

1150

DIETZGEN  
TRADE MARK

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ENGINEERS'  
LEVEL BOOK

No. 410

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# 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.

II	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	II
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 1/2 see inside of back cover.

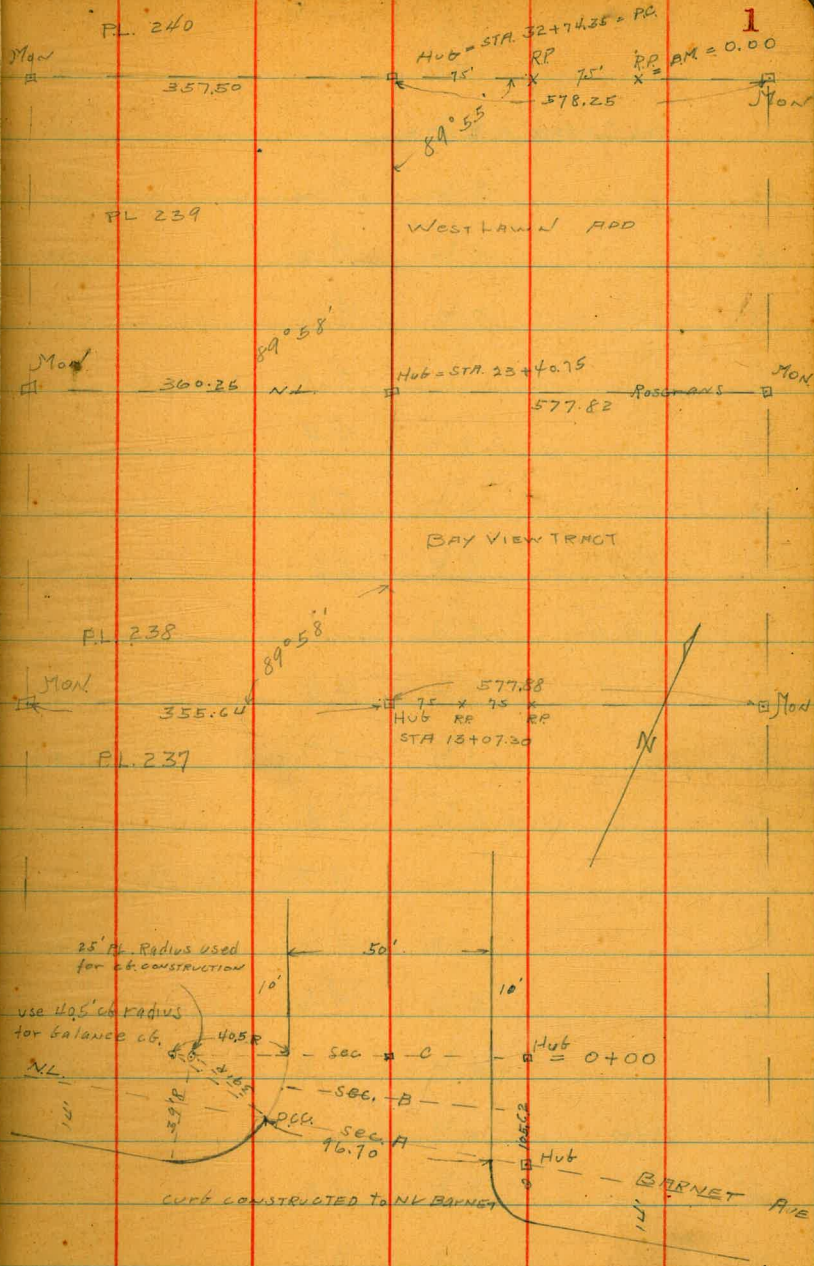
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M 0000  
3/11/06

CROSS SECTION of  
MIDWAY DRIVE

70' wide  
10' cbs.  
12" / 45

	3.13	4.47	1.2	Tide + Midway
NEBP				
	Sec A = NL Tide			
w		3.7		
Top cem cb		2.84		
gut on paving		3.43		
1/4		3.13		
c		3.03		
1/4		3.19		
gut		3.53		
Top cem cb		3.17		
E		4.6		
	Sec B			
E		5.1		
cb		5.0		
1/4		4.6		
c		3.8		
1/4		3.7		
cb		3.6		
w		4.0		



Jim Lueders

Sheet

447

Sec C = 0+00 = ± STA.

w/	4.6
cb	4.3
1/4	4.1
c	4.6
1/2	4.9
cb	5.1
E	5.5
100' N	
E	4.9
cb	4.7
1/4	4.8
e	4.7
1/2	4.3
cb	4.6
w/	5.0
200'	
w/	4.5
cb	4.4

447

Midway

2

1/4	4.4
c	4.6
1/2	4.7
cb	4.8
E	4.7
300' N	
E	4.8
cb	4.8
1/4	4.7
e	4.7
1/2	4.5
cb	4.6
w/	4.6
400' N	
w/	5.1
cb	4.9
1/4	4.6
c	4.6
1/2	4.9
cb	5.1
E	5.1

	500'N	447
E		5.2
cb		5.3
1/4		5.3
c		4.9
1/4		4.6
cb		4.9
w		5.0
	600'N	
w		5.3
cb		5.2
1/4		4.7
c		4.7
1/4		5.3
cb		5.5
E		5.5
	700'N = Spot culvert here	
E		5.7
cb		5.6
1/4		5.7

		447	Midway	3
c			5.0	
1/4			5.3	
cb			5.3	
w			5.3	
T.P.	5.35	4.13	5.69	-1.22
	800'N			
w			5.5	
cb			5.6	
1/4			5.2	
c			5.2	
1/4			5.3	
cb			5.4	
E			5.3	
	900'N			
E			5.3	
cb			5.2	
1/4			5.3	
c			5.1	
1/4			5.2	
cb			5.6	
w			5.7	

4:13  
1000' N

wl	5.7
cb	5.3
1/4	5.0
c	4.7
1/4	5.2
cb	5.3
E	5.2

1100

E	4.9
cb	4.9
1/4	4.9
c	4.7
1/4	4.7
cb	5.1
wl	5.2

1200

wl	5.3
cb	5.2
1/4	4.8

4:13

Midway 4

c	4.7
1/4	5.3
cb	5.0
E	5.0

1300' N

E	4.7
cb	4.8
1/4	5.0
c	4.8
1/4	4.7
cb	5.1
wl	5.2

1400

wl	5.2
cb	5.1
1/4	4.8
c	4.9
1/4	5.3
cb	5.3
E	5.3

4.13

14+80<sup>20</sup> = SW Wallace

E	5.0
cb	5.1
1/4	5.3
e	5.0
1/4	5.0
cb	5.3
w	5.3

15+60<sup>20</sup> = NL Wallace

w	5.1
cb	5.5
1/4	5.1
c	4.8
1/4	5.4
cb	5.0
E	5.0

1600' N

E	5.0
cb	5.1
1/4	5.2

4.13

Midway

5

e	4.9
1/4	4.9
cb	5.4
w	5.1

1700'

w	5.1
cb	5.2
1/4	4.6
c	4.7

1/4	5.2
cb	4.8
E	4.6

1800'

E	5.0
cb	5.1
1/4	5.1

c	4.8
1/4	4.8
cb	5.3
w	5.4

4.13

18+60° = SE Taylor

w/	5.0
cb	5.0
1/4	4.8
c	4.8
1/4	5.3
cb	4.6
E	4.6

19+40° = NW Taylor

E	4.6
cb	4.9
1/4	5.1
c	5.0
1/4	4.9
cb	5.0
w/	5.2

T.P.	4.92	4.31	4.75	-0.6v
------	------	------	------	-------

T.P. & Hub	5.06	4.49	4.88	-0.57
------------	------	------	------	-------

road

w/	5.3
----	-----

4.49

Midway

6

cb	5.3
1/4	5.0
c	5.1
1/4	5.2
cb	5.4
E	5.4

2100

E	5.4
---	-----

cb	5.2
----	-----

1/4	5.4
-----	-----

c	4.9
---	-----

1/4	5.3
-----	-----

cb	5.6
----	-----

w/	5.5
----	-----

2200

w/	5.2
----	-----

cb	5.2
----	-----

1/4	5.0
-----	-----

c	4.8
---	-----

1/4	5.3
-----	-----



4.49

cb	4.8
E	5.1
NW + 40.75 = SE ROSECRANS	
E	5.1
cb	4.8
1/4	4.9
e	4.6
1/4	4.7
cb	4.8
w/	4.6

NW + 40.75 = SE ROSECRANS

w/	5.4
cb	5.3
1/4	4.8
C	4.6
1/4	5.3
cb	5.3
E	5.1

Midway  
NW + 40.75 = NW ROSECRANS Sawidge Thru West LANE

E	5.4
---	-----

4.49

Midway

7

cb	5.0
1/4	5.2
C	5.1
1/4	4.9
cb	5.0
w/	5.1
2400w	
w/	5.3
cb	5.3
1/4	5.0
C	5.0
1/4	5.3
cb	5.3
E	5.1
2500	
E	5.3
cb	5.4
1/4	5.5
C	5.1
1/4	5.3

449

cb	5.6
w	5.3
25 + 96.60 = SW GAINSES	
w	5.6
cb	5.5
1/4	5.1
e	5.2
1/4	5.5
cb	5.4
E	5.3
26 + 46.60 = NW GAINSES	
E	5.4
cb	5.5
1/4	5.2
e	5.3
1/4	5.4
cb	5.4
w	5.3
2700' N	
w	5.1

449

Midway

8

cb	5.5
1/4	5.2
c	5.1
1/4	5.2
cb	5.3
E	5.4
2800' N	
E	5.0
cb	5.4
1/4	5.0
c	4.7
1/4	4.8
cb	5.4
w	4.8
29 + 96.6 = SW RILEY	
w	4.9
cb	5.6
1/4	5.1
e	4.9
1/4	5.0

449

cb			5.2	
E			4.9	
	29+56.60 = N. L. Riley			
E			5.0	
cb			5.4	
1/4			4.9	
e			4.7	
1/4			5.0	
cb			5.5	
w			5.2	
T.P.	493	474	468	-0.19
	3000			
w			5.4	
cb			5.0	
1/4			5.1	
c			4.9	
1/4			5.0	
cb			5.5	
E			5.2	

474

Midway

9

			3100 w	
w				4.5
cb				5.2
1/4				5.2
c				4.9
1/4				5.2
cb				5.5
E				5.5
			3200	
E				5.3
cb				5.8
1/4				5.3
c				5.2
1/4				5.1
cb				5.6
w				5.3
			3239.35 = S. L. Greenwood	
w				5.0
cb				5.3
1/4				5.2

474

C	5.2
1/4	5.4
CB	5.4
E	5.1

P.C. = 32+74.35 = NL Greenwood. Midway = 10' wide

E	5.4
cb	5.4
1/4	5.1
C	5.0
1/4	5.4
cb	5.4
w	5.4

IP in NRP 104 ↓ 36 1.36 4.24 0.00

Curve divided in 4 equal parts #1

wk now sl	4.9
cb	4.9
1/4	4.9
C	4.4
1/4	4.8
cb	5.0
EL = NL	4.9

PL 219

# P.C. STA 64+96.00 =  $\Delta 60^\circ 00'$  Midway  
R=200

10

Mon STA 64+35.10 PL 243

PL 220

Mon STA 62+07.20

PL 242

Mon

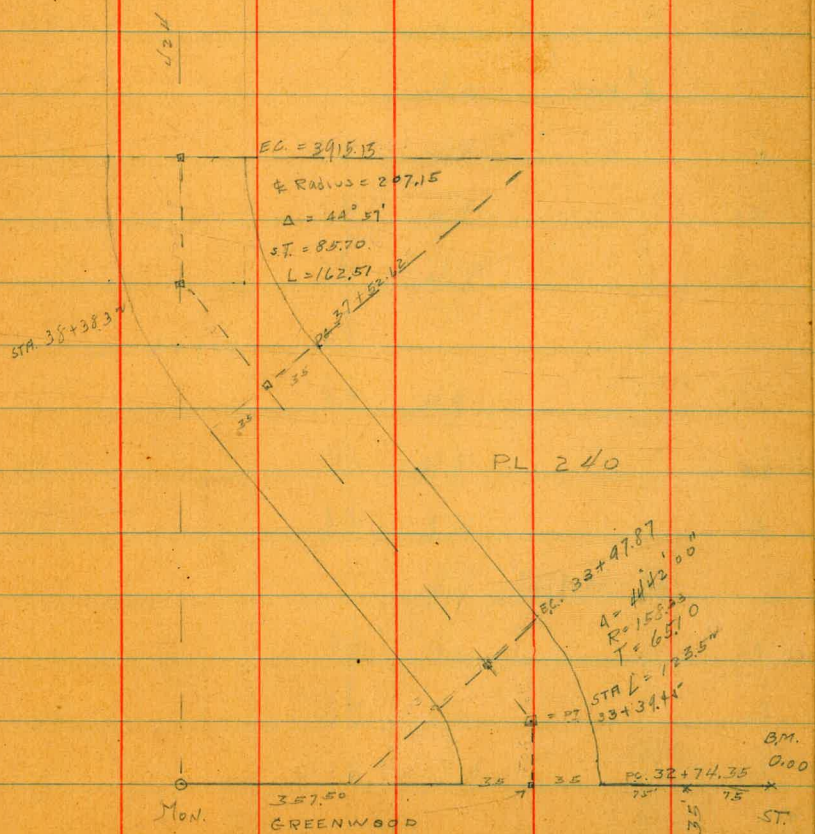
STA 52+73.18

PL 241

Mon

STA 43+39.12

PL 221



PL 240

Mon.

