

BK. 36 Dr. 12A

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

Plan Survey

Plum str.

From Brand str To Harvester

Road Acc't. No.

Date Filed 6-11-41

File.

PLAN SURVEY

PLUM ST.

Brand Ave to Harvester Ave.

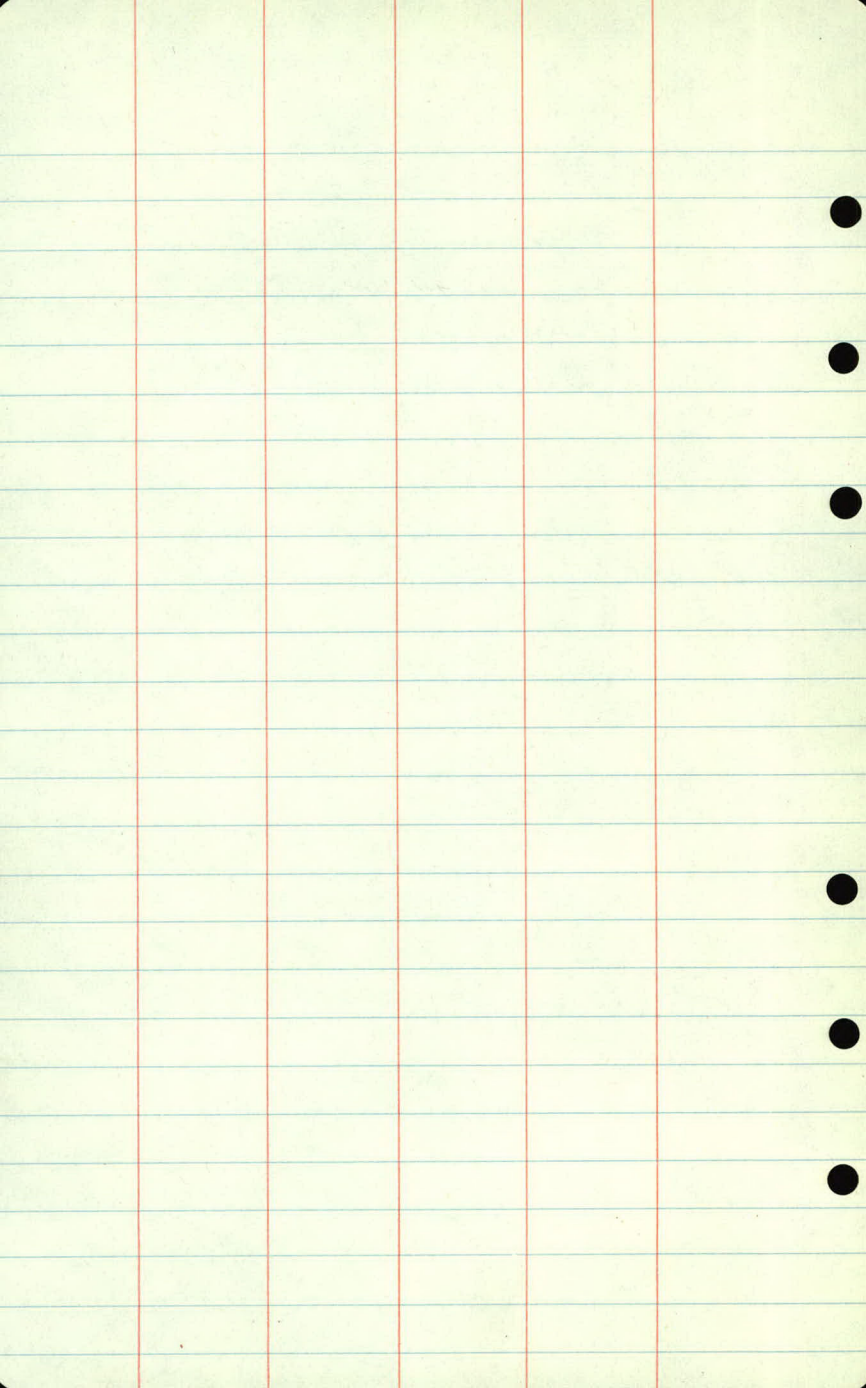
Index

Align - 1-2

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Plan Completed
10/16/40
H.P.C.



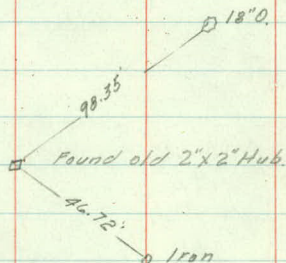
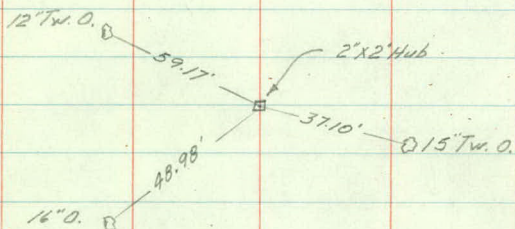
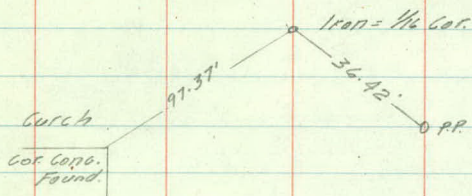
Alignment

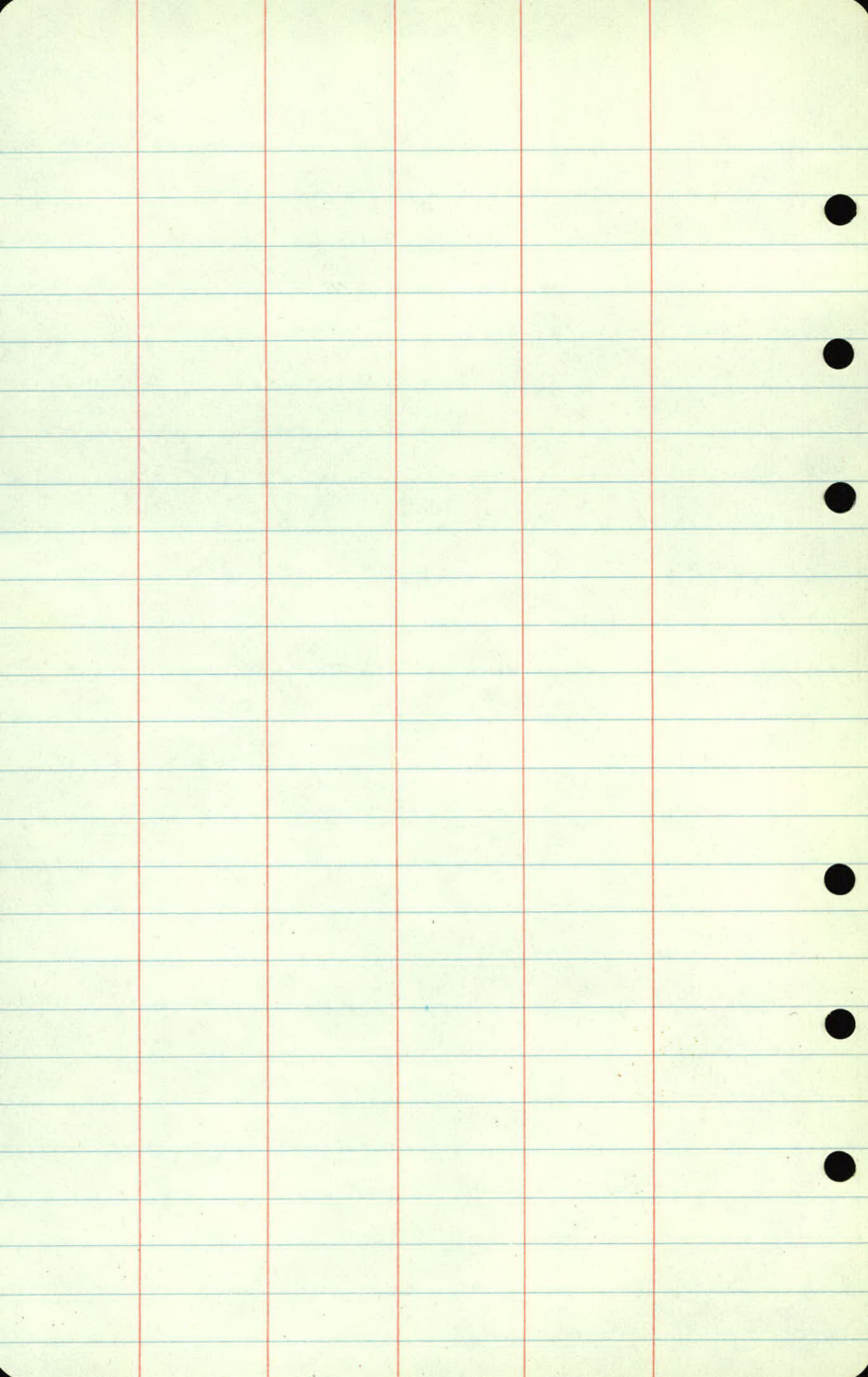
Sta	Point	ΔLt	ΔRt
-----	-------	-------------	-------------

