

COUNTY DITCH No 11  
CASS CO  
MINN.

FIELD BOOK

15

# KEUFFEL & ESSER CO.

## DRAWING MATERIALS AND SURVEYING INSTRUMENTS. NEW YORK.

CHICAGO. ST. LOUIS. SAN FRANCISCO. MONTREAL.

### TABLES FOR EXCAVATIONS AND EMBANKMENTS.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.  
ROADWAY 18 FEET WIDE. SIDE SLOPES 1 TO 1.  
FOR SINGLE TRACK EXCAVATION.

*"Copyright, 1895, by Keuffel & Esser Co."*

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	0
1	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	1
2	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	2
3	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	3
4	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	4
5	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	5
6	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	6
7	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	7
8	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	8
9	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	9
10	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	10
11	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	11
12	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	12
13	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	13
14	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	14
15	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	15
16	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	16
17	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	17
18	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	18
19	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	19
20	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	20
21	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	21
22	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	22
23	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	23
24	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	24
25	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	25
26	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	26
27	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	27
28	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	28
29	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	29
30	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	30
31	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	31
32	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	32
33	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	33
34	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	34
35	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	35
36	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.

For Keith's Railroad Curve Tables see end of book.

#### NOTICE OF FILING OF AND HEARING ON DITCH PETITION.

Notice is hereby given that a petition, of which the following is a copy, has been filed in the office of the County Auditor of Cass County, State of Minnesota, and that a hearing will be had upon said petition before the County Board, at the office of the County Auditor of said County, in the Village of Walker, on the 3rd day of April, A. D. 1917, at 10 o'clock A. M.

Dated at Walker, Minn., this 26th day of February, 1917.

C. D. BACON,  
County Auditor.

PETITION FOR PUBLIC DITCH.  
To the County Board of the County of Cass, State of Minnesota:

The undersigned land owners, whose lands will be liable to be affected by or assessed for, the expense of the construction of the County Ditch hereinafter described, would respectfully represent that the public health, convenience and welfare and the reclamation of wet and overflowed lands require the establishment and construction of County Ditch along the following described route in the Towns of Becker and May, in said County of Cass, and that the construction of the same would be of public benefit and utility, and is necessary for the following reasons, to-wit:

Drainage of land and road now subject to overflow

A general description of the proposed starting point, route and terminus of said ditch is as follows: Commencing at a point near the center of SW $\frac{1}{4}$  Sec. 19, Town 134, Range 31; thence in a Southwesterly direction to the NE corner of Section 25, 134-32; thence south a distance of one mile through said section 25 to a point on the town line between towns 134-32 and 134-31, near the NE corner of Section 36, 134-32; thence a nearly easterly course through the NW $\frac{1}{4}$  of Section 31, 134-31; thence in a southeasterly course across the NE $\frac{1}{4}$  of said section 31, 134-31 and terminating in Mosquito Creek at a point near the South line of NE $\frac{1}{4}$  of Section 31, 134-31.

And your petitioners pray that you will proceed to establish such County Ditch and cause the same to be constructed as provided by Chapter Two Hundred Thirty (230), of the General Laws of Minnesota for 1905, and acts amendatory thereof.

Dated February 3rd, 1917.

JAMES FRANCISCO,  
PALMER GOPLEN,  
F. HAZUKA,  
A. H. HENWOOD,  
R. RASMUSEN,  
M. HOLUB,

Petitioners.

COUNTY DITCH NO II

INDEX

Alignment of Main Ditch & Extension of offtake ditch	1 to 8
Traverse Notes	9 to 17
Levels including extension of offtake soundings on page	18 to 31 32

