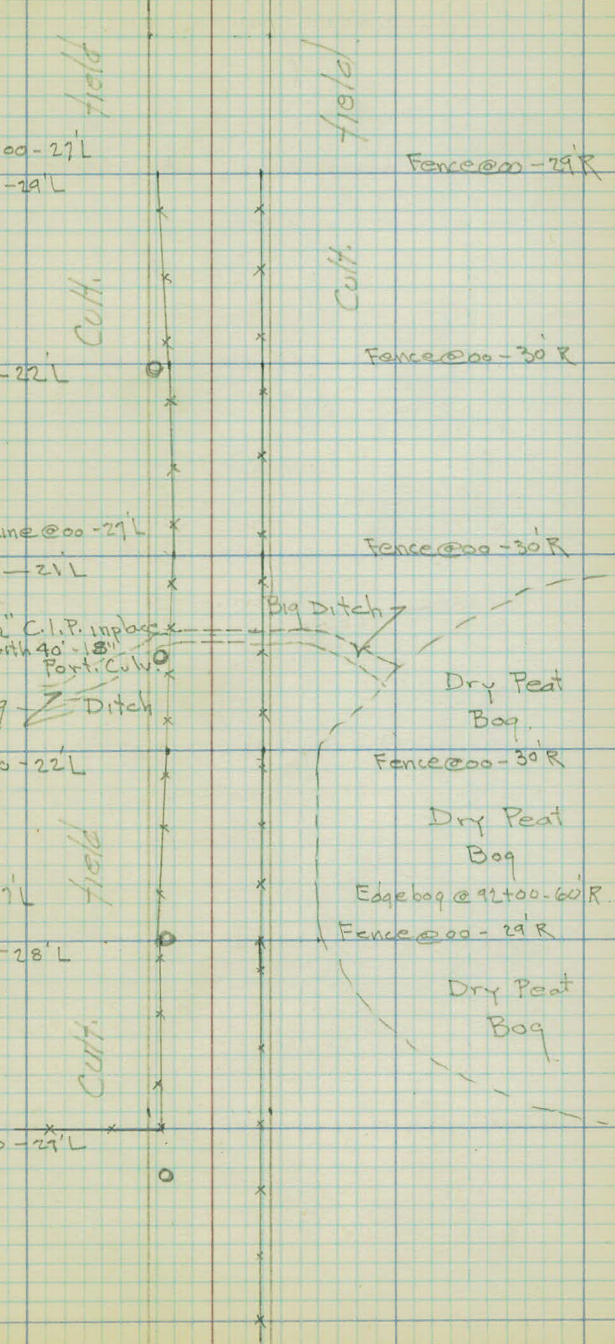
Fence @ 00 - 30' L

84+00

Fence @ 00 - 28' R



R.C. Line L ℄ R 16



Pole Line @ 00 - 27' L
96+00
Fence @ 00 - 29' L
Fence @ 00 - 29' R

95+00
Fence @ 00 - 22' L
Fence @ 00 - 30' R

94+00 Pole Line @ 00 - 27' L
Fence @ 00 - 21' L
Fence @ 00 - 30' R

@+60 Old 12" C.I.P. in place
Replace with 40' - 18" Port. Culv.
Big Ditch
Big Ditch
Dry Peat Bog

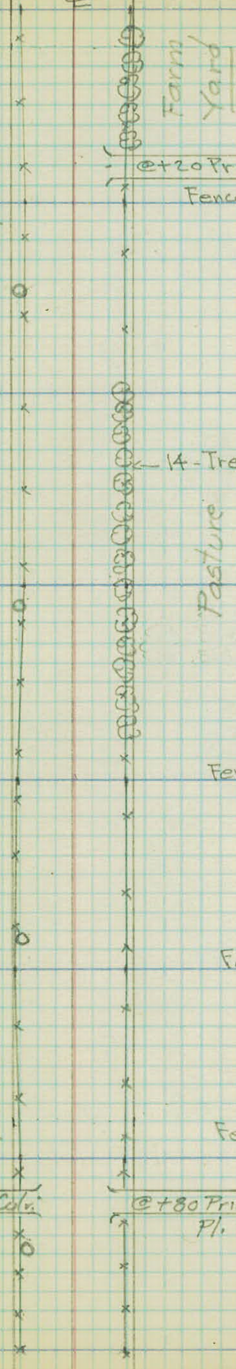
93+00
Fence @ 00 - 22' L
Fence @ 00 - 30' R
Dry Peat Bog

Pole @ 00 - 27' L
Edge bog @ 92+00 - 60' R
92+00
Fence @ 00 - 28' L
Fence @ 00 - 29' R
Dry Peat Bog

91+00
Fence Cor @ 00 - 27' L

90+00

R.C. Line L ℄ R



@+20 Priv. Drive {Pl. 18'-15" Port. Culv

102+00
Fence + Pole Line @00 - 27' L
Fence @00 - 29' R

101+00

← 14 - Trees - 28' R

Fence @00 - 28' L
100+00
Fence @00 - 30' R

99+00 Fence @00 - 31' L
Fence @00 - 30' R

Fence @00 - 32' L
98+00
Fence @00 - 30' R

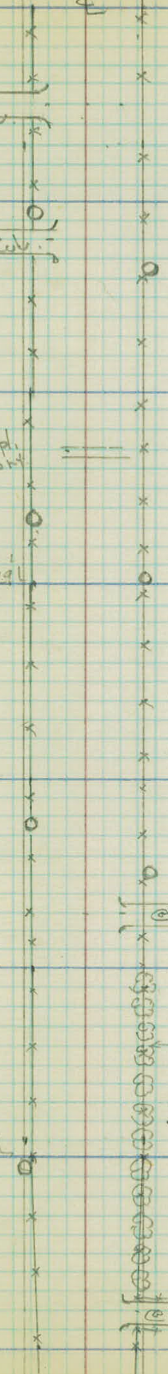
Fence @00 - 30' L
Pole Line @00 - 27' L
97+00
Fence @00 - 29' R

@+80 Priv. Drive
Pl. 20'-15" Port. Culv.

@+80 Priv. Drive.
Pl. 20'-15" Port. Culv.

96+00

R.C. Line L ℄ R



@+50 - Priv. Drive
Pl. 20'-15" Port Culv.

108+00 Fence @ 00 - 33' R

@+80 Priv. Drive
Pl. 20'-15" Port. Culv.

Fence @ 00 - 30' L

107+00 Fence @ 00 - 33' R

@+70 Old C.I.P. Inpl.
Pl. 35'-18" Port
Culv.

106+00 Fence @ 00 - 29' L Fence @ 00 - 33' R

105+00
Fence @ 00 - 30' L
Pole Line @ 00 - 28' L

Fence + Pole Line
@ 00 - 33' R

+50 Begin Pole Line R

@+30 - Priv. Drive {Pl. 18'-15"
Port. Culv

104+00
Fence + Pole Line @ 00 - 29' L

Fence @ 00 - 33' R

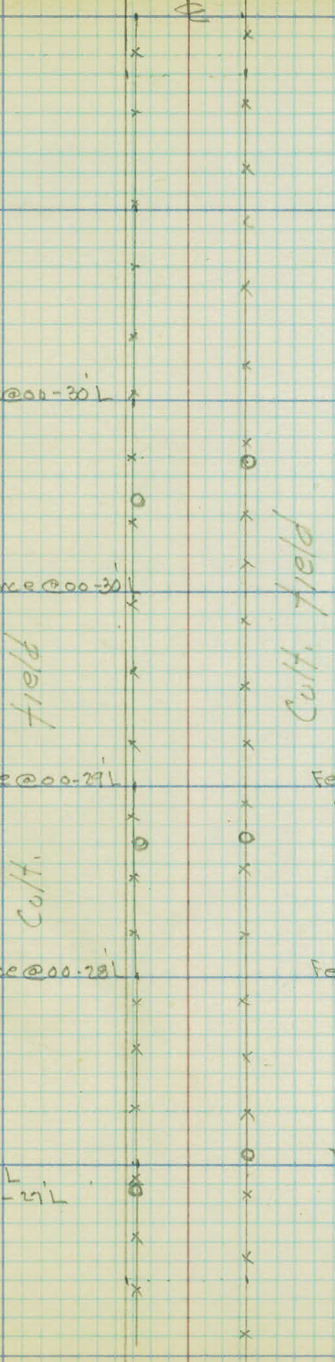
Windbreak abt 30' R

103+00 Fence @ 00 - 29' L Fence @ 00 - 32' R

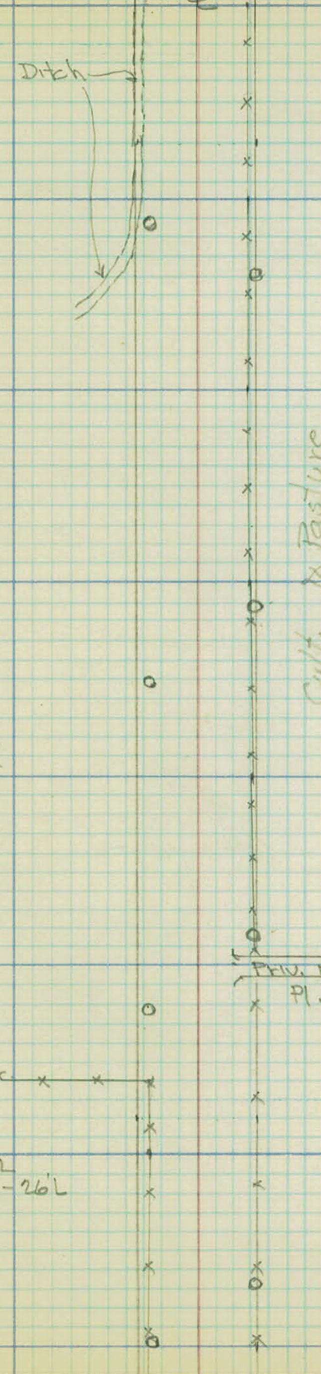
@+20 Priv. Drive Pl. 18'-15" Port
Culv.

