

83

ST. ...
 PH and ...
 ...
 BRANCH AVE. Guizot to Williams
 ST. ...
 MATSWORTH ET AL
 DAS Park Blvd to Vermont
 PAPER AVE. Prospect to St. La Jolla Pl.
 TH ST. Leeson to Main

380

... ave N.L. Rushville to St. Corcoran's 75

FIELD

683

MICROFILMED
DEC 7 1964

ENGINEERING DEPARTMENT,
CITY OF SAN DIEGO,
CALIFORNIA.

ENGINEERING DEPARTMENT,
CITY OF SAN DIEGO,
CALIFORNIA.

10' Walk

PALM

STREET

30435	304	40'	303
30336	30311		30211
30249	30224		30124
✓ 30162	30137		30037
✓ 30025	30050		29950
✓ 29984	9953		29863
29844	29919		29819
300 ✓ 29885	29860		2976
2980	29725		2969
✓ 29680	29625		29555
29535	2951		29410
29355	29330		29230
29155	29130		29028
✓ 28915	2889		28790
28655	28630		28530
✓ 28560	28335		28236
28038	28013		27913
277	7075		7575

STREET

DALE

5' 270' 40' 26900
NUTMEG STREET

Bm Dale + Palm NE @ 303.86

1.

30386	Bm	30730	30730	3073	30730	30730	30734
3144		30730	30730	3073	30730	30730	30734
31730		30730	30730	3073	30730	30730	30734
304.40		30730	30730	3073	30730	30730	30734
301.40		30730	30730	3073	30730	30730	30734
C1L 70.4		30730	30730	3073	30730	30730	30734
C18 7.15		30730	30730	3073	30730	30730	30734
C1W 7.36		30730	30730	3073	30730	30730	30734
C23 CW		30730	30730	3073	30730	30730	30734
C27 2.09		30730	30730	3073	30730	30730	30734
C30 C10		30730	30730	3073	30730	30730	30734
C31 31		30730	30730	3073	30730	30730	30734
C41 C23		30730	30730	3073	30730	30730	30734
C33 705		30730	30730	3073	30730	30730	30734
C14 7.9		30730	30730	3073	30730	30730	30734
C07 2106		30730	30730	3073	30730	30730	30734
0.19 71		30730	30730	3073	30730	30730	30734

NE Palm Dale
203.86
307.44

Bank extends out into st
from 50' to 100' So. of Palm on
west side also from 200' to 250'
So. Roadway not in acceptable
condition. Sidewalks OK.
"4/14 Gregory"

DALE ST. 10' Walk

W.

E.

54. Palm St.	304.75	304.00	303.40	303.50	302.85	303.00	303.25
25'S.	303.81	303.56	302.76	303.06	302.41	302.56	302.81
50'S.	303.37	303.12	302.52	302.62	301.97	302.12	302.37
75'S.	302.93	302.68	302.09	302.18	301.54	301.68	301.93
100'S.	302.50	302.25	301.65	301.75	301.10	301.25	301.50
125'S.	302.06	301.81	301.21	301.31	300.66	300.81	301.06
150'S.	301.62	301.37	300.77	300.87	300.22	300.37	300.62
175'S.	301.19	300.94	300.34	300.44	299.79	299.94	300.19
200'S.	300.75	300.50	299.90	300.01	299.35	299.50	299.75
225'S.	300.31	300.06	299.46	299.56	298.91	299.06	299.31
250'S.	299.87	299.62	299.02	299.12	298.47	298.62	298.87
275'S.	299.44	299.19	298.59	298.69	298.04	298.19	298.44
300'S.	298.86	298.61	298.01	298.11	297.46	297.61	297.86
325'S.	298.48	298.23	297.63	297.73	297.08	297.23	297.48
350'S.	298.11	297.86	297.26	297.36	296.71	296.86	297.11
375'S.	297.73	297.48	296.88	296.98	296.33	296.48	296.73
400'S.	297.35	297.10	296.50	296.60	295.95	296.10	296.35
425'S.	296.97	296.72	296.12	296.22	295.57	295.72	295.97
450'S.	296.59	296.34	295.74	295.84	295.19	295.34	295.59
475'S.	296.21	295.96	295.36	295.46	294.81	294.96	295.21
500'S.	295.83	295.58	294.98	295.08	294.43	294.58	294.83
525'S.	295.45	295.20	294.60	294.70	294.05	294.20	294.45
550'S.	295.07	294.82	294.22	294.32	293.67	293.82	294.07
575'S.	294.69	294.44	293.84	293.94	293.29	293.44	293.69
599'S.	294.31	294.06	293.46	293.56	292.91	293.06	293.31

Bank 7
 not back in
 See Book 12-14
 to set grades by
 N. K. Hottinger St.

304

4

ROBINSON & CURLEW

π Curb $\frac{1}{4}$ Φ $\frac{1}{4}$ Curb S

W.L. Albatross

26600

26600

ROBINSON & CURLEW

11 Curb $\frac{1}{4}$ \neq $\frac{1}{4}$ Curb S

6

ROBINSON & CURLEW

π · Curb 1/4 Φ 1/4 Curb S

7

ROBINSON & CURLEW

11 curb 1/4 Φ 1/4 curb 5

ROBINSON & CURLEW

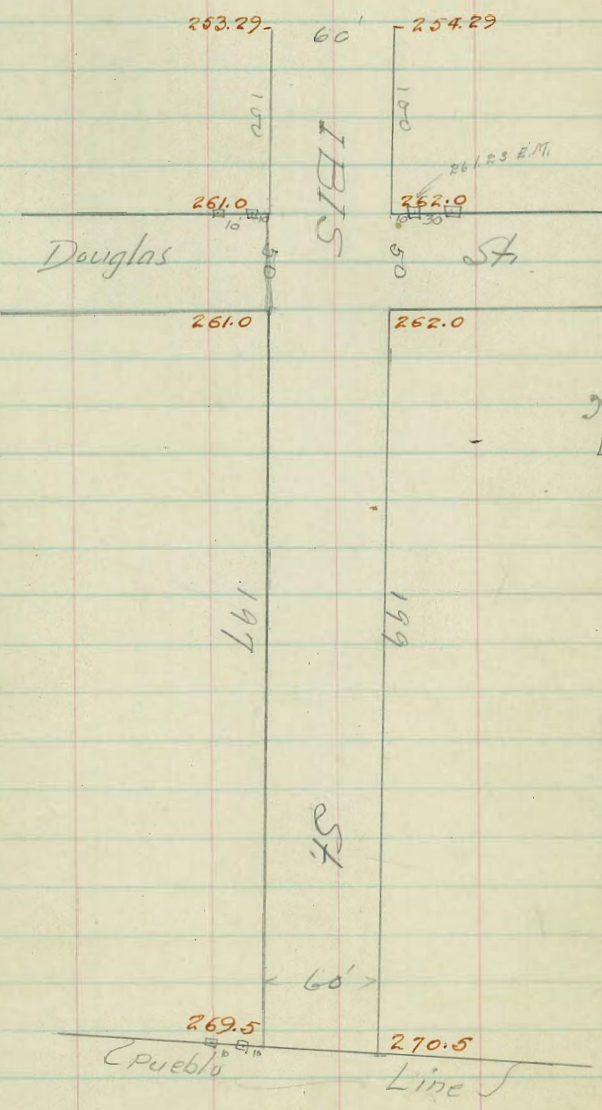
N curb 1/4 Φ 1/4 curb S

ROBINSON & CURLEW

10

Ave. produced SL of Penn.	W	Corb.	A	±	1/4	Corb.	E
	18225	18200	18135	18250	18240	18300	18325
25'	18058	18033	18018	18083	18073	18133	18158
50'	17891	17866	17851	17916	17906	17966	17991
75'	17725	17700	17685	17750	17740	17800	17825
100'	17558	17533	17518	17583	17573	17633	17658
125'	17391	17366	17351	17416	17406	17466	17491
150'	17225	17200	17185	17250	17240	17300	17325
175'	17058	17033	17018	17083	17073	17133	17158
200'	16891	16866	16851	16916	16906	16966	16991
225'	16725	16700	16685	16750	16740	16800	16825
250'	16558	16533	16518	16583	16573	16633	16658
275'	16391	16366	16351	16416	16406	16466	16491
29379' Sec A	16225	16200	16185	16250	16240	16300	16325
6.11.15 Sec A on W. side Sec B	16225	16200	16195	16270	16280	16340	16365

Mission St. Intersection



DALE STREET
Book 971

Aug 21, 1914.

Thorn 80'

st.

318.00

60'

318.00

314.50

314.75

313.06

312.69

312.24

311.77

312.09

311.48

312.47

311.82

113'

316.00

315.00

Spruce

st.

NOT OPEN

315.50

314.50

287'

312.50

60'

312.00

Redwood

st.

BM Dale SEO Redwood

311.82

" NW @ Thorn

318.39

262

278

152'

10.0

700 ft
on well

Get well on
well

677 Set 9-21-14 Blount

311.82	Bm	SE	Redwood	1250	1250	1204	1245	1358	1290	1141	1224
710				6.50	8.20	5.88	6.37	5.84	6.00	4.88	5.58
318.50				1415	1379	1579	1424	31550	14500	21600	15000
4.46				4.27	5.13	3.73	4.08	4.41	5.41	3.91	4.71
312.46				ad set 10-11-14							
317.91				Check OK 9/21/14 Gregory							
3				311.60							
				5.77							
				317.59							

N.L. Spruce	31625	31600	31520	31550	31485	31500	31525
Curb	31600	31600	31500	31525	31485	31500	31500
1/2	31500	31500				31400	31400
1/4	31520	31488	31525	31525	31470	31288	31440
Center	31525	31475	31515	31525	31465	31275	31475
1/2	31525	31465	31508	31518	31465	31267	31475
1/4	31450	31450				31250	31250
Curb	31450	31450	31500	31510	31445	31250	31450
SL Spruce	31575	31550	31490	31500	31435	31450	31475
179=SL Spruce	31575	31550	31490	31500	31435	31450	31475
175	31525	31519	31490	31470	31408	31400	31425
176	31517	31491	31475	31467	31384	31400	31425
170	31490	31466	31400	31400	31367	31379	31400
175	31460	31438	31428	31397	31337	31327	31380
150	31426	31411	31381	31373	31314	31320	31329
175	31409	31384	31320	31328	31290	31290	31327
100	31382	31358	31280	31280	31267	31260	31275
75	31356	31331	31250	31259	31200	31207	31220
50	31320	31304	31200	31200	31180	31180	31200
25	31300	31277	31170	31170	31196	31190	31200
0=N.L. Redwood	31275	31250	31190	31190	31173	31200	31225

847 9-21-14

319.81
 5.14
 314.77
 5.90
 318.67
 5.61
 313.06
 317.45
 312.84

1454	1369	1308	1237	1197	1182	1124	1450	1425
537	622	559	601	620	685	640	417	442
1306	1320	1150	1205	1144	1177			
561	67	217	662	749	674			

Checked OK 9/21/14 Gregory

Vertical curve

271	318.75	318.00	317.60	318.00	317.60	318.00	318.75
250	316.78	316.55	316.13	316.48	316.03	316.73	316.68
226	315.07	314.78	314.29	314.67	314.15	314.55	314.80
221	314.14	314.50	314.10	314.38	314.85	314.45	314.50
206	312.14	312.79	312.89	313.14	312.74	312.99	312.19
196 x	312.14	312.90	312.66	312.88	312.69	312.69	312.74
171	311.64	311.27	311.07	310.84	311.24	311.94	311.77
171 +	311.64	311.24	311.84	311.14	311.74	311.74	311.64
150	311.14	310.84	311.14	311.84	311.14	311.54	311.54
126 +	311.14	310.84	311.14	311.74	311.14	311.48	311.72
125	311.14	310.74	311.80	311.09	311.55	311.77	311.14
121	311.14	310.74	311.84	311.14	311.59	311.82	311.74
100	311.14	310.74	311.84	311.14	311.59	311.82	311.64
75	311.14	310.74	311.84	311.14	311.59	311.82	311.64
50	311.14	310.74	311.84	311.14	311.59	311.82	311.64
25	311.14	310.74	311.84	311.14	311.59	311.82	311.64
0 = NL Spruce	316.75	316.00	315.50	315.85	315.00	315.00	315.25

LARK and DOUGLASS ST'S

Aug. 31-1912.

Fort Stockton

Drive

272.00

60'

273.00

See Page 33
300

for this Block

270.50

270.00

Washington

50 St

270.50

270.00

300'

Lark St

266.50

266.00

250'

250.00

St.

250.00

Douglass

50

St.