6	+62.88	=	Harvester Ave.
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1	+82.9	P.O.T.	
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0	+00	=	Brand Ave.
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Topography

5

13' 13'

4

13' 13'

3

13' 13'

+24-Str-50'

+21-15"Tw-47'

+19-15"O-25'

+17-15"O-21'

+10-15"O-34'

+08-15"O-38'

+01-15"O-42'

18"O-52'

2

+80-Str-31' +87-Str-20'

+69-15"O-48' 15"O-11'

+60-18"O-52' +68-8"O-35'

+55-Str-30' +58-18"O-42'

+50-Str-13' +55-24"O-6'

+35-12"O-8' +49-18"O-34'

+33-8"O-28' +24-15"O-29'

+20-12"Tw-0-12'

+18-15"O-4'

1

R Trail-30'

+20-Beg. Turnpike-21'

R Drive-27'

+61-5"O-31'

+69-15"O-18'

+52-12"O-40'

+42-15"O-20'

+29-12"O-19'

+16-15"O-37'

+18-Str-19'

+07-20"O-50'

+02-6"O-20'

+60-18"O-33'

+49-8"O-7'

+35-18"O-2'

+27-Str-6'

+19-15"O-12'

+14-8"O-8'

3"O-23'

+13-Trail X5 R

+55-Swamp-20'

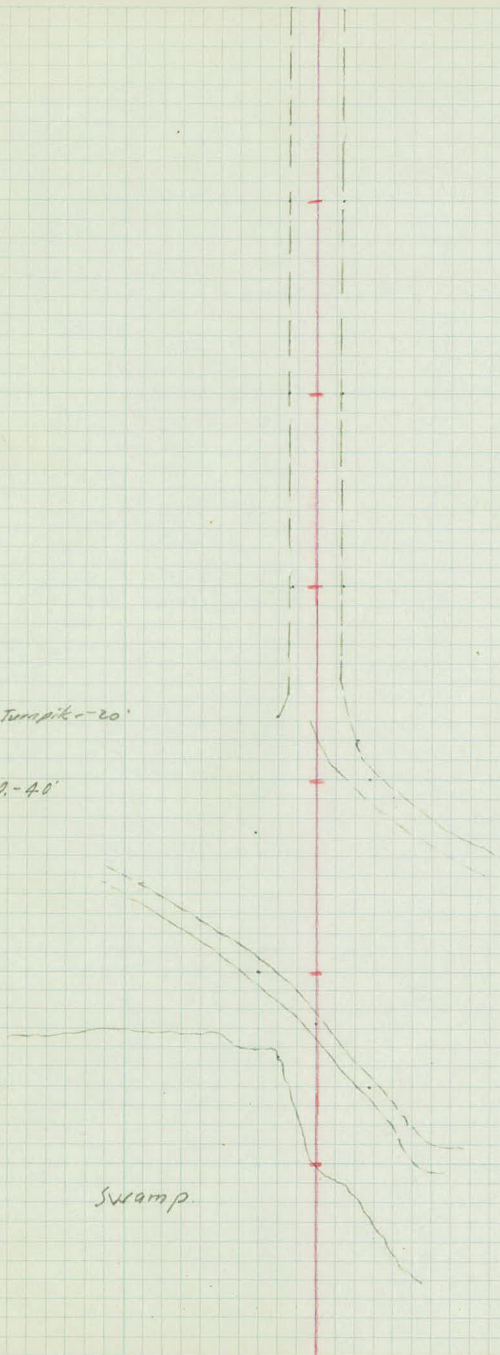
+40-4 Trail-27'

