

HIGH WATER LINE
OTAY VALLEY

LETTLE BOOK

370

W85

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 18 FEET WIDE. SIDE SLOPES 1 TO 1.

FOR TRACK EXCAVATION.

"Copyright, 1895, by Keuffel & Esser Co."

MICROFILMED
JAN 7 1965

	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.

Elev of Drift
on Tower Trail left

130.00 1300.0

0.57 129.43

538 134.81

13338 ✓

0.81 ✓

024

132.57

= Drift across trail

Elev of L.O. Core-wall and Road-way Wueste-Cornell 2-18-16

556 15327

147.71

= B.M. on cement-lined reservoir

1188 14139

125 14264

7.25

135.39 = Top Road-way.

681 ✓

1188 ✓

10.67

131.97 = Top Core-wall.

Flood line Otay Valley

98

47

3-4-16
HUSTON
SHO...

2

B.M.	1.00	394.47		394.47
T.P.	0.67	384.20	11.94	383.53
T.P.	2.03	374.67	11.56	372.64
T.P.	0.41	362.17	12.91	361.76
T.P.	0.50	349.88	12.79	349.38
T.P.	0.20	337.89	12.19	337.69
T.P.	0.25	326.11	12.03	325.86
T.P.	1.38	314.59	12.00	313.31 OK OK
Δ				
0+00 Δ			+2.2	14.8
+91.7			15.3	299.3
1-			14.8	99.8
2- Δ			16.7	97.9
+103			13.15	301.11
B.M.			6.44	308.15
3-			19.6	95.0
Δ				
+79.8			12.48	302.11
4-				

$313.31 + 7.82 + 349.46 = 394.47$ OK
OT Filter plant

Point on L&T Co fence line N. side of creek
called line

ROCK ON POINT 0+60 = 6' h.

314.59

5-			15.2	299.4	
T.P. A	237	303.88	13.08	301.51	ROCK STIS
6+37 ⁴			10.32	93.56	
7-			16.5	87.4	
T.P.	240	293.89	12.99	290.89	ROCK RISK
469 ^A			10.78	82.51	
8-			12.0	81.3	
9-			14.4	78.9	
10-			15.4	79.9	
11-			16.5	76.8	
12-			16.8	76.5	
+323 ^A			16.8	76.5	
13-			13.7	79.4	
14-			10.7	82.6	
T.P. A					
+39 ^B	4.59	284.93	12.95	280.34	
15-			4.2	80.7	
16-			7.3	77.6	

STO	HI	-RM	FIC
	284.93		
17		3.9	281.0
+71.6		6.35	278.58
18		7.0	277.9
+98.4		2.68	275.25
19		6.64	278.29
20		5.3	279.6
21		2.3	275.4
+53.8		5.90	279.03
22		8.3	274.6
T.P.	4.25	282.13	278.38
23		10.5	272.1
24		12.7	269.9
25		6.9	275.7
26		2.8	279.8
+08.5		2.95	279.8
+98.7		1.0	282.4
27		6.3	274.3

282.6
3.6
279.0

3.6
8.7
5.9

282.7 4

ROCK + 60

28263

28-		0.5	277.1
29-		5.1	77.5
30-		8.8	73.8
+49 ^Δ		7.7	74.9
31-		8.9	73.7
32-		8.0	74.4
+53+02 ^Δ		1.0	81.6
+508 ^Δ		0.38	82.35
34-		2.5	80.1
T.P.	9.27	288.47	84.3
			290.20
35 ^Δ		10.4	78.1
+814 ^Δ		4.10	84.37
36-		5.2	83.3
37-		6.6	81.9
38-		11.4	76.9
+524 ^Δ		7.2	81.3
39-		4.9	83.6

Rock 34+ix

28847

40-		3.3	285.2	
△				
+133		5.15	83.32	71
41-		7.5	81.0	
42-		6.6	81.9	
△				
+333		2.75	85.74	7.0
43-		7.7	80.8	
44-		11.5	77.0	20
45-		3.3	85.3	7.4
△				
T.P. A				
+438	2.63	284.95	4.85	281.63
46-		3.4	80.9	
△				
+983		+5.3	79.0	
48-		4.0	80.3	
△				
+042		4.14	80.11	
49-		6.0	78.3	-
△				
+315		7.88	74.37	
50-		10.3	74.0	-
51-		15.1	69.2	

		284.20		
51+03			157	269.2
52-			12.8	21.5
T.P.	119	273.31	12.13	272.12
+94 ⁵			3.59	49.92
53-			3.2	70.1
54-			2.4	70.9 4.8
+61 ^A			5.47	67.84
55-			4.4	68.9
+89 ⁸			5.73	67.58
56-			6.0	67.3
57-			6.9	66.4
58-			6.1	67.2
+62 ^A			7.30	66.01
59-			8.9	64.4
60-			7.5	65.8
61-			7.0	66.3
+71 ^A			6.90	66.41

Book

27331

62- 6.7 66.4

63- 5.0 68.3

+713^Δ 5.55 67.76

64- 6.3 67.0

65- 4.5 68.8

66- 2.4 70.7

67- 3.4 69.9

68- 0.8 72.5

T.P. 7.85 274.83 6.33 266.98

ROCK +25-10'3

+163^Δ 4.2 70.6

69- 3.3 71.5

70- 3.1 71.7

71- 5.7 69.1

+753^Δ 6.91 67.92 -

72- 7.4 69.4

73- 8.4 66.2

+254^Δ 9.25 65.58

27483

74-			10.2	26.44		
75-			18.0	41.8		
T.P.	371	266.14	19.40	262.43	3.5	TOP 75
76-			5.4	40.7	0.9	
77-			1.9	44.2		
78-			2.9	43.2		
+73 ²			2.89	43.25		
79-			2.7	42.4		
+613			4.12	42.03		
80-			4.4	41.7		
81-			4.5	41.4		
82-			6.1	40.0		
+77 ²			2.50	57.64		
83-			8.4	57.7		
84			9.2	56.9		
T.P.	133	259.11	8.36	257.78	OK. OK.	TOP 57.84
85-			2.0	57.1	3-4-16	

