

Bk. 36 Dr. 14

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

..... Plan Survey

..... First Str.

From Clark Ave To Banning Ave

Road Acc't. No.

Date Filed. 6-11-41

File.

PLAN SURVEY

FIRST ST.

Clark Ave. to Banning Ave.

INDEX

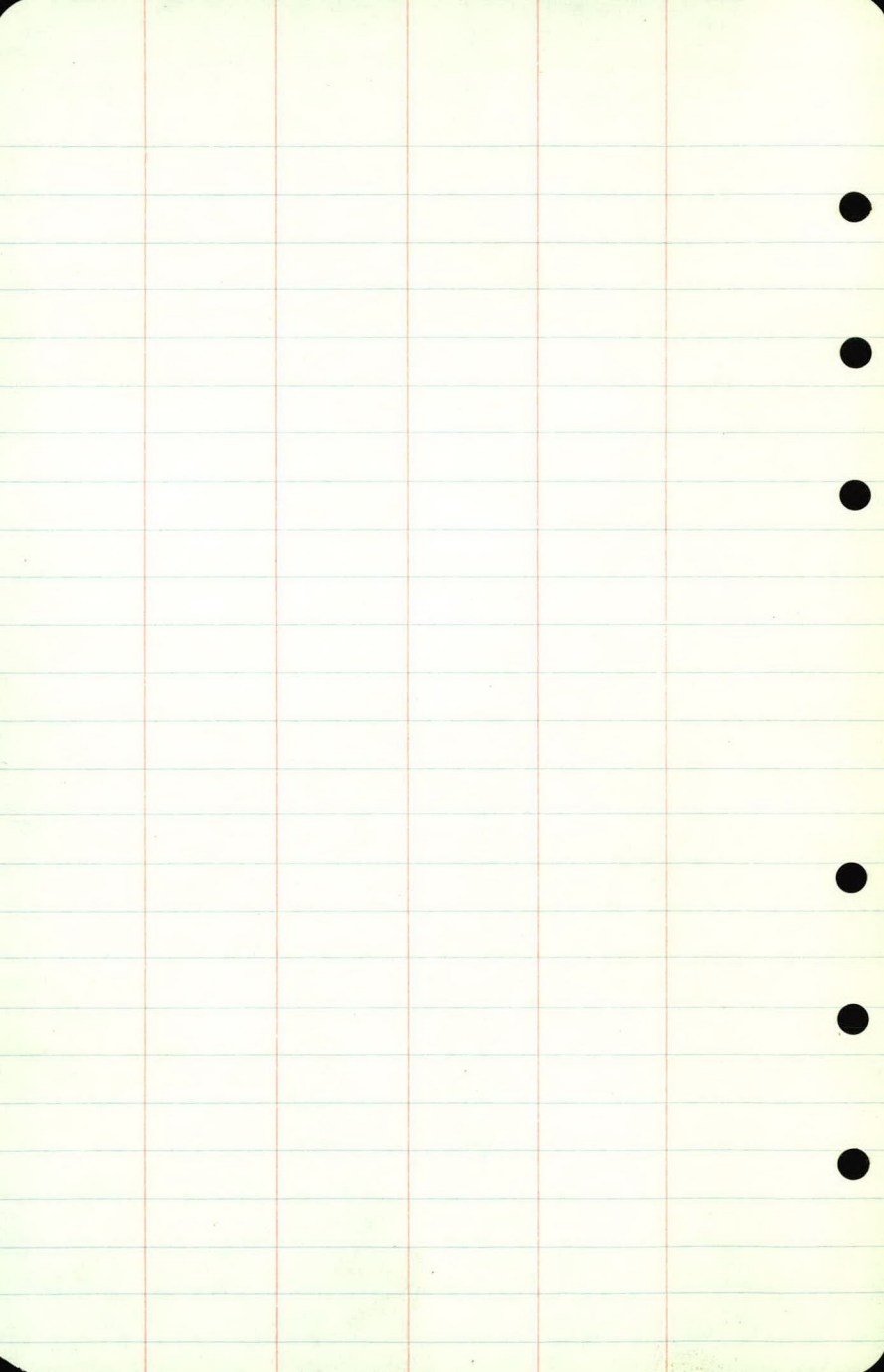
Align 1-2

Topog. 3-5

Xsections 6-9

Completed 5-6-41

Reid 5/6/41
Plans Completed 6/3/41



Alignment

Φ is split of existing curbs.