357.50  
GREENWOOD

B.M.

0.00

ST.

1136

2<sup>nd</sup> part

N	5.1
cb	4.9
1/4	5.2
c	4.3
1/4	4.9
cb	4.8
S	4.8

3<sup>d</sup> part

S	4.7
cb	4.5
1/4	4.8
c	4.5
1/4	4.8
cb	4.9
N	4.9

EC = 33 + 97.57

N	4.9
cb	4.8
1/4	5.1

4.36

Midway

11

c	4.4
1/4	4.7
cb	4.8
S	4.9

35700

S	5.0
cb	5.2
1/4	4.6
c	4.3

1/4	4.9
cb	4.9
N	4.8

36700

N	4.9
cb	4.8
1/4	5.0
c	4.4
1/4	4.6
cb	5.0
S	4.9

436

37+00

S	5.1
cb	5.5
1/4	4.9
c	4.9
1/4	5.2
cb	4.9
N	4.9

P.C. = 37+52.62

N	5.1
cb	5.0
1/4	5.1
c outlet	4.96
1/4	4.8
cb	5.6
S	5.7

Curve in 4 pts 1<sup>st</sup> pt

S Considerable water flows to this point from the South 5.1

cb May be diverted East of SL 5.5

1/4 5.2

436

Midway 12

e	5.1
1/4	5.4
cb	5.2
N	5.0

2<sup>nd</sup> pt.

N	5.1
cb	5.3
1/4	5.3
c	5.2

1/4	4.9
cb	4.9
S	4.9

3<sup>rd</sup> pt

S	5.4
cb	5.6
1/4	5.2

c	5.1
1/4	5.1
cb	5.1

N	4.9
---	-----

4.36

EG=39+15.13

N	4.3
cb	4.50
1/4	4.7
e on foot	4.71
1/4	4.8
cb	5.1
S	5.2
40+00	
S	4.7
cb	4.8
1/4	4.7
e	4.1
1/4	4.4
cb	4.5
N	4.4
41+00	
N	3.8
cb	3.8
1/4	3.8

4.36

Midway 13

e	3.4
1/4	3.5
cb	4.0
S	3.9
42+00	
S	4.0
cb	3.9
1/4	3.5
e	3.4
1/4	3.6
cb	3.7
N	3.6
43+00	
N	3.8
cb	4.0
1/4	3.7
e	3.4
1/4	3.5
cb	3.7
S	3.7

4.36

	43+291.4 = P.L.	44+40	44+24	
S				2.6
cb				3.4
1/4				3.2
c Mark				3.3.6
1/4				3.4
cb				2.4
N				2.3
T.P.	5.76	6.76	3.36	1.00
	44+00			
N				6.0
cb				5.8
1/4				5.7
c				5.3
1/4				5.7
cb				5.7
S				5.4
	45+00			
S				5.6
cb				5.5

$A = 52^{\circ}30'$   
 $R = 150'$   
 $T = 73.97$   
 $L = 137.44$

$E.C. = 72+64.57$

$P.I. = 72+00.90$

$P.C. = 71+26.90$

$E.C. = 70+20.31$

$A = 47^{\circ}00'$   
 $R = 140.00'$   
 $T = 60.89$   
 $L = 114.87$

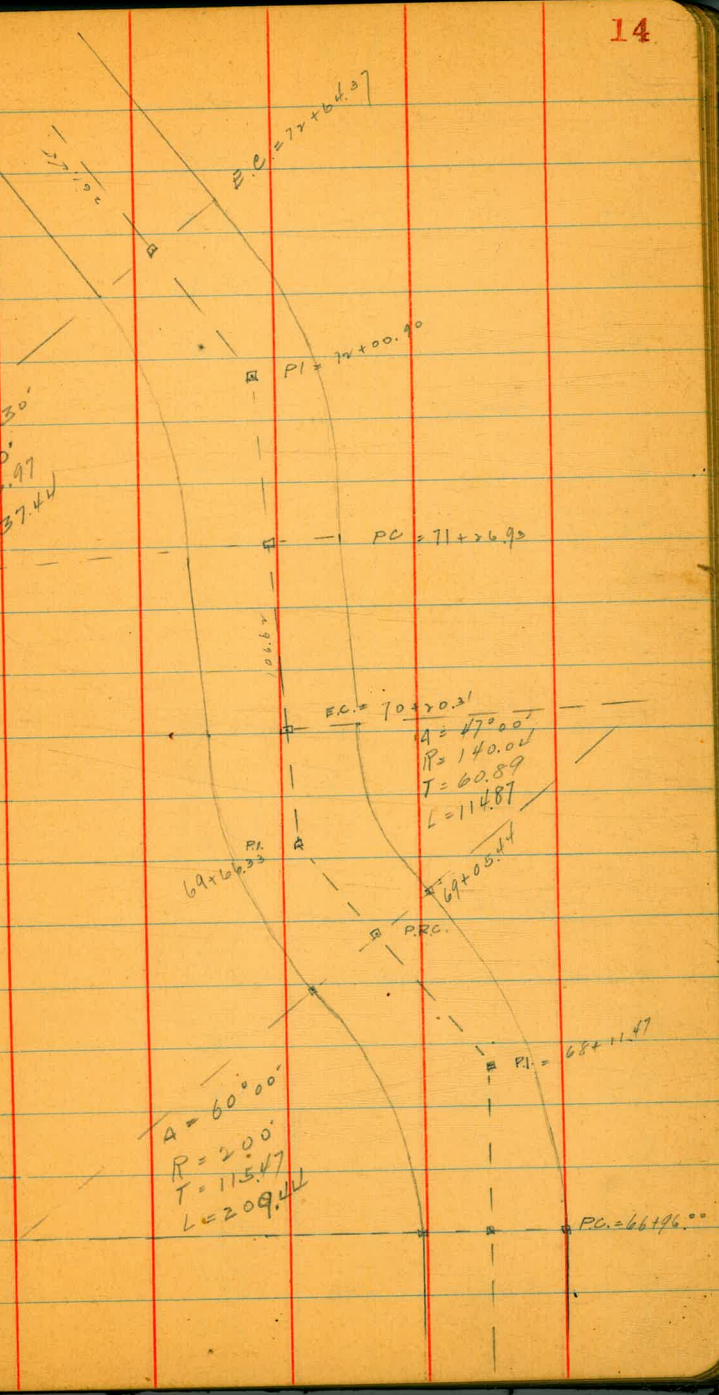
$P.I. = 69+16.33$

$P.R.C.$

$P.I. = 68+11.47$

$A = 60^{\circ}00'$   
 $R = 200'$   
 $T = 115.47$   
 $L = 209.44$

$P.C. = 66+96.00$





676

1/4	5.5
C	4.9
1/4	5.3
cb	5.3
N	5.5

46+00

N	5.3
cb	5.7
1/4	5.6
C	5.4
1/4	5.6
cb	5.7
S	5.3

47+00

S	5.3
cb	5.6
1/4	5.4
C	5.1
1/4	5.3
cb	5.4
N	5.4

Midway 15

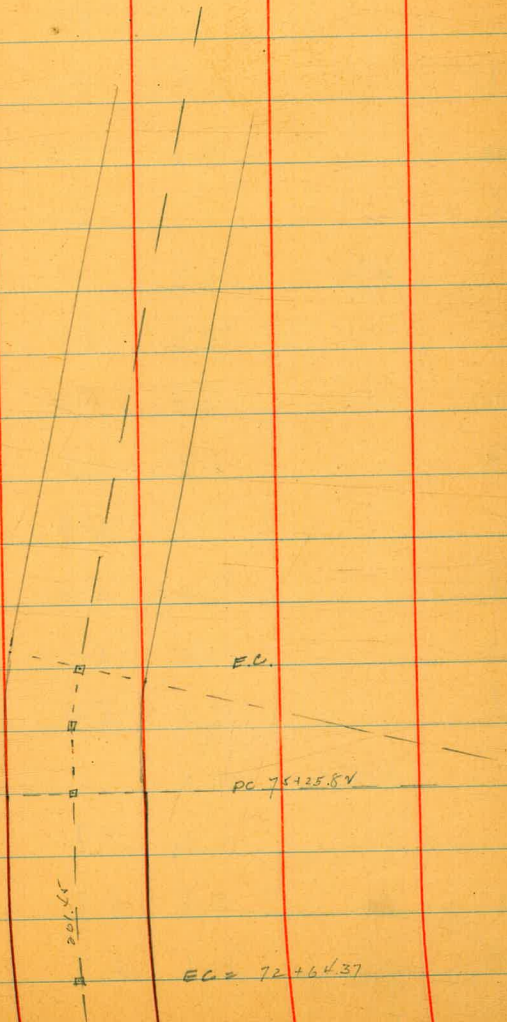
A =  
R = 200  
T =  
L =

PI =

EC =

PC 75+25.84

EC = 72+64.37



676

48+00

N	4.9
cb	5.1
1/4	5.2
e	4.8
1/4	5.1
cb	5.5
S	5.1

49+00

S	4.8
cb	5.0
1/4	4.8
e	4.9
1/4	5.0
cb	5.1
N	5.0

50+00

N	5.7
cb	5.7
1/4	5.4

676

Midway 16

c	5.3
1/4	5.2
cb	6.2
S	5.8

51+00

S	5.6
cb	6.2
1/4	5.4

c	5.3
1/4	5.3
cb	5.5
N	5.2

52+00

N	5.9
cb	5.9
1/4	5.7
e	5.4
1/4	5.3
cb	5.7
S	5.4

676

59+73.8 = P. time

# 241 # 242

S			6.0	
cb			5.9	
1/4			5.6	
c on Mod.			5.98	
1/4			6.3	
cb			6.5	
N			6.5	
TP	50d	582	598	0.78
	53100			
N			5.5	
cb			5.7	
1/4			5.5	
c			5.0	
1/4			5.0	
cb			5.0	
S			5.1	
	54100			
S			5.4	
cb			5.6	

582

Midway 17

1/4				4.8
c				5.0
1/4				5.5
cb				5.4
N				5.1
			55+00	
N				5.2
cb				5.2
1/4				5.4
c				4.9
1/4				4.7
cb				5.1
S				5.0
			56+00	
S				5.4
cb				5.4
1/4				5.0
c				4.9
1/4				5.5
cb				5.5
N				5.4

