

1226

W. H. H. & C.

FIELD BOOK

No. 3857



1226

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ENGINEERING DEPARTMENT  
CITY OF SAN DIEGO.  
CALIFORNIA

1865.

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B.M. From U.S.G.S. to pavement at  
top of Grade

176.64 B.M.	
6.12 Correction for diff between City & U.S.G.S.	
<u>170.52 City &amp; Lev</u>	219.97 $\pi$
9.20	210
<u>179.72 <math>\pi</math></u>	217.87 Pole 4166
1.31	9.58
<u>178.41 <math>\Delta</math> 35+52</u>	227.45
8.64	0.39
<u>187.05 <math>\pi</math></u>	227.06 Pole 4162
5.83	11.03
<u>181.82 Pole 4192</u>	238.09
12.82	0.74
<u>194.04 <math>\pi</math></u>	237.35 Pole 4161
1.21	7.45
<u>192.83 Pole 4188</u>	244.80
8.39	4.60
<u>201.22 <math>\pi</math></u>	240.20 Pole 4159
4.76	10.90
<u>196.46 Pole 4184</u>	251.10
11.32	1.72 Round Pole
<u>207.78</u>	249.40 opposite 4157
9.46	12.84
<u>198.32 Pole 4183</u>	262.24
10.46	0.88
<u>208.78 <math>\pi</math></u>	261.36 FENCE
1.55	12.82
<u>207.23 Pole 4181</u>	274.25
12.99	0.49
<u>220.22 <math>\pi</math></u>	273.76 FENCE
1.31	12.93
<u>218.91 Pole 4178</u>	286.69
5.10	1.30
<u>224.01</u>	285.39 FENCE
7.00	12.63
<u>217.01 Pole opposite</u>	298.02
4.36 4174	0.30
<u>220.37</u>	297.72 Peg vt.
11.20	15.00
<u>215.17 Pole opposite 4178</u>	310.72
2.02	75
<u>217.19</u>	309.97 Pole 4152
5.82	12.18
<u>211.37 Pole 4168</u>	322.15
8.60	0.59
<u>219.97 <math>\pi</math></u>	321.56 Peg vt.

No. In oppo 7/16/30 H.H.



Rose Canyon X  
Section Continued

0+00 = 60+00<sup>90</sup> = intersection & +

P.L. 1252 15 in. book 1216

	+	$\pi$ ✓	-	Elev
<u>1+00</u>		137.69		
EL-50			27.0	110.7
EL			14.8	122.9
+9 FENCE				
+17			5.7	132.0
£			5.7	132.0
+13			5.4	132.3
+16			2.6	135.1
WL 0.4				139.0
+3 FENCE				
+25 14.8				152.5
<u>2+00</u>				
WL-25 14.3				152.0
-2 FENCE				
WL 2.0				139.7
+5 0.4				
+7			4.5	133.2
£			5.4	132.3
+5			5.5	132.2
+13 FENCE			11.8	125.9
EL			14.7	123.0
+20			21.0	116.7
+50			26.3	111.4

	+	$\pi$	-	Elev.
<u>3+00</u>		137.69		
EL-50			14.7	123.0
-1 FENCE				
EL			5.5	132.2
+11			2.1	135.6
£			3.0	134.7
+10			3.0	134.7
+12			0.0	137.7
+16 FENCE				
WL 2.5				140.2
+25 8.8				146.5
<u>4+00</u>				
WL-25 15.8				153.5
WL 9.7				142.4
+3 FENCE				
+7 -0.2				137.9
+9			1.8	135.9
£			1.8	135.9
+8			2.4	135.3
+13			5.2	132.5
EL			6.0	121.7
+8 FENCE				
+50			11.3	121.4
T.P. 1232		14294 ✓	7.07	130.62 <sup>Pole</sup> 1235
<u>4+96</u>				At $\Delta$ s to back turn.

No. 1252 7/16/30







	+	$\pi$	-	Elev.
-40	Fence	142.94		
WL			1.0	141.9
+5			3.5	139.4
♀			2.8	140.1
+5			2.8	140.1
+7			4.2	138.7
+12	Fence			
EL			5.4	137.5
+80			14.3	128.6
T.P.	6.39	147.46	1.87	141.07
<u>7+15</u>				
EL-50			17.0	130.5
EL			9.5	138.0
+6	Fence		8.5	139.0
+10			6.6	140.9
♀			7.8	140.0
+14			7.0	140.5
+15			5.0	142.5
W.L.			4.0	143.5
+21	Fence			
+38	1.1			148.6
+50	2.0			149.5
<u>7+78</u>				
WL-25		$\Delta$ 13° 56' 30" LT		(SPLIT AT $\angle$ )
-8	Fence		1.4	146.1

	+	$\pi$	-	Elev.
WL		147.46		
4.2				143.3
+4			4.4	143.2
+5			6.7	140.8
♀			6.2	141.3
+7			6.1	141.4
+10	Fence			
EL			8.4	139.1
+70			16.9	130.6
<u>8+50</u>				
EL-70			14.0	133.1
EL			6.8	140.7
+1	Fence			
+5			6.1	141.4
+7			4.8	142.7
♀			3.2	142.3
+11			5.8	141.7
+12			2.5	145.0
WL			1.9	145.6
+7	Fence			
+25	1.0			148.5
<u>9+14</u>	$\Delta$ 30° 56' LT			(SPLIT OF $\angle$ )
WL-65	5.0			152.5
-21	Fence			
720			1.4	146.1
-2			2.9	144.6



	+	$\bar{T}$ 147.46	-	Elev.
WL			5.4	142.1
♀			4.7	142.7
+4			4.7	142.7
+6			6.4	141.1
+8	Fence			
EL			8.3	139.2
+80			17.1	120.4
<u>10+00</u>				
EL-80			14.8	132.7
-2	Fence		5.4	142.1
EL			5.4	142.1
+5			3.1	144.4
♀			3.7	143.8
+6			3.7	143.8
+7			1.3	146.2
+17	Fence			
WL	0.7			148.2
+25	3.2			150.7
<u>11+00</u>				
WL-30	5.4			152.9
-2	Fence			
WL	2.0			149.5
+10	0.4			
+11			1.6	145.9
♀			1.8	145.7

Start

	+	$\bar{T}$	-	Elev.
+15			1.7	145.8
EL			3.7	143.8
+5	Fence			
+80			13.1	134.4
<u>11+63.37</u>	Rt Ls to back tan			
EL			4.7	142.8
+4			3.6	143.9
♀			2.0	145.5
+10			1.6	145.9
+16			0.0	147.5
W.L.	0.7			149.2
<u>11+71</u>	$\Delta$	4146 <sup>0</sup> Rt	Split of L	
T.P.	6.88	153.50	0.84	146.62
WL-50	8.7			162.2
WL-10	Fence		3.3	150.2
WL			5.4	148.1
+12			7.5	146.0
♀			8.0	145.5
EL			9.6	143.9
+8	Fence		11.6	141.9
+80			18.0	135.5
<u>11+78</u>	<sup>63</sup>	Rt Ls to forward tan.		
EL			9.6	143.9
♀			8.2	145.3
+10			7.6	145.9



5

	+	$\bar{\pi}$ 153.50	-	Elev.
W.L.			5.3	148.2
+8	Fence		1.6	157.9
+40	10.6			164.1
<u>12+50</u>				
W.L. 25	14.2			167.7
-5	Fence			
W.L.	2.0			155.5
+12			4.5	149.0
+13			7.3	146.2
ℓ			7.7	145.8
+8			7.5	146.0
+16	Fence			
EL			15.0	138.5
+17			18.0	135.5
+60			19.5	134.0
<u>13+50</u>				
EL-60			26.0	127.5
-50			25.5	128.0
-25			19.7	133.8
-2	Fence			
EL			8.7	144.9
+5			5.2	148.3
ℓ			5.5	148.0
+9			5.3	148.2
+13	3.0			156.5
W.L.	6.4			159.9

	+	$\bar{\pi}$	-	Elev.
+7	9.2 Fence			162.7
+20	15.0			168.5
T.P.	6.22	152.84	6.88	146.62
<u>14+69</u>	$\Delta$	12°43' RT	(split of L)	
W.L.-25	13.5			166.3
-5	9.0 Fence			156.8
W.L.	2.7			155.5
+5			0.3	152.5
+11			4.6	148.2
ℓ			5.0	147.8
+9			5.6	147.2
EL			10.7	142.8
+7	Fence			
+20			16.3	136.5
+50			21.1	131.7
<u>15+50</u>				
EL-50			14.1	138.7
EL			9.1	143.7
+3	Fence			
+6			7.8	145.0
+12			4.1	148.7
ℓ			3.9	148.9
+12			3.6	149.2
+17			0.0	152.8
W.L.	1.4			154.2



	+	$\Sigma$ 152.84	-	Elev.		+	$\Sigma$ 152.84	-	Elev.	
	+1	FENCE				+2	2.9		155.7	
	+25	10.6		163.4		+4		0.6	152.2	
	<u>16+38</u>	$\Delta$	23°09' Rt	SPLIT OF L		$\phi$		0.4	152.4	
	WL-30	8.3		161.1		+8		0.0	152.8	
	WL	1.2		154.0		+12	FENCE			
	+5	FENCE				+14		2.6	150.2	
	+13			2.8	150.0	EL		3.9	148.9	
	$\phi$			2.9	149.9	+40		10.0	142.8	
	EL			3.3	149.5	T.P.	7.17	159.25	0.76	152.08
	+1	FENCE				<u>19+30</u>	$\Delta$	28°56' Lt	(SPLIT OF L)	
	+13			6.5	146.3	EL-40		16.6	142.7	
	+40			11.5	141.3	EL		7.9	151.4	
	<u>17+25</u>					+3	FENCE			
	EL-60			12.4	140.4	+5		7.3	152.0	
	EL			3.1	149.7	+10		4.9	154.4	
	+5	FENCE		1.5	151.3	$\phi$		5.5	153.8	
	$\phi$			2.1	150.7	+15		5.7	153.6	
	+9			2.4	150.4	+19		1.8	157.5	
	+11	1.7			154.5	WL		1.8	157.5	
	WL	2.7			156.5	+8	FENCE			
	+40	9.0			161.8	+25	2.0		161.3	
	<u>18+10</u>	$\Delta$	26°50'30' Rt	(SPLIT OF L)		+40	4.3		163.6	
	WL-50	10.9			163.2	<u>20+00</u>				
	-15	FENCE				WL-25	4.0		163.3	
	WL	2.9			155.7	-1	FENCE			
						WL		0.8	158.5	

17+25  
 18+10  
 19+30  
 20+00



	+	$\pi$	-	Elev.
+8		159.25	2.4	162.9
+11			5.7	154.6
♀			5.4	154.9
+17			5.4	154.9
+19	FENCE			
EL			7.1	162.2
+40			13.4	146.9
<u>20+89<sup>50</sup></u>	RTLS to back tangent			
EL			6.0	153.3
♀			4.6	154.7
+3			4.4	155.9
+5			3.2	156.1
+10	FENCE		1.0	168.3
WL	2.0			
<u>20+98</u>	$\Delta$	46° 4' 30" RT (split of L)		
WL-25	12.6			171.9
WL	2.5			161.8
+12	FENCE		0.5	158.8
♀			4.3	155.0
EL			5.7	153.6
+5	FENCE		6.2	153.1
+40			9.7	149.6
+60			12.1	147.2
<u>21+06<sup>50</sup></u>	RTLS Forward tan.			
EL			5.7	153.6

	+	$\pi$	-	Elev.
♀		159.25	4.0	165.3
+3			3.8	155.6
+9	FENCE		1.2	168.1
WL	1.6		1	160.9
<u>20+75</u>				
WL-25	4.5			163.8
-10	3.0	FENCE		162.3
WL	1.0			160.3
+10			0.9	168.4
+11			2.5	166.8
♀			2.3	157.0
+15			2.5	156.8
EL	FENCE		4.5	154.8
+50			9.9	149.4
<u>22+39<sup>6</sup></u>	RTLS back Tang			
EL			5.8	153.5
+5	FENCE		4.5	154.8
+10			2.1	157.2
♀			2.9	156.4
+15			3.0	156.3
WL			00	159.3
<u>22+46</u>	$\Delta$	35° 34' 30" LT (split of L)		
WL-65	10.6			169.9
-28	5.0	FENCE		164.3
WL	0.2			159.5



	+	X	-	Elev.
+8	+2	159.25	3.2	156.1
+11	⊕		2.9	156.4
⊕	+9		2.5	156.8
+17	+13 FENCE		4.6	154.7
+19	EL		6.3	153.0
EL	+40		12.1	147.2
+40	<u>22+52<sup>4</sup></u>	RT L3 Forward turn		
<u>20+89</u>	EL		6.5	152.8
EL	+8 FENCE		4.9	154.4
⊕	+12		2.6	156.7
+3	⊕		3.1	156.2
+5	+18		3.2	156.1
+10	WL 0.2			
WL	T.P. 2.26	158.64	2.87	156.38
<u>20+98</u>	<u>23+00</u>			
WL-25	WL-50 11.0			169.6
WL	-9 4.3 FENCE			162.9
+12	WL 3.3			161.9
⊕	+8 1.4			160.0
EL	+11		4.0	154.6
+5	⊕		3.5	155.1
+40	EL		3.1	155.5
+60	+4 FENCE			
<u>21+06</u>	+40		11.2	147.4
EL	<u>24+00</u>			

	+	X	-	Elev.
		156.64		
EL-40			17.7	140.9
-7 FENCE			12.5	146.1
EL			11.4	147.2
+10			5.6	153.0
⊕			5.7	152.9
+9			5.3	153.3
WL	2.5 FENCE			161.1
+25	13.0			171.6
<u>25+18</u>	△	5° 36' LT	split of L	
WL-35	26.0			184.6
WL	7.3 FENCE			166.9
+13	1.0			159.6
+16			6.0	152.6
⊕			6.3	152.3
+13			5.4	153.2
EL			10.0	149.6
+5 FENCE			12.2	146.4
+50			26.4	132.2
<u>26+06</u>				
EL-40			28.0	130.6
-9 FENCE			16.6	132.0
EL			10.5	148.1
+5			7.2	151.4
⊕			7.4	157.2
WL FENCE	6.0		6.0	164.6
+25	20.0			178.6



	+	π	-	Elev.
T.P.	289	155.23	6.30	152.34
<u>27+00</u>				
WL-25	21.4			176.6
-2	Fence			
WL	8.9			164.1
+11	3.4			158.6
♀		4.8		150.4
+18		4.5		150.7
FL		5.6		149.6
+6	Fence			
+45		24.2		131.0
+60		28.0		127.2
<u>Equation</u> : Station 28+09.65 = 0+00 = S.L.P.L. 1267				
<u>0+00</u>				
EL-60		29.8		125.4
-45		25.4		129.8
-4	Fence			
EL		9.8		145.4
+8		5.1		150.1
♀		5.3		149.9
+10		5.4		149.8
+12		1.6		153.6
WL	1.2			156.4
+25	12.7			167.9
<u>1+00</u>				

	+	π	-	
WL-25	10.2	155.23		165.4
WL	1.8			159.0
+5			5.1	150.1
♀			5.4	149.8
+5			5.3	149.9
WL			14.2	141.0
+2 Fence				
+45			25.3	129.9
+55			27.0	128.2
<u>2+00</u>				
EL-50			24.8	130.4
-25			20.7	124.5
-7	Fence			
EL			9.4	145.8
+8			3.7	151.5
♀			3.6	151.6
+13			4.0	151.2
+15			2.6	152.6
WL			0.4	154.8
+25	12.8			168.0
<u>3+00</u>				
WL-25	24.4			179.6
-2	12.5			167.7
WL	9.2			164.4
+12			26	152.6



	+	$\pi$ 15523	-	Elev.
$\xi$			2.4	152.8
+15			2.1	153.1
EL			5.2	150.0
+10	Fence			
+17			13.4	157.8
+50			18.5	136.7
TP	9.40	162.02	2.61	152.62
4+19	$\Delta$	6°42' LT (split of L)		
EL-75			25.0	137.0
-15			18.4	143.6
-10	Fence			
EL			10.8	151.2
+7			7.3	154.7
$\xi$			7.6	154.4
+14			7.5	154.5
WL			0.7	161.3
+9	6.3			168.3
+25	13.0			175.0
5+11 <sup>3</sup>	RT's	to back tang		
WL	3.0			165.0
+6	1.5			163.5
+12			6.5	155.5
$\xi$			6.4	155.6
EL			6.6	155.4
Oak tree	20" diam.	on EL	Station	5+19

	+	$\pi$ 16202	-	Elev.
5+19	$\Delta$	43° RT		(Split of L)
EL-75			20.4	141.6
-36	Fence			
-15			14.3	147.7
EL			6.6	155.4
$\xi$			6.5	155.3
+10			6.1	155.9
WL	1.4			163.4
+25	10.4			172.4
5+26 <sup>87</sup>	RT's	to Forward tang.		
WL			5.5	157.5
$\xi$			6.1	155.9
EL			6.6	155.4
5+49	=	intersection of $\xi$ + 24" iron culvert set		
		at RT's to $\xi$		
WL-55			5.0	157.0
-10	End of pipe on West		10.30	FL. of pipe 157.72
EL+10	" " " " East		15.30	FL. of pipe 146.72
+15			22.7	139.3
+50			26.6	135.7
5+90	=	intersection of $\xi$ of Rose Canyon road + $\xi$ of		
		private road bearing 90° right. Road runs down		
		across RR track.		
EL-75			20.3	141.7
-25	Fence line		13.2	148.8



	+	$\bar{x}$ 162.02	-	Elev.
EL			8.4	163.6
♀			6.1	165.9
WL			5.8	166.2
+25			5.4	166.6
<u>6+00</u>				
WL-25			1.0	161.0
-15			5.4	166.6
WL			5.8	166.2
♀			6.2	165.8
+5			6.4	165.6
EL			11.8	160.2
+25	Fence			
+75			22.3	139.7
<u>6+15</u>				
EL-75			24.3	137.7
-40			21.2	140.8
-25	Fence			
EL			11.8	160.2
+10			5.7	166.3
♀			6.0	166.0
WL			6.0	166.0
+10	2.3			164.3
+25	6.7			168.7
<u>7+00</u>				
WL-25	23.7			185.7

