1339

EAST

FIELD BOOK

No. 885

ENGINEERING DEPARTMENT
CITY OF SAN DIEGO.
CALIFORNIA.

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

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SOLEDAD VALLEY ROUTE	
Stadia Survey in Valley	1
Government Canyon Line	13
Sorrento Canyon Line -	21
Alley 7 La Jolla	33

Sta.	Deflection Lt.	Deflection Rt.	Rod Reading	Dist.	Mag. Bear
# 2	P.O.T.		7.00 4.54 2.46 492'		
# 1	19°15' 38°30'		13.00 6.44 6.56 1312	1312' 199'	
# 0	14°16' - Single 28°32' - Double		7.00 5.01 199'		

Stadia Survey

SOLEDAD VALLEY ROUTE

From

State Highway Easterly to Sorrento.

1

Cultivated Field

Culvert
Sta. 2+50
32. - 2 A

S.D.

Apr. 25th, 1929
Norman Coote
Frank Osborne
A.F. Hilbourne Rod.
A.L. Remmen Stk's.

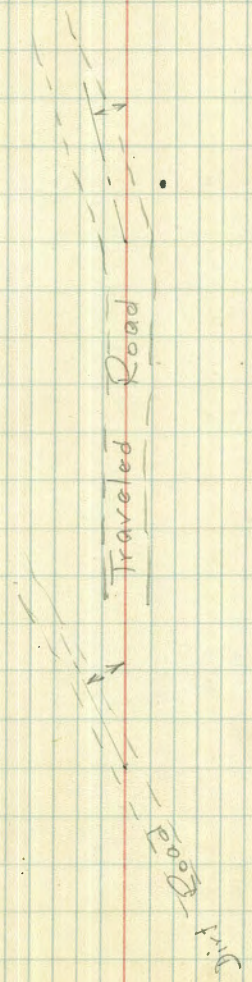
14½'

Old Pavement

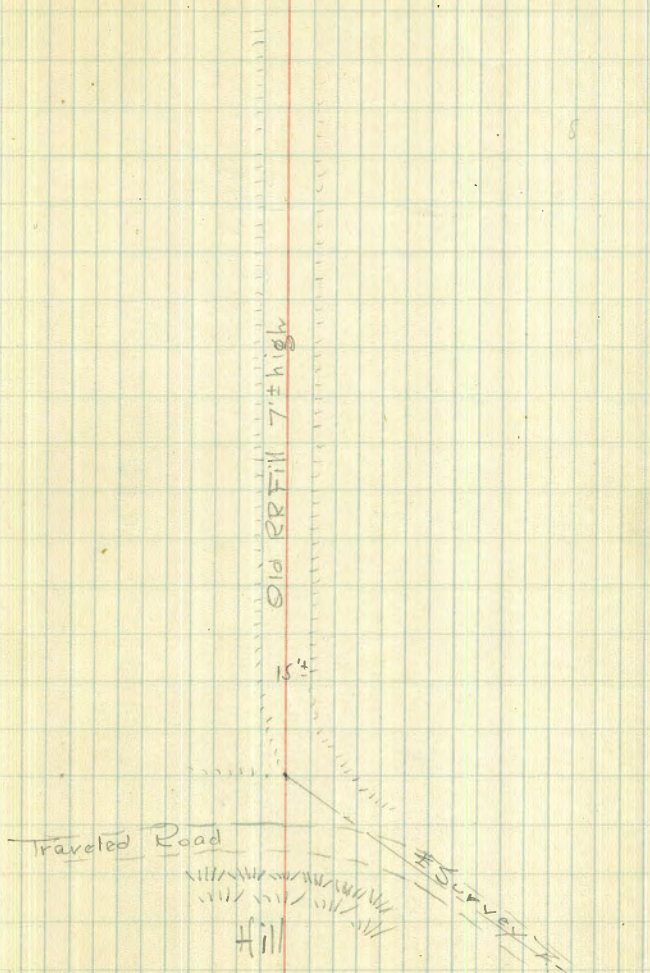
State Highway to

To Del Mar

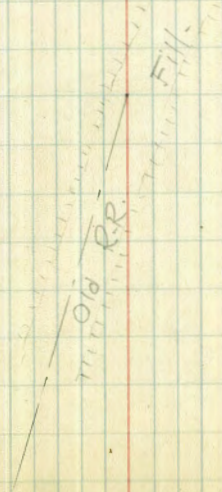
Sta.	Deflection Lt.	Deflection Rt.	Rod Reading	Dist.	Mag. Bearing-
				1918'	
#4	7°22' 14°44'		13.00 3.41 9.59 1918'		
				1114'	
#3	25°06' 50°13'		7.00 1.43 5.57 1114'		
				492'	



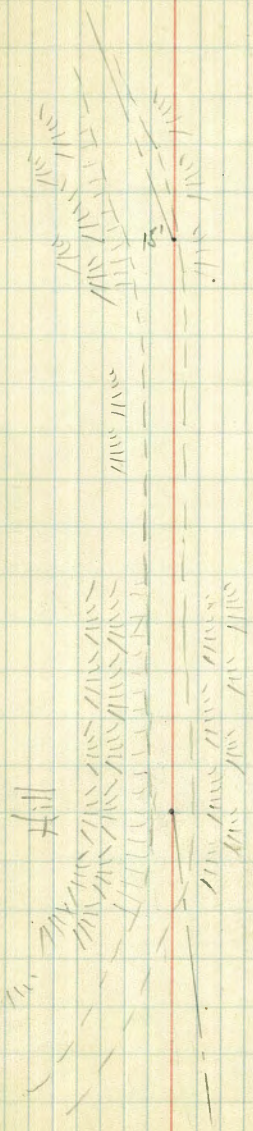
Sta.	Deflection Lt.	Deflection Rt.	Rod Reading	Dist.	Mag. Bear.
#6	P.O.T.		13.00 1.78 11 22'		
				1286	S 1°0' E
#5		44°55' 89°19	13.00 6.57 6 43		
			12 86		



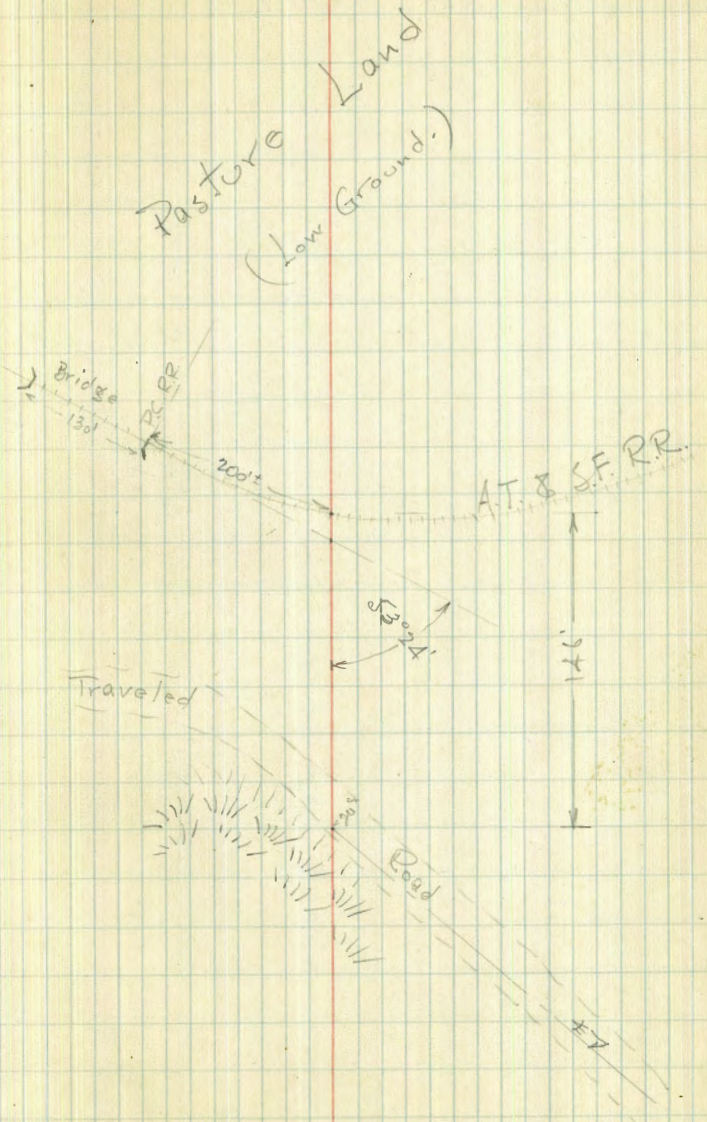
Sta	Deflection Lt.	Deflection Rt.	Rod Reading	Dist.	Mag. Bearing
# 8	3°30' 7°00'		13.00 6.77 6.23 12.46		
				65.2'	
				540.1'	
#7	P.O.T.		13.00 6.48 6.52		
				112.2'	



Sta.	Deflection Lt.	Deflection Rt.	Rod Reading	Dist.	Mag. Bearing.
#10	5°17' 10°34½		7.43'	536'	S 40° E
#9		1°46' 3°32'	13.00 7.64 5.36'	1246'	S 42° E



Sta.	Deflection Lt.	Deflection Rt.	Rod Reading	Dist.	Mag. Bearing
# 11		46° 18' 92°36'	13.00 7.54 5.46 1092'	1092' 243'	S 1° W S 45-1/2 E

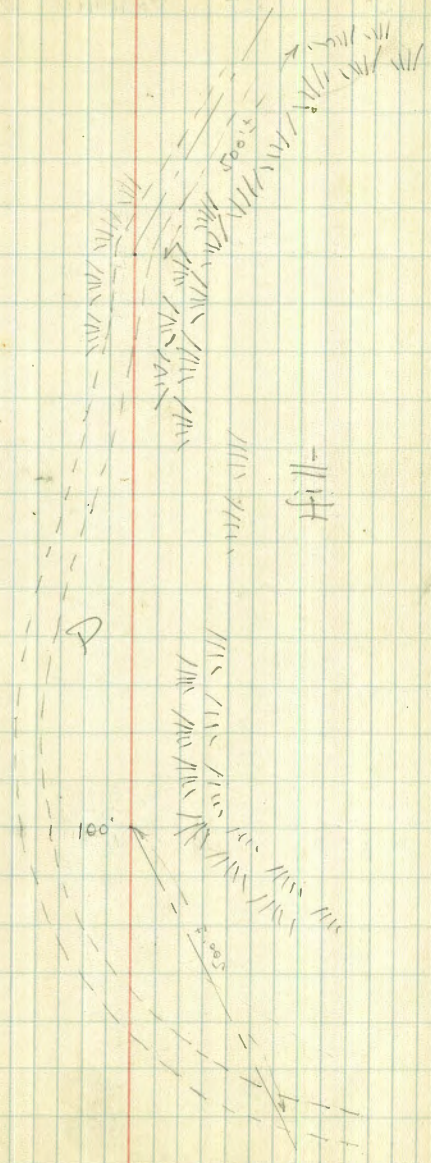


Sta	Deflection Lt.	Deflection Rt.	Rod Reading	Dist.	Mag. Bearings
#13	P.O.T.		13.00 6.82 7 18' 14 36'		
				732'	S 60° E
#12	61° 25' 122° 50'		7.00 3.34 3.66' 7 32'		
					S 1° W

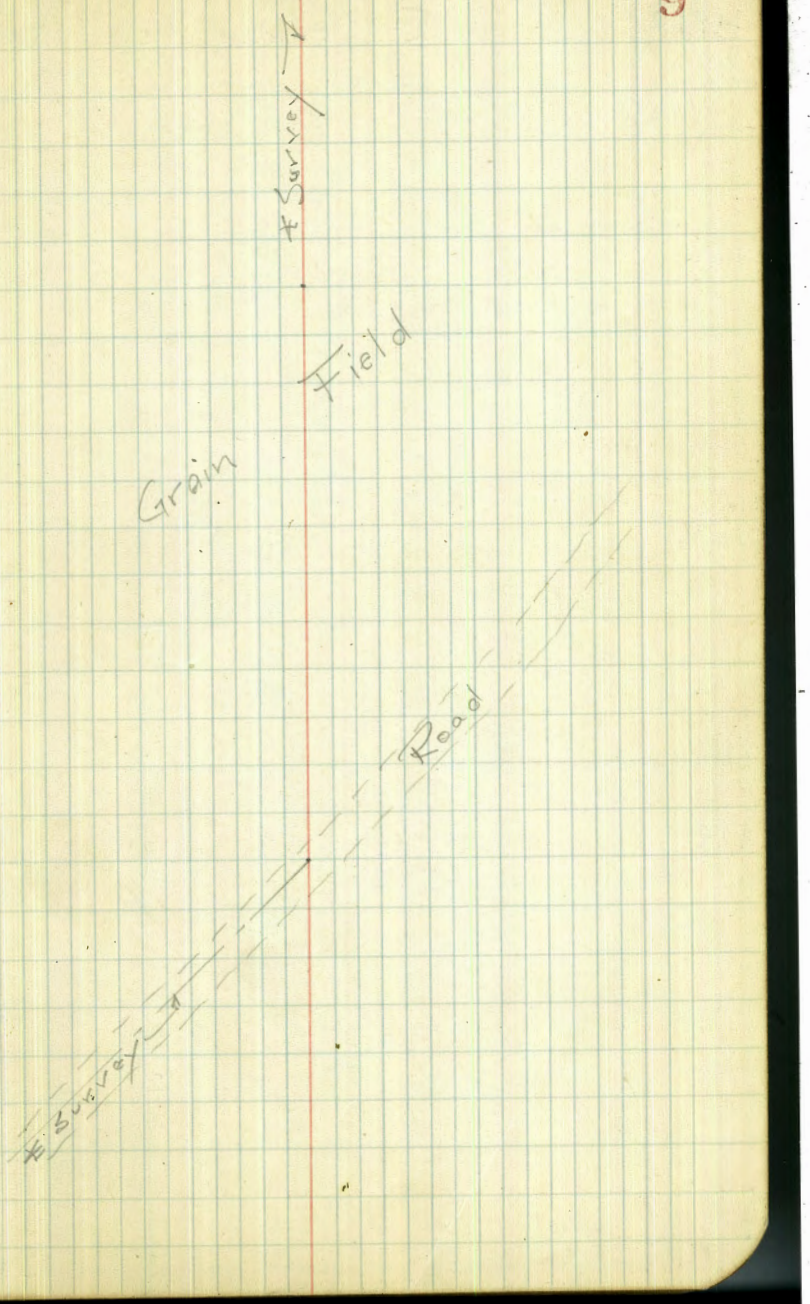
Cultivated Land

Pasture

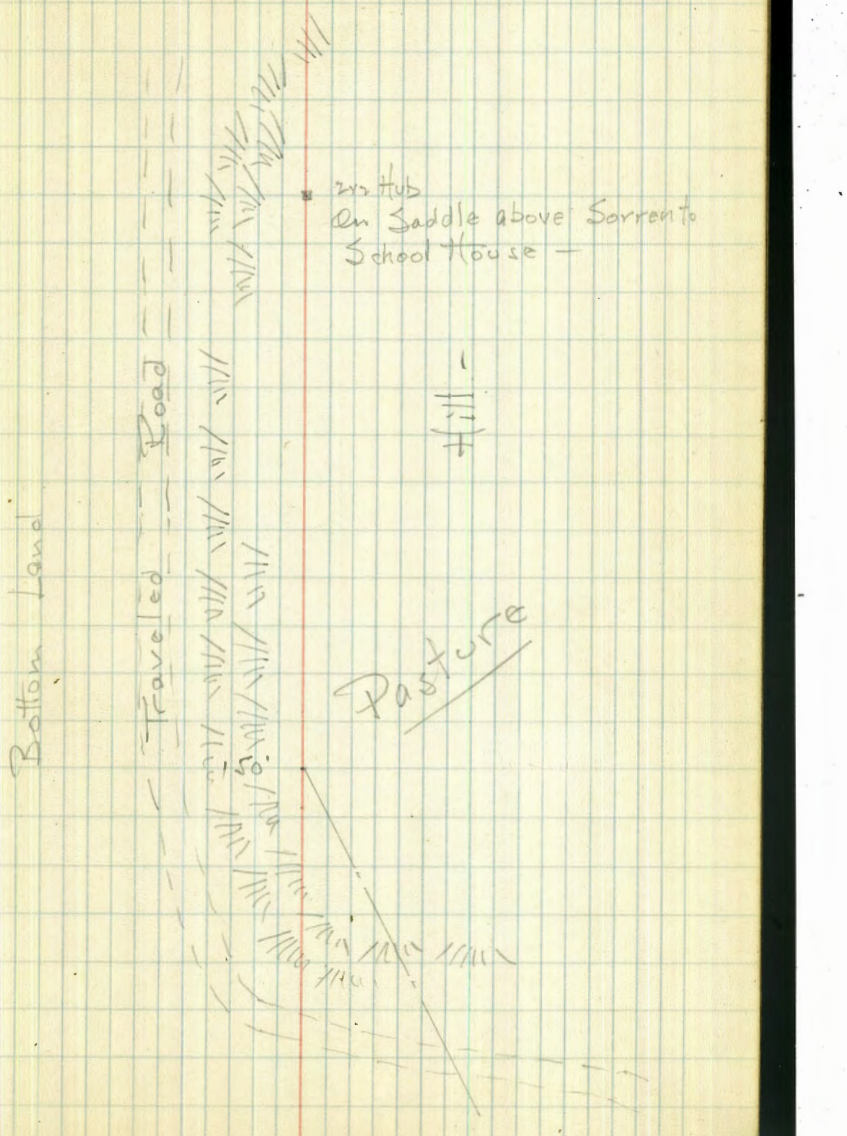
Sta	Deflection Lt.	Deflection Rt.	Rod Reading	Dist	Mag. Bearing
#15		10°31'	13.00		
		21°02	1.71		
			11 29'		
				857'	S 41° E
#14		19°36'	13.00		
		39°12	1.43		
			8 57'		
				1436'	