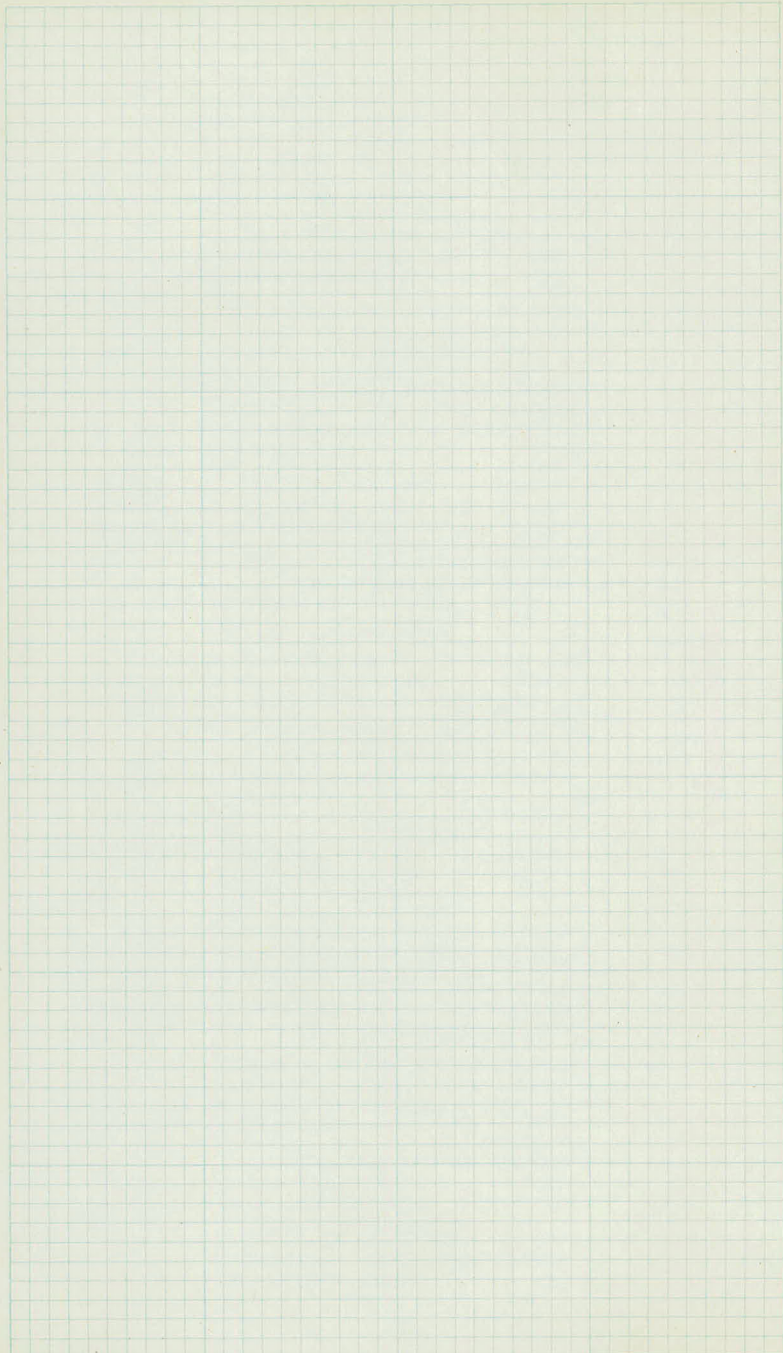
0+00

+35-Beg. Turnpike - 20'

+93-15° 0' - 40'

Swamp.





xsections

Sta	+	π	-	Elev
B.M.	5.12	1012.94 ✓		1007.22
0	+00			98.5
	+50			99.3
	+80			99.2
1	+05			00.3
T.P.	13.70	1025.11 ✓	1.53	1011.41 ✓
	+36			15.1
T.P.	13.60	1031.45 ✓	7.26	1017.85 ✓
	+59			22.8
	+83			29.1
2				28.9
	+50			29.0
3				29.0
	+50			28.3

Lt

X

Rt

Spk. in Top str. 55' Rt sta 0+80

$$\begin{array}{r} 16.0 \\ 50 \end{array} \quad \begin{array}{r} 15.4 \\ 25 \end{array} \quad \begin{array}{r} 14.4 \\ 15 \end{array} \quad \begin{array}{r} 14.4 \\ 15 \end{array} \quad \begin{array}{r} 12.7 \\ 36 \end{array} \quad \begin{array}{r} 11.5 \\ 50 \end{array}$$

$$\begin{array}{r} 15.3 \\ 50 \end{array} \quad \begin{array}{r} 14.8 \\ 25 \end{array} \quad \begin{array}{r} 13.6 \\ 31 \end{array} \quad \begin{array}{r} 12.3 \\ 31 \end{array} \quad \begin{array}{r} 11.8 \\ 50 \end{array}$$

$$\begin{array}{r} 14.6 \\ 50 \end{array} \quad \begin{array}{r} 14.4 \\ 22 \end{array} \quad \begin{array}{r} 13.7 \\ 18 \end{array} \quad \begin{array}{r} 13.1 \\ 36 \end{array} \quad \begin{array}{r} 12.2 \\ 36 \end{array} \quad \begin{array}{r} 10.9 \\ 50 \end{array}$$

$$\begin{array}{r} 13.8 \\ 50 \end{array} \quad \begin{array}{r} 12.9 \\ 15 \end{array} \quad \begin{array}{r} 12.6 \\ 22 \end{array} \quad \begin{array}{r} 6.1 \\ 50 \end{array} \quad \begin{array}{r} 10.8 \\ 50 \end{array}$$

$$\begin{array}{r} 24.4 \\ 50 \end{array} \quad \begin{array}{r} 16.3 \\ 22 \end{array} \quad \begin{array}{r} 14.8 \\ 16 \end{array} \quad \begin{array}{r} 10.0 \\ 21 \end{array} \quad \begin{array}{r} 5.8 \\ 50 \end{array} \quad \begin{array}{r} 0.6 \\ 50 \end{array}$$

$$\begin{array}{r} 15.8 \\ 50 \end{array} \quad \begin{array}{r} 13.8 \\ 37 \end{array} \quad \begin{array}{r} 12.2 \\ 25 \end{array} \quad \begin{array}{r} 8.7 \\ 17 \end{array} \quad \begin{array}{r} 6.2 \\ 36 \end{array} \quad \begin{array}{r} 4.1 \\ 50 \end{array} \quad \begin{array}{r} 1.8 \\ 50 \end{array}$$

$$\begin{array}{r} 7.8 \\ 50 \end{array} \quad \begin{array}{r} 5.6 \\ 27 \end{array} \quad \begin{array}{r} 2.4 \\ 30 \end{array} \quad \begin{array}{r} 2.2 \\ 30 \end{array} \quad \begin{array}{r} 1.7 \\ 50 \end{array}$$

$$\begin{array}{r} 4.2 \\ 50 \end{array} \quad \begin{array}{r} 2.6 \\ 23 \end{array} \quad \begin{array}{r} 2.3 \\ 11 \end{array} \quad \begin{array}{r} 2.6 \\ 19 \end{array} \quad \begin{array}{r} 2.3 \\ 50 \end{array} \quad \begin{array}{r} 1.5 \\ 50 \end{array}$$

$$\begin{array}{r} 3.2 \\ 50 \end{array} \quad \begin{array}{r} 2.8 \\ 22 \end{array} \quad \begin{array}{r} 3.3 \\ 19 \end{array} \quad \begin{array}{r} 3.0 \\ 15 \end{array} \quad \begin{array}{r} 2.5 \\ 13 \end{array} \quad \begin{array}{r} 2.7 \\ 17 \end{array} \quad \begin{array}{r} 3.3 \\ 20 \end{array} \quad \begin{array}{r} 3.3 \\ 23 \end{array} \quad \begin{array}{r} 2.4 \\ 23 \end{array} \quad \begin{array}{r} 2.0 \\ 50 \end{array}$$

$$\begin{array}{r} 3.3 \\ 50 \end{array} \quad \begin{array}{r} 3.0 \\ 21 \end{array} \quad \begin{array}{r} 3.8 \\ 18 \end{array} \quad \begin{array}{r} 3.0 \\ 13 \end{array} \quad \begin{array}{r} 2.5 \\ 14 \end{array} \quad \begin{array}{r} 3.1 \\ 16 \end{array} \quad \begin{array}{r} 3.7 \\ 20 \end{array} \quad \begin{array}{r} 3.7 \\ 20 \end{array} \quad \begin{array}{r} 2.9 \\ 22 \end{array} \quad \begin{array}{r} 2.7 \\ 50 \end{array}$$

$$\begin{array}{r} 4.2 \\ 50 \end{array} \quad \begin{array}{r} 3.5 \\ 22 \end{array} \quad \begin{array}{r} 4.4 \\ 20 \end{array} \quad \begin{array}{r} 4.4 \\ 16 \end{array} \quad \begin{array}{r} 3.6 \\ 13 \end{array} \quad \begin{array}{r} 3.2 \\ 13 \end{array} \quad \begin{array}{r} 3.7 \\ 16 \end{array} \quad \begin{array}{r} 4.4 \\ 21 \end{array} \quad \begin{array}{r} 4.4 \\ 23 \end{array} \quad \begin{array}{r} 3.5 \\ 23 \end{array} \quad \begin{array}{r} 3.6 \\ 50 \end{array}$$

Sta	+	π	-	Elev
		1031.45 ✓		
4				27.4
+50				26.9
5			4.9	26.6
+50			5.2	26.3
6			5.9	25.6
+62.88			6.2	25.3
B.M.			4.78	1026.67 ✓
				(1026.66)

Lt.