△	25911		
85+996		3.65	255.46
87-		5.8	53.3
88-		9.2	49.9
89-		12.1	47.0
T.P. △			
+358	2.85	249.95	12.71
			246.40
90-		4.0	45.3
91-		4.3	45.0
92-		5.7	43.6
93-		7.6	41.7
△			
+53.4		8.60	40.65
94-		8.5	40.8
95-		9.0	40.3
96-		9.9	39.4
97		10-	39.3
T.P.	425	244.18	9.32
			239.95
98-		5.5	38.7
△			
+153		5.96	38.23

See sta 97

244.18

99-		5.4	238.8	
100-		5.3	38.9	
101 ^Δ		4.3	39.9	
+822		4.88	39.80	
102-		5.4	38.8	
102 ^Δ		7.78	36.41	
+80-6				
103-		7.3	36.9	
T.P.	9.23	244.35	9.06	235.12
104		5.4	39.0	
104 ^Δ				
+525		3.8	40.6	
105-		4.7	39.7	
106-		5.3	39.1	
107.		4.7	39.7	
107 ^Δ				
+253		4.84	39.57	
108.		3.7	40.7	
108 ^Δ				
+122		3.96	40.39	
109		4.6	39.8	

Page 104 to 106

110-	244.35	5.0	239.4
111-		4.4	40.0
TR Δ			
+45.4	6.91	244.49	40.7
240.58			
112-		6.9	39.6
113-		7.4	39.1
Δ			
+44.5		7.76	38.73
114-		7.4	39.1
Δ			
+38.8		7.40	39.09
115-		5.4	41.1
Δ			
+70.2		6.04	40.45
116-		10.0	36.5
117-		7.7	38.8
Δ			
+05.2		6.3	40.2
118-		11.0	35.5
Δ			
+74.1		7.04	39.45
119-		6.5	40.0
Δ			
+75.9		6.83	39.64

2449

120-		4.8	240.0	
121-		7.4	39.1	
△				
+073		7.54	38.93	
122-		7.3	39.2	
123-		8.4	36.1	
T.P.	4.82	243.52	7.79	238.70
△				
+90.5		7.47	36.05	
124-		7.3	36.2	
125-		7.0	36.5	
△				
+243		7.07	36.45	
126-		7.6	35.9	
127-		7.7	35.8	
△				
+98.5		7.42	36.10	
129-		7.9	35.6	
△				
+71.5		7.67	35.85	
130-		6.5	37.0	
131-		8.2	35.3	

Top 123

243.59

T.P.	3.97	239.31	8.18	235.34
132			3.0	34.3
+112 ^Δ			2.75	36.56
133			2.4	36.9
134			4.8	32.5
+948 ^Δ			7.33	31.99
135			7.5	31.8
136			10.8	28.5
+241 ^Δ			11.80	27.5
+948 ^Δ			13.10	26.21
137			13.1	26.2
138			13.1	26.2
+232 ^Δ			12.57	26.74
+989 ^Δ			12.53	26.78

BOLH 6' 1 131-

T.P.	5.84	232.87	12.28	227.03
140			6.6	26.3
+106 ^Δ			6.15	24.75

peg 139+25-

	△	232.87		
140+	98 ³		5.48	227.39
142-			8.8	24.1
143-			5.3	27.6
144-	+		5.4	27.5
	△			
+712			6.63	26.24
145-			6.9	26.0
146-			6.9	26.0
147-			7.1	25.8
T.P.	△			
+88 ²	587	233.06	6.68	226.19
148-			6.1	26.0
149-			6.4	25.7
150-			5.8	26.3
	△			
+87 ³			5.26	26.80
151-			5.1	27.0
152-			5.0	27.1
	△			
+87 ³			5.13	26.94
153			5.0	27.1

232.06

154-			3.8	228.3
155-			4.8	27.3
TR Δ				
+803	544	232.60	4.90	227.16
156-			5.5	27.1
157-			5.3	27.3
TR Δ				
+105			6.33	26.27
158-			7.4	25.2
TR Δ				
+472			7.11	25.49
159-			8.8	23.8
160-			5.5	27.1
TR Δ				
+113			5.76	26.84
161-			6.3	26.3
TR Δ				
+195			5.65	26.95
162-			7.4	25.2
163-			10.0	22.4
164-			13.1	19.5
TR Δ				
+203	174	231.24	13.10	219.50

22124

165		2.9	218.3
166		3.0	18.2
167		4.7	16.5
+319		4.71	16.53
168		6.1	15.1
+183		6.24	15.00
169		6.2	15.0
170		5.9	15.3
+165		6.00	15.24
171		6.8	14.4
+125		7.2	14.0
+803		6.71	14.53
172		—	
+742		7.52	13.72
173		8.0	13.2
174		10.4	10.8
T.P. A			
+522	556	219.53	737 213.97

219.53

175-		5.6	213.9		
176-		4.1	213.4		
+181 ^Δ		6.99	13.14		
177-		4.4	12.9		
+184 ^Δ		5.44	14.09		
178-		4.5	15.0		
+183 ^Δ		5.59	213.94		
179-		4.4	13.1		
180-		4.7	12.8		
181		4.0	13.5		
+118 ^Δ		6.03	13.50		
182-		4.4	13.9		
183-		4.3	13.2		
T.P.	5.77	219.55	5.75	213.78	NEON
184-		4.4	13.3		
185		7.4	13.2		
+322 ^Δ		6.17	13.38		

186		219.55	7.8	211.8
187			4.7	12.9
+262 ^Δ			6.49	13.06
188			6.5	13.1
+46 ^Δ			5.80	13.75
189			6.3	13.4
+39 ^Δ			5.93	13.62
190			5.1	14.5
+50 ^Δ			6.36	13.89
T.P.	10.76	221.42	8.83	210.73
191			8.4	13.1
+90 ^Δ			8.4	13.1
192			10.5	11.0
193			7.1	14.4
+45 ^Δ			8.10	13.38
194			7.8	13.7
+35 ^Δ			7.93	13.55