5.82

57+00

N	5.6
cb	5.5
1/4	5.6
c	4.9
1/4	5.1
ct	5.5
S	5.2

58+00

S	5.9
cb	5.8
1/4	5.3
c	5.2
1/4	5.8
cb	5.7
N	6.0

59+00

N	5.8
cb	5.9
1/4	6.1

5.82

Midway 18

e	5.6
1/4	5.5
cb	6.1
S	6.1

60+00

S	6.5
cb	6.4
1/4	5.8
c	5.6

1/4	6.2
cb	6.2
N	6.3

61+00

N	6.5
cb	6.6
1/4	6.5
c	6.4
1/4	6.3
cb	6.8
S	6.9

5.82

62+07.20 = Pline

#242 + #243

8.75

Midway 19

S			7.0	
cb			6.9	
1/4			6.3	
e Mod.			6.64	
1/4			6.6	
cb			6.5	
N			6.4	
T.P	907	8.25	6.64	-0.84
-	63+00			
N			9.2	
cb			9.1	
1/4			9.0	
e			8.5	
1/4			8.7	
cb			9.2	
S			9.1	
	64+00			
S			8.7	
cb			9.1	

1/4

o

1/4

cb

N

64+3510 = Pline

P# 219 + 220

N

cb

1/4

o

1/4

cb

S

65+00

S

cb

1/4

o

1/4

cb

N

8.3

8.5

8.8

8.8

8.6

9.2

9.0

8.7

8.48

-0.23

8.2

8.7

8.7

9.1

8.5

7.9

8.1

9.1

10.5

10.6

66400

8.25

8.25

Midway 20

N	10.6
cb	9.1
1/4	8.1
c	7.6
1/4	8.0
cb	8.9
S	10.1

66410

-10	12.9
S	13.4
+5	12.4
cb	10.3
78	8.0
1/4	7.8
c	7.6
1/4	8.6
cb	10.4
N	10.4
+10	11.4

66450

-10	10.6
N	9.8
cb	9.1
1/4	8.0
c	7.4
1/4	7.8
+3	7.8
cb	10.5
+5	12.0
S	12.4
+10	12.4

6646000=PC

-10	12.2
S	11.8
+7	11.3
cb	10.6
+10	7.4
1/4	7.3
c or hut	7.21

8.25

1/4

7.8

eb

8.8

N

8.9

+10

9.0

T.P. sd Max

1.50

6.75

approx 8' N  
of the Midway  
on So edge of  
Curt. Dyke

East Side of South Abutment of 30th St Bridge  
Levels for estimate of fill needed 4/6/22

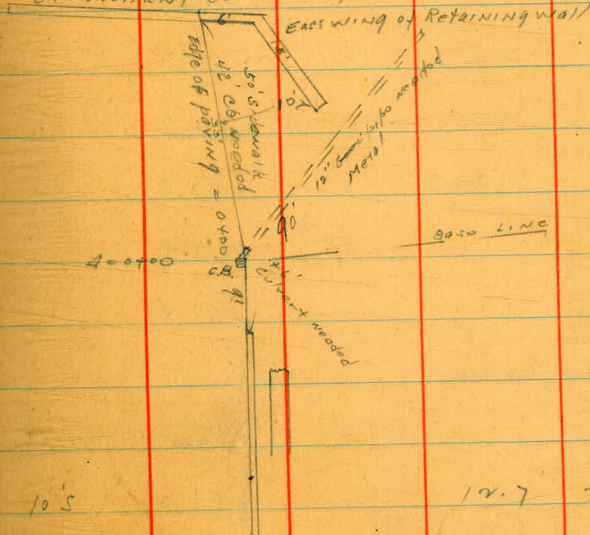
	Moore			
SEDP	3.97	√93.65	289.71	
	0.54	√81.46	1796	√80.74
Δ at west edge of paving = Baseline = 0000				
Δ paving		1.80	√79.5	
37' N		1.3	√80.0	
9' S top of		1.3	√80.0	
√ paving		1.8	√79.5	
Δ East edge paving = 3' = paving under raised				
Δ 0400 = Baseline		6.0	√75.3	
1' N		7.8	√73.5	
23' N		5.7	√75.6	
74' N		6.7	√74.6	
28' N		5.9	√75.4	
34' N		1.3	√80.0	
8' S top cave in		3.5	√77.8	
+6' on Baseline				
Baseline		10.5	√70.8	
7' N		11.1	√70.7	
21' N		10.8	√70.5	

281.26

22

31' N	5.0	√76.3
37' N = Top Retaining Wall	1.3	√80.0
+10' on Baseline		
Baseline	13.6	√67.7
41' N	13.5	√67.8
15' N	12.3	√69.0
17' N = Second retaining wall	17.6	√68.7
17' N Top retaining wall	1.3	√80.0

S. Abutment 30th St Bridge



10' S	12.7	√68.6
15' S	8.1	√73.2
17' S top of cave in	1.0	√80.3



+15 on Baseline

19'S top cave in	1.8	279.5
17'S	8.8	272.5
T.P. 148	12.35	268.91
8'S	6.4	264.0
Baseline	5.6	264.8
17' N - Sand retaining wall	3.0	267.4

+20 on Baseline

Baseline	10.0	260.4
6'S	9.0	261.4
17'S Top cave in	0.0	270.4
20' N	7.0	263.4
33' N	7.8	262.6
30' N top of cave in	3.0	267.4

+30 on Baseline

40' N top of cave in	11.4	259.0
36' N	14.0	256.4
Baseline	14.7	255.7
5'S	14.5	255.9
15'S top cave in	3.5	266.9

+40 on Baseline

10'S top cave in	10.0	260.4
10'S	12.3	258.1
Baseline	18.0	252.4
T.P. 004	257.83	12.60
40' N	7.0	250.8
45' N top cave in	3.8	254.0

+50 on Baseline

54' N top cave in	9.0	248.8
50' N	13.0	244.8
20' N	14.0	243.8
Baseline	10.0	247.8
5'S top cave in	5.0	252.8

+60 on Baseline - bottom of ravine

3'S top cave in	8.3	249.5
Baseline	11.0	246.8
4' N	14.5	243.3
20' N	16.5	241.3
35' N	19.0	238.8
40' N	23.0	234.8
50' N	24.0	233.8

West side North Abutment south side bridge  
 levels for estimate of fill needed

1/6/70  
 Moore

280.60

24

33' 26" side walk needed - 17' additional s/w needed

65' 17" culvert needed.

Construction of New C.B.

Assumed Elev

Top of NC Abutment 0.60 280.60

280.00

West edge paving = 0200

Baseline - on paving

1.4 279.4

13' N

1.4 279.4

18' S

1.6 279.0

0200 = below edge paving

15' N

6.4 274.4

Baseline

10.0 270.6

18' S

10.0 270.6

0200 - 4' = paving undermined

Baseline

4.2 276.4

15' N

3.2 277.4

18' S

8.0 272.6

+5

Baseline

14.0 266.6

+6 N

14.0 266.6

7' 10' N

8.0 272.6

13' N Top cover in

1.0 279.6

10' S

13.0 267.6

20' S

5.0 275.6

22' S Top cover in

1.0 279.6

+10 West

8' S to N end of retaining wall

0.60 280.0

8' S Bottom

14.0 261.6

3' S

17.5 263.1

Baseline

17.0 263.6

6' N

18.0 262.6

12' N

10.0 270.6

15' N Top cover in

3.5 277.1

+20 West

15' N Top cover in

11.2 269.4

T.P. 0.60 268.30

12.9 267.0

8' N

10.0 258.3

Baseline

12.0 256.3

5' S

9.0 259.3

268.30

10'S	top cavern	6.0	267.3
	+30' w/		
8'S		9.0	259.3
Baseline		15.0	253.3
5' N		15.0	253.3
8' N	top cavern	9.0	259.3
	+35' w/		
5' N	Top cavern	11.6	256.7
4' N		17.0	251.3
Baseline		17.0	251.3
5' S		17.0	251.3
8' S	✓ ✓	13.0	255.3
T.P.	2.0	257.30	13.0
	+40' w/		
8' S	Top cavern	3.7	253.6
6' S		8.0	249.3
Baseline		8.5	248.8
4' N		9.0	248.3
8' N	✓ ✓ ✓	3.3	254.0

257.30

25

60' w/			
Baseline	Top cavern	18.0	239.3
5' S		18.0	239.3
5' S		21.0	236.3
7' S		21.0	236.3
11' S		16.0	241.3
18' S	✓ ✓ ✓	13.0	244.3
	70' w/		Bottom of Ravine
18' S		19.0	238.3
10' S		21.0	236.3
Baseline		20.0	237.3
5' N		19.0	238.3

Redwood below 30th + GRIM

4/6/22  
Moore

30658

26

Levels for Fill  
SWBP 45v 306.58  
Redwood 60' wide  
10' c/s  
10' / 45  
302.6 Redwood 30th

+40 to end of s/w  
overhanging approx 6'  
11.2 295.4  
+51 4.6 302.0

31' E of EL 30th = baseline

+51 Top of conc cb 3.50 303.1  
E Redwood +40  
✓ SW + CB should be replaced to here

10' N of N1 Redwood

Baseline 5.7 300.9 ✓

Baseline to 4.2 302.4 ✓

+13 5.9 300.7 ✓

+23 18.0 288.6 ✓

+15 7.5 299.1 ✓

+37 17.5 289.1 ✓

+20 4.8 301.8 ✓

+49 9.5 297.1 ✓

NK Redwood +10

+54 4.5 302.1 ✓

Baseline 4.3 302.3 ✓

S 1/4 +30

+3 4.3 302.3 ✓

Baseline to 5.0 301.6 ✓

+6 7.0 299.6 ✓

+22 12.0 294.6 ✓

+16 14.0 297.6 ✓

+38 21.0 285.6 ✓

+26 13.0 293.6 ✓

+45 21.0 285.6 ✓

+34 3.6 303.0 ✓

+58 10.6 296.0 ✓

N on line Redwood +20

+64 4.4 302.2 ✓

Baseline on CB 4.0 302.6 ✓

S 1/4 +4 +54

+3 9.6 297.0 ✓

Baseline +10 5.0 301.6 ✓

+20 16.8 289.8 ✓

+16 10.0 296.6 ✓

+28 17.0 289.6 ✓

+24 10.0 296.6 ✓

306.58

+38	21.5	✓85.1 ✓
+45	21.5	285.1 ✓
+52	11.0	✓95.6 ✓
+69	10.0	~96.6 ✓
+73	4.0	302.6 ✓

Sub of Redwood +60

Baseline top of

+3	7.2	✓99.4 ✓
+8	10.5	✓96.1 ✓
+26	11.5	✓95.1 ✓
+37	22.0	✓84.6 ✓
+53	16.5	✓90.1 ✓
+67	9.0	✓97.6 ✓
+70	4.7	301.9 ✓
1407 <sup>100</sup> switch to here built to here	1.70	304.9 ✓

SL Redwood +70

Baseline top cone S/W

+7	12.6	✓94.0 ✓
+10	17.0	✓89.6 ✓
+15	17.0	~89.6 ✓

306.58

Redwood

.27

+25	9.0	✓97.6 ✓
+30	16.0	✓90.6 ✓
+37	23.0	✓83.6 ✓
+42	23.0	✓83.6 ✓
+62	5.0	301.6 ✓
T.P.	1.50	✓95.08
20 S of SL +90	13.00	✓93.55 ✓

Baseline

+4	+1.0	✓94.0 ✓
+8	6.0	289.0 ✓
+8	10.0	285.0 ✓
+11	11.0	284.0 ✓
+20	12.0	283.0 ✓
+27	5.5	✓89.5 ✓
+35	14.0	281.0 ✓
+49	15.5	✓79.5 ✓
+55	6.5	✓88.5 ✓

35 S of SL = Top of old Fill +105

Baseline +13

+17	6.7	✓88.3 ✓
+17	13.0	282.0 ✓
+28	15.0	✓80.0 ✓

295.08

+55

17.0

~78.0 ✓

+57

15.7

~79.3 ✓

158' sidewalk to be rebuilt.