266.00

265.50

249.00

249.00

262.00

60'

261.50

rite

(FT Stockton Drive)
0 = SL Gett

0	27125	27100	27135	27150	27140	27200	27125
25	27125	27188	27169	27171	27118	27175	27200
50	27100	27175	27157	27127	27195	27150	27175
75	27188	27167	27126	27196	27177	27125	27150
100	27175	27150	27180	27175	27151	27200	27125
125	27167	27138	27106	27156	27129	27175	27200
150	27150	27125	27088	27128	27106	27150	27175
175	27128	27117	27071	27119	27086	27125	27150
200	27125	27100	27055	27100	27067	27100	27125
225	27117	27088	27029	27081	27029	27075	27100
250	27100	27075	27027	27067	27017	27050	27075
275	27088	27067	27006	27044	26995	27025	27050
300 = NL Wash	27075	27050	26990	27025	26975	27000	27025

Changed This Block
See Page 2

0 = SL Washington	27075	27050	26990	27025	26975	27000	27025	+20 +20
25	27057	27017	26957	26997	26979	26967	26997	
50	27008	26987	26927	26958	26906	26927	26958	+42 +40
75	26975	26950	26890	26925	26877	26900	26925	
100	26957	26917	26857	26897	26879	26867	26897	+43 +47
125	26908	26887	26827	26858	26806	26827	26858	
150	26875	26850	26790	26825	26777	26800	26825	+36 +35
175	26847	26817	26757	26797	26779	26767	26797	
200	26808	26787	26727	26758	26706	26727	26758	+23 +18
225	26775	26750	26690	26725	26677	26700	26725	
250	26747	26717	26657	26697	26679	26667	26697	+17 00
275	26708	26687	26627	26658	26606	26627	26658	
300 = NL Douglas	26675	26650	26590	26625	26575	26600	26625	+06 -15

Douglas Lark St.

	W	W	W	W	W	W	E.
0=SL Douglas	26675	26600	26540	26575	26573	26550	26575
25	26575	26500	26440	26475	26473	26450	26475
50	26475	26400	26340	26375	26373	26350	26375
75	26375	26300	26240	26275	26273	26250	26275
97	26277	26217	26157	26187	26173	26150	26187
100'S.	26216	26100	26140	26175	26173	26150	26175

DOUGLASS ST.

	S.	W	W	W	W	W	N.	
W.L. Lark	26675	26600	26577	26627	26590	26650	26675	-21 (+04)
Curb	26600	26600	26567	26617	26580	26650	26650	
110	26500	26500	26557	26607	26570	26650	26550	
110	26440	26488	26557	26608	26577	26658	26590	
Center	26575	26475	26548	26600	26567	26575	26627	-29-21
110	26575	26467	26540	26597	26558	26617	26573	
Curb	26450	26450	26517	26587	26550	26600	26500	
EL. Lark	26575	26550	26577	26575	26540	26600	26627	
110=EL. Lark	26575	26550	26577	26575	26540	26600	26627	-70 (-70)
100	26475	26400	26374	26477	26395	26457	26480	-82-24
175	26375	26317	26188	26227	26217	26277	26298	
150	26050	26075	26001	26058	26071	26091	26116	-93-19
145	25863	25828	25815	25877	25849	25909	25974	
100	25675	25600	25649	25688	25667	25777	25757	-82 +07
75	25488	25467	25427	25504	25485	25547	25570	
50	25300	25275	25267	25319	25304	25364	25389	-221-05
25	25127	25088	25071	25127	25117	25187	25207	
0=W.L. Kite	24975	24900	24887	24950	24940	25000	25075	-135 +02

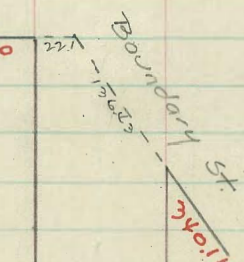
W. Kite and Douglass. E.
E.

N.L. Douglass	73075	73500	73960	74000	74960	75000	75075
Curb	73000	73500	73950	73980	74950	75000	75000
	74900	74900			74900	74900	74900
114	74900	74875	74975	74965	74975	74875	74940
Center	74950	74850	74910	74950	74910	74850	74950
114	74885	74875	74895	74975	74895	74875	74885
Curb	74800	74800			74800	74800	74900
St. Douglass	74975	74900	74860	74900	74860	74900	74975

BANCROFT ST.

Lincoln Ave

343.00



336.00

335.00

339.00

336.00

University

Ave.

Bancroft Street.

see Box 900
for field notes

59687=St. Lincoln	34224	34200	34240					+11
550	34247	34221	34164	34191				+19
500	34166	34139	34079	34106	34049	34011		+23
46963=Boundary	34107	34087	34027	34047	33989	34011	34036	+12+31
450	34081	34046	33996	34020	33967	33984	34009	+21+21
400	33998	33977	33917	33927	33877	33896	33921	+13+20
350	33914	33890	33830	33849	33788	33808	33827	+08+27
300	33832	33807	33747	33766	33707	33720	33745	+01+22
250	33749	33724	33664	33678	33615	33637	33667	-11+13
200	33708	33683	33623	33636	33577	33588	33617	
175	33666	33641	33581	33592	33528	33544	33569	-9.8+06
150	33624	33600	33540	33550	33484	33500	33524	
125	33668	33647	33587	33599	33536	33554	33579	-29-17
100	33711	33686	33623	33607	33548	33569	33594	
75	33754	33729	33669	33636	33579	33597	33628	-29-79
50	33796	33771	33711	33664	33607	33627	33652	
25	33839	33814	33754	33697	33640	33661	33686	-26-96
8	33882	33857	33797	33740	33684	33704	33729	
0=N.L. Univ.	33925	33900	33840	33783	33726	33746	33771	-03-02

Corrected
Book 8 P. 2.

LONG BRANCH AVE

West Point Long Blvd.

Cable

50

St.

Sept. 16, 1904.
16' Walks.
Books 463

21

			16.00	16.00
	50'		22.00	22.00
			26.00	26.00
	Are.		De Foe St.	St.
38		2.8	26.50	26.50
Abbott		St.		
			32.00	32.00
	Branch		32.50	32.50
			Ebers St.	St.
5.50		6.00	32.00	32.50
Bacon		St.		
6.00		6.50		
8.50	50'	8.50		
	Long		50.50	49.50
			Froude St.	St.
15.00		15.00	51.50	50.50
Cable		St.		
16.00			66.00	65.00
			90.00	90.00
		Guizot St.		

W.L. Froude	5075	5050	4990	5000	4935	4950	4975
Curb	5050	5050	5007	5017	4952	4950	4950
"	4950	4950				4850	4850
"	5035	4975	5023	5033	4968	4875	4975
Center g	5100	5000	5040	5050	4985	4900	5000
"	5090	5025	5057	5067	5002	4945	4990
Curb	5050	5050				4950	4950
"	5150	5150	5073	5083	5018	5050	5050
E.L. Froude	5175	5150	5090	5100	5035	5050	5075

600 = E.L. Froude	5175	5150	5090	5100	5035	5050	5075	+07 +05
550	5417	5392	5332	5342	5277	5292	5317	-01 -03
503 = PL	5644	5619	5559	5569	5504	5519	5544	-03 -05
500	5658	5633	5573	5583	5518	5533	5558	
450	5900	5875	5815	5825	5760	5775	5800	-13 -14
400	6142	6117	6057	6067	6002	6017	6042	-15 -11
350	6383	6358	6298	6308	6243	6258	6283	-17 -10
300	6625	6600	6540	6550	6485	6500	6525	-06 -11
250	6865	6840	6780	6790	6725	6740	6765	-05 -14
200	7106	7081	7021	7031	6966	6981	7006	-01 -06
150	7345	7320	7260	7270	7205	7220	7245	+03 -15
100	8185	8160	8100	8110	8045	8060	8085	+02 -09
50	8625	8600	8540	8550	8485	8500	8525	+03 +01
0 = W.L. Guizot	9065	9040	8980	8990	8925	8940	8965	+12 -06

See p. 76 for grades east of Guizot St

Long Branch Ave.

S

E

N

23

W.L.Ebers	3177	3180	3190	3177	3173	3200	3177
Curb	3180	3180	3198	3177	3181	3200	3200
"	3180	3180				3100	3100
"	3177	3163	3207	3167	3190	3113	3173
Center	3177	3177	3177	3180	3198	3177	3177
"	3160	3188	3177	3188	3206	3178	3190
Curb	3200	3200	3237	3267	3217	3180	3180
EL.Ebers	3277	3300	3260	3277	3277	3280	3277

600=EL.Ebers	3277	3300	3260	3277	3277	3280	3277	+04+03
550	3471	3466	3386	3419	3366	3397	3417	+01+07
500	3617	3597	3537	3563	3508	3533	3558	+07+13
450	3763	3738	3678	3706	3651	3677	3700	+13+21
400	3908	3883	3823	3850	3794	3817	3847	+19+23
350	4054	4029	3969	3994	3936	3968	3983	+24+22
300	4200	4175	4115	4138	4079	4100	4127	+30+18
250	4346	4321	4261	4281	4222	4244	4267	+37+11
200	4492	4467	4407	4427	4364	4383	4408	+44+10
150	4638	4613	4553	4569	4507	4527	4550	+51+15
100	4783	4758	4698	4713	4650	4667	4697	+58+13
50	4929	4904	4844	4856	4797	4808	4833	+67+01
0=W.L.Froude	5075	5050	4990	5000	4935	4950	4975	+76+05

W.L. De Foe	16.74	16.00	15.60	16.00	15.60	16.00	16.74
Curb	16.00	16.00	15.68	16.08	15.68	16.00	16.00
1/2	15.00	15.00				15.00	15.00
	15.77	15.13	15.77	16.17	15.77	15.13	15.77
Center g	16.74	15.74	15.85	16.74	15.85	15.74	16.74
1/2	15.90	15.78	15.93	16.33	15.93	15.78	15.90
	15.50	15.50				15.50	15.50
Curb	16.50	16.50	16.04	16.44	16.04	16.50	16.50
EL De Foe	16.74	16.50	16.10	16.50	16.10	16.50	16.74

600 = EL De Foe	16.74	16.50	16.10	16.50	16.10	16.50	16.74	+03+03
550	17.44	17.00	16.58	16.98	16.57	16.96	17.41	+05+06
500	17.74	17.50	17.07	17.46	17.06	17.44	17.67	+05+04
450	18.44	18.00	17.54	17.94	17.51	17.88	18.13	00 +04
400	18.74	18.50	18.03	18.42	17.98	18.33	18.58	-01 00
350	19.44	19.00	18.54	18.90	18.44	18.79	19.04	-06-03
300	19.74	19.50	19.00	19.38	18.94	19.44	19.50	-10-05
250	20.44	20.00	19.48	19.84	19.38	19.71	19.96	-11-08
200	20.74	20.50	19.97	20.33	19.86	20.17	20.42	-09-08
150	21.44	21.00	20.44	20.81	20.34	20.63	20.88	-11-07
100	21.74	21.50	20.93	21.29	20.79	21.08	21.33	-04-07
50	22.44	22.00	21.40	21.77	21.26	21.54	21.79	-01-07
0 = W.L. Ebers	22.74	22.50	21.90	22.24	21.73	22.00	22.24	-02-07

W.L. Cable	15.25	15.00	14.60	15.00	14.60	15.00	15.25
Curb	15.00	15.00	14.77	15.17	14.77	15.00	15.00
114	14.85	14.75	14.93	15.33	14.93	14.75	14.85
Center	15.50	14.50	15.10	15.50	15.10	14.50	15.50
114	15.40	14.75	15.27	15.67	15.27	14.75	15.40
Curb	15.00	15.00				15.00	15.00
	16.00	16.00	15.43	15.83	15.43	16.00	16.00
EL Cable	16.25	16.00	15.60	16.00	15.60	16.00	16.25

600 = EL Cable	16.25	16.00	15.60	16.00	15.60	16.00	16.25	-0.3 +1.7
550	17.25	17.00	16.60	17.00	16.60	17.00	17.25	00 +0.1
500	18.25	18.00	17.60	18.00	17.60	18.00	18.25	+0.1 +0.7
450	19.25	19.00	18.60	19.00	18.60	19.00	19.25	-0.1 +0.4
400	20.25	20.00	19.60	20.00	19.60	20.00	20.25	00 +0.1
350	21.25	21.00	20.60	21.00	20.60	21.00	21.25	+0.1 +0.3
300	22.25	22.00	21.60	22.00	21.60	22.00	22.25	-0.7 +0.4
250	23.25	23.00	22.60	23.00	22.60	23.00	23.25	+0.4 +0.4
200	24.25	24.00	23.60	24.00	23.60	24.00	24.25	-0.7 -0.1
150	25.25	25.00	24.60	25.00	24.60	25.00	25.25	-0.3 00
100	26.25	26.00	25.60	26.00	25.60	26.00	26.25	00 -0.3
50	27.25	27.00	26.60	27.00	26.60	27.00	27.25	-0.1 -0.1
0 = W.L. De Foe	28.25	28.00	27.60	28.00	27.60	28.00	28.25	00 -0.7

S. Long Branch Ave.

N.

