

OFFICE OF COUNTY ENGINEER
RAMSEY COUNTY, MINN.

LOCATION Survey

LOWER AFTON ROAD

From Mc KNIGHT To E. Co. LINE

Road Acc't. No. _____

Date Filed 2-21-61

Dr. 9
File Bk. 32

Mc KNIGHT to OLD U.S. #61

CITY

Alinément

Sta Point ΔL ΔR

+34.21 P.T. 18.0' $\Delta = 0^\circ 36'$

20 12.9' $D = 30'$

19+74.26 P.I. $0^\circ 36'$ $T = 60.05$
 60.00

+50 $0^\circ 5.4'$ $L = 120.00$

19+14.21 P.C. $0^\circ 00'$ $R = 11459.2$

11+88.29 P.T. $12^\circ 29.25'$

+30 $10^\circ 57'$

P.O.S.T.

11 $8^\circ 57'$ $\Delta = 24^\circ 58\frac{1}{2}' Lt$

+50 $6^\circ 57'$ $D = 8'$

10+34.84 P.I. $T = 158.74 \checkmark$

10 $4^\circ 57'$ $L = 312.19 \checkmark$

+50 $2^\circ 57'$ $R = 716.78$

9 $0^\circ 57'$

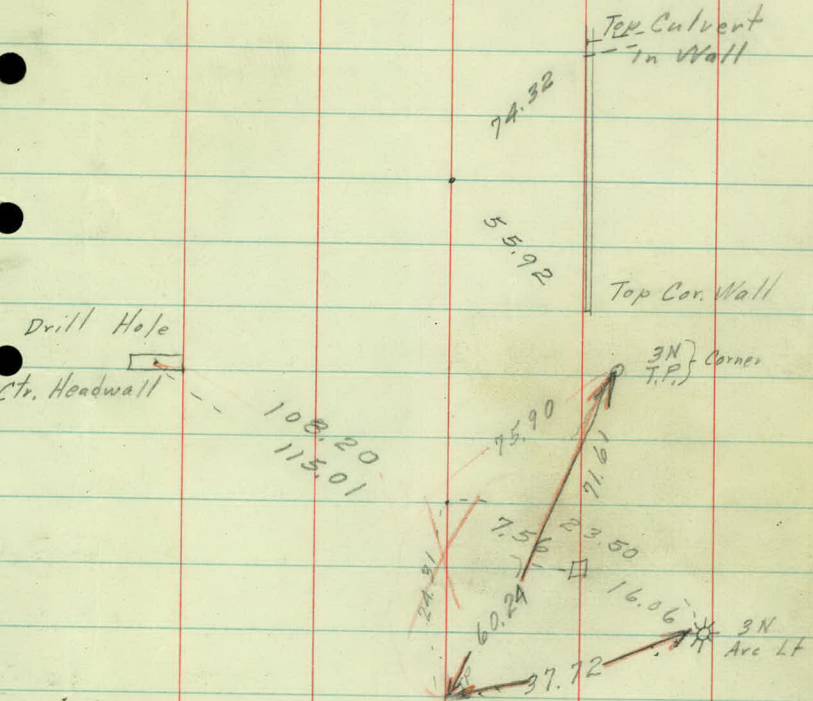
8+76.10 P.C. $0^\circ 00'$

7+75 to +80 P.T. $D = 10' Lt$

0+00

Nov. 16, 1961

2



Sta Point ΔL ΔR

28+13.28 P.T.

28

+50

27

+50

$\Delta = 20^{\circ} 06'$

$D = 5^{\circ}$

26+14.43 P.I.

26

+50

$T = 203.15$

$L = 402.00$

$R = 1146.28$

25

+50

24+11.28 PC

21+00

Nov. 15, 1961
£

3
11

3N
12" Cott

75.85

51.06 3N
16" Oak

87.48

Drill Hole
S. End 15" SGP

3N
G.P.

71.40

52.33

3N
10" Ash

111.80

0.3N.
G.P.

* 3N
Arc Lt.

51.27

Top
Cor
Wall

34.84

70.39

Top Culvert
In Wall

Near
Battle Creek Road

Sta Point ΔL ΔR

56+00 P.I.

41+1826 PT

41

40

39

$$\Delta = 41^{\circ} 14 \frac{1}{2}'$$

38

$$D = 5^{\circ}$$

37+2+76

3724.76 P.I.

$$T = 431.33$$

37

$$L = 824.83$$

36

$$R = 1146.28$$

35

34

33

32+93.43

32193.43 PC

431.3

Nov. 15, 1961

4

16° 3' N
16° Elm 2
E Mc Knight 312' 76.39

90° 27 1/2'

3N
4" Pop

85.25

62.83

Nail

3N
16" O

3N
30" Oak

80.43

3N
18" Oak

80.88

3N
24" CoH

14.91

53.61

3N
12" Oak

312'

29.60

3N
6" Elm

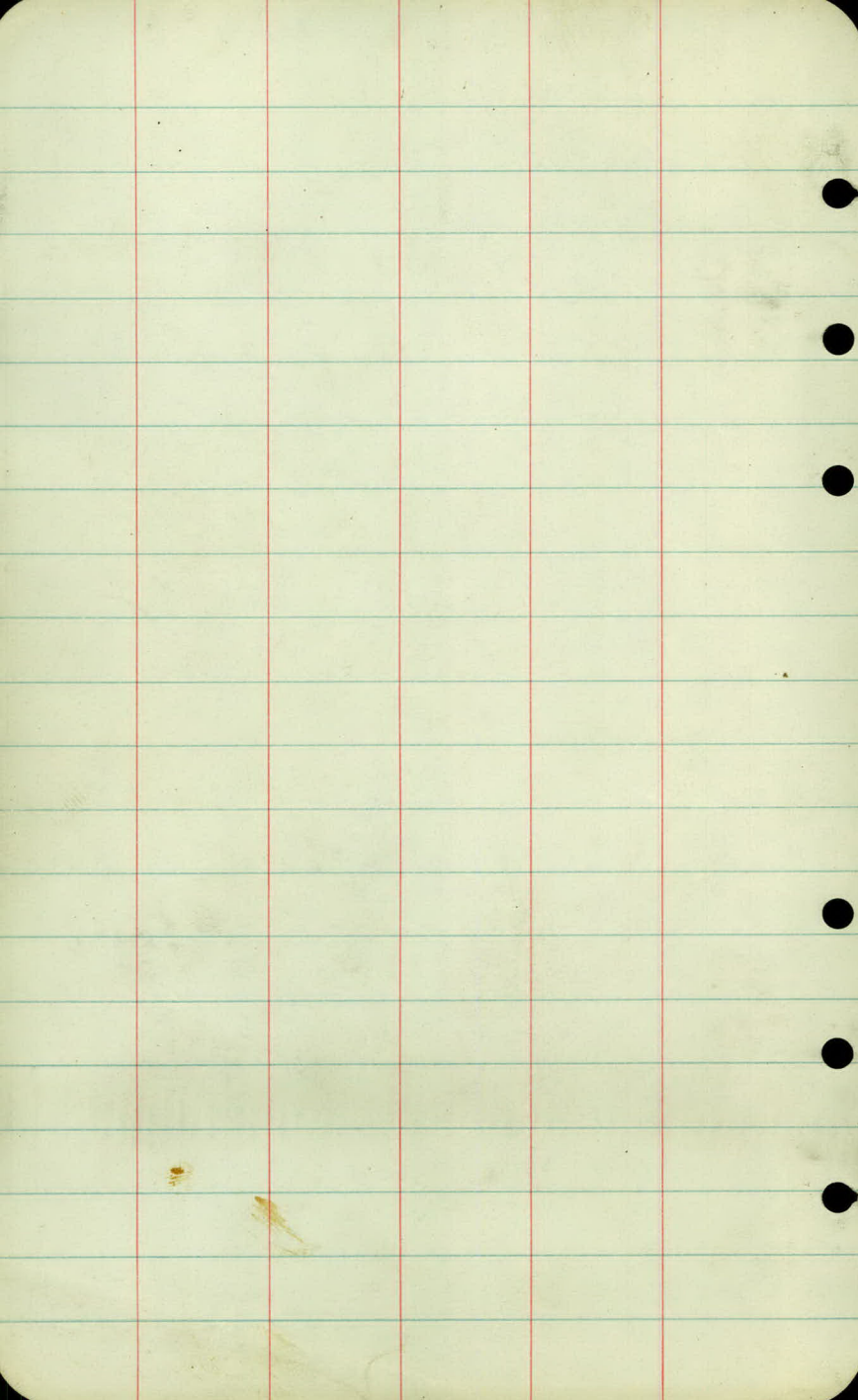
3N
14" CoH

83.25

78.11 3N
12" Oak

25.42

3N
14" CoH



LOWER AFTON ROAD

Old S.T.H. #61 to Mc KNIGHT

LOCATION SURVEY

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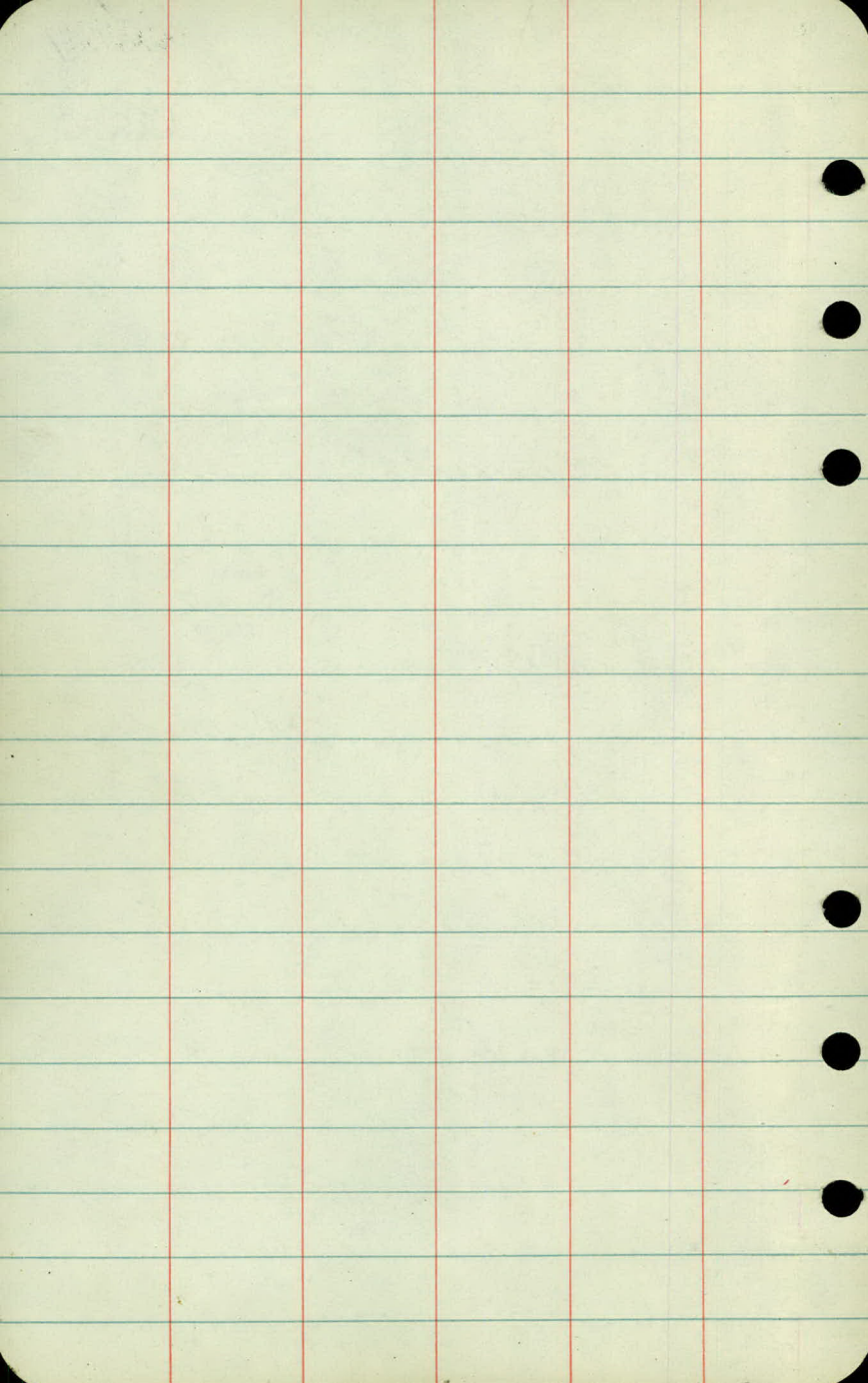
Stadia 15-18

Soundings 19-22

Traverse Line

Alinement 23-25

Topography 26-36



FK
KP
KJ
JH

Nov. 8, 1959
Clear 36'

~~78~~
2

Alignment

Lower Afton Rd.

Mc Knight Rd. to T.H. 61

City

Sta Point ΔL ΔR

S. $49^{\circ}13'W$

+06.57 PT $20^{\circ}37'15''$

23 $20^{\circ}27'$
+50 $19^{\circ}12'$

22 $17^{\circ}57'$
+50 $16^{\circ}42'$

21 $15^{\circ}27'$
+50 $14^{\circ}12'$

$\Delta = 41^{\circ}14\frac{1}{2}'$

20 $12^{\circ}57'$
+50 $11^{\circ}42'$

$D = 5^{\circ}$

19+13.07 P.I.

$T = 431.33$

19 $10^{\circ}27'$
+50 $9^{\circ}12'$

$L = 824.83$

18 $7^{\circ}57'$
+50 $6^{\circ}42'$

$R = 1146.28$

17 $5^{\circ}27'$
+50 $4^{\circ}12'$

16 $2^{\circ}57'$
+50 $1^{\circ}42'$

15 $0^{\circ}27'$

14+81.74 PC $0^{\circ}00'$

N $89^{\circ}32\frac{1}{2}'W$

0+00 $\pm$ McKnight Rd

Nov. 8, 1959

74

3



$3\frac{1}{2}'$

$90^\circ 27\frac{1}{2}'$

$3\frac{1}{2}'$



Sta Point ΔI ΔR

45+92.34 P.I. 24° 23'

S. 69° 19' W

+88.72 PT 10° 03'

+50 9° 05'

31 7° 50'

+50 6° 35' $\Delta = 20° 06'$

30 5° 20' $D = 5°$

29+89.87 P.I. $T = 203.15$

+50 4° 05' $L = 402.00$

29 2° 50' $R = 1146.28$

+50 1° 35'

28 0° 20'

27+86.72 PC 0° 00'

S. 49° 13' W

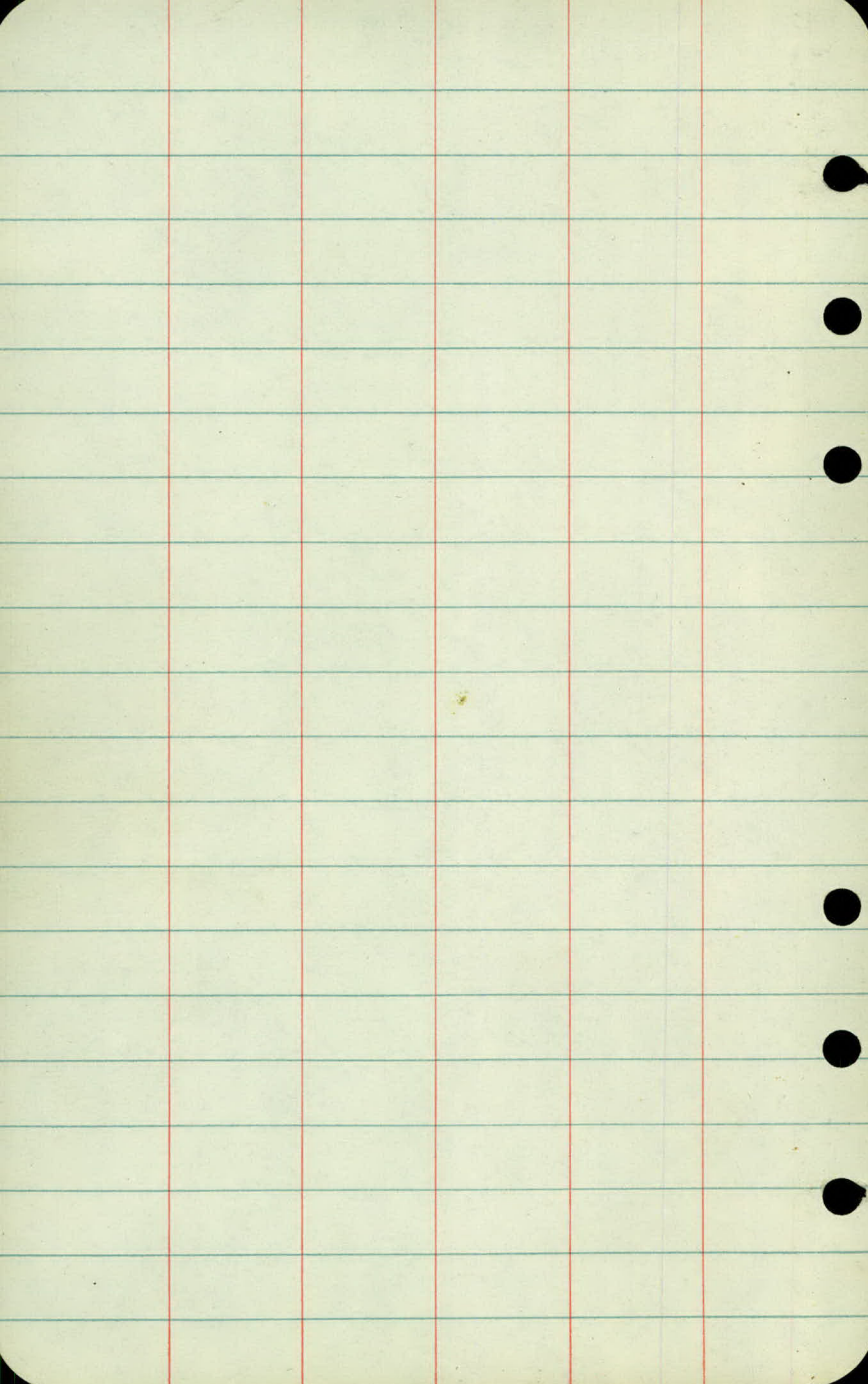
November 13, 1959

FK
LC
KP
KJ
JH

~~73~~
4

± Point Douglas Rd (old STH #61)

P.K. Nail



FK
RG
KP
JS
KJ
JH

18 December 1959
1

BATTLE CREEK ROAD

LOWER AFTON RD TO UPPER AFTON RD.

HOUSE LOCATION

STADIA

3
~~2~~ PAGES

OBJECT

AZ

STADIA

T AT LOWER AFFORD.

STATION 35+00.

TO PI STATION

30+40.40

000

N.W. COR.

HOUSE

294°16'

5.40

S.W. COR

HOUSE

296°45'

5.08

N.W. COR.

GARAGE

292°43'

5.62

S.E. COR

HOUSE

298°39'

5.22

S.W. COR

GARAGE

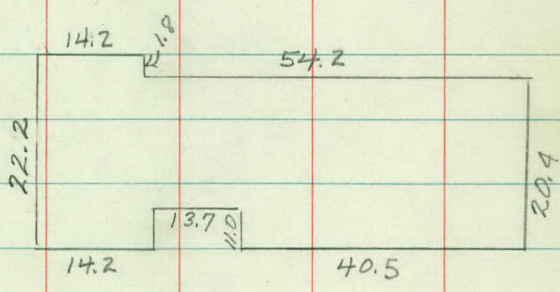
293°34'

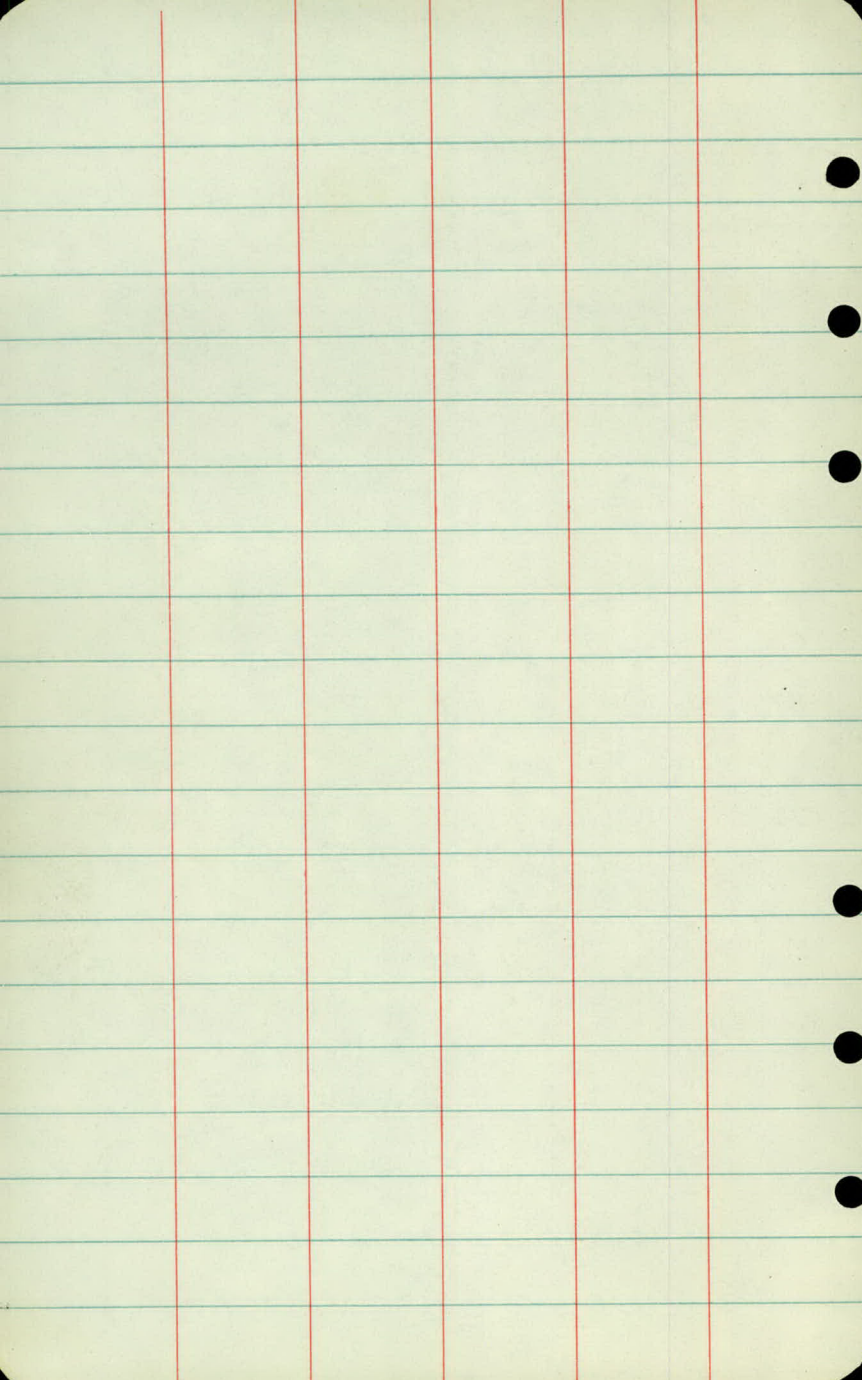
5.52

18 DECEMBER 1957 Z.
35°

DIST.	VERT ANGLE	ROD EQUIV	ROD	DIFF	ELEV.
-------	---------------	--------------	-----	------	-------

540
508
562
522
552





Dec. 9, 1959

Lower Afton Rd

House Location

36

SW, Cor Ho
106

12'N + S

+ 25 SE Cor Ho 36'E + W
106.5

35

Dec 18, 1959

3

House

142

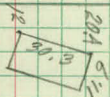
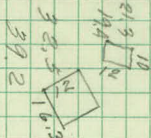
112

96

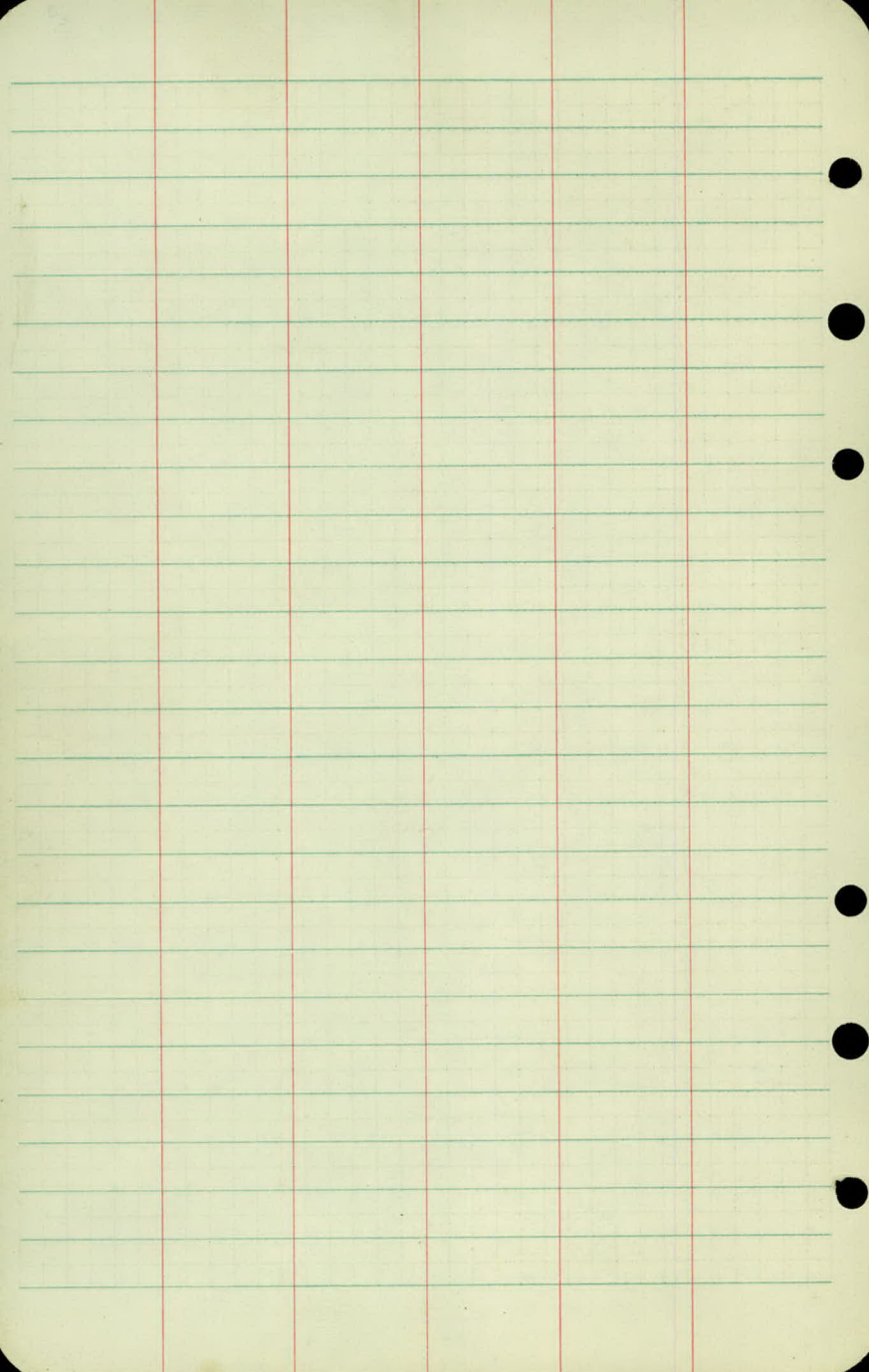
84

66

54



10 x 12



Lower Afton Rd

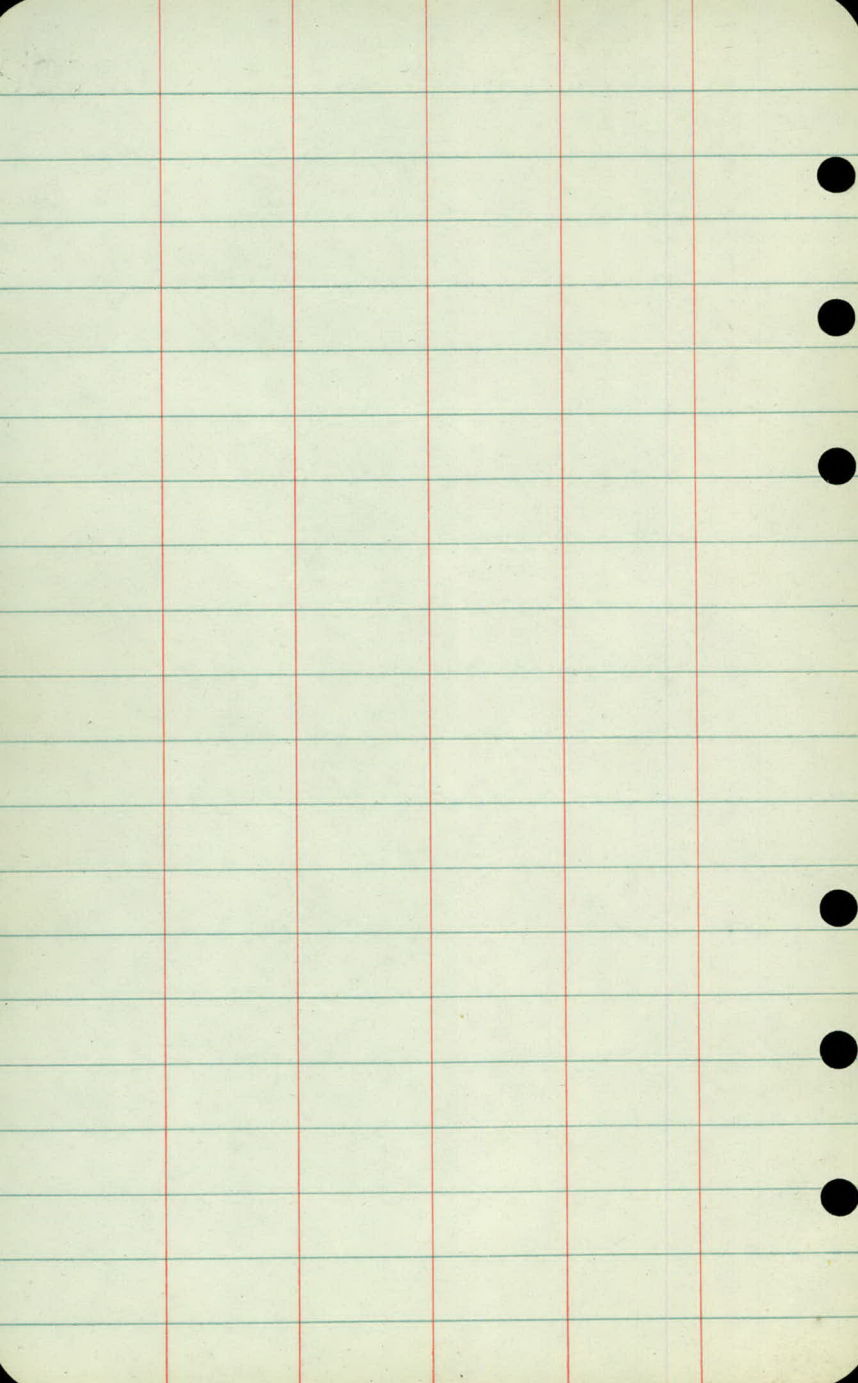
McKnight to STH #61

Line 1

INDEX:

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Topography 4-9



FK
RG
KP
HJ
HAW
LC

October 20, 1959

62
~~0050~~

Alignment

Sta Point ΔL ΔR
30+40.40 =
31+75.95 Equation

31+75.95 ORIG. Tr. Line

30+40.40 P.I. = $21^{\circ}10\frac{1}{2}'$

18+98.10 P.I. $41^{\circ}14'$

0+00 $\pm$ McKnight

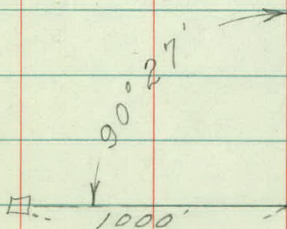
HAW
LC
KP

October 20, 1959

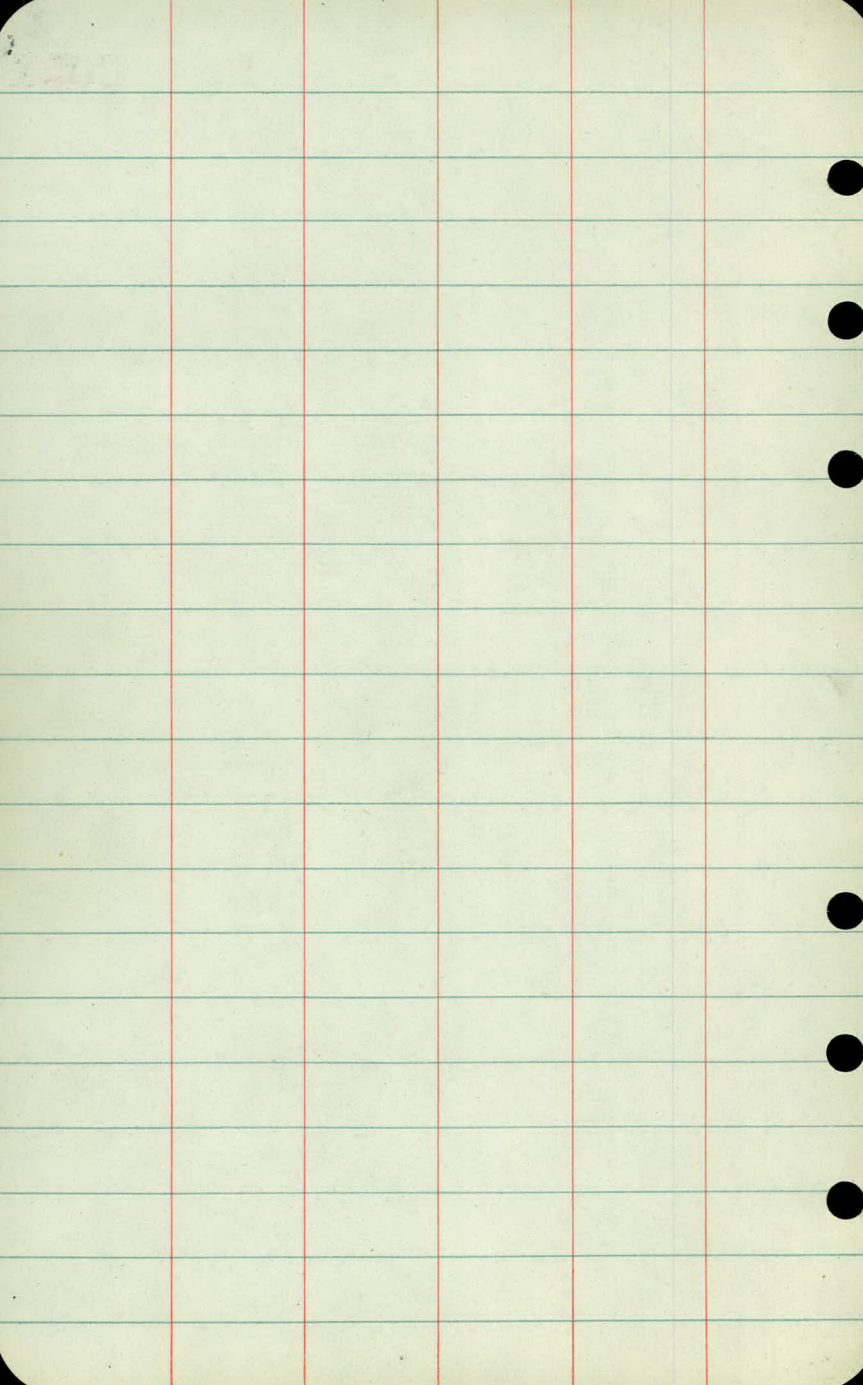
7
~~0051~~

spike

spike



spike



FX
RG
KJ

October 20, 1959 8

Clear Cool 38°

~~C052~~

Topography

$$551 \quad +100 \frac{\text{Creek}}{120} \quad \frac{1}{2}$$

$$+50 \frac{\text{Creek}}{95}$$

$$+46 \frac{18'' \text{BE}}{110}$$

452

$$+100 \frac{\text{Creek}}{109}$$

$$+92 \frac{18'' \text{BE}}{78}$$

$$+30 \frac{\text{Tw } 14'' \text{W}}{34}$$

$$+30 \frac{\text{Creek}}{30}$$

$$+16 \frac{10'' \text{W}}{15}$$

$$+03 \frac{10'' \text{W}}{7}$$

$$+10 \frac{\text{Trip } 24'' \text{Cat}}{6}$$

353

$$+100 \frac{\text{Creek}}{6}$$

$$+74 \frac{\text{Creek}}{1}$$

$$+54 \frac{36'' \text{W}}{10}$$

$$+50 \frac{\text{Creek}}{14}$$

$$+22 \frac{\text{Creek}}{1}$$

54

2

$$+100 \frac{\text{Creek}}{38}$$

$$+90 \frac{20'' \text{W}}{42}$$

$$+76 \frac{\text{Trip } 14'' \text{W}}{44}$$

$$+62 \frac{\text{Creek}}{37}$$

55

1

$$+100 \frac{\text{Creek}}{125}$$

$$+17 \frac{14'' \text{E}}{19}$$

$$+06 \frac{\text{Cluster } 8-16'' \text{E}}{11}$$

256

$$+03 \frac{\text{X-Fe } 3-5 \text{ Barb}}{1}$$

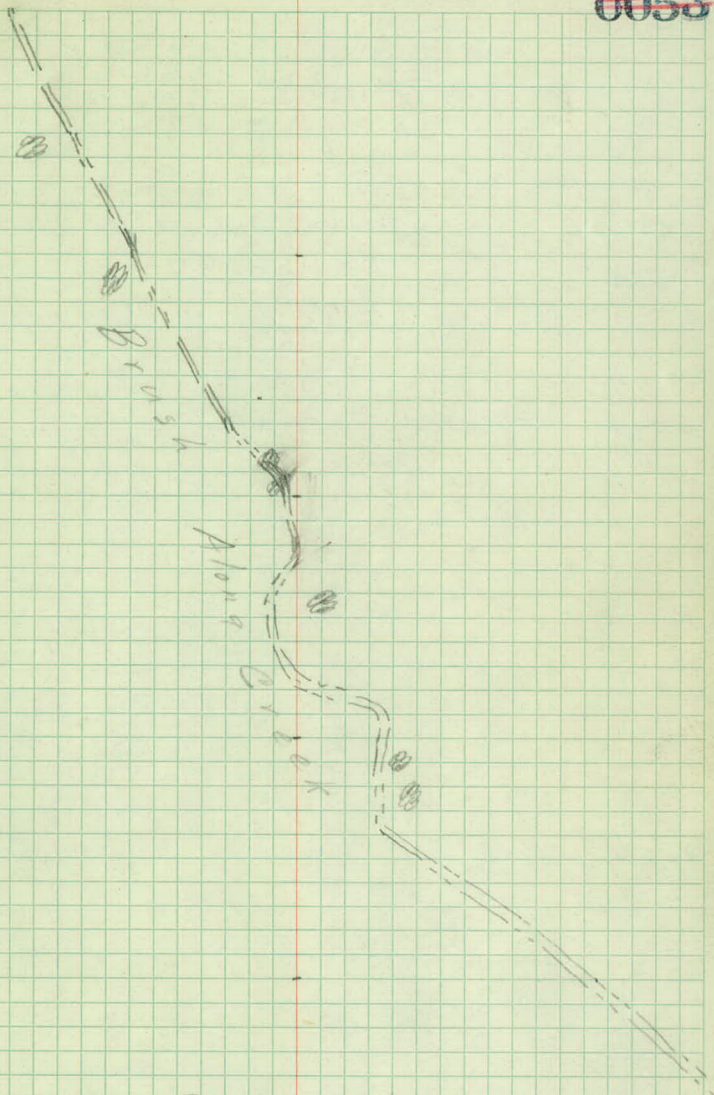
$$+100 \frac{\text{Creek}}{280}$$

21

Oct 20, 1959
RT

9

0053



— x — x — x — x — x —

1046

+100 $\frac{\text{Creek}}{86}$ +84 $\frac{\text{X Fe}}{2-5-8-6}$

947

+100 $\frac{\text{Creek}}{98}$ +79 $\frac{\text{X-Ditch}}{}$

848

+100 $\frac{\text{Creek}}{115}$

749

+100 $\frac{\text{Creek}}{113}$ +55 $\frac{12''0}{98}$ +62 $\frac{\text{X-Ditch}}{}$ +15 $\frac{18''0}{110}$ +30 $\frac{18''0}{118}$

650

+100 $\frac{14''W \text{ Creek}}{136 \quad 132}$ +78 $\frac{14''W}{148}$ +50 $\frac{\text{Creek}}{162}$ +25 $\frac{16''E}{131}$

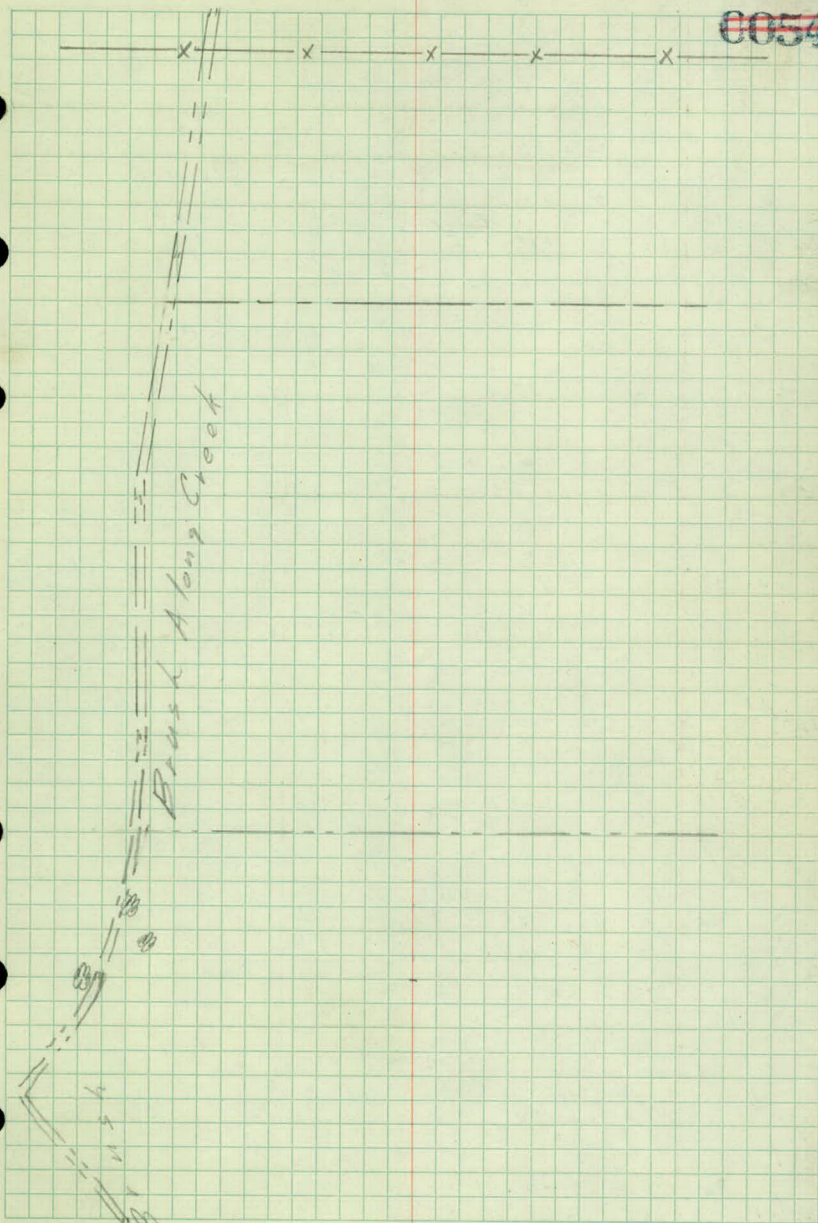
51

+100 $\frac{\text{Creek}}{120}$

Oct. 20, 1959

10

~~C054~~



15 41

100 $\frac{\text{Creek}}{16}$

170 $\frac{\text{Creek}}{17}$

+70 $\frac{8' \text{ Conc Apron}}{24 \ 31' 24''}$

+30 $\frac{\text{Creek}}{\cancel{2}}$

14 42

+10 $\frac{\text{Bank}}{\cancel{2}}$

100 $\frac{\text{Creek}}{80}$

170 $\frac{\text{Creek}}{53}$

+10 +13 $\frac{\times \text{Fe}}{4-5 \text{ Bark}}$

13 43

+100 $\frac{\text{Begin Woods}}$

100 $\frac{\text{Creek}}{47}$

+56 $\frac{\text{Creek}}{6}$

+30 $\frac{16'' \text{ W}}{17}$

+31 $\frac{16'' \text{ W}}{29}$

+15 $\frac{\text{Creek}}{\cancel{2}}$

+24 $\frac{\text{Trip } 10'' \text{ W}}{19}$

+25 $\frac{12'' \text{ W}}{24}$

12 44

100 $\frac{\text{Creek}}{10}$

+90 $\frac{\text{Creek}}{30}$

160 $\frac{\text{Creek}}{38}$

+21 $\frac{\text{Creek}}{\cancel{2}}$

11 45

+100 $\frac{\text{Creek}}{45}$

150 $\frac{\text{Creek}}{48}$

+49 $\frac{\text{Cluster } 712'' \text{ Willows}}{31}$

10 46

$\frac{\text{Creek}}{86}$

Under Cultivation

Woods

Area

Bed = 10' Average

 $\rightarrow \text{Bed Ave} = 15'$

36
20

Creek
20

+60 Bed
55+5

37
19

+28 Creek
52

+10 Bed
2

+26 Bed
60-32

+91 Creek
2

+70 Bed
50

+70 Bed
2

+70 Bed
35-45

+45 Creek
56

+34 Top Bank
2

38
18

+100 Fe
17

(20' Bed)

+100 Creek
60

Bank
9

+75 Bank
2

+65 Fe
9

+66 Creek
27

+50 (15' Bed)

+50 Bank
14

+20 Creek
80

39
17

Fe
24

+100 Bank
13

+100 Creek
40

+60 Bank
2

+66 Creek
25

+40 Bank
13

16 40

+100 Creek
43

Bank
16

+77 Creek
2

+90 Bank
2

+68 Creek
12

+60 Bed
55+5

+95 Creek
26

+35 Creek
45

Creek
16

15 41

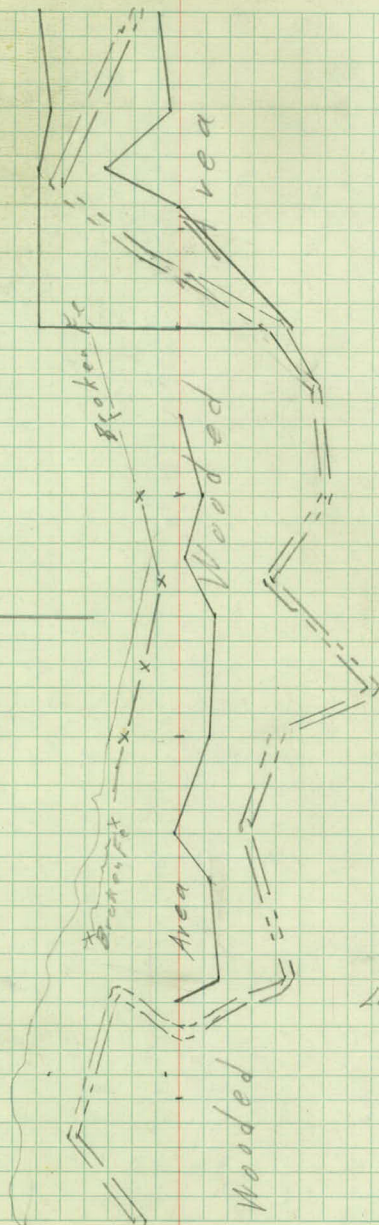
Oct 20, 1959

12

~~6056~~

Creek Bed = 15' Ave — Bed Ave = 20'

Under Cultivation



Bank previous
Less than 8' high

31
23

+80 $\frac{16 \text{ Cnt}}{11}$
 +76 $\frac{16 \text{ Cnt}}{39}$ +71 $\frac{12 \text{ Cnt}}{35}$ +79 $\frac{16 \text{ Cnt}}{44}$
 +49 $\frac{6 \text{ E}}{48}$ +52 $\frac{6 \text{ E}}{34}$
 +36 $\frac{18 \text{ Cnt}}{8}$ +21 $\frac{16 \text{ Cnt}}{52}$

32

24
 +94 $\frac{8.5 \text{ Headwall}}{40}$ +73 $\frac{\text{Fe Cr}}{55}$
 +70 $\frac{\text{Creek}}{40}$ +65 $\frac{\text{RTic Fe}}{40 \text{ Lt}}$
 (Bed) +61 $\frac{\text{X-Fe}}{1}$
 $\frac{57 \ 36}{\text{Creek}}$ (Bed)
 +25 $\frac{40}{53-30}$

33

23 $\frac{\text{Bed}}{31-5}$ +100 $\frac{\text{Creek}}{14}$
 +88 $\frac{\text{Creek}}{1}$

+95 $\frac{\text{Bed}}{1}$ +60 $\frac{\text{Creek}}{27}$ +70 $\frac{\text{Bed}}{28}$
 +70 $\frac{\text{Bed}}{15}$ +30 $\frac{\text{Bed}}{5}$ +25 $\frac{\text{Creek} + \text{Bed}}{32}$

34

22 +100 $\frac{\text{Bed}}{4}$ +100 $\frac{\text{Creek} + \text{Bed}}{17 \ 28}$

+22 $\frac{\text{Bed}}{2}$ +10 $\frac{\text{Bed}}{8-5}$ +22 $\frac{\text{Bed}}{23}$

35

21 +37 $\frac{\text{Creek}}{1}$ +100 $\frac{\text{Creek} + \text{Bed}}{8 \ 25}$
 +72 $\frac{\text{Bed}}{22}$ +72 $\frac{\text{Creek}}{19}$
 +72 $\frac{\text{Bed}}{14}$

+13 $\frac{\text{Creek} + \text{Bed}}{36 \ 40-5}$

36

20 +100 $\frac{\text{Bed} + \text{Creek}}{60+10 \ 20}$

30

29

28

27 29

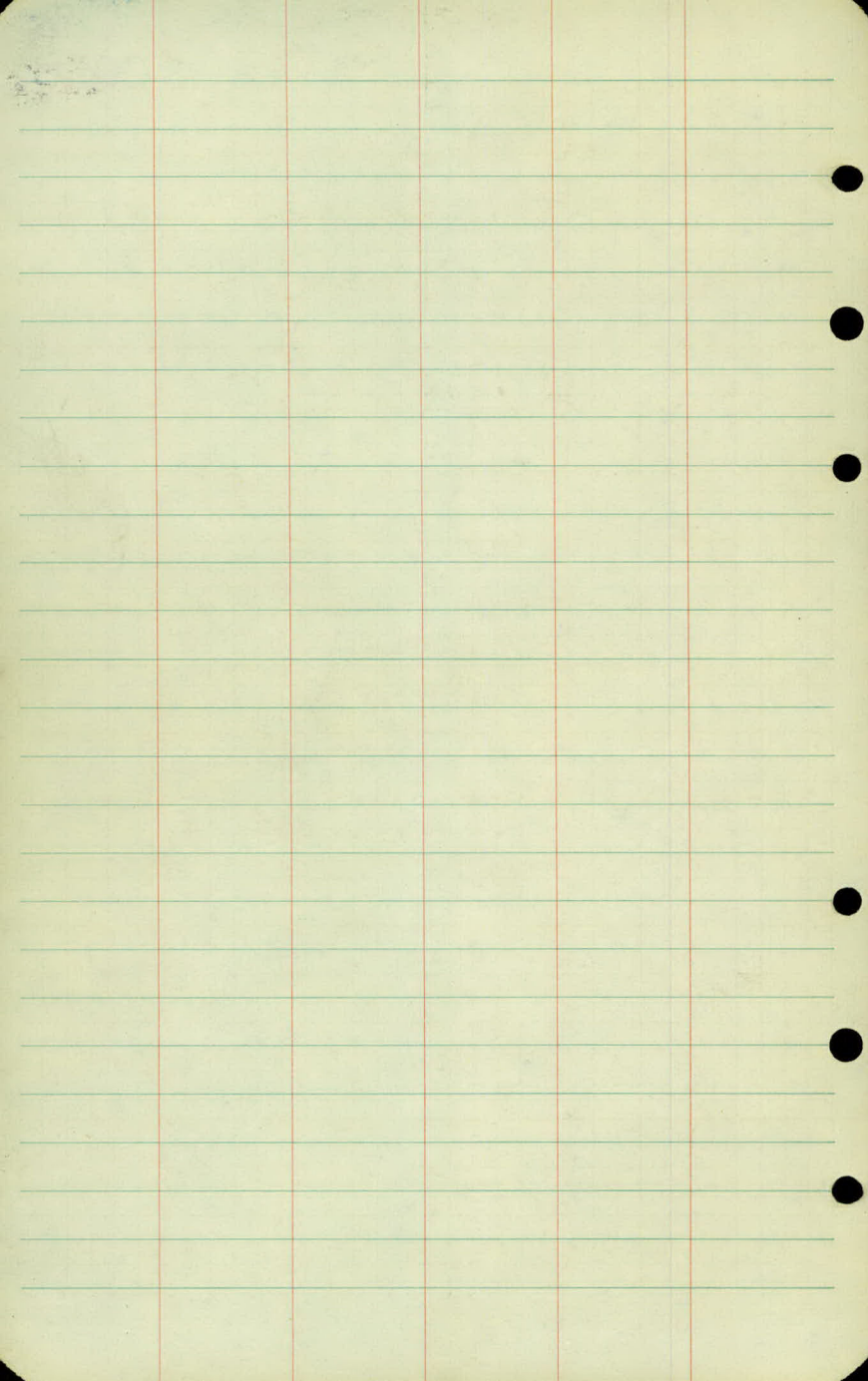
+88 C+8Hdwall
33

26 30

25 31



60" S.C.P.