		221.48		
194+70			7.98	213.50
195-			8.5	13.1
196			9.4	12.1
+11.6			8.95	12.23
197-			8.0	13.5
+59			9.12	12.26
198-			8.5	13.0
199-			6.5	15.0
T.P.				
+63.4	9.37	223.33	7.43	214.06
200-			6.2	17.1
+57.3			4.7	18.76
1			6.4	16.9
T.P.	4.30	220.52	7.11	216.99
2-			5.4	15.1
+97-			6.20	14.32
3-			6.2	14.3
4-			6.3	14.3
+29.2			4.8	15.7

Recd +40-54

220.2

105			4.6	215.9
+203			3.04	17.48
106-			7.5	13.0
107-			6.9	13.6
108			5.9	14.6

T.P.	5.61	226.09	0.04	220.48	3-6-16	OK OK	+15-12' B ROCK
------	------	--------	------	--------	--------	-------	----------------

+591			4.17	9.8	3-10-16		
212+47			11.39	9.3			stadio

T.P.	6.57	223.25	9.41	214.68			
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220+44			9.12				
225+81			14.7				

T.P.	1.88	213.64	11.49	211.76			+15-5' B ROCK
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229+10			4.5	9.5			
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T.P.	1.36	202.93	12.08	201.53			
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236+81			14.9				
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T.P.	0.20	190.30	12.82	190.10			
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T.P.	4.10	184.80	9.60	180.70	OK OK		
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Hustad
Shoemaker

		184.80				
242+74			6.97	177.83	4.0	
T.P. Δ						NOOK
249+20	7.86	182.93	9.73	175.07		
Δ						
254+05			3.55	179.38	1.7	
T.P. Δ						
257+74	6.08	184.98	4.03	178.90		
T.P.	12.18	184.55	13.41	172.37		
Δ						
271+10			12.32	172.33		
T.P.	4.97	186.20	3.32	181.33		
Δ						
282+32			15.1		21.0	
T.P.	2.55	175.76	13.99	173.21	OK. OK.	
T.P.	3.49	166.45	13.80	162.96		
Δ						
291+22			11.16		7.9	
T.P.	0.90	154.38	19.97	153.48	3-10-16	
T.P.	1.48	149.45	6.41	147.97	3-17-16	
Δ						
300+60			6.63	142.82	+7.4	180.2
T.P.	9.15	150.79	7.87	141.58		
T.P.	13.04	162.91	0.86	149.87	OK. OK.	
Δ						
311+72			6.22	156.69		

S	+ Rod	H.I.	- Rod	Flt	
T.P. Δ		162.91			
321+08	10.41	152.88	10.44	152.47	
324+35			200	152.88	16.0
T.P.	110	141.38	12.70	140.18	
T.P.	518	133.56	12.90	128.38	ROCK
332+11			7.20	126.34	
T.P. Δ					
339+72	4.14	129.98	8.42	125.14	
T.P. Δ					
348+32	4.90	125.59	8.58	120.69	OK, OK
357+89			7.93	117.64	
T.P.	4.54	118.98	11.25	114.34	ROCK
362+72			4.17	114.73	
T.P.	2.61	113.76	8.25	110.85	ROCK
370+08			4.92	108.52	
T.P.	9.84	112.30	10.50	102.96	
377+93			10.46	101.64	4.1
T.P. Δ					
#1 SHIT	1.63	107.99	6.64	105.66	
			1.96	105.33	
T.P. Δ					
393+93	5.86	102.83	10.32	94.97	OK

710-

3-17-16 23
 Huston notes
 Shoemaker level
 Bellamy Rod
 Carvell "
 Mansfield Team

no visit to last level 7-11-16

398+34	102.83	9.43	93.40	
T.P. 7.59	103.49	6.93	95.90	STAMP OF TREE
404+07		5.92	97.57	
T.P. 1.30	106.57	4.22	99.27	3-17-16
415.88		10.40	90.17	3-18-16
T.P. 0.43	72.66	8.34	92.73	ON POST
419.87		8.80	83.86	
T.P. 1.32	81.47	12.56	80.10	POST
423+45		3.08	78.34	
427+57		8.73	72.69	
T.P. 5.13	78.57	8.98	78.14	
438+59		5.10	73.17	
T.P. 7.84	73.20	7.91	70.36	
448+75		8.42	64.78	
T.P. 3.60	44.23	11.57	61.63	PLG
455+38		2.84	61.39	
T.P. 5.44	63.69	5.98	58.25	+

STC	+ Rad.	H.T	- Rad	Flc
462.68		63.69	3.63	60.04
T.P.	2.47	41.19	5.04	58.45
469.66			3.10	58.09
T.P.	8.70	52.74	7.08	54.04 +
472.62	6		3.08	49.66
T.P.	2.79	49.92	5.61	47.13
477.47			4.56	45.35
T.P.	5.43	45.31	9.14	40.78
481.74			6.26	39.95
T.P.	1.64	43.87	4.78	41.43
T.P.	8.37	45.99	5.45	37.62
497+94			4.15	39.84
T.P.	4.73	45.26	7.45	38.54 peg.
B.M.			1.95	43.31
T.P.	3.47	41.01		38.54
505+36			5.68	36.33
T.P.	1.74	36.92	5.83	35.18

U.S.S. at Olay School House Flc 62.

STO.	Δ	34.92			
√11438			2.84		
TP.	Δ				
√1466	339	32.90	7.41	29.51	
√7946			4.20		
Δ					
√2428			7.25	25.65	

Dried

Sta	+ Rod	H.T.	- Rod	Ele
T.P. Δ		162.91		
331+08	10.41	162.88	10.44	152.47
334+35			2.00	160.88 14.0
T.P.	1.10	151.28	12.70	150.18
T.P.	5.18	143.56	12.90	138.38 Road
332+11			7.20	136.36
T.P. Δ				
339+72	4.14	139.28	8.42	135.14
T.P. Δ				
348+22	4.90	135.59	8.59	130.69
354+89			7.93	127.66
T.P.	4.56	128.90	11.25	124.34 Rock
362+72			4.17	124.73
T.P.	2.61	123.46	8.05	120.95 Rock
370+08			4.90	118.56
T.P.	9.34	122.30	10.50	112.96
377+93			10.66	111.64 4.1
T.P. Δ				
384+83	1.63	117.29	6.64	115.66
391+39			1.96	115.33
T.P. Δ				
393+23	5.86	112.83	10.32	106.97

