BOOK 125

F.B. 125

125

Table showing the difference of latitude and departure in running 80 chains at any course from 1 to 60 minutes.

Minutes	Lks.	Minutes	Lks.	Minutes	Lks.
1	2⅓	21	49	41	95⅔
2	4⅔	22	51⅓	42	98
3	7	23	53⅔	43	100⅓
4	9⅓	24	56	44	102⅔
5	11⅔	25	58⅓	45	105
6	14	26	60⅔	46	107⅓
7	16⅓	27	63	47	109⅔
8	18⅔	28	65⅓	48	112
9	21	29	67⅔	49	114⅓
10	23⅓	30	70	50	116⅔
11	25⅔	31	72⅓	51	119
12	28	32	74⅔	52	121⅓
13	30⅓	33	77	53	123⅔
14	32⅔	34	79⅓	54	126
15	35	35	81⅔	55	128⅓
16	37⅓	36	84	56	130⅓
17	39⅔	37	86⅓	57	133
18	42	38	88⅔	58	135⅓
19	44⅓	39	91	59	137⅔
20	46⅔	40	93⅓	60	140

Return to City Engineers Office
City Hall, San Diego, Cal.

MICROFILMED
DEC 1964

TABLE FOR RUNNING ON SLOPES.

In the following table the first column shows the angle, the second the number of links to be added to a chain on the slopes, to make one chain, horizontal measurement.

Angle	Cor. in Links	Angle	Cor. in Links	Angle	Cor. in Links	Angle	Cor. in Links
°		°		°		°	
4	0.24	11	1.88	18	5.14	25	10.54
5	0.38	12	2.24	19	5.76	26	11.26
6	0.55	13	2.63	20	6.42	27	12.24
7	0.76	14	3.06	21	7.11	28	13.37
8	0.98	15	3.53	22	7.85	29	14.34
9	1.24	16	4.02	23	8.64	30	15.47
10	1.55	17	4.56	24	9.47	35	22.07

11.35½ P.M.

125

56° 28' 30"
56 28 30
112 57 00 = 114.00
101.88
12.12
11.93

Book no. 125

name. date.

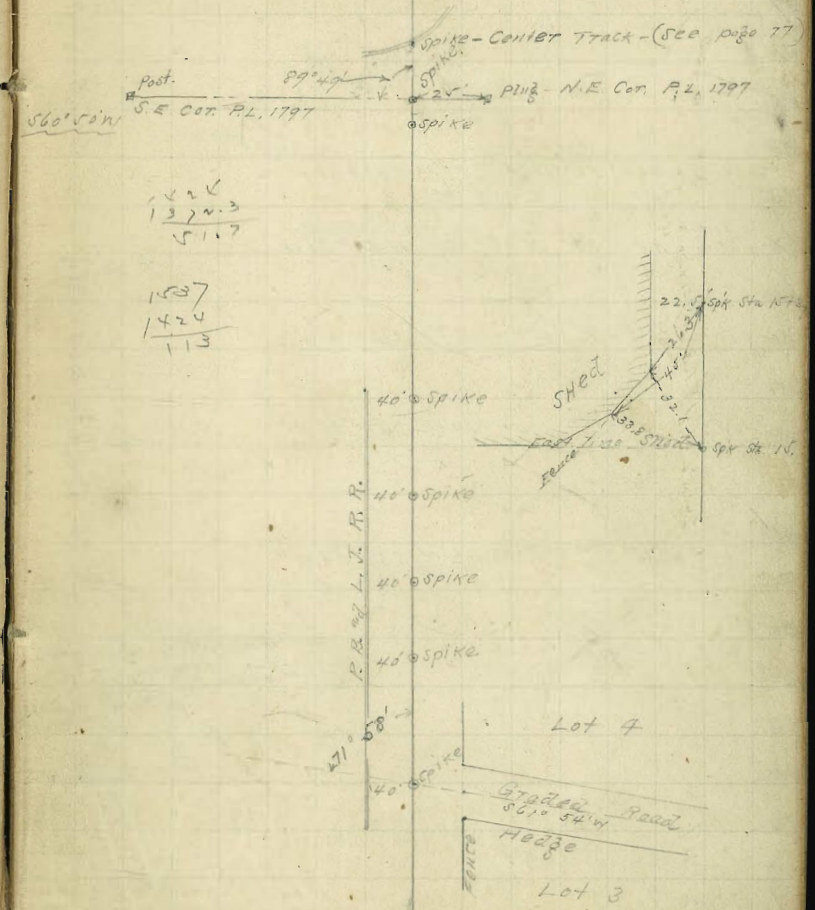
11/23/01
Rumsey
Williams
Ken
Daley

Survey for Road from the La Jolla to the Toney River

Race Track, through Pacific Beach, and Main Line

1

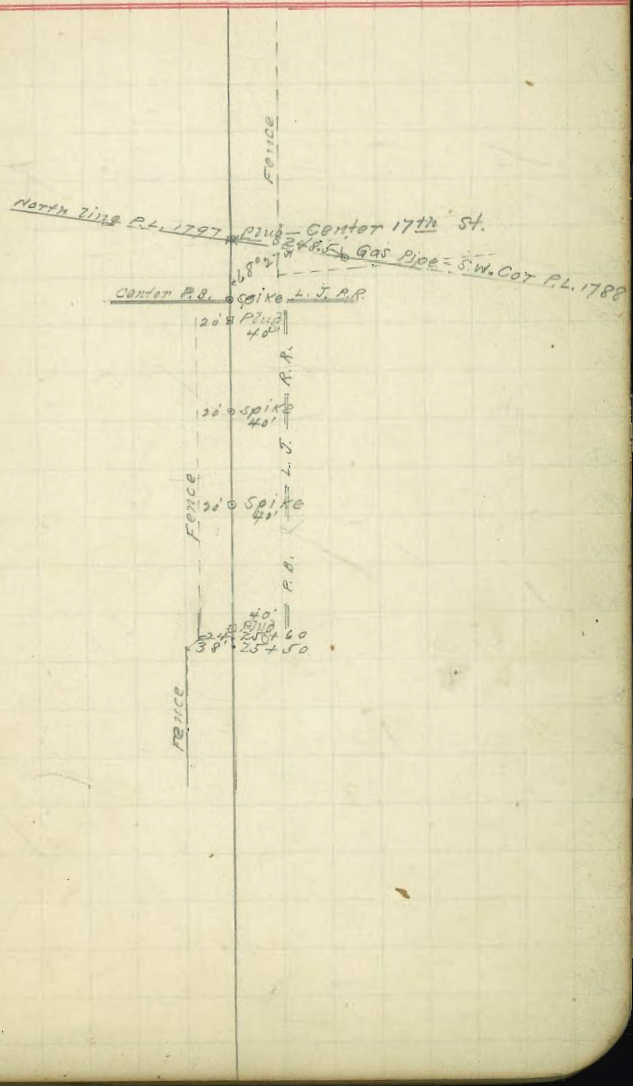
Sta.	Ang.	Bearing	Mag. Bear.
+37			
+24			
+72.3	L73°37'	S74°48'W	S60°30'W
307.3			
+65	L4°20'	N31°35'W	N45°55'W
265'			
	R5°15'	N27°15'W	N41°35'W
200'			
	R5°55'	N32°30'W	N46°45'W
185			
+15	R5°06'	N38°25'W	N52°35'W
160			
+55	R2°37'	N43°31'W	N57°40'W
255'			
		N46°08'W	N60°30'W



Main Line

Sta.	Ang.	Bearing	Mag. Bear.
37			
36	507.6		
35			
34			
+76.4	Δ R 20° 56'	N 15° 30' W	N 29° 30' W
33			
+41.4	121.0		
32 +01.4	Δ R 89° 31'	N 36° 26' W	N 50° 30' W
31			
30 +11	190.4 Δ L 7° 47'	S 54° 03' W	S 40 0' W
29			
28 +29.2	181.8 Δ L 8° 26'	S 61° 50' W	S 47° 35' W
27			
26	246.2		
25 +83	Δ L 4° 32'	S 70° 16' W	S 56° 25' W
24			
23			
22			
21			
20			
19	1210.7		
18			
17			

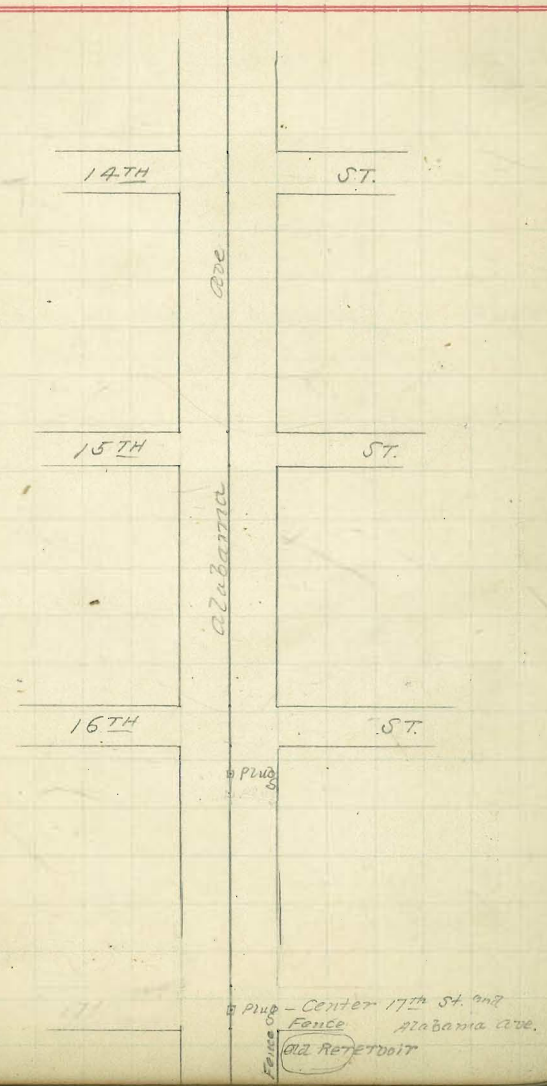
S 56° 0' W



11/27/01

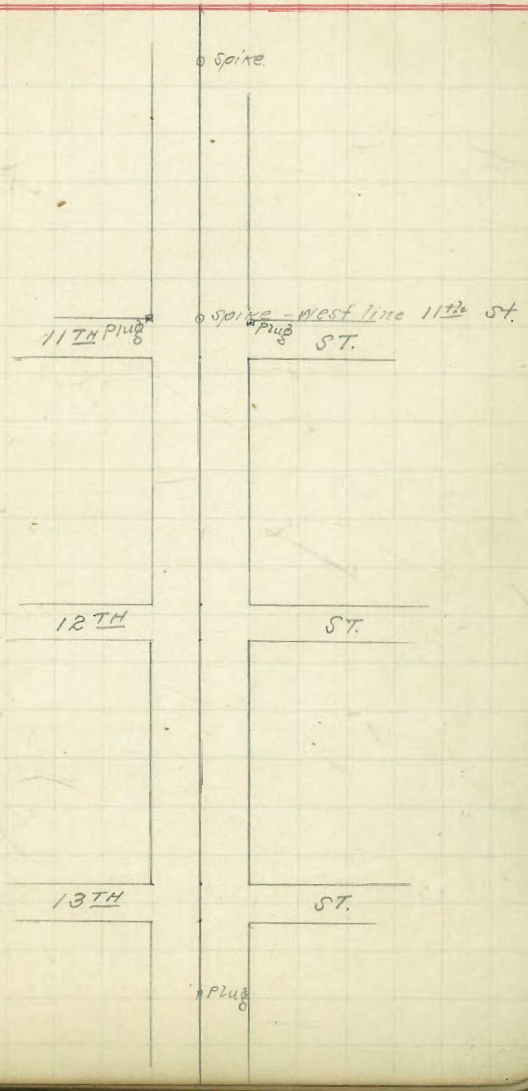
Main Line

Sta.	Ang.	Bearing.	Mag. Bear.
58			
57			
56			
55			
54			
53			
52			
51			
50	9292		
49			
48			
47			
46			
45			
44			
43	+71 △		
42			
41			
40			
39			
38	+84 ○ L 89°55'	S74°35'W	S60°30'W



Main Line

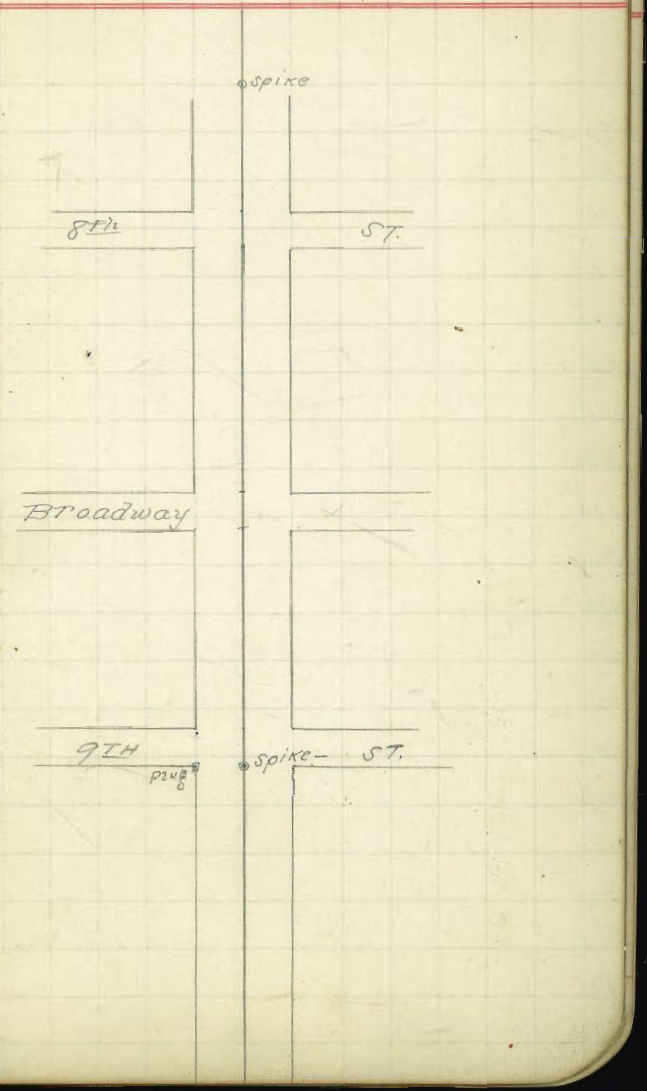
Sta.	Angle	Bearing	Mag. Bear.
79 + 56.5 △			
78			
77			
76			
75			
74 + 01.2 △			
73			
72			
71			
70			
69			
68			
67			
66			
65			
64			
63			
62			
61			
60 + 06.8 △			
59			



12/2/01

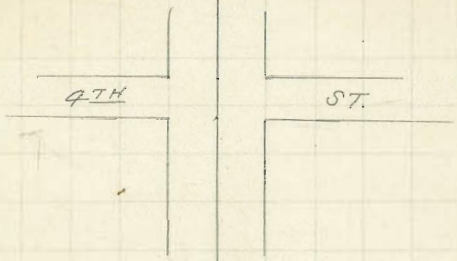
Main Line

Sta.	Dist	Bearing	Mag. Bear.
100			
99			
98			
97			
96			
95			
94			
93			
92			
91			
90			
89			
88			
87			
86			
85			
+81.			
84			
83			
82			
81			
80			



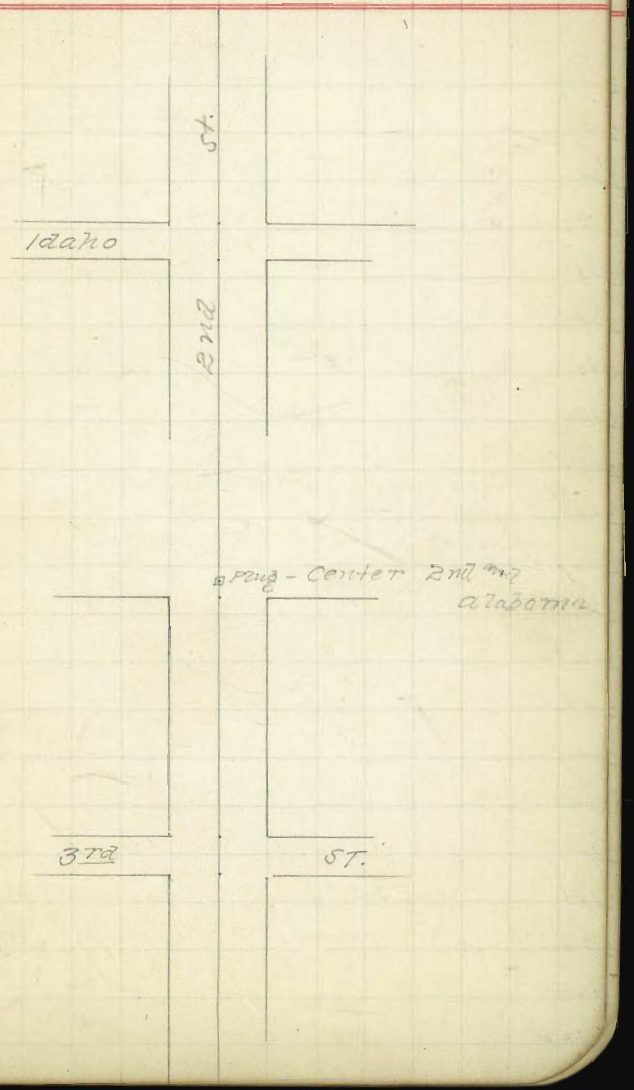
Main Line

Sta.	Ang.	Bearing	Mag. Bear.		
121					
120					
119					
118					
117					
116					
115					
114					
113					
112					
111					
110					
109					
108					
107					
106					
105					
104					
103					
102					
101					



