

22.00 22.05

2200

2205

HAMPTON - RICH VALLEY

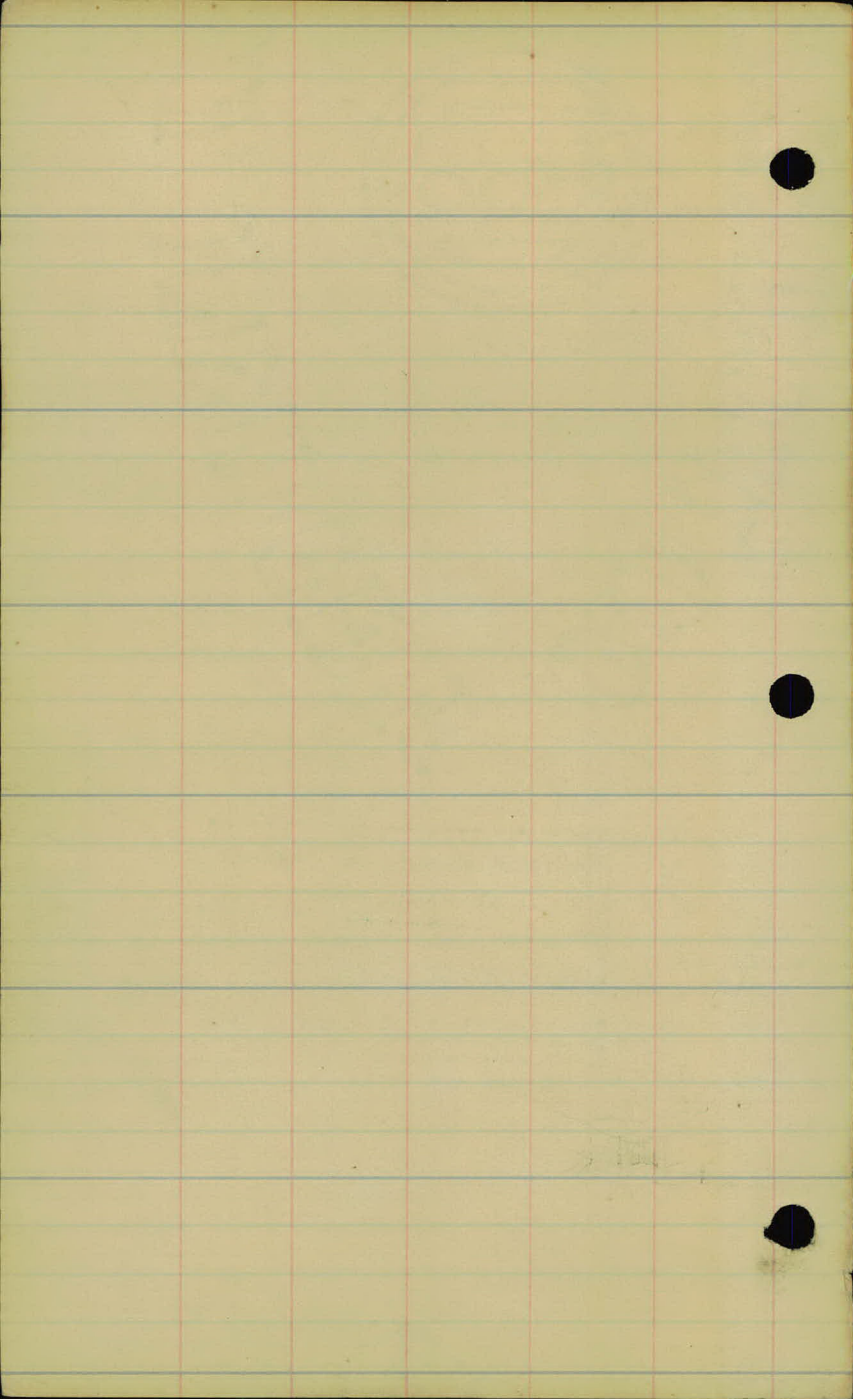
DAKOTA COUNTY

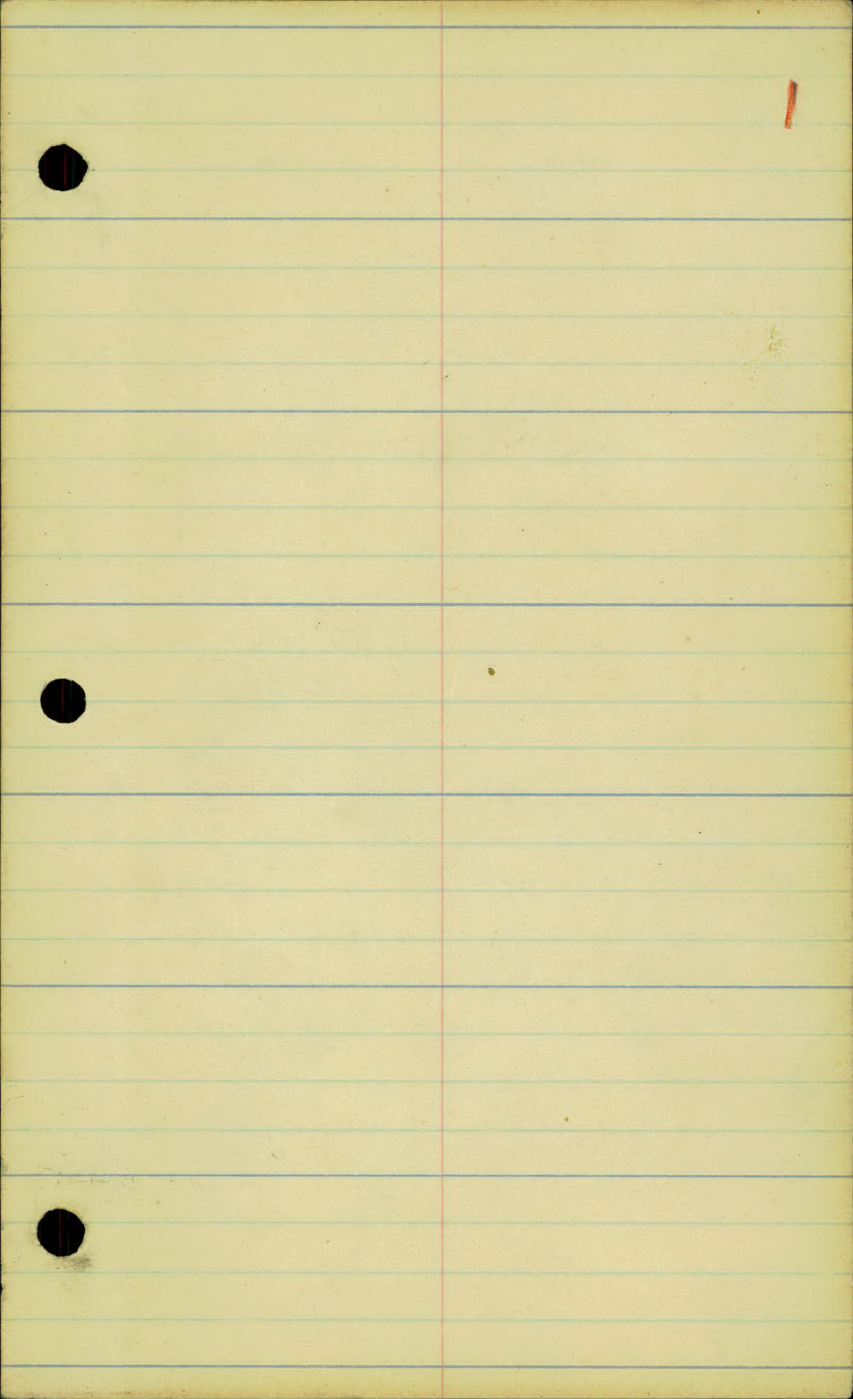
JOB - 22-05

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Office of Ramsey Co. Engineer
ST. PAUL, MINN.

Hampton - Rich Valley
9 - (2200) (2205)





1
B.M. 3.39 96053

957.14

0 + 00

3.6

56.9

0 1

4.2

56.3

+99² E.C.

4.1

56.4

0 2

0 3

4.2

56.3

0 4

4.6

55.9

0 5

3.9

56.6

0 6

2.9

57.6

T.P.

6.86

964.68

3.31

957.22

0 7

5.7

58.4

0 8

4.8

59.3

0 9

4.2

59.9

1 0

3.7

60.4

1 1

3.6

60.5

L

♀

R.

8/2/23

2

3.8
33

(4.9)

3.6
303.0
33

(5.0)

4.5 33	6.7 29	6.5 19	4.6 14	4.2 30	4.8 20	6.2 25	6.6 33	4.2 36
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(4.8)

5.8 33	7.2 29	6.8 17	5.6 10	4.3 10	4.1 30	4.6 18	6.5 25	6.3 33	4.5 35
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

(5.3)

6.6 35	7.7 34	7.6 24	4.9 15	4.2 30	4.9 13	6.8 17	6.8 30	6.5 33
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

(5.2)

6.0 30	7.5 36	7.4 24	5.0 15	4.6 30	5.0 13	6.6 17	6.7 33
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

(4.3)

4.4 36	6.8 33	6.8 27	4.5 17	3.9 30	4.5 14	6.1 21	6.9 27	5.4 28	5.4 33
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

(3.5)

3.6 33	5.1 30	4.8 22	3.7 15	2.9 30	3.3 13	4.1 16	5.4 23	5.9 28	4.2 30	4.1 33
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

(6.5)

6.5 33	6.6 31	8.1 29	7.8 22	7.1 16	6.4 14	5.7 30	6.6 15	8.1 23	8.5 29	6.9 31	6.9 33
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

(5.7)

5.9 33	7.2 29	6.8 22	5.6 15	4.8 30	5.5 15	6.6 18	7.1 23	7.4 26	5.7 32	5.3 35
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

(4.9)

5.1 33	6.7 29	6.3 22	5.7 15	5.0 13	4.2 30	5.0 15	5.7 16	6.4 27	4.9 28	4.6 35
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

(4.0)

4.3 33	4.4 30	5.8 29	5.7 21	4.0 15	3.1 30	4.1 11	4.3 14	5.2 21	5.8 26	4.0 27	3.6 35
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

(4.3)

4.6 31	5.8 31	5.9 23	4.1 17	3.6 30	4.1 11	4.9 15	5.1 19	6.1 23	5.7 21	4.3 28	3.8 34
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

2
 + 964.08 - Elev.
 T.P. 6.10 966.42 3.76 960.32 ✓

12 ✓ 58 60.6

13 4.3 62.1
 6.2 → 60.2

14 4.6 61.8

15 4.3 62.1

16 3.7 62.7

17 2.8 63.6

18 2.1 64.3

T.P. 8.00 977.04 2.38 964.04 ✓
 9.83 978.67 ✓ 3.20 968.84 ✓
 5.49 983.92 ✓ 0.24 978.43 ✓
 B.M. 5.76 978.16 ✓ 978.22 ✓

L.

±

R.

8/2/22

3

(6.8)

7.1	8.9	8.8	8.3	7.4	7.1	6.1	5.8	6.1	6.3	7.3	7.2	8.7	9.6	7.3
35	33	28	22	20	16	13	20	14	15	17	20	23	28	33

(5.6)

6.2	6.0	6.0	6.7	5.8	4.8	4.3	4.6	6.1	7.1	6.8	6.6
33	27	24	21	18	13	20	13	17	20	30	34

6.7 Lt. side of pipe C under R.R. track upper end 18"?

(5.3)

6.0	4.9	7.9	6.7	4.8	4.6	5.3	6.8	7.0	7.9	8.0	7.3
36	34	27	20	15	20	13	17	20	23	30	33

(5.3)

5.8	7.6	6.7	6.7	5.0	4.3	4.8	5.5	6.2	6.6	7.7	6.1
33	31	23	18	15	20	11	14	16	20	27	33

(4.5)

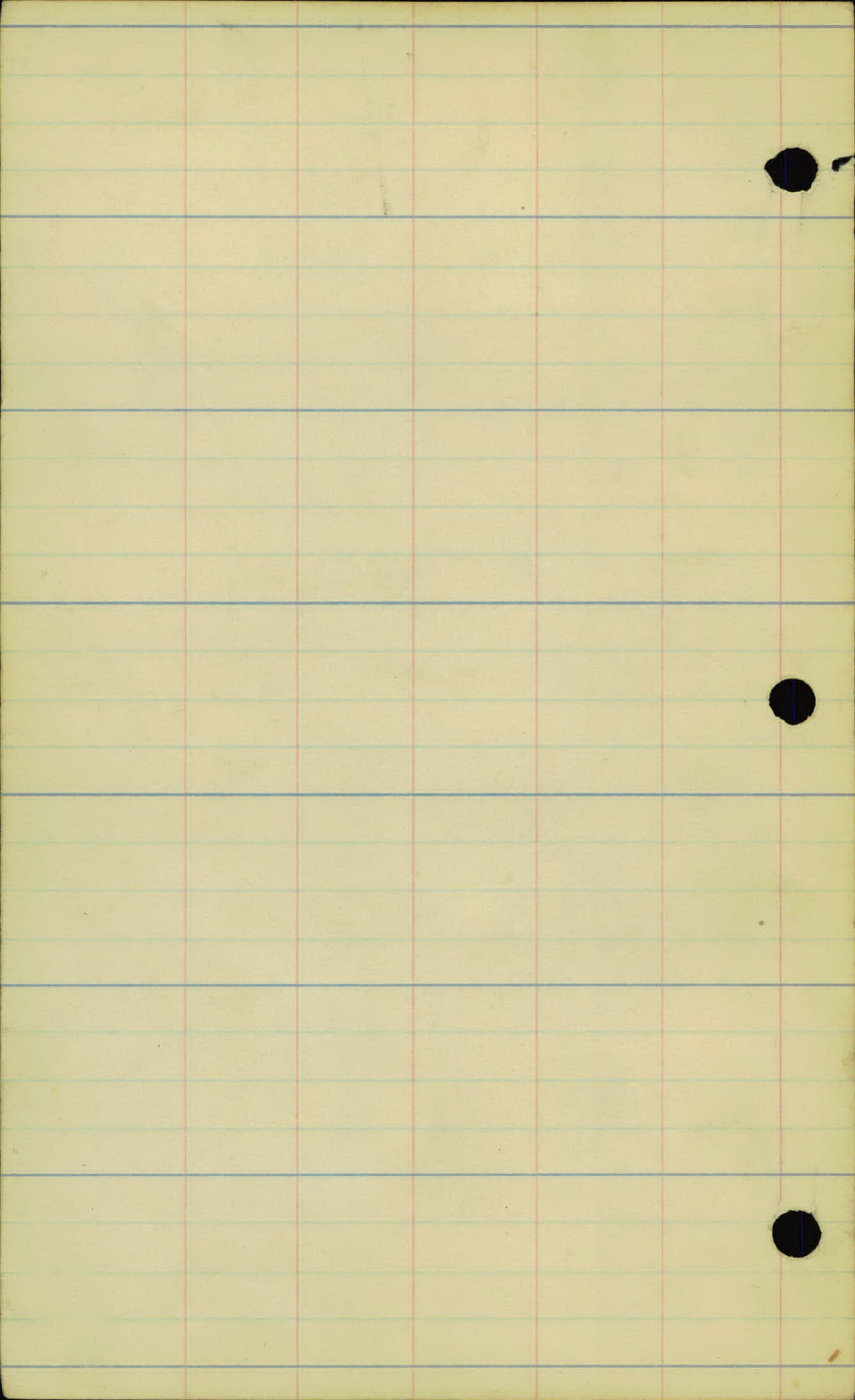
5.0	7.0	6.0	5.5	4.4	3.7	3.9	5.0	5.8	6.6	6.6	5.4
33	32	23	18	15	20	10	14	16	24	28	33

