

Bk. 71 Dr. 16

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

Plan Survey

Johanna Blvd.

From Co. Rd. "E" To ^{STH #51} Snelling Ave.

Road Acc't. No. 6

Date Filed 6-11-41

File

PLAN SURVEY

JOHANNA BLVD.

from Co. Rd "E"
to Snelling Ave.

Index:

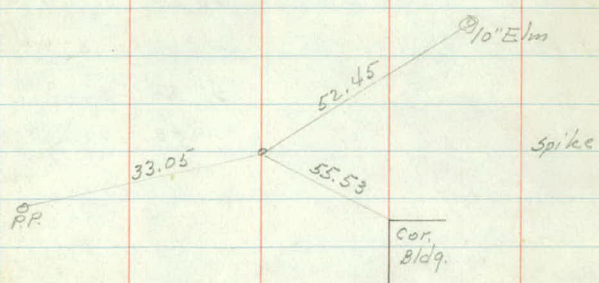
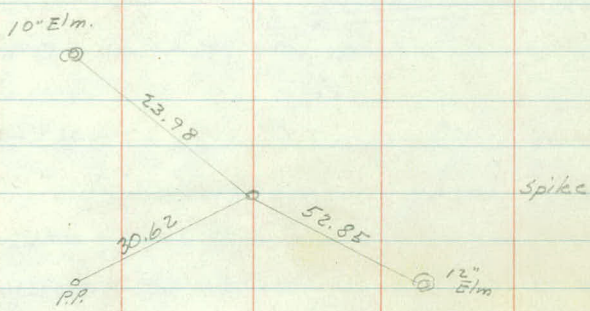
Old Alignment - 2/8/40 - 1-7

New Alignment - 2/29/40 - 22-24

Topography (Taken from old Alignment) 8-21

Sta.	pt.	Angle		Curve Data
		Lt.	Rt.	
+14.07	P.T.		15° 22'	$\Delta = 30^{\circ} 45'$ Rt.
5			14° 19'	$D = 15^{\circ}$
+50			10° 43'	$T = 105.33'$
4 + 14.40	P.I.		30° 45'	$L = 205.00'$
4			6° 49'	$R = 383.065'$
+50			3° 04'	$E = 14'$
3 + 09.07	P.C.			

+73.50	P.T.		8° 40.5'	$\Delta = 17^{\circ} 21'$ Rt.
+50			7° 30'	$D = 10^{\circ}$
1 + 00			5° 00'	$T = 87.53'$
0 + 87.53	P.I.		17° 21'	$L = 179.50'$
+50			2° 30'	$R = 573.686'$
0 + 00	P.C.		0° 0'	$E = 7.0'$



Sta.	Pt.	Angle Lt. Rt.	Curve Data.
+21.31	P.T.	6° 04'	Δ 12° 08' Lt.
11		5° 26'	D 6°
+50		3° 56'	T 101.54'
10 +20.63	P.I.	12° 08'	L 202.22'
10		2° 26'	R 955.366'
+50		0° 56'	E 8.0'
9 +19.09	P.C.		

+03.72	P.T.	14° 48'	Δ 29° 36' Rt.
8		14° 28'	D 18°
+50		9° 58'	T 84.45'
7 +23.73	P.I.	29° 36'	L 164.44'
7		5° 28'	R 319.623'
+50		0° 58'	E = 11'
6 +39.28	P.C.		

8" Oak
Side Tie



49.34

40.33 P.P.



40.23

10" Oak



R.R. Spike

6" Elm



22.80

R.R. Spike

42.08

20" Elm

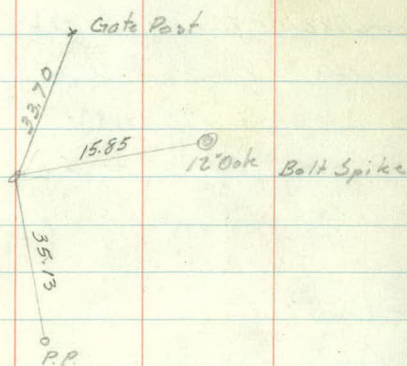
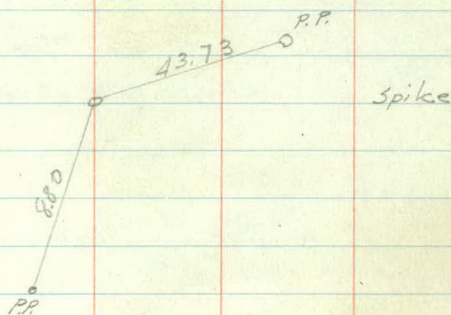


34.61

10" Oak

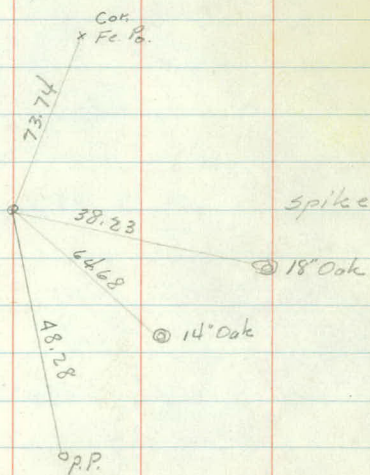
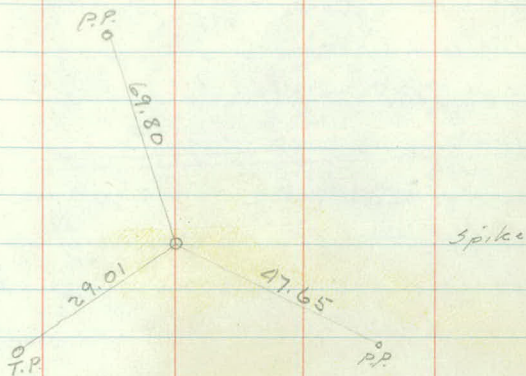


Sta.	Pt.	Angle		Curve Data.
		Lt.	Rt.	
+42.75	P.T.		18°45'	A 37°30' Rt.
17			15°33'	D - 15°
+50.			11°48'	T 130.03
16+22.78	P.I.		37°30'	L 250.00.
16			8°03'	R 383.065
+50			4°18'	E - 21
15			0°33'	
14+92.75	P.C.			
+68.42	P.T.	22°58'		A 45°56' Lt.
+50		20°23'		D 28°
13		13°23'		T 87.59.
12+91.97	P.I.	45°56'		L 164.04.
+50		6°23'		R 206.678
12+04.38	P.C.			E 18'

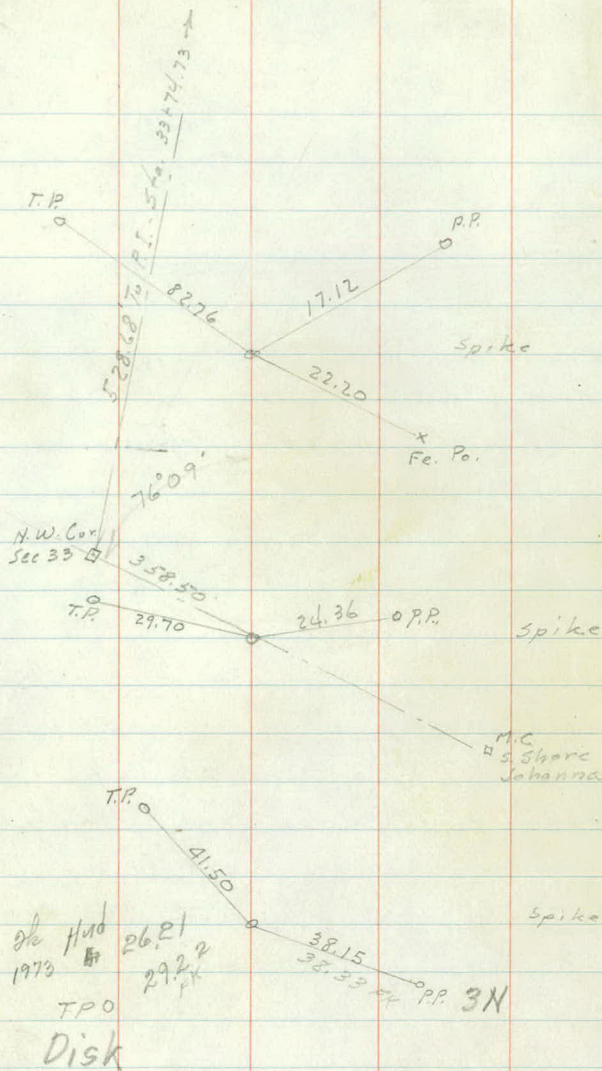


Sta	P.I.	Angle		Curve Data
		Lt.	Rt.	
	+02.04 P.T.		7° 01½'	
23			6° 57'	A - 14° 03'
	+50		5° 12'	D - 7°
22+02.26	P.I.		14° 03'	T 100.93
22			3° 27'	L 200.71
	+50		1° 42'	R 819.02
21+01.33	P.C.			E - 6

	+61.82 P.T.	27° 57½'	Δ 55° 55' Lt.
	+50	26° 25'	D 26°
20		19° 55'	T 117.98
19+64.74	P.I.	55° 55'	L 215.06
	+50	15° 25'	R 222.271
19		6° 55'	E 30
18+46.76	P.C.		



Sta.	Pt.	Angle		Curve Data
		Lt.	Rt.	
27+59.17	P.T.	15° 33½'		
+50		15° 11½'		
31		13° 11½'		
+50		11° 11½'		A 31° 07' Lt.
30		9° 11½'		D 8°
29+69.78	P.I.	31° 07½'		T 199.57.
+50		7° 11½'		L 388.96.
29		5° 11½'		R 716.779.
+50		3° 11½'		E 25
28 ₀₄		1° 11½'		
27+70.21	P.C.			
27+27.70	P.O.T.			
23+1.82	P.T.		12° 49½'	A 25° 39' Rt.
25			10° 55'	D 12°
+50			7° 55'	T 108.89.
24+26.96	P.I.		25° 39'	L 213.75.
24			4° 55'	R 478.339.
+50			1° 55'	E 13.
23+18.07	P.C.			



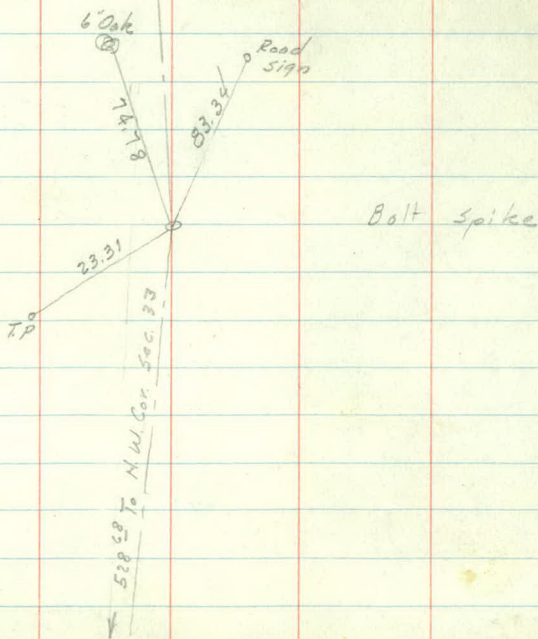
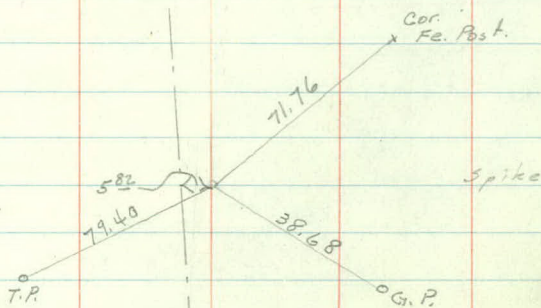
Sta	Pt.	Lt.	Angle	RT.	Curve Data
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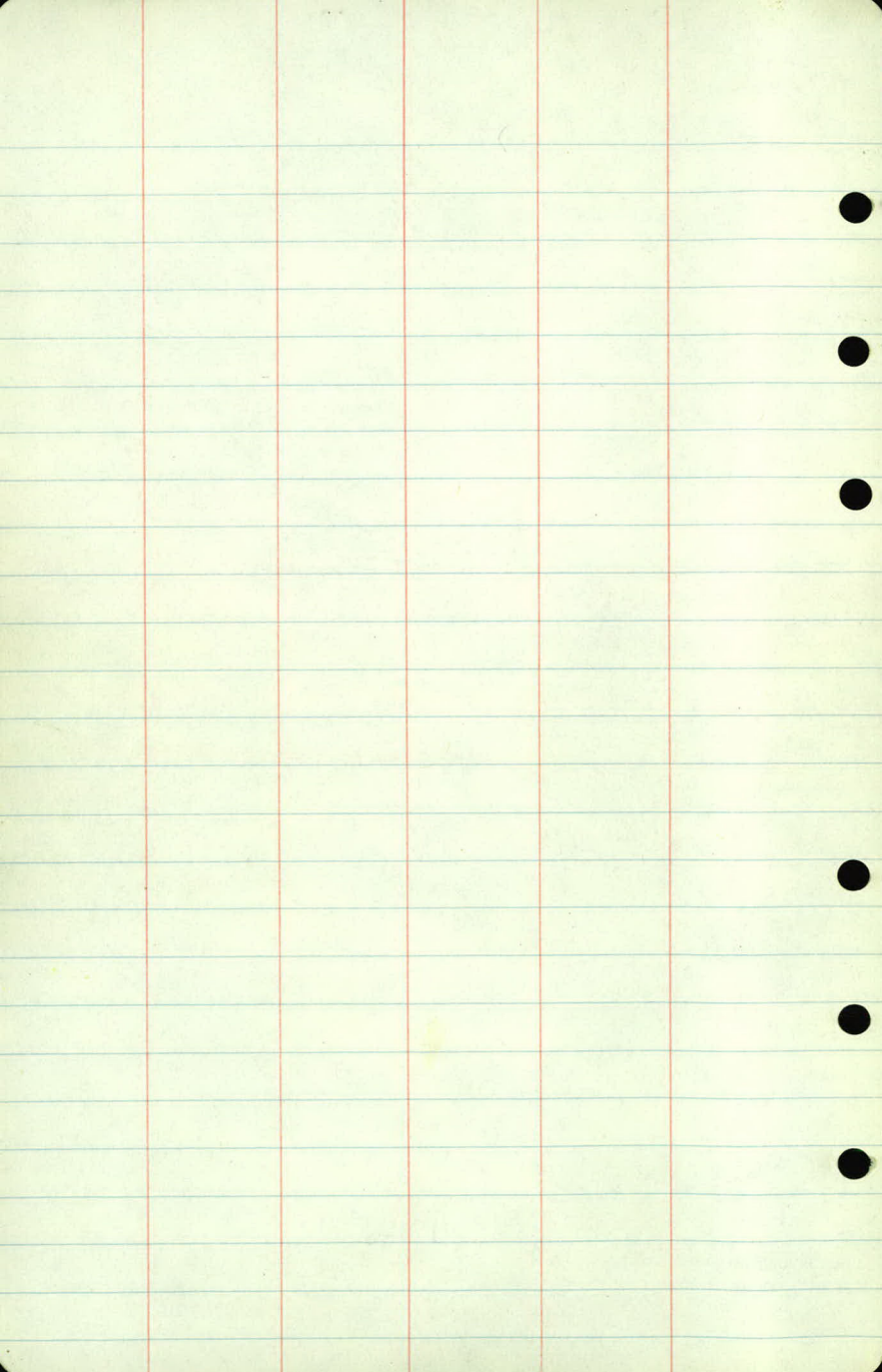
38+05.19	P.O.T.				(Snelling Ave)
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34	P.T.				23° 14' 1/2" A 46° 29' RL
+50					22° 58' D 28°
					15° 58' T 88.76
33+74.73	P.I.				46° 29' L 166.01
+50					8° 58' R 206.678
33					1° 58' E 18'