	+	$\bar{x}$ 162.02	-	Elev.
WL	7.8			169.8
+17			4.9	167.1
♀			4.9	167.1
+15			4.1	167.9
EL			8.2	163.8
+10			14.1	147.9
+20	Fence			
+30			22.2	139.8
+50			25.5	136.5
<u>8+00</u>				
EL-50			22.3	139.7
-25			17.0	145.0
-18	Fence			
-5			8.6	153.4
EL			5.5	166.5
+4			2.2	159.8
♀			2.8	159.2
+4			2.8	159.2
+8			0.0	162.0
+12	5.5			167.5
WL	8.8			170.8
+25	22.6			184.6
<u>8+88</u>	Δ	5°32'30" Lt	(Split of L)	
WL-25	18.6			180.6
W.L.	11.0			173.0



12

	+	T 16202	-	Elev.
+7	8.8			170.8
+14			0.4	161.6
♀			0.4	161.6
+13	0.5			162.5
EL			1.1	160.9
+12	Fence		7.8	154.2
+25			13.2	148.8
+50			19.1	142.9
T.P.			6.58	155.44

Elev of B.M. Pole 4211 = 155.48  
 154.44  
 0.04 Error

T.P.	1277	168.25		155.48
<u>9+50</u>				
EL-50			17.8	150.5
-25			15.4	132.9
-6	Fence			
EL			8.3	160.0
+7			4.9	163.4
♀			4.7	163.6
+7			5.1	163.2
+10			2.2	166.1
WL	2.7			171.0
+25	18.0			186.3
<u>10+00</u>				
WL-25	9.3			177.6

	T	T 168.25	-	Elev.
-1	2.2			166.1
WL	1.4			166.9
+10			3.0	165.3
♀			2.8	165.5
+12			2.8	165.5
EL			6.8	161.5
+4	Fence			
+10			8.5	159.8
+20			13.6	154.7
+40			16.3	152.0
<u>10+45</u>				
EL-40			16.5	151.8
-20			12.1	156.2
-15			9.1	159.2
-4	Fence			
EL			5.9	162.4
+7			1.5	166.8
♀			2.0	166.3
+10			1.8	166.5
WL	5.4			173.7
+25	19.7			188.0
<u>10+80</u>				
WL-25	6.7			173.0
WL	6.9			175.2
+10			1.1	167.2



	+	$\bar{\Delta}$ 163.25	-	Elev
♀			1.0	167.3
+10			0.9	167.4
E.L.			7.7	160.6
+9	FENCE			
+15			12.0	156.3
+25			16.7	151.6
+40			18.8	149.5
T.P.	11.51	175.00	9.76	163.99
<u>11+50</u>				
EL-60			35.5	139.5
-40			32.7	142.3
-3	FENCE		15.3	159.7
E.L.			13.3	161.7
+10			5.9	169.1
♀			6.3	168.7
+7			6.1	168.9
WL	3.7			178.7
+25	19.8			194.8
<u>12+50</u>				
W-25	18.5			193.5
WL	7.0			182.0
+15			2.6	172.4
+16			3.6	171.6
♀			3.9	171.1
+12			3.3	171.7

	+	$\bar{\Delta}$ 175.00	-	Elev
EL			9.5	165.5
+2	FENCE			
+40			28.8	146.2
+60			36.8	138.2
+75			41.3	133.7
<u>13+50</u>				
EL-100			41.8	133.2
EL FENCE			3.4	171.6
+2			1.7	173.3
♀			2.2	172.8
+5			2.3	172.7
+11	5.5			180.5
WL	9.3			184.3
+25	18.7			193.7
<u>13+88</u>	Δ	11°34' 14"		{ = end of fence on East (split of 1)
WL-25	24.3			199.3
WL	13.4			188.4
+12	8.4			183.4
+15			1.4	173.6
♀			1.3	173.7
+14			0.2	174.8
EL			2.5	172.5
+115			59.4	115.6
T.P.	6.61	180.01	1.60	173.40
<u>14+16</u>				



14				Elev
14+16				
	+	180.01	-	
EL-74			55.7	124.3
EL			12.9	167.1
+11			5.2	174.8
℄			5.6	174.4
+6			5.6	174.4
+10	7.8			187.8
WL	13.0			193.0
+24	23.6			203.6
T.P.	4.85	180.80	4.06	175.95
14+90				
WL-41	46.7			227.5
WL	10.0			190.8
+7			4.9	175.9
℄			5.0	175.8
+4			4.8	176.0
EL			15.4	165.4
+72			55.5	125.3
T.P.	7.00	182.95	4.85	175.95
15+50				
EL-61			51.6	131.4
EL			14.0	169.0
+7			5.0	178.0
℄			4.9	178.1
+12			4.4	178.6
WL	7.0			190

	+		-	Elev
		182.95		
+3	16.2			199.2
+30	40.1			223.1
T.P.	2.80	183.26	2.49	180.46
16+00	Δ	19°30' RT	(split of L)	
WL-33	32.0			215.3
WL	2.8			196.1
+12			4.9	178.4
℄			4.9	178.4
+9			4.9	178.4
+15	Fence			
EL			13.3	170.0
-51			48.0	135.3
T.P.	4.05	185.26	2.05	181.21
		185.16		181.11
17+00				
EL-51			66.7	118.6
EL			18.0	167.3
+18			5.5	179.8
℄			4.8	180.5
+16			4.8	180.5
WL	0.6			185.9
+10	17.9			203.2
+35	41.3			226.6
T.P.		847		176.79
				176.67

see page 48 For next section



Brought back from Page 51

	+	∩	-	Elev.
T.P.	6.99	177.51		170.52

28+63 Rt 15 to back tan

WL		7.7		169.8
℄		7.7		169.8
+11		8.7		168.8
EL		14.2		163.3

28+70 Δ split of L

EL-25		17.2		159.7
EL FENCE		12.0		165.5
+10		8.4		169.1
℄		8.0		169.5
WL		7.7		169.8
+10		7.6		169.9
+25	4.7			182.2

28+76.33 Rt 15 to forward tan

WL		7.7		169.8
℄		8.1		169.4
EL		10.2		167.3

28+85 = intersection of ℄ Rose Canyon Road & ℄ of road  
leading to Dairy Farm & Brickyard Bears  
about 20° Rt.

Levels down ℄ of Road 0+00 = 28+85

0+00		8.3		169.2
0+65		10.6		166.9
1+00		14.0		163.5

	+	∩	-	Elev.
		177.51		

29+35

EL-20 FENCE		10.4		167.1
EL		10.1		167.4
+8		10.0		167.5
+17		6.2		171.3
℄		6.6		170.9
WL		7.5		170.0
+3		4.5		173.0
+10		1.2		176.3
+70	5.9			

29+94 Δ 19°54' Lt (Split of L)

WL-50	3.7			181.2
-25	0.6			178.1
-2		4.8		172.7
WL		7.3		170.2
℄		5.7		171.8
EL		8.9		168.6
+15		16.0		161.5
+25		15.8		161.7

30+57 = Start of Fence on East Line.31+15.06 = P.L. 1291 Δ 0°4'30" Rt

EL-40		17.9		159.6
EL		8.2		169.3
+7 FENCE		6.9		170.6
+12		4.7		172.8

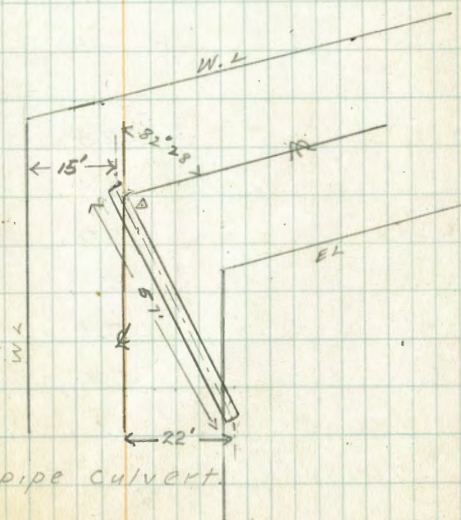


	+	$\pi$	-	Elev.
2		177.51	4.9	172.6
+15			5.5	172.0
WL			2.1	175.4
+25	3.0 Fence			180.5
+35	4.8			182.3
<u>31+55</u>	$\Delta$ 19° 10' Lt		Split of L	
WL-35	5.5			183.0
-18	1.8 Fence			179.3
WL			2.1	175.4
+5			5.2	172.3
2			4.5	173.0
+6			4.1	173.4
+8	Fence			
+10			7.0	170.5
EL			2.5	169.0
+25			14.5	163.0
<u>32+00</u>				
EL-25			12.2	165.3
EL			6.3	171.2
+4	Fence		5.2	172.3
+9			3.0	174.5
2			4.0	173.5
+7			4.6	172.9
+10			0.8	176.7
WL	0.8			178.3

	+	$\pi$	-	Elev.
+5	Fence	177.51		
+25	6.3			183.8
+35	7.5			185.0
<u>32+59</u>	25			182.5 = Rt Ls to back tan
WL	0.4			177.9
+3	0.4			177.9
+6			3.4	174.1
2			2.8	174.7
+5			2.8	174.7
EL			12.2	165.3
T.P.	8.41	183.25	2.67	174.84
<u>32+66</u>	$\Delta$ 37° 07' 30" Lt		(Split of L)	
EL-25			25.8	157.5
-4	Fence			
EL			18.2	165.1
+16			8.6	174.7
2			8.4	174.9
+14			9.1	174.2
WL			5.4	177.9
+7			1.0	182.3
+12	Fence			
+25	3.4			186.7
+35	5.8			189.1
<u>32+72</u>	35			
WL			5.4	177.9



	+	$\pi$ 183.25	-	Elev.
+6			9.1	174.2
$\phi$			8.3	175.0
+6			8.3	175.0
E.L.			16.6	166.7
<u>33+41</u>				
E.L.-50			27.8	155.5
-40			24.0	159.3
-17			18.9	164.4
W.L.			9.3	174.0
+5			7.0	176.3
$\phi$			7.3	176.0
+7			7.6	175.7
W.L.	3.0			186.3
+6	Fence			
+25	10.8			194.1
+35	12.8			196.1
34+07.3	Pt 15 to back tan			
W.L.			0.9	182.4
+7			5.1	178.2
$\phi$			5.7	177.6
E.L.			6.2	177.1
<u>34+21</u>				
W. E.L. of Pipe			8.36	174.89
E. E.L. of Pipe			10.22	193.03
34+21	$\Delta$	82°28'	Split of L	



= 12" concrete pipe culvert.



	+	$\bar{x}$ 183.25	-	Elev
EL-50			23.8	159.5
-33			21.5	161.8
-15			7.1	176.2
EL			6.2	177.1
☒			5.5	177.8
+17	Fence			
WL			3.5	189.8
+25			3.1	180.2
34+34 <sup>3</sup>	RTLS to forward tang			
<del>WL-25</del>			0.0	183.3
WL	Fence		5.2	178.1
+10			6.2	177.1
☒			5.7	177.6
EL			6.2	177.1
34+81				
EL-40			22.4	160.9
-13			13.0	170.3
EL			6.2	177.1
+2			5.4	177.9
☒			5.9	177.4
+13			5.8	177.5
WL	1.0			184.3
+4	7.6			190.9
+12	Fence			
+25	14.8			198.1
35+42 <sup>1</sup>	RTLS to back tang			

	+	$\bar{x}$ 183.25	-	Elev
WL			5.4	177.9
☒			5.0	178.3
+13			5.9	177.4
EL			10.1	173.2
35+52	$\triangle$	52°45'30 Lt	Split of L	
EL-40			27.0	166.3
-16	Fence			
EL			13.0	170.3
+10			6.1	177.2
☒			4.8	178.5
WL			5.4	177.9
+5			5.2	178.1
+25	12.0			190.3
+30	Fence			
+35	15.8			199.1
35+60 <sup>2</sup>	RTLS to Forward Tang			
WL			5.4	177.9
☒			4.6	178.7
+13			6.2	177.1
EL			10.1	173.2
36+27				
EL-40	Fence		31.0	152.3
EL			11.4	171.9
+10			3.9	179.4
☒			4.2	179.1
+11			4.0	179.7



	+	$\bar{x}$	-	Elev
WL	4.6	183.25		187.9
+2	8.0			191.3
+13	Fence			
+25	18.4			201.7
<u>36+98</u>	$\Delta$	19°46' RT	(split of L)	
WL-25	18.8			202.1
-12	13.5			196.8
WL	6.0	Fence		189.3
+11			2.9	180.4
$\phi$			3.3	180.0
+10			2.8	188.5
EL			8.2	175.1
+20			21.2	162.1
+35			26.7	156.6
T.P.	6.03	187.59	1.69	181.56
<u>37+98</u>				
EL-32	Fence		26.3	161.3
-25			24.6	163.0
EL			14.0	173.6
+10			6.7	180.9
$\phi$			6.6	181.0
+12			6.7	180.9
WL			2.2	185.4
+10	Fence.			
+25	11.8			199.4

	+	$\bar{x}$	-	Elev
+35	16.2	187.59		203.8
<u>38+70</u>	$\Delta$	8°23'30" LT	(split of L)	
WL-25	11.7			199.3
-10	5.9			193.0
-2	Fence			
WL	3.2			190.8
+10			5.7	181.9
$\phi$			5.9	181.7
+13			5.7	181.9
EL			9.6	175.0
+22	Fence			
+25			18.7	168.9
<u>39+70</u>				
EL-20			16.8	170.8
-18	Fence			
EL			11.0	176.6
+9			5.2	182.4
$\phi$			5.1	182.5
+12			5.3	182.3
WL			1.3	186.3
+2	Fence			
+25	6.9			194.5
<u>40+30</u>				
WL-25	10.3			197.9
WL	2.5	Fence		190.1



	+	$\pi$ 187.59	-	Elev.
+10			5.2	182.4
♀			4.8	182.8
+10			4.3	183.3
EL			10.4	177.2
+9			14.1	173.5
+14			16.8	170.8
+25			18.1	169.7
<u>40+84</u> $\Delta$			10°50' RT (split of L)	
EL-25			19.2	168.4
-23	= First row of Grove of Eucalyptus trees			
-11	fence		13.0	174.6
-6			10.5	177.1
EL			9.6	178.0
+15			5.1	182.5
♀			4.5	183.1
+13			4.6	183.0
WL	2.2			189.8
+4	fence			
+25	11.9			199.6
<u>41+84</u>				
WL-25	15.8			203.4
-2	fence			
WL	7.3			194.9
+12			3.7	183.9
♀			3.0	184.6

	+	$\pi$ 187.59	-	Elev.
+15			3.1	184.5
♀			6.9	180.7
+4			9.5	178.1
+17	fence		13.7	173.9
+30			19.0	168.6
<u>42+84</u>				
EL-25	fence		14.8	172.8
EL			5.6	182.0
+5			1.3	186.3
♀			1.4	186.2
+8			1.7	185.9
WL	7.3			194.9
+7	fence			199.1
+25	17.8			206.4
<u>43+49</u> $\Delta$			15°41' RT (split of L)	
WL-25	11.7			199.3
WL	fence			189.6
+12			0.2	187.4
♀			0.4	187.2
+15			1.3	186.3
EL			5.0	182.6
+10			10.8	176.8
+30	fence		16.2	171.4
T.P.	11.80	193.0	6.39	181.20
<u>44+20</u>				



21

44+20

	+	T	-	Elev.
EL-25		193.00	20.9	172.1
EL			11.3	181.7
+9			5.4	187.6
¢			5.2	187.8
+9			5.3	187.7
+15	2.0			195.0
WL	3.7 fence			196.7
+25	12.8			205.8
<u>44+87</u>	△	8' 0' 30" Lt (Split of L)		
WL-25	12.6			205.6
WL	3.8 fence			196.8
+10			5.0	188.0
¢			4.6	188.4
+10			4.3	188.7
EL			11.2	181.8
+2	Fence			
+25			22.7	170.3
T.P.	11.72	192.92	11.80	181.20
T.P.	3.38	195.85	0.95	192.97
<u>45+87</u>				
EL-25			19.6	176.3
EL	Fence		12.2	183.7
+10			6.3	189.6
¢			7.0	189.9
+12			6.5	189.4

pile 4197  
Elev 181.22

	+	T	-	Elev.
+17	Fence		0.4	195.5
WL			0.0	195.9
+25	8.8			204.7
<u>46+67</u>	Culvert needed here			
WL-25	8.2			204.1
WL	Fence		2.0	193.9
+8			6.5	189.4
¢			6.5	189.4
+6			6.3	189.6
+13	Fence		14.2	181.7
+15			13.3	177.6
EL			20.8	175.7
-25			27.6	168.3
T.P.	3.65	196.12	3.38	192.97
<u>47+47</u>				
EL-25			18.9	177.2
EL	Line of Eucalyptus grove			11.7
+5	Fence			
+10			5.7	190.4
¢			5.9	190.2
+10			6.0	190.1
+16	0.6			196.7
WL	1.6	Fence		197.7
+25	11.9			207.5
<u>48+37</u>				



✓  
48+37

	+	π 196.12	-	Elev
WL-25	3.3			199.4
WL	FENCE		3.2	192.9
+3			5.4	190.7
♀			5.5	190.6
+2			5.7	190.4
+7			9.8	186.3
+13	FENCE			
EL = Line of Grove			12.9	183.2
+25			19.9	176.2
49+37				
EL-25			14.5	181.6
-6	Line of Grove			
EL			8.6	187.5
+4	FENCE		7.4	188.7
+10			3.7	192.4
♀			3.8	192.3
+10			4.2	191.9
+18	0.8 FENCE			196.9
WL	1.6			197.7
+25	7.7			203.8
50+04	Δ 22° 37' RT			Split of L
WL-25	11.2			207.3
WL	3.8			199.9
+7	FENCE			
+16			3.6	192.5

	+	π 196.12	-	
♀			3.6	192.5
+15			4.1	192.0
+18	FENCE			
EL			7.6	188.5
+25			13.2	182.9
+35			15.9	180.2
T.P.	6.6	199.24	3.34	192.78
50+92	END of Eucalyptus Grove. East Line.			
51+04	6.6			
EL-35			18.0	181.2
-25			16.3	182.9
EL			13.0	186.2
+15	FENCE		9.6	189.6
♀			6.5	192.7
+3			5.9	193.8
WL			5.5	193.7
+3			5.5	193.7
+25	2.8 fence as at this point			202.0
+50	11.5			210.7
51+24	= 18" iron culvert			
WL-50			3.2	196.0
-25			6.2	193.0
-12	= Flow Line of culvert			
WL			7.5	191.7
WL			4.8	194.4
+17			5.6	193.6



