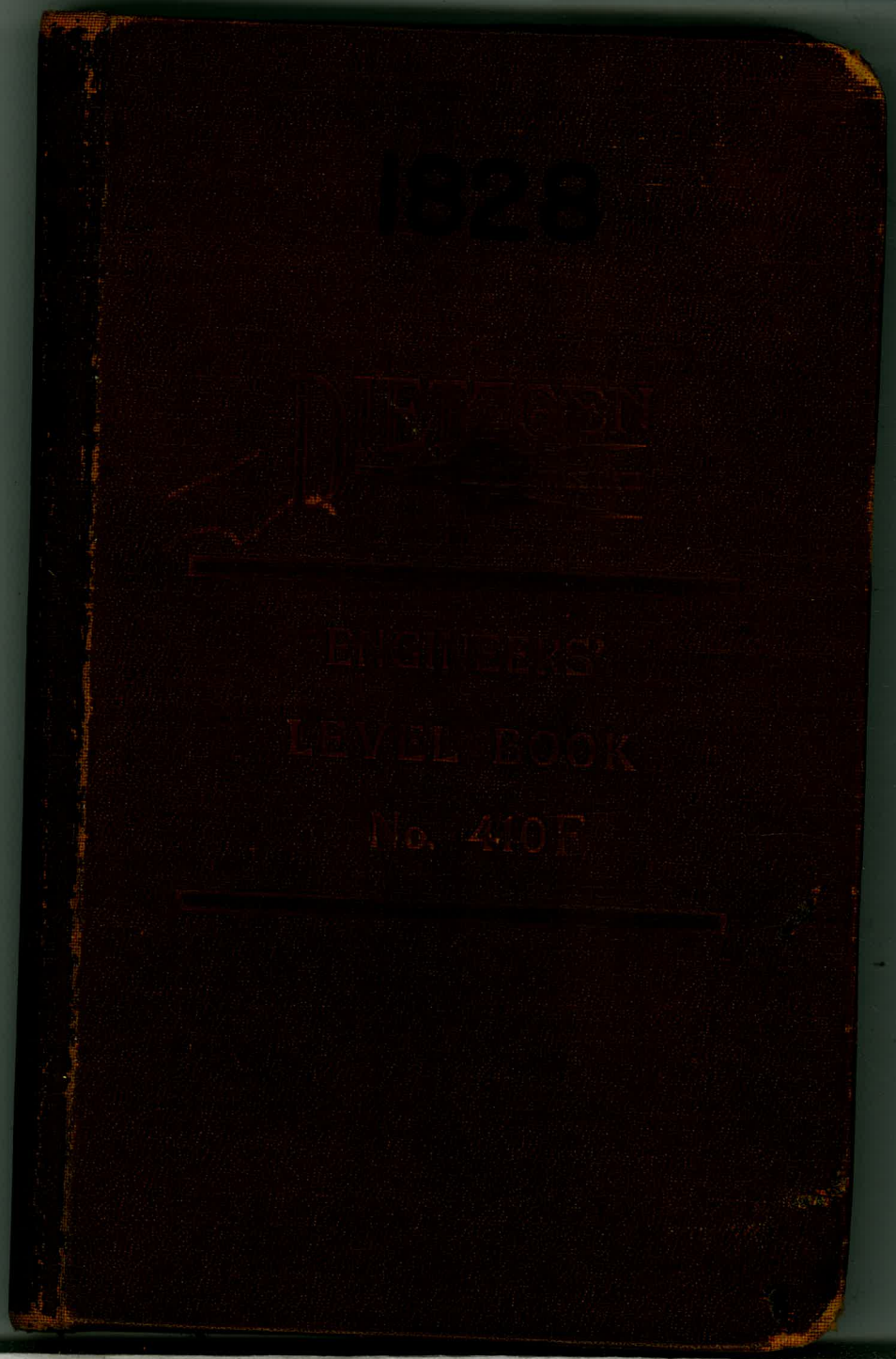

1828
ENGINEERS'
LEVEL BOOK
No. 410F

EUGENE DIETZGEN CO.

DRAWING MATERIALS, MATHEMATICAL and SURVEYING INSTRUMENTS

Chicago New York San Francisco New Orleans Pittsburg Toronto

Distances from Center of Roadway for Cross-Sectioning
Roadway 16 feet wide. Side Slopes 1 on 1.
For Single Track Embankment.

H	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	H
0	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	0
1	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	1
2	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	2
3	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	3
4	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	4
5	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	5
6	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	6
7	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	7
8	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	8
9	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	9
10	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	10
11	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	11
12	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	12
13	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	13
14	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	14
15	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	15
16	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	16
17	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	17
18	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	18
19	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	19
20	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	20
21	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	21
22	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	22
23	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	23
24	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	24
25	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	25
26	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	26
27	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	27
28	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	28
29	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	29
30	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	30
31	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	31
32	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	32
33	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	33
34	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	34
35	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	35
36	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	36
37	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	37
38	46.0	46.1	46.2	46.3	46.4	46.5	46.6	46.7	46.8	46.9	38
39	47.0	47.1	47.2	47.3	47.4	47.5	47.6	47.7	47.8	47.9	39
40	48.0	48.1	48.2	48.3	48.4	48.5	48.6	48.7	48.8	48.9	40

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 30.6. For same slopes but other widths of roadbed, correct above figures by one-half difference in width of roadbed; thus in example above, for 20 ft. roadbed distance will be 30.6+(20—16)÷2 or 2 ft. added to 30.6 =32.6. For slopes of 1 on 1½ see inside of back cover.

1828

CITY ENGINEERS OFFICE

INDEXED
to page #[illegible]6v

5
3-69
-73

This Field Book is manufactured of a High Grade 50% Rag Paper having a WATER RESISTING SURFACE, and is sewed with Bing Special Enamel Waterproof thread.

Made in U. S. A.

Xsec alley Blk 15 Bird Rock Add -2

YAMA ST. 11

Prop. train Lots 2 & 3 Met. Ctr. 12

Xsec Alley 253 U.H. 17

" " 206 Pac. Beach 26

Additional Notes alley 15 Bird Rock 35

X Sec Curlew St Laurel St North to Canyon 63-67

Canyon & Catalina X-sec. Pave. 72-73

INDEXED

JAN 19 1948

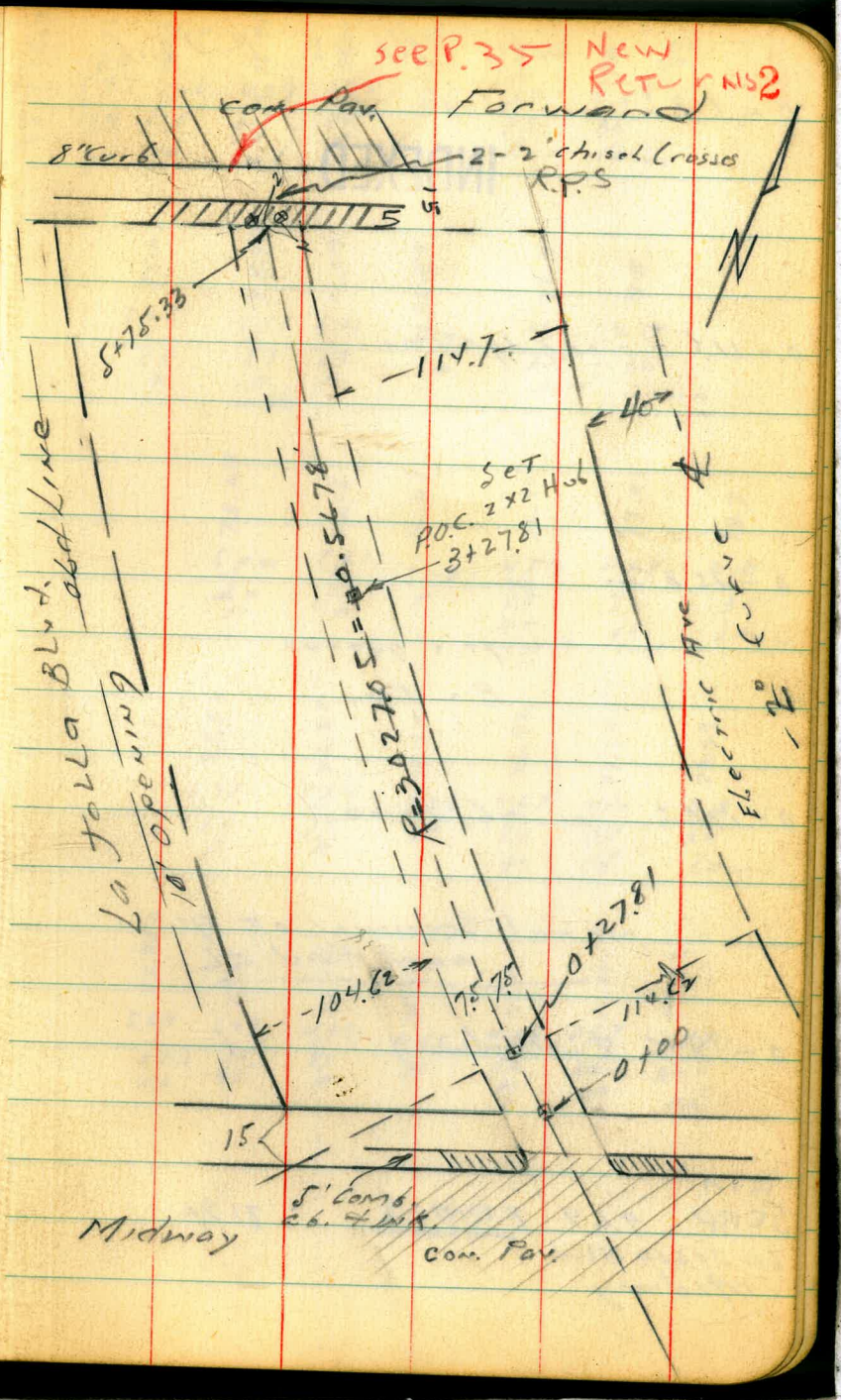
Xsec alley 15' wide
Blk 15 Bird Rock Add.
MAP NO 1083

WO 25001

Moore
Begg
Green
Roberts
1-15-48

0°14.2 - 25'

0°56.78 - 100



alley Blk 15 Bird Rock

INDEXED

0 – 6.8 ±

0 – 11.6 ± N. edge Pav

0 – 15.8 ±

gt. = gutter
P. Pav.

0 – 17.6 ± N c6 Line

Note! Sections at 90° and Radial

0 – 34.7 ± ℄ Midway

B.M.
SEBP 9.69 81.49 71.80
La Jolla Blvd.
Midway

Lt									Rt
75.27	75.52	76.23	76.70	76.37	77.8				
5.97	5.97	5.26	4.79	5.13	4.1 V		3.7	2.79	
30	17.9	17.8	8.3	8.3			7.5	30	
P.	gt	c6	c6 end	gt P			dirt	lawn	
75.41	75.99	76.09	76.57		77.5	78.8			
6.08	5.50	5.40	4.92		4.0	2.7			
30	8.7	7.5	P		7.5	30			
P	P in gt.	P			dirt	Lawn			
	75.49	76.18	76.41		76.90	77.41	78.7		
	6.00	5.31	5.08		4.59	4.08	2.8		
	30	7.5	P		7.3	7.5	30		
	P	P			gt. edge P.	c6 end	Lawn		
	75.52	76.25	76.35		76.82	77.39	78.69		
	5.97	5.2 V	5.1 V		4.67	4.10	2.8		
	30	7.5	gt.		7.2	7.5	30		
	P	P			gt	c6	Lawn		
75.85	75.26	76.53	76.94		77.13	77.82	78.52		
5.6 V	6.23	4.96	4.65		4.36	3.67	2.97		
30.1	30	7.5	P		7.5	30	30.1		
c6	gt.	P			P	gt	c6		

81.49

0+80.3 end garage

0+64.6 beg dbl garage 11.6 Rt

+60.5 7.6 Rt end of fence

T.P. 4.86 81.98 4.37 77.12
BC. Hub

0+52.81

0+28 8' Rt Beg. 6' Bd fence

0+27.81 B.C. Rt.

0+04.5 7.6 Lt Beg. Bd. fence 6' High

0+00 = N 47 1/4 dway Sec. at 90°

81.49

Lt			℄		Rt	
76.3		77.1	77.4	77.96	78.33	78.89
5.7	fence	4.9	4.6	4.02	3.65	3.09
20	7.7	7.5		5 edge apron	7.5	11.2 floor
75.9		76.7	77.2	77.7	78.07	78.75
6.1		5.3	4.8	4.32	3.91	3.23
20		7.5 fence		5 edge apron	7.5	11.6 floor

81.98

76.0		76.8	77.3	77.5		78.0
5.5		4.7	4.2	4.0	Fence	3.5
20 yard		7.5 fence		7.5	7.7	15
76.2		76.7	77.1	77.8	78.3	
5.3		4.8	4.4	3.8	3.2	
20 in yard		7.5 Fence		7.5	14 against house	
75.9		76.9	77.3	77.8	78.1	
5.6		4.6	4.2	3.8	3.4	
25		7.5		7.5	14.4 SW Cor house	

81.49

Station	Lt		℄	Rt		
1+77.81	78.0 — 4.0 / 20	78.5 — 3.5 / 7.5	79.0 — 3.0	79.3 — 2.7 / 7.5	fence 8.4	78.8 — 3.2 / 20
1+52.81	77.5 — 4.5 / 20	78.0 — 4.0 / 7.5	78.4 — 3.6	78.9 — 3.1 / 7.5	fence 8.0	79.7 — 2.3 / 20
1+27.81	77.2 — 4.8 / 20	77.8 — 4.2 / 7.5	78.1 — 3.9	78.5 — 3.5 / 7.5	fence 8.0	79.3 — 2.7 / 20
1+02.81	76.4 — 5.6 / 20	77.3 — 4.7 / 7.5	77.6 — 4.4	fence 6.6	78.1 — 3.9 / 7.5	78.6 — 3.4 / 20

1+24 7.9 L P. Pole PA 5511

1+16.6 7.8 R beg of fence

1+16.5 6.0 R end of fence

0+84.7 { 7.8 R beg fence board
7.5 L end of fence picket }

81.98

81.98

	+	HI	-	EI
	4.72	86.15	0.55	81.43
2+77 81				
2+71.7	7.5 R 7.5 R	beg Picket fence end of fence board		
2+52 81				
2+31 6	6.6 L	Pole A 5577		
2+27.8				
2+02 81				
		81.98		

	79.7	80.1	80.4	81.1		81.4
	2.8	1.9	1.6	0.9	fence	0.6
	20	7.5		7.5	7.5	20
	79.3	79.9	80.4	80.8		81.4
	2.7	2.1	1.6	1.2		0.6
	20	7.5		7.5	fence 7.7	20
	78.1	79.6	80.0	80.5		81.1
	2.9	2.4	2.0	1.5	fence	0.9
	20	7.5		7.5	8.0	20
	78.6	79.2	79.6	80.0		80.5?
	3.4	2.8	2.4	2.0	fence	1.5
	20	7.5		7.5	8.6	20
			81.98			

3+71	7.0 R	end of Picket		
3+53.81				
3+35	8.0 L	P Pole	A5563	
3+27.81	P.O.C.	Set 2x2	RW Hub	
3+10.5	11.7 R	2.9 wide steps	Top of Step	
3+10	7.0 R	℄ Evc.	24"	
3+02.81				
2+87	7.5 R	℄ 24" Evc.		
		86.15		

	L		℄		R	
	79.7 6.5 20	80.5 5.7 7.5	81.1 5.1	81.2 5.0 7.5	fence 7.8	81.5 4.7 20
	79.5 6.7 20	80.0 6.2 7.5	80.6 5.6	80.9 5.3 7.5 fence	81.9 4.3 20	
				lower	81.97 4.18 Step	
	79.6 6.6 20	80.1 6.1 7.5	80.3 5.9	80.8 5.4 7.5 fence	81.6 4.6 14.5 cor. house	
		86.15				

			2	4		5	
4+77.81			80.4	81.2	81.9	82.4	
			5.8	5.0	4.3	3.8	
			20	7.5		7.5	
4+72	7.2	Rt end bd fence					
4+59	8.8	Lt P. Pole A5575					
4+52.81			80.1	80.6	81.1	81.8	82.6
			6.1	5.6	5.1	4.4	fence 3.6
			20	7.5		7.5	20
4+47	8.0	Rt beg bd fence					
4+27.81			79.8	80.5	80.9	81.3	81.9
			6.4	5.7	5.3	4.9	4.3
			20	7.5		7.5	20
4+02.81			80.1	80.4	80.8	81.2	81.9
			6.1	5.8	5.4	5.0	4.6
			20	7.5		7.5	20
3+77.81			80.1	80.8	81.1	81.7	81.7
			6.1	5.6	5.1	5.0	4.5
			20	7.5		7.5	20
		86.15			86.15		

5 + 91.3 ± 5 c6 Forward

5+75.33 intsec. ℄ of alley & S Prop line Forward
S.L. Con. sdwalk
No Returns

5+52.81

5+37.81

4+98 end of garage

4+85 11.1 beg dbl garage

86.15

Lt				Rt	
81.2	81.5	81.7 ℄	81.02	81.51	82.33
5.0	4.7	4.50	5.13	4.64	3.82
20	7.5 dirt	Top C6	0.1 gt.	7.5	20
81.4	82.1	82.22	82.47	83.1	
4.8	4.1	3.93	3.68	6.1	
20	7.5 dirt		7.5	20 dirt	
81.6	82.2	82.6	82.8	83.4	
4.6	4.0	3.6	3.4	2.9	
20	7.5		7.5	20	
81.7	82.1	82.6	83.2	84.0	
4.5	4.1	3.6	3.0	2.2	
20	7.5		7.5	20	
81.1	82.3	82.6	83.0	83.37	
5.0	3.9	3.6	3.2	2.78	
20	7.5		7.5	16.0 floor	
80.6	82.0	82.5	82.9	83.37	
5.4	4.2	3.7	3.3	2.78	
20	7.5		7.5	11.1 floor conc	

86.15

FOR New alley
Returns
see P. 35

check to orig. BM, Midway	5.84	71.73	71.80 / 0.07	
SW BP	2.22	77.57	74.95	
check to BM BP SW La Jolla Blvd Forward	11.14	75.01	74.95 / 0.06	

L + 07.03 : Q Forward

80.15

80.34	81.11	81.49	81.6	82.41
5.81 / 20	5.04 / 7.5	4.66 / P	4.25 / 7.5 P	3.24 / 20 P

80.15

Add. Notes for x-Sections of Yama St. from Dalbergia to Cottonwood
Orig Sections in 1717 - P-19

6+13 - 30' Lt. = ℄ 4' Conc. walk

5+08 - 51' Lt. = ℄ Sing. Gar. - Wood floor

4+75 - 38' Lt. = end Paint shop

4.00 12.86 8.86 - ct.

4+50 - Some fill Made for Cabinet Shop

4+45 - 38.3 Lt. = Cor. Paint Shop - Conc. floor

Conc. floor.

4+29 - 30.6 Rt. = ℄ of Wing of Cabinet shop

3.49 12.35 8.86 - ct. 1717-P.21

Lt ℄ Rt

10-26-48

INDEXED
WK
FEB 1 1949

70.

W.O. 3159

8.35 8.37

4.51 4.49
33 30 = walk
walk at steps

7.84

5.02
51 = floor.

8.45

4.41
38
Conc. floor

12.86

8.0	7.9	7.5	7.8	7.8	7.7	7.2	8.0	8.0	8.0	8.2
4.4	4.5	4.9	4.6	4.6	4.7	5.2	4.4	4.4	4.4	4.2
38.3	30	25	20	10		10	13	20	30	40

along Bldg.

