130

FIELD BOOK

360

KEUFFEL & ESSER CO.

DRAWING MATERIALS
AND
SURVEYING INSTRUMENTS.
NEW YORK.

CHICAGO. ST. LOUIS. SAN FRANCISCO. MONTREAL.

TABLES FOR EXCAVATIONS AND EMBANKMENTS.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.
ROADWAY 18 FEET WIDE. SIDE SLOPES 1 TO 1.
FOR SINGLE TRACK EXCAVATION.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	0
1	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	1
2	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	2
3	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	3
4	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	4
5	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	5
6	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	6
7	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	7
8	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	8
9	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	9
10	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	10
11	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	11
12	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	12
13	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	13
14	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	14
15	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	15
16	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	16
17	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	17
18	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	18
19	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	19
20	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	20
21	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	21
22	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	22
23	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	23
24	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	24
25	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	25
26	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	26
27	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	27
28	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	28
29	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	29
30	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	30
31	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	31
32	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	32
33	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	33
34	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	34
35	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	35
36	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.

For Keith's Railroad Curve Tabels see end of book.

Frams Cor. North Rd. T.H. 130
Parkman Twp.
Middlefield Twp. Page 1

TROY-PARKMAN CENTER
NASH Rd T.H. 207
Frams Cor's easterly Pg. 63

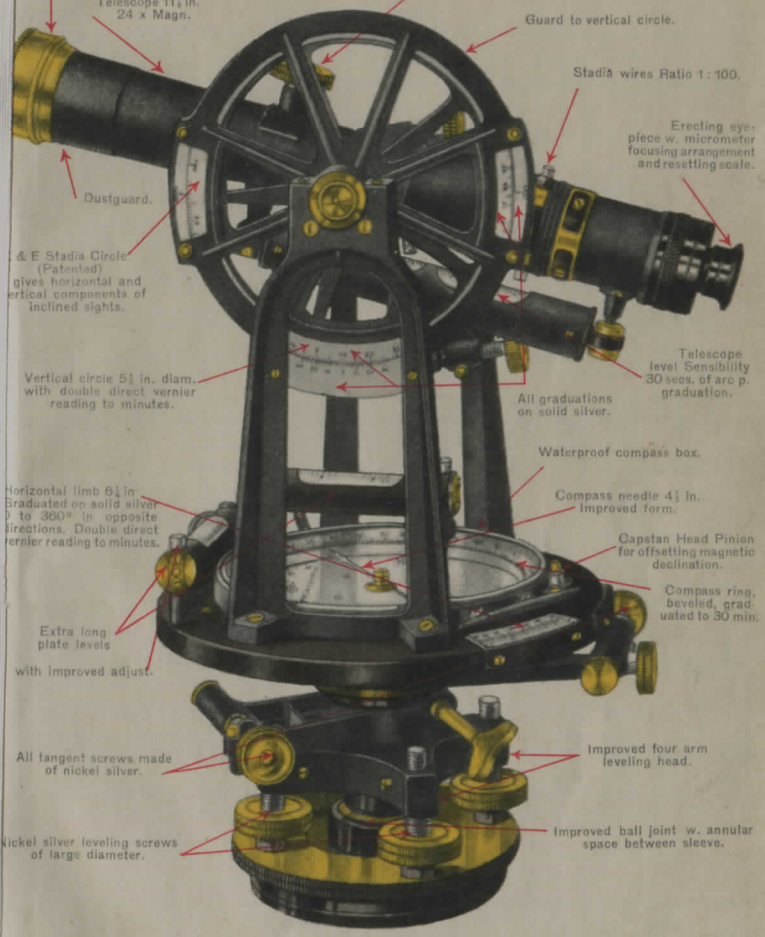
SHEDD Rd T.H. 126 Pg 68

130

EXTRA FINE ENGINEERS' TRANSIT

No. 5060 S

KEUFFEL & ESSER CO., N.Y.



ALSO MADE WITH

INTERNAL FOCUSING TELESCOPE

PRACTICALLY DUST AND MOISTURE PROOF.

T.H. #130

Restaked 5/31/35 6/18/33 Richey Merritt Goodrich 1

℄ Location Frams Cor. North Road Parkman Twp

Note: Sidestakes set 25' Lt. or West

6

5

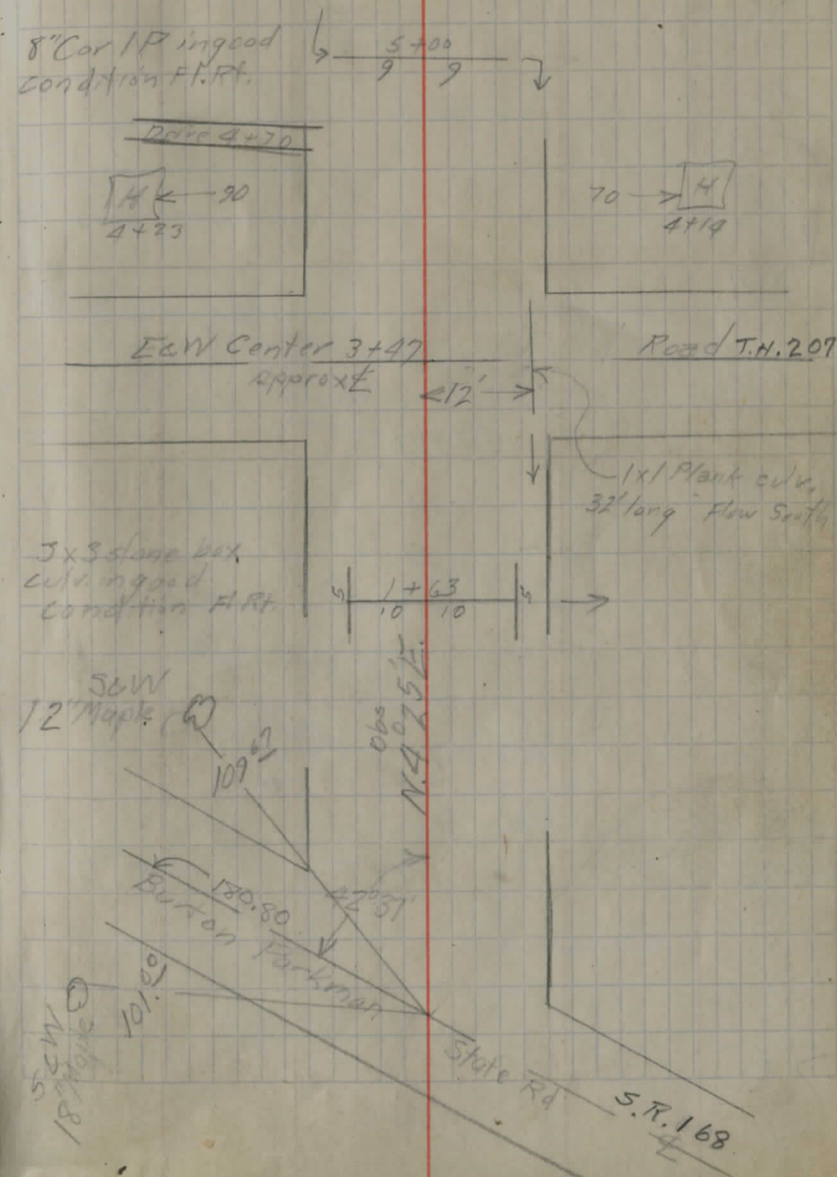
4

3

2

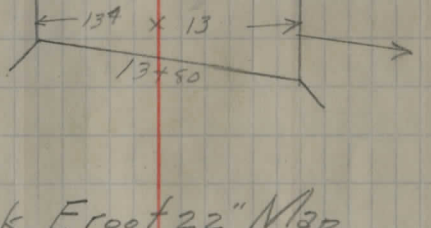
1

Sta 0+00 Beginning of Imp Pipe Set

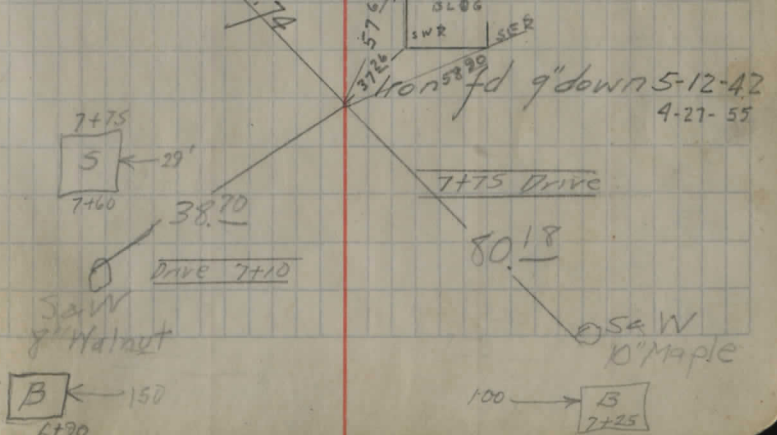


18
17
16
15
14
13
12
11
10
9
Sta 8+00 POT Iron set
7
6

7' x 4 Conc. Slab Top Culv. 20° Skew Good condition overall length 28.2±



B.M. spk. E root 22" Map



30
29
28
27
Sta 26+00 POT Pipe Set
25
24
23
22
21
20
19
18

335 T
I.P. fd 5-12-42 9"
± 4' W of 4-27-55 down
trav. ℄
Fence row

18" W.Ch.
S & W
10" W. Cherry
25.55

24" W.Ch
45.43
S & W
Twin 10" W Cherry

12" Cor I P good condition.
21+15
21+97
T 9

37.5 T
75
H
20+10

Drive
19+80

18+67

42

41

40

39

38

37

36

35

34

33

32

31

30

42700 Drive

80' → H

41+54

Section Line 39+22

39+22

31' T

12" Cor IP in good condition

32+13

10 8

34' →

T

54

53

Sta 52+45.79 PI Def Lt 0°13' ~~Pipe~~ Set

52

51

50

49

48

47

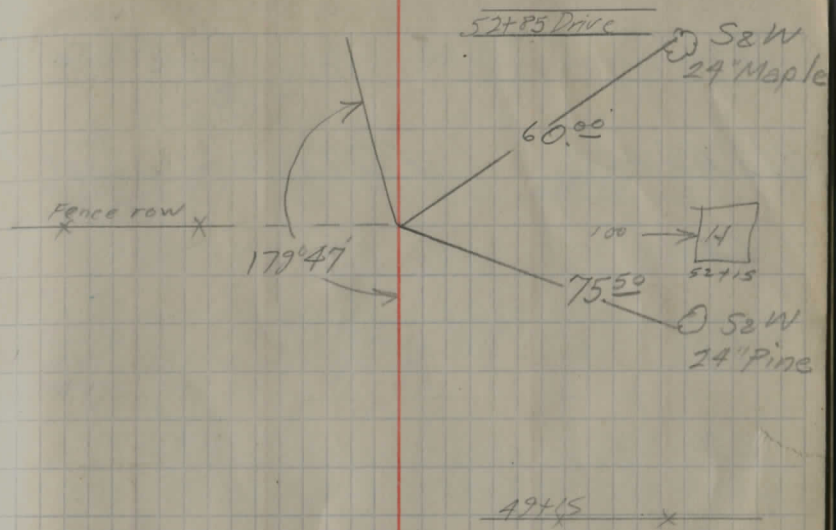
46

45

44

43

42



66

Sta 65+00 POT Iron set

64

63

62

61

60

59

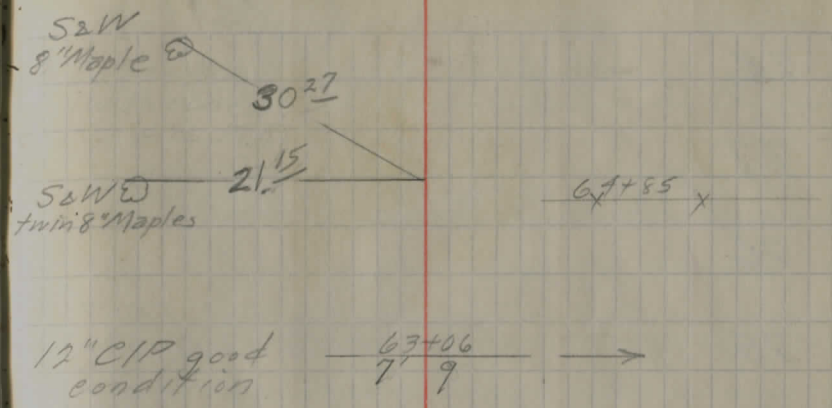
58

57

56

55

54



78
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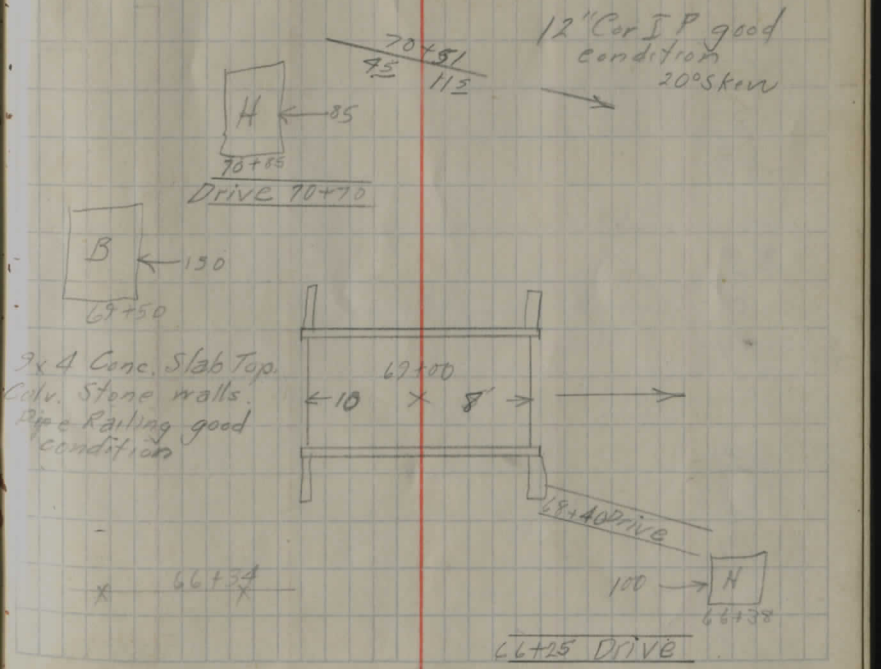


90

89

Sta 88 + 84.30 P.I. Def. Rt. 0°15' Iron set

88

87

86

85

84

83

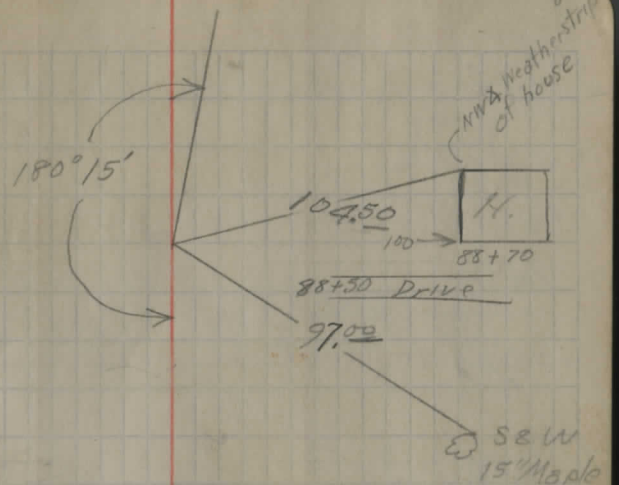
82

81

80

79

78



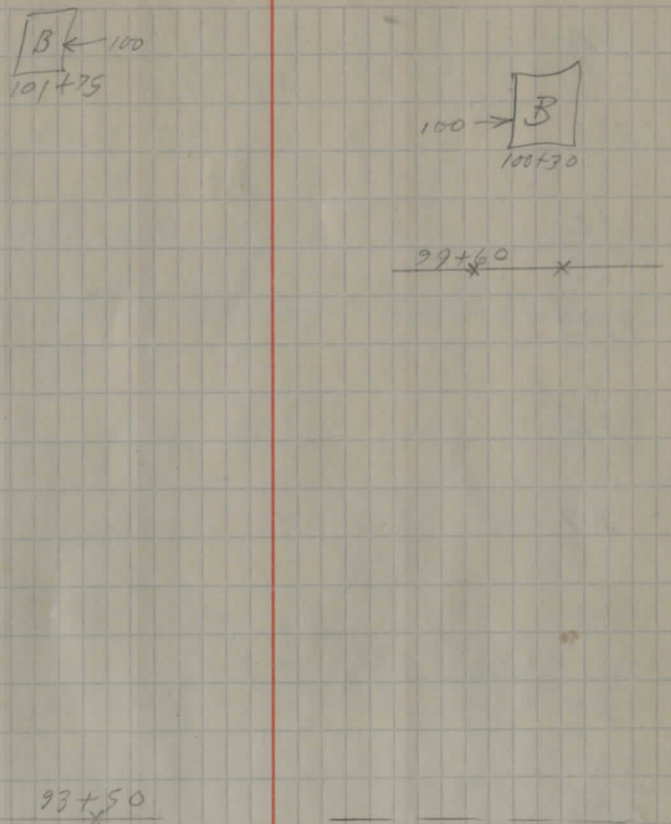
3 x 3 Conc. Slab. Top. Calv. good condition.