	+	$\pi$ 19924	-	Elev.
♀			7.4	191.9
+10	East end of culvert, covered by fill.			
EL			20.6	178.6
+25			24.5	174.7
+50			27.0	172.2
<u>51+99</u>				
EL-35			15.6	183.6
-25			14.4	184.8
EL			12.1	187.1
+5	Fence			
+7			10.7	188.5
+16			5.0	194.2
♀			5.1	194.1
WL			5.1	194.1
+5			1.3	197.9
+25	3.7			202.9
+35	7.3			206.5
<u>52+59</u>	$\Delta$	10°45'30" Lt	Split of L	
WL-35	10.3			209.5
-25	8.5			207.7
-11	4.4			203.6
WL			1.8	197.4
+6			4.1	195.1
♀			3.7	195.5
+10	Fence			
			3.7	195.5

	+	$\pi$ 19924	-	
EL			8.4	190.8
+25			13.6	185.6
+35			16.4	182.8
<u>53+59</u>				
EL-25			15.7	183.5
EL			9.1	190.1
+8			7.0	192.2
+13	Fence			
♀			3.6	195.6
+13			3.7	195.5
+13			4.0	195.2
WL			2.5	196.7
+25	4.7			203.9
T.P.	5.07	201.94	2.37	196.87
<u>54+59</u>				
WL-25	6.7			208.6
-10	3.1			205.0
WL			1.5	200.4
+7			6.1	195.8
♀			5.6	196.3
+5			5.4	196.5
+7	Fence			
EL			10.4	191.5
+25			15.5	186.4
<u>54+99</u>	$\Delta$	7°46'30" Lt	(Split of L)	
	= 12" concrete culvert			



	T	X	-	Elev.
EL-25		201.94	12.9	189.0
+20			10.0	191.9
EL			12.5	189.4
+12	Flow Line End pipe		10.65	191.29
+15	FENCE			
+18			5.3	196.6
2			5.3	196.6
+13			6.2	195.7
+15	Flow Line Ward pipe		7.90	191.04
WL			4.4	197.5
+25			1.2	200.7
<u>55+50</u>				
WL-25	2.8		<del>X</del>	209.7
WL	0.8			202.7
+7			5.1	196.8
2			5.3	196.6
+5			5.2	196.7
+13	FENCE		10.4	191.5
EL			12.6	189.3
+25			14.7	187.2
<u>56+00</u>				
EL-25			17.7	184.2
E.L.			14.6	187.3
+4	FENCE			
+17			4.4	197.5

	T	T	-	Elev.
2		201.94	43	197.6
+15			45	197.4
WL			0.9	201.0
+25	9.3			211.2
<u>57+00</u>				
WL-25	9.1			211.0
WL	1.1			203.0
+6			2.9	199.5
2			2.1	199.8
+2			2.1	199.8
+10			7.7	194.2
EL			9.1	192.8
+4	FENCE			
+25			11.5	191.4
T.P.	10.92	207.36	5.50	196.44
<u>57+50</u>				
EL-25			15.5	191.9
-9	FENCE			
EL			11.7	195.7
+18			5.7	201.7
2			5.7	201.7
+18			6.1	201.5
WL			4.7	202.7
+25			1.6	205.8
<u>57+92</u>	Δ	5° 02' Lt	(split of L)	



25

	+	$\pi$ 207.36	-	Elev.
WL-25	6.3			213.7
-4	1.6			209.0
WL			1.6	205.8
+7			5.7	201.7
♀			5.1	202.3
+8			4.6	202.8
EL			9.9	197.5
+12	Fence			
+25			14.9	192.5
<u>58+79</u>				
EL-35			15.1	192.3
-6	Fence		5.9	201.5
EL			4.4	203.0
♀			5.1	202.3
+8			5.0	203.4
+15	1.5			208.9
WL	2.1			209.5
+25	6.9			214.3
<u>59+10</u>				
WL-25	3.2			210.6
WL	0.8			208.2
+5			0.0	207.4
+10			5.3	202.1
♀			5.2	202.2
EL			4.4	203.0

	+	$\pi$ 207.36	-	Elev.
+5	Fence			
+25			12.1	195.3
+37			14.0	193.4
+45			21.1	186.3
+50			16.6	190.8
+60			14.8	192.6
+65			15.0	192.4
T.P.	245	209.09	0.72	206.64
<u>59+35</u>				
EL-50			14.1	195.0
-24			13.3	195.8
-20			18.2	190.9
-13			11.4	197.7
-5	Fence		9.7	199.4
EL			7.9	201.2
+3			6.4	202.7
♀			6.9	202.2
+17			6.9	202.7
WL			5.1	204.0
+25			2.2	206.9
<u>59+60</u>	= ♀ 20" iron culvert			
WL-25			4.6	214.5
WL			6.0	203.1
+7	End of Pipe	F Line	9.40	199.69
+13			7.6	201.6



	+	T 209.09	-	Elev.
£			6.9	202.2
+16			6.8	202.3
EL	= East End of pipe ft.		10.25	198.84
+1			15.3	193.8
+5	FENCE			
+18			16.6	192.5
+20			11.4	197.7
+30			12.1	197.0
<u>60+62</u>	△ 16°51' RT (split of L)			
EL-30			14.3	194.8
-15			12.6	196.5
-3	Fence		6.7	202.4
EL			6.5	202.6
£			21	202.0
+3			3.7	205.4
W.L.	1.2			210.3
+25	8.7			217.8
<u>61+62</u>				
W.L-25	9.8			218.9
W.L	2.1			211.2
+11			6.2	202.9
£			6.2	202.9
+15			6.2	202.9
EL			9.4	199.7
+5	Fence		12.3	196.8

	+	T 209.09	-	
+25			16.0	193.1
<u>62+74</u>	△ 11°08' RT (split of L)			
EL-40			15.4	193.7
-20	Fence			
-17			13.6	195.5
EL			4.4	204.7
£			4.9	204.2
+7			5.1	204.0
+18	2.3			211.4
W.L.	3.0			212.1
+25	11.6			220.7
<u>63+74</u>				
W.L+25	10.2			219.3
W.L.	2.0			211.1
+6			3.1	206.0
£			2.6	206.5
+15			1.1	208.0
EL			2.6	206.5
+3	Fence			
+10			6.6	207.5
+25			8.1	2010
T.P.			1.92	207.17
	10.07	217.30 <sup>v</sup>		207.23 <sup>06'</sup>
<u>6434</u>				
EL-25			14.6	202.7

 BM  
 ELEV  
 207.13  
 4010713  
 1010  
 1010



	+	↑ 217.30	-	Elev.
EL			10.9	206.4
+5	FENCE			
+10			7.2	200.1
£			8.6	208.7
WL			9.7	207.6
+2			5.6	216.7
+25			2.2	215.1
<u>65+00</u>	△	14°39'30" Lt	(Split of L)	
WL-25	4.6			221.9
WL			8.0	209.3
£			7.1	210.2
+2			6.8	200.5
+8	FENCE			
+12			11.4	205.9
EL			12.6	204.7
+25			15.3	202.0
<u>65+76</u>				
EL-25			13.3	204.0
-5			9.2	207.5
EL			8.1	209.2
+2	FENCE			
+8			4.0	213.3
£			5.0	212.3
+7			5.7	211.6
+17	4.2			221.5

	+	↑ 217.30	-	Elev.
WL	5.4			222.7
+25	10.6			227.9
<u>66+61</u>				
WL-25	4.0			221.3
WL	0.7			218.0
+9			0.3	217.0
+11			3.5	213.8
£			2.8	214.5
+15			2.4	214.9
EL			3.7	213.6
+5	FENCE		4.4	212.9
+25			6.9	210.4
<u>67+61</u>	21	PL. 1279	= Start of Gregory's line	Bookings <sup>page 47</sup>
<u>67+61</u>	21		= 0+00	
<u>0+00</u>				
EL-25			6.4	210.9
-3	FENCE			
EL			5.3	212.0
+6			5.3	212.0
+9			1.1	216.2
£			1.3	216.0
+12			1.6	215.7
WL	0.8			218.1
+25	3.9			221.2
0+08	£	2'	iron culvert	



0+08 - culvert			Elev
+	+	-	-
	217.30		
WL-25		0.5	216.8
WL		1.9	215.4
+4 = Flow line W.E. of pipe		3.40	213.90
+8		1.6	215.7
℄		1.2	216.1
+12		1.1	216.2
+14		2.8	214.5
EL = Flow Line E.E. of pipe		5.20	212.10
+25		6.4	210.9
T.P.	6.90	223.63	0.57
			216.73
<u>1+00</u>			
EL-25		14.0	109.6
-2			
EL.		10.8	112.8
+8		10.0	113.6
+13		5.5	118.1
℄		5.7	117.9
+13		5.9	117.7
WL		6.6	117.0
+25		5.1	118.5
+37 FENCE		2.5	121.1
<u>1+60</u>			
WL-25	+1		227.7
-16			
WL		2.7	220.9

	+	-	Elev
	223.63		
+7		5.0	118.6
℄		4.6	119.0
+6		4.3	119.3
EL		12.8	110.8
+2 FENCE			
+25		16.4	107.2
<u>2+10</u>			
EL-25		18.5	105.1
-20		16.7	106.9
-1 = Fence			
EL.		9.5	114.1
+13		3.0	220.6
℄		3.6	220.0
+13		3.6	220.0
W.L.	3.8		227.4
+1 FENCE	6.9		230.5
+25	15.0		238.6
<u>2+90</u>			
WL-25	13.9		237.5
-2	7.0		230.6
WL	5.4		229.0
+7		2.2	221.4
℄		1.7	221.9
+10		1.6	223.0
EL FENCE		6.2	217.4



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	+	$\bar{x}$	-	Elev.
+35		228.63	17.0	206.6
+47			23.0	200.6
+60			26.0	197.6
T.P.	9.19	228.08	4.74	218.89
<u>3+38</u>				
EL-60			31.3	196.8
-40			28.0	200.1
-20			22.0	206.1
EL	Fence		13.4	214.7
+12			5.2	222.9
♀			5.3	222.8
+12			5.8	222.3
+16			3.0	225.1
WL			2.3	226.8
+25	4.7			232.8
<u>3+70</u>				
WL-25	11.2			239.3
WL	3.0			231.1
+8			5.4	222.7
♀			4.9	223.2
+10			4.5	223.6
EL	Fence		8.7	219.4
+50			30.5	197.6
+65			33.4	194.7
<u>4+70</u>				

	+	$\bar{x}$	-	Elev.
EL-50		228.08	20.8	207.3
EL			6.5	221.6
+3	Fence		5.7	222.4
+10			3.0	225.1
♀			3.2	224.9
+13			3.4	224.7
+16	1.7			229.8
WL	2.6			230.7
+25	8.5			236.6
<u>5+70</u>				
WL-25	8.1			236.2
WL			0.4	227.7
+7			2.5	225.6
♀			2.1	226.0
+10			1.8	226.3
+16	Fence		6.1	222.0
EL			7.7	220.4
+25			11.6	216.5
<u>6+40</u>				
EL-25			8.1	220.0
EL			4.6	223.5
+5	Fence		3.2	224.9
+8			0.7	227.4
♀			0.7	227.4
+11			1.2	226.9



30

	+	X	-	Elev.
		228.08		
+16	1.6			229.7
WL	2.3			230.4
+25	7.1			235.2
T.P.	6.96	234.63	0.91	227.67
<u>7+00</u>				
WL-25	7.4			242.0
-5	Fence			
WL	3.2			237.8
+5	2.0			236.6
+12			6.6	228.0
⊕			6.1	228.5
+16	Fence		4.9	229.7
EL			5.4	229.2
+25			10.2	224.4
<u>7+84.63</u>	Δ	3°55'30" RT	(SPLIT 0.1)	
EL-25			11.0	223.6
-6			8.0	226.6
EL	Fence		6.4	228.2
+5			4.8	229.9
⊕			5.2	229.4
+7			5.6	229.0
+13			1.5	233.1
+17	Fence			
WL			0.0	234.6
+25	4.2			238.8

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	+	X	-	Elev.
		234.63		
<u>8+70</u>				
WL-25	7.1			241.7
WL	2.6			237.2
+4	Fence			
+5	1.3			235.9
+10			5.2	229.4
⊕			4.9	229.7
+15			5.0	229.6
EL	Fence		6.4	227.7
+25			11.9	222.7
<u>9+13</u>				
EL-25			12.5	222.1
-5			10.7	223.9
EL	Fence		8.2	226.4
+5			6.2	228.4
⊕			5.0	229.6
+15			4.4	230.2
WL			3.2	231.4
+25			0.3	234.3
+35	3.0			237.6
<u>9+70</u>				
WL-25	16.2			250.8
WL	6.0			240.6
+7	4.4			239.0
+11			5.6	229.0



	+	$\bar{x}$ 239.63	-	Elev.
♀			6.2	228.4
+15			5.6	229.0
EL	FENCE		9.1	223.5
+13			12.5	222.1
+25			13.6	221.0
<u>10+70</u>				
EL-25			15.3	119.3
-3			13.7	220.9
EL			12.3	222.3
+4	FENCE			
+8			6.8	227.8
♀			7.3	227.3
+11			7.4	227.2
WL			4.0	230.6
+25	6.9			241.0
<u>11+55</u>				
WL-25			5.3	229.3
WL			6.6	228.0
+10			7.1	227.5
♀			7.5	227.1
+15	FENCE		7.2	227.4
+17			8.6	226.0
EL			9.1	225.5
+25			12.5	222.1
<u>12+70</u>				

	+	$\bar{x}$ 239.63	-	Elev.
EL-25			12.5	215.1
-3	FENCE		16.6	218.0
EL			14.3	220.3
+10			9.2	225.4
♀			9.3	225.3
+10			9.3	225.3
+14			2.9	231.7
WL			0.6	234.0
+25	9.5			244.1
T.P.	5.86	232.54	7.95	226.68
<u>13+12</u>	= ♀	14" iron culvert		
WL-5	= Flowline west End of pipe	1028	222.26	
EL+7		?	12.22	220.32
<u>13+48</u> <sup>19</sup>	Δ			(Split of L)
WL-?	12.5			245.0
WL	2.9			235.4
+7			0.0	232.5
+13			7.2	225.3
♀			7.4	225.1
EL			7.5	225.0
+15	FENCE		16.6	215.9
+23			19.0	213.5
<u>14+49</u>				
EL-15			12.5	220.0
EL			10.3	222.2



	+	$\bar{x}$ 232.54	-	Elev.
+5	FENCE			
+8			5.8	226.7
♀			6.4	226.1
+12			6.8	225.7
WL			0.8	231.7
+25	6.1			238.6
<u>15+49</u>				
WL-25	3.0			235.5
-10			0.0	232.5
WL			3.7	228.9
+8			5.8	226.7
♀			5.8	226.7
+12	FENCE		5.0	228.5
EL			7.9	224.6
+15			10.2	222.3
<u>16+11</u> = ♀ 24" iron culvert				
EL+3	END of Pipe FL.		9.22	223.32
♀+12	" " FL.		8.71	225.83
<u>16+49</u>				
EL-15			6.0	226.5
EL			5.6	226.9
+7	FENCE		4.6	227.9
♀			5.5	227.0
+10			6.2	226.3
+13			6.0	231.5

	+	$\bar{x}$ 232.54	-	Elev.
WL			0.3	232.2
+15	1.0			234.1
<u>17+49</u>				
WL-15	6.2			238.7
WL	0.7			233.2
+4			0.8	231.7
+12			5.8	226.7
♀			5.5	227.0
+12			5.1	227.4
+16	FENCE			
EL			9.8	222.7
+15			11.4	221.1
+25			12.4	220.1
<u>18+49</u>				
EL-30			20.0	212.5
-20			18.2	214.3
EL			10.9	222.1
+2	FENCE			
+12			5.1	227.4
♀			5.2	227.3
+11			5.5	227.0
WL	1.1			233.6
+15	6.5			239.0
<u>19+33</u> <sup>51</sup> Δ				
WL-15	5.0			237.5

18° 40' RT (Split of L)



	+	$\bar{T}$	-	Elev.
		232.54		
WL			0.6	231.9
+12			5.0	227.5
♀			5.0	227.5
+18			5.4	227.1
EL			7.0	225.5
+13	FENCE			
+38			24.2	208.3
+50			25.7	206.8
T.P.	4.10	233.24	3.40	229.14
<u>20+33</u>				
EL-70			26.0	207.2
-55			25.5	207.7
-2				
EL			9.0	224.2
+8			4.5	228.7
♀			5.4	227.8
+6			4.7	228.5
+15	3.0			236.2
WL	4.4			237.6
+21	11.6			244.8
<u>21+04<sup>56</sup></u>	Δ	29°34' Lt	(split of L)	
WL-25	11.7			244.9
-8	6.2			239.4
WL			4.1	229.1
♀			4.8	228.4

	+	$\bar{T}$	-	Elev.
		233.24		
+7			4.7	228.5
H5	FENCE			
EL			9.9	228.3
+50			26.0	207.2
+60			26.2	207.0
<u>22+04</u>				
EL-60			24.6	208.6
-50			24.5	208.7
-3			12.3	220.9
EL	FENCE		9.8	223.4
+5			5.5	227.7
-♀			4.9	228.3
+7			4.9	228.3
WL			0.5	232.7
+25	6.8			240.0
<u>23+04</u>				
WL-25	9.0			242.2
WL			0.3	232.9
+13			4.8	228.4
♀			4.8	228.4
+15			4.6	228.6
EL			9.3	223.9
+2	FENCE			
+10			15.4	217.8
+35			21.3	211.9



	+	$\bar{\pi}$	-	Elev.
		233.24		
+50			23.3	209.9
+60			23.6	209.6
<u>23+74</u>				
EL-55			23.0	210.2
-95			23.0	210.2
-3	Fence			
EL			9.6	223.6
+6			4.2	229.0
♀			4.3	228.9
+11			4.1	229.1
WL			1.3	231.9
+25	4.7			237.9
<u>24+45<sup>47</sup></u>	$\Delta$ 7°37' Lt	(Split of L)		
WL-25	17.3			250.5
-4	7.8			241.0
WL	4.0			237.2
+9			3.7	229.5
♀			3.7	229.5
+10			3.1	220.1
EL			10.1	223.1
+11	Fence			
+35			22.8	210.4
+50			23.4	209.8
<u>25+45<sup>47</sup></u>	$\Delta$ 14°20' Lt	(Split of L)		
EL-50			22.3	210.9

	+	$\bar{\pi}$	-	Elev.
		233.24		
-35			21.5	211.7
EL	Fence		10.0	223.2
+12			2.5	220.7
T.P.	10.92	241.38	2.28	230.96
♀			10.9	220.6
+13			11.2	220.2
WL	3.2			244.6
+10	10.0			251.4
+20	17.0			258.4
<u>26+08</u>				
WL-25	14.0			255.4
-WL	2.0			243.4
+19			9.8	221.6
♀			9.8	221.6
+14			10.1	221.2
EL			15.8	226.6
+5	Fence			
+25			25.8	215.6
+40			29.0	212.4
<u>26+70<sup>22</sup></u>	$\Delta$ 6°03' 30" Lt	(Split of L)		
EL-30			27.0	214.4
-20			27.0	214.4
-2	Fence			
EL			17.1	224.3
+10			8.7	222.7



