

Cross-sections. Evans St.
Pierce Ave - M. St

GRADES FOR GAS-PIPE ON.
JULIAN AVE.

202

400

LEVEL

F.B. 202

Table showing the difference of latitude and departure in running 80 chains at any course from 1 to 60 minutes.

MINUTES	LKS.	MINUTES	LKS.	MINUTES	LKS.
1	2 1/3	21	49	41	95 2/3
2	4 2/3	22	51 1/3	42	98
3	7	23	53 2/3	43	100 1/3
4	9 1/3	24	56	44	102 2/3
5	11 2/3	25	58 1/3	45	105
6	14	26	60 2/3	46	107 1/3
7	16 1/3	27	63	47	109 2/3
8	18 2/3	28	65 1/3	48	112
9	21	29	67 2/3	49	114 1/3
10	23 1/3	30	70	50	116 2/3
11	25 2/3	31	72 1/3	51	119
12	28	32	74 2/3	52	121 1/3
13	30 1/3	33	77	53	123 2/3
14	32 2/3	34	79 1/3	54	126
15	35	35	81 2/3	55	128 1/3
16	37 1/3	36	84	56	130 2/3
17	39 2/3	37	86 1/3	57	133
18	42	38	88 2/3	58	135 1/3
19	44 1/3	39	91	59	137 2/3
20	46 2/3	40	93 1/3	60	140

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City Hall, San Diego, Cal.
TABLE FOR RUNNING ON SLOPES.

In the following table the first column shows the angle, the second the number of links to be added to a chain on the slopes, to make one chain, horizontal measurement.

Angle	COR. IN LINKS						
0		0		0		0	
4	0.24	11	1.88	18	5.14	25	10.54
5	0.38	12	2.24	19	5.76	26	11.26
6	0.55	13	2.63	20	6.42	27	12.24
7	0.76	14	3.06	21	7.11	28	13.37
8	0.98	15	3.53	22	7.85	29	14.34
9	1.24	16	4.02	23	8.64	30	15.47
10	1.55	17	4.56	24	9.47	35	22.07

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City Hall, San Diego, Cal.

Handwritten notes and numbers:
57.25
58.25
59.25
60.25
61.25
62.25
63.25
64.25
65.25
66.25
67.25
68.25
69.25
70.25
71.25
72.25
73.25
74.25
75.25
76.25
77.25
78.25
79.25
80.25
81.25
82.25
83.25
84.25
85.25
86.25
87.25
88.25
89.25
90.25
91.25
92.25
93.25
94.25
95.25
96.25
97.25
98.25
99.25
100.25

Hatch
Melmore
Dorner

1/105

H (Evans)

28

1

North line Pierce - South line N.

20th & main -

BM

3.79

30.37

26.58

N. line Pierce

W

10.5

19.9

10.5

19.9

10.5

19.9

C

10.3

20.1

10.2

20.2

10.3

20.1

E

10.0

20.4

25' N. of Pierce

E

9.6

20.8

9.7

20.7

9.9

20.5

C

10.0

20.4

10.1

20.3

10.3

20.1

30.37

W	10.1	20 3
50' N of Pine		
W	9.6	20 8
	9.5	20 9
	9.4	21 0
C	9.5	20 9
	9.3	21 1
	9.3	21 1
E	9.3	21 1
75' N of Pine		
E	8.7	21 7
	8.7	21 7
	8.7	21 7
C	9.0	21 4
	9.1	21 3
	9.0	21 4

30.37

W	9.0	21 4
100' N of Pine		
W	8.2	22 2
	8.4	22 0
	8.5	21 9
C	8.5	21 9
	8.4	22 0
	8.3	22 1
E	8.4	22 0
125' N of Pine		
E	7.9	22 5
	7.8	22 6
	7.9	22 5
C	8.3	22 1
	8.1	22 3
	8.2	22 2

30.37

W		8.3	22 1
	140' N of Pier		
W		7.9	22 5
		8.0	22 4
		7.9	22 5
C		7.9	22 5
		7.6	22 8
		7.8	22 6
E		7.7	22 7
	160' N of Pier		
E		7.0	23 4
		6.9	23 5
		6.8	23 6
C		7.3	23 1
		7.2	23 2
		7.4	23 0

30.37

W		7.2	23 2
	175' N of Pier		
W		7.3	23 1
		7.2	23 2
		7.1	23 3
C		7.1	23 3
		6.3	24 1
		6.3	24 1
E		6.5	23 9
	200' N of Pier		
E		5.9	24 5
		6.1	24 3
		6.2	24 2
C		6.7	23 7
		6.6	23 8
		6.7	23 7
W		7.0	23 4

3037
225' N of Pierce

W	6.4	240
	6.3	241
	6.3	241
C	6.2	242
	5.9	245
	5.8	246
E	5.6	248

250' N of Pierce

E	4.8	256
	5.2	252
	5.5	249
C	5.5	249
	5.5	249
	5.6	248
W	5.7	247

30.37
275' N of Pierce

W	5.2	252
	5.1	253
	5.0	254
C	4.8	256
	4.8	256
	4.6	258
E	4.5	259

300' N of Pierce - S. line Main

E	4.0	264
	4.1	263
	4.2	262
C	4.7	260
	4.6	259
	4.7	257
W	4.8	256

30.37
 x. side of Main

W	2.7	277
	2.4	280
	2.2	282
C	2.1	283
	2.1	283
	1.9	285
E	1.7	287
25' N of Main		
F	0.9	295
	0.4	300
	0.8	296
C	1.3	291
	1.6	288
	1.9	285
W	2.0	284

30.37
 50' N of Main

W	1.1	293
	0.9	295
	0.5	299
C	0.5	299
	0.4	300
	0.1	303
E	+0.3	30.7
T.P.	11.44	41.45 036 30.01
75' N of Main		
E	10.0	315
	10.0	315
	10.5	310
C	10.7	308
	10.9	306
	11.1	304
N	11.3	302

41.45

100' N of main

W	10.2	31 3
	10.1	31 4
	9.7	32 1
C	9.6	31 9
	9.6	31 9
	9.1	32 4
E	8.7	32 8

126' N of main

E	7.8	33 7
	8.1	33 4
	8.6	33 9
C	8.6	32 9
	8.4	33 1
	8.7	32 8
W	9.3	32 2

41.45

140' N of main

W	8.8	32 7
	8.3	33 2
	8.1	33 4
C	8.3	33 2
	7.7	33 8
	7.3	34 2
E	7.1	34 4

160' N of main

E	6.9	34 6
	7.0	34 5
	7.4	34 1
C	7.5	34 0
	7.5	34 0
	7.7	33 8
W	8.1	33 4

41.45
175' N of Main

W	7.8	33.7
	7.3	34.2
	7.0	34.5
C	6.9	34.6
	6.6	34.9
	6.4	35.1
E	6.3	35.2

200' N of Main

E	5.5	36.0
	5.7	35.8
	5.9	35.6
C	6.4	35.1
	6.3	35.2
	6.7	34.8
W	6.8	34.7

41.45
225' N of Main

W	5.7	35.8
	5.7	35.8
	5.6	35.9
C	5.5	36.0
	5.1	36.4
	5.1	36.4
E	5.1	36.4

250' N of Main

E	4.7	36.8
	4.8	36.7
	5.0	36.5
C	5.3	36.2
	5.4	36.1
	5.5	36.0
W	5.6	35.9

41.45

275' N of main

W	4.9	36 6
	4.5	37 0
	4.5	37 0
E	4.6	36 9
	4.7	37 1
	4.2	37 3
E	3.9	37 6

300' N of main - 5 line Newton

E	3.6	37 9
	3.6	37 9
	3.8	37 7
C	4.0	37 5
	3.9	37 6
	4.2	37 3
W	4.5	37 0

41.45

5. Co. Newton

W	4.2	37 3
	3.7	37 8
	3.5	38 0
C	3.6	37 9
	3.4	38 1
	3.2	38 3
E	3.1	38 4

5 1/4 Newton

E	2.5	39 0
	2.9	38 6
	3.3	38 2
C	3.4	38 1
	3.3	38 2
	3.4	38 1
W	3.5	38 0

41.45

ϕ of Newton

W	- Top of Trees -		
	3.6	379	
	3.4	381	
	3.3	382	
S	3.2	383	
	2.1	384	
	3.2	383	
E	3.2	383	