Main Line

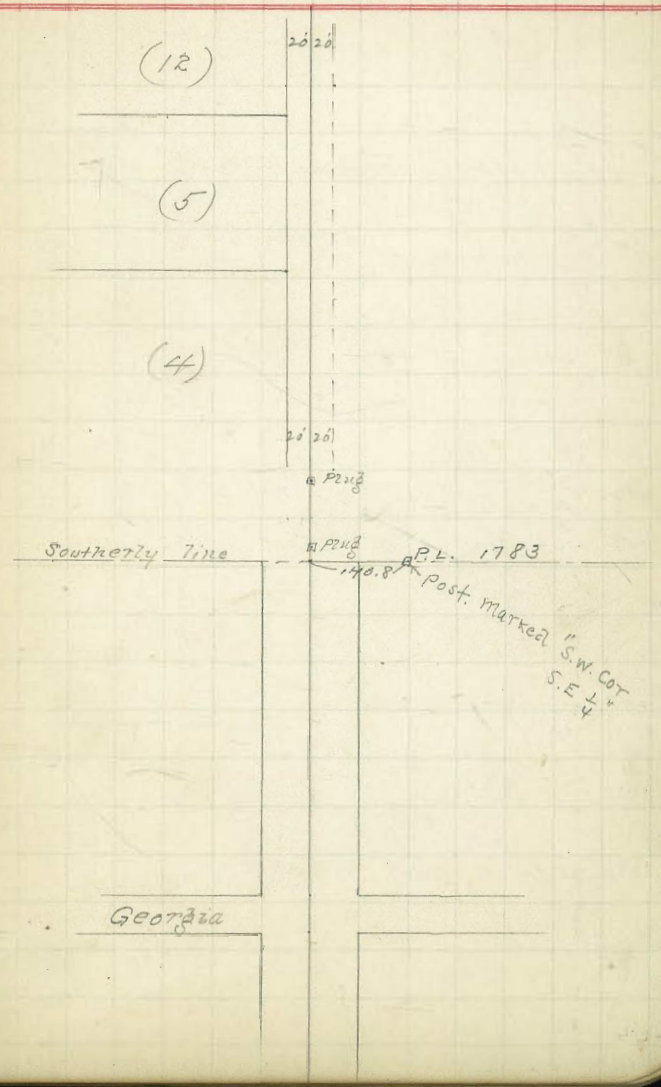
Sta.	Ang	Bearing	Mag. Bear.			
142						
141						
140						
139	2168.4					
138						
137						
136						
135						
134						
133						
132						
+76	90°0'R	N15°25'W	N28°55'W		(N61° 0 E)	Reverse
131						
130						
129						
128						
127						
126						
125						
124						
123						
122						



Plug - Center 2nd and Alabama

Main Line

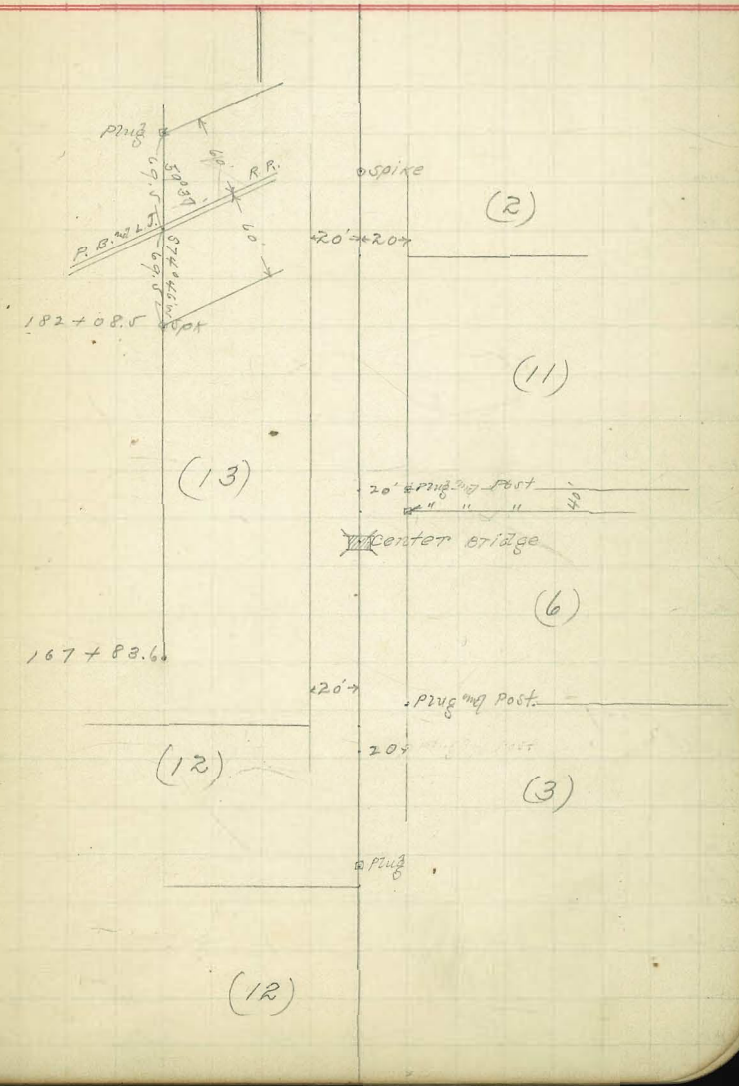
Sta.	Ang	Bearing	Mag. Bear.		
163					
162					
161	1298.5				
160					
159					
158					
157					
156					
155					
+85.20	L 88°25'	N 15°06' W	N 28°40' W	V	
154	140.8				
+44.4	R 88°44'	N 73°19' E	N 59°45' E		
153+24.4					
152					
151					
150					
149					
148					
147					
146					
145					
144					
143					



11/3/01

Main Line

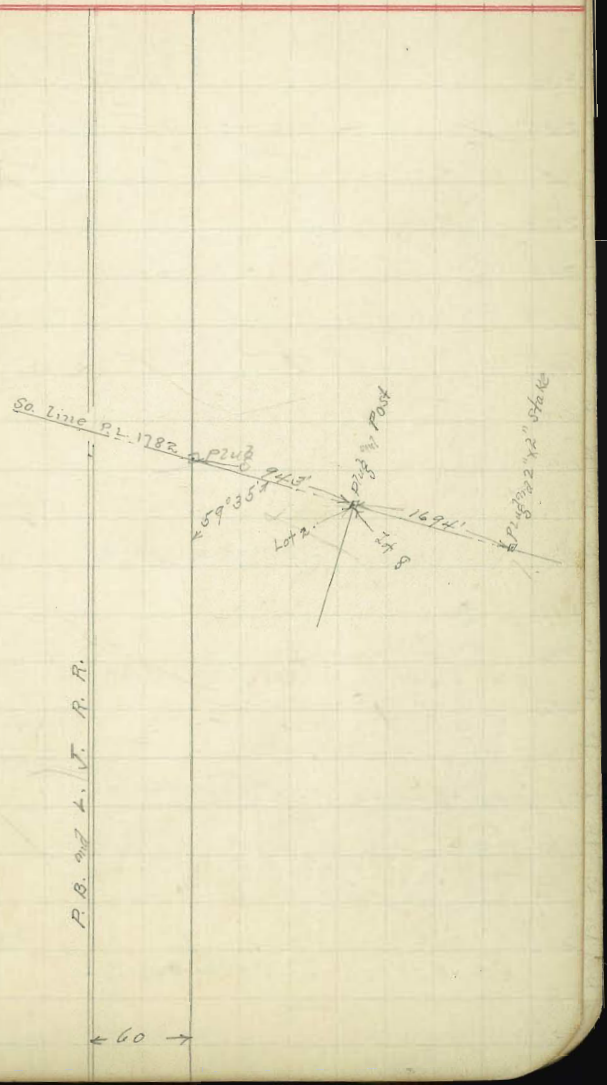
Sta.	Ang.	Bearing	Mag. Bear.
184			
183			
182 +08.5	R 59°37'	N45°37'W	N59°25'W
181			
180			
179			
178			
177			
176			
175 +54.7	1424.9		
174 +51			
173			
172			
171 +08			
170			
169			
168 +83.6	L 90°08'	S74°46'W	S.61°0'W
167			
166			
165			
164			



Main Line

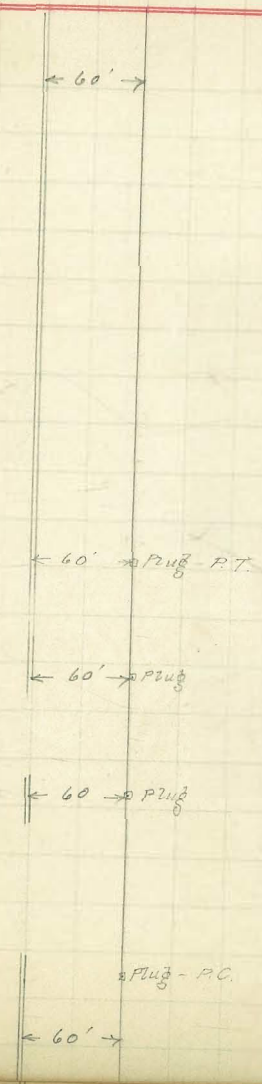
Sta.	Ang.	Bearing	Mag. Bear.		
205					
204					
203					
202					
201					
200					
199					
198					
197 +38.8					
196					
195					
194					
193					
192					
191					
190					
189					
188					
187					
186					
185					

2541.5



Main Line

Sta.		Ang.	Bearing	Mag. Bear.		
226						
225						
224						
223	3826.7					
222						
221						
220						
219						
218						
217						
216	+13	R2° 01'	N28° 40'W	N42° 35'W		
215	238'					
214						
213	+75	R5° 01'	N30° 41'W	N44° 35'W		
212	249					
211	+26	R6° 23'	N35° 42'W	N49° 35'W		
210	376'					
209						
208						
207	+50	R3° 32'	N42° 05'W	N56° 0'W		
206						



Main Line

Sta.	Ang.	Bearing	Mag. Bear		
247					
246					
245					
244					
243					
242					
241					
240					
239					
238					
237					
236					
235					
234 +75					
233					
232					
231					
230					
229					
228					
227					

12/5/01

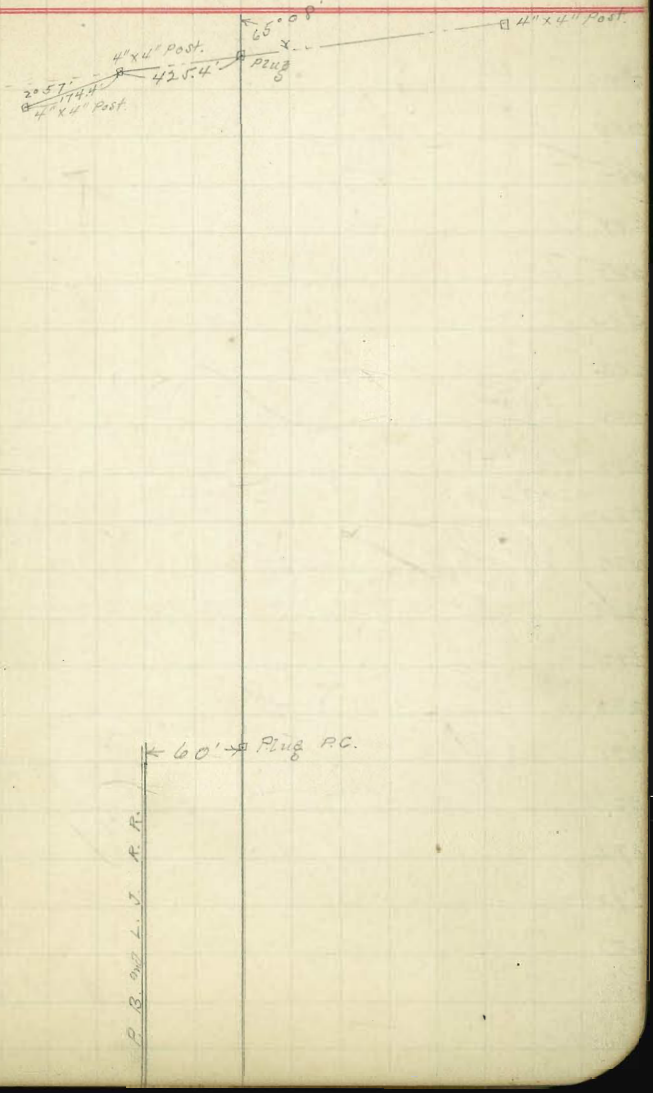
Main Line

(13)

13

Sta.	Ang.	Bearing	Mag. Bear.		
268	+93.6				
267					
266					
265					
264					
263					
262					
261					
260					
259					
258					
257					
256					
255					
254	+39.7	R 36° 6'	N 7° 26' E	N 6° 25' W	
253					
252					
251					
250					
249					
248					

5538.1



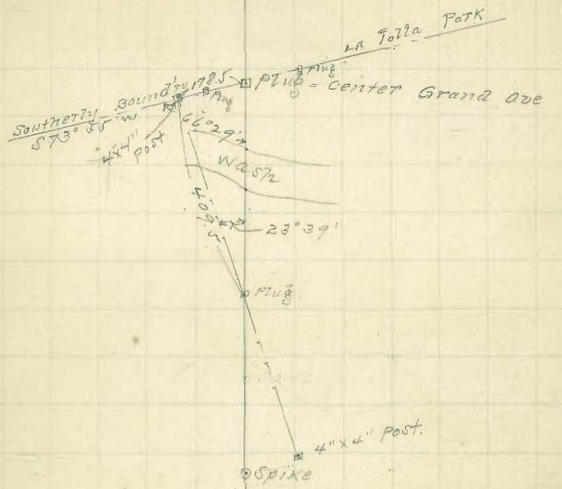
Main Line

(4)
14

Sta.	Ang.	Bearing	Mag. Bear.		
289					
288					
287					
286					
285					
284					
283					
282					
281					
280 +70					
279					
278					
277					
276					
275					
274					
273					
272					
271					
270					
269					

Main Line

Sta.	Angle	Bearing	Mag. Bear.		
310					
309 +77.8	℄ L 23° 31'	N 16° 05' W	N 29° 55' W		
308 +32					
307 +50					
306					
305 +31.5 △					
304					
303					
302					
301 +53					
300					
299					
298					
297					
296					
295					
294					
293					
292					
291					
290					



Main Line

Sta.	Ang.	Bearing	Mag. Bear.		
321					
320					
319	+63.7°				
318					
317					
316					
315					
314					
313					
312					
311	218'				
310					
309					
308					
307					
306					
305					
314					
313					
312					
311					

Main Line

Sta.	Ang.	Bearing	Mag. Bear		
342					
341					
340					
339					
338					
337					
336					
335					
334					
333					
332					
331 +88.8					
330					
329					
328					
327					
326					
325					
324					
323					
322					

Center {Connecticut / Grand ave.}

Main Line

Sta.	Ang.	Bearing	Mag. Bear.		
363					
362					
361					
360					
359					
358					
357					
356					
355					
354					
353					
352					
351					
350					
349					
348					
347					
346					
345					
344					
343					

