

Job #88

NAME Broadway Extension

Class _____ Course Book # 7 Party 7

Massachusetts Ave

"B" Line - X-sections + alignment.

B" LINE
68 1965
ALIGNMENT

FIELD NOTES

No. 403P

ESPECIALLY ADAPTED
TO THE USE OF
ENGINEERING STUDENTS

EUGENE DIETZGEN Co.

MANUFACTURERS

DRAWING MATERIALS

MATHEMATICAL AND SURVEYING INSTRUMENTS

MEASURING TAPES

CHICAGO SAN FRANCISCO NEW YORK
NEW ORLEANS PITTSBURGH

BROADWAY EXTENSION -

Massachusetts Avenue -

"B" Line

Book #7

MICROFILMED

DEC 30 1964

Property of
Watson, Valle & Gough
508 Spreckles Bldg.
San Diego -

INDEX -

	<u>Page -</u>
Alignment & Topog. 0+00 to 51+19.33	1 - 4
Cross Sections 0+00 to 51+19.33	10 - 27

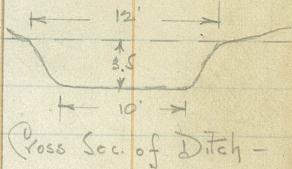
Sta.

Dist.

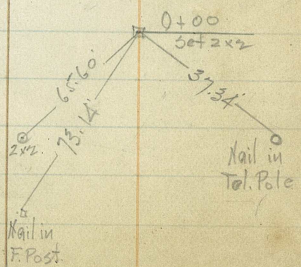
Def. Angle
Lt. Rt.

1124.45'

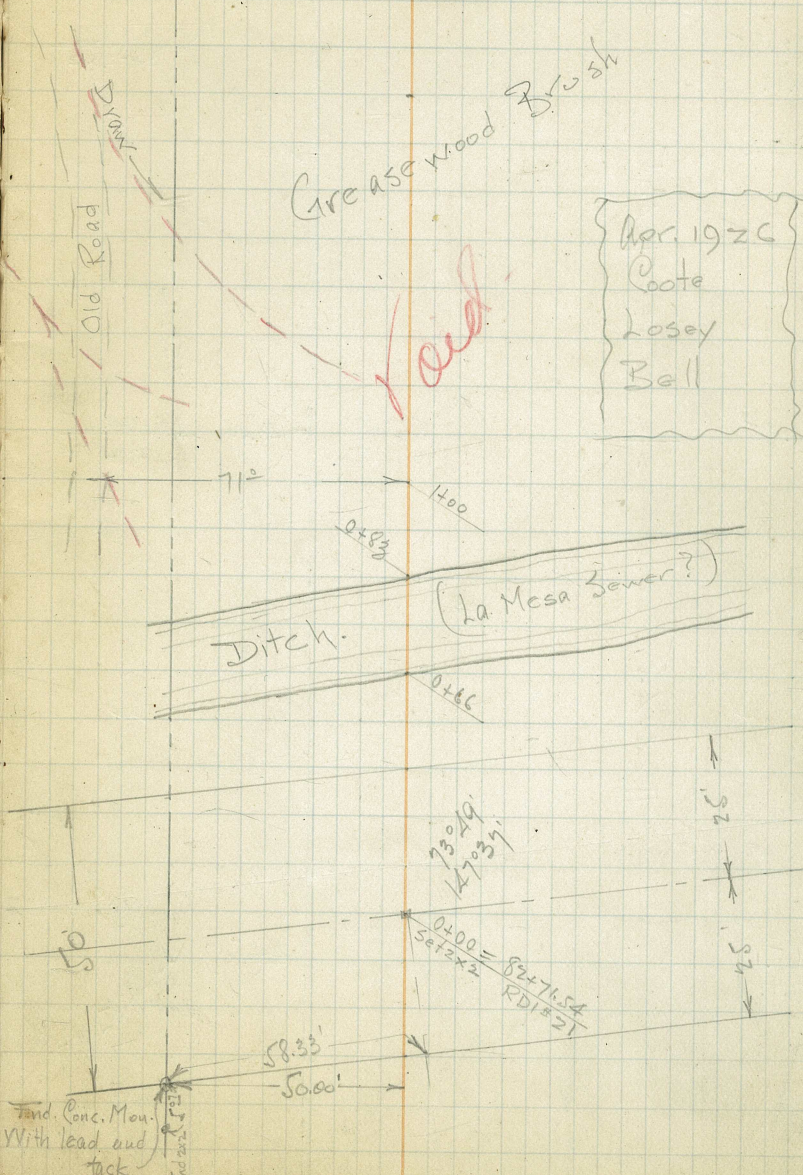
Field



0+00



Find Conc. Mon. With lead and tack



Apr. 1920
Cooty
Losey
Bell

73° 19'
47° 37''

82471.54
RDI#21

Sta. Dist. Def. Angle.
Lt. Rt.

13+83.85
P.O.T.

764.15

11+24.45
P.I.

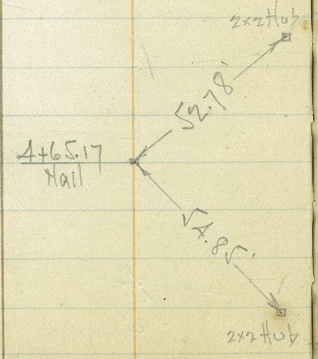
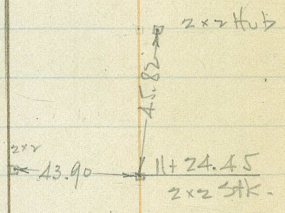
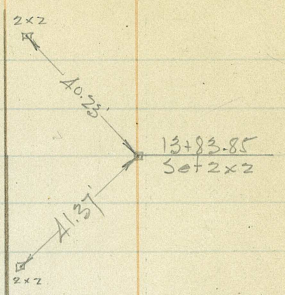
1124.45

4+65.17
P.O.T.

←
←

Load

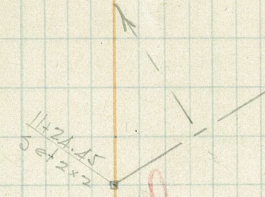
54°08'
108°17'



2

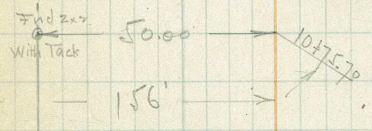
Unimproved

Sta. 12 to 20
50% Rock
50% Earth



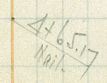
Use R = 300

Load



Bush

LA MESA CITY BOUNDARY



Sta. Dist. Def. Lt. Angle. Rt.

3230.73'

18+88.60
P.I.

~~54.6~~
~~108.51~~

See Bk #69
for new ties

18+88.60
Set 2x2 tub

Set 2x2

51.70'
Set 2x2

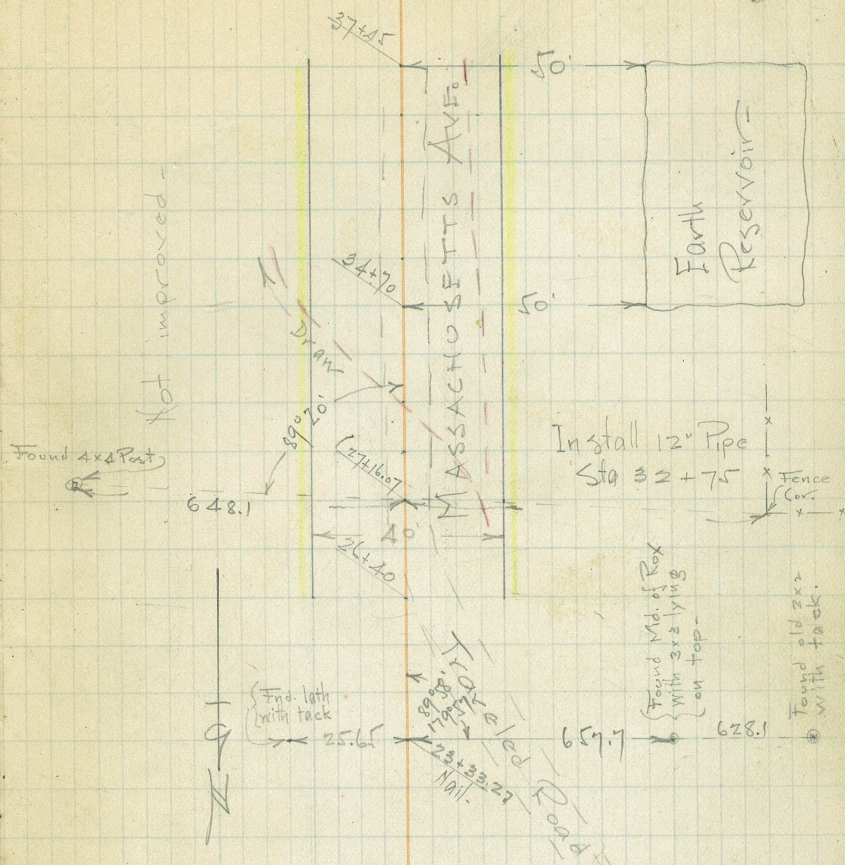
18+07.98
P.O.T.

