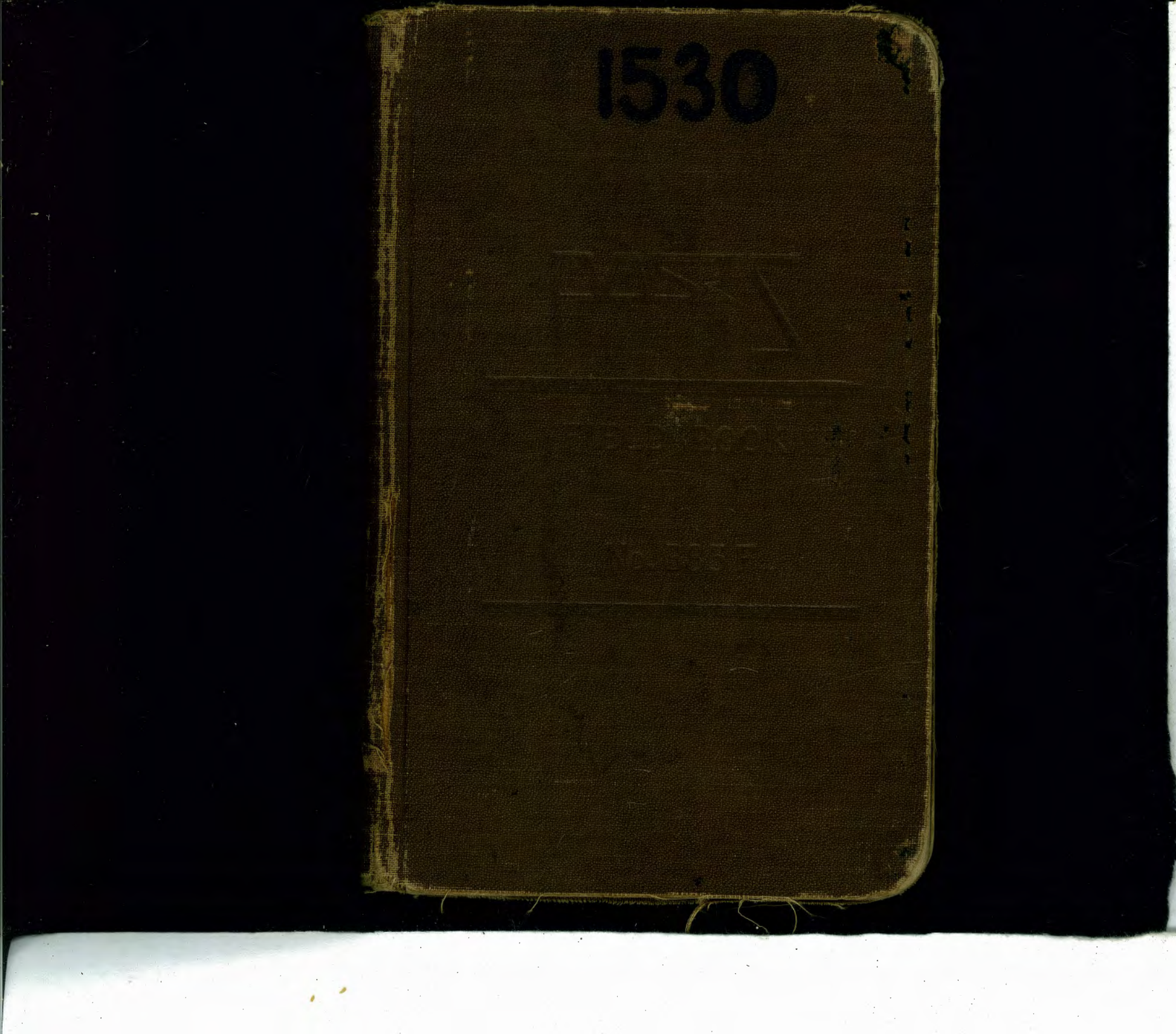

1530

Our Leather Bound Engineers Note Books are carried in the following rulings:

No. 380 LEVEL BOOK. Left and Right Hand Page the same as Left Hand Page of this Book.

No. 382 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 4 x 4 to the inch, Center Line Red.

No. 384 MINING TRANSIT BOOK. Left Hand Page as in this Book, Right Hand Page 8x8 to the inch, Center Line Red.

No. 385 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 8 vertical and 4 horizontal lines to the inch, Center Line Red.

We also carry the Note Books listed above, bound in extra strong Fabri-Hide (otherwise the same quality of book), which can be furnished at a somewhat lower price.

In ordering Fabri-Hide covered books, add the letter *"F"* to catalog number.

THE FREDERICK POST CO.

ENGINEERING and DRAFTING SUPPLIES

IRVING PARK STATION

CHICAGO, ILL.

to page # 74
except pages 27 & 28

Camino Del Rio
Continued from Book 1528

Indexed
C.S.K.

INDEXED

107

for Ties + Monuments
on Mission Valley Road
= CAMINO DEL RIO

+50

See FB. 1588

106

+88.87 P.O.T. C.T. & Ex. Pav. { 62+92.44 B.C. L+ Paymt
Book G 154 - P 4.

+50

INDEXED

105

+50

104

+50

103

+50

→ Do not use this Station ←

℄ 102+05.06 E.C. = Improvement Plans

℄ 102+07.62 E.C. = C.T. & Ex Pav. at. { 59+11.38 E.C. Paymt.
Book G 154 - P 4

O.K.

1

℄ = Pueblo Line

L ∠ = 89° 58' 30"
℄ R = 121.56'
℄ T = 121.51
℄ L = 190.89

set ½" l. pin ○ 40°± ○ C.T. 33°± ○ set ½" l. pin
B.C. Sta 56+76.68
Sixth St.
90°

℄

113

+50

112

+50

111

+50

110

+50

109

+50

108

+50

℄ = Pueblo Line

℄

+50

117

+60 Drilled Well

+50

116

+50

115

+50

114

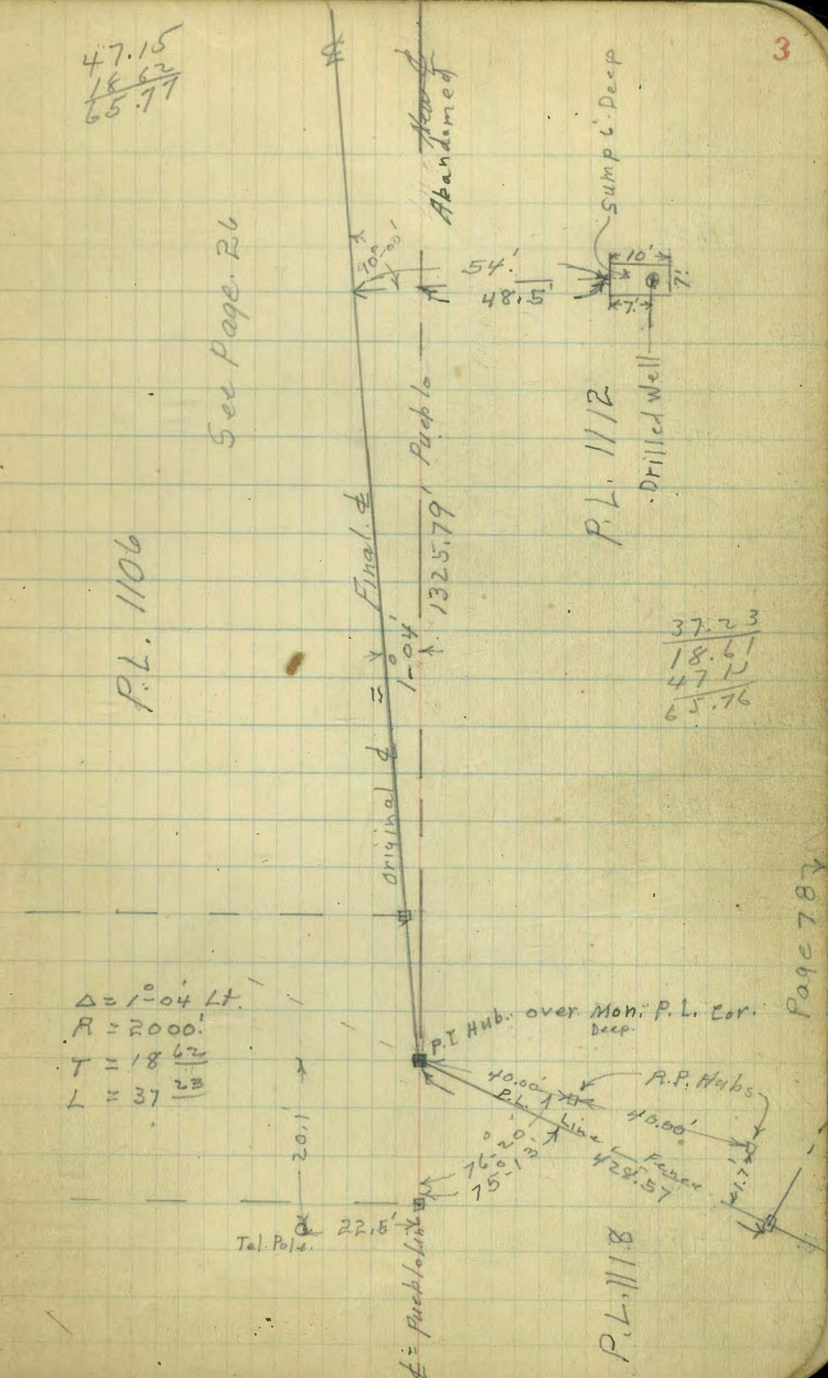
+ 84^{38} E.C. Nail (+84^{26} plans)

+65^{18}

+47^{15} B.C. Lt Nail (47^{03} Plans) 18.62 / 65.65

+ 45 Tel Pole #D-19201-T. 22.5' Lt.

113



124

+50

123

+50

122

+50

121

+50

120

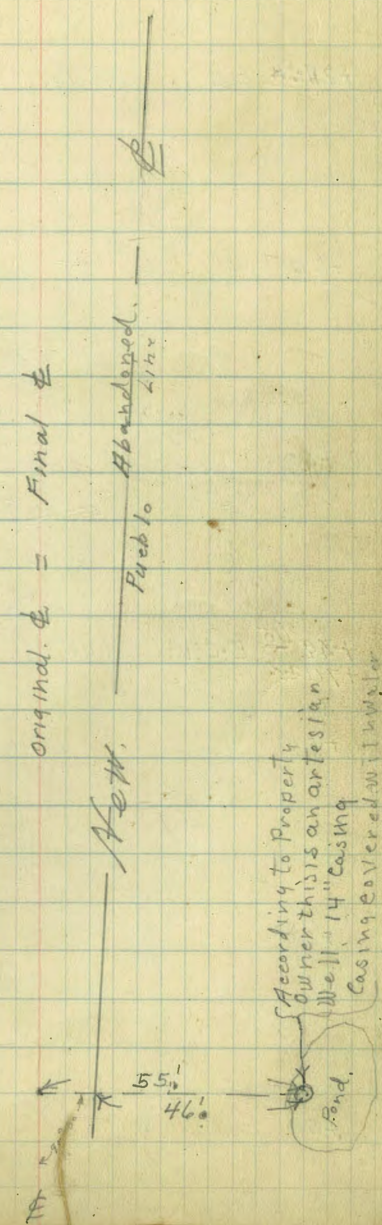
+50

119

+50
+45

118

See Page 26



Continued on Page 7.

~~See Page 6 for Change~~

	+50			
	+25 07 E.C.	Hub.	Def. ∠s 7°-17.75'	(+24 32 Plans)
129			6°-35'	
	+50		5°-09'	Δ = 14°-35'-30" Lt. ℄ R = 1000.' ℄ T = 128.03' ℄ L = 254.67
128			3°-43'	
	+50		2°-17'	
127			0°-51'	
	+70 40 B.C. Lt.	Hub.		(+69 65 Plans)
	+50			
126				
	+50			
125				
	+50			

Set ½" I. pin — 50.00 — 50.00 — Set ½" I. pin

Set ½" I. pin 3' below surface

10-27-39 R.A.J.

P.I. Hub

R.P. □ Hub

30°

30'

143.10

Mon. S.W. Cor. P.L. 1107

122.00'

37°-10'

S.E. Cor. P.L. 1106.

91°-01'-30"

89°-57'-30"

21.36

44.00

40.00'

R.P. □ Hub

R.P. □ Hub

See Page 24

Orig ℄ = Final ℄

Abandoned Pueblo Line

Appl. ℄

Pueblo Lot Ties:-

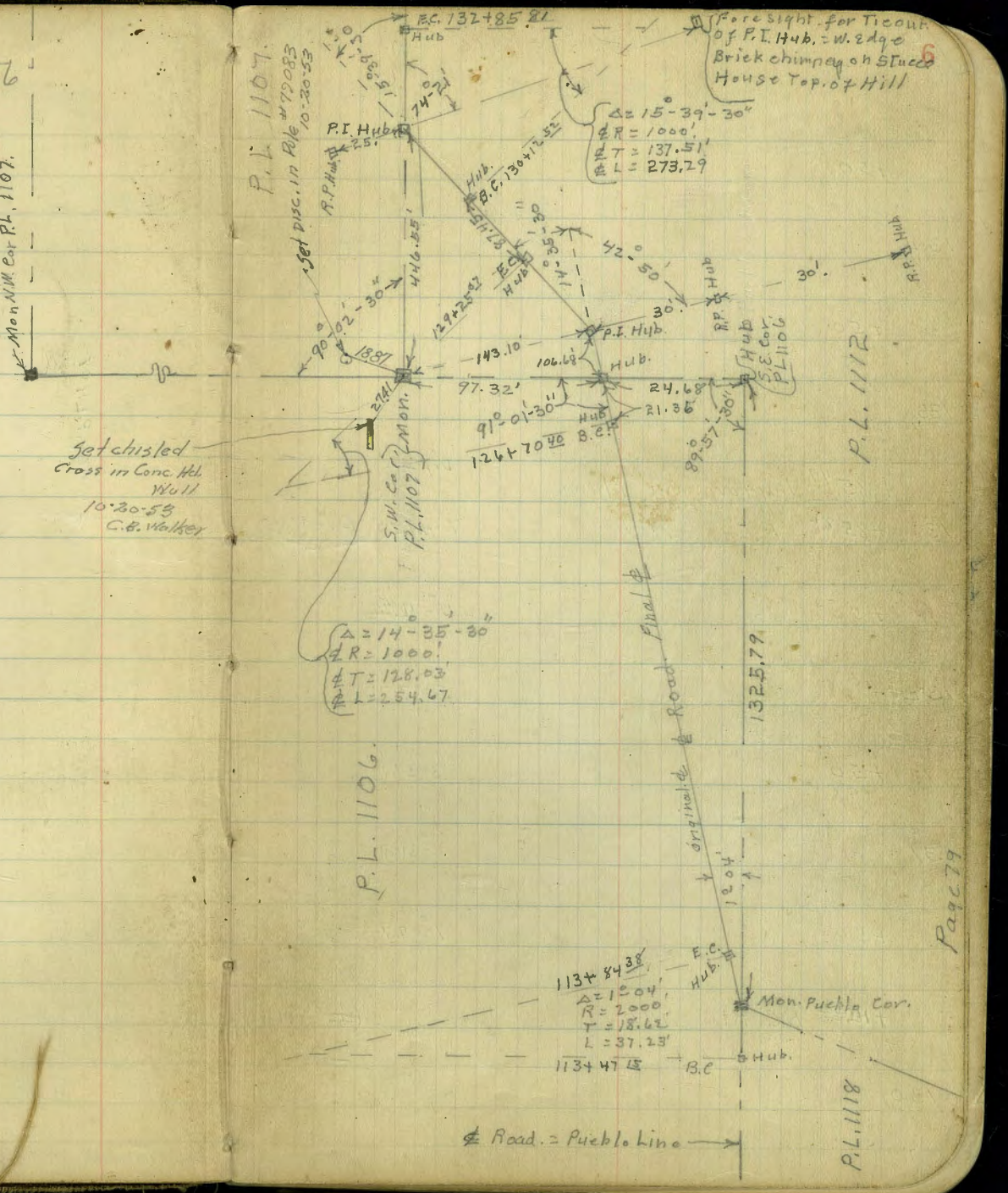
~~Abandoned. See Page 86~~

Original ℄ = Final ℄

97.32
24.68
122.00
50.00
72.00

14-35-30
1-04
15-39-30

130 12.5
137.5
131 50.0



Page 79

Abandoned See Page 26.

+50

134

+50

133

Def Δs.

+85.81 E.C. Hub 7°-49.75' (+85.49 Plans)

+50 L°-48.4'

132 5°-22.4'

+50 3°-56.4'

131 2°-30.4'

+50 1°-04.4'

+12.52 R.C. Rt. Hub. (+12.04 Plans)

130

32.0
+8.7
33

Pueblo Line = ℄

δ2°-40'

26.00'

28.00'

3" below ol'
10/27/39
R.A.S.

set 1/2" I. pin

74'-21

C

R.P. Hub.

25'

R.I. Hub. △

Δ = 15°-39'-30" Rt.
℄ R = 1000'
℄ T = 137.51
℄ L = 273.29

Foresight = W. side Brick chimney on Stucco House, Top of Hill

Hub △ 50 ℄ ▫ 50 ℄ ▫ set 1/2" I. pin

℄

141

+50

140

+50

139

+50

+20 P.O.T Hub

138

+50

137

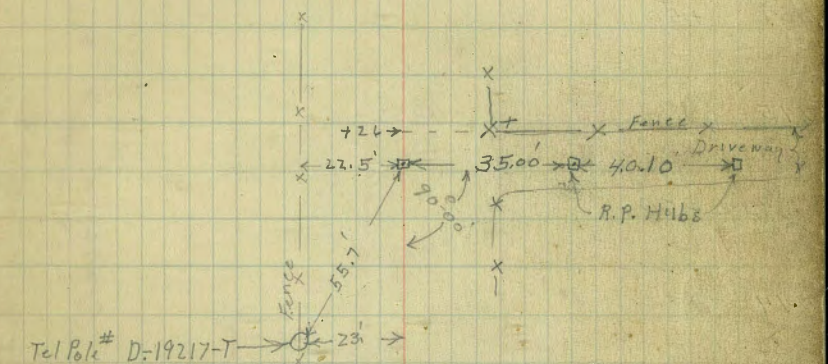
+50

136

+50

135

Pueblo Line = ℄



℄

+50

147

+50

+06.25 P.O.T. ℄Hub

146

+50

145

+50

144

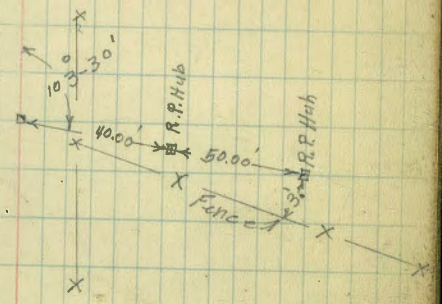
+50

143

+50

142

+50



Pueblo Line = ℄

℄

Continued Page 12

+45.50 P.O.T. Hub, Over. Mon S.E. Cor P.L. 1107

153

+50

152

+50

151

+50

150

+50

149

+50

148

℄ Pueblo Lot Line = ℄

165+68 85 E.C. Ties.

161+29 12 B.C.

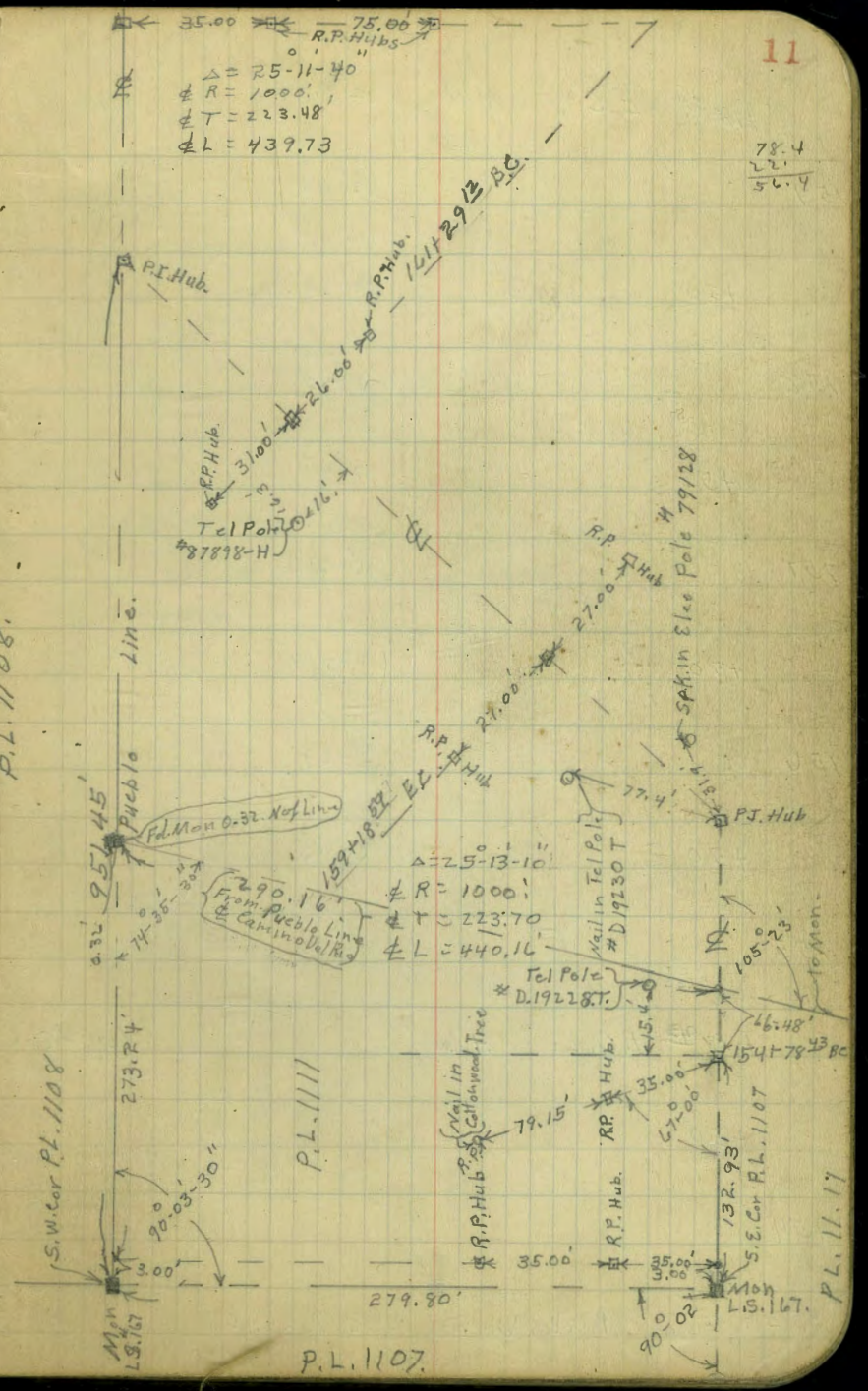
159+18 59 E.C.

+78 43 B.C. Lt. Hub (+78 03 Plug)

154

+48 50 P.O.T. Nail Tied out.

153+45 50 P.O.T. Hub, over, Mon S.E. Cor. P.L. 1107.

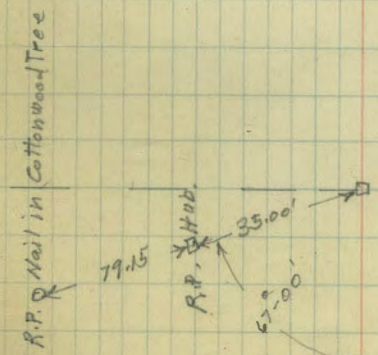


			Def ∠s	
+18 59	E.C.	Hub	12°-36'-35"	(+18 19 plat)
159			12°-04'	
	+50		10°-38'	
158			9°-13'	
	+50		7°-47'	
157			6°-21'	
	+50		4°-55'	
156			3°-29'	
	+50		2°-03'	
155	+00 (21.57)		0°-37'	
+78 43	B.C. Lt.	Hub		(+78 03 Plan)
	+50			
154				
153 + 45 50	P.O.T.	Hub over Mon.	S.E. P.L. 1107	

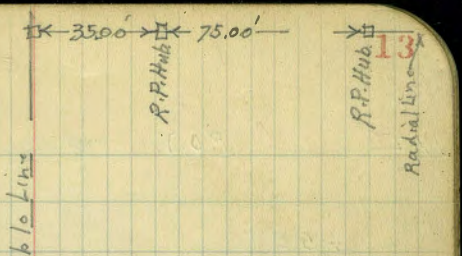
continued from Page 10

∠ = 25°13'-10" Lt
℄ R = 1000
℄ T = 223.70
℄ L = 440.16'

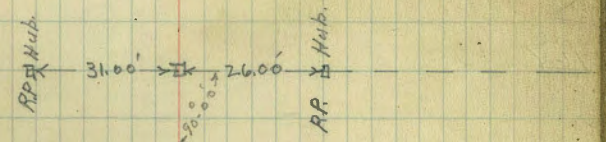
□ P.T. Hub



+68 85	E.C. Hub.	Def. Δ = 12°-35'-35"	(+68 37 Plan)
+50		12°-03'	
165		10°-37'	
+50		9°-11'	
164		7°-45'	
+50		6°-20'	
163		4°-54'	
+50		3°-28'	
162		2°-02'	
+50		0°-36'	
+29 12	B.C. Rt Hub.		(+28 64 Plan)
161			
+50			
160			
+50			



Δ = 25°-11'-40" Rt
℄ R = 1000.'
℄ T = 223.48'
℄ L = 439.73'



172 P.O.T. Hub.

+50

171

+50

170

+50

169

+50

168

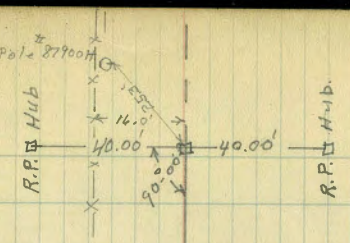
+50

167

+50

166.

+97 53 Fd Mon. N.E. Cor Lot "A" Licenced Survey # 167



P.L 1110.

Line

Pueblo

P.L 1111

0.10' Lt. of ℄.

Lot 4

Lot A.

