

589

ENGINEERS'

LEVEL BOOK

NO. 10

02

F.B. 589

PRINTED  
IN GREAT BRITAIN



29596

# 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  $30.6 + (20 - 16) \div 2$  or 2 ft. added to  $30.6 = 32.6$ . For slopes of 1 on  $1\frac{1}{2}$  see inside of back cover.

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800

846

491.54

94.75

586.29

13 35

599.64

36



INDEX

Page

Mission Ave & Alvarado

1

" " Intersections Univ to Kearney

1-2



480.55  $\frac{1}{2}$  Mission Ave Alignment Univ Ave South

90-13 - Direct  
180-25-30  
270-39 -  
360 51-20 } Rev.

$\angle L 0^{\circ}-12'-06''$   
Intersection Castle St  
and Mission Ave

$\angle R 0^{\circ}-0'-58''$

89-56 } Direct  
170-52 }  
269-48 } Reverse  
359-44 }

$\angle R 0^{\circ}-0'-58''$   
Intersection Klauber St  
and Mission Ave

Mission Ave Summary of Alignment to Kearney  
Sta  $\frac{1}{2}$  Int Street Intersections

32+55.66 Kearney

25+75.38 Fulton

10+98.68 Bowery

12+00.25 Castle

5+20.37 Klauber

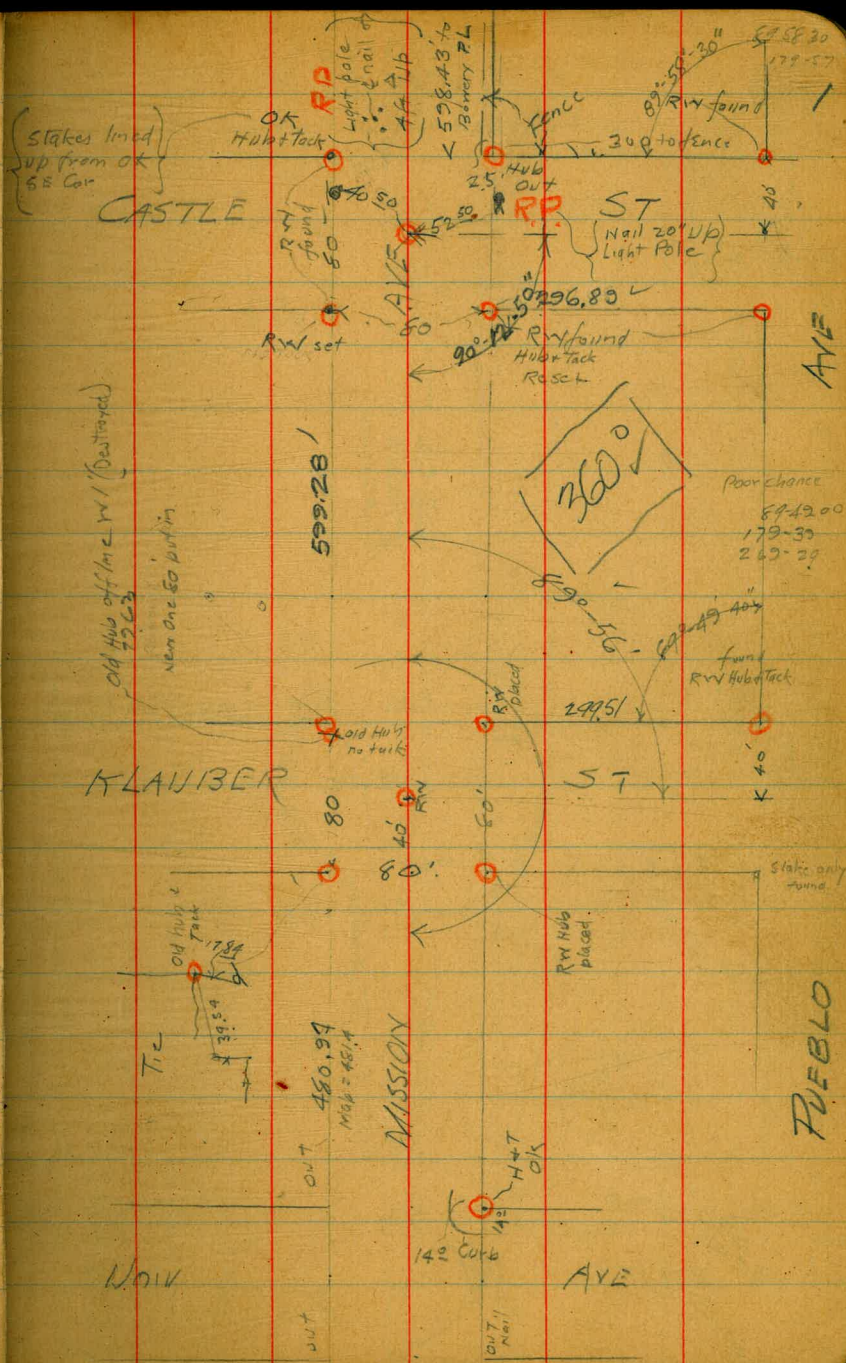
0+00  $\frac{1}{2}$  Univ + Mission

$0^{\circ}-0'-29''$

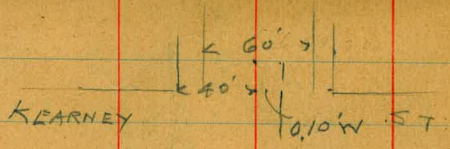
0 - 0

$0^{\circ}-12'-06''$

$0^{\circ}-0'-58''$







90-05-30  
180-11

B.S. produced

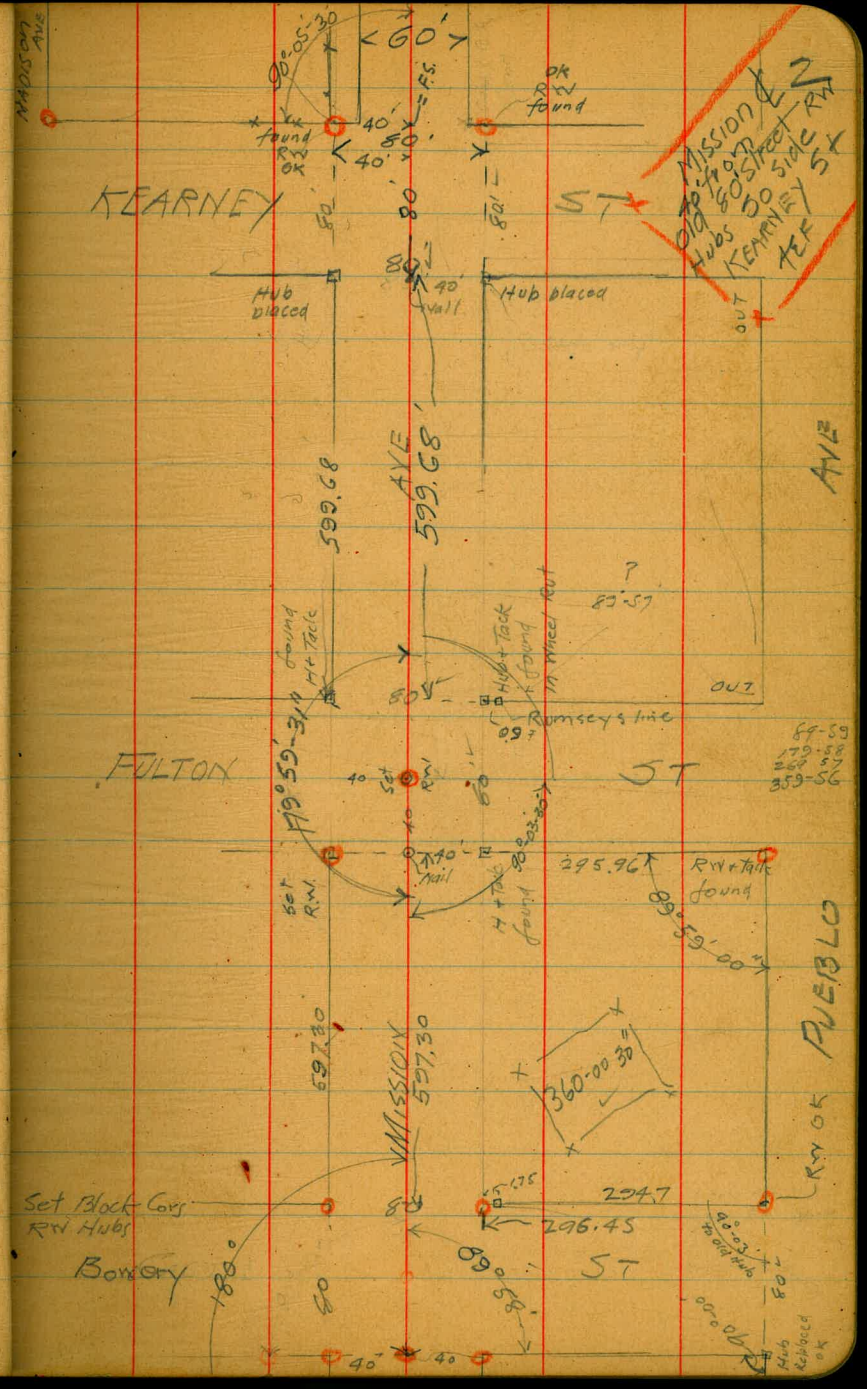
∠ 144° 06' 29"

90-03-30  
160-07  
270-11  
360-14

4.77' Nail west

B.S. produced

90-02-04 } Dir  
180-04 }  
270-06 } Rev  
360-08 }





3

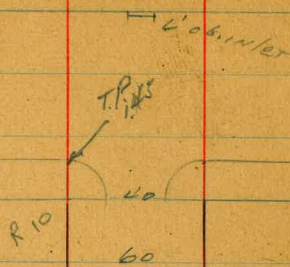


4



Levels to Estab. Grades  
of STS in Druckers Add

Look up  
for opening



605

Pittsburgh

Panama

B11-1.72

Indexed  
C.S.K.

curb

1/2

curb

New S.L.

20

605

LIBERTY

Venus

MARS

Moore 8-28-39

1

h

40

10  
20

Causeway  
Ingraham

R10

30

R10

212.7

192.7

1/2

200

50

200

50

OLLIE



Curb Levels on Ingraham St

668

Indexed  
C.S.K.

2

BM.B.P. 5.22 8.22 3.00  
T.P. 4.15 6.68 5.69 2.53

S. City  
hd. wall  
city of  
P.L. Co. RR  
on Ingraham

1+00

wly cb

4.44 2.74

gut

5.10 1.58

C Pav

5.08 1.60

gut

5.42 1.26

Ely cb drive

5.31 1.30

1+50

Ely cb drive

5.43 1.45

gut

5.87 1.31

C

5.00 1.65

gut

5.20 1.48

wly cb

4.56 2.12

1+89

wly cb

4.69 1.99

gut

5.28 1.40

C Pav

5.06 1.62

gut

5.38 1.30

Ely cb

4.73 1.95

2+14 = 2011 E St

Ely cb

4.78 1.93

21' S Ely from Ely Cor. of P.L. # 218 = 0+00

Wly = to Left - Ely = to Right.