764.15

Cont'd from
Book 8, Pg 2

Set 2x2 tub

void



Use R = 400'

Install 12" Pipe Sta. 15+50

void

3

Sta.

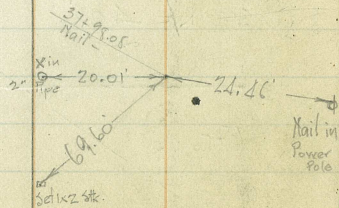
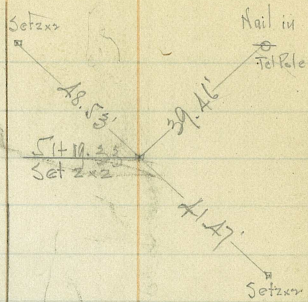
Dist.

Def. Angle
Lt. Rt.

51+19.33 Mass. =
36+30.41 San Diego

3230.73'

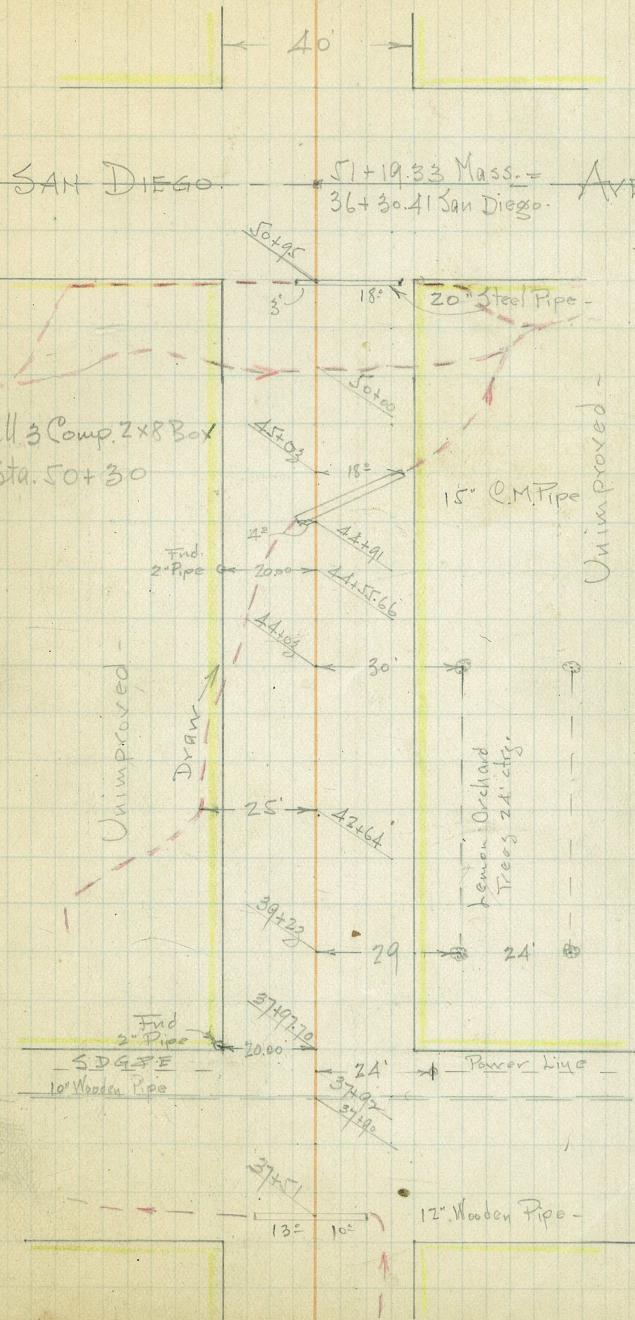
3798.08
P.O.T.