178

+50

177

+50

176

+50

175

+50

174

+50

173

+50

Pueblo Lim

184

213.33'

+50

183

+32 05 E.C. Hub. Def ∠s. 11°-03.5 (= +31 24 Plan)

182 10°-08.5'

+50 8°-42.5'

181 7°-16.5'

+75 6°-33.5'

+50 5°-50.5'

+38 5°-30'

+25 5°-07.5'

180 4°-24.5'

+80.9 3°-51.7'

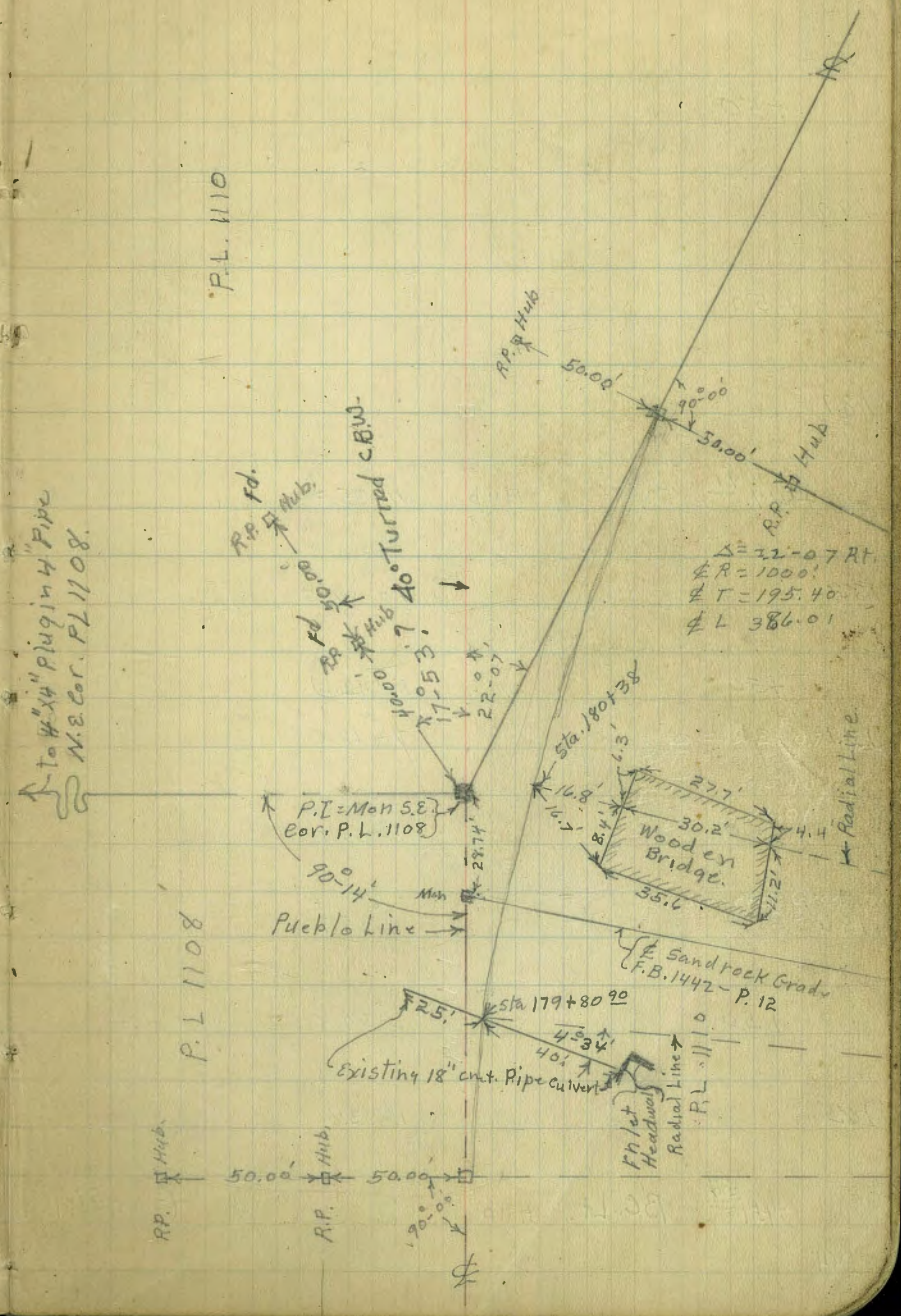
+75 3°-41.6'

+50 2°-58.6'

179 1°-32.7'

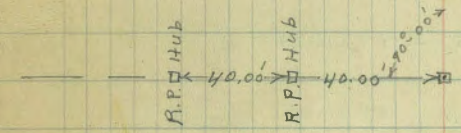
+46 04 B.C. Rt Hub = +45 23 Plan.

178

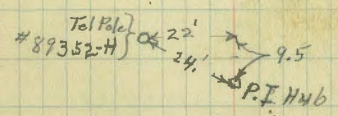


+50				
190				
+50				
189				
+49 91	E.C.	Hub	11°-35.3'	(= +49 [illegible] Plan)
188			10°-09.5'	
+50			8°-43.6'	
187			7°-17.6'	
+50			5°-51.7'	
186			4°-25.7'	
+50			2°-59.8'	
185			1°-33.8'	
+45 38	B.C. Lt.	Hub.		(= 44 57 Plan)
184				

184+45.38
182+32.05
V. 13.33



Δ=23°-10'-40" Lt.
℄ R = 1000.0
℄ T = 205.07'
℄ L = 404.53'



197

+50

196

+50

195

+85 Tel Pole #89355-A 21' Lt

+50 P.O.T. Hub

194

+50

193

+50

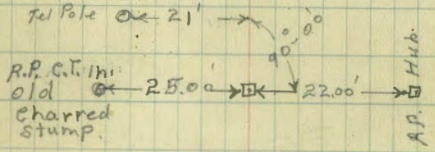
+41.50 E. Side Barn

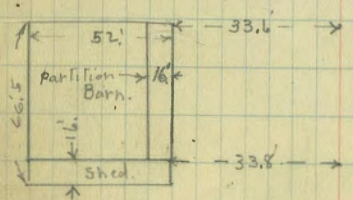
192

+91. W. Side Barn

+50

191





℄

203

+55.24 P.I. Lot Line Bet. Lots 7 + 8.

33 92

Ref Cs.

+21.32 E.C. Hub 3°-09.25 (=203+20.40 Plan)

202 2-46.3

+50 1°-52.6'

201 0°-58.9'

+45.16 B.C. Rt. Hub (=+44.47 Plan)

200

+50

199

+50

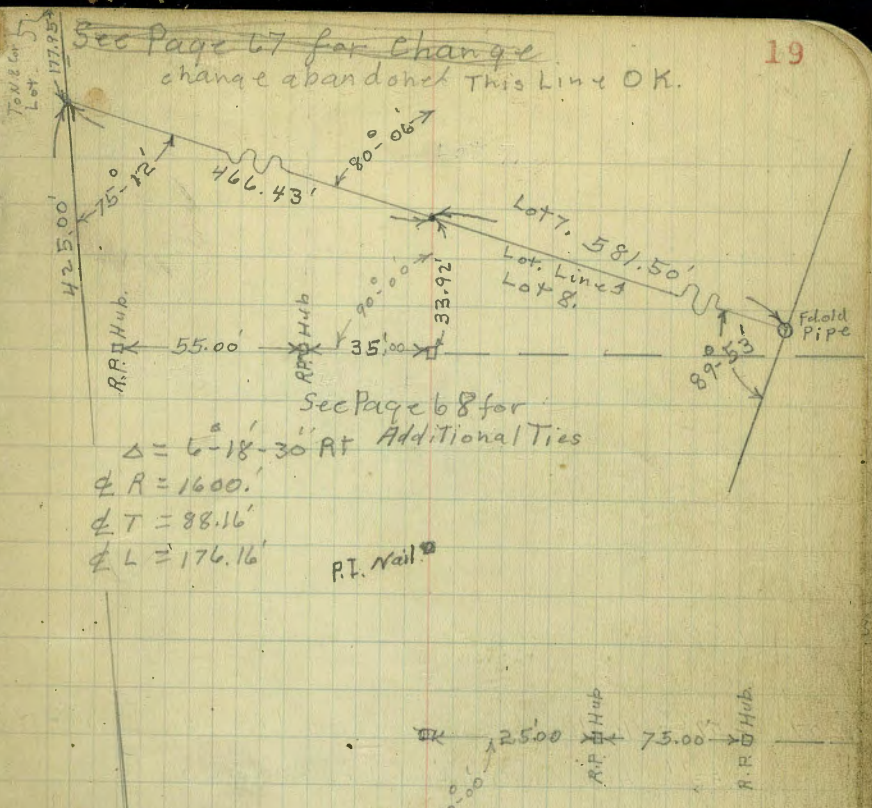
198

+50

5

See Page 67 for change

change abandoned This Line OK.



See Page 68 for Additional Ties

Δ = 6°-18'-30" Rt

℄ R = 1600.'

℄ T = 88.16'

℄ L = 176.16'

P.T. Nail

See T.P. Book #9 P 34-36

" Page 68 for Ties.

℄

Camino Del Rio
old City Line East 3/10/36

See Page 69 for New Alignment at Boundary.

Additional Ties Monuments set etc.
See F.B. 1588
County Survey from station of 205+35.44
See County Book 727

+59 98 Hub. ¢ on City Boundary Line (Plan 204+58 67)
+53 79 Hub. on City Boundary 20' Lt of ¢
+50

206

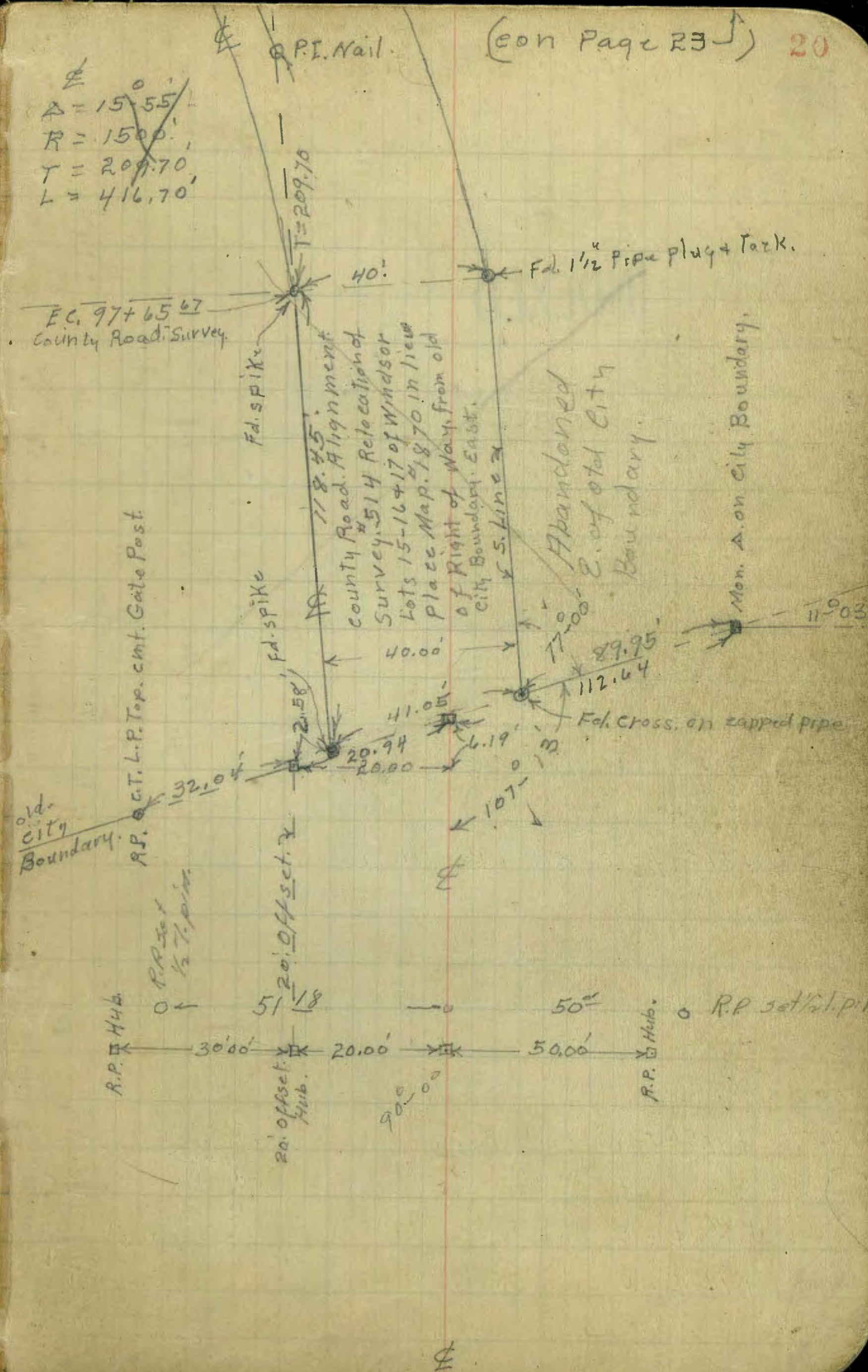
+50
+35 51 B.C. Rt. Curve to join County Station 72+99 62 see P. 73.
+08 48 P.O.T. Hub.

205

+50

204

(on Page 23)



Location of Improvements 3/10/36
Camino Del Rio.

INDEXED

+72 43' Rt. of ℄ (℄ = st.) = New Elec. Pole # 79161

+40 50' Lt. of ℄ = 2" Hyd.

+35 49' Lt of ℄ (℄ = S.T) Tel Pole # J.P. 79886

Manhole 8' West of City Bdy Line
along Conc. fence. Elev Bot of Manhole
60.0. power pole 3'50
of manhole

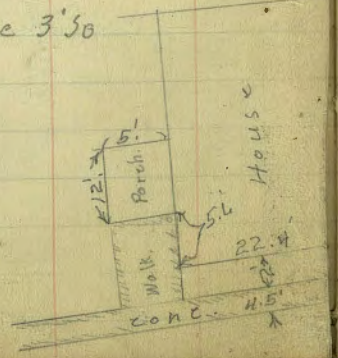
206

+91.50 ℄ = W. End. Barn

+88 ℄ = E. End. Shed

+74 ℄ = W. End. Shed

205



Indexed
C.S.K.

21

Sta 208+00
34.4'
90.00
77.45
19.1'
6.3'
8'
Gal. Iron Pump House
3.0 Tanks 9.6 Diameter
Sta 207+72
39.7'
90.00
77.42
10.1'
10'
20.5
Sunken Cone Tank
Sta 207+69
Sta 207+40
Sta 206+89
93°-55'
31'
17.8'
Corrugated Iron Tank 16' High
18'
38.7'
20'
90.00
Garage Dirt floor
18'
Sta 207+26
Sta 206+58
75'
Offset Line 20' Lt. of ℄
℄ Produced from West. in Semi Tangent.
Mon. at City Boundary
69'
72.35'
20.94
+59.98
112.64
End. cmt. wall 206+38
30.4'
0.7
107.13'
Sta 206+51.5
34.5'
90.00
17'
Sta 206+59.38 ℄
206+53.27
2" Pipe Fence
63.2'
Barn.
Cmt. Wall
Base
Sta 205+87 ℄
32.3'
22.5'
10.5' Porch
6.3'
53.7'
Walk
9.5
2.5
32.7'
Sta 205+91.5
Sta 205+88
Shed.
Sta 205+74
End. cmt. wall 205+48 ℄
30.6'

See Page 22.

Location of Improvements
Camino Del Rio.

3/10/36

205+74. 9' Lt of ℄ (℄ = S.T.) = { N.W. cor shed. see Page 21 / ℇ, End. Fence

+51 18' Lt of ℄ (℄ = S.T.) = Elec Pole 79707

+50 13' " " " (℄ = S.T.) = Fences. side Ez. Road

+48.5
+35.51 BC. Lt. curve to Meet County ℄ See Page 73.
+34.2

+22.2

205

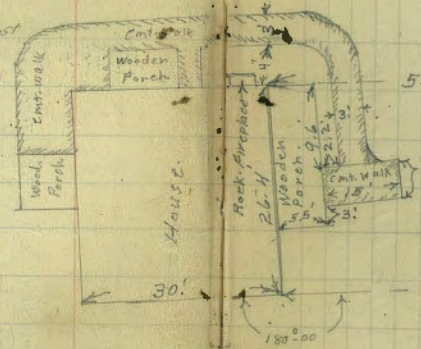
+95 ℄ = Cross fence 10.5 S. of Gate Post

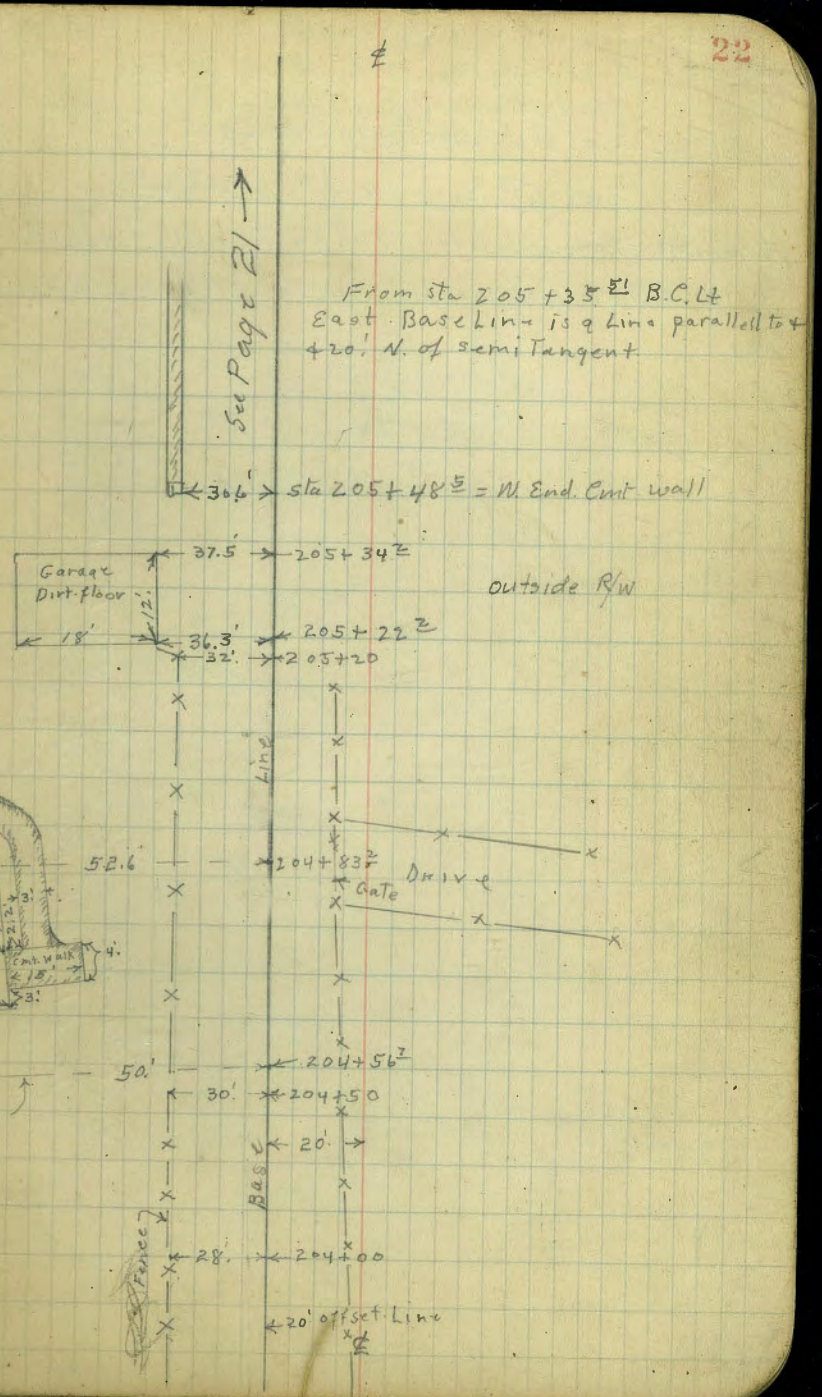
+76 ℄ Cross. Fence 10' S. of Gate Post

+56.7

+34 48.7 Lt = Tel Pole D-192 59-T

204





Camino Del Rio 3/10/36

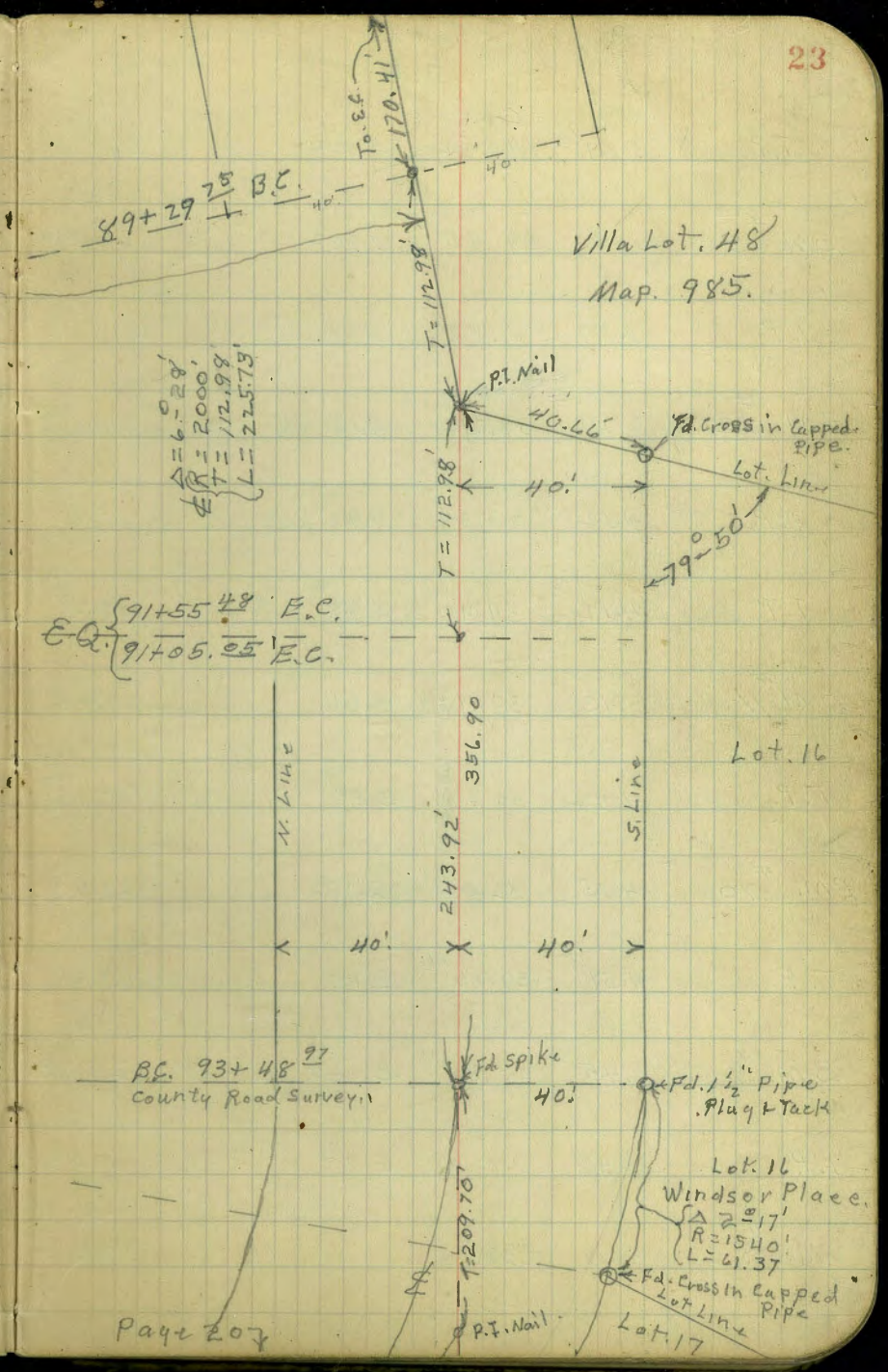
℄ County Road Survey #514
80' R. of Way. Replacing old
R. of Way Maps #1870 - #985 + #875

See T.P. Book 18 - Page 25-26-27 for
Alignment From station 89+29 75 to Sta. 74+86 30
point where city Boundary Line Leaves the Road.

See Page 69 for New Alignment.

Abandoned from 93+48 97 B.C.
To Old City Boundary New station ing
from 93+48 97 East. see Page 69

Continued from Page 20



Page 207

Bench Marks

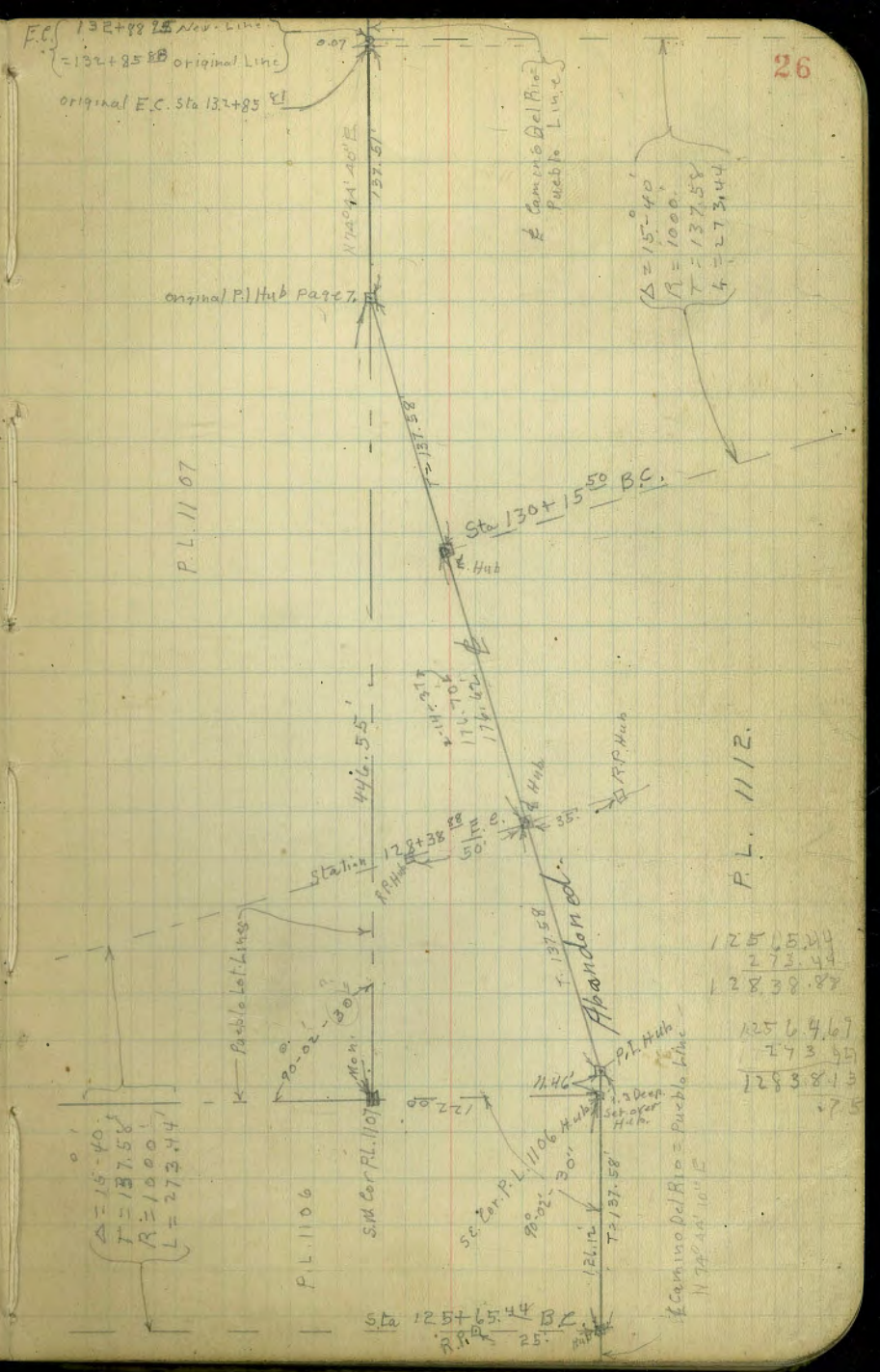
T.P.	5.01	40.62	4.24	35.61	Nail Tel Pole 87899 H 15' Lt. Sta 169+19.
B.M. #13	2.48	39.85	1.42	37.37	3 Nails in Elec Pole #79132 28.5' Rt. of Sta 164+21
T.P.	7.77	38.79	5.90	31.62	
B.M. #12	6.14	37.52	4.16	31.38✓ =	~~31.37 City B.M. B.P. Cmt. Mon 26.5 Lt. of Sta. 154+22~~ out.
T.P.	4.12	35.54✓	2.98✓	31.42✓	Nail in Tel. Pole #87894-H 24' Lt. of Sta. 151+32
T.P.	4.12	34.40✓	2.88	30.28✓	Nail in Elec Pole #79119 23' Rt. of Sta 145+21
B.M. #11	3.43	33.16✓	3.66	29.73✓	2 Nails Tel. Pole D-19217-T 23' Lt. of Sta. 137+69
T.P.	4.92	33.39✓	3.58	28.47✓	Nail in Tel Pole #89546-H. 32' Lt. of Sta. 131+64
B.M. #10	4.15	32.05✓	2.86	27.90✓	3 Nails in Elec Pole #79082 46' Rt of Sta 126+50
T.P.	4.51	30.76✓	2.13	26.25✓	Nail in Elec Pole #79079 32' Rt. of Sta. 119+25
B.M. #9	3.45	28.38✓	3.25	24.93✓	3 Nails in Cypress Tree 26' Rt. of Sta. 113+70
T.P.	5.45	28.18✓	5.27	22.73✓	
B.M. #8	4.64✓	28.00✓		23.36✓	B.P. Sly End Existing 48"X18" Culvert 64' Rt. Sta 100+69

B.M. #17			2.34	44.38	Cross N. side Iron Rim Water Dept. Man Hole 53.3' Lt. Sta 206+37
B.M. #16	11.94	66.72	1.74	54.78	R.P. Hub. 35' Lt of Sta 202+21 32 E.C.
T.P.	11.40	56.52	5.48	45.12	Nail Tel. Pole #306148-H 22' Lt. of Sta 198+29
B.M. #15	8.50	50.60	1.68	42.10	3. Nails in Tel. Pole #89354 21.5' Lt. of Sta 191+13
T.P.	2.35	43.78	8.32	41.43	Nail in Elec Pole #79143
B.M. #14	2.07	49.76	2.71	47.69	3. Nails in Large Cypress Tree 55' Rt. of Sta 180+50 E. Line Sand Rock Grade
T.P.	12.10	50.40	2.32	38.30	Nail Tel Pole #305605H 16' Lt. of Sta 173+75
		40.62			

Camino Del Rio Change at Pueblo
Line Bet. P.L. 1106 & P.L. 1107.
original Line Pages. 5-6+7

This change Abandoned.
Original & = Final &.