81+60
10E 13E

80+60

80+60

102
101
100
99
98
97
96
95
94
93
92
91
90



114

Sta 113+54.80 POT. Iron Found

113

112

111

110

109

108

Sta 107+52.25 POT Iron Set

107

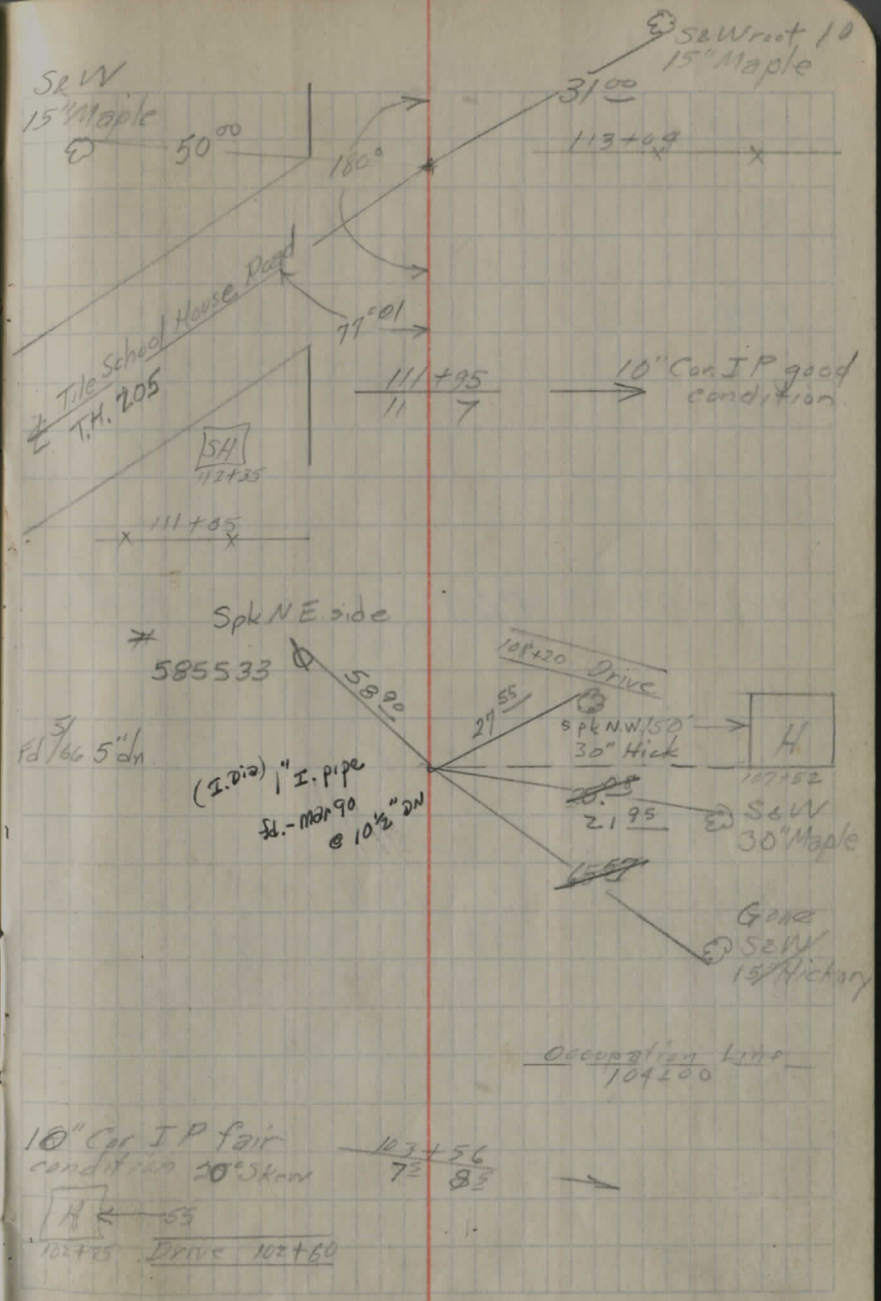
106

105

104

103

102



126

125

124

123

122

Sta 121+00 POT spike set

120

119

118

117

116

115

114

2 x 3 Stone Box
Culv. Conc. extensions | 125+53 / 14 14 | →

5 x 4 Stone Box
Culv. Conc. extensions | 123+24 / 21 21 | →

121+05

52W
24" Ash — 21.50 — gone 5/66

38.07

BM spike
15" Maple

10" Cor IP fair
condition skew 20° 118+45 / 7 11 →

B ← 80
117+75 ~~Drive 118+50~~

3 x 1 Stone Box
Culv. fair condition | 117+15 / 13 8 | →

H ← 100
117+04

139

138

137

136

135

134

133

Sta 132+24 48 POT Iron Set

132

131

130

129

128

Sta 127+51 85 POT Spike Set

127

10" Cor I P good condition 139+23 9 7 →

138+48

133+12

Grave 5/66

25.41 Tacked Hub Fence row

38.50

Scw 12" Maple

151

2.79 miles Parkman

5280 | 14779
10560
4219
3696
5230

150

149

148

Pipe fd 5/66 12" dn

Sta 147+79.01 Twp Line — Pipe set

1966 ref. pg 69

147

146

145

Sta 144+00 PI Def Lt 3°21' — Spike set

Curve Data:
- Δ = 3°21'
- D = 2°
- T = 83.80
- E = 1.2'
- L = 167.50

143

142

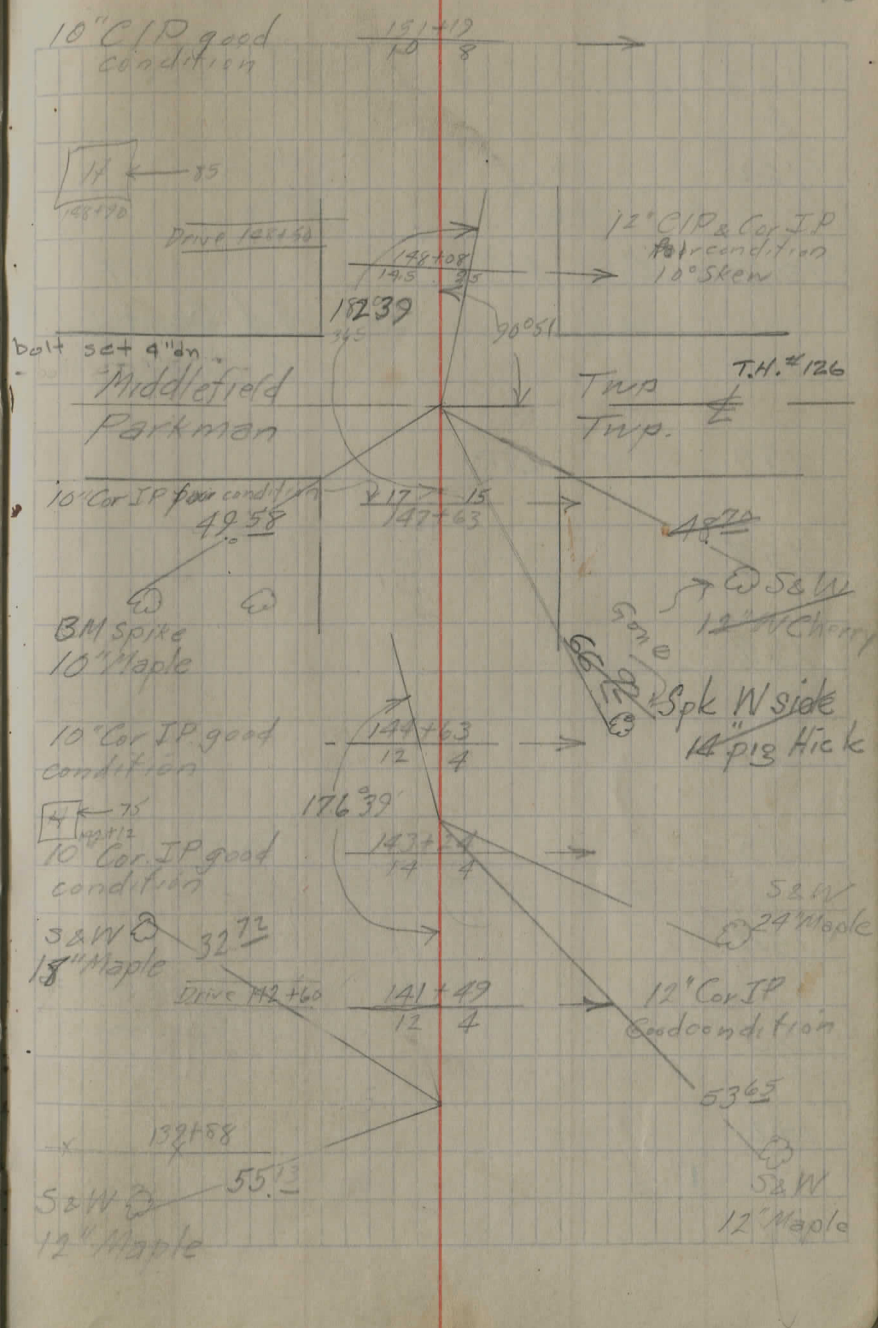
141

Sta 140+57.82 P.O.T. — Iron set

140

145'

139



10" CIP good condition
151+19
10 8
14
85
148+90
Drive 148+50
12" CIP & Cor IP fair condition 10° Skew
148+08
145 35
182°39'
90°05'
bolt set 4" dn
Middlefield
Parkman
Twp Twp.
T.H. #126
10" Cor IP fair condition
49.58
17 15
147+63
48.70
S&W
12" Cherry
Gone
66 ℄
Spk W side
14" pig Hick
BM Spike
10" Maple
10" Cor IP good condition
144+63
12 4
176°39'
75
10" Cor IP good condition
143+24
14 4
S&W
24" Maple
S&W
18" Maple
32.72
Drive 142+60
141+49
12 4
12" Cor IP Good condition
53.65
139+58
55.13
S&W
12" Maple
S&W
12" Maple

163

162

Sta 161+00 POT

PIF Set

Fd Sept '51
11" under

160

159

158

157

156

155

154

153

152

151

163+44 / 32 / 125 — 12" CIP Good condition Skew 20°

Spk NW root 30" Oak

36 63

37 15

161+90 Drive

24 93

25 15

Spk NW root 18" Pine

B 160+50 162-00

60'

4 161+18

fd 5/66 10" dr.

155+09

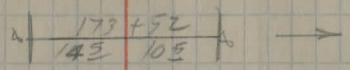
12" CIP & C.M.P. good condition

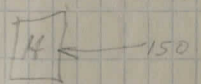
154+25 / 12 / 8

153+12

175
174
173
172
171
170
169
168
167
166
165
164
163

24" CIP
Good condition





Drive 163+75

187
186
185
184
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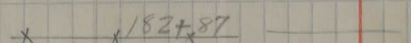
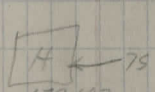
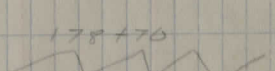
175

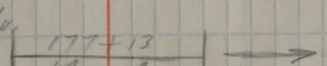


Drive 179+75

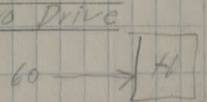




9 x 3 Slab Top Culv.
Cone Slab Stone
Walls Pipe rail



175+80 Drive



199

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197

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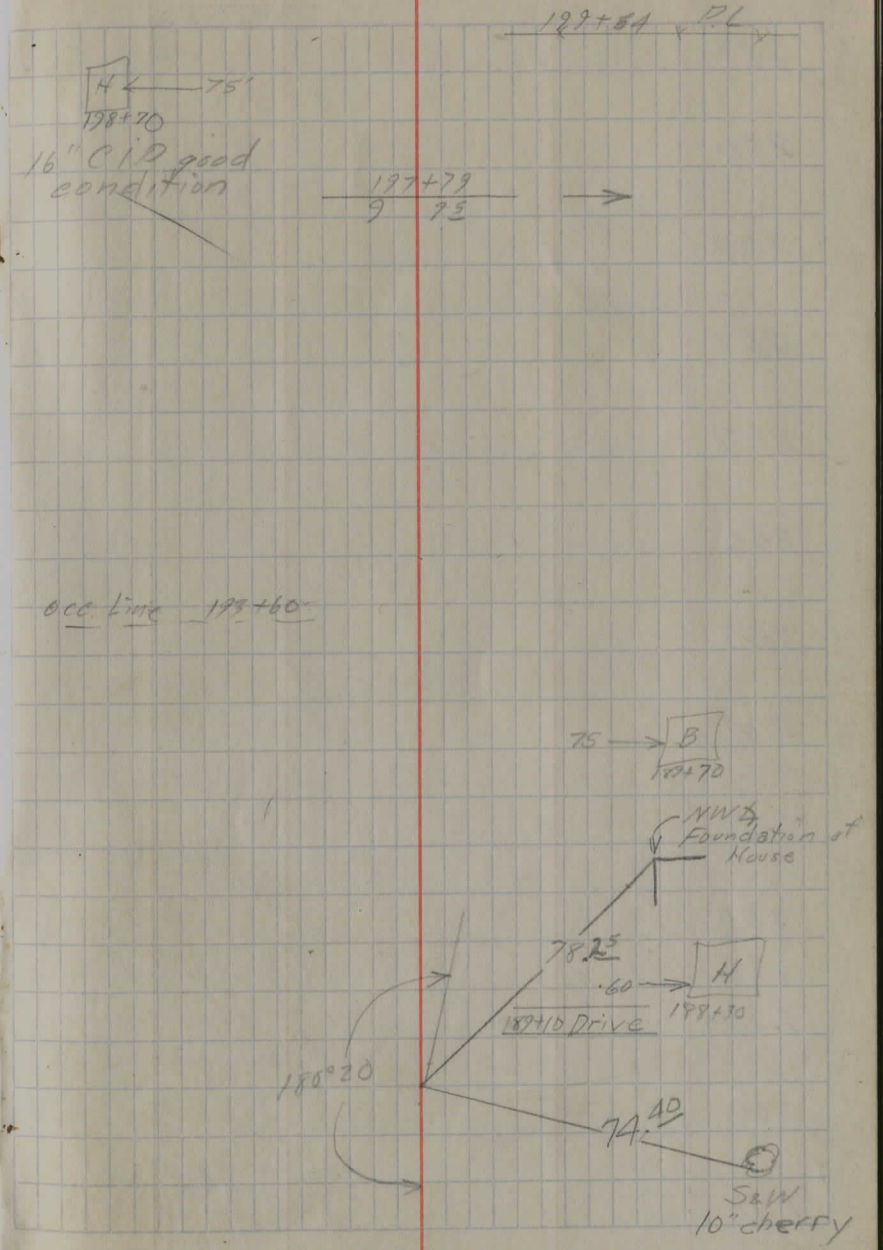
190

189

Sta 188+06.21 PI Def Rt 0°20' Pipe Set

188

187



211
210
209
208
207
206
205
204
203
202
201
200
199

211+12

School ← 75

210+25

209+72

150 → 4

208+60

208+20 Drive

Drive 200+05

223

222

221

220

219

218

217

216

215

214

213

Sta 212+83.62 PI Def Lt 0°29' Pipe set

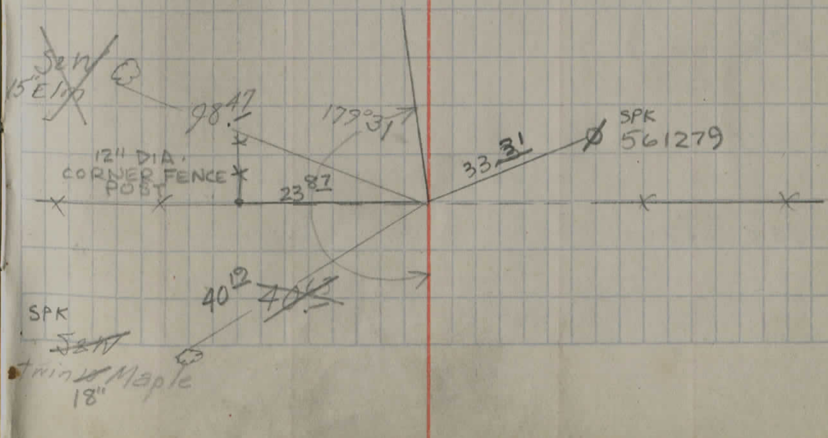
212

211

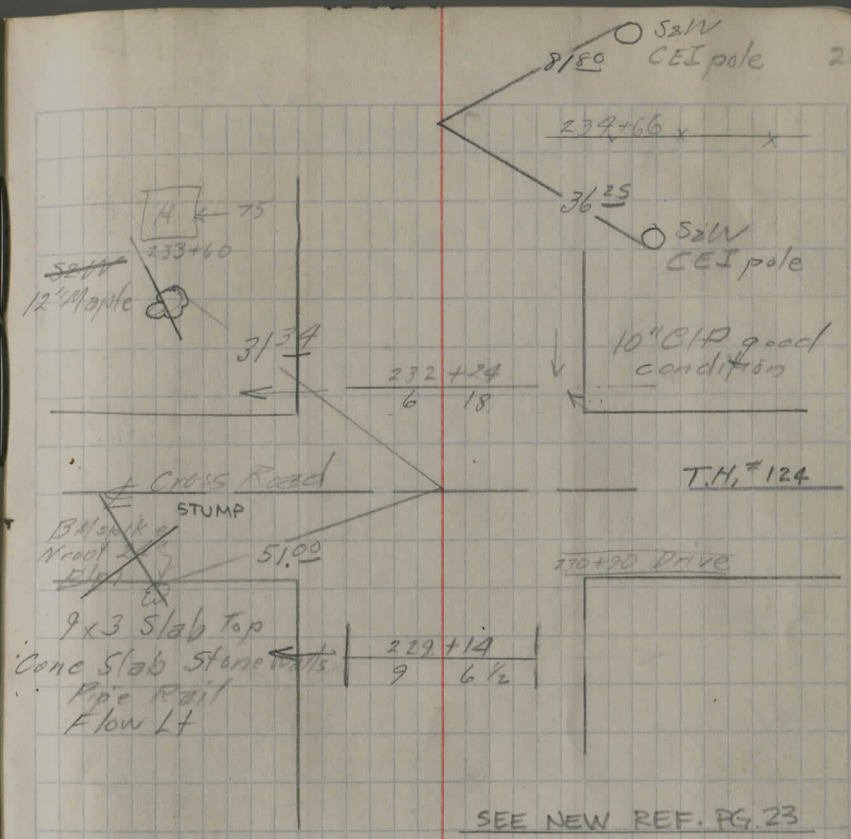
14" CIP good condition

	222+59	
	6	12

→



Sta 235 +00	POT	Spike Set
234		
233		
232		
Sta 231+94.75	POT	Pipe Found
231		
230		
229		
228		
227		
226		
225		
224		
223		



4.61 miles total

5284 | 29361
21120
32410
31680
7300

Parkman 2.79 miles.
Middlefield 1.82 miles.

Sta 243+66.04 End of Project Pipe Set

243

242

241

240

239

Sta 238+18.85 PI Def Rt 0°48' Pipe Set

238

237

236

235

Note: See yellow sheet for data in Village (per CEI Co) (Pg 23)

9W

12" Maple

BM spike
E root
12" Elm

68.76

43.65

Approx Corp. Line.

