

Gr 109

THE

BOOK

No. 251



2/38.5  
19.8  
7/16.4  
23.5

MICROFILMED  
APR

Our Leather Bound Engineers Note Books are carried in the following rulings:

- No. 380 LEVEL BOOK. Left and Right Hand Page the same as Left Hand Page of this Book.
- No. 382 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 4 x 4 to the inch, Center Line Red.
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**THE FREDERICK POST CO.**  
*ENGINEERING and DRAFTING SUPPLIES*  
IRVING PARK STATION  
CHICAGO, ILL.

92 FIFTH ST.                      79 NEW MONTGOMERY ST.  
PORTLAND, ORE.                      SAN FRANCISCO, CAL.

AGENTS FOR  
"BERGER" TRANSITS and LEVELS  
"GURLEY" SURVEYING and HYDRAULIC INSTRUMENTS  
"CHICAGO" STEEL TAPES, etc.

MICROFILMED

APR 7 1965



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*Journal*  
*AP*



Grades on Folk Ave from E Line of Idaho  
to W. Line of 32<sup>nd</sup>

	S. Line	S. Ck.	N. Eb.	N. Line	
E Line Idaho	370.25	370.00	370.00	370.25	
+75	+1.0	369.75		369.88	
1+50	-0.3	369.25		369.50	
2+25	+1.0	368.75		369.12	CURB
W. Line Utah	368.25	368.00	368.50	368.75	
E. Line "	368.25	368.00	368.50	368.75	
+75	+1.0	368.50		368.87	+1.0
1+50	+0.4	368.75		369.00	+0.9
2+25	+1.0	369.00		369.12	+0.3
W. Line Kansas	369.25	369.00	369.00	369.25	
E " "	369.25	369.00	369.00	369.25	
+75	0.0	368.87		368.00	+1.0
1+50	+0.4	368.50		368.75	0.0
2+25	+1.3	365.12		365.5	+0.7
W. Line 30 <sup>th</sup>	363.75	363.50	364.0	364.25	
E " "	363.75	363.0	363.5	363.75	
+75	+0.4	363.87		364.25	+0.2
1+50	Side walk	364.50		364.75	
2+25	Side walk	365.12		365.25	Side walk
W. Line Ohio	365.75	365.5	365.5	365.75	
E. Line "	366.25	366.0	366.0	366.25	
+75	-0.2	366.50		366.50	+0.2
1+50	0.0	366.75		366.75	0.0
2+25	-0.2	367.0		367.00	+0.1
W. Line Illinois	367.25	367.0	367.0	367.25	

369.96 BM SE Idaho

369.25	369.75	369.25	369.75	368.5	368.5
373.21	3.46	3.96	4.46	7.8	5.01
4.23	3.46	3.96	3.46	366.0	
368.98	2.46	3.30	3.46	5.42	
1.53	2.07	-1.34	2.07		
370.51					
4.01					
365.50	S 368.5	368.75	369.00	367.87	366.5
5.92	4.7	4.46	4.21	2.64	4.01
371.42	3.7	3.70	3.21	2.0	3.65
	+1.07	+0.46	+1.07	0.0	+1.36
	N 368.87	369.00	369.12	368.00	366.75
	4.34	4.21	4.07	2.51	3.76
	3.24	3.30	3.4	1.51	3.73
	+1.10	+0.9	+0.29	+1.07	0.0
	S 363.87			366.5	366.75
	6.64			4.92	4.67
	6.24			5.17	4.72
	+0.40			-0.25	0.05
	N 364.25			4.92	4.67
	6.26			7.72	4.65
	6.03			+0.20	0.0
	+0.23				



S Line				
E. Line Illinois	366.75	366.5	366.5	366.75
+75	+0.4	364.62		364.37
+150	+0.9	362.50		362.00
+225	+2.0	360.37		359.62
W. Line Iowa	358.25	358.0	357.0	357.25
E " "	357.25	357.0	356.5	356.75
+75	-0.1	356.37		356.0
+150	-1.1	355.5		355.25
+225	-0.7	354.62		354.50
W. Line 32 <sup>nd</sup>	353.75	353.5	353.5	353.75

Popk Ave

sidewalk

HI	271.42			
	12.65			
T.P.	358.77			
	1.88			
	360.65			
S	364.62	362.5	360.37	357.0
	6.80	8.92	11.05	14.4
	6.40	8.0	9.05	
	+0.40	+0.92	+2.0	3.65
N	364.37	362.0	359.62	353.5
	7.05	9.42	11.80	7.15
	7.10	9.20	11.10	
	.05	+0.2	+0.7	
S	356.37	355.5	354.62	
	4.28	5.15	6.03	
	3.4	6.44	6.53	
	-0.1	-1.40	-0.7	
N	356.0	355.25	354.5	
	4.65		6.15	
			5.05	
			+1.1	



OLIVETAS ST  
GRADES.80 wide  
14' cbs.

3

W.L.

E.L.

51. PEARL	49.75
50 S	50.81
100 S	51.87
150 ✓	52.93
200 ✓	54.00
250 ✓	55.06
300 ✓	56.12
350 ✓	57.18
400 ✓	58.25

50.25
51.31
52.37
53.43
54.50
55.56
56.62
57.68
58.75



233.01 N.M. Fern + Ash  
 238.49

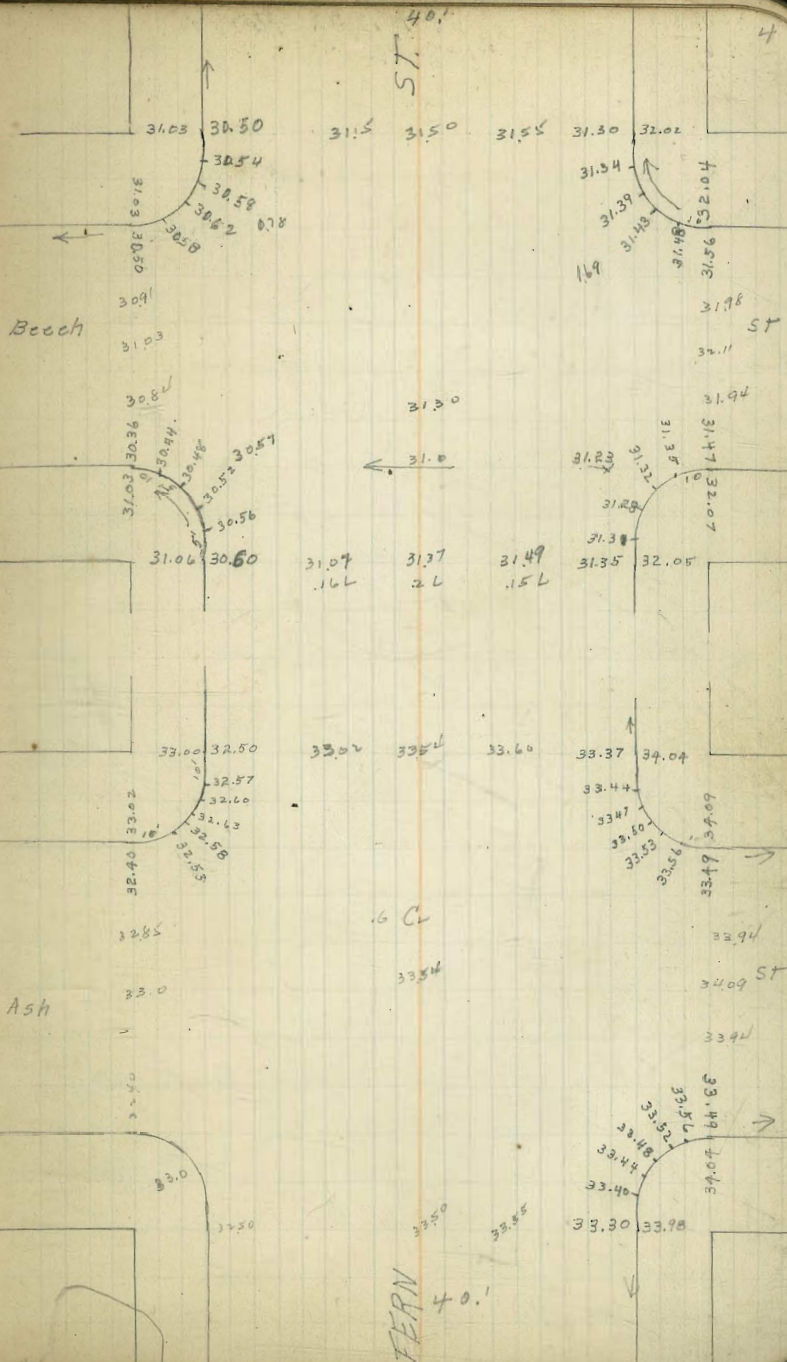
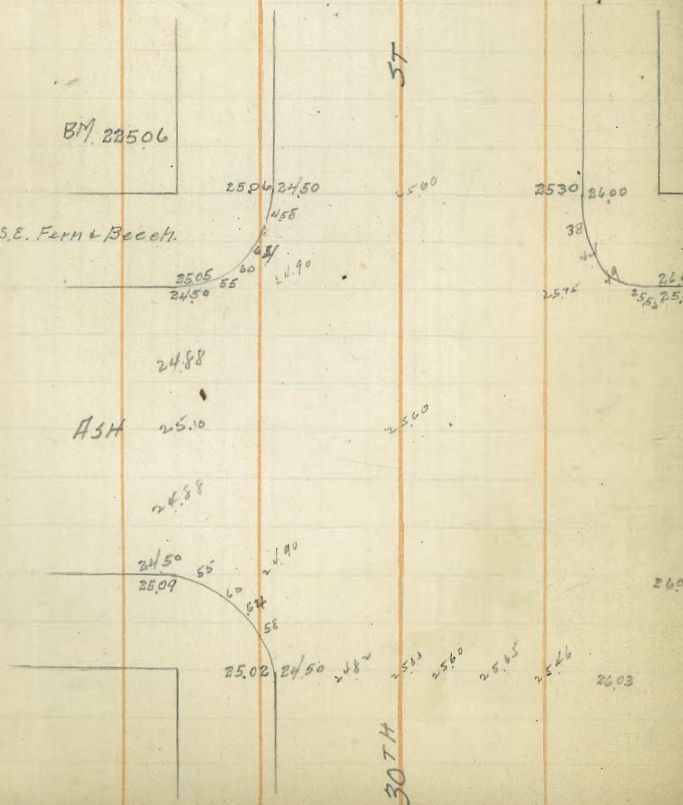
FERN ST PAVING  
 From A to Ivy

233.01	2080	3115	3150	3153			
238.49	299						
73301	31.43						
23393							
30.60	31.07	31.97	31.1	31.30	31.44	31.23	31.24
36.13	5.06	4.76	5.13	2.83	2.64	4.90	4.19
	31.96	149	178	3091	3103	3084	3057
	7.15	4.44	5.35	5.27	5.10	5.29	5.56
	3902	3054	3360				
	3.11	4.39	4.53				
3330							
406							
37.36	3350	3355	33.0	32.85	32.80	33.54	34
	3.84	5.61	4.26	4.51	4.56	3.84	4.9

887

BM 22506

232.07 S.E. Fern + Beech  
 4.71  
 236.78









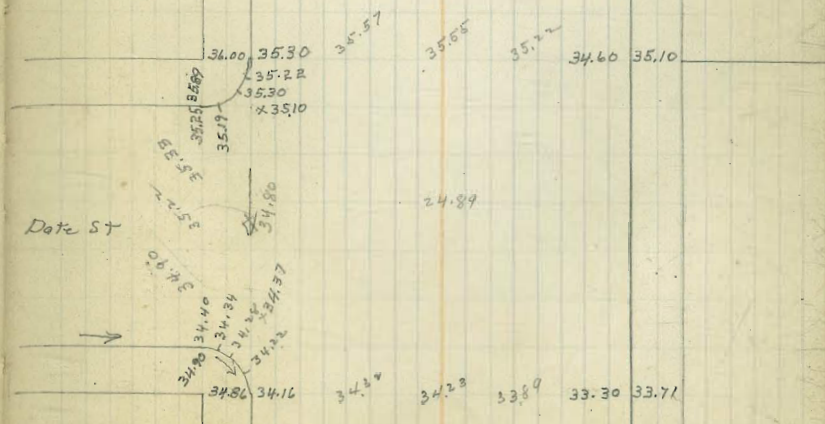
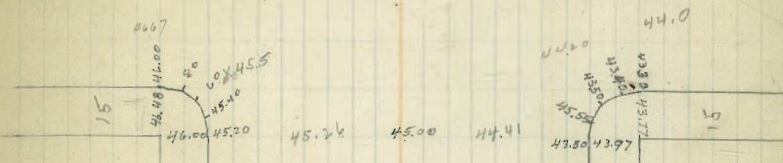
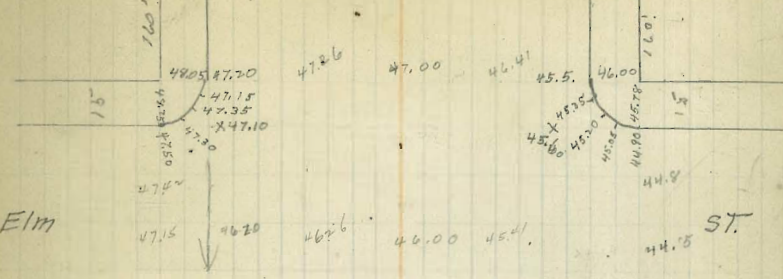
FERN ST

45.20	45.26	45.0	44.41
<u>3.48</u>	<u>3.42</u>	<u>3.64</u>	<u>4.27</u>
48.68			

35.25	35.8	35.57	35.55	35.72	24.89	4.23
<u>4.47</u>	<u>4</u>	<u>4.15</u>	<u>4.17</u>	<u>5.50</u>	<u>4.83</u>	<u>5.49</u>
39.72	4.80	4.37	4.90	35.22	35.30	35.10
	<u>9</u>	<u>5.33</u>	<u>4.82</u>	<u>4.50</u>	<u>4.37</u>	<u>4.62</u>
53.89	7.20	7.26	7.0	6.41		
	<u>6.69</u>	<u>6.63</u>	<u>6.89</u>	<u>7.48</u>		

45.20	45.26	45.0	44.41	44.7	44.0	44.5	44.8	45.6	46.4
<u>4.34</u>	<u>4.28</u>	<u>4.5</u>	<u>5.13</u>	<u>5.34</u>	<u>5.5</u>	<u>5.0</u>	<u>4.74</u>	<u>3.94</u>	<u>3.13</u>
49.54									
	<u>47.0</u>	<u>47.26</u>	<u>47.10</u>	<u>47.42</u>	<u>47.15</u>	<u>46.20</u>	<u>46.67</u>	<u>45.5</u>	
	<u>2.8</u>	<u>2.8</u>	<u>2.44</u>	<u>2.1</u>	<u>2.39</u>	<u>3.34</u>	<u>2.87</u>	<u>2.04</u>	

Brk





50.6  
4.57  
64.77

61.87  
3.90  
60.40  
4.57

61.35  
3.42  
59.35  
5.62

61.45  
3.52  
59.57  
5.40

60.85  
4.12  
59.45  
5.52

61.15  
3.82  
59.12  
5.85

61.30  
3.67  
59.15  
5.72

.08  
97  
58.6  
6.37

51.4  
2.49  
53.89

59.31  
.66

60.31  
.66

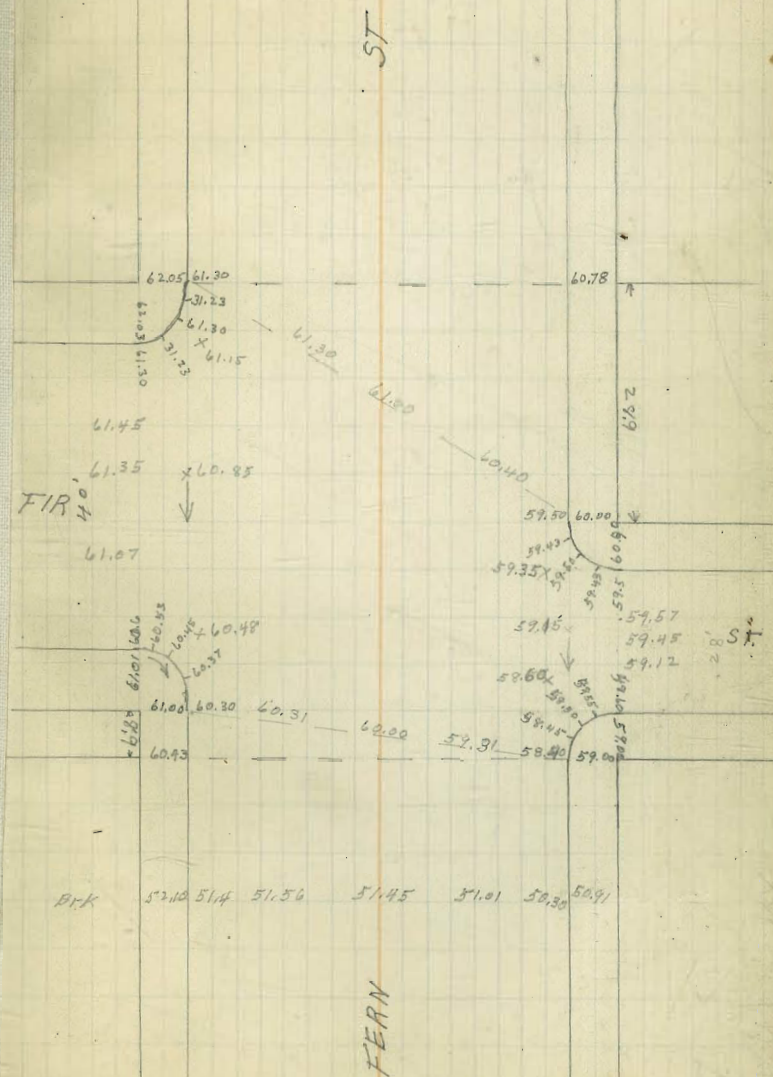
60.48  
4.49

51.56  
2.32

51.45  
2.44

51.01  
2.88

FERN ST





50.6  
4.5  
24.3  
269.47 S.E. Fern & Grape  
7.02  
276.49

FERN

69.97 70.13 70.04 69.70  
3.82 66 75 09  
72.79

51.4  
2.4  
53.8

7440  
193  
72.33

7440  
482  
78.92

7449 7430 7398  
490 5.03 5.35

7395 7447 7475 7479 7459 7420 7395  
497 4.45 5.17 5.13 4.33 4.74 4.97

7394 7340 7370 7372 7350 7345  
598 5.48 5.24 5.20 5.12 5.47

7330  
2.29  
75.59

710 7123 7096 7050 7030 6935  
4.59 4.36 4.61 5.09 5.29 6.24

6958 6972 6997 7006 6996  
6.31 5.87 5.64 5.53 5.63

.05L .16L .09L  
W Line 30" 08L .03L  
51.0

GRAPE

109

108

7402 7360 7395 7447 7475 7479 7459 7440 7507

7430 X  
7440  
7430  
7440

210740  
12  
70

73.10

7442 23L

FERN ST. 30L

7399

7398 35L

7350 7350 7350 7400  
7345 7345 7345

7302 7250 7294 7344 7370 7372 7370 7330 7398

49.4

72.05

49.40

7064 7017 7050 7098 7123 7123 710 7090 7198

7012 7007 7002

7013

7014

FERN ST

69.70

7032

57.96

69.52 69.00

69.95 69.10

69.85 69.05

69.52 69.00

.07L

.16L

.20L

.16L

.07L

69.28 69.72

69.97

70.06

69.96

69.85

70.54

12

51.0 ST

12











203.42 H.I.  
 12.95  
 190.47  
 1.66  
 172.13

A ST PAVING  
 28th To 30th

8970 8921 8970 8997 8992 8986 8995  
 293 3.4 3.3 2.66 2.71 2.77 5.56  
 92.63

198.26 199.51 199.20 199.07  
 5.33 4.68 4.49 4.62  
 203.69

8655 8724 8778 8790  
 6.18 3.39 4.85 4.83  
 92.73

8824 8856 8932 8959 8984 8950 89 8994  
 4.54 3.83 3.97 2.7 2.9 3.24 3.7 2.87  
 92.77

88.0 87.0 87.0 8690 8774 8775 8761 8730 8684 8627  
 4.54 5.4 5.64 4.30 4.79 4.93 5.3 5.72 4.34

8689 8725 8780 8797 8794  
 5.65 5.09 4.76 4.61 4.60

8817 8829 8829 8803 8756  
 4.31 4.21 4.25 4.61 4.88

189.2 898 8830 892 897 899 886 8970 9030

89.83 90.30  
 89.83 x .63 89.70

199.20

89.54 19L  
 89.25 29B  
 88.56 19L

872 8756 8803 8829 8832 887 8800 8870

1970 8712 8652 8745 8745 8791 8794 8784 8756 8784

86.87

29457

87.01

86.85

8730 8690 8620 8650 8650 8650 8650 8650 8650 8650

187.0

115.4

8735

8730 8761 8776 8774 8761 8756 8756 8756 8756 8756

198.74 198.36 CUT 199.01 199.20 199.07  
 198.98 RAKE

LAWRENCE

w. line Date

198.3 199.17  
 198.29 RAKE

FL 199.21



205.50 B.M. N.W. C.P. A+Granada  
4.11  
209.61

AST

205.50

3.01  
208.50

$\frac{347}{5.03}$

$\frac{422}{5.28}$

$\frac{471}{5.99}$

$\frac{495}{3.55}$

$\frac{493}{3.57}$

$\frac{438}{4.12}$

$\frac{453}{3.97}$

$\frac{468}{3.80}$

205.50

2.13  
207.63

$\frac{288}{5.62}$

$\frac{355}{4.95}$

$\frac{401}{4.84}$

$\frac{426}{4.26}$

$\frac{430}{4.20}$

$\frac{492}{2.71}$

$\frac{493}{2.70}$

$\frac{482}{2.81}$

205.50

3.71  
209.21

$\frac{492}{2.79}$

$\frac{493}{2.78}$

$\frac{482}{2.89}$

28 In ST

12

4.91 4.55 5.00 5.76 6.13 6.32 6.24 6.11 6.91  
Paving 9.15  
.15L .25L .23L .12L .09L