21 OCTOBER 1959
CLEAR AND COOL
45°

15
~~0059~~

HAW

LC

KP

LOWER AFTON ROAD
STADIA

Top of Bank Location

OBJECT :

$$h = K S \cos^2 A$$

$$V = \frac{1}{2} K S \sin 2A$$

π at sta 19+26.6

to sta 25

000

Top bank

143°50' 88

" "

119°20' 52

" "

47°20' 58

" "

14°45' 67

" "

14°04' 92

19°20' 94

" "

208°00' 91

" "

228°20' 78

" "

260°10' 100

" "

278°40' 92

" "

296°10' 135

" "

321°40' 180

" "

342°10' 190

" "

147°55' 140

" "

169°42' 165

" "

180°20' 180

Top Creek
Bed

180°10' 146

" "

181°20' 96

Creek

180°20' 110

RODMAN COULD
NOT BE SEEN SO
HE WENT AND
STARTED AT
ANOTHER POINT
KP

21 OCTOBER 1959

16
~~0000~~
ELEV.

DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.
-------	----------------	---------------	-----	-------

+7°05'

+14°10'

+13°30'

+6°55'

+7°10'

+7°15'

+6°55'

+8°45'

+6°40'

+6°56'

+7°40'

+7°36'

+4°30'

11.0

+7°40'

+7°25'

+3°20'

+2°30'

-0°10'

+0°00'

OBJECT

AZ.

STADIA

at sta 22+00

to sta 25+00

000

top bank

246°10' 72

276°10' 77

297°40' 75

139°50' 138

125°20' 140

drown

109°25' 128

top bank

93°25' 130

64°45' 115

43°15' 140

25°00' 240

21 OCTOBER 1959

17
~~COC1~~
ELEV.

DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.
-------	----------------	---------------	-----	-------

+22°28'

+24°00'

+27°06'

+11°50'

+10°30'

+11°40'

+13°14'

+14°05'

+13°25'

+13°35'

OBJECT

AZ.

STADIA

π at Sta 24+86

to Sta 25+00

0°00'

Top of Bank

161°57' 130.

" " "

154°05' 116.

" " "

140°31' 109.

" " "

119°43' 61.

" " "

93°32' 46.

" " "

214°35' 206.

" " "

208°15' 237.

" " "

200°02' 254.

" " "

192°05' 280.

DIST

EQUIV.

ROD

DIFF.

ELEV. 18

~~0062~~ $+12^{\circ}41'$ $+12^{\circ}42'$ $+11^{\circ}35'$ $+10^{\circ}55'$ $+6^{\circ}50'$ $+4^{\circ}28'$ $+6^{\circ}-$ $+5^{\circ}50'$ $+5^{\circ}10'$

OBJECT

AZ.

STADIA

191
~~0063~~

LOWER AFTON RD
(city)

Locations &

Soundings

Sta

31

O.O Profile 46' Rt

30

O.O Profile 50' Rt

NW Cor Ho. to Bank = 60'

N.W. Cor Barn to Bank 100'

NE Cor Ho to Bank 63'

Sta 3+00 100' Lt

Feet

Material

0-1.5

Black Top soil

1.5-4

Sandy Clay

FK
RG
KP
HJ

Oct. 23, 1959
Drizzle
25 Rt

20
~~6064~~

Sta 3+00

Feet

Material

0-2

Black Topsoil

2-4

Clay

Sta 4+00

±

Feet

Material

0-1.5

Topsoil

1.5-4

clay

Sta 5+00

±

Feet

Material

0-4

clay

Sta 6+00 ±

Feet	Material
0-2	clay
2-3	sandy clay
3-4	clay

Sta 7+00 ±

Feet	Material
0-4	clay

Sta 8+00 ±

Feet	Material
0-2	Black Topsoil
2-4	clay

Oct 23, 1959

21

Rain

~~COGS~~

Sta 9+00

£

FeetMaterial

0-1

Black Topsoil

1-3

Clay

Sta 10+00

£

FeetMaterial

0-0.5

Black Topsoil

0.5-2

Sandy Clay

2-4

Clay

Sta 11+00

£

FeetMaterial

0-3

Black Topsoil

3-4

Sand & Loam

4-5

Clay

Sta	Feet	Material
11+00	0-4	100' Lt Sandy Clay

Sta	Feet	Material
9+50	0-2	140' Lt Black Topsoil
	2-4	Clay

Sta	Feet	Material
8+00	0-1	160' Lt Black Topsoil
	1-4	Clay

Sta	Feet	Material
6+00	0-2	180' Lt Black Topsoil
	2-4	Clay

October 23, 1959 22

Sta. 4+50 170' Lt

~~0000~~

Feet

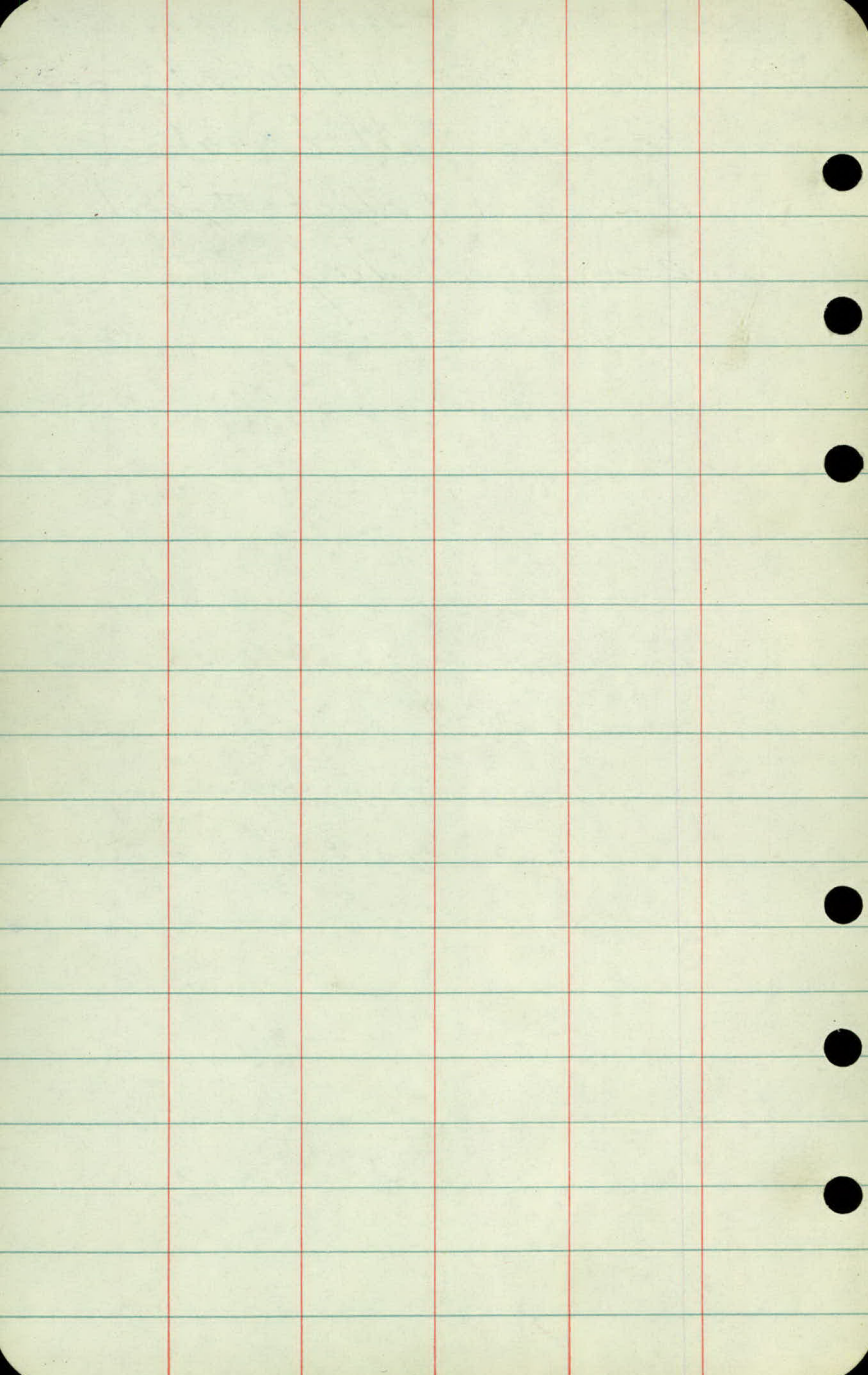
Material

0-2

Black Topsoil

2-4

Clay



Lower Afton

McKnight to STH #61

Traverse line

Alignment

Location Survey

Sta	Point	ΔL	ΔR	Assumed Bearing
-----	-------	------------	------------	--------------------

18+00	P.I.	14°10'		
-------	------	--------	--	--

14+00	P.I.	40°10'		
-------	------	--------	--	--

9+00	P.I.	21°38 $\frac{3}{4}$ '		
------	------	-----------------------	--	--

N-88°10'10"-W

0+00	± Mc Knight			
------	-------------	--	--	--

KA
RL
RR
KJ

Sept 16, 1959

24

~~0051~~

$92^{\circ} 49\frac{1}{2}'$

Sta Point ΔL ΔR
47+72.77 P.I. $21^{\circ}52\frac{1}{2}'$

41+00 P.I. $6^{\circ}30'$

37+22.73 P.I. $5^{\circ}17\frac{1}{4}'$

31+75.95 P.I. $18^{\circ}49\frac{1}{2}'$

27+00 P.I. $25^{\circ}00'$

20+75.92 P.I. $33^{\circ}55\frac{1}{2}'$

Sept 16, 1959

25
~~0032~~

old STP #61

Drill Hole

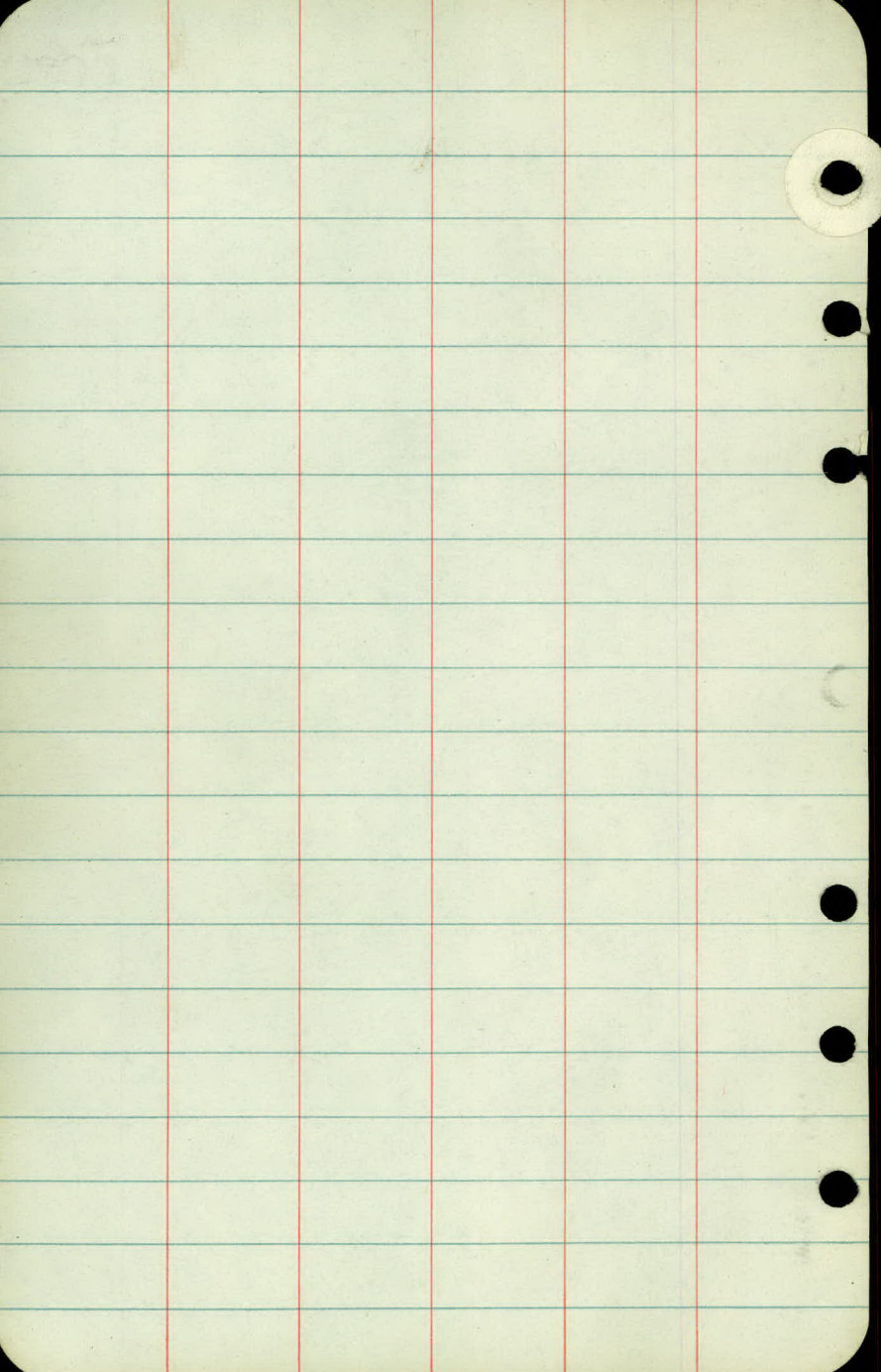
Car Wall

124.75

110.91

S.W. Cor
Ho
(Wood)

Arc Lt. $\frac{1}{4}$
(Disk) - 9



Topography

Lower Afton Rd

McKnight Rd. West to Hwy 61

NOTE: Black stationing is correct on old Lower Afton Rd from McKnight backward to U.S. 61. Red figures indicate new stationing on new line and does not match black stationing.

4/13/62 K.J.

P.C.C.

9/22/59

51
5100

Lt.

♀
1318

Rt.

+54 ^{Begin Brush} 26-32

+84 ^{STP} 27 +91 ^{STP} 34

+49 ^{10' ENT} +36 ^{8" OAK} 29

13 17 +49 ^{12" X 14 CM} 22 +37 ^{End Trees} 39

+81 ^{STP} 31 +94 ^{11 Trees} 39-51 to 4+34

+82 ^{5" OAK} 29 +86 ^{SE Cor. Ho.} 107

+62 ^{PP} 26 +72 ^{End Lilacs} 29

+32 ^{Bag Lilacs} 29 +55 ^{3-4" OAKS} 34

12 17 +20 ^{15" X 14 CM} 21 +30 ^{Fe Posts} 33-150+

52
3100

54
2100

12 18 +01 ^{PP} 26

+30 ^{3-12" E/MS} 57

+19 ^{14" E/MS} 25 +22 ^{5" E/MS} 25

12 18 +00 ^{4" E/MS} 25 +04 ^{7" E/MS} 42

+72 ^{8" E/MS} 25 +76 ^{6" E/MS} 25 +80 ^{8" E/MS} 25

+75 ^{SE cor Ho} 130 +67 ^{14" E/MS} 25 +96 ^{8" E/MS} 25

+53 ^{10' ENT} +58 ^{3 Pines} 57

+30 ^{PP} 26 +30 ^{20" OAK} 61 +35 ^{14" E/MS} 25

18 +01 ^{SE Cor Gar} 36 +17 ^{4" Tree} 41

55
1100

+29 ^{PP} 101 +35 ^{4" E/MS} 78

+35 ^{4" E/MS} 38 +40 ^{End Rod} 13

56
0100 +12 ^{Bag Rad} 33

R6
JH

16 Sept. 1959 27
40° & Windy
Rt. ~~0034~~

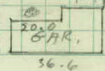
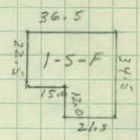
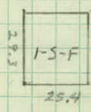
Lt.

2

Open Field

Power Line

Cultivated



McKnight Rd.



~~46~~
~~10+00~~ RT=10+03 +64 42 +69 66 PD
 NE Cor Ho NW Cor Ho (RT+55)
 +52 93 +24 73
 14" Elm NE Cor Ho (RT+34)
 +00 44 +04 65
 +09 10' ENT RT=+14 W End Culv.
 16.0
~~47~~ RT=+14 E. End 15'x17' metal Culv.
 11.5
 +00 11.5
 End Brush
 +66 18-22
 5" Elm
 +73 34 PP
 +37 28.5
 Begin Brush
 +25 18-24
~~48~~
 8+00
 11 16
 SE Cor Bldg (60x14.3)
 +86 75 L-S-F
 Begin Trees
 60
 +83
 6" OAK
 28
 +51 28
 Twin 8" OAK
 30
 +60 30
 155-75 Brush
 22
~~49~~
~~7+00~~ End Brush
 12 15 +08 24-28
 PD
 +93 26
 Brush Clump
 +80 22
 End Brush
 +15 22-33
 End Trees (26)
 +46 33
~~50~~
 6+00
 13 17
 Beg Brush
 +93 22-26
 17 Trees
 +31 to Sta 6+00 27-47
 5" OAK
 35
 13 18 +10 35

R6
JH

16 Sept, 1954 28

~~0033~~

Lt.

4

Rt.

1-5-F
24.4

2-5-F
20.4
18-0
21.0
16-0
19

1-5-F
32.5
24

Transformer on Pole

BRUSH

Power Line

1-5-F
14.3
10.0

Open Field

BRUSH

BRUSH

Wooded Area

S N

41
~~15+00~~

Lt.

+00 FC
20

10' Ent RT = 79

+59 15

PP

+10 9 +69 24

13" Oak & B.W. Pipe

±

8 21 +00 Ditch
26

Rt.

42
~~14+00~~

9+36

+89 PP
47 +89 R, R, Ditch
42

+74 RT No & So Wall Ho (SW cor)

22" COTT

+43 20

End Lilacs

+10 35

Rip Rap Ditch

23 2

+00 9

End Rock Wall

+82 12

+78 SW Cor Ho

82

43
~~13+00~~

22" COTT

+84 35

+74 Guard Rail Post

34

GP

+34 44

22" COTT

+14 43

Rip Rap Ditch

+00 4

+28 PP

(E-W wall)

+08 = RT, SW Cor Ho

+05 20

43

(Road 36' + 9)

Rock wall

+00 18

44
~~12+00~~

30" COTT

+98 18

18" Rock

Lilac Hedge (on top of wall)

+54 40

PP

+30 38

12' Ent

14' Ent

+78 38

Rock Wall (Radins to Sta 12)

+31 41

+40 9

+06 36

RT +27

W. end ctr E. end 15" X 25" CM

End of Rip Rap

Ditch

+26 on ±

45
~~11+00~~

36+6 +00 in Ditch

+87 TP
117

W Edge ctr

+42 35

10' Ent

PP

+47 40

PP

+54 10.5

+33

RT = 79

E. End 12" X 14" CM

Req. Lilac hedge

25

46
~~10+00~~

+23

33

22.5

+15

29

0036

£

Rt.



36

20+00

Lt.

+00 Fe
17

£

11 14

Ditch Rt.

+00 28

+40 $\frac{21'' \text{ OAK}}{37}$
PP

+39 26

+56 $\frac{20'' \text{ OAK}}{34}$

37

19+00

B.W.Fc
16

11 18

Ditch
26

SW Cor Ho

+51 $\frac{99}{99}$ RT=+88+38 $\frac{31'' \text{ Ash}}{34}$ +92 $\frac{16'' \text{ OAK}}{50}$

E. end 12" X 15" CM Wond Culv.

+17 $\frac{8}{10 \text{ Ent}}$ +30 13

+23 3 RT=+26 74.0 X 22.

RR Ditch -06 (Ext. Tan) SE Cor Ho.

+66 $\frac{PP}{15}$ RT=+08 78+31 $\frac{E-92'' \times 20' \text{ CM}}{21}$ +52 $\frac{\text{Wond Culv}}{14}$ +43 $\frac{10' \text{ Ent}}{13}$ RT=+49

38

18+00

B.W.Fc
42

38+7

RR Ditch

+66 $\frac{PP}{15}$ RT=+08 78+31 $\frac{E-92'' \times 20' \text{ CM}}{21}$ +52 $\frac{\text{Wond Culv}}{14}$ +43 $\frac{10' \text{ Ent}}{13}$ RT=+49

39

17+00

+00 B.W.Fence
15

11 18

RR Ditch

+51 $\frac{\text{SE Cor Ho}}{83}$ RT=+58
32 X 30

40

16+00

B.W.Fc
14

8 22

RR Ditch
29+92 $\frac{PP}{33}$

41

15+00

+00 B.W.Fc
20

8 21

+00

R.R. Ditch
26

RG
JH

Lt.

£

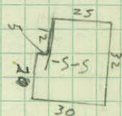
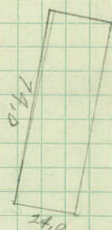
17 Sept. 1959
Weather: Perfect! 30
Rt. ~~0037~~

Waded Area

Waded Area

Rip Rap Ditch & Run

Cultivated



S ————— N

31
~~25100~~

Lt.

£.

Rt.

14 G. Rails
17
+61 PP +89 Beg Guard Rails
27 17

+15 Beg Rad
16

32

~~24100~~ +00 BW Fe +00 Ditch 15 15 +00 Ditch +00 Fe
36 21 21 42

33

~~23100~~ +00 BW Fe +00 Ditch 15 15 +00 Ditch +01 Fe Cor
36 22 20 34
+88 PP +94 Fe Cor
23.5 45

+23 Fe Cor (4' Smooth wire)
41
+20 End Hedge
28+82 RT+22

Beg in Ditch

+00 23

34

~~22100~~ +00 BW Fe +00 Ditch 16 13 +00 Ditch
27 16 18
SE Cor Ho SW Cor Ho
+68 83 RT+77 +98 82 RT+06
W end Cul Hedge RT = +53
+51 15 +51 21+15 12' ENT
RT = +36 +44 9
SW Cor Bar End 12" x 18" CM
+19 103 +33 14
+19 BW Fe (23 4) +00 Ditch +19 PP
29 10 17

35

~~21100~~

50 x 24
SE Cor Conc. Blk. Bldg + Garage
+76 98 RT = +84.5

36

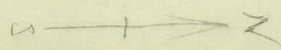
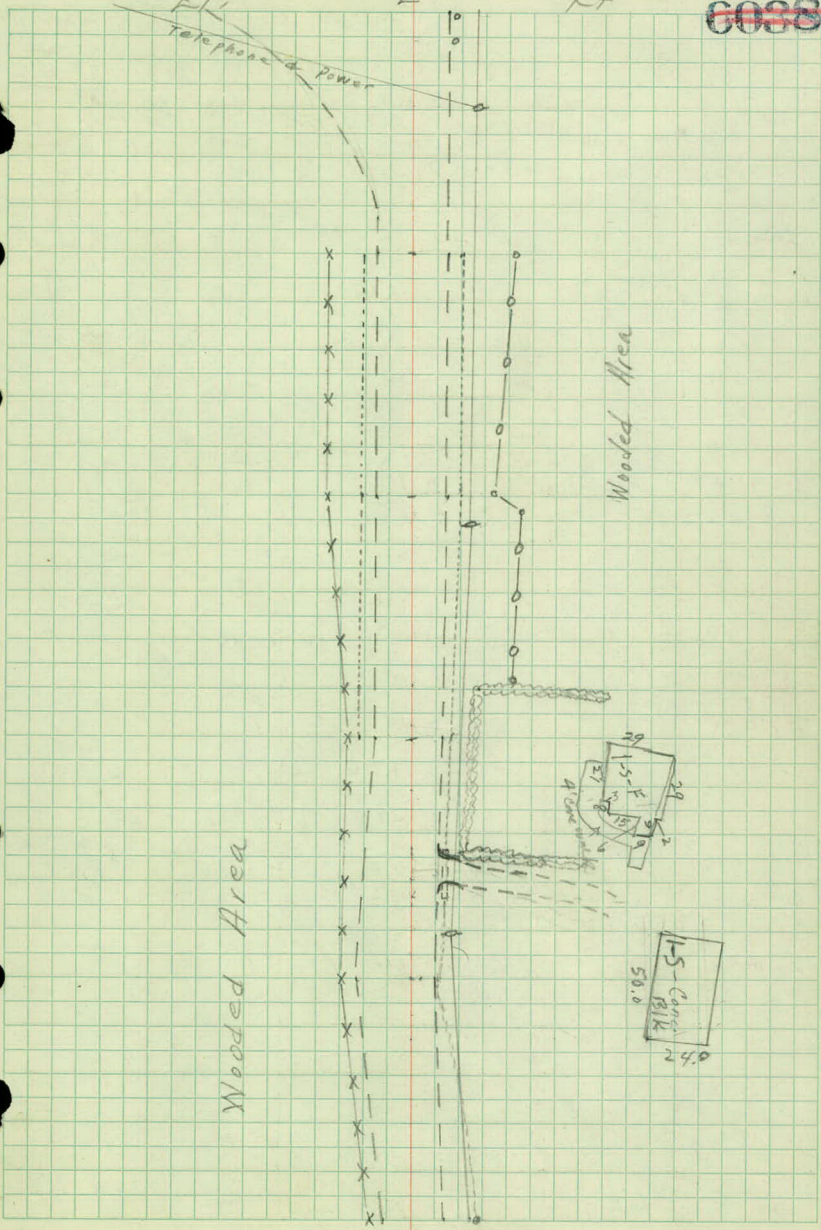
~~20100~~ +00 FC 11 14 +00 Ditch
17 28

R6
JH

18 Sept. 1959
45°
RT

31

~~COSS~~



26
29+00

Lt,

16.11

100 R_T, Rail
13

conc Ditch
37

+22 PP

27
29+00

100 Rip Rap
G. Rail 29
12 15 +00 17.5 +00 Conc. Ditch
47

+38 End G. Rails
11

+30 Edge Rip Rap
36
Begin Conc Ditch 9' wide
+29 47
w End 60" storm drain
+29 47

28
28+00

+00 G. Rail
11

9 17 +00 G. Rail
20

+60 wooded Area

+47 PP 12" Cott
25 +55 59

+26 96 RT=+61 +13 20
Sweet Ho 4" Maple

+13 56 RT=+31 +00 18

29
29+00 +00 G. Rail
23

21 4 +00 6 Rail
6 +00 14" Cott.
38

+86 10
Begin G. Rail

+69 10 RT=+64

+50 End Rad
15

+47 End G. Rail End Wooded
15 +53 Area

30
26+00

+58 Beg G. Rail
120

+52 Wedge Island
25

+52 B. Rad
110

14 G. Rails
18

+67 PP
23

+22 End Rad
135

+48 Rad
16+39

+19 Edge Island
25

+26 RAD
15+41

+34 N. end 60" x storm Drain
62

31
25+00

+02 PP
126

14 +00 G. Rails
17 +09 Fe cor
47

17 Sept. 1959
55° - Breezy
Rt

32

~~0009~~

Lt.

£

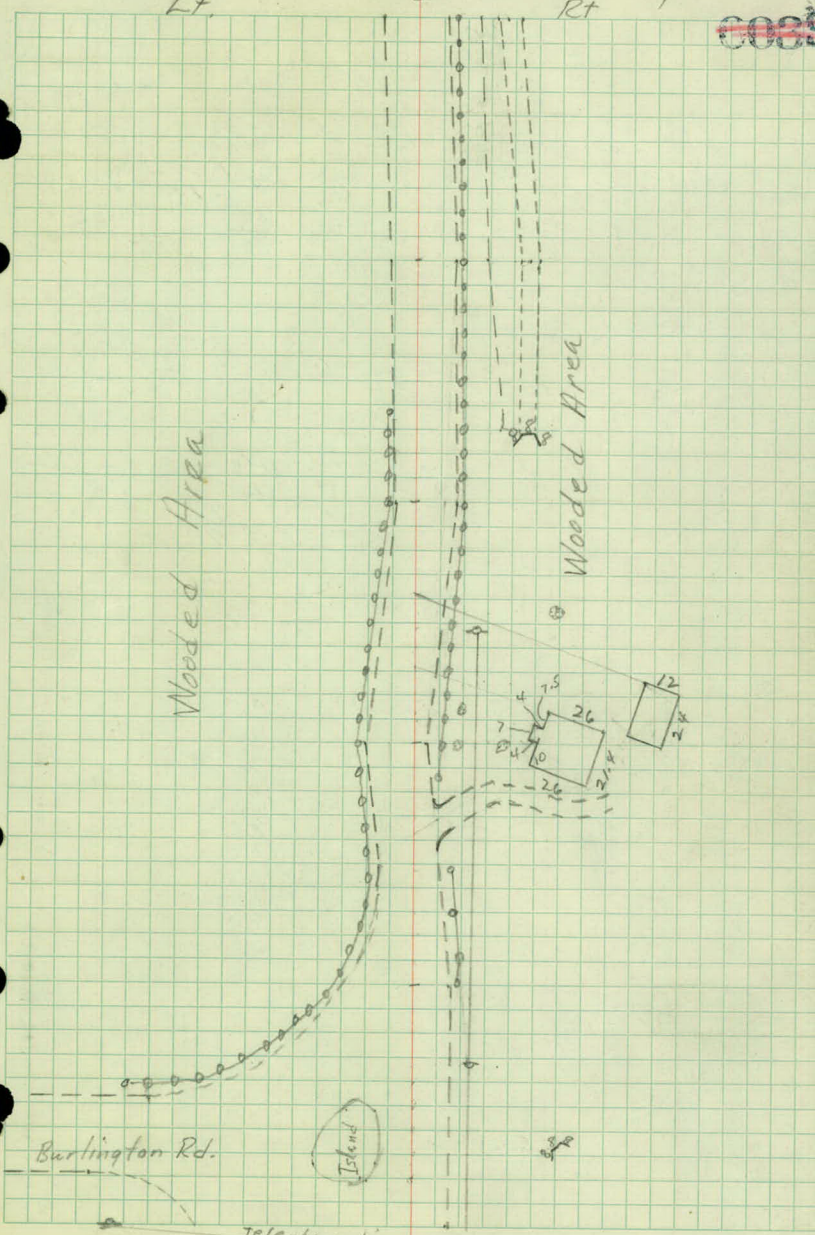
Wooded Area

Wooded Area

Burlington Rd.

Island

Telephone Line & Power



Lt $\frac{\$}{\text{Wall Road GR RR Pt}} \frac{\text{Ditch}}{\text{Ditch}}$
 25 21 100 $\frac{31}{22-2}$ $\frac{6}{12}$ $\frac{23}{23}$

+23 $\frac{35 \text{ Conc Wall}}{31}$ +87 $\frac{\text{R Tie}}{\text{No Rt}}$ +84 $\frac{\text{PP}}{9}$ +84 $\frac{\text{SE Shed}}{\text{SE Cov Ho}}$ 105 50
 +14 $\frac{\text{SE 18' SCP}}{27}$ +36 $\frac{\text{NE 18' SCP}}{18'}$

24 22 100 $\frac{\text{Road}}{21-3}$ $\frac{\text{GR}}{7}$ $\frac{\text{RR}}{11}$ $\frac{\text{Ditch}}{22.5}$

+150 $\frac{\text{Road}}{21-3}$ $\frac{\text{GR}}{7}$ $\frac{\text{RR}}{10}$ $\frac{\text{Ditch}}{22}$

27 23 100 $\frac{\text{Road}}{19-5}$ $\frac{\text{GR}}{8}$ $\frac{\text{RR}}{12}$ $\frac{\text{Ditch}}{24}$
 +70 $\frac{\text{PP}}{10}$

+67 $\frac{\text{GP}}{28}$ +150 $\frac{\text{Road}}{15-8}$ $\frac{\text{GR}}{10}$ $\frac{\text{RR}}{14}$ $\frac{\text{Ditch}}{26'}$

22 24 100 $\frac{\text{Road}}{12-13}$ $\frac{\text{GR}}{17}$ $\frac{\text{RR}}{22}$ $\frac{\text{Ditch}}{34}$

+150 $\frac{\text{Road}}{11-14}$ $\frac{\text{GR}}{17}$ $\frac{\text{RipRap}}{24}$ $\frac{\text{Ditch}}{36}$

25 197 $\frac{\text{GP}}{25}$ $\frac{\text{Road}}{17-10}$ $\frac{\text{GR}}{13}$ $\frac{\text{RipRap}}{21}$ $\frac{\text{Ditch}}{33}$
 +95 $\frac{\text{PP}}{18}$ +65 $\frac{\text{NE 15' SCPX-Drain}}{28}$

+150 $\frac{\text{Road}}{9}$ $\frac{\text{GR}}{12}$ $\frac{\text{Ditch}}{32}$ $\frac{\text{Edge R. 20'}}$

+95 $\frac{\text{S.E. 15' SCPX-Drain}}{20}$

26 100 $\frac{\text{RipRap}}{25}$

FK.
KP
KJ

Lt

Sept. 28, 1959
Overcast 55°

33

~~6010~~

Wooded Area

Wooded Area

Wooded Area



Lt

$\frac{2}{\text{Road}} \quad \frac{GR}{8} \quad \frac{RR}{15} \quad \frac{RT}{27} \quad \frac{2 \text{ Ditch}}{27}$
 20 3

+16 $\frac{PP}{34}$

39 17

$\frac{\text{Road}}{22-1} \quad \frac{GR}{7} \quad \frac{RR}{17} \quad \frac{2 \text{ Ditch}}{28}$

+44 $\frac{E. Wall}{31}$

38 18

$\frac{Wall}{31} \quad \frac{Road}{23} \quad \frac{GR}{9} \quad \frac{RR}{15} \quad \frac{2 \text{ 11.5' Ditch}}{30}$

+52 $\frac{ER}{6}$

+76 $\frac{PP}{37}$

+43 $\frac{Bip. R.R.}{19}$ +45 $\frac{S. Wing}{24}$ $\frac{N. Wing}{35}$
 +37 $\frac{N.E. 6' SCP + 9' Headwall}{28}$

+41 $\frac{NE 12' CM}{31}$ +07 $\frac{R. Tie}{Ho. R. T.}$

+12 $\frac{SEC. C. Ho.}{110}$ +34 $\frac{GR}{11}$

37 19

$\frac{Wall}{32} \quad \frac{Road}{25} \quad \frac{27}{117} \quad \frac{Ent}{55} \quad \frac{BGR}{31}$

+61 $\frac{R. Tie}{Ent 37+17}$

+54 $\frac{NE 36' SCP}{117+6' Headwall}$ +48 $\frac{BR}{120}$

+45 $\frac{TP}{59}$

+42 $\frac{Arc. Lt.}{33}$ +65 $\frac{POR}{74}$ +87 $\frac{POR}{40}$ +11 $\frac{ER}{105}$

+04 $\frac{N. End 42' SCP}{104}$ +12 $\frac{POR}{60}$

36 20

$\frac{Wall}{31} \quad \frac{Road}{25} \quad \frac{100}{38} \quad \frac{Ent}{55.4}$

+86 $\frac{14'E}{40}$ +92 $\frac{PP}{116}$

+59 $\frac{Angle in BR}{9}$ +70 $\frac{EGR}{29}$

+53 $\frac{BR}{4}$ +75 $\frac{POR}{15}$ +75 $\frac{2' Ent}{58}$

+59 $\frac{2' 6' SCP + 9' Headwall}{24}$

35 21

+51 $\frac{S. Wing}{18}$ $\frac{N. Wing}{29}$ $\frac{Bip. R.R.}{13}$

FK
KP
KT
JH

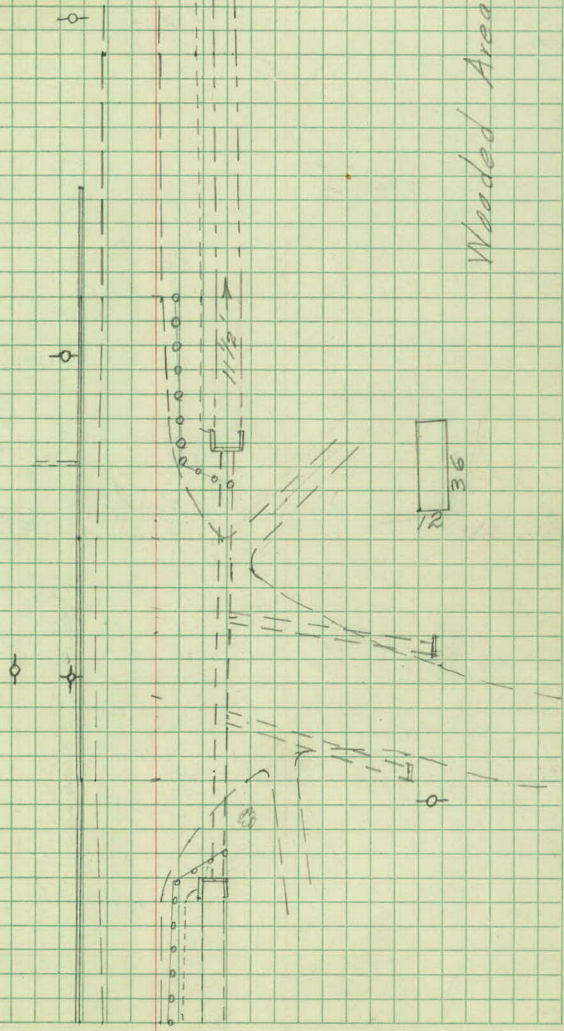
27

Sept 28, 1959
Sept 29, 1959
Cold 45° overcast

34
~~CO-1~~

Wooded Area

Wooded Area



45 11

Road
8 17E Ditch
69+71 E 9' Conc Ditch
72

44 12

Road
1-19+98 W. Br
9.5+90 W. Br
27+92 O. Br
4+87 Cor Br
20+73 W. Br
14.5+77 Cor Br
5+68 W. Br
23+71.5 Cor Br
18.5

43 13

+56 TP
43Road
6-16+26 End S. Wall + B. Conc Wall
112+24 Angle in Wall
103

42 14

+03 PP
38Road
9 15+04 B. Conc Wall
90

41 15

Road
10 13+95 Angle in Wall
99+70 Begin Stone Wall
112+70 RR
20+83 ERR
37+62 PP
29+68 EGR
13+77 End 11.5' Conc Ditch
44+62 E Ditch
27+55 RR
16

40 16

+53 E Ditch
27

Sept. 29, 1959

35

~~COLE~~

Lt

±

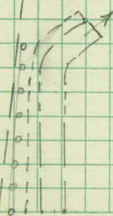
Rt

Bridge
Not Needed

Wooded Area

Wooded Area

Wooded Area



506

Road± Ditch
100.5+150 ± Ditch
99+27 16" BE
73

497

Road
13-13± 9' Ditch
100+100 18" CM
195+74 ± 6 CM + Headwall
100+158 28" E
87+73 18" BE
64+159 MH
45

+

+39 30" E
60+30 PP
61+43 16" E
63+11 WE 15" CM
43+23 ER
74+26 30" E
35

488

+09 BR
38+21 Ch CB
48+ Ditch w/ Hdwall
101+74 BR
20+79 Ac Lt
23+61 Edge Conc
±+159 TP
22+47 ER at Conc
77+49 GR
±+155 Road
±+62 ER
11+91 ER
12+38 TP
69+40 NE 15" SCP
1+157 EGR
9+35 Road
55-10+13 SE 15" SCP
43+20 Road
42-12+45 EE 15" CM With Headwalls
7.5

479

+7 GR
7+37-11 Road
±+ ± Ditch
84+85 TP
66+150 GR
±+150 ± Ditch
73

4610

Road
21-2GR
6± Ditch
68+150 ± Ditch
66+24 TP
54

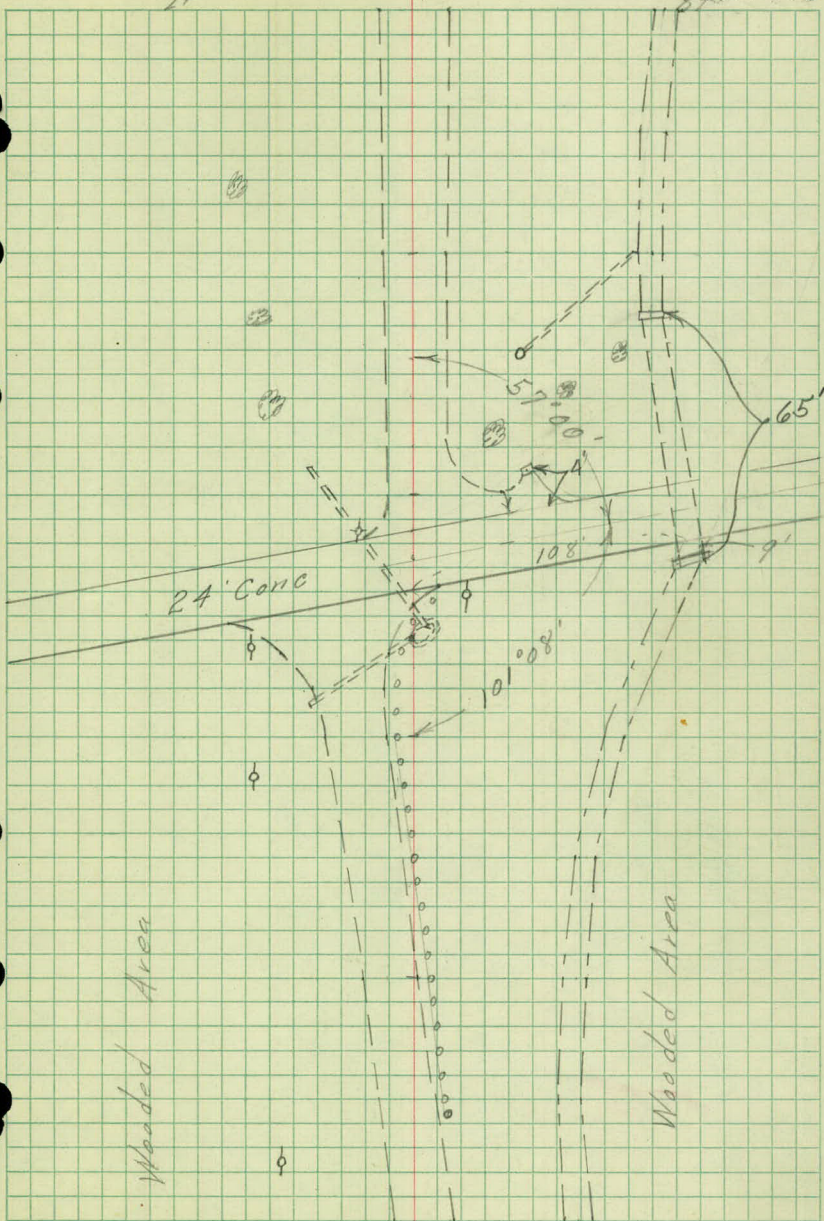
4511

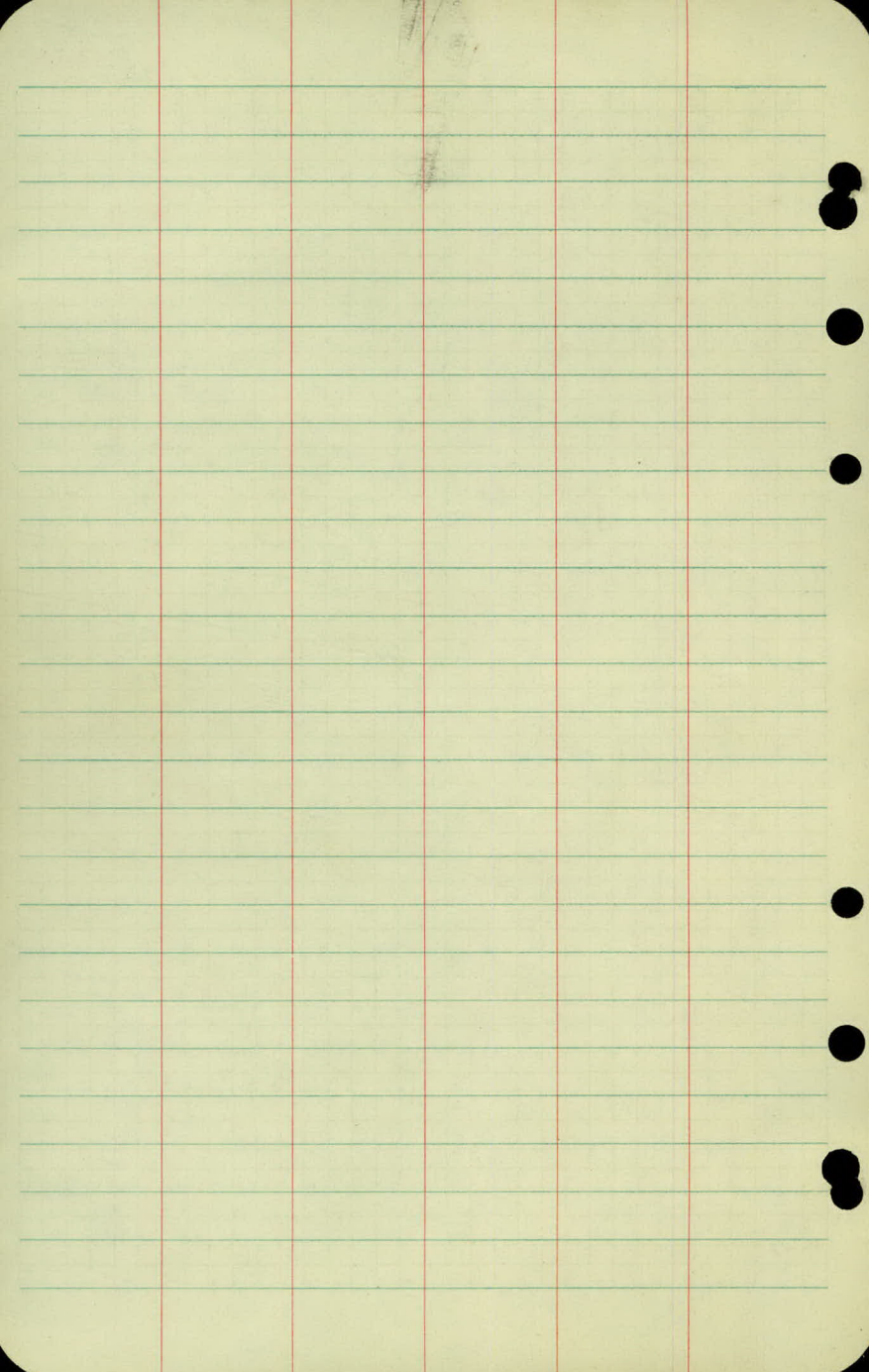
+43 BGR
14

Sept 29, 1959

36

~~CONFIDENTIAL~~





11/16/59 ^{LC.} JES.

spike in 18" oak 60' Lt. of Sta. 0+12

spike in 36" oak 145' Lt. Sta 13+25

Top Lower step @ 2081 Lower Afton Rd (S.E. Cor.)