+88.25	EC	7°-50'
+50		6°-43'
132+		5°-17.1'
+50		3°-51.2'
131		2°-25.3'
+50		0°-59.3'
130+15.50	BC	
128+38.88	EC	7°-50'
128		6°-43.4'
+50		5°-17.4'
127		3°-51.4'
+50		2°-25.4'
126+00		0°-59.4'
125+65.44	BC	



Camino Del Rio X. Sec

Continued from F.B. 1528

			℄		
+39.			4.86	23.14	
+05.			5.08	22.92	
106		27.23	4.30		
+88[87]	B.C. Existing 20' Strip Pavmt.		5.14	22.86	
+50		27.28	4.26	4.98	23.02
105		27.29	4.16	4.87	23.13
+50		27.26	4.04	4.78	23.22
104		27.18	3.86	4.68	23.32
+50		27.05	3.66	4.61	23.39
103		26.92			
B.M. #8.	4.64	28.00			23.36

INDEXED

29

Lt					℄					Rt	
22.60	22.30	22.60	22.72	22.83	23.14	23.10	23.00	23.20	22.00	22.00	
5.4 50	5.7 40	5.40 27.2 N.Pav	5.28 20 Pav	5.17 15 Pav	4.86 S.Pav	4.9 15	5.0 20	4.8 24	6.0 30	6.0 50	
		22.60	22.70	22.59	22.92	23.09	23.30	22.40	23.30	22.20	22.30
		5.4 50	5.3 20	5.41 15 NPav	5.08 Pav	4.91 8 SPav.	4.7 15	5.6 20	4.7 24	5.8 30	5.7 50
22.60	22.60	21.80	22.50	22.60	22.53	22.86	23.06	23.20	22.00	23.00	22.00	22.10
5.4 50	5.4 28	4.2 23	5.5 20	5.4 15	5.47 11.6 NPav	5.14 Pav.	4.94 10 SPav.	4.8 15	6.0 20	5.0 24	6.0 30	5.9 50
22.20	22.20	23.00	22.00	22.90	22.84	23.02	23.06	23.09	22.70	22.00	23.50	22.10	22.20
5.8 50	5.8 28	5.0 23	6.0 20	5.1 15	5.16 10 NPav	4.98 Pav	4.94 10 SPav.	4.91 15	5.3 20	6.0 22	4.5 24	5.9 30	5.9 50
22.30	22.90	23.50	22.40	23.10	22.99	23.13	23.12	23.00	23.20	21.90	23.40	22.20	22.30
5.7 50	5.1 28	4.5 23	5.6 20	4.9 15	5.01 10 Pav	4.87 Pav	4.88 10 Pav	5.0 15	4.8 20	4.1 22	4.6 24	5.8 30	5.7 50
22.10	22.10	23.50	22.50	23.40	23.05	23.22	23.21	23.20	23.50	21.50	23.80	22.10	22.00
5.9 50	5.9 28	4.5 23	5.5 20	4.6 15	4.95 10 Pav	4.78 Pav	4.79 10 Pav	4.9 15	4.8 20	6.5 22	4.7 24	5.9 30	6.0 50
23.10	23.20	23.20	22.40	23.50	23.20	23.32		23.24	23.10	23.00	23.40	22.20	22.00
4.9 50	4.8 30	4.8 24	5.6 20	4.5 15	4.80 10 Pav	4.68 Pav		4.76 10 Pav	4.9 15	5.0 20	4.6 28	5.8 30	6.0 50
21.80	21.80	23.20	22.20	23.50	23.22	23.39	23.37		23.46	23.40	21.70	23.40	22.10	22.00
6.2 50	6.2 30	4.8 24	5.8 20	4.5 15	4.78 10 Pav	4.61 Pav	4.63 10 Pav		4.6 15	4.6 17	6.3 20	4.6 24	5.9 30	6.0 50

28.00

B.P. Sta End. Headwall Existing 48"x18" Culvert. 64' Rt. Sta 100+67 50

110		26.25	+or− −3.07	5.0	23.18
+50		26.37	−3.39	5.2	22.98
109		26.50	−3.72	5.4	22.78
+50		26.62	−4.14	5.7	22.48
108		26.75	−4.57	6.0	22.18
T.P.	5.45	28.18	5.27		22.73
+50		26.87 (27.3) 4.37	−4.37	5.5	22.50
107		27.00	4.30	5.3	22.70
106+66		27.10 28.00	−4.10	5.0	23.00

Lt. ℄ Rt.

	22.58	22.48	23.68	21.88	22.98	22.68	23.18	23.18	23.08	23.78	22.88	22.88	
F38 27.2	5.6 50	5.7 27	4.5 24	6.3 20	5.2 18	5.5 15	5.0	5.0 15	5.1 20	4.4 24	5.3 30	5.3 50	F33 27.8
		22.48	22.58	23.48	21.68	22.98	22.58	22.98	23.08	23.08	22.58	22.78	22.78		
F36 27.8		5.7 50	5.6 27	4.7 24	6.5 20	5.2 18	5.6 15	5.2	5.1 15	5.1 20	4.6 24	5.4 30	5.4 50	F27 26.6
		22.38	22.38	23.18	21.38	22.58	22.38	22.78	22.88	22.88	23.08	22.68	22.68		
F40 27.8		5.8 50	5.8 27	5.0 24	6.8 20	5.6 18	5.8 15	5.4	5.3 15	5.3 20	5.1 24	5.5 30	5.5 50	F33 27.2
		22.38	22.38	23.18	21.38	22.48	22.28	22.48	22.68	22.78	23.28	22.58	22.58		
F45 28.7		5.8 50	5.8 27	5.0 24	6.8 20	5.7 18	5.9 15	5.7	5.5 15	5.4 20	4.9 24	5.6 30	5.6 50	F42 28.1
		22.48	22.48	23.38	21.18	22.18	22.18	22.18	22.28	22.78	23.08	22.38	22.38		
F50 29.6		5.7 50	5.7 27	4.8 24	7.0 20	6.0 18	6.0 15	6.0	5.9 15	5.4 20	5.1 24	5.8 30	5.8 50	F50 29.6

28 18

	22.20	22.20	23.50	21.50	22.90	22.80	22.50	22.60	22.90	22.60	22.70		
F45 28.7	5.8 50	5.8 28	4.5 25	6.5 22	5.1 20	5.2 18	5.5	5.4 15	5.1 20	5.4 30	5.3 50	F44 28.7
				23.20	23.10	23.10	22.70	22.60	22.60	23.20	22.40	22.40	
F				4.8 50	4.9 20	4.9 15	5.3	5.4 15	5.4 20	4.8 24	5.6 30	5.6 50	F45 28.7
	22.60			22.65	23.09	23.18	23.00	22.70	22.90	23.30	22.40	22.40	
F	5.4 50.			5.35 47 N. Pav	4.91 20 Pav	4.82 15 S. Pav	5.0	5.3 15	5.1 20	4.7 23	5.6 30	5.6 50	F43 29.0

28.00

		Grade	+ or −	℄	
BM. #9	3.45	28.38	3.45		24.93
T. P.	5.28	28.38	5.08		23.10
+84[38] E.C.					
+50		26.12	3.04	5.1	23.08
+47[15] B.C. Lt.					
113		26.02	3.14	5.3	22.88
+50		25.95	3.07	5.3	22.88
112		25.94	−3.06	5.3	22.88
+50		25.95	−2.77	5.0	23.18
111		26.07	−3.04	5.2	22.98
+50		26.12	−3.04	5.1	23.08
		28.18			

Lt ℄ Rt

3 Nails in Cypress Tree 26' Rt. of Sta 113+70

F40 27.2	22.98	22.98	23.88	23.38	23.08	23.08	23.08	23.18	24.08		24.18		F2.8 27.2
	5.2 50	5.2 27	4.3 24	4.8 20	5.1 15	5.1	5.1 15	5.0 20	4.1 24		4.0 50		
F40 27.2	22.58	22.58	23.48	23.18	22.98	22.98	23.18	23.18	23.88	23.48	23.48		
	5.6 50	5.6 27	4.7 24	5.0 20	5.2 15	5.3	5.0 15	5.0 20	4.3 24	4.7 30	4.7 50		F2.8 27.5
F4.5 28.1	22.38	22.38	23.28	23.18	22.48	22.88	23.18	22.98	24.38	23.58	23.58		
	5.8 50	5.8 27	4.9 24	5.0 20	5.2 15	5.3	5.0 15	5.2 20	3.8 27	4.6 30	4.6 50		F2.6 27.2
F40 27.8	22.48	22.48	22.98	22.88	22.88	22.88	22.98	22.98	23.98	23.18	23.18		
	5.7 50	5.7 27	5.2 24	5.3 20	5.3 15	5.3	5.2 15	5.2 20	4.2 27	5.0 30	5.0 50		F3.1 27.6
F38 27.5	22.48	22.48	22.88	22.88	22.88	23.18	23.18	23.18	24.18	23.18	23.18		
	5.7 50	5.7 27	5.3 24	5.3 20	5.3 15	5.0	5.0 15	5.0 20	4.0 24	5.0 30	5.0 50		F2.5 27.2
F3.7 27.5	22.58	22.58	23.08	22.88	22.98	22.98	23.18	22.58	23.68	23.08	23.08		
	5.6 50	5.6 27	5.1 24	5.3 20	5.2 15	5.2	5.0 15	5.6 20	4.5 27	5.1 30	5.1 50		F3.0 27.5
F3.5 27.2	22.58	22.58	23.08	21.78	22.88	22.88	23.08	23.18	22.68	23.68	23.08	23.08	
	5.6 50	5.6 27	5.1 24	6.4 20	5.3 18	5.3 15	5.1	5.0 15	5.5 20	4.5 27	5.1 30	5.1 50	F3.0 28.1

28.18

℄

+22 Tel Pole #D-19204-T.12.5' Lt.

118		27.25	3.07	4.2	24.18
	+50	27.12	3.14	4.4	23.98
117		27.00	3.32	4.7	23.68
	+69 Tel Pole #D-19203-T.16' Lt				
	+50	26.87	3.29	4.8	23.58
116		26.78	3.27	4.9	23.48
	+50	26.62	3.04	4.8	23.58
115		26.50	3.02	4.9	23.48
	+50	26.38	2.90	4.9	23.48
114		26.25	3.27	5.4	22.98
		28.38			

Lt. ℄ Rt.

F4.0 29.0				23.88		23.88		25.08		24.18		24.28		24.38		24.98		25.28	F2.8 42.8 (20)
				4.5 50		4.5 20		3.3 15		4.2		4.1 15		4.0 20		3.4 30		3.1 50	
F36 28.7		23.88		23.98		23.98		23.98		23.98		24.08		24.28		24.38		24.98	24.98 F2.8 42.8 (9)
		4.5 50		4.4 20		3.0 15		4.4 12		4.4		4.3 15		4.1 20		4.0 28		2.8 30	3.4 35	3.4 50	
F3.8 28.7		23.78		23.78		25.28		25.28		23.18		23.68		23.88		23.98		24.08	25.28	24.68	24.68 F2.3 30.4 (7)
		4.6 50		4.6 20		3.1 17		3.1 15		5.2 11		4.7		4.5 15		4.4 20		4.3 28	3.1 30	3.7 35	3.7 50
F4.2 29.3		23.78		23.78		24.18		23.58		23.58		23.88		23.98		24.08		25.28	24.58	24.58	F2.6 28.4
		4.6 50		4.6 23		4.2 20		4.8 15		4.8		4.5 15		4.4 20		4.3 27		3.1 32	3.8 35	3.8 50	
F4.4 29.6		23.58		23.58		24.78		24.48		23.48		23.78		23.98		23.98		24.98	24.78		F2.4 28.7
		4.8 27		4.8 23		3.6 20		3.9 15		4.9		4.6 15		4.4 20		4.4 25		3.4 30	3.6 50		
F4.2 26.0		23.38		23.38		24.98		24.88		23.88		23.58		23.78		23.88		23.98	24.88	24.68	F2.2 28.4
		5.0 50		5.0 23		3.4 20		3.5 15		4.5 12		4.8		4.6 15		4.5 20		4.4 24	3.5 28	3.7 50	
F4.2 26.6		23.28		23.28		24.78		24.28		23.48		23.68		23.78		24.58		24.68			F2.4 26.7 (3)
		5.1 50		5.1 24		3.6 20		4.1 15		4.9		4.7 15		4.6 20		3.4 24		3.7 50			
F4.5 27.2	22.98	22.98		24.58		24.58		23.98		23.08		23.48		23.38		23.58		24.68		24.68	F2.6 26.1 (3)
	5.4 50	5.4 25		3.8 22		3.8 20		4.4 15		5.3 9		4.9		5.0 15		4.8 20		3.7 24		3.7 50	
F43 28.1	22.98	22.98		23.88		23.28		23.28		23.28		22.98		23.28		23.28		24.68		24.28	F3.0 28.0
	5.4 50	5.4 27		4.5 24		5.1 20		5.1 15		5.1		5.4		5.1 15		5.1 20		3.7 27		4.1 50	

28.38

	+20 Tel Pole 4.5' Lt.				
122		28.25	F4.0	6.5	24.26
	+50	28.12	3.66	6.3	24.46
	+18 Tel Pole 7' Lt.				
121		28.00	3.84	6.6	24.16
	+50	27.87	3.11	6.0	24.76
120		27.75	3.19	6.2	24.56
T.P.	4.51	30.76	2.13		26.25
	+71 Tel Pole #8952-H 10' Lt.				
	+50	27.62	3.54	4.3	24.08
119		27.50	3.22	4.1	24.28
	+50	27.38	3.09	4.1	24.28

Lt				℄				Rt				
	24.46	24.46	24.76	24.76	25.66	24.26	24.06	25.36	25.36	25.52	25.46	25.56
F3.7 28.4	6.1 50	6.1 20	6.0 15	6.0 11	5.1 8	6.5	6.7 5	5.4 7	5.4 15	5.2 20	5.3 40	5.2 50
	24.56	24.52	24.52	24.72	25.86	24.46	24.06	25.06	25.26	25.36	26.36	25.56
F4P 28.4	6.2 50	6.2 20	6.2 15	6.0 11	4.9 8	6.3	6.7 5	5.7 15	5.5 20	5.4 39	4.4 40	5.2 50
	24.52	24.46	24.32	24.52	25.76	24.16	25.06	25.16	25.06	25.96	25.66	F33
F3.7 28.4	6.2 50	6.3 20	×6.2 15	6.2 12	5.0 9	6.6	5.7 15	5.6 20	5.7 38	4.8 39	5.1 50	44.6 (23)
	24.56	24.46	24.46	24.76	26.06	24.76	24.86	24.96	24.86	25.86	25.96	
F4.1 28.7	6.2 50	6.3 20	6.3 15	6.0 12	4.7 9	6.0	5.9 15	5.8 20	5.9 37	4.9 58	4.8 50	F3.0 42.2 (20)
		24.46	24.36	25.76	24.56	24.66	24.86	24.76	24.76	25.76	25.76	
F3.6 28.4	50	6.3 20	6.4 15	4.8 10	6.2	4.1 15	5.9 20	6.0 35	5.0 36		5.0 50	F2.5 37.1 (15)

30.76

Nail in Elec Pole #79079 32' Rt. of Sta 119+45

	24.38	24.48	24.38	25.78	24.08	24.88	24.88	24.88	25.98	25.98		
F4.2 29.3	4.0 50	3.9 20	4.0 15	2.4 13	4.3	3.5 15	3.5 20	3.5 33	2.4 35	2.4 50	F1.8 35.8	(13)
	24.18	24.18	24.98	25.48	24.38	24.28	24.68	24.78	24.78	26.08	26.08	
F4.0 29.0	4.2 50	4.2 20	3.4 15	2.9 12	4.0 5	4.1	3.7 15	3.6 20	3.6 32	2.3 33	2.3 50	F2.8 32.5 (10)
	24.08	24.08	24.08	25.08	23.58	24.28	24.68	24.68	24.68	25.98	25.98	
F3.9 29.0	4.3 50	4.3 20	4.3 15	3.3 13	4.8 5	4.1	3.7 15	3.7 20	3.7 31	2.4 35	2.4 50	F1.4 33.5 (11)

28.38

				℄	
B.M. #10	4.15	32.05	2.86		27.90
126	1/25=0,3	29.25	3.00	4.5	26.26
+53	Tel Pole 3' Rt.				
+50	–	29.12	2.16	3.8	26.96
125		29.00	3.24	5.0	25.76
+50		28.87	2.71	4.6	26.16
+13 = Tel Pole 2' Lt.					
124		28.75	3.09	5.1	25.66
+50		28.62	3.26	5.4	25.36
123		28.50	3.34	5.6	25.16
+50		28.37	3.71	6.1	24.66
		30.76			

Lt ℄ Rt.

3. Nails in Elec Pole #79082 46' Rt. of Sta. 126+50

Slope stake	Cross-section readings (elev. / rod / distance), left → ℄ → right
F3.8 / 29.0	24.76 6.0/50 · 24.96 5.8/20 · 25.66 5.1/15 · 26.26 4.5 (℄) · 26.76 4.0/15 · 26.56 4.2/20 · 26.76 4.0/46 · 26.06 4.7/56 · F3.7 / 47.9 (26)
F4.3 / 30.0	24.66 6.1/50 · 24.66 6.1/20 · 24.76 6.0/15 · 24.76 6.0/11 · 26.96 3.8/8 · 26.96 3.8 (℄) · 26.06 4.7/9 · 25.36 5.4/12 · 26.56 4.2/15 · 26.36 4.4/20 · 2.6 / 46.3 (25) · 26.26 4.5/46 · 25.76 5.0/50
F4.3 / 29.3	24.56 6.2/50 · 24.56 6.2/20 · 24.66 6.1/15 · 24.76 6.0/7 · 26.16 4.6/5 · 25.76 5.0 (℄) · 24.76 6.0/9 · 25.16 5.6/12 · 26.16 4.6/15 · 26.06 4.7/20 · 26.26 4.5/46 · F2.8 / 46.2 (24) · 25.86 4.9/50
F4.1 / 29.3	24.56 6.2/50 · 24.56 6.2/20 · 24.66 6.1/15 · 24.66 6.1/7 · 26.76 4.0/4 · 26.16 4.6 (℄) · 24.96 5.8/11 · 25.76 5.0/15 · 25.76 5.0/20 · 26.46 4.3/44 · 27.06 3.7/45 · F2.4 / 46.0 (25) · 26.16 4.6/50
F4.4 / 29.6	24.46 6.3/50 · 24.56 6.2/20 · 24.56 6.2/15 · 24.56 6.2/8 · 26.06 4.7/5 · 25.66 5.1 (℄) · 24.56 6.2/8 · 25.66 5.1/15 · 25.86 4.9/20 · 26.06 4.7/42 · 26.96 3.8/45 · 25.66 5.1/50 · F2.5 / 45.3 (24)
F4.3 / 29.0	24.36 6.4/50 · 24.46 6.3/20 · 24.76 6.0/15 · 24.76 6.0/7 · 26.36 4.4/5 · 25.36 5.4 (℄) · 24.26 6.5/6 · 25.46 5.3/15 · 25.66 5.1/20 · 25.86 4.9/42 · 26.96 3.8/43 · 25.96 4.8/50 · F2.5 / 45.6 (24)
F3.8 / 28.7	24.76 6.0/50 · 24.76 6.0/20 · 24.76 6.0/15 · 24.56 6.2/8 · 26.06 4.7/5 · 25.16 5.6 (℄) · 24.46 6.3/8 · 25.26 5.5/10 · 25.36 5.4/15 · 25.66 5.1/20 · 25.56 5.2/40 · 26.46 4.3/42 · F2.5 / 45.3 (24) · 25.56 5.2/50
F3.6 / 28.4	24.76 6.0/50 · 24.76 6.0/20 · 24.76 6.0/15 · 24.96 5.8/8 · 26.26 4.5/5 · 24.66 4.1 (℄) · 24.56 6.2/7 · 25.56 5.2/9 · 25.56 5.2/15 · 25.56 5.2/20 · 25.36 5.4/40 · B.5 / 41.5 · 26.66 4.1/42 · 25.66 5.1/50

30.76

(20)

					℄	
	+50	½S=1.4	30.38	3.83	5.5	26.55
	+12^52	B.C. Rt				
130		½S=0.8	30.25	4.0	5.8	26.25
	+50	½S=0.7	30.12	3.57	5.5	26.55
	+25^07	EC				
129		½S=1.2	30.00	3.06	5.1	26.95
	+50	½S=1.4	29.87	2.62	4.8	27.25
	+49	Elec Pole #79088. 10' Rt.				
128		½S=1.4	29.75	2.40	4.7	27.35
	+50	½S=1.4	29.62	2.57	5.0	27.05
	+0.2	Tel Pole 3' Lt				
127		½S=1.2	29.50	3.45	6.0	26.05
	+70^40	B.C. Lt.				
	+50	½S=0.7	29.37	5.22	7.9	24.15
			32.05			

Lt — ℄ — Rt (each entry: elevation / rod / distance)

F5.0 / 50.8 (25) — 27.55 / 4.5 / 50 — 26.85 / 5.2 / 45 — 26.35 / 5.7 / 20 — 26.35 / 5.7 / 15 — 26.95 / 5.1 / 13 — 26.55 / 5.5 (℄) — 26.35 / 5.7 / 15 — 26.15 / 5.9 / 20 — 26.55 / 5.5 / 50 — F3.0 / 27.2

F3.8 / 46.0 (22) — 26.75 / 5.3 / 50 — 27.25 / 4.8 / 45 — 26.75 / 5.3 / 43 — 26.35 / 5.7 / 20 — 26.35 / 5.7 / 16 — 27.05 / 5.0 / 15 — 26.25 / 5.8 — 26.25 / 5.8 / 15 — 26.25 / 5.8 / 20 — 26.45 / 5.6 / 50 — F3.1 / 27.1

F2.1 / 41.6 (20) — 27.55 / 4.5 / 50 — 27.55 / 4.5 / 42 — 26.85 / 5.2 / 40 — 26.75 / 5.3 / 20 — 26.65 / 5.4 / 15 — 26.55 / 5.5 — 26.55 / 5.5 / 4 — 26.05 / 6.0 / 5 — 26.15 / 5.9 / 15 — 26.25 / 5.8 / 20 — 26.45 / 5.6 / 50 — F4.7 / 30.2

F2.3 / 38.2 (17) — 27.35 / 4.7 / 50 — 26.95 / 5.1 / 38 — 26.95 / 5.1 / 20 — 26.95 / 5.1 / 15 — 26.95 / 5.1 — 26.75 / 5.3 / 6' — 26.05 / 6.0 / 10 — 26.25 / 5.8 / 15 — 26.35 / 5.7 / 20 — 26.35 / 5.7 / 50 — F5.4 / 31.1

F0.8 / 32.5 (13) — 27.55 / 4.5 / 50 — 27.35 / 4.7 / 20 — 27.25 / 4.8 / 15 — 27.25 / 4.8 — 27.95 / 4.1 / 10 — 26.35 / 5.7 / 15 — 26.05 / 6.0 / 20 — 26.55 / 5.5 / 50 — F5.1 / 30.8

F1.6 / 25.7 — 27.15 / 4.9 / 50 — 26.85 / 5.2 / 20 — 27.05 / 5.0 / 15 — 27.35 / 4.7 — 26.95 / 5.1 / 15 — 27.25 / 4.8 / 20 — 26.05 / 6.0 / 25 — 25.95 / 6.1 / 50 — F5.5 / 31.1

F1.7 / 25.4 — 26.95 / 5.1 / 50 — 26.85 / 5.2 / 20 — 26.65 / 5.4 / 15 — 27.05 / 5.0 — 27.35 / 4.7 / 15 — 27.25 / 4.8 / 20 — 27.15 / 4.9 / 30 — 26.35 / 5.7 / 50 — F4.5 / 29.6

F2.0 / 26.0 — 26.85 / 5.2 / 50 — 26.55 / 5.5 / 20 — 26.55 / 5.5 / 15 — 26.05 / 6.0 — 26.05 / 6.0 / 4 — 27.35 / 4.7 / 15 — 27.55 / 4.5 / 20 — 27.55 / 4.5 / 50 — F3.0 / 38.5 (16)

F3.8 / 28.7 — 24.75 / 7.3 / 50 — 24.75 / 7.3 / 30 — 26.05 / 6.0 / 20 — 25.05 / 7.0 / 15 — 24.15 / 7.9 — 24.35 / 7.7 / 5 — 26.65 / 5.4 / 7 — 26.55 / 5.5 / 15 — 26.85 / 5.2 / 20 — 26.85 / 5.2 / 50 — F3.3 / 46.9 (25)

32.05

		Grade	Fill		
	+50	30.30	3.1	6.2	27.19
134	—	30.34	3.1	6.2	27.19
	+50 ½S=0.4	30.43	3.34	6.3	27.09
133	½S=.8	30.52	3.63	6.5	26.89
	+85 81 E.E.				
	+50 ½S=1.4	30.57	3.68	6.5	26.89
132	½S=1.4	30.59	3.80	6.6	26.79
	+76 Elec Pole 15' Rt.				
	+50 ½S=1.4	30.55	3.96	6.8	26.59
T.P.	4.92	33.39	3.58		28.47
131	½S=1.4	30.48	3.03	4.6	27.45
	5	32.05			

Lt

F1.7	27.39	27.39	28.59	27.99	27.69	27.09	27.19	26.69	27.69	28.29	27.59	26.69	26.79			
26.3	6.0	6.0	4.8	5.4	5.7	6.3	6.2	6.7	5.7	5.1	5.8	6.7	6.6	F2.0		
	50	29	27	20	15	13		15	20	24	35	40	50	26.0		
	27.19	27.39	29.09	28.39	28.29	27.19	27.19	26.79	26.79	28.99	28.09	26.59				
F1.4	6.2	6.0	4.3	5.0	5.1	6.2	6.2	6.6	6.6	4.4	5.3	6.8	F2.0			
26.6	50	30	28	20	15	13		15	20	23	33	39	26.3			
	27.19	27.49	28.79	27.79	27.79	27.29	27.09	26.59	28.89	28.89	27.39	26.69				
F2.4	6.2	5.9	4.6	5.6	5.6	6.1	6.3	6.8	4.5	4.5	6.0	6.7	F2.5			
27.2	50	31	28	20	15	13		15	20	24	30	50	26.9			
	27.09	27.19	28.39	27.89	27.59	26.89	26.89		26.89	28.39	26.79	26.79				
F3.5	6.3	6.2	5.0	5.5	5.8	6.5	6.5		6.5	5.0	6.6	6.6	F2.0			
28.4	50	31	28	20	15	13			15	20	30	50	26.5			
	27.09	27.19	28.69	28.59	26.89	26.89	26.79	27.69	28.59	26.69	26.79					
4.8	6.3	6.2	4.7	4.8	6.5	6.5	6.6	5.7	4.8	6.7	6.6	F1.6				
24.4	50	31	27	20	15		13	15	20	30	50	24.5				
	26.79	26.89	27.99	27.89	27.19	26.89	26.79	26.59	27.89	28.09	27.79	27.09	27.09			
F3.8	6.6	6.5	5.4	5.5	6.2	6.5	6.6	6.8	5.5	5.3	5.6	6.3	4.3	F2.5		
29.6	50	35	30	21	20	15		9	11	15	20	25	50	23.4		
	26.79	26.79	28.09	27.79	27.09	26.89	26.79	26.59	26.59	27.39	27.89	27.39	26.59	F2.5		
F5	6.6	6.6	5.3	5.1	6.3	6.5	6.6	6.8	6.8	5.0	5.5	6.0	6.8	27.0		
30.8	50	40	34	28	27	20	15		4	5	13	15	20	50		

33.39

Nail Tel. Pole #89546-H 32' Lt. of Sta. 131+64

	26.85	28.05	27.05	26.35	26.35	26.35	27.35	27.45	27.85	26.55	26.55	26.45				
F4.8	5.2	4.0	5.0	5.7	5.7	5.7	4.7	4.6	4.2	5.5	5.5	5.6	F2.6			
32.05 (15)	50	43	33	20	15	6	5		7	15	20	50	27.2			

32.05

+50		31.00	3.1	5.3	27.86
138		30.87	3.1	5.4	27.76
T.P. B.M. # 11	3.43	33.16	3.46		29.73
+50		30.75	3.0	5.6	27.79
137		30.62	3.1	5.9	27.49
+50		30.49	3.1	6.0	27.39
136		30.37	3.2	6.2	27.19
+50		30.32	3.3	6.4	26.99
135		30.29	3.2	6.3	27.09
		33.39			

Lt. ℄ Rt.

