

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

Road Map Survey

LONG LAKE ROAD

From Co. Rd. 'E' To No. Co. Line

Road Acc't. No. 12

Date Filed.....

File.....

ALIGNMENT NOTES
FOR THAT PORTION OF
CO. RD. #12 AT CARD "E"

T. L. Church
3-14-40

25+19.10

Edge of Conc. on S.T.H. #8

17+82.0

Approx. $\pm$ Co. Rd. "E"

4+42.61

S. Line Sec. 29.

3+37.0

$\pm$ North Track

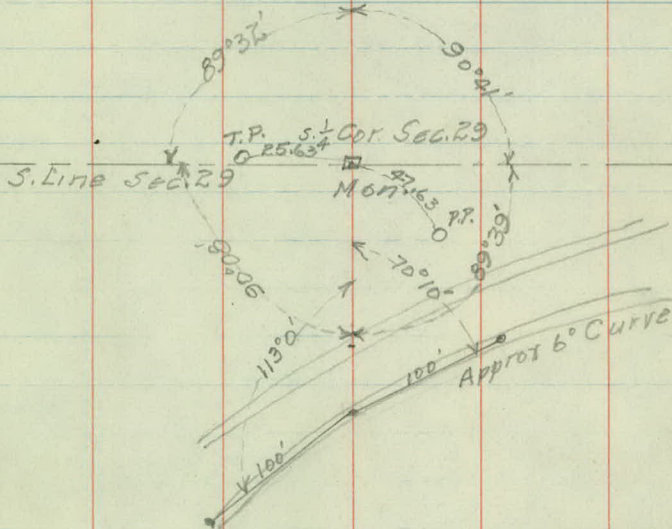
3+14.95

$\pm$ South Track

0+00

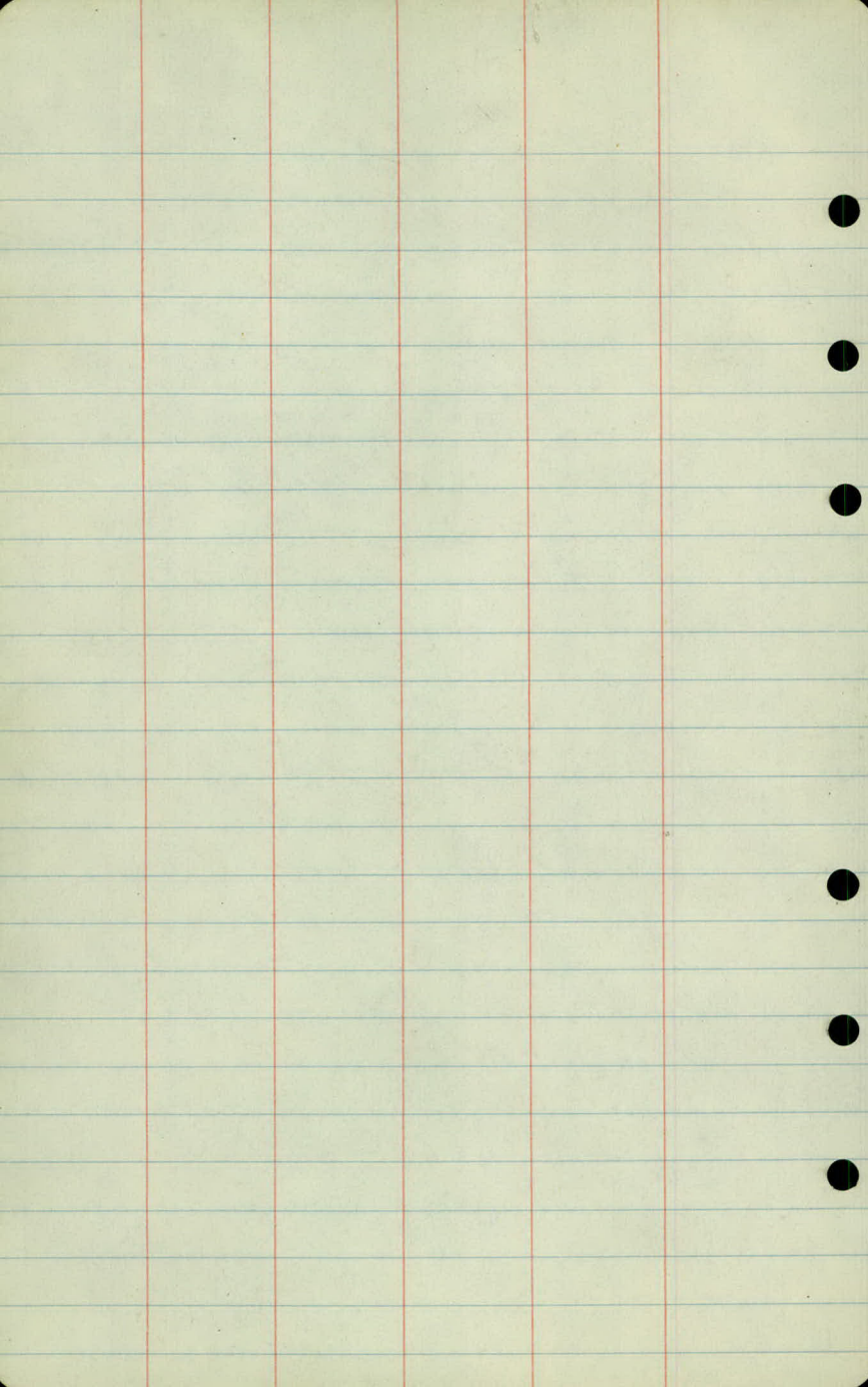
S.T.H. #8
 12" Oak
 65.8
 Nail Edge of Conc.
 63.15
 14" Oak.

Approx. E Co. Rd. E



S.T.H. #8

T.P. Conc. spike Edge of Conc.
 54.75
 50.60
 P.P.



TOPOGRAPHY ON ROAD #12
AT CO. RD. 'E'

T. L. Church

3-14-40

25+19.10 Edge of Cono. Avt.

6.0 24+46 Stop Sign

22.018+11 Cross Rd. Sign

18+02 Int. Sign.

27.0

17+82 $\angle$ Co. Rd. "E"

16+60 Drive

13+37 $\angle$ North Track

13+14.95 $\angle$ South Track

11+41 Drive

6+51 15" Corr. Iron Culv.

