

NAME National Ave Ext.

Class Alignment Book #3 Course Alignment Party Book #3

Alignment Book #3

RETURN TO
Watson, Vaile & Gough, Inc.
508 Spreckels Bldg.
San Diego, Calif.

1899

169.

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

NAT'L AVE EXT.
Alignment Book #3

MICROFILMED

DEC 30 1964

INDEX:

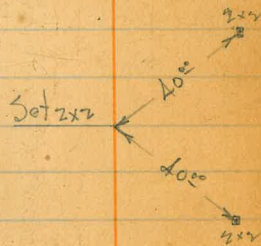
	Page
NAT'L AVE EXT. -	
Line Chg. $45+71.71$ to $69+90.96$ = $45+81.71$ to $69+65.00$	1-2
X-Sec. Line Chg. $45+71.71$ to $69+90.96$ = $45+81.71$ to $69+65.00$	4-14
Check Levels 67+0 - 72+0	35 1/2
"D" Line $45+85.81$ to $69+37.56$ = $69+59.92$	15-16
" " X-Secs	17-27

Sta.	Dist.	Angle Az.	Def.	* Ties
------	-------	--------------	------	--------

	521.85			
52+83.85		172°56' 345°51'	7°04' Lt.	

Laid

	171.21			
51+26.4 P.I.		149°38' 299°15'	30°22' Lt.	Set 2x2



47+86.08 P.O.T.	3128.57			
45+81.71				
45+71.71				
19+88.00				

Equation

Cont'd from F.B.# 12A, Pg. 3

9/9/26

Coate K
Todd H.C.
Rodiers R.C.

~~Laid~~

Sta. Dist. Angle Az. Def ±Ties

68+65.00
69+90.96
P.T.

Equation -

68+69.15
P.I.

130°03' 19°57' Lt.
260°06'

67+29.42
P.C.

A = 49°57'
R = 300'
T = 139.73'
L = 261.54'

64+69.14
P.O.T.

106345

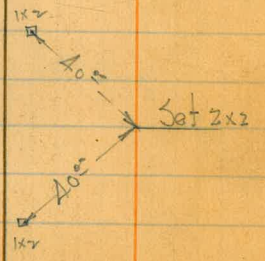
Set 2x2

~~Void~~

58+05.70
P.I.

191°34' 11°34' Rt.
+23°08'

52185



Continued in F.B. # 116, Pg. 12

~~Void~~

Sta.	Dist.	Angle Az. Def.	Ties
------	-------	-------------------	------

Cross Section

Line Chg. 69+90.96 to 45+71.71

Sta. + Hl. - E.L.

Bk #9 294.54
133 295.90

69+90.96 Bk
69+65.00 A.V.

+50

9/10/26
Coote T
Todd Rod
Rodier Tape

69

68+50

68

~~Void~~

Cont'd from Bk #82/

A

cut at 10' Lt. 69+70
H.I. = 295.9

290.9	291.9	292.5	293.9	295.9
5.0	1.0	3.4	2.0	0.0
<u>3.0</u>	<u>1.8</u>	<u>1.4</u>		<u>3.0</u>

289.1	292.1	292.8	293.4	293.9
6.8	3.8	3.1	2.5	2.0
<u>3.0</u>		<u>1.5</u>	<u>2.2</u>	<u>3.0</u>

287.9	289.3	290.0	291.2	291.8	293.8
8.0	6.6	5.9	4.7	4.1	2.1
<u>3.0</u>	<u>1.8</u>	<u>1.4</u>		<u>1.0</u>	<u>3.0</u>

289.2	291.2	292.4
6.7	4.7	3.5
<u>3.0</u>		<u>3.0</u>

287.3	289.5	291.6	291.6
8.6	6.4	4.3	4.3
<u>3.0</u>		<u>2.2</u>	<u>3.0</u>

~~Void~~

+

67+50

295.90

+36

67

66+70

+33

66

2.54 287.42

65+50

+25

~~Void~~

11.02 284.88

$\frac{2899}{100}$	$\frac{286.6}{9.3}$	$\frac{287.7}{8.2}$	$\frac{287.4}{8.5}$	$\frac{287.6}{8.3}$
$\frac{30}{30}$	$\frac{23}{23}$	$\frac{8.2}{8.2}$	$\frac{8}{8}$	$\frac{30}{30}$

$\frac{285.4}{105}$	$\frac{285.9}{100}$	$\frac{286.8}{9.1}$
$\frac{30}{30}$	$\frac{100}{100}$	$\frac{30}{30}$

$\frac{286.1}{9.8}$	$\frac{286.1}{9.8}$	$\frac{287.2}{8.7}$	$\frac{287.5}{8.4}$	$\frac{287.6}{8.3}$	$\frac{286.9}{9.0}$
$\frac{30}{30}$	$\frac{17}{17}$	$\frac{8.7}{8.7}$	$\frac{11}{11}$	$\frac{19}{19}$	$\frac{30}{30}$

$\frac{284.4}{11.5}$	$\frac{285.3}{10.6}$	$\frac{287.6}{10.3}$	$\frac{285.7}{10.2}$	$\frac{286.6}{9.3}$
$\frac{30}{30}$	$\frac{22}{22}$	$\frac{10.3}{10.3}$	$\frac{18}{18}$	$\frac{30}{30}$

