

EL CAPITAN
Pipe Line Survey
Levels &
Cross Sections - # 9

10

W200

MICROFILMED
JAN 11 1965

#1

Cross Sections and Profile of
El Capitan Pipe Line Survey From Sta.
1099+72.6 to Sta. 1147+96.5

Mar. May 1926

Party: Tadd - T, Rec.
R.P. - Rods
A.R.

+	T	-	Elev.	B.M.	Sta
		0.	103.272	# 1236-1096+20	
3.234	106.506	0.834	105.672	✓	
6.547	112.239	7.4	104.8	✓	1099+72.6
		7.033	105.206	✓	
3.348	108.554	4.5	104.0	✓	1099+97.6
		5.7	102.8	✓	1100+21.0
		7.9	100.6	✓	1100+47.6
		11.6	96.9	✓	1100+72.6
		12.300	96.259	✓	
1.240	97.494	3.5	94.0	✓	1100+97.6

10' L

#2

10' R

Note: On this page, stations appear in the
column indicated.

109.7 ✓

7.5
102.2

103.6 ✓

4.2
102.2

102.3 ✓

6.2
102.2

99.8 ✓

8.2
102.2

96.6 ✓

11.2
102.2

72.4 ✓

4.2
102.2

96.9 ✓

102.2
5.2

105.3 ✓

6.2
102.2

104.2 ✓

4.1
102.2

102.3 ✓

5.2
102.2

101.7 ✓

6.2
102.2

98.2 ✓

102.2
102.2

94.5 ✓

3.0
102.2

#3

Sta	T	Ele	BM
	97.494 (brought forward)		
1101+22 ^e	5 ^L	92.4	✓
+27 (Fce)			
1101+34	6 ^L	91.3	✓
1101+37	7 ^L Wash	89.8	✓
1101+42	6 ^L	91.4	✓
1101+47 ^e	6 ^e	91.5	✓
1101+72 ^e	7 ^L	89.8	✓
1101+97 ^e	7 ^L	90.0	✓
1102+22 ^e	8 ^L	89.0	✓
1102+47 ^e	9 ^L	88.5	✓
	3.286	91.698	✓
		9.082	✓
		88.412	✓
1102+72 ^e	4 ^L	87.4	✓
1102+97 ^e	4 ^L	87.3	✓
1103+22 ^e	4 ^L	87.2	✓

Elevations Left

♀

Elevations Right

#4

10' ^L	10' ^R
91.8 ✓	93.0 ✓
5 ^L 10 ^L	4 ^L 10 ^L
91.5 ✓	91.6 ✓
7 ^L 10 ^L	5 ^L 10 ^L fence
91.7 ✓	91.6 ✓
7 ^L Wash 10 ^L	90.8 ✓
91.7 ✓	6 ^L 3 ^L
5 ^L 10 ^L	91.1 ✓
91.3 ✓	7 ^L 6 ^L
6 ^L 10 ^L	91.0 ✓
90.5 ✓	8 ^L 10 ^L
89.8 ✓	6 ^L 10 ^L
7 ^L 10 ^L	90.2 ✓
89.6 ✓	7 ^L 5 ^L
12 ^L 10 ^L	91.7 ✓
89.0 ✓	5 ^L 10 ^L
8 ^L 10 ^L	90.2 ✓
88.4 ✓	7 ^L 10 ^L
9 ^L 10 ^L	89.1 ✓
87.5 ✓	8 ^L 10 ^L
4 ^L 10 ^L	88.4 ✓
87.3 ✓	9 ^L 10 ^L
4 ^L 10 ^L	87.8 ✓
87.3 ✓	3 ^L 10 ^L
4 ^L 10 ^L	87.3 ✓
4 ^L 10 ^L	4 ^L 10 ^L
	87.2 ✓
	4 ^L 10 ^L

#5

Sta	+	T (bring hit forward) 91.698	-	Ele.	B.M.
1103+47 ^e			4 ²	87.0 ✓	
Tues, 5-18-26 Cloudy		Todd, N. Notes Troy, J. Redd ✓	4.220	87.478 ✓	
	3.767	91.245			
1103+57 ^e			4 ^e	86.6 ✓	
1103+72 ^e EC			5 ^s	85.7 ✓ 85.5 ✓	
1103+75 ^e			8 ²	82.5 ✓	
1103+95			8 ¹	83.1 ✓	
1104+00			5 ²	86.1 ✓	
1104+07 ^e			4 ²	86.4 ✓	
1105+00			4 ²	86.3 ✓	
			4.969	86.276 ✓	
	5.527	91.803 ✓			
			2.655	89.148 ✓	
	2.655	91.801 ✓			
				Record E.L. 89.146	
1105+06			5 ^s	86.3 ✓	

Note: Record E.L. used.
B.M. #124 Nail in Syc. Tree
25' N. Sta. 1105+00

86.1 ✓
5²
10²

#6

Sta	+	T (bring hit forward) 91.698	-	Ele.	B.M.
				10 ¹	
				87.3 ✓	
				4 ²	
				10 ²	
				87.0 ✓	
				4 ²	
				10 ²	
				83.3 ✓	
				83.0 ✓	
				86.2 ✓	
				4 ²	
				10 ²	
				86.1 ✓	
				5 ²	
				10 ²	
				86.0 ✓	
				7 ² Center of Wire	
				8 ²	
				3 ²	
				82.5 ✓	
				8 ²	
				7 ²	
				86.1 ✓	
				5 ²	
				4 ²	
				85.5 ✓	
				86.4 ✓	
				5 ²	
				10 ²	
				82.0 ✓	
				9 ²	
				10 ²	
				83.5 ✓	
				82.2 ✓	
				9 ²	
				10 ²	
				86.9 ✓	
				4 ²	
				10 ²	
				86.1 ✓	
				5 ²	
				10 ²	
				86.0 ✓	
				5 ²	
				10 ²	

#7

Sta.	+	T Bright forward	-	EL.	B.M.
		91.801 ✓			
1105+13			6 ^e	85.2 ✓	
+20			5 ^s	86.3 ✓	
+75			4 ^e	87.2 ✓	
+82			5 ^s	86.5 ✓	
+94			7 ^e	84.0 ✓	
1106+00			7 ^L	84.7 ✓	
+15			5 [±]	86.4 ✓	
+41			7 ^e	84.8 ✓	
1107+00			7 ^s	84.5 ✓	
		4.548	7.698	84.103 ✓	
		88.651 ✓			
1108+00			4 ^L	83.9 ✓	
1109+00			5 ^L	83.5 ✓	
+75			3 ^e	85.4 ✓	

10^eL
 85.5 ✓
 6^s
 10^e
 86.5 ✓
 5^s
 10^e
 87.0 ✓
 4^e
 10^e
 85.3 ✓
 6^s
 10^e
 84.6 ✓
 7^e
 10^e
 85.3 ✓
 6^s
 10^e
 85.7 ✓
 6^e
 10^e
 84.7 ✓
 7^e
 10^e
 84.8 ✓
 7^e
 10^e
 84.8 ✓
 7^e
 10^e
 84.5 ✓
 83.9 ✓
 5^s
 10^e
 83.6 ✓
 5^s
 10^e
 87.4 ✓
 12^e
 10^e

83.8 ✓
 8^e
 5^s

#8

10 ^e A	center of Wash	Bottom of Wash	Center of Wash
83.2 ✓			
6 ^e			
7 ^e			
86.2			
85.4			
5 ^e			
10 ^e			
87.0			
4 ^e			
10 ^e			
86.3			
5 ^s			
10 ^e			
84.1			
7 ^e			
10 ^e			
84.2			
7 ^e			
10 ^e			
86.7			
85.8			
5 [±]			
10 ^e			
85.4			
84.9			
6 ^L			
10 ^e			
84.4			
83.8			
7 ^e			
8 ^e			
10 ^e			
84.1			
7 ^e			
8 ^e			
10 ^e			
84.2 ✓			
4 ^L			
10 ^e			
83.6 ✓			
5 ^e			
10 ^e			
85.1 ✓			
3 ^e			
10 ^e			

#9

Sta.	+	π Brought forward.	#	EL.	B.M.s
		88.651 ✓			
			2.882	85.769	
+10+00	9.472	95.241 ✓	2 ²	93.2 ✓	
			1.251	93.990 ✓	
110+00	10.236	104.226 ✓			
+23			6 ²	98.0 ✓	
+69 fence			1 ³	102.4 ✓	
			1.057	103.169 ✓	
	4.907	108.076 ✓			
+69					
111+00			4 ⁵	103.5 ✓	
+05± BC			4 ²	103.2 ✓	
+30±			4 ²	103.4 ✓	
+55±			3 ¹	104.7 ✓	
+80±			3 ²	105.1 ✓	
			3.147	104.929	Rec. EL.
	11.043	115.961 ✓		104.915	

10'L.

96.7 ✓
7⁵
10²
100.6 ✓
3⁵
10²

104.2 ✓
0²
4²

105.6 ✓
2⁵
10²

106.3 ✓
1⁵
10²
106.2 ✓

1⁸
10²
104.9 ✓

3⁴
10²
104.9 ✓

3³
10²
105.9 ✓

2³
10²

105.2 ✓
2²
4²

105.2 ✓
2²
5²

103.1 ✓
4²
2²

#10

10'R.

90.8 ✓
4²
10²

95.7 ✓

8⁵
10²
101.1 ✓
3²
10²

101.9 ✓
6²
10²
102.0 ✓

6²
10²
102.5 ✓

5⁵
10²
104.0 ✓

4²
10²
103.7 ✓

4²
10²

Note: - Rec. EL. Used
B.M. = 125 Nail in 6" tree
5' R. Sta. 111+80

#11

Sta.	+	T	-	EL.	B.M. ₁₅
1112+00		Brought forward 115.961 ✓	10 ²	105.2 ✓	
1112+05±			9 ²	106.8 ✓	
			1.468 ✓	114.493 ✓	
	12.483	126.976			
1112+30±			11 ²	115.3 ✓	
+55±			5 ²	121.3 ✓	
			1.037 ✓	125.939 ✓	
	12.150	138.089			
+80±			10 ²	127.3 ✓	
1113+05±			5 ²	132.3 ✓	
+30±			2 ²	135.4 ✓	
+55±			1 ²	137.1 ✓	
			1.393 ✓	136.696 ✓	
	12.862	149.558			
			11.611 ✓	137.947 ✓	
+80±	11.611	149.553	10 ²	139.2 ✓	
1114+05±			7 ⁶	141.9 ✓	
+30±			5 ²	144.3 ✓	

Note: - Stake numbered wrong
no mistake in measure.

10' L. 105.8 ✓
10² 106.6 ✓
9² 106.6 ✓
10²

113.9 ✓

13²
10²

120.3 ✓

6²
10²

126.2 ✓

11²
10²

130.7 ✓

7²
10²

134.6 ✓

3²
10²

136.9 ✓

1²
10²

Rec. EL.
137.942 Note: Rec. El. used.