S.E. Cor. Deer sill. Ho. # 2019 Lower Afton Rd.

Tip S.E. Cor. of Headwall at E. side of Battlecreek Rd.
at Lower Afton Rd.

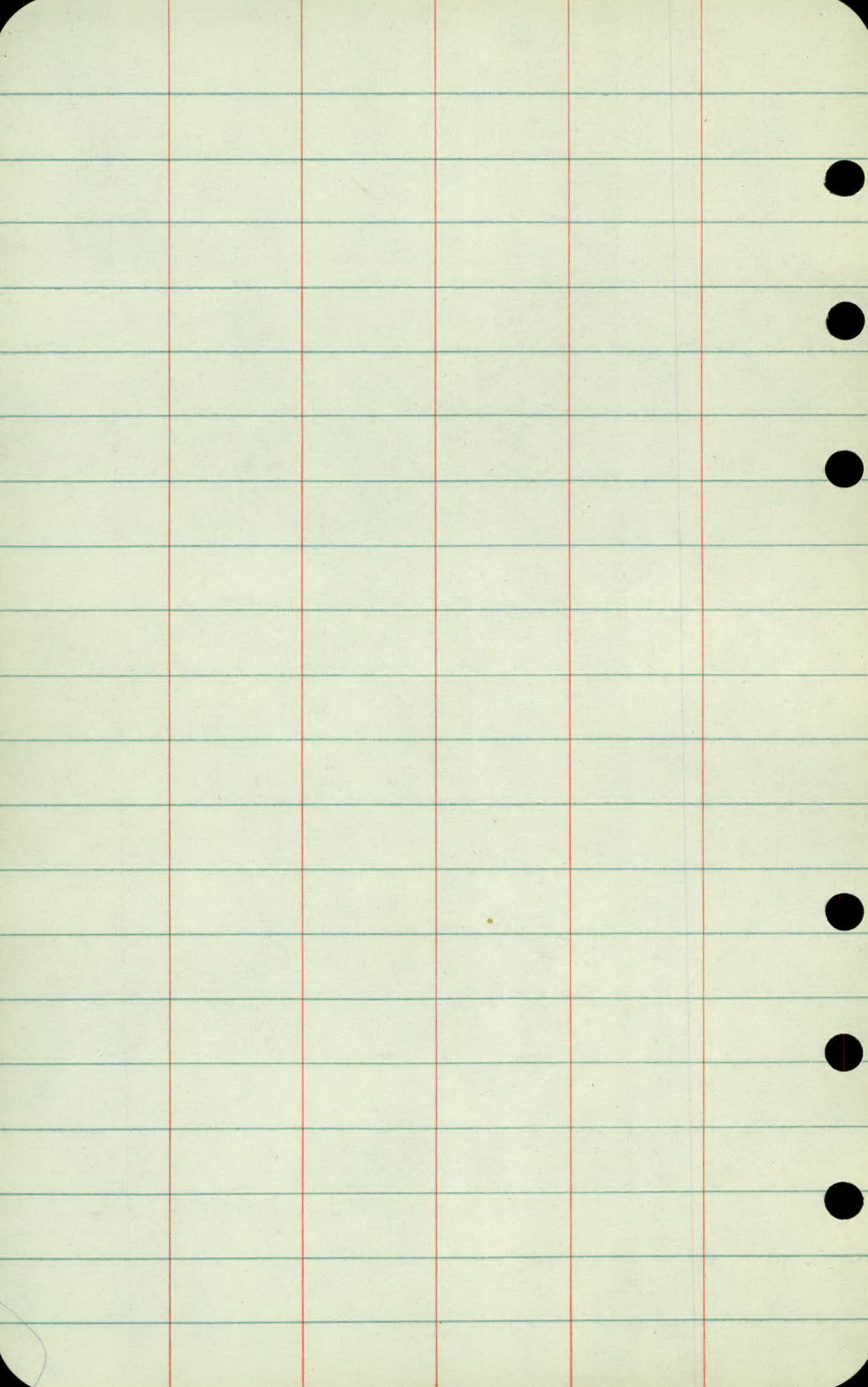
B. M.

7.34

750.99

751.39

S.E. Cor Mont. Lower Afton + Pt. Douglas Rd



Lower Afton Rd.

Profile Levels

No. of Lower Afton Rd

McKnight to Point Douglas Rd.

LINE REVISION

Sta + Δ - Elev

B. M. 1.74 904.28

902.94

902.54

0 + 00

+ 14

+ 53

1 + 00

+ 40

+ 55

2 + 00

+ 15

+ 21

Creek

Lt

£

Pt

1

03.5

0.8

/

01.1

3.2

/

96.1

8.2

/

96.8

7.5

/

96.8

7.5

/

96.0

8.3

/

93.7

10.6

/

89.3

15.0

/

87.0

17.3

/

Sta 4 π - Eleo

904.28

2 + 30

+ 42

+ 73

3

+ 36

+ 62

4

T.P. 4.74 897.77 11.25 893.03

+ 32

+ 59

Lt

E

Rt

2

88.5

15.8

✓

90.9

13.4

✓

87.6

16.7

✓

89.5

14.8

✓

91.8

12.5

✓

91.3

13.0

✓

93.0

11.3

✓

94.0

3.8

✓

95.6

2.2

✓

Sta	+	Δ	-	Elev
-----	---	----------	---	------

		892.77		
--	--	--------	--	--

5+00				
------	--	--	--	--

+43				
-----	--	--	--	--

+78				
-----	--	--	--	--

6				
---	--	--	--	--

+29				
-----	--	--	--	--

+59				
-----	--	--	--	--

+63				
-----	--	--	--	--

X ditch				
---------	--	--	--	--

+66				
-----	--	--	--	--

+82				
-----	--	--	--	--

£

3

95.3

2.5

/

94.0

3.8

/

93.1

4.7

/

92.7

5.7

/

91.1

6.7

/

89.1

8.7

/

86.9

10.9

/

88.4

9.4

/

87.1

10.7

/

Sta + π - Elev

897.77

7+00

+28

+59

+80

8+00

T. P. 0.12 885.23 12.66 885.11

+20

+33

+63

+75

£

4

86.1

11.7

85.2

12.6

83.1

14.1

82.4

15.4

81.8

16.0

80.8

4.4

80.1

5.1

79.2

6.0

79.6

5.6

Sta + $\nearrow$ - Elev

885.23

8+79 X ditch

+82

9

+50

10

+33

+38 Creek

+43

+54

~~4~~

17.9

7.3

18.9

6.3

16.2

7.0

17.3

7.9

16.6

8.6

15.1

9.5

14.1

11.1

15.2

10.0

16.2

9.0

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

		885.23		
--	--	--------	--	--

10+78				
-------	--	--	--	--

11				
----	--	--	--	--

T.P.	7.08	881.64	10.67	874.56
------	------	--------	-------	--------

+22	creek			
-----	-------	--	--	--

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

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

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

+92				
-----	--	--	--	--

12				
----	--	--	--	--

+21	creek			
-----	-------	--	--	--

£

6

14.7

10.5

14.5

10.7

10.1

11.5

14.4

7.2

15.3

6.3

14.3

7.3

13.7

7.9

11.4

10.2

11.3

14.3

Sta + π - E/cu

881.64

12 + 45

+ 62

+ 77

+ 82

13

B. M.

2.13

879.51

879.88

+ 24

+ 56

+ 85

14 + 00

T.P.

9.37

881.29

9.72

871.92

2

7

66.5

15.1

67.8

13.8

70.2

11.4

73.2

8.4

72.9

8.7

spk in 36" oak 145' pt. sta 13+25

73.1

7.9

74.4

7.2

73.0

8.6

71.9

9.7

Sta + T - Elev

881.29

B. M.

4.74

876.55 (876.94)

T. B. M. 0.22 872.14

876.92

14 + 16

+27

+31 Creek

+35

+50

+67

+82

+97

2

8

Ho # 2081 Lower Afton Rd

19.6

2.5

1.9

10.2

60.5

11.6

61.4

10.7

62.0

10.1

63.0

9.1

65.1

7.0

65.9

6.2

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

		872.14		
--	--	--------	--	--

15400				
-------	--	--	--	--

+22				
-----	--	--	--	--

+39				
-----	--	--	--	--

+43				
-----	--	--	--	--

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

+57				
-----	--	--	--	--

+72				
-----	--	--	--	--

+80	Creek			
-----	-------	--	--	--

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

£

9

5.3

6.8

5.9

6.2

5.5

6.6

4.0

8.1

3.9

8.2

3.4

8.7

5.2

16.9

5.6

17.5

5.1

17.0

Sta

+

π

-

Elev

872.14

15 + 93

16

+23

+50

+63

+76

17

+27

+50

£

10

62.1

9.4

63.0

9.1

62.3

9.8

63.0

9.1

65.3

6.8

66.1

5.4

66.5

5.6

67.4

4.7

68.2

3.9

Sta + π - Elev

872.14

17+77

18

+18

+27

+45

+50

+55

T.P. 1.20 861.02 12.32 859.82

+65

+71

C

61.4

4.7

66.1

5.4

63.9

6.2

65.8

6.3

64.1

7.4

63.9

8.2

63.6

8.5

53.1

7.9

51.8

9.2

sta	+	π	-	Elev.
-----	---	-------	---	-------

		861.02		
--	--	--------	--	--

18+79				
-------	--	--	--	--

T.P.	3.93	851.63	13.32	847.70
------	------	--------	-------	--------

+82				
-----	--	--	--	--

+85				
-----	--	--	--	--

+91				
-----	--	--	--	--

19				
----	--	--	--	--

+05				
-----	--	--	--	--

+27				
-----	--	--	--	--

+38				
-----	--	--	--	--

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

~~4~~

48.0

13.0

46.6

5.0

44.6

7.0

45.8

5.8

41.8

9.8

43.9

7.7

42.9

8.7

46.0

5.6

41.9

9.7

Sta + π - Elev

851.63

19 + 67

+ 87

+ 89 creek

+ 95

20

+ 22

T. P. 4.35 843.50 12.48 839.15

+ 31 creek

+ 37

+ 50

~~E~~

13

40.4

11.2

38.8

12.8

37.5

14.1

38.9

12.7

39.0

12.6

37.6

14.0

36.7

7.3

38.3

5.2

39.9

3.6

sta	+	π	-	Elev
-----	---	-------	---	------

sta	+	π	-	Elev
		843.50		

sta	+	π	-	Elev
20+60				

sta	+	π	-	Elev
+70				

sta	+	π	-	Elev
+88				

sta	+	π	-	Elev
+94				

sta	+	π	-	Elev
21				

sta	+	π	-	Elev
+09				

sta	+	π	-	Elev
+20				

sta	+	π	-	Elev
+26				

sta	+	π	-	Elev
+50				

£

14

40.5

3.0

39.2

4.3

38.5

5.0

36.4

7.1

34.4

9.1

35.6

7.9

35.0

8.5

36.4

7.1

36.2

7.3

Sta + π - Elev

843.50

21 + 64

22

+ 26

+ 40

+ 44

+ 50

+ 61

+ 67

+ 80

£

34.7

8.8

32.2

11.3

30.4

13.1

28.5

15.0

27.7

15.8

28.6

14.9

33.0

10.5

38.2

5.3

40.7

2.8

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

		843.50		
--	--	--------	--	--

22+95				
-------	--	--	--	--

23				
----	--	--	--	--

T.P.	3.14	842.29	4.35	839.15
------	------	--------	------	--------

+11				
-----	--	--	--	--

+17				
-----	--	--	--	--

+30				
-----	--	--	--	--

+47				
-----	--	--	--	--

+57				
-----	--	--	--	--

+78				
-----	--	--	--	--

24				
----	--	--	--	--

~~±~~

39.9

3.6

✓

39.1

4.4

✓

38.6

3.7

✓

40.2

2.1

✓

40.7

1.6

✓

36.5

5.8

✓

39.3

3.0

✓

39.7

2.6

✓

39.2

3.1

✓

Sta	+	Δ	-	Elev
-----	---	----------	---	------

		842.29		
--	--	--------	--	--

24 + 31				
---------	--	--	--	--

+ 56				
------	--	--	--	--

25				
----	--	--	--	--

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

B.M.	0.06	838.26	4.16	838.13	838.60
------	------	--------	------	--------	--------

26					
----	--	--	--	--	--

+ 12					
------	--	--	--	--	--

+ 18					
------	--	--	--	--	--

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

27					
----	--	--	--	--	--

T.P.	0.45	825.06	13.65	824.61	
------	------	--------	-------	--------	--

Lt

£

Rt

38.0

4.3

37.2

5.1

38.0

L Rd

4.3

49

36.0

6.3

34.3

8.0

S.E. cor. of Deer sill Ho. #2019 Lower Hftan Rd

L Rd

31.46

6.8

28

31.3

7.0

30.1

8.2

27.8

10.5

26.6

11.7

24.76

L Rd

13.5

21

22.6

15.7

Sta	+	π	-	Elev
		825.06		

27 + 50

28

+ 50

T.P.	0.21	811.91	13.36	811.70
------	------	--------	-------	--------

29

+ 50

30

+ 50

31

T.P.	0.34	798.94	13.31	798.60
------	------	--------	-------	--------

+ 50

Lt

¢

Rt

19.4
5.7

/

17.86
\$ Rd. 2.2
21

14.8
10.3

/

14.46
\$ Rd. 10.6
22

09.5
15.6

/

10.91
\$ Rd. 1.0
24

05.6
6.3

/

07.71
4.2
25

01.6
10.3

/

04.71
7.2
26

09.5
12.4

/

02.01
9.9
25

07.4
14.5

/

09.7
12.2
23

05.9
16.0

/

07.7
1.2
21

04.8
4.1

/

Sta + Δ - Elev

798.94

32 +00

+50

33

+50

34

B.M.	6.98	796.21	9.75	789.19	789.63
------	------	--------	------	--------	--------

+50

35

side set

T.P.	12.19	806.80	1.60	794.61
------	-------	--------	------	--------

Lt.

£

Rt

£ Rd.

96.2

94.4

2.7

4.5

19

94.3

4.6

93.9

92.6

5.0

6.3

19

91.9

7.0

91.8

91.7

7.1

7.2

19

Top S.E. Cor. Headwall East side of Battle Creek Rd

90.6

5.6

89.7

35+00

89.6.5

89.5

91.3

94.4

Battle Creek Rd

6.7

4.9

1.8

50 100

98.0

01.8

05.9

8.8

5.0

0.9

153

200

250

sta + π - Elev

T.P. 4.41 793.64 789.23

35+50

36.

+50

37

T.P. 1.57 783.10 12.11 781.53

+50

38

+50

+89

39

Lt

£

Rt

£ Rd.

88.3

88.1

5.3

5.5

15

86.7

86.6

6.9

7.0

17

84.6

9.0

82.7

79.3

10.9

14.3

28

75.1

8.0

78.3

69.3

4.8

13.8

31

67.5

15.6 ice

67.3

15.8

73.4

71.1

9.7

12.0

29

sta + π - Elev

783.10

39+08

+34

+41

+62

+80

4/0

T.P. 0.39 769.84 1365 769.45

+50

41

+50

Lt

E

Rt

72.3

10.8

70.3

12.8

72.6

10.5

71.4

11.7

68.9

14.2

68.0

Q Rd

15.1

25

67.7

15.4

64.1

5.7

63.6

6.2

18

62.1

7.7

61.6

8.2

Sta + Δ - E/100

769.84

42+00

+50

43

+50

44

T.P. 2.30 759.89 12.25 757.59

+32

+59

+75

45

Lt

~~E~~

Rt

60.7

60.6

4 R

9.1

9.2

11

60.0

9.8

59.4

59.4

10.4

10.4

9

58.7

11.1

57.7

57.5

12.1

12.3

13

56.3

3.6

54.1

5.8

52.0

7.9

54.5

51.1

5.4

8.8

25

Sta + π - Elev

759.89

45+26

+ 63

+ 64

+ 69

+ 79

+ 92

B. M.

8.87

751.02

751.39

#

50.8

9.1

49.6

10.3 Headwall Bottom

51.8

8.1 Headwall Top

52.1

7.8

51.1

8.8

51.13

8.76 conc.

S.E. Cor. of Meant. Point Douglas Rd.
at Lower Pfton Rd.

sto

+

π

-

Elev

1
Lower Afton Rd.

Bench Levels

Lower Afton Rd + Point Douglas
To Battle Creek Bridge

also to 30" Elm to Lt Sta 125+10
Hiway # 61

LINE REVISION

Sta	+ -	Δ	-	Elev	
B.M.	0.46	751.45			<u>751.39</u> 750.99
T.P.	0.30	738.19	13.56	737.89	
T.P.	0.38	725.09	13.48	724.71	
T.P.	5.89	719.82	11.16	713.93	
T.P.	8.81	722.78	5.85	713.97	
T.P.	8.96	731.74	0.00	722.78	
T.P.	5.09	735.30	1.53	730.21	
B.M.	0.45		1.69	733.61	
	4.61	722.61	12.06	722.00	
			0.22	721.35	
B.M.	0.95	751.94			<u>751.39</u> 750.99
T.P.	1.34	739.98	13.30	738.64	
T.P.	0.55	731.77	8.76	731.22	
B.M.	9.24		5.30	726.47	<u>726.92</u> 726.52

Top S.E. cor. Mont. Point Douglas Rd and
Lower Afton Rd.

Fed. proj # 307-F. Battle Creek

Top N. post-E. Rail # 5542

Difference 677 726.84 # 5770 /

Top S.E. Cor Mont Point Douglas Rd + Lower
Afton

Spk. in 30" Elm 70' Lt. Sta 125+10 Hwy # 61

876.94

sta $21 + 50$

KP
JS
LB
DS

6 APRIL 1962

1.

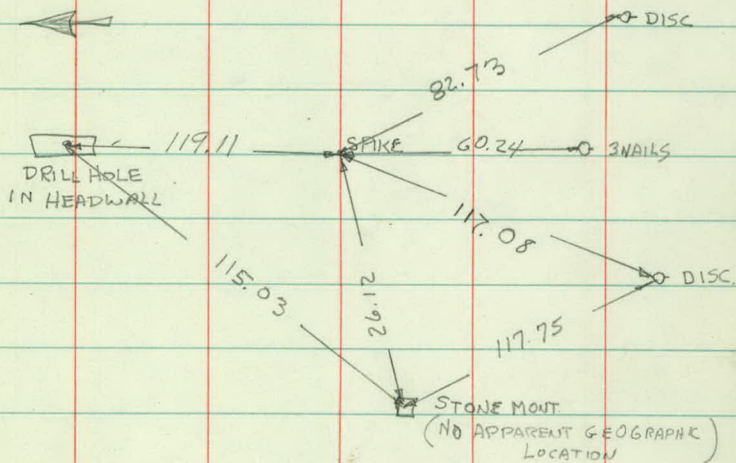
LOWER AFTON RD

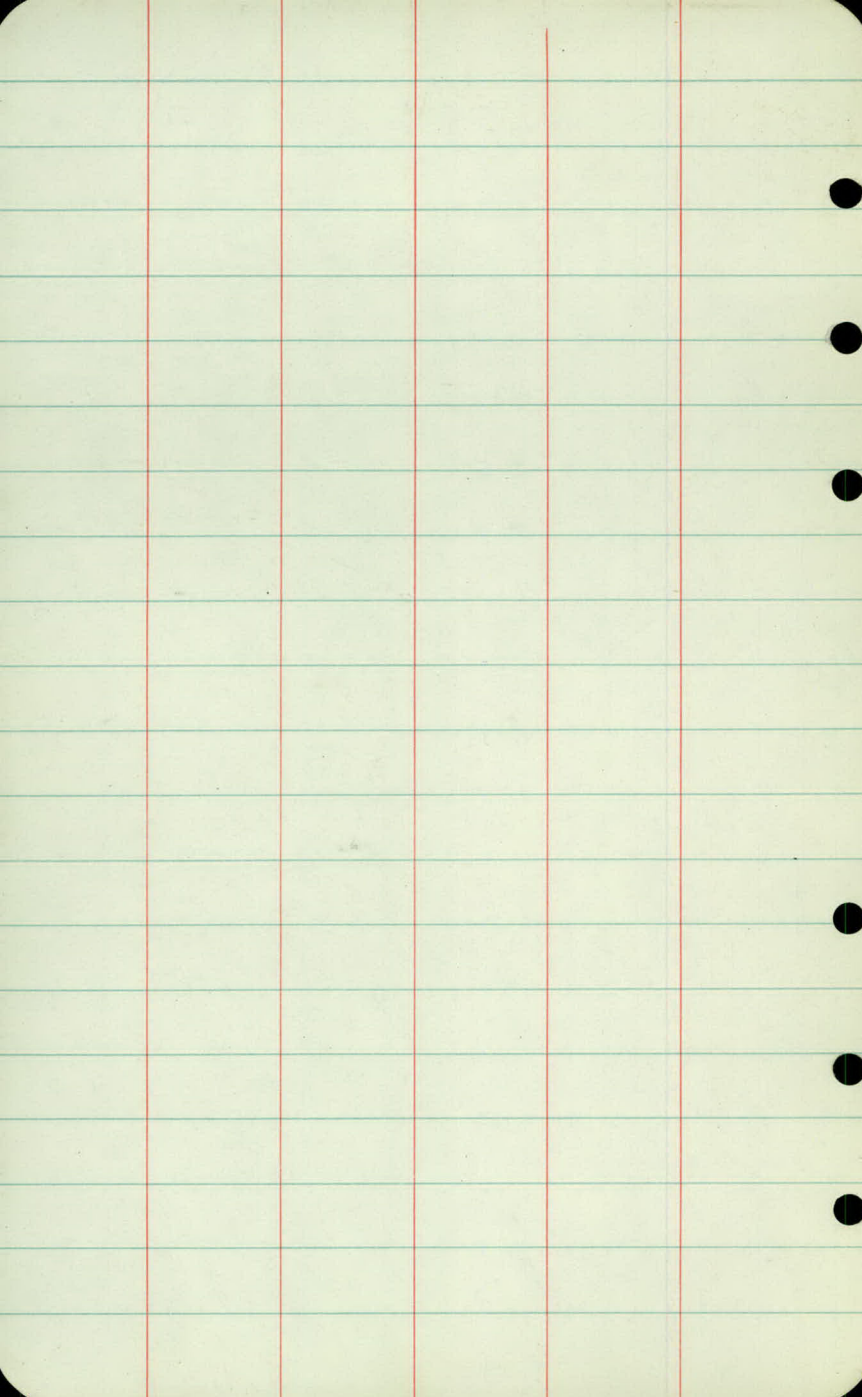
S.T.H. #100 TO PT. DOUGLAS RD

TIES

6 APRIL 1962

2.





LOWER AFTON RD

PT DOUGLAS RD TO STH #100

INTERSECTING ANGLE AT PT.

DOUGLAS RD.

STA

Point

$\Delta L +$

$\Delta R +$

10+34.84 PI $24^{\circ}58\frac{1}{2}$

16+10.57 P.O.S.T. = $\frac{1}{2}$ PT DOUGLAS RD. (24.0 cong)

8+76.10 P.C.

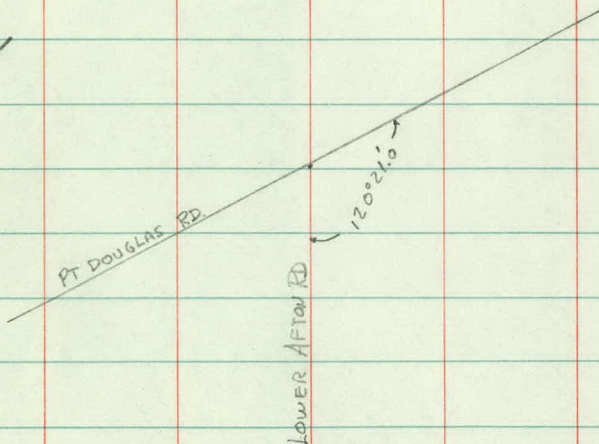
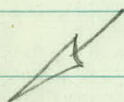
11 APRIL 1962

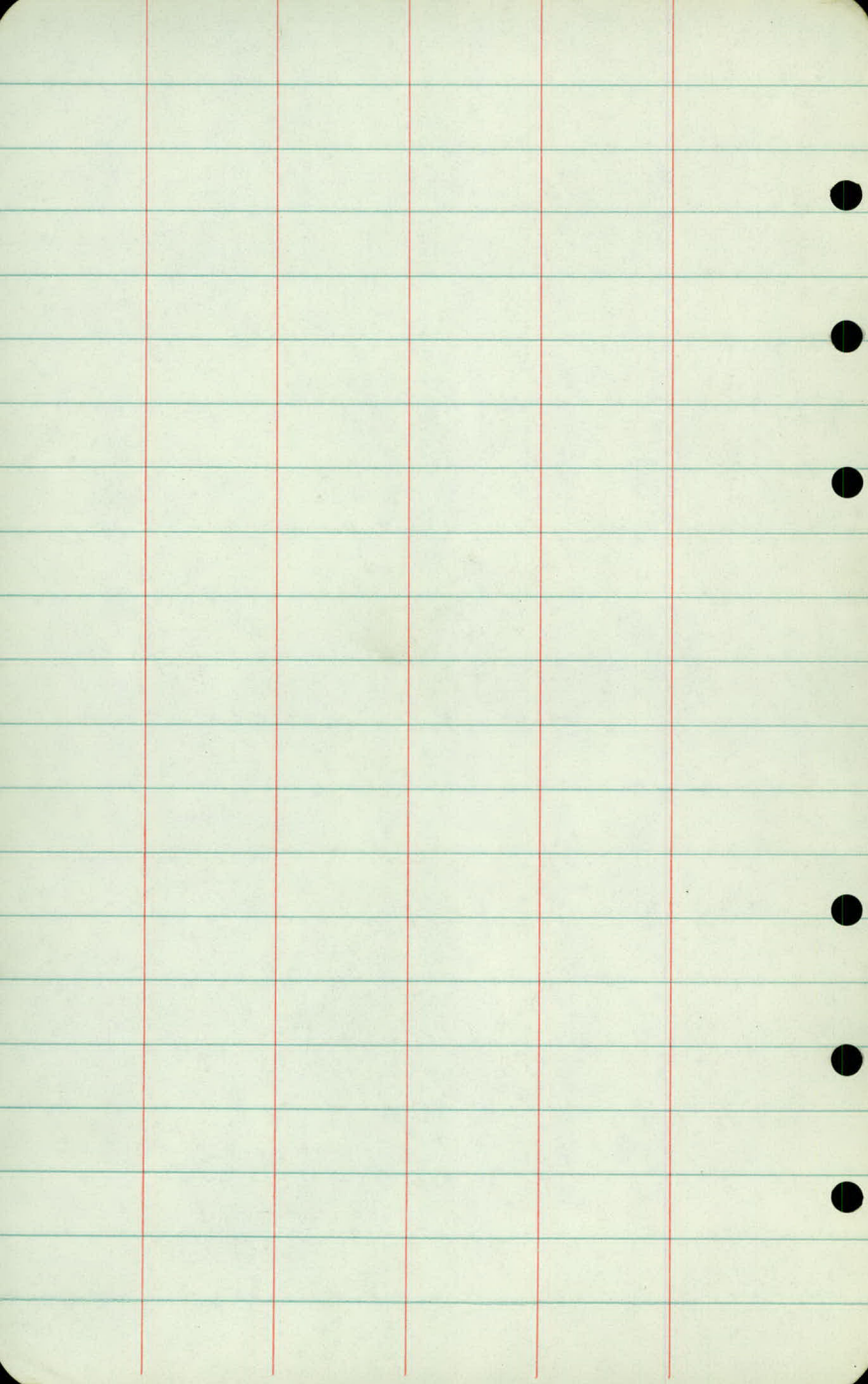
4.

LT

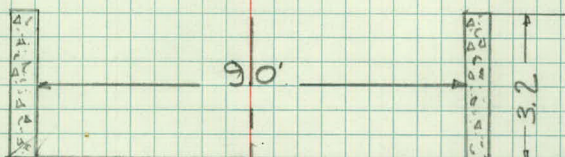
~~S~~

RT.





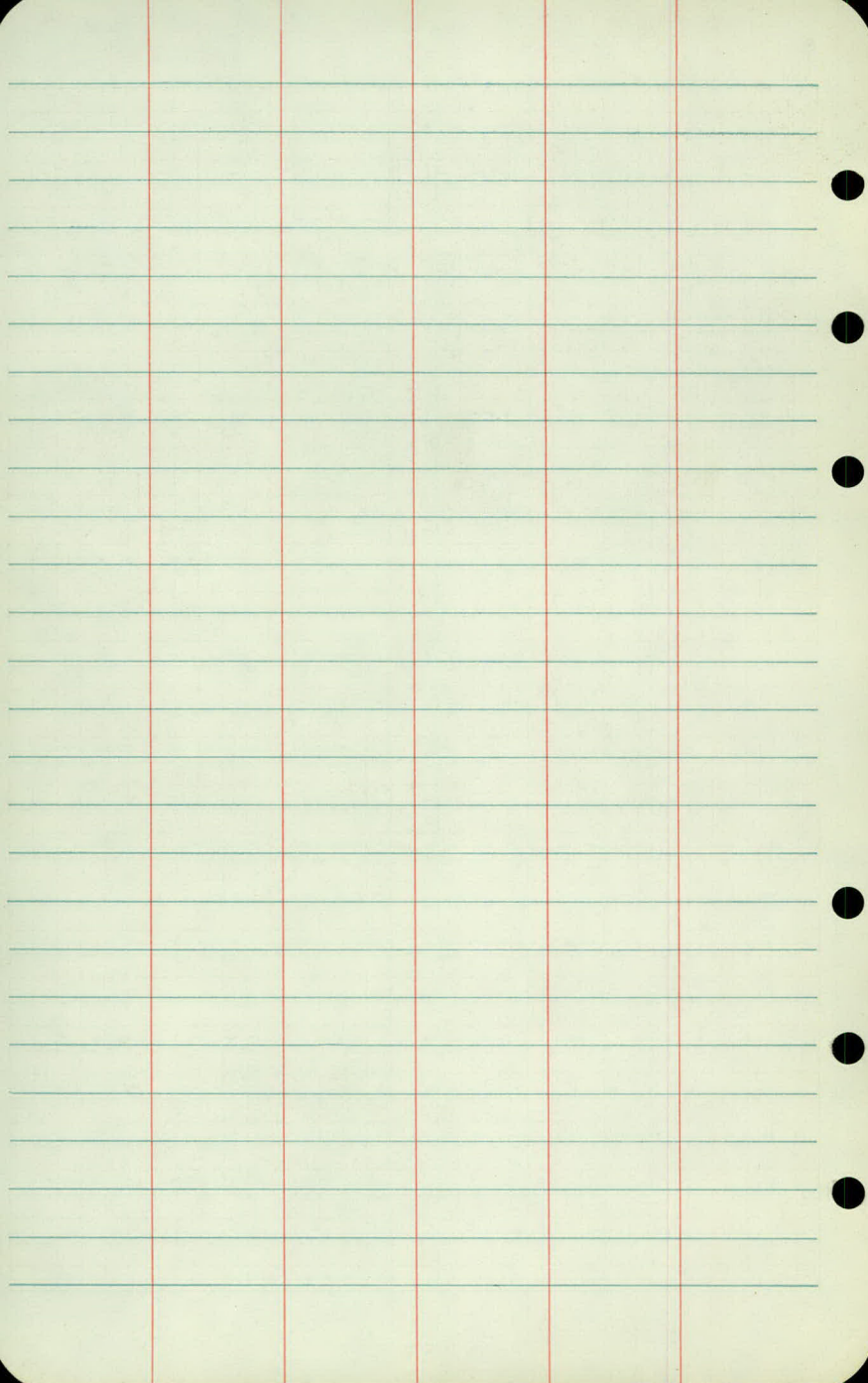
DETAIL VIEW #1



TYPICAL DITCH

SECTION

STA 8+00 TO STA 15+62



DETAIL VIEW #2



10+43

DITCH

MASONRY
RUBBLE
STRUCTURE

10+34

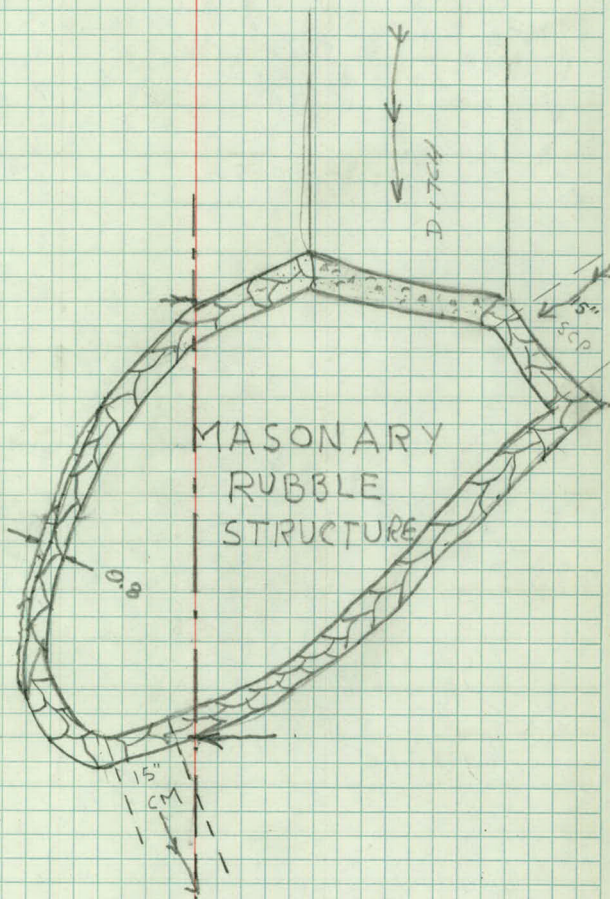
0.8

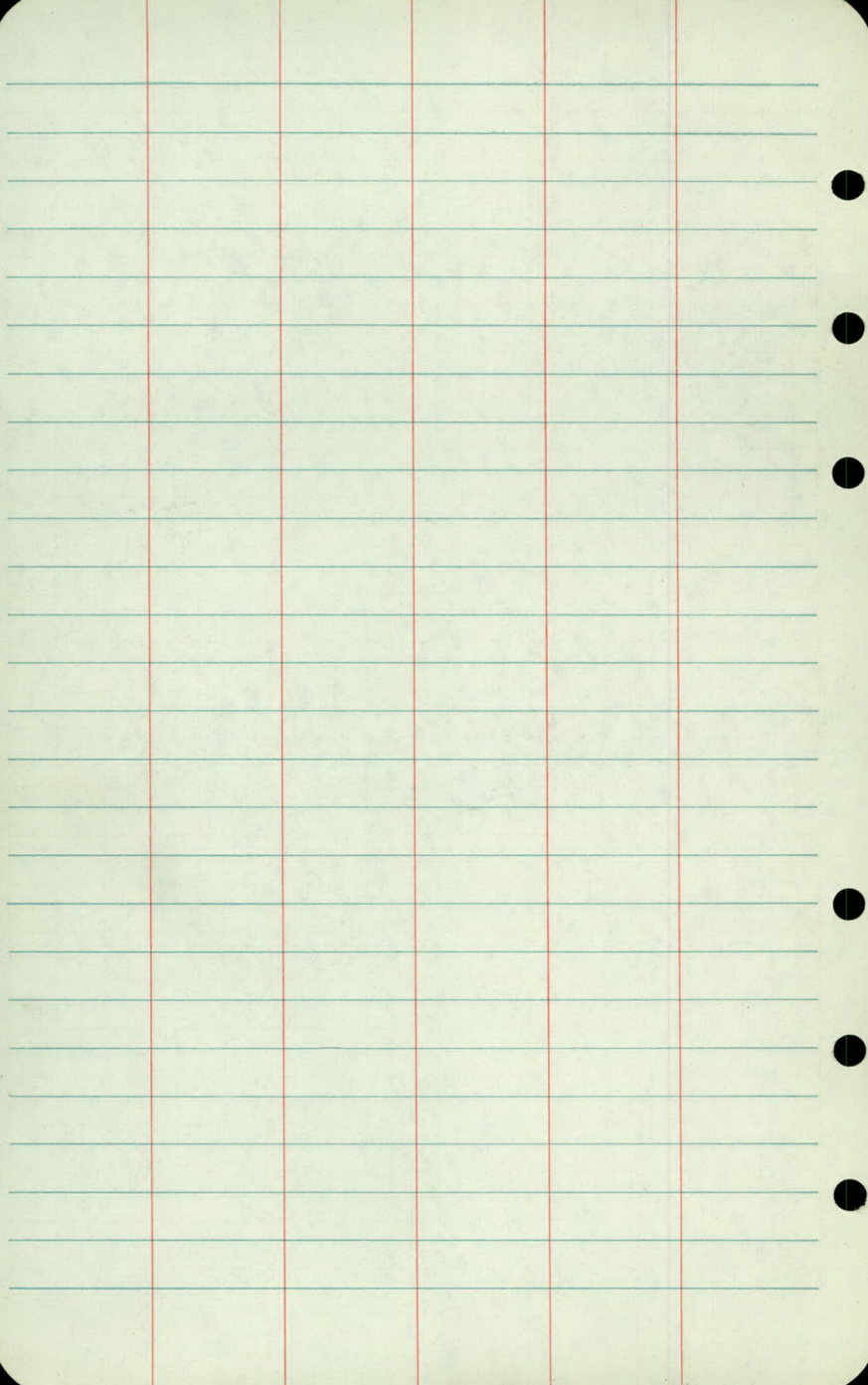
15"
1 CM

5"
SCP

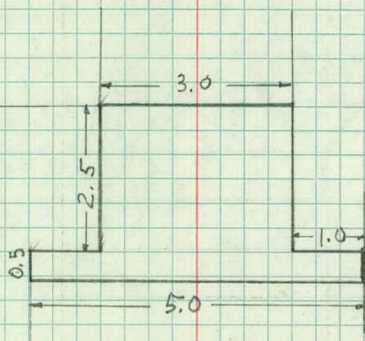
SCALE

1 SQ. = 0.5'

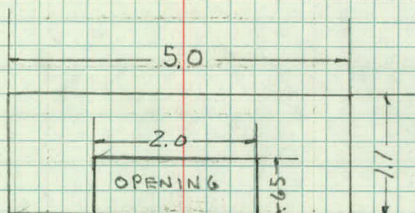




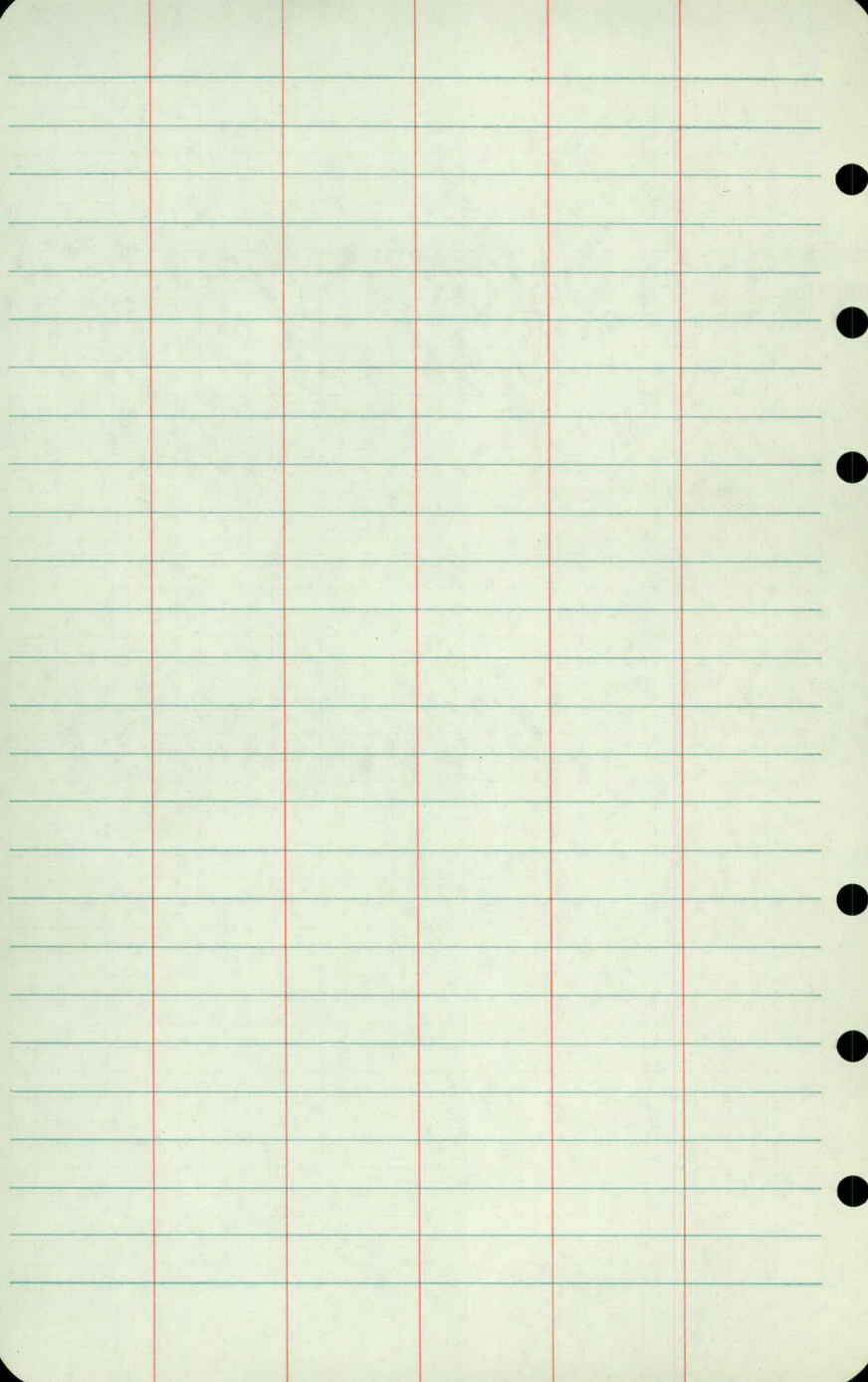
DETAIL VIEW #3



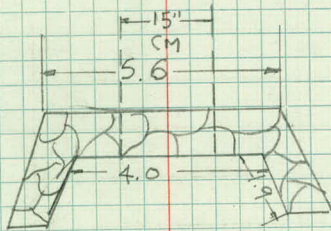
TOP

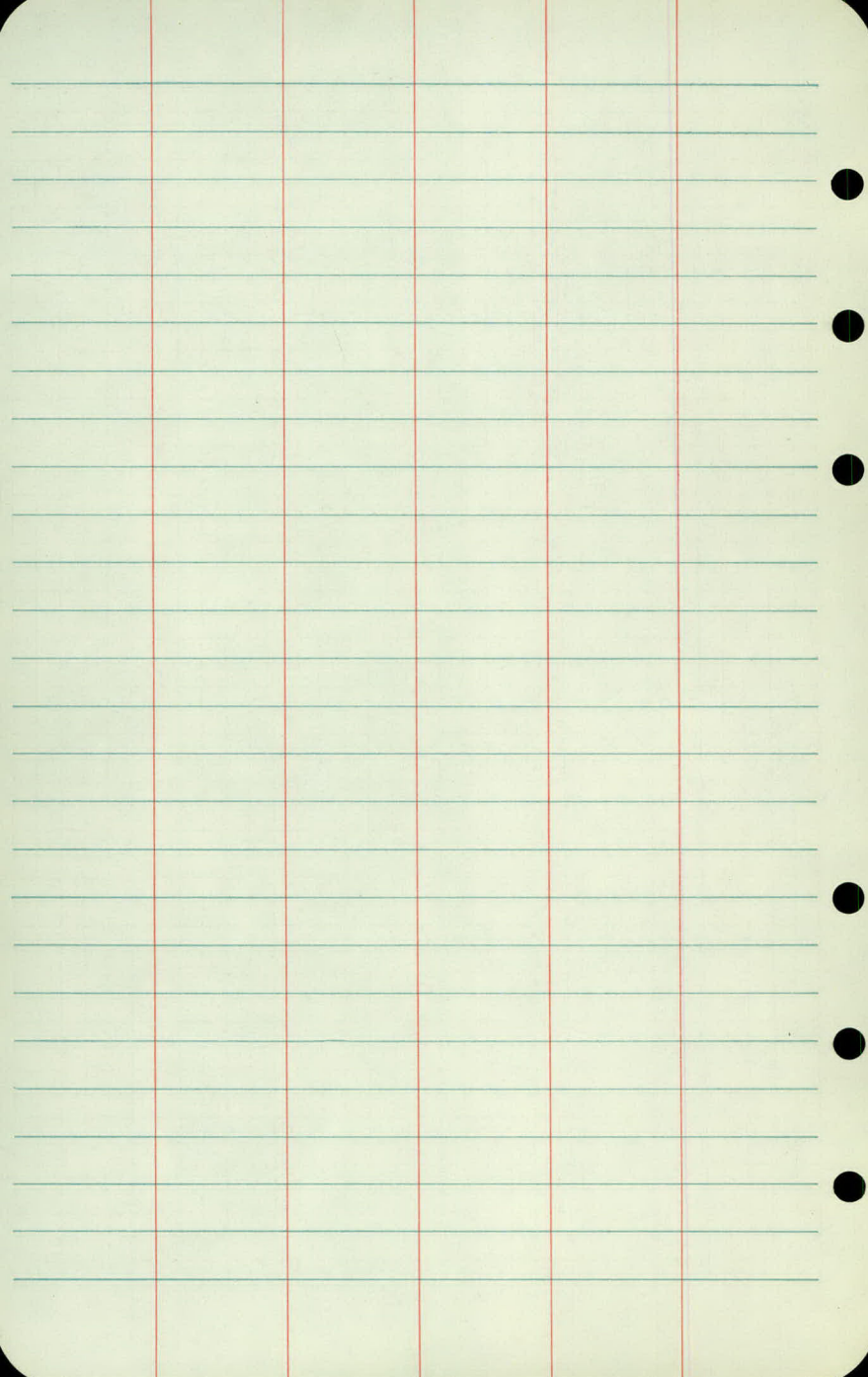


SIDE

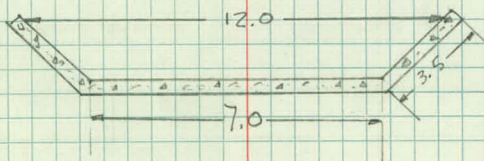


DETAIL VIEW #4



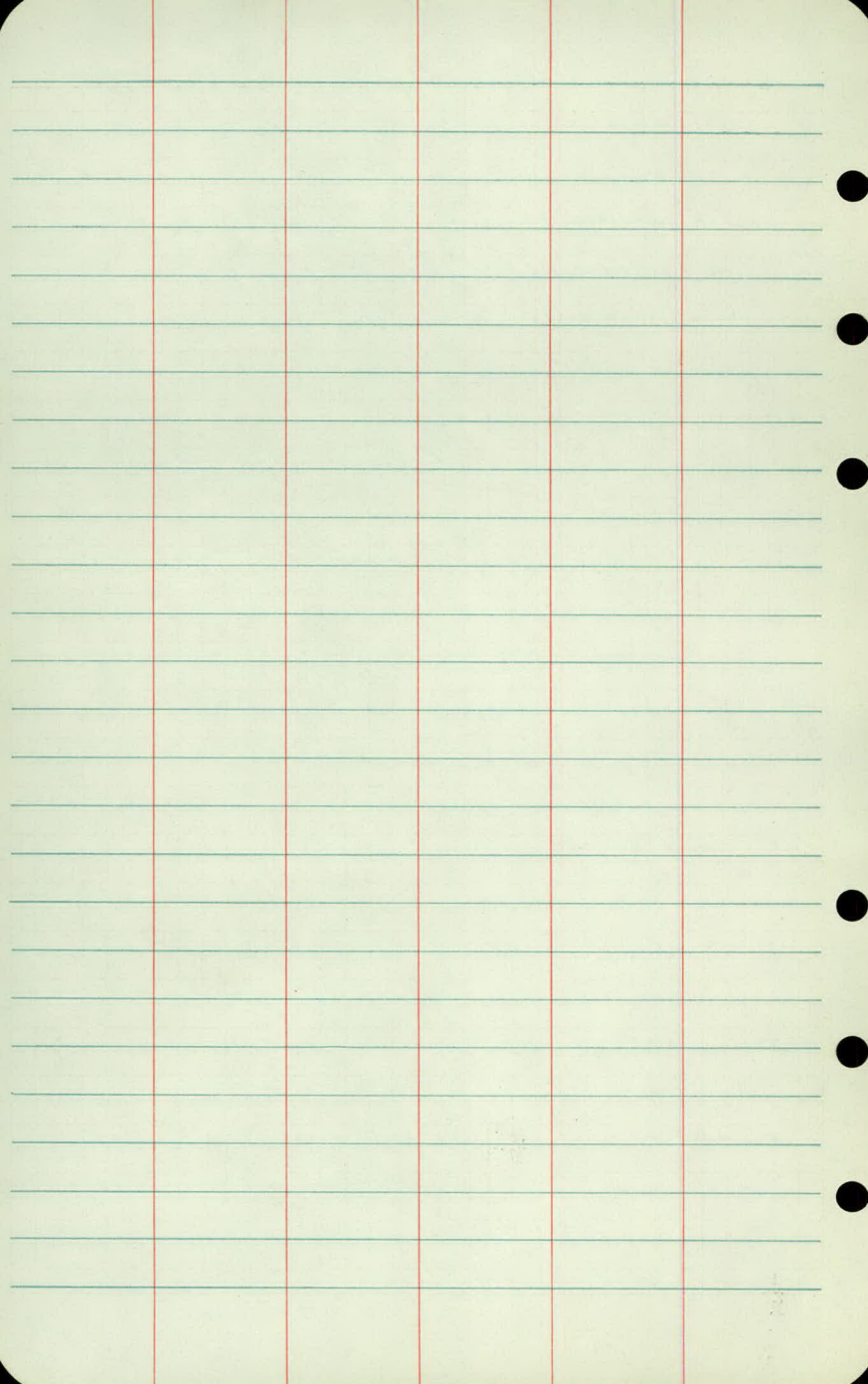


DETAIL VIEW # 5



DITCH SECTION

STA 16+94 TO 29+44



10 APRIL 1962

10.

