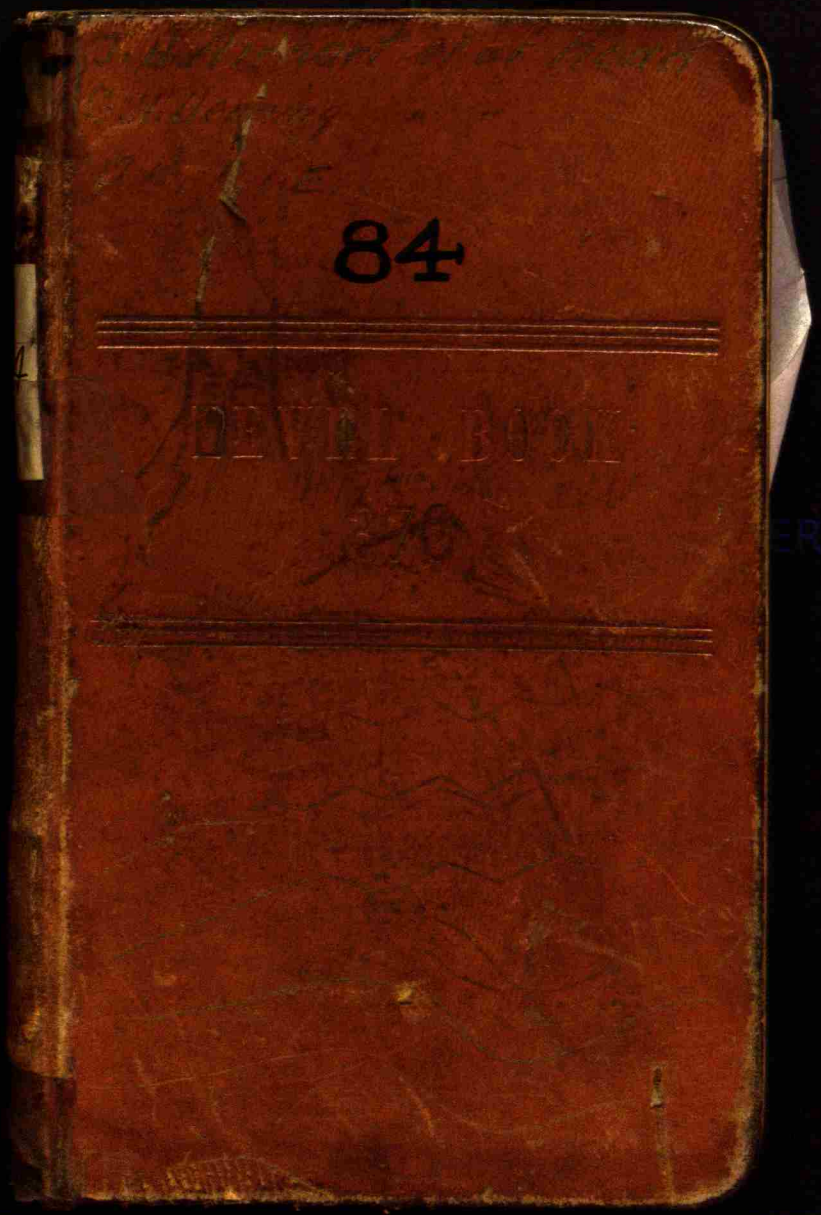

84
LEVEL BOOK

66

Stone 132+95 30

Bridge 133+90 13 41

Sewer 136+0

9306
7974
32

10637
5313
5324
5280
44

10637
9306
1331

53+13
2657
4 | 2656
664

13295
10637
2658

14609
13295
14

15922
14609
1313

5280
3
15840
15922
82

100
37
63
37

195

131

159+22
132+95
26+27

J.H. Airhart et al

1. Cor stone between Secs. 15+16					X ✓
26+57	stone at		#2		X ✓
53+13	"	"	#3		X ✓
66+43	"	"	#4		
79+74	"	"	#5		X ✓
93+6	"	"	#6		
106+37	"	"	#7		X ✓
132+95	"	"	#8		X ✓
146+9	"	"	#9		
159+22	"	"	#10		X ✓

Stat	F.S.	H.I.	B.S.	Elev	Grade	Cut	Fill	Remarks
		101.50						
0	1.49	101.49	1.49	100.00	100.00			Top of stone at #1
1	2.2			99.3	99.2	.1		S.E. wing
2	3.1			98.4	98.4			
3	3.7			97.8	97.7	.1	.1	Ditch begins at end of
4	4.3			97.2	96.9	.3	.3	bridge running S to
5	4.9			96.6	96.2	.4		14' wide. Thread 6'
6 ℄	5.96			95.53	95.40	.1		W. of E. line of road
℄		98.52	2.99					Edge of road at ditch
7	3.5			95.0	94.7	.3		bank
8	3.6			94.9	94.3	.6		8+85 Smith's gate
9	4.5			94.0	94.0			Bottom rep. 9+65
	8.6			89.9				Bottom of ditch E side
	7.9			90.6				of bridge at Smith's
10	4.8			93.7	93.3		.2	30"-16' cor. sewer in place
11	5.3			93.2	93.8		.6	Bridge at 9+45
12 ℄	5.59			92.93	93.6		.7	10' flat top req.
		97.64	4.71					Skew 10° Rt forward
								11+85. Airlie's gate

Stat	F.S.	H.I.	B.S.	Elev	Grade	Cut	Fill	12+95	ditch	leaves	Road
13	5.2	97.64		92.4	93.5		1.1	13+92	15" Sewer		
14	4.7			92.9	93.4		.5				
15	4.9			92.7	93.2		.5				
16	4.9			92.7	93.1		.4				
17	4.5			93.1	93.00	.1					
18	3.9			93.7	93.2	.5					
~~19~~ 20 ⊙	4.10			93.54	93.4	.1					
~~20 10~~		97.6 97.37	4.03								
20 ~~12~~	5.1			92.5	93.6		1.1		18" Sewer Water E.		
	8.1			89.5					W. end of		
21	4.4			93.2	93.8		.6				
22	3.5			94.1	94.1						
23	3.4			94.2	94.4		.2				
24	3.3			94.3	94.6		.3				
250	2.85			94.72	94.8		.1				
		9.972	5.00								
26	4.00			95.7	94.8	.9					