(3.6)

3.7	5.6	4.8	4.6	3.0	2.8	3.4	4.7	6.2	4.6
33	31	21	17	14	20	13	16	26	33

(2.4)

2.1	3.8	3.7	2.9	2.1	2.5	2.8	3.8	4.0	3.1
34	25	18	16	20	10	13	15	21	33



4

Sta.	+	H.I.	-	Elev.
1377	6.68	1006.81 ✓		1000.13
+50				02.0
45				02.5
46				03.5
47				05.0
T.P.	5.51	1009.98 ✓	4.34	1004.47 ✓
48			4.5	05.5
49				05.6
50				05.4
	4.00	1008.84 ✓	5.14	1004.84 ✓
B.M.			2.83	1006.01 ✓ 1006.06

Fair Cloudy

7/2/23

Spike on tel. pole ²⁰¹ Rt. of sta 41+75 5
6.7 6.3 5.8 6.2 5.9 5.1 4.8 4.7 5.2 5.2 3.9 3.4
33 30 27 20 16 14 20 16 18 21 23 33

(4.8)

6.9 6.7 5.9 5.0 4.3 4.3 4.9 4.9 3.7 3.2
33 30 17 15 20 17 19 24 25 33

(3.4)

3.1 3.2 4.4 4.3 3.5 3.3 3.5 4.6 4.0 3.3 3.2
33 22 21 16 15 20 15 17 23 25 33

(1.3)

1.0 1.0 3.0 2.8 2.0 1.8 2.1 2.7 3.0 1.7 0.6
33 23 21 18 16 20 15 18 22 23 33

(4.3)

3.9 3.7 5.9 5.9 4.8 4.5 5.0 5.1 6.1 3.7 3.6
33 24 22 18 16 20 17 19 22 23 33

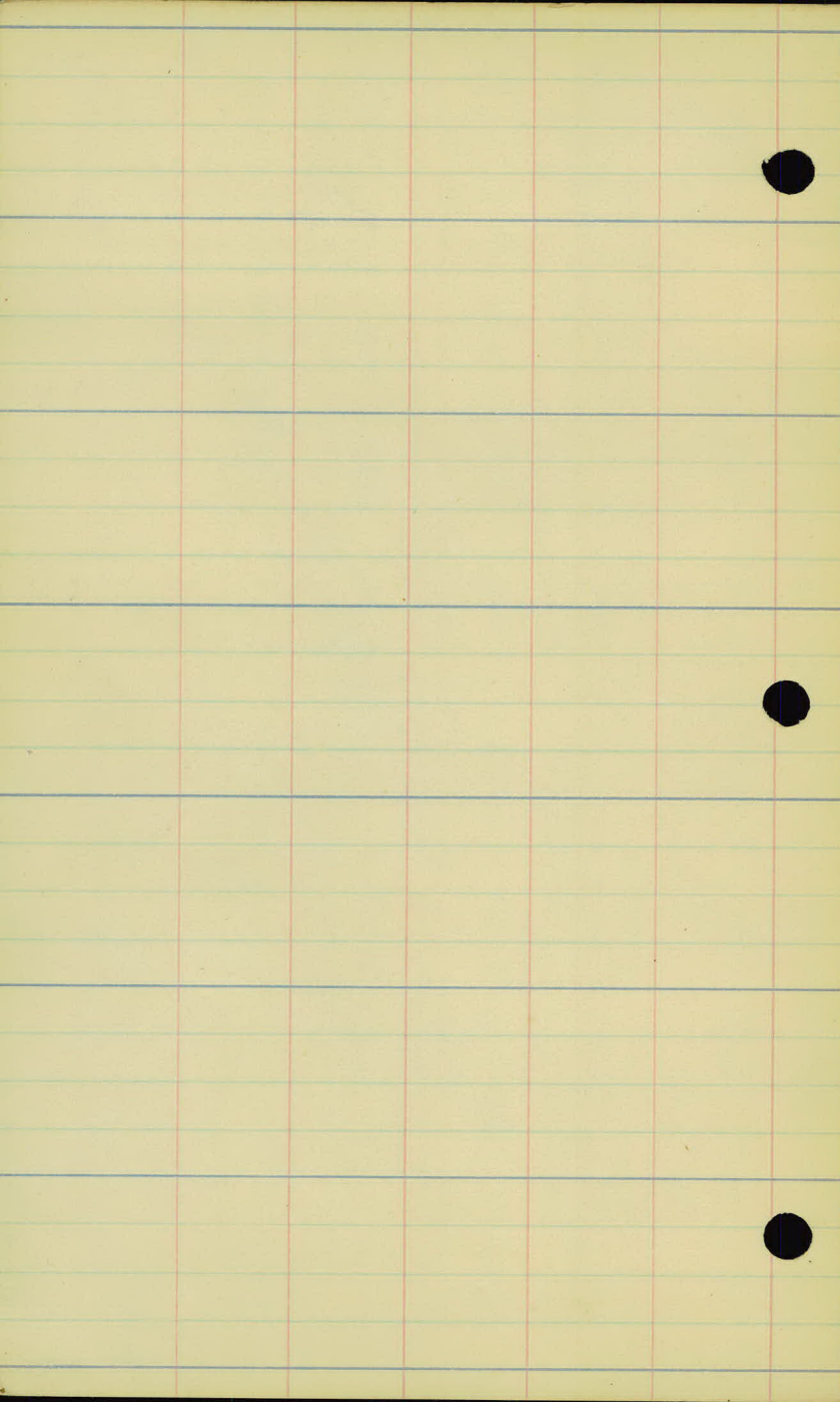
(4.4)

4.0 3.9 5.1 5.3 4.7 4.4 4.5 5.3 5.1 3.5 3.6
33 26 24 20 15 20 15 17 22 24 33

(4.8)

3.9 3.9 5.9 5.8 5.0 4.6 4.9 5.6 5.4 4.2 4.3 4.2
33 21 24 22 20 20 14 16 19 20 25 33

Spike on tel. pole ²⁰¹ Rt. of sta 52+00.



stg + H.1. -
B. VI. 443 1004.56 ✓ 1000.13

44 01.4

43 01.0

42 00.6

41 99.8

40 99.1

+70 98.5

+50 97.9

39 95.6

+50 93.3

T. P. 156 993.84 ✓ 10.54 994.28 ✓
38 91.2

+50 88.4

37 85.9

T. P. 1.79 985.09 ✓ 10.54 983.30 ✓

L.

4

R. 7 ^{8/2/23}

Spike on tel Pole Lt. of sta 41.75

(5.5)

6.8	6.6	6.1	5.4	3.8	3.2	3.3	4.4	4.5	4.0	3.8	3.6
33	30	22	15	12	20	16	19	20	24	25	33

(6.6)

6.3	8.2	7.7	7.5	4.1	3.6	3.5	6.3	5.9	5.7
33	32	25	18	14	30	16	18	25	33

(4.5)

5.8	4.6	5.5	5.5	4.3	4.0	4.2	5.1	5.2	0.6	0.5
33	25	24	18	15	20	15	17	22	28	33

(5.1)

6.8	6.5	6.1	6.6	6.3	5.2	4.8	4.6	5.6	5.4	3.3	2.8	1.7	1.4
33	29	25	23	16	14	20	16	16	22	26	27	29	33

(5.4)

2.7	2.9	6.6	6.6	6.3	5.8	5.5	5.7	6.9	6.5	3.0	3.0
33	27	23	19	15	13	20	15	20	25	30	33

(5.4)

6.7	5.1	8.1	8.0	6.3	6.1	6.2	7.3	7.5	1.8	1.9
34	28	22	18	14	20	15	18	23	31	33

4.6	5.3	5.6	8.3	8.4	7.0	6.7	6.7	7.9	7.7	1.4	6.5
33	30	27	21	18	13	20	17	20	23	31	35

(9.5)

6.5	5.8	9.9	10.1	9.4	9.0	9.0	10.1	9.8	7.0	7.0
35	30	23	18	16	20	15	19	24	32	40

9.6	9.3	10.6	12.0	12.4	12.9	10.0	11.3	11.4	12.5	12.6	10.1	6.6	6.7
35	30	26	24	22	18	15	20	15	18	22	27	31	33

(2.9)

2.7	2.0	1.9	3.3	3.4	4.2	4.0	2.9	2.6	3.0	5.0	4.8	4.0	3.9	2.2	1.8
33	30	26	23	21	19	18	15	20	17	18	21	22	24	26	33

7.2	7.0	7.8	7.8	7.4	5.6	5.4	5.4	5.0	7.7	6.7	6.6
33	26	24	22	19	14	20	14	21	28	30	33

(8.9)

10.9	10.9	11.4	12.0	11.2	8.1	7.9	8.1	10.2	10.9	11.0	10.2
33	26	25	23	18	14	20	15	18	24	29	33

sta + H.I. - Elev.

985.09

36 2.4 82.7

35 5.5 79.6

34 6.4 78.7

33 77.9

B.M.

✓ 6.60

979.49

978.49

T.P.

5.85 983.79 7.15

977.94 ✓

3.42 986.28 ✓ 0.93

982.86 ✓

B.M.

8.04

978.24 ✓ 978.24 ✓

L.

±

R.

1/2/23
8

(3.8)

5.9	5.5	6.3	6.2	5.5	2.9	2.4	2.7	4.5	5.1	5.1	4.7	4.4	3.3	3.0
33	29	28	26	19	13	20	14	17	28	24	25	28	31	33

(6.3)

7.6	7.5	8.6	8.5	6.7	5.5	5.9	7.1	7.0	4.6	3.7
33	30	28	21	16	20	13	19	24	27	33

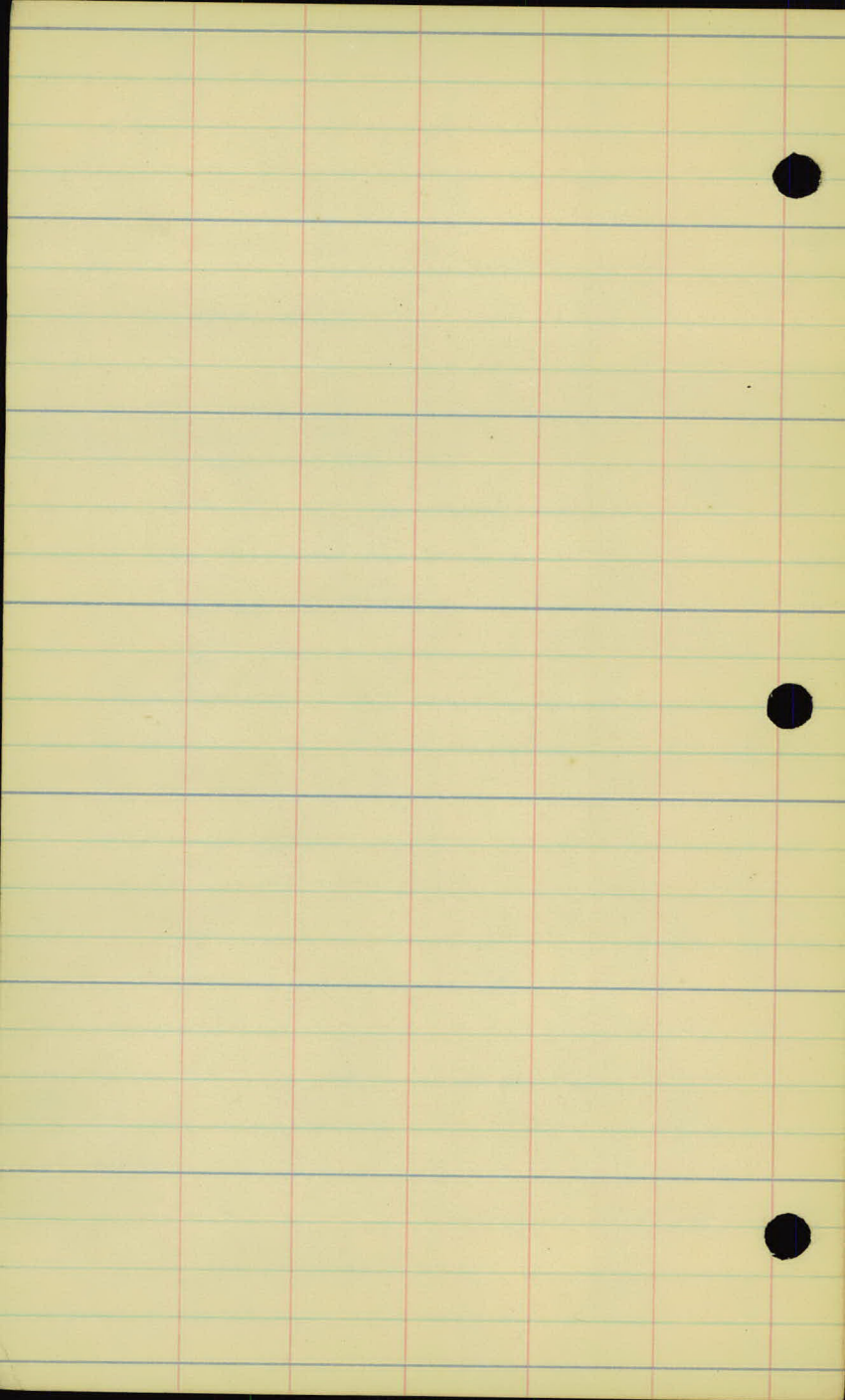
(7.9)

7.7	9.5	9.4	7.1	1.4	6.4	7.9	8.5	7.9	5.9	5.1
33	27	23	16	20	10	15	20	25	28	33

(7.7)

8.0	8.1	8.1	8.8	8.5	7.6	7.2	7.5	8.9	8.8	8.8	7.3
33	30	26	25	28	14	20	13	19	24	29	33

spike on tol. pole lt. of 8.9-34+45



Final X Sections

Sta 0+00 to 131+19.4
Proj. 2-05

Road Acct No 86

Hampton-Richvalley

Const. 1922

X Sect. 1923

+ H.1 - E/24

B.M. 3.68 1002.22 ✓ 998.54

131+19⁵ 999.0

131 999.1

130 998.2

129 997.7

128 998.4

127+59³ EC 998.5

T.P. 246 1001.87 ✓ 2.81 999.41 ✓

127 998.8

+50 999.0

126 998.9

+50 998.1

125 997.0

124+446 BC 995.9

L

COMPUTES
Wishcup
Ruffenbarg
1112-1774185

E

R.