$\frac{283.2}{12.7}$	$\frac{284.7}{11.2}$	$\frac{284.8}{11.1}$	$\frac{286.1}{9.8}$
$\frac{30}{30}$	$\frac{11.2}{11.2}$	$\frac{20}{20}$	$\frac{30}{30}$

$\frac{283.8}{12.1}$	$\frac{284.9}{11.0}$	$\frac{284.8}{11.1}$	$\frac{285.1}{10.8}$
$\frac{30}{30}$	$\frac{18}{18}$	$\frac{11.1}{11.1}$	$\frac{30}{30}$

$\frac{282.6}{48}$	$\frac{284.5}{29}$	$\frac{285.4}{2.0}$	$\frac{285.4}{2.0}$	$\frac{285.0}{2.4}$	$\frac{285.7}{1.7}$
$\frac{30}{30}$	$\frac{19}{19}$	$\frac{2.0}{2.0}$	$\frac{17}{17}$	$\frac{26}{26}$	$\frac{30}{30}$

$\frac{2819}{5.5}$	$\frac{283.1}{4.3}$	$\frac{284.1}{3.3}$	$\frac{284.2}{3.2}$	$\frac{284.6}{2.8}$	$\frac{284.9}{2.5}$	$\frac{285.4}{2.0}$
$\frac{30}{30}$	$\frac{22}{22}$	$\frac{33}{33}$	$\frac{14}{14}$	$\frac{19}{19}$	$\frac{25}{25}$	$\frac{30}{30}$

5

65

287.4

64+50

64

63+70

+34

63

0.12 275.59

11.95 275.47

62+50

420

Void

Lt.
(3)

$\frac{282.6}{4.8}$
 $\frac{30}{30}$

$\frac{284.8}{2.6}$
 $\frac{12}{12}$

$\frac{285.0}{2.4}$
 $\frac{12}{12}$

Rt.
(11)

$\frac{284.1}{3.3}$
 $\frac{20}{20}$

$\frac{284.8}{2.6}$
 $\frac{30}{30}$

$\frac{280.2}{7.2}$
 $\frac{30}{30}$

$\frac{281.1}{6.3}$
 $\frac{20}{20}$

$\frac{281.7}{5.7}$
 $\frac{12}{12}$

$\frac{282.8}{4.6}$
 $\frac{20}{20}$

$\frac{282.9}{4.5}$
 $\frac{30}{30}$

$\frac{279.6}{7.8}$
 $\frac{30}{30}$

$\frac{281.0}{6.4}$
 $\frac{8}{8}$

$\frac{281.2}{6.2}$
 $\frac{12}{12}$

$\frac{281.0}{6.4}$
 $\frac{13}{13}$

$\frac{280.6}{6.8}$
 $\frac{21}{21}$

$\frac{280.6}{6.8}$
 $\frac{30}{30}$

$\frac{277.6}{9.8}$
 $\frac{30}{30}$

$\frac{278.2}{9.2}$
 $\frac{15}{15}$

$\frac{278.0}{9.4}$
 $\frac{12}{12}$

$\frac{277.8}{9.6}$
 $\frac{30}{30}$

$\frac{277.9}{9.5}$
 $\frac{30}{30}$

$\frac{278.4}{9.0}$
 $\frac{27}{27}$

$\frac{278.4}{9.0}$
 $\frac{16}{16}$

$\frac{277.4}{10.0}$
 $\frac{12}{12}$

$\frac{277.1}{10.3}$
 $\frac{17}{17}$

$\frac{276.3}{11.1}$
 $\frac{30}{30}$

$\frac{274.3}{13.1}$
 $\frac{30}{30}$

$\frac{275.6}{11.8}$
 $\frac{12}{12}$

$\frac{276.0}{11.4}$
 $\frac{8}{8}$

$\frac{276.4}{11.0}$
 $\frac{14}{14}$

$\frac{276.3}{11.1}$
 $\frac{27+30}{27+30}$

$\frac{269.4}{6.2}$
 $\frac{30}{30}$

$\frac{270.4}{5.2}$
 $\frac{16}{16}$

$\frac{271.1}{11.5}$
 $\frac{12}{12}$

$\frac{271.6}{4.0}$
 $\frac{30}{30}$

$\frac{265.9}{9.7}$
 $\frac{30}{30}$

$\frac{270.2}{5.4}$
 $\frac{12}{12}$

$\frac{271.2}{4.4}$
 $\frac{10}{10}$

$\frac{271.3}{4.3}$
 $\frac{24}{24}$

$\frac{270.9}{4.7}$
 $\frac{30}{30}$

6

Void

X

61+86

275.59

+6.0

+43

61

Void

60+92

↓
5.48 270.11

111 271.22

11.56 259.66

2.83 262.49

Btm #8 7.64 254.85 254.87

7.64 262.51

2.83 259.69

11.52 271.20

1.06 270.14

6.83 276.97

Lt
(5)

Rt
(11)

