

OFFICE OF COUNTY ENGINEER
RAMSEY COUNTY, MINN.

PLAN

Survey

VICTORIA ST.

From "C" & VICTORIA INT.

Road Acc't. No. 52

Date Filed _____

File _____

PLAN SURVEY

Co Rd C

&

Victoria

Intersection

INDEX

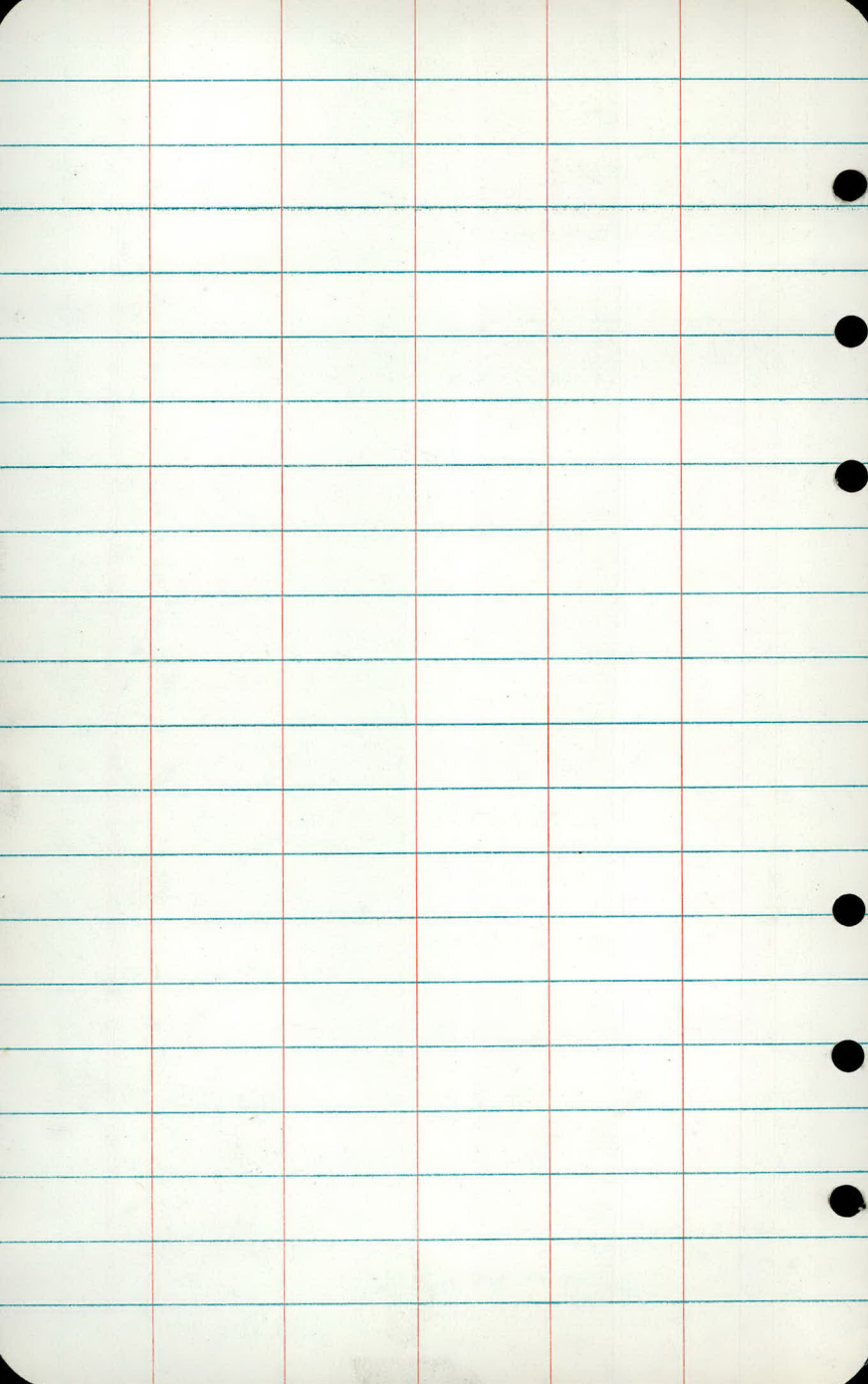
1-7 Alinement

8-15 Topography

16-17 Bench Levels

18-29 X Sections

30-35 X-SEC EXT.



1

Victoria Alinement

July 15, 16, 19 '71

PK
BP
ZPD
DR

SZA

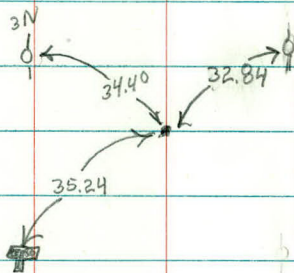
97+00

Lt

⊕

Rt

2



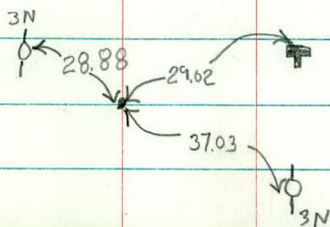
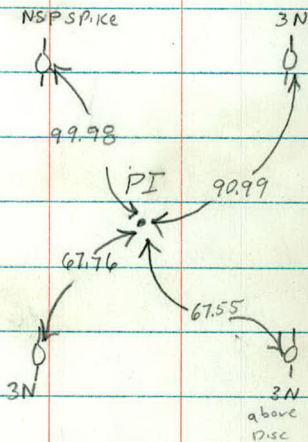
Sta	Point	S	
+75		20° 57'	$\Delta = 48.03'$
+50		19° 42' ✓	$D = 10'$
+25		18° 27'	$T = 255.40$
105		17° 12' ✓	$L = 480.50$
+75		15° 57'	$R = 572.96$
+50		14° 42' ✓	$PI = 104+11.13$
+25		13° 27'	$\Delta/2 = 24.01.5'$
104		12° 12' ✓	$PI\ 104+11.13 = 0^\circ 00'$
+75		10° 57'	chord 49.97
+50		9° 42' ✓	
+25		8° 27'	
103		7° 12' ✓	
+75		5° 57'	
+50		4° 42' ✓	
102		3° 27'	
101		2° 12' ✓	
+75		0° 57'	
101+55.72 PC		0° 00' ✓	
$\begin{array}{r} 192.8 \\ 25 \\ \hline 54.28 \end{array}$			

LZ

E

RZ

3



ST	Point	S
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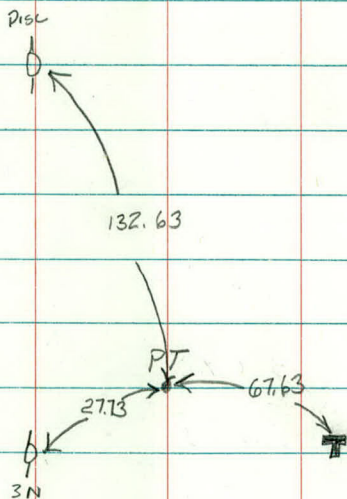
136.23 PT	24° 01'	
+25	23° 27' ²⁴	
106	22° 12'	✓

Lt

E

Rt

4



Sta Point &

$$\Delta = 12^{\circ} 14'$$

$$D = 6^{\circ}$$

$$T = 102.38'$$

$$L = 203.89$$

$$R = 955.37$$

$$\Delta/2 = 6^{\circ} 07'$$

$$PI = 107 + 75.61$$

+77.12 PT $6^{\circ} 07'$

chord 49.97

+75 $6^{\circ} 04.8$

+50 $5^{\circ} 19.6'$ ✓

+25 $4^{\circ} 34.4$

108 $3^{\circ} 49.2'$ ✓

+75.61 PI $0^{\circ} 00'$

+75 $3^{\circ} 04.0'$

+50 $2^{\circ} 18.8'$ ✓

+25 $1^{\circ} 33.6'$

107 $0^{\circ} 48.4'$ ✓

+75 $0^{\circ} 03.2'$

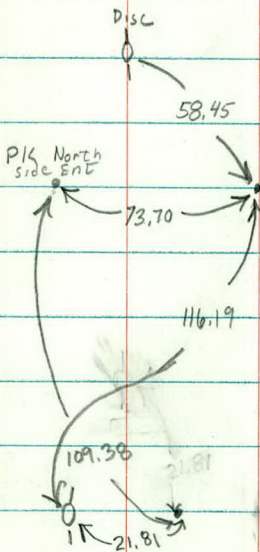
106+73.23 PC $0^{\circ} 00'$

Lt

E

Rt

5



Sta Point

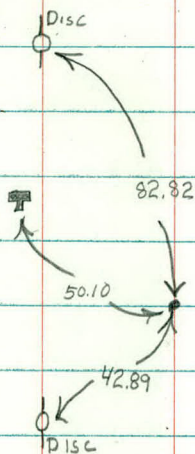
109+57.14 EE

Lt

E

Rt

6



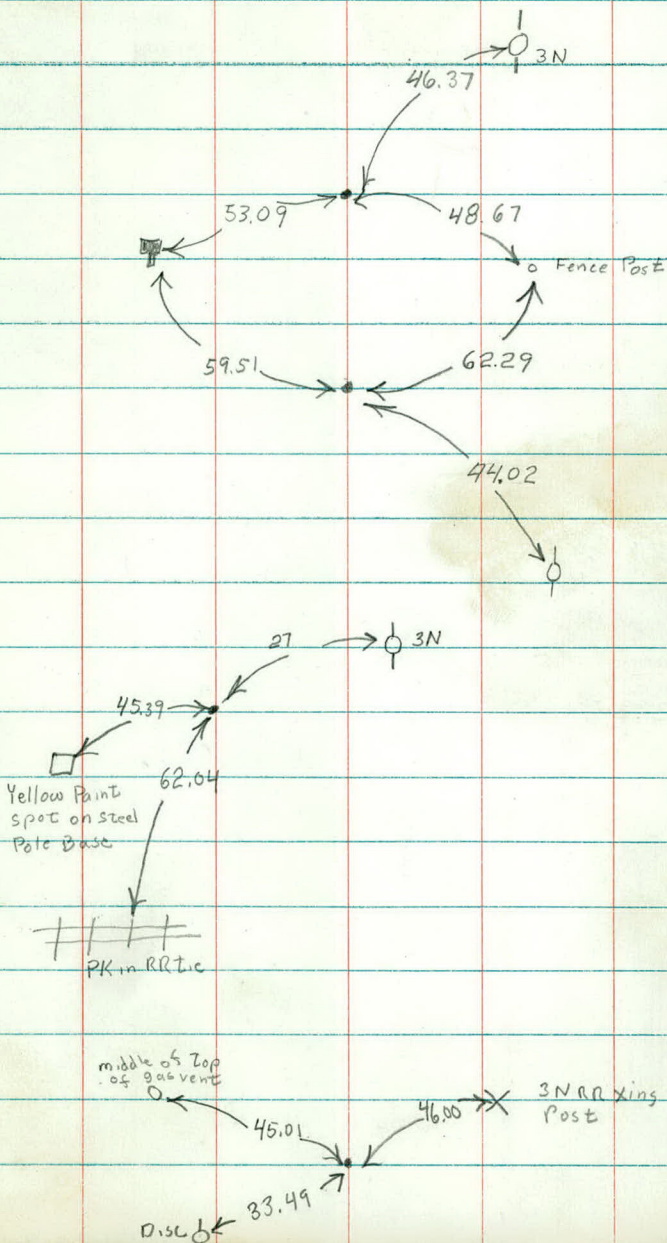
Sta	Point	δ		
114	POI			
+09.77	PT	$10^{\circ}04'$	✓	
113		$9^{\circ}40.5'$	✓	$\Delta = 20^{\circ}08'$
+75		$8^{\circ}40.5'$		$D = 8$
+50		$7^{\circ}40.5'$	✓	$T = 127.25$
+25		$6^{\circ}40.5'$		$L = 251.68$
112		$5^{\circ}40.5'$	✓	$R = 716.78$
111+85.34	PI	$0^{\circ}00'$		$PI = 111+85.34$
+75		$4^{\circ}40.5'$		$\Delta/2 = 10^{\circ}04'$
+50		$3^{\circ}40.5'$	✓	$chord = 49.97$
+25		$2^{\circ}40.5'$		
111+25		$1^{\circ}40.5'$	✓	
+75		$0^{\circ}40.5'$		
110+58.09	PC	$0^{\circ}00'$	✓	
110+94				