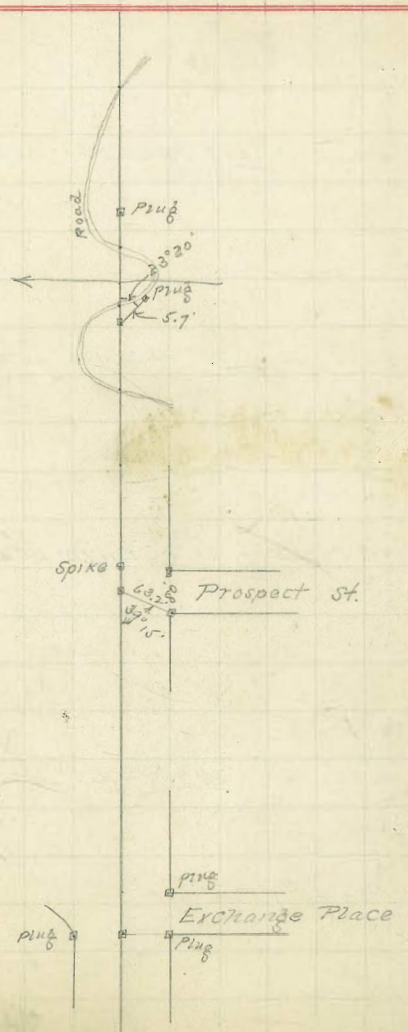
12/20/01 Main Line

Continued from page 16

Sta.	Ang	Bearing	Mag. Var.		
16					
15					
14					
13 +62.6					
12					
11					
10					
9					
8					
7					
6					
5					
4					
3					
2					
1					
0 = 319+63.7		=N 41.°10'E	N 27° 30' E		

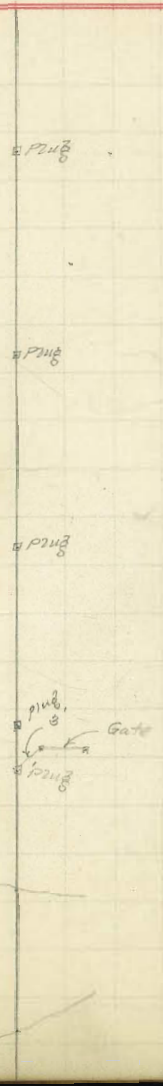
Main Line

Sta.	Ord.	Bearing	Mag. Bear.		
37					
36					
35					
34 +30	⊙ R11°56'	N80°02'E	N66°0'E		
33					
32 +04	△				
31					
30					
29					
28					
27	⊙ R26°56'	N68°06'E	N54°15'E		
26 +50	△				
25					
24					
23					
22					
21					
20					
19 +42	△				
18					
17					



Main Line

Sta.	Ang.	Bearing	Mag. Bear.
58			
57			
56 ~~760~~ +48	⊕ A 42° 0'	S 67° 19' E	S 81° 20' E
55			
54	426.		
53			
52 ~~+37~~ +22	⊕ L 15° 42'	N 70° 41' E	N 56° 45' E
51			
50			
49			
48 +29	⊕ R 57° 25'	N 86° 23' E	N 72° 25' E
47			
46			
45			
+61			
44			
+71	⊕ L 51° 04'	N 28° 58' E	N 15° 0' E
43			
42			
41			
40			
39			
38			



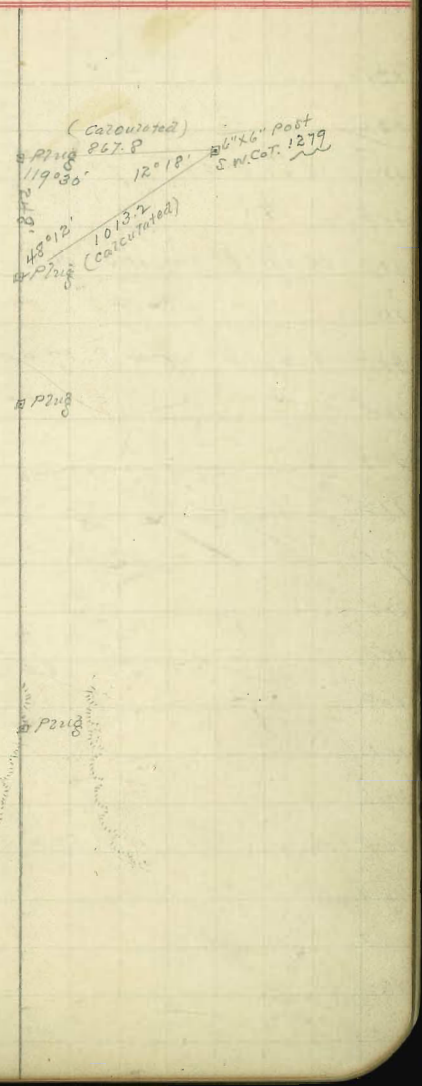
12/23/01

Main Line

Sta.	Ang	Bearing	Mag. Bear		
79					
78					
77					
76					
75					
74					
73					
72					
71					
70					
69					
68					
67 +50	◊				⊡ Plug
66					
65					
64					
63					
62					
61 +80	△				⊡ Plug
60					
59 ~~+70~~ +60	◊	L 37° 15'	N 75° 26' E	N 61° 20' E	⊡ Plug

Main Line

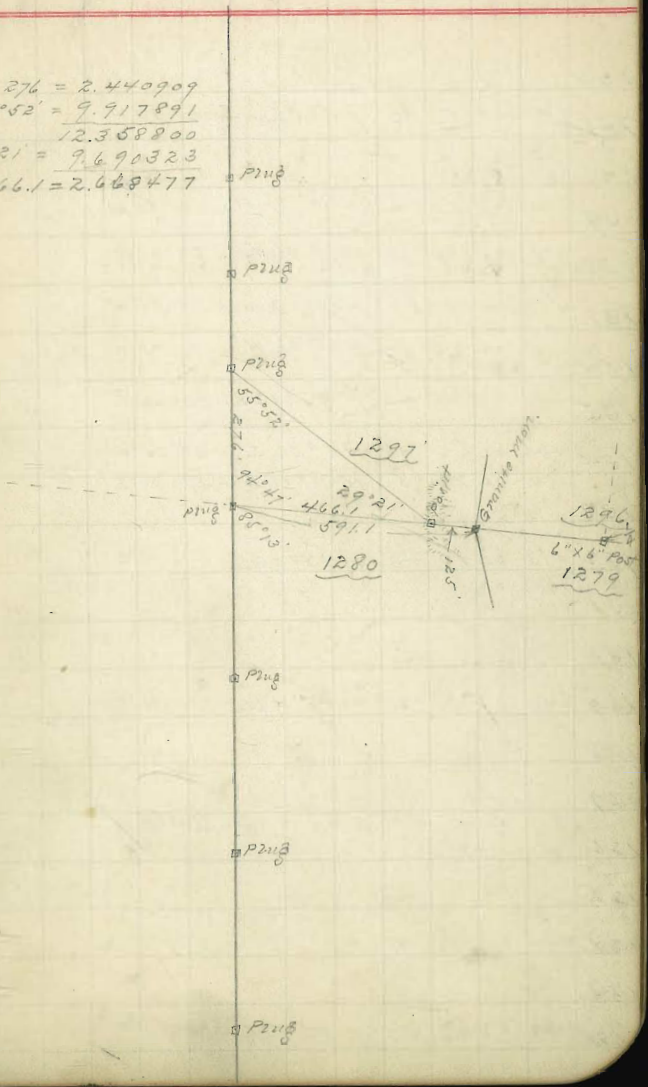
Sta.	Ang	Bearing	Mag. Bea.
100			
99			
98 +48	⊙L 32°05'	N5°12'W	N19°10'W
97			
96	⊙L 24°38'	N26°53'E	N12°50'E
95			
94			
93 +33	⊙L 17°19'	N51°31E	N37°35'E
92			
91			
90			
89			
88			
87			
86 ~~+80~~ +40	⊙L 6°36'	N68°50'E	N54°50'E
85			
84			
83			
82			
81			
80			



Main Line

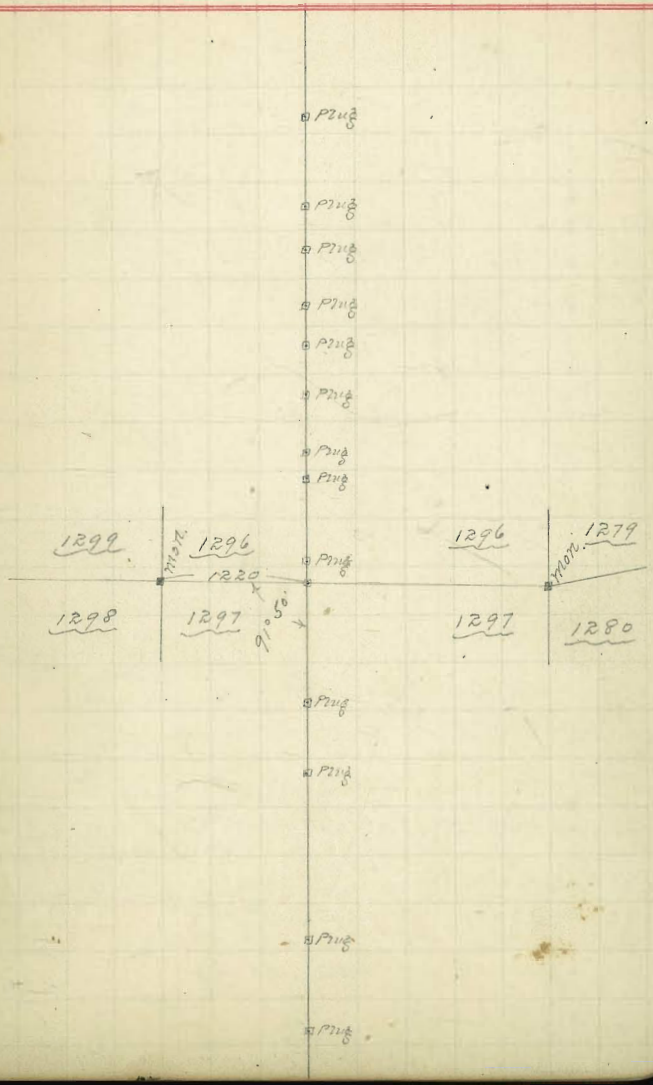
Sta.	Ang.	Bearing Mag. Var.			
121					
120					
119 +08	∘L 7°07'	N 7° 01'W	N 21° 0'W		
118					
117 +23	∘R 18°23'	N 0° 06'E	N 13° 50'W		
116					
115 +18	∘L 13°09'	N 18° 17'W	N 32° 15'W		
114					
113					
112 +42	△				
111					
110					
109 +76	∘L 2°11'	N 5° 08'W	N 19° 05'W		
108					
107					
106					
105 +06	∘L 2°11'	N 2° 57'W	N 16° 50'W		
104					
103					
102					
101 +50	∘R 4°26'	N 0 46'W	N 14° 45'W		

Log. 276 = 2.440909
" Sin. 55°52' = 9.917891
12.358800
" " 29°21' = 9.690323
" 466.1 = 2.668477



Main Line

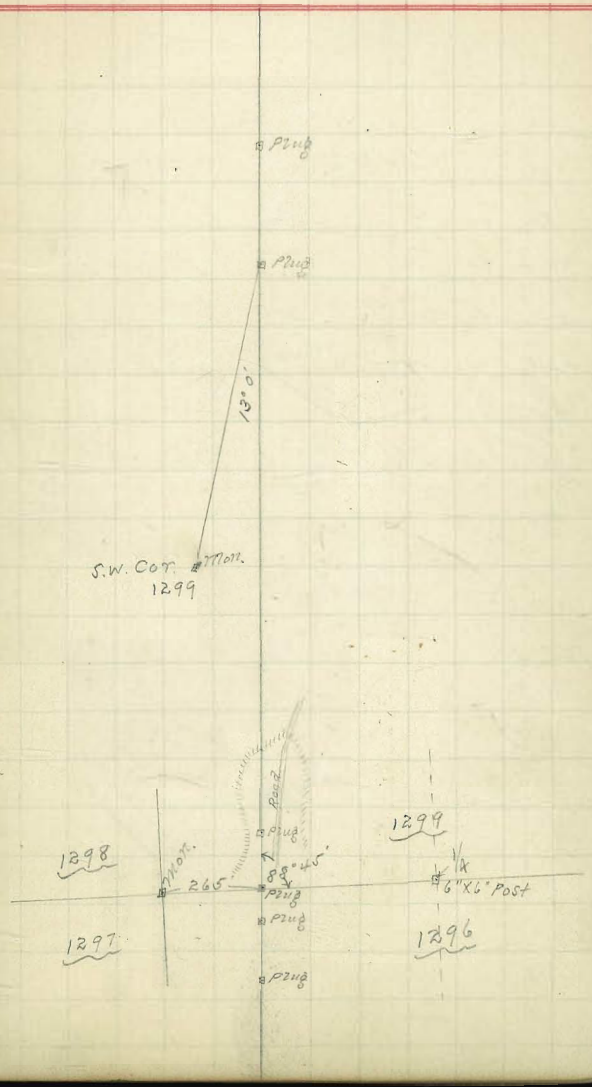
Sta.	Ang	Bearing	Mag. Bear.
142			
141 +47	○R 9° 00'	N5° 35'W	N19° 35'W
140 +23.6 △			
139 +53	○L 23° 40'	N14° 36'W	N28° 35'W
138 +57	○R 26° 25'	N9° 06'E	N5° 0'W
137 +50	○L 12° 27'	N17° 19'W	N31° 20'W
136 +62	○L 40° 34'	N4° 52'W	N18° 55'W
135 +59	○R 30° 40'	N35° 42'E	N21° 45'E
134 +46	○L 46° 08'	N5° 02'E	N9° 05'W
+96	○L 25° 53'	N51° 10'E	N37° 10'E
133			
132 +13	○L 10° 40'	N77° 08'E	N63° 00'E
+60.6 △			
131			
130			
129 +09	○R 31° 53'	N87° 43'E	N73° 35'E
128			
127			
+85	○L 4° 44'	N55° 50'E	N41° 50'E
126			
125			
124 +15	○R 49° 38'	N60° 34'E	N46° 35'E
123			
122 +29	○R 17° 57'	N10° 56'E	N3° 05'W



12/30/01

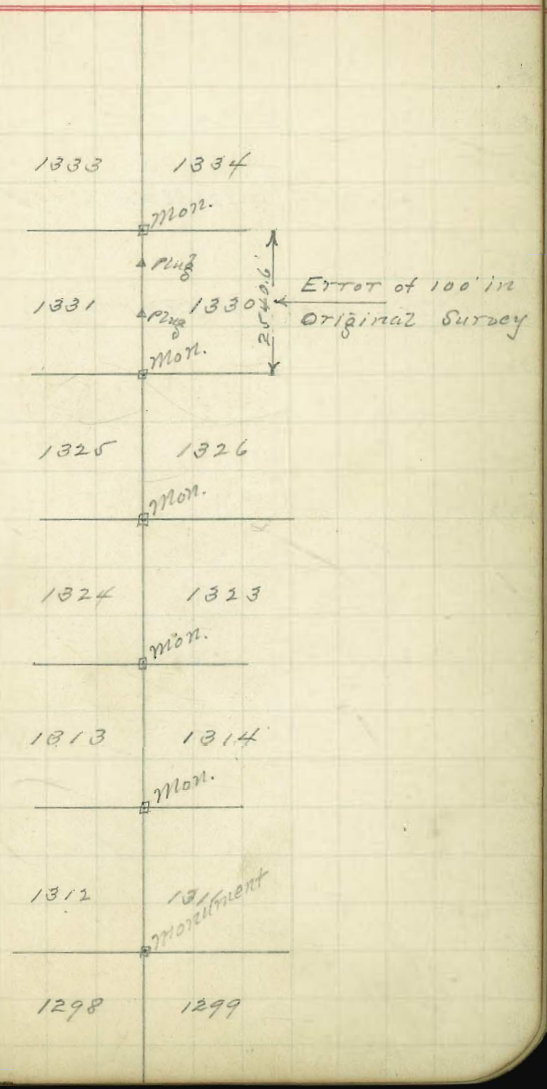
Main Line

Sta.		Ang.	Bearing	Mag. Bear.	
163					
162					
	+87.7	△			
161					
160					
159	+38	⊙R 13° 0′	N 0° 16 W	N 14° 30′ W	
158					
157					
156					
155					
154					
153					
152					
151					
150					
149					
148					
147	+50′	⊙L 14° 17′	N 13° 16 W	N 27° 15′ W	
146	+28.5	△			
	+76	⊙L 6° 47′	N 1° 01′ E	N 12° 55′ W	
145					
144	+46	⊙R 13° 23′	N 7° 48 E	N 6° 10′ W	
143					



Main Line

Sta.	Ang.	Bearing	Mag. Bear.		
306					
305					
304					
303+83.4 △					
291+00 △					
283+00 △					
278+42.8 △					
252+02.8 △					
225+60.7 ⊙					
199+22 ⊙	R 0°02'	N 0°18' W			
172+86 ⊙	L 0°04'	N 0°20' W	N 14°15' W		