B.M. F 1259
Nail in hub 25' P. Sta. 1113+80

10² 138.9 ✓
10²

142.2 ✓

7²
10²

144.7 ✓

4²
10²

#12

10' F 105.0 ✓
11² 105.0 ✓
10² 107.5 ✓
8² 107.5 ✓
10²

116.5 ✓

10⁵
10²

122.2 ✓

4²
10²

127.0 ✓

11²
10²

132.6 ✓

5²
10²

135.5 ✓

2²
10²

139.1 ✓

1²
10²

139.4 ✓

10²
10²

141.3 ✓

8³
10²

143.5 ✓

6²
10²

#13

Sta.	+	T. Brought forward.	±	EL.	B.M.s
		149.553 ✓			
	12.526	160.743 ✓	1.336	148.217 ✓	
1114+55 ^a E.C.			9 ^z	151.0 ✓	
			.979	159.764 ✓	
	11.715	171.479 ✓			
1115+00			9 ^z	162.0 ✓	
+13			7 ^z	164.3 ✓	
			1.141	170.338 ✓	
	12.474	182.812 ✓			
1115+57			5 ^z	177.6 ✓	
+68			2 ^L	180.7 ✓	
			1.012	181.800 ✓	
	12.377	194.177 ✓			
+80			7 ^L	186.5 ✓	
1116+00			1 ^L	192.5 ✓	
			.859	193.318 ✓	
	12.789	206.107 ✓			
+22			6 ^L	199.4 ✓	
			2.117	203.990 ✓	
	12.643	216.640 ✓			
+42			9 ^z	207.6 ✓	

Rec. EL. Nail Inset
B.M. #125a
10' R. Sta. 1116+50

Note: Rec. EL. used.

#14

±	10' L.	±	10' R.
151.4 ✓		150.1 ✓	
$\frac{9^z}{10^z}$		$\frac{10^z}{10^z}$	
162.3 ✓		160.1 ✓	
$\frac{9^z}{10^z}$		$\frac{11^z}{10^z}$	
165.1 ✓		163.4 ✓	
$\frac{6^z}{10^z}$		$\frac{8^z}{10^z}$	
180.1 ✓		175.6 ✓	
$\frac{2^z}{10^z}$		$\frac{7^z}{10^z}$	
182.6 ✓		180.1 ✓	
$\frac{0^z}{10^z}$		$\frac{2^z}{10^z}$	
187.6 ✓		183.8 ✓	
$\frac{4^z}{10^z}$		$\frac{10^z}{10^z}$	
193.9 ✓		190.5 ✓	
$\frac{0^z}{10^z}$		$\frac{3^z}{10^z}$	
202.6 ✓		197.0 ✓	
$\frac{3^z}{10^z}$		$\frac{9^z}{10^z}$	
210.4 ✓		204.7 ✓	
$\frac{6^z}{10^z}$		$\frac{11^z}{10^z}$	

#15

±

Sta. + T - EL. BM.s.

Brought forward
216.640 ✓1116+48^e6[±]

210.1 ✓

.937

215.703 ✓

Wed. May 19th 1926. Cool and Cloudy. Note: Cross-Party: (Rup. T
Todd, Notes
Andy, Rod ✓Sections must be
taken at all profile
points.

12.418 228.121 ✓

+81

6[±]

221.2 ✓

1117+00

2[±]

225.6 ✓

.699

227.422 ✓

12.148 232.570 ✓

+52

1[±]

238.3 ✓

1.342

238.228 ✓

12.943 251.171 ✓

+84

4[±]

246.4 ✓

1118+00

1[±]

249.3 ✓

.772

250.399 ✓

12.488 262.887 ✓

+26[±] B.C.6[±]

256.2 ✓

+51[±]1[±]

261.4 ✓

.757

262.130 ✓

12.367 274.497 ✓

#16

±

10' L.

211.9 ✓

4[±]
10[±]

10' R

207.6 ✓

9[±]
10[±]

#17

Sta.	+	π	-	EL.	B.M.s	10' L.
1118+76±		274.497 ✓	6 ²	267.7 ✓		
1119+01±			1 ²	273.5 ✓		
			959 ✓	273.538 ✓		
+05±	12.856	286.394	11 ⁶	274.8 ✓		
+26±			7 ³	279.1 ✓		
+43±			3 ³	283.1 ✓		
+51±			2 ²	284.2 ✓		
			1.248 ✓	285.146 ✓		
+76±	12.125	297.271	8 ⁵	288.8 ✓		
1120+01±			4 ¹	293.2 ✓		
			1.067 ✓	296.204 ✓		
+26±	12.610	308.814	11 ⁶	297.2 ✓		
+42 ⁵ fence			7 ⁴	301.4 ✓		
+51±			2 ²	306.8 ✓		

#18

10' R.

#10	Stn	+	π	-	EL.	B.M.s
			Brought forward			
			308.814			
		9.490		9.490	299.324	Rec. EL. used 299.320
		9.490	308.810			
				.803	308.007	✓
		12.453	320.460			
1121+05				8 ⁸	311.7	✓
		+364		3 ⁵	317.0	✓
		+474		2 ²	318.3	✓
	Bright - Sun. 10 AM.			.857	319.603	✓
		13.033	332.636			
1122+00				6 ⁸	325.8	✓
		+13		4 ²	327.7	✓
				1.009	331.627	✓
		12.331	343.958			
		+57		10 ⁵	333.5	✓
				10.512	333.446	Rec. EL. used 333.456
		10.512	343.968			Approx. 9' L. Sta. 1122+65
1123+00				5 ²	338.1	✓
		+13		4 ⁰	340.0	✓
		+35 P.O.T.		2 ⁴	341.6	✓

#20

10' L.

10' R.

approx. 20' L.
Sta. 1120+45

#21

#22

Sta.	T.	T	EL. BM.	10'L.
		Brought forward		
		343.968		
1123+40			1 ¹	342.3 ✓
			1.693	342.275 ✓
	5.751	348.026		
1124+00			5 ¹	342.9 ✓
1121			5 ²	343.0 ✓
+21				
+38			5 ²	342.8 ✓
1125+00			7 ¹	340.9 ✓
			6.758	341.268 ✓
	1.741	343.009		
112			2 ⁶	340.4 ✓
+25 ⁵ P.O.T.				
1126+00			9 ⁶	333.4 ✓
+13			10 ²	332.2 ✓
			10.842	332.167 ✓
	1.980	334.147		
112			5 ²	328.13 ✓
+42				
+69			9 ⁶	324.5 ✓
+80			12 ⁴	321.7 ✓

10'R.

#23

Sta.	+	π Brought forward	ϕ -	EL.	B.M.	10'L
		334.147				
	1.992	323.759	12.380	321.767		
1127+00			4 ²	318.9		
11	+25		7 ⁶	316.2		
	+42		9 ⁵	314.3		
	+50		11 ⁴	312.4		
			9.738	314.021		
	5.215	319.236				
11	+66		10 ²	309.0		
			8.916	310.320		
	1.353	311.673				
	+83		7 ⁸	303.8		
1128+00			9 ²	302.0		
	+25		3 ⁰	308.7		
11			1.074	310.599		
	12.909	323.508				
	+50		10 ¹	313.4		
	+75		7 ⁵	316.0		

#24

10'R

#25

Sta.	+	T	-	EL.	B.M.s	10' L.
1129+00		Brought forward 323.508	4 ²	318.6		
			1722	321.786		
	12.423	334.209				
1130+00			1 ²	332.3		
			1.890	332.319		
	9.982	342.301				
+10			8 ²	333.4		
+50			5 ²	336.9		
+82			3 ²	338.7		
1131+00 P.O.T.			4 ²	338.3		
			4.377	337.924	Not. El. used 337.929 approx. 15' L. Sta. 1131+00	
	4.377	342.306				
+17			5 ²	337.0		
+42			9 ²	332.5		
			11.245	331.061		
	1.712	332.773				
+66			6 ²	326.6		
+77			10 ²	322.7		
+91			12 ²	320.6		

#26

10' R.

#27

Sta.	+	T	±	EL.
		Brought forward 332.773		
			12.241	320.532
1131+95	1.729	322.261	2 ²	319.4 ✓
1132+00			5 ¹	317.2 ✓
+08			8 ²	313.6 ✓
			11.344	310.917
+25	1.127	312.044	3 ⁸	308.2 ✓
+38			7 ⁴	304.6 ✓
+50			9 ⁵	302.5 ✓
			11.255	300.789
	1.642	302.431		
			3.921	298.510
				298.507 Approx. 3' R Sta. 1132+66
+64	3.921	302.428	3 ¹	299.3 ✓
+75			5 ⁵	296.9 ✓
+85			7 ⁸	294.6 ✓

10'L

±

#28

10'R

#29

Sta.	+	T Brought forward	±	EL.	B.M.s	10' L
		302.428				
1132+88			6 ⁶	295.8	✓	
1133+00			8 ²	293.7	✓	
+11			11 ²	290.7	✓	
+25			11 ⁸	290.6	✓	
			10.230	292.198		
	.823	293.021				
+36			5 ^L	287.9	✓	
+50			6 ²	286.8	✓	
+75			7 ⁶	285.4	✓	
1134+00			8 ⁶	284.4	✓	
+06			11 ³	281.7	✓	
+15			9 ²	284.0	✓	
+25			8 ^L	284.9	✓	

#30

10' R

center of
small wash.

#31

Sta.	+	π	ξ	EL.	B.M. _s	10' L
		Brought forward 293.021				
1134+50			7 ^o	286.0	✓	
+64			7 ³	285.7	✓	
+75			6 ²	286.8	✓	
1135+00			4 ⁶	288.4	✓	
			5.403	287.618		
	6.610	294.228				
+25			4 ⁸	289.4	✓	
+37			5 ⁸	288.4	✓	
+50			6 ⁵	287.7	✓	
+75			8 ⁴	285.8	✓	
+95			9 ⁶	284.6	✓	
1136+00			10 ⁵	283.7	✓	
+09 ⁶ P.O.T.			11 ⁸	282.4	✓	
			9.088	285.140		
	7.062	292.202				

#32

10' R

#33

Sta.	+	π Brought forward	ϕ -	EL.	B.M. _s Rec. El. Used 286.929 Approx. 35' L of Sta. 1136+35
		292.202			
	5.270	292.199	5.270	286.932	
1136+25			12 ²	279.8	✓
			11.889	280.310	
	1.410	281.720			
+50			6 ²	274.8	✓
+69 ⁶ B.C.			11 ²	269.8	✓
			11.901	269.819	
	2.571	272.390			
+94 ⁶			9 ¹	263.3	✓
			12.727	259.663	
	.456	260.119			
1137+19 ⁶			2 ²	257.2	✓
+44 ⁶			9 ⁰	251.1	✓
			12.226	247.893	
	1.987	249.880			
			5.723	244.157	Rec. El. Used 244.158 Approx. 10' R. Sta. 1137+60
+69 ⁶	5.723	249.881	3 ⁵	246.4	✓
+84			5 ³	244.6	✓

10' L.

 ϕ

#34

10' R.

#35

±

Sta. + T - EL. B.M.s 10'L.

Brought forward
249.8811137+94^e 7^e 242.3 ✓1138+03 10^e 239.0 ✓

11.583 238.298

Thurs. May 20th Cool and CloudyParty: { Pup. T
Todd, Notes
Andy, FredNote: - Cross-sections must be taken
at all profile points.

1.591 239.889

+19^e 4^e 235.8 ✓+36 5^e 234.4 ✓+44^e 6^e 233.7 ✓+69^e 9^e 230.5 ✓+94^e 11^e 228.9 ✓1139+03^e-EC. 12^e 227.9 ✓

11.929 227.960

2.213 230.173

+25 3^e 226.9 ✓+49 4^e 225.3 ✓

#36.

±

10'R.