N 1/4 Newton

E	1.9	396	
	2.5	390	
	2.7	388	
C	2.8	387	
	2.7	388	
	2.4	391	
W	2.7	388	

41.45

N. Cb. Newton

W	2.4	391	
	2.2	393	
	2.0	395	
C	2.2	393	
	2.2	393	
	2.0	390	
E	1.9	396	

N line Newton

E	1.2	403	
	1.2	403	
	1.4	401	
C	1.5	400	
	1.3	402	
	1.7	398	
W	2.0	395	

41.95

25' N. of Newton

W	1.3	40 2
	1.0	40 5
	1.0	40 5
C	0.7	40 8
	0.6	40 9
	0.3	41 2
E	0.1	41 4

T.P. 12.79 51.06 3.13 38.32

x 50' N of Newton

E	9.2	41 9
	9.3	41 8
	9.5	41 6
C	9.7	41 4
	9.7	41 4
	9.9	41 2
W	9.9	41 2

51.06

75' N of Newton

W	9.2	41 9
	9.0	42 1
	8.8	42 3
C	8.7	42 4
	8.7	42 4
	8.3	42 8
E	8.3	42 8

100' N of Newton

E	7.7	43 4
	7.7	43 4
	7.9	43 2
C	8.1	43 0
	8.1	43 0
	8.2	42 9
W	8.1	43 0

51.06

125' N of Newton

W	7.2	43.9
	7.1	44.0
	7.1	44.0
C	7.2	43.9
	7.0	44.1
	6.7	44.4
E	6.6	44.5

140' N of Newton

E	5.9	45.2
	6.1	45.0
	6.4	44.7
C	6.6	44.5
	6.5	44.6
	6.4	44.7
W	6.4	44.7

11

51.06

160' N of Newton

W	6.0	45.1
	5.8	45.3
	5.7	45.4
C	5.8	45.3
	5.6	45.5
	5.5	45.6
E	5.5	45.6

175' N of Newton

E	5.1	46.0
	5.0	46.1
	5.1	46.0
C	5.2	45.9
	5.3	45.8
	5.0	46.1
W	4.6	46.5

5106

200' N of Newton

W	4.0	471
	4.2	469
	4.3	468
C	4.2	469
	4.0	471
	3.9	472
E	3.7	474

225' N of Newton

E	2.5	486
	2.8	483
	3.1	480
C	3.0	481
	3.1	480
	3.2	479
W	3.5	476

5106

250' N of Newton

W	2.2	489
	1.9	492
	2.0	491
C	2.0	491
	1.9	492
	1.4	497
E	1.3	498

275' N of Newton

E	0.3	508
	0.7	504
	0.7	504
C	0.7	504
	0.7	504
	0.6	505
W	0.9	502
TP	11.97	62.76
	0.27	50.79

6276

300' N of Newton - S Line National

W	11.5	513
	11.6	512
	12.0	508
C	11.9	509
	11.8	510
	11.7	511
E	11.7	511
	N line National	
E	10.1	527
	11.5	513
	10.3	525
C	9.9	529
	8.3	545
	8.0	548
W	8.0	548

$$\frac{1069}{5207} \text{ stick } 5208$$

6276

25' N of National

W	6.5	563
	6.8	560
	7.3	555
C	8.0	548
	8.5	543
	8.6	542
E	8.2	546
	50' N of National	
E	7.5	553
	8.0	548
	7.3	555
C	7.1	557
	6.5	563
	5.8	570
W	5.4	574

62.76

75' N of National

W	3.3	59.5
	3.8	59.0
	4.8	58.0
C	6.0	56.8
	6.6	56.2
	7.7	55.1
E	7.0	55.8

100' N of National

E	6.1	56.7
	6.6	56.2
	5.3	57.5
C	3.7	59.1
	2.7	60.1
	1.8	61.0
W	1.2	61.6

62.76

125' N of National

W	+0.9	63.2
	0.3	62.5
	1.1	61.7
C	1.6	61.2
	4.0	58.8
	5.2	57.6
E	5.3	57.5

140' N of National

E	4.5	58.3
	4.4	58.4
	4.0	58.8
C	1.7	61.1
	0.7	62.1
	+0.1	62.9
W	+1.0	63.8

6276

160' N of National

W	0.4	624
	1.6	612
	2.2	606
C	2.7	601
	3.6	592
	4.7	581
E	4.4	584

175' N of National

E	4.1	587
	3.7	591
	4.4	584
C	3.4	594
	3.1	597
	2.4	604
W	1.7	611

6276

200' N of National

W	1.9	609
	2.7	601
	3.6	592
C	4.0	588
	4.1	587
	3.5	593
E	4.1	587

225' N of National

E	4.0	588
	3.7	591
	4.1	587
C	4.2	586
	4.1	587
	3.2	596
W	2.2	606

6276

250' N of National

W	2.1	607
	3.4	594
	4.0	588
C	4.0	588
	3.6	592
	3.4	594
E	3.7	591

275' N of National

E	4.0	588
	3.0	598
	2.7	601
C	3.9	589
	3.4	594
	3.2	596
W	3.0	598

6276

300' N of National - S line Logan

W	0.9	619		
	1.1	617		
	1.8	610		
C	1.9	609		
	1.7	611		
	1.4	614		
E	0.5	623		
T.P.	11.36	73.38	0.74	62.02

N line Logan

W	10.1	63.3
	10.3	63.1
	10.7	62.7
C	10.4	63.0
	10.3	63.1
	10.4	63.0
E	10.1	63.3

Curb on west

73.38

25' N. of Logan

E		9.4	640
	Curb on west	9.9	635
		9.9	635
C		10.2	632
		10.2	632
		9.7	637
W		9.6	638

50' N. of Logan

W		8.6	648
		8.8	646
		9.1	643
C		9.0	644
		8.6	648
		8.6	648
E		8.0	654

73.38

75' N. of Logan

E		7.3	661
	Curb on west	7.7	657
		7.2	662
C		8.0	654
		8.3	651
		8.4	650
W		8.1	653