5.86L

3.50 3.00 4.71 4.95 4.93 4.83 5.43

4.75  
4.75  
4.80  
4.68  
4.70  
4.80

-2.86

-2.73

-2.61

4.92  
2.82 Low  
Granada

4.83  
4.92 4.90  
3.7L Granada

4.82  
2.22L

4.88 4.85 4.82 4.80 4.78 4.76 4.74 4.72 4.70 4.68 4.66 4.64 4.62 4.60 4.58 4.56 4.54 4.52 4.50 4.48 4.46 4.44 4.42 4.40 4.38 4.36 4.34 4.32 4.30 4.28 4.26 4.24 4.22 4.20 4.18 4.16 4.14 4.12 4.10 4.08 4.06 4.04 4.02 4.00 3.98 3.96 3.94 3.92 3.90 3.88 3.86 3.84 3.82 3.80 3.78 3.76 3.74 3.72 3.70 3.68 3.66 3.64 3.62 3.60 3.58 3.56 3.54 3.52 3.50 3.48 3.46 3.44 3.42 3.40 3.38 3.36 3.34 3.32 3.30 3.28 3.26 3.24 3.22 3.20 3.18 3.16 3.14 3.12 3.10 3.08 3.06 3.04 3.02 3.00 2.98 2.96 2.94 2.92 2.90 2.88 2.86 2.84 2.82 2.80 2.78 2.76 2.74 2.72 2.70 2.68 2.66 2.64 2.62 2.60 2.58 2.56 2.54 2.52 2.50 2.48 2.46 2.44 2.42 2.40 2.38 2.36 2.34 2.32 2.30 2.28 2.26 2.24 2.22 2.20 2.18 2.16 2.14 2.12 2.10 2.08 2.06 2.04 2.02 2.00 1.98 1.96 1.94 1.92 1.90 1.88 1.86 1.84 1.82 1.80 1.78 1.76 1.74 1.72 1.70 1.68 1.66 1.64 1.62 1.60 1.58 1.56 1.54 1.52 1.50 1.48 1.46 1.44 1.42 1.40 1.38 1.36 1.34 1.32 1.30 1.28 1.26 1.24 1.22 1.20 1.18 1.16 1.14 1.12 1.10 1.08 1.06 1.04 1.02 1.00 0.98 0.96 0.94 0.92 0.90 0.88 0.86 0.84 0.82 0.80 0.78 0.76 0.74 0.72 0.70 0.68 0.66 0.64 0.62 0.60 0.58 0.56 0.54 0.52 0.50 0.48 0.46 0.44 0.42 0.40 0.38 0.36 0.34 0.32 0.30 0.28 0.26 0.24 0.22 0.20 0.18 0.16 0.14 0.12 0.10 0.08 0.06 0.04 0.02 0.00

2.96 2.46 2.88 3.55 4.01 4.26 4.30 4.23 5.04

Lowered

21

14.1

14.1

A  
1.67 Cal



B St Paving  
28<sup>th</sup> to East of Edgemont.

213.49  
863  
217.12

267  
843

256  
16

481  
1227

468  
1044

600  
240

566  
1140

569  
173

551  
1161

545  
167

559  
143

585  
1127

605  
1107

673  
239

746  
966

856  
856

998  
714

1206  
506

1245  
447

1105  
607

1022  
289

816  
896

661  
1051

553  
1187

466  
246

F11

375  
337

346  
266

335  
397

350  
1062

110 1.18  
102

110  
10

115

1270  
296  
1546

B.M. 21349

Edgemont 12.65 12.30 12.19 11.97 11.50 10.60 10.87 ST

12.27

11.70  
12.27

12.29 11.50

11.59

11.61

11.40

10.97

10.30

9.90

10.44

10.10 9.985 10.22

16

B

689	640	619	621	600	557	491	450	504
846	820	829	831	810	767	701	660	714
1051	970	978	978	955	910	842	800	854
1154	1080	1088	1098	1065	1020	952	910	966
1246	1170	1177	1175	1150	1103	1033	990	1039
1301	1225	1233	1233	1210	1165	1094	1055	1107
1337	1260	1267	1265	1240	1193	1123	1080	1127
1366	1290	1296	1293	1267	1219	1148	1105	1153
1377	1302	1309	1308	1283	1237	1166	1125	1167
1362	1287	1292	1285	1272	1227	1157	1117	1161
1345	1270	1277	1278	1253	1210	1141	1100	1146
1356	1260	1263	1257				1083	1143
							1077	1080

1096

10.58

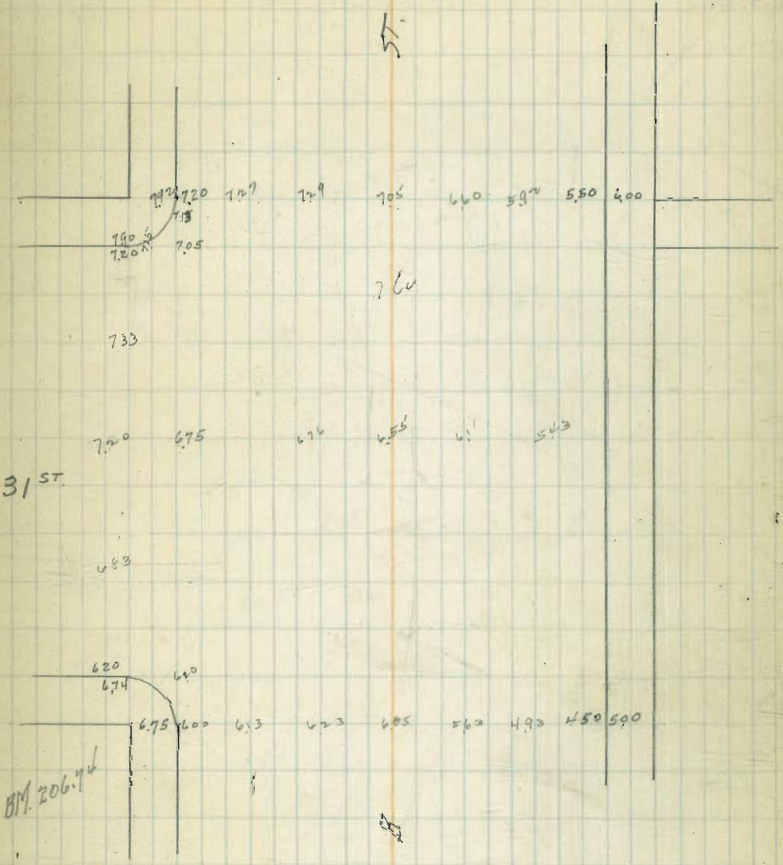


B ST PAVING  
28th To E. of Edgemont

206.74  
4.72  
111.82

7.0  
6.65  
13.85

5.53 6.52





B ST PAVING

2115v

20505

21011

11.31

22196

~~22014~~

20014

874

2388

15.90

2.02

18.23

88v

777 845 713 822 827

356 307

141 1011

459 690 480 672 766 672 622 523

141 684 592 548 192

1485 1604 1653 2054

390 446 492 592

1877 1750 702 1604

1901

965 1491 2010

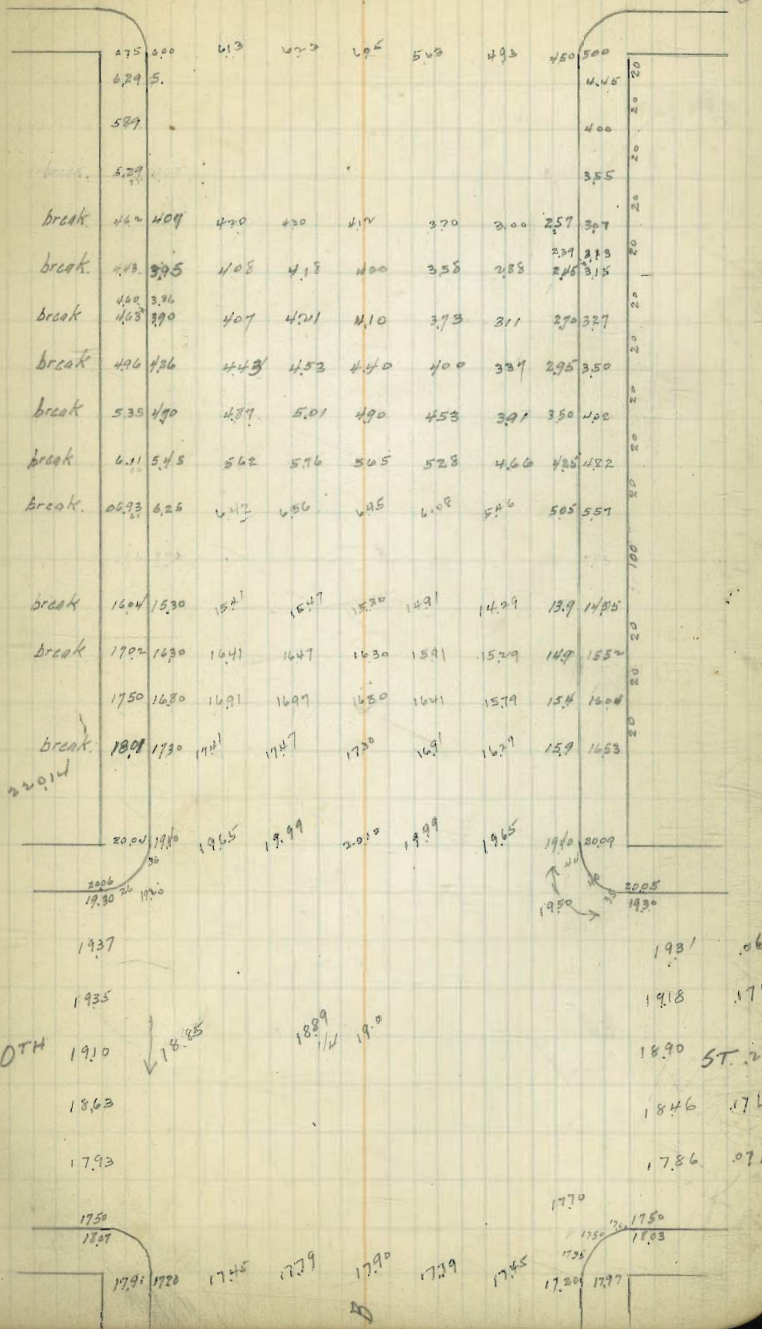
194 132 720 747 741

194 132 720 747 741

31<sup>ST</sup>

ST

ST 15



BM 2014

30TH

1931 06L

1918 17L

1890 ST. 20

1846 17L

1786 07L

B



B ST PAYING

197  
 $\frac{450}{201.80}$

$\frac{59}{59}$

$\frac{489}{9691}$

$\frac{498}{682}$

$\frac{53}{625}$

$\frac{536}{644}$

$\frac{95}{85}$

$\frac{654}{626}$

$\frac{656}{524}$

$\frac{9625}{222}$   
 99.69

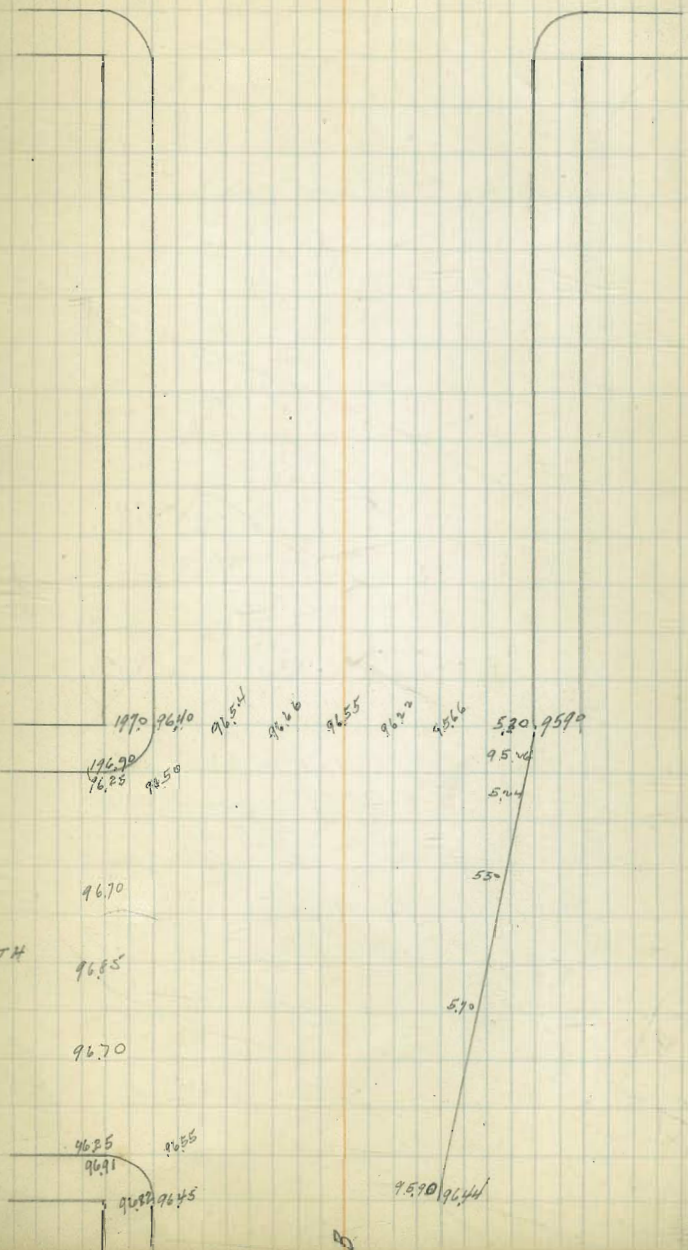
$\frac{9670}{299}$

$\frac{9685}{287}$

30TH

5

ST. 1.6



29TH



B ST PAVING.

196.96  
+50  
201.46

116  
650

202  
784

514  
579

623  
4523

519  
9627

57.  
BRIDGE

17

9703 9634 9619 9664 9656 9625 9572 9536 9597

9724 9714 9732 9753 9752 9728 9681 959 9446

196.96

28TH

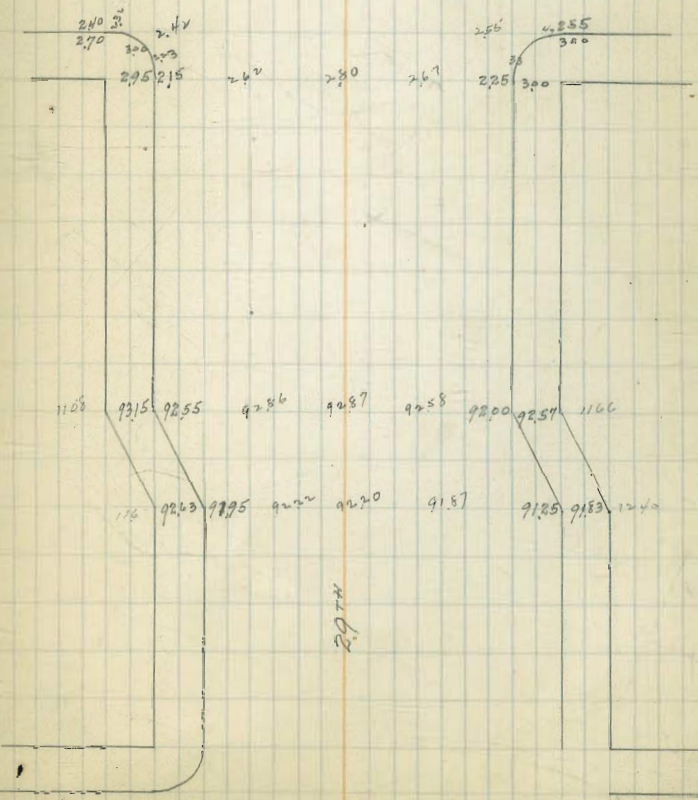
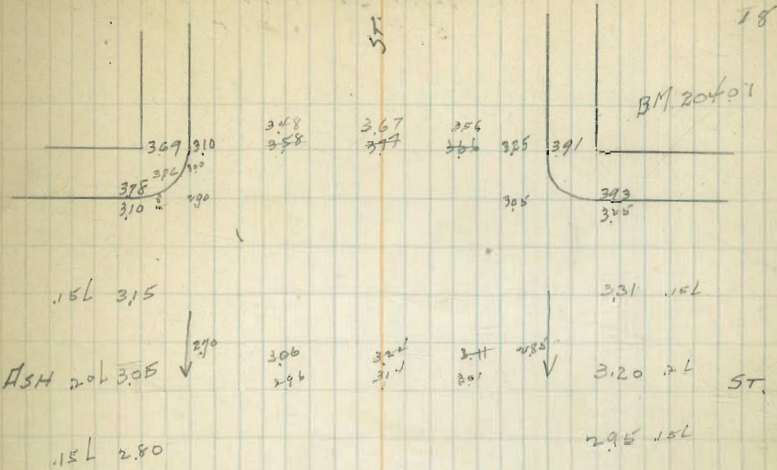
B

57



20th St PAVING  
B ST. TO DATE

$\begin{array}{r} \text{w.o.d.} \\ \text{4.2} \\ \hline 204.22 \end{array}$	$\begin{array}{r} 030 \\ \hline 373 \end{array}$	$\begin{array}{r} 032 \\ \hline 391 \end{array}$	$\begin{array}{r} 054 \\ \hline 309 \end{array}$	$\begin{array}{r} 037 \\ \hline 86 \end{array}$	$\begin{array}{r} 045 \\ \hline 378 \end{array}$	
$\begin{array}{r} 325 \\ \hline 365 \\ \hline 690 \end{array}$	$\begin{array}{r} 366 \\ \hline 324 \end{array}$	$\begin{array}{r} 377 \\ \hline 312 \end{array}$	$\begin{array}{r} 358 \\ \hline 332 \end{array}$	$\begin{array}{r} 262 \\ \hline 408 \end{array}$	$\begin{array}{r} 280 \\ \hline 410 \end{array}$	$\begin{array}{r} 267 \\ \hline 323 \end{array}$
$\begin{array}{r} 9625 \\ \hline 9258 \\ \hline 367 \end{array}$	$\begin{array}{r} 9257 \\ \hline 238 \end{array}$	$\begin{array}{r} 9286 \\ \hline 239 \end{array}$	$\begin{array}{r} 9222 \\ \hline 403 \end{array}$	$\begin{array}{r} 9220 \\ \hline 405 \end{array}$	$\begin{array}{r} 9182 \\ \hline 428 \end{array}$	





GRANADA AVE PAVING  
 A ST To HAWTHORN

$\frac{21093}{343}$   
 $\sim 1436$

$\frac{1045}{3.91}$

$\frac{1040}{3.96}$

$\frac{1005}{4.21}$

$\frac{992}{4.42}$

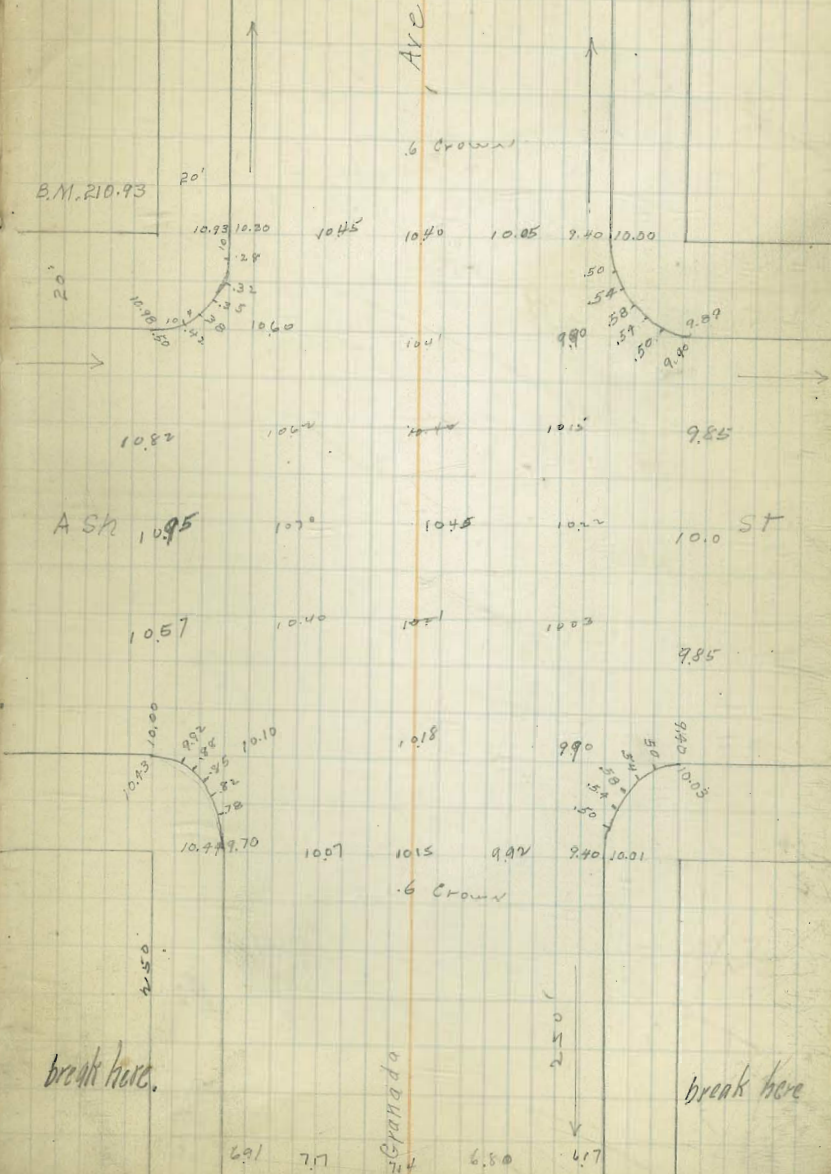
$\frac{1015}{4.21}$

$\frac{1007}{4.29}$

$\frac{1050}{501}$   
 15.81

PAVING

156 256 17.7





GRANADA AVE PAVING

21299  
361  
21660

21299  
647  
21341

447  
894  
522  
816

437  
874  
614  
721

510  
831

506  
835

1299  
359  
1658

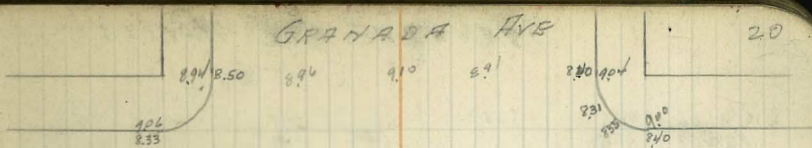
45/93 27/86 27/86 11/87 45/93 48/88 11/87