600=EL. Abbott	4.54	4.30	3.70	3.80	3.14	3.30	3.54	-22-16
550	4.64	4.40	3.80	3.96	3.34	3.53	3.78	-20-12
500	4.74	4.50	3.96	4.13	3.53	3.74	4.00	-20-14
450	4.84	4.60	4.08	4.29	3.71	3.98	4.23	-22-16
400	4.94	4.70	4.21	4.47	3.90	4.20	4.44	-20-15
350	5.04	4.80	4.34	4.61	4.09	4.43	4.68	-21-18
300	5.14	4.90	4.47	4.78	4.28	4.64	4.90	-22-20
250	5.24	5.00	4.59	4.94	4.46	4.88	5.13	-22-19
200	5.34	5.10	4.72	5.10	4.64	5.10	5.34	-20-19
150	5.44	5.20	4.84	5.26	4.84	5.33	5.58	-16-17
100	5.54	5.30	4.98	5.42	5.03	5.54	5.80	-13-15
50	5.64	5.40	5.10	5.59	5.21	5.78	6.03	-09-12
0=W.L. Bacon	5.74	5.50	5.23	5.74	5.40	6.00	6.24	-03-01
W.Curb	5.80	5.60	5.31	5.83	5.48	6.00	6.00	
W.W.	5.84	5.63	5.40	5.94	5.57	5.13	5.73	
Center	5.94	5.74	5.48	6.00	5.64	5.24	6.24	+05 00
E.W.	5.40	5.88	5.57	6.08	5.73	5.38	5.90	
E.Curb	5.00	5.00				5.50	5.50	
600	6.00	6.00	5.64	6.17	5.84	6.50	6.50	
574=EL. Bacon	6.24	6.00	5.73	6.24	5.90	6.50	6.74	-01-03
550	7.28	7.23	6.90	7.36	6.98	7.49	7.74	
501.5=PL.	8.74	8.50	8.10	8.50	8.10	8.50	8.74	-02 00
450	9.41	9.16	8.76	9.16	8.76	9.16	9.41	-02 +02
400	10.06	9.81	9.41	9.81	9.41	9.81	10.06	-03 00
350	10.71	10.46	10.06	10.46	10.06	10.46	10.71	-04-0.1
300	11.36	11.11	10.71	11.11	10.71	11.11	11.36	-06-0.4
250	12.01	11.76	11.36	11.76	11.36	11.76	12.01	-05-0.2
200	12.66	12.41	12.01	12.41	12.01	12.41	12.66	-05-0.2
150	13.30	13.05	12.66	13.05	12.66	13.05	13.30	-01-0.1
100	13.94	13.70	13.30	13.70	13.30	13.70	13.94	-02 00
50	14.60	14.35	13.94	14.35	13.94	14.35	14.60	00 00
0=W.L. Cable	15.24	15.00	14.60	15.00	14.60	15.00	15.24	-03-0.1

for Abbott Intersec.
see next page

CHESTNUT ST. 10' walk
see Book 922

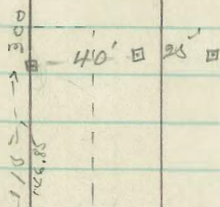
21

Hortensia

St.

235.00

235.50



25300

252.50

BM. 252.03

Wetherby

St.

254.00

LONG BRANCH AVE.

Abbott St. Intersection

	S	380	370	320	265	N.	220	205
WL Abbott	405	380	370	320	265	N.	220	205
Curb	380	380	378	338	273	180	180	
"	280	280				180	180	
"	353	493	337	207	282	193	253	
Center	405	305	345	355	290	205	205	
"	370	318	357	363	298	218	270	
Curb	330	230				230	230	
"	430	430	262	272	307	230	330	
EL Abbott	455	430	370	380	315	330	355	

-18 -09

-18 -07

Chestnut St. 5' wide 10' walks
S E N.

252.03

0.39

252.42

249.83

2.59

5.99

8.4

250.25

2.17

7.47

-5.3

13.01

239.41

0.58

239.99

247.25

7.26

6.24

-12.5

13.01

246.35

6.36

7.24

13.6

12.57

227.42

239.26

246.04

16.78

5.72

22.5

246.35

246.92

6.98

10.23

-17.2

244.18

14.92

11.46

-28.4

244.44

15.18

0.82

-16.00

28

700. 700 700 700 700

380.8 700.78 700.78 700.78
115 700.78 700.78 700.78
100 700.78 700.78 700.78
86 700.78 700.78 700.78
75 700.78 700.78 700.78
60 700.78 700.78 700.78
50 700.78 700.78 700.78
25 700.78 700.78 700.78
0 = W.L. Witherby 700.78 700.78 700.78

WHITMAN ST.
And
WITHERBY ST.

See Book 977

29

Hortensia St.

50

Whitman ST

22460
22460

22410
22410

22460

22410

50

50

22460

22410

22660

22410

300

25200

50

252.50

300

25400

Witherby St.

Chestnut ST

See Page 43 1/2

26000

26000

26000

67560

25400

150

253.1

1960

252.00

Hickory

0=SL Chestnut	7577 ⁻¹¹	75700	75785	75760	75600
75	75771	75776	75770	75774	
75	75777 ⁻¹⁰	75767	75776	75700	
75	75703	75778	75761	75778	
100	75778 ⁻¹⁰	75703	75787	75750	
175	75754	75779	75717	75757	
175	75750 ⁻⁰⁹	75754	75758	75700 ⁺⁰⁶	
175	75706	75781	75767	75774	
700	75777 ⁰⁰	75707	75788	75749 ⁺⁰²	
775	75758	75777	75754	75774	
775	75757 ⁻¹⁶	75758	75759	75799 ⁻¹⁷	
775	75709	75784	75766	75774	
700=N.L. Whitman	75754 ⁻¹²	757610	75790	75764 ⁻¹²	75688

N.L. Chestnut

Curb

116

Center 75776 75794 75770 75774

116 75750 75777 75704 75777

Curb 75700 75700 75794 75740

SL Chestnut 75777 75700 75786 75750 75700

see page 47 1/2

Sunset Blvd.

260.00

BM 26248 av. Ft Stockton & Witherby
mass plug O.E.

264.04 H.I.	25275	25350	25352	25450
12.01	7.17	6.42	6.40	5.42
252.03	253.00	254.0	254.03	254.53
7.89	6.92	5.92	5.89	4.92
259.92 H.I.				5.37
255.07	257.49	257.99	258.38	256.10
4.83	4.43	3.93	4.34	3.82
			253.8	11.42
256.74			252.03	263.43
3.18			2.48	

26248
7.01
252.03
7.89
259.92
6.01
267.91

253

5.71

253.7

4.19

254.0

4.67

254.55

4.19

5.07

3.82

255.1

4.13

256.1

2.27

Curb States
11/17/12
Gregory
Shipmaker
11/10/12

L ST.

Oct 8, 1914

ST	78.00	200	79.00
32 ND	77.00	80	78.00

	S.	E.	N.					
0 = EL. 32 ND	77.75	77.00	76.85	77.50	77.40	78.00	78.25	+1.2+0.3
25								
50	77.60	77.25	77.10	77.75	77.65	78.25	78.60	+1.5+0.6
75								
100	77.75	77.60	77.35	78.00	77.90	78.60	78.75	+1.2+0.0
125								
150	78.00	77.75	77.60	78.25	78.15	78.75	79.00	+1.1-0.2
175								
200 E.	78.25	78.00	77.85	78.60	78.40	79.00	79.25	+0.5-0.3

L ST LINES EAST OF 32ND ST ARE THE PRODUCTIONS
OF LINES WEST OF 32ND R.M.G

31

AP. 77.05 SH 32 ND L	77.50	77.75	78	78.25	cuts + Fills	4/15	Gregory Shadmoker 1700-2
6.75	5.67	5.45	5.17	4.95			
82.77	81.3	81.3	80.9	80.4			
78.25	78.50	78.25	78	78.25			
4.67	4.67	4.67	4.67	3.97			
4.07	4.17	4.25	4.67	4.35			
	4.05	4.0	4.07	4.3			

AP. 77.05 SH 32 ND L	77	77.25	77.50	77.50	77.50	77.75	78	78.25
5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67
81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3

78	78.25	78.50	78.50	78.50	78.75	79	79.25
4.67	4.67	4.67	4.67	4.67	4.67	4.67	4.67
81.3	81.3	81.3	81.3	81.3	81.3	81.3	81.3

5.94	82.99	K.I.	78.00	79.00	78.75	77.75	77.50	78.50
			4.99	3.99	4.24	5.24	5.49	4.49
78.25	77.25	77.0	78.0					
4.74	5.74	5.99	4.99					

old - 0.14
Apr. 10/15
Stehald
Allen
Kerr

Lark St.

W E E

0	= SL Ft Stockton	77400	77186	77180	77180	77300	77275	✓	
25		77486	77231	77216	77281	77271	77356	✓	
50		77288	77167	77228	77203	77276	77288	✓	
60		77300	77274	77260	77274	77275	77200	✓	
75		77216	77291	77274	77260	77270	77290	✓	
85		77276	77201	77285	77250	77260	77200	✓	
100		77226	77209	77293	77257	77260	77299	✓	
110		77270	77215	77299	77261	77270	77207	✓	
125		77276	77298	77299	77260	77274	77203	✓	
135		77226	77270	77300	77260	77240	77200	✓	
150		77226	77209	77288	77248	77277	77287	✓	
160		77276	77201	77280	77270	77219	77279	✓	
175		77278	77293	77269	77274	77294	77280	✓	
185		77270	77288	77261	77214	77279	77239	✓	
200		77294	77267	77274	77289	77262	77210	✓	
210		77278	77273	77270	77274	77280	77290	✓	
225		77280	77275	77285	77288	77210	77280	✓	
235		77234	77207	77267	77216	77186	77229	✓	
240		77198	77177	77273	77214	77185	77270	✓	
260		77270	77160	77210	77216	77102	77274	✓	
275		271.38	271.13	270.65	271.00	270.53	270.89	271.14	
300	= NL Washing	77078	77060	76990	77075	76977	77000	77075	✓

Vertical Curve

(ton)

Points Tie out

2 - 124B - 15 - 6/10/11

Bm 12582 SW H 26

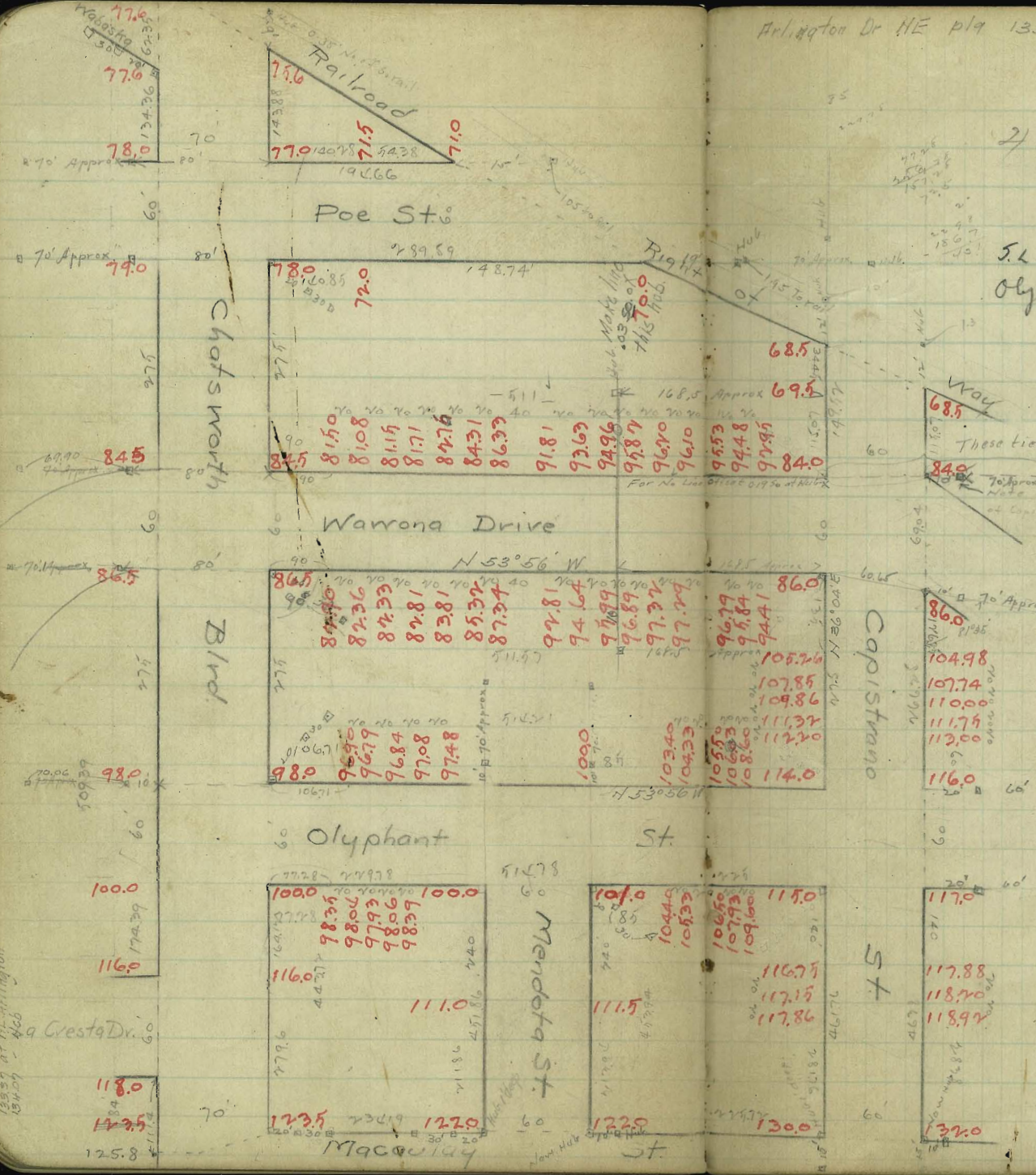
Mendota + Masonry

5.2 Chatsworth spec car line 77.14

Olyphant + Masonry 152.81

These ties for N.E. N.W. Cons of Wawona + Capistrano
Not outside of Wawona beyond N.W. Cor.