	+	$\Sigma$ 241.38	-	Elav.
¢			8.6	232.8
+11			9.0	232.4
WL	8.7			250.1
+25	21.5			262.9
<u>27+19.9</u>	= P.L. + N.L. Leavitts Add.			
WL-25	22.7			264.1
WL	10.0			251.4
+10			7.5	233.9
¢			7.5	233.9
+12			7.5	233.9
EL			12.8	229.6
+5	Fence			
+25			26.0	214.6
<u>28+20</u>				
EL-30			22.7	218.7
-20			22.0	219.4
-8	Fence			
EL			12.2	229.2
+9			5.0	236.4
¢			5.6	235.8
+8			5.4	236.0
WL	2.2			243.6
+2.0	13.0			254.4
<u>29+20</u>				
WL-23	13.0			254.4

	+	$\Sigma$ 241.38	-	
WL	3.2			244.6
+13			4.5	236.9
¢			4.2	237.2
+13			4.2	237.2
EL			10.2	231.2
+7	FENCE			
+20			17.5	223.9
+35			18.2	223.2
<u>30+20</u>				
EL-30			12.4	229.0
-20			12.2	229.2
-6	FENCE			
EL			1.8	239.6
¢			2.9	238.5
+4			3.1	238.3
+10	5.0			246.4
WL	6.0			247.4
+25	12.2			252.6
<u>31+00</u>	= ¢ 2-6" Pipe Culvert			
WL+12	= West End	Flow Line	2.38	239.00
EL+6	= East end	" "	5.43	235.95
<u>31+20</u>				
WL-25	17.8			259.2
WL	8.0			249.4
+4	6.0			247.4



	+	T	-	Elev.
+15		241.38	2.0	239.4
⊕			1.7	239.7
+15			1.4	240.0
EL			5.2	236.2
+1	Fence			
+25			6.8	234.6
T.P.	7.14	247.33	1.19	240.19
<u>32+20</u>				
EL-15			8.5	238.8
EL			6.9	241.4
+4	Fence			
+7			5.4	241.9
⊕			6.0	241.3
+10			6.8	240.5
+13			3.6	243.7
WL			2.5	244.8
+15			1.5	245.8
<u>33+10<sup>27</sup></u>	Δ		split of L	
WL-15			0.0	247.3
WL			1.5	245.8
+7			2.1	245.2
+11			6.0	241.3
⊕			5.4	241.9
+13			4.1	243.2
+14	Fence			

	+	T	-	Elev.
EL		247.33	5.3	242.0
+15			6.9	240.4
<u>34+00</u>				
EL-15			9.0	238.3
EL			8.0	239.3
+4			7.4	239.9
+10	Fence			
+12			3.7	243.6
+13			4.4	242.9
⊕			4.7	242.6
+10			4.6	242.7
-WL	2.5			249.8
+15	8.7			256.0
<u>35+00</u>				
WL-15	9.0			256.3
WL	4.2			257.5
+11			3.9	243.4
⊕			3.8	243.2
+10			3.5	243.8
+11	Fence			
EL			10.2	237.1
+15			11.8	235.5
<u>36+00</u>				
EL-20			14.0	233.3
-6			12.2	235.1



	+	$\pi$ 24733	-	Elev.
EL			10.0	237.3
+9	FENCE			
+11			2.7	244.6
$\phi$			2.5	244.8
+13			2.7	244.6
WL	2.4			249.7
+12	7.8			253.1
+25	13.0			260.3
<u>37+00</u>				
WL-25	19.8			257.1
WL	8.8			251.1
+10			1.1	246.2
$\phi$			0.6	246.7
+10			0.4	246.9
+11	FENCE			
EL			7.2	240.1
+10			12.9	234.4
+25			15.0	232.3
T.P.	9.97	257.24	0.06	247.27
<u>38+00</u>				
EL-15			15.0	242.2
EL			13.2	244.0
+8	Fence			
+10			8.1	249.1
$\phi$			8.3	248.9

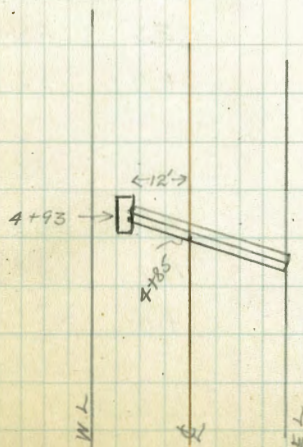
	+	$\pi$ 25724	-	Elev.
$\phi$ +10			8.6	248.6
+14			3.0	254.2
WL	1.7			252.9
+15	8.5			265.7
<u>39+00</u>				
WF-25	12.5			269.7
WL	3.8			261.0
+11			6.7	250.5
$\phi$			6.6	250.6
+10			5.9	251.3
+11			5.1	252.1
<u>+13 FENCE</u>				
EL			8.6	248.6
+15			10.1	247.1
<u>39+75</u>				
EL-15			5.8	251.4
EL			4.5	252.7
<u>+6 FENCE</u>				
+10			4.6	252.6
+11			5.3	251.9
$\phi$			5.5	251.7
+11			5.5	251.7
+15			1.4	255.8
WL			0.3	256.9
+25	9.5			266.7



	+	x	-	Elev.
40+03		257.24		
	= 2 14" iron culvert			
WL-15		4.6		252.6
WL		6.2		251.0
+4	FL West end of pipe	6.47		251.77
+5		4.6		252.6
+10		5.1		252.1
☉		5.2		252.0
+10		4.8		252.4
+12		3.9		253.3
+15	FENCE			
EL		6.6		250.6
+2	FL East end of pipe	8.22		249.02
+3		12.6		244.6
+15		12.8		244.4
40+25				
EL-15		3.7		253.5
EL		4.1		253.1
+5	FENCE			
+9		4.4		252.8
☉		4.8		252.4
+10		5.1		252.1
+17		0.1		257.7
WL	1.0			258.2
+15	1.5			258.7
41+60				

Angle

	+	x	-	
WL-15	6.4	257.24		263.6
WL	3.7			260.9
+9			3.6	253.6
☉			3.3	253.9
+10			2.9	254.3
+11			2.5	254.7
+15	FENCE			
EL			5.2	252.0
+15			8.5	248.7
40+85				
	= 2 two 6" iron pipe culvert			
	West end of pipe set in concrete box			
-	East End Flow line		6.73	250.51
	West End " "		5.05	252.19
	West End top of box		4.10	253.14





	+	$\pi$	-	Elev
40+93		257.24		
WL-25	5.8			263.0
WL			1.1	257.1
+8	Flow Line pipe Top of Box		5.05	252.19
			4.10	253.14
+10			3.5	253.7
⊕			3.1	254.1
+11			2.7	254.5
+15	Fence		3.3	253.9
EL			7.0	250.2
+15			11.1	246.1
+25			12.6	244.6
42+60				
T.P.	1043	265.70	1.97	255.27
EL-15			2.0	241.7
-10			22.5	243.2
EL			16.9	248.8
+6	Fence			
+9			10.6	255.1
⊕			10.6	255.1
+12			11.1	254.6
WL			4.5	261.2
+15	2.6			268.3
43+60				
WL-15	6.0			271.7

	+	$\pi$	-	Elev.
WL		265.70		
			1.9	263.8
+11			9.8	255.9
⊕			9.1	256.6
+12			8.6	257.1
+14	Fence			
EL			11.6	254.1
+15			14.0	251.7
44+00				
EL-15			11.0	254.7
EL			8.1	257.6
+5	Fence			
+8			7.2	258.5
⊕			8.4	257.3
+8			8.8	256.9
WL			2.2	263.5
+15	0.5			266.2
45+00				
WL-15	5.9			271.6
WL	1.1			266.8
+11			7.1	258.6
⊕			7.0	258.7
+11			6.2	259.5
+14	Fence			
EL			7.0	258.7
+15			8.6	257.1



	+	$\bar{\pi}$ 265.70	-	Elev.
<u>46+00</u>				
EL-15			7.1	258.6
EL			5.6	260.1
+7	Fence			
+11			5.1	260.6
Q			5.6	260.1
+13			5.7	260.0
WL			2.0	263.7
+15	2.1			267.8
+25	2.8			268.5
<u>46+95<sup>25</sup></u>	$\Delta$ 21° 05' Rt (split of L)			
WL-15	9.2			275.1
WL	3.6			269.3
+12			5.7	260.7
Q			5.4	260.3
+15			5.3	260.4
EL			9.7	256.0
+3	Fence			
+25		12.0		253.7
<u>47+50</u>	= 6" iron pipe culvert { w.e. set in concrete Box			
EL-25		16.3		249.4
-10		15.0		250.7
EL	Fence	12.5		253.2
+3	Flowline culvert	10.22		255.49
+9		5.7		260.0

	+	$\bar{\pi}$ 265.70	-	Elev.
Q			5.4	260.3
+17			6.0	259.7
+18	Flowline of pipe		7.20	258.50
	Top of Box		6.38	259.32
WL			6.0	259.7
+25	2.5			268.2
<u>48+00</u>				
WL-25	15.0			280.7
WL	5.1			270.8
+8			5.1	260.6
Q			5.3	260.4
-+10			4.9	260.8
EL	Fence		9.7	256.0
+22			19.3	246.4
+35			22.0	243.7
+45			22.7	243.0
T.P.	11.03	272.72'	4.01	261.69'
<u>49+00</u>				
EL-50			31.4	241.3
-40			29.6	243.1
EL	Fence		16.0	256.7
+10			10.9	261.8
Q			11.0	261.7
+18			11.1	261.6
WL			9.4	263.3



	+	$\bar{\pi}$	-	Elev.
+7		272.72	0.5	272.2
+11	4.0			276.7
+25	9.4			282.1
<u>49+50</u>				
WL-90			5.7	267.0
-30			9.5	263.2
WL			10.7	262.0
+13			10.7	262.0
$\Phi$			15.5	259.2
+10			21.7	251.0
+16	FENCE			
EL			23.1	249.6
+15			24.7	248.0
<u>50+50</u>				
EL-25			26.3	246.4
EL			19.5	253.2
+1	FENCE			
$\Phi$			12.6	260.1
+7			8.9	263.8
WL			7.7	265.6
+8			8.7	264.5
+13			3.2	269.5
+25	1.7			271.4
<u>51+00</u>				
WL-25	5.5			268.7

	+	$\bar{\pi}$	-	Elev.
-7	1.2	272.72		273.9
WL			5.9	266.8
$\Phi$			4.4	267.3
+17	FENCE			
EL			13.0	259.7
+25			20.4	252.3
<u>52+00</u>				
EL-15			8.8	263.4
EL FENCE			4.0	268.7
T.P.	1308	284.17	1.63	271.09
+10			10.7	273.5
$\Phi$			10.5	273.7
+12			11.5	272.7
WL			3.9	280.3
+25	4.3			288.5
52+39 = $\Phi$ 6' iron culvert				
52+46 = Station of west end				
52+32 = " " East end				
WL+8	= Flow line West end		7.91	276.26
$\Phi$ +15	= " " East end		9.58	274.69
<u>53+00</u>				
WL-25	8.4			292.6
WL	2.0			286.2
+9			5.5	278.7
+12			3.9	280.3



	+	$\pi$	-	Elev.
$\phi$		284.17	3.5	280.7
+12			3.6	280.6
+18			7.0	277.2
EL FENCE			7.0	277.2
+20			13.5	270.7
TP	13.05	296.89	0.33	283.84
<u>54+00</u>				
EL-25			15.4	281.6
EL FENCE			12.8	284.1
+7			8.7	288.2
$\phi$			8.8	288.1
+10			9.3	287.6
+14			9.9	292.5
WL			2.0	294.9
+15	0.9			297.8
54+21 = $\phi$ 6" Culvert				
54+30 = Station of West end set in box				
54+08 = " " East "				
WL+8	Flowline Top of Box	7.60		289.29
		6.83		290.06
$\phi$ +15	Flowline	10.00		286.89
54+589.7 = NL PL 1299 = start of eucalyptus Grove on West				
WL-15	3.3	<u>0+00</u>		300.2
WL	1.0			297.9
+8			4.8	292.1

	+	$\pi$	-	
$\phi$		296.89	4.1	292.8
+13			3.9	293.0
EL FENCE $\phi$ here			5.6	291.3
+12 = U.S.M.C. Lease marker			7.19	289.70
+15			8.7	289.2
TP	11.97	308.77	0.09	296.80
<u>1400</u>				
EL-25			12.6	291.2
-10			14.2	294.6
EL			14.6	294.2
+2			9.8	299.0
$\phi$			9.4	299.4
+18			9.6	299.2
WL			9.1	299.7
+15 = line of grove			3.0	305.8
+20			2.3	306.5
<u>12+00</u>				
WL-30	3.4		Line of grove	314.8
-15	1.9			310.7
-10			2.7	306.1
WL			2.4	306.4
$\phi$			3.5	305.3
+EL			5.6	303.2
+10			6.5	302.3
TP	1269	321.16	0.30	308.47



+	π	-	Elev.
3+00	321.16		
EL-25		11.6	309.6
EL		9.5	311.7
±		8.5	312.7
+10		7.9	313.3
WL		7.3	313.9
+20		6.9	314.3

west End set in concrete

3+80 = ± 6" iron culvert

3± = East End of culvert

East End Flowline 256 318.60

WL± = west End of culvert

4+00 = station of west end of culvert

T.P. 10.31 331.04 0.43 320.73

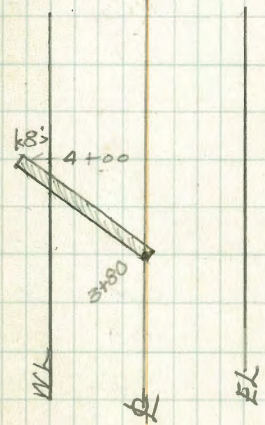
West End Flow Line 10.11 320.93

TOP of Box 9.35 321.69

4+00

WL-35		6.6	324.4
-15		7.3	323.7
WL		9.8	321.2
±		10.7	320.3
EL		10.9	320.1
+10		12.6	319.4
+18		16.1	314.9
+25		11.4	319.6
5+00			
EL-15 Fence		3.7	327.3

+	π	-	Elev.
	331.04		
EL		3.4	327.6
±		3.2	327.8
+15		3.4	327.6
WL		1.9	329.1
+15		0.6	330.4
T.P.	130.8	343.81	0.31 330.73



5+60	Δ	12° 52' 47"	
WL-15		9.8	334.0
WL		11.3	332.5
+7		12.9	330.9
±		12.5	331.3
+13		13.0	330.8
EL Fence		11.4	332.4
+15		11.4	332.4
6+60			

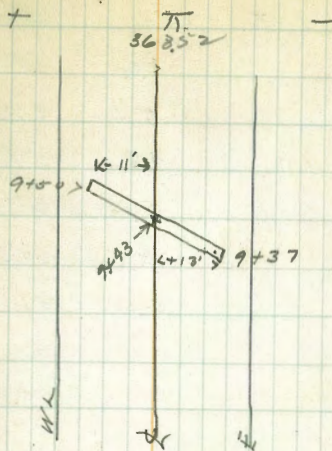






	+	$\pi$	-
9+43	= $\phi$	10" IRON Culvert	
Flow Line West End	6.45	349.40	
" " East "	7.62	348.23	
9+90	$\Delta$	29°30'30" Lt (Split of L)	
WL-20	Line of Trees	2.7	353.2
WL		3.8	352.1
$\phi$		3.8	352.1
+11		4.2	357.7
+19	FENCE		
EL		5.3	350.6
+10		5.5	350.4
T.P.	1304	368.52	0.37
10+90			
EL-10		10.7	357.8
-3	LINE of TREES		
EL		10.1	358.4
$\phi$		10.3	358.2
WL		10.0	358.5
+8	LINE of TREES	9.5	359.0
11+90			
WL-12	" 0.4 "		368.9
WL		0.7	367.8
+7		3.6	364.9
$\phi$		2.8	365.7
+15		2.7	365.8

Station 9+90 = Intersection  
 Sorrento Road + Rose Canyon Road



EL	Line of Trees	2.1	366.4
+10		3.1	365.4
T.P.	12.75	384.04	0.23
12+90			
EL-10		10.1	370.9
EL		9.3	371.7
+6	TREES		
+12		9.0	372.0
+13		10.2	370.8
$\phi$		9.6	371.4
WL		10.0	371.0
+3		7.0	374.0
+8	TREES	6.2	374.8
13+90	P.O.T.		



46

13+90

	+	$\bar{x}$	-	Elev.
WL-15	trees	381.04	3.6	377.4
-7			5.4	375.6
WL			4.8	376.2
♀			5.6	375.4
+10	trees		5.6	375.4
EL			6.0	375.0

14+90

EL	0.8			381.8
+10	trees			
♀			1.5	379.5
WL			1.1	379.9
+15	trees		0.8	380.2
TP	9.86	390.37	0.53	380.51

15+90

WL-15			4.8	385.6
+7	trees		6.0	384.4
WL			8.1	382.3
♀			7.7	382.7
+10	trees		7.6	382.8
EL			7.4	383.0

16+90

EL			6.5	383.9
+6	trees			
♀			5.9	384.5
WL			6.0	384.4
+9	trees		4.6	385.8

+

 $\bar{x}$   
390.37

-

Elev.

