PLANS SURVEY

LAKE DEMONTREVILLE ROAD

From East County Line

To Long Lake Road

CO. PROJ. Nº 24-52

Line Change
& Line Extension

Proj- 24-52

Index

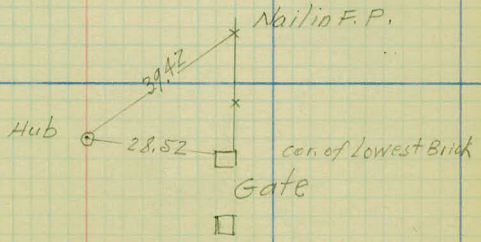
Alignment

Station 148+29.4 ; 202+73

Proj- 24-52

Station	Point	L	R	Bear.
				N. 39°-32' E.
156+14.07	P.T.		5°30.1'	
156+00			5°-13.1'	
155+50			4°13.1'	4° C.R.
155+00			3°13.1'	Δ 11°-00'
154+50			2°13.1'	P.I. 154+77
154+00			1°13.1'	T. 137.93
153+50			0°13.1'	L. 275.00
153+39.07	P.C.		0°00.'	
				N. 48°-32 E.
149+63.98	P.T.	13°-26.5'		20° C.L.
149+50		12°-03.6'		Δ 26°-55'
149+00		7°-03.6'		P.I. 148+98.3
148+50		2°-03.6'		T. 68.90
148+29.4	P.C.	0°-00'		L. 134.58
				N. 75°-27' E.

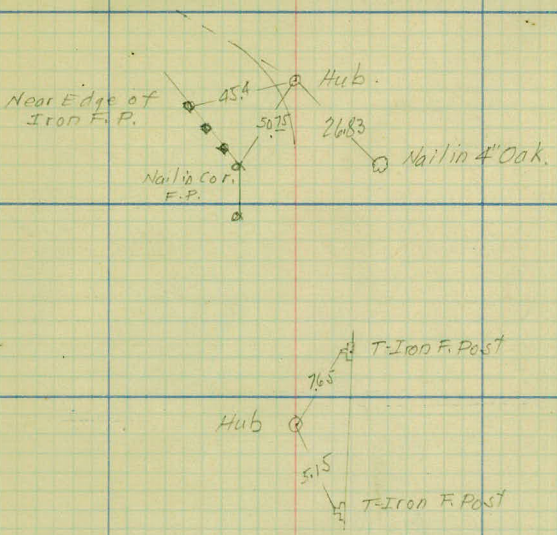
⊙ Hub.



W.H.C
Eck.
Gavin
Franke

July 25-1924

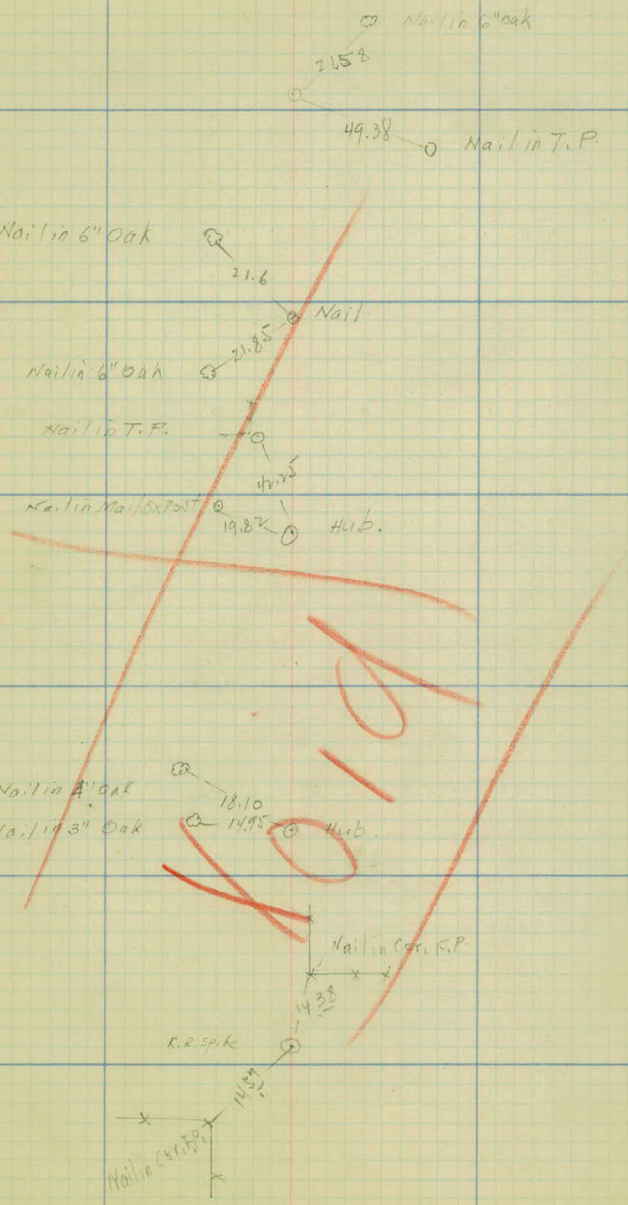
Station	Pt.	L	R.	Bear.
				N. 2° 48' W. ✓
171+49.99 ✓	P.T.	26°-35'		
171+49.77 = 171+00		20°-20.1'		25° C.L.
170+50		14°-05.1'		Δ 53°10'
170+00		7°-50.1'		P.I. 170+52.7
169+50		1°-35.1'		T. (115.38) 115.60 ✓
169+37.32 169+37.1 ✓	P.C.	0°-00'		L. 212.67 ✓
				N. 50°22' E. ✓
167+14.3 ✓	P.T.		15°30'	
167+00			14°-47.1'	
166+50			12°-17.1'	10° C.R.
166+00			9°-47.1'	Δ 31°-00'
165+50			7°-17.1'	P.I. 165+63.1
165+00			4°-47.1'	T. 159.10 ✓
164+50			2°-17.1'	L. 310.2° ✓
164+04.3 ✓	P.C.		0°-00'	
				N. 19°22' E. ✓
160+78.20 ✓	P.T.	20°-05'		
160+50		17°-16.7'		20° C.L.
160+00		12°-16.7'		Δ 40°-10'
+50		7°-16.7'		P.I. 159+82.5
159		2°-16.7'		T. 105.28 ✓
158+77.22 ✓	P.C.	0°-00'		L. 200.83 ✓
				N. 59°-32' E. ✓


Near Edge of Iron F. P.
45.4
Hub.
50.75
26.83
Nail in 4" Oak.
Nail in Cor. F.P.
T-Iron F. Post
76.5
Hub
5.15
T-Iron F. Post
Hub.

Station	Pt.	L	R.	Bear.
202+73.00	℄ Long Lake Road.			
192+11.00	P.O.T.			N. 1°-03' W. ✓
188+14.1	P.I.	98°-10'		
182+11.35	P.O.T.			N. 89°-07' E. ✓
175+12.1	P.I	91°-55'		
				N. 2°-48' W. ✓

10 rd

W.H.C
Eck. July 28-1924
Gahrig
Franke



Art. Topog.

Proj - 24-52

Station.

153

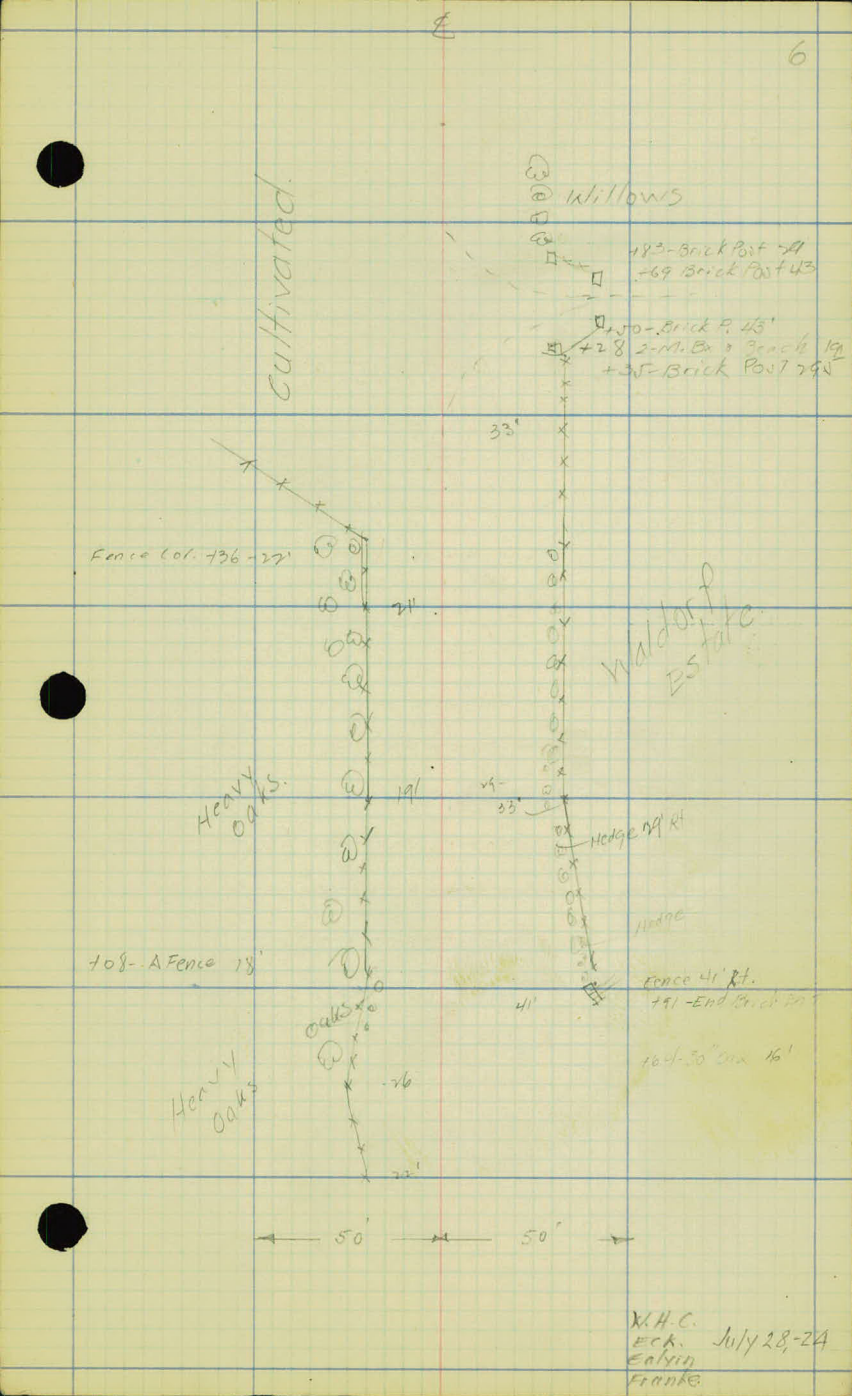
152

151

150

149

148



W.H.C.
E.C.R. July 28-24
Evelyn
Frankie

station.

159

158

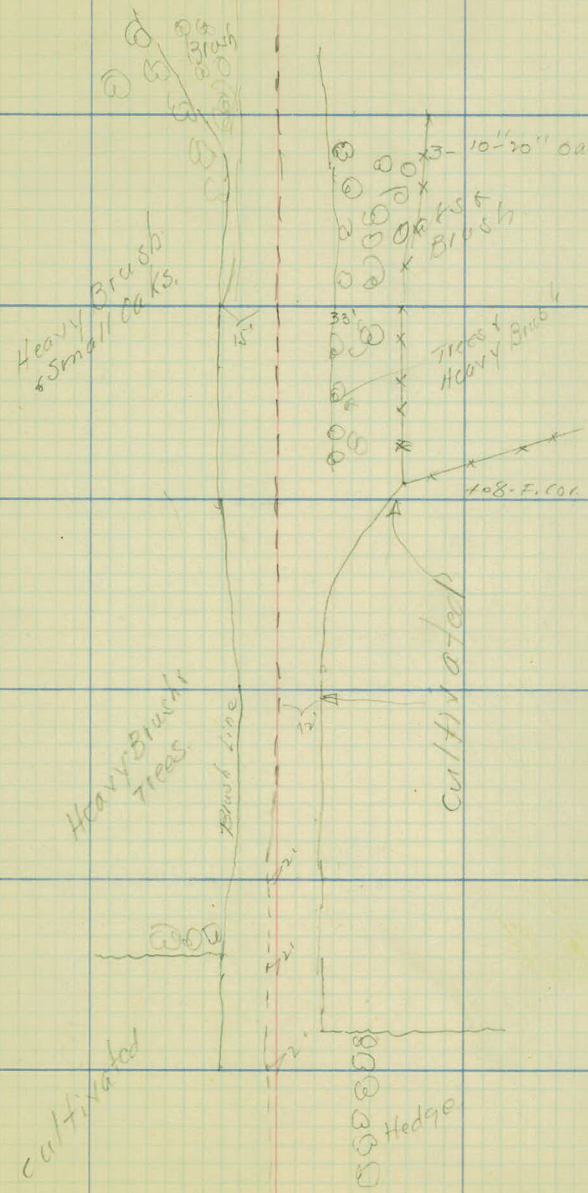
157

156

155

154

153


Brush
3- 10"-20" Oaks
Oaks & Brush
Heavy Brush & Small Oaks.
15'
33'
Trees & Heavy Brush
108-F. Cor. 34
Heavy Brush & Trees.
Brush line
12'
Cultivated
Hedge

station.

165

164

163

162

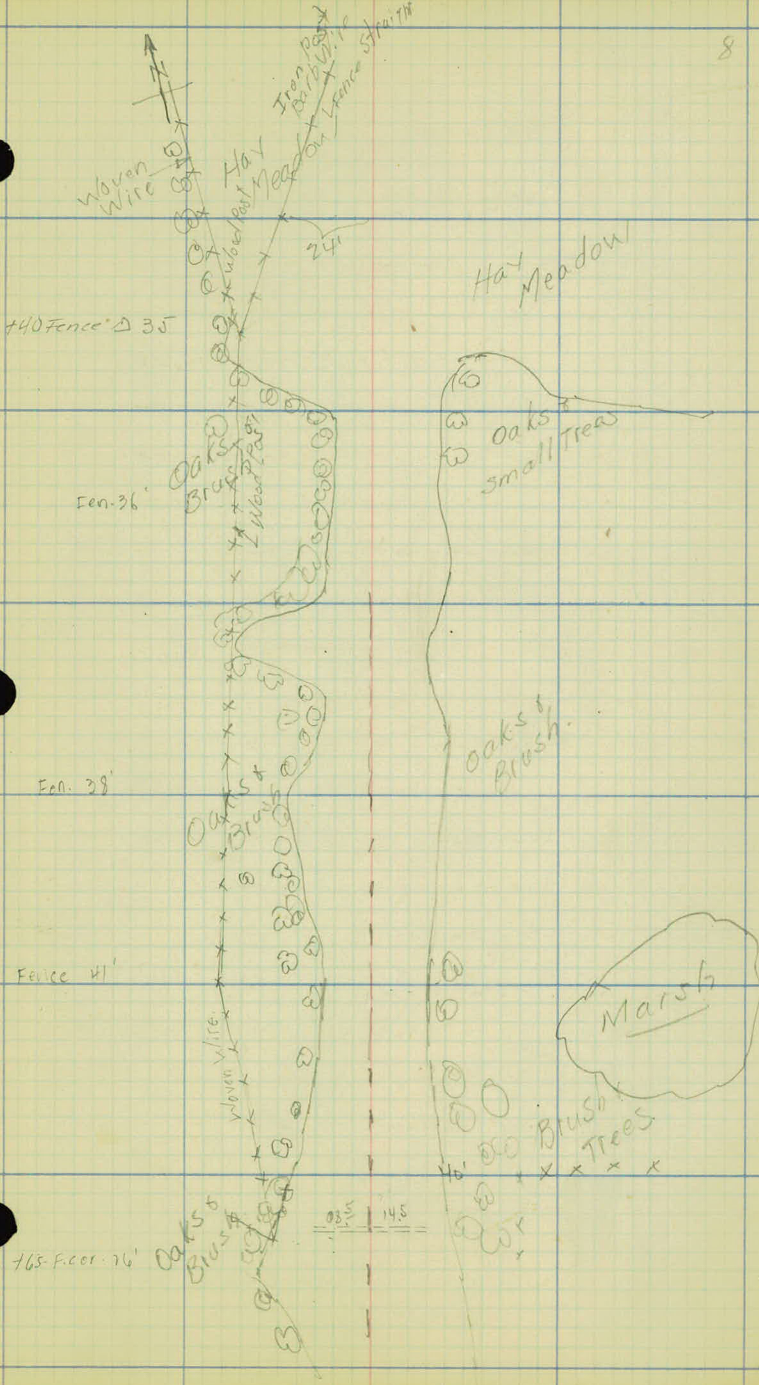
161

160

172 12" x 23" Vit.

small Lagoon
Left

159


N
Iron post
Barb Wire
Fence straight
Woven Wire
Hay Meadow
Wood post
24'
Hay Meadow
+40 Fence △ 35
Oaks & Brush
Wood Post
Oaks & small Trees
Fen. 36'
Oaks & Brush.
Fen. 38'
Oaks & Brush
Fence 41'
Marsh
Woven Wire
Brush Trees
40'
03.5
14.5
+65 F. cor. 76'
Oaks & Brush

Station

171

170

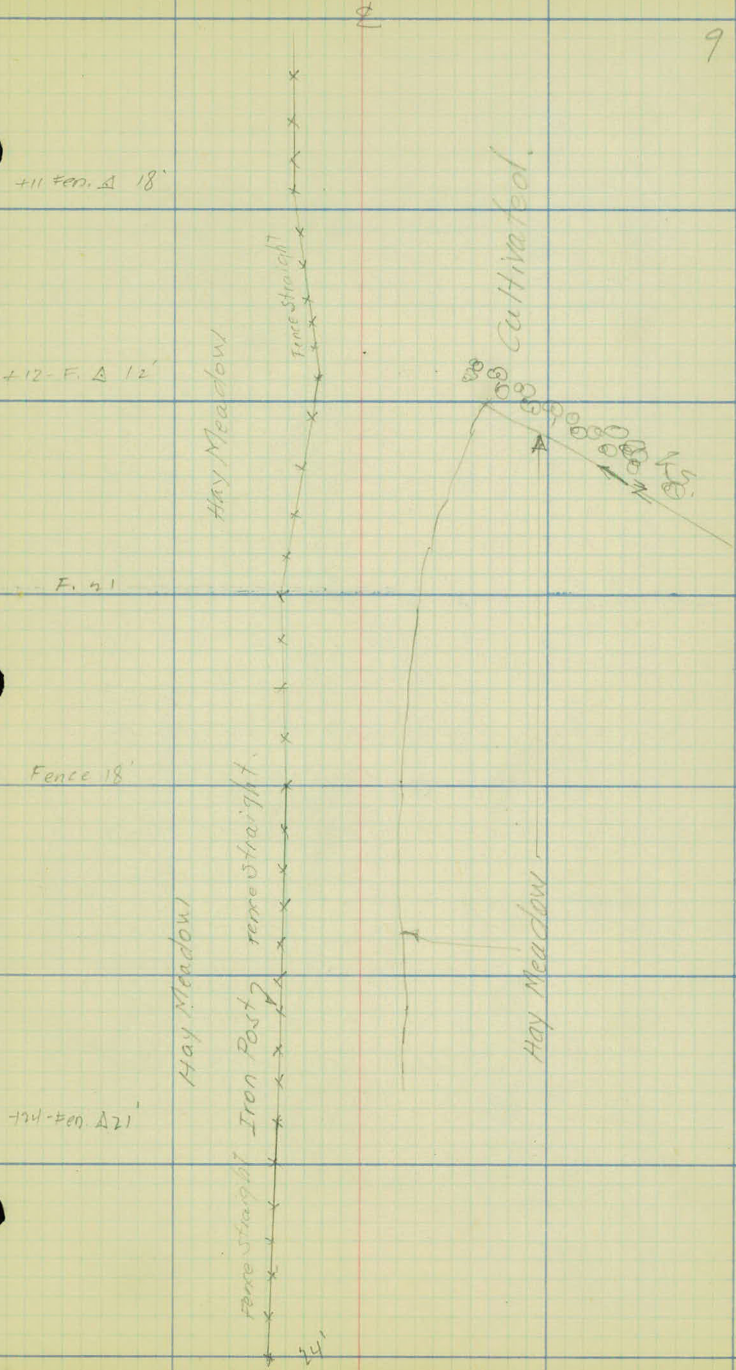
169

168

167

166

165


℄
+11 Fen. Δ 18'
+12- F. Δ 12'
F. 41
Fence 18'
+24- Fen. Δ21'
Fence Straight
Hay Meadow
Cultivated
N
Fence Straight
Hay Meadow
Iron Post
Fence Straight
Hay Meadow
24'

Station

cont'd next page

175+12.10 RI

175

+78 12" x 28.5 c.M.

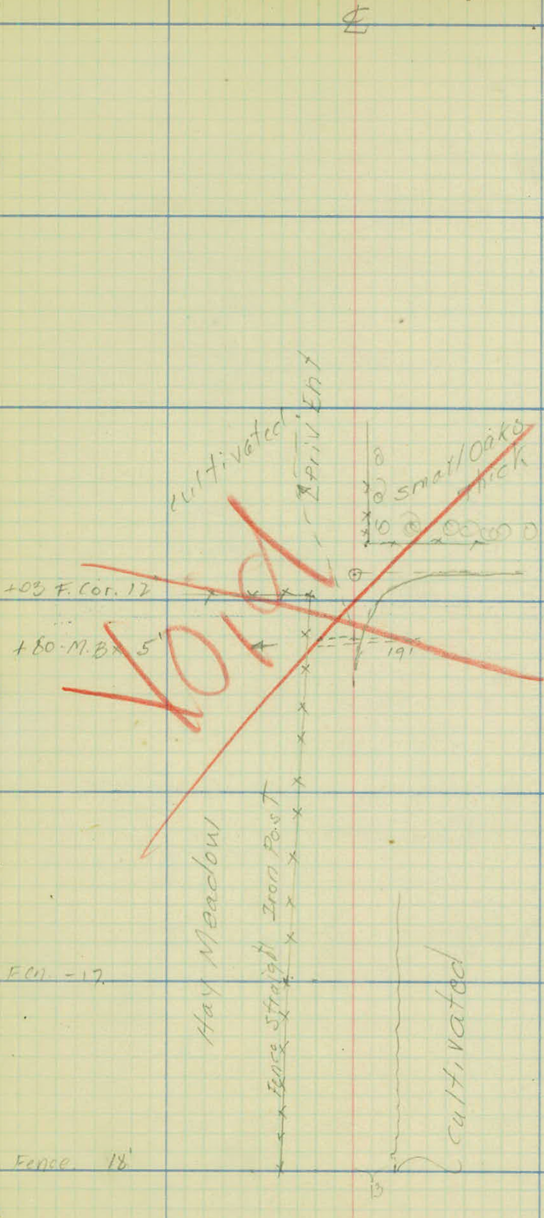
VOID

174

173

172

171


℄
cultivated
Priv Ent
small oaks
thick
+03 F. Cor. 12
+80 M.B. 5'
191
VOID
Hay Meadow
Fence Straight Iron Post
F.Cn. -17
cultivated
Fence 18'
13

Station

180

179

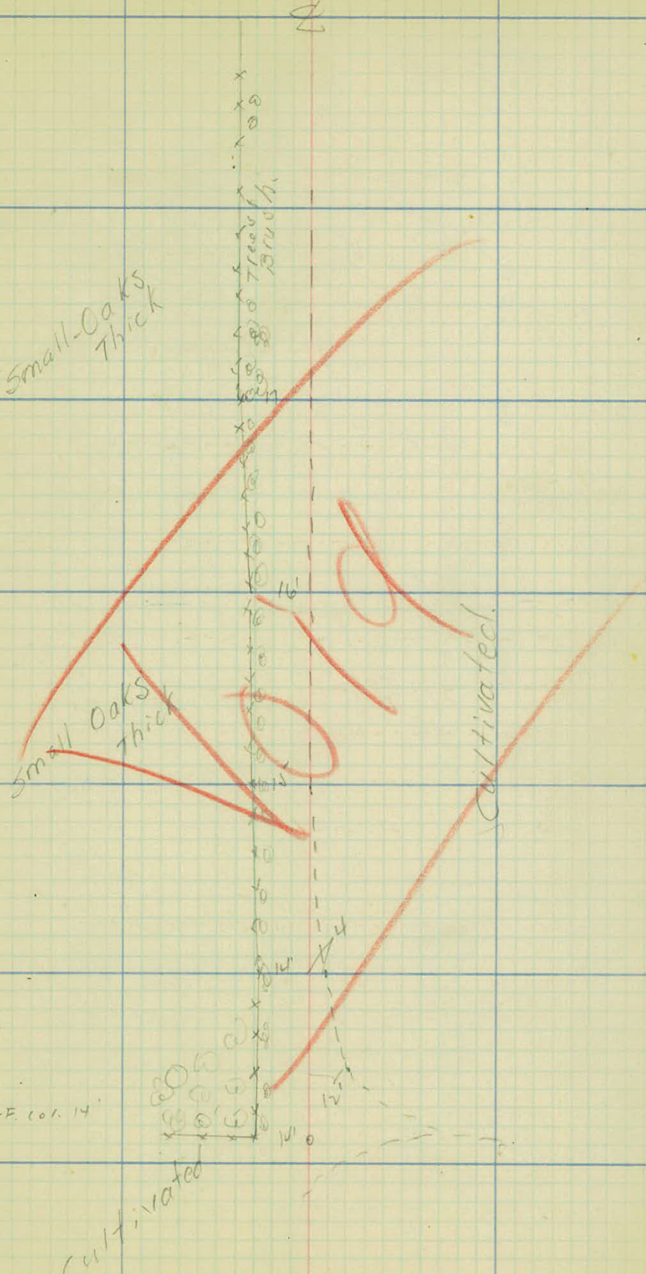
178

177

176

175+12.1 R.I

175


Small-Oaks Thick
Trees & Brush
Small Oaks Thick
16'
14'
12'
14'
Cultivated
Cultivated
VOID

715-F. col. 14'

Station

186

185

184

183

182

181

180

Marsh
Oaks
Thick
Oaks
Thick.
Void
Cultivated
Oaks
Thick
Trees & Brush
Trees & Brush

station

190

189

188+14½ P.I.

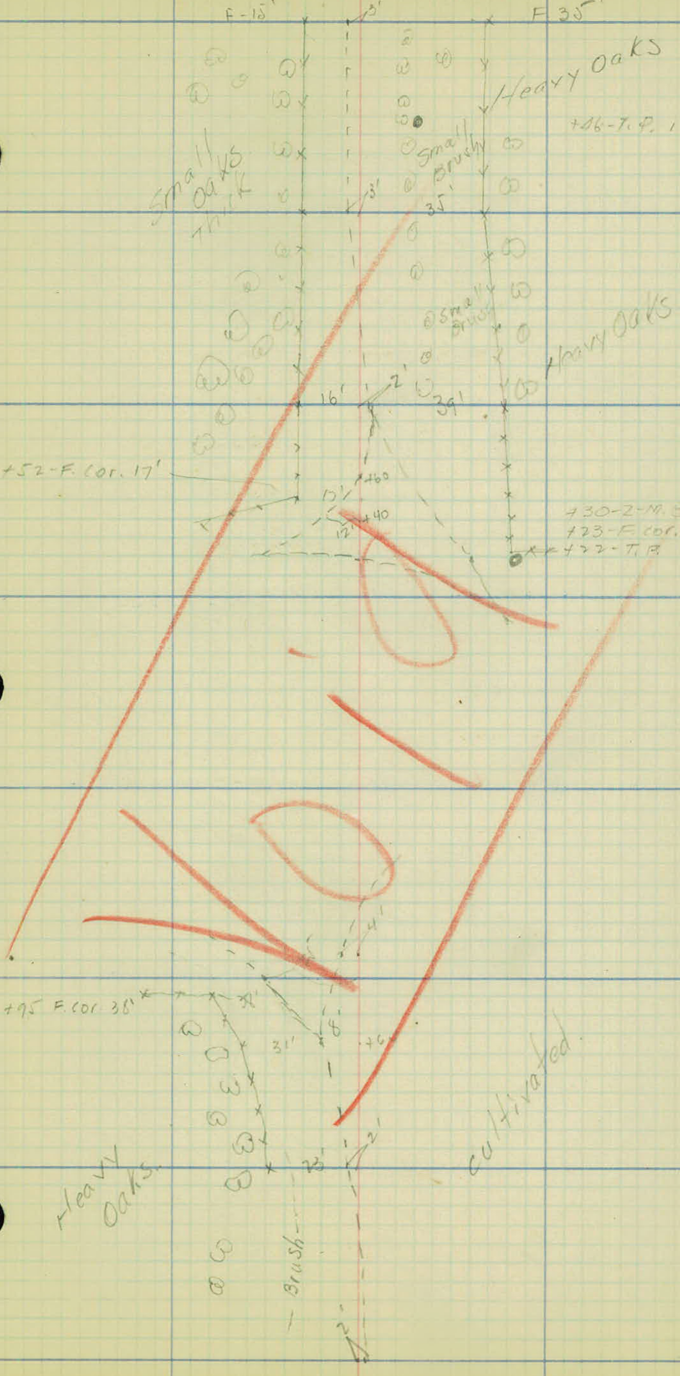
188

188+14.1 P.I.

188

187

186


F-15'
3'
F 35'
Heavy Oaks
Small Oaks Thick
Small Brush
35'
Small Brush
Heavy Oaks
16'
2'
39'
+52-F. Cor. 17'
+60
15'
+40
12'
+23-F. Cor. 41'
+22-T.B. 41'
Void
4'
+95 F. Cor. 38'
8'
31'
cultivated
2'
23'
Heavy Oaks.
Brush
2'

Station

197

196

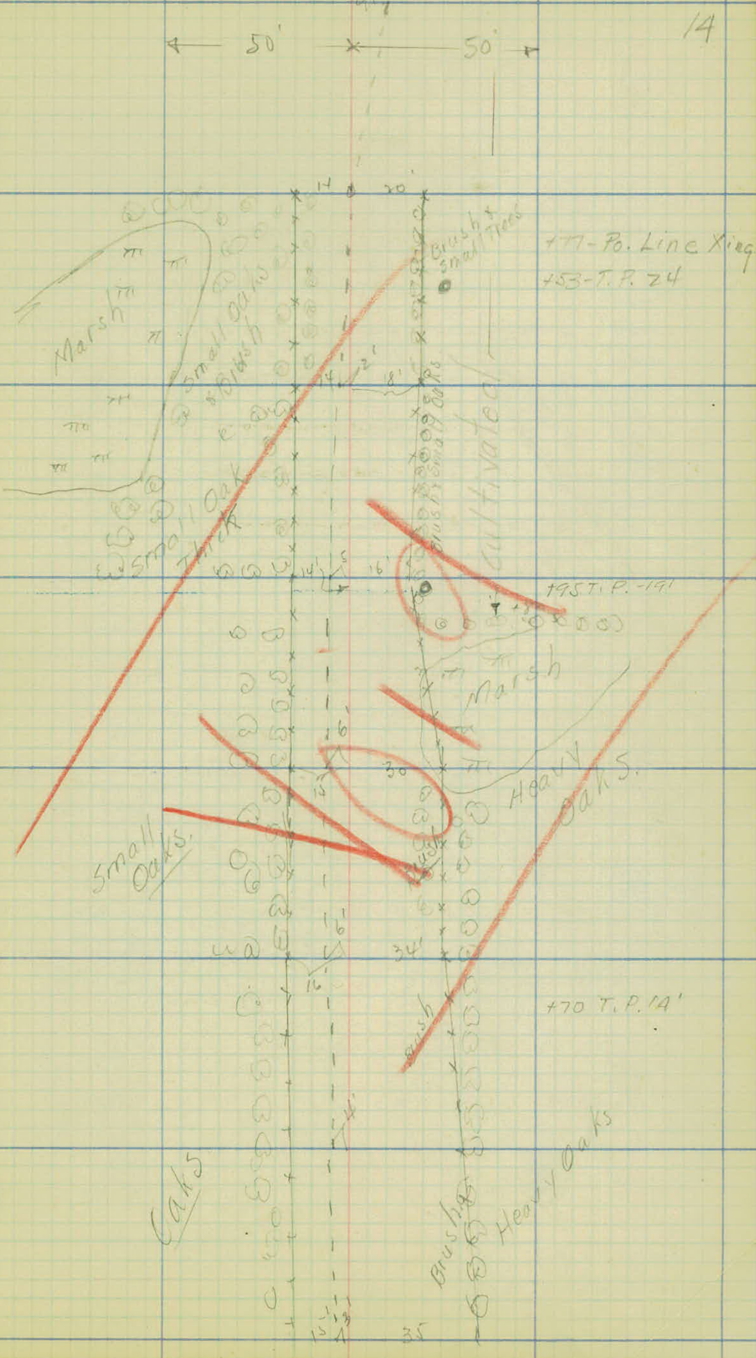
195

194

193

192

191


50'
50'
Marsh
Small Oaks & Brush
Small Oak Thick
Brush & small trees
+77 - Po. Line X-ing
+53 - T.P. 24
Cultivated
+95 T.P. -19'
Marsh
Heavy Oaks.
Small Oaks.
+70 T.P. 14'
Brush
Oaks
Brush
Heavy Oaks
Void

Station

202+73 End of Long Lake Road

+25 12x30 C.M.

