

F.B.
915

LEVEL BOOK
373

KEUFFEL & ESSER CO.

DRAWING MATERIALS

AND

SURVEYING INSTRUMENTS.

NEW YORK.

CHICAGO.

SAN FRANCISCO.

ST. LOUIS.

TABLES FOR EXCAVATIONS AND EMBANKMENTS.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.
ROADWAY 48 FEET WIDE. SIDE SLOPES 1 TO 1.
FOR SINGLE TRACK EXCAVATION.

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

Calculated by Julien A. Hall, M. Am. Soc. C. E.

11
18
73

Line of 36th St
Continued from Book 912

1

51.45
51.48

S line of Boston

E			130	385	51.45 51.48
			126	389	42.42 1.65
			124	391	40.57
b			121	394	
			117	398	
			114	401	
W			111	404	
70	165	4377	933	422	13' 20"
	50	4227			Boston W 1
		S of			
W			61	377	
			64	374	
			67	371	
L			70	368	
			74	364	
			80	358	
E			79	359	

House on the Line
PLOTTED

4377

100 S of Boston

E	73	365
	67	371
	60	378
b	54	384
	57	387
	54	384
W	55	383
150 S of Boston		
W	65	373
	67	371
	64	374
b	67	371
	70	348
	76	367
E	82	356

4377

365

2

200 S of Boston

E	86	357	277
	76	367	276
	70	368	357
b	74	364	145
	80	358	36.86
	84	354	
W	86	353	
TP	145	3686	836
	250	3691	3541
250 S of Boston			
W	26	343	
	27	343	
	31	338	
b	31	338	
	28	311	
	26	343	
E	21	348	

PLOTTED

36.86

301 S=2 2 y. 20 (5) 80)

40 32.9

43 32.6

45 32.4

47 32.28

50 31.9

49 32.0

48 32.1

h Comb 2

51 31.8

52 31.7

51 31.8

49 32.0

43 32.6

40 32.9

39 33.0

36.86

h 1/4 y 2

42 32.7

38 33.1

39 33.0

48 32.1

53 31.6

54 31.5

54 31.5

comb y 2

58 31.1

57 31.2

54 31.5

45 32.4

39 33.0

39 33.0

41 32.2

36.86

3

PLOTTED

3686

S

1/4 of

Z

E

50 31.9

48 32.1

47 32.2

b

53 31.6

58 31.1

59 31.0

W

58 31.1

S

burst of

Z

W

61 30.8

60 30.9

60 30.9

b

57 31.2

51 31.8

57 31.8

E

54 31.5

PLOTTED

3686

S

burst of

Z

E

56 31.3

56 31.3

56 31.3

b

63 30.6

63 30.6

63 30.6

W

66 30.3

S

S of

Z

W

82 28.7

86 28.3

85 28.4

b

86 28.3

87 28.2

88 28.1

E

88 28.1

3686

4

TO

3686

100

S of

Z

V

E

102 25.7

10.0 25.9

9.8 27.1

b

9.6 27.3

9.2 27.7

8.8 28.1

W

8.6 28.3

TP

3087

252

3087

8.5 28.5

150

S of

Z

V

W

37 27.2

3.8 27.1

4.2 26.7

b

4.7 26.2

5.2 25.5

5.8 25.1

E

6.4 24.5

PLOTTED

3087

3087

3687

5

200

S of

Z

E

7.6 23.3

6.8 24.1

6.3 24.6

b

5.6 25.3

4.8 26.1

4.6 26.3

W

4.3 26.6

236 (3) S = N of Acadia St on W

W

6.3 24.6

6.7 24.2

7.4 23.5

b

8.5 22.7

9.1 21.8

E

10.4 20.5

11.8 19.1

26.8
8.5
28.3
2.5
30.8236
4.7
281

(88) $\begin{matrix} 236 \\ 281 \end{matrix} \begin{matrix} \text{S} \\ \text{S} \end{matrix} \begin{matrix} \text{at W} \\ \text{at E} \end{matrix} y = n \cdot z$ Acacia (80)

E 16.0 14.9

15.0 15.9

13.6 17.3

b 12.0 18.9

10.0 20.9

7.7 23.3

W 6.3 24.6

2.60 22.47 11.00 19.87

4.33 17.3 20.74

2.30 21.75

TPH 149
B912

PLOTTED

Along
 Top
 Fly
 X sec of 35' to 60'
 S of N Purple Lin
 581 10230 9649
 018 8994 1254 8976
 214 7982 1226 7768
 1062 6920
 15' m
 Paddy
 12
 13' m
 25' P2

See Page 28

Along
 Top
 Fly
 X sec of 35' to 60'
 Woolman An S of
 338 7993 7655
 S Lin of Woolman An
 34 74.5
 40 75.9
 42 75.7
 45 75.4
 49 75.0
 50 74.9
 52 74.7
 50' S of Woolman
 54 74.8
 53 74.6
 46 75.3
 41 75.8
 40 75.9
 39 76.0
 37 76.8
 Men 35
 Woolman
 76.2
 35
 79.9

PLOTTED

7993

7993

100

S of

Waldman

E

43 756

47 757

52 747

S

55 744

58 741

66 733

W

69 730

150

S of

Waldman

W

79 720

79 720

70 729

S

66 733

60 739

54 745

E

49 750

PLOTTED

7993

350

8

200

S of

Waldman

E

54 745

62 737

68 731

S

74 725

80 719

88 711

W

87 712

260

S of

Waldman at 60

W

94 705

97 702

89 710

S

87 712

83 714

81 718

E

77 722

7993

7993

	N	Count of	S.W.	
E			80	71.9
			83	71.5
			85	71.4
N			89	71.0
			91	70.8
			97	70.3
W			102	49.7
	N	1/4 f	S.W.	
W			104	49.5
			100	49.9
			93	70.6
N			91	70.8
			88	71.1
			85	71.4
E			82	71.7

PLOTTED

7993

35-10

9

		Count of	S.W.	
E			84	71.5
			86	71.3
			90	70.9
N			93	70.5
			95	70.4
			103	49.4
W			105	49.4
	S	1/4 f	S.W.	
W			110	49.9
			108	49.1
			99	70.0
N			96	70.3
			93	70.5
			88	71.1
E			86	71.3

7973

7075

354

10

	S	Dist of SW		
E			87	71.7
			91	70.8
			95	70.4
b			100	69.9
			103	69.6
			112	68.7
W			118	68.1
	S	Dist of SW		
W			119	68.0
			115	68.4
			107	69.2
b			100	69.9
			96	70.3
			94	70.5
E			91	70.8

TP

327

7075

1245

6744

	50	SY	S 21	
E			16	69.3
			22	68.4
			24	68.4
b			30	67.8
			35	67.3
			38	67.0
W			40	66.8
	100	SY	S 21	
W			58	65.0
			60	64.8
			56	65.2
b			51	65.7
			47	66.1
			40	66.8
E			32	67.6

7973
1245
6744
327
70.75

PLOTTED

70.75

150 S of S of

E	53	65.5
	60	64.8
	67	64.1
S	74	63.4
	78	63.0
	84	62.4
W	85	62.3

200 S of S of

W	119	58.9
	110	59.8
	98	61.0
S	88	62.0
	82	62.6
	77	63.1
E	68	64.0

TP 101 60.67 1109 59.66

PLOTTED

1067
60.67

260 S = 25 TJ (60)

E	34	57.3
	45	56.3
	56	55.1
S	65	54.3
	73	53.4
	83	52.4
W	96	51.1

N Cont. to T of

W	111	49.6
	96	51.1
	90	51.7
S	80	52.7
	71	53.6
	64	54.3
E	55	55.3

352

11

70.75
1109
59.66
101
60.67

60.67
60.67

	N	14.7	T	N
E			7.2	53.5
			8.0	52.7
			9.0	51.7
b			9.9	50.8
			10.7	50.0
			11.2	49.5
W			12.5	48.3
	Center of		T	N
W			14.1	46.6
			13.4	47.4
			12.7	48.0
b			11.6	49.1
			10.8	49.9
			10.0	50.7
E			9.2	51.5

PLOTTED

60.67
60.67

35.12
12

	S	14.7	T	N
E			11.0	49.7
			12.0	48.7
			12.7	48.0
TP	0.69	<u>48.70</u>	12.66	48.01
b			1.5	47.3
			2.2	46.5
			3.2	45.5
			3.8	44.9
	S	Center of	T	N
W			4.8	43.9
			4.8	43.9
			4.0	44.7
			3.3	45.4
			2.6	46.1
			2.0	46.7
E			1.0	47.7

60.67
52.46
48.01
61
48.70

4870

S Lin of T₂₁

E			3.2	45.4
			4.0	44.7
			4.4	44.3
L			5.2	43.5
			5.7	43.0
			6.4	42.3
W			6.6	42.1
	0.40	3623	12.87	35.83
	3.0	S of	T ₂₁	
W			3.6	32.6
			3.8	32.4
			3.8	32.4
L			3.5	32.7
			3.0	32.2
			2.6	33.6
E			2.7	32.1

PLOTTED

36.23

100 S of T₂₁

E			12.7	23.5
			13.2	23.0
			13.6	22.6
L			13.6	22.6
			14.0	22.2
			14.2	22.0
W			14.2	22.0

150 S of T₂₁

W			16.0	20.2
			16.3	19.9
			16.4	19.8
L			16.0	20.2
			16.0	20.2
			15.7	20.5
E			15.7	20.5

35.22

13

4870
 12.87
 31.73
 40
 36.23

3623

	200	S of	T of	
E			142	320
			143	317
			140	322
N			127	335
			111	357
			90	372
W			72	390

	250	S of	T of	
W			55	357
			25	337
			42	320
N			62	300
			83	279
			102	260
E			114	248

PLOTTED

3620

	300	S of	T of	
E			34	378
			14	348
			02	36.0
TD	1294		48.17	48.17
			48.17	48.17
N			100	3523
			100	382
			83	399
			54	428
W			38	444

	325	S of	T of	
W			04	478
			12	470
			10	472
N			38	444
			70	412
			83	399
E			100	382

14

3623
 3523
 1294
 4817

4817

	350'	S of	T	
E			75	40.7
			5.6	42.6
			3.5	44.7
b			1.4	46.8
			0.0	48.2
TP	858	<u>5625</u>	0.50	<u>47.7</u>
		<u>5625</u>	7.5	48.8
W			6.8	49.5
	400'	S of	T	
W			5.2	51.1
			6.2	50.1
			6.8	49.5
b			7.8	48.5
			8.8	47.5
			10.1	46.2
E			11.0	45.3

PLOTTED

5025
5675

15

444 S = N of Florence St 60

Florence is 21' wide Sid walks & curb on W

E			84	47.9
			7.8	48.5
			7.0	49.3
b			6.3	50.0
			5.6	50.7
			5.4	50.9
N			5.0	51.3
W on curb			5.25	51.00
			5.5	50.8
			5.3	51.0
b			5.9	50.4
			6.3	50.0
			7.2	49.1
E			7.4	48.9