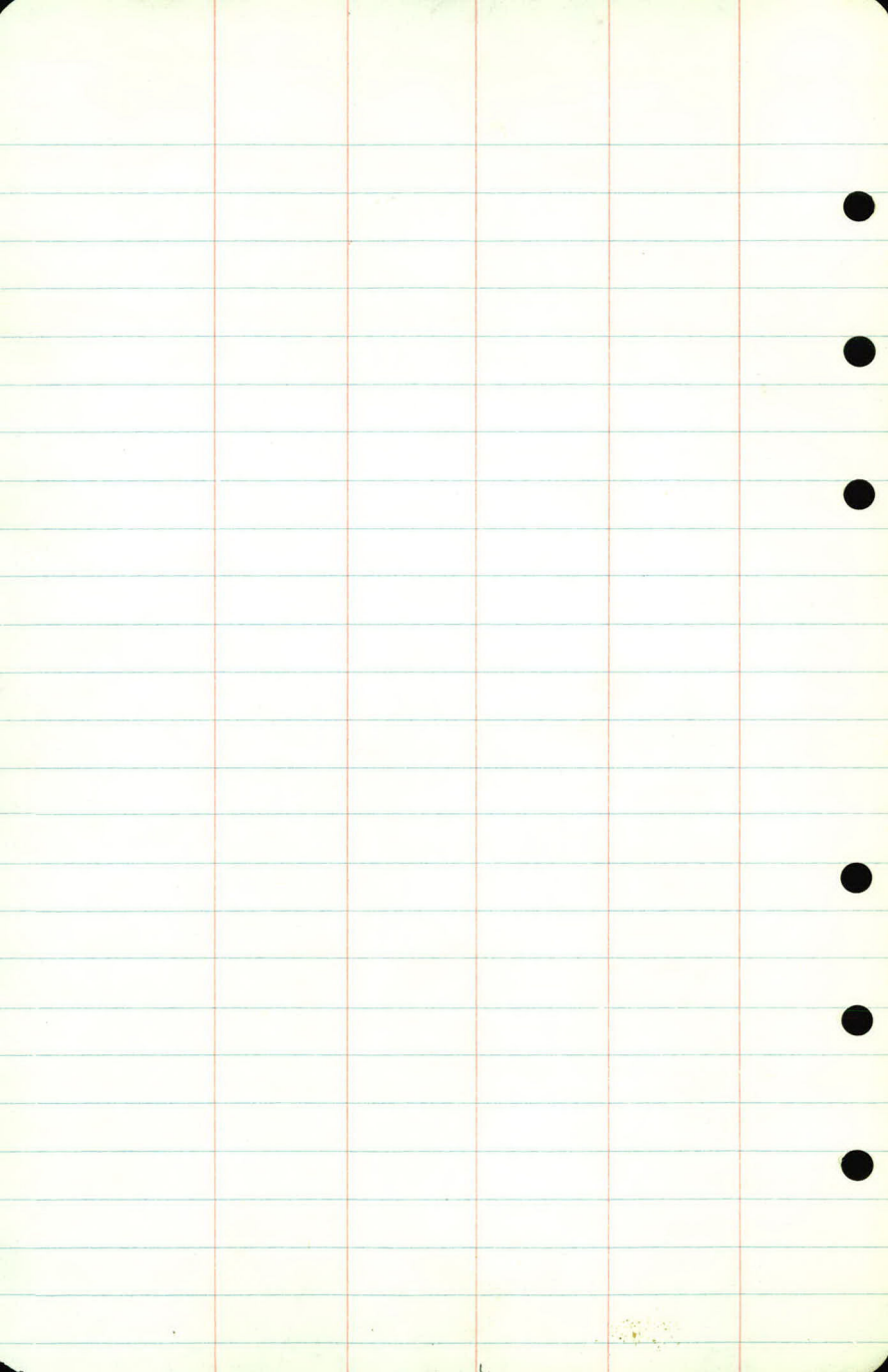
Sta	Point	Δ Lt.	Δ Rt.
-----	-------	--------------	--------------

6	+14.25 = E. Banning Ave.		
---	--------------------------	--	--

0	+00 = E. Blvd. Clark Ave.		
---	---------------------------	--	--

5-5-41.
K.R.
L.G.
198.
C.N.