F26 26.9	28.36	28.46	28.76	28.46	28.36	27.66	27.86	27.76	28.06	27.86	27.36	F30 26.6		
	4.8 50	4.7 30	4.4 24	4.7 20	4.8 17	5.5 15	5.3	5.4 15	5.1 20	5.3 25	5.8 50			
F24 26.0	28.16	28.16	28.96	29.06	29.06	27.76	27.76	28.06	28.16	27.76	27.46	F30 26.3		
	5.0 50	5.0 28	4.2 24	4.1 20	4.1 18	5.4 15	5.4	5.1 15	5.0 20	5.4 25	5.7 50			
						33.16								
2 Nails Tel Pole # D-19217-T. 23' Lt. of Sta 137+69														
F24 26.3	28.09	28.39	28.39	27.59	27.79	27.29	27.29	28.49	28.29	27.79	F24 26.0			
	5.3 50	5.0 20	5.0 17	5.8 15	5.6	6.1 15	6.1 18	4.9 20	5.1 25	5.6 50				
F24 26.6	28.59	28.09	28.29	27.59	27.49	26.89	26.89	28.29	28.09	27.99	F23 26.0			
	4.8 50	5.3 20	5.1 15	5.8 13	5.9	6.5 15	6.5 18	5.1 20	3.3 23	5.7 50				
F21 26.3	28.69	28.29	28.19	27.39	27.39	26.89	28.09	28.09	27.79	F20 26.0				
	4.7 50	5.1 20	5.2 15	6.0 13	6.0	6.5 15	5.3 20	5.3 30	5.4 50					
F30 27.5	27.69	27.29	27.49	27.19	26.89	27.99	27.89	27.79	F22 26.0					
	5.7 50	6.1 20	5.9 15	6.2	6.5 15	5.4 20	5.5 30	5.6 50						
F17 25.0	27.39	27.59	29.09	28.99	28.39	27.19	26.99	26.79	27.39	27.89	28.09	26.69	26.49	F23 26.0
	6.0 50	5.8 29	4.3 27	4.4 20	5.0 15	6.2 13	6.4	6.6 15	6.0 20	5.5 30	5.3 50	6.7 33	7.0 50	
F17 25.1	27.29	27.39	28.99	28.19	27.79	27.19	27.09	26.79	28.29	28.69	27.79	26.09	F17 25.4	
	6.1 50	6.0 29	4.4 27	5.2 20	5.6 15	6.2 13	6.3	6.6 15	5.1 20	4.7 25	5.6 35	7.3 50		
						33.39								

143		32.10	3.6	4.7	28.46
	+50	32.00	3,5	4.7	28.46
142		31.87	3,2	4.5	28.66
	+50	31.75	3.6	5.0	28.16
141		31.62	3.5	5.1	28.06
	+50	31.50	3,4	5.1	28.06
140		31.38	3,2	5.0	28.16
	+50	31.25	3.4	5.4	27.76
139		31.13	3.5	5.6	27.56
		33.16			

Lt. Rt.

F3.5 27.8	28.96 4.2 50	29.16 4.0 24	28.96 4.2 20	28.46 4.7 15	28.46 4.7	28.26 4.9 15	29.86 3.3 20	30.56 2.6 23	30.56 2.6 50	F2.0 26.0		
F3.6 27.5	28.86 4.3 50	28.96 4.2 24	28.66 4.5 20	28.26 4.9 15	28.46 4.7	28.26 4.9 15	28.96 4.2 20	29.76 3.4 23	29.76 3.4 50	F2.2 26.9		
F3.0 27.5	28.56 4.6 50		28.76 4.4 20	28.46 4.7 15	28.66 4.5	28.56 4.6 15	28.46 4.7 20	29.16 4.0 25	29.16 4.0 50	F3.0 27.5		
F3.4 28.1	28.56 4.6 50	28.66 4.5 24	28.26 4.9 20	28.16 5.0 15	28.16 5.0	27.56 5.6 15	27.66 5.5 20	28.66 4.5 25	28.96 4.2 50	F2.8 28.4		
F3.7 27.5	28.66 4.5 50		28.46 4.7 20	28.26 4.5 15	28.06 5.1	27.66 5.5 15	27.66 5.5 20	27.96 5.2 25	27.96 5.2 50	F3.4 27.8		
F3.9 27.2		28.46 4.7 50	28.16 5.0 20	28.36 4.8 15	28.06 5.1	27.56 5.6 15	27.76 5.4 20	27.66 5.5 50		F3.8 27.8		
F2.4 26.0	28.46 4.7 50	28.46 4.7 27	28.96 4.2 23	28.76 4.4 20	28.06 5.1 15	28.16 5.0	27.76 5.8 15	27.66 5.5 20	27.96 5.2 25	27.76 5.4 50	F3.4 27.4	
F2.4 26.5	28.56 4.6 50	28.56 4.6 27	29.16 4.0 23	28.86 4.3 20	27.96 5.2 15	27.76 5.4	27.56 5.6 15	28.16 5.0 20	27.76 5.4 25	27.46 5.7 50	F3.5 27.2	
F2.4 26.6	28.46 4.7 50	28.46 4.7 28	28.96 4.2 24	28.46 4.7 20	27.86 5.3 15	27.56 5.4	27.56 5.6 15	27.96 5.2 20	27.76 5.7 25	27.16 6.0 50	F3.4 27.2	

33.16

				℄	
147		Grade 31.81	Fill 2.8	5.4	29.00
+50		31.83	2.9	5.5	28.90
146		31.89	3.1	5.6	28.80
+50		31.99	3.3	5.7	28.70
T.P.	4.12	34.40	2.88		30.28
145		32.10	3.4	4.5	28.66
+50		32.15	3.5	4.5	28.66
144		32.18	3.7	4.7	28.46
+50		32.16	3.6	4.6	28.56
		33.16			

Lt ℄ Rt

		29.30	29.50	29.00	29.00	29.00	29.00	29.00	29.20	30.60	30.60		
F2.3 / 26.3		5.1 / 50	4.9 / 20	5.4 / 15	5.4	5.4 / 15	5.4 / 18	5.2 / 20	3.8 / 24	3.8 / 50		F0.7 / 26.0	
	29.30	29.30	29.90	29.60	28.90	28.90	28.80	28.80	29.30	30.70	30.70		
F2.2 / 26.0	5.1 / 50	5.1 / 30	4.5 / 25	4.8 / 20	5.5 / 15	5.6	5.6 / 15	5.4 / 18	5.1 / 20	3.7 / 24	3.7 / 50	F1.0 / 26.3	
		29.30	29.30	28.80	28.80	28.70	28.70	29.80	30.40	30.40			
F2.7 / 26.6		5.1 / 50	5.1 / 20	5.6 / 15	5.4	5.7 / 15	5.7 / 18	4.6 / 20	4.0 / 24	4.0 / 50		F1.4 / 25.7	
	29.30	29.40	28.90	28.70	28.80	28.80	29.70	30.90	30.90				
F3.0 / 26.9	5.1 / 50	5.0 / 20	5.5 / 15	5.7	5.1 / 15	5.6 / 18	4.7 / 20	3.5 / 24	3.5 / 50		F1.4 / 26.3		

34.40

Nail Elec. Pole #79119 23' Rt. of Sta. 145+21

		29.06	29.06	28.86	28.66	28.76	28.76	29.16	30.86	30.86			
F3.0 / 26.6		4.1 / 50	4.1 / 20	4.3 / 15	4.5	4.4 / 15	4.4 / 18	4.0 / 20	2.3 / 24	2.3 / 50		F1.6 / 26.2	
	29.06	29.22	28.82	28.62	28.66	28.66	29.56	30.56	30.56				
F3.0 / 27.2	4.1 / 50	3.9 / 20	4.3 / 16	4.5	4.5 / 15	4.5 / 18	3.6 / 20	2.6 / 23	2.6 / 50		F1.7 / 26.3		
	29.06	29.06	28.66	28.46	28.46	29.46	30.56	30.56					
F3.4 / 27.7	4.1 / 50	4.1 / 20	4.5 / 15	4.7	4.5 / 15	3.7 / 20	2.6 / 23	2.4 / 50			F1.7 / 26.0		
	28.86	29.26	28.96	28.26	28.56	28.46	29.86	30.56	30.56				
F3.5 / 27.5	4.3 / 50	3.9 / 24	4.2 / 20	4.9 / 15	4.6	4.7 / 15	3.3 / 20	2.6 / 23	2.6 / 50		F2.0 / 28.0		

33.16

	+50	32.75 Grade	Fill 2.2	3.9	30.50	F1.6 25.7
151		32.67	2.2	4.0	30.40	F2.0 24.3 ③
	+50	32.50	2.4	4.3	30.10	F2.5 23.3 ②
150		32.37	2.5	4.5	29.90	F2.5 23.9 ②
	+50	32.25	2.5	4.7	29.70	F2.0 24.7 ①
149		32.17	2.4	4.7	29.70	F2.2 26.3
	+50	32.0	2.6	5.0	29.40	F2.4 26.3
148		31.90	2.6	5.1	29.30	F2.4 25.1
	+50	31.84 34.40	2.7	5.3	29.10	F2.2 26.0

Lt.

31.00	30.90	30.70	30.50	30.30	29.90	29.90	31.30	31.30			
3.4 50	3.5 20	3.7 15	3.9	4.1 15	4.5 20	4.5 23	3.1 25	3.1 50	F0.8 26.6		
30.00	30.30	30.40	30.40	30.10	30.00	29.90	31.20	31.20			
4.4 50	4.1 20	4.0 15	4.0	4.3 15	4.4 20	4.5 23	3.2 25	3.2 50	F1.0 26.0		
29.80	29.90	29.90	30.10	29.80	29.60	29.60	31.00	31.00			
4.6 50	4.5 20	4.5 15	4.3	4.6 15	4.8 20	4.8 22	3.4 24	3.4 50	F1.4 26.9		
29.50	29.50	29.80	30.10	29.90	29.90	29.40	29.40	30.80	30.80		
4.9 50	4.9 25	4.6 20	4.3 15	4.5	4.5 15	5.0 20	5.0 22	3.6 24	3.6 50	F1.4 26.5	
29.90	29.90	29.90	29.70	29.60	29.30	30.80	30.80				
4.5 50	4.5 20	4.5 15	4.7	4.8 15	5.1 20	3.6 24	3.6 50	F1.2 26.5			
29.80	29.80	30.10	29.70	29.40	29.30	30.90	30.90				
4.6 50	4.6 20	4.3 15	4.7	5.0 15	5.1 20	3.5 24	3.5 50	F0.8 26.6			
29.60	30.00	29.70	29.50	29.40	29.20	29.00	30.70	30.70			
4.8 50	4.8 30	4.4 23	4.7 20	4.9 15	5.0	5.2 15	5.4 20	3.7 24	3.7 50	F1.4 26.6	
29.80	29.80	30.20	29.90	29.30	29.30	29.20	29.00	30.60	30.60		
4.6 50	4.7 30	4.2 23	4.5 20	5.1 15	5.1	5.2 15	5.4 20	3.8 23	3.8 50	F0.5 25.7	
29.60	29.70	30.10	29.60	29.10	29.10	29.10	29.20	30.60	30.60		
4.8 50	4.7 30	4.3 25	4.8 20	5.3 15	5.3	5.3 15	5.2 20	3.8 23	3.8 50	F0.8 25.7	

34.40

℄ Lt. ℄ Rt.

Grade Fill

B.M. #12	6.36	37.74	4.16	31.38 = 31.37 City
+78.43	B.C.	Lt.		
+50	½S=0.7	33.50	2.2	
154	″	33.37	2.5	
+50		33.25	2.3	
153		33.12	2.3	
+50		33.00	2.4	
152		32.87	2.4	
T.P.	4.12	35.54	2.98	31.42
		34.40		

B.P. Mon. 26.5' Lt. of Sta. 154+22

	30.94	31.54	31.34	31.34	31.34	30.94	31.54	31.54	31.54		
F1.2 25.1	4.6	4.0 25	4.2 20	4.2 15	4.2	4.6 15	4.0 17	4.0 20	4.0 50	F21 26.3	
	31.04	30.64	31.04	30.94	30.94	31.14	30.14	30.14	30.94	31.54	31.54
F2.4 26.3	4.5 50	4.9 25	4.5 20	4.6 15	4.6	4.4 13	5.4 15	5.4 17	4.6 20	4.0 21	4.0 50
		31.54	31.54	31.34	30.94	30.64	29.84	29.74	31.04	31.04	F20
F2.0 24.1 (21)		4.0 50	4.0 20	4.2 15	4.6	4.9 15	5.7 17	5.8 20	4.5 25	4.5 50	F16 27.0
		31.54	31.54	31.24	30.84	30.64	29.24	29.24	29.34	31.34	31.34
F1.5 26.3 (6)		4.0 50	4.0 20	4.3 15	4.7	4.9 15	6.3 18	6.3 20	6.2 22	4.2 25	F13 26.9 4.2 50
		31.54	31.44	30.94	30.64	30.54	30.54	29.14	29.14	31.44	31.44
F2.2 49.7 (29)		4.0 50	4.1 20	4.6 15	4.9	5.0 15	5.0 17	6.4 20	6.4 23	4.1 26	F17 26.9 4.1 50
		31.34	31.14	30.74	30.54	30.34	30.04	29.44	29.44	31.44	31.44
F1.7 26.6		4.2 50	4.4 20	4.8 15	5.0	5.2 15	5.5 19	6.1 20	6.1 23	4.1 25	F10 26.6 4.1 50

35.54

Nail Tel Pole #87894-H. 24' Lt. of Sta 151+82

		℄	℄ Grade	
	18+59 E.e			
159		½S=1.0	34.62	F1.9
	+50	½S=1.4	34.50	F1.9
158		½S=1.4	34.37	F1.7
	+67 Tel Guy Pole #301485-H. 21' Rt			
	+67 Tel Pole #D-19230-T. 12.5 Lt.			
	+50	½S=1.4	34.25	F1.5
	+28 Ele Pole #79128 21' Rt			
157		½S=1.4	34.12	F1.4
	+50	½S=1.4	34.00	F1.6
156		½S=1.4	33.87	F1.6
	+50	½S=1.4	33.75	F1.5
155		½S=1.0	33.62	F1.8

37.74

	Lt.								Rt.		
	30.94	30.94	31.94	32.74	32.74	32.84	32.84	32.74			
F1.3 24.5	6.8 50	6.8 30	5.8 20	5.0 15	5.0	4.9 15	4.9 20	5.0 50		F2.2 24.9	(3)
	31.14	31.04	31.84	32.34	32.64	32.84	33.14	32.94			
F1.7 24.7	6.6 50	6.7 30	5.9 20	5.4 15	5.1	4.9 15	4.6 20	4.8 50		F2.5 26.2	(4)
	31.24	31.34	32.44	32.74	32.64	32.94	32.74	32.74			
F1.5 23.3	6.5 50	6.4 25	5.3 20	5.0 15	5.1	4.8 15	5.0 20	5.0 50		F2.5 27.2	
	31.14	31.14	33.14	32.54	32.74	32.84	32.84	32.74			
F1.7 25.0	6.6 50	6.6 20	4.6 15	5.2 11	5.0	4.9 15	4.9 20	5.0 50		F2.4 27.0	
	31.14	31.24	32.94	32.44	32.44	32.74	32.74	33.34	32.74	32.44	
Gr 23.3	6.6 50	6.5 26	4.8 23	5.3 20	5.3 15	5.0	5.0 15	4.4 20	5.0 25	5.3	3.7 26.0
	30.94	30.94	31.94	32.14	32.24	32.44	32.64	32.24	32.24		
F07 28.9	6.8 50	6.8 33	5.8 30	5.6 20	5.5 15	5.3	5.1 15	5.5 20	5.5 50		F2.7 27.2
	30.94	31.14	32.54	32.04	32.04	32.24	32.24	32.24	32.24		
Gr 28.8 10	6.8 50	6.6 38	5.2 33	5.7 20	5.7 15	5.5	5.5 15	5.5 20	5.5 50		F3.0 27.2
	30.94	31.04	32.34	32.04	32.04	32.24	32.04	32.04	32.04		
C07 33.0 (15)	6.8 50	4.7 40	5.4 37	5.7 20	5.7 15	5.5	5.7 15	5.7 20	5.7 50		F2.6 27.0
	30.84	30.94	32.14	31.74	31.74	31.84	31.64	31.84	31.64	31.64	
C03 29.0 (10)	6.9 50	6.8 37	5.6 34	4.0 20	4.0 15	5.9	6.1 11	5.9 15	6.1 20	6.1 50	F2.5 26.9

37.74

163			½S=1.4	35.62	F2.0
	+67	Elec Pole #J9181	19' Rt		
	+66	Tel Pole #82317-H.	19' Lt		
	+50		½S=1.4	35.50	F2.1
162			½S 1.4	35.37	F2.5
	+50		½S=1.0	35.25	F2.6
	+29 12	B.C. Rt.			
161			½S 0.7	35.12	F2.5
T.P	4.02	37.87	3.89		33.85
	+50		0.2	35.00	F2.6
160			½S=0.2	34.87	F2.5
	+50		½S=0.7	34.75	F2.3
		37.74			

℄

Lt. ℄ Rt.

	30.37	30.47	31.37	32.67	33.07	33.57	33.37	33.57	35.17	34.67	34.57			
F52	7.5	7.4	6.5	5.2	4.8	4.3	4.5	4.3	2.7	3.2	3.3	GR		
30.5	50	40	25	20	15		15	20	22	30	50	23.6		
	30.37	30.87	32.87	31.67	31.77	32.97	33.07	33.07	33.07	34.07	34.07			
F48	7.5	7.0	5.0	4.12	6.1	4.9	4.8	4.8	4.8	3.8	3.8		CGH	
38.1	50	35	23	20	15	12	15	17	20	50			25.4	
(12)														
	30.27	30.27	32.57	32.57	32.07	33.07	32.87	32.87	32.97	34.07	33.47	33.27		
F55	7.6	7.6	5.3	5.3	5.8	4.8	5.0	5.0	4.9	3.8	4.4	4.6	GR	
29.3	50	40	24	20	15	13		15	20	23	29	50	23.5	
	30.37	30.37	31.97	31.97	32.77	32.67	32.77	32.77	32.37	33.07	33.07			
F45	7.5	7.5	5.9	5.9	5.1	5.2	6.1	5.1	4.5	4.8	4.8	FOL		
29.0	50	35	20	15	13		15	20	22	26	50	24.3		
	30.77	30.77	32.37	32.37	32.67	32.67	32.67	32.67	32.67	33.27	33.07			
F34	7.1	7.1	5.5	5.5	5.2	5.2	5.2	5.2	5.2	4.6	4.8			
27.5	50	35	25	20	15		15	20	25	28	50	FOT		
						37.87						24.1		
												(4)		

Wall Elec. Pole 24.5' Rt. of Sta. 160+26

	30.64	30.64	32.24	32.34	32.44	32.44	32.44	32.74	33.04	33.04				
F28	7.1	7.1	5.5	5.4	5.1	5.3	5.3	5.0	4.7	4.7		F16		
26.9	50	35	25	20	15		15	20	25	50		24.0		
												(3)		
	30.74	30.74	31.64	32.34	32.34	32.34	32.34	32.54	33.14	33.14				
F25	7.0	7.0	6.1	5.4	5.4	5.4	5.4	5.2	4.6	4.6		E18		
25.2	50	35	28	20	15		15	20	25	50		24.6		
(4)												(2)		
	30.74	30.74	31.54	32.64	32.64	32.44	32.64	32.74	32.74					
F18	7.0	7.0	4.2	5.1	5.1	5.3	5.1	5.0	5.0			F2.7		
25.4	50	35	30	20	15		15	20	50			24.8		
						37.74						(3)		

			Grade ℄	
167			36.62	F1.6
+50		½S=0.2	36.50	F1.0
166		½S=0.7	36.37	6r
+73	Tel Pole 5' Lt.			
+68.85	E.C.			
+50		½S=0.9	36.25	C0.5
165		½S=1.4	36.12	C0.5
+50		½S=1.4	36.00	C0.2
BM. #13.	3.47	40.84	0.50	37.37
+22	Tel Pole 8' Lt.			
164		½S=1.4	35.87	F1.2
+50		½S=1.4	35.75	F1.7

37.87

	Lt.					℄				Rt.		
			32.54		33.74		35.14	35.04	35.14	35.54	36.24	36.84
F31 41.0 (30)			8.3	7.1 20	5.7 15	5.8	5.7 15	5.3 20		4.6 30	4.0 50	F1.0 25.1
	31.84	34.54	34.54	35.34	36.34	35.64	35.54	35.54	36.64	37.34		
F27 26.7	9.0 50	6.3 20	6.3 15	5.5 11	4.5 8	5.2 7	5.3	5.2 15	5.0 20	4.2 30	3.5 50	C03 29.0 (10)
	31.54	33.64	34.34	34.74	36.34	36.34	36.34	36.44	37.74	38.34		
F30 27.0	9.3 50	7.2 30	6.5 20	6.1 15	4.5 7	4.5	4.5 15	4.4 20	3.1 30	2.5 50		C23 34.0 (5)
		30.94	34.44	34.74	35.84	36.74	36.54	36.54	36.84	37.94	37.24	
F32 27.0		9.9 50	6.4 20	6.1 15	5.0 7	4.1	4.3 15	4.3 20	4.0 28	2.9 30	1.6 50	C16 29.4 (10)
	30.84	31.14	34.44	34.84	35.54	36.64	36.54	36.54	36.64	38.04	39.34	
F38 28.4	10.0 50	9.7 40	6.4 20	6.0 15	5.3 11	4.2	4.3 15	4.3 20	4.2 23	2.8 24	1.5 50	
		31.04	31.04	33.64	33.64	36.14	35.84	35.74	35.74	35.74	37.24	38.54
F12 25.0		9.8 50	9.8 30	7.2 20	7.2 15	4.7 4	5.0	5.1 15	5.1 20	5.1 23	3.6 24	2.3 50

40.84

3 Nails Elec Pole # 79132 28.5' Rt. of Sta. 1647.21

	30.57	30.87	32.37	33.47	34.67	34.67	34.67	34.77	36.47	37.27	37.47	
F38 29.0	7.3 50	7.0 20	5.5 15	4.4 6	3.2 3	3.2	3.2 15	3.1 20	1.4 30	0.4 35	0.4 50	C25 32.3 (12)
	30.57	30.57	31.57	32.97	33.87	34.07	34.07	34.07	34.87	36.07	35.77	35.77
E50 30.5	7.3 50	7.3 30	6.3 20	4.9 15	4.0 7	3.8	3.8 15	3.8 20	3.0 23	1.8 26	2.1 36	2.1 50	C10 25.0

37.87

			℄ Grade	℄	
171		F2.14	37.67	5.4	35.48
	+75 Tel Pole 16' Lt.				
	+50	F2.12	37.50	5.7	35.38
170		F2.29	37.37	6.0	35.08
	+50	F2.17	37.25	6.0	35.08
T.P.	5:47	41.08	5:23		35.61
169		F2.38	37.17	6.1	34.74
	+50	F2.36	37.00	6.2	34.64
168		F2.53	36.87	6.5	34.34
	+81 Tel Pole 15' Lt.				
	+50	F2.31	36.75	6.4	34.44
		40.84			

Lt

F2.7 / 27.0	34.48	6.6 50	34.88	6.2 20	35.38	5.5 15	35.48	5.4	35.48	5.4 15	35.48	5.6 20	F1.9 / 26.3
F3.2 / 27.0	34.08	7.0 50	34.88	6.2 20	35.88	5.2 15	35.38	5.7	35.28	5.8 15	35.28	5.8 20	F1.6 / 26.3
F3.6 / 28.1	32.58	8.5 50	33.98	7.1 20	35.48	5.6 15	35.08	6.0	35.08	6.0 15	35.08	6.0 20	F2.0 / 26.3
F2.8 / 27.0	32.18	8.9 50	32.28	8.8 40	33.98	7.1 35	34.48	6.6 20	34.98	6.1 15	35.08	6.0	F1.7 / 26.0

41.08

Nail Tel Pole # 87899-H, 15' Lt. of Sta 169+19

F3.4 / 27.0	32.94	7.1 50	33.14	7.4 25	34.64	6.2 20	34.64	6.2 15	34.74	6.1	34.94	5.9 15	F1.8 / 26.3
F3.5 / 27.5	32.64	8.2 50	32.64	8.2 35	34.04	4.8 20	34.64	6.2 15	34.64	6.2	34.84	6.0 15	F1.9 / 26.3
F3.3 / 27.8	33.74	7.1 50			33.54	7.3 20	33.84	7.0 15	34.34	6.5	34.74	6.1 15	F2.4 / 26.0
F3.2 / 27.5	32.14	8.7 50	33.84	7.0 40	33.94	4.9 20	34.14	6.7 15	34.44	6.4	34.74	6.1 15	F1.8 / 26.0

40.84

			Grade ℄	℄	
175		C1.02	41.65	7.5	42.67
T.P.	11.87	50.17	2.78		38.30
+50		C0.6	40.92	0.1	40.98
174		F0.91	40.19	1.8	39.28
+75	Tel Pole 16' Lt.				
+50		F1.73	39.51	3.3	37.78
173		F2.05	38.93	4.2	36.88
+50		F1.87	38.45	4.5	36.58
+20	Tel. Pole 15.5' Lt.				
172		F2.10	38.08	5.1	35.98
+50		F2.12	37.80	5.4	35.68
		41.08			

Lt. | ℄ | Rt.