Stat	B.S.	H.I.	F.S.	Elev	Grade	Cut	Fill	Remarks
39	5.4	89.81		84.4	88.6		4.2	
40	5.8			84.0	87.4		3.4	
⊙	4.2			85.61				W. edge bridge floor
		93.0 92.96	7.35	B.S & F.S.	to here interchange			9.5 below to bottom of
41			7.00	86.0	87.4		1.4	stream a W end
42			4.8	88.2	87.4		.8	30' arch req'd
⊙			5.9	87.1				Center stream 40+64
	4.00	91.10						E. side 6' fill at ℄ road
43			2.8	88.3	87.4	.9		
44			2.1	89.0	87.4	1.6		
45			3.7	87.4	87.4			
46			5.0	86.1	86.8		.7	
47			5.8	85.3	86.2		.9	
48 ⊙			6.60	84.5	85.6		1.1	
π	4.40	88.90						
49			4.80	84.1	85.0		.9	49+25 12"
50			5.00	83.9	84.4		.5	

Stat	B.S.	H.I.	F.S.	Elev	Grade	Cut	Fill		
51		88.90	3.50	85.4	83.8	1.6			
52			5.60	83.3	83.2	.1			
52+88	Culvert reqd								
53			6.50	82.4	82.5		.1		
			6.60	82.3				+ roads	
540			7.24	81.66	81.6				
	3.65	85.31							
55			4.1	81.2	81.4		.2		
56			4.5	80.8	81.2		.4		
57			4.6	80.7	81.0	.3		57 +78 12"	
58			4.6	80.7	80.8		1	12" A.E.T pipe in	
59			4.1	81.2	82.0		.8	place herafter	
60			3.1	82.2	83.2		1.0		
61 ⊙			1.87	83.44	84.3		.9		
	6.40	89.84			83.1				
62			4.4	85.4	85.4				
63			3.7	86.1	85.1	1.0			
64			3.8	86.0	84.8	1.2			

Stat	B.S.	H.I.	F.S.	Elev	Grade	Cut	Fill			
65		89.84	4.6	85.2	84.5	.7				
66			5.6	84.2	84.2					
67 ⊙			6.86	82.98	84.3		1.4			
T	3.88	86.9 86.86								
68			4.8	82.1	84.3		2.2		68+21	6' flat top
69			5.3	81.6	84.4		2.8			
70			4.2	82.7	84.4		1.7			
71			2.2	84.7	84.5	.2			71+25	J. Johnson Cote
72			1.1	85.8	84.5	1.3				
73 ⊙			1.24	85.62	84.6	1.0				
	2.13	87.75								
74			3.20	84.5	84.6		1			
75			4.5	83.2	84.3		1.1		75+85	15'
76			4.7	83.0	84.1		1.1			
77			4.2	83.5	83.8		.3			
78			3.1	84.6	83.5	.6				
79 ⊙			3.62	84.13	83.3	.8				

Stat	B.S.	H.I.	F.S.	Elev	Grade	Cut	Fill				
℄	2.70	86.83		84.13							
80			3.1	83.7	83.1	.6					
81			4.0	82.8	82.8						
82			4.6	82.2	82.3		.1				
83			5.0	81.8	81.8						
84			5.7	81.1	81.3		.2				
85 ⊙			6.40	80.43	80.8		.4				
℄	4.12	84.55									
86			4.1	80.4	80.3	.1					
87			4.3	80.2	79.9	.8					
88			4.3	79.6	79.6						
89			5.0	79.5	79.7		.2				
90			5.6	78.9	79.8	.1			90+9 W End 30"		
91 ⊙			5.05	79.50	79.9		4		Skew 9' Skew Int		
℄	4.50	84.00									
92			4.50	79.5	80.1	~~.4~~	6				
93			5.10	78.9	80.1		1.2	93+55	18"		

Stat.	B.S.	H.I.	F.S.	Elev.	Grade	Cut.	Fill				
94		84.00	4.7	79.3	80.2		.9				
95			4.2	79.8	80.3		.5				
96			2.9	81.1	80.3	.8					
97			2.6	81.4	80.4	1.0					
98 ⊙			3.29	80.71	80.5	.2					
π	2.86	83.6 83.57									
99			3.7	79.9	80.5		.6		99+60	12"	
100			3.7	79.9	80.0		.1				
101			3.1	80.5	79.0	1.5			101+70	Annich's gate	front
102			2.6	81.0	78.0	3.0					
103			6.2	77.4	77.0	.4					
104 ⊙			8.38	75.19	75.9		.8				
π	1.48	76.8 76.67									
105			2.00	74.8	74.8						
106			2.8	74.0	73.8	.2					
106+05 H dwls req'd			3.3	73.5	72.7				X Roads		
107			3.8	73.0	72.7	.3					

Stat.	BS	H.I.	FS	Elev	Grade	Cut	Fill			
		76.7								
108		76.67	4.9	71.8	71.8					
109			5.2	71.5	71.7		.2			
110			5.3	71.4	71.6		.2			
111			5.3	71.4	71.5		.1			
112 Q			4.73	71.94	71.4	.5	.5			
T	1.06	73.02								
113			1.7	71.3	71.4		.1			
114			2.6	70.4	69.8		.6			
115			4.8	68.2	68.2					
116			5.5	67.5	68.1			.6	116+45	12"
117			5.6	67.4	68.0			.6	9' skew	1 wt.
118 Q			5.54	67.48	67.9			5		
T	4.35	71.83								
119			3.80	68.03	67.8	.2				
120			4.30	67.5	67.6		.1			
121			4.5	67.3	66.9	.4				
122			5.3	66.5	66.2	.3				

8.0
71.8
8.2
1.0

67.6
64.2
3.4
.7

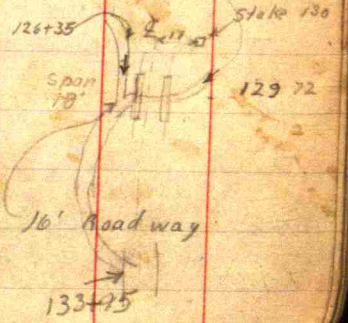
Stat	B.S.	H.I.	F.S.	Elev	Grade
123		71.83	5.9	65.9	65.5
124 ⊙			6.53	65.30	64.8
	2.08	67.4 67.38			
125			3.20	64.2	64.2
126			3.9	63.5	64.1
127			4.0	63.4	64.1
128			4.5	62.9	64.0
129			4.4	63.0	64.0
⊙			3.99	63.39	
π	4.24	67.63			

Cut	Fill
4	
5	
	.6
	.7
	1.1
	1.0

Grade level each way from top of bridge
Concrete wall on W
Side road W to where ditch enters

Road over flows from 124 ~~to~~ 50 to

Ditch comes in road 126+35
Bottom of ditch
Runs S on W side of road. E end 23' W of E line of road
Thread 30' W of same
W side bridge floor 5' 4" from floor to bed of stream