3-17-16 27
 Huston Notes
 Shoemaker Level
 Bellamy Rod
 Carrell
 Mansfield Team

△		112.83			
398+34			9.43	103.40	
T.P.	7.59	113.49	4.93	108.90	STUMP of TREE
△					
404+07			5.92	107.57	
T.P.	1.30	110.57	4.22	109.27	OK OK 3-17-16
△					
415+88			10.40	100.17	3-18-16
T.P.	0.43	102.66	8.34	102.23	Post
△					
419+88			8.89	93.86	
T.P.	1.32	91.42	12.56	90.10	Post
△					
423+45			3.08	88.34	
△					
427+57			8.73	89.69	
T.P.					
△					
433+96	5.13	88.27	8.28	83.14	
△					
438+59			5.10	83.17	
T.P.					
△					
443+89	2.84	83.30	7.91	80.36	
△					
448+75			8.42	74.78	peg-
T.P.	2.60	74.23	11.57	71.63	
△					
455+38			2.84	71.39	
T.P.	5.44	73.69	5.98	68.25	OK OK

Δ		73.69			
463+68			363	70.06	
T.P.	247	71.12	504	68.65	ROCK
Δ					
469+66			310	68.02	
T.P.	870	72.74	708	64.04	ROCK
Δ					
472+62			308	69.66	
T.P.	279	69.92	561	67.13	
477+47			456	65.36	
T.P.	543	66.21	914	60.78	
Δ					
484+74			636	69.95	
T.P.					
490+66	1.64	63.07	478	61.43	
T.P.	837	65.99	545	57.62	
Δ					
497+94			615	69.84	
T.P.	672	65.26	745	59.54	peg
B.M.			1.95	63.31	
T.P.	247	61.01		58.54	
Δ					
505+36			568	55.33	
T.P.	174	56.92	583	55.18	

U.S.G.S-B.M. at Otoy School-File 62372

3-20-16
"Rain"

Huston
Sperdy
Bellamy
Carrell
Marshall

30

△		56.92			
511+38			284	54.08	
T.P. △					
516+45	3.39	52.90	741	49.51	
△					
519+65			620	46.70	
T.P. △					
524+28	5.66	51.31	725	45.65	3-13-16
T.P.	4.53	49.77	607	45.34	3-20-16
△					
529+81			513	44.64	2.2
T.P.	3.36	49.23	390	40.87	peg -
△					
538+15			441	44.82	
T.P.	7.46	47.95	874	40.49	peg
△					
545+65			355	44.40	
T.P. △					
544+00	0.61	46.96	160	46.35	
R.R.			005	46.91	
T.P.	2.96	37.11	12.91	34.15	
△					
570+20			12.75	24.36	
T.P.	2.49	27.53	12.07	25.04	peg
573+20			12.61	14.92	"
T.P.	2.48	17.67	12.54	14.99	OK

center of S.D.A. R.R.

Top Rail " " " "

Top Fence Post

△
575+64 17.67 7.85 9.85

T.P. 5.44 17.68 5.43 13.34 P.C.G.

△
584+01 3.84 13.84

T.P. △
589+75 4.15 17.43 4.40 13.38

B.M. △
593+37 1.91 15.53

SPRING TIDE TEL. POST AT N-S MARKS 17.40

T.P. △
593+37 5.70 11.75

T.P. 2.16 13.75 5.84 11.59

△
603+16 3.90 5.72 8.03 3.4

T.P. 3.90 13.80 3.80 9.95

T.P. 3.90 15.58 2.17 11.68

△
615+46 2.90 12.68

T.P. △
626+42 3.56 12.73 4.42 9.16

T.P. △
638+54 3.35 10.31 5.86 6.80

△
646+51 7.60 2.61

M.O.M., 6.90 3.41 G.M. Tide Survey CXXII

Huston
Stromacker
Bellamy
Correll
Manfield

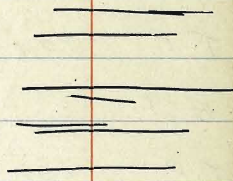
A line				
A ²	1.58	47.90		46.35
T.P.	0.06	35.07	12.89	35.01
T.P.	2.92	28.25	974	25.33
T.P.	4.73	26.17	6.81	21.44
A ¹			4.17	22.00
T.P.	4.91	26.26	4.82	21.35
A ²			4.71	21.55
T.P.	3.44	23.44	5.26	21.00
T.P. ²				
A ²	3.29	25.30	1.45	22.01
T.P.	12.96	37.06	1.30	24.10
T.P.	9.64	41.84	0.85	36.21
A ² ^{B²}			4.91	40.94
T.P.	1.91	41.44	6.32	39.53
T.P.	3.06	38.19	6.31	35.13
A ⁵			3.50	34.69 8.0
T.P.	0.45	26.15	12.51	25.68
T.P. ²				69.01
A ⁴	3.58	19.14	9.57	16.52 6.0

554+00 = A²

concrete-culvert, S.W. cor at top of Tia Juana Bay

Sta.	+ Rod	Hgt	- Rod	Ele
A7	(358)	19.14	6.70	12.44
T.P.	175	19.01	1.88	17.13
T.P.	938	20.93	8.16	10.85
T.R.				
A8	539	24.01	1.57	18.72
T.P.	327.	31.92	5.36	18.60
A9			5.33	16.59
T.P.	339	12.90	12.41	9.51
T.P.	903	31.44	0.46	12.44
T.P.	964	25.82	5.28	16.18
A10			7.45	18.37
T.P.	305	22.75	6.12	19.20
A11			10.38	12.37
T.P.	111	19.63	4.23	18.52
B.M.			3.91	15.72
T.P.	043	12.18	8.08	11.55
T.P.	634	16.64	1.90	10.98
A12			3.15	14.49

Top corner post



= Sta N. of S.W. N.S. Triangulation

order of Mexico & S.D. Ry Ele 17.48

= Sta Q. of W-S.W.S. Triangulation

A. Line

3-21-16

34

Sta	+ Rod	H.I.	- Rod	Elev
	6.367	16.64		
T.P.	3.48	11.73	8.39	8.25
T.P. Δ				
A.13	4.63	10.95	5.41	6.32 out. E.
T.P.	8.24	14.36	4.83	6.12
A.14			5.42	8.87
T.P.	5.09	13.11	6.34	8.09
A.15			6.21	6.90
Mon,		11.90	1.21	OK. QK.