39.37 | 41.07 | 41.07 | 42.17 | 42.67 | 42.17 | 42.77 | 42.17 | 44.17 | 45.87 | 46.07

F0.2 / 23.7: 10.8 (50) | 9.1 (25) | 8.2 (20) | 8.0 (15) | 7.5 | 7.4 (15) | 7.4 (20) | 6.0 (21) | 4.3 (30) | 4.1 (50) | C 2.8 / 24.2

50.17

Nail Tel Pole # 305 605 H. 16' Lt of Sta 173+75

33.08 | 39.18 | 40.28 | 40.28 | 40.98 | 41.28 | 41.28 | 41.28 | 42.48 | 43.38 | 43.48

F0.8 / 23.9: 3.0 (50) | 1.9 (25) | 0.8 (20) | 0.8 (15) | 0.1 | +0.2 (15) | +0.2 (20) | +0.7 (21) | +1.4 (23) | +2.3 (30) | +2.4 (50) | C2.7 / 23.8

37.18 | 37.48 | 38.28 | 38.48 | 37.28 | 39.38 | 39.38 | 40.18 | 40.78 | 40.88 | C0.2 / 24.2

F2.6 / 25.4: 3.9 (50) | 3.6 (25) | 2.8 (20) | 2.6 (15) | 1.8 | 1.7 (15) | 1.7 (20) | 0.9 (24) | 0.3 (34) | 0.2 (50)

35.58 | 36.38 | 36.88 | 37.78 | 37.98 | 38.08 | 38.08 | 38.38 | 38.28

F3.4 / 27.8: 5.5 (50) | 4.7 (20) | 4.2 (15) | 3.3 | 3.1 (15) | 3.0 (20) | 3.0 (24) | 2.7 (34) | 2.8 (50) | F1.8 / 25.4

35.58 | 35.78 | 36.08 | 36.88 | 37.08 | 37.08 | 37.58 | 37.58

F3.7 / 27.8: 5.5 (50) | 5.3 (20) | 5.0 (15) | 4.2 | 4.0 (15) | 4.0 (20) | 4.0 (24) | 3.5 (34) | 3.5 (50) | F2.0 / 26.3

35.48 | 35.88 | 35.98 | 36.58 | 36.58 | 36.58 | 36.58 | 37.08 | 36.98

F2.9 / 27.7: 5.6 (50) | 5.2 (20) | 5.1 (15) | 4.5 | 4.5 (15) | 4.5 (20) | 4.5 (24) | 4.0 (30) | 4.1 (50) | F1.6 / 26.0

35.08 | 35.58 | 36.08 | 35.98 | 36.18 | 36.18 | 36.18 | 36.88 | 36.88

F2.6 / 27.0: 6.0 (50) | 5.5 (20) | 5.0 (15) | 5.1 | 4.9 (15) | 4.9 (20) | 4.9 (26) | 4.2 (32) | 4.2 (50) | F2.2 / 26.0

34.78 | 35.28 | 35.88 | 35.68 | 35.68 | 35.68 | 35.68 | 34.28 | 34.28

F2.7 / 27.0: 6.3 (50) | 5.8 (20) | 5.2 (15) | 5.4 | 5.4 (15) | 5.4 (20) | 5.4 (31) | 6.8 (33) | 6.8 (50) | F2.1 / 26.3

41.08

	46.17 45 30 .87		℄		
T.P.	4.89	52.32	2.74		47.43
179	½S=14	F0.35	47.44	3.1	47.07
+50	½S=1.0	F0.1	46.76	3.5	46.67
+46 04	B.C. Rt				
178	½S=0.5	C0.44	46.03	3.7	46.47
+67	Tel Pole 19' Lt.				
+50	½S=0	C0.87	45.30	4.0	46.17
+33	Elec Guy Pole 12' Lt				
177		C1.3	44.54	4.3	45.87
+50		C1.53	43.84	4.8	45.37
176.		C1.46	43.11	5.6	44.57
+75	Tel Pole 18' Lt.				
50		C1.54	42.38	6.2	43.97
		50.17			

	Lt					℄					Rt				
	37.17														
F10.6 38.6	13.0 50	11.2 23	10.0 20	7.1 15	3.9 10	3.1	3.1 15	3.1 20	3.7 28	6.3 31	5.3 50	C0.9 27.0 (8)			
	37.97	38.67	40.17	42.47	44.37	46.67	46.67	46.67	46.57	44.17	44.97				
F9.4 36.8	12.2 50	11.5 26	10.0 20	6.7 15	3.8 10	3.5	3.5 15	3.5 20	3.6 24	6.0 26	5.2 50	C0.9 24.0			
	38.67	39.87	40.47	43.47	45.87	46.47	46.67	46.67	46.57	44.17	45.17				
F7.2 33.5	11.5 50	10.3 24	9.5 20	6.7 15	4.3 12	3.7	3.5 15	3.5 20	3.6 23	6.0 26	5.0 50	C0.9 24.3			
	38.27	40.57	41.77	43.67	45.67	46.17	46.37	46.27	46.17	44.47	45.47				
F6.7 29.6	11.9 50	9.6 27	8.4 20	8.9 18	4.5 15	4.5 12	4.0	3.8 15	3.9 20	4.0 23	5.7 25	4.7 50	C0.7 24.0		
	40.27	42.07	42.97	43.07	45.57	45.87	45.97	45.77	45.97	46.37					
F2.5 25.4	9.9 50	8.1 25	7.2 20	7.1 15	4.6 12	4.3	7.2 15	4.4 20	4.2 25	3.8 50		C1.0 24.2			
	40.77	42.77	43.67	43.87	45.17	45.37	45.57	45.37	45.37	46.57	47.07				
F0.3 23.0	9.4 50	7.4 25	6.5 20	6.3 15	5.0 13	4.8	4.6 15	4.8 20	4.8 24	3.6 26	3.1 50	C2.2 24.5			
	40.77		43.17	44.17	44.57		45.07	45.57	47.47						
F0.2 23.4	9.4 50		7.0 20	6.0 15	5.6		5.1 15	4.4 20	2.3 50			C3.5 35.2 (15)			
	40.17	42.17	42.87	43.37	43.97		44.07	44.07	45.47	46.27	47.07				
GR 23.8	10.0 50	8.0 27	7.3 20	6.8 15	6.2		4.1 15	6.1 20	4.7 22	3.5 30	3.1 50	C3.8 24.8			

50.17

			℄		
+44	under bridge		11.3	41.0.2	
+32	under bridge		11.7	40.62	
+31			11.4	40.72	
+23			5.7	46.62	
		+ or −			
180	½S=1.4	F0.32	47.94	4.7	47.62
+85				4.7	47.62
+80.90 = existing 18" cmt. Pipe Culvert.					
+75				4.7	47.62
+74	Elec Guy Pole 16.5' Lt.				
+50	½S=1.4	F0.5	47.80	5.0	47.32
179+45	Tel Pole 21' Lt.				

52.32

Lt.										Rt.
37.82	40.22	40.52	41.02	41.72	41.92	43.32				
14.5 / 5.0	12.1 / 20	11.8 / 15	11.3	10.4 / 15	10.4 / 20	9.0 / 50				
38.12	39.32	39.92	40.62	41.62	41.82	43.52				
14.2 / 5.0	13.0 / 20	12.4 / 15	11.7	10.7 / 15	10.5 / 20	8.8 / 50				
38.12	39.32	39.92	40.72	41.42	48.02	48.32	48.12			
14.2 / 5.0	13.0 / 20	12.4 / 15	11.6	10.7 / 10	4.3 / 15	4.0 / 20	4.2 / 50			
42.82	45.32	45.82	46.62	47.92	48.02	48.32				
9.5 / 50	7.0 / 20	6.5 / 15	5.7	4.4 / 15	4.3 / 20	4.0 / 50				
42.62	46.02	46.32	47.62	48.12	48.12	48.62				
8.7 / 50	6.3 / 20	6.0 / 15	4.7	4.2 / 15	4.2 / 20	3.7 / 50				
F42 / 31.1 ⑧										
39.72	40.32	45.72	46.82	47.62	48.02	48.02	47.92	48.62		
12.6 / 50	12.0 / 40	6.6 / 20	5.5 / 15	4.7	4.3 / 15	4.3 / 20	4.4 / 38	3.7 / 50		
42.82										
9.5 / 25										
outlet										
37.72	41.42	43.52	45.82	46.72	47.62	47.62	47.62	47.62	47.82	45.32	45.52	
12.6 / 50	10.9 / 25	8.8 / 20	6.5 / 15	5.6 / 13	4.7	4.7 / 15	4.7 / 20	4.5 / 38	7.0 / 41	6.8 / 50		
38.92	40.12	41.02	43.92	47.02	47.32	47.42	47.52	47.62	45.12	44.72		
F10.2 / 38.0	13.4 / 50	12.2 / 23	11.3 / 20	8.4 / 15	5.3 / 10	5.0	4.9 / 15	4.8 / 20	4.7 / 33	7.2 / 37	7.4 / 50	C1.2 / 33.0 ⑭

52.32

4a Inlet.

183		½S=0.2	44.86	F7.44	11.6	37.42
	+50	½S=.7	45.55	F8.13	11.6	37.42
	+32.5	E.C.				
182		½S=1.2	46.24	F8.22	11.0	38.02
	+50	½S=1.4	46.93	F8.91	11.0	38.02
BM #14.		1.33	49.02		4.63	47.69
181		½S=1.4	47.50	F8.68	13.5	38.82
	+75				12.7	39.62
	+62	Tel Pole	13' Rt.			
	+50	½S=1.4	47.84	F5.0	9.5	42.82
	+46				10.0	42.32
			52.32			

24

F8.6 / 35.3	36.02	36.82	37.02	37.42	37.42	38.02	38.02	40.22	43.62	F6.2		
	13.0	12.2	12.0	11.6	11.0	11.6	8.8	5.4	33.0			
	50	20	15		15	20	4	50				
F9.8 / 37.4	36.02	36.62	36.82	37.42	37.62	37.82	39.62	44.32	44.32	F6.0		
	13.0	12.4	12.2	11.6	11.4	11.2	9.4	4.7	4.7	33.0		
	50	20	15		15	20	39	47	50			
F11.0 / 39.0	36.02	37.02	37.22	38.02	38.22	38.42	40.72	44.72	44.72	F5.8		
	13.0	12.0	11.8	11.0	10.8	10.1	8.3	4.3	4.3	31.4		
	50	20	15		15	20	35	42	50			
F11.8 / 40.4	36.02	36.92	37.32	38.02	39.02	39.52	40.42	45.72	45.82	F2.4		
	13.0	12.1	11.7	11.0	10.0	9.5	8.6	3.3	3.2	30.5		
	50	20	15		15	20	26	37	50			
			49.02									

3. Nails in Large Cypress Tree 55' Rt. of Sta 180+55

F11.4 / 40.1	36.72	37.52	37.72	38.82	40.32	41.72	46.62	46.82	GR			
	15.4	14.8	14.4	13.5	12.0	10.6	5.7	5.5	28.4			
	50	20	15		15	20	29	50				
	37.82	38.52	38.72	39.62	40.62	44.32	46.52	47.42	47.22			
	14.5	13.8	13.6	12.7	11.7	8.0	5.8	4.9	5.1			
	50	20	15		10	15	20	23	50			
38.52	38.62	40.52	41.12	42.82	43.82	46.92	48.02	48.02	47.22			
13.8	13.7	11.8	11.2	9.5	8.5	5.4	4.3	4.3	5.0			
50	35		15		7	15	20	46	50			
38.32	41.22	41.52	42.32	42.32	48.12	48.12	48.02	47.32				
14.0	11.1	10.8	10.0	10.0	4.2	4.2	4.3	5.0				
50	20	15		12	15	20	46	50				
			52.32									

187		½S=1.4	40.58	F1.61	5.1	38.97
	+54	Tel Pole 3' Lt.				
	+50	½S=1.4	40.71	F2.04	5.4	38.67
186		½S=1.4	41.01	F3.84	5.9	38.17
	+50	½S=1.4	41.41	F3.59	6.2	37.87
T.P.		2.63	44.07	7.58		41.44
185		½S=1.4	42.07	F4.35	11.3	37.72
	+50	½S=1.0	42.79	F4.77	11.0	38.02
	+45	B.C. Lt.				
184		½S=0.5	43.48	F5.66	11.2	37.82
	+50	00	44.17	F6.45	11.3	37.72
			49.02			

Nail in Elec Pole Pole #79143.

	37.67	38.07	38.17	38.97	39.27	39.27	39.37	40.17	41.97	42.07
F1.4	6.4	6.0	5.6	5.1	4.8	4.8	4.7	3.9	2.7	2.0
25.1	50	20	15		15	20	26	30	36	50

	37.47	37.77	37.87	38.67	39.07	39.27	39.27	39.57	40.47	42.07
F2.2 F2.8	6.6	6.3	6.2	5.4	5.0	4.8	4.8	4.5	3.6	2.0
26.3	50	20	15		7	15	20	36	39	50

	37.37	37.67	37.67	38.17	39.37	39.37	39.67	40.27		
F1.8	6.7	6.4	6.4	5.9	4.7	4.7	4.4	3.8	F1.6	
25.7	50	20	15		15	20	45	50	47.3	

	37.27	37.67	37.77	37.87	38.47	39.07	39.47	39.87		
F2.5	6.8	6.4	6.3	6.2	5.6	5.0	4.6	4.2	F2.7	
26.6	50	20	15		15	20	27	50	25.5	

44.07

	37.22	37.52	37.52	37.72	37.92	37.92	38.62	40.02		
F3.3	11.8	11.5	11.5	11.3	11.1	11.1	10.4	9.0	F3.8	
27.8	50	20	15		15	20	26	50	30.8	

	36.92	37.22	37.32	38.02	38.32	38.42	37.62	41.02		
F4.6	12.1	11.8	11.7	11.0	10.7	10.6	9.4	8.0	F4.8	
31.1	50	20	15		15	20	40	50	30.2	

	36.52	37.22	37.22	37.82	38.12	38.12	38.12	40.12	41.02	
F6.3	12.5	11.8	11.8	11.2	10.9	10.9	8.9	8.0	F5.6	
32.0	50	20	15		15	20	48	59	31.7	

	36.52	37.12	37.32	37.72	38.02	38.02	39.52	42.02		
F7.6	12.5	11.9	11.7	11.3	11.0	11.0	9.5	7.0	F4.5	
33.8	50	20	15		15	20	45	50	30.0	

49.02

				℄	
	+50		42.60	F0.63	2.1	41.97
	+43	Tel Pole 21.5 Lt.				
191			42.34	F1.37	3.1	40.97
	+50		42.08	F1.91	3.8	40.27
190			41.82	F2.15	4.4	39.67
	+88	Elec Pole 20' Rt.				
	+61	Tel Pole 21' Lt.				
	+50	½S=00	41.56	F2.29	4.8	39.27
189		½S=0.5	41.30	F2.33	5.1	38.97
	+50	½S=1.0	41.04	F2.37	5.4	38.67
	+49 91	E.C.				
	+08	Tel Pole 20.5' Lt.				
188		½S=1.4	40.78	F1.71	5.0	39.07
	+50	½S=1.4	40.60	F1.53	5.0	39.07
			44.07			

	Lt.								Rt.		
F2.0 / 24.2	39.67	40.97	41.67	42.27	41.87	41.97	42.27	43.37	44.47	44.87	C2.0 / 23.6
	4.4 / 50	3.1 / 25	2.4 / 20	1.8 / 15	2.2 / 12	2.1	1.8 / 15	0.7 / 20	+0.4 / 24	+0.8 / 50	
F2.4 / 25.7	39.07	40.17	40.97	40.97	40.97	41.17	41.77	43.67	43.97		C1.2 / 23.6
	5.0 / 50	3.9 / 20	3.1 / 15	3.1	2.9 / 15	2.3 / 20	0.4 / 24	0.1 / 50			
F3.0 / 26.6	38.57	39.77	40.07	40.27	40.07	40.87	42.17	43.07			C0.8 / 24.2
	5.5 / 50	4.3 / 20	4.0 / 15	3.8	4.0 / 15	3.2 / 20	1.4 / 24	1.0 / 50			
F2.8 / 26.3	38.47	39.37	39.77	39.67	39.87	40.77	42.07	42.27			C0.5 / 24.5
	5.6 / 50	4.7 / 20	4.3 / 15	4.4	4.2 / 15	3.3 / 20	2.0 / 24	1.8 / 50			
F2.6 / 26.6	38.17	39.07	39.07	39.57	39.27	39.47	40.37	41.47	42.27		C.5 / 24.8
	5.9 / 50	5.0 / 20	5.0 / 15	4.5 / 13	4.8	4.6 / 15	3.7 / 20	2.6 / 25	1.8 / 50		
F1.5 / 25.7	38.27	38.97	38.97	38.97	38.97	39.27	40.37	41.57	41.97		C1 / 24.9
	5.8 / 50	5.1 / 20	5.1 / 15	5.1	4.8 / 15	3.7 / 20	2.5 / 24	2.1 / 50			
F1.2 / 24.8	38.37	38.77	38.77	38.67	38.97	39.07	39.97	41.37	41.57		F0.6 / 26.0
	5.7 / 50	5.3 / 20	5.3 / 15	5.4	5.1 / 15	5.0 / 18	4.1 / 20	2.7 / 23	2.5 / 50		
C1 / 23.6	37.97	38.67	38.47	39.07	39.07	39.07	41.57	41.67			F0.3 / 25.7
	4.1 / 50	5.4 / 20	5.6 / 15	5.0	5.0 / 15	5.0 / 20	2.5 / 24	2.4 / 50			
F0.8 / 24.0	37.87	38.47	38.57	39.07	39.17	39.17	39.17	41.47	41.87		(24) F0.7 / 26.9
	6.2 / 50	5.6 / 20	5.5 / 15	5.0	4.9 / 15	4.9 / 20	4.9 / 22	2.6 / 30	2.2 / 50		

44.07

Sta.	Plus	Remarks			¢	
	+39	Elec Pole 21.5′ Rt.				
195			44.42	C1.51	6.8	45.93
	+86	Tel Pole 21.5′ Lt.				
	+50		44.16	C1.57	7.0	45.73
194			43.90	C1.73	7.1	45.63
	+50		43.64	C1.27	7.8	44.93
	+06	Tel Pole 21′ Rt.				
193			43.38	C0.85	8.5	44.23
	+88	Elec Pole 22′ Rt				
	+50		43.12	C0.61	9.0	43.73
192			42.86	C0.07	9.8	42.93
BM #15	10.63	52.73	1.97			42.10
		44.07				

	Lt					¢			Rt.			
C0.3 / 24.1	41.63 — 11.1 / 50	42.63 — 10.1 / 32	44.23 — 8.5 / 26	45.53 — 7.2 / 20	45.93 — 6.8 / 15	45.93 — 6.8	45.83 — 6.9 / 15	47.73 — 5.0 / 18	49.03 — 3.7 / 20	50.03 — 2.7 / 24	50.43 — 2.3 / 50	C5.6 / 28.7
Gr / 23.7	41.33 — 11.4 / 50	42.63 — 10.1 / 30	44.13 — 8.6 / 25	44.53 — 8.2 / 20	45.73 — 7.0 / 15	45.73 — 7.0	46.13 — 6.6 / 15	48.03 — 4.7 / 20	49.73 — 3.0 / 24		50.33 — 2.4 / 50	C5.6 / 28.6
F1.1 / 23.7	41.33 — 11.4 / 50	42.93 — 9.8 / 27	44.23 — 8.5 / 20	45.13 — 7.6 / 15		45.63 — 7.1	45.83 — 6.9 / 15	47.63 — 5.1 / 20	49.43 — 3.3 / 24		49.73 — 3.0 / 50	C5.5 / 28.6
F0.6 / 23.6	41.33 — 11.4 / 50	42.73 — 10.0 / 27	43.83 — 8.9 / 20	44.63 — 8.1 / 15		44.93 — 7.8	45.13 — 7.6 / 15	45.13 — 7.6 / 17	46.73 — 6.0 / 20	48.53 — 4.2 / 24	48.73 — 4.0 / 50	C5.0 / 27.2
C0.3 / 23.9	41.53 — 11.2 / 50	42.23 — 10.5 / 35	43.83 — 8.9 / 20	44.03 — 8.7 / 15		44.23 — 8.5	44.63 — 8.1 / 13	45.53 — 7.2 / 15	46.53 — 6.2 / 20	47.93 — 4.8 / 24	48.43 — 4.3 / 50	C4.6 / 27.2
	41.23 — 11.5 / 50 S. Side Barn	41.53 — 11.2 / 32	42.43 — 10.3 / 20	43.63 — 9.1 / 15		43.73 — 9.0	44.43 — 8.3 / 15	44.93 — 7.8 / 20	45.73 — 7.0 / 25	46.93 — 5.8 / 50		C1.9 / 24.4
F0.9 / 23.0	S. Side Barn	41.33 — 11.4 / 32	42.33 — 10.4 / 20	42.83 — 9.9 / 15		42.93 — 9.8	43.43 — 9.3 / 15	44.73 — 8.0 / 20	45.83 — 6.9 / 25	46.43 — 6.3 / 50		C2.8 / 25.0

52.73

3 Nails in Tel Pole #89354-H. 21.5′ Lt. of Sta 191+13

				¢	
199		46.87	F1.62	10.0	45.25
+50		46.33	F1.18	10.1	45.15
T.P.	10.13	55.25	7.61		45.12
+33	Elec Pole 22'.5 Rt.				
+29	Tel Pole 22' Lt.				
198		45.97	F0.44	7.2	45.53
+50		45.72	C0.11	6.9	45.83
197		45.46	C0.47	6.8	45.93
+76	Tel. Pole 21.5 Lt.				
+50		45.20	C0.53	7.0	45.73
196		44.94	C0.79	7.0	45.73
+50		44.68	C1.45	6.6	46.18
		52.73			

	Lt						¢			Rt			
F2.8/55.3 ④	42.05	42.55	44.15	44.35	44.65	45.05	45.25	45.55	45.95	46.85	47.75	48.65	
	13.2	12.7	11.1	10.9	10.6	10.2	10.0	9.7	9.3	8.4	7.5	6.6	C1.0
	50	28	25	20	15	13		15	18	20	24	50	24.2
F2.5/56.6	42.15	42.53	43.65	43.65	44.25	44.95	45.15	45.55	46.15	47.15	48.75	49.25	
	13.1	12.7	11.6	11.6	11.0	10.3	10.1	9.7	9.1	8.1	6.5	6.0	C1.5
	50	26	23	20	15	13		15	18	20	24	50	23.0

45.12 ? 55.25 a.s.k.

Nail Tel. Pole #306148-H. 22' Lt. of Sta 198+29

							¢						
F2.4/26.0	41.43	42.43	43.33	43.73	44.13	44.93	45.53	45.73	46.13	47.73	49.93	50.53	
	11.3	10.3	9.4	9.0	8.6	7.8	7.2	7.0	6.6	5.0	2.8	2.2	C3.3
	50	32	27	20	15	13		15	19	20	24	50	22.4 ④
F1.6/24.5	41.33	42.33	43.43	44.23	44.43	45.53	45.83	46.13	46.13	47.83	49.73	50.43	
	11.4	10.4	9.3	8.5	8.3	7.2	6.9	6.6	6.6	4.9	3.0	2.3	C3.6
	50	31	26	20	15	13		15	19	20	24	50	22.9 ④
F1.0/24.2	41.43	42.33	43.73	44.53	44.53	45.53	45.93	45.93	45.93	47.53	49.33	50.13	
	11.3	10.4	9.0	8.2	8.2	7.2	6.8	6.8	6.8	5.2	3.4	2.6	C4.5
	50	31	26	20	15	13		15	19	20	24	50	25.5
F1.6/23.9	41.43	42.33	43.63	44.13	44.53	45.43	45.73	45.83	45.83	47.33	49.33	49.93	
	11.3	10.4	9.1	8.6	8.2	7.3	7.0	6.9	6.9	5.4	3.4	2.8	C4.0
	50	31	26	20	15	13		15	18	20	24	50	25.4
F0.5/23.0	41.33	42.43	43.73	44.43	44.53	45.33	45.73	45.73	47.43	49.33		49.93	
	11.4	10.3	9.0	8.3	8.2	7.4	7.0	7.0	5.3	3.4		2.8	C4.4
	50	31	26	20	15	13		15	20	24		50	25.9
C0.3/23.9	41.43	42.73	44.73	45.43	45.73	46.13	45.83	47.43	48.23	49.73	50.33		
	11.3	10.0	8.0	7.3	7.0	6.6	6.9	5.3	4.5	3.0	2.4		C5.3
	50	30	25	20	15		15	17	20	24	50		27.5

52.73

203	½S=0.1	56.59	C 3.05	7.0	59.64 C1½ 36.0 (15)
+50	½S=0.3	55.19	C0.65	10.8	55.84
BM #16	11.86	66.64	0.47		54.78
+21.32	EC				
202	½S=0.5	53.77	F0.82	2.3	52.95
+50	½S=0.6	52.37	F1.92	4.8	50.45
201	½S=0.6	50.97	F2.72	7.0	48.25
+50	½S=0.4	49.66	F2.91	8.5	46.75
+46.16	B.C. Rt				
200	½S=0.2	48.54	F2.29	9.0	46.25
+50	½S=0	47.61	F2.06	9.7	45.55
		55.25			

Rt

54

Rd 40 wide

56.94 | 58.24 | 58.64 | 57.84 | 58.14 | 58.14 | 57.84 | 58.94 | 58.64 | 59.64 | 61.84 | 61.64 | 61.84 | 63.04

9.7 8.4 8.0 8.8 8.5 8.5 8.8 7.7 8.0 7.0 4.8 5.0 4.8 3.6
50 38 32 32 20 15 6 5 1 5 15 20 50

C5.7 30.4

C0.6 28.6 (10)

56.04 | 54.34 | 55.44 | 55.44 | 55.54 | 55.84 | 56.64 | 58.54 | 59.24 | 59.94 | 60.54

10.6 10.3 11.2 11.2 11.1 10.8 10.0 8.1 7.4 6.7 6.1
50 24 25 20 15 7 10 15 20 50

C5.1 29.8

66.64

R.P. Hub 35' Lt. of 202+21.32 EC.

F1.4 25.7

52.15 | 53.25 | 53.35 | 52.65 | 52.85 | 52.95 | 53.05 | 55.25 | 56.35 | 56.35 | 56.75

3.1 2.0 1.9 2.6 2.4 2.3 2.2 0.0 +1.1 +1.1 +1.5
50 32 21 20 15 11 15 17 20 50

C2.8 27.5

F2.2 26.1

48.05 | 49.35 | 50.85 | 50.15 | 50.85 | 50.25 | 50.45 | 50.85 | 50.25 | 50.25 | 52.45 | 53.45 | 54.05

7.2 5.9 4.4 5.1 4.4 5.0 4.8 4.4 5.0 5.0 3.0 2.8 1.8 1.2
50 33 28 20 16 15 10 13 15 16 20 22 50

C1.7 26.9

F4.0 26.1 (3)

45.45 | 46.65 | 47.75 | 47.45 | 48.25 | 48.25 | 48.85 | 48.05 | 47.95 | 49.35 | 50.55 | 51.25

9.8 8.6 7.5 7.8 7.0 7.0 6.4 7.2 7.3 5.9 4.7 4.0
50 30 25 20 15 13 15 18 20 24 50

C0.3 24.5

F5.P 26.3 (2)

44.25 | 44.25 | 45.55 | 45.75 | 46.65 | 46.75 | 47.45 | 47.45 | 47.45 | 48.55 | 49.25

11.0 10.6 9.7 9.5 8.6 8.5 7.8 7.4 7.4 6.7 6.0
50 28 25 20 15 15 20 22 25 50

F0.2 25.7

F 4.0 26.1 (3)

43.35 | 44.05 | 45.15 | 45.55 | 45.95 | 46.25 | 46.65 | 46.75 | 47.65 | 48.05

11.9 11.2 10.1 9.7 9.3 9.0 8.6 8.5 7.6 7.2
50 28 25 20 15 15 20 24 50

F0.5 24.8

F3.6 25.5 (3)

42.45 | 43.05 | 44.25 | 44.45 | 44.95 | 45.55 | 45.55 | 45.75 | 46.55 | 47.45 | 48.15

12.8 12.2 11.0 10.8 10.3 9.7 9.7 9.5 8.7 7.8 7.1
50 28 25 20 15 13 15 20 24 50

F0.6 23.2 (4)

55.25

				¢	
206		63.94		3.3	68.50
+51	Elec Pole 18' Lt.				
+50	½S=0.2	63.0		3.3	68.50
+35 51	BC				
205	½S0.1	62.0	C5.8	4.0	67.80
+50	½S=.1	60.8	C4.8	6.2	65.60
T.P	7.04	71.80	1.88		64.76
+35	P.C.				
204		59.4	C5.34	1.9	64.74
+11.	E. Pole of Transformer station			6.5' Lt. of ¢	
204					
+95	W. Pole of Transformer station			5' Lt. of ¢	
+50		58.00 46.64	C5.64	3.0	63.64

Lt. ¢ Rt.