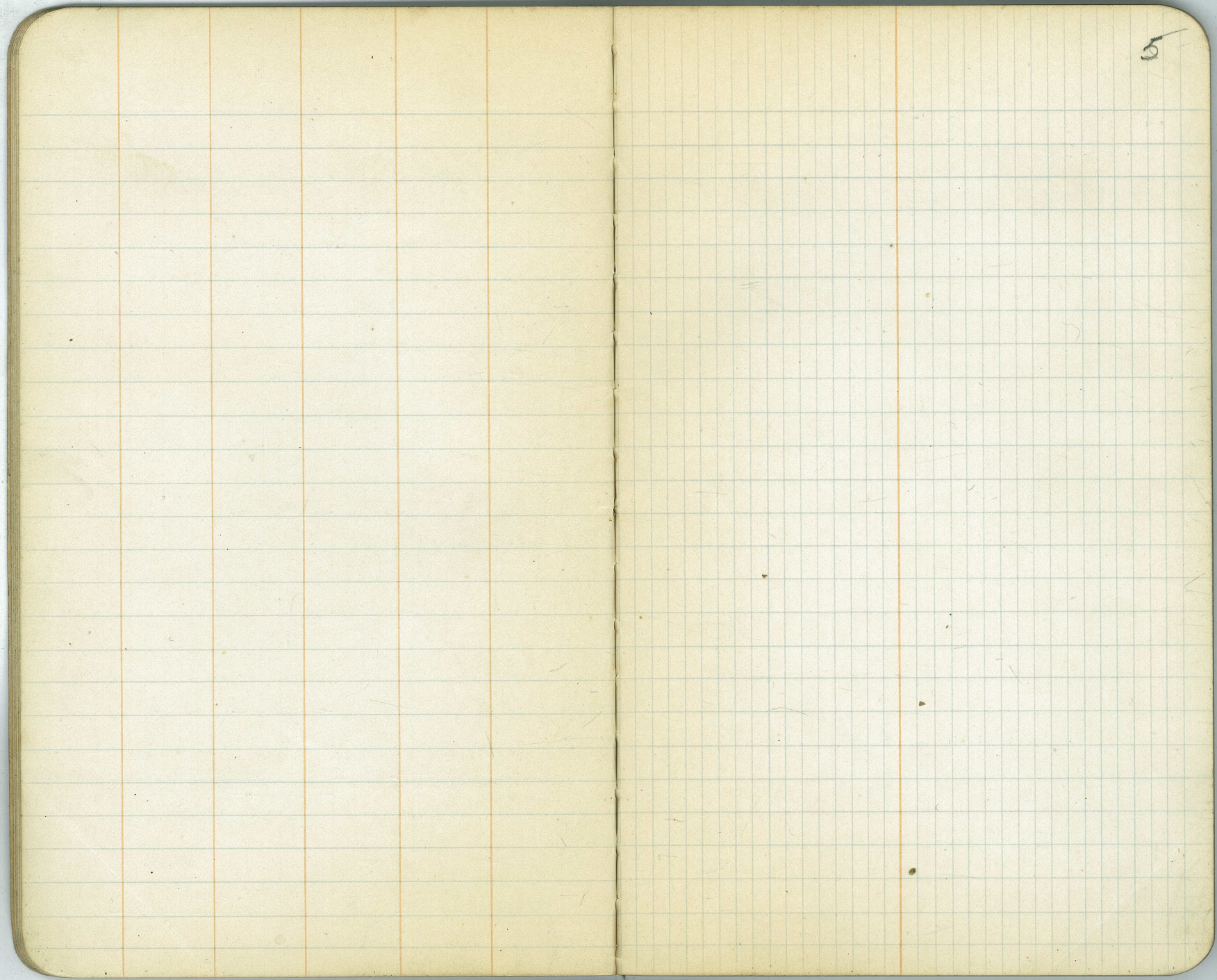


SAN DIEGO

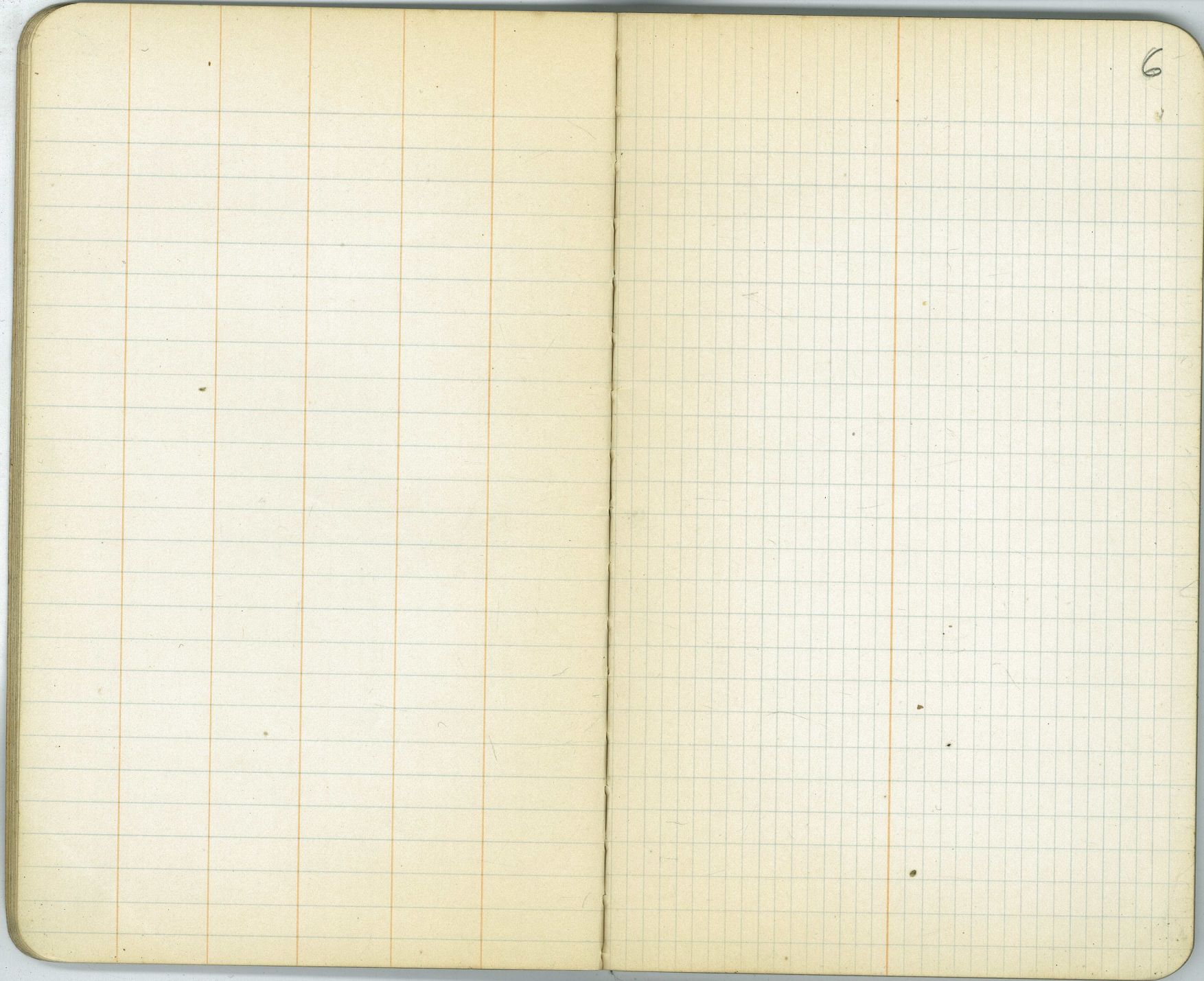
51+19.33 Mass. =
36+30.41 San Diego. AVE.

Install 3 Comp. 2x8 Box
Sta. 50+30

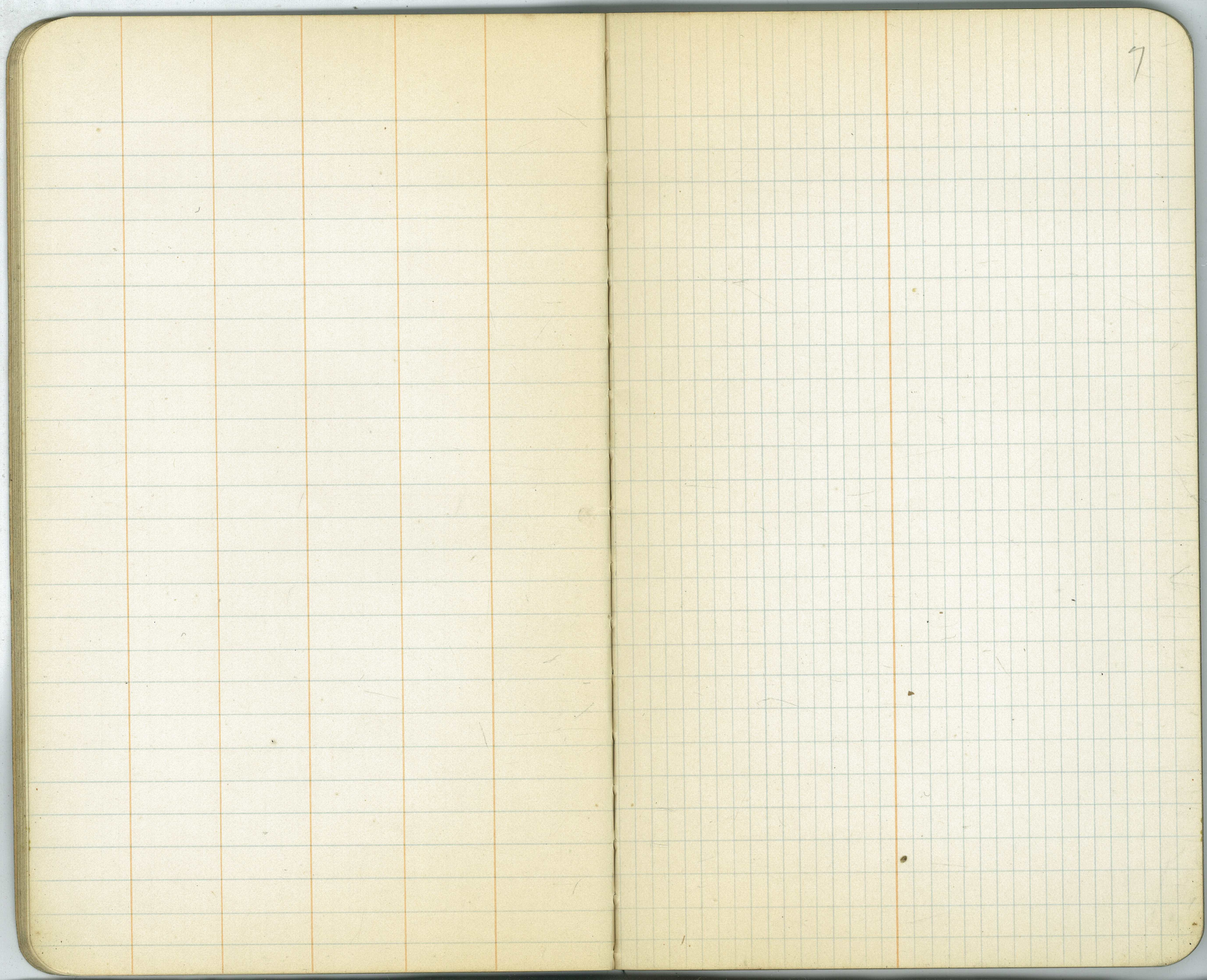




5



6



9

CROSS SECTIONS

MASSACHUSETTS AVE. 10

+ Hl. - El.

Bu#0 416.00

6.31 422.31

0+00 ±RDI#21

+24

Bench Levels
in Book #2

+30

+42

5/1/26
Coote.
Losey.
Bell.

+50

+65

+70

+74 On next page-

See Book #8, P. 7
for X-secs of line Chg.

fail

Lt. Rt.