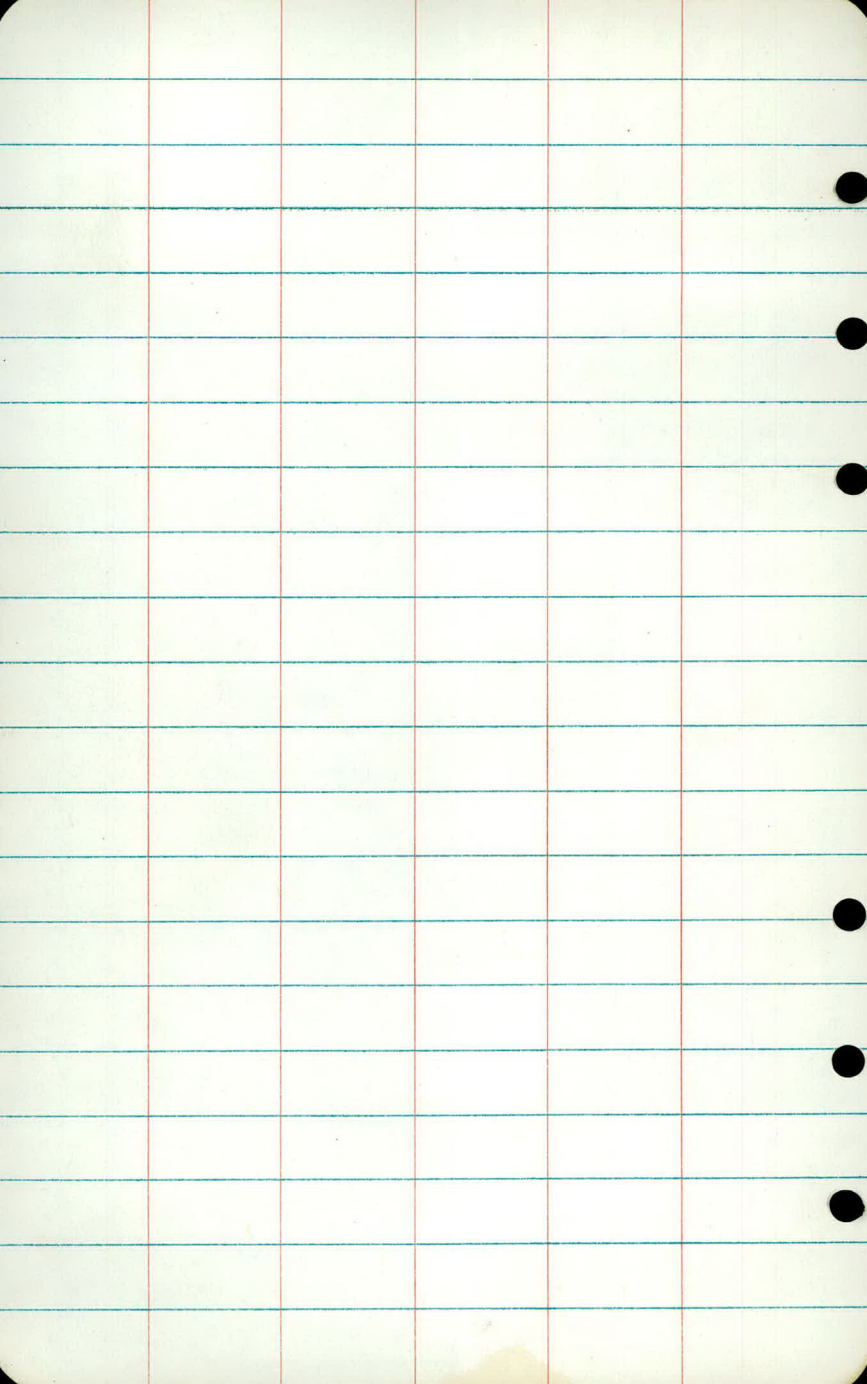
LZ

E

Rt

7





Victoria
Topography

LT

✓

RT

+50

+46 $\frac{2'' \text{P/Om}}{43}$

$\frac{B.L.}{18} \frac{B.L.}{12}$

$\frac{\text{Swamp}}{42}$

$\frac{C. \text{Ditch}}{46}$

+28 $\frac{C.B.E.}{33}$

+27 $\frac{4'' \text{B.E.}}{24}$

+28 $\frac{\text{clump } 1'' \text{ B.E.}}{30}$

+19 $\frac{\text{Bark sign}}{29}$ +33 $\frac{8'' \text{ Beech}}{34}$

+12 $\frac{2'' \text{ Elm}}{40}$

+18 $\frac{8'' \text{ Elm}}{49}$

+12 $\frac{\text{PP}}{29}$

99.

+88 $\frac{\text{MH}}{22}$

+93 $\frac{2 \text{ ENT } 16'' \text{ or } 17''}{43}$

$\frac{\text{Swamp}}{37}$

$\frac{C. \text{Ditch}}{42}$

+73 $\frac{E. \text{ wall}}{43}$ +77 $\frac{8'' \text{ C.W.}}{43}$

+63 $\frac{\text{TP}}{29}$

+55 $\frac{5'' \text{ Ash}}{51}$

+55 $\frac{6'' \text{ Ash}}{47}$

+50

$\frac{B.L.}{18} \frac{B.L.}{11}$

$\frac{\text{Swamp}}{34}$

$\frac{C. \text{Ditch}}{46}$

+19 $\frac{52'' \text{ Elm}}{45}$

+10 $\frac{B. \text{ wall}}{44}$

+15 $\frac{9'' \text{ Pine}}{54}$

98

+03 $\frac{89'' \text{ ENT}}{42}$

$\frac{B.L.}{18}$

$\frac{B.L.}{12}$

+94 $\frac{5'' \text{ willow}}{27}$

+95 $\frac{2'' \text{ willow}}{28}$

+96 $\frac{2'' \text{ willow}}{24}$

+94 $\frac{E. \text{ wall}}{43}$

+86 $\frac{\text{Gas vent}}{28}$

+86 $\frac{22'' \text{ C.W.}}{56}$

$\frac{B.L.}{18}$

+90 $\frac{6'' \text{ willow}}{31}$

+94 $\frac{5'' \text{ willow}}{31}$

+100 $\frac{\text{swamp}}{37}$

+78 $\frac{\text{Pipeline marker}}{31}$

73 $\frac{2 \text{ will } 3'' \text{ willow}}{26}$

+75 $\frac{3'' \text{ willow}}{26}$

+69 $\frac{\text{Gas Vent}}{41}$

+77 $\frac{\text{Pipe Marker}}{45}$

+60 $\frac{B. \text{ wall}}{44}$

+59 $\frac{\text{Quad } 10'' \text{ C.W.}}{43}$

+50

+50 $\frac{12'' \text{ Cotton wood}}{38}$

$\frac{B.L.}{18}$

$\frac{B.L.}{12}$

$\frac{\text{Swamp}}{34}$

+45 $\frac{4'' \text{ cotton wood}}{40}$

+40 $\frac{2 \text{ will } 6'' \text{ Elm}}{45}$ +47 $\frac{14'' \text{ C.W.}}{47}$

+48 $\frac{15'' \text{ C.W.}}{49}$

+46 $\frac{\text{Ditch}}{50}$

+19 $\frac{\text{TP}}{29}$

+18 $\frac{\text{PP}}{29}$

97

$\frac{\text{Fence}}{37}$

$\frac{B.L.}{18}$

$\frac{B.L.}{11}$

$\frac{\text{Swamp}}{26}$

LT

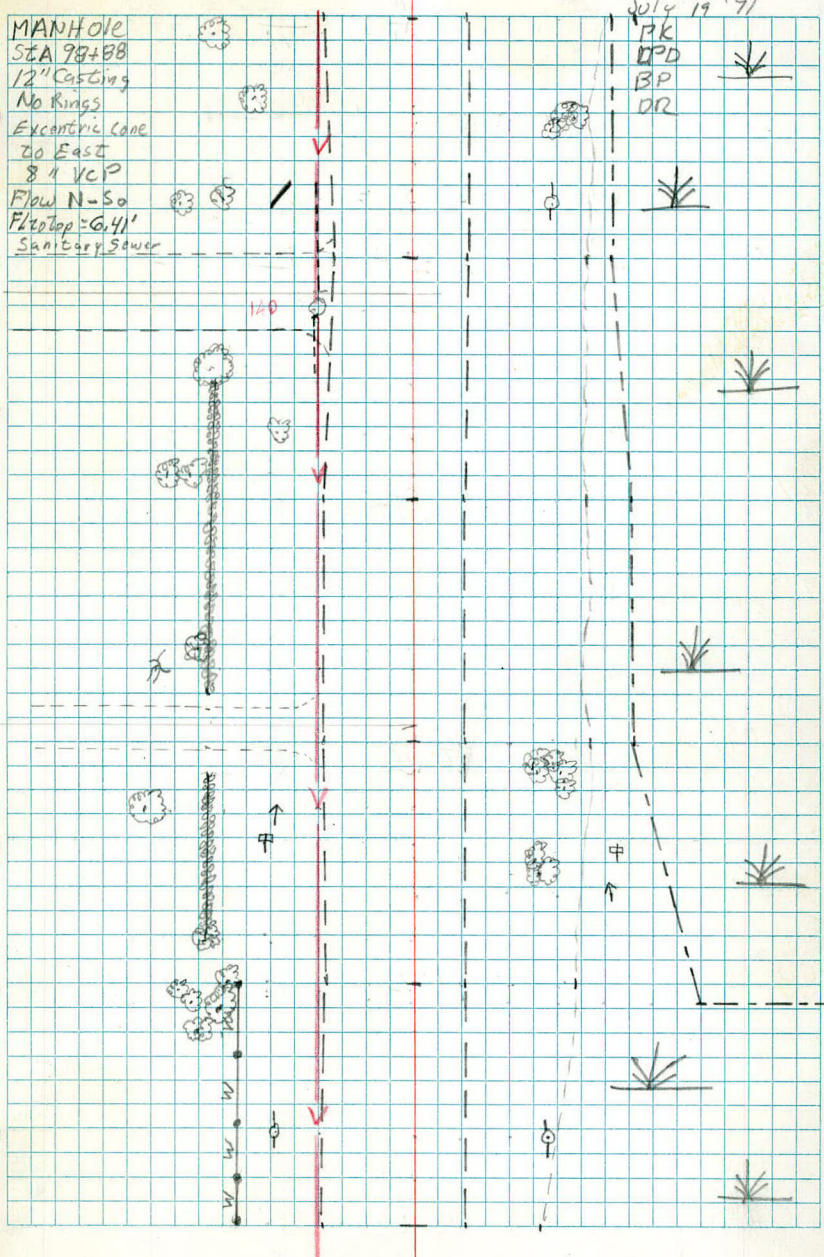
±

RT

July 19 '71

MANHOLE
STA 98+88
12" Casting
No Rings
Excentric Cone
20 East
8" VCP
Flow N-So
Ft to Top = 6.41'
Sanitary Sewer