0+00 = S Ely line Nashville to N.E.

wly curb 4.15 2.53

gut 4.84 1.86

C Pav 4.79 1.89

gut 5.31 1.35

Ely curb 4.70 1.98

0+50

Ely cb drive 5.24 1.44

gut 5.44 1.24

C Pav 4.94 1.76

gut 5.01 1.60

wly cb 4.35 2.33



6.68

Ely gvt.	5.41	
C Par. on Ld. plug	5.10	1.58 C.T.B.M.
wly cb on Par	5.12	1.56
wly " "	5.11	1.52
2+39 = Nly 0110 ST = 0+00		
wly cb	4.57	2.11
gvt	5.19	1.49
C	5.06	1.62
gvt	5.40	1.28
Ely cb	4.75	1.93
0+50		
Ely cb	4.68	2.00
gvt	5.34	1.36
C	5.02	1.64
gvt	5.19	1.49
wly cb	4.58	2.10
1+00		
wly cb	4.74	1.94
gvt	5.17	1.51
C	4.95	1.93

6.68

gvt	5.33	1.35
Ely	4.66	2.02
1+50		
F1	4.61	2.07
gvt	5.29	1.39
C	4.94	1.72
gvt	5.17	1.51
wly cb	4.55	2.13
2+00		
wly cb	4.49	2.19
gvt	5.10	1.58
C	4.93	1.75
gvt	5.20	1.48
Ely cb	4.56	2.12
2+50		
Ely cb	4.56	2.12
gvt	5.15	1.53
C	4.94	1.76
gvt	5.08	1.60
wly cb	4.45	2.23

3



668

3+00

Wly cb	4.57	1.36
gut	5.15	1.53
c	4.92	1.74
gut	5.25	1.43
Ely cb	4.61	2.07

TP	4.37	6.57	4.48	2.20
----	------	------	------	------

5+50

Ely cb	4.51	2.06
gut	5.15	1.43
c	4.92	1.65
gut	5.13	1.44
Wly cb	4.51	2.06

4+00

W cb	4.65	1.92
gut	5.29	1.28
c	4.92	1.65
gut	5.25	1.32
Ely cb	4.67	1.95

657

4+50

E cb	4.74	1.81
gut	5.40	1.17
c	5.04	1.53
gut	5.39	1.18
W cb	4.72	1.83

5+00

W cb	4.93	1.64
gut	5.36	1.03
c	5.24	1.33
gut	5.53	1.04
Ely cb	4.88	1.69

5+50

Ely cb	4.92	1.65
gut	5.58	1.099
c	5.25	1.32
gut	5.54	1.03
Wly cb	4.93	1.64

6+05 Sly Panama

W cb	4.92	1.65
gut	5.55	1.02

4



6.57

c	5.38	1.19
gut	5.73	0.84
Ely cb	5.05	1.52
4 + 35 E PANAMA		
E cb	5.13	1.44
gut E 6' cb in lot	5.99	0.58
c Pav	5.60	0.92
<del>cb</del> Line on Pav	5.54	1.03
W "	5.43	0.94
0 100 NLY PANAMA		
W cb	5.12	1.48
gut	5.79	0.78
c	5.54	1.01
gut	5.89	0.68
Ely cb	5.22	1.38
1 + 00		
Ely	5.11	1.46
gut	5.78	0.79
c	5.41	1.10

6.57

gut	5.63	0.94	5		
Wly cb	4.99	1.58			
T.P.	5.10	6.55	5.12	1.45	TOP WEST RETURN
2 + 00					
Wly cb	4.87	1.68			
gut	5.46	1.09			
c	5.27	1.28			
gut	5.66	0.89			
Ely cb	5.02	1.53			
3 + 00					
Ely cb	4.70	1.85			
gut	5.33	1.22			
c	5.03	1.52			
gut	5.40	1.15			
Wly cb	4.72	1.83			
4 + 00					
Wly cb	4.65	1.90			
gut	5.30	1.25			
c	4.97	1.58			



6.55

gut	5.33	1.22	
Ely cb	4.70	1.81	
5+00			
Ely cb	4.26	2.09	
gut	5.08	1.47	
c	4.78	1.77	
gut	5.20	1.33	
wly	4.55	1.00	
6+05 Sly Pit			
wly cb	4.24	2.29	
gut	4.90	1.65	
c	4.63	1.92	
gut	4.96	1.59	
Ely cb	4.30	2.22	
6+30 I Pit			
Ely	4.20	2.35	
gut	4.85	1.70	
c	4.59	1.98	B.M.
gut Pav	4.65	1.90	
wc "	4.65	1.90	

6.55

6+55 Nly Pit = 0+00

6

wly cb	4.19	2.36	
gut	4.83	1.72	
c	4.55	2.00	
gut	4.85	1.70	
Ely cb	4.24	2.31	
T.P.	4.68	1.96	1d C.T.
1+00			
Ely cb	4.74	1.88	
gut	5.40	1.24	
c	5.19	1.45	
gut	5.45	1.21	
wly cb	4.87	1.77	
1+00			
wly cb	4.74	1.90	
gut	5.34	1.28	
c	5.09	1.55	
gut	5.35	1.29	
Ely cb	4.71	1.93	



Camulos  
PANAMA Levels

N = RT + S = LT.

T.P. 1.58 4.83 1.25 W Ret.  
Panama

W. / W. Graham = 00 = S. edge Parking

0120 = SL Street  
N/Y CB 2.83 1.20

90T 3.37 0.66

C Pav 3.09 0.94

90T 3.14 0.87

S/Y CB 2.41 1.42

0+20

S 4.8 -0.87

C 5.3 -1.3

N 4.4 -0.6

0+50

N 4.9 -0.9

C 4.5 -0.5

S 4.6 -0.6

1+00

S 5.7 -1.7

C 5.8 -1.8

N 5.4 -1.6

4.03

Indexed  
C.S.K.

1+50

N 5.0 -1.0

C 5.0 -1.0

S 5.0 -1.0

2+12.7 = ELY Liberty

S 4.8 -0.8

C 5.0 -1.0

N 5.0 -1.0

0+00 WLY Liberty

N 4.9 -0.9

C 5.0 -1.0

S 4.9 -0.9

1+00

S 5.2 -1.2

C 5.0 -1.0

N 4.9 -0.9

2+00 ELY Venus

N 5.4 -1.4

C 5.5 -1.5

S 5.4 -1.6



403

Wily Venus = 00

S	5.9	-1.9
C	5.9	-1.9
N	5.8	-1.7

T.P.R.W.

5.37

3.65

5.75

-1.72

W. Cor.  
Panama  
Venus

1400

N	5.1	-1.4
C	5.2	-1.5
S	5.0	-1.3

2+00 Fly Mars

S	4.5	-0.8
C	4.5	-0.8
N	4.6	-0.9

0+00 Wily Mars = 00

N	4.5	-0.8
C	4.4	-0.7
S	4.4	-0.7

365

8

1400

S	4.6	-0.9
C	4.6	-0.9
N	4.7	-1.0

2+00 Fly Williams

N	3.8	-0.1
C	4.1	-0.4
S	4.1	-0.4

00 Wily Williams

S	3.8	-0.1
C	3.9	-0.2
N	3.9	-0.2

1400

S	3.8	-0.1
C	3.8	-0.1
N	4.0	+0.3

2+00 Fly Prince

N	5.5	+1.8
C	4.9	-1.2
S	4.8	-1.1



365

~+30 Top Bank Est 4.0 -0.3

~+35 in slough 7.2 -3.5 30 wide



Liberty Levels  
Panama to Ollie

BM Hub 5.67 3.95 -1.72

100 S/y of Panama

E = LT 4.8 -0.8

C 4.7 -0.9

W = RT 5.0 -1.0

200 S/y

W 4.4 -0.6

C 4.7 -0.7

E 4.4 -0.6

300 S/y

E 4.3 -0.3

C 4.5 -0.5

W 4.3 -0.3

400 S/y

W 4.2 -0.2

C 4.3 -0.3

E 4.1 -0.1

Indexed  
C.S.K.

3.95

500 S/y

E 4.4 -0.4

C 4.4 -0.4

W 4.3 -0.3

T.P. 3.86 +0.09

with  
NL Liberty  
& Ollie

4.05 = NLY Ollie, see p 11



indexed  
c.s.k.

OLLIE Levels

N = Rt S = Lt

0-30 = Pueblo line or d. of Street

C.T.B.M. 3.27 4.80 1.58 P3

00 = ~~W~~ Ingraham S. Edge of Paving End Rel

South line of Street = 0+20

N Top ch. Rd. 2.84 1.96

cut Pav. 3.44 1.36

C " 3.20 1.60

cut " 3.59 1.31

S Top end ch. 2.88 1.92

0+47

S 3.8 1.0

C 3.7 1.1

+17 E 14' Cem Pr. 3.62 1.18

W +4.7 E do. gar. Cem. 3.68 1.12

1+00

N 4.3 0.5

C 4.0 0.8

S 4.1 0.7

1+50

S 4.1 0.7

check to T.P. P10 4.74 0.06 0.09

480

11

C 4.7 0.6

N 4.8 0.0

2+12.7 = Fly Liberty

N 5.4 -0.6

C 4.6 +0.2

S 4.5 +0.3

00 = W Fly Liberty

S 4.3 0.5

C 4.3 0.5

N 4.5 0.3

0+50

N 4.8 0.0

C 4.0 0.8

S 4.7 0.1

1+00

S 4.5 0.3

C 4.4 0.4

N 4.8 0.0

1+50

N 4.5 0.3



4.80

C 4.4 0.4

S 4.6 0.2

2+00 Ely Venus

S 4.8 0.5

C 4.2 0.4

N 4.6 0.2

0.0 = Wly Venus

N 4.5 +0.3

C 4.9 -0.1

S 4.0 +0.8

Bottom  
Wly VenusTo P  
LATA

T.P. 3.54 5.17 3.17 1.43

0+50

S 4.5 0.7

C 4.5 0.7

N 4.6 0.8

1+00

N 5.2 0.0

C 4.9 0.3

S 5.0 0.2

5.17

1+50

I 5.1 0.1

C 5.1 0.1

N 5.2 0.0

2+00 Ely Mars

N 4.8 0.4

C 4.9 0.3

S 4.9 0.3

0.0 = Wly Mars

S 4.5 0.7

C 4.5 0.7

N 4.7 0.5

0+50

N 4.6 0.6

C 4.7 0.5

S 4.4 0.6

1+00

S 4.4 0.8

C 4.7 0.5

N 4.5 0.7

12



517

	1+20		
N		4.4	0.8
C		4.5	0.7
+20		4.4	0.8
S	IN Slough	8.6	-3.4
	1+50		
S	IN slough	9.6	-4.4
+15		8.6	-3.4
+20		5.2	0.0
C		4.8	0.4
N		4.5	0.7

1+65

N		4.3	0.9
C		4.9	0.3
+5	IN slough	9.5	0.7
S		10.0	-4.8

2+00 Ely Williams St

S	IN slough	9.6	-4.4
C	" "	9.6	-4.4
+15	" "	9.0	-3.8

517

+20

N

6.4 -1.2

5.2 0.0

13



Venus Levels

Orbit to Panama

W = LT    E = RT

517

T.P.    284    447    3.54    163    Lark

T	6.0	-2.1
C	6.0	-1.5
W	5.9	-1.4

5400

00 Nly of 01114

W	5.9	-1.4
C	6.5	-2.0
E	5.8	-1.3

1400

W	5.1	-0.6
C	5.1	-0.6
E	5.0	-0.5

6405 you have p7

2400

E	5.4	-0.5
C	5.4	-1.1
W	5.5	-1.0

3400

W	5.5	-1.0
C	5.7	-1.2
E	6.0	-1.5



indexed  
c.s.k.