See Bk #2 Pg. 12 H.I. = 422.31

420.9	417.7	416.4	415.8	414.9	414.1	413.8	413.0	412.0
14	1.6	.59	6.5	7.4	8.2	8.5	9.3	10.3
200	100	50	30	1	30	50	100	200
413.4	415.8	417.7	414.2	413.9	413.8	415.6	415.2	414.4
7.9	6.5	6.6	8.1	8.4	8.5	6.7	7.1	7.9
75	68	51	52	40	33	24	1	20
415.8	415.4	415.7	414.0	413.7	412.3	412.9	414.4	414.2
6.5	6.9	6.6	8.3	8.6	9.0	9.4	7.9	8.1
100	74	59	51	40	20	1	20	40
414.6	415.5	415.5	415.7	415.1	413.2	412.6	412.3	411.8
7.7	6.8	6.8	6.6	7.2	9.1	9.7	10.0	10.5
100	93	75	50	29	16	1	20	40
413.6	413.1	414.0	415.3	414.9	414.8	414.5	414.2	412.3
8.7	9.2	8.3	7.0	7.4	7.5	7.8	8.1	10.0
100	86	74	65	50	20	1	5	15
414.0	413.7	411.8	411.5	411.8	411.6	413.3	414.0	414.1
8.3	8.6	10.5	10.8	10.5	10.7	9.0	8.3	8.2
100	80	71	62	50	20	15	1	15
414.4	414.0	412.9	413.7	412.2	411.4	411.2	410.9	413.6
7.9	8.3	9.4	8.6	10.1	10.9	11.6	11.3	8.7
100	79	75	58	50	39	20	1	21
414.4	414.0	412.9	413.7	412.2	411.4	411.2	410.9	413.6
7.9	8.3	9.4	8.6	10.1	10.9	11.6	11.3	8.7
100	79	75	58	50	39	20	1	21

See Bk #8, P. 7

422.31

0 + 78

+74

+85

+34

+50

+74

2

11.80 433.94

0.17 422.14

On Angle of Wash

Yield

$\frac{82}{100} \frac{81}{79}$

415.3	414.3	414.4	413.9	414.1	413.8	411.8	411.0	410.8	413.2
$\frac{7.0}{74}$	$\frac{8.0}{66}$	$\frac{7.9}{55}$	$\frac{8.4}{50}$	$\frac{8.2}{25}$	$\frac{8.5}{16}$	$\frac{10.5}{9}$	$\frac{11.3}{9}$	$\frac{11.5}{26}$	$\frac{9.1}{50}$

414.7	412.0	411.4	410.8	410.4	409.6
$\frac{7.6}{200}$	$\frac{10.3}{100}$	$\frac{10.9}{50}$	$\frac{11.5}{50}$	$\frac{11.9}{50}$	$\frac{12.7}{100}$

416.1	415.4	415.3	414.5	414.2	414.4	411.8	410.7	410.5	413.3
$\frac{6.2}{100}$	$\frac{6.9}{70}$	$\frac{7.0}{54}$	$\frac{7.8}{41}$	$\frac{8.1}{19}$	$\frac{7.9}{9}$	$\frac{10.5}{5}$	$\frac{11.6}{24}$	$\frac{11.8}{45}$	$\frac{9.0}{55}$

416.4	416.7	416.5	416.9	414.8	414.7	414.0	413.2	413.1	413.8	413.7
$\frac{5.9}{100}$	$\frac{5.6}{84}$	$\frac{6.8}{78}$	$\frac{6.4}{47}$	$\frac{7.5}{38}$	$\frac{7.6}{19}$	$\frac{8.3}{19}$	$\frac{9.1}{20}$	$\frac{9.2}{27}$	$\frac{8.5}{30}$	$\frac{8.6}{45}$

Yield

416.1	415.2	415.1	415.5	414.2	414.2	414.5	414.8	414.8
$\frac{6.2}{75}$	$\frac{7.1}{40}$	$\frac{7.2}{20}$	$\frac{6.8}{20}$	$\frac{8.1}{10}$	$\frac{8.1}{20}$	$\frac{7.8}{20}$	$\frac{7.5}{40}$	$\frac{7.5}{50}$

416.3	415.8	415.7	414.5	414.5	414.9	414.8	414.8
$\frac{6.3}{75}$	$\frac{6.5}{40}$	$\frac{6.6}{17}$	$\frac{7.8}{4}$	$\frac{7.8}{7}$	$\frac{7.4}{12}$	$\frac{7.5}{40}$	$\frac{4.4.8}{50}$

416.9	415.6	415.1	416.5	416.3	415.9	416.0	415.9	416.8	416.8
$\frac{5.4}{66}$	$\frac{6.7}{50}$	$\frac{7.2}{30}$	$\frac{5.8}{26}$	$\frac{6.0}{16}$	$\frac{6.6}{16}$	$\frac{6.3}{21}$	$\frac{6.4}{30}$	$\frac{5.5}{40}$	$\frac{4.6.8}{50}$

418.9	418.5	418.7	418.4	417.8
$\frac{3.4}{50}$	$\frac{3.8}{25}$	$\frac{3.6}{25}$	$\frac{3.8}{25}$	$\frac{4.5}{50}$

41. = 422.31

11

2+36 433.94

+50

11.84 445.16 0.62 433.32

3

+21

11.59 456.57 0.23 444.93

+50

+78

void

4
Blu=1 0.86 455.66 455.67

+50

6 1.18 455.34
6.59 461.93

41.433.94

12

425.4 $\frac{8.5}{50}$	426.2 $\frac{7.7}{42}$	426.3 $\frac{7.6}{25}$	426.2 $\frac{7.7}{25}$	425.0 $\frac{8.9}{25}$	424.0 $\frac{9.9}{50}$
427.0 $\frac{6.9}{50}$	428.1 $\frac{5.8}{31}$	428.6 $\frac{5.3}{15}$	428.4 $\frac{5.5}{15}$	427.8 $\frac{6.1}{25}$	428.0 $\frac{5.9}{42}$
					427.3 $\frac{6.6}{50}$

435.4 $\frac{9.8}{50}$	436.8 $\frac{8.4}{25}$	436.4 $\frac{6.8}{25}$	438.4 $\frac{6.8}{25}$	438.9 $\frac{6.3}{50}$
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436.7 $\frac{8.5}{50}$	438.7 $\frac{6.5}{25}$	440.5 $\frac{4.7}{25}$	442.1 $\frac{3.1}{23}$	443.0 $\frac{2.2}{50}$
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441.7 $\frac{12.8}{50}$	442.5 $\frac{14.0}{26}$	445.2 $\frac{11.3}{19}$	446.8 $\frac{9.7}{19}$	448.2 $\frac{8.3}{50}$
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444.4 $\frac{12.1}{50}$	446.6 $\frac{9.9}{25}$	449.2 $\frac{7.3}{25}$	451.5 $\frac{5.0}{25}$	452.5 $\frac{4.0}{50}$
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446.7 $\frac{9.8}{50}$	448.9 $\frac{7.6}{25}$	450.3 $\frac{6.2}{10}$	451.4 $\frac{5.1}{15}$	452.9 $\frac{3.6}{15}$	453.9 $\frac{2.6}{31}$	454.8 $\frac{1.7}{50}$
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450.2 $\frac{6.3}{50}$	452.1 $\frac{4.1}{25}$	454.1 $\frac{2.4}{25}$	455.5 $\frac{1.0}{25}$	456.7 $\frac{1.0}{50}$
---------------------------	---------------------------	---------------------------	---------------------------	---------------------------

void

465.

461.93

✓

+50

+67

6

+19

+50

+75

fold

461.93

457.2 458.1 453.7 454.5 457.2 455.7 456.7

$\frac{107}{50}$ $\frac{8.8}{31}$ $\frac{8.2}{14}$ $\frac{7.4}{9}$ $\frac{4.7}{9}$ $\frac{6.2}{25}$ $\frac{5.2}{50}$

452.7 454.3 455.1 456.4 456.8 456.5

$\frac{9.2}{50}$ $\frac{7.6}{21}$ $\frac{6.8}{16}$ $\frac{5.5}{16}$ $\frac{5.1}{38}$ $\frac{5.4}{50}$

454.6 455.6 455.8 455.2 455.9 457.0

$\frac{7.3}{50}$ $\frac{6.3}{39}$ $\frac{6.1}{18}$ $\frac{6.7}{25}$ $\frac{6.0}{25}$ $\frac{4.9}{50}$

454.7 455.2 454.7 454.8 455.4 457.6 457.5 456.7

$\frac{7.2}{50}$ $\frac{6.7}{44}$ $\frac{7.2}{33}$ $\frac{7.1}{15}$ $\frac{6.5}{17}$ $\frac{4.3}{17}$ $\frac{4.4}{32}$ $\frac{5.2}{50}$

454.5 454.3 455.7 456.9 456.8 455.7 457.8 457.8

$\frac{7.4}{50}$ $\frac{7.6}{38}$ $\frac{6.2}{28}$ $\frac{5.0}{7}$ $\frac{5.1}{19}$ $\frac{6.2}{19}$ $\frac{4.1}{46}$ $\frac{4.1}{50}$

457.3 455.4 455.8 456.1 457.2 457.7

$\frac{7.6}{50}$ $\frac{6.5}{22}$ $\frac{6.1}{25}$ $\frac{5.8}{25}$ $\frac{4.7}{38}$ $\frac{4.2}{50}$