SEE NEW REF. PG 23

6378

24+60 Drive

S&W
15" Elm

50 → H
243+91

12" CIP & Cor IP
fair condition

240+01
15 7.5

S&W
18" Elm
Point to point

38.45

47' x 9.7'
238+69

Steel I Beam Bridge
10' span 5' high
14' wide plank floor
7-8" Beams

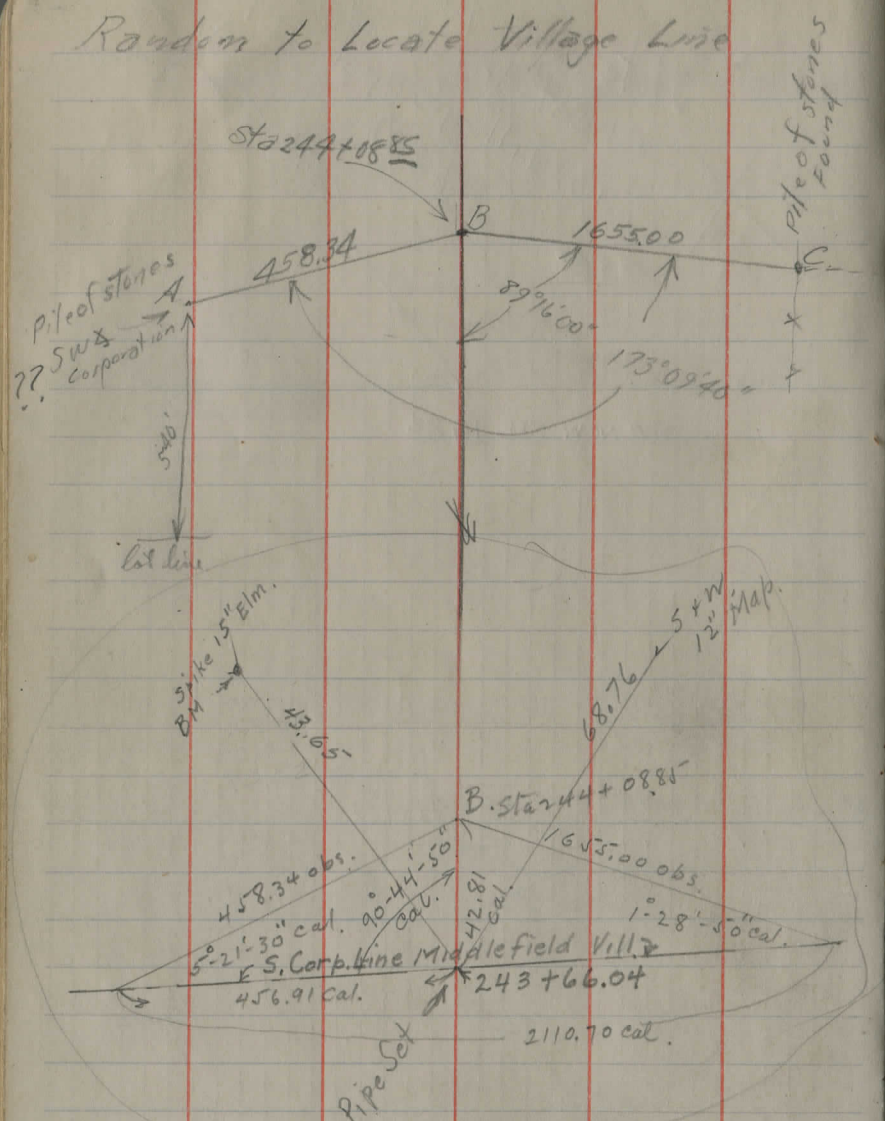
180°48'

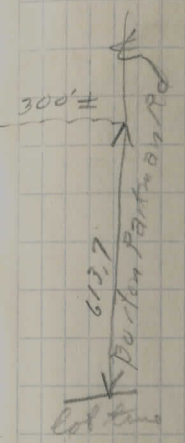
238+10 Drive
60 → H
237+72

54.11

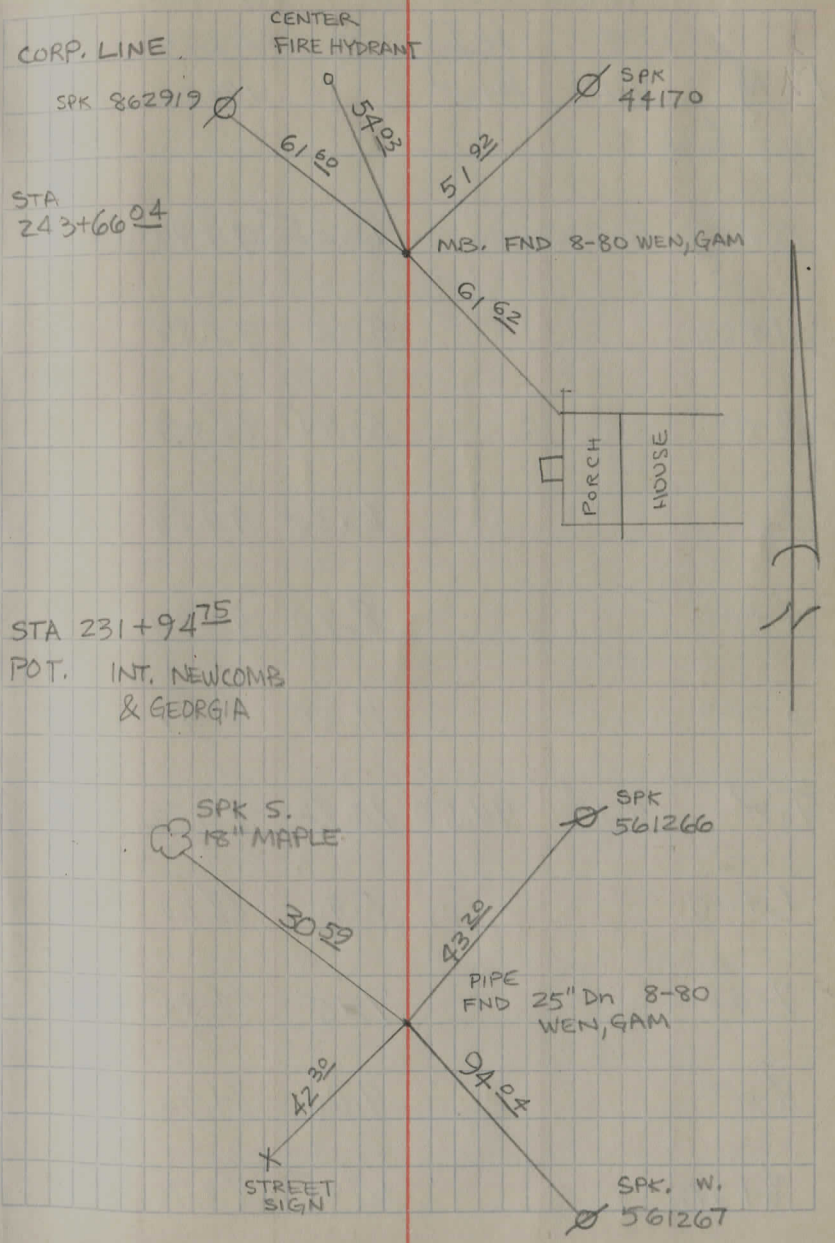
32W
18" Elm

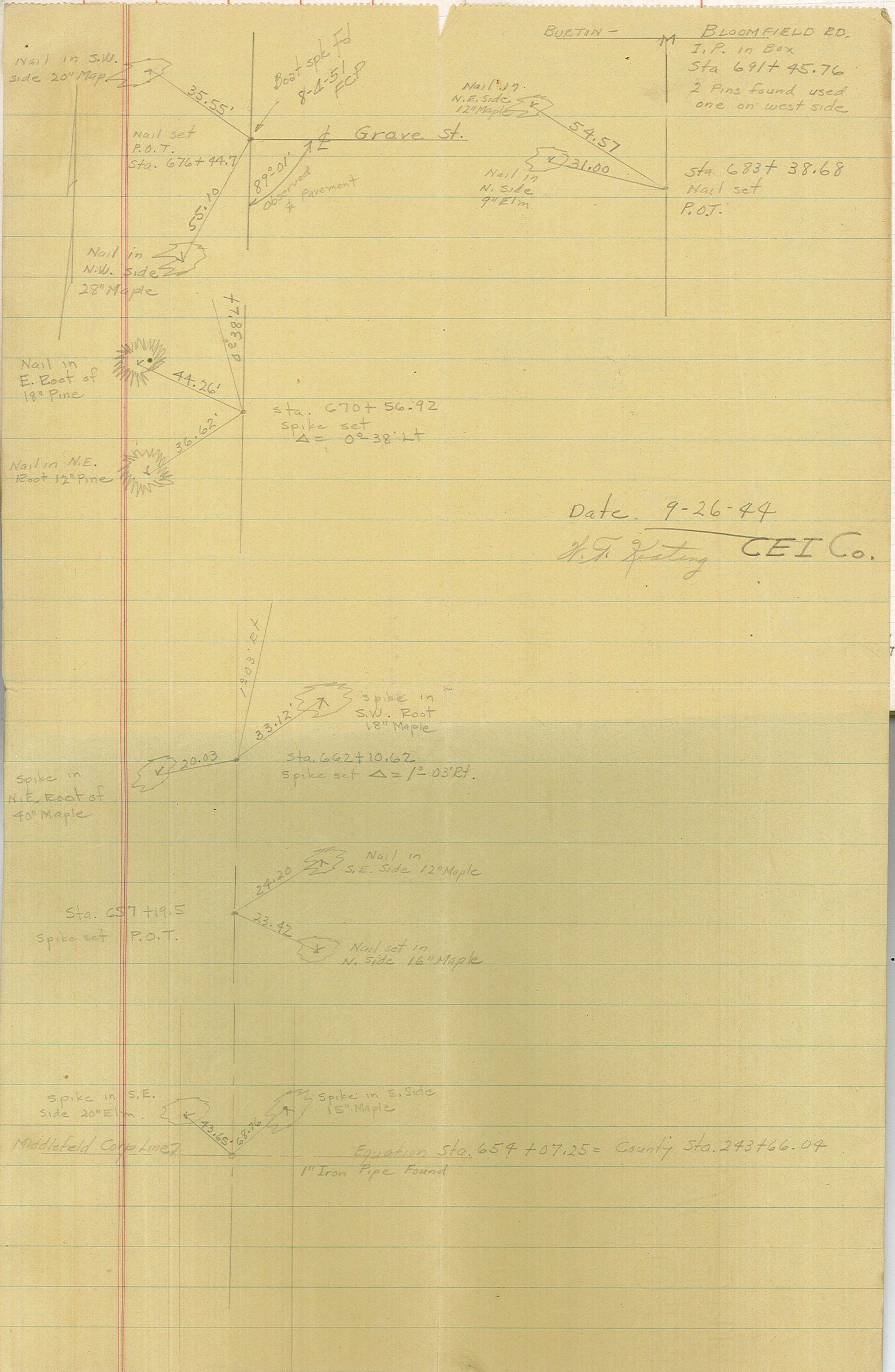
Random to Locate Village Line





2110.
456
1654


CORP. LINE
CENTER
FIRE HYDRANT
SPK 862919
SPK
44170
54 03
61 60
51 92
STA
243+66 04
MB. FND 8-80 WEN, GAM
61 62
PORCH
HOUSE
STA 231+94 75
POT. INT. NEWCOMB
& GEORGIA
SPK S.
18" MAPLE
SPK
561266
30 59
43 20
PIPE
FND 25" Dn 8-80
WEN, GAM
47 30
94 04
STREET
SIGN
SPK. W.
561267


BURTON – BLOOMFIELD RD.
I.P. in Box
Sta 691+45.76
2 Pins found used one on west side
Nail in S.W. side 20" Map.
35.55'
Boot spk Fd 8-4-51 FCP
Nail set P.O.T. Sta. 676+44.7
℄ Grove. st.
89°-01'
observed ℄ pavement
55.10
Nail in N.W. side 28" Maple
Nail in N.E. side 12" Maple
54.57
31.00
Nail in N. side 9" Elm
Sta. 683+38.68 Nail set P.O.T.
0°38' Lt
Nail in E. Boot of 18" Pine
44.26'
Sta. 670+56.92 spike set Δ = 0°-38' Lt
36.62'
Nail in N.E. Root 12" Pine
Date. 9-26-44
H. F. Keating CEI Co.
1°-03' Rt
Spike in S.W. Root 18" Maple
33.12'
20.03
Sta. 662+10.62 Spike set Δ = 1°-03' Rt.
Spike in N.E. Root of 40" Maple
Nail in S.E. Side 12" Maple
24.20
Sta. 657+19.5 Spike set P.O.T.
23.42
Nail set in N. Side 16" Maple
Spike in S.E. Side 20" Elm.
Spike in E. Side 15" Maple
43.16
68.76
Middlefield Corp. Line
Equation Sta. 654+07.25 = County Sta. 243+66.04
1" Iron Pipe Found

NEWCOMB RD DITCH

	+	HI	−	ELEV
B.M. N.E Cor Conc Slab T.P.	1.14	101.14		100.00
0+00			6.35	94.79
1+00			5.60	95.54
2+00			5.45	95.69
3+00			6.55	94.59
4+00			8.70	92.44
5+00			11.55	89.59
T.P	4.18	94.50	10.82	90.32
6+00			5.90	88.60
7+00			7.15	87.35
8+00			9.60	84.90
8+70			10.80	83.70

GOING EAST

4/11/59

℄ DITCH @ E. EDGE OF RD

X-SEC MIDDLEFIELD - FRAMS COR. RD.

Sta.	+	H.I.	−	Elev.	
	3.72	1163.18		1159.46	
	8.72	1165.15	6.75	1156.43	
0+00			4.53	1160.62	
+50			5.2	60.00	
1+0			6.8	58.4	
	5.20	1164.83	5.38	1159.63	chk Culv
1+~~63~~ Culv.			6.4	58.4	
2+0			6.2	58.6	
3+0			4.0	60.8	
	10.92	1173.78	1.97	1162.86	
+47 Ex Rd			9.8	64.0	
4+0			7.4	66.4	
5+0			2.6	71.2	
	12.12	1185.50	0.40	1173.38	
6+0			11.2	74.3	
7+0			7.5	78.0	
8+0			3.3	82.2'	
~~9+0~~			2.33	1183.17	1183.28

7+49 = 1" water pipe 1.25 undergr.
7+64 = 1" " " 1.00 "

T.H. #130 6-1-35

BM #1

Graber
Rossbech
Hill.

100/2.60 Pave. 1162.6 — 0/4.53 Pavement. 1160.6 — 100/7.40 Pave 1157.8

Top. Pav. Rd Slope = 25/1.7 12/2.3 8/6.0 5.2 5/5.7 8/5.9 11/3.1 25/3.6

2/9.2 0/6.8 7/7.4 10/8.0 13/6.7 25/6.6

— 25 — 13/5.3 8/7.9 4/7.2

Culv. 60/7.5 9/10.0 FL 1154.8 6.4 8/9.2 FL 1155.6 100/10.1

25/7.2 10/7.1 9/7.5 8/7.0 5/6.4 6.2 2/6.6 10/7.0 12/7.3 25/9.2

25/1.6 18/2.5 9/5.0 5/4.3 4.0 8/4.3 11/5.1 15/3.5 25/3.2

X Rd ℄ 100/8.9 25/8.5 0/9.8 ~~8.9~~ 25/9.8 90/11.5

25/6.2 13/7.4 7.4 6/7.7 8/7.5 11/7.9 18/7.0 25/6.7

— 25/1.1 14/1.7 11/3.2 9/2.5 2.6 8/2.7 11/3.2 13/2.4 25/2.1 —

25/10.0 20/10.2 14/11.3 12/12.1 8/11.2 11.2 5/11.3 8/11.7 9/11.3 14/10.9 - 25 —

25/4.2 12/5.0 10/6.0 7/7.5 7.5 10/7.8 15/6.4 20/5.8 - 25 —

— 25/1.9 19/1.7 15/2.4 11/4.2 7/3.6 3.3 7/3.7 9/4.1 11/3.2 17/3.2 25/3.5

See Pg 59 for BM. checks

	~~0.48~~	1185.50			
9+0			4.8	80.70	
	1.48	1184.76		1183.28	
10+0			8.3	76.50	
	3.92	1175.99	12.71	1172.05	
11+0			5.2	70.80	
12+0					
	0.70	1165.97	10.72	1165.27	
12+0			4.8	61.2	
	4.13 ~~4.03~~	1162.73 ~~63~~	7.37	1158.60	1158.62
13+0			5.9	56.8	
13+85	Culv.		6.0	56.7	
14+0			6.2	56.5	
15+0			5.2	57.5	
	10.89	1170.32 ~~.32~~	3.30	1159.43 ~~.33~~	
			8.9	61.4	
16+0					
	11.77	1180.21	1.78	1168.54 ~~.44~~	
17+0			9.5	70.7 ~~.83~~	
	8.80	1187.63 ~~.53~~	1.48	1178.73 ~~.83~~	
				~~880~~	

2.5/3.1 1.6/3.6 1.4/4.7 1.2/6.3 .8/5.3 4.8 .5/5.1 .9/5.9 1.1/4.4 2.0/4.8 2.5/5.0

B.M. #2

2.5/5.2 1.8/5.8 2.5/9.7 .9/8.4 8.3 .4/8.4 .7/9.7 1.0/6.0 2.5/6.2

3.5/3.0

2.5/1.6 1.8/2.0 1.4/7.3 .8/5.4 5.2 .6/5.4 .9/6.6 1.2/3.1 1.8/2.4 2.0/2.8

2.5/7.5 1.9/7.5 14.8 1.5/11.5 2.0/11.0 2.5/11.8

61.2

.9/5.2 .6/4.6 4.8 .6/4.9 .9/5.6

on H.W.