32+85.97	P.C.				
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35+21
 35+32
 35+76
 40-9
 41-1





New Alignment

JOHANNA BLVD.

2/29/40

R. Pease
A. Moeschter
L. Goldberg
G. Fewer

Sta.	Pt.	Lt.	Angle Rt.	Curve Data
+57.41 ⁰⁶		13° 03 1/2'		
+50		12° 46'		
12		10° 46'		$\Delta - 26° 07' Lt.$
+50		8° 46'		$D - 8°$
11		6° 46'		$T - 166.25°$
10 + 97.20 P.I.		26° 07'		$L - 326.46°$
+50		4° 46'		$R - 716.779°$
10		2° 46'		
+50		0° 46'		
9 + 30.95 ⁰³ P.C.				

+23.06 ⁰³ P.T.		10° 03'	$\Delta - 20° 06' Rt.$
8		8° 54'	$D - 10°$
+50		6° 24'	$T - 101.67°$
7 + 23.73 P.I.		20° 06'	$L - 201.00°$
7		3° 54'	$R - 573.686°$
+50.8		1° 24'	
6 + 22.06 P.C. = P.O.T. 6 + 22.06			

15" B. Oak

50.87

24.63

T.P.

Bolt Spikes

20.39

15" W. Oak

6' Elm

22.80

R.R. Spike

42.08

34.61

20" Elm

10" Oak

Sta.	Pf.	Angle	Curve Data
		Lt. Rt.	

24+51.46	P.O.T. = P.T.	25+31.82	
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+46.55	P.T.	1.4° 32'	
24		11° 44'	Δ 29° 04' Rt.
+50		8° 44'	D - 12°
23+28.33	P.I.	29° 04'	T - 124.00
23		5° 44'	L - 242.22
+50		2° 44'	E - 478.339.
22+04.33	P.C.		

+45.98	P.T.	15° 07'	D - 30° 14' Lt.
20		11° 27'	D - 16°
19+53.97	P.I.	30° 14'	T - 97.05.
+50		7° 27'	L - 188.96.
19		3° 27'	R - 359.265.
18+56.92	P.C.		

T.P.
0

57.37

44.47

O.P.P.

Bolt Spike

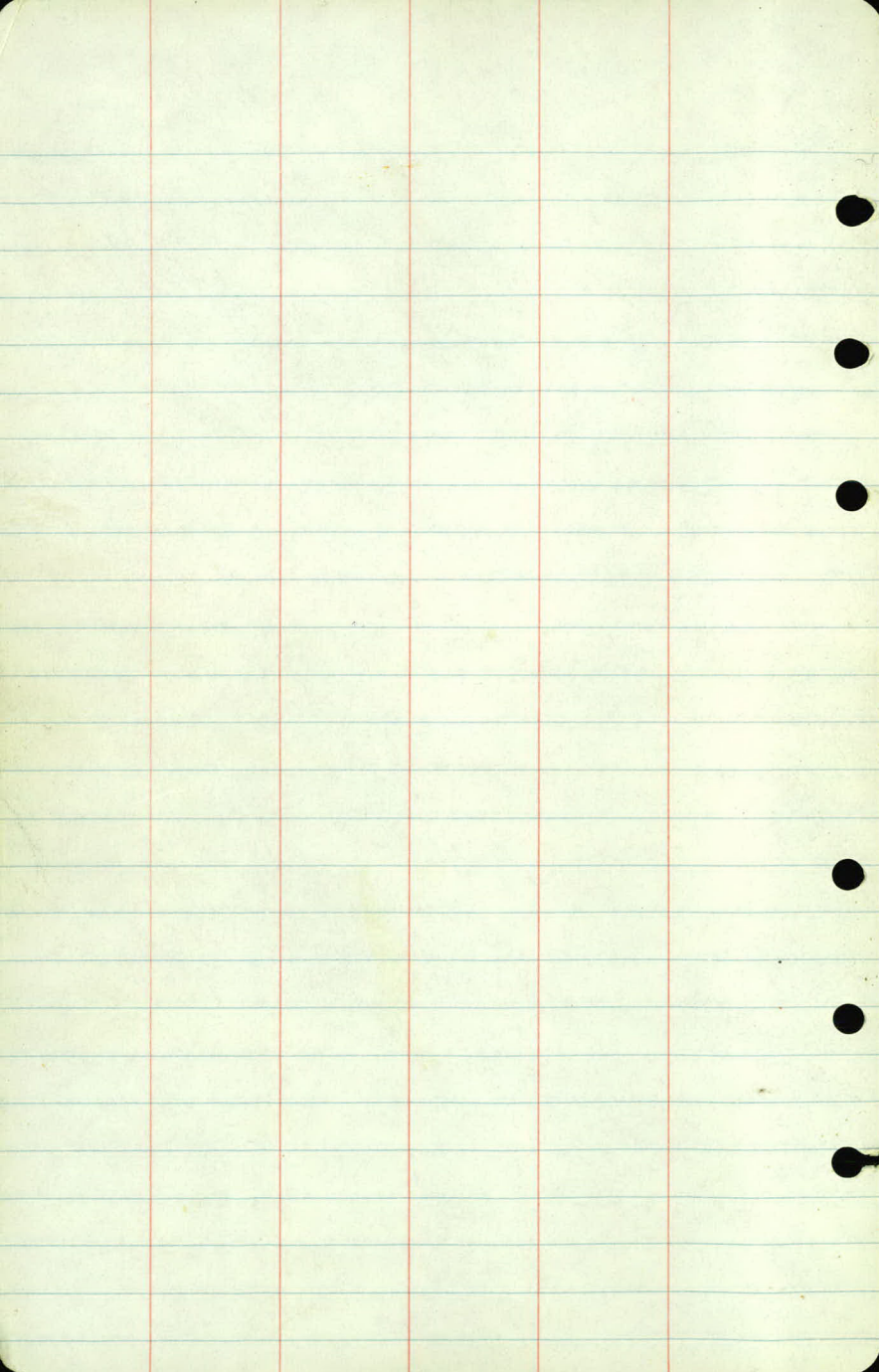
P.P.
0

7.43

52.50

*
Fe. Cor.

Bolt Spike



New. Alignment

JOHANNA BLVD.

$27+33.53 \text{ P.C. (New Line)} = 27+33.53 \text{ P.O.T. (Old)}$
to.

$34+63.50 \text{ P.T. (New)} = 34+68.28 \text{ P.O.T. (Old.)}$

3/4/40

R. Pease
A. Mopschler
L. Goldberg
C. Fower.

Sta.	Pt.	Angle		Curve Data
		Lt.	Rt.	
+63.50 ¹⁹	P.T.	(P.O.T. 34+68.28) 20° 22'		Δ 40° 05' Rt
+50			18° 41½'	D 20°
34			13° 4½'	T 105.04
33+68.12	P.I.		40° 05'	L 200.42
+50			8° 41½'	R 287.939
33			3° 41½'	E
32+63.08 ¹⁶	P.C.			

+81.20 ⁰⁴	P.T.	12° 23'	Δ 24° 46' Lt
+50		10° 49'	D 10°
29		8° 19'	T 125.95
28+59.48	P.I.	24° 46'	L 247.67
+50		5° 49'	R 573.686
28		3° 19'	
+50		0° 49'	
27+23.53 ⁰⁵	P.C.	P.O.T. 27+33.53	

122
123
124
125

Copy

P.L. 33+74.73 Ties →

Bolt Spk.

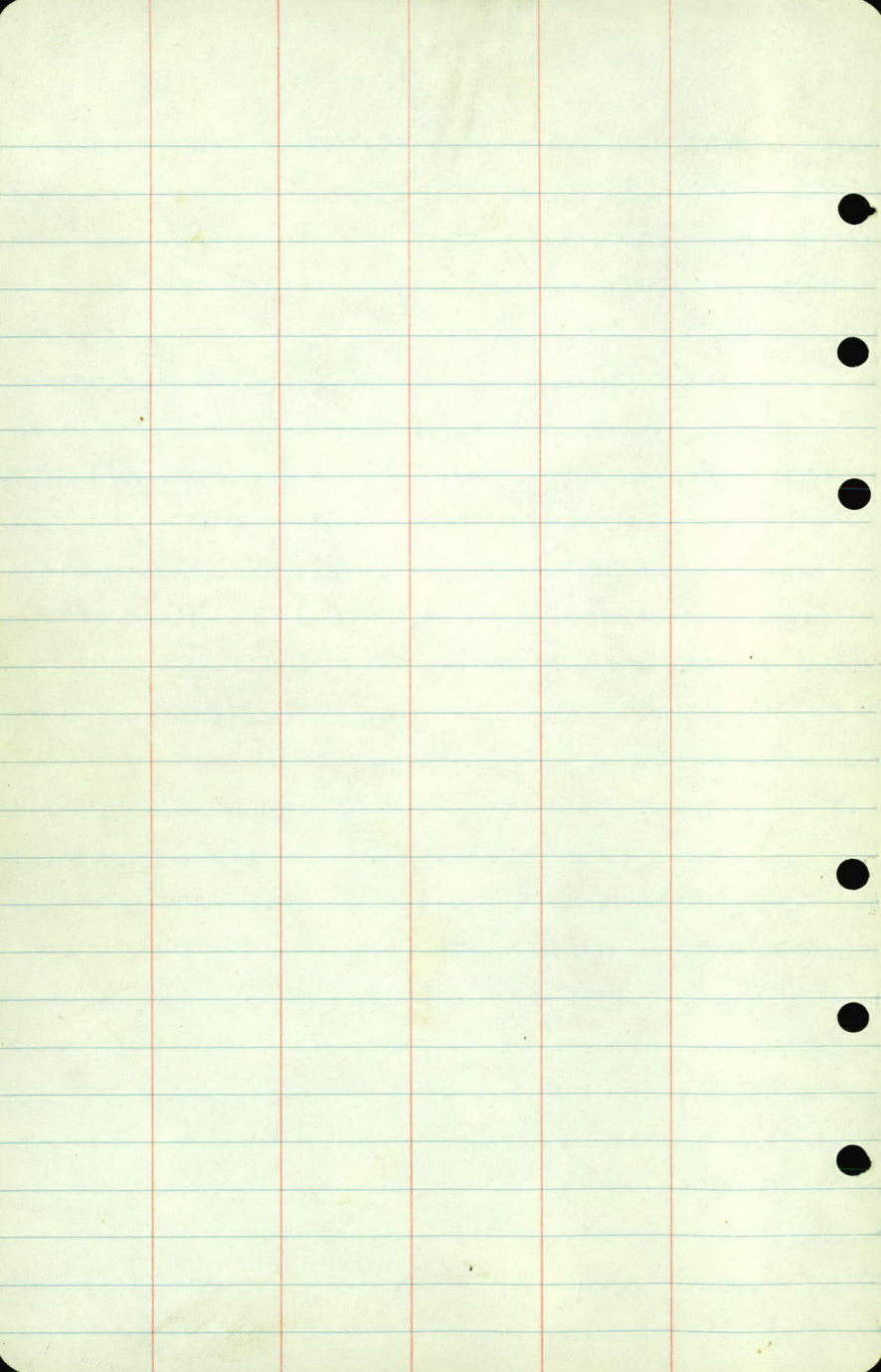
T.P.
o

4.0
8.3

25.84

o P.P.

Bolt. Spk.



Bench Levels

JOHANNA BLVD.