455.3 455.9 457.0 457.4 457.2

$\frac{6.6}{50}$ $\frac{6.0}{25}$ $\frac{4.9}{27}$ $\frac{4.5}{27}$ $\frac{4.7}{50}$

456.1 457.1 458.2 458.7 458.6 457.3 458.4

$\frac{5.8}{50}$ $\frac{4.8}{13}$ $\frac{3.7}{6}$ $\frac{3.2}{6}$ $\frac{3.3}{15}$ $\frac{4.1}{28}$ $\frac{3.5}{50}$

fold

46193

7

4.84 457.09

+50

5.67 467.76

8

+50

9

+50

10

+25

11.75 471.70

2.81 459.95

Lead

456.5 457.1 457.5 457.2 456.7
 $\frac{54}{50}$ $\frac{18}{25}$ $\frac{14}{25}$ $\frac{47}{25}$ $\frac{52}{50}$

4.1. = 462.76

457.2 457.6 457.3 456.6 456.8
 $\frac{56}{50}$ $\frac{52}{25}$ $\frac{45}{25}$ $\frac{62}{25}$ $\frac{60}{50}$

456.4 456.9 456.8 457.9 456.4 457.3
 $\frac{64}{50}$ $\frac{59}{25}$ $\frac{60}{25}$ $\frac{49}{25}$ $\frac{64}{43}$ $\frac{55}{50}$

457.2 457.1 456.3 456.9 456.6
 $\frac{56}{50}$ $\frac{57}{25}$ $\frac{65}{25}$ $\frac{59}{25}$ $\frac{62}{50}$

457.9 456.8 455.9 456.3 456.9 455.6 457.5
 $\frac{79}{50}$ $\frac{60}{23}$ $\frac{69}{8}$ $\frac{65}{8}$ $\frac{59}{8}$ $\frac{72}{38}$ $\frac{53}{50}$

456.7 457.6 456.7 458.4 459.0 457.6 455.6
 $\frac{61}{50}$ $\frac{52}{25}$ $\frac{61}{25}$ $\frac{44}{12}$ $\frac{38}{25}$ $\frac{52}{37}$ $\frac{72}{50}$

4.1. = 471.70

459.3 460.5 459.7 460.8 458.7 456.2 458.7
 $\frac{124}{50}$ $\frac{112}{25}$ $\frac{120}{25}$ $\frac{109}{10}$ $\frac{130}{31}$ $\frac{135}{47}$ $\frac{130}{50}$

462.0 462.0 460.3 460.2 461.1 459.8 460.2
 $\frac{97}{37}$ $\frac{97}{25}$ $\frac{112}{25}$ $\frac{115}{14}$ $\frac{106}{31}$ $\frac{119}{50}$ $\frac{115}{65}$

10+50

471.70

482

11+24.45
On Split-

0.02 471.68

+50

9.34 481.02

+73

12

+50

1.18 479.84

13

9.97 489.81

paid

462.8 89 — 40	463.2 8.5 — 34	465.0 6.7 — 25	465.4 6.3 — 16	466.3 7.4 — 11	462.1 9.6 — 11	463.7 8.0 — 28	463.5 8.5 — 35	462.3 9.4 — 28	460.4 11.3 — 65
465.7 6.0 — 35	465.8 5.9 — 18	465.4 6.3 — 21	466.4 5.3 — 21	466.0 5.7 — 34	464.8 6.9 — 50	473.5 +1.8 — 25	470.4 1.3 — 9	472.2 +0.5 — 15	472.3 +0.6 — 15
469.3 2.4 — 35	465.6 5.1 — 50	464.1 7.6 — 75	461.6 10.1 — 100						

paid

476.8 4.2 — 40	474.7 6.3 — 26	474.3 6.7 — 14	471.3 9.7 — 20	472.0 11.0 — 40	467.3 13.7 — 50	467.7 13.3 — 50
478.6 2.4 — 40	471.5 3.5 — 26	471.5 3.5 — 17	476.7 4.3 — 7	474.6 6.4 — 10	470.8 9.2 — 10	467.1 13.3 — 43
473.6 +1.6 — 40	481.7 +0.7 — 30	477.0 1.0 — 7	475.5 5.5 — 9	475.7 5.3 — 9	475.3 5.7 — 17	469.1 11.9 — 42
482.2 +8.2 — 50	485.3 +7.3 — 12	485.1 +4.1 — 33	481.1 +0.1 — 9	480.6 0.4 — 14	477.1 3.9 — 26	475.4 5.6 — 26
471.1 +3.0 — 50	491.2 +1.4 — 40	488.7 11 — 32	486.2 3.6 — 19	484.3 5.5 — 11	483.4 6.4 — 14	481.2 8.6 — 22
478.5 11.3 — 22	476.0 12.8 — 37	473.4 16.4 — 50	468.5 12.5 — 57	468.1 12.9 — 65		

paid

492.8 +3.0 — 50	491.2 +1.4 — 40	488.7 11 — 32	486.2 3.6 — 19	484.3 5.5 — 11	483.4 6.4 — 14	481.2 8.6 — 22	478.5 11.3 — 22	476.0 12.8 — 37	473.4 16.4 — 50
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13+36

189.81

+62

+84

14+20

T.P.

4.09 493.58

+50

15

+50

16

10.24 503.23

0.32 489.49

0.59 492.99

Red

Red

495.4
+5.6
50

492.8
+3.0
40

492.1
+2.5
36

491.2
+1.4
26

490.6
+0.8
20

485.5
+5.3
3

485.0
+4.8
3

483.9
+5.9
12

478.7
+1.1
33

476.9
+2.9
45

475.6
+1.2
50

490.9
+7.1
10

495.8
+6.0
48

494.1
+4.3
38

490.5
+0.7
25

488.7
+1.1
14

486.9
+2.9
4

485.5
+4.3
4

483.2
+6.6
14

478.0
+1.8
40

477.7
+2.1
50

497.7
+7.9
50

496.8
+7.0
45

495.0
+5.2
37

491.6
+1.8
25

490.8
+1.0
20

487.3
+2.5
20

486.9
+2.9
3

485.1
+4.7
9

481.7
+8.1
25

477.4
+12.4
50

497.3
+8.5
50

496.8
+7.0
43

492.8
+3.9
30

490.4
+0.6
20

489.6
+0.2
15

486.6
+3.2
15

485.5
+4.3
7

484.6
+5.2
20

481.9
+7.9
29

499.6
+10.2
43

477.5
+12.5
50

On Rock 9.24 of 2 Sta. 13+90

H.I. = 493.58

497.5
+3.9
50

493.0
+0.6
35

491.4
+2.2
20

489.4
+4.2
12

486.5
+7.1
12

482.5
+9.1
8

480.6
+3.0
28

478.2
+1.4
46

476.8
+16.8
50

493.5
+0.1
50

490.4
+3.2
38

486.6
+7.0
25

481.9
+11.7
25

477.1
+16.5
25

474.7
+18.9
48

473.9
+19.7
50

490.3
+3.3
50

487.9
+5.7
37

482.8
+10.8
10

481.5
+12.1
10

479.1
+14.5
20

473.6
+2.00
50

494.3
+0.7
50

491.4
+2.2
38

490.6
+3.0
22

488.3
+5.3
11

486.1
+7.5
11

484.7
+8.9
8

483.3
+10.3
25

481.4
+12.2
39

481.5
+12.1
50

16

16+50

503.23

17

+50

-18

Bk # 3

+50

3.14

501.15

5.24

498.01

498.01

+88.60
in Split.