PK
DPD
BP
DR



102

LT ✓

$$+100 \frac{5'' \text{ Elm}}{30}$$

$$\frac{B.I.T.}{14}$$

$$\frac{B.I.T.}{12}$$

$$\frac{\text{Swamp}}{41}$$

$$\frac{6' Ditch}{45}$$

$$+178 \frac{5'' \text{ Elm}}{56}$$

$$+172 \frac{5'' \text{ Elm}}{48}$$

$$+155 \frac{H40}{30}$$

$$+63 \frac{LP}{28}$$

$$+162 \frac{12'' \text{ Elm}}{36}$$

+50

$$+50 \frac{13' Ditch}{37}$$

$$\frac{B.I.T.}{14}$$

$$\frac{B.I.T.}{11}$$

$$\frac{\text{Swamp}}{51}$$

$$\frac{6' Ditch}{56}$$

$$+31 \frac{PP}{29}$$

101

$$\frac{B.I.T.}{15}$$

$$\frac{B.I.T.}{11}$$

$$\frac{\text{Swamp}}{58}$$

$$\frac{6' Ditch}{62}$$

+50

$$\frac{B.I.T.}{16}$$

$$\frac{B.I.T.}{12}$$

$$\frac{\text{Swamp}}{55}$$

$$\frac{6' Ditch}{60}$$

$$+112 \frac{Lilac Bush}{36}$$

$$+112 \frac{TP}{29}$$

100

$$+82 \frac{\text{Swamp } 12'' \text{ Elm}}{40}$$

$$\frac{B.I.T.}{18}$$

$$\frac{B.I.T.}{12}$$

$$\frac{\text{Swamp}}{50}$$

$$\frac{6' Ditch}{54}$$

$$+173 \frac{6'' \text{ Elm}}{47}$$

$$+60 \frac{4'' \text{ Elm}}{34}$$

$$+59 \frac{14'' \text{ Elm}}{46}$$

+50

$$\frac{B.I.T.}{18}$$

$$\frac{B.I.T.}{12}$$

$$\frac{\text{Swamp}}{42}$$

$$\frac{6' Ditch}{46}$$

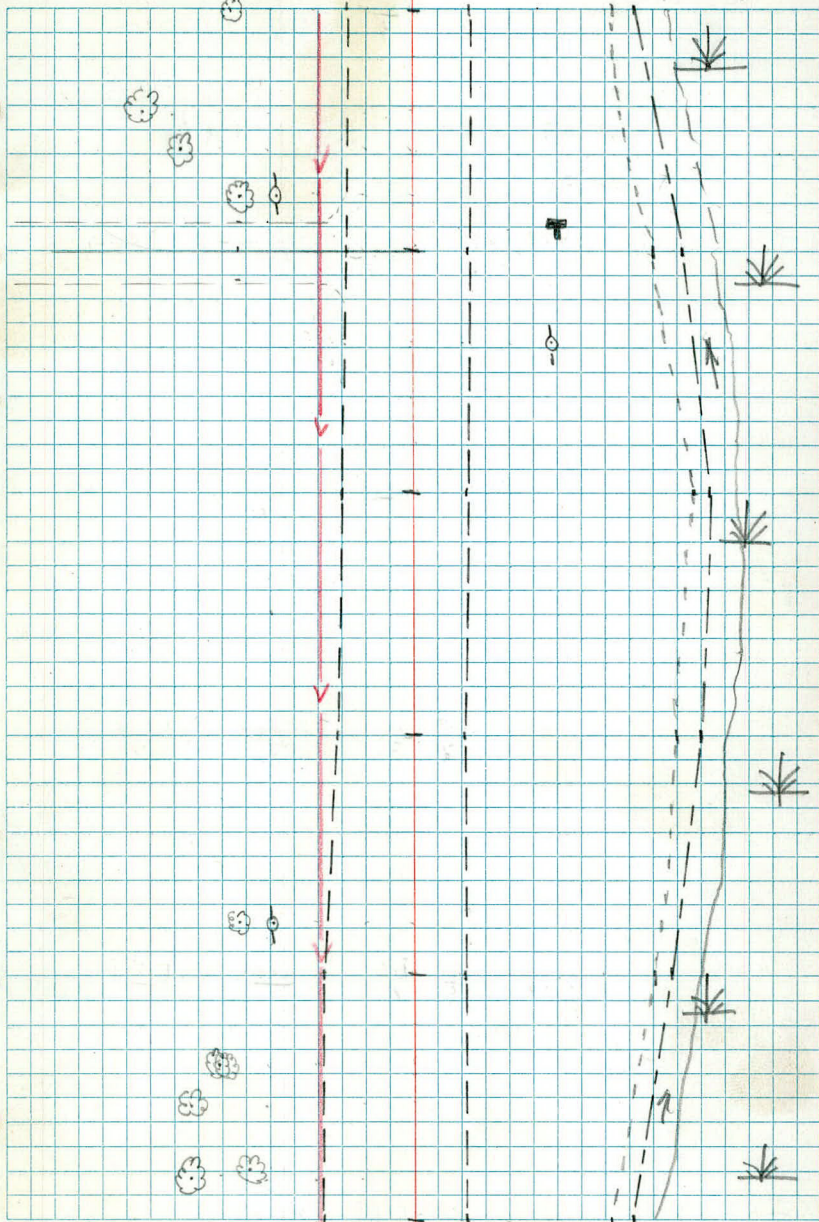
10

10

RZ

10

July 19 '71



+50

LT

2

B.L
4-37

+50

RT 8'Ditch
107

136 $\frac{1'' \text{ Pine}}{51}$

+16 $\frac{MH}{3}$

B.L
8-39

+00 8'Ditch
106

+24 $\frac{1'' \text{ Pine}}{49}$

+22 $\frac{1'' \text{ Pine}}{49}$

+16 $\frac{MH}{3}$

+57 $\frac{\text{church sign}}{16}$

+62 $\frac{\text{Bush}}{38}$

+61 $\frac{\text{church sign}}{32}$

+50

+40 $\frac{\text{POR}}{0}$

+50 $\frac{\text{G.L.}}{53}$

B.L
6-36

+53 $\frac{TP}{3}$

+50 8'Ditch
77

+36 $\frac{MH}{6}$

+36 $\frac{BR}{12}$

+40 $\frac{CP}{60}$

+19 $\frac{\text{G.L.}}{53}$

+12 $\frac{\text{ER}}{54}$

103

+93 $\frac{\text{POR}}{8}$

+87 $\frac{BR}{4}$

+76 $\frac{8' \text{ Elm}}{54}$

+59 $\frac{TP}{20}$

B.L
0 27

Swamp 6'Ditch
67

+50

+50 $\frac{8' \text{ Elm}}{29}$

B.L
9 18

Swamp
52

6'Ditch
53

+34 $\frac{MH}{17}$

102

B.L
14 12

Swamp
41

6'Ditch (8')
46

LT

E

Rt

11

2014 19 '71

MANHOLE
SEA 103+16
11" casting
2 Rings
Eccentric Cone
To West
8" VCP
Flow N to S
Flow to top 9.13
Sanitary Sewer

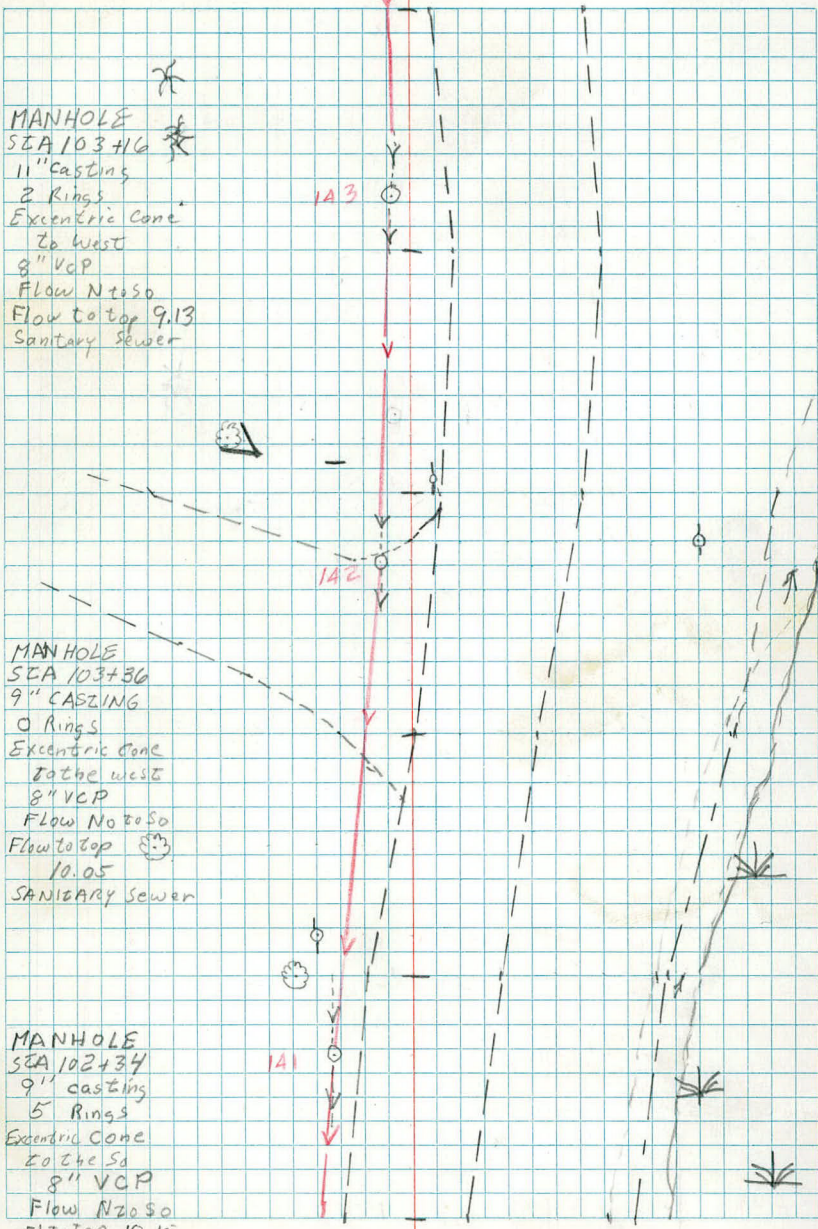
MANHOLE
SEA 103+36
9" CASIZING
0 Rings
Eccentric Cone
To the west
8" VCP
Flow N to S
Flow to top 10.05
SANITARY Sewer

MANHOLE
SEA 102+34
9" casting
5 Rings
Eccentric Cone
To the S
8" VCP
Flow N to S
Flow to top 10.15
SANITARY Sewer

1A3

1A2

1A1



107

✓ Lt
Row Pine
41✓ E ✓
B.L. B.L.
15 12✓ Rt
Swamp
38

+50

✓
Row Pine
39✓ ✓
B.L. B.L.
16 11✓
Swamp
40✓
+20 Row Pine
36✓
+20 PP
24✓
+07 B Row 3" Pine
37