202

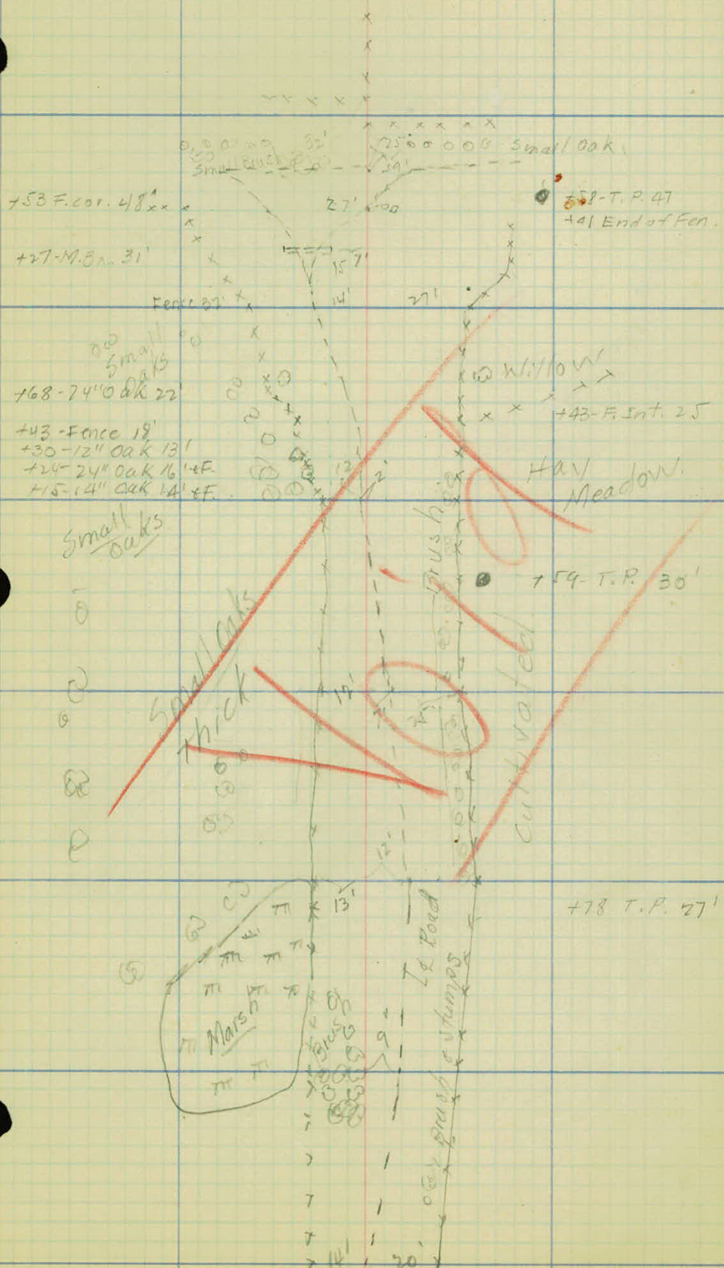
201

200

199

198

197


Small Oak
+53 F. cor. 48'
+58-T.P. 47
+41 End of Fen.
Fence 32'
Small oaks
+68-24" Oak 22'
+43-Fence 18'
+30-12" Oak 13'
+24-24" Oak 16' +F.
+15-14" Oak 14' +F.
Willow
+43-F. Int. 25
Hay Meadow
Brush
+54-T.P. 30'
Small oaks
Small oaks
Thick
Cultivated
Void
+78 T.P. 27'
Road
Marsh

Entered in 7/30/24 16

Center Line Levels.

Proj-24-52-Extension

Station	+	H.I	−	Elev.	
				958.6	✓
B.M.	6.76	964.88	✓	958.52	
148+50			11.7	53.2	✓
149			6.0	58.9	✓
+50			2.8	62.1	✓
150			0.0	64.9	✓
T.P.	9.80	974.50	✓ 0.18	964.70	✓
+50			7.0	67.5	✓
151			5.9	68.6	✓
152			4.4	(71.1) 70.1	✓
+60			3.7	(71.8) 70.8	✓
153			3.1	71.4	✓
T.P.	4.73	978.48	✓ 0.75	973.75	✓
154			2.5	76.0	✓
+50			1.1	77.4	✓
155			2.9	75.6	✓
+50			5.6	72.9	✓
156			7.6	70.9	✓
157			9.4	69.1	✓
+60			8.9	69.6	✓
158			7.4	71.1	✓
+60			5.5	73.0	✓
159			5.4	73.1	✓
T.P.	4.48	977.42	✓ 5.54	972.94	✓
+50			6.1	71.3	✓
160			6.3	71.1	✓

W.H.C.
Eck
Gahrin
Franke

July 29, 24

R.R. spike in 16" Oak 35' Lt. Sta. 149+00
(Iron Sign on tree)

	L. ℄	R
℄ Drive Rt.		5.0 / 50

station	+	H.I	−	Elev.
:		977.42 ✓		
160+50			5.4	977.0 ✓
161			4.6	72.8 ✓
162			4.6	72.8 ✓
+50			4.8	72.6 ✓
163			4.2	73.2 ✓
+50			2.3	75.1 ✓
T.P.	11.73	988.66 ✓	0.49	976.93 ✓
164			11.0	77.7 ✓
+50			8.2	80.5 ✓
B.M.			5.92	982.74 ✓
165			5.9	82.8 ✓
+50			3.9	84.7 ✓ 84.8
166		✓	1.2	87.5 ✓
T.P.	4.32	992.45	0.53	988.13 ✓
+50			3.3	89.2 ✓
167			3.3	89.2 ✓
+45			3.2	89.3 ✓
168			4.4	88.1 ✓
169			5.6	86.9 ✓
+50			5.9	86.6 ✓
170			6.6	85.9 ✓
+50			7.4	85.1 ✓
171			7.9	84.6 ✓
+50			8.6	83.9 ✓
172			9.1	83.4 ✓

R. R. Spike 20" Oak 60' Lt. 16+85

Station	+	H.I.	−	Elev.	
		992.45 ✓			
T.P.	5.80	987.40 ✓	8.85	983.60	✓
173			5.0	82.4	✓
174			5.5	81.9	✓
+80			5.7	81.7	✓
175			6.5	80.9	✓
+12.1			6.6	80.8	✓
176			4.2	83.2	✓
B.M.			4.75	982.65	✓
177			6.0	87.4	✓
T.P.	11.31 ✓	998.51 ✓	0.20	987.20	✓
178			6.5	92.0	✓
179			4.0	94.5	✓
180			2.1	96.4	✓
T.P.	5.68	1003.69 ✓	0.50	998.01	✓
181			4.6	99.1	✓
182			2.3	1001.4	✓
+80			2.1	1001.6	✓
183			2.5	1001.2	✓
184			8.5	95.2	✓
T.P.	0.80	993.40 ✓	11.09	992.60	✓
185			4.0	89.4	✓
186			7.1	86.3	✓
187			7.2	86.2	✓
188			5.8	87.6	✓
+14.1			5.5	87.9	✓

Void

P.I.

R.R. Spike in 24" Cott. 2' Lt. 175+80 [Line Revised S.M. At Sta. 175+00

R.I.

Station	+	H.I	−	Elev.
		993.40 ✓		
B.M.	7.07	997.45 ✓	3.02	990.38 ✓
189			4.7	92.8 ✓
+70			1.6	95.9 ✓
190			1.7	95.8 ✓
+70			1.3	96.2 ✓
191			0.4	97.1 ✓
T.P.	7.46	1004.69 ✓	10.22	997.23 ✓
192			7.7	1004.0 1002.0 ✓
+50			2.2	1002.5 ✓
193			3.6	1001.1 ✓
+50			4.1	998.6 ✓
194			6.8	997.9 ✓
195			7.6	997.1 ✓
196			8.7	96.0 ✓
197			8.8	95.9 ✓
T.P.	7.00	1002.67 ✓	9.02	995.67 ✓
+85			6.6	96.1 ✓
198			8.5	94.2 ✓
+50			10.2	92.5 ✓
199			10.0	92.7 ✓
+55			6.8	95.9 ✓
200			6.3	96.4 ✓
+75			5.4	97.3 ✓
201			5.7	97.0 ✓
+30			6.4	96.3 ✓

R.R. Spike in T.P. Lt. Sta 188+22

L. ℄ R.

8.5 6.7 Pres. Road

10.0 7.0 Pres. Road.

Station	+	H.I	−	Elev.
		1002.67 ✓		
201+70			9.0	993.7 ✓
202			11.4	991.3 ✓
+35			10.6	992.1 ✓
+60			9.0	93.7 ✓
+73	94.44 48.58 45.86 ✓	✓	9.4	93.3 ✓ ℄ Long Lake Rd.
B.M.	9.45	1003.93	8.19 48.58	994.48 ✓ 958.62 45.86 ✓

Void

℄ Levels East on Long Lake Road.

Station	+	H.I	−	Elev.
0+00 = 202+73			10.6	93.3 ✓
0+50			7.0	96.9 ✓
1+00			2.5	1001.4 ✓
1+30			0.0	1003.9 ✓

℄ Levels West on Long Lake Road

Station	+	H.I	−	Elev.
B.M	3.75	998.23 ✓		994.48 ✓
0+00 = 202+73				93.3 ✓
0+50			7.6	90.6 ✓
1+00			9.4	88.8 ✓
1+50			11.0	87.2 ✓
2+00			12.4	85.8 ✓

check Levels following page.

Checked RJW
7-30-?

℄ Long Lake Road.

R. R. spike in T. P. Rt. Sta 202 + 58

Check-Levels

	+	H.I	−	Elev.	
B.M.	7.60	1002.08		994.48	
T.P.	9.54	1005.02	6.60	995.48	
T.P.	0.53	993.78	11.77	993.25	
B.M.			3.41	990.37	= 90.38
T.P.	11.46	1004.81	0.43	993.35	
T.P.	0.40	996.06	9.15	995.66	
T.P.	1.33	987.93	9.46	986.60	
B.M.	4.61	987.24	5.30	982.63	= 87.65
T.P.	8.88	993.95	2.17	985.07	
B.M.	2.89	985.63	11.21	982.74	
T.P.	1.47	975.73	11.37	974.26	
T.P.	8.34	978.65	5.42	970.31	
T.P.	0.11	968.34	10.42	968.23	
B.M.			9.75	958.59	58.62

W.H.C.
Eck
Galvin
Franke
July 29, 24

R.R. Spike in T.P. Rt. Sta. 202+58

R.R. Spike in T.P. Lt. Sta. 188+22

R.R. in 24" Co Ht. 12' Lt. 175+80 / Line Revised B.M. Rt. Sta. 175+00

R.R. in 20" Oak 60' Lt. 164+85

R.R. Spike 16" Oak 35' Lt. 149+00

Cross Sections.

Proj. 24-52

Station		Elev.
155		75.6
+50		77.4
154		76.0
153		71.4
+60	+0.6	70.8
152		70.1
151		68.6
+50		67.5
150		64.9
+50		62.1
149+00		58.9
148+65	-2.7	56.2

Lt. ℄ Rt.

-3.7	-2.2	-1.1	-1.0	-0.4	-0.2	-0.6	+2.1	+3.2
33	22	17	14	12	7	10	13	33
		0.6	+0.8	0.0	+0.1	+2.6	+2.0
		33	12	14	7	13	33
		+1.1	+1.0	-0.2	+0.3	+0.6	-0.4
		33	16	10	9	12	33
			+0.9	+0.4	+0.4	-0.7	-0.9
			33	14	8	13	33
			+0.7	-0.5	-0.5	-0.8	
			33	12	16	33	
		+1.2	0.0	-0.9	-1.5	-1.6	
		33	15	12	17	33	
		+3.4	+2.2	-0.9	-1.5	-1.5	
		33	20	15	19	33	
		+3.1	+2.8	-1.1	-0.8	+0.7	
		33	18	13	19	33	
		-0.2	+1.4	-1.1	-0.6	+2.5	
		33	17	12	18	33	
		-2.2	-0.3	-1.3	-0.5	-0.9	+0.2	+0.9
		33	17	15	12	19	29	33
	-0.5	+1.2	-1.0	-0.9	-0.1	-0.7	-1.3	-0.7	0.0
	33	16	12	7	13	18	20	22	33
	+0.7	+1.4	-0.6	-1.1	-0.6	+2.0	+2.4	+1.1
	33	19	16	12	14	17	19	33

(Head Level)

W.H.C.
Ed Galvin
Frank
July 31, 1944

Station		Elev.
161		72.8
+50		72.0
160		71.1
+50		71.3
159		73.1
+60	-0.2	73.0
158		71.1
+60	-1.7	69.6
157		69.1
+55	+0.2	69.3
156		70.9
155+50		72.9

Lt. | Rt.

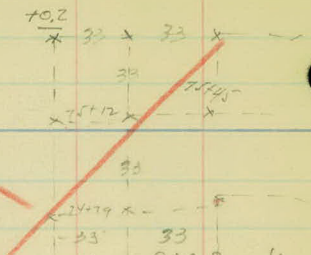
-2.0	-1.7	-0.8		-1.1	-2.0	-0.7	0.0
33	13	10		14	20	21	33
-0.6	-0.6	-0.2	-1.1	-0.5	-1.1	+0.6	+2.0
33	10	13	12	12	15	16	33
-3.3	-2.1	-0.7		-0.4	-1.8	-1.3	-1.4
33	15	7		10	16	20	33
-4.2	-3.7	-0.5		-1.1	-2.0	-1.8	
33	14	7		14	18	33	
-1.8	-1.8	-0.6		-0.7	+2.5	+4.0	+5.5
33	17	12		10	14	25	33
+2.5	+1.5	-1.0		-0.3	+4.5	+4.2	
33	17	13		10	14	33	
+1.0	+0.8	+0.6	-0.9	-0.5	-1.0	+0.5	-0.2
33	24	18	14	9	12	10	33
+0.5	0.0	-1.3	-0.4		-0.7	-1.7	-2.2
33	18	15	10		8	13	33
	-1.7	-1.7	-0.2		-0.6	-1.4	-2.3 -3.2
	33	16	9		8	9	14 33
	-3.5	-3.2	-0.7		-0.3	-1.5	-2.0
	33	17	9		7	11	33
-3.7	-3.2	-0.8	-0.5		-0.5	8.0	+0.3 +1.0
33	17	10	8		10	15	23 33
-1.8	-1.7	-0.8	-0.4		-0.5	+1.8	+3.0
33	20	14	9		10	16	33

Station		Elev.
168		88.1
167		89.2
+50		89.2
166		87.5
+50		84.2
165		82.8
+50		80.5
164		77.7
+55	-3.2	74.5
163		73.2
+50	-1.0	72.6
162		72.8

Lt. & Rt.

-1.1 / 33	-1.0 / 18	-1.0 / 11	-0.6 / 12	0.0 / 14	+1.2 / 33
	-2.0 / 33	-1.7 / 12	-0.4 / 12	+0.3 / 14	+1.0 / 33
-1.0 / 33	-0.9 / 22	-1.5 / 13	-0.6 / 12	+0.4 / 14	+0.8 / 33
-0.5 / 33	-0.2 / 26	-0.6 / 17	-1.5 / 16	-0.5 / 10	0.0 / 18	0.0 / 33
+0.4 / 33	+0.5 / 26	-1.0 / 16	-0.4 / 8	-0.8 / 12	-1.2 / 33
-1.0 / 33	-0.3 / 24	-0.9 / 13	-1.4 / 12	-0.9 / 33	
+1.0 / 33	+1.0 / 24	-0.8 / 13	-1.0 / 10	-1.7 / 12	+0.2 / 17	-0.3 / 33
+5.8 / 33	+5.2 / 26	-1.1 / 12	-0.8 / 11	-1.5 / 13	+1.0 / 17	+5.2 / 21	+5.9 / 33
	-0.1 / 33	-0.7 / 14	-0.8 / 11	-0.9 / 18	0.0 / 20	+1.0 / 33
-5.2 / 33	-5.2 / 25	-2.0 / 17	-0.6 / 10	-0.6 / 7	-2.2 / 14	-4.4 / 19	-4.8 / 33
	-5.0 / 33	-3.3 / 18	-0.5 / 10	-1.2 / 10	-1.9 / 14	+0.7 / 17	+1.0 / 33
-1.5 / 33	-1.8 / 13	-0.9 / 9	-1.0 / 12	-1.7 / 16	-0.7 / 19	+0.3 / 33

Station	Elev.
175+12	80.8
175+00	80.9
+79	81.3
174	81.9
173	82.4
172	83.4
+50	83.9
171	84.6
+50	85.1
170	85.9
+50	86.6
169	86.9



Plan of X-Sections.

@ P.I.

Same @ Sta. 188+14

Lt. ℄ Rt.

E. W.

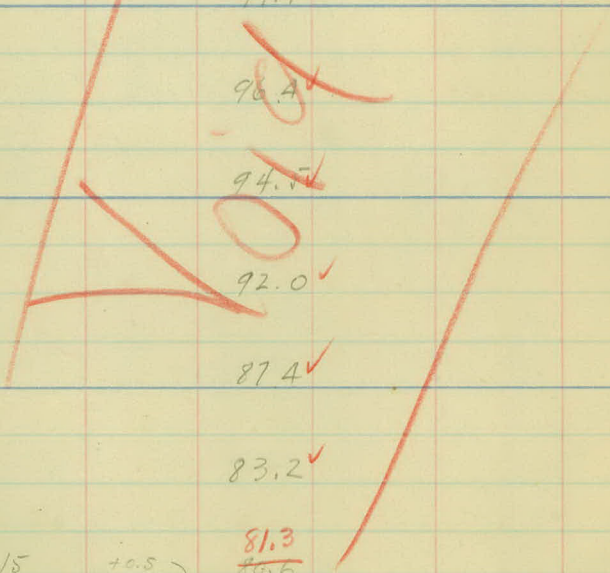
-1.3/33 -0.5/13 — ℄ Road. —

Void

E — W.

Lt.			Rt.			
-2.0/33	-1.3/13	-0.[illegible]/7	-0.3/15	-0.2/17	-0.9/22	-1.0/33
-3.0/33	-1.9/14	-0.8/8	-0.[illegible]/5	-0.9/11	-0.4/33	
-3.4/33	-2.0/17	-1.1/13	-0.9/13	0.0/15	+0.8/33	
-3.0/33	-1.7/18	-0.9/10	-0.3/8	-1.2/12	-0.3/14	-0.0/33
-2.1/33		-0.3/13		-0.7/12	-0.0/14	+0.3/33
-1.7/33		-0.4/10	-0.3/8	-0.9/13	0.0/15	+0.2/33
-1.3/33	-1.0/18	-0.5/12	-0.2/16	+0.3/18	+0.1/33	
-2.0/33	-0.9/14	-0.6/8	+0.1/11	-0.6/16	+0.6/17	+0.6/33
-1.5/33	-1.5/20	-1.1/11	-0.3/12	+0.7/14	+0.6/33	
-1.6/33	-1.4/20	-1.1/11	-0.1/12	0.0/14	+0.5/33	

Station		Elev.
+40	-3.2	92.0
184		95.2
+50	-3.5	97.7
183		101.2
182		101.4
181		99.1
180		96.4
179		94.5
178		92.0
177		87.4
176		83.2
175+45	+0.5	81.3 ~~80.6~~
175+12		80.8



Lt.	℄	Rt.
-2.0/33 -0.5/12		-0.4/12 +1.8/17 +3.0/33
0.0/33 +1.0/20 0.0/15		-0.2/8 +3.1/17 +4.5/33
+2.0/33 +2.1/17 0.0/13		-0.2/7 +0.2/11 +3.0/18 +3.4/33
+0.6/33 +0.7/20 -1.1/15 -0.5/13 0.0/8		-0.3/5 0.0/13 +0.9/18 +1.0/33
0.0/33 -0.2/18 -0.8/8		0.0/7 -0.6/12 -1.4/17 -2.7/33
+2.6/33 +2.3/20 +1.9/12 +0.2/9		-0.2/9 -1.1/14 -2.0/33
+2.7/33 +1.6/20 +1.4/12 +0.4/9 +0.1/5		-0.2/7 -0.9/12 -2.2/33
+2.5/33 +1.6/18 +1.4/12 -0.1/7		+0.2/7 -0.8/12 -2.0/33
+2.7/33 +2.4/20 +2.2/14 +0.5/11 -0.4/7		0.0/6 +0.4/8 -1.3/14 -1.0/33
+2.3/33 +1.5/14 +1.5/12 0.0/10 [illegible]/7		0.0/7 +0.4/9 -1.0/13 -1.5/33
-0.5/33 -1.2/14		+0.1/13 -0.8/18 -1.4/33
-0.5/33 -0.5/14 -0.6/4		+0.4/7 0.0/17 -0.2/22 -1.0/33 = same @ 05

XH19-33' Rt

N. S.

0.0/33 +0.6/14 — ℄ Road.

Void

Station		Elev.
+50	+1.7	94.5
189		92.8
188+47	+1.4	89.3
188+14		87.9
188+14		87.9
187+81	-1.2	86.7
+37	-1.2	85.0
187		86.2
+50	-1.0	85.3
186		86.3
+60	+0.4	86.7
+18	-1.0	88.4
185		89.4

VOID

Lt. ℄ Rt.

-6.5/33 -1.6/18 -0.8/15 .09/10 -0.7/9 +2.9/13 +3.2/33

+0.2/33 +2.6/12 0.0/8 -0.6/13 -0.5/33

W. — E.

(Same as 187+81 33' Lt.) +0.7/33 +0.9/17 -1.8/13 0.0/14 -0.3/23 -0.5/33

W. —— E

0.0/17 +0.2/33

N —— S (188+14) S.E -0.6/46

-0.5/4 -1.5/8 -3.2/33

N —— S

+3.5/33 +1.5/24 0.0/18 +0.0/9 -3.0/12 -5.0/33

+2.0/33 -2.9/18 -0.5/14 0.0/6 -0.2/5 -1.9/8 -3.5/33

-2.8/33 -1.0/25 +1.8/15 -0.3/12 -0.3/7 -1.8/13 -4.8/33

-7.5/33 -5.0/25 -1.1/9 -0.7/7 -2.6/14 -4.5/33

-14.0/33 -12.0/21 -5.0/14 -1.7/10 -0.4/6 -1.1/10 -3.2/17 -4.8/33

-15.0/40.0 -12.0/33 -5.0/12 -0.2/8 -0.8/8 -2.1/16 -2.5/33

-0.1/33 +0.5/19 -1.1/15 -0.4/10 -0.6/8 -1.2/24 -1.0/33

+4.1/33 +4.0/22 -0.5/14 0.0/9 -0.3/8 -0.8/24 -0.3/33

VOID

Station		Elev.
197		95.9
+50	-1.9	94.6
196		96.0
195		97.1
+60	-1.2	96.1
194		97.9
+50	-3.3	98.6
193		01.1
+50	-0.6	02.5
192		02.0
+50	+1.8	88.9
191		97.1
+50	-0.8	95.0
190		95.8

LT. & RT.

$\frac{-7.0}{33}$	$\frac{-3.9}{20}$	$\frac{-0.2}{8}$		$\frac{-0.3}{9}$	$\frac{+5.0}{15}$	$\frac{+8.3}{20}$	$\frac{+8.3}{33}$
$\frac{-5.3}{33}$	$\frac{-4.0}{17}$	$\frac{-0.1}{9}$		$\frac{0.2}{7}$	$\frac{-0.5}{10}$	$\frac{+2.1}{23}$	$\frac{+2.1}{33}$
$\frac{-5.2}{33}$	$\frac{-1.1}{15}$	$\frac{-0.4}{10}$	$\frac{+0.3}{2}$	$\frac{+0.2}{10}$	$\frac{+1.8}{12}$	$\frac{+2.2}{17}$	$\frac{+2.2}{33}$
$\frac{-2.8}{33}$	$\frac{-1.1}{16}$	$\frac{0.0}{11}$	$\frac{+0.5}{5}$	$\frac{+0.5}{7}$	$\frac{+1.7}{8}$	$\frac{+1.9}{16}$	$\frac{+1.9}{33}$
$\frac{-2.6}{33}$	$\frac{-1.5}{16}$	$\frac{-0.5}{13}$	$\frac{+0.4}{5}$	$\frac{-0.3}{4}$	$\frac{-1.1}{16}$	$\frac{-1.2}{16}$	$\frac{-1.4}{33}$
$\frac{-4.8}{33}$	$\frac{-1.6}{17}$	$\frac{-0.1}{13}$	$\frac{+0.6}{5}$	$\frac{0.0}{3}$	$\frac{-3.2}{26}$	$\frac{-4.1}{26}$	$\frac{-4.1}{33}$
$\frac{-2.5}{33}$	$\frac{-0.8}{18}$	$\frac{0.0}{13}$	$\frac{+0.6}{6}$	$\frac{-0.1}{4}$	$\frac{0.0}{15}$	$\frac{0.0}{33}$	
$\frac{-2.0}{33}$	$\frac{+0.6}{18}$	$\frac{-0.2}{16}$	$\frac{+0.4}{9}$	$\frac{+0.3}{6}$	$\frac{+4.6}{9}$	$\frac{+5.10}{20}$	$\frac{+5.6}{33}$
$\frac{-0.1}{33}$	$\frac{+1.3}{18}$	$\frac{-0.5}{12}$	$\frac{+0.5}{5}$	$\frac{0.0}{6}$	$\frac{+3.6}{9}$	$\frac{+4.6}{20}$	$\frac{+4.6}{33}$
$\frac{+1.8}{33}$	$\frac{+1.8}{18}$	$\frac{+0.8}{16}$	$\frac{0.3}{13}$	$\frac{+0.5}{5}$	$\frac{-0.4}{6}$	$\frac{+2.6}{10}$	$\frac{+3.0}{18}$	$\frac{+3.0}{33}$
$\frac{+1.0}{33}$	$\frac{+0.8}{17}$	$\frac{0.0}{15}$	$\frac{-0.3}{9}$	$\frac{-0.4}{8}$	$\frac{+0.9}{11}$	$\frac{+0.9}{20}$	$\frac{+0.9}{33}$
$\frac{-1.3}{33}$	$\frac{-1.4}{16}$	$\frac{-0.5}{11}$		$\frac{-0.7}{9}$	$\frac{-0.9}{20}$	$\frac{-1.0}{33}$	
$\frac{-4.8}{33}$	$\frac{-4.2}{20}$	$\frac{-0.5}{10}$	$\frac{+0.2}{2}$	$\frac{-1.11}{7}$	$\frac{-2.6}{12}$	$\frac{-3.1}{19}$	$\frac{-3.0}{33}$
$\frac{-6.0}{33}$	$\frac{-4.4}{25}$	$\frac{-0.8}{16}$	$\frac{-0.5}{12}$	$\frac{+0.3}{3}$	$\frac{+3.2}{9}$	$\frac{+3.6}{12}$	$\frac{+4.8}{20}$	$\frac{+5.5}{33}$

Station		Elev.
202+73		93.3
+41	-1.2	92.1
202		91.3
+70	-3.1	93.7
+37	+1.7	95.3
201		97.0
+43	-0.3	96.1
200		96.4
+50	-1.8	94.6
199		92.7
198		94.2
+80	+2.2	96.4
197+40	0.0	95.9

Lt. 2 Rt.

-2.2 / 33	+1.8 / 33
-1.1 / 33 ; +0.4 / 13	-0.7 / 6 ; -1.0 / 33
+0.5 / 33 ; +0.2 / 27 ; +1.4 / 13 ; +0.9 / 7	- 0.9 / 33
+2.8 / 33 ; -0.8 / 19 ; +0.6 / 8	-2.5 / 8 ; -2.5 / 33
+2.8 / 33 ; +2.3 / 20 ; +1.7 / 10 ; -0.7 / 11	-2.6 / 8 ; +2.8 / 18 ; -3.2 / 25 ; -4.0 / 33
+0.5 / 33 ; +1.8 / 8 ; +2.8 / 10 ; -0.3 / 7	+0.4 / 3 ; -0.5 / 18 ; +6.3 / 20 ; +6.9 / 33
+0.2 / 33 ; -1.5 / 15 ; -1.3 / 7	+0.6 / 6 ; -0.2 / 20 ; +2.2 / 23 ; +2.8 / 28 ; +5.0 / 33
0.0 / 33 ; -1.0 / 15 ; -0.9 / 7	+0.8 / 8 ; +0.2 / 19 ; +2.4 / 21 ; +4.9 / 33
+0.8 / 33 ; -0.7 / 18 ; -0.5 / 8	+0.7 / 10 ; +0.2 / 19 ; +4.2 / 24 ; +5.7 / 33
-1.8 / 33 ; -1.0 / 15	+2.5 / 7 ; +2.8 / 13 ; +3.0 / 26 ; +6.0 / 33
3.6 / 33 ; -1.3 / 10	+1.6 / 11 ; +1.9 / 9 ; +1.2 / 20 ; +2.8 / 23 ; +4.1 / 28 ; +4.1 / 33
-5.2 / 33 ; -3.2 / 11	+0.2 / 6 ; 0.0 / 15 ; +3.1 / 19 ; -5.2 / 28 ; -5.2 / 33
-3.5 / 33 ; +0.4 / 11 ; -0.8 / 8	+0.2 / 9 ; 0.0 / 10 ; +5.0 / 24 ; +10.0 / 28 ; +10.5 / 33

Drainage

Proj. 24-52

Station	Present Culv.	Reomd Culv.
159+72	12" x 73' V.I.T. Ext. 14.5 R. & 8.5 L.	
174+78	12" x 285 C.M. Ext. 19 Rt 9.5 L. Note: Not neag Revised Line	
200+75 / 200182 / Rev. Aug. 24	12" x 30' C.M. Ext.	

W.H.C.
Eck.
Galvin
Franke
July 31, 1934

Inv. Elev. -3.1 - ℄ Elev. 160
Drains L. to Lake

Inv. Elev. -2.1 ℄ Elev. Sta. 175
Drains. L.

Inv. Elev. -3.2 ℄ Elev. Sta 202+78
Drains. L. End of Pipe 6' ℄ of ℄.

Line Revision

Proj. 24-52

Sta. 172+98.5 to 200+85.6

Index

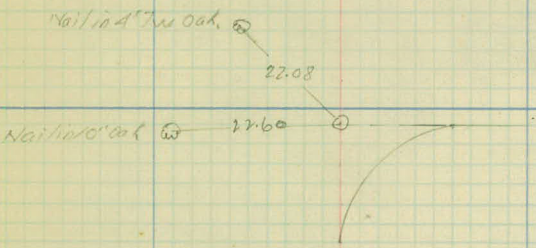
Aug 9 1924

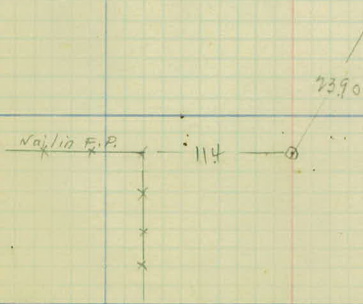
Line Revision

Proj. 24-52

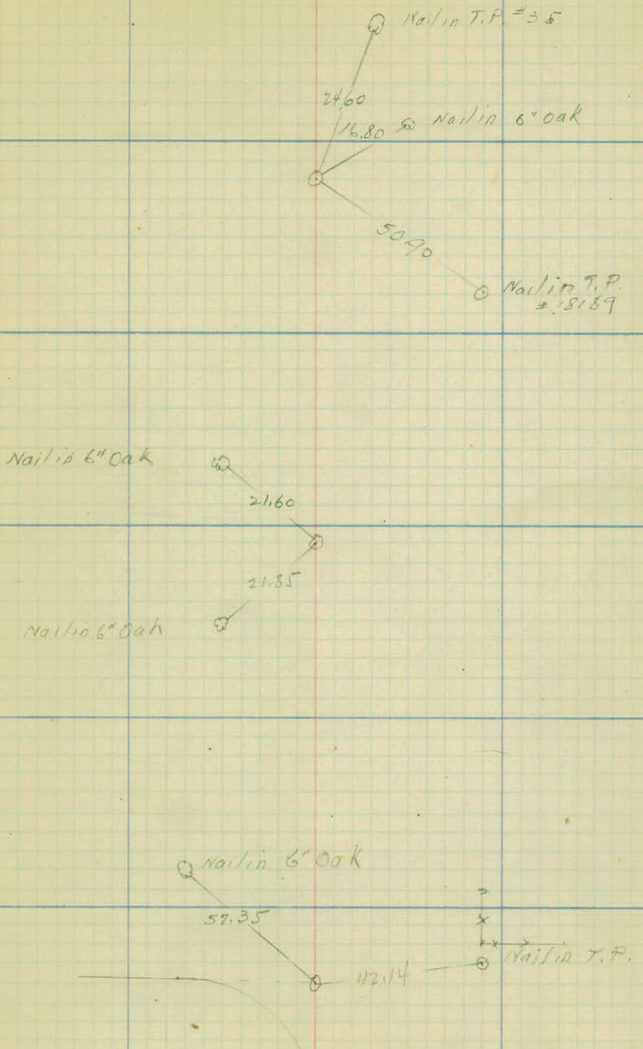
Alignment.
Aug 8, 1924

Station	Point	L	R	Bear.
				N. 88° 32' E
180+63.3	P.O.T			
				N. 88° 32' E
+13.05	P.T.		45° 40'	
176			43° 46.1	
+50			36° 31.1	29° C.R.
175			29° 16.1	Δ 91° 20'
+50			22° 01.1	P.I 175+02.5
174			14° 46.1	T. 204.35
+50			7° 31.1	L. 314.9
173			0° 16.1	
172+98.15	P.C.		0° 00'	
				N. 2° 48' W.


Nail in 4" Tree Oak.
22.08
Nail in 10" Oak
27.60


Nail in 6" Oak.
23.90
Nail in F.P.
11.4

Station	Point	∠	R	Bear
	℄ End of Proj			
300+85.5	Iron Mon			
				N. 1° 01' W. ✓
190+17.70	P.O.T.			
				N. 1° 01' W. ✓
+22.01 ✓	P.T	44° 46.5'		
188		41° 35'		29° C.L.
+50		34° 20'		Δ 89° 33'
187		27° 05'		P.I 187+11.30
+50		19° 50'		T 198.08 ✓
186		12° 35'		L 308.79 ✓
185+50		5° 20'		
185+13.22 ✓	P.C	0° 00'		
				N. 88° 32' E. ✓


Nail in T.P. #35
24.60
16.80
Nail in 6" oak
50.70
Nail in T.P.
#5189
Nail in 6" Oak
21.60
24.35
Nail in 6" Oak
Nail in 6" Oak
57.35
42.14
Nail in T.P.

Line Revision.

Art. Topog

Proj - 24-57

W.H.C.
Eck.
Galvin
Fraske

Aug 1, 24

Station

177

+13.09 P.T.