KP
FS
LB
DS

LOWER AFTON RD
PT. DOUGLAS RD. TO STH #100
TOPOGRAPHY
STA 8+00 TO 32+00

13+00 $\pm$ DITCH LT WOODS 8 $\pm$ 11 WOODS RT $\pm$ CREEK
 67 20 29 100

+52 PD
 58

12+00 WOOD $\pm$ DITCH 2 18 WOOD
 10-61 82 75
 +95 2" PIPE BE
 44

+38 BEGIN WOODS
 6-90
 +34 9" PIPE
 85
 +41 STD 35
 +57 4" MAPLE 38
 +11 STD 45
 +18 STD 44
 +30 4" MAPLE 39
 +106 4" MAPLE 49

11+00 $\pm$ DITCH RD
 82 8-29
 +72 BR 13
 14
 +50 POR 13
 +72 PD 65
 +68 COR WOOD 70

+67 10" POR 85
 +43 END STRUCTURE 44
 +34 BEGIN STRUCTURE
 +53 PD 43
 +32 POR 73
 +17 EDGERD 12
 +58 BR 73
 +50 POR 69
 +13 BR 8
 +28 STD 9
 +15 PD 13
 +04 4" W 77
 +04 RD
 +11 ER 39
 +4 N END 15" CM 6

10+00 +100 END 15" CM
 56 RD +61 BR 74
 74 8
 +56 PD 57
 +43 16" MAPLE 57
 +100 END 15" CM
 74
 +56 PD 57
 +100 30" TW MAPLE 31
 +14 POR 17
 +93 ARCH 55
 +99 POR 79
 +30 MH 43
 +79 ER 43
 +32 28" MAPLE 24
 +62 S.W. END 15" CM 46
 +88 BR 22
 +14 W. END 72" CM 99.5
 +69 CB 42
 +35 30" MAPLE 64
 +14 $\pm$ 1.8x7.2 HEADWALL 99.5
 +01 N. END 15" CM 96

9+00 $\pm$ DITCH 101 11 13 24" BE 66

+49 14" BE 74
 +36 2" PINE 84

8+00 $\pm$ DITCH 101 13 13

10 APRIL 1962

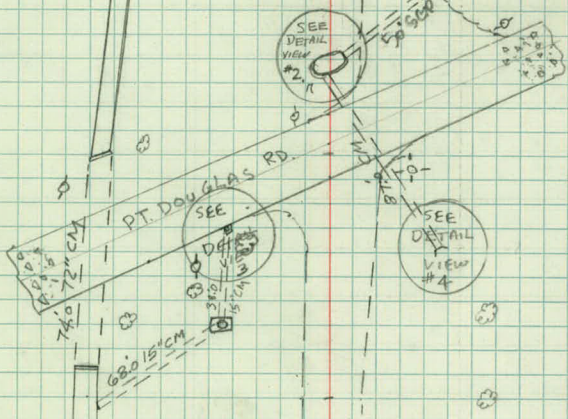
11.

LT

RT

WOODS

WOODED AREA



+00 CORN DITCH
3-14

+00 WOODS
12

18+00

LT

± ROAD
19-38

RT

RIP RAP
4

G.R.
14

+04 END WALL
86

+15 ANGLE POINT
10

+14 WOODS
11

+11 BEGIN GR 12.0 CTOL
11 (29 POSTS)

+02 RIP RAP
1

+02 END DITCH
24

+15 ANGLE POINT

+15 RIP RAP
8

+23 PP
52

17+00

± CONC. DITCH
15

ROAD
16-35

WOODS
4

+94 RIP RAP
10

+94 END OF DITCH
19

+14 ANGLE POINT WALL
72

+48 WOODS
1

+13 20" ELM
50

16+00

WALL
87

+00 WOODS
8

ROAD
9-30

+81 STP
48

+90 STP
48

+62 BEGIN RIP RAP WALL
93

+78 END WALL
71

+58 16" ELM
39

+94 PP
58

+62 END CORNER
93

+62 ANGLE POINT WALL
85

+12 TW 6" ELM
41

15+00

WOODS ± DITCH
13 83

0 22

+72 cluster 6" ELM
39

+92 TRIPLE 6" ELM
37

+23 PP
56

+23 5" ELM
44

+31 4" ELM
36

+13 N.E. CORNER
11

+08 N.E. COR BRIDGE
7

+00 WOODS
14

+02 S.E. CORNER
25

+11 36" WILLOW
31

+43 STP
33

+03 S.E. COR BRIDGE
17

14+00

± DITCH

8 16

+93 NW COR BRIDGE
9

+88 SW COR BRIDGE
15

+90 END WOODS
30

+90 NW CORNER
15

+83 SW CORNER
20

13+00

8 11

10 APRIL 1962

12.

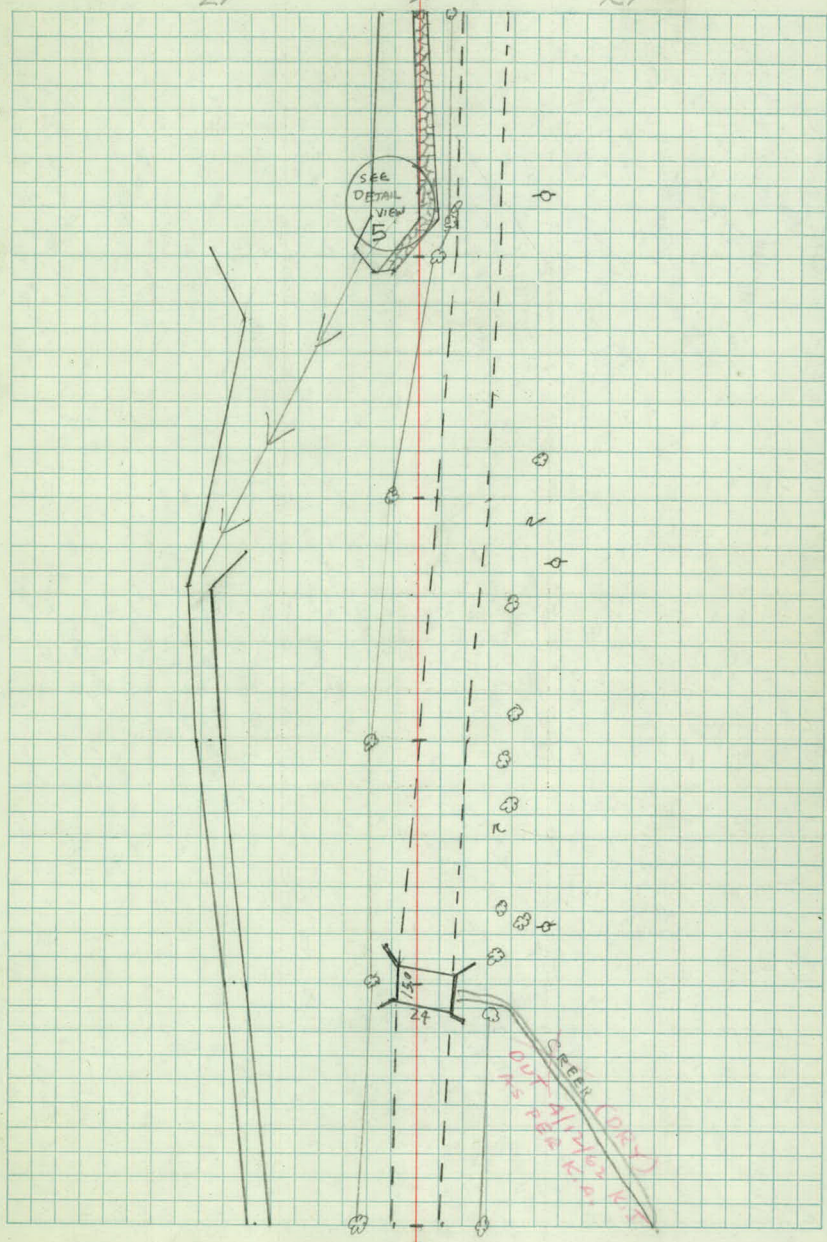
LT

RT

SEE
DETAIL
VIEW
5

150
24

CREAK (ORT)
OUT 24 1/2 46 1/2 KT
PER K.O.



23+00

LT

S

RT

+74 SW COR HO

44

+72 5 12" ELM

25

+72 6" BE

21

+50 14" ELM

26

+60 6" ELM

21

+19 S NEAR WALL

17

+19 E END 6" SC

17

+31 BRUSH

3-10

+89 GR

22

+19 GR 12.0
CROC

25 DYES

+26 BEG W R RAP

7-12

22+00

ROR

7 27 Begin Woods

WALL

7

41

37

+94 8" ELM

33

+93 NEAD 30" SC

98

+76 6" ELM

87

+10 36" COT

93

+34 S BOLLINGER RD

99

+63 BR

99

+76 6" ELM

75

+25 BR

100

+25 NEAD 30" SC

113

+76 ROR

31

+36 PP

38

21+00

ROR

WALL

10-20

PDR

54

35

+31 END DITCH

20-31

+39 Center Handrail (9.0x1.0)

100

+32 42" TW COTT

53

+36 6" ELM

50

+43 END GR

7

+21 6" ELM

53

+54 GR

28

+100 ROR

30

+35 4" CE

30

+29 BR

BR

+100 5" BE

60

+60 36" 12-18

41

+100 DITCH

28-18

+100 PP

44

+38 NEAD 12" ELM

36

+100 5" BE

60

+100 TRIP BE

41

+100 ROR

29

+100 DITCH

28-18

+100 PP

44

+38 NEAD 12" ELM

36

+100 5" BE

60

+100 TRIP BE

41

+100 ROR

29

+100 DITCH

28-18

+100 PP

44

+38 NEAD 12" ELM

36

+100 5" BE

60

+100 TRIP BE

41

+100 ROR

29

+100 DITCH

28-18

+100 PP

44

+38 NEAD 12" ELM

36

+100 5" BE

60

+100 TRIP BE

41

+100 ROR

29

+100 DITCH

28-18

+100 PP

44

+38 NEAD 12" ELM

36

+100 5" BE

60

+100 TRIP BE

41

+100 ROR

29

+100 DITCH

28-18

+100 PP

44

+38 NEAD 12" ELM

36

+100 5" BE

60

+100 TRIP BE

41

+100 ROR

29

+100 DITCH

28-18

+100 PP

44

+38 NEAD 12" ELM

36

+100 5" BE

60

+100 TRIP BE

41

+100 ROR

29

+100 DITCH

28-18

+100 PP

44

+38 NEAD 12" ELM

36

+100 5" BE

60

+100 TRIP BE

41

+100 ROR

29

+100 DITCH

28-18

+100 PP

44

+38 NEAD 12" ELM

36

+100 5" BE

60

+100 TRIP BE

41

+100 ROR

29

+100 DITCH

28-18

+100 PP

44

+38 NEAD 12" ELM

36

+100 5" BE

60

+100 TRIP BE

41

+100 ROR

29

+100 DITCH

28-18

+100 PP

44

+38 NEAD 12" ELM

36

+100 5" BE

60

+100 TRIP BE

41

+100 ROR

29

+100 DITCH

28-18

+100 PP

44

+38 NEAD 12" ELM

36

+100 5" BE

60

+100 TRIP BE

41

+100 ROR

29

+100 DITCH

28-18

+100 PP

44

+38 NEAD 12" ELM

36

+100 5" BE

60

+100 TRIP BE

41

+100 ROR

29

+100 DITCH

28-18

+100 PP

44

+38 NEAD 12" ELM

36

+100 5" BE

60

+100 TRIP BE

41

+100 ROR

29

+100 DITCH

28-18

+100 PP

44

+38 NEAD 12" ELM

36

+100 5" BE

60

+100 TRIP BE

41

+100 ROR

29

+100 DITCH

28-18

+100 PP

44

+38 NEAD 12" ELM

36

+100 5" BE

60

+100 TRIP BE

41

+100 ROR

29

+100 DITCH

28-18

+100 PP

44

+38 NEAD 12" ELM

36

+100 5" BE

60

+100 TRIP BE

41

+100 ROR

29

+100 DITCH

28-18

+100 PP

44

+38 NEAD 12" ELM

36

+100 5" BE

60

+100 TRIP BE

41

+100 ROR

29

+100 DITCH

28-18

+100 PP

44

+38 NEAD 12" ELM

36

+100 5" BE

60

+100 TRIP BE

41

+100 ROR

29

+100 DITCH

28-18

+100 PP

44

+38 NEAD 12" ELM

36

+100 5" BE

60

+100 TRIP BE

41

+100 ROR

29

+100 DITCH

28-18

+100 PP

44

+38 NEAD 12" ELM

36

+100 5" BE

60

+100 TRIP BE

41

+100 ROR

29

+100 DITCH

28-18

+100 PP

44

+38 NEAD 12" ELM

36

+100 5" BE

60

+100 TRIP BE

41

+100 ROR

29

+100 DITCH

28-18

+100 PP

44

+38 NEAD 12" ELM

36

+100 5" BE

60

+100 TRIP BE

41

+10

10 APRIL 1962

13.

LT

RT

WOODS

1-5-F

29.0

71.0

79.0 30" SCP

92.0 30" SCP

180' 12" SCP

12.0

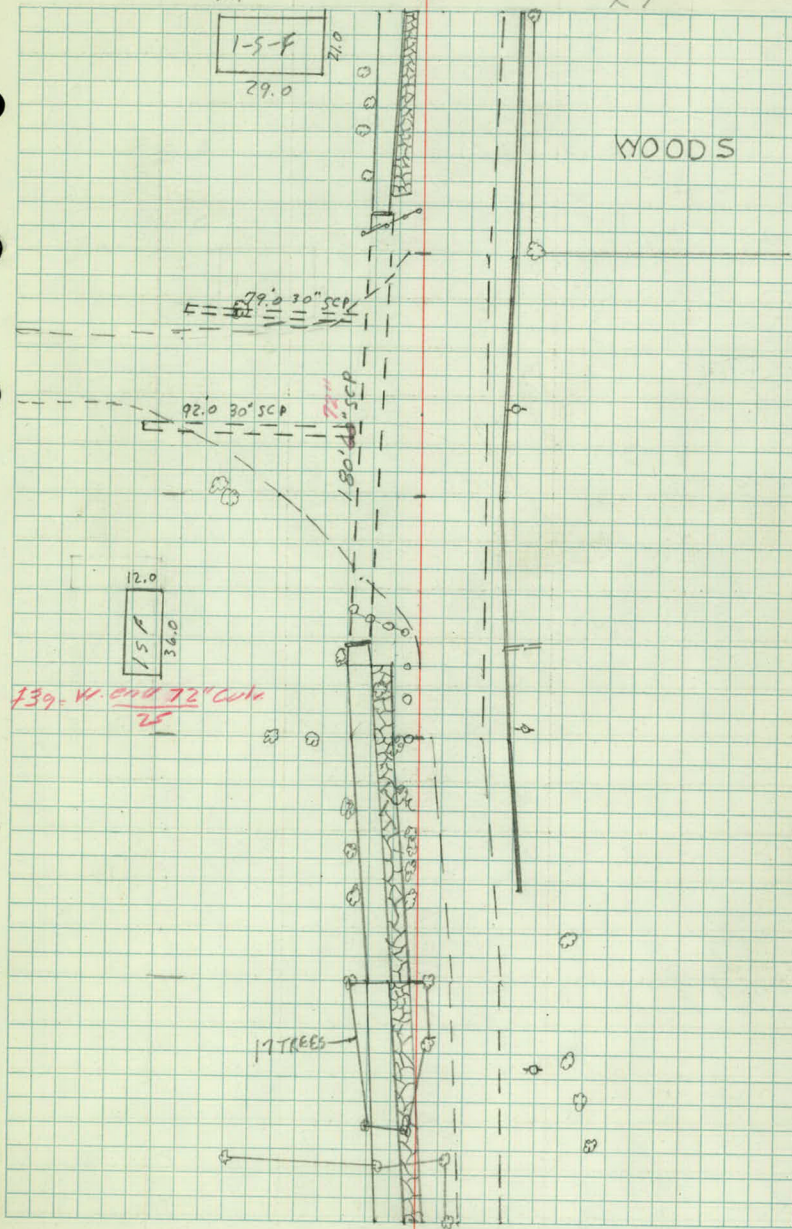
15 F

36.0

139- W. end 72" Cuto

25

17 TREES



28+00

LT

±

RT

+49 10" COTT
10

105 END 15" SCP
5

+36 SEND 15" SCP
40

27+00

WOODS

± DITCH

RIPRAP

GR

ROAD

WOODS

29

12

0

9

14-36

55

+74 PP
4

+74 PP
49

+90 END BRUSH
4

+90 END BRUSH
4

26+00

RIPRAP

WOODS

± ditch

RD

RIPRAP

GR

WOODS

3

16

8

15-36

3

10

54

+08 PP
47

+08 PP
7

25+00

WOODS

± ditch

BRUSH GR

RD

WOODS

24

7

3

3

8

12-33

52

24+00

WOODS

± DITCH

BRUSH

RD

WOODS

GR

30

12

0-6

9-30

45

4

+67 BEGIN WOODS
76

+50 Triple 8" BE

+64 SEND 15" SCP
38

+43 END 18" SCP
9

20
+59 (4) 5" ELM
6

+55 END WALL
41

+09 5" TWB
20

+16 18" COTT
25

+30 PP

23+00

± Creek RIPRAP

BRUSH

RD

WALL

WOODS

GR

15

3-9

2-9

8-32

40

45

2

11 APRIL 1962

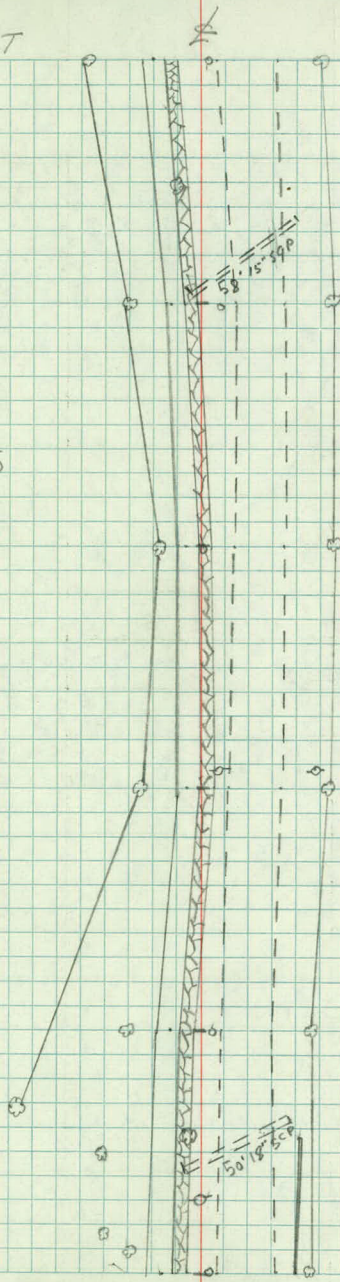
14

LT

RT

WOODS

WOODS



LT

±

RT

$$\begin{array}{r}
 +41 = \text{E. END 60" COT} \\
 \quad \quad \quad 50 \\
 +46 \text{ E. END 60" SCP} \\
 \quad \quad \quad \underline{50}
 \end{array}$$

32+00

$$\begin{array}{r}
 +81 \text{ 4" ELM} \\
 \quad \quad \quad 24
 \end{array}$$

$$\begin{array}{r}
 +51 \text{ 4" ELM} \\
 \quad \quad \quad 38
 \end{array}$$

$$\begin{array}{r}
 10" \text{ ELM} \\
 \quad \quad \quad 55
 \end{array}$$

$$\begin{array}{r}
 +98 \text{ 24" COTT} \quad +92 \text{ PP (ARC) 10' } \\
 \quad \quad \quad 18 \quad \quad \quad 70 \\
 +66 \text{ 24" COTT} \quad \quad \quad 46 \\
 \quad \quad \quad \underline{+32 \text{ 10" COTT}} \\
 \quad \quad \quad \quad \quad \quad 9
 \end{array}$$

$$\begin{array}{r}
 +58 \text{ 4" 15" COTT} \\
 \quad \quad \quad 28
 \end{array}$$

$$\begin{array}{r}
 +20 \text{ Begin GR} \quad +25 \text{ 14" COTT} \\
 \quad \quad \quad 41 \quad \quad \quad 21
 \end{array}$$

$$\begin{array}{r}
 +13 \text{ 8" COTT} \\
 \quad \quad \quad 59
 \end{array}$$

$$\begin{array}{r}
 +26 \text{ 10" COTT} \\
 \quad \quad \quad 43
 \end{array}$$

31+00

$$\begin{array}{r}
 +72 \text{ 12" COTT} \quad +36 \text{ 12" COTT} \quad +59 \text{ SW COR RD} \\
 \quad \quad \quad 8 \quad \quad \quad 100 \quad \quad \quad 28
 \end{array}$$

$$\begin{array}{r}
 \text{RD} \quad \text{GR} \quad \text{WOODS} \\
 41-62 \quad 66 \quad 86 \\
 +66 \text{ 3" MAPLE} \quad 16
 \end{array}$$

$$\begin{array}{r}
 +24 \text{ PP} \quad +20 \text{ 12" COTT} \quad +36 \text{ 10" COTT} \\
 \quad \quad \quad 3 \quad \quad \quad 32 \quad \quad \quad 90
 \end{array}$$

$$\begin{array}{r}
 +89 \text{ END GR} \quad 16 \\
 \quad \quad \quad 28 \\
 +56 \text{ 6" TW MAPLE} \quad +72 \text{ 4" MAPLE} \\
 \quad \quad \quad 6 \quad \quad \quad 11
 \end{array}$$

$$\begin{array}{r}
 +48 \text{ RT HO} \quad +52 \text{ SW COR GR 12x24} \\
 \quad \quad \quad 100 \text{ 8" DAK} \quad \quad \quad 68 \\
 \quad \quad \quad 59 \quad \quad \quad +80 \text{ TWIN 6" MAPLE} \\
 \quad \quad \quad \quad \quad \quad 15
 \end{array}$$

30+00

$$\begin{array}{r}
 \text{GR} \quad \text{ROAD} \quad \text{GR} \quad \text{WOODS} \\
 8 \quad 12-35 \quad 38 \quad 51
 \end{array}$$

$$\begin{array}{r}
 +87 \text{ END WOODS} \\
 \quad \quad \quad 6
 \end{array}$$

$$\begin{array}{r}
 +44 \text{ 1" HEAD WALL} \quad +42 \text{ 1" END 60" SCP} \\
 \quad \quad \quad 23 \quad \quad \quad 23
 \end{array}$$

$$\begin{array}{r}
 +33 \text{ Begin GR} \\
 \quad \quad \quad 36
 \end{array}$$

$$\begin{array}{r}
 +20 \text{ 8" BE} \\
 \quad \quad \quad 13
 \end{array}$$

$$\begin{array}{r}
 +18 \text{ 18" COTT} \\
 \quad \quad \quad 13
 \end{array}$$

29+00

$$\begin{array}{r}
 \text{WOODS} \quad \text{ditch} \quad \text{RIPRAP} \\
 30 \quad 24 \quad 15
 \end{array}$$

$$\begin{array}{r}
 \text{GR} \quad \text{ROAD} \quad \text{WOODS} \\
 3 \quad 8-31 \quad 46
 \end{array}$$

$$\begin{array}{r}
 +64 \text{ 10" BE} \\
 \quad \quad \quad 10
 \end{array}$$

$$\begin{array}{r}
 +48 \text{ PP} \\
 \quad \quad \quad 2
 \end{array}$$

28+00

$$\begin{array}{r}
 \text{WOODS} \quad \text{ditch} \quad \text{RIPRAP} \\
 43 \quad 20 \quad 10
 \end{array}$$

$$\begin{array}{r}
 \text{GR} \quad \text{ROAD} \quad \text{WOODS} \\
 4 \quad 8-32 \quad 50
 \end{array}$$

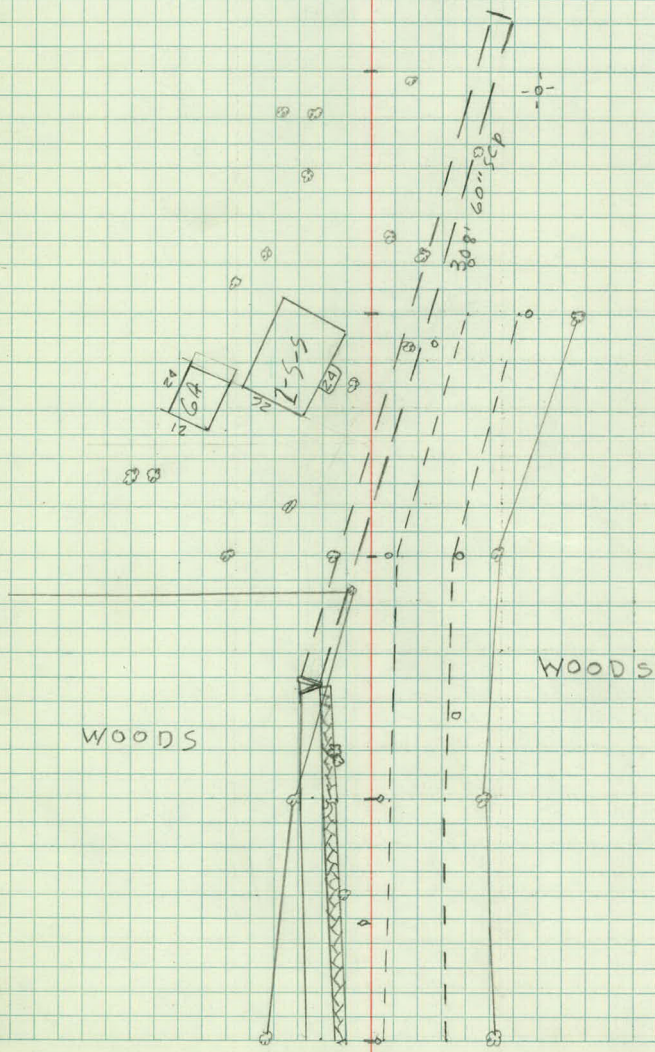
11 APRIL 1962

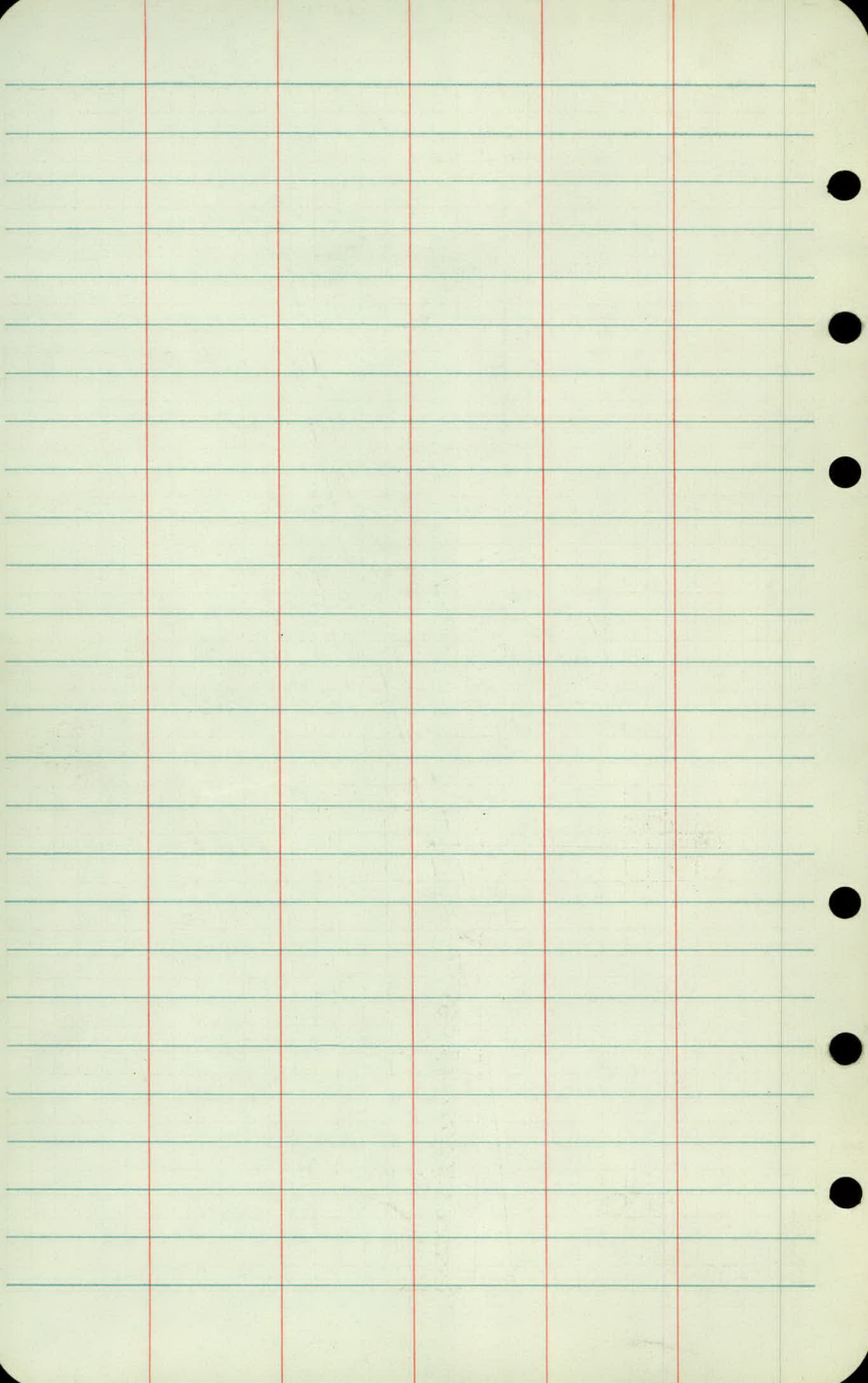
15.

LT

#

RT





R6
LB
WS

April 30, 1962
Cl. 45°

1

LOWER AFTON

Additional Topog.
(Fence locations)

37

36+00

35+00

34+00

33+00

+90 $\frac{FeCor}{19}$

+61 $\frac{FeCor}{50}$

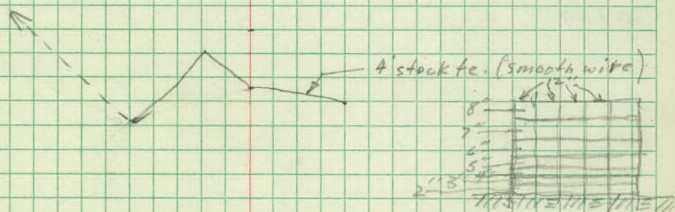
+76 $\frac{Fe}{E}$

+69 $\frac{EndFe}{40}$

32+00

April 30, 1962

2



42+00

$$\begin{array}{r} \text{End Fe} \\ +65 \quad \underline{49} \end{array} \quad \begin{array}{r} \text{BW Fe} \\ +65 \quad 31 \end{array}$$

41+00

$$+00 \quad \frac{\text{Fe}}{47}$$

$$+50 \quad \frac{\text{Fe}}{56}$$

40+00

$$+00 \quad \frac{\text{BW Fe}}{41}$$

$$+50 \quad \frac{\text{BW Fe}}{8}$$

$$+40 \quad \frac{\text{End Fe}}{24}$$

$$+39 \quad \frac{\text{BW Fe}}{4}$$

$$39+00 \quad +00 \quad \frac{\text{BW Fe}}{26}$$

$$+00 \quad \frac{\text{Fe}}{4}$$

$$+50 \quad \frac{\text{BW Fe}}{41}$$

$$+94 \quad \frac{\text{Fe}}{4}$$

$$\begin{array}{r} \text{Beg. upright Fe} \\ +27 \quad 27 \end{array} \quad +50 \quad \frac{\text{Fe}}{21}$$

$$38+00 \quad +00 \quad \frac{\text{Fe}}{24} \quad +00 \quad \frac{\text{BW Fe}}{35}$$

$$\begin{array}{r} (1 \text{ strand}) \\ \text{Beg. B.W. Fe} \\ +56 \quad 3 \end{array}$$

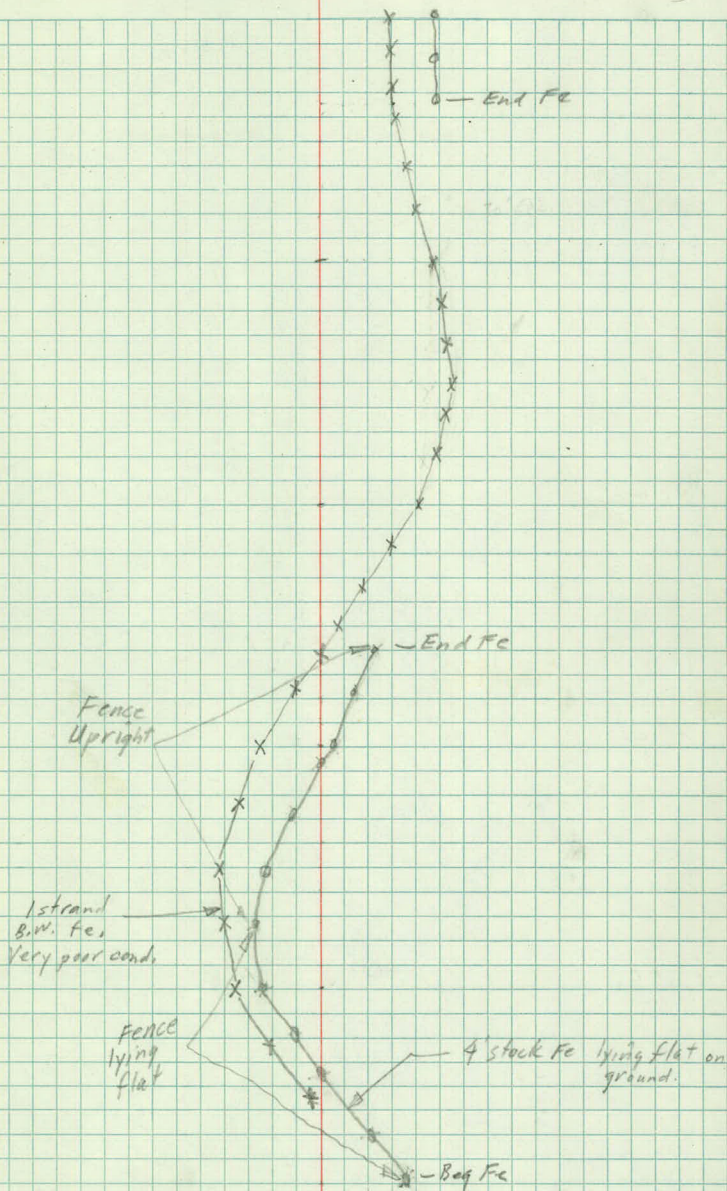
$$+65 \quad \frac{\text{Fe}}{4}$$

$$+23 \quad \frac{\text{Beg Fe}}{34}$$

37+00

April 30, 1962

3



81+00

80+00



44+00

+64 $\frac{Fe Cor}{69}$ Rt 68
 $\frac{Fe Cor}{7}$
+39
+14 4

43+00

+98 $\frac{End Fe}{28}$

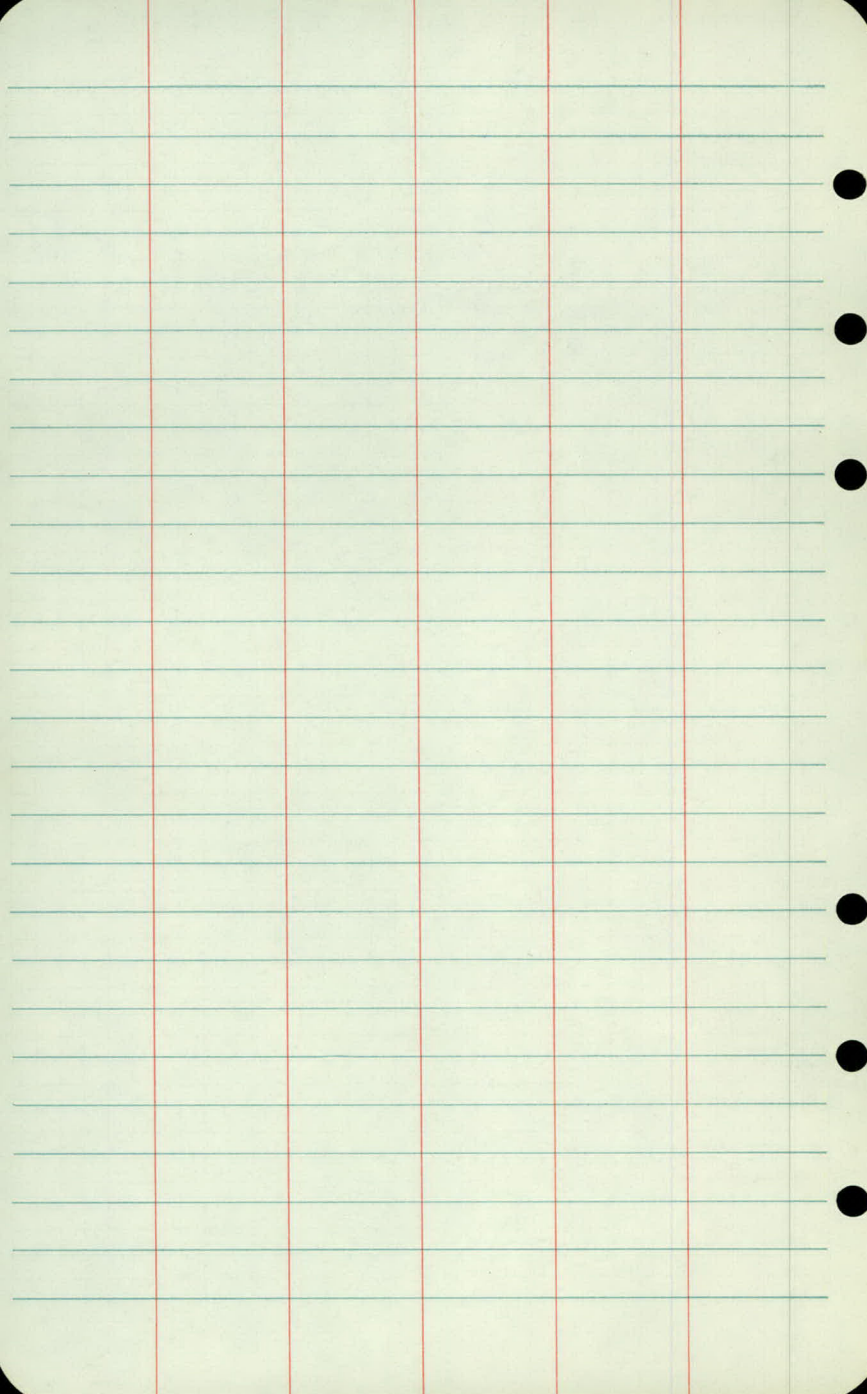
+13 $\frac{Fe (2 strand BW)}{4}$ Steel Posts) +00 $\frac{Fe}{36}$ -100+

+91 $\frac{Fe}{4}$ +93 $\frac{Fe Cor}{27}$

+50 $\frac{End steel Posts}{35}$

42+00

+00 $\frac{Fe}{24}$ +00 $\frac{Fe}{41}$



Profile

Lower Afton Rd

± Hwy 61 to Sta 8+50

2 pages

Sta	+	π	-	Elev
BM ₁	0.13	754.31		754.18
8+50			6.6	747.7
8+00			9.1	745.2
7+50			11.9	742.4
TP	0.52	742.23	12.60	741.71
7+12			4.05	738.18
7+00			2.5	739.7
6+50			5.1	737.1
6+00			7.5	734.7
5+50			10.1	732.1
5+00			12.5	729.7
TP	0.06	730.31	11.98	730.25
5+10			2.32	727.99
4+50			2.8	727.5
4+00			5.0	725.3
3+50			6.9	723.4
3+11			10.17	720.14
3+00			8.4	721.9

WM
DS

Jan 29, 1962

1.

Spike in Arc Lt. pole SW Cor. Pt. Douglas + Lower Alton

F.L. 15 in CM culvert at 7+12 15' Lt.

Rock at 5+00 6 Lt.

F.L. 15 in CM culvert at 5+10 15 Lt.

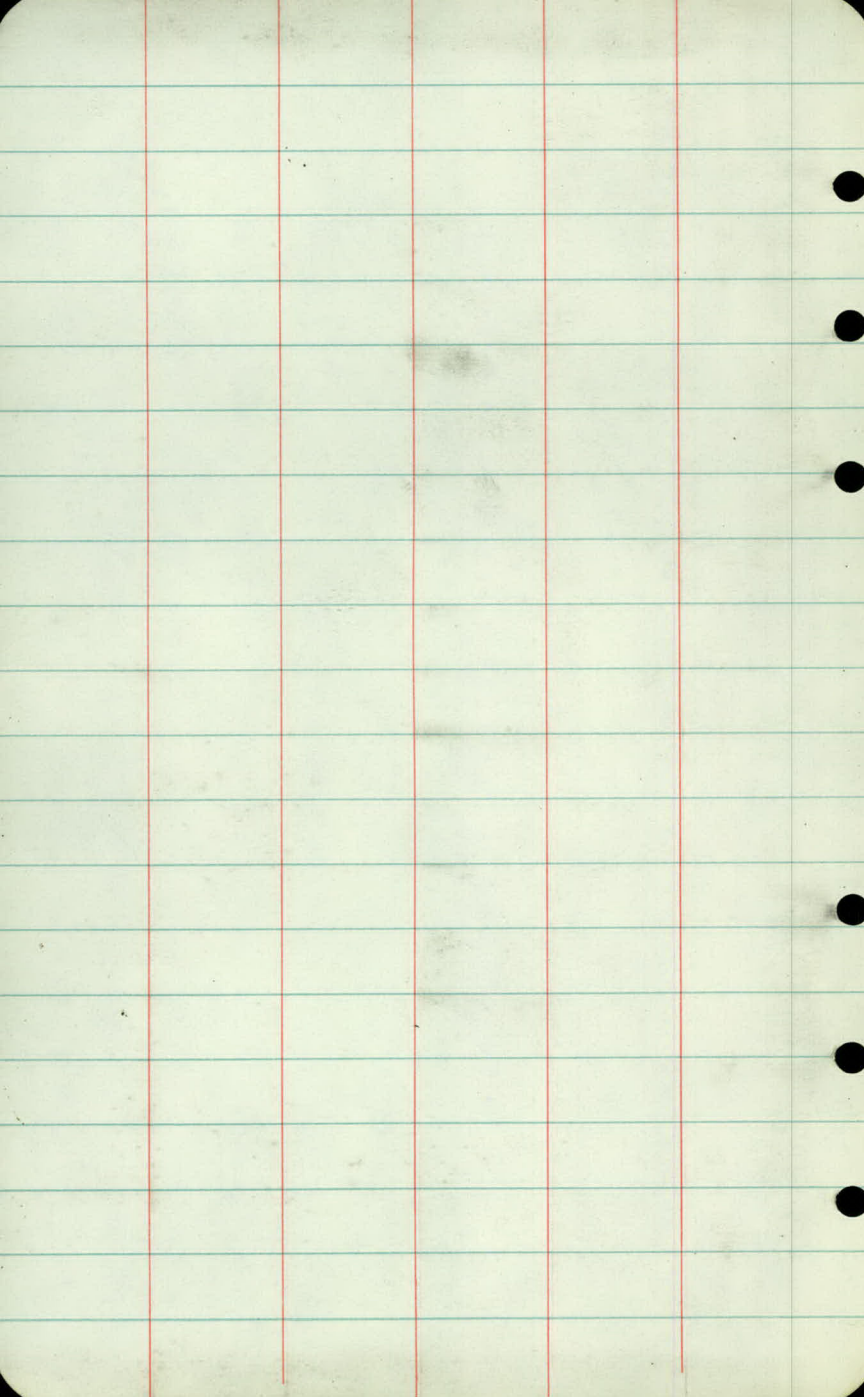
F.L. 15 in CM culvert 15 Lt.

Sta	+ -	π	-	Elev
		730.31		
2+50			9.8	720.5
2+00			10.9	719.4
1+50			11.9	718.4
1+12			12.95	717.36
TP	2.37	721.64	11.04	719.27
1+00			4.1	717.5
0+50			5.0	716.6
0+00			5.9	715.9
-0+50			6.5	715.1
-1+00			6.9	714.7
-1+50			6.8	714.8
-1+86			7.4	714.2
T.P.	13.25	732.52	2.37	719.27
T.P.	13.29	745.34	0.47	732.05
TP	10.03	754.64	0.73	744.61
B.M.			0.45	754.19
				754.18

Jan 29, 1962 2

Top, 15 in. C.M. Culvert 15' Lt

£ S.T.H 61 of North bound Lane



RG
FS
LB
DS
WS

Jan 25, 1962
Cloudy, 25°

1

Lower Afton Rd.

Bench Levels Pg 1-2

X-Sections Pg 3-

Bench Levels

Sta	+	π	-	Elev	
BM ₁	4.52	794.15			789.63
TP ₁	0.77	782.39	12.53	781.62	
TP ₂	1.39	771.05	12.73	769.66	
BM ₂	0.62	763.50	8.17	762.88	
BM ₃			9.32	754.18	
BM ₃	9.75	763.93			754.18
BM ₂	8.48	771.37	1.04	762.89	762.88
TP ₂	11.00	780.67	1.70	769.67	769.66
TP ₃	13.54	793.35	0.86	779.81	
BM ₁			3.71	789.64	789.63

Jan 25, 1962

Lt

E

Rt

2

SE Cor. Headwall at E. Side of Battle Creek Rd.

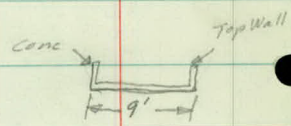
Top Conc railing S.E. cor Bridge 20' Rt Sta 14+10 ±
Spike in Arc light Pole SW Cor. Pt. Douglas + Lower Attonk

Sta	+	π	-	Elev
BM	1.13	755.31		754.18

8+50

✓

Typical
ditch Section



PC?
+76

✓

13.80 741.51

9+00

✓

Jan 25, 1962

Lt

E

Rt

3

Spike in Arc Lt. Pole SW Cor Pt Douglas & Lower Afton Rds.