#37

Sta.	T	π	ϕ	FL.	B.M. _s	10' L.
		Brought forward 230.173				
1139+52	PI.		7 ⁰	223.2	✓	
+71			8 ⁵	221.7	✓	
			10.971	219.502		
	3.097	222.599				
1140+00			2 ⁶	220.0	✓	
+25			4 ³	218.3	✓	
+42			5 ²	216.8	✓	
+50			7 ⁰	215.6	✓	
+75			9 ⁶	213.0	✓	
1141+00			11 ²	211.6	✓	
			10.520	212.079		
	1.995	214.074				
+22			2 ³	211.4	✓	
+44			5 ⁵	208.6	✓	
+56			5 ²	208.2	✓	

#38

10' R.

 ϕ

#39

Sta.

+

 π
 Brought forward
 214.074

FL. B.M.s

10' L.

1141+75

8^e

206.1 ✓

1142+00

8^e

205.3 ✓

+18

9^e

204.3 ✓

+24

11^e

202.6 ✓

9.542

204.532

204.522

1.222 205.744

 Rec. El. Used
 Approx. 12' L.
 Sta. 1142+44

+38

9^e

196.3 ✓

11.904

193.840

2.470 196.310

11.320

184.990

 Rec. El. Used.
 184.988
 Approx. 13' R.
 Sta. 1143+95

Note

#40

10' R.

#41

Sta.

+

T

~~2~~

-

EL.

B.M.s

10'L.

#42

10'R.

~~2~~

#43

Sta.

+

π

Σ

-

EL.

B.M.

10' L.

#44

10' R.



#

11

8
817
485

10

100

10'L

U

#46

10'R

Station + T - Elev. 264.522 B.M.

.599	205.121 ✓
1142+29	2.5 202.6 ✓
+44	9.1 196.0 ✓
	11.284 193.837 ✓
0.576	194.913 ✓
+54	4.4 190.0 ✓
	11.288 183.125 ✓
1.971	185.096 ✓
+66	3.8 181.3 ✓
	11.075 174.021 ✓
2.313	176.334 ✓
+81	5.0 171.3 ✓
+90	10.2 166.3 ✓
	12.897 163.437 ✓
1.915	165.352 ✓
1143+00	6.4 159.0 ✓
+09	11.0 154.4 ✓
+11	13.1 152.3 ✓
+15	13.9 151.5 ✓

ORIGINAL COPR. 1910 U. S. G. S. LEFAX FILING INDEX

$\frac{82}{200} 157.2$ ✓
 $\frac{93}{100} 156.1$ ✓
 $\frac{125}{40} 152.9$ ✓
 $\frac{142}{100} 150.5$ ✓
 $\frac{149}{200} 150.5$ ✓
 $\frac{125}{40} 144.4$ ✓
 $\frac{12}{100} 161.4$ ✓
 $\frac{159}{200} 159.7$ ✓
 $\frac{157}{100} 159.6$ ✓
 $\frac{38}{200} 172.7$ ✓
 $\frac{48}{100} 171.7$ ✓
 $\frac{55}{15} 170.9$ ✓
 $\frac{82}{100} 168.3$ ✓
 $\frac{10}{200} 165.9$ ✓
 $\frac{95}{200} 179.1$ ✓
 $\frac{9}{100} 179.6$ ✓
 $\frac{139}{100} 175.3$ ✓
 $\frac{16}{200} 172.4$ ✓
 $\frac{85}{200} 188.1$ ✓
 $\frac{98}{100} 187.8$ ✓
 $\frac{6}{100} 182.6$ ✓
 $\frac{92}{200} 179.5$ ✓
 $\frac{12}{100} 194.9$ ✓
 $\frac{93}{100} 187.3$ ✓

LEFAX, PHILADELPHIA, PA. 42

Sta.	+	π	-	Elev.
		165.352		
+17			11.5	153.9 ✓
+36 ^s			3.1	162.3 ✓
		176.452	1.93	163.421 ✓
	13.031	174.453		
+48			6.3	170.2 ✓
			.699	175.753 ✓
	12.937	188.690		✓
+58 ^s			10.8	177.9 ✓
+71			4.3	184.4 ✓
		'A'	.292	188.398 ✓
	8.233	196.631		✓
+90			4.4	192.2 ✓
			11.639	184.992 ✓ B.M.

LEFAX FILING INDEX

$$\frac{08}{170} \begin{matrix} 205.1 \\ 198.0 \end{matrix}$$

$$\frac{12}{100} \begin{matrix} 203.9 \\ 197.0 \end{matrix}$$

$$\frac{40}{100} \begin{matrix} 201.1 \\ 194.4 \end{matrix}$$

$$\frac{79}{100} \begin{matrix} 200.2 \\ 193.9 \end{matrix}$$

$$\frac{28}{150} \begin{matrix} 191.6 \\ 183.3 \end{matrix}$$

$$\frac{52}{60} \begin{matrix} 188.5 \\ 180.6 \end{matrix}$$

$$\frac{57}{100} \begin{matrix} 189.0 \\ 180.3 \end{matrix}$$

$$\frac{10}{200} \begin{matrix} 183.3 \\ 173.4 \end{matrix}$$

$$\frac{20}{200} \begin{matrix} 182.8 \\ 172.7 \end{matrix}$$

$$\frac{70}{100} \begin{matrix} 180.6 \\ 171.2 \end{matrix}$$

$$\frac{90}{200} \begin{matrix} 180.3 \\ 170.2 \end{matrix}$$

$$\frac{22}{200} \begin{matrix} 173.4 \\ 166.6 \end{matrix}$$

$$\frac{36}{100} \begin{matrix} 172.7 \\ 166.6 \end{matrix}$$

$$\frac{50}{50} \begin{matrix} 171.2 \\ 169.9 \end{matrix}$$

$$\frac{60}{200} \begin{matrix} 170.2 \\ 169.0 \end{matrix}$$

$$\frac{92}{200} \begin{matrix} 166.6 \\ 160.6 \end{matrix}$$

$$\frac{92}{100} \begin{matrix} 166.6 \\ 160.2 \end{matrix}$$

$$\frac{114}{100} \begin{matrix} 169.9 \\ 158.7 \end{matrix}$$

$$\frac{120}{200} \begin{matrix} 169.0 \\ 157.3 \end{matrix}$$

$$\frac{40}{200} \begin{matrix} 160.6 \\ 153.7 \end{matrix}$$

$$\frac{52}{100} \begin{matrix} 160.2 \\ 153.9 \end{matrix}$$

$$\frac{62}{100} \begin{matrix} 158.7 \\ 153.9 \end{matrix}$$

$$\frac{80}{200} \begin{matrix} 157.3 \\ 152.9 \end{matrix}$$

$$\frac{158.6}{800} \begin{matrix} 156.5 \\ 152.9 \end{matrix}$$

$$\frac{90}{160} \begin{matrix} 153.7 \\ 152.9 \end{matrix}$$

$$\frac{115}{100} \begin{matrix} 153.9 \\ 152.6 \end{matrix}$$

$$\frac{115}{100} \begin{matrix} 153.9 \\ 152.3 \end{matrix}$$

$$\frac{125}{200} \begin{matrix} 152.9 \\ 151.5 \end{matrix}$$

$$\frac{110}{200} \begin{matrix} 152.9 \\ 151.5 \end{matrix}$$

$$\frac{120}{200} \begin{matrix} 152.6 \\ 151.5 \end{matrix}$$

$$\frac{130}{150} \begin{matrix} 152.3 \\ 151.5 \end{matrix}$$

$$\frac{135}{200} \begin{matrix} 151.5 \\ 151.6 \end{matrix}$$

#45

Sta.	+	-	EL.	B.M.
	8.407	193.395	184.988	184.988 Res. El. Used. Approx. 13' R. Sta. 1143+85
1144+00		There	191.0	2 [±] ✓
+14			187.5	5 [±] ✓
+29			185.1	8 [±] ✓
+45			182.4	11 [±] ✓
+64			180.6	12 [±] ✓
	11.709		181.686	
+86	1.944	183.630	176.8	6 [±] ✓
1145+00			175.4	8 [±] ✓
+11			174.9	8 [±] ✓
+24			172.8	10 [±] ✓
	11.149		172.481	
+36	1.712	174.193	169.8	4 [±] ✓
+58			165.0	9 [±] ✓

10' L.

#46

10' R.

#47

Sta.	+	π Brought forward 174.193	ϕ -	EL.	B.M.s	10' L.
1145+81			9 ⁵	164.7		
1146+00			10 ⁰	164.2		
+17			9 ²	165.0		
+50 P.O.T.			8 ²	165.3		
+71			12 ²	161.5		
		1.982		172.211		
	5.752	177.963				
B.M. #152			3.725	174.238	174.243	
	3.725	177.968				
			12.868	165.100		
	2.328	167.428				
1147+00			11 ⁵	155.9		
+04 ⁵ B.C.			12 ⁵	154.9		
			12.436	154.992		
	2.621	157.613				
+18 ⁵			6 ⁴	151.2		
+29 ⁵			9 ²	148.4		

Real. Used.

Approx. 10' L.

Sta. 1146+50

#48

10' R.

#49

Sta.	+	T	±	-	EL.	B.M.s
		Brought forward				10'L
		157.613				
1147	+43 ⁵		11 ²		146.0	✓
	+54 ⁵		13 ¹		144.5	✓
			10.385		147.228	
		1.388				
		148.616				
	+63 ⁵		5 ³		143.3	✓
	+71		6 ²		141.8	✓
	+79 ⁵		8 ²		139.8	✓
	+88 ⁵		11 ³		137.3	✓
	+96 ⁵		12 ³		136.3	✓
1148	+04 ⁵		13 ²		135.3	✓
			10.572		138.044	138.046
						Approx. 30'L
						Sta. 1148+10
		1.849				
		139.895				
	+18 ⁵		5 ³		134.6	✓
	+63 ² E.C. Approx.		4 ²		135.1	✓
	+74 ² Approx.					

Note: - E.C.
hub out these
distances are
approximated
by tape meas.

#50

10' R.

#51

Sta.	+	π Brought forward	ϕ -	EL.	B.M. _s	10' L.
		139.895				
1148+74 ²			8 ^e	131.1		
+80			10 ²	129.7		
+81			10 ^e	129.3		
+83			10 ^e	129.3		
+87			8 ²	131.7		
1149+00			7 ⁴	132.5		
+36			6 ^e	133.0		
1150+00			3 ^e	136.0		
			3.286	136.609		
	7.450	144.059				
1151+00			5 ^e	138.6		
1152+00			2 ^e	141.2		
1153+00			0 ^e	144.1		
			1.740	142.319		
	10.490	152.809				

#52

10' L.

 ϕ

1-18' culvert C.I.

1-18' culvert C.I.