+15			4.4	386.0
<u>17+90</u>				
WL-10			3.6	386.8
WL	trees		3.6	386.8
♀			4.2	386.2
+13			4.7	385.7
+18	trees			
EL			4.7	385.7

18+90

EL	trees		2.8	387.6
♀			2.6	387.8
+13			2.9	387.5
WL	trees		2.1	388.3
+10			1.5	388.9
TP	9.80	399.95	0.22	390.15

19+90

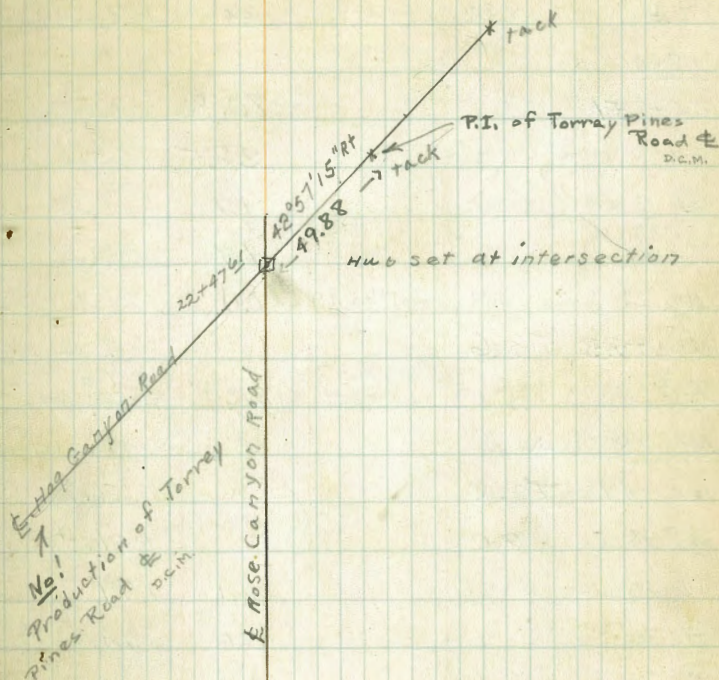
WL	trees		8.7	391.3
+7			10.2	389.8
♀			10.0	390.
+15			10.3	389.7
EL	trees		10.2	389.8

20+90

EL				
-9	trees		8.9	391.1
EL			8.8	391.2



	T	$\bar{X}$	-	
E		399.95	7.9	392.1
WL			7.4	392.6
<u>21+90</u>				
WL			5.4	394.6
E			5.5	394.5
EL			6.8	393.2
+ 13	Trees		7.2	392.8
<u>22+47.6</u> on diagonal				
EL			3.1	396.9
E			3.4	396.6
WL			3.4	396.6
TP	3.89	399.40	4.4	395.51
T.P.			5.65	393.75
BM = Tack in pavement at E.C. on Biological				
grade	=	393.91		
		<u>393.75</u>		
		0.16	ERROR	





Brought forward from Page 14

Elev.

	+	T	-	Elev.
T.P.	9.24	186.03 <del>185.93</del>	8.47 8.46	176.79 176.69
<u>18+00</u>				
EL-51			80.8	105.2
EL			22.5	163.5
¢			4.7	181.3
+16			4.7	181.3
WL			0.0	186.0
WL+33	53.6			239.6
T.P.	8.58	185.37 <del>185.27</del>	9.24	176.79 <del>176.69</del>
<u>18+78</u>	△ Rt			
WL-47	70.8			256.2
WL-22	6.0			191.4
WL			6.1	179.3
+17			5.6	179.8
¢			4.8	180.6
EL			21.0	164.4
+59			80.7	104.7
T.P.	3.18	179.97 <del>179.87</del>	8.58	176.79 <del>176.69</del>
<u>19+78</u>				
EL-41			67.7	112.3
EL			23.9	156.1
¢			11.7	168.3
+6			4.8	175.2
+11	= ¢ of clay dumping trap			
WL			5.3	174.7

	+	T	-	Elev.
+1		179.97 <del>179.87</del>		
- {Guard fence for Brick Yd. } = East edge of present road				
+14			6.1	173.9
+30			4.1	175.9
+43			0.0	180.0
T.P.	5.25	177.12 <del>177.02</del>	8.10	171.97 <del>171.77</del>
<u>20+78</u>				
WL-50			5.9	171.2
-26	= west edge of Road			
-13	= EAST " " "			
WL			5.0	172.1
+10			4.9	172.2
¢			11.9	165.3
EL			23.8	153.3
+35			38.0	139.1
+75			65.6	111.5
+85			67.6	109.5
				<i>marked</i>
EL			11.2	165.9
+8			5.7	171.4
¢			5.2	171.9
WL			5.3	171.8
<u>21+37</u>	△			20°04' Lt
WL-35	(Split of 4)			4.3 172.8
= Toe of Slope of clay pit				



	+	T	-	Elev.
-20		177.02	4.9	172.7
WL			5.3	171.8
♀			5.2	171.9
+14			6.4	170.7
EL			11.0	166.1
+90			69.8	107.3
EL = Lip of bluff			5.9	171.2
♀			5.2	171.9
W.L.			5.3	171.8
T.P.	521	<del>177.08</del> 176.98	5.25	<del>171.87</del> 171.77
22+23 <sup>01</sup>	RT LS to Back tan			
WL			3.8	173.3
♀			4.9	172.2
EL			6.2	170.9
22+36	Δ	62023'	RT	
EL-125			52.0	125.1
-40			32.5	144.6
EL			6.2	170.9
♀			4.8	172.3
+13			2.8	174.3
WL	2.7			179.9
+8	11.5			188.6
+25	19.8			196.9
22+48 <sup>01</sup>	RT LS to forward tan			

	+	T	-	Elev.
		176.98 177.08		
WL	3.6			180.7
+8			3.6	173.5
♀			4.0	173.1
EL			6.2	170.9
23+00				
EL-40			33.7	143.4
-20			27.4	149.7
EL			14.1	163.0
+12			6.2	170.9
♀			5.0	172.1
WL			5.1	172.0
+1			5.1	172.0
+5	10.0			187.1
+25	15.0			192.1
23+54 <sup>19</sup>	RT LS to Back tan			
WL			5.8	171.3
♀			6.4	170.7
+10			8.5	169.6
EL			11.7	165.4
23+61	Δ	37052'30	LT	(Split off)
EL-25			23.6	143.5
-19	Fence			
EL			14.	163.1
+12			8.7	168.4



	+	$\bar{x}$	-	Elev.
Q		$\frac{17698}{177.08}$	6.8	170.3
WL			5.8	171.3
+15			6.4	170.7
+20	7.0			184.1
+25	9.0			186.1
$\frac{23+67.86}{WL}$		R+LS to forward tan	5.8	171.3
Q			6.4	170.7
+7			7.9	169.2
EL			12.8	164.3
<u>24+61</u>				
EL-20			18.3	158.8
-4	Fence			
EL			10.7	166.4
+10			7.2	169.9
Q			7.2	169.9
+16			7.7	169.4
WL			2.3	174.8
+25	4.6	Fence		181.7
T.P	5.28	$\frac{174.64}{174.54}$	7.72	$\frac{169.36}{169.26}$
<u>25+33<sup>28</sup></u>		R+LS to back tan		
WL			5.8	168.8
Q			5.3	169.3
+6			5.0	169.6
+16	Fence			
EL			10.4	164.2

	+	$\bar{x}$	-	Elev.
$\frac{17464}{174.54}$				
<u>25+42</u>	$\Delta$	73°44'	LT (split of L)	
EL-25			18.0	156.6
EL			11.2	163.4
+6	Fence			
+17			4.9	169.7
Q			5.1	169.6
WL			5.8	168.8
+7			1.2	173.4
+25	2.7			177.3
<u>25+50<sup>02</sup></u>				
WL			5.8	168.8
Q			5.2	169.4
+4			4.9	169.7
+18	Fence			
EL			10.7	163.9
<u>25+73</u>	= Q	8' iron culvert		
EL-6	= East End of Pipe	FL.	10.00	164.6
Q +10	= West End of Pipe	underground		
<u>26+25</u>				
EL-25			19.4	155.2
EL			9.4	165.2
+7			4.8	169.8
Q			5.0	169.6
+7			4.9	169.7
+10	1.4			



	+	<del>174.4</del> 174.54	-	Elev.
WL	4.2			178.8
+8	FENCE			
+25	9.0			183.6
26+89 <sup>32</sup>	RTLS to back tan			
WL		4.0		170.6
☿		4.7		169.9
+15		6.7		167.9
EL		10.7		163.9
26+95	= $\phi$ 16" wood culvert			
EL	= East End of Pipe	9.90		164.74
WL+2	= West " "	5.69		169.00
27+03	$\Delta$ 68°46'30" (split of L)			
EL-25		15.5		159.1
EL		10.7		163.9
+8		6.6		168.0
☿		4.7		169.9
WL	FENCE	2.6		172.0
+25	5.0			179.6
27+16 <sup>68</sup>	RTLS to forward tan			
WL		3.5		171.1
☿		4.8		169.8
+13		6.3		168.3
EL		10.7		163.9
28+00				
EL-25		19.6		156.0

	+	<del>174.4</del> 174.64	-	Elev
EL			12.2	162.4
+10			5.6	169.0
☿			5.6	169.0
WL			5.7	168.9
+21	FENCE		4.3	170.3
28+22	= location of dillapidated culvert			
Roadway is undermined here				
WL-26	Fence	Flowline of pipe	8.96	165.68
-20			4.6	170.0
WL			5.6	169.0
☿			5.6	169.0
+8			5.2	169.4
+16			11.4	163.2
EL			24.0	150.6
+30	FENCE		29.0	145.6
T.P.			4.41	170.52
				<del>170.23</del> 170.13

See page 15 this book for  
continuation of line

Note: Missed U.S.G.S. B.M. 0.27 when bench  
line was run from lower end of canyon  
U.S.G.S. B.M. 170.52  
Benchline El. 170.25  
0.27 dif



Polk St X See  
35<sup>th</sup> St to Chamourre

3-7-28  
miller

375.06

52

BM	9.26	369.78	360.61	
T.P.	5.43	375.06	0.24	369.63
R6' 8" Bet Curbs Walks el. 4.8 wide				
S. el		4.48		370.58
gutter		4.83		
⊕		4.51		
gutter		4.51		
N. el		4.00		371.06
00 =	8.8 E. on S. = E. line 35 <sup>th</sup> produced from N. at 90°			
N. el		4.00		371.06
gutter		4.51		
⊕		4.3		
gutter		4.9		
S. el		4.58		370.48
	50' E.			
S. el		4.72		370.34
gutter		5.1		
⊕		4.3		
gutter		4.6		
N. el		4.15		370.91
	100' E.			
N. el		4.37		370.69
gutter		4.7		
⊕		4.4		
gutter		5.1		
S. el		4.7.8		370.28

Plotted  
H.C.H.  
3/24/28

N.W. 1/4 Sec 15  
+ Univ. Ave

Bot. 126' E + 148' E on N.  
" 129' E + 154' E on S. } Curb + walk dipped for Alley Approach

				126' E. on N. + 129' E. on S.
S. el		4.82		370.24
gutter		5.3		
⊕		4.4		
gutter		4.7		
N. el		4.38		370.68
	148' E. on N. + 154' E. on S.			
N. el		4.48		370.58
gutter		4.9		
⊕		4.8		
gutter		5.3		
S. el		4.90		370.16
	200' E.			
S. el		5.08		369.98
gutter		5.5		
⊕		5.0		
gutter		5.0		
N. el		4.60		370.46
	250' E.			
N. el		4.69		370.37
gutter		5.2		
⊕		5.0		
gutter		5.7		
S. el.		5.23		369.83



(Polk 26.6 Bet curbs) 2 91' E = W. edge of Pavmt on Wilson Intersection  
 4.8' cl. + walk 2 92' E = W. line Wilson Ave at 90°

s. cl	5.39	369.67	
gutter	5.90		pavmt
⊕	5.60		"
gutter	5.14		"
N. cl	4.73	370.39	cl. to west
	4.68		cl. return
T.P.	3.91	373.54	5.43 369.63

(Polk 26.6 Bet curbs)  
 4.8' walk + curb.

00 = E. line Wilson Ave

0.8 E. of E. line = E. edge Pavmt in Wilson Intersection

N. cl	3.73	369.81	
gutter	4.33		pavmt
⊕	4.13		"
gutter	4.68		"
s. cl	4.23	369.31	

50' E.

s. cl	4.34	369.20	
gutter	4.8		
⊕	4.5		
gutter	4.5		
N. cl	3.96	369.58	

100' E

N. cl	4.01	369.43	
gutter	4.8		
⊕	4.7		
gutter	4.9		
s. cl	4.53	369.01	

Bet 140' E & 160' E. cl + walk dipped for Alley

	140' E.	
s. cl	4.69	368.85
gutter	5.0	
⊕	4.5	
gutter	4.6	
N. cl	4.16	369.58

160' E.

N. cl	4.38	369.16
gutter	4.7	
⊕	4.5	
gutter	5.1	
s. cl	4.73	369.81

174' E

s. cl	4.73	368.81
gutter	5.2	
⊕	4.7	
gutter	4.9	
N. cl	4.14	369.40

200' E

N. cl	4.39	369.15
gutter	5.0	
⊕	4.9	
gutter	5.1	
s. cl	4.77	368.77



373.54

R 50' E

S. cl	4.91	368.63	
gutter	5.3		
♀	4.7		
gutter	5.0		
N. cl	4.50	369.04	
Polk 2 1/2 Bat cbs 4 1/8 cbs + walk	300' E = W. Line	36 <sup>th</sup> St	
N. cl	4.74	368.80	
gutter	5.16		Paymt
♀	5.00		"
gutter	5.58		"
S. cl	5.08	368.46	
T.P. 1.51	369.99 <sup>v</sup>	5.06	368.48 <sup>v</sup>
Polk 2 1/2 Bat cbs 4 1/8 walk cbs.	00 = E. Line	36 <sup>th</sup> St.	
S. cl	2.02	367.97	
gutter	2.80		Paymt
♀	2.23		"
gutter	2.28		"
N. cl	1.60	368.39	
	50' E.		
N. cl	2.33	367.66	
gutter	3.3		
♀	2.8		
gutter	3.3		
S. cl	2.72	367.27	

369.99

100' E

Polk

54

S. cl	3.34	366.65	
gutter	3.9		
♀	3.2		
gutter	3.6		
N. cl	2.82	367.17	
	Pat 140' E + 160' E cbs + walk dipped for Alley		
	140' E = W. Line Alley	Paymt to N.	
6 1/4 No. of N. cl = 5 end Alley Paymt	3.13		
N. cl	3.42	366.57	
gutter	3.9		
♀	3.5		
gutter	4.2		
S. cl	3.86	366.13	
	150' E = ♀ Alley		
	6 1/4 No. of N. cl	3.58	366.43
			Ally Paymt
	160' E = E. Line Alley		
S. cl	4.14	365.85	
gutter	4.6		
♀	4.0		
gutter	4.3		
N. cl	3.65	366.34	
6 1/4 No. of N. cl	3.49		Ally Paymt
	200' E		
N. cl	4.20	365.79	
gutter	4.9		
c	4.6		
gutter	5.0		
S. cl	4.53	365.46	



369.99

250'E

S. cl	5.15	364.84
gutter	5.9	
φ	5.2	
gutter	5.6	
N. cl	4.87	365.12

Polk 2617 801 dls

300'E = W. line Cherokee

N. cl	5.52	364.47
gutter	6.10	
φ	6.00	
gutter	6.42	
S. cl	5.88	364.11

T.P. 2.48 366.18 6.29 363.70

Polk 2617 801 dls

4.4 walk a cl. 00 = E. line Cherokee

S. cl	2.48	363.70
gutter	2.92	
e	2.46	
gutter	2.59	
N. cl	2.00	364.18

50'E

N. cl	2.73	363.45
gutter	3.4	
φ	2.8	
gutter	3.5	
S. cl	3.10	363.08

366.18

100'E

S. cl	3.61	362.57
gutter	4.2	
φ	3.4	
gutter	3.9	
N. cl	3.29	362.89

Det. 138'E + 162'E. cl. + walk dipped for Alley

138'E

N. cl	3.82	362.36
gutter	4.6	
φ	3.9	
gutter	4.5	
S. cl	4.10	362.08

162'E

S. cl	4.34	361.84
gutter	4.7	
φ	4.3	
gutter	4.8	
N. cl	4.12	362.06

200'E

N. cl	4.71	361.47
gutter	5.4	
φ	5.1	
gutter	5.5	
S. cl	4.80	361.38



366.18  
250'E

S. cl	5.45	360.73
gutter	6.1	
⊕	5.5	
gutter	6.0	
N. cl	5.33	

300'E = W. line 37<sup>th</sup> St

N. cl	5.93	360.25
gutter	6.47	Paint
⊕	6.46	"
gutter	6.70	"
S. cl	5.97	360.21

T.P. 3.23 362.91 6.50

00 = E. line 37<sup>th</sup> St.

S. cl	3.23	359.68
gutter	3.88	Paint
⊕	3.49	"
gutter	3.67	"
N. cl	3.24	359.67

50'E

N. cl	3.56	359.35
gutter	4.1	
⊕	3.5	
gutter	4.3	
S. cl	3.60	359.31

362.91

Polk

56

90'E.

S. cl	3.90	359.01
gutter	4.4	
⊕	3.8	
gutter	4.2	
N. cl	3.61	359.30

• Bat 138'E x 160'E. cl + walk dipped for Hiley

138'E

N. cl	4.05	358.86
gutter	4.5	
⊕	4.0	
gutter	4.6	
S. cl	4.15	358.76

160'E.

S. cl	4.38	358.53
gutter	4.8	
⊕	4.4	
gutter	4.5	
N. cl	4.20	358.71

200'E

N. cl	4.30	358.61
gutter	4.8	
⊕	4.7	
gutter	5.4	
S. cl	4.74	358.17



362.91

250' E

s. cl	4.91	358.00
gutter	5.4	
♀	4.8	
gutter	5.2	
N. cl	4.58	358.33
Polk 2.18 Bat ds H. 8 walk cl. 300 = W. Line 38 <sup>th</sup> St.		
N. cl	4.70	358.21
gutter	5.33	Paint
♀	5.10	"
gutter	5.64	"
s. cl	5.17	357.74

T.P. 5.36 363.27 5.00 357.91  
 (Polk 2.17 Bat ds)  
 H. 8 walk cl. 00 = E. Line 38<sup>th</sup> St

s. cl	5.54	357.73
gutter	6.25	Paint
♀	5.74	"
gutter	5.76	"
N. cl	5.09	358.18

50' E

N. cl	4.90	358.37
gutter	5.5	
♀	5.2	
gutter	5.8	
s. cl	5.27	358.00

363.27

Polk

57

100' E

s. cl	5.06	358.21
gutter	5.5	
♀	4.9	
gutter	5.3	
N. cl	4.55	358.72

Bat 140' E &amp; 100' C. cl. walk dipped for Alley

140' E

N. cl	4.40	358.87
gutter	5.2	
♀	4.8	
gutter	5.3	
s. cl	4.75	358.52

160' E

s. cl	4.61	358.66
gutter	5.1	
♀	4.6	
gutter	5.0	
N. cl	4.16	359.11

200' E

N. cl	4.03	359.24
gutter	4.8	
♀	4.2	
gutter	5.1	
s. cl	4.38	358.89



363.27

250'E.

s. cl	4.11	359.16
gutter	5.0	
♀	4.1	
gutter	4.5	
N. cl	3.69	359.58

300'E = W. line 39<sup>th</sup> ST(Polk 26.8 Bet obs)  
4.8 walk + cl

N. cl	3.37	359.90
gutter	3.94	Parvmt.
♀	3.85	359.42
gutter	4.27	"
s. cl	3.75	359.52

T.P. 3.72 363.40 3.59

359.68

00 = E. line 39<sup>th</sup> ST(Polk 26.8 Bet obs)  
4.8 walk + cl

s. cl	3.92	359.48
gutter	4.43	Parvmt.
♀	4.05	359.22
gutter	4.19	"
N. cl	3.58	359.82

50'E.