Stat	B.S.	H.I.	F.S.	Elev	Grade	Cut	Fill	
130		67.63	4.7	62.9	63.9		1.0	
131			4.9	62.7	63.9		1.2	
132			4.6	63.0	63.8		.8	
133			6.1	61.5	63.8		2.3	
⊙			4.2	63.43	63.0		.4	Top of iron
ℸ	1.60	65.03						bridge floor
134			~~4.60~~	~~60.4~~				20' span rod
135			4.0	61.0	63.7		2.7	8' from floor to
136			4.5	60.3	63.7		3.2	bottom
137			4.6	60.4	63.6		3.2	8' stem Inf
138 ⊗			3.9	61.1	63.6		2.5	
139 ⊙			2.91	63.62	65.6			136 ~~45~~ W end
ℸ	6.35	71.30 7097						24" 12' stem Inf
140			3.40	67.6	64.2	3.4		
141			2.90	68.1	64.7	3.4		
142			3.9	67.1	65.3	1.8		
143			3.9	67.1	65.9	1.2		

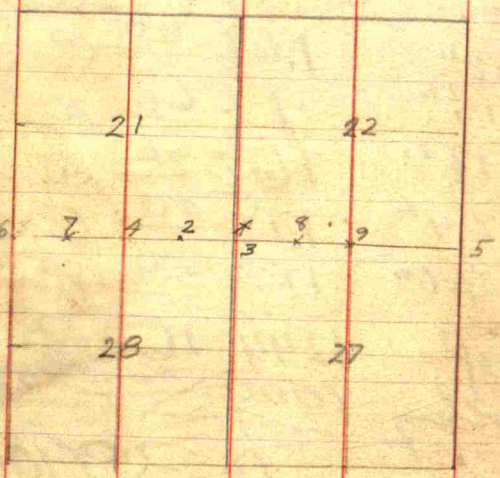
63.6
64.2
6

Stat.	B.S.	H.I	F.S.	Elev	Grade	Cut	Fill
144		71.00	4.1	66.9	66.4	.5	
145			4.0	67.0	67.0		
146.0			3.41	67.59	67.0	.5	
	4.90	72.5 72.49					
147			4.10	68.4	66.9	1.5	
148			3.5	69.0	66.9	2.1	
149			2.3	70.2	66.8	3.4	
150			1.0	71.5	66.8	4.7	
151			7.2	65.3	66.8		.5
152				65.2	66.8		1.6
153			7.32	65.17	66.8		1.7
150	4.62	69.8 69.79					
154			5.00	64.8	66.8		2.0
155			5.00	64.8	66.8		2.0
156			4.50	65.3	66.8		1.5
157			5.00	64.8	66.8		2.0
						157 + 18	18" culvert
158			4.70	65.1	66.8		1.7
159			3.1	66.7	66.8		.1

5280
3
158+40
1592
4
34

30

G. H. Henning et al. Road.



6 Beech 20 N 48½E 35½

2 18x12 Beech 12 S 85½E 71

3 20x20x16 Ash 30 S 83E 215

4 10x12

3 B. Walnut 8 N 19½E 98

5 11x8 Stone West 12'-9"

31

6 Catalpa N 5W 61'

7 13+25 Stone N. 16'

4 26+52 — Stone 4' off line North

2 39+76 Cedar 24" S 45° W 43'

3 53+01 Walnut 15" N 10° E 66'

8 66+30 Forked W. Cherry N 80W 25'

9 79+59

5 106+17 Big rock E 19.75

Stat	BS	H.I	F.S.	Elev	Grade
0	2.50	52.50		50.00	50.00
1			2.90	49.6	49.6
2			3.30	49.2	49.3
3			3.50	49.0	49.0
4			3.70	48.8	48.6
5			4.50	48.0	48.3
6			4.7	47.8	48.0
7 ⊙			5.45	47.05	47.6
	2.76	49.81			
8			3.2	46.6	47.3
9			4.0	45.8	47.00
10			4.6	45.2	47.4
10+15			7.3	42.5	
			7.5	42.3	
11			3.9	45.9	47.6
12			3.5	46.3	48.2
13 ⊙			2.94	46.87	49.7

May 19, 1914
Clear. Very cool

Cut	Fill	
	.1	
.2		
	3	
	8	
	6	
	4	
	.7	
	1.2	
	2.2	6' Flat top
		N. end bottom
		S. " "
	1.9	
	1.9	
	1.8	

Stat	BS.	H.I. 550	FS.	Elev.	Grade	Cut	Fill			
	8.12	54.99		46.87						
BM			7.81	47.18				Top of big rock at side		
14			7.2	47.8	49.1		1.3	of road opposite stone 9		
15			5.2	49.8	49.6	.2				
16			2.5	52.5	50.00	2.5				
17			2.7	52.3	50.00	2.3				
18 ⊙		56.9	2.81	52.18	50.00	2.2				
	4.70	56.88								
19			4.9	52.0	50.00	2.0				
20			4.3	52.6	50.00	2.6				
21			4.6	52.3	50.00	2.3				
22			6.1	50.8	50.00	.8				
23			7.3	49.6	49.5	.1				
24 ⊙			7.93	49.05	49.1	.0				
⊼	2.40	51.5 51.45								
24+45			4.1	47.4				15"	South	
			4.2	47.3					North	

Stat	B.S.	H.I.	F.S.	Elev.	Grade	Cut	Fill				
		51.5									
25		51.45	3.5	48.0	48.5		.5				
26			4.2	47.3	47.9		.6				
B.M			4.75	46.70				Top of stone # 4			
27			5.0	46.5	47.3		.8				
28			5.8	45.7	46.7		1.0				
29 ⊙			6.28	45.17	46.1		.8				
		48.5									
π	3.30	48.47									
30			3.9	44.6	45.5		.9				
31			4.3	45.2	44.9	.3					
32			4.5	44.0	44.3		.3				
33			4.5	44.0	43.7	.3					
34 ⊙			4.91	43.56	43.0	.6					
π	3.28	46.84									
35			4.00	42.8	42.4	.4					
36			4.3	42.5	41.8	.5					
37			4.7	42.1	41.2	.9					
38			5.3	41.5	40.6	.9					

Sta	B.S.	H.I.	F.S.	Elev.	Grade	Cut	Fill	
39 ⊙		46.84	6.51	40.33	40.00	3		
	.63	41.0 40.99						
40			2.8	38.2	40.3		2.1	
40+52			8.6	32.4				South Bottom
			8.4	32.6				N. "
41			3.4	37.6	40.6		3.0	8' arch at flat top.
B.M.			3.37	37.62				11' skew r.w.f.
42			3.0	38.0	41.9		2.9	Top of blue rock at N. side road
43			2.1	38.9	41.2		3.3	at 44+15
44 ⊙			1.61	39.33	41.5		1.5	
TT	6.04	46.02						
44+27			7.4	38.6				South 15"
			7.0	39.0				N
45			5.4	40.6	41.7		1.1	
46			4.1	41.9	42.0		.1	
47			3.0	43.0	42.0	1.0		
48			1.5	44.5	42.0	2.5		

Stat	BS	H.I.	FS.	Elev	Grade	Cut	Fill
49 ⊙		46.02	0.00	46.02	42.0	4.0	
		45.9					
T	-.15	45.87					
50			1.5	44.4	42.0	2.4	
51			3.7	43.2	42.00	1.2	
52			5.9	40.0	39.7	.3	
53			8.5	37.4	37.40		
⊙			8.2				
	2.17	39.83		37.66			
54			3.3	36.5	37.4		.1
55			3.5	36.3	37.2		.9
56			3.9	35.9	37.1		1.2
57			3.8	36.0	36.8		.8
58			3.1	36.7	36.3	.4	
59 ⊙			2.75	37.08	36.0	1.1	
		39.5					
	2.41	39.99					
58			4.6	34.9			
			3.6	35.9			

Rock moon

N. 4½"

S.