39.9 ✓	40.8 ✓	44.1 ✓	47.6 ✓	47.9 ✓	47.8 ✓	48.1 ✓	48.8 ✓	45.6 ✓	41.5 ✓	35.9 ✓
15.4	14.5	11.2	7.7	7.9	7.5	7.2	6.5	9.7	13.8	19.4
69	43	34	23	11		12	22	34	45	61

39.1 ✓	36.1 ✓	38.9 ✓	39.3 ✓		35.5 ✓
16.2	19.2	16.4	16.0		19.8
96	96-105	105	110		73

Top Wall E. Top Wall

40.9 ✓	42.2 ✓	43.2 ✓	45.7 ✓	49.1 ✓	48.6 ✓	48.8 ✓	49.0 ✓	49.4 ✓	48.3 ✓	37.9 ✓	37.4 ✓
14.4	13.1	12.1	9.6	6.2	6.7	6.5	6.3	5.9	7.0	17.4	17.9
95	62	40	32	22	11		13	23	42	64	86

Top Wall

38.2 ✓	40.8 ✓	40.8 ✓
17.1	14.5	14.5
95-106	104	107

ditch Top Wall

FL 15" CM 95' Lt Sta 8+80

44.9 ✓	45.0 ✓	48.0 ✓	50.3 ✓	49.6 ✓	49.7 ✓	49.8 ✓	50.6 ✓	45.1 ✓	38.8 ✓	38.7 ✓
10.4	10.3	7.3	5.0	5.7	5.6	5.5	4.7	10.2	16.5	16.6
61	41	30	20	13		12	24	42	62	82

44.7 ✓	43.4 ✓	41.3 ✓	43.7 ✓	44.8 ✓
10.4	11.9	14.0	11.6	10.5
89	96	96-105	105	107

Top Wall & Top Wall ditch

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

		755.31		
--	--	--------	--	--

9+08				
------	--	--	--	--

✓				
---	--	--	--	--

✓				
---	--	--	--	--

+29				
-----	--	--	--	--

✓				
---	--	--	--	--

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

✓				
---	--	--	--	--

sta	+	π	-	Elev
-----	---	-------	---	------

		755.31		
--	--	--------	--	--

9+75				
------	--	--	--	--

✓				
---	--	--	--	--

10+00				
-------	--	--	--	--

EOA?				
------	--	--	--	--

TP				
----	--	--	--	--

7.56				
------	--	--	--	--

761.25				
--------	--	--	--	--

1.62				
------	--	--	--	--

753.69				
--------	--	--	--	--

Jan 25, 1962

5

Lt

E

Rt

52.10 ✓	51.8 ✓	51.7 ✓	51.8 ✓	51.7 ✓	51.6 ✓	51.5 ✓	51.7 ✓	52.2 ✓	49.3 ✓	45.7 ✓	44.3 ✓
3.21	3.5	3.6	3.5	3.6	3.7	3.8	3.6	3.1	6.0	9.6	11.0
41	34	18	13	8		9	14	21	33	52	68

W. edge
conc

52.32 ✓

2.99
58

9 Pt. D.
Road

52.54 ✓

2.77
80

E. edge
conc

53.3 ✓

2.0 1.62
98 99

Top
So. end
Headwall

53.69 ✓

53.69 ✓

1.62
108

No. end
Headwall

46.91 ✓

8.40
103

± ditch
144.6' CM

55.0 ✓

0.3
89

54.6 ✓

0.7
72

53.0 ✓

2.3
55

52.07 ✓

3.24
44

51.85 ✓

3.46
22

51.56 ✓

3.75
Wedge

51.3 ✓

4.0
16

52.3 ✓

3.0
24

51.0 ✓

4.3
39

48.4 ✓

6.9
50

47.3 ✓

8.0
74

E. edge & Pt. D. Rd. BT

52.8 ✓

2.5
100
Top Wall

48.0 ✓

7.3
100-109
± ditch

52.6 ✓

2.7
109
Top Wall

53.5 ✓

1.8
115

Top No. End Headwall 108' Rt Sta 9+75

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

761.25

9+69

16.39

744.86

10+11

± Pt Douglas Rd. $\pm 1' 50''$

+18

E. edge Pt. D. Road $2' 50''$

✓

+32

$\pm 3' 50''$

✓

Jan 25, 1962

LT F RT — 6

inv of 15" CM 42' RT Sta 9469

✓ 53.65	✓ 53.18	✓ 52.70	✓ 52.18	✓ 51.59	✓ 51.08	✓ 50.58	✓ 49.76	✓ 49.50
7.60	8.07	8.55	9.07	9.46	10.17	10.67	11.49	11.90
200	150	100	50	50	50	100	150	200
201	151	101	51	49	99	149	199	

✓ 52.51	✓ 52.1	✓ 53.7	✓ 53.0	✓ 51.6	✓ 51.45	✓ 51.08	✓ 50.60	50.7	51.0
8.74	5.6	7.6	8.3	9.7	9.80	10.17	10.65	10.6	10.3
99	82	47	25	9	39	74	95	100	
Top Wall	80	47	27	11	£ Pt. D.	72	95	98	

✓ 48.44	✓ 52.3	✓ 53.1	✓ 55.3
12.81	9.0	8.2	6.0
99-106	106	108	152
99 & 108	Top	110	154
Ditch	Wall		

✓ 52.4	✓ 49.61	✓ 52.12	✓ 52.2	✓ 52.1	✓ 52.0	✓ 51.7	✓ 50.8	✓ 50.7	✓ 50.3
8.9	11.64	9.13	9.1	9.2	9.3	9.6	10.5	10.6	11.0
16	13 16	13 16	7	10	20	41	59	86	100
19	INV 15" CM	Top			17	38	56	83	97

✓ 51.3	✓ 51.8	✓ 51.4	✓ 51.3	✓ 52.39
9.0	6.5	5.9	5.0	8.86
22	53	72	85	96
25	56	75	88	99

✓ 55.6	✓ 54.8	✓ 53.7	✓ 53.4	✓ 49.27
5.7	6.5	7.6	7.81	11.98
154	135	116	105	96-105
157	138	119	108	99, 108
				£ ditch (8.8')

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

		761.25		
--	--	--------	--	--

+43				
-----	--	--	--	--

$\pm 3' 50$				
-------------	--	--	--	--

✓				
---	--	--	--	--

✓				
---	--	--	--	--

BM ₃				
-----------------	--	--	--	--

		7.04		
--	--	------	--	--

			754.21	
--	--	--	--------	--

				754.18
--	--	--	--	--------

BM ₃				
-----------------	--	--	--	--

843				
-----	--	--	--	--

		762.47		
--	--	--------	--	--

		762.61		
--	--	--------	--	--

				754.18
--	--	--	--	--------

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

$\pm 4' 50$				
-------------	--	--	--	--

✓				
---	--	--	--	--

7

27

L

an
Rt

7

6.4	6.8	9.17	11.1	11.04	8.93	9.1	9.6	9.9	8.7	9.5
46	15	8	4-6	4	Top	8	30	52	69	86
49	18	11	Top ditch	Inv	Headwall	5	27	49	66	83
✓ 5.1	✓ 5.2	✓ 5.7	Wall (6')	15" conc. inv.	✓ 5.7					
5.4	5.1	8.51	11.75	8.58						
71	80	90	90-99	99						
74	83	Top 93	93-102	102						
		Wall	(9')							
		✓ 5.5	✓ 5.6							
		5.5	6.7							
		154	124							
		157	127							

Spike in Arc Lt Pole SW cor Pt Douglas & Lower Atton R.

11

10

22

[illegible]

Sta + π - Elev

762.49

762.61

11+00

$\pm = 4.0$ South

✓

+50

$\pm 6.50.$

✓

12+00

X

$\pm = 5.0$ South

✓

✓

Jan 26, 1962
Cool, Windy, 20°

LT

E

RT

9

53.53	56.9	56.8	56.2	55.4	52.0	52.0	55.2	54.8	55.0	54.7	54.6	55.8
8.94	5.6	5.7	6.3	7.1	10.5	10.5	7.3	7.7	7.5	7.8	7.9	6.7
76	80	68	57	38	12	4	4	7	12	24	33	45
Top Wall	72	61	42	16	8	ditch	BT	BT	BT	41	45	
							RA					

50.93	53.50	54.3	54.9	56.3								54.8
12.04	8.97	8.2	7.6	6.2								7.7
76-85	85	100	122	150								65
ditch	80	89	104	126	154							61
	Top Wall											

55.26	57.1	57.1	56.6	54.0	53.9	56.5	56.5	56.5	56.3	55.9	57.1	55.1
9.21	4.8	5.4	5.9	8.5	8.6	6.0	6.0	6.0	6.2	6.6	5.4	7.4
64	56	34	15	9	6	6	18	27	38	45	69	
Top Wall	62	40	21	15	ditch	12	BT	4	8	32	39	63
70												

52.12	55.20	56.1	56.5	56.5								
10.35	7.27	6.4	6.0	6.0								
64-73	73	100	125	155								
ditch	70	77	106	131	161							
	Top Wall											

58.6	58.6	57.7	55.1	55.1	57.9	58.3	57.9	57.9	57.6	56.6	57.8	56.7
3.9	4.0	4.8	7.4	7.4	4.6	4.2	4.6	4.6	4.9	5.9	4.7	5.8
50	36	17	12	9	3		6	16	23	33	39	56
55	41	22	17	14	8		BT	2	BT	28	34	51

56.37	53.33	56.46	56.7									55.5
6.10	9.14	6.01	5.8									7.0
57	57-66	66	100									75
Top Wall	62	71	105									70
	ditch											

57.8
4.7
160
165

57.2
5.3
125
130

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

762.47

762.61

12+50

$\pm 12' 50''$

✓

✓

13+00

$\pm = 18' 0'' S$

✓

TP

7.91

768.00

768.14

2.38

760.09

760.23

BM₂

5.12

762.88

763.02

762.88

TP

2.69

762.42

762.56

8.27

759.73

759.87

BM₃

8.25

754.17

754.31

754.18

Jan 26, 1962

LT

E

RT

9

59.3	59.1	56.8	56.8	59.4	59.4	59.2	59.0	58.8	58.5	57.5
3.2	3.4	5.7	5.7	3.1	3.1	3.3	3.5	3.7	4.0	5.0
29	17	11	9	3		5	17	24	31	45
41	29	23	21	15		BT	5	BT	19	33

59.3	58.0	54.9	57.99
3.2	4.45	7.57	4.48
42	49	49-58	58
54	Top Wall	& Ditch	70
		61-70	

55.8	56.6
6.7	5.9
80	59
68	47

59.1	58.8	58.2
3.4	4.1	4.3
150	100	79
162	112	91

59.26	59.5	59.8	58.2	59.7	59.3	59.9	59.9	59.7	58.8	56.9	57.3
3.21	3.0	2.7	4.3	2.8	2.2	2.6	2.6	2.8	3.7	5.6	5.2
43	40	16	5.7	3		9	17	25	34	56	65
Top Wall	58	24	ditch	21		BT	21	BT	16	38	47
61			23-25								
56.20	59.25	59.7	60.3	61.5							
6.27	3.22	2.8	2.2	1.0							
43-52	52	74	100	150							
ditch	70	92	118	168							
61-70											

54.2	57.2
8.3	5.3
80	76
62	58

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

BM ₂	5.59	768.47		762.88
-----------------	------	--------	--	--------

13+50	$\angle$ 12'50.			
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✓

+80	$\angle$ 9'50.			
-----	----------------	--	--	--

✓

✓

Jan 26, 1962

14

2

RT

10

60.52	60.4	60.2	58.4	60.7	60.8	60.5	60.6	60.3	60.5	57.2
7.95	8.1	8.3	10.1	7.8	7.7	8.0	7.9	8.2	8.0	11.3
53	34	14	5-7	4		6	14	21	30	40
Top wall	46	26	17	19	16	RT	2	BT	18	28

57.29	60.54	61.7
11.18	7.93	6.8
53-62	62	89
ditch	74	101
65-74		

65.2	62.2	54.2	56.4
3.3	6.3	14.3	12.1
150	100	74	59
138	88	62	47

61.5	61.7	58.7	61.1	60.9	60.8	60.7	60.5	57.9	55.7
7.0	6.8	9.8	7.4	7.6	7.7	7.8	8.0	10.6	12.8
40	21	10-14	8		11	22	30	35	42
49	30	19-23	17	BT	2	BT	13	21	26

61.6	61.60	58.01
6.9	7.47	10.46
55	60	60-69
64	Top wall	Ditch
	69	69-78

52.8	53.1
15.7	15.4
75	57
Ditch	48
66	

67.6	65.8	63.5	62.6	61.06
0.9	2.7	5.0	5.9	7.41
150	125	100	85	69
159	134	109	94	Top wall
				78

Sta

+

A

-

Elev

768.47

13+92

E 8' 50"

✓

14+00

E = 7' 0" S

✓

✓

+10

E = 7' 50"

✓

Jan 26, 1962

L+

£

R+

11

67.5 59.1 57.8 55.8 56.0 57.57 60.9 61.0 61.1 60.9 61.0 62.70 55.2
 7.0 9.4 10.7 12.7 12.5 10.9 7.6 7.5 7.4 7.6 7.5 5.77 13.3
 56 41 24 19 7 0
 64 49 32 27 15 WW
 Bridge Wedge BT 5 13 20 25 25 25
 17 17 Top Ditch Rail

61.02 58.00 61.02 62.4 63.5 65.9 67.4
 7.45 10.97 7.45 6.1 5.0 2.6 1.1
 62 62-71 71 85 100 125 150
 Topwall Ditch Topwall 93 108 133 158
 70 70-79 79 52.1 54.0
 16.4 14.5
 75 41
 67 33

58.8 57.6 56.0 56.5 55.6 62.74 61.12 61.7 61.0 61.08 62.70 55.0
 9.7 10.9 12.5 12.0 12.9 5.73 7.35 7.3 7.5 7.39 5.77 13.5
 44 34 18 6 1 1 12 19 23 23 23
 Ditch Top Rail 5 12 16 Top Ditch Rail 16 16

58.1 61.2 61.05 57.99 61.05 62.4
 10.4 7.3 7.92 10.48 7.92 6.1
 52 60 63 63.72 72 78
 45 53 56 56 65 65 71
 67.4 65.3 63.3
 1.1 3.2 5.2
 150 125 100

55.7 52.9 53.8
 128 156 187
 80 71 50
 73 64 43

59.7 60.9 57.3 55.8 62.00 60.89 61.2 61.3 61.1 59.7 56.15 55.2
 8.8 7.6 11.2 12.7 5.57 7.58 7.3 7.2 7.4 9.8 12.32 13.3
 27 12 6 1.8 7.8 4 12 19 26 32 3.6
 34 19 14 0.1 BT 5 12 19 WW 25 29
 Top Rail

59.3 57.9 57.7 61.3 61.09
 9.2 10.6 10.8 7.2 4.38
 29 46 44 54 65 67.74
 58.1 54.9 54.5
 10.4 13.6 14.0
 69 76 62 56 39 32

Sta	+	T	-	E/er
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		768.47		
--	--	--------	--	--

14+10 (cont)

✓

+37 ~~£~~ 5'50

✓

BM ₂	10.08	772.96	5.59	762.88	762.88
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+75 ~~£~~ 3'50

✓

Jan 26, 1962

R1

12

✓ 63.6 ✓ 62.8 ✓ 61.14 ✓ 57.07
 4.9 5.7 7.33 11.40
 100 86 76 67-76
 107 93 TopWall ditch

83

74-83

✓ 65.5 ✓ 67.0
 3.0 1.5
 125 150
 132 157

✓ 61.37 ✓ 61.4 ✓ 58.9 ✓ 60.2 ✓ 61.2 ✓ 61.6 ✓ 61.6 ✓ 61.9 ✓ 61.8 ✓ 61.5 ✓ 58.4 ✓ 59.2
 7.10 7.1 9.6 8.3 7.3 6.9 6.7 6.6 6.7 7.0 10.1 9.3
 69 65 57 29 7 5 13 20 24 34 46
 TopWall 74 70 62 34 12 BT 8 5 15 19 29 41

✓ 58.15 ✓ 61.32 ✓ 63.3 ✓ 64.7 ✓ 67.0 ✓ 68.0
 10.32 7.15 5.2 4.0 1.5 0.5
 69-78 78 83 85 100 125 140
 & Ditch TopWall 74-83 90 105 130 145

✓ 68.0 ✓ 65.2 ✓ 62.8
 0.5 5.3 5.7
 81 69 63
 76 64 58

✓ 59.2 ✓ 57.8 ✓ 59.3 ✓ 60.4 ✓ 60.5 ✓ 62.6 ✓ 62.8 ✓ 63.1 ✓ 63.0 ✓ 61.2 ✓ 63.5
 13.8 15.2 13.7 12.6 12.5 10.4 10.2 9.9 10.0 11.8 9.5
 55 48 46 31 9 8 17 27 35 48
 58 51 49 34 12 5 14 24 32 45

✓ 59.6 ✓ 61.9 ✓ 61.54 ✓ 58.47 ✓ 61.53
 13.4 11.1 11.42 14.49 11.43
 60 67 72 72-81 81
 63 70 75 ditch TopWall 75-84 84
 TopWall Wall

✓ 70.2 ✓ 65.6 ✓ 63.7
 2.8 7.4 9.3
 67 61 58
 64 58 55

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

		772.96		
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14+75	(cont.)			
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15+00				
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	$\phi = 2.5$ South			
--	--------------------	--	--	--

✓				
---	--	--	--	--

✓				
---	--	--	--	--

150				
-----	--	--	--	--

	$\phi = 1.50$			
--	---------------	--	--	--

✓				
---	--	--	--	--

RG
FS
WM
RB
LB
DS
WS

Jan 29, 1962
Overcast, 12°

Lt

£

Rt

13

✓ 70.4 ✓ 67.8 ✓ 66.4 ✓ 64.3
1.6 5.2 6.6 87
144 118 100 87
147 121 103 90

✓ 59.7 ✓ 57.5 ✓ 60.1 ✓ 60.4 ✓ 61.1 ✓ 63.7 ✓ 63.8 ✓ 64.0 ✓ 64.0 ✓ 62.7 ✓ 64.2
13.3 15.5 12.9 12.6 11.9 9.5 9.2 9.0 9.0 10.3 8.8
57 53 47 22 9 86 10 14 27 37 47
59 55 49 24 11 BT 44 BT 25 35 45

✓ 61.6 ✓ 61.76 ✓ 58.71 ✓ 61.77
→ 11.4 11.20 14.25 11.19
68 76 78 76-85 85 87
70 TopWall 78 87 T.Wall

✓ 71.6 ✓ 67.5 ✓ 65.8
1.4 5.5 7.2
71 65 60
69 63 58

✓ 72.4 ✓ 68.5 ✓ 66.5 ✓ 64.5
0.6 4.5 6.5 8.5
153 135 114 92
155 137 116 94

✓ 62.01 ✓ 64.6 ✓ 63.6 ✓ 64.0 ✓ 64.8 ✓ 66.0 ✓ 66.2 ✓ 65.3 ✓ 66.2 ✓ 64.5
10.95 8.4 9.4 9.0 8.2 7.0 6.8 7.7 6.8 6.8 8.5
84 74 51 23 6 76 75 24 28 35
TopWall 75 52 24 7 BT 14 BT 23 27 34

✓ 56.98 ✓ 62.04 ✓ 65.2 ✓ 68.1
→ 13.98 10.92 7.8 4.9
84-93 93 105 131
ditch TopWall 106 132
85-94 74

✓ 72.2 ✓ 66.5
0.8 6.5
63 42
62 41

13.0
0.0
150

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

772.96

+75 Angle pt. of wall $E=0.0$

✓

✓

TP	10.02	<u>780.72</u>	2.26	770.70
16+00	$E=$	0.0		

✓

✓

Jan 29, 1962

Lt

E

Rt

14

65.0	65.7	67.8	67.0	65.9	66.5	67.2	67.4	67.3	67.5	65.6
8.0	7.3	5.2	6.0	7.1	6.5	5.8	5.6	5.7	5.5	7.4
46	36	24	14	4		8	17	25	28	37
						BT	E	BT		

65.3	62.32	60.18	62.90	65.2
7.7	10.64	12.78	10.06	7.8
63	72	72-91	91	100
T.Wall (End)		ditch (19')		

76.8	73.0
+3.8	0.0
77	48

73.0	68.8
0.0	4.2
146	128

67.3	66.5	68.9	69.5	67.8	67.8	68.6	68.8	68.8	69.1
59.5	58.8	61.2	61.8	60.1	60.1	60.9	61.1	61.1	61.4
13.5	14.2	11.8	11.2	12.9	12.9	12.1	11.9	11.9	11.6
40	28	16	9	3		8	16	28	34
						BT	E	BT	

64.3	62.8	62.02	64.52	67.3	71.4	67.8
56.5	55.1	54.26	56.76	69.6	63.7	60.1
16.5	17.9	18.70	16.20	3.4	9.3	12.9
48	77	77-84	84	74	54	41
		7' ditch	T.Wall			

80.7	76.8	67.8	59.4
73.0	69.1	61.1	62.1
0.0	3.9	11.9	13.6
135	128	116	100

Sta	+	Δ	-	Elev
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		780.72		
--	--	--------	--	--

16+50				
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✓				
---	--	--	--	--

+75	Angle Pt of Wall		14.1	
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17+00				
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+50				
-----	--	--	--	--

✓				
---	--	--	--	--

TP	4.50	785.13	0.09	780.63
----	------	--------	------	--------

Lt

£

Jan 29, 1962
P.C. 20°
Rt

15

65.3	69.0	69.6	69.8	72.7	70.6	70.5	71.1	71.1	71.4	70.7
15.4	11.7	11.1	10.9	8.0	10.1	10.2	9.6	9.6	9.3	10.0
52	45	28	17	6		8	20	29	35	42

BT

£

BT

62.7

66.2

67.0

74.8

78.8

76.70

18.0

14.60

13.7

5.9

1.9

4.0

67-77

77

98

110

116

60

ditch

T.Wall

74' Lt (Top Wall)

68.67	66.1	65.1	65.3	66.6	72.9	73.7	73.1	73.8	73.7	73.9	73.7
12.05	14.6	15.6	15.4	14.1	7.8	7.0	7.3	6.9	7.0	6.8	7.0
85	85	48-21		16		9	15	25	34	40	46

Top Wall End Wall

(ditch 27)

BT

£

BT

69.8

72.2

80.1

80.7

78.7

10.9

8.5

0.6

0.0

2.0

96

100

114

61

59

67.9	68.6	70.7	68.1	68.1	69.7	76.2	76.2	76.7	76.4	75.8
12.8	12.1	10.0	12.6	12.6	11.0	4.5	4.5	4.3	4.3	4.9
44	27	14	10	2		13	16	34	43	53

Ditch

BT

£

67.9

75.7

80.7

80.6

12.8

5.0

0.0

0.1

67

81

90

65

Top Guard Rail Post 13' Rt 17+87 ±

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

		785.13		
--	--	--------	--	--

18+00				
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✓				
---	--	--	--	--

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

✓				
---	--	--	--	--

19+00				
-------	--	--	--	--

✓				
---	--	--	--	--

+34				
-----	--	--	--	--

		3.21		
--	--	------	--	--

			781.92	
--	--	--	--------	--

TP				
----	--	--	--	--

	5.79			
--	------	--	--	--

		790.89		
--	--	--------	--	--

		0.03		
--	--	------	--	--

			785.10	
--	--	--	--------	--

R6
WM
FS
LB
WS

Feb 8, 1962
cloudy 50
RT

16

LT

LT

75.8	74.5	73.9	69.18	71.3	78.0	78.2	78.4	78.4	78.0	78.2
9.3	10.6	11.2	15.95	13.8	7.1	6.9	6.7	6.7	7.1	6.9
65	44	22	2-11 ditch		14	18	32	43	49	57
78.9	83.9									
6.2	1.2									
71	83									
									84.6	
									0.5	
									69	

76.8	74.8	72.8	70.66	72.6	75.3	80.4	80.6	80.6	80.5	85.1
8.3	10.3	12.3	14.47	12.5	9.8	4.7	4.5	4.5	4.6	0.0
63	25	19	7-16 ditch	5		14	29	40	52	64
77.4	82.4	93.1						94.3	90.6	
7.7	2.7	+8.0						+9.2	+5.5	
87	100	120						87	71	

75.9	73.9	72.82	73.5	80.2	82.8	82.8	83.2	83.1	83.6
9.2	11.2	12.31	11.6	4.9	2.3	2.3	1.9	2.0	1.5
27	21	12-20	11		8	16	25	33	44
		ditch							
77.3	78.8	79.6	81.5	82.5		99.1	94.6	91.1	
7.8	6.3	5.5	3.6	2.6		+12.0	+9.5	+6.0	
50	73	100	120	127		80	69	61	

Top Ref. W. 42' RT
Top Guard Rail Post
RT sta 11491

84.9
0.2
131

Sta	+	π	-	Elev
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		790.89		
--	--	--------	--	--

19+50				
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✓				
---	--	--	--	--

✓				
---	--	--	--	--

20+00				
-------	--	--	--	--

✓				
---	--	--	--	--

✓				
---	--	--	--	--

TP	3.98	794.25	0.62	790.27
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Feb 8, 1962

LT

E

RT

17

76.4

75.21

76.4

80.5

85.1

85.4

85.5

85.2

84.8

14.5

15.68

14.5

10.4

5.8

5.5

5.4

5.7

6.1

26

14-24

14

8

8

22

31

35

ditch

77.8

78.2

79.4

81.3

82.1

80.9

90.9

88.07

85.4

13.1

12.7

11.5

9.6

8.8

+10.0

0.0

2.82

5.5

29

50

72

100

111

60

45

42

41

Top Wall

90.9

87.8

84.6

0.0

3.1

6.3

157

142

117

78.1

76.08

77.2

83.5

87.0

86.8

87.1

86.9

86.6

90.0

12.8

14.81

13.7

7.4

3.9

4.1

3.8

4.0

4.3

0.9

28

20-29

19

8

5

18

28

33

38

ditch

81.5

83.4

83.2

82.7

86.5

803.4

98.6

94.4

89.77

9.4

7.5

7.7

8.2

4.4

+12.5

+7.7

+3.5

1.12

42

61

85

100

117

64

52

43

38

Top Wall

98.9

90.9

87.6

+8.0

0.0

3.3

174

143

134

Top Guard Rail Post Lt. Sta 20+10

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

		794.25		
--	--	--------	--	--

20+10				
-------	--	--	--	--

✓				
---	--	--	--	--

✓				
---	--	--	--	--

+39	West wing wall			
-----	----------------	--	--	--

✓				
---	--	--	--	--

BM	10.82	800.44	4.63	189.62	789.63
----	-------	--------	------	--------	--------

RG
WM
FS
RB
LB
DS
WS

Feb 9, 1962
Cloudy 10°
RT

Lt

£

18

76.21

77.7

81.9

87.0

87.2

87.6

87.0

86.1

90.01

94.3

18.04

16.6

12.4

7.3

7.1

6.7

7.3

8.2

4.24

0.0

21-28

21

14

4

16

31

36

37

42

ditch

£

Top
Wall (conc)

78.0

81.3

87.2

88.6

88.9

806.3

98.3

16.3

13.0

7.1

5.7

5.4

+12.0

+4.0

30

37

50

80

100

65

49

94.3

94.8

89.9

+5.0

+0.5

4.4

141

127

126

Top Wall
rip-rap

76.73

84.76

83.5

88.6

88.2

88.5

84.6

86.8

90.87

17.52

9.49

8.8

5.7

6.1

5.8

6.7

7.5

3.38

21-28

20

14

6

18

23

37

38

ditch

Top SW Cor
wingwall

Top Wall

1/2 Inv 6' conc
Box Culvert

84.78

87.0

84.2

84.4

90.2

804.3

804.3

94.3

9.47

7.3

5.1

4.9

4.1

+10.0

+7.0

0.0

29

36

43

57

106

65

55

46

Top NW Cor
W. Wall

140

SE Cor Headwall E side Battle Creek Rd & Lower Afton

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

		800.44		
--	--	--------	--	--

20+70				
-------	--	--	--	--

✓				
---	--	--	--	--

21+00				
-------	--	--	--	--

✓				
---	--	--	--	--

+11				
-----	--	--	--	--

		10.00		
--	--	-------	--	--

			790.44	
--	--	--	--------	--

+35				
-----	--	--	--	--

✓				
---	--	--	--	--

Feb 9, 1962

Lt

L

Rt

19

91.3

91.3

89.9

89.3

789.3

89.3

88.8

88.3

91.86

95.7

9.1

9.1

10.5

11.1

11.1

11.1

11.6

12.1

8.58

4.7

100

82

49

16

15

29

34

35

35

45

BT

TopWall

92.8

94.1

94.6

96.8

800.4

812.4

800.4

7.6

6.3

5.8

3.6

0.0

+12.0

0.0

113

122

133

140

146

73

53

93.1

91.4

90.7

90.4

90.2

89.9

90.0

89.6

88.8

92.80

7.3

9.0

9.7

10.0

10.2

10.5

10.4

10.8

11.6

7.64

76

59

49

32

15

15

15

30

35

36

BT

L

TopWall

93.0

94.4

95.4

96.5

99.6

812.4

98.4

7.4

6.0

5.0

3.9

0.8

+12.0

2.0

100

117

135

142

154

69

42

Inv 30" conc ditch culvert 180' Lt

95.4

95.4

95.0

93.5

91.7

90.6

90.9

90.3

90.2

93.59

99.7

2.0

5.0

5.4

6.9

8.7

9.8

9.5

10.1

10.2

6.85

0.7

114

109

100

69

33

17

31

37

38

50

BT

TopWall

95.8

93.8

94.4

96.0

99.9

812.4

4.6

6.6

6.0

4.4

0.5

+12.0

121

128

140

152

163

66

ditch

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

		800.44		
--	--	--------	--	--

+51		Battle Creek Rd Lt.		
-----	--	---------------------	--	--

+63				
-----	--	--	--	--

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

		10.82		
--	--	-------	--	--

			789.62	
--	--	--	--------	--

				789.63
--	--	--	--	--------

Feb 9, 1962

	LT	E	RT	20
	95.5	94.4	93.1	91.9
	4.9	6.0	7.3	8.5
	100	82	57	29
	98.3	800.4	91.1	91.1
	2.1	0.0	90.5	90.5
	135	163	89.6	89.6
			6.70	6.70
			Top Wall	Top Wall
			37	37
			812.4	99.9
			+12.0	0.5
			67	50
	91.85	95.60	93.4	92.5
	8.59	4.84	7.0	2.9
	98	97	67	48
	in N	TOP	BT	BT
	end 30' w. wall			
	Conc. Cul.			
	94.6	98.0	800.3	92.1
	5.8	2.4	0.1	91.4
	111	130	158	91.3
	ditch	TOP	BT	90.9
	Bank			90.4
			812.4	94.03
			+12.0	0.5
			67	50

SE cor Headwall E. of Battle Creek Rd and Lower Afton

Sta

+

π

-

Elev

KP
JS
FS
LB

30 Nov 1961
DRIZZLE A.M.
36°

1.

LOWER AFTON ROAD
STH#100 TO POINT DOUGLAS RD.

X- SECTIONS

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

BM	4.53	843.13		838.60
----	------	--------	--	--------

BM	7.22	848.12	2.23	840.90
----	------	--------	------	--------

BM	12.14	859.93	0.33	847.79
----	-------	--------	------	--------

TP	7.99	867.72	0.20	859.73
----	------	--------	------	--------

	12.31	878.89	1.14	866.58
--	-------	--------	------	--------

BM			1.93	876.96
----	--	--	------	--------

				876.94
--	--	--	--	--------

30 NOV. 1961
WINDY PM.

2.

Lt

£

Rt

S.E. COR DOOR SILL Ho # 2019

spike in 10" OAK 33+17 - 2' Rt

spike in 14" COTTONWOOD 3.0 Lt 36+47

spike in 8" ELM 90± Lt Sta 38+35

SPIKE IN GROUND

TOP LOWER STEP Ho # 2081

840.90

Sta	+	π	-	Elev.
BM	12.83	851.43		838.60
31+25				
✓				
✓				
31+75				
✓				
✓				

AD
US
FS
LB

Lt

1 DEC. 1961
cloudy
38°
Rt.

3

S.E. COR DOOR- SILL Ho⁴ 2019

46.6	44.6	41.3	37.6	37.1	38.2	39.1	40.8
4.8	6.8	10.1	13.8	14.3	13.2	12.3	10.6
76	57	48	26		20	35	42

51.1	56.4	60.3	61.4
.3	25.0	48.9	110.0
100	115	126	129

41.3	41.3	40.9
10.1	10.1	10.9
75	66	47
BT	BT	BT

80.4	71.4
+29.0	+20.0
181	159

55.2	50.3	49.8	45.2	39.1	38.7	38.3	39.5	40.9	44.7
+3.8	1.1	1.6	8.2	12.3	12.7	13.1	11.9	10.5	6.7
74	54	42	30	14		38	53	62	70

51.3	62.8	66.4	69.8
+5.9	+11.4	+15.0	+18.4
91	113	13	143

44.8
66
78
BT

78.5	71.4
+27.1	+20.0
175	147

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

		851.43		
--	--	--------	--	--

32+00				
-------	--	--	--	--

✓				
---	--	--	--	--

✓				
---	--	--	--	--

32+28				
-------	--	--	--	--

✓				
---	--	--	--	--

1 DEC. 1961

4

L

E

R

$\checkmark$ 53.6 $\checkmark$ 51.4 $\checkmark$ 47.8 $\checkmark$ 42.1 $\checkmark$ 39.6 $\checkmark$ 37.8 $\checkmark$ 37.6 $\checkmark$ 39.3 $\checkmark$ 45.7
 $\rightarrow$ +2.2 0.0 3.6 9.3 11.8 13.6 13.8 12.1 5.7
 50 43 35 17 26 53 66 77

$\checkmark$ 54.0 $\checkmark$ 59.1 $\checkmark$ 62.2
 $\rightarrow$ +2.6 +7.7 +10.8
 64 86 100

$\checkmark$ 46.1
 5.3
 85
 BT

$\checkmark$ 40.6 $\checkmark$ 40.8 $\checkmark$ 69.0 $\checkmark$ 66.1
 $\rightarrow$ +29.2 +19.4 +17.6 +14.7
 175 134 135 119
 154

$\checkmark$ 63.7 $\checkmark$ 62.7 $\checkmark$ 61.0 $\checkmark$ 51.4 $\checkmark$ 44.9 $\checkmark$ 39.9 $\checkmark$ 36.2 $\checkmark$ 31.3 $\checkmark$ 31.9 $\checkmark$ 36.0
 $\rightarrow$ +12.3 +11.3 +9.6 0.0 6.5 11.5 15.2 20.1 19.5 15.4
 100 87 64 39 21 20 28 58 73

$\checkmark$ 67.2 $\checkmark$ 71.4 $\checkmark$ 79.7
 $\rightarrow$ +15.8 +20.0 +28.3
 122 141 175

$\checkmark$ 37.2
 14.2
 75

STA

+

π

-

ELEV.

851.43

32+36

✓

✓

✓

32+45

✓

1 DEC. 1961

5.

Lt

±

Rt

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 56.9 51.4 47.4 42.8 39.6 37.7 29.2 30.1 30.44
 +5.5 0.0 3.8 8.6 11.8 13.7 21.2 21.3 20.99
 50 36 30 11 10 26 46 47
 TOP HEAD WALL

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 61.4 63.3 65.6 30.1 30.3 23.91 30.47
 +10.0 +11.9 +14.2 21.3 21.1 27.62 20.96
 60 73 100 62 56 51 55
 FL 5.0 TOP HEAD WALL
 CONC. CULVERT 15.81

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 73.5 71.4 68.3 34.7
 +22.1 +20.0 +16.9 16.7
 146 142 124 75

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 76.4 79.3
 +25.0 +27.9
 160 175

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 61.4 60.0 56.4 42.5 39.5 37.8 29.5 29.9 24.4
 +10.0 +8.6 11.0 8.9 11.9 13.6 21.9 21.5 27.0
 40 33 21 12 5 22 40 50-54
 Creek

✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
 66.4 67.9 68.3 35.5 29.4 25.6
 +15.0 +16.5 +16.9 15.9 22.0 25.9
 48 64 100 76 67 58

FJS.

STA

+

π

-

Elev

851.43

32+45

✓

32+63

✓

✓

✓

1 DEC. 1961

6.

LT

E

RT

74.5

71.2

70.3

+23.1

+19.8

+18.9

154

138

130

77.2

79.6

+25.8

+28.2

165

175

59.4

58.1

51.4

46.0

37.6

30.4

29.9

28.3

24.4

+8.0

+6.7

0.0

5.4

13.8

21.0

21.5

23.1

27.0

25

21

14

8

14

35

45

49-5

creek

68.1

68.0

68.6

69.4

34.7

28.5

27.9

26.0

+16.7

+16.6

+17.2

+18.0

16.7

22.9

23.5

25.4

40

59

81

96

81

67

62

56

75.1

71.4

70.8

69.4

+23.7

+20.0

+19.4

+18.0

151

137

125

100

76.6

80.0

+25.2

+28.6

160

175

FJS.

Sta

+

π

-

ELEV.

851.43

32+75

✓

✓

33+00

✓

✓

1 DEC. 1961

7.

LT

E

RT

68.5	61.4	50.4	45.9	41.4	33.6	29.5	28.0
+17.1	+10.0	1.0	5.5	10.0	17.8	21.9	23.4
44	30	14	9		30	37	41

68.5	68.5	68.8	29.5	27.5	26.3	25.5
+17.1	+17.1	+17.4	21.9	23.9	25.1	25.9
62	80	100	68	67	51	45-49
79.8	79.5	73.3	71.2	31.4	34.0	Creek
+28.4	+26.1	+21.9	+19.8	20.0	17.4	
175	167	146	136	72	75	

67.4	61.4	56.1	42.5	39.2	31.7	31.2	29.6	26.9
+16.0	+12.0	+4.7	8.9	12.2	19.7	20.2	21.8	24.5
58	45	32	6		16	31	39	46

68.1	67.9	68.6	72.6	30.9	27.7	26.7	26.0
+16.7	+16.5	+17.2	+21.2	20.5	23.7	24.7	25.4
76	100	110	146	67	61	55	49-51
							Creek

77.8	75.2	32.7	38.4
+26.4	+23.8	18.7	13.0
175	166	75	84

STA

+

π

-

ELEV.

851.43

33+11

✓

✓

33+34

✓

✓

1 DEC. 1961

8

LT

E

RT

64.1	60.4	54.7	48.2	40.9	36.7	32.4	32.1	28.0
+12.7	+9.0	+3.3	3.2	10.5	14.7	19.0	19.3	23.4
43	35	26	15		14	25	31	42

67.0	67.2	68.1	31.7	30.8	28.0	26.5
+15.6	+15.8	+16.7	19.7	20.6	23.4	24.9
60	81	100	72	62	55	48-50

Creek

78.9	74.4	70.9	34.9	41.3
+27.5	+23.0	+9.5	16.5	10.1
175	157	143	78	86

52.1	48.0	46.0	41.2	38.7	37.9	29.0	27.5
+7	3.4	5.4	10.2	12.7	13.5	22.4	23.9
43	30	24	10		5	15	22-24

Creek

61.0	62.1	64.2	35.8	32.7	31.3	29.0
+9.6	+10.7	+12.8	15.6	18.7	20.1	22.4
64	81	100	69	60	43	39

78.8	73.4	71.4	67.4	41.2	46.1
+27.4	+22.0	+20.0	+16.0	10.2	5.3
175	156	144	124	75	81

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

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

851.43

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

33+50

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

✓

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

✓

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

BM

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

12.82

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

838.61

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

838.60

1 DEC. 1961

9.

LT

E

RT

53.6	49.5	46.5	40.5	29.1	27.7	30.1	30.7
+2.2	1.9	4.9	10.9	22.3	23.7	21.3	20.7
65	51	45	24		5-7	13	28

creek

59.9	61.5	64.5
+8.5	+10.1	+13.1
83	100	126

55.5	51.4	50.2	39.3	33.0
+4.1	0.0	1.2	12.1	18.4
75	71	68	48	36

74.6	71.4	69.4
+23.2	+20.0	+18.0
175	162	154

61.1
+9.7
86

S.E. COR. Door SILL Hoth 2019

STA	+	π	-	ELEV.
BM	12.66	851.26		838.60
TP	11.61	861.86	1.01	850.25

33+74

✓

✓

34+00

✓

✓

KP
JS
FS
LB
WM
RB
DS
WS

LT

4 DEC. 1961
CLOUDY
40° RT

10.

SE COR DOOR SILL Ho #2019

SPIKE IN GROUND 40.0 LT STA ✓

40.7	31.6	29.4	30.9	31.6	31.5	32.1	40.6
21.2	30.3	32.5	31.0	30.9	30.4	29.8	21.3
42	23	20-22	17		13	23	36

CREEK

46.3	59.1	63.7	66.6	67.1	62.8	48.4	42.5
15.6	2.8	+1.2	+4.7	+5.2	+0.9	13.5	19.4
65	95	100	121	100	84	52	41

79.6	75.3	71.3
+17.7	+13.4	+9.4
175	161	147

31.9	30.9	32.1	32.8	32.7	32.9	41.4	46.8	52.5
30.0	31.0	29.8	29.1	29.2	29.0	20.5	15.1	9.4
29	25-27	22	14		10	20	29	40

CREEK

40.2	47.7	56.9	60.7
21.7	14.2	5.0	1.2
40	54	77	100

67.5	64.2	60.5
+5.6	+2.3	1.4
85	65	55

70.5	68.6	65.4	61.9
+8.6	+6.7	+3.5	0.0
175	163	134	107

STA

+

π

-

ELEV

861.86

34+26

✓

✓

✓

34+50

✓

4 DEC 1961

11.

Lt

E

Rt

31.5	32.4	33.1	34.6	34.3	34.5	40.5	48.0	53.6
30.4	29.5	28.8	27.3	27.6	27.4	27.4	13.9	8.3
14-16	13	11	6		7	15	32	42

creek

32.4	32.6	46.1	50.8
29.5	29.3	15.8	11.1
19	25	47	59

67.9	67.1	60.4
16.0	15.2	1.5
88	71	56

67.9	64.2	59.3	57.8	54.5
16.0	12.3	2.6	4.1	7.4
164	124	100	92	80

70.9
+9.0
175

34.9	34.4	32.8	33.0	36.6	38.5	39.6	46.2	53.6
27.0	27.5	29.1	28.9	25.3	23.4	22.3	15.7	8.3
29	21	14-18	11		6	13	24	39

creek

44.3	46.8	50.6	54.9
17.6	15.1	11.3	7.0
46	61	81	100

64.9	62.7	58.7
+3.0	+0.8	3.2
90	65	51

59.4	60.4	59.3
2.5	1.5	2.6
175	147	125

FJS

STA

+

Δ

-

ELEV.

861.86

34+74

✓

✓

35+00

✓

✓

4 DEC. 1961

12.

LT

Σ

RT

38.0	37.7	33.2	33.4	36.8	39.4	47.5	56.7	59.8
23.9	24.2	28.7	28.5	25.1	22.5	14.4	5.2	2.1
36	23	10-14	8		10	20	40	49

CREEK

44.3	47.8	52.3	55.3
174	14.1	9.6	6.6
48	63	79	00

69.9	62.2
+8.0	+0.3
107	76
40.	

58.9	59.1
3.0	2.8
175	137

39.6	35.7	33.8	33.7	34.4	36.5	40.6	49.5	55.8
22.3	26.2	28.1	28.2	27.5	25.4	21.3	12.4	6.1
22	15	7	1		6	11	29	47

CREEK

42.3	44.6	48.6	57.2
19.6	17.3	18.3	4.7
29	47	62	83

63.9	63.0	61.5
+2.0	+1.1	0.4
109	92	59

64.3	63.9	63.4	61.4
+2.4	+2.0	+1.5	0.5
157	136	121	100

66.0

+4.1
175

STA

+

π

-

ELEV.

861.86

35+16

✓

✓

35+50

✓

✓

4 DEC. 1961

13.

LT

RT

36.6	34.5	33.8	38.1	38.9	40.3	47.8	55.8	59.8
25.3	27.4	28.1	23.8	23.0	21.4	14.1	6.1	2.1
36	20	15-19	3		5	20	32	43

CREEK

46.1	50.6	58.5	62.8	69.2	67.6	61.9
15.8	11.3	3.4	10.9	17.3	15.7	0.0
47	63	87	100	120	100	55

70.1	68.3	61.0	65.6
+8.2	+6.4	+5.1	+3.7
175	157	138	122

36.7	35.7	37.1	37.8	40.3	44.8	49.2	55.7	61.9
25.2	26.2	24.8	24.1	21.6	17.1	12.7	6.2	0.0
37	34-36	27	14		15	24	31	44

CREEK

42.2	46.8	60.1	62.8
19.7	15.1	1.8	+0.9
48	49	80	106

68.4	66.9
+6.5	+5.0
100	90

69.4	67.0	65.4
+7.5	+5.1	+3.5
175	154	129

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

		861.86		
--	--	--------	--	--

35+76				
-------	--	--	--	--

✓				
---	--	--	--	--

36+00				
-------	--	--	--	--

✓				
---	--	--	--	--

TP	9.29	858.84	12.31	849.55
----	------	--------	-------	--------

BM			11.01	847.83
----	--	--	-------	--------

				847.79
--	--	--	--	--------

4 DEC. 1961

14.

LT

RT

61.4	55.3	47.5	38.5	38.5	37.4	37.0	37.5	39.5
0.5	6.6	14.4	23.4	23.4	24.5	24.9	24.4	22.4
79	61	37	22	4		3-5	7	11

CREEK

63.7	66.2	70.7
+1.8	+4.3	+8.8
100	142	175

69.9	68.4	64.4	45.6
+8.0	+6.5	+2.5	16.3
100	77	52	26

64.4	63.0	53.5	40.4	39.4	38.7	37.6	40.5
+2.5	+1.1	8.4	21.5	22.5	23.2	24.3	21.4
108	71	40	24		7	9-11	15

CREEK

65.3	68.0	70.8
+3.4	+6.1	+8.9
132	158	175

71.0	69.6	64.4	50.2
+8.1	+7.7	+2.5	11.7
100	65	48	34

SPIKE IN 14" COTT. 3.0 LT STA 36+47

STA

+

π

-

ELEV.

858.84

36+31

✓

✓

36+65

✓

4 DEC, 1961

15.

LT

E

RT

✓ 39.1	✓ 38.5	✓ 39.2	✓ 41.0	✓ 40.9	✓ 45.8	✓ 52.9	✓ 58.1
✓ 19.7	✓ 20.3	✓ 19.6	✓ 17.8	✓ 17.9	✓ 13.0	✓ 5.9	✓ 0.7
✓ 22	✓ 17-21	✓ 16		✓ 9	✓ 20	✓ 33	✓ 44

CREEK

✓ 47.8	✓ 55.2	✓ 63.6	✓ 63.8	✓ 76.3	✓ 75.4	✓ 69.9
✓ 11.0	✓ 3.6	✓ +4.8	✓ +7.0	✓ +17.5	✓ +16.6	✓ +11.1
✓ 33	✓ 50	✓ 68	✓ 103	✓ 125	✓ 82	✓ 65

✓ 71.3	✓ 67.3
✓ +12.5	✓ +8.5
✓ 175	✓ 140

✓ 43.7	✓ 40.1	✓ 39.6	✓ 40.3	✓ 46.7	✓ 49.9	✓ 55.3	✓ 68.1	✓ 69.7
✓ 15.1	✓ 18.7	✓ 19.2	✓ 18.5	✓ 12.1	✓ 8.9	✓ 3.5	✓ +9.3	✓ +10.9
✓ 45	✓ 14	✓ 11.5	✓ 13.5	✓ 11	✓ 11	✓ 38	✓ 64	✓ 94

✓ 52.3	✓ 68.2	✓ 68.4
✓ 6.5	✓ +9.4	✓ +9.6
✓ 58	✓ 100	✓ 150

✓ 90.4
✓ +11.6
✓ 175

STA	+	T	-	ELEV.
-----	---	---	---	-------

STA	+	T	-	ELEV.
-----	---	---	---	-------

858.84

STA	+	T	-	ELEV.
-----	---	---	---	-------

37+00

STA	+	T	-	ELEV.
-----	---	---	---	-------

✓

STA	+	T	-	ELEV.
-----	---	---	---	-------

✓

STA	+	T	-	ELEV.
-----	---	---	---	-------

37+25

STA	+	T	-	ELEV.
-----	---	---	---	-------

✓

STA	+	T	-	ELEV.
-----	---	---	---	-------

BM

STA	+	T	-	ELEV.
-----	---	---	---	-------

11.00

STA	+	T	-	ELEV.
-----	---	---	---	-------

847.84

STA	+	T	-	ELEV.
-----	---	---	---	-------

847.79

4 DEC. 1961

16.