6/1/23

10

$\frac{2.0}{33}$ $\frac{2.5}{27}$ $\frac{2.9}{24}$ $\frac{3.1}{17}$ $\frac{3.2}{50}$ $\frac{3.3}{12}$ $\frac{3.7}{18}$ $\frac{3.7}{33}$

(3.7)

$\frac{2.7}{33}$ $\frac{2.3}{29}$ $\frac{3.3}{26}$ $\frac{3.7}{21}$ $\frac{4.2}{19}$ $\frac{3.6}{17}$ $\frac{2.1}{50}$ $\frac{3.5}{15}$ $\frac{4.1}{18}$ $\frac{4.6}{23}$ $\frac{4.6}{33}$

(6.4)

$\frac{4.8}{33}$ $\frac{4.3}{30}$ $\frac{5.0}{26}$ $\frac{5.3}{19}$ $\frac{5.8}{17}$ $\frac{4.6}{15}$ $\frac{4.0}{50}$ $\frac{4.8}{17}$ $\frac{6.2}{19}$ $\frac{6.7}{33}$

(6.5)

$\frac{4.3}{33}$ $\frac{4.5}{29}$ $\frac{4.9}{25}$ $\frac{5.3}{19}$ $\frac{5.9}{17}$ $\frac{4.6}{15}$ $\frac{4.5}{50}$ $\frac{5.2}{15}$ $\frac{6.0}{18}$ $\frac{6.4}{20}$ $\frac{6.4}{27}$ $\frac{6.8}{33}$

(4.2)

$\frac{2.0}{33}$ $\frac{1.7}{29}$ $\frac{2.5}{24}$ $\frac{3.4}{23}$ $\frac{4.3}{22}$ $\frac{4.1}{19}$ $\frac{3.7}{17}$ $\frac{3.8}{50}$ $\frac{4.6}{19}$ $\frac{5.5}{22}$ $\frac{4.6}{24}$ $\frac{4.8}{33}$

$\frac{4.0}{33}$ $\frac{3.0}{30}$ $\frac{1.8}{26}$ $\frac{4.1}{25}$ $\frac{4.0}{20}$ $\frac{3.6}{18}$ $\frac{3.7}{50}$ $\frac{4.4}{17}$ $\frac{5.0}{19}$ $\frac{5.2}{22}$ $\frac{3.6}{24}$ $\frac{3.6}{33}$

(3.7)

$\frac{1.5}{33}$ $\frac{1.6}{27}$ $\frac{2.7}{26}$ $\frac{3.4}{21}$ $\frac{2.8}{19}$ $\frac{3.1}{50}$ $\frac{4.0}{18}$ $\frac{4.6}{20}$ $\frac{5.0}{24}$ $\frac{3.3}{26}$ $\frac{3.3}{30}$

$\frac{1.7}{33}$ $\frac{3.2}{26}$ $\frac{3.4}{23}$ $\frac{2.7}{17}$ $\frac{2.9}{50}$ $\frac{3.5}{19}$ $\frac{4.4}{21}$ $\frac{4.9}{26}$ $\frac{3.2}{27}$ $\frac{3.1}{33}$

(2.2)

$\frac{2.3}{33}$ $\frac{2.7}{28}$ $\frac{4.3}{26}$ $\frac{4.3}{23}$ $\frac{2.8}{21}$ $\frac{2.1}{50}$ $\frac{3.8}{20}$ $\frac{4.5}{22}$ $\frac{4.8}{26}$ $\frac{3.3}{27}$ $\frac{2.5}{33}$

$\frac{3.3}{33}$ $\frac{3.4}{28}$ $\frac{4.4}{27}$ $\frac{4.4}{24}$ $\frac{3.7}{22}$ $\frac{3.8}{50}$ $\frac{4.2}{19}$ $\frac{4.8}{21}$ $\frac{5.3}{26}$ $\frac{3.7}{27}$ $\frac{4.3}{33}$

(3.9)

$\frac{4.9}{33}$ $\frac{5.3}{29}$ $\frac{5.6}{26}$ $\frac{5.0}{24}$ $\frac{4.7}{50}$ $\frac{5.2}{17}$ $\frac{6.0}{20}$ $\frac{6.6}{24}$ $\frac{6.1}{25}$ $\frac{5.2}{26}$ $\frac{5.6}{33}$

$\frac{5.8}{33}$ $\frac{6.1}{30}$ $\frac{7.1}{27}$ $\frac{6.1}{26}$ $\frac{6.0}{50}$ $\frac{6.1}{17}$ $\frac{6.8}{13}$ $\frac{7.5}{17}$ $\frac{8.0}{18}$ $\frac{6.8}{22}$ $\frac{7.6}{33}$

1001.87

124

995.2

123

92.7

T.P.

0.44

993.88 ✓

8.43

993.44 ✓

122

90.3

121

87.2

120

85.2

T.P.

2.92

987.44 ✓

9.36

984.52 ✓

984.51

119

83.7

118

80.6

117

78.7

116

988.35

78.9

T.P.

9.17

988.37

8.26

979.18 ✓

115

79.3

+50

80.6

114

823

T.P.

6.47

991.02
991.04

3.80

984.57

984.55

L. ♀ R.

(7.3)

67 69 78 69 66 67 70 76 69 92 84 91
33 30 26 22 07 20 07 14 16 19 20 33

(9.0)

8.7 9.0 9.7 9.1 8.9 8.9 9.2 9.5 10.8 10.9 9.5 10.4
33 25 22 21 15 05 20 16 18 21 22 33

(3.7)

6 4.2 1 5.1 4.1 3.5 3.6 3.9 5.1 5.1 3.8 4.2
33 33 36 25 23 22 05 20 15 17 20 22 33

7.9

71 75 8.7 70 66 67 73 8.7 90 79 79
33 27 24 20 04 20 15 17 20 22 33

(8.8)

8.5 8.4 10.4 10.1 8.8 8.7 9.3 10.7 10.6 9.5 9.5
33 26 23 20 17 20 16 18 21 22 33

Top of S-End of 991. Colv. Pt. of Stg 120+00

4.5

3.7 4.1 5.9 5.9 4.7 4.5 4.7 4.8 6.4 6.2 5.0 5.0
33 25 20 18 16 11 20 15 18 21 22 33

(8.0)

6.7 7.3 8.5 8.4 7.3 6.8 7.7 8.4 9.4 8.5 8.6
33 20 22 18 16 20 15 18 23 26 33

(10.6)

9.0 10.3 10.5 10.4 8.8 8.7 9.3 11.4 12.4 12.4 12.5 12.0
33 28 27 17 15 20 14 18 21 24 30 33

(11.7)

12.9 12.7 11.4 11.1 8.8 8.5 9.2 11.2 12.6 12.6
33 24 21 19 15 20 14 18 25 33

(12.0)

11.2 11.1 11.8 11.6 9.4 9.1 9.1 10.6 9.8 7.1 6.6
33 28 24 19 14 20 16 19 27 32 36

7.5 7.6 9.9 9.8 8.2 7.8 7.6 8.2 7.3 3.8 3.2
33 30 25 18 13 20 15 19 28 31 33

(5.5)

5.6 6.0 7.1 8.0 7.9 6.9 6.1 5.9 6.6 6.7 6.0 5.4 3.9 4.3 0.9
33 27 26 22 19 15 20 10 15 17 19 25 29 31 33

Sta + H.I. - Elev

991.04
991.02

+50 83.8

01 1/2 E.C. 84.7

113

+50 84.7

112 83.9

+50 83.4

111 83.1

+71.9^{E.T.S.} 82.9

+50 82.5

+21.9 81.9

110 81.5

B.M. 1.18 983.25 8.95 982.09 982.07

109 79.7

108 77.5

L. ^{Campers} ~~Wichitka~~ ~~Ruttonburg~~ ~~MS 10112~~ £

R.

12

⁷³
 $\frac{90}{33}$ $\frac{30}{28}$ $\frac{73}{26}$ $\frac{83}{25}$ $\frac{84}{25}$ $\frac{94}{23}$ $\frac{92}{20}$ $\frac{77}{17}$ $\frac{1.2}{00}$ $\frac{70}{11}$ $\frac{73}{17}$ $\frac{76}{17}$ $\frac{62}{20}$ $\frac{59}{25}$ $\frac{45}{27}$ $\frac{29}{30}$ $\frac{26}{33}$

(2.8)
 $\frac{68}{33}$ $\frac{63}{30}$ $\frac{63}{28}$ $\frac{79}{25}$ $\frac{80}{20}$ $\frac{67}{17}$ $\frac{63}{00}$ $\frac{63}{16}$ $\frac{56}{19}$ $\frac{54}{23}$ $\frac{38}{26}$ $\frac{24}{29}$ $\frac{23}{33}$

$\frac{73}{33}$ $\frac{71}{27}$ $\frac{75}{26}$ $\frac{77}{25}$ $\frac{85}{24}$ $\frac{83}{19}$ $\frac{70}{14}$ $\frac{63}{00}$ $\frac{62}{16}$ $\frac{65}{20}$ $\frac{59}{21}$ $\frac{53}{26}$ $\frac{38}{28}$ $\frac{39}{33}$

(6.5)
 $\frac{86}{33}$ $\frac{81}{26}$ $\frac{82}{19}$ $\frac{92}{17}$ $\frac{90}{14}$ $\frac{74}{15}$ $\frac{71}{00}$ $\frac{66}{22}$ $\frac{76}{24}$ $\frac{79}{26}$ $\frac{65}{30}$ $\frac{65}{33}$

$\frac{89}{33}$ $\frac{85}{24}$ $\frac{84}{19}$ $\frac{95}{17}$ $\frac{94}{14}$ $\frac{82}{10}$ $\frac{76}{00}$ $\frac{76}{23}$ $\frac{86}{26}$ $\frac{88}{28}$ $\frac{76}{30}$ $\frac{72}{33}$

(8.2)
 $\frac{90}{33}$ $\frac{85}{31}$ $\frac{89}{17}$ $\frac{100}{16}$ $\frac{99}{14}$ $\frac{88}{11}$ $\frac{77}{00}$ $\frac{75}{16}$ $\frac{70}{24}$ $\frac{67}{33}$ *from entrance of Rt.*

$\frac{90}{33}$ $\frac{86}{25}$ $\frac{93}{23}$ $\frac{94}{19}$ $\frac{104}{18}$ $\frac{101}{14}$ $\frac{93}{12}$ $\frac{81}{00}$ $\frac{78}{21}$ $\frac{84}{23}$ $\frac{82}{25}$ $\frac{65}{28}$ $\frac{67}{33}$

$\frac{89}{33}$ $\frac{88}{30}$ $\frac{93}{29}$ $\frac{95}{23}$ $\frac{106}{21}$ $\frac{106}{19}$ $\frac{98}{16}$ $\frac{85}{00}$ $\frac{86}{17}$ $\frac{92}{18}$ $\frac{88}{20}$ $\frac{70}{23}$ $\frac{70}{33}$

$\frac{95}{33}$ $\frac{92}{26}$ $\frac{98}{25}$ $\frac{101}{21}$ $\frac{111}{19}$ $\frac{110}{17}$ $\frac{98}{13}$ $\frac{91}{00}$ $\frac{92}{19}$ $\frac{96}{21}$ $\frac{95}{24}$ $\frac{75}{26}$ $\frac{74}{33}$ $\frac{91}{33}$

(9.8)
 $\frac{101}{33}$ $\frac{97}{26}$ $\frac{101}{24}$ $\frac{104}{21}$ $\frac{116}{20}$ $\frac{116}{17}$ $\frac{104}{14}$ $\frac{95}{00}$ $\frac{100}{19}$ $\frac{106}{21}$ $\frac{105}{24}$ $\frac{80}{26}$ $\frac{80}{33}$

spike on tel. pole Lt. of Sta 110+00

(40)
 $\frac{34}{33}$ $\frac{36}{26}$ $\frac{44}{24}$ $\frac{43}{22}$ $\frac{53}{21}$ $\frac{60}{20}$ $\frac{56}{18}$ $\frac{43}{15}$ $\frac{36}{00}$ $\frac{40}{19}$ $\frac{47}{21}$ $\frac{48}{24}$ $\frac{21}{24}$ $\frac{18}{33}$

(6.6)
 $\frac{63}{33}$ $\frac{60}{26}$ $\frac{67}{25}$ $\frac{67}{23}$ $\frac{78}{22}$ $\frac{76}{21}$ $\frac{14}{19}$ $\frac{63}{15}$ $\frac{58}{00}$ $\frac{60}{18}$ $\frac{66}{20}$ $\frac{63}{22}$ $\frac{40}{24}$ $\frac{33}{33}$

Sta	+	H.I.	-	Elev.
		<u>983.27</u>		983.25
107			7.9	75.4
106		975.02	10.1	73.2
T.P.	3.16	<u>975.04</u>	11.39	<u>971.88</u> 171.86
105			4.0	71.0
104			4.6	70.4
103			4.8	70.2
102			4.3	70.7
B.M.		975.75	3.15	<u>971.89</u> 971.88
	3.88	<u>975.76</u>		<u>971.88</u> 971.87
101			4.7	71.2 ✓
100			4.5	71.3 ✓
99			5.5	70.3 ✓
98			6.6	69.2 ✓
97		974.08	7.5	68.3 ✓
T.P.	6.15	<u>974.09</u>	7.8 ✓	<u>967.94</u> 967.93
96			6.1	68.0 ✓

L.

CONTRAKS
WILSON
RUTLAND
MILWAUKEE

R.