N curb of Florence

4817
32
47.87
858
56.25

5025

5625

N 1/4 of Florence

E	70	49.3
	65	49.8
	60	50.3
S	55	50.8
	50	51.3
	50	51.3
W	54	50.9

Center of Florence

W	52	51.1
	41	52.2
	44	51.9
S	48	51.5
	53	51.0
	60	50.3
E	65	49.8

PLOTTED

5625

352

16

S 1/4 of Florence

E	60	50.3
	60	50.3
	50	51.3
S	44	51.9
	41	52.2
	41	52.2
W	51	51.3

S Center of Florence

W	47.5	51.50
	42	52.1
	34	52.9
S	35	52.8
	41	52.2
	52	51.1
E	54	50.9

5625

S line of Florence

E	50	57.3
	44	57.9
	34	57.9
S	27	53.6
	27	53.6
	29	53.4
W	42	52.1

50 S of Florence

W	70.2	54.5
	70.2	54.5
	0.0	57.3
L	0.0	57.3
	0.6	55.7
	1.3	55.0
E	15	54.8

TP 390 59.30 085 55.40

PLOTTED

59.30
59.30

100 S of Florence

E	25	54.8
	27	54.6
	24	56.9
S	25	54.8
	28	54.5
	30	57.3
W	33	54.0

140 S = Pueblo line

50 W of W L	64	53.9
W	53	54.0
	46	54.7
	40	55.3
L	38	55.5
	32	56.1
	27	54.6
E	16	57.7

TP 480 58.40 570 53.60

35 ft at offsets 60' to the W at
22' S of Pueblo line

3500

17

56.25
85
55.40
57.0
59.30
57.0
53.60
4.80
54.40

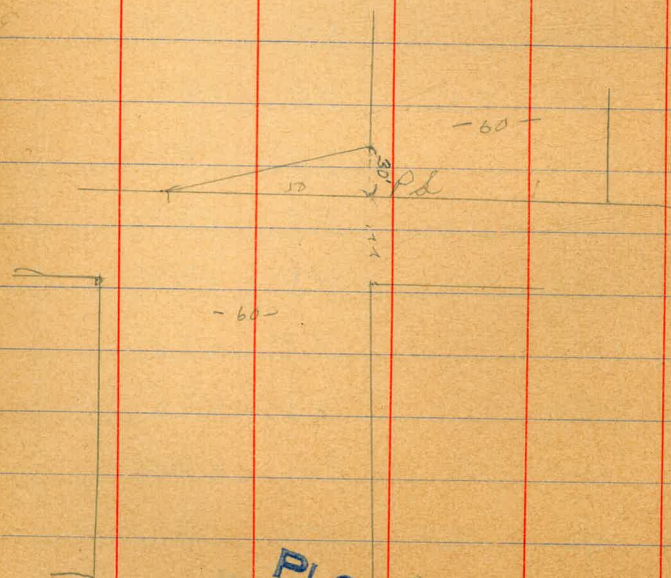
Total
at 50' W

5840

22' S of Pd = 140' N of Logan am

W	72	573
	70	574
	67	577
b	62	577
	55	579
	52	577
E	43	541

100' S of Pd am



PLOTTED

Logan am

5840

18

100' N of Logan

E	35	54.9
	44	54.0
	47	53.7
L	49	53.5
	55	52.9
	58	52.6
W	58	52.6

50' N of Logan

W	60	53.4
	55	52.9
	51	53.3
	36	54.8
	35	54.9
	31	55.3
E	22	56.7

5840

N S of Logan (80)

E 23 56.1

32 55.7

40 54.4

6 47 53.7

50 53.4

54 53.0

W 55 52.9

N back of Logan an

W 53 52.9

55 52.9

51 53.3

6 49 53.5

43 54.1

38 54.6

E 32 55.7

PLOTTED

5840
5840

354

19

N 1/2 of Logan an

E 38 54.6

39 54.5

42 54.2

6 47 53.7

50 53.4

53 53.1

W 55 52.9

back of Logan

W 54 53.0

56 52.8

49 53.5

6 44 54.0

37 54.7

36 54.8

E 36 54.8

5840

S 1/4 of Log 9

E	39	545
	38	546
	36	548

L	45	539
	51	533
	54	530

W	52	537
---	----	-----

S. 6th of Log 9

W	48	536
	53	531
	57	533

L	47	537
	43	541
	40	544

E	39	545
---	----	-----

PLOTTED

5840

35-20

20

S. 6th of Log 9

E	40	544
	44	540
	48	536

L	53	531
	57	527

	58	536
--	----	-----

W	59	535
---	----	-----

S. 50 54 Log 9

W	69	575
	67	577
	63	521

L	60	534
---	----	-----

	56	528
--	----	-----

	51	533
--	----	-----

E	45	539
---	----	-----

E		
---	--	--

5840

	100	S of	Logan	
E			66	518
			70	514
			68	516
S			70	514
			77	507
			80	504
W			80	504
TP	253	<u>5083</u>	1010	4850
	150	S of	Logan	
W			27	481
			23	485
			20	488
S			14	494
			05	503
			05	503
E			04	504

PLOTTED

5083

	200	S of	Logan	
E			20	488
			27	481
			27	481
S			24	484
			21	487
			23	485
W			28	480
	250	S of	Logan	
W			49	459
			46	462
			46	462
S			44	464
			36	472
			22	486
E			16	494

3500

21

5840
1010
4850
257
1-0.83

PLOTTED

5083

299' S of Logans

E 37 47.1

44 46.4

51 45.7

b 56 45.2

64 44.4

55 45.3

W 58 45.0

300' S = N of National (80')
(Grouped)

W 65 44.3

66 44.2

67 44.1

b 61 44.7

63 44.5

63 44.5

E 53 45.5

PLOTTED

5083

5083

S S of National

E 75 43.3

80 42.8

85 42.3

b 85 42.3

88 42.0

88 42.0

W 85 42.3

50 S of National

W 96 41.2

93 41.5

90 41.8

b 88 42.0

88 42.0

82 42.6

E 80 42.8

TP 034 42.5 842 42.4

35

22

5083
5083
42.41
034
42.25

42.75
42.75

100

S of

National

E 1 06 42.2

07 42.1

06 42.2

b 11 41.7

13 41.5

15 41.3

W 20 40.8

150

S of

National

W 37 39.1

34 39.4

33 39.5

b 34 39.4

27 40.1

21 40.7

E 27 40.1

PLOTTED

42.75
42.75

200

S of

National

E 60 34.8

63 34.5

63 34.5

b 61 34.7

55 37.3

54 37.4

W 52 37.4

250

S of

National

W 85 34.3

86 34.2

89 33.9

b 86 34.2

83 34.5

80 34.8

E 75 35.3

23

4275

4275

300

S = 2d of Grand or (80)

E 56 37.7

72 35.6

83 34.5

6 93 33.5

100 32.8

104 32.4

W 109 31.9

N limb of Grand

W 105 32.3

101 32.7

98 33.0

6 90 33.8

77 35.1

68 36.0

E 56 37.7

4275

35-2

24

N

147

Grand

E 56 37.7

60 36.8

67 36.1

6 83 34.5

93 33.5

99 32.9

W 101 32.7

Center of Grand

W 98 33.0

93 33.5

83 34.5

6 75 35.3

62 36.6

54 37.4

E 55 37.3

PLOTTED

4275

S 1/4 of Grand

E	57	37.1
	57	37.1
	62	34.6
b	70	35.8
	78	35.0
	85	34.3
W	93	33.5
W	78	35.0
	66	36.2
	72	35.6
b	70	35.8
	63	34.5
	60	34.8
E	57	37.1

PLOTTED

4275

S 1/4 of Grand

E	56	37.2
	57	37.1
	64	34.4
b	70	35.8
	72	35.6
	69	35.9
W	77	35.1
TD	360	38.81
		38.81
	30	59
W	37	35.1
	36	35.2
	34	35.4
b	28	36.0
	24	36.4
	19	36.9
E	19	36.9

354

25

4275
~~760~~
 3515
 366
 38.81

PLOTTED

3881

100

S of

Ground

E

33 35.5

35 35.3

34 35.4

b

35 35.3

39 34.9

41 34.7

W

43 34.5

150

S of

Ground

W

47 34.1

57 33.1

58 33.0

b

57 33.1

50 33.8

48 34.0

E

47 34.6

3881

200

S of

Ground

E

54 33.4

55 33.3

58 33.0

b

64 32.4

64 32.4

58 33.0

W

50 33.8

250

S of

Ground

W

62 32.6

63 32.5

63 32.5

b

60 32.8

60 32.8

62 32.6

E

59 32.9

35
26

PLOTTED

300 S = 70 L of Basin

E

64 32.4

65 32.3

68 32.0

S

74 31.4

76 31.2

74 31.4

W

78 31.0

70

698

4324

255 3626

118

4226

13' m

Basin

36

3881

~~255~~

36.26

4.98

43.24

1.25

42.99

PLOTTED

11. 1/2
22. 7/8
13. 1/2

X Sec of 35 st (60)
Sugil st to Woolman

712

7632

6920

From 13' from
Plot Sugil
3-9

Profile line at Sugil
= 114' on N of Webster in N
= 113' " " " " " "

W

23

69.0

W

69

69.4

S

65

69.8

S

69

69.4

70

69.3

74

68.9

61

70.3

S

65

69.8

S

53

71.0

S

59

70.4

S

52

71.1

59

70.4

54

70.9

60

70.3

46

71.7

E

55

70.8

E

44

71.9

N curb of Webster

51

71.3

50' on N of Webster

S

49

71.4

E

56

70.7

55

70.8

S

57

70.6

58

70.5

66

69.7

60

70.3

58

70.5

S

58

70.5

S

64

69.9

S

63

70.0

67

69.6

71

69.3

S

75

68.8

66

69.7

70

69.3

W

70

69.3

W

70

69.3

35' st is graded on officially to

Woolman Profile of curbs is the
better one

PLOTTED

7632

35-71

28

Graded
not officially
69.50
76.50

	R	1/4 of	Wahale	
W			73	69.0
			67	69.4
			63	70.0
L			60	70.3
			56	70.7
			53	71.0
E			49	71.4
	Center of Wahale			
E			45	71.8
			53	71.0
			57	70.6
L			61	70.3
			65	69.8
			70	69.3
W			74	68.9

PLOTTED

	S	1/4 of	Wahale	
W			75	68.8
			69	69.4
			64	69.9
L			60	70.3
			56	70.7
			53	71.0
E			48	71.5
	Center of Wahale			
E			50	71.3
			58	70.5
			60	70.3
L			62	70.1
			67	69.6
			77	68.6
			70	69.3
W			76	68.7
			86	67.7

7632
7632

S line of Webster

W		69	69.4
		66	69.7
S		73	69.0
		64	70.1
6		57	70.6
		59	70.4
S		60	70.2
		54	70.9
E		50	71.3
	50 S of Webster		
E		49	71.4
		51	71.2
S		59	70.4
		52	71.1
6		50	71.3
		54	70.9
S		64	69.9
		57	70.6
W		59	70.4

7632

3511

30

100 S of Webster

W		57	70.6
		53	71.0
S		60	70.3
		52	71.1
6		47	71.6
		50	71.3
S		58	70.5
		52	71.1
E		50	71.3

7632
266
71.7
57
77.46

150 S of Webster

E		50	71.3
		50	71.3
S		55	70.8
		49	71.4
6		44	71.9
		48	71.5
S		58	70.5
		51	71.3
W		54	70.9

70 575 7246 461 71.1

PLOTTED

77.46
77.46

200 S of Webster

W	64	71.1
S	6.1	71.4
	6.7	70.8
L	5.7	71.8
	5.3	72.2
S	5.5	72.0
	6.4	71.1
	5.8	71.7
E	5.8	71.7

250 S of Webster

E	5.3	72.2
S	5.3	72.2
	6.0	71.5
	5.3	72.2
L	5.0	72.5
	5.3	72.2
S	6.1	71.4
	5.2	72.3
W	5.3	72.2

PLOTTED

77.46
77.46

350

31

300 S = S of Stratford Park

W	5.1	72.4
S	5.3	72.2
	5.7	71.8
L	5.3	72.2
	5.0	72.5
S	5.3	72.2
	6.0	71.5
	5.3	72.2
E	5.0	72.5

350 S is graded for 16' walks from Stratford to Webster

350 S of Webster

L	5.2	72.3
(16) L	5.2	72.3
S	5.7	71.8
L	5.0	72.5
S	5.9	71.6
L	5.3	72.2
W	5.5	72.0

No. 14 taken of this

77.46
77.46

400

S of

Webster

W		5.0	72.5
		5.1	72.4
S		5.7	71.8
b		4.9	72.6
b		5.6	71.9
		5.0	72.5
E		4.6	72.9