C. I. V.
 X-CLX
 Two men vs. M.H.T. survey

	B. Life	- Rod	Flc	
B ⁰	4.42	45.36		40.94
B ¹			7.97	37.39
T.P.	0.41	41.08	4.69	40.67
T.P.	4.03	37.63	7.48	35.66
B ²			+9.7	47.3
T.P.	5.23	34.65	8.21	29.42
B ³			3.15	31.50
T.P.	3.70	36.50	1.85	32.80
B ⁴			+12.3	48.8
T.P.	10.45	43.59	3.36	33.14
T.P.	8.70	51.62	0.67	42.92
B ⁵			1.71	49.91 + 5.0
T.P.	3.98	45.82	9.78	41.84
B ⁶			^{6.50} 3.70	+ 6.5
T.P.	6.27	53.44	0.65	45.17
T.P.	8.61	61.13	0.92	52.52 OK. OK.
B ⁷			²⁵⁰ 5.30	

= A⁴

3-27-14

35

HUSTON
SHOEMAKER
BELLAMY
CARVELL
MANSFIELD

	(8.41)	61.13		
T.P.	6.83.	65.00	2.96	58.17
B8			3.78	+17.0
			17.0	
T.P.	3.56	64.34	3.22	61.78
			13.0	
B9			5.81	59.53 +13.0
T.P.	8.36	67.24	6.44	58.90
B10			3.75	
S#2			+10.0	
T.P.	11.34	78.01	0.59	66.67
B11	T.P.	12.70	89.41	1.30
				76.71
S#3			+13.8	103.2
T.P.	11.01	98.93	1.47	87.93
B13			6.71	
S#1			+4.7	
T.P.	12.19	110.37	0.75	98.18
B13			2.96	107.41
S#1			0.0	
T.P.	5.00	114.96	0.41	109.96
				OK. OK. NOON

	(3.00)	114.96		
B 14			2.73	112.23
S #1			+1.0	116.0
T.P.	10.33	121.03	4.16	110.80
B 15			6.12	114.91
T.P.	10.74	127.31	4.56	116.47
B 16			1.46	125.75
T.P.	7.79	132.97	2.03	125.18
T.P.	9.13	140.85	1.35	131.72
B 17			5.70	134.15 + 0.5
T.P.	7.82	138.07	10.58	130.27
T.P.			6.20	131.89
T.P.	11.02	147.75	1.34	136.73
B 18			0.98	146.77
T.P.	7.30	145.84	9.11	138.64
T.P.	12.76	153.56	5.04	140.80
B 19			9.47	144.09
T.P.	6.31	155.43	4.44	149.12 OK O.K.

Foundation of Dinca's House

Sta	+ Rod	H.I.	- Rod	Elev
T.P. ^Δ	4.31	153.43		
B.20	8.50	152.66	11.37	144.16
T.P.	8.40	159.00	206	150.60
B.21 ^Δ			266	156.34
T.P.	7.60	161.74	0.84	158.14
T.P. ^Δ	8.51	172.76	1.49	164.25
B.22			6.00	166.76
T.P. ^Δ	6.38	176.05	3.09	169.67
B.23			6.85	169.20
T.P.	5.61	178.17	3.49	172.56
T.P.	7.09	178.48	4.78	171.39
B.24			6.78	171.70
T.P.	5.51	182.34	1.75	176.73
T.P.	10.89	192.85	0.38	181.96
B.25			+1.0	193.9
T.P.	9.33	200.25	1.83	191.02
T.P.	5.05	202.37	2.93	197.37
T.P.	4.35	205.58	1.04	201.33

very windy

3-22-16

4.05

3-23-15

STG	+ Rod	H.I.	- Ald	SLC
T.P. Δ		205.58		
B 96	7.36	207.73	5.21	200.37
T.P.	10.23	214.84	3.09	204.63
T.P. Δ				
B 97	1.74	214.12	2.48	212.38
T.P.	3.84	210.80	4.14	207.94
T.P.	12.80	220.70	2.90	207.90
B 98 Δ			0.2	220.50
T.P.	0.94	218.21	3.46	217.35
T.P.	3.30	208.90	12.61	205.60
T.P.	6.90	204.00	11.80	197.10
T.P.	12.12	209.27	6.85	197.15
T.P.	11.77	219.50	1.54	207.73
T.P. Δ	7.63	225.94	1.18	218.32
B 99			3.14	222.78
T.P.	3.54	220.78	7.72	218.22
T.P. Δ	6.58	226.37	0.99	219.79
T.P. Δ				
B 30	11.78	236.82	1.53	225.04