7

262.3

13.3

30

266.0

9.6

30

269.9

5.7

30

263.8

11.8

30

265.0

10.6

25

266.2

9.4

15

267.2

8.4

30

269.8

5.8

30

263.0

12.6

30

265.8

9.8

30

268.8

6.8

30

265.2

10.4

30

268.8

6.8

30

271.6

10.4

20

271.6

4.0

27

272.2

3.4

30

268.6

7.0

30

271.4

4.2

30

272.1

3.5

12

272.2

3.4

30

Rock 2' So. 60+85

This is an old Btm - See Book 114/3

Void

x

60+50

27697

+20

59+76

+50

+30

58+86

+50

+23

Void

11
(5)

H.I. = 276.97

P.4
(N)

8

269.3	270.0	271.7	273.5	273.2
<u>7.7</u>	<u>6.0</u>	<u>5.3</u>	<u>3.5</u>	<u>3.8</u>
30	13		22	30

269.9	271.8	274.2
<u>7.1</u>	<u>5.2</u>	<u>2.8</u>
30		30

271.4	272.5	272.4	272.4	273.1
<u>5.6</u>	<u>4.5</u>	<u>4.6</u>	<u>4.6</u>	<u>3.9</u>
30	15		19	30

269.9	271.3	272.3	272.7
<u>7.1</u>	<u>5.7</u>	<u>4.7</u>	<u>4.3</u>
30	15		30

271.9	272.7	272.3	272.5	273.7
<u>5.1</u>	<u>4.3</u>	<u>4.7</u>	<u>4.5</u>	<u>3.3</u>
30	18		17	30

272.8	273.2	272.9	273.5	274.5	274.9	274.7	274.2
<u>4.2</u>	<u>3.8</u>	<u>4.1</u>	<u>3.5</u>	<u>2.5</u>	<u>2.1</u>	<u>2.3</u>	<u>2.8</u>
30	25	13		9	15	24	30

273.5	274.1	274.2	274.4	275.7	275.5
<u>3.5</u>	<u>2.9</u>	<u>2.8</u>	<u>2.6</u>	<u>1.3</u>	<u>1.5</u>
30	21	14		14	30

271.2	273.5	274.2	275.0	275.3	275.5	275.1
<u>5.8</u>	<u>3.5</u>	<u>2.8</u>	<u>2.0</u>	<u>1.7</u>	<u>1.5</u>	<u>1.9</u>
30	16	13	14		3	30

Void

end of
check

X

276.97

58+05.70

On Split-

B-hr

5.55 271.42

0.60 272.02

57+61

+50

Void

+26

11.65 260.37

56+75

0.71 261.08

+37

56

2.29 251.65

11.72 249.36

Lt.
(S)

Rt.
(N)

9

271.1	272.3	273.7	273.6	274.2	274.8	274.7
5.9	4.7	3.3	3.4	2.5	2.2	2.3
30	17		4	14	25	30

2x2 Tub 30' South RT+05.70
11.1 = 272.02

265.5	269.4	270.0	272.4
6.5	2.6	2.0	10.4
30		7	30

264.6	265.9	269.1	269.5	271.9
7.4	6.1	2.9	2.5	0.1
30	22		9	30

263.0	263.1	265.2	267.0	269.2
9.0	8.9	6.8	5.0	2.8
30	22		14	30

Void

4.22 61.1

257.9	58.7	59.6	270.3	272.0
268.8	269.6	270.6	59.4	61.1
3.2	2.4	2.0	1.7	0.0
30	20		9	30

271.5	55.4	57.8	56.2	57.6
267.4	267.3	267.1	267.1	267.6
9.6	5.7	5.3	4.9	4.0
30	6		5	30

247.3	249.9	251.2	262.9
258.2	260.8	262.1	263.0
13.8	11.4	9.9	8.4
30		16	30

+

55+50

251.65

+20

55

54+70

+50

+15

Btu#7

7.01 251.59

53+85

7.01 244.64 244.58

Lt.
(S)

H.I. = 257.7

Rt.
(N)

10

243.3	244.4	244.8	246.5	249.0
8.4	7.3	6.9	5.2	2.7
<u>30</u>	<u>23</u>	<u>16</u>		<u>30</u>

244.4	245.4	246.7	247.6	247.9
7.3	6.3	5.0	4.1	3.8
<u>30</u>	<u>27</u>		<u>10</u>	<u>30</u>

244.2	245.9	247.0	247.2
7.5	5.8	4.7	4.5
<u>30</u>		<u>20</u>	<u>30</u>

244.9	246.9	248.3
6.8	4.8	3.4
<u>30</u>		<u>30</u>

244.8	246.1	246.6	246.0
6.9	5.6	5.1	5.7
<u>30</u>	<u>16</u>		<u>30</u>

242.7	244.3	245.3
9.0	7.4	6.4
<u>30</u>		<u>30</u>

2x2 Hub 43' Lt. Sta 54+00 - See Bk # 114/3

240.6	244.5	244.7	243.9
11.0	7.1	6.9	7.7
<u>30</u>		<u>10</u>	<u>30</u>

Void

Void

x

S3+70

251.59

+50

11.94 239.65

S3

1.06 240.71

S2+60

+27

S2

S1+50

+27

0.95 229.73

11.93 228.78

Void

Lt.
(S)

239.6
12.0
30

238.3
13.3
30

237.4
3.3
30

236.0
4.7
30

233.2
7.5
30

231.3
9.4
30

229.3
11.4
30

227.5
12.2
30

242.5
9.1
30

242.0
9.6
30

H.I. = 240.11

237.9
2.8
26

236.9
3.8
21

235.1
5.6
30

232.6
8.1
30

229.8
10.9
15

227.5
12.2
21

Rt.
(N)

243.2
8.4
17

242.2
9.4
30

239.0
1.7
13

237.9
2.8
18

233.9
6.8
30

231.7
9.0
30

228.6
12.1
30

229.7

226.5
3.2
30

226.0
3.7
30

11

Void

X

Sta 12.64

229.73

cu Split.