450

S of

Webster

E		4.4	73.1
		4.8	72.7
S		5.5	72.0
b		4.7	72.8
		5.5	72.0
S		4.9	72.6
E		5.0	72.5

PLOTTED

77.46
77.46

500

S of

Webster

W		5.0	72.5
		5.0	72.5
S		5.4	72.1
b		4.6	72.9
S		5.4	72.1
		4.6	72.9
E		4.2	73.3

550

S of

Webster

E		4.0	73.5
		4.4	73.1
S		4.8	72.5
b		4.7	72.8
S		5.6	71.9
		4.9	72.6
W		5.0	72.5

TP

570

78.16

440

73.06

3507

32

77.46
450
73.06
500
78.16

7816

7816

460' S of

Milestone

W	5.4	72.8
	5.5	72.7
S	6.0	72.7
b	5.1	73.1
S	5.8	72.4
	4.9	73.3
E	4.7	73.5
	660' S = rd of	Goodly (50')
E	4.4	73.8
	5.0	73.3
S	5.7	72.5
b	5.1	73.1
S	6.1	72.1
	5.5	72.7
W	5.4	72.8

PLOTTED

7816

7816

35-47

33

N bank of Menemee

W	6.1	72.1
	6.8	71.4
U	6.1	72.1
	5.2	73.0
U	5.6	72.6
E	4.8	73.4
	8.5	72.7

N 1/4 of Menemee

E	5.1	73.1
U	5.1	73.1
U	5.0	73.3
L	5.3	72.9
Y	5.6	72.6
U	6.0	72.2
W	6.4	71.8

7816
7816

South of Minerva

W 14 71.8

5.9 72.3

5.5 72.7

S 5.3 72.9

5.2 73.0

5.0 73.7

E 4.9 73.3

S 1/4 of Minerva

E 5.2 73.0

5.3 72.9

5.1 73.1

S 5.3 72.9

5.7 72.5

6.0 72.7

W 6.4 71.8

PLOTTED

7816
7816

3507 34

S East of Minerva

W 1.0 72.7

S-W 7.0 71.7

6.0 72.7

5.6 72.6

S 5.3 72.9

5.5 72.7

5.8 72.7

E 5.3 72.9

S-W 5.7 72.0

S East of Minerva

E 5.1 73.1

W 5.2 73.0

S 5.8 72.4

S 5.2 73.0

S 6.2 72.0

W & 5.7 72.5

W 6.0 72.7

7816
7814

50

S of

Munro

W	54	72.8
	52	73.0
S	59	72.3
S	52	73.0
S	57	72.5
	50	73.2
E	48	73.4

100

S of

Munro

E	43	73.9
	46	73.6
S	53	72.9
S	47	73.1
S	56	72.6
	48	73.4
W	50	73.2

PLOTTED

7816
7816

35

35

150

S of

Munro

W	47	73.5
	45	73.7
S	50	73.2
S	42	74.0
S	49	73.3
	43	73.9
E	38	74.4

200

S of

Munro

E	38	74.4
	40	74.2
S	47	73.5
S	41	74.1
S	49	73.3
	42	74.0
W	43	73.9

70

500

7816

374

7442

7816
374
74.42
500
79.42

7942
79.42

250 S of Minerva

W	51	74.3
	52	74.2
S	59	73.5
S	54	74.0
S	56	73.8
	49	74.5
E	41	75.3

Side walk not graded on E side
250' to north

300 S of Minerva

A	30	76.4
	35	75.9
	47	74.7
S	55	73.9
L	50	74.4
S	55	73.9
	50	74.4
W	48	74.6

PLOTTED

7942
79.4235
30

350 S of Minerva

W	48	74.6
	52	74.3
S	57	73.7
S	48	74.6
S	52	74.2
	44	75.0
	37	76.2
E	26	76.8

390 S of Woodman

E	22	77.2
	38	75.6
	44	75.0
S	53	74.1
S	49	74.5
S	59	73.5
	54	74.0
W	50	74.4
check	290	76.52

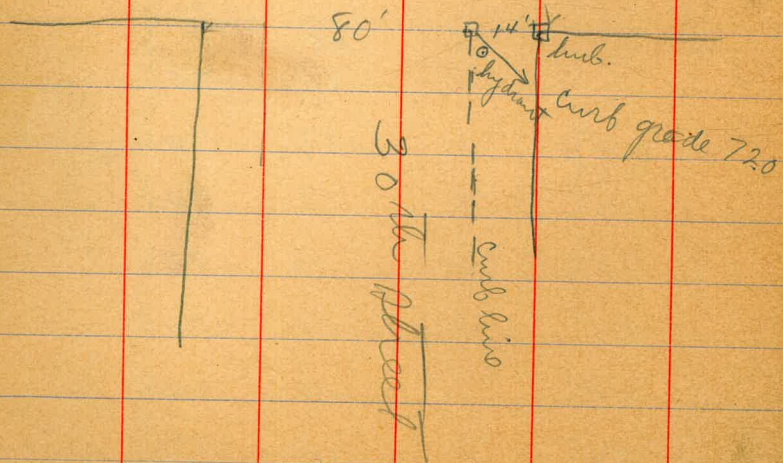
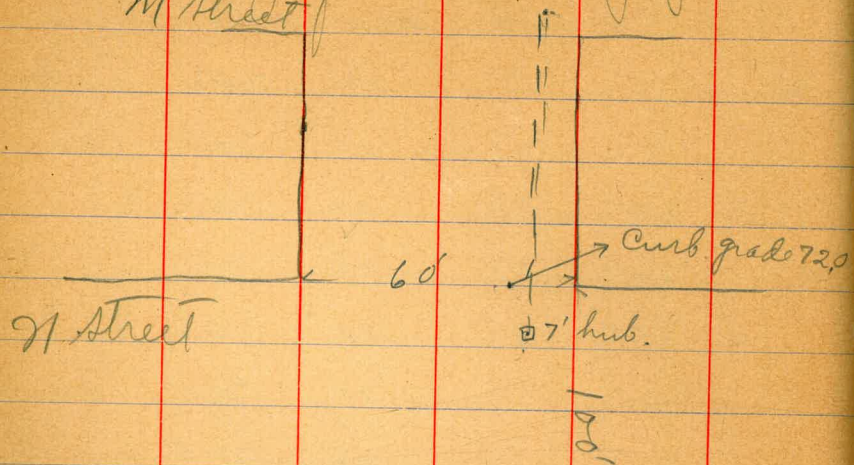
on 35' W of
Woodman

PLOTTED

Survey for water pipe at 30th & N Streets
N Street

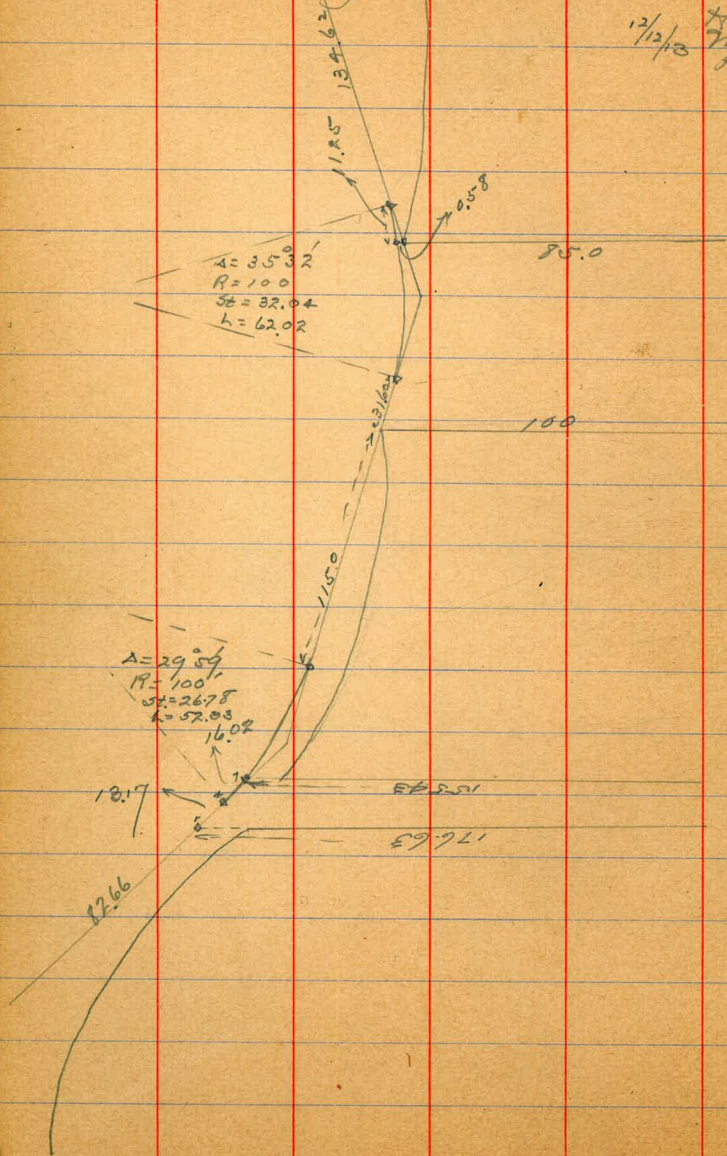
Dec. 6/13

Halildy
Allen
Bunker



Change in line of Garfield St.
at New York St.

