

Grade.
118

NETZGEN

ENGINEERS

WETZLAR

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EUGENE DIETZGEN CO.

DRAWING MATERIALS, MATHEMATICAL and
SURVEYING INSTRUMENTS

Chicago New York San Francisco New Orleans Pittsburg Toronto

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

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

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

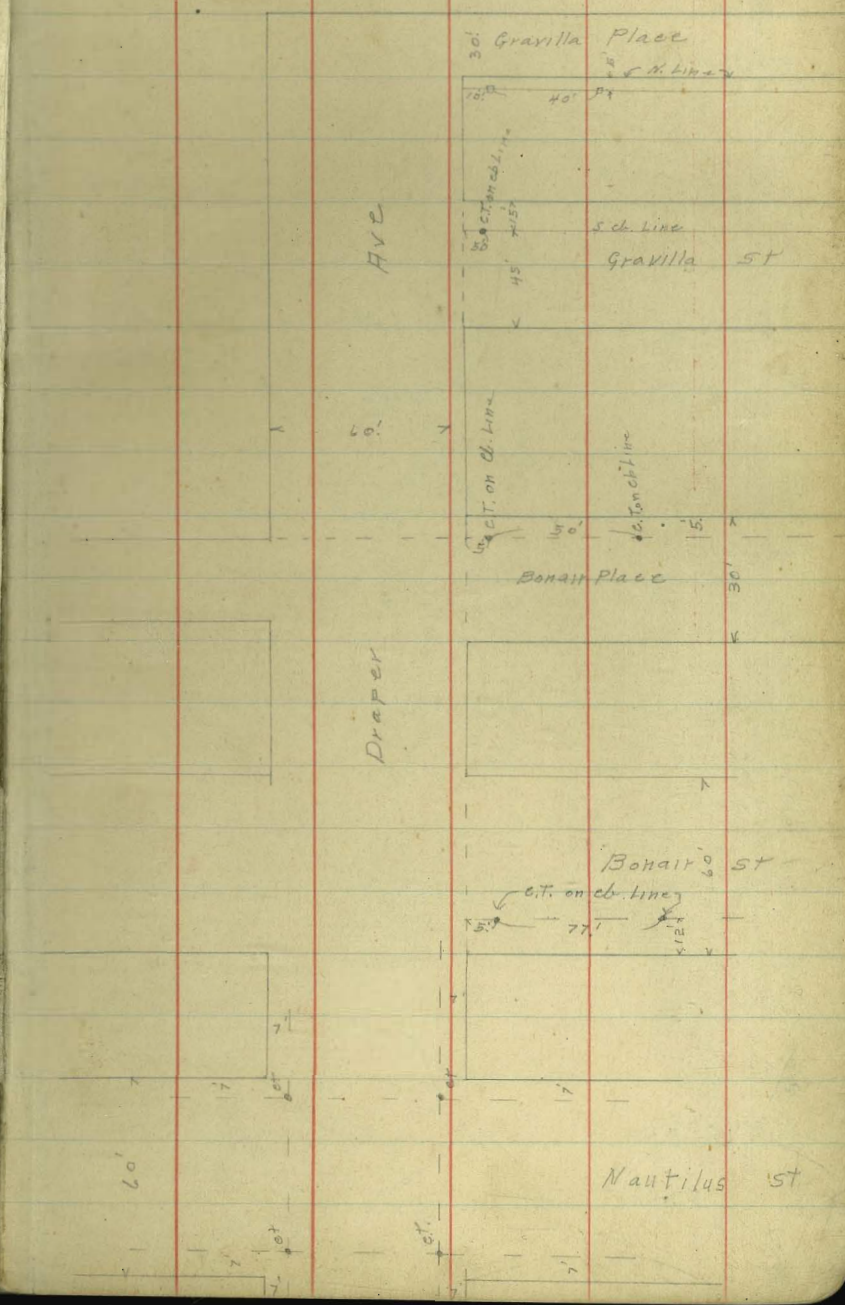
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Indexed
8/20/24

Praper Ave Grading 4-12-24
Miller



Westbourne

ST

Farm

Glen

Rushville

Arcenas

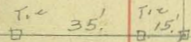
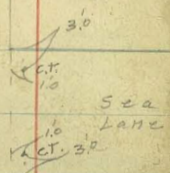
Genters

Ave

Drapet

Drapet

Ave



MARIE ST



Palshub
all Ref Line

ST

ST

ST

ST

ST

ST

ST

ST

ST

ST



RZ

17'

17'

		Draper Ave Grades			
		W line	W 26	E ct	E Line
S. Line Gravilla	Place	103.75	103.50	104.50	104.75
N. Line	Gravilla Place	103.75	103.75	104.50	104.75
+50		104.1			105.1
1+00		104.5			105.5
1+50		104.9			105.9
2+00 = S. Line	Gravilla St	105.25	105.00	106.00	106.25
N. Line	Gravilla St	105.75	105.50	106.50	106.75
+60		109.45		109.20	110.45
+80		111.05		111.13	112.05
1+00				111.80	112.05
1+20				12.12	
1+40		111.55		12.30	112.55
1+60				12.33	
1+80		111.45	111.20	112.20	112.45
2+00 = S. Line	Bonair St	111.25	111.00	112.00	112.25
N. Line	Bonair Place	111.05	110.80	111.80	112.05
+50		109.8			110.8
1+00		108.55			109.55
+50		107.35			108.35
2+00 = S. Line	Bonair St	106.15	105.90	106.90	107.15

		S. Line				E. Line	
		105.9	106.25	105.9	106.25	105.9	106.25
		8.7	8.4	8.7	8.4	8.7	8.4
		6.2	5.7	6.2	5.7	6.2	5.7
		+2.5	+2.7	+2.5	+2.7	+2.5	+2.7
		104.9	105.00	104.9	105.00	104.9	105.00
		9.7	9.59	9.7	9.59	9.7	9.59
		10.9	9.70	10.9	9.70	10.9	9.70
		-1.2	0.11	-1.2	0.11	-1.2	0.11
		112.05	112.55	112.05	112.55	112.05	112.55
		7.9	9.1	7.9	9.1	7.9	9.1
		4.5	3.5	4.5	3.5	4.5	3.5
		+3.4	+3.3	+3.4	+3.3	+3.4	+3.3
		111.05	111.00	111.05	111.00	111.05	111.00
		8.9	10.35	8.9	10.35	8.9	10.35
		9.2	9.6	9.2	9.6	9.2	9.6
		-0.3	0.2	-0.3	0.2	-0.3	0.2
		112.05	106.15	112.05	106.15	112.05	106.15
		9.3	15.2	9.3	15.2	9.3	15.2
		4.0	11.5	4.0	11.5	4.0	11.5
		+5.3	+3.7	+5.3	+3.7	+5.3	+3.7
		110.80	105.90	110.80	105.90	110.80	105.90
		10.55	7.06	10.55	7.06	10.55	7.06
		10.56	7.14	10.56	7.14	10.56	7.14
		0.04	0.08	0.04	0.08	0.04	0.08
		115.55	12.33	115.55	12.33	115.55	12.33
		3.75	3.75	3.75	3.75	3.75	3.75
		4.42	3.75	4.42	3.75	4.42	3.75
		5.35	3.75	5.35	3.75	5.35	3.75
		6.35	3.75	6.35	3.75	6.35	3.75
		7.05	3.75	7.05	3.75	7.05	3.75

Draper Ave Grades			
S. Line	E. d	N. d	W. Line
106.15	106.90	105.90	105.15
51+25	106.65		106.02
1+02.50	107.15		106.40
1+53.75	107.65		106.74
5+11+2+05	108.15	107.8	106.80
107.15	107.8	106.80	107.15
1+53.75	107.65		106.74
5+11+2+05	108.15	107.8	106.80
107.15	107.8	106.80	107.15
2+76.25	107.85		106.82
3+27.50	107.55		106.50
3+78.75	107.25		106.17

Draper Ave Grades			
S. Line	E. d	N. d	W. Line
106.95	106.70	105.60	105.85
36" Cmt Pipe Culvert			
Prop grade Flow line			
106.3	101.1	101.1	106.3
5.2	7.5	7.5	5.2
2.6	7.5	7.5	2.6
99.9	105.9	99.9	105.9
6.0	3.0	3.0	6.0
9.000T			9.000T

Banair St Grades			
S. Line	E. d	N. d	W. Line
107.15	106.9	105.9	106.15
50' E	112.5		111.5
100' E	117.9		116.9
140' E	122.25	122.00	121.00

Banair St Grades									
S. Line	E. d	N. d	W. Line	S. Line	E. d	N. d	W. Line	S. Line	E. d
106.15	106.90	105.90	105.15	106.6	106.8	106.3	106.5	106.6	106.8
51+25	106.65		106.02	106.3	106.4	106.5	106.5	106.6	106.8
1+02.50	107.15		106.40	106.4	106.5	106.5	106.5	106.6	106.8
1+53.75	107.65		106.74	106.5	106.6	106.6	106.6	106.7	107.0
5+11+2+05	108.15	107.8	106.80	106.6	106.7	106.7	106.7	106.8	107.1
107.15	107.8	106.80	107.15	106.7	106.8	106.8	106.8	106.9	107.2
1+53.75	107.65		106.74	106.8	106.9	106.9	106.9	107.0	107.3
5+11+2+05	108.15	107.8	106.80	106.9	107.0	107.0	107.0	107.1	107.4
107.15	107.8	106.80	107.15	107.0	107.1	107.1	107.1	107.2	107.5
2+76.25	107.85		106.82	107.1	107.2	107.2	107.2	107.3	107.6
3+27.50	107.55		106.50	107.2	107.3	107.3	107.3	107.4	107.7
3+78.75	107.25		106.17	107.3	107.4	107.4	107.4	107.5	107.8

Banair St Grades									
S. Line	E. d	N. d	W. Line	S. Line	E. d	N. d	W. Line	S. Line	E. d
106.95	106.70	105.60	105.85	106.6	106.8	106.3	106.5	106.6	106.8
36" Cmt Pipe Culvert									
Prop grade Flow line									
106.3	101.1	101.1	106.3	106.7	106.8	106.8	106.8	106.9	107.2
5.2	7.5	7.5	5.2	106.8	106.9	106.9	106.9	107.0	107.3
2.6	7.5	7.5	2.6	106.9	107.0	107.0	107.0	107.1	107.4
99.9	105.9	99.9	105.9	107.0	107.1	107.1	107.1	107.2	107.5
6.0	3.0	3.0	6.0	107.1	107.2	107.2	107.2	107.3	107.6
9.000T			9.000T	107.2	107.3	107.3	107.3	107.4	107.7

Banair St Grades									
S. Line	E. d	N. d	W. Line	S. Line	E. d	N. d	W. Line	S. Line	E. d
107.15	106.9	105.9	106.15	106.6	106.8	106.3	106.5	106.6	106.8
50' E	112.5		111.5	106.7	106.8	106.8	106.8	106.9	107.2
100' E	117.9		116.9	106.8	106.9	106.9	106.9	107.0	107.3
140' E	122.25	122.00	121.00	106.9	107.0	107.0	107.0	107.1	107.4

00=N. line Naut. Hts	Drapet Grades		W. d. s	W. line
	E. line	E. d.		
	107.05	106.80	106.30	106.55
+49.50	106.67			106.10
1+99.12	106.30			105.65
1+48.68	105.93			105.21
1+98.24	105.56			104.77
2+47.80	105.19			104.33
3+47.35	104.82			103.89
S. line West Bourne				
3+46.90	104.45	104.20	103.20	103.45
00=N. line				
West Bourne	103.75	103.50	102.50	102.75
0+55.57	103.3			102.3
1+11.14	102.9			101.9
1+66.71	102.50			101.5
2+22.25	102.1			101.1
2+77.83	101.7			100.7
3+23.40 = S. line				
Fern Glen	101.25	101.20	100.00	100.25

112.93
9.81
103.12

B.M. B.P. S.W. Westbourne + Draper

5

E								W	
106.80	106.7	106.3	105.9	105.6	105.2	104.8		106.30	106.1
6.13	6.2	6.6	7.0	7.3	7.7	8.1		6.63	6.8
6.21	1.0	2.3	3.4	4.1	4.5	4.9		6.70	6.5
0.08	+5.2	+4.3	+3.6	+3.2	+3.2	3.2		0.07	+0.3
								103.12	
								7.14	
								110.26	
E								W	
103.50	3.3	2.9	2.5	2.1	1.7	1.25		103.12	103.12
6.76	7.0	7.4	4.3	4.7	5.1	5.5		3.14	3.14
6.76	5.5	5.9	3.3	3.2	2.2	1.4		106.76	106.76
0.K	+1.5	+1.5	+1.0	+1.5	+2.9	+4.1			
E								W	
102.50	2.3	1.9	1.5	1.1	0.7	0.25		102.50	102.50
7.76	4.5	4.9	5.3	5.7	6.1	6.5		101.25	101.25
7.66	6.6	7.1	6.3	6.2	6.1	8.3		109.50	110.50
0.14	-2.1	-2.2	-1.0	-0.5	0.0	-1.8		2.56	1.56
								101.25	
								4.50	
								1.56	
								101.00	
								100.00	
								4.76	
								5.76	

(4.90)

Draper Grades				
00=N. Line	E. Line	E. cl	W. cl	W. Line
Fern Glen	101.25	101.00	100.00	100.25
+56.4	102.8			101.8
1+12.8	104.3			103.2
S. Line Rushville				
1+6.92	105.80			104.80
00=N. Line				
Rushville	106.34			105.34
+53.36	107.9			106.9
1+06.67	109.3			108.3
S. Line Arenas				
1+60	110.75	110.50	109.50	109.75
00=N. Line				
Arenas	110.75	110.50	109.50	109.75
+50	110.25			109.25
1+00	109.75			108.75
1+50	109.25			108.25
2+00	108.75			107.75
2+50	108.25			107.25
3+00=S. Line				
Center	107.75	107.50	106.50	106.75
00=N. Line				
Center	107.25	107.00	106.00	106.25
0+46.67	106.1			105.1
0+73.33	104.9			103.9
1+00	103.75	103.50	102.50	102.75
S. Line Sea Lane				

BR SW Draper Center							
106.76	0.24						
105.92	9.93						
115.85	1.25	2.8	4.3	5.8	6.34	7.9	9.3
7.429	5.5	4.0	2.5	1.0	9.5	8.0	6.5
106.34	2.7	4.4	4.5	1.0	9.2	5.2	4.1
	+2.8	-0.4	-2.0	0.0	+0.3	+2.7	+2.4
							10.75
							8.1
							4.2
							4.9
							7.9
							7.9
							-1.8
							9.75
							6.1
							7.5
							7.9
							-0.4
							-1.8
							9.75
							6.1
							7.5
							7.9
							-0.4
							-1.8
							9.75
							6.1
							7.5
							7.9
							-0.4
							-1.8
							9.75
							6.1
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							7.9
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							7.9
							-0.4
							-1.8
							9.75
							6.1
							7.5
							7.9
							-0.4
							-1.8
							9.75
							6.1
							7.5
							7.9
							-0.4
							-1.8
							9.75
							6.1
							7.5
							7.9
							-0.4
							-1.8
							9.75
							6.1
							7.5
							7.9
							-0.4
							-1.8
							9.75
							6.1
							7.5
							7.9
							-0.4

Girard Grades

oo-Bhind
Fay

146.25 146.00 145.00 145.25

+49.67

48.6 47.6

+99.33

50.9 49.9

+49.00

53.2 52.2

+98.67

55.6 54.6

+48.33

57.9 56.9

W. Lind Girard

+198

160.25 160.00 159.00 159.25

145.58

0.54

145.04

12.46

157.50

1.62

155.88

6.86

162.74

N. d.

45.00

0.58

0.56

OK

d.