50+67

+38

0.10

218.49

11.34

218.39

50

49+50

49

48+77

Blu #6

Void

1.75

216.74

216.72

Lt

(5)

225.5
4.2
30

225.2
4.5
18

226.0
3.7
13

226.2
3.5
13

225.4
4.3
30

220.0
9.7
30

219.7
10.0
13

219.9
9.8
13

220.7
9.0
30

218.7
11.0
30

219.1
10.6
25

219.3
10.4
13

218.4
11.3
13

219.1
10.6
30

215.5
3.0
30

216.2
2.3
20

216.7
1.5
20

218.7
4.0
30

214.3
4.2
30

214.0
4.5
22

215.2
3.3
13

215.5
3.0
30

213.4
5.1
30

213.9
4.6
18

213.5
5.0
10

214.2
4.3
13

215.3
3.2
13

215.3
3.2
19

214.2
4.3
30

212.1
6.4
30

212.7
5.8
24

213.2
5.3
14

213.6
4.9
10

213.8
4.7
10

213.0
5.5
14

213.7
4.8
25

213.5
5.0
30

Void

Top 6" Water Valve 68' Lt. Sta 48+67

See Book # 114/3

48+50

218.18

+25

47+96

+50

+20

47

46+70

+50

6.14 215.81

Void

9.12 209.37

Lt.
(5)

212.3
6.2
30

214.3
4.2
12

214.1
4.4
12

212.5
6.0
18

213.8
4.7
30

210.5
8.0
30

211.5
7.0
18

211.6
6.9
18

212.1
6.4
30

210.2
8.3
30

210.3
8.2
16

212.3
6.2
12

212.9
5.6
20

212.4
6.1
30

210.6
7.9
30

209.7
8.8
15

209.9
8.6
12

210.3
8.2
16

211.1
7.4
30

209.2
9.3
30

209.5
9.0
15

209.7
8.8
15

210.5
8.0
30

H.I. = 215.8

210.0
5.8
30

209.1
6.7
13

209.4
6.4
12

209.7
6.1
24

210.4
5.4
30

208.1
7.7
30

209.8
6.0
10

210.4
5.4
11

210.9
4.9
11

210.0
5.3
20

209.8
6.0
30

208.1
7.7
30

208.1
7.7
16

209.3
6.5
12

209.8
6.0
10

209.2
6.6
30

Void

x

A6+35

215.81

+13

45+71.71=
45+81.71

Equation -

Void

Bk#5

329

212.54

212.49

Continued in Bk# 82/

L
(S)

R
(N)

14

$\frac{208.0}{7.8}$
30

$\frac{208.9}{6.9}$
30

$\frac{209.0}{6.8}$
30

$\frac{208.8}{7.0}$
30

$\frac{208.5}{7.3}$
28

$\frac{210.8}{5.0}$
30

$\frac{210.8}{5.0}$
15

$\frac{208.7}{7.1}$
30

$\frac{208.6}{7.2}$
30

$\frac{208.4}{7.4}$
19

$\frac{209.1}{6.7}$
10

$\frac{209.0}{6.8}$
30

$\frac{208.3}{7.5}$
18

$\frac{208.3}{7.5}$
30

Void

Out Hub # Sta 47+96.08 - See Bk# 114/3

X

Sta. Dist. Angle Az. Def. \pm Ties.

Topog-

15

53+04.89
P.T.

1888.1
1888.1
1888.1

29+52.40
P.I. \times 152°32' 27°28' Lt.
305°04'



45+85.81
P.C.

$L = 27^{\circ}28'$
 $R = 1500'$
 $T = 366.59'$
 $L = 719.08'$

Route Notes
Glover π
Clifton H.S.
Key R.C.
10/7/26

"D" LINE.

Continued from Bk. # 124/3

Deflections-

46 = 0° 16'
+50 = 1° 13'
47 = 2° 11'
+50 = 3° 08'
48 = 4° 05'
+50 = 5° 05'
49 = 6° 00'
+50 = 6° 57'
50 = 7° 54'
+50 = 8° 52'
51 = 9° 49'
+50 = 10° 46'
52 = 11° 44'
+50 = 12° 41'
53 = 13° 38'
to 439 = 13° 44'

X-Secs on Pg. 17 this book-

Sta. Dist. Angle Az. Def. ± Ties-

↑
69+59.94
69+37.56 =
P.T.
↓

Equation-

68+19.07 P.I. 131°39' 48°21' Lt.
263°18'