Topography

+86-30' Elm-20.5'

+80-End S.W.-24'-28.7'

+70- ϕ Drive

+61-24' Elm 21.5'

+41-30' Elm-20.5'

+34- ϕ Drive

+26-PP-22' Beg. S.W.-24'-28.5'
+14-18' Elm-21.5'

2 +02-Cor¹ Chute on Church 17' 17'
S.W.-27'-23'

+88-24' Elm-21'

+76- ϕ Drive

+67-20' Elm-21'
+63-End S.W.-23.5'-28.2'

+24-30' Elm-21'

+23-24' Elm-20.5'

S.W.-29.1'-23.2' 17' 17' S.W.-23.2'-27.0'

+87-PP-21'

+73.7-End Curb-18'

+73.7-Cor S.W.-29'-23' End S.W.-12'

+67.7-S.W. X^s ϕ

+73.7-Cor S.W.-29.1'-27.7'

+64-M.H.-0.2' +67.7-End Curb-18.3'

+52-Hyd-29.4'

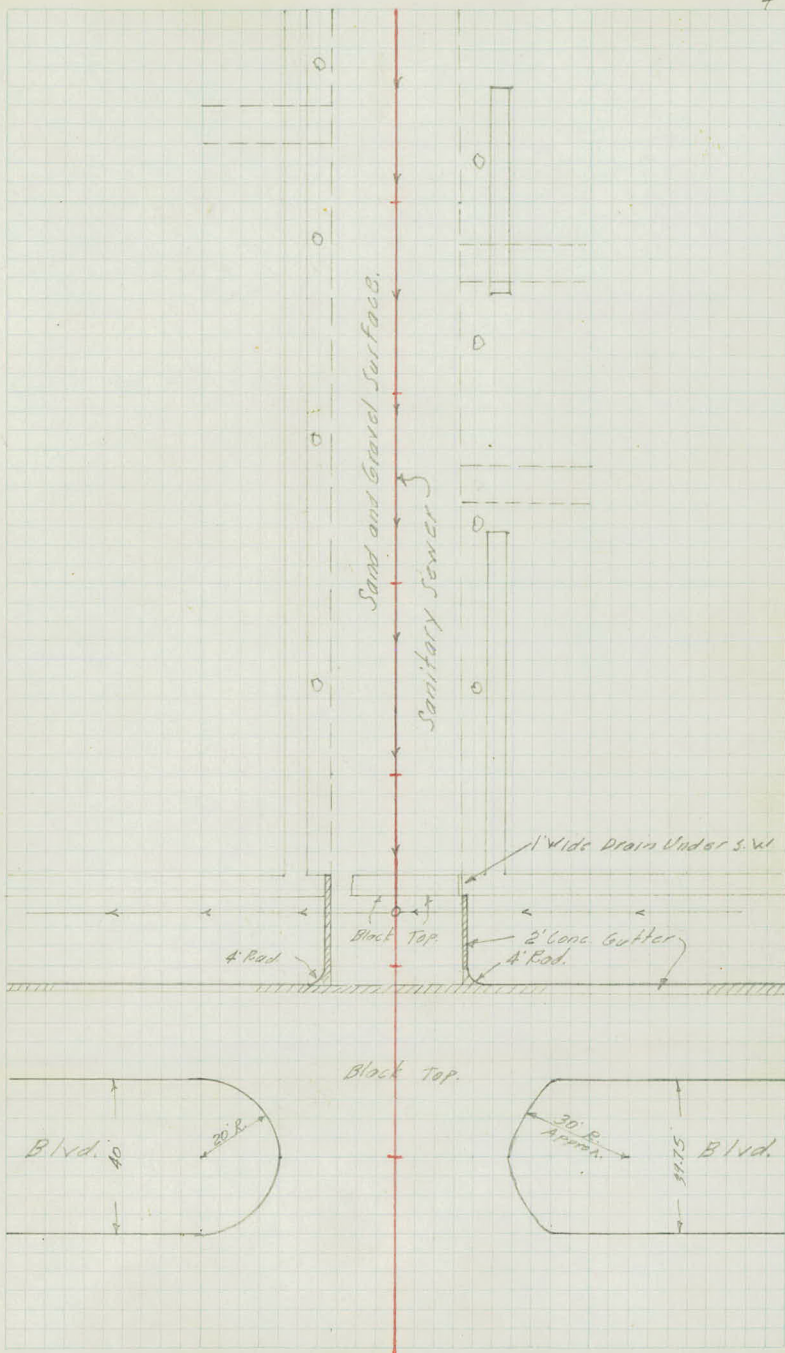
+49.8-End End-18.3' 18.3'

Beg. Road 22.3' +44.8-End Curb

Beg. Road 22.3'

0+00 Curb-29.3

Curb-29.1'



+32.8-Curb Inlet-1'

+32.8-Curb Xs 2'

+145-M.H.-20.6'

+107-M.H.-1'

6

+96.9-Face Curb-28.1'

+87-Cor S.W.-27.9-21.8'

+81.8-Box Curb-13.1'

+95-Curb Inlet.

+79-24" Elm-20'

+96.8-Face Curb-28.1'

+87-Edge S.W. +92-Edge S.W.

+81.8-Box Curb-13.1'

+78-PP-24.5'

+94-M.H.-15'

+90-Curb Inlet.

+59-18" Elm-20'

+47-4' Walk-15'

+36-30" Elm-19.5'

+33-Non hitching post-18'

+12-30" Elm-19'

5

S.W.-28.3'-22.3'

14'

+109-PP-24'

14'

+87-18" Elm-20'

+89-30" Elm-22'

+72-15" Elm-22.5'

+61-20" Elm-20'

+54-30" Elm-22'

+42-4.5 Walk-14.7'

+36-30" Elm-19.5'

+37-15" Elm-22'

+34.5-M.H.-0.8'

+24-4 DRIVE

+27-Gate Valve-24.4'

+26-4 DRIVE

+19-12" Elm-21.5'

+13-24" Elm-21.5'

4

S.W.-28.6'-22.6'

15'

16'

+85-30" Elm-19.5'

+84-24" Elm-21.5'

+77-4 DRIVE

+73-PP-23'

+70-15" Elm-20'

+55-18" Elm-20'

+42-Gate Valve-21.7'

+40-18" Elm-20'

+30-4 Double Drive

+27-18" Elm-20'

+21-4.2 Walk-27'

+16-15" Elm-20'

+11-18" Elm-20.5'

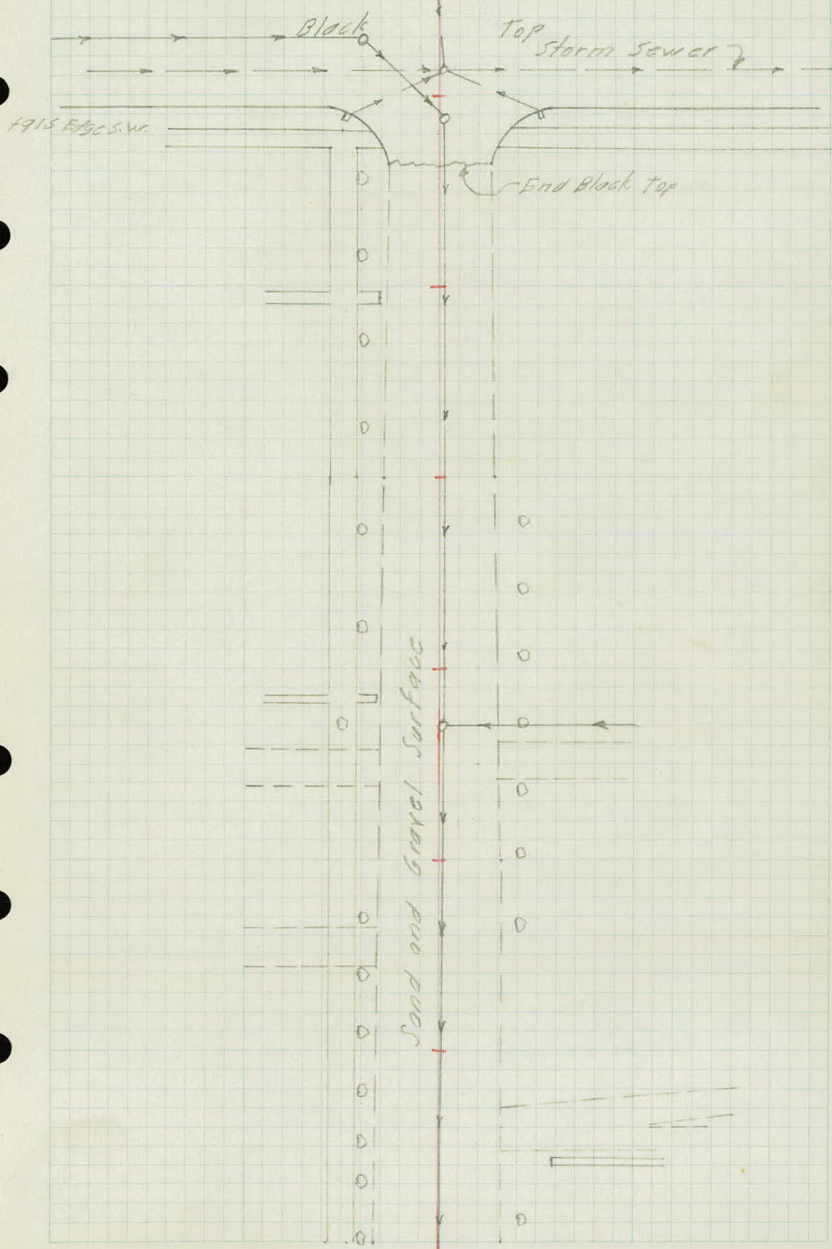
+107-24" Elm-22.5'

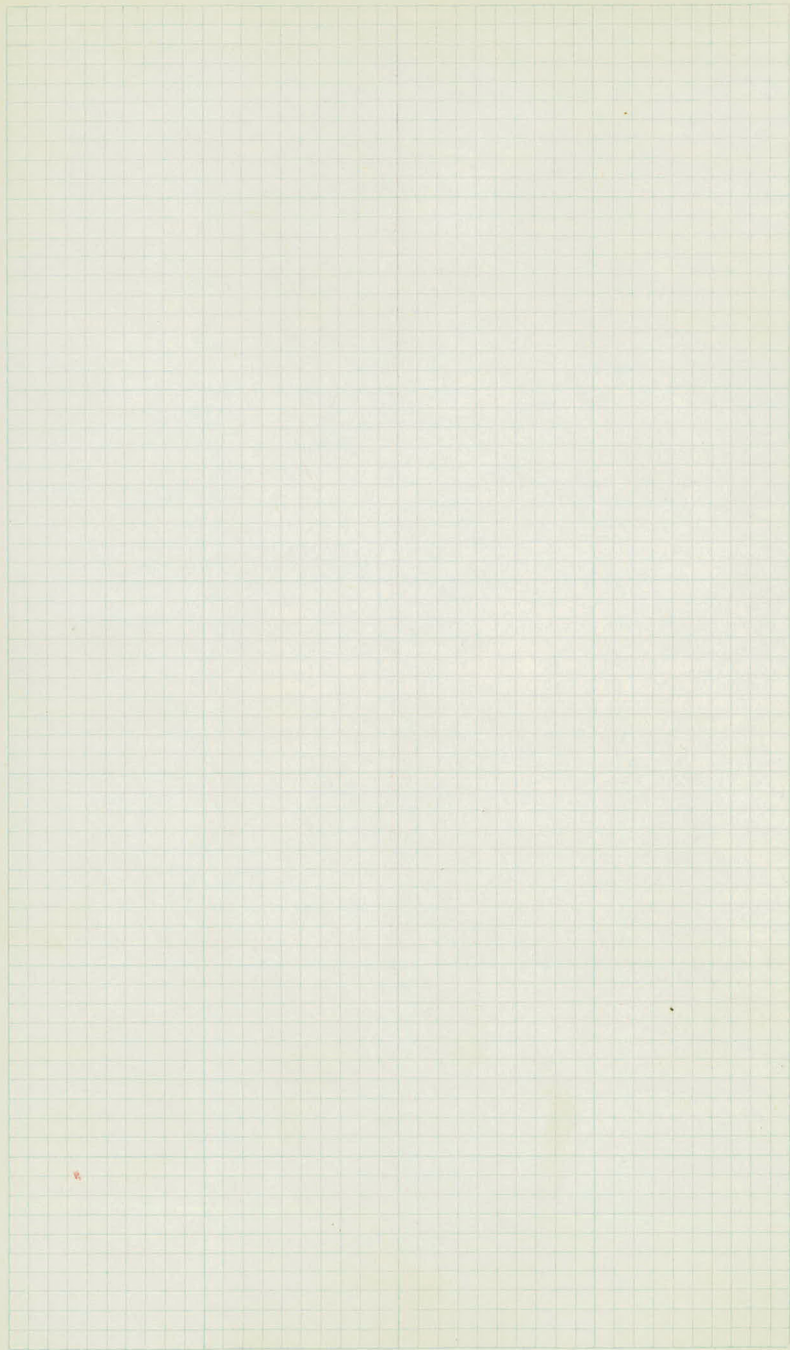
3

S.W.-28.8'-22.9'

17'

16'





Xsections

Sta.	+	π	-	E/cx.
B.M.	2.55	942.94		(940.39)

0	+00		468	38.26
---	-----	--	-----	-------

	+20		517	37.77
--	-----	--	-----	-------

	+41		564	37.30
--	-----	--	-----	-------

	+44.8			36.99
--	-------	--	--	-------

	+59.8			37.68
--	-------	--	--	-------

	+64 M.H.			
--	----------	--	--	--

	+73.7			37.94
--	-------	--	--	-------

1				37.94
---	--	--	--	-------

	+50			37.94
--	-----	--	--	-------

	+63 For End SW.			37.94
--	-----------------	--	--	-------

2				37.94
---	--	--	--	-------

T.P.	6.48	944.91	4.51	938.93
------	------	--------	------	--------

Lt.

R.

Rt.

Top Hyd. N.E. Cor. Clark Ave & 1st St

37.77

37.66

37.00

36.89

36.82

36.72

37.59

37.50

Curb

Gutter

Gutter

Curb

$\frac{5.17}{50}$ $\frac{5.28}{30}$ $\frac{5.28}{22.3}$

$\frac{5.94}{50}$

$\frac{5.98}{30}$ $\frac{6.05}{22.3}$ $\frac{5.95}{22.3}$

$\frac{6.12}{22.3}$ $\frac{6.18}{30}$ $\frac{6.22}{50}$

$\frac{5.95}{22.3}$ $\frac{5.40}{30}$ $\frac{5.44}{50}$

Curb 37.58

Gutter 37.61

Curb 37.54

$\frac{5.2}{50}$ $\frac{5.3}{30}$ $\frac{5.36}{18.3}$ $\frac{6.0}{18.3}$ $\frac{5.26}{18.3}$ $\frac{5.99}{18.3}$ $\frac{5.33}{18.3}$ $\frac{5.4}{30}$ $\frac{5.1}{50}$

37.80

28.50

$\frac{5.14}{Tqo}$

$\frac{14.44}{F.L.}$

37.79

37.56

$\frac{5.02}{50}$ $\frac{5.15}{30}$ $\frac{5.38}{18.2}$ $\frac{5.7}{18.2}$ $\frac{5.21}{12}$ $\frac{5.0}{17.2}$ $\frac{5.30}{17.2}$ $\frac{6.0}{17.2}$ $\frac{6.0}{18.2}$ $\frac{5.35}{18.2}$ $\frac{5.04}{30}$

37.84

38.02

$\frac{5.10}{29.1}$ $\frac{5.19}{29.2}$ $\frac{5.6}{16}$ $\frac{5.0}{18}$ $\frac{5.6}{20}$ $\frac{5.2}{23.2}$ $\frac{5.04}{27.9}$ $\frac{4.92}{27.9}$

38.01

38.12

$\frac{4.98}{29}$ $\frac{4.96}{23}$ $\frac{5.4}{16}$ $\frac{4.9}{17}$ $\frac{5.4}{20}$ $\frac{5.0}{23.7}$ $\frac{4.85}{28.2}$ $\frac{4.82}{28.2}$

38.24

38.04

$\frac{5.0}{17}$ $\frac{5.4}{21}$ $\frac{5.0}{23.6}$ $\frac{4.75}{28.3}$ $\frac{4.90}{28.3}$

$\frac{4.70}{29}$ $\frac{4.76}{23.0}$ $\frac{5.4}{17}$ $\frac{5.0}{18}$ $\frac{5.2}{23}$ $\frac{4.8}{30}$ $\frac{5.0}{L.O.}$

37.74

Sta	+	π	-	E/OK
		944.91		
2	+26			38.01
	+50			38.11
	+80			38.31
3				38.41
	+21			38.51
	+50			38.61
4				38.81
	+345 M.H.			
	+50			39.11
5				39.11
	+50			39.21

LH

4

R.

38.40

38.30

$$\frac{6.51}{29} \quad \frac{6.5}{23} \quad \frac{7.1}{13} \quad \frac{6.9}{15} \quad \frac{7.1}{23.7} \quad \frac{6.63}{28.4} \quad \frac{6.61}{28.4}$$

38.52

38.53

$$\frac{6.39}{29} \quad \frac{6.50}{23} \quad \frac{7.0}{15} \quad \frac{6.8}{15} \quad \frac{7.1}{23.8} \quad \frac{6.47}{28.4} \quad \frac{6.38}{28.4}$$

38.68

$$\frac{6.6}{15} \quad \frac{6.9}{24} \quad \frac{6.26}{28.6} \quad \frac{6.23}{28.6}$$

38.68

38.81

$$\frac{6.23}{28.8} \quad \frac{6.23}{23} \quad \frac{6.9}{17} \quad \frac{6.5}{16} \quad \frac{6.8}{21} \quad \frac{6.5}{23} \quad \frac{6.1}{23} \quad \frac{6.1}{30} \quad \frac{5.9}{50}$$

38.67

39.02

$$\frac{6.24}{29} \quad \frac{6.91}{23.0} \quad \frac{6.3}{20} \quad \frac{6.9}{16} \quad \frac{6.4}{15} \quad \frac{6.7}{23} \quad \frac{6.6}{29} \quad \frac{5.89}{29} \quad \frac{5.51}{50}$$

38.80

39.01

$$\frac{6.11}{28.8} \quad \frac{6.14}{23} \quad \frac{6.3}{19} \quad \frac{6.7}{17} \quad \frac{6.3}{14} \quad \frac{6.6}{25} \quad \frac{6.1}{30} \quad \frac{5.9}{50} \quad \frac{6.0}{50}$$

38.90

39.21

$$\frac{6.01}{28.6} \quad \frac{5.95}{22.6} \quad \frac{6.0}{19} \quad \frac{6.4}{16} \quad \frac{6.1}{17} \quad \frac{6.4}{21} \quad \frac{5.9}{30} \quad \frac{5.7}{50} \quad \frac{5.4}{50}$$

39.39

29.49

$$\frac{5.52}{Top} \quad \frac{15.42}{FL.}$$

38.93

39.61

$$\frac{5.98}{28.6} \quad \frac{5.97}{22.5} \quad \frac{5.9}{18} \quad \frac{6.2}{15} \quad \frac{5.8}{15} \quad \frac{6.2}{21} \quad \frac{5.7}{30} \quad \frac{5.3}{50} \quad \frac{5.5}{50}$$

38.97

39.31

$$\frac{5.94}{28.2} \quad \frac{5.92}{22.7} \quad \frac{5.7}{17} \quad \frac{6.2}{14} \quad \frac{5.8}{13} \quad \frac{6.1}{18} \quad \frac{6.1}{24} \quad \frac{5.5}{30} \quad \frac{5.6}{50} \quad \frac{5.7}{50}$$

39.11

39.11

$$\frac{5.80}{28.1} \quad \frac{5.84}{22.2} \quad \frac{5.6}{19} \quad \frac{6.1}{13} \quad \frac{5.7}{13} \quad \frac{5.8}{30} \quad \frac{5.8}{50} \quad \frac{5.6}{50}$$

Sta.	+	X	-	Elev.
		944.91		
5	+81.8			38.83
	+94 M.H.			
	+95 Curb inlet Lt.			
	+96 Curb inlet Rt.			
	+96.8			38.51
6	+07 M.H. Storm sewer			
	+14.5 M.H.			
	+14.85		6.22	38.69
B.M.			2.52	942.39.

Lt.

R

Rt.

39.13 38.83 38.77 39.41
Corb Corb
5.78 5.71 6.08 6.56 6.08 6.58 6.14 5.5 5.6
27.8 22.0 13.1 13.1 13.1 13.1 12.1 30 50

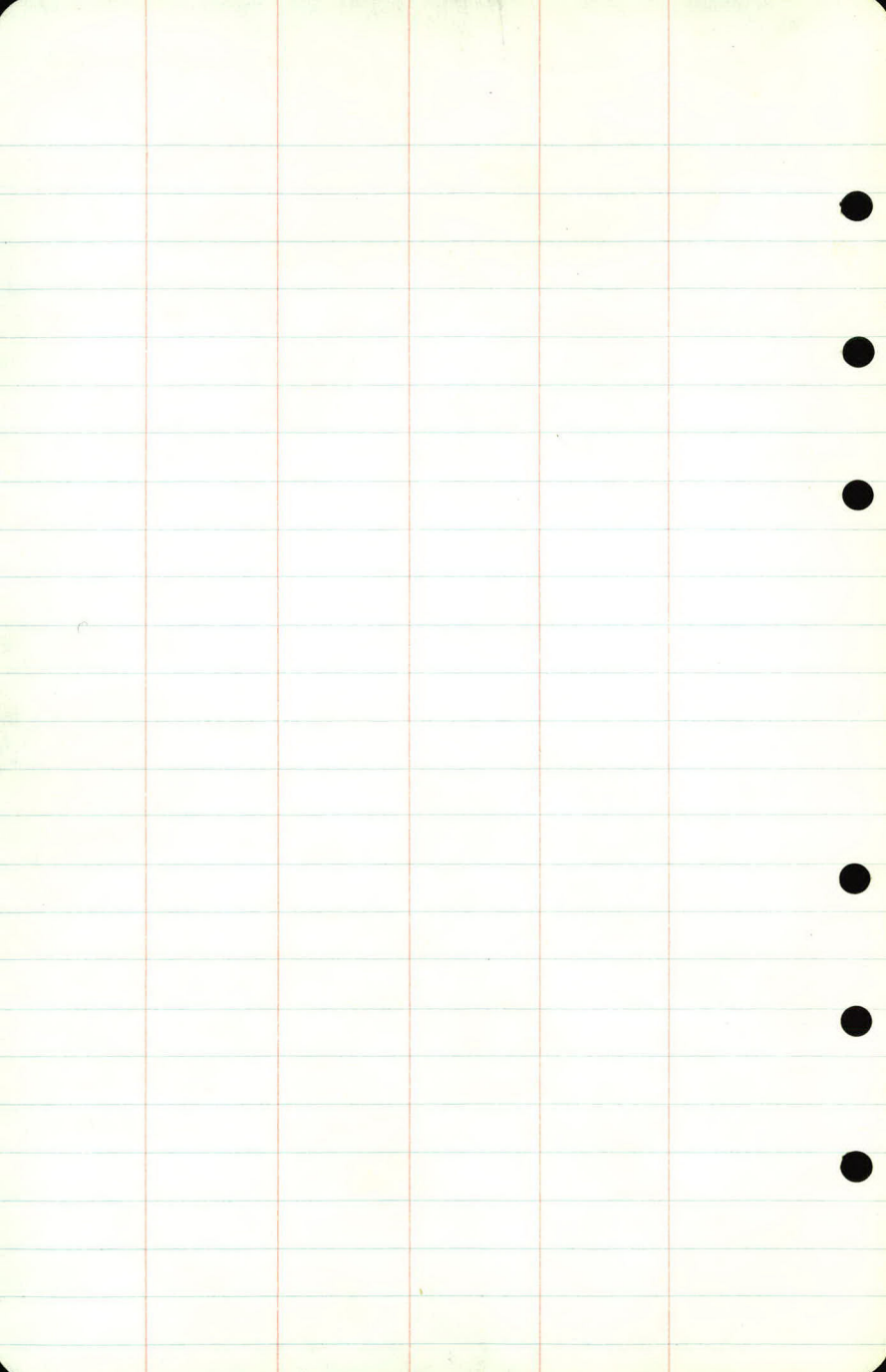
35.67 37.91
9.24 7.10
F.L. Invert.