Sta.	Deflection Lt.	Deflection Rt.	Rod Reading	Dist.	Mag. Bearing.
# 17	P.O.T.		13.00 -1.61 7 39 1478'	107'	N 77° E
# 16	40° 16'		13.00 2.79 10 71	112'	S 33° E



Sta.	Deflection Lt	Deflection Rt	Rod Reading	Dist.	Mag. Bear.-
#19				87'	S 38° E
#18		32°42' 65°23'	87'	147.8'	S 71° E



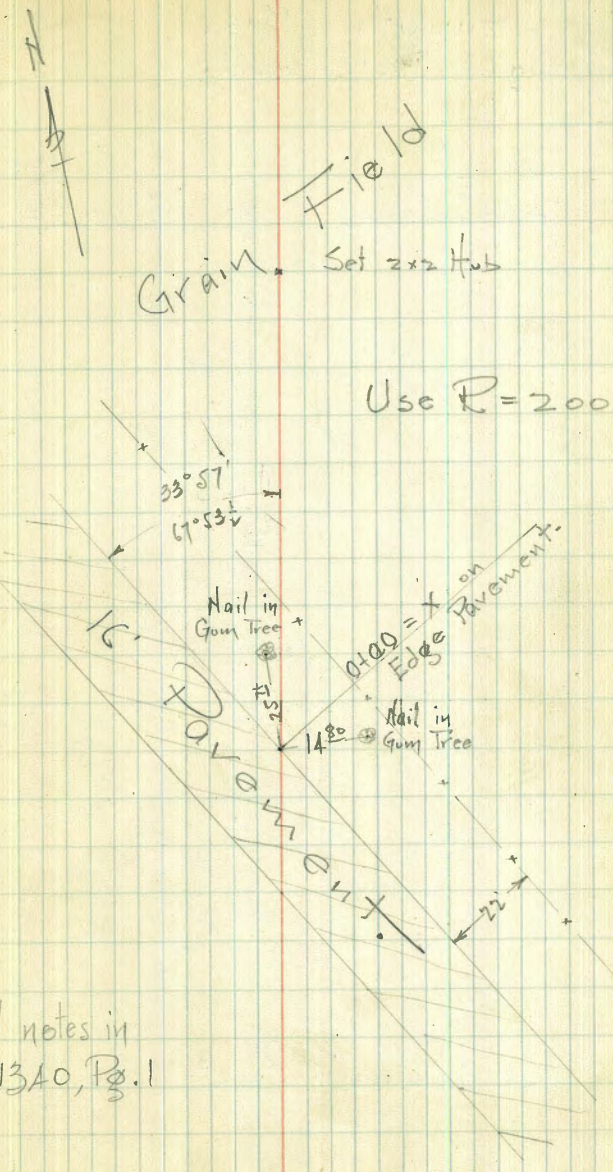
Sta.	Azimuth Single	Azimuth Double	Mag. Bearing
5+86.25 P.O.T.			
0+00			

Preliminary Survey of

"A" LINE (Government Canyon)

SOLEDAD VALLEY ROUTE.

Apr. 1929 { Coote, Osborne, Hilbourne, Remmen



Level notes in F.B. # 1340, Pgs. 1

Sta	Azimuth Sgl.	Azimuth Dbl.	Mag-Bearings-
22+36	54°25'	308°49'	

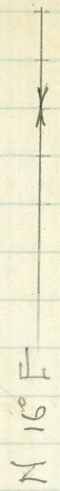
Δ = 25°35' Lt.
Use R = 2000'

Set 2x2 Hub

Note:
Azimuths turned clockwise from back sight-

Field-

Grain



12+36.26
P.O.T.

Set 2x2 Hub

Grove Gum Trees - D = 6" ±
8 Ctrs both ways-

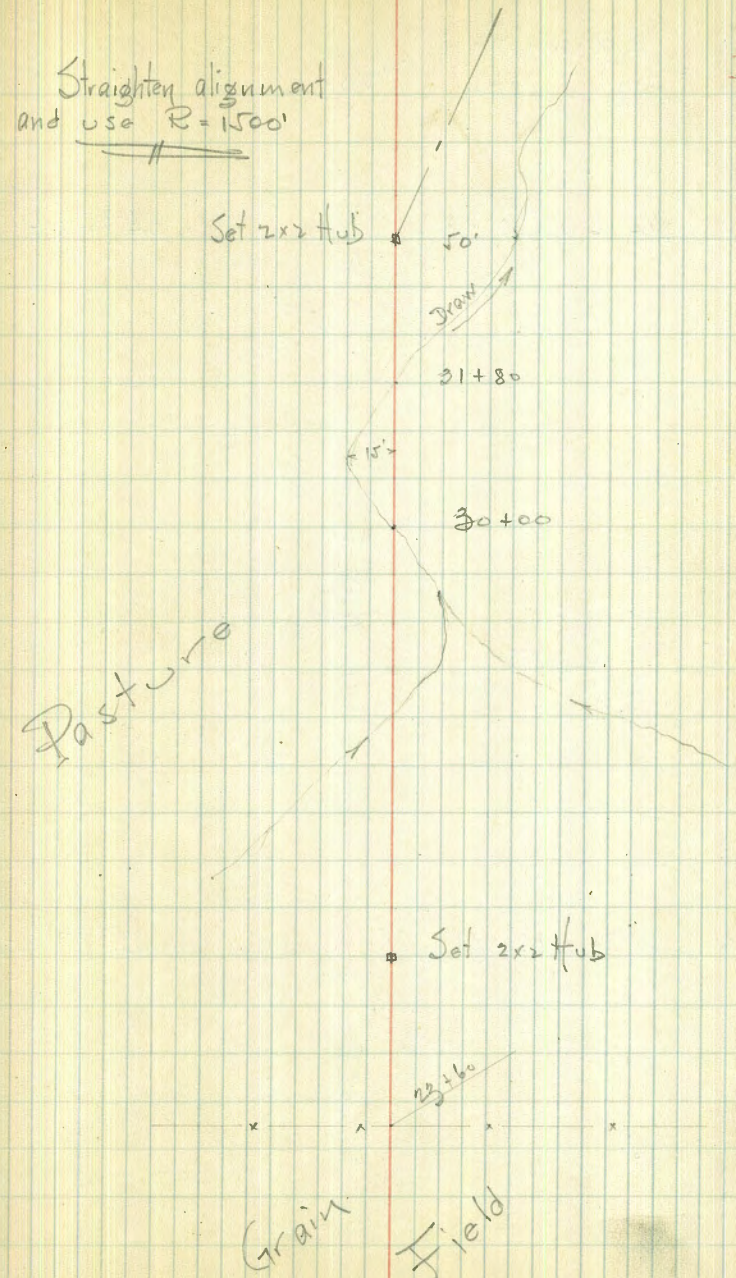
12+20

10+80

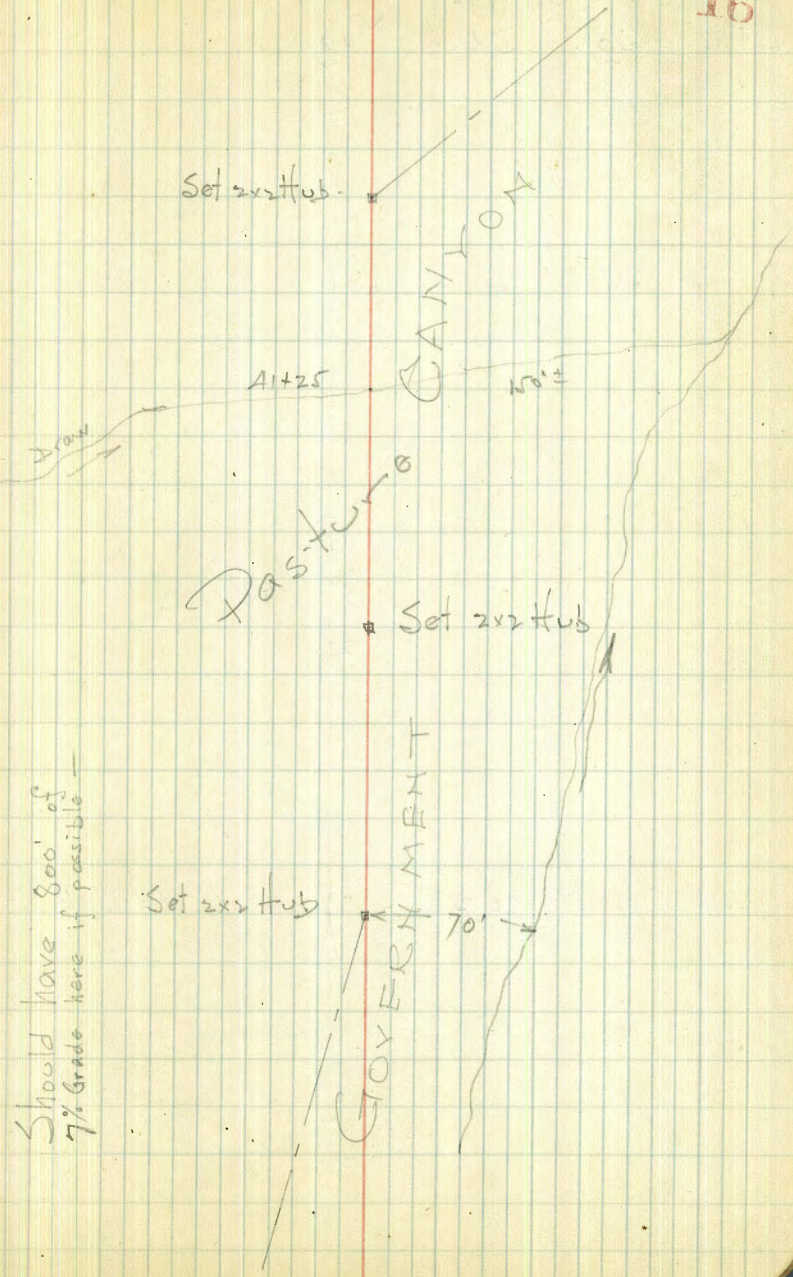
Level Notes in Book # 1340, Pg. 1

Sta-	Azimuth Sgl.	Dbl.	Mag-	
32+65.00	209° 03'	418° 06½		Δ = 29° 03' Rt.
22+56.31	P.O.T.			

Straighten alignment and use R = 1500'



Sta.	Azimuth Sgl.	Dbl.	Mag-	
42+00 PC	214°16'	360° + 68°33'		Δ = 34°16' Rt.
39+47.45	P.O.T.			
35+76.45	165°23'	330°46½'		Δ = 14°37' Lt.



Sta.	Azimuth Sgl.	Dbl.	Mag.	
48+90.05	170°18'	340°36'		Δ = 9°42' Lt.
			N 50° E	
44+73.71	190°08'	360° +20°16'30"		Δ = 10°08' Rt.
			N 40° E	

Pasture

1000' Radius curve is maximum can be used here. Should be R=800'

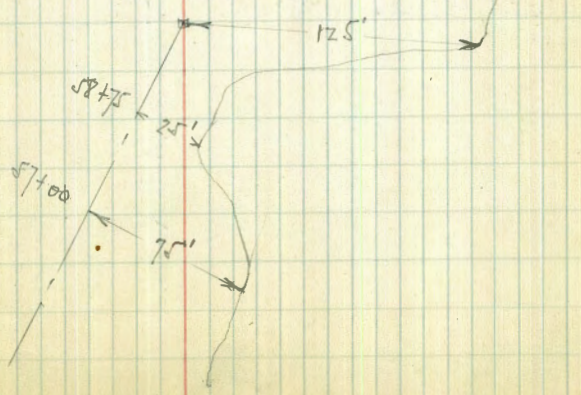
Draw

43+10

Sta.	Azimuth Sgl.	Dbl.	Mag.	
61+67.10	169°29'	338°57½'		Δ = 10°31' Lt.
			N 8½° E	
60+04.12	151°43'	303°26'		Δ = 28°17' Lt.
			N 37° E	

Dastyret

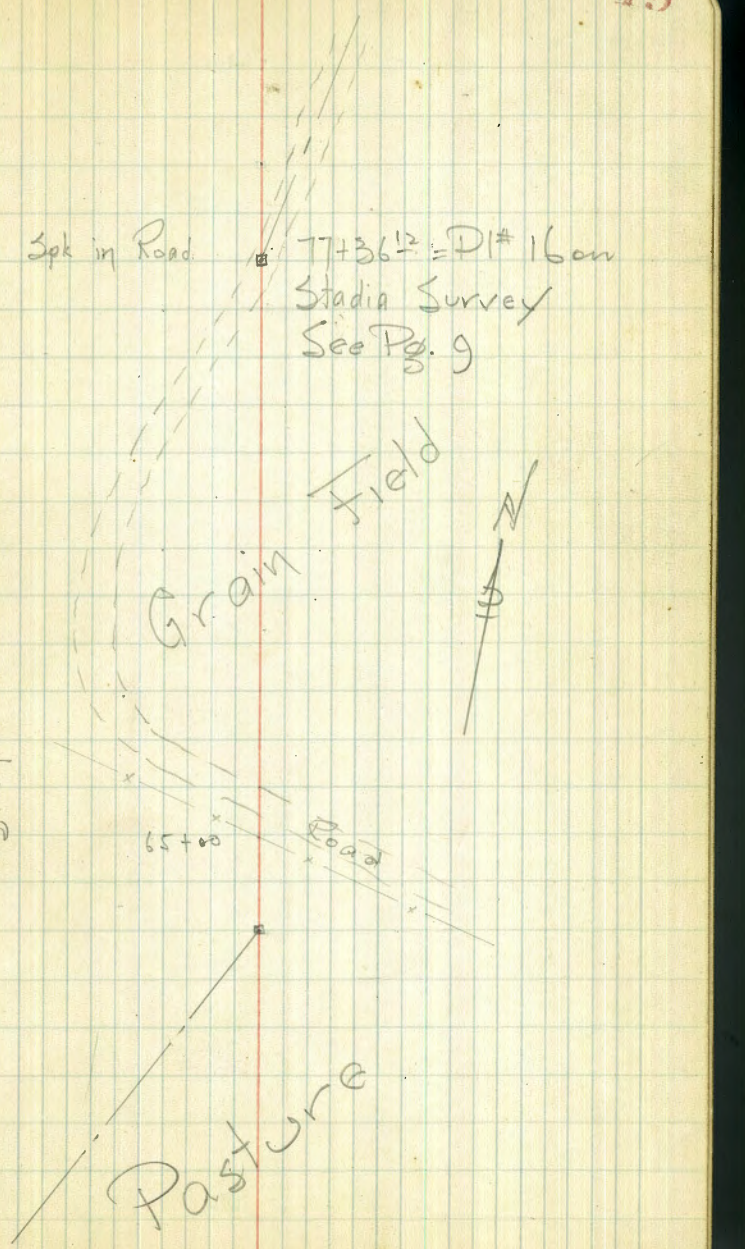
Draw 1



Sta.	Azimuth Sgl.	Dbl.	Mag.	
P.I.# 15				
77+36½	194° 14'	+ 360° 28° 28'	N 30° W	Δ = 14° 14' Rt.
			N 45° W	
63+57.32	137° 32'	275° 03'	N 2° W	Δ = 42° 28' Lt.