1065  
401  
1466

27/84 47/19 40/24 26/80 22/83 22/83 46/70 10/56 11/74

GRANADA AVE

20



857

859

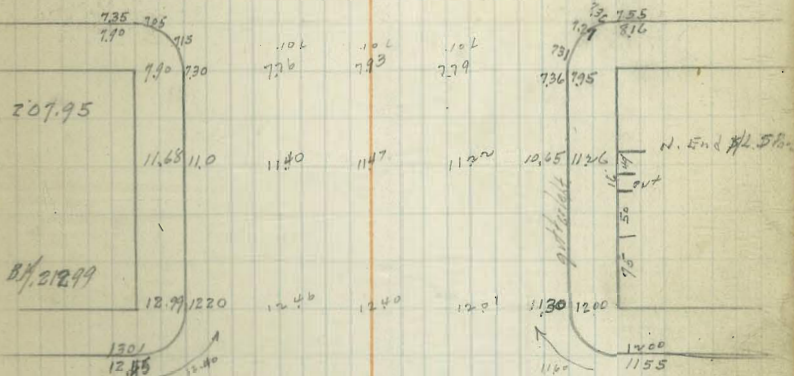
DATE 849

6564

862 ST

808

825



207.95

8/21/29

CEOR

1271

1174

1265

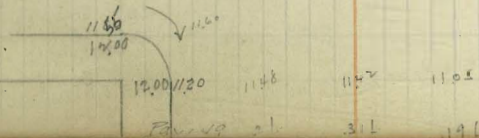
1219

1174 ST

1220

65 Crown

1122



1160

1160







GRANADA AVE PAVING

23296  
443  
-----  
23738

3291  
489  
-----  
3780

3295  
355  
-----  
3650

3853

3155 3436 2224 3224  
316-3185 3015 2219 3149  
2219 3152 3140  
33.07  
32.18 3222 3466  
3402 3222 32.50 3222  
3130 3177  
177  
88

119  
78.8  
714

66  
56  
66  
56  
56  
198

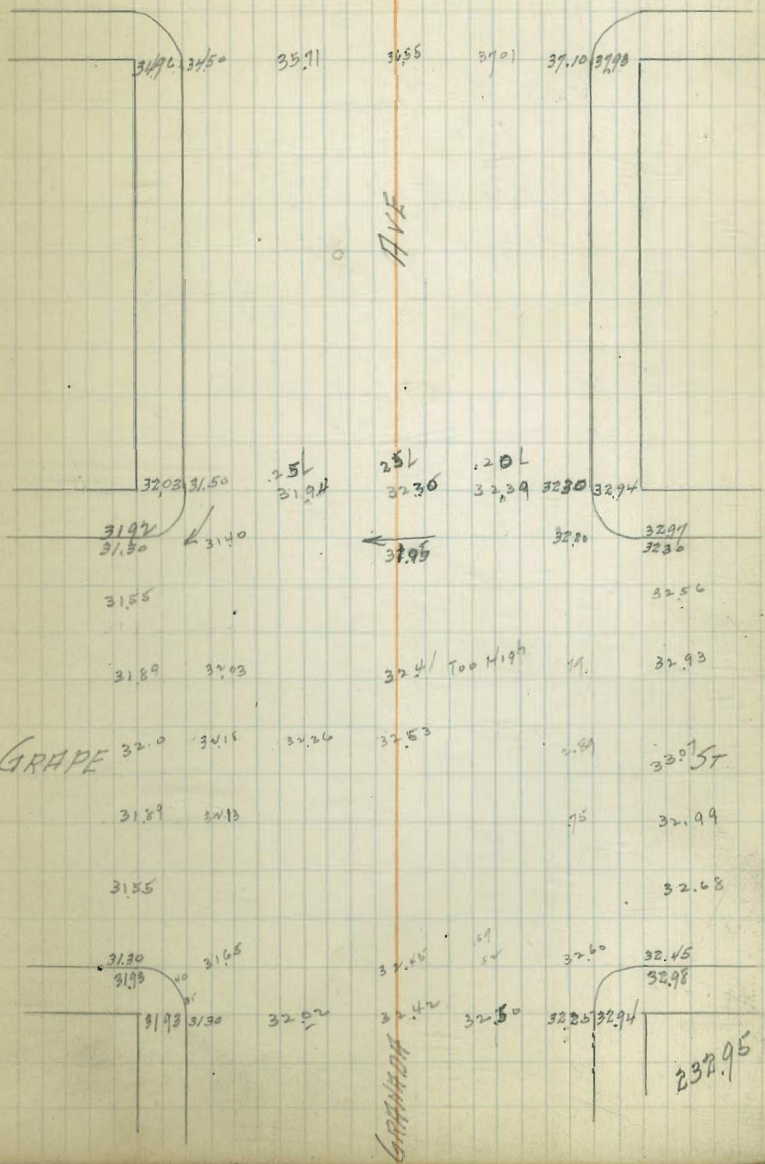
3200  
3222

HAWTHORN

22

37.30  
36.57  
37.00  
37.00

57





29th St PAVING  
A To DATE

21294  
544  
21838

21294  
334  
21668

1280 / 3.88    1295 / 3.73    1275 / 3.5    1307 / 3.61    1340 / 3.28    1347 / 3.21    1260 / 3.08    1296 / 2.72    1407 / 2.61

1388 / 4.50    1320 / 3.78    1344 / 3.54    1320 / 3.78    1303 / 3.65    1250 / 2.78    1300 / 2.68    1334 / 2.57    351 / 2.17

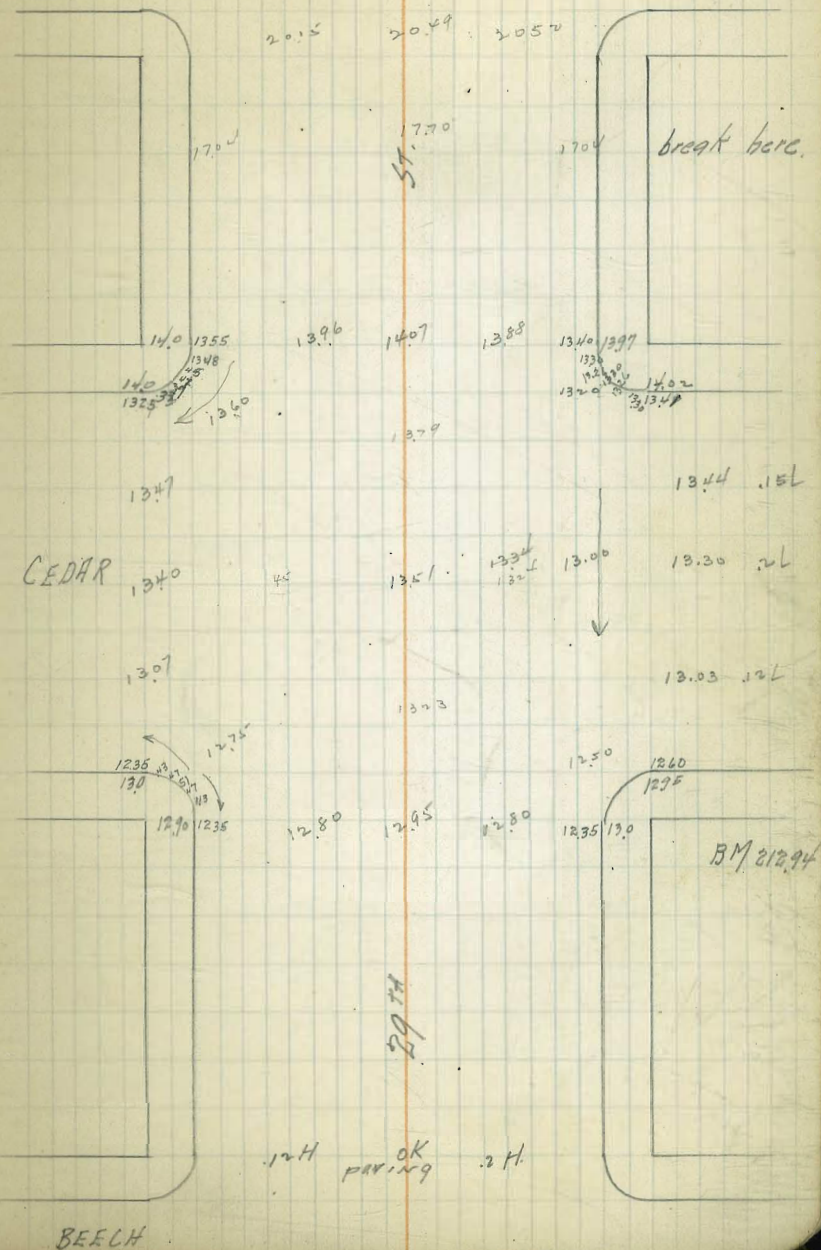
1407  
780  
2187

1270  
35 / 30    45 / 23    20 / 08    45 / 23

1279 / 2.89    1320 / 3.55

DATE

23









Curb Grades on Arnold from S. Line of Myrtle  
to N. Line Park For Water Dept. 7/31/24

	W. CP.	E. CP.
S. Line Myrtle = 00	277.0	278.0
+50	275.0	275.72
+100	273.0	273.43
+150	271.0	271.14
+200	269.0	268.86
+250	267.0	266.57
+300	265.0	264.29
+349.5 Park N. Line	263.0	262.0

279.01 N.E. Myrtle + Arnold B.P.

25

	279.01	268.46	270.69	271.0	269.0	267.0
W	277.0	275.0	273.0	271.0	269.0	267.0
	4.18	6.18	8.18	10.18	12.18	14.18
	04.64.15	5.95	9.00	10.18	12.78	14.20
		+0.23	-0.82	+10.09	-0.60	-0.51
E	278.0	275.72	273.43	271.14	268.86	266.57
	5.18	5.46	7.75	10.04	1.93	4.12
	7.67	4.20	6.80	10.67	3.47	8.01
	+0.50	+1.26	+0.95	-0.63	-1.64	-3.89
W	265.0	273.0				
	5.69	7.69				
	6.09	8.12				
	-0.40	-0.43				
E	264.29	262.0				
	6.40	8.69				
	8.94	10.69				
	-2.54	-2.00				



Grades on 1<sup>st</sup> St from apt 133's. of Nutmeg

to Pt 203' N. of Nutmeg  
W. ch E. ch E. Line

7/31/24

00 = Pt 133's  
of Nutmeg on E.

	W	W. ch	E. ch	E. Line
			224.16	
0+33		221.8	223.8	224.05
0+53		221.9	223.9	224.15
0+73		222.8	224.8	225.05
S. line Nutmeg		227.0	229.0	229.25
1+33				
N. line Nutmeg		228.15	230.0	230.15
= 00				
+50	227.15	229.0	231.0	231.15
1+00	229.65	229.5	231.5	231.65
1+50	229.15	229.0	231.0	231.15
2+00 on W.	228.15	228.0		
2+03 on E		229.9		230.05

BM 22 3.99 Maple + 1<sup>st</sup> N.W. BP

227.26  
2.84

231.84					
0.80					
231.04					
7.46	E	224.16	224.05	224.15	225.05
239.00		7.68	7.79	7.69	6.79
4.98		ch ch	7.61	6.30	5.69
234.02			+ 0.18	+ 1.19	+ 6.10
2.74					
226.76					229.25

	E	230.15	231.15	231.65	231.15
		8.95	7.55	7.35	7.85
		7.96	5.45	4.05	4.05
		+ 0.89	+ 2.4	+ 3.2	+ 3.80

W	227.85	228.15	229.15	229.65	229.15
	11.75	10.85	9.35	9.35	9.85
	11.95	10.45	8.05	7.55	8.35
	- 0.2	+ 0.70	- 1.80	+ 1.80	+ 1.5

W	228.15
	10.85
	12.97
	- 2.1

E	230.05	228.5
	8.95	8.26
	4.98	4.85
	+ 4.0	+ 4.4

223.99	223.8	223.4	222.8	226.9	227.
9.22	9.61	9.51	8.61	6.51	4.41
233.41					
	231.0	231.5	231.0	229.9	
	2.1	1.9	2.41	8.51	
			1.8	1.21	
			+ 0.8	2.10	

223.99	229	230	230.5	230	228.9
9.80	4.11	3.41	2.11	3.41	4.51
233.79					
E	229.00	226.90	224.80	223.90	223.80
	4.79	6.89	8.99	9.89	9.99

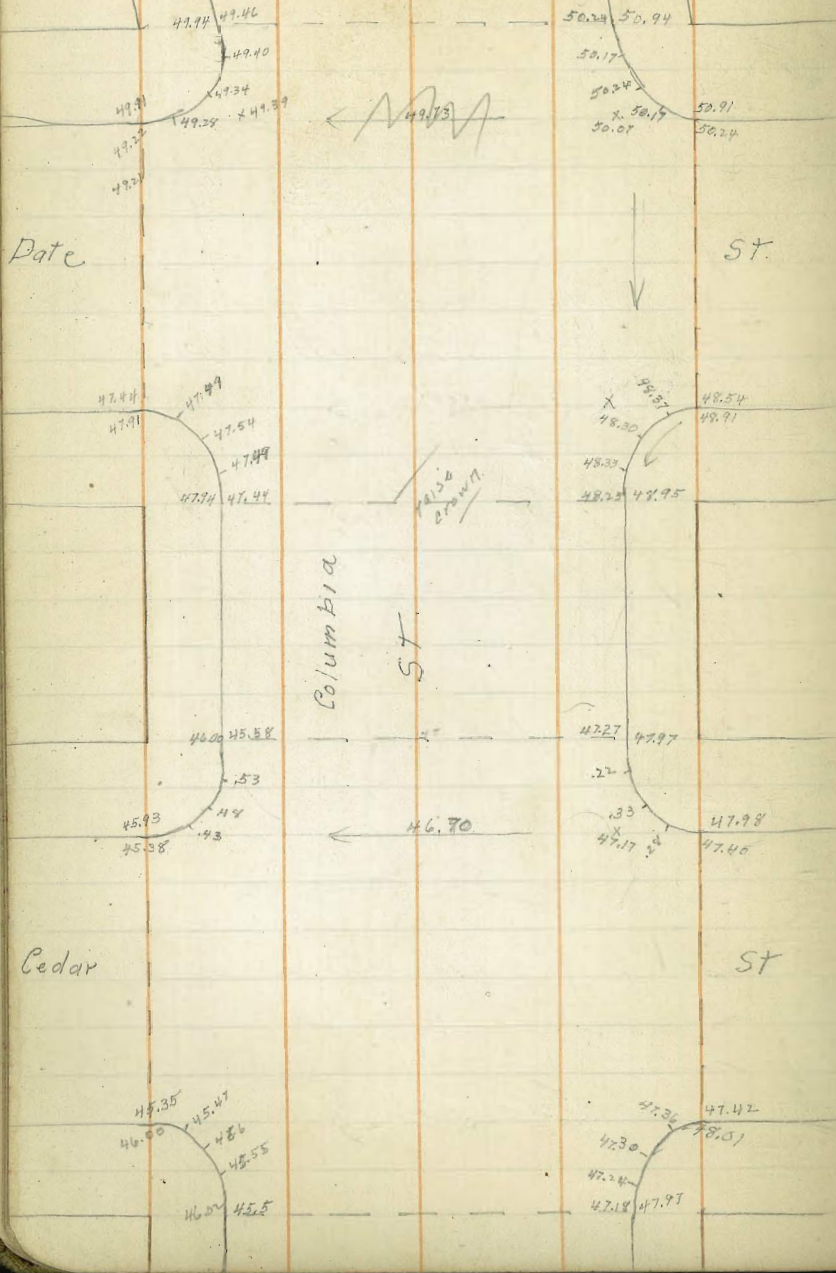
223.99	230.8	231.0	231.50	231.0	230.0
10.80	4.85	3.85	2.25	3.85	4.85
233.79					

W	229.0	230.0	220.50	230.0	229.0	228.	E. ch / ch
	8.85	4.85	4.35	4.85	8.85	8.85	on west

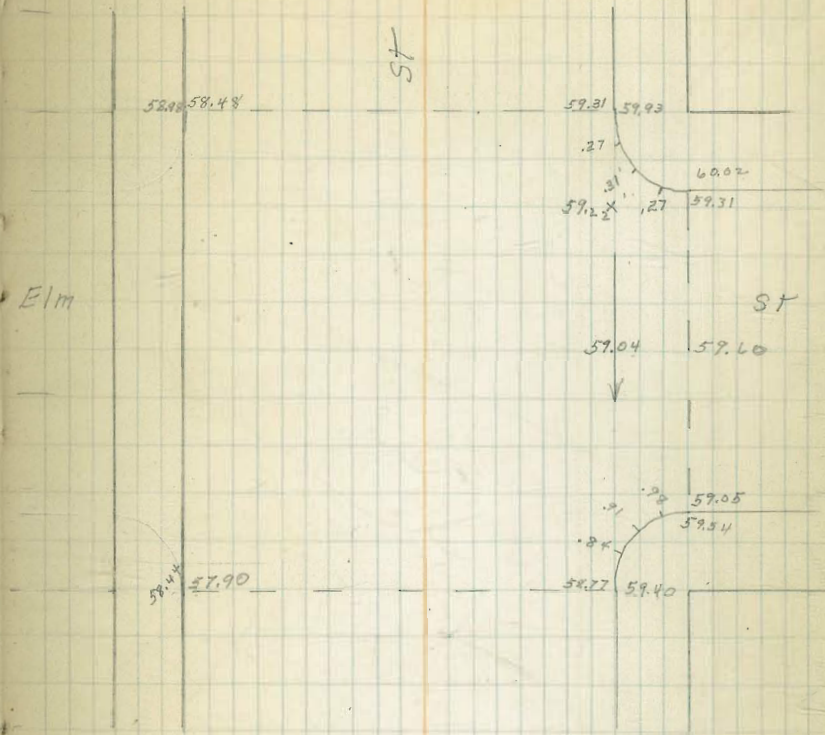
230.0	230.34	226.33	224.89	213.0	211.80	227.33	226.
6.24	12.19	4.01	5.45	17.34	7.43	634.5	
	18.15	130	0.85	12.19	3.84	283	
	6.88	+ 2.71	+ 2.60	+ 5.18	+ 3.59	+ 3.51	



COLUMBIA ST PAVING  
A TO QUINCE



47.95 SW. Col. Elm Date  
 $\frac{6.76}{54.71}$      $\frac{49.46}{5.25}$      $\frac{50.24}{4.47}$      $\frac{50.17}{.54}$      $\frac{48.54}{6.17}$      $\frac{47.44}{7.27}$



46.02 SW. Col. Cedar  
 $\frac{6.30}{52.32}$      $\frac{45.4}{.72}$      $\frac{47.18}{5.14}$      $\frac{47.24}{5.04}$      $\frac{47.22}{.99}$

58.45 SW Col. Elm  
 $\frac{5.96}{64.41}$      $\frac{57.90}{6.59}$      $\frac{58.44}{6.00}$      $\frac{59.31}{5.17}$      $\frac{58.27}{5.21}$



COLUMBIA ST PAVING  
A TO QUINOC

6396  
607  
70.03



JUNIPER

ST.