Note: - Profile taken at
stations. Cross-sections
to be taken where necessary

#53

Sta.	+	π Brought forward	ϕ -	EL.	B.M.
		152.809			10' 28"
1152+75 B.C.			9 ^e	143.2	
1153+13			8 ²	144.5	
+25			6 [±]	146.4	
+50			4 ²	147.9	
+75			4 ²	148.8	
1154+00			5 ^e	147.8	
+22 ²			4 ^e	148.8	
1155+00			3 ²	149.6	
+48 [±] P.I.			2 ²	150.6	
			2.162	150.647	
	8.935	159.582			
1156+00			7 ²	152.4	
1157+00			5 ^e	154.6	
+42			3 [±]	156.2	

#54

10' 28"

#55

Φ

Sta.	+	π	-	EL.	B.M.s.	10' L.
		Brought forward				
		159.582				
1158+00			0 ²	158.7		
			1.173	158.409		
	10.599	169.008				
1159+00			7 ²	161.8		
			7 ¹	161.9		
+02 ² B.C.			6 ¹	162.9		
			11.455	157.553		
	11.455	169.016				
+52 ³			5 ²	163.8		
			3 ²	165.1		
+77 ³			2 ³	166.7		
+83 ² E.C.			1 ¹	167.9		
+91 ²			1 ⁴	167.6		
1160+00			1 ²	167.1		
			2.211	166.805		
	9.230	176.035				

Rec. El. Used.
157.561
 Approx. 40' L
 Sta. 1158+70

#56

Φ

10' L.

#57

Sta.	+	π Brought forward	Σ -	EL.	B.M.s	10' L.
1160+29		176.035	6 ⁵	169.5		
+43			6 ²	169.8		
+51			6 ²	169.8		
+58			8 ⁵	167.5		
+61			8 ³	167.7		
1161+00			7 ²	168.3		
+50			6 ²	169.3		
1162+00			4 ⁸	171.2		
+17 ¹			4 ⁶	171.4		
+42 ¹			4 ⁴	171.6		
+67 ¹			3 ²	172.8		
+92 ¹			2 ⁰	179.0		

#58

 Σ

10' R.

Edge of old Culvert

#59

Sta.	+	T	-	EL.	B.M.	10' L.
		Brought forward				
		176.035				
1162+95 ² E.C.			1 ²	174.1		
1163+00			1 ⁸	174.2		
			.886	175.149		
	11.885	187.034				
1163+50			11 ⁵	175.5		
1164+00			9 ⁷	177.3		
+10 B.C.			8 ⁴	178.6		
+35			6 ²	181.0		
+60			5 ⁵	181.5		
+82 ³ E.C.			5 ²	182.0		
1165+00			5 ³	181.7		
+50			4 ²	183.0		
1166+00			2 ²	184.8		
+10			1 ⁸	185.2		

#60

10' R

♀

#61

Sta.	+	π Brought forward	ϕ -	EL.	B.M. ₅	10' L
		187.034				
1166+20			1 ⁸	185.2		
+30			1 ²	185.8		
			1.322	185.712		
	10.013	195.725				
+40			9 ²	186.0		
+50			9 ⁵	186.2		
+60			7 ²	188.0		
+70			7 ⁰	188.7		
+80			6 ⁵	189.2		
+90			5 ³	190.4		
1167+07 ²			5 ¹	190.6		
1168+00			3 ⁶	192.1		
1168+50			2 ⁰	193.7		
1169+00			0 ⁰	194.8		

62

10' R.

#63

Sta.	+	π	$\frac{\$}{-}$	EL.	B.M. ₁₃	10' L.
		Brought forward 195.725				
		12.834	7.989	187.736	187.736	
1169+43		200.570	3 ⁵	197.1	✓	
1170+00			1 ²	198.7	✓	
+06			1 ⁵	197.1	✓	
+17			0 ²	199.7	✓	
+32			0 ³	200.3	✓	
		1.089		199.481		
		8.446		207.927	✓	
1171+00			5 ²	202.6	✓	
		1.848		206.079		
		8.021		214.100	✓	
+59 ³ BC			9 ²	209.2	✓	
+84 ²			9 ⁵	209.6	✓	
1172+09 ³			8 ²	205.2	✓	
+10 ³			9 ⁷	204.4	✓	

Rec. EL. Used
187.736
Approx. 40' R
Sta. 1167+90

Fri. May 21
Party 1 -
Clear and Bright
(Hub T
Todd Notes
Andy Rod)

14' C.I.C. Invert

#64

10' R.

#65

Q

Sta.

+

T
Brought forward
214.100

-

EL.

B.M.s

10' L.

1172+34³8^E

205.6 ✓

+59³7^E

206.6 ✓

+70² EC.7^L

207.0 ✓

1172+85

5^E

208.3 ✓

1173+00

5^L

209.0 ✓

+50

4^E

209.7 ✓

+92² BC.3^E

211.1 ✓

1174+02²3^E

210.6 ✓

+12²3^L

211.0 ✓

+22²2^E

211.8 ✓

+29² EC.1^L

212.7 ✓

1.649 212.451

8.237 220.688

1175+00

7^L

213.6 ✓

#66

Q

10' R.

#67

Sta.	+	T Brought forward 220.688	- ℄	EL.	B.M.s	10'L.
1175+50			5 ⁸	214.9		
1176+00			4 ⁶	216.1		
+13			3 ⁸	216.9		
+50			1 ⁸	218.9		
+77			1 ³	219.4		
			.895	219.793		
	8.179	227.972				
1177+00			5 ²	222.3		
+20			6 ⁵	221.5		
+34 ² B.C.			6 ²	221.1		
+43 ²			7 ²	220.3		
+57 ⁴			6 ⁴	221.6		
+80 ⁶ E.C.			5 ⁸	222.2		
1178+00			3 ⁴	224.6		

#68

10'R.

℄

14' O.I. Colvent

#69

Sta.	+	Σ Brought forward	ϕ -	EL.	B.M.s	10'L.
		227.972				
11178	+30		2 ^o	226.0		
11178	+42 ³ BC.		2 ²	225.3		
	+69 ²		2 ²	225.1		
	+95 ⁶ EC.		2 ⁵	225.5		
11179	+00		1 [±]	226.6		
		2.002		225.970		
		7.746		233.716		
11179			6.834	226.882	226.870	
		6.834		233.704		
	+50		5 [±]	228.3		
	+60		3 ^L	230.6		
11180	+00		4 ^L	229.6		
	+50		2 ²	230.9		
	+60		2 ²	230.8		
11181	+46 [±] BC.		2 [±]	231.1		

#70

10'R.

 ϕ

#71

Sta.	+	π Brought forward 233.704	-	EL.	B.M.	10' L.
1181	+71 [±]		1 ^e	232.7		✓
	+96 [±]		0 ²	233.0		✓
1182	+21 [±]		1 ^e	232.7		✓
		1.244		232.460		
		7.403		239.863		
	+36 [±]		8 ^e	231.4		✓
	+46 [±]		7 ^e	232.9		✓
	+71 [±]		6 ^e	233.4		✓
	+96 [±]		5 ^e	234.1		✓
1183	+21 [±]		5 ^e	234.6		✓
	+46 [±]		5 [±]	234.8		✓
	+57 [±] EC.		4 ²	235.0		✓
1184	+00		3 ^e	236.1		✓
	+45		2 ^e	237.4		✓

#72

10' R.

14' CI. Culvert

#73

Φ

Sta.

+

Brought forward
239.863

-

EL.

B.M.s

10' L.

1.985 237.878

7.964 245.842

1184+55

4² 241.6 ✓+65⁵ B.C.2² 242.9 ✓+75⁵2⁶ 243.2 ✓+85⁵3³ 242.5 ✓+95⁵4² 241.1 ✓1185+05⁵5² 240.1 ✓+15⁵6⁰ 239.8 ✓+25⁵6¹ 239.7 ✓+35⁵6⁵ 239.3 ✓+45⁵6⁴ 239.4 ✓+55⁵5² 239.9 ✓

#74

Φ

10' R.

#75

Sta.	+	⊖	EL.	B.M.s	10' L
1185+58 ²	EC.	5 ²	239.9		
+69 ²		10 ²	235.0		
1186+00		5 ²	240.6		
+37		3 ⁵	242.3		
+37		1 ⁵	244.3		
+58		0 ²	245.6		
+75 ²	B.C.	0 ²	245.2		
		11.456	234.386	234.389	
	11.456	245.845			
		1.003	244.842		
	9.762	254.604			
1186+93 ²		8 ²	245.7		
1187+10 ²	EC.	8 ²	245.7		
+33 ²		4 ²	249.7		
+50		5 ²	249.2		

Brought forward
245.842

Rec. El. Used
234.389
Approx. 4' R.
Sta. 1185+60

#76

10' R.

3.5' G.P. Culvert

#77

Sta.	+	π Brought forward 254.604	ϕ -	EL.	B.M.s
1187+64			4 ²	249.7	
+66			8 ²	246.4	
+92 ² BC			7 ²	247.4	
1188+17 ²			6 ²	248.3	
+42 ²			5 ²	249.4	
+69 ⁵ EC			4 ²	250.6	
1189+00			1 ²	252.7	
+22			1 ²	252.9	
+40			0 ²	254.2	
		.889		253.715	
		11.338		265.053	
+50			10 ⁵	254.5 254.6	
+75			9 ²	255.6 255.7	
+90			8 ²	256.3 256.4	

#78

10' R.

 ϕ

10' L.

#79

Sta.	+	π	-	EL.	B.M.s
		Brought forward			
				265.053	
1190+00			8 ³	256.7	✓
				256.8	
+43			3 ³	261.7	✓
				261.8	
+48			3 ⁴	261.6	✓
				261.7	
+49			4 ²	260.3	✓
				260.4	
+93			3 ⁴	261.6	✓
				261.7	
+95			0 ²	264.8	✓
				264.9	
			1.585	263.468	
	10.478	273.946			
1191+00			8 ⁶	265.3	✓
+18			9 ⁶	264.3	✓
+29			11 ²	262.7	✓
+50			10 ²	263.0	✓
1192+00			7 ²	266.0	✓
+35			6 ⁶	267.3	✓

#80

10' R.

#81

±

±

#82

Sta.

+

 π
 Brought forward
 273.946

-

EL.

B.M.s

10'L.

10'R.

1192+36

7^g

266.0 ✓

+45^g7^g

266.1 ✓

+71

5^g

268.3 ✓

1193+00

5^z

268.6 ✓

+12

1^z

272.6 ✓

+25

0^z

273.0 ✓

0.880 273.066

12.245 285.311

+50

10^t

274.9 ✓

+82

8^z

277.3 ✓

1194+00

10^z

274.6 ✓

+50

9^z

276.3 ✓

+62^z B.C.8^z

276.8 ✓

+90^z P.I.7^z

278.3 ✓

#83

Sta.	+	T	-	EL.	B.M.s	10'L.
		Brought forward				
		285.311				
1195	+19 ⁵		6 ^L	279.2		
1196	+00		1 ²	283.4		
			1.683	283.628		
		12.989		296.617		
			10.100	286.517	286.526	
		10.100		296.626	Approx. 25' R Sta. 1196+85	
	+35		10 ³	286.3		
1197	+00		5 ⁵	291.1		
	+13		6 ²	289.9		
1198	+00		2 ⁵	294.1		
			1.273	295.353		
		12.226		307.579		
	+77		9 ⁰	298.6		
1199	+00		7 ²	299.8		
	+14		7 ⁴	300.2		
	+87		2 ²	305.4		

#84

10'R.

12" O.I. Culvert

#85

∅

Sta.	+	∏ Brought forward	-	EL.	B.M. ₁₅	10' L
		307.579				
1200+00			1 ⁴	306.2		
			1.653	305.926		
	10.912	316.838				
+50			8 ⁴	308.4		
1201+00			6 ⁵	310.3		
1202+00			1 ⁴	315.7		
			0.866	315.972		
	10.384	326.356				
1203+00			5 ⁵	320.9		
+30			7 ⁰	319.4		
1204+00			2 ⁰	324.4		
			1.016	325.340		
	11.440	336.780				
+77 ⁸ bc.			7 ⁵	329.3		
+87 ⁸			7 ⁰	329.8		
+97 ⁸			6 ⁴	330.4		
1205+07 ⁸			5 ⁶	331.2		

#86

∅

10' R.