1/2/02
Primary
Tie
Basis

Main Line

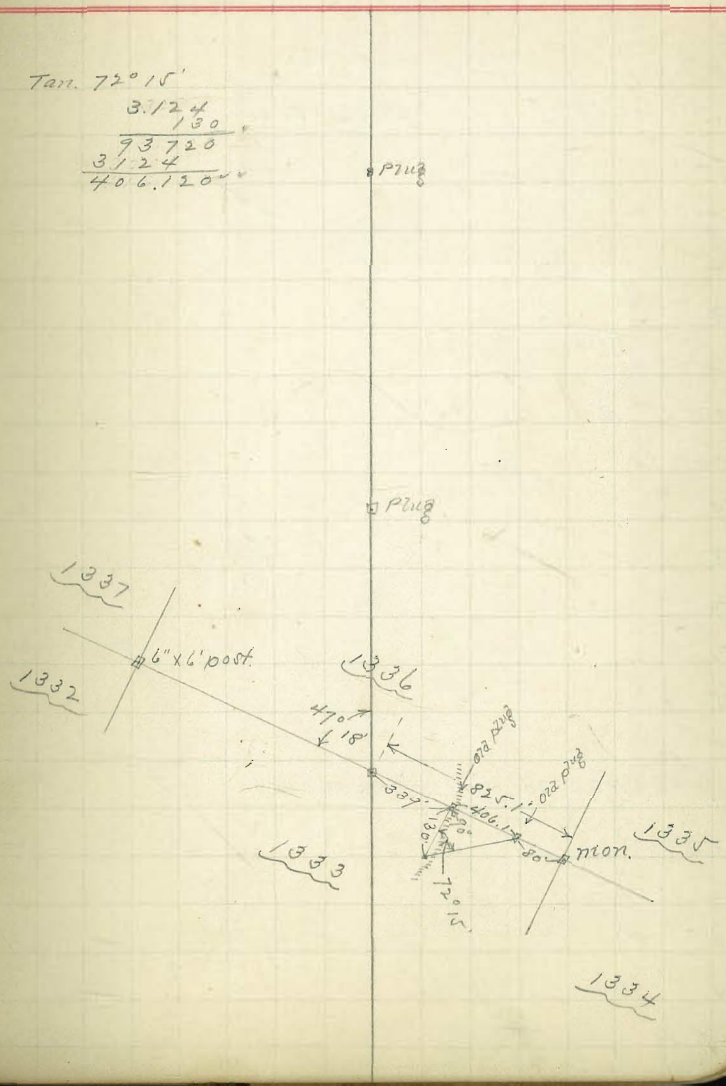
Sta.	Ang	Bearing	Mag. Bear.		
327					
326					
325					
324 +7.1	⊙	R 17°30'	N 42°58'W	N 56°45'W	Plug
323					
322 +37	⊙	L 60°10'	N 60°28'W	N 74°15'W	Plug
321					
320					
319					
318					
317					
316					
315	△				Plug
314					
313					
312					
311					
310	△				Plug
309					
308					
307					

Main Line

Sta.	Ang.	Bearing	Mag. Bear.
348			
347			
346 +14	∅L 32° 31'	N 63° 22 W	N 77° 15' W
345			
344			
343			
342			
341			
340			
339 +08	∅R 12° 07'	N 30° 51' W	N 44° 45' W
338			
337			
336			
335			
334 +89.6 △			
333			
332			
331			
330			
329			
328			

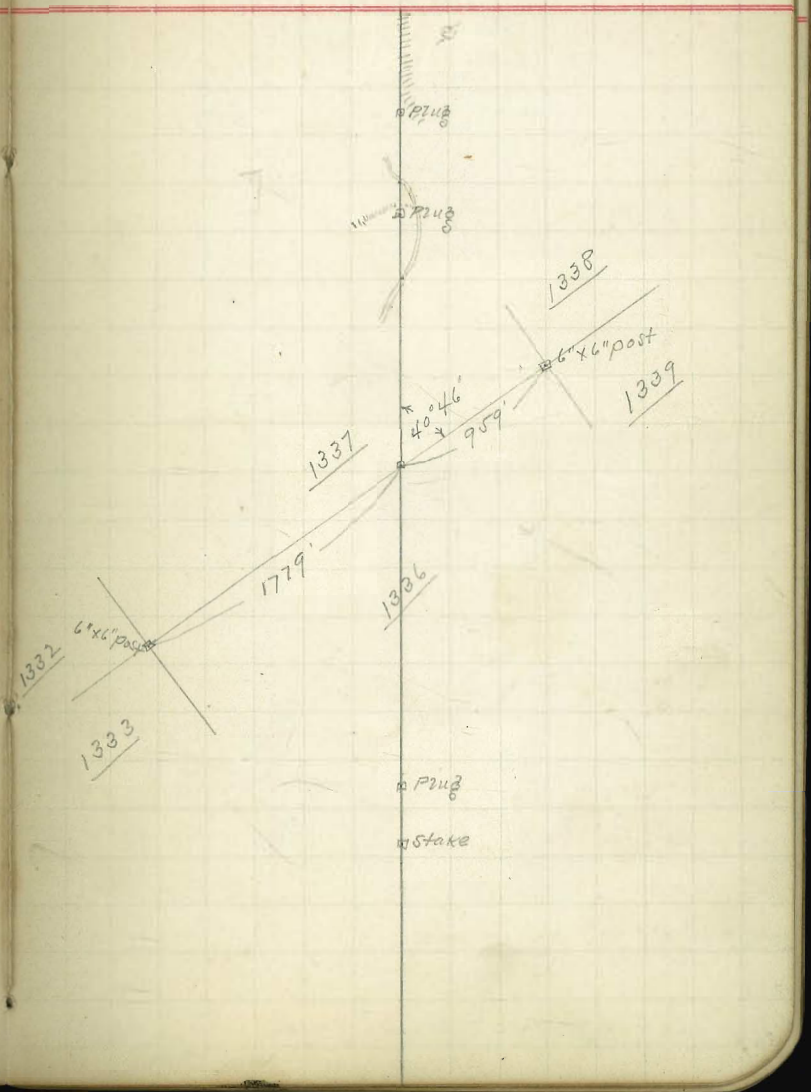
Tan. 72° 15'

3.124
130
93720
3124
406.120



Main Line

Sta.	Angle	Bearing	Mag. Bear.
368			
367+50	⊙ L 58°19'	S 80°39' W	S 66°50' W
366			
365+31	△		
364			
363			
362			
361			
360+01.8	△		
359			
358			
357			
356			
355			
355			
354+48	⊙ R 22°20'	N 41°02' W	N 54°45' W
353+17	△		
352			
351			
350			
349			



Main Line

Sta.	Ang.	Bearing	Mag. Bear.
371+38 △			
370			
369+34 ⊙	R 50° 54'	N 48° 27' W	N 62° 10' W

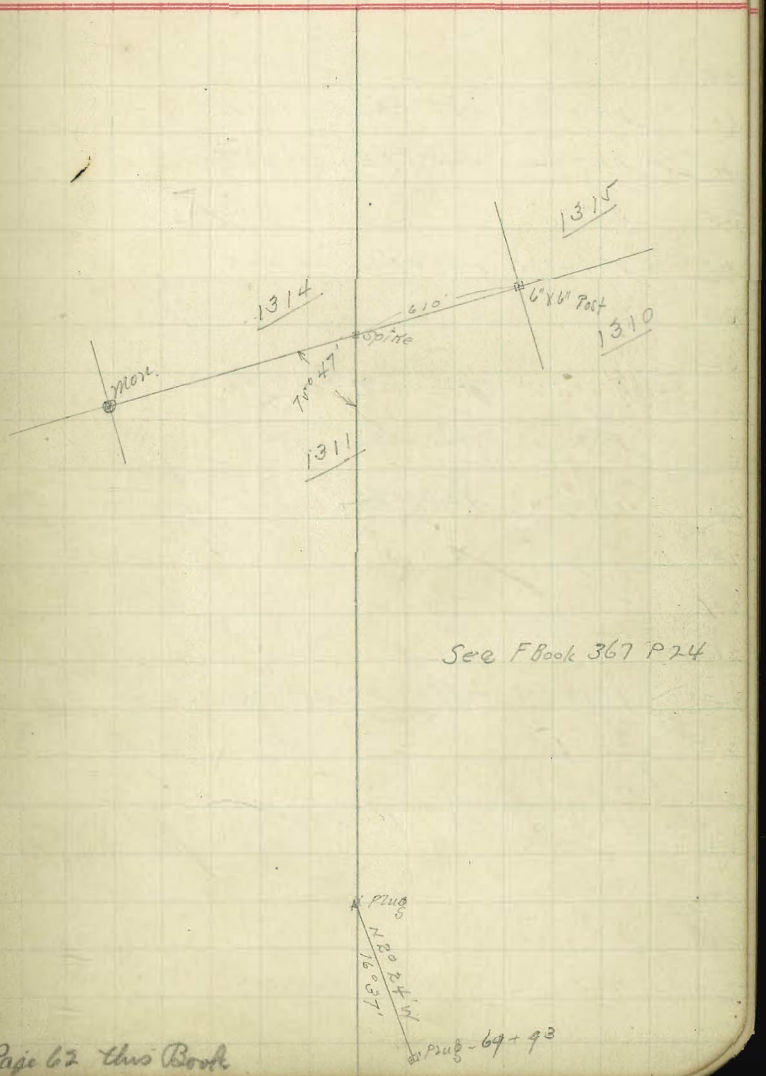
△ Spike in stone mound

1/11/02

Survey for Road, from Sta. 80, (Pine Canon Line) through Sorrento, to the Northerly Easterly Boundary or City Limits

Sorrento Line

Sta.	Ang.	Bearing	Mag Bear.
17			
16			
15			
14			
13			
12			
+96			
11			
10			
9	1009'		
8			
7			
6			
5			
4			
3			
2			
1			
0 = 80		N14°13'E	North



See F Book 367 P 24

Page 62 this Book

Sorrento Line

Sta.	Ang.	Bearing	Mag. Bear.	
38				
37 +~~50~~ +00	R10°35'	N56°32'E	N42°25'E	Plug
36 +~~50~~ +00	R7°10'	N45°57'E	N31°40'E	Plug
35				
34 +~~36~~ +86	R24°15'	N38°47'E	N24°40'E	Plug
33				
32				
31 +~~82~~ +33	L36°52'	N14°32'E	N0°25'E	Plug
30 +~~57~~ +07	R25 42'	N51°24'E	N37°20'E	Plug
29 +~~30~~ +80	R32°43'	N25°42'E	N11°35'E	Plug
28				
27				
26				
25 +~~45~~ +95	R13°14'	N7°01'W	N21°10'W	Plug
24				
23				
22 +~~76~~ +26	L76°20'	N20°15'W	N34°30'W	Plug
21				
20				
19 +09	R41°52'	N56°05'E	N42°00'E	Plug
18				

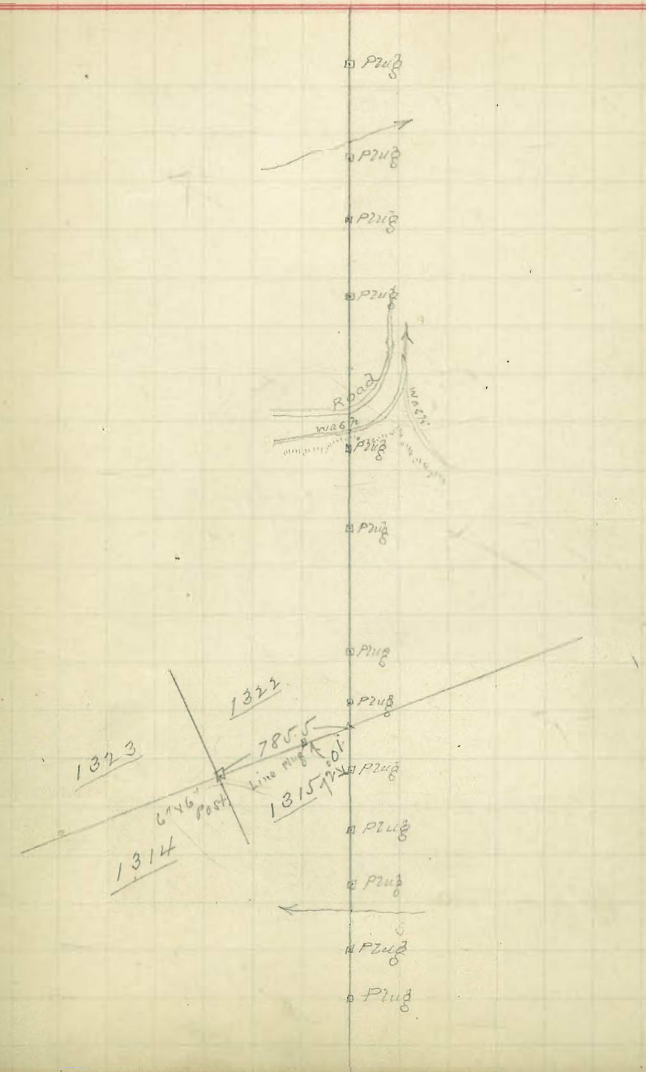
300' 100' 214' 253' 126' 127' 385' 269' 317'

1/13/02

Sorrento Line

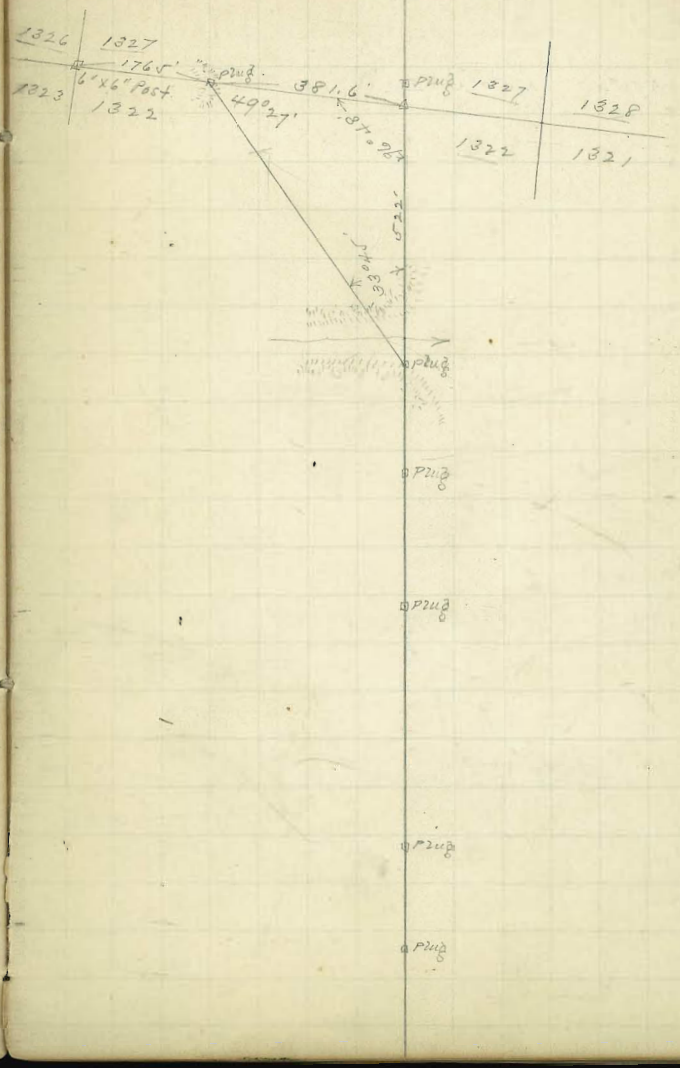
Sta.		Ang.	Bearing	Mag. Bear.
59	+66	R28°45'	N77°58'E	N63°40'E
58				
57	+55	R16°59'	N49°13'E	N34°55'E
56	+12	L29°22'	N32°14'E	N18°00'E
55				
54	+62	R44°20'	N61°36'E	N47°20'E
53				
52				
51	+85 +54	L59°40'	N17°16'E	N3°0'E
50				
49	+87	R34°38'	N76°56'E	N62°30'E
48				
47	+29	R5°52'	N42°18'E	N27°55'E
46	+06	R18°24'	N36°26'E	N22°0'E
45	+60.5			
44	+84	L43°41'	N18°02'E	N3°45'E
43	+44	R33°21'	N61°43'E	N47°25'E
42	+43	L44°58'	N28°22'E	N14°0'E
41				
40		R16°48'	N73°20'E	N59°0'E
39				

200' 211' 143' 150' 308' 167' 258' 123' 122' 140' 101' 243'