46.00

11.50

11.51

OK

47.6

49.9

9.9

9.7

+0.5

+0.9

48.6

50.9

8.9

7.0

+1.9

+1.3

52.2

54.6

5.2

4.8

+0.5

+0.7

53.2

55.6

4.3

4.5

-0.2

+0.3

56.6

56.9

2.9

1.8

+0.3

+1.1

57.9

57.9

4.8

4.8

-0.2

+0.3

59.2

59.2

3.5

5.5

4.0

-0.5

60.2

60.2

2.5

2.8

-0.3

-0.3

148.14

2.97

151.11

1.36

154.75

6.96

161.71

146.00

11.71

145.00

12.71

160.00

1.71

159.00

2.71

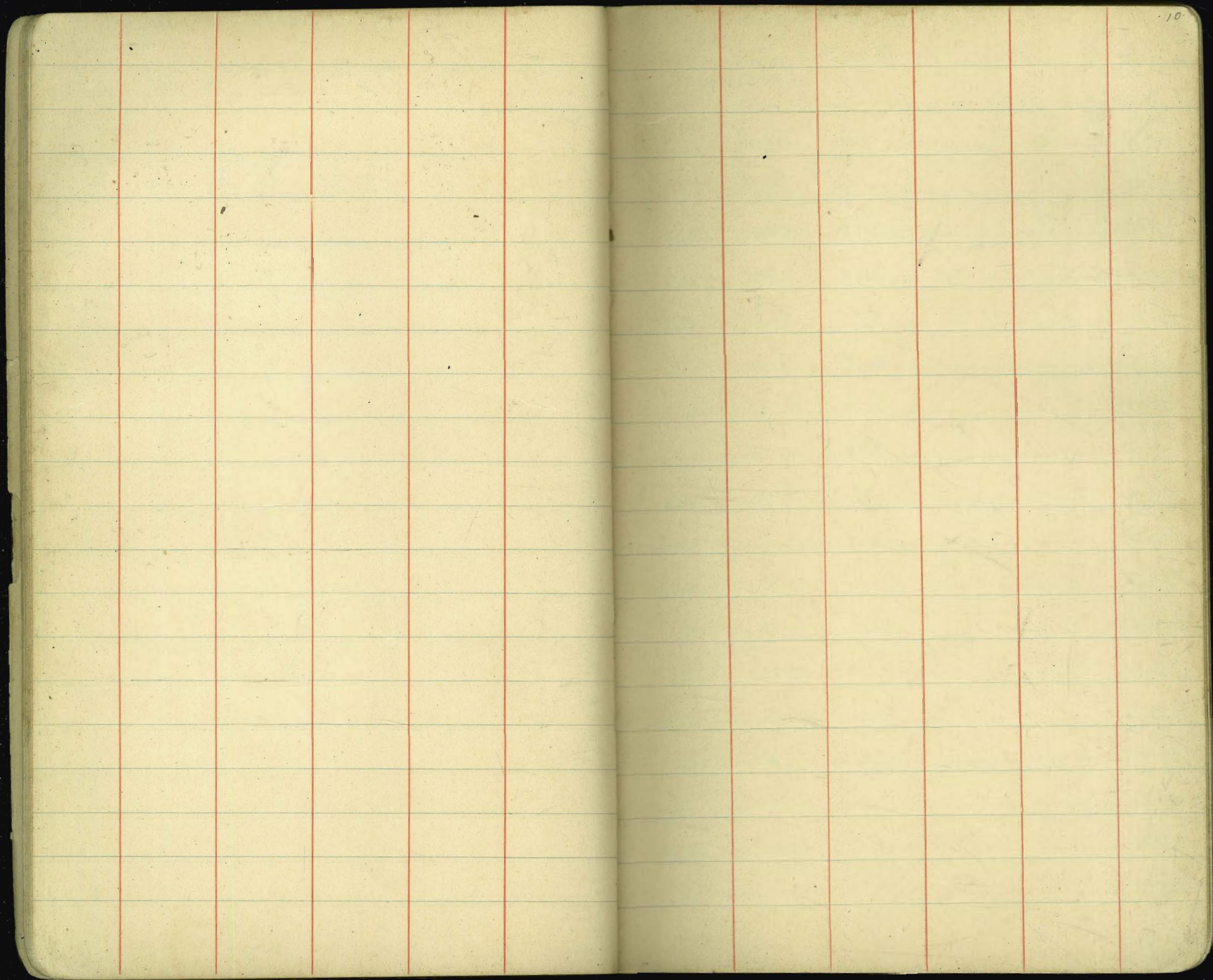
56.6

7.1

6.8

20.2

9



Sand Construction Torrey Road

RM. T.P.	0.16 12.91	104.13 106.58	102.97 93.67	54.4mm x 1mm
002 EX 10.M.H. 7.5W. 0.2 E Grand ST			88.00	88.14
0 + 46.76		18.44	88.14	89.11
0 + 93.53		11.17	95.41	90.08
1 + 40.29		10.60	95.98	91.05
1 + 47.06		9.71	96.87	92.02
M.H. # 9 2 + 73.83 2 + 24.83 M.H. (50.2)		8.25	98.33	93.00
2 + 75.04		6.73	100.45	94.78
3 + 25.25		3.55	103.03	96.56
3 + 75.46 T.P. 11.59	118.03	1.32 0.14	105.26 106.44	98.33
4 + 75.67		10.64	107.39	100.11
4 + 75.88		9.22	108.81	101.89
5 + 76.09		8.17	109.86	103.66
5 + 76.30		6.62	111.41	105.44
6 + 26.51 M.H. 27.14 81k 24 6 + 76.73 (63.8) T.P. 11.88	118.03	5.00	113.03	107.22
7 + 28.11	128.95	3.02 0.46	115.01 117.07	109.00
7 + 79.49		11.62	117.33	111.42
8 + 30.87		8.69	120.26	113.84
		6.36	122.59	116.25

Flow line

Lateral's

#	#	#	#	#	#	#	#	#
17	16	15	14	13	12	11	10	11
118.03	128.95							
104.0	105.0	106.0	107.5	109.5	111.5	113.5	119.5	
14.03	13.03	12.03	10.58	8.53	6.53	4.55	2.45	
10.30	9.63	9.00	6.93	5.48	3.03	1.10	4.93	
+3.73	+3.40	+3.60	+3.10	+3.10	+3.50	+3.95	+4.52	
140.79	150.5							
122.00	124.00	127.0	131.0	135.50	140.5	144.0	148.50	141.5
6.95	16.79	13.79	9.79	5.29	10.02	16.52	12.02	9.02
1.37	10.65	8.95	3.94	+0.30	4.85	9.65	7.45	5.04
+5.58	+6.14	+4.84	+5.85	+5.59	+5.17	+6.87	+4.27	+3.94
					3.8	1.88	148.64	

Torrey Road Sewer
128.95

8+82.25			3.79	125.16	118.67	+6.49
9+93.63			1.34	127.61	121.09	+6.52
M.H. #3	T.P. 12.14	140.79	0.34	128.61		
9+85.00			11.26	129.53	123.50	+6.03
(52.00)						
10+37.00			8.54	132.25	127.62	+4.63
10+89.0			4.07	136.72	131.75	+4.97
T.P.	9.96	150.32	0.23	140.56		
11+41.0			9.38	141.14	135.87	+5.27
DE						
11+93.0			5.72	144.80	140.50	+4.80

Sewer Construction

Alley BIK R4
126.95 (part 11)

M.H. & Torrey Road					109.00	
0+00						
0+41.94			12.68	116.27	110.33	+5.94
+83.88			12.65	116.30	111.67	+4.63
DE						
1+25.82			11.20	117.75	113.00	+4.75

125.07	Ivan Hot. E.	N. Line Kline	Torrey Road
7.99			
136.09	134.00	131.00	129.00
	2.09	5.00	7.08
	2.24	130.50	
		5.58	

Southernland St Grades
Moore to La Jolla Ave

	W line	W sk	Ed	E line
00 = S line				
La Jolla Ave	67.25	67.0	66.0	66.25
+50	62.0			61.5
100	56.9			56.7
150	51.8			52.0
200 = N line Moore St	46.75	46.53	47.03	47.25

14

67.17 B.M. N Cor La Jolla Ave & Southernland					
3.29	cl	50	100	150	
70.48	cl	70.48	70.48	70.48	11.76
12.99	E	4.48	66.00	56.7	47.03
57.49		61.5		52.0	
130		9.0		13.8	
58.79		6.4		10.0	
9.07		42.6		43.8	
79.32				44.5	
	cl	70.48	58.8	58.8	cl
	W	3.45	62.10	56.9	12.26
		67.03	8.5	1.9	46.53
			5.4	3.3	
			43.1	- 1.4	47.6

Florence St Grades
37th St East to PL

	S. Line	S. d	N. d	N. L. H. r
00 = S. Line 37 th St	69.25	69.00	69.50	69.75
+50	71.6			72.25
1+00 B ✓	73.94	73.69	74.50	74.75
+20 B		74.57	75.45	
+40 B ✓	75.63	75.38	76.28	76.53
+60 B		76.09	77.00	
+80 B ✓	76.95	76.70	77.62	77.87
2+00 B		77.23	78.18	
2+20 B ✓	77.90	77.65	78.52	78.77
+50	78.5			79.3
3+00	79.4			80.1
+50	80.4			81.0
4+00	81.3			81.8
+50	82.3			82.7
5+00	83.2			83.6
+50	84.2			84.4
W. Line 38 th St				
6+00	85.25	85.00	85.00	85.25

88.26 Top Hydt SE 38th Florence

L5

	S	N	S	N	S	N	S	N	S	N
88.55	69.2	71.6	73.9	75.6	76.9	77.9	78.5	79.4		
11.90	10.3	7.9	5.6	3.9	11.6	10.6	10.0	9.1		
76.65	9.7	7.3	5.5	4.0	11.9	10.5	10.4	10.7		
2.88	+0.6	+0.6	+0.1	-0.1	-0.3	+0.1	-0.4	-1.6		
79.53										
	N 69.7	72.2	74.7	76.5	77.9	78.8	79.3	80.1		
	9.8	7.3	4.8	3.0	10.6	9.7	9.2	8.4		
	6.3	5.1	4.0	2.0	8.3	8.1	7.1	7.2		
	+3.5	+2.2	+0.8	+1.0	+2.3	+1.6	+2.1	+1.2		
	S 80.4	81.3	82.3	83.2	84.2	85.2				
	8.1	7.2	6.2	5.3	4.3	3.3				
	8.3	9.5	10.7	6.1	3.4	3.4				
	-0.2	-2.3	-4.5	-0.8	+0.9	-0.1				
	N 81.0	81.8	82.7	83.6	84.4	85.2				
	7.5	6.7	5.8	5.0	4.1	3.3				
	6.5	5.0	4.4	6.5	6.1	6.2				
	+1.0	+1.7	+1.4	-1.5	-2.0	-2.9				
88.26										
11.0										
89.36	85.00									
18.56	4.36									
79.80										
	S 67.00	71.35	73.69	74.57	75.38	76.09	76.70	77.23	77.65	
	10.77	4.42	6.98	5.20	4.39	3.68	3.07	2.54	2.12	
88.26										
0.99										
89.15	N 69.50	71.00	N 74.50	75.45	76.28	77.00	77.61	77.18	78.22	
9.94	10.27	7.77	5.27	4.32	3.49	2.77	2.15	1.67	1.25	
79.21										
0.56										
79.77										
	69.50		69.00							
	72.00		72.62							
	1144.00		1142.67							
	72.00		71.85							

ELIM. 39th
0+0

89.25 89.00 89.00 89.25

88.00 88.4

+50 88.36 87.7

86.75 87.5

1+00 87.47 88.2

85.75 85.50 86.50 86.75

1+40 B 84.75 86.50 87.50 87.75

85.5 86.5

1+90 84.5 87.5

85.2 86.2

2+40 84.2 87.2

84.9 85.9

2+90 85.9 86.9

84.6 85.6

3+40 85.6 86.6

84.4 85.4

3+90 85.4 86.4

84.08 83.83 84.83 85.08

4+40 B 85.08 84.83 85.83 86.08

83.62 84.62

4+60 B 84.63 85.63

83.5 83.28 84.28 84.5

4+80 B 84.5 84.25 85.25 85.50

82.75 83.75

5+00 B 83.66 84.66

82.35 82.08 83.08 83.35

5+20 B 83.16 82.91 83.91 84.16

81.22 82.22

5+40 B 81.94 82.94

80.45 80.19 81.19 81.45

5+60 B 81.04 80.79 81.79 82.04

47. 93.5 77.85 78.85

6+0.7 78.1 79.1

6+53.48 Y -PL 75.25 75.00 76.00 76.25

Florence St Grades
S. cl N. cl

17.71
16.15
87.41
2.64
90.29

S 89.2 88.4 87.5 86.7 86.5 86.2 85.9 85.6 85.4

8.5 -9.3 10.2 4.3 4.5 4.1 4.4 4.7 4.9

6.4 8.4 11.9 6.1 6.4 6.6 6.5 6.6 6.4

+2.1 +0.9 -1.7 -1.8 -2.3 -2.5 -2.1 -1.9 -1.5

+1.2 1.2 -1.0 -0.8 -1.3 -1.5 -1.1 -0.9 -0.5

N 89.2 88.7 88.2 87.7 87.5 87.2 86.9 86.6 86.4

8.5 9.0 9.5 10.0 2.8 3.1 3.4 3.7 3.9

7.3 9.2 10.0 10.1 2.2 1.4 0.8 2.5 3.1

+1.2 -0.2 -0.5 -0.1 +0.6 +1.7 +2.6 +1.2 +0.8

+0.1 +0.2 +0.9 +1.6 +2.7 +3.6 +2.2 +1.8

B 85.1 84.5 83.2 81.0 78.1 75.2

5.2 5.8 7.1 9.3 12.2 15.1

6.6 6.5 5.3 7.1 9.1 13.3

-1.4 -0.7 +1.8 +2.2 +3.1 +4.8

-0.4 +0.3 +2.6 +2.8 +3.4

N 86.1 85.5 84.2 82.0 79.1 76.2

4.2 4.8 6.1 8.3 11.2 14.1

2.2 2.5 5.0 8.3 10.9 15.0

+2.0 +2.3 +1.1 0.0 +0.3 -0.9

+3.0 +3.3 +1.9 +0.6 +0.6

92.21
7.71
84.50
1.33
85.83

S 89.00 85.50 83.83 83.62 83.24 82.75 82.04

3.37 6.71 2.00 2.21 2.55 3.08 3.75

N 89.00 86.50 84.83 84.62 84.28 83.75 83.08

3.21 5.71 1.00 1.21 1.55 2.04 2.75

S 81.22 80.19 75.00 80.19 75.00

4.11 5.64 10.83 15.00

2155.00

N 81.22 81.19 76.00 77.60 81.23 71.03

3.31 4.24 9.83

87.4
3.4
91.0

B 91.0

17

Andrews Grades

	S. cl	N. cl
8 Line/India	80.75	80.60
0+56.3	88.05	85.82
1+02.56 PC into Columbia	95.50	91.04
CR Curve	98.1	92.46
00- send Curve in Columbia	100.7	95.00

B 102.77 ✓	123.00 6.03 8.03 -2.00	125.50 3.53 3.03 10.50
B	127.50 1.93	124.00 5.03

77.97	80.60	80.75	
7.53	4.90	4.75	
85.50	5.40	5.25	
	-0.50	-0.50	

Curve SW Andrews & Columbia

P.V.C.	100.70	99.83	98.97	98.10	97.23	96.36	95.50
100.22	2.24	3.11	3.97	4.84	5.71	6.58	7.44
0.72	1.24	2.16	2.97	3.84	4.71	5.58	6.44
101.94	11.00	10.50	11.00	11.00	10.50	0.0	0.0
+1.00							
102.94							

101.22	95.00	95.50	96.50	98.00
+1.00	9.32	9.42	8.72	6.92
2.70R		10.42	5.92	5.92
104.92	95.50	-1.00	+2.50	+1.00
0.00	9.42			
104.92				
12.80				
117.72				
0.12				
117.60 send				

117.60 send	99.41	99.16	99.18	99.46	100.01	100.82
11.43	5.51	5.76	5.74	5.46	4.91	4.10
129.03	5.01	5.26	5.24	4.96	4.41	3.60
4.50						
10.50						

77.97 NW Andrews & India

13.03	11.00	91.04	92.46	95.00	95.50
91.00	80.00	85.82	91.04	92.46	95.00
0.21		5.2	12.0	70.6	8.1
90.77		5.1	11.8	11.2	7.6
12.30		+0.150d	+0.2	-0.6	8.5
103.07					-0.9
1.06					
101.03					
9.79					
111.82					

102.00	106.5	106.00	104.6	103.20	104.0	109.0
0.94	5.3	5.8	9.8	10.7	7.9	4.9
102.94	106.5	106.00	104.6	103.20	104.0	109.0
	5.3	5.8	9.8	10.7	7.9	4.9
	3.9	3.7	2.6	11.0	7.3	3.3
	+2.7	+1.4	+6.8	-0.5	-0.8	1.6

102.00	106.5	106.00	104.6	103.20	104.0	109.0
0.94	5.3	5.8	9.8	10.7	7.9	4.9
102.94	106.5	106.00	104.6	103.20	104.0	109.0
	5.3	5.8	9.8	10.7	7.9	4.9
	3.9	3.7	2.6	11.0	7.3	3.3
	+2.7	+1.4	+6.8	-0.5	-0.8	1.6

102.6	105.2	106.5	106.5	106.0	104.6
102.7	104.5	105.42	105.4	105.0	103.9
+1.7	-1.2	-1.9	-3.3	-2.5	-0.5
+1.8	-0.5	-0.8	-2.2	-1.5	+0.2

101.08	102.2	102.38	105.4	107.3
13.18	107.8	4.8	4.2	2.2
113.18	107.8	4.8	4.2	2.2
	-0.3	+6.8	+4.2	+2.2
	+0.1	+7.2		

108.2	107.48	106.5	106.0	106.3
+0.9	+1.0	+3.7	+4.6	6.9
				3.7
				+3.2

6 | 97-08

16-11-20	20
16-11-20	20
20-22-40	40
16-11-20	20
48-34-00	00
16-11-20	20
16-11-20	20
16-11-20	20
80-56-40	40
16-11-20	20
97-08-00	00

	S. el	N. el
E Line Titus	99.00	98.00
14 E on S. = P.C.	100.75	
+50	105.25	104.2
1400	111.50	110.50
1+50	117.75	116.75
2+00 = W Line Linwood	124.00	123.00
E Line Linwood	127.50	126.50
	Linwood	Grades
	N. el	E. el
60 = S Line Andrews	125.50	126.50
B+30	128.50	129.50
B+50	130.31	131.31
B+70	131.75	132.72
B+90	132.81	133.74
B1+10	133.50	134.37
1+57.5	134.7	135.4
2+05	135.8	136.4
2+52.5	137.0	137.4
300 = N. Wellborn	138.20	138.50

111.82
2.73
109.09
10.32
119.41
2.17
117.24
11.65
129.89
129.40
129.40
129.50
0.28
129.88
129.50
6.75
136.25
0.30
137.95
5.77
143.67
135.82
3.26
139.05
4.87
144.92
16.37
161.75
144.78
6.85
137.93
134.62

N 98.00
13.4
12.4
+1.4
S 99.00
12.8
4.2
+8.4
129.40
129.40
129.40
129.50
0.28
129.88
129.50
6.75
136.25
0.30
137.95
5.77
143.67
135.82
3.26
139.05
4.87
144.92
16.37
161.75
144.78
6.85
137.93
134.62

104.2
7.6
7.2
-7.6
100.7
11.1
3.1
+8.0
129.40
129.40
129.40
129.50
0.28
129.88
129.50
6.75
136.25
0.30
137.95
5.77
143.67
135.82
3.26
139.05
4.87
144.92
16.37
161.75
144.78
6.85
137.93
134.62