Stat	B.S.	H.I.	F.S.	Elev.	Grade	Cut	Fill			
		39.5								
60		39.49	3.5	36.0	35.7	.3				
61			4.6	34.9	35.4		.5			
62			5.2	34.3	35.2		.9			
62+65			9.5	30.0				6' Flat top		
			10.00	29.5				Wings: N.W. 11 to road.		
63			5.7	33.8	34.9		1.1		N.E. ⊥ to .. . r	
64			5.4	35.1	34.7	.4			Others splayed.	
65 ⊙			4.7	34.7	34.4	.4				
		38.6								
π	3.82	38.59								
66			4.5	34.1	34.2		.1			
67			4.7	33.9	34.00	1				
68			4.3	34.3	34.5	.2				
			9.5	29.1				S.	Water flows S.	
			10.0	28.6				N.		
69			4.5	34.1	34.9		.8	68+3	10' bridge	
70			4.3	34.3	35.4		1.1			
71			3.4	35.2	35.9		.7			

Stat	B.S.	H.I.	F.S.	Elev	Grade	Cut	Fill				
72 ⊙		38.59	3.18	35.41	36.4		1.0				
T	6.14	41.55									
73			5.7	35.8	37.1		1.3				
74			5.0	36.5	37.5		1.0				
75			4.2	37.3	37.9		.6				
76			3.7	37.8	38.3		.5				
77			2.7	38.8	38.7	.1					
78			1.2	40.3	39.00	1.3					
79 ⊙			.43	41.12	39.0	2.1					
T	2.60	43.72									
B.M			2.71	41.01				Top of stone #9			
80			3.3	40.4	38.2	1.5					
81			4.0	39.7	38.3	.8					
82			4.8	38.9	38.8	.1					
83			5.2	38.5	38.6		.3				
84			5.3	38.4	38.7		.3				
85			4.9	38.8	38.6	.2					

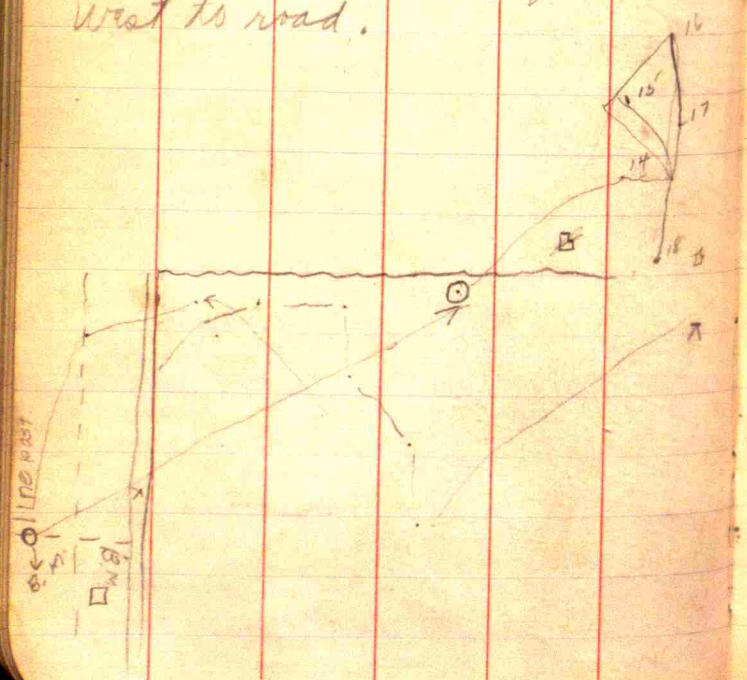
Stat	BS	HI	FS.	Elev	Grade	Cut	Fill			
86 ⊙		43.72	5.55	38.17	38.5	.3				
π	3.55	42.72								
87			4.2	38.5	38.4		.1			
87+50			5.6	37.1				S.	X"	
			5.5	37.2				N.		
88			4.2	38.5	38.2	.3				
89			4.4	38.3	38.1	.2				
90			4.6	38.1	38.0	.1				
91			4.7	38.0	37.9	.1				
92			5.1	37.6	37.8		.2			
93 ⊙			5.20	37.52	37.7		.2			
			6.6	36.1				12" at 93		
			6.4	36.3						
π	5.32	42.84								
94			4.9	37.9	37.6	.3				
95			4.6	38.2	37.5	.7				
96			4.7	38.1	37.5	.6				

Stat	B.S.	H.I.	F.S.	Elev	Grade
97		42.84	6.2	36.6	37.4
97+72			8.0	34.8	
			7.8	35.0	
98			6.3	36.5	37.3
99 ⊙			6.76	36.08	37.2
T.	4.94	41.02			
100			4.1	36.9	37.1
101			3.7	37.3	37.00
102			4.3	36.7	36.0
103			5.0	36.0	35.0
104			6.2	34.8	34.0
105			7.8	33.2	33.0
⊙			8.13	32.89	
T	4.00	36.89			
			4.85	32.0	32.0
B M			4.35	32.54	

Cut	Fill	
	.8	
		5 15"
		N.
	.8	
	1.1	
	.2	
.3		
.7		
1.0		
.8		
.2		
		Over rock #5
		Rock E of #5 E side road

Levels in Apple Vs.

Began in road in front of Alva Routh's house; ran line north along road, thence East and between Fishback's house and barn, thence South to corner of Fishback's field, then West to road.