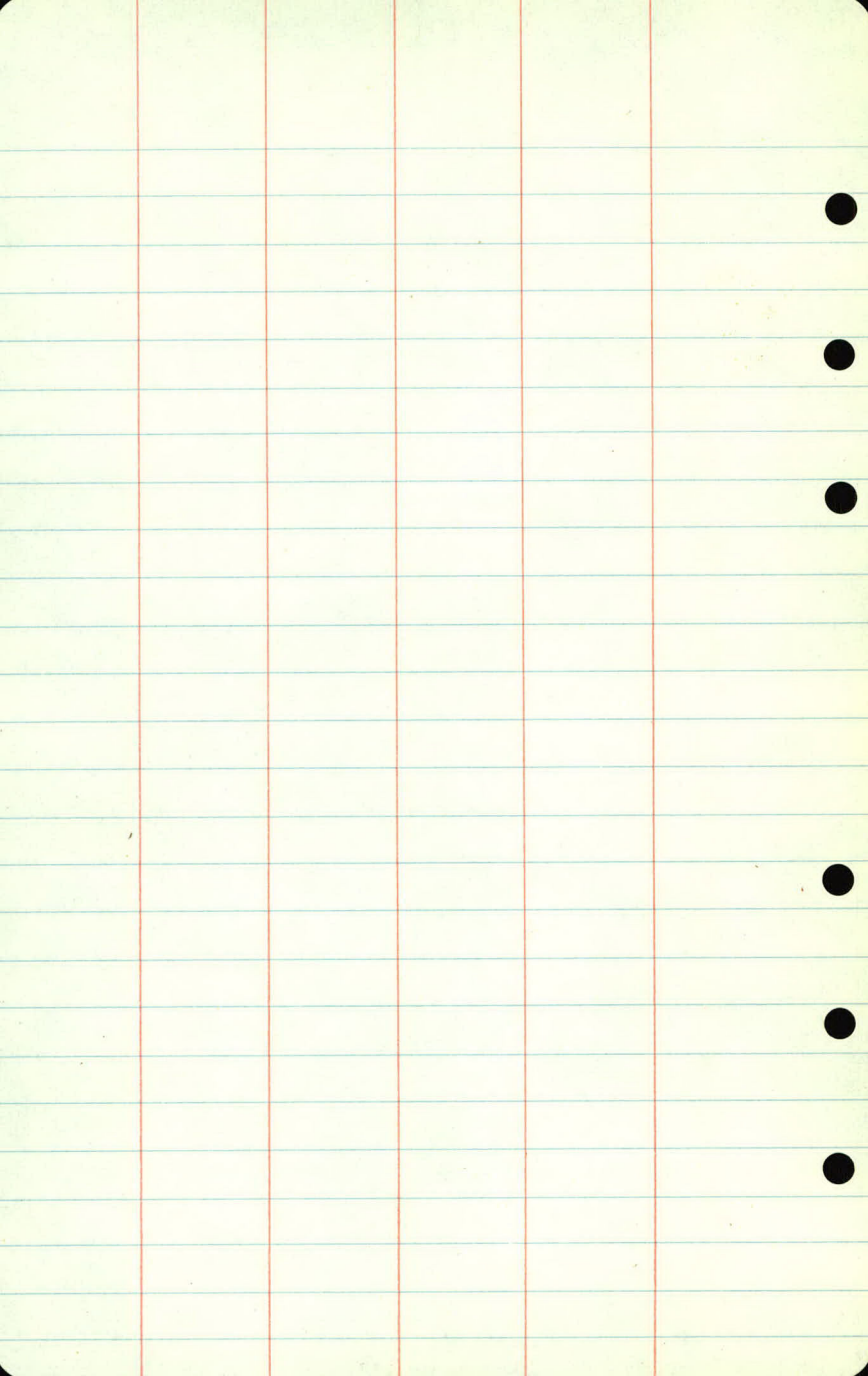
Z

Rt.

45	48	53	53	45	41	45	51	51	42	41
50	22	20	17	12		14	16	20	22	50

42	46	56	53	50	46	51	57	57	49	45
50	23	19	13	12		14	16	20	22	50

Top N.E. Cor. Lower step Front of Church.



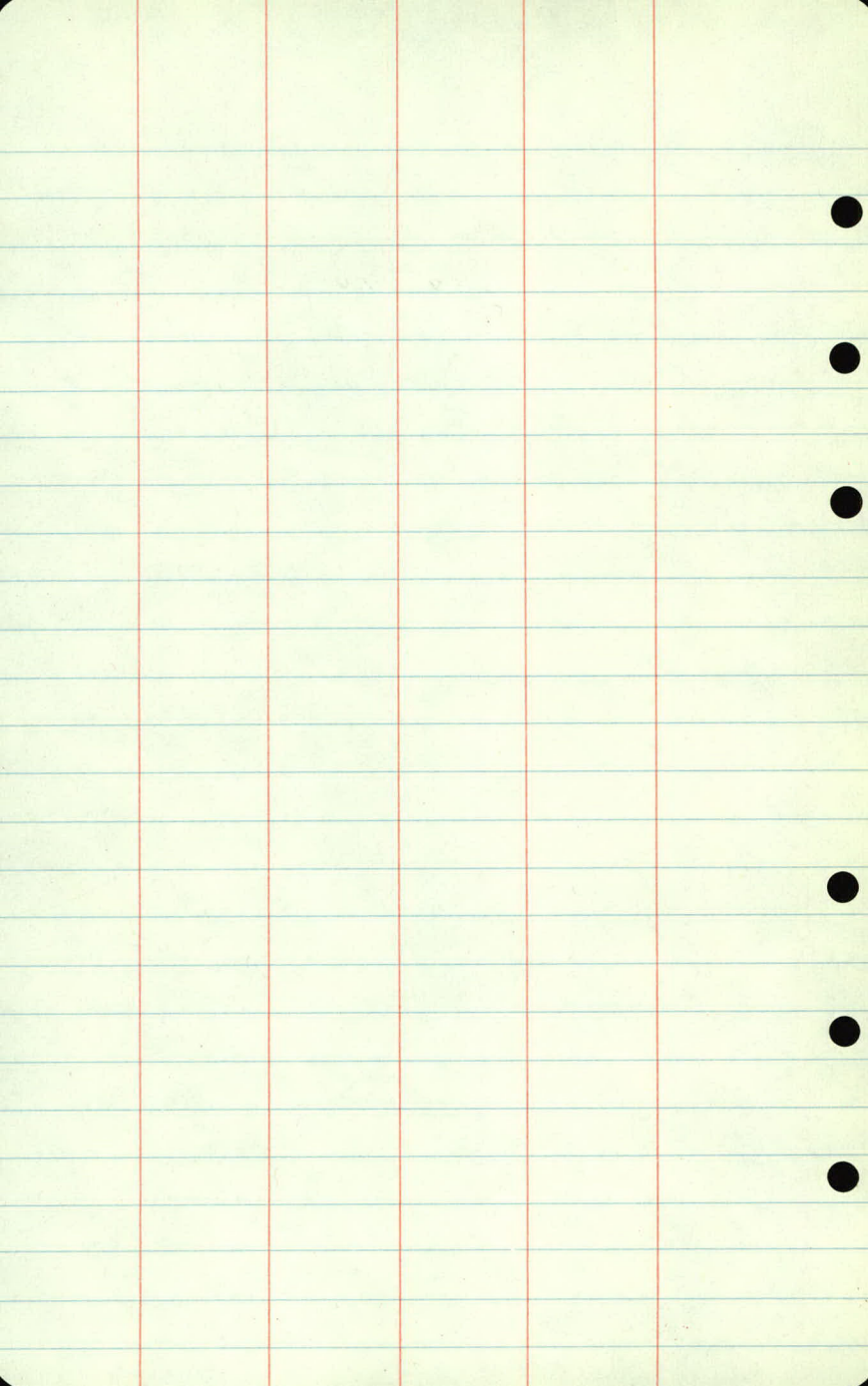
PLAN SURVEY
BRAND AVE.
PLUM ST to 700' East