12/12/10
Hatch
more
Hall

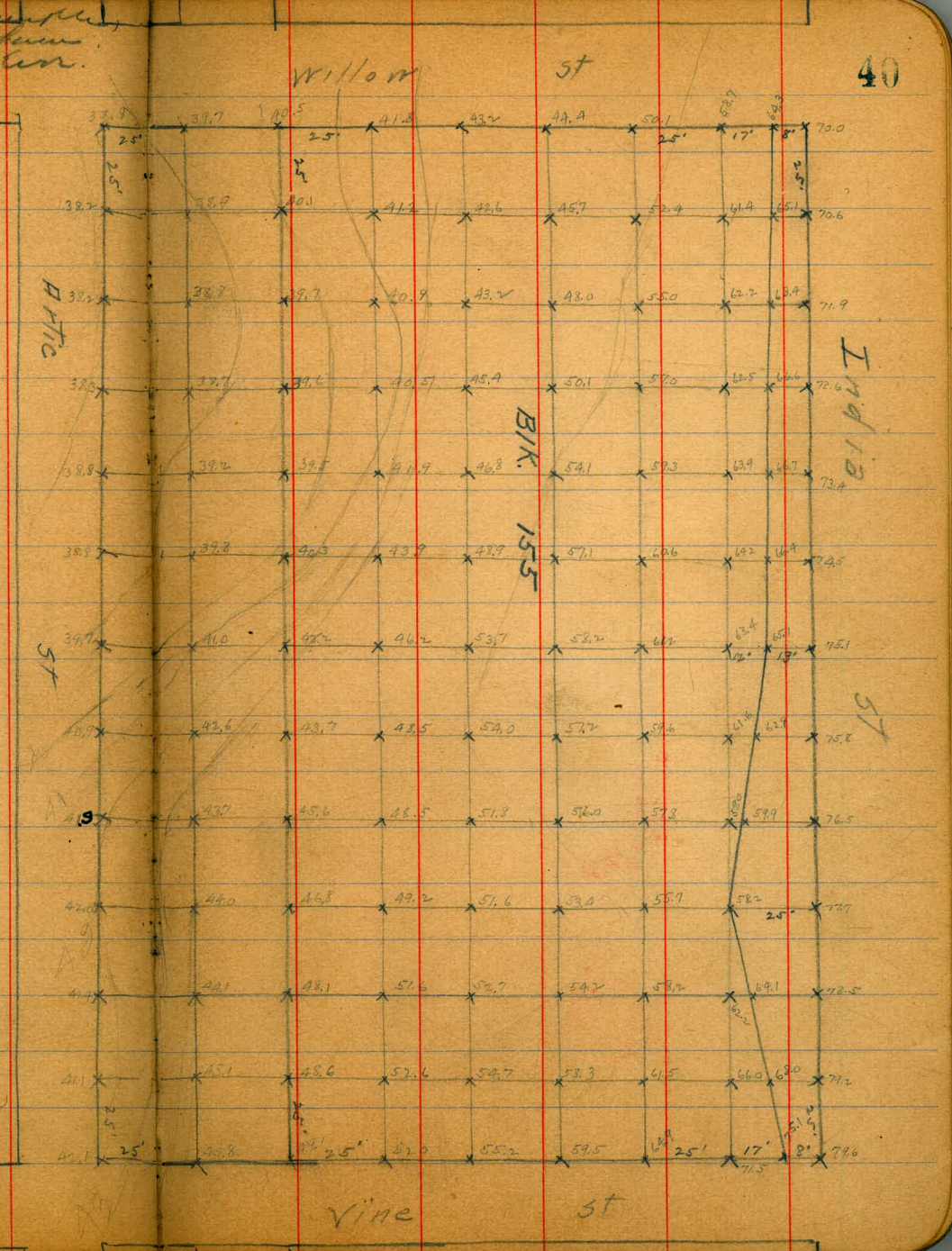


Contour Levels for BIK 155

12/13/13
 Sample
 Station
 Run.

40

B.M. Coy. Map S.W. Ind 12 Vine				81.07
B.M.	1.57	82.64		
T.P.	1.00	71.54	12.10	70.54
T.P.	2.14	61.24	12.24	59.10
T.P.	1.18	50.44	11.98	49.26



DEPARTMENT OF PUBLIC WORKS
 ENGINEERING DIVISION
 SAN DIEGO, CALIFORNIA
 Supt. *[Signature]*
 Date 12/13/13
 Scale 1" = 100'

#7

NOTED

1/4
1/2
3/4
Elevations
shown

CROSS-SECTION OF
BEECH ST. (80' WIDE)
from the East Line of 31st St
to West 32nd St

16 WALKS
12 1/4's
54 1/2
58
62
66
70
74
78
82

237.72

40

50' E

54 1/2
58
62
66
70
74
78
82

B.M

11.47

237.41

225.91

S

1.9

235.8

T.P

1.83

237.22

15%

235.89

st

2.2

235.5

E.L. 31st ST

1/4

2.6

235.1

S

2.9

234.8

C

3.2

234.5

st

3.9

233.8

1/2

4.0

233.7

1/4

4.6

233.1

st

5.0

232.7

C

5.8

231.9

N

6.3

231.4

1/2

6.8

230.9

PLOTTED

75' E

st

7.4

230.3

N

6.7

231.0

N

7.3

230.4

st

4.9

232.8

25' EAST

1/4

4.4

233.3

N

8.2

229.5

C

3.5

234.2

st

5.9

231.8

1/4

2.7

235.0

1/4

5.0

232.7

st

2.1

235.6

C

4.2

233.5

S

1.5

236.2

1/2

3.5

234.2

100' E

S

2.0

235.7

st

3.2

234.5

st

2.6

235.1

S

2.4

235.3

1/4

3.3

234.4

227.72

C			4.2	232.5
1/4			5.5	232.2
cb			7.4	230.3
N			10.7	227.0
	125' E.			
N			17.0	220.7
cb			13.0	224.7
1/4			10.4	227.3
C			8.3	229.4
1/4			6.1	231.6
cb			4.4	233.3
S			2.7	235.0
	150' E.			
S			7.2	230.5
cb			9.5	228.2
1/4			12.6	225.1
T.P.	1.54	227.13	12.13	225.59
C			4.1	228.7
1/4			7.1	220.0
cb			9.6	217.5

PLOTTED

227.13

BEECH ST.

43

N					13.0	214.1
					175' E	
N					21.9	205.2
cb					17.7	209.4
1/4					13.6	213.5
C					10.7	216.4
1/4					8.2	218.9
cb					5.5	221.6
S					2.4	224.7
					200' E = W.L. IDA ST (80' WIDE IN WALKS)	
S					9.9	217.2
cb					12.2	214.9
T.P.	0.59	215.30	12.42		12.42	214.71
1/4					3.7	211.6
C					6.4	208.9
1/4					10.2	205.1
cb					13.8	201.5
N					19.4	195.9
					W. CURB	
N					24.0	191.3

cb	19.2	196.1
1/4	15.6	199.7
C	11.0	204.3
1/4	9.6	205.7
cb	5.6	209.7
S	1.1	214.2
W. QUARTER		
S	5.2	210.1
cb	9.0	206.3
1/4	12.0	203.3
C	15.3	200.0
1/4	19.3	196.0
cb	23.5	191.8
N	27.0	187.3
CENTER		
N	30.8	182.5
cb	26.3	189.0
1/4	22.9	192.4
C	19.3	196.0
1/4	15.2	200.1

PLOTTED

cb	12.9	202.4	
S	9.3	206.0	
E. QUARTER			
S	12.6	202.7	
T.P.	203.12	12.65	202.65
cb	4.3	198.8	
1/4	7.4	195.7	
C	10.5	192.6	
1/4	13.9	189.2	
cb	17.2	185.9	
N	20.8	182.3	
E. CORN			
N	23.4	179.7	
N	19.2	183.9	
1/4	16.4	186.7	
C	13.6	189.5	
1/4	10.8	192.3	
cb	7.8	195.3	
S	4.4	198.7	

203.12

E. L. IDA ST

S			7.8	195.3
cb			11.0	192.1
T.P.	0.51	191.09	12.54	190.58
1/4			2.3	188.8
C			4.8	186.3
1/4			7.4	183.7
cb			9.6	181.5
N			14.1	177.0
		25' E		
N			20.4	170.7
cb			13.6	177.5
1/4			11.9	177.2
S			10.5	180.6
1/4			8.3	182.8
cb			5.8	185.3
S			1.8	189.3
		50' E.		
S			8.6	182.5
cb			11.4	179.7
T.P.	0.61	172.69	13.01	172.25

PLOTTED

178.69

BEECH ST

45

1/4			0.8	177.9
C			2.9	175.8
1/4			6.5	172.2
cb			10.1	168.6
N			14.3	164.4
		75' E.		
N			19.2	159.5
cb			16.1	162.6
1/4			13.3	165.4
C			10.8	167.9
1/4			8.7	170.0
cb			6.1	172.6
S			2.3	176.4
		100' E		
S			7.5	171.2
cb			11.4	167.3
T.P.	0.41	166.65	12.45	166.24
1/4			1.5	165.2
C			3.4	163.3
1/4			5.1	161.3

166.65

dt	8.4	158.3
N	11.2	155.5

125' E

N	13.8	152.9
---	------	-------

dt	12.6	154.1
----	------	-------

1/4	11.1	155.6
-----	------	-------

C	9.3	157.4
---	-----	-------

1/4	7.2	159.5
-----	-----	-------

PLOTTED

dt	4.1	162.6
----	-----	-------

S	0.9	165.8
---	-----	-------

150' E

S	5.7	161.0
---	-----	-------

dt	10.2	156.5
----	------	-------

1/4	12.3	154.4
-----	------	-------

C	14.4	152.3
---	------	-------

1/4	14.9	151.8
-----	------	-------

dt	15.1	151.6
----	------	-------

N	15.3	151.4
---	------	-------

175' E

N	13.6	153.1
---	------	-------

166.65

BEECH ST.

46

dt	16.4	150.3
----	------	-------

1/4	16.8	149.9
-----	------	-------

C	16.7	150.0
---	------	-------

1/4	15.6	151.1
-----	------	-------

dt	14.6	152.1
----	------	-------

S	11.8	154.9
---	------	-------

200' E

S	15.7	151.0
---	------	-------

dt	16.8	149.9
----	------	-------

1/4	17.9	148.8
-----	------	-------

C	16.9	149.8
---	------	-------

1/4	14.6	152.1
-----	------	-------

dt	10.6	156.1
----	------	-------

N	5.9	161.0
---	-----	-------

225' E

N	1.3	165.4
---	-----	-------

dt	6.0	160.7
----	-----	-------

1/4	11.4	155.3
-----	------	-------

C	15.5	151.2
---	------	-------

1/4	17.4	149.3
-----	------	-------

16.6.65

cb			18.3	148.4
S			17.4	149.3
	250' E			
S			19.2	147.5
cb			18.4	149.3
1/4			13.4	153.3
C			8.8	157.9
1/4			4.8	161.9
cb			1.0	165.7
T.P.	12.64	178.54	0.75	165.90
N			8.5	170.0
	275' E			
N			6.4	172.1
cb			10.0	168.5
1/4			12.8	165.7
C			15.1	163.4
1/4			19.6	158.9
cb			25.6	152.9
+8			30.7	147.8
S			31.1	147.4

PLOTTED

BEECH ST.

$$\left. \begin{array}{l} 303.7 \text{ on } S_0 \\ 303.5 \text{ on } N_0 \end{array} \right\} = E.L. 32^{ND} ST.$$

47

S			30.0	148.5
cb			21.1	157.4
1/4			15.1	153.4
C			11.5	167.0
1/4			8.6	169.9
cb			6.6	171.9
N			3.6	174.9
T.P.	12.65	190.97	0.22	178.32
T.P.	12.16	203.13	0.00	190.97
T.P.	13.26	216.37	0.02	203.11
T.P.	13.01	229.29	0.09	216.28
T.P.	9.36	237.54	0.11	229.18
T.P.	2.50	235.59	1.45	233.09
T.P. on B.M.			9.64	225.95

The image shows an open notebook with two facing pages. The pages are cream-colored and feature a grid of light blue horizontal lines and red vertical margin lines. The right page has the number '48' printed in the top right corner. The notebook is bound in the center, and the pages are otherwise blank.

B.M.