using 8°00' variation

19446<sup>5</sup> Δ 28°04' L 51°38' E N side of E and W Road

19408<sup>5</sup> N & S Twp Fence Line 3 wires

18

17

16

15

14

13

12

11

10

9483<sup>2</sup> Δ 34°33' R. S 26°24' W

9

8

7

6

5493<sup>7</sup> Δ 8°42' R. 58°07' E } End of off take ditch

5

4

3

2+19.7 } East west fence 2 wires

2

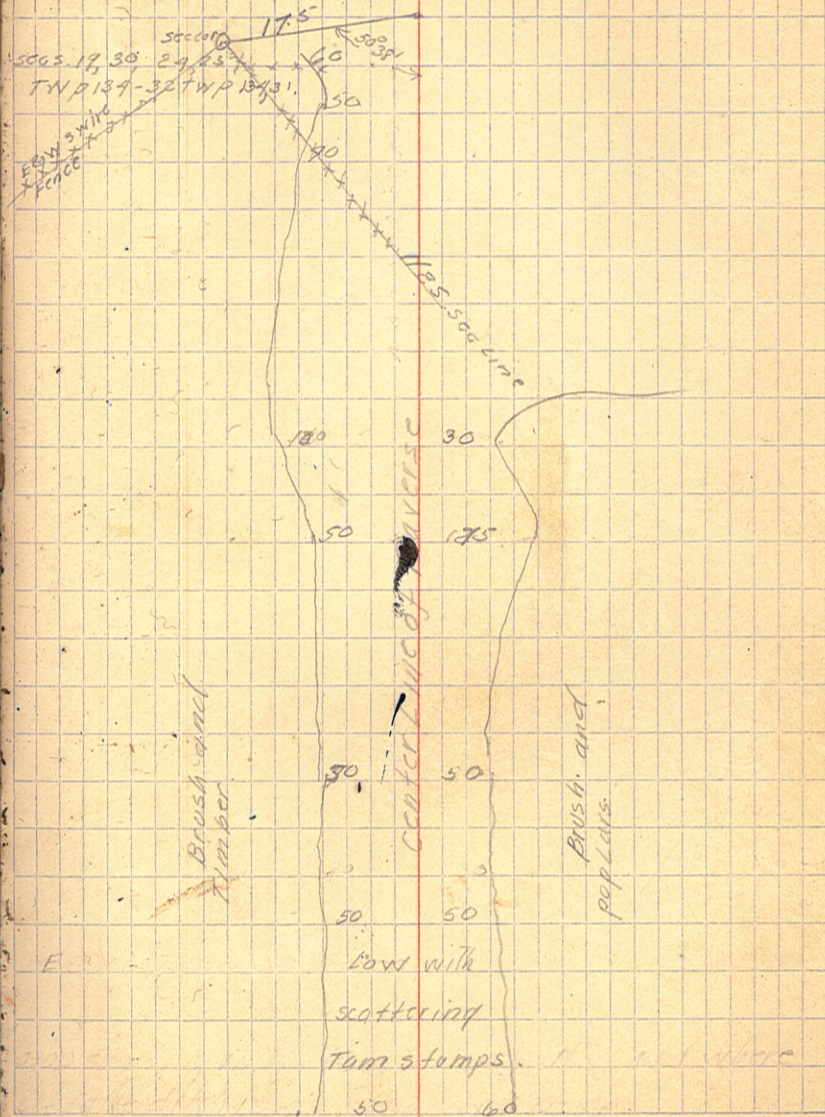
1

0+00 } 516°49' E  
0+00 initial point in off take ditch  
13.5937 FT N of End where off take ditch  
13 1/4' wide and 16' deep