176

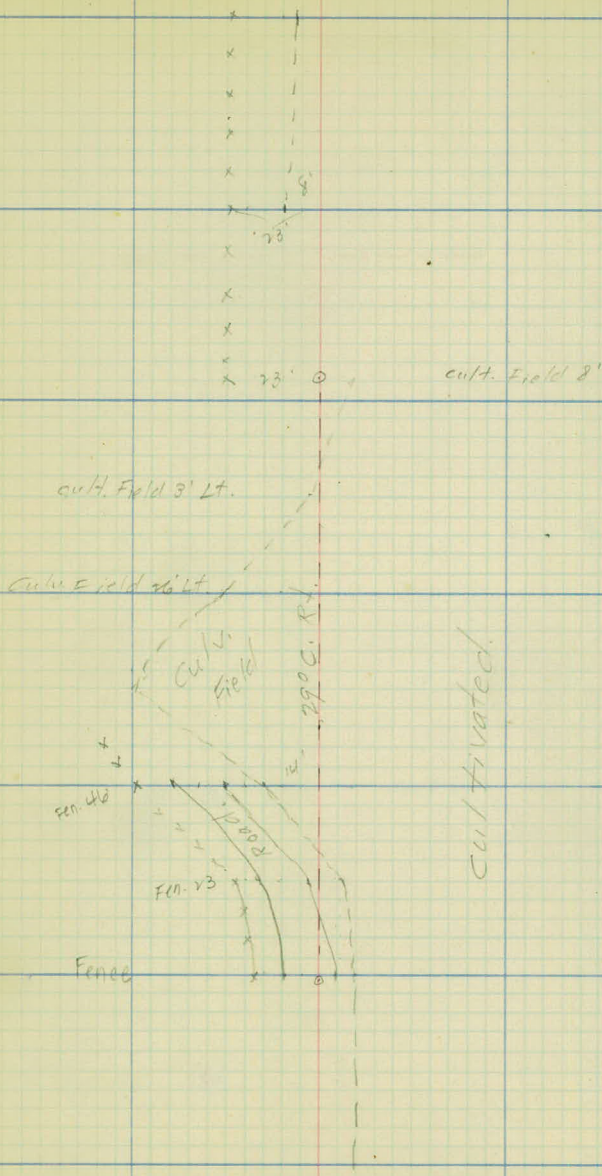
175

174

173

+98.15 P.C.

172


73'
cult. Field 8' Rt.
cult. Field 3' Lt.
Cult. Field 26' Lt.
Cult. Field
220' Rt.
Cultivated
Fen. 46
Road
Fen. 23
Fence

183

182

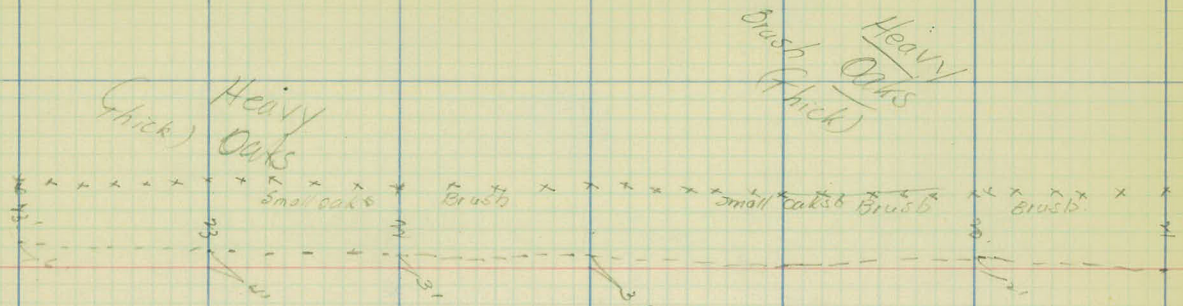
181

180

179

178

177


Heavy Oaks (Thick)
Heavy Oaks (Thick)
Brush
Small Oaks
Brush
Small Oaks
Brush
Brush
cultivated

189

+22.01 P.T.

188

187

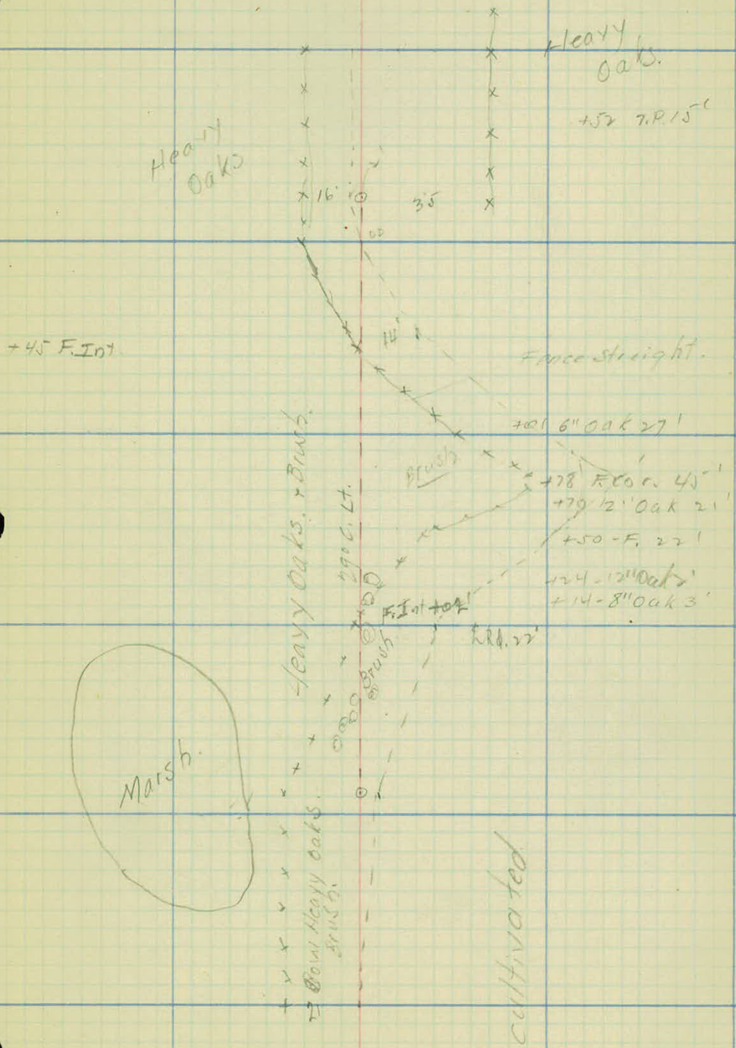
186

+13.22 P.C.

185

184

183


Heavy Oaks.
+52 T.P. 15'
Heavy Oaks
16'
35
14'
+45 F. Int
Fence straight.
+00 6" Oak 27'
Brush
+78 F. Cor. 45'
+70 12" Oak 21'
+50 - F. 22'
+24 - 12" Oaks 2'
+14 - 8" Oak 3'
290 C. Lt.
F. Int +04'
L.Rd. 22'
Heavy Oaks & Brush.
Brush
Marsh.
Heavy Oaks
Brush.
cultivated

195

184 Po. Line Xing.

194

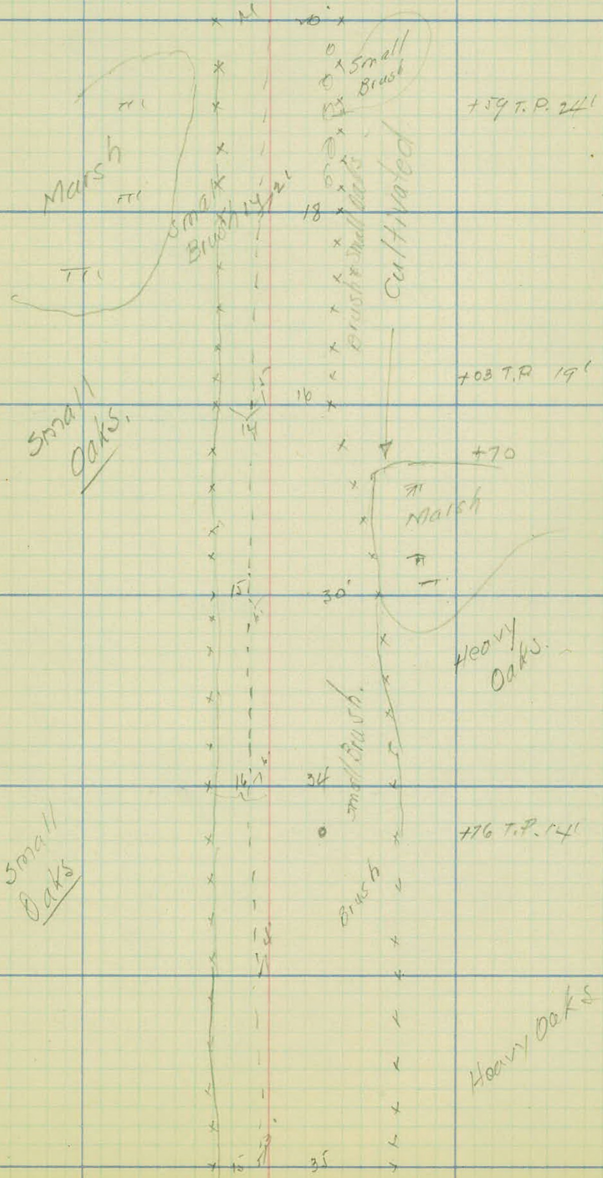
193

192

191

190

189


Marsh
Small Brush 14'
Small Brush
+59 T.P. 24'
18
Brush & Small Oaks
Cultivated
+03 T.P. 19'
16
14'
Small Oaks.
+70
Marsh
15'
30'
Heavy Oaks.
Small Brush.
34
14'
+76 T.P. 14'
Small Oaks
Brush
Heavy Oaks
35

200485.6 endotRej Iron Mon.

200

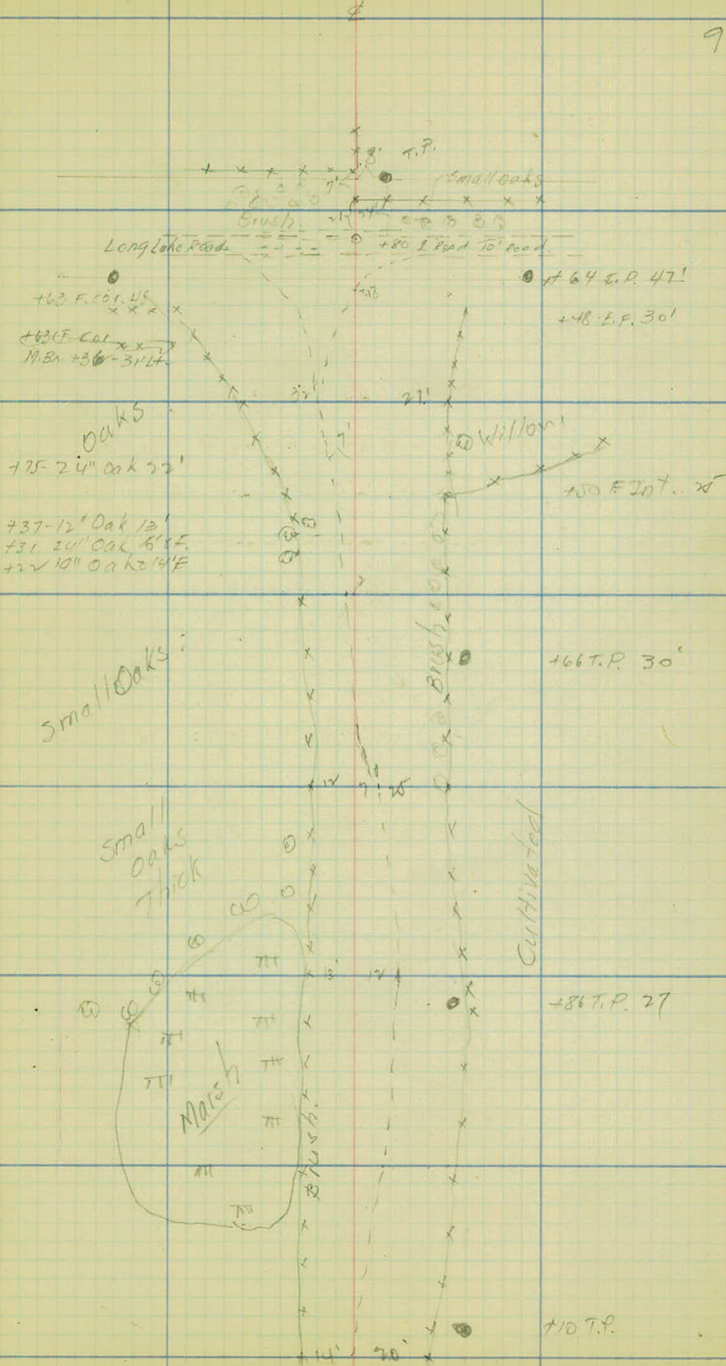
199

198

197

196

195


T.P.
Small Oaks
Brush
Long Lake Road
+80 ℄ Road 10' Road
+64 T.P. 47'
+63 F. Cor. US
+48 E.F. 30'
M.Bx. +36 - 3' Lt.
Oaks
+75 - 24" Oak 32'
Willow
+50 F Int.
+37 - 12" Oak 13'
+31 24" Oak 6' F.
+22 10" Oak 14' F
Small Oaks
Brush
+66 T.P. 30'
Small Oaks Thick
Cultivated
+86 T.P. 27
Marsh
Brush
+10 T.P.

Line Revision
& Levels

Proj. 24-52

Station	+	H.I.	−	Elev.	
B.M.	5.90	988.55		982.65	
173+00			6.2	82.4	
+50			6.7	81.9	
174			7.0	81.6	
+50			6.8	81.8	
175			6.4	82.2	
+50			4.3	84.3	
176			0.9	87.7	
T.P.	9.36	997.08	0.83	987.72	
+40			7.5	89.6	
177			4.9	92.2	
178			2.4	94.7	
179			0.5	96.6	
T.P.	6.37	1002.90	0.55	996.53	
180			3.8	99.1	
+60			2.1	1000.8	
181			1.5	01.4	
+50			1.4	(10.5)	1.5
182			2.1	1000.8	
+50			~~5.9~~	97.9	
183			8.3	94.6	
+50			11.0	91.9	
T.P.	0.49	993.11	10.28	992.62	
184			3.6	(99.5)	89.5
+30			4.8	88.3	
+55			5.7	87.4	

W.H.C.
ECK. Aug. 1, 1924
Calvin
Franke

R.R Spike 24" Co ft. at Sta. 175+00

Station	+	HI	−	Elev.	
		993.11			
185			7.1	996.0	86.0
+50			7.5	995.6	85.6
B.M.	5.82	996.21	2.72	990.39	990.38
186			9.7	86.5	
+50			6.4	89.81	
187			3.3	92.9	
+50			1.3	94.9	
188			0.4	95.8	
T.P.	5.05	1004.88	0.38	995.83	
188+60			9.0	95.9	
189			8.1	96.8	
+57			5.6	999.3	
190			3.2	1001.7	
+55			2.3	02.6	
191			3.7	1001.2	
+57			6.3	998.6	
192			7.0	97.9	
+63			7.2	97.7	
193			7.7	97.2	
194			8.8	96.1	
+54			9.4	95.5	
195			9.1	95.8	
T.P.	5.62	1001.87	8.63	996.25	
+50			5.5	95.1	96.4
+85			5.9	96.0	

R.R. Spike in T.P. Rt. 3 sta. 1864+95

Station	+	H.S	-	Elev.
		1001.87		
196			6.0	995.9
197			9.2	92.7
+60			6.2	95.7
198			5.6	96.3
+50			5.2	96.7
199			4.8	97.1
+45			6.0	95.9
+77			8.7	93.2
200			10.6	91.3
+50			7.0	93.9
+80			8.5	93.4
+91			8.3	93.6
B.M.			7.40	994.47

Note: for L Levels of Long Lake Road see original Level Notes.

Check Levels P 42 Orig. Notes

℄ Long Lake Road

R.R. Spike in T.P. Rt Sta. 700+64

Line Revision

X-Sections

Proj - 2452

Station	Elev
180+60	1000.8
180	999.1
179	996.6
178	994.7
177	992.2
+40	989.6
176	987.7
+50	984.3
175	982.2
+50	981.8
174	981.6
+50	981.9
173	982.4

Lt.				℄	Rt.		
+2.0 / 33	+1.4 / 14	+0.1 / 12			0.0 / 6	-1.3 / 14	-2.5 / 33
+2.1 / 33	+1.9 / 25	+1.5 / 15	0.0 / 12		0.0 / 7	-1.1 / 10	-1.9 / 33
+2.0 / 33	+1.0 / 16	+0.1 / 14	-0.3 / 9		0.0 / 5	-1.2 / 11	-2.2 / 33
+2.1 / 33	+1.5 / 24	+1.0 / 16	-0.3 / 12		-0.1 / 5	-1.1 / 9	-2.1 / 33
+2.6 / 33	+1.7 / 20	-0.5 / 14	0.0 / 8		+0.5 / 1	-0.2 / 7	-1.0 / 33
+3.1 / 33	+2.6 / 21	-0.4 / 16			+0.5 / 1	-0.6 / 7	-1.1 / 33
+1.0 / 33	+1.4 / 21	0.0 / 18			+0.4 / 1	-0.6 / 6	-1.8 / 33
0.0 / 33	+1.1 / 10	+0.4 / 7			0.0 / 33		
-0.4 / 33					0.0 / 33		
-0.5 / 33					+0.3 / 33		
+0.2 / 33					+0.9 / 33		
-1.6 / 33	-0.8 / 26	+0.[illegible] / 9			-0.3 / 6	+1.4 / 23	

Same as Originals.

W.H.C.
Eck. Aug 11, '94
Galvin
Franks

Station	Elev.	
186 +50	989.8	
186	986.5	
+50	995.6	85.6
185	996.0	86.0
+55	987.4	
+30	988.3	
184	988.5	89.5
+50	991.9	
183	994.6	
+50	997.9	
182	1000.8	
+50	1010.5	1001.5
181	1001.4	

LH RH

-11.0	-5.0	-1.4		+1.2	+0.8	0.0			
33	16	5		8	26	33			
-10.0	-1.6			+1.8	-0.2	-0.7	-0.8	-1.8	
33	6			7	9	21	30	33	
-9.2	-3.8	-0.8		+0.8	-0.5	-2.8	-4.0		
33	15	5		7	13	22	33		
-13.5	-11.0	-5.0	-1.4	-0.1	+0.2	-0.6	-3.1	-4.2	
33	25	12	10	6	3	10	28	35	
-14.6	-12.0	-5.0	0.0	0.5	0.0	-0.7	-1.9	-2.6	
37	26	11	6	3	2	9	17	33	
-5.0	-4.6	-2.1	-0.5		-0.6	-1.2	-1.7		
33	25	14	8		9	24	33		
+3.6	+4.0	-1.0	-0.2		-0.4	-1.2	-1.2		
33	31	21	8		8	26	38		
-0.9	-1.1	-0.1			-0.4	+0.8	+2.0		
33	21	12			12	16	33		
-0.0	+1.2	+0.2	0.0		-0.1	+2.2	+4.0		
33	22	17	10		8	15	33		
+1.9	+2.5	0.0	+0.5		0.0	+2.1	+4.0		
33	18	15	11		8	16	38		
+0.8	+1.5	-0.6	-0.2		0.0	+1.2	+0.9		
33	17	15	10		8	16	33		
0.0	+1.4	-0.4	0.0		0.0	0.0	0.0		
33	16	14	8		6	15	33		
-0.1	-1.1	-0.2			-0.4	-0.9	-2.7		
33	17	9			8	11	33		

Station	Elev.
193	997.2
+65	997.7
192	997.9
+57	998.6
191	1001.2
+55	1002.6
190	1001.7
+57	999.3
189	996.8
+60	995.9
188	995.8
+50	994.7
+30	93.7
187	997.9

+0.8 → 994.9

LH. & RH.

-7.8 / 33	-1.1 / 16	0.0 / 11	+0.5 / 5
-2.6 / 33	-1.5 / 16	-0.8 / 13	+0.4 / 5
-4.8 / 33	-1.6 / 17	-0.1 / 13	+0.6 / 5
-2.5 / 33	-0.8 / 18	-0.0 / 13	-0.6 / 6
-2.0 / 33	+0.6 / 18	-0.2 / 16	-0.6 / 10	+0.4 / 9
-0.1 / 33	+1.3 / 18	-0.5 / 12	+0.5 / 5
+1.8 / 33	+1.8 / 18	+0.5 / 16	-0.3 / 13	+0.5 / 5
+1.0 / 33	+0.8 / 17	-0.0 / 15	-0.3 / 9
-1.3 / 33	-1.6 / 16	-0.5 / 11
-4.8 / 33	-4.2 / 20	-0.5 / 10	-0.2 / 2
-4.7 / 33	-4.8 / 25	-2.1 / 17	-1.0 / 14	-0.8 / 9
-10.6 / 33	-3.6 / 11	-1.5 / 4
-8.9 / 33	-5.0 / 18
-10.5 / 33	-10.0 / 17

+0.5 / 7	+1.7 / 8	+1.9 / 16	+1.9 / 33
+0.3 / 4	-1.1 / 6	-1.2 / 16	-1.4 / 33
0.0 / 3	-3.2 / 9	-4.1 / 20	-4.1 / 33
-0.1 / 4	-0.0 / 15	0.0 / 33
+0.3 / 6	+4.6 / 9	+5.0 / 20	+5.6 / 33
0.0 / 6	+3.9 / 9	+4.6 / 20	+4.6 / 33
-0.4 / 6	-0.0 / 8	+2.6 / 16	+3.0 / 18	+3.0 / 33
-0.4 / 8	+0.9 / 11	+0.9 / 20	+0.9 / 33
-0.7 / 9	-0.9 / 20	-1.0 / 33
-1.1 / 7	-2.6 / 12	-3.1 / 19	-3.0 / 33
-0.2 / 10	+4.8 / 13	+5.2 / 18	+5.8 / 33
-0.6 / 6	0.9 / 15	-1.1 / 26	+1.7 / 29	+1.7 / 33
+2.0 / 6	+2.0 / 11	+0.4 / 14	0.0 / 8	-0.6 / 33
+1.6 / 10	+1.2 / 27	+0.7 / 33

Station	Elev.
199 +77	993.2
+45	995.9
199	997.1
+50	996.7
198	996.3
+60	995.7
197	997.9 ~~92.7~~
196	995.9
+85	996.0
+50	995.4 ~~96.4~~
195	995.8
+54	995.5
194	996.1

+2.8	-0.8	+0.6		-2.5	-2.5		
33	19	8		8	33		
+2.8	+2.3	+1.7	-0.7	-0.6	-2.8	-3.2	-4.0
33	20	16	11	8	18	28	33
+0.5	+1.8	+2.8	-0.3	+0.5	+0.5	+6.3	+6.9
33	18	16	7	3	18	20	33
+0.2	-1.5	-1.3		+0.6	-0.3	+2.2	+3.9 5.0
33	15	7		6	20	23	28 33
0.0	-1.0	-0.9		+0.8	+0.2	+2.4	+4.9
33	15	4		8	19	21	33
+0.8	-0.7	-0.5		+0.7	+0.2	+4.2	+5.7
33	18	8		10	19	24	33
	-1.5	-1.0		+2.5	+2.8	+3.0	+6.0
	33	15		7	13	26	38
	-3.5	-3.1		+0.7	-0.3	+3.2	+3.2
	33	8		8	18	26	33
	-5.2	-3.2		+0.2	-0.0	+3.4	+5.2 +5.2
	33	11		6	15	19	28 33
-3.5	-0.4	+0.8		+0.3	0.0	+5.0	+10.0 +10.5
33	11	8		3	10	14	23 33
-7.0	-3.9	-0.2		-0.5	+3.8	+7.0	+7.5
33	20	8		10	15	21	33
-5.3	-4.0	-0.1		-0.2	-0.5	+2.1	+2.1
33	17	7		7	16	23	33
-5.2	-1.1	-0.4	+0.3	+0.2	+1.8	+2.2	+2.2
33	15	10	2	10	12	17	33

Station		Elev.
201+10	+2.0	995.6
+91		993.6
Mon 200+86.6 End of Proj		
+80		993.4
+48		992.9
200		991.3

℄ Extended

Lt. & Rt. 19

completed
Aug 11, 24

$\frac{-1.6}{33}$ $\frac{+0.4}{17}$ $\frac{0}{33}$

$\frac{-1.3}{33}$ $\frac{+1.1}{33}$

$\frac{-2.2}{33}$ $\frac{-1.8}{33}$

$\frac{-1.1}{33}$ $\frac{+0.4}{13}$ $\frac{-0.7}{6}$ $\frac{-1.0}{33}$

$\frac{+0.5}{33}$ $\frac{+0.2}{17}$ $\frac{+1.4}{33}$ $\frac{+0.9}{7}$ $\frac{-0.9}{33}$

Proj. 27-5 ✓

200+60

12" x 27' C.M. in pl. remove

Pl - 24" C.M. @ Sta 200+00 ✓

~~199+00 199+70 — 8 trees 8" dia. L~~

197+00 No culv to be placed

Pot hole left of ℄ ✓

~~2 trees 8" dia. 195 to 196 L~~

~~197~~

192+15 Pl. 24" C.M. ✓

186+75 F.E.R.

~~P. 12" C.M.~~ No culv reqd. ✓

Ext. farm ent., 30 cy.

~~186+85 P 24" C.M.~~ ✓

174+50 Pl 24" C.M. ✓

175+00 F.E.L

12" C.M. 24' long under old road at corner - use it under farm ent. ✓

163+00 Drainage both ways from ℄ - no culv reqd. ✓

159+72 Pl. 24" C.M ✓

157+00 Drain to R of ℄ ✓
no x-drain regd

152+55 P.L. 12" x 60 C.M ✓
Ent. R.

Change grade ✓
near above Int.

10 trees per 100 Lin. ft. 200+85 — 188+22

~~Cl. Gr. 10' wide~~

Cl. Br. 10' wide

188+22 —— 185+13

60 trees Cl. Gr.

185+13 — 176+13

10 Trees per 100 ft — 0.25 A Br.

164+40 —— 162+50

30 trees cl & gr.

10' strip cl. Br.

159+00 155+00

10' strip cl. brush

15 trees cl & gr.

Alignment Notes.

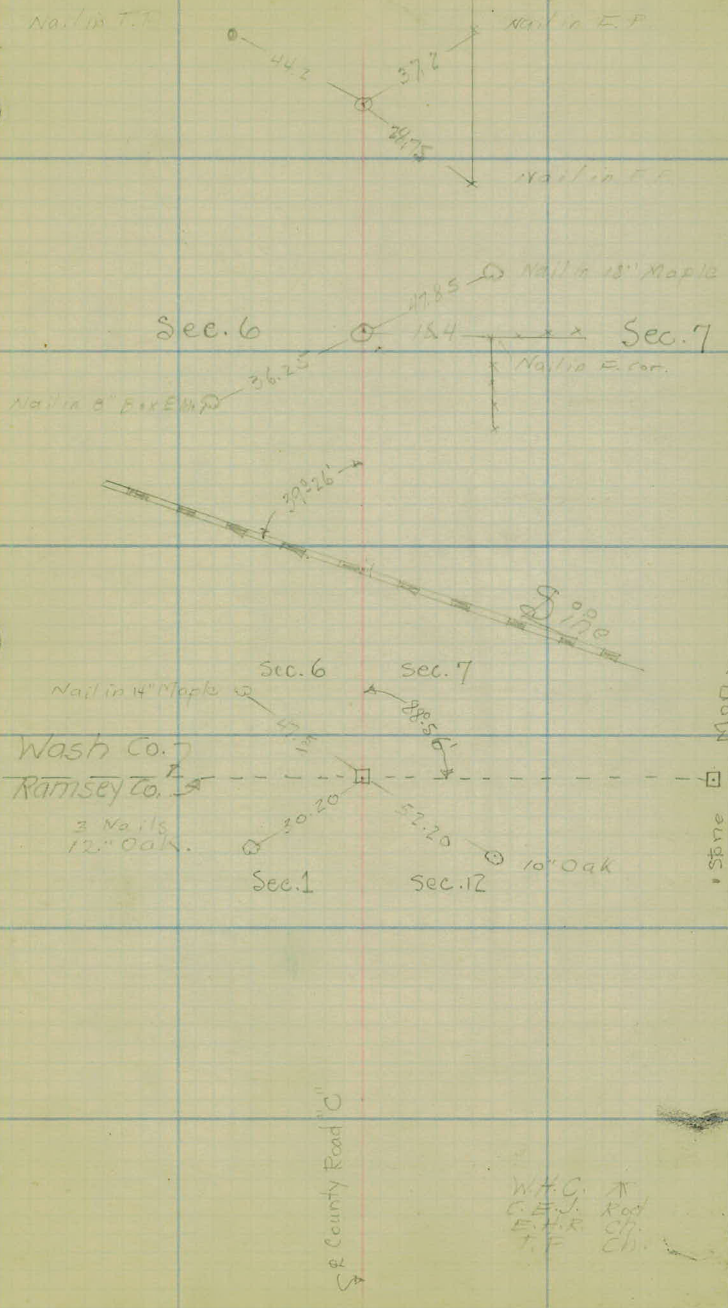
Project 24-52. 24-52

From County Road "C" and the East County Line, West into Washington County.

Office of Ramsey Co. Engineer
ST. PAUL, MINN.
Rec'd 2/27/24 Rec. 2-27-24
Date Filed APR. 15th '24
File No. 11 11-24-52

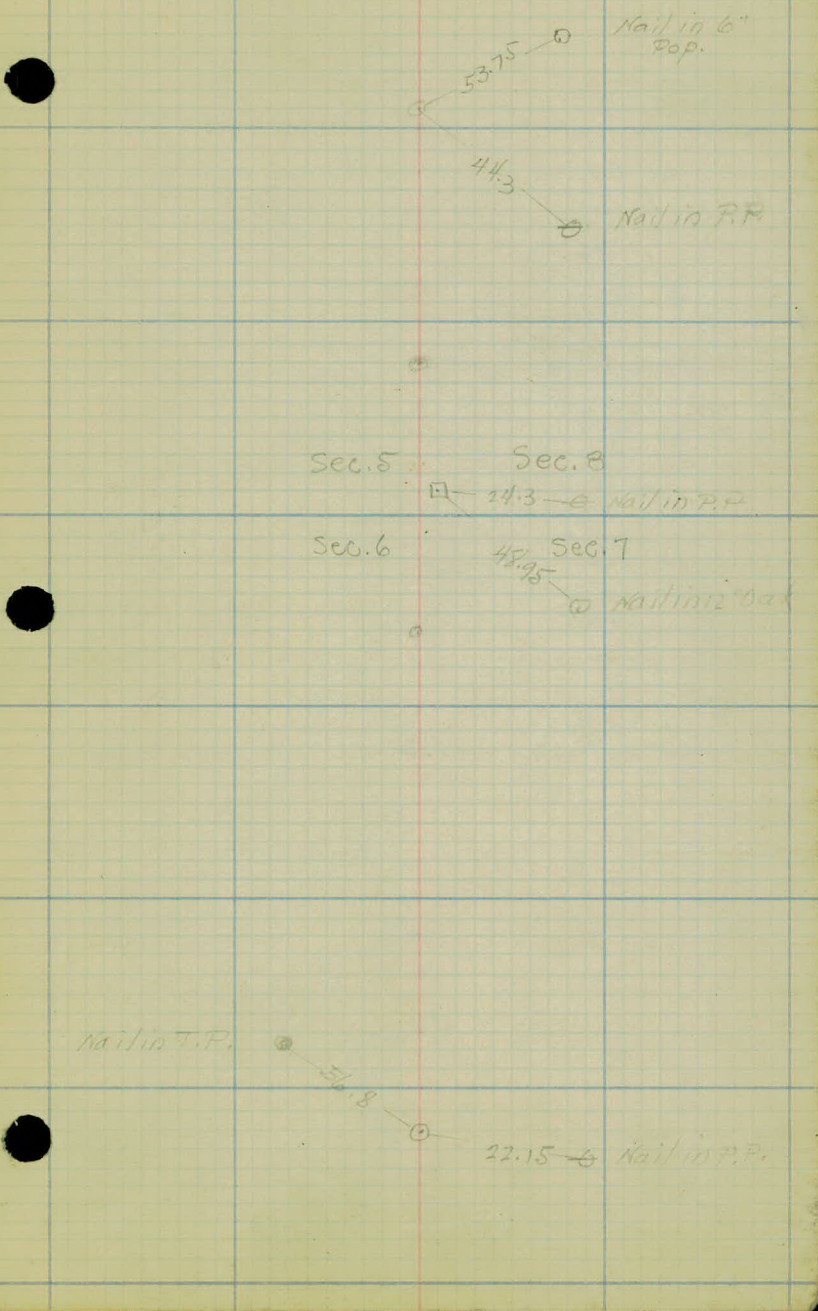
LAKE DE MONTREVILLE ROAD

Station	Pt.	L.	R.	Calc. Bear.
35+96.8	P.O.T.			
35+79.8	1/4 Corner. Iron Pipe.		0°-02'	S 89°58' E. N. 90°-02' E.
7+97.00	℄ 3rd Line			N. 90°-00' E.
0+00	Sec. Corner Mon. (Stone)			

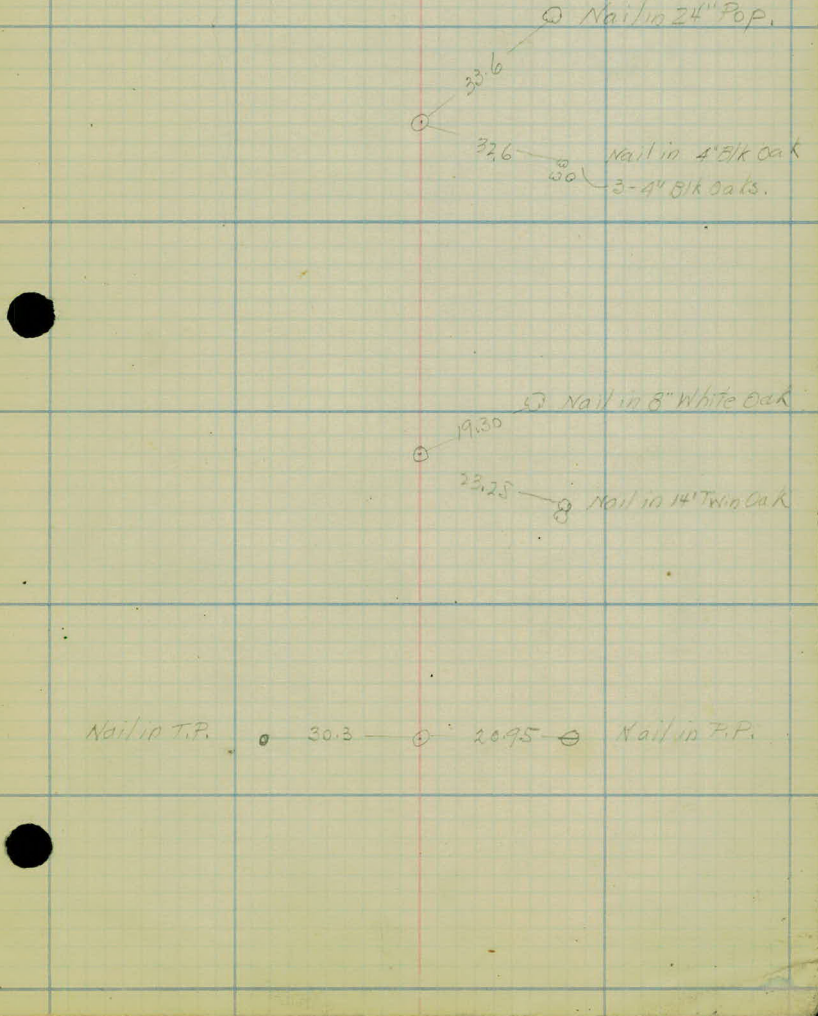


Nail in T.P.
Nail in E.P.
44.2
37.2
24.75
Nail in E.P.
Nail in 18" Maple
47.85
Sec. 6
18.4
Sec. 7
36.25
Nail in E. cor.
Nail in 8" Box Elder
39°26'
Line
Sec. 6
Sec. 7
Nail in 14" Maple
88°56'
Wash Co.
Ramsey Co.
30.20
52.20
3 Nails 12" Oak.
10" Oak
Sec. 1
Sec. 12
Stone Mon.
County Road "C"
W.H.C.
C.E.J. Rod
E.H.R. Ch.
T.F. Ch.