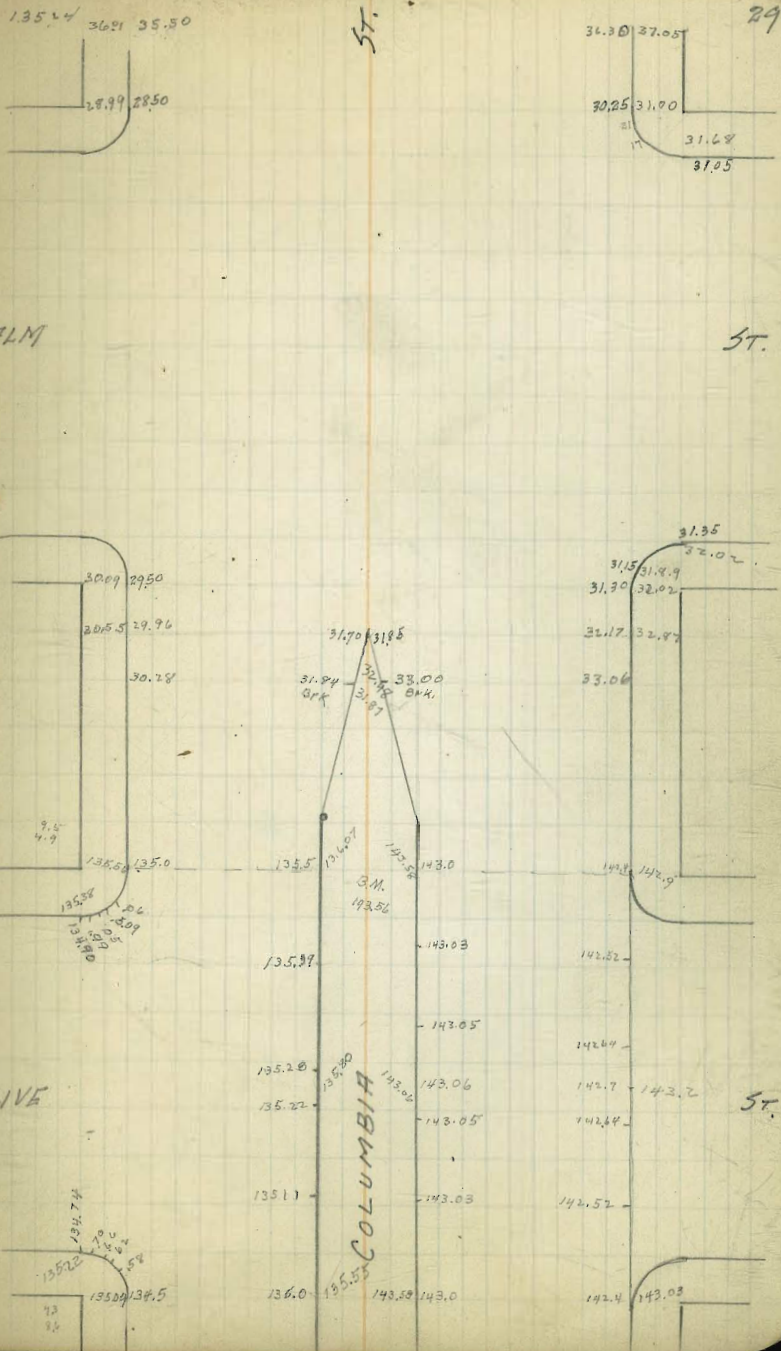
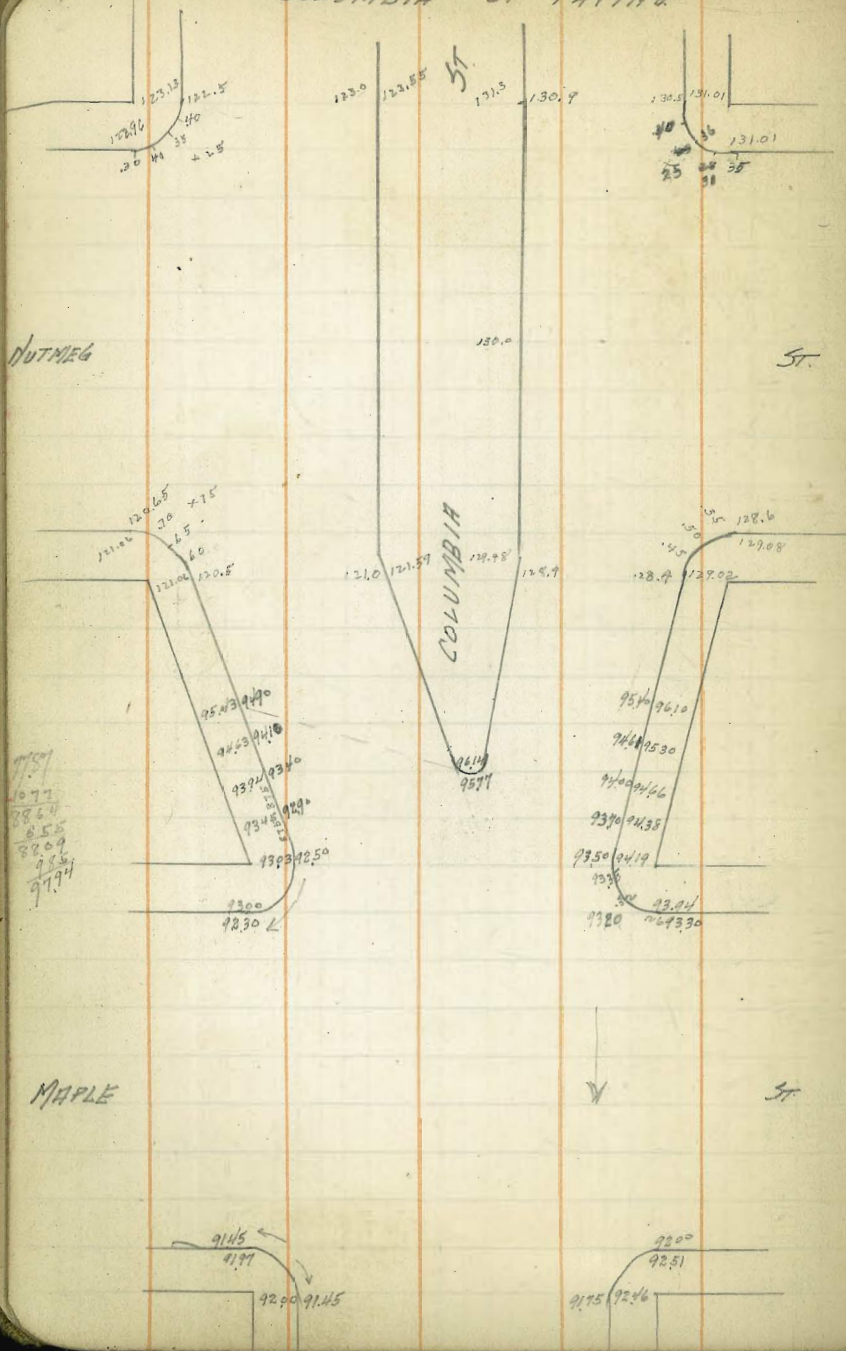


D.P.  
63.96

COLUMBIA



COLUMBIA ST PAYING





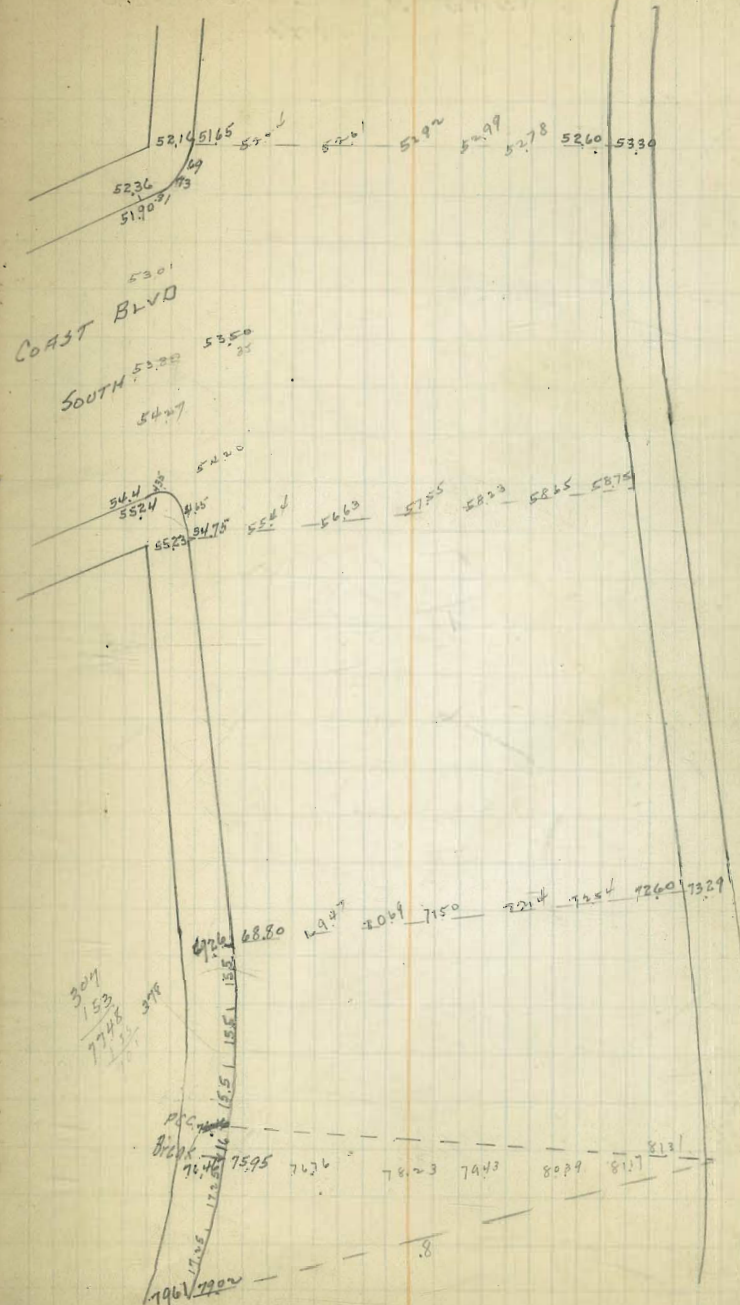
GIRARD & COAST  
BLVD PAVING

5621  
~~2970~~  
016  
5405  
1276  
6881  
829  
6852  
1274  
5175 8126  
9.60  
6435

291 405 325 097  
5330 216 9236 24  
1200 7926

480 165 444 266 197  
7442 961 7900 260 7329  
5844 5603 5758 5823 5865  
891 777 6.80 6.12 5.70  
7254 7214 7150 7089 6947  
798 238 3.02 2.82 2.05

8238  
5190  
481  
36.71  
7876 7823 7943 8039 8117  
5.62 4.12 2.35 1.99 1.22  
4.40 3.01 5427 5380 5350 5204 261 292 299 278  
2.91 3.70 2.40 2.91 3.21 4.67 7.10 3.79 3.72 3.23





GIRARD & COAST BLVD.  
PAYING

44.22  
11.94  
56.21

887  
4734

44.22  
11.94  
45.84

363  
4.21

431 569 162  
49.25 15 44.22

5' 44.22  
0.55  
44.75  
1.23  
32.43

1731  
32.44

124 718  
3.71 277.5

4350

583  
49.33

4350

5.83

346

5.87

315

6.18

260

6.73

285

7.85

170

7.63

4205

7.25

4282

6.51

320

6.03

334

5.79

350

5.83

3400

130

35.96

3400

1.27

3428

1.0

3370

2.16

3290

3.00

3180

4.1

7.8

8.06

863

7.07

825

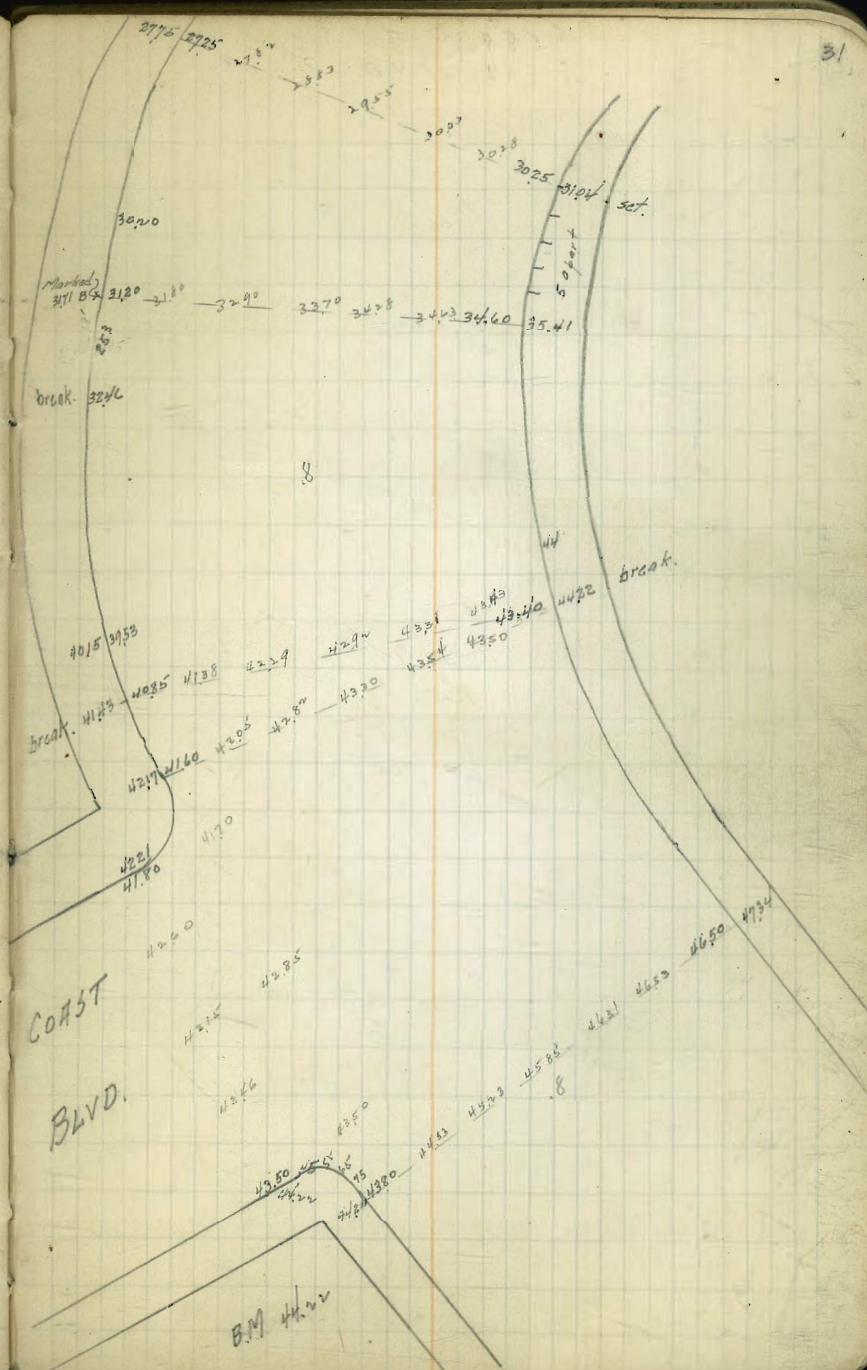
6.55

3009

6.87

3028

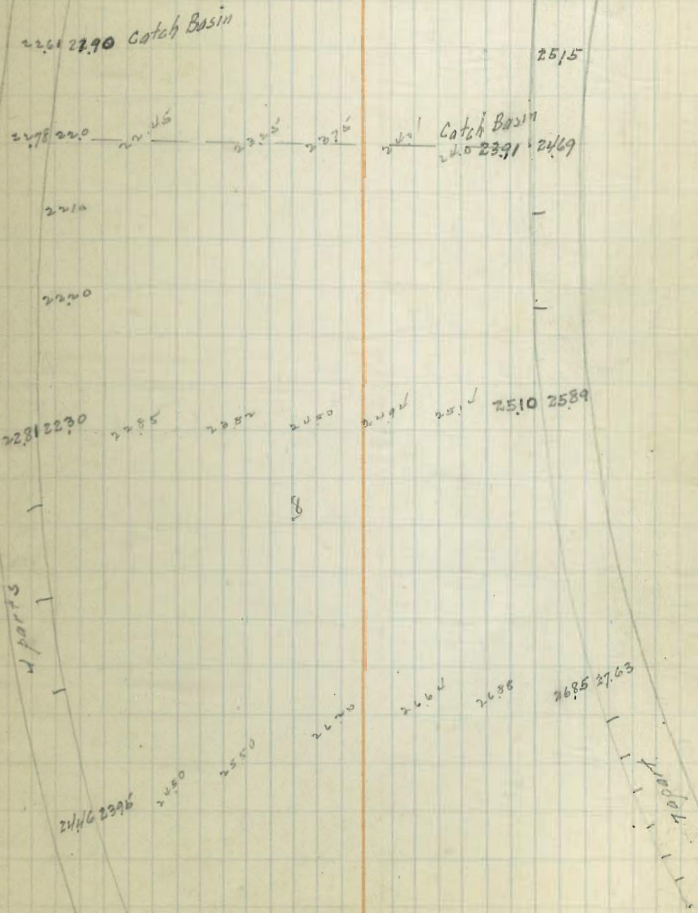
6.62





GIRARD &  
COAST BLVD PAVING

3243 175 3418 327 3091 3493 1230 2263 1046 3359	389 3124	1047 2446	1212 2281	1215 2278	1222 2261	1344 2149
2685 338 3043 2.6 8.28 30.48	2688 758	2662 379	2620 403	2580 493	245 593	
	285 758	282 661	450 573	494 579	514 524	
	2245 503	225 70	375 673	401 607	240 648	2469





# GIRARD & COAST BLVD PAVING

3359

695  
266

485  
2874

551  
2808

645  
2714

688  
2671

857  
2502

926  
2432

1021  
2328

1091  
2268

3048

265  
282  
2968

2425  
502  
550

586  
597  
461

2755

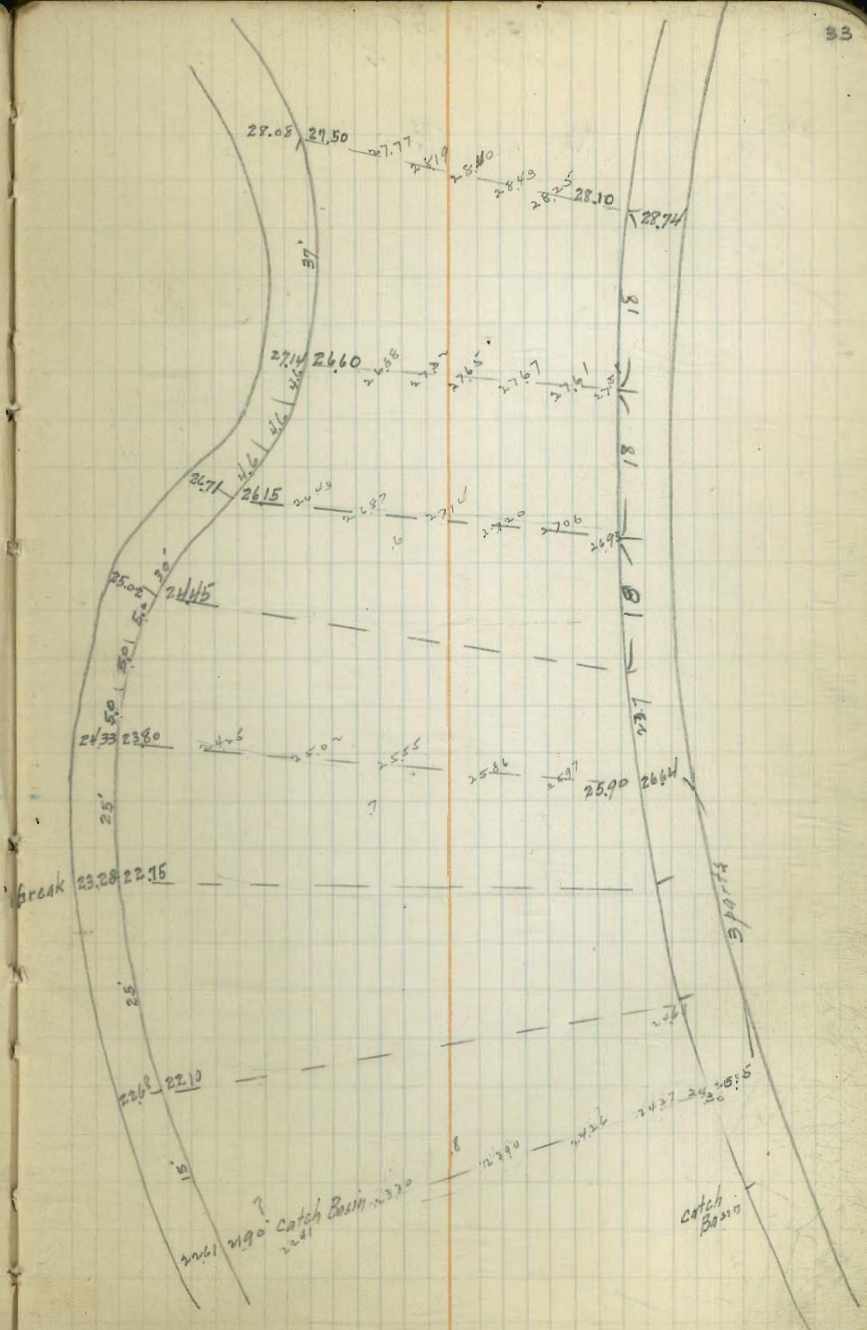
245  
210 2343 412 457 460

643  
505

687  
710  
720

2713

241  
320 390 47 433 276

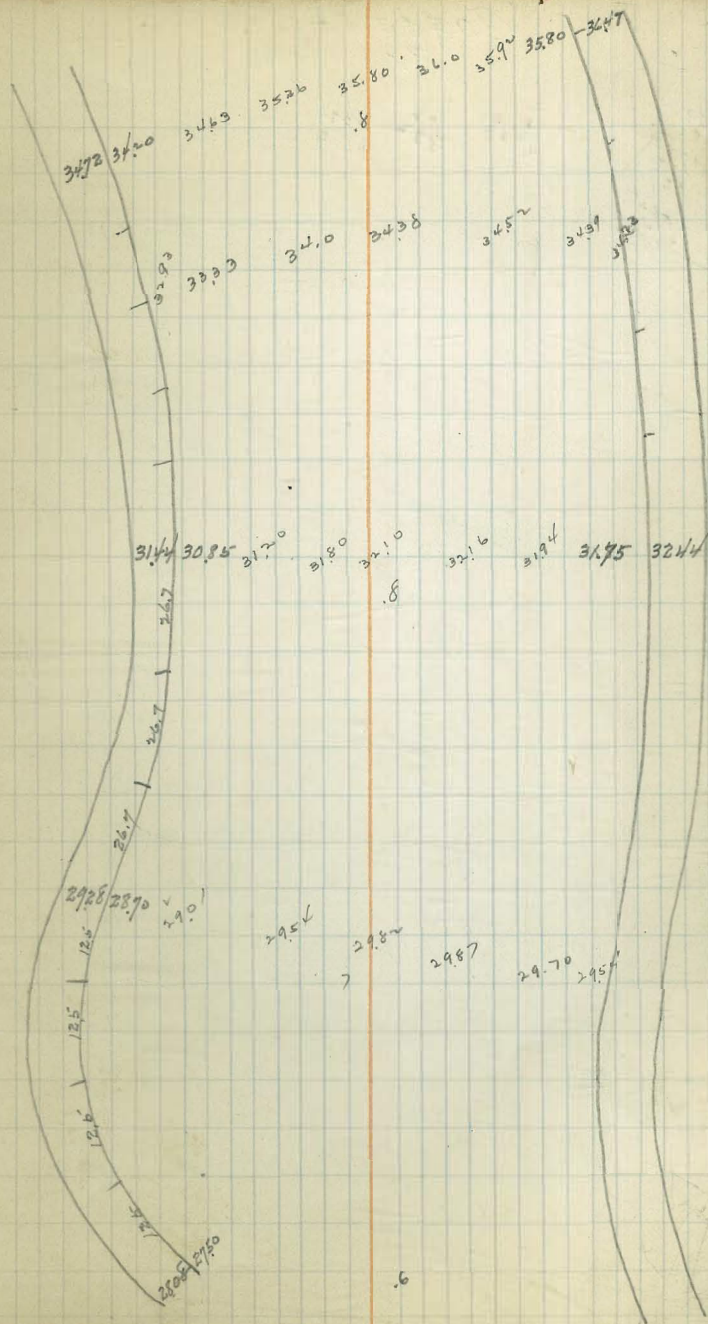




COAST BLVD  
PAYING

3359  
451  
---  
037  
3322  
1113  
---  
4432  
4435

431  
1928  
---  
788  
3417  
---  
163  
3412



34

.6



COAST BLVD  
PAVING.

