

1602



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ENGINEERS

LEVEL BOOK

No. 1602

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# 1602

## EUGENE DIETZGEN CO.

DRAWING MATERIALS, MATHEMATICAL and

**MICROFILM** 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 1½ see inside of back cover.

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# CITY ENGINEER'S OFFICE

ENGINEERING DEPARTMENT

CITY OF SAN DIEGO,

CALIFORNIA.

The paper stock of this book is made of a high grade 50% rag paper having a water resisting surface and is sewed with Bing Special Enamel Waterproof Thread.

Made in U. S. A.

Chica

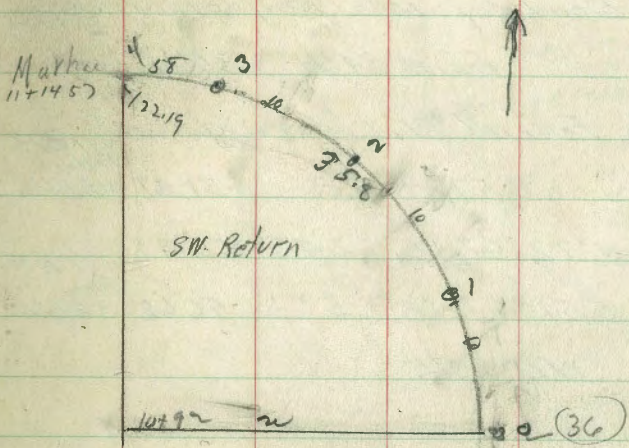
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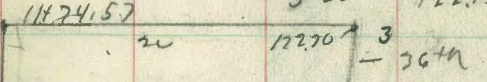
to b  
of r  
exar  
30.6

Cross-Sections of Proposed Broadway } Extension 80' Wide from 35th to Federal Blvd. }	2-13
Olive E. of State Location of Imp.	14
36th (N) to beyond Peak St.	16-17 19-29
above sketches	15 & 31
A.B. WRIGHT Survey Sub. Unit-1-	30
Estrella Trojan to El Cajon Blvd.	32-34
Trojan 48 to 49	35-39
Fairmount Canyon to Hillsdale	40-53
Wright St. P.Hi. to La Jolla	54-65
Alley Blk 88 E.W. Morse	66-71
& levels on Low & Cass Felipepar Fanuel (etc)	72-74

SW Ret Market + 36



Sto	+	M1	-	Flow
0	4.80	122.37		122.57
1			492	122.45
2			503	122.34
3			516	122.27
4			520	122.19



Market	+	M1	-	Flow
0	5.38	122.62		122.24
1			5.21	122.41
2			507	122.58
3				122.70

Mulker  
Bliss  
1st Bell  
5-9-41

Cross Section of Proposed Extension  
BROADWAY AVE. 80' wide 14' lbs. 13.0 45  
from 35th to FEDERAL Blvd.

Broadway is a projection of  
" " from 34th & 35th produced  
to Federal Blvd. Paving.

6.00 57.87 51.87 NW 1/4 B.P.  
Federal Blvd.

T.P. 6.72 62.13 2.46 55.41 NW 1/4 B.P. Non  
Broadway  
5.51 62.13 5.51 56.62 4351b

W/ 35th

S 64 55.7

cb. 63 55.8

1/4 61 56.0

2/4 61 56.0

1/4 57 56.4

cb. 55 56.6

N 57 56.4

W cb. 56 56.5

N 56 56.5

cb. 38 56.3

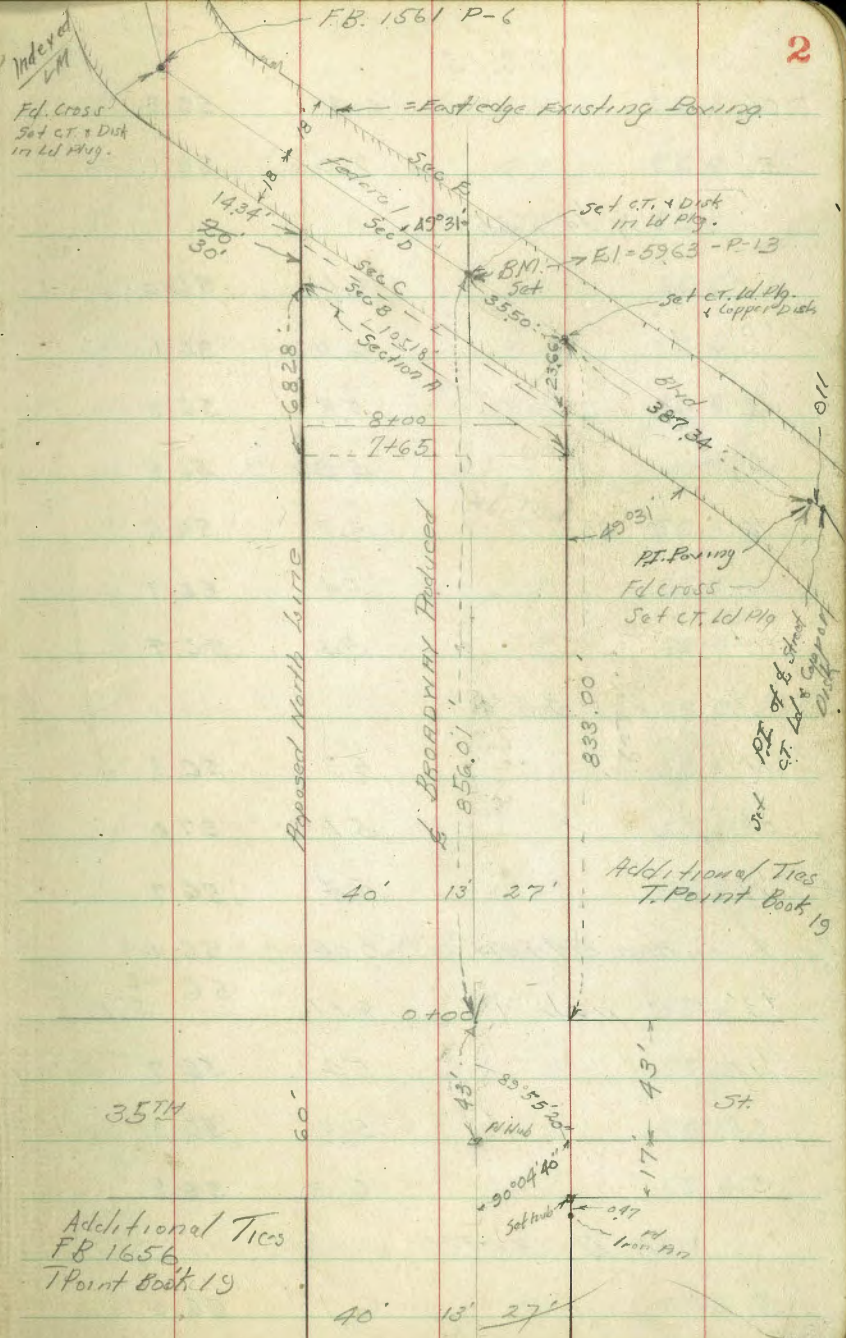
1/4 60 56.1

2/4 62 55.9

1/4 64 55.7

Cont. P. 3

Reduced & Plotted on light Profile paper  
4-14-41 GBH



2

62.13

cb.	6.8	55.3
S	7.0	55.1
N 1/4 35th		
S	6.1	56.0
cb.	6.0	56.1
1/2	5.8	56.3
2	5.3	56.8
1/4	5.5	56.6
cb.	5.4	56.1
N	5.4	56.7
E 2 35th		
N	5.3	56.8
cb.	5.1	57.0
1/2	5.4	56.7
2 on Rim old MH	6.04	56.09
13' " " New "	6.11	56.02 3' E
1/4	5.4	56.7
cb.	5.8	56.3
S	6.3	55.8
E 1/4 35th		
S	6.1	56.0

62.13

3

cb.	5.9	56.2
1/4	5.7	56.4
2	5.6	56.5
1/4	5.5	56.6
cb.	5.7	56.4
N	5.6	56.5
E cb.		
N	5.6	56.5
cb.	5.8	56.3
1/4	5.7	56.4
2	6.3	55.8
1/4	6.0	56.1
cb.	6.7	55.4
S	6.3	55.8
0+00 = E. 2 35th 04		
S	6.7	55.4
cb.	7.1	55.0
1/4	6.6	55.5
2	6.7	55.4
1/4	6.0	56.1
cb.	5.9	56.2
N	6.1	56.0

0+25

-15	5.5	56.6
N	5.6	56.5
cb.	5.7	56.4
1/4	6.0	56.1
L	6.2	55.9
1/4	7.2	54.9
cb.	7.2	54.9
S	6.7	55.4
+15	6.8	55.3

0+50

-15	7.5	54.6
S	8.8	53.3
cb.	9.0	53.1
1/4	8.4	53.7
L	8.7	53.4
1/4	8.8	53.3
cb.	7.8	54.3
N	7.7	54.4
+25	7.9	54.2

0+75 = Wedge Wabush Channel

-25 on bank	7.4	54.7
-------------	-----	------

N in channel	8.5	53.6
cb. " "	8.8	53.3
1/4 " "	9.3	52.8
L " "	9.6	52.5
1/4 " "	9.4	52.7
cb. " "	10.1	52.0
S " "	9.9	52.2
+25 " "	12.0	50.1

1+00 = in channel

-25	10.4	51.7
S	10.5	51.6
cb.	11.2	50.9
1/4	10.3	51.8
L	9.4	52.7
1/4	9.6	52.5
cb.	9.7	53.0
N	9.0	53.1
+25	8.3	53.8

1+25 = in channel

-25	8.5	53.6
N	9.6	52.5

6213

cb.	9.5	52.6
1/4	9.6	52.5
1/2	10.1	52.0
1/2	10.2	51.9
cb.	10.3	51.8
S	9.8	52.3
+25	10.4	51.7

1+50 - 10 channel

-25	10.0	52.1
S	9.5	52.6
cb.	9.2	52.9
1/4	8.9	53.2
1/2	10.0	52.1
1/4	10.0	52.1
cb	10.2	51.9
N	9.4	52.7
+25	8.7	53.4

1+85

-15 on Bank	4.3	57.8
N in channel	8.5	53.6
cb	9.1	52.0

6213

5

1/4	9.2	52.9
1/2	9.9	52.2
1/4	10.7	51.4
cb.	9.6	52.5
S	10.7	51.4
+25	10.3	51.8
TP	4.50 60.07	6.56 55.57

Nail  
in Pole.

2+00

-25 in channel	7.9	52.3	E edge channel
S " "	9.7	50.4	"
cb " "	8.2	51.9	"
1/4 " "	7.8	52.3	"
1/2 " "	7.2	52.9	"
+5 on Bank	3.8	56.3	"
1/4	3.5	56.6	
cb	3.0	57.1	
N	2.1	58.0	
+15	0.8	59.3	

2+13

-15	+2.8	63.9
N	+1.7	61.8



60.07

cb.	+08	60.9
1/4	00	60.1
L	17	58.4
1/4	34	56.7
cb.	49	55.2
S	61	54.0
+25	89	51.2

2+30

-25	83	51.8
S	73	52.8
cb.	54	54.7
1/4	35	56.6
L	17	58.4
1/4	+06	60.7
cb.	+19	62.0
N	+36	63.7
+15	+48	64.9

2+41

-15	+59	65.5
N	+35	63.6
cb.	+06	60.7

60.07

6

1/4	2.0	58.1
L	4.3	55.8
1/4	5.6	54.5
cb.	6.3	53.8
S	7.7	52.4
+25	8.0	52.1
+40	8.0	52.1

2+50

-25	81	52.0
S	8.3	51.8
cb.	8.2	51.9
+6	5.8	54.3
1/4	5.7	54.4
L	5.7	54.4
1/4	4.8	55.3
cb.	1.9	58.2
N	+1.3	61.4
+15	+4.0	64.1

2+75

-15	-2.8	62.9
N	4.5	55.6

6007

cb.		55	54.6
1/4		5.7	54.4
2		5.8	54.3
1/4		5.7	54.4
cb.		7.8	52.3
S		7.3	52.8
+25		8.7	51.4
TP	6.05	61.62	4.50 55.57
	3+00		
-25		9.1	52.5
S		10.2	51.4
cb.		7.3	54.3
1/4		6.5	55.1
2		7.4	54.2
1/4		7.0	54.6
cb.		7.1	54.5
N		7.1	54.5
+25		5.5	56.1
	3+25		
-25		6.0	55.6
N		4.5	55.1

6162

7

N cb.		7.0	54.6
1/4		7.2	54.4
2		7.1	54.5
1/4		6.5	55.1
cb.		6.5	55.1
S		9.4	52.2
+25		7.5	54.1
	3+50		
-25		10.6	51.0
S		9.3	52.3
cb.		10.0	51.6
1/4		7.0	54.6
2		6.7	54.9
1/4		7.0	54.6
cb.		7.2	54.4
N		7.2	54.4
+25		6.5	55.1
	3+75		
-25		8.5	53.1
N		7.1	54.5
cb.		7.1	54.5

6162

1/4	6.9	54.7
L	6.8	54.8
1/2	6.9	54.7
cb	8.8	52.8
S	2.1	52.5
+25	8.6	53.0

4100

-25	8.9	52.7
S	8.1	53.5
cb	9.0	52.6
1/4	6.9	54.7
L	7.1	54.5
1/2	6.8	54.8
cb	6.9	54.7
N	7.5	54.1
+25	7.2	54.4

4125

-25	6.8	54.8
N	5.4	56.2
cb	6.4	55.2
1/4	6.7	54.9

6162

8

L	6.9	54.7
1/4	6.9	54.7
cb	8.3	53.3
S	8.3	53.3
+25	10.2	51.4

4150

-25	12.2	49.4
-5	12.2	49.4
S	8.2	53.4
cb	6.5	55.1
1/4	6.4	55.2
L	6.5	55.1
1/2	6.8	54.8
cb	6.7	54.9
N	6.4	55.2
+25	6.1	55.5

4175

-25	7.8	53.8
N	11.5	50.1
cb	11.5	50.1
1/4	11.8	49.8

E	11.7	49.9
1/4	9.6	52.0
79	8.5	56.1
cb	5.5	56.1
76	6.3	55.3
5	9.5	52.1
725	11.8	49.8

5+00

-25	11.2	50.4
5	11.3	50.3
cb	11.7	49.9
1/4	11.3	50.3
L	11.5	50.1
1/4	10.8	50.8
cb	10.5	51.1
N	10.6	51.0
725	11.3	50.3

5+50

-25	10.9	51.3
N	9.7	51.9
cb	8.9	52.7

1/4	8.9	52.7
L	10.3	51.3
1/4	10.3	51.3
cb	10.4	51.2
5	10.2	51.4
725	10.6	51.0

5+85

-25 in channel	15.0	46.6
-5 " "	15.0	46.6
5	10.9	51.7
cb	10.6	51.0
1/4	9.9	51.7
L	10.3	51.3
1/4	9.5	52.1
cb	9.6	52.0
N	9.8	51.8
725	9.6	52.0

chollas creek

6+00

-25	9.2	52.4
N	9.5	52.1
cb	8.8	52.8

6162

N 1/4	10.0	51.6
L	10.9	50.7
1/4 in channel	14.4	47.2
cb " "	16.3	45.3
S " "	16.3	45.3
+25 " "	15.3	46.3

6+25

-25	10.2	51.4
S	11.1	50.5
cb.	12.0	49.6
1/4	12.0	49.6
L	13.3	47.3
1/4 in channel	14.5	47.1
cb " "	13.7	47.9
N on Bank	8.8	52.8
+25	9.2	52.4

6+39

-25	9.7	51.9
-13	8.7	52.9
N	12.4	49.2
cb. in channel	14.0	47.6

6162

10

1/4	12.6	49.0
L	12.0	49.6
1/4	10.7	50.9
cb	10.0	51.6
S	10.9	50.7
+25	10.8	50.8

6+50

-25	10.7	50.9
S	10.0	51.6
cb.	10.4	51.2
1/4	9.9	51.7
L	10.6	51.0
1/4	11.9	49.7
cb.	12.3	49.3
N	13.3	48.3
+25	10.2	51.4