2.0/7.5 1.1/6.3 1.0/6.4 .7/6.2 5.9 .7/6.1 .9/6.4 1.1/6.3 1.7/7.8 2.5/8.8

1.0/10.4 FL. 1.4/11.4 11.51.3 6.0 1.45/11.6 FL. 11.51.1 2.00/12.2

2.5/10.0 2.1/10.0 1.2/6.4 6.2 .6/6.3 1.5/7.5 2.5/8.5

2.5/6.4 1.6/5.8 1.4/6.0 .8/5.4 5.2 1.1/5.0 2.0 – 2.5/4.4

2.5/7.3 1.8/8.0 1.5/9.9 1.2/9.0 8.9 3/8.9 6/10.2 13/5.9 2.1/4.7 2.5/4.3

2.5/4.9 1.9/5.6 1.5/9.0 1.3/10.4 10.5/9.5 9.5 .3/9.4 .5/10.0 .6/9.3 1.3/10.3 2.1/3.4 2.5/3.6

		1187.63			
18+0			9.8	77.8	
19+0			6.8	80.8	
20+0			4.8	82.8	
+50 V.P.I			3.7	83.9	
21+0			4.0	83.6	
			1.52	1186.11	1186.13
	1.51	1187.64			
22+0			4.1	83.5	
23+0			3.4	84.2	
24+0			1.9	85.7	
	6.19	1192.73	1.10	1186.54	
25+0			4.7	88.0	
26+0			2.9	89.8	
	3.58	1196.31	0.00	1192.73	
27+0			5.8	90.5	
28+0			5.4	90.9	
29			4.2	92.1	
	5.26	1196.95	4.62	1191.69	

6-5-35

6

2.5 / 7.3 — 14 / 8.3 — 10 / 10.7 — 7 / 10.0 — 9.8 — 10.0 — 8 / 10.8 — 11 − 2.5 / 8.9

2.5 / 6.6 — 12 / 7.5 — 11 / 8.4 — 8 / 7.3 — 6.8 — 7 / 7.2 — 9.5 / 7.7 — 11 / 7.1 — 2.5 / 6.6

3.5 / 4.3 — 12 / 8.0 — 10 / 6.0 — 7 / 5.4 — 4.8 — 8.5 / 5.4 — 14 / 4.9 — 17 − 2.5 / 4.2

2.5 / 2.8 — 14 / 3.5 — 10 / 4.6 — 7 / 4.1 — 3.7 — 7 / 4.1 — 9 / 4.5 — 11 − 2.5 / 3.2

2.5 / 2.2 — 12 / 4.0 — 10 / 5.0 — 6 / 4.1 — 4.0 — 7 / 4.4 — 11 / 5.0 — 12 / 4.6 — 2.5 / 5.3

BM #3 21+40

2.5 / 3.0 — 12 / 4.4 — 10 / 4.9 — 7 / 4.3 — 4.1 — 9 / 4.4 — 11 / 5.2 — 13 / 4.7 — 2.5 / 5.2

2.5 / 2.3 — 4 / 3.8 — 9 / 4.4 — 7 / 3.7 — 3.4 — 8.5 / 3.5 — 12.5 / 4.4 — 12 / 4.0 — 2.5 / 4.2

2.5 / 0.0 — 10 / 1.2 — 7 / 2.7 — 5 / 2.1 — 1.9 — 10 / 2.1 — 14 / 3.1 — 15 / 2.1 — 2.5 / 1.3

2.5 / 3.3 — 9.5 / 4.8 — 8 / 5.9 — 4 / 4.9 — 4.7 — 11 / 5.2 — 14 / 5.9 — 15.5 / 5.0 — 2.5 / 4.9

2.5 / 2.3 — 10 / 3.2 — 8 / 4.5 — 4 / 3.1 — 2.9 — 10.5 / 3.3 — 14 / 4.2 — 16 / 3.5 — 2.5 / 2.4

Spk Tel P. Sta 27+00

2.5 / 5.4 — 11 / 6.2 — 8 / 7.1 — 6 / 6.1 — 5.8 — 9 / 6.0 — 17.5 / 6.7 — 14 / 6.0 — 2.5 / 6.0

2.5 / 5.0 — 11 / 5.6 — 9 / 6.3 — 6 / 5.6 — 5.4 — 9 / 5.6 — 13 / 6.4 — 16 / 5.7 — 2.5 / 5.9

2.5 / 4.7 — 10 / 5.5 — 8.5 / 4.6 — 4.2 — 8 / 4.4 — 12 / 5.1 — 16 / 4.8 — 2.5 / 5.0

	~~+196~~	1196.95			
30+0			4.4	92.6	
31+0			4.2	92.8	
32+0			4.8	92.2	
33+0			4.3	92.7	
	7.20	1200.20	3.95	1193.00	
34+0			7.0	1193.2	
35+0			5.4	1194.8	
36+0			3.6	1196.6	
37			2.2	1198.0	
	8.29	1206.14	2.35	1197.85	
			5.48	1200.66	1200.70
	5.48	1206.18		1200.70	use
38+0			6.5	1199.7	
39+0			4.6	1201.6	
40+0			2.2	1204.0	
	9.43	1214.71	0.90	1205.28	

BM #4 37+92.4

		1214.71			
41+0			7.9	06.8	
42+0			5.2	09.5	
43+0			3.5	11.2	
44			1.7	13.0	
	9.15	1222.91	0.95	1213.76	
45			8.3	14.6	
46+0			6.7	16.2	
47+0			4.6	18.3	
48			1.7	21.2	
	12.25	1234.68	0.48	1222.43	
49+0			10.5	24.2	
50+0			7.2	27.5	
51+0			4.6	30.1	
			1.75	1232.93	1132.98 mer.
	1.75	1234.73			
52+0 R.P.1.			2.8	31.9	

25-11 8 1 9 12 14 25
6.7 9.9 8.1 7.9 8.1 9.1 8.0 4.9

25 9 7 6 7 20 25
5.2 4.5 6.6 6.3 5.2 4.9 4.0 3.1

25 9 7 5 8 12 16 25
3.8 3.3 4.3 3.6 3.5 3.8 4.7 3.1 2.5

25 9 5 8 13 16 - 25
3.2 2.2 1.9 1.7 1.8 3.4 2.2

25 — 9.5 8 6 7 13 14.5 21
8.7 9.0 8.7 8.3 8.4 9.9 9.0 8.4

25 10 8 8 12 14 25
6.5 6.9 7.9 6.9 6.7 8.6 8.3 6.9 5.2

25 10 9-7 6 8 12 25
4.8 4.7 5.7 5.0 4.6 4.6 5.7 3.0

25 — 12 9 5 8 11-13 14 25
1.8 3.1 2.0 1.7 2.0 2.5 1.7 1.3

25-10 8 5 80 11 11 25
9.9 11.9 11.0 10.5 11.0 11.6 9.5 8.7

25 - 11 8 5 8 11 14 25
6.2 8.3 7.6 7.2 7.5 8.4 7.8 5.4

25 - 11 8 6 8 11 13 25
4.3 5.6 5.0 4.6 4.9 5.7 4.4 4.2

BM #5 Sta 51+85

25 13 10 7 6 9 11 - 25
2.8 3.2 4.5 3.7 2.8 3.3 3.9 3.0

		1234.73		
53+0	3.85	1235.21	3.37	1231.36
F—	—	—	3.5	31.7
54+0			4.2	31.0
55+0			5.0	30.2
56+0			6.3	28.9
57+0			7.6	27.6
58+0			8.2	27.0
	3.31	1230.35	8.17	1227.04
59+0			4.3	26.0
60+0			5.5	24.8
61+0			7.3	23.0
62+0			8.7	21.6
63+0			9.2	21.1
63+06	10" C.I.P. Culv.		9.1	21.2
	9.61	1230.68	9.28	1221.07

25 — 14/3.5 — 12/4.4 — 8/3.7 — 3.5 — 6/3.8 — 11/3.5 — 20 — 25/3.0

25/5.0 — 13/4.6 — 12/5.3 — 8/4.3 — 4.2 — 6/4.5 — 10/5.0 — 12/4.4 — 25/4.0

25/5.5 — 12/5.3 — 11/6.0 — 8/5.2 — 5.0 — 5/5.1 — 10/6.1 — 12/4.8 — 25/4.4

25/6.0 — 12/6.8 — 10/7.2 — 7/6.5 — 6.3 — 5/6.5 — 10/7.4 — 12/5.9 — 21/5.6

25/8.0 — 13/8.1 — 11/8.6 — 8/7.8 — 7.6 — 6/7.6 — 11/8.8 — 14/7.8 — 21/7.6

25/8.5 — 13/8.7 — 11/9.3 — 7/8.5 — 8.2 — 5.5/8.4 — 11/9.7 — 14 — 25/8.7

25/3.7 — 13/4.6 — 12-11/5.5 — 8/4.6 — 4.3 — 7/4.6 — 11/5.6 — 13/4.2 — 25/4.3

25 — 13/6.0 — 11/7.0 — 7/5.8 — 5.5 — 7/5.9 — 11/6.9 — 13/5.6 — 25/5.8

25/6.6 — 12/7.6 — 10-11/8.5 — 7/7.7 — 7.3 — 8/7.8 — 11/8.4 — 13/7.2 — 25/7.5

25/8.0 — 14/9.1 — 11/9.1 — 10-9/9.7 — 7/8.9 — 8.7 — 8/8.9 — 11-13/9.9 — 14/9.3 — 25/9.8

25/10.3 — 13/9.9 — 12-9/10.5 — 6/9.5 — 9.2 — 8/9.4 — 12-14/10.2 — 15/10 — 25/10.4

7.5/9.8 — FL 10.4 — 9.1 — 10/10.4 FL — 100/11.4

		1230.68			
64+0			8.4	22.3	
65+0			5.3	25.4	
66+0			5.6	25.1	
+50 R.P.			7.5	23.2	
	5.35	1230.72	5.35	1225.33	1125.37
67			11.5	19.2	
	1.09	1220.09	11.72	1219.00	
68+0			6.4	13.7	
69+0 Stone Colv. Sec.			6.6	13.5	
69+0 Reg. Sec.			6.6	13.5	
70+0			6.1	14.0	
71+0			4.4	15.7	
	11.33	1227.78	3.64	1216.45	
72+0			8.2	19.6	
73+0			5.9	21.9	
74+0			5.0	22.8	

11-8

B.M. #6 Sta 66+70

		1227.78			
75+0			4.9	22.9	
76+0			4.1	23.7	
77+0 VPI			2.8	25.0	
	3.63	1227.98	3.43	1224.35	
78+0			4.7	23.3	
79+0			6.9	21.1	
80+0			9.5	18.5	
81+0			10.3	17.7	
			8.00	1219.98	1220.07
81+60		Culvert	9.5	18.5	
82+0			8.9	19.1	
	10.15	1228.02	10.11	1217.87	
83+0			6.8	21.2	
84+0			1.6	26.4	
	8.64	1234.76	1.90	1726.14	
			3.60	1231.16	1231.21
	3.60	1234.81			
85+0			5.2	29.6	

25 / 3.8 — 11 / 4.7 — 9 / 5.7 — 5 / 5.0 — 4.9 — 12 / 4.9 — 15-17.5 / 6.1 — 18-25 / 0.8

25 / 3.5 — 11 / 4.6 — 9 / 5.2 — 5 / 4.2 — 4.1 — 11 / 4.1 — 14-15 / 5.2 — 17 / 4.3 — 20 / 4.1

25 / 2.2 — 10 / 2.8 — 8 / 3.4 — 6 / 3.0 — 2.8 — 10 / 2.8 — 12 / 3.5 — 15 / 2.1 — 20 / 1.8

25 / 4.1 — 10 / 4.9 — 8 / 5.8 — 4 / 4.8 — 4.7 — 10 / 4.7 — 14 / 5.3 — 16 / 4.5 — 25 / 4.3

25 / 5.1 — 12 / 6.0 — 7.5 / 8.0 — 5 / 7.2 — 6.9 — 10 / 7.0 — 14-16 / 7.8 — 18 / 6.4 — 20 / 6.0

25 / 8.7 — 12 / 9.9 — 10-8 / 10.3 — 5 / 9.7 — 9.5 — 12 / 9.6 — 16 / 10.3 — 18 / 9.7 — 20 / 9.6

20 / 11.3 — 10 / 10.7 — 9 / 11.1 — 5 / 10.5 — 10.3 — 11 / 10.4 — 14 / 10.9 — 14 / 10.5 — 20 / 11.8

Side chk on HW

7.5 / 11.5 — 10 / 13.4 — 9.5 — 14 / 13.4 HFL — 100 / 14.1

25 / 10.5 — 9 / 8.7 — 7 / 9.3 — 5 / 8.6 — 8.9 — 9 / 9.2 — 12.5 / 9.6 — 14 / 9.0 — 35 / 11.0 =

20 / 4.4 — 14 / 11.4 — 9-7 / 7.8 — 5 / 6.9 — 6.8 — 9 / 7.0 — 13 / 7.1 — 20 / 3.6 — 20 / 3.3

25-12 / 0.1 — 8 / 3.6 — 5 / 2.0 — 1.6 — 10 / 2.1 — 14 / 3.6 — 21-25 / 0.0

= Bm #7 used 84+90

25-16 / 3.8 — 10 / 5.0 — 8 / 7.0 — 4 / 5.4 — 5.2 — 11 / 5.6 — 15 / 7.1 — 20-25 / 3.4

		1234.81		
86+0			2.7	32.1
	9.10	1242.52	1.39	1233.42
87+0			7.7	34.8
88+0			6.1	36.4
89+0			5.3	37.2
90+0			4.5	38.0
91+0			3.7	38.8
	8.07	1246.94	3.65	1238.87
92+0			7.0	39.9
93+0			5.8	41.1
94+0			4.3	42.6
95+0			2.9	44.0
	5.30	1249.89	2.35	1244.59
5+6.35	3.71	1253.60	0.00	1249.89
			2.00	1241.60
	2.00	1253.53		
96+0			8.1	45.4

25-20 9 8 5 11 14 19-25
15 25 4.6 3.1 2.7 2.8 3.6 0.6

25-10 7 3 11 15-16 19 25
7.7 9.7 7.9 7.7 7.8 9.0 6.0 6.5

25-17 9 7 4 11 15 18 25
6.2 6.3 7.8 6.6 6.1 5.7 7.1 5.3 4.9

25 9 7 3 12 14.5 16 25
5.2 5.8 5.4 5.3 5.2 6.4 5.1 4.4

25-16 9 7-6 4 10 15
5.4 4.9 5.4 4.5 4.5 4.3 5.5 4.9 4.7

25-18 9 8 4 10 14 18 25
4.3 3.8 4.3 3.6 3.7 3.6 4.4 4.1 4.0

25-15 8 7-6 4 11 13-15 17 25
6.6 7.3 7.9 7.3 7.0 7.0 7.8 6.0 6.0

25-10 8 5 9 13 15 25
5.8 6.9 6.0 5.8 6.0 7.1 5.3 4.6

25 11 9-8 6 8 12 16 25
5.0 4.4 5.2 4.6 4.3 4.4 5.5 4.4 3.9

25 13 10 8 7 10 13 25
2.8 3.3 3.9 3.3 2.9 2.7 3.5 2.7 2.0

Apiko W.C. Trce 96+25 20' E ℄ = temp. turn
BM # 8 = 98+30

25 12 12-10 8 7 9-11 12 24
7.5 8.0 9.2 8.4 8.1 8.2 8.7 7.5 6.9

		1253.53			
97+0			5.8	47.7	
98+0			3.6	49.9	
99+0			2.0	51.5	
	7.96	1260.38	1.11	1252.42	
100+0			7.3	59.1	
101+0			5.8	54.6	
101			4.8	55.6	
103			3.5	56.9	
104			3.3	57.1	
	7.98	1261.64	2.72	1257.66	
105			7.0	58.6	
106			5.7	59.9	
107			4.7	60.9	
108+0			4.3	61.3	
109			4.5	61.1	
			3.12	1262.52	1262.51

Graben
Rossback
Hill.

6-6-35

36

25 5.2 | 12 6.2 | 10 7.7 | 6 6.4 | 5.8 | 7 6.1 | 10-11 7.4 | 12 6.0 | 17 4.7 | 25 4.6

25 3.7 | 12 3.9 | 10 4.9 | 7 3.9 | 3.6 | 7 3.6 | 10 4.7 | 11 4.1 | 25 3.4

25 1.6 | 13 2.4 | 11 3.6 | 7 2.4 | 2.0 | 6 2.1 | 10 3.0 | 12 2.0 | 25 1.5

25 6.0 | 13 7.4 | 9-10 8.9 | 6 7.9 | 7.3 | 7 7.4 | 10 8.0 | 12 6.8 | 25 7.2

25 4.5 | 12 6.2 | 11-9 7.3 | 6 6.4 | 5.8 | 7 5.9 | 10 6.7 | 12 6.3 | 25 5.9

25 4.1 | 11 4.9 | 10 5.8 | 7 5.0 | 4.8 | 7 4.7 | 11 5.4 | 13 4.9 | 25 4.6

25 2.7 | 13 3.1 | 12-10 4.3 | 7 3.7 | 3.5 | 7 3.8 | 9 4.3 | 12 4.0 | 25 3.7

25 3.3 | 11 3.6 | 10 4.2 | 6 3.4 | 3.3 | 7 3.3 | 10-11 4.0 | 13-25 3.4

25 6.1 | 13 7.0 | 12-10 8.6 | 7 7.3 | 7.0 | 7 7.1 | 11-13 8.3 | 14 7.2 | 25 7.0

25 4.6 | 13 5.3 | 10-12 7.3 | 6 6.0 | 5.7 | 7 5.8 | 11 7.0 | 13 5.6 | 25 5.4

25 4.2 | 15 4.7 | 11-10 6.3 | 6 5.0 | 4.7 | 7 4.9 | 10 5.4 | 13 4.8 | 25 4.6

25 3.8 | 11 4.5 | 10-8 5.5 | 5 4.6 | 4.3 | 9 4.1 | 12 5.1 | 14 4.3 | 25 4.7

25 3.7 | 11 4.5 | 9 5.7 | 6 4.9 | 4.5 | 10 4.7 | 13 5.3 | 14 4.5 | 25 4.3

132 m + 9 = Sta 109+55

	2.1↗	1264.63		1262.5↑
110			3.6	61.0
111			4.4	60.2
112			4.6	60.0
112+95	Culvert - 12" Cor. I.P.		4.6	60.0
113+0			4.9	59.7
114+0			5.5	59.1
	1.41	1259.55	6.49	1258.14
115+0			3.0	56.5
116+0			6.3	53.2
	8.62	1256.28	11.89	1247.66
117+0			9.5	47.8
117+15	Culvert		9.4	47.9
118+0			8.3	48.0
119+0			5.9	50.4
120+0			5.3	51.0
			2.45	1253.83

1253.83

6-6-35 37

BM# 9

25 / 2.8 — 12 / 3.4 — 11-9 / 5.0 — 7 / 4.1 — 3.6 — 8 / 3.8 — 13 / 4.9 — 15 / 3.9 — 25 / 3.8

25 / 4.1 — 13 / 4.7 — 11 / 5.6 — 9 / 4.7 — 4.4 — 8 / 4.8 — 11-12 / 5.6 — 13 / 4.8 — 25 / 4.4

25 / 4.5 — 14 / 5.0 — 12 / 5.8 — 8 / 4.6 — 4.6 — 7 / 4.8 — 10.5 / 6.1 — 14 / 5.0 — 25 / 5.3

5.0 / 4.5 — 10.5 / 5.6 — 4.6 — 8 / 6.1 FL — 5.0 / 7.0

35-15 / 4.7 — 17 / 5.2 — 8 / 5.1 — 4.9 — 7 / 5.1 — 10-11 / 5.9 — 13 / 4.7 — 35 / 4.4

25 / 4.3 — 14 / 5.3 — 10 / 6.6 — 7 / 6.0 — 5.5 — 6 / 5.6 — 11 / 6.6 — 13 / 5.3 — 25 / 5.4

25 / 0.5 — 11 / 2.3 — 10 / 4.2 — 6 / 3.3 — 3.0 — 7 / 3.3 — 10 / 3.8 — 13 - 25 / 1.7

25 / 3.4 — 16 / 4.0 — 11 / 7.9 — 7 / 6.6 — 6.3 — 6 / 6.6 — 9 / 7.6 — 14 / 4.0 — 25 / 3.5

25 / 9.5 — 13 / 10.0 — 8 / 8.7 — 8.5 — 6 / 8.7 — 13 / 8.5 — 25 / 7.9

40 / 10.0 — 12.5 / 12.4 FLW — 8.4 — 8.6 / 12.6 FLE — 100 / 14.4

25 / 6.0 — 13 / 6.5 — 9 — 8 / 8.3 — 8.3 — 10 / 8.7 — 11 / 7.9 — 17 - 25 / 9.2 — 25 / 10.2

25 - 19 / 4.0 — 17 / 5.0 — 10 / 6.3 — 7 / 6.0 — 5.9 — 8 / 6.1 — 10 / 6.3 — 14 / 4.9 — 25 / 1.5

25 / 3.2 — 15 / 3.9 — 11 / 5.7 — 5.3 — 10 / 5.5 — 14 / 6.1 — 18 / 4.8 — 35

BM#10

120+70

	24.5	1256.28		1253.83
121+0 V.P.I.			7.7	48.6
122+0			14.3	42.0
	0.98	1245.07	12.19	1244.09
122+50			5.4	39.7
	0.82	1238.29	7.60	1237.47
123+0			0.0	38.3
123+24 Culv.			0.2	38.1
	10.19	1247.66		1237.47
124+0			10.0	37.7
125+0. N. end cut			10.9	36.8
	8.70	1245.70	10.66	1237.00
125+53 culvert.			8.3	37.4
126+0 Beg. cut.			7.4	38.3
	9.18	1254.78	.010	1245.60
127+0			11.5	43.3
128+0			5.9	48.9
129+0			3.3	51.5
130+0			1.4	53.4
	5.80	1259.37	1.21	1253.57