100' N. of Logan

W		7.5	659
		7.6	658
		7.7	656
C		7.5	659
		6.7	667
		7.0	664
E		6.7	670

7338

125' N of Logan

E	5.9	67.5
	6.5	66.9
	6.5	66.9
C	7.1	66.3
	7.6	65.8
	7.0	66.4
W	6.8	66.6

Ourban West

↓

140' N of Logan

W	7.7	65.7
	7.3	66.1
	7.1	66.3
C	6.9	66.5
	6.1	67.3
	6.5	66.9
E	6.0	67.4

7338

160' N of Logan

E	5.3	68.1
	5.1	68.3
	5.8	67.6
C	7.0	66.4
	6.7	66.7
	7.2	66.2
W	7.2	66.2

175' N of Logan

W	7.0	66.4
	7.0	66.4
	6.8	66.6
C	6.9	66.5
	5.6	67.8
	5.2	68.2
E	5.2	68.2

7338
200' N of Logan

E	5.1	683
	5.2	682
	6.4	670
⊙	6.4	670
	6.5	669
	6.7	667
W	6.8	666

225' N of Logan

W	5.7	677
	5.7	677
	5.9	675
⊙	6.2	672
	5.4	680
	4.8	686
E	4.6	688

7338
250' N of Logan

E	4.2	692
	4.5	689
	4.7	687
⊙	5.3	681
	5.2	682
	5.0	684
W	5.0	684

275' N of Logan

W	4.2	692
	4.3	691
	4.3	691
⊙	4.2	692
	3.9	695
	3.8	696
E	3.5	699

7338

300' N of Logan - S line Kearney

E	2.6	70.8
	2.9	70.3
C	3.5	69.9
	3.6	69.8
	4.0	69.4
	3.4	70.0
W	3.2	70.2

75' of narrow
Cement walk on
West side

8m 11.23 81.75 2.88 70.50 70.52

N line Kearney

W	8.5	73.3
	8.8	73.0
	8.7	73.1
C	8.7	73.1
	8.5	73.3
	7.9	73.9
E	8.0	73.8

81.75

25' N of Kearney

E	7.4	74.4
	7.6	74.2
	7.5	74.3
C	7.8	74.0
	8.0	73.8
	8.4	73.4
W	7.7	74.1

50' N of Kearney

W	6.8	75.0
	7.1	74.7
	7.2	74.6
C	7.2	74.6
	7.0	74.8
	6.7	75.1
E	6.6	75.2

81.75

75' N of Kearney

E	6.0	75.8
	5.6	76.2
	6.3	75.5
C	6.4	75.4
	6.3	75.5
	6.1	75.7
W	6.0	75.8

100' N of Kearney

W	5.3	76.5
	5.3	76.5
	5.6	76.2
C	5.6	76.2
	5.5	76.3
	5.4	76.4
E	5.2	76.6

81.75

125' N of Kearney

E	4.7	77.1
	4.8	77.0
	4.5	77.3
C	4.6	77.2
	4.6	77.2
	4.4	77.4
W	4.4	77.4

140' N of Kearney

W	4.1	77.7
	4.1	77.7
	4.2	77.6
C	4.2	77.6
	4.1	77.7
	4.1	77.7
E	4.2	77.6

8175

160' N of Kearney

E	3.8	780
	3.6	782
	3.4	784
C	3.5	783
	3.9	779
	3.4	784
W	3.1	787

175' N of Kearney

W	2.4	794
	2.8	790
	3.3	785
C	2.9	789
	2.8	790
	3.1	787
E	2.0	788

8175

200' N of Kearney

E	2.1	797
	2.4	794
	2.0	798
C	2.0	798
	1.9	799
	1.8	800
W	1.5	803

225' N of Kearney

W	0.4	814
	0.5	813
	0.7	811
C	1.3	805
	1.1	807
	1.0	808
E	0.8	810

	81.75		
T.P. 7.94	89.59	0.10	81.65
	250' N of Kearney.		
E	7.9	81	7
	8.2	81	4
	8.2	81	4
C	8.2	81	4
	7.8	81	8
	7.7	81	9
W	7.3	82	3
	275' N of Kearney		
W	6.8	82	8
	7.0	82	6
	7.0	82	6
C	7.3	82	3
	7.2	82	4
	7.1	82	5
E	7.1	82	5

	89.59		
	300' N of Kearney - S. line Julian		
E	6.3	83	3
	6.2	83	4
	6.7	83	2
C	6.3	83	3
	6.1	83	5
	6.3	83	3
W	6.4	83	4
	N. line of Julian.		
E	3.7	85	9
	4.0	85	6
	4.3	85	3
C	4.3	85	3
	4.2	85	4
	4.4	85	2
W	5.0	84	6

89.59

25' N of Julian

W	4.3	85 3
	3.8	85 8
	3.7	85 9
C	3.9	85 7
	3.9	85 7
	3.3	86 3
E	3.2	86 4

50' N of Julian

E	2.8	86 8
	2.8	86 8
	3.2	86 4
C	3.3	86 3
	3.2	86 4
	3.5	86 1
W	4.2	85 4

89.59

75' N of Julian

W	3.7	85 9
	3.5	86 1
	2.8	86 8
C	2.6	87 0
	2.6	87 0
	2.9	87 2
E	2.2	87 4

100' N of Julian

E	1.8	87 8
	1.9	87 7
	2.2	87 4
C	2.1	87 5
	2.2	87 4
	2.6	87 0
W	3.3	86 3

8939

125' N of Julian

W	3.2	864
	2.2	874
	1.5	881
C	1.2	884
	1.8	878
	1.6	880
E	1.5	881

140' N of Julian

E	1.4	882
	1.7	879
	1.9	877
C	1.4	882
	1.7	879
	2.1	875
W	3.2	864

89.59

89.53 89.93 0.14 89.75 89.40

160' N of Julian

W	3.7	862
	3.3	866
	2.6	873
C	2.4	875
	2.7	872
	2.4	875
E	1.4	885

175' N of Julian

E	1.7	882
	2.8	871
	3.0	869
C	3.2	867
	3.3	866
	4.0	859
W	4.9	855

8993

200' N of Julian

W	3.5	84 4
	5.7	84 8
	4.6	85 3
C	4.2	85 7
	3.8	86 1
	3.7	86 2
E	3.2	86 7

225' N of Julian

E	4.0	85 9
	4.6	85 3
	4.8	85 1
C	5.1	84 7
	3.5	84 4
	5.9	84 0
W	6.1	83 8

8993

250' N of Julian

W	6.8	83 1
	6.5	83 4
	6.2	83 7
C	5.8	84 1
	5.5	84 4
	5.1	84 8
E	4.5	85 4

275' N of Julian

E	5.0	84 9
	5.9	84 0
	6.1	83 8
C	6.7	83 2
	7.0	82 9
	7.2	82 7
W	7.7	82 2

8993

300 N. of Julian - Sline Irving

VV	7.8	81 8
	8.5	81 4
	7.3	82 6
Q	6.7	83 2
	6.7	83 2
	7.0	82 9
E	5.9	84 0

S. Ch. Irving

E	6.2	83 7
	7.1	82 8
	7.5	82 4
C	7.9	82 0
	8.5	81 4
	9.1	80 8
W	9.5	80 4

8993

S 1/4 Irving

W	9.8	80 1
	9.3	80 6
	8.7	81 2
C	8.4	81 5
	7.9	82 0
	7.4	82 5
E	6.7	83 2

S Irving.

E	7.2	82 7
	7.7	82 2
	8.4	81 5
C	8.6	81 3
	9.2	80 7
	9.5	80 4
W	9.8	80 1

8993

N 1/4 Irving

W	9.7	80 2
	9.6	80 3
	9.1	80 8
C	8.6	81 3
	8.0	81 9
	7.4	82 5
E	6.4	83 5

N Ch. Irving

E	6.5	83 4
	7.2	82 7
	8.3	81 6
C	8.6	81 3
	8.8	81 1
	9.4	80 5
W	10.0	79 9

Hatch
McIntire
Blanco

1/10/05

8993

N. line Irving

W	10.4	79 5
	10.0	79 9
	9.3	80 6
C	8.8	81 1
	8.5	81 4
	7.5	81 4
E	7.1	82 8

B.M.