Sorrento Line

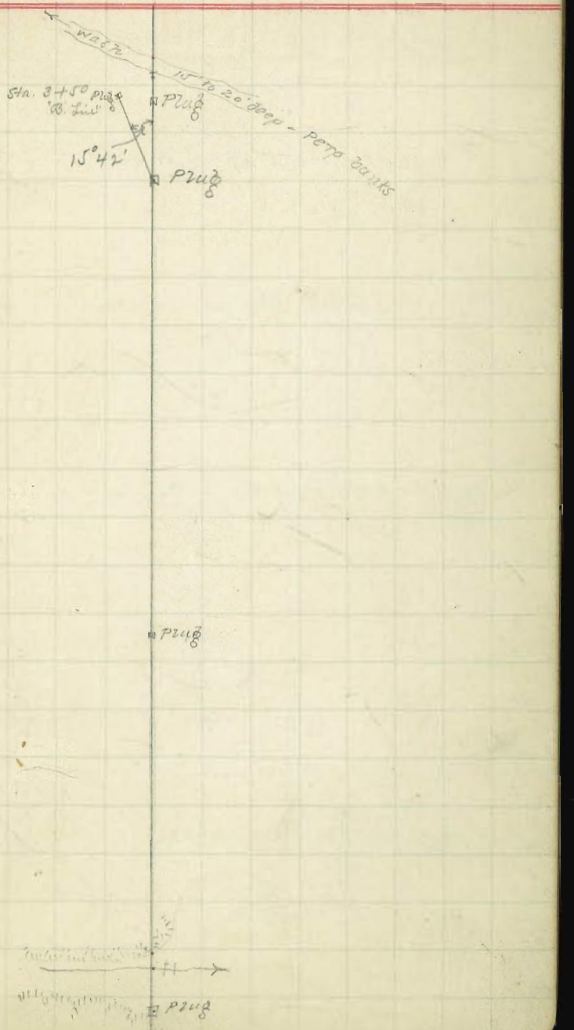
Sta	Ang	Bearing	Mag. Bear	
80				208'
+70	⊙R 11°54'	N 3°10'E	N 9°10'W	
79+15				
78				
77				577'
76				
75				
74				
+98	⊙R 10°28'	N 6°44'W	N 21°10'W	
73				
72				240'
71 +53	⊙L 20°37'	N 17°12'W	N 31°38'W	
70				
69				262'
+91	⊙L 24°31'	N 3°25'E	N 11°0'W	
68				
67				
66				305'
65				
64				
+86	⊙L 20°04'	N 27°56'E	N 13°40'E	
63				
62				220'
+66	⊙L 29°58'	N 48°00'E	N 33°40'E	
61				
60				



1/15/02

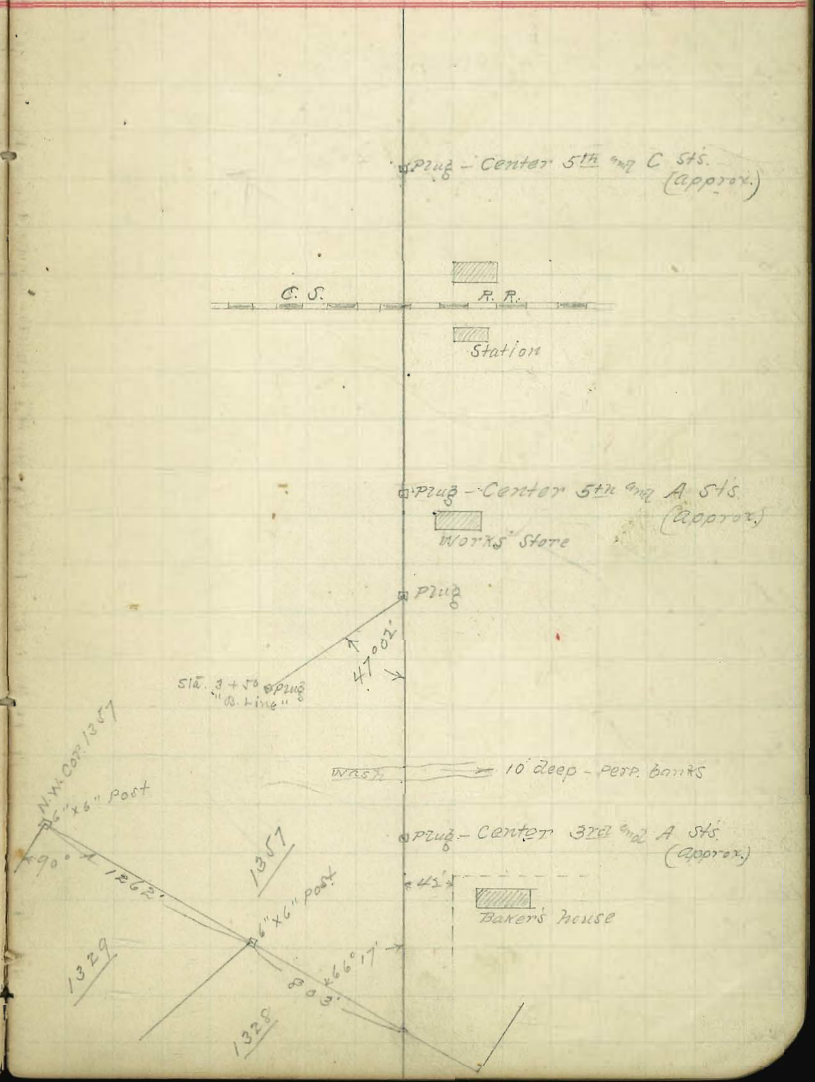
Sorrento Line

Sta.	Ang	Bearing	Mag. Bear.		
101 +61 +41					
+68	⊙R 10°49'	N 50°38'E	N 36°10'E		
100					
99					
98					
97					
96					
95					
94					
93					
92					
91					
90					
89 +50	⊙R 5° 0'	N 39°49'E	N 25°25'E		
88					
87					
86					
85					
84					
83					
82					
+78	⊙R 29°39'	N 34°49'E	N 20°30'E		
81					



Sorrento Line

Sta.	Ang.	Bearing	Mag. Bear.
122			
121			
120 +16.5	⊙L 89° 58'	N 39° 18' W	N 53° 50' W
119			
118			
117 +36.8			
116	670'		
115			
114			
113 +46.5	⊙R 89° 59'	N 50° 40' E	N 36° 10' E
112			
111 +35			
110			
109	719'		
108			
107			
106 +27.5	⊙L 89° 57'	N 39° 19' W	N 53° 40' W
105			
104			
103	559.5'		
102 +32.5			

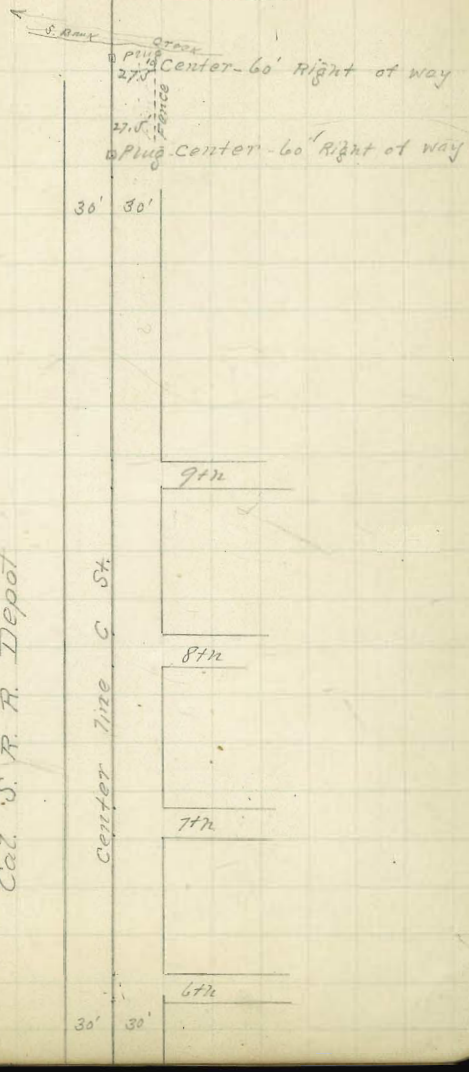


Sorrento Line

Sta.	Ang.	Bearing	Mag. Bear.		
143 +34					
+16.5	R 89° 58'	N 39° 20' W	N 53° 40 W		
142					
141 +16.5	L 90° 0'	S 50° 42' W	S 36° 20' W		
140					
139					
138					
137					
136					
135					
134					
133					
132					
131					
130					
129					
128					
127					
126					
125					
124					
123					

200'

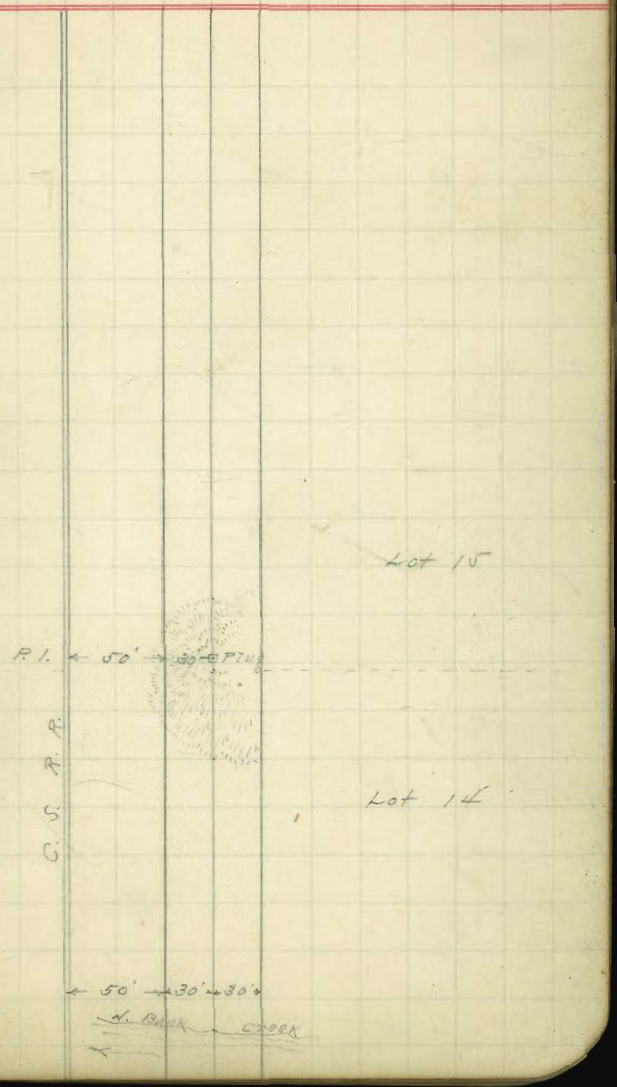
2100'



Sorrento Line

Sta.	Ang.	Bearing	Mag. Bear.
164			
163			
162			
161			
160			
159			
158			
157			
156			
155			
154			
153			
152 + 04	0°R 1° 51'	N 37° 29' W	N 51° 40' W
151			
150			
149			
148			
147			
146			
145			
144 + 30			

207.5'



Sorrento Line

Sta.	Ang	Bearing	Mag. Bear.		
185					
184					
183					
182					
181					
180					
179					
178					
177					
176					
175					
174					
173					
172					
171					
170					
169					
168					
167					
166					
165					

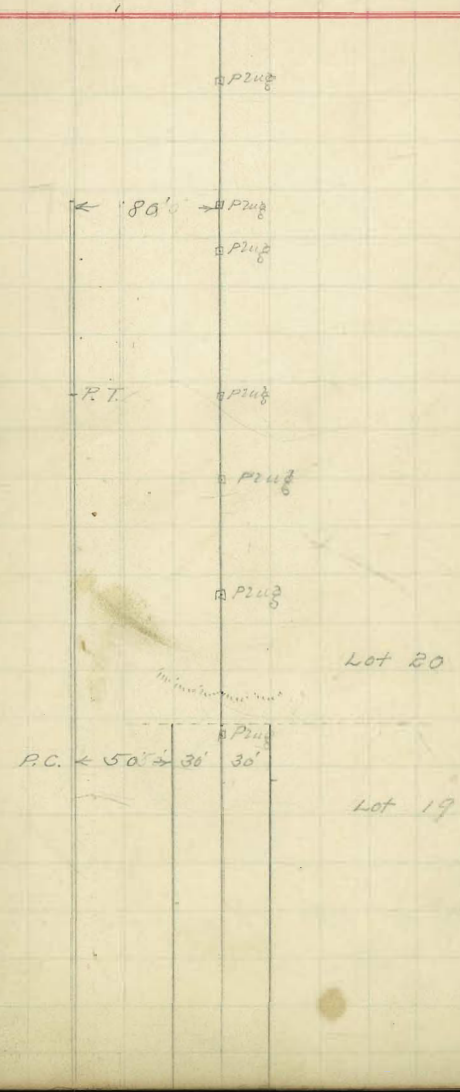
H 055'

50' 30' 30'

50' 30' 30'

Sorrento Line

Sta.		Azi.	Bearing	Mag. Bear.
206	+20	R 11° 18'	N 9° 18' E	N 4° 55' W
205				
204				
	+65	R 21° 25'	N 2° 00' W	N 16° 15' W
203				
	+81			
202				
201				
200				
	+75	R 1° 0'	N 23° 25' W	N 37° 35' W
199				
198		R 4° 15'	N 24° 25' W	N 38° 40' W
197				
196				
	+54	R 5° 46'	N 28° 40' W	N 42° 50' W
195				
194				
193				
	+60	R 3° 03'	N 34° 26' W	N 48° 45' W
192				
191				
190				
189				
188				
187				
186				

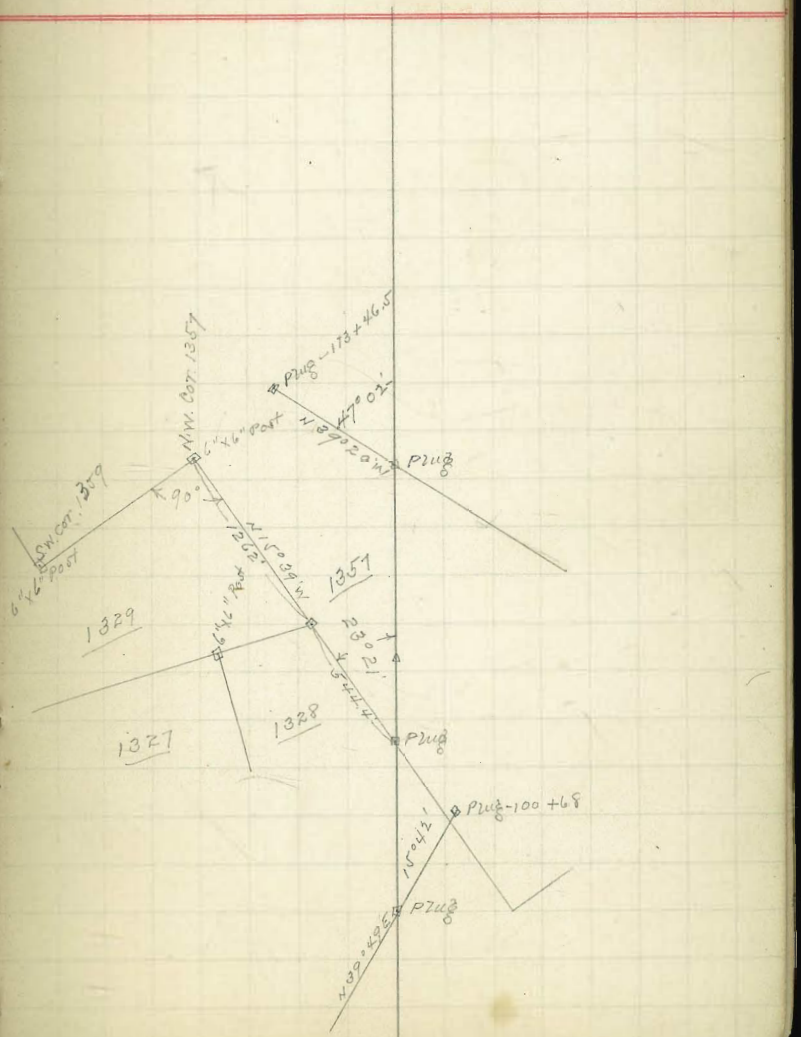


Sonente Line

Sta.	Ang.	Bearing	Mag. Bear.
211 +45.60			
210	163.3		
209 +82	0 L 6° 58'	N 2° 20' E	N 12° 0' W
208			
207	362'		

1/17/02 B. Line, Sta. 99+00 to Sta. 111+35, "Sorrento Line"