Mars Levels

E = LT W = PT

4.47

00 = S/P PANAMA

E 1+00 5.0 -0.5

C 5.1 -0.6

W 4.9 -0.4

2+00

W 5.0 -0.5

C 5.1 -0.6

E 4.9 -0.4

3+00

E 4.8 -0.3

C 4.6 -0.1

W 4.4 +0.1

4+00

W 4.4 +0.1

C 4.5 00

E 4.6 -0.1

4.47

5+00

E 4.4 +0.1

C 4.3 +0.2

W 4.4 +0.3

6+05 you have on 0/1.0



Williams Levels

E = LT      W = RT

4.47

0.400 = Sly Panam 19 P8  
Camulos

E	5.9	-1.4	
C	5.8	-1.3	
W	5.6	-1.1	
			2+00
W	4.5	00	
C	4.5	00	
E	4.5	00	
			3+00
E	4.3	+0.2	
C	4.3	+0.2	
W	4.4	+0.3	
			4+00
W	4.3	+0.2	
C	4.1	+0.4	

Indexed  
C.S.R.1

4.47

16

E		4.0	+0.5
	5+00		
E		4.0	+0.5
C		3.9	+0.6
W		4.2	+0.3
	5+50		
W		5.0	-0.5
C		3.8	+0.7
E		3.8	+0.7
	5+70		
E		3.7	+0.8
C		4.0	-1.5
W	in Slough	8.3	-3.8

6+05 you have on 01/10 P13



1 sec of 45th St.  
Thorn to Quince

INDEXED  
EFS

Thorn

NWBP 1.05 334.01 332.96 Thorn

0+0 S L Thorn

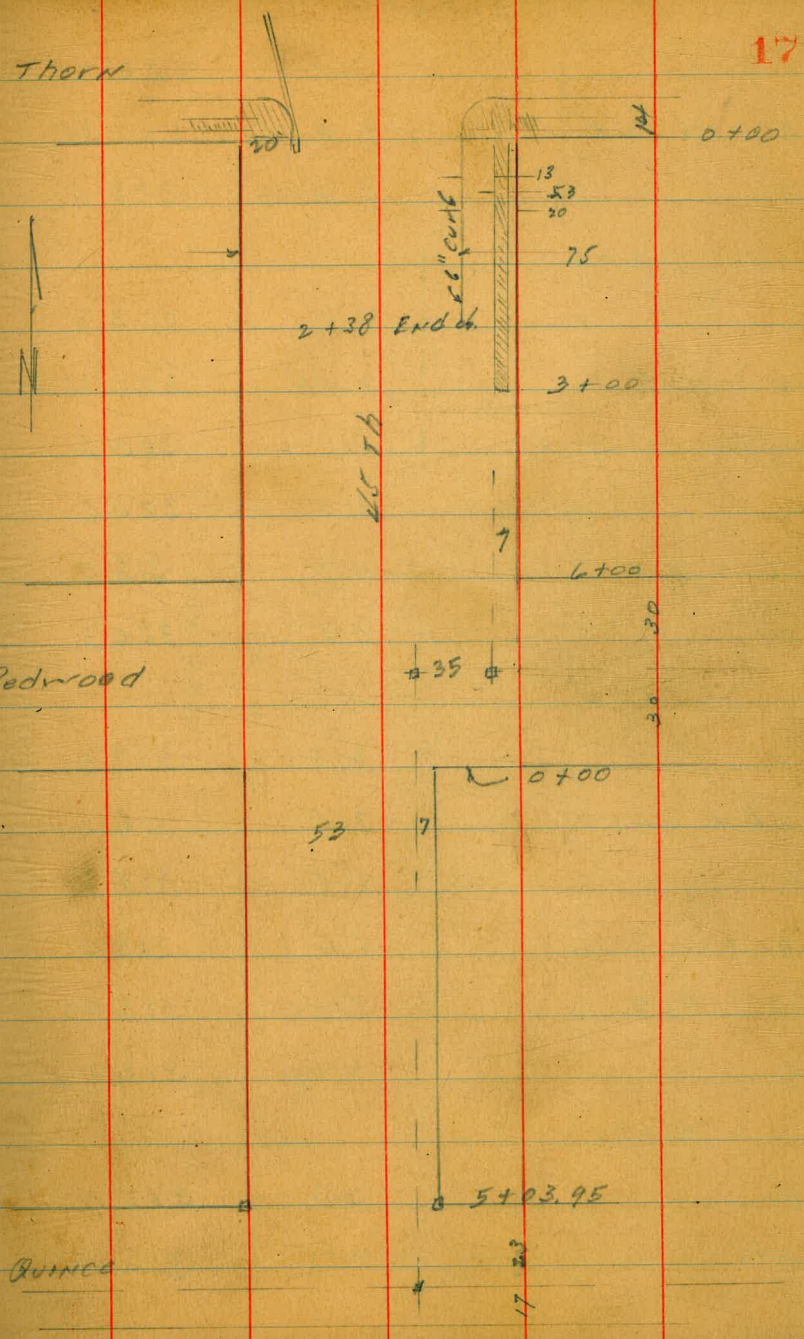
E	7.0	326.8
cb top	7.50	326.51
gut	8.5	325.5
C	8.3	325.7
gut fl. outlet drain	10.0	324.0
cb top	18.1	325.20
W	8.8	325.2
T.P.	0.98 323.61 11.38	322.63

Reduced & Plotted on Profile 1669 2/17/40 CDH

0+50

W	0.7	322.9
cb + gut	1.9	321.7
C	0.0	323.6

Quince





323.61 ✓

gut	0.3	323.3
E cb TOP	+0.25	323.86
E	+0.4	324.0
1+00		
E	1.3	322.3
cb TOP	2.4X	321.17
gut	3.1	320.5
c	3.0	320.6
cb + gut	4.7	318.9
W	3.3	320.3
1+50		
W	6.6	317.0
cb + gut	7.5	316.1
c	5.5	318.1
gut	5.6	318.0
cb TOP	5.21	318.40
E	4.7	318.9
2+00		
E	6.3	317.3
+2	7.51	316.4

Highland

65

17.23

Highland  
27 53

45.74

53

7

Quince

46

27 53

45.74

18

Charoone

7.0500



323.61 ✓

cb		7.58	316.03
gut		8.9	315.3
c		7.7	315.9
cb		9.4	314.4
W		9.0	314.6
	2+38		
Ecb. TOP END CURB		9.71	313.90
	2+50		
W		11.7	311.9
cb		11.5	312.1
c		10.4	313.2
cb		10.8	313.3
E		9.7	313.9
	2+90		
E		12.0	311.6
cb		12.4	311.2
c		12.9	310.7
cb		13.0	310.6
W		13.4	310.2
T.P.	0.58	311.49 ✓	12.70 310.91

311.49 ✓

		3+10	
W		2.9	308.6
		+15	2.2 308.9
c		13.3	298.2
cb		2.4	308.9
E		0.0	311.5
		3+50	
E		2.1	309.4
		+15	4.2 307.3
c		17.2	294.3
		+10	21.1 290.4
cb		21.0	290.5
W		10.4	301.1
		+10	7.0 304.5
		2+100	
		-10	10.4 301.1
W		15.5	296.0
cb		25.5	286.0
		+15	26.4 285.1
c		18.4	292.9

19



311.49 ✓

299.57

20

cb + 5		6.0	305.5
E		4.2	307.3
	4 + 50		
E		6.9	304.6
	+ 15	8.6	302.9
C		23.2	288.3
	+ 10	28.3	283.2
cb		28.5	283.0
W		19.3	292.2
	+ 10	15.5	296.0
T.P.	0.76	✓ 299.57	12.68 298.81
	5 + 00		
- 10		7.0	292.6
W		10.0	289.6
cb + 5		21.1	278.5
" + 15		19.7	279.9
C		14.1	285.5
	+ 32	0.0	299.6
E		+ 4.1	303.7

	5 + 50		
E		+ 4.0	303.6
	+ 10	0.0	299.6
C		16.1	283.5
	+ 10	23.1	276.5
cb		23.5	276.1
W		16.7	282.9
	+ 10	12.8	286.8
	6 + 00	NL Redwood	60' wide
	- 15	28.2	271.4
W		25.1	274.5
C		6.6	293.0

T.P. 9.50 308.22 ✓ 0.85 298.72

C + 30		5.8	302.4
E		4.4	303.8
	E Redwood		
E - bet cons		8.2	300.0
C to North		12.2	296.0



308.22 ✓

C + 37	21.0	287.2
W	25.6	282.6
+ 15	31.1	277.1
S.W. Redwood = 0 + 0 45" 60' wide base		
- 15	31.8	276.4
W	26.8	281.4
C	18.1	290.1
+ 15	13.3	294.9
E	12.8	295.4
0 + 20		
E	14.2	294.0
+ 20	14.5	293.7
C	19.3	288.9
+ 10	25.2	283.0
W	28.3	279.9
+ 15	28.8	279.4
0 + 50		
- 15	17.2	291.0
W	18.0	290.2
+ 20	18.0	290.2

308.22 ✓

21

C	14.8	293.4
E	13.6	294.6
0 + 75		
E	10.5	297.7
+ 10	13.2	295.0
C	13.4	294.6
W	10.8	297.4
1 + 00		
W	8.6	299.6
C	9.4	298.8
+ 8	11.5	296.7
+ 16	10.8	297.4
E	8.6	299.6
1 + 50		
E	5.2	303.0
+ 20	6.6	301.6
C	5.5	302.7
W	3.4	304.8
1 + 65		
W	2.7	305.5



308.22 ✓

C	3.3	304.9
+15	6.0	302.2
E	3.5	304.7
1+73		
E	4.0	304.2
+20	6.0	302.2
C	7.3	300.9
W	10.9	297.3
1+95		
W	12.3	295.9
C	11.3	296.9
+10	6.4	302.0
+19	6.1	302.1
+24	11.4	297.0
E	11.5	296.7
2+07		
E -10		
E	10.4	298.8
+10	9.1	299.1
+15	5.3	302.9

308.22 ✓

22

C	4.5	301.7
W	2.9	305.3
+10	2.9	302.3
2+25		
W	2.4	305.6
+24	2.2	306.0
C	4.1	304.1
+15	4.2	304.0
+20	1.9	306.3
E	2.3	305.9
2+50		
E	3.0	305.2
C	2.7	305.5
W	2.7	305.7
T.P. 227	307.19	3.30
3+00		304.92
W	3.4	303.8
C	3.0	304.2
E	3.7	303.5



307.19 ✓

23

3750

E	5.7	302.0
C	4.9	302.3
W	5.4	301.8

4700

W	7.0	300.2
C	6.7	300.5
E	6.6	300.6

4750

E	8.1	299.1
C	8.5	298.7
W	9.0	298.2

5703.95 N.L. Quince

W	on pipe cor.	10.73	296.46	Set B.M.
C		10.1	297.1	
E	on but	10.25	296.94	



INDEXED

E.F.B.

X sec of Quince 40 wide

Chamoune to Highland

B.M. Pipe  
N.W. Cor. 9.18 305.64 296.46 Quince 45 7/8

E. Chamoune N of Quince = 60 wide

N 3.7 301.9

C 4.6 301.0

S 5.7 299.9

Set B.M. 16  
7 + 17

4.81 300.83 S.E. Quince Chamoune

E Cham to N.

S 5.4 300.2

C 4.4 301.2

N 3.2 302.4

W. Chamoune = 0 + 100 beg. Quince 40 wide

N 5.1 300.5

C 5.6 300.0

S 6.4 299.2

305.64 ✓

0 + 50

S 9.8 295.8

C 9.1 296.5

N 8.3 297.3

0 + 75

N 10.4 295.2

C 11.4 294.2

S 12.4 293.2

T.P. 0.44 292.61 12.47 292.17

0 + 100

S 5.5 288.1

C 4.5 289.1

N 3.2 290.4

N 8.6 285.0

C 9.8 283.8

S 10.6 283.0

T.P. 0.85 281.73 12.73 280.88

Notes Reduced and  
Plat. on new profiles  
2/17-1940  
E.F.B.