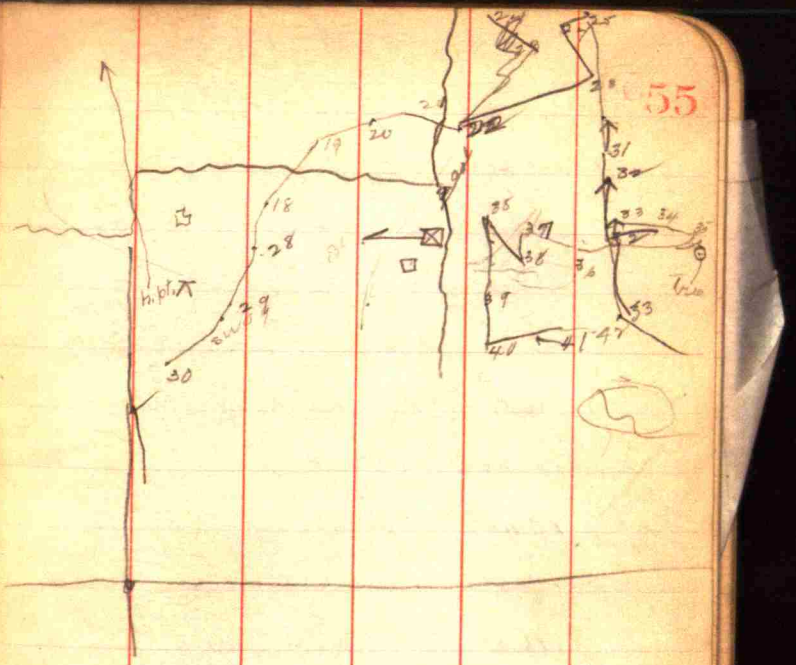


Fair 3/19/21

Routh et al- 4/5-21.
Drainage Suit.

Sta.	Elev.	
B.M. 1	100.00	B.M. Concrete base to iron brace post NE of Routh's house
150 N. 2	99.80	Distances approximate
100 NE 3	99.54	
P. 30' NW 4	100.03	30', rail 30' E. road fence
50' NW 5	100.35	
100' NW 6	101.10	50' S. of rail fence
100' N 7	101.80	" " " "
" " 8	101.55	
250' S. 9	99.22	800' "
9A		
200' S. 10E	97.00	
9B		
300' S 10	94.45	
200' W 11	98.16	across in Owens' barn lot pasture
400 SW 12	93.50	
B.M. 13	98.32	Top of large lone post.
⊙	103.87	3/5' from Road E. to house
14	107.58	300' NE
15	110.31	100' N
16	110.72	200' N. high pt. on divide

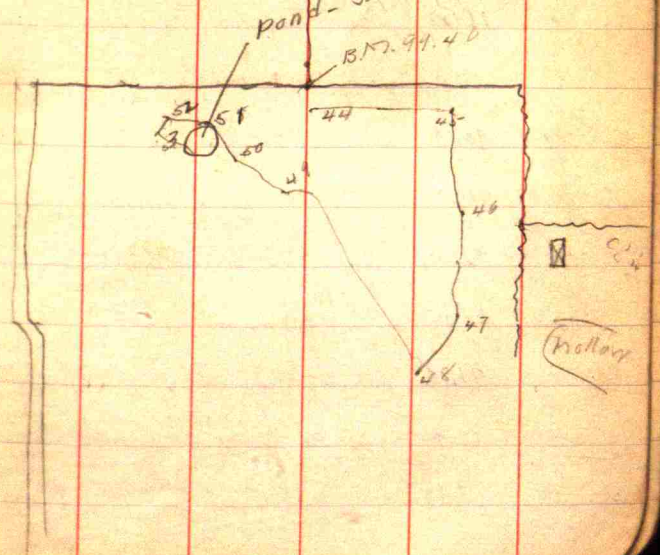
	Elev	
17		
200' SW	109.75	
18		Fish books house.
400' S	108.65	70' N. rail fence & 150' W. of
350' E 19	106.00	250' E house
20	106.15	100 NE across rail fence
21	106.38	in swag Mc barn
22	106.45	" " " "
23	107.54	" " " "
24	107.60	N of " " "
25	106.89	1000' N45E from inst
26	~~110.50~~ 111.20	1500 N45°E from inst.
27	107.78	300' S.
28		In swag running S30W
~~B.M.~~ ⊙	105.45	between house & barn
29	107.61	same 165' SW. fence.
30	100.21	" - 100' NE from
~~26~~	~~111.20~~	~~vessel~~
~~27~~	~~107.90~~	~~"~~
31	110.60	In NE pt. of field NE bank
32	108.60	100' S.



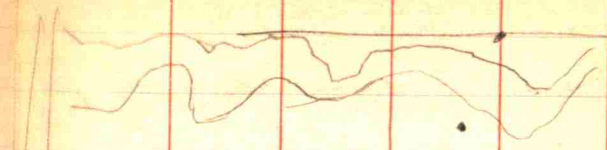
Sta	Elev	
33	110.60	100' S.
34	110.55	100' E.
35	113.30	100' E.
36	108.00	200' W. of preceding
37	106.60	300' " " "
38	107.56	100 NW " "
39	107.48	100' S " "
39A	106.81	100' S " "
40	110.65	100' E. barn
41	110.54	300' E "
42	109.70	350' E "
B.M. 43	99.40	
50' S 44	94.32	50' S
300 E 45	95.35	
300' S 46	95.10	
200' S. 47	94.78	
200' SW 48	95.31	
400' NW 49	93.36	

H. pt. E. of barn

Turned on No. 28 again + set mat about 600' S of 28. This after taking #42. Then to top of cor. post 800' S. of Fish Lacks house + about 1000' E. of Rouths house. B.M. is S. post of two, a line, + brace N.



50	93.20	
51	93.11	
52	93.05	
53	92.70	pond
54	93.60	
55	93.05	
56	92.95	outlet for pond
57	92.65	100' W. of preceding
58	92.40	100' " " "
59	92.45	" " " "
60	92.10	" " " "
61	91.20	" " " "
62	91.50	" " " "
63	91.45	" " " "
⊙ 64	91.18	on V.T. at fence at road
65	93.20	on ℄ road at Gill N. line
⊙ 66	98.16	in road in front Quattle

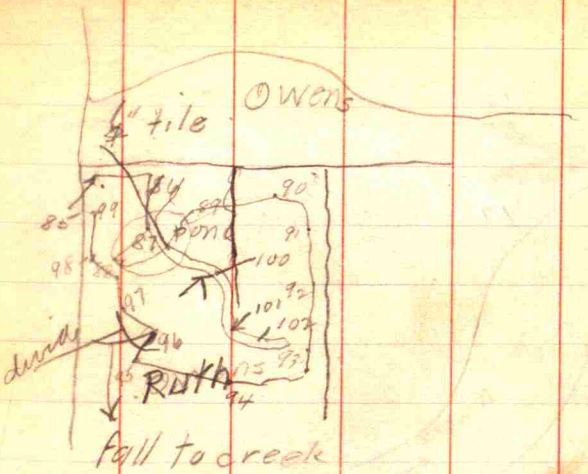


	Elev.	
67	99.95	check back on orig. B.M. Bing
		0.05 error in circuit
0/SO #12		South of road.
68	98.37	B.M. post N.g Rankin barn
⊙ 69	88.60	on bank of swag
70	86.33	half way S in field in swag
71	83.74	300' N 70° W.
		flow line
B.M 72	79.20	F.L. tile 12" diameter
73		
⊙	79.26	on bank 150 W
74	76.50	Bed of branch
75	77.90	150' W. in bed brar
76		
⊙	73.80	on bank 150' below
B.M. 77	77.85	Rock in side of Hugg
78		
⊙	67.03	
79	62.00	On bank stream
80	57.83	

mark. set at E. line Apple 40

Bed stream W. of apple E. line 40.