Culverts	#	#	#
104.2			
7.6			
7.2			
-7.6			
100.7			
11.1			
3.1			
+8.0			
129.40			
129.40			
129.40			
129.50			
0.28			
129.88			
129.50			
6.75			
136.25			
0.30			
137.95			
5.77			
143.67			
135.82			
3.26			
139.05			
4.87			
144.92			
16.37			
161.75			
144.78			
6.85			
137.93			
134.62			

110.5
9.0
16.0
-7.0
105.2
14.3
7.3
+7.0
129.40
129.40
129.40
129.50
0.28
129.88
129.50
6.75
136.25
0.30
137.95
5.77
143.67
135.82
3.26
139.05
4.87
144.92
16.37
161.75
144.78
6.85
137.93
134.62

116.7
2.9
7.6
-4.8
117.7
8.0
3.9
+4.1
129.40
129.40
129.40
129.50
0.28
129.88
129.50
6.75
136.25
0.30
137.95
5.77
143.67
135.82
3.26
139.05
4.87
144.92
16.37
161.75
144.78
6.85
137.93
134.62

Flow Line	#	#	#	#
124.00				
5.88				
10.02				
+5.90				
123.00				
15.2				
20.2				
-5.0				
128.0				
-1.0				
122.17				
7.71				
3.11				
+4.60				
126.5				
11.8				
12.8				
-1.0				
127.50				
10.7				
4.5				
+6.2				
124.0				
14.2				
70.5				
+3.7				
120.18				
9.70				
5.50				
5.4				
131.31				
12.4				
4.3				
+7.2				
132.72				
11.0				
3.2				
+7.8				
133.74				
10.0				
2.4				
+7.6				
134.37				
9.3				
1.0				
+8.3				
130.31				
8.0				
7.4				
+0.6				
131.75				
6.5				
4.9				
+1.6				
132.81				
5.5				
5.0				
+0.5				
133.50				
4.8				
4.0				
+0.8				
135.4				
9.4				
2.4				
+7.0				
136.4				
2.7				
1.4				
+1.3				
137.4				
1.7				
4.7				
-3.0				
138.5				
0.6				
0.4				
+0.2				
139.2				
11.2				
10.7				
4.5				
8.0				
134.7				
4.4				
6.4				
-2.0				
135.5				
3.6				
3.3				
137.0				
2.1				
11.7				
-9.6				
138.2				
138.2				

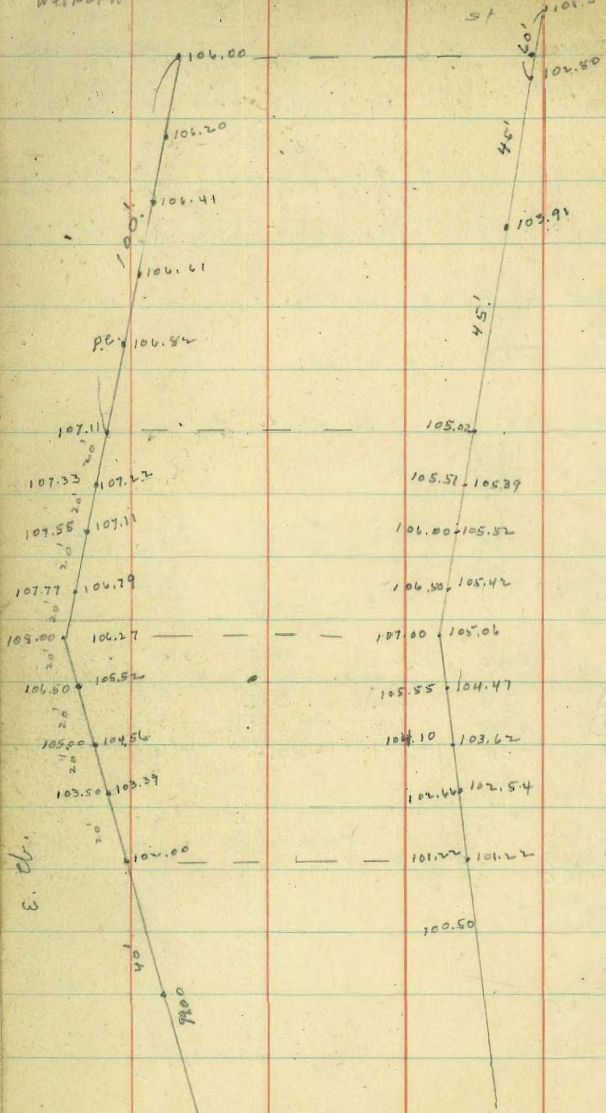
CT. N.E. Tie Airwood & Wellborn

126.00
8.62
134.62
124.50
8.12
10.12
-2.00
127.50
7.12
2.62
+4.50

Walborn

Columbia St Grades

winder



137.73

3.36
14.31
11.81
129.50
5.14
134.64

Linwood ct.

140.00
1.21
0.31
+1.00

2.16
3.00
1.5

2.3

138.50

2.81

139.50

1.81
2.81
-1.00

141.00

0.31

138.0

3.31
1.31
+2.00

137.0

4.31

138.00

3.31

138.20

2.11
124.0
10.64

S

133.50

7.81

132.81

8.50
9.00
+0.50

131.75

9.56
9.06
+0.50

130.31

11.00
10.00
+1.0

128.50

12.81
11.81
+1.00

125.50

9.14
8.64
+0.50

N

134.37

6.94
8.94
+1.00

133.74

7.57
6.57
+1.00

132.72

8.59
7.59
+1.00

131.31

10.00
8.00
+2.00

129.50

11.81
9.81
+2.00

126.50

8.14
6.64
+1.50

B

FVC

S

141.00

13.16
13.16
0.0

146.50

7.66
7.66
0.0

52.00

2.16
2.16
0.0

56.00

8.26
7.76
+0.50

60.00

4.26
4.26
0.0

61.55

2.71
2.71
0.0

62.15

2.11
2.11
0.0

61.84

5.14
5.14
0.0

N

141.56

12.66
12.66
+0.50

147.00

7.16
7.16
+0.50

52.50

1.66
1.66
0.0

56.50

7.76
7.26
+0.50

60.5

3.76
3.76
0.0

62.05

2.21
2.21
0.0

62.70

1.56
1.56
0.0

62.45

5.26
5.26

16270

501
167.71

S

60.60

6.38
6.38
0.0

155.50

11.44
12.46
-1.00

14.9

11.48
3.5

4.54

+1.00

5.54

+2.00

3.54

N

61.30

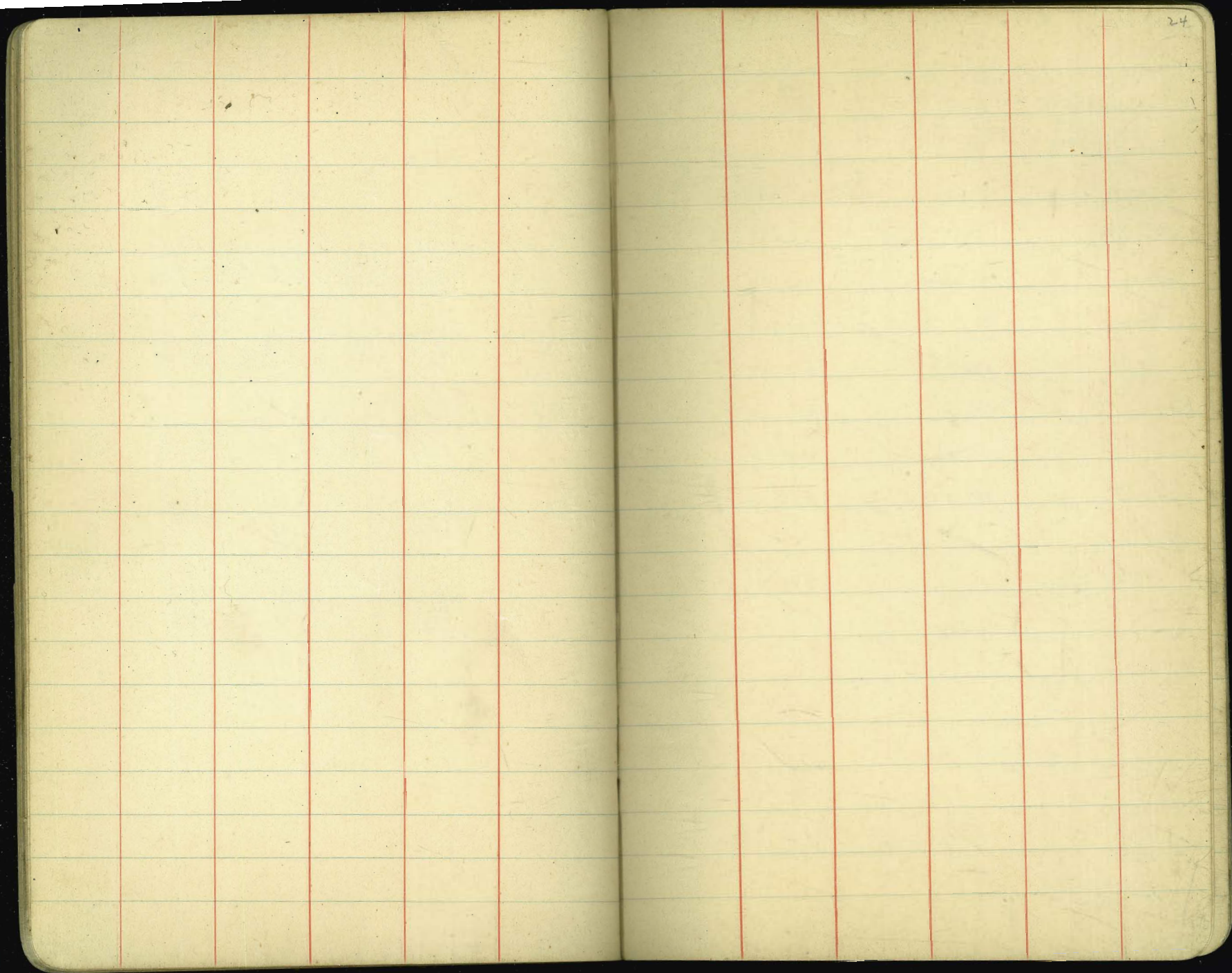
6.41
4.91
+1.50

156.50

11.21
11.21

56.50

3.76
3.76
+4.00



no. made Alley BIK RR U.H.

Paving Grades

6-22-20
mull

	E. Line 331.28 cl	W. Line 331.14 Top cl
N. Line Madison	331.00	331.00
+ 16.67	31.50	31.50
+ 93.33	31.00	32.00
+ 140.13	332.50	332.50
+ 186.67	333.33	333.33
+ 33.33	334.17	334.17
+ 80.00	335.00	335.00
+ 42.00	335.27	335.27
+ 60.00	335.53	335.53
+ 400.13	335.80	335.80
+ S. Line Adams	337.79	338.10

329.09 SE. Florida Madison

	B	B
	31.20	31.50
	31.50	32.00
	32.50	33.33
	34.17	35.00
	35.27	35.27
	35.80	35.80
	36.42	36.42
	37.04	37.04
	37.66	37.66
	38.28	38.28
	38.90	38.90
	39.52	39.52
	40.14	40.14
	40.76	40.76
	41.38	41.38
	42.00	42.00
	42.62	42.62
	43.24	43.24
	43.86	43.86
	44.48	44.48
	45.10	45.10
	45.72	45.72
	46.34	46.34
	46.96	46.96
	47.58	47.58
	48.20	48.20
	48.82	48.82
	49.44	49.44
	50.06	50.06
	50.68	50.68
	51.30	51.30
	51.92	51.92
	52.54	52.54
	53.16	53.16
	53.78	53.78
	54.40	54.40
	55.02	55.02
	55.64	55.64
	56.26	56.26
	56.88	56.88
	57.50	57.50
	58.12	58.12
	58.74	58.74
	59.36	59.36
	59.98	59.98
	60.60	60.60
	61.22	61.22
	61.84	61.84
	62.46	62.46
	63.08	63.08
	63.70	63.70
	64.32	64.32
	64.94	64.94
	65.56	65.56
	66.18	66.18
	66.80	66.80
	67.42	67.42
	68.04	68.04
	68.66	68.66
	69.28	69.28
	69.90	69.90
	70.52	70.52
	71.14	71.14
	71.76	71.76
	72.38	72.38
	73.00	73.00
	73.62	73.62
	74.24	74.24
	74.86	74.86
	75.48	75.48
	76.10	76.10
	76.72	76.72
	77.34	77.34
	77.96	77.96
	78.58	78.58
	79.20	79.20
	79.82	79.82
	80.44	80.44
	81.06	81.06
	81.68	81.68
	82.30	82.30
	82.92	82.92
	83.54	83.54
	84.16	84.16
	84.78	84.78
	85.40	85.40
	86.02	86.02
	86.64	86.64
	87.26	87.26
	87.88	87.88
	88.50	88.50
	89.12	89.12
	89.74	89.74
	90.36	90.36
	90.98	90.98
	91.60	91.60
	92.22	92.22
	92.84	92.84
	93.46	93.46
	94.08	94.08
	94.70	94.70
	95.32	95.32
	95.94	95.94
	96.56	96.56
	97.18	97.18
	97.80	97.80
	98.42	98.42
	99.04	99.04
	99.66	99.66
	100.28	100.28
	100.90	100.90
	101.52	101.52
	102.14	102.14
	102.76	102.76
	103.38	103.38
	104.00	104.00
	104.62	104.62
	105.24	105.24
	105.86	105.86
	106.48	106.48
	107.10	107.10
	107.72	107.72
	108.34	108.34
	108.96	108.96
	109.58	109.58
	110.20	110.20
	110.82	110.82
	111.44	111.44
	112.06	112.06
	112.68	112.68
	113.30	113.30
	113.92	113.92
	114.54	114.54
	115.16	115.16
	115.78	115.78
	116.40	116.40
	117.02	117.02
	117.64	117.64
	118.26	118.26
	118.88	118.88
	119.50	119.50
	120.12	120.12
	120.74	120.74
	121.36	121.36
	121.98	121.98
	122.60	122.60
	123.22	123.22
	123.84	123.84
	124.46	124.46
	125.08	125.08
	125.70	125.70
	126.32	126.32
	126.94	126.94
	127.56	127.56
	128.18	128.18
	128.80	128.80
	129.42	129.42
	130.04	130.04
	130.66	130.66
	131.28	131.28
	131.90	131.90
	132.52	132.52
	133.14	133.14
	133.76	133.76
	134.38	134.38
	135.00	135.00
	135.62	135.62
	136.24	136.24
	136.86	136.86
	137.48	137.48
	138.10	138.10
	138.72	138.72
	139.34	139.34
	139.96	139.96
	140.58	140.58
	141.20	141.20
	141.82	141.82
	142.44	142.44
	143.06	143.06
	143.68	143.68
	144.30	144.30
	144.92	144.92
	145.54	145.54
	146.16	146.16
	146.78	146.78
	147.40	147.40
	148.02	148.02
	148.64	148.64
	149.26	149.26
	149.88	149.88
	150.50	150.50
	151.12	151.12
	151.74	151.74
	152.36	152.36
	152.98	152.98
	153.60	153.60
	154.22	154.22
	154.84	154.84
	155.46	155.46
	156.08	156.08
	156.70	156.70
	157.32	157.32
	157.94	157.94
	158.56	158.56
	159.18	159.18
	159.80	159.80
	160.42	160.42
	161.04	161.04
	161.66	161.66
	162.28	162.28
	162.90	162.90
	163.52	163.52
	164.14	164.14
	164.76	164.76
	165.38	165.38
	166.00	166.00
	166.62	166.62
	167.24	167.24
	167.86	167.86
	168.48	168.48
	169.10	169.10
	169.72	169.72
	170.34	170.34
	170.96	170.96
	171.58	171.58
	172.20	172.20
	172.82	172.82
	173.44	173.44
	174.06	174.06
	174.68	174.68
	175.30	175.30
	175.92	175.92
	176.54	176.54
	177.16	177.16
	177.78	177.78
	178.40	178.40
	179.02	179.02
	179.64	179.64
	180.26	180.26
	180.88	180.88
	181.50	181.50
	182.12	182.12
	182.74	182.74
	183.36	183.36
	183.98	183.98
	184.60	184.60
	185.22	185.22
	185.84	185.84
	186.46	186.46
	187.08	187.08
	187.70	187.70
	188.32	188.32
	188.94	188.94
	189.56	189.56
	190.18	190.18
	190.80	190.80
	191.42	191.42
	192.04	192.04
	192.66	192.66
	193.28	193.28
	193.90	193.90
	194.52	194.52
	195.14	195.14
	195.76	195.76
	196.38	196.38
	197.00	197.00
	197.62	197.62
	198.24	198.24
	198.86	198.86
	199.48	199.48
	200.10	200.10
	200.72	200.72
	201.34	201.34
	201.96	201.96
	202.58	202.58
	203.20	203.20
	203.82	203.82
	204.44	204.44
	205.06	205.06
	205.68	205.68
	206.30	206.30
	206.92	206.92
	207.54	207.54
	208.16	208.16
	208.78	208.78
	209.40	209.40
	210.02	210.02
	210.64	210.64
	211.26	211.26
	211.88	211.88
	212.50	212.50
	213.12	213.12
	213.74	213.74
	214.36	214.36
	214.98	214.98
	215.60	215.60
	216.22	216.22
	216.84	216.84
	217.46	217.46
	218.08	218.08
	218.70	218.70
	219.32	219.32
	219.94	219.94
	220.56	220.56
	221.18	221.18
	221.80	221.80
	222.42	222.42
	223.04	223.04
	223.66	223.66
	224.28	224.28
	224.90	224.90
	225.52	225.52
	226.14	226.14
	226.76	226.76
	227.38	227.38
	228.00	228.00
	228.62	228.62
	229.24	229.24
	229.86	229.86
	230.48	230.48
	231.10	231.10
	231.72	231.72
	232.34	232.34
	232.96	232.96
	233.58	233.58
	234.20	234.20
	234.82	234.82
	235.44	