24



281.73 ✓

1450

S	4.7	275.0
C	7.3	274.4
N	4.5	275.2

1447.5 EL 45th to So.

N	15.3	266.4
C	17.7	264.0
S	20.1	261.6

1487.5

- 22	33.1	248.6
S	14.0	267.1
C	8.6	273.1
N	7.5	274.2

+30

12.4 269.3

2407.5 E to So.

N	1.0	280.7
C	3.8	277.9
S	7.1	274.6
+15	11.1	270.6

25

281.73 ✓

TP 11.88 293.35 0.26 281.47

2447.5 EL 45th South

S	9.8	283.6
C	7.6	285.8
N	6.2	287.2

T.P. 8.28 300.32 1.31 292.04 ✓

2475

N	8.5	291.8
C	9.8	290.5
S	11.5	288.8

3400

S	7.7	292.6
C	6.7	293.6
N	5.9	294.4

3425.9 EL 45th to North

N	4.4	297.9
C	4.4	295.9
S	5.0	294.7



300.32 ✓

3+55.9 E 45th

S	4.7	295.6
C	4.1	296.2
N	3.1	297.2

3+85.9 W 45th to N

N TOP PIPE	3.87	296.45
C	4.9	295.4
S	5.5	294.8

4+10

S	7.4	292.9
C	6.3	294.0
N	5.3	295.0

4+40

N	8.8	291.5
C	9.8	290.5
S	10.3	290.0

T.P. 0.25 288.27 12.30 288.02 ✓

488.47 ✓

26

4+70

S	4.9	283.4
C	4.0	284.3
N	1.4	286.7

4+95

N	8.7	279.6
C	9.8	278.5
S	10.3	278.0

T.P. 0.00 275.31 12.90 275.31 ✓

5+25

S	7.5	267.8
C	6.7	268.6
N	5.8	269.5

5+47.5 E 2 Highland to So

N	12.8	262.5
C	14.2	261.1
S	14.2	261.1



275.31 ✓

T.P.	0.31	267.87	1280	262.51
	5+87.5	E to 50.		
S		14.3		248.5
C		13.7		249.1
N		14.6		248.2

T.P. 4.11 254.31 ✓ 12.04 250.20

Set B.M.  
13. Cont. M.

Quince  
10.92 243.39 Highland

6+13

N		18.0		236.3
C		16.1		238.2
S		13.7		240.6

6+27.5 E to No. 9

S-25		21.0		233.3
S		20.5		233.8
C		20.0		234.3

254.31 ✓

N		19.5		234.8
+25		19.0		235.3
	6+38			
N		21.4		232.9
C		21.0		233.3
S		23.1		231.2
+30		24.2		229.9

6+48

S		21.5		232.8
C		21.0		232.7
N		20.2		234.1

6+56 EL Highland to No.

N		16.1		238.2
C		17.7		236.6
S		18.2		236.1

T.P. 12.73 266.60 0.38 253.93

6+88.5 E to No.

S		16.8		249.9
---	--	------	--	-------



266.66

C 12.1 252.6

N 13.9 252.8

7 121 via Highland to No

N 5.0 261.7

o 6.2 260.5

S 10.2 256.5

110 13.3 253.4

T.P. 889 273.27 2.28 266.38

T.P. 1217 284.57 0.87 272.40

T.P. 11.90 296.17 0.41 284.16

T.P. 10.48 305.74 0.86 295.26

T.P. 414 308.45 1.42 304.29

T.P. 290 308.60 2.75 305.70

SWBP with T.P. 445 304.15

Please check

No record in office  
C.R.H.



INDEXED

E.F.B.

80' wide  
10' obs  
13' 1/2

229.24

Moore  
4-4-48

X sec of Catalina Blvd

Pt. Loma Ave to Hill St.  
See 1348-1 for sketch

Paloma & Cat.	0.27	234.89	234.64	NWBT	1/2		9.9	219.3
T.P.	6.89	229.24	12.54	227.35	c	PAR	9.28	219.96
					1/2	"	8.99	220.25
					cb	"	8.34	220.90
					W	"	7.53	221.71
0-18						0 + 00		
W	PAR		7.68	221.56	W	gut	7.44	221.80
cb	"		8.86	220.38	W	cb TOP RET.	6.80	222.44
1/2	"		9.84	219.42	"	E RET		
c	"		10.07	219.17	W	TOP cb	7.25	221.99
+11	edge		10.18	219.06		gut	7.91	221.33
1/2			10.5	218.7		0 + 27		
gut			10.88	218.36	W	on walk	6.66	222.58
cb + r	left end		10.27	218.97 W+68	cb		7.04	222.18
E			10.5	218.7	gut	PAR	7.84	221.42
	0 + 00				1/2	"	7.98	221.26
E			9.3	219.9	c		8.7	220.5
cb			9.4	219.8	1/2		9.1	220.1
+1			10.2	219.0	+9		9.7	219.5

Notes: Redy Plot on Profile # 1057. 4-7-40 C.B.H.



229.24

1/4	8.1	2211
cb	8.1	221.1
E	7.9	2213
0 + 50		
E	6.4	222.8
cb	6.5	222.7
+ 4	6.7	222.5
+ 5	8.8	220.4
1/4	8.3	220.9
c	7.4	221.6
1/4	7.1	222.1
gut	6.9	222.3
cb	5.90	223.34
wf walk	5.60	223.58
1 + 00		
wf	3.60	225.64
cb	3.77	225.47
gut	5.4	223.8
1/4	5.3	223.9
c	5.4	223.6

229.24

1/4	6.5	222.7	30
+ 3	6.8	222.4	
+ 5	4.2	225.0	
cb	4.2	225.0	
E	4.7	224.5	
1 + 50			
E	3.0	226.2	
cb	3.3	225.9	
+ 5	3.4	225.8	
+ 7	5.2	224.0	
1/4	4.9	224.3	
c	3.9	225.3	
1/4	3.0	225.6	
gut	3.4	225.6	
cb	1.83	227.41	
wf walk	1.72	227.52	
1 + 75			
wf	0.80	228.38	
cb	1.02	228.20	
gut	2.6	226.4	



229.24

1/4	2.8	226.4
C	3.1	226.1
1/4	3.9	225.3
+5	4.4	224.8
+6	4.7	226.5
CB	2.8	226.4
E	3.0	226.2

T.P. 10.52 237.34 2.44 226.80

2+00

E	10.4	226.9
CB	10.3	227.0
+7	10.0	227.3
+8	11.7	225.6
1/4	11.4	225.9
C	10.6	226.7
1/4	10.2	227.1
9.4	10.0	227.3
CB	8.47	228.85
W	8.78	229.04

WIK

237.37

31

2+50		
W	7.31	230.01
CB	7.50	229.82
9.4	8.8	228.5
1/4	8.9	228.4
C	9.2	228.1
1/4	10.2	227.1
+9	10.5	226.8
+5	8.7	228.6
CB	9.0	228.0
E	10.0	227.3

3+00

E	9.0	228.3
CB	8.4	228.9
+8	8.1	229.2
+9	9.4	227.9
1/4	9.1	228.2
C	8.1	229.2
1/4	7.7	229.6
9.4	7.6	229.7



237.34

cb		4.47	230 85
W	WK	6.76	231.06
	3 + 50		
W	WK	5.18	232 14
cb		5.40	231 92
gvt		6.4	230.9
1/4		6.6	230 7
c		7.1	230 2
1/4		8.1	229 2
+ 4		8.1	229 2
+ 5		6.4	230.7
cb		7.3	230 0
E		7.9	229.4
	4 + 00		
E		7.1	230 2
cb		6.2	231.1
+ 8		5.7	231 6
+ 9		7.4	229.9
1/4		7.1	230 2
c		6.1	231 2

237.34

1/4		5.7	231 6	32
gvt		5.5	231 8	
cb		4.41	232 91	
W		4.8	233.13	
	4 + 50			
W		3.45	233.87	
cb		3.64	233.68	
gvt		5.0	232.3	
1/4		5.2	232.1	
c		5.5	231.8	
1/4		6.5	230 8	
+ 3		6.4	230 9	
+ 6		4.7	232 6	
cb		5.5	231 8	
E		6.0	231 3	
	5 + 00			
E		5.4	231.7	
cb		4.8	232 5	
+ 9		4.8	232 5	
+ 10		5.8	231 5	



237.32

1/4	5.7	231.6
c	5.1	232.2
1/4	4.7	232.6
gut	4.5	232.8
cb	3.05	234.27
w	2.80	234.52

5+29.37 RC.

w	2.26	235.06
ob	2.74	234.60
gut	3.9	233.4
1/4	4.4	232.9
c	4.8	232.5
1/4	5.2	232.1
+5	4.2	233.1
cb	4.2	233.1
F	4.2	233.1
+10	6.5	230.8

5+39.39 NL Palomita

w	1.97	235.35
+10	2.57	234.75
"	3.22	234.10
cb	3.30	234.02

237.32

33

N. ob Palomita = 10.3	5 of w	
on Ret		
w	2.07	235.25
"	2.60	234.72
N. ob Palomita		
-10 cb	1.28	236.04
+10 gut	1.94	235.38
w	2.55	234.77

w	2.99	234.33
N. 1/4		
-10	1.46	235.86
w	2.11	235.21
cb	2.88	234.44
E		
-10	1.06	236.26
w	1.75	235.57
cb	2.63	234.69
1/4	3.6	233.7
c	4.2	233.1
1/4	4.9	232.4
+5	3.3	234.0



237.82

cb	3.0	233.7
+11	6.9	230.4
E	7.1	230.2
+10	8.0	229.3
5 cb		
-10	8.1	229.2
E	6.0	231.3
cb	3.5	233.8
+6	3.0	234.3
+8	4.0	232.7
1/4	4.7	232.6
c	4.1	233.2
1/4	3.5	233.8
+8	3.1	234.2
cb	2.2	235.1
W	0.5	236.8

T.P. 10.04 245.47 1.89 235.43

245.47

34

0+0	St Palomra, Catalina = 70 wide	10 cb
		236.9
0-10		8.4
W		9.6
cb - W + 10		9.98
gut		11.6
1/4		11.7
c		12.1
1/4		12.7
+3		12.7
1/4		11.1
cb regular		10.5
E		13.4
+10		15.4
0+50		
-10	line to N	15.2
E		12.5
cb		9.8
+10		12.0
1/4		12.0

236.9

235.9

235.49

233.9

233.8

233.4

232.8

232.8

234.4

235.0

232.1

230.1

230.3

233.0

235.7

233.5

233.5

1/4 + 8 regular  
Ecb "  
This old curb  
15 N.G.