102+00

R.C. Line	L	R
114+00		Fence @ 00-32' R
113+00	Fence @ 00-30' L	
112+00	Fence @ 00-30' L	Fence @ 00-33' R
111+00	Fence @ 00-29' L	Fence + Pole Line @ 00-33' R
110+00	Fence @ 00-28' L	Fence @ 00-34' R
109+00	Fence @ 00-29' L Pole Line @ 00-27' L	Fence @ 00-34' R
108+00		



R.C. Line L ℄ R



120+00 Fence@00 29'R

119+00 Fence@00-29'R

118+00 Fence@00-30'R

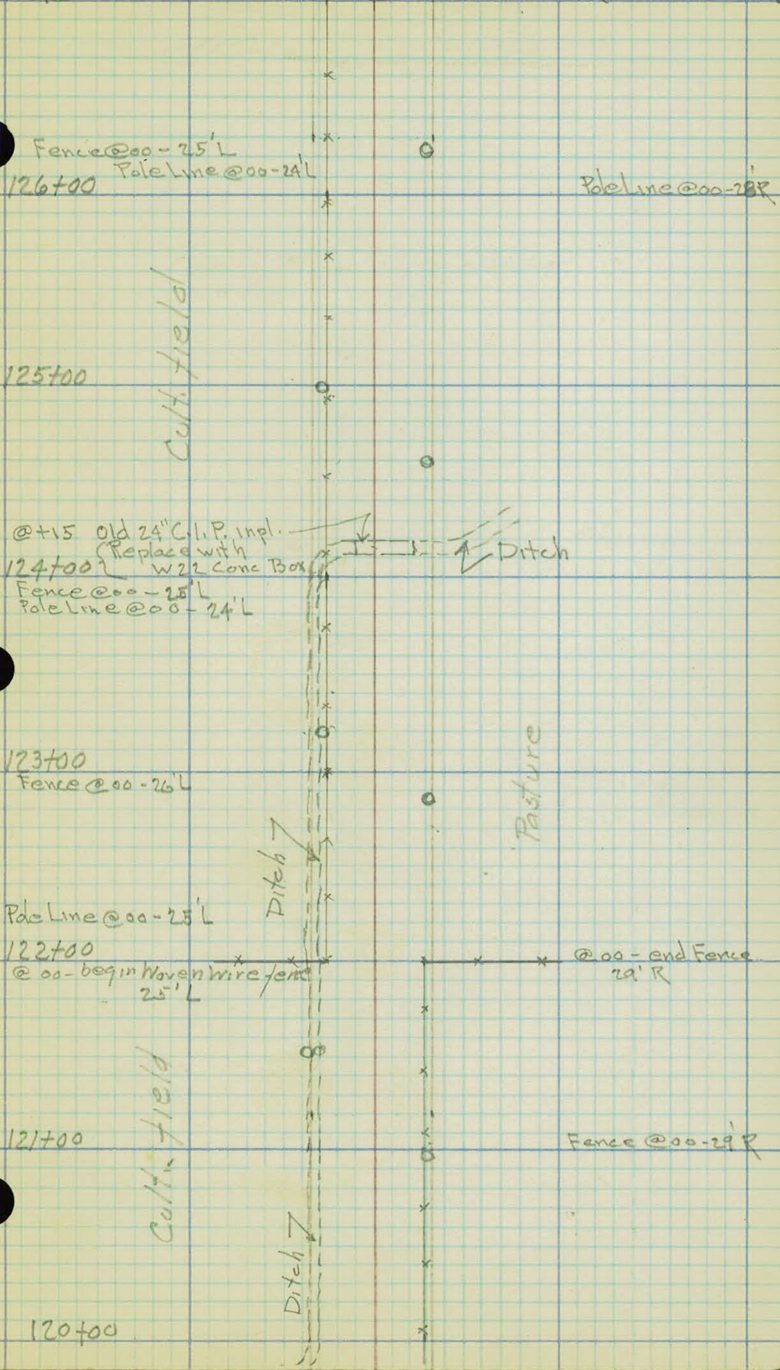
117+00 Fence@00-31'R

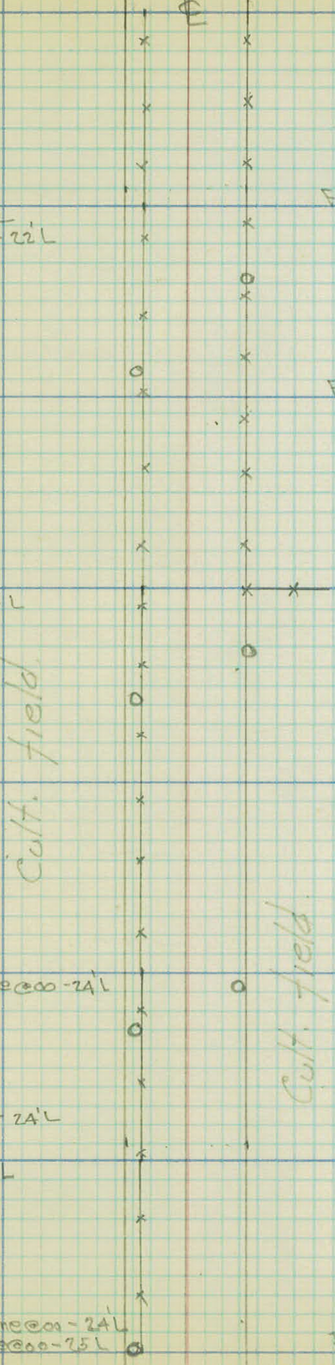
116+00 Fence@00-32'R
Priv. Drive @00
Pl. 16'-15" Port. Culv.

@+40 Fence Cor.

115+00
Fence@00-28'L
Pole Line @00-26'L

114+00 Fence@00-32'R


Fence @ 00 - 25' L
Pole Line @ 00 - 24' L
126+00
Pole Line @ 00 - 28' R
Cult. Field
125+00
@ +15 Old 24" C.I.P. inpl.
(Replace with
124+00 W22 Conc Box
Ditch
Fence @ 00 - 25' L
Pole Line @ 00 - 24' L
Pasture
123+00
Fence @ 00 - 26' L
Ditch
Pole Line @ 00 - 25' L
122+00
@ 00 - end Fence
29' R
@ 00 - begin Woven wire fence
25' L
Cult. Field
121+00
Fence @ 00 - 29' R
Ditch
120+00



132+00
Fence@00 - 23'L
Pole Line @00 - 22'L
Fence + Pole Line @00 - 33'R

131+00
Fence + Pole Line @00 - 32'R

130+00
Fence@00 - 24'L
Begin fence @00 32'R
Pole Line @00 - 32'R

129+00
Pole Line @00 - 30'R

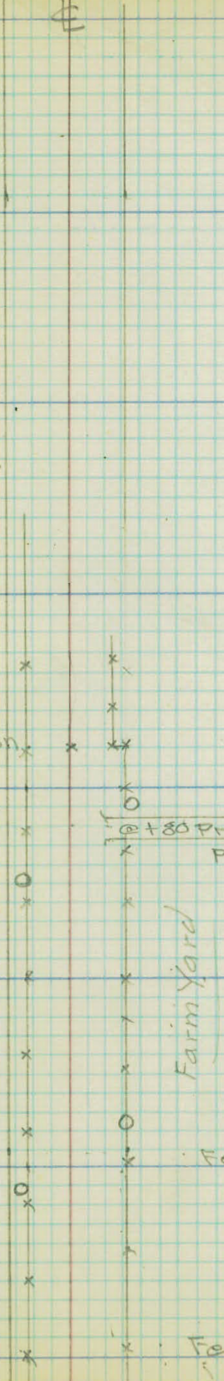
128+00
Fence + Pole Line @00 - 24'L
Pole Line @00 - 28'R

Pole Line @00 - 24'L

127+00
Fence@00 - 25'L

Pole Line @00 - 24'L
126+00 Fence@00 - 25'L
Pole Line @00 - 28'R

R.C. Line L ℄ R



135+20.35 End of Location

135+00
Fence @ 00 - 22' L

Fence @ 00 - 33' R

@ +80 Priv. Drive
Pl. 16' - 15" Port Culv.

134+00
Fence @ 00 - 22' L

Fence @ 00 - 33' R

133+00
Fence @ 00 - 22' L

Fence @ 00 - 33' R

Pole Line @ .00 - 22' L
Fence @ 00 - 23' L
132+00

Fence @ 00 - 33' R

Cross - Sections.

Centerville Rd.

Ramsey Co. Line No.

Pages 1 to 16 incl.

1922

Proj. 23-03

Station	B.S.	H.I.	F.S.	Rod	Elev.
B.M.	5.86	242.64 ✓			236.78
0+00				5.0	237.6
0+20		Begin		5.6	237.0
1+00				5.6	237.0
2+00				5.0	237.6
3+00				4.9	237.7
4+00				6.1	236.5
5+00				7.0	235.6
T.P.	3.97	239.76 ✓	6.85		235.79
6+00				4.3	235.4 235.5
7+00				4.7	235.1
7+50				4.9	234.9
	9.83	239.76	6.85		
	6.85	236.78			
	2.98	Check 2.98			

1

L ℄ R

Spike in Oak 0+75' - East side of Road.