Co. Rd. "E" to Snelling Ave.

3/1/40

Pt.	+	π	-	Elev.
B.M.	11.34	892.03		880.69
T.P.	3.78	888.92	6.89	885.14
B.M.			4.75	884.17
B.M.	12.04	892.73		880.69
B.M.	1.96	893.08	1.61	891.12
T.P.	4.31	886.22	11.17	881.91
B.M.	5.04	886.81	4.45	881.77
T.P.	8.82	893.39	2.24	884.57
B.M.	12.01	904.32	1.08	892.31
T.P.	10.14	914.18	0.28	904.04
T.P.	5.21	918.93	0.46	913.72
B.M.			2.18	916.75

100' Rt. Sta 8+75

Spike in Cottonwood - Betw. Lake & Road - {Lake Level - 8' 11"

Spike in Arc Light Pole 30' Lt. Sta 87

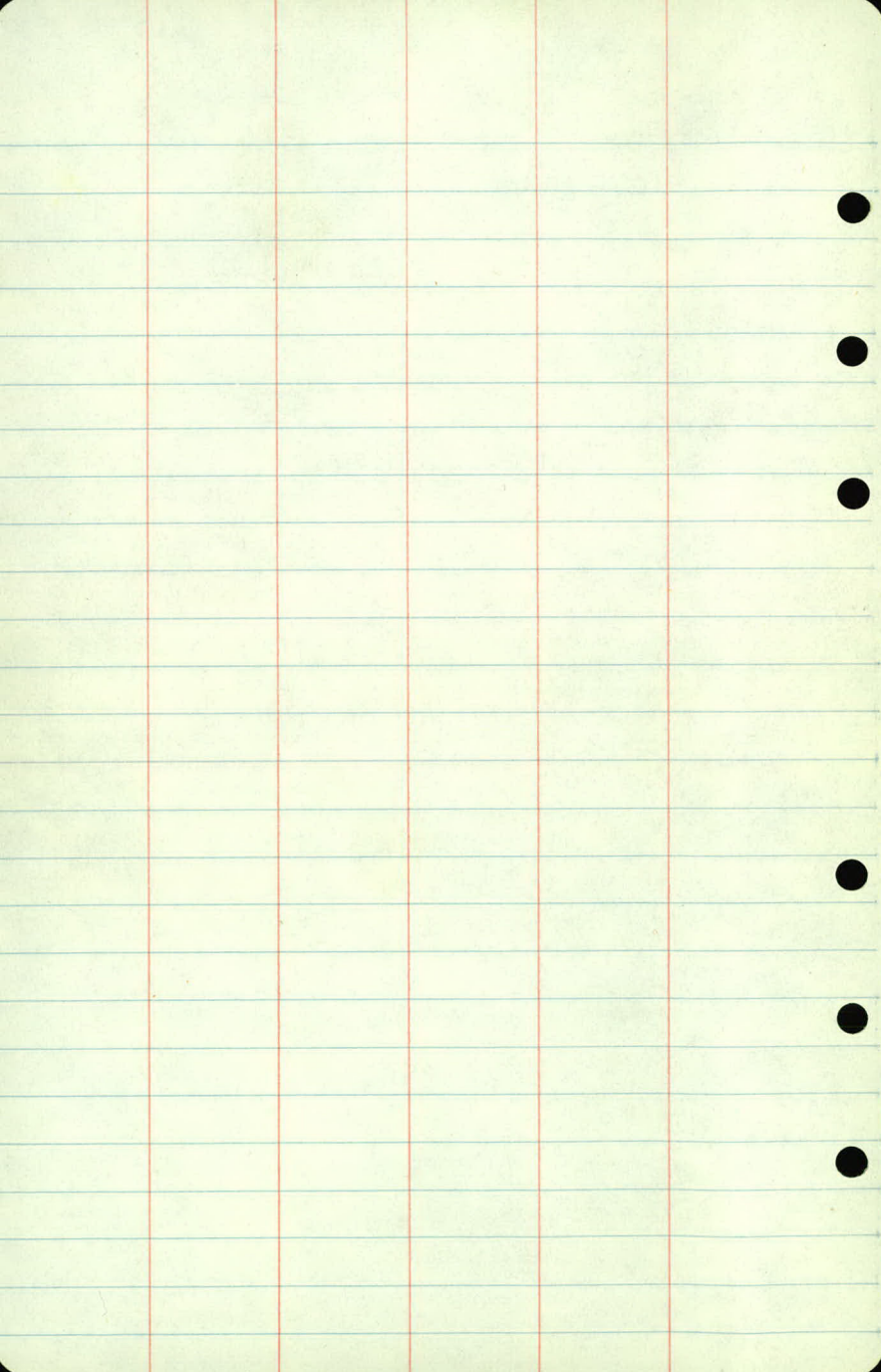
100' Rt. Sta. 8+75

Spike in P.P. 100' Rt. Sta 11+50

Spike in 6" Oak 100' Rt. Sta. 19+50

Spike in P.P. 60' Rt. Sta. 30+25

Top S. End Conc. Pump Base - Gas Sta Lt



Cross Sections

JOHANNA BLVD.

Co Rd "E" to Snelling Ave

Begin - 3/1/40

Complete - 3/7/40

Sta.	+	π	-	Elev
B.M.	4.62	888.79		884.17

0+00			4.5	
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+50			4.7	
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1+00			4.9	
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+50			5.0	
-----	--	--	-----	--

2			5.0	
---	--	--	-----	--

+50			4.7	
-----	--	--	-----	--

3			4.6	
---	--	--	-----	--

+50			4.6	
-----	--	--	-----	--

4			4.5	
---	--	--	-----	--

+50			4.6	
-----	--	--	-----	--

5			4.7	
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T.P.	6.42	890.63	4.58	884.21
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+50			6.4	
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Lt.

Spike in Arc Light Pole 30' Lt. Sta 0+87

3.3	3.4	4.8	5.0	5.2	5.0	5.8	9.7	10.8
50	41	35	30	24	19	45	18	50

6.5	5.7	5.0		5.7	7.0	8.5	11.0
50	43	27	47	17	29	50	67

7.0	5.6	5.6		5.6	7.8	9.8	11.1
50	30	23	49	16	30	50	64

6.8	5.2	5.4		5.5	6.9	8.6	10.9
50	30	17	50	14	28	50	60

6.1	5.5	5.4		5.3	6.4	9.8	11.0
50	27	19	50	12	24	50	62

6.9	5.2	5.3		5.1	6.2	10.2	11.1
50	26	21	47	10	23	50	65

7.4	5.4	5.4		5.0	6.1	8.8	11.2
50	36	22	46	12	24	50	67

7.5	5.6	5.3	5.4		5.2	5.5	9.3	10.0	11.1
50	37	24	21	46	13	23	40	50	67

7.7	5.2	5.4	5.4		5.3	7.8	8.8	11.2
50	33	26	19	45	14	31	50	69

6.4	5.6	5.6	4.7		5.6	9.3	9.4	11.2
50	44	19	9	46	15	31	50	64

5.7	5.7	5.9	4.9		5.6	8.4	7.3	10.7	11.2
50	35	18	8	4.7	15	29	36	50	59

8.0	7.3	7.3	7.6	6.5		7.0	11.3	12.9	13.2
50	33	26	17	7	6.4	13	36	50	57

2907

Sta.	+	Σ	-	Elev.
		890.63		
6			6.2	
	+22 P.C.		6.1	
	+39		6.0	
7			5.3	
	+50		4.8	
8			3.9	
	+23 P.T.		3.6	
	+71		3.1	
9			3.0	
T.P.	5.20	894.79	1.04	889.59
	+31 P.C.		7.5	
	+50		7.6	
10			6.6	

$\frac{8.6}{50}$ $\frac{8.2}{25}$ $\frac{8.0}{17}$ 6.2 $\frac{6.7}{12}$ $\frac{8.9}{25}$ $\frac{12.9}{41}$ $\frac{13.0}{50}$

$\frac{10.5}{50}$ $\frac{10.7}{41}$ $\frac{9.1}{19}$ $\frac{7.1}{13}$ $\frac{6.6}{9}$ 6.1 $\frac{6.8}{11}$ $\frac{10.7}{30}$ $\frac{13.4}{50}$

$\frac{8.6}{50}$ $\frac{8.1}{33}$ $\frac{7.7}{20}$ $\frac{6.6}{11}$ $\frac{6.2}{7}$ 6.0 $\frac{6.5}{9}$ $\frac{12.0}{32}$ $\frac{12.9}{50}$

$\frac{9.0}{50}$ $\frac{7.8}{25}$ $\frac{6.3}{14}$ $\frac{5.9}{11}$ 5.3 $\frac{6.2}{13}$ $\frac{9.6}{32}$ $\frac{12.8}{43}$ $\frac{12.8}{50}$

$\frac{8.7}{50}$ $\frac{6.4}{32}$ $\frac{5.6}{12}$ $\frac{5.3}{8}$ 4.8 $\frac{4.6}{9}$ $\frac{5.0}{17}$ $\frac{7.4}{26}$ $\frac{9.0}{35}$ $\frac{12.1}{45}$ $\frac{12.8}{50}$

$\frac{1.7}{50}$ $\frac{2.6}{32}$ $\frac{4.2}{13}$ $\frac{4.3}{8}$ $\frac{4.1}{2}$ 3.9 $\frac{3.5}{13}$ $\frac{4.2}{26}$ $\frac{4.3}{28}$ $\frac{8.0}{37}$ $\frac{9.4}{50}$

$\frac{1.1}{50}$ $\frac{2.2}{32}$ $\frac{3.3}{14}$ $\frac{3.4}{5}$ 3.6 $\frac{3.1}{17}$ $\frac{3.7}{30}$ $\frac{8.3}{42}$ $\frac{9.4}{50}$

$\frac{2.1}{50}$ $\frac{3.1}{26}$ $\frac{3.0}{11}$ 3.1 $\frac{3.0}{6}$ $\frac{2.3}{24}$ $\frac{3.0}{39}$ $\frac{3.8}{42}$ $\frac{7.4}{50}$

$\frac{6.3}{50}$ $\frac{6.7}{33}$ $\frac{5.4}{21}$ 3.0 $\frac{2.1}{6}$ $\frac{1.9}{10}$ $\frac{2.4}{12}$ $\frac{1.7}{30}$ $\frac{2.1}{44}$ $\frac{2.4}{48}$ $\frac{2.8}{50}$

$\frac{11.3}{50}$ $\frac{10.8}{20}$ 7.5 $\frac{5.4}{12}$ $\frac{5.2}{16}$ $\frac{5.6}{18}$ $\frac{5.2}{35}$ $\frac{5.1}{50}$

$\frac{10.4}{50}$ $\frac{10.7}{33}$ $\frac{9.4}{16}$ 7.6 $\frac{6.0}{17}$ $\frac{5.7}{21}$ $\frac{4.9}{37}$ $\frac{4.8}{50}$

$\frac{9.1}{50}$ $\frac{7.8}{33}$ $\frac{7.2}{11}$ 6.6 $\frac{4.8}{13}$ $\frac{3.4}{23}$ $\frac{4.9}{28}$ $\frac{4.0}{48}$ $\frac{4.0}{50}$

Lake

↓

See Additional Secs. to Lake

Sta.	+	π	-	Elev
		894.79		
10+50			8.8	
+72			11.2	
11			11.3	
+34			10.2	
B.M.	3.67		3.67	891.12 (891.12)
+50			12.9	
B.M.	0.03	891.15	3.67	891.12
+75			12.3	
12			14.0	
+50			15.3	
T.P.	2.43	886.54	7.04	884.11
13			11.4	
+50			11.5	
14			10.3	
+50			9.9	

$\frac{12.7}{50}$ $\frac{11.2}{33}$ $\frac{10.3}{15}$ 8.8 $\frac{7.3}{13}$ $\frac{5.3}{27}$ $\frac{4.0}{34}$ $\frac{4.8}{39}$ $\frac{4.1}{55}$

$\frac{14.8}{50}$ $\frac{14.0}{41}$ $\frac{12.9}{20}$ 11.2 $\frac{8.8}{14}$ $\frac{6.3}{31}$ $\frac{4.8}{41}$ $\frac{5.1}{43}$ $\frac{4.3}{57}$

$\frac{14.9}{50}$ $\frac{14.0}{33}$ $\frac{12.3}{10}$ 11.3 $\frac{9.2}{18}$ $\frac{7.3}{33}$ $\frac{4.8}{47}$ $\frac{5.6}{50}$ $\frac{4.6}{65}$

$\frac{15.9}{50}$ $\frac{14.9}{34}$ $\frac{12.6}{14}$ 10.2 $\frac{8.7}{14}$ $\frac{6.7}{28}$ $\frac{4.6}{41}$ $\frac{3.9}{50}$ $\frac{5.0}{55}$ $\frac{6.2}{58}$ $\frac{4.7}{75}$

Spike P.P. 100' et. 51.0 11.1 50
 $\frac{12.1}{50}$ $\frac{15.8}{33}$ $\frac{14.7}{18}$ 12.9 $\frac{11.9}{7}$ $\frac{8.56}{23}$ $\frac{6.4}{33}$ $\frac{4.7}{47}$ $\frac{3.7}{54}$ $\frac{5.7}{59}$ $\frac{6.4}{64}$ $\frac{4.9}{82}$

$\frac{14.5}{50}$ $\frac{12.2}{15}$ 12.3 $\frac{10.1}{23}$ $\frac{7.1}{38}$ $\frac{3.8}{50}$ $\frac{2.1}{57}$ $\frac{3.1}{63}$ $\frac{3.1}{68}$ $\frac{1.8}{87}$