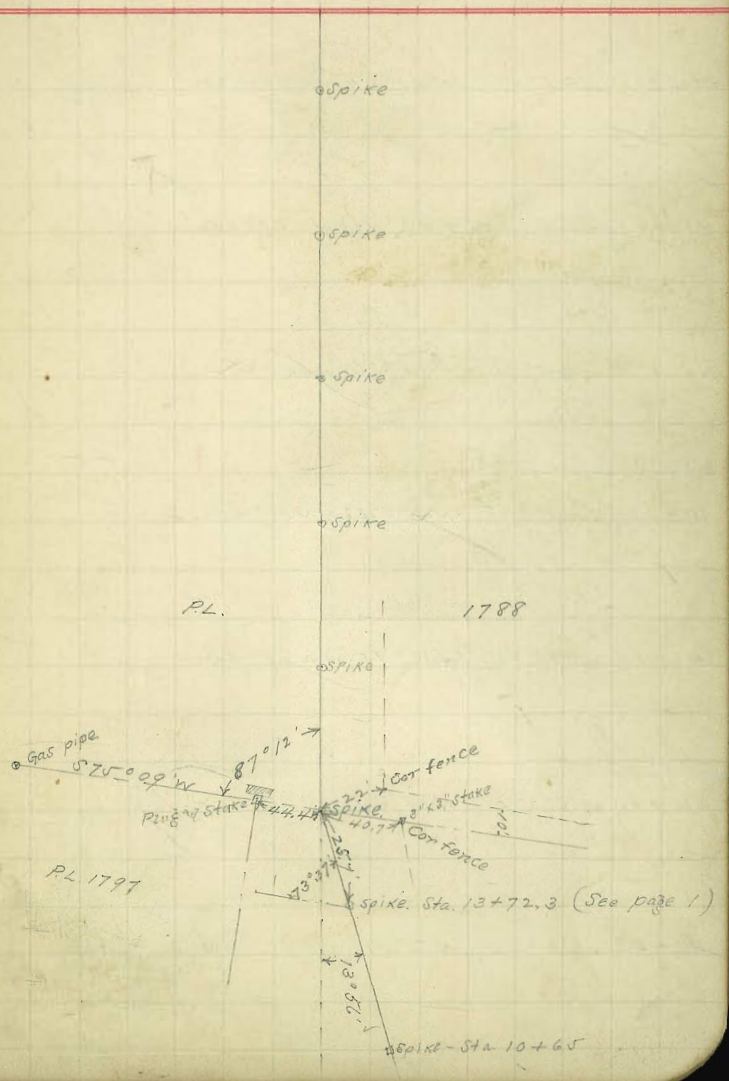
Sta.	Ang.	Bearing	Mag. Bear.		
14					
13					
12					
11					
10					
= 111+35 +12	△				
9					
8					
7					
6					
5+14	△				
4					
3 +50	0 L 16° 25'	N 7° 42' E	N 6° 45' W		
2					
1					
0 = 99	▷	N 24° 07' E	N 9° 40' E		



12/10/01
Rumsey, Transit
Kerr, Head chain
Daley, Rear - "

Survey of graded Road through Rose Cañon

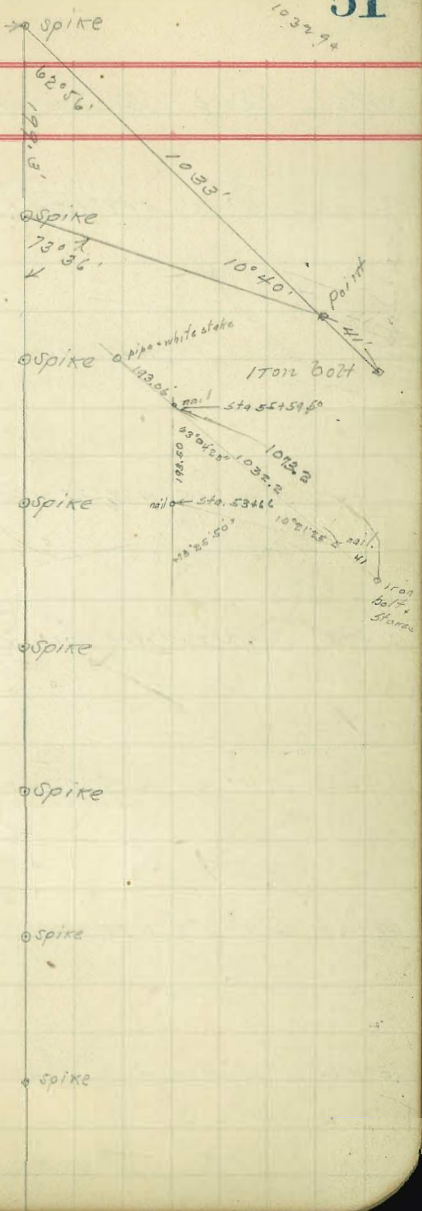
Sta.	Ang	Bearing	Mag. Bear.
25+84	R 2° 9½'	N 29° 49' W	N 44° 15' W
334'			
22+50	L 5° 24½'	N 31° 58½' W	N 46° 25' W
275'			
19+75	L 17° 49½'	N 26° 34' W	N 41° 0' W
1100'			
8+75	L 5° 8½'	N 8° 44½' W	N 23° 05' W
315'			
5+60	R 14° 03'	N 3° 36' W	N 18° 0' W
560'			
0		N 17° 39' W	N 32° 0' W



Rose Cañon Line

Sta.	Ang.	Bearing	Mag. Bear.	
53+66	R1°47½'	N41°54'W	N56°10'W	
521				
48+45	L9°15'	N43°41½'W	N57°55'W	
248'				
45+97	R8°16½'	N34°26½'W	N48°45'W	
270'				
43+27	L16°28'	N42°43'W	N56°55'W	
164'				
41+63	R8°31½'	N26°15'W	N40°35'W	
753'				
34+10	R22°05'	N34°46½'W	N49°10'W	
187				
32+23	L27°2½'	N56°51½'W	N71°10'W	* Last
639'				

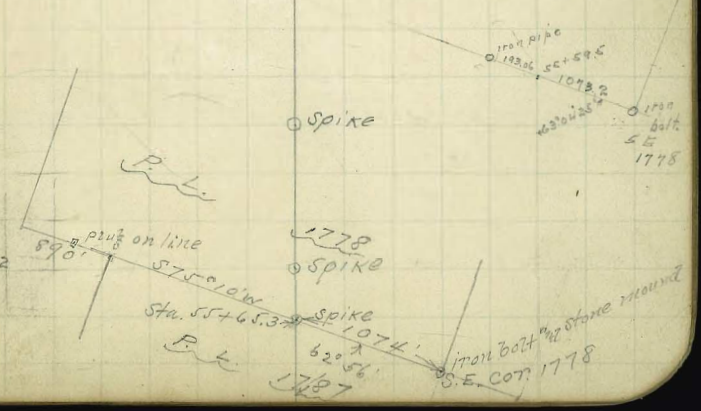
Log. 199.3 = 2.299507
Sin 73°36' = 9.981961
2.281468
Sin 10°40' = 9.267395
Log. 1033 = 3.014073



12/11/61

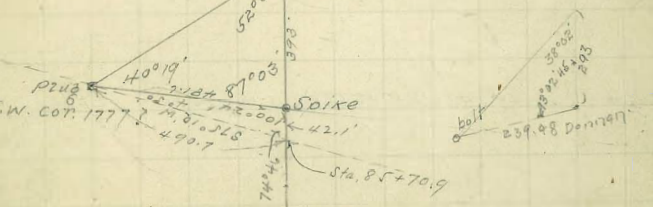
Rose Cañon Line

Sta.	Ang.	Bearing	Mag. Bear.		
76+98	⊙ L 9°12'	N48°13½'W	N62°30'W		⊙ Spike
166'					
75+32	⊙ R 28°25½'	N39°01½'W	N53°20'W		⊙ Spike
				75+12 R 20°41'	E = 8.0
177'					
73+57	⊙ L 41°35'	N67°27'W	N81°45'W		E = 10'-12 ⊙ Spike
164'					
71+93	⊙ R 27°20'	N25°52'W	N40°10'W		E 10-12 ⊙ Spike
215'					
69+28	⊙ R 17°10'	N53°12'W	N67°30'W		E 4-6 ⊙ Spike
144'					
67+84	⊙ L 33°58'	N70°22'W	N84°35'		E 9-11 ⊙ Spike
768'					
60+16 ✓	⊙ R 5°31'	N36°23'W	N50°40'W		E 1.0-2 ⊙ Spike
650					



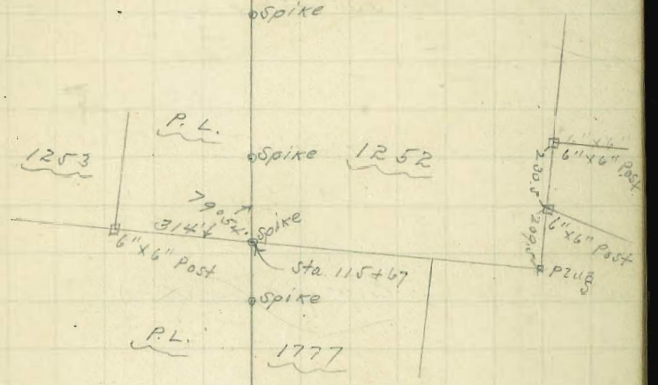
Poe Canon Line

Sta.	Angle	Bearing Mag. Bear.			
99+14	R 54° 12'	N 29° 41' E	N 15° 25' E		E 17-16 Spike
97+80	L 16° 31'	N 24° 31' W	N 38° 45' W	These two can be combined	E 5-10 Spike
96+12	L 24° 34'	N 8° 0' W	N 22° 20' W		E 7.0 - 11.0 Spike
93+59	R 11° 42½'	N 16° 34' E	N 2° 20' E		E 4.0 - 6.0 Spike
90+06	R 27° 29'	N 4° 51½' E	N 9° 25' W		E 10.0 - 12.0 Spike
86+13	R 7° 27'	N 22° 37½' W	N 36° 55' W		E 1-1.5 S.W. Cor. 1777 Spike
79+82	R 18° 09'	N 30° 04½' W	N 44° 20' W	= 79+80.31	Spike
		Equation			
				79+82.31	R 16° 41½' E = 4.0'



Rose Canon Line

Sta.	Ang.	Bearing	Mag. Bea.		
122+19	L 21° 43'	N 13° 32½' W	N 27° 45' W		Spike
200'					
120+19	R 33° 17½'	N 8° 10½' E	N 6° 05' W	P.L. 1253	Spike 1252
430'				79° 52' 314½'	Spike
113+89	R 18° 32½'	N 25° 07' W	N 39° 25' W	6"x6" Post	Sta. 115+67
138'					Spike
112+51	L 33° 0½'	N 48° 39½' W	N 57° 55' W	P.L.	1777
396'					Spike
109+55	R 41° 17'	N 10° 39' W	N 24° 55' W	E 7-10	Spike
158'					
107+97	L 44° 41½'	N 51° 56' W	N 66° 15' W	E 10'	Spike
83'					
107+14	L 36° 55½'	N 7° 14½' W	N 21° 20' W	E 10.	Spike
800'					



12/12/'01

Rose Cañon Line

Sta.	Ang.	Bearing	Mag. Bear		
134+97	L 28° 56'	N 36° 33½' W	N 50° 45' W		Spike
120'					
133+77	L 26° 50½'	N 7° 37½' W	N 21° 45' W		Spike
172'					
132+05	R 23° 09'	N 19° 13' E	N 5° 05' E		Spike
169'					
130+36	R 12° 43'	N 3° 56' W	N 18° 10' W		Spike
298'				pole 46.40	21.25' 205
127+38	R 41° 46'	N 16° 39' W	N 30° 55' W	40.6	Spike
257'				25.85	
124+81	L 30° 56'	N 58° 25' W	N 72° 40' W		Spike
136'					
123+45	L 13° 56½'	N 27° 29' W	N 41° 40' W		Spike
126'					

Rose Cañon Line

Sta.	Ang.	Bearing	Mag. Bear.
157+69	L 11°34'	N 22°28' W	N 36°50' W
500'			
152+69	L 5°32½'	N 10°54' W	N 25°10' W
369'			
149+00	R 43°00'	N 5°21½' W	N 19°40' W
100'			
148+00	L 16°42'	N 48°21½' W	N 62°40' W
715'			
140+85	L 5°36'	N 31°39½' W	N 46°0' W
272'			
138+13	L 35°34½'	N 26°03½' W	N 40°20' W
148'			
136+65	R 46°04½'	N 9°31' E	N 4°40' W
168'			

12/13/9

DEPARTMENT OF PU

DAILY SURVEY TIM

JOB

NAME AND RATE

ITEM

Reconnaissance
Prelim. C/L
Location C/L
Levels
Cross Sections
Topography
Drainage
Right of Way
Lost Time

1 2 3 4 5 6 7

XXXXXXX

Survey Total
Prelim. Hard Copy
Projection
Cross Sections
Quantities

125

Hard Copy Sheet #3

Survey - N 31° 39½' W 715' P. 56 F.B. 125 - Sta 140+85 -

Plotted. " 710.65

O.K. ahead.

Hard Copy Sheet #4

Survey N 13°43'E 391' P.59 F.B. 125 Sta 4+82 -

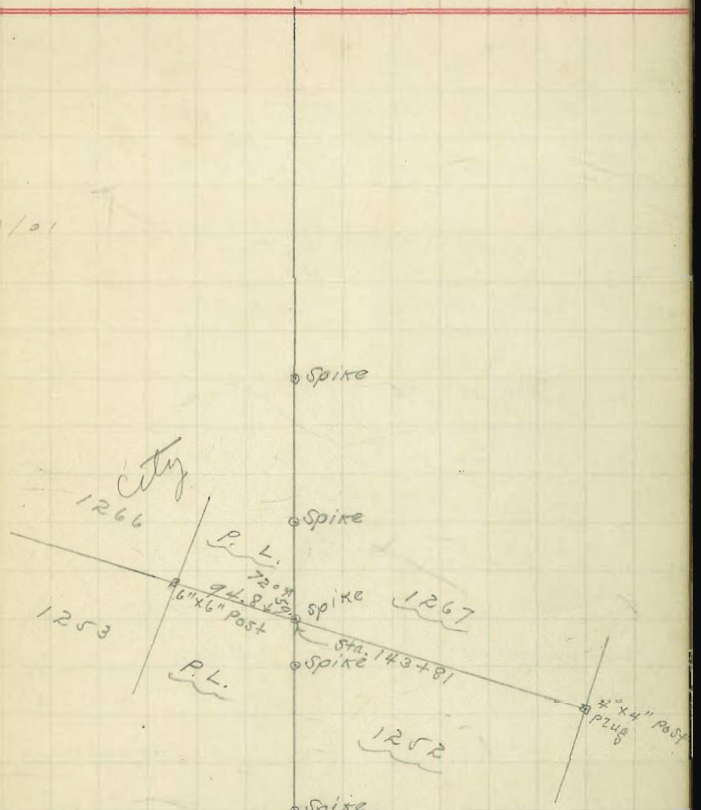
Plotted " 226.21'

No courses some ahead.