Co ditch No 11

G Tomasel ASST ENGR

W Starkweather Redman June 21 1917



38

37

36

35

34+27.7  $A35^{\circ}28' L$   $S15^{\circ}58' E$

33+60.5  $E$  and  $W$  Fence 3 wires

33

32

31

30

29

28

27

26

25

24

23

22

21

20

19+81.8  $E$  and  $W$  Fence

19+73.4  $A21^{\circ}08' R$   $S19^{\circ}30' W$

173.2

End of culvert

164.5

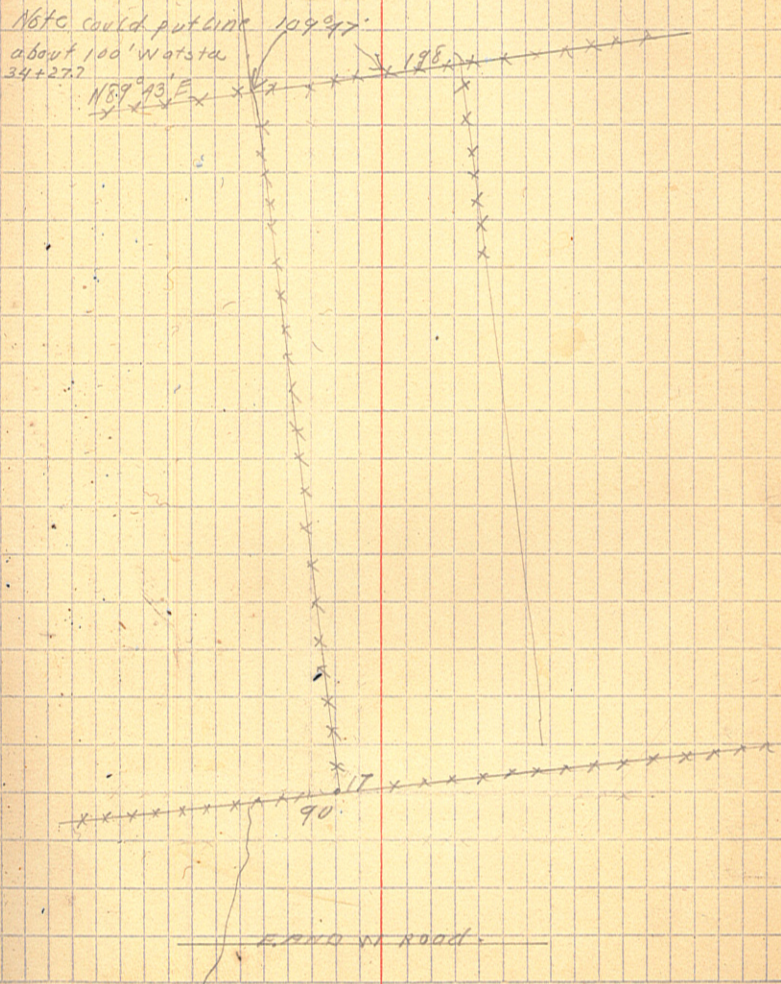
center of Road

19+55.5  $30" \times 18" C.P.$

June 21 1917

2

SUMMARY



61

60

59

58+70<sup>3</sup> Δ 13°08' Z 513°24'W say 10' EX

58

57

56

55

54

53

52

51

50

49

48+52<sup>9</sup> Δ 42°20' R 526°32'W N2' EX +

48

47+55<sup>0</sup>

East west rail fence partly wired

47

46

45

44

43

42

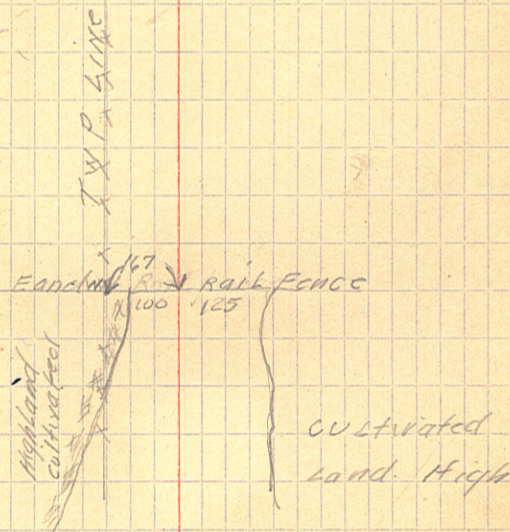
41

40

39

June 22 1917.  
same crew.  
cool and cloudy day

3



June 22, 1917

7

84

83

83+24.7 Δ R.

82

81

80

79

78

77

76+835

E and W fence 2 wires N line scc 36

76

TWP 134 R 32 75+24.2 Δ L. 20' N of scc line

75

74

73

Change of line

72+70.3 Δ 64° 21' L S 50° 57' E 72+70.3 Pot.