Note No line of evidence produced East from
at Capistrano 11/29/30 of N.W. X



125.57 at Arlington
134.01 - 466

Cresta Dr.

125.8

W. Capistrano St. Book 44 E.

NL Olyphant 11425 11400 11410 11500 11540 11600 11625
 Curb 11400 11400 11427 11517 11557 11600 11600
 11300 11300
 11385 11325 11443 11533 11573 11525 11585
 Center 11450 11350 11460 11550 11590 11550 11650
 11440 11375 11477 11567 11607 11575 11640
 11400 11400
 Curb 11500 11500 11493 11583 11673 11700 11700
 SL Olyphant 11525 11500 11510 11600 11640 11700 11725

0 = SL Olyphant 11525 11500 11510 11600 11640 11700 11725 -10+43
 50 11588 11563 11564 11647 11671 11731 11756 -16+58
 100 11650 11625 11619 11694 11703 11763 11788 -15+46
 140 11700 11675 11663 11731 11728 11788 11813
 150 11720 11695 11683 11750 11744 11804 11829 -16+45
 160 11740 11715 11702 11768 11760 11820 11845
 180 11811 11786 11773 11839 11832 11892 11917
 200 11897 11872 11861 11928 11924 11984 12009 -10+27
 250 12113 12088 12080 12151 12155 12215 12240 -18+29
 300 12328 12303 12299 12374 12386 12445 12470 -16+17
 350 12543 12518 12518 12597 12617 12676 12701 -07+12
 400 12759 12734 12737 12820 12848 12906 12931 -13+29
 450 12974 12949 12956 13043 13079 13136 13161
 4676 on W. 13025 13000 13010 13100 13140 13200 13225
 4638 " E.
 = NL Macaulay

135.40
 723.21
 188.77 1/2 pole

38

135.40
723.21

20' x 4 1/2"

Gregory Moore Miller

12025	13025	12925	12825	12725	12625	12525	12425	12325	12225	12125	12025	11925	11825	11725	11625	11525
12025	13025	12925	12825	12725	12625	12525	12425	12325	12225	12125	12025	11925	11825	11725	11625	11525

gutter stakes set 4' from curb 5/16
Gregory Moore Miller

Capistrano St

W

E

7-26
9830
9387-N.W.C

39

SL Right of Way 6875 6833 6810 6850 6810 6773 6874

115.07=Ro. Man E 6975 6950 6890 6900 6835 6850 6875

110 7039 7014 6955 6966 6902 6918 6943

75 7480 7455 7402 7422 7366 7390 7415

50 7795 7770 7721 7748 7697 7726 7751

25 8110 8085 8041 8074 8029 8063 8088

0=NL Warrana 8425 8400 8360 8400 8360 8400 8425

NL Warrana 8425 8400 8360 8400 8360 8400 8425

Curb 8400 8400 8392 8432 8392 8400 8400

1/4 8300 8300 8410 8461 8427 8360 8410

Center 8500 8400 8460 8500 8460 8400 8500

1/4 8540 8450 8492 8533 8492 8450 8540

Curb 8500 8500 8527 8567 8527 8500 8500

2750N W 266250N E 8600 8600 8527 8567 8527 8600 8600

SL Warrana 8625 8600 8560 8600 8560 8600 8625

250 8982 8957 8917 8952 8804 8844 8869

225 9228 9213 9173 9268 9130 9220 9245

175 10052 10027 9987 10000 9932 9972 9997

150 10402 10383 10343 10366 10308 10348 10373

120 10551 10526 10486 10512 10458 10498 10543

125 10745 10720 10680 10713 10665 10705 10730

120 10810 10785 10745 10780 10734 10774 10799

100 11011 10986 10946 10993 10960 11000 11025

80 11157 11132 11092 11154 11135 11175 11200

75 11179 11154 11119 11181 11166 11206 11231

60 11245 11220 11200 11260 11240 11300 11325

45 11280 11255 11223 11400 11415 11475 11500

0=NLOlyphant 11425 11400 11410 11500 11540 11600 11625

Handwritten notes and calculations on the right page, including measurements and survey data. Includes phrases like 'cut & fills 1/2 mile', 'Gregory Moore Miller', 'Curb stakes 4' from curb', and various numerical values.

N. Olyphant

S.

EL. Mendota	10025	10000	99.85	100.50	10040	101.00	101.25	
Curb	10001	9976	9963	10030	10033	101.00	101.00	
110	9976	9951	9940	10009	10017	100.00	100.00	
Center	9952	9927	9918	9989	10000	99.50	100.50	
110	9927	9902	9896	9968	9973	99.25	99.85	
Curb	9903	9878	9873	9948	9957	100.00	100.00	
230 = VL Mendota	9879	9854	9851	9927	9940	100.00	100.25	-17+0.2
200	9805	9780	9779	9857	9874	99.34	99.59	-29-0.7
18671	9773	9748	9747	9826	98.64	99.04	99.29	
175	9750	9725	9723	9801	9818	98.78	99.03	
16671	9733	9708	9706	9784	9800	98.60	98.85	
15728	9722	9697	9693	9768	9779	98.39	98.64	
150	9713	9688	9683	9758	9767	98.27	98.52	-49-2.8
14671	9709	9684	9679	9753	9762	98.22	98.47	
13728	9707	9682	9673	9744	9746	98.06	98.31	
12671	9704	9679	9669	9739	9739	97.99	98.24	
11728	9709	9684	9674	9744	9733	97.93	98.18	
10671	9715	9690	9680	9745	9739	97.99	98.24	
100	9722	9697	9684	9750	9743	98.03	98.28	-09+20
9728	9725	9700	9686	9752	9744	98.04	98.29	
7728	9745	9720	9709	9778	9775	98.35	98.60	
50	9773	9748	9745	9821	9833	98.93	99.18	+21+30
0 = EL. Chatsworth	9825	9800	9810	9900	9910	100.00	100.25	-0.8+1.5

1/2 from low level
1100.00 follow

96.00
5.7

109.72
10.5
229.72

41

100.25	100.50	99.75	99.50	99.25	99.00	98.75	98.50	98.25	98.00	97.75	97.50	97.25	97.00	96.75	96.50	96.25	96.00	100.00
100.50	100.75	101.00	101.25	101.50	101.75	102.00	102.25	102.50	102.75	103.00	103.25	103.50	103.75	104.00	104.25	104.50	104.75	105.00

cuts = hills 2/16/17

Gregory Moore Miller

Gregory Miller

N. Oilyphant St.
E.

S.

42

2.2h = W2 @istrano 1142h 11400 113.8h 114.50 114.40 115.00 115.25

+0.7-1.0

2.00 112.00 111.7h 111.60 112.2h 112.1h 112.7h 113.00

+0.4-1.1

1.6h 108.8h 108.60 108.4h 109.10 109.00 109.60 109.8h

1.50 107.60 107.3h 107.20 107.8h 107.7h 108.3h 108.60

-0.6-1.0

1.4h 107.18 106.93 106.78 107.43 107.33 107.93 108.18

1.2h 105.7h 105.50 105.3h 106.00 105.90 106.50 106.7h

1.0h 104.5h 104.33 104.18 104.83 104.73 105.33 105.58

1.00 104.3h 104.10 103.9h 104.60 104.50 105.10 105.3h

-0.6-0.7

8h 103.6h 103.40 103.2h 103.90 103.80 104.40 104.6h

50 102.2h 102.00 101.8h 102.50 102.40 103.00 103.2h

-0.7+0.5

0 = EL Mendota 100.2h 100.00 99.8h 100.50 100.40 101.00 101.2h

+0.9+1.7

102.4 103.1 from 102.05
102.5 107.5 106.5 104.5 103.5 102.5 102.5
112.0 112.0 112.0 112.0 112.0 112.0 112.0
112.0 112.0 112.0 112.0 112.0 112.0 112.0

102.5 102.5 102.5 102.5 102.5 102.5 102.5
102.5 102.5 102.5 102.5 102.5 102.5 102.5
102.5 102.5 102.5 102.5 102.5 102.5 102.5

106.46 105.87
106.46 105.87
106.46 105.87
106.46 105.87

115.01 114.02 113.5 108.8 107.13 105.64 104.35 102.0 115.4
115.01 114.02 113.5 108.8 107.13 105.64 104.35 102.0 115.4

113.2 112.05 109.1 102.23 101.70 103.63
113.2 112.05 109.1 102.23 101.70 103.63

102.2 102.2 102.2 102.2 102.2 102.2 102.2
102.2 102.2 102.2 102.2 102.2 102.2 102.2

cut off
10/16/06

curb stakes
11/1/06

Gregor
Miller

gutter stakes w/ from curb
Gregor
Miller

W. Mendota St. E. BOOK 997

E

0=SL Olyphant	10025	10000	9985	10050	10040	10100	10125
50	10254	10229	10212	10274	10259	10319	10344
100	10487	10458	10438	10498	10478	10538	10567
150	10713	10688	10665	10722	10696	10756	10781
200	10942	10917	10892	10946	10915	10975	11000
240	11125	11100	11073	11125	11090	11150	11175
250	11177	11152	11124	11176	11139	11199	11224
300	11436	11411	11380	11428	11385	11445	11470
350	11695	11670	11636	11681	11631	11691	11716
400	11954	11929	11891	11933	11877	11937	11962
451.86 W. = N.L.							
457.94 E. Maccaulay	12225	12200	12160	12200	12160	12200	12225

+0.2 +1.8	121.25	121.50	121.75	122.00	122.25	122.50	122.75
-0.2 +0.7	123.00	123.25	123.50	123.75	124.00	124.25	124.50
+0.1 -0.2	125.00	125.25	125.50	125.75	126.00	126.25	126.50
+1.0 -0.5	128.00	128.25	128.50	128.75	129.00	129.25	129.50
-0.1 -1.4	131.00	131.25	131.50	131.75	132.00	132.25	132.50
-0.2 -1.4	134.00	134.25	134.50	134.75	135.00	135.25	135.50
+0.5 -1.4	137.00	137.25	137.50	137.75	138.00	138.25	138.50
+1.3 -1.1	140.00	140.25	140.50	140.75	141.00	141.25	141.50
+1.6 -0.4	143.00	143.25	143.50	143.75	144.00	144.25	144.50
+0.7 -0.2	146.00	146.25	146.50	146.75	147.00	147.25	147.50

cut & fills 5/16 Gregory Miller
gutter stakes set 4' from curb 5/16 Gregory Miller

N. Poe St. E.

S.

W.L. Rightorlay	7125	7085	7023	7053	7003	7021	7026
19466	7125	7100	7060	7114	7088	7128	7153
150	7167	7138	7112	7164	7138	7188	7213
140.28 N.	7175	7150	7123	7175	7140	7200	7225
140.85 S.	7204	7195					
100	7233	7208	7285	7341	7314	7374	7399
50	7529	7504	7485	7545	7517	7587	7612
0=EL Chatsworth	7725	7700	7685	7750	7740	7800	7825

726-756	726	736	746	756	766	776	786
337	337	337	337	337	337	337	337
N.E. Chatsworth	7725	7700	7685	7750	7740	7800	7825
cut & fills 5/16	7825	7800	7785	7850	7840	7900	7925
Gregory Moore	7925	7900	7885	7950	7940	8000	8025
gutter stakes set 4' from curb 5/16 Gregory Miller	8025	8000	7985	8050	8040	8100	8125

Wetherby Street Book 395

W.

E.

E.

43 1/2

0=SL Hickory	25125	25100	25085	25150	25140	25200	25225	-05 +09
45	25138	25113	25088	25163	25154	25214	25239	
50	25150	25125	25111	25177	25168	25228	25253	+10 +28
75	25163	25138	25124	25190	25182	25242	25267	
100	25175	25150	25137	25203	25196	25256	25281	+19 +28
125	25188	25163	25149	25216	25210	25270	25295	
150	25200	25175	25162	25230	25224	25284	25309	+19 +47
175	25213	25188	25175	25243	25238	25298	25323	
196	25223	25198	25186	25254	25250	25310	25335	
200	25225	25200	25188	25256	25252	25312	25338	+03 +29
225	25238	25213	25201	25270	25267	25327	25352	
250	25250	25225	25214	25283	25282	25342	25367	-04
275	25263	25238	25227	25297	25296	25356	25381	
300=NL Chestnut	25275	25250	25240	25310	25311	25371	25396	-10 -19
Curb	25250	25250	25242	25313	25317	25377	25402	
W	25250	25250	25243	25315	25321	25381	25406	
Center	25250	25250	25244	25318	25324	25384	25410	-20 +21

SL 25250 25400 25475

UPAS ST.