443  
822  
413  
1272  
5692  
602  
5690  
1037  
6927

612  
3823

543  
392

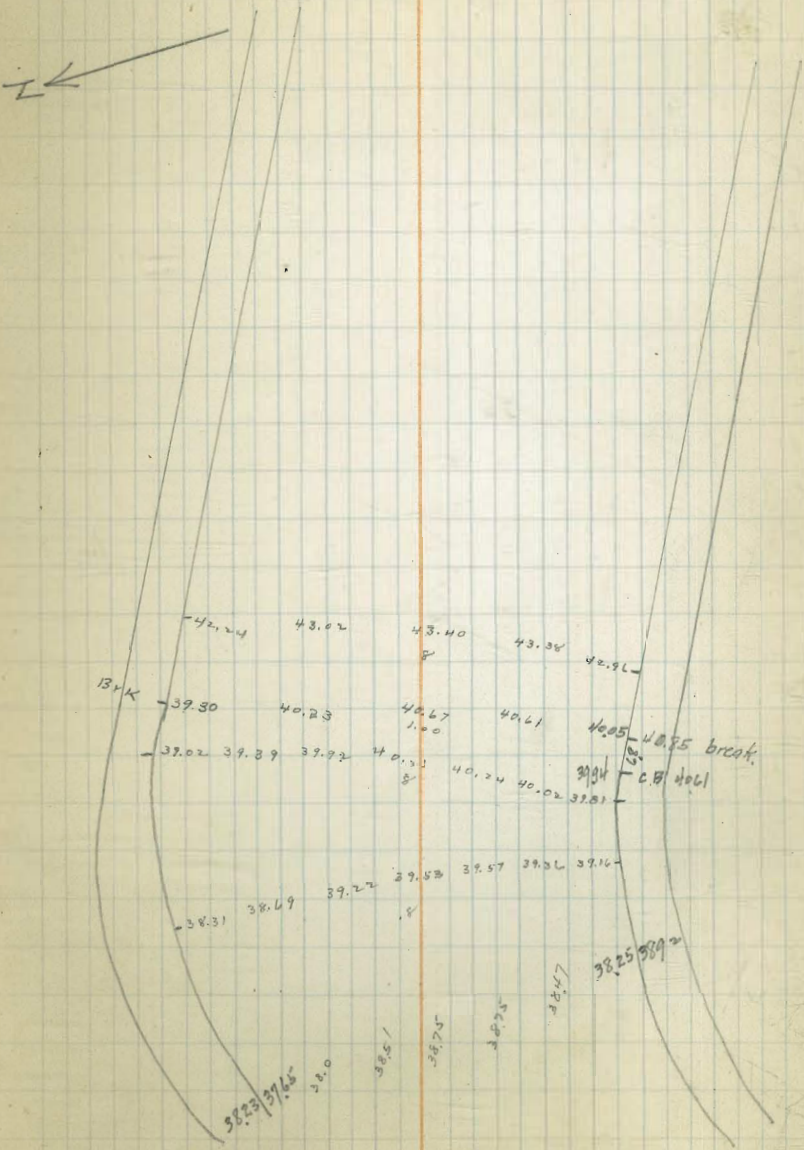
374  
4061

441  
274

380  
4085

911  
6016

3765  
621  
4386





COAST BLVD  
PAVING

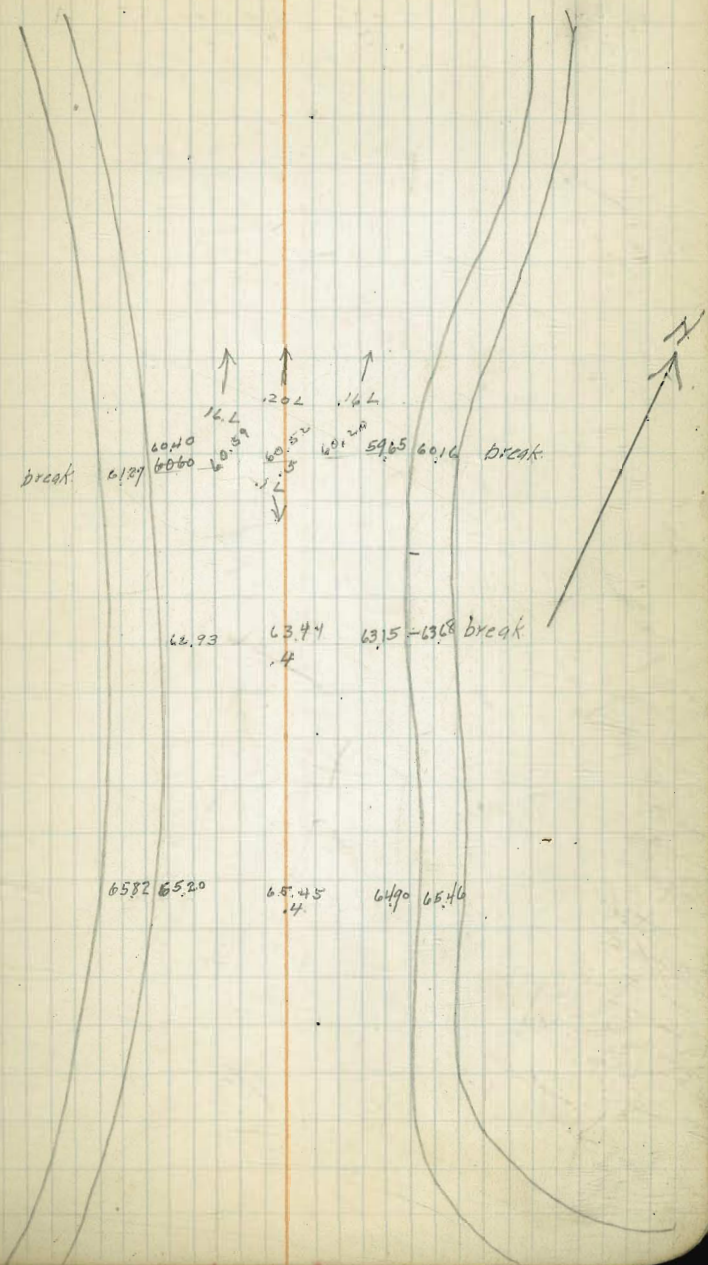
6927  
036  
6893

800

559  
6368

381  
6546

346  
6582





COAST BLVD  
PAVING

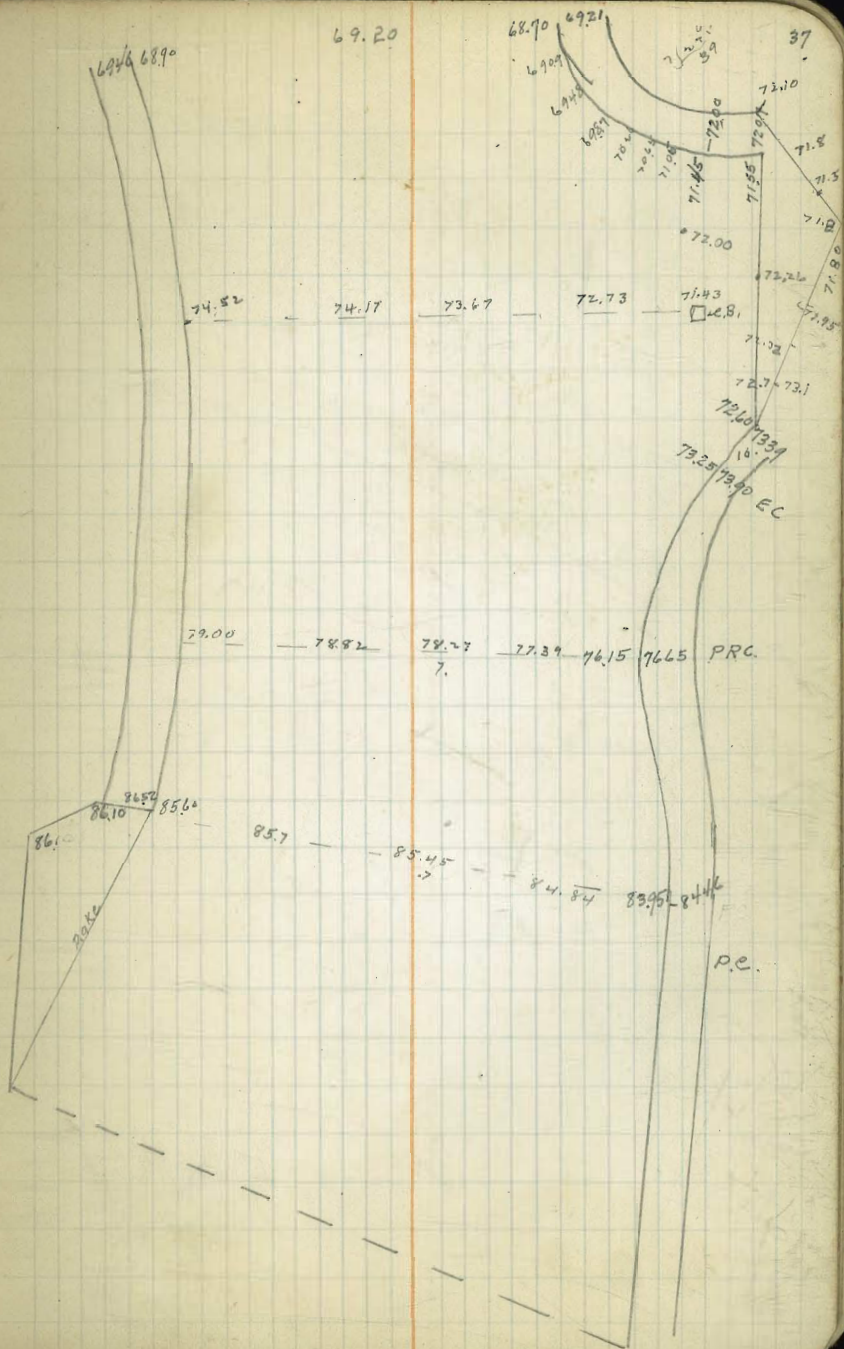
6893  
1248  
8141  
808  
8138  
1174  
9332

1220    1196    943    10  
6921    946    7201    7141

802    751    476  
7339    390    7665

680    886    643  
8652    8446    8689

7 9 45  
.16









WOOLMAN AVE  
PAVING

82.00 TB  
4.88  
76.88

494 493 388  
81.74 79.25

DEWEY

B.P.  
81.95



81.35 80 81.50  
81.74 85  
81.95 81.40

WOOLMAN AVE

AVE

82.00 81.50  
82.03 81.35

82.50 82.74  
83.00 82.35

39

57

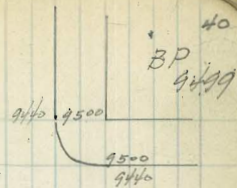
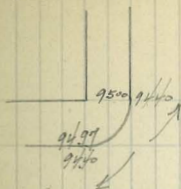
82.30 83.00  
82.35 83.00



WOOLMAN AVE  
PAYING.

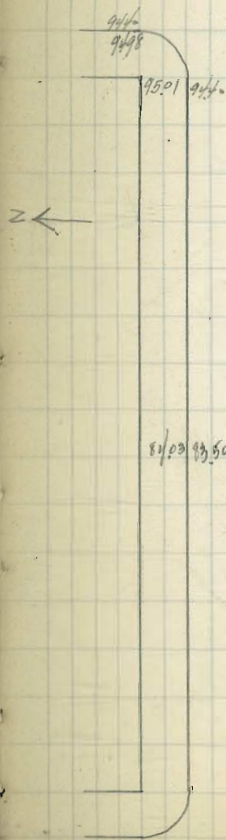
94.99  
498  
9997  
12.49  
87.68  
1.07  
88.75

377  
598



EVANS

ST.



AVE

WOOLMAN

81.00 93.50

84.25 94.98



WOOLMAN AVE  
PAYING

90.97  
539  
9636

480  
2136

160 560  
820  
560 1160  
1150  
130

SAMPSON

BP 9097



41

9120 9200  
9115  
9125 9115

↑  
9132

ST.

9140 9145  
9145 9145  
9145 9145  
9145 9200





WOOLMAN HVE  
PAYING

9105  
461  
9566

9017

BP  
9105

9100 9045

9122  
9036

42

8955 9000

8903  
8935

28th

37

8946

9008

9005 8955

8936

9002

8955 9008

WOOLMAN



WOOLMAN AVE  
PAVING  
25<sup>th</sup> To 30<sup>th</sup>

$\frac{8803}{900}$   
97.83

$\frac{196}{2507}$   $\frac{305}{398}$

$\frac{9785}{474}$   
102.19

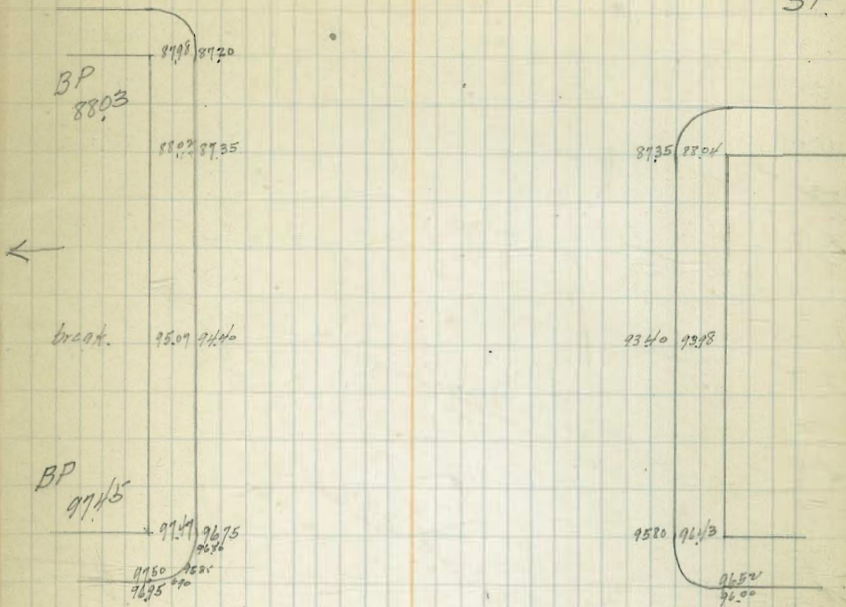
$\frac{412}{747}$

$\frac{567}{652}$   $\frac{576}{643}$   $\frac{100}{10094}$

30<sup>th</sup>

43

5T



29<sup>th</sup>



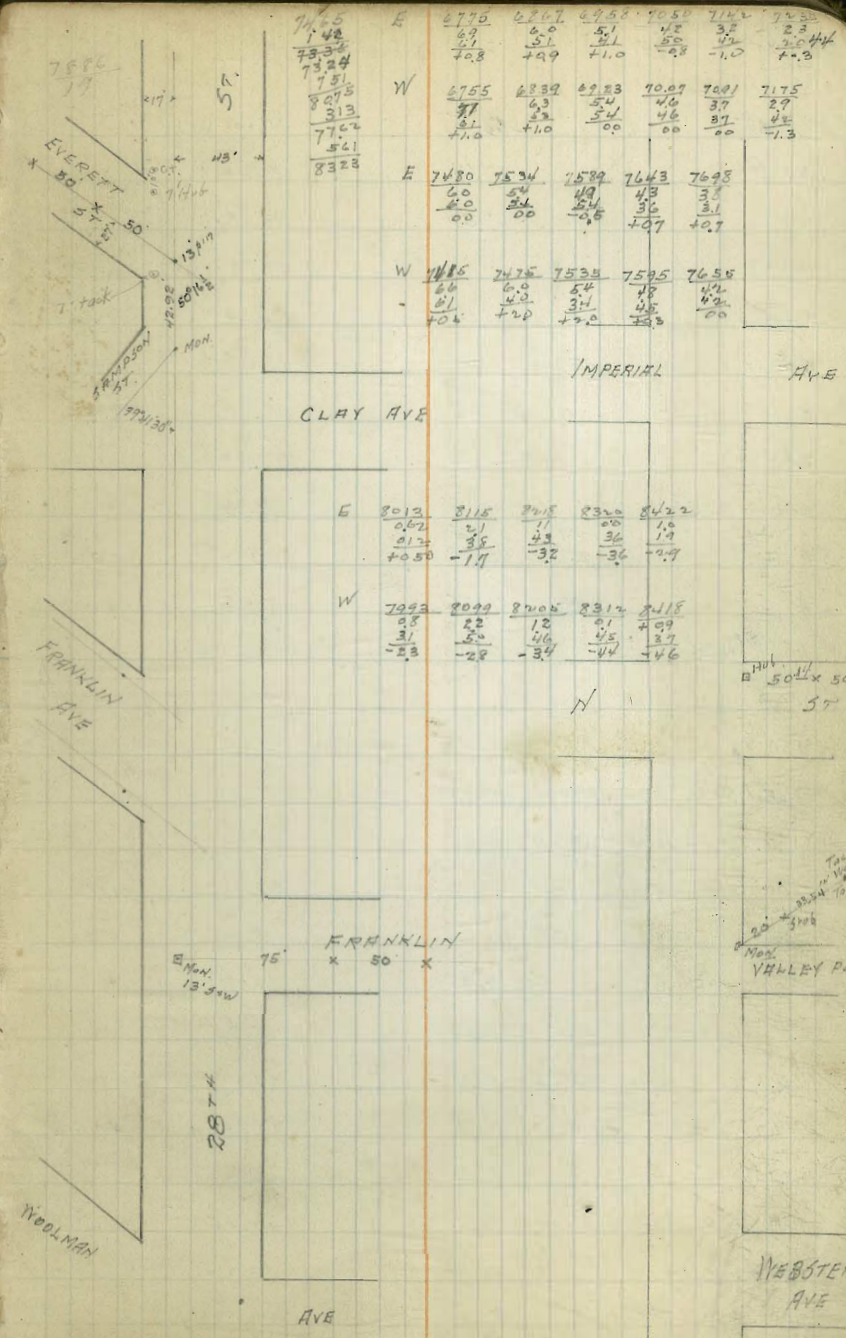
5T





GRADES ON  
28<sup>TH</sup> ST  
From K St To Woolman.