Note: If this route is adopted the line should run from Sta 63+57.32 to P.I.# 15

Spk in Road ■ 77+36½ = P.I.# 16 on Stadia Survey See Pg. 9



Azimuth

Station - Single - Double - Magnetic -

N 12° W

0+00

SOLEDAD VALLEY ROUTE.

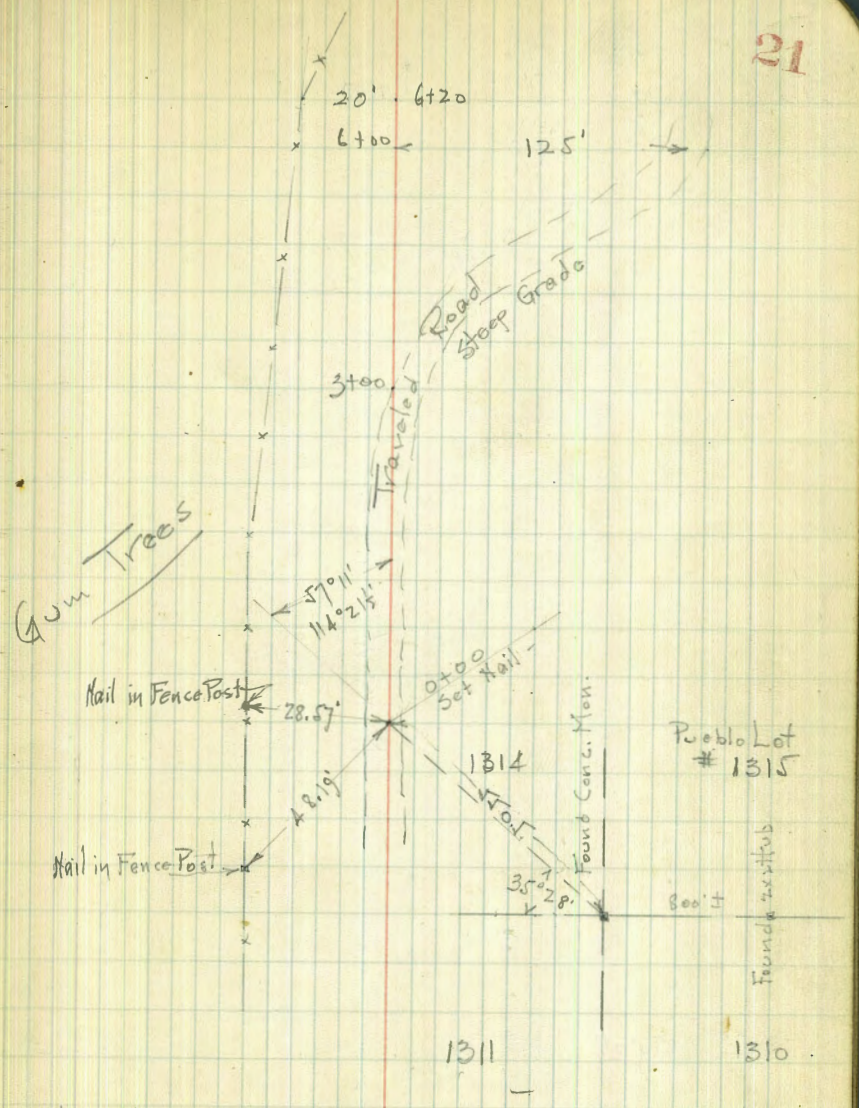
Preliminary Survey of

"B" LINE

(SORRENTO CANYON)

Marine Camp to Sorrento School

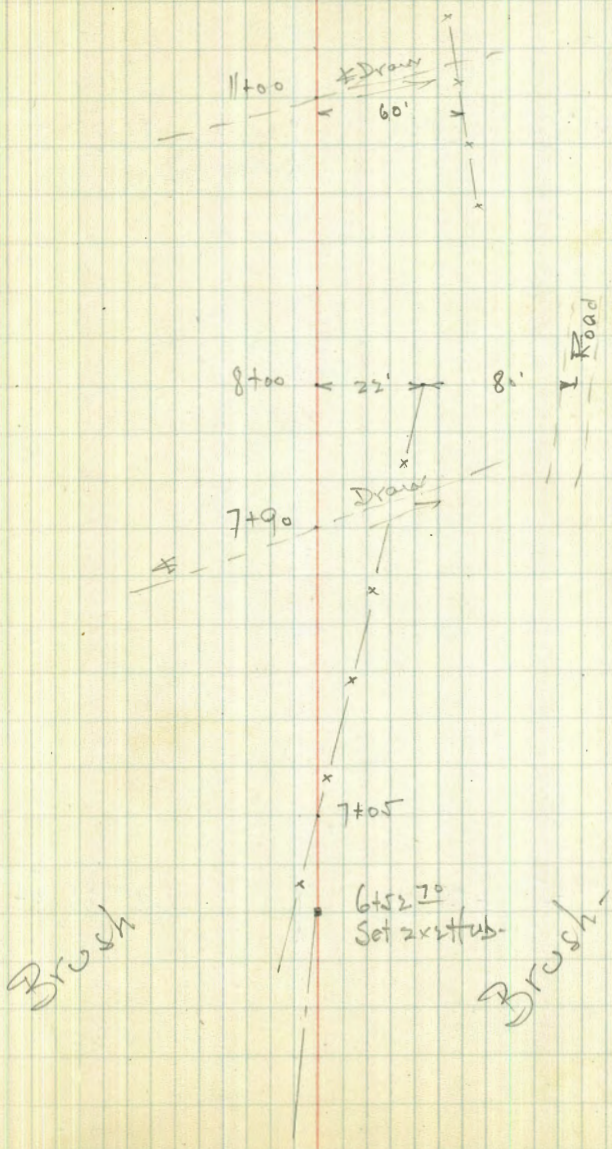
May 1929 { Coote, Osborne, Hilbourne, Remmen



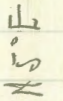
Level notes in

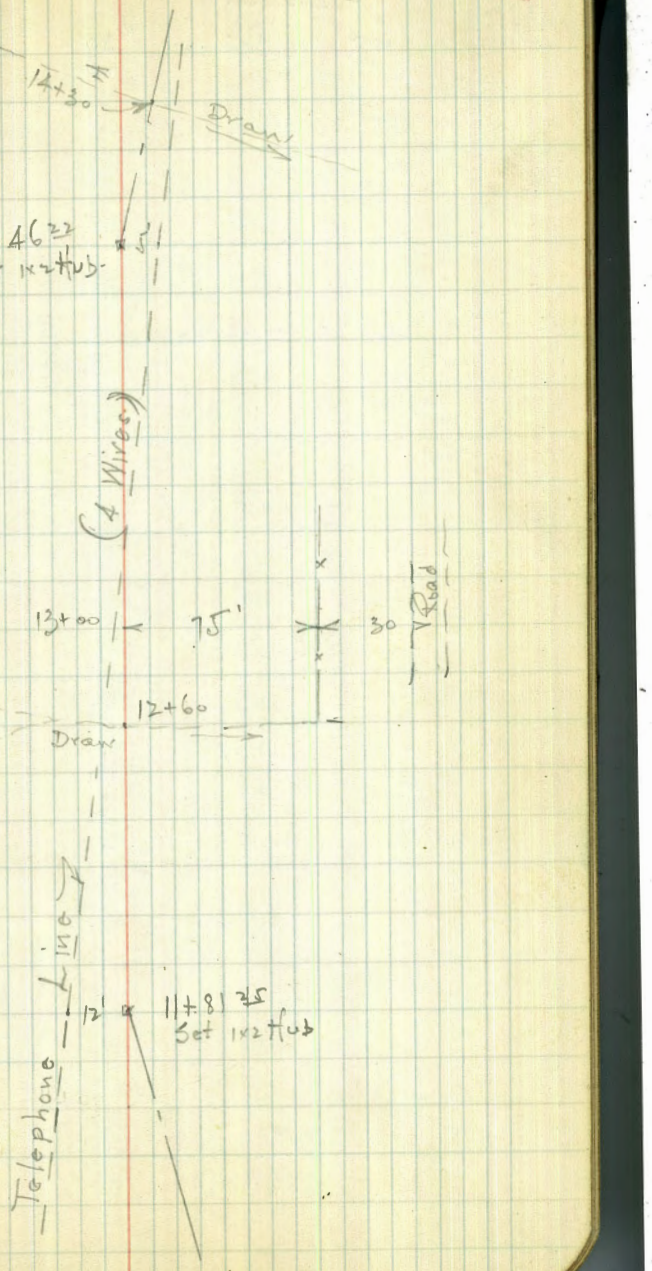
F.B. # 1340, Pgs. 13

Sta.	Azimuth Sgl.	Dbl.	Mag.	
9+73 ℄	P.O.T.			
			N 13° W	
6+52 ℄	179°26'	358°52½'		Δ = 0°34' Lt.



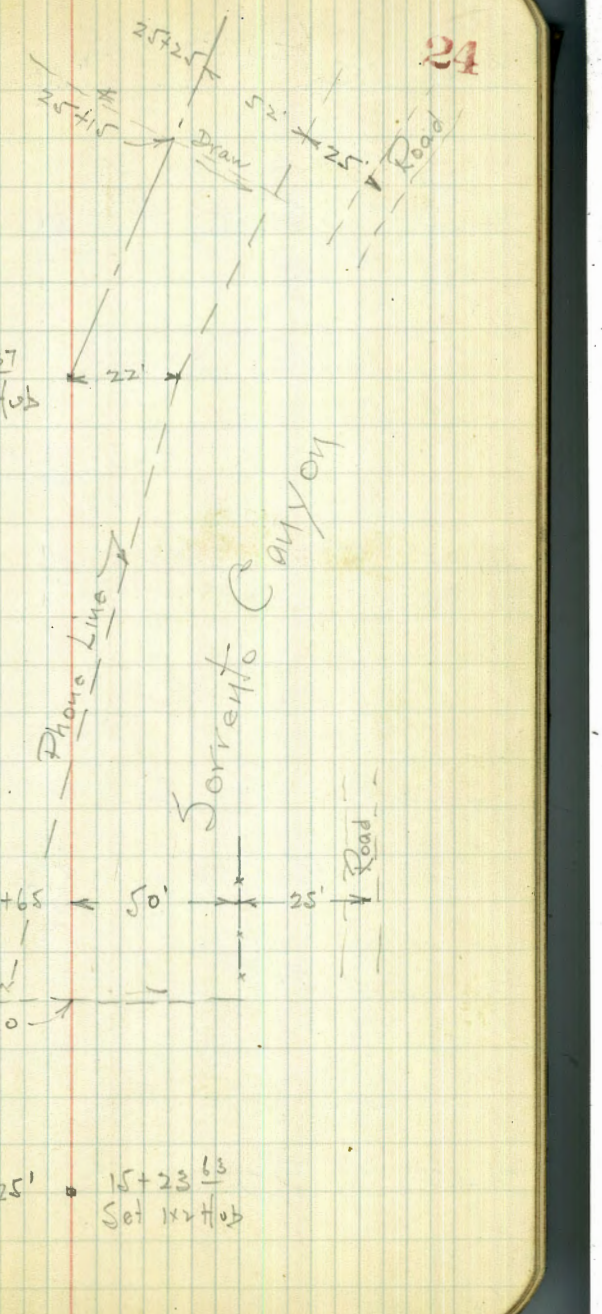
Sta.	Azimuth Sgl.	Dbl.	Mag.	
13+46.22	193°23'	+26°46'		Δ = 13°23' Rt.
11+81.25	197°35'	+35°11'		Δ = 17°35' Rt.



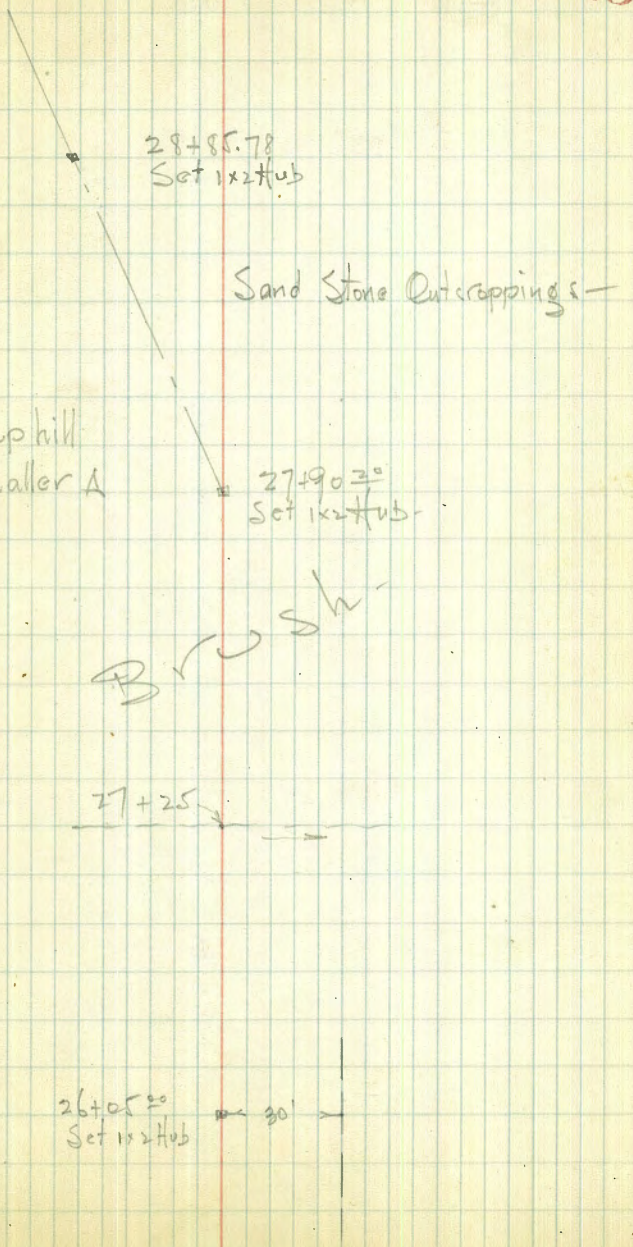


Sta	Azimuth Sgl.	Dbl.	Mag.	
19+41 37	204°28'	+48°56'		Δ=24°28' Rt.
15+23.63'	P.O.T.			

N 18° E



Sta.	Azimuth Sgl.	Dbl.	Mag-	
28+85.78	P.O.T.		N 22° W	
27+90 ±	159°36'	319°11'		Δ = 20°24' Lt.
26+05 ±	P.O.T.		N 42° W	



Sta	Azimuth Sgl.	Dbl.	Mag.	
35+64 $\frac{83}{}$	166°15'	332°30'		Δ = 13°45 Lt.
31+39 $\frac{90}{}$	197°44'	+35°27½		Δ = 17°44' Rt.