153' curb ✓ ✓ ✓

## DALE ST WASHOUT

Botch Redwood + Thorn

25' of slw to be replaced. curb, C. Basin + Culvert all O.K. here

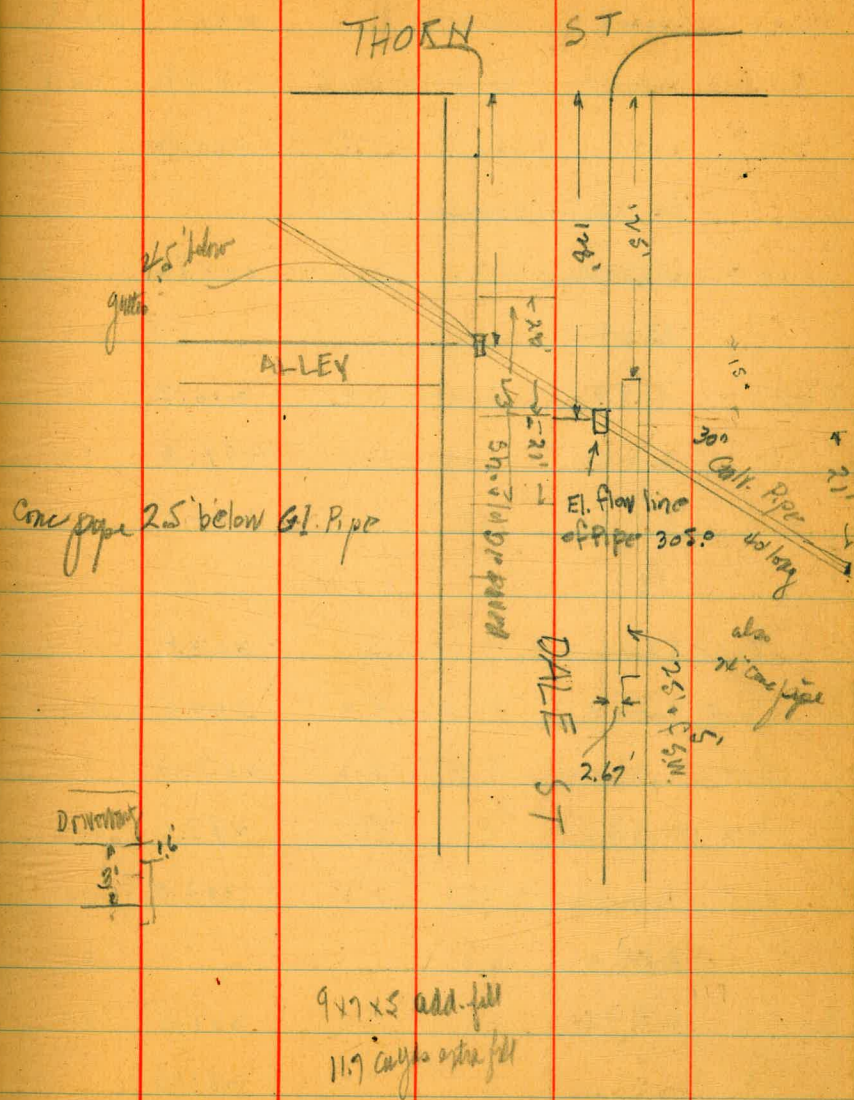
Station	Dist	Elev	Notes	Station	Dist	Elev	Notes
NWB P	0.5	318.93	Thorn + Dale	06 - 2'		307.1	intermined
	195' S of SL of Thorn	20400		06		311.2	
Ecb on Dale	top of b	8.0		+7		301.8	
+7.5		7.7		+4		297.8	
+8		10.5		+9		297.8	
+10 = EL Dale		11.2		+13		303.3	
+14		9.0		+16		305.3	
+20		11.0		+18		303.4	
+25		9.4		+22		303.5	
	+3' South			+28		305.3	
Ecb on 2 B grating		8.4			+15'		
+2		7.8		06 - 2'		307.3	paving undermined
+3		17.0		000		311.4	top of b
+12		13.3		+1		301.1	
+15		10.6		+2		298.1	
+21		13.4		+18		297.8	
+25		11.8		+21		300.3	
TP	6.0	212.23	12.70	+30		300.8	

4/6/26  
Moore

312.23

29

	+20		
0+00	top of ss	0.8	311.5
+1		5.1	307.4
+4		3.0	309.3
+7		6.1	306.4
+12		6.0	306.3
+15		13.0	299.3
+23		15.5	296.8
+36	= outlet culvert pipe	15.5	296.8
	+25		
0+00	tip of	0.6	311.7
+3		0.4	311.9
+7.5	Edge sidewalk	0.4	311.9
+8		4.7	307.6
+15		7.0	305.3
+21		9.0	303.3
+27		15.0	297.3
+35		15.5	296.8
	+29		
El Dale S. edge curb		0.7	312.1
+25 EAST		15.5	296.8





Gregory ST S of UPAS 4/6/26  
Levels for Washout

Moore

305.51

31

NWOP	263	302.08		315.51	UPAS + 33d
TP	020	310.66	11.65	310.43	
TP	278	305.51	7.93	304.73	
67' S of 1st UPAS = 0400					
Ecb Gregory top cement		2.75		302.76	
	+2.5				
Ecb		5.2		300.3	
+6 E		6.0		√99.5	
+6.5		3.0		302.5	
	+10				
Ecb - 6		3.1		302.4	
- 5		5.0		300.5	
Ecb		8.0		√97.5	
+12 E		8.5		√97.0	
+15 ✓		2.5		303.0	
	+22				
Ecb - 6		3.0		302.5	
- 5		4.5		301.0	
- 3		4.5		301.0	

Ecb	8.0	√97.5
+23 E	9.3	√96.2
+24 ✓	3.0	302.5
	132.5	
- 2	3.6	301.9
Ecb Top cement	2.65	302.86
+2 E	7.0	√98.5
+15 ✓	11.0	√94.5
+24 ✓	11.2	√94.3
+25 ✓	5.2	300.3
	38.5	
Ecb top cement	2.40	303.1
+4 E	2.4	303.1
+9 ✓	9.3	√96.2
+20	10.3	√95.2
+21	12.0	√93.5
+28	11.5	√94.0
+29	6.5	√99.0
	49.5	
Ecb top cement	2.0	303.5

3055/

32

+9 e 1.9 303.6

+18 10.3 ✓95.7

+31 E 11.4 ✓94.1

↓ or 5 lengths of conc pipe maybe  
salvaged from creek below.

33' of curb to be replaced

to sidewalk ✓

entire new c. basin ✓ ✓

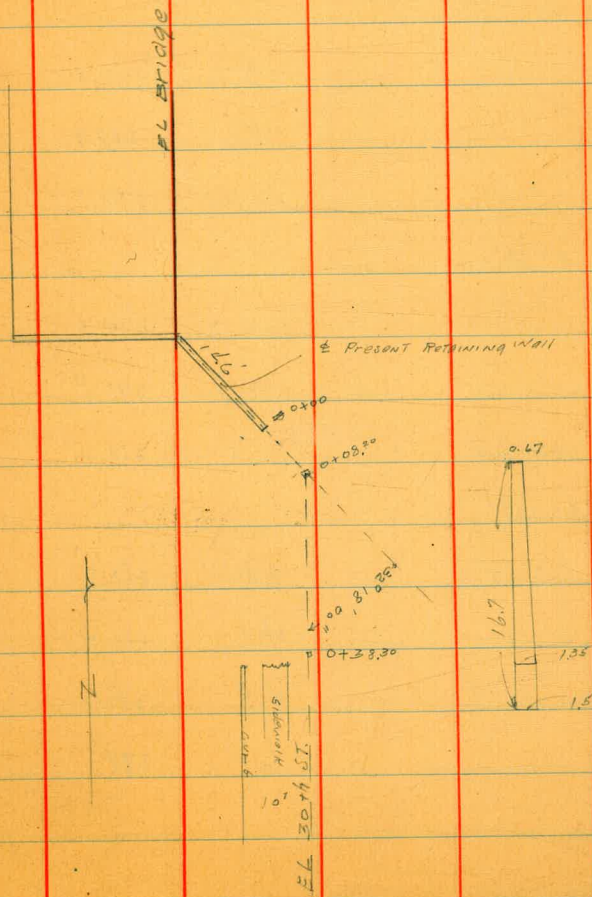
Levels for proposed Retaining Wall  
South End of 30th St Bridge

43' 6"  
19000

284.53

33

	3.8'	284.53	280.74	T.P.		19.0	284.5
Top present Retaining Wall		4.53	280.0		5' W	17.4	267.3
	0+00 = S end wall		284.5			16.5	268.0
	5' W		15.2	269.3	5' W		14.3
	↓		16.4	268.1			
Wood Bottom Wall			21.2	263.3			
	5' E		20.5	263.7			
	0+8.2 = A						
	5' E		21.7	262.8			
	↓		18.2	266.3			
	7.1 W		16.7	267.8			
	5' W		15.1	269.4			
	0+9						
	5' W		16.8	267.7			
	↓		18.0	266.5			
	5' E		20.9	263.6			
	0+15						
	7' E		20.7	260.1			
	5' E		20.2	264.3			



	284.53	Levels for well cold	
3 w		15.5	$\frac{284.5}{269.0}$
r w		16.6	267.9
⊕		17.2	267.3
3' E		18.6	265.9
5' E		20.2	264.1
0+25			
5' E		19.5	265.0
⊕		16.6	267.9
5' w		12.4	272.1
0+33			
5' w		10.2	274.3
⊕		12.7	271.8
5' E	Soft fill	11.2	273.2
0+38.30			
5' E	Soft fill	3.8	280.7
⊕	r	4.1	280.4
5' w top broken and split		4.4	280.1
5' w		6.4	278.1

Cross Section of CORONADO Flvo

Defec to Eburne

80' wide  
90' 1/2  
10' 1/2

Moore  
4/12/26

60.93

35

		60.93	50.00	60.9		60.9	55.5
NVDP	1093	60.93	50.00				
	EL Defec x 0.100			60.9			
L			7.8	53.1			
o/b			9.1	51.8			
com ab			9.9	51.0			
1/4			9.2	51.7			
c			9.4	51.5			
1/4			9.5	51.4			
cb			9.7	51.2			
com ab			10.87	50.0			
S			10.3	50.6			
	15' E						
S			7.7	53.2			
cb			7.7	53.2			
1/4			8.1	52.8			
c			7.7	53.2			
1/4			8.1	52.8			
+3			8.1	52.8			
cb			5.8	55.1			

Coronado Defec

38' E

42' E

6093

1/4			1.2	60.9 56.7
06			3.4	57.5
+5			2.9	58.0
N			0.0	60.9
T.P.	12.47	72.84	0.56	60.37
	68'E			72.8
N			8.5	64.3
+2			8.9	63.9
+6			10.2	62.6
06			11.4	61.4
+5			11.4	61.4
+7			12.9	59.9
1/4			13.3	59.5
0			12.4	60.2
1/4			13.1	59.7
06			13.4	59.4
5			14.2	58.6
+5			14.8	58.0
	9'E			
-5			18.3	60.5

72.84

Coronado

36

S			11.8	61.0
+7			10.9	61.9
00			10.5	61.3
1/4			9.7	63.1
0			9.7	63.1
1/5			9.4	63.4
+2			9.6	63.2
+5			8.4	64.4
06			8.7	64.1
N			6.8	66.0
		10'E		
N			3.7	69.1
+4			4.5	68.3
+7			5.9	66.9
06			7.5	65.3
1/4			8.1	64.7
0			8.3	64.5
+5			7.7	65.1
1/4			8.5	64.0
06			9.1	63.7
S on lawn			9.4	63.4