1+87 Stop Sign . 12.0

S.T.H. #8

30'

Stop
sign

Cross
Road
sign

Int. sign

Co. Rd. "E"

Drive

Sootling Tracks.
Approx. 60 Curve

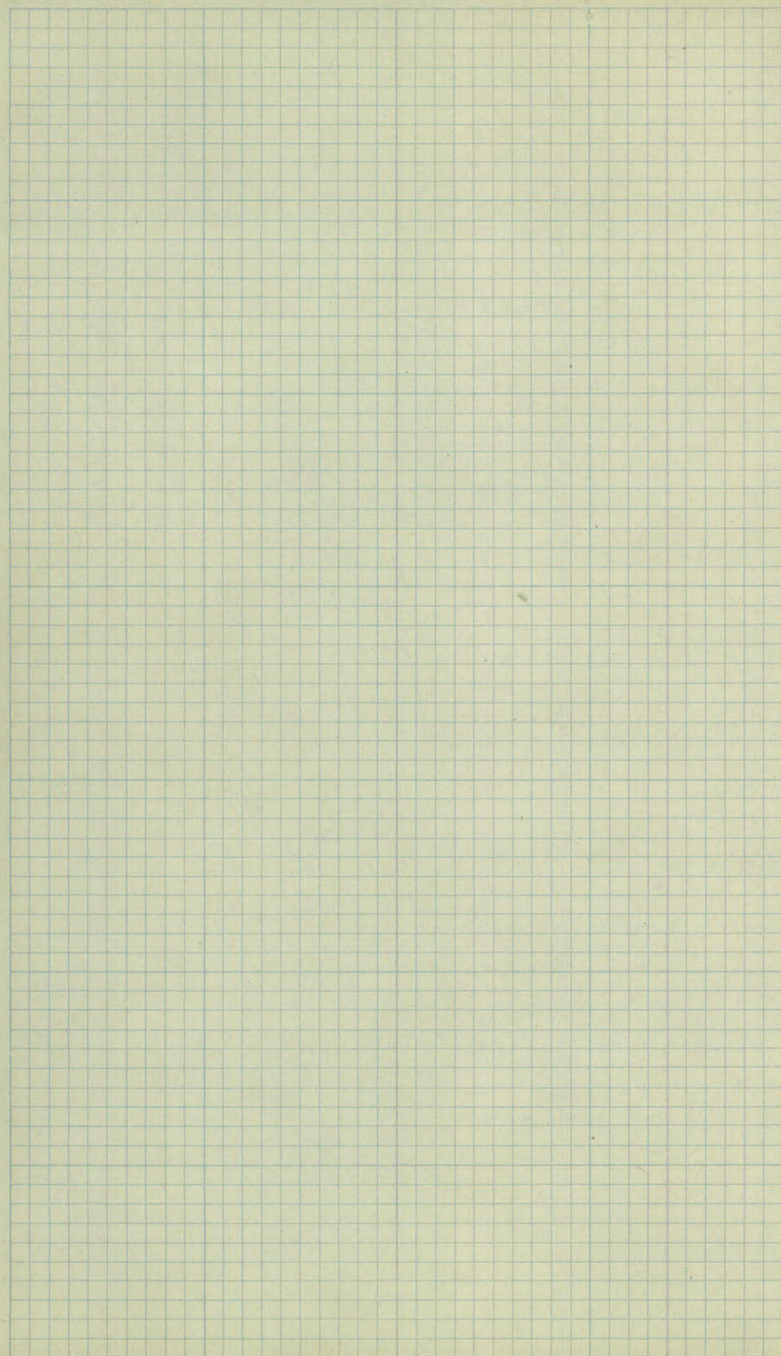
Drive

15" Corr. Iron.
65' Long

stop
sign

S.T.H. #8

6000



586E

Alignment Notes

Long Lake Road.

From 603.2' N. of Center Sec. 29-23-30
To N. County Line

12

T.L. Church

3-14-40

Sta.	Pt.	Ang. Lt.	Ang Rt.	Calc. Brg.
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20+30.91	P.O.T. Mon.			
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12+49.25	P.O.T.			
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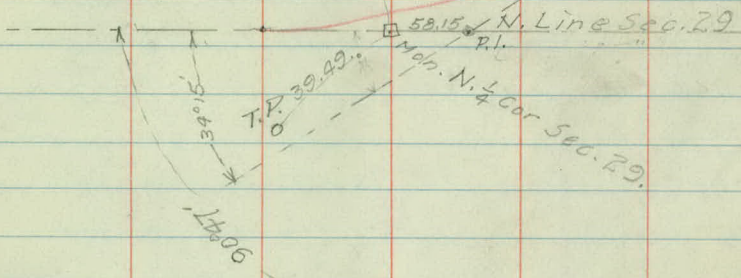
7+13.5	Intersection & Cemetery Rd.			
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0+00	Edge Conc. P.Vt. T.H. #8			
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Frame House

$A = 34.16'$
 $L = 285.42$
 $T = 149.90$
 $R = 474.34$

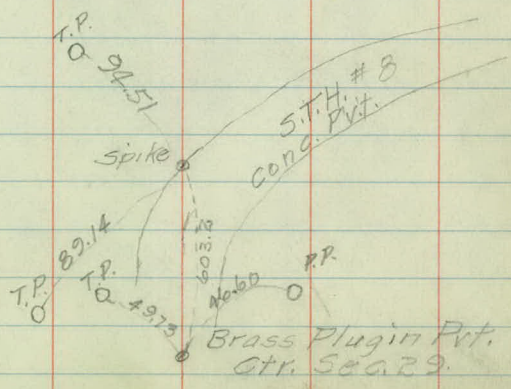
12° Curve to Co. Rd. F



146.06

Assumed North
spike

Cemetery Road
under Construction



Sta.	Pt.	Ang. Lt.	Ang. Pt.	Calc. Bearing
				N18°25'W
32+74.06	P.T.		35°24'	
32+50			33°35.7'	
32+00			29°50.7'	
31+50			26°05.7'	$\Delta 70^\circ 48'$
31+00			22°20.7'	$D = 15^\circ R$
30+74.28	P.I.			$T = 272.22$
30+50			18°35.7'	$L = 472.0$
30+00			14°50.7'	$R = 383.06$
+50			11°05.7'	
29+00			7°20.7'	
28+50			3°35.7'	
28+02.06	P.C.	15° Curve	Right.	
21+22.66	P.T. of Curve	in Co. Rd. "F"		
				N89°13'W
20+30.91	Mon.			

46.84 Spike T.P.
61.160

N 45 $\frac{1}{4}$ Line Sec 29
E Long Lake Rd.

Sta.	Pt.	Ang. Lt.	Ang. Rt.	Calc. Bearing
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54+35.6	P.O.T.	Intersection Side Rd.		
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N 18° 25' W

58+24.25	Intersection & Side Road.			
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58+18.41	P.O.T.			
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$\swarrow$ 112° 40'
 T.P. 58.83
 Spike
 99.94 OPP.