N. cl	3.66	359.74
gutter	4.3	
♀	4.1	
gutter	4.6	
s. cl	4.10	359.30

363.40

90'E.

s. cl	4.25	359.15
gutter	4.8	
♀	4.3	
gutter	4.6	
N. cl	3.85	359.55

Bet 140'E. + 140'E walk + cl dipped for Polk

140'E.

N. cl	4.10	359.30
gutter	4.6	
♀	4.1	
gutter	4.7	
s. cl	4.45	358.95

160'E.

s. cl	4.53	358.87
gutter	5.0	
♀	4.3	
gutter	4.84	
N. cl	4.1	359.30

200'E.

N. cl	4.37	359.03
gutter	5.1	
♀	4.8	
gutter	5.5	
s. cl	4.61	358.79



363.40

250'E

s. cl	4.78	358.62
gutter	5.4	
φ	4.8	
gutter	5.0	
N. cl	4.49	

300' E. SW Line 40<sup>th</sup> ST

N. cl	4.62	358.78
gutter	5.16	
φ	4.96	358.44
gutter	5.49	
s. cl	4.90	

T.P. on B.M. B.P. 3.24 361.98 4.66 358.74  
 (Polk 26.8 Bet chs) 4'8" cl + walk  
 00 = E. Line 40<sup>th</sup> ST

s. cl	3.88	358.10
gutter	4.40	
φ	3.97	358.01
gutter	3.96	
N. cl	3.51	358.47

50'E

N. cl	3.73	358.25
gutter	4.4	
φ	3.8	
gutter	4.6	
s. cl	4.09	357.89

361.98

Polk

59

95'E

s. cl	4.28	357.70
gutter	4.9	
φ	4.3	
gutter	4.5	
N. cl	3.99	357.99

• Bet 139'E + 161'E. cl + walk dipped for Allen  
 139'E

N. cl	4.16	357.82
gutter	4.7	
φ	4.2	
gutter	5.0	
s. cl	4.52	357.46

161'E

s. cl	4.54	357.44
gutter	5.1	
φ	4.5	
gutter	4.9	
N. cl	4.10	357.88

200'E

N. cl	4.39	357.59
gutter	5.2	
φ	4.4	
gutter	5.4	
s. cl	4.78	357.20



361.98

250'E

s. cl	5.03	357.95
gutter	5.8	
⊥	4.9	
gutter	5.3	
N. cl	4.63	357.35

T.P. 4.26 361.12 5.12 356.86  
 Polk 26.7 Bet els  
 4.8 Walk el 300'E = W. Line Central

N. cl	4.02	357.10
gutter	4.58	Paint
⊥	4.45	356.67
gutter	4.88	"
s. cl	4.37	356.75

00 = E. Line Central

Polk 26.7 Bet els  
 4.8 el walk

s. cl	4.36	356.76
gutter	4.86	Paint
⊥	4.41	356.71
gutter	4.40	"
N. cl	4.10	357.02

50'E

N. cl	4.07	357.05
gutter	4.5	
⊥	4.1	
gutter	5.0	
s. cl	4.41	356.71

361.12

Polk

60

100'E

s. cl	4.45	356.67
gutter	5.0	
⊥	4.2	
gutter	5.0	
N. cl	4.16	356.96

• • Bet 137'E + 140'E el walk dipped for <sup>on North</sup> <sup>only</sup> ~~Allyn~~  
 137'E.

N. cl	4.27	356.85
gutter	4.8	
⊥	4.3	
gutter	5.1	
s. cl	4.53	356.59

140'E

s. cl	4.63	356.49
gutter	5.0	
⊥	4.6	
gutter	4.7	
N. cl	4.38	356.74

200'E

N. cl	4.44	356.68
gutter	5.1	
⊥	4.6	
gutter	5.1	
s. cl	4.73	356.39



250'E

S. cl	4.55	356.27
gutter	5.3	
⊕	4.6	
gutter	4.9	
N. cl	4.51	

300'E = W. line 41<sup>st</sup> St.

356.61  
Polk 26.9 Bet els  
4.8 walk + cl

N. cl	4.57	356.55
gutter	5.16	parmt
⊕	5.08	356.04
gutter	5.49	"
S. cl	4.99	356.13

T.P. 4.97 361.81 4.28 356.84  
Polk 26.7 Bet els  
4.8 cl + walk  
00 = E. line 41<sup>st</sup> St.

S. cl	5.27	356.54
gutter	5.83	parmt
⊕	5.38	356.43
gutter	5.49	"
N. cl	4.97	356.84

50'E

N. cl	4.90	356.91
gutter	5.5	
⊕	5.0	
gutter	5.6	
S. cl	5.13	356.68

100'E

S. cl	5.00	356.81
gutter	5.6	
⊕	5.0	
gutter	5.3	
N. cl	4.77	357.07

Bet 140'E &amp; 160'E cl + walk dipped for Alley

140'E

N. cl	4.58	357.23
gutter	5.3	
⊕	4.6	
gutter	5.3	
S. cl	4.81	357.00

160'E

S. cl	4.77	357.04
gutter	5.1	
⊕	4.4	
gutter	5.1	
N. cl	4.55	357.26

175'E

N. cl	4.49	357.32
gutter	5.2	
⊕	4.5	
gutter	5.1	
S. cl	4.86	356.95



200' E.

s. cl	4.87	356.94
gutter	5.1	
⊕	4.5	
gutter	5.0	
N. cl.	4.46	357.35

250' E.

N. cl	4.30	357.51
gutter	5.0	
⊕	4.2	
gutter	5.1	
s. cl	4.86	357.95

300' ⊕ = W. line Marlborough

Polk 26.4 Bit els  
4.8 walk el

s. cl	4.71	357.10
gutter	5.01	paunt
⊕	4.57	357.34
gutter	4.67	"
N. cl.	4.18	357.63

T.P. 5.37 363.25 3.93 357.89

000' E. line Marlborough

Polk 26.4 Bit els  
4.8 els

N. cl	5.15	358.10
gutter	5.72	paunt
⊕	5.63	357.62
gutter	6.13	"
s. cl	5.67	357.58

50' E.

s. cl	5.40	357.85
gutter	5.9	
⊕	5.2	
gutter	5.6	
N. cl.	4.90	358.35

100' E.

N. cl	4.70	358.55
gutter	5.4	
⊕	4.9	
gutter	5.7	
s. cl	5.11	358.14

Bit 140' E + 161' E walk & cl - dipped for Alley

140' E

s. cl	4.85	358.30
gutter	5.4	
⊕	4.6	
gutter	5.2	
N. cl	4.54	358.71

161' E

N. cl	4.46	358.79
gutter	5.0	
⊕	4.6	
gutter	5.3	
s. cl	4.86	358.39



200'.E

S. cl	4.54	358.71
gutter	5.3	
⊕	4.4	
gutter	4.9	
N. cl	4.28	358.97

250'.E

N. cl	4.04	359.21
gutter	4.6	
⊕	3.9	
gutter	5.1	
S. cl	4.29	358.96

300'.E. = W. line 42<sup>nd</sup> St (Polk 26.8 Bet chs 4.8. walk ch)

S. cl	4.09	359.16
gutter	4.66	Parvt
⊕	4.23	359.02
gutter	4.34	"
N. cl	3.85	359.40

00 = E. line 42<sup>nd</sup> St (Polk 27.0 Bet chs 4.8. walk ch)

N. cl	3.42	359.83
gutter	4.10	parvt
⊕	4.06	359.19
gutter	4.41	
S. cl	3.80	359.45
T.P.	6.17	365.91
		3.51
		359.74

50'.E

S. cl	5.85	360.06
gutter	6.4	
⊕	5.6	
gutter	6.2	
N. cl	5.68	360.23

100'.E

S. cl	5.18	360.73
gutter	5.9	
⊕	5.3	
gutter	6.1	
S. cl	5.41	360.50

Bet 140' &amp; 160'.E. cl walk dipped for Alley

140'.E. = W. line Alley Paved to S.

6' S. of S. cl = N. End. Alley Parvt	4.75	361.16
S. cl	4.74	360.97
gutter	5.3	
⊕	4.8	
gutter	5.4	
N. cl	4.78	361.13

140'.E. = E. line Alley

N. cl	4.64	361.27
gutter	5.1	
⊕	4.6	
gutter	5.2	
S. cl	4.83	361.08

6' S. of S. cl = N. End Parvt

E. Alley S. line = Polk

	4.53	
	4.92	

PARVT



200' E

s. cl	4.40	361.51
gutter	5.0	
⊕	4.2	
gutter	5.0	
N. cl	4.23	361.68

250' E

N. cl	3.82	361.09
gutter	4.6	
⊕	3.8	
gutter	4.6	
s. cl	3.91	362.00

300' E = W. Line Van Dyke

Polk 26.7 Bet chs  
His walk + ch

s. cl	3.32	362.59
gutter	3.96	Paint
⊕	3.62	362.29
gutter	3.90	"
N. cl	3.40	362.51

T.P. 3.31 365.54 3.68 362.23

00 = E. Line Van Dyke

Polk 26.7 Bet chs  
4.8 walk + ch

N. cl	2.97	362.57
gutter	3.54	Paint
⊕	3.23	362.31
gutter	3.65	"
s. cl	3.05	362.49

50' E

s. cl	3.35	362.19
gutter	3.8	
⊕	3.2	
gutter	4.1	
N. cl	3.47	362.07

60' E to 76' E. top of face of ch. Broken on S.

100' E

N. cl	3.95	361.59
gutter	4.4	
⊕	3.7	
gutter	4.4	
s. cl	3.81	361.73

Bet 140' E &amp; 160' E walk + ch dropped for Allen

140' E

s. cl	4.14	361.40
gutter	4.6	
⊕	4.0	
gutter	4.6	
N. cl	4.26	361.18

160' E

N. cl	4.59	360.95
gutter	4.9	
⊕	4.2	
gutter	4.8	
s. cl	4.30	361.24



365.54

200' E.

s. ch	4.72	360.82
gutter	5.4	
⊕	4.5	
gutter	5.6	
N. ch	5.00	360.84

250' E.

N. ch	5.58	359.96
gutter	5.9	
⊕	5.1	
gutter	5.9	
s. ch	5.19	360.35

300' E = W. Line 43<sup>rd</sup> ST.Polk = 6.8 Bet chs  
4.8 walk ch

s. ch	5.55	359.99
gutter	6.15	Parmt
⊕	5.92	359.62
gutter	6.29	"
N. ch	5.97	359.57
T.P.	4.74	364.04
	6.24	359.30

00 = E. Line 43<sup>rd</sup> ST.Polk 26.8 Bet chs  
4.8 walk chs

N. ch	4.57	359.47
gutter	5.12	Parmt
⊕	4.78	359.26
gutter	5.10	"
s. ch.	4.23	359.81

364.04

50' E

s. ch	4.30	359.74
gutter	4.8	
⊕	4.3	
gutter	5.0	
N. ch	4.59	359.45

100' E

N. ch	4.66	359.38
gutter	5.0	
⊕	4.4	
gutter	4.8	
s. ch	4.38	359.66

Bet 124.6' + 144.6' E. Walk ch on North dipped for Alley

At 124.6' + 144.6' E on S. = Alley ch returns Built to Alley Pavd to line

	124.6' E	
6' s. of sch.	4.64	359.40 on Alley Pavt
" " " "	4.29	on top curb
s. ch. line	4.46	359.58 Top curb
" " " "	4.98	Alley Parmt
⊕	4.4	
gutter	4.9	
N. ch	4.69	359.35
	134.6' E = ⊕ Alley	
s. ch. line	5.01	359.03 All p parmt
s. Prop line	4.87	359.17 " "

Polk

65



364.04

144' 6" E = E. Line Alley

N. cl	4.73	359.31
gutter	5.1	
♀	4.4	
S. cl line	5.05	358.99 alley Pavmt
" " "	4.60	357.44 Top. cl. ret
6.4.5 of cl = S. line	4.20	" " "
" " " " = " "	4.50	359.54 Alley Pavmt
	200'E.	
S. cl	4.59	359.45
gutter	5.12	
♀	4.5	
gutter	5.2	
N. cl	4.76	359.28
	269.2' E. = N. line Fairmont	Polk 26.9 B. els 4.8 walk cl
N. cl	4.80	359.24
gutter	5.32	
♀	4.82	359.22
gutter	5.13	
S. cl	4.77	359.27
T.P. on B.M. B.P. 1.84	361.02	359.18 + Fairmont Polk 26.9 B. els 4.8 walk cl
" 00 = E. line Fairmont.	4.86	
S. cl	1.81	359.21
gutter	2.62	Pavmt
♀	2.00	359.02
gutter	2.54	"
N. cl	1.89	359.13

361.02

50'E.

Polk

66

N. cl	2.75	358.27
gutter	3.8	
♀	2.4	
gutter	3.5	
S. cl	2.72	358.30
	100'E.	
S. cl	3.74	357.28
gutter	4.4	
♀	3.7	
gutter	4.5	
N. cl	3.66	357.36
	Get 125' + 153.5' on N. cl walk dipped for Alley + 99.499	
	" 125' + 158' " " " " " " " " " " " "	
	125'E	
N. cl	4.28	356.94
gutter	4.8	
♀	4.2	
gutter	4.9	
S. cl	4.22	356.80
	153.5' E on N + 158' E. on S.	
S. cl	4.85	356.17
gutter	5.6	
♀	4.9	
gutter	5.5	
N. cl	4.66	356.36



341.02

200'E.

N. cl	5.52	355.50
gutter	6.3	
φ	5.7	
gutter	6.3	
S. cl	5.68	355.34

(Polk 27.0 Bat chg  
4.8 walk chg)

273.2 E = W. edge of Pavmt on 44<sup>th</sup> St 53.4 wide

S. cl	7.02	354.00
gutter	7.47	pavmt
φ	6.89	354.13
gutter	7.09	"
N. cl	6.77	354.25

(Polk 27.0 Bat chg  
4.8 walk chg)

4.28 358.29<sup>✓</sup> 7.01 354.01<sup>✓</sup>80 = E. Edge pavmt on 44<sup>th</sup> St.

N. cl	4.20	354.09
gutter	4.65	pavmt
φ	4.36	" 353.93
gutter	4.93	"
S. cl	4.53	353.76

50'E.

S. cl	4.61	353.68
gutter	5.1	
φ	4.5	
gutter	5.0	
N. cl	4.29	354.00

358.29

100'E

N. cl	4.38	353.91
gutter	4.9	
φ	4.5	
gutter	5.2	
S. cl	4.64	353.65

Bat 127.5 E &amp; 148.5 E et 9 walk dipped for P.I.K.

S. cl	4.72	353.57
gutter	5.3	
φ	4.5	
gutter	5.0	
N. cl	4.46	353.83

148.5 E

N. cl	4.44	353.63
gutter	5.0	
φ	4.6	
gutter	5.2	
S. cl	4.63	353.66

200'E.

S. cl	4.76	353.53
gutter	5.4	
φ	4.6	
gutter	5.0	
N. cl	4.59	353.70



Polk 26.8 Bet els  
4.8 walk + el

358.29

273.5 E. = W. Line Highland 66' wide

N. el	4.62	353.67	
gutter	5.17		paint
φ	4.96	353.33	
gutter	5.38		"
S. el	4.85	353.44	

T.P.  
(Polk 26.8 Bet els  
4.8 walk + el)

2.44

358.23

2.50

355.79

Top Hndt N.e.  
Polk + Highland

00 = E. Line Highland.

S. el	4.95	353.28	
gutter	5.50		paint
φ	5.20	353.03	"
gutter	5.40		"
N. el	4.87	353.36	

50' E.

N. el	4.77	353.46	
gutter	5.4		
φ	4.7		
gutter	5.2		

S. el	4.75	353.48	
-------	------	--------	--

100' E.

S. el	4.55	353.68	
gutter	5.2		
φ	4.7		

gutter	5.3		
--------	-----	--	--

N. el	4.66	353.57	
-------	------	--------	--

Polk

68

358.23

Bct 124 + 145.8. walk + el dipped for Alley

124' E.

N. el	4.60	353.63	
gutter	5.1		
φ	4.5		
gutter	5.0		
S. el	4.47	353.76	

145' E.

S. el	4.36	353.97	
gutter	4.7		
φ	4.3		
gutter	4.9		
N. el	4.54	353.69	

200' E.