72

71

70

69

68

67

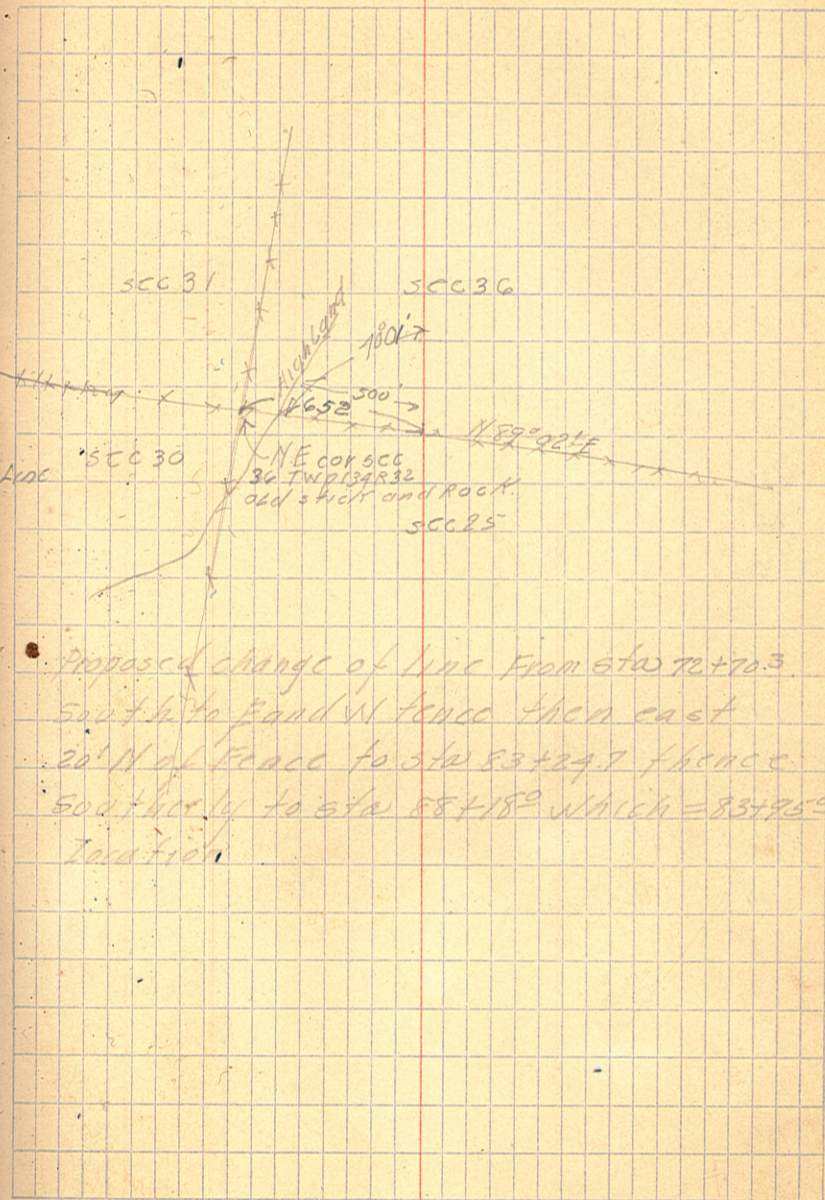
66

65

64

63

62



107

106

105

104

103

102

101

100

99

98

97

96

95

94

93

92

91

90

89

88

87

86

85

to off take ditch which will

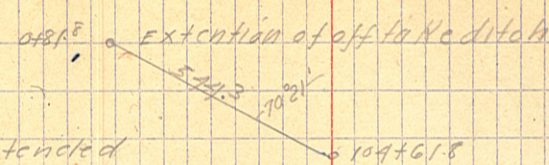
$\Delta 33^{\circ}07' \text{ L } 584^{\circ}04' \text{ E}$

$88+18^{\circ} = 83+95^{\circ}$

E.L. line of SEC 36 TWP 13 N R. 32

June 22 1917

5



to be extended

road

of location