$\leftarrow$ 18°

Side Road.

24" Cottonwood.
 74.11
 Nail
 T.P. 29.11

Sta.	Pt.	Ang Lt.	Ang. Rt.	Calc. Brg.
75+22.0	P.O.T.			
66+08.12	P.T.		44°17'	
66+00			43°29.5'	
+50			38°37'	
65+00			33°44.5'	
64+50			28°52'	$\Delta 88°34'$
64+36.13	P.I.			$D = 19°30'$
				$T = 287.95$
64+00			23°59.5'	$L = 454.18$
+50			19°07'	$R = 295.25$
63+00			14°14.5'	
+50			9°22'	
62+00			4°29.5'	
61+48.18	P.C.	19°30'	Curve Right	
59+57.75	P.T.			$N 89°18' W$
59+57.75	P.T.	35°26.5'		
59+00		30°14.7'		
+50		25°44.7'		$\Delta 70°53'$
58+00		21°14.7'		$D = 18°$
57+91.44	P.I.			$T = 227.49$
+50		16°44.7'		$L = 393.8$
57+00		12°14.7'		$R = 319.62$
+50		7°44.7'		
56+00		3°14.7'		
55+63.95	P.C.	18°	Curve Left	

T.P. 38.95 $\circ$ Nail
 26.85 $\circ$ 20" Cottonwood
 31.0 $\circ$ 20" Cottonwood

Mon. $W\frac{1}{4}$ Cor. Sec. 20
 N $0^{\circ}44'W$

21.0 T.P.
 $\circ$

$\Rightarrow \circ \Rightarrow N$

G.P. 024.12
 P.P. 063.91 $\circ$ Spike
 29.15 $\circ$ P.P.

5

Sta.	Pt.	Ang Lt.	Ang Rt.	Calc, Bearing
				N0°42'E
96+20.90	P.T.		45°47'	
96+00			43°28.6'	
+50			37°36.1'	Δ 91°34'
95+00			31°43.6'	D = 23°30'R
94+83.57	P.I.			T = 252.31
+50			25°51.1'	L = 389.64
94+00			19°58.6'	R = 245.5
+50			14°06.1'	
93+00			8°13.6'	
+50			2°12.1'	
92+31.26	P.C.	23°30'	Curve Right	589°08'W
91+24.43	P.T.	45°04'		
91+00		42°41'		
+50		37°48.5'		Δ 90°08'
90+00		32°56'		D = 19°30'L
+50		28°03.5'		T = 295.94
89+58.25	P.I.			L = 462.22
89+00		23°11'		R = 295.25
+50		18°18.5'		
88+00		13°26'		
+50		8°33.5'		
87+00		3°41.5'		
86+62.81	P.C.	19°30'	Curve Left.	

N 0° 43' E
 Nail
 54.00
 11.67
 4 Willow

N. Line Sec.

16" Oak

35.260

Mon. N. W. Cor. Sec. 20

W. Line Sec. 20

49.01

20" Oak

Sta.	Pt.	Ang Lt.	Ang Rt.	Calc. Brg.
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N19°42'W

108+67.49	P.T.	10°12'		
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108+50		9°37.5'		
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108+00		7°57.5'		
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+50		6°17.5'		
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 $\Delta 20^{\circ}24'$ $D = 6^{\circ}40' L$

107+15.91	P.T.			
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 $T = 154.72$

107+00		4°37.5'		
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 $L = 306.30$

+50		2°57.5'		
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 $R = 859.92$

106+00		1°17.5'		
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105+61.19	P.C.	6°40' Curve Left.		
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106+89	Approx. Int. Rice Crk Rd.			
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N0°42'E

103+72.6	Approx P.C. Turnout to Rice Crk Rd.			
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T.P. 58.98 P.I. P.P.
15.4

← Rice Ck Rd
Approx. Rad. 330.0'
E = 130.2
88° 27' 47"

7

Sta.	Pt.	Ang. Lt.	Ang Rt.	Brg.
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120+72.78 P.T.

N 89° 02' E

 $\Delta 77^\circ 20'$

D = 120° Right

120+40.71 P.I.

T = 45.88

L = 77.95

119+94.83 P.C. Right Turn

R = 57.33

N 11° 42' E

111+93.06 P.T.

15° 42'

+50

12° 02.4'

 $\Delta 31^\circ 24'$

111+03.44 P.I.

D = 17° R

111+00

7° 47.4'

T = 95.08

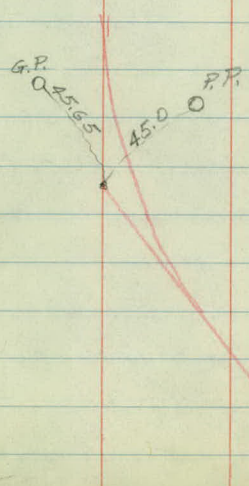
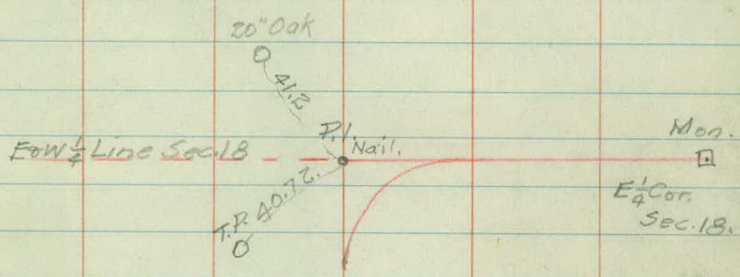
110+50

3° 32.4'

L = 184.70

110+08.36 P.C. 17° Curve Right

R = 338.27



Sta.	Pt.	Ang Lt.	Ang Rt.	Calc. Brg.
				N0°03'W

152+47.55	P.I.	0°45'		
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144+33.15	P.O.T.			
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132+94.89	P.O.T.			
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N0°42'E

129+50.90	P.O.T.	Int. & Minn. Transfer Ry.		
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126+84.22	P.T.			
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 $\Delta 88^{\circ}20'$