8.37 8.0

3.98 4.4
38.3 38.3
Conc. floor ground

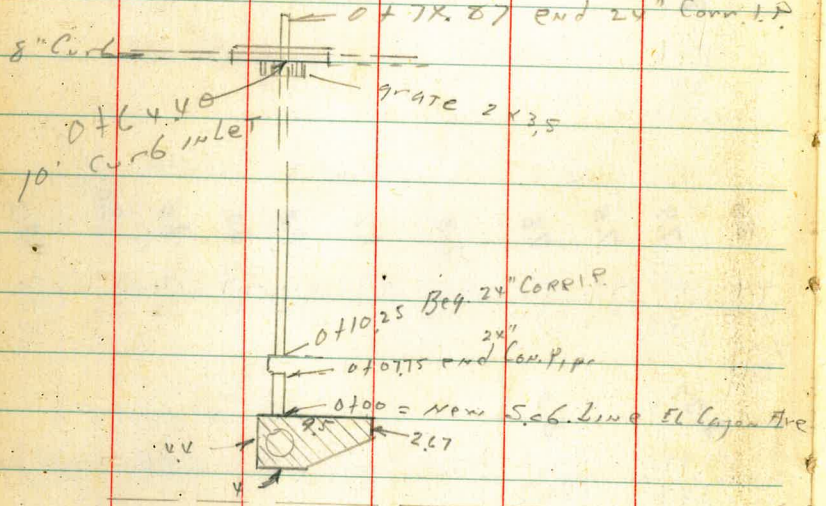
7.95

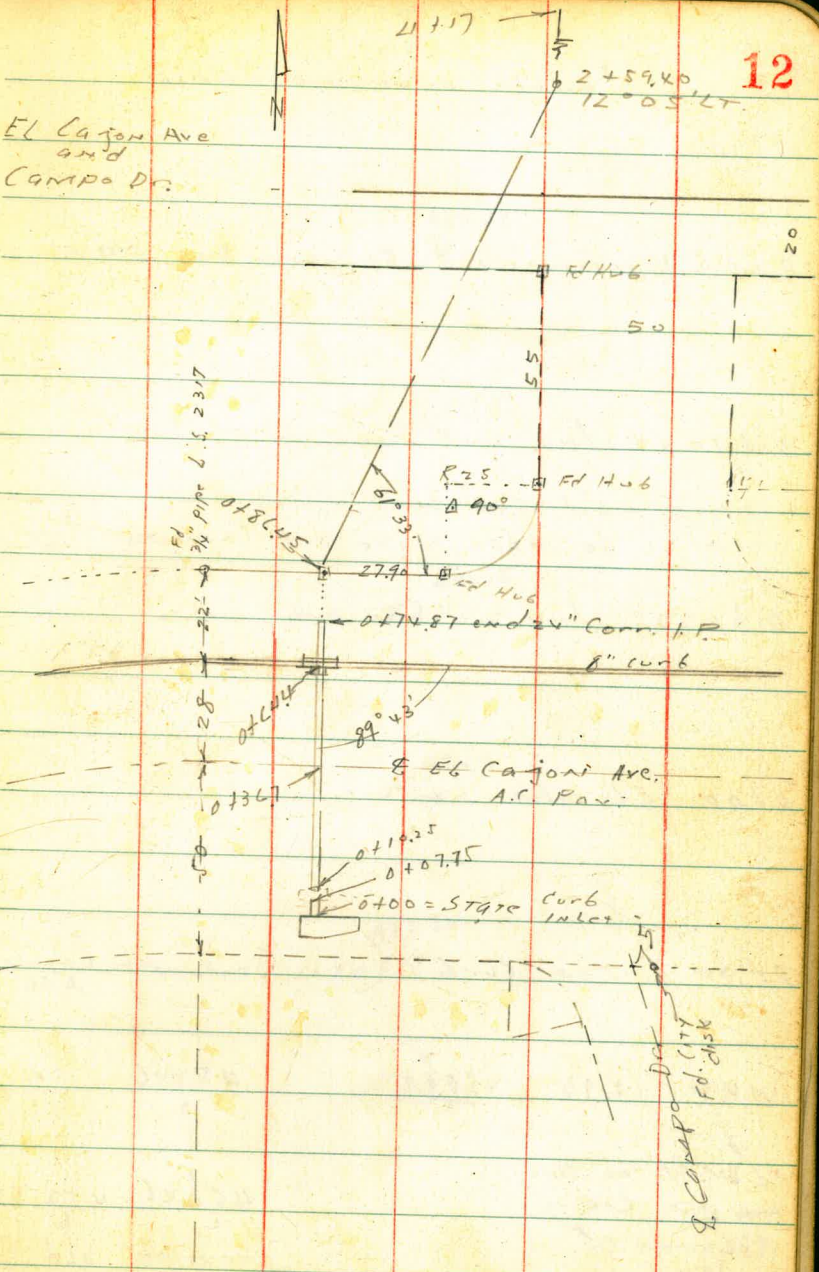
4.40
30.6
Conc. floor

12.35

Proposed drain across
Lots 2 + 3 Metropolitan Ctr.
W.O. 80143

Moore Notes
Begg = Instr.
Shoaman
Bonelli
2-28-49.





Levels Proposed drain.

0+36.7 approx ℄ El Cajon Ave. Pav. 452.88

2.51

0+10.25 Inv. 24" Conc. I.P. Culv. 445.89

9.50

This old Con. Box will be abandoned and Connection to old 24" Conc. I.P.

0+07.75 Inv. 24" Con. Pipe Culv. 446.18

9.21

0+00 El. Inlet. Future Pav. Gut. 451.19

4.20

0+00 Top Curb (New So. Curb El Cajon Ave. 452.22

3.17

SWBP 293 455.39 ✓ 452.46 455.39 ✓

Fd. BM. B.P. on SWly BP Cor. Rolando Dr. and El Cajon Ave.

452.46 Corrected ?

452.53 old 1301-47

	Lt	℄	Rt
0+86.45 ⚠ N.L. El Cajon Ave.	A52.3 3.1 20	A51.1 x.3 10	A46.9 8.5 — A46.5 8.4 10 — 9.8 20 — A45.6
0+74.87 Inv. end 24" Conc. I.P. Culv.	A52.8 2.6 20	A52.0 3.4 10	A45.62 9.77 — A48.3 7.1 10 — 7.2 20 — A48.20
0+68		A52.6 2.8	
0+64.4 Top conc inlet		A52.77 2.62	
0+64.4 Top iron grating		A54.77 3.62	
0+64.4 N.C.B. El Cajon Cive ~~Box~~ Box		A46.1 9.3 — Box full of mud and water	
455.39		455.39	

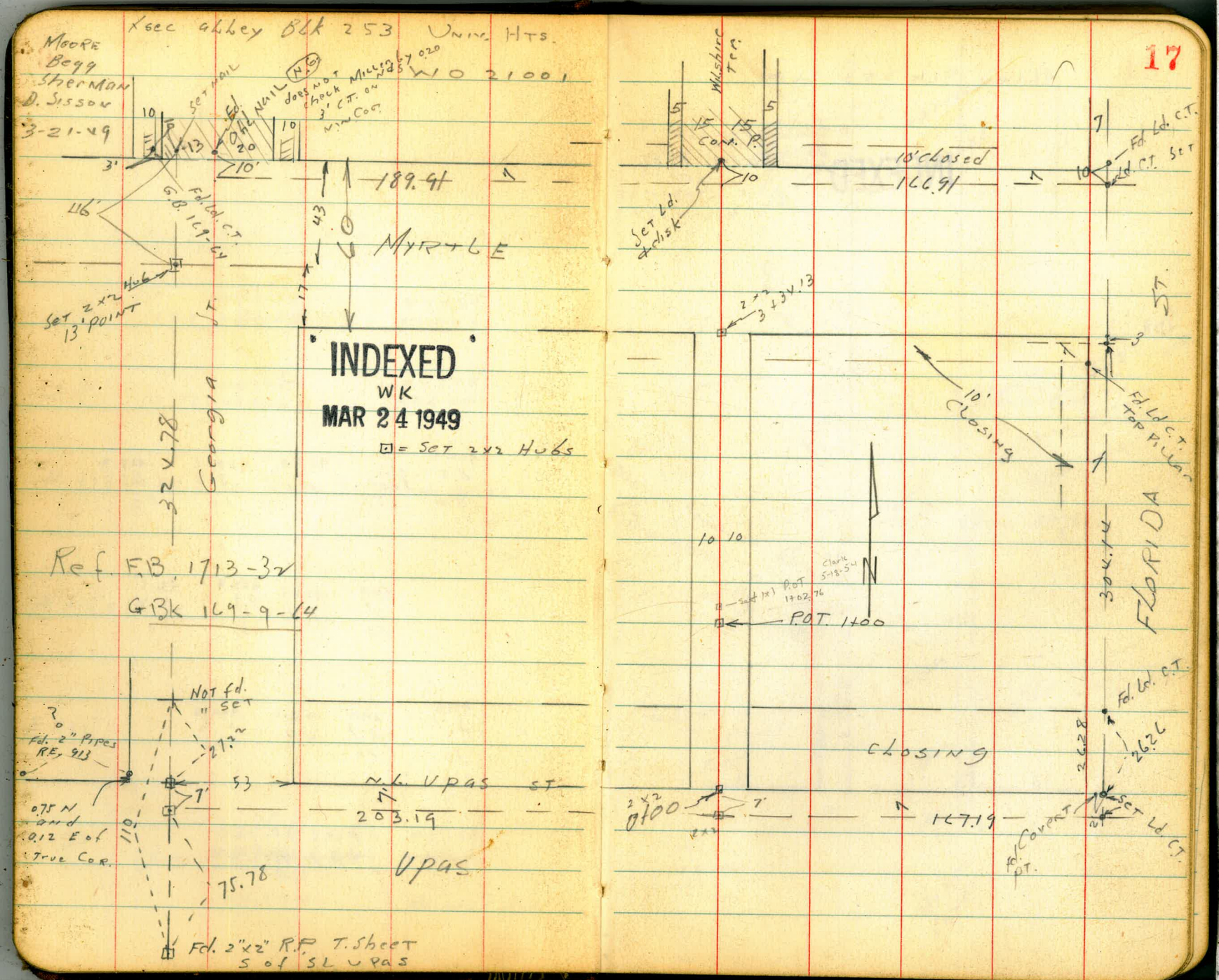
	L		R	
2+5940 Δ 12°05' Lt. ON SPLIT				
	437.6	435.1	436.3	442.3 443.6
	8.3	10.8	9.6	3.6 2.3
	30		10	30 40
2+20	440.2	438.2	437.6	437.5 443.6 443.9
	5.7	7.7	8.3	8.4 1.3 2.5
	30	15		10 20 25
1+90	442.3	440.0	439.2	439.9
	3.6	5.9	6.7	6.0
	30	15		50
1+60	448.9	440.9	440.7	440.5
	3.0	5.0	5.2	5.4
	25	8		20
T.P. 329 445.92 12.76 442.63		XX 5.92 ✓		
1+30	449.7	449.2	442.6	442.4 442.6
	5.7	6.2	12.8	13.0 12.8
	25	12		20
1+00	451.4	450.2	445.4	445.1 445.3 445.8
	4.0	5.2	10.0	10.3 10.1 9.6
	25	15	3	10 20
V 55.39		X 5.39		

Check to Orig. BM			3.13	452.45	452.46
T.P.	11.09	455.58 ~~456.58~~	2.56	444.49 ~~445.49~~	
T.P.	11.76	447.05 ~~448.05~~	1.17	435.29 ~~436.29~~	
4+17	Run to here to show creek				
3+50					
3+00					
T.P.	16.2	436.91 ~~437.91~~ 445.92	10.63 ~~4.63~~	435.29 ~~436.29~~	

Mis-Read Rod

Lt	℄	Rt
428.4 8.5 20	5' dia. Eucal. 15	425.8 11.1
431.0 5.9 30	429.5 7.4 15	427.9 9.0 3
433.8 3.1 30	433.0 3.9 10	432.0 4.9
436.91 ~~437.91~~		

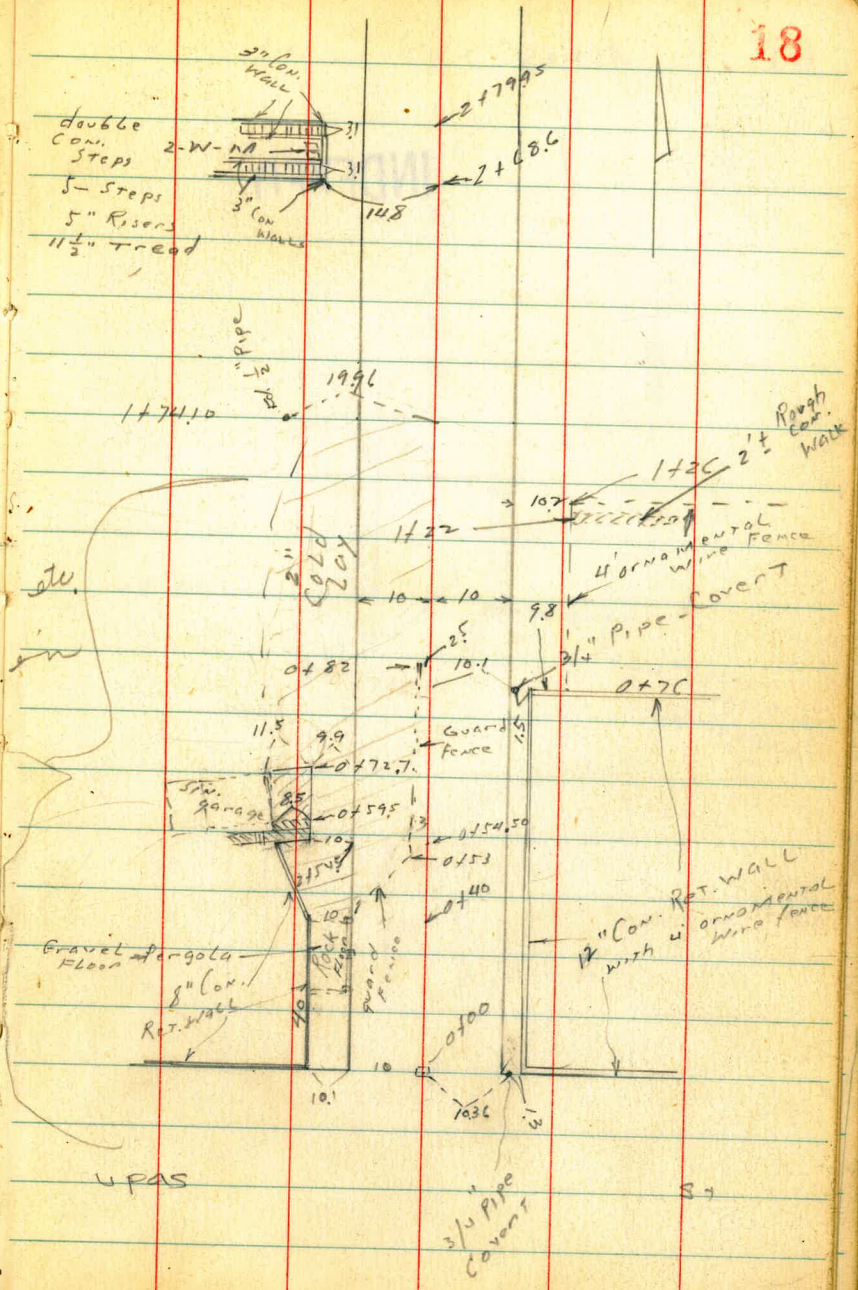
428.1 8.8 10	428.2 8.7 13	
432.5 4.4 10		
434.6 2.3 15		


X Sec Abbey Blk 253 Univ. Hts.
Moore
Begg
Sherman
D. Sisson
3-21-49
Set Nail
Fd. Nail
Does not Mill
Stock 0.20
3' C.T. on
Line Conc.
W 10 2100'
10
5
10
3'
10'
189.4'
116'
Fd. Ld. C.T.
G.B. 169-64
Hub
Set 2"x2" 13' Point
Myrtle
St.
INDEXED
WK
MAR 24 1949
□ = Set 2x2 Hubs
Georgia
N 32 W 78
Ref. F.B. 1713-37
G.B.K. 169-9-64
Not fd. " Set
Fd. 2" Pipes R.E. 9.13
0.75 N and 0.12 E of True Cor.
75.78
Fd. 2"x2" R.P. T. Sheet S of SL Upas
N.L. Upas St.
203.19
Upas
Wilshire Ter.
15' Com. R.
15' Closed
166.91
Set Ld. Spike
Fd. Ld. C.T.
Ld. C.T. Set
3 + 3V.13
10' Closing
Fd. Ld. C.T. Top Pin
Clark 5-18-54
Set 1x1 P.O.T. 1702.76
P.O.T. 1400
10 10
304.14'
Florida
Fd. Ld. C.T.
Closing
262.8
262.7
Set
Ld. C.T.
Fd. Cover P.O.T.
0100
167.19

Alley Blk 253 U.H.

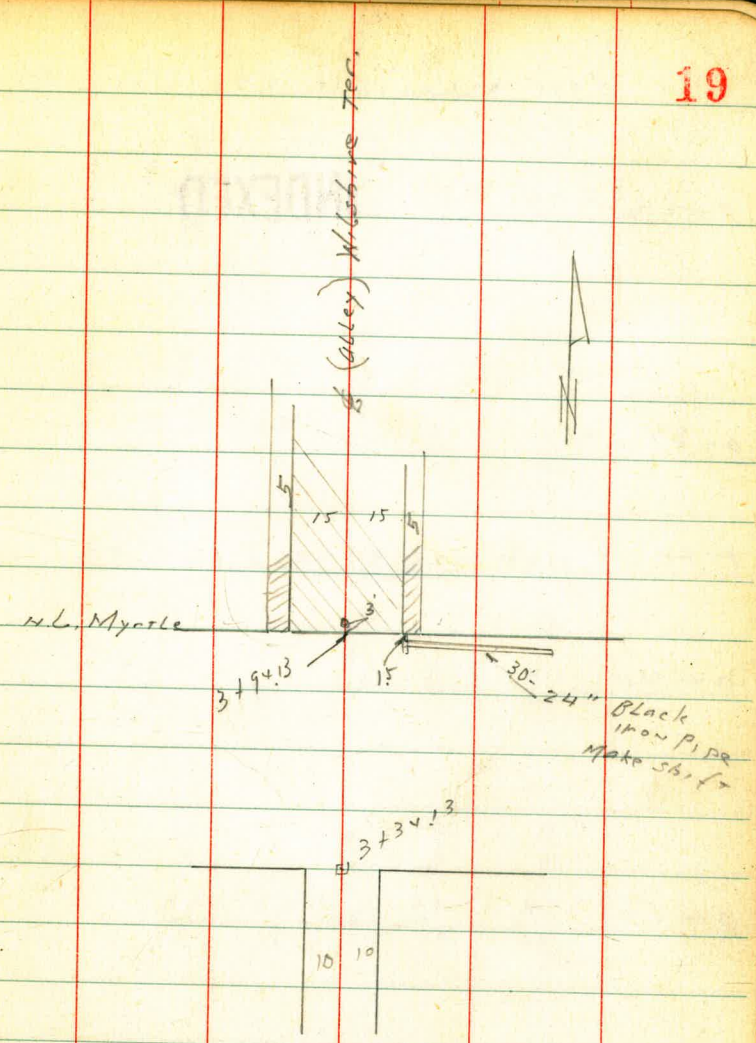
INDEXED

Over all
Width 10.85
" Stairs 3.1



Alley 253 S.H.

INDEXED



Y SEC Alley Blk. 253 UNIV HTS

INDEXED

					Lt	℄	Rt
0-22					2328 / 0.0 / 30	8/20 2/1 / 2.6 / 10	8/16 5/1 / 6.3	7/31 3/1 / 4.5 / 10	10/26 5/1 / 20.2 / 40
0-37					2/18 5/1 / 4.3 / 30	2/17 5/1 / 5.8 / 10	2/15 6 / 7.2	2/12 5/1 / 10.3 / 10	1998 / 23.0 / 40
T.P.	11.25	222.81	028.	211.56		222.81			
0-40					2/18 8/1 / +1.0 / 30	2/10 3/1 / 1.5 / 10	2/09 2/1 / 2.6	2/09 3/1 / 4.5 / 10	2002 / 11.1 / 40
0-60					219 / 0.0 / 30	204 / 2.8 / 10	2/07 3/1 / 4.5	2/04 5/1 / 7.3 / 10	2/00 3/1 / 11.5 / 40
T.P.	11.98	211.84	138	199.86		211.84			
B.M. SW BP Myrtle Florida	3.25	201.24		197.99					

0+59.5 N.L. Con. walk + S.L. Gar. Apron

0+54.5

T.P. 7.88 239.73 0.16 231.85

0+40 Beg. 2" Cold Lay 10' to 20' Lt.

T.P. 11.48 232.01 2.28 220.53

0+00 N.L. Upas St.

0-15

222.81

L ℄ R

3.15 / 28.5 gar. Floor	235.31 4.42 / 20 Con. Apron						
235.01 4.72 / 20 S.L. 5' Con. Wall	234.6 5.1 / 10 C.L.	234.5 5.2 / 3 C.L.	231.5 8.2	226.0 13.7 / 10	226.21 13.52 / 11.5 Top Wall	224.31 1/3	210.1 29.6 / 40

239.73

234.4 +2.4 / 20 Top angle Wall	233.8 +1.8 / 20 C.L.	233.8 +1.8 / 10 C.L.	228.9 3.1	224.1 7.9 / 10	224.33 7.68 / 11.5 Top Wall	222.8 1/3	211.2 20.8 / 40

232.01

232.31 +9.5 / 20 Top Wall	229.8 +7.0 / 20	227.7 +4.9 / 10	221.1 1.7	216.14 6.67 / 10.36 Top 3/4" Pipe	216.74 6.07 / 11.7 Top Con. Wall	213.5[illegible] 1/3	204.5 18.[illegible] / 40
228.81 +6.0 / 30	226.81 +4.0 / 19	225.1 +2.3 / 10	219.7 3.1	214.5 8.3 / 10	203.6 19.2 / 40		

222.81

1+77 23 Lt & 14 Long con steps 11 to Alley

1+59 17 3/4 Lt & 4x4 post set in con.