LT

±

RT

51.7	45.0	42.2	41.0	42.8	47.8	54.6	63.3	66.0
7.1	13.8	16.6	17.8	16.0	11.0	4.2	+4.5	+7.2
60	15	9	4-8		10	22	34	65

CREEK

52.9	63.9	67.4	68.8
5.9	+5.1	+8.6	+10.0
78	100	111	150

67.5
+8.7
105

70.2
+11.4
175

44.6	42.7	42.4	42.5	48.2	50.3	54.2	62.7	64.6
14.2	16.1	16.4	16.3	10.6	8.5	4.6	+3.9	+5.8
38	22	16-20	15		4	18	35	73

CREEK

52.4	53.4	65.5	67.6
6.7	5.4	+6.7	+8.8
50	79	111	147

66.0
+7.2
100

68.7
+9.9
175

SPIKE IN 14" COTT 3.0 LT STA 36+47

Sta + π - elev

B.M. 242 879.36

876.94

37+37

✓

✓

+50

✓

✓

✓

2.5
 P.5
 2.13
 D.5
 W.5

5 Dec 1961 17.
 Cloudy 35°
 Rt

Top lower step H₀ = 2981

47.3	51.4	49.3	52.5	56.5	58.1	60.8	62.8	64.0
32.1	28.0	30.0	26.8	22.9	21.3	18.6	16.7	15.4
40	31	27	13		14	23	29	40

46.2	45.1	45.4	44.0
33.2	34.3	34.0	35.4
58	73	90	92.0x

Creek

70.7	67.8	64.8
87	116	146
100	75	50

69.8	67.8	66.4	58.5	56.2	45.8
9.6	11.6	13.3	20.8	23.2	33.6
175	150	132	121	115	97

52.1	53.1	60.1	59.7	65.5	64.5	63.2	63.1	63.9	67.4
27.4	24.3	19.3	19.7	13.9	14.9	16.2	16.3	15.5	12.0
49	38	28	16	10		12	24	42	76

52.8	54.6	55.3	47.4
26.6	24.9	24.2	32.3
61	68	84	94

70.4	68.8
9.0	10.6
100	96

55.5	46.7	44.8	44.8	46.0
23.9	32.7	34.6	34.6	33.4
126	108	106	104	101

Creek

65.3	68.1	70.1
14.1	11.3	9.3
137	150	175

Sta T H - elev

879.36

37+73

✓

✓

13. M.

2.41

876.95

876.94

5 Dec 1961

18

✓ LT ✓ ✓ ✓ ✓ ✓ Rt ✓ ✓ ✓

56.6	59.4	66.4	66.7	66.2	64.7	64.0	64.0	65.4
22.8	20.0	13.0	12.7	13.2	14.7	15.4	15.4	14.0
79	71	46	21		21	45	50	67

✓ ✓ ✓ ✓

55.7	46.7	46.1	45.2
23.7	32.7	33.3	34.2
95	108	114	116-117

Creek

68.1
11.3
100

✓ ✓ ✓ ✓ ✓

72.2	69.8	61.6	51.9	46.0
7.2	9.6	12.8	27.5	33.4
175	165	150	131	118

TOP Lower step $H_0 = 2081$

STA	+	π	-	ELEV.
BM	4.85	881.79		(876.94)
TP	4.69	873.35	13.13	868.66
38400				
✓				
✓				
+25				
✓				
✓				
BM			13.66	859.69 (859.73)

KP
FS
LB
WM
RB
DS

LT

±

RT

19

WS TOP LOWER STEP No# 2081

SPIKE IN GROUND 10' RT STA 38+50

51.0	61.8	67.6	67.6	70.0	60.8	66.1	65.2	65.3
22.4	11.6	5.8	5.8	6.4	6.6	7.3	8.2	8.1
83	75	54	19		15	37	65	75

47.1	48.7	63.2
26.3	24.7	20.2
96-100	109	122

CREEK

66.2
7.2
100

68.5	58.9
4.8	14.4
176	134

65.5	69.1	63.3	68.1	61.9	67.6	66.6	66.0	65.8
7.9	4.3	5.1	5.3	5.5	5.8	6.8	7.4	7.6
40	38	22	11		30	50	69	75

54.0	49.8	47.1	53.5
19.4	23.6	26.3	19.9
56	68	90-94	100

Creek

65.9
7.5
100

69.3	67.2	60.3
4.1	6.2	13.1
175	155	123

SPIKE IN 8" ELM 90±' LT STA 38+85

STA

+

π

-

ELEV

873.35

38+50

✓

✓

+75

✓

✓

18 DEC. 1961

20

LT

Z

RT

51.1	64.5	68.2	64.9	68.7	64.6	67.3	66.5
22.3	8.9	5.2	4.5	4.7	4.8	6.1	6.9
63	42	40	18		23	47	75

48.9	50.0	62.5
24.5	23.4	20.9
70-73	74	87

Creek

65.5
7.9
100

69.5	60.6	54.5
3.9	12.8	14.9
175	124	100

61.2	65.7	67.2	67.8	67.9	67.4	66.1	65.6	65.2
12.2	7.7	6.2	5.6	5.5	6.0	7.3	7.8	8.2
49	34	23	9		20	48	64	89

59.5	55.6	52.6
13.9	17.8	20.8
66	73	92

65.0
8.4
100

65.6	52.9	51.5	52.4
7.8	20.5	21.9	21.0
131	115	107-110	100

Creek

67.9	64.1
5.5	4.3
152	175

STA

+

π

-

ELEV.

873.35

39+00

✓

✓

✓

+12

✓

18 DEC. 1961

21

LT

RT

60.8	62.4	66.3	67.2	67.2	66.7	66.2	66.4	66.3
12.6	11.0	7.1	6.2	6.2	6.7	7.2	7.0	6.9
51	43	31	18		19	54	79	100

59.8	59.3	55.4	51.6
13.6	14.1	18.0	21.8
65	77	89	100

67.0	61.1	57.1	55.5	51.6
6.4	12.3	16.3	18.9	21.8
133	128	117	115	104

69.0
4.4
175

52.4	53.4	56.4	63.2	66.2	67.8	67.7	66.3	66.4	67.1
21.0	20.0	17.0	10.2	7.2	5.6	5.7	7.1	7.0	6.3
63	55	43	26	20		12	38	66	100

Creek

52.3	51.8	51.7	53.2
21.1	21.6	21.7	20.2
70	85-89	100	104

Creek

64.8	64.6	67.1	60.6
4.6	4.8	6.3	12.8
175	167	134	125

STA

+

π

-

ELEV.

873.35

39+38

✓

✓

+50

✓

✓

18 DEC. 1961

22

LT

Σ

T

RT

54.3

53.0

54.4

60.4

65.8

66.0

66.5

65.9

66.3

66.6

19.1

20.4

19.0

13.0

7.6

7.4

6.9

7.5

7.1

6.8

42

37-41

35

17

11

18

57

91

100

CREEK

60.7

60.2

61.5

65.9

12.7

13.2

11.9

7.5

63

87

100

117

68.6

68.3

4.8

5.1

175

154

55.2

52.9

55.0

63.1

63.7

65.9

66.1

65.7

66.1

18.2

20.5

18.4

10.3

9.7

7.5

7.3

7.7

7.3

47

37-41

28

14

23

34

65

89

CREEK

60.6

61.4

63.7

66.9

12.8

12.0

9.7

6.5

53

82

100

118

66.4

7.0

100

68.7

67.9

4.7

5.5

175

144

STA

+

π

-

ELEV.

873.35

39+87

✓

✓

TP

4.28

869.07

40+00

✓

18 DEC. 1961

23

LT

E

RT

513

53.5

55.1

62.2

62.9

63.4

64.5

63.4

65.8

16.1

19.9

18.3

11.2

10.5

10.0

8.9

8.0

7.6

56

49-53

45

33

20

32

52

75

CREEK

63.5

67.2

67.3

67.8

9.9

6.2

6.1

5.6

65

89

100

135

66.7

6.7

100

69.4

68.2

4.0 5.2

175 145

SPIKE IN 20" DARK 5' 0 LT STA 40+00

59.4

63.1

56.2

61.5

63.7

63.6

55.2

55.1

51.9

14.0

19.7

18.2

11.9

9.7

9.8

18.2

18.3

15.5

66

52-55

51

36

5

15

22

35

CREEK

65.0

67.7

68.1

69.5

8.4

5.7

5.3

3.9

75

100

138

175

69.3

67.8

65.6

62.3

5.1

6.6

7.8

11.1

100

83

62

45

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

		873.35		
--	--	--------	--	--

40+25				
-------	--	--	--	--

✓				
---	--	--	--	--

✓				
---	--	--	--	--

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

		13.67	859.68	859.73
--	--	-------	--------	--------

18 DEC. 1961

24

LT

E

RT

61.9	63.0	59.6	64.5	56.3	58.6	60.8	56.0
11.5	10.4	13.8	18.9	17.1	14.8	12.6	17.4
41	32	13	4		7	13	22-26
			ECREEK				CREEK

54.2	58.3	60.1
19.2	15.1	13.3
46-50	69	70
CREEK		

69.6	66.6	63.7	59.6
3.8	6.8	9.7	13.8
100	72	57	37

64.9	68.5	66.8
3.5	4.9	6.6
175	126	90

SPIKE IN 8" ELM 90'± LT STA 35+85

STA	+	π	-	ELEV.
BM	13.55	882.62		869.07
40+50				
✓				
✓				
+75				
✓				
41+00				

RP WM
FS RB
LB DS
WS

LT

19 DEC. 1961

25.

RT

SPIKE IN 20" OAK 5.0 LT. STA 40.

63.4	65.2	67.5	65.0	64.5	63.4	60.0	56.6	59.8
19.2	17.4	20.1	17.6	18.1	19.2	22.6	26.0	22.8
58	33	25	11		15	23	38-42	44

Creek

64.1	65.4	68.4
18.5	17.2	14.2
90	100	129

70.1	67.0	65.1
12.5	15.6	16.9
100	65	54

70.1	69.1
12.5	12.9
175	149

66.1	67.0	67.5	67.2	66.4	64.5	62.1	58.1	65.1
15.9	15.6	15.1	15.4	16.2	18.1	20.5	24.5	17.5
100	80	56	24		18	28	35-39	51

Creek

68.7	69.7	69.9
13.9	12.9	12.7
131	152	175

71.9	70.4	67.4
10.7	12.2	15.2
100	91	69

68.5	68.0	68.3	67.3	66.0	65.9	64.0	58.1	62.6
14.1	14.6	14.3	15.3	16.6	16.7	18.6	24.5	20.0
100	82	59	24		5	8	12-16	28

Creek

STA

+

π

-

ELEV.

882.62

41400

+25

✓

+50

✓

+75

19 DEC. 1961

26.

LT

RT

68.1 68.0 68.5
14.5 14.6 14.1
175 159 138

65.9 69.0 12.3
16.7 13.6 10.3
51 73 100

69.0 69.0 67.9 67.4 63.3 61.9 60.2 61.9
13.6 13.6 14.7 15.2 19.3 20.7 22.4 20.7
100 84 51 32 7 14-18 25
creek

68.7 67.8
13.9 14.8
131 175

73.8 69.2 66.2
8.8 13.4 16.4
100 68 50

70.1 69.6 67.7 66.8 62.6 60.3 62.0 68.1
12.5 13.0 14.9 15.8 20.0 22.3 20.6 14.5
100 84 58 26 9-13 19 29
creek

69.3 68.4
13.3 14.2
141 175

75.9 73.3 70.7
6.7 9.3 11.9
100 78 52

61.4 62.5 61.2 63.1 65.6 70.5 73.0 74.9
21.2 20.1 21.4 18.9 17.0 12.1 9.6 7.7
54 41 15 5 20 46 70
creek creek creek

STA

+

π

-

ELEV.

882.62

41+75

✓

42+00

✓

+25

✓

LT

~~E~~

RT

69.3	69.9	10.7	68.0	78.5
13.3	12.7	11.9	14.6	4.1
159	128	100	66	100

69.0
13.6
175

62.1	65.0	68.2	69.7	72.4	73.3	75.2	76.8	77.5
20.5	17.6	14.4	12.9	10.2	9.3	7.4	5.8	5.1
80-84 Creek	71	61	30		21	38	61	72

72.4 73.8 73.3
10.2 8.8 9.3
100 135 175

80.0
26
100

64.1	69.3	73.2	74.4	75.3	76.7	78.6	80.0
18.5	13.3	9.4	8.2	7.3	5.9	4.0	2.6
56-59 Creek	48	18		17	41	65	87

67.1 74.3 75.6
15.5 8.3 7.0
90 100 126

80.9
1.7
100

75.6 75.8
7.0 6.8
175 160

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

		882.62		
--	--	--------	--	--

42+50				
-------	--	--	--	--

✓				
---	--	--	--	--

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

✓				
---	--	--	--	--

TP	8.36	883.58	7.40	875.22
----	------	--------	------	--------

19 DEC. 1961

28

LT

E

RT

110	65.3	65.3	73.1	75.0	71.2	78.5	80.3	82.6
11.6	17.3	17.3	9.5	7.6	5.3	4.1	2.3	0.0
82	63	42-46	21		24	36	63	100

Creek

74.8	77.1	79.0	78.6
7.8	4.9	3.6	4.0
100	136	168	175

73.7	67.0	66.1	71.2	74.3	75.3	76.3	78.8	81.1	85.2
8.9	15.6	16.5	11.4	8.3	7.3	6.3	3.8	0.9	+2.6
65	50	40-43	23		19	31	51	72	100

Creek

76.9	79.0	79.8
5.7	3.6	2.8
100	150	175

NAIL IN TRIPLE WILLOW 20' LT STA 43+75

STA	+	π	-	ELEV
		883.58		

42+84 = $\frac{1}{2}$ DRAINAGE DITCH

+88 SAME AS + 84 ON THE RT.

19 DEC. 1961

29.

LT

~~E~~

RT

69.8	64.8	69.6	74.0	75.5	78.3	81.1	81.5
13.8	18.8	15.0	9.6	8.1	5.3	2.5	2.1
54	36-40	24	✓	24	48	74	90
Creek							

73.2	74.4	76.1	77.1
10.4	9.2	7.5	6.5
70	100	148	175

78.6

5.6

200

73.4	66.2	66.2	70.8	73.7
10.2	17.4	17.4	12.8	9.9
60	46	35-39	23	✓
Creek				($S_{EE} + 84$)

76.9	74.3	74.8
6.7	5.3	3.8
100	136	175

STA

+

π

-

ELEV

883.58

43+00

✓

+25

✓

✓

+50

LT

E

RT

23823

11.7	15.1	66.1	10.8	13.1	14.8	16.5	19.0	20.5
6.4	7.9	17.5	12.8	9.9	8.8	7.1	4.6	3.1
100	67	44-48	32		19	45	78	100

creek

18.9	20.4
4.7	3.2
135	175

66.6	68.0	65.8	67.9	71.0	73.9	75.2	76.7	77.9
17.0	15.6	17.8	15.7	12.6	9.7	8.4	6.9	5.7
43	36	19-23	10		8	31	56	83

creek

13.8	15.5	16.8
9.8	8.1	6.8
68	100	142

18.9
4.7
100

18.5
5.1
175

13.1	68.0	69.9	68.6	66.6	67.8	74.8	75.0	76.6	77.8
10.5	15.6	13.7	15.0	17.0	15.8	8.8	7.6	7.0	5.8
68	50	45	24	5-9		18	41	65	100

creek

STA

+

π

-

Elev.

883.58

43+50

+75

✓
44+00

✓
+25

19 DEC. 1961

31.

LT

E

RT

11.1 15.3 ~~15.9~~
6.5 8.3 9.7
175 134 100

73.6 71.6 69.5 67.3 68.2 68.9 75.0 76.2 77.2
10.1 12.1 14.1 16.3 15.4 14.7 8.6 7.4 6.4
67 30 17 4-8 7 20 50 75
creek

74.7 75.4 76.3
8.9 8.2 7.3
100 133 175

78.3
5.3
100

75.3 74.6 72.8 68.6 71.8 74.8 76.5 77.6 79.4
8.3 9.0 10.8 15.0 11.8 8.8 7.1 6.0 4.2
100 75 43 24-26 8 40 66 100
creek

76.6 77.4 77.7
7.0 6.2 5.9
134 158 175

76.2 75.1 68.5 71.3 75.0 77.2 78.3 79.7 81.1
7.4 8.5 15.1 12.3 8.6 6.4 5.3 3.9 2.5
80 54 38-44 20 23 60 79 100
creek

77.1 78.7 78.8

6.5 4.9 4.8
100 137 175

STA	+	π	-	ELEV.
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		883.58		
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44+50				
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✓				
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✓				
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467				
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✓				
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+ 75				
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19 DEC. 1961

32

LT

E

RT

70.9	69.1	13.4	74.0	76.2	77.2	78.0	79.2	80.4	81.5
12.7	13.9	10.2	9.6	7.4	6.4	5.6	4.4	3.2	2.1
43	29-33	18	10		14	30	63	83	100

creek

76.1	77.1	78.4	79.8
7.5	6.5	5.4	3.8
51	75	100	148

80.0
3.6
175

78.5	78.9	71.4	69.9	74.9	77.9	78.7	79.6	80.6
5.1	7.7	12.2	13.7	8.7	5.7	5.1	4.0	3.0
82	43	30	14-16		19	49	77	100

creek

78.9	79.6	80.5	80.6
4.7	4.0	3.1	3.0
100	130	160	175

79.8	77.3	75.3	71.5	71.0	71.4	71.9	74.0	78.3	74.6	80.1
4.8	6.3	8.3	12.1	12.6	12.2	11.7	9.6	5.3	4.0	3.5
100	67	44	25	5-7		16	49	54	82	100

creek

79.1	80.1
3.9	2.9
140	175

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

		883,58		
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44+86				
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✓				
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45+00				
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✓				
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+25				
-----	--	--	--	--

✓				
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Lt

E

Rt

79.0	76.7	75.3	72.9	71.6	71.7	72.4	71.1
4.6	6.9	8.3	10.7	12.0	11.9	11.2	12.5
100	55	23	13		22	40	50-52
							creek

80.2	81.2
3.4	2.4
140	175

79.2	79.8
4.4	5.8
100	70

81.2	79.5	78.9	77.0	75.4	75.1	73.9	74.4	71.2
2.4	4.1	4.7	6.6	8.2	8.5	9.7	9.2	12.4
175	130	100	60	31		18	39	47-49
								creek

79.3	78.8	79.1
4.3	4.8	6.5
100	95	64

80.4	79.1	77.3	75.9	75.6	75.8	72.4	71.0	75.6
3.2	4.5	6.3	7.7	8.1	7.8	11.2	12.6	7.8
135	100	64	27		29	36	41-43	56
							creek	

82.2
1.4
175

79.6	76.9
6.0	6.7
100	88

Sta	+	π	-	ELEV
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		883.58		
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45+50				
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✓

TP			1.48	882.10
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BM	4.58	879.80	8.34	875.24	875.22
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			10.70	869.10	869.07
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19 DEC. 1961 34

LT

E

RT

79.6	78.8	77.8	76.9	76.1	76.3	72.3	71.9	75.8
4.0	4.8	5.8	6.7	6.9	7.3	11.3	11.7	7.8
125	100	63	30		19	37	46-48	56

creek

81.4	82.1
2.2	1.5
160	175

77.5	76.8
6.1	6.8
100	82

SPIKE IN 8" WILLOW 132.0 RT STA 46+25

NAIL IN TRIPLE WILLOW 20.0 LT STA

SPIKE IN 20" OAK 5.0 LT STA 40

STA	+	π	-	ELEV.
BM	1.60	883.70		882.10
45+75				
✓				
46+00				
✓				
+50				
✓				

RP WM
LB RB
FS DS
WS

LT

21 DEC. 1961
RT

35.

SPIKE IN 8" WILLOW 130'± RT STA 46+25

78.9	78.4	77.5	77.1	75.2	76.4	76.9	76.3	77.0	77.2
4.8	5.3	6.2	6.6	7.5	7.3	6.8	7.4	11.7	6.5
100	92	59	26	9		26	34	46-50	75

creek

80.2
3.5
135

81.9
1.8
175

77.9
5.8
100

90.2	78.6	77.8	77.4	76.9	77.2	77.8	77.4	72.0	77.9
3.5	5.1	5.9	6.3	6.8	6.5	5.9	6.3	11.7	5.8
150	100	67	29	10		17	46	77-81	97

creek

80.9
2.8
175

78.0
5.7
100

90.5	79.0	78.4	77.6	78.0	78.7	78.7	78.1	75.7
3.2	4.7	5.3	6.1	5.7	5.0	5.0	5.6	8.0
100	57	25	7		37	54	77	88

81.1
2.6
127

80.6
3.1
163

80.1
3.6
175

79.2
4.5
113

78.1
5.6
99

72.9
10.8
89-93

creek

STA	+	π	-	ELEV.
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		883.70		
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47+00				
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✓				
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+50				
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✓				
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TP	13.61	895.91	1.50	882.20
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48+00				
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LT

RT

80.0	79.8	79.6	78.7	78.8	79.5	79.8	78.2	73.6
3.7	3.9	4.2	5.0	4.9	4.2	3.9	5.5	10.1
105	100	66	28		29	70	88	95-99

creek

79.5	79.7
4.2	4.0
150	175

79.2	79.5
4.5	4.2
118	107

80.0	80.0	80.2	80.4	80.3	80.5	80.9	80.5	79.6	74.2
3.7	3.7	3.5	3.3	3.4	3.2	2.8	3.2	4.1	9.5
175	145	100	55	23		34	63	89	98-102

creek

79.8	79.7
3.9	4.0
122	112

SPIKE IN WILLOW 125' RT STA 48+25

80.9	81.2	81.7	82.1	82.5	82.5	82.1	81.9	81.3	81.
14.9	14.6	14.1	13.7	13.3	13.3	13.7	13.9	14.5	14.
130	100	79	52	8		32	65	88	100

81.1	81.0
14.7	14.8
160	175

STA

+

π

-

ELEV.

895.81

48+50

✓

49+00

✓

+33

✓

21 Dec. 1961

37.

LT

Z

RT

82.4	82.6	83.3	84.3	84.7	84.7	84.0	84.1	80.1
13.4	13.2	12.5	11.5	11.1	11.1	11.8	11.7	15.0
100	79	52	24		17	44	82	100

82.3	82.3	82.2
13.5	13.5	13.6
131	169	175

83.7	84.0	85.3	86.0	86.5	86.0	85.6	85.3	85.6
12.1	11.8	10.5	9.8	9.3	9.8	10.0	10.5	10.2
125	100	52	24		36	57	77	88

83.6	83.6
12.2	12.2
147	175

82.6
13.2
100

86.1	86.4	87.1	88.4	88.5	88.6	88.0	86.7	86.1
9.7	9.4	8.4	7.4	7.0	7.2	7.8	9.1	9.7
100	90	59	30		18	38	67	79

85.9	86.2	86.9
9.9	9.6	9.9
122	149	175

84.1	87.0
11.7	8.8
100	89

STA

+

π

-

ELEV.

895.81

49+38

±

DRAINAGE DITCH

✓

+43

✓

+75

✓

LT

E

RT

851	856	864	874	877	874	872	867	863	860
10.1	10.2	9.4	8.4	8.1	8.4	8.6	9.1	9.5	9.1
128	100	52	16		20	38	56	79	92

869	862
8.9	9.6
153	175

836
12.2
100

866	865	88.1	89.1	89.9	89.7	89.6	88.9	87.1	87.1
9.2	9.3	7.7	6.7	5.9	6.1	6.2	6.9	8.7	8.7
121	100	70	44	17		18	39	71	93

87.1	868
8.7	9.0
144	175

857
10.1
100

89.5	89.3	91.2	91.5	91.8	91.9	91.2	89.7	88.6	88.0	867
6.3	6.5	4.6	4.0	4.0	3.9	4.6	6.1	7.2	7.8	9.1
100	95	64	35	13		24	47	64	94	100

877	882	880
8.1	7.6	6.8
132	156	175

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

		895.81		
--	--	--------	--	--

50+00				
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✓				
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+50				
-----	--	--	--	--

✓				
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TP	5.74	900.08	1.47	894.34
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51+00				
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✓				
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21 DEC. 1961

39

LT

±

RT

88.7	90.5	91.9	93.3	93.1	93.2	92.3	91.6	89.4	88.5	87.1
7.1	5.0	3.9	2.5	2.7	2.6	3.5	4.2	6.4	7.3	8.1
130	100	81	47	16		23	39	62	92	100

89.0	89.8
6.8	6.0
152	175

92.2	93.5	94.1	94.3	94.3	93.0	91.8	90.2	89.2
3.6	2.3	1.1	1.5	1.5	2.8	4.0	5.6	6.6
100	78	53	23		30	49	66	91

90.8	90.5
5.0	5.3
129	175

88.9
6.9
100

TOP NAIL 70' LT STA 51+00

95.3	96.1	96.6	96.4	96.0	93.5	91.4	90.1	89.1
4.8	4.0	3.5	3.7	4.1	6.5	8.7	10.0	11.0
80	62	45	20		30	52	73	95

94.0	92.4	91.5	92.3
6.1	7.7	8.3	7.8
100	122	148	175

88.1
12.0
100

STA

+

π

-

ELEV

900.08

51+50

✓

52+00

✓

+25

✓

21 DEC. 1961

40

LT

E

RT

95.9	97.2	97.5	96.6	95.6	93.7	92.2	91.1	89.6
4.2	2.9	2.6	3.5	4.6	6.4	7.9	9.0	10.5
100	74	51	21		20	40	60	80

94.9	94.9	95.6	96.6
5.2	5.2	4.5	3.5
116	139	156	175

85.6	83.2	87.7
14.5	16.9	12.4
100	90-94	88

creek

96.1	96.4	96.1	95.3	94.6	93.6	91.3	90.7	89.3	84.9
3.4	3.7	4.0	4.6	5.5	6.5	8.8	9.4	10.8	15.2
128	100	75	46	17		22	47	57	66-70

creek

98.3	99.4
1.8	0.7
160	175

98.6	89.0
11.6	11.1
100	83

97.7	96.6	95.9	94.3	92.5	91.2	90.3	89.3	84.1
2.4	3.5	4.2	5.8	7.6	8.9	9.8	10.7	16.0
130	100	75	29		18	39	57	67-71

creek

900.1	99.2
0.0	+0.9
165	175

89.9	88.6
10.2	11.5
100	76

STA

+

π

—

ELEV.

900.08

52+50

✓

+75

✓

53+00

✓

21 DEC. 1961 41

LT

£

RT

98.1	96.9	95.9	92.9	92.0	91.1	84.9	89.6	90.1
2.0	3.2	4.2	7.2	8.1	9.0	15.2	10.5	10.0
125	100	81	21		18	39-43	53	69

creek

900.1 903.0
0.0 +2.9
150 175

90.5
9.6
100

99.1	97.3	95.1	93.0	91.8	89.5	85.1	91.0	90.6
1.0	2.8	5.0	7.1	8.3	10.6	15.0	9.1	9.5
118	95	52	16		24	29-33	44	100

creek

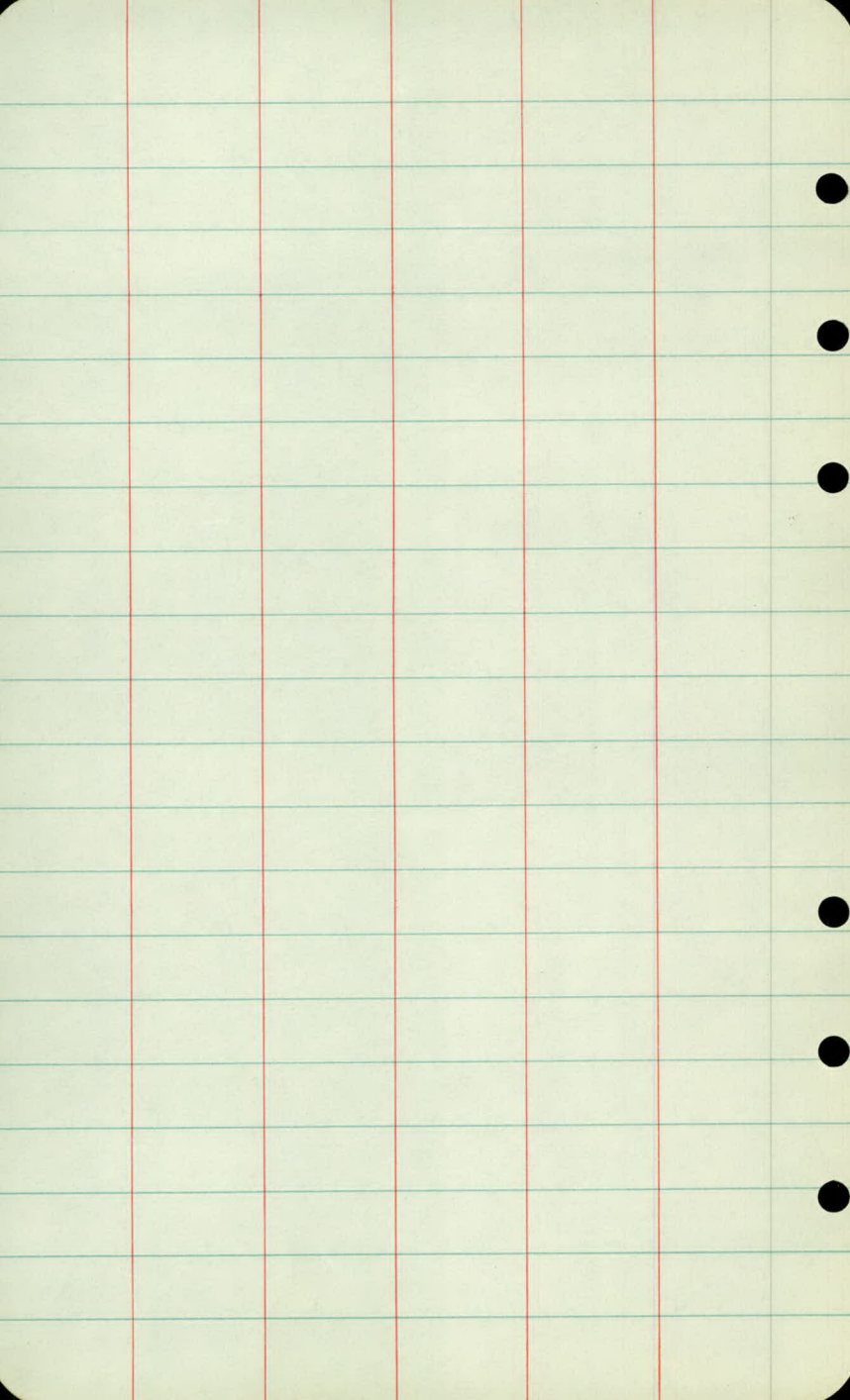
900.3 902.1 905.4
+0.2 +2.0 +5.3
133 151 175

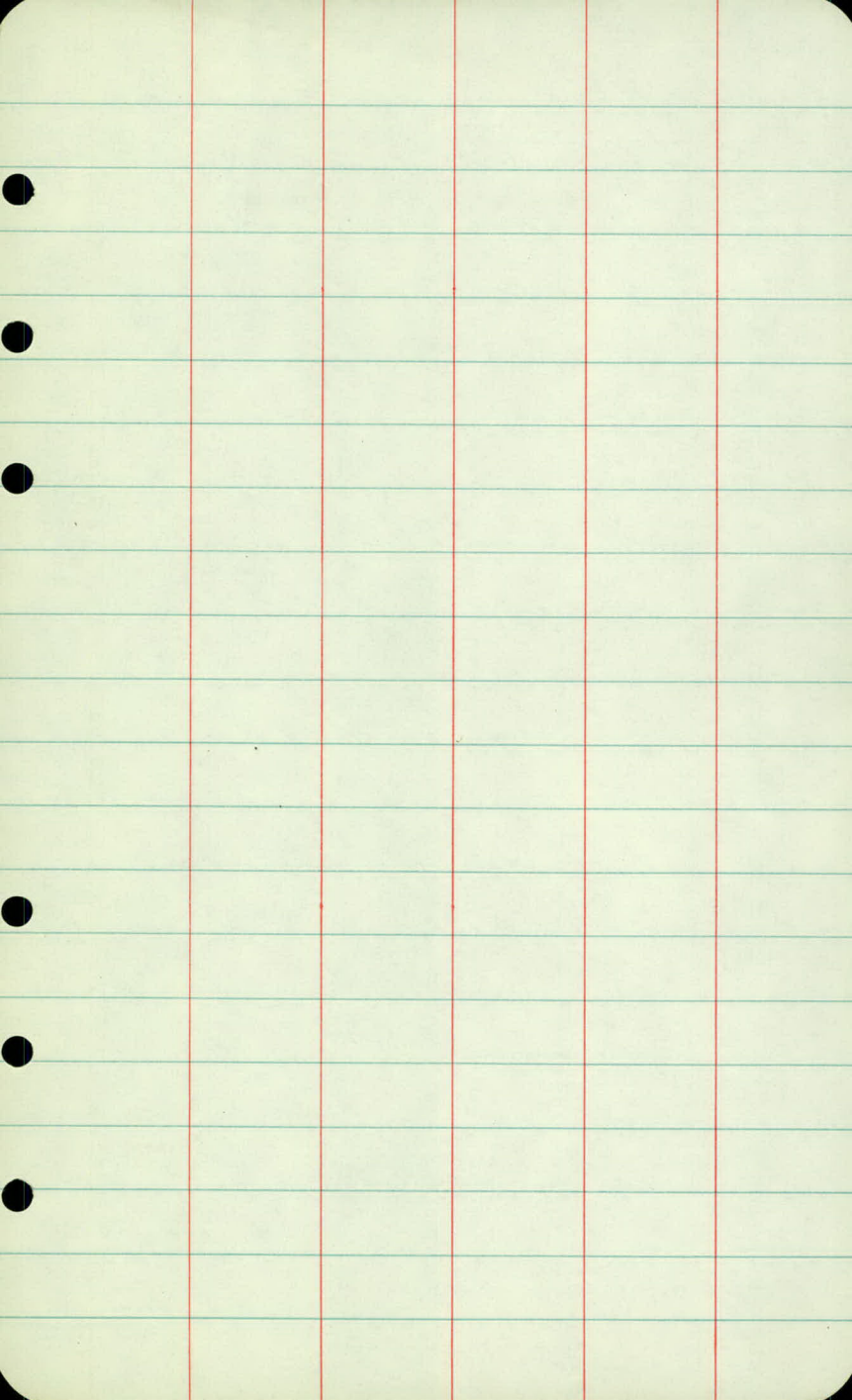
99.3	97.9	95.5	93.8	91.8	90.2	86.2	90.2	91.8	91.9
0.8	2.2	4.6	6.3	8.3	9.9	13.9	9.9	8.3	8.2
124	100	57	23	11		2-6	12	45	70

creek

902.1 905.3
+2.0 +5.2
148 175

91.4
8.7





Sta + π - ELEV

900.08

53425

✓
+50

✓
+75

✓
TP 9.44 902.76 6.76 893.32

21 DEC. 1961

42.

LT

S

RT

94.3	96.6	94.6	90.2	88.1	86.4	91.4	92.3	92.4
1.8	3.5	5.5	9.9	12.0	13.7	8.7	7.8	7.7
93	63	23	6		1-4	13	28	51

Creek

906.1	903.4	905.4
+0.0	+3.3	+5.3
122	150	175

92.1	91.9
8.0	8.2
100	75

906.9	903.1	99.1	97.8	95.8	90.3	87.6	92.5	93.1	93.1
+5.8	+3.0	1.0	2.3	4.3	9.8	12.5	7.6	7.0	7.0
175	139	100	75	30		12-16	20	50	78

Creek

92.5
7.6
100

901.1	98.8	96.7	92.5	90.6	90.4	88.8	93.8	94.2	93.6
+1.0	1.3	3.4	7.6	9.5	9.7	11.3	6.3	5.9	6.5
100	78	45	24	5		2-5	18	31	52

Creek

903.8	906.5
+3.7	+6.4
142	175

93.1	93.4
7.0	6.7
100	86

NAIL IN TRIPLE BE 5.0 RT STA 52+90

STA

+

π

-

ELEV.

902.74

54+00

✓

✓

+25

✓

✓

KP
FS
WS
LB

LT

22 DEC. 1961
≠ SNOWING
26° RT

43.

91.9	89.8	926	93.6	94.3	94.1	94.8	94.1	93.0
10.9	13.0	10.2	7.2	8.5	8.1	8.0	8.7	9.8
41	36-40	28	10		22	48	68	100

Creek

897.1	899.3	900.2	902.2
5.7	3.5	2.6	0.6
56	87	100	120

905.8	904.7
+3.0	+1.9
175	149

91.3	89.3	94.5	96.3	96.4	95.8	95.2	94.4	93.5
11.5	13.5	8.3	6.5	6.4	7.0	7.6	8.4	9.3
38	30-34	25	7		22	44	66	100

Creek

93.1	97.7	99.7	901.1
9.1	5.1	3.1	1.7
60	72	100	114

904.3	903.0
+1.5	+0.2
175	148

22 DEC. 1961

44

LT

E

RT

96.1	92.9	91.2	96.8	96.7	96.0	94.5	93.9	93.8
6.7	7.9	11.6	6.0	6.1	6.8	8.3	8.9	9.0
81	54	40-44	29		26	65	81	100

Creek

94.9	0.9	90.2	902.8
7.9	1.9	0.8	0.0
96	118	149	175

97.3	98.0	97.6	97.9	97.1	96.6	95.2	95.0	94.2
5.5	4.8	5.2	4.9	5.1	6.2	7.6	7.8	8.6
67	47	27	8		23	47	66	100

94.8	95.0	95.6	92.3
8.0	7.8	7.2	10.5
86	100	122	124-128

Creek

1.8	1.1	95.4
1.0	1.7	7.0
175	163	142

STA	+	π	-	ELEV.
		902.76		
55+00				
✓				
✓				
+50				
✓				
TP	7.52	908.47	1.81	900.95

LT

22 DEC 1961

45

RT

963	985	980	977	974	958	944	946
6.5	4.3	4.8	5.1	5.4	7.0	8.4	8.2
105	94	47	15		35	65	100

922	943	961	1.2
10.6	8.5	6.7	1.6
118-121	127	148	158

creek

2.3
9.5
175

998	994	986	984	976	969	967	964	980	985
3.0	3.4	4.2	4.4	5.2	5.9	6.1	6.4	4.8	4.3
141	100	77	47	21		23	48	69	100

970	930	961
5.8	9.8	6.1
158	162-166	175

creek

Top Nail $\pm$ STA 55+80

STA

+

π

-

ELEV.

908.47

56400

✓

BM

5.40

903.07

902.94

22 DEC. 1961

46

Lt.

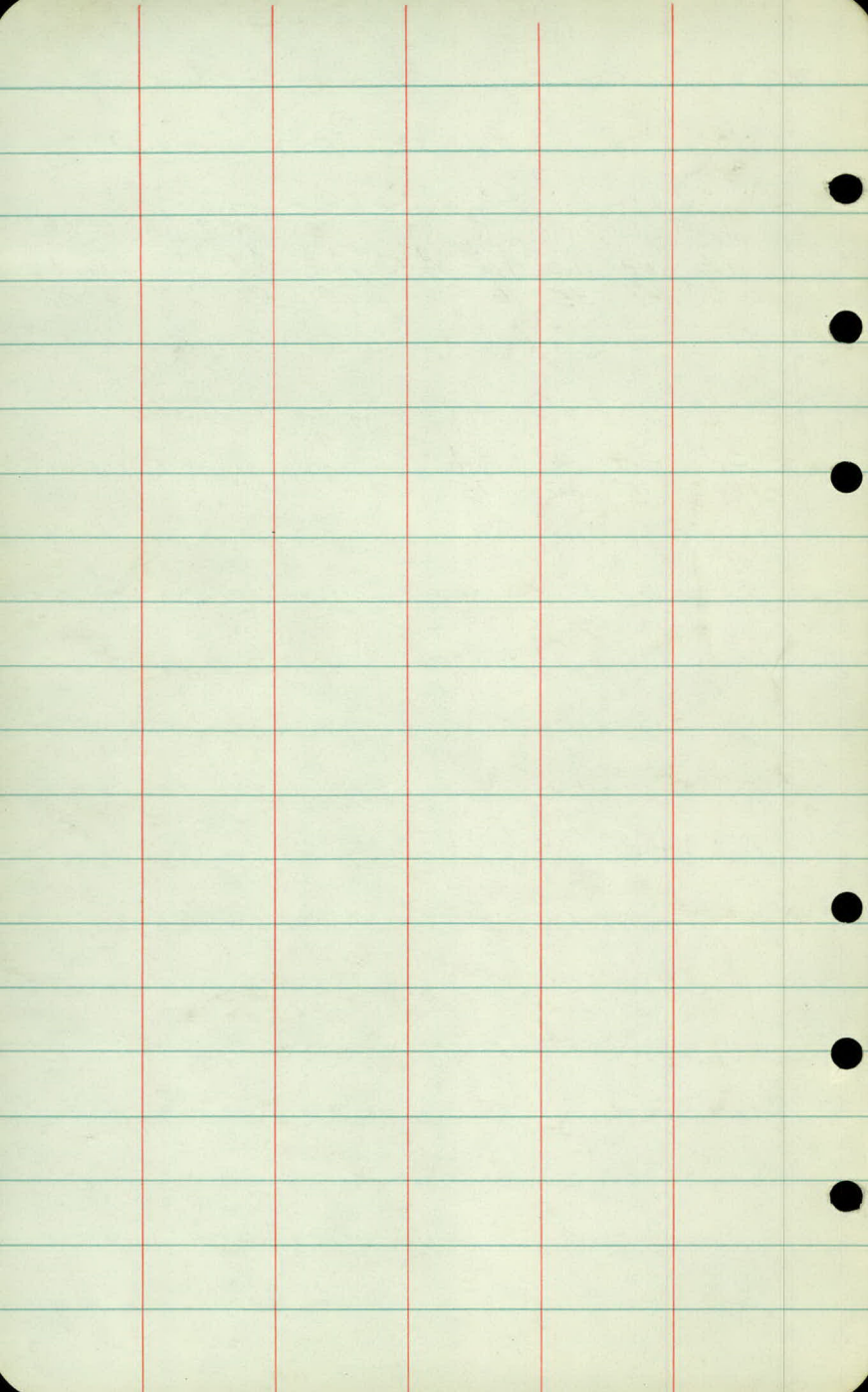
±

Rt

03.7	04.0	04.0	04.1	04.2	04.1	04.4	05.4	05.8
4.8	4.5	4.5	4.4	4.5	4.4	4.1	3.1	2.7
100	67	35	16		28	59	79	100

03.4	03.1	02.1	00.1
5.1	5.4	5.8	8.4
121	145	162	175

SPIKE IN 18" OAK 60' LT STA 55+88



Feb 1, 1962

1

RG
WM
FS
RB
LB
DS
WS

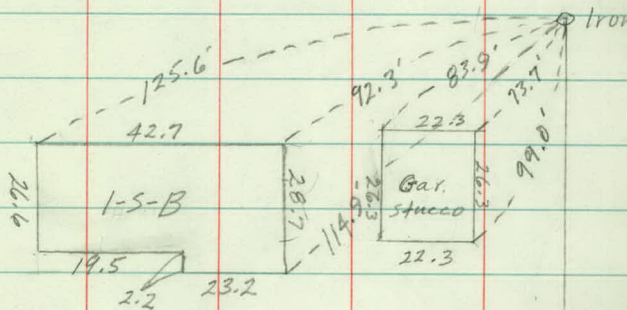
House Location

2075 Lower Afton Rd

Object	Az	Stadia
at PC Sta 32+93.43		
To Sta 32+00	180°00'	
SW Cor Ho	42°43.5'	1199'
N.W. Cor Ho	34°47'	193'

Feb. 1, 1962

2



Vert L.

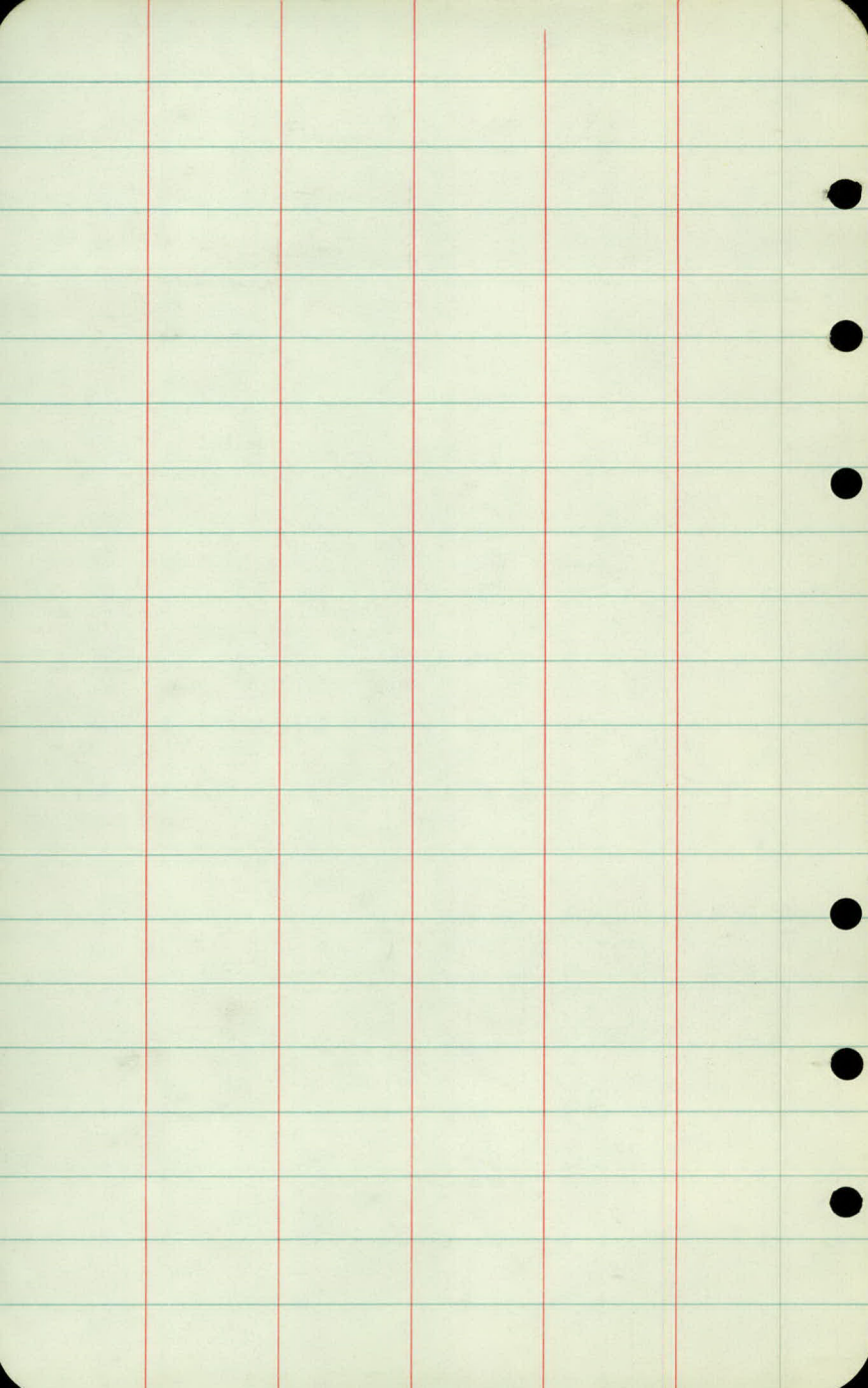
Rod

195 + 10° 20'

9.0

190 + 10° 20'

12.1



LOWER AFTON RD.

STH#100 TO PT. DOUGLAS RD.

X- SECTIONS

STA 22+00 TO 31+00

STA	+	π	-	ELEV
BM	12.29	801.92		789.63

22+00

✓

+18

✓

✓

+56

KP
JS
FS
LB
DS
WS

LT

7 DEC. 1961
RT

S.E. COR. HEADWALL AT E. SIDE OF BATTLE CREEK

00.0	96.5	93.9	92.0	92.1	92.2	91.6	94.84	02.4
1.9	5.4	8.0	9.9	9.8	9.7	10.3	7.08	+0.2
127	100	48	10	8	20	36	37	52
			BT		BT	BASE OF WALL	TOP WALL	

03.4
+1.5
150

06.6
+4.7
175

11.9
+10.0
75

05.0
+3.1
63

81.69	89.64	92.5	92.4	92.5	92.3	95.14	02.3
20.23	12.28	9.4	9.5	9.4	9.6	6.78	+0.4
18	14	4		20	37	38	51
FL	SE COR				WALL	TOP WALL	

G.O. SCP

4th COR

WALL

TOP WALL

89.55	93.7	98.0	98.6
12.37	8.2	3.9	3.3
21	34	92	100
N EDGE			
HEADWALL			

14.4	07.4	06.7
+12.5	+5.5	+4.8
75	60	58

11.9	04.9	06.9	01.9
+10.0	+8.0	+5.0	0.0
175	163	135	115

95.9	96.6	96.0	92.9	83.27	92.8	93.4	92.5	93.1	96.12
2.0	5.3	5.9	9.0	18.65	9.1	8.5	8.4	8.8	58.0
89	50	38	29	14-19		6	20	36	37
				CREEK		BT	BT	WALL	TOP WALL

STA

+

7

-

ELEV,

80.92

22+56

23+00

+18

7 DEC 1961

4

5

21

09.4	05.6	02.1	00.7	06.9	1.2	15.1
+7.5	+3.7	+0.2	1.2	+5.0	+8.3	+13.2
113	110	100	44	57	65	75

12.9	20.0	23.3
+11.0	+18.1	+21.4
136	135	175

04.6	98.2	92.9	85.33	93.0	94.2	94.4	93.8	96.81
+2.7	3.7	9.0	16.59	8.9	7.7	7.5	8.1	5.11
80	69	37	10-15 CREEK	18 BT	20 BT	39 WALL	40 TOP	

11.9
+10.0
91

13.0	11.9	06.8	01.2
+11.1	+10.0	+4.9	0.7
75	69	60	50

05.0	99.1	96.9	86.21	93.3	94.7	94.7	94.1	97.28
+3.1	2.8	5.0	15.71	8.6	7.2	7.2	7.8	4.64
79	67	33	11-16	9 BT	21 BT	39 WALL	40 TOP WALL	

11.9
+10.0
91

13.6	11.9	08.1	02.0
+11.7	+10.0	+6.2	+0.1
75	70	62	48

St or

+

7

-

801.92

23+42

✓

+55

4.08

97.84

+65

9.61

92.31

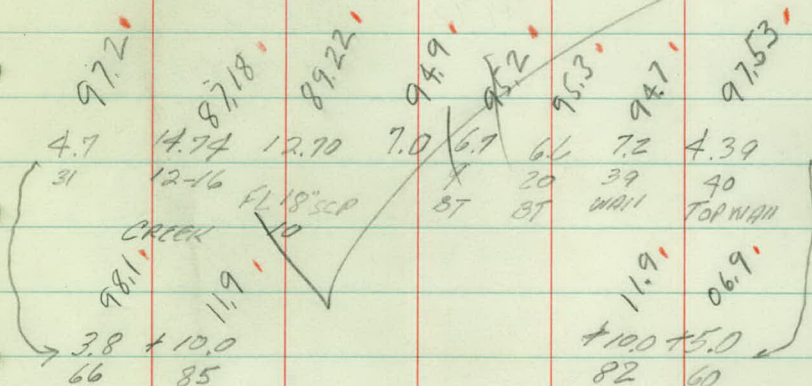
+83

✓

LT

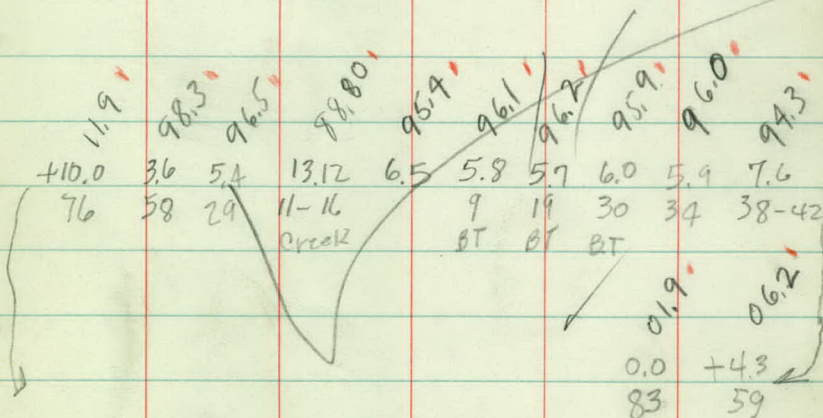
E

RT



TOP
E. END WALL 40.0 RT.