$\frac{15.4}{50}$ $\frac{14.8}{33}$ 14.0 $\frac{11.6}{33}$ $\frac{9.9}{50}$ $\frac{4.1}{68}$ $\frac{4.1}{72}$ $\frac{3.8}{79}$ $\frac{3.8}{95}$

$\frac{15.4}{50}$ $\frac{16.0}{33}$ 15.3 $\frac{14.8}{33}$ $\frac{13.0}{50}$ $\frac{10.1}{75}$ $\frac{6.1}{87}$ $\frac{4.9}{100}$

$\frac{11.6}{50}$ $\frac{11.6}{33}$ 11.4 $\frac{11.1}{33}$ $\frac{10.5}{50}$ $\frac{9.4}{68}$ $\frac{3.5}{81}$ $\frac{2.4}{95}$

$\frac{10.8}{50}$ $\frac{11.1}{33}$ 11.5 $\frac{10.1}{46}$ $\frac{4.0}{56}$ $\frac{3.1}{71}$

$\frac{10.7}{50}$ $\frac{10.7}{33}$ 10.3 $\frac{9.3}{30}$ $\frac{4.5}{40}$ $\frac{3.7}{55}$

$\frac{10.7}{50}$ $\frac{10.7}{33}$ 9.9 $\frac{9.4}{7}$ $\frac{5.2}{18}$ $\frac{4.5}{34}$ $\frac{5.0}{44}$ $\frac{6.4}{48}$ $\frac{6.4}{50}$

Sta.	t	π	-	Elev.
		886.54		
15			7.3	
+50			5.7	
+73	Sec. thru 12" C.M.		5.6	
16			5.6	
+50			5.8	
17			9.0	
T.P.	5.52	886.90	5.16	881.38
+50			9.5	
18			10.0	
P.C.				
+57			10.2	
19			9.5	
+50			8.7	
20			7.2	
B.M.	4.82	886.59	5.11	881.79
				(881.77)

£

$\frac{10.6}{50}$	$\frac{10.4}{33}$	$\frac{9.4}{7}$		$\frac{6.5}{3}$	$\frac{5.2}{21}$	$\frac{5.7}{32}$	$\frac{7.0}{36}$	$\frac{7.4}{43}$	$\frac{6.9}{47}$	$\frac{3.3}{50}$
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£

$\frac{10.4}{50}$	$\frac{9.8}{29}$	$\frac{9.1}{12}$	$\frac{6.6}{5}$	$\frac{5.7}{14}$	$\frac{6.5}{24}$	$\frac{7.3}{28}$	$\frac{6.9}{34}$	$\frac{8.0}{45}$	$\frac{11.0}{50}$
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£ F.L. £ F.L.

$\frac{10.4}{50}$	$\frac{9.4}{21}$	$\frac{8.7}{12}$	$\frac{8.65}{12}$	$\frac{6.5}{6}$	$\frac{5.76}{10}$	$\frac{7.81}{23}$	$\frac{7.8}{24}$	$\frac{7.2}{25}$	$\frac{5.2}{27}$	$\frac{4.5}{30}$	$\frac{3.0}{50}$
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£

$\frac{10.0}{50}$	$\frac{9.6}{33}$	$\frac{8.8}{17}$	$\frac{6.6}{7}$	$\frac{5.7}{12}$	$\frac{6.3}{21}$	$\frac{6.5}{23}$	$\frac{5.4}{27}$	$\frac{4.4}{29}$	$\frac{6.0}{50}$
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£

$\frac{10.1}{50}$	$\frac{9.3}{27}$	$\frac{8.6}{8}$	$\frac{6.1}{2}$	$\frac{5.8}{5.8}$	$\frac{5.3}{13}$	$\frac{5.7}{24}$	$\frac{5.2}{26}$	$\frac{4.7}{28}$	$\frac{3.5}{32}$	$\frac{1.0}{41}$	$\frac{12.5}{45}$	$\frac{14.0}{50}$
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£

$\frac{10.8}{50}$	$\frac{10.1}{33}$	$\frac{9.5}{17}$	$\frac{9.0}{9.0}$	$\frac{8.4}{10}$	$\frac{6.0}{10}$	$\frac{5.2}{23}$	$\frac{5.6}{35}$	$\frac{5.6}{41}$	$\frac{4.9}{46}$	$\frac{3.7}{50}$
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£ Swamp

$\frac{12.0}{250}$	$\frac{12.0}{200}$	$\frac{12.0}{150}$	$\frac{11.2}{100}$	$\frac{11.2}{50}$	$\frac{11.2}{33}$	$\frac{9.5}{9.5}$	$\frac{9.3}{12}$	$\frac{6.7}{21}$	$\frac{5.5}{35}$	$\frac{5.9}{50}$
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£

$\frac{11.0}{50}$	$\frac{11.2}{33}$	$\frac{11.1}{19}$	$\frac{10.0}{10.0}$	$\frac{8.9}{24}$	$\frac{8.0}{30}$	$\frac{6.5}{35}$	$\frac{5.3}{50}$
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£

$\frac{11.4}{50}$	$\frac{11.4}{33}$	$\frac{11.2}{20}$	$\frac{10.2}{10.2}$	$\frac{9.3}{26}$	$\frac{7.5}{37}$	$\frac{7.0}{41}$	$\frac{5.8}{56}$
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£

$\frac{10.9}{50}$	$\frac{10.6}{33}$	$\frac{10.0}{17}$	$\frac{9.5}{9.5}$	$\frac{8.7}{22}$	$\frac{7.3}{32}$	$\frac{7.2}{38}$	$\frac{6.1}{53}$
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£

$\frac{10.5}{50}$	$\frac{9.4}{33}$	$\frac{9.2}{19}$	$\frac{8.7}{8.7}$	$\frac{8.4}{13}$	$\frac{6.8}{21}$	$\frac{5.8}{41}$	$\frac{5.3}{50}$
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$\frac{10.4}{50}$	$\frac{9.3}{33}$	$\frac{9.1}{20}$	$\frac{8.5}{8}$	$\frac{7.2}{7.2}$	$\frac{6.3}{4}$	$\frac{5.8}{8}$	$\frac{5.1}{23}$	$\frac{6.0}{40}$	$\frac{6.1}{50}$
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Spike 6 Oak 100' et. sta. 19+50

Sta.	+	π	-	Elev.
		886.59		
20+46 P.T.			5.2	
21			5.0	
+50			4.7	
22 P.C.			4.4	
+50			3.8	
23			3.3	
+50			2.3	
T.P.	6.15	892.39	0.35	886.24
+77			7.2	
24			6.7	
P.T. +47 = (25 + 31.82 + 24151.46)			5.7	
25			4.9	
+50			4.6	

$\frac{9.9}{50}$ $\frac{9.1}{33}$ $\frac{8.0}{19}$ $\frac{7.7}{12}$ $\frac{5.4}{4}$ $\frac{5.1}{9}$ $\frac{5.9}{25}$ $\frac{6.0}{35}$ $\frac{6.4}{50}$

$\frac{9.5}{50}$ $\frac{8.3}{28}$ $\frac{7.0}{20}$ $\frac{5.1}{11}$ $\frac{5.6}{20}$ $\frac{6.1}{25}$ $\frac{6.7}{35}$ $\frac{6.7}{50}$

$\frac{9.4}{50}$ $\frac{9.1}{40}$ $\frac{8.8}{27}$ $\frac{8.4}{23}$ $\frac{5.1}{12}$ $\frac{5.7}{16}$ $\frac{5.8}{20}$ $\frac{6.2}{28}$ $\frac{6.0}{50}$

$\frac{8.3}{50}$ $\frac{8.9}{33}$ $\frac{9.0}{27}$ $\frac{8.1}{23}$ $\frac{5.4}{15}$ $\frac{4.8}{12}$ $\frac{5.0}{16}$ $\frac{5.5}{29}$ $\frac{5.7}{50}$

$\frac{6.6}{50}$ $\frac{7.3}{38}$ $\frac{7.4}{30}$ $\frac{6.5}{20}$ $\frac{4.5}{11}$ $\frac{4.9}{19}$ $\frac{5.0}{22}$ $\frac{6.1}{30}$ $\frac{6.1}{50}$

$\frac{7.1}{50}$ $\frac{6.1}{35}$ $\frac{3.6}{14}$ $\frac{4.2}{17}$ $\frac{4.8}{23}$ $\frac{5.4}{35}$ $\frac{5.4}{50}$

$\frac{5.8}{50}$ $\frac{5.2}{36}$ $\frac{3.5}{27}$ $\frac{3.4}{22}$ $\frac{2.3}{16}$ $\frac{3.3}{14}$ $\frac{4.0}{20}$ $\frac{5.1}{26}$ $\frac{6.2}{50}$

$\frac{9.7}{50}$ $\frac{8.2}{37}$ $\frac{6.7}{29}$ $\frac{8.3}{25}$ $\frac{8.1}{21}$ $\frac{7.5}{15}$ $\frac{8.5}{18}$ $\frac{9.5}{23}$ $\frac{9.8}{30}$ $\frac{10.2}{50}$

$\frac{7.1}{27}$ $\frac{7.5}{21}$ $\frac{7.0}{15}$ $\frac{7.9}{21}$ $\frac{8.5}{26}$ $\frac{7.6}{31}$ $\frac{8.8}{50}$

$\frac{3.8}{29}$ $\frac{5.7}{25}$ $\frac{6.2}{19}$ $\frac{5.7}{12}$ $\frac{6.6}{19}$ $\frac{7.0}{24}$ $\frac{7.1}{27}$ $\frac{6.6}{36}$ $\frac{6.8}{50}$

$\frac{4.2}{31}$ $\frac{4.9}{24}$ $\frac{5.5}{19}$ $\frac{5.0}{13}$ $\frac{5.6}{14}$ $\frac{6.0}{21}$ $\frac{6.0}{26}$ $\frac{5.8}{50}$

$\frac{2.2}{29}$ $\frac{4.0}{23}$ $\frac{5.0}{20}$ $\frac{4.8}{12}$ $\frac{5.0}{12}$ $\frac{5.8}{19}$ $\frac{5.6}{25}$ $\frac{5.6}{37}$ $\frac{5.3}{50}$

Sta.	+	π	-	Elev.
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		892.39		
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27			4.2	
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	P.C. +34		4.1	
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	+66		4.0	
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28			3.7	
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	+50		3.7	
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T.P.	12.06	898.30	6.15	886.24
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24				
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	+47			
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T.P.	12.25	906.01	4.54	893.76
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26				
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	+50			
--	-----	--	--	--

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

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

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

$$\begin{array}{r} 2.8 \quad 4.6 \quad 4.4 \\ 24 \quad 20 \quad 11 \end{array} \quad \begin{array}{r} 5.0 \quad 5.7 \quad 6.0 \quad 6.8 \quad 8.3 \\ 13 \quad 17 \quad 21 \quad 25 \quad 50 \end{array}$$

$$\begin{array}{r} 2.5 \quad 4.5 \quad 4.4 \\ 26 \quad 19 \quad 13 \end{array} \quad \begin{array}{r} 4.8 \quad 5.4 \quad 7.6 \quad 8.5 \\ 13 \quad 17 \quad 24 \quad 50 \end{array}$$

$$\begin{array}{r} 2.9 \quad 4.5 \quad 4.3 \\ 25 \quad 19 \quad 12 \end{array} \quad \begin{array}{r} 4.5 \quad 5.3 \quad 7.1 \quad 10.4 \\ 13 \quad 18 \quad 24 \quad 50 \end{array}$$

$$\begin{array}{r} 1.6 \quad 4.6 \quad 4.4 \quad 4.1 \\ 25 \quad 22 \quad 16 \quad 11 \end{array} \quad \begin{array}{r} 4.5 \quad 5.6 \quad 5.7 \quad 9.6 \quad 10.6 \\ 19 \quad 21 \quad 25 \quad 36 \quad 50 \end{array}$$

$$\begin{array}{r} 4.8 \quad 4.8 \quad 5.5 \quad 4.6 \quad 4.0 \\ 50 \quad 16 \quad 14 \quad 13 \quad 12 \end{array} \quad \begin{array}{r} 3.3 \quad 3.5 \quad 4.6 \quad 6.9 \quad 9.3 \\ 10 \quad 19 \quad 26 \quad 33 \quad 50 \end{array}$$

$$\begin{array}{r} 5.2 \quad 6.4 \\ 50 \quad 34 \end{array}$$

$$\begin{array}{r} +2.0 \quad 2.0 \quad 0.7 \\ 75 \quad 50 \quad 40 \end{array}$$

$$\begin{array}{r} 4.5 \quad 9.5 \quad 11.8 \\ 75 \quad 50 \quad 39 \end{array}$$

$$\begin{array}{r} +0.7 \quad 5.4 \quad 9.2 \\ 75 \quad 50 \quad 37 \end{array}$$

$$\begin{array}{r} +5.0 \quad +2.0 \quad +0.6 \quad 1.9 \quad 7.1 \\ 75 \quad 67 \quad 65 \quad 50 \quad 36 \end{array}$$

$$\begin{array}{r} +2.4 \quad 2.0 \quad 3.4 \quad 3.9 \quad 5.7 \quad 8.3 \\ 75 \quad 59 \quad 57 \quad 50 \quad 46 \quad 36 \end{array}$$

$$\begin{array}{r} 1.3 \quad 5.6 \quad 6.8 \quad 7.6 \quad 8.9 \quad 11.2 \\ 75 \quad 59 \quad 57 \quad 50 \quad 43 \quad 31 \end{array}$$

906.01

28

T.P.	1.33	894.11	13.23	892.78
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29		5.9
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+50		7.8
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P.T.	12" V. t. Rt	
+ 78	Sec. thru	15" C. M. Lt. 10.8