D = 78°L

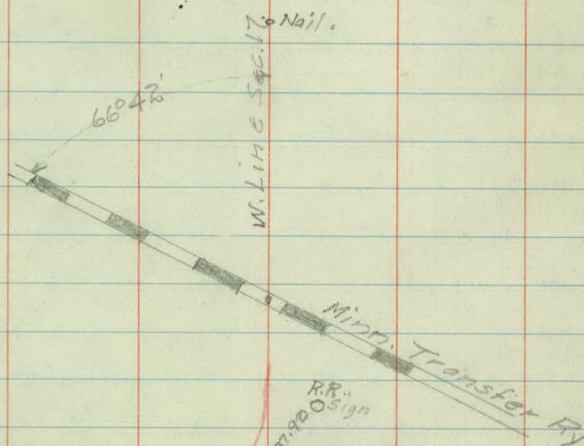
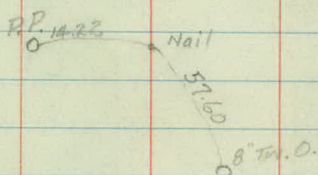
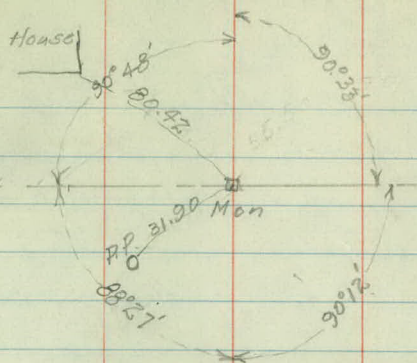
126+38.89	P.I.	Mon. E $\frac{1}{4}$ Cor Sec. 18	T = 77.17	
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125+61.72	P.C.	Left Turn.		
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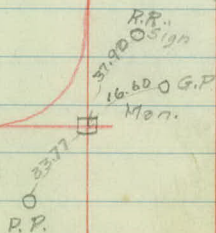
L = 122.5

R = 79.45

N89°03'E



E.W. $\frac{1}{2}$ Line Sec. 18
N 89° 02' E



Sta.	Pt.	AngLt.	Ang.Rt.	Calc. Brg.
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				N0°03'W
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231+84.82	P.O.T. Mon.			
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				N0°03'W
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205+36.74	P.I.			
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			0°02'	
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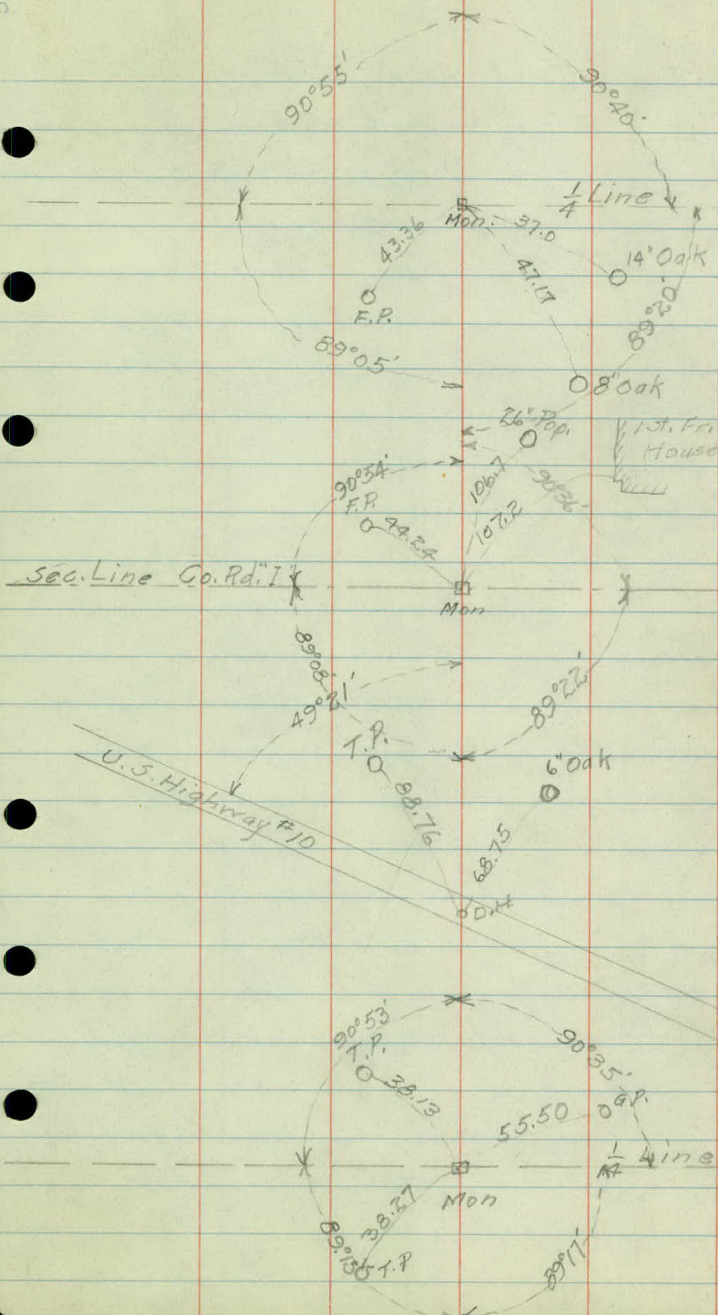
194+05.25				
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				N0°05'W
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78+87.68	P.I.			
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			0°08'	
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				N0°03'W
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Sta.	Pt.	Ang Lt.	Ang Pt.	Calc. Bearing
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265+13.18	Co. Line			
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N0°03'W.

N.W. Cor. Sec. 5

Mon.