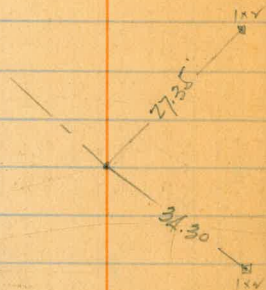
66+84.40 PC

A = 48°21'
R = 300'
T = 134.67
L = 253.16

1880.7
514.18

58+00 POT

Set 2x2



Topo 3-

16

Cont'd in Bk # 116/12

Deflections-

67 = 1° 29'
+50 = 6° 16'
68 = 11° 02'
+50 = 15° 49'
69 = 20° 35'
+37.56 = 24° 10'

LINE
Cross Sections

Bk# J

7.19 219.68

212.49

See Pg. 14

45+85.81

46+03

+23

+55

Transit Notes on Pg. 15

+76

47+09

10/7/26
Coote Notes
Glover A
Clifton Rod
Key Tape

Cont'd from Bk# 82/

17

208.9	208.5	209.5	209.3	208.7	209.6
$\frac{11.3}{30}$	$\frac{11.4}{27}$	$\frac{10.7}{11}$	$\frac{10.4}{11}$	$\frac{11.0}{13}$	$\frac{10.1}{30}$

208.6	210.8	210.8	208.3
$\frac{11.1}{30}$	$\frac{8.9}{14}$	$\frac{8.9}{11}$	$\frac{11.4}{30}$

208.8	209.0	208.0	208.0
$\frac{10.9}{30}$	$\frac{10.7}{11}$	$\frac{11.7}{15}$	$\frac{11.7}{30}$

209.5	210.1	211.0	210.5	208.3	208.0
$\frac{10.2}{30}$	$\frac{9.6}{19}$	$\frac{8.7}{11}$	$\frac{9.2}{11}$	$\frac{11.4}{24}$	$\frac{11.7}{30}$

211.5	209.8	209.1	208.7	209.4
$\frac{8.2}{30}$	$\frac{9.9}{15}$	$\frac{10.6}{11}$	$\frac{11.0}{16}$	$\frac{10.3}{30}$

210.4	209.7	209.6	209.1
$\frac{9.3}{30}$	$\frac{10.0}{10}$	$\frac{10.1}{11}$	$\frac{10.6}{30}$

219.68

47+26

+50

+82

18

+25

+45

+75

49

LH

219.68

GH

18

212.3	211.3	209.9	209.4
<u>74</u>	<u>84</u>	<u>98</u>	<u>103</u>
30	14		30

210.7	210.3	209.7
<u>90</u>	<u>94</u>	<u>100</u>
30		30

213.3	214.0	212.6	212.3	212.2	210.4
<u>64</u>	<u>57</u>	<u>71</u>	<u>74</u>	<u>75</u>	<u>93</u>
30	23	7		14	30

211.9	211.9	211.1
<u>78</u>	<u>78</u>	<u>86</u>
30		30

213.0	212.8	212.1	212.0	212.9
<u>67</u>	<u>69</u>	<u>76</u>	<u>77</u>	<u>68</u>
30	10		15	30

215.9	215.8	213.2	212.7	212.9	214.8
<u>38</u>	<u>39</u>	<u>65</u>	<u>70</u>	<u>68</u>	<u>49</u>
30	26	5		10	30

214.1	213.7	213.7	214.1	213.7
<u>56</u>	<u>60</u>	<u>60</u>	<u>56</u>	<u>60</u>
30	19		24	30

215.5	214.5	214.5	214.7
<u>42</u>	<u>52</u>	<u>52</u>	<u>50</u>
30	19		30

19+50 219.68
11.81 231.34

+84

50

+29

+50

+80

5414

+50

11.33 242.16
0.51 250.83

Lt.

Rt.

19

$\frac{216.5}{30}$	$\frac{216.9}{19}$	$\frac{216.2}{35}$	$\frac{215.7}{11}$	$\frac{216.4}{30}$
--------------------	--------------------	--------------------	--------------------	--------------------

$\frac{217.0}{30}$	$\frac{217.1}{23}$	$\frac{219.2}{12.1}$	$\frac{219.4}{11}$	$\frac{218.5}{23}$	$\frac{217.0}{30}$
--------------------	--------------------	----------------------	--------------------	--------------------	--------------------

$\frac{217.9}{30}$	$\frac{217.7}{29}$	$\frac{218.3}{13.0}$	$\frac{217.7}{30}$
--------------------	--------------------	----------------------	--------------------

$\frac{218.9}{30}$	$\frac{219.2}{12.1}$	$\frac{219.7}{30}$
--------------------	----------------------	--------------------

$\frac{221.0}{30}$	$\frac{222.3}{20}$	$\frac{221.8}{15}$	$\frac{222.2}{23}$	$\frac{222.0}{30}$
--------------------	--------------------	--------------------	--------------------	--------------------

$\frac{222.9}{30}$	$\frac{222.9}{22}$	$\frac{223.3}{8.0}$	$\frac{223.9}{30}$
--------------------	--------------------	---------------------	--------------------

$\frac{225.6}{30}$	$\frac{228.5}{7}$	$\frac{228.6}{27}$	$\frac{228.7}{30}$
--------------------	-------------------	--------------------	--------------------

$\frac{229.8}{30}$	$\frac{230.8}{11}$	$\frac{230.6}{0.1}$	$\frac{231.7}{30}$
--------------------	--------------------	---------------------	--------------------