6+75

-25	12.4	49.2
N	11.6	50.0
cb.	9.6	52.0
1/4	10.1	51.5

6162

d	10.1	51.5
S 1/4	10.3	51.3
cb.	9.3	52.3
S	8.8	52.8
	10.4	51.2

7+00

-25	9.8	51.8
S	9.3	52.3
cb.	8.6	53.0
1/4	8.7	52.9
1/2	9.4	52.2
1/4	9.3	52.3
cb.	9.9	51.7
N	10.5	51.1
+25	12.5	49.1

7+25

-25	12.0	49.6
N	9.0	52.6
cb.	10.3	51.3
1/4	9.0	52.6
1/2	8.6	53.0

6162

11

S 1/4	8.5	53.1
cb.	8.9	52.7
S	9.5	52.1
+25	9.2	52.4

7+65

-25	7.9	53.7
S	9.4	52.2
cb.	9.3	52.3
1/4	8.4	53.2
1/2	8.6	53.0
1/4	8.2	53.4
cb.	9.3	52.3
N	9.2	52.4
+25	10.3	51.3

7+80

-25	9.4	52.2
N	9.5	52.1
cb.	8.1	53.5
1/4	8.0	53.6
1/2	8.6	53.0
1/4	10.0	51.6

1/4 + 3/4 Intersection	9.0	52.6	Section A
S	4.7	56.9	
+5	3.0	58.6	
+25	3.0	58.6	
TP	4.56	63.37	2.81 58.81

Section A = 184' cbs 17.09' 1/4

-25	11.4	52.0	
S	11.2	52.2	
cb	11.4	52.0	
1/4	11.1	52.3	
L	10.4	53.0	
1/4	10.1	53.3	
cb	9.8	54.1	
N	9.1	54.3	
+20	9.9	53.5	
+25	11.3	52.1	

Sec B = 105.18 184' cbs 17.09' 1/4

-25	3.0	60.4	
N	3.3	60.1	
cb	3.6	59.8	
1/4	3.6	59.8	

L	4.5	58.9
1/4	4.7	58.7
cb	4.8	58.6
S	4.8	58.6
+25'	4.9	58.5

Sec C = W edge existing Porring

S-25' on Porring	4.66	58.71
S " "	4.51	58.86
cb " "	4.35	59.02
1/4 " "	4.17	59.20
L " "	4.07	59.30
1/4 " "	4.01	59.36
cb " "	3.90	59.47
N " "	3.70	59.67
+25 " "	3.58	59.79

Sec D = E Existing Porring

-25 on Porring	3.20	60.17
N " "	3.32	60.05
cb " "	3.43	59.94
1/4 " "	3.53	59.84
L " "	3.63	59.74

5'4 on Porng	3.74	59.63
cb " "	3.87	59.50
S " "	4.00	59.37
+25 " "	4.14	59.23

## Sec E = E edge Easting Porng

-25 on Porng	4.42	58.95
S " "	4.21	59.16
cb " "	4.11	59.26
1/4 " "	4.04	59.33
L " "	3.88	59.49
1/4 " "	3.74	59.63
cb " "	3.67	59.70
N " "	3.51	59.86
+25 " "	3.34	60.03

chk edge Porng	6.04	57.33
F.B. 1561-31	}	57.35
8+50 5'4		
		0.02 Error

13' line Brdwy + E Por.

Copper Disk 3.74 59.63 P-13



Location of Improvements  
Oliver St East of State

Indexed  
LM

0+20 = Fly End of Pile Dirt

H.L. + 5.5 = Fly Dirt Pile 2' High at H.L.

0+45

H.L. + 6.0 = Fly Dirt Pile 2' High at H.L.

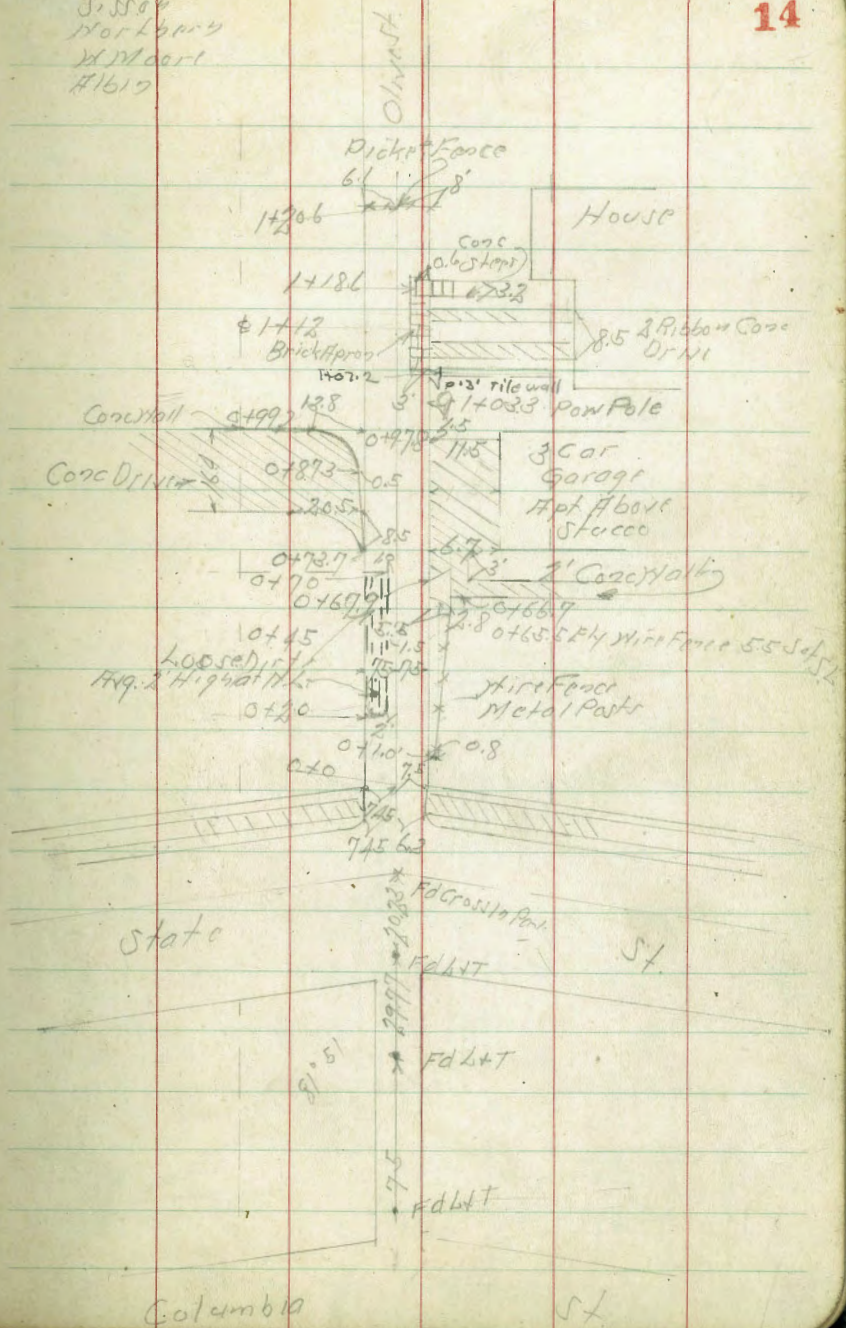
0+70 = Fly End of Pile Dirt

H.L. + 6.5 = Fly Dirt Pile 2' High at H.L.

Notes - There are some dead Cypress  
branches on top of dirt pile

Map 13-41  
Sisson  
Workman  
H. Wood  
H. 1612

14



Cross Section 3614 St  
L St to Peak St.

Indexed  
LM  
4+15.65

170.24.41  
S 35° 00'  
North by 2  
Moore  
1716.19

J St

M<sub>2</sub>

3+35.65

514198.85

Peak St

514138.85

30

3614 St

Base Line

2+64.29

32.8

K St

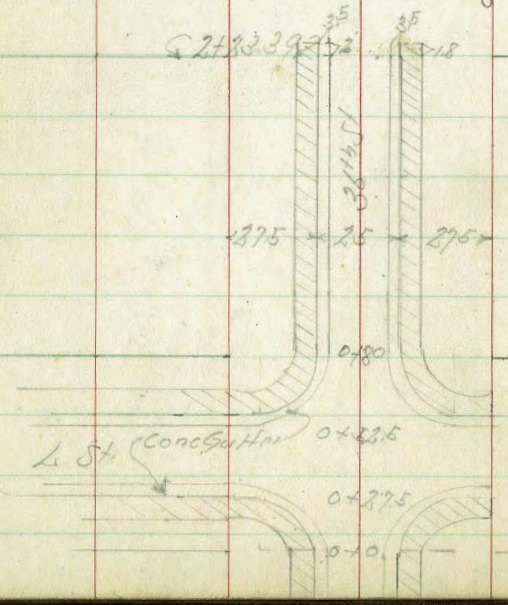
40.9

0+07

0+46.30

0+07  
17/01

52+33.39  
35  
35  
15.18



Market

5'  
75'

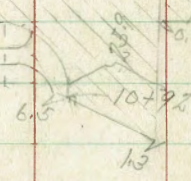
11+74.57

11+54.57

11+14.57

10+91.57

10+74.57



3614 St

Base Line

7+95.06

Island

27

M<sub>2</sub>

7+15.07

Cross Section 36th St.  
L St. to Park St.

0+27.5 = SC6 L St.

0+0 = J.L. L St.

BM 6.93 92.76 5.67 86.83  
5th L St  
 5th L St  
 13th St

TP 8.24 92.50 0.27 84.26

TP 10.89 84.53 0.29 74.14

TP 11.68 74.43 0.22 62.75

TP 11.71 62.97 0.49 51.26

TP 11.37 51.75 0.22 40.38

BM 11.03 40.60 29.57

B.P.N. Rail 18 ft.  
 Imperial

L-11 Z R1-E

88.03	87.33	87.4	87.4	87.1	86.67	87.35
5.73 40-cb	6.43 40-60	6.4 12.5	6.3	6.7 12.5	7.09 40-50	6.41 40-cb
86.81	85.89	86.18	86.1	85.94	85.66	86.36
6.95 12.5	7.77 12.5	7.58 9	7.7	7.82 9	8.10 12.5-50	7.40 12.5-cb

93.76

Red. and Plotted on Profile's  
 No. 1631 -  
 6-6-41 C.B.H.

2+0

92.20	91.38	91.61	91.8	91.28	90.99	91.62
1.56 12.5	2.38 12.5	2.15 9	2.0	2.48 9	2.77 12.5	2.14 12.5

1+50

90.83	90.01	90.19	90.4	89.74	89.44	90.09
2.93 12.5	3.25 12.5	3.57 9	3.4	4.02 9	4.32 12.5	3.67 12.5

1+0

89.30	88.49	88.71	89.0	88.24	87.95	88.58
4.46 12.5	5.27 12.5	5.65 9	4.8	5.57 9	5.81 12.5	5.18 12.5

0+80 = N6. L St

88.66	87.93	88.04	88.4	87.79	87.55	88.16
5.10 12.5-56	5.83 12.5-61	5.77 9-11 Apr	5.4	5.97 9-11 Apr	6.21 12.5-61	5.60 12.5-56

0+52.5 = N6 L St

87.96	87.18	88.0	88.0	87.6	86.50	87.19
5.80 40-56	6.58 40-61	6.8 12.5	5.8	6.8 12.5	7.26 40-56	6.57 40-56

0+40 = L St

87.8	87.8	87.9	87.7	87.1
6.0 40	6.0 12.5	5.9	6.1 12.5	6.7 40

9376

9376

Cross Section K St  
 From 36th St From S to 36th St to N

0+25

0+10

TP 0.28 91.46 11.91 91.18

2+64.3 = N.L. K St.

2+13

TP 10.24 103.09 0.91 92.85

2+25.4 = 11/4 Side Walk + Curb Rts Lt.

93.76

K = Plot. New Profile 7/19/41 C.O.H.

L.N

8

June 2-41  
 R.T.S. 18

81.3

78.5

77.5

76.3

75.5

74.8

10.2  
5.0

12.0  
2.0

14.0

15.2  
2.0

16.0  
4.0

16.7  
6.0

79.5

80.0

80.1

79.4

78.1

12.0  
4.0

12.5  
2.0

11.4

12.1  
2.0

12.1  
4.0

91.46

21

101.6

99.4

95.1

92.3

89.7

85.3

82.5

1.5  
4.0

2.7  
3.0

7.4  
12.5

10.8

12.4  
12.5

17.8  
3.0

20.6  
4.0

101.6

99.3

97.1

97.7

95.0

92.3

91.7

84.8

1.5  
4.0

3.8  
3.5

6.0  
2.5

5.4  
12.5

8.1

10.8  
12.5

11.4  
2.7

18.0  
4.0

103.09

102.3

94.1

92.88

92.04

92.28

92.5

92.04

91.78

92.40

92.0

83.4

7.85  
4.0

10.2  
2.5

0.88  
12.5

17.2  
12.5

14.8  
9.4

7.3  
9.4

1.23  
9

1.98  
13.5

1.31  
12.5

1.3  
23

1.04  
4.0

93.76

1760

1420

0780

TP 10.83 102.00 0.29 91.17.

0740.9 = 11.6 K ST

0720

0700 = 5.4 K ST

91.46

47.11

8

Pt. E

89.4

92.0

96.5

98.7

103.2

126  
50

90  
32.6

55  
15

3.3

113  
20

89.0

92.9

96.2

100.5

103.0

130  
50

91  
32.7

58  
15

1.5

71.0  
20

83.2

88.7

92.9

96.4

98.8

18.8  
50

12.3  
32.7-11.4

9.1  
15

5.6

3.2  
20

103.00

82.7

87.0

90.1

93.9

8.8  
32

4.5  
15

1.4

7.2  
20

81.9

86.4

89.5

91.6

9.6  
33

5.1  
15

2.0

7.1  
20

81.0

85.5

89.51

93.8

10.5  
33

6.0  
15

2.95  
0.717

7.3  
20

91.46

TP 12.12 113.73 0.39 101.61

370

2765

2745

2730

270

1785

102.00

dt

8

ft

20

91.9 95.2 97.2 99.5 102.3 103.5

10.1 6.8 4.8 2.5 10.3 7.5  
57-80/64 32.4 15 20 30

89.8 95.1 97.1 98.7 101.6 103.3

12.2 6.9 4.9 2.3 9.1 7.3  
57-80/64 32.5 15 20 30

92.0 94.2 95.9 97.4 99.8 101.2

10.0 7.8 6.1 4.6 2.2 0.8  
50 32.5 15 20 30

89.9 92.6 95.4 98.0 100.5 103.3

12.1 9.4 6.6 4.0 1.5 10.3  
50 32.6 15 20 30

89.8 93.9 97.7 98.9 101.6

12.2 8.1 4.3 3.1 0.4  
50 32.6 20 30

89.8 93.0 96.2 98.5 101.8

12.2 9.0 5.8 3.5 0.2  
50 32.6 15 20 30

102.00

570

4175

4145

411515 = 11.6 JST

377565 = 2 JST

R17

9.50

104.23

02 Mar  
13 2175 JST  
F.L. 361457

373565 = 52 JST 26.6 Lt of B = 744 Power Palt

113.73

106.8

107.4

108.0

109.1

110.7

111.7

6.9  
50

6.3  
322

5.7  
20

4.6

3.0  
20

2.0  
30

105.4

106.1

107.2

108.5

111.7

112.9

8.3  
50

7.6  
322

6.5  
15

5.2

3.0  
20

0.8  
30

104.1

106.3

106.5

108.4

111.4

112.1

9.6  
50

7.4  
322

7.2  
15

5.3

2.3  
20

1.6  
30

101.9

102.7

105.3

107.6

110.1

111.7

4.8  
50

11.0  
322

8.4  
15

6.1

3.6  
20

2.0  
30

99.0

101.1

104.5

105.9

106.9

109.3

14.7  
50

13.1  
322

9.2  
15

7.8

6.8  
13

4.1  
30

96.7

98.3

100.0

102.2

104.9

105.9

17.0  
50

15.4  
322

12.5  
15

11.5

8.8  
20

7.8  
30

113.73



740

Lt	B	Pt
116.3	116.5	117.0
7.4 50	7.2 32	6.7 15
66	59 20	56 30

6765

114.5	115.3	115.1	115.3	116.1	116.3
9.2 50	8.1 32	8.6 15	8.4	7.6 20	7.1 30

6780

112.8	113.8	114.0	114.6	115.3	115.8
10.9 50	9.9 32	9.7 15	9.1	8.4 20	7.9 30

640

111.1	111.6	112.7	113.6	114.2	114.3
12.6 50	11.9 32	11.0 15	10.1	9.5 20	9.1 30

TP 10.12 123.67 0.18 113.55

123.67

5757 26.6 Lt of B = Nly Power Pole

109.5	109.8	110.2	111.5	112.3	113.2
4.2 50	3.9 32.1	3.5 15	2.2	1.4 20	0.5 30

5780

107.9	108.8	109.0	109.7	111.5	112.3
5.8 50	4.9 32.1	4.7 15	4.0	2.2 20	1.4 30

113.73

113.73

7+9504 = N.L. Island

7+77

TP 11.54 124.87 0.34 123.33

7+70

7+5504 = L Island

7+47

7+19 264 Lt of B - Wly Power Pole ✓

BM

2.75 120.92

7+1504 = SL Island

123.67

Mon  
132 int Island  
E.L. 361504

L1

B

R1

1280	1283	1279	1276	1268	1262
69 50	66 31.7	70 15	73	81 15	87 30

1247	1250	1254	1251	1249	1229
102 50	99 31.7	95 15	98	100 10	120 30

13487

1222	1224	1227	1228	1228	1227
15 50	13 31.7	10 15	09	09 20	10 30

1220	1222	1225	1228	1231	1224
17 50	15 31.8	12 15	09	06 16	13 30

1206	1210	1215	1216	1215	1215
21 50	27	22 15	21	22 20	22 30

1173	1179	1179	1184	1189	1191
64 50	58 31.9	58 15	53	48 20	46 30

12367

9+60

156.2	156.8	157.3	156.5	154.4	152.7
$\frac{26}{50}$	$\frac{20}{31.6}$	$\frac{15}{15}$	$\frac{2.3}{15}$	$\frac{4.4}{15}$	$\frac{6.1}{30}$