19+50

+78

Lead

Cont'd from Bk # 8, Pg. 14

H.I. = 503.23

17

499.3	496.6	494.3	493.1	491.2	490.0	490.0	488.6	488.0
$\frac{4.9}{50}$	$\frac{6.6}{35}$	$\frac{8.9}{23}$	$\frac{10.1}{14}$	$\frac{12.0}{11}$	$\frac{13.2}{11}$	$\frac{13.2}{26}$	$\frac{14.6}{38}$	$\frac{15.2}{50}$

501.4	499.8	497.2	496.8	495.0	493.9	492.0	491.6	493.5	493.5
$\frac{1.8}{50}$	$\frac{3.4}{40}$	$\frac{6.0}{15}$	$\frac{6.6}{8}$	$\frac{8.2}{5}$	$\frac{9.3}{5}$	$\frac{9.2}{11}$	$\frac{8.6}{30}$	$\frac{9.7}{44}$	$\frac{9.7}{50}$

503.3	500.9	499.2	498.2	497.8	496.6	496.0
$\frac{10.1}{50}$	$\frac{2.3}{31}$	$\frac{4.0}{13}$	$\frac{5.0}{10}$	$\frac{5.4}{25}$	$\frac{6.6}{40}$	$\frac{7.2}{50}$

500.6	500.4	505.0	503.2	500.6	499.6	499.2	498.9	499.3
$\frac{15.4}{75}$	$\frac{13.2}{65}$	$\frac{11.8}{50}$	$\frac{0.0}{44}$	$\frac{2.6}{25}$	$\frac{3.6}{25}$	$\frac{4.0}{25}$	$\frac{4.3}{45}$	$\frac{3.9}{50}$

H.I. = 501.15

502.8	498.9	498.3	498.0	498.3	498.8
$\frac{11.6}{50}$	$\frac{2.3}{20}$	$\frac{2.9}{25}$	$\frac{3.2}{25}$	$\frac{2.9}{41}$	$\frac{2.4}{50}$

508.2	506.1	504.1	498.7	497.4	495.4	494.8
$\frac{17.0}{100}$	$\frac{14.9}{90}$	$\frac{12.9}{73}$	$\frac{25}{40}$	$\frac{38}{26}$	$\frac{18}{26}$	$\frac{6.4}{20}$

505.4	503.8	501.1	499.7	496.6	495.0	492.3	489.8	488.1
$\frac{14.2}{75}$	$\frac{12.0}{64}$	$\frac{0.1}{50}$	$\frac{15}{40}$	$\frac{1.6}{16}$	$\frac{6.2}{15}$	$\frac{8.9}{15}$	$\frac{11.4}{45}$	$\frac{13.1}{50}$

501.3	496.5	496.1	495.3	490.6	489.5	486.8
$\frac{10.1}{50}$	$\frac{4.7}{21}$	$\frac{5.1}{5}$	$\frac{5.9}{5}$	$\frac{9.6}{12}$	$\frac{11.7}{20}$	$\frac{12.9}{50}$

Lead

20+09 $\sqrt{50.15}$

+50 11.67 489.48

21 2.56 492.04

+50

22

+27

+75

23+25 1.79 482.44

500.5 $\frac{0.7}{50}$ 498.0 $\frac{3.2}{35}$ 495.4 $\frac{1.8}{19}$ 491.9 $\frac{9.3}{14}$ 489.8 $\frac{1.30}{32}$ 488.2 $\frac{16.0}{50}$

498.9 $\frac{2.3}{50}$ 496.6 $\frac{4.6}{38}$ 494.3 $\frac{6.9}{20}$ 493.2 $\frac{8.0}{7}$ 491.6 $\frac{9.6}{6}$ 490.0 $\frac{11.2}{6}$ 484.6 $\frac{16.6}{35}$ 483.0 $\frac{18.2}{50}$

496.0 $\frac{4.0}{50}$ 492.9 $\frac{0.9}{33}$ 489.8 $\frac{2.2}{15}$ 487.5 $\frac{1.5}{15}$ 485.0 $\frac{7.0}{18}$ 483.6 $\frac{8.4}{30}$ 479.7 $\frac{12.3}{50}$

491.6 $\frac{0.4}{50}$ 490.1 $\frac{1.9}{36}$ 486.5 $\frac{1.5}{18}$ 484.0 $\frac{8.0}{7}$ 483.3 $\frac{8.7}{10}$ 481.7 $\frac{10.3}{10}$ 478.1 $\frac{13.9}{50}$

487.3 $\frac{4.7}{50}$ 485.1 $\frac{6.9}{33}$ 482.6 $\frac{9.4}{9}$ 481.4 $\frac{10.6}{11}$ 479.3 $\frac{12.7}{11}$ 477.1 $\frac{14.9}{32}$ 476.6 $\frac{15.4}{50}$

486.8 $\frac{5.2}{50}$ 486.0 $\frac{6.0}{44}$ 482.2 $\frac{9.8}{21}$ 479.9 $\frac{13.1}{25}$ 477.9 $\frac{14.1}{35}$ 477.8 $\frac{14.2}{35}$ 476.0 $\frac{16.0}{50}$

485.9 $\frac{6.7}{50}$ 482.4 $\frac{9.6}{24}$ 481.5 $\frac{10.5}{6}$ 480.9 $\frac{11.1}{9}$ 479.6 $\frac{12.4}{9}$ 479.1 $\frac{12.9}{25}$ 476.7 $\frac{15.3}{40}$ 475.7 $\frac{16.3}{50}$

484.8 $\frac{12.4}{50}$ 482.9 $\frac{10.5}{37}$ 480.6 $\frac{18}{14}$ 480.0 $\frac{24}{14}$ 478.7 $\frac{3.7}{16}$ 477.0 $\frac{14}{30}$ 477.1 $\frac{15.3}{24}$ 476.1 $\frac{6.3}{50}$

182.44

23+50

24

+50

25

11.82 470.62

+50

0.91 471.53

26

+27

36=1

+50

7.50 471.59

7.50 464.03 464.09

19

LH
483.2

$\frac{108}{50}$

481.1
 $\frac{13}{32}$

479.4
 $\frac{3.0}{14}$

476.3 ✓
 $\frac{4.1}{14}$

475.8
 $\frac{6.6}{29}$

R.
475.0
 $\frac{7.4}{50}$

480.2

479.9
 $\frac{2.5}{46}$

478.5
 $\frac{3.9}{30}$

476.7
 $\frac{5.7}{13}$

476.2 ✓
 $\frac{6.2}{15}$

475.3
 $\frac{7.1}{15}$

473.4
 $\frac{9.0}{38}$

473.0
 $\frac{9.4}{50}$

477.1

475.5
 $\frac{5.3}{50}$

474.0
 $\frac{6.9}{38}$

474.1 ✓
 $\frac{8.4}{14}$

473.2
 $\frac{8.3}{3}$

472.0
 $\frac{9.2}{24}$

471.1
 $\frac{10.4}{50}$

472.8
 $\frac{9.6}{50}$

471.5
 $\frac{10.9}{30}$

470.8
 $\frac{11.6}{18}$

470.7 ✓
 $\frac{11.7}{8}$

470.6
 $\frac{11.8}{28}$

468.5
 $\frac{13.0}{28}$

469.2
 $\frac{13.2}{50}$

469.8
 $\frac{1.7}{50}$

470.4
 $\frac{1.1}{36}$

468.3
 $\frac{3.2}{17}$

471.53 ✓
 $\frac{3.1}{11}$

468.4
 $\frac{2.9}{11}$

468.6
 $\frac{2.2}{20}$

469.3
 $\frac{3.5}{30}$

468.0
 $\frac{4.3}{40}$

467.2
 $\frac{4.3}{50}$

467.7
 $\frac{3.8}{50}$

467.1
 $\frac{4.4}{26}$

468.0
 $\frac{3.5}{14}$

467.9 ✓
 $\frac{3.6}{15}$

466.1
 $\frac{5.4}{15}$

465.6
 $\frac{5.9}{50}$

467.4
 $\frac{4.1}{50}$

466.7
 $\frac{4.8}{32}$

466.5
 $\frac{5.0}{21}$

465.5
 $\frac{6.0}{10}$

466.7 ✓
 $\frac{5.4}{9}$

466.1
 $\frac{5.9}{28}$

465.6
 $\frac{6.4}{28}$

465.1
 $\frac{6.9}{50}$

465.7
 $\frac{5.9}{30}$

465.6
 $\frac{6.0}{22}$

464.9
 $\frac{6.7}{8}$

465.2
 $\frac{6.4}{17}$

463.9
 $\frac{7.7}{18}$

465.1
 $\frac{6.5}{30}$

464.9
 $\frac{6.7}{30}$

27

171.59

+50

9.27 A6V.32

28

2.67 164.99

+50

29

+50

30

+50

	464.3	463.5	463.2	462.8	462.8	463.3	462.8
	7.3	8.1	8.4	7.8	8.8	8.3	8.5
	30	9	8	11	12	30	
	463.7	463.2	462.4	462.8	462.4	462.8	462.0
	7.9	8.4	9.2	8.8	9.2	8.8	9.6
	30	14	13	9	8	10	30
	462.6	462.5	461.9	461.6	461.9	461.5	461.0
	2.4	2.5	3.1	3.6	3.1	3.6	3.2
	30	26	15	14	9	8	10
	462.3	460.9	460.4	461.0	460.7	461.0	460.2
	2.7	4.1	4.6	4.0	4.3	4.0	4.8
	30	20	13	9	8	10	10
	461.2	461.3	460.7	460.3	460.7	460.0	460.4
	3.8	3.7	4.3	4.7	4.3	5.0	4.6
	30	26	16	13	9	7	10
	460.3	460.6	460.2	460.3	459.6	459.9	459.0
	4.7	4.4	4.8	4.7	5.1	5.1	6.0
	30	16	18	9	8	10	11
	459.8	460.2	459.1	459.4	458.4	459.1	458.0
	5.4	4.8	5.9	5.6	6.6	5.9	7.0
	30	9	7	10	10	30	
	459.5	458.9	458.3	458.5	458.0	458.6	457.7
	5.5	6.1	6.7	6.5	7.0	6.4	7.3
	30	15	14	9	8	10	11
	458.7	457.4	457.9	457.4	457.9	457.4	457.9
	6.3	7.6	7.2	7.6	7.2	7.6	7.2
	17	24	30	17	24	30	