19.01

19

4.91

23.96

N. E. Cor
N. on 3rd

N. E. Cor

N. Crk
inlet

4.42

bottom

5.07

5.71

E on J

crk

4.43

inlet

5.05

bottom

5.62

S. E. Cor

E on J

crk

4.95

inlet

5.58

bottom

6.16

South on 5th

crk

4.98

outlet

6.24

bottom

6.30

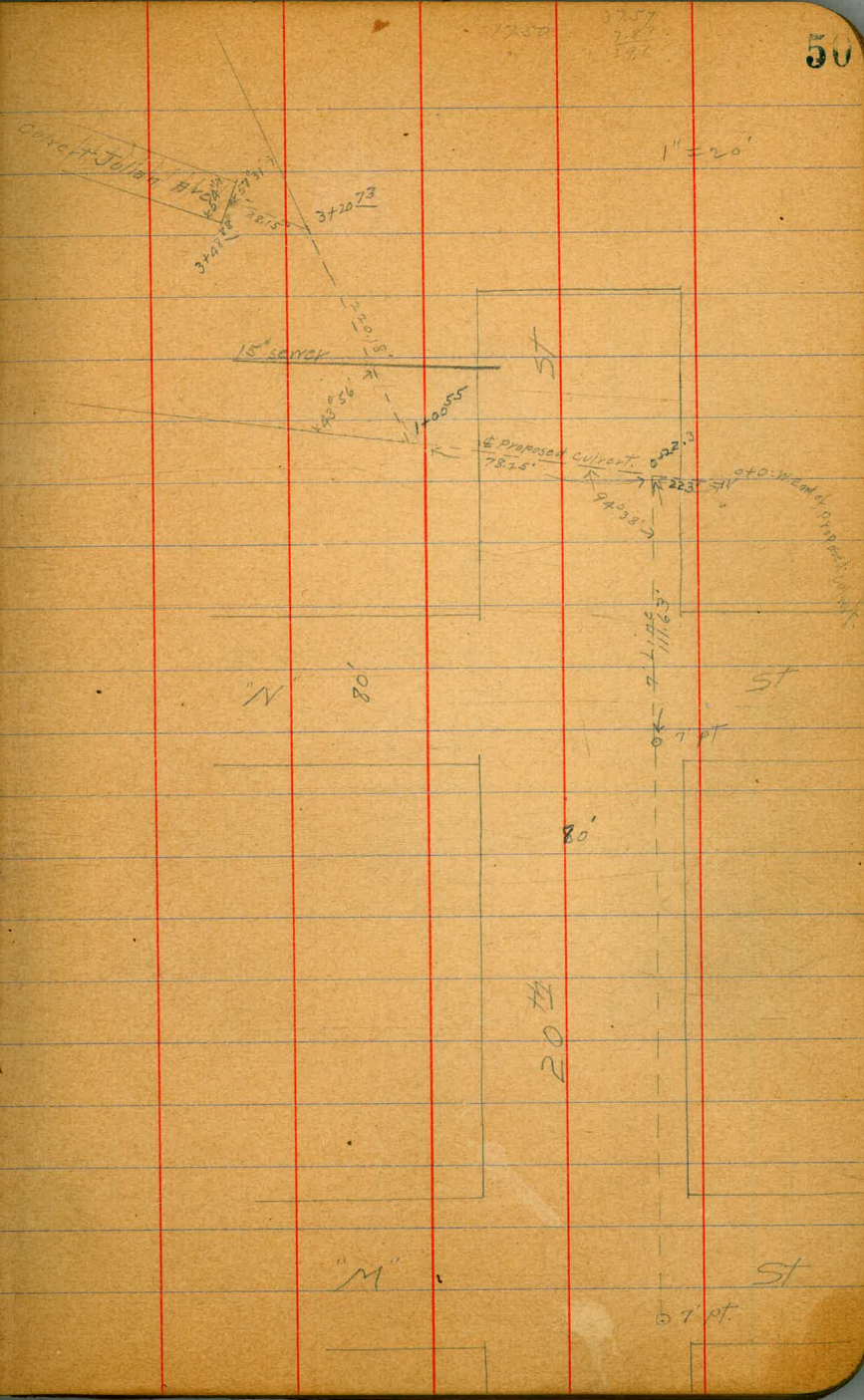
100' south gutter

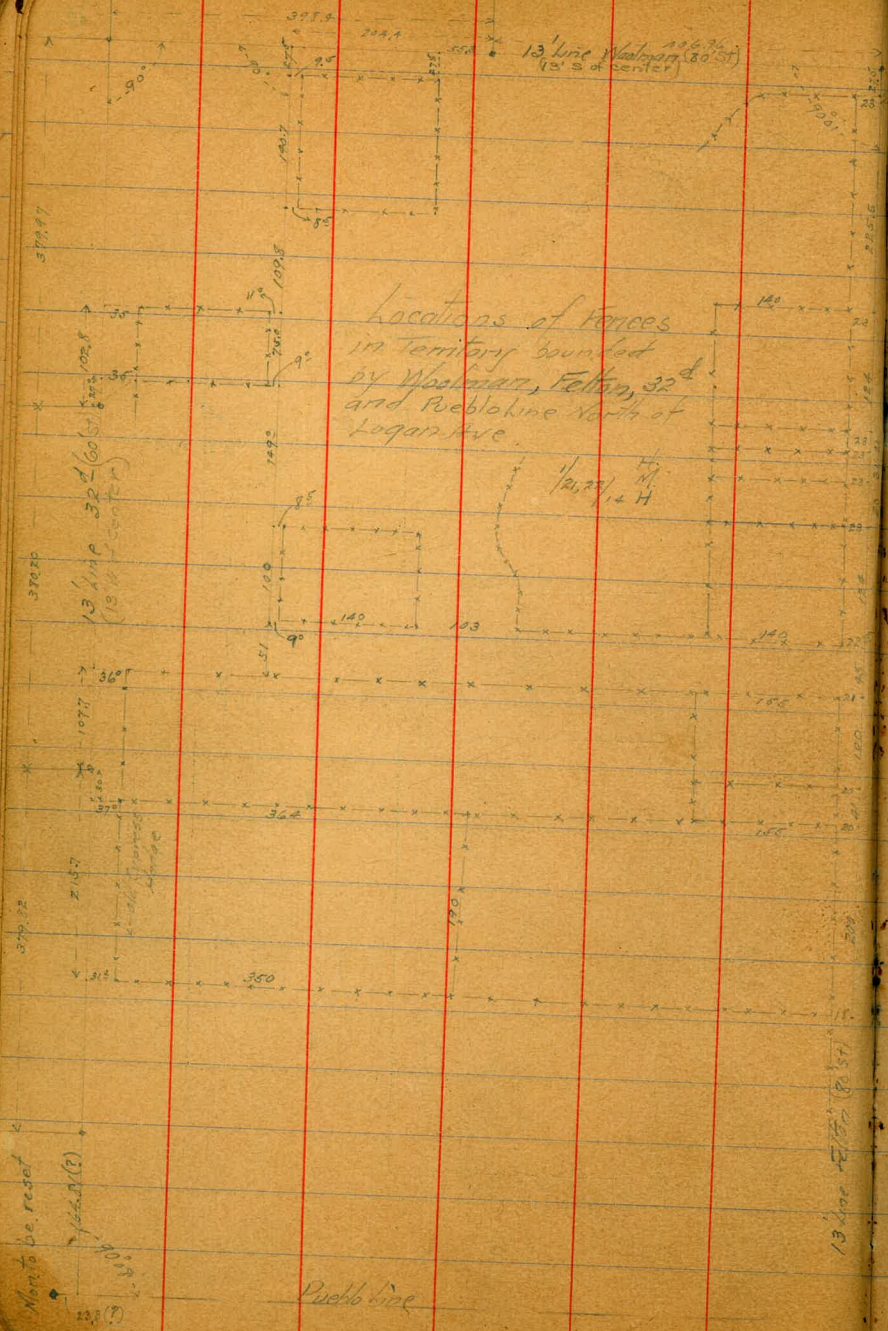
7.1

Levels for Culvert on opposite page

1/2 Double
1/2 Frame
Kearney

B.M. Brooks Rly 20 th 2 nd N.E. Cor		34.96
B.M.	2.61	37.57
T.P.	5.00	30.32
0+0 = outlet		7.8
0+22.3 = 7' line		7.8
+50		7.3
+75		7.2
+100 ¹⁵ = Δ		6.5
+25		6.2
+50		5.7
+75		6.2
2+02 ⁵ = top of 15" sewer pipe verified	3.4	26.9
+25		3.8
+50		3.6
+75		3.7
3+0		4.9
3+20 ^{7.3} = Δ	2.8	27.5
3+25	2.9	27.4
3+30	3.1	25.2
3498 ^{8.3} = bottom of outlet Julian Ave Culvert, A.3	A.3	26.0
Elev intake culvert Kearney Ave =		17.50
" of 5' and 6' culvert across N 5 th 4 th S.W. 25 th approx =		29.70

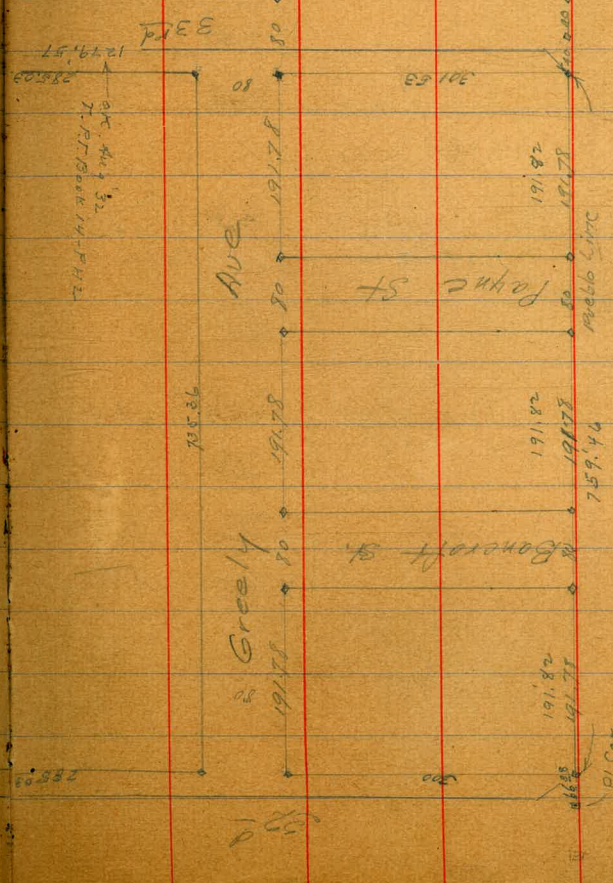
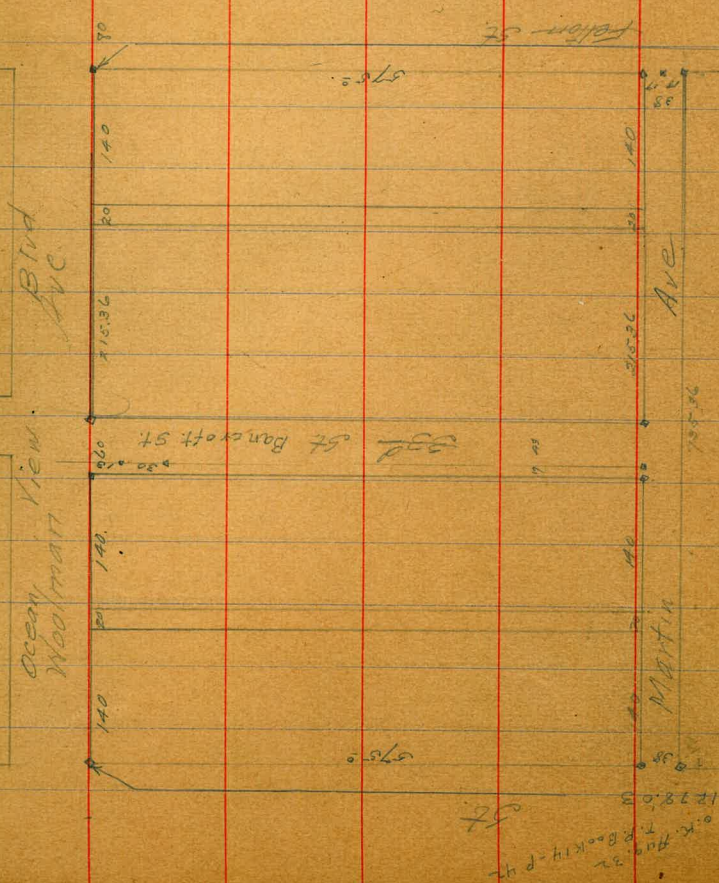




5/4/12
Kath Moore
Hall

Survey of Spencer's Alley
and Wetmore's Sanborn's Alley

Indicates 2"x2" RV Hub.