1+50

1+49 17 3/4 Lt & 4x4 post set in con

1+25

1+23 PP P.A. 3427. 16 Lt Lt 12" dia

1+00

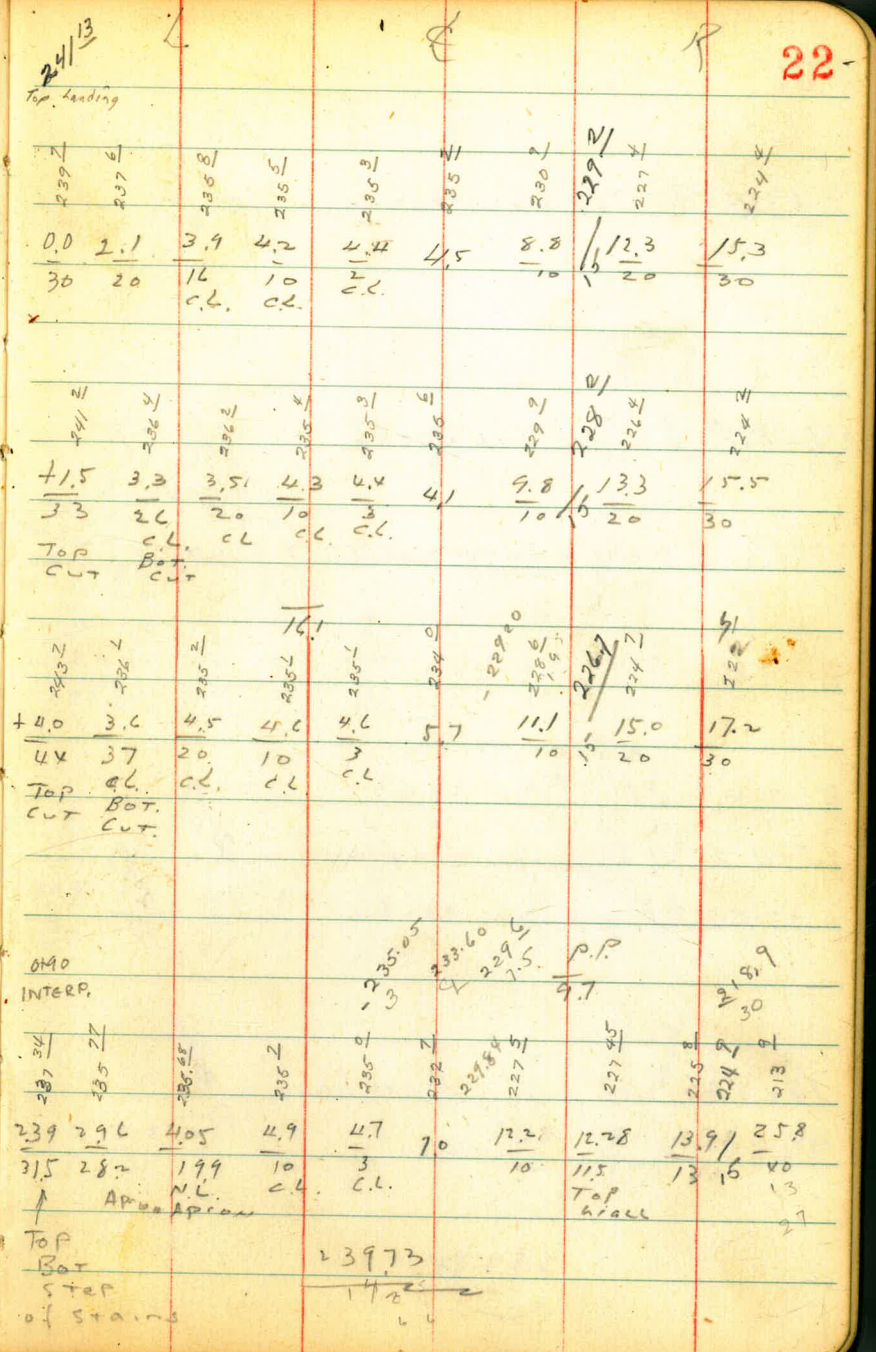
0+75.5 PP P.A 3410 92 Rt 12" dia

0+72.7

239.73

2372
Footing

24/13
Top. Landing



2+73.4 ℄ Top Wall between steps

2+68.6 S.L. do. Con Steps

T.P. 530 240.92 4.11 235.81

2+25 +0.8 30

16" Lt 14" dia

2+22 P.P. P.A. 34.67

2+11 26 3/4 Lt ℄ garage con floor

2+00 26 3/4 ℄ garage con flor

1+89 26 3/4 Lt ℄ garage con floor

1+85

239.73

L ℄ R

3.47 5.12 5.11 5.4
14.8 13 10
Top Wall

2.52 4.89 5.32 5.2 5.5 5.6 9.6 12.6 12.7 14.3
19.8 14.8 13 10 C.L. 3 10 14 20 30
Top Bot Step.

Top 3x3 Con Landing Then Steps Cont. Up

240.92

2.0 3.0 4.4 4.1 4.4 4.4 8.8 11.5 14.8
25 20 14 C.L. 10 C.L. 3 C.L. 10 20 30

P.P. 16.4

+0.3 2.2 4.3 4.7 4.2 4.2 5.5 10.9 15.1
30 20 14 C.L. 10 C.L. 3 C.L. 10 15 20 30

+0.1 2.8 4.2 4.2 4.2 4.5 7.9 9.1 11.6 14.8
30 20 14 C.L. 10 C.L. 3 C.L. 6 10 16 20 30

239.73

3+64.3 ℄ Myrtle				
T.P. on disk 3' N of NL Myrtle	5.45	241.56	4.81	236.11
3+60				
3+39 P.P.	P.1949	14"Ht	12"dia	
3+34.3 SL N Myrtle				
3+00				
2+79.45 NL Steps				
	240.92			

L ℄ R

244.3 241.6 236.2 236.4 236.6 236.6 235.0 231.2 230.3

+2.9/30 0.0/20 5.4/13 5.2/10 5.0 5.0/6 6.6/10 9.9/20 11.3/30

241.56

12" di. Pepper tree
T6.1

P.P.
14.7

246.0 237.3 236.6 236.2 235.9 232.4 229.3 228.6 228.2 227.5

+5.1/30 3.6/15 4.8/10 4.7 5.0/6 8.5/10 11.6/14 15 12.7/20 13.4/30

237.3 238.5 236.4 235.9 235.6 235.5 232.9 230.4 228.0 227.3

+3.6/30 2.4/20 4.5/17 5.0/10 5.3 5.4/5 8.7/10 15 12.9/20 13.6/30

238.47 236.17 235.6 235.6 235.5 236.5 230.6 229.4 226.9

2.45/19.8 4.73/14.8 5.3/13 5.3/10 5.4 5.4/3 10.3/10 11.5/20 14.0/30

3x3 Con. Landing
Top Bot. Step

240.92

check to ORig. B.M.	7+43	197.94	197.99	0.05
+P	5+58	205.37	10.85	199.79
T.P.	1+22	210.64	11.55	209.42
T.P.	1+07	220.97	10.86	219.90
T.P.	0+72	230.76	11.54	230.04

4+94.13 100' N of N.L. to show pav. cb. etc

3+94.13 N.L. Myrtle Beg. Con. Pav. and Conc. cb. and Walk

3+92.6

3+80

24+56

	Lt.					Rt.		
	238 32	238 24	237 58 / 237 42 / 237 60	237 29	237 37	237 42 / 236 75	237 40	237 42
	3.24	3.30	3.88	3.76	3.83	4.19	4.81	4.16	4.14
	20	15	15	7.5		7.5	15	15	20
	Walk	cb	gut				gut	cb	walk
	236 27	236 66	236 08	235 54 / 236 12	236 06	235 69	235 84 / 235 07	235 68	235 72
	4.79	4.90	5.56	5.44	5.50	5.87	6.49	5.88	5.84
	20	15	15	7.5		7.5	15	15	20
	Walk	cb	gut				gut.	cb	walk
	244 2	237 6	236 2	236 3	236 1	235 6	232 9	235 3	230 6
	+3.1	4.0	5.4	5.3	5.5	6.0	8.65	6.3	6.5	6.5	10.2
	30	21	14	10		10	15	17	20	22	30
							Inv. Inlet 24" Pipe		236	236	230
	246 7	239 6	236 2	236 2	236 4	236 4	236 0	233 3	232 4	229 6
	+4.3	2.0	5.4	5.4	5.2	5.2	6.6	8.3	9.2	12.0
	30	20	12	10		6	10	20	24	30

interpolation

Inv. outlet

24+56

3333

26

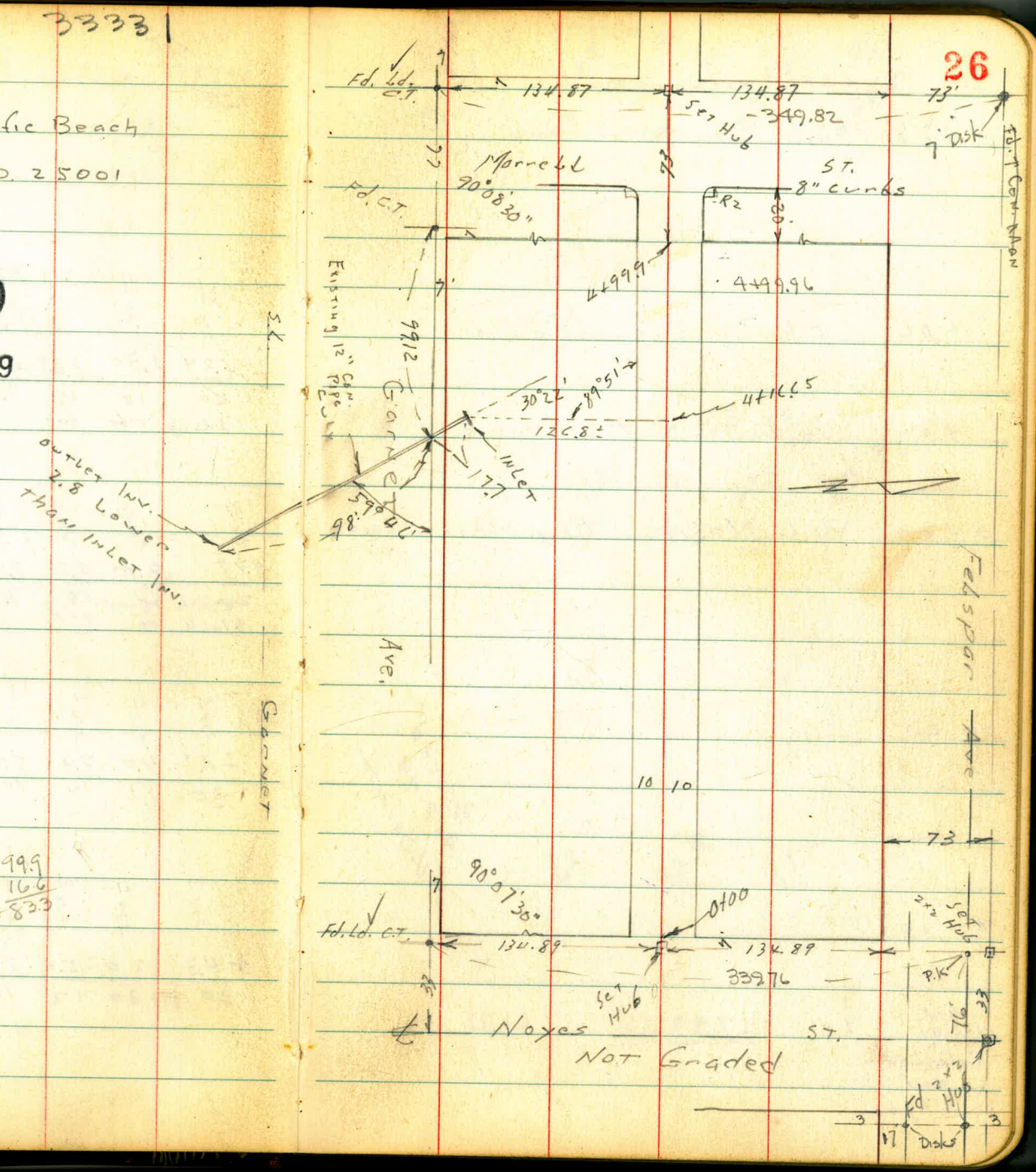
X Sec 20' Alley

Blk 206 Pacific Beach

W.O. 25001

Moore
Begg
D. Sisson
4-C-49.

INDEXED
WK
APR 8 1949



134.87
269.74
73
342.74
14
5674

349.82
66
28382
1419
66
2079

339.76
56
28376
1418
56
1978

99.9
166
+833

Xsec alley 20C

0+28 W.L. Do. gar. Com.

+DL E.L. Do. gar. Com. floor

+04 14" di. Tel. P. # 505700 4

0+00 W.L. Noyes. Beg. picket Fence
10.1 Rt

0-20

Reduced
4-8-49
V. Barrett

0-40

BM. NW BP Garnet and Noyes	6.01	67.99	61.98

Lt 63.92 4.07 14.9 | 63.8 4.2 10 | 63.8 4.2 | 63.9 4.1 10 | Rt 64.8 3.2 20

63.92 4.07 14.9

Pole 4.1

63.8 4.2 25 | 63.5 4.5 10 | 63.3 4.7 | 63.6 4.4 10 | 63.9 4.1 25

62.1 5.3 25 | 63.1 4.9 | 63.4 4.6 25

62.3 5.7 50 | 62.9 5.1 | 63.5 4.5 50

67.99

0+91	10.2 Lt NW Con Shed
0+84	10.2 Lt NE Con Shed
0+83	10.2 Lt NW Con. Shed
0+77	
	N.E. Con Shed 10.2 Lt.
0+75.2	Beg. Wire fence 10 Lt.
0+75	Con. end Con. Blk Wall 10.1 Lt.
T.P.	8.1N 74.76 1.35 66.64
0+64	Beg. Con. Blk. Wall 10.1 Lt.
0+58	Beg. Picket Fence 10.1 Rt
0+50	
0+46	end Picket Fence 10.2 Rt

67.99

L						C						R
						68.3	67.8	67.8	68.2	68.1	66.0	
						6.5	7.0	7.0	6.6	6.7	8.8	
						10	7		7	10	20	
65.4	65.3	68.1	68.4	67.1	68.0	66.4						65.5
9.4	9.5	6.7	7.4	7.1	6.8	7.9	P. fence					9.3
15	10.1	10	7		8	10	10					20
Base Wall												
			7x.76									
65.4	65.2	66.6	66.5		66.7	65.5		65.1				
2.6	2.8	1.4	1.5		1.3	2.5		2.9				
15	10.1 Base Wall	10			8	10		20				
65.9	65.6	65.1	65.6		64.9	65.1						
2.6	2.4	2.9	3.0		3.1	2.9						
20	10	7			10	20						

67.99

9' Wide

1+95 ℄ Sin gar. Con Floor No Apron

1+89 end fence 10.8 Lt

1+53 Beg. Bd fence 11 Lt

Apron Level

1+47.5 ℄ 10' Wide Con. Apron Sin. gar.

1+41 10.9 Lt end Bd. fence

1+25 Beg. Bd. fence 10.9 Lt
P.P. 8.4 Lt A 2074 — 9.1 Rt. Tel. P. 505726

1+23 WL Sin gar.

1+14 E.L. Con Apron Sin. gar.

1+11 10.1 Lt end fence

1+00

74.76

L

68.81 — 5.95 — 12.7 — Con Floor

64.7 — 6.1 — 10

68.8 — 5.9

5.3 — 10

69.5 — 4.5 — 20

69.6

69.79 — 4.97 — 19 — Con Fl. Apron

69.78 — 4.98 — 10.9

69.7 — 5.1 — 10

69.8 — 5.0

70.0 — 4.7 — 10

70.2 — 4.5 — 12 — Top Con. Wall // with gutter

69.5 — 5.3 — 12

69.6 — 4.9 — 20

69.42 — 4.9x — 14 — gar.

69.76 — 5.00 — 11.5 — Apron

69.8 — 4.9 — 10

69.8 — 4.9

70.0 — 4.7 — 10

Picket Fence 10

69.3 — 5.5 — 20

69.81 — 4.95 — 14 — gar.

69.66 — 5.08 — 11.5 — Apron

69.1 — 5.7 — 20

69.3 — 5.5 — 10

69.5 — 5.3

69.5 — 5.3 — 10

71.6 — 7.2 — 17

71.3 — 7.5 — 23

74.76

2+50 P.P. A 2050 9.2 Lt. 9" dia

+49.6 10.5 Lt Beg. Wire fence

2+49.5 end Bd fence + Blk. Con. Wall

2+39 end picket fence 10' Rt.

2+28 11' Lt. Beg. fence + Con. Blk Wall

2+22 W.L. do. gar. & Apron

2+03 E.L. do. gar. Con. Apron & F.L.

2+00 N end Top 6" Con. Blk Wall

T.P. 3.12 71.45 6+3 68.33

74.76

Lt	℄	Rt
65.6	65.6	65.6
5.9	5.9	5.9
11	10	
Base Wall		
66.0	67.0	67.1
5.5	4.5	4.4
11	10	
Base	dirt	
Wall		
67.56	67.56	67.72
3.90	3.89	4.3
19.8	15	10
gar.	Apron	
67.56	67.54	
3.89	3.91	
19.8	14.9	
gar.	Apron	
68.40		
3.05		
10.4		

Rt
65.9
5.6
10
66.2
5.3
20
67.5
4.0
10
67.5
4.0
20
67.9
3.6
10
69.0
2.5
12
69.4
2.1
20

71.45

3+06 W.L. 3 car gar.

3+32 E Con. Apron 8' Wide and and gar. Level

3+19 E.L. 3 Car gar. dirt Floor

3+00 end wire fence 10.4 Lt.

2+75

2+74 Tel. Pole 505-7-4 12" dia. 8.7 Rt

71.05

Lt 65.4 / 6.1 / 11.7 dirt Floor

65.3 / 6.2 / 10

65.5 / 6.0

65.7 / 5.8 / 10

66.5 Rt / 5.0 / 20

65.3 / 6.2 / 10

65.3 / 6.2

65.6 / 5.7 / 9.9

68.16 / 3.29 / 30

Apron gar. EL. Level

65.4 / 6.1 / 11.7 gar. dirt

65.1 / 6.4 / 10

65.1 / 6.4

65.6 / 5.9 / 10

66.2 / 5.3 / 20

64.5 / 7.0 / 20

64.6 / 6.7 / 10

64.9 / 6.6

65.3 / 6.2 / 10

65.6 / 5.9 / 20

64.0 / 7.5 / 25

65.1 / 6.4 / 10

65.1 / 6.4

65.4 / 6.1 / 10

65.8 / 5.7 / 20

71.45

4+4 –

and Bog. brine Force 10,7 Rt.

4+25 Tel. P. 12" dr. 9.2 Rt 505728 H

4+16.65

Inv. toilet Con. 12" Pipe

T.P. 6.08 70,55 6.98 64.47

4+01 10" dr. P.P. 9.1 Lt A 20 20

4+00 W.L. do. gar. dirt Floor.

3+83 E.L. do. gar. dirt floor

3+65 E 3.2 Con. slab

71.45

1+ 63.8 64.4 64.8 64.8 P.T. 65.6

6.8 6.2 5.8 5.8 5.0

15 10 10 25

58.35 60.0 62.6 64.1 64.8 64.7 65.1

12.20 10.6 8.0 6.5 5.8 5.9 5.5

12C.8 100 50 10 10 25

70 55

65.3 64.9 64.1 64.1 64.9

6.2 6.6 6.8 6.8 6.6

1+ 10 10 25

dirt Floor

65.3 65.0 65.0 65.0 65.4

6.2 6.5 6.5 6.5 6.4

1+ 10 10 10 20

dirt Floor

65.11 65.11

5.7+ 5.7+

1+.7 11.6

Con. slab Con. slab

71.45

4+99.9 E.L. Morrell

4+85

4+65 10' Rt Beg. 6" Con Ret. Wall

4+63 & 3' Con Walk

4+61.5 10' Rt end wire fence

70.55

Lt	&	Rt
67.90	67.5	67.3
2.65 / 10.1 Top curb	3.1 / 10	3.3
67.0	67.0	66.0
2.6 / 20	3.6 / 10	4.6 / 7
65.8	65.4	67.40
4.8 / 10 dirt	5.2 / 10 Base wall	3.15 / 10 Top
66.9	66.1	64.9
3.7 / 20	4.5 / 10	5.7 / 6

Lt	&	Rt
67.8	68.40	
2.8 / 9.9	2.15 / 9.9 Top curb	
65.9	66.7	68.08
4.7	3.9 / 10 dirt	2.47 / 10 Top wall
67.9		
2.7 / 15		
65.0	65.8	66.11
5.6	4.8 / 10	4.44 / 10 Con.
66.42		
4.13 / 20 Con walk		

70.55

check to Starting B.M.	6.02	61.99	61.98	0.01
T.P.	3.11	68.01	10.50	64.90
Check to Top curb	4.56	70.84	70.83	0.01
T.P.	7.30	75.40	2.45	68.10

out dirt

E 20' curb Line Morrell

70.55

E cb. on SL Felspar, at Morrell
FB 1701 page 42

66.2 − 4.4 / 40 = 61.8
71.1 − 6 − 3.5 / 10 = 61.6
71.1 − 6 − 3.5 dirt
71.6 − 6 − 3.0 / 10 = 62.6
71.8 − 2.8 / 40 = 69.0

71.00 − 3.55 / 40 = 67.45 cb
71.57 − 2.98 / 10 = 68.59 cb
71.1 − 6 − 3.5 dirt
68.19 − 2.36 / 10 = 65.83 cb
68.74 − 1.81 / 40 = 66.93 cb

70.55

W.O. 25001

CSM Add'L. Notes on Alley
Blk 15 Bird Rock Add
From P.2 this Book

0+11.7 end c6 Return on Lt.