Station	Pt.	L.	R.	Calc. Bearing.
57+42.3	P.O.T.			
				N.88°-26' E.
53+05.50	P.T.	0°-48'		
53+00		0°-46.4'		1° C.L.
52+50		0-31.4'		Δ 1°-36'-L.
52+25.5	P.I. 2"x2" Stake.			S.T. 80.09'
	*See corner.			
52+00		0°-16.4'		C.L. 160.00
51+45.5	P.C.	0°-00'		PI 52+25.5
46+97.4	P.O.T			
				S89.58 E.
				N1°-02 E.

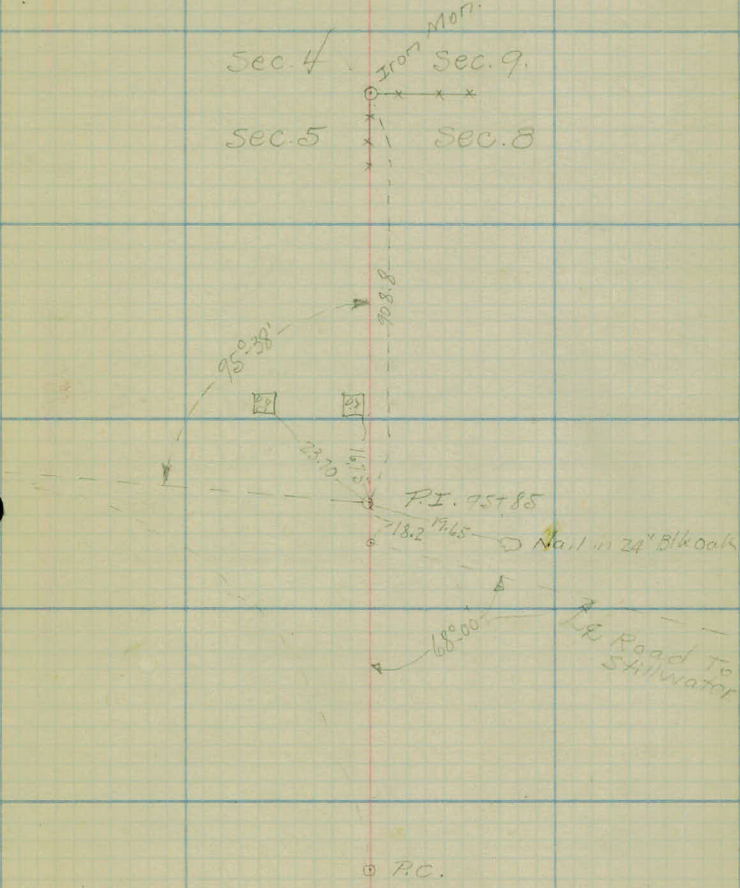

Nail in 6" Pop.
53.75
44.3
Nail in P.P.
Sec. 5
Sec. 8
14.3
Nail in P.P.
Sec. 6
Sec. 7
48.95
Nail in T.P.
22.15
Nail in P.P.

Station	Pt.	L.	R.	Calc. Bear.
				N 88° 10' E ~~N 78° 26' E.~~
91-42.7	P.O.T.			
				N 88° 10' E
87+64.80	P.O.T.			
87+63.40	P.I. 2½" Stake 0°-16' ¼ Cor. Sec. 5 and 8			
				~~N 78° 26' E~~

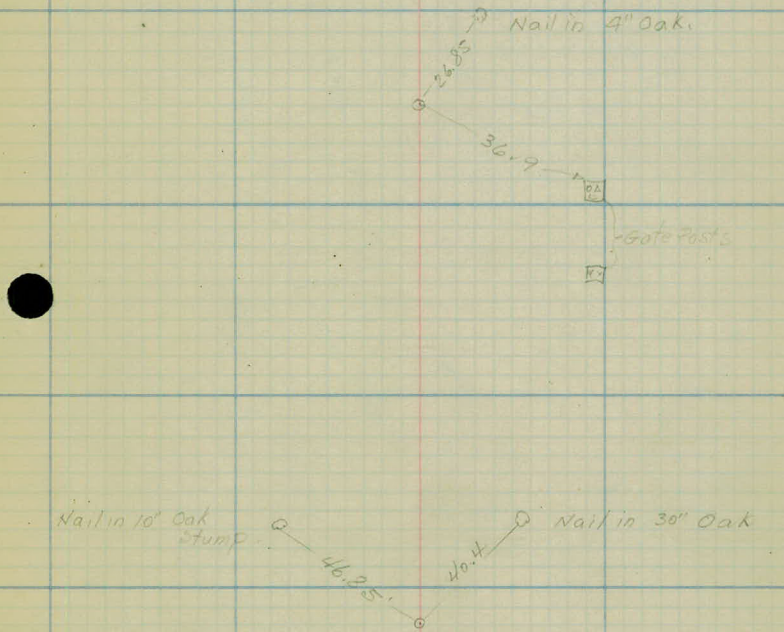

Nail in 24" Pop.
33.6
32.6
Nail in 4" Blk Oak
3-4" Blk Oaks.
Nail in 8" White Oak
19.30
23.25
Nail in 14" Twin Oak
Nail in T.P.
30.3
20.95
Nail in T.P.

Station	P.T.	∠	R	Calc. Bear.
				N. 7° 28' W.
96+94.48	P.T.	47° 49'		
96+50		41° 22.6'		29.° C. ∠.
96+00		34° 07.6'		Δ 95° 38'
95+50		26° 52.6'		S.T. 220.36. 220.29
95+00		19° 37.6'		C.L. 329.77
94+50		12° 22.6'		P.I. 95+85'
94+00		5° 07.6'		0.40 Cor. 50' Ch.
93+64.71	P.C.			

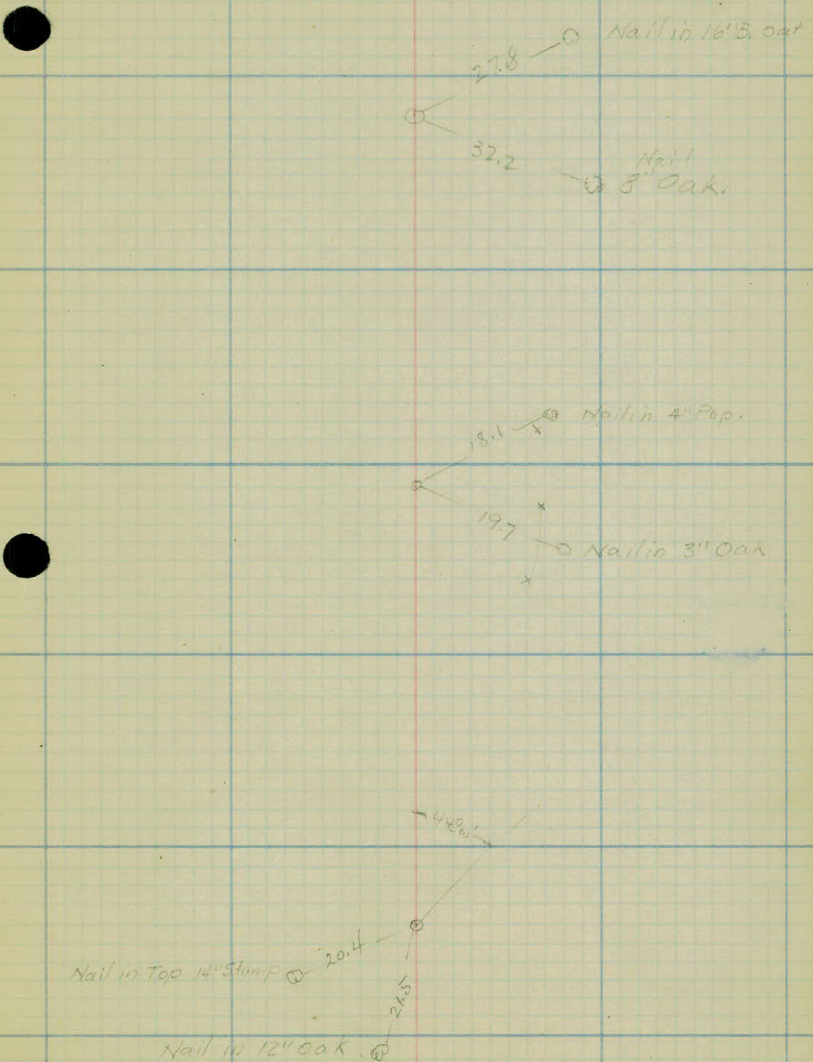
N. 88° .10 E.


Sec. 4
Iron Mon.
Sec. 9.
Sec. 5
Sec. 8
908.8
95°38'
23.70
16.75
P.I. 95+85
18.2
19.65
Nail in 24" Blk oak
68°00'
℄ Road To Stillwater
P.C.

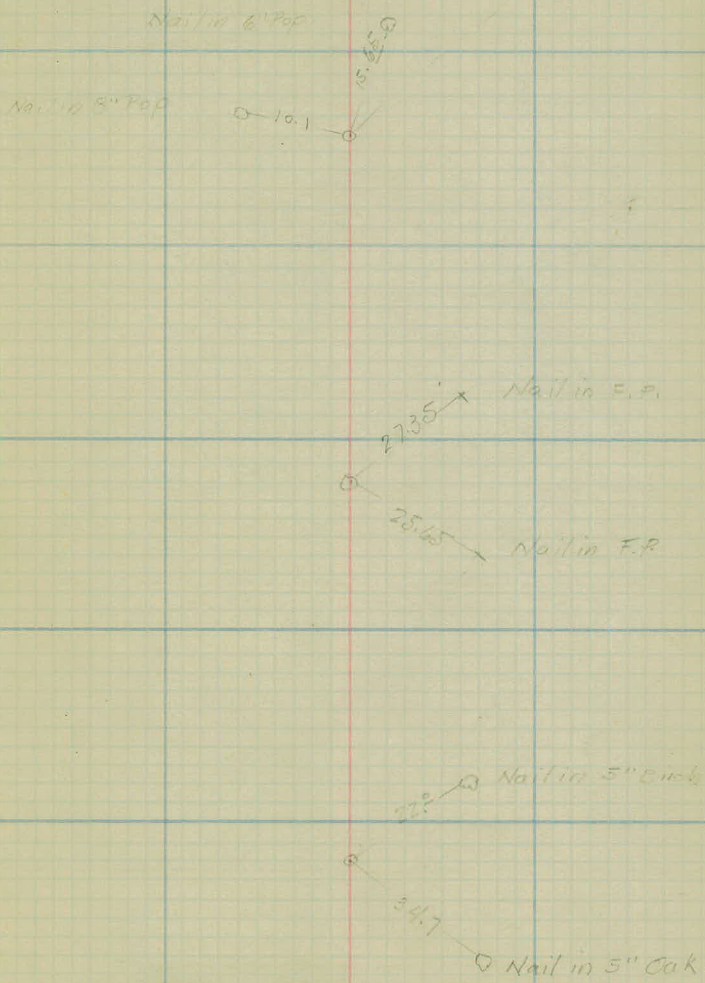
Station	PT.	L	R	Calc. Bear.
				N. 40° ~~23'~~ W.
102+22.56	P.T.	14°30'		
102+00		12°14.6'		20° C.L.
101+50		7°14.6'		Δ 29°-00'
101+00		2°14.6'		P.I. 101+52.03
100+77.56	P.C.	0°-00'		S.T. 74.47
				L.C. 145.00
				Cor. 19-50' ch.
				N. 11° ~~23'~~ W.
100+02.62	P.T	1°57½'		
				4°-C.L.
99+50		0°54.3'		Δ 3°-55'
				P.I 99+53.7
99+04.72	P.C	0°-00'		S.T. 48.98
				C.L. 97.91
				N. 7° ~~28'~~ W.


Nail in 4" Oak.
26.85
36.9
Gate Post
Nail in 10" Oak Stump
46.25
40.4
Nail in 30" Oak

Station	PT.	L	R	Calc Bear
				N. 11° 37' E.
113+95.46	P.T.		15°45'	
113+50			11°-39.5'	18° C.R.
113+00			7°-04.5'	Δ 51°-30'
112+50			2°-39.5'	P.I 113+10.6
112+20.46	P.C.		0°-00'	S.T. 90.14
				C.L. 175.00
				cor. 15' - 50' ch.
				N. 19° 53' W.
111+32.30	P.T.	11°-45'		
111+00		9°-13.6'		15° C.L.
110+50		5°-34.6'		Δ 23°-30'
110+00		1°-49.6'		P.I 110+55.3
109+75.63	P.C.	0°-00'		S.T. 79.67
				L.C. 156.67
				Cor. 12.- 50' ch.
				N. 3° 37' E.
105+44.62	P.T.		22°-00'	
105			17°-32.3'	20° C.R.
104+50			12°-32.3'	Δ 44°-00'
104+00			7°-32.3'	P.I 104+09
103+50			2°-32.3'	S.T 116.28
103+24.62	P.C		0°-00'	L.C. 220.00
				Cor. 19-50 ch.
				N. 46° 23' W.

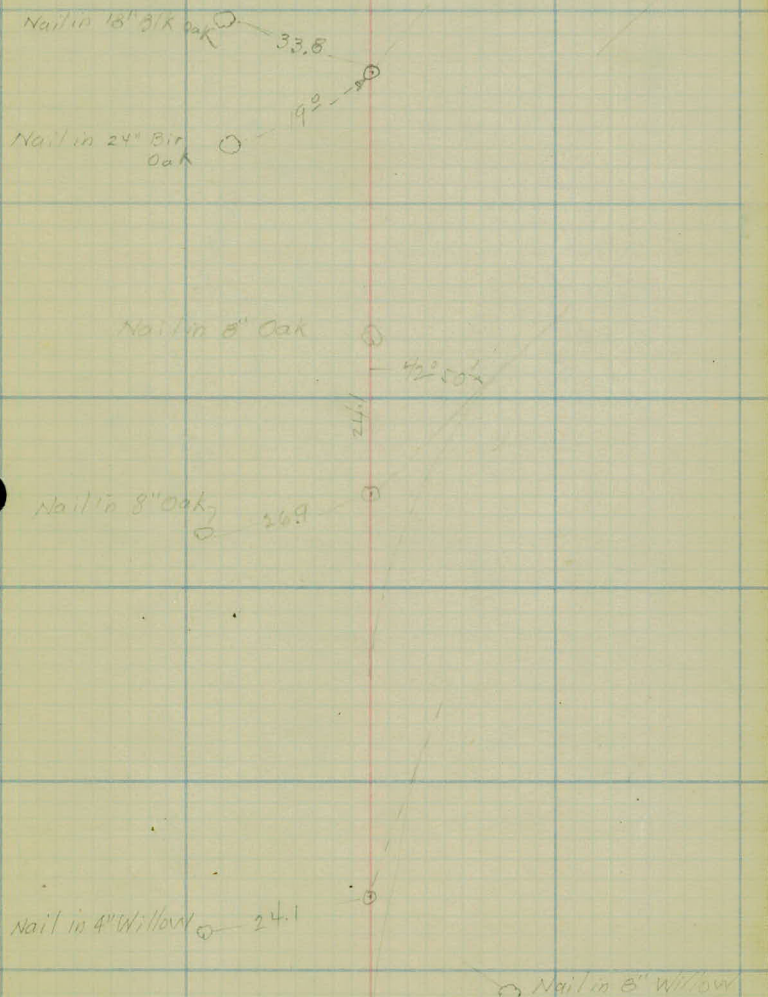

Nail in 16" B. oak
27.8
32.2
Nail
8" Oak.
Nail in 4" Pop.
18.1
19.7
Nail in 3" Oak
44°30'
Nail in Top 14" Stump
20.4
24.5
Nail in 12" Oak

Station	Pt.	L	R	Calc. Bear.
				~~N [illegible]-03 E~~ 1. 57 E
123+52.12	P.T.		24°-45'	
123+00			19°-01'	22° C. R.
122+50			13°-31'	Δ 49°-30'
122+00			8°-01'	P.I. 122+47.92
121+50			2°-31'	S.T. 120.80 ✓
121+27.12 ✓	P.C.		0°-00'	L.C. 225.00 ✓
				0.23 cor. - 50 ch.
				N 12° ~~30~~ 27 E.
121+25.82 ✓	P.T.		7°-30'	12° C.R.
121			5°-57'	Δ 15°.
120+50			2°-57'	P.I. 120+63.[illegible]
120+00.82 ✓	P.C.		0°-00'	S.T. 62.98 ✓
				L.C. 125.00 ✓
				0.06 cor. 50 ch.
				N. 2° ~~[illegible]~~ 33 W.
116+25.37 ✓	P.T.	7°-05'		
116		5°-49'		10° C.L.
115+50		3°-19'		Δ 14°-10'
115		0°-49'		P.I. 115+55.0
114+83.70 ✓	P.C.	0°-00'		S.T. 71.30 ✓
				C.L. 141.67 ✓
				.05 cor. 50 ch.
				N 11° ~~[illegible]~~ 37 E.



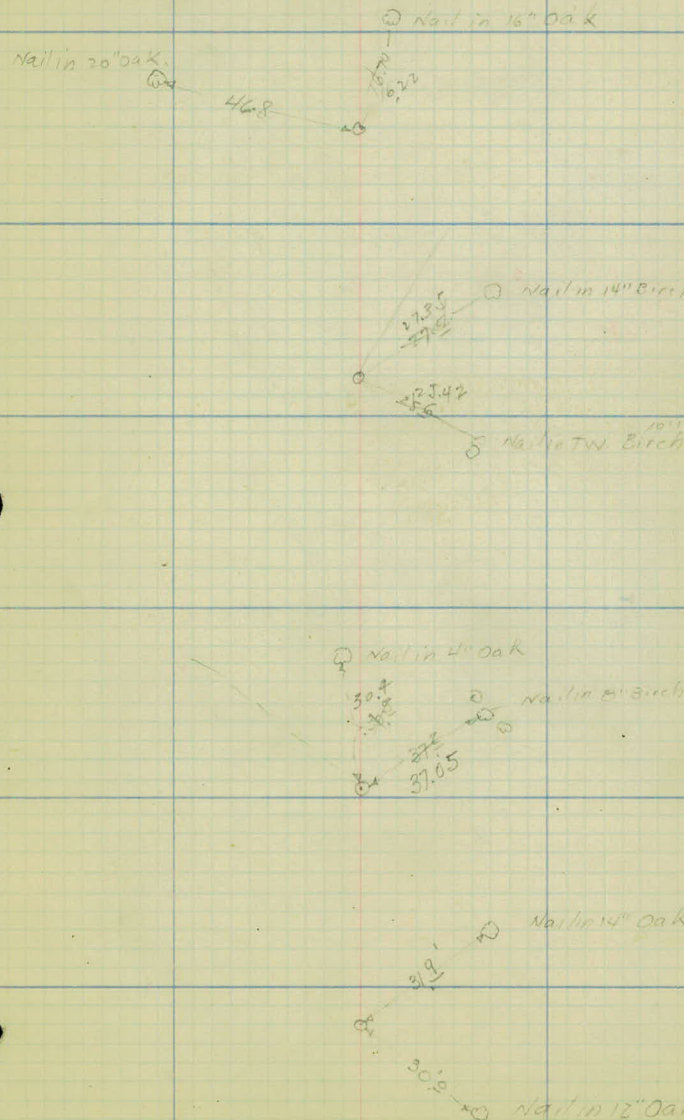
Nail in 6" Pop
Nail in 8" Pop
10.1
27.35'
Nail in F.P.
25.65
Nail in F.P.
Nail in 5" Birch
34.7
Nail in 5" Oak.

Station	Pt.	L	R	Calc. Bear.
				S. 27 33 E
				S 20 13 W
136+92.9	P.T.		30°40'	
136+50			17°40'	
136			14°10'	14° C.R.
+50			10°40'	Δ 41°20'
135+00			7°10'	P.I 135+52.4
134+50			3°40'	S.T. 154.75
133+97.25	P.C.		0°00'	L.C. 295.24
				S. 69°-53' E
				N. 20°-13' W
129+56.50	P.T.		21°25'	
+50			20°50'	18° C.R.
129			16°20'	Δ 42°.50'
+50			11°50'	P.I 128+43.93
128			7°20'	S.T. 12.5.36
+50			2°50'	L.C. 237.96
127+18.6	P.C.		0°00'	a.15 Cor - 50' h.
				N. 69°-17' E.
127+05.25	P.T.		8°10'	5° C.R.
127			8°02'	Δ 6°-20'
+50			1°-47'	P.I 126+42
126			0°-32'	S.T. 63.4
125+78.5	P.C.		0°00'	L.C. 126.65
				61-57
				N 62°-03' E.


Nail in 18" Blk Oak
33.6
19°
Nail in 24" Blk Oak
Nail in 8" Oak
42° 50'
21.1
Nail in 8" Oak
36.9
Nail in 4" Willow
24.1
Nail in 8" Willow

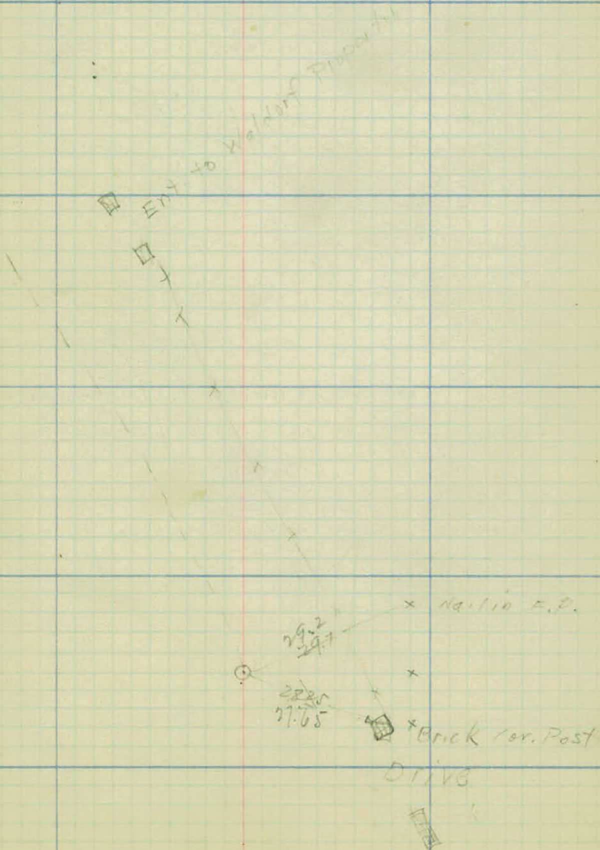
Station	Pt.	L.	R.	
				N 75° 27' E
				~~S 56° 47' E~~
147+94.~~18~~ 54	P.T.	18°-25'		29° C.L.
147+50		11°-58'		Δ 36°-50'.
147+00		4°-43'		P.I 147+34.0
146+67.~~17~~ 53	P.C.			S.T. 66.~~53~~ .47
				L.C. 127.01 ✓
144+85.42 = 144+85.05				S 67° 43' E
				~~S 19° 57' E~~
144+85.~~05~~ 42	P.T.		11°-30'	20° C.R.
144+50			7°-57.5	Δ 23°-00'.
144+00			2°-57.5	P.I 144+29
143+70.~~05~~ 42	P.C.			S.T. ~~58.95~~ 58.58
				L.C. 115.00
				cor. 19, 50' ch.
				N 89° 17' E
				S 42° 57 E.
142+44.~~?~~ 7	PT ~~P.C.~~	31°-35'		42°- C. L.
142+00		18°-01'		Δ 63°-10'
141+50		7°-31'		P.I. 142+00
141+14.~~2~~3	P.C	0°-00'		S.T. ~~85.78~~ 85.70
				L.C. 150.40 ✓
37+55	P.O.T.			
				S 27° 33' E
				S 20° 13' W.

Equation 145 / 144 99.63


Nail in 16" Oak
Nail in 20" Oak
46.8
Nail in 14" Birch
Nail in TW. Birch
Nail in 4" Oak
Nail in 8" Birch
37.05
Nail in 14" Oak.
Nail in 12" Oak.

Station	Pt.	L	R	
				N 48° 24 E
149+77.~~21~~ 00	P.T.	13°31.5		~~S 83° 50 E~~
				20° C.L.
149+50		10°48'		Δ 27° 03'
				P.I 149+15
149		5°48'		S.T. 69.04 69.25
				L.C. 135.25
148+41.~~96~~ 75	P.C.			
				N 75° 27' E
				~~S 56° 47 E~~

Eastern
150 100.21
149



Ent to Waldorf Prop
Nailin E.D.
29.2
29.7
28.25
27.65
Brick Cor. Post
Drive

Center Line Levels.

Project 24-52

Station	+	H.I	−	Elev.	
B.M.	4.96	996.13		991.17	
West along Co. Rd. "C"					
0+00			4.56	991.57	✓
+ 14			4.9	91.2	✓
+20			4.9	91.2	✓
+50			5.7	90.4	✓
1+00			6.4	89.7	✓
2+00			6.1	90.0	✓
So. along E. Co. Line					
0+00			4.56	991.57	✓
1			4.8	91.3	✓
2			4.5	91.6	✓
3			4.5	91.6	✓
4			3.4	92.7	✓
No. along E. Co. Line					
0+00			4.56	991.57	✓
1			4.7	91.4	✓
2			3.8	92.3	✓
3			2.6	93.5	✓
#10 Approx			1.7	94.4	✓

W.H.C.
C.E.J.
E.H.R.
T.F. } Feb 6, 1924.

Lake Imp B.M. #23, Spike in T.P. NW cor. Co. Rd "C" & E. Co. Line

Top Stone Mon. E. Co. Road "C" & E. County Line.

Stone Mon. Co. Rd "C"

Stone Mon. Co. Rd. "C"

Top of Rail

Station	+	H.I	−	Elev.
		996.13		
0+00			4.56	991.57
+25			5.5	90.6
+34			5.6	90.5
1			4.1	92.0
+44			3.3	92.8
2			3.9	92.2
3			5.4	90.7
T.P.	4.85	995.81	5.17	990.96
4			5.5	90.3
5			5.6	90.2
6			5.8	90.0
7			5.7	90.1
+56			4.9	90.9
+97			4.08	91.73
8			4.1	91.7
+27			5.1	90.7
9			7.3	88.5
10			7.6	88.2
11			6.3	89.5
T.P.	1.90	992.56	5.15	990.46
12			2.2	90.4
13			4.3	88.3
14			4.9	87.7
+62			5.3	87.3

℄ E. Co. Line Top of Mon.

Top of Stake Sta. 3.

Top of Rail ℄ Line Left Right.

5.2 5.1 4.6 3.6 3.1 2.3
300 200 100. 100 200 300

Top of Stake Sta. 11.

Farm Ent. L.

Station	+	H.I	−	Elev.
		992.56		
15			5.2	987.4
16			5.1	87.5
+37			4.9	87.7
17			5.7	86.9
18			7.4	85.2
19			10.2	82.4
T.P	5.79	989.16	9.19	983.37
20			8.3	80.9
21			7.1	82.1
22			5.5	83.7
+77			4.9	84.3
23			4.7	84.5
+50			4.1	85.1
24			2.5	86.7
T.P	9.69	997.07	1.78	987.38
25			5.4	91.7
+10			4.63	92.44
26			4.8	92.3
B.M.	8.00	1002.75	3.82	994.75
27			8.8	94.0
28			5.6	97.2
29			3.6	99.2
30			2.6	1000.2
T.P	12.10	1013.27	15.8	1001.17
31			10.2	1003.1

Top of Stake Sta. 19.

℄ Road Left.

℄

Top stake 24

Top of Mon. (Iron)

Taken 3/6/24

R.R spike in 30" Maple 30' R. Sta 76+70

Top

Station	+	H.I	−	Elev.	
		1013.27			
32			6.2	1007.1	✓
33			2.5	1010.8	✓
T.P.	10.95	1022.92	1.30	1011.97	✓
34			9.2	13.7	✓
35			5.4	17.5	✓
36			4.0	18.9	✓
37			5.5	17.4	✓
+60			7.6	13.3	✓
38			11.8	11.1	✓
T.P	2.56	1014.19	10.59	1012.33	✓
39			6.5	08.4	✓
+66			6.8	08.1	✓
40			6.8	08.1	✓
+73			8.4	06.5	✓
41			9.8	05.1	✓
+50			12.0	02.9	✓
T.P.	4.92	1008.19	11.62	1003.27	✓
42			6.1	02.1	✓
43			5.5	02.7	✓
+35			6.1	02.1	✓
44			6.2	02.0	✓
45			5.6	02.6	✓
46			4.4	03.8	✓
47			5.6	02.6	✓
+55			11.3	00.9	✓

Top of Stake 33

Top of Stake 38

Top of Rock

Station	+	H.I	−	Elev.
		1008.19		
48			9.1	999.1
T.P	0.17	996.85	11.51	996.68
49			3.8	93.1
50			8.6	88.3
51			12.0	84.9
T.P.	0.48	986.93	10.40	986.45
52			4.1	82.8
B.M.			4.52	982.41
+50			4.7	82.2
53			5.2	81.7
54			6.1	80.8
55			6.5	80.4
56			6.5	80.4
T.P.	4.38	985.73	5.58	981.35
57			2.8	82.9
+42			2.2	83.5
58			3.7	82.0
+55			7.1	78.6
59			8.5	77.2
60			9.7	76.0
61			10.3	75.4
62			10.2	75.5
T.P.	3.22	979.64	9.31	976.42
63			5.9	73.7
64			7.4	72.4 72.2

Top of Rock

Top of Stake 51

RR Spike in Power Pole 22' R. Sta 52+17

Top of Stake 52

Station	+	H.I	−	Elev.	
		979.64			
65			7.7	(970.9)	71.9
66			7.2	72.4	✓
1+38					
67			8.4	71.0	✓
406			8.6	71.0	
68			8.7	70.7	✓
69			8.7	71.4	✓
70		✓	7.1	72.5	✓
T.P.	0.47	973.70	6.41	973.23	✓
71			1.9	71.8	✓
72			3.7	70.0	✓
73			5.3	68.4	✓
74			5.7	68.0	✓
75			6.3	67.4	✓
76			7.0	66.7	✓
77			7.0	66.7	✓
78		✓	6.3	67.4	✓
B.M.	12.01	980.51	5.20	968.50	✓
79			10.9	69.6	✓
80			7.8	72.7	
81			5.4	75.1	✓
82			4.9	75.6	✓
83			5.0	75.5	✓
84			1.9	78.8	✓
T.P.	11.30	990.76	1.05	979.46	✓

Int of Road Right

Farm Ent Left

Top of Stake

R.R. Spike in Power Pole 78+63 75' Left

Top of Stake

Station	+	H.I	−	Elev.
		990.76		
85			5.3	985.5
T.P.	11.25	1001.55	0.46	990.30
86			9.8	92.1
+50			6.4	95.2
87			4.0	97.6
+50			2.5	99.1
91			3.2	98.4
T.P.	0.95	997.61	4.92	996.63
89			2.9	94.7
0			6.3	91.3
91			8.8	88.8
+42			10.7	86.9
T.P.	0.30	986.53	11.38	986.23
92			2.7	83.8
93			7.9	78.6
T.P.	1.28	975.89	11.92	974.61
+64			6.3	69.6
94			7.1	66.8
T.P.	0.72	964.95	11.66	964.23
+50			2.9	62.1
95			7.0	58.0
+50			3.9	56.1
96			10.2	54.8
T.P.	2.94	956.10	11.79	953.16
96+50			3.9	52.2

Station	+	H I	−	Elev.
		956.10		
97			6.0	950.1
98			10.3	945.8
T.P.	1.45	946.00	11.55	944.55
99			2.5	43.5
+50			3.4	42.6
100			4.2	41.8
B.M.			5.21	940.79
101			5.3	40.7
+50			5.3	40.7
102			4.5	41.5
+50			3.4	42.6
103			2.6	43.4
+50			4.9	41.1
104			6.1	39.9
+50			6.5	39.5
T.P.	4.48	943.99	4.49	939.51
105			4.4	39.6
+44			3.8	40.2
106			4.2	39.8
107			7.8	36.8
108			9.1	34.9
+50			8.7	35.3
109			6.8	37.2
110			2.1	41.9
T.P.	4.40	945.82	2.57	941.42

Top Stake 99

R.R. Spike in 14" Tree 22' R. 100+13

Station	+	HI	−	Elev.
		945.82 ✓		
110+50			5.8	940.0 ✓
111			7.9	37.9 ✓
~~112~~ +50			8.4	37.4 ✓
112			8.8	37.0 ✓
+50			8.2	37.6 ✓
113			7.0	38.8 ✓
+50			5.1	40.7 ✓
114			4.6	41.2 ✓
+75			5.4	40.4 ✓
115			9.1	36.7 ✓
B.M.			8.23	937.59 ✓
	125.53		179.13	991.17
			125.55	937.59
			53.68 ✓	53.58 ✓
B.M.				