N. el	4.45	353.78	
gutter	4.9		
φ	4.2		
gutter	4.5		
S. el	4.07		

270' E. = W. Line 45th St 69.2 Wide

354.16  
(Polk 26.8 Bet els  
4.8 walk + el)

S. el	3.67	354.56	
gutter	4.12		paint
φ	4.09	354.14	
gutter	4.60		"
N. el	4.18	354.05	



358.23

00 = E. line 45<sup>th</sup> ST (Polk 26.8 Bet chs)  
4.5' walk to ch

N. ch	4.67	353.56
gutter	5.15	paint
⊕	4.55	353.68
gutter	4.63	"
S. ch	4.11	354.12
T.P.	1.82	355.66
	4.39	353.84

50' E

S. ch	2.40	356.76
gutter	3.1	
⊕	2.6	
gutter	3.4	
N. ch	2.80	352.86

100' E

N. ch	3.55	352.11
gutter	4.3	
⊕	3.4	
gutter	3.9	
S. ch	3.17	352.49

134' 125' E + 146' E. on N. walk & ch dipped for Alley  
125' 8 E. on S. W. Alley ch. Ret + 146' E. on S. E. Alley Ret  
Alley paved from S  
To S. ch. line of Polk

125' on N. - 125' E. on S

68 S. of S. ch = S. end Alley Ret	3.31	Top ch
" " " " " " " "	3.58	352.08 Alley paint
S. ch	3.55	352.11 Top. ch
S. ch	4.23	Alley paint

355.66

⊕	3.2
gutter	4.4
N. ch	3.91
⊕	4.11
S. line	4.00
S. ch. line	4.29

146' E

N. ch	4.25	357.01
gutter	4.7	
⊕	4.2	
S. ch	4.49	Alley paint
S. ch	3.85	357.81 Top. ch
46 S. of S. ch = S. end Alley ch. Ret.	3.68	Top ch
" " " " " " " "	3.90	357.76 Alley paint

200' E

S. ch	4.83	350.83
gutter	5.5	
⊕	5.0	
gutter	5.6	
N. ch	4.97	350.69

Polk 26.8

270' E = W. line chamoune

N. ch	5.98	349.68
gutter	6.48	Paint
⊕	6.09	349.57
gutter	6.58	"
S. ch	6.05	349.61
X.P. B.M. 44 Polk chamoune	5.98	349.68 = 349.66

Polk  
349.66 B.M. N. 69  
Polk Chamoune

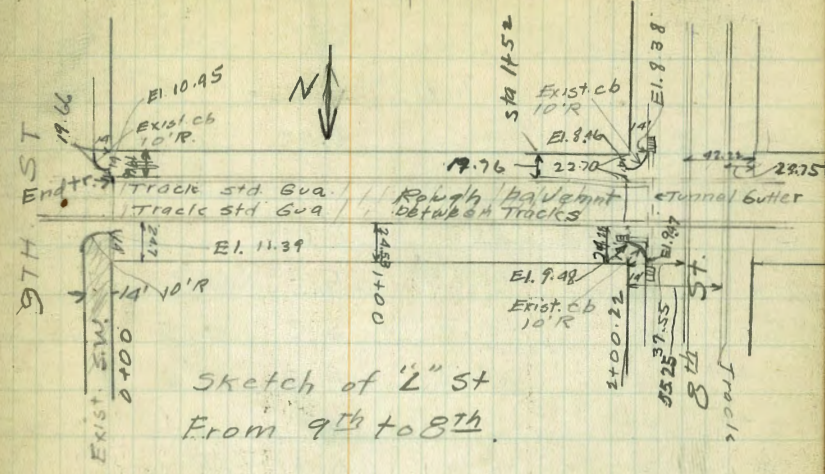


X section 5 L St From 9th st. to 8th st

Apr. 28-28 70  
London - Inst

Sta	+ H.I	- E.I.	10th L N.W.B.P
B.M.	2.70	16.81	14.11
0+00 N.L	(side walk m 9th St.)	5.07	11.74
N.cb		5.42	11.39
But Pav.		6.16	10.65
N rail N track		5.85	10.96
N 1/4		5.86	10.95
S rail N Track		5.82	10.99
⊕		5.92	10.87
S 1/4		6.29	10.52
N rail S track		6.42	10.39
S " "		6.45	10.36
S. Gut		6.76	10.05
S.cb (end of Ret)		6.36	10.45
S.L		6.76	10.05
0+12 S.L.		6.8	10.0
+10		6.8	10.0
+14		6.0	10.8
+16		6.5	10.3
S. rail S track		6.63	10.18
N " S "		6.60	10.21
S 1/4		6.56	10.25
⊕		6.02	10.79
S rail N track		5.94	10.87
N 1/4		6.11	10.70
N rail N track		5.93	10.86

Plotted. 5-22-1928  
C.B. Hough.



Sketch of "L" St  
From 9th to 8th

Sta.	+ H.I	- E.I.
	16.81	
N 1/4 +7	5.9	10.9
+9	6.2	10.6
N.cb	5.7	11.1
+3	5.4	11.4
N.L	5.3	11.5
flooY Warehouse <sup>N side</sup> 0+00	3.82	12.99
0+17 N.L	5.3	11.5
cb	5.8	11.0
+3	6.2	10.6
+6	6.1	10.7
N rail N track	6.04	10.77
N 1/4	6.2	10.6
S rail N track	6.03	10.78
⊕	6.09	10.72



Cont = Fr. P 70+

Sta	+	H.I	-	EI
		16.81		
0+17 S $\frac{1}{4}$		6.59		10.22
N rail str.		6.68		10.13
S " "		6.66		10.15
S $\frac{1}{4}$ +10		6.5		10.3
Scb		5.3		11.5
+1		5.0		11.8
+5		6.7		10.1
S.L		6.8		10.0
floor warehouse	N side	3.85		12.96
0+48 N.L		5.5		11.3
+7		5.6		11.2
Ncb		5.9		10.9
+6		6.4		10.4
N rail N+tr.		6.34		10.47
N $\frac{1}{4}$		6.5		10.3
S rail N+tr		6.33		10.48
$\Phi$		6.33		10.48
S $\frac{1}{4}$		6.89		9.92
floor W.H. 0+66 N side		3.81		13.00
0+66 N.L		5.7		11.1
+7		5.7		11.1
Ncb		6.1		10.7
N rail N+tr.		6.64		10.17
N $\frac{1}{4}$		6.7		10.1

L ST

Sta	+	H.I	-	EI
		16.81		
S rail N+tr.		6.67		10.14
$\Phi$		6.54		10.27
S $\frac{1}{4}$		7.06		9.81
T.P. N.L	5.30	15.38		6.73
1+00 N.L		4.9		10.5
+7		5.0		10.4
Ncb		5.2		10.2
N rail N+tr.		5.50		9.88
N $\frac{1}{4}$		5.6		9.8
S rail N+tr.		5.47		9.91
$\Phi$		5.52		9.86
S $\frac{1}{4}$		5.93		9.45
1+52 N.L		5.0		10.4
+9		4.8		10.6
Ncb		5.4		10.0
+2		5.8		9.6
N rail N+tr.		5.94		9.44
N $\frac{1}{4}$		6.0		9.4
S rail N+tr.		5.98		9.40
$\Phi$		6.04		8.34
S $\frac{1}{4}$		6.40		8.98



Cont Fr. P 71

Sta.	+	15.38 H. 1	-	EI.
2+00.22	N.L		5.7	9.7
<del>At</del> +10			5.6	9.8
N cb			6.1	9.3
+6			6.1	9.3
N rail	N.tr.		6.19	9.19
N 1/4			6.4	9.0
S rail	N.tr.		6.36	9.02
£			6.45	8.93
N rail	S.tr.		6.75	8.63
S 1/4			6.8	8.6
S rail	S.tr.		6.76	8.62
S 1/4 +6			6.7	8.7
Scb			6.7	8.7
S.L.			6.8	8.6
<sup>S.cb</sup> 2+00.22	top cb		6.92	8.46
Gut			6.99	8.39
S 1/4 on Pav.			6.78	8.60
£ on Pav.			6.40	8.98
N 1/4 on Pav			6.28	9.10
Ncb	top cb & Pav. same		5.90	9.48
F.L. Gut. culvert			7.08	8.30
T.P.	5.92	14.25	6.55	8.83
1+52 S.L.			4.9	9.4
Scb			5.1	9.2
+4			5.1	9.2

Nail Pole

L st.

72

Sta	+	14.25 H. 1	-	EI.
1+52	S. rail str		5.44	8.81
1+00	S.L.		4.8	9.5
S.cb			4.8	9.5
+5			5.0	9.3
1+08	S. rail str		4.97	9.28
1+08	N. rail S.tr.		4.97	9.28
0+66	S.L		4.7	9.6
+11			4.6	9.7
Scb			4.3	10.0
+3			4.5	9.8
+8			4.7	9.6
0+48	S.L		4.6	9.7
+11			4.5	9.8
Scb			3.3	11.0
+3			4.0	10.3
+8			4.6	9.7

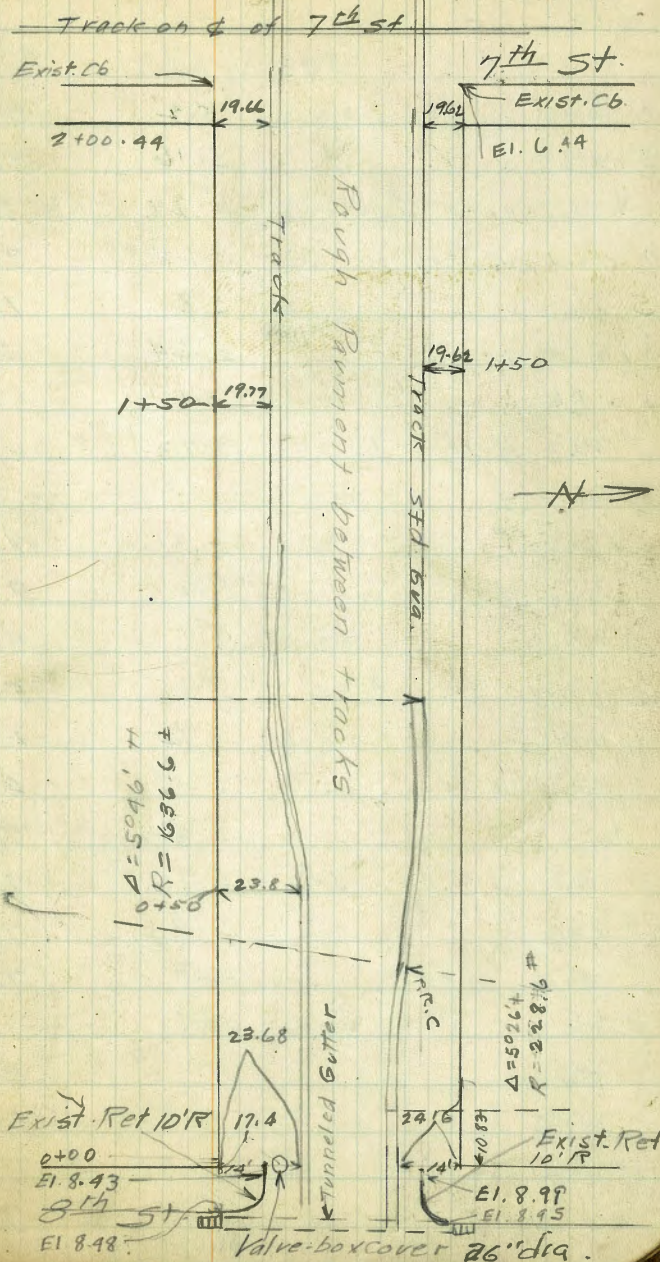


0+00 = W. Lot 8th St.

Sta	+	H.I	-	EI
	4.40	13.23		8.83
0+00	TOP cb.	N. cb line.	4.24	8.99
	Gut Pav.		5.04	8.19
	N rail N tr.		5.03	8.20
	N 1/4 Pav.		5.06	8.17
	S rail N tr.		5.05	8.18
	± Pav.		5.14	8.09
	N rail S tr.		5.42	7.81
	S 1/4		5.42	7.81
	S rail S tr.		5.47	7.76
	Value box cover.		5.75	7.48
	TOP cb	S cb line.	4.80	8.48
0+00				
	N.L (floor warehouse)		3.7	9.5
	cb Ground.		4.1	9.1
	+2		4.8	8.4
	N 1/4		5.3	7.9
	± Rough Pav.		5.24	7.99
	S 1/4		5.5	7.7
	+7		5.6	7.6
	S cb		5.2	8.0
0+10				
	N.L		3.7	9.5
	N cb		4.4	8.8
	N rail N tr.		5.13	8.10

X Sections "L" St From 8th St to 7th

APR 30-28





L st.

Sta	+	H.I.	-	E.I.
		13.23		
N/A			5.2	8.0
S rail N tr.			5.16	8.07
£	Rough Pav.		5.28	7.95
N rail S tr.			5.63	7.60
8 1/4			5.8	7.4
S rail S tr.			5.64	7.59
S 1/2 + 6			5.6	7.6
T.P.	4.24	13.24	4.23	9.00
0+14				
N.L.			3.8	9.4
+4			4.2	9.0
Ncb			4.5	8.7
N rail N tr.			5.16	8.08
N/A			5.2	8.0
S rail N tr.			5.19	8.05
£			5.30	7.94
N rail S tr.			5.70	7.54
S 1/4			5.8	7.4
S rail S tr.			5.7	7.5
0+50			4.6	
N.L.			4.6	8.6
N.cb			4.8	8.4
+6			5.3	7.9
S rail N tr.			5.49	7.75

L st.

74

Sta	+	H.I.	-	E.I.
		13.24		
N/A			5.47	7.77
£			5.76	7.48
N rail S tr.			5.89	7.35
1+00				
N.L.			5.0	8.2
floor warehouse N. side			3.89	9.35
+12			5.4	7.8
Ncb			5.7	7.5
N rail N tr.			6.10	7.14
S rail N tr.			6.03	7.21
N/A			6.06	7.18
N rail turnout			6.29	6.95
£			6.37	6.87
S rail turnout			6.30	6.94
£+10			6.55	6.69
1+50				
N.L.			5.6	7.6
Ncb			5.9	7.3
+2			6.5	6.7
N rail N tr.			6.59	6.65
S rail N tr.			6.62	6.62
N rail turnout			6.60	6.64
N/A			6.62	6.62
S rail turnout			6.53	6.71



Sta	L	St	H.I	EI
			1324	
¢			6.70	6.54
S 1/4			6.99	6.25
2+00.44 = E.L. 7th			6.6	
N.L			6.6	6.6
floor bldg. N side.			5.43	7.81
N.cb			6.8	6.4
N rail N tr.			7.28	5.96
S rail N tr.			7.29	5.95
N 1/4			7.30	5.94
¢			7.15	6.09
S 1/4			7.40	5.84

Intersection L & 7th

Sta	L	St	H.I	EI
Eob line 7th				
top cb N.L. of L			6.80	6.42
Gut. N.L. of L			7.51	5.73
N.L (Ground)			7.0	6.2
N.cb			7.19	6.05
+4			7.6	5.6
N rail N tr.			7.46	5.78
S rail N tr.			7.45	5.79
N 1/4			7.45	5.79
¢			7.27	5.97
S 1/4			7.50	5.74
N rail S tr.			7.62	5.62
T.P			7.09	6.15

Sta	L	St	H.I	EI
			1091	6.15
T.P.			4.76	
S rail S tr.			5.33	5.58
S.cb			5.4	5.5
+4			5.3	5.6
S.L.			5.3	5.6
E 1/4 line 7th				
S.L			5.6	5.3
+7			5.4	5.5
S.cb			5.5	5.4
S rail S tr.			5.57	5.34
N rail S tr.			5.50	5.41
S 1/4			5.40	5.51
¢			5.21	5.70
N 1/4			5.30	5.61
S rail N tr.			5.28	5.63
N rail N tr.			5.28	5.63
N.cb			5.20	5.71
N.L			5.11	5.80
Section along E rail N & S track & 7th				
N.L			5.12	5.79
N.cb			5.31	5.60
¢			5.34	5.57
S.cb			5.71	5.20
S.L			5.91	5.00



Sta	+	H.I	-	E.I
☉	7th	10.91		
S.L		6.0		4.91
Scb		5.75		5.16
S rail	S + r.	5.78		5.13
N rail	S + r.	5.70		5.21
S 1/4		5.60		5.31
☉		5.46		5.45
N 1/4		5.40		5.51
S rail	N. tr.	5.40		5.51
N rail	N. tr.	5.38		5.53
Ncb.		5.32		5.59
N.L		5.19		5.72
W 1/4	line 7th			
N.L		5.63		5.28
Ncb		5.48		5.43
+B		5.62		5.29
N 1/4		5.60		5.31
+A		5.49		5.42
☉		5.63		5.28
S 1/4		5.95		4.96
Scb		6.0		4.9
S.L		6.0		4.9
W. qb	line 7th			
S.L.		5.9		5.0
Scb		6.1		4.8

Sta	+	H.I	-	E.I
		10.91		
S 1/4		6.05		4.86
☉		5.75		5.36
N 1/4		5.70		5.21
N.Cb.		5.8		5.1
N.L		4.9		6.0
top web	7th at N.L	6.09		4.82
But.	7th	6.55		4.36
2+00.44	= E.L 7th			
Fdn. Plate	Bldg. S. side	3.84		7.07
S.L		5.0		5.9
Scb		5.2		5.7
+A		5.15		5.76
1+50				
Fdn. Plate	Bldg S. side	3.89		7.02
S.L		4.8		6.1
Scb		4.6		6.3
+A		4.7		6.2
1+00				
Fdn. Plate	Bldg S. side	3.30		
S.L		4.1		6.8
Scb		4.2		6.7
+B		4.3		6.6



L St

Stg	+	H.I	-	E.I.
D+50		10.91		
Fdn Plate			2.30	8.55
S.L			3.5	7.4
Scb			3.9	7.0
+7			3.9	7.0
T.P	9.19 ↓ 5. side	12.73		
Fdn. plate	0+14		2.37	8.54
0+14				
S.L			4.9	7.8
Scb			5.1	7.6
S rail S.tr.			5.16	7.57
N rail S.tr.			5.19	7.54
S 1/4			5.3	7.4
0+10				
S.L.			4.9	8.0
+9			4.6	8.1
Scb			4.8	7.9
+7			5.2	7.5
S 1/4			5.3	7.4
0+00				
S.L			4.7	8.0
+7			4.7	8.0

cb top cb S.L of L - W. cb L 8 <sup>th</sup>	5.30	7.43
Gut.	6.49	6.24
top cb S.L of L - E. cb line 8 <sup>th</sup>	4.35	8.38
Gut.	5.62	7.11

L St

77

Stg	+	H.I	-	E.I
		12.73		
top cb	N.L. of L-E cb line 8 <sup>th</sup>		3.26	9.47
Gut			4.10	8.63
top cb	N.L. of L-W cb line 8 <sup>th</sup>		3.78	8.95
Gut.			4.62	8.11
T.P			3.90	8.83



L St.

Sta	+	H.I	-	EI
	1.02	9.85		8.83
T.P	s.w 75 L		4.60	5.25
T.P	4.37	7.46	6.76	3.09
Intersection L 26th				
Ecb line 6th.				
top cb s.l			4.42	3.04
s.l.			4.8	2.7
+7			4.7	2.8
Scb			4.8	2.7
S rail S.tr.			5.09	2.37
N rail S.tr.			5.02	2.44
S 1/4			4.93	2.53
⊕			4.64	2.82
N 1/4			4.89	2.57
S rail N.tr.			4.91	2.45
N rail N.tr.			5.05	2.41
Ncb			5.3	2.2
N.L			4.8	2.7
top cb Ecb line 6th			4.80	2.66
Gut.			5.18	2.28
E 1/4 line 6th				
N.L			5.0	2.5
Ncb			5.0	2.5
N 1/4			4.9	2.6
⊕			4.75	2.71

L St.

78

Sta	+	H.I	-	EI
		7.46		
S 1/4			4.96	2.50
Scb			5.20	2.26
S.L			5.1	2.4
⊕ 6th				
S.L			5.2	2.3
Scb			5.0	2.5
S rail S.tr.			5.26	2.20
N rail S.tr.			5.24	2.22
S 1/4			5.09	2.37
⊕			4.81	2.65
N 1/4			5.15	2.31
S rail N.tr.			5.21	2.25
N rail N.tr.			5.19	2.27
Ncb			5.1	2.4
N.L			4.7	2.8
T.P	4.96	7.36	5.06	2.40
W. 1/4 6th				
N.L			4.92	2.44
Ncb			5.1	2.3
N 1/4			5.2	2.2
⊕			4.91	2.45
S 1/4			4.99	2.37
Scb			5.0	2.4
S.L			4.9	2.5



L st.