INDEXED

0+10.7 end c6. Return on Rt

Sections ll with Forward

0+05.4 = N. edge sdw.

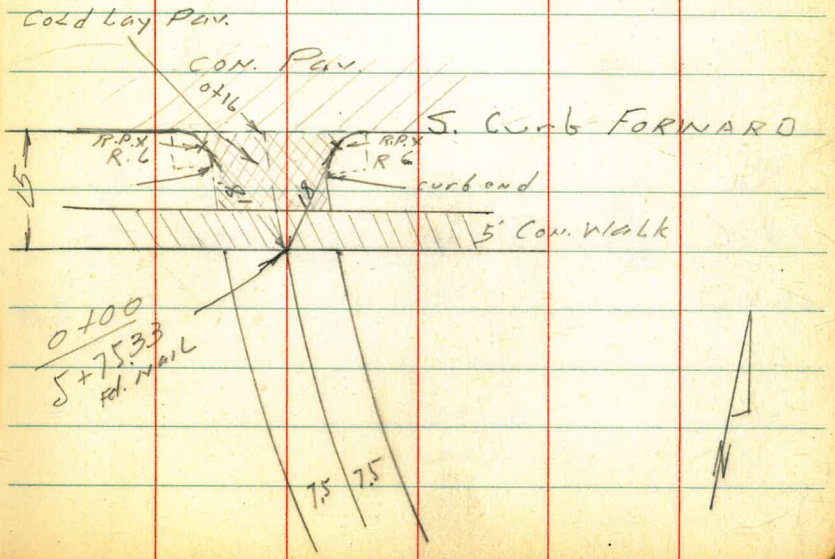
0+00 / 5+75.33 S.L. Forward = S edge sdw

T.P.	82.x	(87.05)	1.3x	78.81
BM SEBP	83.5	80.15		71.80

La Jolla Blvd
at
Midway

Notes Reduced
6/30/49

Lt	℄	Rt.
81.41 / 5.6x / 8.3 Top c6 end	81.06 / 5.99 / 8.3 P	81.48 / 5.57 / P
81.83 / 5.22 / 9.5 P	82.29 / 4.76 / 9.5 c6	
81.54 / 5.49 / 7.8 P	81.29 / 5.76 / 7.7 P	81.65 / 5.40 / Pav
81.93 / 5.12 / 8.8 Pav	82.30 / 4.75 / 8.9 Top c6 end	
81.17 / 5.88 / 20	81.55 / 5.50 / 10	82.02 / 5.03
82.45 / 4.60 / 10	82.89 / 4.16 / 20	
81.33 / 5.70 / 20	81.75 / 5.30 / 10	82.22 / 4.83
82.64 / 4.41 / 10	83.07 / 3.98 / 20	



Alley Blk 15 Bird Rock

0+16 Sly cb of Forward

87.5

81.15
5.90
12.6
↑ Top cb B.C.

80.45
6.60
12.6
P

80.83
6.22
4 p.5

81.02
6.03
P

81.55
5.50
12
P

81.71
5.34
16.0
P

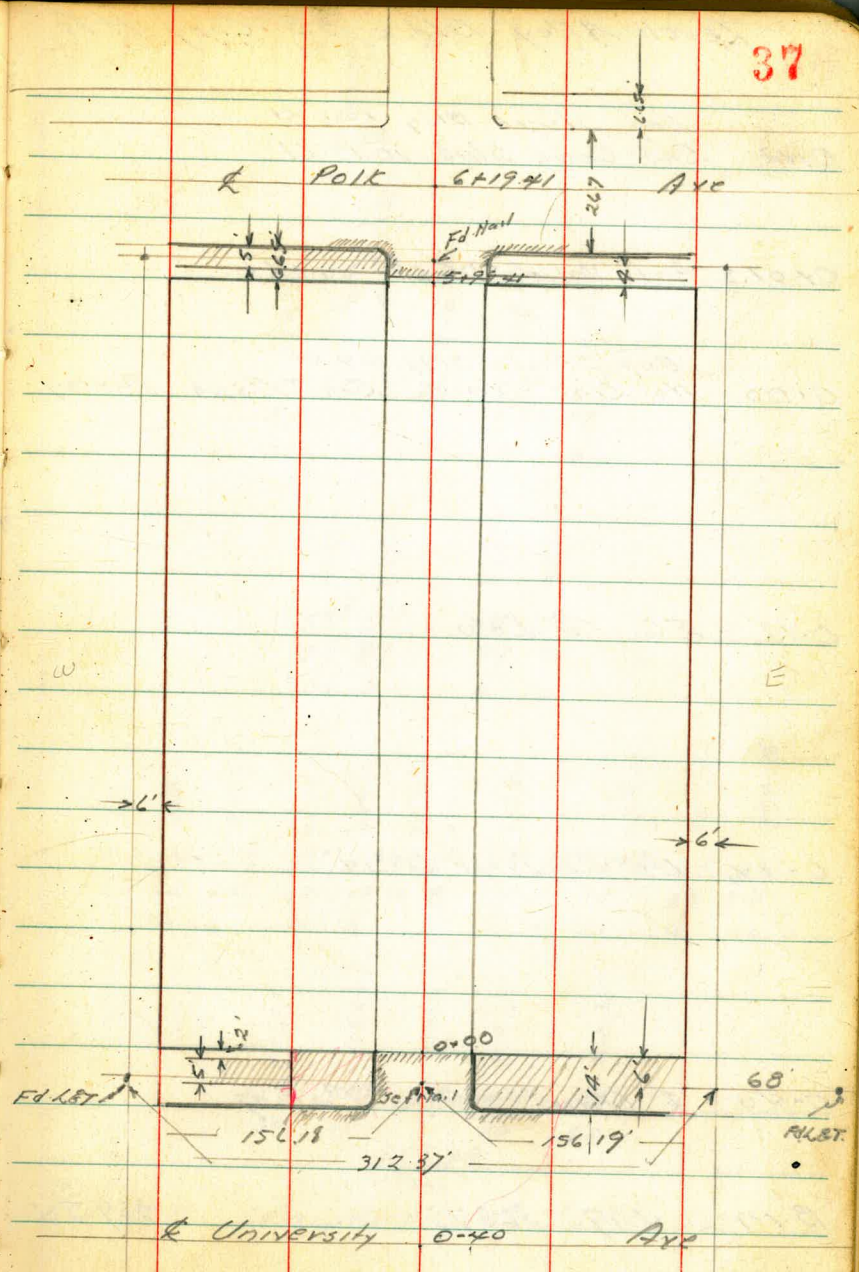
82.38
4.67
16.0
Top cb B.C.

9-27-49
Hendricks
Roberts
Greer
WO# 31771

Re-Cross Section Alley
Block 35 City Hts.
(Original Notes FB 1571 P-57)

INDEXED
W.K.
SEP 30 1949

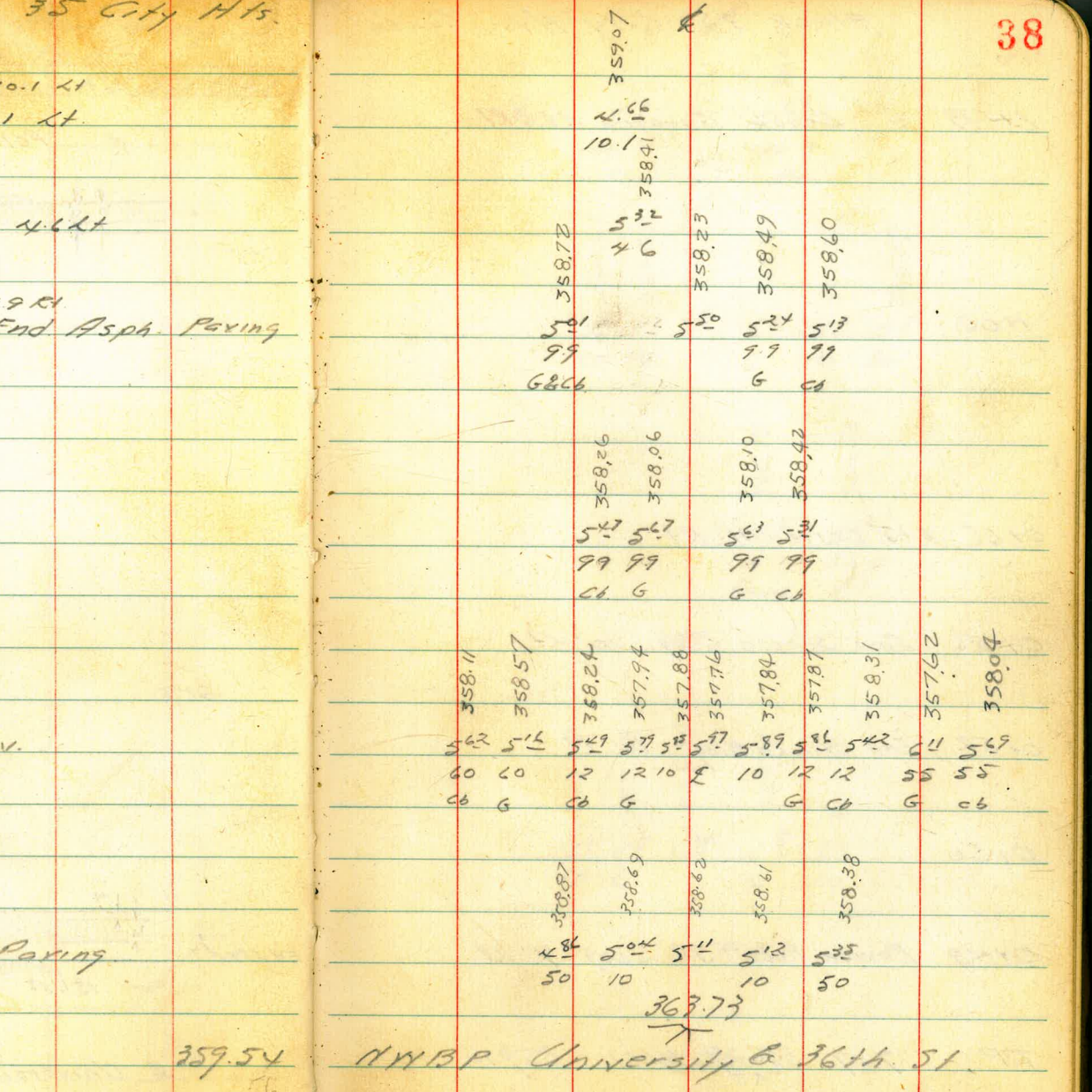
NOTES REDUCED BY MORGAN 9-30-49.



Levels Alley Block 35 City Hts.

	Beg Stucco Bldg 10.1 Lt			
0+12	End Conc. Slab 10.1 Lt			
0+01.5	Gate Valve SDGBE 4.6 Lt			
	Beg. Stucco Bldg. 9.9 Rt			
0+00	No. Line Univ. End Asph. Paving			
0+12	EC Cb. Rets.			
0+14	No. Cb. Line Univ.			
0+40	℄ Univ. Asph. Paving			
B.M.	4.19	363.73		359.54

NWBP University & 36th St.



Block 35 City Hts. Contd.

1+13 ℄ Double Garages Lt & Rt.

1+00

0+66 ℄ 15 Drive 11' Rt

0+58 End Stucco Bldg. 10' Lt.

0+52 End Stucco Bldg. 10' Rt.

0+50

0+49 Power Pole # JP. 4009 9' Lt.

T.P. 7.17 36629 4.61 359.12
363.73

361.12 ℄
5.17
14.3
Fl

360.61
5.68
10.7
Fl.

360.69 360.59 360.49 360.29 360.59 360.59
5.4 5.7 5.8 6.0 5.7 5.7
20 10 6 10 20

360.74 360.78
5.5.5 5.2.1
11 20.5
Ramp. Fl.

360.29 359.79 359.89 359.79 360.29
6.1 6.3 6.4 6.1 6.0
10 6 6 10

366.29

Block 35 City Hts. Contd.

2+50

2+27 Beg Conc Ramp 4 Car Garage 10.2 Lt

2+24 Power Pole # PA 4035 9' Lt

2+00

1+50

1+36 ℄ Single Garage 14.6 Lt.

1+25 Power Pole # PA 4021 8.7' Lt.

366.29

362.35 362.22 362.29 362.09 362.29 362.29 362.09

3.4 Lt 2.7 Lt 1.0 Lt 1.2 Lt 2.9 Lt 1.0 Lt 4.2 Lt

14.9 10.2 6 8 10 20

Fl. Ramp

362.26 362.08

4.3 Lt 4.2 Lt

14.9 10.2

Fl. Apron

361.59 361.49 361.59 361.49 361.29 361.09

4.7 Lt 4.8 Lt 4.7 Lt 4.8 Lt 5.0 Lt 5.2 Lt

20 10 7 10 20

361.29 361.09 361.09 360.79 360.79 360.69

5.1 Lt 5.2 Lt 5.2 Lt 5.5 Lt 5.5 Lt 5.6 Lt

14 10 6 10 20

361.42

4.87 Lt

14.6

Fl.

366.29

Block 35 City Hts. Contd.

TP.	7.54	371.57 ↑	2.26	364.03
4+00				
3+93	℄ Single Garage 16.4 Rt.			
3+50				
3+25	End 5' Conc. Block Wall 10.1 Lt Power Pole # PAL 005 9.5' Lt.			
3+00				
2+75	Beg 5' Conc Wall 10.1 Lt.			
2+64	End Conc. Ramp 10.4 Lt			
	366.29 ↑			

364.29
364.09 364.09 364.09 364.09 364.09
2.10 2.12 2.12 2.12 2.12 2.12
20 10 7 10 16

363.78
2.51
16.4
Fl.

363.35 363.19 363.19 363.09 363.39 363.29 363.59
2.19 3.12 3.12 3.12 2.19 3.10 2.17
20 10 4 7 10 20

362.89 362.69 362.79 362.79 362.59 362.99 362.99 362.99
3.14 3.16 3.15 3.15 3.17 3.14 3.14 3.14
20 10 7 6 8 10 20

362.35
362.29
3.94 ℄
15 10.4
Fl. Ramp

366.29 ↑

Block 35 City Hts Contd.

4+65 ℄ Double Garage 15.2' Lt

4+63 ℄ Double Garage 9C' Rt.

4+50

4+32 ℄ Single Garage Dirt fl. 11' Lt.

4+25 Power Pole # PA 4065 9.3' Lt.

4+09 ℄ Single Garage 16.2 Rt.

371.57

℄

365.25

6 3.2

15.2

fl.

364.99

6 5.8

9C

fl.

364.67 364.67 364.77 364.67 364.87 364.97

6? 6? 6.8 6? 6? 6.6

20 10 5 10 20

364.67

6?

11

fl.

364.40

7.7

16.2

fl.

371.57

℄

Alley Block 35 City Hts. Cont'd

5+75 End Frame Garage 9.5 Rt opens North

End Wire fence 9.5 Rt

5+55 Beg Frame Garage 9.5 Rt opens to North

5+36 ℄ Single Garage 10 x Lt

5+15 Beg. Wire fence 10.2 Rt.

5+50

5+24 Power Pole # PA 40685 9' Lt.

5+16 ℄ Single Garage 15.9 Lt

5+00

371.57

366.77 366.57 366.47 366.17 365.97 366.27 366.37 366.07

365.97 365.97 365.67 365.87 365.77 365.87

365.62

365.37 365.37 365.27 365.07 365.37 365.27 364.97

371.57

Riley Blk 35 City Hts. Contd

B.M.		9.89	359.55	359.54
T.P.	1.14	371.44	3.27	368.30

6+19.41 E Polk Ave

6+06.6 So. Cb Line Polk Ave

6+04.06 BC Cb Rds.

6+01.41 Beg. Cbs & Asphalt Paving.

5+99.41 So. Line Polk

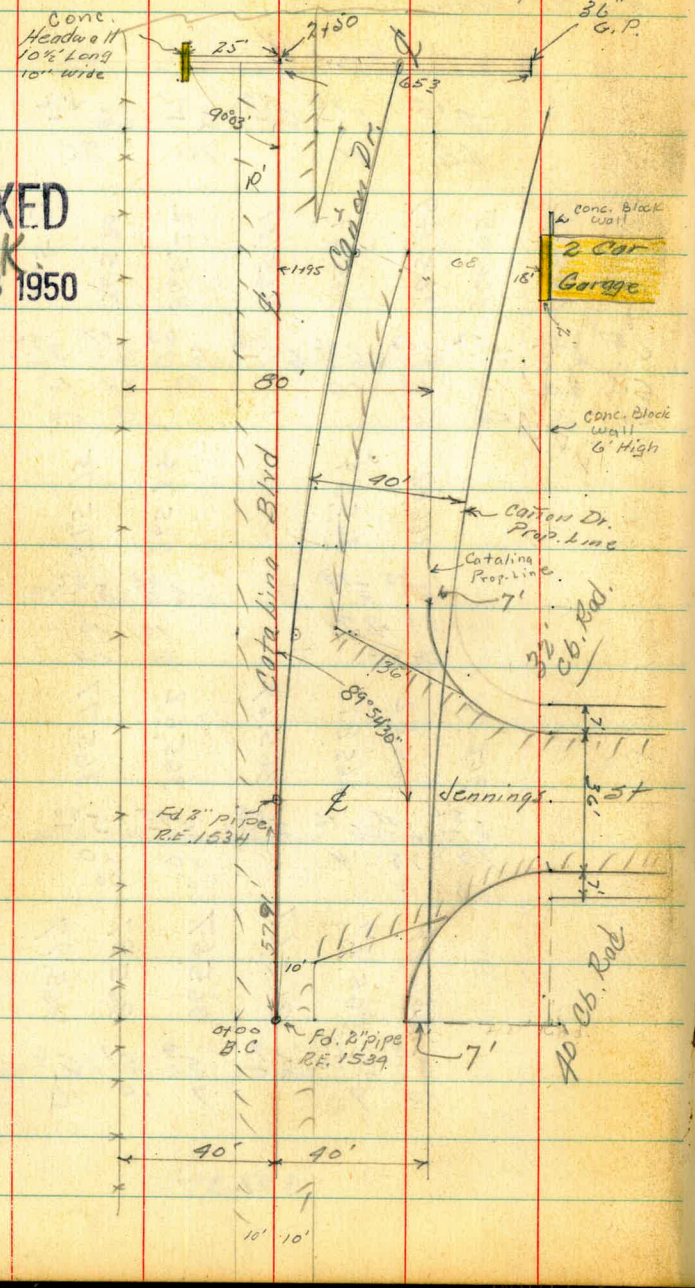
371.57

NW BP Univ. & 36th St.

371.57

Johnson
Greer
Cota
Fay
2-2-50
W.O. 25020

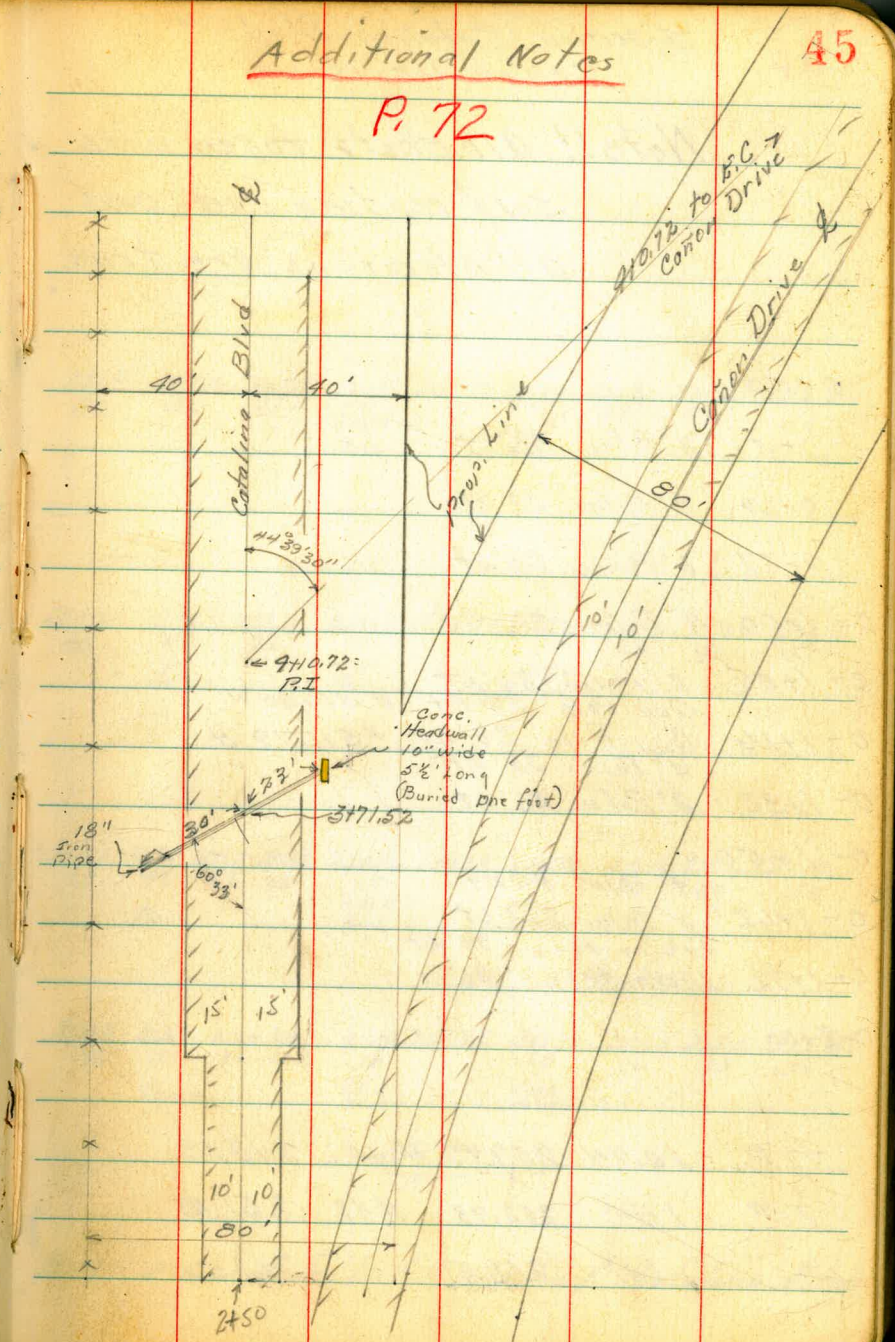
Y-Section Catalina Blvd. for 200' & Cañon Drive for 200' NELy



Additional Notes

45

P. 72



4-Section Catalina Blvd. & Canon Drive

Note!! All shots taken with self reading rod and all elevations are true.