J St Curb Grades

	32 nd to 33 rd	N. d.
00.81.00 32 nd	81.50	81.00
+40	81.77	81.54
+80	82.04	82.09
B 1+20	82.32	82.64
B 1+40	82.38	82.81
B +60	82.24	82.77
B +80	82.03	82.54
B 2+00	81.62	82.10
+20	81.06	81.45
+40	80.34	80.60
+60	79.47	79.54
+80	78.44	78.28
3+00	77.26	76.80
3+20	75.92	75.15
3+33.3	75.00	74.00

	32 nd 4 th J.	32 nd 4 th J.	32 nd 4 th J.	32 nd 4 th J.	32 nd 4 th J.	32 nd 4 th J.	32 nd 4 th J.	32 nd 4 th J.	32 nd 4 th J.	32 nd 4 th J.
31.52 NW 32 nd 4 th J.	5.24	5.90	81.48	82.06	82.64	82.91	82.77	82.54	82.35	81.45
86.80	80.90	4.15	3.57	2.99	2.82	2.86	3.09	3.53	4.18	2.6
2.94	41.00									
83.86	41.00									
1.77	41.00									
85.63	41.00									
	5.27	51.79	82.05	82.32	82.38	82.28	82.03	81.62	81.06	
	41.53	3.84	3.59	3.31	3.25	3.35	3.60	4.01	4.57	
	81.80									
	0.234									
	80.60	79.54	78.28	76.80	75.15	74.00				
	5.03	6.09	7.35	8.83	10.48	11.63				
	80.34	79.47	78.44	77.26	75.92	75.00				
	5.29	6.16	7.19	8.37	9.71	10.63				
							75.25			
							10.4			
							12.6			
							2.4			

Alley BIK 202 U.H. Grades

	E. line	W. line		
00=N. line Univ	323.58	322.92	change	
+55	324.26	323.86		
B 1110	325.20	324.80	325.20	324.80
53.75				
1+63.75	326.35	325.95	326.31	25.91
2+17.50	327.50	327.10	27.42	27.02
2+71.25	328.65	328.25	28.53	28.13
3+25.00	329.80	329.40	29.63	29.23
3+78.75	330.95	330.55	30.74	30.34
4+32.50	332.10	331.70	31.85	31.45
B 4+86.25	333.25	332.85	332.95	332.55
B 5+40.00	334.40	334.00		
B 5+80.0	336.40	336.00		
st line Lincoln				
6+00	338.52	336.98		

306.40 30	S.E. A. 101 + Univ	346.05 NW	25" + Univ	27
13.07	328.29		5.99	
319.47	321.42	Sett. B.P. SE	Univ + Villa Terrace	
0.78	524	23.86	324.80 2595	27.10 28.25
318.69	322.92	4.34	3.40 2.25	4.74 3.59
7.51	322.92	5.14	3.40 2.31	4.99 4.13
328.20	chk	-0.84	0.0 -0.06	-0.25 -0.54
2.31			0.04 0.04	0.12 0.12
325.89			-0.02 -0.17	-0.42 -0.64
5.95				
331.84	E 4.73	24.26	25.20 26.35	27.50 28.65
0.84	323.47	2.94	3.00 5.49	4.34 3.19
321.00	+323.58	3.15	3.00 4.49	3.99 2.19
9.68	no chk	+0.79	0.0 +1.00	0.35 1.00
340.68			0.04 0.04	0.12 0.12
			+1.04 +0.43	+1.12 +2.17
	W 3170	32.85 34.00	36.00	36.98
	8.99	7.83 6.68	4.64	3.70
	10.09	7.83 7.98	4.86	3.69
	-1.11	0.0 -1.30	-0.18	chk
	0.111	0.301		
	-0.86	+0.30		
	E 32.10	33.25 34.40	36.40	38.52
	8.58	7.43 6.28	4.28	2.16
	7.58	6.63 5.05	3.76	2.06
	+1.00	+0.80 +1.23	+0.52	6
	0.151	0.301		2.66
	+1.15	+1.10		
	90's line	on 4" lower		
	332.55	332.95	4.32	
	3.96	3.86	332.49	
	30	2.76	15	
	336.81	+1.1	332.34	
			4.47	

00 = 2 Line Granada

+56

1+12

1+68

2+24

B 2+80

B 3+05

B

B

B 3+80

SPRUCE

7' at.

Alley

Redwood

293.20

Water Grades 63rd St
AKINS To Bach
Stakes 5' B of ϕ

	8.0	ϕ	W. 2.0	
00-A line AKINS on E.	191.0	191.0	191.0	192.0
+50		191.43		
100		191.86		
+50		192.29		
200		192.72		
+50		193.15		
300		193.58		
B 3+50	194.0	194.0	194.0	194.00
4+10.6		206.65		202.6
4+71.2		209.30		211.2
5+31.8		216.95		219.9
B 5+92.4		224.60		228.5
6+53.0		232.25		235.5
7+13.6		239.90		242.5
7+74.2		247.55		249.5
8+34.8		255.20		256.5
8+95.4		262.85		263.5
S. Line Brooklyn				
9+56	270.0	270.5	270.0	270.5

AKINS + 63rd

192.42									
5.56									
197.98									
0.17									
197.81	191.09	91.9	92.3	92.7	93.1	93.6	94.0	26	11.2
12.81		6.1	5.7	5.3	4.9	4.4	4.0	8.0	12.0
110.62		5.5	5.4	4.9	4.2	3.0	1.2	8.4	11.8
0.15		10.6	10.3	10.4	10.7	11.4	12.8	10.4	20.2
110.47							11.8	Raise 1.0	
12.66									
123.13	19.9	28.5	35.5	42.5	49.5	56.5	63.5	70.5	
0.09	3.2	7.5	0.5	6.3	12.0	5.0	10.2	3.2	
123.04	3.1	8.2	0.8	5.0	10.5	4.2	10.4	3.1	
12.92	10.1	-0.7	-0.3	11.3	11.5	10.8	-0.2	10.1	
135.92									
0.02									
135.90	192.0	2.3	2.6	2.9	3.1	3.4	3.7	4.0	
12.95			5.4	5.1	4.9	4.6	4.3	4.0	
148.85			5.5	5.4	4.9	4.2	3.0		
0.37			-0.1	-0.3	0.0	10.4	11.3		
148.48									
12.96									
161.44									
0.24									
161.10									
12.54									
173.64									
0.11									
173.57									
13.16									
186.73									

	E. cl	¢	W. cl
N. Line Brooklyn			
0+00	274.0	274.0	274.0
+61.33		282.2	
1+22.67		290.4	
P.V.C. +84 60	299.0	298.50	298.0
P.V.C. +244 60		303.87	
P.V.C. +304 60	305.0	304.00	304.0
+5.85		301.25	
3+694			
S. Line Wunderlin			
4+35.6	299.0	298.5	298.0

180.73
 0.17
 146.56
 12.78
 199.34
 0.32
 199.02
 7.55
 206.57

	P.V.C.	ctr	P.V.C.				
74.0	82.2	90.4	98.5	3.9	4.0	7.2	98.5
12.7	4.5	9.0	8.1	2.7	2.6	5.4	8.1
9.2	2.3	7.1	2.1	1.8	1.0	2.2	4.9
3.4	2.2	1.9	1.0	0.9	1.6	5.2	43.2

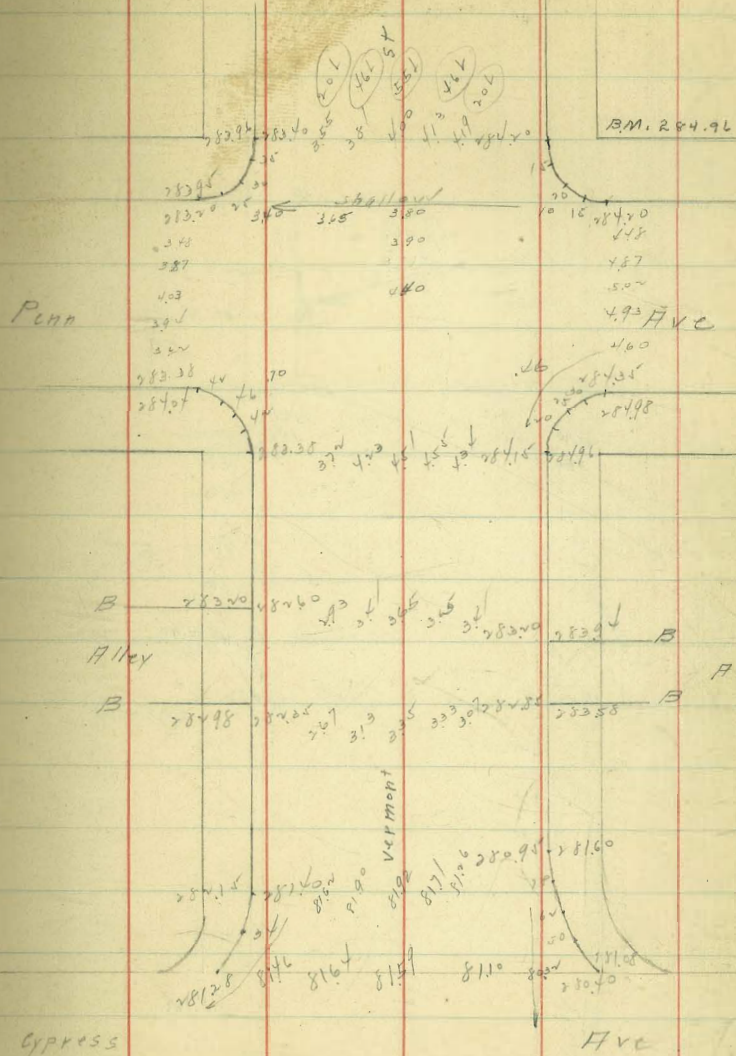
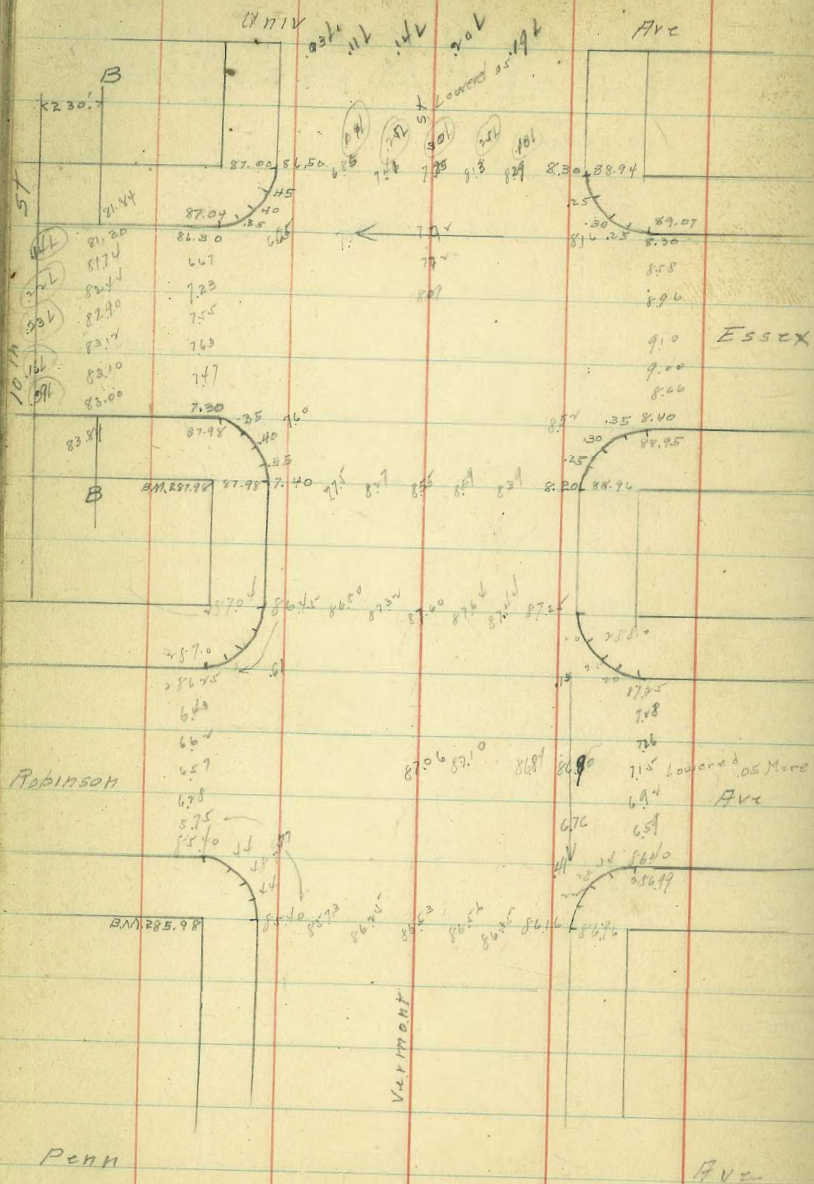
	S. cl	cl	W. cl
N. Line Wanderlin 0400	298.0	297.5	297.0
+60		93.7	
+80		93.7	
EC1+40 (49.20)	298.0	297.5	297.0
1+89.26		303.0	
2+38.53		308.5	
2+82.80		314.0	
3+37.06		319.5	
3+86.33		325.0	
S. Line Back 4+35.60	336.0	330.5	330.0

206.57
0.54
206.03
13.00
219.03
0.50
218.53
13.25
231.78
0.53
231.25 =

32

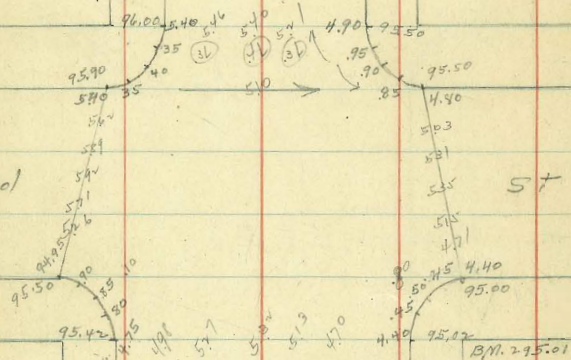
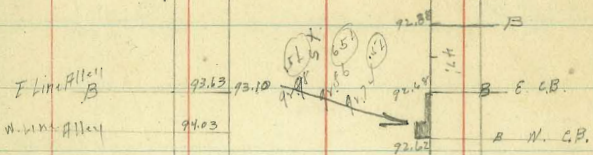
97.5	93.7	93.7	97.5	3.0	8.5	14.0	19.5	25.0	30.5
9.1	12.9	12.9	9.1	3.6	10.5	5.0	12.3	6.8	1.3
9.1	11.7	11.8	9.1	3.4	9.0	3.0	10.8	6.3	0.2
00	+1.0	+1.1	00	+0.2	+1.5	+2.0	+1.5	+0.5	+1.1

CHK on BM 15.W. 63rd + Back.



Herbert

ST



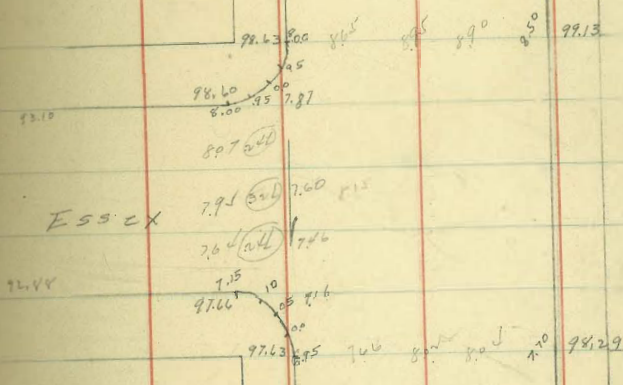
Vermont

ST

7/11/14

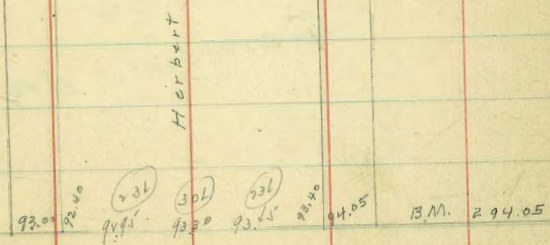
(151) (161) (171)

Ave



Robinson

Ave



CENTRE ST PAVING

UNPAVED
14
paved
Break
AVE

← 50 →

196° 50°
lower than
shallow
436 197 96
→
ROBINSON AVE

Eyre Road
Paving & Sewer Grades

7-1-24

289.04 S.E. 30th + Adams

34

	E. line	W. line
00 - N. line Copely	389.88	390.08
45.4 on W		
41.75 - E	390.13	390.33
90.8 on W		
93.5 on E = N. end Paving	390.38	390.58

289.04			
4.53			
<u>393.57</u>			
5.05			
<u>388.52</u>			
5.64			
<u>394.16</u>			
4.22			
<u>398.94</u>			
5.12			
<u>395.80</u>			
	about		
	W 5.22	90.82	90.58
	<u>390.04</u>	4.97	4.77
		4.65	5.24
		<u>10.32</u>	<u>-0.52</u>
	E 5.42	90.13	90.38
	<u>389.88</u>	5.17	4.92
		4.17	4.92
		<u>7.10</u>	<u>0.0</u>

Sewer

	Floor Line
00 - N line Copely	385.00
46.05	384.00
92.1 - N End DE	387.00

Sewer

385.00	386.00	387.00
10.30	9.30	8.30
<u>5.61</u>	4.90	6.01
+4.69	+4.40	+2.29

ALBATROSS +-

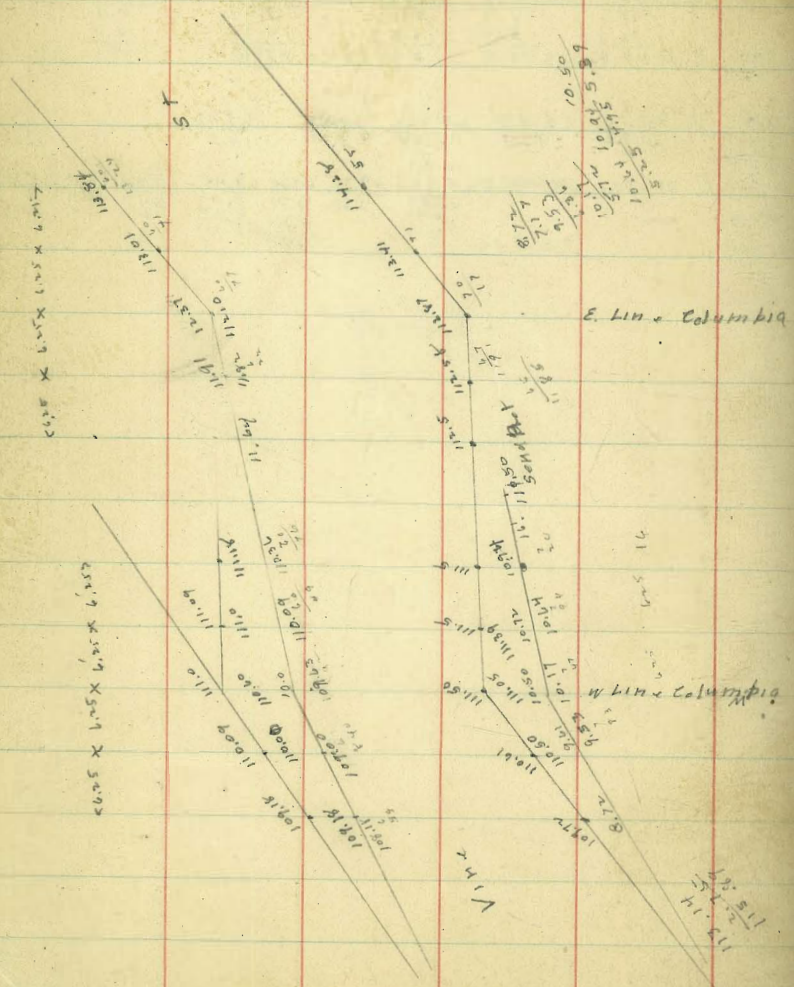
Douglass South.