Park

Blvd

295.5

↑ 294.0

39.22

291.0

Herbert St.

290.0

21.0

288.0

88.501
59.2701

Albert St.

287.0

25.0

285.0

283.0

Richmond St.

82.05 ↓

284.0

282.0

60.0

278.0

85.5

277.0

Vermont St.

N.

UPAS St.

S.

45

-75	W.L. Park Blvd	29575	29560	29490	29475	29398	29400	29425	
0	old W.L. "	29550	29525	29465	29449	29372	29374	29399	+04+18
75		29524	29499	29439	29422	29346	29348	29372	
50		29499	29474	29414	29397	29320	29322	29347	-01+15
75		29474	29449	29389	29372	29293	29265	29290	
100		29448	29423	29363	29346	29267	29269	29294	-02+09
125		29423	29398	29338	29320	29241	29242	29267	
150		29397	29372	29312	29295	29215	29216	29241	-14-05
175		29372	29347	29287	29268	29189	29190	29215	
200		29347	29322	29262	29245	29163	29163	29188	-22+05
225		29321	29296	29236	29216	29137	29137	29162	
250		29296	29271	29211	29190	29110	29110	29135	-16+18
275		29271	29246	29186	29165	29084	29084	29109	
300		29246	29220	29160	29139	29058	29058	29083	+05+24
325		29220	29195	29135	29112	29032	29031	29056	
350		29195	29170	29110	29087	29006	29005	29030	+06+17
375		29169	29144	29084	29061	28980	28978	29003	
400		29144	29119	29059	29035	28954	28952	28977	+01+22
41865	=EL Herbert	29125	29100	29040	29016	28934	28932	28957	+01+21

EL Herbert	29125	29100	29040	29016	28934	28932	28957	
Curb	29100	29100	29023	29003	28922	28922	28942	
"	29000	29000						
"	29040	28975	29007	28989	28910	28911	28936	
Center	29050	28950	28990	28976	28898	28901	28926	+20+29
"	28985	28975	28973	28962	28886	28890	28915	
Curb	28900	28900						
"	29000	29000	28957	28949	28874	28880	28905	
W.L. "	29025	29000	28940	28925	28862	28869	28894	

N. Upas St.
E.S. 29601
50201

46

0=WL Herbert	29025	29000	28940	28925	28862	28869	28894	+18+43
50	28977	28952	28892	28885	28811	28816	28841	+21+56
100	28920	28905	28845	28825	28759	28764	28789	+26+28
150	28882	28857	28797	28784	28708	28711	28736	+21+20
210=EL Albert	28825	28800	28740	28724	28646	28648	28673	+10+15

EL Albert	28825	28800	28740	28724	28646	28648	28673	
Curb	28800	28800	28723	28707	28621	28622	28658	
116	28740	28675	28675	28697	28616	28619	28644	
Centerog	28750	28650	28690	28678	28607	28606	28621	+07+11
116	28685	28625	28672	28663	28589	28592	28617	
Curb	28600	28600	28700	28658	28648	28572	28578	28602
WL "	28725	28700	28640	28622	28558	28562	28588	

0=WL Albert	28725	28700	28640	28622	28558	28562	28588	-02+17
50	28685	28660	28600	28586	28508	28511	28526	-01+27
100	28645	28620	28560	28539	28459	28458	28482	+05+29
150	28605	28580	28520	28492	28409	28405	28420	+06+26
200	28565	28540	28480	28446	28360	28352	28378	-15+12
250=EL Richmond	28525	28500	28440	28400	28310	28300	28325	-11+01

N.

Upas St.
E.

S.

47

EL. Richmond 28525 28500 28440 28400 28310 28200 28225

Curb 28500 28500 28423 28333 28297 28257 28208

" 28400 28400
28440 28375 28406 28366 28276 28266 28291

Center g 28450 28350 28290 28250 28260 28250 28275 -0.8+1.9

" 28285 28225 28274 28274 28244 28274 28259

Curb 28200 28200
28400 28400 28258 28218 28228 28218 28242

W.L. " 28225 28400 28340 28200 28210 28200 28225

0=W.L. Richmond 28425 28400 28340 28200 28210 28200 28225 -0.8+0.9

50 28225 28250 28290 28254 28166 28158 28182 -0.2+0.7

100 28225 28200 28240 28208 28123 28117 28142 +0.6-0.2

150 28225 28250 28190 28162 28079 28075 28100 +0.2-0.5

200 28225 28200 28140 28117 28035 28033 28058 +0.600

250 28175 28160 28090 28071 27991 27992 28017 +0.9-0.1

300 28125 28100 28040 28025 27948 27950 27975 +1.1+1.1

350 28075 28050 27990 27979 27904 27908 27932 +1.4+2.3

400 28025 28000 27940 27922 27860 27867 27892 +2.2+2.5

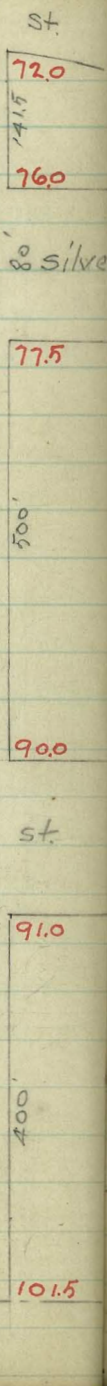
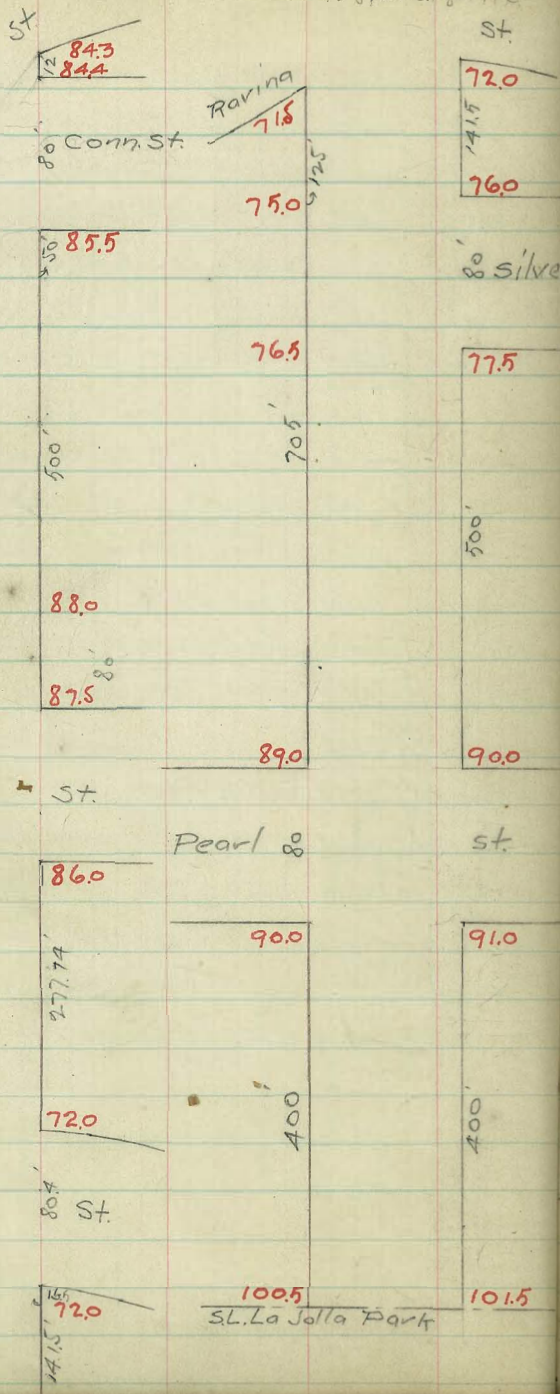
450 27975 27950 27890 27888 27816 27825 27850 +2.9+2.7

500 27925 27900 27840 27827 27777 27782 27808 +2.1+2.4

550 27875 27850 27790 27796 27729 27727 27767 +1.2+0.9

600=EL. Vermont 27825 27800 27740 27750 27685 27700 27725 +1.6+1.0

DRAPER AVE. Book 958, Dec. 18-1914



Kline NE spk 89.69
 Pearl NW spk 8784
 ✓ W. cor Mon 89.60

$\frac{454}{7493}$ $\frac{591}{7130}$
 $\frac{7058}{661}$ $\frac{7061}{666}$

111.53
 252
 114.06
 13.04
 101.02
 8.28
 101.80
 12.73
 88.57
 20.1
 88.58
 12.54
 76.04
 12.3
 77.27

747
 7183 - BM
 3.5 Draper
 112.11

W. Draper Ave. E.

	W.	E.	1/4	1/2	3/4	E.
SL Prospect	8375	8350 8330	8390	8370	8430	8455
NL Connecticut				8380	8440	8465
Curb			8361	8394	8440	8440
1/4			8378	8407	8340 8368	8340 8408
Center 1/2			8395	8420	8396	8495-05
1/4		8330	8412	8433	8423 8450	8490 8450
Curb	8350	8350	8346	8429	8449	8550
SL Silverado and Conn	8375	8350	8359	8449	8498	8550
450	8375	8350	8368	8465	8520	8580
400	8416	8391	8406	8500	8550	8610
350	8456	8431	8444	8535	8579	8639
300	8497	8472	8482	8570	8609	8669
250	8537	8512	8519	8606	8639	8699
200	8578	8553	8557	8641	8669	8729
150	8618	8593	8595	8676	8698	8758
100	8659	8634	8633	8711	8728	8788
80	8675	8650	8648	8725	8740	8800
50	8656	8631	8629	8706	8721	8781
0 = NL Kline	8625	8600	8598	8675	8690	8750
NL Kline	8625	8600	8598	8675	8690	8750
Curb	8600	8600	8572	8649	8664	8750
1/4	8540	8463	8547	8624	8639	8690
Center 1/2	8525	8425	8523	8600	8615	8575
1/4	8448	8388	8499	8576	8591	8538
Curb	8450	8450	8474	8551	8566	8600
SL "	8475	8450	8448	8525	8540	8600

49

8996 H.I.	8368	8447	8465	8606	8676
8390	8622	5.49	5.31	3.90	3.20
6.06	85.0	85.35	85.70	86.41	87.11
87.25	4.96	4.61	4.26	3.55	2.85
2.71	87.06	86.75	85.25		
	2.90	3.21	4.71		

chk O.K. for grade

culvert in poor
condition

-0.1 -0.2

-0.3 -0.1

-0.3 -0.1

-0.3 0.0

-0.2 0.0

-0.4 -0.6

-0.3 -0.1

-0.2 -0.1

-0.9 -0.2

-0.7 -0.6

-0.9 -0.9

-0.5 -0.5

W. Draper Ave
E.

E.

0 = S.L. Kline	8475	8450	8448	8525	8540	8600	8625	-0.1	-0.6
50	8249	8224	8215	8436	8292	8348	8373	+1.6	+1.1
100	8024	7999	7983	8047	8043	8096	8121	+2.9	+1.7
150	7798	7773	7750	7808	7795	7844	7869	+4.1	-0.5
175	7685	7660	7634	7689	7670	7718	7743		
200	7572	7547	7518	7569	7546	7592	7617	+4.3	-2.8
225	7459	7434	7401	7450	7422	7466	7491		
250	7347	7322	7285	7331	7298	7340	7365	+0.9	-5.5
277.74	7221	7196	7156	7198	7160	7200	7225		
N.L. Ravina	7175	7150	7123	7175	7140	7200	7225	-5.7	-7.9
N.L. Ravina	7175	7150	7123	7175	7140	7200	7225		
Curb	7150	7150	7063	7075	7088	7200	7200		
1/4	7050	7050			7100	7100			
	7110	7119	7127	7135	7143	7151	7160		
Center	7150	7159	7167	7175	7183	7191	7200	-6.7	-6.7
1/4	7110	7119	7127	7135	7143	7151	7160		
Curb	7050	7050			7100	7100			
	7150	7150	7063	7075	7088	7200	7200		
S.L. Ravina	7175	7150	7123	7175	7140	7200	7225		
S.L. Ravina	7175	7150	7123	7175	7140	7200	7225	-1.8	-0.8
125	7175	7150	7135	7199	7187	7247	7272		
100	7245	7220	7205	7269	7257	7317	7342	-1.9	-0.8
50	7385	7360	7345	7410	7399	7459	7484	-3.5	-0.7
0 = N.L. Silver	7525	7500	7485	7550	7540	7600	7625	-4.3	+0.5

89.96 H.I. 8348 7273 7844
 82.24 6.48 12.23 11.52
 7.72 12.68 JP. 7547 7592
 80.96 79.99 77.28 7.84 1.39
 9.00 9.97 77.81 H.I. 7322 7340
 4.09 3.91
 71.50 72.0 72.20 73.17 73.60 74.59
 5.81 5.81 5.11 4.14 3.71 2.72
 75.0 762
 2.31 1.31
 74.95
 33.2
 77.17 H.I.
 72.00
 5.17