	W.L.	E.L.	
5 L. K.	85.26	85.26	
50	84.18	84.22	
100	83.12	83.20	
150	82.06	82.16	
200	80.99	81.16	
250	79.93	80.13	
300 = N.L.	78.86	79.11	
5 L. L.	77.15	77.53	
50	76.55	76.98	
100	75.96	76.43	
150	75.36	75.89	
200	74.76	75.34	
250	74.16	74.80	
300 = S.L. Imperial	73.55	74.25	
S.L. Imperial	72.60	73.25	
50	-1.3	71.96	72.33
100	00 nail	70.91	71.42 -1.0 nail
150	00 "	70.09	70.50 -0.3
200		69.23	69.58 +1.0 nail
250		68.39	68.67 +0.9
300 = N.L.N.	67.55	67.95	+0.8





Sl. N/ST		66.75	67.00	
50' S		67.17	67.21	
100' S	+1.0 nail	67.58	67.72	+1.2
120.45 = NL Valley			67.50	+1.6
150' S	+0.5	68.00		+2
160.4 = Sl. Valley			67.67	+2.0
200' S	+0.7	68.42	67.82	+2.0
250'	+1.1	68.83	68.05	+3.2
300' = NL Webster		69.25	68.75	
40' S. = v	+0.1	69.65		
Sl. Webster	+2.1	70.05	69.75	+0.2
50' S	out	70.56	70.08	+3.1
68.84 S = End Ref @ Everett	+1.7	70.75		
100' S			70.91	+3.0 nail
150' S			71.75	+1.5
165.8' S = Sl. Everett	+0.0 nail	72.25		
182.7' = NL Sampson	+0.0 nail	72.75		
200' S			72.58	+2.0 nail
250'			73.41	+1.3
300' S = NL Clay		75.75	74.25	Curbin
Sl. Clay	Curbin	76.25	75.25	Curbin
45.71	-dit	78.0	77.0	+1.2
91.42	+0.7	79.75	78.76	+0.9
137.13' S	+0.4	81.50	80.50	+0.9
182.84' S = NL Franklin	+0.7	83.75	82.75	+0.7
241.42' S		83.75	83.25	+0.5
300' S = NL Franklin	+0.7	84.75	84.25	+0.5

46  
79

45

2414  
1825  
386

7619	E	8426	8328	8225	8052	7875	770	7525	
1145		119	2.5	3.5	525	7.2	875	10.50	
1474		112	2.0	3.2	43	61	75		
1592		105	1.5	2.7	404	409	712		
1800									
7553	W	8425		8328	8150	7975	780	7625	7525
206		119		2.5	425	6.00	775	2.5	1080
7759		112		3.2	34	67	815		7.8
802		107		2.2	426	407	404		402
1200									
479									
781	W			7275	7225	7075	7025	7005	6965
455				4.8	5.8	6.8	7.8	7.5	7.9
6826				22	33	51	81	81	83
630				22.0	22.0	21.7	18.1	12.1	12.0
7465									11.4
	E	7841	7258	7175	7091	7007	6925		6805
42		5.0	4.8	6.7	7.5	8.3			7.5
249		3.0	4.3	3.7	4.1	4.1			6.2
11.8		20.0	11.5	13.0	13.1	10.2			13.2
	W	6842		680		6755	6710	6675	
917		9.6		7.0		15.6	6.1		
847		9.1		9.8		5.6	7.0		
107		10.5		11.0		10.0	10.9		
	E	6784	6767		6750	6712	6671	6630	
97		9.9		10.1		5.0	5.2	5.81	
47		7.9		8.4		4.2	5.1	6.0	
42.0		7.0		11.5		7.7	40.5	20.6	



1.0 min		+1.0	85.25		
51. Franklin E.		+0.4	86.25	85.75	+1.1
50 S		+1.0	87.25	87.25	+4.3
100 S		+1.1	88.25	88.75	+5.3
150 S break		+1.4	89.25	90.25	+3.5
200 S		+3.0 nail	89.61	90.58	+3.3
250 S		+2.6	89.97	90.92	+2.9
289 S = N.W. Woolman or W			90.25	<del>77.25</del>	
300 S = " " E				91.25	

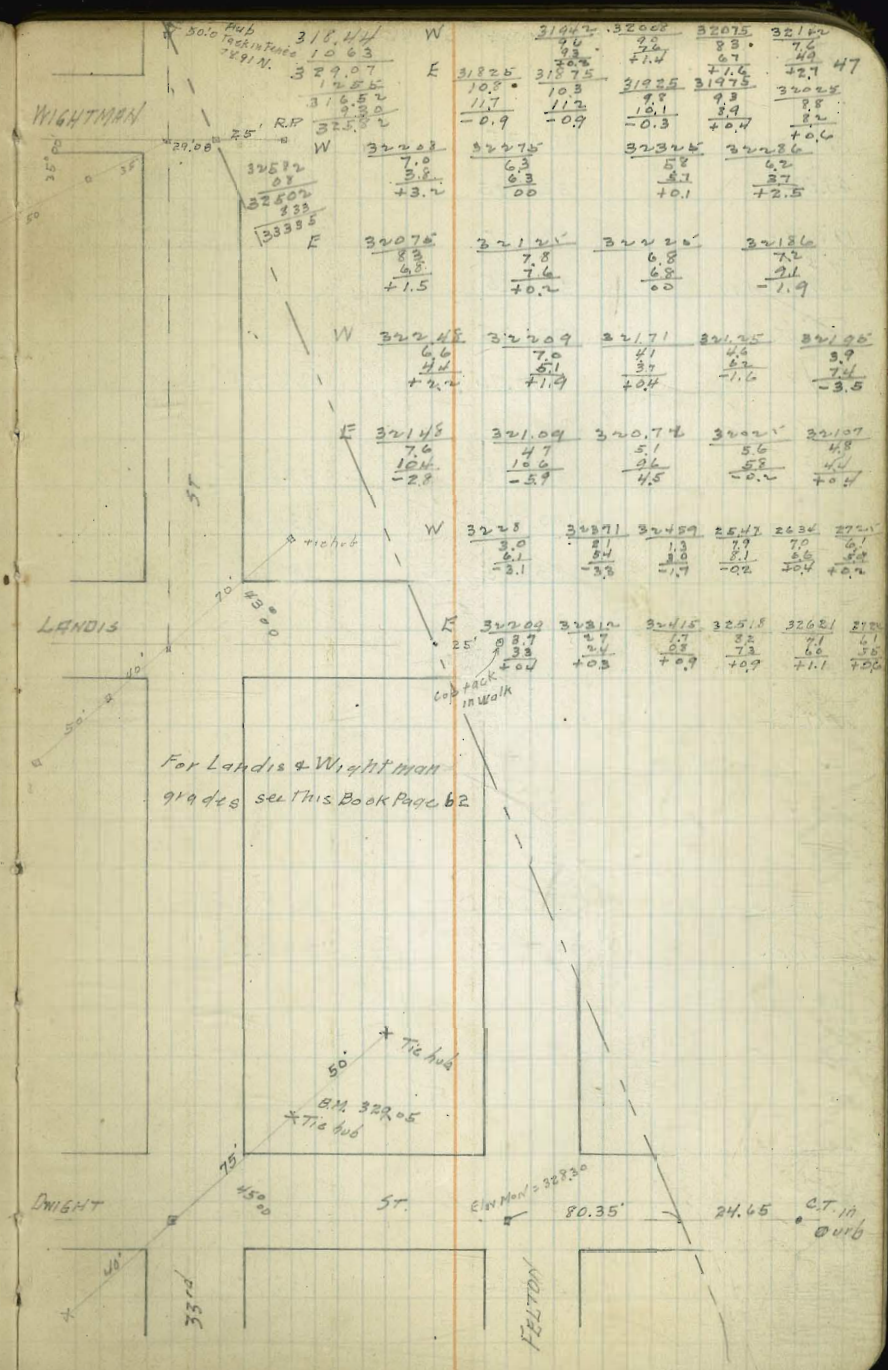
46

91.05 BP NE Woolman E	90.92	90.58	90.25	88.75	87.25	85.75
	5.3	5.6	5.9	7.1	8.9	10.4
	3.4	3.8	4.1	5.1	6.6	8.3
	42.9	43.3	43.5	45.3	44.3	41.1
W	89.97	89.61	89.25	88.25	87.25	86.25
	6.2	6.6	6.9	7.2	8.9	9.4
	3.6	3.8	3.9	4.2	4.9	5.2
	42.6	43.0	41.6	41.1	41.0	40.4
						41.0



9/25/24 Gregory. GRADES ON 33RD ST from Ups St To North end.

400.5		
450 ✓		
500 ✓		
550 ✓		
600 ✓ = N.L. DWIGHT.	328.25	328.25
5. L DWIGHT	327.25	327.25
50.5	326.34	326.21
100 ✓	325.47	325.18
150 ✓	324.59	324.15
200 ✓	323.71	323.12
250 ✓	322.83	322.09
300 ✓	321.95	321.07
340 - break	321.25	320.25
400 ✓	321.71	320.74
450 ✓	322.09	321.09
500 ✓	322.48	321.48
550 ✓	322.86	321.86
600.5		
= N.L. Myrtle	323.25	322.25
5 L Myrtle	322.75	321.25
50.5	322.08	320.75
100.5	321.42	320.25
150 ✓	320.76	319.75
200 ✓	+1.2 320.08	319.25
250 ✓	+0.3 319.42	318.75
200.5 = N.L. Ups	318.75	318.25





W. Pardo St	325.35	
63.595	325.75	
98.59 ✓	326.75	
123.595 = NL Wightman	329.25	
5L. Wightman	331.25	
47 ✓ break	333.75	332.75
91 ✓		
147 ✓ break	337.25	336.25
207 ✓ break	338.45	337.45
267 ✓ break	338.75	337.75
317 ✓		
367 ✓		
417 ✓		
467 ✓		
517 ✓		
567 ✓		
607.5 = NL Landis	336.25	335.75
5L. Landis	335.75	335.25
50 ✓		
100 ✓		
150 ✓		
200 ✓		
250 ✓		
300 ✓		
320 ✓ break	333.25	332.75
350 ✓		



9/26/04

GRADES ON  
FELTON ST  
From Pueblo St To Upas

	W.L.		E.L.	
N.L. Dwight	+0.5	328.75	327.75	+0.6
S.L. Dwight	+0.1	327.75	327.25	+0.4
50'S	+0.7	327.0	326.62	+0.5
100	+0.4	326.25	326.0	+0.5
150		325.50	325.37	+0.8
200 break		324.75	324.50	324.5
250		323.59	323.70	+1.0
300		322.44	322.64	+2.0
350		321.28	321.58	+2.0
400		320.13	320.54	+0.5
400 break		318.75	318.5	319.00
500		317.47	317.22	317.21
550		315.86	315.41	316.43
N.L. Myrtle		314.25	314.00	315.00
S.L. Myrtle		313.25		314.25
50'		311.50		312.26
100		309.75		310.25
150'S		308.0		308.25
160		307.70		307.90
180		307.42		307.50
200		307.56		307.50
220		308.12		307.90
240		309.10		308.70
250'S		309.75		309.25
N.L. Upas		313.25		312.25

31844 NW 23-4- Upas

213  
320.57  
1169  
308.88  
488  
313.76  
340  
319.1

313.25	309.75	308.12	307.42	308.0	307.75	311.5	313.25
7.3	10.8	12.5	13.2	5.8	4.0	2.3	5.9
5.7	7.7	9.8	7.2	8.8	8.2	4.2	3.1
71.6	43.1	42.7	76.0	-3.0	-4.2	-1.9	+0.5

312.25	309.25	307.90	307.50	308.25	310.25	312.25	314.25
8.3	4.5	5.8	4.3	12.3	3.5	2.6	3.4
11.5	3.3	11.8	8.2	7.4	3.6	2.6	-0.4
-3.2	-3.8	-6.0	-2.1	-4.9	-6.1	-1.1	

328.90  
306  
331.35  
1269  
318.66  
422  
322.88

327.75	327.0	326.25	325.50	324.75	323.59	322.44	321.28
3.4	4.4	5.1	5.8	6.6	7.5	8.9	10.1
3.5	3.7	4.8	5.3	6.3	7.3	8.6	9.5
+0.1	+0.7	+0.6	+0.8	+0.3	0.5	1.3	2.6

327.25	326.62	326	325.37	324.75	323.70	322.64	321.58
4.1	4.3	4.3	6.0	6.6	7.6	8.7	9.8
3.7	4.2	4.3	5.2	6.7	6.5	6.7	7.8
+0.4	+0.5	+0.5	+0.8	0.7	+1.0	+2.0	+2.0

320.13	318.75	317.47	315.86	314.25	312.25	310.25	308.12
11.2	12.6	13.7	7.2	14.2	8.6	8.6	8.6
10.5	2.2	13.1	5.8	8.8	8.0	8.0	8.0
+0.7	+0.4	+0.8	+1.2	20.6			

320.54	317.25	318.11	316.68	315.45			
10.8	12.1	13.2	6.2	7.6			
10.8	11.5	12.6	5.5	7.6			
+0.5	+0.6	+0.6	+0.7				

328.75	328.25	328.21	327.42	327.69	327.43	327.25	327.25
2.6	2.9	3.1	3.4	3.7	3.9	4.1	4.1
2.1	1.8	1.3	1.1	1.4	1.6	1.9	1.9
+0.5	+1.1	+1.3	+2.3	+2.3	+2.3	+2.2	+2.2

327.75	327.43	327.00	324.8	319.0	317.84	316.43	315.00
3.6	3.9	4.0	4.8	10.3	11.44	12.81	13.69
3.0	3.0	2.9	2.9	5.05	10.12	11.37	12.71
+0.6	+0.7	+0.7	+0.9	-0.25	+0.12	+0.09	-0.15

327.5	324.5	319.5	317.22	315.41	314.00
1.0	4.8	10.8	12.08	13.69	13.79
2.4	4.2	10.6	12.0	13.79	13.79
-0.4	-0.12	+0.04	+0.08	-0.10	-0.10

W.L. E.L.

284.95	N.L. Dwight	+0.2	327.25	
250	"	+2.3	327.43	
200	"	+2.3	327.69	
150	"	+2.3	327.95	
100	"	+1.9	328.21	
77.5	"			327.25
50	"	+1.1	328.48	327.43



Grades on 334 Dwight to Landis  
to Wightman

		W cft		E cft	
All Dwight = 0 to tail		328.0		328.0	-0.03
50 N	-0.30	328.89	prop +0.2	328.80	+1.0 -0.09
100	-0.26	329.78	+0.8	329.60	+1.2 -0.41
150	-0.13	330.67	+1.1	330.40	+1.1 -0.20
200	-0.25	331.56	+0.5	331.21	+0.5 -0.25
250	-0.24	332.46	+0.4	332.01	+0.5 -0.31
280 Break	-0.21	333.0	+0.5	332.5	+0.8 -0.32
300	-0.11	333.16	+0.4	332.66	+0.9 -0.12
350	-0.07	333.55	+0.8	333.05	+1.0 +0.06
400	0.0	333.94	+1.0	332.44	+0.4 -0.03
450	-0.13	334.33	+0.8	332.83	+0.3 -0.30
500	-0.2	334.72	+0.8	334.22	+0.5 -0.11
550	+0.08	335.11	+1.3	334.61	+1.0 -0.22
600 = S. Landis to 0.5		335.5	+1.5	335.0	+1.3 -0.22
N.L. Landis	-0.14	336.0	+1.8	335.5	+1.7 -0.14
50' N	-0.10	336.36	+1.8	335.81	+1.2 0.0
100	-0.07	336.73	+1.8	336.12	+1.0 -0.15
150	-0.26	337.09	+1.8	336.43	+0.7 -0.17
200	-0.07	337.46	+1.8	336.74	+0.7 -0.94
250	-0.07	337.82	+1.8	337.05	+0.7 -0.06
300	-0.04	338.20	+1.8	337.36	+0.6 +0.30
340 Brk	-0.33	338.5	+1.7	337.5	+0.5 +0.33
370		338.35		337.35	+0.31
400 Brk		338.2	+2.2	337.2	-0.7 +0.21
430		337.6		336.6	+0.25

329.05 4.88	W	28.25	29.4	30.03	30.92	31.81	32.71	33.25
333.73 0.03		5.66	4.79	3.9	3.0	2.14	1.22	0.56
333.70 5.91			4.6	3.7	2.9	2.07	1.20	0.61
337.81			+0.19	+0.8	+1.1	+0.22	+0.34	+0.40
29.25	E	29.05	29.55	30.65	31.46	32.26	32.75	
5.68		4.88	4.08	3.28	2.47	1.67	0.86	
4.9		3.9	3.0	2.2	1.4	0.6	0.3	
7.9		+0.48	+1.15	+1.05	+0.85	+0.65	+0.46	
334.2	W	33.80	34.19	34.58	34.97	35.36	35.75	
6.39		5.5	5.2	5.2	4.8	4.4	4.0	
6.0		5.1	4.6	4.4	4.0	3.6	3.2	
+0.39		+0.8	+1.0	+0.83	+0.84	+0.75	+0.65	
32.91	E	33.30	33.69	34.08	34.47	34.86	35.25	
6.9		6.5	6.1	5.7	5.3	4.9	4.5	
6.0		5.5	5.0	4.6	4.2	3.8	3.4	
+0.7		+1.0	+0.9	+0.83	+0.75	+0.65	+0.55	
342.22	W	34.25	34.61	34.98	35.34	35.71	36.07	
2.31		3.56	3.41	3.24	3.08	2.91	2.75	
339.91		6.8	6.2	5.8	5.4	5.0	4.6	
2.98		+1.72	+1.3	+1.0	0.8	0.7	0.6	
344.89	E	35.75	36.06	36.37	36.68	36.99	37.30	
2.06		6.16	5.85	5.54	5.23	4.92	4.61	
2.4		5.1	4.8	4.5	4.2	3.9	3.6	
+1.66		+1.2	+1.0	+0.9	+0.75	+0.65	+0.55	
35.47	W	35.45	35.75	36.05	36.35	36.65	36.95	
2.44		3.77	3.47	3.17	2.87	2.57	2.27	
340.91		4.1	3.8	3.5	3.2	2.9	2.6	
5.49		+0.27	+1.67	+1.37	+1.07	+0.77	+0.47	
1.30	E	37.61	37.75	37.90	38.05	38.20	38.35	
335.72		4.6	5.14	5.28	5.42	5.56	5.70	
336.78		+0.15	+0.2	+0.25	+0.3	+0.35	+0.4	
34.99	W	32.0	32.0	32.5	33.0	33.5	34.0	
235.42		8.78	8.78	8.78	8.78	8.78	8.78	
6.67		8.66	8.66	8.66	8.66	8.66	8.66	
242.07		+0.12	-0.21	+0.05	+0.1	+0.15	+0.2	
28.00	E	32.5	33.0	33.5	34.0	34.5	35.0	
8.78		4.28	4.28	4.28	4.28	4.28	4.28	
8.81		4.0	4.0	4.0	4.0	4.0	4.0	
-0.03		-0.32	-0.22	-0.12	-0.07	-0.02	+0.03	
338.2	W Brk	337.6						
3.89		4.49						
4.0		4.54						
-0.11		-0.05						
337.2	E	336.6						
4.89		5.49						
4.69		5.24						
+0.22		+0.25						











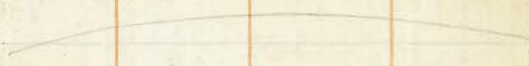
HAWTHORN  
PAVING

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1002  
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1011  
6204

765  
6286

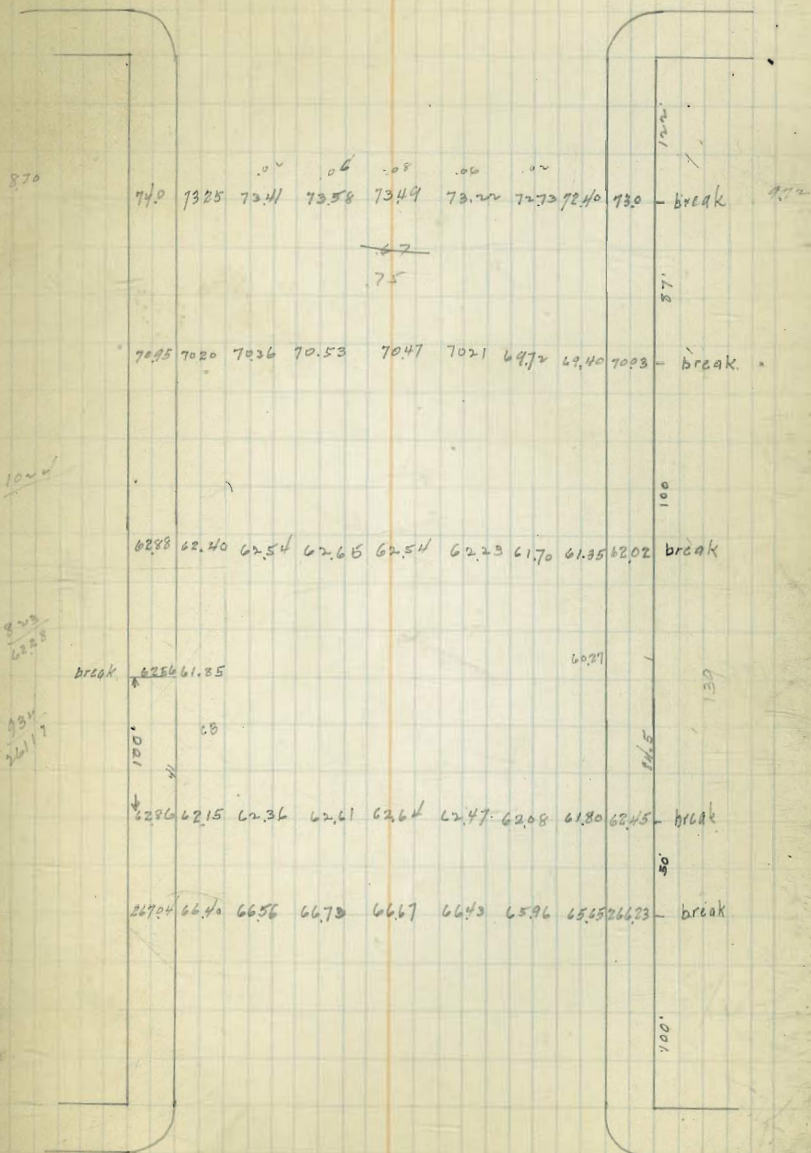


761  
6256

31ST

55

ST.



FERN

ST.



GRADES IN ALLEY  
BLK 3  
WATKINS + BIBLE

N.L.

S.L.

4+50 END	280.5	280.7
4+00 break	282.3	282.3
3+57.5	282.72	282.72
3+150	283.15	283.15
2+72.5	283.57	283.57
2+30 break	284.0	284.0
1+95	283.8	283.8
1+60 break	283.6	283.6
1+1667	283.07	283.07
73.33	282.53	282.53
30' E break	282.0	282.0
EL 31 <sup>ST</sup>		

W 21 + 100

282.99 2.00 287.03 2.72 284.11 4.93 289.04 6.30	N	282.0 5.03 4.54 +0.49	282.53 4.50 3.5 +1.0	282.07 3.96 3.40 +0.56	283.6 3.43 2.43 +1.0	283.8 5.24 4.24 +1.0
287.71 4.78 287.49 3.33 284.11 2.30	S	5.03 4.03 +1.0	4.5 3.5 +1.0	3.96 2.96 +1.0	3.43 2.43 +1.0	3.23 2.23 +1.0
286.93 3.70 283.03	N	284.0 5.04 4.94 +0.12	283.57 5.27 4.47 +1.0	282.15 5.89 5.20 +0.29	282.72 4.77 4.57 +0.20	282.3 5.19 4.19 +1.0
	S	5.04 4.04 +1.0	5.47 4.47 +1.0	5.89 4.89 +1.0	4.77 4.77 -0.21	5.19 5.19 -0.19
	N	280.50 6.99 7.04 -0.03				
	S	280.70 6.79 5.79 +1.0		4.93 4.41 0.52		
	N	282.0 4.20 3.73	282.53 5.19	282.07 3.40 2.40	283.6 3.35	283.8 2.59
	N	283.15 4.0	282.72 4.43	282.15 2.85	282.72 2.65	282.3 2.65
	S			60.70 6.45		

282.99 3.27 286.26 2.57 283.69 3.46 287.15	S	280.70 6.79 5.79 +1.0		4.93 4.41 0.52		
	N	282.0 4.20 3.73	282.53 5.19	282.07 3.40 2.40	283.6 3.35	283.8 2.59
	N	283.15 4.0	282.72 4.43	282.15 2.85	282.72 2.65	282.3 2.65
	S			60.70 6.45		







Washington

10th St Paving  
Univ. to Washington

Headcrucks Ave

Brk.