-2.0	-2.0	-0.4		-0.8					
7.0	7.0	5.4		5.8					
33	21	10		30					

-1.4	-2.1	-0.7	-0.5	-1.8	-2.8	-2.7	-1.3	
7.0	7.7	6.3	6.1	7.4	8.4	8.3	6.9	
33	14	8	11	16	23	30	40	

-1.4	-1.3	-2.1	-0.5	-0.5	-1.7	-2.1	0.6	-0.6
7.0	6.9	7.7	6.1	6.1	7.3	7.7	6.2	6.2
33	23	17	9	7	13	19	22	40

-0.6	-0.5	-2.4	-0.7	-0.5	-1.2	+1.0	+1.2	+1.2
5.6	5.5	7.4	5.7	5.5	6.2	4.0	3.8	3.8
33	25	18	9	8	13	18	28	33

-0.7	-0.7	-2.3	-2.0	-0.5	-0.4	-1.9	-0.0	+0.1	-0.1
5.6	5.6	7.2	6.9	5.4	5.3	6.8	4.9	5.0	5.0
33	27	23	19	10	7	15	21	26	33

-0.6	-1.9	-1.1	-2.0	-1.7	-0.3	-0.2	-1.7	+0.1	+0.1
6.7	8.0	7.2	8.1	7.3	6.4	6.3	7.8	5.9	5.9
29	25	22	21	14	9	6	15	18	40

-1.2	-0.8	-2.0	-1.2	-0.3	-0.1	-1.8	-0.8	-0.2	-0.2 ✓
8.2	7.8	9.0	8.2	7.3	7.1	8.8	7.8	7.2	7.2
40	30	24	16	11	6	13	16	22	40

Nail in Tel. Pole on R. 5+80

-1.3	-1.3	-2.1	-0.7	0.0	-0.1	-0.7	-1.9	-1.7
5.6	5.6	6.4	5.0	4.3	4.4	5.0	6.2	6.0
33	29	24	17	11	7	11	15	31

+1.1	+1.1	-1.4	-1.0	-0.3	+0.1	-1.6	+0.2	+1.6	+0.4
3.6	3.6	6.1	5.7	5.0	4.6	6.3	4.5	3.1	4.3
33	29	24	15	13	7	13	17	23	32

+1.2	+1.2	+.5	-1.7	-0.8	-0.3	-0.2	-4.2	-3.4	+1.3
3.7	3.7	6.4	6.6	5.7	5.2	5.1	9.1	8.3	3.6
33	28	22	15	14	11	8	17	28	35

Station	B.S.	H.I.	F.S.	Rod	Elev.
		239.76			
8+00				5.6	234.2
9+00				7.0	232.8
T.P.	1.26	234.17 ✓	6.85		✓ 232.91
10+00				2.9	231.3
11+00				3.7	230.5
12+00				5.7	228.5
13+00				7.6	226.6
14+00				9.3	224.9
T.P.	1.12	227.65 ✓	7.64		✓ 226.53
15+00				4.9	✓ 222.7
16+00				7.0	220.6
	2.38	239.76 227.65 12.11	14.49 2.38 12.11		

12.11 – 12.11

check

L ℄ R

-0.1	-0.1	-2.9	-3.3	-0.1		-0.4	-4.3	-4.5	-0.1
5.7	5.7	8.5	8.9	5.7		6.0	9.9	10.1	5.7
33	28	23	20	11		7	18	27	35

+1.0	-0.8	-3.1	-3.4	-0.8		-0.3	-1.5	-1.0	-1.5
6.0	6.2	10.1	10.4	7.2		7.3	8.5	8.0	8.5
28	24	22	19	13		6	11	14	33

Nail in Tel. Pole to R 9+80

-0.9	-0.9	-1.4	-1.6	-0.1		-0.2	-1.8	-0.7	-0.2
3.8	3.8	4.3	4.5	3.0	.	3.1	4.7	3.6	3.1
33	27	24	19	12		6	12	15	33

-0.1	-0.2	-0.8	-1.7	-0.5		-0.4	-1.7	-0.2	-0.5
3.8	3.9	4.5	5.4	4.2	.	4.1	5.4	3.9	4.2
30	22	19	15	10		7	11	16	32

+0.5	-0.6	-1.6	-0.3		-0.5	+0.7	+0.5
5.2	6.3	7.3	6.0	.	6.2	5.0	5.2
31	19	16	10		17	27	35

+1.1	-1.4	-1.5	-2.0	-0.3		-0.4	-0.7	-0.1	+0.3	+1.2
6.5	9.0	9.1	9.6	7.9	.	8.0	8.3	7.7	7.3	6.4
26	21	19	15	9		10	15	18	25	33

+0.7	+0.4	+0.2		+0.3	+0.7	-0.3	-0.3
10.0	9.7	9.5	.	9.6	10.0	9.0	9.0
36	26	9		9	13	16	33

Nail in Tel. Pole to R. 13+80

-0.1	-0.5	-0.3	-0.5	-1.4	+1.5	+2.9
5.0	5.4	5.2	5.4	6.3	3.4	2.7
33	12	10	8	12	19	33

-2.8	-1.4	-1.8	-0.4		-0.1	-1.6	-1.1	-0.5	-0.7
9.8	8.4	8.8	7.4	.	7.3	8.6	8.1	7.5	7.7
33	24	15	7		9	14	16	20	33

Station	B.S.	H.I.	F.S.	Rod	Elev.
		227.65			
T.P.	4.50	223.65	8.50		219.15
17+00				4.8	218.8
18+00				7.1	216.5
+50				6.7	217.0
19+00				6.3	217.3
+50				5.5	218.1
20+00				5.5	218.1
21+00				5.0	218.6
T.P.	8.26	226.71	5.20		218.45
22+00				6.3	220.4
23+00				3.2	223.5
	12.76	227.65 226.71 0.94	13.70 12.76 0.94		

Check

L ℄ R

-5.0 9.8 33	-4.9 9.7 28	-1.4 7.2 18	-0.4 5.2 11	-0.2 5.0 4	-1.0 5.8 9	-0.5 5.3 13	-2.7 7.5 19	-4.6 9.4 33

-3.5 10.6 55	+0.6 6.5 33	+1.5 5.6 24	+1.9 5.2 15	+1.4 5.7 5	-1.6 8.7 7	-2.6 9.7 20	-3.5 10.2 30

-3.3 10.0 60	+0.7 6.0 35	+1.5 5.2 25	+1.7 5.0 15	+0.7 6.0 3	-1.3 8.0 3	-2.3 9.0 8	-2.6 9.3 17	-3.5 10.0 33

-3.5 9.8 55	-0.1 6.4 29	+1.1 5.2 24	+1.4 4.9 15	+0.7 5.6 3	-1.0 7.3 6	-2.7 9.0 13	-3.6 9.9 26	-3.9 10.2 33

-3.8 9.3 30	-1.2 6.7 26	+0.2 5.3 18	+0.4 5.1 8	-1.3 6.8 7	-3.0 8.5 14	-3.7 9.2 27	-4.5 10.0 33

-2.8 8.3 47	-1.2 6.7 25	0.0 5.5 15	+0.4 5.1 6	+0.1 5.4 8	-0.9 6.4 12	-2.9 8.4 18	-2.7 8.2 24	-3.7 9.2 33

-2.8 7.8 33	-2.6 7.6 22	-0.6 5.6 12	0.0 5.0 3	-0.4 5.4 7	-1.4 6.4 11	-3.9 8.9 15	-3.0 8.0 19	-0.8 5.8 22	-1.2 6.2 33

On Tel. Pole # 471 to R 20 + 6.0

-1.0 7.3 33	-1.0 7.3 27	-0.8 7.1 16	-0.1 6.4 11	-0.1 6.4 9	-1.4 7.7 14	-1.7 8.0 22	-3.0 9.3 33

-1.3 4.5 35	-0.4 3.6 8	-0.4 3.6 9	-0.8 4.0 19	-0.1 3.3 23	+0.3 2.9 33

Station	B.S.	H.I.	F.S.	Rod	Elev.
		226.71			
24+00				2.4	224.3
25+00				4.3	222.4
T.P.	1.18	224.87	3.02		223.69
26+00				4.9	220.0
27+00				7.2	217.7
28+00				7.8	217.1
+50	30'-24" Vit. Culv. inplace			13.0	211.9
T.P.	4.80	223.55	6.12		218.75
29+00				6.2	217.3
30+00				5.6	218.0
31+00				4.9	218.6
32+00				4.3	219.2
	5.98	226.71	9.14		
		223.55	5.98		
		3.16	3.16		

Check

L ℄ R

$$\begin{array}{cc|cccc} -1.5 & -0.3 & -0.3 & -0.6 & +0.3 & -0.2 \\ 3.9 & 2.7 & 2.7 & 3.0 & 2.1 & 2.6 \\ 40 & 8 & 10 & 16 & 33 & 45 \end{array}$$

$$\begin{array}{cc|cc} -0.6 & -0.2 & -0.5 & -1.0 \\ 4.9 & 4.5 & 4.8 & 5.3 \\ 40 & 12 & 15 & 33 \end{array}$$