231.78
231.78
463.56

see book 91 1261

Line & Grade for 12" water main Atlantic St from
 N.L.H. St to S.L. Broadway - 16' E. of Atlantic from N.L.H. to
 N.L. "E"

BM	I.R.	H/L	-R	elev. stk.	grade	cut.
B.M. S.F. brass plug Atlantic & H.				3.20		
	1.50	4.70				
0+0 = N.L.H. St			1.3	3.4	-0.80	4.2
S.L. "G" St			4.5	0.2	-0.80	1.0
N.L. " " "			5.0	-0.3	-0.80	0.5
S.L. "F" St			4.4	0.3	-0.80	1.1
N.L. " " "			4.3	0.4	-0.80	1.2
S.L. "E" St			3.3	1.4	-0.80	2.2
F.R.	5.50	7.20	3.30	1.70		
N.L. " " "			5.6	1.6	-0.80	2.4
S.L. "D" St			5.0	2.2	-0.80	3.0

X Sect. Feltan from Pueblo line
 80' Street 14' walks
 walks in cross streets 14' wide

no. 9 A. to A.O. line Date
 Mar 2/14
 +80' streets 50' no.

Childs
 Cite 54
 Bunker

Label	Value	Value	Value	Value	Value	Value
T.P. nr cor 33 rd	247 + Cedar.	H.I. 238.46	235.99	White		1.3 2279
S.P.	3.45	H.I. 229.15	12.76 225.70	cb+1'		2.1 227.1 3.7 225.5 4.0 225.2
		No. line Cedar.				
W. line		225.0	4.15	c		4.4 224.8
cb+1'		223.7 223.0 222.5	5.5 6.2 6.7			4.6 224.6 4.9 224.3
c		222.7	7.0	cb+2' E line		3.8 225.4 3.6 225.6
		222.0	7.2		75' no.	
cb+1' E line		221.9 223.7 223.0	7.3 6.0 6.18	E line +11' +13' cb 1/4		2.9 226.3 2.9 226.3 4.1 225.1 4.3 224.9 3.9 225.3
		224.4	4.8			3.6 225.6
E line +12'		224.5 223.3	4.7 5.9			3.5 225.7 2.8 226.4 1.9 227.3
		223.5	5.7	cb+12'		
c		223.6	5.6	White		1.1 228.1
		224.0	5.2			
1/4+12 cb		224.6 225.7	4.6 3.5			
White		226.5	2.7			

100' no.

150' no.

White
+13
cb1.1 228.1
2.1 227.1
2.7 226.5White
+13
cb2.2 227.0
2.9 226.3
3.9 225.3

C

3.3 225.9

4.0 225.7

3.5 225.7

C

3.9 225.3

3.7 225.5

4.1 225.1

cb+3'
E line

3.8 225.4

cb+4'
E line

4.6 224.6

2.7 226.5

3.5 225.7

2.5 226.7

3.3 225.9

125' no.

175' no.

E line
+11'
cb

2.6 226.6

E line
+11'

4.6 224.6

2.8 226.4

+12'

4.7 224.5

3.9 225.3

cb

5.8 223.4

3.6 225.6

1/4

5.8 223.4

5.1 224.1

C

3.5 225.7

C

5.0 224.9

1/4+12'

3.4 225.8

4.9 224.3

3.8 225.4

2.2 227.0

cb+11'
White

5.0 224.2

White

1.7 227.5

4.0 225.8

3.2 226.0

200' no.

White

4.3 2247

5.7 2235

6.1 2231

C

6.3 2229

6.8 2224

6.7 2225

E line

5.8 2234

225' no.

E line

7.6 2216

8.6 2206

9.0 2202

C

8.4 2208

7.8 2214

7.0 2222

White

5.6 2236

243' no.

White

13.7 2155

15.0 2142

13.5 2157

C

17.6 2116

19.0 2102

12.2 2170

E line

9.8 2194

250' no.

E line

10.6 2186

E. cl.

13.6 2156

T.P.

low line

12.31 216.84

No. 6. Cedar.

White

5.9 2233

7.0 2222

7.8 2214

C

8.5 2207

9.1 2201

9.2 2200

Elm

9.3 2199

No 4

Elm

10.8 2184

10.7 2185

10.5 2187

C

9.5 2197

8.5 2207

7.3 2219

White

6.3 2229

Center

White

7.0 2222

8.2 2210

9.4 2198

C

10.5 2187

11.6 2176

12.0 2172

Elm

12.1 2171

No 1/4

Elm

14.1 2151

13.6 2156

12.6 2166

C

11.7 2175

10.5 2187

9.1 2201

White

7.7 2215

	20. cb.		
White		8.6	220.6
		10.8	218.4
		11.8	217.4
c		12.7	216.5
	20. line Cedar.		
c		13.6	215.6
		12.9	216.3
		11.9	217.3
White		9.15	220.0
	9' 20.		
White		9.7	219.5
w cb.		12.6	216.6
	25' 20.		
w cb.		13.2	216.0
White		10.6	218.6

	36' 20.		
White		11.0	218.2
w cb.		13.8	215.4
	45' 20.		
w cb.		14.0	215.2
White		11.1	218.1
	50' 20.		
White		11.2	218.0
w cb.		14.2	215.0
	75' 20.		
w cb.		14.2	215.0
White		11.0	218.2
	100' 20.		
White		9.7	219.5
+13		11.7	217.5
cb.		13.3	215.9

135' 20.

W. 1/4	13.4	215.8
	12.7	216.5
cb+2'	11.1	218.1
White	8.8	220.4

150' 20.

White	8.3	220.9
+12'	9.9	219.3
	12.2	217.0
	12.3	216.9
C	13.1	216.1

175' 20.

E 1/4	12.8	216.4
C	12.1	217.1
	11.3	217.9
1/4+11'	11.3	217.9
	9.0	220.2
White	7.8	221.4

200' 00.

White	7.4	221.8
+13'	8.5	220.7
cb	10.4	218.8
	10.8	218.4

C

11.2 218.0

12.1 217.1

12.3 216.9

11.3 217.9

12.0 217.2

225' 20.

White	11.4	217.8
+13'	11.1	218.1
cb	12.0	217.2
	11.7	217.5
C	10.8	218.4
	10.5	218.7
1/4+12'	10.2	219.0
cb	8.0	221.2
White	6.9	222.3

250' 20.

White
+13'
cb.

7.0 222.2
8.2 221.0
10.1 219.1

10.3 218.9

C

10.6 218.6

11.3 217.9

cb + 2'
Elm

11.7 217.5

10.9 218.3

11.1 218.1

275' 20.

Elm
+12'
cb.

11.7 217.5

11.3 217.7

12.1 217.1

11.5 217.7

C

10.7 218.5

10.4 218.8

10.2 219.0

8.1 221.1

1/4 + 12'
cb

White

7.2 222.0

229.15

60

300' 20. (North line Beech)

White
+13'
cb

7.20 222.0

8.6 220.6

10.0 219.2

10.5 218.7

C

11.1 218.1

11.8 217.4

12.1 217.1

Elm

12.47 216.68

J.P.

0.05 ^{45.} 216.17 1303 216.12

South cb. Cedar.

2.2 214.0

1.7 214.5

0.8 215.4

Elm

E 1/4

North line Cedar.

1.7 214.5

2.6 213.6

4.02 212.2

Elm

216.2

9' 20.

E line
+5'
cb.5.6 210.6
9.4 206.8
3.5 212.7

1.8 214.4

c

1.1 215.1

w 1/4

0.7 215.5

25' 20.

w 1/4

1.2 215.0

c

1.8 214.4

c+3'

1.9 214.3

8.7 207.5

11.9 204.3

E line

14.8 201.4

36' 20.

E cb.

15.0 201.2

1/4+9'

6.3 209.9

1.9 214.3

2.0 214.2

w 1/4.

1.6 214.6

w

216.2

61

45' 20.

w 1/4

1.8 214.4

c

2.6 213.6

c+4'

2.5 213.7

6.3 209.9

E cb

14.3 201.9

~~E cb~~

50' 20.

E cb.

13.5 202.7

1/4+8

6.0 210.2

c

2.9 213.3

2.3 213.9

w 1/4

1.5 214.7

75' 20.

w 1/4

1.3 214.9

c

1.9 214.3

c+7'

2.4 213.8

1/4+7

5.8 210.7

E cb.

9.5 206.7

c

11.0 205.2

216.17

100' 20.

E line

114 204.8

8.7 207.5

2.7 213.5

C

1.2 215.0

W 1/4

0.8 215.4

125' 20.

C

0.8 215.4

1.6 214.6

5.2 211.0

E line

6.9 209.3

150' 20.

E line

3.5 212.7

2.7 213.5

E 1/4

0.8 215.4

175' 20.

E. cb.

0.1 216.1

E line

0.7 215.5

62

J.P.

2.15 ^{H.T.} 203.28 13.04 203.13

75' 20. Cedar.

E line

4.2 201.1

30' E. slope.

7.9 197.4

50' 20.

30' E slope.

14.7 190.6

E line

7.6 197.7

45' 20.

E line

11.0 194.3

30' E slope.

15.0 190.3

36' 20.

30' E slope

9.2 196.1

E line

9.5 195.8

25' 20

30' E slope.

2.6 202.7

J.P. 0.74 ^{H.I.} 217.58 216.84

250' north of cedar. E line

E 1/4 12.6 2050

C 9.3 208.3

6.3 211.3

8.3 209.3

W line 2.8 214.8

275' no.

W line 1.4 216.2

W cb. 10.5 207.1

E line 4.5 213.1

300' no. (South line date)

W cb 8.6 209.0

W line 4.13 213.45

J.P. 0.31 ^{H.I.} 204.95 12.94 204.64

275' no.

W 1/4 4.2 ^{209.8} ~~213.4~~

C 9.1 ^{195.9} 208.5

9.1 ^{195.9} ~~208.5~~

E cb. 1.4 ^{203.6} 216.2

4.5
300' no. (South line date)

4.91 ^{194.6} 200.04 ✓

10.4 ^{187.9} 207.2 ✓

17.1 ^{193.5} 200.5 ✓

11.5 ^{201.0} 206.1 ✓

4.0 213.6 ✓

C

W 1/4

J.P	4.88	H.I. 221.56	216.68	center		
		north ab. of Beech		White	1.7	219.9
White			0.5 221.1		3.2	218.4
			2.0 219.6		4.0	217.6
			2.8 218.8	c	4.7	216.9
c			3.8 217.8		5.4	216.2
			4.6 217.0		5.9	215.7
			5.3 216.3	E line	6.3	215.3
E line			5.7 215.9		20 1/4	
		no. 114		E line	7.1	214.5
E line			5.9 215.7		6.5	215.1
			5.5 216.1		6.0	215.6
			4.8 216.8	c	5.4	216.2
c			4.0 217.6		4.8	216.8
			3.0 218.6		4.0	217.6
			2.0 219.6	White	3.0	218.6
White			0.8 220.8			

22/6
20.6.

White

3.7 217.9

5.0 216.6

5.9 215.7

C

6.2 215.4

6.8 214.8

7.5 214.1

Elm

8.2 213.4

Southside Beech

Elm

8.4 213.2

8.1 213.5

7.4 214.2

C

7.0 214.6

6.8 214.8

5.9 215.7

White

4.27 217.3

65

25.10.

White

6.4 215.2

7.6 214.0

8.0 213.6

C

8.1 213.5

8.7 212.9

9.2 212.4

Elm

9.9 211.7

50.10.

Elm

11.3 210.3

10.4 211.2

9.5 212.1

C

8.8 212.8

8.4 213.2

8.7 212.9

White

7.6 214.0

75' 20.

White

8.5 213.1

9.3 212.3

9.4 212.3

C

9.5 212.1

10.5 211.1

11.3 210.3

E line

12.7 208.9

100' 20.