N.L. Silver	7525	7500	7485	7550	7540	7600	7625
Curb	7551	7576	7511	7576	7566	7600	7600
"	7576	7551	7536	7601	7591	7598	7598
C. 80	7600	7575	7560	7625	7615	7575	7675
"	7624	7599	7584	7649	7639	7613	7690
Curb	7649	7624	7609	7674	7664	7750	7750
S.L. Silver	7675	7650	7635	7700	7690	7750	7775

o=S.L. Silver	7675	7650	7635	7700	7690	7750	7775
50	7800	7775	7760	7825	7815	7875	7900
100	7925	7900	7885	7950	7940	8000	8025
150	8050	8025	8010	8075	8065	8125	8150
200	8175	8150	8135	8200	8190	8250	8275
250	8300	8275	8260	8325	8315	8375	8400
300	8425	8400	8385	8450	8440	8500	8525
350	8550	8525	8510	8575	8565	8625	8650
400	8675	8650	8635	8700	8690	8750	8775
450	8800	8775	8760	8825	8815	8875	8900
500=N.L. Pearl	8925	8900	8885	8950	8940	9000	9025

N.L. Pearl	8925	8900	8885	8950	8940	9000	9025
Curb	8900	8900	8903	8968	8958	9000	9000
"	8885	8885	8919	8984	8974	8975	8985
Center	8950	8850	8935	9000	8990	8950	9050
"	8940	8875	8951	9016	9006	8975	9040
Curb	8900	8900	8968	9033	9023	9100	9100
S.L. Pearl	9025	9000	8985	9050	9040	9100	9125

7731	#J	2.36	5R
7575	76.75	74.95	
1.56	0.56	12.04	
		86.99	#J
		76.50	77.50
		10.49	9.49
77.75	8.24	80.00	7.99
9.24		6.99	80.25
			5.74
82.75			5.49
4.24	3.24	85.00	4.49
		1.99	8.25
			2.99
0.53			8.50
86.46	J.P.	87.50	7.74
		7.79	5.74
10.83		10.79	
97.29	#J	87.25	90.00
		9.54	8.29
			89.50
			7.74
			6.74
			0.74
77.17	#J	86.46	
76.75		681	
.42		93.27	91.98
		59.50	49.50
			2.48
			3.77

W. Draper Ave. E.

E.

0 = St. Pearl	9000	8985	9050	9040	9100	9125	-0.8 + 0.9	
50	9156	9131	9116	9181	9171	9231	9256	-1.0 + 0.7
100	9288	9263	9248	9313	9303	9363	9388	-0.7 + 0.8
150	9419	9394	9379	9444	9434	9494	9519	-1.2 + 0.5
200	9550	9525	9510	9575	9565	9625	9650	-1.1 + 0.5
250	9681	9656	9641	9706	9696	9756	9781	-1.2 + 0.6
300	9813	9788	9773	9838	9828	9888	9913	-1.3 + 0.6
350	9944	9919	9904	9969	9959	10019	10044	-1.0 + 0.7
400 = St. La	10075	10050	10035	10100	10090	10150	10175	-0.9 + 0.7

9729 H.I. 91.31
 91.00 6.00
 6.29 7.29
 9394 0.78
 3.35 2.35 96.25 96.51 SR
 1.04 2.04 7.02
 9878 96.56
 4.65 5.65 6.97 5.97
 9919 101.50
 4.34 3.34 2.03 3.03

52

27TH STREET Book 932

Logan	60'	Ave
61.0		61.0
300'		
54.5		54.5
National		Ave.
52.5		52.5
300'		
46.0		46.0
Newton		Ave.
45.0		45.0
300'		
35.0		35.0
Boston		Ave
34.0		34.0
300'		
22.5	60'	22.5
Main		St.

Marcey	Ave.
65.5	65.5
62.0	62.0
Logan	Ave.

W. 27th St.

£.

E.

54

0=SL Logan	6125	6100	6060	6100	6060	6100	6125	-01 00
50	6017	5992	5952	5992	5952	5992	6017	+01 -03
100	5908	5883	5843	5883	5843	5883	5908	+07 -06
150	5800	5775	5735	5775	5735	5775	5800	+07 -13
200	5692	5667	5627	5667	5627	5667	5692	+18 -07
250	5583	5558	5518	5558	5518	5558	5583	+13 00
300=NL National	5475	5450	5410	5450	5410	5450	5475	-01 00

0=SL "	5375	5350	5310	5350	5310	5350	5375	-01 00
50	5250	5225	5185	5225	5185	5225	5250	+03 -03
100	5125	5100	5060	5100	5060	5100	5125	+09 -02
150	5000	4975	4935	4975	4935	4975	5000	+13 +01
200	4875	4850	4810	4850	4810	4850	4875	+11 +05
250	4750	4725	4685	4725	4685	4725	4750	+04 -05
300=NL Newton	4625	4600	4560	4600	4560	4600	4625	+02 +01

0=SL "	4525	4500	4460	4500	4460	4500	4525	-06 -12
50	4358	4333	4293	4333	4293	4333	4358	-19 -17
100	4192	4167	4127	4167	4127	4167	4192	-16 -08
150	4025	4000	3960	4000	3960	4000	4025	-03 +09
200	3858	3833	3793	3833	3793	3833	3858	+06 +23
250	3692	3667	3627	3667	3627	3667	3692	+19 +25
300=NL Boston	3525	3500	3460	3500	3460	3500	3525	+25 +30

W. 27th St.

E.

0=SL Boston	3448	3400	3360	3400	3360	3400	3448	+10+1.1
50	3233	3208	3168	3208	3168	3208	3233	+0.5+2.1
100	3042	3017	2977	3017	2977	3017	3042	+1.3+3.2
150	2850	2825	2785	2825	2785	2825	2850	+2.2+4.5
200	2658	2633	2593	2633	2593	2633	2658	+2.2+3.6
250	2467	2442	2402	2442	2402	2442	2467	+1.9-0.9
300=NL Main	2275	2250	2210	2250	2210	2250	2275	+0.1 0.0

Lat St

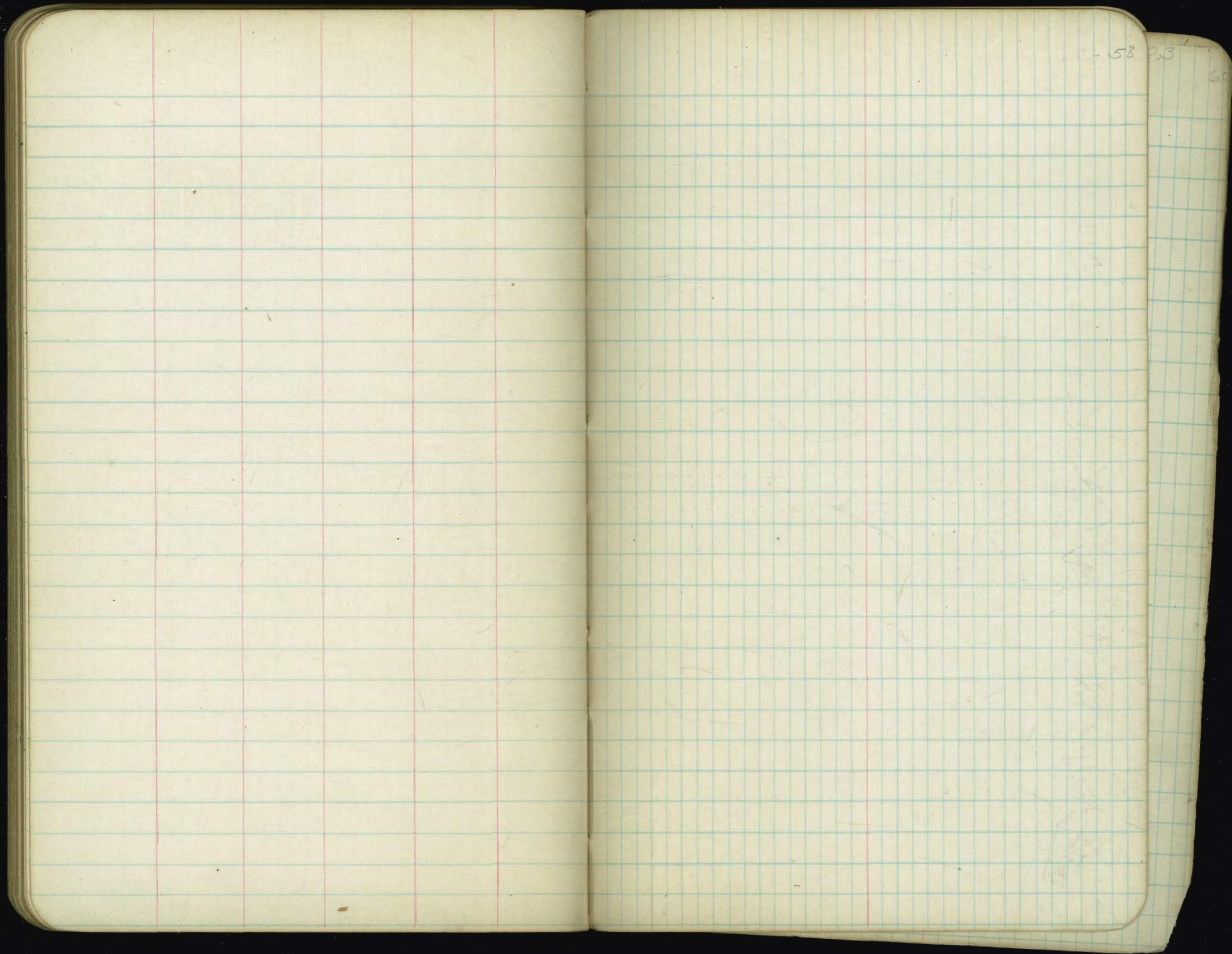
Page 16

12

12

56

60



58

60

Note - Side elevations are 0.3' below center el.

LA JOLLA BOULEVARD

5.2.74

STA.	W	11' ϕ	11' E
336	334.70	335.00	334.70
+50	334.08	334.38	334.08
337	333.45	333.75	333.45
+50	332.83	333.13	332.83
338	332.20	332.50	332.20
+50	331.58	331.88	331.58
339	330.95	331.25	330.95
+50	330.33	330.63	330.33
340	329.70	330.00	329.70
+50	329.08	329.38	329.08
341	328.45	328.75	328.45
+50	327.83	328.13	327.83
341+67.59 B.C.	327.32	327.62	327.32
342	325.70	326.00	325.70
+50	325.08	325.38	325.08
343	320.70	321.00	320.70
+50	318.20	318.50	318.20
344	315.70	316.00	315.70
+50	314.98	315.28	314.98
345	314.27	314.57	314.27
345+44.60 E.C.	313.63	313.93	313.63
345+91.17 B.C.	312.91	313.21	312.91
346	312.84	313.14	312.84
+25	312.48	312.78	312.48
+50	312.12	312.42	312.12
346+76.25 E.C.	311.75	312.05	311.75

12.5% to 341.60

5%

X

14.5%

LA JOLLA BOULEVARD

STA.	W	E	E
347	311.42	311.72	311.42
+25	310.82	311.12	310.82
+50	309.74	310.04	309.74
347+67.48 BC. 308.70		309.00	308.70
+75	308.19	308.49	308.19
348		306.46	
+25		304.19	
+50		301.92	
348+66.38 E.C.		300.43	
349		299.38	
+25		295.11	
+50		292.84	
349+74.18 BC.		290.64	
350		288.30	
+25		286.03	
350+44.00 E.C.		284.30	
+75		281.49	
351		279.22	
+25		276.95	
351+51.73 BC.		274.53	
+75		272.41	
352		270.14	
352+19.40 E.C.		268.38	
+50		265.60	
352+67.55 BC.		264.00	
353		261.06	

LA JOLLA BOULEVARD

62

STA	W	€	E
353+25		258.79	
353+48.40 EC.		256.67	
353+75		254.26	
354		252.00	
+25		249.88	
354+50.85 BC.		247.68	
+75		245.63	
355		243.50	
355+25.60 EC.		241.33	
+50		239.25	
355+72.45 BC.		237.35	
356		235.00	
+25		232.88	
+50		230.76	
356+75.01 EC.		228.62	
357		226.50	
+25		224.38	
+50		222.26	
+75		220.13	
358		218.00	
358+16.90		217.16	
+25		216.75	
+50		215.50	
+75		214.25	
359		213.00	
+25		211.75	

LA JOLLA BOULEVARD

63

STA.	W	E	E
359+50		210.50	
Blue line on Profile			
359+60.90 EC.		209.96	
360		208.00	
+50		203.35	
361		198.70	
361+33.14 BC.		195.62	
+50		194.05	
+75		191.73	
362		189.40	
+25		187.08	
+50		184.76	
+75		182.43	
362+84.10 EC.		181.58	
363		180.10	
+50		175.45	
364		170.80	
+50		166.15	
365		161.50	
+50		156.85	
366		152.20	
366+38.73 BC.		148.61	
+50		147.55	
+75		145.22	
367		142.90	
+25		140.57	
367+58.30 EC.		137.48	