9+30

25.8 Lt of  $\rho = 1/4$  Porv Pale

155.4	154.7	154.3	153.0	150.6	148.9
$\frac{3.4}{50}$	$\frac{4.1}{31.6}$	$\frac{4.5}{15}$	$\frac{5.8}{15}$	$\frac{8.2}{15}$	$\frac{9.9}{30}$

9+0

149.5	149.2	147.6	146.3	145.3	144.3
$\frac{9.3}{50}$	$\frac{9.6}{31.6}$	$\frac{11.2}{15}$	$\frac{12.5}{15}$	$\frac{13.5}{15}$	$\frac{14.5}{30}$

TP

11.84 158.82 0.09 146.98

158.82

8+65

141.5	141.6	140.6	139.6	137.5	137.1
$\frac{5.6}{50}$	$\frac{5.5}{31.6}$	$\frac{6.5}{15}$	$\frac{7.5}{15}$	$\frac{9.6}{15}$	$\frac{10.0}{30}$

TP

12.33 147.07 0.13 134.74

147.07

8+30

134.9	133.9	133.4	133.1	132.3	131.7
$\frac{0.0}{50}$	$\frac{1.0}{31.7-1/2}$	$\frac{1.5}{15}$	$\frac{1.8}{15}$	$\frac{2.6}{15}$	$\frac{3.2}{30}$

134.87

134.87

BM 8.95 122.26  
 122.81  
 Mark with  
 3/10/11  
 122.26

TP 6.69 131.21 11.99 124.52

TP 0.99 136.51 11.88 135.52

TP 0.41 147.40 11.83 146.99

10140

10124

10110

9180

158.82

41 B Pt.

147.4 149.5 142.5 126.4 126.3 136.5 140.3 146.5 144.6  
 11.4 9.3 16.3 32.4 32.5 22.3 18.5 12.3 14.2  
 65 72 40 25 70 14 18 30

151.5 152.7 152.8 152.1 150.6 147.7  
 7.3 6.1 6.0 6.7 8.2 11.0  
 50 31.5 15 15 15 30

154.1 155.6 155.8 156.1 155.6 151.8  
 4.7 3.2 3.0 2.7 3.2 7.0  
 50 31.5 15 13 13 30

155.2 156.5 157.2 157.3 156.8 153.7  
 3.6 2.3 1.6 1.5 2.0 5.1  
 50 31.5 15 10 10 30

158.82

11+3457 = 11 1/4 Pav From East + N Cb From W

122.24	121.61	122.24	122.49	122.35	122.28
8.97 49-Cb	9.60 49-Gut	8.97 20	8.72	8.86 15	8.93 30

11+3457

122.09	122.35	122.57	122.83	122.68	122.60
9.12 45	8.81 30	8.64 15	8.88	8.53 15	8.61 30

11+1457 = 5 1/4 Pav From East + S Cb from West

122.19	121.61	122.05	122.41	122.30	122.17
9.02 45-Cb	9.60 45-Gut	9.16 20	8.80	8.91 15	9.04 30

10+92

122.57	121.93	122.27	122.4	122.7	122.7
8.64 259-Cb 101	9.28 259-Gut	8.94 1.1-Edge 101	8.8	8.5 15	8.5 30

10+7457 = 5 1/2 Market From East

130.2	124.2	123.0	122.24	123.0	123.7	127.6	130.6
6.0 45	7.0 31.5	8.2 15	8.97 1.3-Edge 101	8.2	7.5 15	8.6 22	1.6 30

10+60

131.2	126.0	124.1	124.3	124.6	125.8	131.8	141.0
0.0 41	5.2 31.5	6.8 28	6.9 15	6.6	5.4 5	7.0 16	9.8 2.1-Top 2.0-1/2

131.21

131.31

12+25

12+0

12+65

TP 10.97 142.15 0.03 131.18

12+30

11+82

11+74.57 = 11.6 Market 27' lot of R =illy Pannu Pak

131.21

Lt

R

Rt

141.6	138.7	138.5	136.0	130.0	126.8
0.6	3.5	3.7	6.2	12.2	15.1
30	25	8		20	40

142.6	141.1	140.5	135.8	135.5	131.5	127.5	124.5
10.4	11	1.7	6.4	6.7	10.7	14.7	17.7
40	31	28	24		8	30	50

140.5	134.6	132.8	133.4	133.5	133.7	129.9	125.2
1.7	7.6	9.4	8.8	8.7	8.5	12.3	17.0
31: Top Cut	21	18	10		6	17	40

143.15

139.4	138.2	129.8	128.6	131.2	130.9	129.9	127.9	124.1
7.8	7.0	1.4	2.6	2.0	0.4	1.3	3.3	6.8
40	29	22	12	7		18	30	45

136.9	135.0	125.0	123.4	124.2	126.9	127.0	126.7
7.7	12.8	6.2	7.8	7.0	7.3	4.8	4.5
43	32	26	12		6	18	30

124.6	122.70	122.12	122.30	123.6	125.8	126.1	126.7
6.6	8.51	9.09	8.91	7.6	5.4	5.1	4.5
40	24.6	24.6	24.6	6.6	9	20	30
	6	5	5	9-ground			

131.21

15+25

14+98.85 = N.L. Peak

14+68.85 = Z Peak

14+38.85 = S.L. Peak

14+10

TP 9.76 151.86 0.05 142.10

13+70

142.15

28

L	R	FL
148.8	148.6	146.1
145.9	138.9	136.7
$\frac{3.1}{30}$	$\frac{5.8}{30}$	$\frac{5.8}{20}$
6.0	$\frac{13.0}{20}$	$\frac{15.2}{10}$

149.5	147.9	146.9	140.2	135.4	135.8
$\frac{2.1}{30}$	$\frac{4.0}{30}$	5.0	$\frac{10.7}{14}$	$\frac{15.5}{32}$	$\frac{16.1}{40}$

148.9	146.5	146.3	147.1	146.1	138.9	134.2
$\frac{3.0}{40}$	$\frac{4.4}{30}$	$\frac{5.1}{20}$	4.8	$\frac{5.8}{8}$	$\frac{13.0}{22}$	$\frac{17.7}{40}$

149.7	148.5	145.9	146.4	146.2	141.7	137.7	133.3
$\frac{2.2}{30}$	$\frac{3.4}{24}$	$\frac{6.0}{20}$	5.5	$\frac{5.7}{8}$	$\frac{10.2}{16}$	$\frac{14.2}{24}$	$\frac{18.6}{40}$

147.9	146.6	144.0	143.7	138.6	134.4
$\frac{4.0}{30}$	$\frac{5.3}{25}$	$\frac{7.9}{21}$	8.2	$\frac{13.3}{13}$	$\frac{17.5}{30}$

151.86 cont.

144.4	143.2	141.1	141.5	140.1	135.3	130.3	128.4
$\frac{4.2}{30}$	$\frac{7.0}{25}$	$\frac{6.1}{22}$	8.7	8.1	$\frac{6.9}{13}$	$\frac{11.9}{25}$	$\frac{13.8}{15}$

142.15

17+0

149.7	149.3	144.2	147.7	148.8	148.1	148.1
$\frac{22}{40}$	$\frac{26}{36}$	$\frac{7.7}{15}$	$\frac{4.2}{5}$	3.1	$\frac{3.8}{25}$	$\frac{5.8}{40}$

16+65

147.9	147.5	145.4	145.6	146.9	145.1
$\frac{4.0}{40}$	$\frac{4.1}{30}$	$\frac{6.5}{20}$	6.5	$\frac{5.0}{28}$	$\frac{6.8}{40}$

16+35

147.9	146.8	146.4	145.3	142.7	141.6
$\frac{4.0}{40}$	$\frac{5.1}{30}$	$\frac{5.5}{15}$	6.6	$\frac{9.2}{17}$	$\frac{10.2}{40}$

16+0

149.9	149.3	146.4	145.6	146.0	145.0	139.7	138.9
$\frac{2.0}{40}$	$\frac{2.6}{30}$	$\frac{5.5}{20}$	$\frac{6.2}{15}$	5.9	6.9	$\frac{12.2}{30}$	$\frac{13.0}{40}$

15+70

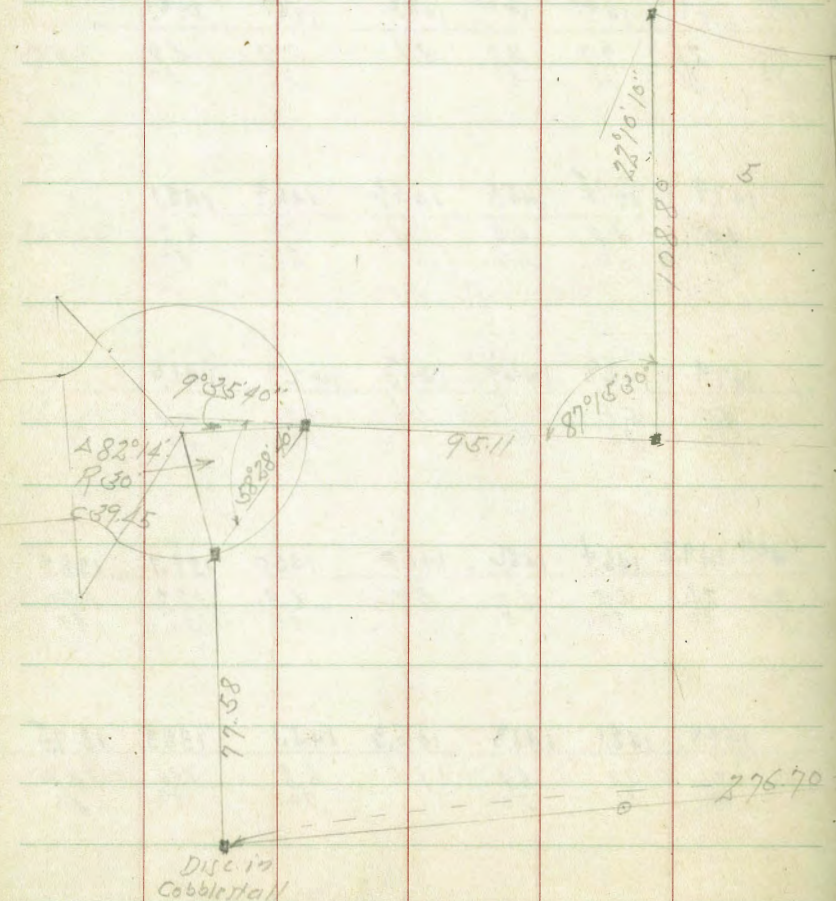
149.8	148.1	145.8	145.3	145.1	138.3	137.5
$\frac{2.1}{40}$	$\frac{2.8}{30}$	$\frac{6.1}{20}$	6.6	8.8	$\frac{13.6}{30}$	$\frac{14.1}{40}$

151.86



Indexed  
LM

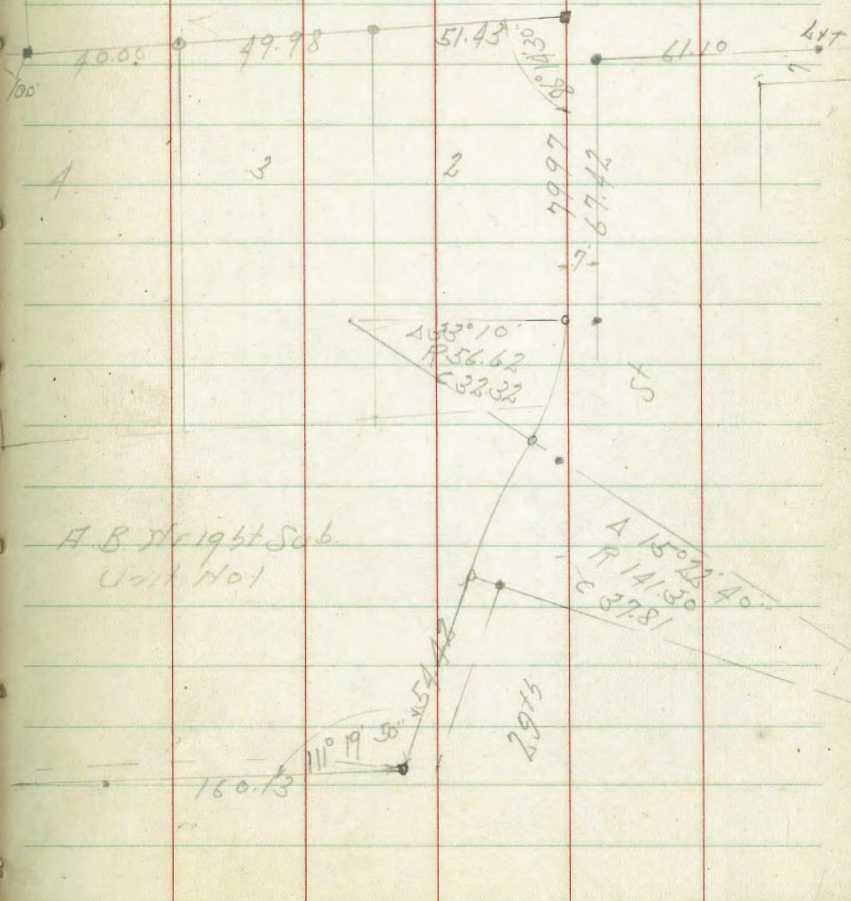
- = Conc. Mon. + Disc
- = Lead + Tack
- = 3/4" Iron Pin



A 25° 55' 40"  
 R 105.33  
 C 60.72

June 2-41  
 Sisson  
 Northey  
 Moore  
 H. B. W.