℄ Levels

Proj. 24-52

Nail in 8" Twin Oak 20' R 115+10

To here 2-7/24

Station	+	H.I	−	Elev.
B.M.	0.54	938.13		937.59
(115)				
115+50			3.8	934.3
116			5.2	32.9
+40			5.6	32.5
117			5.5	32.6
118			6.2	31.9
119			6.0	32.1
T.P.	6.21	938.43	5.91	932.22
+50			6.3	32.1
120			6.4	32.0
+50			6.5	31.9
121			6.2	32.2
+50			6.4	32.0
122			6.4	32.0
+50			6.7	31.7
123			6.4	32.0
+50			6.1	32.3
T.P.	2.50	937.48	3.45	934.98
124			4.8	32.7
+50			5.4	32.1
125			5.6	31.9
126			5.4	32.1
+30			4.7	32.8
127			5.5	32.0
+50			5.0	32.5

W.H.C.
C.E.S.
M.S.A. } Feb 27, 24
T.F.

Top of Stake 119

Nail in 8" Poplar 15'R Sta 1193+53

Station	+	H. I	−	Elev.
		937.48		
128			.46	9.22.9 ✓
+50			46	932.91
129			1.9	32.6 ✓
T.M.	1.05	937.43 ✓	1.10	936.38 ✓
+50			5.6	31.8 ✓
130			5.6	31.8 ✓
+65			4.7	32.7 ✓
131			5.4	32.01
132			5.7	31.7 ✓
133			4.8	32.6 ✓
134			16.00	921.43 ✓
			3.5	33.9 ✓
+50			2.0	35.4 ✓
T.P.	10.52	947.08 ✓	0.87	936.56 ✓
135			10.0	37.1 ✓
+50			7.9	39.2 ✓
136			4.8	42.3 ✓
+50			1.3	45.8 ✓
T.P.	5.53	952.09 ✓	0.52	946.56 ✓
137			3.7	48.4 ✓
+55			1.2	50.9 ✓
+70			1.8	50.3 ✓
138			3.8	48.3 ✓
+60			2.9	43.2 ✓
139			10.3	41.8 ✓
140			11.7	40.4 ✓

P.K. spike in 8" Oak. 33' Lt. Sta. 127+40

Top of Ice Lake De-Montarville Feb 27, 1924

Top Stake 34+50

Top Stake 136+50

Station	+	H.I	−	Elev.
		952.09		
T.P.	1.42	942.86 ✓	10.65	941.44 ✓
141			3.5	39.4 ✓
+50			4.2	38.7 ✓
142			4.9	38.0 ✓
+65			5.2	37.7 ✓
143			5.4	37.5 ✓
+70			5.5	37.4 ✓
144			5.4	37.5 ✓
+50			5.9	37.0 ✓
145			5.6	37.3 ✓
T.P.	9.65	948.09 ✓	4.42	938.44 ✓
146			9.8	38.3 ✓
+67			7.3	40.8 ✓
147			6.7	41.4 ✓
+50			4.6	43.5 ✓
148			0.3	47.8 ✓
T.P.	10.94	958.84 ✓	0.19	947.90 ✓
+41			6.5	52.3 ✓
B.M	10.24	968.86 ✓	0.22	958.62 ✓
149			9.9	59.0 ✓
+50			6.9	62.0 ✓
150			4.0	64.9 ✓
151			0.5	68.4 ✓
T.P.	7.08	975.69 ✓	0.13	968.61 ✓

Top of Stake 140

Top. Stake 145

Top of Stake 148+00

R.R. spike in 16" Oak 35' Lt. Sta. 149+00
(Two Slits on Tree Priv. Grds.)

Station	+	H.I	−	Elev.	
		975.69 ✓			
152			6.0	69.7 ✓	
162			5.1	70.6 ✓	
153			4.4	71.3 ✓	
	Across Lake				
	Checking back to Sta. 115.				
B.M.	0.35	958.97 ✓		958.62	
T.P.	0.13	948.04 ✓	11.06	947.91 ✓	
T.P.	0.28	936.93 ✓	11.29	936.65 ✓	
T.P.	3.44	930.38 ✓	9.99	926.94 ✓	
T.P.	4.89	926.48 ✓	8.79	921.59 ✓	
T.P.	10.38	931.99 ✓	4.87	921.61 ✓	
T.P.	8.76	939.94 ✓	0.31	931.68 ✓	
B.M.			2.33	937.61 ✓ = 37.59	

For check levels from Sta 0 to 0
to Sta 115 to see following page

℄ Drive to Estate left.

Nail in 8" oak 20' R. 115+10

Check Levels

Project - 24-52.

W.H.C.
G.E.J.
M.S.A.
T.F. } Feb 25, 24.

Sta.	+	H.I	−	Elev.	
B.M.	5.68	996.85		991.17	
T.P.	5.54	996.25	6.14	990.71	
T.P.	2.16	992.83	5.58	990.67	
B.M. (new)			4.29	988.54	
T.P.	5.28	988.66	9.45	983.38	
T.P.	9.16	996.56	1.26	987.40	
B.M.	9.33	1004.09	1.80	994.76	994.75
T.P.	10.82	1014.80	0.11	1003.98	
B.M. (new)	7.32	1021.15	0.97	1013.83	
T.P.	3.01	1012.49	11.67	1009.48	
T.P.	5.60	1008.88	9.21	1003.28	
T.P.	0.66	1000.29	9.25	999.63	
T.P.	0.90	990.78	10.41	989.88	
B.M.	4.35	986.78	8.35	982.43	982.41
T.P.	4.37	985.74	5.41	981.37	
T.P.	3.28	979.71	9.31	976.43	
T.P.	0.92	974.17	6.46	973.25	973.23
B.M. (new)			1.25	972.92	
T.P.	10.87	979.35	5.69	968.48	968.50
T.P.	11.06	990.22	0.19	979.16	
T.P.	10.67	1000.87	0.02	990.20	
B.M. (new)	2.94	1000.31	3.50	997.37	
T.P.	0.24	988.72	11.93	988.38	
T.P.	0.79	977.81	11.70	977.02	
T.P.	0.30	966.50	11.61	966.20	
T.P.	0.34	954.86	11.98	954.52	

Lake Imp B.M. #23, R.R Spike in T.P. N.W. Cor.
Co. Rd "C" & E. Co. Line.

Top of Large Rock - 15' Lt. Sta 15+72

R.R. spike in 30" Maple 30' R. 26+70

Nail in Po. Pole Rt. Sta 54

Top of Rock

Nail in Po. Pole
R.R. Spike in Po Pole, 22' R. Sta. 52+17

R.R spike in 18" Poplar 35' Rt 70+36
" " " Po Pole 75' Lt. 78+63
Nail in F.P. Lt. Sta 84+00

Nail in 8" Oak 89+70 R. 18'

	+	H.I	−	Elev	
		954.86			
T.P.	3.34	946.82	11.38	943.48	
B.M.	6.91	947.72	6.01	940.81	
T.P.	4.33	944.77	7.28	940.44	
T.P.	7.82	945.38	2.21	942.56	
B.M.			7.77	937.61 = 937.59	
	133.09		186.65	991.17	
			133.09	937.61	
			53.56 ✓	53.56 ✓	

R.R. spike 14" Tree 22' R. 100+13

Nail in 8" Oak 20' R 115+10

Proj. #24-52

Art. Topog. from Sta. 0+00 to End of Proj.

Sta.

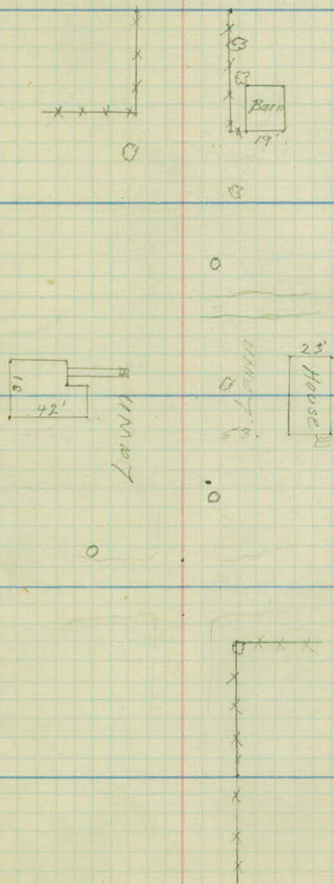
3

2

1

0+00 Center of East Co. Line Road.

-1



+82 14" T. 30' R
+63 12" T. 30' R
+60 Barn 34' R.
+45 Cor. of F. 27' L
+37 Barn 34' Barn
+37 F. 26' R.
+24 T. 30' L.
+07 T. 27' R.
+68 P.P. 17' R.
+45 10' Drive Way
+37 T. 30' R.
+45 T. 33' L
+37 T. 37' L
+12 Tree 43' L
+10 steps 30' L
+19
+06 T. 22' R.
+86 House 52'
+89 T. 29' R.
+78 House 53' R
+67 T. 32'
+73 Three T. 25'
+55 T. 32'
+46 T. 25' R.
+36 T. 32'
+45 P.P. 17' R.
+18 P.P. 50' L
+18 Roadsign 40' L
-26 T 18'
-32 Hyd. 21' L.
-26 6" T. 29' R
-30 6" T. 29' R
-32 15" T. 23' R
-54 8" T. 29' R
Fence 29' R.

Sta.

9

8

7

4

5

4

3

+87 T.P 27' L.

+61 F. Cor. 42'

+49 F. Cor. 56' L.

7 3"x10" Plank

+97.0 R.R. Track

Soo Line

+65 F. 62' L

+36 Cor. F. 26' L.

+32 T.P. 26' L.

+83 Private Rd. 15' w.

+97 T.P. 25' L.

+20 18" T. 30' L.

Fence 25' L.

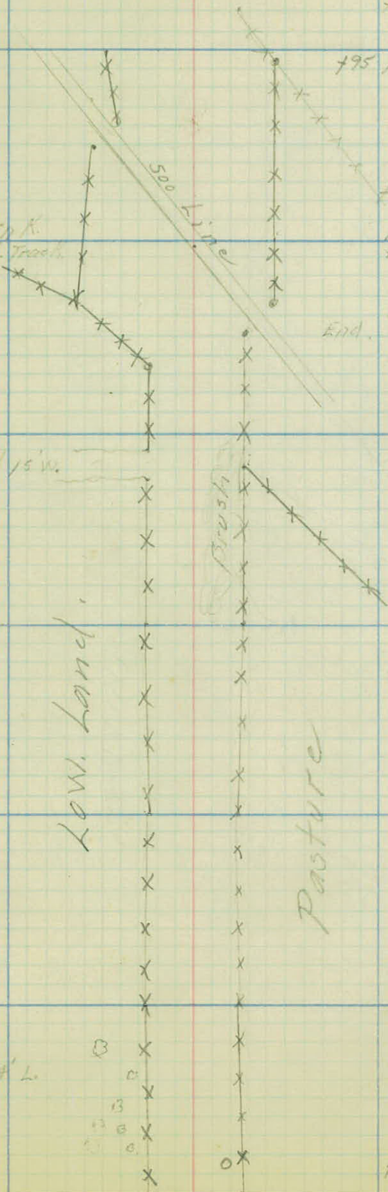
+14 T.P. 24' L.

+25 8" T. 17' L.

+62 12" Tree 34' L.

+20

26' F.



+21 Fence 52'

+95 Fence Cor. 44' R

+25 P.P. 21' R.

Fence 44' R.

+97 Sign Post 20' R

+64 P. 42' R

End. +51 F. 28' R

+81 T.P. 26' R

Fence 26' R

+94 P.P. 19' R.

Fence 26' R

+79 P.P. 20' R

Fence 22' R

+68 6" T. 32' R.

+45 P.P. 20' R

F. 25' R

+14 P.P. 19' R.

Sta.

15

14

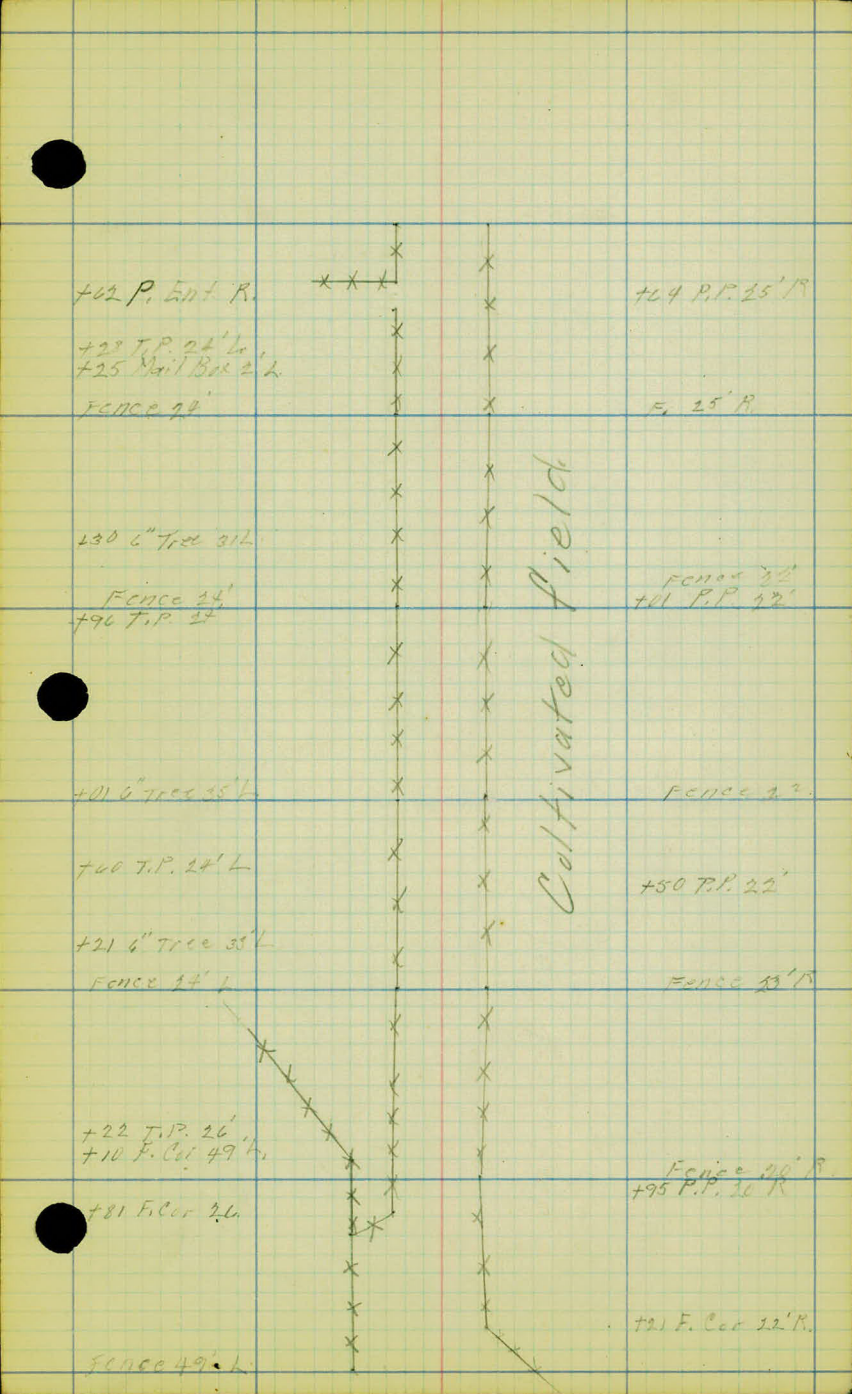
13

12

11

10

9


+62 P. End R.
+28 T.P. 24' L.
+25 Mail Box 2' L.
Fence 28'
230 6" Tree 31' L.
Fence 24'
+96 T.P. 27'
+01 6" Tree 25' L.
+40 T.P. 24' L.
+21 6" Tree 33' L.
Fence 24' L.
+22 T.P. 26'
+10 F. Cor 49' L.
+81 F. Cor 2.6
Fence 49' L.
Cultivated Field
+64 P.P. 25' R.
F. 25' R.
Fence 32'
+01 P.P. 22'
Fence 2.0'
+50 P.P. 22'
Fence 33' R.
Fence 29' R.
+95 P.P. 20' R.
+21 F. Cor 32' R.

Sta.

21

20

19

18

17

16

15

+98 T.P. 21' L.
~~+87 Mail P.~~
+78 Road
+62 Cor F. 20'

+56 T.P. 22'

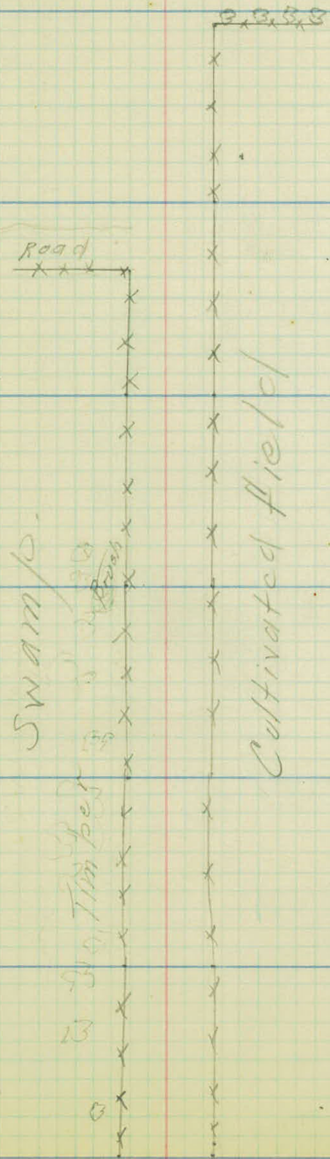
+22 6" T. 29' L.

F. 21' L

+27 T.P. 21' L.
+03 12" T. 31' L.
Fence 21'

Fence 22'
+95 10" T. 18'
+78 T.P. 22'
+79 6" T. 15'
+48 6" T. 18'
+50 8" T. 10' L.
+34 6" T. 20'
+33 12" Tree 37' L.

Fence 25' L.



+95 18" T. 28'
+92 F. Cor. 27'

+34 P.P. 27' R.

F. 27' R
+87 Mail Box 21' R.

F. 27' R
+83 P.P. 26' R

+78 Sign Post 22' R

+39 P.P. 25' R.

Fence 26'
+97 P.P. 26'

+04 Cross F.
Fence 24' R

Sta.

27

26

25

24

23

22

21

+98 Mail Box 9' L.

+23 T.P. 18' L
+18 P.P. 18' L
+18 Sign Post 18' L
F. Ent.

+65 6" T. 30' L.

+42 Sidewalk 30' L 4' Wide
+36 14" T. 30
+28 Post 15' L
+12 14" T. 30
+05 House 49' L
+91 T.P. 18' L
+88 8" T. 30'

+55 6" T.
+25 6" T. 27' L
+24 Mail Box 8' L
+16 F. Cor. 20' L

+47 T.P. 18' L

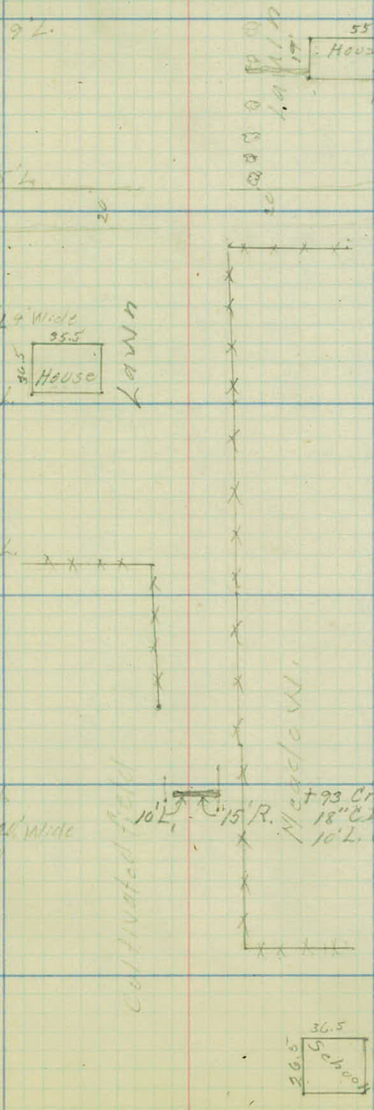
+40 F. Cor. 18' L

+03 Guard Rail
+90 Guard rail 7' L

+77 Farm Ent 20' Wide
+53 Mail Box 10
+51 T.P. 19

+71 4" T. 20' L

+24 T.P. 21' L.



+73 4' Sidewalk 53' R
+69 House 63' R

+18 24" T. 32' R
+15 P.P. 27' R
F. Ent.

+80 F. Cor. 20' R

+25 5" T. 16' R.
+06 House
F. 25' R

+81 P.P. 27
+32 4" T. 12' R

F. 25' R

+33 P.P. 25' R
F. 28' R.
+10 End of G. Rail

+93 Cross Drain
18" C.I.P. 25' Long
10' L. & 15' R.
+84 Guard rail 13' R.

+11 Cor. F. 30' R.
+08 12" T. 30' R
+85 P.P. 26' R.

+38

Sta.

33

32

31

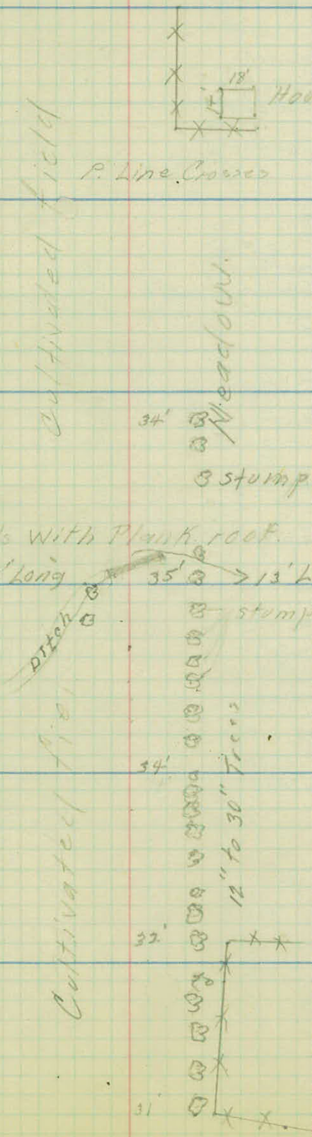
30

29

28

27

F. 26' R



+41 House
+37 F. Cor. 27' R

+14 P.P. 19' L
+05 T.P. 19' L.

+14 P.P. 27' R.

+35 18" T. 35' R
+18 12" T. 35' R

+02 P.P. 19' L.

+48 T.P. 18' L
+17 8" T. 19' L

Cobble stone Walls with Plank roof. +23 30" T. 34' R
+10 Cross Drain
6' Wide 4' Deep 26' Long > 13' L. & 13' R.
+95 5 4" T. 21' L
+80 6" T. 15' L

12"–24" Trees

+39 P.P. 19' L.

+90 T.P. 19' L.

+12 F. Cor 52' R.

Mail Box 6' L.

+87 P.P. 19' L

+57 T.P. 19' L.

18" T. 31' R
+19 F. Cor 45' R.

Sta.

39

38

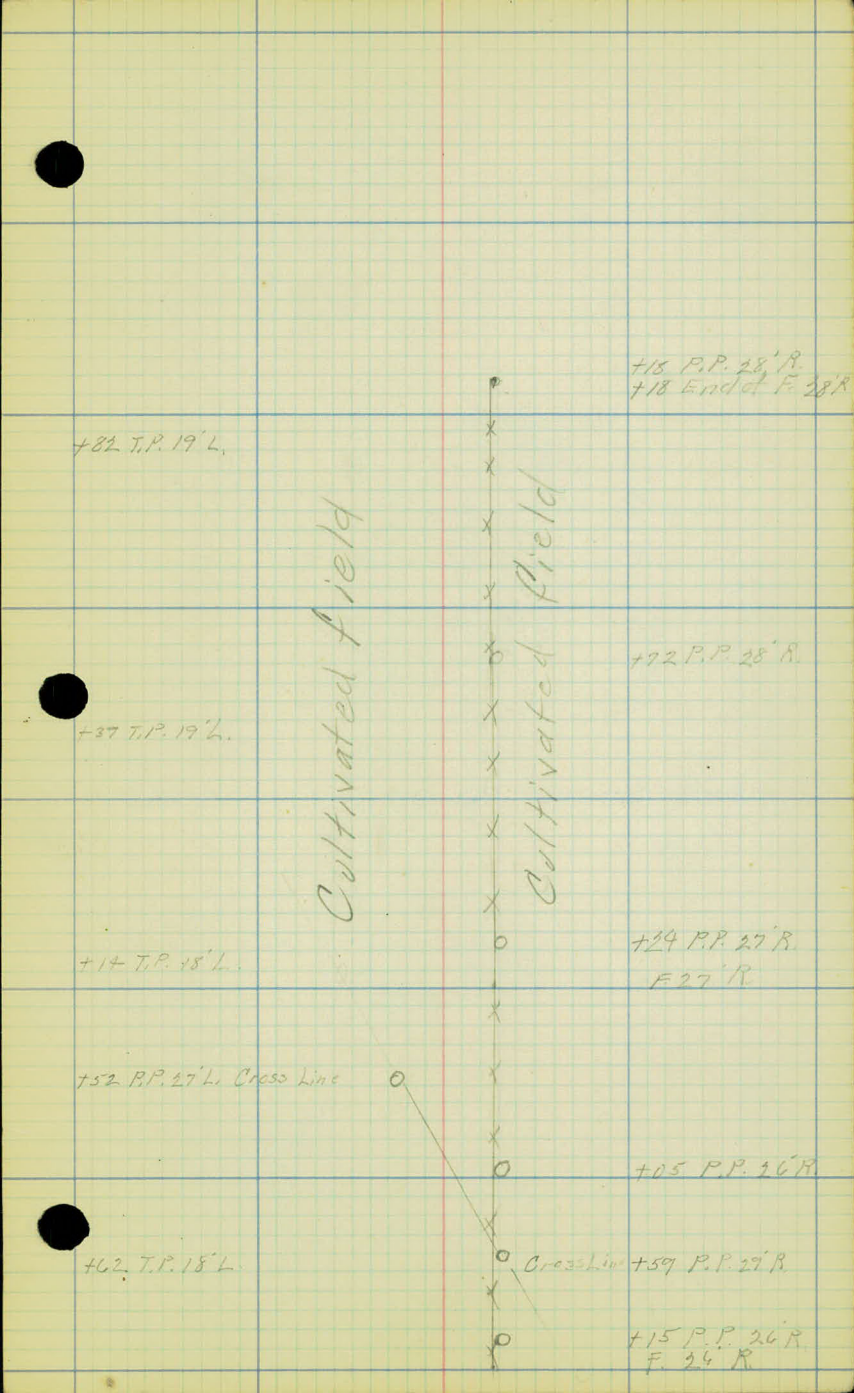
37

36

35

34

33


+18 P.P. 28' R.
+18 End of F. 28' R.
+82 T.P. 19' L.
Cultivated Field
Cultivated Field
+72 P.P. 28' R.
+37 T.P. 19' L.
+14 T.P. 18' L.
+29 P.P. 27' R.
F. 27' R.
+52 P.P. 27' L. Cross Line
+05 P.P. 26' R.
+62 T.P. 18' L.
Cross Line +59 P.P. 29' R.
+15 P.P. 26' R.
F. 24' R.

Sta.

45

44

43

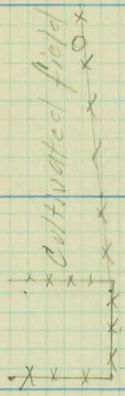
42

41

40

39

+80 F. 29'L.
+79 T.P. 29'L.



+96 P.P. 26'R.

+57 Cross F 15'L.
+87 T.P. 27'L.
+06 F. Cor 15'L.
+88 3" T. 17'L.
+72 3" T. 17'L.
+56 4" T. 17'L.
+90 4" T. 17'L.
+23 6" T. 17'L.
Farm Ent. L.

+43 P.P. 28'R.

Farm Yard

+67 T.P. 24'L.

Barn

+02 P.P. 29'R.

+47 T.P. 23'L.

Cultivated Field

+68 P.P. 29'R.

+18 T.P. 22'L.

Sta.

51

50

49

48

47

46

45

+29 F. Cor 19' R.

+05 T.P. 40' L.

+78 P.P. 16' R.

Cultivated Field

Cultivated Field

+77 T.P. 36' L.
+77 F. 30' L.

+33 P.P. 19' R.

+46 T.P. 34' L.
+46 F. 34' L.

+92 P.P. 21' R

+15 T.P. 32' L.
F. 32' L.

+36 P.P. 24' R

57a.

57

56

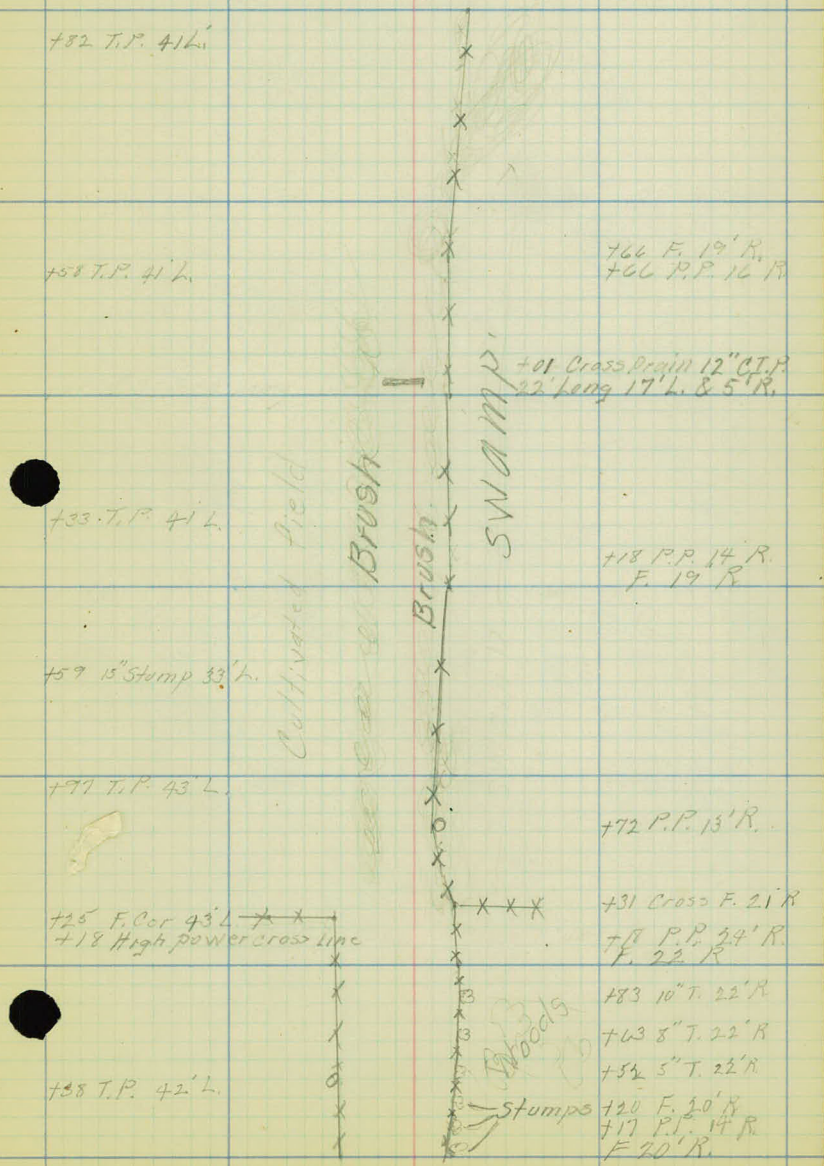
55

54

53

52

51


+82 T.P. 41 L.
+66 F. 19' R.
+66 P.P. 16' R.
+58 T.P. 41' L.
+01 Cross Drain 12" C.I.P.
22' Long 17' L. & 5' R.
SWAMP
Brush
Brush
Cultivated Field
+33 T.P. 41' L.
+18 P.P. 14' R.
F. 19' R.
+59 15" Stump 33' L.
+97 T.P. 43' L.
+72 P.P. 13' R.
+31 Cross F. 21' R
+25 F. Cor 43' L
+18 High power cross line
+78 P.P. 24' R.
F. 22' R
+83 10" T. 22' R
+63 8" T. 22' R
+52 5" T. 22' R
Woods
+38 T.P. 42' L.
Stumps
+20 F. 20' R
+17 P.P. 14' R.
F 20' R.

57a.