FL 18" SCP 36.0 RT



STA	+	π	-	Elev.
-----	---	-------	---	-------

		801.92		
--	--	--------	--	--

TP				
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			0.00	
--	--	--	------	--

				801.92
--	--	--	--	--------

7 DEC, 1961

LT

$\frac{1}{2}$

RT

SPike in PP 3.0 RT STA 25410

STA	+	π	-	ELEV.
TP	10.04	811.96		801.92
TP			0.00	811.96

24+00

✓

NOTE: THE FOLLOWING X-SECTIONS

ARE TAKEN FROM THE LONG-CHORD

OF CURVE (S) 30.0' RT. 0+00 = 24+11.28 PC

24+36.28

0+25

✓

RP WM
FS RB
LB DS
WS

LT

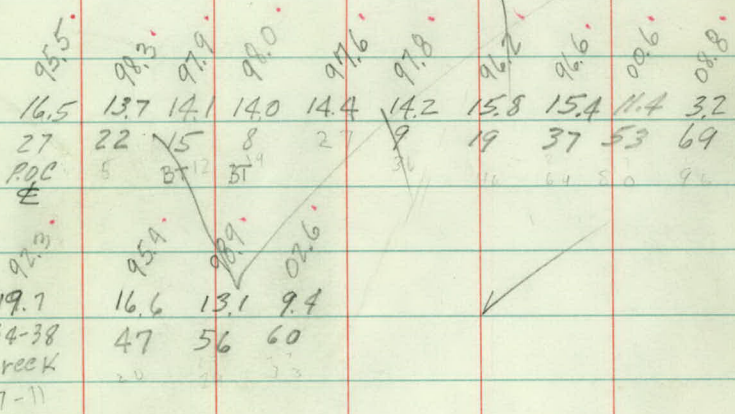
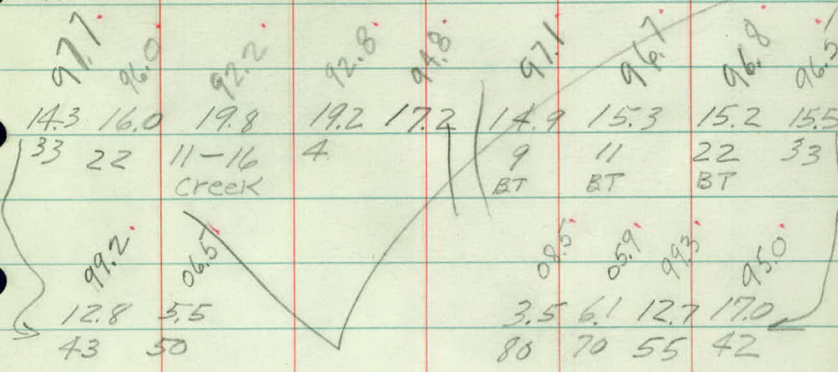
~~E~~

26 FEB. 1962

RT

SPIKE IN PP 5.0 RT STA 25+10

Roofing
NAIL IN PP 40' RT STA 27+20±



STA

+

K

-

Elev

811.96

24+61.28

0+50

25+11.28

1+00

25+61.28

1+50

26 FEB. 1962

LT

E

RT

91.5	95.1	92.9	98.1	98.1	98.1	98.1	91.4	90.8
20.5	16.9	13.1	13.3	13.3	13.3	13.9	14.6	11.2
32-36	24	17	5	BT	12	25	36	53
Creek	P.O.C.	BT	BT					

94.4	90.6	94.1
17.6	11.4	7.9
43	55	63

94.6
7.4
70

90.6	97.0	92.0	96.5	90.1	90.6	90.9	90.9	99.7	99.4	99.0
11.4	15.0	19.0	15.5	11.9	11.4	11.1	11.1	12.3	12.6	13.0
44	33	21-25	18	12	BT	8	19	28	45	67
		Creek	P.O.C.	BT		BT	BT			

93.0
9.0
61

93.9
8.1
82

90.4	96.5	97.9	92.6	92.7	93.2	93.3	91.4	91.5
11.6	16.5	14.1	9.4	9.3	8.8	8.7	10.6	10.5
32	19-23	15	7	BT	13	23	34	53
	Creek	P.O.C.	BT		BT	BT		

93.0	90.1
9.0	1.9
39	50

96.2	92.0
5.8	10.0
93	81

STA

+

K

-

ELEV

26+11.28

811.96

2+00

✓

26+61.28

2+50

✓

27+11.28

3+00

✓

27+12.28

+01

10.10

37

LT

RT

02.6	97.1	00.0	05.6	05.6	05.9	06.1	04.3	04.6
9.4	14.9	12.0	6.4	6.4	6.1	5.9	7.7	7.4
31	19-24	14	4	BT	15	26	36	47
Creek	POC	BT			BT	BT		

9.2	11.0
2.8	1.0
43	46

0.9	0.5
2.2	6.8
84	73

0.50	0.21	0.4	0.5	0.8	0.9	0.9	0.9	0.9	0.9
7.0	9.9	12.6	9.5	3.3	3.1	3.1	3.9	4.8	
34	28	23-27	17	BT	13	23	35	53	
		Creek	RO.		BT	BT			

10.3
 1.7
 79
 20
 00
 7
 5

02.1	04.0	10.0	12.1	12.1	12.2	12.0	11.0	16.2
9.9	8.0	2.0	10.1	10.1	10.2	0.0	1.0	4.2
50-34	23	12	5	BT	8	17	30	42
Creek	POC		BT		BT	BT		

0.1	0.6	1.6	16.0
8.9	5.9	+0.5	+4.0
39	46	69	80

$$\begin{array}{r} 19.1 \\ + 7.1 \\ \hline 54 \end{array}$$

FL 15" SCP 26.0' LT LC STA 3+01

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

		811.96		
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TP	12.86	824.82	0.00	811.96
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			0.00	824.82
--	--	--	------	--------

27+61.28

3+50

4+00.68 = PT 28+13.28

26 FEB 1962

LT

E

RT

Roofing nail in PP 40' RT STA 27+20⁺SPIKE IN PP $\frac{1}{2}$ STA 28+50

05.4	03.8	06.6	13.9	15.4	15.6	15.3	13.9	24.0	30.9
19.4	21.0	18.2	10.9	9.4	9.3	9.5	11.0	0.8	+6.1
48	39	43	32	20	10	BT	10	16	36
Creek P.O.C.			BT		BT				46

11.9	16.9	18.4	23.5
12.9	7.7	6.4	1.3
63	72	77	84

15.2
+9.6
50

29.1	31.5
+4.3	+6.7
134	111

07.2	05.4	11.5	18.6	18.6	18.6	11.5	16.1	33.8
17.6	19.4	7.3	6.2	6.2	6.2	7.3	+1.3	+9.0
64	49	53	28	19	BT	3	13	34
Creek P.O.C.			BT					47

06.4	11.0	18.6
18.4	13.8	6.2
80	92	100

STA	+	π	-	Elev
-----	---	-------	---	------

		824.82		
--	--	--------	--	--

28+50				
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29+00				
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TP	13.00	837.82	0.00	824.82
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+42				
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26 FEBRUARY 1962

LT

RT

10.8	9.4	7.7	13.4	20.4	21.6	21.8	21.6	20.2
14.0	15.4	17.1	11.4	4.4	3.2	3.0	3.2	4.6
46	32	18-24	12		7	19	29	40

CREEK

08.1 16.5 25.1
 16.7 2.3 + 0.3
 58 75 88

34.9 31.9
 +10.1 +7.1
 68 60

13.5	11.8	9.8	15.2	21.4	24.9	25.2	14.9	25.0
11.3	13.0	15.0	9.6	0.4	+0.1	+0.4	+0.1	+0.2
59	42	23-27	13		9	18	29	41

CREEK BT

11.8 31.1
 7.0 + 6.9
 75 108

35.8 31.3
 +11.0 +6.5
 67 60

SPIKE IN PD $\neq$ STA 28+50

13.6	10.0	11.0	16.3	21.9	27.7	17.8	27.6	25.7
24.2	27.78	20.78	21.5	15.9	11.3	10.1	10.0	10.2
36	24	24	20	8		9	20	30

FL 60 TOP HEADWALL

14.7 18.3 21.3 17.9
 23.1 19.5 16.5 9.9
 47 57 74 100

35.0 29.8 23.7
 2.8 8.0 14.1
 75 67 51

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

		837.82		
--	--	--------	--	--

29+68				
-------	--	--	--	--

✓				
---	--	--	--	--

✓				
---	--	--	--	--

30+00				
-------	--	--	--	--

✓				
---	--	--	--	--

TP	2.82	839.94	0.70	837.12
----	------	--------	------	--------

BM			1.35	838.59
----	--	--	------	--------

				838.60
--	--	--	--	--------

LT

26 FEB. 1962
E

RT

20.9	19.1	18.0	18.1	17.9	29.5	29.5	29.6	29.3
16.9	18.7	19.8	14.1	2.9	8.3	8.3	8.2	8.5
42	31	22	6		5	12	24	32

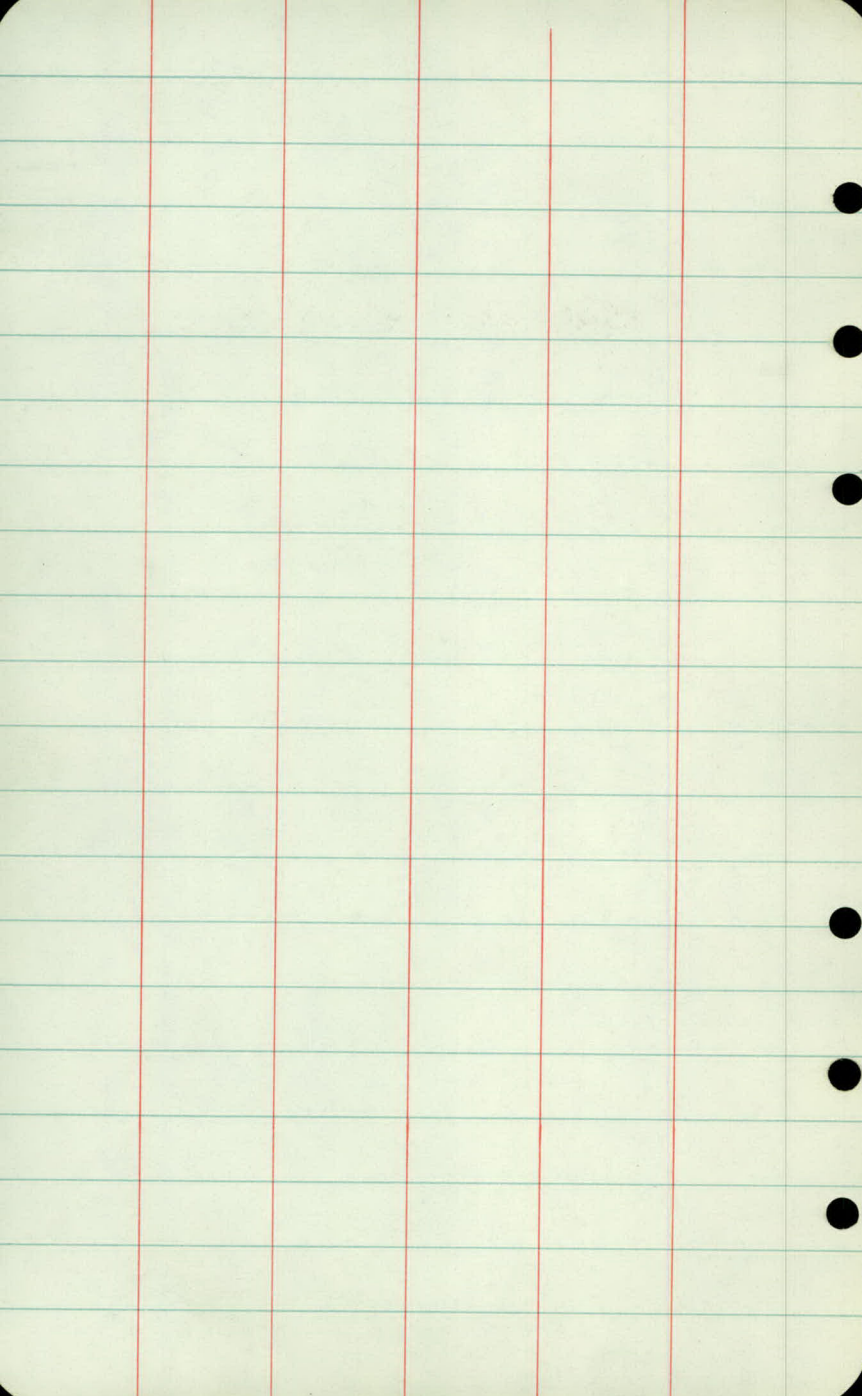
24.1	26.1	28.7	33.9	26.6	22.1	22.1	27.1
13.7	11.7	9.1	3.9	11.2	15.7	15.7	10.7
63	74	85	100	81	70	55	44

37.4
0.4
118

36.2	35.4	32.6	31.8	30.7	31.4	31.1	31.1
1.6	2.4	5.2	6.0	7.1	6.4	6.4	6.7
84	73	28	9	15	25	33	42

24.1	23.8	24.8
13.7	14.0	13.0
90	73	53

S W COR 2ND STEP Ho[#] 2019S.W. COR DOOR SILL Ho[#] 2019 LOWER AFTON RD.



LOWER AFTON ROAD POINT DOUGLAS RD TO STA #100

LONG CHORD FOR CURVE
PC PT
STA 24+11.28 TO STA 28+13.28

$$PI = 26+14.23$$

$$\Delta = 20^{\circ}06' \angle T$$

$$D = 5^{\circ}$$

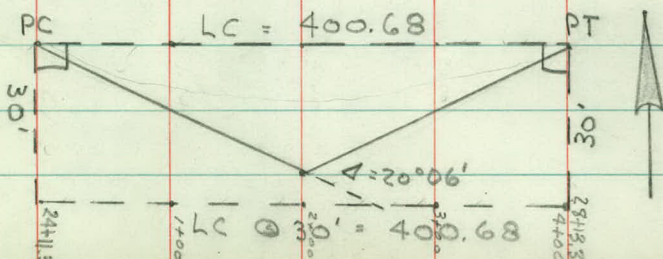
$$T = 203.15$$

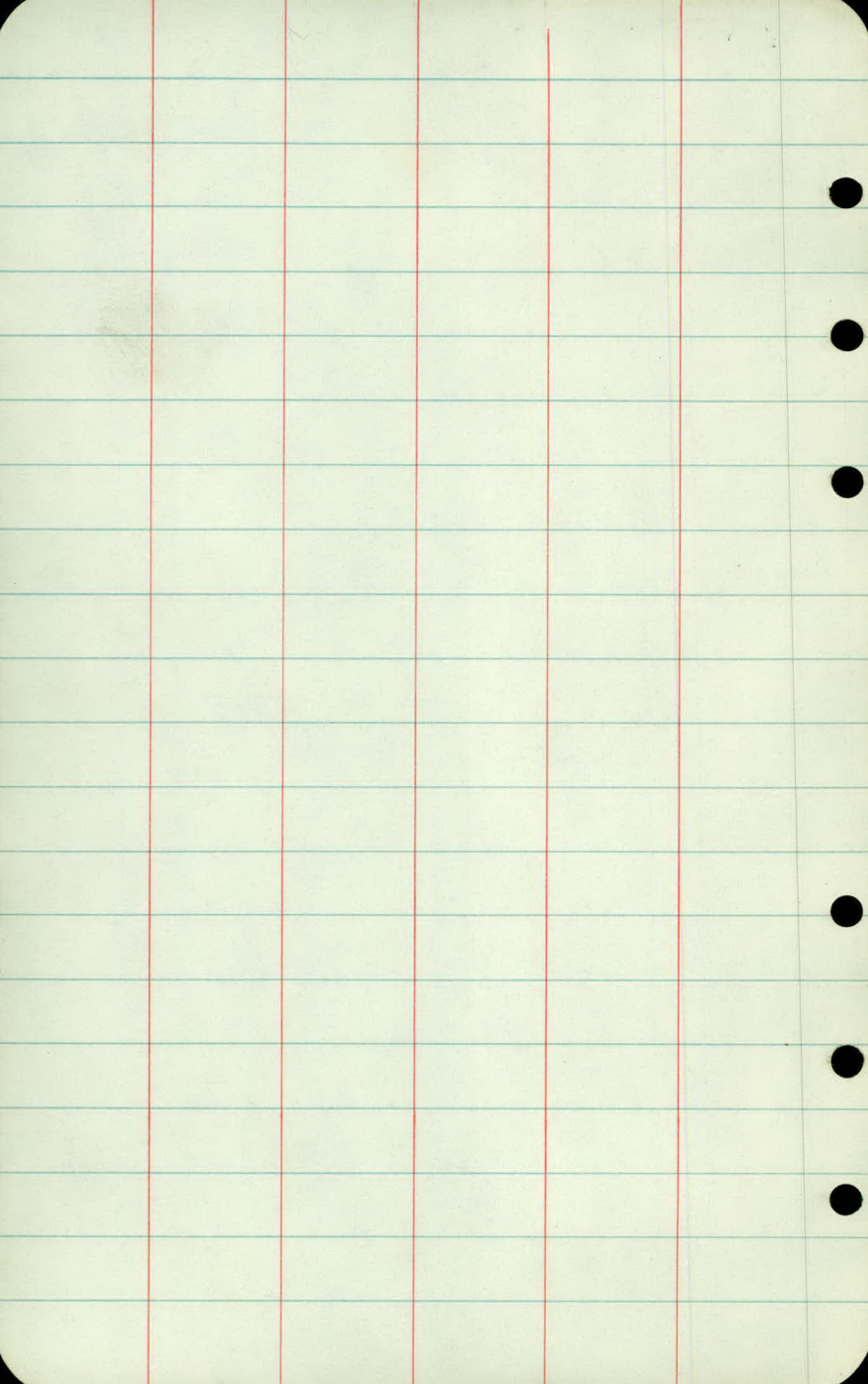
$$L = 402.00$$

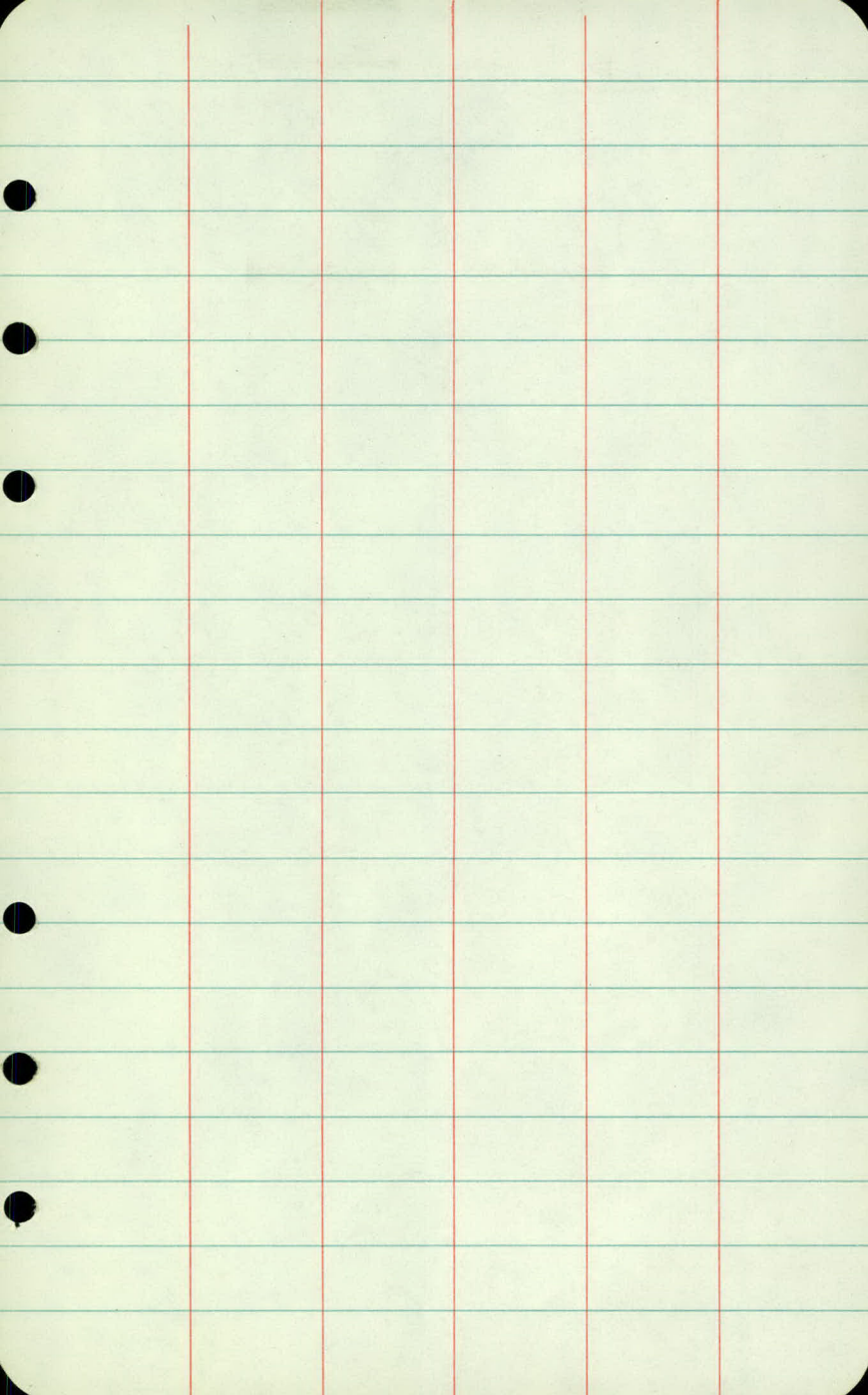
$$R = 1146.28$$

$$LC = 400.68$$

LC ON 30.0 @ TO THE SOUTH = 400.68







OBJECT

AZ

STADIA

HI 802.70

π AT STA 24+36.28

h_i = 4.95

ON LC @ 30.0 RT

BM

TO PT @ 30.0

90

GE

0.00 187'

" 210'

150' @

" 203'

HI 803.79

h_i 5.20

BM

π at STA 24+61.28

ON LC @ 30.0 RT

TO PT

90

GE

0.00 172'

150' @

0.00 200'

DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV.
-------	----------------	---------------	-----	-------	-------

			+0.78		
SPIKE IN PP 5.0 RT STA 25+10					801.92

162	^{34.24} + 21°37'	64.03	3.95	60.08	862.68
182	+ 21°37'	71.90	11.90	60.00	862.70
175	+ 21°37'	69.51	8.55	60.96	863.66

			+1.87		801.92
--	--	--	-------	--	--------

152	^{32.34} + 20°09'	55.62	3.86	51.76	855.55
176	+ 20°09'	64.68	6.32	58.36	862.15

OBJECT

AZI

STADIA

HI

805.84

415.25

 π at Sta 25+11.28

on LC @ 30' RT

To PT @ 30.0 RT 090

GE

000

125'

146'

150' @

200'

HI

807.84

 π at Sta 25+61.28

on LC @ 30' RT

415.18

To Pt @ 30.0 RT

90

GE

91'

122'

DIST.

VERT.
ANGLEROD
EQUIV.

ROD

DIFF.

ELEV.

+3.92

801.92

	^{32.58}					
110	+20°20'	40.73	4.28	36.45	842.29	
127	+20°15'	47.41	4.71	42.70	848.54	
	^{31.19}					
178	+19°18'	62.38	8.00	54.38	860.22	

+5.92

801.92

	^{37.35}					
76	+24°10'	33.99	4.45	29.54	837.38	
	^{35.42}					
103	+23°33'	43.21	12.0	31.21	839.05	

OBJECT

AZI

STADIA

π at Sta 26+11.28

ON LC @ 30' RT

To PT @ 30' RT

90

HI 810.06

44.55

BM

801.92

GE

000 98'

000 125'

000 159'

HI 813.97

π at Sta 26+61.58

45.33

ON LC @ 30' RT

To PT @ 30' RT

90

GE

000 86'

000 118'

000 140'

150' (S)

000 176'

DIST.

VERT.
ANGLEROD
EQUIV.

ROD

DIFF.

ELEV.

Roofing nail in PP 40' RT STA 27+20

+8.14

88	+ 19° 02'	30.21	5.00	25.21	835.27
112	+ 19° 00'	38.48	10.62	27.86	837.92
145	+ 17° 20'	45.22	11.40	33.82	843.88

+12.05

80	+ 14° 50'	21.29	4.00	17.29	831.26
110	+ 14° 55'	29.36	8.55	20.81	834.78
132	+ 13° 40'	32.14	9.00	23.14	837.11
166	+ 13° 42'	40.50	11.00	29.50	843.47

OBJECT

AZI

STADIA

H1

817.10

T ST 27+11.28

 $h_1 = 5.05$

ON LC ① 30' RT

TO PT ② 30' RT

90

6E

000 128'

150 ③

000 176'

T at STA 27+61.28

 $H_1 = 820.41$

ON LC ⑤ 30' RT

 $h_1 = 5.02$

TO PT ③ 30' RT

90

GE

000 126'

150 ③

000 182'

DIST.

VERT.
ANGLEROD
EQUIV.

ROD

DIFF.

ELEV.

 roofing nail in pp 40 RT 27+29 +5.14 16.49 124 + 9° 37' 20.57 5.00 15.57 832.67 16.97 171 + 9° 55' 29.87 5.00 24.87 841.97 					
--	--	--	--	--	--

8.45

811.96

 14.12 123 + 8° 12' 17.79 3.62 14.17 834.58 3 13.84 178 + 8° 02' 25.19 3.00 22.19 842.60 					
---	--	--	--	--	--

OBJECT.

AZI

STADIA

2 MARCH 1962

BM'S on Line 150' LT
OF LOWER AFTON RD.

STA + π — ELEV.

BM 11.95 850.55 838.60

TP 13.72 863.89 0.38 850.17

TP 0.90 863.44 1.35 862.54 862.53

0.95 851.14 13.25 850.19 850.17

BM 12.52 838.62 838.60

LT

£

2 MARCH 1962

RT

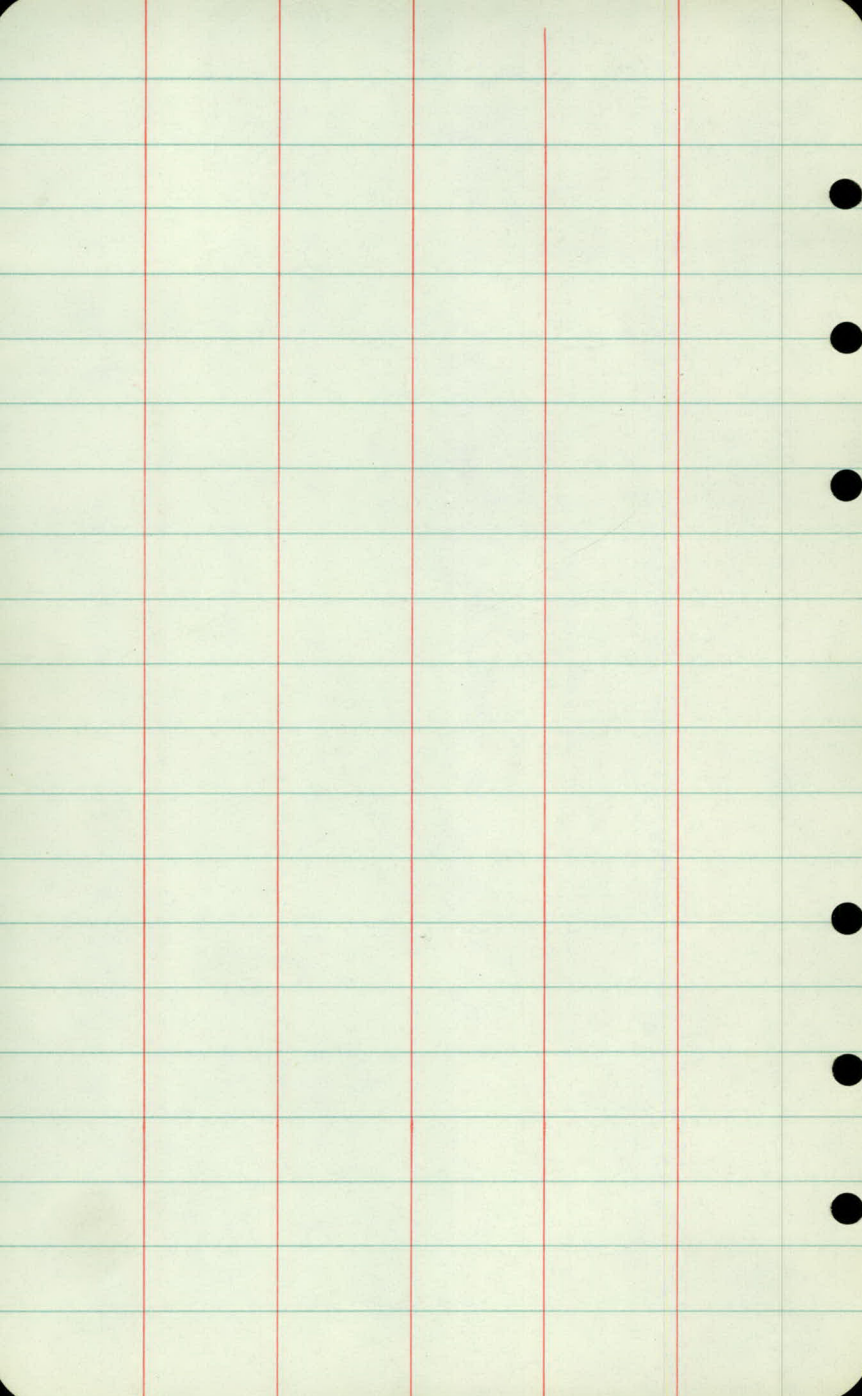
TOP DOOR-SILL H/O #2019 LOWER AFTON RD.

● SPIKE IN 6" TWIN OAK 2'0 RT STA 25+90
@150'

● SPIKE IN 6" TWIN OAK 2'2 LT STA 24+50
@150'

● SPIKE IN 6" TWIN OAK 2'0 RT STA 25+90
@150'

TOP DOOR-SILL H/O #2019 LOWER AFTON RD.



KP
FS
DS
LB

6 MARCH 1962

LOWER AFTON RD

STH #100 TO PT. DOUGLAS RD

X- SECTIONS

STA	+	π	-	ELEV.
BM	4.30	866.84		(862.54)

23+00

✓

+18

✓

+42

✓

6 MARCH 1962

LT

~~E~~

RT

② 150'

SPIKE IN 6" TWIN OAK 2.0 LT. STA 24+50

54.8
12.0
150

59.3
7.5
150

~~55.2~~
~~11.6~~
~~140~~

STA

+

π

-

ELEV.

866.84

23+83

✓

24+06

BM

4.30

862.54

862.54

BM

4.68 854.85

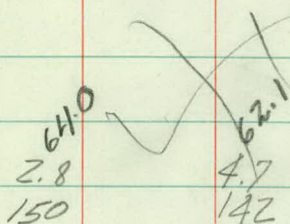
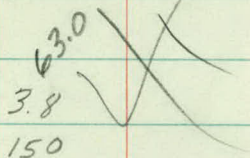
850.17

28+13.28

6 MARCH 1962

LT

RT



SPIKE IN 6" ^{TW.} OAK 2.0 LT STA 24+50 @ 150'

SPIKE IN 6" ^{TWW} OAK 2.0 RT STA 25+90 @ 150'

46.0	47.8	39.6	37.2	36.4
9.9	12.1	15.3	17.7	18.5
150	139	120	100	94

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

		854.85		
--	--	--------	--	--

28+50				
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29+00				
-------	--	--	--	--

TP	1263	864.57	2.91	851.94
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+42				
-----	--	--	--	--

+68				
-----	--	--	--	--

TP	6.17	870.06	0.68	863.89
----	------	--------	------	--------

30+00				
-------	--	--	--	--

6 MARCH 1962

LT

±

RT

~~48.1
6.8
150~~ ~~45.5
9.4
137~~ ~~41.9
13.0
114~~ ~~38.0
16.9
100~~

~~52.2
2.7
150~~ ~~45.2
9.7
124~~

STUMP 9' RT 29+06 @ 150'

~~57.1
7.5
150~~ ~~48.7
15.9
132~~

~~60.9
3.7
150~~

TOP STUMP 2'0 RT STA 29+90 @ 150'

~~64.4
5.7
150~~ ~~60.7
9.4
141~~ ~~55.3
14.8
129~~

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

		870.06		
--	--	--------	--	--

30+40				
-------	--	--	--	--

✓				
---	--	--	--	--

31+00				
-------	--	--	--	--

TP	1.21	862.33	8.94	861.12
----	------	--------	------	--------

TP	2.31	851.36	13.28	849.05
----	------	--------	-------	--------

BM			12.87	838.49
----	--	--	-------	--------

				838.60
--	--	--	--	--------

6 MARCH 1962

LT

£

RT

64.1	62.2	59.2
4.0	7.9	10.9
150	140	134

66.9	62.1	58.0	55.0
3.2	8.0	12.1	15.1
150	132	122	116

SPIKE IN GROUND 20' RT STA 31+00 (S) 150'

SPIKE IN GROUND 90' LT STA 31+00

S.W. CORNER DOOR SILL HO^W 2019

STA	+	π	-	ELEV.
BM	0.92	839.52		(838.60)
29+42				
+68				
30+00				
+40				
✓				
31+00				
BM	0.91	838.61		(838.60)

6 MARCH 1962

LT

E

RT

S.W. COR DOOR SILL Ho# 2019

37.5

33.1

2.0 6.4

127 113

39.3

0.2

132

38.5

1.4

114

39.4

0.1

111

38.9

0.6

100

37.3

2.2

61

35.7

3.8

28

34.8

4.7

20

34.3

5.2

20

34.0

5.5

40

33.6

5.9

50

28.2

11.3

60

26.9

12.6

78

50.7

49.3

112

100

48.6

30.2

19.3

82

45.7

33.4

45.8

70

45.5

38.9

1.0

57

38.9

37.1

0.6

35

37.1

37.0

2.4

22

37.0

37.7

2.5

38

37.7

37.5

1.8

54

37.5

35.6

2.0

69

35.6

31.1

3.9

82

31.1

8.4

82

SW Cor Door Sill

STA

+

π

-

ELEV.

KP
US
FS
LB
DS

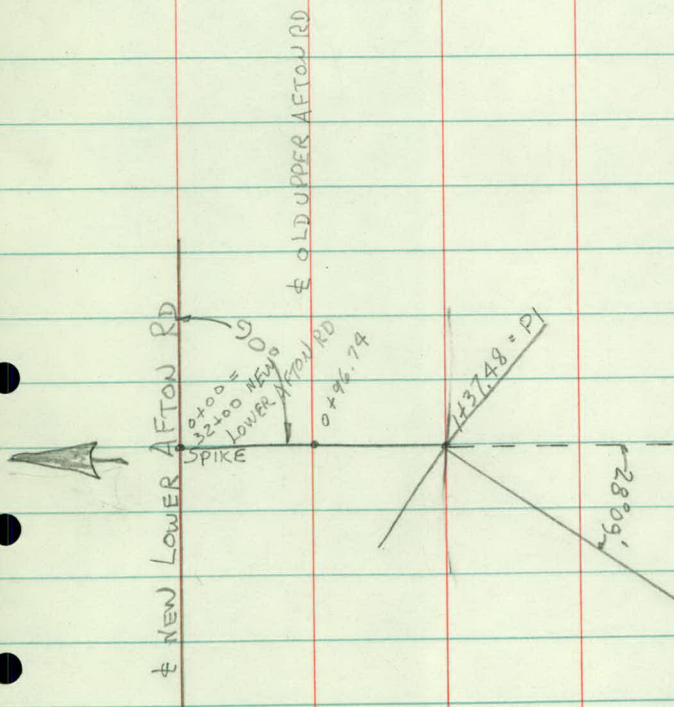
30 MARCH 1962
COLD 25°

1.

BURLINGTON RD

TOTEM RD TO LOWER AFTON RD

ALINEMENT & X-SECTIONS



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

BM	12.22	850.82		
----	-------	--------	--	--

838.60

0+00

0+96.74 = ~~E~~ Old Lower Afton Rd. (PROFILE)

✓

1+00

✓

30 MARCH 1962

2.

LT

±

RT

TOP DOOR-SILL Ho^m 2019 LOWER AFTON RD.

11.14

3.1	1.6	0.6	4.6	6.6	7	3.2	1.1	9.5
5	5	5	4	16	11	11	11	9
+3.0	+1.2	0.2	2.2	4.2	6.1	7.6	9.4	11.3
100	75	50	25		25	50	75	100

5.6	7.1	9.6						
5	5	5						
+4.8	+6.6	+8.8						
125	150	175						

5.1	4.6	6.5	7.3	6.8	5.2	7	2.0	3.1
11	11	11	11	11	11	11	11	11
5.0	2.2	2.3	3.5	4.0	5.6	7.1	7.8	7.7
54	46	34	10	BT	25	47	58	63
	TOP	BT	BT		BT	BT	BT	TOP

Shoulder			± RD					Shoulder
5.5	2.0							
11	11							
5.3	8.8							
62	84							

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

		850.82		
--	--	--------	--	--

1425				
------	--	--	--	--

✓				
---	--	--	--	--

+38				
1437.48				

✓				
---	--	--	--	--

30 MARCH 1962

3.

LT

£

RT

3. A	2. A	50.8	99.2	100	6.6	9.8	9.8	10.8
5	5	50.8	99.2	100	6.6	9.8	9.8	10.8
+ 2.6	+ 1.6	0.0	1.6	2.8	4.2	6.0	6.0	10.0
89	66	43	20		21	47	54	63
BT	E	BT	BT		BT	BT	TOP	

54.2	52.9	36.5	38.0	36.5	39.8
+2.9	+2.1	14.3	12.8	14.3	11.0
94	99-101	100	92	86	76
TOP	↓				
Shoulder	DITCH				

Shoulder	DITCH							
52.1	52.0	50.8	49.2	48.1	46.6	44.8	44.8	40.0
+11.6	+1.2	0.0	1.6	2.7	4.2	6.0	6.0	10.8
75	62	38	13		21	47	54	64
TOP	BT	BT	BT		BT	BT	TOP	
Shoulder								

Shoulder	Shoulder
51.9	51.9
5.84	5.84
+1.1	+1.1
81-83	81-83
± d.fch	± d.fch

STA	+	T	-	ELEV
		850.82		
1+75				
✓				
2+00				
✓				
4+50				
✓				

30 MARCH 1962

4.

LT

Δ

RT

Δ9.6

Δ9.8

Δ9.5

Δ9.2

Δ7.3

Δ6.5

Δ6.2

Δ3.2

Δ2.9

1.2

1.0

1.3

1.6

2.5

4.3

4.6

7.6

7.9

44-46

38

32

15

BT

25

31

40

57

ditch

TOP

BT

BT

BT

TOP
Shoulder

Shoulder

50.8

52.9

54.9

58.8

0.0

+2.1

+4.1

+8.0

35.0

40.1

49

57

71

90

15.8 10.7

100 73

Fe

Δ7.3

Δ8.6

Δ8.7

Δ8.5

Δ8.1

Δ7.2

Δ7.0

Δ3.9

Δ5.6

3.5

2.2

2.1

2.3

2.7

3.6

3.8

6.9

5.2

37-39

24

17

9

BT

21

23

30-32

41

DITCH

TOP

BT

BT

BT

TOP

Shoulder

Ditch

Shoulder

Δ7.8

Δ9.7

Δ50.6

Δ51.1

Δ36.3

Δ41.4

Δ49.8

3.0

1.1

0.2

+0.3

14.5

9.4

7.0

41

60

71

75

100

75

58

Fe

Δ3.7

Δ3.8

Δ9.1

Δ8.7

Δ8.6

Δ8.3

Δ8.7

Δ4.3

Δ6.2

7.1

7.0

1.7

2.1

2.2

2.5

2.1

4.5

4.6

46

32-34

21

11

BT

12

17

24

38

Fe

ditch

TOP

BT

BT

BT

TOP

Shoulder

Δ4.2

Δ6.7

Δ36.5

Δ4.1

Δ3.1

Δ2.2

Δ3.0

6.6

4.1

14.3

10.7

7.7

8.6

7.8

55

78

91

81

68

62

46

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

		850.82		
--	--	--------	--	--

3+00				
------	--	--	--	--

✓				
---	--	--	--	--

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

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

		12.22	838.60	
--	--	-------	--------	--

30 MARCH 1962

5.

LT

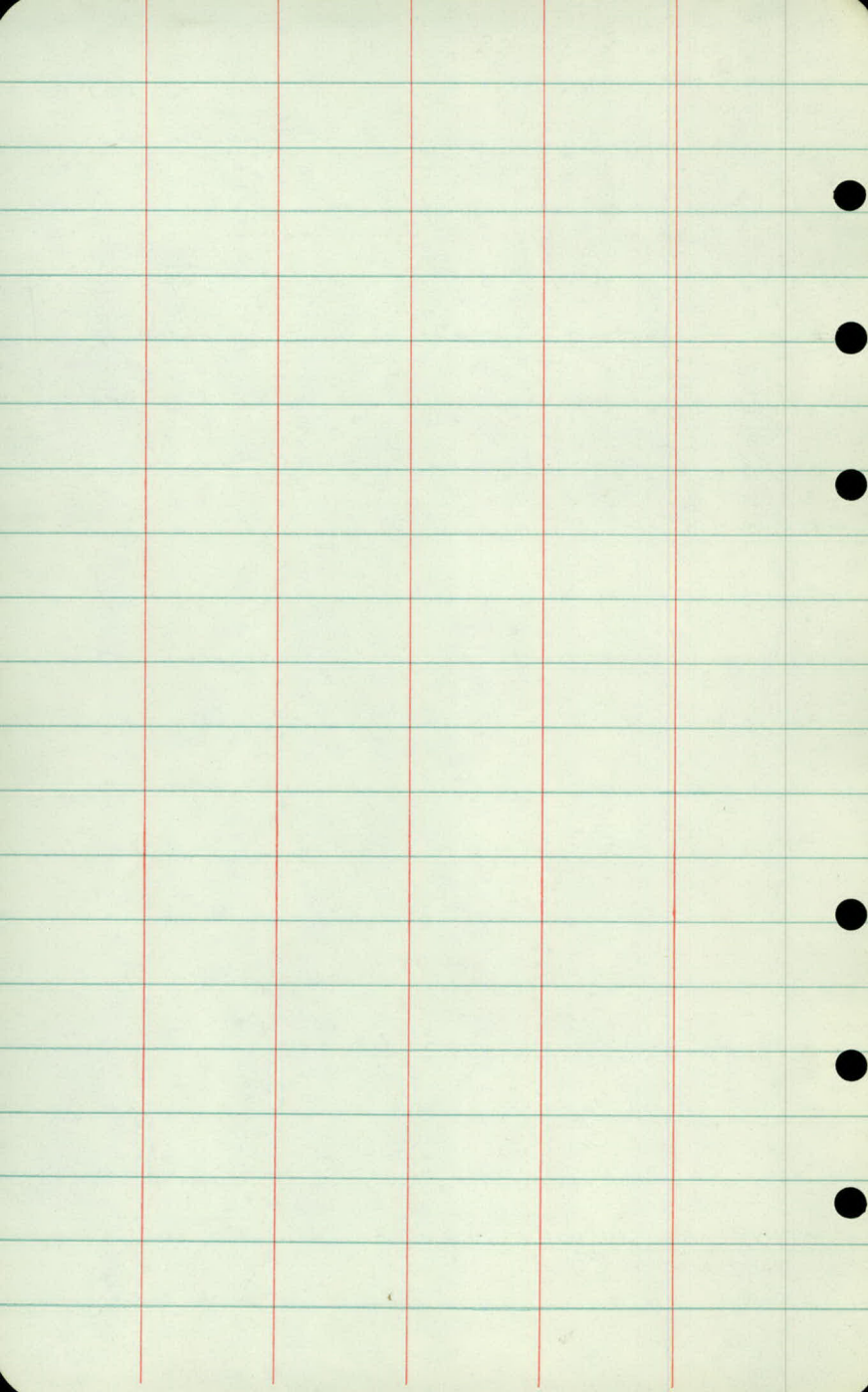
RT

47.8	43.8	48.1	49.6	49.5	49.9	49.4	49.8	48.7	47.8
7.0	7.0	2.7	1.2	1.3	1.1	1.4	1.0	2.5	3.0
37-39	34	21	15	12	BT	11	15	29	40
DITCH			TOP	BT		BT	TOP		
		Shoulder				Shoulder			
47.7	49.9	50.0	52.8						48.7
3.1	1.4	0.0	+2.0						2.1
49	58	65	75						75
Fe									

50.6

+0.2

TOP DOOR - SILL HO#2019 LOWER AFTON RD



RG
WM
RB
WS

April 4, 1962
cloudy 35°

1

Stadia

Intersection of Lower Afton Rd.
& Burlington St.

3 pages

Topog. Platted

HT = 5.08

object

A2. Stadia

$$HI = 44.68$$

$$0^{\circ}00' = N 42^{\circ} E$$

Tat sta 32

to Sta 30

G. Rail

180°00'

153°15' 87' ✓

B. Top

150°15' 91' ✓

G.R.

117°50' 69' ✓

B.T.

117°10' 74' ✓

G.R.

83°15' 83' ✓

B.T.

84°05' 87' ✓

End GR

60°25' 130' ✓

B.T.

60°55' 133' ✓

B.T.

55°50' 152' ✓

B.T.

67°45' 179' ✓

B.T.

82°50' 178' ✓

B.T.

93°20' 200' ✓

B.T.

98°45' 233' ✓

B.T.

101°45' 279' ✓

B.T.

106°40' 275' ✓

B.T.