9.30% from STA 360

LA JOLLA BOULEVARD

64

STA	W	☉	E
368		133.60	
+50		128.95	
369		124.30	
369+3547	BC.	121.00	
+50		119.65	
+75		117.32	
370		115.00	
+25		112.67	
+50		110.35	
+75		108.02	
371+0450	EC.	105.28	
+50		101.05	
372		96.40	
9.50% +50		91.75	
373		87.10	
+50		82.45	
374		77.80	
+50		73.15	
375		68.50	
+50		63.85	
376		59.20	
376+3050	BC.	56.36	
+50		54.55	
+75		52.72	
377		49.90	
+25		47.51	

LA JOLLA BOULEVARD

STA	W	E	E
377 + 46 ⁵⁸ = EC.		45.57	
377 + 63 ⁵⁸		40.60	
378			
0% + 50		35.95	
0% 379		31.30	
0% —		—	
379 + 316 BC.		28.36	
+ 50		26.65	
+ 75		24.33	
380		22.00	
+ 25		19.68	
380 + 40		18.30	
+ 50		17.13	
+ 75		15.36	
381		13.59	
+ 25		12.11	
+ 50		10.91	
+ 75		10.01	
381 + 99.6 EC.		9.40	
382 + 40		9.00	
382 + 50		9.00	
383		9.00	
+ 50		9.00	
384		9.00	
0% + 50		9.00	
0% 385		9.00	
+ 50		9.00	
386		9.00	
+ 50		9.00	
387		9.00	

LA JOLLA BOULEVARD

66

STA.	W	Σ	E
387+50		900	
388		900	
+50		900	
389		900	
+50		900	
390		900	
+50		900	
391		900	
+50		900	
392		900	
+50		900	
393		900	
+50		900	
394		900	
+50		900	
395		900	
+50		900	
396		900	
+50		900	
397		900	
+50		900	
398		900	
+50		900	
399		900	
+50		900	
400		900	
+50		830	

LA JOLLA BOULEVARD

STA.	W	C	E
401		760	
+50		690	
402		620	
+50		550	
403		480	
+50		410	
404		340	
+50		270	
405		200	
+50		200	
405+91.52 BC.		200	
406		200	
+50		200	
407		200	
+50		200	
408		200	
+50		200	
409+06.30 End of Bridge		200	
411+03.0 " " "		180	
411+11.40 $\angle 18^{\circ}40'$ Rt.		179	
+50		173	
412		165	
+50		158	
413		150	
+50		143	
414		135	
+50		127	

LA JOLLA BOULEVARD

STA	W	C	E
415		120	
+50		112	
416		105	
34 416+4495	AT&SF	099	
417		090	
+50		082	
418		074	
+50		061	
34 419		059	
+50		052	
419+6035	CITY LINE	050	

34

35

351

352

353

60' Street
10' Walks
10' Quarters

LARK STREET

new
finished
grade
line

Book 951

	W. CURB	1/4	±	1/4	CURB	E.
S.L. WASHINGTON	270.75	270.50	269.90	270.25	269.70	270.00
50' So.	269.50	269.25	268.65	268.87	268.78	268.50
100' "	268.25	268.00	267.40	267.50	266.85	267.00
150'	267.00	266.75	266.15	266.12	265.71	265.50
200'	265.75	265.50	264.90	264.75	263.97	264.00
250'	264.50	264.25	263.65	263.37	262.53	264.50
300' S. = M.L. DOUGLAS	263.25	263.00	262.40	262.00	261.10	261.00

DOUGLAS STREET INTERSECTION 50' ST.

M.L. DOUGLAS	263.25	263.00	262.40	262.00	261.10	261.00	261.25
N. Curb	263.00	263.00	262.30	261.90	261.00	261.00	261.00
M. 1/4	262.40	261.87	261.22	261.82	260.92	259.87	260.40
Center	262.75	261.75	262.15	261.75	260.85	259.75	260.75
5/4	262.22	261.62	262.07	261.67	260.77	259.62	260.22
S. Curb	261.50	261.50	262.00	261.60	260.70	259.50	259.50
S.L. DOUGLAS	262.75	262.50	261.90	261.50	260.60	260.50	260.75

S.L. DOUGLAS	262.75	262.50	261.90	261.50	260.60	260.50	260.75
50' So.	260.50	260.25	259.65	259.50	258.72	258.75	259.00
100' "	258.25	258.00	257.40	257.50	256.85	257.00	257.25

50' street
10' Walks
7 1/2 Quarts

DOUGLAS STREET

Book 919

KITE STREET INTERSECTION 60' ST.

∩ Curb 1/4 ⊕ 1/4 Curb S

(17 GALLS) E.L. KITE	250.25	250.00	249.40	249.50	248.85	249.00	249.25
E. Curb	250.00	250.00	249.40	249.50	248.85	249.00	249.00
E 1/4	249.80	249.00	249.40	249.50	248.85	248.00	248.60
⊕	250.00	249.00	249.40	249.50	248.85	248.00	249.00
W 1/4	249.80	249.00	249.40	249.50	248.85	248.00	248.60
W Curb	250.00	250.00	249.40	249.50	248.85	248.00	248.00
W.L. KITE	250.25	250.00	249.40	249.50	248.85	249.00	249.25

(17 GALLS) W.L. KITE	250.25	250.00	249.40	249.50	248.85	249.00	249.25
-------------------------	--------	--------	--------	--------	--------	--------	--------

25' W.	251.50	251.25	250.65	250.78	250.14	250.31	250.56
50' "	252.75	252.50	251.90	252.06	251.44	251.62	251.87
75'	254.00	253.75	253.15	253.33	252.72	252.92	253.17
100'	255.25	255.00	254.40	254.62	254.02	254.23	254.48
125'	256.50	256.25	255.65	255.90	255.32	255.54	255.79
150'	257.75	257.50	256.90	257.17	256.61	256.85	257.10
175'	259.00	258.75	258.15	258.45	257.90	258.16	258.41
200'	260.25	260.00	259.40	259.73	259.19	259.46	259.71
220' W = EL. LARK	261.25	261.00	260.40	260.75	260.22	260.50	260.75

Levels over line of proposed Culvert across Wawona Drive

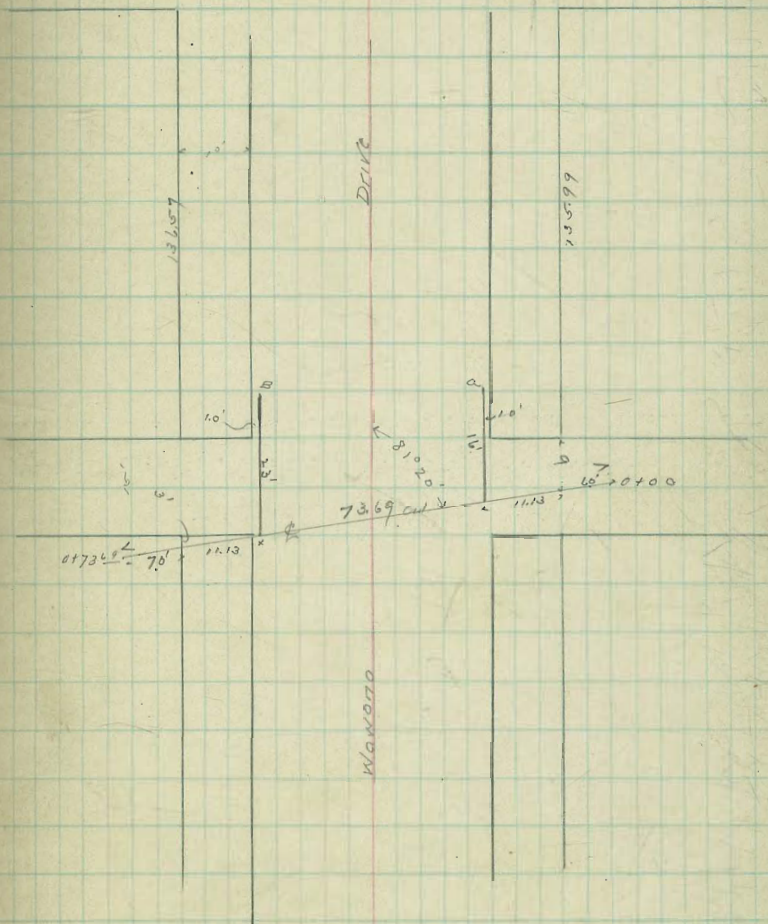
	6.39	83.52		77.14	Fig. C. E. L. Rev. "1914" Ct.
	12.01	84.30	112.4	72.29	
0+0.0			74	76.9	
+11 ¹³ Intake pipe			68	77.5	
136 ²⁵ Ch. St.			65	77.8	
+55 ⁵ Intake pipe			60	78.3	
173 ⁴³ End			57	78.6	
TR	1.53	82.94	0.89	83.41	
A			67	78.2	
B			44	80.5	

Location of Culvert Across Wawona Drive

2
25
15
15
Hornick

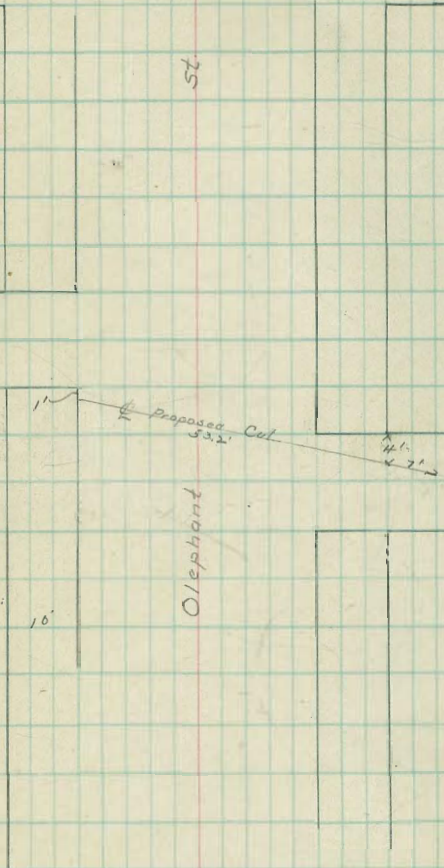
Chatsworth

Bld.



Chatsworth

BIRD



Olephant

6.77 100.78

9501

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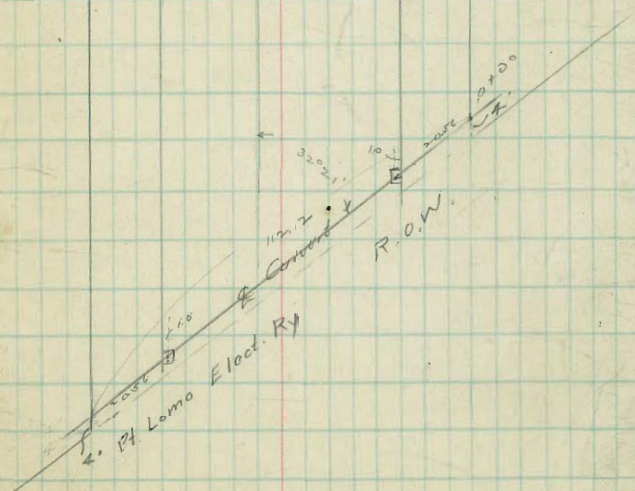
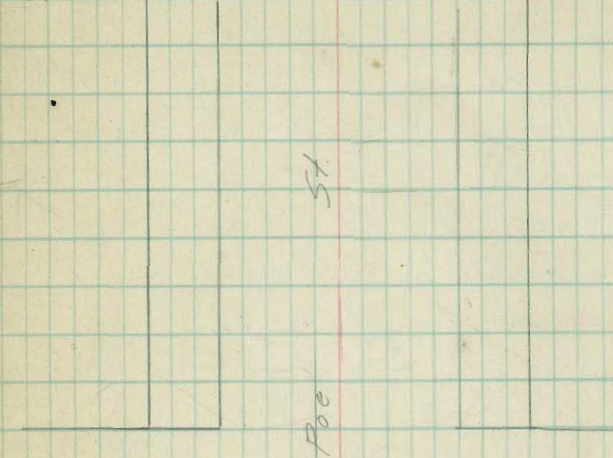
3

Levels over C.L. Poe St Collect

T.P.	2.34	7+63	7+29
0+00		4.5	70.1
121 st Ch C.B		4.7	69.9
156 th Ch St		4.9	69.7
191 st Ch C.B		5.2	69.4
1+12 th S.L.		5.4	69.2
Top rail N.L. St		3.2	71.51
Top rail S.L. St		4.60	70.03
T.P	3.83	7.28	6.8

Location of Proposed Culvert Across Poe St

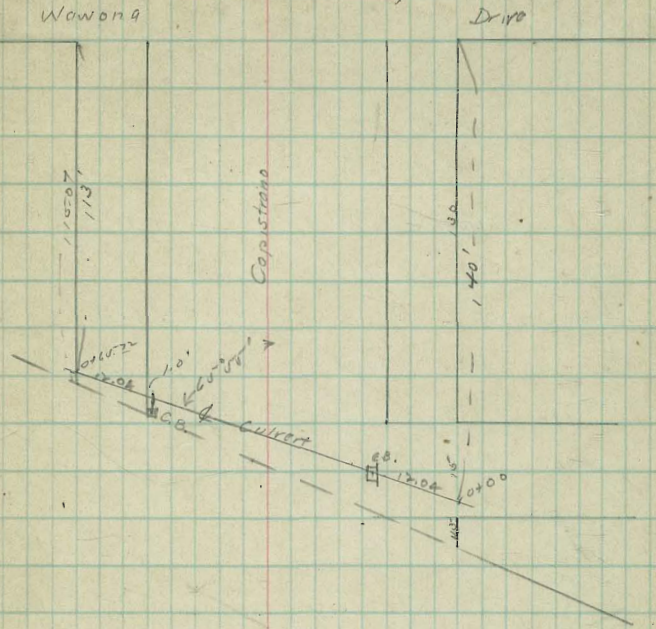
Chatsworth Blvd.