992

91.77

81.85

25' N of Irving

(1/10/05)

E	9.9	81 9
	10.4	81 4
	11.2	80 6
C	11.3	80 5
	12.0	79 8
	12.5	79 3
W	12.5	79 3

7/8/05

9177

50' N of Irving

W 13.9 77 9

13.5 78 3

13.1 78 7

C 12.5 79 3

12.2 79 6

11.7 80 1

E 11.6 80 2

75' N of Irving

E 11.8 80 0

12.5 79 3

13.0 78 8

C 13.2 78 6

13.5 78 3

13.9 77 9

W 14.4 77 2

29

9177

100' N of Irving

W 14.4 77 4

13.8 78 0

13.6 78 2

C 13.2 78 6

12.9 78 9

12.5 79 3

E 12.3 79 6

125' N of Irving

E 9.8 82 0

10.0 81 8

11.8 80 0

C 12.3 79 5

12.9 78 9

13.2 78 6

W 13.6 78 2

9177

140 n of Irving

W	13.5	783
	12.4	794
	11.9	799
C	11.5	803
	11.0	808
	9.3	825
E	8.8	830

160 n of Irving

E	7.3	845
	8.2	836
	9.7	821
C	10.1	817
	10.8	810
	11.8	800
W	12.0	798

9177

175 n of Irving

W	10.7	811
	10.4	814
	9.6	822
C	8.9	829
	8.3	835
	6.7	851
E	6.0	858

200 n of Irving

E	4.8	870
	5.5	863
	6.5	853
C	7.0	848
	7.8	840
	8.2	836
W	8.4	834

9177
225 n of Irving

W	6.8	850
	6.1	857
	5.5	863
C	6.0	858
	5.9	864
	4.5	873
E	3.9	879

230 N of Irving

E	3.6	882
	4.0	878
	4.7	871
C	5.0	868
	5.1	867
	5.3	865
W	5.4	864

9177
275 n of Irving

W	5.3	865
	5.0	868
	4.5	873
C	4.5	873
	4.1	877
	3.7	881
E	3.4	884

300 n of Irving - S line Harris

E	2.9	889
	3.1	887
	3.8	880
C	4.2	876
	4.4	874
	4.9	869
W	5.2	866

9177

N. line Harrison

W	6.7	851
	6.4	853
	5.8	860
C	5.2	866
	4.6	872
	4.5	873
E	4.1	877

25' N of Harrison

E	3.9	879
	4.5	873
	4.6	872
C	5.1	867
	5.5	863
	6.7	851
W	6.1	857

9177

50' N of Harrison

W	5.1	867
	5.2	866
	5.0	868
C	4.7	871
	4.7	871
	4.5	873
W	4.3	875

75' N of Harrison

E	3.4	884
	3.9	879
	4.0	878
C	4.2	876
	4.4	874
	4.2	876
W	4.3	875

9177

100' N of Harrison

W	3.3	885
	3.5	883
	3.5	883
C	3.4	884
	3.2	886
	3.0	888
E	3.0	888

125' N of Harrison

E	2.0	898
	2.0	898
	2.2	896
C	2.6	892
	2.8	890
	2.6	892
W	2.6	892

9177

170' N of Harrison

W	1.3	905
	2.3	895
	2.0	898
C	1.9	899
	1.7	901
	1.3	905
E	1.5	903

TP 1260 10371 666 9111
160' N of Harrison

E	11.7	920
	11.8	919
	12.1	916
C	12.2	915
	12.4	913
	11.4	923
W	11.5	919

	10371	
	175' N of Harrison	
W	10.0	93.7
	10.2	93.5
	10.9	92.8
C	10.5	93.2
	10.6	93.1
	10.5	93.2
E	10.7	93.0
	200' N of Harrison	
E	8.6	95.1
	9.0	94.7
	9.3	94.4
C	9.2	94.5
	9.3	94.4
	9.1	94.6
W	8.7	95.0

	10371	
	225' N of Harrison	
W	6.9	96.8
	7.2	96.5
	7.4	96.3
C	7.5	96.2
	7.8	95.9
	7.7	96.0
E	7.3	96.4
	250' N of Harrison	
E	5.5	98.2
	5.5	98.2
	5.5	98.2
C	5.2	98.5
	5.1	98.6
	4.8	98.9
W	4.6	99.1

Bm. $\frac{1.85}{101.86}$
 101.83 ch.

103.71

275' N of Harrison

W	2.9	100 8
	2.9	100 8
	2.9	100 8
C	3.1	100 6
	3.0	100 7
	3.0	100 7
E	3.3	100 4

5 line Grant.
 300' N of Harrison

E	2.5	101 2
	2.0	101 7
	2.1	101 6
C	2.1	101 6
	2.5	101 2
	2.5	101 2
W	2.4	101 3

103.71

5 cb. Grant

W	2.5	101 2
	2.5	101 2
	2.5	101 2
C	2.2	101 5
	2.3	101 4
	2.2	101 5
E	2.4	101 3

5 1/4 Grant

E	2.7	101 0
	2.8	100 9
	2.4	101 3
C	2.3	101 4
	2.6	101 1
	2.5	101 2
W	2.5	101 2

103.71

P Grant

W	3.1	1006
	3.2	1005
	3.1	1006
C	2.9	1008
	3.0	1007
	3.3	1004
E	3.6	1001

N. 1/4 Grant

E	4.6	991
	4.3	994
	4.0	997
C	3.6	1001
	3.9	998
	3.8	999
W	3.5	1002

103.71

N. Cb. Grant

W	4.5	992
	5.1	986
	4.9	988
C	4.8	989
	5.5	982
	6.0	977
E	6.2	975

N. line Grant

E	8.6	951
	8.5	952
	8.1	956
C	7.8	959
	7.7	960
	7.4	963
W	7.0	967

10371

25' N of Grant.

W	8.1	95 6
	10.0	93 7
	10.3	93 4
C	10.6	93 1
	10.4	93 3
	10.6	93 1
E	11.7	92 0

50' N of Grant.

E	14.2	89 5
	14.2	89 5
	14.0	89 7
C	13.3	90 4
	12.7	91 0
	12.8	90 9
W	13.0	90 7

103.71

T.P.

0.57

91.94

1234

91.37

75' N of Grant.

W	4.8	87 1
	4.8	87 1
	4.3	87 6
C	4.6	87 3
	5.1	86 8
	5.2	86 7
E	5.4	86 5

100' N of Grant.

E	7.2	84 7
	7.0	84 9
	6.6	85 3
C	6.7	85 2
	7.1	84 8
	7.2	84 7
W	7.4	84 5

91.94

125' N of Grant

W	9.4	82 5
	9.5	82 4
	8.1	83 8
C	7.4	84 5
	6.9	85 0
	7.6	84 3
E	8.6	83 3

140' N of Grant.

E	11.6	80 3
	11.0	80 9
	10.7	81 2
C	10.7	81 2
	10.8	81 1
	10.1	81 8
W	9.4	82 5

91.94

160' N of Grant

W	10.3	81 6
	11.3	80 6
	11.3	80 6
C	11.6	80 3
	12.1	79 8
	12.3	79 6
E	12.5	79 4

175' N of Grant.

E	12.6	79 3
	12.8	79 1
	12.5	79 4
C	11.9	80 0
	11.4	80 5
	12.1	79 8
W	12.1	79 8

91.94

200' N of Grant

W	12.7	79.2
	13.0	78.9
	14.0	77.9
C	14.2	77.7
	14.4	77.5
	14.3	77.6
E	14.0	77.9
T.P. 0.23	79.13	13.04
225' N of Grant	78.90	
E	0.1	79.0
	0.6	78.5
	1.1	78.0
C	1.6	77.5
	2.0	77.1
	1.7	77.4
W	1.5	77.6

79.13

250' N of Grant.