24547

c	11.4	2341
1/4	11.1	2344
qut	11.1	2344
1/4 + 7 = 06	9.72	23575
cb + 8	9.4	2361
W	9.4	2381
+ 10 <small>W to N</small>	6.4	239.1
1400 g		
- 10	5.7	2398
- 2	6.2	2393
W	7.6	237.9
+ 2	8.4	2371
cb	8.72	23675
qut	10.2	235.3
1/4	10.1	2354
c	10.4	234.9
1/4	11.1	2344
+ 5	10.8	2347
+ 10	9.3	236.2
cb	9.4	236.1

24547

E	13.5	232.0	35
+ 10	15.0	2305	
	14.50		
- 10	14.6	230.9	
E	12.4	233.1	
cb	8.7	2368	
+ 4	7.8	237.7	
+ 8	10.1	2354	
1/4	10.2	2353	
c	9.4	2359	
1/4	9.2	236.3	
+ 7 qut	9.4	2361	
" cb	7.80	237.67	
+ 8	7.4	2381	
W	6.2	2393	
+ 1	5.7	239.8	
+ 10	4.6	240.9	
	2 + 0.2		
- 10	3.5	242.0.	
- 2	4.2	241.3	



245.47

w	6.7	239.3
cb	6.53	238.94
gut	8.3	237.2
1/4	8.2	237.3
c	8.7	236.8
1/2	9.2	236.3
+4	9.1	236.4
+7	7.4	238.1
cb	7.5	238.0
E	11.6	234.9
+10	12.0	232.9
2 + 50		
-10	11.1	234.4
E	9.5	236.0
cb	5.5	240.0
+4	5.7	239.8
+7	7.8	237.7
1/2	7.9	237.6
c	7.8	237.7
1/4	7.2	238.3

245.47

36

gut	7.4	238.3
cb	5.70	239.77
w	5.2	240.3
+1	3.5	241.0
+10	2.4	243.1
T.P.	8.60	252.33
17.4	203.73	Nail in Pole 3x00
3 + 00		
-10	8.2	244.1
-1	9.0	243.3
w	10.4	241.9
+1	11.1	241.2
cb	11.54	240.81
gut	12.9	239.4
1/4	12.9	239.4
c	12.9	239.4
1/4	13.9	238.4
+5	13.0	238.7



254.33

+7	11.6	240.7
cb	11.5	240.8
E	15.4	236.9
+10	16.4	235.9
3+15		
-10	12.6	239.7
E	11.5	240.8
cb	11.5	240.8
+4	11.8	241.0
+6	13.1	239.2
1/4	13.5	238.8
c	12.7	239.6
3+50		
-10	12.1	240.2
E	11.6	240.7
cb	10.4	241.9
+5	10.5	241.8
+6	12.2	240.1
1/4	12.7	239.6
c	12.0	240.3

254.33

1/4	11.5	240.8	37
got	11.7	240.6	
cb	10.07	242.26	
w	9.4	242.7	
+2	7.4	244.9	
+10	6.5	245.8	
4+00			
-10	5.2	247.1	
-2	6.0	246.3	
w	8.4	243.9	
cb	8.60	243.73	
got	10.4	241.9	
1/4	10.1	242.2	
c	10.5	241.8	
1/4	11.5	240.8	
+8	11.0	241.3	
+9	9.4	243.1	
cb	9.1	243.2	
F	10.1	242.2	
+10	11.0	241.3	



252.33

4+50

-5	9.1	243.2
E	8.7	243.6
cb	8.0	244.3
+2	8.2	244.1
+10	10.2	242.1
1/2	10.6	241.7
c	9.1	243.2
1/2	8.7	243.6
+7 gut	9.0	243.3
" cb	7.04	245.29
w	7.0	245.3
+2	4.3	248.0
+10	3.7	248.6
5+00		
-10	2.2	250.1
-2	2.7	249.6
w	5.4	246.9
cb	5.31	247.02
gut	7.6	244.7

252.33

38

1/2	7.2	245.1
c	7.5	244.8
1/2	8.8	243.5
+3	8.6	243.7
cb	6.4	245.7
E	7.1	245.2
+10	7.8	244.5
5+50		
-10	6.3	246.0
E	5.2	247.1
cb	5.0	247.3
+5	6.0	246.3
+6	7.4	244.9
1/2	7.3	245.0
c	6.1	246.2
1/2	6.0	246.3
gut	6.4	245.9
cb	3.75	248.58
w	3.7	248.6
+2	1.4	250.9
+10	0.7	251.6



257.33

6+00.31	N 2 Verona		
- 10	W to So.	0.5	251.8
W		1.4	251.1
cb		2.8	250.05
gut		4.8	247.5
1/4		4.2	247.9
c		4.7	247.6
1/4		5.7	246.6
+5		6.0	246.3
+6		4.0	248.3
+11	10" Acacia		
cb		3.8	248.5
E		4.9	247.4
+10		5.5	246.8
	N cb		
- 10		5.4	246.9
E		4.7	247.6
cb		3.3	249.0
+4		4.0	248.3
+7		5.6	246.7

257.33

1/4		5.6	246.7	39
c		4.5	247.8	
1/4		4.1	248.2	
gut		4.3	248.0	
W	old cb P.C.	2.06	250.27	Top
"	gut	2.8	249.5	
+10	" + cb	1.22	251.11	10' old cb on N side of Verona
8				
- 10	par	0.18	252.15	N.G. should be 12'
W	"	1.12	251.21	cb
cb	" cb 14' now	2.57	249.76	
+8		3.9	248.4	
1/4		3.4	248.7	
c	SMITH P.M.	3.66	248.67	
1/4		5.2	247.1	
+1		5.2	247.1	
+8		2.7	249.6	
cb		2.9	249.4	
E		4.6	247.7	
+10		5.7	246.6	



457.33

E + 4 + E + 7 12" Pepper tree

506

- 10	against CITY pump Dwelling	5.6	246.7
E		5.0	247.3
cb		4.7	249.6
+ 4		2.6	249.7
+ 8		4.3	248.0
1/4		4.6	247.7
c		3.4	248.9
1/4		3.2	249.1
+ 5		3.5	248.8
cb	PAR.	2.46	249.87
W	"	1.44	250.89
+ 10	gUT	0.40	251.93
"	cb	+ 0.20	252.53
Mid. S.W. Ret			
cb		1.73	250.60
gUT	PAR	2.26	250.07

457.33

40

S L VAKONA = 0 + 100

W	SDW	0.89	251.44
cb		1.83	250.50
gUT	PAR	2.32	250.01
0 + 10			
W	WALK	1.02	251.31
cb	ON B/M B/P	1.56	250.77 ~ 250.82
gUT		2.2	250.1
1/4		2.5	249.8
c		2.8	249.5
1/4		3.4	248.9
+ 5		3.5	248.8
+ 10		2.1	250.2
cb		2.5	249.8
E		4.7	247.6
+ 10		5.6	246.7

0 + 15 E + 5 36" Palm

Date



252.33

0+37

E - 21.4 E <sup>shop #</sup> gar. 5.87246.46 <sup>CEM</sup> fl.E - 4.5 Sedge 8' <sup>con.</sup> approx 5.00

247.33

0+50

E + 4.5 24" Pepper

E + 6.5 gas PUMP

E + 15.5 TANK INLET cap

-10 4.9

247.4

E 3.2

249.1

ob 1.7

250.6

+5 1.7

250.6

+4 2.4

249.9

1/4 2.2

250.1

c 1.9

250.4

1/4 1.7

250.6

gut 1.7

250.6

ob 0.60

251.73

W walk 0.31

252.02

T.P. 9.68 260.45 1.56 250.77 250.82

BM SW  
CAT. + Varong

260.45 ✓

41

0+70

E + 6 20" Pepper tree

0+79 E + 8 P. Pole

1+00

W on walk 7.30 253.15

ob 7.51 252.94

gut 8.8 251.7

1/4 8.7 251.8

c 8.7 251.8

1/4 9.3 251.2

+4 9.5 251.0

+7 9.0 251.5

ob 9.3 251.2

E 10.2 250.3

+10 11.0 249.5

1+50

E 7.8 252.7

ob 7.0 253.5



260.45

cb + x	7.9	252.6
+ 6	8.6	251.9
1/4	8.4	252.1
c	7.7	252.8
1/4	7.6	252.9
gut	7.7	252.8
cb	6.20	254.25
W mark	5.95	254.50
r + 100		
W	4.57	255.88
cb	4.98	255.47
gut	6.3	254.2
1/4	6.7	253.8
c	6.9	253.6
1/4	7.6	252.9
+ 7	7.8	252.7
+ 8	5.8	254.7
cb	5.5	255.0
E	6.3	254.2

260.45

42

2 + 10		
gut	5.5	255.0
W cb P.C.	4.80	255.65
W	4.20	256.25
2 + 20	H.L. P.C.	Savoy St.
W	3.56	256.89
+ 11 cb Ret	4.35	256.10
gut pav	4.97	255.48
cb "	5.24	255.20
1/4	4.2	254.3
c	6.7	253.8
1/4	7.1	253.4
+ 9	7.4	253.1
+ 8	5.7	254.8
cb	5.5	255.0
E	5.8	254.7
W. cb		
W - 10 cb	2.20	258.25
" gut	2.82	257.63
W cb	3.14	257.31
" gut	3.80	256.65
cb pav	4.93	255.52



26043

E Savoy

-10	par	2.40	258.19
W	"	3.46	257.19
cb	"	4.58	255.87
1/4		5.7	254.8
0		6.7	254.3
1/4		6.7	253.8
+7		6.9	253.6
+8		5.0	255.5
cb		4.4	256.1
E		5.3	255.2

S cb

W	cb	par	4.48	255.97
W	"		3.36	257.09
+10		gut	4.38	258.07
"		cb	1.75	258.70

S W Savoy = 00

W		wk	2.96	257.49
+ 11		cb	3.80	256.65
"		gut	4.38	256.07
cb		par	4.52	255.93

26045

1/4		5.3	255.2
c		5.5	255.0
1/4		6.0	254.5
+7		6.4	254.1
1/10		4.3	256.2
cb		4.5	256.0
E		5.1	255.4

0 + 10

W gut 4.7 255.8

W cb PC 3.7 256.71

W walk 3.3 257.13

0 + 50

W . 2.96 257.49

W cb 3.17 257.28

gut 4.5 256.0

1/4 4.4 256.1

c 4.1 256.4

1/10 4.9 255.6

+9 5.5 255.0

+10 3.9 256.6

43



260.45

cb		0.6	256.9
E		3.8	256.7
	1+00		
E		3.3	257.2
cb		2.8	257.7
+2		2.7	257.8
+3		2.7	255.8
1/4		4.2	256.3
c		3.7	256.8
1/4		3.6	256.9
gut		3.6	256.9
cb		2.32	258.11
w	walk	2.12	258.33
	1+50		
w		1.40	259.05
cb		1.58	258.87
gut		2.6	257.9
1/4		2.8	257.7
c		2.9	257.6
1/4		2.4	257.1

260.45

44

+9		3.8	256.7
+10		2.5	258.0
cb		2.3	258.2
E		2.5	258.0
	2+00		
E		1.9	258.6
cb		1.7	258.8
+4		1.7	258.8
+5		3.1	257.4
1/4		2.9	257.6
c		2.3	258.2
1/4		2.2	258.3
gut		2.1	258.4
cb		0.84	259.61
w		0.60	259.85
	2+25		
w		0.32	260.13
cb		0.51	259.94
gut		2.0	258.5
1/4		2.0	258.5



260.45

C	2.0	258.5
1/4	2.6	257.9
+7	2.9	257.6
+8	1.2	259.3
CB	1.0	259.5
E	1.5	259.0

T.P. 4.1 264.22 2.64 257.81

2+50

E	4.9	259.3
CB	4.9	259.3
+5	4.9	259.3
+6	6.5	257.7
1/4	6.2	258.0
C	5.7	258.5
1/4	5.7	258.5
9UT	5.6	258.6
CB	4.08	260.14
W	3.90	260.32

264.22

45

2+75

W	3.84	260.36
CB	4.08	260.14
9UT	5.6	258.6
1/4	5.4	258.8
C	5.7	258.5
1/4	6.0	258.2
+6	6.3	257.9
+7	4.8	259.4
CB	4.6	259.6
E	4.6	259.6
3700		
E	4.7	259.5
CB	4.4	259.8
+6	4.8	259.4
+7	6.2	258.0
1/4	6.0	258.2
C	5.5	258.7
1/4	5.6	258.6