	65.20 6.6/50	65.80 6.0/20	66.20 5.6/16	67.20 4.6/15	68.50 3.3	69.70 2.1/15	69.80 2.0/20	71.50 0.3/50					
	65.70 6.1/50	66.20 5.6/20	67.30 4.5/15	68.50 3.3	68.90 2.9/15	69.10 2.7/20	70.70 1.1/50						
	64.20 6.4/50	66.00 5.8/20	66.40 5.4/17	67.80 4.0/15	67.80 4.0	68.10 3.7/15	68.50 3.3/12?	69.80 2.0/50					
C3.6/49.6 (26)	64.20 7.6/50	64.20 7.6/20	65.20 6.6/15	65.60 6.2	66.70 5.1/15	66.80 5.0/20	68.40 3.4/50	C6.9/31.7					

71.80

Nail Tel Pole D-19259-T 46 Lt of Sta 204+35

C2.7/44.9 (22)	61.34 5.3/50	61.94 4.7/47	61.84 4.8/38	62.24 4.4/20	62.34 4.3/15	64.24 2.4/7	64.74 1.9	65.44 1.2/15	65.84 0.8/20	67.84 +1.2/50	C7.1/31.8		
C2.5/40. (18)	59.24 7.4/50	59.44 7.2/46	60.34 6.3/44	60.54 6.1/20	60.44 6.2/15	59.94 6.7/12	60.94 5.7/7	62.44 4.2/5	63.64 3.0	63.84 2.8/15	64.04 2.6/20	65.64 1.0/50	C6.7/31.4

66.64

Sta	+	H.I.	−	Elev	
BM1	8.51	72.89		64.38	
205		½S=0.1		62.0	C5.8
+50		½S=0.2		63.0	C5.3
206		½S=0.2		63.9.4	C3.6
+50		½S=0.2		64.7	C2.3
71+50		½S=0.2		65.2	C0.6
71				65.7	65.9
70+50				66.1	
B.M. #17			7.42	64.38	
206+50				5.0	66.80
		71.80			

11/21/19

Lt.	℄	Rt
		C7.9 / 49.8 (23)
C7.8 / 5.1		
68.3 / ↓		C7.6 / 49.6 (23)
67.5 / 5.4		C6.5 / 50.4 (25)
C7.0 / 5.9		C4.6 / 49.0 (26)
6.5.8 / 7.1		C2.6 / 26.4 (4)
C4.1 / 57.2 (29)		
C3.3 / 50.5 (27)		
C1.8 / 49.2 (27)		
Gr / 47.4 (27)		
F1.2 / 38.3 (20)		F1.2 / 33.3 (12)
C0.7 / 23.0 (5)		

{cross N. Side Iron Rim of Water Dept. Man Hole
{53.3' Rt of Sta 206+37

64+20	64+90	65+30	66.80	67.80	67.80	70.30
7.6	6.9	6.5	5.0	4.0	4.0	1.5
50	20	15		15	20	50.

Moore & Jason Northern
2-9-37

El.° of High Water Marks on Camino Del Rio, Flood of Feb. 6, 1937
Old Town to City Boundary

INDEXED

	1.75	16.04		14.29
3+50			2.4	13.64
8+50			1.8	14.24
14+50			1.4	14.64
23+50			1.0	15.04
27+50			0.7	15.34
T.P. Nail in Pole #79048	2.90	22.54		19.64
56+00			2.4	18.14
T.P. Nail in Pole #79044	4.09	22.75		18.66
66+00			3.0	19.75
T.P. Pole #79055	1.80	21.07		19.27
80+00			1.70	19.37
B.M. #6 USC&G	5.10	24.17		19.07
87+38 Concrete Detention Gate			2.3	21.87
B.M. #8	5.40	28.76		23.36
100+70			3.4	25.16
B.M. #9	3.90	28.83		24.93
112+50			3.3	25.53

Indexed
C.S.K.

57

Tel. Pole #89546	5.00	33.47		28.47
131+50			4.50	28.97
Tel. Pole 87894-H	4.30	35.77		31.42
151+00			3.80	31.97
B.M. #13	3.10	40.47		37.37
164+00			5.60	34.87
Tel. Pole #87899 H	4.80	40.41		35.61
170+00			5.0	35.41
El. Pole #79128	3.40	45.09		41.69
185+50			5.60	39.43
B.M. #15 #8935 X	3.50	45.60		42.10
191+00			6.10	39.50

2-7-36 Culvert Profiles #16

Station 126+90 on Radial Line

58

100' Lt.		6.7	W.9
70' Lt.		6.0	W6.6
35' Lt.		6.0	W6.6
31' Lt		4.9	W7.7
13' Lt		5.7	W6.9
7' Lt		6.7	W5.9
℄		5.8	W6.8
16' Rt		4.2	W8.4
35' Rt		3.9	W8.7
40' Rt		4.6	W8.0
60' Rt		5.1	W7.5
100' Rt. of ℄		3.8	W8.8
B.M. #10	4.68	32.58	2.7.90

Culvert Profiles #17

Sta 130+30

13+00			5.8	26.5
12+70			6.3	26.0
12+30			6.8	25.5
12+00			7.8	24.5
11+50			8.0	24.3
11+25			7.0	25.3
11+00			5.1	27.2
T.P.	6.0	32.3	5.50	26.30
10+00			5.5	26.3
9+00			5.4	26.4
8+00			5.2	26.6
7+00			5.2	26.6
6+00			4.8	27.0
5+00			5.0	26.8
T.P.	4.80	31.80	4.80	27.00
400' Lt.			4.8	27.0
300' Lt			4.9	26.9
200' Lt			5.4	26.4
100' Lt			5.2	26.6
50' Lt.			5.1	26.7
8' Lt.			4.6	27.2
℄			5.5	26.3
50' Rt			5.4	26.4
100' Rt. of ℄			5.2	26.6
B.M. Nail Pole	3.33	31.80		28.47

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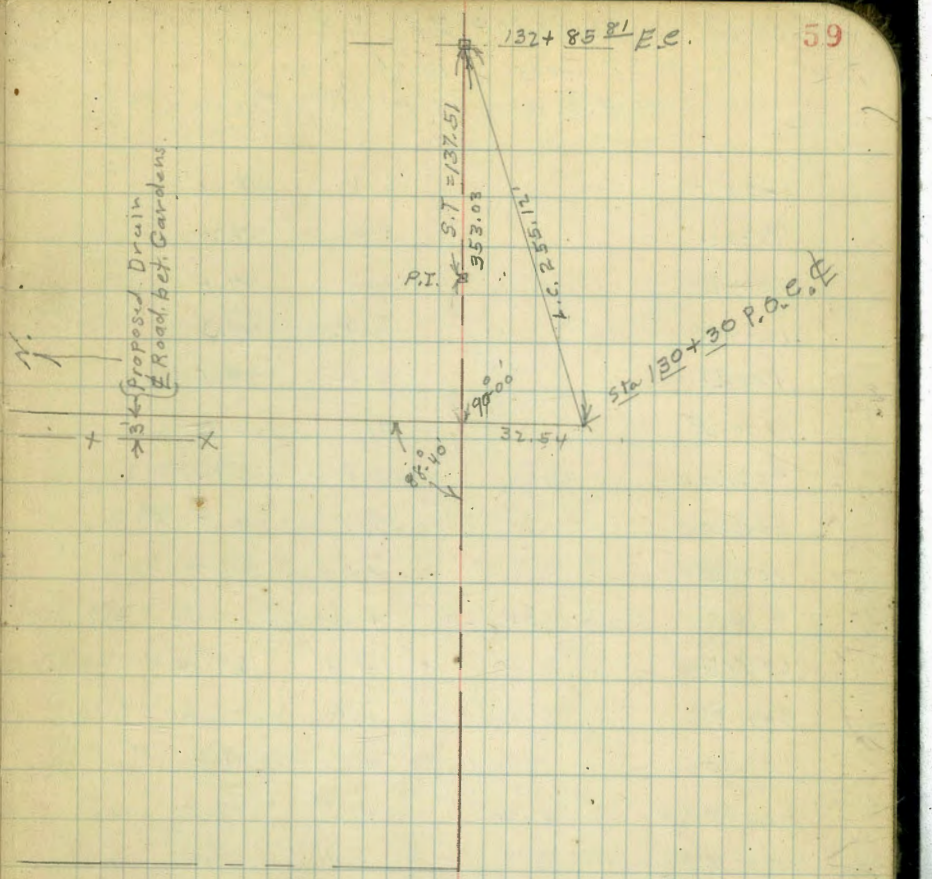


17+20 bottom Sand P.t.			11.2	19.9 S. of River
17+00			7.6	23.5
16+85			4.6	26.5
16+00			5.3	25.8
15+00			4.9	26.2
14+00			4.1	27.0
T.P.	4.40	31.10	5.80	26.50
		32.30		

Sta 140+30. ℄ ✓ #19
∠89°-58' from E, to N, from ℄
Line 4'E. and Parallel to Fence.

1400' Lt			4.1	28.1
1330 Lt			5.0	29.2
1300' Lt			5.1	29.1
1200' Lt			4.9	29.3
1100' Lt			4.7	29.5
1000' Lt			4.7	29.5
900 Lt			4.5	29.7
800 Lt.			4.7	29.5
700' Lt			5.0	29.2
T.P.	5.20	34.20	4.46	29.06
600' Lt.			4.4	29.0
500' Lt			4.0	29.4
400' Lt			4.2	29.2
300 Lt			4.2	29.2
200' Lt			4.4	29.0
100' Lt			4.8	28.6
25. Lt of ℄			5.2	28.2
℄			5.4	28.0
15' Rt of ℄			6.0	27.4
25' Rt			5.3	28.1
50' Rt.			6.0	27.4
100' Rt.			5.5	27.9
B.M. #11	3.67	33.40		29.73

1800' Lt	In River		11.7	22.2
1755 Lt	S. Side River		11.3	22.6
1747' Lt	S. Bank River		9.5	24.4
1700' Lt.			6.0	27.9
1685' Lt			5.0	28.9
1650' Lt			4.8	29.1
T.P.	4.50	33.90	5.80	27.40
1600' Lt			5.8	27.4
1540' Lt			5.5	27.7
1517' Lt			7.5	25.7
1500' Lt			7.5	25.7
1490 Lt			9.7	23.5
7' to W. of 1475' Lt			11.0	22.2 in sump. Not a channel
1475' Lt			7.6	25.6
1452' Lt			7.0	26.2
T.P.	5.40	33.20	6.60	27.60
1448' Lt			6.6	27.6
		34.20		

Sta 153+50 ℄ #21
5.50' E. of S.E. Cor P.L. 1107
∠ 89°-58' E. to N. from ℄
Parallell to Pueblo Line.

T.P.	4.50	33.50	6.10		29.00
1500 Lt			5.0	30.1	
1400 Lt			3.7	31.4	
1300 Lt			4.7	30.4	
1200 Lt			3.6	31.5	
1100 Lt			3.5	31.6	
1000 Lt			3.0	32.1	
T.P.	2.80	35.10	3.50		32.30
900' Lt			3.5	32.3	
800' Lt			3.2	32.6	
700' Lt.			3.1	32.7	
600' Lt			3.5	32.3	
500' Lt			3.5	32.3	
400' Lt			4.1	31.7	
300' Lt.			5.0	30.8	
200' Lt.			5.9	29.9	
150' Lt.			5.8	30.0	
100' Lt.			4.5	31.3	
25 Lt. of ℄			4.5	31.3	
℄			4.8	31.0	
15' Rt.			4.8	31.0	
25' Rt.			4.3	31.5	
100' Rt. of ℄			4.6	31.2	
B.M. #2	4.42	35.80			31.38

1900' Lt.	7.0	26.5
1885 Lt.	9.5	24.0
1822' Lt. S. Edge Channel	9.7	23.8
1812' Lt	7.2	26.3
1800' Lt	7.2	26.3
1700' Lt.	7.0	26.5
1615 Lt	7.2	26.3
1611' Lt	4.3	29.2
1600' Lt.	4.5	29.0
	33.50	

Sta 162+41.4 #22

Sta 162+39 P.O.C.
Culvert. Profile S. &
of Fence. & Parallel to it.
at Rt. Lts to S. Line of Pueblo Lot. 1108.

1000 Lt			5.0	34.8
935' Lt			5.3	34.5
920 Lt			6.3	31.5
900' Lt.			6.2	31.6
800' Lt.			4.6	33.4
700' Lt			4.8	33.0
600' Lt			4.4	33.4
T.P.	4.8	37.8	4.96	33.00
500' Lt			5.0	33.0
437' Lt			4.7	33.3
420' Lt			6.0	34.0
400' Lt			5.7	34.3
300' Lt.			5.0	33.0
200' Lt			5.2	34.8
100' Lt			7.2	30.8
38' Lt			7.9	30.1
11' Lt of ℄			5.2	34.8
℄			4.9	33.1
18' Rt			4.9	33.1
25' Rt			3.7	34.3
45' Rt.			4.5	33.5
100' Rt of ℄			4.8	33.4
BM. #13	0.59	37.96		37.37

1175	S. side River	10.0	27.8
1162	S. Bank "	5.3	34.5
1100		5.3	34.5
1087		6.3	31.5
		37.8	

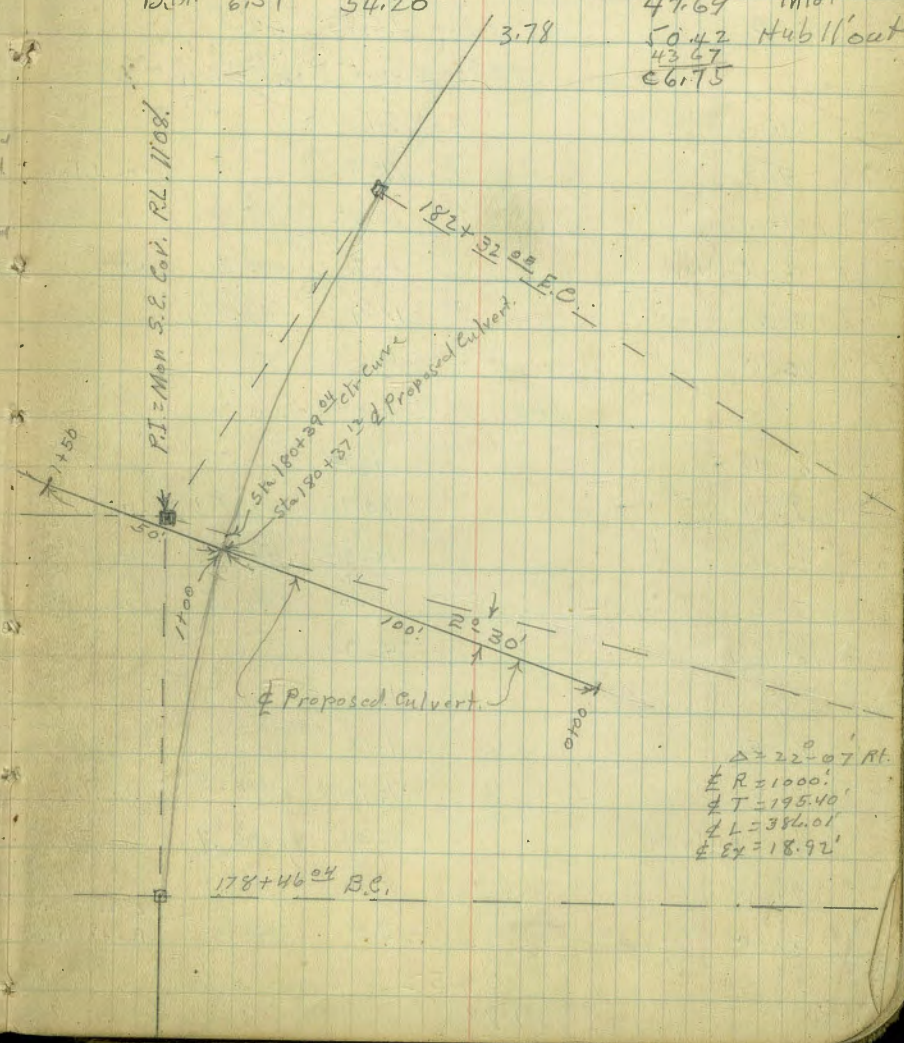
Sta 180 + 37 12a
Box Culvert. x. Sec. #4

				Fl. Grade
Bm 14	3.64	53.33	47.69	
Intak		1.90	51.43	43.67
outlet.		10.22	43.11	37.5
11. E		6.0	46.0	
9. E		8.1	43.9	In. Ditch
℄ Culvert		8.7	43.3	" "
9. W.		8.0	44.0	" "
10. W		4.0	48.0	E. Line Sand Rock. Road
	0+45			
13. W		4.0	48.0	E. Line Sand Rock. Road
10. W		6.9	45.1	In. ditch
℄ Culvert.		7.5	44.5	" "
6. E		7.3	44.7	" "
10. E		4.2	47.8	
	0+25			
12. W		7.0	50.0	E. Line Sand Rock. Road
10. W		5.1	46.9	In. ditch
℄ Culvert		5.1	46.9	" "
4. E		4.0	46.0	" "
9. E		2.5	49.5	
	100. Rt. of ℄ = 0+00			
B.M. #14	4.30	51.99		47.69

51.43
43.67
7.76

Fl. Line
64' above outlet 40.22

Sta	+	H.I.	—	Elev	
B.M.	6.57	54.20		47.69	inlet
				50.42	Hub 11' out
				43.67	
				6.75	



Station 180+39 ℄ ✓
Culvert. Levels

20' W		9.6	44.4	
11' W		13.3	38.7	In. Ditch
		13.5	38.5	" "
7' E		13.9	38.1	" "
8' E		11.7	40.3	
	1+50 = N. Line R. of W.			
11 E		9.1		
9' E		10.9		In. Ditch
		10.8	41.2	" "
℄ Culvert		11.7	40.3	" "
8' W		10.9	41.1	
12 W		5.6	46.4	
	1+00 = ℄ R. of W.			
8' W		4.2		
7' W		10.1	41.9	In. Ditch
℄		10.3	41.7	" "
7' E		10.5	41.5	" "
8' E		4.2		
	0+84			
8' E		4.0		
7' E		7.7	44.3	In. Ditch
℄ culvert		8.3	43.7	" "
7' W.		8.7	43.3	" "
8' W		4.0	48.0	E. Line Sand Rock Road
	0+52			
51.99				

Culvert Profile #28

Sta. 206+32.85 ✓

4+00			5.6	63.6	
3+75 Δ			4.1	65.1	
3+41			3.5	65.7	
3+40			2.5	66.7	
3+26 = N Side Barn			1.7	67.5	
T.P.	1.59	69.21 ✓	12.57		67.42
2+91 S. Side Barn.			10.2	70.0	
2+50			8.3	71.9	
2+00			4.4	75.8	
T.P.	0.13	80.19 ✓	12.86		80.06
1+50			12.7	80.2	
1+00			9.5	83.4	
0+50			6.0	86.9	
0+12 E. Bank of wash			3.0	89.9	
0+00 In wash.			4.7	88.2	

Proposed Culvert.

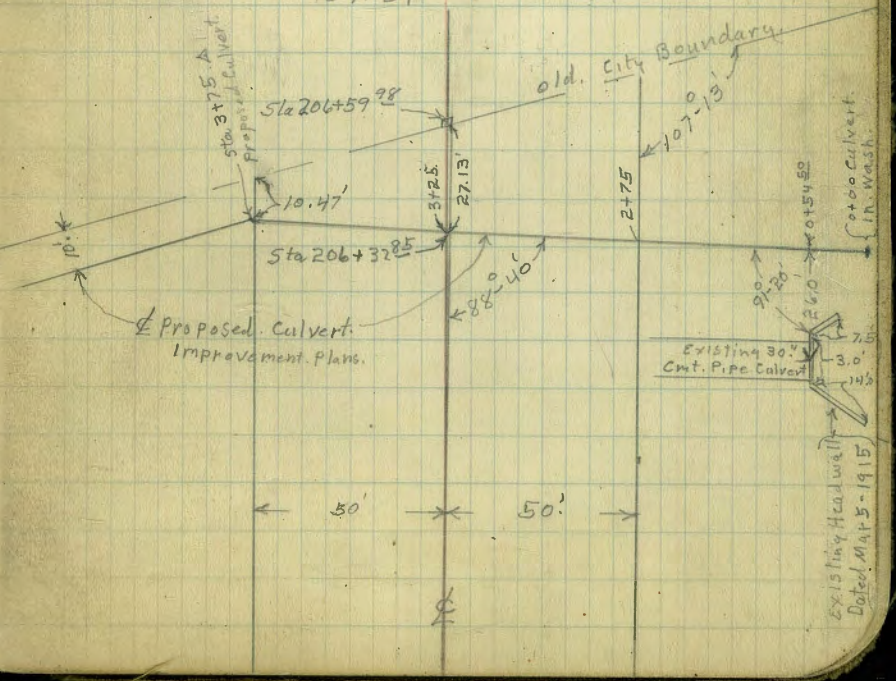
Inlet Existing 30" Culvert {26.0' W. of Sta of 54.50}			10.50	82.4	F.L. Pipe
Top Head wall over pipe			6.50	86.4	
Top. S.W. End Wing wall			5.15	87.7	
" S.W. " " "			4.00	86.9	

Existing Culvert.

T.P.	10.13	92.92 ✓	0.72		82.79
T.P.	12.20	83.51 ✓	1.14		71.31
B.M. #17	8.07	72.45			64.38

B.M. #17				3.07	64.38
T.P.	11.10	67.45		0.19	56.35
T.R.	12.86	54.54		2.83	43.68
7+46 In River				11.0	35.5
7+15 S. Bank of River				6.1	40.4
T.P.	2.83	46.51 ✓		12.87	43.68
6+50.				13.8	47.8
22' Rt. of 6+20 Outlet. Culvert.				15.40	41.7 F.L.
16' Rt. of 6+05 Top. 30" Pipe at Δ				11.55	45.0 Pipe Does not Run Straight from Inlet to outlet
6+05				11.1	45.5
17' To 6+75+82				9.35	47.7 Floor of Pump House
5+82				9.8	46.8
T.P.	0.20	56.55 ✓		12.86	56.35
5+00				13.0	56.7
4+50				8.8	60.4

69.21



+50

199

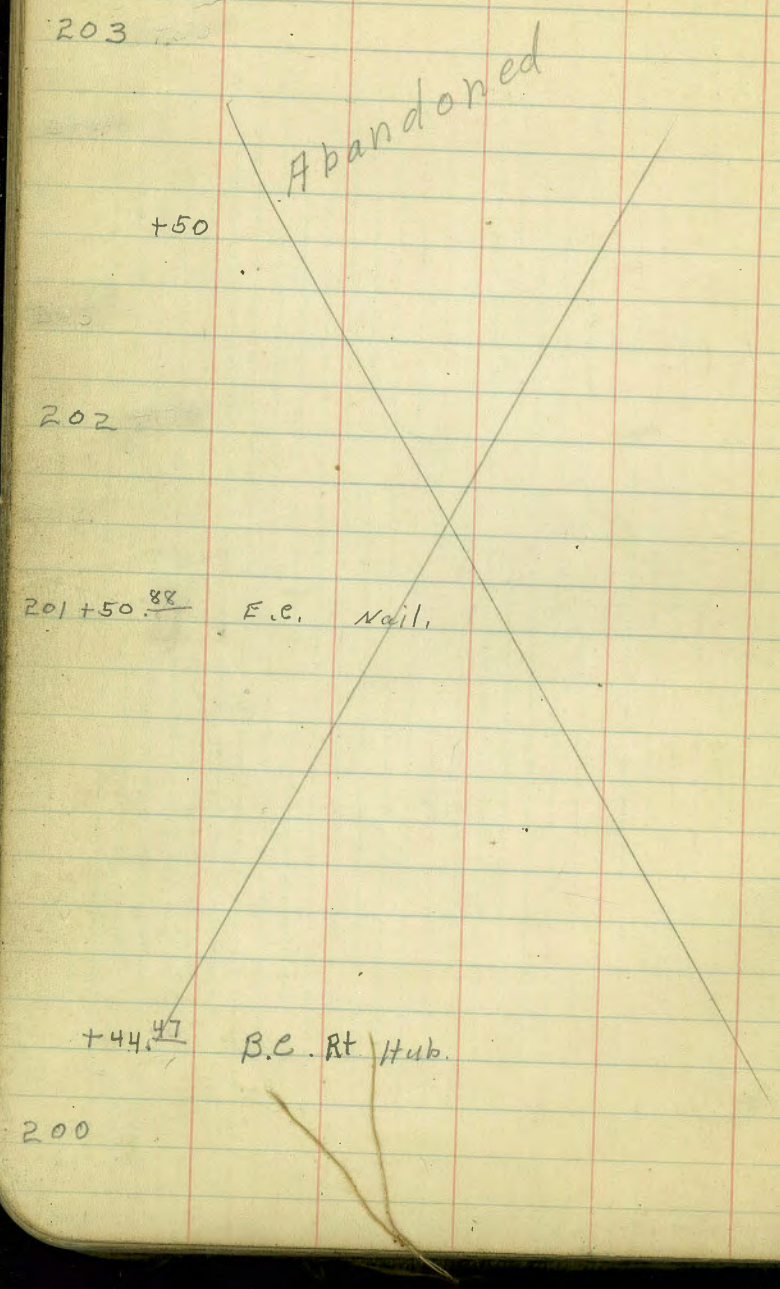
+50

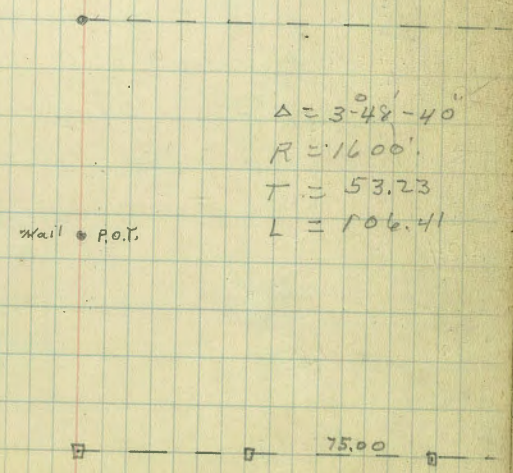
198

+50

197

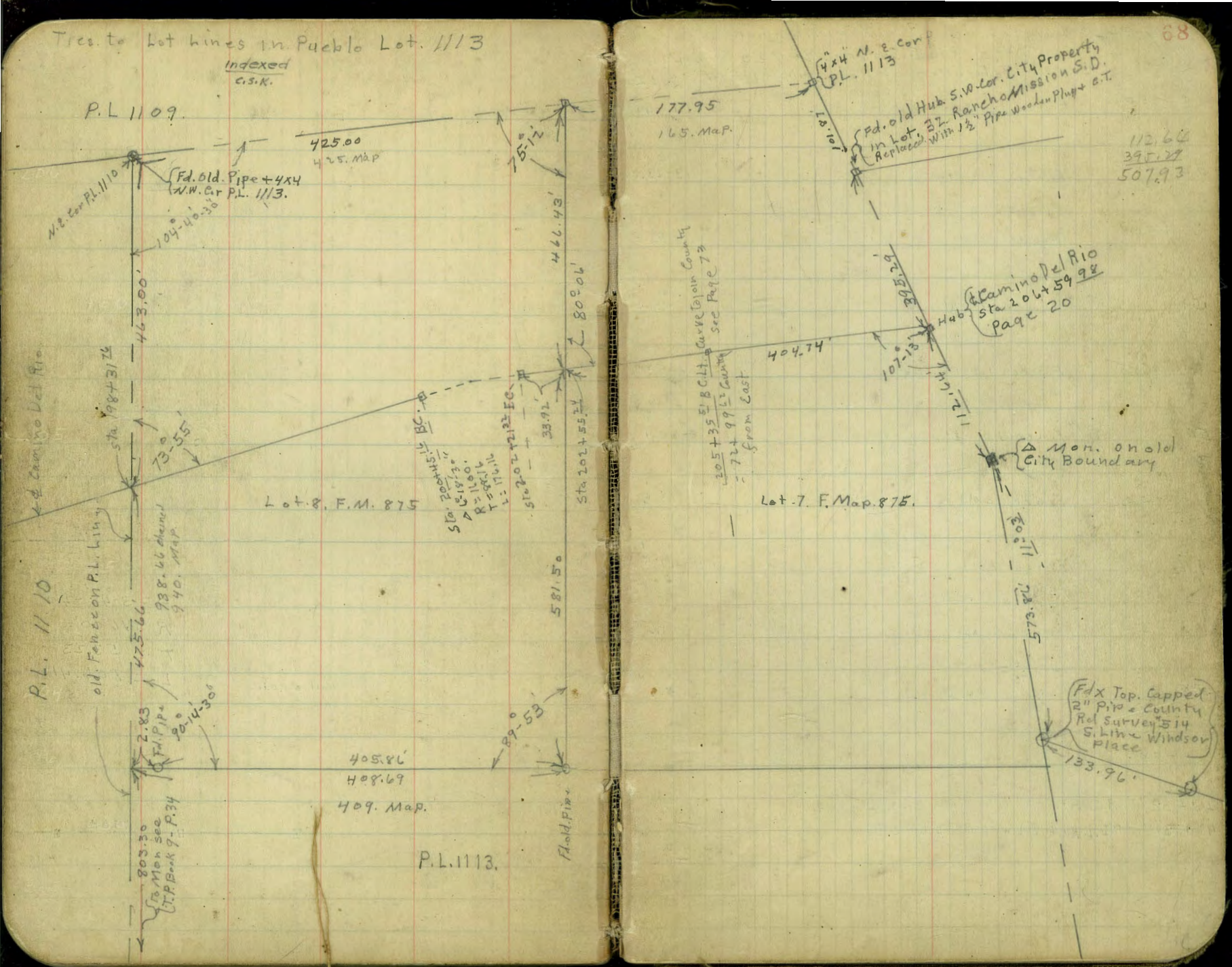
Camino Del Rio
Change in Alignment from
Sta. 200 + 44.47





Ties to Lot lines in Pueblo Lot. 1113

Indexed
C.S.K.