W	2.3	76.8
	2.5	76.6
	2.2	76.9
C	1.8	77.3
	2.1	77.0
	2.2	76.9
E	2.4	76.7
275' N of Grant -		
E	4.2	74.9
	4.0	75.1
	3.9	75.2
C	3.8	75.3
	3.7	75.4
	3.7	75.7
W	3.3	75.8

38

8m $\frac{579}{75.90}$
78.38 elect

7913

300' N of Grand - S line Franklin

W	4.2	74.9
	4.7	74.4
	4.8	74.3
C	4.9	74.2
	4.7	74.4
	4.3	74.8
E	4.4	74.7

S. Cb. Franklin

E	5.9	73.2
	6.1	73.0
	6.0	73.1
C	6.0	73.1
	5.7	73.4
	5.8	73.3
W	5.7	73.4

40

7913

S. 1/4 Franklin

W	6.1	73.0
	6.1	73.0
	6.1	73.0
C	6.3	72.8
	6.5	72.6
	6.7	72.4
E	6.3	72.8

C Franklin

E	7.0	72.1
	7.2	71.9
	7.0	72.1
C	6.7	72.4
	6.8	72.3
	6.8	72.3
W	6.8	72.3

01

7913

N 1/4 Franklin

W	7.2	71 9
	7.5	71 6
	7.5	71 6
C	7.4	71 7
	7.3	71 8
	7.2	71 9
E	7.5	71 6
	N Eb. Franklin	
E	7.3	71 8
	7.5	71 6
	8.0	71 1
C	7.9	71 2
	7.9	71 2
	7.8	71 3
W	7.6	71 5

7913

N line Franklin

W	8.5	70 6
	8.7	70 4
	9.3	69 8
C	9.0	70 1
	9.0	70 1
	9.0	70 1
E	8.0	71 1
	25' N of Franklin	
E	8.5	70 6
	9.1	70 0
	9.6	69 5
C	10.6	68 5
1/4	10.2	68 9
TP	2.42	71.32
db.	10.23	68.90
	1.7	69 6
W	1.5	69 8

71.32

50' N of Franklin

W	2.1	69.2
	2.5	68.8
	3.1	68.2
C	2.9	68.4
	2.6	68.7
	2.3	69.0
E	1.5	69.8

75' N of Franklin

E	2.2	69.1
	2.7	68.6
	3.3	68.0
C	3.6	67.7
	3.6	67.9
	3.5	67.8
W	3.3	68.0

71.32

100' N of Franklin

W	3.4	67.7
	3.9	67.4
	3.9	67.4
C	3.9	67.4
	3.7	67.6
	3.4	67.9
E	2.9	68.4

125' N of Franklin

E	2.1	69.2
	3.2	68.1
	3.9	67.4
C	4.3	67.0
	4.1	67.2
	4.0	67.3
W	4.4	66.9

7.32

140 N of Franklin

W	4.2	671
	4.4	669
	4.3	670
C	4.9	669
	3.9	674
	3.5	678
E	2.8	685

160 N of Franklin

E	3.3	680
	3.6	677
	3.9	674
C	4.3	670
	4.9	669
	4.7	666
W	4.9	664

7.32

175' N of Franklin

W	5.7	659
	4.7	666
	4.5	668
C	4.6	667
	4.4	669
	4.0	673
E	3.3	680

200' N of Franklin

E	4.0	673
	4.3	670
	4.7	666
C	4.8	665
	4.8	665
	4.8	665
W	5.3	660

7132

225' N of Franklin

W	5.3	66.0
	5.2	66.1
	5.0	66.3
C	5.0	66.3
	4.9	66.4
	4.9	66.4
E	3.9	67.4

250' N of Franklin

E	3.7	67.6
	4.9	66.4
	5.1	66.2
C	5.1	66.2
	5.1	66.2
	5.1	66.2
W	5.5	65.8

7132

275' N of Franklin

W	5.1	66.2
	5.0	66.3
	4.9	66.4
C	4.6	66.7
	4.7	66.6
	4.4	66.9
E	3.8	67.5

300' N of Franklin
5 line of Everett

E	3.5	67.8
	3.8	67.5
	3.9	67.4
C	4.0	67.3
	4.1	67.2
	4.2	67.1
W	4.2	67.1

	165.	70.35	68.70
	25' N of Everett.		
E	3.2		67.2
	3.3		67.1
	4.2		66.2
C	3.9		66.5
	4.1		66.3
	3.5		66.9
W	3.3		67.1
	50' N of Everett.		
W	3.1		67.3
	3.6		66.8
	4.7		65.7
C	4.7		65.7
	4.5		65.9
	4.0		66.4
	3.6		66.8

	70.35	
	75' N of Everett.	
E	4.4	66.0
	4.6	65.8
	5.2	65.2
C	5.4	65.0
	5.2	65.2
	5.1	65.3
W	4.2	66.2
	100' N of Everett.	
W	5.7	64.7
	5.7	64.7
	5.7	64.7
C	5.9	64.5
	5.8	64.6
	5.4	65.0
E	5.6	64.8
	112' N of Everett.	
E	5.8	64.6
	6.7	64.0

70.35

	6.5	63	9	
C	6.7	64	0	
	6.1	64	3	
	5.8	64	6	
W	5.6	64	8	
W	(127) ?' n of Everett. S line N St	62	9	
	7.5	62	9	
	7.3	63	1	
	7.2	63	2	
C	6.7	63	7	
	6.8	63	6	
	7.1	63	3	
E	5 Ch. N St	6.7	64	0
E		7.1	63	3
cb.		7.2	63	2
1/4		7.0	63	4
C		5.5	64	9
1/4		6.4	64	0
cb.		6.6	63	8
W		6.7	63	7

70.35
S 1/4 N St

W	5.4	65.0
cb.	5.3	65.1
1/2	5.3	65.1
C	5.0	65.4
1/4	5.0	65.4
cb.	5.0	65.4
E	4.9	65.5

} Center
of S. Ry
Track

33' from S. line N.

E	6.2	64	2
cb.	6.4	64	0
1/2	6.0	64	0
C	5.7	65	0
1/4	6.3	64	1
cb.	6.7	63	7
W	6.7	63	7

C N St

W	6.2	64	2
cb.	6.1	64	3
1/4	6.0	64	4
C	5.8	64	6
1/4	5.9	64	5
cb.	5.7	64	7
E	5.7	64	7

7135
7' N of Center of N St

E	6.9	63 5
cb.	6.2	64 2
1/4	6.3	64 1
C	6.0	64 4
1/4	6.9	63 5
cb.	7.0	63 4
W	6.7	63 7

N 1/4 N St.

W	8.2	62 2
cb.	8.3	62 1
1/4	8.0	62 4
C	6.6	63 8
1/4	6.6	63 8
cb.	7.8	62 6
E	8.0	62 4

N cb. N St.

E	7.7	62 7
cb.	7.6	62 8
1/4	7.4	63 0
C	6.8	63 6
1/4	7.4	63 0
cb.	7.5	62 9
W	7.7	62 7

7/5/05 3.89 7132 70.76 440 66.92

N line N St

E	7.6	63 2
	7.6	63 2
	7.5	63 3
C	7.5	63 3
	7.9	62 9
	8.0	62 8
W	7.0	63 8

25' N of N St

W	7.0	63 8
	7.4	63 4
	6.9	63 9
C	6.9	63 9
	6.7	64 1
	6.5	64 3
E	6.1	64 7

70.76

50' N of N St.

E	4.7	661
	4.9	659
	5.5	653
C	6.1	647
	5.9	649
	5.4	654
W	5.5	653

75' N of N St.

W	4.5	663
	4.6	662
	5.4	654
C	5.5	653
	5.3	655
	4.5	663
E	4.0	668

70.76

100' N of N St.