18" Concrete Culvert

#87

Sta.	+	π	-	EL.	B.M.s	10' L.
		Brought forward				
		336.780				
1205+17 ²			4 ²	331.9		✓
+27 ²			4 ³	332.5		✓
+37 ²			4 ²	332.8		✓
+47 ²			3 ²	333.5		✓
+57 ²			2 ²	334.1		✓
+67 ²			2 ²	334.6		✓
+77 ²			1 ²	334.9		✓
+86 ² EL.			1 ⁵	335.3		✓
1206+02 ² B.C.			0 ²	335.9		✓
			0.799	335.981		
	7.372	343.353				
+12 ²			7 ¹	336.3		✓
+22 ²			6 ²	336.6		✓
+32 ²			6 ³	337.1		✓

#88

10' R.

#89

Sta.	+	π Brought forward, 343.353	-	EL.	B.M.s	10'L.
1206+42 ^a			7 ¹	336.3		
+44 ^a			7 ²	335.7		
+45 ^a			11 ³	332.1		
+52 ^a			11 ²	331.7		
+62 ^a			12 ⁶	330.8		
+72 ^a			13 ⁵	329.9		
			11.340	332.013	Rec. El Used 332.020 Approx. 20'L Sta. 1207+03 ^a	
	3.130	335.150				
+82 ^a			8 ⁶	326.6		
+92 ^a			10 ²	324.5		
1207+03 ^a _{to}			16 ²	319.0		
+15			16 ²	318.5		
+60			15 ²	320.0		
1208+00			2 ^a	332.3		

#90

10'R

#91

☉

Sta.

+

T

-

EL.

B.M.s

10'L.

Brought forward
335.150

1.102 334.048

12.882 346.930

1208 + 33^{BC}10[±] 336.5 ✓+58[°]10[°] 336.9 ✓+83[°]11[°] 335.9 ✓

4.628 342.302

Rec. El. Used

342.301

Approx. 20' R

Sta. 1208 + 85

1.386 343.687

1209 + 08[°]12[°] 331.7 ✓+33[°] EL.12[°] 331.0 ✓+38[°] BC12[°] 331.2 ✓+63[°]8[±] 335.3 ✓+88[°]3[°] 340.7 ✓

2.469 341.218

12.452 353.670

1210 + 13[°]8[°] 344.8 ✓+38[°]2[°] 351.0 ✓

#92

☉

10'R.

#93

#94

Sta.	+	T	ϕ	-	EL.	B.M.	10' R.
		Brought forward 353.670					
		1.088			352.582		
	8.717	361.299					
1210	+49°		6°		355.1		
	+63°		5°		355.5		
	+88°		5°		356.1		
1211	+13°		4°		357.3		
	+38°		2°		358.5		
	+63°		2°		358.5		
	+88°		0°		361.3		
		3.279			358.020	358.014	
		10.153			368.167		
1212	+11° EC		5°		362.6		
	+50		3°		365.0	358.9	
			2°		365.8	359.7	
		2.080			366.087	366.088	
		7.786			373.874		

Note: From Elevations
at Sta. 1212 + 50 on
6.119 has been subtracted
to convert to City Datum
Equation:
0.0 City Datum
= 6.119 85.85.

359.7
Rec. El. Used
S.M. Cor. Meas
and Fairview

#95

Sta.	+	T	-	EL.	B.M.s	10' L.
		Brought forward				
		373.874				
1214+00			6 ³	369.6	361.5	
1215+00			4 ⁶	369.3	363.2	
1216+00			3 ⁸	370.1	364.0	
		3.566		370.308	364.201	

Rec. El. 724
S.W. Cor. Mead
and Copeland

#96

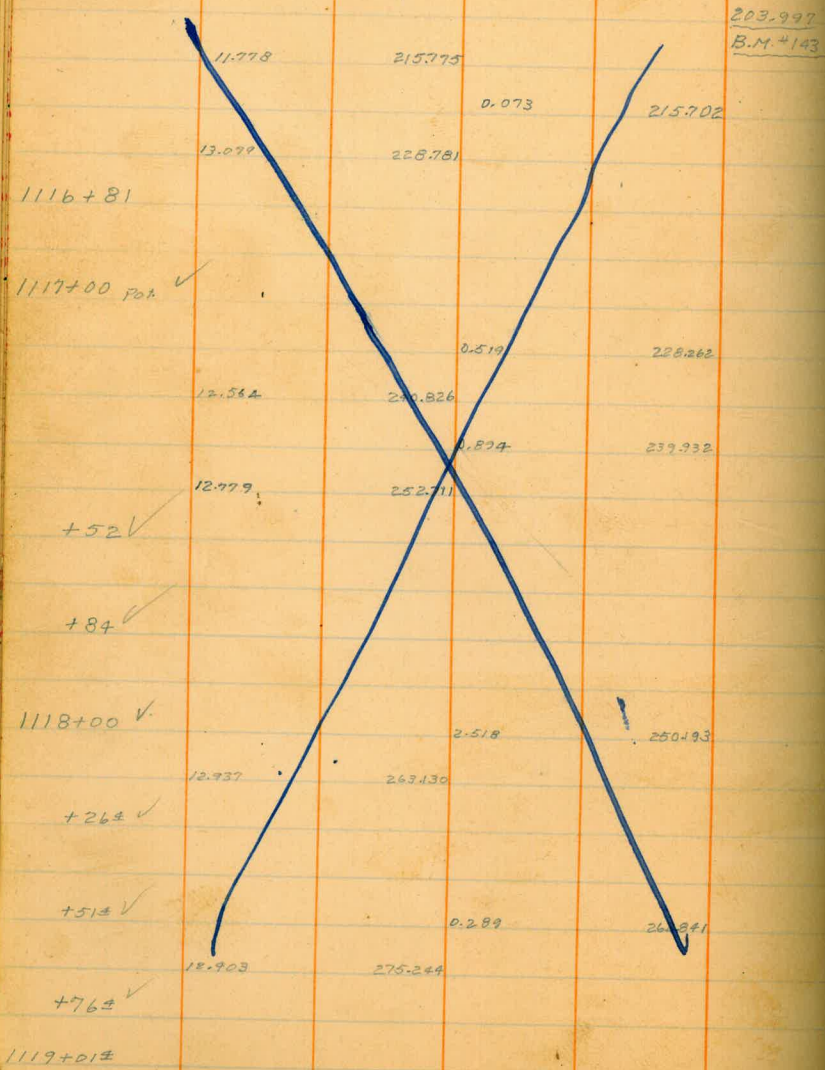
10' R

97

98

Continuation of Cross Sections (Void)

Sta. + π - Elev. B.M.



Tras. 25, '26 Average Party!

Rep. π Rec.
Todd - Rods
Anderson

$\frac{62}{108}$

$\frac{12}{100}$

$\frac{102}{108}$

$\frac{42}{108}$

$\frac{25}{108}$

$\frac{82}{108}$

$\frac{62}{108}$

$\frac{62}{108}$

$\frac{12}{102}$

22

32

192

64

35

72

20

78

12

$\frac{92}{102}$

$\frac{42}{102}$

$\frac{142}{102}$

$\frac{83}{102}$

$\frac{42}{102}$

$\frac{62}{102}$

$\frac{32}{102}$

$\frac{92}{102}$

$\frac{29}{102}$

Sta	+	↑ (Void)	Elev	B.M.
		275.244 (Parred)		
		1.912	273.232	
	12.745	286.077		
+05±	✓			
+26±	✓			
+46	✓			
+51±	✓			
		11.135	289.942 to here	
	11.818	294.00		
+76±	✓			
+82±	✓			
1120±0.1±		0.756	296.000	
	12.089	308.093		
+26±				
+51±				
		8.967	299.126	

L	C	R
112	112	132
102		102
48	22	72
100		102
28	23	54
100		102
12	21	35
100		102
72	20	92
100		102
72	22	72
100		102
36	32	97
100		102
108	42	112
100		102
72	42	72
100		102

Continuation of Cross Sections

L

±

R

Sta.	+	∓	-	Elev.	B.M.
	11.203	215.200	✓		← 203.997 B.M. #123
			1.047	214.153	✓
	12.284	227.137	✓		
			1.169	225.968	✓
1116+81	12.728	238.696	✓		
1117+00 P.O.T.			2.680	236.016	✓
	12.752	248.768	✓		
+52					
+84			1.348	247.420	✓
	11.945	259.365	✓		
1118+00					
+26 ¹ B.C.			1.686	257.679	✓
	12.020	269.699	✓		
+51 ¹					
			1.261	268.438	✓
	11.949	279.887	✓		
+76 ¹					
1119+01 ¹					

Wed. 26 '26. Average

Cross Sec. 1142+00 - 1144+00. 7:00 - 11:00

Party: Todd T. Reo after 12:00
Boyle & Rods.
Rup. S

222.4	221.3	219.3
$\frac{161}{10^2}$	$\frac{174}{0}$	$\frac{194}{10^2}$
228.2	225.6	223.8
$\frac{105}{10^2}$	$\frac{131}{0}$	$\frac{148}{10^2}$
240.8	238.9	236.8
$\frac{82}{10^2}$	$\frac{104}{0}$	$\frac{12^2}{10^2}$
247.8	246.4	244.8
$\frac{1^2}{10^2}$	$\frac{24}{0}$	$\frac{4^2}{10^2}$
250.6	249.4	247.9
$\frac{8^2}{10^2}$	$\frac{10^2}{0}$	$\frac{11^5}{10^2}$
257.9	256.2	254.4
$\frac{2^2}{10^2}$	$\frac{32}{0}$	$\frac{5^2}{10^2}$
262.8	261.3	259.5
$\frac{6^2}{10^2}$	$\frac{84}{0}$	$\frac{10^2}{10^2}$
269.1	267.6	265.9
$\frac{10^2}{10^2}$	$\frac{123}{0}$	$\frac{14^2}{10^2}$
273.9	273.4	272.5
$\frac{6^2}{10^2}$	$\frac{6^2}{0}$	$\frac{7^2}{10^2}$

Sta.	+	π	-	EL.	B.M.s
		279.887			
1119+05 [±]			.979	278.908	
	12.397	291.305			
+26 [±]					
+57 [±]					
+76 [±]			1.038	290.267	
	11.315	301.582			

Rec. El. Used
2.254 299.328 299.320
Approx. 20' L.
Sta. 1120+45

Thurs. 9:AM. Clear and Bright. Party: Todd - T Notes
Rup Anderson's Rod

	6.178	305.498			
1120+014					
+26 [±]					
+42 [±]					
+51 [±]			0.956	304.542	
	12.750	317.292			
+76 [±]					

1121+05[±] E.C.

+36[±]

L	π	π
278.9	279.9	278.9
$\frac{5^{\circ}}{10^{\circ}}$	$\frac{5^{\circ}}{10^{\circ}}$	$\frac{7^{\circ}}{10^{\circ}}$
282.0	279.0	278.1
$\frac{11^{\circ}}{10^{\circ}}$	284.1	282.8
284.6	288.8	287.8
6 [±]	289.1	287.8
$\frac{7^{\circ}}{10^{\circ}}$	288.8	287.8
289.1	288.8	287.8
2 [±]	288.8	287.8
$\frac{2^{\circ}}{10^{\circ}}$	288.8	287.8

Wed. 3:45 P.M.