On Tel. Pole #474 to R 24+50

$$\begin{array}{ccc|cccccc} -0.5 & -0.1 & +0.3 & -0.7 & -2.9 & -2.9 & -1.3 & -1.5 & -0.8 \\ 5.4 & 5.0 & 4.6 & 5.6 & 7.8 & 7.8 & 6.2 & 6.4 & 5.7 \\ 33 & 15 & 8 & 7 & 12 & 14 & 16 & 24 & 33 \end{array}$$

$$\begin{array}{cccc|cccccc} -0.2 & -0.4 & +0.2 & +0.3 & -0.6 & -2.0 & -2.8 & -2.2 & -1.9 & -2.4 \\ 7.4 & 7.6 & 7.0 & 6.9 & 7.8 & 9.2 & 10.0 & 9.4 & 9.1 & 9.6 \\ 33 & 21 & 17 & 7 & 2 & 11 & 14 & 17 & 25 & 33 \end{array}$$

$$\begin{array}{ccccc|ccccc} -2.4 & -2.2 & -1.9 & -0.1 & +0.3 & -0.1 & -1.3 & -2.7 & -1.9 & -2.5 \\ 10.2 & 10.0 & 9.1 & 7.9 & 7.5 & 7.9 & 9.1 & 10.5 & 9.7 & 10.3 \\ 40 & 25 & 14 & 11 & 3 & 5 & 10 & 15 & 21 & 33 \end{array}$$

$$\begin{array}{cccc|cccccc} -2.0 & -1.7 & -0.6 & -0.1 & 0.0 & -0.3 & -4.0 & -3.7 & 0.0 & +0.2 \\ 8.2 & 7.9 & 6.8 & 6.3 & 6.2 & 6.5 & 10.2 & 9.9 & 6.2 & 6.0 \\ 35 & 15 & 9 & 4 & 3 & 12 & 21 & 26 & 32 & 40 \end{array}$$

$$\begin{array}{cccc|ccccc} -1.6 & -1.4 & -0.9 & -0.3 & +0.2 & -0.4 & -2.8 & -2.5 & -0.6 \\ 7.2 & 7.0 & 6.5 & 5.9 & 5.4 & 6.0 & 8.4 & 8.1 & 6.2 \\ 35 & 18 & 10 & 5 & 6 & 14 & 22 & 28 & 33 \end{array}$$

$$\begin{array}{ccccc|ccccc} -1.9 & -1.6 & -1.3 & -1.5 & -0.5 & -0.5 & -2.6 & -2.6 & -0.3 & -0.9 \\ 6.8 & 6.5 & 6.2 & 6.4 & 5.4 & 5.4 & 7.5 & 7.5 & 5.2 & 5.8 \\ 35 & 21 & 16 & 14 & 8 & 11 & 18 & 20 & 27 & 33 \end{array}$$

$$\begin{array}{cccc|ccccccc} -0.5 & -0.5 & -1.0 & -0.2 & -0.3 & -1.5 & -2.1 & -1.8 & -3.0 & -4.0 & -4.7 \\ 4.8 & 4.8 & 5.3 & 4.5 & 4.6 & 5.8 & 6.4 & 6.1 & 7.3 & 8.3 & 9.0 \\ 33 & 22 & 16 & 7 & 7 & 11 & 15 & 17 & 25 & 28 & 33 \end{array}$$

station	B.S.	H.I.	F.S.	Rod	Elev.
		223.55			
33+00				3.8	219.7
34+00				3.6	220.0
T.P.	5.28	225.43	3.40		220.15
35+00				4.6	220.8
36+00				4.2	221.2
37+00				5.1	220.3
38+00				5.0	220.4
39+00				4.5	220.9
T.P.	5.87	225.92	5.38		220.05
40+00				5.3	220.6
41+00				5.2	220.7
	11.15	225.92	8.78		
	8.78	223.55			
	2.37	2.37			

Check

L ℄ R

$$\begin{array}{cccc|ccccc} \underline{-0.1} & \underline{-0.3} & \underline{-1.0} & \underline{-0.2} & \underline{-0.5} & \underline{-1.6} & \underline{-2.5} & \underline{-4.2} & \underline{-5.2} \\ \underline{-3.9} & \underline{-4.1} & \underline{-4.8} & \underline{-4.0} & \underline{-4.3} & \underline{-5.4} & \underline{-6.3} & \underline{-8.0} & \underline{-9.0} \\ 35 & 23 & 13 & 7 & 10 & 14 & 20 & 25 & 33 \end{array}$$

$$\begin{array}{cccc|ccccc} \underline{-0.9} & \underline{-1.3} & \underline{-1.6} & \underline{-0.4} & \underline{-0.4} & \underline{-1.5} & \underline{-2.4} & \underline{-4.0} & \underline{-5.4} \\ \underline{4.5} & \underline{4.9} & \underline{5.2} & \underline{4.0} & \underline{4.0} & \underline{5.1} & \underline{6.0} & \underline{7.6} & \underline{9.0} \\ 35 & 19 & 11 & 7 & 10 & 15 & 21 & 31 & 35 \end{array}$$

$$\begin{array}{cccc|ccccc} \underline{+2.3} & \underline{+1.0} & \underline{-0.8} & \underline{-0.1} & \underline{-0.6} & \underline{-1.9} & \underline{-2.2} & \underline{-3.7} & \underline{-6.4} \\ \underline{2.3} & \underline{3.6} & \underline{5.4} & \underline{4.7} & \underline{5.2} & \underline{6.5} & \underline{6.8} & \underline{8.3} & \underline{11.0} \\ 35 & 20 & 12 & 5 & 7 & 14 & 20 & 33 & 50 \end{array}$$

$$\begin{array}{ccc|ccccc} \underline{+1.8} & \underline{+1.2} & \underline{-0.2} & \underline{-0.7} & \underline{-1.8} & \underline{-3.0} & \underline{-4.9} & \underline{-6.8} \\ \underline{2.4} & \underline{3.0} & \underline{4.4} & \underline{4.9} & \underline{6.0} & \underline{7.2} & \underline{9.1} & \underline{11.0} \\ 33 & 19 & 13 & 10 & 16 & 23 & 30 & 50 \end{array}$$

$$\begin{array}{ccccc|ccccc} \underline{+1.9} & \underline{+1.4} & \underline{+0.9} & \underline{-0.4} & \underline{-0.4} & \underline{-0.5} & \underline{-2.0} & \underline{-1.8} & \underline{-3.7} & \underline{-6.4} \\ \underline{3.2} & \underline{3.7} & \underline{4.2} & \underline{5.5} & \underline{5.5} & \underline{5.6} & \underline{7.1} & \underline{6.9} & \underline{8.8} & \underline{11.5} \\ 40 & 27 & 17 & 10 & 7 & 10 & 17 & 23 & 33 & 50 \end{array}$$

$$\begin{array}{ccccc|ccccc} \underline{+0.6} & \underline{0.0} & \underline{+0.9} & \underline{-0.8} & \underline{-0.4} & \underline{-0.6} & \underline{-1.5} & \underline{-2.0} & \underline{-4.0} & \underline{-6.2} \\ \underline{4.4} & \underline{5.0} & \underline{4.1} & \underline{5.8} & \underline{5.4} & \underline{5.6} & \underline{6.5} & \underline{7.0} & \underline{9.0} & \underline{11.2} \\ 33 & 25 & 20 & 10 & 6 & 10 & 15 & 22 & 33 & 50 \end{array}$$

$$\begin{array}{ccccc|cccccc} \underline{+0.6} & \underline{+0.1} & \underline{-0.4} & \underline{-0.9} & \underline{-0.3} & \underline{+0.1} & \underline{-0.2} & \underline{-0.9} & \underline{-2.2} & \underline{-2.3} & \underline{-5.6} \\ \underline{3.9} & \underline{4.4} & \underline{4.9} & \underline{5.4} & \underline{4.8} & \underline{4.4} & \underline{4.7} & \underline{5.4} & \underline{6.7} & \underline{6.8} & \underline{10.1} \\ 33 & 23 & 12 & 8 & 5 & 4 & 11 & 16 & 25 & 33 & 50 \end{array}$$

On Tel. Pole # 485 to R 38+60

$$\begin{array}{ccc|cccccc} \underline{+1.5} & \underline{+0.6} & \underline{-0.3} & \underline{+0.4} & \underline{+0.1} & \underline{-0.6} & \underline{-0.9} & \underline{-0.5} & \underline{-1.3} \\ \underline{3.8} & \underline{4.7} & \underline{5.6} & \underline{4.9} & \underline{5.2} & \underline{5.9} & \underline{6.2} & \underline{5.8} & \underline{6.6} \\ 35 & 15 & 4 & 7 & 15 & 20 & 26 & 32 & 43 \end{array}$$

$$\begin{array}{cccc|cccccc} \underline{+1.2} & \underline{+0.2} & \underline{+0.6} & \underline{-0.6} & \underline{+0.5} & \underline{+0.2} & \underline{-0.7} & \underline{-0.6} & \underline{-0.9} & \underline{0.0} \\ \underline{4.0} & \underline{5.0} & \underline{4.6} & \underline{5.8} & \underline{4.7} & \underline{5.0} & \underline{5.9} & \underline{5.8} & \underline{6.1} & \underline{5.2} \\ 33 & 16 & 13 & 4 & 7 & 16 & 22 & 29 & 30 & 35 \end{array}$$