51+73 242.16

52+16

+39

169

11.37 253.30 0.23 241.93

53

136

34+9

8.73 244.57 244.58

+77

<u>131.5</u>	<u>132.2</u>	<u>132.2</u>	<u>133.9</u>	<u>133.5</u>
<u>10.7</u>	<u>10.0</u>	<u>10.0</u>	<u>8.3</u>	<u>8.7</u>
<u>30</u>	<u>14</u>		<u>20</u>	<u>30</u>

<u>137.2</u>	<u>136.5</u>	<u>137.5</u>	<u>137.5</u>	<u>136.9</u>	<u>137.5</u>
<u>5.0</u>	<u>5.7</u>	<u>1.1</u>	<u>1.7</u>	<u>5.3</u>	<u>4.7</u>
<u>30</u>	<u>14</u>		<u>4</u>	<u>23</u>	<u>30</u>

<u>238.0</u>	<u>137.7</u>	<u>137.7</u>
<u>12</u>	<u>15</u>	<u>15</u>
<u>30</u>		<u>30</u>

<u>239.7</u>	<u>239.9</u>	<u>241.3</u>	<u>241.5</u>	<u>240.1</u>
<u>2.5</u>	<u>2.3</u>	<u>0.9</u>	<u>0.7</u>	<u>2.1</u>
<u>30</u>	<u>18</u>		<u>16</u>	<u>30</u>

<u>242.0</u>	<u>242.7</u>	<u>241.9</u>	<u>242.3</u>	<u>242.0</u>
<u>11.3</u>	<u>10.6</u>	<u>11.4</u>	<u>11.0</u>	<u>11.3</u>
<u>30</u>	<u>17</u>		<u>19</u>	<u>30</u>

<u>243.6</u>	<u>244.4</u>	<u>243.8</u>	<u>244.0</u>
<u>9.7</u>	<u>8.9</u>	<u>9.5</u>	<u>9.3</u>
<u>30</u>		<u>14</u>	<u>30</u>

2x2 + 0.5 53+60 - 2.14-

<u>245.6</u>	<u>245.8</u>	<u>245.6</u>	<u>244.6</u>
<u>7.7</u>	<u>1.5</u>	<u>7.7</u>	<u>8.1</u>
<u>30</u>		<u>13</u>	<u>30</u>

54

253.30

+25

+55

55

+50

11.15

264.22

0.23 253.07

+90

+6+26

+67

10.76 274.70

0.28 263.94

21

<u>246.2</u>	<u>246.1</u>	<u>246.0</u>
<u>7.1</u>	<u>7.2</u>	<u>7.3</u>
30		30

<u>248.5</u>	<u>248.9</u>	<u>248.3</u>	<u>245.7</u>
<u>4.8</u>	<u>4.4</u>	<u>5.1</u>	<u>7.6</u>
30	27		30

<u>247.6</u>	<u>247.1</u>	<u>245.4</u>
<u>5.7</u>	<u>6.2</u>	<u>7.9</u>
30		30

<u>250.1</u>	<u>247.8</u>	<u>245.5</u>	<u>244.7</u>
<u>3.2</u>	<u>5.5</u>	<u>7.8</u>	<u>8.6</u>
30		24	30

<u>254.0</u>	<u>250.1</u>	<u>247.2</u>
<u>4.0</u>	<u>3.2</u>	<u>6.1</u>
30		30

<u>257.6</u>	<u>255.7</u>	<u>254.8</u>	<u>250.7</u>
<u>6.6</u>	<u>8.5</u>	<u>9.4</u>	<u>13.5</u>
30		7	30

<u>261.3</u>	<u>259.2</u>	<u>258.6</u>	<u>257.2</u>	<u>255.7</u>
<u>2.9</u>	<u>5.0</u>	<u>5.6</u>	<u>7.0</u>	<u>8.5</u>
30	11		22	30

<u>267.2</u>	<u>262.3</u>	<u>261.3</u>	<u>258.4</u>
<u>4.3</u>	<u>1.9</u>	<u>2.9</u>	<u>5.4</u>
30	19	11	30

274.70

57

270.0	269.0	266.4	265.0	263.5	262.6
<u>4.7</u>	<u>5.7</u>	<u>8.3</u>	<u>9.7</u>	<u>11.2</u>	<u>12.1</u>
30	15	9	24	30	

+21

271.6	270.5	267.5	265.2	263.9
<u>3.1</u>	<u>4.2</u>	<u>7.2</u>	<u>9.5</u>	<u>10.8</u>
30	25	18	30	

34w ~

3.34 271.38 271.44

On 2nd Hub 1' H 57+49

+50

273.5	271.2	267.1	266.6
<u>1.2</u>	<u>3.5</u>	<u>7.6</u>	<u>8.1</u>
30	24	30	

3.34 271.38 271.44

6.51 277.93

+68

275.2	274.3	271.2	266.9
<u>2.7</u>	<u>3.6</u>	<u>6.7</u>	<u>11.0</u>
30	19		30

58

274.6	273.9	273.5	272.6	268.6
<u>3.3</u>	<u>4.0</u>	<u>4.4</u>	<u>3.9</u>	<u>3.3</u>
30	20	7	30	