8/2/23

13

(8.8)

8.3	9.0	9.4	9.9	9.8	8.9	7.9	8.1	8.9	8.7	7.0	6.4	6.0
33	29	26	25	23	20	00	76	78	21	23	25	33

(11.9)

13.5	12.2	12.3	12.1	10.7	10.1	10.6	11.3	11.3	8.6	8.4
33	22	21	19	15	20	16	19	22	24	33

(5.6)

7.4	6.7	6.6	4.2	4.0	4.4	5.5	5.9	5.7	2.7	3.2
33	25	20	15	00	76	18	20	22	25	33

(6.3)

6.5	7.1	6.8	4.6	4.6	4.8	6.8	7.5	7.6	7.7
33	30	20	16	00	15	78	21	23	33

(5.9)

5.0	5.7	5.4	5.2	4.7	4.8	5.5	7.1	7.2	7.5	8.3
33	25	23	18	16	00	16	19	21	24	33

(3.3)

1.0	1.0	1.4	5.0	5.0	4.3	4.3	4.6	5.6	5.6	3.7	4.2
33	28	25	23	18	16	00	17	19	23	25	33

(3.8)

Spiko on F.P. Rt. of Sta 1024+00

2.1	2.6	6.0	6.3	4.7	4.7	5.1	6.4	6.1	4.2	4.7	4.5
33	28	26	20	16	00	15	19	23	24	26	33

(3.1)

2.2	2.2	5.1	5.4	4.5	4.5	5.0	6.3	6.2	3.6	3.5
33	28	25	21	20	00	15	16	23	24	33

(4.1)

3.2	2.7	6.4	6.3	5.4	5.5	5.7	6.6	6.5	4.0
33	25	20	20	19	00	15	19	23	33

(5.6)

7.4	6.6	8.1	8.2	6.8	6.6	7.0	8.2	8.5	5.0	5.1
33	27	26	23	19	00	15	16	22	23	33

(8.5)

10.5	10.2	9.9	7.5	7.6	9.2	9.2	7.5	7.9
33	24	19	00	00	14	20	22	33

(8.9)

10.6	9.7	6.7	6.1	6.2	11.6	11.9
33	23	18	00	11	19	33

95	+	<u>974.09</u> 974.08	-	Elev.	695 ✓
+74			4.2		699 ✓
+15			4.3		698 ✓
94			4.4		697 ✓
93		<u>983.68</u>	3.9		702 ✓
T.P.	11.19	<u>983.69</u>	1.59	<u>972.50</u>	972.49
92			10.1		736 ✓
91		<u>994.57</u>	5.0		787 ✓
T.P.	1134	<u>994.58</u>	0.45	<u>983.24</u>	983.23
90			11.2		83.4 ✓
89		<u>998.68</u>	5.3		893 ✓
T.P.	7.28	<u>998.69</u>	3.17	<u>991.41</u>	991.40
+50			7.1		916 ✓
+28			6.3		924 ✓
88			5.5		932 ✓
+50			5.1		936 ✓
87			4.4		943 ✓
+45			3.6		951 ✓
B.M.			3.03	<u>995.60</u>	995.70
86				995.65	

8/3/23

L

13.1 12.0 4.7
33 70 10

6.6
4.2
4.0

R.

4.8 8.9 12.7 13.5
70 15 78 33

14

Water

12.7 6.6 4.4 4.2
16 14 10 80

4.4 6.5 13.5
09 13 76

Water

Water surface

14.7 6.6 4.5 4.3
16 72 09 80

4.6 7.0 12.9
09 12 76

Water

5.1

14.0 13.4 10.5 4.6
33 25 16 70

4.8 11.3 13.0 12.7
09 18 27 33

4.2

7.4 6.2 6.9 6.9 4.2
33 24 23 17 74

3.9 4.0 5.6 5.5 3.2
80 15 20 31 34

11.1

10.1 10.1 11.7 11.7 10.4
33 29 26 18 76

10.1 10.3 11.6 11.4 8.2
80 18 22 27 33

7.0

6.0 7.3 7.3 5.3 5.0
33 27 79 75 80

5.3 6.2 6.4 5.3 5.2
13 19 22 24 33

12.5

10.7 12.0 12.3 11.3 11.2
33 28 18 16 80

11.3 12.4 12.7 11.7 11.4
16 18 22 24 33

5.9

2.7 5.9 6.1 5.7 5.3
33 26 17 15 80

5.6 6.6 6.3 5.5
17 19 24 33

3.0 8.3 8.4 7.3 7.1
33 23 14 13 80

7.7 8.3 8.0 5.2
77 76 28 33

4.0

1.9 7.7 7.6 6.6 6.3
33 21 15 14 80

6.9 5.6 5.3 5.3
15 20 33 33

2.5

1.8 7.0 7.5 6.0 5.5
33 24 15 14 80

5.8 7.2 6.9 1.6
16 18 24 33

0.9

1.8 6.6 6.6 5.5 5.1
33 21 15 13 80

5.1 5.9 5.8 0.8
16 17 24 33

1.1

0.0 0.0 4.7 5.2 4.3
33 29 22 15 13

3.6 3.9 5.1 5.0 1.3
80 76 17 24 30 33

Spike on F.P. Pt. of 8/9. 55+75

Sta.	+ H.I.	-	Elev.
B.M.	2.34	998.04	995.70
86		2.7	95.3
85		4.0	94.0
+50		4.8	93.2
84			93.2
83			95.7
T.P.	11.52	1009.02	0.54 997.50
+50			98.3
82			01.2
+75			02.4
+50			03.8
T.P.	8.16	1013.25	3.93 1005.09
81			05.4
+90			05.7
+50			06.1

8/2/23

L.

±

R.

Spike on F.P. Rt. of Sta. 85+75 - 2.15 ^{above ground}

(4.1)

1.7	1.1	1.9	4.4	4.6	5.1	7.1	3.2	4.0	4.0	2.7	3.0
33	30	21	24	28	15	10	15	16	23	35	33

(10.9)

10.6	10.5	4.7	4.0	4.7	11.0	11.1
33	25	15	60	16	27	33

(11.3)

13.5	12.3	11.8	5.2	4.8	5.3	11.5	11.9
33	30	27	15	60	15	25	33

(10.3)

13.2	12.7	12.2	5.0	4.8	5.3	11.1	11.4	11.6
33	28	25	13	60	16	26	30	33

(6.2)

8.8	8.1	2.7	2.3	2.3	7.0	7.3	7.2	7.1
33	26	26	60	14	22	28	31	33

(14.0)

14.6	14.0	13.3	11.1	10.7	11.2	11.1	13.3	12.5	13.7	14.0
33	30	24	16	60	12	14	19	21	32	33

(8.0)

6.7	6.0	6.4	9.0	9.1	8.0	7.8	8.4	9.3	9.3	8.9	9.6	9.2
33	29	24	21	16	15	60	14	18	21	27	31	33

(6.0)

0.9	1.1	3.4	7.8	7.7	6.7	6.6	7.0	8.3	8.2	7.1	6.8	6.2
33	28	25	21	15	14	60	15	19	22	24	29	30

(4.4)

0.9	1.1	2.7	4.0	5.3	5.8	5.3	5.2	5.7	7.0	7.1	5.2	4.8	4.6
33	29	26	24	21	16	14	60	15	18	21	26	33	36

(5.0)

0.3	1.5	4.3	4.7	7.9	8.5	8.2	7.8	7.9	7.8	9.0	9.4	6.2	6.2
33	30	27	24	20	17	15	12	10	16	18	24	26	33

(0.6)

0.9	1.7	4.2	7.8	8.3	7.7	7.6	7.1	7.8	9.1	9.4	6.0	5.8
33	30	26	20	17	14	10	60	17	19	24	27	33

+1.0	3.5	7.9	7.9	7.4	7.2	7.5	8.9	9.2	9.9	6.1	5.8	5.2	5.1
33	25	19	15	11	60	16	18	21	23	26	29	31	33

Sta + H.I. - Elev

1013.25

80 7.6 05.7

+50 8.0 05.3

79 8.6 04.7

B.M. 5.35 1009.64 8.96 1004.29

+50 04.4

78 04.4

+50 04.5

77 04.9

+50 05.0

B.M. 76 5.58 1009.87 5.35 1004.29

76

05.3

B.C. 8
+67.8

05.2

T.P. 4.35 1009.54 4.68 1005.19

1004.8

5.70 1008.89 6.35 1003.19

3.75 1005.14 1005.40

L.

E

R.

8/10/03

16

(7.5)

7.4	7.7	6.8	7.2	8.2	7.6	8.1	8.8	7.7	7.7	7.0	7.3
33	30	21	15	13	20	16	19	23	26	29	33

6.4	6.7	6.9	8.9	8.9	8.3	8.0	9.4	9.4	9.3	8.5	9.7
33	30	27	23	19	15	20	15	24	28	29	33

(9.5)

8.0	9.3	9.7	9.5	8.8	8.6	8.9	9.9	10.2	9.2	9.3
33	31	21	17	15	20	16	23	28	30	33

Top of bottom step S-E. Cor. School house

5.8	6.3	6.6	6.5	6.4	5.2	5.3	6.3	6.5	5.7
33	32	26	21	16	20	19	22	31	33

(6.9)

7.1	7.0	6.5	6.2	5.7	5.3	5.2	5.6	6.0	6.7	6.6	5.4	5.2
33	30	27	23	18	29	20	14	19	20	22	25	33

6.5	6.6	6.0	4.9	5.1	5.5	6.1	6.5	5.3	5.3
33	25	22	18	20	10	11	17	21	33

(5.2)

6.1	6.1	5.5	4.5	4.7	5.2	6.2	6.2	4.8	4.8
33	28	23	18	20	14	17	21	22	33

4.0	4.3	4.8	4.6	5.0	6.3	6.6	5.0	5.4
33	26	15	20	15	21	22	26	33

(5.5)

4.5	4.7	5.1	5.1	4.8	4.8	4.6	5.1	6.4	6.9	5.7	5.9
33	29	27	25	22	16	20	16	19	24	26	33

4.5	4.6	5.3	5.5	5.4	4.7	4.7	5.1	5.9	6.4	6.8	5.4	5.5
33	24	22	20	17	14	20	10	13	17	22	23	33

Spike on F.P. Rt. of Sta 63+90

31



HAMPTON - RICH VALLEY

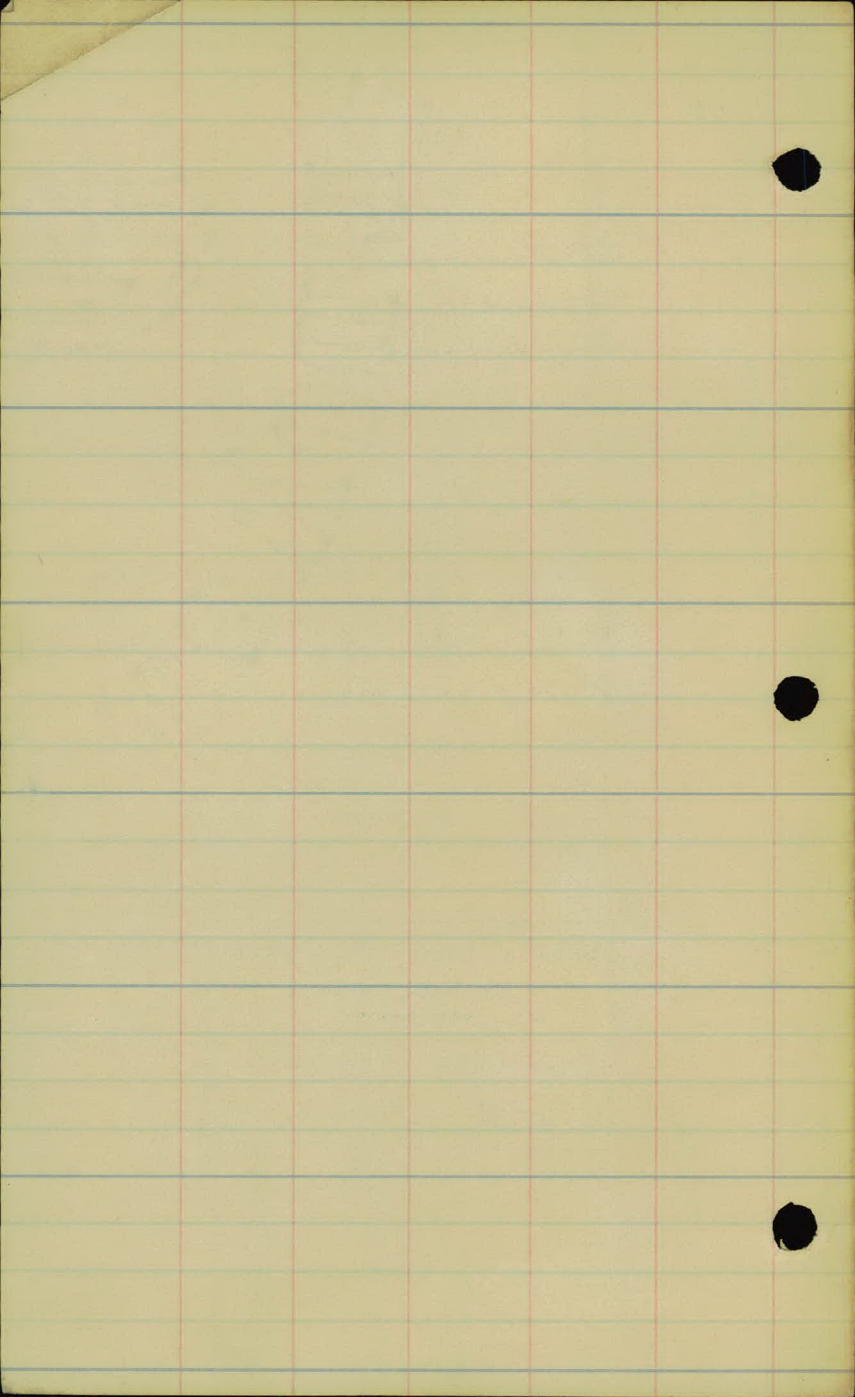
DAKOTA COUNTY

JOB - 22-00

	PAGE
Re-cross-section 62+50 - 66+00 Original - Book 79 - Page 27	1-2
Re-cross-section 71+00 - 83+50 Original - Book 79 - Page 28	3-5
Re-cross-section 121+00 - 136+00 Original - Book 79 - Page 31-32	6-9
Re-cross-section 176+00 - 201+00 Original - Book 79 - Page 34-35	10-13
Re-cross-section 281+00 - 309+00 Original - Book 80 - Page 5-6-7	14-18
Original cross-section - Borrow-pit	19-22
Re-cross-section - Borrow-pit	23-25

Office of Ramsey Co. Engineer
ST. PAUL, MINN.