Sta	+	H.1	-	E.1
Web line 6 <sup>th</sup>		7.36		
S.L		5.1		2.3
S cb		5.1		2.3
S 1/4		5.13		2.23
±		4.96		2.40
N 1/4		5.31		2.05
N cb		5.3		2.1
N L		5.35		2.01
top cb at N.L		4.99		2.37
cut. at N.L		5.58		1.78

0+00 = W.L of 6<sup>th</sup>

N.L		4.68		2.68
N cb		5.1		2.3
N 1/4		5.4		2.0
N rail N Tr.		5.26		2.10
S rail N Tr.		5.35		2.01
±		5.02		2.34
S 1/4		5.08		2.28
N rail str.		5.24		2.12
S rail str.		5.32		2.04
S cb		5.3		2.1
+6		5.1		2.3
+6 top Exist sdwk.		4.89		2.47
S.L on sdwks		4.73		2.63

321.56	peg rt
11.74	
333.30	
0.43	
332.87	Fence
12.98	
345.85	
0.39	
345.46	rail in road
12.78	
358.24	
0.69	
357.55	peg left ✓
12.49	
370.04	
0.66	
369.38	peg left ✓
11.59	
380.97	
0.37	
380.60	peg left ✓
9.67	
390.27	
0.03	
390.24	sign rt.
10.35	
400.59	
4.20	
396.39	

This B.M. Has been destroyed  
 sign left by pavement. Donnan's Elev on same  
 BM 396.96 run from LaJolla  
 396.39  
 0.57 diff.



L St.

Sta	+ H.1	-	El
D+50	7.36		
S.L. on sdwls	4.86		2.50
+8 top Exist. ch	5.00		2.36
+8 (Ground)	4.6		2.8
Sub	4.6		2.8
S rail S tr.	5.34		2.02
S 1/4	5.4		2.0
N rail S tr.	5.28		2.08
±	5.3		2.1
S rail N tr.	5.19		2.17
N rail N tr.	5.25		2.11
N 1/4	5.3		2.1
N cb	5.1		2.3
N.L	4.8		2.6
Floor Bldg. N. side	4.39		2.97
1+00			
N.L	5.0		2.4
N cb	5.2		2.2
N 1/4	5.3		2.1
N rail N tr.	5.32		2.04
S rail N tr.	5.27		2.09
±	5.4		2.0
N rail S tr.	5.35		2.01
S rail S tr.	5.44		1.92
S 1/4	5.6		1.8
Sub	5.7		1.7

Continued in Book 1250 P.34

L St.

73.6

El. 1.5

sta

Sub+6

+6 top Exist S.Walk

S.L. on S.Walk

5.6

5.13

5.06

2.23

2.30

TABLE No. 1

Distance of slope stake from side or shoulder  
 stake for any roadway slope  
 Cont. in Book 1250 P.34

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 is same row and column gives distance  
 from side stake to slope stake. If ground is not

level  
 level  
 level

amount if cut elevate if fill. Add this amount  
 to cut or fill and find in table. Set up

rod at this point and line of sight should cut  
 target

necessary.

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  $L$  may be found

by dividing (tangent (or external), opposite  $L$  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.



## DIRECTIONS FOR USE OF TABLES

TABLE No. 1.

Distance of slope stake from side or shoulder stake for any width roadway, slope  $1\frac{1}{2}$  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 from side stake to slope stake. If ground is not level estimate the difference in elevation between the side stake and slope stake, lower target by this amount if cut, elevate if fill. Add this amount to cut or fill and find distance in table. Set up rod at this point, and line of sight should cut target. If it does not make the slight adjustment necessary.

TABLE No. 9.

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 I may be found by dividing tangent, (or external), opposite I 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.

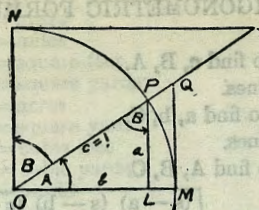


TABLE II  
TRIGONOMETRIC FORMULÆ.

$$\angle A = \angle MOP \quad \angle B = \angle PON = \angle OPL$$

$$R = OB = c = 1$$

$$\sin A = \frac{a}{c} = \frac{a}{1} = a = \cos B = LP$$

$$\cos A = \frac{b}{c} = \frac{b}{1} = b = \sin B = OL$$

$$\tan A = \frac{a}{b} = \frac{MQ}{OM} = \frac{MQ}{1} = MQ = \cot B = MQ$$

$$\cot A = \frac{NT}{ON} = \frac{NT}{1} = NT = \tan B = NT$$

$$\sec A = \frac{OQ}{OM} = \frac{OQ}{1} = OQ = \csc B = OQ$$

$$\csc A = \frac{OT}{ON} = \frac{OT}{1} = OT = \sec B = OT$$

$$\text{vers } A = \frac{LM}{OP} = LM = \text{covers } B \#$$

$$\text{covers } A = \frac{OP - LP}{OP} = OP - LP = \text{vers } B$$

$$\text{exsec } A = PQ = \text{coexsec } B$$

$$\text{coexsec } A = PT = \text{exsec } B$$

$$\sin \frac{1}{2} A = \sqrt{\frac{1 - \cos A}{2}} \quad \cos \frac{1}{2} A = \sqrt{\frac{1 + \cos A}{2}}$$

$$\sin 2A = 2 \sin A \cos A \quad \cos 2A = \cos^2 A - \sin^2 A$$

$$\text{Law of Lines} \quad \frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$$

$$\text{Law of Cosines} \quad c^2 = a^2 + b^2 - 2ab \cos C$$

$$\text{Law of Tangents} \quad \frac{a+b}{a-b} = \frac{\tan \frac{1}{2}(A+B)}{\tan \frac{1}{2}(A-B)}$$



TABLE II—Continued  
TRIGONOMETRIC FORMULAE (continued)

In any triangle:

Given a, b, C; to find c, B, A.

Use Law of Lines.

Given A, B, c; to find a, b, C.

Use Law of Lines.

Given a, b, c; to find A, B, C.

$$\text{Let } \frac{a+b+c}{2} = s, \sqrt{\frac{(s-a)(s-b)(s-c)}{s}} = r$$

$$\cos \frac{1}{2} A = \sqrt{\frac{s(s-a)}{bc}}$$

$$\tan \frac{1}{2} A = \frac{r}{s-a}$$

$$\tan \frac{1}{2} B = \frac{r}{s-b}$$

$$\tan \frac{1}{2} C = \frac{r}{s-c}$$

Area of a triangle:

$$\text{Area} = \frac{1}{2} ab \sin C$$

$$\text{Area} = \sqrt{s(s-a)(s-b)(s-c)}$$

PRISMOIDAL FORMULA.

$$\text{Vol.} = \frac{h}{6} (B+b+4M)$$

h = altitude; b, B = bases; M = midsection

TABLE III  
INCHES AND FRACTIONS OF AN INCH IN DECIMALS OF A FOOT

	0	1	2	3	4	5	6	7	8	9	10	11
$\frac{1}{16}$	.0052	.0885	.1719	.2552	.3385	.4219	.5052	.5885	.6719	.7552	.8385	.9219
$\frac{1}{8}$	.0104	.0938	.1771	.2604	.3438	.4271	.5104	.5938	.6771	.7604	.8438	.9271
$\frac{3}{16}$	.0156	.0990	.1823	.2656	.3490	.4323	.5156	.5990	.6823	.7656	.8490	.9323
$\frac{1}{4}$	.0208	.1042	.1875	.2708	.3542	.4375	.5208	.6042	.6875	.7708	.8542	.9375
$\frac{5}{16}$	.0260	.1094	.1927	.2760	.3594	.4427	.5260	.6094	.6927	.7760	.8594	.9427
$\frac{3}{8}$	.0313	.1146	.1979	.2813	.3646	.4479	.5313	.6146	.6979	.7813	.8646	.9479
$\frac{7}{16}$	.0365	.1198	.2031	.2865	.3698	.4531	.5365	.6198	.7031	.7865	.8698	.9531
$\frac{1}{2}$	.0417	.1250	.2083	.2917	.3750	.4583	.5417	.6250	.7083	.7917	.8750	.9583
$\frac{9}{16}$	.0469	.1302	.2135	.2969	.3803	.4635	.5469	.6302	.7135	.7969	.8802	.9635
$\frac{5}{8}$	.0521	.1354	.2188	.3021	.3854	.4688	.5521	.6354	.7188	.8021	.8854	.9688
$\frac{11}{16}$	.0573	.1406	.2240	.3073	.3906	.4740	.5573	.6406	.7240	.8073	.8906	.9740
$\frac{3}{4}$	.0625	.1458	.2292	.3125	.3958	.4792	.5625	.6458	.7292	.8125	.8958	.9792
$\frac{7}{8}$	.0677	.1510	.2344	.3177	.4010	.4844	.5677	.6510	.7344	.8177	.9010	.9844
$\frac{15}{16}$	.0729	.1563	.2396	.3229	.4063	.4896	.5729	.6563	.7396	.8229	.9063	.9896
$\frac{1}{2}$	.0781	.1615	.2448	.3281	.4115	.4948	.5781	.6615	.7448	.8281	.9115	.9948
1	.0833	.1667	.2500	.3333	.4167	.5000	.5833	.6667	.7500	.8333	.9167	1.0000

TABLE IV  
USEFUL RELATIONS.

Lineal feet	×.00019	= miles
Lineal yards	×.0006	= miles
Square inches	×.007	= square feet
Square feet	×.111	= square yards
Square yards	×.0002067	= acres
Acres	×4840	= square yards
Cubic inches	×.00058	= cubic feet
Cubic feet	×.03704	= cubic yards
Links	×.22	= yards
Links	×.66	= feet
Feet	×1.5	= links

$$360^\circ = 21600' = 1296000''$$

$$\text{Radius} = \text{arc of } 57.2957790''$$

$$\text{Arc of } 1^\circ (\text{radius} = 1) = .017453292$$

$$\text{Arc of } 1' (\text{radius} = 1) = .000290888$$

$$\text{Arc of } 1'' (\text{radius} = 1) = .000004848$$

$$\pi = 3.141592654 \quad \sqrt{\frac{1}{4}} = 0.564190$$

$$\frac{\pi}{4} = 0.785398163 \quad \sqrt[3]{\frac{6}{\pi}} = 1.240700982$$

$$\frac{\pi}{6} = 0.523598776 \quad \pi^2 = 9.869604401$$

$$\sqrt{\frac{4}{\pi}} = 1.128379167 \quad \frac{1}{\pi^2} = 0.101321184$$

$$\frac{\pi}{6} = 0.523598776 \quad \sqrt{\pi} = 1.772453851$$

$$\frac{4\pi}{3} = 4.188790205 \quad \frac{1}{\pi} = 0.3183099$$

Curvature of Earth's surface = about 0.7 feet in 1 mile

Curvature in feet = 0.667 (Dist. in miles)<sup>2</sup>

Difference between arc and chord length, 0.05 feet in 11½ miles

$$\text{Probable error of a single observation} = 0.6754 \sqrt{\frac{\sum v^2}{n-1}}$$

Error in chaining of 0.01 feet in 100 feet:

Due to—

1. Length of tape error of 0.01 feet
2. Alignment. One end 1.4 feet out of line
3. Sag of tape at centre of 0.61 feet.
4. Temperature difference of 15°
5. Difference of pull of 15 lbs.

STADIA REDUCTION FORMULAE.

$$\text{Horizontal Distance} = R - R \sin^2 a + C \cos a$$

$$\text{Vertical Distance} = R \frac{1}{2} \sin 2a + C \sin a$$

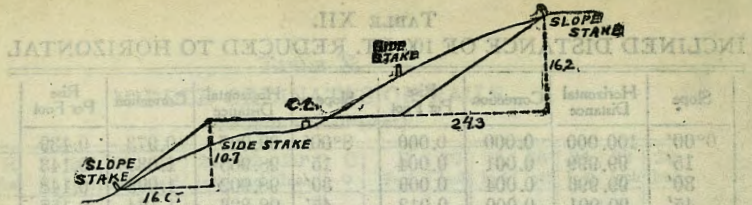
distance from Object glass to cross hairs

$$R = \text{Reading} \times \frac{\text{distance between cross hairs}}{\text{distance from Object glass to center of instrument.}}$$

C = distance from Object glass to cross hairs + distance from Object glass to center of instrument.

a = angle of elevation for mid Reading





DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.

SLOPE 1 1/4 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 05	1 20	1 35	1 50	1 65	1 80	1 95	2 10	2 25	1
2	3 00	2 15	2 30	2 45	2 60	2 75	2 90	3 05	3 20	3 35	2
3	4 50	3 15	3 30	3 45	3 60	3 75	3 90	4 05	4 20	4 35	3
4	6 00	4 15	4 30	4 45	4 60	4 75	4 90	5 05	5 20	5 35	4
5	7 50	5 15	5 30	5 45	5 60	5 75	5 90	6 05	6 20	6 35	5
6	9 00	6 15	6 30	6 45	6 60	6 75	6 90	7 05	7 20	7 35	6
7	10 50	7 15	7 30	7 45	7 60	7 75	7 90	8 05	8 20	8 35	7
8	12 00	8 15	8 30	8 45	8 60	8 75	8 90	9 05	9 20	9 35	8
9	13 50	9 15	9 30	9 45	9 60	9 75	9 90	10 05	10 20	10 35	9
10	15 00	10 15	10 30	10 45	10 60	10 75	10 90	11 05	11 20	11 35	10
11	16 50	11 15	11 30	11 45	11 60	11 75	11 90	12 05	12 20	12 35	11
12	18 00	12 15	12 30	12 45	12 60	12 75	12 90	13 05	13 20	13 35	12
13	19 50	13 15	13 30	13 45	13 60	13 75	13 90	14 05	14 20	14 35	13
14	21 00	14 15	14 30	14 45	14 60	14 75	14 90	15 05	15 20	15 35	14
15	22 50	15 15	15 30	15 45	15 60	15 75	15 90	16 05	16 20	16 35	15
16	24 00	16 15	16 30	16 45	16 60	16 75	16 90	17 05	17 20	17 35	16
17	25 50	17 15	17 30	17 45	17 60	17 75	17 90	18 05	18 20	18 35	17
18	27 00	18 15	18 30	18 45	18 60	18 75	18 90	19 05	19 20	19 35	18
19	28 50	19 15	19 30	19 45	19 60	19 75	19 90	20 05	20 20	20 35	19
20	30 00	20 15	20 30	20 45	20 60	20 75	20 90	21 05	21 20	21 35	20
21	31 50	21 15	21 30	21 45	21 60	21 75	21 90	22 05	22 20	22 35	21
22	33 00	22 15	22 30	22 45	22 60	22 75	22 90	23 05	23 20	23 35	22
23	34 50	23 15	23 30	23 45	23 60	23 75	23 90	24 05	24 20	24 35	23
24	36 00	24 15	24 30	24 45	24 60	24 75	24 90	25 05	25 20	25 35	24
25	37 50	25 15	25 30	25 45	25 60	25 75	25 90	26 05	26 20	26 35	25
26	39 00	26 15	26 30	26 45	26 60	26 75	26 90	27 05	27 20	27 35	26
27	40 50	27 15	27 30	27 45	27 60	27 75	27 90	28 05	28 20	28 35	27
28	42 00	28 15	28 30	28 45	28 60	28 75	28 90	29 05	29 20	29 35	28
29	43 50	29 15	29 30	29 45	29 60	29 75	29 90	30 05	30 20	30 35	29
30	45 00	30 15	30 30	30 45	30 60	30 75	30 90	31 05	31 20	31 35	30
31	46 50	31 15	31 30	31 45	31 60	31 75	31 90	32 05	32 20	32 35	31
32	48 00	32 15	32 30	32 45	32 60	32 75	32 90	33 05	33 20	33 35	32
33	49 50	33 15	33 30	33 45	33 60	33 75	33 90	34 05	34 20	34 35	33
34	51 00	34 15	34 30	34 45	34 60	34 75	34 90	35 05	35 20	35 35	34
35	52 50	35 15	35 30	35 45	35 60	35 75	35 90	36 05	36 20	36 35	35
36	54 00	36 15	36 30	36 45	36 60	36 75	36 90	37 05	37 20	37 35	36
37	55 50	37 15	37 30	37 45	37 60	37 75	37 90	38 05	38 20	38 35	37
38	57 00	38 15	38 30	38 45	38 60	38 75	38 90	39 05	39 20	39 35	38
39	58 50	39 15	39 30	39 45	39 60	39 75	39 90	40 05	40 20	40 35	39
40	60 00	40 15	40 30	40 45	40 60	40 75	40 90	41 05	41 20	41 35	40
41	61 50	41 15	41 30	41 45	41 60	41 75	41 90	42 05	42 20	42 35	41
42	63 00	42 15	42 30	42 45	42 60	42 75	42 90	43 05	43 20	43 35	42
43	64 50	43 15	43 30	43 45	43 60	43 75	43 90	44 05	44 20	44 35	43
44	66 00	44 15	44 30	44 45	44 60	44 75	44 90	45 05	45 20	45 35	44
45	67 50	45 15	45 30	45 45	45 60	45 75	45 90	46 05	46 20	46 35	45
46	69 00	46 15	46 30	46 45	46 60	46 75	46 90	47 05	47 20	47 35	46
47	70 50	47 15	47 30	47 45	47 60	47 75	47 90	48 05	48 20	48 35	47
48	72 00	48 15	48 30	48 45	48 60	48 75	48 90	49 05	49 20	49 35	48
49	73 50	49 15	49 30	49 45	49 60	49 75	49 90	50 05	50 20	50 35	49
50	75 00	50 15	50 30	50 45	50 60	50 75	50 90	51 05	51 20	51 35	50

Computed by L. Leland Locke.

Sta + H.I - E I  
 7.36  
 5.6  
 5.13 2.23  
 S.L on Exist. sdwk 5.06 2.30



ENGINEERING DEPARTMENT  
CITY OF SAN DIEGO,  
CALIFORNIA.

67 29 20 100

181.20	272.72
11.72	1.63
192.94	271.09
0.45	13.08
192.49	284.17
3.33	283.89
195.95	13.05
	296.89
265.70	284.17
4.01	10.12
261.69	273.75
	296.89
	11.50
	585.39