Rose Canon Line

Sta.	Ang.	Bearing	Mag. Bear.	
157+69				
		∠ 11° 34'	N 22° 28' W	N 36° 50' W
	500'			
152+69		∠ 5° 32½'	N 10° 54' W	N 25° 10' W
	369'			
149+00		R 43° 00'	N 5° 21½' W	N 19° 40' W
	100'			
148+00		∠ 16° 42'	N 8° 21½' W	N 26° 40' W
	71.5'			
140+85		∠ 5° 36'	N 31° 39½' W	N 46° 0' W
	272'			
138+13		∠ 35° 34½'	N 26° 03½' W	N 40° 20' W
	140'			
136+65		R 46° 04½'	N 9° 31' E	N 4° 40' W
	168'			

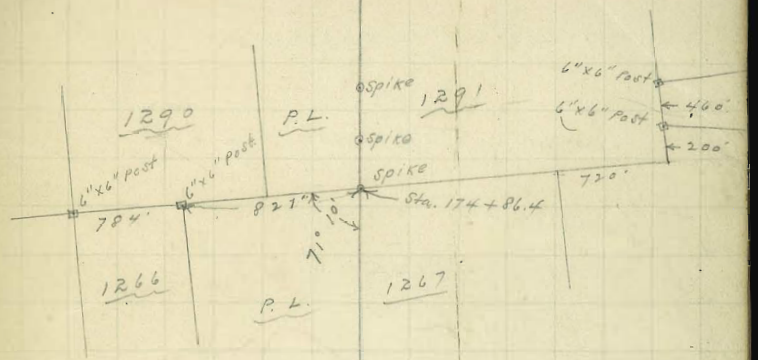
12/13/01



12/19/01

Rose Cañon Line

Sta.		Ang.	Bearing	Mag. Bear.
177				
176	+47	L37° 07½'	N52° 20½' W	N66° 40' W
175	+36	L19° 10'	N15° 13' W	N29° 35' W
174	+75	L19° 54'	N3° 57' E	N10° 25' W
173	+51	L35° 08'	N23° 51' E	N9° 35' E
172	+84	R68° 46½'	N58° 59' E	N44° 40' E
171	+23	L43° 44'	N9° 47½' W	N24° 05' W
170	+42	L37° 52½'	N33° 56½' E	N19° 40' E
169	+17	R62° 23'	N71° 49' E	N57° 30' E
168	+18	L20° 04'	N9° 26' E	N4° 55' W
167				
166				
165				
164				
163				
162	+59	R32° 28'	N29° 30' E	N15° 15' E
159	+81	R19° 30'	N2° 58' W	N17° 05' W



12/19/01

Rose Canon Line

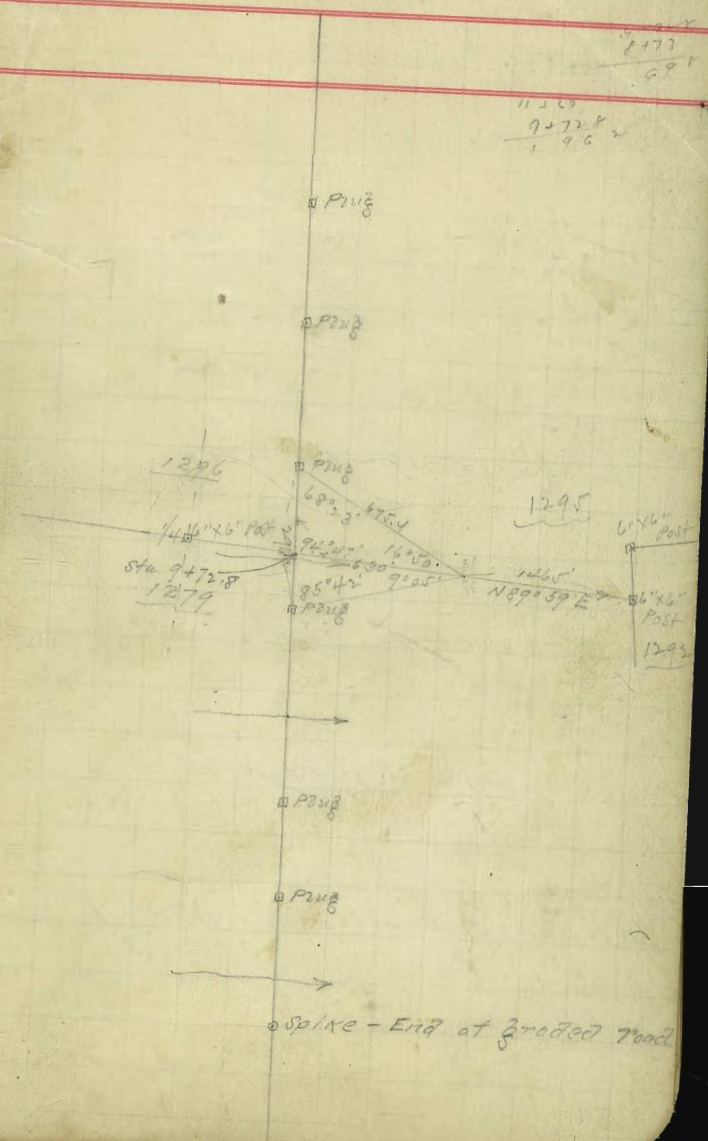
Sta.		Ang.	Bearing	Mag. Bear.	
198	+80	⊙L 7° 40½'	N 9° 14' W	N 23° 35' W	⊙Spike
197		240'			
196	+40	⊙L 10° 45½'	N 1° 33½' W	N 15° 55' W	⊙Spike
195		255'			
194	+85	⊙R 22° 37'	N 9° 12' E	N 5° 10' W	⊙Spike
193					
192					
191		317'			
190					
189					
188	+68	⊙L 8° 0½'	N 13° 25' W	N 27° 40' W	⊙Spike
187	+30	⊙R 15° 41'	N 5° 24½' W	N 19° 45' W	⊙Spike
186		265'			
185					
184	+65	⊙L 10° 50'	N 21° 05½' W	N 35° 30' W	⊙Spike
183		244'			
182	+51	⊙L 8° 23½'	N 10° 15½' W	N 24° 35' W	⊙Spike
181		172'			
180	+79	⊙R 19° 46'	N 1° 52' W	N 16° 15' W	⊙Spike
179	+33	⊙L 52° 45½'	N 21° 38' W	N 36° 05' W	⊙Spike
178	+02	131' ⊙R 83° 28'	N 31° 07½' E	N 16° 45' E	⊙Spike

1/7/01
Pinney
Kerr
Cavin

Rose Canon Line

Sta.	Ang.	Bearing	Mag. Bear.
18			
17 +13	⊙L 12°55'	N5°03'W	N19°25'W
16			
15	250		
+63	⊙R 5°28'	N7°52'E	N6°30'W
14			
13	294		
12			
+69	⊙R 7°12'	N2°24'E	N11°55'W
11			
10	296		
9			
+73	⊙L 18°31'	N4°48'W	N19°10'W
8			
7			
6	391		
5			
+82	⊙R 11°08'	N13°43'E	N0°35'W
4			
3	212		
+70	⊙R 16°51'	N2°35'E	N11°50'W
2			
1	270		
0			
201 +73	⊙L 5°02'	N14°16'W	N28°40'W
	293		

Survey for proposed extension of road from the end of graded portion, to a connection with "Main Line" at Sta. 1+22



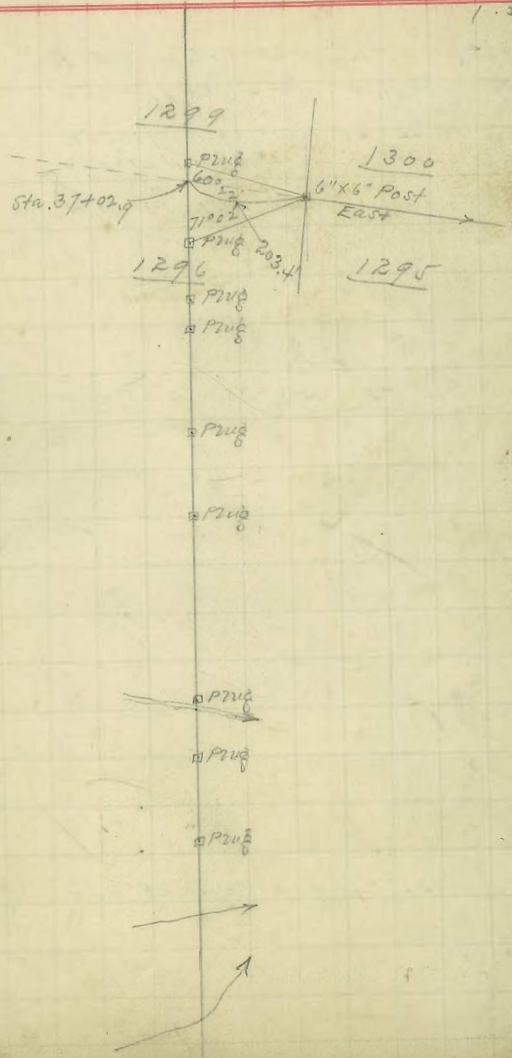
Pon Canon Line

Sta.	Ang.	Bearing	Mag. Bear.
39			
38			
37 +37	⊙L 4° 41'	N 25° 56' W	N 40° 10' W
36	173		
+64	⊙L 17° 15'	N 21° 15' W	N 35° 30' W
35	114		
+50	⊙L 16° 49'	N 4° 00' W	N 18° 10' W
34	151		
33 +99	⊙R 10° 13'	N 12° 49' E	N 1° 25' W
32	525		
31 +71	⊙L 39° 57'	N 2° 36' E	N 11° 35' W
30	171		
29	⊙R 29° 23'	N 42° 33' E	N 28° 20' E
28	295		
27			
26 +25	⊙L 6° 13'	N 13° 10' E	N 1° 05' W
25	314		
24			
23 +11	⊙R 24° 26'	N 19° 23' E	N 5° 05' E
22			
21	598		
20			
19			

314.0
48.4
265.6

37+37
029
34.1

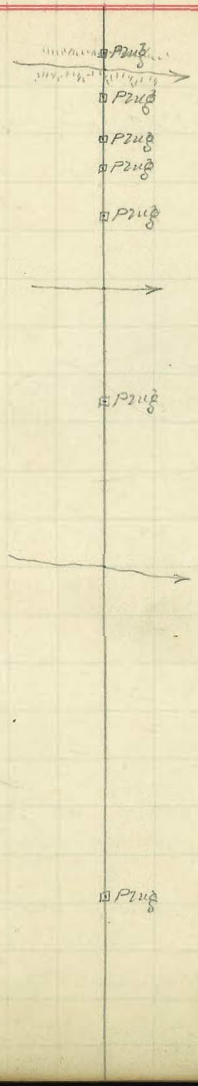
37+029
35+64
1.389



Rose Cañon Line

Sta.		Ang.	Bearing	Mag. Bear.
60	+72	⊙ R 27°15'	N 27°56'E	N 13°45'E
	+85	⊙ R 62°18'	N 0°41'E	N 13°35'W
59	+95	⊙ L 48°48	N 61°37'W	N 75°50'W
58	+40	⊙ L 23°35'	N 12°49'W	N 27°05'W
57	+32	⊙ R 30°11'	N 10°46'E	N 3°30'W
56				
55				
54				
53	+45	⊙ L 4°55'	N 19°25'W	N 33°40'W
52				
51				
50				
49				
48				
47				
46				
45				
44				
43	+07	⊙ R 11°26'	N 14°30'W	N 28°45'W
42				
41				
40				

87
90
108
85
385
1038
570



Rose Canon Line

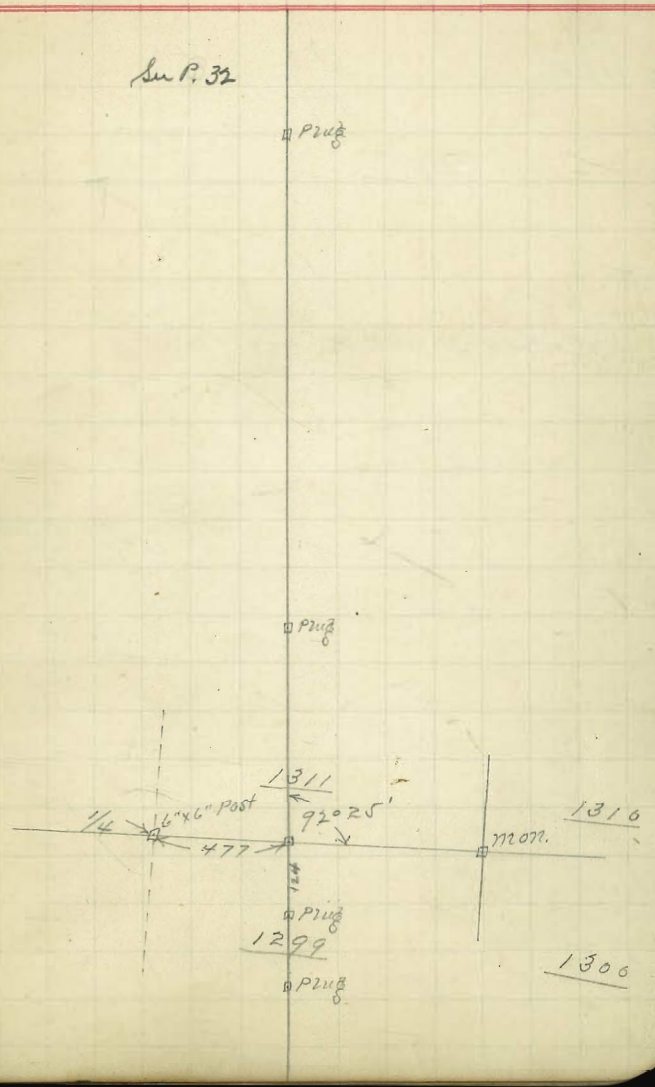
Sta.	Ang.	Bearing	Mag. Bear.
81			
80	⊙ L 43°05'	N 45°29' W	N 59°40' W
79			
78			
77			
76			
75			
74			
73			
72			
71			
70			
+93 △			
69			
68			
67			
66			
65 +20 △			
64			
+96	⊙ L 6°01'	N 22°24' W	N 16°35' W
63			
62 +29	⊙ L 24°19'	N 3°37' E	N 10°35' W
61			

1604

167

137

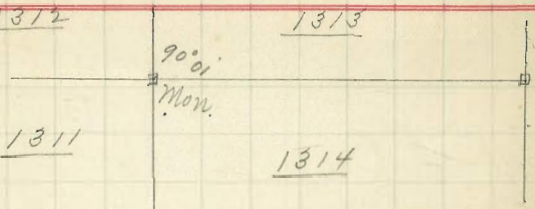
See P. 32



Aloe Cañon Line

Sta.	Anz	Bearing	Mag. Bear.		
= 199+22					
102+08.50 ⊙					
101					
100					
99					
98					
97					
96 +51 ⊙	L 44°31'	WEST	S 75°50' W		
95					
94					
93					
92					
91					
90					
89					
88					
87					
86					
85					
84					
83					
82					

1651

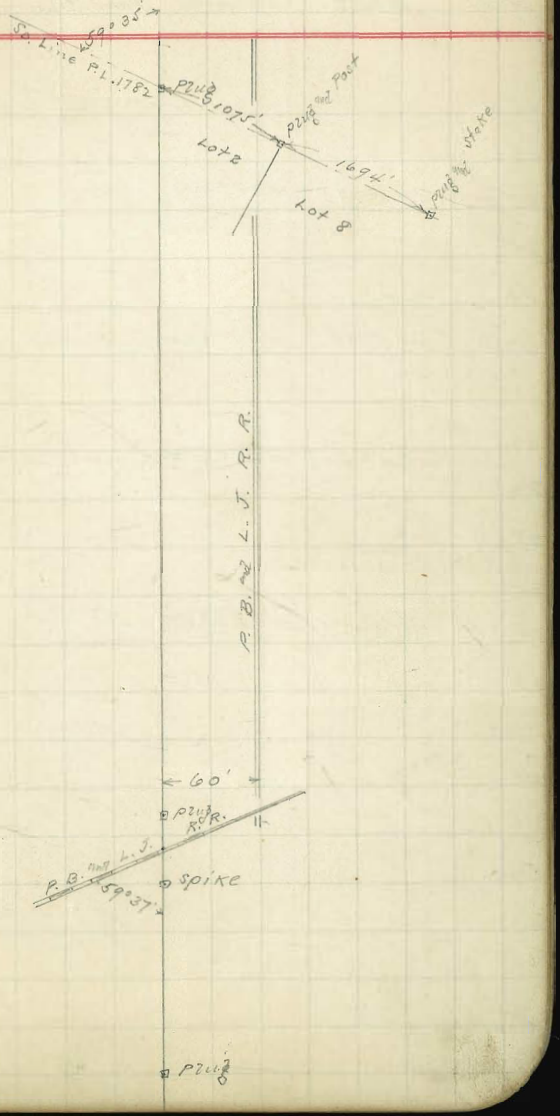


Proj. Line bet. 1311 & 1314

12/7/31.

