

91

FIELD BOOK

368

14-140-27 140-30 Island Lake 1-17
137-29-30 Walden 18-34
Mally May Trip 199-81 35-36

-140-27 H.W. Corn 37.

12-140-27 State Highway Corn 37-48

22-142-31 Village of Walker 49.

12-140-27 State Highway Corn 50-78

145-31. Carr Lake Swanberg Levels 79-83

134-30 Levels B Road 16 at Clows Job 12 Pg 84 To 97.

19-140-30 Hackensack Levels 98 To 129.

"

"

130-140

Note:

This book belongs to
John W. Cress Hackmire
Min. April 1-1910

April 1st 1910.

Hackensack to Pine River
and back to Walker on night train
to get field notes of 140-26.

April 2nd 1910

Walker to Hackensack on morn-
ing train with Port McFee who
I paid me \$10. in full for borrowed
money.

April 3rd 1910. Sunday

All day at Hackensack

April 4-1910 Hackensack to Pine
River on morning train. rained.
Bill Moulster and I submitted
the plat of Sec 19-140-30, to
Washington D.C.

April 5th 1910. all day at Pine
River waiting for Chris Snell
to take I and W. Moulster to Snow-
Ball to survey roads for Island
Lake Township

P.R. fare Walker to Pine River
Hotel Exp.
Salary for April 5

.61
1.00
7.00
5.61

140-27

③

April 6th 1910

Paid Geo Bill \$2⁰⁰ hotel bills
and I leave with Bill Moulster
and two transits with Chris Snell
Dinner with Geo Island on over night
with Geo Snell.

Bill Moulster got in one day for
Island Lake Trap 4.00
Myself on day 4.00
Dinner for Bill 25
Hotel expense for me 1.00

April 7th 1910.

Bill Moulster and I, Geo and Mark
Snell, E.C. Mc Day and Cap Wilkison
worked on South of Sec 14-140-27
in A.M. Geo Snell and I worked
on E. side in P.M. all got in full
day. for Island Lake Trap

Bill one day 4.00
I one day 4.00

boarding with Geo Snell who will
put in a bill to the Township for
our board @ 1⁰⁰ per day each.

April 7 1910 Thursday

Mark Snell, Cap Wilkison and E.C. McVay worked with A.W. Moulster.

Geo Snell worked with me. all got in full day for Island Lake Trip.

Moulster's Notes read as follows:

" Beg @ line SE cor 14-140-27 previously set by Euro run west 7.30' @ 1100. Lv of old bog 1698.5' Hub on bench 1225 enter little bog 1510 Lv bog. 1664.50 Hub on bench 1737. stake 3. p. E of lakeshore. near M.C.N. = 15' where Gout Voles call for NP243.59 E 8. Tam 8 N 40° 50' E 8." gone.
@ 1740. enter lake. we get distance across lake by lying a 800 x 200 foot steel lake together @ 2120.02 Lv Lake and set pin 2420.02 pin @ 2428.140 Hub in field @ 2420 + 220 = 2640. Hub Temp 1/4 2900 Lv field 2940 pin 3130 enter open bog 3240 pin in bog 3540 pin in bog. 3840 pin in bog 4140 " 4225 Lv bog 4315.50 Hub 4440. pin 4705.25 Hub. 4740. pin 5040 pin 5240 pin @ 5240 + 99.6 = 5339.60 True SW cor of 14-140-27 sets to 95.35 ft dated April 7-1910. quit for night

" Apr 8-10 Correcting South boundary Sec 14 140-27 @ 5339.60 SW cor sets S 95.35 ft at Hub 2640 we chain west. 29.80 ft to Hub 2669.80 Thence South 47.675 feet and set line 1/4 with B.T.s as follows.

A rock as witness corner South 2 feet - Crown on Rock.

Setting Liavitt on line 1/4 on S side of 14-140-27 run N 8° W 278.45 Hub 300 pin 500 enter bog 600 pin in bog 900 pin in bog 1200 pin in bog 1450 Lv bog 1500 pin in old bog 1500.80 Tack in old bog 1800 pin 2100 pin 2269.85 Hub 2400 pin 2603 cross old E & W preliminary line 2654.65 Hub on North side of cut-out road.

April 8th 10

Mouldster's Notes continued

West Boundary:

Setting Liannit on line $\frac{1}{4}$ part
 previously established by Cuss on W
 side of 14-140-27 back right
 on a corrected line for the SW cor. of
 the sec and run North 7° 55' 00" $\frac{1}{4}$
 @ 100 Ls slew 128.25 Hub on bench
 250 enter little slew 300 pin in marsh
 330 LV marsh 600 pin 854.05 Hub
 900 pin in bog 1200 " 1491.50 Hub
 1500 pin Quit for night
 Mouldster.

Geo. Brill and I worked around
 the SE cor of 14-140-27 all got in
 full day

Mouldster worked one day
 I worked " " "

400

400

Saturday Apr 9th 10.

cap Willow Mouldster Marksell,
 one crew. Mc Day worked all day in
 and of mouldster's notes
 read as follows:

Continuing N on west line of 14-140-27
 @ 1800 pin 1968.55 Hub 2100 pin
 2400 pin at 2640, line NW cor. of sec
 14, sets North 4.50 ft and West 1.22 ft
 P.M.