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Align 1-2

Topog 3-4

Xsection 5-7



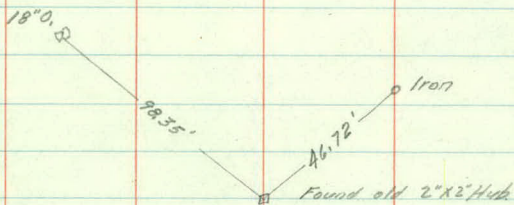
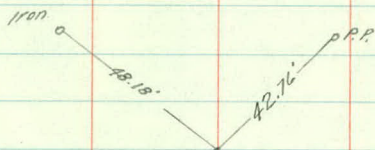
1

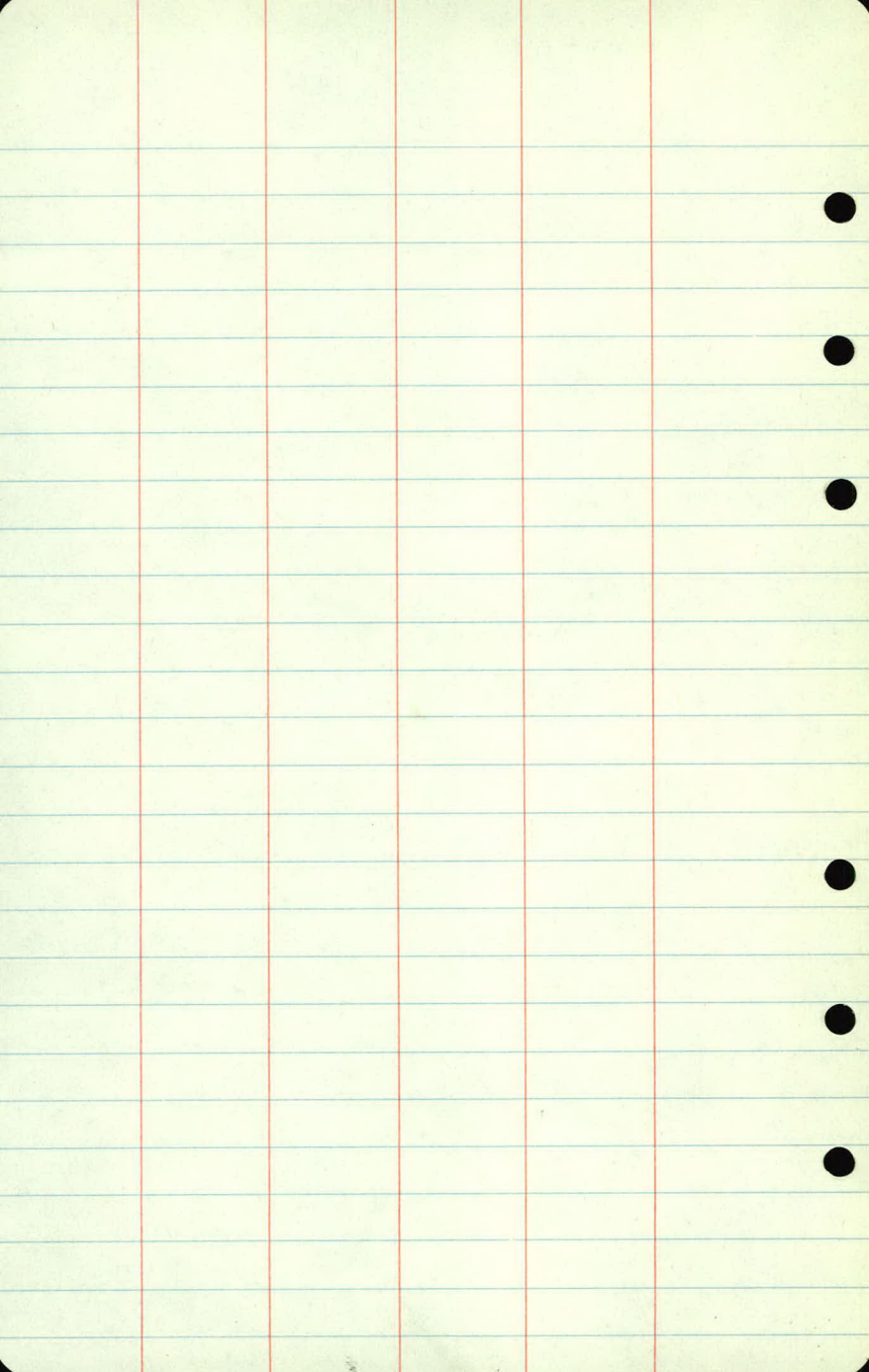
Alignment

Sta	Point	ΔLt	ΔRt
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7	+20.4	P.O.T.	
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0	+00	= E. Plum st	
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Topography

5 Shoulder - 15'

Shoulder - 15'

+79-End 15" C.M. - 2.9'
Ent. - 15" X 20" C.M.
+61-End 15" C.M. - 33'
+55-P.P. - 25'

4 Shoulder - 15'

Shoulder - 14'

+46-Ent. $\frac{15" \times 20" \text{ C.M.}}{19'}$

+68-Ent

+25-30" Ceff - 25'

3 Shoulder - 12'

Shoulder - 13'

+81-24" O. - 22'

+49-Ent. $\frac{15" \times 20" \text{ C.M.}}{19'}$

+62-Fc. Cor - 33'
+60-Long 716

2

Shoulder - 14' Fc - 34'
+99-5" Pop. - 13'

+50-Swamp - 33'

+28-End Brush - 15' - 7'

+28-End Brush - 9' - 14'

1 Shoulder - 14'

to Trail 00 Shoulder - 14' Fc - 33'

+65-to Trail - 4' Beg Brush - 19' - 11'