Station	B.S.	H.I.	F.S.	Rod	Elev.
		225.92			
42+00				5.5	220.4
43+00				7.1	218.8
44+00				8.0	217.9
T.P.	3.20	222.44 ✓	6.68		✓ 219.24
45+00				4.8	217.6
46+00				5.1	217.3
47+00				5.0	217.4
48+00				4.2	218.2
49+00				4.3	218.1
T.P.	8.22	226.72 ✓	3.94		218.50
50+00				8.0	218.7
	11.42	226.72	10.62		
	10.62	225.92			
	0.80	0.80			

Check

L ℄ R

+0.3	+0.3	-0.3	-1.3	-0.5	+0.2	-0.3	-1.3	-0.7	-1.1	-0.1
5.2	5.2	5.8	6.8	6.0	5.3	5.8	6.8	6.2	6.6	5.6
35	18	13	9	5	6	12	19	23	29	32

-1.3	-1.8	-0.5	0.0	-0.3	-1.5	-1.4	-2.1	-4.0
8.4	8.9	7.6	7.1	7.4	8.6	8.5	9.2	11.1
35	15	11	5	6	15	21	32	45

-1.0	-1.0	-1.7	0.0	+0.4	0.0	-2.5	-3.2	
9.0	9.0	9.7	8.0	7.6	8.0	10.5	11.2	Level
35	27	20	12	6	3	10	20	

On Tel. Pole # 490 to R 44+40

-0.8	-2.0	-2.0	-2.0	-0.4	-0.5	-2.5	-3.1
5.6	6.8	6.8	6.8	5.2	5.3	7.3	7.9
35	18	16	14	9	10	16	34

-2.1	-2.1	-0.9	-1.3	-0.3	-0.1	-2.5	-2.7
7.2	7.2	6.0	6.4	5.4	5.2	7.6	7.8
50	33	11	9	6	10	19	36

-1.9	-1.0	-1.6	-0.2	-0.3	-2.6	-2.7
6.9	6.0	6.6	5.2	5.3	7.6	7.7
35	13	12	7	10	20	33

+0.8	+0.5	-1.5	-1.5	-0.3	-1.2	-0.3	-0.2	-1.0	-2.0	0.0	+0.4	-0.2
3.4	3.7	5.7	5.7	4.5	5.4	4.5	4.4	5.2	6.2	4.2	3.8	4.4
38	28	22	20	15	13	7	9	14	20	26	30	35

+0.7	-0.4	-1.0	-1.3	-0.1	+0.1	-2.2	-1.7	-2.1	
3.6	4.7	5.3	5.6	4.4	4.2	6.5	6.0	6.4	Level
41	23	22	14	7	9	16	18	26	

Nail in Root of Tree on Left 49+30

-0.5	-0.2	-0.9	-0.7	0.0	+0.1	-1.1	-0.6	
8.5	8.2	8.9	8.7	8.0	7.9	9.1	8.6	Level
40	22	18	13	7	11	19	24	

Station	B.S.	H.I.	F.S.	Rod	Elev.
		226.72			
51+00				6.1	220.6
52+00				4.2	222.5
T.P.	3.85	✓ 227.67	2.90		✓ 223.82
53+00				4.8	222.9
54+00				4.5	223.2
55+00				4.5	223.2
56+00				4.3	223.4
57+00				4.8	222.9
T.P.	1.08	✓ 223.85	4.90		✓ 222.77
58+00				1.8	222.0
59+00				3.5	220.3
	4.93	226.72 223.85	7.80 4.93		
		2.87	2.87		

check

L ℄ R

-0.4 6.5 35	-0.7 6.8 19	-1.3 7.4 12	-0.3 6.4 9	-0.1 6.2 10	-0.9 7.6 20	-0.5 6.6 22	+0.9 5.2 35

Level	+0.6 3.6 35	-1.0 5.2 13	-0.1 4.3 8	-0.2 4.4 9	-0.5 4.7 20	+1.4 2.8 30	Level

On Tel. Pole #498 to R 52+40

-0.8 5.6 33	-1.2 6.0 21	-1.8 6.6 18	-0.7 5.5 13	-0.4 5.2 9	-0.4 5.2 6	-2.1 6.9 16	-2.0 6.8 35

-1.9 6.4 33	-2.3 6.8 18	-1.1 5.6 12	-0.5 5.0 9	-0.4 4.9 8	-1.6 6.1 15	-2.1 6.6 19	-1.1 5.6 33

-0.3 4.8 33	-0.4 4.9 24	-1.6 6.1 16	-0.8 5.3 10	-0.3 4.8 7	-0.5 5.0 9	-0.8 5.3 11	-1.6 6.1 15	-1.1 5.6 20	-0.5 4.0 24	-1.0 3.5 33

-0.5 4.8 33	-1.9 6.2 18	-0.7 5.0 12	-0.4 4.7 8	-0.4 4.7 9	-0.8 5.1 11	-1.4 5.7 13	-0.1 4.4 17	+1.5 2.8 22	+1.4 2.9 33

-2.0 6.8 40	-1.4 6.2 33	-2.4 7.2 22	-0.9 5.7 16	-0.5 5.3 8	-0.6 5.4 8	-1.2 6.0 13	+1.2 3.6 19	+1.1 3.7 33	+0.6 4.2 40

On Tel. Pole #501 to R 57+90

-1.6 3.4 40	-1.6 3.4 33	-3.2 5.0 24	-0.8 2.6 17	-0.4 2.2 9	-0.5 2.3 7	-1.0 2.8 10	-0.7 1.1 18	+2.0 +0.2 21	+2.0 +0.2 40

-3.8 7.3 40	-2.9 6.4 33	-2.2 5.7 22	-2.5 6.0 18	-1.2 4.7 13	-0.6 4.1 10	-0.4 3.9 8	-1.6 5.1 14	+1.4 2.1 21	+2.2 1.3 33	+2.6 0.9 40

Station	B.S.	H.I.	F.S.	Rod	Elev
		223.85			
60+00				5.4	218.4
61+00				6.9	216.9
62+00				7.2	216.6
T.P.	0.50	217.02	7.33	✓	216.52
63+00				1.6	215.4
64+00				3.3	213.7
65+00				4.1	212.9
66+00				5.1	211.9
67+00				4.6	212.4
68+00				4.2	212.8
T.P.	6.93	219.45	4.50	✓	212.52
	7.43	223.85	11.83		
		219.45	7.43		
			4.40		
		4.40			
			check		

L ℄ R

$$\frac{\frac{-0.7}{6.1}}{40}\ \frac{\frac{-0.4}{5.8}}{31}\ \frac{\frac{-3.1}{8.5}}{25}\ \frac{\frac{-2.6}{8.0}}{17}\ \frac{\frac{-0.7}{6.1}}{11}\ \frac{\frac{-0.3}{5.7}}{6}\ .\ \frac{\frac{-0.3}{5.7}}{7}\ \frac{\frac{-1.6}{7.0}}{15}\ \frac{\frac{-1.6}{7.0}}{17}\ \frac{\frac{+1.5}{3.9}}{23}\ \frac{\frac{+2.0}{3.4}}{33}\ \frac{\frac{+2.4}{3.0}}{40}$$

$$\frac{\frac{-2.2}{9.1}}{40}\ \frac{\frac{-2.0}{8.9}}{22}\ \frac{\frac{-2.1}{9.0}}{20}\ \frac{\frac{-1.5}{8.4}}{14}\ \frac{\frac{-1.6}{8.5}}{12}\ \frac{\frac{-0.2}{7.1}}{8}\ \frac{\frac{-0.3}{7.2}}{9}\ \frac{\frac{-1.8}{8.7}}{16}\ \frac{\frac{-1.8}{8.7}}{18}\ \frac{\frac{+0.8}{6.1}}{24}\ \frac{\frac{+1.2}{5.7}}{33}\ \frac{\frac{+1.5}{5.4}}{40}$$

$$\frac{\frac{-2.0}{9.2}}{40}\ \frac{\frac{-1.4}{8.6}}{33}\ \frac{\frac{-2.4}{9.6}}{21}\ \frac{\frac{-1.6}{8.8}}{14}\ \frac{\frac{-0.8}{8.0}}{10}\ \frac{\frac{-0.4}{7.6}}{8}\ \frac{\frac{-0.8}{8.0}}{9}\ \frac{\frac{-2.0}{9.2}}{14}\ \frac{\frac{-1.6}{8.8}}{18}\ \frac{\frac{+1.0}{6.2}}{29}\ \frac{\frac{+0.8}{6.4}}{40}$$

$$\frac{\frac{-0.4}{2.0}}{35}\ \frac{\frac{-2.4}{4.0}}{27}\ \frac{\frac{-2.4}{4.0}}{20}\ \frac{\frac{-0.9}{2.5}}{14}\ \frac{\frac{-0.6}{2.2}}{9}\ \frac{\frac{-0.8}{2.4}}{8}\ \frac{\frac{-2.4}{4.0}}{14}\ \frac{\frac{-2.1}{3.7}}{20}\ \frac{\frac{-0.6}{2.2}}{22}\ \frac{\frac{-0.8}{2.4}}{25}\ \frac{\frac{-0.8}{2.4}}{40}$$

$$\frac{\frac{-1.3}{4.6}}{40}\ \frac{\frac{-1.3}{4.6}}{33}\ \frac{\frac{-1.7}{5.0}}{16}\ \frac{\frac{-0.8}{4.1}}{12}\ \frac{\frac{+0.5}{3.8}}{9}\ \frac{\frac{-0.3}{3.6}}{7}\ \frac{\frac{-1.2}{4.5}}{9}\ \frac{\frac{-1.8}{5.1}}{19}\ \frac{\frac{-1.0}{4.3}}{23}\ \frac{\frac{-1.7}{5.0}}{33}\ \frac{\frac{-1.7}{5.0}}{50}$$