94.28

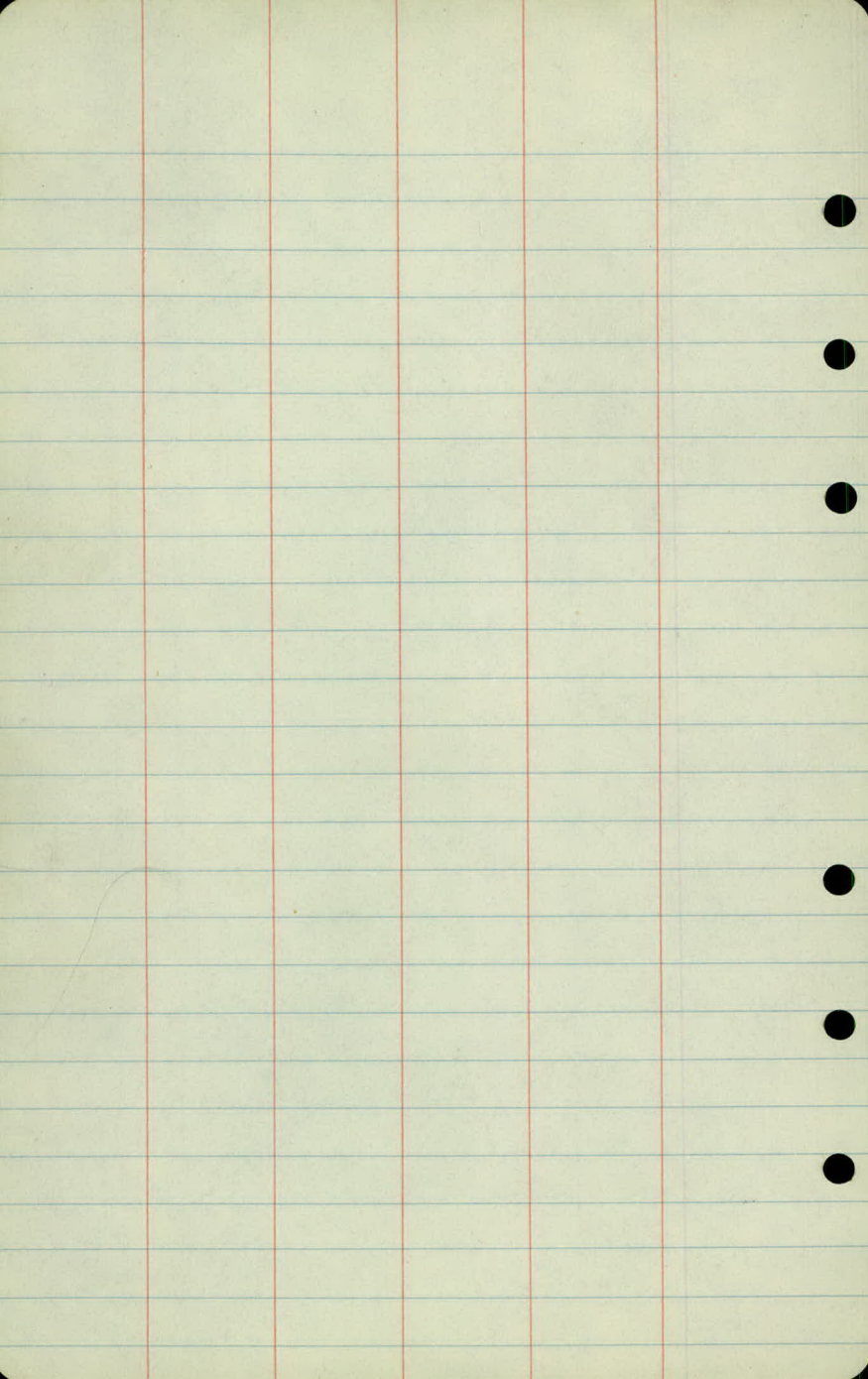
153.90

91.05

Willow

89° 0'

06" Elm



TOPOGRAPHIC NOTES

LONG LAKE ROAD.

T.L. Church

3-14-40

20+40 Drive

20+30.91 Intersection & Co. Rd. "F"

20+05 Road Int. Sign 29.0

19+79 No Tractor Sign 17.0

17+09 Drive

7+18.5 & Cemetery Road

18.0 5+23 Side Rd. Sign

27.0 1+18 Road Name Sign

0+95 Stop Sign 19.0

0+61 Intersection Side Rd

21+22.66 P.T.

Drive

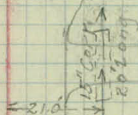
Go. Rd. A.

Black Top.

P.I.

Road Lgt. Sign

No Tractor Sign



Cemetery Road

Under Construction

Dirt Road Under Const.

30' Roadway

Side Rd. Sign

Road Name Sign

Stop Sign

Dirt Road

Edge of Conc Pavmt on T.H. #8

0+00

Platted

27+45 24" Conc. Pipe Culv.

26+15 Begin Guard Rail 12.5

25+94 Drive

13.0 25+87 Begin Guard Rail
15.0 25+84 Turn Sign

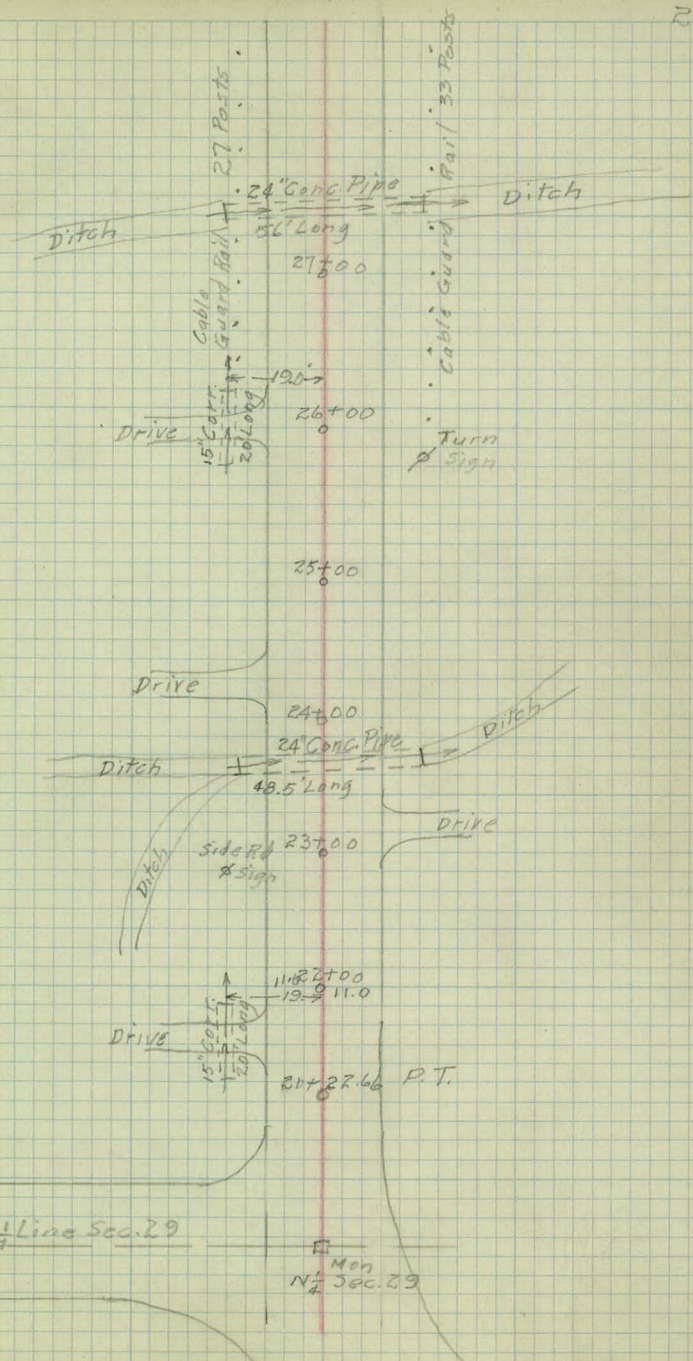
24+11 Drive

23+64 24" Conc. Pipe Culv.