293.3	293.1	292.3
$\frac{12^{\circ}}{10^{\circ}}$	$\frac{12^{\circ}}{10^{\circ}}$	$\frac{13^{\circ}}{10^{\circ}}$
297.3	297.2	296.5
0 [±]	8 [±]	9 [±]
$\frac{7^{\circ}}{10^{\circ}}$	301.5	301.5
301.5	301.5	301.5
4 [±]	306.7	306.5
$\frac{4^{\circ}}{10^{\circ}}$	306.7	306.5
306.3	306.7	306.5
$\frac{11^{\circ}}{10^{\circ}}$	311.6	311.7
311.3	311.6	311.7
6 [±]	317.1	317.1
$\frac{7^{\circ}}{10^{\circ}}$	317.1	317.1
317.1	317.1	317.1
0 [±]	317.1	317.1
$\frac{0^{\circ}}{10^{\circ}}$	317.1	317.1

Sta. + T - EL. B.M.s L

Brought forward
317.292

1.039 316.253

1121+36±

11.850 328.103

+47±

1122+00

10.256 337.313

+13

+57

12.433 345.889

1123+00

+13

+35^{pot}

+40±

1124+00

6.642 349.716

+21

2.815 343.074

Rec. El. Used
333.450
Approx. 11' L.
Sta. 1122+65

R

3169 ✓
112
10⁰

3181 ✓
10⁰
10⁰

3253 ✓
2⁰
10⁰

3273 ✓
10⁰
10⁰

3325 ✓
4⁰
10⁰

3369 ✓
9⁰
10⁰

3394 ✓
6⁰
10⁰

3401 ✓
5⁰
10⁰

340A ✓
5⁰
10⁰

341.9 ✓
4⁰
10⁰

3417 ✓
8⁰
10⁰

±

3181 ✓
10⁰
0

3258 ✓
23⁰
0

3277 ✓
9⁰
0

3333 ✓
4⁰
0

3381 ✓
7⁰
0

3399 ✓
6⁰
0

3419 ✓
4⁰
0

3422 ✓
3⁰
0

3429 ✓
3⁰
0

3431 ✓
6⁰
0

3167 ✓
11±
10⁰

3177 ✓
10⁰
10⁰

3261 ✓
2⁰
10⁰

327.6 ✓
9⁰
10⁰

324.0 ✓
3⁰
10⁰

339.0 ✓
6⁰
10⁰

3465 ✓
5±
10⁰

3432 ✓
2⁰
10⁰

343.5 ✓
2±
10⁰

3453 ✓
0⁰
10⁰

3453 ✓
4±
10⁰

Sta. + π - EL. B.M.

Brought forward
349.716 ✓

1124+38

1125+00

+25⁵ Pat.

0.807 338.978 ✓

1126+00

+13

+42

2.652 329.503 ✓

+69

+80

1127+00

0.954 318.343 ✓

+25

+42

+50

11.545

338.171 ✓

T.R. in Castles

12.127

326.851 ✓

12.114

317.389 ✓

L.

341.9 ✓

$\frac{78}{100}$

339.2 ✓

$\frac{10}{100}$

338.2 ✓

$\frac{11}{100}$

331.2 ✓

$\frac{78}{100}$

330.0 ✓

$\frac{9}{100}$

326.0 ✓

$\frac{13}{100}$

321.7 ✓

$\frac{78}{100}$

319.3 ✓

$\frac{10}{100}$

314.9 ✓

$\frac{14}{100}$

311.8 ✓

$\frac{6}{100}$

309.9 ✓

$\frac{8}{100}$

307.5 ✓

$\frac{10}{100}$

312.9 ✓

$\frac{5}{100}$

311.8 ✓

$\frac{6}{100}$

312.2 ✓

$\frac{1}{100}$

311.8 ✓

$\frac{6}{100}$

312.2 ✓

$\frac{1}{100}$

311.8 ✓

$\frac{6}{100}$

312.2 ✓

R

342.7 ✓

$\frac{7}{100}$

340.7 ✓

$\frac{9}{100}$

340.3 ✓

$\frac{9}{100}$

333.3 ✓

$\frac{5}{100}$

332.3 ✓

$\frac{6}{100}$

328.2 ✓

$\frac{10}{100}$

324.9 ✓

$\frac{5}{100}$

322.9 ✓

$\frac{4}{100}$

322.5 ✓

$\frac{3}{100}$

322.9 ✓

$\frac{7}{100}$

322.5 ✓

$\frac{3}{100}$

322.5 ✓

$\frac{10}{100}$

322.5 ✓

$\frac{7}{100}$

322.5 ✓

$\frac{10}{100}$

322.5 ✓

$\frac{2}{100}$

322.5 ✓

$\frac{4}{100}$

322.5 ✓

$\frac{3}{100}$

322.5 ✓

$\frac{3}{100}$

322.5 ✓

$\frac{6}{100}$

R

344.7 ✓

$\frac{5}{100}$

342.4 ✓

$\frac{7}{100}$

341.4 ✓

$\frac{8}{100}$

335.2 ✓

$\frac{3}{100}$

334.9 ✓

$\frac{4}{100}$

330.7 ✓

$\frac{8}{100}$

326.9 ✓

$\frac{2}{100}$

325.7 ✓

$\frac{3}{100}$

322.5 ✓

$\frac{7}{100}$

322.5 ✓

$\frac{10}{100}$

322.5 ✓

$\frac{7}{100}$

322.5 ✓

$\frac{10}{100}$

322.5 ✓

$\frac{12}{100}$

322.5 ✓

$\frac{12}{100}$

322.5 ✓

$\frac{0}{100}$

322.5 ✓

$\frac{1}{100}$

322.5 ✓

$\frac{1}{100}$

322.5 ✓

$\frac{1}{100}$

322.5 ✓

Subtract from
329.503

3175 ✓

122

$\frac{100}{100}$

318.3 ✓

$\frac{0}{100}$

316.8 ✓

$\frac{1}{100}$

316.8 ✓

$\frac{1}{100}$

316.8 ✓

Sta.	+	T	-	LI.	B.M.
		Brought forward			
		318.343			
1127+66					
+83					
1128+00					
+25					
+50	Party =	Anderson - T and Notes 2:P.M.			
		Tods Rod - Rod			
+75		1.724	316.619		
1129+00		12.767	329.386		
		0.913	328.473		
1130+00		12.119	340.592		
1130+10					
1130+50					
1130+82		2.671	337.921		
		2.130	340.059		
1131+00	P.O.T.				

Center of Wash slope constant both sides.

Rec. E/Use
20' STA
1131+00
#146

L.				R.
305.1	306.5	308.9	310.9	312.3
$\frac{132}{100}$	$\frac{112}{60}$	$\frac{92}{8}$	$\frac{74}{45}$	$\frac{60}{100}$
299.2	301.1	303.6	306.6	308.7
$\frac{191}{100}$	$\frac{172}{50}$	$\frac{142}{0}$	$\frac{122}{50}$	90
278.6	300.3	299.5	301.8	306.3
$\frac{192}{100}$	$\frac{180}{30}$	$\frac{165}{0}$		120
304.8	306.7	308.5	310.5	312.3
$\frac{135}{100}$	$\frac{110}{50}$	$\frac{90}{0}$	$\frac{70}{50}$	60
311.1		313.2		100
$\frac{82}{100}$		$\frac{51}{0}$		316.9
312.1		315.9		14
$\frac{62}{100}$		$\frac{24}{0}$		318.3
313.9		318.9	319.7	00
$\frac{137}{100}$		$\frac{110}{0}$	$\frac{95}{50}$	78
332.0		332.3		100
$\frac{86}{100}$		$\frac{80}{0}$		333.2
332.9		333.9		74
$\frac{77}{100}$		$\frac{70}{0}$		10
336.9		334.7		339.4
$\frac{42}{100}$		$\frac{30}{0}$		62
338.2		338.8		100
$\frac{24}{100}$		$\frac{18}{0}$		338.0
338.2		338.4		26
$\frac{10}{100}$		$\frac{17}{0}$		100
				339.4
				12
				100
				339.2
				02
				100

113

Sta.	+	T	-	EL.	B.M.s
		Brought Forward			
		340.059			
1131+17					
1131+42					
1131+66				328.958	
	9:1 A.M.		11.101	328.950	(T.W. 395)
Fri. May 28 th	Party	Todd	J. Rep. Rec.		
	0.758	329.716	Bailey		
		327.728	And. Rods		
1131+77					
+91					
+95					
1132+00					
+08				317.725	
		11.291		317.717	
	0.863	318.588			
+25		319.800			
+38					
				306.307	
		12.281		306.277	
	2.505	308.812			
+50		307.004			

114

L	R
336.9	
$\frac{32}{100}$	$\frac{27}{100}$
332.3	332.9
$\frac{78}{102}$	$\frac{72}{102}$
326.8	327.8
$\frac{133}{100}$	$\frac{127}{100}$
322.2	325.5
$\frac{75}{100}$	$\frac{68}{100}$
320.4	320.1
$\frac{83}{105}$	$\frac{96}{100}$
319.7	318.7
$\frac{100}{102}$	$\frac{112}{100}$
316.7	317.0
$\frac{137}{102}$	$\frac{122}{102}$
314.2	314.2
$\frac{155}{102}$	$\frac{153}{100}$
309.6	308.1
$\frac{90}{102}$	$\frac{108}{102}$
304.6	304.6
$\frac{120}{100}$	$\frac{140}{100}$
305.0	301.8
$\frac{38}{100}$	$\frac{70}{100}$
	302.5

Sta.

+

308.812
~~308.809 (Parted)~~

Elev.

B.M.