$$\frac{\frac{-2.7}{6.8}}{50}\ \frac{\frac{-2.7}{6.8}}{33}\ \frac{\frac{-2.8}{6.9}}{22}\ \frac{\frac{-1.7}{5.8}}{13}\ \frac{\frac{-0.7}{4.8}}{11}\ \frac{\frac{-0.4}{4.5}}{9}\ \frac{\frac{-0.5}{4.6}}{8}\ \frac{\frac{-2.1}{6.2}}{14}\ \frac{\frac{-2.5}{6.6}}{22}\ \frac{\frac{-2.4}{6.5}}{33}\ \frac{\frac{-2.4}{6.5}}{45}$$

$$\frac{\frac{-2.4}{7.5}}{40}\ \frac{\frac{-1.9}{7.0}}{15}\ \frac{\frac{-0.7}{5.8}}{11}\ \frac{\frac{-0.4}{5.5}}{8}\ .\ \frac{\frac{-0.5}{5.6}}{8}\ \frac{\frac{-1.6}{6.7}}{12}\ \frac{\frac{-1.7}{6.8}}{20}\ \frac{\frac{-1.1}{6.2}}{23}\ \frac{\frac{-2.3}{7.4}}{36}$$

$$\frac{\frac{-3.0}{7.6}}{40}\ \frac{\frac{-2.9}{7.5}}{21}\ \frac{\frac{-2.0}{6.6}}{14}\ \frac{\frac{-0.4}{5.0}}{8}\ .\ \frac{\frac{-0.3}{4.9}}{8}\ \frac{\frac{-2.0}{6.6}}{12}\ \frac{\frac{-2.0}{6.6}}{18}\ \frac{\frac{-1.9}{6.5}}{21}\ \frac{\frac{-1.9}{6.5}}{40}$$

Swamp, $\frac{\frac{-3.8}{8.0}}{33}\ \frac{\frac{-3.8}{8.0}}{23}\ \frac{\frac{-0.3}{4.5}}{9}\ \frac{\frac{-0.5}{4.7}}{8}\ \frac{\frac{-0.8}{5.0}}{10}\ \frac{\frac{-2.1}{6.3}}{13}\ \frac{\frac{-2.2}{6.4}}{22}$ Swamp

Station	B.S.	H.I.	F.S.	Rod	Elev.
		219.45			
69+00				5.7	213.7
70+00				5.0	214.45
71+00				5.0	214.45
72+00				6.5	213.0
73+00				7.5	212.0
T.P.	3.68	215.95 ✓	7.18		✓ 212.27
74+00				4.7	211.2
75+00				4.1	211.8
76+00				4.8	211.1
77+00				3.8	212.1
78+00				2.7	213.2
	3.68	219.45 215.95 3.50	7.18 3.68 3.50		

Check

L ℄ R

-1.9	-2.2	-1.5	-0.4	-0.4	-1.5	-1.9	-1.0	-1.0
7.6	7.9	7.2	6.1	6.1	7.2	7.6	6.7	6.7
33	21	15	9	7	10	22	24	40

-1.4	-0.8	-3.0	-3.0	-1.7	-0.6	-0.2	-0.1	+3.9
6.4	5.8	8.0	8.0	6.7	5.6	5.2	5.1	1.1
40	33	26	22	19	9	9	20	37

-4.5	-3.4	-3.2	-1.2	-0.5	-0.7	-1.2	-0.4	+5.0
9.5	8.4	8.2	6.2	5.5	5.7	6.2	5.4	00
45	33	20	14	9	8	14	20	37

-3.1	-3.1	-1.1	-0.3	-0.3	-1.1	-0.7	+4.1
9.6	9.6	7.6	6.8	6.8	7.6	7.2	2.4
50	21	13	8	9	13	22	37

-2.9	-2.5	-0.5	-0.4	-0.4	-1.8	-2.4	-2.4
10.4	10.0	8.0	7.9	7.9	9.3	9.9	9.9
40	14	10	7	10	19	30	40

On Tel. Pole #513 to R 73+20

	-2.5	-2.4	-1.1	-0.6	-0.5	-1.4	-1.7	-1.7
Peat Bog	7.2	7.1	5.8	5.3	5.2	6.1	6.4	6.4
	23	13	10	7	10	13	30	40

	-3.0	-3.0	-0.7	-0.4	-0.3	-1.9	-2.0	-2.0
Bog	7.1	7.1	4.8	4.5	4.4	6.0	6.1	6.1
	24	13	9	6	10	14	30	40

	-2.5	-2.9	-0.9	-0.6	-0.5	-1.9	-1.9	-1.9
Bog	7.3	7.1	5.7	5.4	5.3	6.7	6.7	6.7
	24	13	9	7	11	15	28	40

	-3.2	-2.7	-1.7	-0.7	-0.6	-0.7	-1.9	-2.4	-2.4
Bog	7.0	6.5	5.5	4.5	4.4	4.5	5.7	6.2	6.2
	26	15	12	10	6	11	13	29	40

-3.3	-2.0	-1.9	-0.7	-0.4	-0.5	-2.2	-2.6	-1.5	-1.5
6.0	5.7	4.6	3.4	3.1	3.2	4.9	5.3	4.2	4.2
26	21	17	10	7	11	20	28	30	40

Station	B.S.	H.I.	F.S.	Rod	Elev
		215.95			
		✓			✓
T.P.	7.00	221.98	0.97		214.98
79+00				8.0 –	214.0
80+00				6.8 –	215.2
81+00				5.5 –	216.5
82+00				3.5 –	218.5
		✓			✓
T.P.	4.78	224.19	2.57		219.41
83+00				4.5 –	219.7
84+00				4.5 –	219.7
85+00				5.0 –	219.2
86+00				4.4 –	219.8
87+00				4.1 –	220.1
	11.78 3.54	224.19 215.95	3.54		
	8.24	8.24			

Check

L ℄ R

On Tel. Pole # 518 to R. 79+10

		-3.4	-2.7	-0.4	-0.3		-0.2	-2.4	-2.6	-0.8	-0.8		
		11.4	10.7	8.4	8.3		8.2	10.4	10.6	8.8	8.8		
		27	18	10	7		11	22	26	30	40		
-2.7	-2.7	-2.4	-1.2	-0.5	-0.3		-0.4	-2.4	-2.4	-2.4			
9.5	9.5	9.2	8.0	7.3	7.1		7.2	9.2	9.2	9.2			
40	28	18	11	9	7		11	19	28	40			
	+4.2	-3.0	-2.5	-0.6	-0.4		-0.3	-1.7	-1.0	-0.1	+5.2	+5.2	
	1.3	8.5	8.0	6.1	5.9		5.8	7.2	6.5	5.4	0.3	0.3	
	33	23	19	10	8		9	18	21	25	33	40	
	+2.8	+2.8	-1.7	-1.6	-0.3		-0.3	-1.2	-1.1	+1.9	+1.9		
	0.7	0.7	5.2	5.1	3.8		3.8	4.7	4.6	1.6	1.6		
	40	30	22	14	9		11	15	25	33	36		

On Tel. Pole # 521 to Left. 82+00

-0.6	-0.6	-0.8	-1.8	-1.7	-0.5		-0.3	-1.3	-1.3	-0.6	-1.1	-1.5	
5.1	5.1	5.3	6.3	6.2	5.0		4.8	5.8	5.8	5.1	5.6	6.0	
40	30	20	18	15	11		9	13	16	18	28	40	
-1.0	-1.0	-0.9	-2.1	-1.9	-0.7		-0.3	-1.1	-1.3	-0.5	-0.8	-1.8	-1.8
5.5	5.5	5.4	6.6	6.4	5.2		4.8	5.6	5.8	5.0	5.3	6.3	6.3
40	30	21	19	13	11		11	13	16	18	22	29	40
-1.6	-1.6	-1.4	-1.9	-1.4	-0.3		0.0	-0.8	-0.8	-0.1	-0.3	-0.3	
6.6	6.6	6.4	6.9	6.4	5.3		5.0	5.8	5.8	5.1	5.3	5.3	
40	30	21	19	14	11		12	15	17	20	29	40	
-1.1	-1.1	-1.3	-2.1	-1.6	-0.4		-0.3	-1.1	-1.3	-0.4	-0.1	+1.2	
5.5	5.5	5.7	6.5	6.0	4.8		4.7	5.5	5.7	4.8	4.5	3.2	
40	29	20	18	13	9		13	16	19	21	29	40	
-1.1	-0.8	-0.7	-1.7	-1.6	-0.7		-0.2	-1.1	-1.3	-0.3	-0.1		
5.2	4.9	4.8	5.8	5.7	4.8		4.3	5.2	5.4	4.4	4.2		
36	28	21	18	11	9		14	17	20	22	29		

Station	B.S.	H.I.	F.S.	Rod	Elev.
		224.19			
88+00				5.0 -	219.2
T.P.	1.29	✓ 220.48	5.0		✓ 219.19
89+00				2.9 -	217.6
90+00				5.2 -	215.3
91+00				6.6 -	213.9
92+00				7.9 -	212.6
T.P.	3.08	✓ 217.40	6.16		✓ 214.32
93+00				5.0 -	212.4
94+00				5.1 -	212.3
95+00				5.2 -	212.2
96+00				3.6 -	213.8
	4.37	224.19 217.40 6.79	11.16 4.37 6.79		

check ✓

L ℄ R

+0.5 +0.5 +0.8 -0.5 -1.0 +0.2✓ -0.2✓ -1.1 -1.1 -0.0 +0.5 +1.0
4.5 4.5 4.2 5.5 6.0 4.8 5.2 6.1 6.1 5.0 4.5 4.0
40 31 22 16 10 6 16 19 21 24 30 40