Kalmia Place

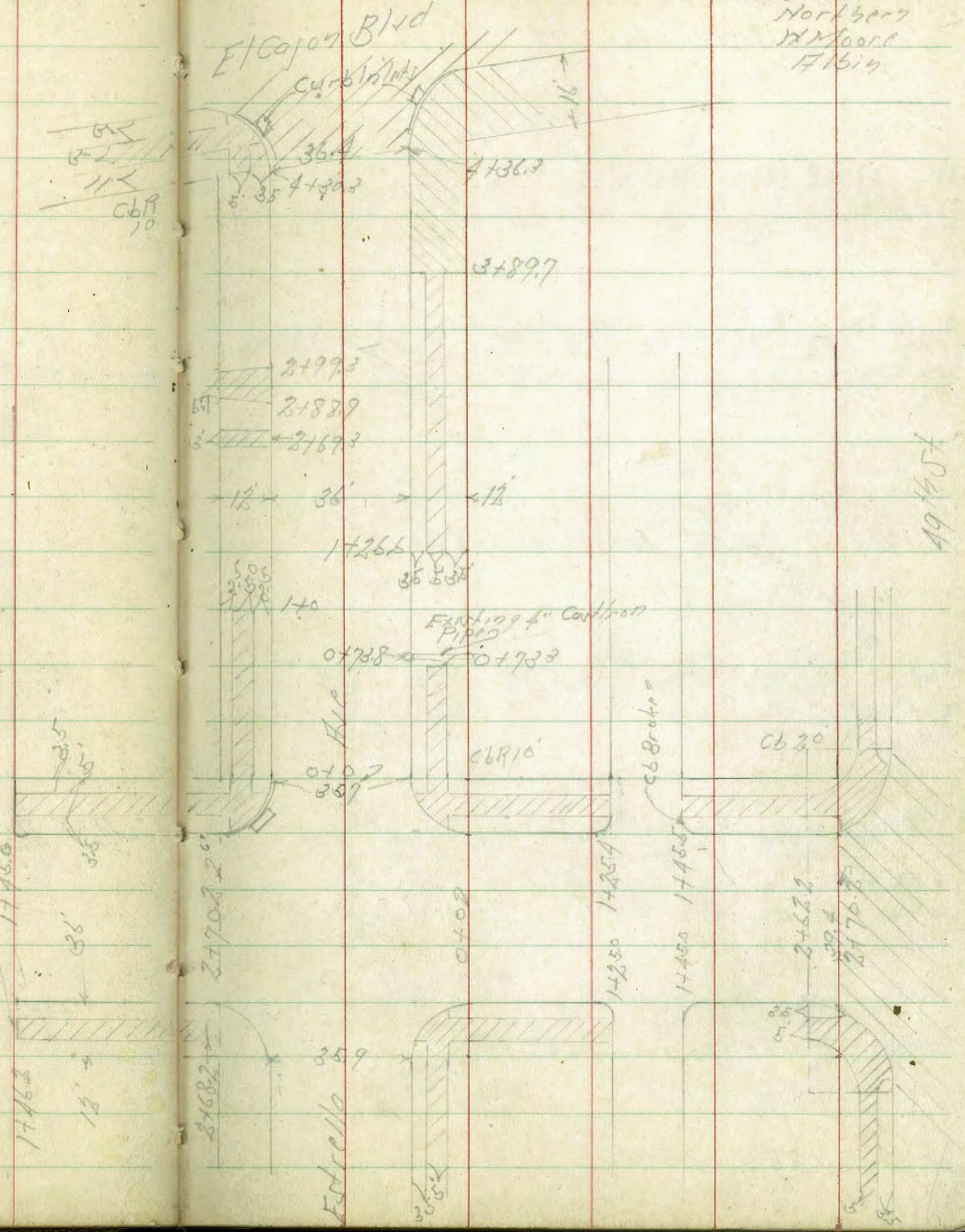
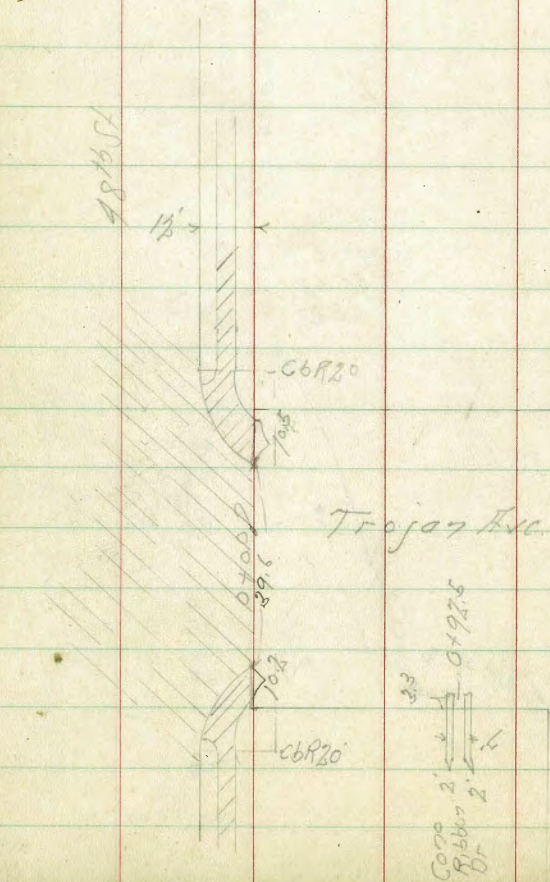


H. B. Wright Sub.  
Unit No. 1

A 15° 22' 40"  
 R 14.30  
 C 37.81

Cross Section Estrella Trojon to El Cajon  
Trojon 48th St to 49th St

June 20-41 31  
Sisson  
Holtzner  
H Moore  
Flin



49th St

Cross Section Estrella  
Trojan Ave to El Cajon  
Used K&E Level

Lt. W

Z

Pt. E

32

Roadway  
Between  
Curb Face  
At Top

1726.6

347.8	347.72	346.9	347.1	347.6	346.9	346.2	347.96	348.1
5.6	5.68	6.5	5.7	5.8	6.1	6.2	5.44	5.3
30	18	18	9	9	9	18		30

170

35.9

347.8	347.5	346.7	347.2	347.4	347.1	346.9	347.72	347.5
5.6	5.95	6.7	6.2	6.0	6.3	6.5	5.68	5.9
30	18	18	9	9	9	18	18	30

0738 = 4" Cast Iron Pipe 17 FCB

346.76

6.64  
179 FCB  
4" CI Pipe

0733

Profile 229

347.19	346.5	346.9	347.0	346.9	346.7	347.50	347.5
6.21	6.9	6.5	6.4	6.5	6.7	5.90	5.9
18	18	9		9	18	18	30

0750

35.9

346.94	346.2	346.5	346.7	346.6	346.6	347.35
6.46	7.2	6.9	6.7	6.8	6.8	6.05
18	18	9		9.0	18.5	17.9

070 = 14" Trojan

35.7

346.59	346.7	345.9	346.2	346.3	346.5	347.16
6.81	7.7	7.5	7.3	7.6	6.9	6.21
18-cb	18-6ut	9		9	18-5ut	18-cb

B/W 1.88

353.40

351.52

H&B  
El Cajon  
Estrella

353.40

Roadway

2x50

36.0

2x70

36.0

2x69.3 = 2.5' Cor Walk at Lt.

2x50

36.0

2x70

35.9

1x50

36.0

353.40

Lt

R

Pt

349.5	349.53	348.8	349.2	349.2	349.0	348.8	349.53
$\frac{5.9}{30}$	$\frac{5.87}{18}$	$\frac{1.6}{18}$	$\frac{1.2}{9}$	$\frac{1.2}{9}$	$\frac{1.1}{9}$	$\frac{1.6}{18}$	$\frac{5.87}{18}$

349.3	349.13	348.4	348.8	349.0	348.8	348.5	349.19
$\frac{4.1}{30}$	$\frac{4.37}{18}$	$\frac{5.0}{18}$	$\frac{1.6}{9}$	$\frac{1.1}{9}$	$\frac{1.6}{9}$	$\frac{1.9}{18}$	$\frac{1.31}{18}$

349.08	348.82
$\frac{1.32}{30 \text{ Cor Walk}}$	$\frac{1.58}{18 \text{ Cor}}$

348.8	348.56	347.9	348.5	348.5	348.3	348.0	348.77
$\frac{1.6}{30}$	$\frac{1.81}{18}$	$\frac{5.5}{18}$	$\frac{1.9}{9}$	$\frac{1.9}{9}$	$\frac{5.1}{9}$	$\frac{5.1}{18}$	$\frac{1.63}{18}$

348.7	348.22	347.5	348.0	348.2	348.1	347.8	348.47
$\frac{4.7}{30}$	$\frac{5.18}{18}$	$\frac{5.9}{18}$	$\frac{5.1}{9}$	$\frac{5.2}{9}$	$\frac{5.3}{9}$	$\frac{5.6}{18}$	$\frac{1.95}{18}$

348.2	347.87	347.1	348.0	348.0	347.6	347.3	348.15
$\frac{5.7}{30}$	$\frac{5.53}{18 \text{ Cor}}$	$\frac{6.3}{18 \text{ Cor}}$	$\frac{5.1}{9}$	$\frac{5.1}{9}$	$\frac{5.8}{9}$	$\frac{6.1}{18 \text{ Cor}}$	$\frac{5.25}{18 \text{ Cor}}$

353.40

TP 3.20 349.24 736 346.04

South Carbine El Cajon on Diag

47363 on Pt = SL El Cajon on Diag  
47303 on Hl

470 260.12x

353.40

L

S

PT

350.72 349.74 349.68 350.07 350.13 349.62 349.47 350.33  
2.68 2.66 3.72 3.23 2.37 3.78 2.92 3.07  
30.3-66 30.3-66 18.2 9.1 2.37 18.2 30.3-66 30.3-66

350.5 350.16 349.42 349.66 349.78 349.72 349.47 350.19  
2.9 3.24 3.98 3.74 2.62 2.58 2.92 3.21  
30.3 18.2 18.2 9.1 2.62 6 18.2 18.2

47 350.6 349.82 349.1 349.5 349.7 349.5 349.3 349.84  
3.8 3.58 4.2 3.9 2.7 2.9 4.8 3.58  
30 18=66 18=66 9 9 9 18=66 18=66

353.40

Cross Section Trojan Hse  
48th St to 49th St

1+0

0+92.6 = 2 2 Conc Ribbon Drive 0219t

0+50

0+27 = 2 5 Conc Walk 02 Lt

0+0 = F.L. 48th St

0-12 = FCB line 48th St

34924 H Ford

Plot on Profile 855 G.D.H.

Raise all elevations .06 to agree with  
original notes Book 1161-62

LN

S

RTS

35

344.4 343.6 343.6 343.5 343.2 343.0 343.5 344.1  
5.8 5.8 5.6 5.7 6.0 6.2 5.7 5.1  
30 18 9 20 18 20 30

343.85

5.39  
26.7 = 2 2 Conc  
Drive

344.0 343.4 343.2 342.8 342.6 342.5 342.9 342.9  
5.2 5.8 6.0 6.4 6.6 6.7 6.0 6.0  
30 18 9 9 18 30 30

344.26

4.98  
27.6 = 5 4 1/2  
Conc Wall

344.1 343.81 343.74 343.28 342.98 342.60 342.04 342.54 342.5  
5.1 5.4 5.0 5.9 6.2 6.4 7.2 6.7 6.7  
30 19.8-36 19.8-50 9 9 19.8-90 19.8-36 30

344.16 343.77 343.30 343.04 342.84 342.67 342.46 342.29 342.01 341.96 342.41  
5.08 5.27 5.94 6.20 6.40 6.57 6.78 6.95 7.23 7.28 6.88  
30 30 30 18 9 9 18 30 30 30 30-50 30-30

34924

Roadway  
Below  
Curb Face  
At Top

2135

35.8

210

1775

35.8

1745 - FL H/CY

1725 - FL H/CY

1723 20.9 RT of S - Sky Port or Pole

1711 = 8' Conc Walk

34924

LT

Z

RT

346.11

5.13  
18

345.7

5.13  
18

345.9

5.20  
9

345.8

5.1  
9

345.7

5.15  
9

345.8

5.1  
18

346.10

5.11  
18

Drive

345.66

5.15  
18

345.2

4.0  
18

345.4

5.18  
9

345.2

4.0  
18

345.0

4.2  
18

345.2

4.0  
18

345.77

5.17  
18

345.31

3.93  
18-C6

344.8

4.1  
18-Gutter

345.0

4.2  
9

344.9

4.3  
18

344.8

4.1  
18

344.4

4.8  
18-Gutter

345.26

3.98  
18-C6

345.25

3.99  
18-C6

344.7

4.5  
30-Gutter

344.97

4.27  
18-C6

344.3

4.9  
18-Gutter

344.6

4.7  
18

344.4

4.8  
18

344.2

5.0  
18

343.9

4.8  
18

344.3

4.8  
18

344.9

4.0  
18

344.6

4.6  
18

344.0

5.2  
18

344.0

5.2  
9

344.0

5.2  
18

343.8

5.1  
9

343.4

5.0  
18

343.7

5.2  
18

344.6

4.6  
18

344.07

5.17  
26.7-344.97  
10.17

34924

Trojan Hic

cu  
Lt

Z

5  
Pt

37

3730.2 = 070 = EL Estrella 358 RM

347.11	346.7	346.8	347.2	347.1	347.0	347.94
215	30	24	20	21	27	1.30
18-cb	18-50	9		9	18-50	18-cb

3718.2 = Ec. Estrella

347.15	346.4	346.2	346.8	347.0	347.0	346.9	347.1	348.19
209	28	30	24	22	22	23	21	107
30-cb	30-cb	18	9	9	18	30-50	30-50	30-cb

3700.2 = ♀ Estrella

346.1	346.2	346.5	346.8	346.9	347.1	347.4
31	30	27	24	23	21	18
30	18	9		9	18	68

2782.2 = 14cb Estrella

346.55	345.6	345.6	346.5	346.8	346.9	346.6	347.0	348.24
219	21	26	27	24	23	26	22	100
30-cb	30-50	18	9		9	18	30-50	30-cb

2780 = ♀ 1st at on Grating on Lt

345.57

367  
21.2 on 5/10/11

2770.2 = 14cb Estrella 359 RM

346.58	345.7	346.2	346.6	346.7	346.5	347.59	348.1
266	25	30	26	25	27	165	11
18-cb	18-50	9		9	18-50	18-cb	30

349.24

349.24



Flood No.  
Bot near  
Curb face  
At Top

1475 358

1445 = F.L. Alley 359

1435 = Z Alley

1425 = W.L. Alley 360

TP 8.46 356.52 118 348.06

140 358

0750 358

349.24

L L R

349.58 349.0 348.9 349.2 349.1 349.0 349.84  
6.91 7.5 7.6 7.3 7.4 7.5 6.68  
18 18 9 9 9 18 18

349.22 348.8 348.95 348.3 348.4 348.9 348.8 348.8 349.19 349.58  
7.30 7.7 7.57 8.2 8.1 7.6 7.7 7.7 7.33 6.91  
30-cb 30-Ground 18-cb 18 9 9 9 18-Gutter 18-cb 30-cb  
Ground

348.7 348.4 347.9 348.5 9 348.09 348.7 348.7 348.9  
7.8 8.1 8.6 8.0 7.13 7.8 7.8 7.6  
30 30 18 9 20-114 9 18 30

348.78 348.58 347.8 348.3 348.7 348.5 348.3 348.69 348.8 349.01  
7.74 7.91 8.7 8.2 7.8 8.0 8.2 7.83 7.7 7.61  
30-cb 18 18 9 9 18 18 30 30-cb

356.52

348.27 347.4 347.9 348.1 348.0 347.7 348.56  
0.97 1.8 1.3 1.1 1.2 1.5 0.68  
18 18 9 9 9 18 18

347.67 346.7 347.1 347.5 347.5 347.4 348.22  
1.57 2.5 2.1 1.7 1.7 1.8 1.02  
18-cb 18-cb 9 9 9 18-Gut 18-cb

349.24

Trojan

BJM

2.05

351.48

NVBP  
F10105 +  
F10110  
351.52

TP

7.1

353.53

10.10

346.42

2+822 - NCB Line 49<sup>th</sup> St

2+702 - N.L. 49<sup>th</sup> St

2+622 - CB BC

35.9 RM

2+35

2+0

35.7 RM

356.52

4.