11 4°0

11 22

35+64 $\frac{83}{}$
Set 1x2 Hub

90°

20'

Road

34+00 < 28' 15'

Road

Use R = 1000'

31+39 $\frac{90}{}$
Set 1x2 Hub

60'

30+60

Drain

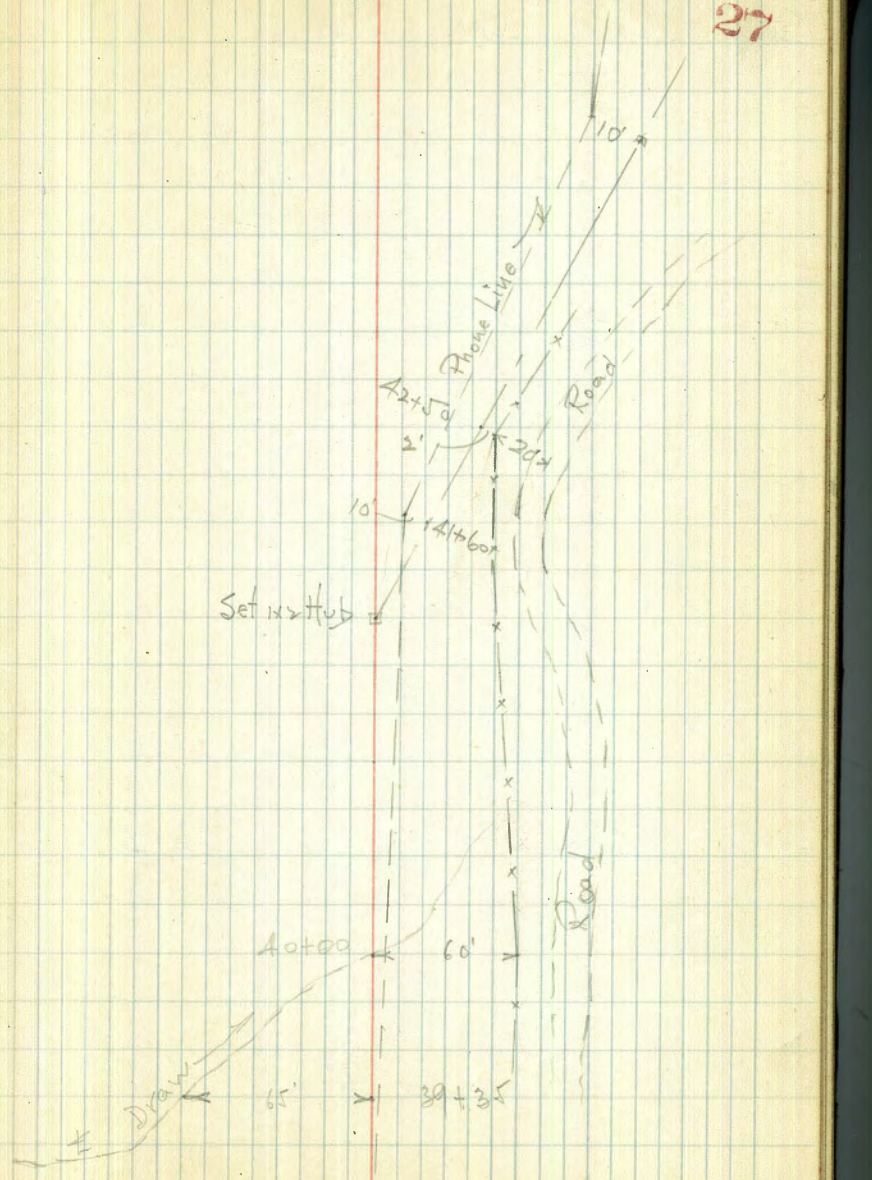
45'

20'

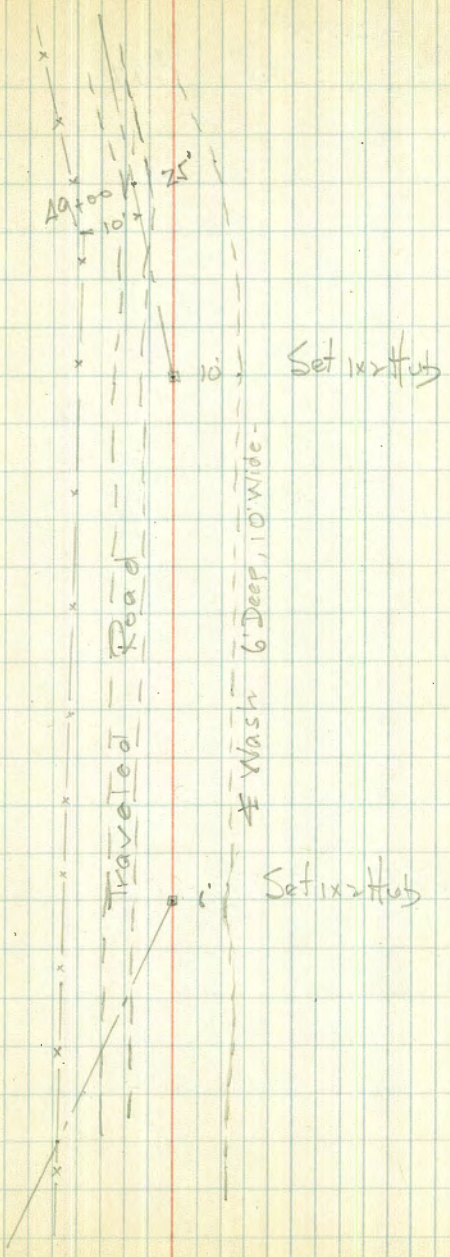
Road

Sta	Azimuth Sgl.	Dbl.	Mag.
AA+23.87	P.O.T.		
			N 54° E
40+77.24	207° 40'	+55°19½'	
			N 92° E

$\Delta = 27°40'$ Rt.

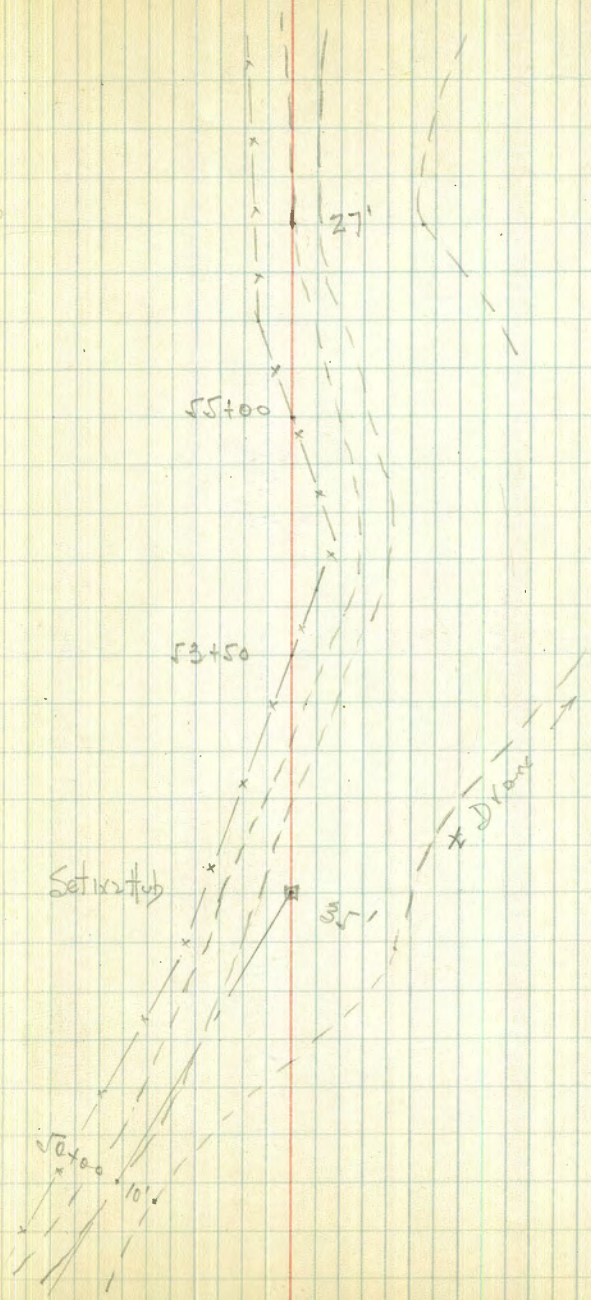


Sta.	Azimuth Sgl.	Dbl.	Mag.	
47+16.9 Ω	163° 23'	326° 45½'		Δ = 16° 37' Lt.
			N 27° E	
46+07.8 Ω	153° 06'	306° 13'		Δ = 26° 54' Lt.
			N 54° E	



Sta	Azimuth Sgl.	Dbl.	Mags.
54+53 ℄	P.O.T.		N 22½° W
52+48 ℄	147°19	294°37½'	N 10° E

A = 32° 41' Lt.



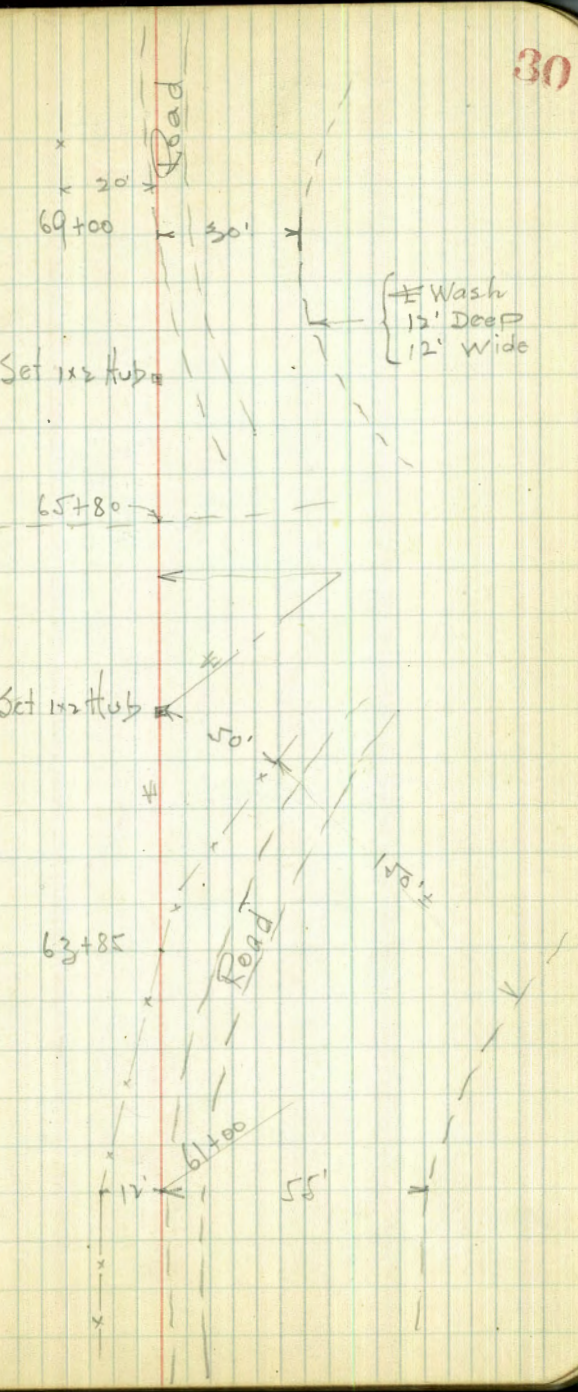
Sta	Azimuth Sgl.	Dbl.	Mag.
66+57.18	P.O.T.		
65+15.65	226°28'	+92°57'	

N 23½° E

N 22½° W

Δ = 46°28' Rt.

Use R = 1500'



Sta	Azimuth Sgl.	Dbl.	Mags
84+27 ℄	137°51'	275° 45'	

Δ = 42°09' Lt

N 18°W

N 23°W

85+40

20'

73+35

20'

Traverse

Sta.	Azimuth Sgl.	Dbl	Mag.		
P.I. #18 See Pg. 10			N 38° W		
96+54.3 (P.I. #19)	174° 07'	348° 13½'		Δ = 5° 53' Lt.	Set 2x2 Hub
90+00	P.O.T.		N 33° W		Set 1x2 Hub
86+88.8	165° 53'	331° 45'		Δ = 14° 07' Lt.	Set 1x2 Hub
			N 18½° W		

For Stadia Line See Pg's 1 to 10 this book.

Pasture

Grain Field

Use R = 1500'
Produce back tangent, (84+27.7 Ahead)
& shift forward tangent
to fit topography.

Cross Section — 20 Wide (C40)
Alley Block 7 LaSalla Park
Between Fay & Girard From Pearl St 400 South

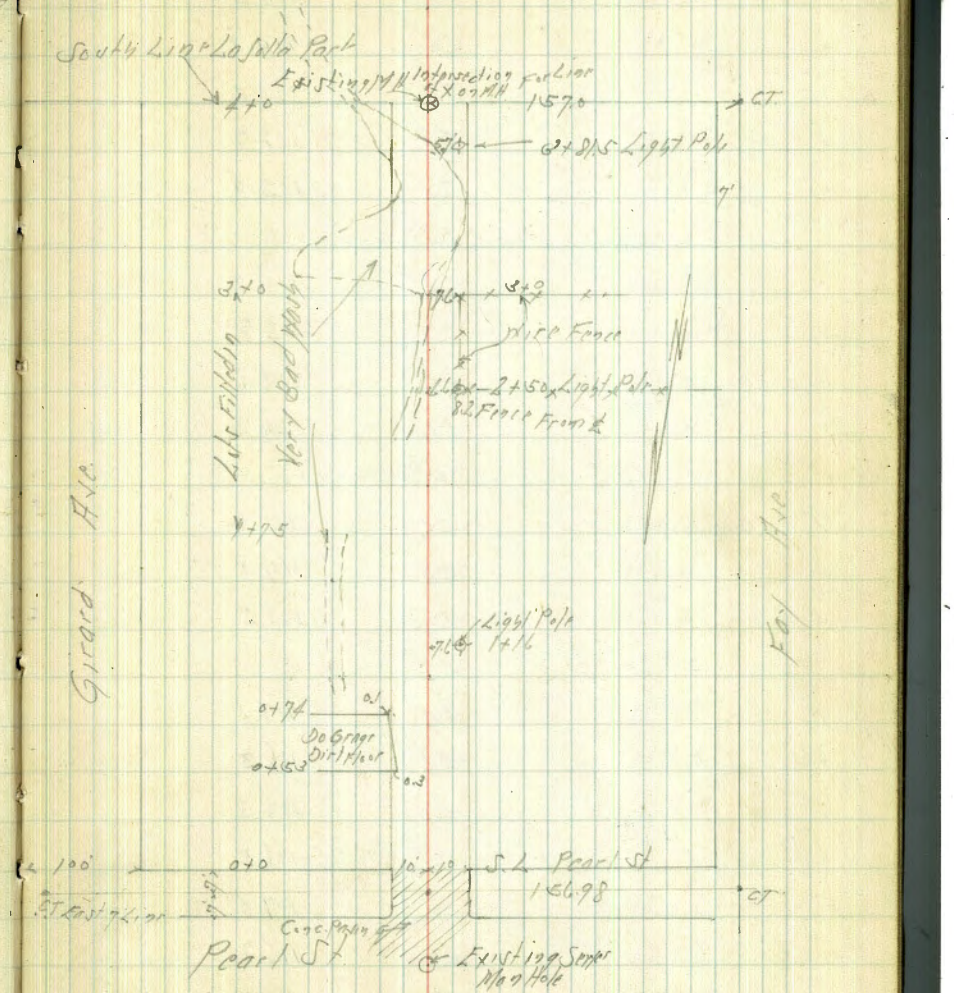
BM	5.54	120.59	115.05
			120.6
			104.06
Flow Line MH & Pearl		16.53	
S C6 Line of Pearl			
E on Paving		9.84	110.75
&		10.03	110.56
W		10.23	110.36
S Line Pearl			
W Top C6		9.25	111.34
W Gutter on Pav		9.47	111.12
& " "		9.66	110.93
E Gutter " "		9.28	111.31
E Top C6		8.88	111.71
2' S of SL Pearl			
E		9.1	111.5
&		9.4	111.2
+9		8.8	111.8
W		7.4	113.2
10' S of SL Pearl			
W		6.9	113.7
+4		8.4	112.2
&		8.6	112.0
+9		8.4	112.2
E		7.6	113.0