106

✓
+94 Group of Pine
50✓ ✓
B.L. B.L.
15 12✓
Swamp
39✓
+80 1" Pine
37✓
+88 Group Pine
50✓
+77 1 1/2"
26✓
+77 GROUP Pine
50

+50

✓ ✓
B.L. B.L.
10 18✓
Swamp
57✓
+06 MH
13

105

✓
+00 1" Pine
50✓ ✓
B.L. B.L.
2 28+00 8' Ditch
132✓
+94 WSO
20✓
+92 B.L.
0✓
+76 PP
1✓
+62 1" Pine
38✓
+68 1" Pine
53✓
+53 2" Pine
51✓
+54 1" Pine
36✓
+72 PP
50

+50

✓
B.L.
4-37✓
+50 8' Ditch
107

Lt

±

Rt

12

July 19 '71

MAN HOLE
Sta 105+06

9" Casting

4 Rings

Eccentric Cone

to the west

8" VCP

Flow No 2050? Dry

Flow to Top 7.68

Sanitary Sewer

144

+50

Lt

✓
BIZ BIZ
16 14

RT
stockpile
24

✓
+27 PP
31

109

✓
+93 BR
15
✓
POR
29
+73

✓ ✓
BIZ BIZ
15 15

✓
stockpile
29

+68 BR
40

+60 ± END 16 BIZ +64 RT

✓
+77 Swamp
42

✓
stockpile
42

+50

50
+52 ER
37

✓
POR
27
+48 Row Pine

✓ ✓
BIZ BIZ
15 13

✓ ✓
Swamp stockpile
42-55 55-

50
+46 POR

✓
+35 BR
14

108

✓
Row Pine
43

✓ ✓
BIZ BIZ
14 13

✓
Swamp
44

✓
+75 Row Pine
68

✓
+64 BR
26

✓
+67 3" cottonwood
34

+50

✓
Row Pine
45

✓ ✓
BIZ BIZ
15 13

✓
Swamp
45

✓
+28 24" CMP
17

✓
+30 24" CMP
20

107

✓
Row Pine
41

✓ ✓
BIZ BIZ
15 12

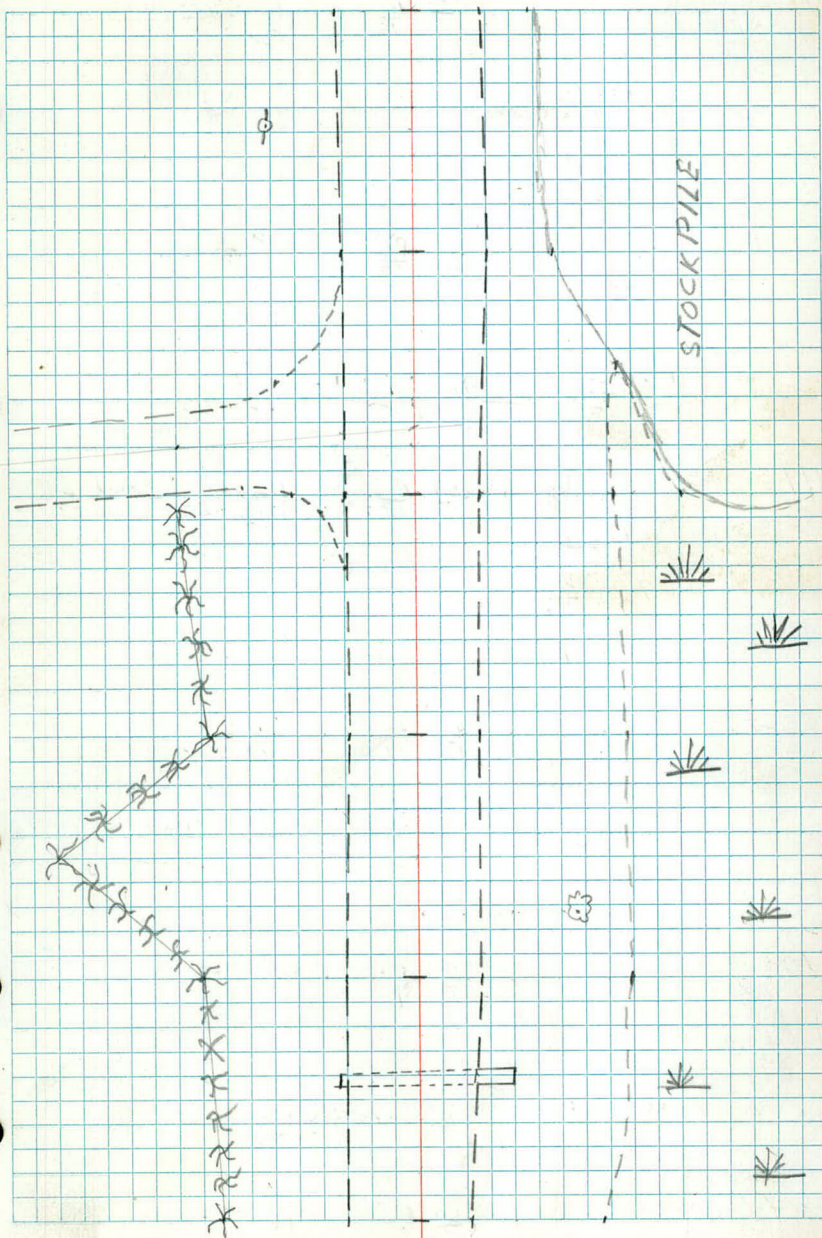
✓
Swamp
38

Lt

2

Rt

13



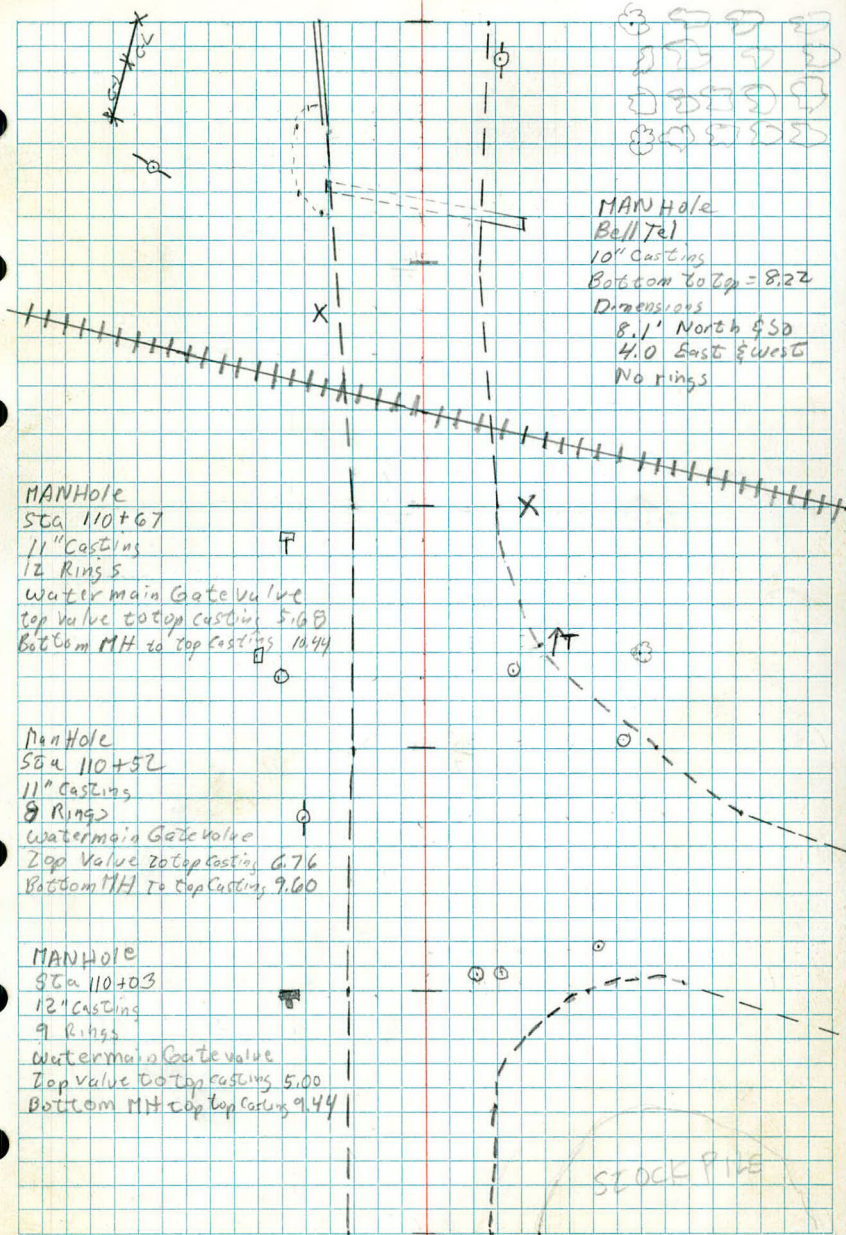
	LT	✓	✓	✓	RT	✓
112	✓ Fence	CURB	B.I.Z	B.I.Z	✓ Cotton woods	
+79	B. Fence Chain Link	60	✓ 22	22	✓ 13	43
	65	✓ +83	24	✓ 79	BBT curb	+93 PP
+70	Highline Pole	B.I.Z	✓ 20	Spillway		12
	57	✓ +78	27	✓		
+66	24" CMP	✓ +65	B.I.Z	Spillway	✓	
20		26	✓		+75	GROUP Cotton woods
		+62	B.I.Z	Spillway	✓	45
		21	✓		+58	24" CMP
+50			✓ B.I.Z	12		
		+41	RR Xing Sign			
		22	✓			
		✓ +31	ET tracks	✓ +19.5	RR tracks	
		50		0		
111		✓	✓	✓	✓	✓
		B.I.Z	B.I.Z	ER	Xing Sign	ET tracks
		15	15	15	21	✓ Pipeline marker
+93	Pipeline marker	28	✓		✓ +75	29
		✓ +69	Junction Box	✓ +72	POB	23
		32		✓ +67	MH	170
		✓ +65	21 MH	✓ 19		3' Cottonwood
		30		✓ 42		45
+50			✓ B.I.Z	15	✓ +50	POB
					48	
		✓	✓	✓	✓	✓
		+36	PP	✓ +36	BR	67
		25		✓ +02	POB	53
				✓ +00	POB	33
		✓ +99	HPD	✓ +03	MH	17
		28		✓ +03	GAS	12
				✓ +90	ER	100
				✓ +74	BR	15
			✓	✓	✓	✓
			B.I.Z	B.I.Z	Stake Spile	
+50			16	14	24	

LT

L

RT

14



+50

LT

L

Rt

114

✓ Fence 45 ✓ CURB 22 ✓ B.I.Z 17 ✓ +82 5" Maple ✓
 +77 72 ✓ SW cor House (2650) ✓ +80 5" Maple ✓
 53

+71 13' B.I.Z END
 32

+59 H4D
 34

+64 END Fence
 32

+59 Fence (chain line)
 50

+50

✓ Fence 46 ✓ CURB 22 ✓ B.I.Z 17

+44 6" Maple
 57

✓ NW cor House
 2642
 74

+39 6" Maple
 35

+15 7" Maple
 37

113

✓ Fence 48 ✓ CURB 22 ✓ B.I.Z 17

✓ +89 10" Maple ✓ +94 4" Birch ✓
 39 ✓ +92 SW cor House
 77 (2642)