	264.22	
gut	5.6	258.6
cb	4.16	260.16
w	4.00	260.22
3 + 50		
w	4.28	259.94
cb	4.51	259.71
gut	5.7	258.5
1/4	5.7	258.5
c	5.7	258.5
1/4	6.2	258.0
+ 5	6.4	257.8
+ 11	4.6	257.6
cb	4.6	257.6
E	5.1	259.1
4 + 00		
E	4.8	259.4
cb	5.1	259.1
+ 5	5.2	259.0
+ 6	6.7	257.5
1/4	6.5	257.7

	264.22	
c	6.0	258.2
1/4	5.9	258.3
gut	5.9	258.3
cb	4.82	259.40
w	4.61	259.61
4 + 50		
w	4.94	259.28
cb	5.13	259.09
gut	6.0	258.2
1/4	6.2	258.0
c	6.4	257.8
1/4	6.9	257.3
+ 5	7.0	257.2
+ 6	5.4	258.8
cb	5.2	259.0
E	5.5	258.7
5 + 00		
E	5.9	258.3
cb	5.5	258.7
+ 5	5.4	258.8



264.22

+4	7.3	256.9
1/4	7.1	257.1
c	6.6	257.6
1/4	6.4	257.8
gut	6.2	258.0
cb	5.42	258.80
w	5.18	258.04
5 + 45 approx. cb PC		
w	4.42	259.60
cb	5.42	258.78
gut	6.2	258.0
5 + 51.79 opposite N.H. Santa Barbara		
w	4.07	259.75
+13 cb Ret	5.26	258.99
gut	6.0	258.2
1/4	6.4	257.8
c	6.6	257.6
1/4	7.1	257.1
+6	7.2	257.0
+7	5.4	258.8

264.22

cb	5.5	258.7
E	7.1	257.1
+10	8.1	256.1
5 + 60.2		5001348-20
-10	8.2	256.0
E	7.3	256.9
cb	5.9	258.3
+5	5.9	258.3
+7	7.3	256.9
1/4	7.5	257.1
c	6.6	257.6
1/4	4.1	258.1
cb	5.9	258.3
w gut	4.90	259.30
" cb	4.39	259.83
No change to 50.		
NW Santa Barb.	361	260.61 260.48
+ CAT.		

47



Moore  
4-4-40

1 sec. alley 20' wide

Blk 3 Sunset Cliffs

~~INDEXED~~  
EPB

48

SWOP

10.79

44.83

Pr LOMA  
34.05 EBERS

0-12 Ely of Ebers

N Pav. 12.84 32.01

S " 13.03 31.80

0+00 Ely Ebers

S cb 12.07 32.76

" Pav 12.52 32.31

E " 12.73 32.10

N " 12.43 32.40

" cb 12.06 32.77

0+05

N 11.2 33.6

C 11.6 33.2

S 11.3 33.5

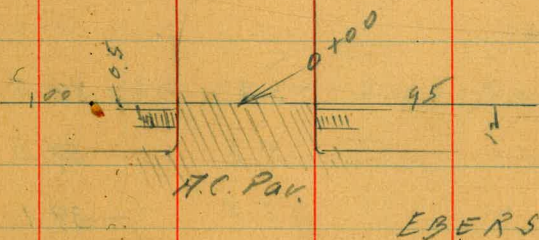
0+50

- 20 9.1 35.7

S 9.3 35.5

Red. Plat. New Profile 4-5-40/CSH

Pr. LOMA AVE



Adair ST



44.83

C		9.2	35.6
N		8.7	36.1
+20		8.4	36.4
	1+00		
-20		7.1	37.7
N		7.4	37.4
C		7.7	37.1
S		7.9	36.9
+20		8.0	36.8
	1+20 S + 0.2 PP		
	1+50		
-20		6.3	38.5
S		5.8	39.0
C		5.7	39.1
N		5.9	38.9
+20		5.4	39.4
	2+00		
-20		3.0	41.8
N		3.6	41.2

44.83

49

C		3.5	41.3
S		3.7	41.1
+20		4.2	40.6
	2+40 S - 0.2 PP		
	2+50		
-20		2.1	42.7
S		1.2	43.6
C		1.0	43.8
N		0.7	44.1
+20		0.4	44.4

T.P. 1+85 57.0 0.66 44.17

	3+00		
-20		10.3	46.7
N		11.1	45.9
C		11.4	45.6
S		11.7	45.3
+20		12.1	44.9



57.02

3+50

-20	10.9	46.1
S	10.2	46.8
C	9.8	47.2
N	9.4	47.6
T	8.7	48.3

3+60

S+0.3 P.P.

4+00

-20	7.4	49.6
N	8.5	48.5
C	9.0	48.0
S	9.6	47.4
+20	9.8	47.2

4+50

-20	8.1	48.9
S	8.3	48.7
C	7.7	49.3
N	7.3	49.7
+20	6.3	50.7

57.02

4+80

S+1.0 P.P.

5+00

-20	5.1	51.9
N	6.5	50.5
C	6.4	50.6
S	6.9	50.1
+20	6.9	50.1

5+50

-20	5.2	51.8
S	4.6	52.4
C	4.6	52.4
N	4.4	52.6
+20	3.3	53.7

5+96 S on line P.P.

5+98.56 Wly Froude

N 0.6	0.45	56.77
N par	0.78	56.24
C "	1.37	55.65
S "	1.49	55.53

50



57.02

S CB

1.08

55.94

T.P.

10.45

64.10

1.17

55.85

Wly CB line Froude

S

Pay

11.04

55.06

N

"

10.05

56.05

SW CB

Froude

1.22

64.88

64.90



Moore  
5-17-40

Garage Levels

MISSION Beach Alleys

16' wide

~~INDEXED~~  
EFS

3.5W

0+87

52

B.M. 0.41 7.48

SAN JUAN

7.07

SEAWALL

S W end apron 4.78 -1.26

T.P. #1 7.84 -0.34 top of

S + 5 " " gar. 4.56 -1.04

T.P. #2 3.95 3.52 7.81 -0.33 " "

1+07

S E end apron 4.77 -1.28

S + 5 " " gar. 4.58 -1.08

Alley B/K 155

1+22

E.L. Blvd = 00 to Bayside Lane

S - 0.6 E apron 5.36 -1.84

0+27

S - 4.7 " " gar. 5.10 -1.48

S - 2.5 W end apron 3.95 -0.43

1+84

S - 4.5 " " car gar. 3.76 -0.24

S + 0.5 E apron 5.28 -1.76

0+33

S - 4.4 " " gar. 5.15 -1.63

N + 0.5 W end apron 4.20 -0.68

1+41

N - 1 " " car gar. 4.08 -0.56

N W end apron 5.39 -1.87

0+51

N - 7.5 " " gar. 5.14 -1.62

S - 2.4 E end apron 4.03 -0.51

1+69

S - 4.4 " " gar. 3.78 -0.26

N E end apron 5.48 -1.96

0+59

N - 8 " " gar. 5.05 -1.53

N + 0.4 E end apron 4.31 -0.99

1+91

N - 1.1 " " gar. 4.09 -0.57

N - 1 W end apron 5.18 -1.66

N - 4.7 " " gar. 5.03 -1.51

CON. FLOORS CHECKS NOTED D.K.



3.54

alley BIK 155

1+84

N-1 E end apron 4.96 -1.44

N-47 " " gar. 5.00 -1.45

16' alley BIK 160 Blvd=00 to B.S. Lane

T.P.#1 3.48 3.14 -0.34

0+10

S-8.5 E do. apron 3.30 -0.16

S-11.5 " " gar 3.18 -0.04

0+40

S W edge apron 3.91 -0.27

0+48

S E apron 4.01 -0.87

S-35 E gar. 3.78 -0.64

0+56

S E edge apron 4.11 -0.97

1+30

N 0.2 E do. apron 4.83 -1.69

1.2 " " gar. 4.82 -1.65

3.14

1+40

S-0.4 E apron 4.91 -1.77

S-3 " Six gar. 4.74 -1.60

1+61

N-5 E do. gar. 4.63 -1.49

T.P. 4.54 3.59 4.07 -0.93

16' alley BIK 163 EL Blvd=00 to Bay side

0+00

S+0.7 W edge apr. 3.71 -0.16

S-0.3 " " 3 car gar. 3.49 +0.10

0+24

S-1.8 E edge apr 3.62 -0.03

S-2.8 " " gar 3.43 +0.16

0+75

N-4.5 W edge gar 4.33 -0.74

0+91

S-3.8 W edge " 4.61 -1.02

53



3.59

40+93

N-37 E edge gar 4.37 -0.98

1+09

S-37 E edge " 4.65 -1.06

1+83

S-5.5 Sin gar 5.6 -2.0 dirt

T.P. 516 4.01 4.74 -1.15

10' alley BIK 108 EL B/Vd=00 to Bay

0+30

S-1.0 W edge apr 4.81 -0.80

S-3.0 " " gar 4.66 -0.65

0+50

S-1 E edge apr 4.69 -0.68

S-3 " " gar 4.57 -0.56

0+65

S-4.7 E Sin gar 4.78 -0.99

4.01

1+85

N+04 E apron 5.33 -1.32

N-3.4 " Sin gar 5.15 -1.14

1+96

N-3 E apron 5.24 -1.23

N-5 " gar 5.00 -1.05

2+09

N-2.5 E apron 5.22 -1.21

N-5.2 " Sin gar 5.15 -1.14

T.P. 497 4.63 4.35 -0.34

16' alley BIK 171 EL B/Vd=00 to E/P

0+05

N-09 W edge 3 car gar 4.65 -0.02

0+31

N-4.0 E " " 4.65 -0.02

54



463

0+55

S - 0.5 wedge apr. 5.15 -0.52

S - 6.5 " " gar. 4.92 -0.29

0+77

S - 0.6 E edge apr. 5.14 -0.49

S - 6.5 " " gar. 4.91 -0.28

0+86

N " E apr. 5.16 -0.53

N - 4 " sin gar. 4.98 -0.35

1+43

S - 1.0 E apr. 5.28 -0.65

S - 5 " sin gar 5.15 -0.52

1+83

S - 1.0 E apr. 5.42 -0.79

S - 5.5 " gar 5.29 -0.66

2+02

S - 1.0 E apr. 5.53 -0.90

S - 2.5 " sin gar - 5.43 -0.80

T.P. 4.67 4.58 4.72 -0.09

10' 9/12/24 BK 176

EL 840 = 00 1/2 55

4.58

0+73

N - 1.5 sin gar. 4.5 +0.1 dirt

S - 4.0 " " 4.60 -0.02 cont. ribbon

1+00

S - 0.4 wedge apr 4.97 -0.39

S - 3.8 " gar. 4.55 +0.03

1+18

N - 3 E do. gar. 4.6 00 dirt

1+25

S - 0.4 E edge apr. 4.89 +0.31

S - 3.7 " gar. 4.59 -0.01

1+49

S + 0.3 E apr 5.37 -0.79

S - 0.9 " sin gar. 5.23 -0.65

1+86

N - 1.8 sin gar 5.22 -0.64

1+90

S + 0.7 W edge apr. 5.26 -0.68



458

56

S - W	W edge gar	x 8 W	-0.24	
	7+05			
S - 0.7 E	" 9 pr.	5.20	-0.62	
S + W	" 9 pr.	4.87	-0.29	
T.P.	7.9 W	7.80	4.70	-0.1 W
T.P. BM.	2.47	9.77	0.50	7.30
T.P.	2.46	9.45	2.58	7.19
check to orig. BM.		2.45	7.20	7.07

BMOP  
Santa Clara  
+ Sedman

7.19



Alley Block 195 Mission Beach  
 Bet. Rockaway + San Jose  
 Mission Blvd to Bayside Lane

BM 0.39 7.17 7.08

BM 4.64 4.28 7.83 -0.36

0+0 = E.L. Mission

Sta. 0+34

H = 2' 3" Door Conc. 4.46 -0.18

+1' = 2.4' Bottom Conc Step. 5.00 -0.72

0+43

H = 2.9' Conc Walk 4.49 -0.21

H Ground 5.1 -0.82

1+36

H - 0.9' = 2' Garage Conc Floor 4.97 -0.69

H 0.7' Conc Apron 5.05 -0.77

+0.4 = 2' 5 1/2" Conc Apron 5.10 -0.82

S 5.3 -1.0

+6' = 2' Garage Dirt Floor 5.1 -0.8

1+42.5

H - 0.4 = 1.6' Conc Walk 4.96 -0.74

B.P. 507  
 San Jose  
 Startall  
 O.E.B.P.  
 San Jose  
 Mission

4.28

1+50

S - 6.8 = 1/4" Conc Slab 5.05 -0.77

1+64.5

S - 6.8 = 1/4" Conc Slab 5.07 -0.79

May 20-40  
 J. S. Ryan  
 Hort. Eng.  
 W. M. Hart 57



Alley Block 200 Mission Beach  
 Bet San Jose - Salem  
 Mission Blvd to Bay Side Lane

BM 5.81 5.45 -0.36

TP 4.62 3.78 6.29 -0.84

Stations 0+0 = E.L.M.