6-6-35 38

25 - 15 / 3.5 — 9 / 8.0 — 7.7 — 13 / 8.1 — 16 / 4.3 — 25 / 4.7

25 / 5.7 — 11 / 14.1 — 14.3 — 12 / 14.2 — 14-18 / 20 / 14.8 — 28 / 7.0

25 / 3.7 — 18 / 4.7 — 15 / 6.6 — 9 / 5.5 — 5.4 — 11 / FL — 20 / 8.6 — 23 / 7.7 — 25 / 8.6 — 30 / 10.6

TP on stump — 0.0

35 / 12.4 — 25 / 9.5 — 8 / 0.5 — 0.0 — 10 / 0.50 — 28 / 10.2 — 35 / 12.2

50 / 12.9 — 23 / 14.8 FLW. — 0.20 — 22 / 15.2 FLE — 1 70 / 16.0

30 - 25 / 3.1 — 15 / 9.8 — 10.0 — 14 / 9.3 — 24 - 30 / 11

25 / 11.9 — 17 / 10.9 — 10.9 — 13 / 11.6 — 15 / 12.0 — 17 / 10.9 — 25 / 10.2

Pond Lor. w 12.7 — 100-30 / 13 / 15.0 FL — 8.3 — 15 / 15.5 FL — 90 / 18.4

25 / 9.7 — 19 / 9.5 — 13 / 7.8 — 7.4 — 9 / 7.9 — 14 / 9.12 — 15 / 8.6 — 25 / 9.9

25 / 5.8 — 15 / 12.3 — 120 / 11.4 — 11.5 — 8 / 11.6 — 10 / 12.1 — 21-25 / 4.2

25 / 2.3 — 21 / 2.6 — 16 / 6.4 — 13 / 5.6 — 5.9 — 9 / 6.2 — 11 / 7.3 — 19 / 3.8 — 25 / 3.5

25 — 20 / 13 — 17 / 3.8 — 13 / 2.8 — 3.3 — 10 / 3.2 — 14 / 4.2 — 20 / 2.5 — 25 / 2.3

19 / 6.4 — 15 / 1.9 — 13 / 1.5 — 1.4 — 11 / 1.8 — 14 / 2.0 — 16-20 / 1.2

		1259.37			
131			5.4	54.0	
132+0			4.7	54.7	
√ 133+0			4.1	55.3	
134+0			2.6	56.8	
	8.16	1265.73	1.80	1257.57	
135			7.6	58.1	
			5.01	1260.72	1260.67 used
	√.01	1265.68			
136+0			6.0	59.7	
137+0			6.1	60.6	
138+0			4.4	61.3	
139+0			6.6	60.1	
140+0			4.0	61.7	
	4.65	1266.33	4.00	1261.68	
√ 141+0			4.7	61.6	
142			5.0	61.3	
143+0			7.1	59.2	

BM #11 136+20

		1266.33			
143+24	Culv. 12" Cor I.P.		7.1	59.2	
	4.72	1263.68	7.37	1258.96	
144+0			3.9	59.8	
144+63	10" Cor Culv.		5.4	58.3	
145+0			5.5	58.2	
146+0			4.9	58.8	
147+0			3.7	60.0	
147+63	Culv.-12" Cor. I.P		3.2	60.5	
	7.23	1267.43	3.48	1260.20	
			3.18	1264.25	1264.26
147+79	℄ Twp Line Rd.			1259.6	
	3.18	1267.44			
148+08	12" C.I.P. - Cor. I.P		6.4	61.0	
148+0			drains E in Rd ditch 6.0	60.6	
149+0			4.9	62.5	
	5.51	1268.80	4.15	1263.29	
150+0			5.5	63.3	
151+0			5.0	63.2	
152+0			5.1	63.7	

6-6-35 40

50/50 12/8.4 7.1 4.5/8.8 FL 10-0/12.8

25-17/10 13/4.2 11/3.9 3.9 5/4.2 9/1.7 14-25/1.8

50/3.0 1.3 3.5 6.4 FL 5.4 6.5 FL.E 100/10.0

25/2.6 17/5.4 15-13/6.0 11/5.6 5.5 8/5.7 12/6.0 16.5-25/6.6

25/3.2 11/4.7 7/5.3 5/4.9 4.9 14-15/5.3 22-25/5.9

25/0.0 8/2.6 5/4.4 3/3.5 3.7 13/3.3 16/4.1 18-25/2.7

12/2.8 3.2 10/4.8 FL 100/12.2 = ℄ Rd.

BM #12" 147+63

102/1.7

12/7.0 6.4 11/8.0

25/5.2 21/5.4 6.8 12/7.5 14/8.7 19/7.0 25/8.3

25/10 13/2.5 9/5.7 5/5.1 4.9 7/5.3 10/5.9 12/4.6 21-25/5.0 5.6

25/4.4 13/5.7 12/6.1 10/5.7 5.5 7-8/6.0 10/5.6 18-25/6.6

25/4.6 13/5.7 11-12/6.3 9/5.7 5.6 7/5.8 9/6.7 11/6.0 17-25/6.6

25/1.7 14/3.8 11-10/6.6 7/5.0 5.1 6/5.3 10/5.9 12/4.7 17/4.0 25/4.7

10

		126880			
153+0			3.2	65.6	
	8.83	1276.14	1.49	1267.31	
154+0			9.8	66.3	
154+25	Culv		10.0	66.1	
155+0			8.9	67.2	
√ 156+0			8.0	68.1	
157+0			6.3	69.8	
158+0			5.0	71.1	
159+0			5.0	71.1	
	4.82	1275.78	5.18	1270.96	
			0.28	1275.50	1275.61
	0.31	1275.92			
160+0			4.9	71.0	
161+0			5.5	70.4	
162+0			7.4	68.5	
163+0			9.6	66.3	

√=6-35

25/1.8 14/3.8 11-12/4.5 9/3.6 3.2 8/4.0 10/4.5 12/3.2 18/3.6 25/3.8

T.P. Top boulder

25/7.7 15/9.4 11-12/10.3 9/9.6 9.8 7/10.1 9/10.4 14/10.3 19-25/11.3

50/7.3 12.5/11.1 FL. 10.0 8/11.4 FL. – 7% gr. down

25/6.8 12/8.4 10/9.8 7/9.0 8.9 9/9.5 11/10.2 13/9.2 25/10.8

25/4.6 10/7.3 8-7/8.8 5/8.2 8.0 11/8.4 13/9.0 16/8.0 25/9.8

25/3.3 10/6.7 8-7/7.5 4/6.5 6.3 11/6.7 13/7.6 16/6.1 20-25/5.9

25/2.3 10/5.2 8-7/6.4 5/5.4 5.0 11/5.6 14/6.4 16/5.5 20-25/5.7

25/2.9 9/5.3 5.0 12/5.6 13-14/6.2 16/5.9 20-25/6.0

BM# 13 - 161+24 For check Lev. See Pg 59

25/2.9 11/4.3 8/5.9 5/5.2 4.9 11/5.5 13/6.1 15/5.6 25/6.2

25/1.3 11/5.5 8/6.9 5/5.7 5.5 10/5.9 12/6.7 13/5.8 20/6.0

25/1.8 11/6.2 8/8.8 6/7.7 7.4 8/7.7 11/8.1 18-25/5.8

20/7.0 8/9.0 6/9.0 4/10.0 9.6 12/10.0 14/10.4 18/9.5 25/10.0

164+0		1275.92	12.2	63.7
	2.01	1267.06	10.90	1265.02
165+0			5.5	61.6
166+0			10.8	56.3
	1.24	1256.30	12.00	1255.06
167+0			3.1	53.2
168+0			5.9	50.4
169+0			8.9	47.4
170+0			12.3	44.0
	1.84	1245.74	12.40	1243.90
171+0			6.0	39.7
172+0			9.3	36.4
173+0			11.4	34.3
~~+52~~	4.10	1238.51	11.33	1234.41
+52 Culv.			5.1	33.4
/				
174+0			5.6	32.9
175+0			5.0	33.5

Graber Rossback Hill 5-7-35

		25/8.4	15/11.2	12.2	7/12.7	10-11/14.1	14/12.2	25/12.6
T.P. Red Boulder								
25/2.0	14/3.7	12/6.6	8/5.6	5.5	7/5.8	10/6.3	12-13/8.7	16-25/6.3
25/7.8	14/9.8	11/12.3	7/11.0	10.8	8/11.0	11-12/13.0	15-25/10.6	
25/7.9	12/2.4	10/4.7	6/3.5	3.1	10/3.7	13-15/4.8	16-25/2.8	
25/4.1	12/4.5	9/7.4	7/6.4	5.9	9/6.4	12-13/7.7	15-25/5.1	
25/6.6	13/6.9	10/10.2	7/9.2	8.9	9/9.6	11-12/10.6	16-25/7.7	
25/8.4	13/9.4	9/13.3	7/12.6	12.3	7/12.7	10/13.8	15/10.0	25/9.8
25/2.6	13/3.5	10/7.0	7/6.1	6.0	8/6.7	11/7.8	14/3.1	25/2.5
25/7.1	14/9.7	12/11.1	9/9.9	9.3	7/9.8	9-10/10.6	12/8.4	25/8.0
25/12.3	15/11.8	13/12.4	11/11.9	11.4	5/11.6	8-9/13.2	10/11.8	25/13.0
	50/7.0		14/8.2 FL	5.1	115/8.3 FL		100/9.6	
25/4.9	17/6.0	15-16/6.7	12/6.1	5.6	6/5.7	10-11/6.8	13/6.1	25/6.9
	25/1.6	15/7.0	12/5.4	5.0	7/5.0	12-25/2.6		

		1238.51			
176+0			11.2	27.3	
	0.21	1230.00	8.72	1229.79	
177+0			5.9	24.1	
+13 Calv.			6.0	24.0	
178+0			5.6	24.4	
	11.00	1240.22	0.78	1229.22	
179+0			13.4	26.8	
180+0			7.0	33.2	
181+0			4.7	35.5	
	4.65	1244.27	0.55	1239.67	1239.62 used
182+0			6.4	37.9	
183+0			4.5	39.8	
184+0			4.4	39.9	
185+0			6.1	38.2	
186+0			7.0	37.3	
	4.22	1240.97	7.52	1236.75	
186+75 Calv.			4.0	37.0	

25 / 6.0 — 16 / 12.0 — 13 / 11.4 — 11.2 — 3 / 11.1 — 5 / 11.4 — 9 / 8.4 — 25 / 6.8

25 / 8.9 — 16 / 7.5 — 12 / 6.0 — 5.9 — 3 / 5.7 — 7 / 7.3 — 19 / 9.0 — 25

50 / 9.3 — 14 / 11.1 FL — 6.0 — 4 / 10.2 FL — 100 / 11.3

25 / 6.6 — 15 / 6.1 — 13-12 / 6.6 — 11 / 6.1 — 5.6 — 7 / 6.0 — 8-9 / 6.3 — 11 / 6.1 — 25 / 8.2

25 / 8.3 — 20 / 9.0 — 12 / 14.1 — 10 / 13.6 — 13.4 — 6 / 13.6 — 8 / 14.4 — 13 / 9.7 — 25 / 9.5

25 / 4.0 — 16 / 6.9 — 14-13 / 7.9 — 11 / 7.1 — 7.0 — 5 / 7.3 — 8 / 8.4 — 10 / 6.1 — 25 / 4.0

25 / 2.7 — 17 / 3.5 — 13-14 / 5.9 — 10 / 5.2 — 4.7 — 6 / 5.1 — 7 / 5.7 — 10 - 25 / 3.5

BM #14 Sta 181+64

25 / 2.0 — 15 / 5.0 — 12 / 7.7 — 10 / 6.8 — 6.4 — 6 / 6.7 — 9 / 7.6 — 11 - 25 / 5.5

25 / 3.9 — 15 / 4.8 — 13-12 / 5.8 — 10 / 5.1 — 4.5 — 7 / 4.9 — 10 / 6.1 — 12 - 25 / 5.2

25 / 3.4 — 14 / 4.8 — 12 / 5.9 — 10 / 5.0 — 4.4 — 7 / 4.8 — 9-10 / 5.8 — 12 / 5.1 — 25 / 5.7

25 / 5.4 — 13 / 6.6 — 10-11 / 7.4 — 8 / 6.8 — 6.1 — 9 / 6.6 — 11-12 / 7.4 — 13 / 7.0 — 25 / 7.3

25 / 5.3 — 12 / 7.4 — 10 / 8.3 — 8 / 7.6 — 7.0 — 9 / 7.4 — 12-13 / 8.2 — 15 / 7.4 — 25 / 7.6

ditch drain only. — 10 / 5.2 FL — 4.0 — 9 / 5.1 FL — 100 / 8.8

		1240.97			
187+0			3.9	37.1	
188+0			4.0	37.0	
189+0			7.2	33.8	
190+0			9.8	31.2	
191+0			11.8	29.2	
	1.35	1230.46	11.86	1229.11	
192+0			3.3	27.2	
193+0			5.7	24.8	
194+0			7.1	23.4	
194+27 BM	1.02	1226.31	5.15	1225.31	1125.29 arc
195+0			4.5	21.8	
196+0			6.3	20.0	
197			7.6	18.7	
197+79 +198+0	Culv.		8.3	18.0	
198+0			8.5	17.8	
	1.36	1220.45	7.22	1219.09	

25 7.9 | 13 4.4 | 11-12 5.0 | 9 4.6 | 3.9 | 9 4.3 | 11 5.1 | -12 | 13 4.3 | 25 5.0

25 1.9 | 15 2.7 | 11 5.8 | 9 4.4 | 4.0 | 11 4.3 | 14 -25 2.6

25 4.7 | 16 6.8 | 13 9.0 | 11 7.7 | 7.2 | 10 7.0 | 14 4.6 | -25

25 7.7 | 15 10.0 | 13 11.3 | 10 10.2 | 9.8 | 7 10.4 | 9 10.8 | 12 8.9 | 25 8.0

25 10.6 | 14 11.6 | 10 13.1 | 8 12.0 | 11.8 | 7 12.1 | 9 12.8 | 12 11.6 | 25 10.4

25 2.0 | 14 3.3 | 11 5.2 | 8 3.9 | 3.3 | 7-9 3.8 | 10 4.7 | 13 3.2 | 25 2.4

25 3.0 | 16 5.1 | 14-11 7.7 | 9 6.0 | 5.7 | 7 5.9 | 9 6.9 | 11 5.9 | 25 4.6

25 4.7 | 17 5.7 | 12-15 9.6 | 8 7.8 | 7.1 | 8 7.5 | 11 8.5 | 14 7.3 | 25 6.8

BM #15 194+27

25 2.7 | 15 4.9 | 13-10 6.3 | 8 5.2 | 4.5 | 9 4.9 | 12 5.7 | 14 4.6 | 25 4.3

25 5.1 | 13 6.4 | 10-12 7.5 | 8 6.7 | 6.3 | 10 6.3 | 12-13 7.3 | 14 -25 6.1

25 — 14 7.2 | 12-11 8.4 | 10 7.7 | 7.6 | 11 7.8 | 13 8.1 | 16 7.3 | 25 7.9

ditch for 25 | 10 9.6 | FL 8.3 | 9 10.2 | FL | 10-10 11.2

25 | 12 8.4 | 11 9.2 | 8 8.6 | 8.5 | 10 8.4 | 13 9.2 | 25 9.0

		1220.45			
199+0			3.0	17.5	
200+0			6.2	14.3	
201+0			9.0	11.5	
	3.70	1213.33	10.82	1209.63	
202+0			4.3	9.0	
203+0			6.6	6.7	
204+0			8.4	4.9	
205+0			10.6	2.7	
	2.71	1204.93	11.11	1202.22	
206+0			4.2	1200.7	
206+15	1.82	1204.91	1.82	1203.11	1203.09
207+0			6.5	1198.4	
~~207~~					
208+0			10.9	1194.0	
	0.55	1193.95	11.51	1193.40	
209+0			5.4	1188.6	
210+0			7.5	1186.5	
211+0			8.9	1185.1	

25 / 0.0 — 17 / 0.5 — 11 / 2.6 — 3.0 — 11 / 3.5 — 14 / 5.3 — 19 / 0.8 — 25 / 1.8

25 / 3.2 — 10 / 6.3 — 6.2 — 9 / 6.7 — 14 / 7.8 — 18 / 4.3 — 25 / 4.1

25 / 8.4 — 11 / 9.2 — 9 / 10.2 — 7 / 9.6 — 9.0 — 9 / 9.4 — 13-15 / 11.3 — 17 / 8.5 — 25 / 9.0

25 / 2.4 — 10 / 3.1 — 8 / 5.7 — 6 / 4.8 — 4.3 — 12 / 4.8 — 14-17 / 5.9 — 20 / 2.4 — 25 / 2.7

25 — 13 / 4.8 — 7 / 8.2 — 5 / 7.0 — 6.6 — 13 / 7.2 — 20-25 / 4.6

25 / 7.0 — 11 / 7.5 — 8 / 10.1 — 6 / 9.0 — 8.4 — 15 / 9.1 — 17-20 / 10.4 — 21-25 / 7.4

25 / 9.0 — 11 / 9.7 — 8 / 12.4 — 6 / 11.0 — 10.6 — 16 / 11.0 — 17-20 / 12.1 — 21 / 9.3 — 25 / 9.7

25 / 2.4 — 14 / 2.7 — 8 / 5.9 — 7 / 4.7 — 4.2 — 13 / 4.4 — 17-18 / 6.3 — 25 / 2.2

BM 16 206+15

25 / 4.3 — 13 / 4.6 — 8-9 / 7.3 — 7 / 7.1 — 6.5 — 13 / 6.5 — 15 / 8.5 — 25 / 3.8

20 — 15 / 7.3 — 9 / 12.5 — 7 / 10.0 — 10.9 — 11 / 10.6 — 13-15 / 11.8 — 21 / 7.0 — 25 / 6.3

23 / 2.0 — 15 / 2.5 — 9-11 / 5.9 — 8 / 5.6 — 5.4 — 10 / 5.3 — 13 / 6.8 — 19 / 2.5 — 25 / 2.3

25 / 7.5 — 11 / 7.6 — 9-8 / 8.3 — 6 / 7.7 — 7.5 — 11 / 7.7 — 13 / 8.4 — 16 / 7.8 — 25 / 7.3

25 / 9.3 — 9 / 9.0 — 8-7 / 9.8 — 6 / 9.1 — 8.9 — 11 / 9.0 — 13-14 / 9.5 — 15 / 8.6 — 22 / 8.9