23+03 Drive

22+90 Side Rd Sign 17.0

21+50 Drive



N+5 1/4 Line Sec. 29

Mon
N 1/4 Sec. 29

19.5 52+06 Turn Sign
50+07 Drive

45+28 End Guard Rail 14.0

11.0 43+58 End Guard Rail

42+62 Begin Guard Rail 12.0

11.0 42+01 Begin Guard Pl.

38+24.25 Int. & Side Rd

22.0 34+66.5 Turn Sign

30+22 Drive

13.5 29+79 End Guard Rail

29+24 End Guard Rail 22.0

Cable Guard Rail
23 Posts 0 0

Turn Sign
Drive

Cable G.R.
14 Posts

18°

Turn Sign

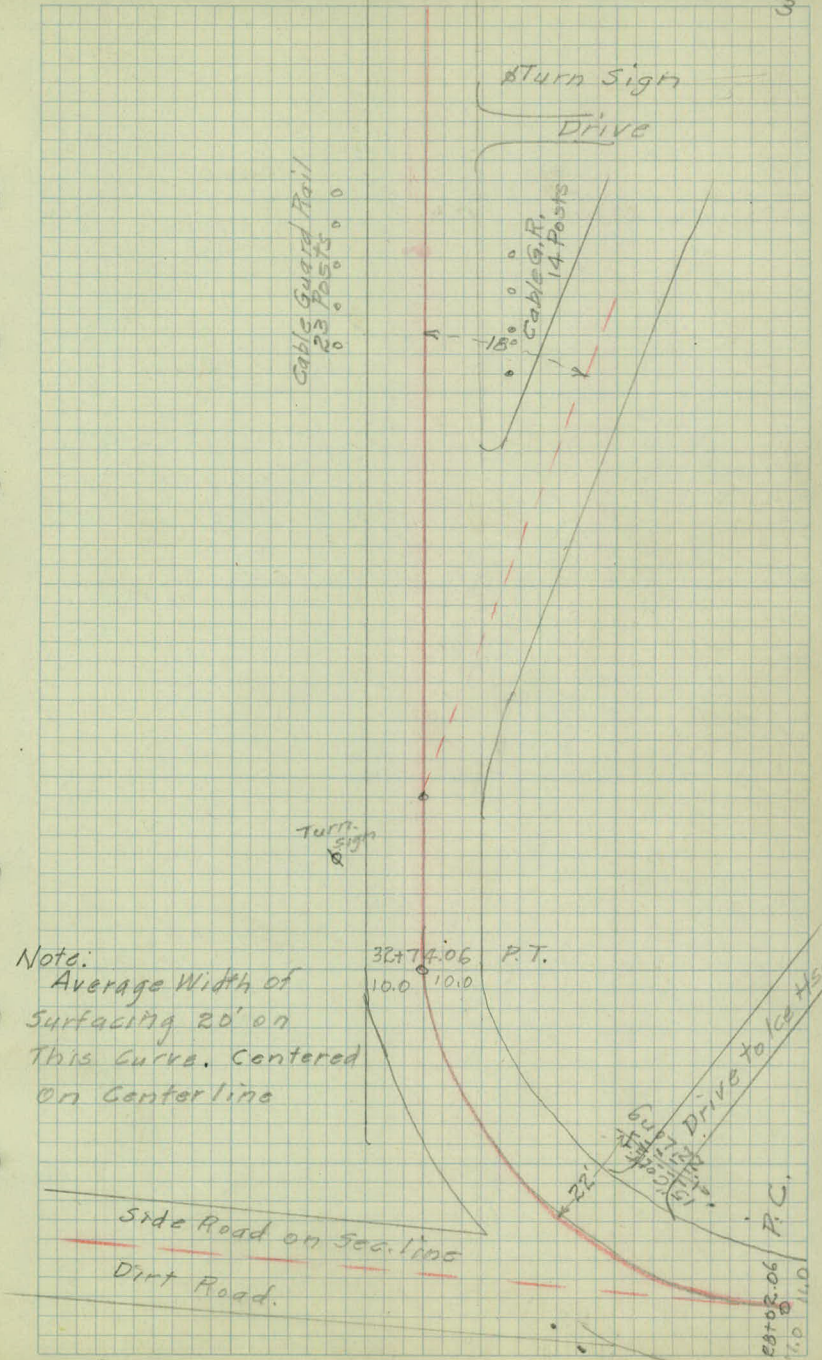
Note:
Average Width of
Surfacing 20' on
This Curve. Centered
on Centerline

32+74.06 P.T.
10.0 10.0

Drive to Ice House
60' 10" (20.31)

Side Road on Sea. line
Dirt Road.

33+02.06 P.C.
10.0 11.0



17.0 57+13 Begin Guard Rail
56+73 Drive
16.0 56+63.5 End Guard Rail
17.5 56+62 Reflector Sign

56+11 End Guard Rail

13.8

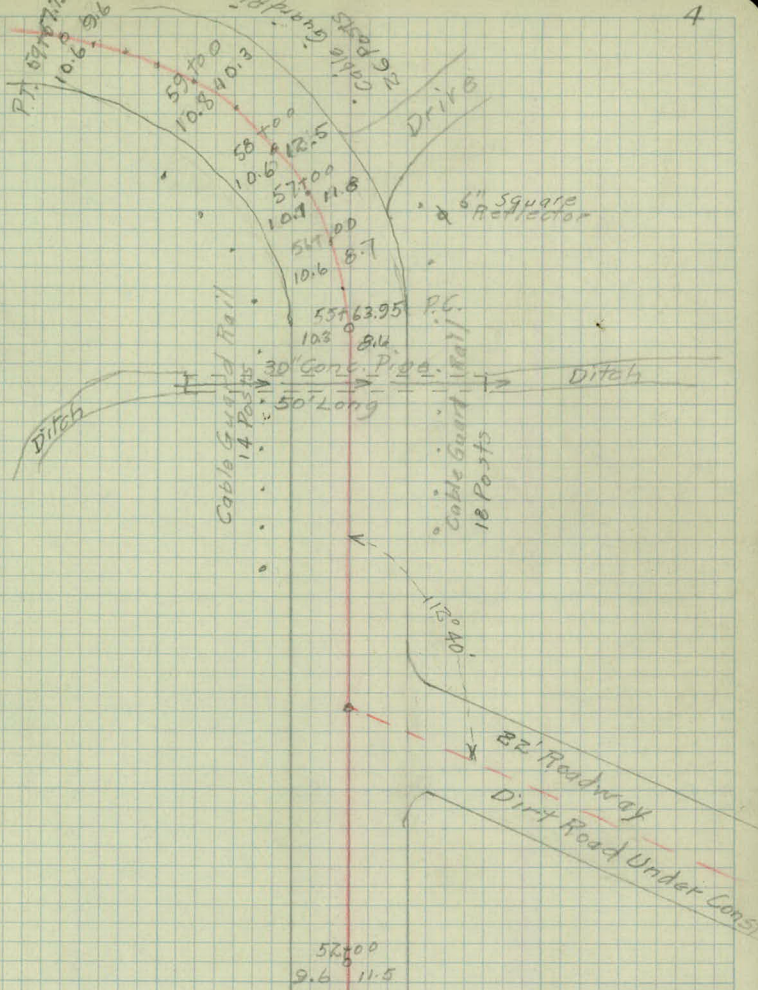
55+55

30" Conc. Pipe Culv.