Hampton - Rich Valley
9 - (2209)(2205)



Road acct. No 86
Re X sectioning

Sta. 62+50 to Sta 66+00
Proj. 2200 - Dakota County
7/17/23

Original X sections
Dakota County book No 79
Page - 27

Unclassified Order
No B - Item (C)
4

	+	H.I.	-	Elev.
B.M.	146	1060.30 ✓		1058.84 ✓
62+50 =	Zero Excav.	below profile grade.	4.8	555
63			7.9	524 ✓
63+50			10.4	492
T.P.	2.43	1057.20 ✓	11.53	1048.77 ✓
64			3.2	480
64+50			5.4	458
65			7.7	435
65+50			10.0	412
66			12.0	392 ✓
T.P.	0.60	1040.12 ✓	1168.	1039.52 ✓

Cross Sections

2 7/17/23

Spire in Fence Post Rt. of Sta-61+70

2.8 6.5 6.5 5.3 4.8 5.6 6.7 6.7 2.6
 $\frac{2}{27}$ $\frac{22}{18}$ $\frac{14}{14}$ $\frac{50}{50}$ $\frac{17}{17}$ $\frac{19}{19}$ $\frac{21}{21}$ $\frac{25}{25}$

#1.
 106030
 $\frac{5.6}{29}$

9.0 9.0 7.8 7.9 8.0 9.4 9.4 4.4
 $\frac{24}{18}$ $\frac{16}{16}$ $\frac{19}{19}$ $\frac{24}{24}$ $\frac{28}{28}$

(4.0)

#1.
 106030
 $\frac{3.6}{31}$

11.7 11.4 10.4 10.4 10.1 11.4 11.6 4.3
 $\frac{24}{18}$ $\frac{16}{16}$ $\frac{15}{15}$ $\frac{18}{18}$ $\frac{24}{24}$ $\frac{30}{30}$

#1.
 106030
 $\frac{2.8}{35}$

4.2 4.2 3.1 3.2 3.3 4.2 4.2
 $\frac{24}{18}$ $\frac{15}{15}$ $\frac{20}{20}$ $\frac{18}{18}$ $\frac{17}{17}$ $\frac{22}{22}$

(6.0)

#1.
 106030
 $\frac{2.6}{34}$

+2.4

#1.
 106030
 $\frac{2.5}{37}$

6.2 6.3 5.3 5.4 6.6 6.5
 $\frac{23}{18}$ $\frac{15}{15}$ $\frac{20}{20}$ $\frac{18}{18}$ $\frac{23}{23}$

(4.2)

#1.
 106030
 $\frac{3.8}{35}$

x11

#1.
 106030
 $\frac{5.3}{27}$

8.6 8.5 7.4 7.7 7.7 8.9 9.1
 $\frac{24}{18}$ $\frac{15}{15}$ $\frac{20}{20}$ $\frac{15}{15}$ $\frac{18}{18}$ $\frac{24}{24}$

(11.6)

#1.
 106030
 $\frac{11.0}{31}$

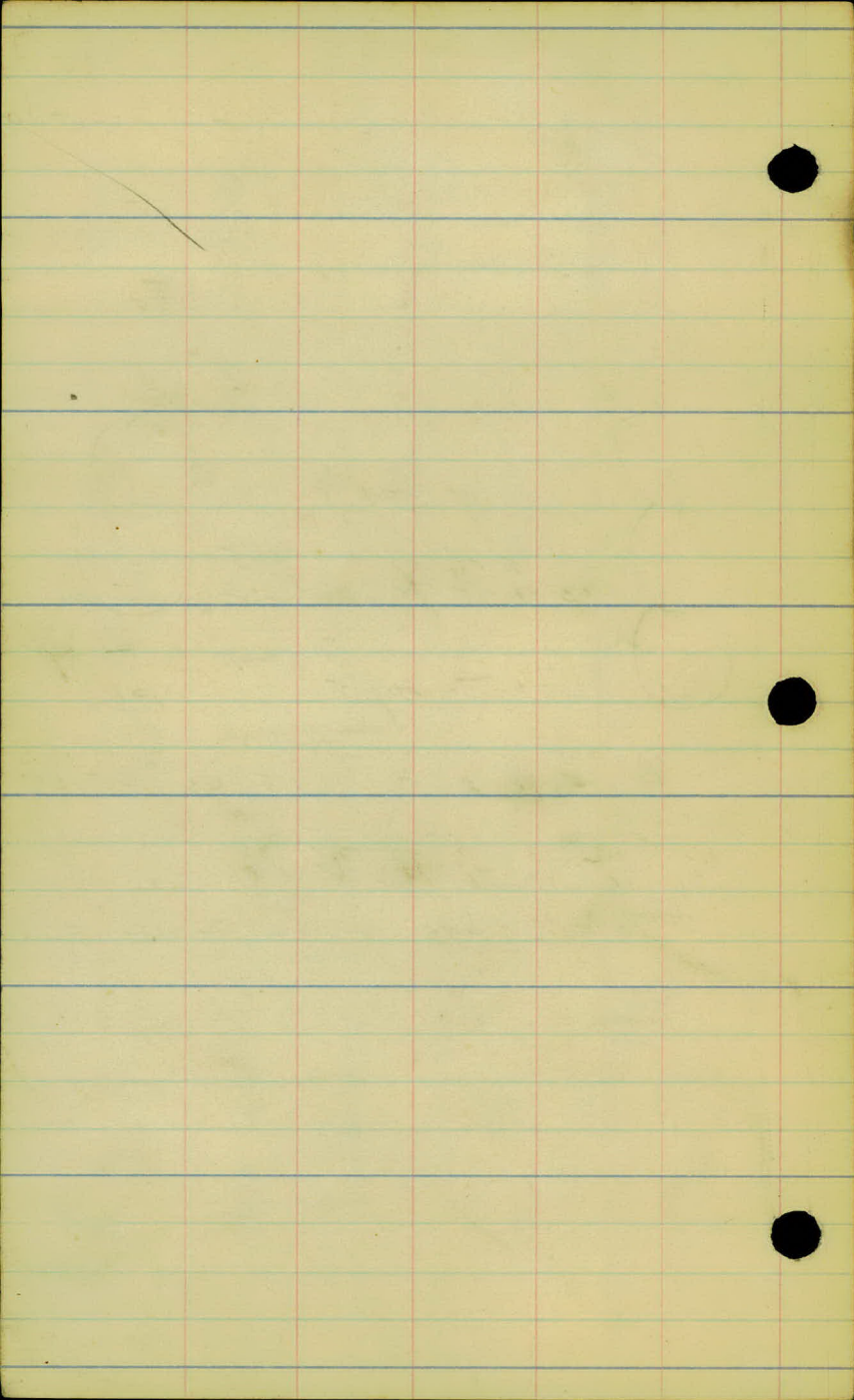
3.7

6.7 10.4 10.4 9.9 10.0 9.9 11.2 11.5 10.4 13.3
 $\frac{29}{26}$ $\frac{20}{18}$ $\frac{50}{50}$ $\frac{16}{16}$ $\frac{18}{18}$ $\frac{23}{23}$ $\frac{25}{25}$ $\frac{35}{35}$

(12.2)

7.2 12.3 12.9 11.8 12.0 12.2 13.6 13.6
 $\frac{31}{26}$ $\frac{18}{16}$ $\frac{50}{50}$ $\frac{15}{15}$ $\frac{18}{18}$ $\frac{22}{22}$

checked on fill stake at Sta 67 - a. off.



Re X Sect. Notes
Sta. 71 to 83+50

To show material that
was borrowed from side
ditches in 1922

between Sta 72+25 to 77
Also to bal. yardage bet
Sta 72+15 & 83+20

from Sta 77+50 to 84+00
Grade has been changed
as indicated - and material
taken from side ditches
will be used for claying
These X sects will also
give check on material
used for claying bet
Sta 104+50 back to
aprox Sta 70 - Sta to be
determined later.

ORIGINAL X SECT. Notes
Book 79 - Page 28
Dakota Co Book.

sta	+	HJ	-	Elev.
		1017 ⁴⁰		
71			2.3	1014.4
72			6.1	11.3
T.P.			8.73	1008.67
72+25	2.43	1011.10	0.5	10.6
73			2.0	09.1
74			2.7	08.4
75			3.8	07.3
76			4.1	06.4
77			3.8	07.3
78			4.1	07.0
T.P.			2.73	1008.37
79	6.04	1014.41	6.7	07.71
80			4.2	10.2
81			1.4	13.0
T.P.	7.70	1020 ⁹⁵	1.16	1013 ²⁵
82			6.4	14.6

7/11/23 4

(6.8)

7.8 7.2 2.7 2.7 7.8 7.3 7.3
33 23 15 15 23 24 33

(8.1)

7.5 7.8 7.3 6.1 6.1 8.0 8.0
37 24 18 15 15 24 33

1.8 1.5 0.0 0.5 0.2 1.8 2.1
36 19 15 00 15 18 32

End of
Bourne
Pt. 1922

(2.4)

2.0 4.0 3.7 3.2 1.6 2.0 2.7 3.3 4.3 4.1 2.6
35 33 26 16 14 00 15 17 29 32 33

(2.5)

2.2 4.3 3.9 2.1 2.6 2.7 3.2 3.8 4.4 4.3 2.5
34 32 26 18 15 00 15 17 25 32 34

(3.9)

2.9 4.9 4.6 4.2 3.8 3.8 3.7 4.3 5.1 5.3 3.1
33 31 22 17 14 00 15 19 26 33 34

(7.4)

7.7 7.8 8.0 4.6 4.7 4.8 6.8 8.0 7.9
34 29 22 17 00 14 17 23 33

(7.1)

7.9 8.1 7.9 4.1 2.8 3.9 8.0 8.3 7.9
37 28 22 14 00 13 24 32 35

(5.7)

7.0 7.3 7.1 4.3 4.1 4.2 7.3 7.3 6.7
37 29 21 16 00 15 20 29 34

(7.2)

6.1 6.5 6.9 6.4 6.7 7.0 6.4 6.6 6.3 6.7 5.9
33 24 20 5 00 3 9 18 27 29 33

(3.9)

3.4 3.3 3.6 4.2 4.3 4.0 3.6 3.7 3.8
33 27 23 00 3 8 17 27 33

(1.7)

0.6 0.8 1.7 1.4 1.8 2.0 1.5 1.1 1.1
33 24 12 00 4 10 19 27 33

(6.4)

5.6 5.7 6.3 6.2 6.4 6.6 6.1 6.6 6.1 6.2
33 24 23 16 00 9 16 23 27 33

Sta	+	HI	-	Elev.
82+50		1020.95	5.3	15.7
83			4.0	17.0
83+50			2.5	18.5
BM			2.28	<u>1018.67</u>

46	47	5.1	5.7	5.3	5.2	5.0	4.7
33	26	24	15	00	7	18	33

4.4

3.7	4.1	4.0	4.0	3.9	4.4	4.0
33	28	17	00	9	18	33

2.7	2.9	3.0	2.4	2.5	2.3	2.6	2.2	2.8	2.9
33	30	19	14	00	6	10	15	22	33

nail in So. Gate Boat Lt. Sta 83

Grade
Elev.

Grade
Elev.

-0.295%

x 0.295%

500' VC

x 200' VC

x +2.28%

x 200' VC

+4.333%

+4.333%

Profile Grades
1922

Grades changed
and under construction
1923

77

77+50

78

+50

79

+50

80

81

82

+50

83

+50

84

07³⁸

07²³

07²⁰

07⁴¹

07⁸²

08⁴⁹

10⁵¹

13⁴⁵

15²⁸

17³²

19⁴⁶

21⁶⁶

05⁵²

07³⁸

07³⁹

07⁷²

08³⁷

09³⁵

10⁴⁹

12⁷⁷

15⁰⁴

16³¹

17⁸⁴

19⁶³

21⁶⁶

Road acct No 86

Re X sections

Sta 121 - 136

Proj - 2200 Dakota Co.

7/17/23

Original X sections

Dakota Co. Book No 79

Pages - 31 - 32

Spike on 15" Oak 48' Lt. of Sta. 116+10
Cross Sections 7

3.7

$\frac{40}{26}$ $\frac{5.6}{24}$ $\frac{3.9}{18}$ $\frac{3.2}{20}$ $\frac{3.7}{17}$ $\frac{4.5}{20}$ $\frac{4.9}{22}$ $\frac{4.1}{23}$

4.2

$\frac{4.7}{26}$ $\frac{6.2}{24}$ $\frac{4.4}{18}$ $\frac{3.9}{20}$ $\frac{4.4}{16}$ $\frac{6.1}{21}$ $\frac{4.6}{22}$

4.8

$\frac{5.0}{26}$ $\frac{6.5}{23}$ $\frac{6.3}{19}$ $\frac{4.9}{16}$ $\frac{4.5}{20}$ $\frac{5.0}{16}$ $\frac{6.2}{19}$ $\frac{6.0}{22}$ $\frac{4.8}{23}$

4.8

$\frac{5.5}{26}$ $\frac{6.7}{24}$ $\frac{6.4}{18}$ $\frac{5.2}{16}$ $\frac{5.3}{20}$ $\frac{5.5}{17}$ $\frac{6.6}{19}$ $\frac{6.2}{24}$ $\frac{5.2}{25}$

4.9

$\frac{5.1}{27}$ $\frac{8.1}{27}$ $\frac{8.0}{17}$ $\frac{7.2}{15}$ $\frac{6.7}{20}$ $\frac{7.2}{16}$ $\frac{8.1}{19}$ $\frac{7.6}{24}$ $\frac{5.1}{28}$

8.2

$\frac{6.2}{28}$ $\frac{9.3}{24}$ $\frac{10.0}{20}$ $\frac{8.5}{17}$ $\frac{8.4}{20}$ $\frac{8.8}{17}$ $\frac{10.0}{21}$ $\frac{10.0}{23}$ $\frac{9.1}{26}$ $\frac{5.3}{31}$

Sta.	+	H.I.	-	Elev
		1068.80	9.28	1059.52 ✓
	1.65	1061.17 ✓		
127			4.3	1056.9 ✓
+60			6.6	1052.6 ✓
128			7.8	1053.4 ✓
B.M.			8.66	1052.51 ✓
+40			8.8	1052.4 ✓
T.P.	0.48	1052.25 ✓	9.40	1051.77 ✓
129			1.2	1051.0 ✓
+50			1.5	1050.3 ✓
130			0.5	1051.7 ✓
T.P.	11.48	1063.25 ✓	0.48	1051.77 ✓
131			9.6	1052.6 ✓
132 ✓			6.1	1057.1 ✓
133			3.7	1059.5 ✓

3.4

5.3/30 6.7/28 6.3/24 6.4/23 5.4/18 4.6/16 4.3/20 4.3/18 5.5/24 0.6/32

6.6

3.8/36 9.8/29 9.8/20 7.1/16 6.6/20 6.8/17 7.8/20 7.7/25 2.8/32

11.3

12.5/20 12.5/23 8.1/16 7.8/20 8.3/17 11.2/22 11.2/22 8.9/37

Spike in FP 40' 12.4 28+40

10.3/29 13.3/23 8.8/16 8.8/20 9.2/16 12.1/21 12.9/24 10.8/30 9.4/33

Top stake at sta 4.3 29+00

12.5/28 2.5/14 1.2/20 1.6/14 11.5/27 13.7/35

3.9

0 15.9/33 1.9/10 1.5/20 2.2/15 12.1/30 13.0/35

3.5

13.6/34 1.2/15 0.5/20 0.8/14 10.7/27 10.4/33 old fill str.