⊙		
BM 81	77.85	Turned on # 77 on bank.
82	82.51	F.L. ~~4~~ 5" tile flow NW from Routh.
83	84.32	On top ground at tile
84	87.005	
85	86.90	field at W. end of long "40" NW cor. Rouths small
86	86.12	100' E.
87	85.75	100' S. in pond
88	85.80	50' SW
89	88.05	100' NE.
90	89.00	150' N 60° E
91	88.61	100' S.
92	88.60	100' S.
93	88.20	200' S near SE cor. field
94	87.05	150' W
95	86.32	slopes to Ramp Run 150' W.
96	88.52	100' N on divide
97	89.49	100' N
98	87.50	150' NW



	Elev.	
99.	87.30	75' N.
100	87.05	200' SE in sw29
101	87.90	100' " "
102	88.65	100' " " "

1922 Bridges

Garrison - Liberty 18' span x 5' rise. 1st bridge W. of 1st road S. which is E. of Amo. present - wooden floor - no rails.

1500 oc

Stat Road:-

Iron bridge station 140+30 20' span — ~~16~~ 2100 oo 140 -

" " " 84+12 14' " 9000 a ~~1400~~ oo 63 yds.

Banks - $1400 oc -

By Sanders -

Hamilton ← - Brown -

G. T. Hadley - Eel River

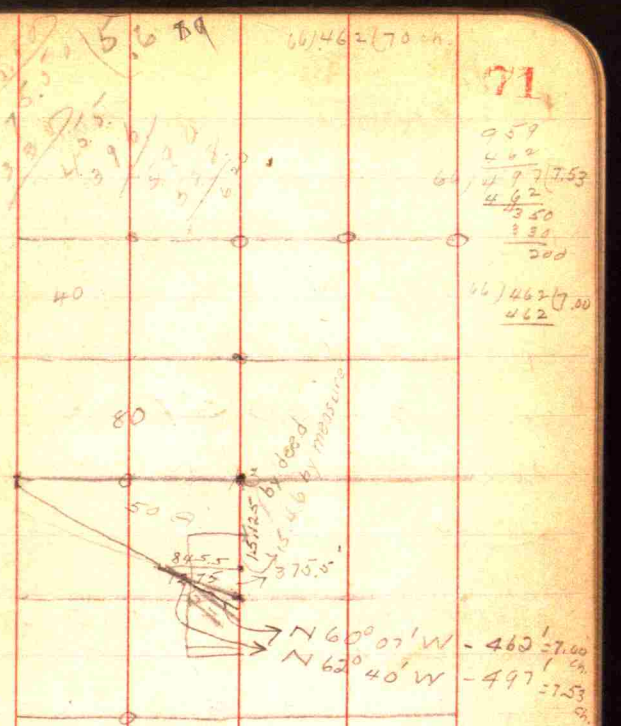
45 x 10
15 x 3 = ~~370~~ 500

8/24

Survey for E.P. Hendricks.
13-17-2W.

Began at cen of sec. 13'
chained S. wire fence W. at
808.80'; wire fence + cor.
post-E. at 521.00'; to
SE cor. of 50 A. tract
1020.5' (called 60½ rods in
50 A. tract description);
~~℄ State Road at~~
fence E. at 1095.50';
℄ fence running NW
along N. side state Rd. 1447.00
; ℄ state Rd; 1471.00
to S. side rd. 1497.00.
Width of rd. at rt ∠s. 43'.

NW. along ℄ road to intersection
of N. line of 3 A. piece
(N. line produced 959'.00.



Sec. cen. Beach 14 N 62 W 14 } promised
" 12 N 79 W 11 } ~~not~~

above stone there - witnesses gone

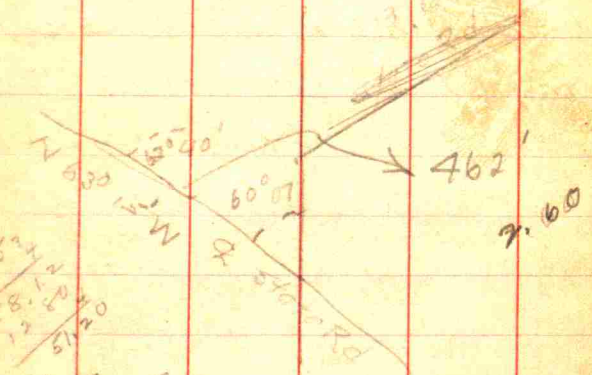
→ To W. end present road fence
840.50'

Thence E. along N line of 3A tract 845.50 = 12.81 ch.

Thence NW along ℄ sh. from pt. of 3 A. tract to W. line sec. 13 - 20.51' (20.51); thence N 46½ to cor. W² mi. stone

Description 3A tract.
Pt. of the SE⁴ NE⁴ SW⁴ + pt NE⁴ SE⁴ SW⁴ of Sec. 13 - 17 - 12 W - des. as follows -
~~Beg. at a pt. on~~

Beg. at a pt. on the E. line of the SW⁴ of said sec. which pt. is 15.46 ch. S. of the stone at the center of said sec.; thence S. with sec. br. 5.69 ch. + to the intersection of the ~~above~~ aforesaid E. line of the SW⁴ with the ℄ of the C'ville or State Rd; thence N 60° 07' W with the ℄ of said road 7.00 ch.; thence N 62° 40' W along said ℄ 7.53 ch.; thence E. with cont. 1.14.



$\frac{12.80}{2} \times 5.69 =$

66) 1095.50 (16.60
66
6435
396
395

66) 20.51 (31.07
198
71
66
500
462
380

66) 1020.5 (15.46
66
360
330
305
264
410
396

5.69
6.40
22760
3414
3.641 60

2051
959

31.076
4
124.304

15.46
4
61.84
5.69
4
22.76

sec. 4v. 12.80 ch. to the place of
beginning.

Estimated to contain 3.64 A.
more or less.