72.84

126'E

			<del>72.8</del>
S		8.6	64.2
+7		8.5	64.3
+15		6.8	66.0
cb		6.6	66.2
+9		6.6	66.2
1/4		5.5	67.3
+8		5.5	67.3
c		6.0	66.8
1/4		5.9	66.9
cb		5.7	67.1
+9		4.9	67.9
+12		3.5	69.3
N		-1.6	71.2
	148'E		
N		+1.2	74.0
+3		-0.6	72.2
cb		2.6	70.2
1/4		3.0	69.8
c		3.4	69.4

72.84

Coronado

37

c		3.1	<del>72.8</del> 69.7	
+3		3.9	68.9	
1/4		4.2	68.6	
+5		4.5	68.3	
+12		7.2	65.6	
S	at low tide.	7.2	65.5	
	150'E			
S		4.7	68.1	
+10		4.1	68.7	
cb		3.8	69.0	
	185'E			
S		1.3	71.5	
cb		1.7	71.1	
+2		1.5	71.3	
1/4		0.7	72.1	
c		0.7	72.1	
T.P.	12.75	85.14	0.45	72.39
+7		12.6	<del>85.1</del> 72.5	
1/4		12.2	72.9	
cb		11.9	73.2	

8514

		85.1	
+15	10.6	74.5	
N	9.3	75.8	
205'E			
N	6.7	78.4	
+10	9.5	75.6	
cb	10.5	74.6	
1/4	11.0	74.1	
+3	11.8	73.3	
c	11.8	73.3	
1/4	12.2	72.9	
cb	13.0	72.1	
S	13.0	72.1	
220'E			
S	12.3	72.8	
cb	11.9	73.2	
1/4	11.2	73.8	
c	10.8	74.3	
1/4	10.2	74.9	
cb	9.5	75.6	
+8	8.5	76.6	

8514

Coronado

38

		85.1	
+16	7.0	78.1	
N	4.8	80.3	
257'E			
N	3.4	81.7	
+5	6.7	78.4	
+12	8.2	76.8	
cb	9.1	76.0	
1/4	9.4	75.9	
c	9.5	75.6	
1/4	10.0	75.1	
cb	10.4	74.7	
S	10.5	74.6	
253'E			
S	9.0	76.1	
+4	10.5	74.6	
cb	10.4	74.7	
280'E			
S	7.2	77.9	
+3	8.5	76.6	
cb	8.8	76.3	



8514

1/4	8.5	$\frac{85.1}{76.6}$
0	8.3	76.8
+1	8.8	76.3
1/4	9.0	76.1
06	8.4	76.7
+10	5.8	79.3
N	2.6	82.5
300'E		
N	0.6	84.5
+5	4.2	80.9
05	8.1	77.0
1/4	8.1	77.0
0	8.2	76.9
1/4	7.5	77.6
05	7.7	77.4
+10	7.9	77.2
S	6.6	78.5
330'E		
S	6.2	78.9
05	6.4	78.7

8514

Coronado

39

1/4	6.2	$\frac{85.1}{78.9}$
0	5.7	79.4
1/4	5.0	80.1
05	4.9	80.2
+15	2.6	82.5
N	0.0	85.1
355'E		
N	+1.5	86.6
+5	0.0	85.1
05	2.5	82.6
1/4	3.1	82.0
0	4.0	81.1
1/4	4.8	80.3
05	4.9	80.2
S	4.8	80.3
387'E		
S	2.8	82.3
05	2.8	82.3
1/4	2.4	82.7
0	2.1	83.0

		85.4		$\frac{85.1}{84.2}$
1/4			0.9	
cb			0.0	85.1
+15			+2.4	87.5
N			+4.0	89.9
T.P	12.5'	97.39	0.26	84.88
	41'E			92.4
N			6.4	91.0
+5			6.8	90.6
+10			7.9	89.5
cb			9.7	87.7
1/2			10.6	86.8
e			11.6	85.8
1/4			12.3	95.1
cb			12.6	94.8
+10			12.9	84.5
S			12.7	84.7
	42.7'E			
-5	in flower bed		14.4	85.0
S			11.6	85.8
cb			10.3	87.1

		97.39	Coronado	40
1/4			9.7	$\frac{97.4}{87.7}$
e			8.4	89.0
1/4			6.6	90.8
cb			5.2	92.2
+15			3.2	94.1
N			2.1	95.3
	450'E			
N			0.7	96.7
+3			1.9	95.5
cb			3.8	93.6
1/4			4.7	92.7
e			5.7	91.7
1/4			7.2	90.2
cb			7.9	89.5
+10			8.3	89.1
+16			9.5	87.9
S			11.2	86.2
+5			11.7	85.7
	475'E	Natural ground at 500 East.		
-5			8.3	89.1

97.39

Coronado con T

S

7.4

90.2

ob

5.3

92.1

1/2

4.7

92.7

e

3.8

93.6

1/2

2.7

94.7

ob

1.7

95.7

+15

0.8

96.6

✓

+0.8

98.2

T.P.

12.48

109.40

0.47

96.92

Cor + Ebers

W.W. Stone

397

10543 105.44

DEL MAR CURB ELEV.  
SANTA BARBARA WEST

80' wide  
20' SW

1000-0  
4(14)26

258.07

42

Del Mar Santa Barbara 7.65 258.07

W.L. Santa Barbara = 0.100

S cb 7.65 250.5

N cb 9.71 248.4

80' w'

N cb 4.57 253.5

S cb 3.16 254.9

100' w'

S cb 2.27 255.8

N cb 3.57 254.5

120'

N cb 3.10 255.0

S cb 1.95 256.2

140'

S cb 2.08 256.0

N cb 3.18 254.9

160'

N cb 3.81 254.3

S cb 2.86 255.2

180' w'

S cb 3.99 254.0

N cb 4.95 253.1

200' w'

N cb 6.62 251.5

S cb 5.61 252.5

260' w' = END of cb + shw on S side Del Mar

S L 10.1 248.0

cb on com. 10.66 247.4

1/4 10.5 247.6

c 10.6 247.5

1/4 10.7 247.4

cb 10.1 248.0

cb on com. 11.25 246.8 *cb lined here*

N 7.8 250.3

295' w' = END of cb on N side of Del Mar

N 9.9 248.2

cb 11.6 246.5

cb on com. 12.24 245.9

1/4 12.1 246.0

258.07

258.1

246.0

c

12.1

1/4

11.9

246.2

f8

12.7

245.4

cb

13.3

244.8

+b

14.2

243.9

+10

15.0

243.1

s

15.6

242.5

+5

15.7

242.4

T.P.

193

247.86

121.4

245.93

326 w

247.9

-5

9.6

238.3

s

9.3

238.6

+10

9.2

238.7

cb

8.0

239.9

1/4

7.5

240.4

c

6.5

241.4

1/4

5.3

242.6

cb

3.1

244.9

1/4

3.4

244.5

247.86

Del Mar 43

326 w

247.9

1/4

3.4

244.5

+11

3.6

244.3

cb

6.4

241.5

1/4

7.1

240.8

c

7.6

240.3

1/4

8.6

239.3

cr

9.0

238.7

s

10.6

237.3

+5

11.1

236.8

350 w

-5

12.2

235.7

s

11.6

236.3

cb

10.8

237.1

1/4

10.2

237.7

c

9.2

238.7

1/4

8.8

239.1

cb

8.2

239.7

+15

6.7

241.2

1/4

5.2

242.7

247.86

44

360' W

247.9

N

7.0

240.9

cb

8.8

239.1

375' W = old natural ground

N

9.0

238.9

cb

9.9

238.0

1/4

11.1

236.8

c

11.6

236.3

1/4

12.2

235.7

cb

13.2

234.7

+15

13.8

234.1

S

14.6

233.3

+5

15.2

232.7

Cross Section Pacific Hld  
From Mission Blvd to Ocean

60' wide  
18' cbs  
9' qb

492

45

51.21  
51.50  
51.51  
Northern

BM	088	484	462	SE Top Hld Pacific & Ocean	S	77	-2.28
TP	601	492	593		S	77	-2.28
				49.3 E of Mission Blvd = West Rail / SDE West RR	cb	71	-2.18
N	on Top Rail		607		1/4	77	-2.78
S	on Top Rail		604		2	77	-2.78
				40' E of Mission Blvd	1/4	73	-2.48
S	on Pav		633		cb	77	-2.48
cb			67		N	78	-2.88
1/4			67				
2			69		N	77	-2.58
1/4			65		cb	72	-2.28
cb			66		1/4	72	-2.28
N			72		2	90	-2.08
				30' E of Mission Blvd	1/4	73	-2.38
N			80		cb	73	-2.38
cb			78.0		S	72	-2.28
1/4			73				
2			75		S	70	-2.08
1/4			75		cb	73	-2.38
cb			72		1/4	73	-2.38

070 - N of Mission

50' W

70' W

492

Z		71	- 2.18
H		71	- 2.18
cb		71	- 2.18
N		70	- 2.08
	100'W		
N		61	- 1.18
H		57	- 0.48
cb		57	- 0.78
H		59	- 0.98
Z		56	- 0.68
H		58	- 0.88
cb		62	- 1.28
S		65	- 1.58
	150'W		
S		47	+ 0.22
cb		46	0.32
H		45	0.42
Z		45	0.42
H		43	0.62
cb		44	0.52
N		42	0.72

492

46

	200'W		
N		87	2.22
cb		88	2.12
H		90	1.92
Z		92	1.72
H		91	1.82
cb		92	1.72
S		95	1.42
	250'W		
S		21	2.82
cb		20	2.92
H		21	2.82
Z		22	2.72
H		17	3.22
cb		10	3.92
N		15	3.42
TP	5.22	960	4.25
	275'W		
N		43	5.3
cb		41	4.8
L3		50	4.6



960

11	60	3.6
2	61	3.2
14	62	3.4
cb	63	3.3
5	64	3.2

300' N

2	68	3.8
cb	57	3.9
14	57	3.9
2	62	3.4
17	63	3.3
14	56	4.0
cb	45	5.1
15	22	7.4
11	21	7.5

318' N

11	31	6.2
cb	25	7.1
18	11	5.2
14	63	3.3
2	62	3.4

960

13	57	3.9
15	46	5.0
14	10	5.6
16	11	5.2
cb	51	4.5
5	54	4.2

330' N

5	50	4.6
cb	50	4.6
17	21	7.2
11	21	7.2
17	56	4.0
2	63	3.3
14	61	3.2
16	25	7.1
cb	28	6.8
15	27	6.9
11	41	5.5

327' N

11	67	2.9
cb	66	3.0

47

920

97

11	64	3.2
2	66	3.0
16	60	3.6
11	51	4.2
cb	54	4.2
5	53	4.3

850' 24

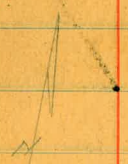
5	71	2.2
cb	76	2.0
11	76	2.0
2	77	1.9
14	78	1.7
cb	78	1.8
11	79	1.7

400' 14

11	105 92	- .9
cb	105	- .9
11	100	- 4
2	96	0.0
11	96	0.0
cb	96	0.0

Lio Costa Drive Drive  
 With Road Map Locations Clearances  
 From Chidwick to Murrumbidgee

71175  
 End Com  
 71595  
 21°13'



41555AR  
 1228300

2135AR 3138'

86950 238'

136° 16.1'

219 180 9.2'

2825 140 9.7'

10 229 180 11.3'

20 0+0

27°00'

ELE 11600

11550 66.24

Chidwick

5626  
 5155  
 3155  
 1015

131422LA

Berridge Dr

1973 131°

1977 103°

194 150°

194 10.6'

194 10.8'

188 150°

186 110° 11.4'

Carbide 238'

10 + 456AL 20' 20'

15° 2130'

1225'

106 192°

750'

7.05 220'

5.3 94.0 219'