63

62

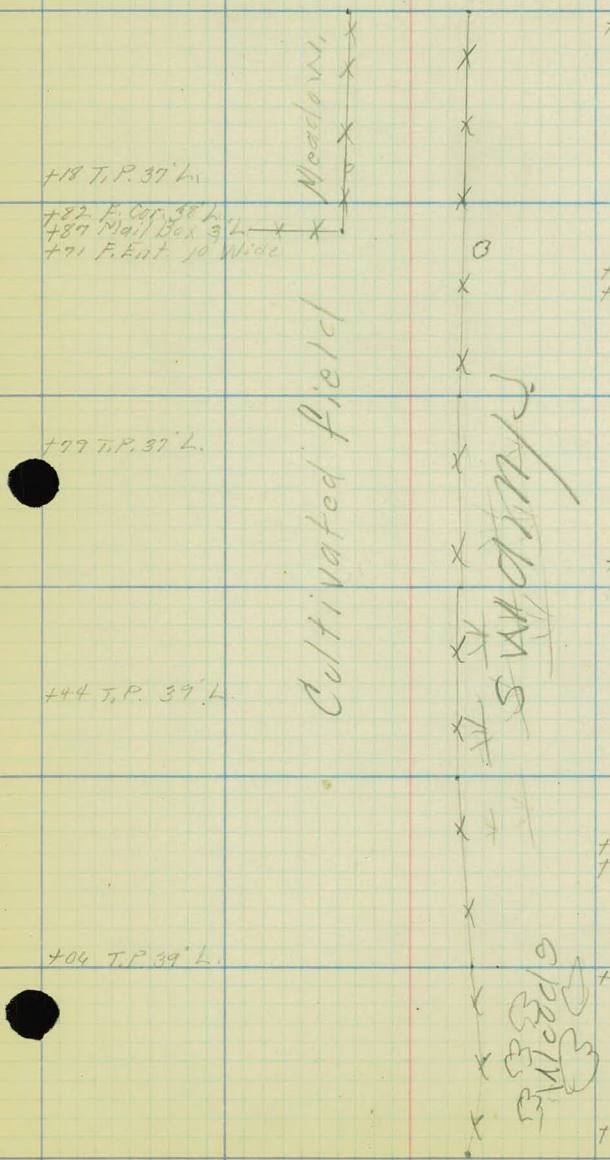
61

60

59

58

57


+97 27" T. 20' R.
+18 T. P. 37' L.
Meadow
+82 F. Cor. 38' L.
+87 Mail Box 3' L.
+91 F. Ent. 10 Wide
F. 22' R.
+58 12" T. 23' R.
+56 P. P. 22' R.
F. 22' R.
+77 T. P. 37' L.
Cultivated Field
+97 P. P. 20' R.
F. 27' R.
+44 T. P. 39' L.
F. 25'
+61 3.6" T. 19' R.
+54 P. P. 19' R.
+04 T. P. 39' L.
F. 32' R.
+93 5" T. 24' R.
+05 P. P. 15' R.
F. 30' R.

Sta.

69

68

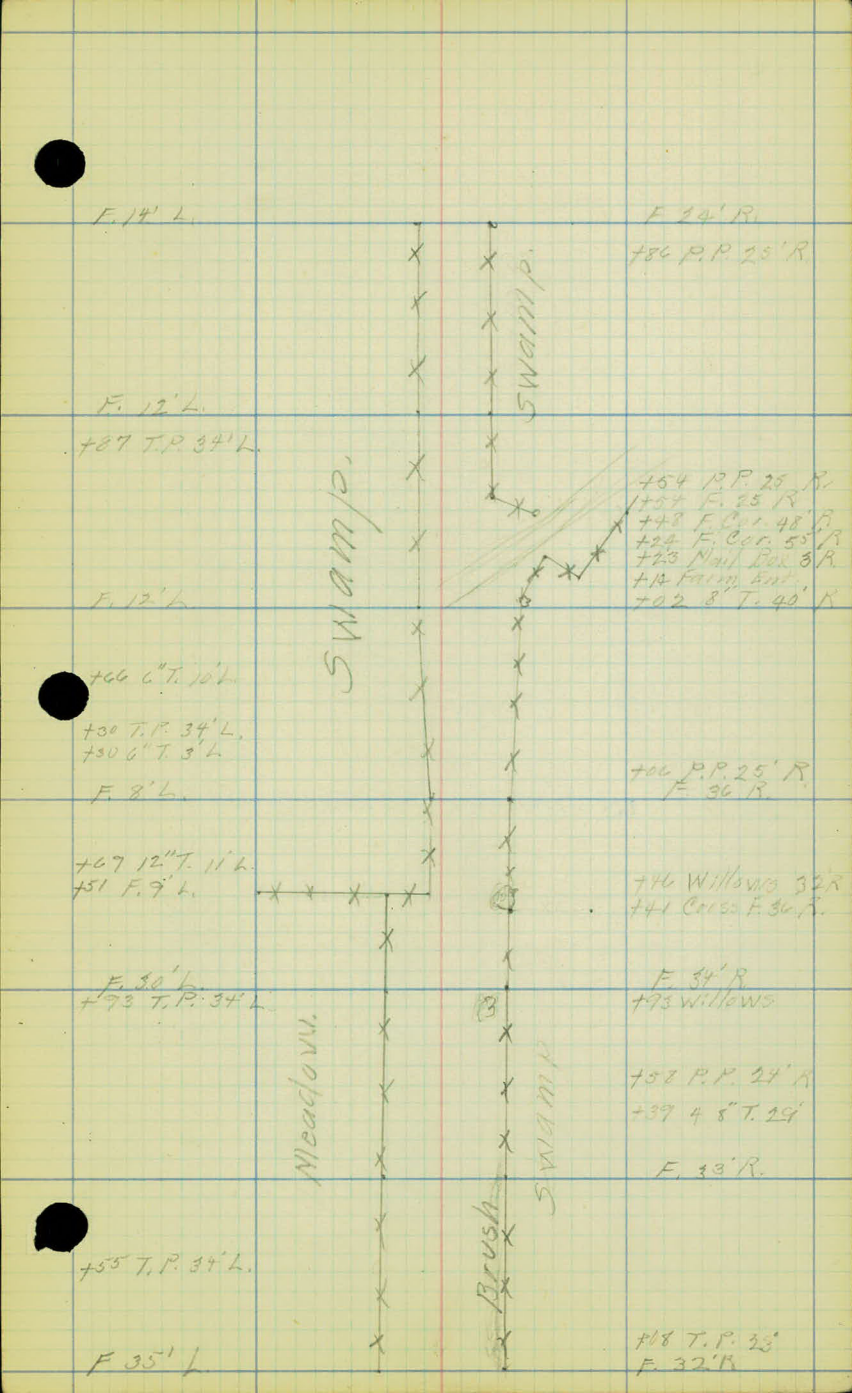
67

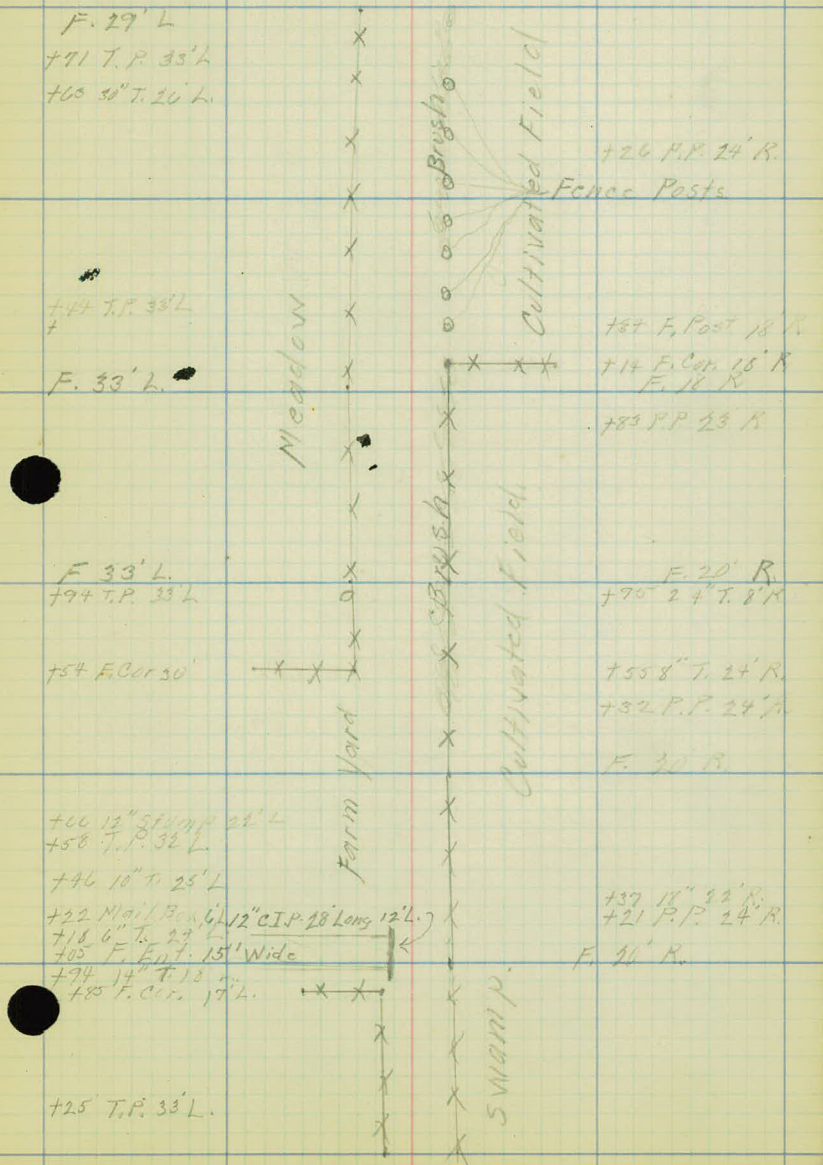
66

65

64

63


F. 14' L.
F. 12' L.
+87 T.P. 34' L.
F. 12' L.
+66 6" T. 10' L.
+30 T.P. 34' L.
+30 6" T. 3' L.
F. 8' L.
+67 12" T. 11' L.
+51 F. 9' L.
F. 30' L.
+73 T.P. 34' L.
+55 T.P. 34' L.
F. 35' L.
Swamp.
Swamp.
Meadow.
Brush
Swamp
F. 24' R.
+86 P.P. 25' R.
+54 P.P. 28' R.
+47 F. 23' R.
+43 F. Cor. 48' R.
+24 F. Cor. 55' R.
+23 Nail Pos. 3' R.
+14 Fence Ang.
+02 8" T. 40' R.
+06 P.P. 25' R.
F. 36' R.
+46 Willows 32' R.
+41 Cross F. 36' R.
F. 34' R.
+93 Willows
+58 P.P. 27' R.
+39 4 8" T. 29'
F. 33' R.
+18 T.P. 33'
F. 32' R.


F. 29' L.
+71 T. P. 33' L.
+68 30" T. 26' L.
+26 M.P. 24' R.
Fence Posts
Brush
Cultivated Field
Meadow
+87 F. Post 18' R.
+14 F. Cor. 18' R.
F. 33' L.
F. 16' R.
+83 P.P. 23' R.
F. 33' L.
+94 T.P. 33' L.
F. 20' R.
+70 24" T. 8' R.
+54 F. Cor. 30'
+55 8" T. 24' R.
+32 P.P. 24' R.
F. 20' R.
Farm Yard
Cultivated Field
+66 12" Stump 22' L.
+56 T.P. 32' L.
+46 10" T. 25' L.
+37 15" T. 22' R.
+22 Mail Box 6' L.
12" C.I.P. 28' Long 12' L.
+18 6" T. 23' L.
+21 P.P. 24' R.
+05 F. Ent. 15' Wide
+94 14" T. 13' L.
F. 41' R.
+80 F. Cor. 17' L.
Swamp
+25 T.P. 33' L.

Sta.

81

80

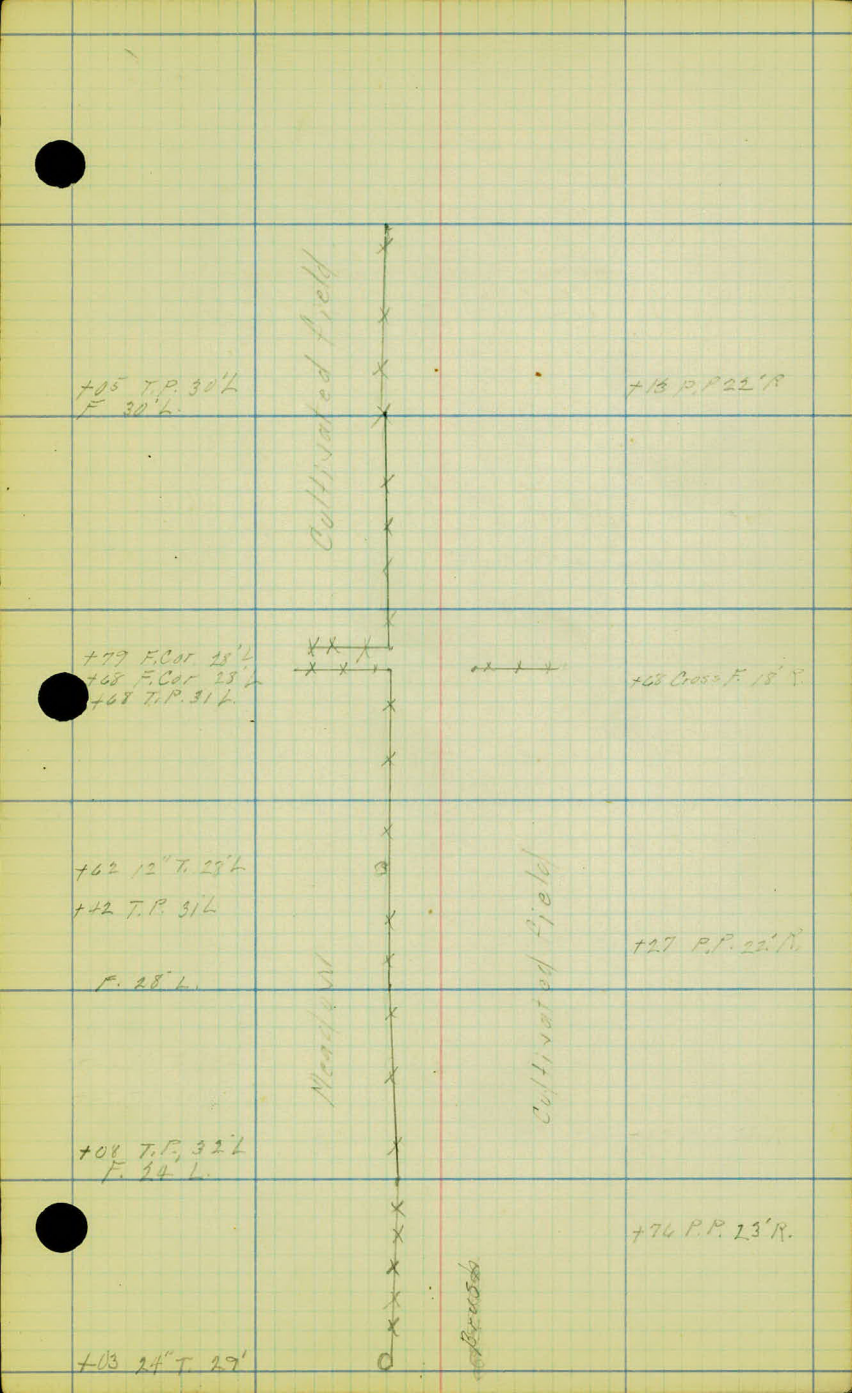
79

78

77

76

75


+95 T.P. 30'L
F. 30' L.
+18 P.P. 22'R
Cultivated Field
+79 F.Cor 28'L
+68 F.Cor 28'L
+68 T.P. 31'L
+63 Cross F. 18' R.
+62 12" T. 28'L
+42 T.P. 31'L
F. 28' L.
+27 P.P. 22'R.
Cultivated Field
+08 T.P. 32'L
F. 24' L.
+76 P.P. 23'R.
+03 24" T. 29'

Sta.

87

86

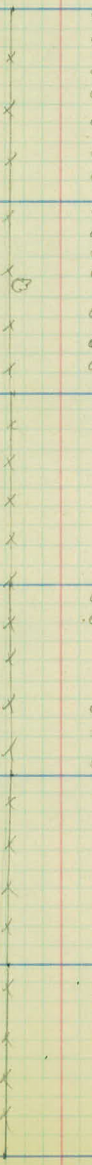
85

84

83.

82

81



+42' 48" T. 22' L.

+59 T.P. 26' L.

+17 12" Twin T. 25' L.
F 24' L.

+91 24" T. 25' L.

+66 24" T. 21' L.

+21 T.P. 28' L.
F. 28' L.

F. 28' L.

+85 T.P. 28' L.

+44 T.P. 28' L.

+82 24" T. 46' R.
+77 24 T. 30' R.

+30 4 2" T. 15' R.

T.P. 23' R.

+62 3" T. 13' R.

+36 40" T. 8' R.

+14 F. Post 19' R.

+79 18" T. 35' R.

+33 P.P. 23' R.

F. Post 19' R.

+06 F. Post 19' L.

+07 P.P. 22' R.

+38 P.P. 23' R.

Sta.

93

92

91

90

89

88

87

Cross to here.

F. 24' R.

+58 16" T. 21 R.

+33 30" Stump 10' L.

F. 23' R.

+97 15" T. 22' R.

+76 30" T. 22' R.

F. 23' R.

F. 22' R.

F. 21' R.

+45 T. P. 27' L.

+82 Mail Box 21' L.

+64 Farm Ent.

+50 F. Cor 27' L.

+03 T. P. 27' L.

F. 27' L.

+74 8" T. 22' R.

+51 10" T. 22' R.

+51 P. R. 23' R.

+31 F. Cor 15' R.

+27 Three 12" T. 14' R.

Sta.

99

98

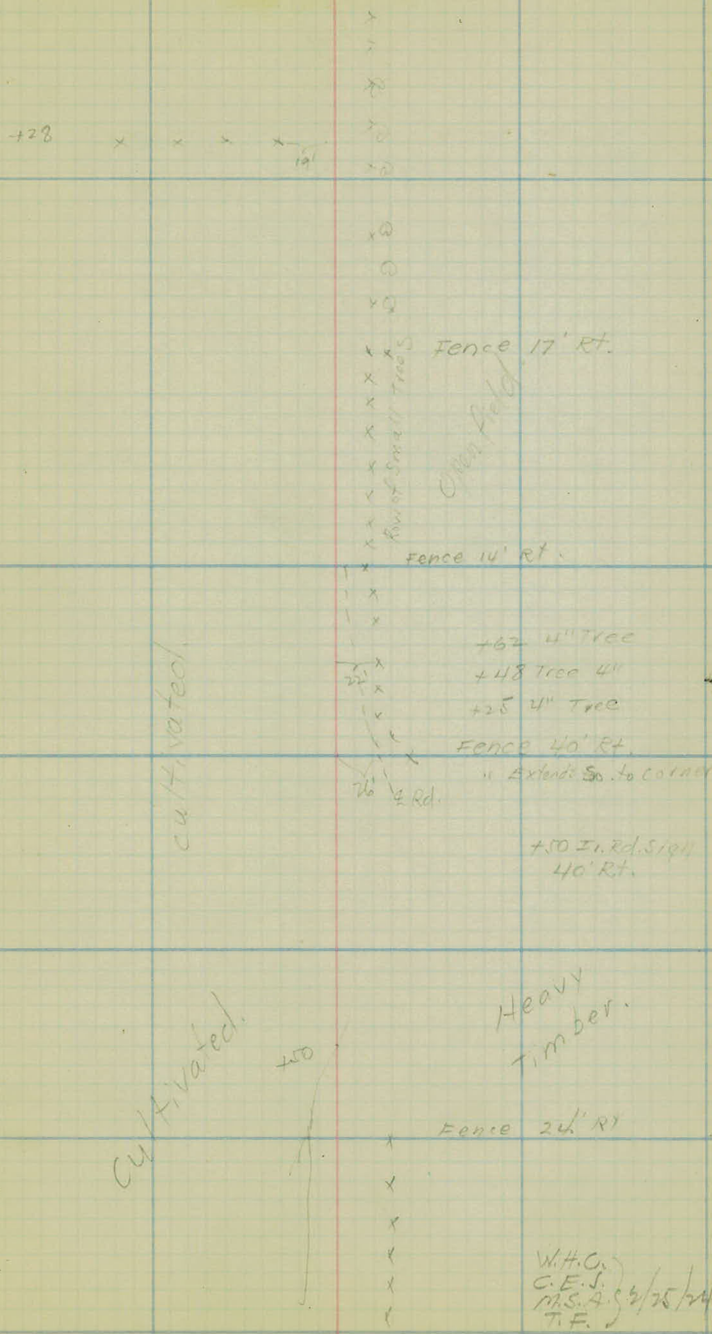
97

96

95

94

93



W.H.C.
C.E.S.
M.S.A.
T.F.
2/25/24

105

104

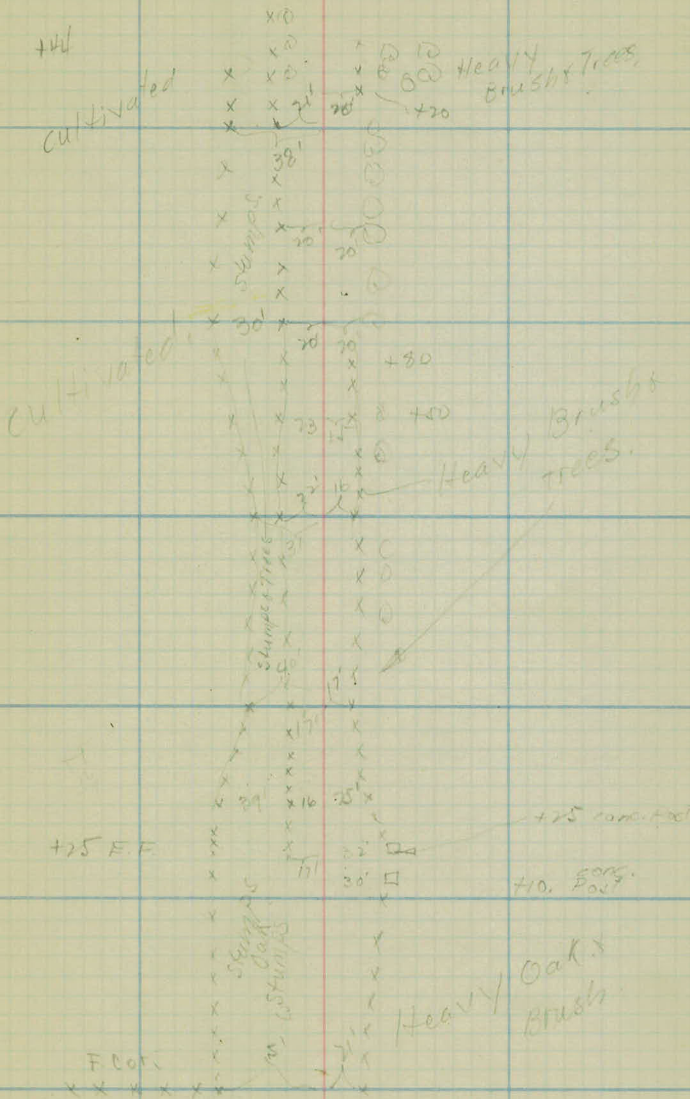
103

102

101

100

99



+41
Cultivated
Heavy Brush & Trees
+20
38'
Stumps
30'
Cultivated
+80
+50
Heavy Brush & trees
Stumps & Trees
+25 F.F.
Heavy Oak & Brush
F. Cor.

111

110

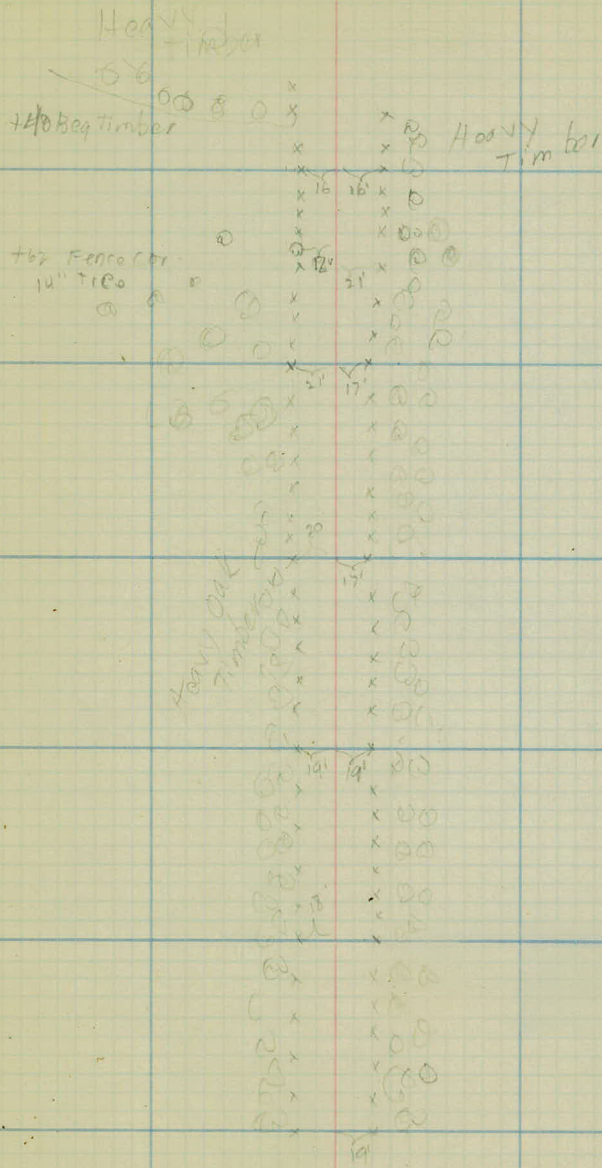
109

108

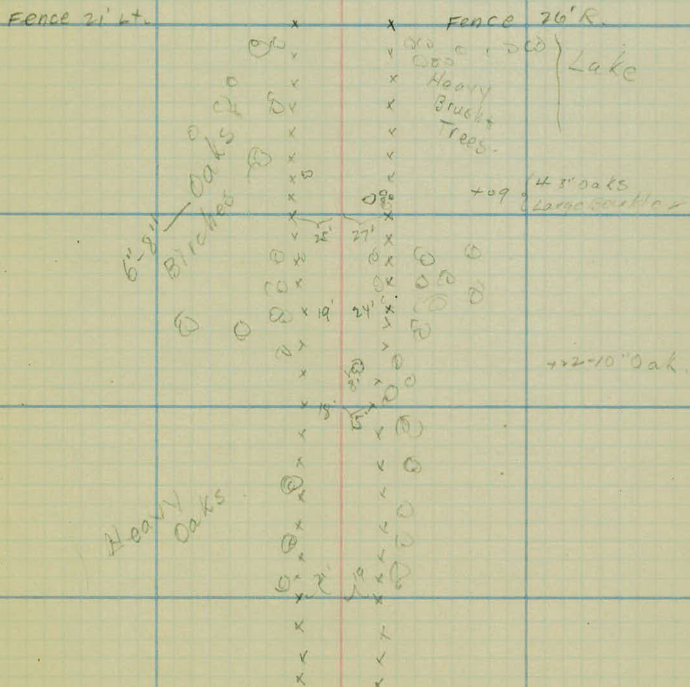
107

106

105



Heavy Timber
Heavy Timber
16
16'
21'
21'
17'
20
19'
Heavy Oak Timber
19'
19'
18'
19'


Fence 21' Lt.
Fence 26' R.
Lake
Heavy Brush + Trees.
+09 { 4 8" Oaks
Large Boulder
6"-8"
Birches
Oaks
25'
27'
19'
24'
+22-10" Oak.
8'
18'
5'
Heavy Oaks

121

120

119

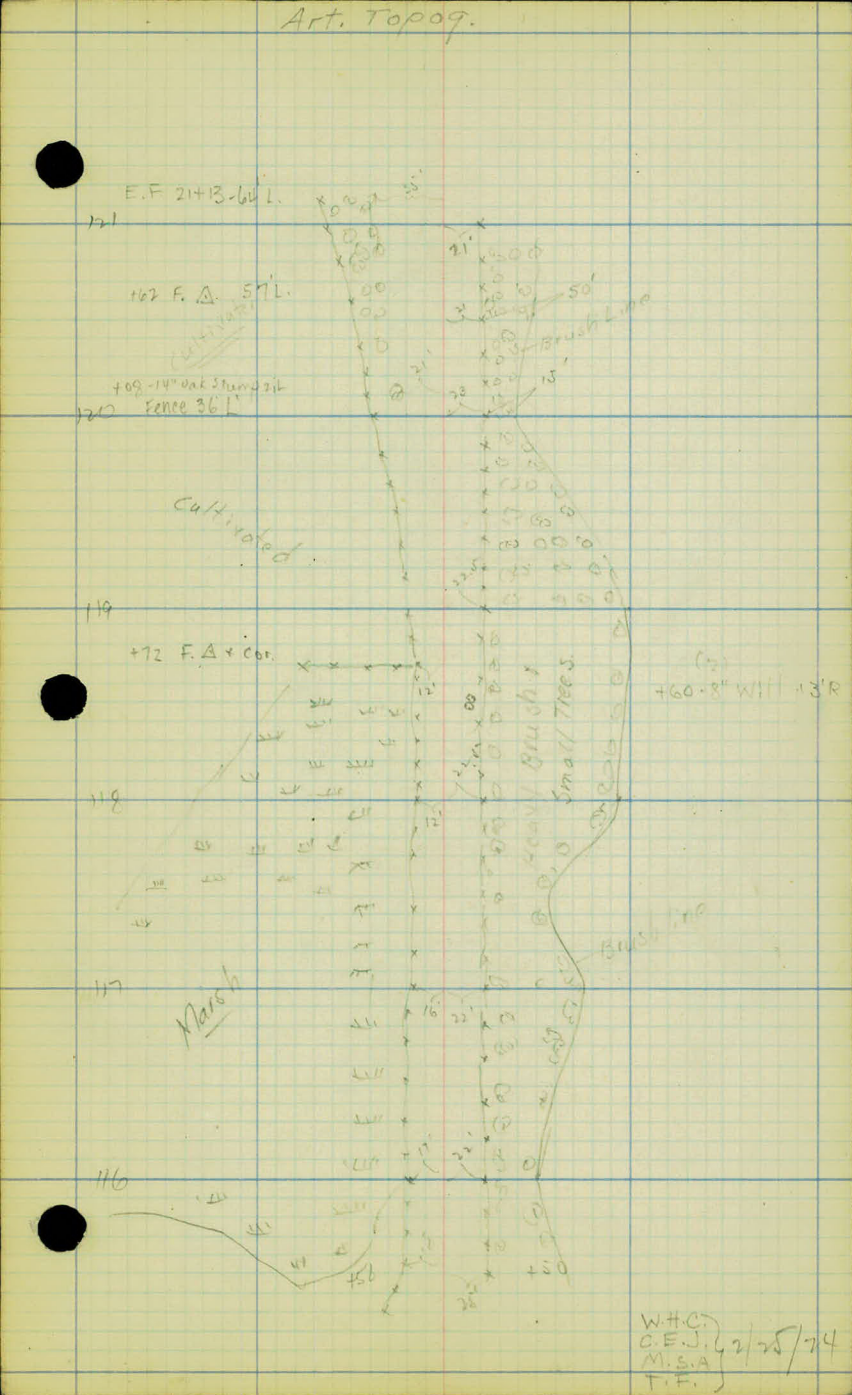
118

117

116

115

Art. Topog.



W.H.C.
C.E.J. } 12/25/14
M.S.A.
T.F.

Station

127

+58 ℄ F.E. L.

+38 Culvert

126

125

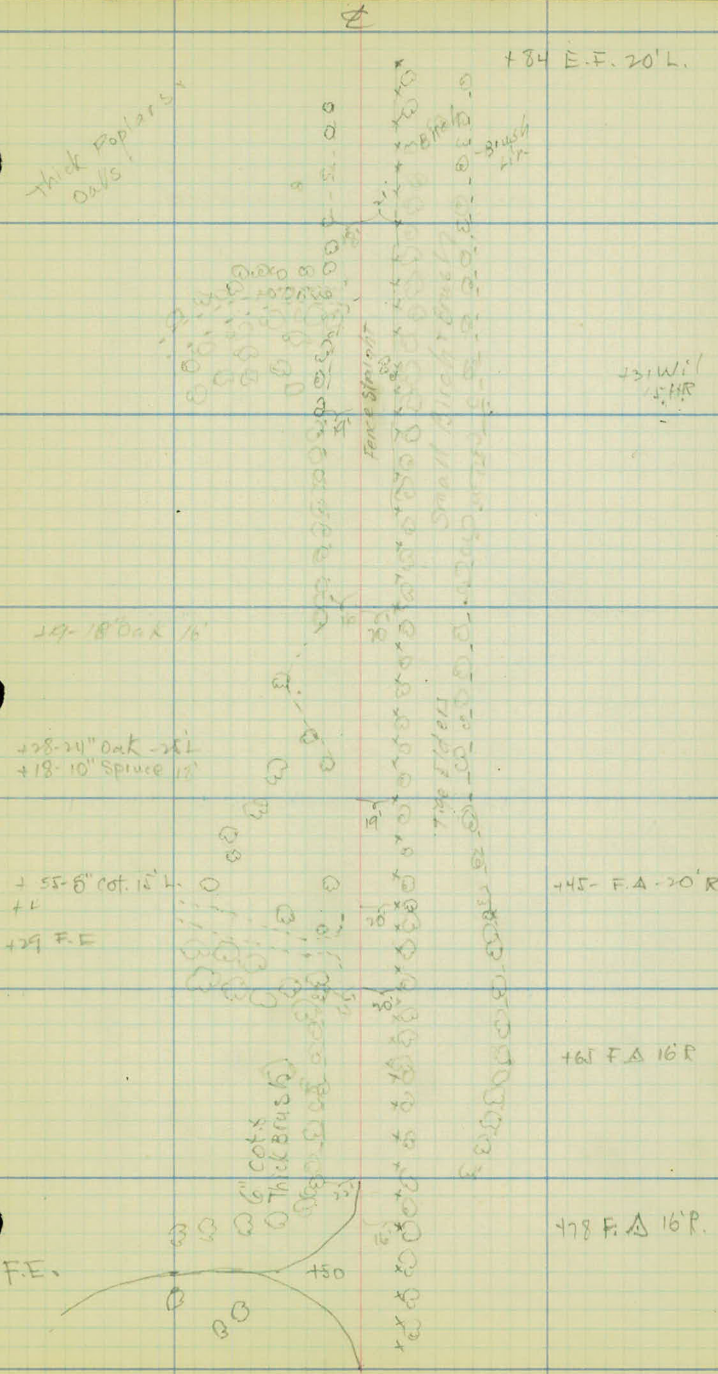
124

123

122

+98 10" x 22½ Vit. Ext. 10' R.