0+76

S+0.2 = 2' Conc. Gate Way 3.98 -0.20

0+83

S = Fly Conc. Apron 4.23 -0.45

S-3.7 " " " 3.73 +0.05

0+96

S = Fly Conc. Apron 4.20 -0.42

S-3.7 = Fly Garage Conc. Floor 3.82 -0.04

1+25

S-0.7 = Garage Conc. Floor 4.23 -0.45

TP 5.13 4.15 4.76 -0.98

SFBP  
 San Jose

May 21-40

SFBP

San Jose

58

Alley Block 203 Mission Beach

Between Salem - Seagirt

Mission Blvd to Bay Side Lane

4.15 Bl. Ford

Sta. 0+0 = E.L. Mission Blvd

0+30

S-0.5 = Fly Conc. Slab 4.35 -0.20

S Ground 4.8 -0.65

0+61.5

S-0.5 = Fly Conc. Slab 4.48 -0.33

S Ground 4.7 -0.5

1+13

H-1.0 = 2' 3.5 Conc. Walk 4.88 -0.73

1+16

H-0.3 = Fly Conc. Back Yard 4.63 -0.48

1+31

H-0.3 = Fly Conc. Back Yard 4.88 -0.73

1+37

S-1.3 = Fly + Fly 2' Conc. Walk 4.94 -0.79



415

1+46

H-0.5 = 2 10.5 Garage Dirt Floor 5.1 -0.9

1+62

S-0.9 = Fly + Fly 2 Conc Walk 4.97 -0.82

TP 5.05 2.94 5.26 -1.11

Alloy Block 208 Mission Beach  
Between Seagirt - Sunset  
Mission Blvd to Bay Side Lane

59

3.94 Bl Ford

0+0 = FL Mission Blvd.

0+92

S-2.6 = 2 10' Garage Conc Floor 4.68 -0.74

S-1.9 = Fly Conc Apron 4.90 -0.96

1+16

S-2.6 = 2 10' Garage Conc Floor 4.75 -0.81

1+21

S-1.6 = Fly Conc Apron 5.03 -1.09

S-2.6 = Fly Hard Level 4.66 -0.72

1+21

S-1.6 = Fly Conc Apron 4.92 -0.98

S-2.6 = Fly Hard Level 4.73 -0.99

TP 3.31 4.48 2.77 1.17



Alley Block 211 Mission Beach  
Between Sunset - Tangiers  
From Mission Blvd to Bayside Lane

4.48 Bl Ford.

0+0 = E.L. Mission Blvd.

0+34

H-0.2 = 1/2 4' Conc. Landing 3.42 1.06

H Ground 4.4 0.1

0+40

H Ground 4.4 0.1

H-0.4 = 1/2 9' Conc. Apron 3.96 0.52

H-3.7 = 1/2 9' Garage Conc Floor 3.47 1.01

1+13

S-3.5 = 1/2 12' Conc Apron 5.19 -0.71

S-4.5 = 1/2 12' Garage Conc Floor 4.94 -0.46

TP 2.70 3.87 3.31 1.17

TP 5.17 4.22 4.82 -0.95

Alley Block 216 Mission Beach  
Between Tangiers - Toulon  
Mission Blvd to Bayside Lane

60

4.22 Bl Ford

0+0 = E.L. Mission Blvd.

0+34

H = 1/2 10' Conc Apron 4.71 -0.49

H-4 = 1/2 10' Garage Conc Floor 4.10 +0.12

0+36

S = 1/2 4' Conc Landing 4.28 -0.06

S-3 = " " " 4.25 -0.03

S-3 = 1/2 4' Top Conc Strip 3.62 +0.60

0+47

S = 1/2 8' Conc Apron 4.73 -0.51

S-5.1 = 1/2 8' Garage Conc Floor 3.63 +0.59

0+58

S = 2' 9.3' Conc Slab 4.78 -0.56

S-5.3 0.2 Conc Slab 4.53 -0.31

0+64

H = 1/2 10' Conc Apron 4.69 -0.47

H-1.2 = 1/2 9' Garage Conc Floor 4.69 -0.47



4.22

1+06

H-0.5 = S/W Garage Dirt Floor 5.6 -1.4  
West Entrance

TP 3.55 4.23 3.54 0.68

Hwy Block 219 Mission Beach  
Between Toulon - Vanitic  
From Mission Blvd to Bayside Lane

4.23 B+ Ford

0+0 = FL Mission Blvd

0+56.5

H = Hwy Conc Apron 4.79 -0.56

H-8 = " " " 4.69 -0.46

0+60

H-8 on Conc Apron 4.89 -0.66

H = Low Point Conc Apron 4.96 -0.73

0+62

H = S/W Garage Conc Floor 4.88 -0.65  
West EntranceH-8 = Hwy Garage Conc Floor 4.88 -0.65  
8' Wide East Entrance

0+57

S-17 = Hwy Garage Conc Floor 5.00 -0.77

0+57.6

S-17 = Hwy Conc Apron 5.26 -1.03

0+75

S-10 = Hwy 9' Garage Dirt Floor 5.4 -1.2  
West Entrance

0+95

S+0.5 = 2.7 Conc Apron 5.44 -1.21

S-10 = 2.7 Garage Conc Floor 5.23 -1.00



Alley Block 224 Mission Beach  
Between Venice - San Rafael  
Mission Blvd to Bay side Lane

4.23 Bl Ford

TP 3.65 4.36 3.52 0.71

0+0 = E.L. Mission Blvd.

0+47

S+0.2 = Fly Conc Apron 5.03 -0.80

S-2' = " Garage 4.90 -0.67

0+59

S - Fly Conc Apron 5.07 -0.84

S-2' = Fly Garage Conc Floor 4.90 -0.67

0+70

S Ground 5.2 -1.0

S-0.3 = 2' 3" Tile Walk 4.82 -0.59

0+70.5

H-1' = 2' 9" Garage Conc Floor 5.18 -0.95

TP 3.50 3.90 3.96 0.40

Alley Block 232 Mission Beach  
Between Venice - Verona  
Mission Blvd to Bay side Lane

3.90 Bl Ford

0+0 = E.L. Mission Blvd

0+03

S+1.5 = Fly Conc Apron 4.74 -0.74

S-0.4 = Fly Garage Conc Floor 4.66 -0.76

0+16

S+1.5 = Fly Conc Apron 4.64 -0.74

S Ground 4.8 -0.7

S-0.4 = Fly Conc Walk Joint Conc Apron 4.64 -0.74

0+30

H = 2' 3" Conc Walk 4.59 -0.69

0+36

H+0.4 = 2' 7.8" Conc Apron 4.74 -0.84

H-0.4 = 2' 7.8" Garage Conc Floor 4.67 -0.77

0+46

H+0.4 = 2' 7.8" Conc Apron 4.93 -1.03

H-0.4 = 2' 7.8" Garage Conc Floor 4.78 -0.88

TP 8.21 7.82 4.29 -0.39

BM 0.68 7.14

S.W.B.P.  
San Rafael  
Sea wall  
7-13



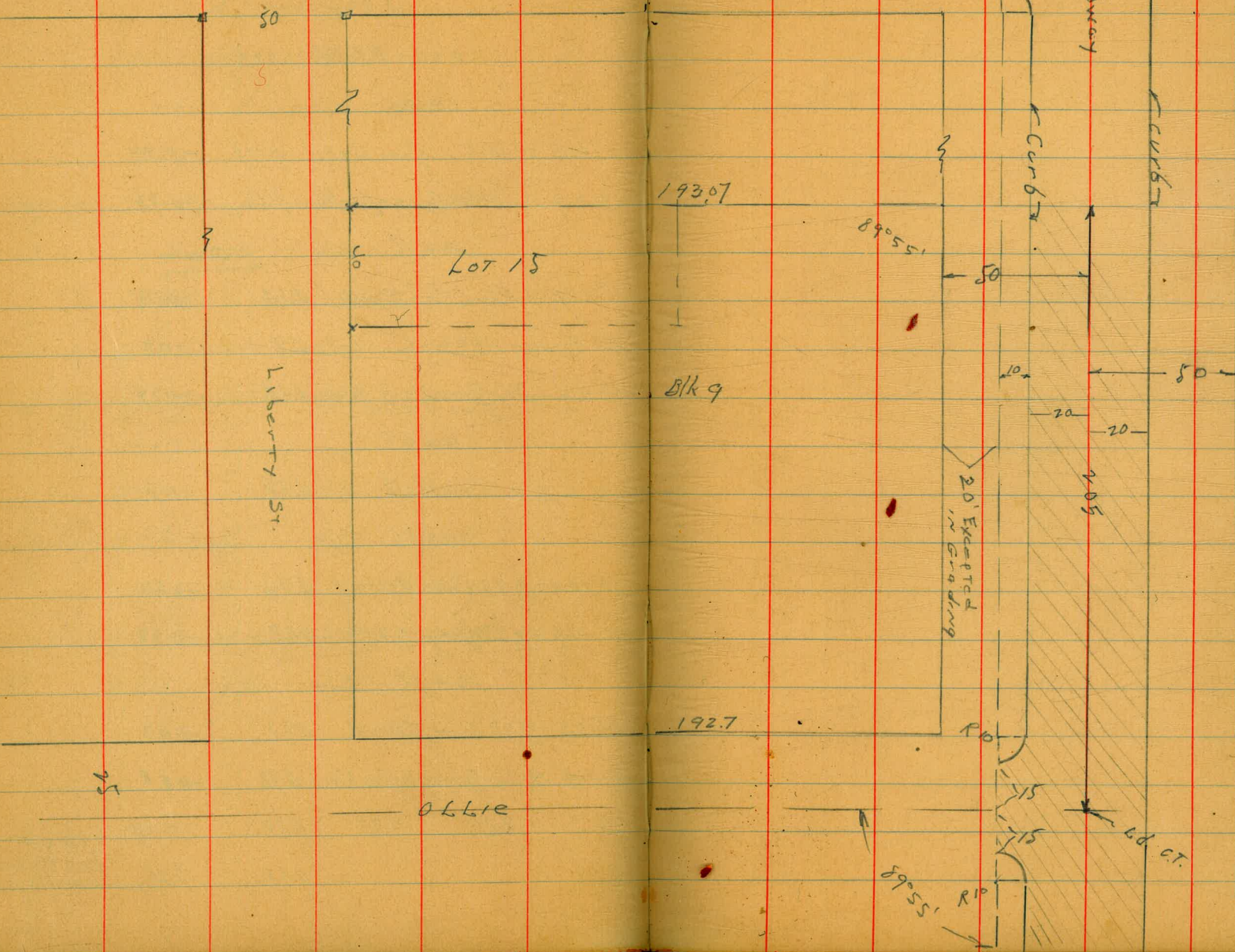
Set Lath, Front Line Lot 15  
Blk 9 Drucker's add

Moore  
Sawyer  
NFM  
11-14-45

Camulos

Indexed  
e.s.k.