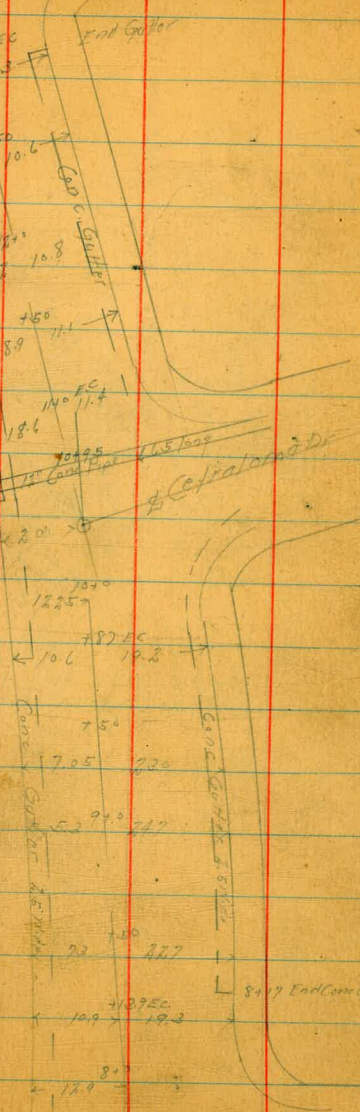
22 100 227'

109 192°

12.9 8°

71595AR  
 1998

Poor Berridge







138.89

850<sup>N</sup>

N 6.80 131.49

E 8.25 179.34

950<sup>N</sup>

E 6.93 131.36

N 5.15 133.14

987<sup>N</sup>

N 4.45 133.84

E - EC 6.28 137.01

BM 6.93 131.36

1087<sup>N</sup>

E - EC 5.08 133.71

N Creek 2.86 135.47

TP 10.51 148.70 6.10 138.19 -

1150<sup>N</sup>

N 9.27 139.53

E 11.28 137.54

1250<sup>N</sup>

E 4.42 144.78

N 2.02 146.68

1278<sup>N</sup>

148.70

N 0.27 148.43

E - EC 2.57 146.13

TP 11.56 159.99 0.27 148.43 -

1340<sup>N</sup>

N 8.39 157.60

1373<sup>N</sup>

N 6.72 153.47

E - EC 9.36 150.63

1400<sup>N</sup>

E 6.22 153.77

N 4.52 155.47

TP 12.54 172.39 0.15 159.84 ✓

1475<sup>N</sup>

N 9.11 163.48

E 8.25 163.54

1513<sup>N</sup>

E - E.C. End Co. 4.33 168.06

N 5.42 166.97

1528

E End Curb 2.90 169.89

BM 2.90 169.89

End Carb  
Baird's

52

172.39

1550

Loff

1.92

170.47

TP

1284

184.95

0.28

172.11

1579.3

Left

12.11

174.84

Right

End Curbit Gader

10.81

174.14

1625

PI

6.64

177.31

LH

7.82

177.13

1682

4.2

LH

3.18

181.77

PI

1.96

182.99

TP

1204

196.74

0.25

184.20

1750

PI

8.3

188.44

LH

10.01

186.23

1800

LH

9.89

189.45

PI

on Ch Private Dr

5.00

191.74

1851

PI

EC to Private Dr

4.08

194.66

196.74

LH

5.49

191.25

1875

LH

5.10

191.64

PI

4.00

194.74

1900

PI

4.19

194.55

LH

4.98

191.76

1925

LH

5.19

191.55

PI

4.62

194.14

1950

PI

5.21

191.43

LH

5.76

190.98

2050

LH

8.17

188.57

PI

8.10

188.64

2150

PI

10.58

186.44

LH

10.22

186.04

TP

11.44

1958

12.38

184.26

2288 - Corbit Inlet N 1/2 L 1

195.80

4

H 12.12 183.64

BAI

225

205101

NE Top Cards  
Lo Crests + Arlington

RI 11.60 184.40

23.50

RI 10.85 184.95

H 11.53 184.47

24.50

H 8.02 187.28

RI 2.20 188.50

25.45 IC

RI 2.89 194.91

H 3.86 191.94

11.99 207.41 ✓ 0.32 195.47 ✓

26.63

H End Card + Gator 10.54 196.90

RI 8.65 198.79

27.00

RI 6.85 400.59 0.10

H on Ground 9.0 199.44 Ground

27.86 = F.L. Arlington

H on Cb Return 5.89 402.05

RI = EC on Return 2.25 405.19



Top Curb Levels Catalina Drive  
 From Chatsworth to La Cresta

BM 237 99.04 ✓ 96.65 514 GP  
Chatsworth  
Tenn. sec

N Plotted  
L.H.M.  
8-10-26 010 N.C. Chatsworth Catalina 4.51 94.53

25' N

N 5.79 93.75

S - 10 5.59 93.45

100' N

S 9.89 89.15

N 9.90 89.14

TP 232 89.13 ✓ 1773 86.31 ✓

229' N F.L. Mabaska Dr. Ch. Gutter  
Sept. 2022

N 7.18 84.45

S 7.48 84.41

010' N.L. Mabaska Dr.

S 7.51 84.14

N 7.11 84.54

TP 730 90.23 ✓ 1679 82.93 ✓

100' N.L. Mabaska

N 6.30 83.85

S 6.63 83.60

Arlington Drive, N.W. line  
 Warrington St to 350' N.W. line

Elev - North curb of Parking  
 Warrington St.

0100 - West line La Cresta Drive

0100 194.00 - 4' st.

0150 197.50 curb

1100 201.00

1150 202.9

2100 204.3

2150 204.9

3100 205.5

3150 206.0

65.19.28  
 62.91.28  
 22.27.60

Top Corb Levels Centraloma Drive  
 From Chatsworth to La Graba

90.23

55

BM	239	99.04 ✓	96.65	514 BP Chatsworth & Tennessee	S		57.0	85.13	
		010 M C Chatsworth to Centraloma			N		5.04	85.19	
N		4.51	94.53			256 M			
		25 M			N		3.57	86.66	
N		5.79	93.75		S		3.57	86.66	
S		5.59	93.45			300 M			
		100 M			S		1.83	88.40	
S		9.89	89.15		N		1.80	81.43	
N		9.90	89.14		TP	12.47	102.29 ✓	0.41	87.82 ✓
TP	238	89.13 ✓	12.73	86.31 ✓			350 M		
		229 M 7 E L Hobaska Dr		Ch + Gutter Stops on EL	N		11.23	91.06	
N		7.18	84.45		S		11.28	91.01	
S		7.48	84.41			400 M			
		010 M L Hobaska Dr			S		8.00	94.49	
S		7.51	84.14		N		8.00	94.49	
N		7.11	84.54			500 M			
TP	730	90.22 ✓	16.79	82.93 ✓	N		0.55	101.74	
		100 M 44 Hobaska			S		0.92	101.87	
N		6.38	83.85		TP	12.72	114.70 ✓	0.31	101.98 ✓
S		6.63	83.60			100 M			

11470

55

S 570 109.50

H 571 109.49

TP 1298 127.35 ✓ 034 114.21

700 H

H 1090 116.95

S 1029 117.06

800 H

S 249 144.86

H 255 144.80

TP 923 135.83 ✓ 075 126.60 ✓

868 H

H 583 130.00

S = IC 580 130.03

889 H

H = IC 421 131.54

B.M. 452 131.81 ✓

Top Carb. Levels Hittingford Drive  
from Chatsworth to Warrington

BM	1217	145.36	138.19
		25 S.H. Chatsworth	
		H. Edge Parking Chatsworth	
E. Propch		12.55	134.81
M		8.72	136.64
		0.10 - H. Chatsworth	
M		9.31	136.05
E. Parking		9.80	135.56
E		11.40	133.96
		25 H	
E.		9.95	135.41
E ParkCb		9.24	136.14
M ParkCb		8.44	136.94
M		7.86	137.54
		50 H	
M		6.26	139.10
M ParkCb		7.00	138.36
E " "		7.74	144.64
E		8.43	136.93
		75 H	
E		6.51	138.85

Plotted  
J.H.M.

E ParkCb		5.84	139.54
M		5.10	145.76
M		4.99	140.87
		100 H	
M		1.92	143.44
M ParkCb		2.62	147.74
E		3.39	141.97
E		4.04	141.34
		125 H	
F		1.03	144.36
TP	11.95	157.83 ✓	0.28
E ParkCb		12.65	145.18
M		11.89	145.94
M		11.16	146.67
		150 H	
M		7.90	150.43
M ParkCb		8.08	149.75
E		8.55	148.95
E		9.53	148.30
		175 H	
E		5.30	154.53

145.36

5.70-2.6  
5.15-2.6  
5.10-2.6  
5.05-2.6  
5.00-2.6  
-7

15783

18097

E Park Cl			457	153.76
H " "			394	153.89
H			315	154.68
TP	10.48	168.62 ✓	0.09	157.74 ✓

E				12.31	168.66
E Park Cl				11.57	169.40
H " "				10.88	170.09
H				10.82	170.69

200'H

200'H

H			933	158.89
H Park Cl			1008	158.14
E " "			1071	157.51
E			1144	156.76

H				7.00	173.97
H Park Cl				7.70	173.47
E " "				8.25	174.74
E				8.87	174.10

225'H

225'H

E			734	160.86
E Park Cl			668	161.60
H " "			608	164.14
H			535	164.87

E				6.02	174.95
E Park Cl				5.41	175.56
H " "				4.88	176.15
H				4.32	176.65

250'H

250'H

H			136	166.86
H Park Cl			199	166.43
E " "			261	165.61
E			307	164.85

H				2.17	178.80
H Park Cl				2.27	178.30
E " "				3.15	177.84
E				3.67	177.30

180.97 ✓  
275'H

275'H

TP	12.86	180.97 ✓	0.11	168.11 ✓
----	-------	----------	------	----------

E				1.55	179.44
---	--	--	--	------	--------

		18097		
E Park Ch			112	179.85
X			0.75	180.44
X			0.28	180.69
TP	11.71	192.40 ✓	0.28	180.69 ✓
		400' N		
X			9.84	184.56
X Park Ch			10.15	184.45
E			10.59	181.81
E			10.90	181.50
		500' N		
E			2.45	189.95
E Park Ch			2.40	190.00
X			2.39	190.01
X			2.35	190.05
TP	11.71	203.76 ✓	0.35	192.05 ✓
		600' N		
X			6.25	197.51
X Park Ch			6.88	197.88
E			5.75	198.01
E			5.77	198.47

611' N 00' N  
K 00' N 11.71  
645' N 00' E

		203.76		
E			1.80	401.96
E Park Ch			2.72	401.04
X			3.20	400.56
TP	6.35	208.31 ✓	1.80	201.96 ✓
B N			3.11	205.20

HFCB  
LoGastor  
H 11.71  
205.19

✓ Cross Section of Harrington St.  
From Arlington to Wildwood Road

60' Wide  
10' Cbs  
10' Gts

208.15

B.M	295	208.15	705.20
		0+0 - E L Arlington	
N		25	705.65
Cb	Top	295	705.70
Gutter		58	704.35
1/4		45	703.65
2		51	703.05
1/4		60	704.15
17		63	701.85
Cb		59	704.45
S		57	704.85
		10 1/2 - Cb	
S	Top Curb	69	701.96
Gutter		70	701.11
Cb		63	701.85
1/4		59	704.75
2		51	703.05
1/4		45	703.65
Cb		37	704.45
N		34	704.75

Plotted  
J.L.M.