2

RT

39

351.93

351.44

351.43

351.65

351.95

352.04

352.07

352.04

351.99

351.91

352.36

4.59

5.08

5.09

4.87

4.57

4.48

4.45

4.48

4.53

4.61

4.6

38<sup>th</sup>

38<sup>th</sup>

38<sup>th</sup>

38<sup>th</sup>

38<sup>th</sup>

38<sup>th</sup>

38<sup>th</sup>

38<sup>th</sup>

38<sup>th</sup>

38<sup>th</sup>

38<sup>th</sup>

38<sup>th</sup>

38<sup>th</sup>

38<sup>th</sup>

351.77

351.24

351.57

351.72

351.77

351.59

352.06

4.75

5.28

4.95

4.80

4.75

4.92

4.11

4.11

4.11

4.11

4.11

4.11

351.61

351.0

350.9

351.3

351.3

351.1

351.79

351.9

352.6

4.91

5.5

5.6

5.2

5.2

5.4

4.79

4.6

4.6

4.6

4.6

4.6

350.97

350.1

350.1

350.5

350.5

350.1

351.07

351.2

352.2

5.55

6.4

6.4

6.0

6.0

6.4

5.45

5.5

5.5

5.5

5.5

5.5

350.17

349.4

349.3

349.7

349.6

349.3

350.38

350.3

351.1

6.25

7.1

7.2

6.8

6.9

7.1

6.14

6.2

6.2

6.2

6.2

6.2

18-66

18-64

18-64

18-64

18-64

18-64

18-64

18-64

18-64

18-64

18-64

18-64

356.52

Stadia Survey  
for Road  
From Fairmont via Carron  
to Hilldale, E. of Marlborough

10 + Sta 97 EC

9 + Sta 91 P.I. 16°00' LT  
R = 800  
T = 12.43  
L = 222.4

8 + 46 P.O.T.

8 + 29.57 B.C. LT

5 + 42 P.O.T.

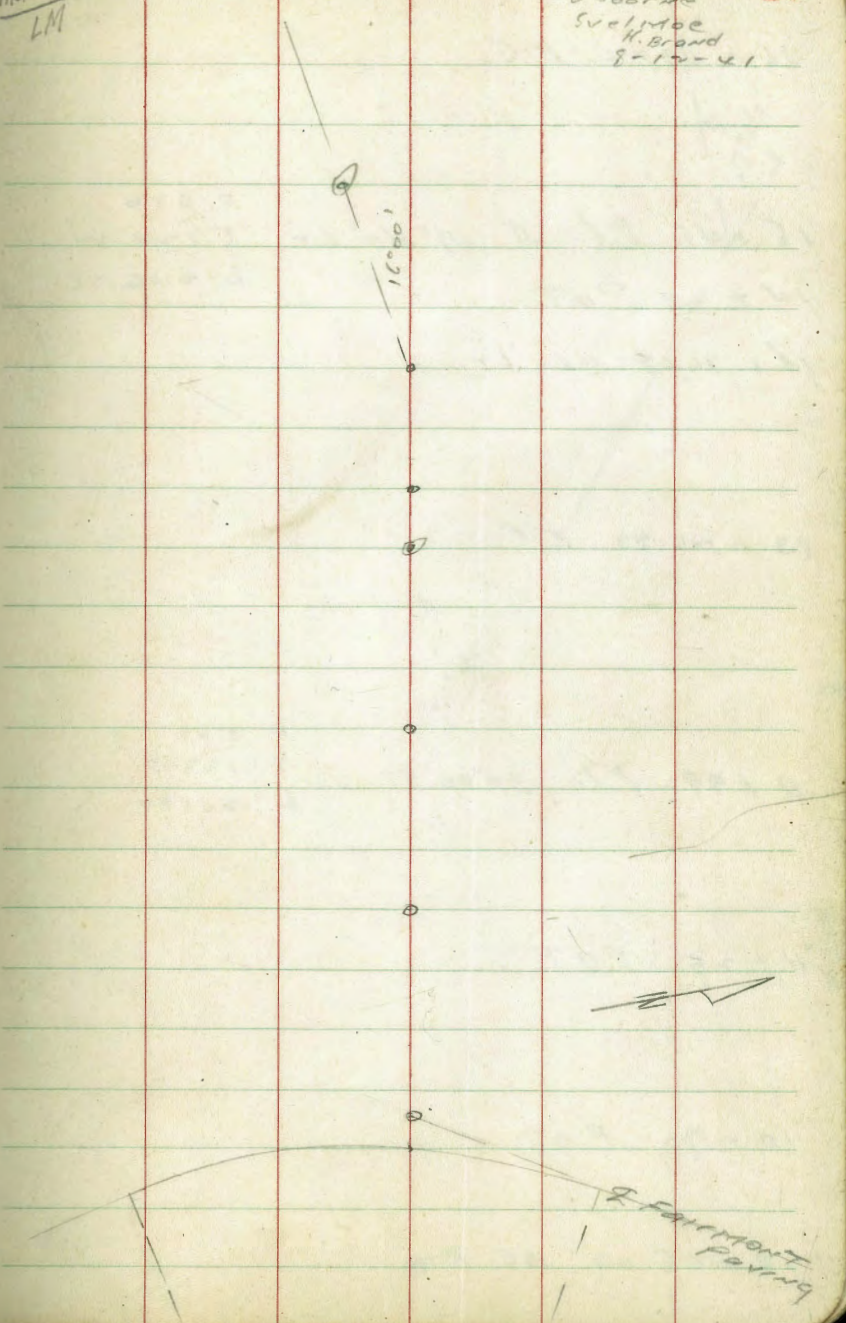
2 + 18 P.O.T.

0 + 00

Indexed  
LM

Moore  
Osborne  
Sveinsoe  
H. Brand  
8-12-41

40



16 + 63.34 E.C.

15 + 41 P.I.  $\Delta$   $17^{\circ}40'$  LT

R 800  
T 124.32  
L 246.66

14 + 49 P.O.T.

14 + 16.18 B.C. LT.

13 + 26.83 E.C.

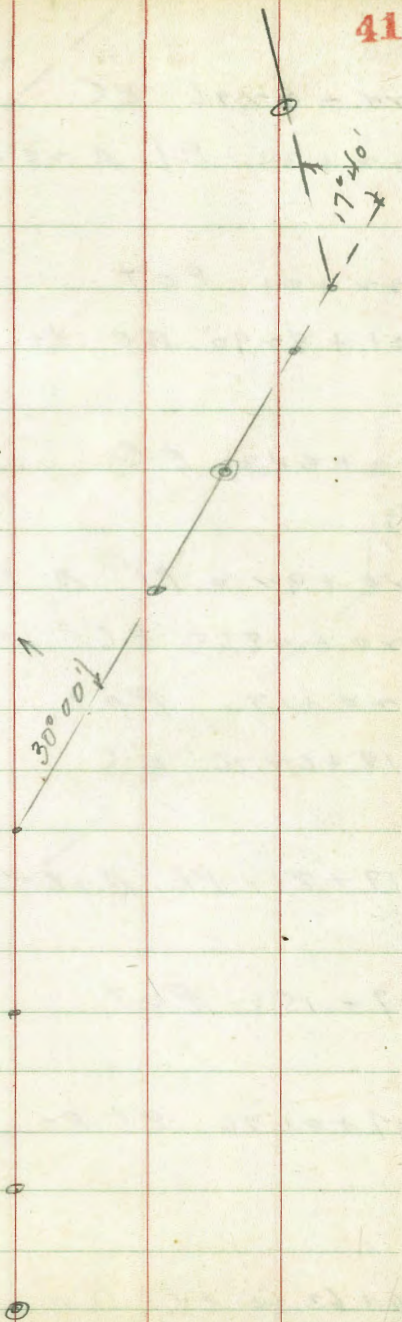
11 + 99 P.I.  $30^{\circ}00'$  RT

R 500  
T 13397  
L 26180

11 + 25 P.O.T.

10 + 90 P.O.T.

10 + 65.03 B.C. RT.



22 + 82.96 E.C.

22 + 34 P.I.  $\Delta$  28°40' RT

R 200  
T 51.10  
L 100.00

22 + 01 P.O.T.

21 + 82.90 B.C. RT

21 + 54.31 E.C.

20 + 92 = P.I.  $\Delta$  18°00' LT. T 63.35

20 + 28.65 B.C. LT.

R 400  
L 125.00

20 + 17 P.O.T.

18 + 62.76 E.C.

17 + 81 = P.I.  $\Delta$  61°30' RT

R 150  
T 29.05  
L 161.00

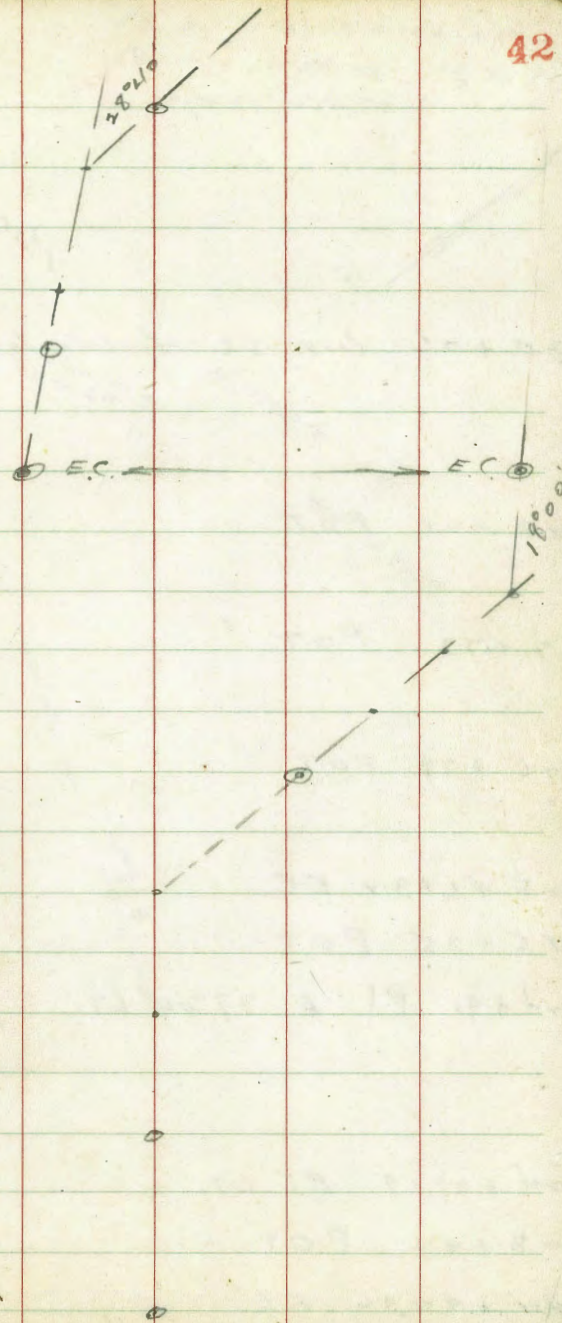
17 + 15.3 P.O.T.

17 + 01.76 B.C. RT

16 + 63.34 E.C.

EX. 15

42



Marlborough Dr

30+06 Int. SL Hildale Rd.

28+46 P.O.T.

27+73 P.O.T.

26+78 P.O.T.

25+68.97 E.C.

25+35 P.O.T.

24+91 P.I. A 37°04' LT.

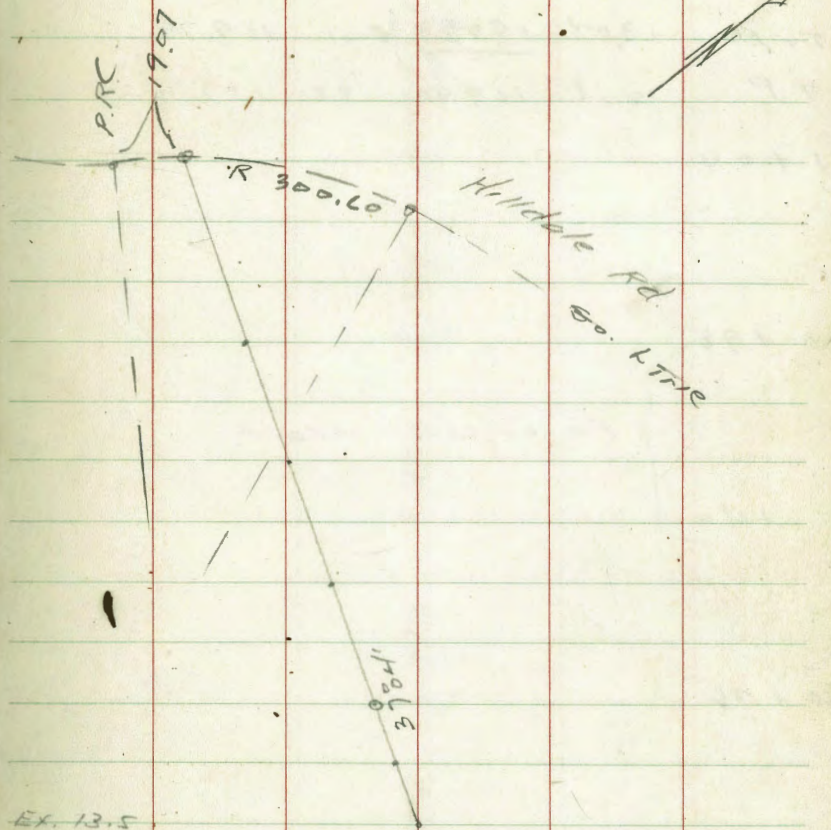
R 250  
T 83.81  
L 161.73

24+07.19 B.C. LT.

23+84 P.O.T.

22+82.96 E.C.

Rd. on North side of 43  
Canal. approx  $1\frac{1}{2}$  to 1  
cross slope



Levels on Kensington Hrs. Road.

1+44

T.P. 13.04 187.81 0.11 169.79

T.P. 12.16 169.90 1.88 157.74

1+04

0+98

Fairmont Wash

+110

0+76

0+00 = approx. & Fairmont Ave Grade

T.P. 12.34 159.62 2.07 147.28

T.P. 11.46 149.30 0.67 137.80

B.M. 7.67 138.46 130.79

165.5

Red. # Chk - Olsen  
8-20-41

17.3

Plotted "

187.81

142.9

16.7

137.4

20.2

139.0

20.6

147.0

12.6

147.28

14.34

159.62

2

ON NAIL IN OIL PAV. 0+00

Id. & C.T. Top of wall N.E. Cor. Conc. Box Culv.  
Fairmont & Mission Valley Rd.

3 + 90

3 + 80

3 + 60

3 + 47

T.P 11.10 192.87 104 181.77

7 + 79

2 + 28

182.81

180.7  
12.2171.8  
21.1183.2  
9.7183.5  
9.4

192.87

184.6  
18.2177.8  
0

182.81



6 + 85

6 + 40

T.P. 1267 20397 1.57 1.91.30

5 + 85

5 + 74

5 + 47

5 + 05

4 + 50

197.87

205.5  
+ 1.5  
199.4  
46

203.97

195.8  
+ 7.9

187.7  
5.2

196.3  
+ 3.4

184.3  
8.5

189.1  
3.8

192.87

9 + 40

9 + 05

8 + 73

8 + 40

8 + 09.57 B.C.L.T

T.P 12.71 227.33 0.14 214.67 8 + 15 <sup>1</sup> <sub>10th</sub>

7 + 84

7 + 60

T.P 12.53 214.76 1.74 202.73

7 + 25

203.97

207.4  
218.3  
222.2  
224.5  
227.3  
228.5  
228.8

227.33

225.6  
92  
222.8  
20

214.76

200.0  
14.0

203.97

17+00

11+40

T.P. 9.73 260.91 0.20 250.28

11+00

T.P. 12.19 250.48 0.00 438.29

10+65.03 B.C.P.T

10+52.97 E.C

T.P. 11.52 238.29 0.56 226.77

9+82

9+62

227.33

255.0  
259.8  
0

260.1  
259.8  
0.7

250.48  
+ 1.2396  
235.3  
3.0

238.29  
220.53  
22.0  
199.4  
27.9

227.33

14 + 50

T.P. 14.45 295.65 0.75 283.20

14 + 44 on Curve

14

13 + 75

13 + 26.83 F.C

13

T.P. 12.13 288.95 1.04 271.82

12 + 50

T.P. 12.39 270.23 1.07 259.84  
1002

281.8  
13.9

295.65

280.4

274.1  
9.9

271.0  
13.0

269.3  
14.7

267.3  
14.7

283.95

2630  
9.2

272.23

18 + 6m PL EC

17 + 80

T.P. 9.50 317.34 0.00 307.84

17 + 25

17 + 01.76 BC RT

T.P. 12.21 307.84 0.00 295.63

14 + 43.34 F.C.