1132+64

+75

3.781

302.288

10.302

298.510

B.M. #147

~~298.502~~ 298.507

1132+60.5R

+85

+88

1133+00

+11

+25

2.586

294.782

10.092

292.196

+36

+50

+75

1134+00

+06

L

R

302.5

301.6

299.3

298.1

297.6

294.7

6.2
10.2

7.3
9.2

9.5

10.7
5.6

11.8
7.8

14.4
10.2

N.B. Line runs along left crest of 150' Wash for 250'

9.4
10.2

296.8

12.0

(30'R Bottom of wash
Elev. 280.0' Approx)

17.8
10.2

298.3

295.9

294.9

288.5

1.2
10.2

6.2
2.2

7.5

13.8
10.2

292.1

295.7

292.7

288.0

4.2
10.2

4.4

9.6
5.2

14.2
10.2

296.3

293.7

286.8

6.8
10.2

8.4

15.2
10.2

294.7

294.3

290.3

289.4

287.9

284.5

7.6
10.2

8.2
8.5

12.2
2.3

14.2
7.8

17.2
10.2

293.3

290.6

288.2

284.3

9.2
10.2

11.2

14.2
5.2

18.2
10.2

291.8

288.0

283.4

3.6
10.2

4.8

11.2
10.2

290.4

286.8

282.6

279.6

9.2
10.2

8.0

12.2
10.2

273.6

273.8

288.8

285.1

281.3

6.6
10.2

2.2

13.8
10.2

287.2

284.3

280.6

9.0
10.2

10.5

14.2
10.2

286.2

285.8

284.6

281.5

280.1

279.4

277.9

8.2
10.2

7.2
8.0

10.2
7.0

13.2

14.2
5.2

17.2
5.2

16.2
10.2

Sta	+	-	Elev.	B.M.
		294.782 (Parted)		
1134415		4.526	290.256	
	4.374	294.632		
+25				
+50				
+64				
+75				
1135100		4.344	290.288	
	6.110	296.398		
+25				
+37				
+50				
+75				
+95				
1136700				

L	R
288.8 ✓ $\frac{6^0}{10^0}$	284.1 ✓ $\frac{15^0}{10^0}$
287.1 ✓ $\frac{5^0}{10^0}$	284.6 ✓ $\frac{16^0}{10^0}$
290.0 ✓ $\frac{4^0}{10^0}$	285.8 ✓ $\frac{8^0}{10^0}$
289.6 ✓ $\frac{5^0}{10^0}$	285.6 ✓ $\frac{9^0}{10^0}$
291.1 ✓ $\frac{3^0}{10^0}$	286.6 ✓ $\frac{8^0}{10^0}$
292.6 ✓ $\frac{2^0}{10^0}$	288.6 ✓ $\frac{6^0}{10^0}$
292.7 ✓ $\frac{3^0}{10^0}$	289.3 ✓ $\frac{7^0}{10^0}$
282.1 ✓ $\frac{12^0}{10^0}$	288.3 ✓ $\frac{8^0}{10^0}$
291.9 ✓ $\frac{4^0}{10^0}$	287.7 ✓ $\frac{9^0}{10^0}$
289.1 ✓ $\frac{7^0}{10^0}$	285.7 ✓ $\frac{12^0}{10^0}$
287.5 ✓ $\frac{8^0}{10^0}$	284.9 ✓ $\frac{12^0}{10^0}$
286.9 ✓ $\frac{9^0}{10^0}$	283.7 ✓ $\frac{15^0}{10^0}$
	284.8 ✓ $\frac{11^0}{10^0}$
	284.4 ✓ $\frac{12^0}{10^0}$
	283.6 ✓ $\frac{12^0}{10^0}$
	282.9 ✓ $\frac{13^0}{10^0}$
	281.4 ✓ $\frac{15^0}{10^0}$
	280.8 ✓ $\frac{15^0}{10^0}$

Sta. + π - Elev. B.M. L. R.

296.398 (Parted)

11.261

285.137 ✓

5.282

290.419 ✓

1136+09⁶ Part.

+25

B.M. # 148

3.492

286.927 286.929

1.202

288.131 ✓

1136+50

+50

9.660

278.471 ✓

1.050

279.521 ✓

+69⁶ S.C.

10.933

268.955 ✓

0.866

269.654 ✓

+94²1137+19²

12.446

257.208 ✓

1.272

258.480 ✓

+44²

10.586

249.894 ✓

1.040

248.934 ✓

B.M. # 149

4.776

244.158 244.158

1137+60

285.2 ✓

 $\frac{32}{100}$

280.7 ✓

 $\frac{92}{100}$

277.7 ✓

 $\frac{108}{100}$

272.4 ✓

 $\frac{71}{100}$

266.3 ✓

 $\frac{32}{100}$

260.1 ✓

 $\frac{32}{100}$

254.5 ✓

 $\frac{40}{100}$

249.5 ✓

 $\frac{80}{100}$

282.4 ✓

 $\frac{80}{100}$

277.4 ✓

 $\frac{42}{100}$

274.4 ✓

 $\frac{138}{100}$

269.8 ✓

 $\frac{32}{100}$

263.3 ✓

263.2 ✓

 $\frac{44}{100}$

257.2 ✓

257.1 ✓

 $\frac{120}{100}$

251.1 ✓

 $\frac{74}{100}$

246.5 ✓

 $\frac{120}{100}$

279.6 ✓

 $\frac{108}{100}$

275.1 ✓

 $\frac{152}{100}$

272.5 ✓

 $\frac{154}{100}$

269.1 ✓

 $\frac{120}{100}$

261.0 ✓

260.9 ✓

 $\frac{82}{100}$

254.3 ✓

254.2 ✓

 $\frac{150}{100}$

248.1 ✓

 $\frac{100}{100}$

242.5 ✓

 $\frac{160}{100}$

121

122

Sta.	+	-	Elev.	B. M.
	4.776	248934	244.158 (Parted)	
1137+84				
+94 $\frac{1}{2}$				
	5.304	240.713	237.409	
1138+03				
+19 $\frac{1}{2}$				
4:00 P.M.		1.921	238.792	T.R. Lath with gear Stake. 1138+30.
				Party. Duerant, Notes Reynolds, π Anderson, Rads, Bichet
	1.200	239.992		
1138+44 $\frac{1}{2}$				
+69 $\frac{1}{2}$				
+94 $\frac{1}{2}$				
1139 +03 $\frac{1}{2}$				E.C.

L	R
246.5	244.5
$\frac{21}{100}$	$\frac{21}{100}$
244.4	242.1
$\frac{4.5}{100}$	$\frac{4.5}{100}$
240.7	238.7
$\frac{0.5}{95}$	$\frac{0.5}{95}$
239.5	235.7
$\frac{1.2}{100}$	$\frac{1.2}{100}$
238.3	234.2
	233.5
	232.6
	231.2
	230.2
	229.2
	228.8
	228.0
	227.2
	225.5
	224.9
	223.6
	223.0
	222.2
	221.4
	220.4
	219.6
	218.8
	218.0
	217.2
	216.4
	215.6
	214.8
	214.0
	213.2
	212.4
	211.6
	210.8
	210.0
	209.2
	208.4
	207.6
	206.8
	206.0
	205.2
	204.4
	203.6
	202.8
	202.0
	201.2
	200.4
	199.6
	198.8
	198.0
	197.2
	196.4
	195.6
	194.8
	194.0
	193.2
	192.4
	191.6
	190.8
	190.0
	189.2
	188.4
	187.6
	186.8
	186.0
	185.2
	184.4
	183.6
	182.8
	182.0
	181.2
	180.4
	179.6
	178.8
	178.0
	177.2
	176.4
	175.6
	174.8
	174.0
	173.2
	172.4
	171.6
	170.8
	170.0
	169.2
	168.4
	167.6
	166.8
	166.0
	165.2
	164.4
	163.6
	162.8
	162.0
	161.2
	160.4
	159.6
	158.8
	158.0
	157.2
	156.4
	155.6
	154.8
	154.0
	153.2
	152.4
	151.6
	150.8
	150.0
	149.2
	148.4
	147.6
	146.8
	146.0
	145.2
	144.4
	143.6
	142.8
	142.0
	141.2
	140.4
	139.6
	138.8
	138.0
	137.2
	136.4
	135.6
	134.8
	134.0
	133.2
	132.4
	131.6
	130.8
	130.0
	129.2
	128.4
	127.6
	126.8
	126.0
	125.2
	124.4
	123.6
	122.8
	122.0
	121.2
	120.4
	119.6
	118.8
	118.0
	117.2
	116.4
	115.6
	114.8
	114.0
	113.2
	112.4
	111.6
	110.8
	110.0
	109.2
	108.4
	107.6
	106.8
	106.0
	105.2
	104.4
	103.6
	102.8
	102.0
	101.2
	100.4
	99.6
	98.8
	98.0
	97.2
	96.4
	95.6
	94.8
	94.0
	93.2
	92.4
	91.6
	90.8
	90.0
	89.2
	88.4
	87.6
	86.8
	86.0
	85.2
	84.4
	83.6
	82.8
	82.0
	81.2
	80.4
	79.6
	78.8
	78.0
	77.2
	76.4
	75.6
	74.8
	74.0
	73.2
	72.4
	71.6
	70.8
	70.0
	69.2
	68.4
	67.6
	66.8
	66.0
	65.2
	64.4
	63.6
	62.8
	62.0
	61.2
	60.4
	59.6
	58.8
	58.0
	57.2
	56.4
	55.6
	54.8
	54.0
	53.2
	52.4
	51.6
	50.8
	50.0
	49.2
	48.4
	47.6
	46.8
	46.0
	45.2
	44.4
	43.6
	42.8
	42.0
	41.2
	40.4
	39.6
	38.8
	38.0
	37.2
	36.4
	35.6
	34.8
	34.0
	33.2
	32.4
	31.6
	30.8
	30.0
	29.2
	28.4
	27.6
	26.8
	26.0
	25.2
	24.4
	23.6
	22.8
	22.0
	21.2
	20.4
	19.6
	18.8
	18.0
	17.2
	16.4
	15.6
	14.8
	14.0
	13.2
	12.4
	11.6
	10.8
	10.0
	9.2
	8.4
	7.6
	6.8
	6.0
	5.2
	4.4
	3.6
	2.8
	2.0
	1.2
	0.4
	0.0

June 2, 1926. 1:30 P.M.

Sta.	+	π	-	Elev.	Elev. B.M.
		239.992			
(T.P.) Rock.			11,702	228.290	
	1.860	230.150			
1139+25					
+49					
Equation: 1139+72 ² = 1139+52 ²	P.I.				
+71					
Stake T.P.			10.647	219.503	
	3.181	222.684			
1190+00					
+25.					
+42					
+50					
+75					
1141+00					
Stake T.P.			10.610	212.074	
	1.615	213.689			

Left	Right
229.6 $\frac{0.6}{10}$	223.6 $\frac{6.6}{10}$
228.0 $\frac{2.0}{10}$	226.9 $\frac{3.3}{10}$
225.7 $\frac{2.2}{10}$	225.3 $\frac{4.9}{10}$
224.6 $\frac{3.6}{10}$	223.4 $\frac{6.8}{10}$
222.3 $\frac{0.7}{10}$	221.8 $\frac{8.4}{10}$
220.6 $\frac{2.1}{10}$	220.0 $\frac{2.7}{10}$
218.3 $\frac{3.3}{10}$	218.4 $\frac{4.3}{10}$
218.1 $\frac{4.6}{10}$	216.8 $\frac{5.9}{10}$
216.1 $\frac{6.6}{10}$	215.5 $\frac{7.2}{10}$
214.1 $\frac{8.1}{10}$	213.0 $\frac{9.7}{10}$
	211.5 $\frac{13.2}{10}$
	209.7 $\frac{16.8}{10}$

Sta	+	π	-	Elev.	Elev. B.M.
1141+22		213.689			
+44					
+56					
+75					
1142+00					
+18					
+29					
1142+30					
B.M. # 150	10'L.	9.161		204.528	204.522

Note, Continued on Page 133.

Left	Right
213.7 $\frac{0.6}{10.0}$	211.3 2.7
210.3 $\frac{3.4}{10.0}$	208.6 5.1
210.4 $\frac{3.3}{10.0}$	208.2 6.5
208.7 $\frac{5.0}{10.0}$	206.1 7.6
207.7 $\frac{6.0}{10.0}$	205.2 8.5
205.9 $\frac{7.8}{10.0}$	204.3 9.4
204.0 $\frac{9.7}{10.0}$	202.7 11.0
	207.5 $\frac{6.0}{10.0}$
	204.6 $\frac{9.1}{10.0}$
	203.6 $\frac{10.1}{15.2}$ Edge of Bank.
	204.3 $\frac{9.7}{8.0}$ Edge of Bank.
	202.6 $\frac{11.1}{8.2}$ Edge of Bank.
	201.4 $\frac{12.3}{9.0}$ Edge of Bank.
	201.7 $\frac{12.0}{10.0}$
	201.2 $\frac{12.0}{10.0}$

Notes taken from Lefax.
Cross Sections run by Leach.