30		10.6
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+ 50			6.6
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31			4.9
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+ 50

32

+45

B.M	12.71	905.02	1.77	892.34	(892.3)
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31 + 50			10.1
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32			6.6
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X-SECTION

STA. 29+78

4' LT & 63' RT

Flow south

7.4 11.2 12.7 13.5
75 54 51 40

7.8 9.4 9.6 6.3 5.1 5.1 11.6 12.8
50 22 8 1 5.9 19 30 42 50

8.1 9.1 11.0 11.6 6.4 4.2 4.8 12.2 13.0
50 30 14 8 7.8 3 25 42 55 60

FL 900.5 ± FL
9.3 10.4 11.2 12.1 13.8 13.1 5.5 4.0 4.7 14.0 13.6 13.0
50 29 14 11 7 7 10.8 8 26 47 63 63 70

10.8 11.9 12.5 13.1 12.6 12.5 5.1 4.3 3.3 3.6 10.9 10.8
50 31 14 11 10 5 10.6 10 18 30 48 60 65

12.8 13.2 13.6 13.0 3.9 2.4 1.5 2.1 6.2 6.4
50 37 16 5 6.6 10 21 32 47 55 60

13.5 13.5 13.0 1.4 0.2 10.3 0.2 1.7 1.5
50 36 20 4.9 9 18 29 43 50 55

12.7 12.9 10.9
50 42 23

10.8 8.4
50 32

4.6 10.5
50 31

Spike P.P. 60' RT. Sta. 30+85

10.6 9.6 8.9 8.0 8.1 9.1 8.4
2 10.1 3 12 22 35 45 50

8.1 7.2 5.6 6.2 6.8 6.6 2.0 0.5 1.2
12 5 6.6 18 31 37 41 47 48 50

Sta.	+	Σ	-	Elev
		905.02		
32+45			3.4	01.6
+69 ^{P.C.}			2.2	02.8
33			0.4	04.6
T.P.	12.12	916.70	0.44	904.58
+50			9.6	07.1
34			7.5	09.2
+50			5.7	11.6
+63.50 ^{P.T.} = 34+68.28			5.1	11.6
T.P.	8.14	923.39	1.45	915.25
32+45				
+69				
33				
+50				
34				

$$\begin{array}{r} \text{\textcircled{4}} \\ \hline 5.6 \quad 4.0 \quad 3.4 \quad 3.7 \quad 4.2 \quad 4.2 \quad +0.2 \\ 2.2 \quad 8 \quad 3.4 \quad 1.5 \quad 2.4 \quad 2.7 \quad 3.1 \quad 3.9 \end{array}$$

$$\begin{array}{r} \text{\textcircled{4}} \\ \hline 3.5 \quad 2.9 \quad 2.1 \quad 2.7 \quad 3.7 \quad +3.3 \\ 5.0 \quad 4.3 \quad 2.2 \quad 1.3 \quad 2.2 \quad 2.6 \quad 3.7 \end{array}$$

$$\begin{array}{r} \text{\textcircled{4}} \\ \hline +0.1 \quad +1.0 \quad 0.8 \quad 1.7 \quad 3.3 \quad 1.3 \quad 1.3 \quad 0.7 \quad 1.2 \quad 2.2 \quad 2.3 \quad +4.9 \\ 5.0 \quad 4.2 \quad 2.3 \quad 2.0 \quad 1.9-1.7 \quad 1.5 \quad 1.1 \quad 0.4 \quad 1.0 \quad 2.0 \quad 2.3 \quad 2.6 \quad 3.6 \end{array}$$

$$\begin{array}{r} 0.0 \quad 9.5 \quad 9.8 \quad 11.9 \quad 10.2 \quad 9.8 \quad 10.6 \quad 11.2 \quad 11.0 \quad 6.7 \quad 2.2 \\ 5.0 \quad 4.4 \quad 3.0 \quad 2.9-2.7 \quad 2.3 \quad 1.7 \quad 9.6 \quad 1.6 \quad 1.8 \quad 2.1 \quad 2.6 \quad 3.1 \end{array}$$

$$\begin{array}{r} 8.0 \quad 8.0 \quad 7.6 \quad 8.3 \quad 10.3 \quad 10.0 \quad 2.5 \\ 2.5 \quad 1.8 \quad 1.3 \quad 7.5 \quad 1.5 \quad 1.7 \quad 1.9 \quad 2.7 \end{array}$$

$$\begin{array}{r} 0.4 \quad 1.7 \quad 8.2 \quad 5.7 \quad 5.9 \quad 7.5 \quad 7.1 \quad 1.3 \\ 5.0 \quad 2.4 \quad 1.8-1.5 \quad 1.2 \quad 5.7 \quad 1.6 \quad 2.0 \quad 2.5 \quad 3.2 \end{array}$$

$$\begin{array}{r} 1.6 \quad 2.8 \quad 5.2 \quad 5.2 \quad 5.4 \quad 6.0 \quad 7.2 \quad 6.3 \quad 4.9 \quad 4.0 \\ 5.0 \quad 3.3 \quad 8 \quad 5.1 \quad 1.4 \quad 1.8 \quad 2.0 \quad 2.2 \quad 2.4 \quad 2.6 \quad 3.3 \end{array}$$

$$\begin{array}{r} 10.1 \quad 9.3 \quad 5.8 \\ 4.5 \quad 5.5 \quad 7.5 \end{array}$$

$$\begin{array}{r} 6.3 \quad 6.1 \quad 3.7 \\ 4.3 \quad 5.6 \quad 7.5 \end{array}$$

$$\begin{array}{r} 6.4 \quad 3.9 \\ 4.3 \quad 7.5 \end{array}$$

$$\begin{array}{r} 4.3 \quad 5.7 \\ 3.6 \quad 7.5 \end{array}$$

$$\begin{array}{r} 3.5 \quad 3.8 \\ 5.0 \quad 4.1 \end{array}$$

$$\begin{array}{r} 4.4 \quad 4.9 \quad 4.9 \\ 3.3 \quad 5.0 \quad 7.5 \end{array}$$

Sta.	+	π	-	Elev.	
		923.39			
34 + 50					
+ 63					
B.M.	7.05	923.80	6.65	916.74	916.75
35			10.9	12.9	
+ 50			9.4	14.4	
36			8.3	15.5	
+ 50			6.9	16.9	
37			5.5	18.3	
+ 20			4.9	18.9	
+ 27			4.6	19.2	
+ 68			2.5	21.3	
+ 85			1.6	22.2	
38 + 05	Sec. Skewed to		0.8	23.0	
B.M.	$\frac{1}{2}$ Snelling Ave.		7.05	916.75	916.75

$$\frac{6.9}{50}$$

$$\frac{10.0}{50}$$

Top. S. End. Conc. Pump Base Gas Sta. Lt. Sta 36

$$\begin{array}{cccccccccccc} 10.9 & 12.6 & 14.0 & 13.5 & 11.6 & 11.3 & & 11.2 & 11.2 & 11.2 & 10.6 & 9.6 \\ \hline 50 & 21 & 20 & 16 & 13 & 10 & 10.9 & 18 & 24 & 27 & 35 & 50 \end{array}$$

$$\begin{array}{cccccccccccc} 11.2 & 11.5 & 10.0 & 12.9 & 13.1 & 10.1 & & 9.9 & 11.5 & 12.0 & 10.8 & 10.2 & 9.6 \\ \hline 50 & 32 & 26 & 23 & 19 & 13 & 9.4 & 15 & 19 & 21 & 24 & 35 & 50 \end{array}$$

$$\begin{array}{cccccccccccc} 11.5 & 12.1 & 10.5 & 9.3 & 11.6 & 11.8 & 9.0 & & 8.8 & 10.4 & 10.7 & 9.8 & 9.6 & 8.9 \\ \hline 50 & 46 & 32 & 27 & 24 & 19 & 17 & 8.3 & 15 & 19 & 22 & 23 & 34 & 50 \end{array}$$

$$\begin{array}{cccccccccccc} 10.5 & 10.3 & 11.0 & 11.0 & 8.5 & 7.5 & & 7.5 & 9.5 & 10.0 & 9.1 & 8.4 & 8.2 \\ \hline 50 & 28 & 26 & 23 & 18 & 15 & 6.9 & 15 & 18 & 20 & 22 & 34 & 50 \end{array}$$

$$\begin{array}{cccccccc} 9.7 & 9.5 & 6.1 & & 5.9 & 7.9 & 8.0 & 7.1 & 6.7 & 5.9 \\ \hline 50 & 26 & 16 & 5.5 & 15 & 18 & 21 & 22 & 34 & 50 \end{array}$$

$$\begin{array}{cccccccc} 9.6 & 8.9 & 9.0 & 5.1 & & 5.3 & 7.7 & 7.4 & 6.0 & 5.6 & 5.6 \\ \hline 50 & 37 & 25 & 17 & 4.9 & 15 & 19 & 21 & 22 & 34 & 50 \end{array}$$

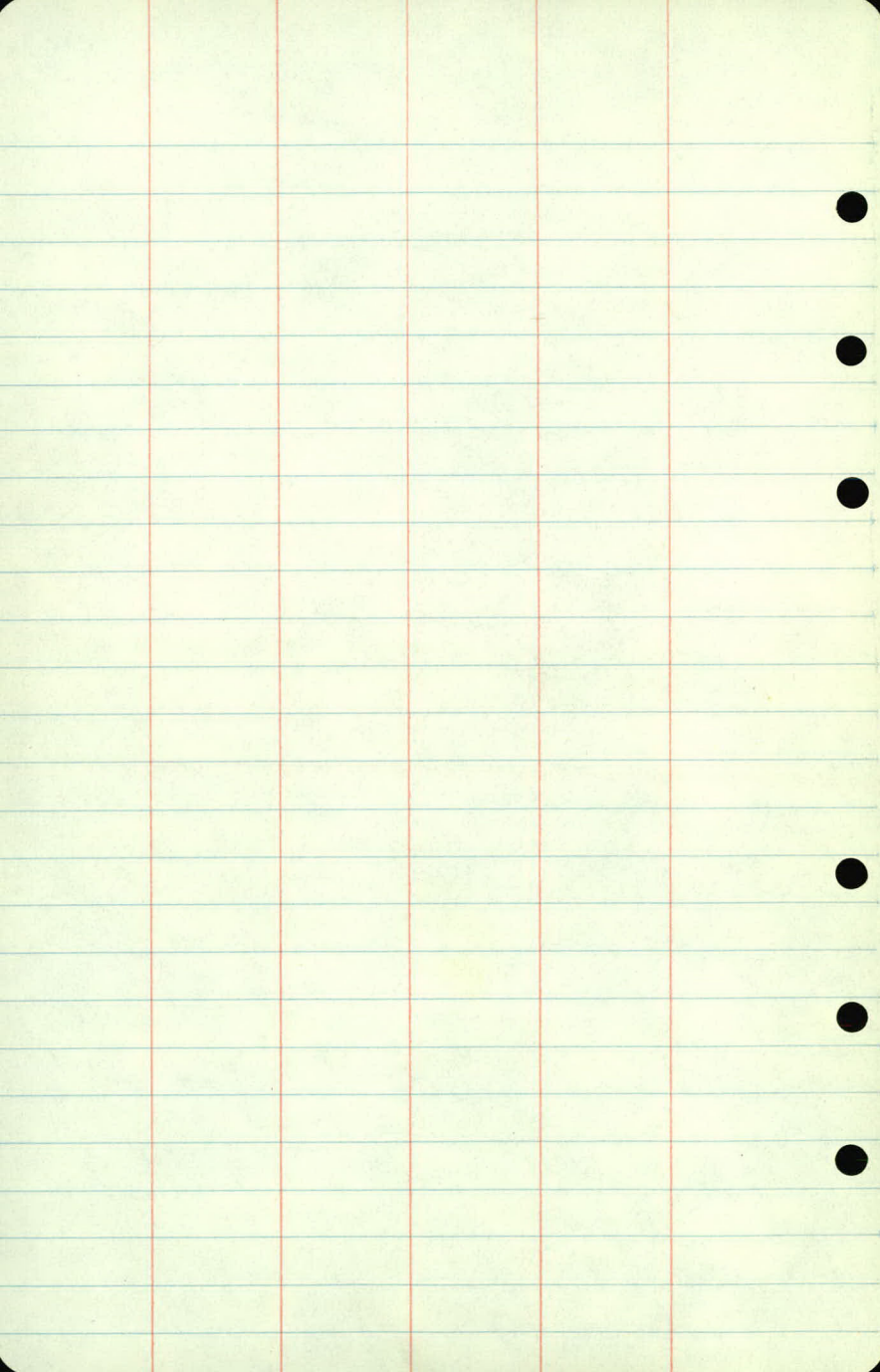
$$\begin{array}{cccccccc} 6.7 & 6.9 & 5.7 & 5.2 & & 4.9 & 7.2 & 7.0 & 5.6 & 5.3 & 5.3 \\ \hline 50 & 35 & 22 & 18 & 4.6 & 16 & 20 & 22 & 23 & 33 & 50 \end{array}$$

$$\begin{array}{cccccccc} 4.2 & 3.8 & 3.1 & & 3.0 & 4.8 & 4.8 & 3.5 & 2.5 & 2.4 \\ \hline 50 & 39 & 17 & 2.5 & 13 & 19 & 22 & 25 & 36 & 50 \end{array}$$

$$\begin{array}{cccccccc} 3.2 & 2.6 & & 1.6 & 2.0 & 1.5 & 1.4 \\ \hline 50 & 29 & 1.6 & 13 & 26 & 44 & 50 \end{array}$$

$$\begin{array}{cccccccc} 2.8 & 1.9 & & 0.9 & 0.9 & 1.1 \\ \hline 50 & 25 & 0.8 & 25 & 50 \end{array}$$

Top S. End. Conc. Pump Base



JOHANNA BLVD.