11.2

10.2/33 13.3/27 13.3/23 10.1/15 9.4/20 9.7/13 14.0/20 12.5/25 5.7/37

5.1

1.9/30 7.3/25 7.3/23 6.4/18 6.1/20 6.0/13 7.7/18 7.7/20 1.0/30

2.9

0.1/29 4.8/23 3.4/17 3.7/20 3.7/13 4.6/18 4.7/24 13.1/29 17.1/37

Barry

Sta	+	H.I.	-	Elev
		1023.25 ✓		
	6.35	1069.05 ✓	0.55 ✓	1062.70 ✓
134			6.9	1062.2 ✓

135			5.2	1063.9 ✓
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136			3.9	1065.2 ✓
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(5.9)

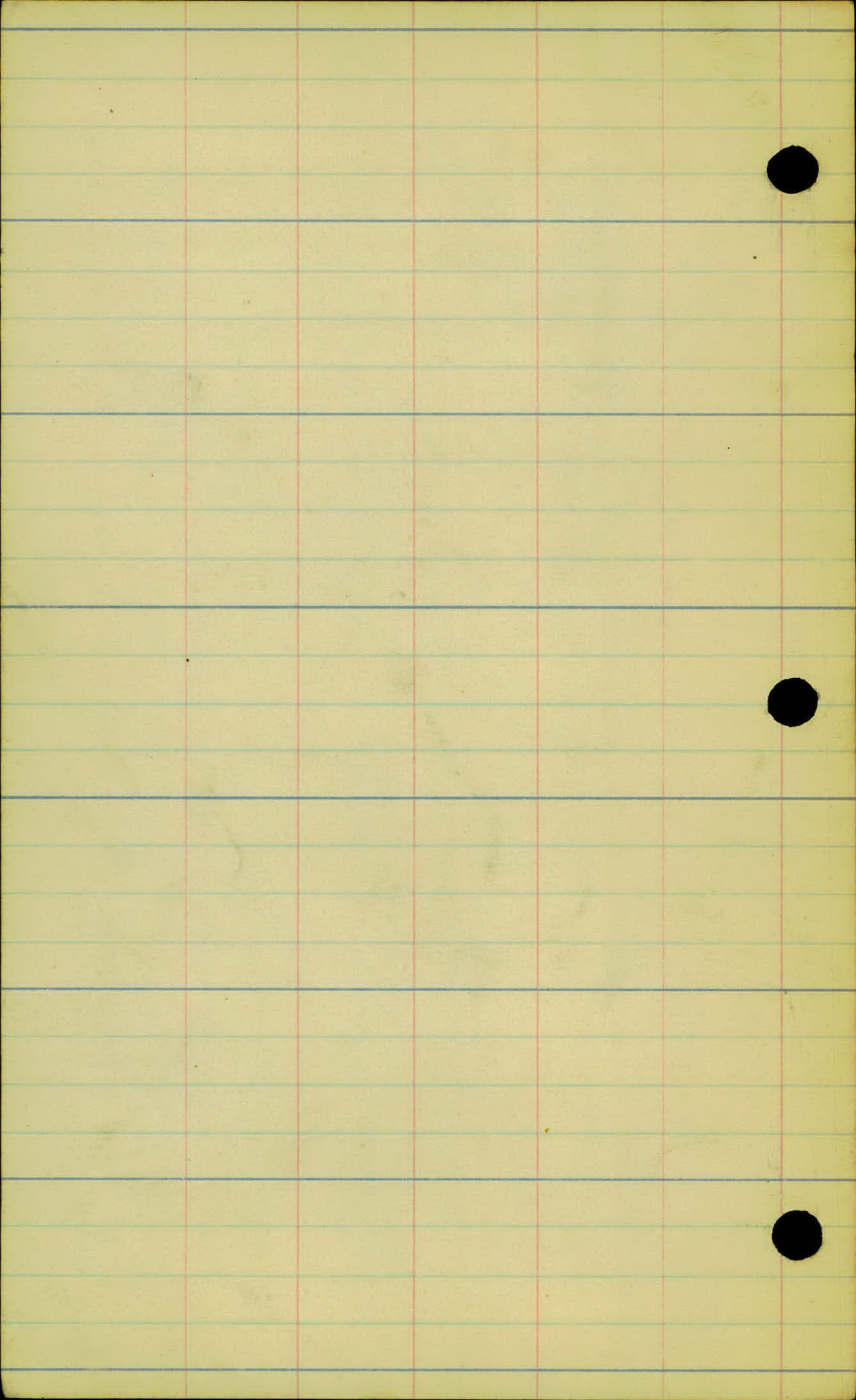
4.7	8.5	8.5	7.0	6.9	7.2	8.5	8.2	5.1
<u>29</u>	<u>24</u>	<u>22</u>	<u>19</u>	<u>20</u>	<u>15</u>	<u>18</u>	<u>26</u>	<u>28</u>

(4.3)

4.1	6.7	5.5	5.2	5.4	6.5	7.0	4.0
<u>29</u>	<u>23</u>	<u>18</u>	<u>20</u>	<u>14</u>	<u>16</u>	<u>20</u>	<u>28</u>

(3.8)

3.4	5.4	5.5	4.1	3.9	4.6	5.7	5.5	3.6
<u>28</u>	<u>24</u>	<u>19</u>	<u>17</u>	<u>20</u>	<u>15</u>	<u>18</u>	<u>22</u>	<u>26</u>



Road Acct No 86

Re X Sections

Sta 176 - 201

Proj 2200 7/18/23

————— 11 —————

Original X-sections

Dakota County Book No 79

Pages - 34 - 35

Sta	+	H.I.	-	Elev.	B.M.
	0.97	1067.35			1066.38
	3.81	1066.30	4.86	1062.49	

1066.30

176 3.7 626 ✓

177 4.2 621 ✓

+50 4.3 620 ✓

178 4.6 617 ✓

179 4.4 612 ✓

180 4.6 612 ✓

181 4.1 622 ✓

T.P. 5.38 1067.86 3.82 1062.48 ✓

182 5.5 624 ✓

183 5.5 624 ✓

184 5.0 629 ✓

+ 75 B.M. 1.47 1066.39 1066.37

Cross Sections
 Spike on 7. P. 50 ft. Lt. of Sta. 184 + 75

7-16-23
 H. W. J. C.
 C. P. - W. J. C.

5.3

4.7 6.0 5.3 4.5 3.7 4.5 5.6 6.2 5.0
 $\frac{31}{30}$ $\frac{18}{18}$ $\frac{14}{14}$ $\frac{20}{20}$ $\frac{19}{19}$ $\frac{21}{21}$ $\frac{28}{28}$ $\frac{30}{30}$
 6.9 8.7 6.7 4.6 4.2 5.0 5.7 4.8 6.0
 $\frac{35}{35}$ $\frac{34}{34}$ $\frac{23}{23}$ $\frac{17}{17}$ $\frac{10}{10}$ $\frac{17}{17}$ $\frac{19}{19}$ $\frac{30}{30}$ $\frac{33}{33}$

7.1

9.0 8.1 4.7 4.3 4.3 6.6 6.5
 $\frac{25}{25}$ $\frac{73}{73}$ $\frac{18}{18}$ $\frac{20}{20}$ $\frac{18}{18}$ $\frac{24}{24}$ $\frac{32}{32}$
 6.9 8.3 6.4 5.3 4.6 5.3 6.8 7.1 6.7
 $\frac{37}{37}$ $\frac{32}{32}$ $\frac{19}{19}$ $\frac{14}{14}$ $\frac{20}{20}$ $\frac{17}{17}$ $\frac{21}{21}$ $\frac{28}{28}$ $\frac{31}{31}$

5.6

5.0 4.5 6.2 4.5 4.4 4.8 6.7 5.5
 $\frac{30}{30}$ $\frac{27}{27}$ $\frac{22}{22}$ $\frac{16}{16}$ $\frac{10}{10}$ $\frac{18}{18}$ $\frac{19}{19}$ $\frac{32}{32}$

5.7

5.7 6.9 5.2 4.6 5.2 6.8 7.4 6.4
 $\frac{30}{30}$ $\frac{28}{28}$ $\frac{15}{15}$ $\frac{11}{11}$ $\frac{16}{16}$ $\frac{21}{21}$ $\frac{28}{28}$ $\frac{30}{30}$

5.4

5.3 6.0 5.2 4.4 4.1 4.6 6.1 6.7 5.3
 $\frac{31}{31}$ $\frac{29}{29}$ $\frac{17}{17}$ $\frac{14}{14}$ $\frac{20}{20}$ $\frac{18}{18}$ $\frac{22}{22}$ $\frac{28}{28}$ $\frac{30}{30}$

7.3

7.6 9.0 7.1 6.0 5.5 6.0 7.3 7.8 6.5
 $\frac{33}{33}$ $\frac{30}{30}$ $\frac{19}{19}$ $\frac{12}{12}$ $\frac{20}{20}$ $\frac{15}{15}$ $\frac{18}{18}$ $\frac{27}{27}$ $\frac{30}{30}$

7.9

9.5 8.1 6.1 5.5 6.0 8.5 8.9 7.6
 $\frac{33}{33}$ $\frac{18}{18}$ $\frac{14}{14}$ $\frac{20}{20}$ $\frac{15}{15}$ $\frac{21}{21}$ $\frac{27}{27}$ $\frac{30}{30}$

6.2

5.8 7.1 6.3 5.3 5.0 5.2 6.1 6.5 4.5
 $\frac{32}{32}$ $\frac{13}{13}$ $\frac{18}{18}$ $\frac{15}{15}$ $\frac{20}{20}$ $\frac{16}{16}$ $\frac{19}{19}$ $\frac{25}{25}$ $\frac{17}{17}$

c-start
 0-07

Spike on 7. Post. 50 ft. Lt. of Sta. 184 + 75

Sta	+	H.I.	-	Elev	B.M. Elev
		1067.86			
185			4.0	639	
186			3.4	645	
187			3.0	649	
T.P.	3.81	1068.93	2.74	1065.12	
188			3.7	652	
189			3.9	650	
190			4.3	645	
191			4.1	648	
192			4.1	648	
193			4.4	645	
T.P.	5.20	1069.59	4.54	1064.39	
194			5.0	645	
195			4.7	649	
196			4.5	651	
197			4.6	650	

Cross Sections

12

7-18
4-20
4-21
4-22
4-23
4-24

(3.3)

$\frac{3.4}{38}$ $\frac{4.4}{24}$ $\frac{4.4}{17}$ $\frac{4.0}{20}$ $\frac{4.2}{15}$ $\frac{5.5}{23}$ $\frac{2.9}{24}$

(2.1)

$\frac{3.0}{38}$ $\frac{5.0}{26}$ $\frac{3.6}{15}$ $\frac{3.4}{20}$ $\frac{3.8}{14}$ $\frac{5.0}{23}$ $\frac{2.5}{24}$

(2.0)

$\frac{2.7}{27}$ $\frac{4.8}{24}$ $\frac{3.2}{15}$ $\frac{3.0}{20}$ $\frac{3.7}{14}$ $\frac{4.6}{18}$ $\frac{5.1}{25}$ $\frac{3.0}{25}$

(4.3)

$\frac{4.0}{38}$ $\frac{5.7}{25}$ $\frac{3.9}{15}$ $\frac{3.7}{20}$ $\frac{4.2}{15}$ $\frac{5.0}{17}$ $\frac{6.0}{24}$ $\frac{4.1}{25}$

(5.1)

$\frac{4.9}{29}$ $\frac{6.2}{28}$ $\frac{5.5}{19}$ $\frac{4.3}{16}$ $\frac{3.9}{20}$ $\frac{4.4}{13}$ $\frac{5.3}{16}$ $\frac{5.8}{23}$ $\frac{4.8}{24}$

(5.1)

$\frac{5.9}{31}$ $\frac{6.0}{28}$ $\frac{6.2}{20}$ $\frac{4.5}{16}$ $\frac{4.3}{20}$ $\frac{4.2}{15}$ $\frac{6.7}{18}$ $\frac{7.2}{24}$ $\frac{6.5}{27}$ $\frac{6.1}{30}$

(5.2)

$\frac{5.0}{33}$ $\frac{6.7}{32}$ $\frac{5.7}{19}$ $\frac{4.5}{16}$ $\frac{4.1}{20}$ $\frac{4.8}{16}$ $\frac{6.1}{19}$ $\frac{6.7}{21}$ $\frac{4.7}{29}$

(3.4)

$\frac{3.1}{33}$ $\frac{6.1}{31}$ $\frac{4.3}{18}$ $\frac{4.1}{20}$ $\frac{4.2}{16}$ $\frac{5.6}{20}$ $\frac{6.1}{27}$ $\frac{3.5}{29}$

(4.3)

$\frac{4.5}{32}$ $\frac{6.9}{29}$ $\frac{5.8}{22}$ $\frac{4.7}{17}$ $\frac{4.4}{20}$ $\frac{4.8}{15}$ $\frac{6.5}{21}$ $\frac{6.6}{28}$ $\frac{3.8}{30}$

(5.4)

$\frac{5.5}{33}$ $\frac{7.5}{31}$ $\frac{7.4}{21}$ $\frac{5.1}{15}$ $\frac{5.0}{20}$ $\frac{5.6}{15}$ $\frac{6.8}{19}$ $\frac{7.7}{26}$ $\frac{5.0}{31}$

(5.0)

$\frac{5.4}{31}$ $\frac{7.5}{29}$ $\frac{6.3}{18}$ $\frac{5.3}{15}$ $\frac{4.7}{10}$ $\frac{5.3}{15}$ $\frac{6.2}{19}$ $\frac{7.3}{30}$ $\frac{5.9}{32}$

(4.6)

$\frac{4.6}{32}$ $\frac{7.1}{28}$ $\frac{5.7}{17}$ $\frac{4.9}{14}$ $\frac{7.5}{20}$ $\frac{5.1}{14}$ $\frac{6.0}{17}$ $\frac{6.8}{31}$ $\frac{4.9}{33}$

Top of 3-Rail C.G. W. Ry

(5.0)

$\frac{5.0}{30}$ $\frac{6.7}{28}$ $\frac{6.1}{18}$ $\frac{4.8}{15}$ $\frac{4.6}{20}$ $\frac{5.2}{14}$ $\frac{6.2}{16}$ $\frac{6.8}{20}$ $\frac{6.1}{25}$

Sta	+	H.I.	-	Elev	B.M.
		1069.59			
798		✓	4.4	65.2 ✓	
+60	0.18	1065.55	9.22	1065.37 ✓	1065.05 ✓
799			1.1	64.5 ✓	
200			3.8	61.75 ✓	
201		↓	6.3	59.25 ✓	
	7.61	1063.30	9.86	1055.69 ✓	✓
			10.5	1062.25 ✓	
1.50		1063.75 ✓	2.40	1061.35 ✓	✓

Cross Sections

13

7-18
Heil
W-15 mc

(6.2)
 $\frac{8.1}{33}$ $\frac{9.1}{28}$ $\frac{8.5}{22}$ $\frac{7.4}{10}$ $\frac{7.4}{20}$ $\frac{4.5}{15}$ $\frac{5.2}{19}$