NE-CB  
20' Cbs  
15' Gts  
Arlington

Arlington  
20' Cbs  
10' Cbs  
15' Gts

Top Cb	217	705.68
1/4		
N	31	705.05
Cb	36	704.55
1/4	42	703.95
2	49	703.75
1/4	56	704.55
Cb	62	701.95
S	69	701.75
2	Arlington	
S	77	700.45
15	67	701.45
Cb	60	704.15
1/4	54	704.75
2	48	703.35
1/4	44	703.75
Cb	34	704.55
N	21	705.05
Top Patch Cb	250	705.65
1/4		
N	30	705.15

708.15

Cb		38	704.4
1/4		45	703.6
8		50	703.4
1/4		54	702.8
Cb		64	701.8
S		75	700.6
	Cb		
S	Top Cb	758	700.57
	Ground	82	199.95
Cb		67	701.4
1/4		51	704.6
8		54	704.8
1/4		45	703.65
Cb		38	704.4
H		31	705.1
	Top Carb	280	705.4
	Mid Arlington		
H		24	705.9
48		21	705.1
Cb		27	704.4
1/4		40	704.4

Carb. Est. from 5/4/17

708.15

21

46		43	703.8
47		51	703.1
48		51	703.1
1/4		55	704.6
45		57	704.4
46		54	704.8
Cb		62	704.0
S		70	701.4
	50.77 of 11.1 Arlington		
S		65	701.6
Cb		57	704.4
1/4		52	704.8
8		51	703.1
42		51	703.1
43		45	703.6
1/4		41	704.1
Cb		30	705.4
H		25	705.6
	75.14		
H		25	705.6
45		27	705.4



20815

17	3.9	704.7
Cb	3.7	704.4
1/4	4.0	704.7
+8	4.9	703.4
2	5.1	703.1
1/4	5.7	704.4
Cb	6.1	704.1
5	6.6	701.6
100' W		
5	7.2	701.0
Cb	6.4	701.8
+2	7.0	701.4
1/4	6.5	701.6
2	6.6	701.6
+1	5.4	707.8
+5	5.1	703.1
+8	6.0	707.4
1/4	5.7	707.4
+4	6.0	707.4
Cb	4.5	703.6
N	3.9	704.3

20815

22

125' W		
N	6.1	707.1
Cb Top End	7.0	701.4
Gutter	7.3	700.8
1/4	7.5	700.6
2	7.7	700.4
1/4	8.3	199.8
Cb Top	8.23	199.92
Gutter	9.0	199.15
5	8.3	199.8
200' W		
S Cb Top	10.94	197.41
N	9.62	198.53
250' W		
N Cb	11.19	196.96
S Cb	12.15	195.50
TP	10.29	207.92 ✓
		11.42
		26.7 W = 5.1
S Cb	12.07	194.95
SE of P...	12.47	194.55
N Cb	10.87	196.73
277' W		
N Cb	10.16	196.86
		Curb 10/10

	20702		
	300' W		
N cb	9.86	197.16	
	342' W - W.L. Ridge		
N cb	8.79	198.73	
S "	10.37	196.65	
S End Return	14.86	195.76	
	350' W		
S cb	8.58	198.14	
N cb	7.18	199.84	
	400' W		
N cb	3.52	403.50	
S "	5.42	401.60	
	419' W		
S	4.13	404.89	
N	- LC Drive End Con - G. after	2.16	404.86
S	N End Return	1.65	405.37
TP	9.24	214.02 ✓	2.19
	448' W		209.83 ✓
N	- End CB + G. after	7.09	406.98
S		9.24	404.83
	500' W		

	21407		
S	6.76	407.31	
N	5.32	408.75	
	567' W - F.L. Wildwood		
N	2.84	411.73	
N End Return	2.77	411.30	
S	3.85	410.44	
S End Return	3.92	410.15	
	W.L. Wildwood		
S	2.30	411.77	
S End Return	2.62	411.45	
N	1.84	417.73	
N End Return	1.80	417.73	

X. Section Bernice Dr. <sup>10' wide</sup> from W.L. Wells st. 10' to  
to La Cresta Dr. 10'

B.M. 514 B.P.  
CITY 1174  
+ NIAGARA

12.11 162.11 ✓ 150.00

T.P. 13.00 175.00 ✓ 0.11 162.00

W.L. WELLS ST.

S 6.9 168.1

cb. 7.3 167.7

$\frac{1}{4}$  7.3 167.7

$\frac{1}{4}$  7.2 167.8

$\frac{1}{4}$  7.5 167.5

cb. 7.0 167.0

N 6.1 168.9

K cb.

N 6.6 168.4

cb. 6.7 168.3

$\frac{1}{4}$  6.6 168.4

$\frac{1}{4}$  6.5 168.5

$\frac{1}{4}$  6.5 168.5

cb. 6.6 168.4

+ 5 5.9 169.1

S 6.0 169.0

175.00 ✓

N  $\frac{1}{4}$

S 5.0 170.0

+ 6 5.3 169.7

cb. 6.1 168.9

$\frac{1}{4}$  5.9 169.1

$\frac{1}{4}$  6.0 169.0

$\frac{1}{4}$  6.0 169.0

cb. 5.9 169.1

N 5.8 169.4

N 5.1 169.9

cb. 5.1 169.9

$\frac{1}{4}$  5.2 169.8

$\frac{1}{4}$  5.4 169.6

$\frac{1}{4}$  5.3 169.7

cb. 5.4 169.6

+ 4 4.6 170.4

S 4.3 170.7

E  $\frac{1}{4}$

S 3.3 171.7

WELLS  
1-27  
64

Plotted  
J.L.M.

175.00 ✓

cb.	4.1	170.9
$\frac{1}{4}$	4.6	170.4
2	5.0	170.0
$\frac{1}{4}$	4.8	170.4
cb.	4.8	170.7
N	5.0	170.0

E. Cb.

N	4.7	170.3
cb.	4.5	170.5
$\frac{1}{4}$	4.3	170.7
2	4.2	170.8
$\frac{1}{4}$	3.8	171.7
+ 6	3.9	171.1
cb.	3.2	171.8
+ 6	2.5	174.5
S	+ 0.2	175.4

E. L. YELLS St.

S	+ 2.0	177.0
+ 4	1.9	173.1
cb.	2.6	174.4
+ 4	3.6	171.4

175.00 ✓

65

$\frac{1}{4}$	3.5	171.5
2	3.8	171.4
$\frac{1}{4}$	4.0	171.0
cb.	4.5	170.5
+ 2	4.5	170.5
+ 5	3.8	171.7
N	3.9	171.1

37.47' E

N	3.0	174.0
+ 8	3.3	171.7
cb.	4.0	171.0
$\frac{1}{4}$	3.4	171.6
2	3.1	171.9
$\frac{1}{4}$	3.4	171.6
+ 7	2.9	174.1
cb.	2.1	174.9
+ 6	1.6	173.4
S	+ 2.0	177.0

72.74' E

S	0.8	174.7
cb.	1.7	173.3

175.00 /

+3 2.2 174.8

+5 2.9 174.1

 $\frac{1}{4}$  3.3 171.7

d 3.1 171.9

 $\frac{1}{4}$  3.5 171.5

cb. 3.9 171.1

+2 3.4 171.6

N 3.1 171.9

T.P. 3.82 178.47 / 0.35 174.65 /

72.74 S - PARALLEL WITH W.L. La Costa Dr.

N 8.7 169.8

cb. 8.8 169.7

 $\frac{1}{4}$  8.0 170.5

d 7.3 171.2

 $\frac{1}{4}$  6.7 171.8

cb. 5.7 174.8

5 4.2 174.3

E.C. South of St. Bernice Dr.

top cb. 1.86 176.64

top cb. on North 8.81 169.69

178.47 -

65

T.P. 0.03 165.48 13.07 165.45

T.P. 1.04 155.36 11.14 154.32

5.35

 $\frac{150.00}{1.01} = 811$

X Section REDONDO st 40' wide  
From N.L. SANTA CRUZ 380.12' N

5' cbs.  
9' 1/2

G.M. N.Y. 87  
CONTAINING 4  
SANTA CRUZ

SANTA CRUZ	12.55	176.06 187.36		163.91
T.P.	10.99	187.38	0.09	176.37

N.L. SANTA CRUZ

N-top Cb		5.69		181.67
Gutter		5.9		181.5
1/4		5.2		184.2
1/2		4.8		184.6
+5		4.5		184.9
1/4		3.5		183.9
cb		3.1		184.3
E		2.5		184.9

Plotted  
John M.

25' N  
197.77

T.P.	11.40	197.79	0.99	186.37 186.39
E			9.5	188.3
cb			10.0	187.8
1/4			10.3	187.5
+2			10.3	187.5
+6			13.3	184.5
1/2			13.3	184.5
1/4			14.1	183.7

Gutter

top Cb.

top Cb.

Gutter

1/4

1/2

+3

+7

1/4

cb

E

E

cb

1/4

+4

1/2

1/4

Gutter

top Cb.

197.79 -

197.77

50' N

75' N

14.9 184.9

14.52 183.75

12.84 184.93

13.2 184.6

12.5 185.3

11.9 185.9

11.8 186.0

9.5 188.3

9.2 188.6

9.0 188.8

8.6 189.2

8.2 189.6

8.6 189.2

9.2 188.6

10.7 187.1

10.8 187.0

11.4 186.4

11.5 186.3

11.53 186.74

67  
JANUARY  
1927

197.79  
197.77  
100° N

top cb.	10.46	187.31
Gutter	10.8	187.0
$\frac{1}{4}$	10.3	187.5
$\frac{1}{2}$	9.9	187.9
+5	10.0	187.8
$\frac{1}{4}$	8.6	189.7
cb.	8.2	189.6
E	7.6	190.7

125° N

E	6.6	191.7
cb.	6.7	191.1
$\frac{1}{4}$	7.3	190.5
+3	7.5	190.3
+5	8.7	189.1
$\frac{1}{2}$	8.8	189.0
$\frac{1}{4}$	9.2	188.4
Gutter	9.9	187.9
top cb.	9.60	188.7

168.7° N - Sh. Wildwood  
8.12 189.65

top cb.

197.79  
197.77

68

Gutter	8.6	189.7
$\frac{1}{4}$	7.9	189.9
$\frac{1}{2}$	7.2	190.6
+4	6.8	191.0
+6	5.3	194.5
$\frac{1}{4}$	4.8	193.0
cb.	4.1	193.7
+5 - top cb. Return = E	3.06	194.71
E	3.2	194.6

S cb. line Wildwood

E	3.2	194.6
cb.	3.2	194.6
$\frac{1}{4}$	3.6	194.7
$\frac{1}{2}$	4.4	193.4
+2	4.5	193.3
+6	6.7	191.1
$\frac{1}{4}$	7.0	190.8
Gutter	8.1	189.7
top cb.	7.81	189.96

S  $\frac{1}{4}$

127.79  
197.77

top cb.	7.52	190.45
Gutter	7.7	190.1
$\frac{1}{4}$	6.9	190.9
$\frac{1}{2}$	6.7	191.1
+3	6.2	191.6
+6	4.0	193.8
$\frac{1}{4}$	3.7	194.1
cb.	2.9	194.9
E	2.7	195.1

*to midwood*

E	2.0	195.8
cb.	2.5	195.3
$\frac{1}{4}$	3.3	194.5
+2	3.3	194.5
+3	6.0	191.8
$\frac{1}{2}$	6.4	191.4
$\frac{1}{4}$	6.6	191.4
Gut.	7.4	190.4
top. cb.	7.22	190.55

N  $\frac{1}{4}$

127.79  
197.77

69

top cb.	6.94	190.83
Gut.	7.3	190.5
$\frac{1}{4}$	6.3	191.5
$\frac{1}{2}$	5.6	194.4
+2	5.2	194.6
+5	2.4	195.4
$\frac{1}{4}$	2.1	195.7
cb.	1.8	196.0
$\frac{1}{2}$	1.3	196.5

N cb.