14 + 00

15 + 40

15 + 00

295.65

~~293.3~~

302.3

15.0

317.34

6.3044

1300.6

1.2

307.84

274.0

287.8

7.9

283.7

13.0

279.7

16.0

295.65

24 + 35 on Curve

T.P. 13.08 327.55 7.87 314.47

24 on Curve

21 + 54.31 EC

20 + 90

20 + 28.65 BC LT

20 + 17

+ 90

+ 50

19 + 00

317.34

312.6

15.0

327.55

324.6

3.7

308.6

3.7

303

17.0

306.2

1.1

305.6

1.7

303.6

1.7

303.6

1.7

290.3

17.0

294.3

13.0

317.34

T.P. 12.74 352.07 0.34 339.31

25 + 68.94 EC

25 + 35

T.P. 12.12 329.67 0.00 327.55

24 + 90

24 + 50

24 + 07.19 BC LT

23 + 84

23 + 34

22 + 82.96 EC

327.55

~~339.31~~  
~~332.8~~  
~~339.67~~  
~~335.4~~  
~~330.6~~  
~~324.1~~  
~~316.8~~  
~~310.6~~  
~~308.6~~  
~~300.6~~  
~~17.0~~  
~~19.0~~

339.67

335.4

330.6

324.1

316.8

310.6

308.6

300.6

327.55

30+00 S.W. Hilldale edge sdwr

29+60

29+00

28+00

28+00

27+73

27+30

T.P. 1284 361.34 3.57 348.50

26+78

26+50

26+00

352.07

361.34

4.34

357.00

4.17

361.17

0.86

360.31

9.92

370.23

5.84

364.39

1.12

365.53

4.98

360.55

6.99

367.54

3.98

363.56

5.71

369.27

5.80

363.47

3.09

366.56

7.77

358.79

358.50 = B.M.

0.29

SE. C.C.T. Adams +  
Edgeware Rd. 361.34

357.00

4.34

351.1

348.92

12.1

347.2

11.1

343.4

17.9

342.3

19.0

343.3

18.0

341.9

10.3

341.9

341.9

341.9

341.9

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Xsec Wright St. 80 wide 14' cbs  
12' 1/4 S

Pacific Hwy to La Jolla Ave

STATE Hwy. SE 1/4 Pct.  
BM. #7 4.50 7.28 2.78 Pacific & Wright

0-7 Ely curb of Pacific

S-6	cb P.C.	4.60	2.68
"	gut Pav	5.26	2.02
S	Pav.	5.35	1.93
cb	"	5.09	2.19
1/4	"	4.84	2.44
C	"	4.76	2.52
1/4	"	4.79	2.49
cb	"	5.05	2.23
N	"	5.33	1.95
+6	gut Pav.	5.37	1.91
"	curb P.C.	4.77	2.51
	iron TOP GRATES SE Cor.	5.50	1.78

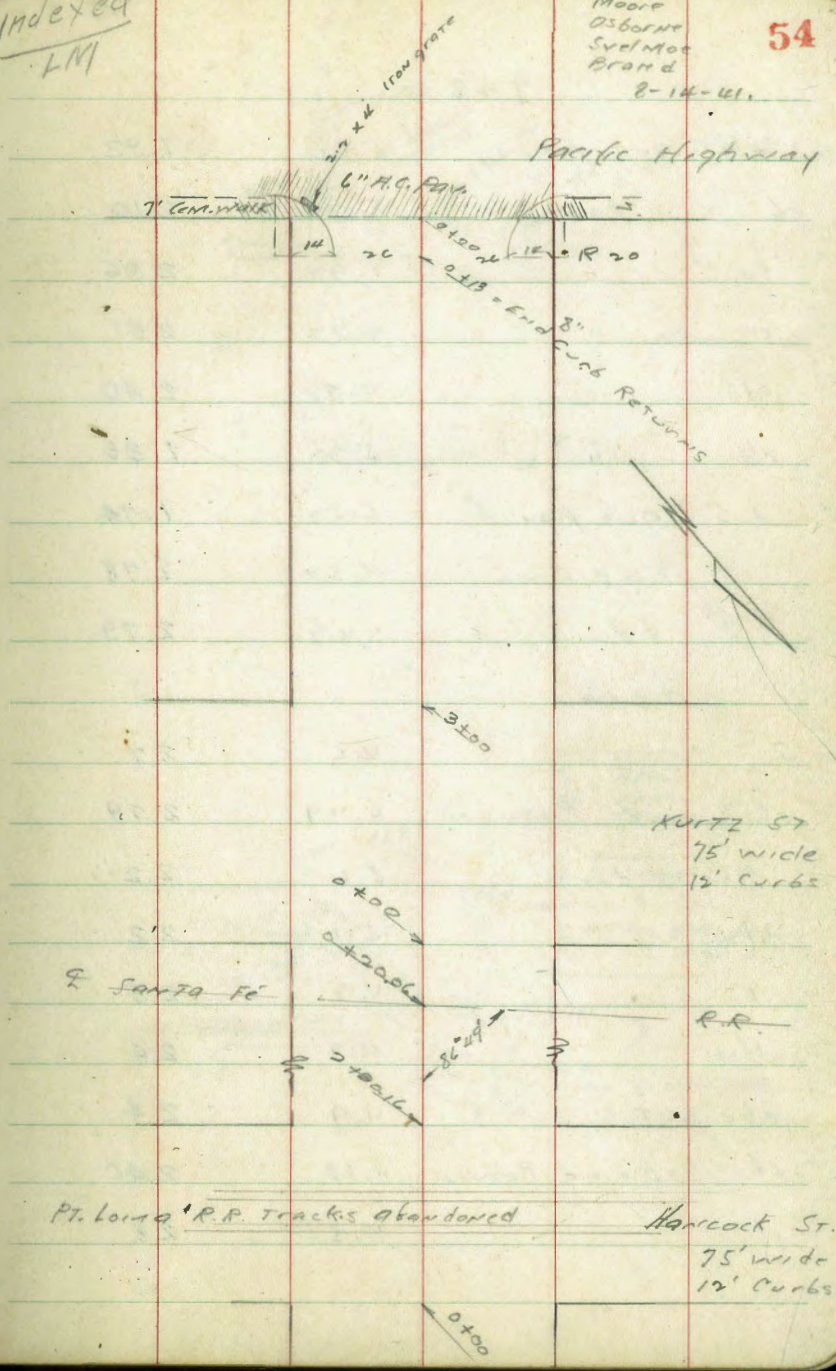
New profile No. same as old  
996  
H.B.S. 10-31-8

0+0 Ely Pacific

N	S dw	4.67	2.61
+9	Top curb	4.72	2.56

Indexed  
LM

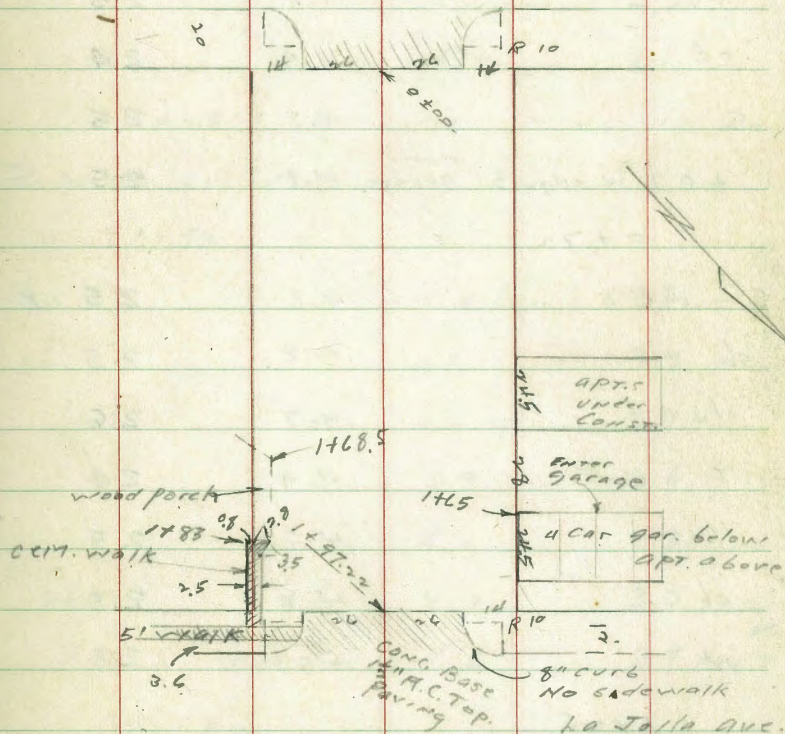
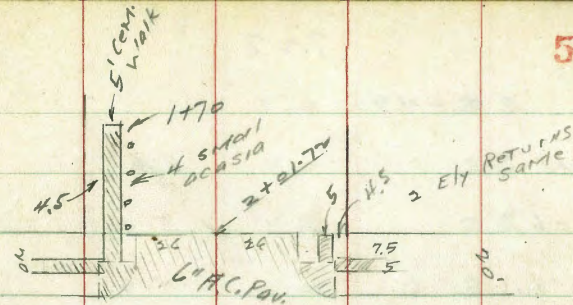
Moore  
Osborne  
Syl Mot  
Brand  
8-14-41. 54



7.28

N x 9	gut pav	5.36	1.92
cb	pav	5.18	2.10
1/4	"	4.92	2.36
c	"	4.77	2.51
1/4	"	4.88	2.40
cb	"	5.33	1.95
7.5	gut pav	5.54	1.74
"	Top curb	4.50	2.78
5	sdw.	4.49	2.79
	0 + 13		
5		4.6	2.7
cb	Top end Return	4.49	2.79
	gut dirt	5.1	2.2
1/4		5.1	2.2
c		4.8	2.5
1/4		4.9	2.4
cb	gut	4.9	2.4
cb	Top end Return	4.88	2.40
N		4.5	2.8

55



0+49			
N	5.0	2.3	
cb	5.0	2.3	
1/4	4.9	2.4	
c	4.8	2.5	
1/4	4.8	2.5	
cb	4.9	2.4	
S	4.8	2.5	
+0.7 wedge 3 car garage	4.8	2.5 dirt	
0+72			
S - 0.6 E " " "	4.8	2.5 "K	
cb	4.8	2.5	
1/4	4.7	2.6	
c	4.9	2.4	
1/4	4.8	2.5	
cb	4.8	2.5	
N	5.0	2.3	
1+25			
-10	6.0	0.9	
N	6.0	1.3	
+12 P. Pole			

cb	5.0	2.3	
1/4	4.7	2.6	
c	4.8	2.5	
1/4	4.2	3.1	
cb	4.0	3.3	
S	4.4	2.9	
+10.8	5.2	2.1	
1+48			
S + 10 Tel. Pole			
1+94			
S	3.5	3.8	
cb	3.6	3.7	
1/4	3.6	3.7	
c	3.9	3.4	
1/4	4.0	3.3	
cb	4.3	3.0	
N E. Sun. garage	4.6	2.7 dirt	
1+50			
N	2.0	5.3	
cb	2.4	5.1	
1/4	1.7	5.6	

C		1.6	5.7
1/4		6.8	6.5
T.S.	10.80	16.84	1.30 5.98
cb		11.1	5.7
S		10.8	6.0
1795 5+10 Tel. Pk. ✓ 3400 w/ly Kurtz St.			
S		7.0	9.8
cb		7.4	9.4
1/4		7.7	9.1
C		8.0	8.8
1/4		8.2	8.4
cb		8.1	8.7
N		8.0	8.8
w/ly curb.			
N		7.5	9.3
cb		7.9	8.9
1/4		7.4	9.4
C		7.2	9.6
1/4		7.0	9.8
cb		7.3	9.5
S		7.7	9.1

Kurtz

S		6.3	10.5
cb		6.0	10.8
1/4		5.7	11.1
C		5.4	11.4
1/4		5.5	11.3
cb		6.1	10.7
N		6.6	10.2

Ely Curb Kurtz

N		6.9	9.9
cb		6.2	10.6
1/4		4.8	12.0
C		4.4	12.4
1/4		4.1	12.7
cb		4.6	12.2
S		5.2	11.6

Ely Line Kurtz 30400

S		4.6	12.2
cb		3.6	13.2
1/4		3.6	13.2
C		3.7	13.1

1/4		4.3	12.5
cb		4.7	12.1
N		5.6	11.2
0 + 2000 E R R Tracks			
N	on W rail	3.66	13.18
C	" " "	3.45	13.39
S	" " "	3.40	13.44
S	on E rail	3.30	13.54
C	" " "	3.45	13.39
N	" " "	3.66	13.18
0 + 36			
S + 16 R.R. King Signal			
0 + 40			
S		1.0	15.8
cb		3.1	13.7
1/4		2.7	13.9
C		3.0	13.8
1/4		2.6	14.2
cb		3.5	13.3
N		3.6	13.2

0 + 67			
N		1.5	15.3
cb		1.5	15.3
1/4		2.0	14.8
C		2.2	14.6
1/4		2.2	14.6
cb		1.8	15.0
+ 3 Tel pole ✓			
S		0.8	16.0
T.P.	11.46	28.20	0.10 16.74
1700			
S		10.4	17.8
cb		10.5	17.7
+ 11		11.2	17.0
1/4		12.3	15.9
C		11.9	16.3
1/4		12.0	16.2
cb		11.2	16.9
N		11.2	17.0
1750			
N		7.9	20.3
cb		8.1	20.1

2820

1/4	9.3	18.9
c	9.1	19.1
1/4	9.8	18.4
tr	8.6	19.6
cb	8.1	20.1
S	7.6	20.6

1769

S + 12 Tel. pole ✓  
 2 + 00.16 w/ly Hancock St.

S	5.1	23.1
cb	5.5	22.7
1/4	6.1	22.1
c	5.8	22.4
1/4	5.8	22.4
cb	5.4	22.8
N	4.7	23.5

W curb

N	4.7	23.5
cb	4.7	23.5
1/4	4.9	23.3
c	4.9	23.3

2820

59

1/4	5.2	23.0
cb	5.2	23.0
S	5.2	23.0

E Hancock

S	4.3	23.9
cb	4.0	24.2
1/4	4.1	24.1
c	4.0	24.2
1/4	4.0	24.2
cb	4.1	24.1
N	4.1	24.1

Ely curb

N	2.4	25.8
cb	2.4	25.8
1/4	2.7	25.5
c	2.7	25.5
1/4	2.9	25.3
cb	3.0	25.2
S	2.5	25.7

Ely Hancock St = 0 + 0

S	2.0	26.2
---	-----	------

S + 3.6	beg. Picket fence	✓		
cb	1.9		26.3	
1/4	2.0		26.2	
c	1.8		26.4	
1/4	2.1		26.1	
cb	1.6		26.6	
N	1.6		26.6	

N + 0.2 beg. Picket fence ✓

T.P. 11.81 39.82 0.19 28.01

0 + 10

N	11.6		28.2	
cb	11.7		28.1	
1/4	12.7		27.1	
c	12.8		27.0	
1/4	12.5		27.3	
cb	11.7		28.1	
+ 5	9.2		30.6	
S	9.0		30.8	

0 + 50

S 6.1 33.7

+ 17	5.8		34.0	
cb	6.3		33.5	
+ 3	7.5		32.3	
1/4	8.5		31.3	
c	9.0		30.8	
1/4	8.8		31.0	
cb	8.4		31.4	
N	9.0		30.8	

0 + 13

N + 11 P. Pole ✓

0 + 85  
+ 85 - 256

N end fence + beg. 16' shed ✓ on line

N	6.6		33.2	
cb	4.8		35.0	
1/4	4.6		35.2	
c	4.5		35.3	
1/4	4.5		35.3	
cb	3.4		36.4	
S	3.2		36.6	

1 + 00

S + 2.5 end Picket fence 2.5 in ST. ✓

	1+02				
S-1.3	Wedge 2 car gar. dirt floor	0.26	√ 39.46	El. bot. of door	
S		0.8	39.0		
cb		1.7	38.1		
1/4		2.1	37.7		
c		2.2	37.6		
1/4		2.3	37.5		
cb		1.3	38.5		
N		5.7	34.1	1+02 to 1+35 garages under same roof. but floor El. differ.	
	1+18				
S-1.3	E. edge 2 car gar.	0.27	√ 39.55	El. Bot door dirt floor	
T.P.	12x3	51.95	0.30	39.52	
	1+18.5				
S-1.3	Wedge 2 car garage	11.18	√ 40.77	El. Bot. door dirt floor	
	1+35				
S-1.3	E. edge 2 car gar.	11.00	√ 40.95	" "	
	1+40				
-10		13.3	38.7		
N		10.0	42.0		
+3		9.5	42.5		
cb		9.4	42.6		

1/4		9.7	42.3	
c		9.2	42.4	
1/4		9.5	42.5	
cb		9.2	42.8	
S		10.5	41.5	
+5		10.6	41.4	
	1+70			
S		6.1	45.9	
+9.5	edge sidewalk	4.88	47.07	√
cb		5.5	46.5	
1/4		6.5	45.5	
c		6.2	45.8	
1/4		6.2	45.8	
cb		6.0	46.0	
N		6.0	46.0	
	2+01.72 villy Moore St.			
N		4.1	47.9	
cb	Top cement	4.12	47.83	
	gut Pav.	4.58	47.37	
1/4		4.00	47.95	
c		3.60	48.35	



51.95

1/4 Pav	3.45	48.50
gUT "	3.53	48.42
cb Top cem.	2.86	49.09
S	2.7	49.3

W curb of Moore ST.