	W. line	W. cl	E. cl	E. line	
W					
20-5 km. Douglass	70.7	270.5	270.5	270.7	SLIN-Douglass
+50	70.2	269.98	269.98	270.2	+50
1+00	69.7	269.46	269.63	69.9	+83 P.C.
1+43	69.2	269.0	269.43	69.6	CTF Curr.
			269.23	69.5	E.C.
			269.00		W. cl
			269.25		Line
					W. Line
					End cl

- 41 64-00
- 16-00
- 32-00
- 48-00
- 64-00

270.53 SW Douglass & Albatross							
	W	70.50	70.2	69.7	69.2		
		4.41	4.7	5.2	5.7		
		4.40	3.2	4.2	6.2		
		2.11	1.5	1.0	-0.5		
	E	70.7	70.2	69.9	69.7		
		4.2	4.7	5.0	5.2		
		3.8	5.2	13.9	14.3		
		10.4	-6.5	8.9	-9.7		
	W	70.45	69.95	69.46	69.23	69.47	
		3.91	4.00	4.98	5.22	4.97	
		274.44		P.E.			
	E	70.50	69.98	69.90	69.75	69.60	69.45
				4.54	4.29	4.84	5.00
					5.34	6.00	
					-0.50	-1.00	
	E.C.	69.30	69.00	69.25			
		5.14	5.14	5.19			
				6.09			
				-1.00			

Vine & Columbia



113.14 B.P. S.E. Vine & Columbia 4.20
 3.95
 117.09

Columbia
 E
 12.58 112.5 111.5
 4.51 4.59 5.59
 6.00
 -0.50

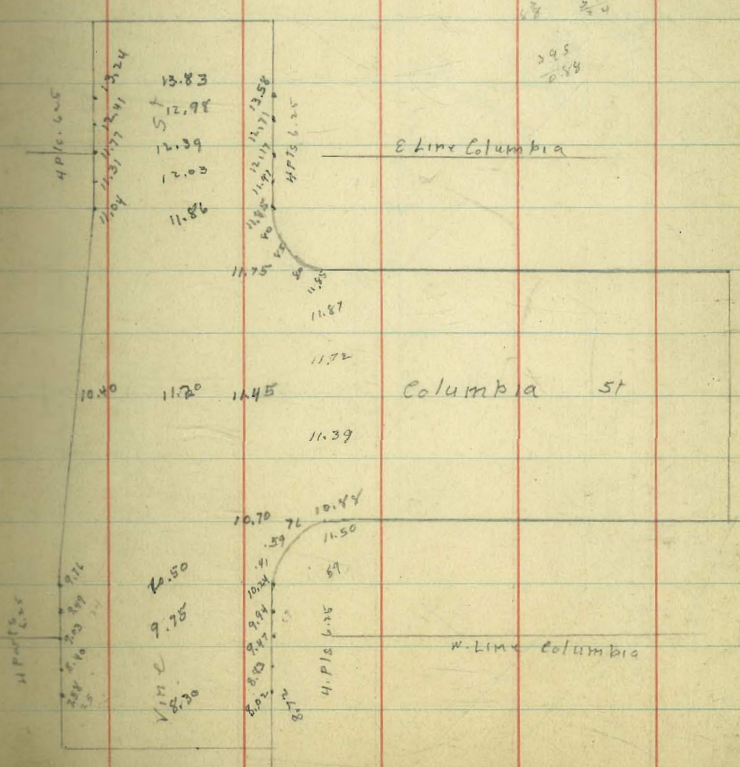
NW
 113.14 108.18 109.00 109.63 110.09 110.36
 2.99 7.45 6.63 6.00 5.54 5.27
 115.13 8.45 8.63 8.00 6.54 6.27
 -1.00 +2.00 -2.00 -1.00 -7.00

4.57
 4.92

N.E.
 111.64 111.91 112.37 113.01 113.54
 3.97 3.72 3.22 3.01 2.18
 3.49 2.72 2.26 2.01 1.14
 +0.50 +1.00 +1.00 +1.00 0.00

14.0
 142.30 S. 21 141.80 NW State & Vine
 1.90
 2.40
 1.00

10.88 10.90 11.45
 5.57 7.5 6.00
 16.45
 117.5 117.5
 73 70
 86 112.0
 57



13.83
 12.98
 12.39
 12.03
 11.86

10.00 11.20 11.45
 11.39

10.70 10.44
 72 59
 11.50

4.176 6.5
 4.176 6.5

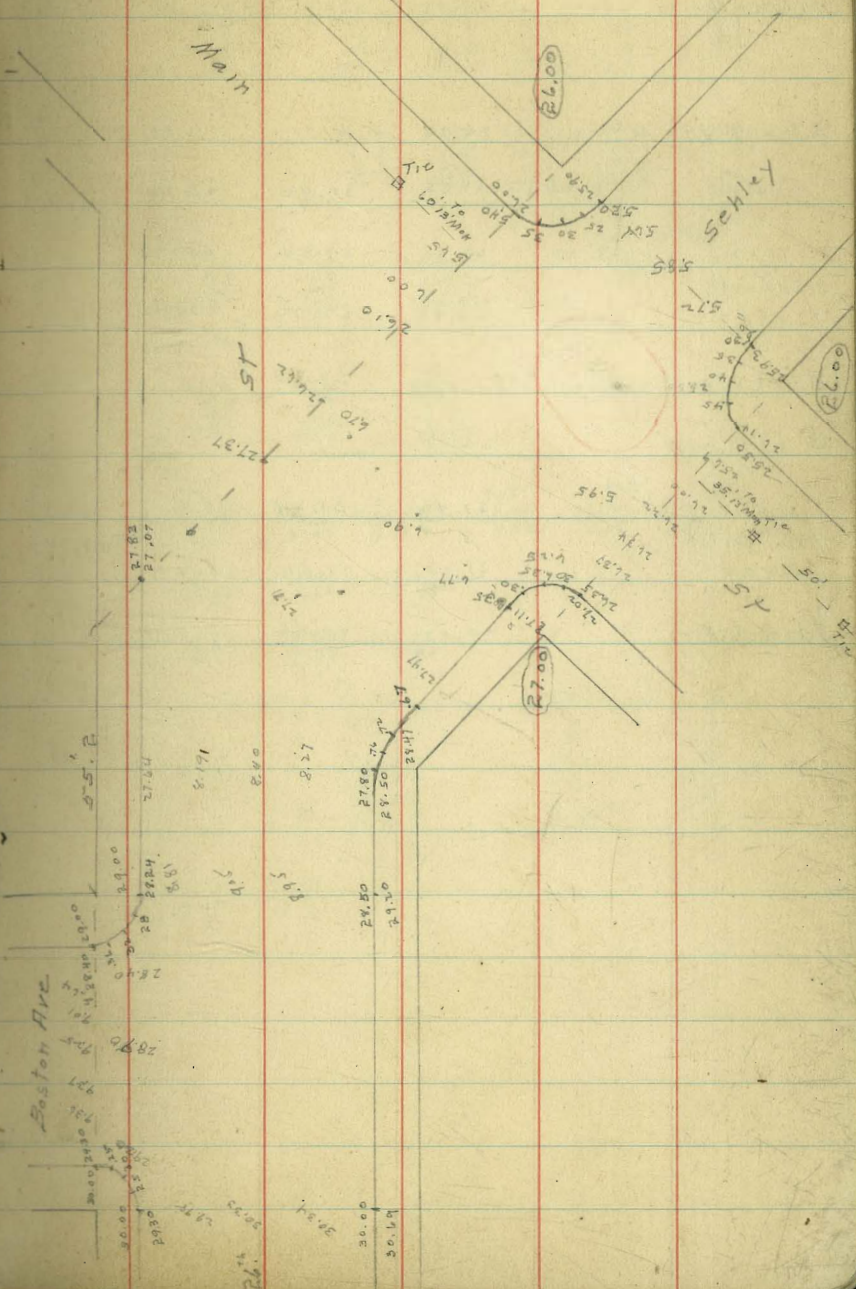
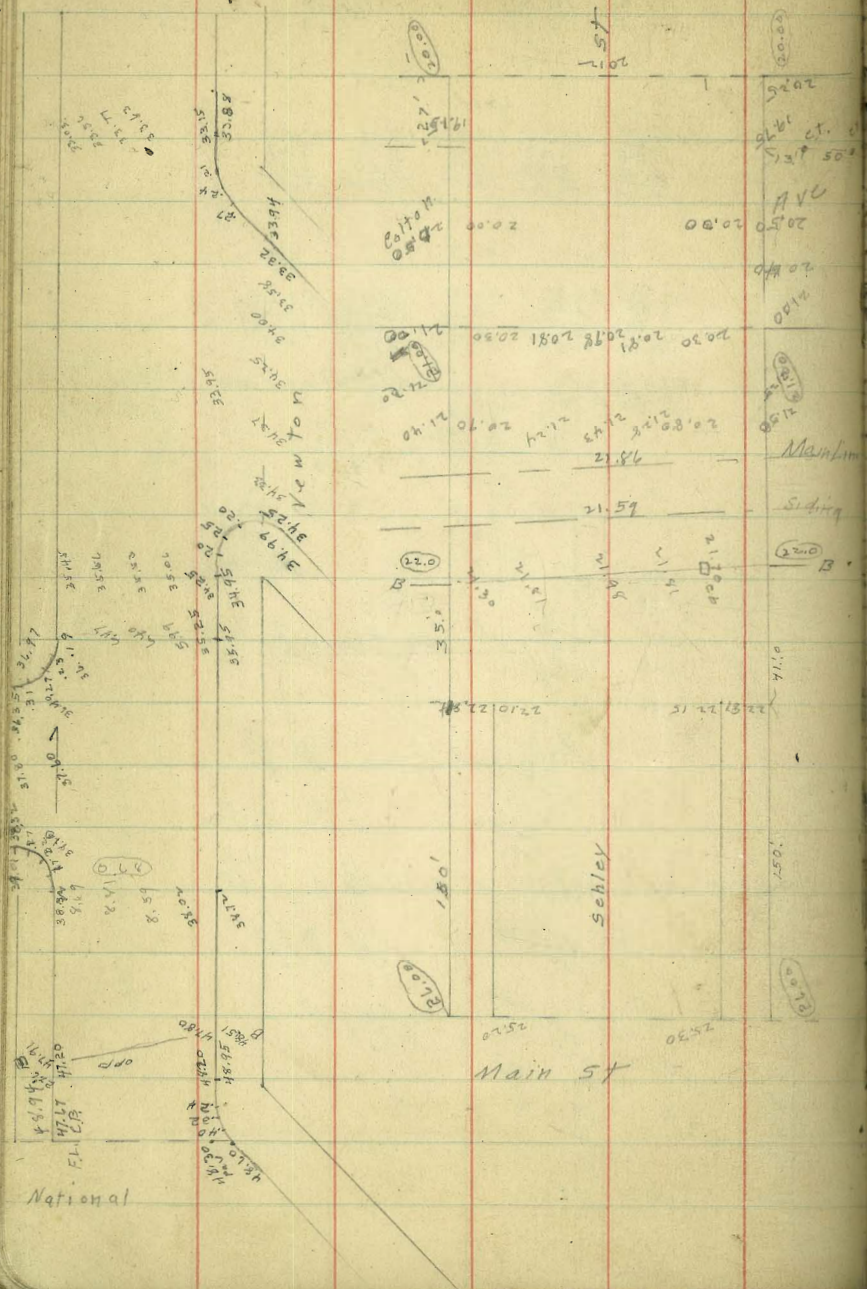
14.50
 9.75
 18.30

W Line Columbia

Boston

26th & Schley St Paving

41



BK 18 Shermans Add

	N. Line	S. Line
00 = Wine G. St	27.68 Paving	27.48 Paving
+57.5 W	26.83	26.74
1+15 W B&K	26.00	26.00
42.5		
1+57.50 W	26.35	26.35
2+00 = W end	26.70	26.70

R5.48 BM N.W. 15th I

536
30.84
4.75 N
26.09
4.75
30.84

Paving
3.17
27.67

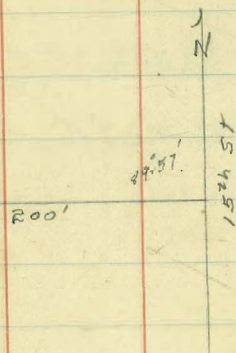
26.83	26.00	26.35	26.70
4.01	4.84	4.49	4.14
5.42	3.84	5.64	4.31
-1.41	71.00	-1.15	-0.17

Paving
3.36
27.48

26.74	26.00	26.35	26.70
4.10	4.84	4.49	4.14
4.18	4.84	4.28	4.28
-0.08	0.0	-0.29	-0.14

25.66 Top of grating 23.66 Flow Line ^{Cal. 1957}

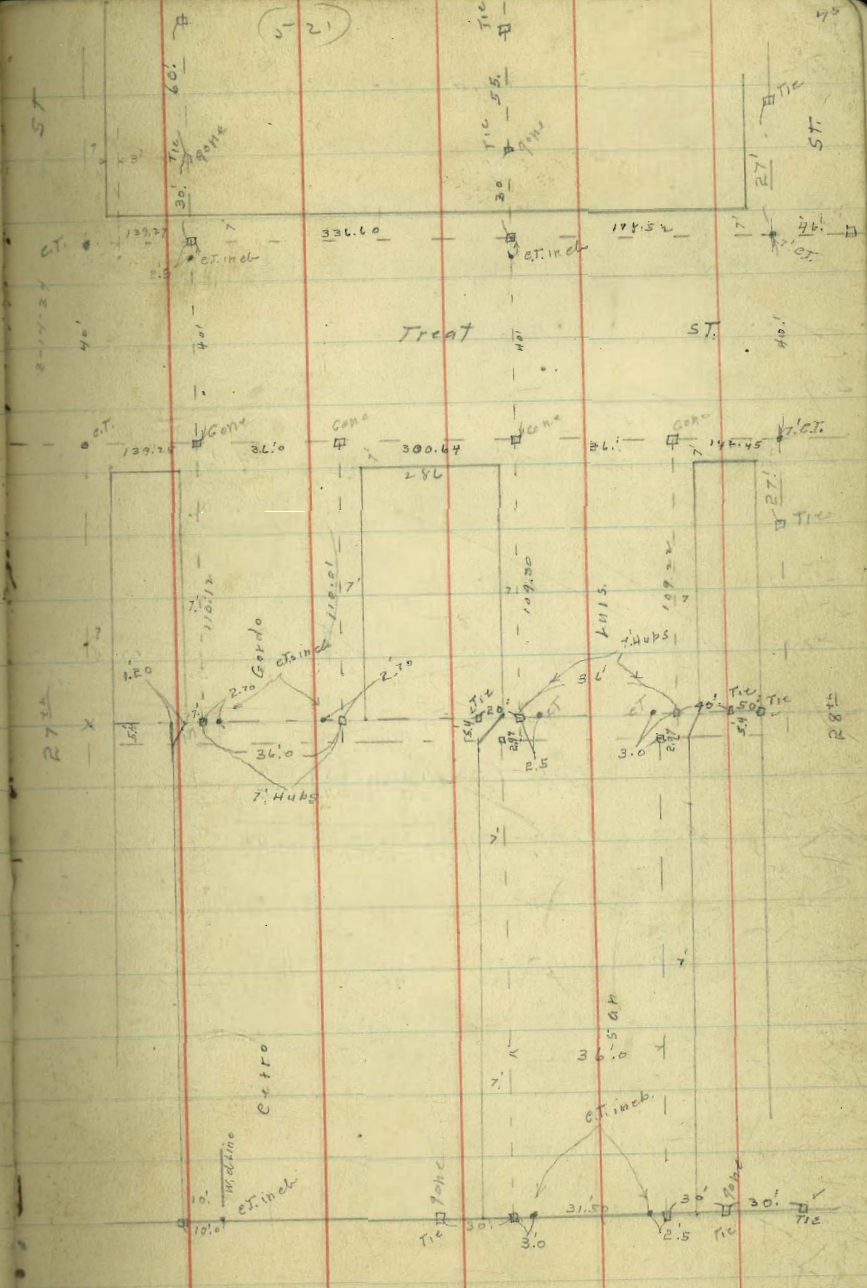
7.18
3.84
3.34



Treat, Cerro Gordo + San Luis Grades

	Treat S. line	S. ch	N. ch	N. line
00 = E. line R7 th St	176.1	175.86	177.66	177.9
+25 B	178.8	178.51	179.44	179.7
+50 B	181.1	180.48	180.94	181.2
+75 B	182.6	182.39	181.86	182.1
1400 B	183.4	183.10	182.22	182.5
+25 W. line Cerro Gordo	183.2	183.00	182.00	182.2
00 = E. line Cerro Gordo	182.2	182.00	181.00	181.2
+47.75	(8.77)			(7.8)
+95.50	174.1			173.4
+143.25	166.0			165.6
+143.25	157.8			157.8
+191.00	149.6			149.9
+238.75	141.4			142.0
+286.50 W. line San Luis	133.5	133.00	134.00	134.2
00 = E. line " "	132.2	132.00	133.00	133.2
B +20 B	132.7	132.49	133.54	133.8
+40 B	135.0	134.74	135.95	136.2
(78.0)				
+18.6				
+28.6	147.2	147.00	149.00	149.2