Track has
brass bolts

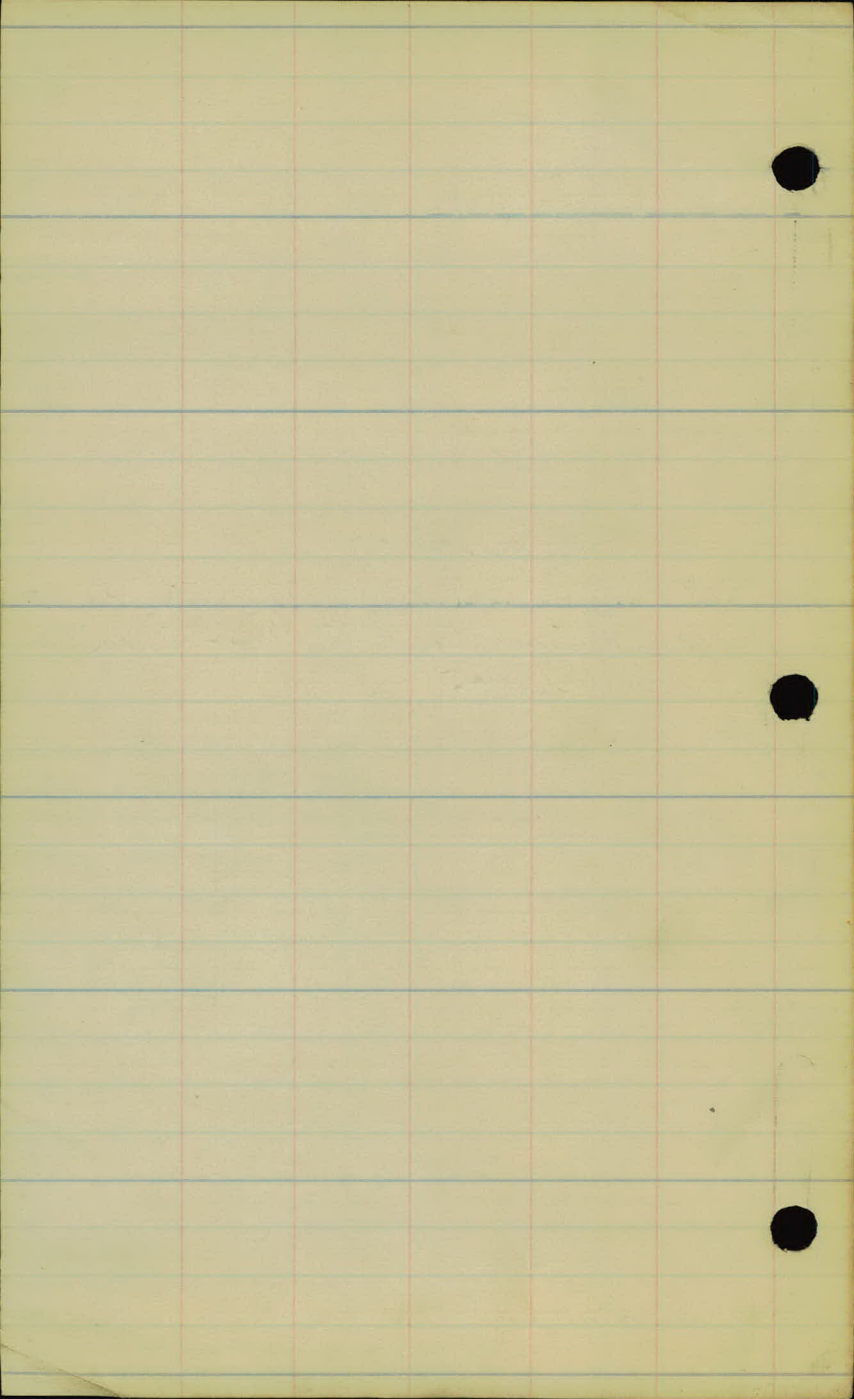
Top of S-Rail (1.3) - G.W. Ry. -
 $\frac{4.5}{33}$ $\frac{4.7}{28}$ $\frac{1.5}{22}$ $\frac{1.1}{10}$ $\frac{1.0}{15}$ $\frac{1.5}{23}$ $\frac{1.9}{32}$

(9.0)
 $\frac{2.3}{28}$ $\frac{5.4}{18}$ $\frac{3.9}{22}$ $\frac{3.8}{10}$ $\frac{4.7}{15}$ $\frac{8.2}{24}$ $\frac{7.4}{33}$

(10.2)
 $\frac{8.7}{33}$ $\frac{8.8}{17}$ $\frac{6.7}{13}$ $\frac{6.3}{10}$ $\frac{6.1}{15}$ $\frac{9.2}{22}$ $\frac{9.8}{25}$ $\frac{8.4}{33}$

foundation.

on top of Conc. Gas. pump Sta 207 Rt
 (1061.46) on top of concrete gas intake
 error 0.05 ret. sta 207



Road Sect. No 86

Re X Sections

Sta 281 - 309

Proj 2200

2/13/23

corner
Wilshusen
Ruttenburg
McManns

original X sections

Dakota County Book No. 80

pages 5-6-7

Hampton - Rich valley

7-13-23
 7.0 E
 1.0 W
 E-R
 Winc

	+	H. I.	-	Elev
	6.98	1026.15		1019.17
			0.16	1025.99
	10.96	1036.95		
			0.80	1036.15
	13.10	1049.25		
			0.12	1049.13
	10.14	1059.27		
			0.76	1058.51
	8.42	1066.93		
			7.11	1059.82

$$\begin{array}{r} + \quad 49.60 \\ - \quad 8.95 \\ \hline + \quad 40.65 \\ + \quad 1019.17 \\ \hline 1059.82 \quad \checkmark \end{array}$$

$$\begin{array}{r} \hline 8.95 \\ \hline \end{array}$$

10" Oak Rt. of Sta 293+10

on top of 6" x 3" rock Rt. of Sta 282+25

Sta	+	T	-	TP Elev	Sta. Elev
		1031.04			
T.P. db.			5.07	1025.97	24.1
290+50				(6.9)	
T.P.	0.15	1026.12			
291				(3.0)	23.1
292				(4.4)	21.7
13m			6.96	1019.16	
293				(4.1)	22.0
B.M)	7.34	1026.13	(7.33)	1018.79	
294				(2.2)	23.9
T.P.	8.30	1033.17	12.6	1024.87	
295				(6.1)	27.1
296				(2.7)	30.5
T.P.	9.79	1041.80	1.16	1032.01	
297				(7.1)	34.7
298				(3.4)	38.4
	11.29	1050.85	2.24	1039.56	
299				(11.2)	39.6
T.P.	7.92	1046.92	11.85	1039.00	
300				(9.5)	37.4
T.P.	27.6	1036.86	12.82	1034.10	
301				(4.2)	32.7
302				(10.0)	26.9

17 7-13-23
2C
4W
E-R
W-1112

TP 15.99 error .02

12.2

11.7 9.0 7.3 6.9 7.5 9.4 11.1
6.0 3.0 1.3 4.0 1.3 3.2 5.0

9.3 9.7 7.6 3.3 3.0 3.1 7.9 9.1 9.3
3.5 2.6 2.1 1.3 2.0 1.3 1.9 2.4 3.1

8.6
7.2

2.8 9.9 4.7 4.4 4.6 8.5 9.3 8.8
3.3 2.2 1.3 2.0 1.4 2.2 2.6 3.2

R.P. SLU 29.3 + 10 error .01

9.5 9.3 8.2 4.7 4.2 8.6 8.8 8.2
3.2 2.2 1.9 1.4 1.4 2.1 2.4 3.0

R.P. 292 + 65 B.M.

5.8

6.8 7.1 6.7 2.6 2.2 2.0 5.8 6.3 6.1
3.4 2.6 2.0 1.3 2.0 1.3 1.9 2.3 2.8

10.7

12.4 11.0 6.4 6.1 6.2 9.2 9.7
3.1 2.0 1.4 2.0 1.4 1.9 2.7

8.5

10.3 9.6 8.1 2.7 3.0 5.1 5.1 4.6
2.5 2.1 1.2 2.0 1.3 1.9 2.6 2.8

R
10.4 9.8 7.9
2.3 1.8 1.4

8.7

L
7.0 8.6 7.2
1.6 2.2 2.0

+1.1

1.8 1.7 4.8 3.9 3.4 3.8 4.4 4.3 2.6
2.8 2.5 2.2 1.6 2.0 1.5 1.9 2.4 2.6

11.8

1.3 12.6 12.4 12.1 11.2 11.5 12.5 12.6 9.5
3.3 2.1 1.6 1.5 2.0 1.5 1.9 2.4 2.6

4.8

2.2 10.5 10.7 9.7 9.5 10.1 11.2 11.2 9.2
3.3 2.3 1.8 1.4 2.0 1.6 2.4 2.3 2.4

2.4

0.80 5.1 5.3 4.6 4.2 4.6 5.3 5.9
2.6 2.2 1.9 1.4 2.0 1.5 1.9 3.4

9.0

8.9 11.0 10.1 10.0 10.5 12.0 12.9 11.7
2.3 2.1 1.6 2.0 1.5 1.9 1.9 3.1

	T	H.I	-	TP Elev.	Sta Elev
T.P. 303	1.27	1036.86 ✓ 1025.67	12.46	1024.40 (5.4)	20 ³
304				(10.9)	14 ⁸
T.P. 305	1.84	1014.89	12.94	1012.74 (5.1)	09 ⁵
306				(7.9)	06 ⁷
307	3.16	1008.97	8.76	1005.81 (3.7)	05 ³
308				(4.3)	04 ⁷
309				(4.3)	04 ⁷
T.P. B.M.	3.21	1007.75	4.43 4.90	1004.54 1002.85	00 ⁰

(7.8)

$\frac{7.1}{22}$ $\frac{7.1}{18}$ $\frac{5.6}{14}$ $\frac{5.4}{20}$ $\frac{5.8}{14}$ $\frac{9.3}{20}$ $\frac{10.5}{27}$ $\frac{9.8}{30}$

(16.3)

$\frac{16.6}{30}$ $\frac{16.5}{21}$ $\frac{11.3}{14}$ $\frac{14.9}{20}$ $\frac{11.6}{14}$ $\frac{15.6}{20}$ $\frac{15.8}{30}$

(9.6)

$\frac{10.8}{30}$ $\frac{10.2}{20}$ $\frac{5.0}{12}$ $\frac{5.1}{20}$ $\frac{5.4}{14}$ $\frac{8.9}{20}$ $\frac{9.9}{30}$

(10.8)

$\frac{12.8}{33}$ $\frac{14.0}{29}$ $\frac{12.0}{21}$ $\frac{8.3}{15}$ $\frac{7.9}{20}$ $\frac{8.4}{13}$ $\frac{13.4}{21}$ $\frac{14.4}{29}$ $\frac{13.8}{31}$

(5.4)

$\frac{6.7}{22}$ $\frac{8.1}{29}$ $\frac{8.1}{25}$ $\frac{7.1}{23}$ $\frac{3.9}{13}$ $\frac{3.7}{20}$ $\frac{4.2}{13}$ $\frac{6.6}{14}$ $\frac{7.9}{24}$

(4A)

$\frac{4.2}{34}$ $\frac{6.5}{28}$ $\frac{6.6}{22}$ $\frac{4.9}{17}$ $\frac{4.3}{20}$ $\frac{4.6}{16}$ $\frac{5.9}{20}$ $\frac{6.4}{27}$ $\frac{4.0}{31}$

(4.9)

$\frac{4.2}{28}$ $\frac{6.0}{25}$ $\frac{5.9}{19}$ $\frac{4.7}{17}$ $\frac{4.3}{20}$ $\frac{4.6}{16}$ $\frac{6.4}{20}$ $\frac{5.6}{27}$ $\frac{4.5}{29}$

U.S.G.S. Mont. Left of Sta. 317+15
 Elev. 1002.93 error. 0.08

2.7 3.2 2.4 4.0 7.1 7.6 7.7 7.2 5.6 4.9 3.5
00 00 10 17 20 30 40 01 23 27 28

Original Sections
of
Borrow Pit

Sta 0+00 to 6+40
Dakota Co. Proj. 2200
Ramsey Co. Road acct No 86
Hampton Richvalley
6/16/23

Unclassified Order
No 21-Item (b)

Sta	+	HI	-	Elev.
B.M.	1.08	1001.08 ✓		1000.00
	5.60	999.28 ✓	7.40	993.68 ✓
			9.72	989.56
1+00				
1+30				997.5
1+75				97.3
2+00				97.2
2+50				96.7
3+00				97.3
3+35				97.3
3+40				97.3
T.P.	7.26	998.82 ✓	7.72	991.56 ✓
4+00				96.5
4+50				96.2
5+00				96.7
5750				96.8

Elev. of water 6/16/73

997.1 $\sqrt{\begin{matrix} 2.2 & 5.1 & 5.1 & 1.7 & 2.0 \\ 6 & 17 & 30 & 40 & 66.4 \end{matrix}}$

1.8 6.5 7.3 2.1
00 15 33 66.2

2.0 6.2 6.5
00 15 57.4

2.1 5.7 6.7
00 15 56

2.6 7.2 7.7 5.7 6.3
00 15 23 40 57.8

2.0 7.3 5.3 5.0
00 15 25 60.4

2.0 5.7 7.0 5.7 4.8 5.6
00 15 18 20 25 59.2

91.6 $\frac{7.7}{25} \quad 7.7$
59.2

91.6 7.2 5.0 4.7 6.0
17 22 45 57.4

2.6 7.2 7.2 5.8 5.5
00 15 23 30 58.4

2.1 7.2 7.2 6.6 5.7 4.7 5.9
00 16 23 28 32 47 59.6

2.0 6.7 6.9 5.1 5.2
00 15 23 38 59.0

sta + HI - Elev.