S Top curb	2.70	49.25
S gUT Pav	3.16	48.79
cb on Pav.	3.20	48.75
1/4 " "	3.28	48.67
c " "	3.42	48.53
1/4 " "	3.74	48.21
cb " "	4.15	47.80
N gUT	4.48	47.47
N cb	4.05	47.90

E curb Moore ST.

N Top cb	4.19	47.76
N gUT	4.63	47.32
cb Pav	4.45	47.49
1/4 " "	4.15	47.80
c " "	3.89	48.06
1/4 " "	3.61	48.34

51.95

62

cb Pav	3.32	48.62
S gUT	3.07	48.88
S Top cb	2.45	49.50

Fly Moore ST = 0.700

S	2.6	49.4
cb end Ret	2.74	49.21
gUT Pav	3.22	48.73
1/4 " "	3.06	48.89
c " "	3.26	48.69
1/4 " "	3.66	48.29
gUT " "	4.51	47.44
cb end Ret.	4.02	47.93
N " "	3.9	48.1

T.P. 13.11 62.33 2.73 49.22

0.7 + 0.15 = for ydgc

N " "	12.7	49.6
cb " "	12.7	49.6
1/4 " "	13.1	49.2
c " "	12.5	49.8

62.33

1/4		12.7	49.6
cb		12.2	50.1
S		11.6	50.7
	0 + 0x		
S		6.5	55.8
+13		8.0	54.3
cb		10.7	51.6
+4		11.5	50.8
1/4		12.0	50.3
c		12.0	50.3
1/4		12.2	50.1
+10		11.4	50.9
cb		7.7	54.6
N		7.7	54.6
	0 + 40		
N		3.8	58.5
cb		4.2	58.1
+3		6.1	56.2
1/4		6.9	55.4
c		6.7	55.6

62.33

63

1/4		6.8	55.5
cb		4.8	57.5
+5		3.4	58.9
S		3.0	59.3
	0 + 59		
N	cb 22 P. Pale	✓	
T.P.	12.40 74.00	0.51	61.80
	0 + 80		
S		11.1	63.1
cb		11.8	62.4
1/4		12.1	62.1
c		12.4	61.8
1/4		11.8	62.4
cb		11.2	63.0
N		11.5	62.7
	7 + 00		
N		10.2	64.0
cb		9.4	64.8
1/4		8.8	65.4

C		9.2	65.0
1/4		9.2	65.0
cb		9.1	65.1
S		8.6	65.6
	1+20		
S		5.8	68.4
cb		5.9	68.3
1/4		6.1	68.1
C		6.1	68.1
1/4		5.9	68.3
cb		6.8	67.4
N	CON. against foundation	8.0	66.2
N	Floor Elev	1.58	72.64 ✓
	1+60		
-10		2.5	71.7
N		1.8	72.4
cb		0.4	73.8
1/4		+0.3	74.5
C		0.1	74.1
1/4		0.0	74.2

cb		+0.2	74.4
S		+0.3	74.5
+10		0.0	74.2
	1+65		
	FUTURE		
N.-1	Gar. floor	1.90	72.32 ✓
T.P.	11.44	85.06	0.60
			73.6 ✓
	1+83		
S	on Cent walk	5.47	79.59 ✓
S	+28 " " "	5.51	79.55
S	+3 ground	6.5	78.6
cb		7.5	77.6
1/4		7.6	77.5
C		7.5	77.6
1/4		7.3	77.8
cb		6.5	78.6
N	against ground CON. foundation	7.7	77.4 ?
N	Floor Elev	3.18	81.88 ?

1797.22 Wk La Jolla Ave

N		5.7	79.9
cb	end Ret.	5.16	79.90
gut	pay	5.67	79.39
1/4	"	5.65	79.41
c	"	5.75	79.31
1/4	"	6.00	79.06
gut	"	6.35	78.71
cb	end Ret	6.10	78.96
S	on cem walk	5.78	79.28
W cb of L.J. Ave			
S	Top cb	6.08	78.98
S	gut pay	6.48	78.58
cb	"	6.30	78.76
1/4	"	6.05	79.01
c	"	5.90	79.16
1/4	"	5.76	79.30
cb	"	5.61	79.45
N	gut "	5.51	79.55
N	cb	5.12	79.94

ME.  
check to BM BP

Wright La Jolla Ave	2.95	82.11	82.15
			0.04

Indexed Oct 7 '41  
Indexed LIXI

X sec alley 20' wide

Moore  
Rand  
Sylvan  
10-2-41

Blk 88 E.W. Morse

SWBP	12.41	207.37	194.96	30th & C
T.P.	8.93	214.43	1.87	205.50

0-10 = W curb line of 30th

S	Par.	8.94	205.49
C	"	8.20	206.23
N	"	7.49	206.94

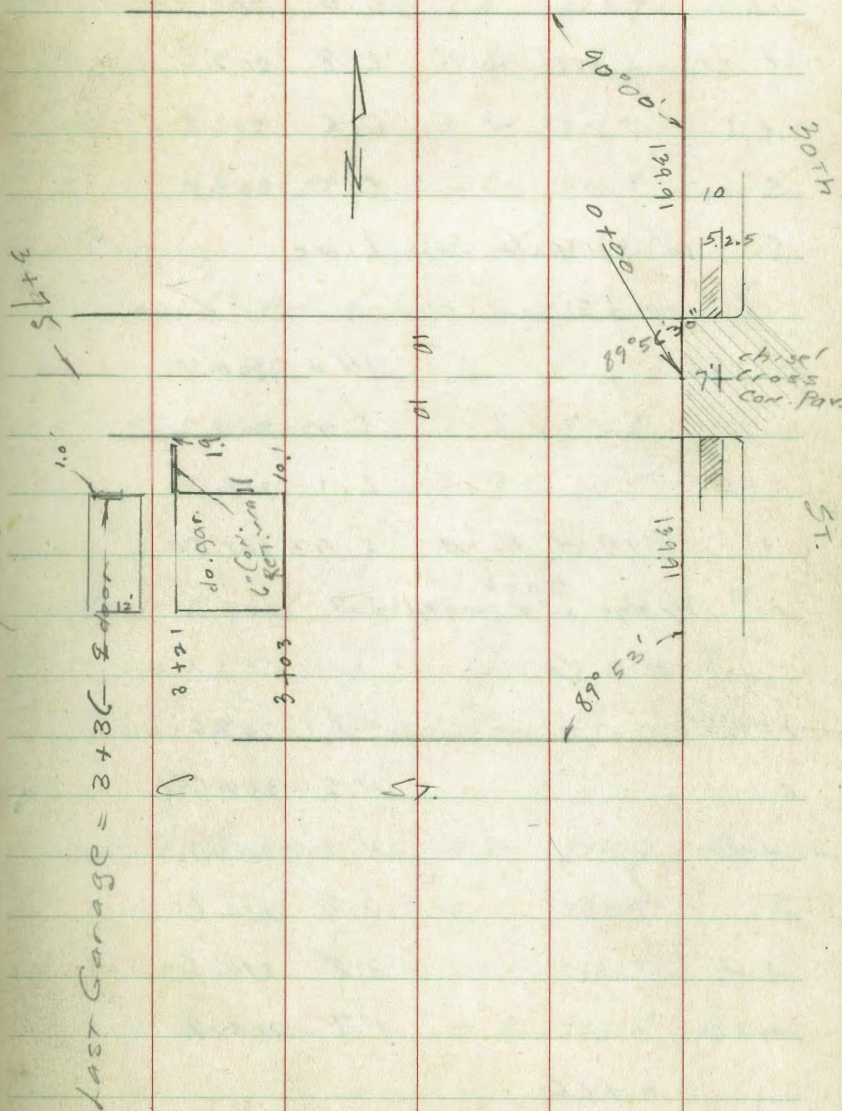
0+00 = W L 30th

N	curb	6.78	207.65
N	Par.	7.23	207.20
C	"	8.13	206.30
S	"	8.40	206.03
S	curb	8.33	206.10

0+00

S		5.3	209.1
+2		6.8	207.6
C		7.9	206.5
+9		7.0	209.4
N		6.4	208.0

Notes reduced D.E.A.  
Plot. C.B.H. 10-8-41



	0 + 23			
N		6.0	208.4	
C		6.8	207.6	
+5		6.6	207.8	
S		5.0	209.4	
S	10" Tel. pole on line			✓
	0 + 31			
-18		14.0	200.4	
S		5.7	209.2	
+6		6.1	208.3	
C	S.M.H. R.M.	5.93	208.50	✓
N	Hedge of line of <sup>Back</sup>	5.7	208.7	✓
	0 + 50			
N		4.8	209.6	
C		4.8	209.6	
+4		4.7	209.7	
S		3.8	210.6	
+4		3.8	210.6	
+18		11.7	202.7	
	0 + 66			
-17		5.7	209.2	

-6		1.5	212.9	
S		1.8	212.6	
+4		3.7	211.2	
C		3.6	210.8	
N		3.3	211.1	
N	Req. 6' Bd. fence on line			✓
	0 + 75			
N	Bd. fence	2.5	211.9	
C		2.9	211.5	
S		2.0	212.4	
	+0.1 Req. 6' Bd. fence			✓
	0 + 83			
N	0.4 End 6' Bd. fence			✓
	0 + 93			
N	4.7 E. Sin. gar.	0.0	214.4	✓ dirt floor
N		0.4	214.0	
C		1.1	213.3	
S	6' Bd. fence	0.6	213.8	at Back
T.P.	5.80	219.10	1.13	213.30

219.10

1+0v

S 6' Bd. fence 5.0 214.1 on line

C 5.5 213.6

+7 5.0 214.1

N 4.3 214.8

+0.15 Beg. 6' Bd. fence 0.15 Back ✓

1+15

S +0.10 End 6' " " 0.10 9/11/47 ✓ in

1+15.2

S - 0.4 NE Cor Bd. garage ✓

1+20

N End 6' Bd fence on line ✓

1+24

S - 0.4 E Side gar floor 4.37 214.73 ✓ Now used for storage

1+26

N - 5.2 E. do. gar. 3.57 215.53 ✓ cement floor

N - 3.6 " cement apron 3.72 215.38 ✓

N 3.9 215.2

C 4.6 214.5

S gar. floor 4.37 214.93

219.10

68

1+28

S +0.10 Beg. 6' Bd. fence 0.10 in alley ✓

1+33

S +0.9 10" Tel. Pole ✓

1+35

S +0.10 End 6' Bd. fence ✓

1+46

S 4.9 214.2

C 4.6 214.5

N 4.2 214.9

+ 3.5 w.l. <sup>cem.</sup> apron 3.57 215.43 ✓

+ 5.1 " do. gar. 3.51 215.59 ✓ cement fl.

1+48

N +0.7 S. side 12" Pepper tree ✓

1+50

N Beg. of Bd. shed on line ✓

1+57.4

S - 1.0 E. <sup>cem.</sup> apron 5.01 214.09 ✓

S - 4.1 " do. gar. 4.85 214.25 ✓ cement floor

1+65

N End Bd. shed on line ✓

219.10

1+73

N		4.5	214.6	
e		5.1	214.1	
S		5.1	214.0	
	+ 1.0 w.l. <sup>cem.</sup> apron	5.06	214.04	✓
	+ 4.1 " do. gar.	4.9w	214.18	cem. fl.

1+74

N	- 4.1 E.L. <sup>cem.</sup> apron	4.43	214.67	✓
N	- 5.0 " do. gar.	4.40	214.70	✓ " "

1+77

S-0.4 N.E. Cor. old Style Frame Barn ✓

1+91

S		5.6	213.5	
C		5.7	213.4	
N		5.0	214.1	
	+ 4.2 w.l. <sup>cem.</sup> apron	4.45	214.65	✓
	+ 5.1 " do. gar.	4.43	214.67	cem. fl.

1+92

S-0.4 E 7.5 sliding door 5.49 213.61 ✓  
Wood floor  
Now storage  
could be  
used as  
garage.

2+05

S-0.4 N.W. Cor. of Frame Barn ✓

219.10

69

2+05.10

S-0.6	beg. 5' Bd. fence			✓
	2+11			
N	- 5.2 E.L. 4 car. gar.	5.20	213.90	cem. floor
N		5.6	213.5	
C		6.3	212.8	
S		6.3	212.8	
S	+ 0.6 Bd. fence			
	2+23			
S-0.6	end Bd. fence and beg. shed			✓ Bd. ✓
	2+31			
S-0.6	end Bd. shed and beg. 5' Bd. fence			✓
	2+38			
-0.6	Bd. fence			
S		7.0	212.1	
C		6.9	212.2	
N		6.3	212.8	
	+ 5.3 w.l. 4 car. gar.	5.27	212.83	cem. floor ✓
	2+44			
N	- 6.3 2 Sin. gar. <sup>7.5 wide</sup> door	6.47	212.63	✓ " "
N	ground	6.8	212.3	✓



219.10

2+50

N-0.4 beg. wire fence ✓

N 6.7 212.4

C 7.7 211.4

S 7.7 211.4

+0.4 Bd. fence

2+73

N-1.8 end of wire fence ✓

✓ 2+75 End 5' Bd fence  
 S-0.6 Bd. fence = Beg. 4' Picket " 210.2  
 S 8.9

+0.7 <sup>12"</sup> Tel. Pole & Power Line ✓

C 9.0 210.1

N 8.1 211.0

3+00

N 10.8 208.3

C 11.4 207.7

S 11.4 207.7

+0.8 end 4' Picket fence ✓

T.P. 1.59 208.14 17.55 206.55

All these poles are S.D. East-Elect.  
 and used by Tel. Co.

208.14

70

3+03

S-10.1 F.L. do. gar. 1.35 206.79 cent. fl. ✓

3+21

S-10.1 w.l. do. gar. 1.42 206.72 ✓

S-10 Top 6" cent. wall 1.53 206.61 ✓

S-1.9 " " " 2.17 205.97 ✓

S 2.2 205.9

C 2.3 205.8

N 2.1 206.0

3+31

C Rim. S.M.H. 3.30 204.84

3+36

N 3.4 204.2

C 4.1 204.0

S 4.7 203.4

9 7.5 door  
 +10.5 I Sin. gar 5.38 202.76 cent. fl. ✓

3+50

-10 6.5 201.6

S 5.5 202.6

C 4.5 203.6

N 4.2 203.9

Beg.  
 N +0.7 Bd. fence ✓

Last Garage  
 on Alley

3+54

N1 + 0.7 1.2 diam. pepper tree ✓

3+75

N1 - 0.4 S edge <sup>Frame</sup> dwelling 8.3 198.8 ✓

C 10.0 198.1

S 12.3 195.8

+10 15.7 192.4

alley drops off sharply into

canyon at 29th St.

T.P. 17.34 219.99 0.49 207.65

T.P. 9.95 222.75 7.19 212.80

NE BP 30th &amp; B St. 24.3 220.34 220.14

T.P. 12.1 211.67 17.79 210.46

+P 3.57 204.33 12.91 198.76

check to Orig. B.M. 7.38 194.95 194.96

001

Here curb has appar. bulged up.