31

464.99

7.80 457.19

+50

1.30 458.49

32

+50

33

+50

34

+50

6.32 452.17

6.09 458.26

21

458.4
6.6
30

458.5
6.5
19

457.2
7.8
13

457.6
7.4
8

457.2
7.8
8

457.7 ✓
7.3

456.9
8.1
10

457.4
7.6
11

456.7
8.3
30

457.1
7.4
30

456.1
7.4
19

456.8
7.7
7

456.3
7.2
6

456.4
7.1
19

455.9
7.6
11

456.4
7.1
11

456.0
7.5
30

456.0
7.5
30

456.5
7.0
26

456.6
7.9
15

456.2
7.3
9

454.9
7.6
7

455.4 ✓
7.1

454.5
7.0
11

454.8
7.7
12

455.4
7.1
17

455.0
7.5
26

454.5
7.0
28

454.5
7.0
30

454.2
4.3
30

453.7
4.8
12

454.1
4.4
8

453.8
4.7
7

454.0 ✓
4.5

453.9
4.6
6

453.4
5.1
12

453.4
5.1
23

454.1
4.4
30

452.5
6.0
30

452.1
6.4
26

452.0
6.5
11

453.1
5.4
8

453.2
5.3
4

453.4 ✓
5.1

453.3
5.2
5

452.6
5.9
11

453.1
5.4
12

454.3
4.2
30

451.2
7.3
30

452.1
6.1
10

453.0
5.5
8

452.6
5.4
6

453.1 ✓
5.4

453.0
5.5
6

452.3
6.2
12

453.6
4.9
13

455.1
3.4
30

450.9
7.6
30

452.7
5.8
9

452.0
6.5
7

452.6 ✓
5.9

452.1
6.1
12

452.9
5.6
13

455.5
3.0
30

449.8
8.7
30

451.6
6.9
11

451.6
6.0
10

452.0
6.5
9

452.4 ✓
6.1

452.0
6.5
11

452.7
5.8
12

454.6
3.9
19

450.7
2.8
12

35

458.26

+50

36

+50

37

+50

+51

+76

Bu#5

0.17 454.76

9.0 449.3
10.3 448.0

3.67 454.59 454.59

Pipe line crosses road
at 37+90, 1'± beneath
present level of road.
5/2/26 H.S.

H.I. = 458.26

2.2

449.9 450.5 451.6 452.5 451.7 452.9 454.6 455.9
8.4 7.8 6.7 6.0 6.6 5.4 3.7 2.4
30 14 10 10 11 12 19 30

448.9 451.5 451.7 451.8 451.5 452.2 453.3 455.8
9.4 7.8 6.6 6.5 6.8 6.1 5.0 2.5
30 16 10 10 10 11 15 30

448.4 450.3 451.2 451.9 451.4 452.8 453.4 455.8
9.9 8.0 7.1 6.4 6.9 5.5 4.9 2.5
30 13 10 10 9 11 17 30

447.7 450.0 451.0 451.7 451.7 451.0 452.9 455.0 456.7
10.6 8.3 7.3 6.6 6.6 7.3 5.4 3.3 1.6
30 13 10 10 10 10 11 24 30

448.4 449.8 450.3 450.9 451.5 450.9 452.6 454.0 455.8 456.7
9.9 8.5 8.0 7.4 6.8 7.4 5.7 4.3 2.5 1.6
30 23 13 11 10 9 10 17 27 30

448.9 449.1 450.5 449.8 450.8 450.4 452.5 454.7 455.1 455.6
9.4 9.2 7.8 8.5 7.5 7.9 5.5 3.6 3.2 2.7
30 25 17 12 10 10 11 22 28 30

Flow line of Culvert Pt. 10
" " H.I. 13

445.0 441.6 441.9 445.2 447.5 448.6 450.7 452.6 453.8 455.2 456.7 458.1
13.3 16.7 16.4 13.1 10.8 9.7 7.6 5.7 4.5 3.1 1.6 2.3
200 150 100 50 30 20 16 20 30 50 100 150

38

454.76

+50

39

+50

T.P.

1.75 444.51

40

+50

41

+50

0.03 437.81

12.00 444.76

11.70 437.81

H.I. = 454.76

2.3

447.8	450.7	450.2	450.9	450.8	452.2	453.3	453.9
$\frac{7.0}{30}$	$\frac{4.1}{9}$	$\frac{1.6}{8}$	$\frac{3.0}{30}$	$\frac{4.0}{11}$	$\frac{2.0}{13}$	$\frac{1.5}{10}$	$\frac{0.9}{30}$

447.0	450.0	449.6	450.0	450.0	452.0	453.4
$\frac{7.5}{30}$	$\frac{4.8}{7}$	$\frac{5.2}{6}$	$\frac{4.8}{12}$	$\frac{4.8}{12}$	$\frac{2.8}{13}$	$\frac{1.4}{30}$

445.8	448.3	448.4	448.1	450.3	451.4	
$\frac{9.0}{30}$	$\frac{6.5}{8}$	$\frac{6.4}{11}$	$\frac{6.7}{11}$	$\frac{4.5}{14}$	$\frac{3.4}{30}$	
443.2	444.9	445.9	445.4	445.5	446.7	447.5
$\frac{11.6}{30}$	$\frac{9.9}{9}$	$\frac{8.9}{7}$	$\frac{9.4}{4}$	$\frac{9.1}{10}$	$\frac{8.1}{15}$	$\frac{7.3}{30}$

Quail Sta. 40

H.I. = 444.51

440.5	441.8	442.9	442.5	442.8	442.9	442.5	442.9	443.3
$\frac{4.0}{30}$	$\frac{2.7}{9}$	$\frac{1.6}{5}$	$\frac{2.0}{3}$	$\frac{1.7}{17}$	$\frac{1.6}{4}$	$\frac{2.0}{13}$	$\frac{1.6}{14}$	$\frac{1.2}{30}$

437.1	439.1	440.1	439.7	439.8	439.9	439.2	439.9	439.9
$\frac{7.4}{30}$	$\frac{5.4}{8}$	$\frac{4.4}{5}$	$\frac{4.8}{3}$	$\frac{4.7}{17}$	$\frac{4.6}{4}$	$\frac{5.3}{13}$	$\frac{4.6}{15}$	$\frac{4.6}{30}$

435.2	436.2	436.9	436.3	436.5	436.7	436.2	437.6	437.6
$\frac{9.3}{30}$	$\frac{8.3}{13}$	$\frac{7.6}{6}$	$\frac{8.7}{13}$	$\frac{8.0}{13}$	$\frac{7.8}{4}$	$\frac{8.3}{13}$	$\frac{6.9}{15}$	$\frac{6.9}{30}$

433.7	434.8	435.0	432.7	433.1	433.3	432.8	435.0	435.5
$\frac{10.8}{30}$	$\frac{9.7}{12}$	$\frac{9.5}{7}$	$\frac{11.8}{3}$	$\frac{11.4}{14}$	$\frac{11.3}{4}$	$\frac{11.9}{14}$	$\frac{9.8}{18}$	$\frac{9.0}{30}$

42

432.84

+50

43

11.68 421.16

+50

0.30 421.46

44

+50

+91

8.0 413.5

45

+03

8.6 412.9

H.1 = 432.84

24

428.5
 $\frac{43}{30}$ 27 $\frac{27}{17}$ $\frac{27}{8}$ $\frac{37}{8}$ $\frac{42}{3}$ $\frac{37}{5}$ $\frac{35}{5}$ $\frac{41}{14}$ $\frac{20}{15}$ $\frac{11}{17}$ $\frac{16}{21}$ $\frac{09}{30}$