+2.3 +2.3 -0.5 -0.9 -0.1 +0.3 -0.1 -1.6 -1.6 -0.4 -0.3 -0.3
0.6 0.6 3.4 3.8 3.0 2.6 3.0 4.5 4.5 3.3 3.2 3.2
33 20 15 8 6 6 18 21 23 26 30 33

-0.1 -0.6 -0.4 +0.5 -0.0 -1.6 -1.3 -1.1 -1.1
5.3 5.8 5.6 4.7 5.2 6.8 6.4 6.3 6.3
33 22 6 6 15 21 24 29 40

+1.0 +0.4 -0.9 -1.0 -0.8 +0.3 +0.2 -1.9 -2.0 -1.5 -1.5 -1.5
5.6 6.2 7.5 7.6 6.9 6.3 6.8 8.5 8.6 8.1 8.1 8.1
27 18 15 7 3 6 15 22 24 26 29 33

0.0 -0.5 -1.2 -1.9 -1.1 -0.1 +0.2✓ -0.1 -1.1 -2.9 -1.5 -1.5 -1.5
7.9 8.4 9.1 9.8 9.0 8.0 7.7 8.0 9.0 10.0 9.4 9.4 9.4
33 28 18 14 11 3 6 15 22 24 25 29 40

On Tel. Pole #530 to Left. 92+00

-3.4 -34 -3.4 -3.4 -0.1 +0.4 0.0 -2.0 -2.5 -2.1 -2.1
8.4 84 8.4 8.4 5.1 4.6 5.0 7.0 7.5 7.1 7.1
50 33 20 11 3 7 16 20 25 26 30

-3.6 -3.6 +0.2 +0.4 -0.1 -2.2 -2.3 -1.9 -2.7
8.7 8.7 4.9 4.7 5.2 7.3 7.4 7.0 7.8
21 13 2 7 16 20 26 30 33

Level -3.2 -3.1 -1.7 0.0 +0.4 0.0 -1.3 -1.7 -1.7
8.4 8.3 6.9 5.2 4.8 5.2 6.5 6.9 6.9
22 15 8 2 6 14 19 30 40

-3.4 -2.8 -2.8 2.9 -0.7 +0.2✓ -0.2✓ -1.0 -0.6 -0.0
8.0 7.4 6.4 6.5 4.3 3.4 3.8 4.6 4.2 3.6
36 29 19 12 5 5 13 16 29 40

Station	B.S.	H.I.	F.S.	Rod	Elev.
		217.40			
T.P.	8.71	224.55	1.56		✓ 215.84
97+00				8.3	216.2
98+00				5.6	219.0
99+00				3.0	221.5
B.M.	1.57	✓ 225.69	0.43		✓ 224.12
100+00				3.9	221.8
101+00				4.3	221.4
102+00				4.5	221.2
103+00				5.5	220.2
104+00				6.0	219.7
T.P.	2.27	221.66	6.30		219.39
105+00				3.8	217.86
	12.55 8.29 4.26	221.66 217.40 4.26	8.29		

Check

L ℄ R

-0.7	-0.2	+0.3	-0.5	-1.7	-1.8	-0.7	-0.4	-1.3	-1.3	+3.7	+3.7
9.0	8.5	8.0	8.8	10.0	10.1	9.0	8.7	9.6	9.6	46	4.6
35	30	24	20	15	14	8	10	15	18	29	33

+3.5	+3.9	+1.8	-1.4	-1.5	-0.8	-0.5	-0.8	+3.0	+1.8	-4.2
2.1	1.7	3.8	7.0	7.1	6.4	6.1	5.8	2.6	1.4	1.4
40	32	22	16	13	10	10	14	22	30	40

+2.1	+2.3	+1.7	-1.0	-0.7	-0.4	-0.9	+2.3	+3.0	+2.7
0.9	0.7	1.3	4.0	3.7	3.4	3.9	0.7	0.0	0.3
40	31	22	16	10	8	15	22	30	40

Nail in Box Elder Tree to R. 99+70

	+0.1	-0.2	-1.2	-1.1	-1.7	-1.6	-0.9	-0.7	-0.6	-0.6	-1.2	-1.1	+0.4	+0.8
Level	4.0	4.1	5.1	5.0	5.6	5.5	4.8	4.6	4.5	4.5	5.1	5.0	3.5	3.1
	28	22	20	17	16	13	11	9	10	14	17	18	22	30

-3.7	-3.1	-2.2	-0.7	-0.4	-1.9	-1.9	-0.7	+0.1	
8.0	7.4	6.5	5.0	4.7	6.2	6.2	5.0	4.2	Level
40	22	13	11	7	16	18	22	29	

	-0.6	-1.2	-2.1	-2.1	-0.5	-0.5	-0.5	-1.6	-1.6	+0.1	+0.7	
Level	5.1	5.7	6.6	6.6	5.0	5.0	5.0	6.1	6.1	4.4	3.8	Level
	27	19	17	14	10	8	9	16	19	21	29	

+1.7	+1.7	0.0	-1.9	-2.1	-0.5	-0.4	-1.9	-1.9	+0.4	+0.8	
3.8	3.8	5.5	7.4	7.6	6.0	5.9	7.4	7.4	5.1	4.7	Level
50	29	23	21	16	9	9	16	19	22	32	

0.0	-0.8	-1.5	-3.0	-3.3	-1.8	-1.5	-3.2	-3.2	-1.0	-1.0
6.0	6.8	7.5	9.0	9.3	7.8	7.5	9.2	9.2	7.0	7.0
40	29	24	22	19	11	7	16	20	22	33

-2.3	-2.3	-1.8	-2.5	-2.1	-0.7	-0.4	-0.4	-0.5	-2.7	-2.6	-1.7	-1.6
6.1	6.1	5.6	6.3	5.9	4.5	4.2	4.2	4.3	6.5	6.4	5.5	5.4
50	30	25	22	17	13	10	7	10	14	19	21	33

Station	B.S.	H.I.	F.S.	Rod	Elev.
		221.66			
106+00				4.4	217.3
107+00				4.7	217.0
108+00				4.6	217.1
109+00				4.1	217.6
T.P.	3.92	✓ 221.94	3.64		✓ 218.02
110+00				4.7 ✓	217.2
111+00				4.6	217.3
112+00				5.0	216.9
113+00				4.5	217.4
114+00				4.5	217.4
T.P.	3.57	✓ 221.05	4.46		✓ 217.48
	7.49	221.66 221.05 0.61	8.10 7.49 0.61		

Check

L ℄ R

Level	-2.1	-2.5	-1.1	-0.2	-0.3	-0.7	-3.0	-2.8	-1.5	-1.2	ok
	6.5	6.9	5.5	4.6	4.7	5.1	7.4	7.2	5.9	5.6	
	29	22	16	10	7	11	17	20	22	33	

-2.3	-2.3	-2.5	-0.5	-0.3	-0.6	-3.0	-2.5	ok
7.0	7.0	7.2	5.2	5.0	5.3	7.7	7.2	
40	30	21	13	10	8	15	33	

Level	-1.5	-1.6	-0.6	+0.6	-0.4	-1.1	-2.8	-3.3
	6.1	6.2	5.2	4.0	5.0	5.7	7.4	7.9
	30	17	14	10	6	9	15	33

+0.3	0.0	-1.9	-1.9	-0.1	-0.3	-0.7	-2.0	-2.4
3.8	4.1	6.0	6.0	4.2	4.4	4.8	6.1	6.5
40	27	25	18	14	5	9	13	27

On Tel. Pole #544 on Left.. 108+90

-0.8	-0.8	-1.3	-2.5	-2.3	-0.4	-0.1	-0.8	-2.5	-2.8	-2.0	-2.5	-0.9
5.5	5.5	6.0	7.2	7.0	5.1	4.8	5.5	7.2	7.5	6.7	7.2	5.6
33	28	26	25	18	13	5	9	12	17	18	26	34

-1.2	-1.2	-1.8	-2.3	-0.7	-0.6	-3.1	-3.3	-2.1	-1.6
5.8	5.8	6.4	6.9	5.3	5.2	7.7	7.9	6.7	6.2
40	29	25	22	16	8	11	17	18	33

-1.2	-1.2	-1.1	-1.8	-1.8	-0.1	-0.6	-2.0	-2.2	-1.3	-0.8
6.2	6.2	6.1	6.8	6.8	5.1	5.6	7.0	7.2	6.3	5.8
50	30	26	25	22	13	9	11	18	19	33

lev	-1.1	-1.7	-2.3	-2.3	-1.5	-1.3	-0.5	-0.5	-2.5	-2.7	-1.8	-1.2
	5.6	6.2	6.8	6.8	6.0	5.8	5.0	5.0	7.0	7.2	6.3	5.7
	30	25	23	20	19	16	14	11	13	17	18	33

-0.1	-0.1	-0.9	-2.3	-1.7	-0.6	-0.6	-2.1	-2.2	-1.5	-1.0
4.6	4.6	5.4	6.8	6.2	5.1	5.1	6.6	6.7	6.0	5.5
40	29	25	22	16	14	11	16	20	21	32