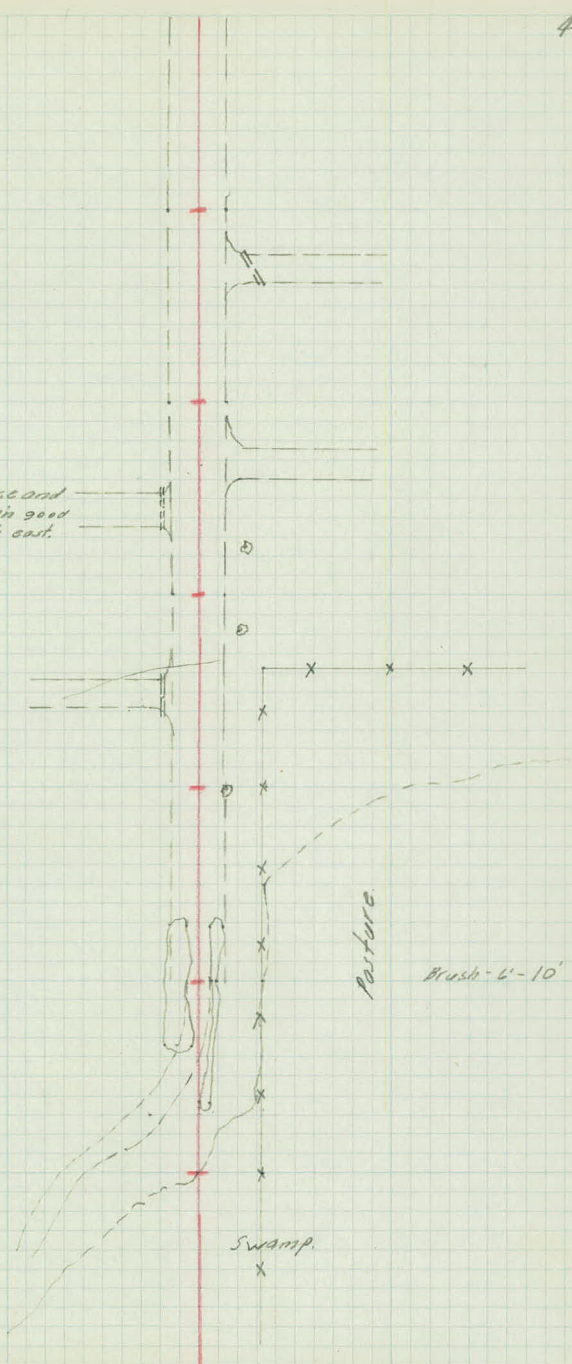
+30-to Trail - 25'

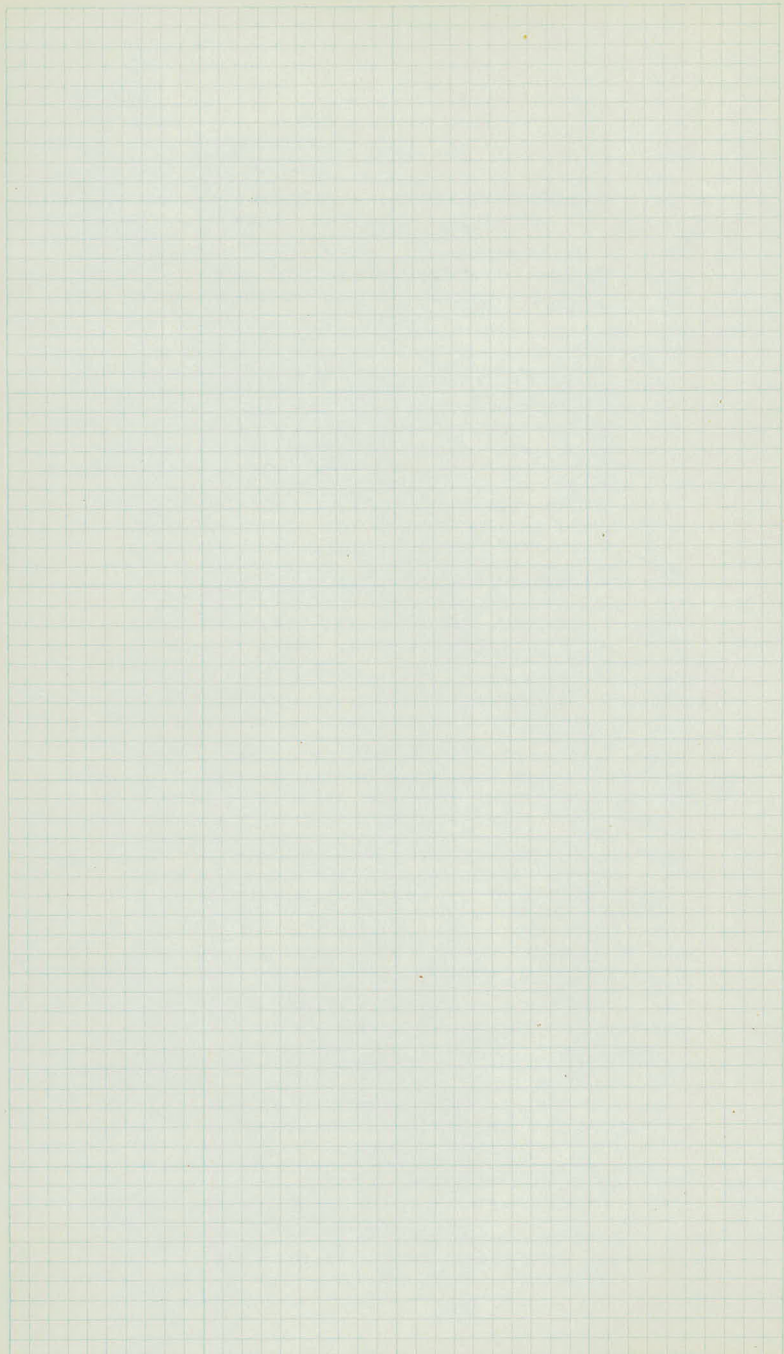
+37-Beg Brush - 0 - 5'
+30-Shoulder - 8'

0+00

Fc - 32'

Note - Road surface and
ditch's are in good
shape from ant. east.





x sections

Sta	+	π	-	Elev
B.M.	7.08	1033.74 ✓		1026.66
T.P.	-0.07	1022.55 ✓	11.12	1022.62 ✓
T.P.	0.79	1010.64 ✓	12.70	1009.85 ✓
B.M.			3.42	1007.22 ✓
0	+00			98.5
	+50			01.1
1				05.1
	+44			06.8
	+67			07.9
T.P.	8.01	1016.95 ✓	1.70	1008.94 ✓
2				09.3
	+38			10.7
	+75			11.8
3				12.8
T.P.	9.42	1023.38 ✓	2.99	1013.96 ✓

Lt.

K

Rt.

Top N.E. Cor. Lower step front of Church.

Spt. in Top of Stump 80' Lt side of ss

$$\begin{array}{r} 108 \\ 50 \end{array} \quad \begin{array}{r} 110 \\ 25 \end{array} \quad \begin{array}{r} 117 \\ 7 \end{array} \quad \begin{array}{r} 121 \\ \end{array} \quad \begin{array}{r} 125 \\ 8 \end{array} \quad \begin{array}{r} 135 \\ 32 \end{array} \quad \text{L.O.}$$

$$\begin{array}{r} 95 \\ 50 \end{array} \quad \begin{array}{r} 94 \\ 24 \end{array} \quad \begin{array}{r} 95 \\ 9 \end{array} \quad \begin{array}{r} 98 \\ 15 \end{array} \quad \begin{array}{r} 116 \\ 22 \end{array} \quad \begin{array}{r} 127 \\ 33 \end{array} \quad \text{L.O.}$$

$$\begin{array}{r} 42 \\ 50 \end{array} \quad \begin{array}{r} 76 \\ 41 \end{array} \quad \begin{array}{r} 79 \\ 35 \end{array} \quad \begin{array}{r} 79 \\ 19 \end{array} \quad \begin{array}{r} 53 \\ 14 \end{array} \quad \begin{array}{r} 5.5 \\ 14 \end{array} \quad \begin{array}{r} 56 \\ 33 \end{array} \quad \begin{array}{r} 121 \\ 50 \end{array} \quad \begin{array}{r} 130 \\ \end{array}$$