420.9 422.2 422.5 423.7 425.3 424.9 425.3 425.6 425.1 425.4 425.8 426.8
 $\frac{19}{38}$ $\frac{106}{30}$ $\frac{103}{16}$ $\frac{91}{10}$ $\frac{75}{6}$ $\frac{79}{3}$ $\frac{78}{5}$ $\frac{72}{5}$ $\frac{77}{13}$ $\frac{74}{15}$ $\frac{70}{20}$ $\frac{60}{30}$

421.2 420.8 419.4 420.7 421.0 421.3 421.1 421.8 421.9 422.0 421.5 422.0 422.5
 $\frac{116}{30}$ $\frac{129}{24}$ $\frac{134}{23}$ $\frac{121}{20}$ $\frac{118}{19}$ $\frac{115}{6}$ $\frac{107}{3}$ $\frac{110}{2}$ $\frac{109}{5}$ $\frac{108}{5}$ $\frac{113}{13}$ $\frac{908}{20}$ $\frac{103}{30}$

H.1 = 421.46

419.9 419.5 418.8 420.1 418.5 418.7 419.3 419.0 419.1 419.0 418.7 419.5 419.9 420.1
 $\frac{16}{38}$ $\frac{40}{23}$ $\frac{47}{21}$ $\frac{14}{17}$ $\frac{30}{8}$ $\frac{28}{5}$ $\frac{29}{4}$ $\frac{25}{3}$ $\frac{24}{3}$ $\frac{25}{4}$ $\frac{28}{14}$ $\frac{20}{17}$ $\frac{18}{24}$ $\frac{14}{30}$

418.9 417.5 416.6 418.0 417.0 417.2 417.4 417.7 417.2 418.0 418.6
 $\frac{26}{30}$ $\frac{40}{20}$ $\frac{49}{20}$ $\frac{35}{15}$ $\frac{45}{9}$ $\frac{43}{3}$ $\frac{41}{5}$ $\frac{38}{5}$ $\frac{43}{15}$ $\frac{35}{17}$ $\frac{29}{30}$

418.5 417.3 415.8 415.0 415.9 415.4 415.8 416.6 416.4 415.8 416.5 416.9
 $\frac{20}{30}$ $\frac{43}{25}$ $\frac{57}{13}$ $\frac{65}{13}$ $\frac{56}{9}$ $\frac{61}{7}$ $\frac{57}{2}$ $\frac{45}{5}$ $\frac{51}{5}$ $\frac{57}{16}$ $\frac{50}{19}$ $\frac{46}{30}$

4' Lt. Flow Line 15" C.M.P.

417.3 416.2 415.5 415.0 415.5 414.3 414.5 414.5
 $\frac{43}{30}$ $\frac{53}{18}$ $\frac{60}{9}$ $\frac{65}{9}$ $\frac{60}{7}$ $\frac{72}{16}$ $\frac{70}{22}$ $\frac{70}{30}$

18' Rt. Flow Line 15" C.M.P.

45+50

421.46

46

8.76 412.70

+40

8.01 420.71

+50

+66

+70

47+20

+50

H.I. = 421.46.

25

415.8 $\frac{57}{30}$	415.1 $\frac{64}{10}$	414.5 $\frac{7.0}{3}$	414.0 $\frac{7.5}{2}$	413.9 $\frac{7.6}{2}$	414.4 $\frac{7.1}{7}$	413.5 $\frac{8.0}{16}$	414.2 $\frac{7.3}{21}$	413.6 $\frac{7.9}{30}$
	415.7 $\frac{58}{30}$	415.1 $\frac{64}{6}$	413.0 $\frac{8.5}{7}$	413.7 $\frac{8.9}{16}$	412.6 $\frac{7.9}{17}$	413.6 $\frac{8.1}{30}$	413.1 $\frac{11.4}{25}$	410.1 $\frac{11.4}{30}$
	419.1 $\frac{1.6}{30}$	418.4 $\frac{2.3}{15}$	417.7 $\frac{3.0}{8}$	412.7 $\frac{8.0}{7}$	412.3 $\frac{8.4}{8}$	412.9 $\frac{7.8}{8}$	412.2 $\frac{8.5}{15}$	412.9 $\frac{7.8}{18}$
	418.4 $\frac{2.3}{22}$	413.6 $\frac{7.1}{15}$	414.5 $\frac{6.2}{5}$	412.4 $\frac{8.3}{7}$	412.0 $\frac{8.7}{7}$	412.7 $\frac{8.0}{8}$	411.9 $\frac{8.8}{15}$	412.8 $\frac{7.9}{18}$
	417.2 $\frac{3.5}{30}$	416.9 $\frac{3.8}{17}$	415.1 $\frac{5.6}{10}$	413.2 $\frac{7.5}{5}$	412.4 $\frac{8.3}{3}$	411.7 $\frac{9.0}{8}$	412.4 $\frac{8.3}{16}$	411.7 $\frac{9.0}{16}$
	417.0 $\frac{3.7}{30}$	416.2 $\frac{4.5}{14}$	415.0 $\frac{5.7}{7}$	412.4 $\frac{8.3}{3}$	411.7 $\frac{9.0}{3}$	412.3 $\frac{8.4}{9}$	411.6 $\frac{9.1}{16}$	412.4 $\frac{8.3}{20}$
		412.5 $\frac{8.2}{30}$	411.6 $\frac{9.1}{5}$	410.6 $\frac{10.1}{5}$	411.1 $\frac{9.6}{8}$	410.4 $\frac{10.3}{17}$	410.4 $\frac{10.3}{19}$	409.6 $\frac{11.1}{26}$
	412.6 $\frac{8.1}{30}$	411.1 $\frac{9.6}{18}$	411.3 $\frac{9.4}{5}$	410.0 $\frac{10.7}{5}$	410.5 $\frac{10.2}{8}$	409.7 $\frac{11.0}{18}$	410.1 $\frac{10.6}{19}$	409.4 $\frac{11.3}{25}$
								408.9 $\frac{11.8}{30}$

48 420.71

+50 1.91 411.88

49

+30

+50

50

+50

+95

109 401.0
111 400.8

1074 409.97

410.0 410.1 409.1 409.0 409.2 408.8 409.5 409.4
107/30 106/6 116/4 117/4 115/5 119/17 112/8 113/30

408.9 409.0 408.4 407.9 408.5 407.7 408.8 408.7
2/30 29/7 35/4 40/4 30/7 42/17 31/19 32/30

406.4 406.5 407.1 406.9 407.4 406.8 407.5 407.4
55/30 54/16 48/3 50/4 45/8 51/17 44/18 45/30

405.4 405.7 407.5 406.0 406.2 406.7 405.7 406.4 405.7
65/30 62/21 44/6 59/2 57/7 52/7 62/17 55/18 62/30

404.9 404.8 405.7 404.9 405.3 405.8 404.9 405.6 404.5
70/30 71/13 62/6 70/3 66/6 61/7 70/17 63/18 74/30

402.5 402.5 402.8 403.0 403.6 403.3 402.8 402.4 402.7 401.7 400.3
94/100 94/44 81/26 89/13 83/3 76/4 91/15 95/20 97/30 102/50 116/100

402.2 401.9 401.4 402.4 402.2 402.7 402.3 401.8 402.1
97/50 100/28 105/14 95/3 87/3 92/6 94/15 101/30 98/50

3' Lt. Flow Line 20" Pipe
18' Rt. " " "

H.I. = 411.88.

27

411.88

51

+19.33

+38

+50

52

53

Bk #0

± San Diego Ave

9.25 402.63 402.65

Bk #2, Pg. 11

402.7	402.5	403.2	403.7	403.8	403.0	403.0
9.2	9.1	8.7	8.2	8.1	8.9	8.9
<u>30</u>	<u>14</u>	<u>3</u>	<u>30</u>	<u>4</u>	<u>15</u>	<u>30</u>
403.9	403.5	403.5	403.4	403.2	403.2	402.6
8.0	8.4	8.4	8.5	8.7	8.7	9.3
<u>200</u>	<u>100</u>	<u>50</u>	<u>30</u>	<u>30</u>	<u>50</u>	<u>100</u>
						<u>200</u>

403.2
8.7

403.5
8.4

404.9
7.0

409.8
2.1

28

29

30

31

32

33

34

35

B-601 455.67

2 471.57

3 498.01

4 464.09

5 454.59

402.66

89-20

37+98

27+16

10.84

56-14

179-60

173-46

90

33-46

52-16

179-60

175-44

90

35-44

Mean 9185