E line

14.0 207.6

12.7 208.9

11.1 210.5

C

10.3 211.3

9.9 211.7

10.1 211.5

White

9.3 212.3

135' 20.

White

10.0 211.6

10.9 210.7

10.5 211.1

C

11.1 210.5

12.1 209.5

E. ob.

13.2 208.4

JP.

2.68 ^{HI.} 211.21

13.03 208.53

E line

5.1 206.1

150' 20.

E line

6.4 204.8

4.3 206.9

2.3 208.9

C

1.4 209.8

0.8 210.4

0.9 210.3

White

0.2 211.0

175' R.O.

White	0.8	210.4
	1.3	209.9
	1.8	209.4
C	2.8	208.4
	4.5	206.7
	6.2	205.0
E line	8.4	202.8

200' R.O.

E line	10.7	200.5
	7.6	203.6
	6.1	205.1
C	4.8	206.4
	4.1	207.1
	3.6	207.6
White	2.0	209.2

225' R.O.

White	3.5	207.7
	5.6	205.6
	6.0	205.2
C	6.6	204.6
	7.0	204.2
	7.5	203.7
	9.8	201.3
E line	12.1	199.1

250' R.O.

E line	12.1	199.1
	9.5	201.7
	7.7	203.5
	7.2	204.0
	6.8	204.4
	6.4	204.8
	5.9	205.3
White	4.6	206.6

2112

275 20.

White

5.5 205.7

6.2 205.0

6.5 204.7

C

6.9 204.3

7.3 203.9

7.9 203.3

Eline

9.5 201.7

300' 20. (no. line ash)

Eline

6.93 204.3

6.6 204.6

6.2 205.0

C

5.7 205.5

5.8 205.4

6.2 205.0

White

5.88 205.3

68

no. 66

White

6.8 204.4

6.2 205.0

5.5 205.7

C

5.2 206.0

5.2 206.0

5.2 206.0

Eline

5.5 205.7

no 14

Eline

3.5 207.7

3.6 207.6

3.7 207.5

C

4.4 206.8

5.3 205.9

6.2 205.0

White

7.1 204.1

Center

White

7.3 203.9

6.0 205.2

4.8 206.4

C

3.5 207.7

2.6 208.6

1.8 209.4

E line

1.8 209.4

20 1/4

E line

1.1 210.1

1.4 209.8

2.5 208.7

C

3.8 207.4

5.4 205.8

6.7 204.5

White

7.9 203.3

So. 06.

White

8.3 202.9

7.2 204.0

6.0 205.2

C

4.6 206.6

3.3 207.9

1.6 209.6

0.5 210.7

E line

South line Ash

E line

0.54 210.7

1.4 209.8

3.3 207.9

4.2 207.0

ob+2'

C

5.2 206.0

6.5 204.7

7.9 203.3

White

8.83 202.4

25' 20.

White	10.0	201.2
	8.9	202.3
	7.7	203.5
C	6.3	204.9
	5.2	206.0
1/4+11' cb	3.6	207.6
	2.3	208.9
E line	0.9	210.2

50' 20.

E line	1.8	209.4
	3.9	207.3
cb+2'	5.9	205.3
	7.0	204.2
C	7.9	203.3
	9.6	201.6
	10.6	200.6
White	11.2	200.0

21, 21

70

75' 20.

White	12.7	198.5
	11.9	199.3
	10.6	200.6
C	9.5	201.7
	7.9	203.3
1/4+11'	7.1	204.1
	5.8	205.4
E line	3.8	207.4

100' 20.

E line	6.0	205.2
	8.2	203.0
	9.8	201.4
C	11.0	200.2
	12.2	199.0
	13.4	197.8
w.cb	4.89	203.08
J.P.		13.02 198.19
White		5.6 197.5

203,08

135'20.

White

6.9 196.2

6.3 196.8

5.2 197.9

C

4.2 198.9

3.6 199.5

2.1 201.0

E line

0.4 202.7

150'20.

E line

2.4 200.7

4.2 198.9

5.2 197.9

C

5.7 197.4

6.6 196.5

7.5 195.6

White

8.2 194.9

71

175'20.

White

9.5 193.6

8.9 194.8

8.0 195.1

C

7.1 196.0

6.5 196.6

5.5 197.6

E line

4.2 198.9

200'20.

E line

6.3 196.8

7.4 195.7

8.5 194.6

C

8.8 194.3

9.5 193.6

10.2 192.9

White

11.1 192.0

20308

225' 20.

Wline

12.0 191.1

12.0 191.1

11.1 198.0

C

10.6 197.5

9.8 193.3

9.1 194.0

Eline

8.2 194.9

250' 20.

Eline

9.3 193.8

10.1 193.0

11.5 191.6

C

11.9 191.7

w 1/4

13.2 189.9

J.P.

3.64 ^{N.I.} 193.77 12.95 190.13

3.9 189.9

Wline

3.7 190.1

n.e. cor. 33rd & ash. — 10.95 192.13

19377

72

275' 20.

Wline

5.6 188.7

5.3 188.5

4.9 188.9

C

4.1 189.7

3.1 190.7

2.0 191.8

Eline

1.2 192.6

12954.W

12938.E

of ash
20; pueblo line north of a.

E line

2.09 191.7

2.8 191.0

4.1 189.7

C

5.3 188.5

6.3 187.5

7.2 186.6

Wline

8.09 185.7

See Book 927 page 44

Stakes Calif Water Dept. C to A on Atlantic
19.3' E. of Atlantic.

78

BNSE Calif 20 Curb

697

Gr.

Cuts

TP

356

10.53

616

4.37

331

7.68

SLC

4

-0.80

NLC

525

2.43

-0.80

3.2

SLB

385

3.83

-0.80

4.6

NL.B. TP

450

3.16

-0.80

4.0

340

6.56

+50

356

3.00

-0.80

3.8

+100

333

3.23

-0.80

4.0

+50

390

2.66

-0.80

3.1

+200

456

2.00

-0.80

2.8

+50

726

-0.80

-0.80

0.0

3+00 SLA

5.76

+1.80

-0.80

1.6

+30 = N 54

965

-3.39

F 2.3

TP

654

0.52

1132

11.34

KL. A St.

764

3.70

-1.2

4.9

+50

664

4.70

+0.05

4.6

1134

Gr

Cuts

1+00

534

600

1.30

4.7

+50

469

665

2.55

4.1

2+00 = WL Calif.

330

804

3.80

4.2

2+75 EL " TP

193

941

3.80

5.6

700 16.41

3+75 -1

517

1124

5.80

5.4

A+75 = WL Arctic

328

1314

7.80

5.3

857 21.71

SW Curb. A & India

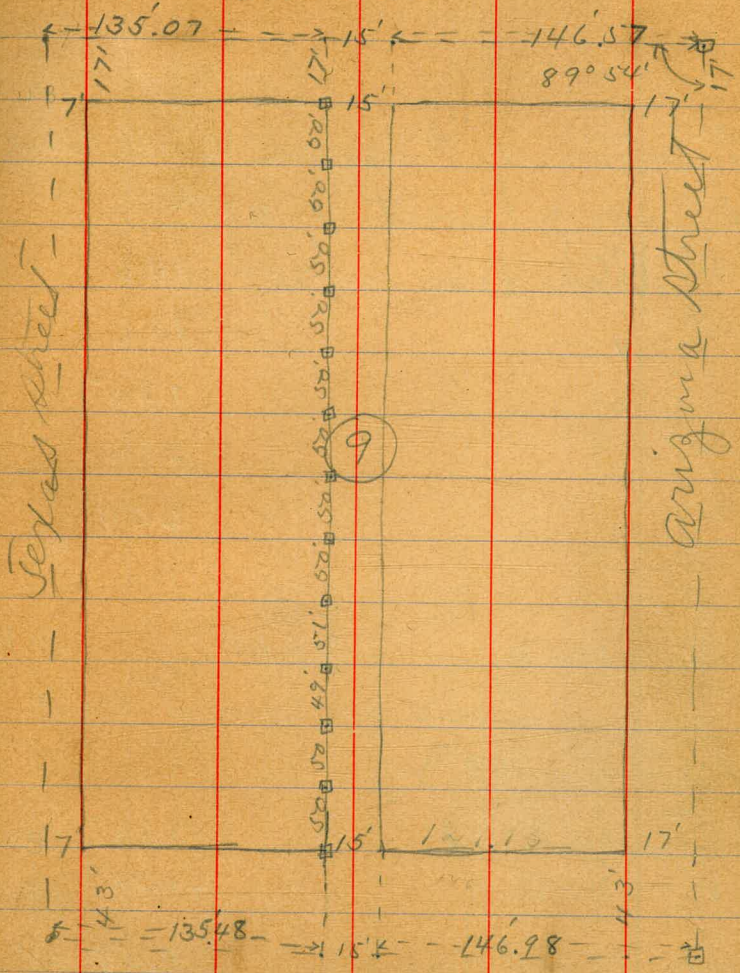
2.80

18.71

7.80

Survey for alley in Blk 9 Parley addy Landis

Belviders
Allen
Bunker
near 17/14
+18



Hwright

B.M. SE. cor. plingetum 27th + 9. 142.11

April 18/14

Childs 76
Allen
Bunker

Location of trees on north curb.

line of g west of 27th

1st tree from cur. 27th 146

2nd " 166

3rd " 185

4th " 204

5th " 224

B.M. 10.54 H.I. 152.65 142.11

Levels on cement curb.

at S.W. cor. 27th + 9.