121



℄
+84 E.F. 20'L.
Thick Poplars + Oaks
Brush
+31 Wil
Fence Straight
+29 - 18" Oak 16'
+28 - 24" Oak - 25'L
+18 - 10" Spruce 18'
+55 - 8" Cot. 15'L.
+29 F.E
+45 - F.Δ - 20'R
+65 F.Δ 16'R
+78 F.Δ 16'R.
6" Cot. Thick Brush
F.E.
+50

Station

133

132

131

130

129

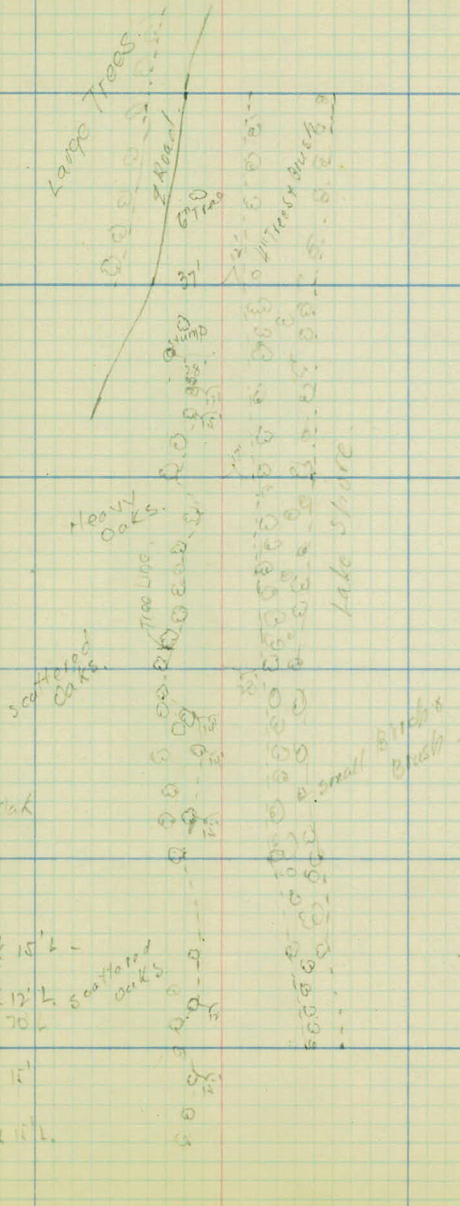
128

127

+65 - 8" Oak

+55 - 2-8" Oak

+35 - 8" Oak



+15 - Old 24" Oak Rotten

+52 - 12" Oak 15' L -

+25 12" Oak 12' L.

+05 8" " 70' L

+85 - 13" Oak 15'

+50 - 8" Oak 12' L.

Station

139

138

137

136

135

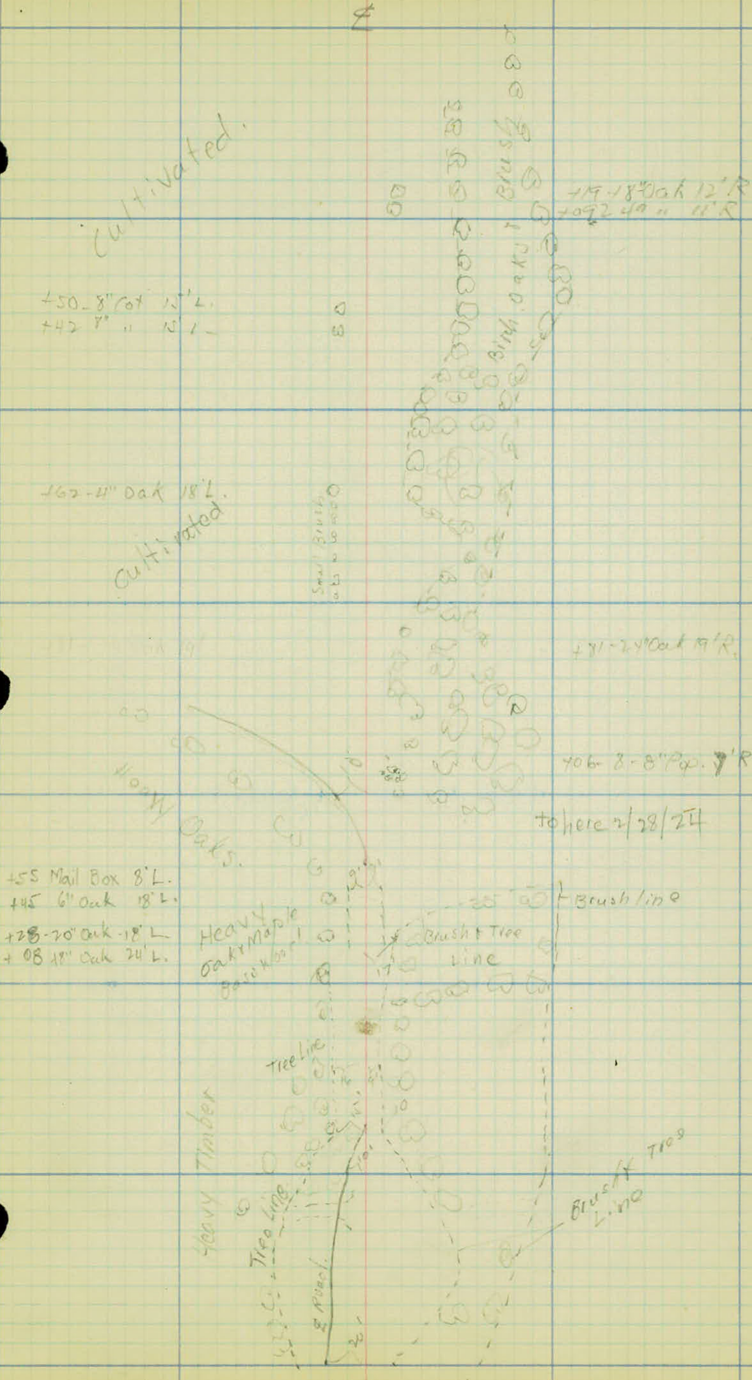
+58 12"x24" conc. Culv. Ext. 8'R.

+25 Int. of Road

134

+83 ℄ F.E. Left.

133



℄
Cultivated.
+50_8" Oak 15' L.
+42 8" " 15' L
+19-18" Oak 12' R
+09 24" " 11' R
Birch, Oaks & Brush
+62-4" Oak 18' L.
Cultivated
Small Brush
+81-24" Oak 19' R.
+06-8-8" Pop. 9' R
Heavy Oaks.
to here 2/28/24
+55 Mail Box 8' L.
+45 6" Oak 18' L.
+28-20" Oak-18' L
+08 18" Oak 24' L.
Heavy Oak & Maple Basswood
Brush line
Brush & Tree Line
Tree Line
Heavy Timber
Tree Line
℄ Road
Brush & Tree Line

Station

145

144

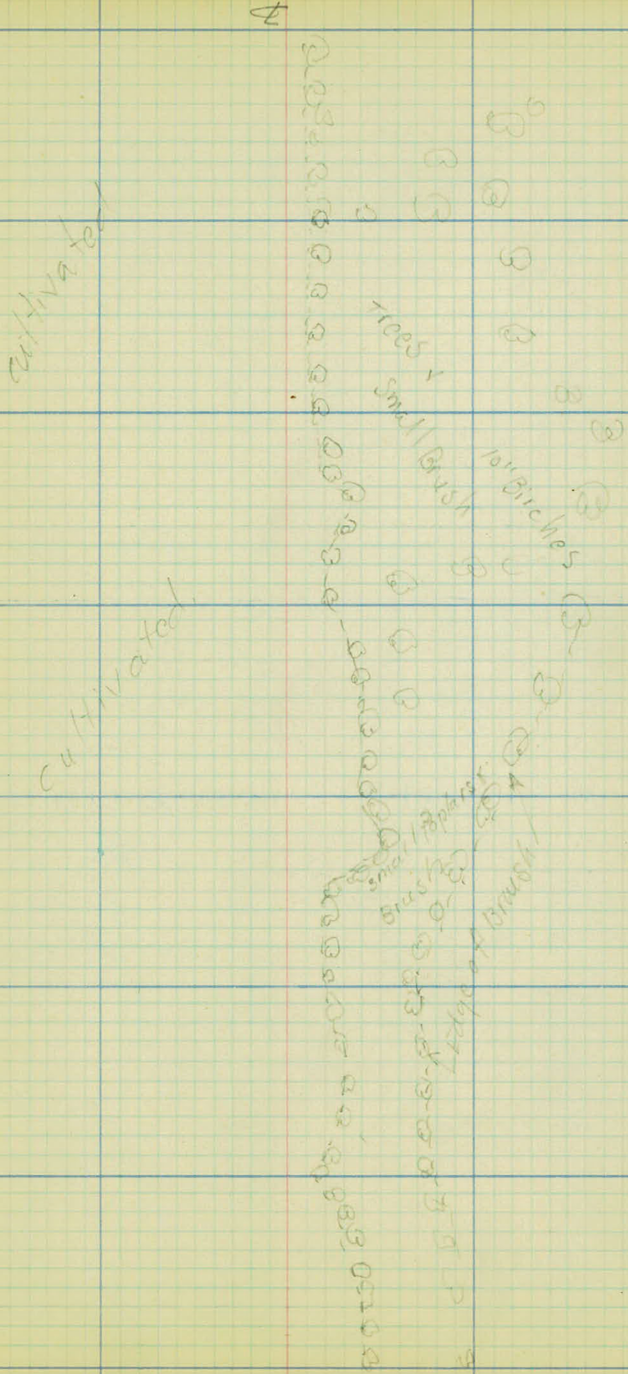
143

142

141

140

139


cultivated
cultivated
trees & small brush
10" Birches
small poplars
brush
Edge of Brush

Station

151

150

149

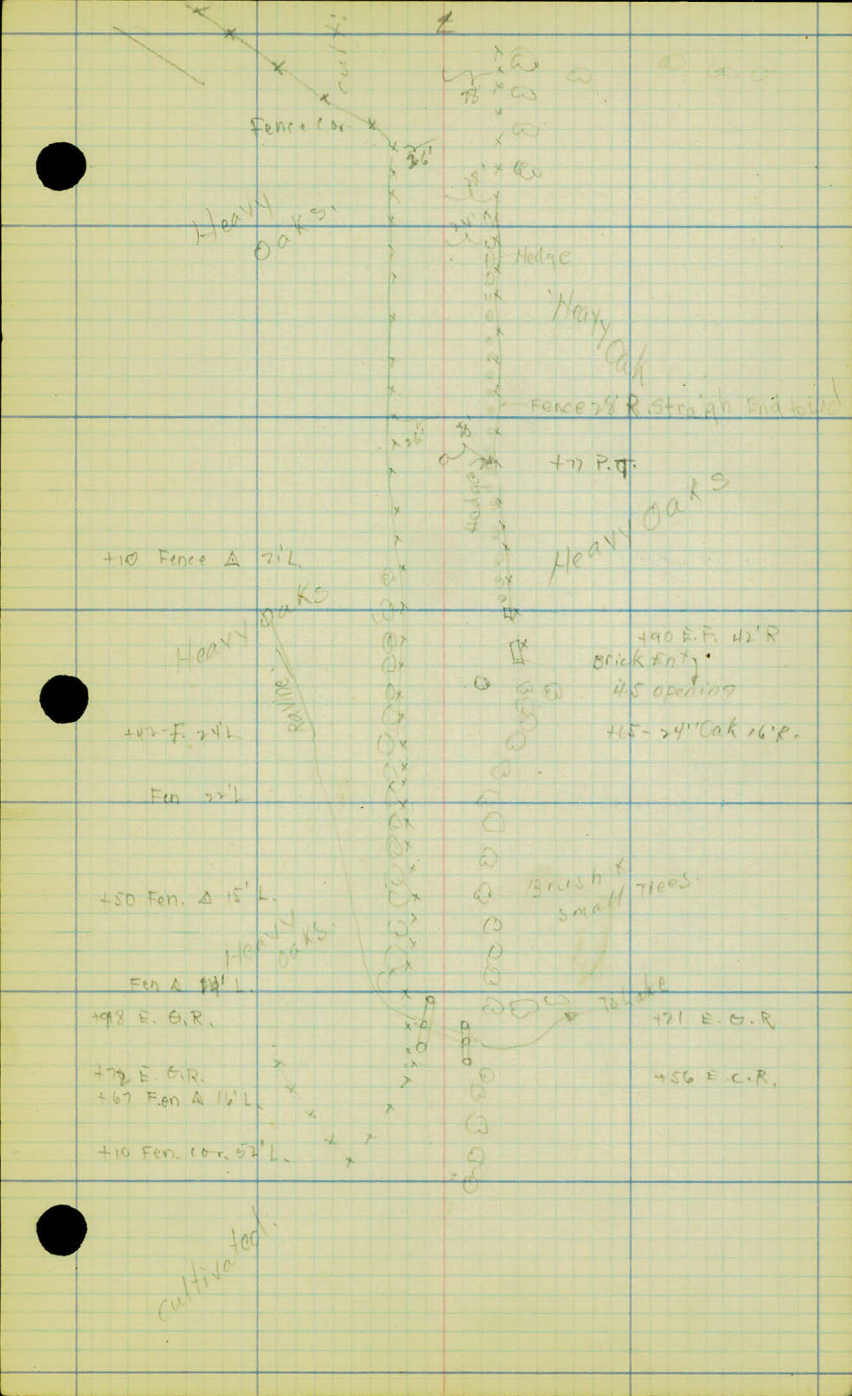
148

147

+74 - 24" x 31' galv. culv.

146

145


Fence Cor.
Heavy Oaks
Hedge
Heavy Oak
Fence 28' R. Straight End to End
+77 P.T.
Heavy Oaks
+10 Fence Δ 21' L.
Heavy Oaks
Drive
+90 E.F. 42' R
Brick Entry
45 opening
+42 - F. 24' L
+65 - 24" Oak 16' R.
Fen 22' L
+50 Fen. Δ 15' L.
Brush & small trees
Heavy Oaks
Fen Δ 14' L.
+98 E. C.R.
+21 E. C.R.
+72 E. C.R.
+56 E. C.R.
+67 Fen Δ 16' L.
+10 Fen. Cor. 32' L.
Cultivated

Station

154 ✓

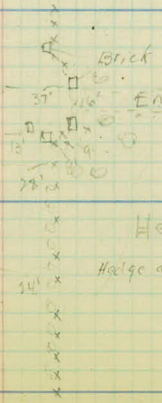
153

440
426 Mail Box on Beach

152

[illegible]

Tohole 7/29/24



24-52

Proj. # 23-52.

X sections from Sta 0+00

to

Sta. Elev.

5

4

3

2

+44 +0.9 Pri. Ent

1

+34 00

+25 -12.5 90.6

0+00

-14 -0.6

-20 -0.1

-50 -0.5

L R

90.2

-2.6	-2.1	00	+0.3	-0.3	-2.0	-1.8	-1.4
33	20	17	7	3	8	18	33

90.3

-2.2	-1.7	+0.2	+0.4	-0.3	-1.2	-1.1	-0.9
33	21	15	10	2	7	20	33

90.7

-0.6	-0.5	+0.1	-0.3	-1.2	+0.4	+0.4
33	22	13	10	18	24	33

92.2

+1.2	+1.4	-0.5	-0.1	-0.5	-0.4	+0.2
33	31	24	15	11	19	33

92.8

+2.2	+2.5	-0.2	00	00	+0.8	+0.2	+0.7
33	31	25	12	15	26	40	50

92.0

+2.2	+2.1	-0.3	+0.2	-0.8	+2.7	+2.9
33	31	26	12	13	21	33

90.5

+0.2	+0.6	-0.4	-0.4	-0.7	-0.4	+2.6	+3.1
33	31	16	13	15	23	28	36

90.6

-1.0	-0.6	-0.2	-0.8	-0.7	-0.8
33	28	16	13	25	33

91.57

+1.6	+0.5	-0.4	-0.3	-0.2	-0.4	-0.1	00
300	200	100	33	33	100	200	300

-1.8	-1.4	-0.1	-0.2	-1.0	-1.3
33	20	8	14	30	33

-1.8	-1.3	-0.1	-1.1	00
33	15	9	24	33

-2.2	-1.7	-1.1	-0.1	-1.2	-0.4
33	19	11	9	18	33

Sta. Elev.

11

+7.0 -0.7

10

9

+2.7 -1.0

8

+7.7 +1.0

+5.4 +1.0

+3.5 +0.3

+2.0 +0.2

7

6

L. R

89.5

-0.2 +0.1 -0.8 -0.8 +0.1 00 -1.7 -1.7 +1.6 +1.7
43 37 33 19 9 10 19 26 33 38

88.8

-1.1 -1.0 +0.1 +0.1 +0.1 -1.3 -0.6
33 18 11 3 8 20 33

88.2

-2.6 -1.2 +0.3 +0.2 -0.1 -1.8 -1.8 -1.8
33 16 11 4 4 9 20 33

88.5

-1.8 -1.1 00 +0.2 00 -1.2 -1.7 -1.9
33 17 12 4 4 8 19 33

90.7

00 00 +0.1 00 -2.9 -3.5
33 15 7 6 18 33

91.7

-1.4 -1.1 -1.6 00 -0.9 -1.2 -3.5
33 27 20 9 10 23 35

91.5

-1.2 -0.9 -0.1 00 +0.1 00 -0.6
33 14 11 4 4 16 33

90.8

-3.7 -4.2 -0.1 +0.2 -0.1 +0.2 +0.4
34 20 11 5 5 24 33

90.6

-3.9 -5.2 -3.2 -4.0 -3.6 -0.2 00 00 -0.5 +0.4 -0.1 +0.2
34 33 29 25 17 11 5 6 10 25 33

90.3

-4.1 -5.4 -3.6 -3.6 -3.7 +0.1 +0.2 +0.1 -2.7 -3.2 -2.4 -0.6
34 32 28 24 18 11 4 3 11 24 28 33

90.1

-2.7 -3.4 -3.6 +0.2 +0.3 +0.2 -3.1 -3.0 -3.1
33 23 19 12 6 2 10 22 33

90.0

-3.4 -3.0 -0.1 +0.1 -0.4 -2.3 -2.2 -2.2
33 20 14 7 3 8 16 33

Sta.		Elev.
19		
18		
+40 -0.8 4.3		
17		
+37 +0.2 4.2		
16		
15		
14		
13		
+32 +1.2		
12		
+40 +1.1		
11	895	

L. R.

82.4

-4.1	-2.8	-1.9	+0.3	+0.2	-0.6	+0.1	+0.5
33	13	5	9	18	23	27	33

85.2

-1.7	-0.7	-1.0	+0.2	+0.1	+0.1	+2.2	+3.0
33	14	10	6	13	22	26	33

85.7

-0.2	+1.0	-1.0	-0.1	+0.3	-0.1	-0.8	+1.5	+2.3
33	22	14	5	4	11	19	24	33

86.9

+0.2	-0.2	-0.2	+0.1	-0.3	-1.1	+0.1	+0.7
33	20	9	7	15	19	24	33

87.7

-0.6	+2.1	+0.7	00	00	-0.1	-1.2	+1.8	+2.0
33	23	14	8	8	13	20	23	33

87.5

-0.9	00	+0.3	+0.1	-0.8	+1.3	+1.3
33	23	10	8	19	24	33

87.4

-2.5	-2.1	-1.6	-0.3	+0.3	+0.7	-1.7	-1.7	-1.4
33	18	6	3	7	15	21	24	33

87.7

-1.6	-1.9	-1.7	-0.7	-0.2	-0.2	-1.3	-0.7
24	17	7	2	6	16	22	33

88.3

-2.7	-2.2	-1.2	00	00	-0.1	-1.0	-0.9
33	14	7	3	4	13	21	33

89.5

-1.6	-1.4	-1.3	-0.7	+0.1	00	-1.3	-1.3
34	29	20	11	4	9	19	33

90.4

+2.2	+2.7	-1.4	-1.4	00	00	-0.5	-0.7	-2.0	+1.3	+1.3
40	33	25	14	4	10	15	22	29	35	40

90.7

+5.0	+5.0	-1.1	-1.8	-3.5	-3.3	-0.1	-0.5	-1.9	-1.9	+5.2	+5.2
45	41	33	25	23	15	10	11	19	25	35	40

Sta. Elev.

25

+76 -1.0

+24 +12

24 ℄

+50 +15

23

+93 +01 Cross Drain

+77 +18 Farm Road L

22

21

20

+78 +03 HL Farm Road L.

L. R.

91.7

+3.9 +3.2 +1.0 -0.3 00 +0.8 +6.5 +6.0
33 20 16 10 9 15 21 33

90.7

+4.7 +3.7 -0.1 -0.1 +0.4 +7.7 +7.4
33 20 10 8 15 25 33

87.9

+1.1 +1.0 -0.3 -0.1 -0.8 +0.5 +0.8
33 16 10 10 19 22 33

86.7

-2.7 -2.2 -1.0 -0.2 -0.2 -2.1 -2.8 -3.8
33 22 14 7 4 16 25 33

85.1

-4.2 -3.0 -0.2 00 -3.0 -4.2 -3.8
33 12 4 10 17 23 33

84.5

-2.7 -2.9 -1.7 +0.1 +0.1 00 -1.3 -4.0 -3.1
33 23 12 6 3 12 18 26 33

invert invert

84.6

-4.5 -4.0 -4.2 -4.1 -0.3 -0.1 -3.9 -4.5 -3.8 -3.0
50 33 22 10 8 11 15 22 33 50

84.3

-0.4 -1.2 -1.2 -0.7 00 -0.9 -4.4 -3.0
50 34 24 11 9 15 21 32

83.7

-0.7 -0.5 -0.8 +0.2 -0.1 00 +0.4 +0.2
33 23 16 5 15 24 26 33

82.1

-9.3 -3.3 -1.8 +0.1 -0.4 -0.2
33 19 6 7 20 33

80.9

-4.0 -2.7 -1.7 +0.7 +0.9 +0.8 -0.5 -0.1
33 16 5 4 10 19 22 33

81.2 — H.L.

-2.8 -2.7 -1.3 -1.2 +0.7 +0.7 +0.5 -0.8 +0.2
50 33 20 9 6 11 19 24 33

Sta. E/cv.

33

32

31

+10 +2.4

30

+47 +0.3

29

28

27

+50 +0.5

26 Pri. Ent. L. & R.

+ 80 +1.2

L R

10.8

+1.3 +0.4 +0.4 -0.1 -0.2 -1.2
33 22 7 8 15 33

1007.1

+2.4 +1.0 +0.9 0.0 +0.2 +0.1 +1.2
33 16 7 8 19 27 33

03.1

+2.0 +0.7 -0.4 +2.3 0.0 -0.1 -3.3 +0.9 +1.1
33 19 9 3 7 16 27 32 37

Pitch → Invert

00.6

-3.4 -3.2 -5.9 -6.4 -5.8 -0.2 -0.1 -0.1 -4.0 -2.6 -3.0 -1.8
32 29 24 20 13 13 3 13 13 27 33 50

Pitch

1000.2

-3.5 -3.2 -6.2 -6.2 -4.9 +0.1 +0.2 0.0 -1.0 -1.2
33 29 24 20 13 6 7 12 21 33

Pitch

99.5

-5.3 -7.0 -6.7 -5.7 -4.2 +0.1 +0.2 +0.1 -0.2 +1.0
51 48 43 39 13 4 5 14 20 33

99.2

-4.3 -3.6 0.0 -0.2 -0.1 +1.4 +2.9
33 14 4 10 20 33 37

97.2

-0.9 +0.2 +0.5 +0.2 +0.8 +2.6
33 15 7 15 22 33

94.0

-1.0 -0.4 +0.3 0.0 +0.3 +1.7 +1.8
33 18 7 8 21 28 33

92.8

-4.8 -4.3 +0.4 +0.1 -0.2 +0.4 +2.0
33 20 8 5 17 29 33

92.3

0.0 +0.4 +0.1 +0.3 -0.3 -0.6 -0.8
50 33 20 9 16 33 50

92.4

+1.8 +1.8 +0.1 -0.4 -0.7 +0.1 -1.4
33 23 11 11 15 19 33

Sta	Elev.
41	
+73 +1.3	
40	
+44 -0.3	
39	
+48 -1.8	
38	
+60 +2.1	
37	
36	
35	
+50 +1.7	
34	

A B

06.5

-6.5 -3.2 -0.6 +0.9 -0.7 +4.5 +5.1
33 17 5 12 24 28 33

.08.1

+1.2 +2.4 +1.0 +0.9 +0.4 +0.2 +2.3 +2.4
33 18 7 12 19 26 30 33

08.1

-0.2 00 -0.4 +1.0 +0.2 +1.0 +1.0
33 18 4 11 24 29 33

08.4

-2.7 -2.9 -2.8 -0.3 +0.6 +0.3 +1.0
33 12 9 4 11 23 33

9.3

-8.1 -4.4 -0.5 +0.4 +0.3 -0.2 +1.0 +1.1
33 12 4 10 17 22 27 33

11.1

-6.8 -2.5 -0.4 +0.6 00 00 +2.8
33 11 7 9 17 22 33

13.3

-4.5 -1.9 -1.0 +0.6 +0.2 -0.1 +2.6 +3.0
33 21 9 7 15 21 27 33

17.4

-2.1 -0.1 -0.9 +0.1 -0.3 +1.3 +2.8
33 13 7 7 19 22 33

18.9

-1.4 -0.6 +0.1 00 -0.4 00 -0.8
33 24 10 6 17 27 33

12.5

-0.3 +1.1 +0.6 +0.2 -0.1 00 -0.4 -1.2 -1.8
33 17 7 6 15 23 29 30 33

15.4

+2.1 +2.0 00 00 -0.3 -1.5 -2.4 -3.2
33 17 6 6 15 18 30 34

13.7

-0.4 +0.1 +0.1 -0.3 -0.3 -2.2 -2.9 -4.1
33 22 4 7 13 25 29 33

Sta. Elev.

48

+55 +2.1

47

46

+75 +2.6

45

+61 +0.7

44

+35 -0.3

43

42 Pri. Ent. L.

+50 +0.0

41

L. R.

00.9

-2.6	+0.7	-0.8	0.0	-0.2	+2.7	+4.6
33	16	8	7	15	25	33

02.6

-5.7	-2.3	+0.4	+0.2	+1.7	+2.5	
33	15	8	17	27	33	

03.8

-3.7	-0.9	+0.1	+0.2	+1.8	
33	18	10	23	33	

03.2

-4.5	-3.4	-2.4	+0.7	+0.7	+0.9	
33	18	7	11	21	33	

02.6

-6.0	-5.1	-3.2	+0.7	+0.4	+1.6	
33	15	4	11	22	33	

02.7

-7.6	-5.2	-2.5	+0.3	+0.2	+2.7	
33	22	7	11	32	33	

02.0

-2.1	-2.4	-3.4	+0.5	+0.3	+0.7	
33	20	6	10	22	33	

02.1

+1.1	+1.0	+0.6	+0.4	0.0	+0.5	
33	18	11	17	25	33	

02.7

0.0	+0.3	+0.4	0.0	-0.4	+1.2	
33	10	11	18	27	33	

02.1

-0.8	-0.5	-0.3	+0.8	+0.6	-0.1	+1.0
50	25	9	9	14	28	33

02.9

-3.1	-2.8	-0.1	+0.5	+0.2	+0.1	+5.3	+5.6
33	15	4	10	19	24	31	33

05.1

-8.8	-7.8	-1.0	-0.3	+0.4	-0.5	+5.2	+5.9
33	27	14	8	12	22	29	33

Sta.	Elev.
57	
	+40-.9
56	
55	
54	
	+40-.05
53	
52	
51	
50	
49	
48	

L R

82.9

+1.1 +0.5 -0.7 -0.9 -0.2 +3.2 -3.0
33 23 9 10 27 33 40

82.0

+1.5 +0.6 -0.6 -0.3 -0.5 -0.7 -1.6
33 20 13 5 6 16 33

80.4

+0.3 -0.4 +0.2 -0.2 -2.3 -3.0 -3.0
33 14 4 3 10 20 33

80.4 (invert)

-2.4 -2.7 -2.9 -0.6 +0.2 00 -2.8 -3.0 -3.5 -3.5
33 28 17 15 6 3 5 17 33 50

80.8

00 -1.4 -1.6 00 +0.7 -2.1 -3.1 -3.5
33 30 20 16 8 4 18 33

81.7

-0.2 -1.0 +1.1 +0.5 -2.2 -2.9 -3.0
32 23 17 8 5 18 33

81.7

-1.9 -1.6 00 +0.4 -2.3 -2.8 -3.0
33 24 17 9 7 14 33

82.8

-1.9 -1.7 -0.5 00 -0.3 -1.3 -1.5
33 24 15 8 10 21 33

84.9

-1.0 -1.1 -0.2 0.0 +2.4 +2.8
33 28 14 12 17 33

88.B

-4.3 -3.5 -0.7 -0.3 +1.0 +2.0
33 23 12 12 20 33

93.1

-5.3 -3.0 -0.5 -0.4 +1.6 +2.9
33 21 10 15 25 33

99.1

-1.2 +0.5 -1.1 -0.6 +0.1 +0.6 +9.8 +6.1
33 23 14 8 7 17 28 33

Sta. Elev.

67

+85 +1.3

66

65

64

63

62

+71 -0.1 Earth Cut to 15' to 16' Wide

61

60

59

58

+42 +1.0

57

L. R.

72.3 → +2.1 (37)

+0.7 +0.2 −1.2 +2.1 +2.4 +1.9 +1.4 +0.7 +0.4
33 15 3 4 15 25 30 33 35

72.4

+1.7 +1.1 +1.1 +1.9 +3.0 +3.4 +3.2 +1.1 +1.1
33 22 7 5 9 14 27 30 33

71.9

.00 −0.1 −0.3 −0.8 +1.2 +1.7 +1.3 +0.1 .00
33 26 4 4 6 15 23 29 33

72.2

−0.6 −0.6 +1.0 +1.5 +1.1 −1.1 −0.3 −0.3
33 5 7 13 21 28 30 33

73.7

−1.5 −1.4 −1.5 +0.7 +1.1 +0.6 −1.0 −1.5
33 15 4 3 12 19 23 33

75.5

−0.6 −1.1 −3.0 −0.6 +0.3 −0.2 −2.1 −2.8
33 11 9 6 10 17 23 33

75.4

−0.3 −0.4 −0.4 +0.3 .00 −2.4 −2.8
50 33 21 9 16 22 33

75.4

−2.4 −2.9 −2.6 +0.4 +0.3 −2.6 −2.9
33 18 9 7 15 22 33

76.0

−2.7 −2.6 −1.4 .00 +0.3 −0.1 −2.7 −3.2
33 17 6 1 7 13 20 33

77.2

+1.4 +0.5 −0.3 .00 −0.3 −2.7 −3.8
33 19 4 5 12 21 33

82.0

+4.7 +2.2 +1.1 +0.2 −0.5 −0.1 −0.4
33 19 12 5 12 15 33

83.5

+0.4 +0.2 −0.7 −0.7 −0.1 +0.8
33 20 8 12 16 33

Sta.	Elev.				
+40 ^00^					
74					
73					
72					
+55 -0.7					
71					
+75 -0.2					
70		Farm Ent. L.			
69					
68					
+14 -0.2		Farm Ent R.			
67					

68.0

-0.9	0.0	-1.4	0.0	+0.6	-1.0	+2.8	+3.6
33	20	19	14	6	11	18	33

68.0

-1.4	-0.9	-1.6	+0.3	+0.8	-1.1	+1.5	+2.4
33	24	21	14	9	9	18	33

68.4

-1.8	-1.6	+0.4	+0.5	-1.3	-2.1	-1.0	
33	21	14	8	7	13	33	

70.0

-1.5	-1.8	-1.2	+0.1	+0.4	-0.7	-1.8	-0.8	-0.7	-0.8
33	22	19	13	5	4	13	18	26	33

71.1

+0.2	-0.1	-3.0	-3.0	-0.7	-0.2	+0.2	-0.8	-1.9	-0.6	-0.2	-1.8	-0.7
33	23	21	19	15	11	4	6	17	20	26	30	33

71.8

+3.6	+3.2	-3.1	-3.1	-0.6	-0.7	-1.3	-1.7	+0.4
33	24	17	15	11	10	21	30	33

72.3

+4.0	+3.7	-3.2	-3.2	-0.5	-0.9	-1.6	-1.9	+0.3
33	20	13	11	7	12	21	31	33

72.5

+0.2	0.0	-0.3	+0.2	-0.1	-2.2	-2.8
50	33	14	3	10	18	33

71.4

-2.1	-2.1	-1.8	+0.6	+0.5	-1.5	-1.8
33	17	6	11	14	19	33

70.7

-1.6	-1.4	-1.2	+0.9	+1.4	+1.1	-1.4	-1.4
33	12	3	2	11	16	18	33

70.5

-1.5	-1.3	-1.0	+1.5	+2.1	+1.7	+1.8
33	26	9	4	15	33	50

71.0

-1.3	-0.7	+2.2	+2.2	+1.7	-0.3	-1.4	-1.4
33	9	6	14	27	29	32	33

Sta.	Elev.	
86		
+70		Int. (83.5)?
84		
83		
82		
81		
80		
79		
78		
77		
76		
75		

L R

85.5

+0.4 -0.2 +0.3 -0.7 -3.6 -4.1
33 17 6 14 22 33

83.5

+0.8 00 -0.6 +0.3 -0.6 -2.5 -2.5 -1.0
33 18 12 5 9 21 30 33

78.8

-1.4 -0.3 00 +0.4 -0.5 -1.9 -2.7
33 19 12 5 7 19 33

75.5

-2.3 -0.9 +0.3 +0.6 -2.0 -3.4 -3.5
33 19 13 8 9 21 33

75.6

-2.3 -1.0 +0.5 +0.1 -0.5 +0.1 +1.1
33 18 12 8 6 13 33

75.1

-1.7 -1.6 -0.1 +0.3 00 +0.7 +2.1
33 19 13 7 5 10 33

72.7

-0.3 -1.1 -0.1 +0.2 -0.9 +0.2 +1.3
33 19 11 5 10 18 33

69.6

-0.7 -1.0 -0.3 +0.5 +0.4 +1.1 +2.2
33 21 15 9 11 21 33

67.4

-1.7 -1.9 +0.5 +0.6 -0.1 -0.1 +0.1
33 18 12 7 12 22 33

66.7

-2.3 -1.7 +0.7 +0.7 -0.4 -1.6 -0.3
33 21 14 10 7 19 33

~~66.7~~ 66.7

-2.1 -1.4 +0.1 +0.4 -0.9 -0.4 -0.5
33 19 12 7 11 20 33

67.4

00 +0.4 -1.1 +0.3 +0.7 -0.5 +1.9 +1.4
33 23 22 15 8 10 16 33

Sta		Elev.				
92						
+56 -0.8						
91						
90						
89						
88						
+44 +0.5				Farm Ent. Lt		
+10 +0.3						
87						
+40 +2.1						
86						
+70 +5.6						
85						

L R.