		Lt.	℄	Rt.
0+50				
0+51	2' Palm 26' Lt			
0+69	3' Palm 33' Rt			
0+77	2' Palm 26' Lt			
0+1400	4' Palm 32' Rt			
0+1405	2' Palm 26' Lt Guy Pole 39' Rt # 511180 H	251.8 80	251.8 40	251.8 21
0+1416	Guy Pole 29' Lt # 511179 H 4' Palm 33' Rt	251.70 10 Edge Pave	251.77	251.56 10 Edge Pave
0+1432	2' Palm 26' Lt	251.3 27	252.2 40	253.6 50
0+1450				
0+1462	4' Palm 33' Rt 2' Palm 26' Lt	252.3 80	253.1 40 fence	253.2 22
0+1492	4' Palm tree 33' Rt 2' Palm tree 26' Lt	253.23 10 Edge Pave	253.39	253.19 10 Edge Pave
0+2400		253.1 28	254.9 40	256.0 50
		254.1 75	255.9 40 fence	256.2 29 254.8 22
		254.86 10 Edge Pave	254.98	254.86 10 Edge Pave
		254.9 26	256.6 40	257.9 50
		254.9 90	256.8 40 fence	256.9 30 256.3 22.5
		256.37 10 Edge Pave	256.55	256.37 10 Edge Pave
		256.2 26	258.1 40	259.1 50
			259.47	

T.P.	10.94	259.47	4.40	248.53
T.P.	1.44	252.93	11.42	251.49
	1.41	262.91		261.50

B.M. Mon. & Talbot & West of Catalina Blvd.

4-section Catalina Blvd & Canon Drive

1+01

0+89 : 4' Palm 30.5' Lt

0+60 = 4' Palm 30.5' Lt

0+57.91 = ℄ Jennings St. & Catalina Blvd.

0+30 : 3' Palm 27' Lt

0+15.5

T.P.	9.02	253.27	9.89	249.25

Δ = 94°39'30"

0+00 = B.C. Canon Drive to Rt.

T.P.	9.84	254.09	10.22	249.25

0-02 = Power Pole 40' Rt #511177 H

0-03 = Power Pole 29.3' Lt #511178 H

0-23 2' Palm 26' Lt

0+44 = ℄ 8' conc. drive 49.6' Rt

259.47

	Lt.		℄		Rt.	
	248.8 80	246.6 40 Fence	246.9 26	249.2 20	249.05 10	248.79
	248.34 10		248.08 135'	247.86 G 42.4	248.74 Cb	
	249.4 80	248.8 40 Fence	249.6 21	249.62 10	249.35	248.77 10
	248.61 26	248.84 40				
	250.8 80	250.0 40 Fence	250.4 27	250.08 10	249.85	249.41 10
	249.20 28	249.34 G 49.6	249.96 Cb			
	251.0 80	250.3 40 Fence	251.0 25	250.33 10 Edge Pave	250.15	249.70 11.5 Edge Pave
	249.5 G 35.6	250.26 Cb				
	251.4 80	251.0 40 Fence	250.9 21	250.65 10 Edge Pave	250.41	250.07 10 Edge Pave
	249.86 G 33 Conc. Cb	250.64 Cb				

2" pipe ℄ Catalina Blvd & Jennings St.

			253.30 49.6	254.37 60

259.47

4-Section Catalina Blvd & Cañon Drive

3+90 = 3' Palm 30' Lt
3' Palm -32' Rt ✓

3+71.52 = ℄ 18" pipe on diagonal

3+61 = 3' Palm 31' Rt ✓

3+58 = 3' Palm 33' Rt ✓

3+50

3+30 = 4' Palm 31' Lt

3+08 = Widening of Catalina Blvd 248.6 80

3+00 = 3' Palm 31' Lt

2+70 = 3' Palm 31' Lt.

2+49 = ℄ 36" C.P. Culvert 248.9 80 247.7 47

2+39 = 3' Palm 30' Lt

2+20 = Guy Pole 30' Lt # 511176 H

2+10 = 4' Palm 31' Lt

2+00

1+80 = 3' Palm 30' Lt

1+50 = 4' Palm 30' Lt 247.4 80

1+19 = 3' Palm 31' Lt.

	Lt.	℄	Rt.
	244.51 I.E. 18" Pipe		242.15 Headwall
245.8 80	244.7 40 Fence	244.9 30	248.2 23
248.49 15 Edge Pave	248.40	248.25 16	247.8 30
248.2 40	247.95 53 Edge Pave Cañon Dr.		
247.5 48	245.0 40 Fence	245.0 32	247.7 21
248.10 16 Edge Pave	248.22	248.07 16	247.74 40
244.9 40 Fence	243.95 25.5 I.E. Pipe	247.65 24.8 Headwall	244.9 20
248.03 10	248.00	248.01 19	244.80 42 Edge Pipe
244.6 52	244.1 60	240.47 64 I.E. Pipe	
248.7 80	247.9 47	245.3 40	245.6 24
248.1 19	248.09 10	248.15	247.89 10
246.92 33 Edge Pave	247.0 40	247.8 50	
245.9 59	245.6 40 Fence	246.4 25	248.7 19
248.60 10	248.42	247.99 10	247.50 20
247.25 25 Edge Pave	247.5 34	247.8 40	

253.27

4-section Catalina Blvd & Cañon Drive

	Lt	℄	Rt.
245.6 40 Fence	245.9 30	248.5 25	248.82 15 Edge Pave
248.86	248.74 15 Edge Pave	248.4 40	248.5 50

Δ 44°39'30"

9+10.72 = P.I. for Cañon Drive 245.6 60

25327

4-Section Cañon Drive

	Lt.			℄		Rt.			
									242.9 75
4+00	248.6 25	248.48 11	248.15	247.73 9	247.55 15	248.0 20	247.9 35	243.3 50	
3+50	248.7 25	247.94 11	247.58	247.18 9	247.01 15	247.4 20	240.2 39	239.7 55	
T.P.	5.10	254.35	402	249.25					
3+00	248.21 50	248.11 30	247.72 9	247.34	246.87 10	246.75 14 Edge Pave	245.5 20	242.4 32	242.4 42
2+43	247.9 50	248.07 40 Edge Pave	248.00 17	247.31	246.86 10	246.62 13 Edge Pave	246.80 19	243.3 32	243.9 40 243.7 50
2+33	248.0 48	248.03 39 Edge Pave	248.11 23	247.40	246.70 12 Edge Pave	247.4 26	247.7 40	247.6 50	
2+17 = Power Pole 3H.2' Rt #5 12H7 H Int. of ℄ Garage Produced									
2+00 = ℄ 2 car Garage ℄ 48.4 Rt to conc. Ramp.	245.1 48	248.2 40	248.06 31 Edge Pave	248.12 18	247.51	247.10 9	246.83 13 Edge Pave	247.1 20	248.1 40 248.4 50 248.92 48.4 Ramp 249.03 50.4 Floor
1+50 on ℄ Cañon Drive	245.5 50	245.7 26	248.6 21	248.52 22 Edge Pave	246.38 11	247.95	247.5 9	247.25 15' Edge Pave	247.4 25 248.2 40 248.6 50

Note: Sections 0+00 thru 1+00 on Cañon Drive are same as on Catalina Blvd

223.27

X-section Cañon Drive

Check 248.87 248.86

5+00

4+50

Lt. ℄ Rt.

Sta. 4+10.72 = P.I. Cañon Drive Curve P-49

250.3 / 50 | 250.2 / 32 | 250.7 / 24 | 250.24 / 10 | 249.85 | 249.33 / 10 | 249.0 / 29 | 251.4 / 38 | 250.6 / 50

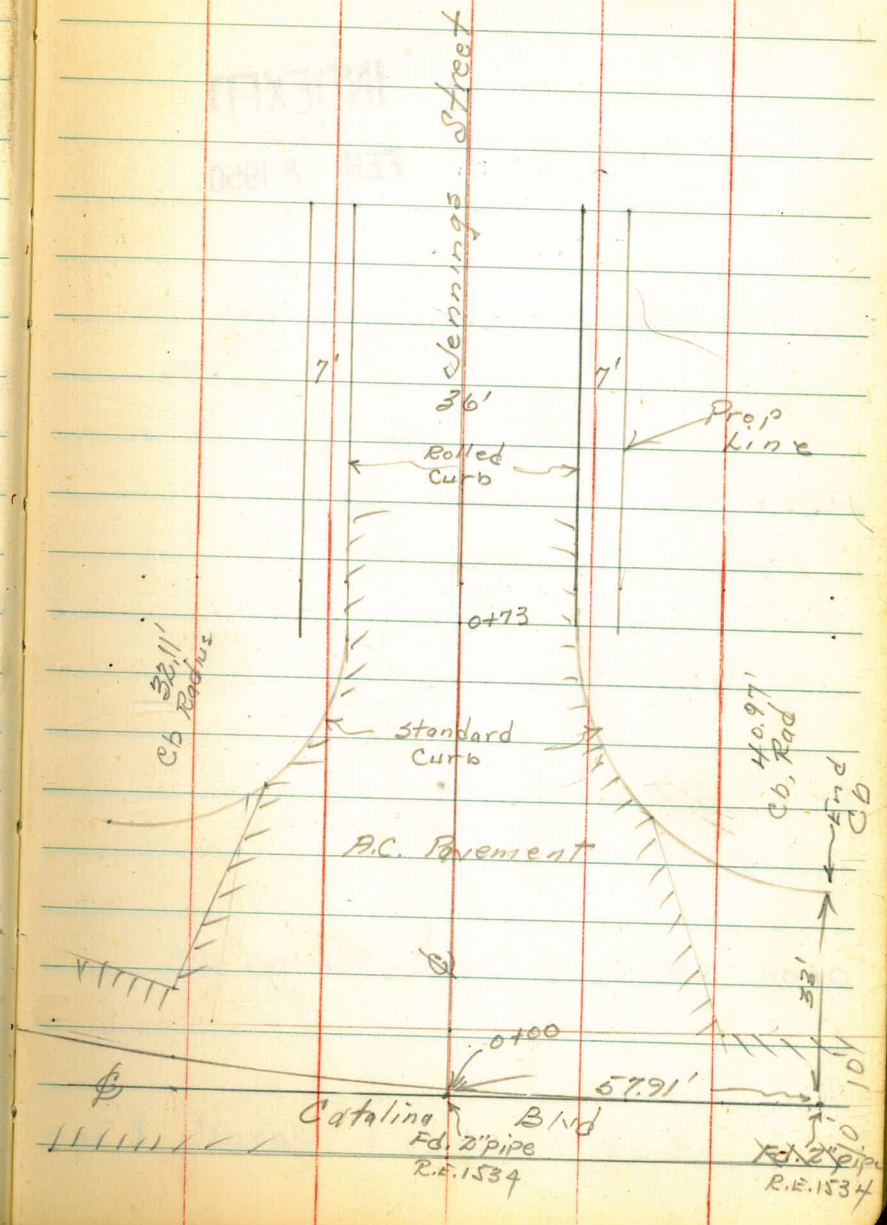
249.2 / 50 | 249.6 / 26 | 249.20 / 11 | 248.88 | 248.30 / 12 | 247.9 / 23 | 249.6 / 30 | 249.8 / 39 | 249.8 / 50

254.35

Johnson
Hendricks
Greer
Cotta
2-6-50

Curb Returns on Jennings Street -

INDEXED
M.K.
FEB 8 1950



Y-section Jennings St from ℄ Catalina Blvd 133' East of ℄ Existing Curbs Returns.

INDEXED
M.K.
FEB 8 1950

0+71.5 = B.C. on Left

0+39.5 = End Existing Curb Left

0+33 = End Existing Curb Right

0+25 = M.H.

0+10

0+00 = ℄ Catalina Blvd & Jennings St.

6.30 255.55 249.25

Lt.	℄	Rt.
249.11 G	249.61 Cb 18.2	249.69
		249.71 G 18.2
		250.19 Cb
247.7 G 58.6	248.50 Cb. 32.8	248.12
	248.89	249.32 30.2
248.0 50	248.01 35.5	248.72
	248.79 31	249.8 G. 58.2
		250.65 Cb.
248.0 50	247.98 39	248.61
	249.30 33	249.6 50
	248.22 44	248.82
	249.68 42	
248.74 50	249.33	250.32 50

Pipe ℄ Jennings & Catalina Blvd

#- Section Jennings St. from
℄ Catalina Blvd 133' East ℄
Existing Curb Returns on
Jennings Street.

630 249.25 249.25

1+33

0+83 = Transition of Curbs.

South East Curb Return - 62.5' around
4 Parts = 15.6

North East Curb Return = 53.1 around
4 Parts = 13.3 each.

0+73 = B.C. on Right

	Lt.	℄	Rt.
Pipe ℄ Jennings & Catalina			
	250.86 / 19	250.58 / 17.5 257.13	251.13 / 17.5 — 251.40 / 19
	249.80 / 19	249.53 / 17.5 250.03	250.09 / 17.5 — 250.32 / 19
	249.73 G 250.22 Cb	249.40 G 249.93 Cb 249.35 G 249.97 Cb	249.7 G 250.20 Cb — 249.8 G 250.65 Cb
B.C. Jennings St.		15.6 — 31.2 — 46.8	62.5
	249.11 2 G 249.61 Cb	248.74 G 249.28 Cb 248.38 G 249.04 Cb	247.9 G 248.78 Cb — 247.7 G 248.50 Cb
B.C. Jennings St.		13.3 — 26.6 — 39.9	53.1
	249.21 G 249.62 Cb	249.78 — 249.73 G	250.22 Cb
	18.4		18

255.55

X-Sect. 20' Alley in Block 5
Alhambra Park - Map No. 1488

4227
W.O. 21777

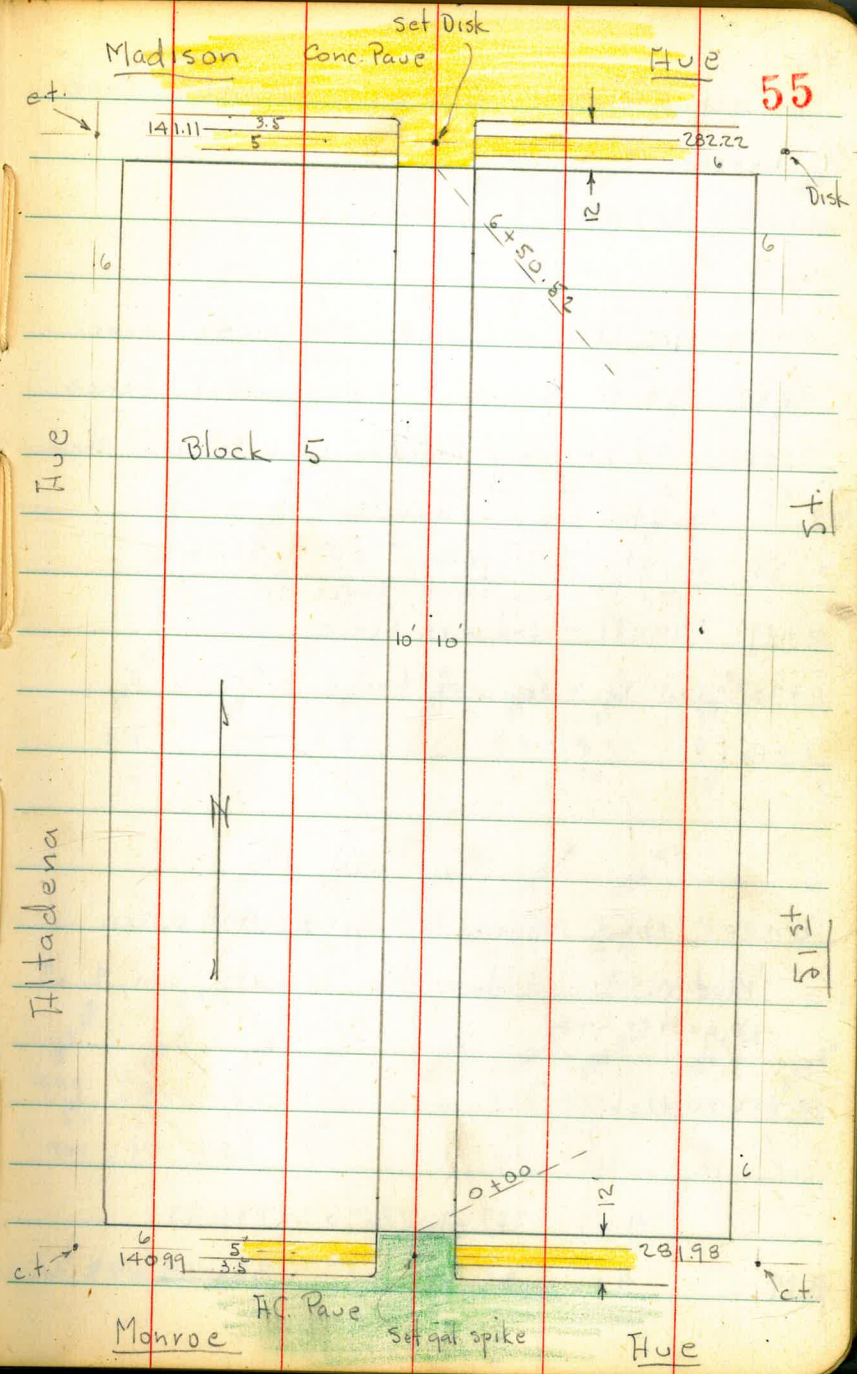
3-6-50
Osborne
Hatch
Shepard

INDEXED
W.K.
MAR 7 1950

Notes Next page

Soil Sample - 5+50

REDUCED P.V.S.



X-Sect. Alley - Blk. 5. - Alhambra Park
Sketch - P. 55

1+03 - 10.2' Rt. = ℄ 4' Conc. walk

1+00 - 9.8' Lt. = end wire + beg. picket fence
0+88 - 9.8' Rt. = end shed + Beg. picket fence
0+80 - 9.8' Rt. = end Board fence + Beg. small shed.
9.5' Lt. = Beg. wire fence
0+50 - 8.6' Lt. = ℄ P. pole ℄ J.P.A. 4525
10.1 Rt. - Beg. board fence
0+49 - 10.2 Rt. = end wire fence
0+25 - 10.1 Rt. = Beg. wire fence
0+10

0+00 = N.L. Monroe = edge of A.C. pave
Pave in ℄ is definitly Lower than ℄ at N. gutter Line

0-12 = N.cb.

4.69	387.67	7.90	382.98

B.M. 4.05 390.88 386.83 = S.E. Cor. 51st + Madison

Lt. = W. ℄ Rt. = E.

							384.44 3.23 10.2 walk	384.47 3.20 20 walk
384.6 3.1 15	384.1 3.6 10	383.8 3.9	384.2 3.5 10	384.3 3.3 15				
								384.0 3.7 9.8 = Cor. shed.
384.4 3.3 15	384.3 3.4 10	383.7 4.0 7	383.5 4.2	384.1 3.6 10	384.6 3.1 15			
384.0 3.7 15	384.3 3.4 10	382.9 4.8 7	382.7 5.0	382.9 4.8 6	383.4 4.3 10	383.8 3.9 15		
383.01 4.66 10 Top end cb.	382.61 5.06 10 gut.	ok ? 382.28 5.39	382.64 5.03 9.9 gut	382.91 4.76 9.9 Top-end cb.				
382.68 4.99 50 Top	382.21 5.46 50 gut	382.85 4.82 Top 2' Rad.	382.48 5.19 10 gut	382.51 5.16	382.52 5.15 10 gut	382.86 4.81 Top 2' Rad.	382.59 5.08 50 gut.	383.06 4.61 50 Top

387.67

51st + Madison

3+12 10.2' Rt. = end fence

3+02 - 10' Lt. = end fence

3+00

2+65 - 10.1 Lt. = Beg. board fence

2+59 - 10.1' Lt. = ℄ Sing. Gar - Conc. floor.