Sta.	+	π	-	Elev	Elev. B.M. 204.522
	0.599	205.121 ✓			
1142+292			2.5	202.6 ✓	
+442			9.1	196.0 ✓	
T.P.		11.284		193.837 ✓	
	0.576	194.413 ✓			
+542			4.4	190.0 ✓	
T.P.		11.288		183.125 ✓	
	1.971	185.096 ✓			
+662			3.8	181.3 ✓	
T.P.		11.075		174.021 ✓	
	2.313	176.334 ✓			
+812			5.0	171.3 ✓	
+902			10.0	166.3 ✓	
T.P.		12.897		163.437 ✓	

Left.	Right.
205.1 ✓	203.9 ✓
$\frac{0^{\circ}}{17^{\circ}}$	$\frac{1^{\circ}}{10^{\circ}}$
198.0 ✓	201.1 ✓
$\frac{7^{\circ}}{20^{\circ}}$	$\frac{4^{\circ}}{10^{\circ}}$
	200.2 ✓
	$\frac{4^{\circ}}{14^{\circ}}$
	197.0 ✓
	$\frac{8^{\circ}}{10^{\circ}}$
	194.0 ✓
	$\frac{11^{\circ}}{10^{\circ}}$
	193.4 ✓
	$\frac{11^{\circ}}{18^{\circ}}$
	196.4 ✓
	$\frac{8^{\circ}}{20^{\circ}}$
	188.5 ✓
191.6 ✓	187.0 ✓
$\frac{2^{\circ}}{15^{\circ}}$	$\frac{5^{\circ}}{6^{\circ}}$
	188.2 ✓
	$\frac{5^{\circ}}{10^{\circ}}$
	180.3 ✓
	$\frac{6^{\circ}}{20^{\circ}}$
	182.8 ✓
183.3 ✓	180.6 ✓
$\frac{1^{\circ}}{20^{\circ}}$	$\frac{4^{\circ}}{10^{\circ}}$
	170.2 ✓
	$\frac{4^{\circ}}{20^{\circ}}$
	172.7 ✓
173.4 ✓	171.2 ✓
$\frac{2^{\circ}}{20^{\circ}}$	$\frac{3^{\circ}}{10^{\circ}}$
	170.3 ✓
	$\frac{5^{\circ}}{5^{\circ}}$
	166.6 ✓
	$\frac{6^{\circ}}{10^{\circ}}$
	164.9 ✓
	$\frac{6^{\circ}}{20^{\circ}}$
	169.10 ✓
	$\frac{9^{\circ}}{20^{\circ}}$
	169.10 ✓
	$\frac{12^{\circ}}{20^{\circ}}$

Sta.	+	-	Elev.	Elev. B.H.
	1.915	165.352 ✓		163.437
1143+00		6.4	159.0 ✓	
+09°		11.0	154.4 ✓	
+11°		13.1	152.3 ✓	
+15°		13.9	151.5 ✓	
+17°		11.5	153.9 ✓	
+36°		3.1	162.3 ✓	
T.P.	1.931	163.421 ✓		
	13.031	176.452 ✓		
+48°		6.3	170.2 ✓	
T.P.	0.699	175.753 ✓		
	12.937	188.690 ✓		
+58°		10.8	177.9 ✓	

Left	Right
160.6 ✓	160.2 ✓
$\frac{48}{200}$	$\frac{52}{100}$
153.7 ✓	153.9 ✓
$\frac{112}{200}$	$\frac{115}{100}$
156.6 ✓	153.8 ✓
$\frac{82}{200}$	$\frac{128}{100}$
157.2 ✓	152.6 ✓
$\frac{82}{200}$	$\frac{134}{100}$
157.2 ✓	152.3 ✓
$\frac{82}{200}$	$\frac{118}{60}$
169.2 ✓	157.8 ✓
$\frac{12}{200}$	$\frac{136}{150}$
172.7 ✓	157.8 ✓
$\frac{32}{200}$	$\frac{138}{200}$
171.7 ✓	151.6 ✓
$\frac{48}{100}$	$\frac{138}{200}$
170.9 ✓	150.5 ✓
$\frac{56}{70}$	$\frac{142}{90}$
168.3 ✓	159.7 ✓
$\frac{82}{100}$	$\frac{148}{100}$
179.1 ✓	172.4 ✓
$\frac{96}{200}$	$\frac{163}{200}$
179.6 ✓	
$\frac{92}{100}$	
175.3 ✓	
$\frac{132}{100}$	

Sta.	+	-	Elev.	Elev. Bal.
	188.690			
1143 + 71.0		4.3	184.4 ✓	
T.P.		"A" 0.292	188.398 ✓	
	8.233	196.631 ✓		
+90.0		4.4	192.2 ✓	
		11.639	184.992 ✓	184.988

Left.	Right.
188.1 ✓	187.8 ✓
$\frac{85}{20}$	$\frac{02}{10}$
	182.6 ✓
	$\frac{61}{10}$
	179.5 ✓
	$\frac{73}{20}$
	194.9 ✓
	$\frac{17}{10}$
	187.3 ✓
	$\frac{93}{10}$

Duermitt Notes
Reynolds, T.
Anderson's Rods.
Bichel

Sta.	+	π	-	Elev.	Elev. B.M.
1143+80	11' R.				187.988
B.M. # 151					
	11.291			196.277	
1143+90					
1144+00					
+14					
+29					
Rock T.P.					
				11.321	184.958
+45	2.246			187.204	
+64					
+86					
1145+00					
Stake T.P.					
	4.882			12.330	174.874
1145+11				179.756	
+24					

Left.	€	Right.
Elev. in Notes 194.988		
195.1		187.5
$\frac{12}{10}$	3.7	$\frac{88}{10}$
195.8		189.9
$\frac{03}{10}$	5.7	$\frac{11}{10}$
194.0		180.6
$\frac{23}{10}$	9.0	$\frac{152}{10}$
191.3		187.6
$\frac{50}{10}$	11.3	$\frac{182}{10}$
187.2		177.6
$\frac{00}{65}$	4.8	$\frac{120}{10}$
186.2		175.2
$\frac{10}{10}$	6.6	$\frac{135}{10}$
184.1		173.7
$\frac{31}{10}$	10.3	$\frac{169}{10}$
182.6		170.3
$\frac{26}{10}$	11.8	$\frac{182}{10}$
175.4		168.5
June 3, 1926		
179.8		168.8
$\frac{00}{6}$	7.9	$\frac{110}{10}$
174.9		166.6
179.5		
$\frac{03}{10}$	6.9	$\frac{133}{10}$
172.9		

Sta	+	π	-	Elev.	Elev. B.M.
		179.756			
1145 + 36 ^o			9.9	169.9	
+ 58 ^o			14.7	165.1	
Stake T.P.			11.852	167.904	
	3.847	171.751			
1145 + 81 ^o			7.2	164.6	
1146 + 00			7.7	164.1	
+ 17 ^o			6.8	165.0	
+ 50 ^o	P.O.T.		6.4	165.4	
Stake T.P.			7.468	164.283	
	8.502	172.785			
1146 + 71 ^o			11.2	161.6	
Stake T.P.			12.382	160.403	
	1.468	161.871			
1147 + 00			5.9	156.0	
+ 04 ^o	B.C.		6.9	155.0	
+ 18 ^o			10.6	151.3	

Left,	Right,
176.1	163.5 163.0
$\frac{32}{100}$	$\frac{163}{100}$
172.1	159.4
$\frac{72}{100}$	$\frac{203}{100}$
170.9	158.7
$\frac{02}{100}$	$\frac{131}{100}$
170.3	158.1
$\frac{15}{100}$	$\frac{132}{100}$
171.1	158.1
$\frac{03}{100}$	$\frac{132}{100}$
170.6	158.5
$\frac{15}{100}$	$\frac{113}{100}$
165.8	158.0
$\frac{70}{100}$	$\frac{140}{100}$
158.1	153.2
$\frac{30}{100}$	$\frac{82}{100}$
157.8	152.1
$\frac{41}{100}$	$\frac{90}{100}$
154.4	147.7
$\frac{75}{100}$	$\frac{140}{100}$

Sta.	+	π	-	Elev.	Elev. B.M.
		161.871			
			12.503	149.368	✓
	0.639	150.007			
1147+29 $\frac{1}{2}$			1.7	148.3	✓
+43 $\frac{1}{2}$			7.0	146.0	✓
+54 $\frac{1}{2}$			5.5	144.5	✓
+63 $\frac{1}{2}$			6.8	143.2	✓
+71 $\frac{1}{2}$			8.2	141.8	✓
+79 $\frac{1}{2}$			10.2	139.8	✓
+88 $\frac{1}{2}$			12.3	137.7	✓
+96 $\frac{1}{2}$			13.7	136.3	✓
Sta. 1148+10 Approx. B.M. # 153			11.962	138.045	Record Elev. 138.046

Left.	Right.
150.0	146.0
$\frac{0^{\circ}}{8^{\circ}}$	$\frac{7^{\circ}}{10^{\circ}}$
147.6	144.1
$\frac{2^{\circ}}{10^{\circ}}$	$\frac{5^{\circ}}{10^{\circ}}$
146.2	143.1
$\frac{3^{\circ}}{10^{\circ}}$	$\frac{6^{\circ}}{10^{\circ}}$
144.9	140.6
$\frac{5^{\circ}}{10^{\circ}}$	$\frac{9^{\circ}}{10^{\circ}}$
143.8	139.6
$\frac{6^{\circ}}{10^{\circ}}$	$\frac{10^{\circ}}{10^{\circ}}$
142.0	137.8
$\frac{8^{\circ}}{10^{\circ}}$	$\frac{12^{\circ}}{10^{\circ}}$
139.7	135.4
$\frac{10^{\circ}}{10^{\circ}}$	$\frac{14^{\circ}}{10^{\circ}}$
138.3	134.7
$\frac{11^{\circ}}{10^{\circ}}$	$\frac{15^{\circ}}{10^{\circ}}$

139

Sta.

+

π

-

Elev.

Elev. B.M.

Left.

£

Right.

140

DIRECTIONS FOR USE OF TABLES

TABLE No. 1.

Distance of slope stake from side or shoulder stake for any width roadway, slope 1 x to 1. If ground is nearly level, the cut or fill at side stake is located by the double entry method in left column and top row. The number in body of table in same row and column gives distance level estimate the difference in elevation between the side stake and slope stake by this amount if cut, elevate if fill. Add this amount to cut or fill and distance in table. Set up rod at side stake and cut. If it does not make the slight adjustment necessary.

IMPROVED TABLES AND INFORMATION

TABLE No. 2.

To find Tangent and External for curve of any other degree divide by degree of curve and add correction found in column of corrections. Degree of curve with a given T may be found by dividing tangent (or external), opposite T by given tangent, (or external). The distance from a point on the tangent to the curve is very nearly the square of the tangent length divided by twice the radius.

138.046
- 2.223
140.269
+ 1.631
138.638
7.598

196.279
- 11.321
184.958
+ 2.246
187.204
- 12.330
174.874
+ 4.882
179.756
- 11.852
167.904
+ 3.847
171.751
- 7.468
164.283
+ 11.332
175.615
- 1.375
to B.M. 174.240

164.283
+ 8.502
172.785
- 12.382
160.403
+ 1.468
161.871
- 12.503
149.368
+ 0.639
150.007
- 11.962
138.045