40
78.54
118.54
39.29



180.01 183.0 W 182.59 185.30 186.05 184.40
 9.96 6.97 7.97 4.67 3.92 3.57
 189.97

181.70 185.60 185.85 186.37
 8.27 4.97 4.15 3.60

N 184.40 186.05 179.50
 3.57 3.89 10.49
 4.39
 -0.50

E 186.36 186.09 179.50
 3.61 3.89 10.49

(4.17)

(4.87)

W del 182.6
 E del

S Treat

185.17 N 77.66 79.44 40.90 81.86 82.22 82.0 83.20 80.64 79.37
 7.51 5.73 4.53 3.31 2.95 3.87 3.97 4.53 5.80

451 41 5.12
 S 75.86 78.20 80.26 81.40 82.24 82.60
 7.31 6.97 5.11 3.77 2.95 2.57

181.70 34.00 33.00 31.90 32.10 33.42
 0.07 9.24 10.34 11.44 11.24 9.92
 181.70 181.80 168.77 169.26 13.83 156.20 156.86 143.34 143.34
 6.28 6.44 32.10 6.28 31.90 31.90 6.42

1.35.00 1.34.00 35.2
 3.30 4.30 3.1
 0.7
 +2.4

180.01 SW 27 1/2 E

TREAT

3.3
 1.3

46

180.01 181.80 182.50 183.20 184.00 184.80 185.50 186.20 187.00 187.80 188.50 189.20 190.00
 2.21 2.21 2.21 2.21 2.21 2.21 2.21 2.21 2.21 2.21 2.21 2.21 2.21
 76.1 78.8 81.1 82.6 83.4 83.2 82.2 74.2 66.0 57.8
 6.7 10.9 8.6 7.1 6.3 6.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5
 6.6 3.4 1.8 1.5 2.1 3.1 6.9 11.0 4.8 14.3
 +0.1 +7.5 +6.8 +5.6 +4.2 +3.4 +0.6 +4.5 +6.0 +4.7

176.85X 176.85X 176.85X 176.85X 176.85X 176.85X 176.85X 176.85X 176.85X 176.85X 176.85X 176.85X 176.85X
 12.91 12.91 12.91 12.91 12.91 12.91 12.91 12.91 12.91 12.91 12.91 12.91 12.91
 163.92 163.92 163.92 163.92 163.92 163.92 163.92 163.92 163.92 163.92 163.92 163.92 163.92
 12.91 12.91 12.91 12.91 12.91 12.91 12.91 12.91 12.91 12.91 12.91 12.91 12.91
 150.74 150.74 150.74 150.74 150.74 150.74 150.74 150.74 150.74 150.74 150.74 150.74 150.74
 2.16 2.16 2.16 2.16 2.16 2.16 2.16 2.16 2.16 2.16 2.16 2.16 2.16
 150.10X 150.10X 150.10X 150.10X 150.10X 150.10X 150.10X 150.10X 150.10X 150.10X 150.10X 150.10X 150.10X
 12.51 12.51 12.51 12.51 12.51 12.51 12.51 12.51 12.51 12.51 12.51 12.51 12.51
 148.53 148.53 148.53 148.53 148.53 148.53 148.53 148.53 148.53 148.53 148.53 148.53 148.53
 4.24 4.24 4.24 4.24 4.24 4.24 4.24 4.24 4.24 4.24 4.24 4.24 4.24
 144.87 144.87 144.87 144.87 144.87 144.87 144.87 144.87 144.87 144.87 144.87 144.87 144.87

N 77.7 79.7 81.2 82.1 82.5 82.2 81.2 73.4 65.6 57.8
 4.9 10.0 8.5 7.6 7.2 7.5 8.5 16.3 11.2 19.0
 3.6 1.8 1.3 1.5 2.4 4.1 8.4 11.9 4.5 13.8
 +1.3 +8.2 +7.2 +6.1 +4.8 +3.4 +0.1 +4.4 +6.7 +5.2

S 49.6 33.2 32.2 32.7 35.0 47.2 35.0
 14.2 2.4 3.6 3.1 0.8 1.5 0.8
 10.5 0.8 9.1 10.3 12.0 2.0 -11.5
 +3.7 +1.9 -5.5 -7.2 -11.2 -0.5

134.75 125 125 125 125 125 125 125 125 125 125 125 125
 135.70 135.70 135.70 135.70 135.70 135.70 135.70 135.70 135.70 135.70 135.70 135.70 135.70
 12.51 12.51 12.51 12.51 12.51 12.51 12.51 12.51 12.51 12.51 12.51 12.51 12.51
 135.59 135.59 135.59 135.59 135.59 135.59 135.59 135.59 135.59 135.59 135.59 135.59 135.59
 12.07 12.07 12.07 12.07 12.07 12.07 12.07 12.07 12.07 12.07 12.07 12.07 12.07
 148.66 148.66 148.66 148.66 148.66 148.66 148.66 148.66 148.66 148.66 148.66 148.66 148.66
 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1.09
 147.57 147.57 147.57 147.57 147.57 147.57 147.57 147.57 147.57 147.57 147.57 147.57 147.57
 5.23 5.23 5.23 5.23 5.23 5.23 5.23 5.23 5.23 5.23 5.23 5.23 5.23
 152.80 152.80 152.80 152.80 152.80 152.80 152.80 152.80 152.80 152.80 152.80 152.80 152.80

N 49.9 34.2 33.2 33.8 36.2 49.2 36.2
 14.0 1.6 2.6 2.0 5.0 4 3.6
 12.2 0.8 7.4 9.6 10.0 3.6
 +1.8 +0.8 -4.8 -7.6 -10.4 0.0

S 141.4 11.7 9.8 +1.9
 N 142.0 11.1 10.1 +1.0

CULVERT

N. END 125.0 10.8 10.2 +0.6 F.L.
 S. END 123.2 12.6 12.3 +0.3 F.L.

122.00 122.86 134.0 33.0 33.54 35.95 149.20 148.80
 144.86 10.36 11.36 10.82 8.41 2.46 2.86
 1.75 143.61 9.05 151.66

S 32.49 34.74 147.00
 11.87 9.62 4.66
 10.87 8.62
 +1.00 +1.00

San Luis Grades

	W. Line	w. cl	e. cl	E. Line
002 S. line Treat St	133.2	133.00	132.00	132.7
751.15	133.5	133.23	132.23	132.5
5.4142				
1402.3 (5.4)	133.7	133.47	132.47	132.7
1707.7 35	133.7	133.50	132.50	132.7
1762.7	134.0	133.75	132.75	133.0
2417.7	134.2	134.00	133.00	133.2
2172.7	134.5	134.25	133.25	133.5
3127.7	134.7	134.50	133.50	133.7
3732.7	135.0	134.75	133.75	134.0
4137.7 S. End	135.2	135.00	134.00	134.2

144.87
10.12
134.75 30 N. T. H. H. Treat San Luis

144.87	33.2	33.5	33.7	33.7	34.0	34.2	34.5	34.7	35.0	35.2
12.27 W	11.7	11.4	11.2	11.2	10.9	10.7	10.4	10.2	9.9	9.7
132.10	9.8	7.3	4.8	4.1	3.5	3.0	6.0	8.4	9.2	7.3
1.60										
134.20	+1.9	+4.1	+6.4	+7.1	+7.4	+5.7	+4.4	+1.8	+0.7	+2.4
E	32.0	32.5	32.7	32.7	32.0	33.2	33.5	33.7	34.0	34.2
	2.0	1.7	1.5	1.5	1.2	1.0	0.7	0.5	0.2	0.0
	7.5	8.7	10.0	9.1	10.2	8.0	11.2	12.2	11.5	9.5
	-5.5	-7.0	-9.5	-7.6	-9.0	-7.0	-10.5	-11.7	-11.3	-9.5

	Cerro Gordo Grades			
	W line	W cl	E. cl	E. Line
00: Stone Treat	183.2	183.0	182.00	182.2
+60 B	185.6	185.40	185.00	185.2
+80 B	186.3	186.05	185.82	186.1
+100 B	186.6	186.40	186.27	186.5
1403.2 54	186.7	186.43	186.30	186.5
1408.6	186.7	186.45	186.36	186.6
1420 B	186.4	186.39	186.36	186.4
1440 B 49.7	186.3	186.08	186.08	186.3
1489.7	185.3			185.3
2439.4	184.3			184.3
2489.1	183.2			183.2
3438.8	182.2			182.2
3488.5	181.2			181.2
4438.2	180.2	180.0	180.0	180.2

	W	^B	^B	^{P.}	^L	¹⁺⁴⁰				
	83.2	85.6	86.3	86.7	86.7	86.3	85.3	84.3	83.2	82.2
	—	—	—	—	—	—	—	—	—	—
E	82.2	85.2	86.1	86.5	86.6	86.3	85.3	84.3	83.2	82.2
	—	—	—	—	—	—	—	—	—	—
W	81.2		80.2							
	—		—							
E	81.2		80.2							
	—		—							

Armada Terrace Grades

12.90
110.60 Mon Skin Armada & P.L. = 110.20 12.90 57

skine	u.d	skine	col
4+20 Brk	99.7	99.50	98.50 98.70
4170	104.2		103.2
5+20	108.7		107.7
P.I. Armada & Harbor View 5+95	115.2	115.0	114.0 114.2
6 143-300		7.63	
23-50		2.95	
23-50		4.108	
47-40		.78	
71-30		2.95	
23-50		3.78 + 3.23 + 0.50	
95-20		.78	
129-10		4.51 + 1.00	
23-50		5.29 4.79 + 0.50	
143-60		.78	
		6.07	
		6.85	
		.78	
		7.63	
84.67	83.67		
99.50	98.50		
2 184.17	2 182.17		
92.08	91.08		
110.60			
8.20			
118.80			
1.65			
116.15			

107.45	Brk						
98.7							
110.60							
3.21							
113.72							
10.07							
123.50							
103.2							
13.4							
11.3							
42.1							
107.7							
114.2							
5.50							
118.00							
99.7							
104.2							
109.7							
115.2							
5.50							
118.00							
116.9							
6.7							
110.2							
111.9							
15.50							
116.00							
4.78							
114.00							
6.42							
110.60							
9.85							
120.42							
110.60							
10.54							
121.14							
115.00							
5.42							
107.45							
1.74							
109.19							
98.50							
10.49							
99.50							
9.69							
115.00							
3.19							
10.19							
125.19							
5.19							
117.00							
115.00							
0.34							
121.14							
120.80							
1.04							
1.60							
2.10							
0.60							
119.50							
5.69							
120.00							
5.19							
3.60							
11.50							
119.50							
5.69							
9.19							
119.50							
4.14							
16.40							
14.90							
4.64							
16.50							
3.84							
17.30							
119.50							
119.50							
116.00							
2.34							
117.00							
2.34							
117.00							
2.91							
17.80							
3.34							
116.00							
5.14							
16.60							
4.54							
16.80							
4.34							
17.00							
4.14							
82.7							
7.8							
98.50							
1.93							
100.43							
12.29							
98.14							
1.83							
99.97							
92.05							
8.35							
7.85							
91.04							
9.35							
8.95							
84.67							
5.30							
82.00							
7.97							
7.47							
83.67							
6.20							
5.30							
81.00							
8.97							

Rose Evans Grades

00-S Lin-Canoh	Wcl 21.50	Ecl 19.50
+ 50	21.00	19.25
1+00	20.50	19.00
1+50	20.00	18.75
N Lin-Upshur		
2+00	19.50	18.50
S Lin-Upshur		
0+00	19.50	18.50
+50	20.13	19.25
1+00	20.77	20.00
1+50	21.40	20.75
N Lin-Talboton E		
2+00	22.04	21.50
Talboton W		
2+37.4	22.50	
S Talboton W		
	23.00	
" " " E		21.50

20.65	W	4.36	4.56	4.76	cl in	5.36	5.76	17.70
4.21			4.46	20.70		17.50		5.56
24.86			+0.10					4.56
4.86								+1.00
20.00								
5.26								
25.26								
	E	5.30	19.30	19.04	18.77	18.50		E.Ret
		19.56	5.56	5.82	6.09	6.36		18.40
			5.06	4.82	5.59	5.36		6.46
			+0.5	+1.00	+0.50	11.00		+2.00
	W.Ret							
	W	19.70	19.50	20.13	20.77	21.40	22.04	
		5.56	5.74	5.13	4.49	3.86	3.22	
		4.56	5.26	4.63	3.99	3.36	2.72	
		+1.00	+0.50	+0.50	+0.50	+0.50	+1.00	
	E.Ret		18.50	19.25	20.00	20.75	21.50	E.Ret
	E	18.40	6.36	6.01	5.26	4.51	3.76	21.50
		4.96	4.86	5.01	4.26	3.51	2.76	3.76
		1.50	+1.50	+1.00	+1.00	+1.00	+1.00	+1.00
	E	22.00	E.Ret					
		3.26	21.50			(4.66)		8.1
			3.76					5.9
			4.26					2.2
			-6.50					
139.47					P.C.			
3.99					41.25	40.76	40.20	
143.46		138.05	40.39	41.66	41.87	2.21	3.26	
13.10		5.41	3.07	1.80	1.39			
120.30								
0.03								
130.33								
	A	39.66	P.C.					
		3.80	139.12			122.00	121.50	121.25
			4.34			8.83	8.83	
						5.83		
						+3.00		
	W.Ret		white 5.46					
	120.2		120.0	119.5				

Alley BIK Okalle Vista Terrace

	E. Line	W. Line
00-N. Line Adams St	351.50	351.50
0+15.0 Brk 47.2	352.50	352.80
+62.2	52.96	53.26
1+09.4	53.42	53.72
1+56.6	53.88	54.18
2+03.8	54.34	54.64
2+51.0 Brk	354.80	355.10
2+66.0 S. Line Cliff St	353.80	354.15
	W. Line for drainage of E & W Alley	
1+25 S. Alley	53.87	
1+32.5 "	53.40	53.94 53.60
1+40 "	54.02	

351.07
6.03
357.10
3.20
353.90
5.52
359.42

E	51.50	52.80	52.96	53.42	53.88	54.34
	5.60	4.60	4.14	3.68	5.54	5.08
cl		4.82	4.14	3.65	4.54	4.84
		-0.22	0.0	+0.03	+1.00	+0.24
W	51.50	52.80	53.26	53.72	54.18	54.64
	5.60	4.30	3.84	3.38	5.24	4.78
cl		4.24	2.84	2.65	4.30	3.98
		+0.03	+1.00	+0.73	+0.94	+0.80
E	54.80	53.80				
	4.62	5.62	cl			
	4.76					
	-6.14					
W	55.10	54.15				
	4.32	5.27	cl			
	4.30					
	+0.02					
E & W Alley	53.87	53.10	54.02			
	5.55	5.82	5.40			
	4.55	4.87	4.92			
	71.00	+0.95	+0.48			

Malmig St Storm Drain
Kettner to Atlantic

00- Existing Pipe W of Kettner	Pr	9.66	10.10
0+50.2			9.30
1+07.8			8.50
1+61.2			7.70
25' W of 4 of California			6.90
2+15.5 Δ			
43.1			
2+60.6			6.08
3+05.3			5.27
3+50.8			4.46
3+95.2			3.64
4+41.0			2.82
45 SW of E. W of ATLANTIC			
4+86.0			2.0

30.97	Kettner + Juniper	10.04	NC Atlantic + Juniper
29.02 NW	" " "	8.65	
7.73			
36.35			
10.72			
25.63	4.50		
0.63	11.66		
10.26	10.76	9.30	8.30
10.65	10.70	16.96	17.76
15.61		12.08	10.26
2.35		+4.88	6.76
17.76			11.00
12.10			+6.66
5.86	5 Δ		
9.81	6.90	6.08	5.27
15.67	11.06	11.88	12.69
	2.03	3.70	4.03
	+9.03	+8.15	+8.11
			13.50
			5.83
			17.67
			4.46
			3.64
			2.82
			2.00
			14.32
			15.14
			15.96
			8.32
			12.10
			+3.86
			+6.82
			+6.23
			6.90
			14.26
			2.06
			+12.20
			4.46
			5.27
			6.08
			7.70
			8.66
			9.08
			7.22
			6.80
			21.15
			21.15
			21.16

Columbia St Grading

	Andrews to E line	Keating E curb	W curb	W line
00 = N line Andrews	96.8	96.83	95.56	95.8
+50	97.3	97.00	96.00	96.3
1400 Brk	97.8	97.50	96.50	96.8
+20 Brk	98.4	98.10	97.11	97.4
+40 Brk	99.7	99.40	98.54	98.8
+60 Brk	101.8	101.58	100.76	101.0
+80 Brk	104.8	104.54	103.44	103.7
2400 Brk	108.5	108.19	106.91	107.2
+20 Brk	112.9	112.63	111.20	111.5
+60	122.6			120.9
S line Keating 3400	132.25	132.00	130.00	130.3
N line Keating		133.00	131.00	