+72 PP ✓
 24

+68 MH
 27

+50

✓ Fence 51 ✓ CURB 22 ✓ B.I.Z 15

+45 13' B.I.Z END 30' D.I.C

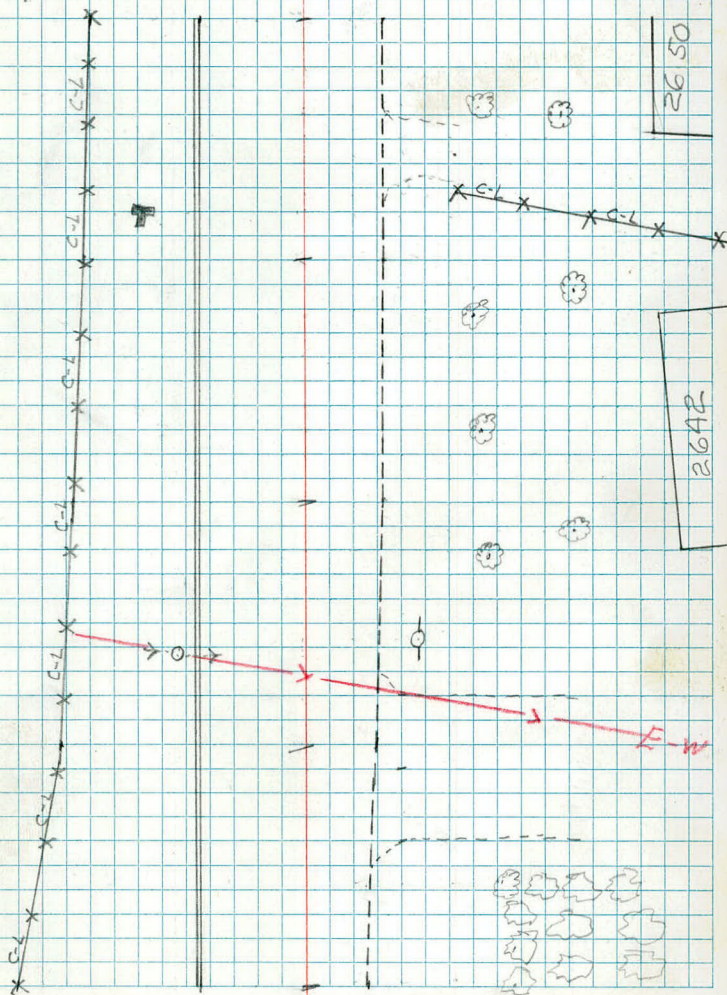
+21 Cottonwoods
 41

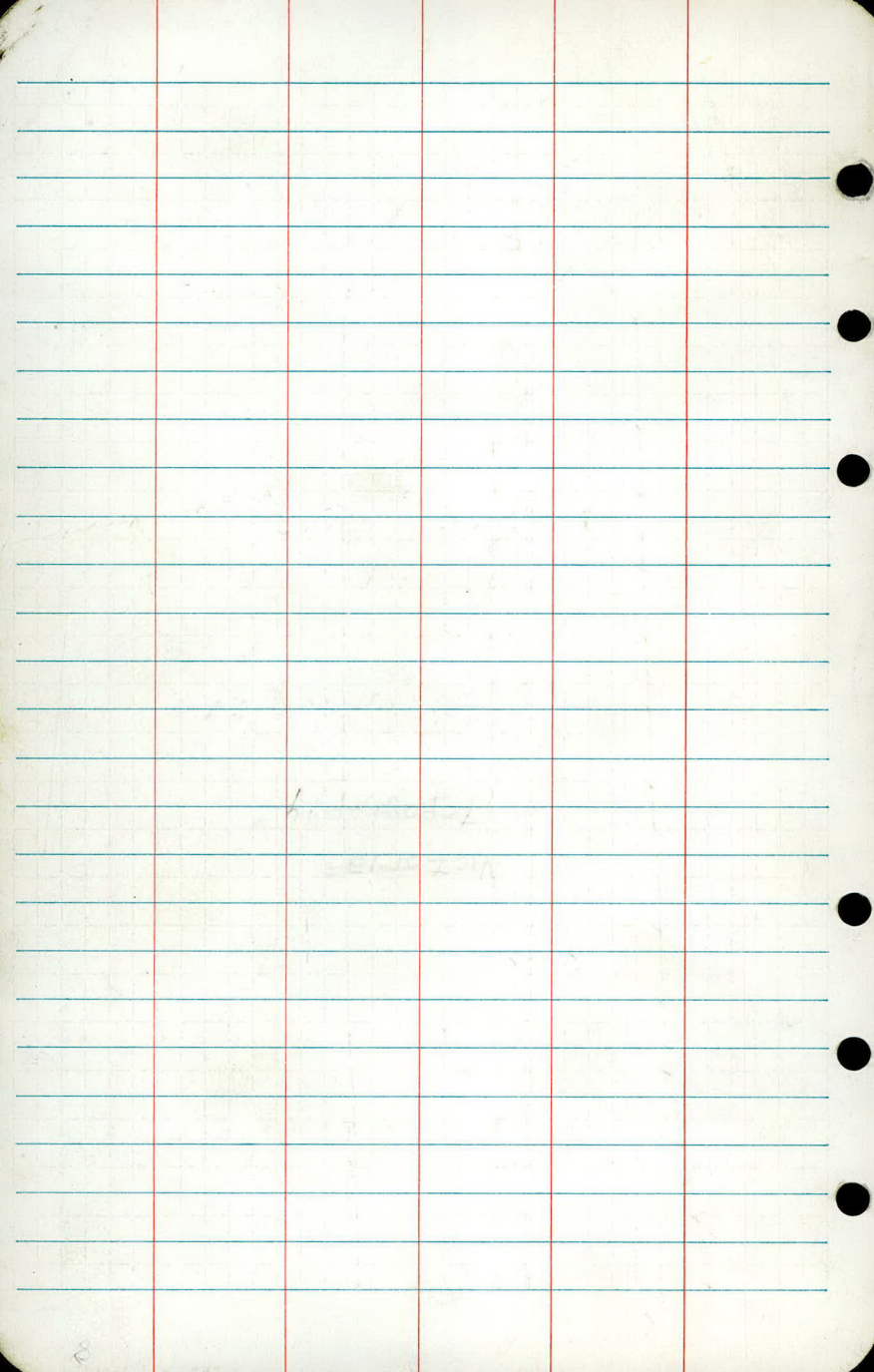
112

✓ Fence 60 ✓ CURB 22 ✓ B.I.Z 13

✓ Cottonwoods
 43

MANHOLE
Sta 112+68
11" Castings
4 Rings
Excavate Conc
to the North
FL to Top = 10.00
Flow West to East
Sanitary Sewer





Bench Levels

Victoria

&

Co Rd "C" Intersection

STA	+	T	-	Elev
BM	1.76	899.44		(897.68)
TP	10.71	908.33	1.82	897.62 897.62
TP	0.21	907.09	0.45	906.88 907.88
TP	0.23	898.48	8.84	898.25 899.25
TP	3.61	895.89	6.20	892.28 893.28
TP	4.71	899.87	0.73	898.16 896.16
TP	1.21	897.30	3.78	896.09 897.09
TP	5.92	897.14	6.08	894.22 892.22
TP	3.37	900.39	0.12	897.02 898.02
TP	3.97	897.61	6.75	898.64 894.64
BM			0.95	897.66 (897.68)

June 20 '71 PK
LPD
BP

Top Hyd SW Cor Cord "C" & Victoria

Top CTR Bolt of three bolts SE Cor Highline Pole 11+70

Top Hyd STA 113+59 LT 34'

Spike in PP STA 111+93 RT 16'

Spike in PP STA 107+64 LT 26'

Spike in PP STA 105+76 LT 1'

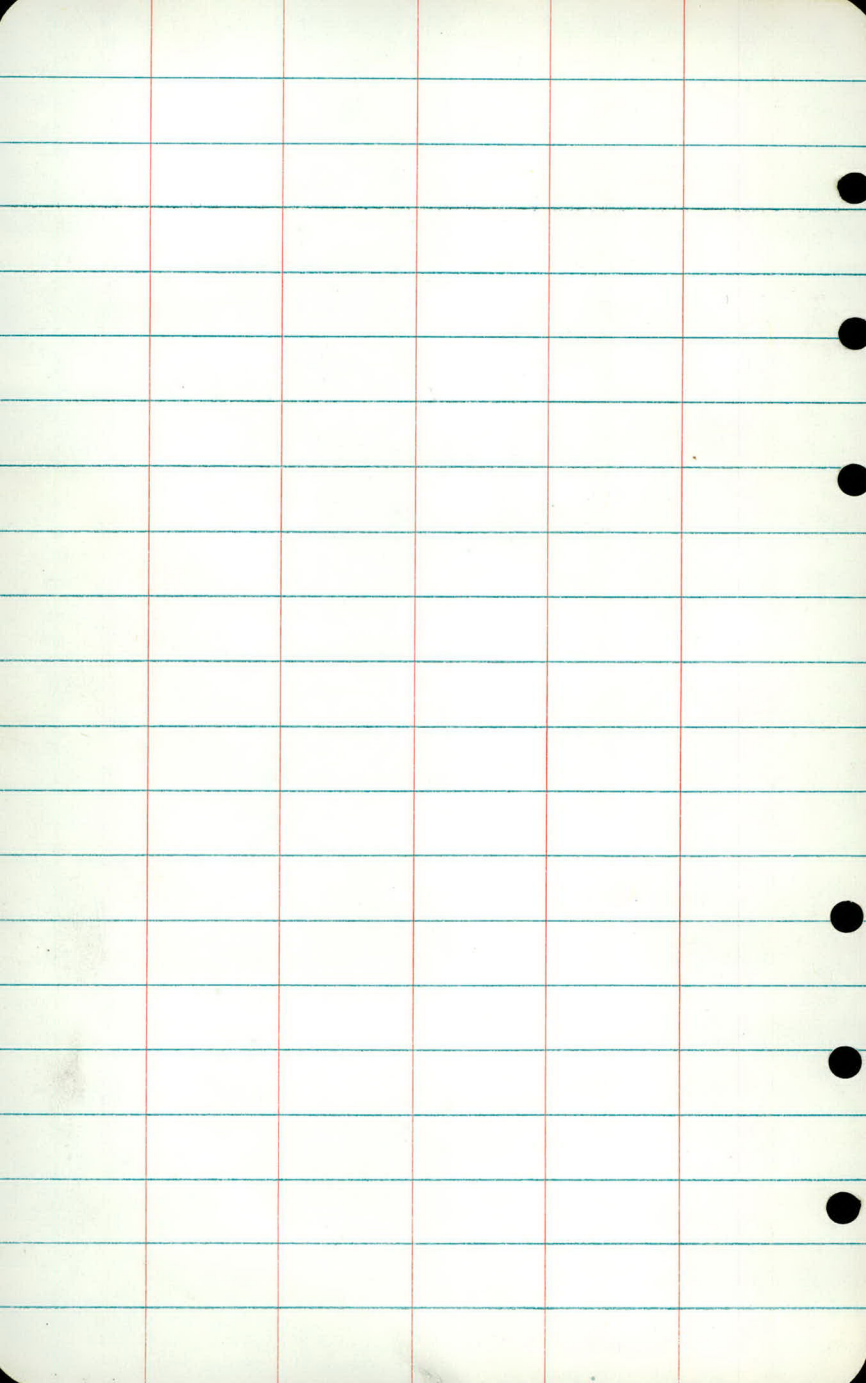
Top Hyd STA 101+55 RT 30'