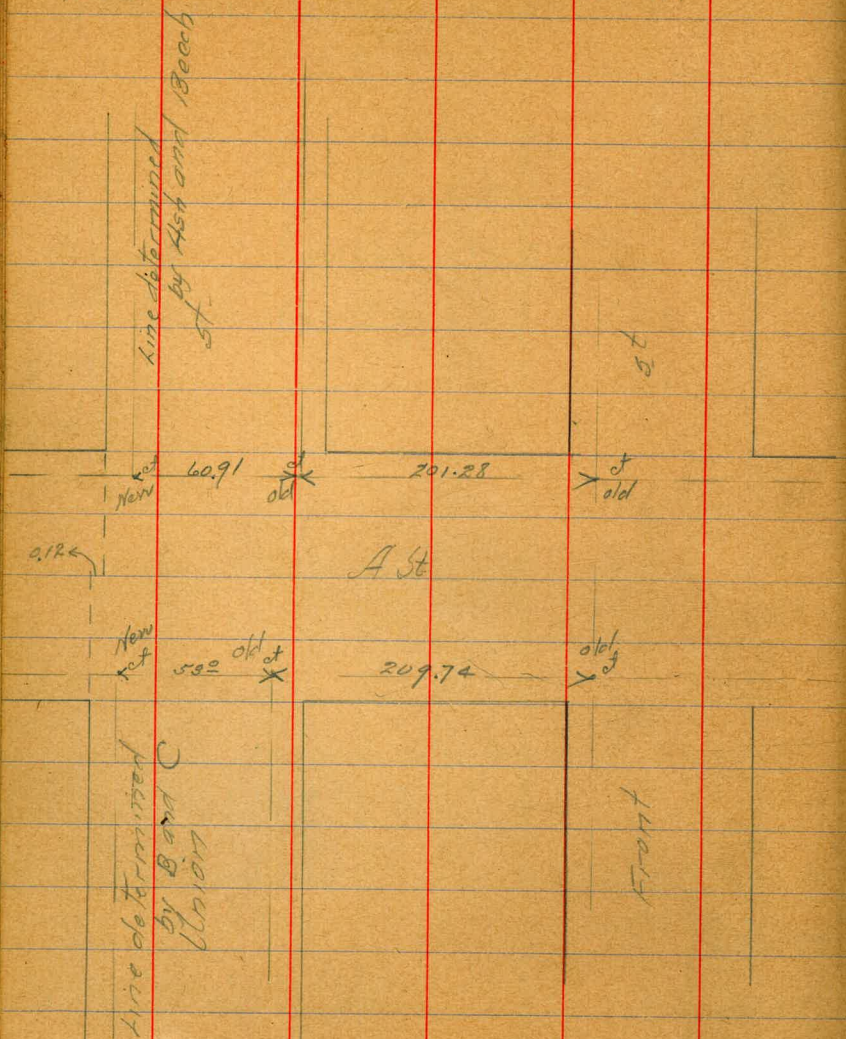
Returns South end 11.65 141.00

" North " 10.75 141.90 0.9 high

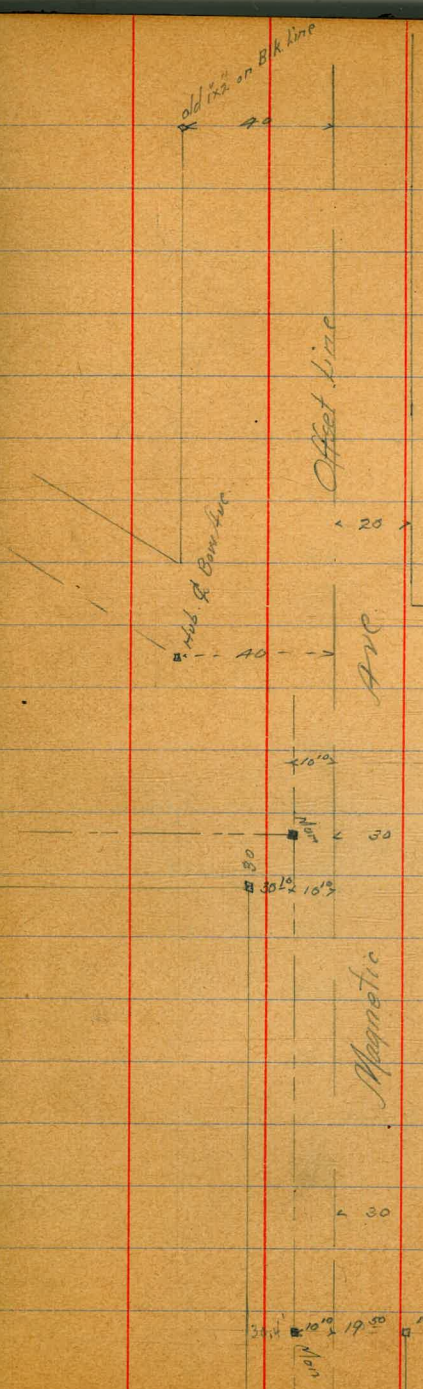
break 17' west of return 9.07 143.58

end of curb 50' " " 7.19 145.46

5/15/14 Hatch Moore Hall
 Measurements for paving
 H St at Union St.



5/15/14 Hatch Moore Hall
 "Closing of Magnetic Ave"



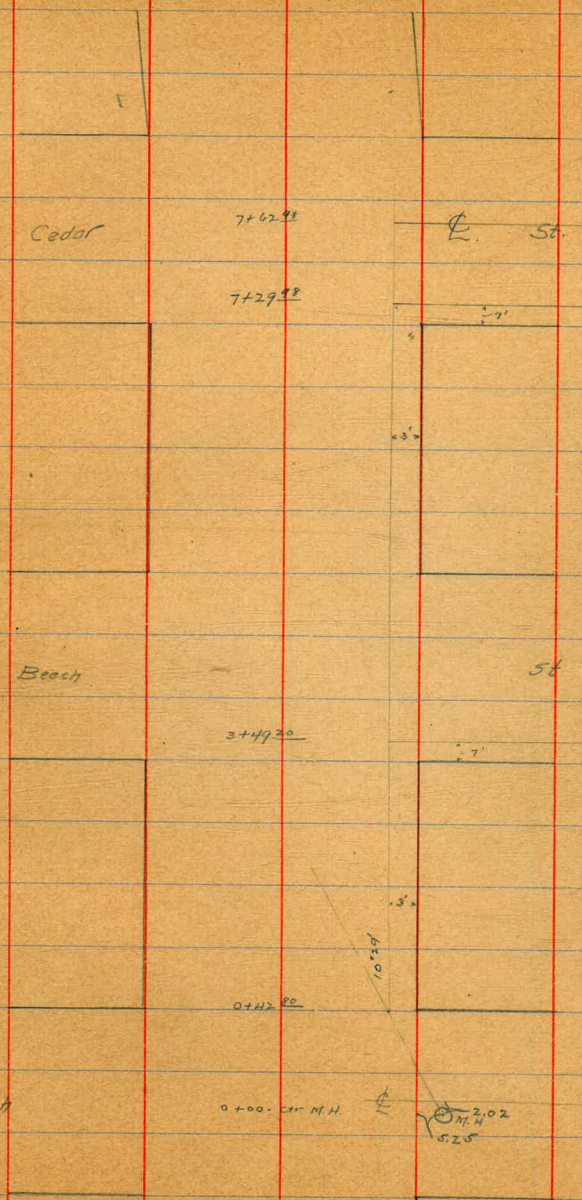
assumed
 1st that Magnetic Ave is
 60' wide above Bow Ave
 2^d that there is an offset
 of 10' in the North line
 of Magnetic

Sta	x	H-T	Elev	Notes
	1.49	24.46	22.97	30 ft. 5 in. radiated
T.P.	1.71	17.18	8.99	15.47
T.P.	2.90	9.00	9.08	8.10
0+00 - bot. M.H.			11.69	-21.9 Bottom
Top M.H.			5.1	3.9 Top
0+42.80			4.9	4.1
+50			4.9	4.1
1			4.9	4.1
+50			5.0	4.2
2			5.0	4.0
T.P.	3.57	9.19	3.38	5.62
+50			5.4	3.5
3			5.3	3.9
+50			4.7	4.5
4			5.2	4.0
+46			5.0	4.2
+50			4.1	5.1
5			4.1	5.1
+50			3.8	5.1

$\frac{5}{24}$ } Davis
 $\frac{15}{15}$ } + 1000
 } 1000

Location of Proposed Sewer Line in Atlantic St from M.H. in Ash St to Chr of Cedar St.

8



Sta	+	9.19 14.1	-	Elev
T.P.	2.96	9.27	2.88	6.31
6			3.3	6.0
+50			3.2	6.1
7			3.5	5.8
+18			3.7	5.6
+29.88			4.2	4.5
+62.98 = Ctr. Cedar St.			4.8	4.5
T.P.	11.37	20.45	0.19	9.08
T.P.	11.04	31.30	0.19	20.26
T.P.	7.39	38.35	0.34	30.96
V B.M. SW India & Beach			3.41	34.94 - 34.97

43
736.26
43
4
81826

70096
39814
80586
70
73526
360
375.86
160
21536

10.50 263 255
 7.57 377 120
 2005 229 21
 479 50
 202 124
 645 45
 748 100
 739 41
 939 200

3757
 2005
 1750

175
 2
 7.48

16293
 13843
 2193
 96

1756
 37
 980
 3726

12
 36

7.20
 1.00

135
 7.5
 127.5
 43
 170.5
 16293
 333.43
 60
 273.43
 271.5
 1.93

1365
 7.5
 129.0
 17
 146

7.20
 1.00

176.5
 135.0
 271.5

100.96
 10.52
 100.44
 100.44

1949
 083
 137
 168
 25
 1001

502
 353
 149

353
 277
 72

278
 123
 145

10.50

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

ROADWAY 14 FEET WIDE. SIDE SLOPES 1 1/2 TO 1.

FOR SINGLE TRACK EMBANKMENT.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	7.0	7.2	7.3	7.5	7.7	7.8	7.9	8.1	8.2	8.4	0
1	8.5	8.7	8.8	9.0	9.1	9.3	9.4	9.6	9.7	9.9	1
2	10.0	10.2	10.3	10.5	10.6	10.8	10.9	11.1	11.2	11.4	2
3	11.5	11.7	11.8	12.0	12.1	12.3	12.4	12.6	12.7	12.9	3
4	13.0	13.2	13.3	13.5	13.6	13.8	13.9	14.1	14.2	14.4	4
5	14.5	14.7	14.8	15.0	15.1	15.3	15.4	15.6	15.7	15.9	5
6	16.0	16.2	16.3	16.5	16.6	16.8	16.9	17.1	17.2	17.4	6
7	17.5	17.7	17.8	18.0	18.1	18.3	18.4	18.6	18.7	18.9	7
8	19.0	19.2	19.3	19.5	19.6	19.8	19.9	20.1	20.2	20.4	8
9	20.5	20.7	20.8	21.0	21.1	21.3	21.4	21.6	21.7	21.9	9
10	22.0	22.2	22.3	22.5	22.6	22.8	22.9	23.1	23.2	23.4	10
11	23.5	23.7	23.8	24.0	24.1	24.3	24.4	24.6	24.7	24.9	11
12	25.0	25.2	25.3	25.5	25.6	25.8	25.9	26.1	26.2	26.4	12
13	26.5	26.7	26.8	27.0	27.1	27.3	27.4	27.6	27.7	27.9	13
14	28.0	28.2	28.3	28.5	28.6	28.8	28.9	29.1	29.2	29.4	14
15	29.5	29.7	29.8	30.0	30.1	30.3	30.4	30.6	30.7	30.9	15
16	31.0	31.2	31.3	31.5	31.6	31.8	31.9	32.1	32.2	32.4	16
17	32.5	32.7	32.8	33.0	33.1	33.3	33.4	33.6	33.7	33.9	17
18	34.0	34.2	34.3	34.5	34.6	34.8	34.9	35.1	35.2	35.4	18
19	35.5	35.7	35.8	36.0	36.1	36.3	36.4	36.6	36.7	36.9	19
20	37.0	37.2	37.3	37.5	37.6	37.8	37.9	38.1	38.2	38.4	20
21	38.5	38.7	38.8	39.0	39.1	39.3	39.4	39.6	39.7	39.9	21
22	40.0	40.2	40.3	40.5	40.6	40.8	40.9	41.1	41.2	41.4	22
23	41.5	41.7	41.8	42.0	42.1	42.3	42.4	42.6	42.7	42.9	23
24	43.0	43.2	43.3	43.5	43.6	43.8	43.9	44.1	44.2	44.4	24
25	44.5	44.7	44.8	45.0	45.1	45.3	45.4	45.6	45.7	45.9	25
26	46.0	46.2	46.3	46.5	46.6	46.8	46.9	47.1	47.2	47.4	26
27	47.5	47.7	47.8	48.0	48.1	48.3	48.4	48.6	48.7	48.9	27
28	49.0	49.2	49.3	49.5	49.6	49.8	49.9	50.1	50.2	50.4	28
29	50.5	50.7	50.8	51.0	51.1	51.3	51.4	51.6	51.7	51.9	29
30	52.0	52.2	52.3	52.5	52.6	52.8	52.9	53.1	53.2	53.4	30
31	53.5	53.7	53.8	54.0	54.1	54.3	54.4	54.6	54.7	54.9	31
32	55.0	55.2	55.3	55.5	55.6	55.8	55.9	56.1	56.2	56.4	32
33	56.5	56.7	56.8	57.0	57.1	57.3	57.4	57.6	57.7	57.9	33
34	58.0	58.2	58.3	58.5	58.6	58.8	58.9	59.1	59.2	59.4	34
35	59.5	59.7	59.8	60.0	60.1	60.3	60.4	60.6	60.7	60.9	35
36	61.0	61.2	61.3	61.5	61.6	61.8	61.9	62.1	62.2	62.4	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.

MADE IN GERMANY.