Andrews to Keating

77.97
7.63
85.10
0.42
85.17
11.83
97.00

	E curb	W curb	W line	E curb	W curb	W line
96.53	97.3	97.8	98.4	99.7	101.8	104.8
0.52	97.0	85.6	85.6	85.6	85.6	97.0
	0.3	12.2	12.8	14.1	16.2	7.8
	5.2	2.5	8.5	6.1	2.9	8.5
	5.5	21.7	21.2	20.2	19.1	16.3

Alley BIK 35 Teratta

El Cajon to Orange Bl Wilson + 36th

1/21/26 Miller

7.57
5.54

000 Stine El Cajon

W Line 378.90
E Line 379.90

82.78	8.67	8.44	8.21	7.98	7.75	7.52	7.29	7.06	6.83
4.50	4.39	4.12	4.80	5.08	5.31	3.26	5.49	5.72	5.95
78.28	4.77	3.62	5.18	7.91	5.06	4.19	4.08	3.72	3.95
4.78	-0.38	+1.00	-0.33	+0.17	+0.25	+1.07	+1.41	+2.00	+2.00
83.06									

+50

78.67 78.67

1+00

78.44 78.44

78.90	E 4.39	4.62	4.86	5.08	5.31	5.26	5.49	5.72	5.95
4.16	5.21	5.12	5.24	4.77	5.17	3.26	4.06	4.59	4.65
	-0.82	-0.50	-0.39	+0.31	+0.14	+2.00	+1.43	+1.13	+1.30

+50

78.21 78.21

2+00

77.98 77.98

W 6.60	6.37
6.18	6.41
4.73	4.41
+1.45	+2.00

+50

77.75 77.75

3+00

77.52 77.52

E 6.18	6.41
5.18	5.27
+1.00	+1.14

+50

77.29 77.29

4+00

77.06 77.06

+50

76.83 76.83

5+00

76.60 76.60

+50

76.37 76.37

6+065

76.30 76.14

77.00			
3.43	3.53	3.53	3.53
82.43	78.90	78.90	79.10
3.84			
78.54	6.64	6.44	
4.24	76.14	76.30	
82.78			

Grades Alley BIK 39 C.L. Carrs Sub 9/29/20
 26th to 27th Bet Market & Island

	S. Line	N. Line		S. Line	N. Line
00			4+90	149.87	149.47
00-8 Line 26 th	151.		5+45		
+40	161.24	161.40	6+60 N. Line 27 th	125.73	124.93
+60	165.56	165.64			
+80	168.76	168.78			
1+00	170.84	170.77			
+20	171.80	171.70			
(40)					
+60	172.60	172.27			
+80	172.59	172.46			
2+00	172.56	172.19			
+20	171.90	171.51			
+40	170.83	170.43			
(50)					
+90	167.62	167.21			
3+15	166.10	165.70			
+40	164.77	164.37			
+65	163.61	163.21			
+90	162.65	162.25			
4+15	161.20	160.80			
+40	158.58	158.18			
+65	154.80	154.40			

Alley Grades BIK 246. 4 Jt.

	E	W
on Ad. Line Ugas	294.90	295.00
+20 BTK	297.00	297.00
+40 ✓	98.50	298.40
+60 ✓ ✓ 278.0 LPA 46.33	99.15	298.94
47	99.50	99.26
42	99.85	99.58
2 N. Line Alley 3	SA Alley 300.04 + 99.82 300.20	99.90
4	300.52	300.22
5	300.84	300.53
S. Lin - Myrtle	301.15 <u>301.25</u>	300.84 <u>300.95</u>

295.80 S.W. Ugas Park Blvd
294.05 N.W. Myrtle + Indiana

	B	B	B	4	3	4	3	20
3.518	97.00	98.50	99.15	99.50	99.85	300.20	300.51	300.84 296
101.54	8.09	6.59	5.94	5.59	5.24	4.89	4.57	4.25 301.17
3.50	5.00	4.91	4.98	5.19	5.03	3.87	3.57	2.25
103.07	73.09	+1.63	+0.96	+0.40	+0.21	+1.02	+1.00	+2.00

E Alley 5.91147
300.04
5.05
4.65
+0.37

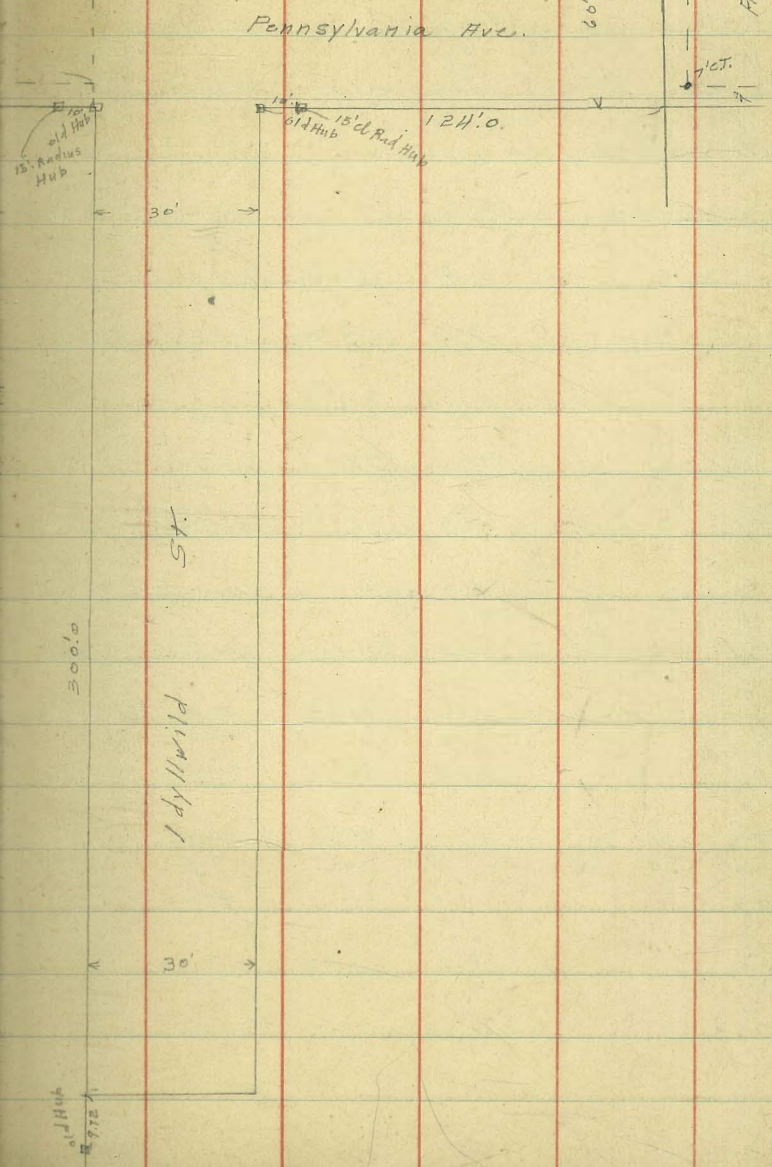
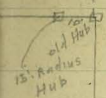
	12.20	97.00	98.40	98.94	99.26	99.58	99.90	300.22	300.53	4.27
94.89	8.09	6.69	6.15	5.83	5.51	5.19	4.87	4.56	300.83	
	7.00	6.64	6.35	5.42	5.37	5.39	4.87	3.56		
	+1.09	+0.05	-0.20	+0.41	+0.74	-0.20	0.0	41.00		

176
60
140
358

338
60
40.00
2700

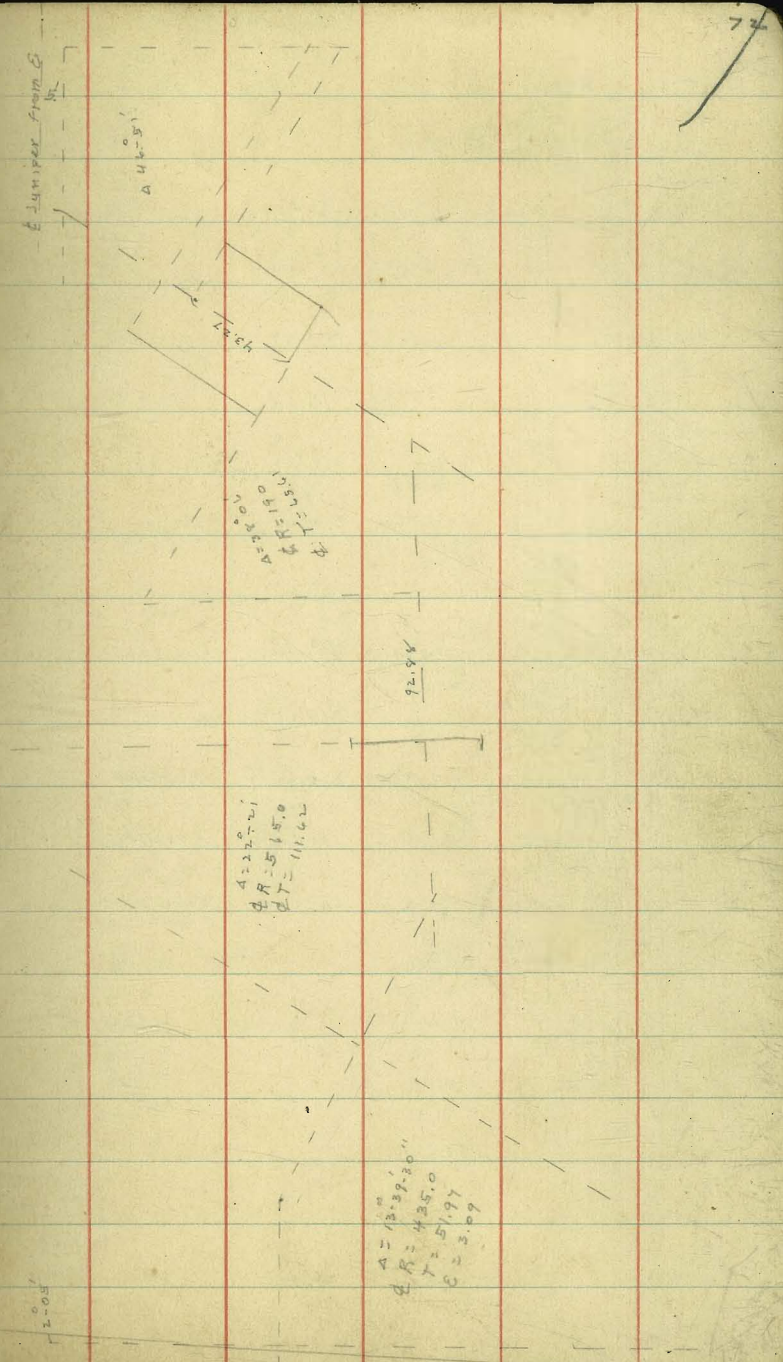
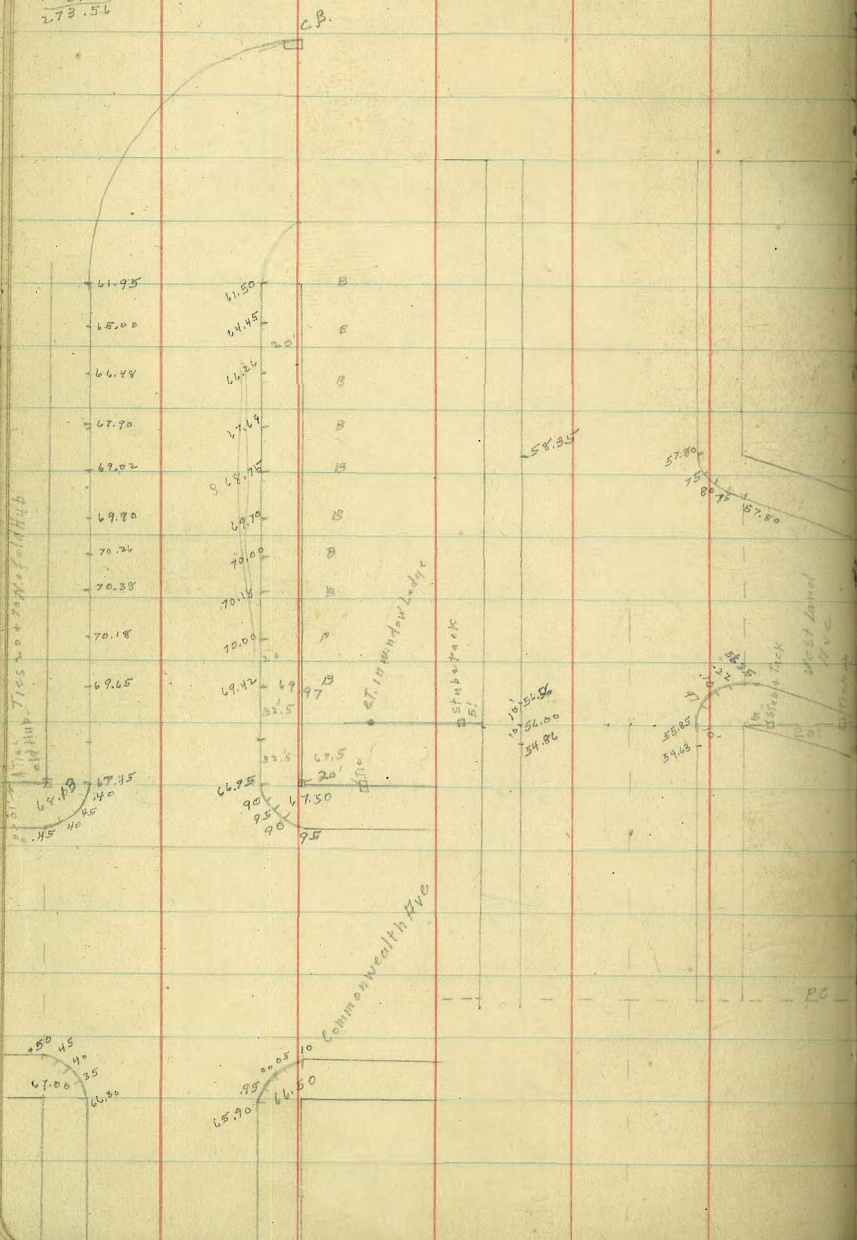
46.33
137.00
20.00
157.00

Pennsylvania + Idyllwild



Juniper St Grading & Paving
 Felton to Pentuck St Ave

270.50 B.M.
 3.06
 273.56



1.54 45.00 44.50
46.51 5.05 5.55
58.05

45.9
43.4
45.4
42.2
40.4
38.6

S. Line S. C. N. C. N. Line
E Hillside 7.5 7.30
8.8 8.64
11.0 10.80
13.7 13.50
17.2 17.00

PC PC 11.0 200 10.80 210.00 18.00
13.7 233 13.50 217.32 17.32
17.2 234 17.00 217.44 17.6
#4-23.04 of 5+2.48
60NY N West 20.70 220.50 221.00 212 20.70

206.42
1.91
208.53
205.0
3.5
9.5
-6.0
15.7 15.7 15.7 15.7 20.4
7.5 8.8 11.0 13.7 17.2
8.2 6.9 4.7 2.0 11.2
9.7 7.0 4.2 2.1 12.0
-1.5 -0.1 +0.5 -0.1 -0.6

25 221.5 21.45 221.25 225.5 257 24.8
4 26.1 26.7 226.50 230.0 302 28.90

244.5
4.0
-4.0
15.7 15.7
9.2 11.0
11.3 4.7
8.0 8.3
-4.8 -3.6 +0.2

3 30.8 31.9 231.75 234.5 343 32.96
2 35.4 37.2 237.00 239.0 392 37.00

248.5
5.0
15.7
13.24
12.44
241.11
241.16
13.16
228.00
244.42
15.82
215.43
12.22
210.65
24.4 24.4 28.4 41.2 41.2 54.2 24.2
21.2 21.45 26.70 31.9 37.2 42.4
7.0 14.5 17.5 23 17.0 11.8
5.6 13.2 9.1 12.1 5.0
+1.4 +1.3 +0.2 +4.4 +0.8
24.4 24.4 28.4 41.2 41.2 54.2
21.2 21.45 26.70 31.9 37.2 42.4
7.2 2.7 +1.8 6.5 5.0 10.5
8.0 4.4 1.9 9.7 5.0 10.6
20.8 -1.7 -3.2 -3.0 -0.1
270.80 270.80 270.80 270.80 270.80 270.80
13.12 13.12 13.12 13.12 13.12 13.12
257.68 257.68 257.68 257.68 257.68 257.68
0.04 0.04 0.04 0.04 0.04 0.04
257.72 257.72 257.72 257.72 257.72 257.72
7.21 7.21 7.21 7.21 7.21 7.21
248.51 248.51 248.51 248.51 248.51 248.51

4 40.1 42.1 242.25 243.5 351 41.10
00a PC 244.7 244.50 245.00 245.2
247.7 247.50 248.00 248.2
250.7 251.2
252.7 253.6

248.5
5.0
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13.24
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241.11
241.16
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228.00
244.42
15.82
215.43
12.22
210.65
24.4 24.4 28.4 41.2 41.2 54.2 24.2
21.2 21.45 26.70 31.9 37.2 42.4
7.0 14.5 17.5 23 17.0 11.8
5.6 13.2 9.1 12.1 5.0
+1.4 +1.3 +0.2 +4.4 +0.8
24.4 24.4 28.4 41.2 41.2 54.2
21.2 21.45 26.70 31.9 37.2 42.4
7.2 2.7 +1.8 6.5 5.0 10.5
8.0 4.4 1.9 9.7 5.0 10.6
20.8 -1.7 -3.2 -3.0 -0.1
270.80 270.80 270.80 270.80 270.80 270.80
13.12 13.12 13.12 13.12 13.12 13.12
257.68 257.68 257.68 257.68 257.68 257.68
0.04 0.04 0.04 0.04 0.04 0.04
257.72 257.72 257.72 257.72 257.72 257.72
7.21 7.21 7.21 7.21 7.21 7.21
248.51 248.51 248.51 248.51 248.51 248.51