Additional X Sections
from Sta. 8+00
to Sta. 12+50

Sta.	+	π	-	Elev.
B.M.	2.98	894.10		891.12
8+00				

+23

+71

9

+31

+50

10

+50

+72

11

+34

+50

Spike in PR 100 Rt. 11+50

$$\begin{array}{r} 16.2 \\ 57 \end{array} \quad \begin{array}{r} 16.5 \\ 65 \end{array}$$

$$\begin{array}{r} 16.1 \\ 62 \end{array} \quad \begin{array}{r} 16.5 \\ 74 \end{array}$$

$$\begin{array}{r} 12.8 \\ 67 \end{array} \quad \begin{array}{r} 16.1 \\ 82 \end{array} \quad \begin{array}{r} 16.5 \\ 89 \end{array}$$

$$\begin{array}{r} 10.1 \\ 64 \end{array} \quad \begin{array}{r} 12.4 \\ 78 \end{array} \quad \begin{array}{r} 15.9 \\ 89 \end{array} \quad \begin{array}{r} 16.5 \\ 98 \end{array}$$

$$\begin{array}{r} 4.6 \\ 60 \end{array} \quad \begin{array}{r} 8.7 \\ 70 \end{array} \quad \begin{array}{r} 9.7 \\ 80 \end{array} \quad \begin{array}{r} 15.8 \\ 98 \end{array} \quad \begin{array}{r} 16.5 \\ 110 \end{array}$$

$$\begin{array}{r} 5.4 \\ 75 \end{array} \quad \begin{array}{r} 10.4 \\ 90 \end{array} \quad \begin{array}{r} 15.9 \\ 109 \end{array} \quad \begin{array}{r} 16.5 \\ 115 \end{array}$$

$$\begin{array}{r} 3.3 \\ 61 \end{array} \quad \begin{array}{r} 4.9 \\ 82 \end{array} \quad \begin{array}{r} 4.3 \\ 94 \end{array} \quad \begin{array}{r} 15.3 \\ 114 \end{array} \quad \begin{array}{r} 16.5 \\ 122 \end{array}$$

$$\begin{array}{r} 3.3 \\ 70 \end{array} \quad \begin{array}{r} 3.9 \\ 80 \end{array} \quad \begin{array}{r} 3.6 \\ 90 \end{array} \quad \begin{array}{r} 14.7 \\ 110 \end{array} \quad \begin{array}{r} 16.5 \\ 120 \end{array}$$

$$\begin{array}{r} 3.6 \\ 74 \end{array} \quad \begin{array}{r} 4.1 \\ 79 \end{array} \quad \begin{array}{r} 4.1 \\ 92 \end{array} \quad \begin{array}{r} 12.3 \\ 105 \end{array} \quad \begin{array}{r} 15.6 \\ 118 \end{array} \quad \begin{array}{r} 16.5 \\ 124 \end{array}$$

$$\begin{array}{r} 4.0 \\ 79 \end{array} \quad \begin{array}{r} 4.5 \\ 85 \end{array} \quad \begin{array}{r} 3.9 \\ 95 \end{array} \quad \begin{array}{r} 10.4 \\ 106 \end{array} \quad \begin{array}{r} 12.0 \\ 112 \end{array} \quad \begin{array}{r} 15.7 \\ 123 \end{array} \quad \begin{array}{r} 16.5 \\ 127 \end{array}$$

$$\begin{array}{r} 4.0 \\ 85 \end{array} \quad \begin{array}{r} 4.6 \\ 89 \end{array} \quad \begin{array}{r} 4.2 \\ 94 \end{array} \quad \begin{array}{r} 3.3 \\ 100 \end{array} \quad \begin{array}{r} 10.7 \\ 112 \end{array} \quad \begin{array}{r} 15.7 \\ 127 \end{array} \quad \begin{array}{r} 16.5 \\ 140 \end{array}$$

$$\begin{array}{r} 4.2 \\ 92 \end{array} \quad \begin{array}{r} 4.8 \\ 95 \end{array} \quad \begin{array}{r} 5.2 \\ 100 \end{array} \quad \begin{array}{r} 3.9 \\ 105 \end{array} \quad \begin{array}{r} 10.8 \\ 116 \end{array} \quad \begin{array}{r} 15.7 \\ 129 \end{array} \quad \begin{array}{r} 16.5 \\ 134 \end{array}$$

107

Sta.	+	π	-	Elev.
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		894.10		
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11+75				
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12				
----	--	--	--	--

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

B.M.				
------	--	--	--	--

		2.97		
--	--	------	--	--

			891.13	
--	--	--	--------	--

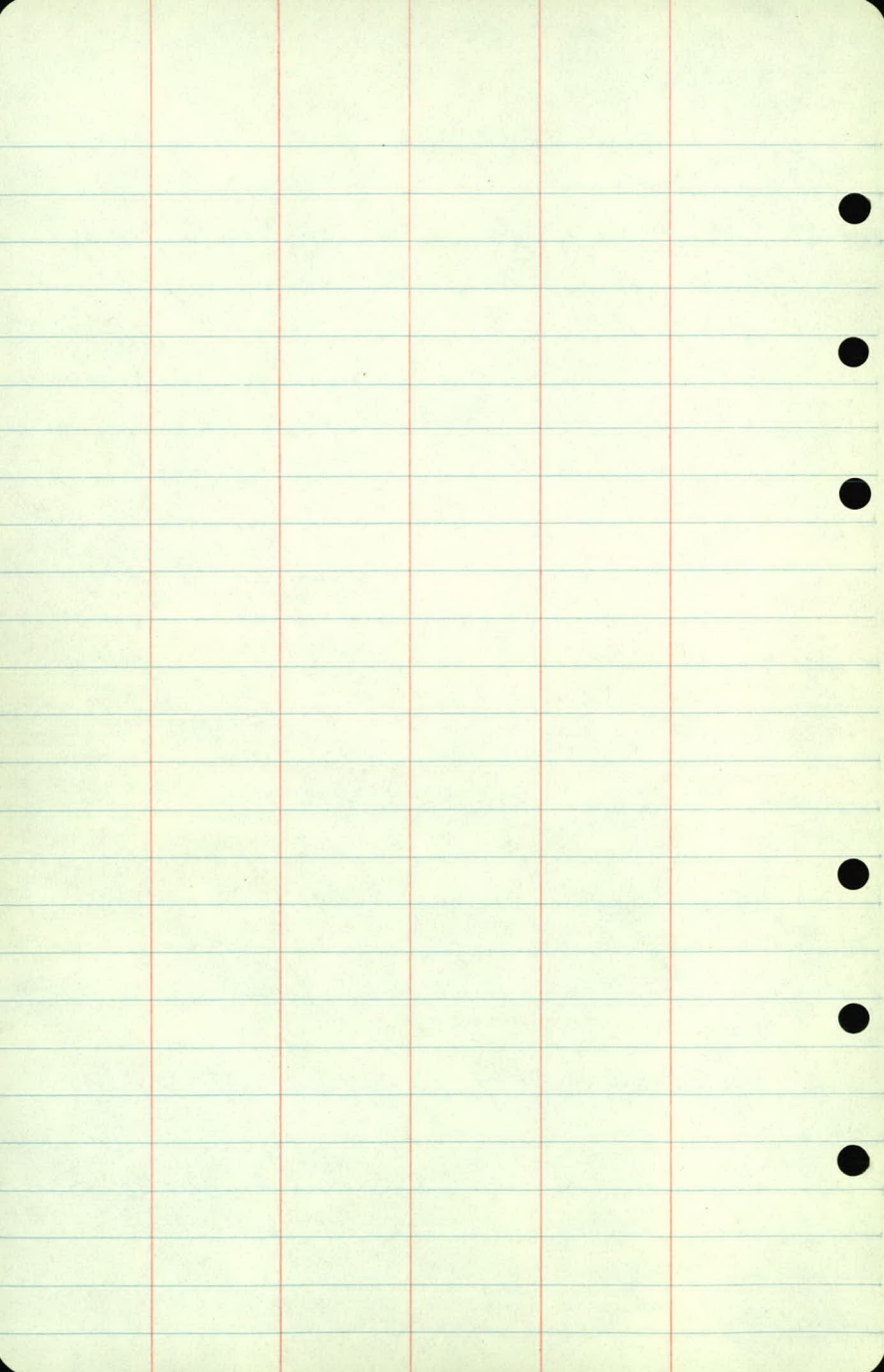
				891.12
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5.1	5.8	4.9	12.0	15.5	16.5
96	100	107	118	127	137

6.0	6.9	6.9	6.3	12.3	15.5	16.5
105	110	113	117	128	141	156

Latv

7.8	8.7	7.8	12.2	15.6	16.5
112	127	132	142	152	162



JOHANNA BLVD.

Additional Topography

on new alignment Sta. 9 to 12+50

13

12

Brush x 3 £

+50-12" Oak £

11

+88-15" Oak £

10

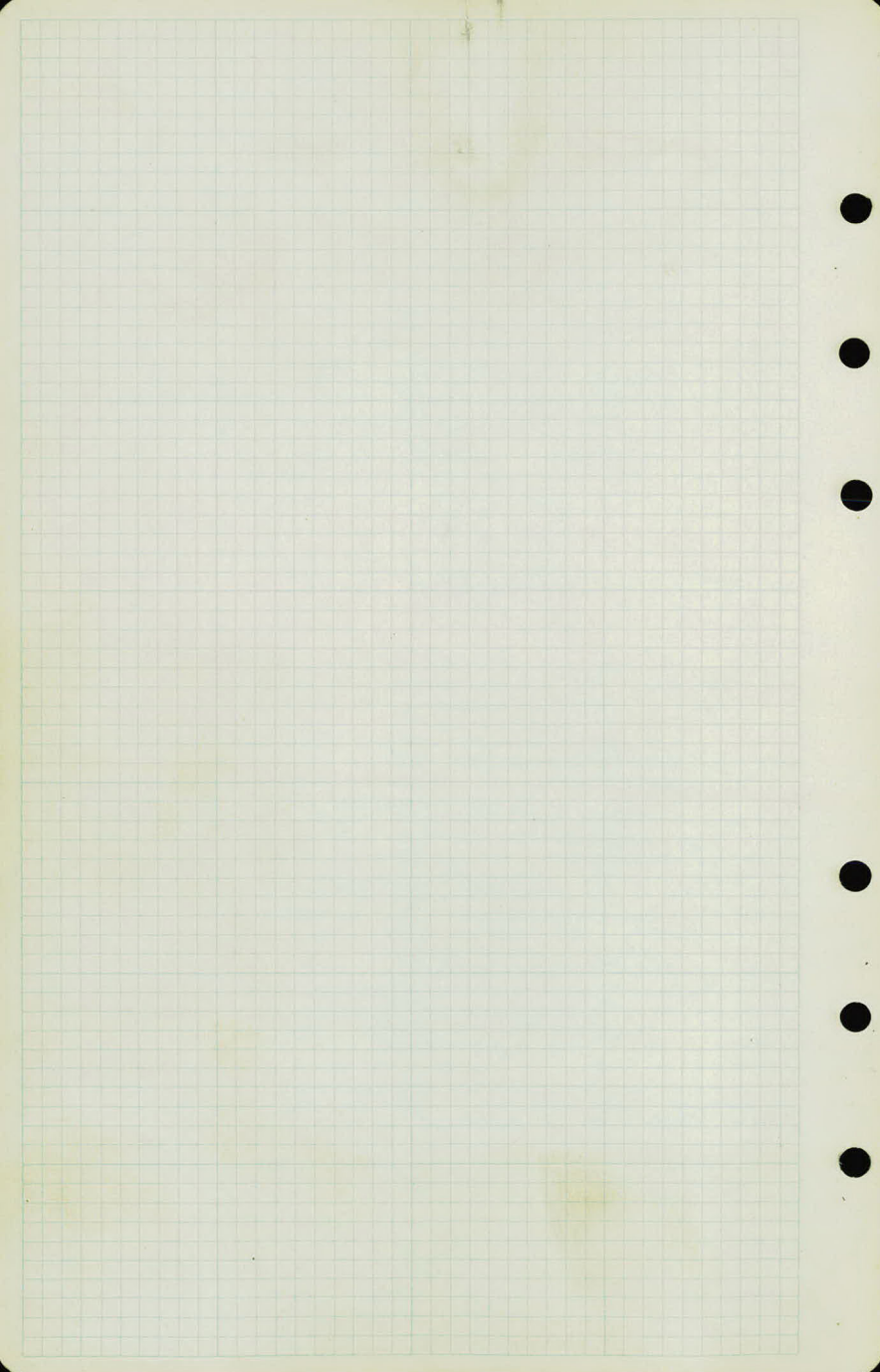
+10 Brush x 3 £

9

+71 Group 3 20'
 +67-12" 2'
 +62 12" 07'
 +51-12" Oak 2'
 +40-12" 30'
 +39-15" 8'
 +20-6" 10'
 +06-12" 3" 06'
 +98 Stump 37'
 +88-4" 41'
 +76-4" 30'
 +72-12" 43'
 +45 Group 3 15'
 +30-8" 07'
 +23-12" 38'
 +15-3" 22'
 +16 Stump 16'
 +97 Stump 46'
 +68 20" 21'
 +41 Stump 32'
 +37 6" 35'
 +35-4"-6" 21-25'
 +33 Twin 4" 18'

+23-12" 45'
 +17-6" 35'
 +08-6" 29'
 +97-2 Traces 10-26'
 +91 15" 16'
 +84 Group 8 11'
 +80 8" 20'
 +71 Twin 22'
 +51-3" 8'
 +37 Twin 3" 8'
 +34 Stump 3'

+52-12" 1'
 +40 Clump 5 5'
 +33 Clump 5 Maple 4'



Information
on Peninsula in
Lake Johanna
Near East Line
Sec. 33.