		1193.95			
212+0			9.5	1184.5	
	2.78	1187.32	9.41	1184.54	
213+0			3.5	1183.8	
214+0			5.3	1182.0	
215+0			9.4	1177.9	
	1.12	1176.04	12.40	1174.92	
216+0			1.4	1174.7	
217+0			3.3	1172.8	
218+0			4.6	1171.5	
219+0			5.3	1170.8	
220+0			5.8	1170.3	
V221+0			6.3	69.8	
	4.53	1174.25	6.32	1169.72	
			2.80	1171.45	1171.57 use
	2.80	1174.37			
222+0			4.8	69.6	
222+59 Calc.			4.7	69.7	

25 / 10.6 — 12 / 9.9 — 8-10 / 11.0 — 7 / 10.0 — 9.5 — 11 / 9.8 — 13-14 / 10.9 — 15 / 9.6 — 25 / 9.8

25 / 3.5 — 13 / 3.7 — 11-10 / 5.3 — 8 / 4.0 — 3.5 — 10 / 3.9 — 13 / 5.7 — 15 / 3.9 — 25 / 3.2

25 / 4.0 — 14 / 4.5 — 10-12 / 7.4 — 7 / 5.6 — 5.3 — 11 / 5.9 — 14 / 8.2 — 19 / 4.9 — 25 / 4.2

25 / 7.9 — 16 / 7.5 — 12-10 / 11.5 — 8 / 9.7 — 9.4 — 12 / 10.0 — 14-17 / 11.7 — 19 / 8.5 — 25 / 8.7

25 — 14 / 0.7 — 12-9 / 2.6 — 7 / 1.8 — 1.4 — 11 / 1.6 — 15-18 / 2.7 — 20-25 / 0.4

25 / 2.1 — 11 / 3.8 — 10-8 / 4.3 — 6 / 3.6 — 3.3 — 11 / 3.6 — 14 / 4.4 — 16 / 3.7 — 25 / 4.0

25 / 5.8 — 10 / 4.8 — 6-10 / 5.4 — 5 / 4.9 — 4.6 — 11 / 4.7 — 13-14 / 5.2 — 16 / 4.6 — 25 / 5.0

25 / 6.2 — 10 / 5.3 — 9-7 / 6.1 — 6 / 5.6 — 5.3 — 11 / 5.3 — 12-14 / 6.0 — 16 / 5.4 — 25 / 5.9

25 / 6.3 — 13 / 6.8 — 9 / 6.6 — 8 / 6.8 — 5 / 6.3 — 5.8 — 12 / 6.0 — 13-15 / 6.9 — 16 / 6.0 — 25 / 6.4

25 — 20 / 4.3 — 10 / 6.4 — 8-7 / 7.3 — 6 / 6.6 — 6.3 — 12 / 6.5 — 14 / 7.4 — 16 / 6.6 — 25 / 6.0

B.M. #17 222+36

25 / 3.6 — 11 / 4.8 — 8 / 6.1 — 7 / 5.3 — 4.8 — 12 / 5.1 — 14-15 / 6.0 — 17 / 5.2 — 25 / 5.4

Roadditch only. — 6 / 6.3 FL — 4.7 — 13 / 7.1 FL. — 100 / 7.2

		1174.37			
223+0			4.6	69.8	
224+0			4.1	70.3	
225+0			3.8	70.6	
	1.85	1173.57	2.65	1171.72	
226+0			3.2	70.4	
227+0			5.2	68.4	
228+0			7.3	66.3	
229+0			7.4	66.2	
229+14 Cl/v.			6.9	66.7	
	8.45	1176.46	5.56	1168.01	1168.06
230+0			11.0	65.5	
231+0					
	9.45	1176.50	9.45	1167.01	1167.05 use
231+94 = X Rd			6.3	70.2	
232+0			6.3	70.2	
	10.22	1185.08	1.64	1174.86	

25 / 4.6 | 1 / 5.0 | 8-10 / 5.6 | 0 / 5.0 | 4.6 | 13 / 5.0 | 15 / 6.2 | 16-25 / 5.6

25 / 4.3 | 12 / 4.8 | 10-9 / 5.4 | 7 / 4.8 | 4.1 | 12 / 4.6 | 14 / 5.7 | 16-25 / 4.9

25 / 2.7 | 12 / 3.6 | 10-9 / 5.1 | 6 / 4.3 | 3.8 | 13 / 4.0 | 14-16 / 4.9 | 17 / 3.9 | 25 / 3.2

25 / 1.9 | 11 / 2.9 | 8 / 4.9 | 6 / 4.0 | 3.2 | 13 / 3.3 | 13-17 / 5.0 | 18 / 3.8 | 25 / 2.9

25 / 1.7 | 16 / 2.3 | 11 / 6.8 | 8 / 5.7 | 5.2 | 10 / 5.6 | 11 / 6.1 | 17 / 2.6 | 25 / 2.3

25 / 4.8 | 20 / 6.0 | 15 / 8.4 | 14-13 / 9.0 | 10 / 7.8 | 7.3 | 8 / 7.8 | 11-12 / 9.2 | 14 / 8.2 | 25 / 8.7

25 / 9.4 | 20 / 8.6 | 18-15 / 10.0 | 10 / 7.4 | 7.4 | 5 / 7.5 | 13 / 10.7 | 25 / 10.1

100 / 12.3 | 9 / 12.2 FL | 6.9 | 7 / 11.9 FL | 50 / 10.6

Tan H/W

25 / 12.0 | 20 / 11.8 | 18 / 12.7 | 13 / 11.6 | 11.0 | 4 / 11.2 | 6-9 / 11.9 | 10-25 / 11.5

B.M. #18 231+63

100 / 10.1 | 6.3 | 100 / 0.5

25 / 8.7 | 6.3 | 39 / 2.5

		1185.08			
233+0			9.3	75.8	
234+0			5.9	79.2	
235+0			5.5	79.6	
236+0			12.0	73.1	
	0.79	1173.98	11.89	1173.19	
237+0			7.8	66.2	
238+0			11.0	63.0	
	1.65	1164.36	11.27	1162.71	
238+69 Bridge			2.9	61.5	
239+0			3.8	60.6	
240+0 + Culv.			5.1	59.3	Road Ht. only
241+0			5.5	58.9	
242+0			4.3	60.1	
	6.38	1166.56	4.18	1160.18	
243			6.0	60.6	
+66.04 =			5.0	61.6	
SL. Middfld Village			4.45	1162.11	1162.14

25/9.8 11/9.0 10/10.0 9.3 8/9.7 10-12/10.0 14/8.6 25/7.8

25/4.8 15/4.6 11/7.0 9/6.3 5.9 8/6.6 9/7.0 13/4.5 25/3.4

25/4.2 16/3.8 12/6.7 11/6.3 5.5 7/6.2 9/6.3 12/3.4 25/2.3

25/8.2 15/7.7 12-10/12.5 9/12.2 12.0 6-7/12.3 11/11.0 16-25/7.1

25/6.3 15/7.5 12-11/9.3 10/8.5 7.8 7/8.1 9/8.6 15/4.0 25/3.7

25/13.0 11/11.3 10-8/11.7 6/11.3 11.0 18/10.8 19-22/11.4 24/10.6 30/7.8

100/8.8 8/8.7 2.9 6.5/8.6 100/8.6 500/12.3

25/5.2 18/6.2 16/5.9 9/4.0 3.8 6/4.3 10-14-25/5.8

25/6.2 20/6.7 18/7.3 15/7.2 FL 5.1 8/7.6 FL 25/7.6

25/5.5 19/6.0 13-15/6.7 13/5.8 5.5 6/5.9 8/6.9 10/6.6 25/5.6

25/4.9 19/5.1 16/6.1 13/4.6 4.3 5/4.7 9/6.6 11-25/6.1

25/7.0 19/6.6 16/7.6 12/6.2 6.0 5/6.4 9-10/7.7 13/6.3 25/6.2

25/5.7 19/6.8 16/5.2 12/5.0 20/6.3 25/6.5

Bm #19 = 244+0

+ Bench Marks Middlefield —

	H.I.	—	B.M.	
2.23	1143.56	7.22	1141.33	
2.56	1138.90	7.2	1136.34	
	1130.64	12.61	1126.29	✓
+ 4.35	1130.64	0.65	1129.99	
10.12	1140.02	3.59	1136.42	
5.90	1142.32	1.05	1141.27	
8.62	1149.89	1.19	1148.70	
+ 5.69	1154.39	5.20	1149.19	B.M.

Check on above.

+0.31	1141.64		1141.33	
		- 5.27	1136.34	
+1.62	1137.96			
-		- 11.68	1126.28	✓
+4.30	1130.58			
		-0.61	1129.97	✓
+8.77	1138.74			
		- 2.28	1136.46	
+6.32	1142.78			
		- 1.50	1141.28	
+9.60	1150.88			
		- 2.16	1148.72	
+5.27	1153.99			
		—4.80	1149.19	1149.33

Cont. Pg 52

Frank's Cor. Rd. Graber Rossbeck Hill 5/27-35

= U.S. Gort Bench Town Hall Middlefield

Top Rail, BBORR. S. Sidewalk

6+67 W. High St.

USGS Bench Mdfld.

Top Rail

#21

= BM Sta 6+67 West High St. Imp. Spike missing + Reset. 12" Maple 29' L. (6+67 W. High St Imp)

+	Hi.	−		
+4.80	1153.99	1	1149.19	BM
		-1.00	1152.99	
+7.68	1160.67			
		3.24	1157.43	
3.95	1161.38			
		7.26	1154.12	
6.94	1161.06			
		3.13	1157.93	
12.43	1170.36			
		5.06	1165.30	Side Shot
		9.76	1160.60	
2.56	1163.16			
		4.39	1158.77	
4.50	1163.27			
		0.19	1163.08	
6.30	1169.38			
		0.32	1169.06	
5.00	1174.06			
		11.92	1162.14	
2.06	1164.20			
		1.70	1162.50	
9.88	1172.38			
		0.22	1172.16	
10.65	1182.81			
		7.43	1175.38	
0.88	1176.26			
		6.2	1170.1	1170. USGS.

Cont Pg ✓3

Warm
Cloudy

5-28-35 52
Graber
Rossbeck Hill

X Rd + Route 87

N.W Cor. Top W. HW. 1st Culv. So. of # 87 (W. High St.)

N.W. Cor. Conc Blk. 20' L. Front J.H Byler House

N.E. Cor. W. HW. Culvert with pipe Rails

#20
B.M. Spike, Root 2.8' Map 20'E± 400'± S. of Dan Gingrich Ho.

#19
B.M. Spk Root 12" Elm 30'N of S. Corp L. & 20' W of ℄ 244+0

on gr. X Rd ℄ both ways

		H.I.			
✓	+	1176.26	−		
			9.21	1167.05	
	9.21	1176.26			
			8.20	1168.06	
	6.75	1174.81			
			3.24	1171.57	
	3.69	1175.26			
			0.00	1175.26	
	11.60	1186.86			
			0.62	1186.24	
	8.63	1194.87			
			4.72	1190.15	Side Shot
			3.39	1191.48	TP
	11.76	1203.24			
			0.15	1203.09	
	6.50	1209.59			
			0.41	1209.18	
	10.49	1219.67			
			1.40	1218.27	
	9.55	1227.82			BM
			2.53	1225.29	
	2.52	1227.81			
			0.47	1227.34	
	10.28	1237.62			
			0.71	1236.91	
	7.73	1244.64			

Cont. Pg 54

#18 {Sta 231+63}

Old BM. 18" Elm. SW X 1st X Rd S. of Conp L.

NE Cor. W. H. Wall 1st Culv. S of 1st X Rd.

#17

BM 18" Hick. 50' West & Spk in Root 222+36

SE Cor. Conc Step. outside Sch. door

#16 206+15

B.M. Spk Root 22" Map 30' W & 400' S. of School No.

#15 194+27

Spike Root 24" Map. 25' W of & So tree of Group of 4.

	124.64			
		5.02	1239.62	
0.92	1240.54			
		4.75	1235.79	
6.84	1242.63			
		7.99	1234.64	Side Shot
		- 0.22	1242.41	
11.89	1254.30			
		0.14	1254.16	
9.99	1264.15			
		1.04	1263.11	
10.47	1273.58			
		3.20	1270.38	
8.52	1278.90			
		3.29	1275.61	
3.29	1278.90			
		8.05	1270.85	
3.46	1274.31			
		10.14	1264.17	
3.60	1267.77			
		8.1	1259.6	± 1261. USGS Map.
		3.51	1264.26	
1.91	1266.17			

Cont Pg 55

5-29-35 Graber Rossback 54

{Clear Moderate.

#14

B.M. Spk Root 24" Map. 25W℄ 50'S of Wire F. East Sta 181+64

N.W. Cor. W. Headwall Conc Colv. 100'S Enos Miller Mailbox

on Boulder

#13

B.M. Hor. Spk E.S. 20" Oak 30'W of ℄ (opp. 3 pines) 161+24

X ℄ & ℄ Rd So. Line Wittbg Twp. (on ground)

= B.M. Spk Root 18" Map 25'S. of ℄ E & W Rd + 50'W. our ℄. #12 147+63

+	HI	−		
	126697			
		7.76	1258.41	
6.92	1265.33			
		4.02	1261.31	
4.75	1266.06			
		5.39	1260.67	
2.76	1262.93			
		10.13	1252.80	
1.21	1254.01			
		11.50	1242.51	
0.50	1243.01			
		0.52	1242.49	
11.95	1254.44			
		0.61	1253.83	
0.61	1254.44			
		5.85	1248.59	
6.95	1255.54			
		0.00	1255.54	
8.92	1264.46			
		1.95	1262.51	BM
3.79	1266.30			
		7.77	1258.53	
3.11	1261.64			
		7.71	1253.93	
1.56	1255.49			
		3.96	1251.53	
3.96	1255.49			

Cont Pg 56.

#11
BM Spk 18" Map Root 22'E & 100' S. of S. Pine 136+20

#10
BM E Root 15" Map 25' W & 225 S of Culvert Sta 120+70

#9
Spike Root SES. 24" Map 25 W & 109+55
5th tree S. of Tile School Lot.

#8
BM. Spk SE Root 18" Map 25'W & 250' S. Red Barn.
98+30

+	HI	−		
	1255.49			
		10.55	1244.94	
2.10	1247.04			
		8.31	1238.73	
1.83	1240.56			
		8.63	1231.93	
2.13	1234.06			
		2.85	1231.21	
1.53	1232.74			
		11.55	1221.19	
2.10	1223.29			
		3.22	1220.07	Side Shot
		0.48	1222.81	TP
5.91	1228.72			
		5.92	1222.80	
2.30	1225.10			
		10.85	1214.25	
10.61	1224.86			
		3.77	1221.09	
8.14	1229.23			
		3.86	1225.37	BM
3.86	1229.23			
		7.50	1221.73	
6.32	1228.05			
		1.84	1226.21	
9.75	1235.96			
		2.98	1232.98	

Cont Pg 57

#7
BM, Spk. E Root 24" Forked Map 20' W. of ℄ Sta. 84+90

.SE Cor Yr. H. Wall Culv. (80+60)

NE Cor W. H. Wall Culv. Sta 69+00

#6
Spk Root 15" Maple 20' W of ℄ Sta 66+70.

#5
BM Spk Root 30" Map. 25' W ℄ Sta 51+85.

5-29-35

+	HI	−		
1.72	1234.70		1232.98	
		11.36	1223.34	
0.28	1223.62			
		9.80	1213.82	
1.53	1215.35			
		12.78	1202.57	
2.09	1204.66			
		3.96	1200.70	
3.96	1204.66			
		8.73	1195.93	
1.99	1197.92			
		5.35	1192.57	
2.90	1195.47			
		9.09	1186.38	
2.30	1188.68			
		2.55	1186.13	BM
2.55	1188.68			
		11.28	1177.40	
1.34	1178.74			
		11.48	1167.26	
0.70	1167.96			
		9.34	1158.62	
9.71	1168.33			
		1.23	1167.10	
11.80	1178.90			
		0.33	1178.57	
7.17	1185.74			

Cont Pg 58

#4
BM Spk Root 20" Map. 3rd tree fr. N. end of Row.
Sta 37+94 23' W ℄

#3
Spk root Quadruplet Elm. 20' W ℄ 75' N. of House
Sta 21+40

N.E. Cor. W. H. Walk Conc Colv New. 4'x7' 13+0 ±

	1185.74			
		2.46	1183.28	
2.46	1185.74			
		12.33	1173.41	
1.91	1175.32			
		12.03	1163.29	Spk T.P.
2.15	1165.44			
		11.40	1154.04	
8.37	1162.41			
		2.95	1159.46	1159.51
0.87	1164.16		1163.29	
		4.45	1159.71	

#2 22' W ℄

B.M. Spk E Root 12" Map. ~~20'~~ W ℄ top 1st Hill

Sta 8+85

#1

= Bench Burton-Parkman Rd Bet. St. 61+0 + 62+0

Spike in Root Hickory Stump.

Yard of 1st House East of Fram's Cors.