103°45' 202' ✓

April 9, 1962 2

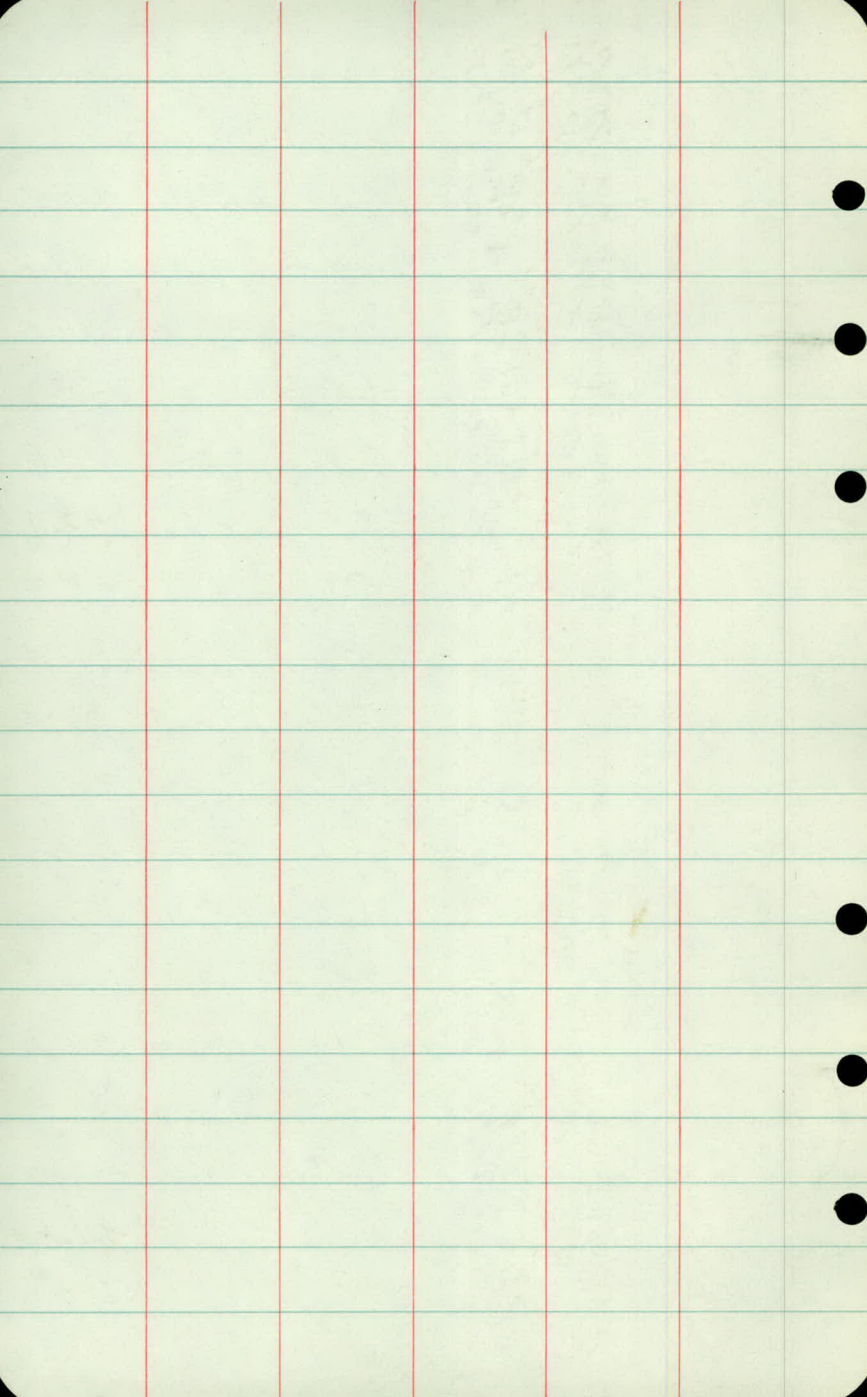
Dist	Vert. Angle	Rod Equiv.	Rod	Diff	Elev.
		H.I. = 50.8			39.6
			14.28	(30.4)	(30.7)
			4.4		40.3
			4.6		40.1
			1.0		43.7
			1.2	-	43.5
	+5°00'	+7.2	5.7	+ 1.5	46.2
	"	7.6	5.9	+ 1.7	46.4
	"	11.3	4.1	+ 7.2	51.9
	"	11.5	4.9	+ 6.6	51.3
	"	13.2	4.8	+ 8.4	53.1
	+3°00'	9.3	1.6	+ 7.7	52.4
	"	9.3	4.1	+ 5.2	49.9
	"	10.5	6.4	+ 4.1	48.8
	"	12.4	8.5	+ 3.9	48.6
	"	14.6	10.1	+ 4.5	49.2
	"	14.4	9.8	+ 4.6	49.3
	+1°00'	3.5	0.8	+ 2.7	47.4

Object	Az.	Stadia
End G.R.	107°30'	275' ✓
G.R.	105° -	201' ✓
G.R.	107°15'	156' ✓
B.T.	106° +	155' ✓
G.R.	105°50'	126' ✓
B.T.	104°50'	123' ✓
G.R.	149° -	122' ✓
B.T.	149°40'	120' ✓
G.R.	167°55'	191' ✓
B.T.	168°20'	189' ✓
Beq G.R.	172°25'	270' ✓
B.T.	173°35'	272' ✓
Island	95°35'	114' ✓
"	81° -	128' ✓
"	84°20'	142' ✓
"	90°05'	142' ✓
"	95° -	136' ✓

April 4, 1962

3

Dist	Vert Angle	Red Equiv.	Red	Diff	Elev
	+2°00'	9.6	4.8	+ 4.8	49.5
	+1°00'	3.5	1.0	+ 2.5	47.2
	"	2.7	1.4	+ 1.3	46.0
	"	2.7	1.5	+ 1.2	45.9
	"	2.2	2.7	- 0.5	44.2
	"	2.2	3.0	- 0.8	43.9
	0°00'		5.9		38.8
	"		6.4		38.3
	"		12.4		32.3
	"		12.7		32.0
	-1°00'	-4.7	12.7	- 17.4	27.3
	"	4.7	13.0	- 17.7	27.0
	+3°00'	6.0	3.8	+ 2.2	46.9
	"	6.7	2.1	+ 4.6	49.3
	"	7.4	2.7	+ 4.7	49.4
	"	7.4	3.8	+ 3.6	48.3
	"	7.1	4.2	+ 2.9	47.6



LOWER AFTAW RD

PT DOUGLAS RD TO STH #100

X- SECTION EXTENSIONS

Plotted 4-10-62
gk

STA

+

K

-

ELEV.

851.47

~~851.49~~

TP

31+78

32+00

+28

+36

+45

LT

E

RT

9 APRIL 1962

7.

40.8 44.3
~~44.3~~ 44.4

10.7 7.2 7.1
 62 71 75
 BT



40.9 43.1 45.2 49.3
 10.6 8.4 6.3 6.2
 66 72 77 81
 BT

43.3 47.6 49.2
 8.2 3.9 4.3
 83 91 96
 BT



43.5 48.1 49.7
 8.0 3.4 3.8
 86 94 99
 BT



43.2 48.9 49.8
 8.3 2.6 2.7
 89 100 103
 BT



Sta	+	π .	-	Elev
		851.47		
		851.49		

2463

+ 75

BM			12.93	838.54	838.56	838.60
----	--	--	-------	--------	-------------------	--------

6 APRIL 1962

L

E

R

8.

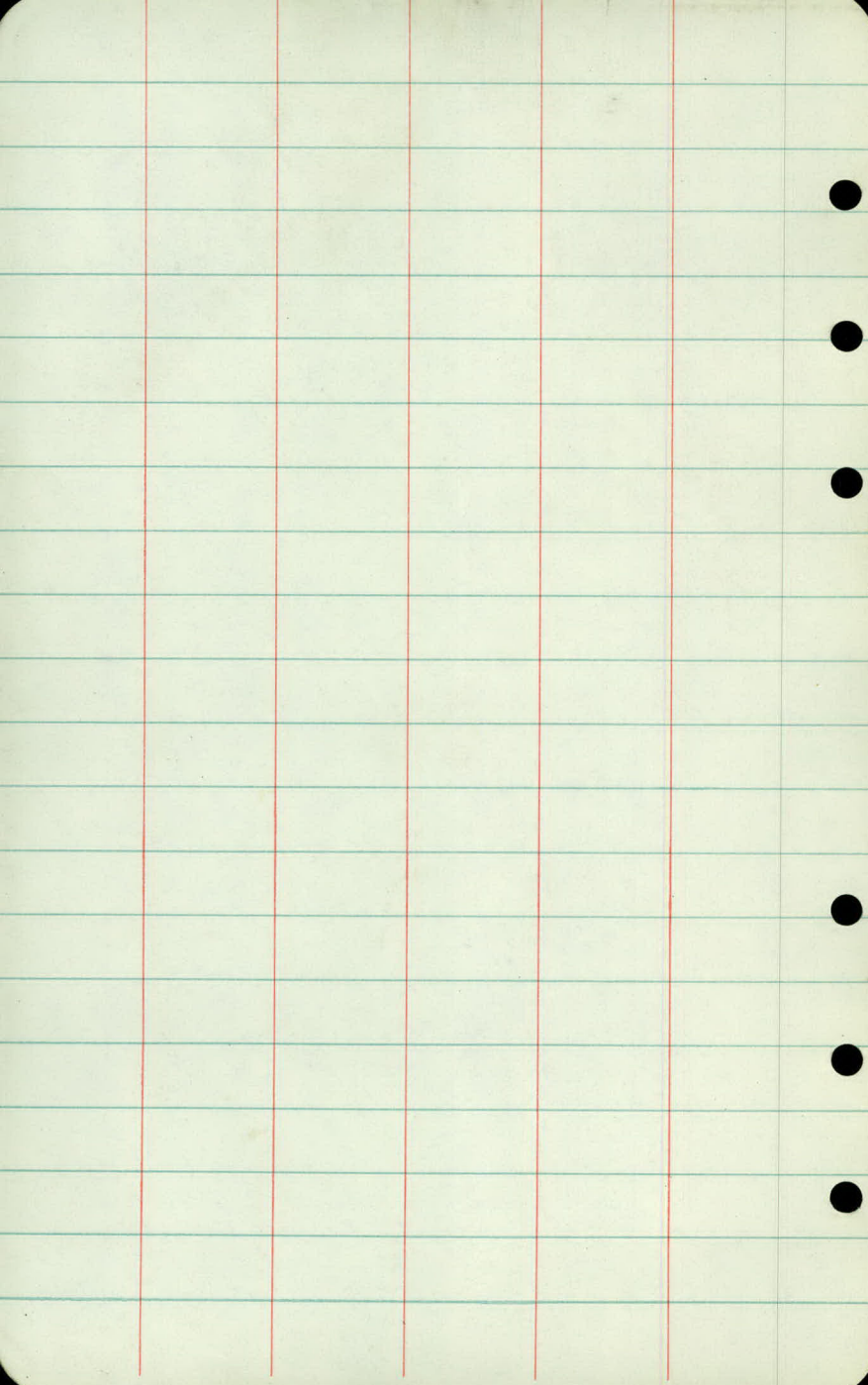
✓

41.3	47.3	51.2	51.0	50.0
10.2	4.2	0.3	0.5	0.6
93	103	106	110	114
				BT

42.5	49.2	51.5	51.3
9.0	2.3	0.0	0.2
98	106	113	120
			BT

✓

TOP SILL Hoth 2019



KP
FS
LB

9 APRIL 1962

1

LOWER AFTON RD.

PT. DOUGLAS RD TO STH#100

Burlington Rd Approach

X-SECTIONS

8 pages

STA

+

π

-

ELEV.

BM

5.24

843.84

838.60

31+78

32+00

+28

+36

+45

LT

E

RT

2.

Top S, LL 40" 2019 Lower AKRON RD.

38.7	38.0	38.5	41.6
5.1	5.8	5.3	3.2
	22	49	62

39.6	40.7
4.2	3.1
	66 77 85

39.8	32.6	31.5	38.4	43.4
4.0	11.2	6.3	5.4	0.4
	58	73	75	83

39.5	32.5	36.6	43.1
4.3	11.3	7.2	0.7
	62	75	86

39.1	31.3	35.6	43.0
4.4	12.5	8.2	0.8
	67	75	89

STA

+

π

-

ELEV.

843.84

32+63

+75

✓

9 APRIL 1962

3.

LT

~~E~~

RT

31.9

5.9

29.6

15.2
67

33.5

10.3
81

40.0

3.8
93

41.5

2.3

30.8

13.0
72

32.5

11.3
75

35.2

8.6
81

33.8

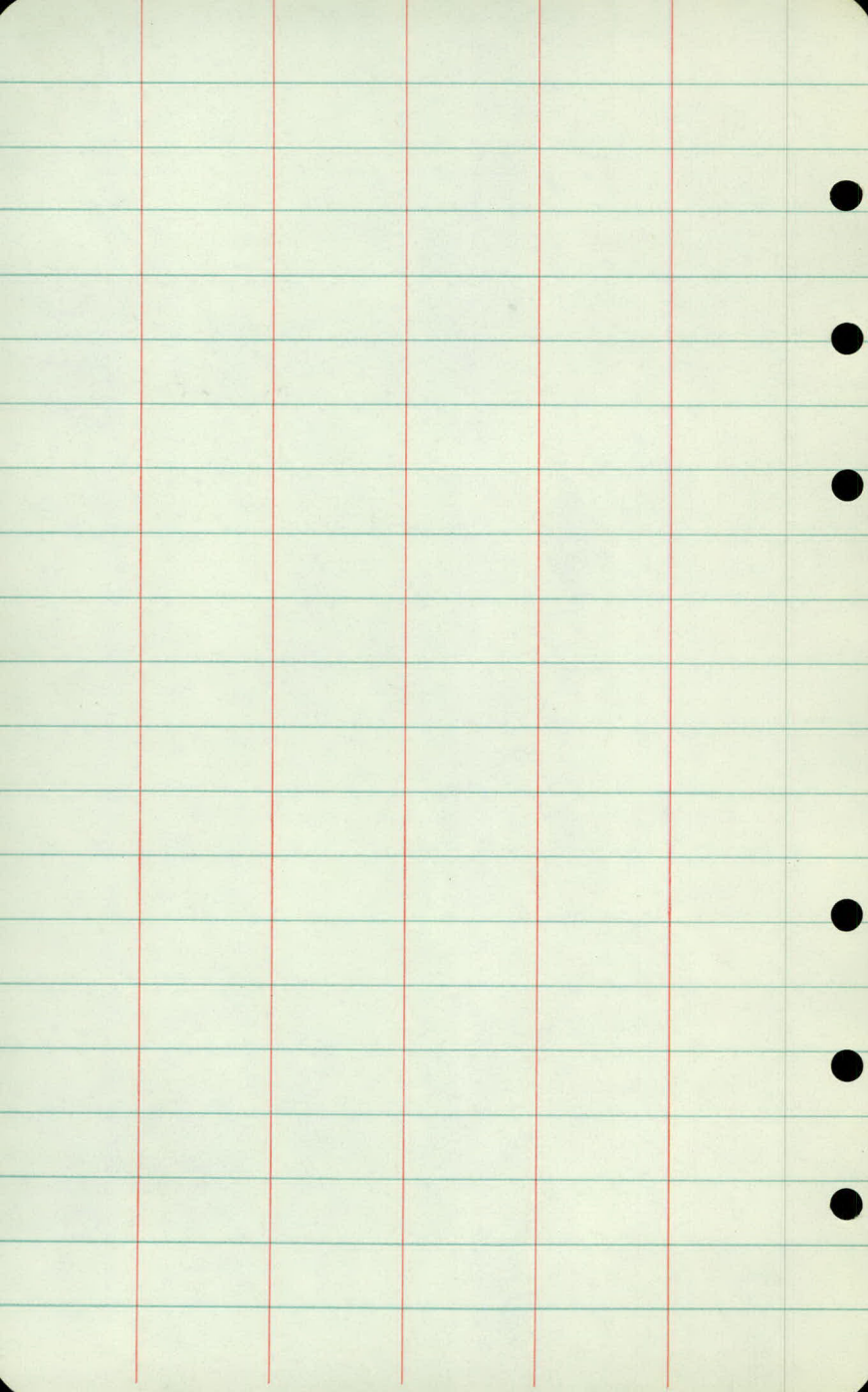
10
84

42.4

1.4
98

39.1

4.7
92



9 APRIL 1962

4.

BURLINGTON AVE

LOWER AKTON RD TO TOTEM RD

X- SECTIONS

STA + π - Elev.

843.84

0+00 = STA 32+00 Lower Afton PL

0+51

TP 12.89 ~~851.49~~ ^{851.47} 5.26 838.58 (838.60)

0+80

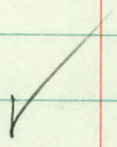
9 APRIL 1962 5,

LT

±

RT

39.58
4.26

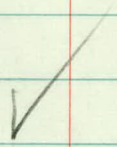


23.94	31.44	31.6	31.5	39.0	39.6	39.0	38.8	40.8	42.4	42.4
20.10	12.40	12.2	12.3	6.8	6.2	4.8	5.0	3.0	1.4	1.4
43	42	30	17	4		20	34	41	48	50

FL 5.0 HEADWALL
SCP

23.8
20.0
50

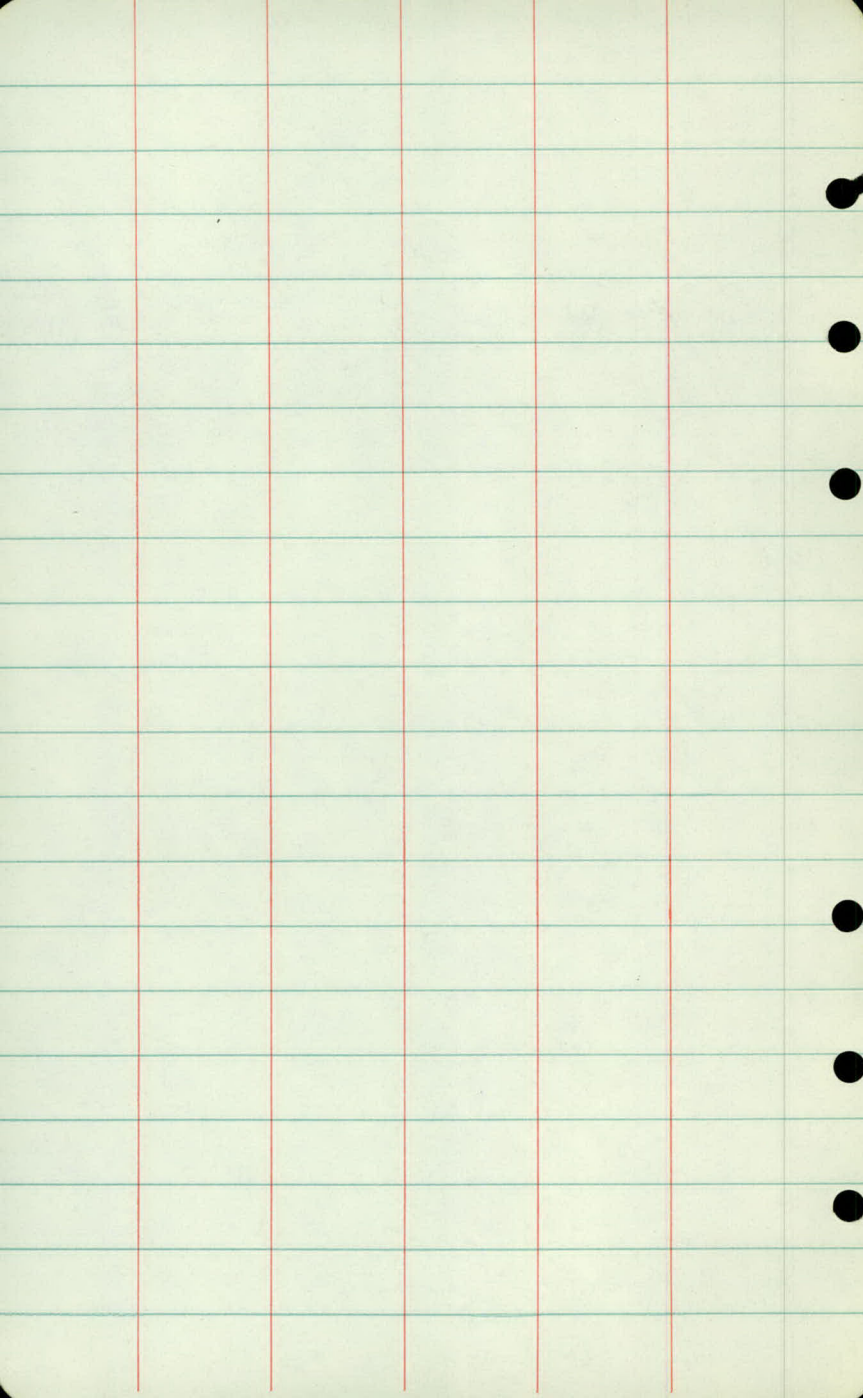
TOP DOOR-SILL Ho*2019



36.4	40.1	42.6	45.1	46.0	45.6	45.2	43.7	42.8
15.1	11.4	8.9	6.4	5.5	5.9	6.3	7.8	8.7
50	33	25	15	7		6	35	50

EDGE BT
BT

platted



KP
JS
ES
LB

9 APRIL 1962
WINDY 35°

1.

LOWER AFTON RD.

POINT DOUGLAS RD TO STH#100

X- SECTIONS

STA 8+00 TO 10+11

5 pages

Rec'd 4/9/62

~~Hand~~

STA	+	π	-	ELEV.
Bm	0.85	755.03		754.18

8+00

✓

+50

✓

+76

9 APRIL 1962 2,

LT

±

RT

SPIKE IN ARC-LITE POLE S.W. COR PT. DOUGLAS

RD (OLD) & LOWER AFTON RD

39.2	42.0	44.6	44.9	44.4	45.2	45.8	46.7	45.9	39.2
15.8	13.0	10.4	10.1	10.6	9.8	9.2	8.3	9.1	15.8
40	32	24	18	13		14	19	27	44
				BT		BT			

38.1	37.1	33.81
16.9	17.9	21.22
61	95	100

32.9	32.8	32.6
22.1	22.2	22.4
100	88	65

41.2	43.0	41.5	47.6	47.2	47.7	48.1	48.5	48.8	38.6	37.0
13.8	12.0	7.5	7.4	7.8	7.3	6.9	6.5	6.2	13.4	18.0
42	36	23	15	13		15	18	24	45	60
				BT		BT				

40.5	39.6	36.71
14.5	15.4	18.32
64	91	100

35.6	35.5
19.4	19.5
100	76

42.9	45.1	48.8	48.8	48.5	48.8	49.1	49.4	49.0	42.9	37.5
12.1	9.9	6.2	6.2	6.5	6.2	5.9	5.6	6.0	12.1	17.5
42	34	25	16	13		13	16	25	44	64
				BT		BT				

41.7	41.6	38.07
13.3	13.4	16.96
66	95	100

37.5	37.1
17.5	17.9
100	92

STA

+

 π

-

Elev

755.03

FL 18" CM

8+81

13.55

95.0 LT

9+00

✓

+09

✓

+29

9 APRIL 1962

LT

E

RT

3

45.4	50.0	49.9	49.4	49.6	49.8	50.1	50.5	44.7
9.6	5.0	5.1	5.6	5.4	5.2	4.9	4.5	10.3
37	22	15	13		14	17	25	44
			BT		BT			

44.3	44.6	42.41	39.40	39.1	39.5	39.5
10.7	10.2	12.62	15.63	15.9	15.5	15.5
61	86	95	100	100	85	61
			E			

DIRN

46.3	48.4	50.8	50.1	49.7	49.9	50.0	50.3	50.9	45.8	40.3
8.7	6.6	4.2	4.9	5.3	5.1	5.0	4.7	4.1	9.2	14.7
35	28	12	13	11		15	17	29	42	60
				BT		BT				

46.0	46.9	46.9	47.65	40.54	39.4	39.6
9.0	8.1	8.1	7.38	14.51	15.6	15.2
49	81	95	100	100	100	85
			TOP E	FL 72"		

CM

47.0	46.7	51.4	51.0	50.3	50.5	50.7	51.6	46.9	42.1	41.4
6.0	6.3	3.6	4.0	4.7	4.5	4.3	3.4	8.1	12.9	13.6
42	34	18	14	11		14	23	44	61	100
				BT		BT				

7.2X1.8
HEAD-100

47.15	42.09	47.8	50.1
7.88	12.94	7.2	4.9
43	43	52	85
Top Mt	FL 100	52.5	
center 3.6 X 3.8		2.5	
conc. TOP BRICK		100	
Mt			

STA	+	π	-	Elev
-----	---	-------	---	------

755.03

9450

✓

+75

✓

10+00

✓

9 APRIL 1962

X

LT

E

RT

52.9	51.3	51.6	50.9	51.0	51.2	52.0	47.3	43.4
2.1	3.7	3.4	4.1	4.0	3.8	3.0	7.5	11.6
63	43	14	10		17	22	44	60
			BT		BT			

53.3	52.54	52.73
1.7	2.49	2.30
78	86	100
WEDGE RD.		PT. DOUGLAS RD

✓

42.5	42.6
12.5	12.4
100	80

52.43	52.7	52.6	51.5	51.6	51.5	51.5	52.2	49.1	45.9
2.20	2.3	2.4	3.5	3.4	3.5	3.5	2.8	6.9	9.1
43	37	23	19		9	20	27	45	58
TOP SIDE INLET			BT		BT	BT			

52.12	52.59	52.77
2.91	2.44	2.26
44	78	100
W. EDGE RD	ERO	

✓

45.0	44.4
10.0	10.6
100	71

53.7	52.5	52.07	51.80	51.67	51.52	51.33	51.1	51.8
1.3	2.5	2.96	3.23	3.36	3.51	3.70	3.3	3.2
66	48	40	12		13	28	33	42
		E. EDGE	PT. DOUGLAS RD			W. EDGE OF RD		

54.0	52.9	47.45
1.0	2.1	7.58
75	89	92
	FL 6	910 DITCH

✓

47.7	47.9	50.6
7.3	7.1	4.4
100	72	57

STA

+

π

-

Elev

755.03

10+11

✓

BM

0.84

754.19

754.18

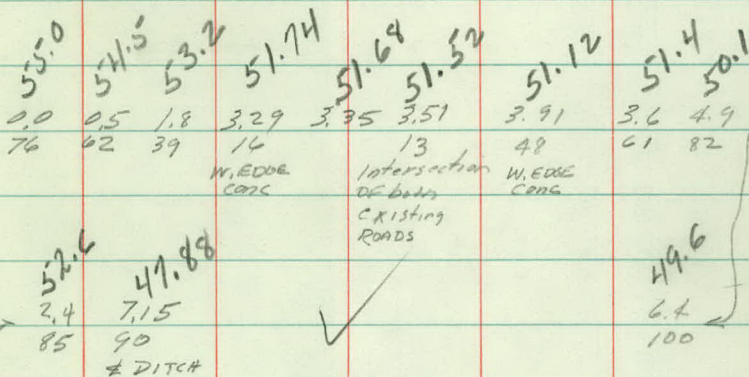
9 APRIL 1962

L4

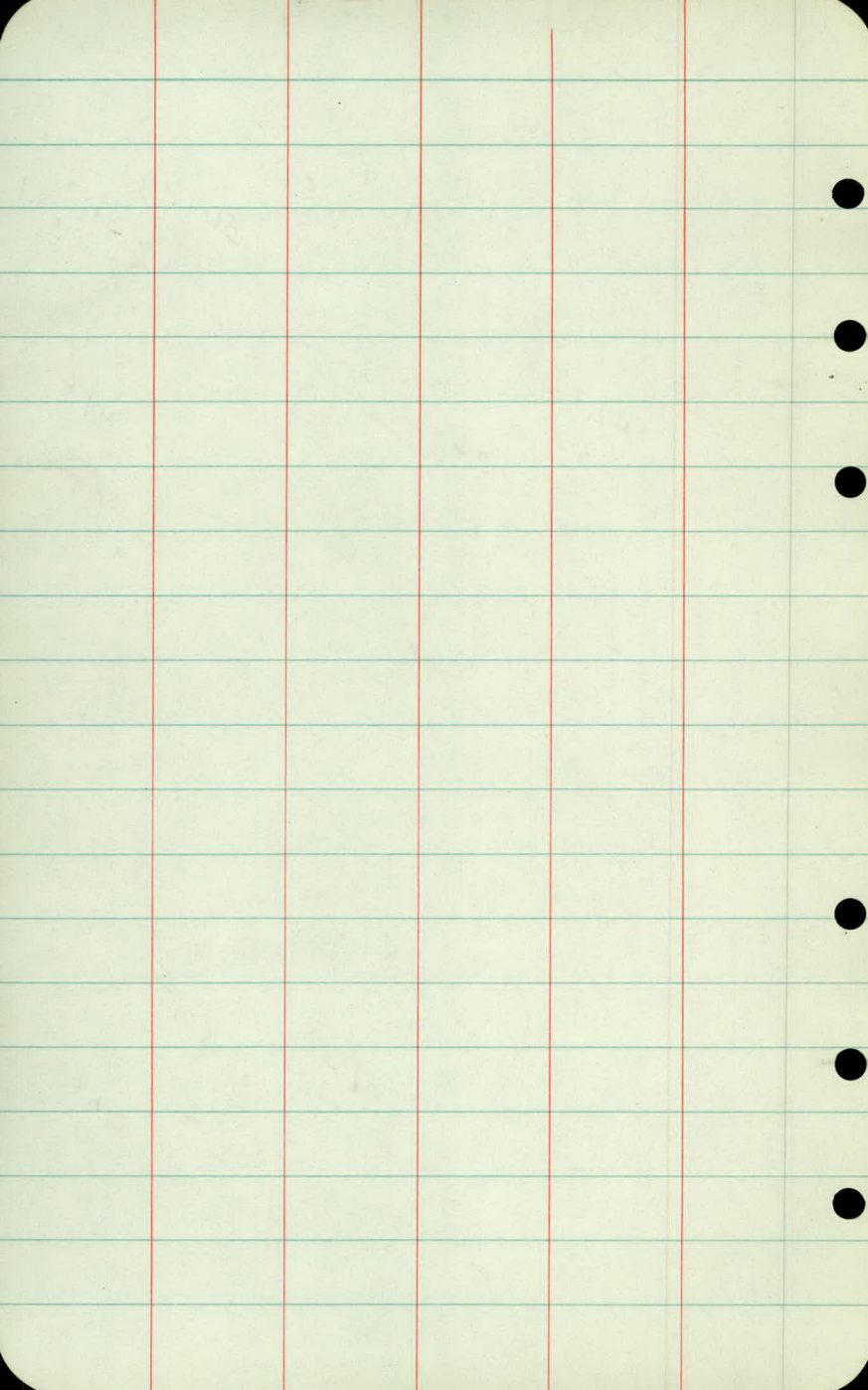
4

Rt

51



SPIKE IN PP. SW. COR PT. DOUGLAS RD, & Lower Afton RD,



18 APRIL 1962

LOWER AFTON RD
TOPOGRAPHY

Reviewed
A-18-62

LT

£

RT

+42 £ HEADWALL (1x8.8)
23

+36 RT HEADWALL

+08 LINE
35

LT

±

RT

NOTE: CULVERT GOES E. FOR 48' THEN
CURVES TO SOUTH.



LT

~~E~~

RT

+81 LINE
49

+46 ~~E~~ Headwall (1x8.8)
50

+40 RT

32

+100 LINE
51

18 APRIL 1962

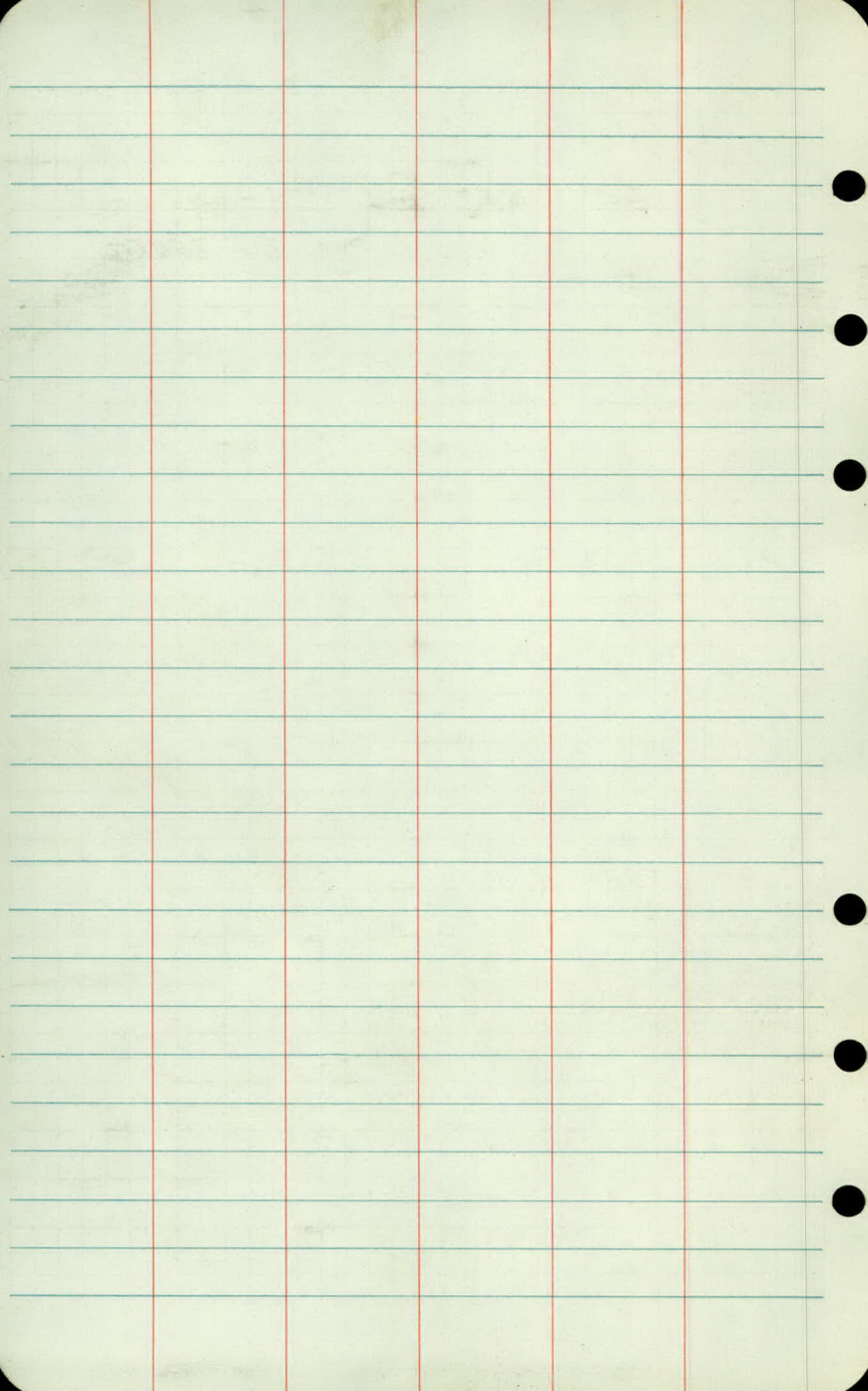
LT

~~E~~

RT

NOTE: CULVERT GOES STRAIGHT^{W.} FOR
96' THEN CURVES TO NORTH





Lower Afton Rd

Hwy #61 to Pt. Douglas Rd Connection

Stadia Survey

OBJECT

HI = 5.1

AZ

STADIA

H. I. = 750.3

T at sta 8+00

To PI Sta 10+34.84

0°00'

To Sta 6+25.0

180°00'

T at Sta 6+25.0

To PI Sta 10+34.84

0+00

Edge Road

" 353°00' 347' ✓

" 355°35' 343' ✓

" 357°35' 333' ✓

" 1°40' 364' ✓

" 2°25' 374' ✓

" 3°40' 385' ✓

" 6°30' 208' ✓

" 3°55' 208' ✓

" 353°10' 123' ✓

" 5°5' 120' ✓

" 297°20' 34' ✓

LB
WS

DIST.

VERT.
ANGLE

ROD
EQUIV.

ROD

May 2, 1962
Clear 75°
DIFF.

ELEV

2

H.I. = 5.1

745.2

+ 2°00'	+ 12.6	3.6
"	12.2	4.0
"	11.9	3.9
"	13.0	4.8
"	13.3	5.5
"	13.6	5.8
"	7.3	4.3
"	7.3	3.3
0 0	—	1.8
"	—	0.6
"	—	7.6

OBJECT

AZI

STADIA

E.R

360°5' 10'

✓

"

221°25' 91'

✓

"

205°55' 86'

✓

"

215°05' 190'

✓

"

207°50' 189'

✓

"

216°50' 309'

✓

"

212°40' 312'

✓

"

210°55' 420'

✓

"

217°50' 425'

✓

"

224°55' 538'

✓

"

222°10' 543'

✓

"

225°35' 610'

✓

"

222°55' 608'

✓

"

223°25' 720'

✓

"

223°05' 730'

✓

"

222°5' 785'

✓

May 2, 1962

DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV.
-------	-------------	------------	-----	-------	-------

00	—	6.2			
----	---	-----	--	--	--

"	—	12.3			
---	---	------	--	--	--

"	—	10.5			
---	---	------	--	--	--

- 4° 0'	- 13.4	3.6			
---------	--------	-----	--	--	--

"	- 13.3	2.0			
---	--------	-----	--	--	--

- 3° 0'	- 16.4	5.4			
---------	--------	-----	--	--	--

"	- 16.5	3.5			
---	--------	-----	--	--	--

- 1° 30'	- 11.2	13.3			
----------	--------	------	--	--	--

"	- 11.3	12.2			
---	--------	------	--	--	--

"	- 14.2	12.4			
---	--------	------	--	--	--

"	- 14.6	10.6			
---	--------	------	--	--	--

"	- 16.2	11.8			
---	--------	------	--	--	--

"	- 16.2	12.5			
---	--------	------	--	--	--

"	- 19.2	10.5			
---	--------	------	--	--	--

"	- 19.50	9.6			
---	---------	-----	--	--	--

"	- 20.7	8.2			
---	--------	-----	--	--	--

OBJECT

AZI

STADIA

E.R.

222°35' 835'

✓

"

224°50' 907'

✓

"

222°10' 542'

P

"

222°55' 610'

P

"

221°10' 710'

✓

"

225°20' 725'

✓

"

219°25' 718'

✓

"

212°35' 565'

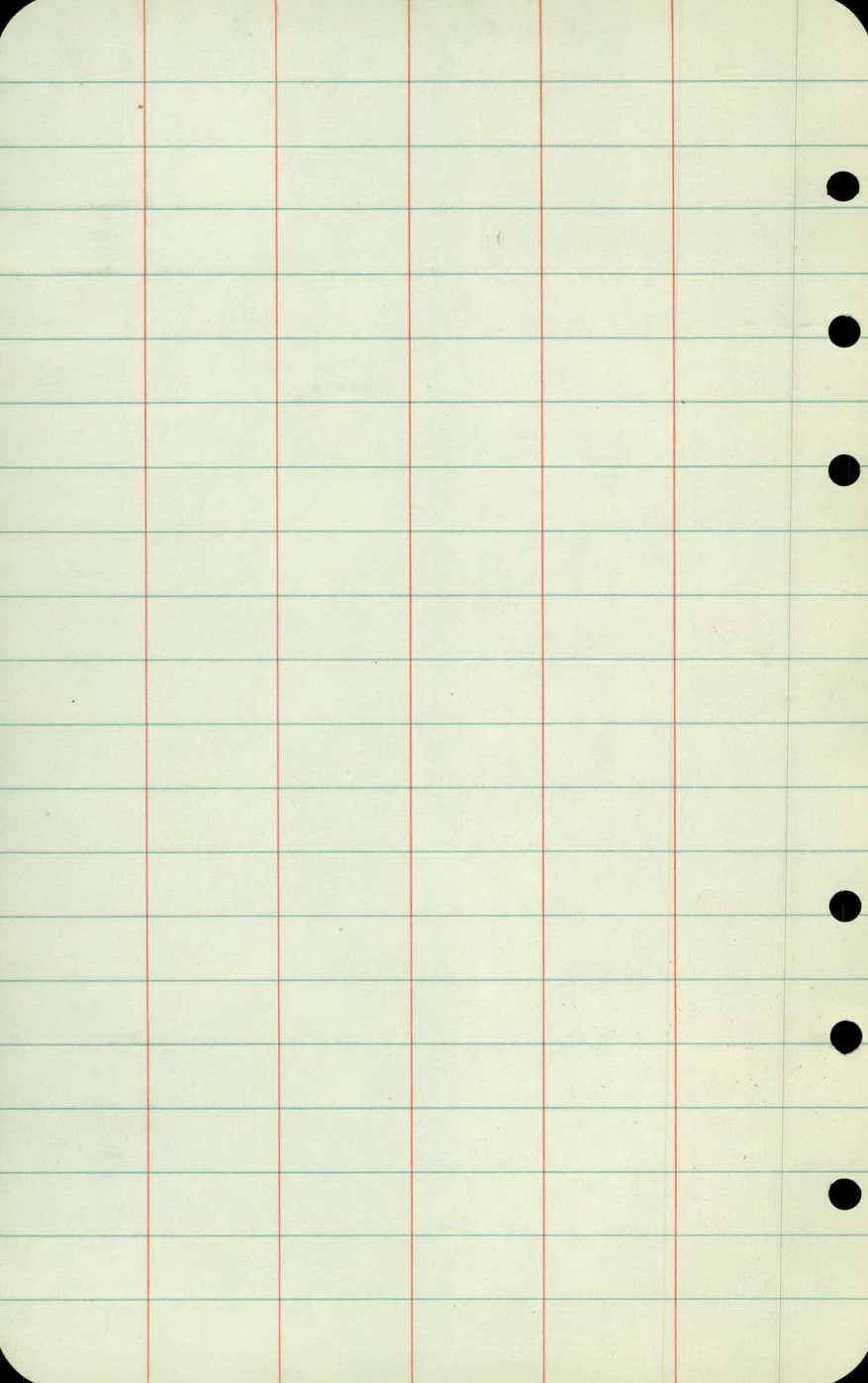
✓

Sta 8+00

0°00' 175'

May 2, 1962

DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV. 4
	- 1° 30'	-22.2	6.9		
	"	-24.4	3.5		
	"	-14.6	12.4		
	"	-16.2	12.2		
	"	-18.9	10.2		
	"	-19.3	9.9		
	"	-19.2	9.7		
	"	-14.9	13.7		
	+1° 00'	+3.1	1.25		



May 11, 1962

1

Lower Afton Rd
Proposed Sewer Profile
Sta 32+78

Sta	+	π	-	Elev.
BM ₁	3.31	841.91		838.60
0+00			10.43	831.48
TP	4.48	835.96		831.48
0+00			12.40	823.56
0+08			11.8	824.2
+14			11.8	24.2
+15			11.2	24.8
+18			10.2	25.8
+21			7.8	28.2
+25			7.2	28.8
+32			6.4	29.6
+39			3.4	32.6
+51			0.8	35.2
TP	12.20	846.55	1.61	834.35
+60			8.3	38.2
+67			6.9	39.6
+70	8.76		4.8	41.7
TP	8.08	853.60	1.03	845.52
BM ₂	0.66	854.26	0:00	853.60

RG
WM
WS

May 11, 1962
cloudy 50°

2

S.E. corner door sill Ho. #2019 Lower Aston Rd

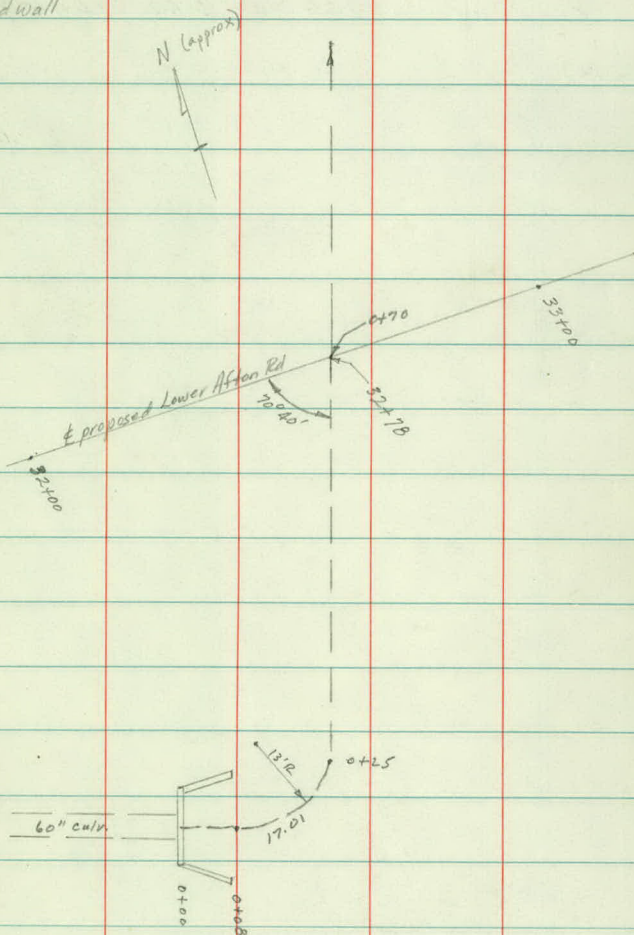
Top of Headwall

" "

inv 60" culv

edge creek

bank



Rock

Rock

spike in PP 150'± So. of Sta 33+00±

Sta	+	π	-	E/cv
-----	---	-------	---	------

854.26

TP	3.50	848.34	9.42	844.84
----	------	--------	------	--------

BM ₁			9.75	838.59	838.60
-----------------	--	--	------	--------	--------

32.23

32.24

838.60

32.23

838.59

.01

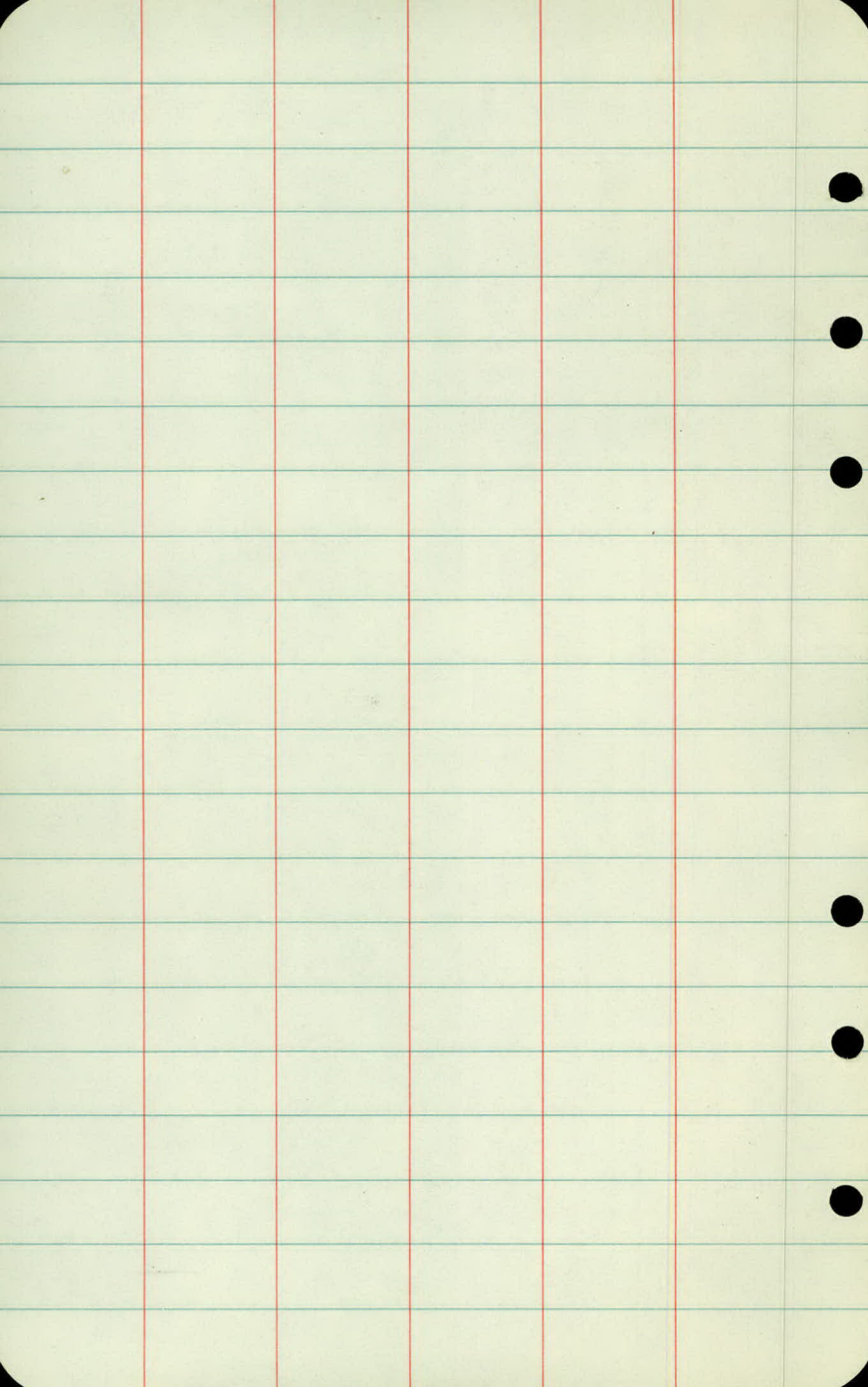
.01

OK

May 11, 1962

3

Top G.R. Post



May 9, 1962

Lower Afton Rd

X- Drain Profile

Plot

Rec. 5/9/62

Profile

Sta	+	π	-	Elev	
BM	1.12	840.32 841.18		840.06 831.2	39.2
0+00		739.58	9.13	832.05	830.45
0+00			7.90 16.93	23.4 824.25	823.81
+08			16.4		
+14			16.5		
+15			15.9		
+19			15.1		
+21			12.8		
+25			11.9		
+32			11.0		
+40			8.0		
+49			6.4		
+59			2.4		
+68			0.0		
+70			+0.7		
BM			+0.28		840.90
BM					838.60

RO
WM
LB
WS

May 9, 1962
Cl. 500

Sta 33±

Top Headwall

F.L. Culv.

Edge creek

Top bank

Lower Aston

E Lower Aston Rd (Line 1)

spike in 12" Out 1' R+ 33+25±

S.E. Cor door Sill House # 2019

suggest you set New Bench
Along Burlington as this house will
be removed