+50

272.9	272.0	271.6	268.0
<u>5.0</u>	<u>5.9</u>	<u>6.3</u>	<u>9.9</u>
30	8	30	

+71

272.9	272.8	272.0	271.1	267.2
<u>5.5</u>	<u>5.1</u>	<u>5.9</u>	<u>6.8</u>	<u>10.7</u>
30	14	9	30	

59

277.93

+25

+50

60

+24

+39

+67

61

6.48 275.35

9.06 268.87

$$\begin{array}{r} 272.2 \\ 57 \\ \hline 30 \end{array} \quad \begin{array}{r} 271.1 \\ 68 \\ \hline 11 \end{array} \quad \begin{array}{r} 270.1 \\ 78 \\ \hline \end{array} \quad \begin{array}{r} 267.9 \\ 100 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 272.2 \\ 57 \\ \hline 30 \end{array} \quad \begin{array}{r} 272.5 \\ 54 \\ \hline 10 \end{array} \quad \begin{array}{r} 271.8 \\ 61 \\ \hline \end{array} \quad \begin{array}{r} 270.5 \\ 74 \\ \hline 12 \end{array} \quad \begin{array}{r} 267.8 \\ 101 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 272.6 \\ 53 \\ \hline 30 \end{array} \quad \begin{array}{r} 272.0 \\ 59 \\ \hline 21 \end{array} \quad \begin{array}{r} 270.2 \\ 77 \\ \hline \end{array} \quad \begin{array}{r} 268.9 \\ 90 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 272.3 \\ 56 \\ \hline 30 \end{array} \quad \begin{array}{r} 271.7 \\ 62 \\ \hline 21 \end{array} \quad \begin{array}{r} 269.8 \\ 81 \\ \hline \end{array} \quad \begin{array}{r} 268.4 \\ 95 \\ \hline 14 \end{array} \quad \begin{array}{r} 267.7 \\ 102 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 272.1 \\ 33 \\ \hline 30 \end{array} \quad \begin{array}{r} 271.5 \\ 39 \\ \hline 23 \end{array} \quad \begin{array}{r} 270.0 \\ 54 \\ \hline 8 \end{array} \quad \begin{array}{r} 269.4 \\ 60 \\ \hline \end{array} \quad \begin{array}{r} 266.0 \\ 94 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 270.4 \\ 50 \\ \hline 30 \end{array} \quad \begin{array}{r} 267.7 \\ 77 \\ \hline \end{array} \quad \begin{array}{r} 265.9 \\ 95 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 269.3 \\ 61 \\ \hline 20 \end{array} \quad \begin{array}{r} 268.7 \\ 67 \\ \hline 21 \end{array} \quad \begin{array}{r} 265.0 \\ 104 \\ \hline \end{array} \quad \begin{array}{r} 261.4 \\ 140 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 267.4 \\ 80 \\ \hline 30 \end{array} \quad \begin{array}{r} 264.8 \\ 106 \\ \hline \end{array} \quad \begin{array}{r} 260.9 \\ 145 \\ \hline 23 \end{array} \quad \begin{array}{r} 259.7 \\ 157 \\ \hline 30 \end{array}$$

275.38

6450

+72

62

+50

0.47 274.89

10.79 285.67

+83

63+28

+54

+76

<u>268.3</u>	<u>265.6</u>	<u>263.8</u>	<u>262.4</u>
<u>7.1</u>	<u>9.8</u>	<u>11.6</u>	<u>13.0</u>
30		18	30

<u>271.3</u>	<u>270.8</u>	<u>267.9</u>	<u>264.7</u>	<u>263.3</u>
<u>4.1</u>	<u>4.6</u>	<u>7.5</u>	<u>10.7</u>	<u>12.1</u>
30	27		19	30

<u>271.7</u>	<u>271.3</u>	<u>271.4</u>	<u>268.4</u>
<u>3.7</u>	<u>4.1</u>	<u>4.4</u>	<u>7.0</u>
30	16		30

<u>276.5</u>	<u>275.8</u>	<u>275.4</u>	<u>273.4</u>
<u>4.1</u>	<u>4.4</u>	<u>0.0</u>	<u>2.0</u>
30	19		30

<u>277.1</u>	<u>278.4</u>	<u>278.3</u>	<u>276.2</u>
<u>8.6</u>	<u>7.3</u>	<u>1.4</u>	<u>9.5</u>
30		15	30

<u>278.7</u>	<u>278.3</u>	<u>277.0</u>
<u>7.0</u>	<u>7.4</u>	<u>8.7</u>
30		30

<u>281.1</u>	<u>281.6</u>	<u>280.8</u>	<u>278.4</u>
<u>4.5</u>	<u>4.1</u>	<u>4.9</u>	<u>7.3</u>
30	15		30

<u>283.2</u>	<u>281.0</u>	<u>280.1</u>	<u>278.7</u>
<u>2.5</u>	<u>4.7</u>	<u>5.6</u>	<u>7.0</u>
30	10		30

64

285.67

+30

+56

7.21 29x.23

0.65 285.07

+77

65

+31

+50

66

25

282.9	281.9	281.4	279.2
<u>28</u>	<u>38</u>	<u>48</u>	<u>65</u>
30	17	-	30

285.7	284.5	283.2	283.0	282.2	280.1
<u>00</u>	<u>1.2</u>	<u>2.5</u>	<u>2.7</u>	<u>3.5</u>	<u>5.6</u>
30	17	8	-	15	30