8-22-34

SE B.P Pearl & Girard

June 11-31
Sisson
McHugh
Markham

33



120.59

			120.6
	25 S of SL Pearl		
E		6.4	114.2
+3		6.5	114.1
+5		7.4	113.2
℄		7.9	112.7
W		7.3	113.3
	53 S = Nly of Do. Garage on E		
W		6.4	114.2
℄		6.7	113.9
+9.7 = Nly of Do Garage Dirt Floor		6.0	114.6
E		6.0	114.6
	74 S = Sly of Do Garage on E		
E Dirt Floor		5.6	115.0
℄		5.8	114.8
W		5.1	115.5
	100 S		
W		3.5	117.1
+3		4.3	116.3
℄		4.3	116.3
+9		4.1	116.5
E		3.6	117.0
+15		3.9	116.7
+26 = Bottom Wash		8.2	112.4
	125 S		
-25 = Bottom Wash		7.1	113.5
-22		4.8	115.8

120.59

			120.6
E		3.4	117.2
℄		3.2	117.4
W		3.2	117.4
	150 S		
W		1.9	118.7
W		2.3	118.3
℄		2.3	118.3
+7		2.5	118.1
E		3.2	117.4
+29		4.5	116.1
+30 = Bottom Wash		6.5	114.1
TP	6.15 126.55 0.19		120.40
	175 S		126.6
-20		9.2	117.4
-10		8.3	118.3
E		7.6	119.0
+5		7.2	119.4
℄		7.1	119.5
W		7.1	119.5
	200 S		
W		6.4	120.2
℄		6.4	120.2
E		6.3	120.3
+30		5.3	121.3

13655

225'S

		126.6
-20'	4.9	121.7
-5	5.4	121.2
E	6.3	120.3
+6	6.8	119.8
S	5.8	120.8
+4	5.2	121.4
W	4.9	121.7

250'S

W	4.6	122.0
+4	5.1	121.5
S	6.4	120.2
+8	6.4	120.2
E	5.4	121.2
+2	4.6	122.0
+20	4.0	122.6

275'S

-20	3.8	122.8
E	4.1	122.5
+3	5.3	121.6
S	5.9	120.7
+4	4.9	121.7
+8	4.1	122.5
W	3.8	122.8

13655

300'S

		126.6
-10	3.5	123.1
W	3.7	122.9
S	5.0	121.6
+4	4.5	122.1
E	4.7	121.9
+30	5.7	120.9
W	11.05 133.95	3.61 122.94

325'S

		134.0
-20	11.5	122.5
E	11.1	122.9
S	11.8	122.2
W	11.7	122.3
+20	9.7	124.3

350'S

-20	8.3	125.7
W	10.6	123.4
S	10.0	123.0
E	10.0	123.0
+20	7.7	126.3

375'S

-20	9.2	124.8
-6	10.2	123.8
E	9.4	124.6
S	9.8	124.2
W	8.2	125.8

133.99

		134.0
+20	7.3	126.7
385'S		
-20	6.8	127.2
W	7.2	126.8
+4	7.8	126.2
℄	9.7	124.3
E	9.1	124.9
+8	8.8	125.2
+15 . BeHem Wash	10.1	123.9
400'S = S.L. La Jolla Park		
-36 . BeHem Wash	9.2	124.8
-15	8.2	125.8
-14	6.2	127.8
E	6.2	127.8
℄ = MH.	5.3	128.7
on Rim MH	4.97	129.02
. Flow Line	15.15	118.84
W	5.0	129.0
+20	5.4	128.6
45'S		
W	3.9	130.1
℄	3.5	130.5
E	2.8	131.2
+25	2.8	131.2
+15 = BeHem Wash	8.1	125.9

133.99

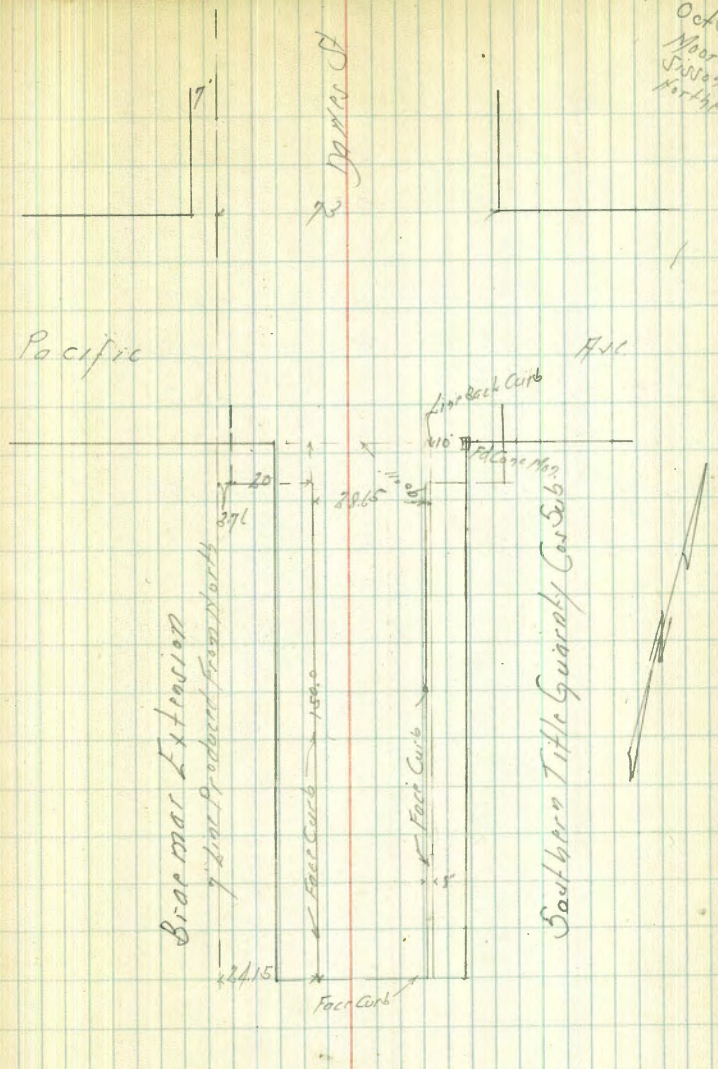
TP	0.45	126.30	8.14	125.85	B.P.S.F. Pacific Grade 115.05
B.M.			11.24	115.06	

Oct 31-31
Moore
Sisler
Northern

37.

Davies St South of Pacific Ave
Check Paving.

B.M	8.82	7.09		-1.73	NEBP Pacific Ave
TP	5.51	5.38	7.22	-0.13	
TP			3.85	1.53	SE Top Hyd Davies St Pacific 1.52
B.M	2.12	3.64		1.52	SE Top Hyd
		S.L Pacific			
E Top Cb			4.28	-0.62	
Gutter on Paving			5.09	-1.45	
¼	"	"	1.89	-1.25	
½ Gutter	"	"	1.55	-0.91	
½ Top Cb			3.74	-0.10	
		8 S of S.L Pacific = Cb BC			
½ Top Cb			3.73	-0.09	
Gutter on Pav			4.58	-0.94	
¼	"	"	4.96	-1.32	
½ Gutter	"	"	5.09	-1.45	
E Top Cb			4.27	-0.63	
		50 S			
E Top Cb			4.32	-0.68	
Gutter on Pav			5.14	-1.50	
¼	"	"	5.30	-1.66	
½ Gutter	"	"	5.17	-1.53	
½ Top Cb			4.32	-0.68	
		100 S			
½ Top Cb			4.34	-0.70	
Gutter on Paving			5.20	-1.56	



3.64

℄ on Paving	5.58	-1.94
℄ Gutter " "	5.20	-1.56
℄ Top Cb	4.38	-0.74
150'S		
℄ Top Cb	4.36	-0.72
Gutter on Paving	5.19	-1.55
℄ Top Cb.	4.37	-0.73
Grating	5.90	-2.26
W on Paving	5.20	-1.56
W Top Cb.	4.35	-0.71

Levels on U.S. Govt Dyke
S. side S. D. River – Causeway East.
Stations Along N. Edge Top of Dyke
U.S. Coast & Geodetic Datum

12-26-31
Miller
Walker
Bliss

indexed
CSK

					8' E. E. Line Midway
B.M. Man	2.41	18.41 ~~9.91~~ 9.90		16.00	on U.S. Dyke
0+00 = E. ch. Line Causeway			1.82	7.58	on Curb
1+17 = N. Rail N. Track S.D.E.R.R.			1.76	7.64	
		1+80			
N. edge Top Dyke			2.0	7.40	
12' Rt			2.0	7.40	
27' "			8.3	1.10	
12' Lt.			8.6	0.8	
		4+00			
N. edge Top Dyke			1.9	7.5	
13' Rt			2.0	7.4	
29' "			8.0	1.4	
12' Lt.			8.8	0.6	
		6+00			
N. edge Top Dyke			2.0	7.4	
12' Rt.			2.0	7.4	
27' "			8.0	1.4	
12' Lt.			8.8	0.6	
		8+00			
N. edge Top Dyke			1.5	7.9	
12' Rt			1.5	7.9	
27' "			7.7	1.7	
11' Lt.			8.6	0.8	

~~18.41~~ 9.90

39

	10+00			
N. Edge Top Dyke		1.3		8.1
12' Rt		1.3		8.1
28' "		7.6		1.8
13' Lt.		8.0		1.4
	12+00			
N. edge Top Dyke		1.2		8.2
12' Rt		1.2		8.2
28' "		7.6		1.8
12' Lt		7.6		1.8
T.P.	4.71	~~25.92~~ 12.31	1.20	17.21
	14+00			
N Edge Top Dyke		4.8		8.1
13' Rt		4.8		8.1
25' "		10.8		2.1
10' Lt		10.4		2.5
	16+00			
N. edge Top Dyke		4.6		8.3
13' Rt		4.6		8.3
27' "		11.4		1.5
11' Lt.		10.0		2.91
	18+00			
N. edge Top Dyke		4.6		8.3
14' Rt		4.6		8.3
27' "		10.1		2.8
11' Lt		10.4		2.5

~~21.92~~ 12.91

20+00

N. Edge Top Dyke		4.2	8.7
20' Rt.		4.2	8.7
29' Rt		11.0	1.91
12' Lt.		10.3	2.6
	22+00		
N. edge Top Dyke		4.0	8.91
16' Rt.		4.0	8.91
29' Rt.		11.0	1.91
10' Lt.		9.7	3.2
T.P.	5.34	~~23.36~~ 9.01 / 14.35	3.90	18.02
	24+00		
N. edge Top Dyke		5.4	9.0
14' Rt		5.4	9.0
29' Rt		12.2	2.2
10' Lt		10.5	3.9
	26+00		
N. edge Top Dyke		4.8	9.6
16' Rt.		4.8	9.6
32' Rt		12.1	2.3
11' Lt		10.1	4.3
	28+00		
N. edge Top Dyke		4.4	10.0
15' Rt		4.4	10.0
36' Rt		12.2	2.2
12' Lt		10.0	4.35
chk. BM. RR. spk S.D. E.G. & E. Pole C. 945		11.67	11.69 = 11.68

U.S. Govt. Dyke

~~23.56~~ 14.35

30+00

N. Edge Top Dyke		4.4	10.0
17' Rt.		4.4	10.0
35' Rt.		13.0	1.35
12' Lt.		10.0	4.35
	32+00		
N. edge Top Dyke		4.0	10.35
17' Rt		4.0	10.35
35' Rt		12.5	1.9
10' Lt		9.8	4.6
	34+00		
N. edge Top Dyke		4.1	10.3
17' Rt.		4.1	10.3
35' Rt.		12.5	1.9
10' Lt.		9.5	4.9
T.P.	4.60	~~24.37~~ 9.37 / 15.06	3.89	19.47
	36+00		
N. edge Top Dyke		4.4	10.7
15' Rt.		4.4	10.7
37' Rt		12.8	2.3
24' Lt.		16.9	— 1.9
15' Lt		10.5	4.6
	38+00		
N. Edge Top Dyke		4.0	11.1
16' Rt.		4.0	11.1
33' Rt.		11.4	3.7
13' Lt.		10.4	4.7
24' Lt.		16.4	— 1.3

~~24.07~~ 15.06

40+00

N. edge Top Dyke	4.0	11.1
15' Rt.	4.0	11.1
34' Rt.	11.6	3.5
15' Lt.	10.2	4.9
26' Lt.	15.7	−0.6

42+00

N. Edge Top Dyke	3.4	11.7
13' Rt.	3.4	11.7
32' Rt.	11.8	3.3
14' Lt	10.2	4.9
26' Lt.	17.5	−2.4

43+15 = 33+00 from E. Book 1430

T.P. 2.88 21.19 = 21.16 Book 1430 Page 59

901

12.18

1 U.S. Govt. Dyke

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Indexed
C.S.K.

x See Alley Blk. 58. H.M. Higgins
Bet. B + C. from. 27th to 28th

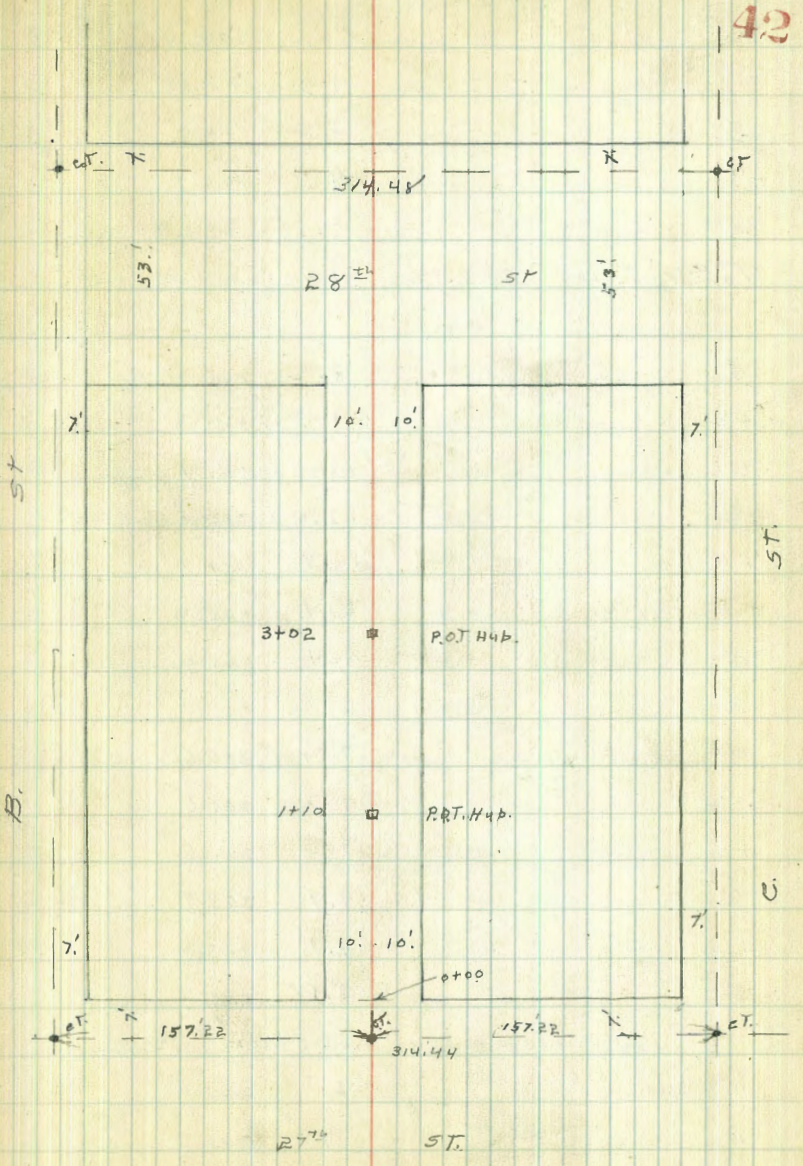
4-1-32
Mullen
Walker
Bliss

NW. 27th
& B. Sts.