N E Cor W. H wall. 1st Culv (Stone)

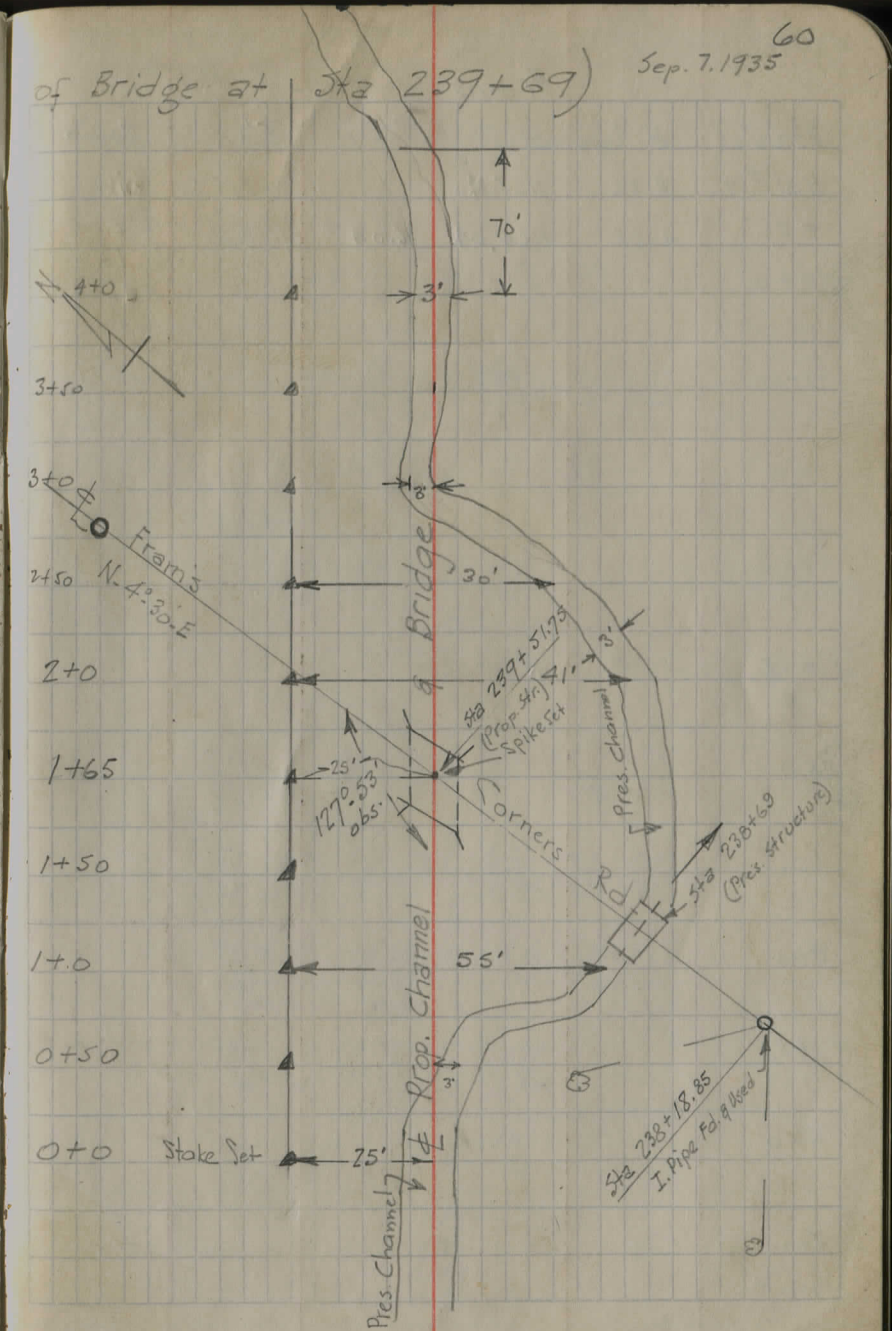
BM Checks 6-1-35

	HI				
4.09	1163.55		1159.46		BM #1
11.15	1170.97	3.73	1159.82	HW	
12.29	1182.89	0.37	1170.60		
3.37	1185.26	1.00	1181.89		
		1.84	1183.42		BM #2
2.40	1161.86		1159.46		BM #1
10.39	1164.16	8.09	1153.77		
12.39	1172.14	4.39	1159.75		
12.73	1184.87	0.00	1172.14		
		1.55	1183.32	1183.28	BM #2
12.39	1170.99		1158.60		M. wall Bet #2 & #3
		2.48	1168.51		
		11.59	1159.40		
11.47	1170.07		1158.60		
11.73	1180.32	1.58	1168.49		
9.95	1189.25	0.92	1179.30		
		3.16	1189.09	1186.13	BM #3
3.18	1189.31		1186.13		
8.80	1196.31	1.80	1187.51		
		3.58	1192.73		
4.00	1268.26		1264.26		BM #12
9.26	1276.60	0.92	1267.34	1267.31	top Boulder check
4.78	1275.92	5.46	1271.14		
		0.31	1275.60	1275.61	BM #13

Sep. 7. 1935

Fram's Corners Rd - (Relocation of Bridge at Sta 239+69)

Note: Stakes Set on 75' offset (Left Side)



Frams Corners Rd.

Sta	+	H.I.	−	Elev.	Remarks
B.M. #19	3.26	1165.40		1162.14	Spike Root 12" Elm
T.P.	4.68	1164.04	6.04	1159.36	20' Lt ℄ Sta 247+0
0+0					
0+50					
1+0					
+50					
+65	℄	Road			
2+0					
+50					
3+0					
+50					
4+0					
5+0					
7+0 ±					

Relocation of Bridge & Channel at Sta 239+69

North ℄ (Prop. Channel) South

4.7/25' 5.0/11' 8.2 5.6/17' 5.0/25'

5.1/25' 5.8/6' 7.2 8.6/3' (ch.) 6.5/8' 6.2/25'

4.9/25' 4.8 5.1/25' 8.4/55' (ch)

5.9/25' 5.9/10' 4.5 4.2/25'

4.5 (Sub-grade +1.00)

6.0/25 6.3/18' 5.4/14' 6.3 6.3/9' 8.9/16' (ch) 7.1/25'

6.1/25' 6.7/15' 6.3/2' 7.1 8.2/5' (ch) 7.3/11' 3.0/25'

6.7/25' 5.7/14' 7.3/7' 8.4/3' (ch) 7.2 2.4/10' 0.2/25'

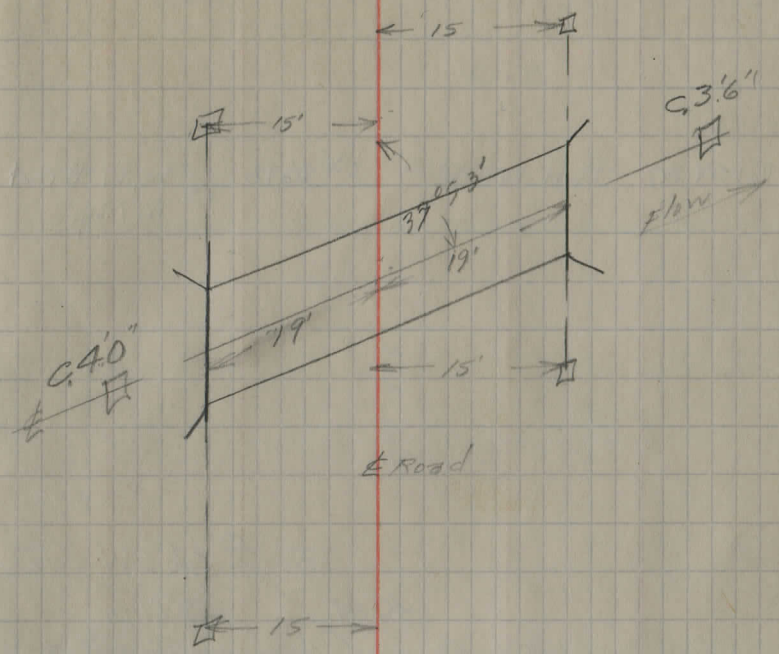
7.9/25' 6.1/20' 5.7/8' 7.9/2' 8.8 (ch) 0.5/20'

7.3/25' 6.4/6' 9.1 1.2/12'

1154.7
9.3
1159.5
10.5

Location of Bridge on Frans Cor. S. Road.

But 19	3.02	1165.16			1162.14
	4.49	1164.14	5.51	1159.65	
℄ Grade				1161.50	
Flow			9.14	1155.00	
℄ Stake R			5.64		C 3.5
℄ Stake L.			5.14		C 4.0
Sta 4 Flow			9.5	54.6	
Top Stake Sta 3			6.85	1157.29	
	5.06	1162.35			
4+70 Flow ℄ in Channel			7.1	55.2	
6+60 Bridge			8.7	53.6	



Concrete Slab Top. Bridge
Span 10' Clear Height. 4'6"
Skew 37°53'

89 60
37 53
52 07
26.03

5/15/40 Pomeroy - Richards - Hosford

TROY - PARKMAN CENTER ROAD

T.H. #207
NASH Rd

16+07.50 Bolt set ±90° 26.7o Spk W E root 20" Map.

14.58

3+25.42 Spk Fd → ½" iron rod set 4-27-55

46.44 Spk. S.W. side 28" Elm

35.44 VERT. Spk. S. root 20" Map.

59.10 Spk; S.W. root 24" Walnut NOW ROTTEN STUMP

0+0 Spk set

Steel Truss
Stone abuts - wings
" " poor.

14' 23.7

21 +64.75

P.O.T.

S 84°-47' E

90-48

See P. 82 this book

Iron (Fd) ℄ Farms Cors N 4°-25' E

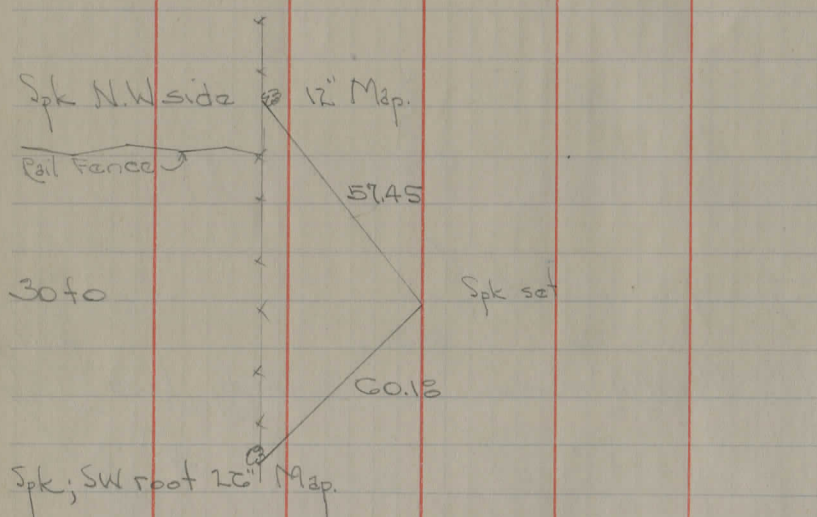
North Road 349.00

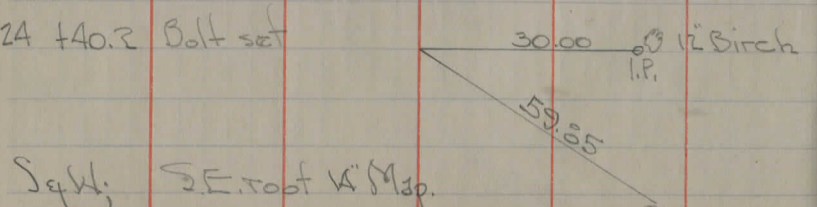
Spk Fd

42-37

Z

℄ Bolton Wallen Road ℄ (#160)


Spk N.W side
12" Map.
Rail Fence
57.45
30 to
Spk set
60.18
Spk; SW root 12" Map.


24 to 40.2 Bolt set
30.00
12" Birch
I.P.
59.65
Sq H; S.E. root 4" Map.

P.O.T.

5/17/40 Cloudy 42° Romeroy · Richards - Hosford

Levels Troy - Parkman Center Road

	+	H.I. 1131.06	−	E 1130.86	
B.M.	0.20	~~1130.88~~	12.05	~~1130.68~~	1131.1
18					
17					
16		1142.91		1142.91	
T.P.	0.00	~~1142.73~~	7.06	~~1142.73~~	
15					
14				1144.71	
B.M. Set			5.26	~~1144.53~~	
13					
12					
11					
10		1149.97		1148.24	
T.P.	1.73	~~1149.79~~	12.65	~~1148.06~~	
9					
8					
7					
6					
5					
	0.25	1160.89			
T.P.	~~0.07~~	~~1160.71~~	12.17	1160.64	
4 to					
3+25.42					
T.P.			13.11	1159.70	(1159.71)
T.P.	0.03	1172.81	12.53	1172.78	
B.M.	2.03	1175.31		1173.28	

Iron bar between roots 20' Map. Sta. 18+79 ± 28' Rt. (Also Spk N.E. root)

10.6	32.3
6.5	36.4
2.0	40.9
6.1	43.9
3.3	46.7

Spk S.E. Root 22" Map. 17+88 20' Lt

5.7	44.3
5.7	44.3
5.1	44.9
3.6	46.4
12.8	48.1
11.0	49.9
8.4	52.5
5.2	55.7
1.5	59.4
10.4	62.4
8.0	64.8

N.E. & W. Hitwall 1st Culv't Frams Ks N Road

Spk E. Root 15" Map 8+85 Frams Ks North Road

	+	H.I.	−	F
31				
30				
~~B.M.~~	6.06	~~1161.13~~ 1161.31	0.00	~~1155.07~~ 1155.25
29				
28				
T.P.	12.56	~~1155.07~~ 1155.25	0.88	~~1142.51~~ 1142.69
27				
26				
25				31.2
T.P.	12.70	~~1143.39~~ 1143.57	0.19	~~1130.69~~ 1130.87
24+0				26.6
23+0				24.4
				25.0
22+0				26.2
21+0				25.1
20+0				26.6
19+0				
				1129.3
		~~1130.00~~ 31.06		

S N

-5.1 56.2

4.9 56.4

Spk SE. root 14" Map. 28+70 Lt 20'

1.0 54.3

7.3 48.0

± 12' drop 30 ±3.2/6 3.2 40.4

± 8' drop 25' 8.8 34.8

12.4 31.2

5.3/33 4.6/15 5.3/24 4.6/12 4.5 4.5/4 6.1/10.5 6.0/20 7.2/31 9.7/40 ℄ creek

6.5/33 6.4/24 6.7 6.9/16 6.3/21 6.6/30 6.8/45 9.9/55 ℄ creek

5.3 high water Mark as indicated by debris on tree

26.8/4.3 W Bridge floor 7.4/30 7.5/11.5 5.0/11 4.0 5.1/4.5 8.3/11 7.7/23 8.2/30

19.2 11.9/19.2 H. line 4.7/27.0 E. Bridge H.

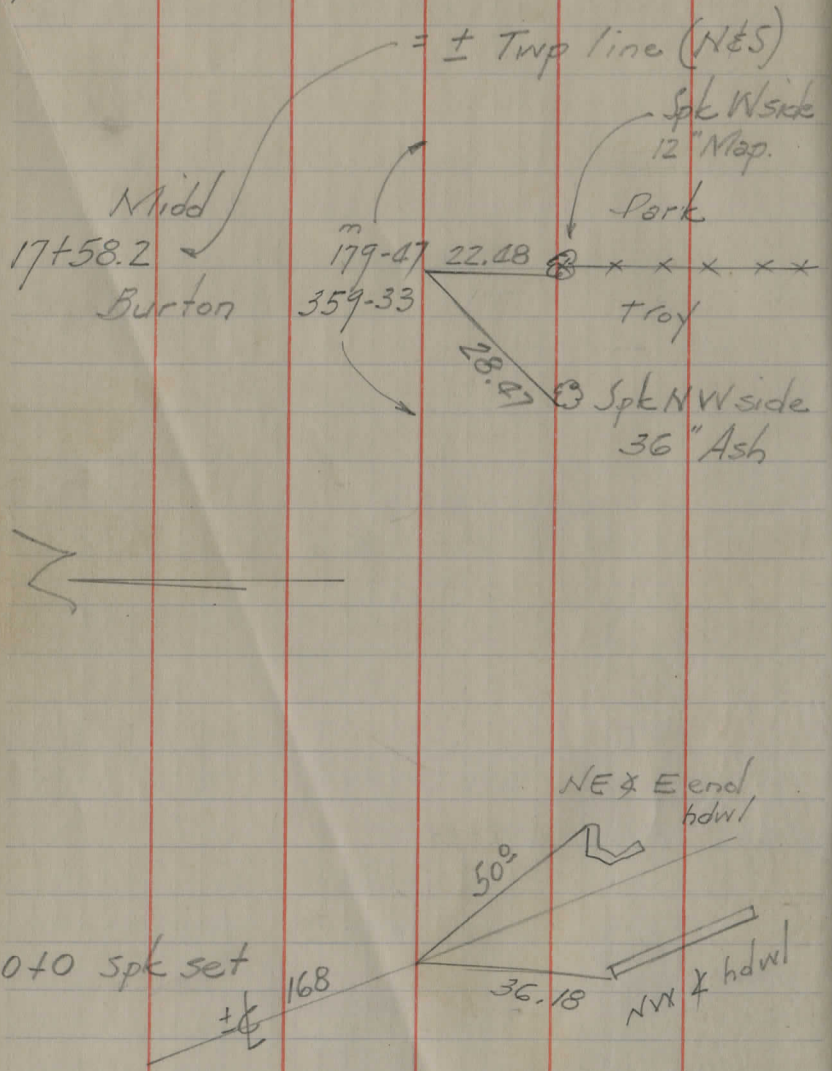
7.0/39 8.5/29 8.7/23 6.3/10 6.0 6.0/5 9.4/9 9812 creek 7.5/14 7/17 7.4/30

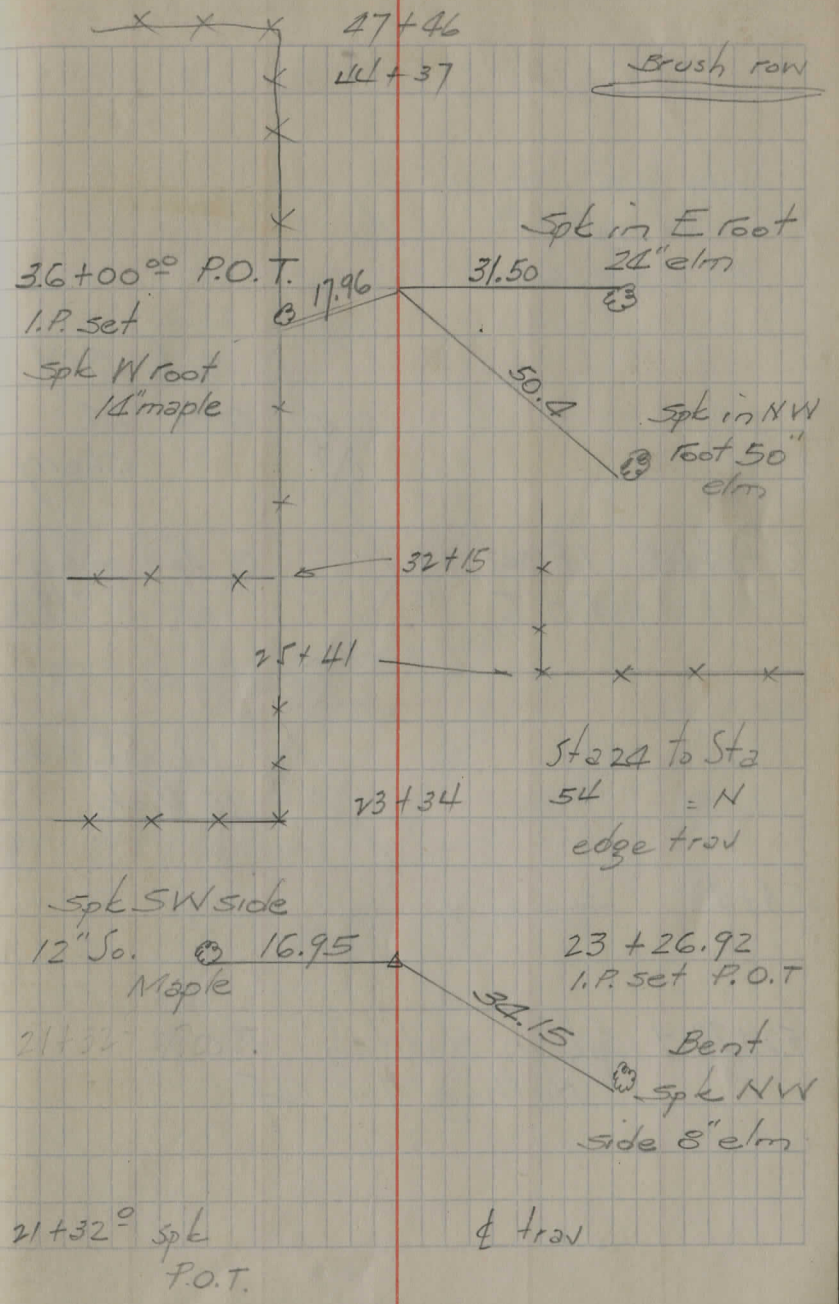
5.3/30 5.8/28 5.8/23 5.4/14 5.7/13 4.5/8 4.5 4.8/5 5.7/8 6.1/16 4.8/23 5.0/30

0.8/30 1.8/24 1.7/15 2.5/11 3.1/9 2.0/5 1.0 2.0/9 2.9/13 3.0/15 0.9/26 0.7/30

	−	H. I.	+			
	6.12					
	6.12	1150.83	1.00	1144.71		
	12.45	1162.88	2.57	1149.83		
					1159.71	
	2.56			59.97		
T.P.	.45	1149.64	12.44	1162.53	59.71	
B.M.	5.56			1144.53	1144.53	23" Maple 20' Lt. Sta. 12+88
T.P.	0.46	1150.09	6.73	1149.63		
T.P.	2.49	1145.85	12.44	1143.36		
FRZ B.M.	3.09			1130.97	31.10	
T.P.	0.47	1134.80 ~~1133.88~~ 1132.58	6.65	1130.79 ~~1133.41~~ 1127.41		
T.P.	5.17	~~1132.70~~ 1143.68	0.14	~~1127.23~~ 1132.44		Most Estly ✕ of N. Abut.
T.P.	11.24	~~1143.50~~ 55.30.	0.99	~~1132.26~~ 1141.69		
T.P.	12.61	~~1155.12~~	0.05	~~1142.51~~	B.M.	
				~~1155.01~~ 55.25	B.M.	