Base Line E. Line Sec. 33
0+00 + E Johanna Blvd.

2/7/40

R.O.P.
A.M.
L.G.
E.F.

Completed
2/9/40

3

48

6

46

5

50

4

40

150

33

3

53

456

100

SEC. 4. 1

2

1

0

CTR ROAD

582
Line

48

13

50

12

56

11

54

10

59

9

54

8

28

7

48

Sec.
Line

+18 - 39 - 174
16 11

+50

25

36

124

48

Topography

Johanna Blvd.

from Co. Rd. "E"

to Snelling Ave.

+50 15

+50 -13

Lake 71

3

17'

12'

Lake 66

2

17'

10'

Lake 66

+50 17

+50 -14'

Lake 69

1

20'

16

Lake 68

+50-39

+50-16'

0

16

14

+44-6" Oak 37
+42-8" Oak 45
+35-30" Oak 42

+17-Twin 6" 58"

+88 Triple 39'
+84 4" Oak 41

+63-4" Oak 50
+62-8" Oak 39

+40-8" Oak 35'
+35 PP 26'
+31-31ump 31

+24-8" Oak 48

+10-6" Oak 47

Uncultivated
Park Area

+86 PP 40'

Co Rd. E.

+00 End Rad 39.97'

+00 Gr. R. 70-29

0-12 End Rad -13' G.R. Posts

G.R. 13
+47-2 Trees 31-43
+38-4" Ash 37
+33-4" Will 49
+31-8" Will 47
+22-4" Will 47
+21-4" Ash 38
+16-4" Ash 44
+13-4" Ash 44

G.R. 14'

+43-2 Trees 38-44
+33-6" Ash 25
+28-30" Will 39
+24-4" Ash 38
+01 2 Trees 34-40
G.R. 12

+95-Twin 30-25-35
+83-3" 39
+77-3" 43
+73-6" Elm 43
+64-2 Tr. 31-38
+50 G.R. 16
+50-4" 44
+46-14" Pop 50
+40 12" Will 43
+36 4" 50
+31-8" Ash 22
+26-6" Elm 44-50
+20 15" Will 31
+18-3 Tr. 37-44-50
+14-6" Will 41
+09-4" Ash 33
G.R. 18

Beach

+70 Ent.

+50 Lake 67
+50-18" Elm 39
+50 G.R. 20

+27-Con. Blg. 24

+17-24" Pop 35

G.R. 20

Lake

63

7 11 11 Lake 48

11 +50-11 Lake 45'

6 12' 11 Lake 40'

+50 Lake 45'

5 14 14 Lake 58

+50 12' +50-14' Lake 67

4 13 13 Lake 71'

+50 15' +50-13 Lake 71

+91 T.P. 17'
+90 6" Oak 35'
+85 30" Pop 27'

+55 Ent.
+50 Ent. 57'

+32 6" Oak 50'
+30 Stump 50'

+26 12" Oak 20'
+22 2 Trees 29-35'
+17 4" Oak 48'
+11 30" Spr. 37'
+00 Ent 56'

+76 18" Ash 22'

+56 Twin Ash 38'
+50 Ent. 48'

+37 4-2 Elm 30
+31 Triple 2" 34'

+50 Elk

+41 6" Elm 49

+19 12" Elm 37

+04 6" Elm 30
+00 6" Oak 45

+87 4" Oak 47
+86 4" Oak 44
+83 P.P. 26'
+81 6" Oak 34
+75 8" Oak 46
+74 6" Oak 34

+69 2 Trees 41-33

+60 6" Oak 49

+00 8" B.E. 25
+94 P.P. 16'
+86 2 Tr. 24-35
+83 12" Elm 31
+80 4" Elm 35
+75 4" Elm 33

+66 2 Tr. 20-33

+50 8" Oak 21'

+14 20" Ash 12'

+01 Twin 33

+98 12" Oak 32
+93 6" Oak 30
+86 4" Elm 27
+79 3" Elm 30
+74 10" Elm 28
+69 6" 38
+67 4" 32
+58 4" B.E. 34
+52 20" Elm 25

+44 Twin 37

+33 4" Ash 32
+29 3" Elm 41

+01 6" Elm 42
+00 Elm G.R. 17
+00 4" B.E. 31
+93 24" Pop 22
+89 12" Pop 27

+78 24" Pop 40

+60 3" Ash 37

+50 G.R. 16'

+35 2" Elm 46
+30 6" Elm 50
+24 24" Pop 50

G.R. 16'
+00 4" Ash 38'
+97 Twin 45'

+86 2 Tr. 43-46

+78 4" Ash 36'

+68 18" Elm 14
+60 4" 38-20-46
G.R. 15

+50 - 12

+50 - 12

Lake - 87'

10

14

12

Lake 77'

12'

+50 - 12

Lake - 76

9

14

12

Lake - 70

+50

Lake 57'

8

11

13

Lake - 50'

+50

12

+50 - 9

Lake 50'

7

Brush 2'

+38 Triple 48'
+30 Triple 48'

Brush

+10 Beg. Brush 30'

+93-8" Oak 45'

+58-TP 17'

+38 12" Oak 27'

Uncultivated

+70 Ent.

+61 Stump 34'

+43 Stump 33'

+76 TP 14'

+91-6" Oak 39'

+60 8" Oak 24'

+65 8" Oak 43'

+51-6" Oak 36'

+50 Ent.

+45 4" B.E. 26'

+41 Triple 24'

+09-12" Oak 22'

+04 12" Oak 24'

+00 Ent. 40'

Parking Area
Look Out

Look Out 46'

Beg. Look Out 12'
+43 46'
+41 49'
+38 43'
+33 26'

+22-TP 19'

+11 2 Trees 32-53'

+98 43'
+85 39'
+79 46'
+73 35'
+67-18" Pop (B.M.) 50'
+58 24'

+47 3 Trees 27-40-4'

+44 30'

+40 24" Pop 48'

+36 33'

+35 38'

+30 27'

+29 36'

+27 24'

+26 37'

+25 2 Trees 26-37'

+13 2 Trees 26-37'

+04 4" B.E. 25'

+00 23'

+96 36'

+94 29'

+93 P.P. 18'

+85 2 Trees 24-37'

+83 2 Trees 27-34'

+69 36'

+61-3" 30'

+53 Twin B.E. 28'

+34 3-22-28' 40'

+31 28'

+30 38'

+26 34'

+13 10" Pop 36'

+11-8" E.H. 34'

+08-2-TP 21-34'

+02 6" E.H. 27'

Uncultivated

14

13

8

+50 12

+50 10 Lake 90

13

11

11 Lake 64

+50 12

+50 11

Lake 53

12

13

12

Lake 56

+66

Lake-56

11

12

13

Lake 61

Swamp 28

+92-10" 19'

Swamp

+50 Swamp 45

+27 10" 15'

+25 10" 16'

+22 T.P. 13'

+10-15" 28'

+00 Swamp 66'

End Brush 26

+78 Twin 38'

+60-6" 40'

+50 Brush 29'

+44 6" 33'

+40-18" 33'

+34 T.P. 17'

+16 6" 37'

+07-6" 46'

+00 Swamp 86'

Brush 30

Brush

+49 6" 46'

+36 6" 34'

+21 4" 46'

+00 28'

Brush 28'

+97 T.P. 20

+59 25

+52 2" 53

End Fe - 29
(Broken Down)

+85 4" 45'

+63 2 Trees 20-24

+56 P.P. 13'

+36 18" 32'

+50 Ent 46'

+50 Fe 25'

+34 G.P. 17'

+22 Δ Fe. 24'

+07 Ent 38'

Fe 42'

+88 14" 34'

+83 2" 39'

+78 4" 48'

+73 6" 47'

+70 Fe. Dec. 56'

+70 6" 44'

+65 6" 43'

+55 A.P. 23'

+47 Swamp 38'

+35 G.P. 21'

+34 2" 43'

+30 4" 40'

+28 4" 44'

+25 4" 41'

+20 4" 44'

+90 4" 43'

+87 4" 47'

+82 4" 45'

+66 12" 46'

+65 12" 23'

+60 R.P. 19'

+59 4" 38'

+47 3" 31'

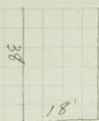
+43 12" 30'

+40 4" 28'

+28 12" 27'

+25 2" 35'

+55 R.P. 27'

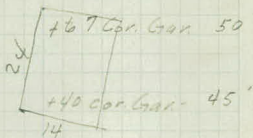


+20 Cor. Gar. - 45

17

11

10



+50 - 13

+50 - 12

16

15

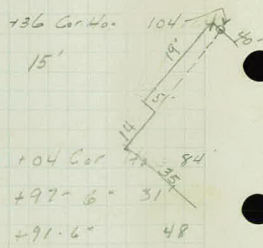
12



+50 - 13

+50 - 11

21' +25- 12" x 36' C.M. X Drain



15

11

10

14

+36 T.P.

16

+41-R.R. - 16'
+38-6" Maple 37
+34-2" 31
+30-2" 31

Swamp 24

+50 Swamp 25

+09 T.P. 29
Swamp 25

Swamp

+50 Swamp - 24

+00 Swamp 29
+96 T.P. - 21

+88 6" 23

+64 6" 20

Brush

+70-3" 40
+64 Twin 49
+64-12" Triple 34
+38 Group 4 37
+31 6" 35
+28-18" Stump 49
+28 4" 34
+25 4" 35
+20-18" 41
+15 Group 4 26
+11 3" 48
+09 4" 36
+00 Brush 26
+90 R.R. 21
+82 6" 49
+78-12" Twin 30
+68 6" 39
+59 Triple 46
+55 4" 55
+48 2" 41
+45 4" 36
+41 2" 26
+37 2 Trees 30-35
+33 4" 40
+33-12" 26
+24 2" 38
+21 Triple 44
+17 2" Trees 34
+10-15" Twin 33
+07-3" 40
+05 4" 39
+00 Bay Brush 26

21	14	16'	Lake 78'
			198 Bush - 25'
	150- 14	150- 13	Lake 79
		4' 4' 30'	Cor. Outborn 48'
20	12'	13	Lake - 105'
	11	150- 15	Lake - 140'
19	15'	12'	
	14	11'	
18	13	11'	
	12'	11'	158 Cor. Cor - 44'

Swamp 10

Swamp 90

+37 T.P. 23

+36 P.P. 21

Swamp 85

+50 Swamp 75

Swamp 50

+93 T.P. 25

+50 Swamp 50

Swamp 23

+50 Swamp 23

Fe. 24
+93 Bush 25
+89 Bush 25
+85 Bush 25
+81-4" 24
+78 Bush 25
+68 5" 25
+50 Fe. 24
+54-2" B.E. 25
+45-12" 34

+23-12" 44
+19-Fe Cor. 27
+15-Aside En" 13
+14 6" 47
+14 Rge tie Fe.

+17-Rod. Pz Ent-16-50
+16-P.P. 50
+15-End. Barracade 47
+15-30' P.p. 44
+135 P.p. 35

+100 Barracade 42
+99-P.P. 26

+74-P.P. 40
+70-18"-Boss 34

+63-4" 32

+50 Barracade 43

+30-20" P.p. 27

+20-P.P. 42

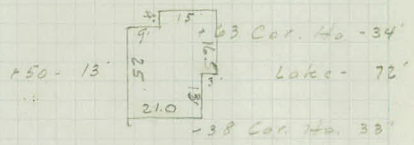
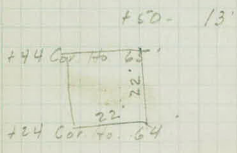
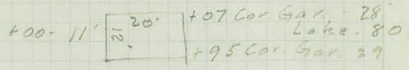
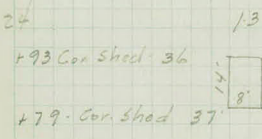
+04-12" Twin 33
+00-12" 35
+00 Barracade 44

+73-P.P. 46
+65-3 Conc Steps 27
+65-800 Barracade 48
+55-15" P.p. 30

+50 - 3'

+50 - 13'

Lake 108'



23

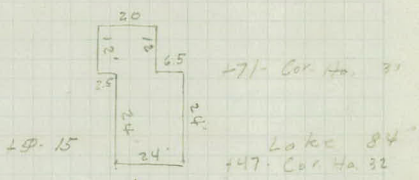
13'

14

Lake 71'

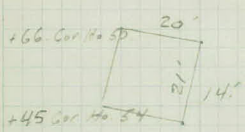
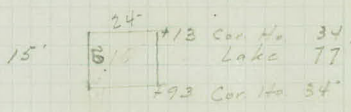
+95 - 4' B.E. 29'

+50 - 12'



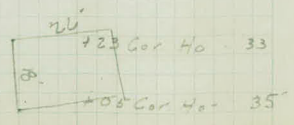
22

13'



+50 - 16'

Lake 84'



24

150 Fe - 38'

+49-2" Elm - 43

13

+28-15" W. No. - 36

+19-PP - 26'

+09-2" 25'

+02 Ent.

Fe - 36'

+72 Ent.