11.5 54+75 Begin Guard Rail

54+51 Begin Guard Rail 13.0

54+35.6 Int. & Side Road



72+00 Drive

71+78 Drive

71+37 Drive

69+73 Drive

68+86 Turn Sign 17.5

67+89 Drive

65+50 Drive

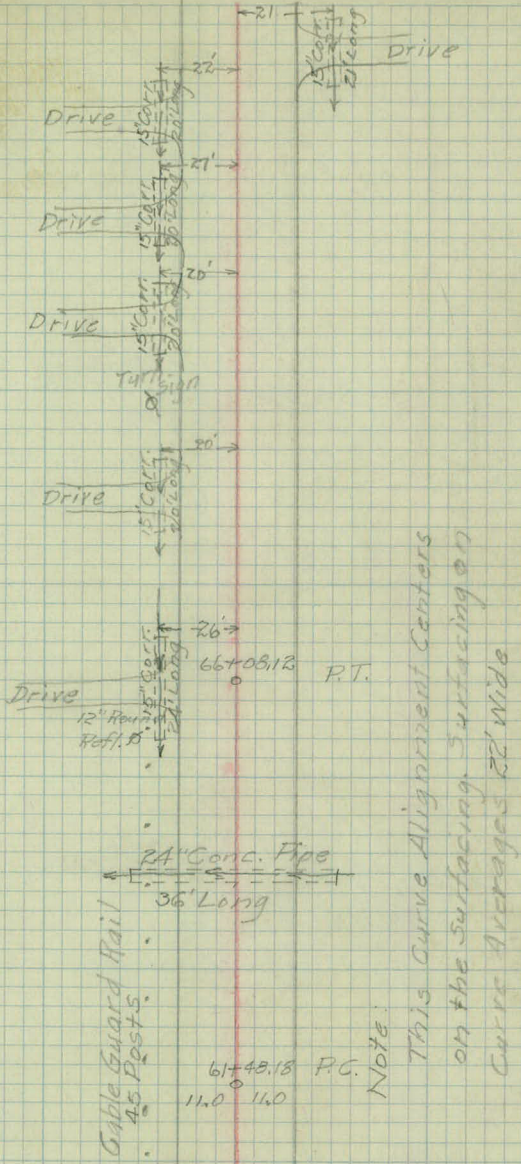
65+36 End GR	14.0
65+29 Refl	12.0

63+08

24" Conc Culr 36"

60+22.5 Begin Guard Rail 13.0

12.5 60+06 End Guard Rail



89+41 Begin Guard Rail 12.0

15.0 87+73 End Guard Rail

19.0 87+47 12" Reflector

86+70 24" Conc. Pipe Culv.

12.0 85+12 Begin Guard Rail

84+23 Drive

15.3 83+93 Turn Sign

82+47 Drive

12.5 81+82 End Guard Rail

80+59 Drive

80+29 Conc. Pipe Culv.

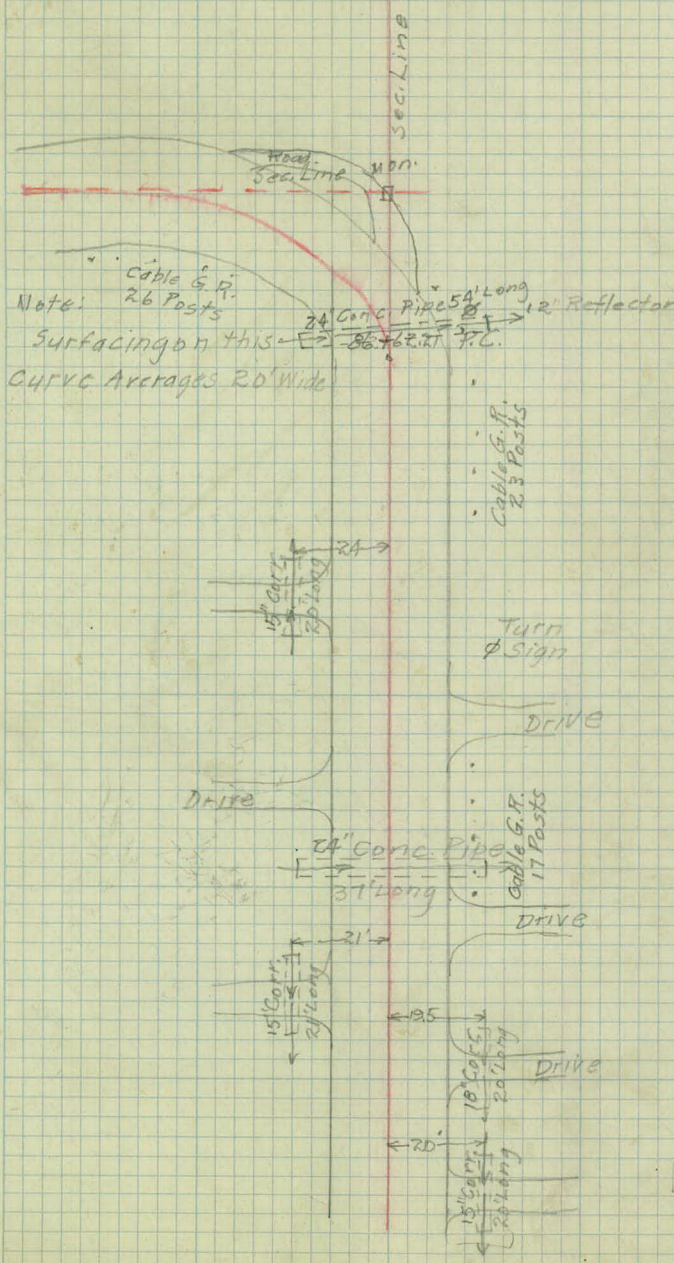
12.5 80+01 Begin Guard Rail

79+82 Drive

76+42 Drive

75+68 Drive

72+92 Drive



106+95 No Tractor Sign 18.5

106+91 24" Conc. Pipe Culv.