Station	B.S.	H.I.	F.S.	Rod	Elev.
		221.05			
115+00				3.7 -	217.3
116+00				4.2 -	216.8
117+00				4.4 -	216.6
118+00				4.3 -	216.7
119+00				4.7 -	216.3
T.P.	3.48	✓ 219.27	5.26	✓	215.79
120+00				3.5 -	215.8
121+00				3.7 -	215.6
122+00				3.7 -	215.6
123+00				4.6 -	214.7
124+00				4.7 -	214.6
	3.48	221.05 219.27 1.78	5.26 3.48 1.78		

Check

L ℄ R

-1.2	-0.0	-2.0	-2.0	-0.5		-0.8	-1.5	-2.3	-2.3	-1.6	-1.8	-0.7
4.9	3.7	5.7	5.7	4.2		4.5	5.2	6.0	6.0	5.3	5.5	4.4
33	28	21	17	12		8	13	16	20	21	26	31

-1.5	-1.5	-1.7	-2.1	-2.3	-0.5		-0.6	-1.8	-1.8	-1.4
5.7	5.7	5.9	6.8	6.5	4.7		4.8	6.0	6.0	5.6
40	33	23	22	17	11		10	17	24	33

-2.3	-2.2	-2.8	-2.4	-0.7		-0.8	-1.9	-2.5	-2.5
6.7	6.6	7.2	6.8	5.1		5.2	6.3	6.9	6.9
33	23	22	17	12		13	15	31	50

-1.8	-1.1	-1.5	-2.9	-2.5	-0.9		-0.7	-0.9	-2.8	-2.8	-1.8	-1.5
6.1	5.4	5.8	7.2	6.8	5.2		5.0	5.2	7.1	7.1	6.1	5.8
40	30	24	22	17	12		9	14	18	26	30	40

-1.6	-1.6	-1.9	-2.6	-2.4	-0.9		-0.6	-0.6	-2.1	-2.4	-0.7	-0.7
6.3	6.3	6.6	7.3	7.1	5.6		5.3	5.3	6.9	7.1	5.4	5.4
40	30	23	22	18	14		9	13	16	25	29	40

On Tel. Pole to Left. 19+90

-2.0	4.0	4.0	-2.0	-1.3	-2.7	-2.2	-1.0		-0.7	-2.5	-2.6	-1.9	-1.9
5.5	7.5	7.5	5.5	4.8	6.2	5.7	4.5		4.1	6.0	6.1	5.4	5.4
34	32	31	28	23	21	19	14		10	13	24	29	40

-0.7	-0.7	-2.6	-1.5	-1.3	-0.8		-0.1	-2.1	-1.4	-1.6	-1.8	-0.4
4.4	4.4	6.3	5.2	5.0	4.5		3.8	5.8	6.1	5.3	5.5	4.1
40	34	32	22	17	13		9	13	20	22	29	40

-1.0	-1.0	-3.0	-3.0	-0.6		-0.4	-1.8	-2.5	-0.9	-0.9
4.7	4.7	6.7	6.7	4.3		4.1	5.5	6.2	4.6	4.6
36	22	21	19	14		10	12	23	27	33

-1.6	-1.6	-0.1	-0.8	-2.6	-2.7	-0.4		-0.3	-0.5	-2.8	-2.4	-1.4	-1.4
6.2	6.2	4.7	5.4	7.2	7.3	5.0		4.9	5.1	6.8	7.0	6.0	6.0
50	28	26	22	21	20	14		8	11	12	26	30	40

-0.4	-0.6	-2.1	-2.4	-3.7	-3.2	-1.3	
5.1	5.3	6.8	7.1	8.4	8.3	6.0	
9	10	13	16	19	23	27	
					℄	-1.3	
						6.0	
						50	

Station	B.S.	H.I.	F.S.	Rod	Elev.
		219.27			
125+00				4.7 -	214.6
126+00				5.2 -	214.1
T.P.	6.38	✓ 220.85	4.80		✓ 214.47
127+00				6.4 -	214.4
128+00				5.2 -	215.6
129+00				4.6 -	216.2
130+00				4.2 -	216.6
131+00				4.4 -	216.4
T.P.	5.08	✓ 221.36	4.57		✓ 216.28
132+00				5.1 -	216.3
133+00				4.6 -	216.8
	11.46	221.36	9.37		
	9.37	219.27			
	2.09	2.09			

Check

L ℄ R

-1.2	-2.8	-1.4	-3.3	-3.3	-0.7	-0.7	-0.5	-1.0	-2.6	-3.5	-1.8	-1.8
6.2	7.5	6.1	8.0	8.0	5.4	5.4	5.2	5.7	7.3	8.2	6.5	6.5
33	27	25	20	19	15	13	7	10	13	24	28	50

—	-2.9	-2.2	-1.9	-3.0	-2.6	-0.5	-0.8	-0.9	-2.9	-2.1	-2.1
	8.1	7.4	7.1	8.2	7.8	5.7	6.0	6.1	8.1	8.3	8.3
	27	25	22	20	18	14	6	9	11	28	40

On Tel. Pole # 558 to Left 126+00

-1.6	-1.6	-1.6	-3.0	-3.0	-0.4	-0.5	-0.6	-0.8	-2.4	-2.6	-2.6
8.0	8.0	8.0	9.4	9.4	6.8	6.9	7.0	7.2	8.8	9.0	9.0
35	25	21	20	19	15	13	6	10	12	28	40

-0.8	-0.8	-1.1	-3.8	-3.8	-1.1	-1.0	-1.0	-1.2	-2.8	-3.7	-2.1	-3.0
6.0	6.0	6.3	9.0	9.0	6.3	6.2	6.0	6.2	8.0	8.9	7.3	8.2
50	24	23	22	20	16	12	7	11	14	26	28	36

-0.6	-0.6	-3.9	-3.9	-0.7	-0.7	-0.8	-0.9	-3.1	-2.3	-0.2	-0.2
5.2	5.2	8.5	8.5	5.3	5.3	5.4	5.5	7.7	7.9	4.8	4.8
50	22	20	17.	13	10	8	12	18	26	31	50

-0.3	-0.3	-0.8	-3.9	-3.9	-0.9	-0.7	-0.8	-1.3	-3.0	-3.1	0.0	0.0
4.5	4.5	5.0	8.1	8.1	5.1	4.9	5.0	5.5	7.2	7.3	4.2	4.3
40	24	22	20	19	14	9.	9	13	16	26	32	45

-2.0	-2.0	-2.1	-3.7	-3.7	-3.4	-1.2	-0.6	-0.6	-0.9	-2.8	-3.3	-1.6	-1.6
6.4	6.4	6.5	8.1	8.1	7.8	5.6	5.0	5.0	5.3	7.2	7.7	6.0	6.0
40	24	21	20	19	17	13	9	8	13	17	27	32	50

-2.7	-2.7	-2.5	-1.1	-1.0	-0.8	-1.0	-2.9	-2.9	-2.3
7.8	7.8	7.6	6.2	6.1	5.9	6.1	8.0	8.0	7.4
40	23	17	12	10	9	15	18	29	33

-1.9	-1.9	-2.5	-2.5	-1.7	-0.8	-0.4	-1.0	-2.1	-2.6	-1.4	-1.4
6.5	6.5	7.1	7.1	6.3	5.4	5.0	5.6	6.7	7.2	6.0	6.0
33	24	20	16	13	8	9	14	17	27	33	40

Station	B.S.	H.I.	F.S.	Rod	Elev.
		221.36			
134+00				4.4	217.0
135+00				4.0	217.4
135+20	End Location			4.0	217.4

L ℄ R

-1.3	-1.3	-1.9	-1.9	-0.9	-0.7	-1.1	-2.3	-2.8	-1.2	-1.0
5.7	5.7	6.3	6.3	5.3	5.1	5.5	6.7	7.2	5.6	5.4
35	25	22	15	9	9	13	16	22	25	33

-1.0	-1.0	-1.8	-2.6	-2.0	-1.0	-0.5	-1.4	-1.4	-0.6	-0.0
5.0	5.0	5.9	6.6	6.0	5.0	4.5	5.4	5.4	4.6	4.0
33	24	19	18	14	11	10	12	18	28	35

" "

Culverts on
Centerville Road - Ramsey Co
Line No. to Centerville.
Page 1 + 2

(Copy)

Proj: 23-03

Station	Present Culv.	Recommended Culv.
16+90	No. "	18" x 45'
28+50	24" x 30' vit.	W 33 - 35'
	This Culvert takes care of Large Drainage ditch.	
44+33	24" wood box & vit.	18" - 35'
	This culvert takes care of drainage ditch.	
66+80	12" x 30 C.I.P.	18" - 35'
	Equalizer	
73+45	12" x 30 C.I.P.	18" - 35'
	Equalizer	
76+60	12" - 20' C.I.P.	18" - 35'
	Equalizer	

Invert El.

" " 215.65 214.15

Drains R 13

Invert Elev. 210.55

Drains R

Invert Elev. 213.82

Drains R

Invert. Elev. 208.52

Invert Elev. 209.1

Invert Elev. 209.5

Station	Present Culv.	Recommended Culv.
93+60	12" x 30' C.I.P.	18"-35'
	Takes care of drainage ditch.	
106+70	12" x 30' C.I.P.	18"-35'
124+15	24" x 30' C.I.P.	W22-35'

Invert Elev. 208.0

Invert Elev. 214.6

Invert Elev. 210.0