83.8

+2.0 -0.3 -0.1 -0.6 -1.2 -1.2 +0.1 -0.4
33 18 12 6 11 18 22 33

88.0

+3.6 +1.3 -1.7 -0.8 -1.3 +1.4 +1.7
33 23 12 10 14 17 33

88.8 24

+1.4 0.0 -0.9 -0.5 -1.0 +1.0 +1.0
33 21 12 9 17 20 33

91.3

+0.8 +0.4 -0.5 -0.8 -1.3 -0.2 -0.2
33 25 13 8 15 19 33

94.7

+3.9 +1.4 +0.3 -0.2 +0.6 -1.5 -1.0 +0.1
33 20 12 7 10 19 25 33

98.4

+3.7 +1.0 +0.4 +0.4 -0.9 -3.2 -4.7 -7.8
33 25 14 3 12 19 29 33

98.7

+2.4 +2.0 +0.1 +0.4 -0.4 -3.8 -5.0
33 33 13 5 12 26 33

97.9

+2.5 +1.6 +0.7 +0.1 -0.1 -0.8 -1.6
33 24 15 2 9 20 33

97.6

+2.4 +1.8 +0.1 +0.3 -0.6 -3.2 -3.6 -1.1
33 25 15 3 8 17 22 33

94.2

+2.5 +1.4 +0.1 +0.4 -1.1 -1.4 +2.0 +2.0
33 21 15 5 11 24 31 33

92.1

+0.8 +0.1 -0.4 +0.1 -1.2 -1.1 +3.2 +1.5
33 18 12 5 9 20 28 33

90.5

+0.1 -0.1 -0.4 +0.3 -0.5 -1.4 -1.0 -0.4
33 18 11 4 7 16 28 33

Sta. Elev.

99

98

97

+50 +1.8

96

+50 -2.0

95

+50 +3.7

94

+64 P.C. -5.3

93

+50 - 5.1

92

L R

43.5

+1.3	+0.2	+0.1	+0.1	−0.8
33	9	7	15	33

45.8

+1.5	+0.5	−1.0	−0.8	−0.5	−0.3
33	24	9	11	17	33

50.1

+2.9	+1.5	−0.9	−0.2	−0.3	+1.7	+1.7
33	16	8	8	13	14	33

52.2

+2.8	+2.6	+1.4	+0.3	+0.2	+1.4	+1.8
33	19	12	7	17	22	33

54.8

+1.3	+0.7	−1.3	−1.0	−1.5
33	16	18	25	33

56.1

+1.3	+0.8	−0.4	−1.3
33	23	17	33

58.0

+1.7	+1.2	−0.7	−1.6
33	20	18	33

62.1

00	−1.0	−0.7	+0.3	−0.5	−1.4
33	15	7	14	16	33

66.8

−1.0	−1.1	−1.4	−1.3	−2.0	−1.6	+0.6	+0.7
33	16	5	13	18	23	28	33

73.3

−2.2	−2.4	−0.5	−0.1	−1.1	−1.8	−0.8	−0.2
33	21	12	8	13	18	22	33

78.6

−1.8	−2.9	−0.3	−0.4	−1.8	−0.8	−0.1
33	21	11	10	18	24	33

78.7

−2.2	−3.6	−0.8	−0.8	−0.4	−1.3	−0.2	−0.5
33	29	14	7	12	14	24	33

Sta	Elev.	
104		
+90 -3'		15" Vit. Culvert 28' Long.
+50 -2.2		
103		
+50 +1.8		
102		
+50 -0.7		
+12 -1.0		Pri. Ent. R.
101		
+14 -0.3		15" Vit. Culvert 24' Long
100		
+50 -0.7		
99		

L. R. 11+

X-Sections.

P. J. Crane Tohere.

Sta 104

+0.6 −0.1 −0.2 −0.2 −5.4 −7.8
33 20 10 10 21 33

Invert Invert

403.

−0.2 −1.5 −1.7 −2.8 −2.9 +0.2 −1.2 −6.0 −7.4 −7.5
33 24 22 19 14 11 14 17 23 33

411 ←

+0.9 +0.7 −1.4 −0.6 −0.2 −10.0 −10.5
33 20 14 10 10 35 40

434

+4.3 +3.0 −2.4 −0.7 −1.2 −9.0 −10.1 −12.7
33 22 14 7 11 27 33 40

+4.0 +4.0 −1.6 −1.0 −8.6 −10.4 −12.7
33 21 12 12 27 33 40

+5.7 +4.5 +3.5 −0.4 −1.0 −8.7 −9.0
33 23 14 9 14 33 40

+5.3 +2.2 +0.1 −0.3 −0.9 −3.4 −5.3
33 14 12 8 11 24 33

+3.6 +1.3 +0.2 −0.9 −4.0 −4.5 −5.0
33 14 9 9 21 33 50

+3.7 +2.3 +1.2 +0.1 −0.9 −3.6 −9.0
33 22 15 12 12 21 33

Invert Invert

+0.7 −1.7 −2.2 +0.1 −1.0 −7.2 −7.4 −7.5
33 21 13 11 10 11 23 40

+0.7 +0.1 −1.2 −0.2 −1.1 −3.6 −2.6
33 22 14 11 11 18 33

+0.7 −0.2 +0.1 −0.4 −1.5 −1.5
33 20 13 12 20 33

Station	Elev.	
110+50	6.8	
110 +20	4.8	
110	5.0	
	X	
109	6.7	
+50	8.5	
	X	
108	5.8	
+55	5.6	
107	4.6	162
+53	3.1	14.5
	X	
106	5.4	14.2
+44	5.1	14.9
105	5.6	
104+50	5.8	
104 Last	3.7	

L. Σ R

L	Σ	R
+5.4/33 +2.2/10 +0.2/7 -0.1/4	40.0	+0.5/10 +0.1/22 -1.0/27 -4.6/33
+3.8/33 +2.8/16 +1.2/14 0.0/12 -0.6/7 +0.1/2	42.1	-0.5/5 -0.5/10 -0.6/14 -0.8/18 -3.0/23 -9.6/33
+3.9/33 +2.3/21 -0.1/18 0.0/14 -0.3/9 +0.2/3	41.9	-0.6/10 -0.1/15 -1.4/18 -4.4/24 -9.5/33
+0.2/33 0.0/17 -0.7/16 -0.6/13 0.0/9 +0.3/3	37.2	-0.2/4 -0.5/8 -1.0/11 -0.7/16 -2.7/33
-1.9/33 -1.6/17 -1.0/12 -0.3/7 +0.2/3		-0.4/5 -1.2/8 -2.0/14 -3.5/33
+2.0/33 -0.4/21 -1.2/15 -0.3/9 -0.1/3		-0.3/6 -4.0/12 -4.5/19 -5.7/33
+5.4/33 +2.5/23 +0.6/18 -0.8/15 -0.7/11 -0.1/5	35.8	-0.5/6 -2.6/11 -3.9/15 -5.1/25 -6.1/33
+8.8/33 +4.8/17 +3.5/14 -0.1/11 -0.1/6		-0.3/7 -0.6/11 -1.6/13 -3.0/19 -4.0/26 -5.4/33
+10.8/33 +8.0/20 +5.3/14 +1.3/11 +0.1/8 -0.1/4	37.5	+0.2/3 -0.2/10 -0.7/16 +0.1/18 -1.2/24 -2.9/33
+11.3/33 +7.5/18 +2.3/14 -0.2/10 -0.4/5	39.8	+0.3/2 -0.4/9 -1.6/15 +0.6/16 -0.8/20 -6.0/33 (Road)
+2.5/33 +6.0/22 +5.2/21 -0.5/14 -0.5/11 -0.6/7		+0.2/2 -0.4/9 -0.4/11 -5.7/20 -8.1/33
+4.7/33 +1.6/21 +0.8/17 -0.1/11 -0.1/6		-0.6/9 -1.4/12 -5.7/21 -7.3/27 -8.3/33
+3.6/33 +0.5/19 -0.2/12 0.0/8		-0.2/9 -0.5/11 -6.6/22 -7.7/33

W.H.C.
C.E.J.
M.A.
T.F. } 2/21/24

Station		Elev.
117	4.4	932.6
	v	
116	6.0	932.9
+50	4.6	934.3
	x	
115	9.3 2.1	
	x	
+80	.8	
114	4.9	
+50	5.3	
113	7.2	
	x	
+50	4.5	
112	5.1	
+50	5.2	
111	4.2	
	x	

L. E R

-4.0 -3.3 -2.7 -0.3 -0.3
33 25 15 11 6

-0.4 -1.1 -3.4 -4.1 -4.2
5 8 13 20 33

-3.9 -3.2 -2.4 -0.5
33 17 11 4

-0.2 -0.8 -1.8 -4.9
10 16 20 33

-4.0 -2.5 -2.3 -1.0 -0.6
33 15 8 6 4

+0.4 -0.7 -0.6 -2.4 -4.2 -4.9
9 14 16 19 28 33

-1.7 +0.8 +1.7 -0.9 -0.9 -0.7
33 22 20 16 13 6

-0.1 -0.3 -0.4 +0.9 -2.4 -4.4
6 10 18 22 27 33

+1.8 +3.8 +5.1 -0.7 -1.3 -0.2 0.0
33 29 21 17 14 9 6

0.0 -0.6 +1.1 -2.5 -4.6
6 19 33 27 33

+8.0 +7.0 +5.0 +0.3 -0.5 -0.5
33 27 22 18 11 7

-0.5 -0.4 +1.2 -5.9 -8.6
6 10 12 25 33

+6.6 +5.3 +4.2 +2.3 -0.4 0.0
33 23 19 17 14 8

-0.3 +0.3 0.0 -4.8 -6.5 -7.8
6 8 11 20 26 33

+4.8 +2.8 -0.2 -0.4 +0.2 +0.4
33 20 17 14 11 8

-0.1 +0.2 -2.2 -3.8 -6.3
5 8 12 17 33

+3.7 +1.5 -0.8 -0.1 -0.1
33 19 15 8 5

-0.5 -0.9 -2.5 -4.0 -5.1 -7.3
8 11 14 19 33 33

+5.1 +3.8 +1.9 0.0 -0.3 -0.3
33 26 18 16 11 7

-0.4 -1.0 -2.2 -3.7 -4.9 -6.1
7 10 17 18 25 33

+6.7 +4.0 +1.8 +0.1 +0.1
33 21 13 10 7

-0.2 -1.0 -2.3 -3.6 -5.2 -6.8
9 13 17 22 29 33

+6.0 +3.1 +2.1 +0.6 -0.3
33 18 13 10 7

+0.2 -0.8 -1.7 -3.0 -6.0 -8.0
8 14 20 25 30 33

Station		Elev.
123+50	4.7	932.3
+35	4.6	932.4
	X	
123	5.0	932.0
+50	5.3	931.7
122	5.0	932.0
+50	5.0	932.0
+27	5.0	932.0
	X	
121	4.8	932.2
+50	5.1	931.9
120	5.0	932.0
+60	5.0	932.0
	X	
119	4.9	932.1
118	5.0	931.9

+8.8/50

L	R
+6.5/33 +4.2/29 +1.5/26 +0.5/21 -0.6/14 -0.5/11 -0.2/8	0.0/4 -0.4/7 -2.3/17 -3.0/20 -3.9/33
+2.6/33 +0.2/27 +0.3/22 -0.5/15 -0.3/10	-0.4/5 -0.9/8 -2.4/13 -3.2/19 -3.8/33
+2.5/33 +0.7/24 +0.3/18 -0.5/14 -0.8/11 -0.4/8 -0.1/6	-0.5/6 -0.8/8 -2.1/12 -2.8/19 -3.7/33
+0.4/33 +0.5/19 -0.7/15 -0.5/11 0.0/7	-0.3/5 -0.3/9 -1.3/12 -2.2/17 -3.4/33
-1.2/33 -0.7/23 -1.4/19 -0.7/14 -0.2/8	-0.4/5 -0.8/9 -2.2/13 -2.5/18 -3.4/33
+1.5/33 +1.3/29 +0.7/16 +0.2/11	-0.4/5 -0.4/8 -1.0/12 -3.0/16 -3.2/20 -4.3/33
+1.8/33 +1.5/26 +0.7/11	-0.3/5 -0.4/10 -2.4/14 -2.9/19 -3.2/33
+3.2/36 -1.1/32 -1.4/25 -1.3/20 0.0/16 0.0/9	-0.6/6 -1.2/10 -2.8/14 -3.0/19 -3.2/33
+10.2/32 +8.3/33 +5.7/28 +4.5/27 -1.2/21 -1.4/16 -0.7/13 -0.2/8	-0.2/6 -0.2/10 -2.3/13 -2.9/20 -3.3/33
+8.3/36 +7.1/33 +6.3/25 +4.0/22 -0.8 (-0.7)/19 -1.4/13 -0.5/9 -0.3/7	-0.4/7 -0.6/10 -2.4/15 -2.9/23 -3.5/33
-0.3/33 -0.3/26 -1.0/16 -1.0/11 -0.3/8	-0.6/7 -0.7/11 -2.5/14 -3.1/22 -3.6/33
-0.7/33 -2.2/15 -2.1/11 -0.4/7	-0.4/8 -0.9/11 -1.5/16 -2.8/22 -3.3/33
-4.2/33 -3.4/16 -3.0/11 -0.2/5	+0.4/3 +0.1/9 -0.7/11 -2.0/14 -3.2/21 -3.7/33

Station		Elev.
129	4.6	937.6
+50	4.3	932.9
128	4.3	932.9
+50	4.5	932.5
127		932.0
+50	4.6	932.5
+30	4.3	932.8
126	5.0	932.1
+50	4.9	932.1
125	5.1	931.9
+40	4.8	932.3
124	4.4	932.7

L E R

		+5.1 / 33	+4.5 / 28	+1.0 / 10	0.0 / 8	-0.6 / 5	-0.9 / 10	-2.2 / 14	-4.1 / 33
		+2.8 / 33		+1.5 / 18	-0.2 / 10	-0.9 / 6	-1.1 / 9	-2.0 / 11	-4.2 / 33
		+1.4 / 33		+1.2 / 20	-0.3 / 12	-0.5 / 11	-1.1 / 10	-2.1 / 14	-3.7 / 33
		-0.7 / 33		+0.8 / 24	+1.2 / 10	-0.2 / 7	0.0 / 2	-0.5 / 7	-0.9 / 10	-1.9 / 16	-2.9 / 31	-3.6 / 33
		+0.2 / 33	+1.0 / 27	+1.9 / 21	-1.0 / 14	-0.3 / 7	-0.1 / 5	-0.4 / 11	-1.7 / 17	-3.5 / 31	-3.7 / 25	-2.5 / 28	-2.5 / 33
			-0.1 / 33		-0.1 / 16	-0.1 / 8	-1.8 / 14	-3.6 / 33	
			-2.5 / 33	-2.3 / 13	-0.6 / 9	-0.5 / 7	-0.8 / 11	-2.6 / 13	-3.5 / 33	
-1.5 / 33	-1.4 / 28	+0.4 / 26	+0.5 / 16	-0.8 / 13	-1.7 / 11	0.0 / 8	-0.4 / 8	-0.9 / 11	-1.9 / 14	-3.1 / 28	-3.1 / 33		
+3.4 / 33	+0.6 / 19	-1.4 / 17	-1.7 / 14	-0.8 / 12	-0.3 / 8	-0.5 / 3	-0.5 / 6	-1.1 / 9	-2.1 / 13	-2.6 / 24	-3.2 / 33		
+11.1 / 50	+10.5 / 43	+6.7 / 33	+4.1 / 29	+1.1 / 16	-0.5 / 15	-0.9 / 11	-0.4 / 8	-0.5 / 8	-2.1 / 12	-2.8 / 20	-3.5 / 33		
+11.0 / 50	+10.7 / 46	+8.0 / 33	+3.7 / 23	+1.1 / 15	-0.5 / 14	-0.9 / 11	-0.6 / 8	-0.3 / 7	-0.4 / 9	-1.9 / 13	-2.7 / 19	-3.7 / 33	
+11.6 / 50	+8.0 / 33	+4.0 / 28	-0.3 / 19	-0.8 / 13	-0.4 / 9	-0.3 / 5	-0.5 / 9	-2.1 / 12	-2.8 / 18	-3.9 / 33			

Station		Elev.
136	7.0	947.3
+50	10.1	939.2
	X	
135	11.9	937.1
+50	6.6	905.4
134	8.1	933.9
+60	8.9	933.1
	X	
133	4.5	937.6
132	5.4	931.7
+50	5.3	931.8
131	5.2	932.0
+65	4.5	937.7
130	5.3	931.8
129+50	5.3	931.8
	X	

L R

+3.6 +3.7 +0.5 +0.7
33 28 23 11

0.0 -0.4 -0.8 -2.3
5 15 23 33

+4.6 +2.9 +2.0 -0.5
33 21 11 9

-0.2 -2.0 -3.7
11 20 33

+3.4 +1.9 +0.2 +0.1
33 13 10 6

0.0 -0.1 -1.5 -2.4
7 13 24 33

-0.1 0.0 0.0
32 18 8

-0.1 -1.1 -1.7 -1.7 -2.0
7 17 21 25 33

+5.8 +3.4 +0.6 +0.1
33 24 19 10

-0.5 -1.3 -2.8
8 12 33

+4.7 +3.1 +0.7 +0.1
33 24 19 8

-0.4 -1.2 -2.4
11 17 33

+4.3 +2.3 +2.3 +0.5 -0.1
33 26 17 10 7

-0.2 -0.4 -0.7 -3.5
3 9 12 33

+5.3 +4.9 +4.8 +2.5 +0.5 +0.4 +0.3
39 33 25 23 19 14 8

-0.3 -2.7 -3.2 -3.6
5 10 28 33

-0.96?
+10.0 +10.3 +5.3 +1.5 -0.1 +0.3
39 33 25 18 15 11

-0.4 -1.1 -2.1 -3.9
9 9 13 33

+13.0 +12.9 +13.6 +6.3 +3.0 +0.1
39 34 30 15 13 8

0.0 -0.3 -1.7 -4.0
5 8 12 33

+15.1 +15.9 +15.4 +9.3 +5.0 +1.1 -0.2
37 33 30 17 15 9 8

-0.4 -0.7 -2.7 -4.9
6 10 14 33

+24.0 +20.5 +14.7 +9.0 +3.6 +0.5 -0.1
58 48 33 23 18 13 9

-0.2 -0.4 -1.5 -4.2
5 8 17 33

+9.1 +7.2 +3.9 +2.1 -0.4
33 26 14 13 9

-0.3 -0.5 -1.8 -3.0 -4.3
5 9 14 25 33

Station		Elev.
142	5.1	938.0
+50	4.4	938.7
141	3.5	939.4
+40	3.4	40.1
	X	
140	5.8	940.4
+60	5.4	940.9
139	4.5	941.9
+60	3.1	943.2
	X	
138	7.0	948.3
+70	8.1	950.3
+55	4.5	950.9
137	6.4	948.4
	X	
136+50	3.6	945.8

L & R

+6.1	+3.3	+3.5	-0.7	+0.7	-0.7	-1.7	-1.9
33	13	12	9	11	19	24	33
+6.1	+4.3	-0.9	-0.5	-0.7	-0.7	-6.6	-7.9
33	19	14	12	8	11	24	33
+6.1	+4.5	-0.9	-0.7	-0.3	-0.3	-0.8	-7.2	-9.7
33	18	13	11	9	4	10	21	33
+2.5	+2.1	-1.10	-0.6	-0.7	-0.4	-0.8	-1.3	-7.8
33	16	13	11	7	6	10	15	33
+1.4	+0.7	-0.8	-0.4	0.0	-0.3	-0.7	-1.0	-7.8
33	15	12	11	8	6	13	17	33
+0.8	+0.7	-0.6	-0.1	-0.3	-0.4	-1.2	-7.8
33	14	12	8	6	9	23	33
+1.7	+0.8	-0.8	-0.4	-0.3	-0.3	-0.9	-6.7
33	16	12	9	5	10	24	33
+3.5	+2.1	+0.7	-0.1	-0.5	-0.7	-1.7	-8.6
33	19	13	9	6	10	19	33
+5.8	+1.1	-0.8	0.0	-0.4	-0.9	-1.1	-8.0
33	20	12	6	5	11	16	33
+4.3	+4.0	-0.5	-0.7	-0.5	-0.3	-0.9	-1.0	-9.1
33	21	14	9	6	5	10	18	33
+3.7	+3.5	-0.5	-0.7	-0.5	-0.4	-1.5	-8.7
33	20	13	7	11	8	20	33
+2.5	+2.8	-0.1	-0.7	-0.9	-1.1	-1.4	-5.6
33	17	13	8	8	12	25	33
+2.6	+1.9	+0.5	0.0	-0.4	-0.8	-2.1	-3.0
33	17	12	6	6	11	24	33

Station		Elev.
+50	7.6	943.5
	x	
147	2.0	941.4
+88	2.3	941.1
+67	3.6	940.8
+52	3.7	940.7
146	5.2	938.3
145	6.1	937.8
+50	6.4	937.0
144	6.0	937.5
	X	
+70	5.6	937.4
143	5.5	937.5
142+65	5.3	937.7

L, Z R

L	R
+0.2/33 0.0/13 -0.5/9 -0.6/4	0.0/6 -0.6/11 -1.7/15 -3.5/21 -4.9/33
-4.9/33 -3.5/24 -2.5/12 -0.3/7	-0.2/8 -1.5/16 -3.6/33
-6.2/33 -6.7/22 -6.0/16 -2.3/14 -0.3/10	-0.2/8 -2.9/18 -4.8/33
-3.3/33 -2.3/19 -1.4/15 -0.7/9	-0.4/7 -1.4/10 -8.0/14 -7.9/33
-1.5/33 -1.0/30 -0.4/24 0.0/21 -0.2/12 -0.4/7	-0.1/6 -0.7/13 -2.3/18 -4.7/33
+4.1/33 +2.1/19 -0.4/11 -0.1/10	-0.3/7 -0.4/10 -3.0/16 -3.8/33
+4.2/32 +3.8/25 +1.7/19 -0.3/12 +0.2/8	-0.6/6 -1.0/10 -3.0/15 -5.3/33
+5.4/33 +5.1/23 +1.1/17 -0.4/11 +0.3/7	-0.6/6 -1.0/11 -3.7/20 -5.0/33
+5.4/33 +4.0/21 +0.3/13 0.0/9	-0.7/7 -1.4/11 -4.1/20 -6.0/33
+5.4/33 +3.8/21 +1.3/17 0.0/13 -0.2/10 0.0/8	-0.9/8 -1.2/10 -3.3/16 -7.0/33
+6.0/33 +2.5/18 +1.2/14 -0.4/10 -0.1/6	-0.8/10 -4.1/18 -6.4/33
+6.2/33 +4.2/18 +3.0/15 -0.1/12 -0.4/9	-0.2/6 -0.2/11 -1.7/25 -5.9/33

Station		Elev.	
153	4.6	971.3	
+62	5.3	970.6	
152	6.1	969.7	
	V		
151	7.9	968.4	
+50	4.3	967.1	
150	6.5	964.9	
+50	9.7	962.0	
	X		
149	3.9	959.0	
+65	7.8	967.9	52.2
	X		
148	3.4	947.8	

L S R

Tahoe 2/24/24

Drainage Notes

Project 24-52

Station	Present Culv.	Recommended Culv.
146+76	24"X31' Galv. Metal. Extends 15' R. & 16' L.	24" C.M. (old very poor)
134+58	12" X 24' conc. Culv. Extends 7' R. & 17' L.	(O.K.)
126+36	18"X24' C.M. Extends 13' R. & 11' L.	(half full of dirt.)
121+98	8"X23' Vitrified Extends 11' R & 12 L.	
117+?	cannot locate account ice & snow, former claims 10" type C.M. is in at this location.	
108		10" C.M. To Drain cuts N.Y.S.
103+90	15"X28' Vitrified Extends 12' R. & 14' L.	
100+12	18"X22' Vitrified Extends 10' R. & 12' L.	
83+20		10"X To Drain Pot hole & small area on Rt.

W.H.C.
C.E.J.
M.S.A.
T.F. } 3-4-24

Inv. Elev. 932.7 32.7 32.6
Drains R. 18 35 40

Inv. Elev. 932.8 32.7 32.1
Drains R. 7 20 40

Inv. Elev. 929.4 29.3
Drains R. 13 30

Inv. Elev. 929.2 29.2 28.4
11 20 40

Inv. Elev.
Drains R.

11.7 = 932.6
11.8 = 931.8

Drains R.

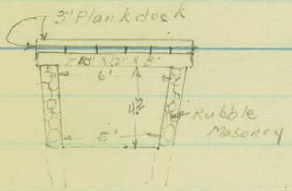
Inv. Elev. 933.6 32.4 31.3
Drains R. 12 20 45

Inv. Elev. 937.7 37.4 37.3
Drains R. 10 20 30

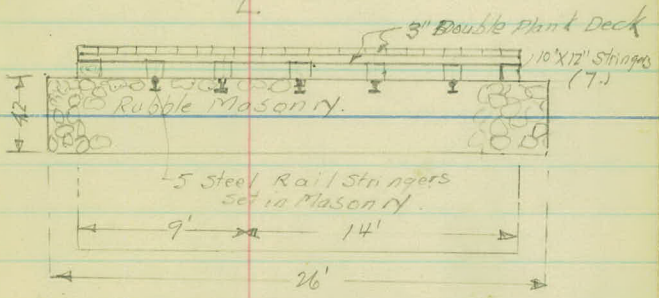
Station	Present Culv.	Recommended culv.
77+50		12" C.M.
55+02	12" x 22' C.M. Extends 5' R & 17' L.	
30+09	4'x5' x 23' Lg. Stone walls, wood deck (see detail) Extends 14' R. & 9' L.	
" "	" "	
22+93	18" x 24.5 C.M. Extends 10' L. & 14.5 R.	
7+06	12" x 24' C.M. Extends 16' L. & 8' R.	

Inv. Elev. 977.7 / 5 — 77.6 / 15 — 77.1 / 30

Drains R.



End Section.



Inv. Elev. 994.4 / 9 — 993.5 / 32

Drains L.

Inv. Elev. 980.4 / 10 — 10.0 / 25 — 79.9 / 35

Drains LL.

Inv. Elev. 987.8 / 16 — 87.2 / 28 — 84.7 / 31

Ties to Lake Shore

Project 24-52

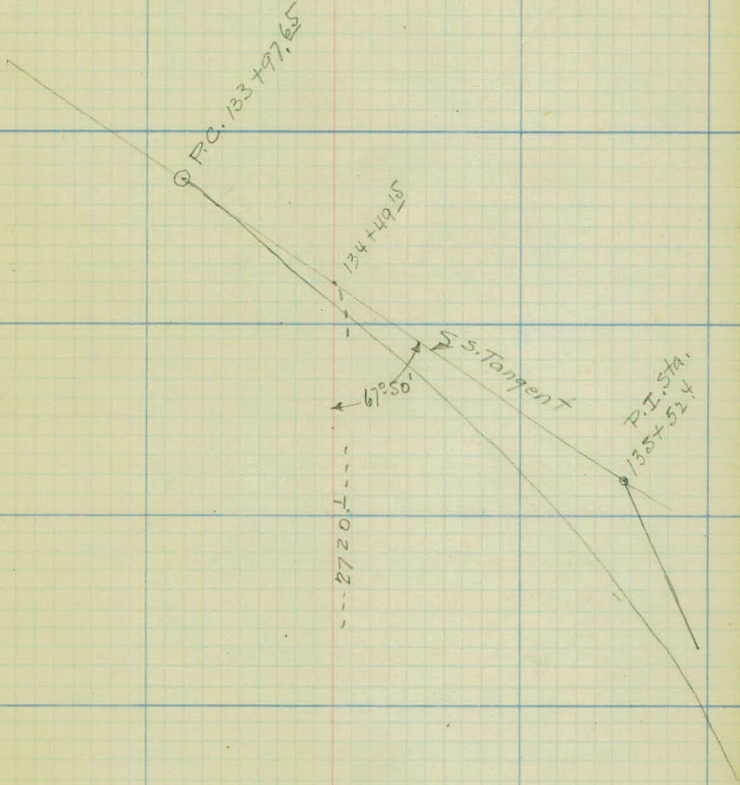
Station	W.H.C. C.E.J. M.S.A. T.F.	March 4, 1924	
141+00	Lake Shore	144'	Right
137+55	"	175'	"
134+00	"	190'	"
130+00	"	148'	"
127+00	"	150'	"
125+50	"	280'	"
119+60	"	335'	"
112+00	"	195'	"
107+25	"	230'	"
103+00	"	345'	"

T. 29 N., R. 21 W.1.

Sec. 5 | Sec. 4

N

W.H.C.
C.E.J.
M.S.A.
T.F.
} 3/6/24



Sec. 5 | Sec. 4

90°38'

Sec. 8 | Sec. 9

24-52

Change of grade – raise
0+00 L 1+50

No culv. reqd. at beginning

1+50 F.E.R. No culv. reqd

7+06 Remove 10"x22' C.M.
P. 18" C.M.

Put on S.R stem

12"x22' C.M. imp. remove

15+00
P-18" C.M Culv

20+00
12" x 24' C.M. imp. remove
P. 18" x C.M

21+20 Build Ents. to School Prop.
21+80 12" C.M. Culvs

22+73 Remove old culv
P. 24" C.M.

25+30 Ent. to House L.
P. 12" x 12' C.M.
Use old Culv

26+00 F.E.R.
P. 12" x 24' C.M.

26+00 F.E.L.
No C.I.v. reqd

26+50 No X drainage required

26+60 Ent. R. to House
P. 12" x 12' C.M.
Place old pipe

30+10 Remove
Plank Floor
P. 24" C.M. Culv

32+40 F.E.R.
P. 12" x C.M.

39+40 Build F.E.R.
P. 12" x 24' C.M.

41+75
18" x 20' C.M. inp. extend with same

44+15 Build F.E.R.
P. 12" x 24' C.M.

50+20 F.E.R.
P. 12" x 24'

53+50
P. 18" C.M. equalizer

55+00 remove old culv.
P. 18" C.M.

61+70 F.E.L.
12" x 24' C.M. imp.
Rem. & Rep. Cond O.K.

67+14 F.E.R.
12" x 20' C.M. imp. Cond. O.K.
Rem. & Rep.

67+00 Cut out culv. across road

68+50 P. 18" x C.M. equalizer

70+00 12" x 24' C.M. imp. Cond OK
Rem. & Rep.

77+12 12" x 24' C.M. imp. Rem.
P. 18" C.M.

78+63 F.E.L.
P 12" x 24' C.M.

95+00
P. 18" C.M. on Curve
Main To R.

100+05 15"x18' V.P. inp. ram
P. 18" C.M.

108+00 P. 18" x C.M.
Drain R.

118+50 P. 24" C.M. equalizer

122+25 10"x 2[illegible] V.P. inp. ram
P. 18" C.M.

123+30 F.E.L.
P. 12" x 24"
18"x 24" C.M.

126+36 P. 24" C.M.

126+60 F.E.L.
P. 12" C.M.

~~134+20 P. 18" C.M.~~

134 + 58 15" x 24' P.I. 11 p ✓
Remove Cond. OK.

134 + 18 P. 18" C.M. ✓

136 + 12 Ent. L ✓
P. 12" x 36' C.M.

LEWIS W. CLARKE, COUNTY SURVEYOR
WASHINGTON COUNTY, MINNESOTA
204 NORTH THIRD STREET
STILLWATER, MINN.

January 31, 1924

Mr. R. J. Wolfgangle
Designing Engineer
County Surveyors office, Ramsey County,

Dear Sir:

Yours of the 29th in re Sections 4 & 5, Oakdale, received. The sketch on the back of this letter shows all I can do for you. As to the widths of the road you mention, I know of no reason why they should not be made 66 feet. I usually do not try very hard to run out the lines as per original surveys. When I have tried it I generally come farther away than if I had taken things as found. You might be able to find the road in question at the County Auditor's office, but I doubt it. It is a Town road and the Town Clerks are not usually very careful about saving such records.

Very truly yours
Lewis W Clarke
County Surveyor.

Wolfangle

2-1-24

Carlson— Please return to me when you are finished with this R.J.H.


N
Ed. Day works for Martindugor
T 29 N R 21 W
Lake
field stone set by Shepard, while old M.C. was there
Co. Mon. set 1907
1316
1316
1316
ties gone
Power line
24.8'
Iron Pin
2633.
Br O. 12"
S24½W 71.95'
Br 14" S62¾E 39.9'
Survey 1919
Field Stone in grass plat near center cross road is at U.S. Cor
1319.6
1319.6
Pole 135
Iron Pin
Iron Pin
Pole
Pole 18189
B.O. 24"
B.O. 16"
(1470.15')
22.27½ ch
(1461.90')
22.15
pyramid shaped granite
Iron Pin R.J.W. 8-7-29
(1316.04')
19.94 ch
Boulder 1x1½x2.0 with drill hole
Iron
1.8'
blaze + nail
stump B.O. 4' high
5
4
2641.2
Stone with drillhole set in place of U.S. Tree
N35E 7.26'
Lag Screw set by me at U.S. Cor 1908.
U.S. W.O. S39°W 56 lks. then standing
U.S. Wh.O. N29E 36 lks
Old post said to be U.S. Cor which I (JMO) believe
Stake 1919
24.6
B.O. 18"
2635.2
V 8°17
(1908)
Red figures +c from J.M. Oldham's survey 1900
Var 7-30
2483.5
3rd Lake
Iron Pin at U.S. MC 11
U.S. B.O. S75W 30 lks
Standing 1908