E	3.7	671
	4.0	668
	4.8	660
C	4.9	659
	4.8	660
	3.7	671
W	4.3	665

125' N of N St.

W	5.4	654
	5.1	657
	5.1	657
C	4.8	660
	4.5	663
	3.8	670
E	3.7	671

7076

150' N of N St

E 3.8 67.0

4.2 66.6

4.8 66.0

C 5.1 65.7

5.1 65.7

5.5 65.3

W 5.5 65.3

175' N of N St

W 3.0 65.8

4.8 66.0

4.4 66.4

C 4.5 66.3

4.3 66.5

4.0 66.8

E 3.5 67.3

7076

200' N of N St

E 2.8 68.0

3.0 67.8

3.5 67.3

C 3.4 67.4

3.5 67.3

3.9 66.9

W 3.4 67.4

225' N of N St

W 3.2 67.6

3.1 67.7

3.3 67.5

C 2.9 67.9

2.6 68.2

2.6 68.2

E 2.0 68.8

7076

250 N of N St.

E	1.9	689
	2.0	688
	2.1	687
C	2.4	684
	2.7	681
	2.8	680
W	2.4	684

275' N of N St.

W	2.7	671
	2.5	683
	2.2	686
C	1.9	689
	1.8	690
	1.7	691
E	1.5	693

7/8/05

7076

300 N of N St - Shire M St.

E	1.3	695
	1.5	693
	1.7	691
C	1.9	689
	1.6	692
	1.6	692
W	2.1	687

GRADES FOR GAS PIPE LINE ON JULIAN AVE.

COVERT WETMORE HASLAM 10/27/05.

B.M.	3.07	86.72	83.65
0 = EAST LINE - EVANS		(25TH) 1.81	84.71
+50		1.97	84.75
1		2.97	83.75
+50		3.07	83.65
2		2.97	83.75
+50		3.65	83.07
3		4.28	82.44
+50		5.83	80.89
4		7.44	77.28
+50		9.12	77.60
5		8.65	78.07
+50		6.65	80.07
6 = WEST LINE - SAMPSON		(26TH) 6.56	80.16
B.M.	2.35	82.68	6.39 80.33
0 = EAST LINE - SAMPSON		(26TH) 2.34	80.31 80.34
+50		2.52	80.16

GRADE CUT FILL

GRADES GIVEN ARE 2.5' BELOW GRADE OF NW CORNER OF STREET. STAKES SET 7' N OF CENTRE OF STREET.

GRADE	CUT	FILL
77.31		
SPIKE IN POLE S.W. COR JULIAN - EVANS		(25TH)
80.10	4.81	
79.88	4.87	
79.65	4.10	
79.43	4.22	
79.20	4.55	
78.98	4.09	
78.75	3.69	
78.53	2.36	
78.30	0.98	
78.08		0.48
77.85	0.22	
77.63	2.44	
77.40	2.76	
SPIKE IN POLE S.W. COR JULIAN - SAMPSON		(26TH)
77.40	2.94	
76.82	3.34	

82.08

1		2.83	79.85	
+50		3.57	79.11	
2		4.32	78.36	
+50		4.42	78.26	
3		4.92	77.76	
+50		5.81	76.87	
4		7.00	75.68	
+50		7.34	75.34	
5		7.70	74.98	
+50		7.43	75.25	
6 = WEST LINE	(27 TH) SICARD	8.17	74.51	
	1.04	75.55	8.17	74.51
0 = EAST LINE	(27 TH) SICARD	1.47	74.08	
+50		1.95	73.60	
1		2.91	72.64	
+50		4.32	71.23	
2		6.17	69.38	
+50		7.55	68.00	
3		7.20	68.35	
B.M.		10.40	65.15	

65.17
65.15
.02

CUTS

76.24	3.6177
75.65	3.46
75.07	3.29
74.49	3.77
73.90	3.86
73.32	3.55
72.74	2.94
72.15	3.19
71.57	3.41
70.99	4.26
70.40	4.11
70.50	3.58
69.72	3.88
68.94	3.70
68.16	3.07
67.38	2.00
66.60	1.40
65.82	2.53

GRADES GIVEN. ARE 2.5' BELOW GRADE OF N⁷⁴ OF STREET.

SPIKE IN POLE S.W. COR 28TH - LOGAN

B.M.	4.30	87.95	8	83.65
0 = WEST LINE		25 TH EVANS	4.07	83.88
+50			5.83	82.13
1			6.95	81.00
+50			9.07	77.88
2	0.27	76.27	11.95	76.00
2			1.92	74.35
+50			6.45	69.82
3			8.47	67.78
+50			12.90	63.37
	1.20	64.57	12.90	63.37
4			0.97	63.60
+50			2.96	61.61
5			4.68	59.89
+50			4.30	60.27
6 = EAST-LINE		24 TH DEWEY	3.35	61.22
B.M.			1.78	62.79

SPIKE IN POLE AT S.W. COR

79.10	4.78
76.90	5.23
74.70	6.30
72.50	6.38
70.30	4.05
68.10	1.72
65.90	1.88
64.72	1.35
63.56	0.04
62.40	0.79
61.22	1.33
60.00	0.21
58.90	2.33

EVANS (25) & JULIAN

81.60
2.50
79.10
61.90
2.50
58.90
79.10
58.90
12 20.20
1.68

STAR ON TOP FIREHYDRANT AT S.E. COR. JULIAN AND DEWEY

	64.57		
0 - WEST LINE	(24 th) DEWEY	2.17	62.40
+50		1.92	62.65
1		3.19	61.38
+50		4.59	59.98
2		5.50	59.07
+50		6.54	58.03
3		7.89	56.77
	0.23 57.00	7.80	56.77
+50		1.46	55.54
4		1.62	55.38
+50		3.40	53.60
5		3.73	53.27
+50		4.65	52.35
6 = EAST LINE	(23 rd) CROSBY	3.24	53.76
B.M.		2.29	54.71
0 = WEST LINE	(23 rd) CROSBY	4.97	52.03
+50		5.75	51.25

	58.90	3.50
	58.15	4.50
	57.42	3.96
	56.69	3.29
	55.96	3.11
	55.22	2.81
	54.49	2.28
	53.76	1.78
	53.03	2.35
	52.30	1.30
	51.56	1.71
	50.83	1.52
	50.10	3.66
STAR ON FIRE HYDRANT AT S.E. COR		(23 rd) CROSBY
	49.10	2.93
	48.51	2.74

57.00

1		6.25	50.75
+50		6.20	50.80
2		6.85	50.15
+50		7.80	49.20
3		7.86	49.14
+50		7.33	49.67
4		7.60	49.40
+50		7.19	49.81
5		9.16	47.84
+50		11.79	45.21
6 = EAST LINE BEARDSLEY	(22 nd)	12.02	44.98

5043
57
4984

		47.93	2.82
		47.34	3.46
		46.76	3.39
		46.18	3.02
		45.60	3.54
		45.01	4.06
		44.43	4.97
		43.85	5.76
		43.27	4.57
		42.65	2.53
		42.10	2.88
	0.80	55.51	2.29
			54.71
			3.05

GRADES FOR GAS-PIPE ON
CROSBY ST. (JULIAN - IRVING)

{ COVERT
WETMORE
MOORE
12/6/05

B.M.	7.39	59.91		52.52
0 =	N.E. LINE	JULIAN	7.0	52.9
+50			7.1	52.8
1			6.6	53.3
+50			7.2	52.7
2			7.0	52.9
+50			6.4	53.5
3	S.W. LINE	IRVING	4.8	55.1

51.85
2.5
49.35

GRADE GUT. FILL 57

SE
B.M. FENCE COR. ALLEY, BETWEEN (JULIAN & KEARNEY)
AND CROSBY

49.35	3.6
49.85	3.0
50.35	3.0
50.85	1.9
51.35	1.6
51.85	1.7
52.35	2.8

GRADES FOR GAS PIPE ON
IRVING AVE. 250 FT. N.W. & S.E. OF
CROSBY.