Top Hyd STA 96+50 ± LT

Spike in TP 102+59 LT 20'

Top Hyd STA 105+74 RT 26'

Top Hyd SW Cor Cord "C" & Victoria



Victoria

X-sections

SZ	+	π	-	Elev
BM	2.91	895.13 4.17		892.22 2.91

97+00

+25

+50

+75

98+00

TP	6.12	897.08	4.17	890.96 6.12
----	------	--------	------	----------------

+03

LI

£

RT

19

July 21 '71

Top Hyd Sta 96+50 ± LT

PK
LPD
BP
DR

86.5	86.9	89.2	89.8	90.1	90.0	89.7	89.5	86.8
8.6	8.2	5.9	5.3	5.0	5.1	5.4	5.8	8.3
50	36	28	18	11	17	20	29	
			Bit	Bit	Shoulder		EDGE Swamp	H2O

87.4	89.1	89.8	90.2	90.1	89.7	88.9	86.9
7.7	6.0	5.3	4.9	5.0	5.4	6.2	8.2
34	28	18		17	17	22	28
		Bit		Bit	Shoulder	EDGE Swamp	H2O

89.4	89.8	90.4	90.3	89.6	87.0
5.7	5.3	4.7	4.8	5.5	8.1
28	18	12	17	33	
	Bit	Bit	Shoulder	Swamp	

87.7	89.6	90.3	89.9	90.6	90.6	90.1	89.7	87.7	86.9
5.4	5.5	4.8	5.2	4.5	4.5	5.0	5.4	7.4	8.2
35	43	23	18	11	17	21	24	31	
				Bit	Shoulder			Swamp	

91.6	91.1	90.4	90.8	90.7	90.3	90.0	87.5	86.9
3.5	4.0	4.7	4.3	4.4	4.8	5.1	7.6	8.2
55	44	18		12	18	22	29	35
		Bit		Bit	Shoulder			Swamp

S. EDGE ENT

91.6	91.4	90.5	90.8
5.5	5.7	6.6	5.3
55	43	19	
ENT		Bit	

Sta

+

π

-

Elev

897.08

98+50

+ 88

+ 94

99+00

+ 21

✓

LT

E

RE

20

93.4	92.9	91.8	91.8	91.0	91.4	91.1	90.7	90.3	87.5	86.2
3.7	4.2	5.3	5.3	6.1	5.7	6.0	6.4	6.8	9.6	10.3
57	46	34	22	18	11	18	25	30	34	
				BIT		BIT	SHOLDER		SWAMP	

95.3 93.1 91.83 91.6 92.0

S. EG. ENT 1.8 4.0 5.25 5.5 5.1

64	39	20	16	
		14		

96.2 94.9 92.8 91.7 92.1

0.9 2.2 4.3 5.4 5.0

E. ENT. 68 58 36 17

94.8	92.9	91.8	92.2	91.9	91.4	90.7	87.8	86.7
N. EG. ENT, 2.3	4.2	5.3	4.9	5.2	5.7	6.4	9.3	10.4
55	35	17		11	19	24	33	34
		BIT		BIT	SHOLDER		SWAMP	

93.2	91.1	96.2	94.6	92.3	92.5	92.2	91.7	91.2	87.5
+6.1	0.0	0.9	2.5	4.8	4.6	4.8	5.4	5.9	9.6
5.1	38	35	27	17		11	19	25	33
			BIT		BIT	SHOLDER			

04.0

+6.9

64

86.7

10.4

38

SWAMP

STA	+	Δ	-	ELEV.
-----	---	----------	---	-------

		897.08		
--	--	--------	--	--

99+50				
-------	--	--	--	--

✓				
---	--	--	--	--

+75				
-----	--	--	--	--

✓				
---	--	--	--	--

100+00				
--------	--	--	--	--

✓				
---	--	--	--	--

LT.

E

RT

21

96.4

95.3

93.2

92.9

93.2

92.9

92.2

91.5

98.4

0.7

1.8

3.9

4.2

3.9

4.2

4.9

5.6

8.7

24

28

20

17

11

19

25

32

BIT

BIT

SHOLDER

97.1

94.2

94.8

50.0

+7.1

+7.7

36

34

70

96.3

10.8

42

SWAMP

94.4

97.1

95.9

93.3

93.6

95.4

92.9

92.3

98.6

+7.3

0.0

1.2

3.8

3.5

3.7

4.2

4.8

8.5

48

32

28

17

12

20

25

34

BIT

BIT

SHOLDER

95.3

+8.2

79

96.9

10.2

44

SWAMP

96.1

94.2

97.1

93.8

94.1

93.8

93.4

92.7

99.9

+9.0

+7.1

0.0

3.3

3.0

3.3

3.7

4.4

7.2

68

48

29

17

12

21

29

37

BIT

BIT

SHOLDER

96.9

96.6

10.2

9.5

50

48

SWAMP

STA	+	Δ	-	ELEV
-----	---	---	---	------

		897.08		
--	--	--------	--	--

100+25				
--------	--	--	--	--

✓				
---	--	--	--	--

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

✓				
---	--	--	--	--

+ 75				
------	--	--	--	--

✓				
---	--	--	--	--

LT.

E

RT

22

04.4	97.1	95.5	94.3	94.6	94.3	93.8	93.3	92.8
+7.3	0.0	1.6	2.8	2.5	2.8	3.3	3.8	7.3
41	27	23	16		12	22	28	39
			BIT		BIT	SHOLDER		

05.4
+8.3
57

96.8 98.3
10.3 8.8
51 49
SWAMP

04.4	97.1	95.7	94.8	94.9	94.8	94.4	94.2
+7.3	0.0	1.4	2.3	2.2	2.3	2.7	2.9
40	27	23	16		12	23	27
			BIT		BIT	SHOLDER	

05.4
+8.3
55

96.8 99.7 91.1
10.3 7.4 6.0
54 45 36
SWAMP

04.6	97.1	95.7	95.1	95.2	95.1	94.7	94.3	91.4
+7.5	0.0	1.4	2.0	1.9	2.0	2.4	2.8	5.7
40	26	20	15		12	23	28	38
			BIT		BIT	SHOLDER		

05.3
+8.2
58

96.8 98.6
10.3 8.5
55 52
SWAMP

STA	+	Δ	-	ELEV.
-----	---	---	---	-------

		897.08		
--	--	--------	--	--

B.M	9.69	906.78	0.0	897.08 (897.09)
-----	------	--------	-----	-----------------

101+00				
--------	--	--	--	--

✓				
---	--	--	--	--

+25				
-----	--	--	--	--

✓				
---	--	--	--	--

+ 44		S. EDGE DR.		
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+51				
-----	--	--	--	--

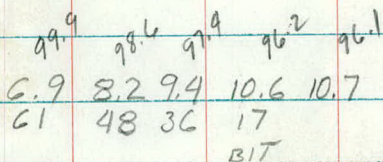
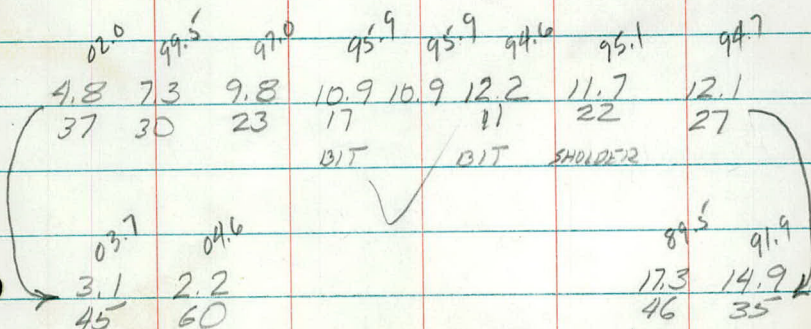
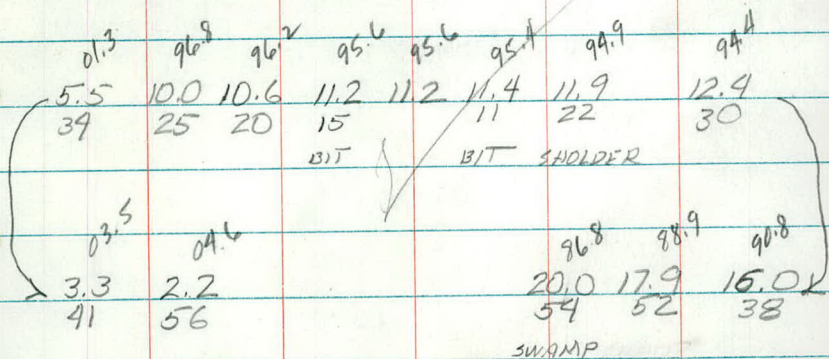
LT

E

RT.

23

TOP HYD AT STA. 101+55 RT. 30'



STA	+	Δ	-	ELEV
-----	---	----------	---	------

		906.78		
--	--	--------	--	--

101+51	±	ENT.		
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✓

+ 58		N. EDGE ENT		
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T.P	9.01	904.40	11.39	895.39
-----	------	--------	-------	--------

+75				
-----	--	--	--	--

✓

102+00				
--------	--	--	--	--

LT.

E

RT.

24

98.7 97.3 96.3 96.1 95.8 95.2 94.5 92.2 90.9
 8.1 9.5 10.5 10.7 11.0 11.6 12.3 14.6 15.9
 50 31 17 11 21 27 35 43
 BIT BIT SHOULDER

98.6
 18.2 K
 48

99.1 97.2 96.4 96.2
 7.7 9.6 10.4 10.6
 52 30 18
 BIT

ON ROCK
 97.5 96.8 96.4 96.3 96.2 95.8 94.9 94.4
 6.9 7.6 8.0 8.1 8.2 8.6 9.5 10.0
 30 20 19 15 11 22 28
 BIT BIT SHOULDER

01.4 03.8
 3.0 0.6
 49 61

96.8 91.0
 17.6 13.4 K
 44 39

03.0 01.0 97.2 96.8 96.4 96.2 95.9 94.9 94.4 96.8
 1.4 3.4 7.2 7.6 8.0 8.2 8.5 9.5 10.0 17.6
 56 45 28 18 14 12 22 28 38
 BIT BIT SHOULDER SWAMP

STA	+	π	-	ELEV
-----	---	-------	---	------

		904.40		
--	--	--------	--	--

102+30				
--------	--	--	--	--

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

✓				
---	--	--	--	--

103+00		S. EDGE ENT.		
--------	--	--------------	--	--

✓				
---	--	--	--	--

+15		2 ENT		
-----	--	-------	--	--

LT.

= 8

RT.

29

96.8 96.3
7.60 8.1
18
M4

99.5 97.3 97.1 96.4 96.3 96.1 95.1 94.6 96.7
4.9 7.1 7.3 8.0 8.1 8.3 9.3 9.8 17.7
37 24 12 8 17 28 32 53
BIT BIT SHOULDER SWAMP

02.0

2.4
53

03.0 99.7 97.8 96.4 96.2 95.3 94.6
1.4 4.7 6.6 8.0 8.2 9.1 9.8
73 44 19 27 36 44
BIT BIT BIT BIT SHOULDER

96.5
17.9
62

04.2 00.6 97.8 96.3
0.2 3.8 6.6 8.1
79 46 19
BIT BIT BIT

STA	+	PK	-	ELEV
				904.40

103+35 N. EDGE ENT.

+50

104+00

B.M.	6.35	898.05	(898.02)
BM	9.62	904.26	(894.64)
			9.62

+17

+50

LT.