2+53 - 10' Lt. = end fence

2+51 - 8.8' Lt. = ℄ P. pole # P.A. 4545

2+50

2+25 - 10' Rt. = end Board + Beg. Lath fence

2+00 - 9.9' Lt. = fence

1+91 - 10.2' Rt. = Beg. Rail fence

T.P. 6.20 390.27 3.60 384.07

1+84 - 12.1' Rt. = ℄ of Back of Sing. Gar. - opens To E.

1+75 - 10' Rt. = end picket fence

10' Rt. = fence

1+50 - 9.8' Lt. = fence

1+47 - 8.8' Lt. = ℄ P. pole # P.A. 4535

1+15 - 11.4' Rt. = ℄ of 4' wing to House - Conc. found

	Lt.	℄		Rt.	
	384^{5} 5.8 15	384^{6} 5.7 10	384^{4} 5.9	384^{1} 5.6 10	385^{3} 5.0 15
384^{42} 5.85 10.1 floor.					
	384^{3} 6.0 15	384^{2} 6.1 10	384^{2} 6.1	384^{5} 5.8 10	384^{5} 6.0 15
	384^{6} 5.7 15	384^{4} 5.9 10	384^{1} 6.2	384^{6} 5.7 10	384^{5} 5.8 15	384^{3} 6.0 25 along House
		390.27			
					384^{5} 3.2 12.1 along Gar.
	384^{7} 3.0 15	384^{3} 3.4 10	384^{0} 3.7	384^{4} 3.3 10	384^{1} 3.0 13.9 = along House
					384^{2} 3.5 11.4 ground	384.48 3.19 11.4 floor.
		387.67			

T.P.	6.42	392.43	4.26	386.01

5+00

4+88 - 10' Rt. = fence

4+75 - 10' Lt. = end fence & 9.9' Lt. = beg. wire Cyclone fence

4+55 - 9.8' Rt. = end Conc. for fence

4+50 - 9.9' Rt. = fence - Conc. found. 6"

4+49 - 7.9' Lt. = ± P. pole # P.A. 456'

4+25 - 10' Lt. = Beg. board fence (dip Sect.)

4+24 - 10.4' Lt. = ± 2' Conc Drain from Court

4+23 - 10.4' Lt. = end House

4+00 - 9.6' Rt. = end Cabin + Beg. picket fence

3+96 - 10.2 Lt. = Beg. House - pier found.

3+88 - 10' Lt. = ± 5' flagstone walk

3+86 - 9.6 Rt. = end fence + Beg. Small Cabin

3+75 - 10' Lt. = Beg. board fence

3+64 - 9.8' Rt. = end Green house + Beg. Picket fence

3+51 - 8.9' Lt. = ± P. pole - # P.A. 455'

3+50 - 9.9 Rt. = Beg. Green House - Conc. floor

3+14 - 11.3' Lt. = ± Doub. Gar. Conc. floor

	Lt.		℄		Rt.
	385.8	385.8	385.6	385.1	385.8
	4.5	4.5	4.7	4.6	4.5
	15	10		10	15
				385.1	386.29
				4.6	3.98
				9.8	9.8 = Top Conc.
	385.6	385.6	385.3	386.28	385.1
	4.7	4.7	5.0	3.99	4.6
	15	10		9.9	10
				Top Conc.	
385.8	385.74				
4.5	4.53 = I.E. of				
10.4	10.4	Drain			
ground.		385.4	385.2	385.2	385.4
		4.9	5.1	5.1	4.9
		10		9.6	15
385.30	385.25	387.59	385.2		
4.97	5.02	2.68	5.0		
15	10	10.2	10.2 ground		
walk	walk	floor			
				385.3	386.21
				5.0	4.06
				9.6	9.6
					floor
384.95	384.9	385.0	384.6	385.3	385.49
5.32	5.4	5.3	5.7	5.0	4.78
11.3	15	10		9.9	9.9
floor.					floor.

390.27

check Starting B.M. 5.59 386.84 386.83

6+62.52 = S. cb.

Rods on edge

6+50.52 = S.L. Madison - edge Conc. pave = 0.2' N.

6+35

6+00 - 10.1' Lt. = end fence

5+63 - 10.7' Rt. = ℄ 2' Conc. walk

5+57 - 11' Rt. = end House

8.5' Lt. = ℄ of P. pole # PA 4585

5+50 - 10.1' Lt. = end wire & Beg. board fence - 10' Lt

5+25 - 10.2' Rt. = end fence & 10.6' Rt. = Beg. House

	Lt.	℄	Rt.
	386.69		
	5.74		
	40		
	Top		
	386.34	386.81	386.42
	6.09	5.62	6.01
	40	Top	10
	gut.	2' Rad.	
			386.43
			6.00
			386.47
			5.96
			10
			386.88
			5.55
			Top
			2' Rad
			386.61
			5.82
			40
			gut
			386.98
			5.45
			40
			Top
	386.93	386.84	386.62
	5.50	5.59	5.81
	10	10	
	Top	gut	
			386.78
			5.65
			10
			gut
			387.02
			5.41
			10
			Top
	387.1	387.1	387.2
	5.3	5.3	5.2
	15	10	
			387.5
			4.9
			10
			387.6
			4.8
			15
	386.5	386.7	386.5
	5.9	5.7	5.9
	15	10	
			386.7
			5.7
			10
			387.4
			5.0
			15
			386.54
			5.89
			10.7
			walk
			386.65
			5.78
			20
			386.2
			6.2
			11
			at Cor.
	385.9	386.0	385.8
	6.5	6.4	6.6
	15	10	
			386.0
			6.4
			10
			386.2
			6.4
			10.7 along House
			385.9
			6.5
			10.6
			ground
			386.28
			6.15
			10.6
			floor

392.43

6-15-50
Hendricks
Johnson
Greer
Crawford
W O # 31.771

Re-Cross Section Alley
Blk 35 City Hts.

for Checking Quantities only.

2+50

2+00

1+50

1+00

0+50

0+00

362.35	362.3	362.5	362.6	362.1
	10		10	20
361.6	361.6	361.7	361.5	361.5
14	10		10	18
361.1	361.0	361.3	360.9	360.8
14	10		10	16
360.7	360.7	360.5	360.5	360.2
16	10		10	17
360.1	360.1	360.2		
10			10	
358.72	358.73	358.49	358.40	
99		99	99	
68 Cb		6	66	

Alley Block 35 Cont'd

5+50

5+00

4+50

4+00

3+50

3+00

366.3 366.1 366.0 365.9 365.8
14 10 10 14

365.4 365.4 365.7 365.4 365.2 365.0
18 10 7 10 13

364.9 364.7 364.9 364.9 364.8 365.1 365.0
20 10 7 6 10 20

364.4 364.3 364.1 364.2 364.1 364.0
20 10 8 10 15

363.4 363.3 363.6 363.4 363.3 363.3 363.7
20 10 7 6 10 15

362.8 362.8 362.7 363.9 363.1 363.0
10 6 8 10 20

Alley Block 35 Cont'd

6+01.41

5+99.41 So. Line Pole

5+75

62

Same

366.4 365.7 365.7 365.7 366.0 366.0
10 5 4 8 10

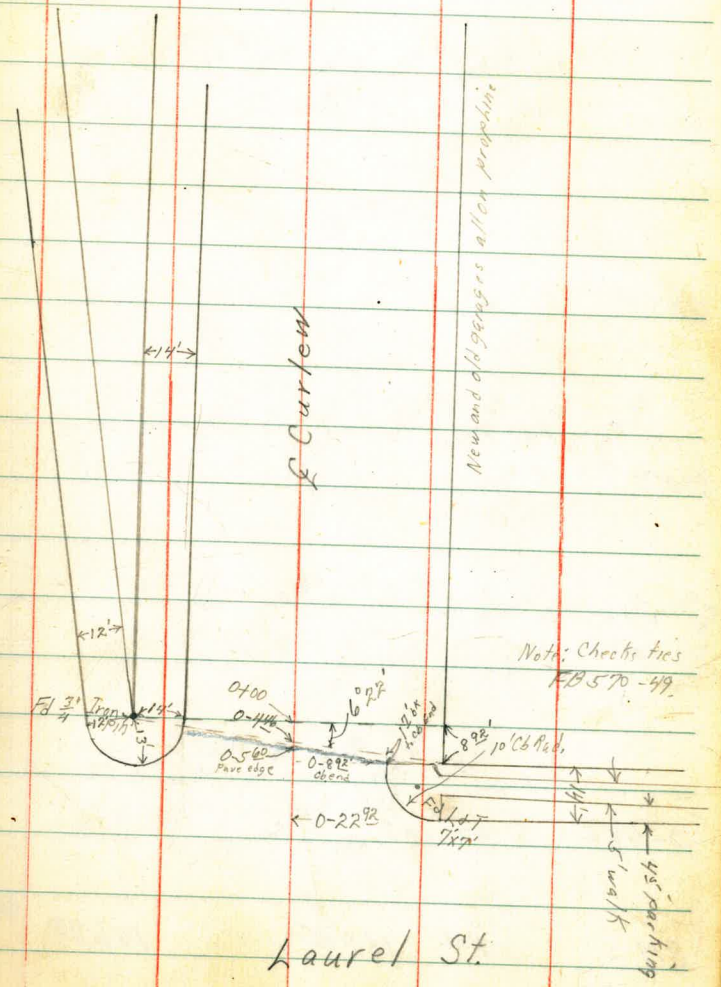
366.8 366.6 366.4 366.3 366.1
15 10 8 10

D. Smith
E. Sherman
G. Cota

Cross Sec. Curlew

W.O.# 25020

Laurel to Canyon 7-6-50



X Sec Curlew Laurel St

0+41 40½ Rt End new garages No floor
Begin old garages con floor only

0+00 Prop cor to west

0-05.69 ℄ int with paving edge.

40½ Rt Begin garages now no floors as yet
0+08.92 N Prophine Laurel to East also cb end
garages

0-22.22 N cb line Laurel to East

0-48.92 ℄ Laurel

BM 6.38 152.45 ✓ 146.07 SE BP Laurel Curlew

Lt = West ℄ to Canyon Rt = East

147.8 147.27 147.0 147.8 148.0 148.1 147.8 148.6 148.83
47 5.18 5.5 47 44 4.3 4.6 3.9 3.42
40 26 cb 26 Sat 13 13 26 40 Floor

147.2 147.13 146.8 147.4 147.6 147.8 148.2 148.0
5.2 5.32 5.6 5.0 48 47 42 44
40 26 cb 26 Sat 13 13 24 40

147.59
4.86

146.81 147.16 147.50 147.65 147.74 148.03 148.31
5.64 5.29 4.93 4.80 4.71 4.42 4.14
26 13 13 26 Sat 26 cb 40 Sat Wall

145.76 146.60 146.83 147.25 147.32 147.45 147.99 147.44 148.03 149.30 149.87
6.69 5.85 5.62 5.20 5.13 5.00 4.46 5.01 4.42 3.45 2.58
90 40 26 26 36 Sat 36 cb 40 Sat 40 cb 90 Sat 86

145.69 146.70 146.84 147.08 147.27 147.52 149.24
6.76 5.75 5.61 5.37 5.18 4.93 3.21
90 40 26 26 40 90

152.45

0+94 40' Rt ℄ 3.5' con steps

0+86 ℄ same garages

0+77 ℄ same garages

0+70 26' Lt Begin Picket fence

0+70 40' Rt ℄ 3.2' con steps

0+65 ℄ same garages

0+56 ℄ same garages

0+47 40' Rt ℄ garage con floor

Lt = West ℄ Rt = East

147.8	147.66	147.0	147.6	148.0	148.0	148.0	148.6	148.81
4.6	4.79	5.4	4.2	4.4	4.5	4.4	3.9	3.46
40	26 cb	26 Sat	13		13	26	40	40' Top bottom step

148.81
3.64
40' floor

148.82
3.63
40' floor

147.6	147.44	147.4	147.8	148.0	148.2	148.4	148.8	149.04
4.8	5.02	5.4	4.6	4.4	4.3	4.1	3.6	3.41
40	26 cb	26 Sat	13		13	26	40	40' Top bottom step

148.82
3.63
40' floor

148.83
3.62
40' floor

148.83
3.62
40' floor

152.45

1747 80° sw cor house

1741 26½ Rt £ 9" dia power pole # 2533

1726 26° Lt End cb also £ int. gaurd fence

1717 26° Lt £ 2' wide conwalk

1713 40' Rt End garages

1708 £ garage

1700 40' Rt £ garage con floor

TP, 608 153.64 H 89 147.56 ✓

Lt = West £ Rt = East

133.64 135.1 135.7 136.9 137.1 144.9 148.8 149.1 149.3

20° 18 17½ 16 16 8 4 4½ 4

40 26 13 13 26 32 40 80

147.4 147.21 147.1 147.9 148.5 148.7 148.6 149.0 151.7

6 6.43 6.5 5.7 5.1 4.9 5.0 4.6 12

40 26 26 13 13 26 40 45

06 end Sht

147.77 147.59

5.87 6.05

40 20

on walk Top cb

148.79

4.85

40' floor

148.78

4.86

40'

148.82

4.82

40'

floor

153.64

Lt = West ℄ Rt = East

BM 7+56 146.08 ↓ 146.7 V Starting BM

40° Rt Fence & guard rail Lt.

1+67 86° Rt NW cor House

129.7 128.9 127.9 129.0 132.5 137.4 145.2 149.1 149.3

23° 24° 25° 24° 21° 16° 8° 4° 4°
40 26 13 13 26 40 50 80

15364

R. Smith
Wm Fay
E. Sherman
J. Crawford.

Re X sec Alley BK 253 Univ Hts

26° Lt End wall

0+90 22½ Lt to ent decorate wall

0+80 25½ Lt where carport decorate wall comes out from main wall

0+74 26° Lt Begin con brick wall

0+65 20½ Lt E garage con floor & apron

0+54

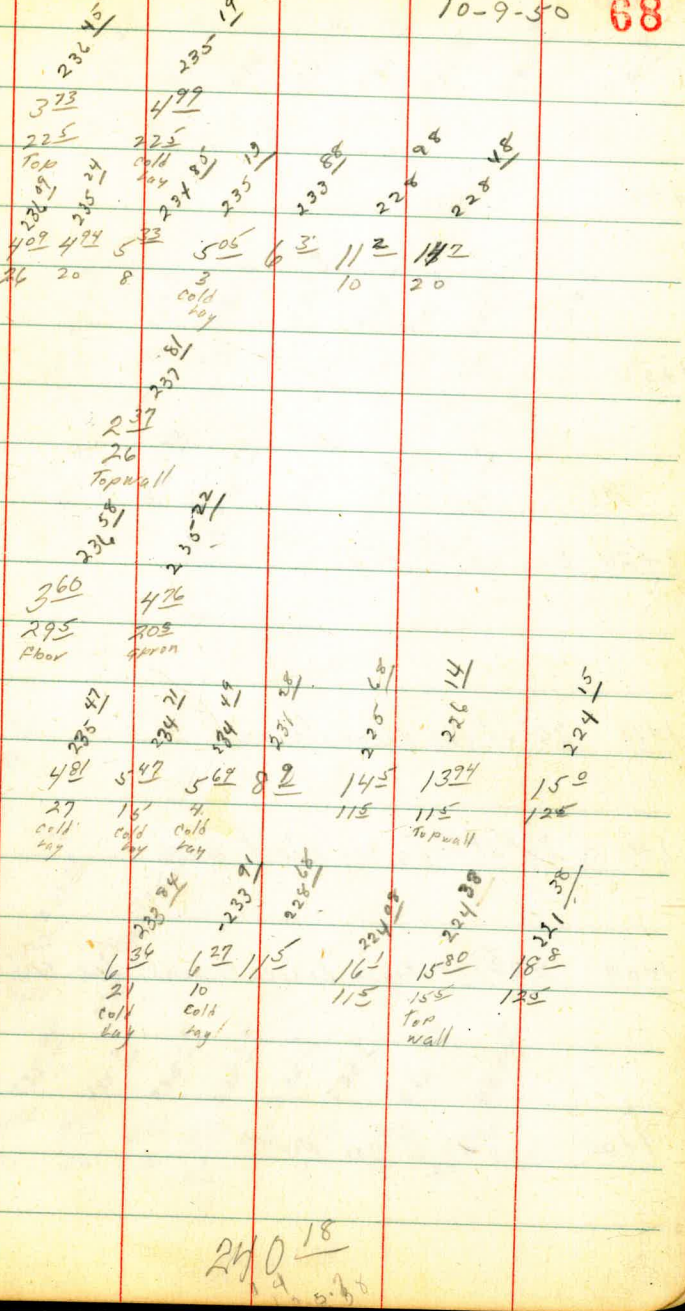
0+40 10 Lt Begin Cold bay

BM	4/07	240 18	236 4	on disk 3' N of Myrtle & Alley P. 24

Lt of North ℄ Rt. East WO 21001

10-9-50

68



1+75

1+50

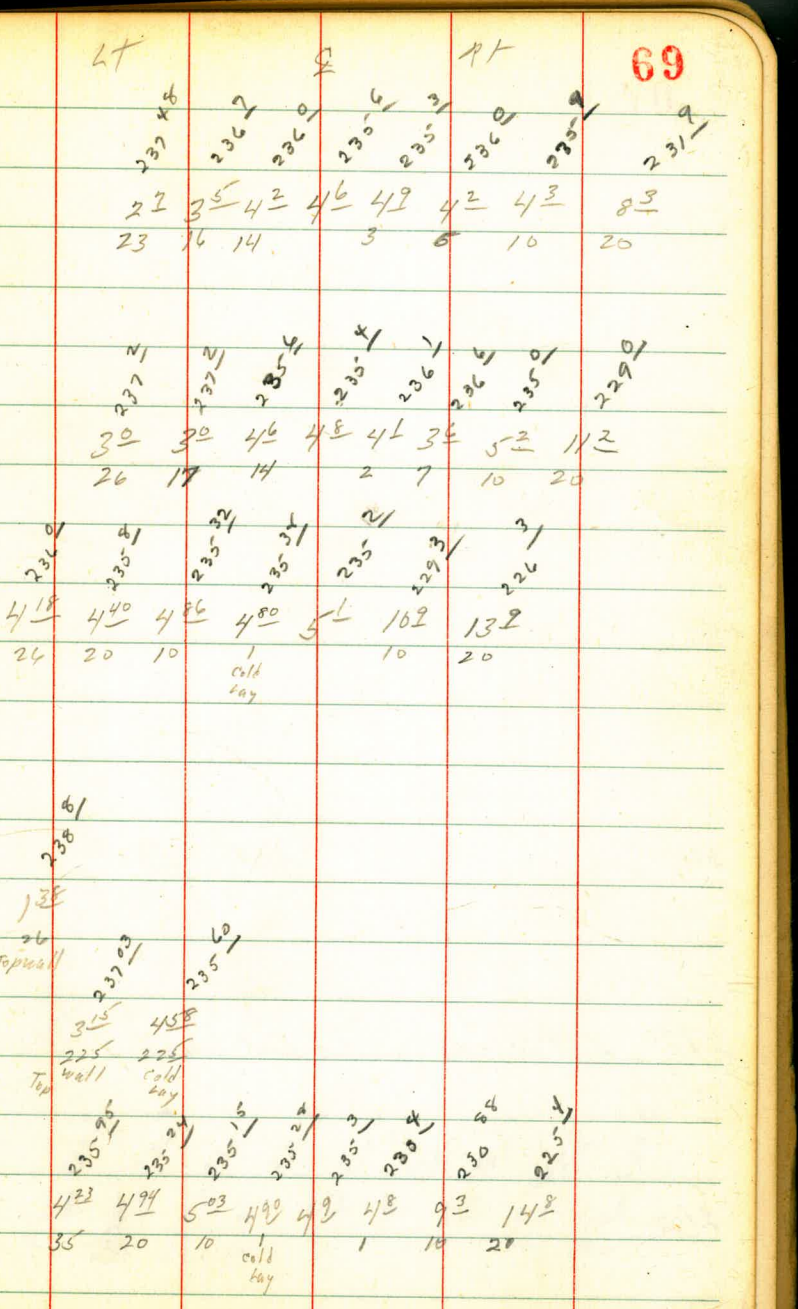
1+20 End cold bay

1+18 26° Lt end decorative wal

1+10 20° Lt Begin con block wall

1+09 22½ Lt Begin decorative wall for entrance car port

1+00 approx ℄ car port



4+ 8 1+

BM starting 4°I 236 4

2124 23 5 4 end west + East wall

2400

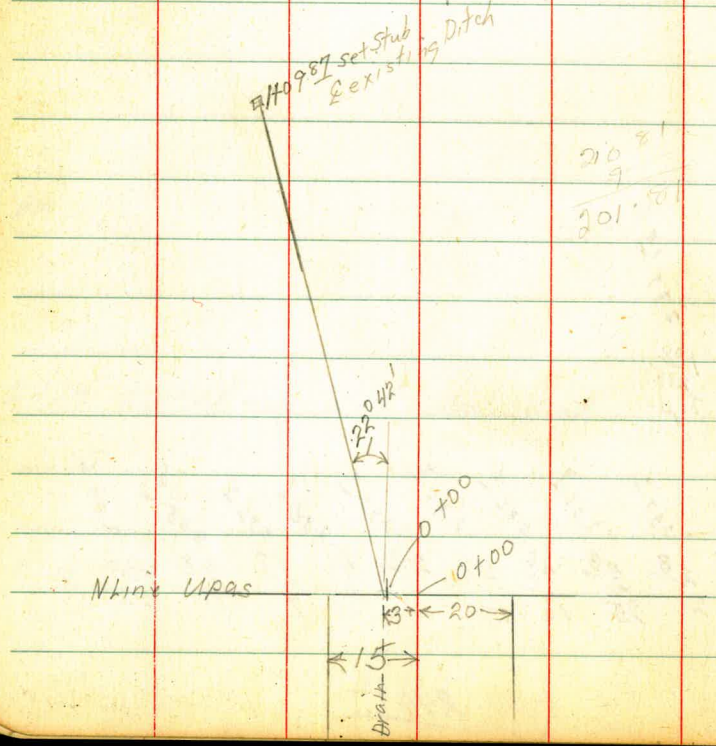
2391 8
100
235
Top

237 4 / 236 7 / 236 6 / 234 2 / 235 1 / 236 5 / 236 5 / 235 4 / 229 6

28 / 24 — 33 / 30 — 36 / 14 — 49 / 14 — 43 — 41 / 5 — 37 / 9 — 48 / 10 — 106 / 20