$$\begin{array}{r} 152 \\ 50 \end{array} \quad \begin{array}{r} 38 \\ 28 \end{array} \quad \begin{array}{r} 47 \\ 23 \end{array} \quad \begin{array}{r} 60 \\ 22 \end{array} \quad \begin{array}{r} 62 \\ 18 \end{array} \quad \begin{array}{r} 43 \\ 17 \end{array} \quad \begin{array}{r} 32 \\ 13 \end{array} \quad \begin{array}{r} 38 \\ 13 \end{array} \quad \begin{array}{r} 44 \\ 25 \end{array} \quad \begin{array}{r} 78 \\ 33 \end{array} \quad \begin{array}{r} 110 \\ 50 \end{array} \quad \begin{array}{r} 128 \\ \end{array}$$

$$\begin{array}{r} 177 \\ 50 \end{array} \quad \begin{array}{r} 114 \\ 33 \end{array} \quad \begin{array}{r} 26 \\ 26 \end{array} \quad \begin{array}{r} 33 \\ 23 \end{array} \quad \begin{array}{r} 53 \\ 21 \end{array} \quad \begin{array}{r} 53 \\ 20 \end{array} \quad \begin{array}{r} 40 \\ 18 \end{array} \quad \begin{array}{r} 25 \\ 14 \end{array} \quad \begin{array}{r} 27 \\ 13 \end{array} \quad \begin{array}{r} 32 \\ 25 \end{array} \quad \begin{array}{r} 73 \\ 34 \end{array} \quad \begin{array}{r} 110 \\ 50 \end{array} \quad \begin{array}{r} 124 \\ \end{array}$$

$$\begin{array}{r} 147 \\ 50 \end{array} \quad \begin{array}{r} 88 \\ 24 \end{array} \quad \begin{array}{r} 97 \\ 19 \end{array} \quad \begin{array}{r} 77 \\ 12 \end{array} \quad \begin{array}{r} 77 \\ 14 \end{array} \quad \begin{array}{r} 83 \\ 36 \end{array} \quad \begin{array}{r} 160 \\ 50 \end{array} \quad \begin{array}{r} 178 \\ \end{array}$$

$$\begin{array}{r} 140 \\ 52 \end{array} \quad \begin{array}{r} 13 \\ 47 \end{array} \quad \begin{array}{r} 23 \\ 36 \end{array} \quad \begin{array}{r} 30 \\ 28 \end{array} \quad \begin{array}{r} 83 \\ 22 \end{array} \quad \begin{array}{r} 83 \\ 15 \end{array} \quad \begin{array}{r} 66 \\ 13 \end{array} \quad \begin{array}{r} 63 \\ 14 \end{array} \quad \begin{array}{r} 66 \\ 29 \end{array} \quad \begin{array}{r} 119 \\ 35 \end{array} \quad \begin{array}{r} 132 \\ 50 \end{array} \quad \begin{array}{r} 150 \\ \end{array}$$

$$\begin{array}{r} 175 \\ 51 \end{array} \quad \begin{array}{r} 132 \\ 43 \end{array} \quad \begin{array}{r} 45 \\ 28 \end{array} \quad \begin{array}{r} 64 \\ 19 \end{array} \quad \begin{array}{r} 63 \\ 16 \end{array} \quad \begin{array}{r} 55 \\ 13 \end{array} \quad \begin{array}{r} 52 \\ 14 \end{array} \quad \begin{array}{r} 58 \\ 27 \end{array} \quad \begin{array}{r} 98 \\ 37 \end{array} \quad \begin{array}{r} 113 \\ 50 \end{array} \quad \begin{array}{r} 128 \\ \end{array}$$

$$\begin{array}{r} 158 \\ 46 \end{array} \quad \begin{array}{r} 34 \\ 32 \end{array} \quad \begin{array}{r} 48 \\ 22 \end{array} \quad \begin{array}{r} 58 \\ 18 \end{array} \quad \begin{array}{r} 56 \\ 14 \end{array} \quad \begin{array}{r} 46 \\ 11 \end{array} \quad \begin{array}{r} 42 \\ 14 \end{array} \quad \begin{array}{r} 48 \\ 26 \end{array} \quad \begin{array}{r} 73 \\ 33 \end{array} \quad \begin{array}{r} 93 \\ 50 \end{array} \quad \begin{array}{r} 113 \\ \end{array}$$

Sta.	+	π ✓	-	Elev.
		1023.38		
3	+34			13.8
	+65			14.7
4			7.6	15.8
	+50		6.0	17.4
5			4.4	19.0
	+50		2.9	20.5
6			1.7	21.7
	+50		1.0	22.4
7			0.4	23.0
I.P.	0.94	✓ 1012.14	12.18	✓ 1011.20
B.M.			4.92	✓ 1007.22 (1007.22)