2

July 21 '71
RT 25

04.1	01.0	07.6	07.05	00.3
0.3	3.4	6.8	7.35	8.1
79	45	14	8	
BIT	BIT	BIT	MH	

03.2	01.8	01.0	08.5	07.1	06.1	06.6	06.0	05.3	01.2
1.2	3.6	3.4	5.9	7.3	8.3	7.8	8.4	9.1	13.2
66	42	31	22		7	36	45	54	68
BIT	BIT				BIT	BIT	SHOULDER		

04.4	01.7	07.8	05.5	05.2	06.5	06.3	05.5	06.6
0.0	2.7	6.6	8.9	9.2	7.9	8.1	8.9	7.8
62	41	19		8	39	50	61	75
				BIT	BIT	SHOULDER		

SPK IN T.P. STA 102+59

Top Hyd SZ 105+74 Rt 26'

July 22 '71

PK

LPD

DR

BP

04.1	02.2	07.7	06.32	06.2	05.7	05.1	06.4	06.3	06.0	03.3
0.2	2.1	6.6	7.94	8.1	8.6	9.2	7.9	8.0	8.3	11.0
56	43	22	2		6	7	40	49	68	73
			M.H.		Curb	BIT	BIT	SH		

03.9	03.2	01.0	07.7	05.4	05.2	04.7	06.0	05.7	05.1	02.6
0.4	1.1	3.3	6.6	8.9	9.1	9.6	8.3	8.6	9.2	11.7
53	49	39	22		3	4	36	44	54	64
					CURB	BIT	BIT	SH		

STA + π - Elev

904.26
H. 66

105

+ 09

+50

106

TP 5.41 898.01 11.66 892.60
5.91

+50

107

LC

£

RZ

26

04.2 00.5 96.8 94.4 94.3 94.3 94.8 94.6 94.1 92.4 91.2

0.1 3.8 7.5 9.9 10.0 10.0 9.5 9.7 10.2 11.9 13.1

58 43 26 2 2 26 35 45 60 77

B.C B.C B.C Sh

03.9 01.5 97.8 95.2 94.6 94.1 94.2 94.6 94.3 93.9 92.5 90.9

0.4 2.8 6.5 9.05 9.7 10.2 10.4 9.7 10.0 10.4 11.8 13.5

59 48 32 73 5 5 25 35 45 49 76

MH B.C B.C B.C Sh

02.6 00.2 97.3 94.3 93.7 93.9 93.8 93.3 92.4 89.1 87.5

1.7 4.1 7.0 10.0 10.6 10.4 10.5 11.0 11.9 15.2 16.8

59 52 37 11 9 17 26 36 55 62

B.C B.C Sh

01.0 96.9 96.5 95.5 93.5 93.2 93.3 92.7 92.1 91.5 87.6 87.1

3.3 7.4 7.8 8.8 10.8 11.1 11.0 12.0 12.2 12.8 16.7 17.2

63 46 41 35 17 15 12 18 24 36 51

B.C B.C Sh

96.8 96.1 94.5 92.3 92.4 91.6 91.3 91.7 96.9 86.8

1.2 1.9 3.5 5.7 5.6 6.4 6.7 10.3 11.8 11.2

57 50 35 15 12 22 39 53 59

B.C B.C Sh

97.0 95.4 94.8 93.6 91.7 91.8 92.0 91.1 90.7 90.1 87.7 86.9

1.0 2.6 3.2 4.4 6.3 6.2 6.0 6.9 7.3 7.9 10.3 11.1

76 57 46 38 20 15 14 20 25 36 63

B.C B.C Sh

SZA + 7 - Elev

898.01

4.76

+29

+50

PM

BM 5.17 898.45 4.76 893.25 (893.28)

5.17

108

+50

+60

109

26

96.3	94.6	92.1	91.6	91.6	92.1	91.2	90.7	89.0	87.0	86.6
1.7	3.4	5.3	6.4	6.4	5.9	6.8	7.3	7.0	11.0	11.4
82	67	46	20	15		13	20	31	54	74
				B.C		B.C	sh			

Strike	101	102	103	104	105	106	107	108	109	110	111	112
96.3	94.0	93.2	92.0	92.2	92.2	92.5	91.5	90.8	90.0	87.9	87.0	86.4
2.2	4.5	5.3	6.5	6.3	6.3	6.0	7.0	7.7	8.5	10.6	11.5	12.1
73	54	38	26	18	13	12	20	25	33	62	77	
				B.I.		B.I.						

96.0	94.7	93.4	92.4	92.7	92.2	91.1	88.9	87.3	90.9	93.9
2.5	3.8	5.1	6.1	5.8	6.3	7.4	9.6	11.2	7.6	4.6
70	55	33	15	11	22	32	52	70	85	
			B.C		B.C					Stock Pile

$q_{0.2}$ $q_{0.2}$ $q_{2.5}$ $q_{2.8}$
 $\frac{2.3}{73}$ $\frac{4.3}{48}$ $\frac{6.0}{17}$ 5.7
 $\$ ENE$ $B.Z$ $\checkmark$

$q_{1.4}$ $q_{5.3}$ $q_{3.4}$ $q_{2.8}$ $q_{3.2}$ $q_{2.8}$ $q_{1.7}$ $q_{1.9}$ $q_{2.4}$ $q_{4.2}$
 $\frac{1.1}{76}$ $\frac{3.2}{45}$ $\frac{5.1}{20}$ $\frac{5.7}{12}$ $\frac{5.3}{10}$ $\frac{5.7}{22}$ $\frac{6.8}{30}$ $\frac{6.6}{46}$ $\frac{6.1}{70}$ $\frac{4.3}{70}$
 Stock Price

SZA + π - Elev

898.45

+57

£ £

110

BM

3.14

^{P.W.}
900.82
~~900.80~~

0.79

897.66
3.14

(897.68)

+40

£ Existing Co Rd "C"

+52

+66

Lt

E

Rt

27

98.00	97.0	95.7	94.4	93.5	93.9	93.3	92.7	94.5	94.8
0.5	1.5	2.8	4.1	5.0	4.6	5.2	5.8	4.0	3.7
100	81	60	34	12		10	20	41	60
				B.C		B.C			

97.8	96.5	95.3	94.5	93.9	94.5	94.5	93.7	93.3	93.3
0.7	2.0	3.2	4.0	4.6	4.0	4.0	4.8	5.2	5.2
97	68	41	19	13		10	32	61	75
			B.C			B.C	B.C	B.C	B.C

Gutter Line

Top Hyd SW cor vict & C

July 23-71 PK
LPD
DR
BP

98.2	96.7	95.7	94.5	94.4	94.9	94.9	94.9	94.8	94.3	93.9
2.6	4.1	5.1	6.3	6.4	5.9	5.9	5.9	6.0	6.5	6.9
96	63	39	20	13		11	28	53	81	100
			B.C			B.C	B.C	B.C	B.C	

97.7	95.6	94.8	94.9	95.0	94.9	94.6	93.9	93.6
3.1	5.2	6.0	5.9	5.8	5.9	6.6	6.9	7.2
85	53	20	14		12	41	67	98
			B.C		B.C	MH		

EDGE B.C

97.9	95.9	94.90	94.9	95.1	95.1	94.8	94.89	94.5	94.2	90.9	99.1
2.9	4.9	5.92	5.9	5.7	5.7	6.0	5.93	6.3	6.6	7.9	11.7
89	54	29	20	14		10	20	28	35	45	57
		MH		B.C		B.C	MH	B.C			

Sta	+	T	-	Elev
		900.82		
		900.80		
		<u>3.19</u>		

111

+ 17

4.72

896.10
Top Rail &

+ 23

4.84

895.98
Top Rail &

+40

+62

BM	10.33	907.95	3.19	897.63	897.61	897.62
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112

+50

Lt

E

Rt

28

July 23 '71

95.6	94.3	94.5	95.3	95.6	95.7	95.3	94.6	93.9	95.22	94.96
52	6.5	6.3	5.5	5.2	5.1	5.5	6.2	6.9	5.60	5.86
77	57	38	20	14		15	25	46	73	92
				Bit		Bit			Top Rail	Top Rail

96.9	96.94	95.1	94.8	96.3	96.3	96.2	95.8	94.6	93.2	92.7
3.9	3.88	5.7	6.0	4.5	4.5	4.6	5.0	6.2	7.6	8.1
94	91	57	22	26	14		14	31	50	66
Top Rail	Top Rail				Bit		Bit			

95.7	96.5	96.8	95.2	94.9	95.9	96.8	96.9	96.1	95.1	93.8	93.9	93.6	93.9
5.1	4.3	4.0	5.6	5.9	4.9	4.0	3.9	4.7	5.7	7.0	6.9	7.2	6.9
43	27	23	18		18	16		13	21	22	25	59	73
Bit	Bit	FL	Bit	Bit			Bit		FL				

Yellow Paint spot on middle Bolt on Highline pole

97.9	98.0	98.1	98.9	98.3	98.2	97.5	97.7	96.7	95.5
10.1	10.0	9.9	9.1	9.7	9.8	10.5	10.3	11.3	12.5
59	46	29	22	22		13	16	36	70
Fence			Top curb GL			Bit			

900.3	900.0	00.8	00.2	99.9	99.3	98.8	98.6	97.5
7.7	8.0	7.2	7.8	8.1	8.7	9.2	9.4	10.5
50	28	22	22		15	20	48	79
Fence		T.C. G.L		Bit		φ ENZ		