63









































STA	+	#I	-	Elev	W.P.L.	W Gutter	W	Q	W	E Gutter	E.P.L.
Center of Howard	490			343.79	4.7 343.5	4.7 343.5	4.5 343.7	4.5 343.7	4.6 343.6	4.5 343.7	4.5 343.7
Curb & Gutter Elevs		348.19				W Curb Elev 5.19 343.00	W Gutter Elev 6.61 341.58	E Gutter Elev 6.33 341.80		E Curb Elev 4.91 343.28	
6700					4.6 341.6	5.1 343.1	4.7 343.3	5.0 343.7		6.3 341.9	343.1
6750					6.4 341.8	5.7 343.3	5.1 343.7	5.4 343.9		6.2 342.0	342.7
1400					6.6 341.6	5.7 343.3	5.4 342.9	5.8 342.4		6.0 341.7	342.4
1450					6.9 341.8	6.1 342.7	5.7 342.5	6.3 341.9		6.7 341.3	342.0
2700					7.1 341.7	6.7 341.5	6.4 342.0	6.5 341.7		7.1 341.7	341.7
T.P.			6.76	341.43							
3750	2.10	343.52			2.7 340.8	2.3 341.2	1.9 341.6	2.3 341.2		2.8 340.7	341.3
3768					3.4 340.1	2.9 340.6	2.4 341.1	2.8 340.7		3.7 340.2	341.3 @ 240
3750					4.4 339.7	3.8 339.7	3.5 340.0	3.9 339.4		4.6 339.1	340.0 340
4700					5.0 338.9	5.1 338.4	4.7 338.8	5.1 338.7		5.5 338.0	338.7
4750					6.8 336.7	6.5 337.0	6.0 337.5	6.5 337.0		6.8 336.7	337.5
5700					7.9 336.6	7.9 336.6	7.2 336.3	7.7 335.8		8.0 335.3	336.2
5750					7.1 334.4	8.8 334.7	8.4 335.1	7.7 334.4		7.4 334.1	335
6760					11.0 332.5	7.9 333.6	9.5 332.0	10.0 332.5		11.0 332.0	333.5
					11.0 333.67	11.0 332.57	11.0 332.57	11.0 332.57		11.0 332.57	

X Sec Col. Howard to Clark June 2 7:3

W.P.L. W Gutter W Q W E Gutter E.P.L.

N.W.C. Col. & Howard  
4.7 4.7 4.5 4.5 4.6 4.5 4.5  
343.5 343.5 343.7 343.7 343.6 343.7 343.7

W Curb Elev 5.19 343.00  
W Gutter Elev 6.61 341.58  
E Gutter Elev 6.33 341.80  
E Curb Elev 4.91 343.28

4.6 5.1 4.7 5.0 6.3  
341.6 343.1 343.3 343.7 341.9

6.4 5.7 5.1 5.4 6.2  
341.8 343.3 343.7 343.9 342.0

6.6 5.7 5.4 5.8 6.0  
341.6 343.3 342.9 342.4 341.7

6.9 6.1 5.7 6.3 6.7  
341.8 342.7 342.5 341.9 341.3

7.1 6.7 6.4 6.5 7.1  
341.7 341.5 342.0 341.7 341.7

T.P. Sta 2750 West side  
2.7 2.3 1.9 2.3 2.8  
340.8 341.2 341.6 341.2 340.7

3.4 2.9 2.4 2.8 3.7  
340.1 340.6 341.1 340.7 340.2

4.4 3.8 3.5 3.9 4.6  
339.7 339.7 340.0 339.4 339.1

5.0 5.1 4.7 5.1 5.5  
338.9 338.4 338.8 338.7 338.0

6.8 6.5 6.0 6.5 6.8  
336.7 337.0 337.5 337.0 336.7

7.9 7.9 7.2 7.7 8.0  
336.6 336.6 336.3 335.8 335.3

7.1 8.8 8.4 7.7 7.4  
334.4 334.7 335.1 334.4 334.1

11.0 7.9 9.5 10.0 11.0  
332.5 333.6 332.0 332.5 332.0

11.0 11.0 11.0 11.0 11.0  
333.67 332.57 332.57 332.57 332.57















CALCULATION OF EARTHWORK.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

Roadway 16 feet wide. Side Slopes 1 on 1½.  
For Single Track Embankment.

Width	HEIGHT														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	.02	.04	.06	.07	.09	.11	.13	.15	.17	.18	.20	.22	.24	.26	.28
2	.04	.07	.11	.15	.18	.22	.26	.30	.33	.37	.41	.44	.48	.52	.56
3	.06	.11	.17	.22	.28	.33	.39	.44	.50	.56	.61	.67	.72	.78	.83
4	.07	.15	.22	.30	.37	.44	.52	.59	.67	.74	.81	.89	.97	1.04	1.11
5	.09	.19	.28	.37	.46	.56	.65	.74	.83	.93	1.02	1.11	1.20	1.30	1.39
6	.11	.22	.33	.44	.56	.67	.78	.89	1.00	1.11	1.22	1.33	1.44	1.55	1.67
7	.13	.26	.39	.52	.65	.78	.91	1.04	1.16	1.30	1.42	1.55	1.68	1.81	1.94
8	.15	.30	.44	.59	.74	.89	1.04	1.19	1.33	1.48	1.63	1.78	1.92	2.08	2.22
9	.17	.33	.50	.67	.83	1.00	1.17	1.33	1.50	1.67	1.83	2.00	2.17	2.33	2.50
10	.18	.37	.56	.74	.93	1.11	1.30	1.48	1.67	1.85	2.04	2.22	2.41	2.59	2.78
11	.20	.41	.61	.82	1.02	1.22	1.43	1.63	1.83	2.04	2.24	2.44	2.65	2.85	3.06
12	.22	.44	.67	.89	1.11	1.33	1.56	1.78	2.00	2.22	2.44	2.67	2.89	3.11	3.33
13	.24	.48	.72	.96	1.20	1.44	1.68	1.92	2.16	2.41	2.65	2.89	3.13	3.37	3.61
14	.26	.52	.78	1.04	1.30	1.55	1.81	2.08	2.33	2.59	2.85	3.11	3.37	3.63	3.89
15	.28	.56	.83	1.11	1.39	1.67	1.94	2.22	2.50	2.78	3.06	3.33	3.61	3.89	4.17
16	.30	.59	.89	1.18	1.48	1.78	2.07	2.37	2.67	2.96	3.26	3.56	3.85	4.15	4.44
17	.31	.63	.94	1.26	1.57	1.89	2.20	2.52	2.83	3.15	3.46	3.78	4.09	4.41	4.72
18	.33	.67	1.00	1.33	1.67	2.00	2.33	2.67	3.00	3.33	3.67	4.00	4.33	4.67	5.00
19	.35	.70	1.06	1.41	1.76	2.11	2.46	2.82	3.17	3.52	3.87	4.22	4.57	4.92	5.28
20	.37	.74	1.11	1.48	1.85	2.22	2.59	2.96	3.33	3.70	4.07	4.44	4.81	5.18	5.56
21	.39	.78	1.17	1.55	1.94	2.33	2.72	3.11	3.50	3.89	4.28	4.67	5.06	5.44	5.83
22	.41	.81	1.22	1.63	2.04	2.44	2.85	3.26	3.67	4.07	4.48	4.89	5.30	5.70	6.11
23	.43	.85	1.28	1.70	2.13	2.56	2.98	3.41	3.83	4.26	4.68	5.11	5.54	5.96	6.39
24	.44	.89	1.33	1.78	2.22	2.67	3.11	3.56	4.00	4.44	4.89	5.33	5.78	6.22	6.67
25	.46	.92	1.39	1.85	2.31	2.78	3.24	3.70	4.17	4.63	5.09	5.56	6.02	6.48	6.94
26	.48	.96	1.44	1.92	2.41	2.89	3.37	3.85	4.33	4.82	5.30	5.78	6.26	6.74	7.24
27	.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50
28	.52	1.04	1.55	2.07	2.59	3.11	3.63	4.15	4.67	5.18	5.70	6.22	6.74	7.26	7.78
29	.54	1.07	1.61	2.15	2.68	3.22	3.76	4.30	4.83	5.37	5.91	6.44	6.98	7.52	8.06
30	.56	1.11	1.67	2.22	2.78	3.33	3.89	4.44	5.00	5.55	6.11	6.67	7.22	7.78	8.33
31	.57	1.15	1.72	2.30	2.87	3.44	4.02	4.59	5.17	5.74	6.32	6.89	7.46	8.04	8.61
32	.59	1.18	1.78	2.37	2.96	3.56	4.15	4.74	5.33	5.92	6.52	7.11	7.70	8.30	8.89
33	.61	1.22	1.83	2.44	3.05	3.67	4.28	4.89	5.50	6.11	6.72	7.33	7.94	8.55	9.17
34	.63	1.26	1.89	2.52	3.15	3.78	4.40	5.04	5.67	6.29	6.93	7.56	8.18	8.81	9.44
35	.65	1.30	1.94	2.59	3.24	3.89	4.53	5.18	5.83	6.48	7.13	7.78	8.42	9.08	9.72
36	.67	1.33	2.00	2.67	3.33	4.00	4.66	5.33	6.00	6.67	7.33	8.00	8.67	9.33	10.00
37	.68	1.37	2.06	2.74	3.42	4.11	4.79	5.48	6.17	6.85	7.54	8.22	8.91	9.59	10.28
38	.70	1.41	2.11	2.82	3.52	4.22	4.92	5.63	6.33	7.03	7.74	8.44	9.15	9.85	10.56
39	.72	1.44	2.17	2.89	3.61	4.33	5.05	5.78	6.50	7.22	7.95	8.67	9.39	10.11	10.83
40	.74	1.48	2.22	2.96	3.70	4.44	5.18	5.92	6.67	7.41	8.15	8.89	9.63	10.37	11.11

Table gives cu. yds. in 1 ft. of a triangle of given width and height. Corrections for tenths of width are one tenth the values found under each height considering the widths from 1 to 9 as tenths and similarly the corrections for tenths of height are one tenth the figures opposite width considering the heights from 1 to 9 as tenths. Thus if w = 16.2 and h = 5.3, cu. yds. = 1.48 + .028 + .089 = 1.597 cu. yds. or practically 160 cu. yds. per 100 ft. If w exceeds 40 ft., use one half and multiply result by 2, if both w and h are large use one half of each and multiply result by 4. Any cross-section may be divided into triangles by the following rule. To the triangle of the sum of the outside cuts (or fills) = h, and ½ the roadbed = w, add the triangles formed by taking the distance out to each break in turn (=w's) by the difference between the cuts (or fills) on each side of it (=h's) always subtracting the outer from the inner.

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.