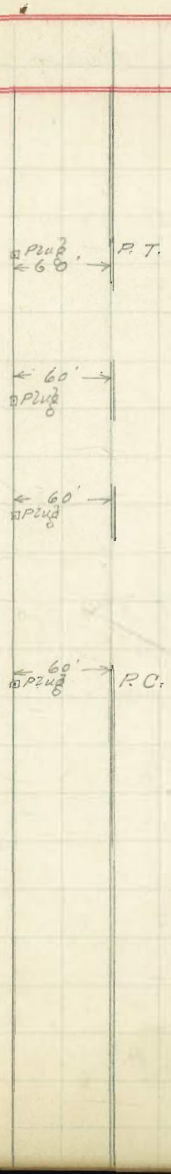
A Line — Survey of Road West of Motor to Sta. 139+58.7. Prospect and Parma Sts, La Jolla — Track from Sta. 182+08.5 ("Main Line")

Sta.	Orig.	Bearing	Mag Bem
+70	Δ		
16			
15			
14			
13			
12			
11			
10			
9			
8			
7			
6			
5			
4			
3			
2			
+69	⊙R 59° 37'	N45°37'W	N59°25'W
1 +69.5			
0 = 182+08.5	Δ "Main Line"	S74°46'W	S61° 0'W
167+88.6	"Main Line"		



A Line

Sta.	Ang.	Bearing	Mag. Bear.
37			
36			
35+13	Δ R 2°30'	N 28°40' W	N 42°35' W
34			
33			
32+10	Δ R 5°10'	N 31°10' W	N 45°05' W
31			
30			
+84	Δ R 5°48'	N 36°20' W	N 50°15' W
29			
28			
27			
26+13.4	Δ R 3°29'	N 42°08' W	N 56°00' W
25			
24			
23			
22			
21			
20			
19			
18			
17			



A Line

(68)

68

Sta.	Ang.	Bearing	Mag. Bear.		
58					
57					
56					
55					
54					
53 +20					
52					
51					
50					
49					
48					
47					
46					
45					
44					
43					
42					
41					
40					
39					
38					

A Line

Sta.	Ang.	Bearing	Mag. Bear.	
79				
+92	⊙R 7°47'	N 13°33'W	N 27°30'W	
78				
77				
76 +40	⊙R 4°16'	N 21°20'W	N 35°15'W	
75				
74				
73 +40	⊙R 3°04'	N 25°36'W	N 39°30'W	
72				
71				
70				
69				
68				
67				
66				
65				
64				
63				
62				
61				
60				
59				

Plug ⊠ 60'

Plug ⊠ 60'

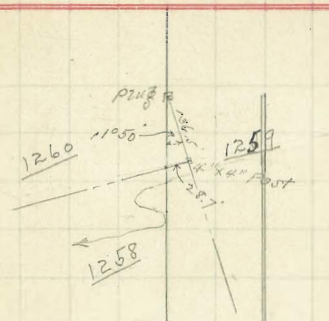
Plug ⊠ 60' P.C.

60'

12/17/01

A Line

Sta.	Adj.	Bearing	Mag. Bear.		
100					
+72.3	⊙L 11° 50'	N16° 02' W	N29° 50' W		
99					
98 +33	⊙				
97					
96					
95					
94					
93					
92					
91					
90					
89					
88					
87					
86 +45	⊙R 2° 57'	N 4° 12' W	N18° 0' W		
85					
84					
83					
82 +28	⊙R 6° 24'	N 7° 09' W	N21° 05' W		
81					
80					



⊙ 60' P.T.

Pin ⊙ 60'

A Line

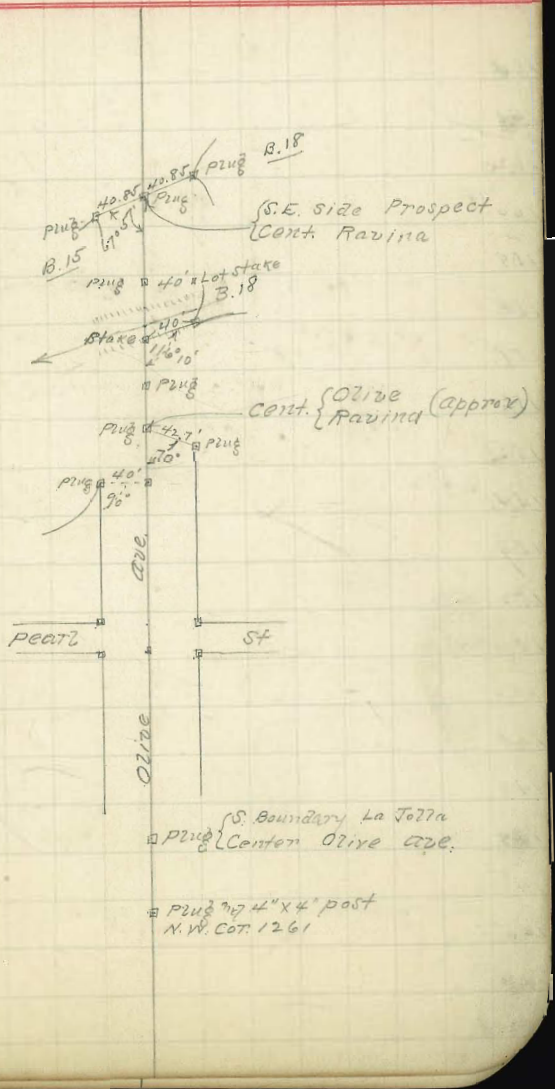
(71)

71

Sta.	Ang.	Bearing	Mag. Bear.		
121					
120					
119					
118					
117					
116					
115					
114					
113					
112					
111					
110 +50					
109					
108					
107					
106					
105					
104					
103					
102					
101					

A Line

Sta.	Ang.	Bearing	Mag. Bar.
142			
141			
140			
139 +58.7			
138			
137 +95	L21°43'	N46°34'W	N60°25'W
136 +62.5	L24°45'	N24°51'W	N38°35'W
135 +66	L16°59'	N0°06'W	N13°50'W
134 +73	R33°0'	N16°53'E	N3°10'E
133 +59.5			
132			
131			
130 +08.5			
129			
128			
127			
126 +08.8	L90°01'	N16°07'W	N30°15'W
125			
124 +74.4	R89°56'	N73°54'E	N59°35'E
123			
122			

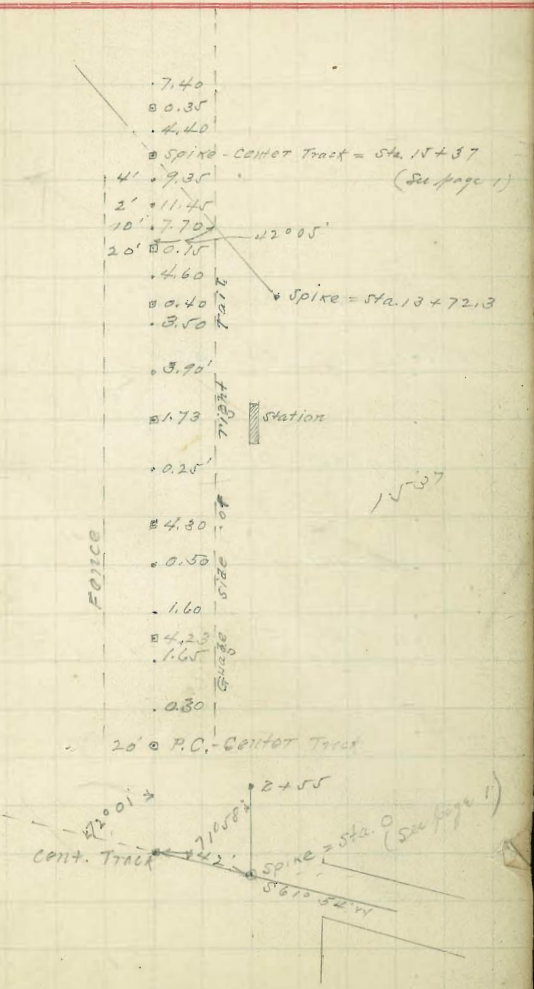


Sta.	Ang.	Bearing	Mag. Bear		
164					
163					
162					
160					
159					
158					
157					
156					
155					
154					
153					
152					
151					
150					
149					
148					
147					
146					
145					
144					
143					

11/27/01 Survey of Pacific Beach and La Jolla Track, near the Race Track

Ramsey
Kerr
Daley

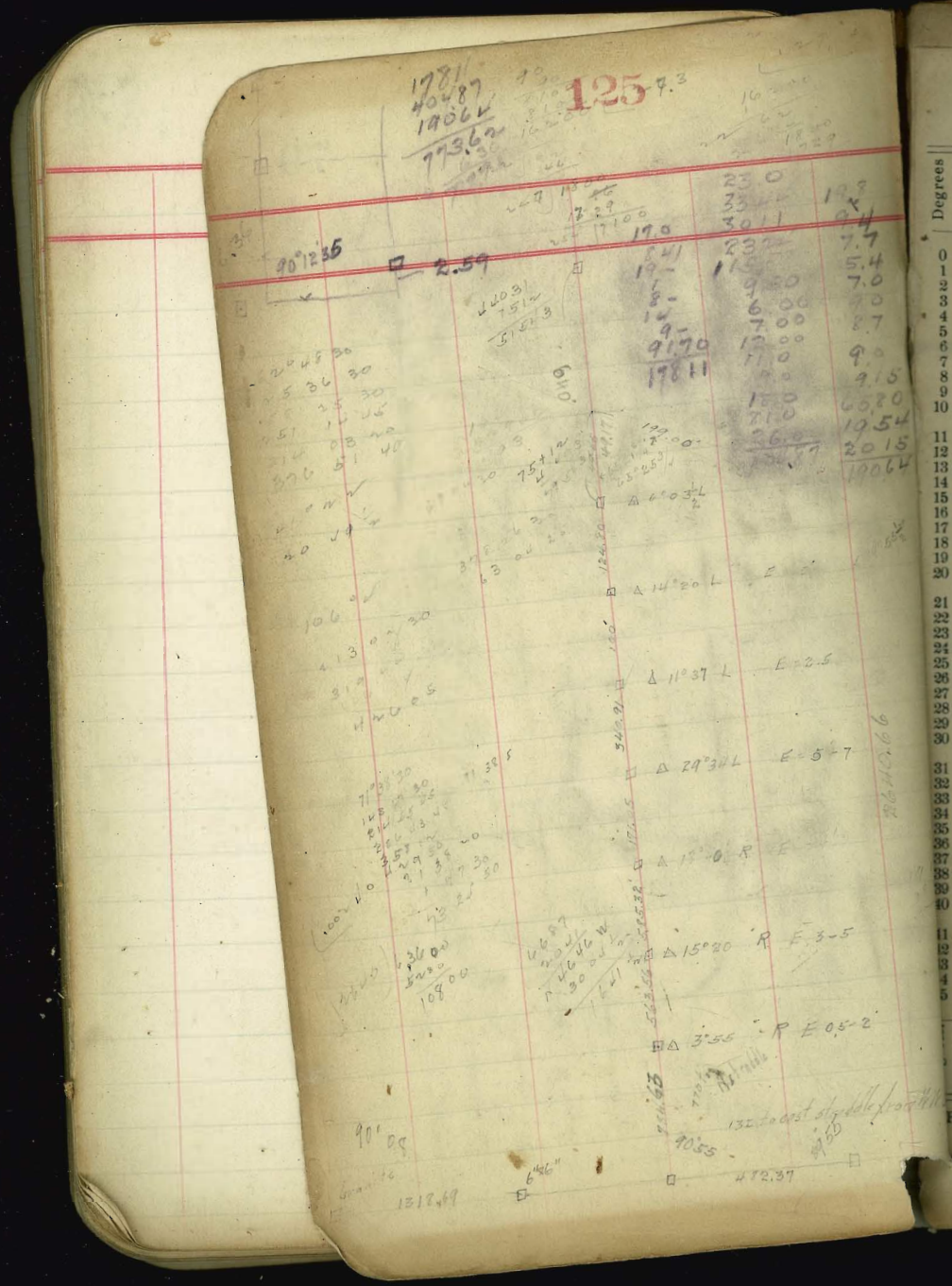
Sta	Ang	Bearing
16		
15 +55.5	L 19° 25'	S 79° 38' W
14 +46.8	L 17° 51'	N 80° 57' W
13 +50		
12 +58	L 20° 50'	N 63° 06' W
11 +39	L 14° 29'	N 42° 16' W
10		
9	R 1° 05'	N 27° 47' W
8		
7 +93	R 7° 22'	N 28° 52' W
6		
5		
4 +48	R 7° 23'	N 36° 14' W
3		
2 +32	R 2° 28'	N 43° 37' W
1		
0		N 46° 05' W



32	+55.7	L 1° 41'	S46° 18' W
31	+36.8	L 6° 35'	S47° 59' W
30			
29		L 9° 39'	S54° 34' W
28			
27		L 7° 14'	S64° 13' W
26			
25	+12.8 +06.8	L 1° 51'	S71° 27' W
24			
23	+57		
22			
21			
20			
19			
18	+24 +08		
17	+40	L 16° 20'	S73° 18' W

Tangent

P.T. Cent. Track
3.4
Sta. 32+01.4 plug — spike = Sta. 32+41.4 – Cent. Track
4.65
89°03'
6.0
0.55
4.50
1.80
4.50
P.C. – Center Track
West end of Bridge
East end of Bridge
West End of Bridge
East " " "
P.T. – Cent. Track
6.50



TRAVERSE TABLE FOR TRANSIT BOOK.

From 1° to 90° for a distance of 100.

Degrees	DEGREES.		¼ DEGREE.		½ DEGREE.		¾ DEGREE.		Degrees.
	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	
0			100.00	0.44	100.00	0.87	99.99	1.31	89
1	99.98	1.75	99.98	2.18	99.97	2.62	99.95	3.05	88
2	99.94	3.49	99.92	3.93	99.91	4.36	99.88	4.80	87
3	99.86	5.23	99.84	5.67	99.81	6.10	99.79	6.54	86
4	99.76	6.98	99.73	7.41	99.69	7.85	99.66	8.28	85
5	99.62	8.72	99.58	9.15	99.54	9.58	99.50	10.02	84
6	99.45	10.45	99.41	10.89	99.36	11.32	99.31	11.75	83
7	99.25	12.19	99.20	12.62	99.14	13.05	99.09	13.49	82
8	99.03	13.92	98.97	14.35	98.90	14.78	98.84	15.21	81
9	98.77	15.64	98.70	16.07	98.63	16.50	98.56	16.93	80
10	98.48	17.36	98.40	17.79	98.33	18.22	98.25	18.65	79
11	98.16	19.08	98.08	19.51	97.99	19.94	97.90	20.36	78
12	97.81	20.79	97.72	21.22	97.63	21.64	97.53	22.07	77
13	97.44	22.50	97.34	22.92	97.24	23.34	97.13	23.77	76
14	97.03	24.19	96.92	24.62	96.81	25.04	96.70	25.46	75
15	96.59	25.88	96.48	26.30	96.36	26.72	96.25	27.14	74
16	96.13	27.56	96.00	27.98	95.88	28.40	95.76	28.82	73
17	95.63	29.24	95.50	29.65	95.37	30.07	95.24	30.49	72
18	95.11	30.90	94.97	31.32	94.83	31.73	94.69	32.14	71
19	94.55	32.56	94.41	32.97	94.26	33.38	94.12	33.79	70
20	93.97	34.20	93.82	34.61	93.67	35.02	93.51	35.43	69
21	93.36	35.84	93.20	36.24	93.04	36.65	92.88	37.06	68
22	92.72	37.46	92.55	37.86	92.39	38.27	92.22	38.67	67
23	92.05	39.07	91.88	39.47	91.71	39.87	91.53	40.27	66
24	91.35	40.67	91.18	41.07	91.00	41.47	90.81	41.87	65
25	90.63	42.26	90.45	42.66	90.26	43.05	90.07	43.44	64
26	89.88	43.84	89.69	44.23	89.49	44.62	89.30	45.01	63
27	89.10	45.40	88.90	45.79	88.70	46.17	88.50	46.56	62
28	88.29	46.95	88.09	47.33	87.88	47.72	87.67	48.10	61
29	87.46	48.48	87.25	48.86	87.04	49.24	86.82	49.62	60
30	86.60	50.00	86.38	50.38	86.16	50.75	85.94	51.13	59
31	85.72	51.50	85.49	51.88	85.26	52.25	85.04	52.62	58
32	84.80	52.99	84.57	53.36	84.34	53.73	84.10	54.10	57
33	83.87	54.46	83.63	54.83	83.39	55.19	83.15	55.56	56
34	82.90	55.92	82.66	56.28	82.41	56.64	82.16	57.00	55
35	81.92	57.36	81.66	57.71	81.41	58.07	81.16	58.42	54
36	80.90	58.78	80.64	59.13	80.39	59.48	80.13	59.83	53
37	79.86	60.18	79.60	60 53	79.34	60.88	79.07	61.22	52
38	78.80	61.57	78.53	61.91	78.26	62.25	77.99	62.59	51
39	77.71	62.93	77.44	63.27	77.16	63.61	76.88	63.94	50
40	76.60	64.28	76.32	64.61	76.04	64.94	75.76	65.28	49
41	75.47	65.61	75.18	65.93	74.90	66.26	74.61	66.59	48
42	74.31	66.91	74.02	67.24	73.73	67.56	73.43	67.88	47
43	73.14	68.20	72.84	68.52	72.54	68.84	72.24	69.15	46
44	71.93	69.47	71.63	69.78	71.33	70.09	71.02	70.40	45
45	70.71	70.71							
	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Degrees.
	DEGREES.		¾ DEGREE.		½ DEGREE.		¼ DEGREE.		

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