North Boundary Sec 11-140-27

Same crew setting Liannit on NE cor sec
 11, previously set by Cuss we run West
 7° 50' 00" @ 213.70 Hub on ridge 20 ft E
 of little slough 300 pin LV bog. 600 pin
 873.50 Hub on bench 900 pin
 Quit for night Mouldster.

⑥

140-27

Saturday April 9-10 Continued

Geo Snell and I set the NW cor 14-140-27 from old Gort Bearing trees. Nails call for.

10 + N-14-15-140-27

ash 6	N 20° 20' E	20	lbr	13.20	ft
"	S 70° 15' E	15	"	9.90	"
W. Birch	S 80° W	20	"	13.20	"
Tom	12 N 40° W	32	"	21.12	"

We found the NW, NE, and SE old B.T. stumps marked but burned off from which we measure to the point of the old stake which we pull out of the moss and water and put a new stake in the old stake hole, and establish new B.T.S. as follows -

Poplar 10 N 86° 53' E 130.15 feet

8 S 36° 7' E 113.75 "

One old B.T. stump bears N 40° 20' W and another S 66° 40' E

Correcting the west boundary of SW 1/4 Sec 14-140-27

My old last years notes of the length of this line gave it as 2647.10 feet but by chaining it over I find we made a mistake of 20 feet, or it is only 2627.10 feet true distance

Correcting up
 @ 2627.10 feet NW cor 14-140-27 true 1/4 sec west 29.60 feet
 Hub 2256.10 goes west 25.22 "

Alex Whitted, Geo Snell & Euro

Beginning at a Hub set on my old survey line at a point 1500 feet North of MCN-10-140-27 we chain North 1280.45 feet to Hub 1780.45. Then west 1741 feet where we drive 3x3x65 inch iron post for line 1/16 post at NE corner of Geo Snell's forty. No bearing trees.

April 9-10 Continued

Begin at Sta 0.0. 32.60 feet East of
 1/4 Port on E. side of 14-140-27 we
 continue my old Transit line North
 along Whittled Taxman. Geo Snell & S Ch
 @ 185.80 Hub 200 stake ender, solid low
 ground. 400 pin 600 pin 800 pin 939.20
 Tack in log 1000 pin, 1200 pin LV
 Tam Swamp 1400 set pin 1414.90 Hub
 on hill 1600 pin 1667. Hub 1800 pin
 2000 pin 2200 pin 2250 ender E. end
 of narrow bog 2300 LV same 2367.80
 Hub 2400 pin 2540.70 Hub 2600 pin
 2640.80 Pin True NE Cor 14-140-27
 sets West - 39.30 feet.
 Quit for night

Sunday April 10-10.

Geo Snell and I worked all day
 for Island Lake Tap. No one else
 working

To chain the old grade! Begin in Cen
 of grade at a point 2045. H E of 1/4 on
 W. side of 15-140-27. I run a line
 with my eye and chain as follows
 No corners. Run about S. 100 ft
 S 20° W 100 ft. S 30° W 100. S 40° W 100.
 S 50° W 163. Put to the old stake in
 the K where we quit chaining when
 Jim Kinler and I chained the old
 grade for a County road two years
 ago.

Going to line 1/16 Port N of SE Cor
 14-140-27. We run about 9° W on
 @ 2060. stake. 390 LV Swamp 400 pin
 600 Hub 800. 1000. 1200 pin 1320 Hub
 E. edge of slough 1520 pin in bog. 1550
 LV bog. 1698.90 Hub at 1720 set stake

Sunday April 10-1910 Could

Geo Snell and I correcting E and W. Cen
line of 14-140-27. Beg at stake N-2000 E"
we chain East 67.10. feet to Hat 2667/10
then North 31.27 feet where we place true
center stake of 14-140-27
at a point 2633.15 feet N. of 14 on S. side
of 14, the preliminary line run by Moulster is
16.52 feet East

We set the true center of sec 14-140-27
with Bearings as follows: On 9°
WP Stump 3 1/6 N 65° 40' E 46.78 ft
Tarn " 8 3/4 S 34° 5' E 50.10 ft

To set the center of E. 1/2 of 14-140-27
We begin at Hat 3737.40 and chain E.
on my old line 257.65 ft to hat 3995.05
then North 46.83 feet where we place the line
1/16 with BTS. 0 1/2"
Spr Stump 15 S 17° 10' E 25.15 ft } On 9°
Sp " 12 N 32° 21' E 36.35"

To set Cen of S 1/2 of 14-140-27
we began at line 1/4 part on S. side and
chain North 13 1/6. 57. feet along Bill
Moulster's N x S. line Then west 8.26 ft
where we place the line 1/16

To set Cen of S E 1/4 - 14-140-27
We begin on our old line at stake 1720.00 and
continue our line west @ 2000 cen of Geo
Snell's road bears N 78. 2020. pin 2250.
enter Swamp 2320. pin 2620. pin in Swamp
26621.85 true corner set 15 North 9.60 feet
correcting E. We set Hat N-1320. west
11.80 feet to Hat 1331.80 Then North
4.80 ft where we place the true center
of S E 1/4 14-140-27

Apr 11 - 10

To put in $\frac{1}{16}$ post on S. side of SE $\frac{1}{4}$
14-140-27. