

DR. 9 BK. 65

OFFICE OF COUNTY ENGINEER
RAMSEY COUNTY, MINN.

PLAN Survey

11TH AV. & CASTLE AV.

From McKNIGHT To HELEN

Road Acc't. No. 24

Date Filed _____

File _____

1967

11TH AVE

Mc Knight to Helen St.

INDEX	PAGE
Align.	1-7
Topo.	8-24
Bench Levels	25-27
X Sections	28-63

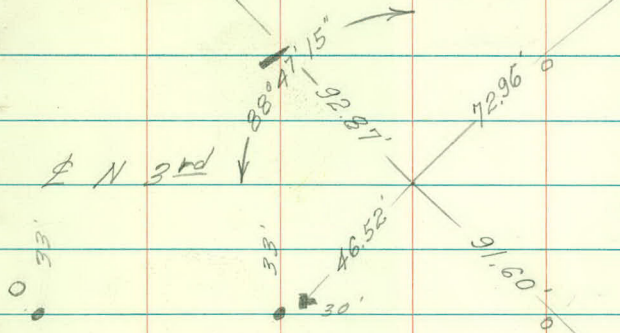
Sta Point ΔL ΔR

6+49.89 P.O.T.

0+00 E Mc Knight

Oct. 19, 1967

2

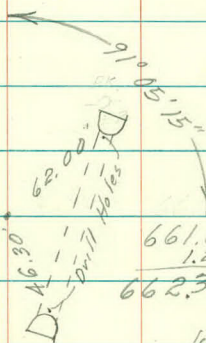


R.K.
PPQ

45.65'
39.82'

ctr. M.H.

5.47'



46067

Monument Does Not Check PLAT
North St Paul 4th Addition

C.I. Mon.

Monument reset
to conform to PLAT

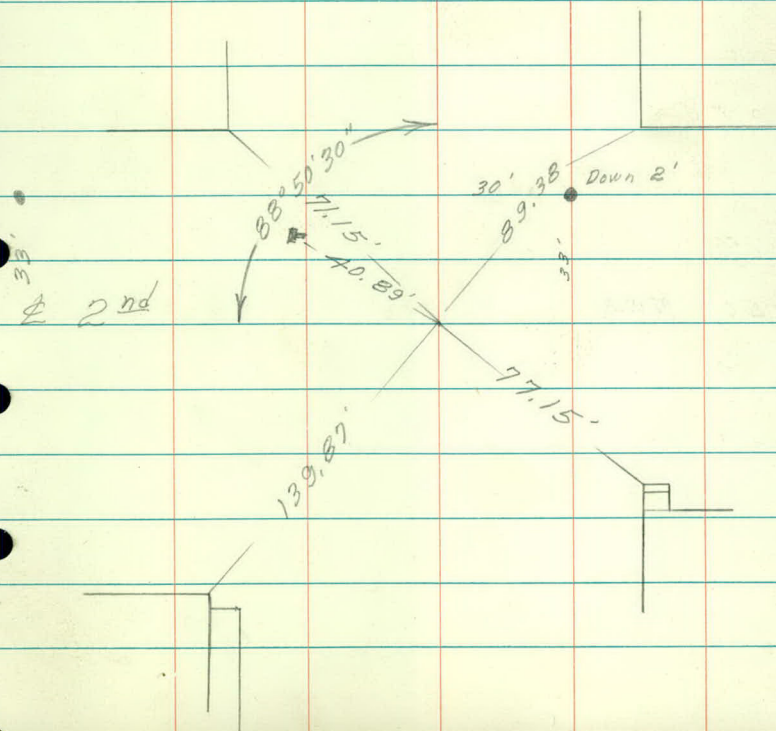
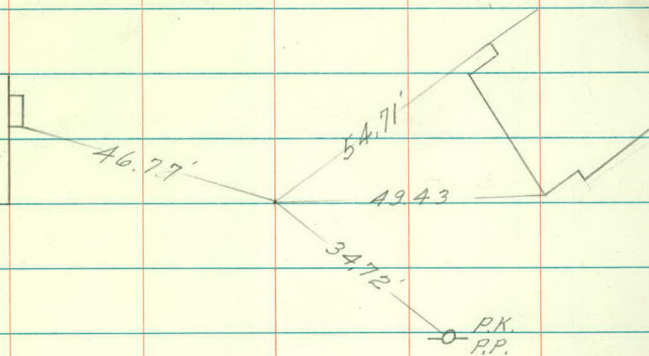
Sta Point ΔL ΔR

18+00 P.O.T.

13+04.15 P.O.T.

Oct. 19, 1967

3



Sta Point $\Delta Lt.$ $\Delta Rt.$

+95.14 P.T. = P.R.C. $4^{\circ}02'$

+75 $3^{\circ}33.95'$

+50 $2^{\circ}59.1'$ $\Delta = 8^{\circ}04'$ Rt.

+25 $2^{\circ}24.3'$ $\frac{1}{2}\Delta = 4^{\circ}02'$

19+08.42 P.I. $T = 87.01'$

19 $1^{\circ}59.5'$ $L = 173.73'$

+75 $1^{\circ}14.65'$ $R = 123.40'$

+50 $0^{\circ}39.8'$ $D = 4^{\circ}38'35''$

+25 $0^{\circ}05'$

18+21.41 PC $0^{\circ}00'$

$$\begin{array}{r}
 60 \overline{) 31'40''} \\
 \underline{30} \\
 1 = 60'' \\
 \underline{40''} \\
 100''
 \end{array}$$

$$\begin{array}{r}
 60 \overline{) 64317} \\
 \underline{60} \\
 60 \\
 60
 \end{array}$$

$\Delta 8004'$

$1/2 A \ 4002$

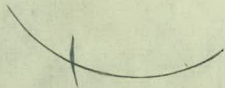
$T = 87.01$

5729.58

$L = 173.73$

$R = 1233.98$

$D = 4038' 36''$



Oct 19, 1967

4

Garage

1st ST.

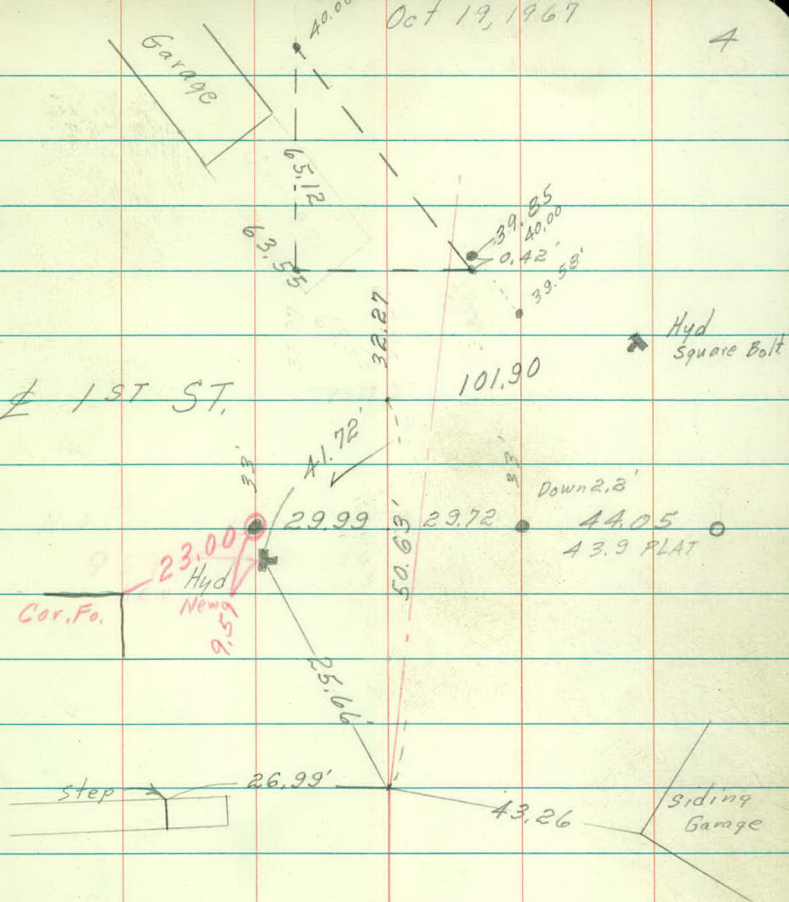
Hyd Square Bolt

Cor. Fo.

Hyd Newg
23.00
9.59

step

Siding Garage



Sta	Point	ΔL	ΔR
-----	-------	------------	------------

+18.68	P.T.	$22^{\circ} 38.5'$	$\Delta = 45^{\circ} 17'$
21		$19^{\circ} 12.2'$	$\frac{1}{2}\Delta = 22^{\circ} 38' 30''$
+75		$14^{\circ} 39.4'$	$D = 36^{\circ} 39' 19''$
20+60.34	P.I.		$T = 65.20'$
+50		$10^{\circ} 02.7'$	$L = 123.54'$
+25		$5^{\circ} 28.0'$	$R = 156.31'$
20		$0^{\circ} 53.3'$	
19+95.14	PRC=PC.	$0^{\circ} 00'$	

P.I.
Garage

127.75'

P.T.
Castle +
N 1st ST.

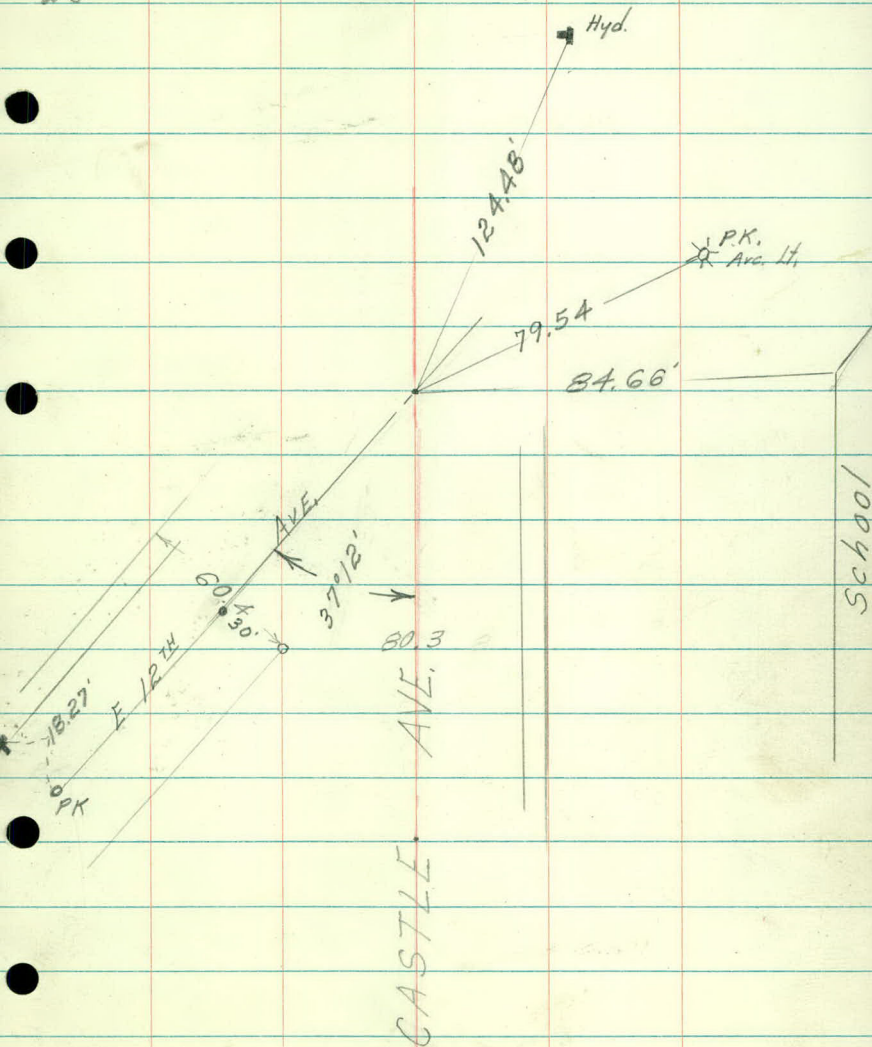
Sta Point Δ Lt. Δ Rt.

26+34.66 P.O.T. E. 12TH AVE.

FK
WM
LPD
WJ

Jan. 8, 1967

6



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

27+58.16	P. I.	51°45'30"	
----------	-------	-----------	--

on Line W Mon
+ 11th 15th on L¹¹
20.50

68' 10'
70'
73'

1.20

26 34.5
26 34.42
26 34.83 Now
43

0.70 W

329.34

13

73

13th

60

329.34

0.36

12

74

0.55

25
0.70

12th

N 0.41

339.03

11

339.03

OK

0.27

360.53

10th

360.53

used

300.52

1.87'

26 45.7
26 45.62
26 45.81
Now

3

70

TOPOGRAPHY

2

Road
14 23

Tw 8" C.H.
+36 23

1

Road
14 24

+83 23	to +94	6" 4" C.H. 21	+77	WE 24" 52
1 OB	+48	ER 12	1 NE 12" S.C.P.	
+46 16	1 W.G.V.	+46 20	+55	ER 24
1 POR	+41	16	+45	C.B. 29
+33 17	1 Arc Light	+41	Hyd 19	+41
	+27	30	+34	POR 31
			+30	Apron 55
		+20	BR 35	+21
				BR 62

0

-05 MH
3
-22 Edge
B.P.

Sewer
2

WE Apron
-46 21

FX
WM
LPD
WT

Oct. 20, 1967

9

2' x 3' Casting
2 Adj. Rings
24" Pre Cast
2, 2' to Inv. N.
4.4' Deep

2' x 3' Casting
4 Adj. Rings
24" Pre Cast
5.1' Deep



0

+42 SW Cor Apt
78

+37 E Edge Ent
B, F

+21 Edge Ent 16'
B, F

+33 Sewer Cleanout
58

+19 N.W. Cor Apt
61

+17 8' E/m
36

+100 Sewer Cleanout Road
57 12 20

+82 S.W. Cor Apt
60

+20 WGV
18

+20 Hud
21

+21 MH
2

Road
13 22

Oct. 20, 1967

10

32.6 51

32.6

51

32.7

51

V



V

V

V

V

V

7

0

+89 $\frac{\text{S.W. Cor Ho}}{48}$
 +49 $\frac{\text{N.W. Cor Apt}}{61}$
 +18 $\frac{\text{S.W. Cor Apt}}{60}$
 +13 $\frac{\text{E. E. Ent}}{\text{B. F}}$
 5
 +97 $\frac{\text{B. Ent}}{\text{B. F}}$
 +86 $\frac{\text{N.W. Cor Apt}}{60}$
 +67 $\frac{\text{4 Walk}}{32}$
 +13 $\frac{\text{Road}}{19}$
 +104 $\frac{\text{Sewer Cleanout}}{57}$
 +78 $\frac{\text{E Edge Ent}}{\text{B. F}}$
 +61 $\frac{\text{W. Edge Ent}}{\text{B. F}}$

2'x3' Casting
 2 Row Block
 2'x3' Pre Cast
 4.5' Deep

Oct. 20, 1967
 1.85'x2' Casting
 4 Adj. Rings
 4.55' Deep
 27" Pre-Cast

11

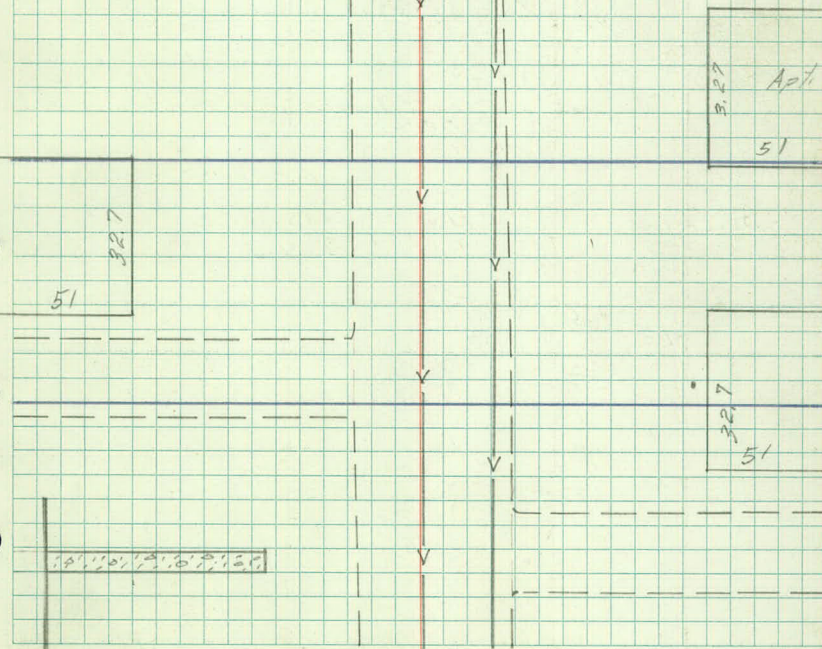
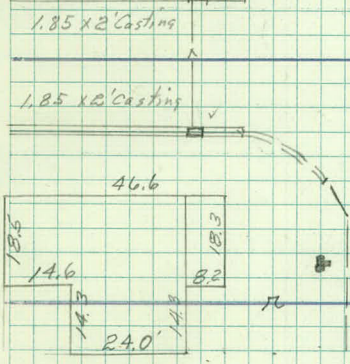
128 Apt

3" Casting
 12 Adj. Rings
 2 Row Block
 4.2' Deep

7" Casting
 8 Adj. Rings
 eccentric Cone
 9.55' Deep

9" Casting w/
 2 Row Block
 Concentric Cone
 7.9' Deep

9" Casting
 6 Adj. Rings
 eccentric Cone
 8.50' Deep
 Sanitary



1.0' 1.0' 1.0' 1.0' 1.0' 1.0'

+14 S.W. Cor Apt.
60

+21 E 4' Walk
30

Road
11 19

+84 Tn 7' BE
21

+83 N.W. Cor. Apt.
61

+76 8" BE
20

+52 S.W. Cor Apt
60

+73 8" E/m
20

+55 6" BE
18

+58 10" E/m
18

+42 E Ent
8 ft

+50 18" E/m
22

+27 B Ent
8 ft

+25 E 4' Walk
31

+19 W 50
23

Road
12 17

+83 S.W. Cor Apt
61

+95 8" E/m
19

+86 N.W. Cor Apt
61

+63 W 50
23

+62 W 50
23

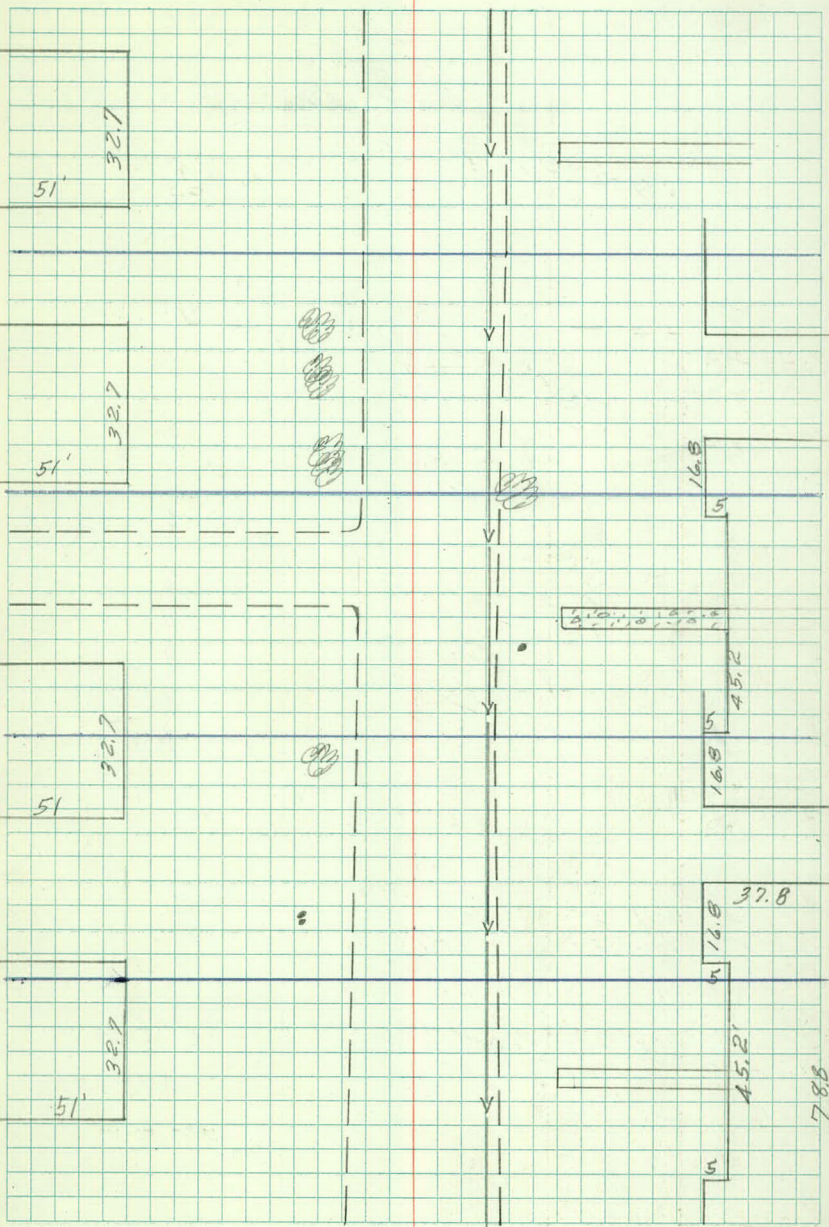
+21 S.W. Cor. Apt.
60

+30 E 4' Walk
30

7

Oct. 23, 1967

12



78.8

12

Road
13 17

+83 Vard Light
30

+87 12" Apple
37

+90 18" Elm
23

+78 2' Walk
18

+61 33" Maple
26

+56 18" Elm
23

+77 T-Fe
31

+48 SW Cor. Hb
56

+53 Fe Elm
30-47

+34 E Ent
Dirt

+26 24" Elm
23

+40 W 50
25

+25 30" Elm
25

+04 18" Elm
55

+23 E 4' Walk
Tile 24

11

+03 12" Elm
46

Road
12 18

+86 N.W. Cor. Apt.
60

+89 14" Elm
17

+76 6" Elm
17

+85 6" Elm
17

+72 8" Elm
17

+52 SW Cor. Apt.
60

+46 E Ent
B.T

+29 B Ent
B.T

+19 E 4' Walk
30

10

Road
11 19

+99 E 4' Walk
31

+73 SW Cor. Apt.
79

+94 W 50
20

+70 E Ent
B.T

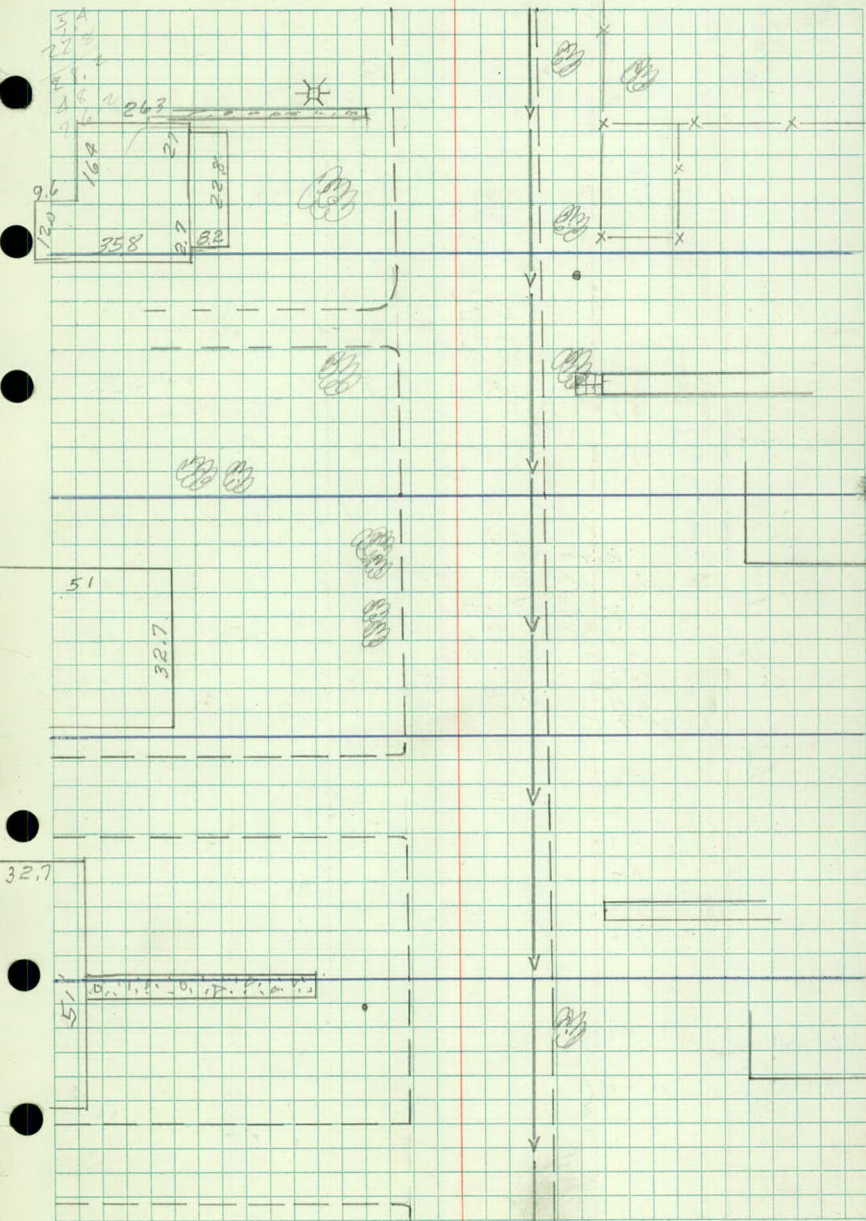
+89 18" Elm
22

+79 NW Cor. Apt.
60

+53 B Ent
B.T

Oct. 23, 1967

13



14

2

Pl

+150 $\frac{\$3' \text{ Walk}}{33}$

+144 $\frac{2" P}{23}$

+140 $\frac{1" P}{23}$

+146 $\frac{NW \text{ Cor Ho}}{53}$

+26 $\frac{\$9' \text{ Ent}}{BIT}$

+108 $\frac{2' \text{ Walk}}{23}$

+34 $\frac{10" Elm}{46}$

+10 $\frac{STP}{22}$

+14 $\frac{Road}{12}$

+92 $\frac{SW \text{ Cor Ho}}{56}$

+73 $\frac{NW \text{ Cor Ho}}{58}$

+80 $\frac{24' \text{ Walk}}{30}$

+74 $\frac{GGV}{16}$

+99 $\frac{6" P}{45}$

+70 $\frac{4" P}{31}$

+70 $\frac{12" Elm}{41}$

+144 $\frac{SW \text{ Cor Ho}}{59}$

+62 $\frac{4" Tree}{49}$

+67 $\frac{6" P}{31}$

+41 $\frac{Bush}{37}$

+44 $\frac{Bush}{37}$

+41 $\frac{CB}{22}$

+48 $\frac{5" P}{33}$

+38 $\frac{ER}{18}$

+31 $\frac{30' \text{ Made}}{49}$

+12 $\frac{WSO}{24}$

+39 $\frac{Honeyuckle}{40}$

+26 $\frac{POR}{24}$

+30 $\frac{Hyd}{32}$

+41 $\frac{CB}{21}$

+18 $\frac{CB}{35}$

+24 $\frac{POR}{23}$

+39 $\frac{ER}{12}$

13 +02.5 $\frac{MH}{0.3}$

+16 $\frac{BR}{39}$

+17 $\frac{BR}{36}$

+91 $\frac{ER}{30}$

+90 $\frac{CB}{34}$

+87 $\frac{MH}{16}$

+84 $\frac{POR}{16}$

+90 $\frac{ER}{39}$

+81 $\frac{Archlight}{19}$

+68 $\frac{BR}{16}$

+84 $\frac{POR}{25}$

+74 $\frac{BR}{13}$

+48 $\frac{\$ \text{ Ent}}{\text{Dirt}}$

+46 $\frac{Tw 12" \text{ Apple}}{48}$

+41 $\frac{NE \text{ Cor Ho}}{49}$

+48 $\frac{\text{Conv. Walk}}{43}$

+41 $\frac{\text{Cor Fe}}{31}$

+25 $\frac{26" Elm}{22}$

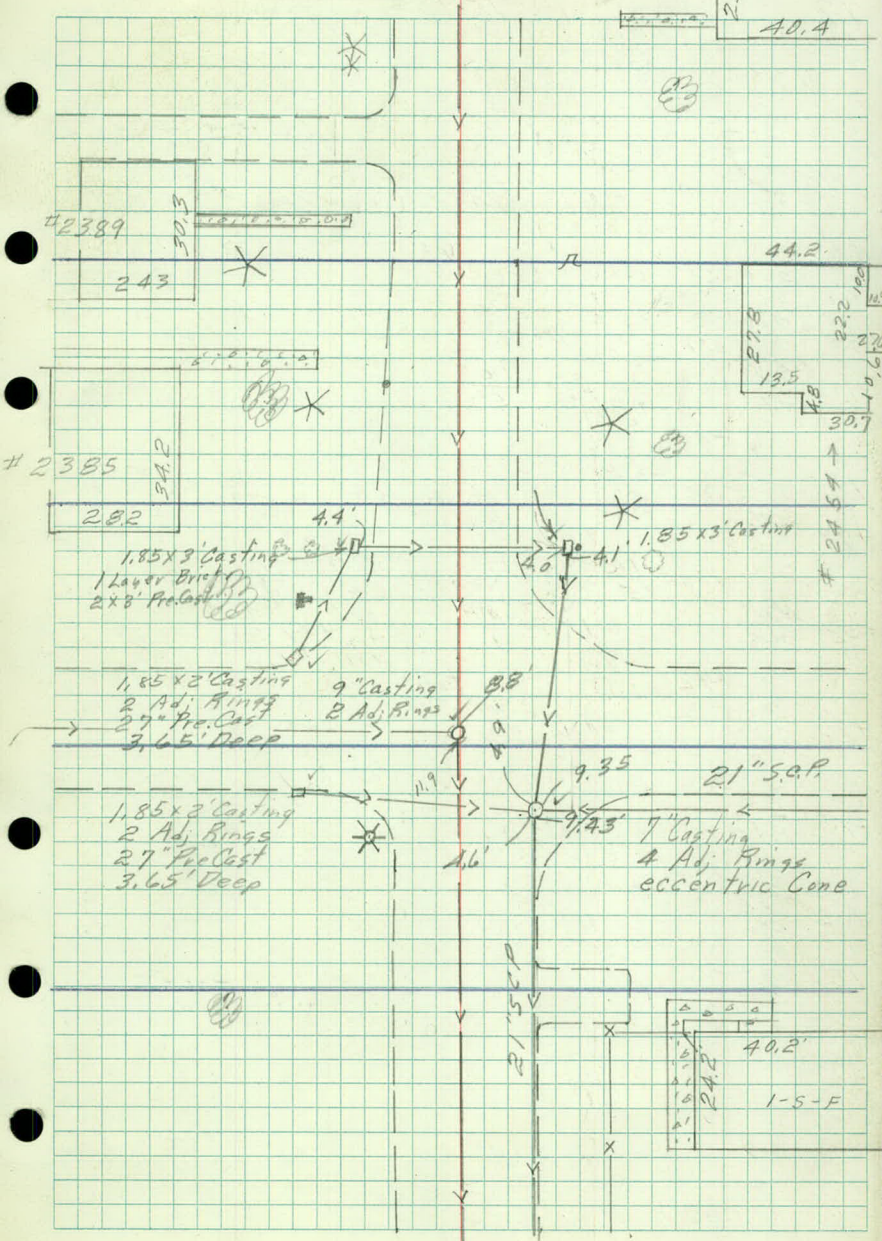
12

Oct. 16, 1967

14

250

40.4



Handwritten notes on lined paper, organized by date from 17 to 15.

17

✓
199 40" Maple
E. Rose Bu 230 ✓
192 334 ✓ 198 £4 Walk 34
✓ +82 S.W. Cor. Ho 50 ✓
Be. Rose Bu ✓
+73 33 ✓ +80 10 Elm 234 ✓
✓ +75 6 Cedar 45 ✓ +75 20" Pear Tree 44 ✓
+48 38 ✓ +58 28" Maple 23.2 ✓ +50 B. Fe 32 ✓
✓ +31 8" BE 23.0 ✓ +45 4" P 31.8 ✓ +71 Cor. Lilac 30 ✓
£4 Walk ✓ +28 Lilac 35 ✓ +46 B. Lilac He 30 ✓
+10 17.6 ✓ +06 22" BE 23.0 ✓ +41 X-Fe 30 ✓
+17 Bush 34 ✓ +13 Cor Garden 33 ✓
Road 14 16 05 Bush 45 ✓

16

S.W. Cor Ho ✓
+98 52 ✓
✓ +87 Lilac 35 ✓
+52 Wall 28.8 ✓ +57.5 MH 1 ✓
✓ +66 NW Cor Ho 52 ✓
+42 Cor Walk 34.5 ✓
+39 2" P 23.2 ✓ +39 2" Birc 30.8 ✓
+58 Lilac 84 ✓
✓ +21 SW Cor Ho 44 ✓
+53 14 Elm 23.1 ✓
+52 Lilac to 36 ✓

18

10" BE 24.0 ✓
✓ +23 WSO 24 ✓
✓ +14 8" P 36.4 ✓
+103 41 ✓ +08 B" P 36.4 ✓
✓ +02 10" BE 23.2 ✓
Road 14 13

15

+76 2" P 22 ✓
+69 30" Maple 50 ✓

Oct. 16, 1967

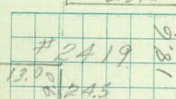
15

18.4

14.0

5.0

23.6



24.2



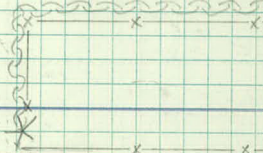
Y

Y

Y

Y

Y



GARDEN

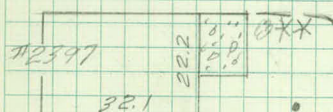
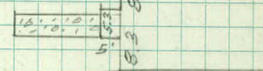
45.7



9" Casting
2 Adj. Rings
1 Layer Block
Concentric Cone

3.0'

29.5



29.5

X



1 +28 $\frac{8"Elm}{51}$ +43 $\frac{Edge Road}{R. Tie}$ +50 $\frac{Tell Cable}{18}$
 +33 $\frac{POR}{13}$ +35 $\frac{CP}{15}$ +42 $\frac{VER}{29}$
 +22 $\frac{Hyd}{25.7}$ +19 $\frac{BRV}{7}$ +47 $\frac{ER}{44}$
 +20 $\frac{3"P}{31.2}$ +15 $\frac{PR}{16.0}$ +35 $\frac{POR}{28}$
 +22 $\frac{GV}{20}$ +10 $\frac{GGV}{12}$ +25 $\frac{12"Elm}{39}$
 +9 +00 $\frac{3'Walk}{21.8}$ 15 Tell Cable 16
 +92 $\frac{16"Oak}{32.7}$ +81 $\frac{R. Tie}{Ho}$ +82 $\frac{NE Cor Garage}{32.4}$
 +78 $\frac{S.W. Cor Ho}{52.8}$ +76 $\frac{SLP}{25}$ +56 $\frac{R. Tie}{Garage}$
 +62 $\frac{26"Maple}{23.8}$ +51 $\frac{Cor. Hedge}{29.5}$ +66 $\frac{PP}{29}$ +67 $\frac{End Wall}{16.3}$
 +22 $\frac{28"Maple}{22.3}$ +30 $\frac{B. Hedge}{29}$ +50 $\frac{Lin Wall}{24}$
 +20 $\frac{2.3'Walk}{28.6}$ +32 $\frac{NE Cor Ho}{34.3}$ +36 $\frac{Lin Wall}{28.4}$
 +06 $\frac{MH}{2}$ +09 $\frac{Spirea}{38}$ +27 $\frac{4'Walk}{18.8}$ +20 $\frac{14"Oak}{21.6}$
 +04 $\frac{S.W. Cor Ho}{44.4}$ Road 11 12 Wall 29
 +95 $\frac{30"Maple}{23.0}$ +92 $\frac{Fe Cor B. Wall}{30}$ +50 $\frac{Alley}{24.2}$
 +70 $\frac{R. Tie}{Fe}$ +81 $\frac{PP}{30}$ +71 $\frac{Lin Fe}{35}$
 +53 $\frac{Cor. Hedge}{30}$ +63 $\frac{4'Walk}{30}$ +69 $\frac{NWC Cor Ho}{54}$
 +24 $\frac{Ent Dirt}{17}$ +36 $\frac{Fe Cor}{63}$ +25 $\frac{R. Tie}{Ho}$
 +03 $\frac{B. Hedge}{33}$ Alley 83

16

Hand-drawn site plan on graph paper showing a proposed road layout. The plan includes several rectangular and diamond-shaped areas with dimensions and labels.

Top Left: A rectangular area labeled "28.2" and "34.2". Above it, text reads "27' Recast" and "4.3' Deep".

Bottom Left: A rectangular area labeled "30.4" and "18.4". Below it, text reads "9' Casting", "No Adj. Rings", "Cone Top Removed 6"±", "8.7' Deep", and "Dead End".

Center: A vertical dashed line runs through the center. A horizontal dashed line crosses it. A red vertical line is also present.

Right Side: A diamond-shaped area labeled "22.1" and "22.2". Below it, a rectangular area labeled "24.3" and "24.3" is shown. Further down, a rectangular area labeled "24.3" and "24.3" is shown, with "Stone Masonry" written below it. At the bottom right, a rectangular area labeled "24.3" and "24.3" is shown, with "24.39" and "24.2" written below it.

Bottom Right: A dashed line labeled "Turning Area" curves around the bottom right corner.

Other Labels: "K" and "O" are marked near the top center. "X" marks are scattered along the right side. "V" marks are scattered along the bottom center.

22

Road
14 21

↓
+90 S.W. Cor. Ho.
55
↓
+83 2 1/2" x 15" x 20" Oak
C. Rock 18
↓
+71 22" Elm
38
↓
+65 2 30" Walk
20
↓
+49 S.E. Cor. Ho.
63
↓
+50 4" Birch
47
↓
+35 24" Ash
34

↓
+89 2 30" Walk
23

↓
+86 SW Cor Ho
49
↓
+76 20" Elm
33
↓
+57 Spirea
25
↓
+54 16" Elm
47
↓
+22 30" Elm
45
↓
+76 5" Cherry
55
↓
+65 Lilac
43 →
↓
+63 1" P
39

21

Road
15 23

↓
+99 26" Ash
33
↓
+75 Rd
10
↓
+77 30" Walk
21
↓
+71 30" Ash
27
↓
+41 18" Ash
17
↓
+18 28" Ash
2
↓
+20 Cor. Garage
40

↓
+99 10" Catalpa
27
↓
+58 N.E. Cor. Ho.
72
↓
+95 GGV
60
↓
+52 Rd
39
↓
+31 23" Walk
53
↓
+27 R. Tie Ho.
27
↓
+75 Rd
29
↓
+53 18" BF
53
↓
+25 Road
17-56

20

Road
37

↓
+95 2 1/2" Ent
31
↓
+88 1 1/2" P
5, 5
↓
+75 2 1/2" Ent
11
↓
+75 E.E. Road
↓
+78 B.R
27
↓
+88 CB
36
↓
+86 C.B.
36
↓
+84 PP.
20
↓
+72 M.H
65

Oct. 17, 1967

17

#2469

22.7

40.7

38.6

#2465

14.3

8.0

30.6

24.3

#2466

38.4

24

#2459

34.4

5.7

14.4

5.7

12.8

9.2

12.4

20.7

34.3

#2454

13.4

14.4

2'x3' Casting

1 Layer Brick

Pre Cast 2x-3'

5.2' Deep

5.3'

8" Casting

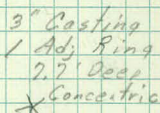
6 Adj. Rings

eccentric Cone

12.4 Deep

12"

✓
 +50 Flag Pole 47 ✓
 +50 Wall 47-31 ✓
 +48 E Hedge 32 ✓
 +44 WGV 7 ✓
 +42 8 P 38-46 ✓
 +29 MH 65 ✓
 +29 4x4 Vent 54 ✓
 +23 Sto 33 ✓
 +25 B Hedge 32 ✓
 +19 S.W. Car School 87 ✓
 +102 30" Walk 32 ✓
 +15 B-6-18 40-7 ✓
 24 ✓
 +192 W 56 ✓
 +193 15 WW 34 ✓
 +179 12" P 55 ✓
 +178 Sto 34 ✓
 +19.5 B-6-18 40-7 ✓
 +59 22 Elm 34 ✓
 +178 E Hedge 32 ✓
 +155 Cor Hedge 32 ✓
 +49 Fe Cor 36 ✓
 +66 25' Walk 40-51 ✓
 +70 Cor. B-6-18 51 ✓
 +41 Tru 4" Ash 21 ✓
 +63 MH 1 ✓
 +40 10" P 49 ✓
 +106 46" Cott 33 ✓
 23 ✓
 +193 2' Walk 33 ✓
 +81 Stamp 34 ✓
 +189 B-6-18 41-51 ✓
 +76 SNCorHo 55 ✓
 +70 B-6-18 40-7 ✓
 +74 4" P 53 ✓
 +70 ER 26 ✓
 +70 B-6-18 40-7 ✓
 +34 8" P 43 ✓
 +57 40" Cott 33 ✓
 +57 BR 15 ✓
 +26 Fe Cor 56 ✓
 +25 2 Ent 32 ✓
 +41 40" Ash 32 ✓
 +12 5" P 44 ✓
 +22 8" P 60 ✓
 +23 MH 0.5 ✓
 +101 30" Walk 33 ✓
 +14 Arbutus 27-31 ✓
 +14 2" P 34-51 ✓
 22 ✓
 +103 28" Ash 33 ✓
 +109 18" Elm 32 ✓



27 Walk 40 34 B.G Curb 25 Walk 77-84

+32 ER 26 +59 B Tie Curb +174 Arch Light 69

+134 E Walk 26 +54 F Walk 26 +133 BR 22 +41 ER 25

+134 6" Maple 55 +132 Cor Walk 40 +40 Cor Walk 40 +152 Cor Walk 34

+22 Cor Walk 41 +132 Cor Walk 40 +40 Cor Walk 40 +149 Cor Walk 40

+111 R Tie S. Side St W +106 Cor Walk 40 +117 Cor Walk 22 +36 Cor School 85

+116 Cor Walk 34 +106 Cor Walk 40 +117 Cor Walk 22 +33 Cor Walk 35

26 +116 BR 33 +107 Gutter Walk 35-40

+60 ER 36 +61 POR 30 +81 MH 6

+29 Fe Cor 40 +45 BR 20

+26 Fe Cor 30 +12 Bush 40

+107 6" WW 44 +107 Bush 39 +124 MH 1

+100 Road 79 +102 Bush 39 +102 Road 17

25 Fe 33 +100 E. Hedge 38 +100 Road 17

+98 4" Elm 33 +86 12" Birch 53 +89 Cor Walk 22

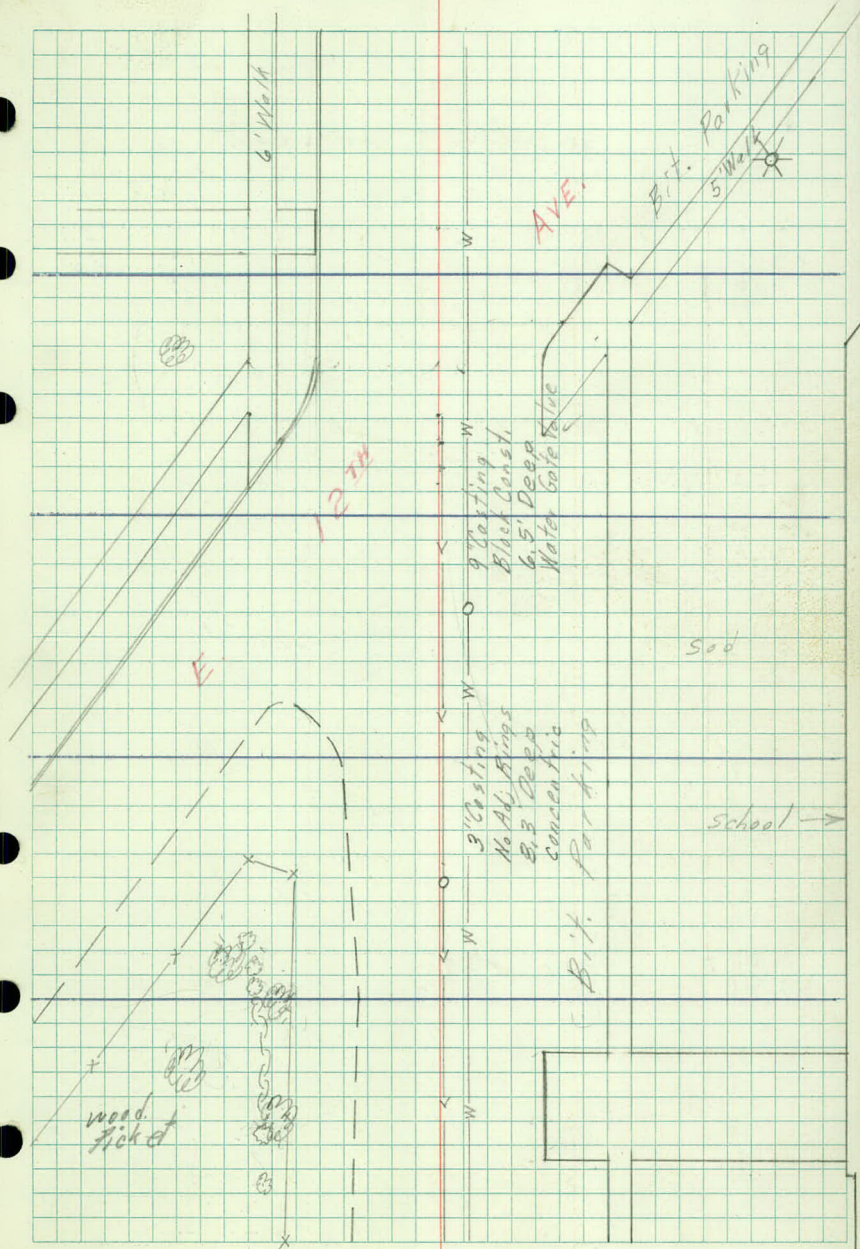
+77 B Hedge 37 +75 8" Elm 33 +67 Cor Walk 23

+72 Bush 37 +61 Bush 37 +63 Bldg 35-87

+50 B Fe 32

October 24, 1967

19



29

+25 = Same

+101 $\frac{.8" \text{ Ash}}{48}$

28	Walk 29-33	Curb 20	Curb 20	Walk 29-33
----	---------------	------------	------------	---------------

+83 $\frac{ER}{20.5}$

+91 $\frac{16" Elm}{24}$

+53 $\frac{Arc Lt}{30}$

+83 $\frac{6" Apple}{48}$

+48 $\frac{BRC}{25.5}$

+75 $\frac{NW Cor Ho}{57}$

+52 $\frac{Cor Walk}{27}$

+58 $\frac{12" Elm}{24}$

+75 $\frac{Fo Cor on carb}{34}$

+45 $\frac{Cor Walk}{31}$

+49 $\frac{Cor Walk}{40}$

+51 $\frac{Hnd}{43}$

+37 $\frac{Cor Walk}{25-34}$

+44 $\frac{ERC}{47}$

+45 $\frac{B Corb}{48}$

27

+17 $\frac{12" Elm}{51}$

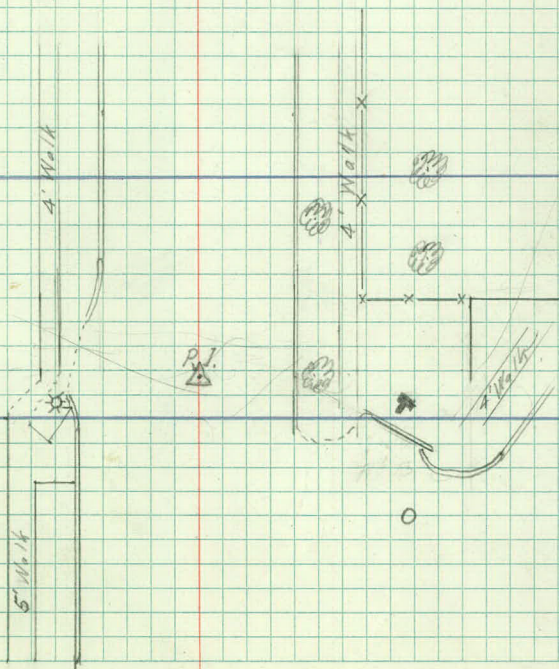
+30 $\frac{MH}{44}$

+43 $\frac{BR}{63}$

FK
WM
LPD
WJ

Jan 11, 1968

20



R-15

✓
9+77.2

MH $\frac{1}{2}$

9" Casting

4 Adj Rings

eccentric Cone

Lader E side

9.81' Deep

0.5 Below Surface

✓
9+84

MH 17' RT Storm Sewer

7" Casting

2 Adj Rings

Max Hat

8.15' Deep

✓
13+21

MH 9' LT

11" Castin

3 Adj Rings

6.94 To Top Pipe

Concentric Cone

1

12+69 MH 10' Lt

1 9" Casting

4 Adj Rings

Concentric

7.15 to Top Main

Sta + Δ - Elev

BM 2.28 944.42

942.14

3+21 MH 2' Rt 4.37 40.05

3+34 MH 17' Rt 6.11 38.31

6+08 W.G.V. 18' Lt

BM 4.41 949.61

945.20

9+77 MH 1' Rt 3.88 43.73

+84 MH 17' Rt 3.83 45.78

BM 0.81 953.77

952.96

13+21 MH 9' Lt 4.64 49.13

12+69^{74.69} MH 10' Lt 5.22 48.55

FK
WM
WS
PS
LPD

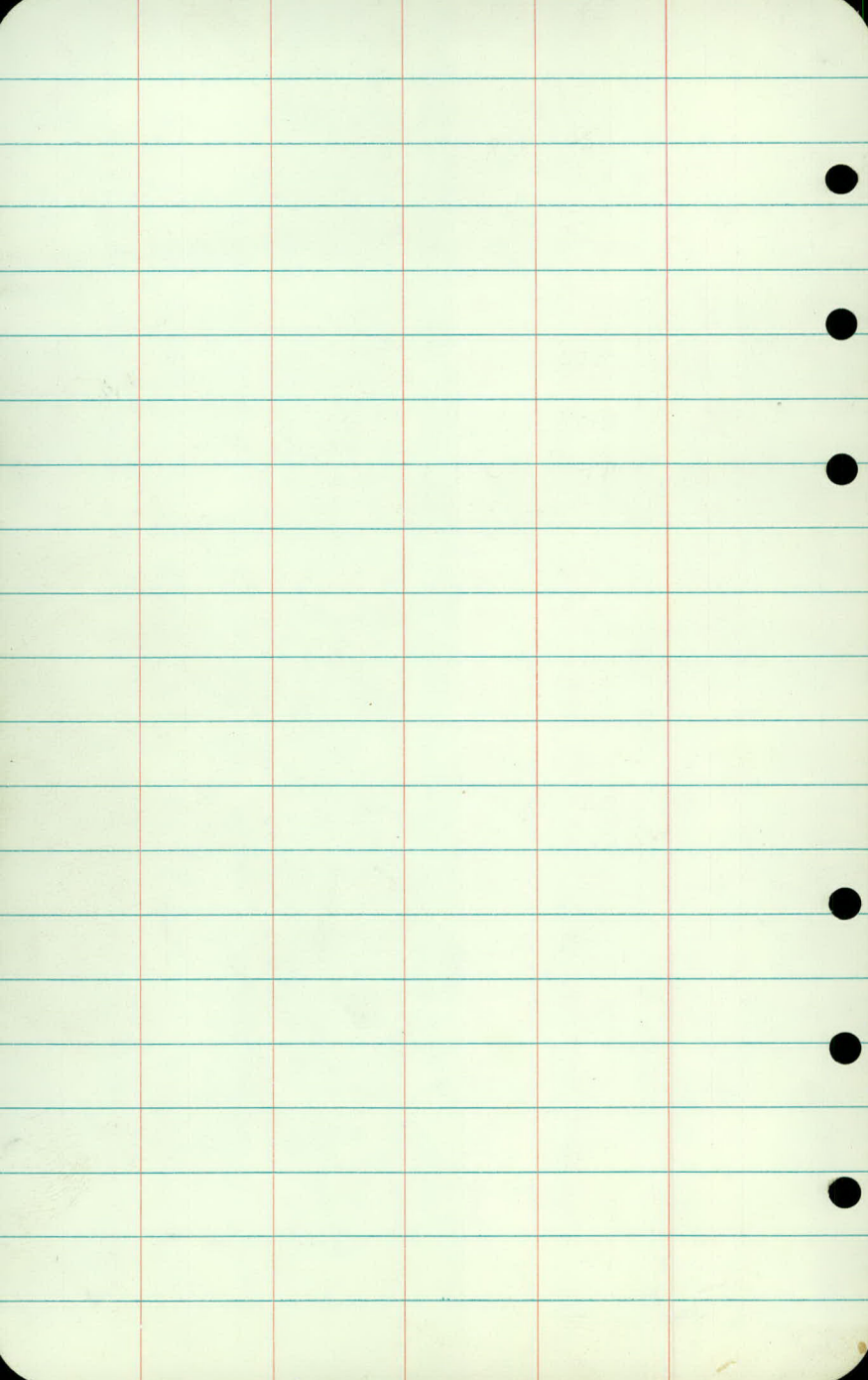
Oct. 23, 1967

22

Top Hyd Lt 3+25

Top Hyd N.W. Corner 3rd St & 4th Ave

Top Hyd NE Cor 2nd



FK
WM
LPD
WAT

Jan 18, 1968

23
6

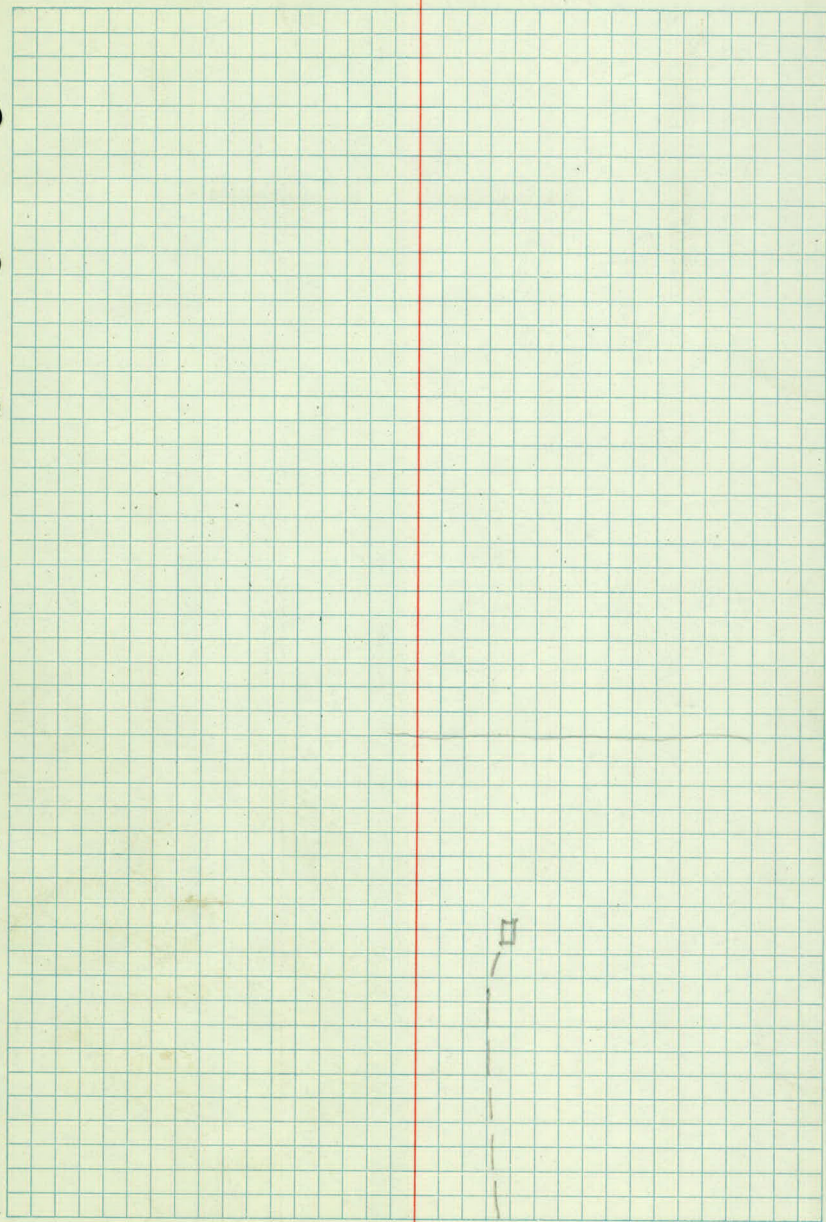
Castle + 1st St

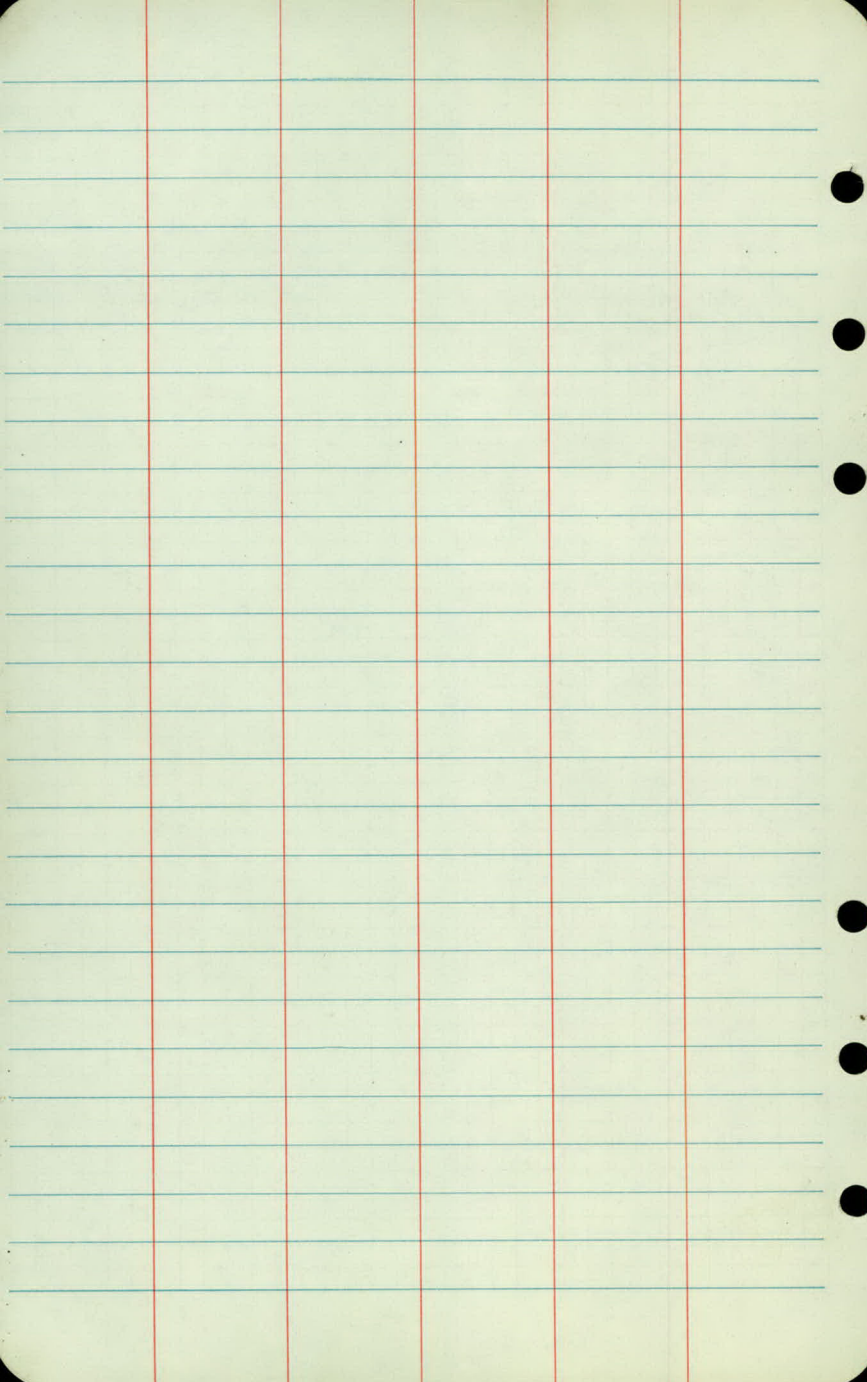
Bit., C.B., + MH

Locations

Jan 18, 1967

24
7





11th Ave.

Page 22 Frank - please get manhole elevation for:

1-3-68

1. 3+21 Rt. 2' 40.05 Survey of 1st
3+34 Rt 17' 38.31

Check 2. ~~6+26~~ Rt. 0.5' Survey to E Holes & Angle and dist
Location ~~6+46~~ page 2

3. 12+02 Lt. 0.3' ? Elev to P.I. from E 12th

4. 15+57 St. 1' 959.63 what kind of Hedge @ 25+00

5. ~~19+72~~ Rt. 65' Elev.

6. ⁻⁰⁵
~~0-50~~ Rt. 3' Elev.

FK
WM
LPD
WJ

Oct. 16, 1967

25
a

BENCH LEVELS

Sta	+	π	-	Elev.
BM	5.60	944.21		938.61
BM			5.61	938.60 938.61
BM	2.85	942.84	4.22	939.99
BM	4.37	946.51	0.70	942.14
BM	5.08	950.28	1.31	945.20
T.P.	8.52	954.77	4.03	946.25
BM	8.84	961.80	1.81	952.96
T.P.	13.75	974.86	0.69	961.11
B.M.	6.97	978.96	2.87	971.99
T.P.	13.39	991.69	0.66	978.30
B.M.	12.34	1000.95	3.08	988.61
B.M.	1.27	1001.11	1.11	999.84 10
BM	1.40	990.00	12.51	988.60
T.P.	0.33	978.62	11.71	978.29
BM	2.91	974.89	6.64	971.98 +1
B.M.	0.05	961.14	13.80	961.09
B.M.	1.61	954.56	8.19	952.95
T.P.	4.22	950.45	8.33	946.23
BM	1.61	946.79	5.27	945.18 12

Oct. 16, 1967

26

+

Nail in 16" Oak Lt. Sta 41+75 McKnight at 12th

● E. Rim M.H. Sta 38 150' Lt

Top Hyd NE Corner McKnight & 11th Ave.

● Top Hyd Lt. Sta 3+20

Top Hyd N.W. Corner 3rd & 11th Ave.

● Top N.W. Cor Walk Apt # 2350 11th Ave.

Top Hyd N.E. Corner 2nd St & 11th Ave.

Road

Top Hyd. N.W. Corner 1st St & 11th Ave.

Road

West Corner Concrete oil tank filler

Top Hyd NE Corner Helen & 12th

● W. Corner Concrete oil Tank Filler

Road

● Top Hyd N.W. Corner 1st St. & 11th Ave.

Road

Top Hyd NE. Corner 2nd St. & 11th Ave.

● Top N.W. Corner Walk Apt. # 2350 - 11th Ave

Top Hyd. N.W. Corner 3rd & 11th Ave

Sta	+	π	-	Elev.
-----	---	-------	---	-------

		946.79		
--	--	--------	--	--

BM	0.87	942.98	4.68	942.11
----	------	--------	------	--------

BM	2.72	942.69	3.01	939.97
----	------	--------	------	--------

BM			4.11	938.58
----	--	--	------	--------

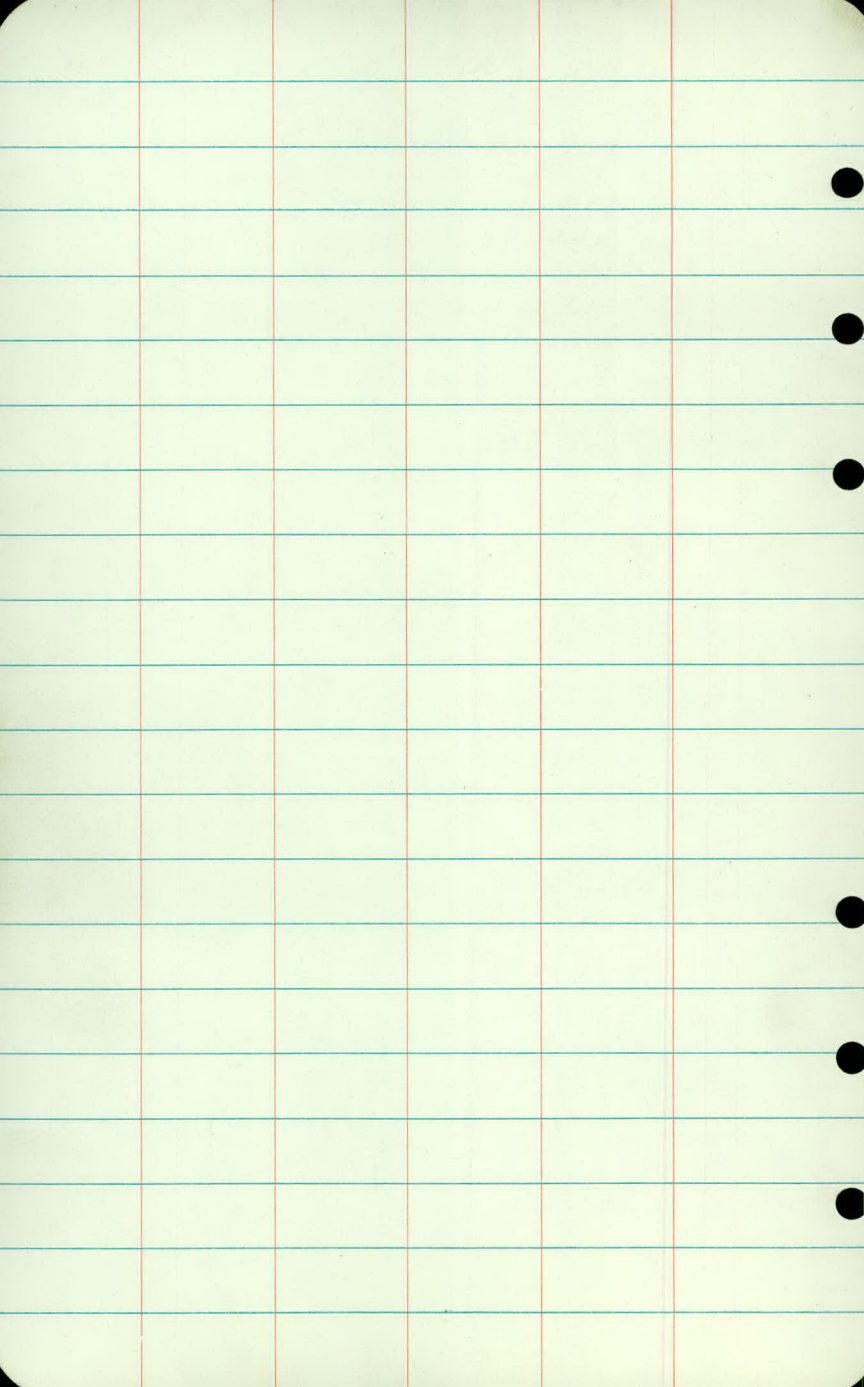
Oct. 16, 1967

27
C

Top Hyd Lt. Sta 3+20

Top Hyd N.E. Corner McKnight & 11th Ave.

Top E. Rim Left Sta 38 McKnight Road



FK
WM
DS

Oct. 25, 1967

28

a

X-Sections

3+21 MH 2' Rt

8" Casting

3 Adj Rings

eccentric Cone

steps East

Flow E $\rightarrow$ W

5.6' Deep

Sta + π - Elev

BM 3.22 943.21

(939.99)

0+00 $\angle$ Mc Knight

+22 Edge Bit

+29 Shoulder Line

+34

+45

Oct. 25, 1967 29

~~4~~

b

Top Hyd NE. Corner McKnight & 11th Ave.

38.6	38.5	38.3	38.2	38.0	37.7	37.4	37.2	36.9
4.6	4.7	4.9	5.0	5.2	5.5	5.8	6.0	6.3
100	77	50	25		25	50	75	100

38.2	38.0	37.8	37.7	37.5	37.1	37.1
5.0	5.2	5.4	5.5	5.7	6.1	6.1
50	33	14		23	42	50

37.6	37.3	37.6	37.4	37.2	37.7	37.5	37.0	37.2	37.0
5.6	5.9	5.6	5.8	5.6	5.5	5.7	6.2	6.0	6.2
50	36	27	24	13		22	37	43	50

36.0	36.2	36.6	37.4	37.6	37.5	37.1	37.5	37.0	37.3
7.2	7.0	6.6	5.8	5.6	5.7	6.1	5.7	6.2	8.9
50	41	25	16		18	31	33	44	50

31.97 (123) 5224

34.94	35.7	36.7	37.0	37.4	37.6	37.5	37.2	37.2	37.3	37.5
8.25	7.5	6.50	6.2	5.8	5.6	5.7	6.0	5.99	5.9	9.7
21	18	16	14	11		16	24	29	42	50

FL Pipe CB CB

36.1	36.9	37.1
7.1	6.3	6.1
26	33	50

Sta	+	π	-	Elev.
-----	---	-------	---	-------

		943.21		
--	--	--------	--	--

0+68				
------	--	--	--	--

✓				
---	--	--	--	--

1.				
----	--	--	--	--

+50				
-----	--	--	--	--

2				
---	--	--	--	--

+50				
-----	--	--	--	--

24

Oct. 25, 1967

30

R1

C

38.2 38.1 36.5 37.1 37.7 37.9 37.7 37.4 37.5 37.0
 50 51 6.7 6.1 5.5 5.3 5.5 5.8 5.7 6.2
 58 30 25 20 13 13 24 42 48

32.21 35.1
 10.98 8.1
 54 50
 FLCalc

39.6 38.7 36.8 37.4 37.8 38.0 38.2 38.0 37.6 37.1 36.6
 3.7 4.5 6.4 5.8 5.4 5.2 5.0 5.2 5.7 6.1 6.7
 58 30 25 21 14 8 14 24 40 58

40.2 40.2 38.0 38.3 38.2 38.4 38.7 38.4 37.9 38.2 37.8 37.3
 3.2 3.0 5.2 4.9 5.0 4.8 4.5 4.8 5.3 5.0 5.4 5.9
 50 31 24 16 15 10 14 23 25 41 50

39.6 40.2 37.9 38.2 38.7 38.9 39.1 38.9 38.4 38.6 38.2 38.0
 3.7 3.0 5.3 5.0 4.5 4.3 4.1 4.3 4.8 4.6 5.0 5.2
 50 30 24 19 14 9 14 22 23 43 50

38.3 39.0 38.6 38.6 39.3 39.4 39.5 39.2 38.8 38.9 38.8 38.4
 4.9 4.2 4.7 4.6 3.9 3.8 3.7 4.0 4.4 4.3 4.4 4.8
 46 30 26 20 14 8 14 22 23 31 50

38.0

5.2

50

Sta + π - Elev

94321

3

BM 6.12 948.26 1.07 942.14 (942.14)

+50

4

+29 $\pm$ Ent Lt

+68 $\pm$ Walk & Ent

5 Ent Lt.

Oct. 25, 1967

31

L

E

R

L

37.7	38.0	38.9	39.4	39.7	39.9	39.6	39.3	39.5	39.2	38.2	37.6
5.5	5.2	4.3	3.8	3.5	3.3	3.6	3.9	3.7	4.0	5.0	5.4
50	38	23	13	8		14	21	24	35	42	50

37.6	37.9	39.2	40.0	40.2	40.5	40.3	39.9	39.6	38.5	37.9
10.7	10.4	9.1	8.3	8.1	7.8	8.0	8.4	8.7	9.8	10.4
50	36	26	14	10		12	20	31	41	50

A1.7	A1.2	A0.9	A0.9	A1.1	A0.9	A0.6	A0.5	A0.4
6.6	7.1	7.4	7.4	7.2	7.4	7.7	7.8	7.9
50	38	21	10		12	20	37	50

A1.9	A1.6	A1.3	A1.4	A1.2	A1.1	A1.3	A1.5	A1.9
6.4	6.7	7.0	6.9	7.1	7.2	7.0	6.8	6.4
50	34	13		13	20	23	36	50

A2.5	A2.1	A1.8	A1.9	A1.8	A1.9	A1.7	A1.6	A1.9	A2.2
5.79	6.16	6.5	6.4	6.5	6.4	6.6	6.7	6.4	6.1
50	31	31	17	12		11	20	37	50

Cone

A2.5	A2.1	A2.2	A2.1	A1.9	A1.8	A1.9	A2.3
5.8	5.9	6.1	6.2	6.4	6.5	6.4	6.0
50	34	13		12	21	34	50

Sta + π - Elev

948.26

5+50

6

+17 Property Line

BM 3.11 948.31 3.06 945.20 (945.20)

+35 Gutter Line

+46 MH 1' Rt 4.84 943.47

+50 $\angle$ 3rd St

+60 MH 28' Rt 5.27 43.04

+65 Gutter Line

+69 MH 46' Lt 4.88 43.43

Oct. 25, 1967 32
 ✓

$A_{2.8}$ $A_{2.4}$ $A_{2.6}$ $A_{2.5}$ $A_{2.7}$ $A_{2.4}$ $A_{2.2}$ $A_{2.9}$ $A_{2.8}$
 5.5 5.9 5.7 5.8 5.6 5.9 6.1 5.8 5.5
 50 37 24 12 12 20 31 50

$A_{4.2}$ $A_{4.2}$ $A_{3.7}$ $A_{2.8}$ $A_{3.0}$ $A_{3.1}$ $A_{2.9}$ $A_{2.8}$ $A_{3.0}$ $A_{2.9}$
 4.1 4.1 4.6 5.5 5.3 5.2 5.4 5.5 5.3 5.4
 46 36 29 17 10 15 23 38 50
 Ho

$A_{4.7}$ $A_{4.4}$ $A_{3.0}$ $A_{3.1}$ $A_{3.3}$ $A_{3.1}$ $A_{2.9}$ $A_{3.1}$ $A_{2.9}$
 36 39 53 52 5.0 5.2 5.4 5.2 5.4
 37 30 25 12 11 17 28 50
 Ho Top Hyd N.W. Corner 3rd & 11th Ave.

$A_{2.7}$ $A_{2.8}$ $A_{2.6}$ $A_{2.7}$ $A_{3.2}$ $A_{3.1}$ $A_{3.2}$ $A_{3.0}$ $A_{2.7}$ $A_{2.3}$
 5.59 5.47 5.65 5.4 5.1 4.9 5.1 5.3 5.6 6.0
 50 36 46 29 15 12 20 31 50
 Gutter C.B.
 Conc

$A_{3.3}$ $A_{3.3}$ $A_{3.2}$ $A_{3.3}$ $A_{3.5}$ $A_{3.3}$ $A_{3.0}$ $A_{2.6}$ $A_{2.3}$ $A_{2.1}$
 5.0 5.0 5.1 5.0 4.8 5.0 5.3 5.7 6.0 6.2
 65 50 37 15 13 29 50 75 100

$A_{2.8}$ $A_{2.8}$ $A_{3.0}$ $A_{3.3}$ $A_{3.5}$ $A_{3.3}$ $A_{2.8}$ $A_{2.2}$
 5.47 5.54 5.33 5.0 4.8 5.02 5.5 6.1
 50 46 36 19 16 29 50
 Conc MH

Sta	+	π	-	Elev
-----	---	-------	---	------

		948.31		
--	--	--------	--	--

6+83				
------	--	--	--	--

+87				
-----	--	--	--	--

✓				
---	--	--	--	--

7				
---	--	--	--	--

+30	W/L	30' Rt	3.62	44.7
-----	-----	--------	------	------

+30	"	50' Rt	2.89	
-----	---	--------	------	--

+50				
-----	--	--	--	--

8				
---	--	--	--	--

TP	3.82	951.35	0.28	947.53
----	------	--------	------	--------

Oct. 25, 1967 33

Lt

L

Rt e

AA.5	A3.8	A3.3	A2.9	A3.2	A3.6	A3.2	A2.7	A3.	A3.5
38	45	50	54	50	4.7	5.1	56	50	48
50	34	22	22	13		15	18	33	50

AA.3	AA.1	A3.3	A2.7	A3.1	A3.6	A3.3	A2.7	A2.7	A3.3	AA.2
40	42	50	56	52	4.7	5.0	5.6	56.3	50	4.1
50	31	23	21	15		15	19	22	24	38
			CB					CB		

A3.0
3.3
50

AA.2	AA.0	A2.9	A3.A	A3.7	A3.A	A2.9	A3.8	AA.6	A5.2
4.1	4.3	54	4.9	4.6	4.9	54	45	3.7	3.1
50	33	18	12		15	20	26	40	50

AA.6	AA.3	A2.8	A3.7	A3.9	A3.7	A3.4	AA.4	A5.0	A5.4
3.7	40	4.5	4.6	4.4	4.6	4.9	3.9	3.3	2.9
50	36	23	12		13	19	26	41	50

A5.1	AA.5	A3.8	A3.9	AA.2	AA.0	A3.8	AA.6	A5.6	A6.5
3.2	3.8	4.5	4.4	4.1	4.3	4.5	3.7	2.7	2.3
50	30	17	10		15	19	25	40	50

Water shut off Apt #2333

Sta + π - Elev

951.35

8+28 Walk & Ent

+65

9

+21 Walk Rt

+62 Ent Lt.

10 Walk Lt.

FR
WM
WJ
DS

Lt.

Oct 26, 1967

34

RT

44.9 44.6 44.3 44.4 44.2 44.1 45.1 45.5 46.1
6.5 6.8 7.1 7.0 7.2 7.3 6.3 5.89 5.29
50 30 12 13 20 30 30 50
Walk

45.6 45.3 45.1 44.7 44.8 44.6 44.4 45.0 46.0 46.1
5.8 6.1 6.3 6.7 6.6 6.8 7.0 6.4 5.4 5.3
50 30 15 11 13 20 28 45 50

45.8 45.5 45.4 45.2 45.2 45.0 44.7 45.5 46.6
5.6 5.9 6.0 6.2 6.2 6.4 6.7 5.9 4.8
50 35 20 13 14 21 33 50

46.4 46.1 45.7 45.4 45.4 45.3 45.1 45.4 45.9 46.7
4.8 5.3 5.7 6.0 6.0 6.1 6.3 5.8 5.53 4.69
50 38 23 12 15 19 29 30 50
Walk

46.6 46.1 45.8 45.8 45.8 45.7 46.2
4.8 5.3 5.6 5.6 5.6 5.7 5.2
50 29 11 18 29 50

47.0 46.8 46.5 45.9 46.2 46.0 45.7 45.8 46.5
4.41 4.62 4.9 5.5 5.2 5.4 5.7 5.6 4.9
50 30 21 12 16 21 31 50
Walk

Sta + π - Elev.

951.35

10+19 W_o 14 Rt

+38 Ent Lt.

+72

11

T.P. 4.73 954.28 1.80 949.55

+06

+27 Ent Lt Walk Rt

Lt

Oct, 26, 1967

35

RT

g

46.8	46.6	46.5	46.2	46.3	46.1	45.8	46.0	46.3	46.8
4.6	4.8	4.9	5.2	5.1	5.3	5.6	5.4	5.11	4.63
50	40	20	11		14	23	29	30	50

Walk

47.4	46.9	46.6	46.5	46.5	46.3	46.0	46.2	46.6
4.0	4.5	4.8	4.9	4.9	5.1	5.4	5.2	4.8
50	32	14	10		13	23	37	50

47.9	47.3	47.3	46.9	46.8	46.5	46.1	46.3	46.6
3.5	4.1	4.1	4.5	4.6	4.9	5.3	5.1	4.8
50	28	17	11		15	22	36	50

47.4	47.6	47.2	46.9	47.2	46.8	46.4	46.5	47.0
4.0	3.8	4.2	4.5	4.2	4.6	5.0	4.9	4.4
50	34	19	10		15	23	31	50

47.5	46.7	46.0	46.2	47.0	46.9	46.9	47.2	46.9	46.7	46.5	47.0
6.8	7.6	8.3	8.1	7.3	7.4	7.3	7.1	7.4	7.6	7.8	7.3
61	50	36	26	16	15	17		16	22	30	50

49.2	48.0	47.3	47.3	47.4	47.0	46.9	46.8	47.2
5.1	6.3	7.0	7.0	6.9	7.3	7.4	7.45	7.08
50	32	13	10		16	26	30	50

Walk

Sta + π - Elev.

954.28

11+46

+78

12

+26

+50

+72 Property Line

BM

1.30 952.98

Oct. 26, 1967 36
 Lt. Rt.

51.0	50.7	49.5	48.5	47.6	47.7	47.7	47.5	47.0	47.1	47.1
3.3	3.6	4.8	5.8	6.7	6.6	6.6	6.8	7.3	7.2	7.2
50	45	33	20	14	10	11	19	30	50	

51.4	50.4	49.6	48.6	48.0	48.2	48.3	48.1	47.4	47.6	47.3	47.1
2.93	3.93	4.74	5.7	6.3	6.1	6.0	6.2	6.9	6.7	7.0	7.2
50	30	18	14	14	10	9	18	30	40	50	

Walk Step.

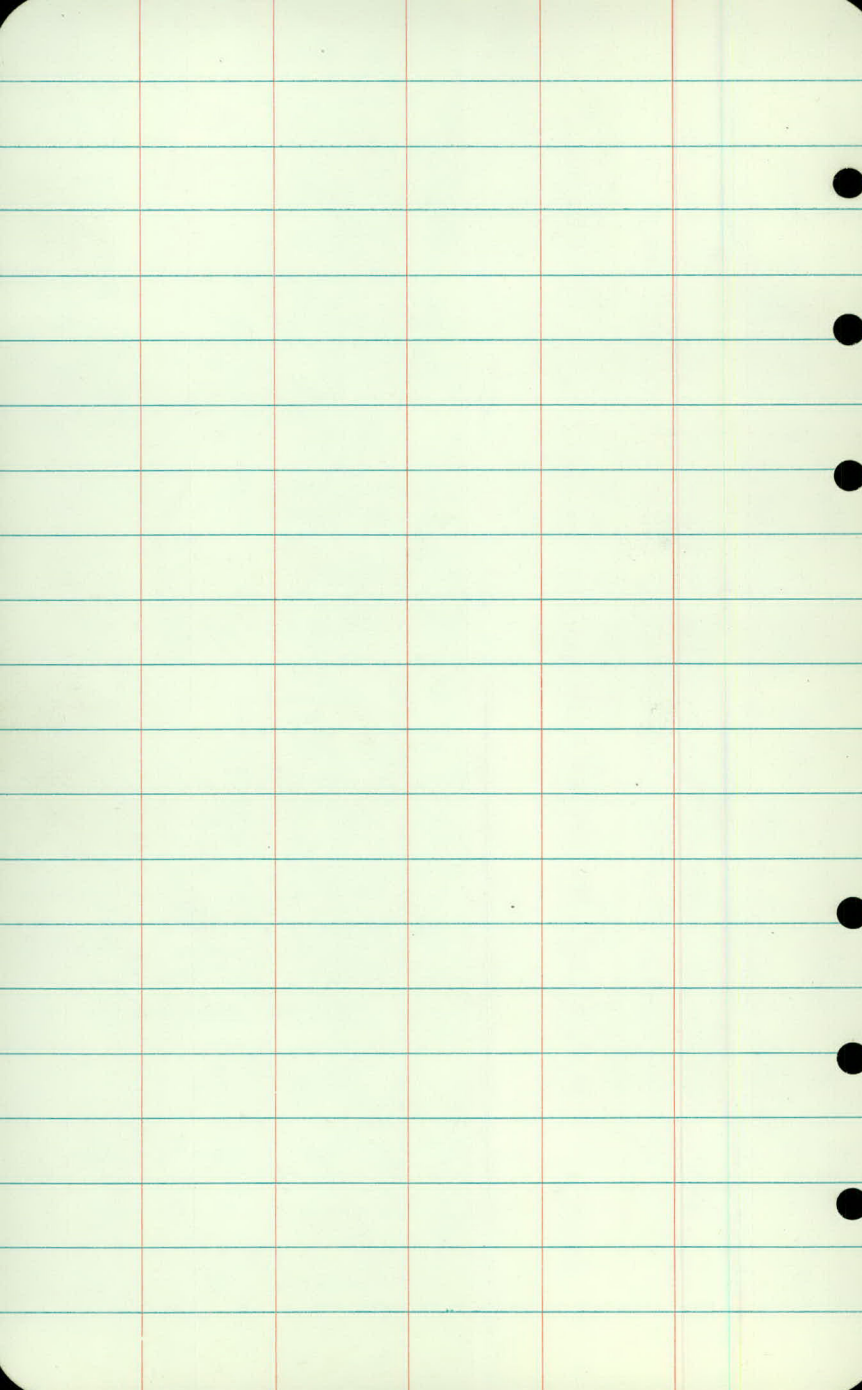
49.6	49.4	49.0	48.1	48.4	48.5	48.4	48.0	48.0	48.2	48.5	48.7
4.7	4.9	5.3	6.2	5.9	5.8	5.9	6.3	6.3	6.1	5.8	5.6
50	31	19	15	10	10	17	26	31	44	50	

48.6	48.3	48.3	48.1	48.5	48.7	48.7	48.5	49.1	49.6	49.9	50.1
5.7	6.0	6.0	6.2	5.8	5.6	5.6	5.8	5.2	4.7	4.4	4.22
50	35	20	15	9	12	18	25	31	38	43	Ho

48.3	48.1	48.1	48.5	48.8	48.7	48.5	48.9	49.8
6.0	6.2	6.2	5.8	5.5	5.6	5.8	5.4	4.5
50	34	16	12	12	19	32	50	

48.2	48.1	48.2	48.6	48.7	48.1	48.5	48.2	47.8	48.2	48.2	48.2
6.1	6.2	6.1	5.7	5.6	5.6	5.8	6.1	6.5	6.1	6.1	6.1
50	38	22	13	8	10	16	18	21	40	50	

Top Hyd N.E. Corner N 2nd St + 11th Ave



Oct. 17, 1967

37
a

X-Sections

Sta	+	π	-	Elev
BM	0.19	953.15		952.96

11			6.01	47.2
----	--	--	------	------

+50			5.4	47.8
-----	--	--	-----	------

12			4.67	48.5
----	--	--	------	------

+50			4.4	48.8
-----	--	--	-----	------

+71	W. Property Line			
-----	------------------	--	--	--

+88	Gutter Line			
-----	-------------	--	--	--

13			4.4	48.8
----	--	--	-----	------

13 + 04	≠ 2 nd			
---------	-------------------	--	--	--

FK
WM
LPD

Lt.

Oct. 12, 1967
RH.

38
b

05.0	05.1	04.8	04.6	04.5	04.7	05.2	04.9	05.0	04.0
48.2	48.1	48.4	48.6	48.7	48.5	48.0	48.3	48.2	48.4
5.0	5.1	4.8	4.6	4.5	4.7	5.2	4.9	5.0	4.8
50	29	17	12		11	17	21	35	50

49.1	48.9	48.1	48.5	48.6	48.7	48.4	48.0	47.3	47.1
4.1	4.3	5.0	4.7	4.6	4.5	4.8	5.1	5.9	6.1
50	43	33	27	13		13	16	27	50
		CB				MH			

50.8	50.1	49.6	49.2	49.0	48.8	48.4	47.9	47.4	47.1	46.9
24	31	36	40	42	44	48	53	58	61	63
100	73	50	30	13		13	28	50	65	78

7.1 6.5
150 100 ←

Sta + π - Elev.

953.15

13+19 Gutter Line

+28

+37 E. Property

+41 C.B. 22' Lt. 3.92 49.23

+41 C.B. 22' Rt. 4.58 48.57

+62

BM 8.00 960.96 0.19 952.96 (952.96)

+80 Walk 30' Lt. 7.92 53.1

14

+08 Walk 23' Lt. 7.23

+23 In Ent Lt.

Oct. 17, 1967

39

Lt.

E

RT

0

^{49.4} 3.8 ^{48.9} 4.32 ^{49.2} 4.0 ^{49.1} 4.1 ^{49.0} 4.2 ^{48.6} 4.6 ^{48.0} 5.2 ^{47.8} 5.4 ^{47.5} 5.7
 50 34 23 13 10 20 29 50
 CB.

^{50.4} 2.8 ^{50.3} 2.9 ^{49.6} 3.6 ^{49.2} 4.0 ^{49.3} 3.9 ^{49.2} 4.0 ^{48.4} 4.8 ^{48.3} 4.9 ^{48.4} 4.8 ^{47.9} 5.3 ^{47.5} 5.7
 50 33 25 22 13 13 18 22 33 50

^{52.2} 1.0 ^{50.7} 2.5 ^{49.4} 3.8 ^{49.6} 3.6 ^{49.5} 3.7 ^{49.1} 4.1 ^{48.6} 4.6 ^{48.8} 4.4 ^{48.9} 4.3 ^{49.0} 4.2
 50 28 22 12 8 16 22 34 50

^{53.72} 10.57 ^{53.6} 10.4 ^{52.1} 1.1 ^{51.3} 1.9 ^{50.8} 2.4 ^{50.6} 2.6 ^{50.7} 2.5 ^{50.2} 3.0 ^{49.9} 3.3 ^{50.3} 2.9 ^{50.5} 2.7 ^{51.8} 1.4 ^{52.1} 1.1
 50 44 28 19 17 14 9 13 16 27 41 50
 Top Hyd NE Corner 2nd St

^{55.0} 6.0 ^{54.4} 6.6 ^{53.2} 7.8 ^{52.5} 8.5 ^{52.6} 8.4 ^{52.4} 8.6 ^{53.9} 7.1 ^{53.6} 7.4 ^{53.3} 7.7 ^{53.4} 7.6
 50 39 23 13 11 17 32 50 H₀

^{54.3} 5.7 ^{54.8} 6.2 ^{54.2} 6.8 ^{53.6} 7.4 ^{53.8} 7.2 ^{53.4} 7.6 ^{54.5} 6.5 ^{54.2} 6.8 ^{53.7} 7.3
 50 36 20 13 13 18 33 50

Sta + π - Elev.

960.96

14+35

+68

+81

15

+26

+34

Lt

Oct. 13, 1967

40

RT d

$\checkmark$
 5A.9 5A.8 5A.7 5A.2 5A.3 5A.0 5A.3 5A.1 5A.1
 6.1 6.2 6.3 6.8 6.7 7.0 4.7 3.9 3.6
 50 34 16 12 12 22 38 50

$\checkmark$
 56.2 56.2 56.1 55.3 55.7 55.2 55.9 56.4 57.9
 4.8 4.8 4.9 5.7 5.3 5.8 5.1 4.6 3.1
 50 34 16 13 15 18 33 50
 No

$\checkmark$
 56.7 56.6 56.4 55.8 56.2 55.7 56.2 55.4 55.4
 4.3 4.4 4.6 5.2 4.8 5.3 4.8 5.6 5.6
 50 35 15 12 13 19 30 50

$\checkmark$
 57.7 57.3 57.0 56.6 57.0 56.6 56.2 56.5 56.8 55.5
 3.3 3.7 4.0 4.4 4.0 4.4 4.8 4.5 5.2 5.5
 50 32 15 13 10 13 16 26 50

$\checkmark$
 60.0 59.6 58.5 57.7 57.8 58.2 58.0 57.7 58.2 56.9 56.3 56.0
 1.0 1.4 2.5 3.3 3.2 2.8 3.0 3.3 2.8 4.1 4.7 5.0
 43 35 18 14 10 9 14 17 25 38 50
 No

$\checkmark$
 60.1 59.9 59.4 58.5 57.9 58.1 58.7 58.2 57.9 58.5 58.4 58.3
 0.9 1.09 1.6 2.5 3.1 2.9 2.3 2.8 3.1 2.5 2.6 2.7
 40 35 27 16 14 10 10 14 25 43 50
 No walk

Sta	+	π	-	Elev.
-----	---	-------	---	-------

		960.96		
--	--	--------	--	--

15+46				
-------	--	--	--	--

T.P.	12.35	971.98	1.33	959.63
------	-------	--------	------	--------

M.H. ✓
15+57 Lt. 1'

+58				
-----	--	--	--	--

+76				
-----	--	--	--	--

16				
----	--	--	--	--

+10	Walk	18' Lt.	8.50	
-----	------	---------	------	--

+10	Walk	30' Lt.	7.27	
-----	------	---------	------	--

+50				
-----	--	--	--	--

17				
----	--	--	--	--

T.P.	6.97	977.23	1.22	970.26
------	------	--------	------	--------

Lt.

Oct. 16, 1967

41

Rt

e

60.5 60.3 59.8 59.0 58.3 58.6 59.0 58.8 58.3 58.5 58.4
 0.5 0.7 1.2 2.0 2.7 2.4 2.0 2.2 2.7 2.5 2.6
 60 44 35 24 14 9 10 15 23 50

61.2 60.7 60.1 59.0 59.2 59.6 59.3 59.0 60.0 61.1 61.3
 10.8 11.3 11.9 13.0 12.8 12.4 12.7 13.0 12.0 10.9 10.7
 50 33 20 14 10 11 16 24 41 50

63.5 62.5 61.5 60.2 60.3 60.6 60.2 60.0 60.5 61.2 61.5
 8.5 9.5 10.5 11.8 11.7 11.4 11.8 12.0 11.5 10.8 10.15
 50 32 19 14 10 11 15 21 30 44
 Walk Ho

65.2 64.5 62.8 61.6 61.7 62.1 61.7 61.3 62.1 62.5
 6.8 7.5 9.2 10.4 10.3 9.9 10.3 10.7 9.9 9.5
 48 35 19 14 10 12 15 28 50

67.1 67.2 67.2 65.2 65.5 65.0 64.9 64.6 64.9 64.2 64.1
 4.9 4.8 4.8 6.8 6.5 7.0 7.1 7.4 7.1 7.8 7.9
 50 35 21 14 12 16 22 30 47 50

69.2 69.3 69.8 69.9 68.5 68.5 68.3 68.6 68.1 67.5
 2.8 2.7 2.2 2.1 3.5 3.5 3.7 3.4 3.9 4.5
 47 34 29 20 15 12 17 30 50
 Walk

Sta + π - Elev.

977.23

17+34

+62

✓

+87

✓

18

+06 MH 2' Lt.

4.92

972.31

2 Oct. 12, 1967 42

11.

BT

5

68.9 69.8 70.7 71.1 69.8 70.0 70.1 69.9 69.7 69.9 69.9 68.7
83 74 65 61 74 72 71 73 75 73 83 85
50 37 33 21 16 10 11 14 17 32 50

70.7 71.3 71.2 70.6 71.2 71.3 70.9 70.3 69.9
65 5.9 6.0 6.6 6.0 5.9 6.3 6.9 7.33 8.67
32 27 18 15 8 11 22 30 38
Walk

70.3
6.9
50

68.2 68.4 68.3 69.7
Ho 898 883 885 75
54 50 46 44 43
Walk

72.2 73.0 73.0 72.0 71.9 72.0 71.8 71.7 71.9 71.1 70.6
50 42 42 52 53 52 54 55 53 6.1 6.6
43 28 20 15 11 11 14 18 28 30

72.0
5.2
50

68.7 68.8 68.9 70.4
8.5 8.44 8.3 6.8
50 42 34 33
Ho Walk

74.2 74.4 74.1 72.5 72.2 72.3 72.0 72.5 72.0 71.4 68.3
3.0 2.8 3.1 4.7 5.0 4.9 5.2 4.7 5.2 5.8 8.91
50 34 21 17 12 13 16 23 28 29

68.6 68.2
8.6 8.78
50 40

Sta	+	π	-	Elev.
-----	---	-------	---	-------

		977.23		
--	--	--------	--	--

18+20				
-------	--	--	--	--

✓				
---	--	--	--	--

+40				
-----	--	--	--	--

✓				
---	--	--	--	--

+54				
-----	--	--	--	--

Oct. 17, 1967

43

Lt

Lt

Rt

8

15^v 15.1 14.8 12.7 12.4 12.3 12.1 12.1 12.6 12.8
 1.64 1.8 2.4 4.5 4.8 4.9 5.1 5.1 4.6 4.4
 29 27 20 15 8 10 13 16 21
 walk

 15.0

2.23

43

Walk-No

 68.1 68.2 71.4

9.1 9.0 5.78

38 29 28

Ho wall

15.4 14.3 12.8 12.0 12.0 12.0 11.6 11.5 11.9 11.6
 1.8 2.9 4.4 5.2 5.2 5.2 5.6 5.7 5.3 5.6
 23 18 17 13 10 11 13 15 20

 15.3 15.1

1.9 2.1

37 50

 67.4 67.5 67.9 71.3

9.8 9.7 9.3 5.90

45 37 28 27

Wall

14.6 13.1 11.8 11.4 11.4 11.4 11.0 10.8 11.0 11.3
 2.6 4.1 5.4 5.8 5.8 5.8 6.2 6.4 6.2 5.92
 22 17 16 13 10 9 12 15 22
 Wall

 15.3 15.3

1.9 1.9

32 50

 67.3 67.5 68.1

9.9 9.7 9.1

50 36 23

Sta + π - Elev

977.23

18+72

+98 Walk Lt.

19

BM 6.89 978.⁸⁷~~88~~ 5.25 971.98 (971.99)

+25 W. Property line

✓

+36

Lt

Oct. 17, 1967

44

BT

$\begin{matrix} 75.0 & 74.5 & 73.4 & 71.8 & 70.4 & 70.1 & 70.3 & 70.3 & 69.2 & 68.3 & 67.4 & 67.3 \\ 22 & 27 & 38 & 54 & 68 & 71 & 69 & 69 & 80 & 89 & 98 & 99 \\ 50 & 37 & 24 & 18 & 14 & 12 & & 4 & 13 & 17 & 32 & 37 \end{matrix}$
 Garage

$\begin{matrix} 76.2 & 74.7 & 73.0 & 72.4 & 71.4 \\ 2.07 & 2.50 & 4.15 & 4.80 & 5.77 \\ 47 & 40 & 29 & 29 & 22 \end{matrix}$

$\begin{matrix} 75.1 & 72.9 & 70.1 & 68.6 & 68.5 & 68.5 & 68.3 & 67.5 & 67.1 & 67.1 & 67.1 \\ 2.1 & 4.3 & 7.1 & 8.6 & 8.7 & 8.7 & 8.9 & 9.7 & 10.1 & 10.1 & 10.1 \\ 48 & 30 & 16 & 12 & 8 & & 6 & 14 & 15 & 34 & 38 \\ \text{Hd Top Hyd NW Cor 1st \& 11th Ave,} & & & & & & & & & & 40 \end{matrix}$

$\begin{matrix} 73.0 & 71.0 & 68.7 & 67.8 & 67.7 & 68.0 & 67.6 & 66.7 & 66.6 \\ 5.9 & 7.9 & 10.2 & 11.1 & 11.2 & 10.9 & 11.3 & 12.2 & 12.3 \\ 50 & 31 & 17 & 14 & 9 & & 9 & 19 & 21 \end{matrix}$

$\begin{matrix} 65.0 & 66.5 & 67.0 \\ 120 & 124 & 119 \\ 50 & 36 & 23 \end{matrix}$

$\begin{matrix} 68.9 & 67.6 & 67.6 & 68.0 & 68.0 & 67.5 & 66.4 & 66.1 & 66.8 \\ 100 & 113 & 113 & 10.9 & 10.9 & 11.4 & 12.5 & 12.8 & 12.1 \\ 20 & 15 & 13 & 8 & & 11 & 26 & 29 & 32 \\ CB & & & & & & & & \end{matrix}$

$\begin{matrix} 69.7 & 70.2 \\ 9.2 & 8.7 \\ 38 & 50 \end{matrix}$

$\begin{matrix} 66.3 \\ 126 \\ 50 \end{matrix}$

Sta + π - Elev.

7887

19+43 Edge of Bit Gutter Line

+60 $\angle$

+74 Gutter Line

+83

20

$\checkmark$

17

Oct. 13/1967

45

Rt

i

69.4	69.2	68.6	68.1	68.2	67.9	67.3	66.2	65.8	65.8
95	97	10.3	10.8	10.7	11.0	11.6	12.7	13.1	13.1
50	42	26	17			17	35	43	50

71.5	70.8	70.1	69.2	68.1	67.1	66.2	65.4	64.8
7.4	8.1	8.8	9.7	10.8	11.8	12.7	13.5	14.1
96	75	50	25		25	50	75	100

69.4	69.3	68.8	67.7	67.1	66.6	66.4
95	96	10.1	11.2	11.8	12.3	12.5
50	47	25		16	32	50

70.3	69.7	69.1	69.0	68.7	67.7	67.3	66.3	66.5
8.6	9.2	9.8	9.9	10.2	11.2	11.6	12.6	12.4
50	34	22	14		16	27	35	50

CB

72.0	71.4	70.7	70.4	70.6	70.2	69.3	68.7	68.2	66.8	66.8
6.9	7.5	8.2	8.5	8.3	8.7	9.6	10.2	10.7	12.1	12.1
50	44	38	31	28	19		12	21	30	34

67.1	66.4
11.8	12.5
50	37

Sta	+	π	-	Elev.
-----	---	-------	---	-------

		978. ⁸⁷ 88		
--	--	----------------------------------	--	--

20+35				
-------	--	--	--	--

			6.9	
--	--	--	-----	--

				72.0
--	--	--	--	------

+60				
-----	--	--	--	--

			8.4	
--	--	--	-----	--

				70.5
--	--	--	--	------

21				
----	--	--	--	--

			6.1	
--	--	--	-----	--

				72.8
--	--	--	--	------

+18.4				
-------	--	--	--	--

			5.25	
--	--	--	------	--

				73.6
--	--	--	--	------

+50				
-----	--	--	--	--

			3.8	
--	--	--	-----	--

				75.1
--	--	--	--	------

22				
----	--	--	--	--

			1.6	
--	--	--	-----	--

				77.3
--	--	--	--	------

+37				
-----	--	--	--	--

			0.0	
--	--	--	-----	--

BM				
----	--	--	--	--

			6.89	
--	--	--	------	--

			(971.99)	
--	--	--	----------	--

				Top Hyd 1st st.
--	--	--	--	--------------------

FX
WM
DS
LPD

Oct. 24, 1967

46
a

Sta + π - Elev

BM 4.44 976.43

971.99

20+25

✓

+50

+75

21

TP 8.73 982.49 2.67 973.76

+50

Oct. 24, 1967

47

B

Top Hyd NW. Corner 1st St & 11th Ave

70.9	73.5	72.6	71.5	71.6	71.9	71.0	69.3	69.0	68.5	68.5
1.5	2.9	3.8	4.9	4.8	5.1	5.4	7.1	7.4	7.9	7.9
46	37	24	14	8		4	11	14	19	37
Ho										

67.1	67.0	66.8	67.5
9.3	9.4	9.6	8.9
66	61	59	54

75.5	74.6	73.2	70.0	70.2	69.5	69.3	69.1	70.9	70.1
0.9	1.8	3.2	6.4	6.2	6.9	7.1	7.3	5.6	6.6
43	27	12		20	35	39	42	48	61
Ho									

75.3	75.1	74.5	71.6	71.4	71.5	71.5	70.9	71.2	71.7	71.7
1.06	1.28	1.88	4.8	5.0	4.9	4.9	5.5	5.2	4.7	4.7
43	36	21	13	10		11	27	30	39	50

Sidewalk

75.7	75.3	74.4	72.5	72.2	72.8	72.5	71.8	73.0	72.9	72.9
0.7	1.1	1.8	3.9	4.2	3.6	3.9	4.6	3.4	3.5	3.5
50	35	23	16	14		14	23	28	34	50

77.9	77.8	76.8	76.5	74.7	74.7	75.1	74.9	74.5	75.0	75.7	75.8	75.6
4.6	4.7	5.7	6.0	8.3	7.8	7.4	7.6	8.0	7.5	6.8	6.7	6.9
50	41	32	24	17	11		14	20	23	26	39	50

Sta + π - Elev

982.49

21+65 Walk

+83 Ent Lt

22

+23

+62

+68

Oct 29, 1967

48

LT

Z

BT

0

78.7 78.2 77.1 76.0
 3.78 4.27 5.43 6.47
 53 40 23 20
 Ho Walk & steps

78.1 77.5 76.8
 4.4 5.0 5.7
 11.0 40 29
 56

78.9 77.9 77.4 75.6 75.9 77.0 77.3 76.9 76.1 76.5 77.1 77.6
 3.56 4.57 5.1 6.7 6.6 5.5 5.2 5.6 6.4 6.0 5.4 4.9
 52 34 26 22 18 15 15 22 23 30 48
 Walk Ho

77.0 78.4 77.6 76.7 76.6 77.9 78.3 77.9 77.8 77.4 77.3
 3.5 4.1 4.9 5.8 5.9 4.6 4.19 4.6 4.7 5.1 5.2
 50 36 27 22 19 14 MH. 17 23 37 50

78.5 78.5 78.2 78.2 79.5 80.0 79.9 79.4 79.3 77.7 76.5 76.1
 4.0 4.0 4.3 4.3 3.0 2.5 2.6 3.1 3.2 4.8 6.0 6.4
 50 30 24 19 15 11 15 18 24 39 50

78.4 78.2 78.4 78.4 79.7 80.2 80.2 79.9 79.9 80.6 80.6 80.3
 4.1 4.3 4.1 4.1 2.8 2.3 2.3 2.6 2.6 1.9 1.85 2.2
 50 37 26 19 15 11 15 20 36 40 50
 Walk Gutter

Sta	+	π	-	Elev
-----	---	-------	---	------

982.49

23

T.P.	11.50	993.25	0.74	981.75	Sta 23 $\pm$
------	-------	--------	------	--------	--------------

+49

+63

24

+50

T.P.	11.36	1001.63	2.98	990.27
------	-------	---------	------	--------

+67	Cor. W. 1/4 22' Rt.	11.79
-----	---------------------	-------

+89	" " " "	10.82
-----	---------	-------

25

Oct. 24, 1967

49

LT

RT

79.3	79.9	79.4	80.8	81.2	81.7	81.8	81.5	81.2	81.5	82.3	82.4
315	360	3.1	1.7	13	0.8	0.7	1.0	1.3	1.0	0.22	0.09
50	33	23	15	14	10		11	15	21	36	40
walk										walk	

80.2	81.0	82.0	83.9	84.7	84.4	83.9	83.6	83.9	84.5	84.6	83.1
13.1	12.3	11.3	9.4	9.1	8.9	9.4	9.7	9.4	8.83	8.74	10.2
50	35	29	17	7		11	14	21	35	40	50
walk										walk	

83.1	83.5	83.1	84.4	84.4	84.8	85.1	84.7	84.4	84.6	85.0	85.1	83.9
10.2	9.8	10.2	8.9	8.9	8.5	8.20	8.6	8.9	8.7	8.9	8.22	10.0
50	37	28	21	17	15	MH	11	15	20	35	40	50
walk										walk		

86.6	86.6	86.9	85.9	86.5	87.0	86.7	86.3	86.4	87.2	86.9	86.9
6.71	6.66	6.4	7.4	6.8	6.3	6.6	7.0	6.9	6.09	6.42	6.4
53	33	24	20	14		12	18	26	35	40	50
walk										walk	

89.4	89.8	89.6	89.0	88.6	88.9	89.3	88.6	88.3	89.4	89.3	89.4	89.5
35	3.5	3.7	4.3	4.7	4.4	4.0	4.7	5.0	4.7	3.95	3.87	3.8
50	47	33	21	18	14		13	16	21	35	40	50
walk										walk		

89.2.1	89.7	91.5	90.7	91.1	91.5	91.0	90.7	91.0	91.4	91.5	91.3
95	9.9	10.1	10.9	10.5	10.1	10.6	10.9	10.6	10.23	10.13	10.3
50	33	20	18	14		11	16	24	35	40	50
walk										walk	

Sta + π - Elev

1001.63

25+25

+45

+65

+

MM 6' RT

2.24

³⁹
~~994.93~~

26

+40

BM

1.80 999.83

(999.89)

Oct. 24, 1967

50

LT.

ST

e

$q_{1.3}$ $q_{1.9}$ $q_{2.7}$ $q_{2.8}$ $q_{1.9}$ $q_{2.2}$ $q_{2.5}$ $q_{2.0}$ $q_{2.0}$ $q_{2.3}$ $q_{2.4}$ $q_{1.3}$
 93 87 89 88 97 94 9.14 96 96 929 920 10.3
 50 47 34 23 19 15 15 18 35 40 50

MM

$q_{1.9}$ $q_{2.8}$ $q_{2.3}$ $q_{4.0}$ $q_{4.0}$ $q_{2.7}$ $q_{2.1}$ $q_{2.4}$ $q_{2.0}$ $q_{2.0}$ $q_{2.1}$ $q_{1.8}$
 9.7 8.8 8.3 7.6 7.6 8.9 8.5 8.2 8.6 8.61 8.50 9.8
 53 48 36 31 24 20 15 16 35 40 50
 gutter 40

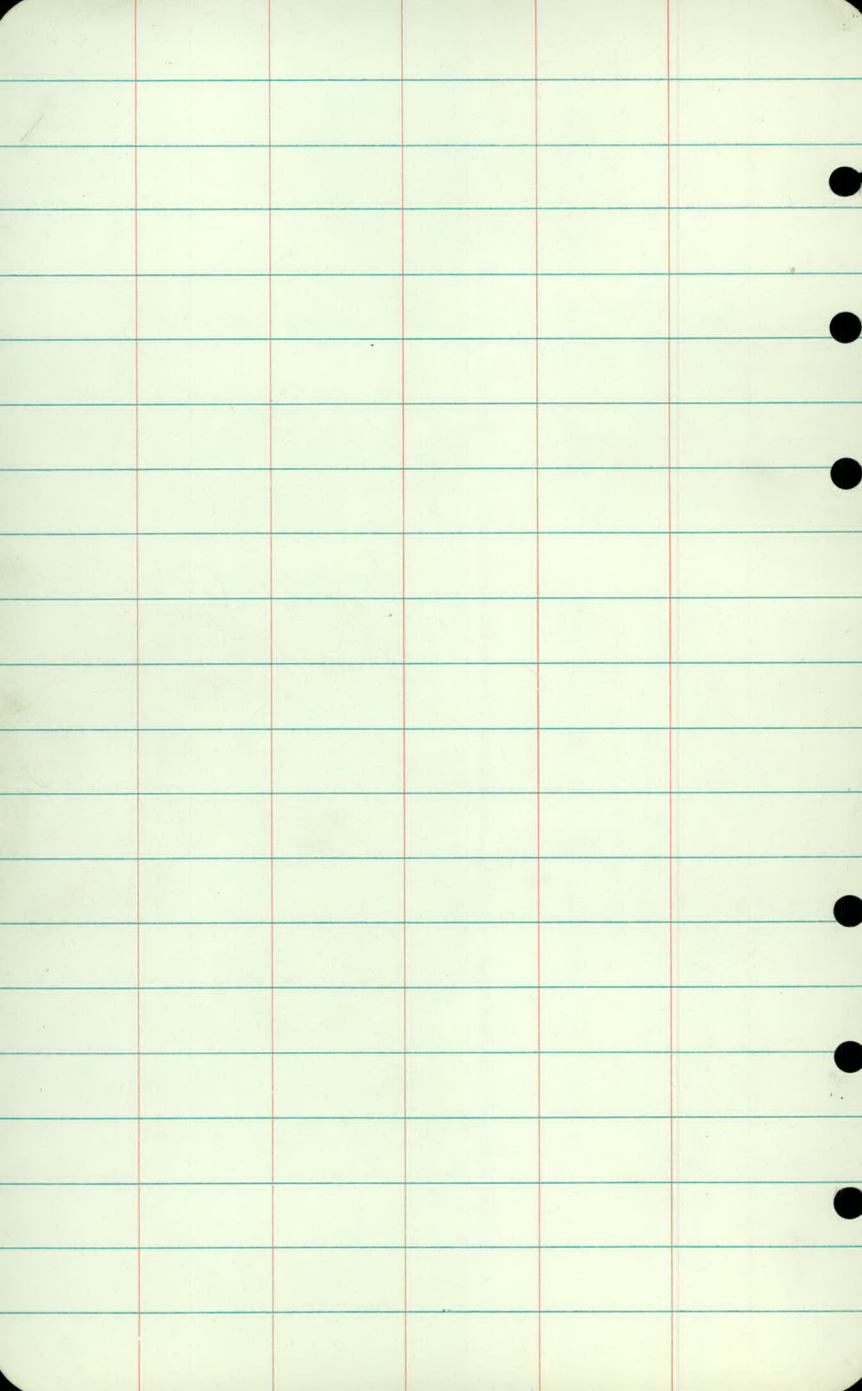
$q_{3.3}$ $q_{2.3}$ $q_{2.5}$ $q_{2.9}$ $q_{4.1}$ $q_{2.6}$ $q_{2.5}$ $q_{2.7}$ $q_{2.8}$ $q_{2.3}$
 8.3 8.3 8.1 7.7 7.5 8.0 8.1 7.8 7.81 9.3
 50 38 27 17 16 22 37 41 50
 walk

$q_{4.7}$ $q_{4.5}$ $q_{5.1}$ $q_{5.6}$ $q_{5.4}$ $q_{4.7}$ $q_{5.0}$ $q_{5.1}$ $q_{5.1}$ $q_{5.0}$ $q_{5.3}$
 6.90 7.1 6.5 6.0 6.2 6.9 6.6 6.48 6.45 6.6 8.1
 48 47 28 14 16 27 35 40 43 50
 curb walk

$q_{4.0}$ $q_{6.6}$ $q_{6.5}$ $q_{6.2}$ $q_{5.7}$ $q_{6.3}$ $q_{6.7}$ $q_{6.2}$ $q_{6.0}$ $q_{6.2}$ $q_{6.7}$ $q_{6.3}$
 4.6 5.11 5.08 5.40 5.9 5.3 4.9 5.4 5.6 5.35 4.88 5.3
 50 40 34 26 25 19 16 22 25 40 50

Top Hyd. NE, Curb
 Corner Helen & 12th Ave.

walk



FK
WM
LPD
WJ

Jan. 11, 1968

51
27

Additional X-Sections

Sta	+	π	-	Elev.
-----	---	-------	---	-------

BM	2.56	1002.40		999.84
----	------	---------	--	--------

26+70

27 ✓

27

✓

+30

Jan. 11, 1968

52

1st

E

RT

28

Top Hyd N.E. Corner Helen & E 12th Ave.

X

97.5 ⁰	97.2 ⁸	96.9	97.3	97.2	96.9	96.3	96.3
484	512	5.5	5.1	5.2	5.5	6.1	6.1
584	25.5	25	15		22	38	43
Walk	Curb						

97.5 ⁰	97.8	95.8	96.5 ⁵	96.5 ²
484	46	6.6	58.5	58.8
584	5.6	7.5	6.5	58
40	51			
Walk			Walk	

X

97.6	97.1 ⁸	96.9	97.3	97.5	97.1	96.9	96.8	95.8 ⁵
480	522	5.5	5.1	4.9	5.3	5.5	6.6	6.55
34	25.5	25	15		21	42	75	87
Walk	Curb							Walk

97.6 ²	98.0	95.4	95.7 ²
4.78	4.4	7.0	6.68
40	56	100	94
Walk			Walk

X

96.9 ⁴	96.6 ⁶	96.3	96.8	97.2	97.1	96.8 ⁹	96.4	95.6
546	574	6.1	5.6	5.2	5.3	5.51	6.0	6.8
34	25.5	25	14		28	44	65	90
Walk	Curb					MH		

96.9 ²	97.2
54.8	5.2
40	35
Walk	

Sta + π - Elev

1002.40

27+50

✓

+85

✓

28

✓

Jan 11, 1968

53

♀

RT

LT

96 ³¹	96 ³²	96 ⁰	96 ³	96 ⁶	96 ⁹	96 ⁸	96 ⁶	No Gulls
6.09	6.08	6.4	6.1	5.8	5.5	5.6	5.8	
Walk	25.5	25	15		18	30	39	
40	Curb							

96 ^A	96 ²	96 ⁹⁶	96 ⁷⁴
6.0	6.20	5.44	5.66
55	71	52	44
	Curb		Curb

96 ⁰⁵	96 ⁸	95 ^A	95 ⁶	96 ⁰	95 ⁹	95 ³	95 ⁷⁶
6.35	6.60	7.0	6.8	6.4	6.5	7.1	6.64
29	20.5	20	13		11	20	20.5
Walk	Curb						Curb

96 ¹	96 ⁷	97 ¹	96 ⁸	96 ⁷⁰	96 ⁰⁶	96 ⁰⁵
6.30	5.7	5.3	5.6	5.70	6.34	6.35
33	45	59	50	34	33	29
Walk						Walk

95 ⁵⁶	95 ^{2A}	9A ⁷	95 ²	95 ⁶	95 ^A	9A ⁸	95 ¹²	95 ⁶²
6.84	7.16	7.7	7.2	6.8	7.0	7.6	6.98	6.78
29	20.5	20	12		12	20	20.5	29
Walk	Curb						Curb	Walk

95 ⁶²	96 ¹	96 ⁶	96 ^A	96 ²⁸	95 ⁶
6.78	6.3	5.8	6.0	6.12	6.80
33	45	59	50	34	33
Walk					

Sta + π - Elev

1002.40

28+33

✓

BM

2.56 999.84 (999.84)

Jan. 11, 1968

54

LT

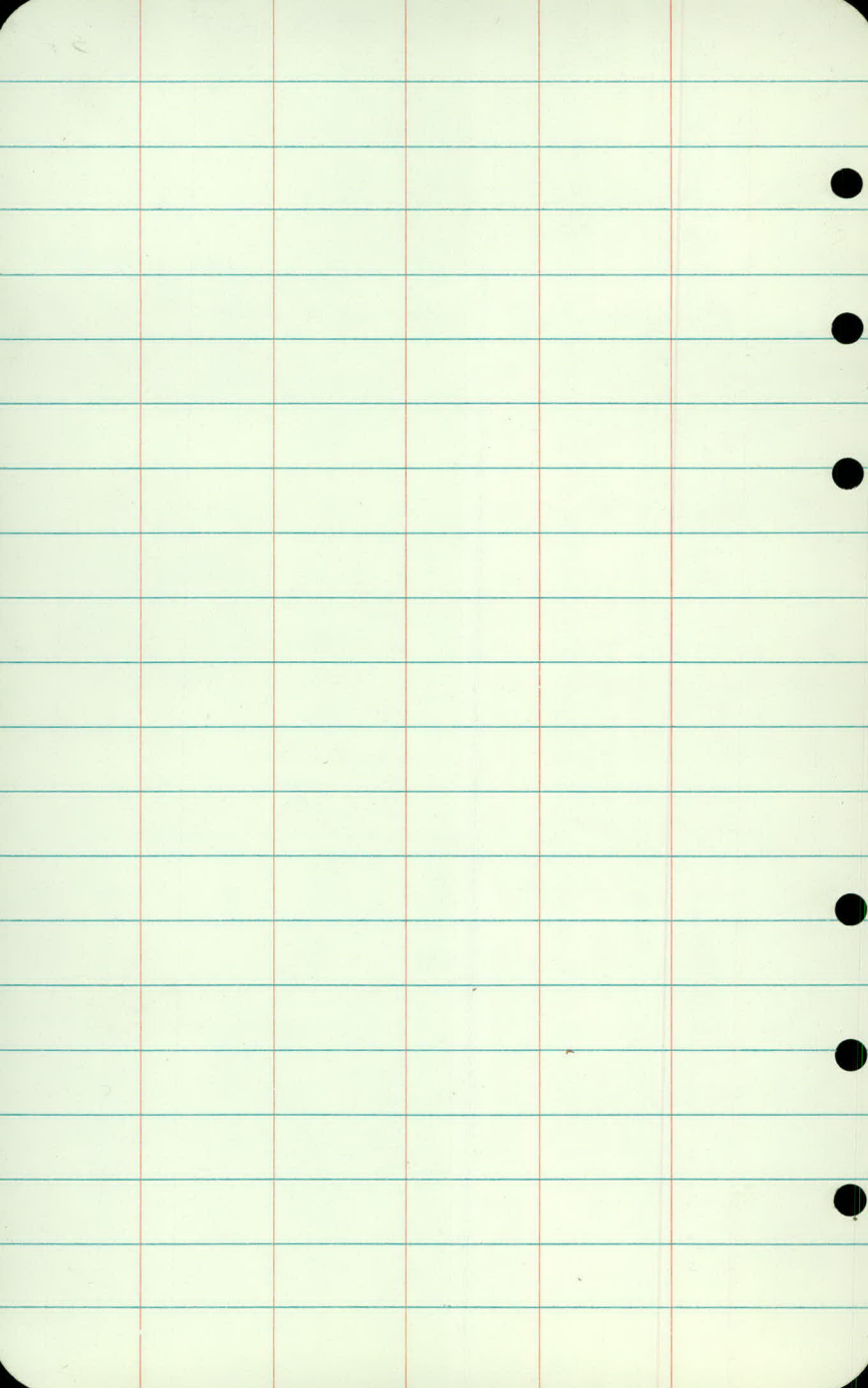
RT

9A.61	9A.28	9A.39	9A.3	9A.4	9A.5	9A.1	9A.6
7.79	8.12	8.5	8.1	8.0	7.9	8.3	7.8
29	20.5	20	11		12	20	23
Walk	Curb						

9A.67	9A.57	9A.8
7.73	6.7	7.6
33	48	63
Walk		

9A.9	9A.6	9A.75	9A.72
6.5	6.8	7.65	7.68
50	34	33	29
		Walk	

Top Hyd N.E. Corner Helen & E. 12th Ave.



FK
WM
LPD
WJ

Jan 15, 1968

55
31

Additional x-sections

Sta + π - Elev.

BM 2.33 1002.17

999.84

26+17 N.G.

✓

+33 N.G.

✓

27+60

✓

BM

2.33 999.84

999.84

Jan 15, 1968

56

LT

RT

Top Hyd N.E. Corner Helen + E 12th Ave

995.7	995.1	995.6	996.0	996.2	995.7	995.7	996.1	996.6
7.04	7.1	6.6	6.2	6.0	6.5	6.5	6.1	60.6
36	35	28	15		14	19	27	35

Curb

95.6		95.9	96.2		94.8	95.9	96.2
660		627	5.99		7.4	6.3	5.99
40		46	52		56	47	40
Walk		Walk					

91.2	95.8	96.4	96.6	96.1	96.0	96.3	96.6
60.6	6.4	5.8	5.6	6.1	6.2	5.93	5.55
25.5	25	15		16	20	23	40

Curb

96.4	96.4		96.0
5.78	5.78		6.2
34	40		54
Walk			

96.6	96.4	95.9	96.42
5.6	5.8	6.3	5.75
	12	20	24.5
			Curb

97.0	96.6	96.6
5.2	5.57	5.60
44	33	30

Top Hyd. N.E. Cor. Helen + E 12th Ave Walk

Sta + π - Elev.

BM 0.48 953.44

952.96

35' South of 11th Ave
on N. 2nd St.

✓

13+00 £

4.66 948.78 48.8

Jan. 15, 1967

57

West

~~E~~

East

Top Hyd NE. Corner E 2ND St & 11th Ave.

47.1

47.5

47.3

47.4

47.4

47.7

47.9

47.7

47.8

5.3

5.9

6.1

6.0

5.8

5.7

5.5

5.7

5.6

32

21

14

10

13

18

22

27

49.0

49.5

51.4

50.4

49.3

4.4

3.9

2.0

2.8

4.1

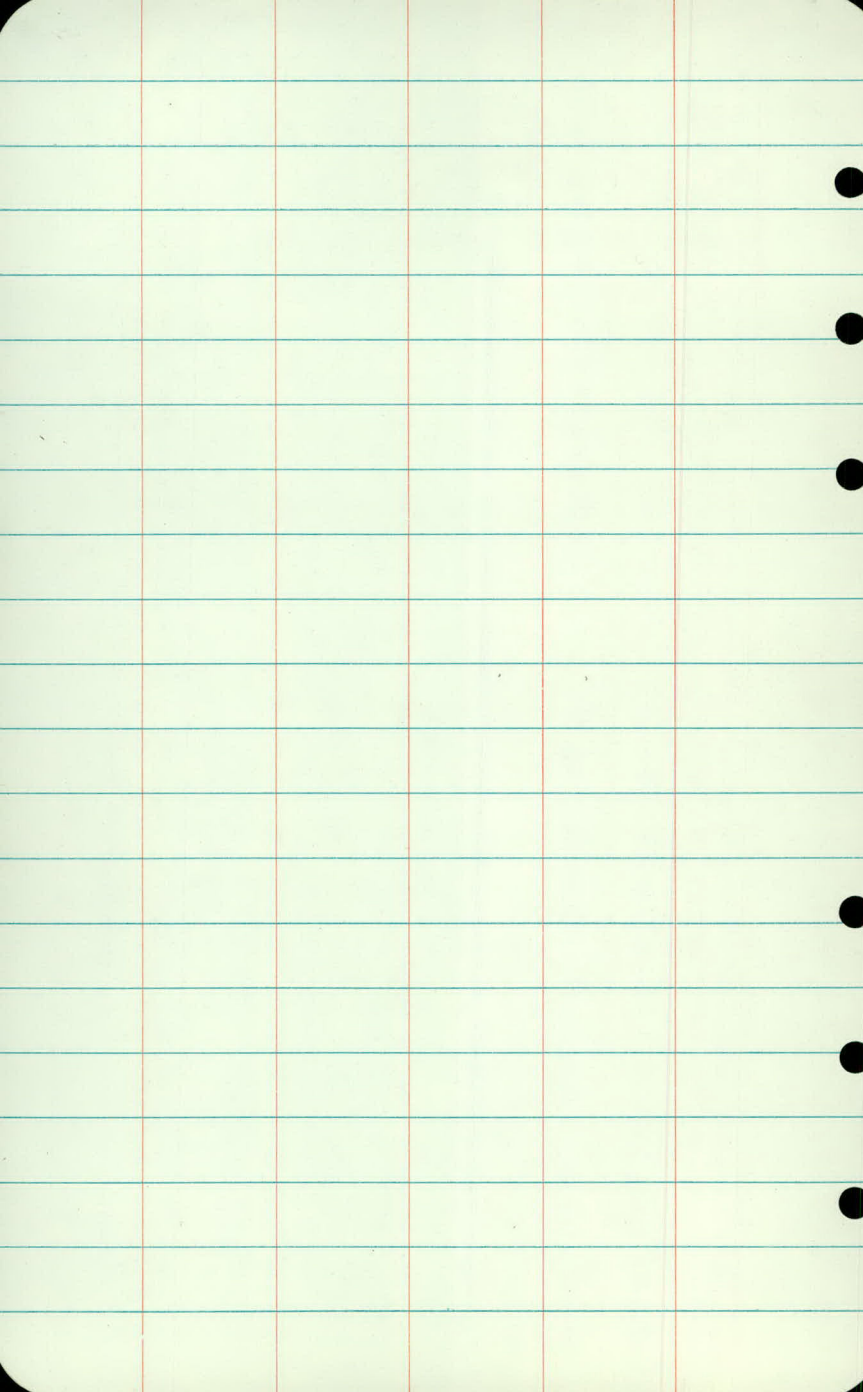
46

57

57

49

37



FK
WM
L PD
WJ

Jan 3, 1968
Cold 0°

583

N. 1ST ST.

Castle Ave to E 11TH AVE.

PLAN

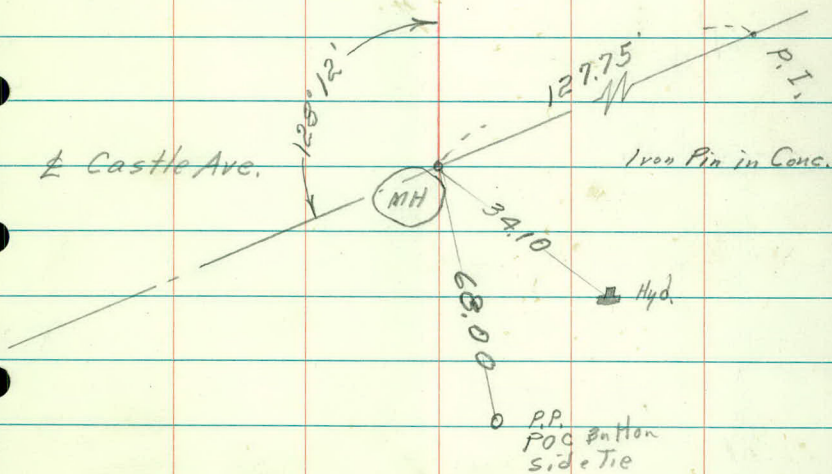
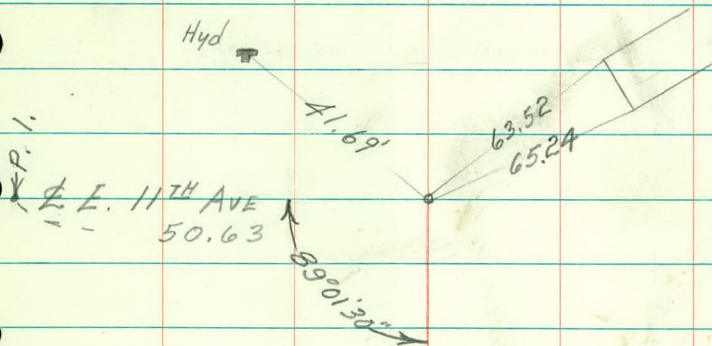
[illegible]

$0 + 98.58$

0+00

Jan 3, 1968

59
24



Sta	+ BM	X 1.02	- 973.01	Elev. 971.99
-----	---------	-----------	-------------	-----------------

0+00 Profile Castle Ave

✓

0-25			8.3	64.7
-50			8.2	64.8
-75			7.6	65.4
-100			6.8	66.2

0+22

+56

+64

19+72	MH 65' Rt.		7.08	65.93
BM			4.69	68.32

FK
WM
LPD

Jan 5, 1968 60
Cold Snowing 3° 25

Top Hyd NW Corner N 1st St & E 11th Ave

62.4	63.2	64.2	65.1	65.1	66.1	67.0	68.0	69.2
10.6	9.8	8.8	7.9	7.9	6.9	6.0	5.0	3.8
75	50	25	MH		25	50	75	100
			1					

61.5	60.7	60.1		71.5	70.4
11.5	12.3	12.9		1.5	2.6
100	125	150		150	125

65.2	65.4	65.4	65.0	65.6	66.0	66.7	67.1
2.8	7.6	2.6	8.0	7.4	7.0	6.3	5.9
50	34	17	14		14	31	50

66.2	66.0	66.3	65.9	66.5	66.6	66.3	67.2	67.6
6.8	7.0	6.7	7.1	6.5	6.4	6.7	5.8	5.4
50	40	20	13		14	27	45	50

67.2	66.8	66.7	66.2	66.2	67.0	66.8	67.1	67.8	68.8
5.8	6.2	6.3	6.8	6.3	6.0	6.2	5.9	5.2	4.2
50	43	29	22	14		14	20	31	50

Chr. Bolt. Hyd S.E. Cor. N. 1st St & Castle Ave

Sta	+	π	-	Elev.
BM	3.16	943.15		939.99
0-05	MH 3'	Rt.	5.20	937.95

BM	0.73	953.42		952.69
----	------	--------	--	--------

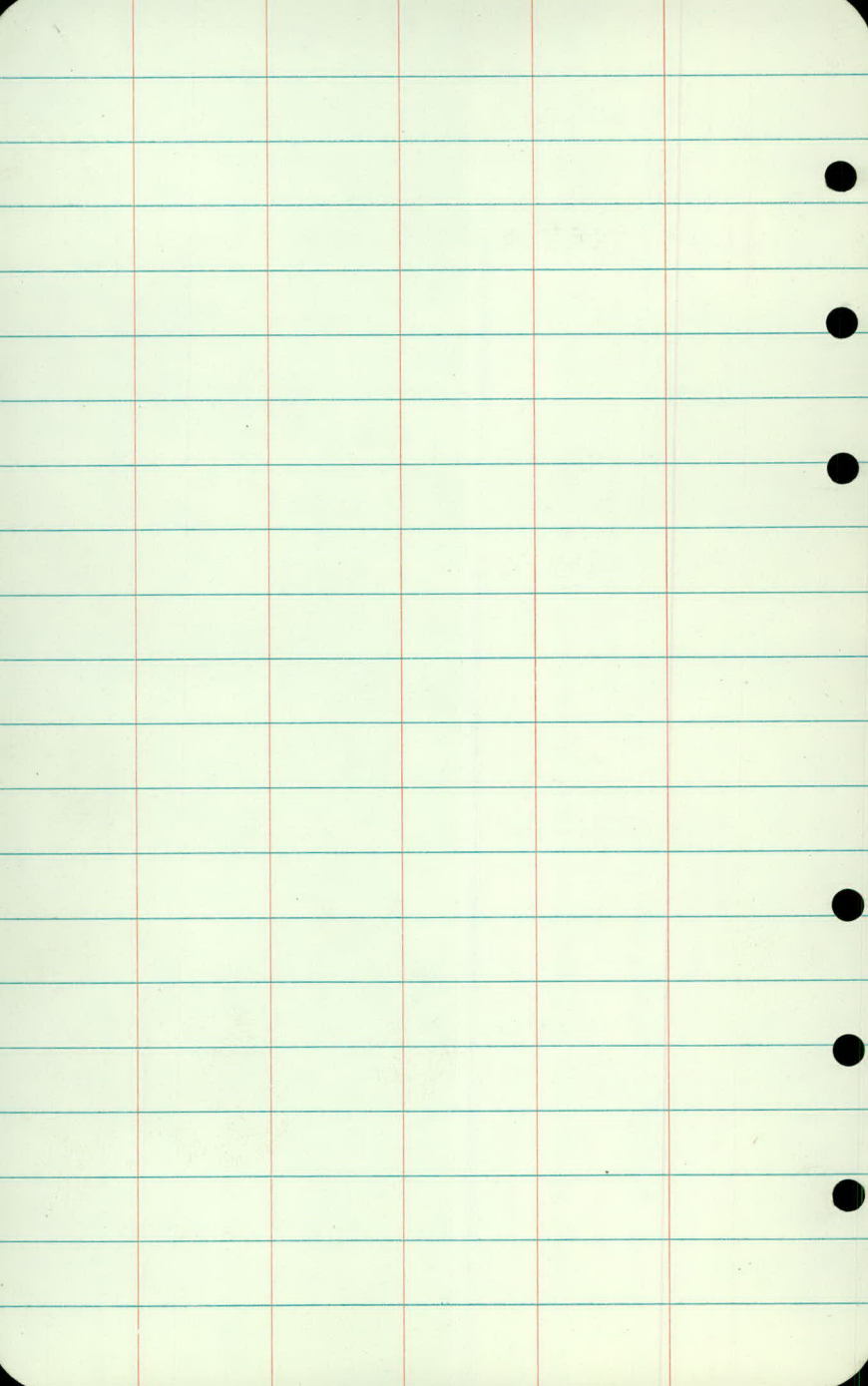
13+02	MH 0.3'	Lt.	5.15	948.27
-------	---------	-----	------	--------

Jan 5, 1968

61
26

Top Hyd NE Corner McKnight & E 11th Ave

Top Hyd NE Corner N 2nd St. & E 11th Ave



1-16-68

67

Additional x-sections

Sta	+	π	-	Elev
-----	---	-------	---	------

BM	2.35	1002.19		
----	------	---------	--	--

				999.84
--	--	--	--	--------

26+17				
-------	--	--	--	--

				D.K
--	--	--	--	-----

✓				
---	--	--	--	--

+33				
-----	--	--	--	--

				D.K
--	--	--	--	-----

✓				
---	--	--	--	--

26 ±				
------	--	--	--	--

		6.68	995.51	
--	--	------	--------	--

FK
WM
LPD

1-16-68

63

995.48

995.09

995.89

996.09

995.69

995.59

995.83

6.71
33.5
Curb

7.1
33.4

6.3
16

6.1

6.5
13

6.6
18

6.36
22.4
Cor. Walk

995.45

995.57

995.88

996.17

995.90

995.84

6.74

6.62

6.31

6.02

6.29

6.35

Cor. Walk

40

44.6

51.3

40

35

Walk

Walk

Walk

996.11

995.79

996.29

996.49

996.59

996.19

996.09

995.89

996.21

6.08

6.4

5.9

5.7

5.6

6.0

6.1

6.3

5.98

26.0

25

17

10

11

15

18

22.3

Con. Curb

996.30

996.30

996.56

996.49

5.89

5.89

5.63

5.70

35

40.3

40.1

35.1

Walk

Walk

Cor. Walk