219.79
 1.33
 226.37
 1.33
 225.04
 11.78
 236.82

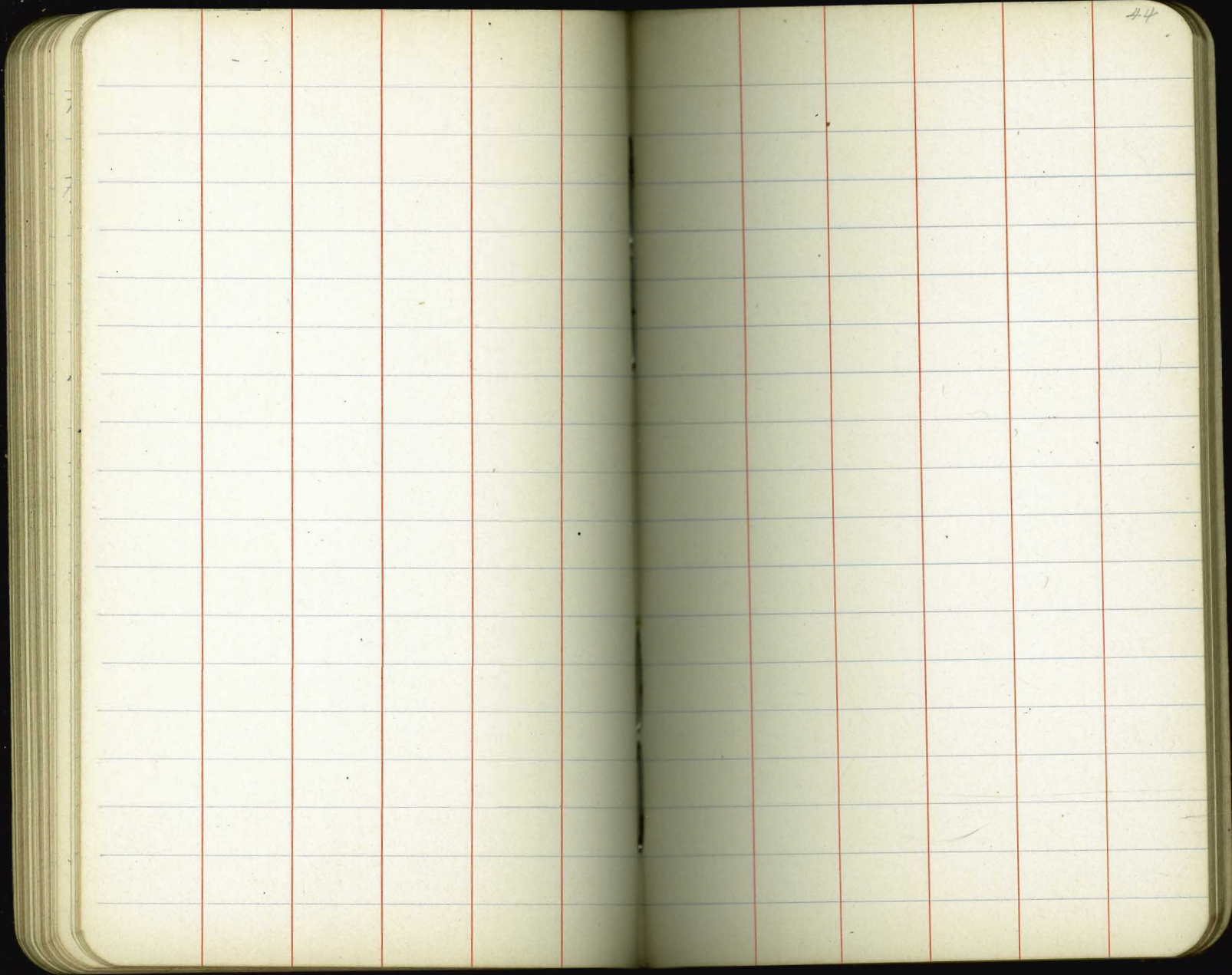
Sta	+	H.L.	-	Elev.
T.P.	7.74	233.58	10.90	225.82
T.P.				
B-31 Δ	10.00	236.84	6.76	226.84
T.P.	12.78	246.67	7.90	233.98
B-32 Δ			3.65	243.02
T.P.	10.16	248.48	8.35	238.32
B-33 Δ			3.04	245.44
T.P.	12.37	253.77	7.08	241.40
T.P.	9.95	261.19	2.53	251.24
B-34 Δ			7.30	253.89
T.P.	12.86		6.50	254.69
B-35 Δ			2.61	264.94
T.P.	3.42	268.14	2.83	264.72
B-36 Δ			4.98	263.16
T.P.	12.60	277.84	2.90	265.24
B-37 Δ			8.76	269.08
T.P.	0.34	266.76	11.92	265.92

246.67	40
3.65	
243.02	
248.48	
8.04	
248.44	236.82
261.19	10.90
2.53	225.82
253.89	7.76
267.53	233.58
2.61	6.76
264.94	226.82
268.14	10.00
4.98	236.84
263.16	2.90
277.84	233.98
8.76	12.78
269.08	246.67
	8.35
	238.32
	10.16
	248.48
	7.08
	241.40
	12.37
	253.77
	2.53
	251.24
	9.95
	261.19
	6.50
	254.69
	12.86
	267.53
	2.83
	264.72
	3.42
	268.14
	2.90
	265.24
	12.60
	277.84
	11.92
	265.92
	0.34
	266.76