Sta

+

π

-

Elev

907.935

+ 68

113

+35

+69

114

BM

0.09

907.86

907.88

LE

£

Rt

29

10/9 23'71

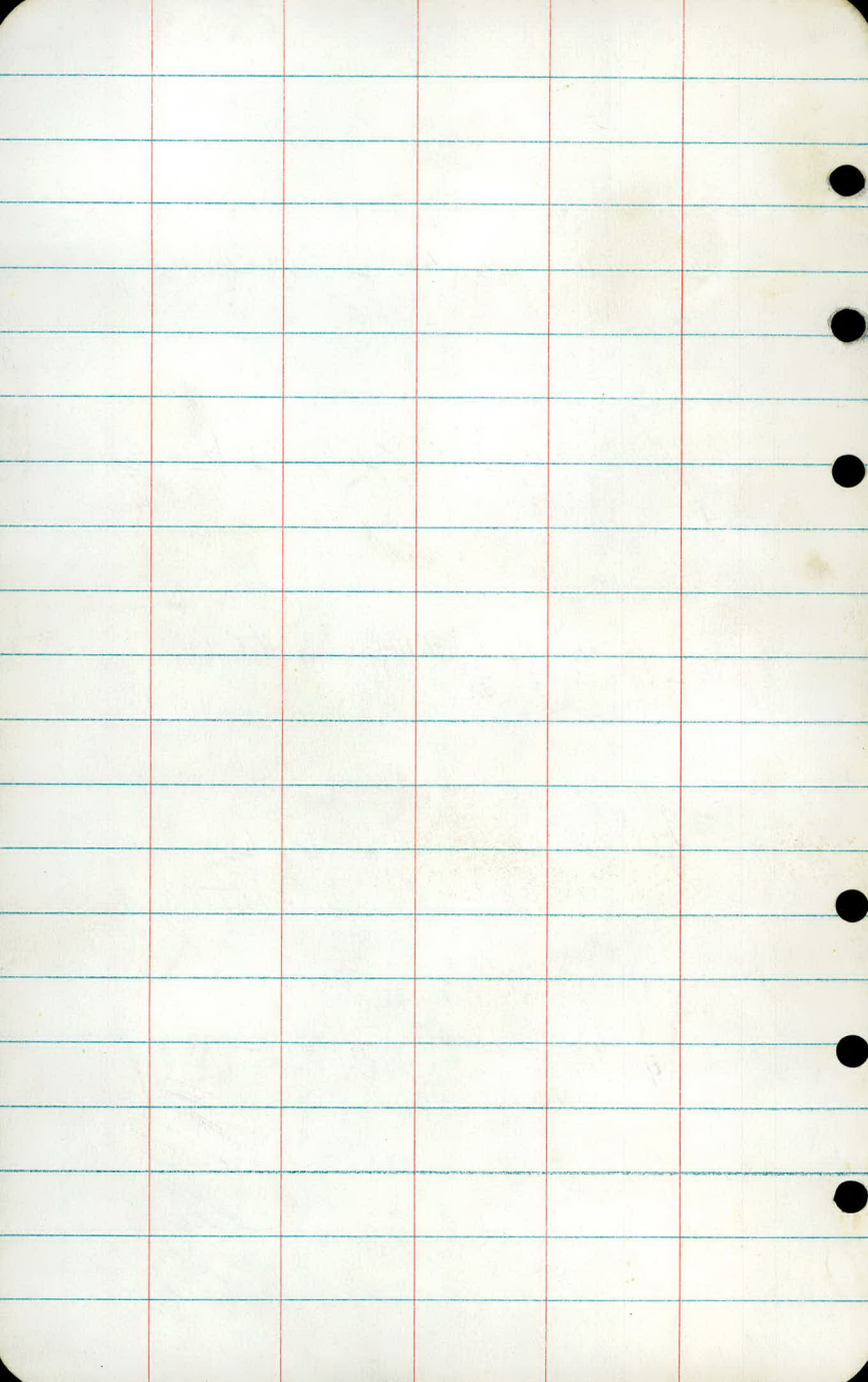
900.9	00.81	01.4	00.8	00.6	00.0	99.9	99.9	99.7
7.1	7.4	6.6	7.2	7.4	8.0	8.1	8.1	8.3
49	24	22	22		16	19	42	68
Fence	MH	Z.C.	GL		B.C			

05.5	02.1	02.6	02.0	01.9	01.3	01.4	02.0	03.8	01.0
4.5	5.9	5.4	6.0	6.1	6.7	6.6	6.0	4.2	4.0
47	27	22	22		16	19	33	55	71
Fence		TC	GL		B.C				House

04.7	03.9	04.1	03.5	03.3	02.7	02.9	03.3	03.9
3.3	4.1	3.9	4.5	4.7	5.3	5.1	4.7	4.1
44	26	22	22		16	18	36	55
Fence		Z.C.	GL		B.C			

06.7	05.4	05.5	04.9	04.8	04.1	04.5	06.2
1.3	2.6	2.5	3.1	3.2	3.9	3.5	1.8
45	25	22	22		17	33	65
		TC	GL		B.C		
					£	ENT	B.C

08.0	06.7	06.9	06.3	06.0	05.2	05.9	07.2	07.3
0.0	1.3	1.1	1.7	2.0	2.8	2.1	0.8	0.7
44	27	22	22		17	36	61	70
		TC	GL		B.C			House



X-Section Extensions

Sta	+	T	-	Elev
BM	13.75	910.84		(897.09) 13.75

99+21

+50

+75

100+00

+25

+50

LT

31

Top Hyd Sta 101+55 Rt 30'

Aug 20 '71

0A.8 0A.2

FK
PK
LPD
DR
RR
GM

5.0 5.2 6.0 6.6
139 114 89 64 ✓

05.9 0A.9

0.9 4.7 4.9 5.9
135 120 100 70 ✓

06.4 06.0

1.9 3.3 4.4 4.8
129 124 103 79 ✓

07.6 06.0

1.8 2.2 3.2 4.8
121 116 100 68 ✓

9.6 7.7 5.7

0.5 1.2 3.1 5.1
108 99 72 57 ✓

9.7 07.6 05.4

0.4 1.1 3.0 5.4
106 102 72 53 ✓
104 98

STA

+

π

-

Elev

910.84

+75

101

+25

BM

13.74

897.09

BM

13.10 911.12

898.02

13.10

101+75

102

LC

32

AUG 20 '71 (cont)

09.1 06.8 05.2

0.4 1.7 4.0 5.6 ✓
106 94 75 58

0.8 09.6 07.3 04.6 ✓
0.2 1.2 3.5 6.2
109 98 81 56

10.7 09.3 08.6 06.7 04.6
0.1 1.5 2.2 4.1 6.2
120 101 95 80 60

AUG 24 '71

Spike in PP Sta 102+59 Lt 20' ^{PK} ^{LPD} ^{RR} ^{GR}

1.3 3.1 4.8 5.9 7.6
127 101 82 69 61

1.1 2.0 4.0 5.3 7.8
124 112 86 73 56

SCA

+

π

-

Elev

9/11.12

+50

103

+35

104

+17

+50

Lt

¢ 33

$$\begin{array}{r} 0.6 \\ \hline 129 \end{array} \quad \begin{array}{r} 1.4 \\ \hline 120 \end{array} \quad \begin{array}{r} 4.0 \\ \hline 93 \end{array} \quad \begin{array}{r} 6.6 \\ \hline 68 \end{array} \quad \begin{array}{r} 9.0 \\ \hline 53 \end{array}$$

$$\begin{array}{r} 0.4 \\ \hline 142 \end{array} \quad \begin{array}{r} 2.6 \\ \hline 123 \end{array} \quad \begin{array}{r} 3.3 \\ \hline 117 \end{array} \quad \begin{array}{r} 4.5 \\ \hline 103 \end{array} \quad \begin{array}{r} 6.5 \\ \hline 85 \end{array} \quad \begin{array}{r} 7.8 \\ \hline 73 \end{array}$$

B.t B.t B.t B.t B.t B.t

$$\begin{array}{r} 0.9 \\ \hline 127 \end{array} \quad \begin{array}{r} 3.8 \\ \hline 110 \end{array} \quad \begin{array}{r} 5.0 \\ \hline 92 \end{array} \quad \begin{array}{r} 6.9 \\ \hline 74 \end{array}$$

B.t B.t B.t

$$\begin{array}{r} 0.4 \\ \hline 115 \end{array} \quad \begin{array}{r} 2.2 \\ \hline 98 \end{array} \quad \begin{array}{r} 4.2 \\ \hline 79 \end{array} \quad \begin{array}{r} 6.5 \\ \hline 62 \end{array}$$

$$\begin{array}{r} 0.0 \\ \hline 118 \end{array} \quad \begin{array}{r} 1.5 \\ \hline 94 \end{array} \quad \begin{array}{r} 3.8 \\ \hline 75 \end{array} \quad \begin{array}{r} 6.8 \\ \hline 56 \end{array}$$

$$\begin{array}{r} 0.0 \\ \hline 106 \end{array} \quad \begin{array}{r} 1.4 \\ \hline 90 \end{array} \quad \begin{array}{r} 3.5 \\ \hline 74 \end{array} \quad \begin{array}{r} 6.9 \\ \hline 53 \end{array}$$

SDA + 7 - Elev

911.12

10.21

105

+09

TP 11.03 911.94 10.21 900.91

16.82

11.03

+50

106

TP 3.85 904.97 10.82 901.12

3.85

+50

107

LT

£34

$$\begin{array}{r} 0.0 \\ \hline 95 \end{array} \quad \begin{array}{r} 1.6 \\ \hline 84 \end{array} \quad \begin{array}{r} 3.8 \\ \hline 73 \end{array} \quad \begin{array}{r} 7.1 \\ \hline 58 \end{array}$$

$$\begin{array}{r} 0.0 \\ \hline 93 \end{array} \quad \begin{array}{r} 3.4 \\ \hline 77 \end{array} \quad \begin{array}{r} 6.9 \\ \hline 59 \end{array}$$

$$\begin{array}{r} 0.0 \\ \hline 97 \end{array} \quad \begin{array}{r} 3.0 \\ \hline 85 \end{array} \quad \begin{array}{r} 5.8 \\ \hline 73 \end{array} \quad \begin{array}{r} 9.3 \\ \hline 59 \end{array}$$

$$\begin{array}{r} 0.0 \\ \hline 110 \end{array} \quad \begin{array}{r} 1.5 \\ \hline 105 \end{array} \quad \begin{array}{r} 3.9 \\ \hline 95 \end{array} \quad \begin{array}{r} 6.0 \\ \hline 79 \end{array} \quad \begin{array}{r} 9.3 \\ \hline 68 \end{array} \quad \begin{array}{r} 10.7 \\ \hline 63 \end{array}$$

$$\begin{array}{r} 1.4 \\ \hline 106 \end{array} \quad \begin{array}{r} 3.8 \\ \hline 96 \end{array} \quad \begin{array}{r} 5.9 \\ \hline 77 \end{array} \quad \begin{array}{r} 8.1 \\ \hline 57 \end{array}$$

$$\begin{array}{r} 3.4 \\ \hline 147 \end{array} \quad \begin{array}{r} 4.2 \\ \hline 120 \end{array} \quad \begin{array}{r} 5.2 \\ \hline 99 \end{array} \quad \begin{array}{r} 6.7 \\ \hline 86 \end{array} \quad \begin{array}{r} 8.1 \\ \hline 76 \end{array}$$

STA

+

7

-

Elev

904.97

11.69

893.28

+50

108

BM

11.69 893.28 (893.28)

BM 2.75 899.84

(897.09)

101+51

102

+50

60

φ 35

29	3.5	44	6.4	8.8
<u>156</u>	<u>138</u>	<u>113</u>	<u>98</u>	<u>82</u>

3.6	4.3	5.5	6.9	8.6
<u>151</u>	<u>129</u>	<u>110</u>	<u>88</u>	<u>73</u>

Spike in PP

FK
DS

April 24, 1972
Clear Cool 45°

Top Hyd 101 + 55 30' Rt

φ

12.9	13.8	13.8	11.7	10.2	10.7	12.6	12.8
50	54	58	61	73	80	86	90

in Ditch

12.8	14.0	13.4	11.8	10.2	11.4	12.8
42	47	49	52	63	71	74

φ
Ditch

13.2	12.2	10.4	10.8	12.7	12.7
53	56	64	75	81	95

Sta + Δ - Elev.

899.84

103

+50

102 $\pm$

3.60 896.24 96.2 ✓

BM 3.46 900.55 897.09

101+75

✓

103+15

✓

102+00

4.3

896.25 (896.2)

FK
DS

⊕

April 23, 1972

36

129 137 120 11.4 11.1 129

61 65 58 77 88 95

\$
4.64

13.1 14.6 12.0 11.9 10.8

74 2 84 95 100

Ditch
81

RG
GA
DK

April 26, 1972
PC 40°

Top Hyd Rt Sta 101+55

0.0 1.0 2.9 4.1 4.3 4.3 4.7 5.6 8.2 10.2 / 13.8
46 42 32 20 12 12 24 32 41 45

96.2

86.7

97.1 91.3 88.9 86.2
13.4 9.3 11.6 14.3
80 71 63 54

96.4

BT Ent. 0.0 1.2 3.1 4.1 4.1 4.2 5.3 6.0 13.4
49 35 14 16 29 41 46 64

86.9 88.6 87.6 86.2 86.5
13.6 11.9 12.9 14.3 14.0
100 82 71 69 66

⊕