11-14-36
Miller
Walker
Bliss

Camino Del Rio New Alignment.
San Diego Road Survey No 720 Termini Map.
Being a Relocation of Road Survey 514

		Def. ∠
+50	Fence 5' Lt. of ℄	14°-49'
52	Fence 4.0' Rt. of ℄	13°-23.2'
+50	Fence 3.0 Rt. of ℄	11°-57.3'
51	Fence 4.0' Rt of ℄	10°-31.3'
+50	Fence 1.0' Rt. of ℄	9°-05.4'
50	Fence 1.0 Lt of ℄	7°-39.4'
+50	Fence 3.0 Lt. of ℄	6°-13.5'
49	Fence 7'0 Lt. of ℄	4°-47.5'
+50	Fence 14'0 Lt. of ℄	3°-21.6'
48	old. Fence 25. Lt. of ℄	1°-55.6'
+50	old Fence 39' Lt. of ℄	

47+32.74 B.C. Rt. old Fence 43' Lt. of ℄
47+31.16 P.I. ℄ Rd. & E. Line Lot 32. R.M.S.D.
1.58

69

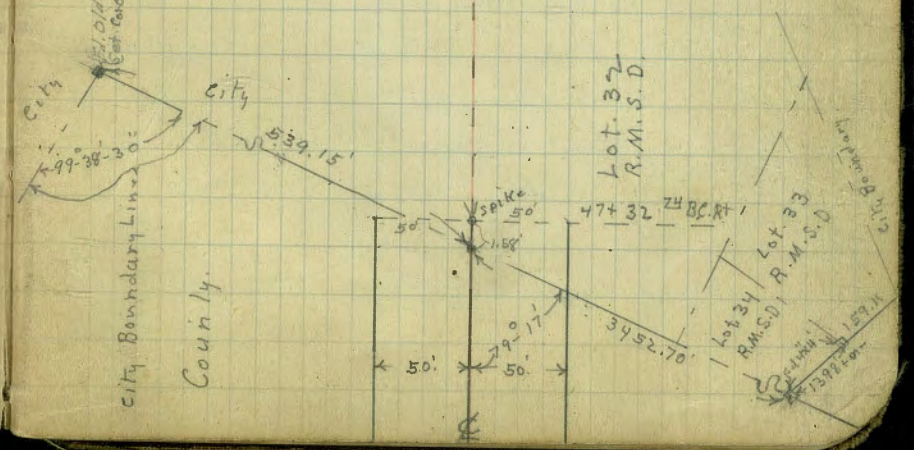
50' 50' Spike 53+04.95 EC

L=295.26'

Δ = 32°-54' Rt
℄ R = 1000'.
℄ T = 295.26
℄ L = 574.21

Iron Pin P.I.

T=295.26'



57+60.02 B.C. Lt. Fence 8' Lt. of ℄

+50 Fence 7' Lt. of ℄

57 Fence 7' Lt of ℄

S 760.02
S 306.95
453.07

+50 Fence 15' Lt of ℄

56 Fence 11' Lt. of ℄

+50 Fence 15' Lt. of ℄

55 Fence 16' Lt of ℄

+50 Fence 19.0 Lt. of ℄

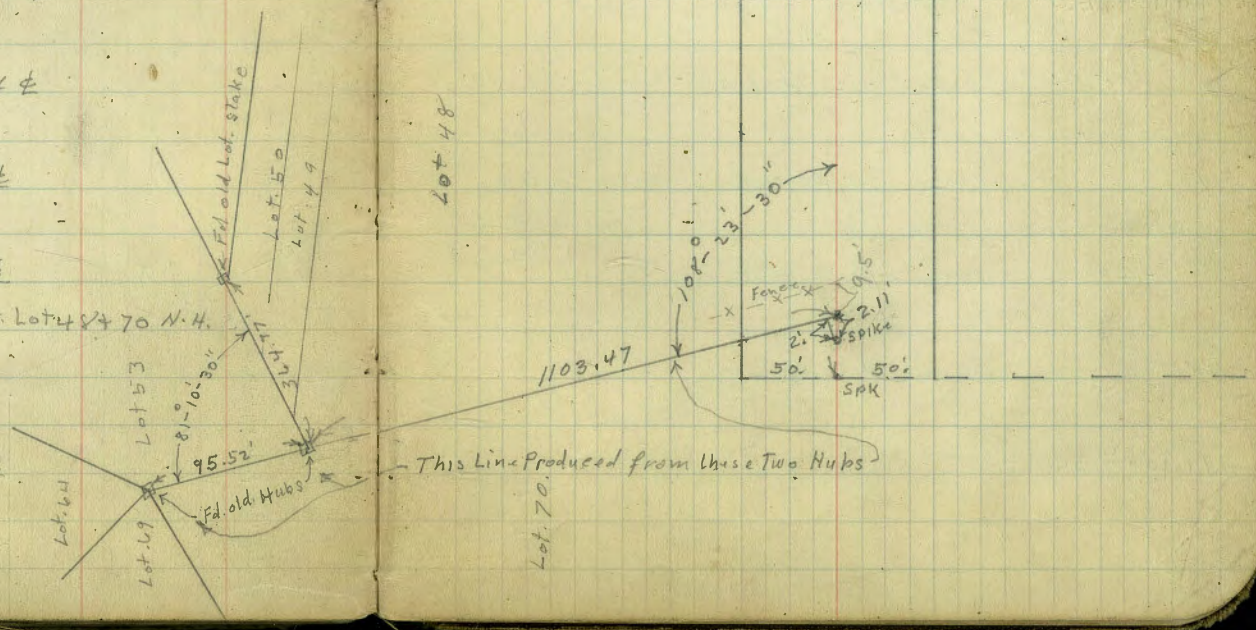
54 Fence 17.0 Lt. of ℄

+50 Fence 17.0 Lt. of ℄

+18.70 P.I. ℄ + Lot Line Bet. Lot 4 & 70 N.H.
+16.95 spike ℄

53+06.95 E.O.

53 Fence 13.0 Lt. of ℄



64+00 36 E.C.

63. Fence 13' Lt of ℄

+50 Fence 14' Lt. of ℄

62 Fence 16' Lt. of ℄

61+74 63 B.C. Rt. Fence 19' Lt. of ℄

+50 Fence 19' Lt. of ℄

61 Fence 15' Lt. of ℄

+50 Fence 11' Lt of ℄

60+04 22 E.C. Fence 9' Lt. of ℄

60

+50 Fence 12' Lt. of ℄

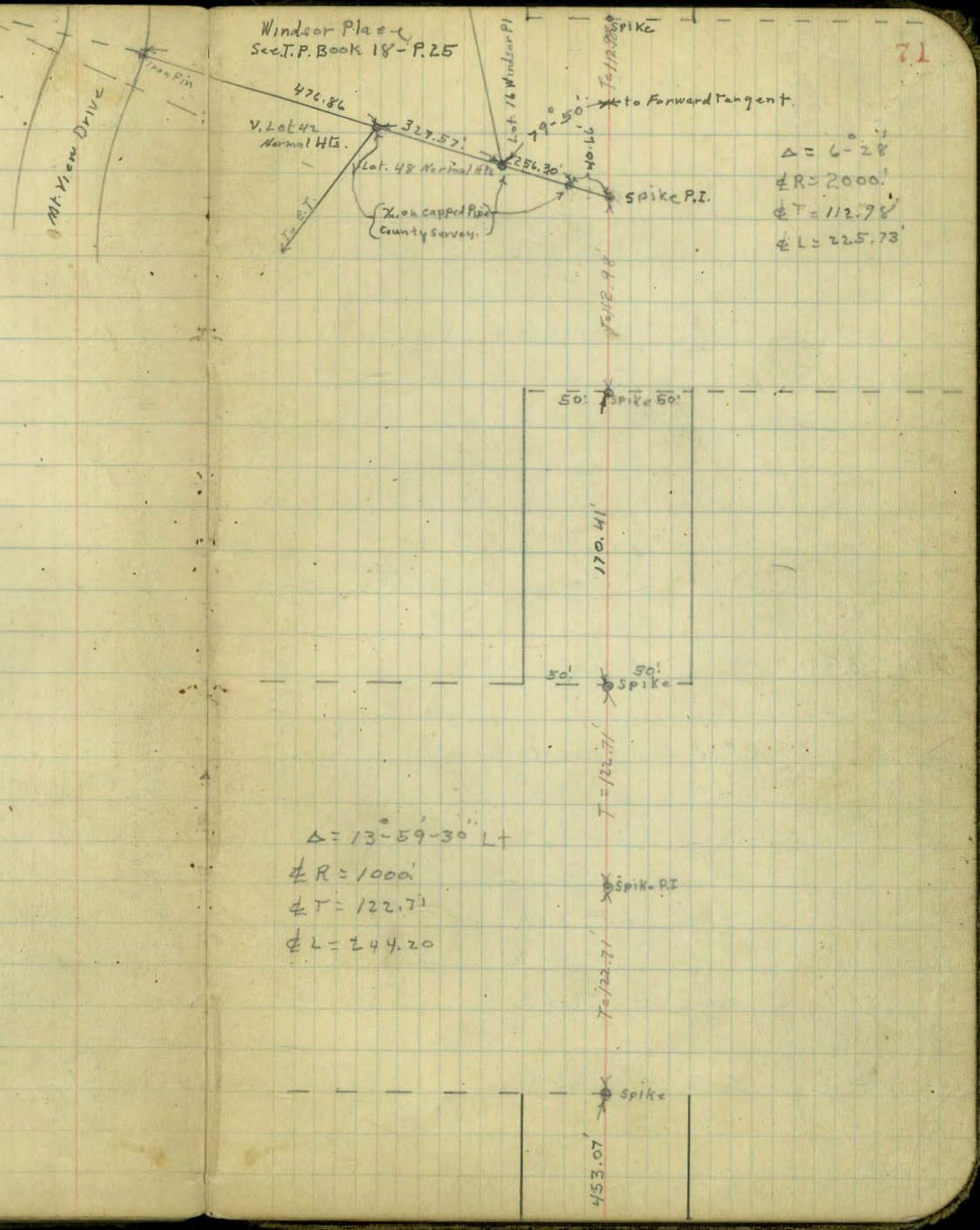
59 Fence 7' Lt. of ℄

+87.73

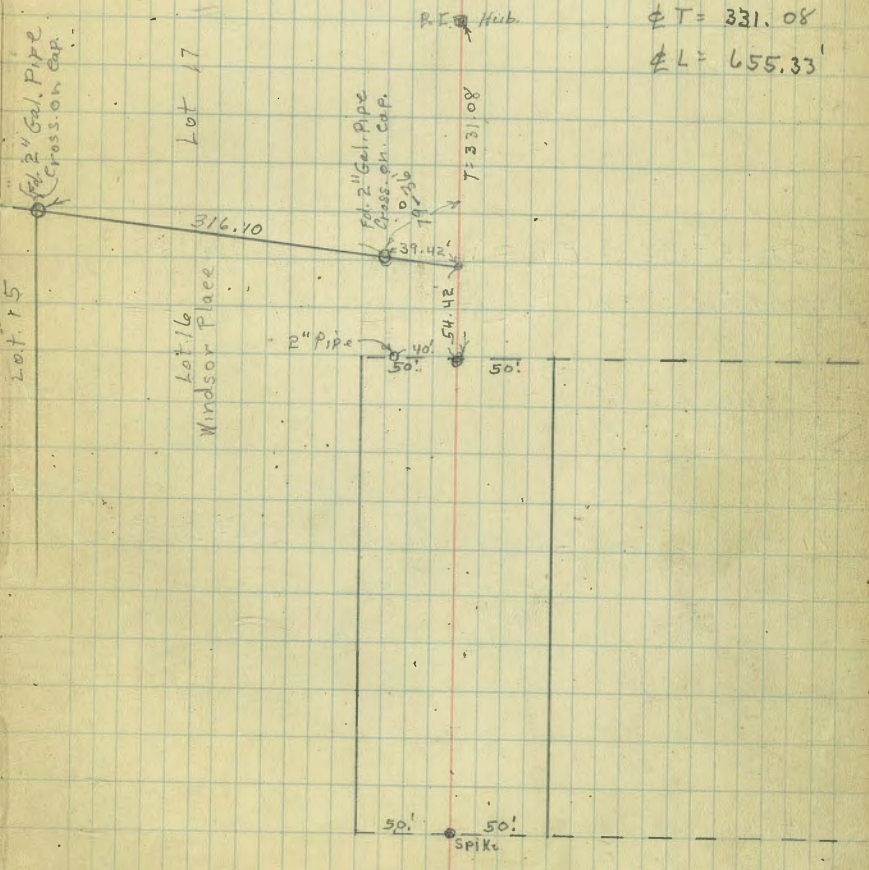
+50 Fence 7' Lt of ℄

58 Fence 9' Lt. of ℄

57+60 02 B.C. Lt.



			Def ∠
	+71 94	ctr curve	5° 02
	+50	Fence 9' Lt. of ℄ = 96+54.70	4° 41 9'
	69	Fence 14' Lt of ℄ = 96+04.70	3° 55.8'
	+50	Fence 32' Lt of ℄ = 95+54.70	3° 09.7'
	68	Fence 19' Lt of ℄ = 95+04.70	2° 23.6'
	+50	Fence 16' Lt of ℄ = 94+54.7	1° 37.5'
	67	Fence 15' Lt of ℄ = 94+04.69	0° 51.4'
	66+44 28	B.C. Rt. Fence 43' Lt. of ℄ = 93+48.91	
	66	Fence 13' Lt of ℄	
	+50	Fence 12' Lt. of ℄	
	65	Fence 11' Lt of ℄	
	+50	Fence 11' Lt. of ℄	
	64+00 36	E.C. Fence 10' Lt. of ℄	
	+50	~~Fence~~ 12' Lt. of ℄	



Δ 20° 08'
℄ R = 1844.96'
℄ T = 331.08'
℄ L = 655.33'

331.08
N 24° E
206.5

Additional Ties FB 1588 = Ties to Monuments set from old towns
County Road Survey
FB 727-9

205+35.51 B.C. Lt. City =
72+99.42 F.C. = County

Def ∠

+50

72

71+77.40 P.O.C. Old City Boundary, county = 206+57.53 City

+50

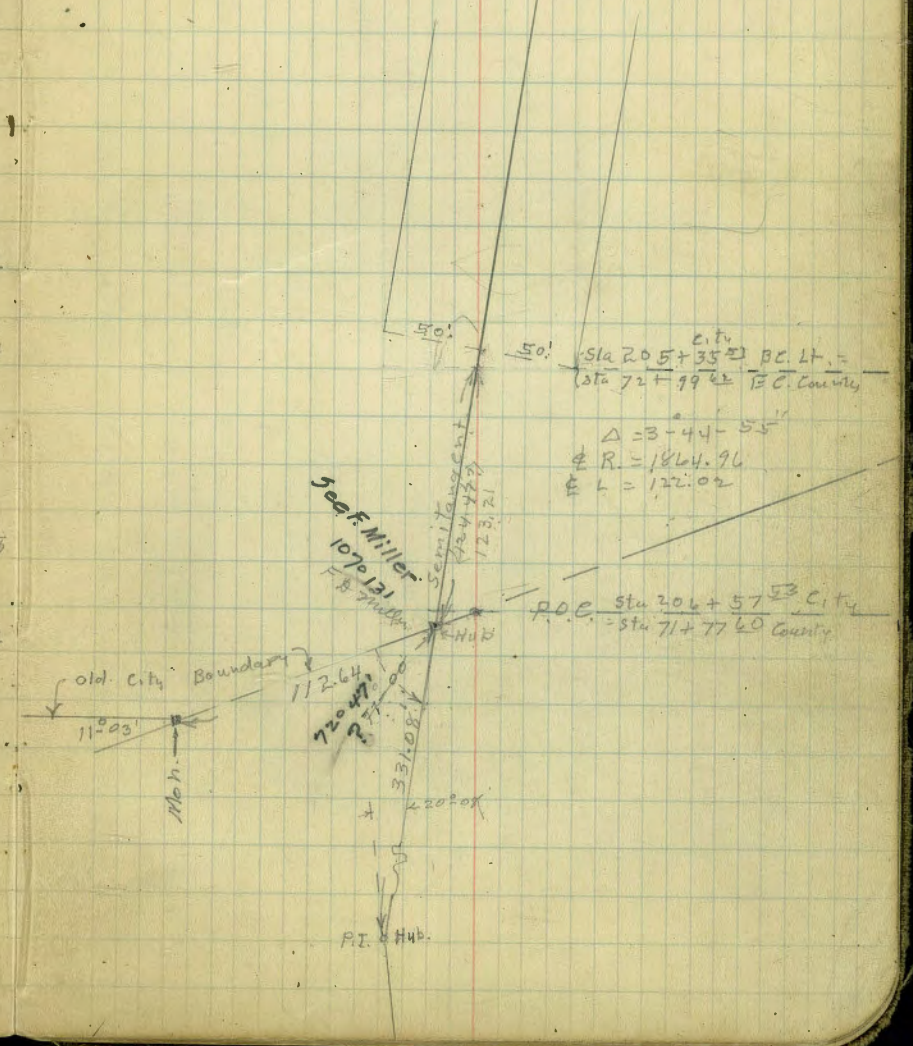
71

+50

+42 W end Fence 14' Lt of ℄ = 97+46.70
Fence 6' Lt of ℄ = 97+04.70

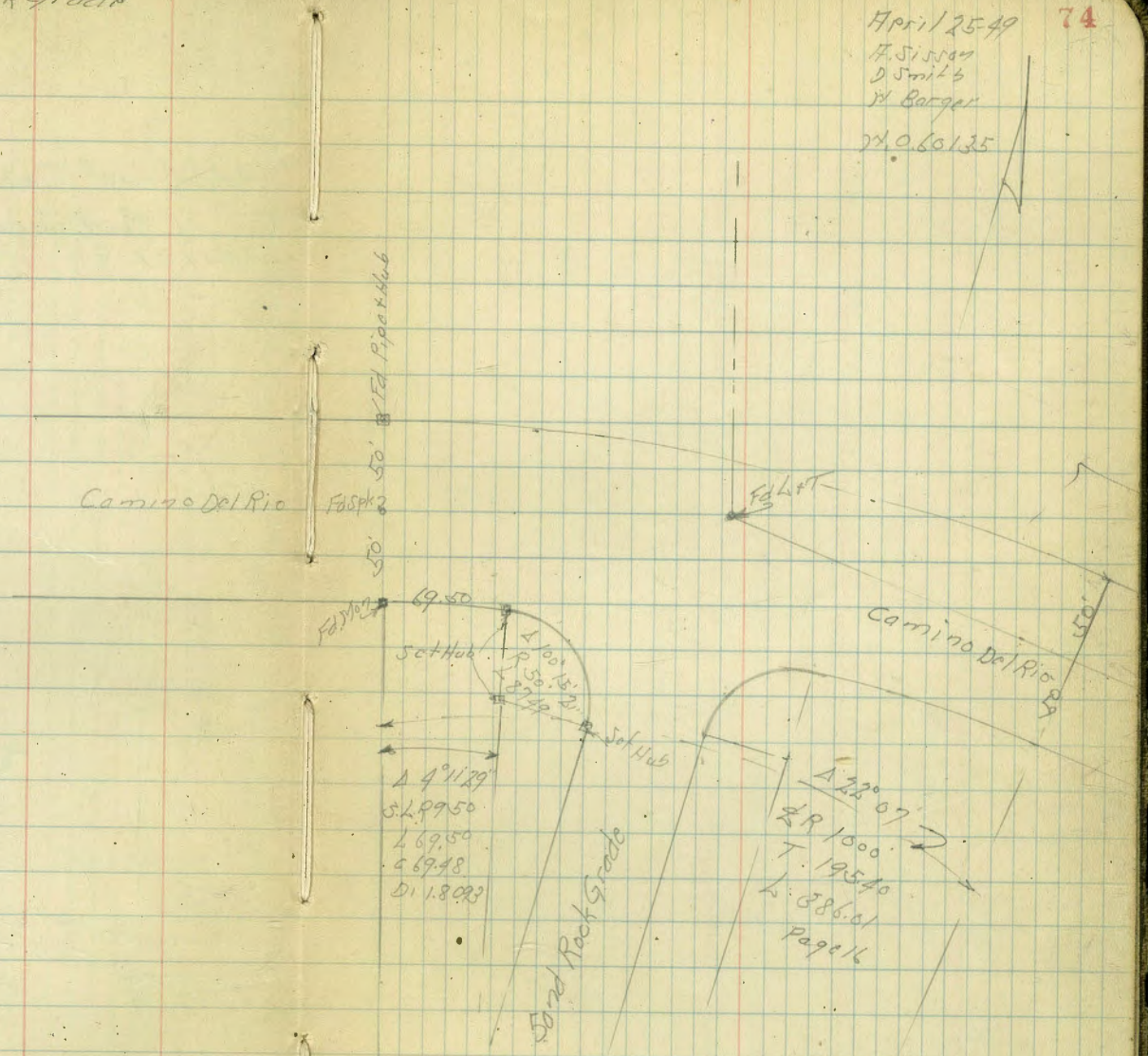
70

10°-04'
9°-18.7'
8°-32.5'
7-46.2'
7°-00'
6°-14'
5°-28'



Camino Del Rio + Sand Rock Grade
South West Corner

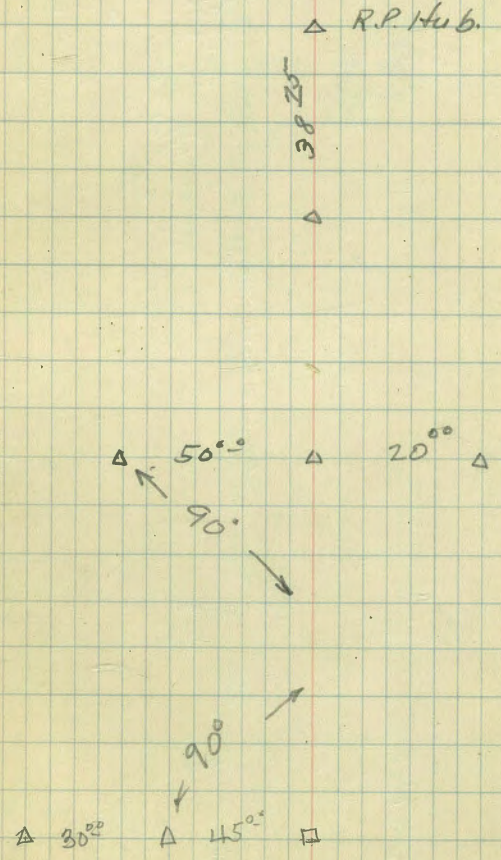
April 25-49 74
H. Sisson
D Smith
H. Berger
H.O. 60135

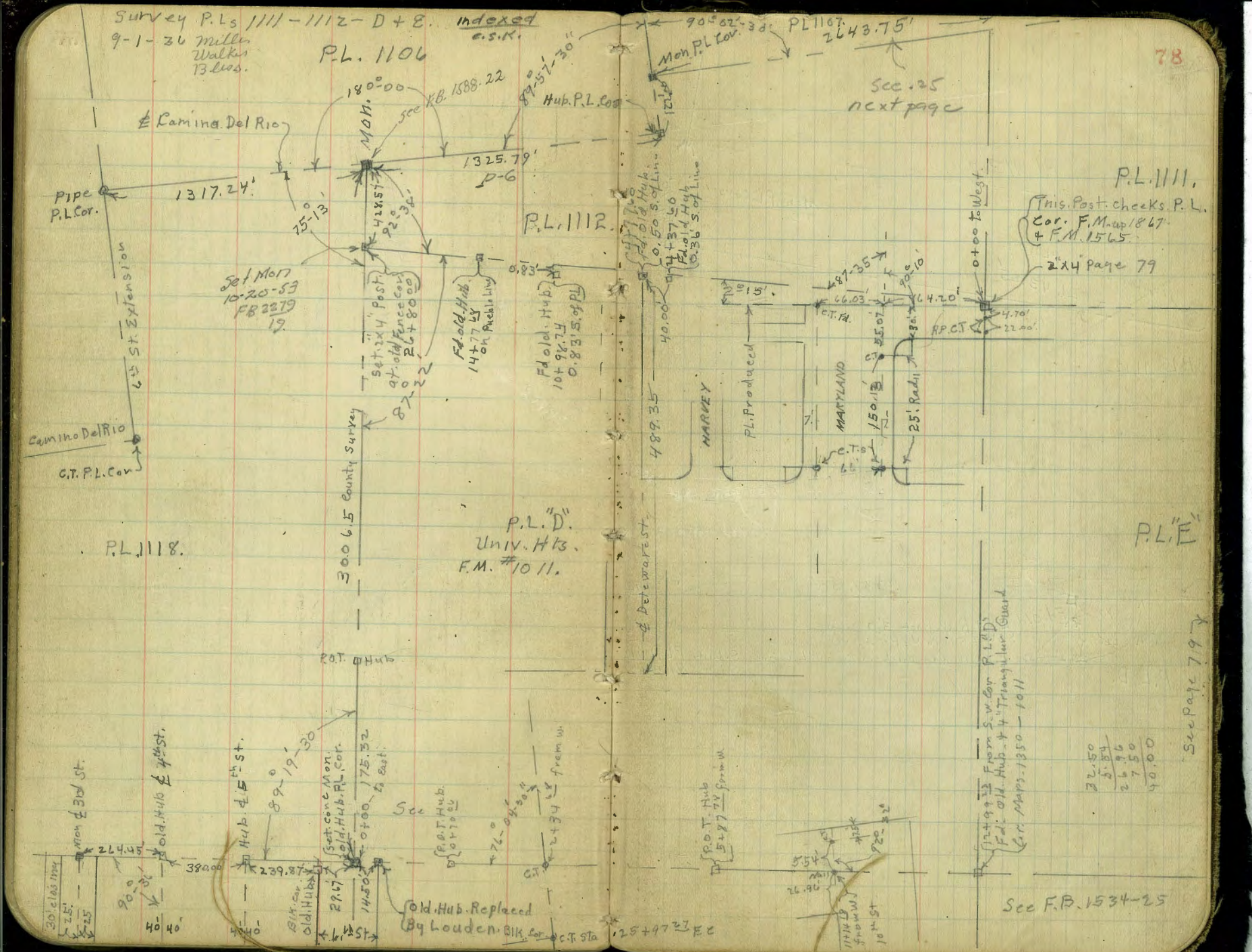


2+88.00 End

2+50

0+50




Survey P.Ls 1111-1112-D+E. Indexed C.S.K.
9-1-36 Millin Walker 13 hubs.
P.L. 1106
℄ Camino Del Rio
Pipe P.L.Cor.
1317.24'
180°-00
Mon.
See K.B. 1588.22
89°-57'-30"
Hub. P.L. Cor.
1325.79'
D-6
75°-13'
42.57'
92°-32'
P.L. 1112.
Set Mon 10-20-53 FB 2279 12.
Set 2"x4" Post. 9' old Fence Cor. 26.78
0.83'
Fd. old Hub 14+77.47 on Parcels Line
Fd old. Hub 10+98.74 0.83 S. of P.L.
0.50 S. of Line
Fd. old Hub 11+37.40 0.36 S. of Line
40.00
489.35
HARVEY
P.L. Produced
MARYLAND
150.13'
25' Radii
C.T.
C.T. P.L. Cor
Camino Del Rio
6½ St. Extension
P.L. 1118.
300.65 County Survey
P.L. "D" Univ. Hts. F.M. #1011.
℄ Between
P.O.T. ⊕ Hub
Mon ℄ 30th St.
Old. Hub ℄ 4th St.
264.45
38.00
Hub ℄ 5th St.
239.87
90°-19'-30"
Set conc. Mon. Old. Hub. P.L. Cor.
175.32
0+00
See
P.O.T. Hub 0+70.00
76°-04'-30"
2+34.47 from W.
C.T.
Old. Hub Replaced By Louden. Blk. Cor.
C.T. Sta
25+97.27 E.E.
90°-32'-30"
P.O.T. Hub 5+87.47 from W.
5.54'
26.96'
11+14.13 from W.
10th St.
90°-02'-30"
Mon. P.L. Cor.
2643.75'
See page 78
78
P.L. 1111.
This Post checks P.L. Cor. F.M. up 1847 & F.M. 1565
2"x4" Page 79
0+00 to West
87°-35'
90°-10'
66.03'
64.20'
C.T. Fd.
R.P.C.T.
4.70'
22.00'
85.07'
C.T.
25' Radii
P.L. "E"
See page 79
32.50
5.84
26.66
7.50
40.00
From S.W. Cor P.L. "D" Fd. old Hub + 4" Triangular Guard
For Maps 1350 — 1011
See F.B. 1534-25

PL 1107

Scc .75 previous page

Mons. P.L. Cors

279.80'

To Mon S.W. cor PL 1107

26 43.25

P.L. 1112

S.W. Cor P.L. 1111.