Lt

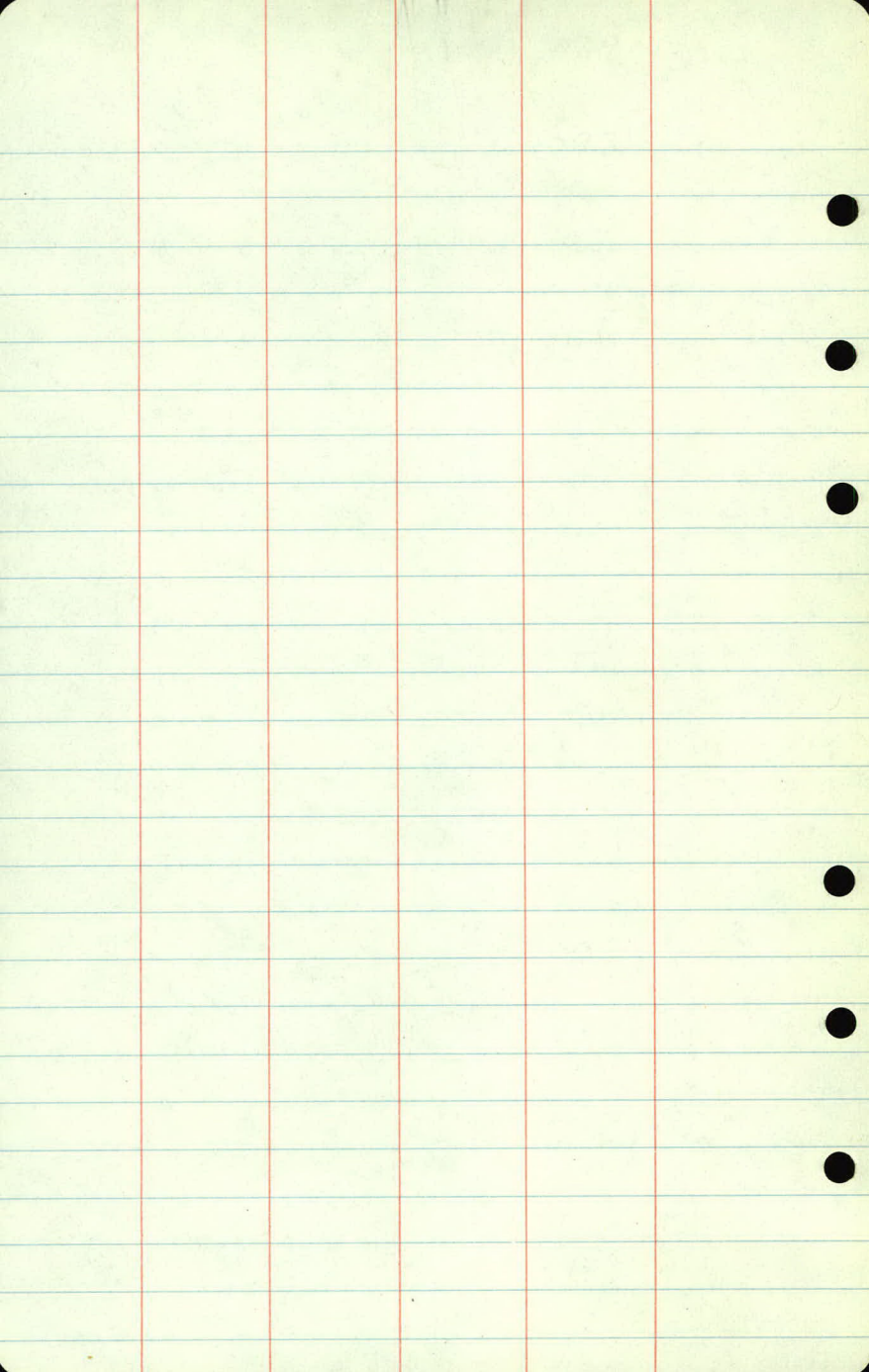
K

Rt

$\frac{1.7}{50}$	$\frac{4.3}{37}$	$\frac{11.3}{23}$	$\frac{11.4}{17}$	$\frac{9.9}{13}$	$\frac{9.6}{14}$	$\frac{10.2}{14}$	$\frac{12.2}{22}$	$\frac{14.8}{32}$	$\frac{15.8}{50}$
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87

Spl. in Top stump 80' Lt. stg. at 55



PLUM ST.

slope stakes

Brand st to 450 North.

Sta	+	π	-	Grade
B.M.	4.48	1011.70		1007.22
0	+00			1005.0
	+50			07.8
1	+80			10.1
1	+05			12.5
T.P.	12.24	1023.66	0.28	1011.42
	+36			15.4
T.P.	10.74	1034.33	0.97	1023.59
	+59			17.3
	+83			19.1
2				20.3
	+50			23.2
3				25.2
	+50			26.4

12-20-40
K.F.
L.G.
A.M.
L.G.

Gr. Bod. Lt. E Pt.

spt. in Top stump 55' at sta 0+80

$$6.7 \quad 27.8 / \begin{array}{r} 14.1 \\ -7.4 \\ \hline \end{array} \quad \begin{array}{r} 13.1 \\ -6.4 \\ \hline \end{array}$$

$$3.9 \quad 32.2 / \begin{array}{r} 13.5 \\ -7.6 \\ \hline \end{array} \quad \begin{array}{r} 12.3 \\ -8.4 \\ \hline \end{array} \quad \begin{array}{r} 11.2 \\ -7.3 / 27.6 \\ \hline \end{array}$$

$$1.6 \quad 35.2 / \begin{array}{r} 12.7 \\ -11.1 \\ \hline \end{array} \quad \begin{array}{r} 12.3 \\ -10.7 \\ \hline \end{array} \quad \begin{array}{r} 11.6 \\ -10.0 / 33.0 \\ \hline \end{array}$$

$$40.8 \quad 38.4 / \begin{array}{r} 11.9 \\ -7.7 \\ \hline \end{array} \quad \begin{array}{r} 10.7 \\ -11.5 \\ \hline \end{array} \quad \begin{array}{r} 4.0 \\ -4.8 / 22.6 \\ \hline \end{array}$$

$$8.2 \quad 21.8 / \begin{array}{r} 12.6 \\ -4.4 \\ \hline \end{array} \quad \begin{array}{r} 8.2 \\ +9.0 \\ \hline \end{array} \quad \begin{array}{r} 2.4 \\ +5.8 / 33.0 \\ \hline \end{array} \quad \begin{array}{r} 16.8 / 35.8 \\ \hline \end{array}$$

$$17.0 \quad 26.4 / \begin{array}{r} 15.3 \\ +1.7 \\ \hline \end{array} \quad \begin{array}{r} 11.7 \\ +5.3 \\ \hline \end{array} \quad \begin{array}{r} 7.4 \\ +9.6 / 33.0 \\ \hline \end{array} \quad \begin{array}{r} 12.0 / 47.0 \\ \hline \end{array}$$

$$15.2 \quad 35.0 / \begin{array}{r} 9.2 \\ +6.0 \\ \hline \end{array} \quad \begin{array}{r} 5.2 \\ +10.0 \\ \hline \end{array} \quad \begin{array}{r} 5.1 \\ +9.1 / 33.0 \\ \hline \end{array} \quad \begin{array}{r} 110.5 / 44.0 \\ \hline \end{array}$$

$$14.0 \quad 38.8 / \begin{array}{r} 4.1 \\ +7.9 \\ \hline \end{array} \quad \begin{array}{r} 5.4 \\ +8.6 \\ \hline \end{array} \quad \begin{array}{r} 4.8 \\ +9.2 / 33.0 \\ \hline \end{array} \quad \begin{array}{r} 19.4 / 41.8 \\ \hline \end{array}$$

$$11.1 \quad 33.0 / \begin{array}{r} 5.8 \\ +5.3 \\ \hline \end{array} \quad \begin{array}{r} 5.3 \\ +5.8 \\ \hline \end{array} \quad \begin{array}{r} 4.9 \\ +4.2 / 33.0 \\ \hline \end{array} \quad \begin{array}{r} 16.3 / 35.6 \\ \hline \end{array}$$

$$9.1 \quad 28.0 / \begin{array}{r} 5.8 \\ +3.3 \\ \hline \end{array} \quad \begin{array}{r} 5.4 \\ +3.7 \\ \hline \end{array} \quad \begin{array}{r} 5.6 \\ +3.5 / 30.0 \\ \hline \end{array}$$

$$7.9 \quad 26.2 / \begin{array}{r} 6.3 \\ +4.6 \\ \hline \end{array} \quad \begin{array}{r} 6.1 \\ +4.8 \\ \hline \end{array} \quad \begin{array}{r} 6.4 \\ +4.5 / 26.0 \\ \hline \end{array}$$

sta	+	π	-	Grade
		1034.33		
4				26.7
+50				26.6
B.M.	3.60	1030.26	7.69	1026.64 (1026.66)
5				26.3
+50				26.0
6				25.7
+				
+62.88				25.3

Gr. Bod.

Lt

R

Rt

7.6

$$23.0' \frac{76}{100}$$

$$\frac{49}{10.7}$$

$$\frac{7.2}{104/23.8'}$$

7.7

$$23.6' \frac{74}{10.3}$$

$$\frac{74}{10.3}$$

$$\frac{76}{101/23.2'}$$

Top N.E. Cor. Lower step front of Church.

4.0

$$23.6' \frac{87}{10.3}$$

$$\frac{37}{19.3}$$

$$\frac{46}{10.9/21.8'}$$

4.3

$$22.8' \frac{44}{11.4}$$

$$\frac{40}{10.3}$$

$$\frac{46}{11.2/22.4'}$$

4.6

$$19.3' \frac{61}{10.0}$$

$$\frac{47}{-2.1}$$

$$\frac{51}{11.0/22.0'}$$