B.M.	6.85	203.82		196.97
		E. curb line 27th		
N emt. el			6.79	197.03
N. gutter pavmt.			7.40	196.42
℄ " "			7.25	196.57
S " "			7.18	196.64
S. emt. el.			6.60	197.22
		13'E. = E. end. pavmt.		
S. emt el			6.30	197.52
S. pavmt.			6.54	197.28
℄ "			6.85	196.97
N "			6.64	197.18
N. emt el			6.50	197.32
		18' E. of E. el. = E. line 27th = 0+00		
N. emt. el + ground			6.50	197.32
℄ "			6.6	197.2
S " " + "			6.30	197.52
		0+02.		
S			1.0	202.8
+2			5.7	198.1
℄			6.4	192.4
+4			6.1	197.7
N			4.4	199.4

BM 198.05 S.W. 27th & C.

42



203.82

0+06.

N			+0.6	204.4
+6			4.3	199.5
℄			5.2	198.6
+16			4.5	199.3
S			+1.1	204.9
T.P.	11.00	213.82	1.00	202.82

0+15

S			8.2	205.6
+2			8.3	205.5
+4			12.7	201.1
℄			13.0	200.8
+4			11.9	201.9
+7			8.4	205.4
N.			8.4	205.4

0+31

N			7.2	206.6
+2			7.2	206.6
+6			9.2	204.6
℄			9.9	203.9
+5			9.9	203.9
S			8.1	205.7

0+46 garage on S. dirt floor. 0,2 Back

S-floor			7.7	206.1
℄			8.1	205.7
+7			7.5	206.3
N			6.6	207.2

213.82

0+55.

N	5.4	208.0
+2	6.7	207.1
℄	7.1	206.7
+8	6.6	207.2
S	5.6	208.2

0+82 garage on S. cmt. floor on Line

S floor	5.1	208.7
℄	5.3	208.5
N.	5.0	208.8

From 0+89.5 to 0+95.5 shed on N. 0.7 in Alley

1+07 garage on S. 21.' Back

1+20

N	5.0	208.8
℄	4.9	208.9
S	5.0	208.8

1+53. Pepper Tree 1'0 diam. 0.3 in Alley.

1+65

S.	5.2	208.6
℄	5.2	208.6
N	5.1	208.7

1+91 garage on S. cmt. floor 3.5 Back

N	6.4	207.4
℄	6.8	207.0
S	6.7	207.1
+2' cmt apron	6.65	207.17
+3.5 floor	6.63	207.19

213.82

2+00 = W. End Double garage cmt. floor 3'. Back

S - 3' floor	7.73	206.09
S = Edge cmt. apron	7.75	206.05
2+21. E. End above garage		
S - 3 floor	7.75	206.07
S. on apron	8.48	205.34
℄	8.8	205.0
N.	8.6	205.2
2+50		
N	10.4	203.4
℄	10.6	203.2
S	10.5	203.3
T.P. 1.61 202.54	12.89	200.93
2+78		
S.	1.4	201.1
℄	1.6	200.9
N.	1.5	201.0

2+82 = W. End double garage on S. cmt. floor 4'. Back.

N.	1.9	200.6
℄	2.0	200.5
S	2.4	200.1
+1.0 cmt. apron	2.50	200.04
+4. = floor	2.50	200.04
2+99 = E. End above garage.		
S - 4 floor	2.73	199.81
-1 apron	3.04	199.50
S	2.9	199.6

202.54

Alley Blk 58 Higgins

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℄	3.4	199.1
N	3.3	199.2
3+05		
-5	6.5	196.0
N	5.2	197.3
+3	4.2	198.3
℄	4.2	198.3
+5	4.7	197.8
S	5.6	196.9
+5	6.1	196.4
3+37		
-5	9.7	192.8
S.	9.0	193.5
+4	8.2	194.3
℄	8.7	193.8
N.	9.6	192.9
+5	9.8	192.7
3+47		
-5	12.6	189.9
N	12.4	190.1
℄	12.0	190.5
S	10.8	189.2
+5	10.8	189.7
T.P 0.96 190.54	12.96	189.58

190.54

			3+53.		
S-2	cmt. walk			1.8	188.7
S				1.4	188.7
℄				1.4	189.1
N				1.6	188.9
+5				1.4	188.7
			3+80		
-5				9.3	181.2
N				8.8	181.7
℄				7.7	182.8
S				7.7	182.8
+5				7.6	182.9
			4+00		
S				10.3	180.2
℄				12.0	178.5
N				12.6	177.9
+5				13.3	177.2
T.P.	11.30	200.88		0.96	189.58
T.P	10.83	204.99		4.72	194.16
chk BM S.W. 27.4th +C	3.33	201.46		6.86	198.13	=198.05
chk original BM.				4.49	196.97 =	196.97

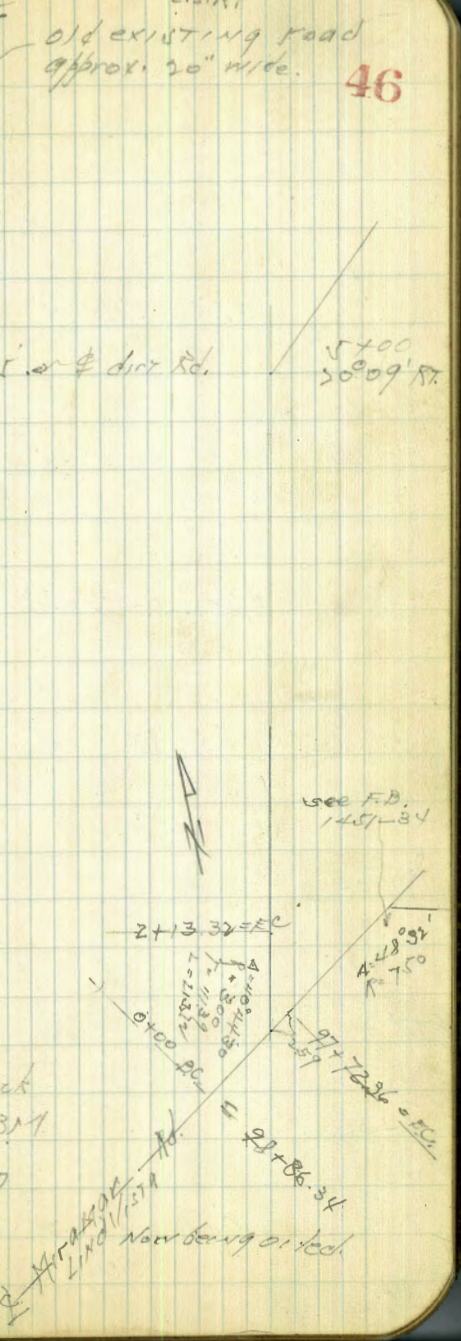
Levels on Sorrento Grade
Miramar-Linda Vista Rd to Sorrento Store
& Santa Fé RR Crossing

6+00			12.4	352.4
T.P.	0.67	364.79	12.6	364.12
5+00 = Δ 20°09' Rt.			14.6	362.1
4+00			9.9	366.8
3+00			7.5	369.2
2+13.32 = E.C.			5.4	371.3
1+06.66			3.7	372.0
0+00 = B.C.			2.1	374.6
98+86.34				
	4.30	376.74		372.44 Spike B.M.
		G.B. 179-24		G. 98+72.36

Moore
Jesson
Northern
7-26-34

Indexed
C.S.I.X.

46



From Co. B.M. at City line & Miramar & Linda Vista. Does not check to Torrey Pines Mesa Rd. B.M. Error of 1.28 Sec 1451-34

			℄	
10+00			2.8	311.7
T.P.	0.53	314.47	12.69	313.94
9+00			5.2	321.4
T.P.	0.06	326.63	12.77	326.57
8+50=A	22°50' LT.		8.7	330.6
8+00			6.6	332.7
T.P.	0.12	339.34	12.98	339.22
7+00			9.1	343.1
T.P.	0.17	357.20 364.79	12.76	357.03

℄

4 @ 20 edge ditch
↑ 2 rd

10 @ ℄ ditch rd.

15 — RP. — RP.

15+00			5.1	271.2
T.P.	0.36	276.32	13.00	275.96
14+14 = Δ 30°36' RT			11.8	277.2
14+00			10.8	278.2
13+00			2.1	286.9
T.P.	0.9	288.96	13.88	288.77
12+00			6.6	295.1
T.P.	0.10	301.65	12.9	301.55
11+00		314.47	11.2	303.3

℄

3 @ 8' edge ditch ℄ Rd

10' @ 11' edge ditch ℄ Rd

10 @ 14' edge ditch ℄ Rd

6 @ 16' edge ditch ℄ Rd

4 @ 6' edge ditch ℄ Rd

			℄	
19+46=A	19°30' RT		0.6	250.9
T.P.	0.00	251.45	12.9 N	251.45
19			11.8	252.6
18+00			7.9	256.5
17+00			3.7	260.7
16+65=A	7°30' LT.		2.1	262.3
T.P.	0.77	264.37	12.7 N	263.60
16+00			10.7	266.1
		276.37		

℄

19 + 46 = A 19°30' RT
0.6
250.9
℄ rd
9 ○ 12 ○ edge ditch

T.P. 0.00 251.45 12.9 N 251.45
℄ rd
2 ○ 9 ○ edge ditch

19 11.8 252.6

18+00 7.9 256.5
℄ rd
9 ○ 11 ○ edge ditch

17+00 3.7 260.7

16+65=A 7°30' LT. 2.1 262.3
℄ rd
10 ○ 12 ○ edge ditch

T.P. 0.77 264.37 12.7 N 263.60

16+00 10.7 266.1
℄ rd
7 ○ 8 ○ edge ditch

276.37

			℄	
T.P.	0.03	213.0 N	12.9 K	212.99
24			9.0	216.9
23			1.3	224.6
T.P.	0.2 N	225.93	12.91	225.71
22			5.3	233.3
21+81 = A	15°47' R.		3.8	234.8
T.P.	0.1 K	238.6 N	12.98	238.47
21			9.6	241.9
20+00			7.8	248.7
		251.25		

℄

.3 @ 11 ° edge ditch
@rd

.4 @ 14 ° edge ditch
@rd

50 @ 40 ° approx.

.7 @ 12 ° edge ditch
@rd

.4 on @rd

on @rd

T.P.	0.46	188.20	12.80	187.74
29+40			+ 2.2	202.7
28+85			18.5	197.0
28+30			+ 9.5	210.0
27+60	Pol. Stub		+ 14.2	214.7
27+00			1.9	198.6
T.P.	0.20	200.54	12.68	200.34
26			9.9	203.1
25+00			3.1	209.9
		213.04		

187.1 · 15 · 10 · 10 · edge ditch
Top Cut, 12.4 rod, End

189.5 · 15 · 10 · 9 · edge ditch
Top Cut, End, 11.0 rod

192.3 · 16 · 10 · 10 · edge ditch
Top Cut, End, 8.2 rod

196.3 · 14 · 10 · 10 · edge ditch
Top Cut, End, 4.2 rod.

· 10 · 10 · edge ditch
End

· 5 · 11 · edge ditch
End

· 5 · 10 · edge ditch
End

			℄	
35			9.8	166.0
34			7.3	168.5
33			2.8	173.0
32+47 = Δ 15°00' RT			1.00	174.8
T.P.	0.09	175.82	12.47	175.72
32			11.7	176.5
31			8.0	180.2
30+05 = Δ 27°30' LT.			4.7	183.5
29+85 = P.O.T. STUB top bank + 9.3				197.5
		188.70		

℄

0 5 0 12 . edge ditch
erd

0 5 0 10 . edge ditch
erd

8 0 25 0 edge ditch
erd

9 0 9 0 edge ditch
erd

14 . 14 . edge ditch
erd

3 7 0 edge ditch
erd

8 . 14 0 edge ditch
wedgerd erd

185.0 . 5 0 10 0 19 0 edge ditch
Tapeat erd 3.7 rod

			℄		
39+60 =	△ 37° 00' Rt.		2.69	149.49	Stub
T.P.	0.48	152.18	12.68	151.70	
39			13.3	151.1	
38			8.8	155.6	
37+66 =	△ 61° 20' Lt		6.4	158.10	
37			4.3	160.1	
T.P.	1.10	164.38	12.54	163.78	
36			12.2	163.6	
35+30 =	△ 31° 36' Rt.		10.7	165.1	
		175.82			

℄

℄ rd

10 . 10 . edge ditch

53

3 . 12 . edge ditch

℄ rd

℄ rd — 14 . edge ditch

℄ rd 10 . 10 . edge ditch

10 . 20 . edge ditch

℄ rd

℄ rd — 7 . edge ditch

10 . 11 . edge ditch

℄ rd

Torrey to Grade

		℄			
44			3.8	139.5	
43+44 = Δ 21°47' RT.			3.3	139.94	Stub
43			1.9	141.4	
T.P.	117	143.25	10.10	142.08	
42			8.8	143.4	
41+50 = Δ 14°34' LT			7.7	144.5	
41			6.8	145.4	
40+00			4.1	148.1	
		152.18			

50 • 40 RP RP

• 14 • 90 • edge ditch ℄rd

• 10 • 10 • edge ditch ℄rd

• 5 • 12 • edge ditch ℄rd

• 50 • 10 • edge ditch ℄rd

• 10 • 19 • edge ditch ℄rd

• 8 • 10 • edge ditch ℄rd

		℄		
51+00		10.5	124.9	
49+90	Δ 12°22' LT	8.0	127.4	
49		7.4	128.0	
48		4.6	130.8	
T.T.	128	125.40	9.3	134.1 Δ Stub
47+17	Δ 36°46' LT	9.3	134.12	
47		8.7	134.6	
46		8.0	135.3	
45+00 =	Δ 15°06' Rt.	6.6	136.7	
		1432		

℄ Sarrent 70 Grade

- 7 ° Crd 15 · edge ditch
- 4 ° Crd 10 · edge ditch
- 10 ° Crd 15 · edge ditch
- 4 ° Crd 14 · edge ditch
- 10 ° Crd 4 · edge ditch
- 5 ° Crd 10 · ditch
- 5 ° Crd 20 · ditch

			℄	
S8			2.1	111.5
T.P.	0.6 N	113.61	12.39	112.99
S7			12.8	112.6
S6			10.4	115.0
S5+17 = Δ 36°57' Lt			8.39	116.99 S To S6
S4			5.0	120.4
S3			3.8	121.6
S2+00			2.8	122.6
T.P.	1.01	1W38 1W5.40	11.03	124.37

℄

- 4 · 15 · ditch (℄ rd)
- 10 · 50 · ditch (℄ rd)
- ℄ rd · ditch · 30
- W · 20 · ditch (2 rd)
- W · 13 · ditch (℄ rd)
- S · 17 · ditch (℄ rd)
- N 4 rd · 10 · 8 · edge ditch (2 rd)

∠ 45°45' RT R 1000 T 421.90 L 798.49	℄		T.P. rock S'LY of B.C.
63+25.6 N B.C.	11.4	102.2	
63	11.N	102.4	
62.	9.7	103.9	
61	7.7	105.9	
60	5.0	108.6	
59+70 = ∠ 4°17' RT	3.6	110.0	
59	3.4	110.2	
58+50			

1136

℄

RP RP
20 20

direct angles away from rd. for some ways

℄rd 50 ' ditch

℄rd 40 ' ditch

℄rd 40 ' ditch

℄rd 30 ' ditch

℄rd 13 ' edge ditch

℄rd 8 ' edge ditch

			℄		
T.P. 70 +60	0.45	93.31	12.41	92.86	
70			7.6	97.7	
69			7.N	98.1	
68			8.0	97.3	
67			5.9	99.4	
66			6.9	98.4	
65			5.6	99.7	
64			4.N	101.1	
T.P.	3.11	105.27 113.61	11.45	102.16	

℄ Sorrento Grade

℄ old rd bad place

.5. 40. edge ditch 15 deep

90.9 . 1N . 1N . edge ditch

℄rd - rod = 14.4

rod 17.0

93.3 . N . 60 . ditch

℄rd

. ℄ rd

rod 5.1 . ℄rd . 20 . 100.2

5.1 rod . 2N . 100.2

℄rd

4.5 rod . 1N . 100.8

℄rd.