284.0	285.3	285.0	284.6	281.4
<u>8.2</u>	<u>6.9</u>	<u>7.2</u>	<u>7.6</u>	<u>10.8</u>
30	13	-	5	30

285.5	284.3	284.2	281.0
<u>6.7</u>	<u>1.9</u>	<u>8.0</u>	<u>11.2</u>
30	21	-	30

285.4	285.0	284.5	281.5
<u>6.8</u>	<u>7.2</u>	<u>7.7</u>	<u>10.7</u>
30	-	9	30

285.3	285.8	285.6	284.2	282.7
<u>6.9</u>	<u>6.4</u>	<u>6.6</u>	<u>8.0</u>	<u>9.5</u>
30	19	-	10	30

285.0	284.9	283.8	282.0
<u>7.2</u>	<u>7.3</u>	<u>8.4</u>	<u>9.5</u>
30	-	20	30

285.7	285.0	284.9	284.0
<u>6.5</u>	<u>6.6</u>	<u>7.3</u>	<u>8.2</u>
30	-	18	30

(66+24)

292.23

$$\begin{array}{r} 286.6 \\ \hline 30 \end{array} \quad \begin{array}{r} 285.9 \\ \hline 24 \end{array} \quad \begin{array}{r} 285.6 \\ \hline 66 \end{array} \quad \begin{array}{r} 285.3 \\ \hline 15 \end{array} \quad \begin{array}{r} 283.8 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 287.2 \\ \hline 30 \end{array} \quad \begin{array}{r} 287.6 \\ \hline 23 \end{array} \quad \begin{array}{r} 287.2 \\ \hline 50 \end{array} \quad \begin{array}{r} 285.8 \\ \hline 12 \end{array} \quad \begin{array}{r} 284.8 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 286.6 \\ \hline 30 \end{array} \quad \begin{array}{r} 285.9 \\ \hline 63 \end{array} \quad \begin{array}{r} 285.0 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 287.1 \\ \hline 30 \end{array} \quad \begin{array}{r} 287.5 \\ \hline 47 \end{array} \quad \begin{array}{r} 286.0 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 289.5 \\ \hline 30 \end{array} \quad \begin{array}{r} 288.5 \\ \hline 11 \end{array} \quad \begin{array}{r} 288.0 \\ \hline 45 \end{array} \quad \begin{array}{r} 286.1 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 290.8 \\ \hline 30 \end{array} \quad \begin{array}{r} 291.1 \\ \hline 26 \end{array} \quad \begin{array}{r} 290.0 \\ \hline 13 \end{array} \quad \begin{array}{r} 289.4 \\ \hline 100 \end{array} \quad \begin{array}{r} 288.2 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 292.7 \\ \hline 30 \end{array} \quad \begin{array}{r} 290.9 \\ \hline 14 \end{array} \quad \begin{array}{r} 290.3 \\ \hline 91 \end{array} \quad \begin{array}{r} 289.4 \\ \hline 17 \end{array} \quad \begin{array}{r} 288.0 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 292.8 \\ \hline 30 \end{array} \quad \begin{array}{r} 292.2 \\ \hline 23 \end{array} \quad \begin{array}{r} 291.1 \\ \hline 83 \end{array} \quad \begin{array}{r} 289.5 \\ \hline 24 \end{array} \quad \begin{array}{r} 288.9 \\ \hline 30 \end{array}$$

+43

+69

67

+28

2.30 289.93

+50

9.43 299.36

+75

68

668+50

299.36

69

+37.56

Byw#9

4.77 294.59 294.57 On Hub 10' Lt. 69+70

27

293.6	291.8	291.2	289.0	287.6
$\frac{5.8}{30}$	$\frac{7.6}{11}$	$\frac{8.2}{11}$	$\frac{10.4}{18}$	$\frac{11.8}{30}$

294.1	292.9	291.9	289.7	288.8
$\frac{5.3}{30}$	$\frac{6.5}{15}$	$\frac{7.5}{15}$	$\frac{9.7}{20}$	$\frac{10.6}{30}$

295.0	293.7	292.6	291.1
$\frac{4.4}{30}$	$\frac{5.7}{15}$	$\frac{6.8}{15}$	$\frac{8.3}{30}$

Pauid in Bk # 114, P 33

28

29

30

31

32

33

34

35

Upper St + Southern Ave. w 63

1/4" Service Pipe under surface (E+W) (N+S)
6" " " drain 2.63 below top of service pipe

National Ave Levels. 67-72. Check

Blk #	3.19	297.76		294.57
6919096			39	93.9
+50			57	92.1
69			65	91.2
+50			66	91.2
68			84	89.4
+50			10.1	87.7
67			10.5	87.3
	3.76	303.33	3.19	294.57
6919096			95	93.8
70			7.6	95.7
+50			7.0	96.3
71			45	98.8
+50			3.1	300.2
72			29	300.4
			876	294.57

174-68
25-19
54-32
30-104
35-6
54-5

68+19.07
53+00.80
15.14.18

92.5
94.4
96.7
98.3
99.8