+40.5 250.7 252.7
+81.00 56.7 56.50 257.00 57.2
W. Line Westland Ave 257.7 257.50 258.00 258.2

248.5
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15.7
13.24
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241.11
241.16
13.16
228.00
244.42
15.82
215.43
12.22
210.65
24.4 24.4 28.4 41.2 41.2 54.2 24.2
21.2 21.45 26.70 31.9 37.2 42.4
7.0 14.5 17.5 23 17.0 11.8
5.6 13.2 9.1 12.1 5.0
+1.4 +1.3 +0.2 +4.4 +0.8
24.4 24.4 28.4 41.2 41.2 54.2
21.2 21.45 26.70 31.9 37.2 42.4
7.2 2.7 +1.8 6.5 5.0 10.5
8.0 4.4 1.9 9.7 5.0 10.6
20.8 -1.7 -3.2 -3.0 -0.1
270.80 270.80 270.80 270.80 270.80 270.80
13.12 13.12 13.12 13.12 13.12 13.12
257.68 257.68 257.68 257.68 257.68 257.68
0.04 0.04 0.04 0.04 0.04 0.04
257.72 257.72 257.72 257.72 257.72 257.72
7.21 7.21 7.21 7.21 7.21 7.21
248.51 248.51 248.51 248.51 248.51 248.51

#4-23.04 of 5+2.48
60NY N West 20.70 220.50 221.00 212 20.70
25 221.5 21.45 221.25 225.5 257 24.8
4 26.1 26.7 226.50 230.0 302 28.90

248.5
5.0
15.7
13.24
12.44
241.11
241.16
13.16
228.00
244.42
15.82
215.43
12.22
210.65
24.4 24.4 28.4 41.2 41.2 54.2 24.2
21.2 21.45 26.70 31.9 37.2 42.4
7.0 14.5 17.5 23 17.0 11.8
5.6 13.2 9.1 12.1 5.0
+1.4 +1.3 +0.2 +4.4 +0.8
24.4 24.4 28.4 41.2 41.2 54.2
21.2 21.45 26.70 31.9 37.2 42.4
7.2 2.7 +1.8 6.5 5.0 10.5
8.0 4.4 1.9 9.7 5.0 10.6
20.8 -1.7 -3.2 -3.0 -0.1
270.80 270.80 270.80 270.80 270.80 270.80
13.12 13.12 13.12 13.12 13.12 13.12
257.68 257.68 257.68 257.68 257.68 257.68
0.04 0.04 0.04 0.04 0.04 0.04
257.72 257.72 257.72 257.72 257.72 257.72
7.21 7.21 7.21 7.21 7.21 7.21
248.51 248.51 248.51 248.51 248.51 248.51

58.7 258.50 259.00 59.2
#4-23.04 of 5+2.48
60NY N West 20.70 220.50 221.00 212 20.70
25 221.5 21.45 221.25 225.5 257 24.8
4 26.1 26.7 226.50 230.0 302 28.90

248.5
5.0
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13.24
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241.11
241.16
13.16
228.00
244.42
15.82
215.43
12.22
210.65
24.4 24.4 28.4 41.2 41.2 54.2 24.2
21.2 21.45 26.70 31.9 37.2 42.4
7.0 14.5 17.5 23 17.0 11.8
5.6 13.2 9.1 12.1 5.0
+1.4 +1.3 +0.2 +4.4 +0.8
24.4 24.4 28.4 41.2 41.2 54.2
21.2 21.45 26.70 31.9 37.2 42.4
7.2 2.7 +1.8 6.5 5.0 10.5
8.0 4.4 1.9 9.7 5.0 10.6
20.8 -1.7 -3.2 -3.0 -0.1
270.80 270.80 270.80 270.80 270.80 270.80
13.12 13.12 13.12 13.12 13.12 13.12
257.68 257.68 257.68 257.68 257.68 257.68
0.04 0.04 0.04 0.04 0.04 0.04
257.72 257.72 257.72 257.72 257.72 257.72
7.21 7.21 7.21 7.21 7.21 7.21
248.51 248.51 248.51 248.51 248.51 248.51

60.00 60.9
61.37 61.87
62.0 62.5
62.70 63.20
63.2 63.7
64.02 64.53
64.4 64.9
65.37 65.87
65.8 66.0

248.5
5.0
15.7
13.24
12.44
241.11
241.16
13.16
228.00
244.42
15.82
215.43
12.22
210.65
24.4 24.4 28.4 41.2 41.2 54.2 24.2
21.2 21.45 26.70 31.9 37.2 42.4
7.0 14.5 17.5 23 17.0 11.8
5.6 13.2 9.1 12.1 5.0
+1.4 +1.3 +0.2 +4.4 +0.8
24.4 24.4 28.4 41.2 41.2 54.2
21.2 21.45 26.70 31.9 37.2 42.4
7.2 2.7 +1.8 6.5 5.0 10.5
8.0 4.4 1.9 9.7 5.0 10.6
20.8 -1.7 -3.2 -3.0 -0.1
270.80 270.80 270.80 270.80 270.80 270.80
13.12 13.12 13.12 13.12 13.12 13.12
257.68 257.68 257.68 257.68 257.68 257.68
0.04 0.04 0.04 0.04 0.04 0.04
257.72 257.72 257.72 257.72 257.72 257.72
7.21 7.21 7.21 7.21 7.21 7.21
248.51 248.51 248.51 248.51 248.51 248.51

#6 W. Line Commonwealth 266.7 266.50 267.00 267.2

248.5
5.0
15.7
13.24
12.44
241.11
241.16
13.16
228.00
244.42
15.82
215.43
12.22
210.65
24.4 24.4 28.4 41.2 41.2 54.2 24.2
21.2 21.45 26.70 31.9 37.2 42.4
7.0 14.5 17.5 23 17.0 11.8
5.6 13.2 9.1 12.1 5.0
+1.4 +1.3 +0.2 +4.4 +0.8
24.4 24.4 28.4 41.2 41.2 54.2
21.2 21.45 26.70 31.9 37.2 42.4
7.2 2.7 +1.8 6.5 5.0 10.5
8.0 4.4 1.9 9.7 5.0 10.6
20.8 -1.7 -3.2 -3.0 -0.1
270.80 270.80 270.80 270.80 270.80 270.80
13.12 13.12 13.12 13.12 13.12 13.12
257.68 257.68 257.68 257.68 257.68 257.68
0.04 0.04 0.04 0.04 0.04 0.04
257.72 257.72 257.72 257.72 257.72 257.72
7.21 7.21 7.21 7.21 7.21 7.21
248.51 248.51 248.51 248.51 248.51 248.51

Juniper cb stakes

45.00
 0.11
 45.11
 12.11
 33.00
 0.03
 33.03
 0.26
 32.77
 12.51
 45.24

N 45.00 42.40 40.20 37.80 35.4 33.00 30.60 28.20
 2.51 4.91 7.31 9.71 12.11 2.42 4.82

24
 1.9
 1.

150
 60
 30
 20

S 44.50 41.68 38.88 36.07 33.27 30.46 27.64 24.85
 0.78 3.60 6.40 9.21 12.01 2.57 5.37 8.17
 6.90 9.71 12.52 15.33 18.14
 -0.50 -0.50 -0.50

21.00
 0.24
 21.24
 12.60
 8.64
 2.15
 11.29

N 25.80 23.40 21.00 18.60 16.20 13.80 11.40 9.00
 7.23 9.63 12.03 14.43 16.83 19.23 21.63 24.03
 10.24 12.64 15.04 17.44 19.84 22.24 24.64
 9.00 7.30 6.10 5.50
 2.29 4.08 5.19 5.79
 3.09 3.89 4.69 5.29
 41.00 41.50 42.00

S 22.05 19.50 17.00 14.50 12.00 9.50 7.00 4.50
 10.98 8.74 6.49 4.25 2.00 0.75 0.50
 10.40 10.44 11.62 12.60 13.58 14.56 15.54 16.52
 7.62 8.64 9.66 10.68 11.70 12.72 13.74 14.76
 7.90 7.30 6.70 6.10 5.50 4.90 4.30 3.70
 3.39 3.39 3.39 3.39 3.39 3.39 3.39 3.39
 4.00 4.50 5.00 5.50 6.00 6.50 7.00 7.50
 4.50 5.00 5.50 6.00 6.50 7.00 7.50
 -0.50

N 550 530 520 510 500
 6.00 6.09 6.19 6.29 6.39
 6.49 6.59 6.69 6.79 6.89
 -0.50 -0.50 -0.50

S 670 610 570 550 540 530 520 510 500
 4.59 5.19 5.59 5.79 5.89 5.99 6.09 6.19 6.29
 5.09 5.59 5.99 6.39 6.79 7.19 7.59 7.99 8.39
 -0.50

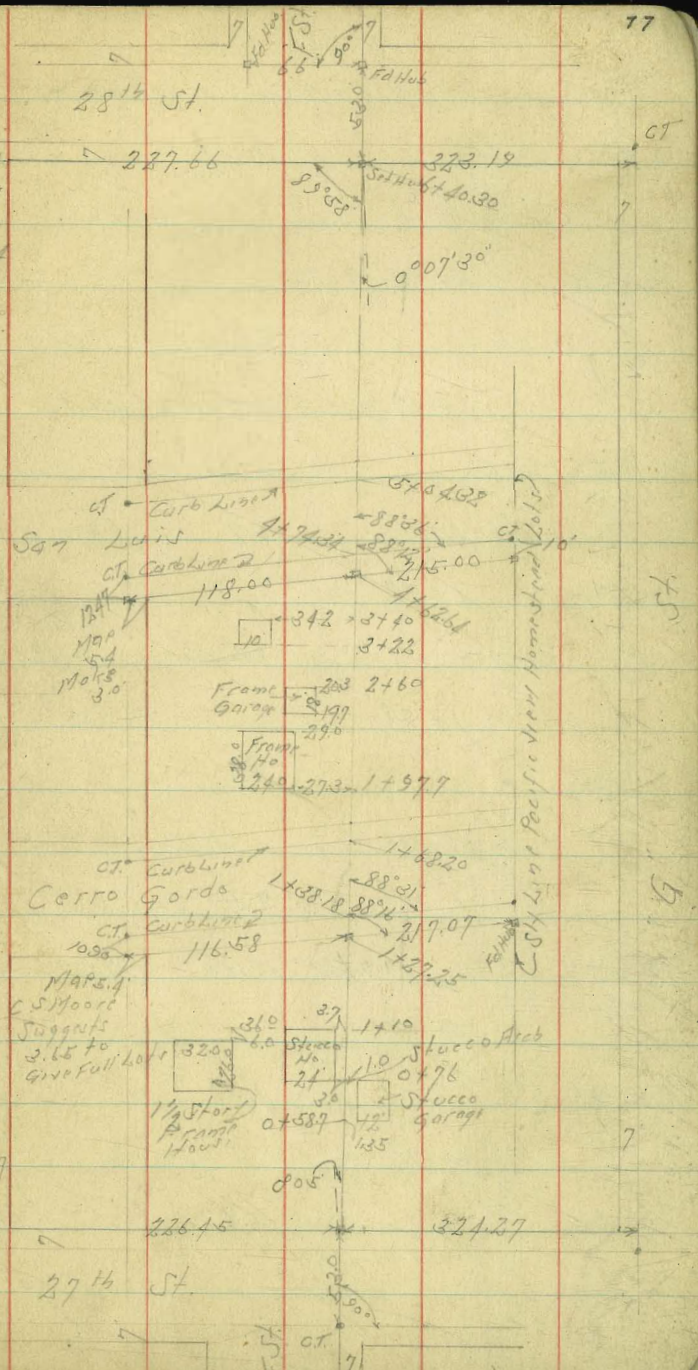
Proposed Opening of E St.

27th St. to 28th St.

Levels

Index
c.s.k.

BM	11.15	181.34	170.19	NW BP E St + 27 th St
		0-10 - E Cb of 27 th St.		
z	Top Curb	11.38	169.76	Aug. 14. 24 Sutton Bill Northboro
	Gutter on Parapet	12.12	169.22	
	0+0			
z		10.0	171.3	
	0+5			
z		6.6	174.7	
	0+30			
z		2.0	179.3	
TP	9.62	190.42	180.80	
	0+50			
z		8.3	184.1	
	0+75			
z		7.2	183.7	
	1+0			
z		5.5	184.9	
	1+27.25	- N.W. Cerro Gordo		
z		5.2	185.2	



190.42
 1738.18 = NCB Cerro Gordo

⊥	Top Cb	5.39	185.03
	Gutter Dirt	6.1	184.3
	1753.18		
⊥		5.5	184.9
	1768.20 = ECB Cerro Gordo		
⊥	Top Cb	5.33	185.09
	Gutter Dirt	5.7	184.7
	1778		
⊥		4.5	185.9
	1798		
⊥		4.5	185.9
	2136		
⊥		7.3	183.1
TP	1.58	179.62	12.38
	2170		178.04
⊥		1.0	178.62
	310		
⊥		5.4	174.7

78
 179.62
 3125

⊥			9.6	170.0
		3150		
⊥			12.0	166.6
TP	0.52	167.36	12.78	166.84
		3180		
⊥			6.0	161.4
		410		
⊥			11.4	156.0
TP	0.82	155.90	12.28	155.08
		4125		
⊥			6.6	149.3
TP	1.02	144.51	12.42	143.48
		4150		
⊥			1.7	142.8
		4158		
⊥			3.7	140.8
		4162.64 = 11/2 San Luis		
⊥			10.1	134.4

144.51

4+74.34 - 7 Cb San Luis

Top Cb 10.69 133.82

Gutter Dirt 11.5 133.0

4+99

11.4 133.1

5+104.32 - 5 Cb San Luis

Gutter Dirt 12.1 132.4

Top Cb 11.72 132.79

5+113

11.3 133.2

TP 2.07 133.97 ✓ 12.61 131.90

5+120

11.3 127.7

5+141

13.4 120.6

5+175

13.3 120.7

6+0

12.7 121.3

133.97

6+18

9.9 124.1

TP 5.36 138.48 ✓ 0.85 133.12

6+40.30 - 11.2 28^{1/2} 5+

2.3 136.7

07 Hob 11.2 28^{1/2} 57 Fst. 4.28 134.20

TP 2.79 129.37 11.90 126.58

BM 5.69 123.68

SE 1107

954 28^{1/2} 57
123.79

			7.46	
			8.10	
			<u>15.56</u>	
			7.70	
			7.25	
11.20				
<u>10.70</u>				
2.30				
6.60				
7.5				
<u>5.05</u>				
7.35				
	115.25	6.15	41.25	3.22
	7.20	1.60	<u>2.93</u>	
	122.45		44.18	<u>408.6</u>
	6.15	11.96	40.20	4.60
	7.0	4.16	3.92	
15.25	7.12	<u>15.80</u>	39.00	59.58
<u>5.85</u>	9.7	.76	5.18	
2.110	8.07	12.96	6.16	
	21	6.10	5	
7.35	9.05	<u>12.80</u>	2.55	
<u>13.75</u>	9.7	10.05	8.96	
	9.4	10.80	5	
4.80	10.80	3.80	7.26	
<u>3.90</u>	9.7	<u>3.08</u>	8.56	
4.70	11.94	6.86	9.36	
4.35			10.16	
<u>4.8</u>			10.96	
3.95				4.85
				<u>5.43</u>
				<u>10.28</u>
				5.14
		4.70	6.15	
		<u>6.85</u>	6.35	5.85
		14.40	14.95	
	5.75	4.75	1.60	2.46
		<u>5.45</u>	2.35	3.14
			2.30	<u>5.68</u>
			4.55	2.78
			1.20	<u>4.0</u>
			1.40	
6.73	6.14	5.97	5.00	4.43
<u>4.43</u>		6.0	4.0	
4.230				
3.7				
6.73	6.48	6.07	5.75	5.42
8.03	4.5	4.0	4.8	
<u>40.20</u>	<u>5.95</u>	<u>5.47</u>	<u>5.30</u>	
3.1				

100.00
 10.00
 110.00
 51.52

8.80 8.8
 6.90 6.30
 +1.9 -2.5

77.06 77.06
 7.14 13.04
 84.20 90.10
 6.23 96.33
 77.97 121.64

200 102.54
 102.6 1.44
 297.2 101.08
 78.6 12.87
 51.4 115.95
 112.01 11.94
 6.00 112.01 S.E. Sub Col & Wind
 6.0

12.44
 101.31 B.P. NW Winders column

0.24
 0.14
 0.0
 34
 54
 14

51.4
 18
 36
 54
 72
 90

319
 257
 62

39
 16.35
 22.65

420
 520
 742
 595

51.4
 48.4

200
 104
 196
 48

380
 110

92
 28
 46
 74
 42
 120

152
 87
 65

100
 944
 520

4
 48.6
 42.6
 6.0

9.5
 323.55
 280
 435
 172
 160

75
 8.5
 17

15.8
 6.8
 145
 130

45
 72
 52

21.45
 5
 107.25
 107
 1180

119
 62
 57
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123
 35
 88
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 44

219
 280
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35
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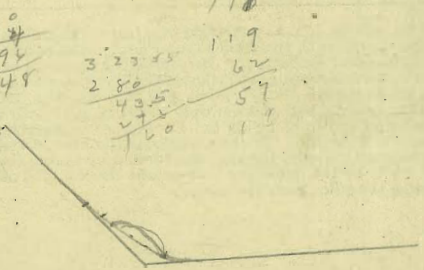


TABLE IX.—CALCULATION OF EARTHWORK.

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

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

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

Roadway 16 feet wide. Side Slopes 1 on $1\frac{1}{2}$.
For Single Track Embankment.

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

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