SHEDD ROAD
9-13-51 Maynard Pom Bender





59.80

Spk SW side 24" Cherry

61+74.65 I.P. set P.O.T.

Ap & poison IVY

95.60

Spk SE side 15" Hick

58+43 ——x——x——x——

52+72.9 Spk in N ditch P.O.T
Nothing for ref.

I.P. Fd Field book # 148 pg 42
Sta. 23+74.54

Gone
S&W 12" W.Ch.

*see Pg 70

NOTE: CEI POLE SHOWN IN WRONG QUAD.
DMS 8/15/75

S.W. side 583655

39.62

48.70

Spk W side 14" Pig Hick.
Gone

66.92

69+81.8 ℄ Newcomb

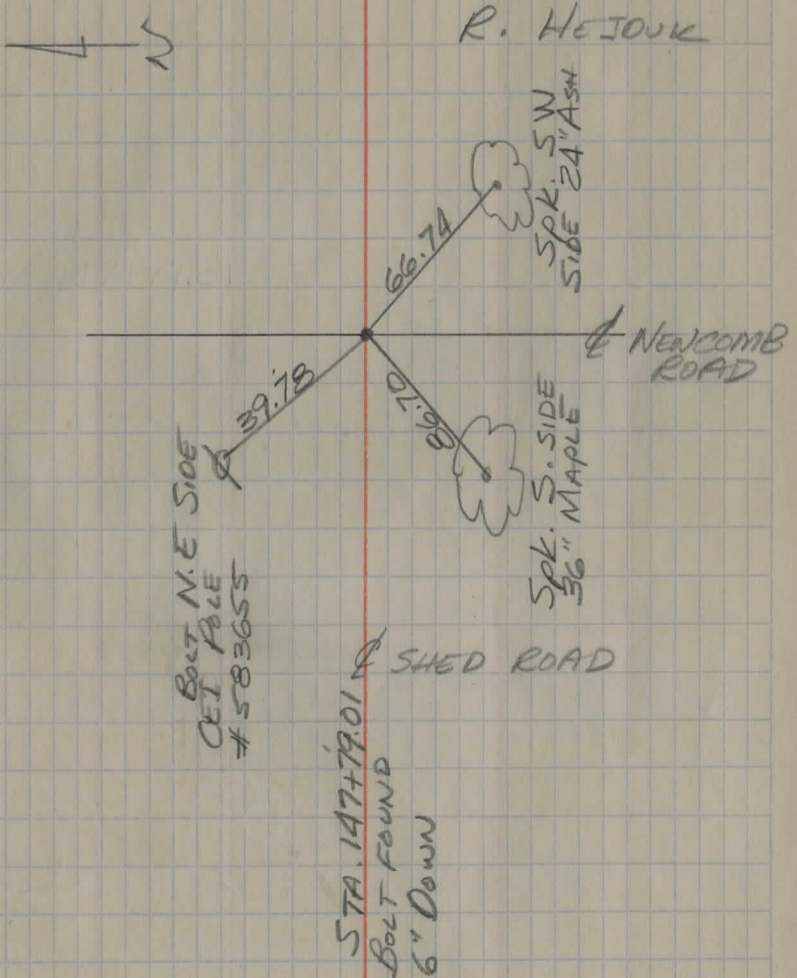
I.P. Fd P.O.T.

Pipe fd 12" dn 5/66
bolt set 4" dn

Steel post 34.3

m 180°

CEI Co. 7/25/75
L. STOFAN
F. LOUDER
R. HEJDUK



DMS
8/5/75

BM. Burton Parkman Rd 93+45
Bent Spike 12" Map 25 L & -1210.25

℄ Road = Sta 0+00 = sta 68 on
Burton Parkman Rd.

Sta 61 or 62 Hickory - 1159.51
Near prop line S. of House on top hill.

Mid fld Vill Town Hall USGS - 1141.33

Mid fld. W. High St. Imp.
12" Map 29' L & Sta 6+67 - 1149.33
Spike gone Replaced 5/27-35 - CCG

Ground 1st X Rd 1000' S of Corp L. 1170
" 2nd X " (S.L. Mdfld Twp) 1261

KEITH'S RAILROAD CURVE TABLES.

Published by KEUFFEL & ESSER CO., New York.

HOW TO USE KEITH'S TABLES.

EXAMPLE.

Wanted a Curve with an Ext. of about 12 ft. Angle of Intersection or I. P.=23° 20′ to the R. at Station 542+72.

Ext. in Tab. IV opposite 23° 20′=120.87
120.87÷12=10.07. Say a 10° Curve.

Tan. in Tab. IV opp. 23° 20′=1183.1
1183.1÷10=118.31.

Tab. V. correction for A. 23° 20′ for a 10° Cur.=0.16
118.31+0.16=118.47=corrected Tangent.

(If corrected Ext. is required find in same way)
Ang. 23° 20′=23.33°÷10=2.3333=L. C.

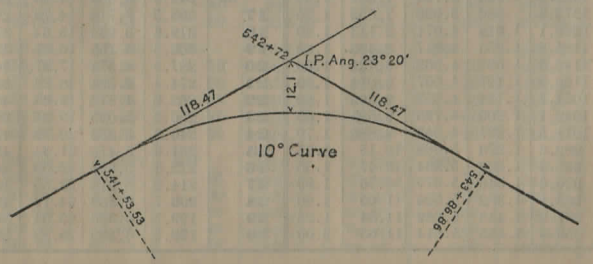
2° 19½′	=def.	for	sta.	542	I. P.=sta.	542+72
4° 49½′	=	"	"	+50	Tan.=	1.18.47
7° 19½′	=	"	"	543	B. C.=sta.	541+53.53
9° 49½′	=	"	"	+50	L. C.=	2.33.33
11° 40′	=	"	"	543+	E. C.=sta.	543+86.86
				86.86		

100—53.53=46.47×3′(def. for 1 ft. of 10° Cur.)=139.41′=
2° 19½″=def. for sta. 542.

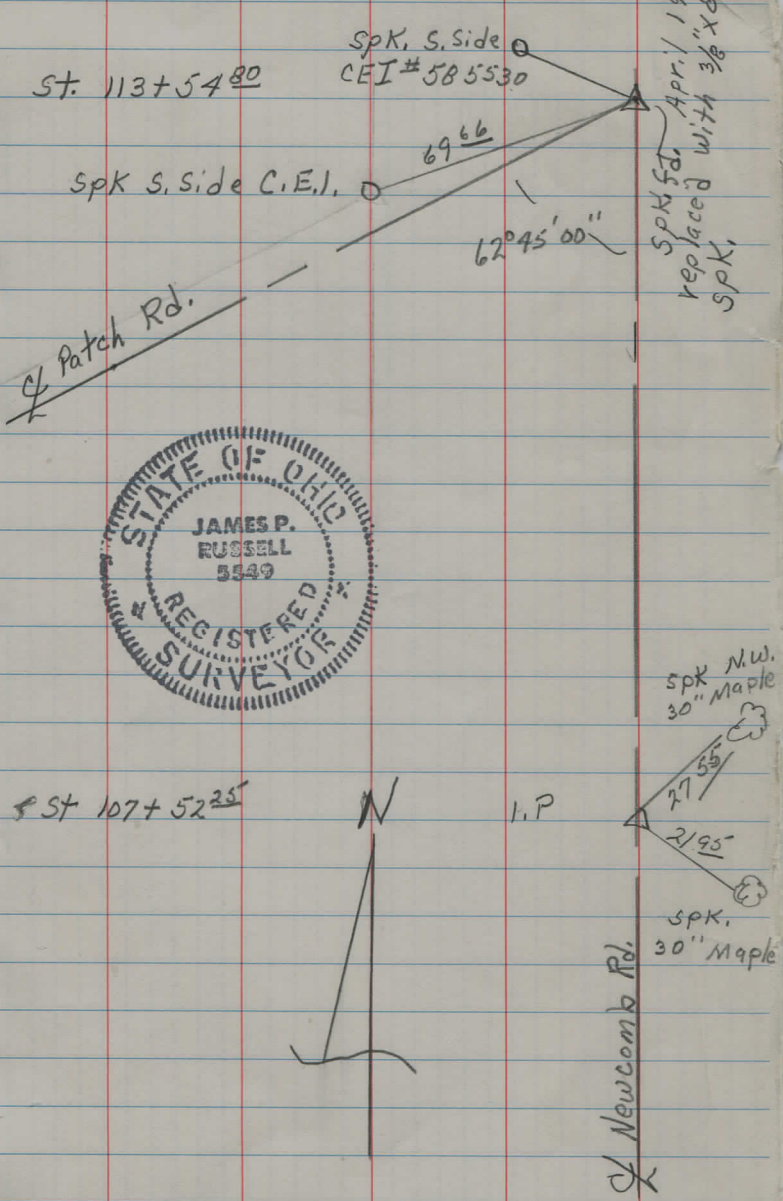
Def. for 50 ft.=2° 30′ for a 10° Curve.

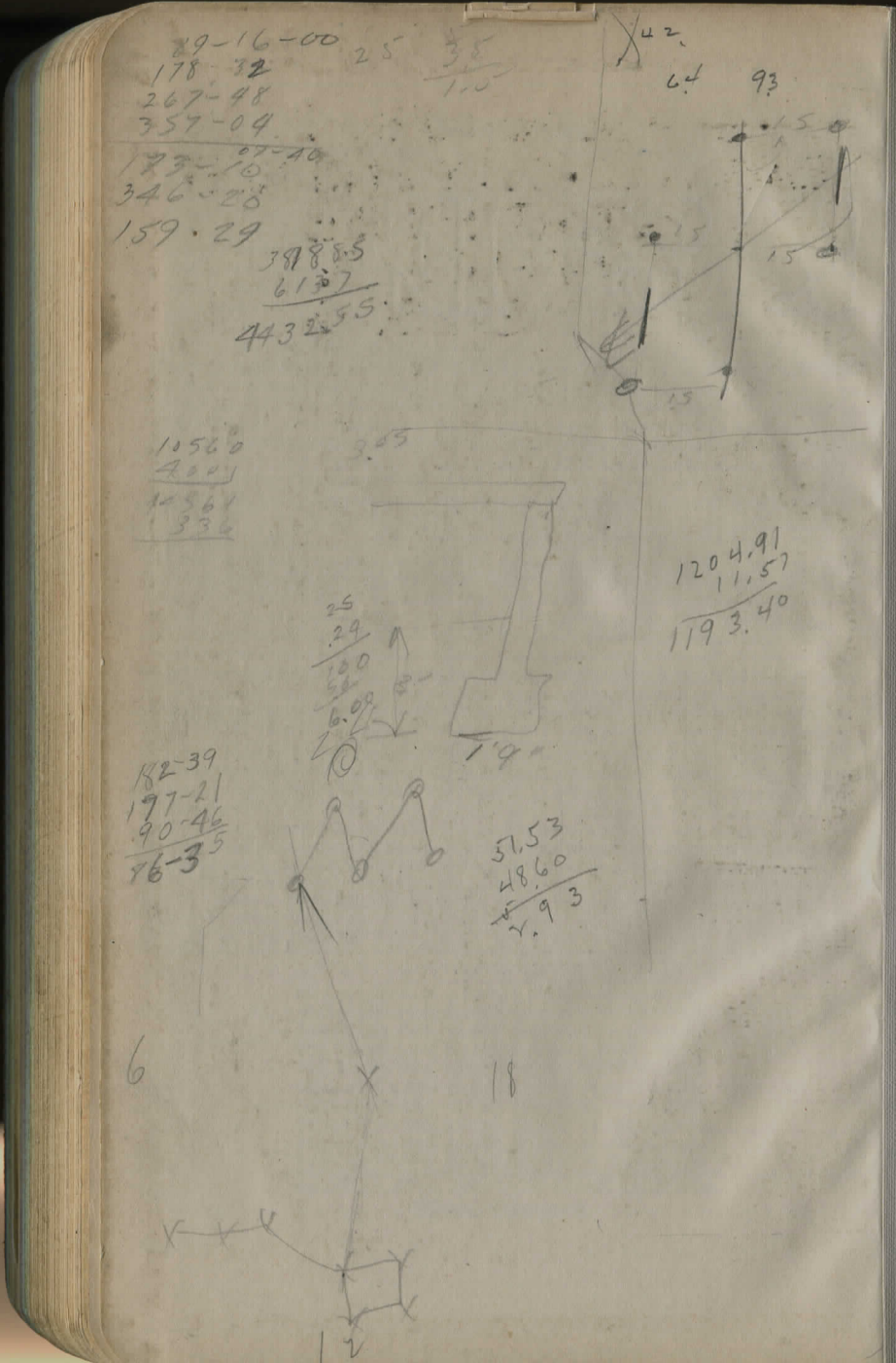
Def. for 36.86 ft.=1° 50½′ for a 10° Curve

(These tables are published in Field Books of
KEUFFEL & ESSER Co., New York, N. Y.)



F. B. #130


Spk. S. Side
CEI # 585530
St. 113+54.80
69.66
Spk S. Side C.E.I.
62°45'00"
Spk Set Apr. 1, 1987 replaced with 3/8" x 8" Spk.
℄ Patch Rd.
STATE OF OHIO
JAMES P. RUSSELL
5549
REGISTERED SURVEYOR
Spk N.W. 30" Maple
St 107+52.25
N
I.P
27.55
21.95
Spk. 30" Maple
℄ Newcomb Rd.



DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

ROADWAY [illegible] WIDE. SIDE SLOPES 1½ TO 1.
FOR SIDEHILL TRACK EMBANKMENT.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	7.0	7.2	7.3	7.5	7.6	7.8	7.9	8.1	8.2	8.4	0
1	8.5	8.7	8.8	9.0	9.1	9.3	9.4	9.6	9.7	9.9	1
2	10.0	10.2	10.3	10.5	10.6	10.8	10.9	11.1	11.2	11.4	2
3	11.5	11.7	11.8	12.0	12.1	12.3	12.4	12.6	12.7	12.9	3
4	13.0	13.2	13.3	13.5	13.6	13.8	13.9	14.1	14.2	14.4	4
5	14.5	14.7	14.8	15.0	15.1	15.3	15.4	15.6	15.7	15.9	5
6	16.0	16.2	16.3	16.5	16.6	16.8	16.9	17.1	17.2	17.4	6
7	17.5	17.7	17.8	18.0	18.1	18.3	18.4	18.6	18.7	18.9	7
8	19.0	19.2	19.3	19.5	19.6	19.8	19.9	20.1	20.2	20.4	8
9	20.5	20.7	20.8	21.0	21.1	21.3	21.4	21.6	21.7	21.9	9
10	22.0	22.2	22.3	22.5	22.6	22.8	22.9	23.1	23.2	23.4	10
11	23.5	23.7	23.8	24.0	24.1	24.3	24.4	24.6	24.7	24.9	11
12	25.0	25.2	25.3	25.5	25.6	25.8	25.9	26.1	26.2	26.4	12
13	26.5	26.7	26.8	27.0	27.1	27.3	27.4	27.6	27.7	27.9	13
14	28.0	28.2	28.3	28.5	28.6	28.8	28.9	29.1	29.2	29.4	14
15	29.5	29.7	29.8	30.0	30.1	30.3	30.4	30.6	30.7	30.9	15
16	31.0	31.2	31.3	31.5	31.6	31.8	31.9	32.1	32.2	32.4	16
17	32.5	32.7	32.8	33.0	33.1	33.3	33.4	33.6	33.7	33.9	17
18	34.0	34.2	34.3	34.5	34.6	34.8	34.9	35.1	35.2	35.4	18
19	35.5	35.7	35.8	36.0	36.1	36.3	36.4	36.6	36.7	36.9	19
20	37.0	37.2	37.3	37.5	37.6	37.8	37.9	38.1	38.2	38.4	20
21	38.5	38.7	38.8	39.0	39.1	39.3	39.4	39.6	39.7	39.9	21
22	40.0	40.2	40.3	40.5	40.6	40.8	40.9	41.1	41.2	41.4	22
23	41.5	41.7	41.8	42.0	42.1	42.3	42.4	42.6	42.7	42.9	23
24	43.0	43.2	43.3	43.5	43.6	43.8	43.9	44.1	44.2	44.4	24
25	44.5	44.7	44.8	45.0	45.1	45.3	45.4	45.6	45.7	45.9	25
26	46.0	46.2	46.3	46.5	46.6	46.8	46.9	47.1	47.2	47.4	26
27	47.5	47.7	47.8	48.0	48.1	48.3	48.4	48.6	48.7	48.9	27
28	49.0	49.2	49.3	49.5	49.6	49.8	49.9	50.1	50.2	50.4	28
29	50.5	50.7	50.8	51.0	51.1	51.3	51.4	51.6	51.7	51.9	29
30	52.0	52.2	52.3	52.5	52.6	52.8	52.9	53.1	53.2	53.4	30
31	53.5	53.7	53.8	54.0	54.1	54.3	54.4	54.6	54.7	54.9	31
32	55.0	55.2	55.3	55.5	55.6	55.8	55.9	56.1	56.2	56.4	32
33	56.5	56.7	56.8	57.0	57.1	57.3	57.4	57.6	57.7	57.9	33
34	58.0	58.2	58.3	58.5	58.6	58.8	58.9	59.1	59.2	59.4	34
35	59.5	59.7	59.8	60.0	60.1	60.3	60.4	60.6	60.7	60.9	35
36	61.0	61.2	61.3	61.5	61.6	61.8	61.9	62.1	62.2	62.4	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.

MADE IN GERMANY.

R.