Sta	FL 10"	stk	Side D	Dd	Cut
10+60	0.29	4.08		0.29	3.79
10+0		4.55	3.48	0.50	4.05
9+0		4.53	3.28	0.83	3.70
8+0		5.43	3.78	1.16	4.27
7+0		5.79	4.08	1.49	4.30
6+0		6.21	4.67	1.82	4.39
5+0		6.64	5.29	2.15	4.49
4+0		7.04	5.53	2.48	4.56
3+0		7.69	6.04	2.81	4.88
2+0		7.85	5.83	3.14	4.71
1+0		8.09	6.48	3.47	4.62
0+20	Top 8" 5.41 .81 4.60	7.45	6.53	3.72	3.73

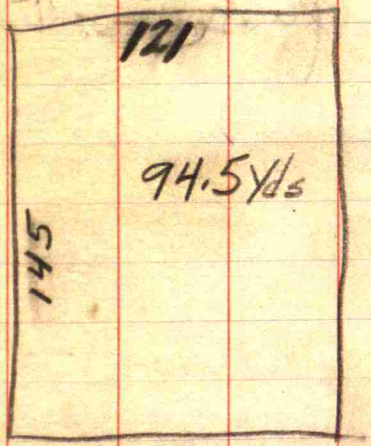
DEAN GRAVEL PIT

Ed Hufford Farm
Lincoln TP

	SH
1 0	78
2-25	74
3-50	73
4-75	77
5-100	81
6-125	81
7-150	85
8-175	86
9-200	89
10-225	90
11-250	81
12-275	77
13-300	79
14-325	75
15-350	80
16-375	84
17-400	85

Ave SL. = 81'

18	425	84
~~+-~~	~~445~~	~~78~~



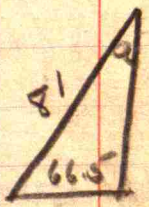
Ave D = 133'

$\sin = a = \frac{O}{H}$

$a = 55° - 11'$

$\cos = \frac{a}{H}$

$H = 46.24'$



$Vol = \frac{1}{3} B H$

$V_1 = \frac{1}{3} (66.5)^2 \times (3.1416) \times 46.24$

$V = \frac{\frac{1}{3}(14929.77) \times 46.24}{27}$

$V = 8523$ Cu. Yds.

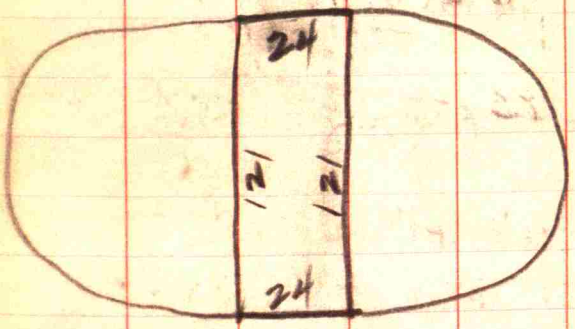
2nd Method

Area Base = 15344.73

$V = \frac{\frac{1}{3}(15344.73)\, 46.24}{27}$

$V = 8761$ Cu. Yds

2nd Method



Area Base = 15344.73

H = 46.24

$V^1 = 8523$ ✓

$V^2 = 8761$ ✓

$2\boxed{17284}$

V^a 8642

Hauled 94. ✓

Bal. in pile 8548

Sta

1+60 24'x15" C.M. + Hdwls ✓

0+00 to 10+60 10"x8" Dr Tile S. side ✓

10+60 Box Culvt ✓

38+40 39+68 10'x10" Dr Tile S side + L's + 24'x10" C.M. ✓

39+15 18"x10" + L's N side ✓

41+20 18"x10" + L's S side ✓

61+63 18'x10" + L's S " ✓

62+68 Box Culvt ✓

67+70 10' Span - 30 - 8" Tile at NE cor ✓

72+46 18'-10" CM 12' old - 84'x10" Dr Tile + Ls ✓

85+65 18'x10" CM + Ls (N)

86+10 - 20'x8" Dr Tile (N)

88+79 to 90+03 96'x8" Dr Tile + 18'x10" CM with L's (N)

98+38 24'x15" + Hdwls ✓

E-end Lay 28'x10" CM furnished by Township and Build 2 L's

97.30
96.65
2 | 65
.325

96.65
825
7.475

4 | 130
3

96.50
.325
6.825

		St.
1+50	95.50+50	96.00
1+25	9575+50	96.25
1+75	95.25+50	95.75
2+00	9500+50	95.50
2+25	9475 2'	
2+40	9460 2'	96.60
~~2+75~~		
~~3+00~~		
~~3+25~~		
~~3+50~~		
~~3+75~~		
~~4+00~~		
~~4+25~~		
~~4+40~~		

From stone
run N 66° W — 8.70
Def R 85° — Tug
ch. N 46° — 12' E
Then — N 70° 32' E — 2 ch Thence
S 85° E 2.0
N ~~65~~° E 4.74
66-32 L
S 87° E

To Cen Creek —
N 19° E — 4.65
— 11.0 ch —
ch — Thence
ch
— Thence

Unloading cost -

$625.00 for 8800 tons -

unloader cost .071

3 men @ unloader -

2 laborers 3.00 - 1 mechanic 5.00 11.00 for 2 cars = 110

= .100

gas + oil 5 gal + 1 qt. = 110 .010 +

repairs + int. .009

.190

demurrage - @ 3¢ .030

.220

Spreading -

3 men @ 3.00 = 9.00

1 team drag + grade @ 5.00 5.00 1400 handles 110 tons

= .127 per ton -

110) 1400 (12.7 8800) 62500 (.071
110
300
220

62500
61600
9000

1 man can clean + trim ditch and shoulder 200' 1 da.

4 + board

5 shovelers - 1 [illegible] 15.00
1 roller - 1 man 5.50 } 600 □ yds.
2 tanks - 2 men 15.00 } 300 □
3 teams to tanks -
1 foreman 5.50
1 ton coal - 11.00
3) 52.00
17 1/3 ¢ per □ yd.

+ water + pump
+ man -

$1000 for unloader - good for 6 mi.
bin - $250.00

switch $2700 - date of 11/23-21 $ switch at station unfit.
stone quotation from W.E. Kelb
+ 2 1/2 ¢ war tax.

Tarvia - Barrett Co. under date of
1000 gal. extra of Tarvia X
1000 gal. extra of Tarvia B.
7442 ft. 5" @ 40.00 from Indiana Drain
22,958 4" @ 28.00

Ball + water bind □ yds.
1 course -
" = 2 course -

good working conditions. =
25 ¢ per □ yd on ave. conditions.

machinery - $1000.00

@ 1 mi. east of Avon -
under date of 11/14-21 of $1.84

11/16-21 13 ¢ + 1.8 ¢ frt. -

Tile Co. - Brooklyn, Ind 11/16-21

Emu. Asph. = 8.6# per gal.