38.62 30.07
6.29 14.84
Top F.L.

38.76 38.81 7.11 9.21 38.79 38.82
(Corb) (Cutter) Invert F.L. (Cutter) (Corb)
6.15 6.10 6.68 6.68 6.40 6.66 6.66 6.12 6.09
50 28.1 50 28.1 28.1 50 28.1 50

30.64 38.71
14.30 6.20
F.L. Top
38.63 27.83
6.28 17.08
Top F.L.

Top Hyd. N.E. Cor Banning Ave + 1st St



Curb Stakes

1st St.

Sta	+	-	Elev
B.M.	2.49	942.88	(940.39)

0 +75.0

1

+25

+50

+75

2

+25

+50

+75

3

+25

10-4-41

Lt	7	Et.
Gr. Rod	Grade	Grade
Top Hyd. N.E. Cor. 1 st St. & Clark Ave.		
5.22 ✓		5.33 ✓
5.35 ✓	37.53	37.40 5.48 ✓
5.29 ✓	37.59	37.49 5.39 ✓
5.21 ✓	37.67	37.58 5.30 ✓
5.15 ✓	37.73	37.66 5.22 ✓
5.09 ✓	37.79	37.75 5.19 ✓
5.02 ✓	37.86	37.83 5.05 ✓
4.95 ✓	37.93	37.91 4.97 ✓
4.88 ✓	38.00	38.00 4.90 - 4.95 ✓
4.82 ✓	38.06	38.06 4.82 ✓
4.75 ✓	38.13	38.12 4.76 ✓
4.69 ✓	38.19	38.18 4.70 ✓

Sta	+	π	-	Elev
		942.89		

3 +50

T.P.	561	943.84	4.65	938.23
------	-----	--------	------	--------

+75

4

+25

+50

+75

5

+25

+50

+75

+81.8

B.M.

1.45

942.39

(942.39)

Lt.	Gr Rod	Grade	Gr Rod	Grade
-----	--------	-------	--------	-------

463 ✓

38.25

38.23

465 ✓

~~5.53~~

38.31

38.29

5.55 ✓

546 ✓

38.38

38.35

549 ✓

~~5.40~~

38.44

~~38.40~~~~5.44~~

534 ✓

38.50

38.46

538 ✓

528 ✓

38.56

38.52

532 ✓

521 ✓

38.63

38.58

526 ✓

515 ✓

38.69

38.63

521 ✓

509 ✓

38.75

38.69

515 ✓

503 ✓

38.81

38.75

509

501

38.83

38.77

507

Top Hyd N.E. Cor 1st & Barning