B.M.				
7.39	59.91		52.52	
0	N.W. LINE CROSBY.	4.6	55.3	
+50	N.W.	5.6	54.3	
1	N.W.	6.8	53.1	
+50	N.W.	8.1	51.8	
2	N.W.	10.0	49.9	
+50	N.W.	13.4	46.5	
0	S.E. LINE CROSBY.	4.1	55.8	
+50	S.E.	4.3	55.6	
1	S.E.	3.9	56.0	
+50	S.E.	3.7	56.2	
2	S.E.	1.9	58.0	
+50	S.E.	1.1	58.8	

58

GRADE CUT FILL

NAIL IN S.E. FENCE POST ALLEY BET. JULIAN & KEARNEY
ON CROSBY.

52.35	3.0	
51.8	2.5	
51.25	1.9	
50.7	1.1	
50.15		0.2
49.6		3.1
47.10		
47.20		
53.3	2.5	
54.5	1.1	
55.8	0.2	
57.		0.8
58.3		0.3
59.5		0.7

12)15
1.25

Cross Section of Kearney Ave
bet 50th 21st and Nth St

POSTED

Sigsbee ST.

a 11 2477

2466

W. line 50th 21st

So	7.1	17.7
Cl	7.0	17.8
1/4	7.5	17.3
C	6.3	18.5
1/4	6.2	18.6
Cl	7.2	17.6
No	7.4	17.4

18' W of 50th 21st

No	6.6	18.2
Cl	7.1	17.7
1/4	7.4	17.4
C	8.3	16.5
1/4	8.4	16.4
Cl	8.6	16.2
So	9.0	15.8

59

25' W 50th 21st

So	8.2	16.6
Cl	7.6	14.2
1/4	7.7	14.1
C	7.5	14.3
1/4	7.3	14.5
Cl	6.4	18.4
No	6.4	18.4

50' W 50th 21st

No	4.7	20.1
Cl	4.6	20.2
1/4	4.9	19.9
C	5.6	19.2
1/4	6.6	18.2
Cl	6.4	18.4
So	6.9	17.9

Keortney Ave

	2477		
	75' W of So	21 st	
So	6.7	18.1	
Ch	6.1	18.7	
1/4	5.3	19.5	
C	5.0	19.8	
1/4	4.6	20.2	
Ch	4.0	20.8	
No	3.9	20.9	
	100' W	So 21 st	
No	3.2	21.6	
Ch	3.5	21.3	
1/4	4.3	20.5	
C	4.5	20.3	
1/4	4.9	19.9	
Ch	5.5	19.3	
So	6.2	18.6	

60

125' W of So 21st

So	5.5	19.3	
Ch	5.3	19.5	
1/4	5.1	19.7	
C	4.5	20.3	
1/4	3.7	21.1	
Ch	2.6	22.2	
T.P.	9.42	30.38	381
No		3.5	26.9

150' W of So 21st

No	1.5	28.9	
Ch	1.9	28.5	
1/4	3.3	27.1	
C	7.2	23.2	
1/4	10.1	20.3	
Ch	10.9	19.5	
So	11.2	19.2	

30.38

175' W S. 21st

So	11.1	19.0
Cl	8.4	22.0
U	5.1	25.3
C	1.8	28.6
U	2.2	28.2
Cl	1.5	28.9
No	11.4	29.0

E.L.R. #1 = 194.45' W int. of S.L. harmony with E.L. #2

No	1.8	28.6
Cl	2.0	28.4
U	2.5	27.9
C	2.5	27.9
U	2.5	27.9
U No Cl.	3.0	27.4
Cl	4.7	25.7
So	10.4	20.0

61

POSTED

#2 = 194.45' W on S.L. = 223.29' W on No. 540 - S.L. 'N'

So	10.4	20.0
Cl	4.3	26.1
U	3.0	27.4
C	3.0	27.4
U	3.0	27.4
Cl	3.1	27.3
No	26	27.8

Cross-section Kearney
Division line - N 14' E. +

X Sect. Kearney ave.
West line So. 21st to 7th St.

SP.	0.23	H.I. 24.89	24.66
		W. line So. 21 st	
No. line		7.2	17.7
		7.2	17.7
		6.8	18.1
C		6.5	18.4
		6.2	18.7
		6.9	18.0
no.		7.3	17.6
		18' W	
no.		6.7	18.2
		7.1	17.8
		7.6	17.3
C		8.4	16.5
		8.5	16.4
		8.8	16.1
no.		9.1	15.8

14' sidewalk
Dec. 3, 1907

Blields
Exam 62
Barber

	25' W	
no.	8.0	16.9
	7.9	17.0
	7.9	17.0
C	7.6	17.3
	7.1	17.8
	6.8	18.1
no.	6.5	18.4
	50' W	
no	4.9	20.0
	4.8	20.1
	5.3	19.6
C	6.0	18.9
	6.7	18.2
	6.6	18.3
no.	7.0	17.9

75' W

So,	6.8	18.1
	6.1	18.8
	5.5	19.4
C	4.7	20.2
	4.3	20.6
	4.2	20.7
no	4.0	20.9
	100' W	
no	3.4	21.5
	3.6	21.3
	4.3	20.6
C	4.6	20.3
	5.0	19.9
	5.7	19.2
So	6.4	18.5

24.89

125' W

So		5.6	19.3
		5.5	19.4
		5.1	19.8
C		4.1	20.8
		3.7	21.2
		2.8	22.1
n.cb			
J.P.	7.82	H.T. 31.24	1.47 23.42
no. line		150' W	5.2 26.0
		150' W	
no		2.7	28.5
		2.7	28.5
		4.1	27.1
C		8.3	22.9
		10.8	20.4
		11.9	19.3
So		12.0	19.2

175' W

So	12.0	19.2
	8.8	22.4
	5.1	26.1
C	2.9	28.3
	2.5	28.7
	2.5	28.7
No	2.3	28.9
	194.45' ^{at} ^{18th} ^{with} ^{line} ^{Kearney,}	
No	2.7	28.5
	3.0	28.2
	3.5	27.7
C	3.5	27.7
	3.4	27.8
	5.9	25.3
So	11.2	20.0

223.9 W Int.

No line Kearney with So. line N.