1700 gal. Emu. Asph. = 14,620# @ 4.15 per 100#

20 x 50 two course □ yds = 40900 - 1 course

□ yds. 40900
7000
39900

Excavation 5000.
Dr. 7000
Br. 2500
Paving 42500
$ 57,000

11.63) 415 (35
3489
6610
5815

8.6) 100 (11.62 8/4 gal. Emu. Asp
86
140 per 100#
86
540
516
240
172
680
681

59485.00

cutrell

5600 yds. dirt - @ @ 50¢ 2800.00
Rolling grade
56 - 14" pipe @ 2.50 140.00
56 - 16" " @ 2.75 156.00 44741.00
3720.24
34' - 10" " @ 2.00 68.00 43690.84
8' - 24" " @ 3.50 28.00 392.00
34 yds. conc. in hdwls @ 18.00 617.00
77 " " " culvts. + bc. @ 15.00 1145.11
1215# steel @ 5¢ 60.75
30,674' 4+5' tile dr. @ 14.00 4294.36
8415 tons stone + 450 @ 3.065 27,171.22
33900 @ 10¢ - 1 course □ yds. @ 20¢ 3390.00
~~20,450~~ □ yds. roll + water bind ~~4090.00~~
17,600 gal. Tar. X @ 14.8¢ 2604.80
7040 " " B 1041.92
3525 " Em. asp. 1256.29
7000 □ yds. X" applica. @ 20¢ 1022.50
990.22
1400.00
14000 □ yds. B " @ 5¢ } Foreman 20 da @ 6 480.00
7000 □ " Em. A. applica. }
Shaping berms + sd. 30,674' @ 3¢
unloader - 1000 - switch 2000 -

30,674
15 337

5280
3
15840

Seal coat 150 tons per mi is 450 tons which is 150 tons more than given.

stone - 1.865
unload + spread .350
haul .85
3.065

3520
8.6
21120
28160
30272.0
4.15
151360
30272
121088
1256.2880

.148
17600
88800
1036
148
2604.800

8865
15325
18390
24520
24520
27171.225

148
7040
5920
1036
1041.920

30674
1½
30674
15337
460.11

20450
5
102250

20450
20
4090.00

Sewer check on

Sta.	+	.	−	El.	
Sewer	8.375	18.375		10.000	
Field			8.47	9.955	.045
Tops. S.			3.84	7.535	.540
" N			6.24	7.135	+ 5"

Tile -

5" - per 100'	4	00
dig - 6 rd. @ 50	3	00
cover + tamp	8	

Pierson Rd.

Sta. 57+77
Broyles field.

1/2" dry pipe + field - 6"
fall thru pipe. OK.

From NE cor of E^2 of SW^4 Sec
9, 15N, 1W measure southwardly
734.7 along E line of said E^2 of SW^4
thence def. 71° 15' to the right
measure southwestwardly 33.6 to
a pt in the N westwardly rt of
way line of the F.H.I. & E. for a place
of bg. thence cont. the last des.
course measure 401' to a point
160' distant measured N west-
wardly at rt angles from the
grantees ℄ between the main
tracks as now located and const.
thence cont. in last des. course
measure 570' (N with and 160'
dist. meas. at rt angles from ℄
bet main tracks) to a pt. in
grantors westerly property line

thence def. 70° 52' to left
measure southwardly 63.5
to a pt 400' distant measured
N westwardly from ℄ thence
def. 110° 38' to the left
measure N. eastwardly 963.7
to a pt. in N ~~ea~~ westerly rt of
way of F.H.I. & E., thence defl.
49° 6' to left measure N.
easterly 45.5 along rt of way
to place of bg. Con. 105 A.

Frm. N.E. cor. of E^2 of SW^4
Sec 9. meas. southwardly 734.7
along E line of said E^2 of SW^4
thence def. 108° 45' to the
left measure eastwardly 31.7
to a pt. in sou. east. right of way
of T.H. I. & E. for a place of bg.
Thence cont. in last des. course
meas. 185', thence def. 9° 47'
to the rt. meas. south east
wardly 420', thence def. 170° 13'
rt measure S. westwardly 655'
to a pt. in said sou. westwardly
rt of way of T.H. I. & E. thence
def. 129° 38' to the rt
meas. N. eastwardly 91'
along said S. easterly rt of
way to place of bg. Con. .69 A

C. S. Shannon to 2 dpls & Wes.
A triang. strip of land lying
in SW^4 of sec 9. Bg at pt
being in E boundary line of
said SW^4 Sec 9, and 660' S of
N.W. cor. of SE^4 of sec. thence
S 114' to N. line of CCC & SDJ.
thence in S westerly dir. along
N. line 49.4', thence N 17° 42'
E. 137.6 to point of bg. cont.
.06

Retta Todd to Tom Pl. & W.
A strip 76' in wid. lying 38'
on each side of ℄. Bg. at pt.
in S line of NE^4 of sec 9, 272'
E. of SW cor. of said NE^4 thence
N 18° E. 1208' to E line of W^2
of W^2 of $N.E^4$ cont. 2.11 A,

Stone 4x8 N 63½ W 119
maple S 35½ W 30

C. W. C 10 x 12 x 9
Stone N 34 W 11.

Cen sec 15 x 15 x 9 Suga N
Stone S 2 W 16
Stone 30½ W
S 59 W. 13¾

C. E. C r ewit. W. Willow S 80 E 103
Walnut 4" N 75 E 58

Cen sec. 6 x 10 x 14
Stone S 30½ W 7¾
" S 59 W 13¾

19.95 R. S cen 6x8x12 Stone N. 19 W 15½

C Sec. Maple 4" S 80 W 61'
Walnut 6" S 7 W 15'

Order Bk 50 p. 346
a strip of land 50' wide
lying in S E⁴ being 25'
on each side of ℄ desc. as fol.
Beg at an passing thru a pt
being in E & W ½ sec line
274
224 E of N. W. cor of SE⁴
thence S 17° 42' W 780' to
a point in W. line of land
owned forum. by Nancy Mat.
717' S of N. W cor. of SE⁴ cont.
.9 A.

Albert Smith Digging Stone
April 14, Staking April 13

James R. Herring Digging stones
April 14 1 day

106+37	125+0	142+0
107+0	126+0	143+0
108+0	127+0	144+0
109+0	128+0	145+0
110+0	129+0	146+0
111+0	130+0	147+0
112+0	131+0	148+0
113+0	132+0	149+0
114+0	132+95	150+0
115+0	133+0	151+0
116+0	134+0	152+0
117+0	135+0	153+0
118+0	136+0	154+0
119+0	137+0	155+0
120+0	138+0	156+0
121+0	139+0	157+0
122+0	140+0	158+0
123+0	141+0	159+0
124+0		159+22

22.288

11.444
40
44,576.0

132
151
132
190
132
580
526
52

585 E
28 28
89 60.00
23 28
8.375
66 32