BKSS  
Sommer  
Beyrs  
10/10/91

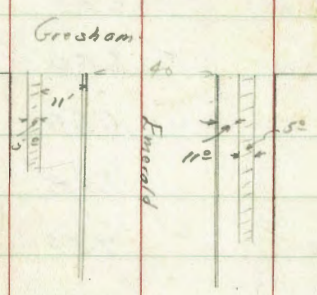
+      π      -      Elev  
Levels on Low Eline Cass

	to 523 East		Oiled Surface	
BM	9.44	75.84	66.40	SWBP Cass + Low
N Topcb		7.38	68.46	
0700 Eline Cass		8.23	67.61	
S Topcb		8.38	67.46	
0750		7.20	68.64	
1000 Beyond 100cb on N Top		5.97	69.87	
1100		6.69	69.15	
+50		5.64	70.20	
End 100cb + Wall on N		9.52	71.92	
2100		9.78	71.06	
750		3.99	71.85	
3100		2.89	72.95	
750		2.08	73.76	
4100		1.52	74.32	
750		1.21	74.63	
5100		0.54	75.30	
+19		8.39	75.45	
723 End		8.46	75.38	

Levels to determine Elev of cbs  
at Emerald + Grestam

72

BM	523	65.52	60.29	SE TOP H Emerald + Grestam
S Edge work on S		3.22		62.30
N " " on S		3.39		62.13
S Topcb		3.52		62.00
N Topcb		3.08		62.44
S Edge N work		2.88		62.64
N " " "		2.79		62.73



Levels on Paving Emerald + Farnel 4<sup>s</sup>

BM	0.82	61.11	60.29	SE Toply
S. Profile Emerald + Farnel	3.31		57.80	
F. Farnel + Emerald	2.84		58.27	
N. Profile Emerald + Farnel	2.49		58.62	

## Levels to Determine Elev. of Obs. Emerald

+ Evert's H.I. Same as Emerald + Farnel elev.

N. Edge walk on N	6.43		54.68	
S " " " N	6.50		54.61	
N. Top cb	6.66		54.45	
S " "	7.68		53.43	
N. Edge walk on S	7.54		53.57	
S " " " "	7.50		53.61	

## Levels on Paving Farnel + Felspar

BM	0.08	60.37	60.29	Emerald Farnel SE Toply
N. Line Felspar + Farnel	9.10		51.27	✓
F. Felspar + Farnel	9.62		50.75	✓
S. Line Felspar + Farnel	10.24		50.13	✓

Felspar: Marcell to 30' East Levels on

Top 66. and Oiled Surface No. Sidewalks

N.E. CPTK

BM. 0.35 88.96 88.11 Lamont + Felspar

7.P. 0.04 78.91 10.09 78.37

SW Return Marcell + Felspar

W Line Marcell 6.39 72.02

S " Felspar 6.55 71.86

NW Return

W Line Marcell 4.96 73.45

N " Felspar 5.62 73.39

NE Return

N Line Felspar 6.08 72.53

E " Marcell 6.18 72.23

SE Return

E Line Marcell 7.50 70.91

S " Felspar 7.56 70.85

20' W E Line Marcell & 7.3 71.1

E " " 7.2 71.2

0+50 7.3 71.1

1+00 7.0 71.4

+50 6.7 71.6

2+00 6.6 71.8

78.41

74

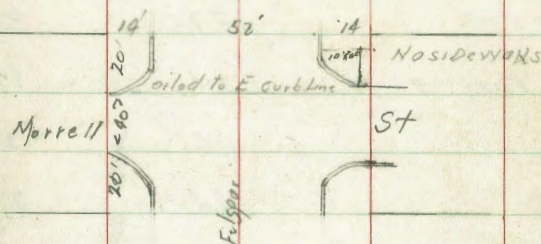
+50 6.6 71.8

3+00 6.6 71.8

+07 6.5 71.9

7.P. " 78.37 89.74 0.04 78.37

Check Starting B.M. 1.62 88.12  
88.11  
0.01



& Levels Cass + Felspar

N. to S.

BM. 9.75 37.60 27.85 S&BP Garnet + Cass

S Line Felspar & Cass 4.87 32.73 ✓

& Cass + Felspar 4.34 33.26 ✓

N Line Felspar & Cass 3.79 33.81 ✓

Re Cross Section Alley Block 67  
 W.P. Herbert's Sub. From Meade to Mooroc  
 Between Mc Clintock & 38<sup>th</sup> St.

indexed  
 C.S.K.

B.M.	5.38	379.76	374.38
	0-14: N Cb Line Meade		
F	on Paving	4.85	374.91
$\frac{1}{2}$	" "	4.88	374.88
W	" "	4.80	374.96
	0-2 = Broken Cb on East		
W+0.1 = Cb		3.95	375.81
W+0.1 = Paving		4.32	375.44
$\frac{1}{2}$	" "	4.51	375.25
+7.4	" "	4.40	375.36
+7.4 = Wly Good Cb		4.07	375.69
	0+0 = N.L. Meade		
F+0.1 = Broken Cb		4.28	375.48
F+0.1 on Paving		4.42	375.33
$\frac{1}{2}$	" "	4.51	375.25
+7.4	" "	4.22	375.44
+7.4 = Wly Cb.		3.96	375.80
	0+10		
-10 = S.E. Cor. Store House		3.4	376.4
W		3.4	376.4

Red T Plat. Profile 2784. 1-7-92 C.S.K.

Original Section Field Book  
 #1557 Page 20  
 15' wide 379.76

Jan. 5-92  
 Sisson  
 Hartberg  
 W. Meade

75

$\frac{1}{2}$		4.1	375.7
F		3.8	376.0
+10		3.8	376.0
	0+16		
W	= Sly 4.5 Chimney		✓
	0+45		
W+0.5 = Wly Power Pole			✓
	0+46		
W-1.0 = N Ely Store House			✓
W-0.4 = Sly Picket Fence			
	0+50		
-10		3.9	375.9 ✓
F		3.5	376.3
$\frac{1}{2}$		3.4	376.4
W = Picket Fence		2.9	376.9 ✓
+5		2.5	377.3 ✓
	0+70		
-10		2.2	377.6
W		2.5	377.3
$\frac{1}{2}$		3.0	376.8

		379.76		
F		3.1	376.7	
+10		3.6	376.2	✓
	140			
-10		3.3	376.5	✓
F		3.0	376.8	
⊥		2.8	377.0	
W = Nly Picket Fence		2.4	377.4	✓
+10		2.2	377.6	✓
	1404			
F-9.0 = ⊥ Garage Ditch Floor		3.2	376.6	✓
	1409			
F = Sly Wire Fence + Hedge				✓
TP	5.54	382.52	2.78	376.98
	1438			
E-0.3 = Nly Wire Fence + Hedge				✓
	1450			
-10		4.8	377.7	✓
W		5.3	377.2	
⊥		5.6	376.9	
F		5.5	377.0	
+10		6.0	376.5	✓

		382.52		
		1475		
-10		5.2	376.8	✓
F = Sly Picket Fence		5.3	377.2	✓
⊥		5.4	377.1	
+6.5 = Nly Partner Pole				✓
W		5.2	377.3	
+10		4.6	377.9	✓
	240			
-10		4.7	377.8	✓
W		5.1	377.4	
⊥		5.3	377.2	
F		5.4	377.1	
+10		5.5	377.0	✓
	2412			
E-0.6 = Nly Picket Fence Sly 20' 6" Fence				✓
	2425			
-10		5.4	377.1	✓
F		5.3	377.2	
⊥		5.3	377.2	
W		5.2	377.3	
+10		4.6	377.9	✓

382.52

2+50

-10	5.0	377.5	✓
H	5.0	377.5	
$\frac{1}{2}$	5.0	377.5	
+7.0 = 1/4 Lat <sup>h</sup> Fence			✓
F	5.0	377.5	
+0.6 = 5/4 Wire Fence			✓
+10	5.1	377.1	✓

2+60

H-9.0 = $\frac{1}{2}$ Garage Conc Floor 4.24		378.16	✓
--	--	--------	---

2+76

-10	5.3	377.2	✓
F	5.0	377.5	
$\frac{1}{2}$	4.9	377.6	
+6.4 = 1/4 Power Pole			✓
H	4.7	377.8	
+10	4.6	377.9	✓

2+83

E-0.3 = 1/4 Lat <sup>h</sup> Fence			✓
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382.52

2+91

H-9.5 = $\frac{1}{2}$ Garage Conc Floor 4.24		378.28	✓
--	--	--------	---

2+0

-9	4.6	377.9	
H	4.5	378.0	
+0.5 = 5/4 Brick & Tile Wall			✓
$\frac{1}{2}$	4.7	377.8	
F	4.8	377.7	
+10	5.1	377.4	✓

2+18

F = 5/4 Lat <sup>h</sup> Fence			✓
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2+20

H+0.5 = 1/4 Brick & Tile Wall			✓
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2+44

H+0.6 = 5/4 8" Conc Wall 3.44		378.08	✓
-------------------------------	--	--------	---

2+50

-10	4.8	377.7	✓
-0.2 = 1/4 Lat <sup>h</sup> Fence + 5/4 Picket Fence			✓
F	4.3	378.2	
$\frac{1}{2}$	4.2	378.3	

77



382.52

+6.9 = N <sup>1</sup> / <sub>4</sub> 8" Wall: Sky Conc Apron	3.57	378.95	✓
N-5.8 = Sky 5 Car Garage Conc Floor	3.10	379.42	✓
	3+96.5		
N+0.7 = N <sup>1</sup> / <sub>4</sub> Conc Apron	3.56	378.96	✓
N-5.8 = N <sup>1</sup> / <sub>4</sub> 5 Car Garage Conc Floor	3.21	379.31	✓
	3+98.5		
N+0.7 = $\frac{1}{2}$ 3" Conc Walk	3.62	378.90	✓
	4+0		
-5	3.8	378.7	✓
N	3.9	378.6	
+0.7 = N <sup>1</sup> / <sub>4</sub> Power Pole			✓
$\frac{1}{2}$	4.2	378.3	
F	4.3	378.2	
+0.2 = N <sup>1</sup> / <sub>4</sub> Picket:			✓
+10	4.7	377.8	✓
TP 4.95	383.30	4.17	378.35
	4+18		
N+0.4 = Sky Conc Apron	4.32	378.98	✓
N-10	0.7	379.05	✓

78

383.30

		4+25 = Break 12 Conc Apron	
N-0.4 = Fly Conc Apron	4.21	379.09	✓
N-10	0.7	379.15	✓
	4+34		
F-0.3 = N <sup>1</sup> / <sub>4</sub> Lot 4 Fence			✓
	4+40		
F-0.2 = $\frac{1}{2}$ 10" Conc Apron	5.08	378.22	✓
F-6.3 = $\frac{1}{2}$ Garage Conc Floor	4.89	378.41	✓
	4+50		
-10	5.1	378.2	✓
F	5.0	378.3	
$\frac{1}{2}$	4.9	378.4	
+7.1 = N <sup>1</sup> / <sub>4</sub> Conc Apron	4.31	378.99	✓
N-6.5 = N <sup>1</sup> / <sub>4</sub> Garage Conc Floor	4.28	379.02	✓
	4+57		
F-0.5 = Sky Picket Fence			✓
	4+75		
-10	4.4	378.9	✓
N	4.9	378.4	
$\frac{1}{2}$	5.0	378.3	

383.30

F 5.1 378.2

+10 5.6 377.7 ✓

540

-10 5.7 377.6 ✓

-0.1 = Nly Picket Fence ✓

F 4.9 378.4

Z 4.8 378.5

+6.6 = Nly Parter Pale ✓

N 4.5 378.8

+10 4.4 378.9 ✓

5425

-10 3.9 379.4 ✓

N 4.2 379.1

Z 4.7 378.6

F 4.9 378.4

+0.3 = Sly Picket Fence ✓

+10 5.9 377.4 ✓

5441

N +0.2 = S E Cor Stucco Garage N Entrance

383.30

79

5450

-10 5.6 377.7

-2.7 = Sly Tile Wall 6" ✓

F 4.5 378.8

+1.0 = Nly Picket Fence ✓

Z 4.6 378.7

+7.3 = Ely Stucco Garage 4.3 379.0 ✓

TP 3.57 382.29 4.59 378.72

5457

N -3.0 = Ely Conc Drive 2.86 379.43

Sly Low Lat 4 Fence  
N +0.25 = N E Cor Stucco Garage N Entrance ✓

5480.7

Z = Z Flush Tank on Rim 4.04 378.25

5485

-3.0 = Ely Conc Drive 2.90 379.39 ✓

N 3.2 379.0

+3' 4.1 378.2

Z 4.2 378.1

F 4.1 378.2

Nly Dr. Birch Garage  
N E Cor Stucco Garage  
-2.2 = Nly Conc Drive 4.42 377.87 ✓

38229

6+00.6 = S Line Moore

E 10.15 = Sly Cb	5.11	377.18	✓
E 10.15 = Paviof	5.34	376.95	✓
f on "	5.32	376.97	✓
+7.4 " "	4.92	377.37	✓
+7.4 Sly Cb	4.70	377.59	✓

6+12.6 = S. Cb Line Moore

M on Paviof	5.30	376.99	✓
f " "	5.45	376.84	✓
E " "	5.60	376.69	✓

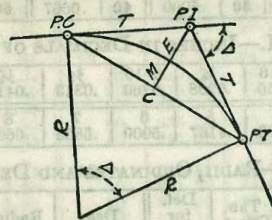
TP	3.30	379.04	6.55	375.74
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BM		4.36	374.68	
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548P  
Moore  
374.68  
11/10  
374.70

# DIETZGEN'S RAILROAD CURVE AND REDUCTION TABLES

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## CURVE FORMULAS

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

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

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

External= $E = T \tan \frac{\Delta}{4}$  (7) =  $R \div \cos \frac{\Delta}{2} - R$  (8) =  $R \text{exsec} \frac{\Delta}{2}$  (9)

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

## EXPLANATION AND USE OF TABLES

**Stations.**—Given P. I.=Sta. 161+60.35 to find Sta. of P. C. and P. T.  $\Delta=62^\circ 10'$   $D=8^\circ 20'$ . From Table IV for  $1^\circ$  curve  $T=3454.1$  and  $+8\frac{1}{3}=414.49$  ft. From Table V correction=.36 or  $T=414.85$  ft. P. C.=Sta. P. I.— $T=157+45.50$ . Also from (4)  $L=746.00$  and P. T.=Sta. P. C. + $L=164+91.50$ .

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

**Deflections.**—Deflection angle= $\frac{1}{2} D$  for 100 ft.,  $\frac{1}{4} D$  for 50 ft., etc. For  $c$  ft.=(in minutes)  $.3 \times C \times D^2$  or=defl. for 1 ft. from Table III  $\times C$ . For Sta. 158 of above curve= $.3 \times 54.5 \times 8\frac{1}{3}=136.2'$  or  $2^\circ 16.2'$ , or= $2.50 \times 54.5=136.2'$  from Table III. For Sta. 159 deflection angle= $2^\circ 16.2' + 8^\circ 20' \div 2=6^\circ 26.2'$ , etc.

**Externals.**—May be found in similar manner to tangents. Thus  $E$  for curve above is 91.37. For from Table IV for  $1^\circ$  curve  $E=960.6$  for  $8^\circ 20'=960.6 \div 8\frac{1}{3}=91.27$  and from Table V correction=.10 or  $E=91.37$  ft. Or suppose  $\Delta=32^\circ$  and  $E$  is measured and found to be 42 ft. What is  $D$ ? From Table IV  $E=230.9$  and  $+42=5.5$  or  $D=5^\circ 30'$ .

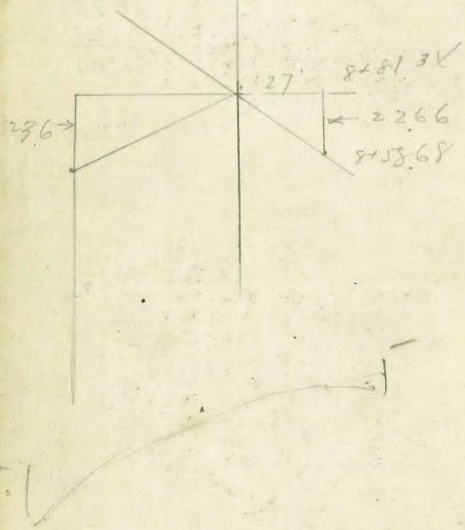
8133	
2366	
8109.34	
1434	
795.00	
20	
778.00	
6825	
813,25	
20	
8163.28	
1434	
8127.62	
2366	
9101.28	

7141	
7762	
83	

7.09464  
 53  
 328392  
 547320  
 5801592  
 1.30541  
 27  
 913787  
 261082  
 3574607  
 878134  
 236  
 85774

44529  
 53  
 133569  
 222615  
 2359719

8391  
 27  
 58737  
 16782  
 226557



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	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.