. 5 .

℄rd

		℄		
76+00			1.5	80.1
T.P.	1.10	81.57	1.84	80.47
75+40				
75			11.5	81.8
74			9.7	83.6
73			7.8	85.5
72			6.2	87.1
71+41 = E.C.			4.6	88.7
71+00			2.0	89.3
		933		

℄ Sorrento Grade

℄rd ~ 0.2 . 40 . direct

℄rd ~ 0.4.6 . edge direct 10' deep 10' wide

℄rd
0 11' . direct 15' deep 10' wide

℄rd.
0 50 . direct

0.3 ℄rd 100 . direct

2" PT. at
71+60 spike Tel. pole
4.2 4
89.07 87.47 See BK.
error 1.80 1440 - 2"
Correction of 0.35 grade
87.47 = worked levels
error = 1.4'

0.3 ℄rd 50 . direct

0.3 2" . direct

0.7 20 . direct
℄rd.

			℄	
83			5.1	63.6
82			2.3	66.4
T.P.	0.03	68.70	1.90	68.67
81			13.0	68.6
80			10.5	71.1
79			8.2	73.4
78			5.5	76.1
77+00			3.0	78.6
		81.57		

℄ Torrenzo Grade

- ℄ dirt rd
- ℄ rd 700 . ditch
- ℄ rd
- ℄ rd 700 . ditch
- ℄ rd
- ℄ rd. 700 . ditch
- ℄ rd . 4 . 15 . ditch

		℄		
87		9.1	55.6	
86+48 E end bridge		1.73	56.95	on deck
86+32 W end bridge		1.58	57.10	on deck
86		1.2	57.5	
T.P. o/d. P.I. Hub. 0.7	√8.68	10.29	√8.41	
85+81.91 = E.C.		10.9	57.8	
A = 9°05'30" RT				
R = 1000				
85+00 = P.I. T = 79.51		9.6	59.1	
L = 158.68				
84+23.23 = B.C.		8.1	60.6	
84+00		7.6	61.1	
	68.70			

℄ Sorrento Grade

61

edge ditch . 45

12 . edge ditch

-℄ rd. 90 . edge ditch

-℄ rd 90 . ditch

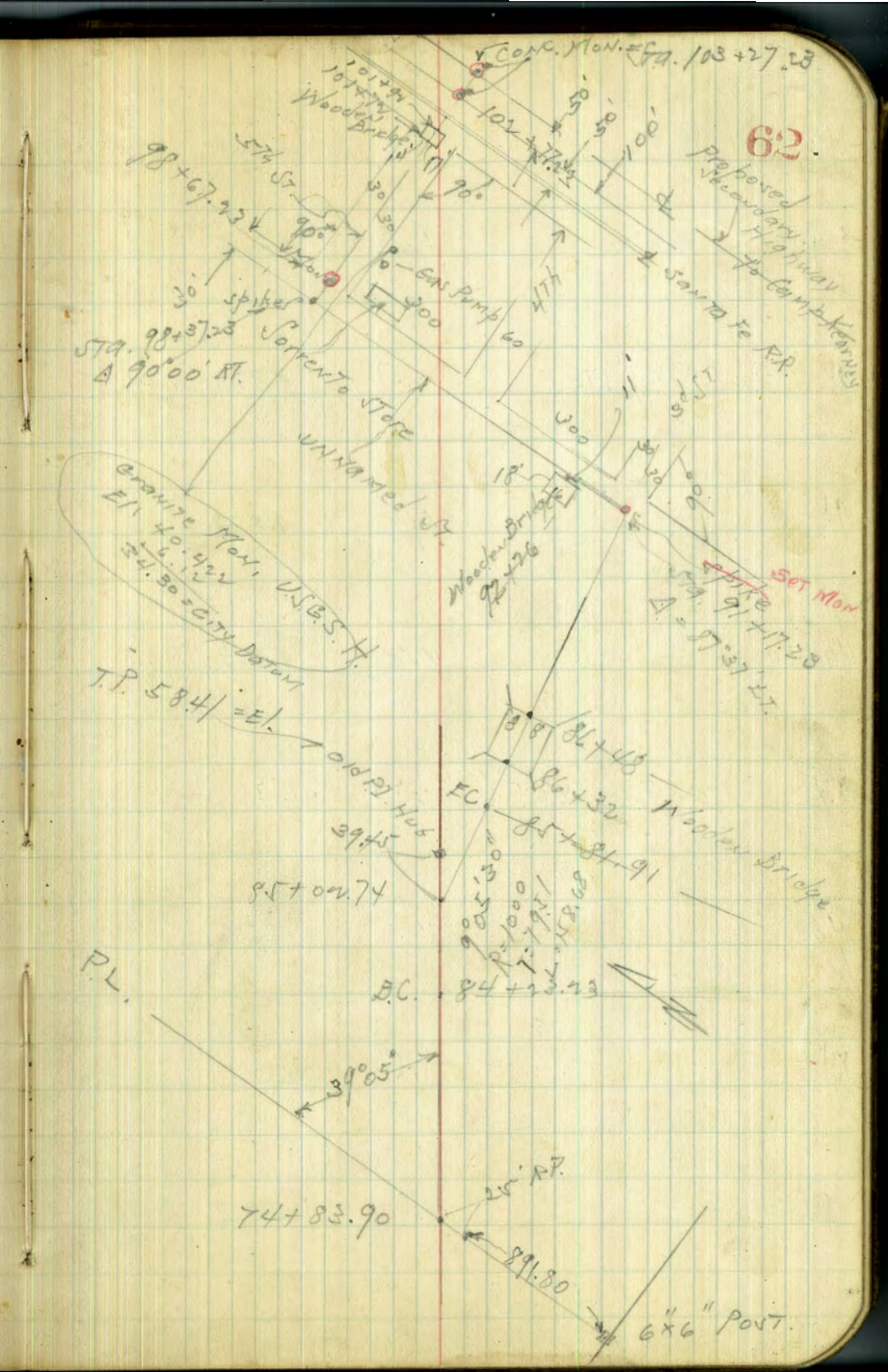
-℄ rd.

Sorrento Grade

97 Sorrento

Next page for levels cont.

10277.23
98 37.23
440.00



			℄		
90			6.2	40.3	
91+50			4.0	42.5	
91+17.3	Δ 87°37'LT.		2.7	43.8	Spike
91			1.6	44.9	
90+50			1.2	45.3	
T.P.	0.18	46.54	123	46.36	
90			17.1	46.6	
89			8.5	50.2	
88			5.5	53.2	
		58.68			

℄ rod 2.9 ± 0 43.6

℄ rod ~ 2.1 35 44.4

~ ℄ dirt rd.

ditch ± 90

ditch ± 70 ~ ℄ dirt rd.

97	4.5	42.2	
96	3.9	42.6	
95	4.4	42.1	
94	4.8	41.7	
+50	6.0	40.5	
93	7.1	39.4	
92+50	7.2	39.3	
92+26	10.6	35.9	
92	6.3	40.2	
	46.5		

℄ 4.0 ~ to rd.

4 ℄ to rd.

℄ rd ~ 0.5

rod 4.7 ℄ rd ~ 9 41.8

rod 4.3 ℄ rd ~ 12 42.2

rod 3.8 ℄ rd ~ 16 42.7

rod 3.4 ℄ rd ~ 20 43.1

deck rod 3.4 x end bridge ~ 20 43.1

deck rod 3.2 ~ 20 43.3

℄ S end bridge

℄

T.P.	1.83	32.40	12.7	30.57
101			13.9	29.4
100			10.7	33.1
99			5.5	37.8
98+67.23	Conc. Mon.		3.9	39.37
T.P.	1.06	43.31	4.9	38.42
98+37.23	Δ 90°00 Rt		3.7	42.8
98+00			5.6	40.9
		46.54		

℄ Sorrento Gr.

Granite Mon. B.M.
U.S.G.S. BM H. Sorrento
7M So. of Santa Fe Sta.
east end Gas Pump at
Sorrento Store

40.42 + 1.56

6.17
6 × .302

43.98
+.708
36.73
7.33
1.93 dcH.

check to Walker BM		4.71	27.69	BP water Tank Conc. Base
103+27.23 = ℄ proposed		6.5	25.9	Secondary
102+77.23 = Ely line R.R. ROW. 6" deep	Conc. Mon.	5.1	27.3	
102+27.23	℄ Santa Fe Main Line	4.85	27.55	Top rail
101+17.23	℄ siding	4.88	27.52	Top rail
101		4.8	27.6	
101+97	on deck	4.6	27.8	E on bridge
101+77	on deck	4.57	28.03	W on bridge

3240

City Dat. ~7.69
Walker El. 21.07
1.6 ~ equ.

~6.9 Correction has NOT been figured

Highway to Carlsbad Caverns

diff. of 1.18 in EL. in County B.M. at Alpine & Lincoln Sts to Torrey Pines Mesa B.M.
See 1457-67

indexed
c.s.k.

Las Perasquitas Rd. Moore Stroh Northern 2-10-27

Santa Fe RR to east'ly.

9+00 Proposed Culv. or bridge radial.

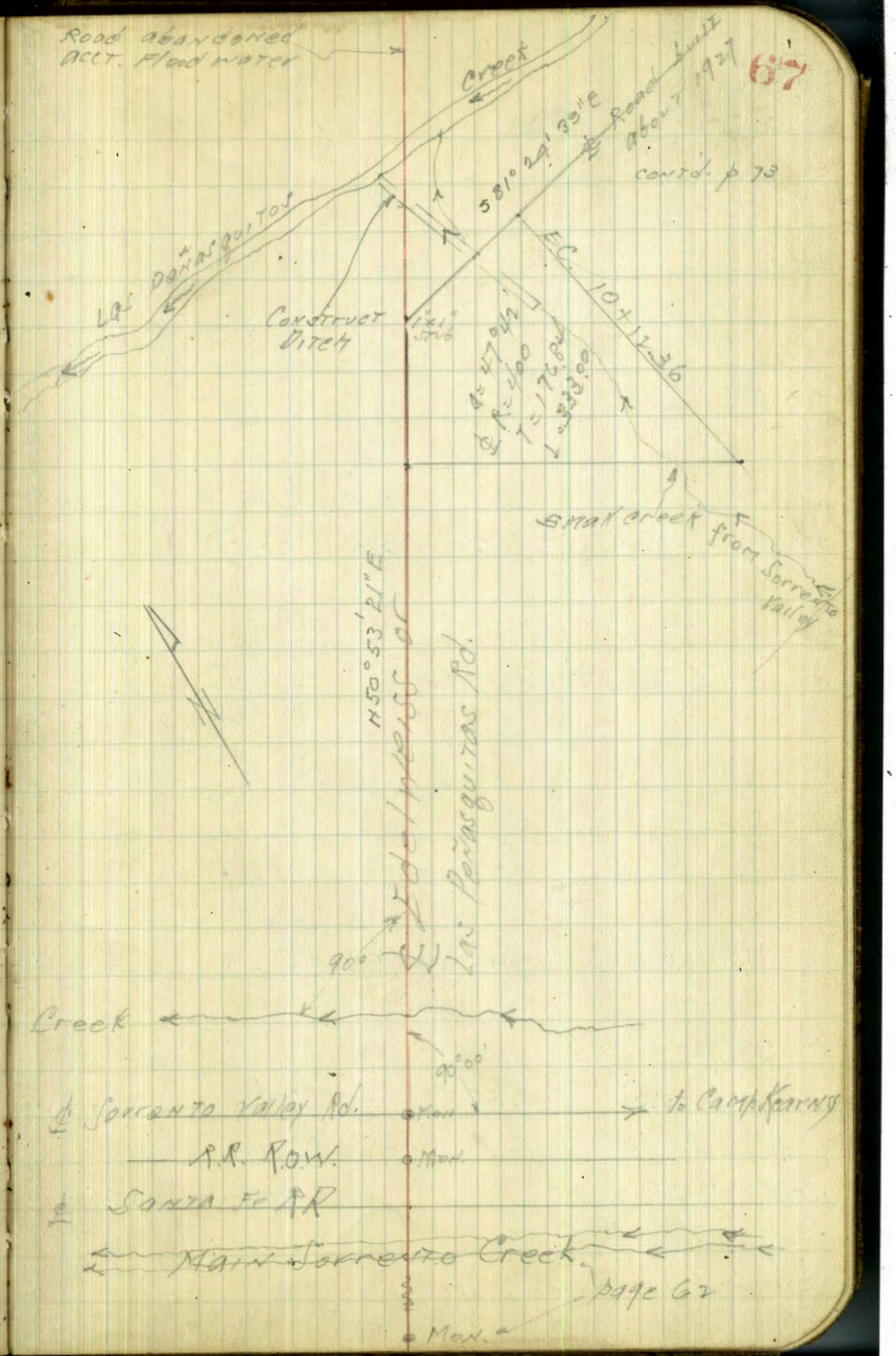
6+79.36 P.C. RT.

1+10 Proposed Culvert or bridge Secondary Sorrento

0+00

0-70

0-100



1+05							
1+00							
0+50							
TP	5.24	29.32	12.47	24.08		29.32 π	
0+00	℄ Sorrento Valley Rd						
0-50						10.6	
00-97.64	on E rail Main Line RR					10.91	
	5.25	36.55		34.30 City Datum		36.55 π	
				- 6.14			
USGS B.M. Mon. H. Sorrento East end gas pump Sorrento Store				40.42	USGS		

27	℄	27
27/30	8.2	7.8/30
6.2/30	6.4	6.5/30
5.6/30	6.3	5.6/30
12.0/30	12.5	12.0/30

	L T	C	R T
3+50	5.6 / 30	5.0	4.6 / 30
3+00	5.7 / 30	4.4	4.8 / 30
2+70 power pole		0 10'	
2+50	6.2 / 30	6.0	5.7 / 30
2+00	6.5 / 30	6.0	5.9 / 30
1+50	6.8 / 30	7.1	6.2 / 30
1+25	7.3 / 30	6.2	6.4 / 30
1+20	8.2 / 30	7.8	7.7 / 30
	29.32	29.32	π

					LT	℄	RT
6+79.36	P.C.	RT.			5.9/30	4.7	4.4/30
T.P.	8.99	29.06	4.5	25.07		29.06	
6+50					6.0/30	4.9	4.8/30
6+00					5.5/30	4.7	4.9/30
5+50					5.7/30	4.6	4.5/30
5+00					5.8/30	4.6	4.5/30
4+50					5.9/30	4.5	4.8/30
4+00					5.7/30	5.0	4.6/30
		29.37				29.37 = T	

L T. ℄ R T.