587.00'

274.80'

90°00'

4.7'

22.0'

Fd. old 2 X 3 R.W. Post 3'0 Deep.
Set 2x4 R.W. Post over

Set C.T.s in Mts. Curbs. R.P.s to P.L. Cor

P.L.D.

S. Line P.L. 1111
S " Adams Ave

See Page 78

PL 1108.

Mon N.W. Cor

P.L. 1111

Mon S.W. Cor

St. Line of Adams.

N 85.93' 313.83' 65.96' 313.91' 66.08' 323.90' 45.96' N 324.17'

North Ave.

Park Blvd

Georgia St

S. Line Adams Ave

Florida St

Alabama St.

P.L. E.

See Page 78

IMPROVED TABLES

AND

INFORMATION

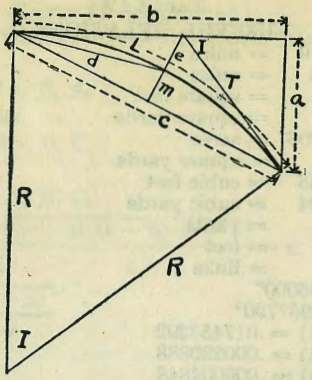


Table V

CURVE FORMULAE FOR SIMPLE CURVES

Compiled by J. Calvin Locke, C.E.

(1) $c = \sqrt{2Ra}$ (2) $c = \sqrt{a^2+b^2}$

(3) $c = \sqrt{2R\,(R-\sqrt{(R+b)\,(R-b)}} = \sqrt{2R(R-\sqrt{R^2-b^2})}$

(4) $c = 2\sqrt{m\,(2R-m)}$

(5) $c = 2R \sin \frac{1}{2} I$ (6) $c = 2T \cos \frac{1}{2} I$

(7) $e = R \operatorname{exsec} \frac{1}{2} I$

(8) $e = R \tan \frac{1}{2} I \tan \frac{1}{4} I$ (9) $e = T \tan \frac{1}{4} I$

(10) $b = \sqrt{a\,(2R-a)}$

(11) $b = \sqrt{\left(c+\frac{c^2}{2R}\right)\left(c-\frac{c^2}{2R}\right)} = \sqrt{c^2-\frac{c^4}{4R^2}}$

(12) $b = R \sin I$ (13) $b = a \cot \frac{1}{2} I$

(14) $R = \frac{a^2+b^2}{2a} = \frac{c^2}{2a}$ (15) $R = \frac{d^2}{2m} = \frac{c^2+4m^2}{8m}$

(16) $d = \sqrt{R\,(2R-\sqrt{(2R+c)\,(2R-c)}} = \sqrt{R(2R-\sqrt{4R^2-c^2})}$

(17) $d = \sqrt{2Rm}$ (18) $d = 2R \sin \frac{1}{4} I$ (19) $m = \frac{d^2}{2R}$

(20) $m = R \mp \sqrt{\left(R+\frac{c}{2}\right)\left(R-\frac{c}{2}\right)} = R \mp \sqrt{R^2-\frac{c^2}{4}}$

(21) $m = R \operatorname{vers} \frac{1}{2} I$ (22) $m = R \sin \frac{1}{2} I \tan \frac{1}{4} I$ (23) $m = \frac{1}{2} c \tan \frac{1}{4} I$

(24) $a = \frac{c^2}{2R}$ (25) $a = R - \sqrt{(R+b)\,(R-b)} = R - \sqrt{R^2-b^2}$

(26) $a = 2R (\sin^2 \frac{1}{2} I)^2$ (27) $a = R \operatorname{vers} I$ (28) $a = R \sin I \tan \frac{1}{2}$

(29) $a = b \tan \frac{1}{2} I$ (30) $a = T \sin I$ (31) $T = R \tan \frac{1}{2} I$

(32) $I = \frac{L}{R} \times 57.295780$ (33) $R = \frac{L}{I} \times 57.295780$

(34) $L = IR \times 0.01745329$ (35) $L = \frac{8d-c}{3}$

(36) Area Seg. $= \frac{LR - R^2 \operatorname{Sin} I}{2} = \frac{LR - Rb}{2}$

Table VI

SINES, COSINES, TANGENTS. COTANGENTS

deg.	sin 0′	tan 0′	sin 10′	tan 10′	sin 20′	tan 20′	sin 30′	tan 30′	sin 40′	tan 40′	sin 50′	tan 50′	deg.
0	0000	0000	0029	0029	0058	0058	0087	0087	0116	0116	0145	0145	89
1	175	0175	0204	0204	0233	0233	0262	262	291	291	320	320	88
2	349	349	378	378	407	407	436	437	465	466	494	495	87
3	523	524	552	553	581	582	610	612	640	641	669	706	86
4	698	699	727	729	756	758	785	787	814	816	843	864	85
5	872	875	901	904	929	934	958	963	987	992	1016	1022	84
6	1045	1051	1074	1080	1103	1110	1132	1139	1161	1169	190	198	83
7	219	228	248	257	279	287	305	317	334	346	363	376	82
8	392	405	421	435	449	465	478	495	507	524	536	554	81
9	564	584	593	614	622	644	650	673	679	703	708	733	80
10	736	763	765	793	794	823	822	853	851	883	880	914	79
11	908	944	937	974	965	2004	994	2035	2022	2065	2051	2095	78
12	2079	2126	2108	2156	2136	186	2164	217	193	247	221	278	77
13	250	309	278	339	306	370	334	401	363	432	391	462	76
14	419	493	447	524	476	555	504	586	532	617	560	648	75
15	588	679	616	711	644	742	672	773	700	805	728	836	74
16	756	867	784	899	812	931	840	962	868	994	896	3026	73
17	924	3057	952	3089	939	3121	3007	3153	3035	3185	3062	217	72
18	3090	249	3118	281	3145	314	173	346	201	378	228	411	71
19	256	443	283	476	311	508	338	541	365	574	393	607	70
20	420	640	448	673	475	706	502	739	529	772	557	805	69
21	584	839	611	872	638	906	665	939	692	973	719	4006	68
22	746	4040	773	4074	800	4108	827	4142	854	4176	881	210	67
23	907	245	934	279	961	314	987	348	4014	383	4041	417	66
24	4067	452	4094	487	4120	522	4147	557	173	592	200	628	65
25	226	663	253	699	279	734	305	770	331	806	358	841	64
26	384	877	410	913	436	950	4462	986	488	5022	514	5059	63
27	540	5095	566	5132	592	5169	617	5206	643	243	669	280	62
28	695	317	720	354	746	392	772	430	797	467	823	505	61
29	848	543	874	581	899	619	924	658	950	696	975	735	60
30	5000	774	5025	5812	5050	851	5075	890	5100	930	5125	969	59
31	150	6009	175	6048	200	6088	225	6128	250	6168	275	6208	58
32	299	249	324	289	348	330	5373	371	398	412	422	453	57
33	446	494	471	536	495	577	519	619	544	661	568	703	56
34	592	745	616	787	640	830	664	873	688	916	712	959	55
35	736	7002	760	7046	783	7089	807	7133	831	7177	854	7221	54
36	878	265	901	310	925	355	948	400	972	445	995	490	53
37	6018	536	6041	581	6065	627	6088	673	6111	720	6134	766	52
38	157	813	180	860	202	907	225	954	248	8002	271	8050	51
39	293	8098	316	8146	338	8195	361	8243	383	292	406	342	50
40	428	391	450	441	472	491	494	541	517	591	539	642	49
41	561	693	583	744	604	796	626	847	648	899	670	952	48
42	691	9004	713	9057	734	9110	756	9163	777	9217	799	9271	47
43	820	325	841	380	862	435	884	490	905	545	926	601	46
44	947	657	967	713	988	770	7009	827	7030	884	7050	942	45
45	7071	1.0000	7092	1.0058	7112	1.0117	133	1.0176	153	1.0235	173	1.0295	44
deg.	60′ cos	60′ cot	50′ cos	50′ cot	40′ cos	40′ cot	30′ cos	30′ cot	20′ cos	20′ cot	10′ cos	10′ cot	deg.

TABLE IX. TANGENTS AND EXTERNALS TO A 1° CURVE

I	T	E	I=10°	I	T	E	I=20°	I	T	E	I=30°
1°	50.00	.218	+	11°	551.70	26.500	+	21°	1061.9	97.577	+
10′	58.34	.297	5° C.	10′	560.11	27.313	5° C	10′	1070.6	99.155	5° C
20′	66.67	.388	T	20′	568.53	28.137	T	20′	1079.2	100 75	T
30′	75.01	.491	.03	30′	576.95	28.974	.06	30′	1087.8	102.35	.10
40′	83.34	.606	E	40′	585.36	29.824	E	40′	1096.4	103.97	E
50′	91.68	.733	.001	50′	593.79	30.686	.006	50′	1105.1	105.60	.013
2°	100.01	.873		12°	602.21	31.561		22°	1113.7	107.24	
10′	108.35	1.024		10′	610.64	32.447		10′	1122.4	108.90	
20′	116.68	1.188		20′	619.07	33.347		20′	1131.0	110.57	
30′	125.02	1.364		30′	627.50	34.259		30′	1139.7	112.25	
40′	133.36	1.552		40′	635.93	35.183		40′	1148.4	113.95	
50′	141.70	1.752		50′	644.37	36.120		50′	1157.0	115.66	
3°	150.04	1.964	10° C.	13°	652.81	37.070	10° C.	23°	1165.7	117.38	10° C.
10′	158.38	2.188	T	10′	661.25	38.031	T	10′	1174.4	119.12	T
20′	166.72	2.425	.06	20′	669.70	39.006	.13	20′	1183.1	120.87	.19
30′	175.06	2.674	E	30′	678.15	39.993	E	30′	1191.8	122.63	E
40′	183.40	2.934	.003	40′	686.60	40.992	.011	40′	1200.5	124.41	.025
50′	191.74	3.207		50′	695.06	42.004		50′	1209.2	126.20	
4°	200.08	3.492		14°	703.51	43.029		24°	1217.9	128.00	
10′	208.43	3.790		10′	711.97	44.066		10′	1226.6	129.82	
20′	216.77	4.099		20′	720.44	45.116		20′	1235.3	131.65	
30′	225.12	4.421		30′	728.90	46.178		30′	1244.0	133.50	
40′	233.47	4.755		40′	737.37	47.253		40′	1252.8	135.35	
50′	241.81	5.100	15° C.	50′	745.85	48.341	15° C.	50′	1261.5	137.23	15° C.
5°	250.16	5.459	T	15°	754.32	49.441	T	25°	1270.2	139.11	T
10′	258.51	5.829	.09	10′	762.80	50.554	.19	10′	1279.0	141.01	.29
20′	266.86	6.211	E	20′	771.29	51.679	E	20′	1287.7	142.93	E
30′	275.21	6.606	.004	30′	779.77	52.818	.017	30′	1296.5	144.85	.038
40′	283.57	7.013		40′	788.26	53.969		40′	1305.3	146.79	
50′	291.92	7.432		50′	796.75	55.132		50′	1314.0	148.75	
6°	300.28	7.863		16°	805.25	56.309		26°	1322.8	150.71	
10′	308.64	8.307		10′	813.75	57.498		10′	1331.6	152.69	
20′	316.99	8.762		20′	822.25	58.699		20′	1340.4	154.69	
30′	325.35	9.230		30′	830.76	59.914		30′	1349.2	156.70	
40′	333.71	9.710	20° C.	40′	839.27	61.141	20° C.	40′	1358.0	158.72	20° C.
50′	342.08	10.202	T	50′	847.78	62.381	T	50′	1366.8	160.76	T
7°	350.44	10.707	.13	17°	856.30	63.634	.26	27°	1375.6	162.81	.39
10′	358.81	11.224	E	10′	864.82	64.900	E	10′	1384.4	164.86	E
20′	367.17	11.753	.006	20′	873.35	66.178	.022	20′	1393.2	166.95	.051
30′	375.54	12.294		30′	881.88	67.470		30′	1402.0	169.04	
40′	383.91	12.847		40′	890.41	68.774		40′	1410.9	171.15	
50′	392.28	13.413		50′	898.95	70.091		50′	1419.7	173.27	
8°	400.66	13.991		18°	907.49	71.421		28°	1428.6	175.41	
10′	409.03	14.582		10′	916.03	72.764		10′	1437.4	177.55	
20′	417.41	15.184	25° C.	20′	924.58	74.119	25° C.	20′	1446 3	179.72	25° C.
30′	425.79	15.799	T	30′	933.13	75.488	T	30′	1455.1	181.89	T
40′	434.17	16.426	.16	40′	941.69	76.869	.32	40′	1464.0	184.08	.49
50′	442.55	17.065	E	50′	950.25	78.264	E	50′	1472.9	186.29	E
9°	450.93	17.717	.007	19°	958.81	79.671	.028	29°	1481.8	188.51	.065
10′	459.32	18.381		10′	967.38	81.092		10′	1490.7	190.74	
20′	467.71	19.058		20′	975.96	82.525		20′	1499.6	192.99	
30′	476.10	19.746		30′	984.53	83.972		30′	1508.5	195.25	
40′	484.49	20.447		40′	993.12	85.431		40′	1517.4	197 53	
50′	492.88	21.161		50′	1001.7	86.904		50′	1526.3	199.82	
10°	501.28	21.887	30° C.	20°	1010.3	88.389	30° C.	30°	1535.3	202.12	30° C.
10′	509.68	22.624	T	10′	1018.9	89.888	T	10′	1544.2	204.44	T
20′	518.08	23.375	.19	20′	1027.5	91.399	.39	20′	1553.1	206.77	.59
30′	526.48	24.138	E	30′	1036.1	92.924	E	30′	1562.1	209.12	E
40′	534.89	24.913	.008	40′	1044.7	94.462	.034	40′	1571.0	211.48	.078
50′	543.29	25.700		50′	1053.3	96.013		50′	1580.0	213.86	

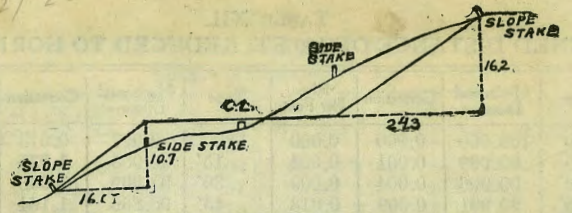
T = R tan ½ I E = R exsec ½ I

TABLE IX. TANGENTS AND EXTERNALS TO A 1° CURVE

I	T	E	I=40°	I	T	E	I=50°	I	T	E	I=60°
31°	1589.0	216.3	+	41°	2142.2	387.4	+	51°	2732.9	618.4	+
10′	1598.0	218.7	5° C.	10′	2151.7	390.7	5° C.	10′	2743.1	622.8	5° C.
20′	1606.9	221.1	T	20′	2161.2	394.1	T	20′	2753.4	627.2	T
30′	1615.9	223.5	.13	30′	2170.8	397.4	.17	30′	2763.7	631.7	.21
40′	1624.9	226.0	E	40′	2180.3	400.8	E	40′	2773.9	636.2	E
50′	1633.9	228.4	.023	50′	2189.9	404.2	.037	50′	2784.2	640.7	.056
32°	1643.0	230.9		42°	2199.4	407.6		52°	2794.o	645.2	
10′	1652.0	233.4		10′	2209.0	411.1		10′	2804.9	649.7	
20	1661.0	235.9		20′	2218.6	414.5		20′	2815.2	654.3	
30′	1670.0	238.4		30′	2228.1	418.0		30′	2825.6	658.8	
40′	1679.1	241.0		40′	2237.7	421.4		40′	2835.9	663.4	
50′	1688.1	243.5		50′	2247.3	425.0		50′	2846.3	668.0	
33°	1697.2	246.1	10° C.	43°	2257.0	428.5	10° C.	53°	2856.7	672.7	10° C.
10′	1706.3	248.7	T	10′	2266.6	432.0	T	10′	2867.1	677.3	T
20′	1715.3	251.3	.26	20′	2276.2	435.6	.34	20′	2877.5	682.0	.42
30′	1724.4	253.9	E	30′	2285.9	439.2	E	30′	2888.0	686.7	E
40′	1733.5	256.5	.046	40′	2295.6	442.8	.075	40′	2898.4	691.4	.112
50′	1742.6	259.1		50	2305.2	446.4		50′	2908.9	696.1	
34°	1751.7	261.8		44°	2314.9	450.0		54°	2919.4	700.9	
10′	1760.8	264.5		10′	2324.6	453.6		10′	2929.9	705.7	
20′	1770.0	267.2		20′	2334.3	457.3		20′	2940.4	710.5	
30′	1779.1	269.9		30′	2344.1	461.0		30′	2951.0	715.3	
40′	1788.2	272.6		40′	2353.8	464.6		40′	2961.5	720.1	
50′	1797.4	275.3	15° C.	50′	2363.5	468.4	15° C.	50′	2972.1	725.0	15° C.
35°	1806.6	278.1	T	45°	2373.3	472.1	T	55°	2982.7	729.9	T
10′	1815.7	280.8	.40	10′	2383.1	475.8	.51	10′	2993.3	734.8	.63
20′	1824.9	283.6	E	20′	2392.8	479.6	E	20′	3003.9	739.7	E
30′	1834.1	286.4	.070	30′	2402.6	483.4	.116	30′	3014.5	744.6	.168
40′	1843.3	289.2		40′	2412.4	487.2		40′	3025.2	749.6	
50′	1852.5	292.0		50′	2422.3	491.0		50′	3035.8	754.6	
36°	1861.7	294.9		46°	2432.1	494.8		56°	3046.5	759.6	
10′	1870.9	297.7		10′	2441.9	498.7		10′	3057.2	764.6	
20′	1880.1	300.6		20′	2451.8	502.5		20′	3067.9	769.7	
30′	1889.4	303.5		30′	2461.7	506.4		30′	3078.7	774.7	
40′	1898.6	306.4	20° C.	40′	2471.5	510.3	20° C.	40′	3089.4	779.8	20° C.
50′	1907.9	309.3	T	50′	2481.4	514.3	T	50′	3100.2	784.9	T
37°	1917.1	312.2	.53	47°	2491.3	518.2	.68	57°	3110.9	790.1	.84
10′	1926.4	315.2	E	10′	2501.2	522.2	E	10′	3121.7	795.2	E
20′	1935.7	318.1	.093	20′	2511.2	526.1	.151	20′	3132.6	800.4	.225
30′	1945.0	321.1		30′	2521.1	530.1		30′	3143.4	805.6	
40′	1954.3	324.1		40′	2531.1	534.2		40′	3154.2	810.9	
50′	1963.6	327.1		50′	2541.0	538.2		50′	3165.1	816.1	
38°	1972.9	330.2		48°	2551.0	542.2		58°	3176.0	821.4	
10′	1982.2	333.2	25° C.	10′	2561.0	546.3	25° C.	10′	3186.9	826.7	25° C.
20′	1991.5	336.3	T	20′	2571.0	550.4	T	20′	3197.8	832.0	T
30′	2000.9	339.3	.67	30′	2581.0	554.5	.85	30′	3208.8	837.3	1.05
40′	2010.2	342.4	E	40′	2591.0	558.6	E	40′	3219.7	842.7	E
50′	2019.6	345.5	.117	50′	2601.1	562.8	.189	50′	3230.7	848.1	.283
39°	2029.0	348.6		49°	2611.2	566.9		59°	3241.7	853.5	
10′	2038.4	351.8		10′	2621.2	571.1		10′	3252.7	858.9	
20′	2047.8	354.9		20′	2631.3	575.3		20′	3263.7	864.3	
30′	2057.2	358.1		30′	2641.4	579.5		30′	3274.8	869.8	
40′	2066.6	361.3		40′	2651.5	583.8		40′	3285.8	875.3	
50′	2076.0	364.5		50′	2661.6	588.0		50′	3296.9	880.8	
40°	2085.4	367.7	30° C.	50°	2671.8	592.3	30° C.	60°	3308.0	886.4	30° C.
10′	2094.9	371.0	T	10′	2681.9	596.6	T	10′	3319.1	892.0	T
20′	2104.3	374.2	.80	20′	2692.1	600.9	1.02	20′	3330.3	897.5	1.27
30′	2113.8	377.5	E	30′	2702.3	605.3	E	30′	3341.4	903.2	E
40′	2123.3	380.8	.141	40′	2712.5	609.6	.227	40′	3352.6	908.8	.340
50′	2132.7	384.1		50′	2722.7	614.0		50′	3363.8	914.5	

T = R tan ½ I E = R exsec ½ I

23°10'40"
46°21'20"



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.

SLOPE 1½ TO 1. ROADWAY OF ANY WIDTH.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0 00	0 15	0.30	0.45	0.60	0.75	0.90	1.05	1.20	1.35	0
1	1.50	1 65	1 80	1.95	2.10	2.25	2.40	2.55	2.70	2.85	1
2	3.00	3.15	3.30	3 45	3.60	3 75	3.90	4.05	4.20	4 35	2
3	4.50	4 65	4.80	4.95	5 10	5 25	5 40	5.55	5.70	5.85	3
4	6.00	6 15	6.30	6.45	6.60	6.75	6.90	7.05	7.20	7.35	4
5	7 50	7.65	7.80	7.95	8.10	8.25	8.40	8.55	8.70	8.85	5
6	9 00	9 15	9.30	9.45	9.60	9.75	9.90	10.05	10.20	10.35	6
7	10.50	10 65	10.80	10.95	11.10	11.25	11.40	11.55	11 70	11.85	7
8	12.00	12 15	12.30	12.45	12.60	12.75	12.90	13.05	13.20	13.35	8
9	13 50	13.65	13 80	13 95	14.10	14.25	14.40	14 55	14.70	14.85	9
10	15.00	15 15	15 30	15 45	15.60	15.75	15.90	16.05	16.20	16 35	10
11	16 50	16 65	16 80	16.95	17 10	17.25	17.40	17.55	17.70	17.85	11
12	18 00	18.15	18.30	18 45	18.60	18 75	18.90	19.05	19.20	19 35	12
13	19 50	19 65	19.80	19.95	20.10	20.25	20 40	20.55	20.70	20.85	13
14	21.00	21 15	21.30	21.45	21 60	21.75	21.90	22 05	22 20	22 35	14
15	22 50	22 65	22 80	22 95	23.10	23.25	23.40	23.55	23.70	23.85	15
16	24.00	24 15	24 30	24 45	24.60	24.75	24 90	25 05	25.20	25.35	16
17	25.50	25 65	25.80	25 95	26.10	26 25	26 40	26.55	26.70	26.85	17
18	27.00	27 15	27.30	27 45	27.60	27.75	27.90	28.05	28 20	28.35	18
19	28 50	28 65	28 80	28.95	29.10	29.25	29 40	29.55	29.70	29.85	19
20	30 00	30 15	30.30	30.45	30.60	30.75	30.90	31.05	31.20	31.35	20
21	31 50	31 65	31.80	31.95	32 10	32 25	32.40	32.55	32 70	32 85	21
22	33 00	33 15	33 30	33 45	33.60	33 75	33.90	34.05	34.20	34.35	22
23	34 50	34 65	34.80	34.95	35.10	35 25	35 40	35.55	35.70	35 85	23
24	36.00	36 15	36.30	36 45	36.60	36.75	36.90	37.05	37 20	37.35	24
25	37.50	37.65	37 80	37.95	38.10	38.25	38.40	38.55	38.70	38.85	25
26	39 00	39 15	39.30	39 45	39 60	39.75	39.90	40.05	40.20	40.35	26
27	40 50	40 65	40 80	40.95	41.10	41.25	41 40	41.55	41.70	41.85	27
28	42 00	42 15	42.30	42.45	42.60	42 75	42.90	43.05	43.20	43.35	28
29	43 50	43 65	43.80	43 95	44.10	44 25	44 40	44.55	44.70	44 85	29
30	45 00	45 15	45.30	45 45	45.60	45.75	45 90	46.05	46 20	46.35	30
31	46.50	46.65	46.80	46 95	47.10	47.25	47.40	47.55	47.70	47.85	31
32	48 00	48.15	48.30	48 45	48.60	48 75	48.90	49.05	49 20	49.35	32
33	49.50	49 65	49.80	49.95	50.10	50.25	50.40	50.55	50 70	50.85	33
34	51 00	51.15	51.30	51.45	51.60	51.75	51 90	52.05	52.20	52.35	34
35	52 50	52.65	52.80	52.95	53.10	53.25	53.40	53.55	53.70	53.85	35
36	54 00	54.15	54.30	54 45	54.60	54.75	54.90	55.05	55.20	55.35	36
37	55 50	55 65	55.80	55.95	56.10	56.25	56.40	56.55	56.70	56.85	37
38	57.00	57.15	57.30	57 45	57.60	57 75	57.90	58.05	58.20	58 35	38
39	58 50	58.65	58 80	58 95	59.10	59 25	59.40	59.55	59.70	59.85	39
40	60 00	60 15	60.30	60 45	60 60	60.75	60 90	61.05	61 20	61.35	40
41	61.50	61 65	61 80	61 95	62 10	62 25	62.40	62 55	62 70	62.85	41
42	63 00	63.15	63 30	63 45	63 60	63 75	63 90	64 05	64 20	64.35	42
43	64.50	64 65	64 80	64.95	65.10	65 25	65 40	65.55	65.70	65.85	43
44	66 00	66 15	66.30	66.45	66.60	66 75	66.90	67.05	67.20	67.35	44
45	67 50	67 65	67 80	67.95	68.10	68.25	68.40	68.55	68.70	68.85	45
46	69 00	69 15	69 30	69.45	69.60	69.75	69.90	70.05	70.20	70.35	46
47	70 50	70 65	70 80	70 95	71.10	71.25	71 40	71.55	71.70	71.85	47
48	72.00	72 15	72.30	72.45	72.60	72.75	72.90	73 05	73.20	73 35	48
49	73 50	73 65	73 80	73.95	74.10	74.25	74.40	74.55	74.70	74.85	49
50	75.00	75.15	75.30	75.45	75.60	75.75	75.90	76.05	76.20	76.35	50

Computed by L. Leland Locke.

130 15.14

124 38.13
1 76 62
130.14.75
.39

18232
18062
170

84
46
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185
655

16.6
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ct. - 8.72 J.P. 79886
ct - 3 2" Hydt.

206.60
.65
206.43.5
8
206+35
5
206+40
185+00
181+00
4.00

1,38
4
5.52

46.93
5.52
41.41
69
42.10

2.8 +6.0
206.72

138
69

16
4
7.8
3-10"

46.93. +5.0
69
46.24 =18.2
69
45.55 +5.0
69
44.86 =183
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44.17 +5.2
69
43.48 =184
69
42.79
69
42.10 =185

207.87

331.08
207.87
123.21

0+76.28

B.M. Mon N Line E End School Prop.
31.37.

23463
20174
436.4
218.2
200452
19827.

19.3
40 5
2 | 59.8
29.9
20221.3
20191.4

2874
2065
8.09
195.40
2874
166.66
178+46.04
172.00
6 46.04
24.68
97.32
122+1

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78 70
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5 | 19.000
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295.26
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14-35-30
1 64
15 39-30

107.13
S 2758-30 E
N 79-14-30 W
52-37-30
26-37-00

82-30
9.54
92-26

N 20-27 W
82 30
102 57

S 59-06 30
44.44-30
18

20 | 6.2
.32
32
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19.24
19.20
16.4

113565
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1.26 91.44
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1 46
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