Brk

University

9th St Paving

58

Washington

8430 83.55

82.50 82.0

100'

Brk 8472 84.05

150'

84.10 84.60 Brk

4th St

8369 83.11

82.28 82.44

28976  
O.M. NW

Univ.

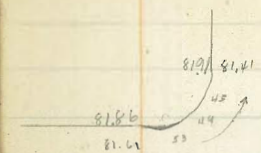


10th St Paving  
UNIV. S to Vermont

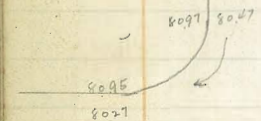
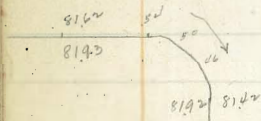
B.M.  
282.00

59

University



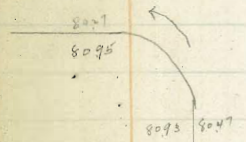
Cherokee Lane



←

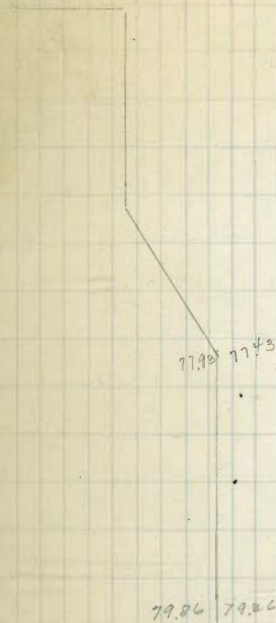
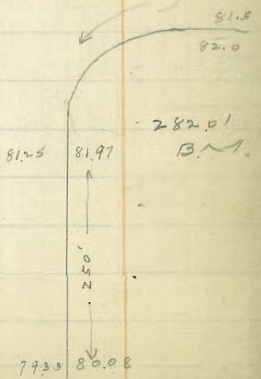
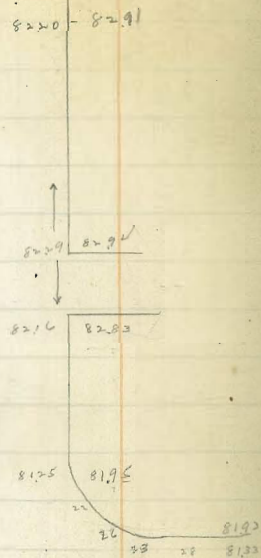
Robinson

10th

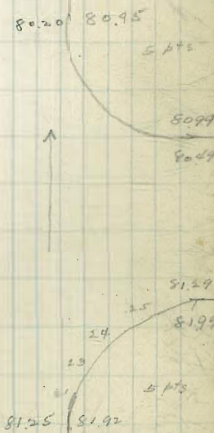


79.50 79.00

FIVE



Essex



80.89 80.39



Filey Grades BIK 89  
E.W. Morse Hdd

wL 30th

	S.L.		N.L.	
40' W Brk	224.0	-0.30	224.0	+0.27
85'	223.5	+0.15	223.5	+0.26
130'	223.0	+1.0	223.0	+0.13
175'	222.5	-0.28	222.5	+1.0
220' Brk	222.0	+0.09	222.0	-0.02
260'	220.75	+1.0	220.75	+0.20
300' Brk	219.50	+0.38	219.50	+1.0
350'	215.35	+1.0	215.35	+1.0
400' Brk	211.20	+0.15	211.20	+0.56
450'	209.05	+1.0	209.05	-0.28
500' Brk	206.90	+1.0	206.90	+0.77
550'	199.74	? +6.0	199.41?	+6.05
600' - Elongth	192.58	✓ ✓	191.92	✓ ✓

NE 30th + Bst

220.14							
7.62							
227.76	N	224.0	223.5	223.0	222.50	222.10	220.75
445		376	4.26	4.19	4.69	5.19	6.44
223.33		349	4.00	4.06	3.69	5.21	6.20
3.86		+227	+0.26	+0.13	+7.0	-0.02	+0.20
227.19							
12.85	S	376	4.26	4.19	4.69	5.19	6.44
110.34		406	4.15	3.19	4.97	5.10	5.00
1.54		-0.30	+0.15	+7.0	-0.28	+0.09	+7.0
115.88							
11.11							
104.77	N	219.50	215.35	211.20	209.05	206.90	199.41
2.32		7.69	11.80	4.68	6.83	8.98	16.47
107.09		669	10.34	4.12	7.1	8.21	10.22
11.40		+1.0	+7.0	+0.56	-0.28	+0.77	+6.05
195.65							
2.03							
197.68	S	769	11.80	4.68	6.83	8.98	19.74
		+0.38	+1.0	+0.15	+1.0	+1.0	7.35
							1.35
							+6.00
	N	5.77					
		141.91					
		✓					
	S	5.13					
		142.55					
		✓					



10/9/91  
K. J. J.

Alley Grades BIK 2 Mission Hills

SW 3P  
Mittamira  
Sierra Vista

			277.49		
	SL		NL		
W. Sierra Vista	✓	275.76	275.98	✓	
40' W	+0.25	275.40	275.60	+1.0	
80' ✓	+1.0	273.80	274.0	+0.20	
120' ✓	+1.0	270.80	271.0	+1.05	
150' ✓	+1.0	269.90	270.10	+1.0	
180' ✓	+1.0	269.0	269.20	+1.0	
220' ✓	+1.0	267.40	267.60	+0.70	
EL Valle Vista	✓	265.63	265.69	✓	

277.49	SL	275.76	275.40	273.80	270.80	269.90
323		496	532	69	99	476
280.72			497	59	89	326
10.04			+0.85	+1.0	+1.0	+1.0
270.68						
3.48						
274.16						
	NL	275.98	275.60	274.0	271.0	270.10
		474	512	672	97	406
		✓	412	68	67	306
			+1.0	+0.8	+1.05	+1.0
	SL	269.0	267.40	265.63		
		516	676	853		
		416	576			
		+1.0	+1.0			
	NL	269.20	267.40	265.69		
		496	656	847		
		396	556			
		+1.0	+0.70			



	S.Eb.	N.Eb.	
00 = E line 32	337.5	338.0	
+50	337.31	337.81	
100	337.12	337.62	
150	336.93	337.43	
200	336.74	337.24	
White Bakers #			
2+65	336.5	337.0	
E line Bakers #			
00	336.5	337.0	
+50	336.31	336.81	
100	336.12	336.62	
150	335.93	336.43	
200	335.74	336.24	
White 33 <sup>rd</sup>			
2+65	335.5	336.0	
E line 33 <sup>rd</sup>			
00	-0.26	335.0	335.5
			-0.41
+50	-0.18	333.37	333.72
			+0.02
100	+0.06	331.74	331.94
			-0.02
White Pueblo on N. + 23			142.00
1+62.9 + 43			143+0.45
White Pueblo on S.			
1+71.87	+0.77	329.4	329.7
			+0.92

32905  
337  
32222

SL 37.5 37.56 37.37 37.18 36.99 36.5

NL 38.0 38.00

SL	36.5	36.56	36.37	36.18	35.99	35.75
	5.72	2.66	5.57	6.00	6.23	6.47
		2.96	2.81	3.8	4.01	5
		+2.70	+2.36	+2.14	+1.92	+1.67

NL	37.0	37.06	36.87	36.68	36.49	36.25
	5.72	5.16	5.35	5.54	5.73	5.97
		2.40	2.78	3.22	3.70	4.24
		+1.52	+1.57	+1.74	+2.08	+2.17

SL	35.25	35.62	35.99	36.35
	4.7	5.60	10.23	12.07
	8.7	6.6	8	12.07
	+4.23	+2.0	+2.4	-0.13

NL	35.75	35.97	36.19	36.45
	6.07	8.15	10.03	12.57
	4.8	5.82	6.2	10.65
	+4.62	+2.3	+1.53	+1.92

335.42  
3.57  
38.99

			PPP	PPP		
N	33.55	33.72	31.94	31.18	30.34	29.7
	3.49	5.27	7.05	7.87	8.65	9.29
	3.80	5.25	7.07	7.87	8.22	8.32
	-0.41	+0.02	-0.02	0	+0.45	+0.92

S	33.50	33.37	33.74	34.12	34.18	30.34	30.68	29.7
	3.99	5.62	7.25	7.97	7.91	8.65	8.31	9.54
	4.25	5.80	7.20	8.21	7.94	8.75	8.63	8.50
	-0.26	-0.18	+0.05	-0.24	-0.15	-0.10	-0.32	+0.77







10/10/24

GRADES ON  
LANDIS ST  
From Alabama To Pershing

N.L.

S.L.

W.L. Texas			
270'E	303.25		302.25
216'E	299.85		299.05
162'E	296.45		295.85
108'E	293.05		292.65
54'E	289.65		289.45
E.L. Louisiana	286.25		286.25
W.L. Louisiana			
270'E	285.25		285.25
230'E	284.25		284.25
190'E - Brk	283.25		283.25
145'E	281.25		281.25
100'E - Brk	279.25		279.25
50'E	275.25		275.50
E.L. Miss	271.25		271.75
W.L. Miss			
271.5'E	270.25	69.5	70.47 270.75
217.2	266.45	65.00	265.25 266.75 +3L
162.9	262.65	60.18	260.90 262.75 +3.8
108.6'E	258.85	55.37	253.33 258.75 +3.0
54.3'E	255.05	50.55	250.33 254.75 +4.5
E.L. Alabama	251.25	45.74	245.35 250.75

245.82 S.E. Landis + Alabama

64

	245.82	251.05	254.85	260.65	265.45	270.00
N	12.14	7.6	3.8	+ 2.0	6.07	1.49
			7.9	-4.2	3.74	
		11.1	-4.1		+2.30	
		8.5				
S	245.5	250.75	255.75	260.75	265.75	270.5
	13.14	7.9	18.74	10.74	5.77	1.04
		3.4	12.25	6.94	2.1	
		+4.5	+3.00	+3.80	+3.6	

Landis + Miss

N	271.00	275.25	279.25	281.25	283.25	284.25	285.0
	13.12	8.9	4.9	2.9	13.25	12.25	11.5
		6.9	3.2	1.4	12.8	12.1	
		2.0	+1.7	+1.5	+1.0	+0.1	
S	271.5	275.5	279.25	281.25	283.25	284.25	285
	12.82	8.6	4.9	2.9	13.25	12.25	11.50
		4.6	3.4	0.8	11.45	10.20	
		+4.0	+2.5	+2.6	+1.8	+2.0	

N	286.00	289.65	292.05	296.45	299.85	303.00
		6.9	2.5	0.05	8.8	5.6
		5.7	3.2	0.45	2.8	
		+1.2	+0.2	-0.4	+1.0	
S	286.00	289.45	292.65	295.85	299.05	302.00
		7.0	4.9	0.7	9.6	6.02
		6.5	3.5	0.9	8.7	
		+0.5	+1.4	-0.2	+0.9	

271.51

N	271.0	275.0	279.0	281.0	283.0	284.0	285.0
	13.24	8.9	4.9	2.9	13.25	12.25	11.5
	13.33	6.9	4.73	1.97	15.8	13.4	3.0
	+0.06	10.47	+0.86	+0.47	-0.19	-2.14	
S	271.5	275.25	279.0	281.0	283.0	284.0	285.0
	14.89	9.44	5.39	3.39	7.89	4.20	3.20
	12.89	7.10	4.60	3.23	1.1	4.26	1.2
	0.0	+0.0	+0.79	1.16	+0.28	4.22	-0.06
	0.0						

245.82

S	1061	528	0.23	585	121	217
	4513	5496	56.01	6151	6615	7017
	4525	5503	55.31	6030	6530	-0.70
	+228	2063	2.070	+121	+287	
	56.01	3.6	+0.21	+0.19	+0.83	-0.14
	1133					
	6753					
	1.21					
	619					
	7234					
	1049	577	0.72	682	144	290
	4575	5077	55.51	6053	6594	6974
	4572	5055	53.31	6018	65	-0.37
	+0.03	0.0	+2.20	+0.55	1.97	-0.92
	1.0.83	1.0.84	1.0.14	0.8	0.8	0.92
	0.11	Landis	0.14	0.8	0.8	-0.38

N	271.0	275.0	279.0	281.0	283.0	284.0	285.0
	12.89	9.44	5.39	3.40	7.10	4.20	3.20
	12.89	7.10	4.70	3.40	1.34	0.51	2.94
	0.24	+0.50	+0.70	0.94	-0.16	-0.11	
S	271.5	275.25	279.0	281.0	283.0	284.0	285.0
	7.25	7.90	8.00	8.00	8.00	8.00	8.00
	7.15	5.40	3.40	3.40	0.40	0.40	0.40
	7.07	4.70	2.80	1.09	0.89	0.89	0.89
	+0.104	+0.68	+0.50	+0.31	-0.09	-0.09	



GRADES ON  
LANDIS ST

W.L. Pershing Ave.		
265 E	338.25	337.75
212 E	334.05	<del>333.05</del>
159 E	329.85	<del>328.85</del>
106 E	325.65	<del>324.65</del>
53 E	321.45	<del>320.45</del>
E.L. Villa Terrace	317.25	316.25
W.L. Villa Terrace		
= 265 E	316.25	315.25
212 E	311.55	310.65
159 E	306.85	306.05
106 E	302.15	301.45
53 E	297.45	296.85
E.L. Arnold	292.75	292.25
W.L. #13		
= 273 E	285.25	285.25
236.5 E	285.50	285.50
200 E break	285.75	285.75
180 E break	286.75	286.75
160 E break	288.25	288.25
100 E break	297.05	296.75
50 E	300.65	300.00
E.L. Texas	304.25	303.25

308.62 12.17 295.85 0.11 295.96	N	300.65	297.05	288.25	286.75	285.5	285.065
8.0 2.7 +5.3			11.6 8.7 +2.9	7.7 8.2 -0.5	10.2 10.8 -0.6	10.5 11.1 -0.6 -0.5	10.94 25+
8.6 4.0 +4.6	S	300.0	296.75	288.25	285.75	285.5	285.0
11.9 10.4 +1.5			7.7 8.2 -0.5	10.2 10.0 +0.2	10.5 10.7 -0.2 -0.1	10.9 10.7 0.2	
Landis + Arnold 291.85 12.84 304.67 2.07 302.60 12.69 315.29 9.26 315.03 12.75 327.78 0.44 327.60 11.62 339.22 11.62 327.60 1.72 329.32	N	292.5	297.45	302.15	306.85	311.55	316.00
12.17 7.2 4.6 +7.5			2.5 4.6 -2.1	8.4 12.7 -4.3	3.7 6.4 -2.7		
12.69 7.8 7.0 +0.8	S	292.0	296.88	301.45	306.05	310.65	315.00
3.2 4.9 -1.7			9.2 12.4 -3.2	4.6 8.6 -4.0	8.9 11.8 -2.9	9.5	
10.35 12.34 7.9 4.3 +3.6	N	317.0	321.45	325.65	329.85	334.05	338.00
13.6 18.5 +3.1			7.4 10.5 +3.1	5.2 8.1 +2.9	1.22		
11.75 8.8 6.8 +2.0	S	312.0	320.55	324.85	329.15	333.45	337.5
17.4 12.1 +5.3			10.1 8.9 +1.2	5.8 1.6 +4.2	1.72		
302.87 1.23 304.10 12.67 291.53 2.75 292.01 6.72 285.29	Landis + Texas						
304.10 12.67 291.53 2.75 292.01 6.72 285.29	N	304.0	300.40	296.80	292.40	288.0	845 85.5 85.5 85.5 85.0
0.10 3.70 372 319 +8.57			7.30 11.70 4.40 0.0	4.01 5.51 6.51 +0.29	6.70 7.01 7.20 -0.20	8.50 7.01 7.20 -0.20	
1.10 4.35 2.22 3.04 +0.78	S	303.0	299.75	296.50	292.25	288.0	85.50 85.25 85.0
1.14 3.04 +0.78			11.85 11.50 +0.35	5.61 5.24 +0.37	6.51 6.22 +0.29	6.70 6.86 -0.16	7.01 7.20 -0.19

1026



	SL		NL	
WL Richmond	292.11	✓	292.39	✓
20' W B	291.40	+0.39	291.60	+0.27
50' W	291.0	+1.0	291.20	+0.16
80' W B	290.60	+1.0	290.80	+0.21
100' ✓	290.53	+1.0	290.73	+1.0
150' ✓	290.36	0.0	290.56	-0.2
200'	290.20	0.0	290.40	0.0
250	290.03	+1.0	290.23	0.0
300	289.86	+0.88	290.06	+1.0
350	289.70	+2.0	289.90	+0.69
400	289.53	+0.76	289.73	+0.91
440 B	289.40	+0.35	289.60	+0.46
470	288.70	+0.82	288.90	+1.0
500	288.0	+1.0	288.20	+0.98
530	287.30	+2.0	287.50	+1.0
560 B	286.60	+1.0	286.80	+0.70
600 EL Vermont	286.18 ✓		286.32	✓

285.98									
5.90									
291.88	N	8632	86.80	87.50	88.20	88.90	89.60	89.73	89.90
201		5.54	5.08	4.88	4.8	4.98	6.19	6.06	5.89
289.27			4.38	3.88	3.70	3.97	5.73	5.5	5.20
6.52			+0.70	+1.0	+0.98	+1.0	+0.46	+0.97	+0.69
295.79	S	8618	86.60	87.20	88.0	88.70	89.40	89.53	89.70
5.64		5.70	5.28	4.58	3.88	3.09	6.39	6.26	6.09
290.15			4.28	3.58	2.88	2.27	6.04	5.88	4.09
5.54			+1.0	+2.0	+1.0	+0.82	+0.35	+0.76	+2.0
295.69									
	N	9006	90.23	90.40	90.56	90.72	90.80	91.20	
		5.73	5.20	5.29	5.18	4.96	4.89	4.49	
		4.73	5.56	5.09	5.33	3.96	4.68	4.23	
		+1.0	0.0	0.0	-0.2	+1.0	+0.21	+0.16	
	S	8980	90.03	90.20	90.36	90.53	90.60	91.0	
		5.93	5.76	5.49	5.33	5.16	5.04	4.69	
		5.05	4.76	4.49	4.30	4.16	4.02	3.69	
		+0.88	+1.0	0.0	0.0	+1.0	+1.0	+1.0	
	N	91.60	92.39						
		4.09	3.30						
		2.22							
		+0.27							
	S	9140	92.11						
		4.29	3.58						
		3.90							
		+0.39							



Alley Grades BIK 62 EW Morse's Field

Moore  
Baulte  
Kelley

	WL		EL	
NL Bst	198.0	✓	197.92	✓
40' N	200.55	-1.17	200.66	+3.50
80' r Brk	203.10	+0.15	203.40	+1.08
105' ✓	203.25	+0.08	203.60	+2.07
130' ✓ Brk	203.40	+1.24	203.80	+0.93
170' ✓ Brk	205.30	+0.22	205.30	+1.0
200' ✓ Brk	205.50	+0.09	205.80	+1.0
250' ✓ Brk	206.30	+0.18	206.60	+0.24
275' ✓ Brk	205.70	+1.14	206.0	+1.03
300' SL Bst	203.99	✓	203.78	✓

SEBP 2474+B

	W		E	
196.96	198.0	200.55	203.10	203.25
10.83	7.24	4.69	4.54	203.40
207.79	8.41	4.54	4.46	205.30
1.58	-1.17	+0.15	+0.08	2.49
206.21	9.72	200.66	203.40	3.15
5.43	9.87	7.15	4.19	+1.24
211.64	3.63	3.63	2.12	2.22
	+3.50	+7.08	+2.07	+0.22
	205.50	206.30	205.70	203.80
	2.29	5.34	5.94	205.30
	2.00	5.16	4.80	2.49
	+0.07	+0.18	+1.14	2.22
				+0.22
	205.80	206.60	206.0	205.30
	1.99	5.04	5.64	2.49
	0.99	4.80	2.61	2.22
	+1.0	+0.24	+1.03	1.44



11/17/44  
 Moore  
 Baulo  
 Kelley

Grades on Lincoln  
 Georgia to Park Blvd

	N 6	S 6
BL Park Blvd	332.4	331.2
50' E	333.1	331.97
100' B	333.8	332.74
125' B	333.9	332.9
150' B	333.35	332.6
175' B	332.70	331.9

NE Lincoln + Park

68

	N 6	S 6	S 1	S 2	S 3	S 4	S 5	S 6
332.20								
7.52								
339.72	22.40	23.35	31.05	34.15	33.60	32.70		
	7.32	6.37	5.67	5.57	6.12	7.12		
	25.20	5.6	5.3	5.7				
		10.77	10.37	10.40				
	31.20	32.23	32.99	33.15	22.85	31.90		
	8.52	7.49	6.93	6.57	6.87	7.82		
	15.4	7.0	6.4	5.87	5.67			
		10.39	10.23	10.70	11.2			