No.	3.7	27.5
	4.2	27.0
	4.0	27.2
C	4.8	26.4
C + 2.86 East line 18 th	0.6	25.6
Int. of So. line N with East line 18 th		
	4.6	26.6

68

68

69

69

70

71

72

57

73

67

74

74

75

65

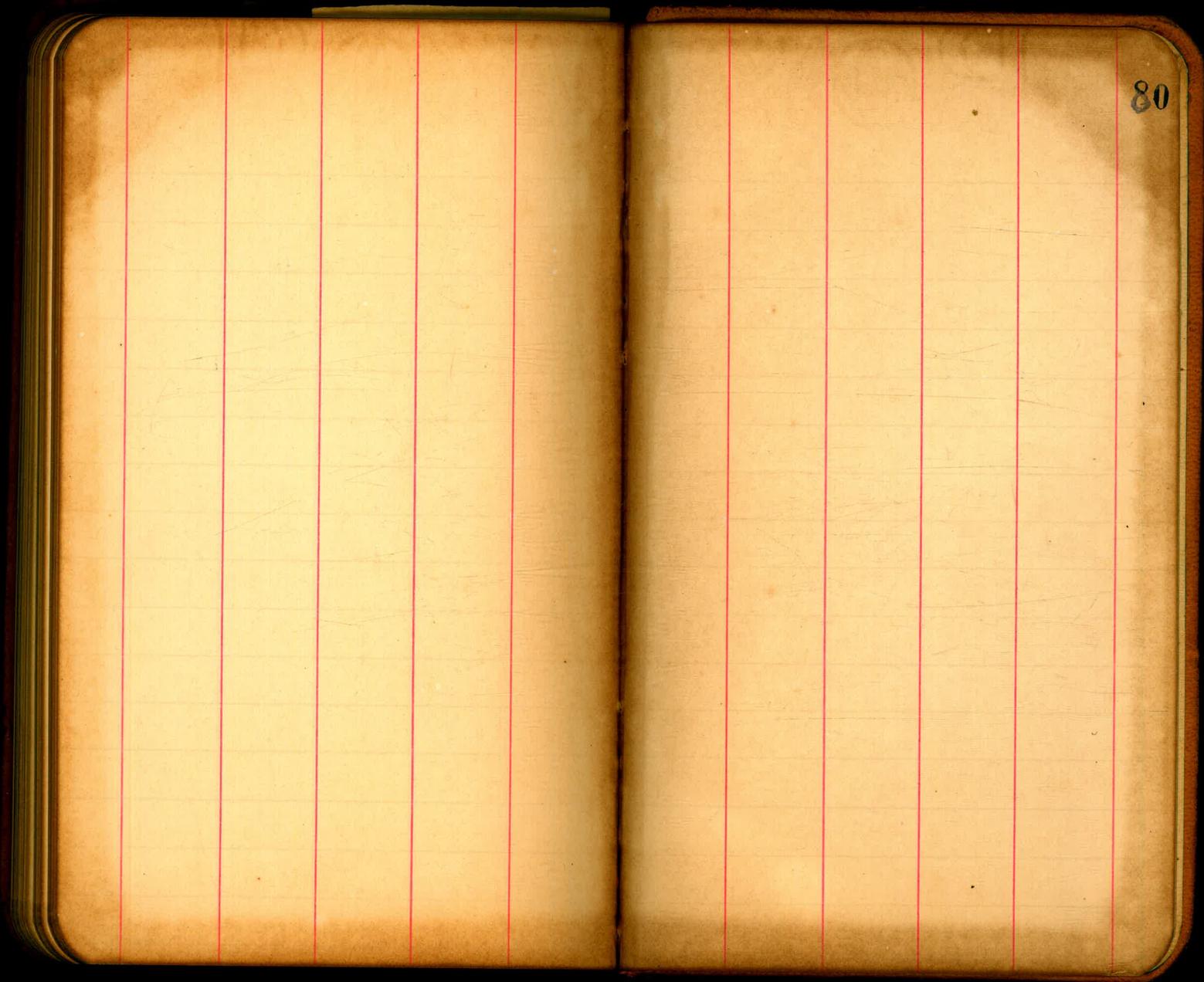
76

77

77

78

79



80

12.55 Julian S. City sphere
 H. C. fence cor. analysis
 52.50 Julian and 23 sphere
 at 3.6. cor. elec. pole

Return to City Engineers Office
 City Hall, San Diego, Cal.

Handwritten notes and scribbles, including the letters 'M' and 'R'.

TRAVERSE TABLE FOR TRANSIT BOOK

From 1° to 90° for a distance of 100.

Degrees.	DEGREES.		¼ DEGREE.		½ DEGREE.		¾ DEGREE.		Degrees.
	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	
0			100.00	0.44	100.00	0.87	99.99	1.31	89
1	99.98	1.75	99.98	2.18	99.97	2.62	99.95	3.05	88
2	99.94	3.49	99.92	3.93	99.91	4.36	99.88	4.80	87
3	99.86	5.23	99.84	5.67	99.81	6.10	99.79	6.54	86
4	99.76	6.98	99.73	7.41	99.69	7.85	99.66	8.28	85
5	99.62	8.72	99.58	9.15	99.54	9.58	99.50	10.02	84
6	99.45	10.45	99.41	10.89	99.36	11.32	99.31	11.75	83
7	99.25	12.19	99.20	12.62	99.14	13.05	99.09	13.49	82
8	99.03	13.92	98.97	14.35	98.90	14.78	98.84	15.21	81
9	98.77	15.64	98.70	16.07	98.63	16.50	98.56	16.93	80
10	98.48	17.36	98.40	17.79	98.33	18.22	98.25	18.65	79
11	98.16	19.08	98.08	19.51	97.99	19.94	97.90	20.36	78
12	97.81	20.79	97.72	21.22	97.63	21.64	97.53	22.07	77
13	97.44	22.50	97.34	22.92	97.24	23.34	97.13	23.77	76
14	97.03	24.19	96.92	24.62	96.81	25.04	96.70	25.46	75
15	96.59	25.88	96.48	26.30	96.36	26.72	96.25	27.14	74
16	96.13	27.56	96.00	27.98	95.88	28.40	95.76	28.52	73
17	95.63	29.24	95.50	29.65	95.37	30.07	95.24	30.49	72
18	95.11	30.90	94.97	31.32	94.83	31.73	94.69	32.14	71
19	94.55	32.56	94.41	32.97	94.26	33.38	94.12	33.79	70
20	93.97	34.20	93.82	34.61	93.67	35.02	93.51	35.43	69
21	93.36	35.84	93.20	36.24	93.04	36.65	92.88	37.06	68
22	92.72	37.46	92.55	37.86	92.39	38.27	92.22	38.67	67
23	92.05	39.07	91.88	39.47	91.71	39.87	91.53	40.27	66
24	91.35	40.67	91.18	41.07	91.00	41.47	90.81	41.87	65
25	90.63	42.26	90.45	42.66	90.26	43.05	90.07	43.44	64
26	89.88	43.84	89.69	44.23	89.49	44.62	89.30	45.01	63
27	89.10	45.40	88.90	45.79	88.70	46.17	88.50	46.56	62
28	88.29	46.95	88.09	47.33	87.88	47.72	87.67	48.10	61
29	87.46	48.48	87.25	48.86	87.04	49.24	86.82	49.62	60
30	86.60	50.00	86.38	50.38	86.16	50.75	85.94	51.13	59
31	85.72	51.50	85.49	51.86	85.26	52.25	85.04	52.62	58
32	84.80	52.99	84.57	53.36	84.34	53.73	84.10	54.10	57
33	83.87	54.46	83.63	54.83	83.39	55.19	83.15	55.56	56
34	82.90	55.92	82.66	56.28	82.41	56.64	82.16	57.00	55
35	81.92	57.36	81.66	57.71	81.41	58.07	81.16	58.42	54
36	80.90	58.78	80.64	59.13	80.39	59.48	80.13	59.83	53
37	79.86	60.18	79.60	60.53	79.34	60.88	79.07	61.22	52
38	78.80	61.57	78.53	61.91	78.26	62.25	77.99	62.59	51
39	77.71	62.93	77.44	63.27	77.16	63.61	76.88	63.94	50
40	76.60	64.28	76.32	64.61	76.04	64.94	75.76	65.28	49
41	75.47	65.61	75.18	65.93	74.90	66.26	74.61	66.59	48
42	74.31	66.91	74.02	67.24	73.73	67.56	73.43	67.88	47
43	73.14	68.20	72.84	68.52	72.54	68.84	72.24	69.15	46
44	71.93	69.47	71.63	69.78	71.33	70.09	71.02	70.40	45
45	70.71	70.71							