E	0.8	197.0
cb.	1.1	196.7
$\frac{1}{4}$	2.0	195.8
+2	2.3	195.5
+6	4.9	194.9
$\frac{1}{2}$	5.6	194.4
$\frac{1}{4}$	6.2	191.6
Gut.	7.0	190.8
top. cb.	6.77	191.00
T.P.	5.66	202.79
		204.27
	116	196.63
		196.61



208.29  
707.77  
N.L. Wildwood

top Cb.	11.18	191.09
Gut.	11.7	190.6
$\frac{1}{4}$	10.5	191.8
¢	10.0	194.3
+2	9.8	197.5
+6	6.8	195.5
$\frac{1}{4}$	6.2	196.1
cb.	5.6	196.7
E	4.8	197.5
	25' N	
E	3.6	198.7
cb.	4.6	197.7
$\frac{1}{4}$	5.6	196.7
+2	6.0	196.3
+7	9.5	197.8
¢	9.8	194.5
$\frac{1}{4}$	10.4	191.9
gut.	11.4	190.9
top cb.	11.05	191.22

208.29  
707.77  
50' North

70

top Cb.	11.18	191.09
Gutter	11.5	190.8
$\frac{1}{4}$	10.4	191.9
¢	9.7	194.6
+4	6.2	196.1
$\frac{1}{4}$	5.6	196.7
cb.	5.3	197.0
E	2.9	199.4
	75' N	
E	3.0	199.3
cb.	3.8	198.5
$\frac{1}{4}$	5.3	197.0
+5	6.0	196.3
+7	9.9	194.4
¢	10.2	194.1
$\frac{1}{4}$	10.9	191.4
gut	11.7	190.6
top Cb.	11.36	190.91
	100' N	

202.29  
704.47

top cb	11.86	190.41
Gutter	12.3	190.0
$\frac{1}{4}$	11.5	190.8
2	10.7	191.6
+5	6.3	196.0
$\frac{1}{4}$	5.4	196.9
cb.	3.8	198.5
E	2.9	199.4

125' N

E	4.3	198.0
cb.	5.7	196.6
$\frac{1}{4}$	7.2	195.1
+3	7.7	194.6
2	11.9	190.4
$\frac{1}{4}$	12.6	189.7
Gut.	13.1	189.4
top cb.	12.67	189.60

151.42' N

top cb.	13.83	188.44
Gutter	13.9	188.4

202.29  
704.47

$\frac{1}{4}$	13.2	189.1
2	12.2	190.1
+4	8.6	193.7
$\frac{1}{4}$	7.5	194.8
cb.	6.5	195.8
E	5.1	197.7
T.P.	0.58	189.92 189.90
T.P.	0.82	177.78 177.76
T.P.		176.94 176.94 163.91 163.93
	13.15	163.91 = BM. 0.02
	12.95	189.34
	12.98	176.94

10' w. d.  
30' e. s.  
10' h. t.

X See Montecito Way  
Jackdaw To Ibis + Ibis

East

2-18-27  
Mell.

276.16  
30' E

72

B.M.

0.66

276.16

275.50

sw. Jackdaw  
+ Montecito

oo = E. Line Jackdaw

S

1.0

275.16

cl

1.17

274.99

+1

1.7

274.46

1/4

1.3

274.86

C

1.2

274.96

1/4

1.4

274.76

+7

1.8

274.36

cl

1.14

275.02

N

0.8

275.36

10' E

N

1.9

274.26

cl

1.8

274.36

1/4

2.0

274.16

C

1.7

274.46

1/4

2.0

274.16

cl

2.2

273.96

S

1.7

274.46

S

2.6

273.56

cl

3.2

272.96

1/4

3.1

273.06

C

3.1

273.06

1/4

3.2

272.96

cl

3.1

273.06

N

3.1

273.06

N to 1 s. end walk to House

2.73

273.43

d 3' emt walk

60' E

N

4.3

271.86

cl

4.4

271.76

1/4

4.5

271.66

C

4.5

271.66

1/4

4.4

271.76

cl

4.2

271.96

S

4.3

271.86

90' E  
 ♀ Double garage on S emt floor o.l. back  
 ♀ " " " " N dir " " 4.0 "

S-66 - garage door

4.80

271.36

garage floor

S+2.0

5.04

271.10

emt approx

cl

5.2

270.96

	276.16 90'E (Eon)			
114		5.3	270.86	
c		5.3	270.86	
114		5.3	270.86	
d		5.2	270.96	
N		5.2	270.96	same as diff Floor
	107.5 c = E #114			
N		5.6	270.56	
d		5.7	270.46	
114		5.7	270.46	
c		5.6	270.56	
114		5.7	270.46	
d		5.6	270.56	
S		5.4	270.76	
+				
	115'E = E. Line #114			
S		5.2	270.96	on Lawn
+8		5.4	270.76	on Flower bed
d		5.7	270.46	gutter
114		5.7	270.46	
c		5.6	270.56	

	276.16			Monterito Way 73
114		5.9	270.26	
d		5.9	270.26	
N		5.8	270.36	
	150'E			
N		6.2	269.96	
d		6.4	269.76	
114		6.2	269.96	
c		6.1	270.06	
114		6.1	270.06	
d		6.1	270.06	gutter
+0.5		5.8	270.36	on Flower bed
S		5.6	270.56	on lawn
	168'E			
	25 N. of S Line	5.9	270.26	amt walk to House
	172'E			
S		5.8	270.36	
d		6.2	269.96	
+0.5		6.4	269.76	
114		6.5	269.66	
c		6.4	269.76	

276.14  
172' E. (Con)

14	6.5	269.66	
cl	6.8	269.36	
+3	6.4	269.76	
N	6.4	269.76	
+1	6.06	270.10	End of mt walk

195' E.

N	6.9	269.26	Lawn
cl	7.1	269.06	
14	6.9	269.26	
E	6.9	269.26	
14	6.8	269.36	
+7	7.1	269.06	
cl	6.8	269.36	
S	6.3	269.86	

215' E = W. Line Ibis St.

S	7.8	268.36	
cl	8.06	268.10	emt cl
+0.5	8.4	267.76	
14	8.1	268.06	
C	7.9	268.26	

Montecito Way

74

14	8.2	267.96	
+7	8.6	267.56	
cl	8.09	268.07	emt cl
N	7.8	268.36	

Street Graded East of Ibis.

100' E. Line Ibis St.

N. cl	9.13	267.03	
S. cl	9.18	266.98	

55.5 E = E end of emt walk on S.

100' E = E end of emt cl on S.

S	10.1	266.06	
cl	10.10	266.06	E end emt cl

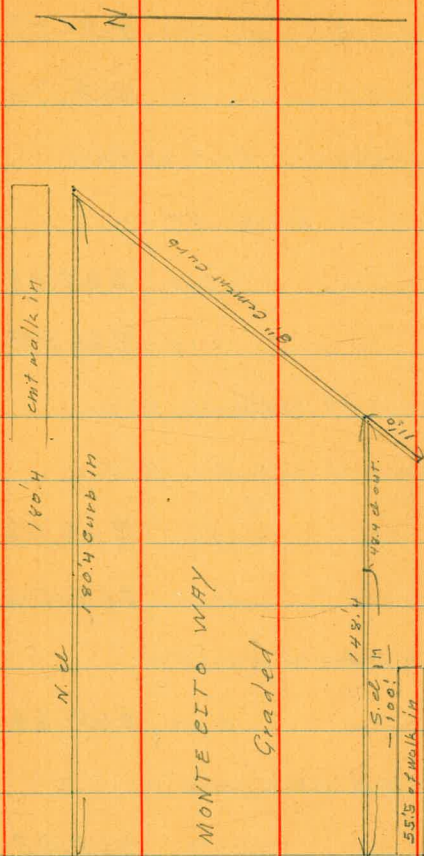
148.4 E on S. cl = cl across ST.

S. cl	10.50	265.66	
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180.4 E on N. cl = cross cl

N. cl	11.14	265.02	
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See SKETCH Page 75.



I B I 5

ST.







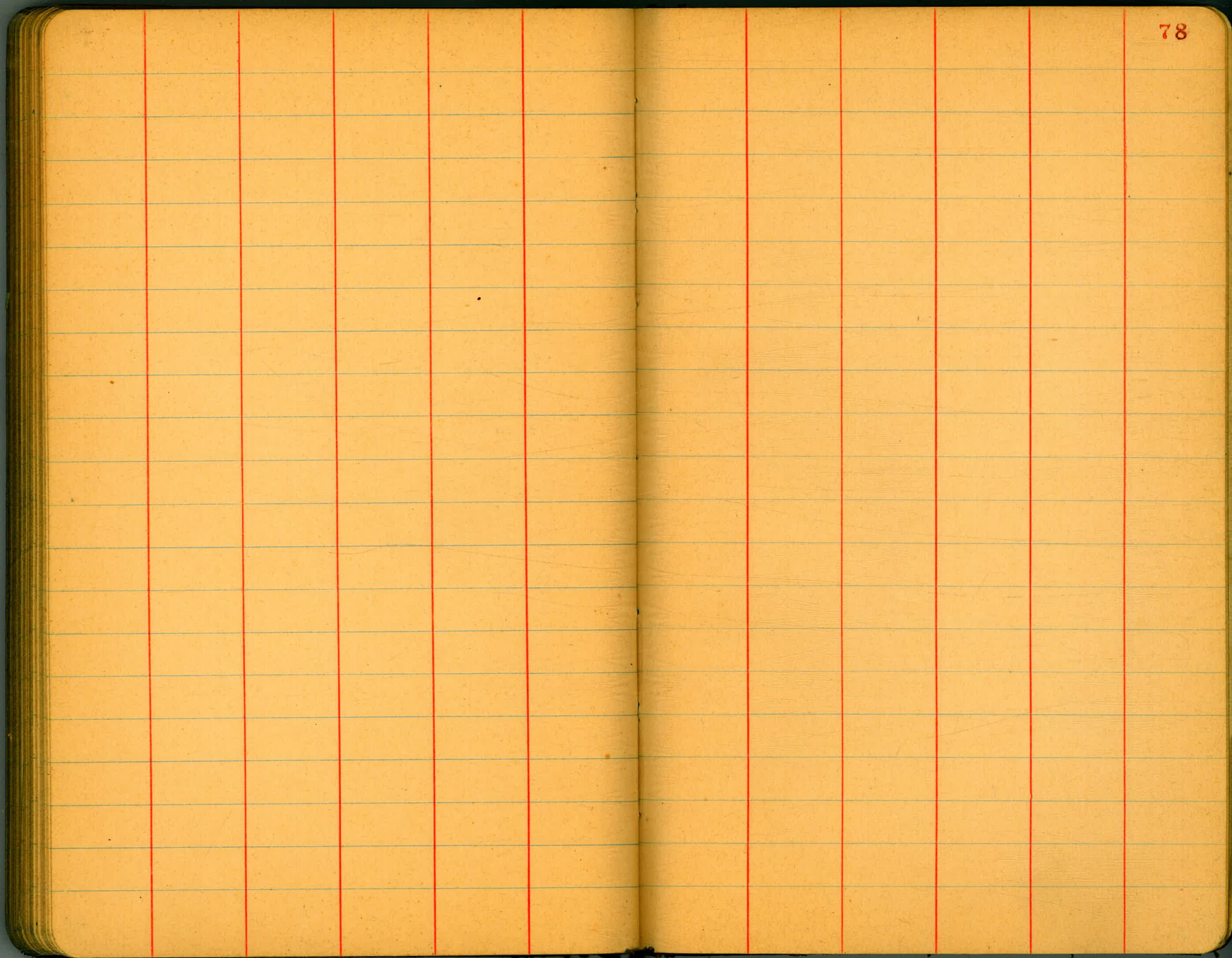






TABLE IX.—CALCULATION OF EARTHWORK.

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	.96	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	.90	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	2.53	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.  $= 1.48 + .023 + .089 = 1.597$  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  $\frac{1}{2}$  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.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

Roadway 16 feet wide. Side Slopes 1 on 1 1/2.  
For Single Track Embankment.

H	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	II
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  $41.9 + (20 - 10) \div 2$  or 2 ft. added to 41.9 = 43.9. For slopes of 1 on 1 see inside of front cover.