	N 6	S 1	S 2	S 3	S 4	S 5	S 6
332.20							
6.62							
338.82	32.4	33.1	33.8	33.9	33.6	29.8	30.8
5.22	6.22	5.72	5.02	4.92	5.20	4.22	4.22
334.90	20.4	10.4					
2.92		10.4					
337.82							

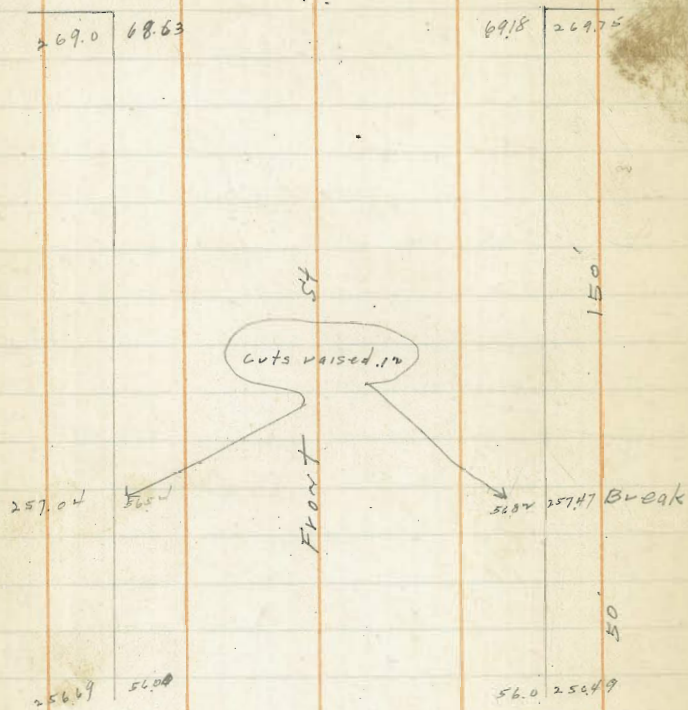
	S 6	S 1	S 2	S 3	S 4	S 5	S 6
	31.2	31.97	32.74	32.9	32.76	32.98	
	7.22	6.87	6.10	5.91	5.06	4.84	
	20.2	25.10			4.7	3.9	
					10.33	0.74	



Moore  
15/11/21

# Front St Paving

Robinson Ave



NO Robinson + Front

$$\begin{array}{r} 269.97 \\ \underline{1.20} \\ 271.20 \\ \underline{12.95} \\ 258.25 \\ \underline{4.16} \\ 262.41 \end{array}$$

$$\begin{array}{r} 256.69 \\ \underline{1.25} \\ 257.94 \end{array}$$

$$\begin{array}{r} 56.69 \quad 57.09 \quad 57.19 \quad 56.79 \quad 56.49 \\ \underline{1.25} \quad \underline{0.85} \quad \underline{.75} \quad \underline{.75} \quad \underline{1.45} \end{array}$$

$$\begin{array}{r} 256.69 \\ \underline{1.18} \\ 257.87 \\ \underline{12.45} \\ 245.42 \\ \underline{1.54} \\ 246.96 \end{array}$$

$$\begin{array}{r} 249.0 \quad 230.82 \\ \underline{8.87} \quad \underline{16.14} \\ 225 \quad \underline{9.55} \\ +6.62 \quad 766' \text{ outlet} \\ \text{JUNCTION} \end{array}$$







Moore ALLEY PAVING  
BK 1 Florence Hghts

15' wide

Wash + Abattoirs

	W		E	
NL Wash = 00	282.11	✓	282.38	✓
50 N	282.61	+1.0	282.86	+2.0
100 ✓	283.11	+1.0	283.35	-0.0 ✓
150 ✓	283.61	+2.0	283.83	+2.0
200 ✓	284.11	+1.0	284.32	+1.0
250 ✓	284.61	+0.38	284.81	+0.15
300 ✓ BK.	285.10	+0.06	285.30	-0.05
350 ✓	285.47	+1.0	285.65	0.0
400 ✓	285.84	+1.0	286.0	+1.0
450 ✓	286.21	+1.0	286.35	+1.0
500 ✓	286.59	+1.0	286.71	-0.09
550	286.96	+1.0	287.06	+1.0
600	287.34	+1.0	287.41	+1.0
640 - S. Lewis	287.64		287.70	

276.99									
9.67									
286.66	W	82.11	82.61	83.11	83.61	84.11	84.61		
3.36		4.55	4.05	6.60	6.10	5.20	5.10		
283.30			2.05	5.6	4.10	4.60	4.70		
6.21			+1.0	+7.0	+2.0	+7.0	+0.38		
289.71									
31.6	E	82.28	82.56	82.36	82.33	84.32	84.81		
86.55		4.28	3.80	6.36	6.38	5.39	4.90		
5.59			1.80	6.20	4.33	4.39	4.75		
292.14			+2.0	-0.04	+2.0	+7.8	+0.15		
	W	85.10	85.47	85.82	86.21	86.59	86.96		
		4.61	4.22	3.87	5.93	5.55	5.18		
		4.51	3.24	2.87	4.93	4.54	4.15		
		+0.06	+1.0	+1.0	+1.0	+1.0	+1.0		
	E	85.30	85.65	86.0	86.35	86.71	87.06		
		4.41	4.06	3.71	5.79	5.43	5.08		
		4.46	4.36	2.71	4.79	5.52	4.88		
		-0.05	0.0	+1.0	+1.0	-0.09	+1.0		
	W	87.34	87.44						
		4.80	4.80						
		3.52							
		+1.0							
	E	87.41	87.70						
		4.73	4.44						
		3.73							
		+1.0							







Mission Blvd. curb grades

52.6

Station	2.88	5.26	2.38	BM spike Mark Curb	50	3.87	+1.39	±10	-0.91	
10 - last stake Marked -1.02		6.22	-0.96		75	3.95	+1.31	±10	-0.79	
25		6.05	-0.79	+0.23	✓ F 1.02	6	3.96	+1.30	±10	-0.80
50		5.95	-0.69	+0.26	✓ F 1.05	✓ top of cb	3.72	+1.54		
75		5.74	-0.48	+0.49	✓ -0.97	+25	4.15	+1.11	±10	-0.99
✓		5.52	-0.26	+0.63	✓ -0.89	T.P. 2.74 4.97	3.03	2.23		
25		5.43	-0.17	+0.76	✓ -0.83	±50	3.77	+1.20	±10	-0.90
+50		5.22	+0.04	+0.91	✓ -0.93	+55.5 = GS of El Carmel Place	3.77	+1.20	±10	-0.90
✓ top of cb		4.88	+0.38			700 = N.S. ✓	3.88	+1.09	±10	-1.01
+75		5.03	+0.23	+1.03	✓ -0.80	105	3.71	+1.26	±10	-0.84
✓		5.03	+0.23	+1.16	✓ -0.93	✓ top of cb	3.39	+1.58		
25		4.94	+0.32	+1.20	✓ -0.98	+50	3.92	+1.05	±10	-1.05
50		4.71	+0.55	+1.23	✓ -0.88	75 break ✓	3.90	+1.07	±10	-1.03
75		4.55	+0.71	+1.26	✓ -0.85	85	3.95	+1.07	±10	-0.90
3		4.60	+0.66	+1.30	✓ -1.04	25	4.07	+0.90	±10	-0.94
✓ top of cb		4.08	+1.16			150	4.04	+0.93	±10	-0.77
+25		4.37	+0.89	+1.33	✓ -0.94	+75	4.07	+0.90	±10	-0.67
50		4.12	+1.14	+1.26	✓ -0.82	✓ top of cb	3.85	+1.12		
✓ 75 break		4.07	+1.19	+1.20	✓ -0.91	90	4.27	+0.70	±10	-0.74
✓		4.30	+0.96	+1.20	✓ -1.14	25	4.42	+0.55	±10	-0.75
25		4.04	+1.22	+1.10	✓ -0.88	50	4.47	+0.50	±10	-0.67
50		3.94	+1.32	+1.10	✓ -0.78	+25	4.50	+0.47	±10	-0.57
✓ top of cb		3.65	+1.61			100	4.64	+0.33	±10	-0.57
75		4.10	+1.26	+1.10	✓ -0.84	±25	4.92	+0.05	±10	-0.72
✓		4.15	+1.11	+1.10	✓ -0.99	✓ top of cb	4.62	+0.35		
25		3.99	+1.27	+1.10	✓ -0.83	check BM spike Newark Court	3.91	1.26	+1.05	



10 + 50		5.14	- 0.17	1024	-081	76
75		5.12	- 0.15	1050	-065	75
11 -		5.30	- 0.33	1051	-070	✓ top of cb
75		5.32	- 0.35	1054	-059	750
50	brank	5.54	- 0.57	1070	-067	75
75		5.52	- 0.55	1070	-065	17
✓	top of cb	5.35	- 0.38	1071		75
12		5.52	- 0.55	1070	-065	50
25		5.63	- 0.66	110	-076	75
50		5.62	- 0.65	110	-075	✓ top of cb
75		5.67	- 0.70	110	-080	15
13		5.65	- 0.68	110	-078	125
25		5.47	- 0.50	110	-040	+50
✓	top of cb	5.33	- 0.36			✓ top of cb
50		5.62	- 0.65		-075	19+50
75		5.67	- 0.70		-080	check on B.M. stake Newbort Court
14 -		5.60	- 0.63		-073	
T.P.	4.32	4.52	4.77	0.20		on BM Santa Clara Place 395
+14.0	S. side of San Juan Place	5.10	- 0.58		-068	1475
+58.5	N. side of	5.29	- 0.77		-087	19
+75		5.29	- 0.77		-087	75
✓	top of cb	4.82	- 0.30			75
15 -		5.04	- 0.52		-062	75
25		5.16	- 0.64		-074	70
50		5.10	- 0.58		-068	76
75		5.18	- 0.66		-076	50

5.09	- 0.57	- 0.67	
5.16	- 0.64	- 0.74	
4.82	- 0.30		
5.06	- 0.54	- 0.64	
5.02	- 0.50	- 0.60	
5.05	- 0.53	- 0.63	
5.11	- 0.49	- 0.59	
5.23	- 0.51	- 0.61	
5.05	- 0.53	- 0.63	
4.82	- 0.32		
5.0	- 0.48	- 0.58	
5.07	- 0.55	- 0.65	
5.04	- 0.52	- 0.62	
4.78	- 0.46		
4.88	- 0.36		
3.77	75	+ 0.73	
			X
			4.66
			+ 0.71 stake in hole
Top 4.56	5.20	+ 0.10 = 5.30	- 0.64
	5.21		- 0.47
	5.30		- 0.74
	5.16		- 0.54
	5.06		- 0.50
	5.23		- 0.57
	5.20		- 0.64
	5.20		- 0.64



466  
XRod  
456

20+75	5.5	+0.10 = Grade	-0.59	T.P.	480	H.I.	493	-0.27
21	5.12		-0.56	27+ms			Rod = 4.45	5.03 -0.58
25	5.10		-0.54					5.09 -0.64
30	5.13		-0.57	75				5.20 -0.75
35	5.12		-0.56	28				5.33 -0.88
37	5.20		-0.64	25				5.25 -0.80
409 S Side of Santa Clara Place	5.25		-0.49	50				5.20 -0.75
+53 N Side	5.23		-0.67	75				5.09 -0.61
+75	5.28		-0.52	29				5.23 -0.78
78	5.08		-0.52	25				5.23 -0.58
725	5.18		-0.62	50				5.25 -0.60
80	5.20		-0.64	75				5.00 -0.55
75	5.21		-0.65	30+10 = 55	San Jose Place			4.86 -0.41
71	5.20		-0.66	45+5 = 50				5.17 -0.72
25	5.21		-0.65	425				5.19 -0.74
30	5.25		-0.67	21				5.12 -0.67
35	5.10		-0.74	20				4.95 -0.50
36	5.20		-0.74	50				5.01 -0.56
35	5.20		-0.64	75				5.26 -0.71
30	5.23		-0.77	20				5.14 -0.71
75	5.16		-0.90	25				5.20 -0.75
20	5.13		-0.57	50				5.04 -0.59
28	5.20		-0.66	50				4.96 -0.41
50	5.00		-0.44	35				5.03 -0.41
75	5.03		-0.47					5.27 -0.90
77	5.00		-0.44	50				5.14 -0.69

75

Grade - 0.10







1/10/5

Alley Grades  
BIK 177 M + SMoore  
Walker  
Preston

SE Kearny + Crosby

43.41  
48.90  
NELSON + Dewey

	N		S	
00 = EL Crosby	45.83	✓	45.72	✓
+35	45.91	+1.0	45.89	+1.0
+70	46.11	+1.0	46.06	+1.0
1+05	46.25	+1.0	46.23	+1.0
1+40 B	46.40	+1.0	46.40	+1.0
1+80	47.10	+1.0	47.0	-0.13
2+20 B	47.80	0.0	47.60	+1.0
+66.67	48.06	+1.0		+1.0
3+13.34	48.32	+1.0		+1.0
+60	48.59	+1.0		-0.03
4+06.67	48.86	+1.0		+1.0
+53.33	49.13	+1.0		0.0
5 - B	49.40	+1.0	49.20	+1.0
+50 B	50.30	+1.0	50.10	+1.0
6 - = W.L. Dewey	51.86 on ch		51.53 on ch	

47.99  
306

51.05

390

47.15

615

4330

483

38.47

5.72

40.17

N	4583	4597	4611	4626	4640	4710	4780
	5.22	5.08	4.92	4.80	4.65	6.20	5.50
		4.08	3.94	3.80	3.65	5.20	5.50
		+1.0	+1.0	+1.0	+1.0	+1.0	0.0

S	4572	4589	4606	4623	4640	4710	4760
	5.33	5.16	4.99	4.82	4.65	4.30	5.70
		4.16	3.97	3.82	3.65	6.43	4.70
		+1.0	+1.0	+1.0	+1.0	-0.12	+1.0

N	4806	4832	4859	4886	4912	4940
	5.24	4.98	5.60	5.33	5.06	4.79
	4.22	3.98	4.60	4.33	4.06	3.79
	+1.0	+1.0	+1.0	+1.0	+1.0	+1.0

S	504	518	530	543	556	49.20
	4.04	4.8	5.83	4.51	5.26	4.99
	+1.0	+1.0	-0.03	+1.0	0.0	3.99
						+1.0

N	50.30	51.46
	3.89	2.33
	2.89	
	+1.0	

S	50.10	51.53
	4.09	2.66
	3.09	
	+1.0	



11/1/95  
Moore

Curb Grades on Monroe Ave

	S. of		N. of	
EL ARIZONA	354.0	12 H	355.60	.05 H
30 E	358.50	-0.7	359.80	+0.29
60 E B	363.0	-0.54	362.0	-1.17
100 E B	367.0	0.0	368.0	-0.74
137 E - W. R	368.85	+0.78	369.85	-0.24
140 E - B	369.0	W. of Alley	370.0	
160 - N Alley	369.80	+0.44	370.74	+0.14
200 ✓	371.10	+0.55	371.95	+0.14
250 ✓	372.85	+0.15	373.57	+0.45
300 ✓ - W. Hamilton	374.60	0.08 L. W	375.20	0.08 L

SE Hamilton  
Monroe

375.30  
0.52  
375.82  
12.00  
363.80  
0.75  
364.55

Problem W. L. Alley	354.0	358.50	363.0	367.0	368.50	369.35
	10.55	6.08	1.55	8.82	7.32	6.57
	.12 H	.63 V	.209	.82 V	.654	6.57
		-0.27	-0.54	0.0	+0.78	0.0
W. L. Alley Prop. Lane						
	355.60	359.80	364.0	368.0	369.85	370.25
	8.95	4.75	11.82	7.82	5.97	5.57
	.05 H	5.02	12.99	8.6	6.21	5.37
		0.29	-1.47	-0.74	-0.24	+0.20
Prop. EL ALLEY						
S	369.80	369.95	371.10	372.85	374.60	
	6.02	5.87	4.74	2.97	1.22	
	5.60	5.39	4.17	2.42	0.8 Low	
	+2.42	+0.75	+0.55	+0.15		
N	370.74	370.89	371.95	373.57	375.20	
	5.08	4.93	3.87	1.25	0.62	
	4.94	4.20	3.73	1.80	0.81	
	+0.14	+0.73	+0.14	+0.15		



Grades on Oregon  
Adams to Collier

	WL		EL	
SL Collier	388.25		388.75	
50 S	388.0	x +1.1	388.45	+0.7
100 S	387.75	+0.4	388.16	+1.1
150 S	387.50	+0.4	387.87	+0.4
200 S	387.25	+0.5	387.57	+2.0
250	387.0	+0.5	387.28	+0.3
300	386.75	+1.8	387.0	+1.0
350	386.50	+1.2	386.70	+0.4
400	386.25	+0.5	386.41	-0.1
450	386.0	+0.5	386.12	+0.2
500	385.75	+0.6	385.83	+0.2
550	385.50	+0.1	385.54	+0.1
600 S - NL Adams	385.25		385.25	

SE Madison  
Oregon

381.05  
-78.9  
388.85  
-3.75  
385.10  
-7.13  
377.97

WL 88.25 88.0 87.75 87.50 87.25 87.0 86.75  
3.98 4.22 4.48 4.73 4.98 5.23 5.48

EL 88.75 88.45 88.16 87.87 87.57 87.28 87.0  
3.48 3.78 4.07 4.36 4.66 4.95 5.23

WL 86.50 86.25 86.0 85.75 85.50 85.25  
5.73 5.98 6.23 6.48 6.73

EL 86.75 86.41 86.12 85.83 85.54 85.25  
5.52 5.82 6.11 6.40 6.69

Moore  
1/14/25

79



## DIRECTIONS FOR USE OF TABLES

TABLE No. 1.

Distance of slope stake from side or shoulder stake for any width roadway, slope  $1\frac{1}{2}$  to 1. If ground is nearly level, the cut or fill at side stake is located by the double entry method in left column and top row. The number in body of table in same row and column gives distance from side stake to slope stake. If ground is not level estimate the difference in elevation between the side stake and slope stake, lower target by this amount if cut, elevate if fill. Add this amount to cut or fill and find distance in table. Set up rod at this point, and line of sight should cut target. If it does not make the slight adjustment necessary.

TABLE No. 9.

To find Tangent and External for curve of any other degree, divide by degree of curve and add correction found in column of corrections.

Degree of curve with a given I may be found by dividing tangent, (or external), opposite I by given tangent, (or external).

The distance from a point on the tangent to the curve is very nearly the square of the tangent length divided by twice the radius.

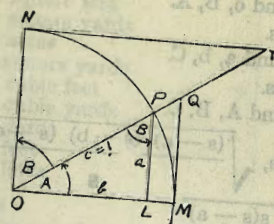


TABLE II

### TRIGONOMETRIC FORMULÆ

$$\begin{aligned} \angle A &= \angle MOP & \angle B &= \angle PON = \angle OPL \\ R &= OB = c = 1 \\ \sin A &= \frac{a}{c} = \frac{a}{1} = a = \cos B = LP \\ \cos A &= \frac{b}{c} = \frac{b}{1} = b = \sin B = OL \\ \tan A &= \frac{a}{b} = \frac{MQ}{OM} = \frac{MQ}{1} = MQ = \cot B = MQ \\ \cot A &= \frac{NT}{ON} = \frac{NT}{1} = NT = \tan B = NT \\ \sec A &= \frac{OQ}{OM} = \frac{OQ}{1} = OQ = \csc B = OQ \\ \csc A &= \frac{OT}{ON} = \frac{OT}{1} = OT = \sec B = OT \\ \text{vers } A &= \frac{LM}{OP} = LM = \text{covers } B \# \\ \text{covers } A &= \frac{OP - LP}{OP} = OP - LP = \text{vers } B \\ \text{exsec } A &= PQ = \text{coexsec } B \\ \text{coexsec } A &= PT = \text{exsec } B \\ \sin \frac{1}{2} A &= \sqrt{\frac{1 - \cos A}{2}} & \cos \frac{1}{2} A &= \sqrt{\frac{1 + \cos A}{2}} \\ \sin 2A &= 2 \sin A \cos A & \cos 2A &= \cos^2 A - \sin^2 A \\ \text{Law of Lines} & \frac{\sin A}{a} = \frac{\sin B}{B} = \frac{\sin C}{C} \\ \text{Law of Cosines} & c^2 = a^2 + b^2 - 2ab \cos C \\ \text{Law of Tangents} & \frac{a+b}{a-b} = \frac{\tan \frac{1}{2}(A+B)}{\tan \frac{1}{2}(A-B)} \end{aligned}$$



280  
208.50  
3.22  
111.82

4 109.5  
27.4

□ 4

□ □

324  
25  
3  
69  
2

221  
20

3 547  
18.2

5 94  
18.8  
75.2

564  
376

50  
470  
26  
450

164.0  
23.0

7 1517  
21.7  
3  
65.1

496  
20  
470  
23  
597  
209  
2

137  
26  
163

4 1122  
28.0

3 178  
254  
3  
77

178.0  
109  
3 683  
22.8

265  
32.5  
13  
+8.5  
54

80.35  
45.5  
34.85  
7.

200.0

203.42

4 10.85  
25  
25

490

802  
2038.0

80.35  
19.5  
99.85

445  
45

7582  
36425

11.57  
93  
2.21

710  
472  
32

694  
189  
5.02

32  
47  
97  
147  
207  
267  
317  
367  
417  
467  
517  
567

280.00  
46.67

.0065  
3210

77 580  
462  
320

285 1.500.005  
1425  
750

.0057  
31  
260  
156  
182

606  
264  
870

31.11  
30.0  
1.11  
32.22

146.6  
187  
139  
150  
622.6

1216  
187  
139  
150  
597.6

31.96  
1.11  
85  
81  
66