998.82

6+00

95.8

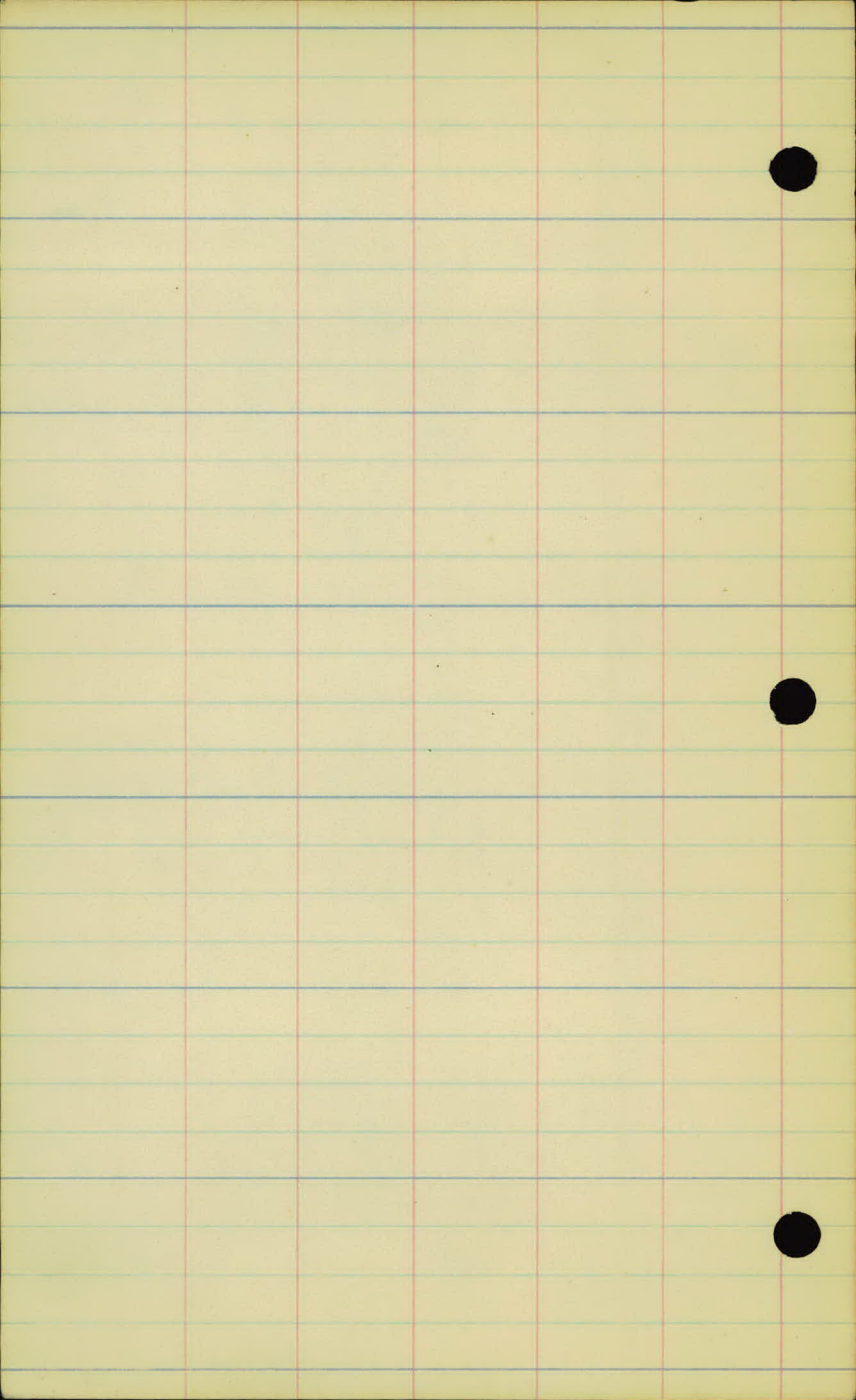
6+40

93.1

6+45

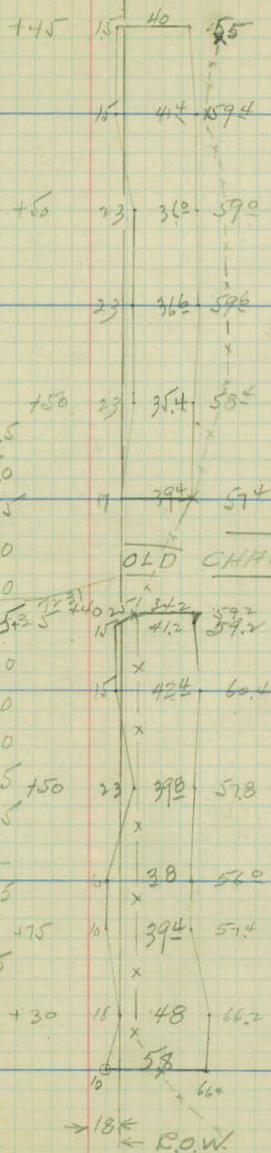
91.6

$$\begin{array}{r} 3.8 \\ 00 \end{array}$$
$$\begin{array}{r} 4.6 \\ 15 \end{array}$$
$$\begin{array}{r} 5.0 \\ 59.4 \end{array}$$
$$\begin{array}{r} 5.7 \\ 00 \end{array}$$
$$\begin{array}{r} 4.1 \\ 70 \end{array}$$
$$\textcircled{91.6}$$
$$\begin{array}{r} 7.2 \\ 15 \end{array}$$
$$\begin{array}{r} 7.2 \\ 52 \end{array}$$



New Channel → 22

6
5
4
3
2
1



593 cu yds.

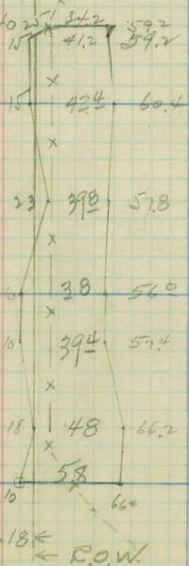
6/16/23
Corner

- 40.7 x 15 = 610.5
- 38.7 x 50 = 1935.0
- 36.3 x 50 = 1815.5
- 36.0 x 50 = 1800.0
- 37.4 x 50 = 1870.0
- 38.7 x 5 = 193.5
- 41.8 x 35 = 1463.0
- 41.1 x 50 = 2055.0
- 38.9 x 50 = 1945.0
- 38.7 x 25 = 967.5
- 43.7 x 45 = 1966.5
- 53 x 30 = 1590

Total 4 ft = 16,411.5

approx 600 cu yds
pr. ft. embank.

OLD CHANNEL →

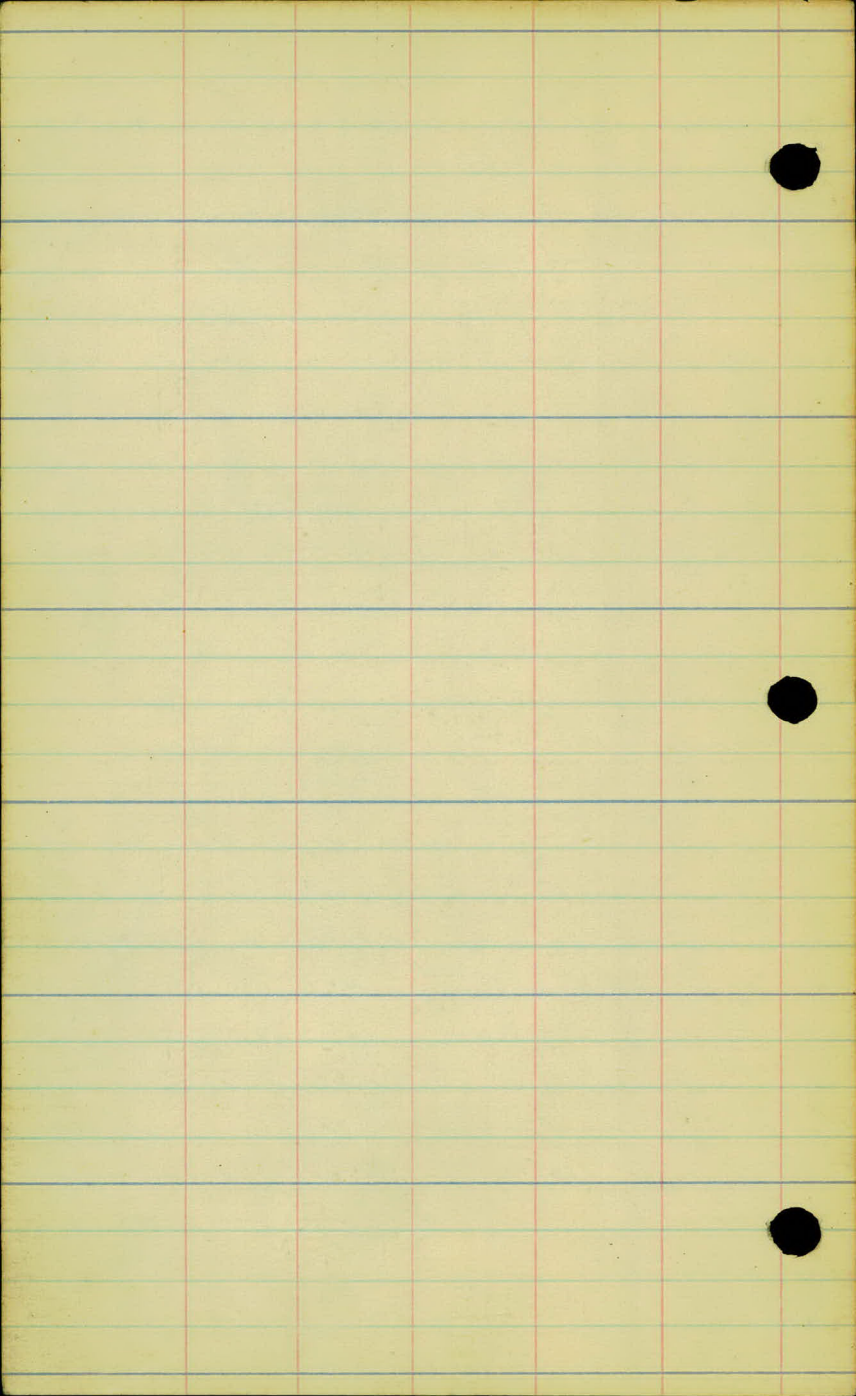


772 cu yds.

Ant. Topog. of Borrow pit
Estimated yardage available

→ 18' ← R.O.W.

← Shoulder Stakes
15 ft. 15 ft. 15 ft.



Re X sections
of
Borrow pit

Sta 0+00 to 6+40

Dakota County Proj 2200

Ramsey Co. Road acct No. 86

Hampton - Rich valley

7/19-23

	+	H.I.	-	Elev.
B.M.	0.98	1000.98 ✓		1000.98 ✓

01

01+30

01+55

01+75

02+00

02+30

02+50

03

03+35

T.P	1.73	1000.45 ✓	2.26	998.72 ✓
-----	------	-----------	------	----------

03+40

03+90

04

Rt.

7-19/23
24
40
New
Exc.
w. 31.5
+20

spike in 31" maple - 60 ft. Lt. of Sta 0+20
0+65 = Zero Excav.

2.9
2.7/20 3.2/26 3.4/30 6.0/37 7.1/40 7.6/40 7.7/40 7.2/41 5.8/43 4.9/47 3.5/58

3.5
2.1/20 7.1/30 8.6/35 8.9/38 8.4/33 7.2/42 3.9/65

Zero Excavation

Excavation

Zero Excavation

4.3
3.1/20 8.6/23 8.8/25 9.0/23 9.1/40 8.1/38

3.7
3.1/20 6.4/27 8.3/35 9.0/21 9.7/30 8.0/27 6.9/21

3.7
3.1/20 6.3/28 7.6/35 8.3/20 8.9/25 9.8/28 9.2/20 7.2/20

Zero Excavation

Zero Excavation

8.9
7.6/20 6.5/23 7.6/27 6.8/22 9.3/25 9.8/21 9.3/25 7.7/28

Shoulder of Road to Rt. 511

Proj - 2200 Re-Cross Section
of Borrow Pit on Right
from Sta. 0+20 to Sta. 6+44

+ H. I. -

1000.45

04+50

05+00

05+50

06+00

06+40

06+45

1002.89

998.21

T. P.

4.68

1002.89

2.24

998.19

B. 177

2.88

999.97

1000.00 ✓

1000.01

E.

RT.

25
219/23
25
6-18
107112

4.3

21/20 31/20 62/20 74/20 93/20 97/27 95/30 87/41 87/57 71/59

3.8

21/20 60/27 51/13 27/16 86/23 88/24 90/34 93/27 52/58 61/60

3.7

21/20 113/29 84/14 83/13 84/23 84/28 87/38 86/57 70/58

4.7

24/20 119/24 58/12 69/15 77/19 84/37 93/56 67/59

7.4

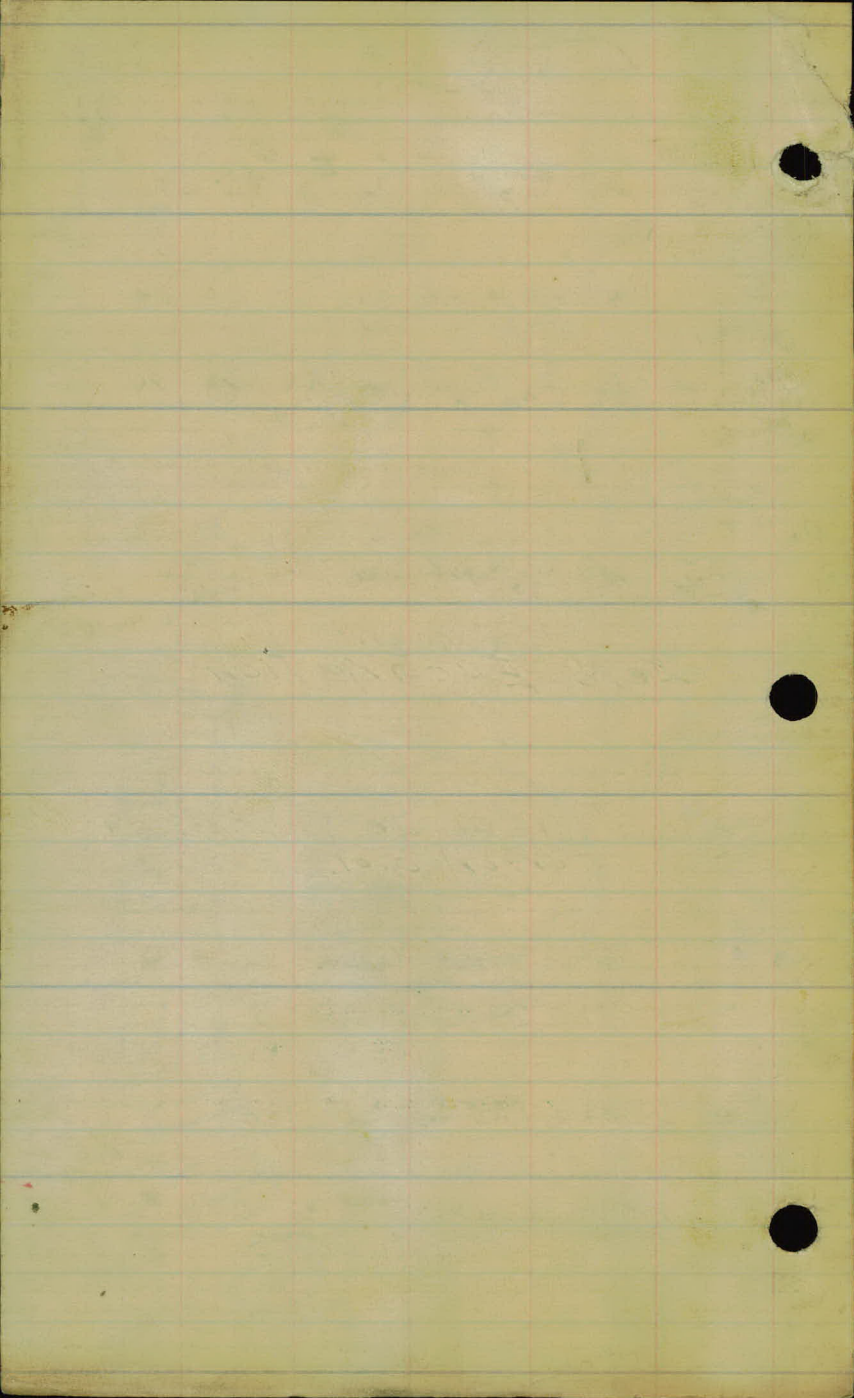
11/10 73/29 85/25 90/20 42/55 75/56

15' St. of Road

Zero Excavation

Shoulder line

spike in 30" Maple 60' it. of sta 9+20
error 0.01.



6 2441