240 8

Drain Alley Blk 253 Univ. Hts



71

		Lt = East	Drain Line	Rt = West
1+09.87 ℄ Ditch		188.21 11.2 20	186.01 11.4 10	188.04 11.33 Stub	186.82 11.4 Ground	187.72 11.7 10	188.11 11.3 20
0+97 Torbay K		186.21 11.1 20	188.21 10.2 10	188.21 10.2 5	188.81 10.6	195.01 4.4 15
TP	0.45	199.39	11.87	198.94
0+75		197.01 11.8 20	201.21 10.7 10	202.71 9.7 10	201.31 8.1	204.31 6.5 20
0+43		201.81 9.0 20	203.11 7.7 10	205.21 5.6	207.11 3.8 10	208.71 1.9 20
TP	0.50	210.81	11.82	210.31
0+35		205.13 17.2 20	208.03 14.4 10	211.41 11.0	213.91 8.2 10	216.51 5.6 20
0+00		219.53 2.6
B.M.	6.09	228.43	216.14	Top 3/4" pipe 10.36 East ℄

Additional to P. 45 2 May '51
Catalina to Canyon 20690

Sommermeyer
Bogg
R. Sisson
Telpoagoff

3+50

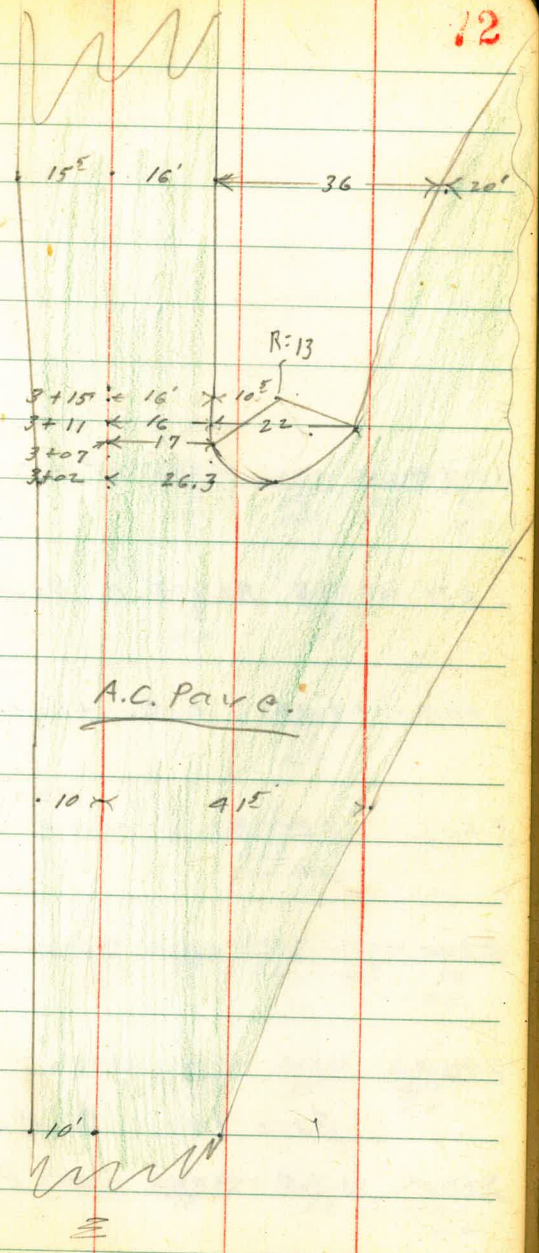
INDEXED

3+00

2+50

2+00

0+00 = ℄ B.C. = Sta. 0+00 Page 45



3+50

3+11 38' Rt. = E.C. Pave. see sketch.

3+07 - 17 Rt. = E.C. pave.

3+02 26 3 Rt. = Nose of curve
see sketch

3+00

2+50

Base line = ℄ Catalina.

2+00 E.P. = edge of Pave

248.45	248.35	248.20	247.91	247.57	247.21
155 E.P.		16 E.P.	52 E.P.	62	72 E.P.
		247.97	247.70		
		16 E.P.	38 E.P.		
			248.02		
			17 E.P.		
			248.02		
			263 End pave		
248.04	248.17	248.07	247.72	247.33	246.74
10		17	36	47	58 E.P.
248.01	247.96	247.75	247.23	246.76	
10 E.P.		25	35	415 E.P.	
248.06	248.13	247.87	247.48	247.00	
10 E.P.		10	20	295 E.P.	

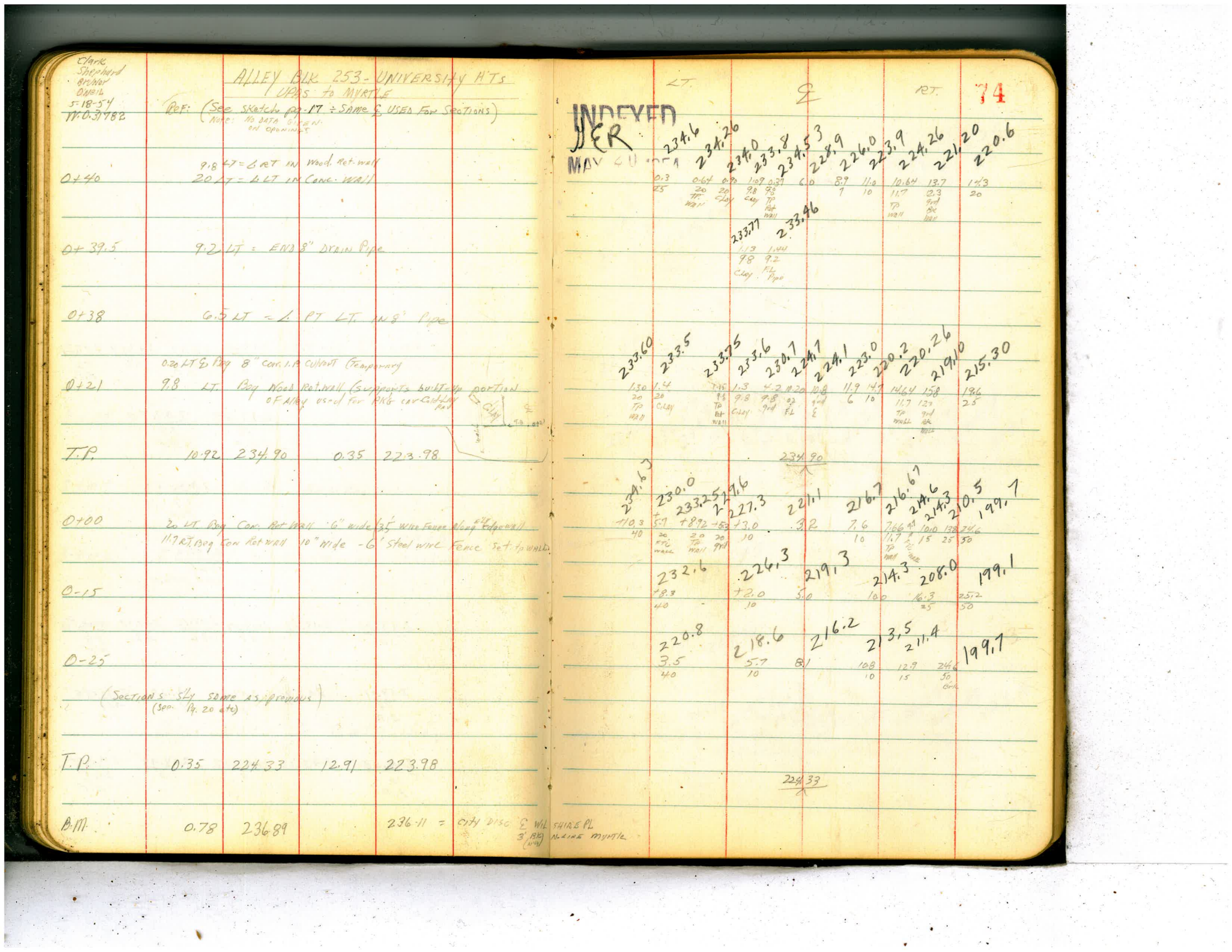
Clark
Shepherd
Brehar
Owen
5-18-54
W.O. 31782

ALLEY BLK 253 - UNIVERSITY HTS
UPPS to MYRTLE

REF: (See Sketch pg. 17 ÷ Same & USED For SECTIONS)
NOTE: NO DATA GIVEN ON OPENINGS

0+40	9.8 LT = ℄ RT IN Wood Ret. wall 20 LT = ℄ LT IN Conc. WALL			
0+39.5	9.2 LT = END 8" DRAIN Pipe			
0+38	6.5 LT = ℄ PT LT. IN 8" Pipe			
0+21	0.20 LT & Beg 8" conc. I.P. CULVERT (Temporary) 9.8 LT. Beg Wood Ret. Wall (Supports built-up portion OF Alley used for R/R car Cold Lay Rd)			
T.P.	10.92	234.90	0.35	223.98
0+00	20 LT. Beg Conc. Ret. WALL 6" wide & 3' Wire Fence along E/P Edge WALL 11.7 RT. Beg Con Ret WALL 10" Wide - 6' Steel Wire Fence Set Up WALL			
0-15				
0-25				
	(SECTIONS SAME AS PREVIOUS (See Pg. 20 etc)			
T.P.	0.35	224.33	12.91	223.98
B.M.	0.78	236.89		236.11 = CITY DISC ℄ W/L SHIRE PL 3' RT (N49) N-LINE MYRTLE

LT. ℄ RT.



Alley Blk 253 (Cont.)

0+76.5	22.9 Lt & 4' wide Conc. Steps ⊥ to ℄ Alley - 3 steps (Top Step against wall & 0.35' lower than wall)	
0+76	11.6' Rt & 5½" Fc End Conc. Wall - Wall As 98° Rt (Ely) / 9.7 Rt & Pole #A-3410	12.0' Rt ∆ Ely. Steel wire fence
0+74	Beg 8' Conc. Wall: 25.9 Lt ± Fc.	
0+73	19.9 Lt End Apron	
0+69.5	27.9 Lt = N.E. Corn. Steps & Nly edge Apron	
0+68	27.3 Lt. SEly corner Conc. Steps / 3' Lt End Wood-Rt. Wall	
0+67.5	30.3 Lt end Single gar.	3' wide Conc. Steps Flush with Nly side gar & Extend 3' toward Alley / From E. garage
0+56	27.9 Lt Beg Single gar.	
0+54.5	20' Lt Beg Edge Apron.	
0+53	35 Lt = 4 Lt in Wood-Rt. Wall / 27' Lt End Conc. Ret. Wall - Beg 3' Con. Wall - meets Sly edge Con. Apron Single gar. See Pg. 48	
T.P.	5.97 240.59 0.28 234.62	

236.36 Lt. 235.82 ℄ Rt

4.23 4.77
22.9 22.9
Tp. Lower Step Clay

227.49 225.24 225.3
13.10 15.35 15.3
Tp Wall Rt 12"
Wall

237.1 237.79 236.32
2.9 2.80 4.27
grd 25.9 25.9
Tp Wall Clay

235.64 235.60
4.95 4.99
19.9 19.9
Lip Apron Clay

237.30 236.74
3.29 3.85
27.9 Lip
Tp Step Apron

237.33 236.57 234.54 235.52 234.94 235.44 234.9 233.4 226.8 227.1 224.8 224.4 214.1
3.26 4.02 5.05 5.07 5.65 5.95 5.7 7.2 13.8 13.48 15.8 16.2 26.5
27.3 27.3 20 20 3 3 3 grd 10 11.7 12.3 20 50
Tp Bff Step Apron Below Step. Lip Apron Curb Clay C.Lay Tp Wall grd ℄ To Wall grd Bk Wall Brick

236.57
4.02
30.3
Fl.

236.55
Conc
27.9
Fl. gar.

234.98
5.61
20
Lip
Apron

235.48 234.95 234.63 234.38 233.51 233.7 231.7 226.1 226.29 224.09 223.4
5.11 5.64 5.96 6.21 5.55 6.1 8.8 14.2 14.30 16.50 17.2
27 20 10 35 35 35 grd 10 11.7 12.3 20
=Tp Wall Cl Cl Clay Tp Wall grd ℄ To Wall grd Bk Wall Brick
White Clay 0.05' Lower

240.59

Alley 253 (Cont.)

1+23 { 3.2 RT ℄ 2.5' Conc. Stairway } Steps Av. 11" deep & 5" rise
15.7 RT to 4.3' x 2.1 Con. Landing at Bottom of series steps
2nd Landing same dimensions & adjacent to 1'st.
End 4' walk 15.6' RT - against S'Ly Edge of Landing's & on approx. same level as 2nd Landing.

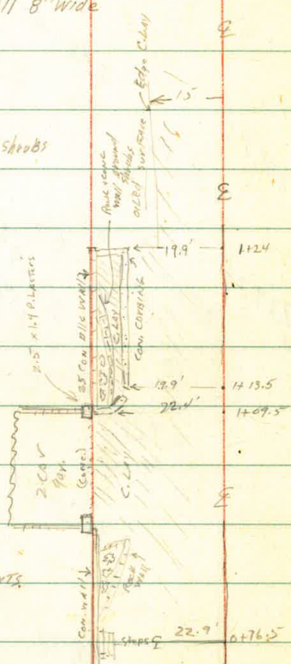
1+13.5 19.9 LT ∠ in 8" CB'G

25.9 LT to Fc. Beg Conc. Blk Wall 8" wide
1+12 26.6 LT End gar

{ 22.7 LT Beg Rock & Con. Wall Around Shrubs
22.4 LT = ∠ in 8" Con. CB'G.
1+09.5 26.6 LT. Beg 8" wide Con. CB'G
Extends E'ly from gar toward alley (see sketch) }

1+03.5 { 15.6 RT Beg 4' Con. Wall
Meets Bk 6" Conc. Ret. Wall }

1+00



0+91 14.5 RT ℄ 3" tree

0+90 22.6 LT = N'ly ∠ Rock & Con Wall Around Plants.

0+88 25.9 LT. End Conc. Blk Wall (Wall & gar meet) & 26.6 LT. Beg Conc. Blk. 2 car gar. (open-side E'ly)

0+79.5 25.6 LT. Beg Conc. & Rock Wall Around Bed - Shrubs etc. Average 8" high

19.9 RT Beg 4' Steel wire Fence
0+77 15.2 RT ℄ to Fc. Beg 6" Con. Ret. Wall
13.0 RT ℄ 4" tree

LT. ℄ RT. 6

235.53 — 5.06, 3.2, TP Step
227.68 — 12.91, 15.7, on 1'st Landing W'ly edge
227.26 — 13.33, 17.8, on 2nd Landing W'ly edge

236.32 — 4.27, 19.9, TP CBG
235.66 — 4.93, 19.9, C.L.

235.93 — 4.66, 26.6, Fl. gar
238.4 — 2.2, 26.6, grd Bk wall
238.54 — 2.05, 25.9, TP Con. wall
235.24 — 5.35, 25.9, FTG Con. wall

236.36 — 4.23, 26.6, TP CBG
235.83 — 4.76, 26.6, C.L.
235.79 — 4.80, 22.4, Clay in opening in CB (see sketch)
236.36 — 4.23, 22.4, TP CBG

235.97 — 4.62, 26.6, Fl. gar.
235.57 — 5.02, 20
235.14 — 5.45, 10
235.19 — 5.40
235.14 — 5.44, 1.5, E'ly edge Clay
235.1 — 5.5, 5
231.8 (228.3) — 8.8, 10
227.19 — 12.3, 15, grd
226.19 — 12.40, 15, TP wall
226.3 — 14.3, 15.6, grd Bk wall
221.7 — 18.9, 36, Brk
216.79 — 23.8, 50
226.35 — 14.24, 15.6, wall
228.18 — 12.41, 15, TP wall

235.85 — 4.74, 26.6, on con flat
235.80 — 4.79, 26.6, Clay

228.04 — 12.55, 15.2, TP wall
225.64 — 14.95, 15.2, FTG wall
225.69 — 14.9, 15.7, grd Bk wall

240.59

Alley 253 (cont.)

T.P. 4.27 241.30 3.56 237.03

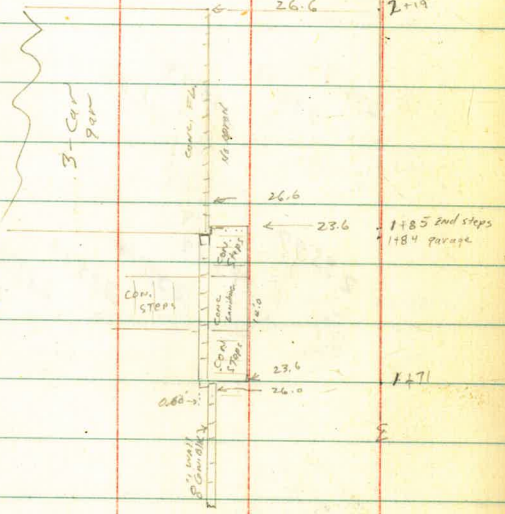
2+14 8.5 Rt ℄ 4" Tree

2+00

1+96 16.0 Rt ℄ 7" Tree

1+85 23.6 Rt End Con. Steps

1+84 { 26.6 Lt Beg 3-Car gar. / 26.6 Lt End 8° Conc. Wall



1+50

14.6 Rt to FC End 6" Conc. Wall

1+25 19.9 Rt End 4' Steel Wire Fence.
7.0 Rt ℄ 3" Tree

1+24 { 26.0 Rt (FC) End 2.5 Conc. Blk Wall - Beg 3' Conc. Blk Wall 8" wide / 19.9 Lt. ∠ 90° in Con. Ctg (see Sketch) / 16.0 Lt ℄ Pole # PA 3427

Lt. ℄ Rt.

237.49 237.01 236.63 236.25 235.91 235.82 236.5 236.3 235.90 233.0 226.0 223.0
3.10 26.6 Floor; 3.58 20; 3.97 15; 4.34 10; 4.68 CL ℄; 4.77 3 Approx. Elev. Edge C. Lay; 4.1 5 ℄ Crude Berm; 4.3 9 Brk; 4.7 10; 7.6 15; 14.6 36 Brk; 17.6 50

238.07
2.52
23.6 TP Bottom Step

241.6 241.71 237.43 237.49
-1.0 277 grid Brk Wall; +1.12 26.6 TP Wall; 3.16 26.6 on Soil Surface; 3.10 26.6 Conc. Flr. gar.

241.01
+0.48
23.6 TP Bench Mk.

243.8 239.4 239.99 237.29 240.03 237.99 237.5
+3.2 31; 1.2 24.7 grid Brk Wall; 0.60 26 TP Wall; 3.30 26.0 FTC; 2.60 26.0 TP Wall; 2.60 23.6 TP Bott. Step; 3.1 23.6 on Soil Surface

243.3 239.5 239.19 238.54 236.65 236.21 236.65 236.00 235.62 235.40 235.38
2.7 27; 3.1 26.7 grid Brk Wall; 1.40 26 3' FTC; 1.08 26 TP Wall; 2.05 26 TP 2.15 Conc. Wall; 3.44 26 TP Conc. Ctg; 4.38 26 C. Lay; 3.96 19.9 TP Ctg; 4.59 19.9 C.L; 5.13 15 C.L; 5.19 C.L ℄; 5.21 3.2 E. Edge C. Lay

240.59

243.4 234.34
12.25 14.6 TP Wall; 226.5 14.1 20; 218.1 22.5 50

(For shots on Steps etc + Conc. see Pg 76.)

ALEX BK 253 UNIV. HTS (CONT.)

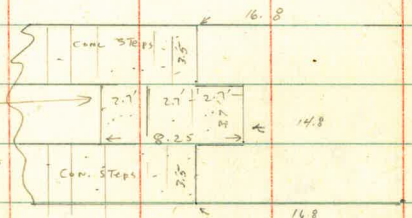
3+00

18' RT ℄ 5" Lemon Tree

2+84 11' RT ℄ 3" Pepper Tree

2+79.35 = NWly Line Conc. Steps.

2+73.95 14.8 LT = ℄ Conc. Ldg's.



2+68.6 = S. Line 2.5' wide Conc. Steps 16.8 LT.

Note: See fg 23 - indicates steps once extended to apt 14.8 from ℄ (Probing indicated steps are buried under present alley surface.)