+50 Fe - 34'

+19-T.P. 21'

Fe - 34'

+70-Fe Cor 34'

+67-P.P. 26'

+63 Rgc 110 Fe

+65-3" Elm - 29

+65 Bush 25

+61 Bush 25

+57 Bush 25

+47 Bush 25

+42 Bush 25

+37-1" Tree 30

+35 End. Fe. 28

+34 Bush 30

+32 Bush 30

+24-4" 29

+17-3" Pop. 30

+13 Bush 30

+09-4" 29

Fe 27

+91 Bush 30

+90 Bep. Fe 27

+88 Bush 29

+44-12"x12" Elm 25

+41-8" 49

+34-12"x12" B. Elm 25

+31-3" 27

+24 Ent. 49

+22-10" 27

+17-2" 25

+17 End. Fe 25

+04 4" 26

+00 Fe 24

+89 4" 26

+85 G. W. 25

+82 6" 34

+74-4" 26

+66-PP 25

+65 Cross Fe. 25

+56-6" 26

+50 Fe 24

+42-6" Maple 30

+33 Ent.

+26 4" 26

+20 Bush 25

+16 Bush 25

+14 Bush 25

+09 Bush 25

+04-4" 25

+80-T.P. 23'

+66 Ent.

+53-PP 28'

28

15

14

+70 - 15

+70 - 13

27

13

13

26

14

13

25

13

13 Lake - 131

Fe. 22'

(16)

x +70 Fe. 22'

+42 T.P. 27'

+36 Rgc. Tc. Fe.
+31 Fe. Cor. 23'
+30 R.P. 25'
+21 3" Elm. 30'

+04 3" Elm. 24'
Fe. 24'

+83 -15" 33'
+80 -15" 33'

+89 2" 25'

+71 2" Elm. 27'

+37 2" 30'

+06 T.P. 26'

+06 Beg. Fe. 26'

+84 Tc. Cor. 53'

+78 2" Elm. 33'
+78 P.P. 26'

Fe. 45'

+24 Cross. Fe. 49'

+76 2" 35'

+61 T.P. 27'

+62 2" 35'

31

16

12

+50 - 13

+50 - 18

30

11

20

30

+78 - 18" x O.M. Left - 12" Tile Rt. total 70" 40

+50

9

+50 - 19

29

10

16

12

+50 14

28

+31 End Brush 41

x

+31. 4" Oak - 38

●

+21. 15" Oak - 38

Brush - 40

x

Fe 30
+97 P.P. 28

x

+50 Brush 33

Brush

x

+50 Fe 35

+29 T.P. 24

x

Brush 33

x

+00 Fe. 41

+29 P.P. - 35
+73. Triple Will. 46

x

+50 Fe 41

+40. Beg Brush 27

x

+18. 15" Pop. 28

+12. 6" Will. 34

+07. 2. 15" Pop. 28 - 41

+04. 15" Will. 27

+00. 8" Will. 30

x

+00 Fe 35

+91. T.P. 20

x

+73. 15" Pop. 40

x

+56 P.P. 31
+50 Fe 25+35 Ent.
12" x 16" C.M. - 24

x

+14 Ago to Ent

x

STA. 29+78

X-culvert

Flows south

SEE SHEET

OF X-SECTIONS

194 T.P. 20'

1"

+71 Ent

15" x 20" C.M. 16'

+49-2" Oak 34

+36-6" Oak 32

+33-4" Oak 49

+02-12" Oak 49

+50- T.P. 30

+83 Ent.

15" x 34" C.M. 32'

+70 T.P. 47

+62 Ego for Ent.

+56-14" Oak 41

+43 Stump 36

+31-15" Pop 36

+26-12" Pop 42

+10

+03-2-12" Pop-34-39'

+80- T.P. 27

+70-16" Pop. 39

+00 Cor. Gate 53

1

+82 Gate-

+75 Fe Cor.

61

36'

+50 Fe 33'

+37-2" Twin 43

+29-6" Oak 50

+06-2" Oak- 44

Fe. 35'

+98-2" Oak 41

+88-2-4" Oak 44-50

+85-6" 44

+63-2-4" Oak-37-43-50

+55-3" Twin 36

+52-4" Oak 50

+50 Fe. 36'

+48-4" Oak 40

+42-2-4" Oak-47-50

+23 6" Oak 42

+12 6" Oak 44

+10 4" Oak 41

+00 Fe. 36

+00-15" Stump 44

+98-4" Oak 47

+87-4" Oak 40

+80-12" Oak 20

+70-15" Stump 33

+66-10" Oak 36

+50 Fe. 34

+43-12" Oak 44

+19-15" Oak-39

+17- T.P. 26'

Fe. 32'

+60 Fe 30

38

37

13'

13

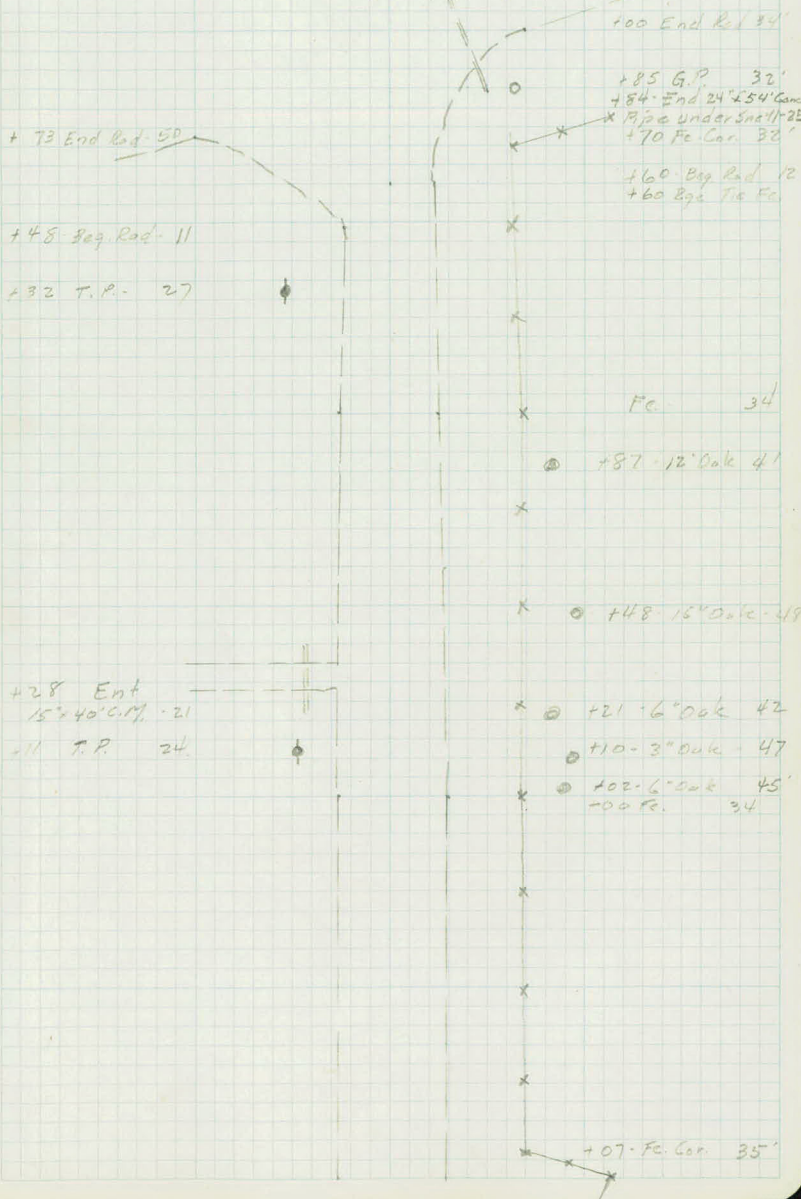
36

13'

15'

35

Note See Stadia Notes for
Additional topog. of Intersection.



42

41

40

39

Stadia Notes

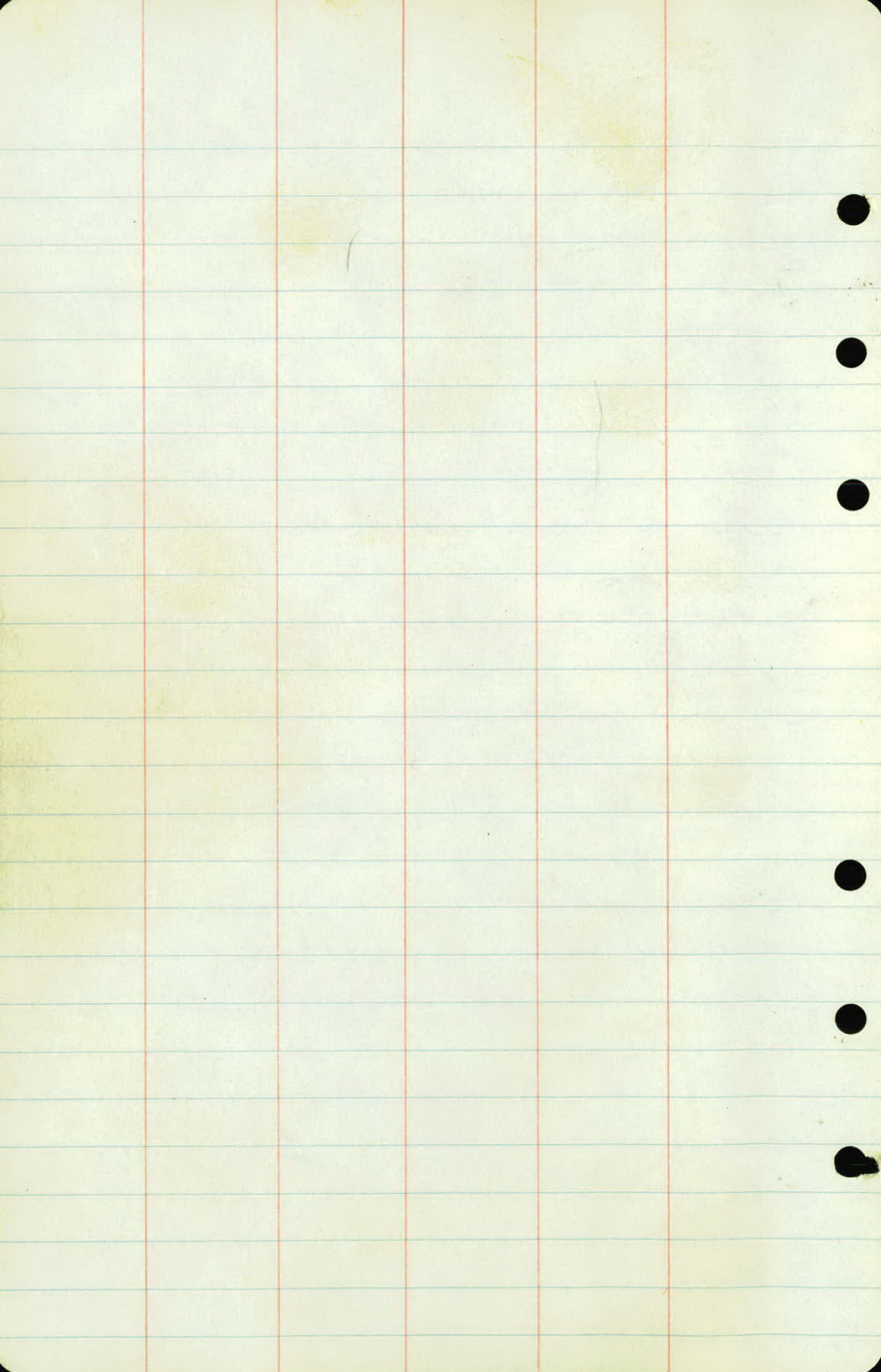
Additional Topog. of Intersection
of Jehanna Blvd. and Snelling Ave

0°00' Line - E of Survey.

Pt.	Azimuth	Dist.		
$\nearrow$ at 38+05.19	0°00'		to	
			① P.I. - 33+74.73	clockwise
Edge Pave	69°57'	650'		
"	73°10'	450'		
"	69°20'	395'		
"	73°06'	395'		
"	68°40'	335'		
"	73°05'	335'		
"	67°47'	273'		
"	73°18'	273'		
"	66°56'	215'		
"	74°18'	216'		
"	69°48'	156'		
"	88°26'	165'		
"	79°18'	103'		
"	87°25'	125'		
"	109°05'	66'		
"	110°26'	92'		
"	154°12'	76'		
"	142°30'	96'		
"	173°16'	123'		
"	163°15'	132'		
"	179°10'	185'		
"	172°49'	191'		
"	180°28'	245'		
"	175°20'	250'		

pt.	Azimuth	Dist.
Edge Pt.	176°04'	308'
"	180°28'	305
shldr.	181°21'	166'
"	166°24'	59'
"	185°40'	61'
"	131°23'	20'
Rad. Pt.	188°53'	43'
"	236°05'	54
shldr.	258°00'	107'
"	243°04'	111'
"	245°40'	169'
"	255°26'	165'
"	246°45'	227'
"	247°35'	282'
"	253°25'	280
shldr.	99°04'	25
"	78°14'	79'
"	65°27'	108'

Section Tie
Johanna Blvd.



FK Aug 25, 1955

0+89- P.I.

0+00 P.C.

N

PI = 0-194.35'
 $\Delta = 31^{\circ}04'$
 $E = 10'$

N.E. Cor.
SE $\frac{1}{4}$
NW $\frac{1}{4}$

Sec 33

(S.W. Cor.
60 & 61
K.A.)

12+91.97 P1

Root Spike



64.41

100' 19 3/4'

Pos 1? POST
12+27.56 Irons 43.83
2.30 39.86

8.97
Boot Spike POT 1/4 1/4
Spike

1/4 1/4 Cor - 970.24 -

Boot Spike 0.27' West
at 1/4 1/4 line 12-22-53

12+04.38 PC

Page 4 Curve