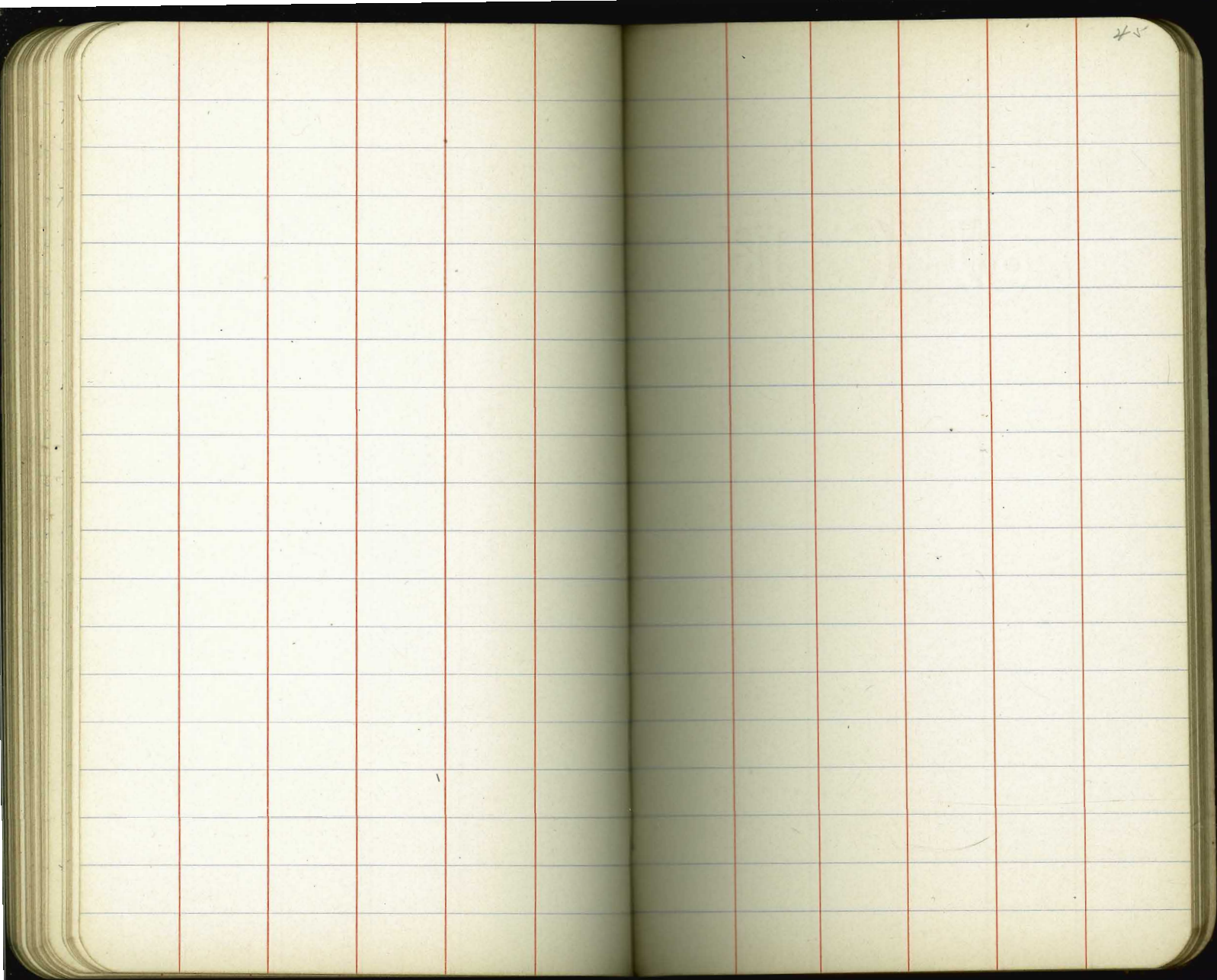
Sta.	+	H.I.	-	Elev.
T.P.				
B-38 A	11.20	275.17	2.29	263.97
T.P.	11.33	285.55	0.95	274.27
T.P.	12.20	297.10	0.65	284.90
T.P.	12.63	309.49	0.24	296.86
B-39 A			0.70	308.79
T.P.	10.41	311.59	8.31	301.19
T.P.	5.80	306.61	10.78	300.81
B-40 A			11.56	295.05
30' L.R.			5.20	301.41 = High Water
T.P.	9.37	302.93	13.05	293.56
T.P.	13.05	306.73	9.25	293.68
T.P.	12.62	316.96	7.39	304.34
B-41 A			1.17	315.79
8' L.			4.05	312.91 = High Water
B-42			5.27	311.69

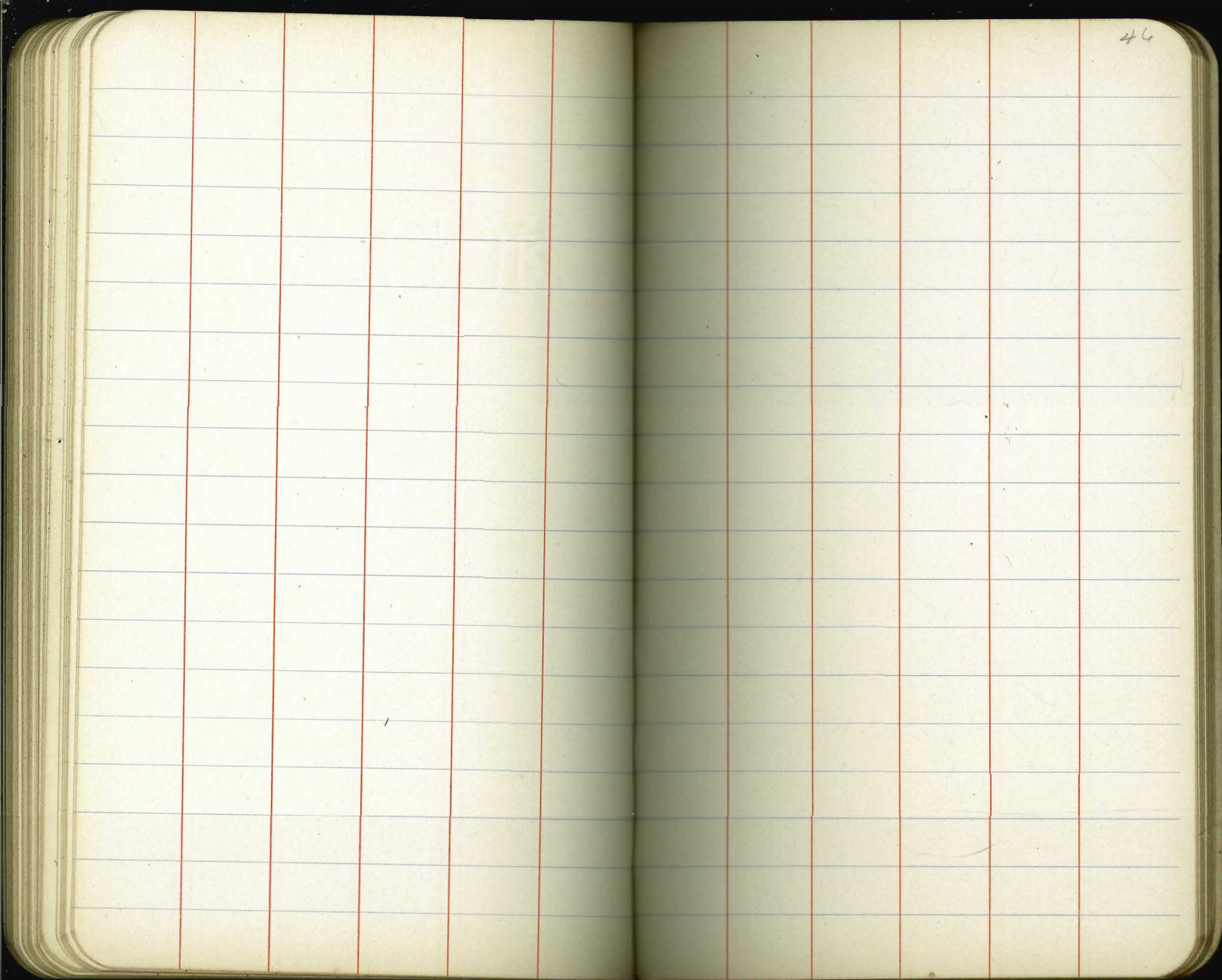
	41
309.49	
0.70	
308.79	266.26
306.61	2.39
11.56	263.97
295.05	11.20
306.61	275.17
0.20	2.45
301.41	274.22
316.96	11.33
1.17	285.55
315.79	0.65
316.96	284.90
4.05	12.20
312.91	297.10
316.96	0.24
5.27	296.86
311.69	12.03
	309.49
	8.31
	301.18
	10.41
	311.59
	10.78
	300.81
	5.80
	306.61
	13.05
	293.56
	7.37
	302.93
	9.25
	293.68
	12.62
	306.73
	2.39
	304.34
	12.62
	316.96