9+50 Las Pensaquitas creek → 7.7/110 5.7/70 7.2/70 4.4/30 4.5 4.7/30

9+20 5.5/30 8.0/2 creek 5.6/10 4.8 5.6/30

9+10 5.5/30 7.0/2 creek bed 5.0/30

9+00 proposed Culv. or bridge on radial line 8.0/170 7.0/30 5.9/30 4.5/20 5.7 7.0/10 7.2/30 = ℄ creek for curve
Las Peñasquitas Creek

8+50 5.9/130 5.2 5.4/30

8+00 4.5/30 5.1 4.8/30

7+50 5.5/30 4.5 5.2/30

7+00 5.7/30 4.6 4.7/30

2906 2906 = π

				34.30	.004 error vs as Sorrento Stere
check to BM Mon.			2.54	34.34	
T.P.	8.27	36.88	1.91	28.61	
T.P.	6.98	30.54	6.00	23.54	
T.P. BM	3.34	29.54	9.49	26.20	3 nails on power pole
50 L of sta 8+50					
11+50					
11+00		Peñarguitas Creek			
10+50					
10+19.36	E.C.				
10+00		Left Peñarguitas Creek			
T.P.	11.35	35.69	2.74	24.34	
		29.06			

$\frac{13.7}{50}$ $\frac{1.4}{44}$ $\frac{11.2}{30}$ 11.4 $\frac{11.7}{10}$ $\frac{6.9}{14}$ $\frac{0.8}{30}$

$\frac{14.0}{47}$ $\frac{11.4}{50}$ $\frac{11.4}{30}$ 11.6 $\frac{10.9}{10}$ $\frac{5.9}{20}$ $\frac{1.7}{30}$

$\frac{11.4}{30}$ 11.1 $\frac{11.0}{10}$ $\frac{7.0}{14}$ $\frac{0.8}{30}$

$\frac{11.1}{30}$ 11.4 $\frac{11.1}{10}$ $\frac{4.5}{30}$

$\frac{14.4}{45}$ $\frac{12.7}{80}$ $\frac{11.4}{30}$ 11.5 $\frac{9.0}{24}$ $\frac{6.7}{30}$

35.69 = T

Las Peñasquitas Rd.

EC 16+52.57

Δ = 14°00' LT.
D R = 1000
PI 15+31.00 T = 122.78
L = 244.35

PC 14+08.22

EC 13+09.37

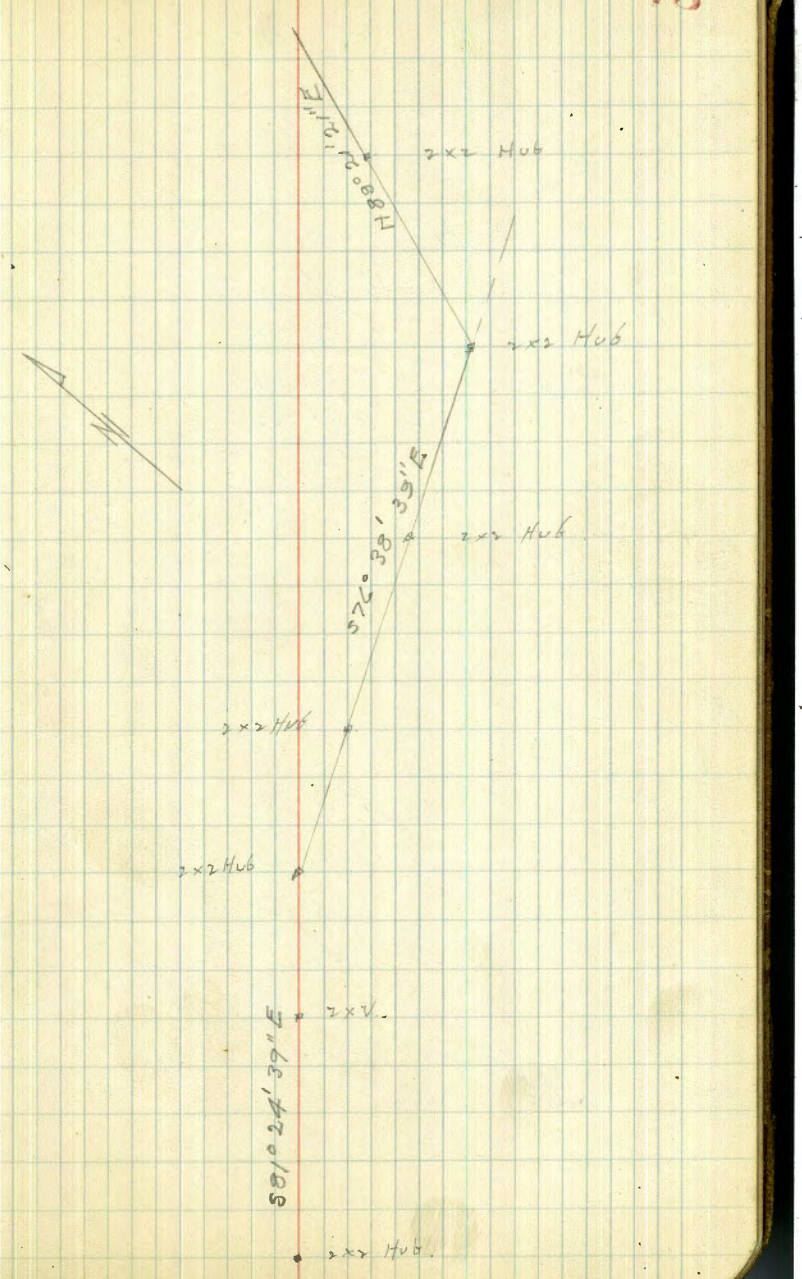
Δ = 4°46' RT
D R = 1000
PI 12+67.80 T = 41.67
L = 83.19

12+67.76 = Center Curve

PC 12+26.18

EC 10+11.86

cont'd from 67



E.C. 29+29.27

Δ = 15°36' Lt.
R = 2000
T = 271.00
L = 538.72

P.I. 26+61.50

P.C. 23+90.50

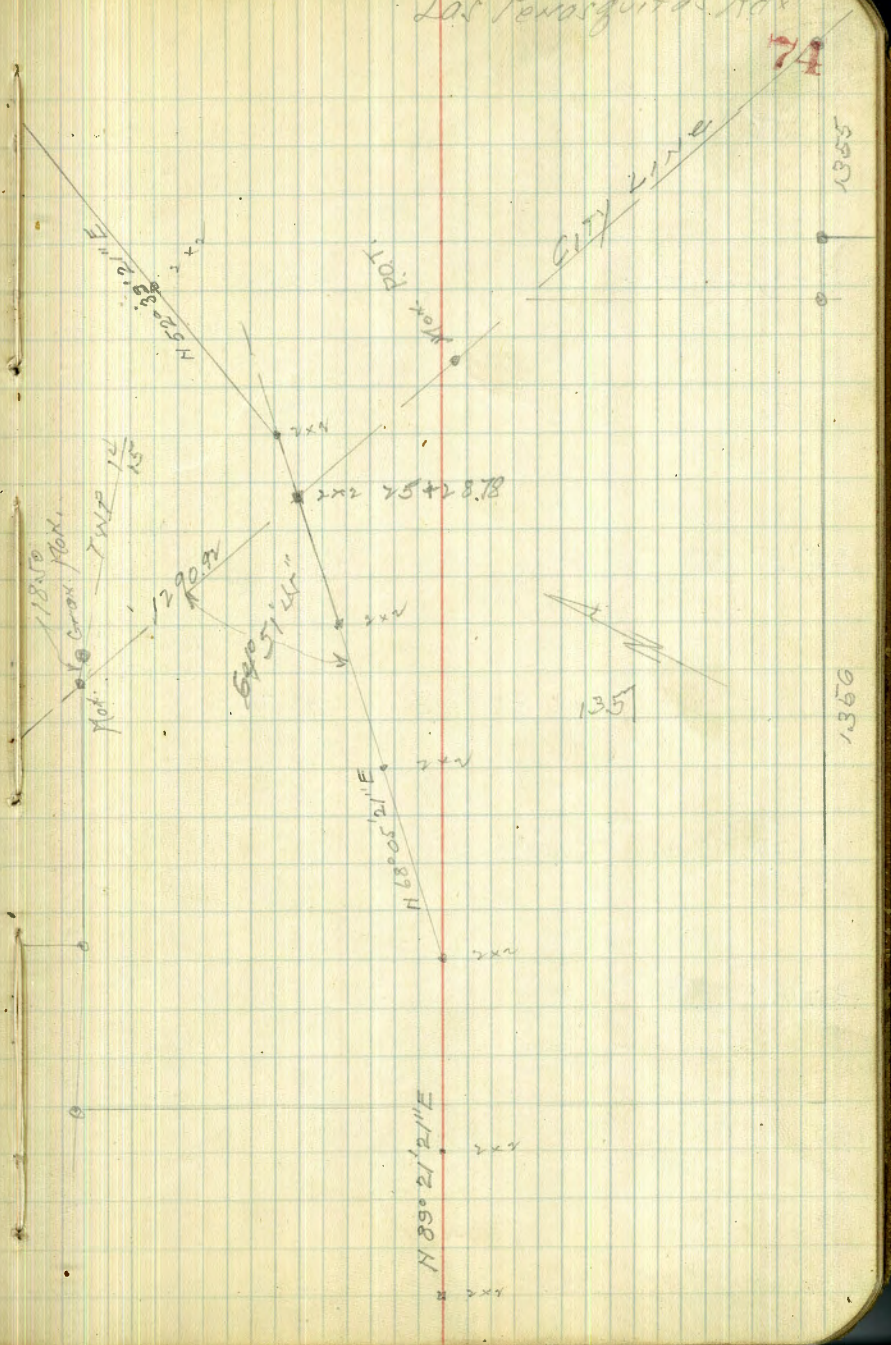
E.C. 21+11.42

Δ = 21°16' Lt.
R = 1000
T = 187.75
L = 371.17

P.I. 19+28.00

P.C. 17+40.75

E.C. 16+52.57



+50					
14+08.22 PC.					
+50					
13+09.37 EC.					
T.P.	12.91	46.80	1.31	33.89	
+67.76 Center Curve					
+26.18 PC.					
12+00					
50' Rt 8+50	9.00	35.20		26.20	3 nails per pole

47. 46 87

25.2 / 30 Creek	23.0 / 20	17.8 / 12	17.5	15.2 / 2	+ 1.5 / 30
22.5 / 30	21.0 / 20	18.0 / 11	17.8	10.3 / 9	+ 1.8 / 30
24.8 / 30 Creek	23.0 / 20	21.0 / 12	17.7 / 10	17.7	13.5 / 4	9.4 / 30
24.8 / 25 Creek	21.2 / 20	21.6 / 12	18.5 / 10	18.0	14.5 / 4	3.3 / 30

46.80

10.7 / 30	10.0 / 10	8.6	8.6 / 4	5.0 / 7	+ 7.0 / 30
10.7 / 30	10.9 / 15	10.2	10.1 / 5	7.1 / 8	+ 4.5 / 30
10.7 / 30	10.8 / 12	10.7	10.6 / 8	8.0 / 10	+ 9.5 / 30

35.20

18+00				
17+40.25 P.C.				
T.P.	13.07	48.15	11.67	35.13
17+00				
16+52.57 EC				
16+00				
15+50				
15				

				48.15	
21.5/30	20.4/20	20.4/4	19.0		6.1/30
21.4/30	21.2/20	19.2/14	19.2/2	17.2	4.9/30
track/50	20.5/30	19.0/16	19.0/6	16.2	4.8/30
19.9/30	19.2/20	17.7/17	17.7/5	15.5	2.8/30
20.6/30	19.1/20	18.6/17	18.6/4	14.5	7.0/15 0.9/30
22.0/30	20.4/20	18.4/12	18.3	13.4/4	0.0/30
24.0/30	22.0/20	17.9/11	17.7	14.3/4	1.7/30
				46.80	

T.P.	10.60	45.92	12.82	35.33
22				
21 +50				
21 +11.42 EC				
+50				
20				
+50				
19				
18+50				

LT Ø RT

creek 100	20.0 30	19.7 8	18.2 6	18.2	18.2 6	16.1 10	10.2 30
	21.0 30	19.9 15	18.2 9	18.2	18.2 4	15.6 6	7.6 30
creek 100	21.2 30	21.0 15	19.0 12	18.9		4.2 30	
	21.1 30	20.0 20	19.0 17	19.0 2	17.0	6.6 30	
	21.9 30	20.9 19	20.9 7	18.7		7.2 30	
	20.8 30	19.6 19	19.8 7	17.1		6.2 30	
	22.1 30	22.1 20	21.1 18	21.1 5	19.3		8.3 30
	22.7 30	21.9 17	21.9 5	18.9		5.0 30	

48.12

27+50									
26+50									
25+50									
25									
24+50									
24+00									
23+50									
23									
22+50									

creek 20	19.2 30	18.1 20	18.0 7	16.2 4	14.2		0.9 30		
20N 35 creek		20.2 20	17.3 15	17.3 4	14.3		10.8 30		
	20.6 35 creek	18.6 15	17.6 13	17.6 2	14.8		5.7 30		
	creek 35	20.8 30	18.8 15	17.8 11	17.8	14.5 4	2.3 30		
creek 40	20.2 30	20.0 20	19.0 10	17.7 8	17.6	17.6 4	13.7 7	4.1 30	
	20.0 30	19.7 15	19.6 7	17.6 4	17.6	17.6 7	14.5 10	4.9 30	
	20.6 30	20.0 15	18.6 4	17.6	17.6 11	17.2 15	5.4 30		
creek 40	19.3 30	18.6 15		15.8	15.7 11	12.3 15	4.2 30		
	17.2 30	17.2 15		17.0	17.0 11	10.6 30			

26.93

3 right pole 26.20 26.17

26.93
12.25
38.68
1.25
37.43
7.41
29.70
2.98
32.43
8.06
26.37
2.68
23.69
2.80
26.17

=

Sta.	Azimuth Sgl.	Azimuth Dbl.	Mag.	
				From sta 23 to 35+64.83 used 300' tape which was later found to be 0.30' short.
31+39.90	197° 44'	+35° 27½'		Δ = 17° 44' Rt
28+85.78	P.O.T.		N 22° E	
27+90.20	159° 36'	319° 11'		Δ = 20° 24' Lt. (Shift line up hill to make smaller Δ)
26+05.00	P.O.T.		N 42½ E	
19+41.37 P.I.	204° 28'	+48° 56		Δ = 24° 28' Rt
15+23.63 P.O.T.	P.O.T.			
			N 18 E	
13+46.22 P.I.	193° 23'	+26° 46'		Δ = 13° 23' Rt
			N 5° E	
11+81.25 P.I.	197-35	+ 35 - 11		Δ = 17° 35' Rt
9+73.28	P.O.T.		N 13° W	
6+52.70 P.I.	179-26	358-52½		Δ = 0° 34' Lt
0+00				

Sta.	Azimuth Sgl.	Azimuth Dbl.	Mag.	
	#18, Pg. 10			
(79) 96+54.30	174° 07'	348° 13½'	N 35½ W	
90+00	P.O.T.		N 33° W	
86+88.80	165° 53'	331° 45'		Δ = 14° 07' Lt.
84+27.00	137° 51'	275° 42'	N 18½° W	Δ = 42° 09' Lt.
66+57.18	P.O.T.		N 23½° E	
65+15.65	226° 28'	+92° 56'		Δ = 46° 28' Rt.
			N 22½ W	
52+48.00	147° 19'	294° 37½'		Δ = 32° 41' Lt
			N 10° E	
47+16.90	163° 23'	326° 45½'		Δ = 16° 37' Lt.
			N 27° E	
46+07.80	153° 06'	306° 13'		Δ = 26° 54' Lt.
44+23.87	P.O.T.			
			N 54° E	
40+77.24	207° 40'	+55° 19½'		Δ = 27° 40' Rt.
			N 26° E	
35+64.83	166° 15'	332° 30'		Δ = 13° 45' Lt.
			N 40° E	
31+39.90				

IMPROVED TABLES
AND
INFORMATION

Culv 2+50. SD 2-A

2+10
26+10
23.36
11.47
11.69

#c. Hilbourne a.7.
* Osborne, Frank
Remmen, a.L.

Mon 8'c China Midway. 21 SC.P. 16.00
100' N+W. Pt Loma Blvd & Causeway 12.07
R.R. spike Elec 945-c. 11.68
S.F. Bridge 21.71

4.86
198.13

1807

PI 8+56.2
170° Rt