Levels over C.L. Capistrano St Culvert.

T.P.	313	72.28	61.45
0700		5.4	66.9
+12 ⁰⁰ Ch C.B.		5.5	66.8
+32 ⁰⁰ Ch		5.7	66.6
+53 ⁰⁰ Intake Pipe		5.7	66.6
+65 ⁰⁰ S.L.		5.7	66.6
Top rail No line St.	3.92		68.35
" " " " "	4.12		68.16

Location of Culvert Across Capistrano St.



74
 {Harts
 Hancock
 Herrick

00
 67
 33
 00
 37
 33
 00
 37
 33
 00

TABLE I.—Minutes in Decimals of a Degree.

1'	.0167	11'	.1833	21'	.3500	31'	.5167	41'	.6833	51'	.8500
2	.0333	12	.2000	22	.3667	32	.5333	42	.7000	52	.8667
3	.0500	13	.2167	23	.3833	33	.5500	43	.7167	53	.8833
4	.0667	14	.2333	24	.4000	34	.5667	44	.7333	54	.9000
5	.0833	15	.2500	25	.4167	35	.5833	45	.7500	55	.9167
6	.1000	16	.2667	26	.4333	36	.6000	46	.7667	56	.9333
7	.1167	17	.2833	27	.4500	37	.6167	47	.7833	57	.9500
8	.1333	18	.3000	28	.4667	38	.6333	48	.8000	58	.9667
9	.1500	19	.3167	29	.4833	39	.6500	49	.8167	59	.9833
10	.1667	20	.3333	30	.5000	40	.6667	50	.8333	60	1.0000

TABLE II.—Inches in Decimals of a Foot.

1-16	3-32	1/4	3-16	1/2	5-16	3/8	1/2	3/4	7/8	1
.0052	.0078	.0104	.0156	.0208	.0260	.0313	.0417	.0521	.0625	.0729
1	2	3	4	5	6	7	8	9	10	11
.0833	.1667	.2500	.3333	.4167	.5000	.5833	.6667	.7500	.8333	.9167

TABLE III.—Radii, Ordinates and Deflections.

Deg.	Radius	Mid. Ord.	Tan. Def.	Chd. Def.	Def. for 1 Foot	Deg.	Radius	Mid. Ord.	Tan. Def.	Chd. Def.	Def. for 1 Foot
0° 10'	34377.	.036	.145	.291	0.05'	7°	819.0	1.528	6.105	12.21	2.10'
20	17189.	.073	.291	.582	0.10	20'	781.8	1.600	6.395	12.79	2.20
30	11459.	.109	.436	.873	0.15	30	764.5	1.637	6.540	13.08	2.25
40	8594.4	.145	.582	1.164	0.20	40	747.9	1.673	6.685	13.37	2.30
50	6875.5	.182	.727	1.454	0.25	8	716.8	1.746	6.976	13.95	2.40
1	5729.6	.218	.873	1.745	0.30	20	688.2	1.819	7.266	14.53	2.50
10	4911.2	.255	1.018	2.036	0.35	30	674.7	1.855	7.411	14.82	2.55
20	4297.3	.291	1.164	2.327	0.40	40	661.7	1.892	7.556	15.11	2.60
30	3819.8	.327	1.309	2.618	0.45	9	637.3	1.965	7.846	15.69	2.70
40	3437.9	.364	1.454	2.909	0.50	20	614.6	2.037	8.136	16.27	2.80
50	3125.4	.400	1.600	3.200	0.55	30	603.8	2.074	8.281	16.56	2.85
2	2864.9	.436	1.745	3.490	0.60	40	593.4	2.110	8.426	16.85	2.90
10	2644.6	.473	1.891	3.781	0.65	10	573.7	2.183	8.716	17.43	3.00
20	2455.7	.509	2.036	4.072	0.70	30	546.4	2.292	9.150	18.30	3.15
30	2292.0	.545	2.181	4.363	0.75	11	521.7	2.402	9.585	19.16	3.30
40	2148.8	.582	2.327	4.654	0.80	30	499.1	2.511	10.02	20.04	3.45
50	2022.4	.618	2.472	4.945	0.85	12	478.3	2.620	10.45	20.91	3.60
3	1910.1	.655	2.618	5.235	0.90	30	459.3	2.730	10.89	21.77	3.75
10	1809.6	.691	2.763	5.526	0.95	13	441.7	2.839	11.32	22.64	3.90
20	1719.1	.727	2.908	5.817	1.00	30	425.4	2.949	11.75	23.51	4.05
30	1637.3	.764	3.054	6.108	1.05	14	410.3	3.058	12.18	24.37	4.20
40	1562.9	.800	3.199	6.398	1.10	30	396.2	3.168	12.62	25.24	4.35
50	1495.0	.836	3.345	6.689	1.15	15	383.1	3.277	13.05	26.11	4.50
4	1432.7	.873	3.490	6.980	1.20	30	370.8	3.387	13.49	26.97	4.65
10	1375.4	.909	3.635	7.271	1.25	16	359.3	3.496	13.92	27.84	4.80
20	1322.5	.945	3.718	7.561	1.30	30	348.5	3.606	14.35	28.70	4.95
30	1273.6	.982	3.926	7.852	1.35	17	338.3	3.716	14.78	29.56	5.10
40	1228.1	1.018	4.071	8.143	1.40	18	319.6	3.935	15.64	31.29	5.40
50	1185.8	1.055	4.217	8.433	1.45	19	302.9	4.155	16.51	33.01	5.70
5	1146.3	1.091	4.362	8.724	1.50	20	287.9	4.374	17.37	34.73	6.00
10	1109.3	1.127	4.507	9.014	1.55	21	274.4	4.594	18.22	36.44	6.30
20	1074.7	1.164	4.653	9.305	1.60	22	262.0	4.814	19.08	38.16	6.60
30	1042.1	1.200	4.798	9.596	1.65	23	250.8	5.035	19.94	39.87	6.90
40	1011.5	1.237	4.943	9.886	1.70	24	240.5	5.255	20.79	41.58	7.20
50	982.6	1.273	5.088	10.18	1.75	25	231.0	5.476	21.64	43.28	7.50
6	955.4	1.309	5.234	10.47	1.80	26	222.3	5.697	22.50	44.99	7.80
10	929.6	1.346	5.379	10.76	1.85	27	214.2	5.918	23.35	46.69	8.10
20	905.1	1.382	5.524	11.05	1.90	28	206.7	6.139	24.19	48.38	8.40
30	881.9	1.418	5.669	11.34	1.95	29	199.7	6.360	25.04	50.07	8.70
40	859.9	1.455	5.814	11.63	2.00	30	193.2	6.583	25.88	51.76	9.00

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Fads Ave

	W		E
NL Rushville	130.75	130.00	131.25
N Curve	130.00	129.68	130.23
N 1/2	129.40	129.51	130.06
E	129.50	129.35	130.00
S 1/4	128.85	129.19	129.84
S Curve	128.00	129.02	129.67
SL Rushville	129.25	128.85	129.50
50 S	127.82	127.57	128.07
100	126.39	126.14	126.64
150	124.96	124.70	125.20
209.4	123.25	122.85	123.50

ENGINEERING DEPARTMENT,
 CITY OF
 SAN DIEGO,
 CALIFORNIA.

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Deg. of Curve	LENGTH OF RAILS.							Deg. of Curve	LENGTH OF RAILS.						
	32	30	28	26	24	22	20		32	30	28	26	24	22	20
1°	.022	.020	.017	.015	.013	.011	.009	16°	.356	.313	.273	.236	.200	.170	.139
2	.045	.039	.034	.030	.025	.021	.017	17	.378	.333	.290	.252	.213	.180	.148
3	.067	.059	.051	.044	.038	.032	.026	18	.400	.351	.306	.265	.225	.190	.156
4	.089	.079	.068	.059	.050	.042	.035	19	.423	.371	.324	.280	.238	.201	.165
5	.112	.098	.086	.074	.063	.053	.044	20	.445	.392	.341	.296	.250	.212	.174
6	.134	.118	.103	.088	.075	.063	.052	21	.466	.410	.357	.309	.262	.222	.182
7	.156	.137	.120	.103	.088	.074	.061	22	.487	.430	.375	.325	.275	.233	.191
8	.179	.157	.137	.118	.100	.084	.070	23	.509	.450	.390	.338	.287	.243	.199
9	.201	.177	.154	.133	.113	.095	.078	24	.531	.469	.408	.354	.299	.253	.208
10	.223	.196	.171	.147	.126	.105	.087	25	.552	.486	.424	.367	.311	.263	.216
11	.245	.216	.188	.162	.138	.116	.096	26	.573	.506	.441	.382	.323	.274	.225
12	.268	.235	.205	.177	.151	.127	.105	27	.594	.524	.457	.396	.335	.284	.233
13	.290	.254	.222	.192	.163	.138	.113	28	.618	.545	.475	.411	.348	.294	.242
14	.312	.275	.239	.207	.175	.148	.122	29	.638	.564	.491	.424	.361	.303	.250
15	.334	.295	.257	.223	.188	.159	.131	30	.660	.583	.508	.438	.374	.313	.259

CURVE FORMULÆ.

$T=R \tan. \frac{1}{2} I$	$R=T \cot. \frac{1}{2} I$	Chord def. = $\frac{\text{chord}^2}{R}$
$T = \frac{50 \tan. \frac{1}{2} I}{\text{Sin. } D}$	$R = \frac{50}{\text{Sin. } D}$	No. chords = $\frac{1}{2} \frac{I}{D}$
$\text{Sin. } D = \frac{50}{R}$	$E = R \text{ ex. sec. } \frac{1}{2} I$	Tan. def. = $\frac{1}{2} \text{ chord def}$
$\text{Sin. } D = \frac{50 \tan. \frac{1}{2} I}{T}$	$E = T \tan. \frac{1}{2} I$	

The square of any distance, divided by twice the radius, will equal the distance from tangent to curve, very nearly.

Table IV. contains Tangents and External to a 1° curve. Tan. and Ext. to any other radius may be found, nearly enough, by dividing the Tan. or Ext. opposite the given central angle by the given degree of curve.

To find Deg. of Curve, having the Central Angle and Tangent: Divide Tan. opposite the given Central Angle by the given Tangent.

To find Deg. of Curve, having the Central Angle and External: Divide Ext. opposite the given Central Angle by the given External.

To find Nat. Tan. and Nat. Ex.-Sec. for any angle by Table IV.: Tan. or Ext. of twice the given angle divided by the radius of a 1° curve will be the Nat. Tan. or Nat. Ex. Sec.

To find angle for a given distance and deflection.

Rule 1. Multiply the given distance by .01745 (def. for 1° for 1 ft.), and divide given deflection by the product.

Rule 2. Multiply given deflection by 57.3, and divide the product by the given distance.

To find deflection for a given angle and distance: Multiply the angle by .01745, and the product by the distance.

RIGHT ANGLE TRIANGLES.—Square the altitude, divide by twice the base. Add quotient to base for hypotenuse.

Given Base 100, Alt. 10. $10^2 \div 200 = .5$. $100 + .5 = 100.5$ hyp.

Given Hyp. 100, Alt. 25. $25^2 \div 200 = 3.125$. $100 - 3.125 = 96.875 = \text{Base}$.

Error in first example, .002; in last, .045.

To find Tons of Rail in one mile of track: multiply weight per yard by 11, and divide by 7.

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300 Lot 124 1/2 Blk 17 Shermano

Handwritten calculations and notes on the right page, including:

- Arithmetic: $88.84 + 9.80 = 98.64$, $98.64 - 40.2 = 58.44$, $58.44 - 26.6 = 31.84$
- Arithmetic: $73.35 - 8.65 = 64.70$, $64.70 - 8.19 = 56.51$, $56.51 - 0.46 = 56.05$, $56.05 - 7.84 = 48.21$, $48.21 - 10.40 = 37.81$
- Arithmetic: $88.84 + 9.80 = 98.64$, $98.64 - 32.00 = 66.64$, $66.64 - 25 = 41.64$, $41.64 - 106 = -64.36$
- Arithmetic: $1120 \div 5625 = 0.1991$
- Arithmetic: $11312 \div 77500 = 0.1460$
- Arithmetic: $24 \div 96 = 0.25$
- Arithmetic: $281 \div 281 = 1$
- Arithmetic: $2824 \div 11296 = 0.25$
- Arithmetic: $1820 + 380 = 2200$, $2200 - 940 = 1260$
- Arithmetic: $14.14 + 14.14 = 28.28$, $28.28 - 5.66 = 22.62$, $22.62 - 14.14 = 8.48$
- Arithmetic: 1999396