106+89 Intersection @ Rice Crk Rd.

28.0 106+42 Int. Sign & Refl.

13.2 105+21 End G.R.

104+86 End G.R. 35.0

103+72.6 R.C. Turnout Rice Crk Rd.

103+43 Begin G.R. 13.3

13.3 103+29 Begin G.R.

17.0 102+66 Side Rpt Sign

17.0 101+68 Turn Sign

98+67 Turn Sign 20.0

95+71 End G.R. 18.0

95+22 Reflector Sign 23.0

95+22 Drive

93+50 Begin G.R. 17.5

92+51 End G.R. 13.0

92+44 Turn Sign 12.5

23.0 90+60 Turn Sign

No Tractax
sign
24" Conc. Pipe
45' Long

Intersection Sign
Button Reflector

105+61.9 P.C. Left.

Cable G.R.
13 Posts

Cable G.R.
17 Posts

Side Rd
sign

Turn
sign

Turn
sign

56+20.9 P.T.
10.0 10.0

12' Reflector

Cable G.R.
21 Posts

DRIVE

Turn sign

92+31.26 P.C. Right

Cable G.R.
26 Posts

91+24.43 P.T.

Turn Sign

25.0 118+04 Turn Sign

117+61 Drive

21.0

117+40 Drive

115+88 End G.R.

12.3

115+73 Drive

14.0 115+53 End G.R.

114+32 Begin G.R.

13.8

13.8 114+32 Begin G.R.

114+22 End Bridge

113+74 Begin Bridge

113+65 End G.R.

13.8

13.8 113+65 End G.R.

113+18 Begin G.R.

13.8

112+95 Drive

13.0

112+92 Begin G.R.

112+12 Drive

110+58 Side Rd. Sign

25.0

109+29 Long Lake Sign 21.0

Turn
Ø Sign

Drive

Drive

Drive

Note:

This section of
Road Covered with
Ice. Edges of
Surfacing Not
Known

Cable G.P.
14 Posts

Cable G.P.
11 Posts

GA
Bridge
#4513

Conc. Bridge
& Rails
Conc. Wing Walls

Rice Creek

Cable G.P.
5 Posts

Cable G.P.
7 Posts

Drive

Drive

411+93.06

P.T.

Side Rd
Ø Sign

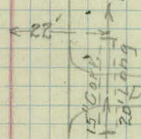
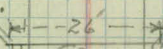
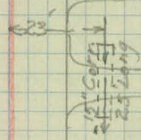
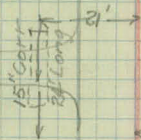
110+08.36

P.C. Right

Long Lake
Ø Sign

108+67.49 P.T.

11.0 11.0



123+47 Turn Sign

18.5

12.5 123+17 Turn Sign

121+89 Drive

125761.12
0

P.C. Left Turn

Note:

This section of
Roadway Built about
2' To Left of $\frac{1}{4}$ Line

Turn
& Sign

Turn
& Sign

122700
27
12.5 8.5
Drive

120772.78
11.6 8.5

P.T. Z

Note:

Roadway on this turn
Buried under 1' of Ice.

119794.83 P.C.
10.0 10.0

Drive

151+00 School Sign 14.5

151+05 Drive

147+25 Drive

146+08 Drive

22.7 140+63 School Sign

132+42 R.R. Sign 16.0

129+97 Drive To Brick Plant.

129+50.90 ∇ R.R. Tracks

129+25 Drive

129+05 Turn Sign 16.0

128+45 Drive

126+47 10" Conn. Iron Culv.

23.0 126+35 R.R. Sign

Schod.
Sigen
Ø

Drive

Drive

Drive

Notes:

This Section of
Road Built to Right
of Section Line
About $1\frac{1}{2}$ ' To Co. Rd
442

♂ School
sign

R.R. Signs

Drinking

Side Road
Parallel to R.R.
R.R. Track

Drive

126+84.22 P.T.

10.0 0 10.0

3

2.5 @ 16.5

3.60

Q R R
Sigh

16.5 190+72 Sted Post for Sign

184+24 Cross Rd. Sign 120

178+62 Int. Sign 22.0

14.0 175+11 Cross Rd Sign

168+73 15' Corn. Iron Culv.

165+75 Drive

157+44 Drive

Steel Post
for Sign

Steel Post
for Sign

Co. Rd. H³
Dirt Road.

178+37.66

Int. Sign

Cross Rd.
Sign

15' Corn. Iron
33.5' Long

18'
Culvert
Drive

Drive

152+47.55

Co. Rd "H"

219+69 15" Corr. Iron Culv.

194+71 Stop Signs 19.0

194+05.25 4 Conc Pkts

193+76 Int. Signs 24.0

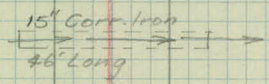
25.5 193+67

Dirt Road.

231+84.82 $\frac{1}{4}$ Line

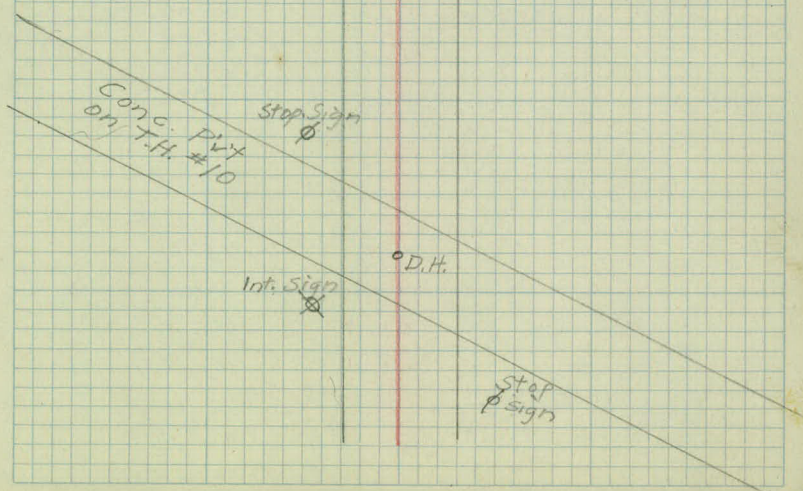
Note:

Edges of Surfacing
From Co. Rd. "H" To N
Co. Line Very irreg-
ular and Broken



Co. Rd. "I."
Dirt Road

205+36.74 Sec. Line



✓
255+00 Drive

254+05 Drive

247+00 Drive

243+92 Drive

240+04 Drive

239+34.5 Drive

237+50 15" Corr. Iron Culv.

Black Top.

Co. Rd. "J"

Co. Line

Drive

Drive

Drive

Drive

Drive

Drive

15" Corri.

46' Long