The image shows an open notebook with two facing pages. Both pages are cream-colored and feature horizontal blue ruling lines. Vertical red lines are drawn to create margins on both pages. The right page has the number '43' written in the top right corner. The notebook is bound in the center, and the pages appear slightly aged or off-white. There is no text or other markings on the pages.



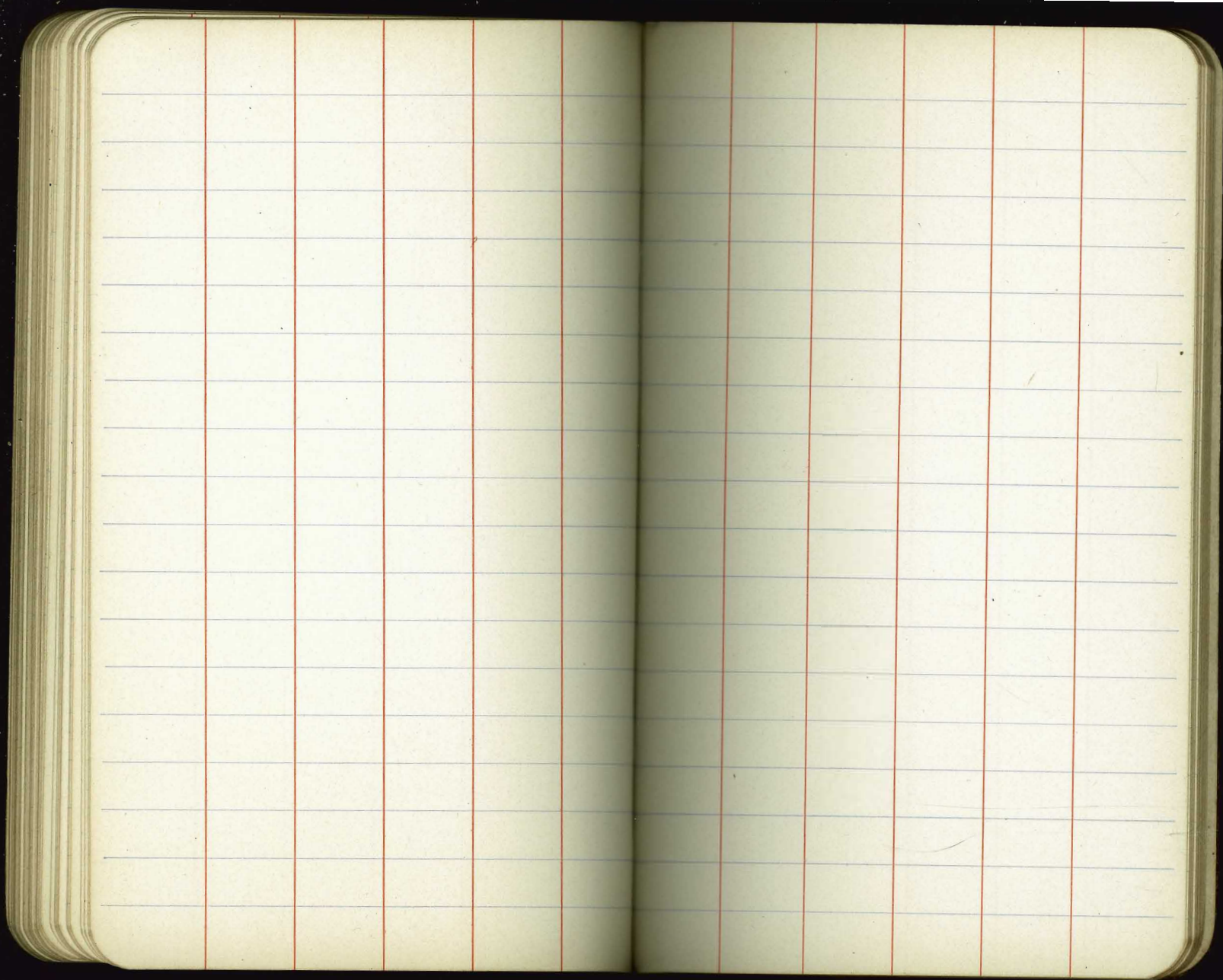
44





46

An open notebook with two blank, lined pages. The pages are cream-colored with horizontal blue ruling and vertical red margin lines. The right page has the number '47' written in the top right corner. The notebook is bound in the center, and the pages are slightly aged.



3-21-16

Ch. levels from Gov. B. TT at
Oley School to B.M. at 5014 Y.M.S.

BM	2.55	65.12	62.57
T.P.	9.83	70.87	40.8
T.P.	8.15	74.69	43.3
T.P.	1.94	71.50	51.3
T.P.	3.61	70.84	42.6
T.P.	3.39	67.88	63.6
T.P.	3.54	65.61	58.1
T.P.	3.31	62.35	65.7
T.P.	4.03	59.24	71.4
T.P.	8.84	57.31	10.77
T.P.	3.23	55.42	39.2
T.P.	0.42	48.65	73.9
T.P.	0.14	36.59	12.20
T.P.	0.02	23.69	12.92
T.P.	4.05	17.08	10.66
T.P.	3.93	16.40	4.61
B.M.		1.70	14.70

NG.

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r.

B.M. N-5 Cor Mexico & S. DRY
17.48

554

220.78
0.99
219.79
6.56
226.37

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	7.6	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.