2+50

2+25 11 RT to Wly END 5' Board Fence

2+24 23.5 LT. E'ly END OF E-West Conc. Blk WALL

2+23 16.6 LT ℄ Pole # PA 3467

2+19 26.6 LT END 3-Car gar.

LT. ℄ RT.

245.2	245.0	237.3	236.88	236.80	236.27	236.03	236.4	234.1	231.1	227.9	226.60	222.8	
+3.9	+3.7	4.0	4.42	4.50	5.03	5.27	4.9	7.2	10.2	13.4	14.7	18.5	
40	33 shoulder	20 Top	15 Approx water C.L	10	C.L ℄	25 E. Edge C.L Top	7 ℄ Porch	10	15	21 Toe	43 Brick	55	

238.43	238.37	236.97	236.85	
2.89	2.93	4.33	4.45	
22.8 BK. Landing	19.8 TP Landing	16.8 TP Step	16.8 Grnd (sloped)	

238.31	237.75	237.36	236.70	
2.89	3.55	3.94	4.60	
20.2 TP 3'x3' Ldg	17.5 TP 2nd Landing	14.8 TP 1st Ldg	14.8 Grnd (sloped)	

238.41	238.32	236.85	236.74	
2.89	2.98	4.45	7.52	
22.8 BK. Landing	19.8 on Landing	16.8 Step	16.8 Grnd (sloped)	

244.2	244.2	236.9	236.47	236.36	235.95	235.83	236.5	234.7	231.1	227.3	225.50	222.4	
+2.9	+2.9	4.4	4.83	4.94	5.35	5.47	4.3	6.6	10.2	14.0	15.8	18.9	
40	37	22 sloped surface	15 Wesley C.L (Approx)	10	C.L Alley ℄	25 E. Edge C.L Alley Top	7 ℄ Porch	10	15	25 Brick	43 Brick	50	

237.51

3.79
26.6
Fl.

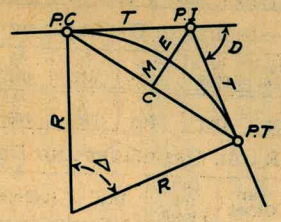
241.30

ALLEY 253 (CONT)

CHK: 5.22 = 236.08 = 236.11 (see 13.M.)

			LT.	℄	RT.
4+94.13	SCT. 100' N'ly to show grade EXIST. Imps on Wilshire Pl.		238.22	237.70	237.69 / 236.73 / 237.31
			3.08 14.8 TP CB	3.60 12.8 C	3.61 / 4.57 13.6 G / 3.99 15.5 TP CB
			245.14	244.3	236.74 / 236.62 / 236.02 / 236.2 / 236.0 / 235.9 / 234.95 / 235.64 / 235.67 / 235.2 / 234.8 / 219.5
3+94.13 = N. LINE MYRTLE	= S'LY END EXIST. Imp's + (30.3 Ref. CB's) CON. POV.; 5' COMB. WALK'S STD. CB'S		+3.8 5.0	+3.0 30	4.56 12.8 BK WALK 4.68 14.8 TP CB 5.28 14.8 90° 5.1 14.8 9x4 5.30 on Conc. E 5.4 c. Lay E 6.35 15.5 G 5.66 15.5 TP CB 5.63 20.5 BK WALK 6.1 20.5 9x4 6.5 25 21.8 50
			235.12	234.89	235.54 / 232.10 / 220.66
			6.18 12.9	6.41 15.5 90°	5.76 15.5 TP CB 9.20 F.L. LINE CB. INLET 20.64 46 F.L. Fire
3+87.5	12.9' RT to S'ly end of CB INLET. (4.5' x 2.6') (24" CAST IRON Pipe at 90° Ely Extends 46' RT	(16.5 RT to CB F.C. S'ly END INLET. Flush with POV. AT. N'ly END INLET.	247.1	240.6	236.5 / 236.14 / 235.96 / 235.59 / 235.6 / 236.0 / 229.4 / 223.4
			+5.8 50	0.7 16	4.8 11 Toe 5.16 9 approx wedge C.L 5.34 5.34 0.2 Rim M.H. 5.71 5 E Edge C/L 5.7 7 5.3 10 11.8 38 17.9 50
3+64.13 = ℄ MYRTLE					
3+63	0.20' RT ℄ M.H.				
3+61.5	16.0 RT ℄ 16" Pepper Tree				
3+40	13.8' LT ℄ P.C. # P-1949		245.8	246.2 / 237.13 / 236.95 / 236.40 / 236.08 / 236.30 / 235.30 / 236.7.0 / 228.0 / 227.2 / 224.1	
			+4.5 40	+4.9 27	4.17 13 approx W. Edge C.L & Toe 4.35 10 4.90 C.L ℄ 5.22 4 E. Edge 5.10 7 ℄ Pan 6.0 10 9.8 15 13.3 22 14.1 41 17.2 50
3+34.13 = S. LINE MYRTLE				241.30	

DIETZGEN'S RAILROAD CURVE AND REDUCTION TABLES



CURVE FORMULAS

Radius=R=$\frac{50}{\text{sin. } D/2}$ (1) Degree of Curve=D and sin. $\frac{D}{2}=\frac{50}{R}$ (2)

Tangent=T=R tan $\frac{\Delta}{2}$ (3) Length of Curve=L=100$\frac{\Delta}{D}$ (4)

Middle ordinate=M=R(1—cos. $\frac{\Delta}{2}$) (5)=R vers $\frac{\Delta}{2}$ (6)

External=E=T tan $\frac{\Delta}{4}$ (7)=R ÷ cos. $\frac{\Delta}{2}$—R (8)=R exsec $\frac{\Delta}{2}$ (9)

Long Chord=C=2 R sin. $\frac{\Delta}{2}$ (10) Δ=Central Angle

EXPLANATION AND USE OF TABLES

Stations.—Given P. I.=Sta. 161+60.35 to find Sta. of P. C. and P. T. Δ=62° 10′ D=8° 20′. From Table IV for 1° curve T=3454.1 and ÷8⅓=414.49 ft. From Table V correction=.36 or T=414.85 ft. P. C.=Sta. P.I.—T=157 +45.50. Also from (4) L=746.00 and P. T.=Sta. P. C.+L=164+91.50.

Offsets.—Tangent offsets vary (approximately) directly with D and with square of the distance. Thus tangent offset for Sta. 158 on above curve is 2.16 ft. found as follows. From Table III tangent offset for 100 ft.=7.27 ft. Distance=158—Sta. P. C.=54.50, hence offset=7.27 $(54.50 \div 100)^2$=2.16 ft. Also square of any distance divided by twice the radius equals (approximately) the distance from tangent to curve. Thus $(54.50)^2 \div (2 \times 688.26)$=2.16 ft.

Deflections.—Deflection angle=½ D for 100 ft., ¼ D for 50 ft., etc. For c ft.=(in minutes) .3 x C x D° or=defl. for 1 ft. from Table III x C. For Sta. 158 of above curve=.3 x 54.5 x 8⅓=136.2′ or 2° 16.2′, or=2.50 x 54.5=136.2′ from Table III. For Sta. 159 deflection angle=2° 16.2′ +8° 20′ ÷2=6° 26.2′, etc.

Externals.—May be found in similar manner to tangents. Thus E for curve above is 115.37. For from Table IV for 1° curve E=960.6 for 8° 20′=960.6 ÷8⅓=115.27 and from Table V correction=.10 or E=115.37 ft. Or suppose Δ=32° and E is measured and found to be 42 ft. What is D? From Table IV E=230.9 and ÷42=5.5 or D=5° 30′.

TABLE VI.—CORRECTIONS FOR SUB-CHORDS AND LONG CHORDS.

FOR SUB-CHORDS ADD										Excess of arc per 100 ft.	LONG CHORDS				
D	10	20	30	40	50	60	70	80	90		D	200	300	400	500
4°	.00	.00	.01	.01	.01	.01	.01	.01	.00	.02	1	199.99	299.97	399.92	499.85
6	.00	.01	.01	.02	.02	.02	.02	.01	.01	.05	2	199.97	299.88	399.70	499.39
8	.01	.02	.02	.03	.03	.03	.03	.02	.01	.08	3	199.93	299.73	399.32	498.63
10	.01	.02	.03	.04	.05	.05	.05	.04	.02	.13	4	199.88	299.51	398.78	497.57
12	.02	.04	.05	.06	.07	.07	.07	.05	.03	.18	5	199.81	299.24	398.10	496.20
14	.02	.05	.07	.08	.09	.10	.09	.07	.04	.25	6	199.73	298.90	397.26	494.53
16	.03	.06	.09	.11	.12	.12	.12	.09	.05	.33	7	199.63	298.51	396.28	492.57
18	.04	.08	.11	.14	.15	.16	.15	.12	.07	.41	8	199.51	298.05	395.14	490.31
20	.05	.10	.14	.17	.19	.20	.18	.15	.09	.51	9	199.38	297.54	393.86	487.75
22	.06	.12	.17	.21	.23	.24	.22	.18	.10	.62	10	199.24	296.96	392.42	484.90
24	.07	.14	.20	.25	.28	.28	.26	.21	.12	.74	12	198.90	295.63	389.12	478.34
26	.09	.17	.24	.29	.32	.33	.31	.25	.15	.86	14	198.51	294.06	385.22	470.65
28	.10	.19	.27	.34	.37	.38	.36	.29	.17	1.00	16	198.05	292.25	380.76	461.86
30	.11	.22	.31	.39	.43	.44	.41	.33	.19	1.15	18	197.54	290.21	375.74	452.02
32	.13	.25	.36	.44	.49	.50	.47	.38	.22	1.31	20	196.90	287.94	370.17	441.15
34	.15	.28	.40	.50	.55	.57	.53	.43	.25	1.48	22	196.32	285.44	364.06	429.30
36	.17	.32	.45	.56	.62	.64	.59	.48	.28	1.66	24	195.63	282.71	357.43	416.53
38	.18	.36	.51	.62	.70	.71	.66	.53	.31	1.86	26	194.87	279.76	350.30	402.89
40	.21	.40	.56	.69	.77	.79	.73	.59	.35	2.06	28	194.06	276.59	342.69	388.42
42	.23	.44	.62	.76	.85	.87	.81	.65	.38	2.28	30	193.18	273.20	334.61	373.20
44	.25	.48	.68	.84	.94	.96	.89	.72	.42	2.50	32	192.25	269.61	326.08	357.28
46	.27	.52	.75	.92	1.02	1.05	.98	.78	.46	2.74	34	191.26	265.81	317.12	340.73
48	.30	.57	.81	1.00	1.12	1.14	1.06	.86	.50	2.99	36	190.21	261.80	307.77	323.61
50	.32	.62	.89	1.09	1.21	1.24	1.15	.93	.55	3.24	38	189.10	257.60	298.03	305.99
52	.35	.67	.96	1.18	1.31	1.35	1.25	1.01	.59	3.52	40	187.94	253.21	287.94	287.94
54	.38	.73	1.04	1.28	1.42	1.46	1.35	1.09	.64	3.80	42	186.72	248.63	277.51	269.54
56	.41	.78	1.12	1.38	1.53	1.57	1.46	1.17	.69	4.09	44	185.44	243.87	266.78	250.85
58	.44	.84	1.20	1.48	1.65	1.69	1.57	1.20	.74	4.40	46	184.10	239.93	255.78	231.95
60	.47	.91	1.29	1.59	1.76	1.81	1.68	1.35	.80	4.72	48	182.71	233.83	244.51	212.92

NOTE.—When a chord of less than 100 ft. is used the corrections given in the above table should be added to the nominal length of chord to get the length which should be used in order that the 100 ft. points will check with those obtained by using the standard 100 ft. chord. Thus in locating a 14° curve by 25 ft. chords measure 25'.06 for each chord. Long chords are useful in passing obstacles.

TABLE VII.—MIDDLE ORDINATES FOR RAILS IN FEET.

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	.016	.013	.011	.009	.008	16°	.356	.313	.273	.236	.200	.170	.139
2	.045	.038	.034	.029	.025	.021	.017	17	.378	.333	.290	.252	.213	.180	.148
3	.067	.058	.051	.044	.037	.031	.026	18	.400	.351	.306	.265	.225	.190	.156
4	.089	.079	.069	.060	.050	.042	.035	19	.423	.371	.324	.280	.238	.201	.165
5	.112	.099	.086	.074	.063	.053	.044	20	.445	.392	.341	.296	.250	.212	.174
6	.134	.117	.102	.088	.076	.064	.052	21	.466	.410	.357	.309	.262	.222	.182
7	.156	.137	.120	.104	.088	.074	.061	22	.487	.430	.375	.325	.275	.233	.191
8	.179	.158	.137	.119	.100	.085	.070	23	.509	.450	.390	.338	.287	.243	.199
9	.201	.175	.153	.133	.112	.095	.078	24	.531	.469	.408	.354	.299	.253	.208
10	.223	.196	.171	.148	.125	.106	.087	25	.552	.486	.424	.367	.311	.263	.216
11	.245	.216	.188	.163	.139	.117	.096	26	.573	.506	.441	.382	.323	.274	.225
12	.268	.236	.206	.179	.151	.128	.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

SLOPE REDUCTIONS.

When distances are measured on a slope that may be reduced to the equivalent horizontal distance by the following approximate rule:—subtract from the slope distance the square of the rise divided by twice the slope distance. Thus for a slope distance of 250.3 ft. and a rise of 15 ft. correction=$15^2 \div 2 \times 250.3$=.45 (by slide rule) or horizontal distance=250.3—.45=249.85. When vertical angle=V. A. is measured horizontal distance=slope distance—slope distance (1—Cos. V. A.). Thus for slope distance of 248.7 ft. and V. A. of 4° 20′ from Table VIII Cos=.99714 and correction=1—.99714=.00286 per foot or total of .286 × 2½ (near enough)=.57 and horizontal distance=248.7—.57=248.13 ft.

TRIGONOMETRICAL FORMULAS.

See fig. (a).

sin. $A=\frac{a}{c}$

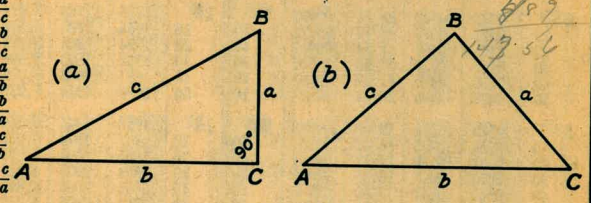
cos. $A=\frac{b}{c}$

tan. $A=\frac{a}{b}$

cot. $A=\frac{b}{a}$

sec. $A=\frac{c}{b}$

cosec. $A=\frac{c}{a}$



FORMULA FOR SOLVING TRIANGLES.

Given	Sought.	Right triangles. See fig. (a).
a, c	A, B, b	sin. $A=\frac{a}{c}$, cos. $B=\frac{a}{c}$, $b=\sqrt{(c+a)(c-a)}$
a, b	A, B, c	tan. $A=\frac{a}{b}$, cot. $B=\frac{a}{b}$, $c=\sqrt{a^2+b^2}$
A, a	B, b, c	$B=90°-A$, $b=a$ cot. A, $c=\frac{a}{\text{sin. } A°}$
A, b	B, a, c	$B=90°-A$, $a=b$ tan. A, $c=\frac{b}{\text{cos. } A°}$
A, c	B, a, b	$B=90°-A$, $a=c$ sin. A, $b=c$ cos. A
Given	**Sought.**	**Oblique triangles. See fig. (b)**
A, B, a	b	$b=\frac{a \text{ sin. } B}{\text{sin. } A}$
A, a, b	B	sin. $B=\frac{b \text{ sin. } A}{a}$
a, b, C	$A-B$	tan. $\frac{1}{2}(A-B)=\frac{a-b \text{ tan. } \frac{1}{2}(A+B)}{a+b}$
c, b, c	A	If $s=\frac{1}{2}(a+b+c)$, sin. $\frac{1}{2}A=\sqrt{\frac{(s-b)(s-c)}{b\,c}}$; cos. $\frac{1}{2}A=\sqrt{\frac{s(s-a)}{b\,c}}$, tan. $\frac{1}{2}A=\sqrt{\frac{(s-b)(s-c)}{s(s-a)}}$; sin. $A=\frac{2\sqrt{(s-a)(s-b)(s-c)s}}{b\,c}$
A, B, C, a	area	area $=\frac{a^2 \text{ sin. } B \text{ sin. } C}{2 \text{ sin. } A}$
A, b, c	area	area $=\frac{1}{2} b\,c$ sin. A
a, b, c	area	$s=\frac{1}{2}(a+b+c)$, area $=\sqrt{s(s-a)(s-b)(s-c)}$

11 11

22° 42' Lt

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

Roadway 16 feet wide. Side Slopes 1 on 1½

For Single Track Embankment.

H	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	H
0	8.0	8.2	8.3	8.5	8.6	8.8	8.9	9.1	9.2	9.4	0
1	9.5	9.7	9.8	10.0	10.1	10.3	10.4	10.6	10.7	10.9	1
2	11.0	11.2	11.3	11.5	11.6	11.8	11.9	12.1	12.2	12.4	2
3	12.5	12.7	12.8	13.0	13.1	13.3	13.4	13.6	13.7	13.9	3
4	14.0	14.2	14.3	14.5	14.6	14.8	14.9	15.1	15.2	15.4	4
5	15.5	15.7	15.8	16.0	16.1	16.3	16.4	16.6	16.7	16.9	5
6	17.0	17.2	17.3	17.5	17.6	17.8	17.9	18.1	18.2	18.4	6
7	18.5	18.7	18.8	19.0	19.1	19.3	19.4	19.6	19.7	19.9	7
8	20.0	20.2	20.3	20.5	20.6	20.8	20.9	21.1	21.2	21.4	8
9	21.5	21.7	21.8	22.0	22.1	22.3	22.4	22.6	22.7	22.9	9
10	23.0	23.2	23.3	23.5	23.6	23.8	23.9	24.1	24.2	24.4	10
11	24.5	24.7	24.8	25.0	25.1	25.3	25.4	25.6	25.7	25.9	11
12	26.0	26.2	26.3	26.5	26.6	26.8	26.9	27.1	27.2	27.4	12
13	27.5	27.7	27.8	28.0	28.1	28.3	28.4	28.6	28.7	28.9	13
14	29.0	29.2	29.3	29.5	29.6	29.8	29.9	30.1	30.2	30.4	14
15	30.5	30.7	30.8	31.0	31.1	31.3	31.4	31.6	31.7	31.9	15
16	32.0	32.2	32.3	32.5	32.6	32.8	32.9	33.1	33.2	33.4	16
17	33.5	33.7	33.8	34.0	34.1	34.3	34.4	34.6	34.7	34.9	17
18	35.0	35.2	35.3	35.5	35.6	35.8	35.9	36.1	36.2	36.4	18
19	36.5	36.7	36.8	37.0	37.1	37.3	37.4	37.6	37.7	37.9	19
20	38.0	38.2	38.3	38.5	38.6	38.8	38.9	39.1	39.2	39.4	20
21	39.5	39.7	39.8	40.0	40.1	40.3	40.4	40.6	40.7	40.9	21
22	41.0	41.2	41.3	41.5	41.6	41.8	41.9	42.1	42.2	42.4	22
23	42.5	42.7	42.8	43.0	43.1	43.3	43.4	43.6	43.7	43.9	23
24	44.0	44.2	44.3	44.5	44.6	44.8	44.9	45.1	45.2	45.4	24
25	45.5	45.7	45.8	46.0	46.1	46.3	46.4	46.6	46.7	46.9	25
26	47.0	47.2	47.3	47.5	47.6	47.8	47.9	48.1	48.2	48.4	26
27	48.5	48.7	48.8	49.0	49.1	49.3	49.4	49.6	49.7	49.9	27
28	50.0	50.2	50.3	50.5	50.6	50.8	50.9	51.1	51.2	51.4	28
29	51.5	51.7	51.8	52.0	52.1	52.3	52.4	52.6	52.7	52.9	29
30	53.0	53.2	53.3	53.5	53.6	53.8	53.9	54.1	54.2	54.4	30
31	54.5	54.7	54.8	55.0	55.1	55.3	55.4	55.6	55.7	55.9	31
32	56.0	56.2	56.3	56.5	56.6	56.8	56.9	57.1	57.2	57.4	32
33	57.5	57.7	57.8	58.0	58.1	58.3	58.4	58.6	58.7	58.9	33
34	59.0	59.2	59.3	59.5	59.6	59.8	59.9	60.1	60.2	60.4	34
35	60.5	60.7	60.8	61.0	61.1	61.3	61.4	61.6	61.7	61.9	35
36	62.0	62.2	62.3	62.5	62.6	62.8	62.9	63.1	63.2	63.4	36
37	63.5	63.7	63.8	64.0	64.1	64.3	64.4	64.6	64.7	64.9	37
38	65.0	65.2	65.3	65.5	65.6	65.8	65.9	66.1	66.2	66.4	38
39	66.5	66.7	66.8	67.0	67.1	67.3	67.4	67.6	67.7	67.9	39
40	68.0	68.2	68.3	68.5	68.6	68.8	68.9	69.1	69.2	69.4	40

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 41.9. For same slopes but other widths of roadbed correct above figures by one-half difference in width of roadbed; thus in example above for 20 ft. roadbed distance will be 41.9+(20—16)÷2 or 2 ft. added to 41.9 =43.9. For slopes of 1 on 1 see inside of front cover.

MADE IN U.S.A.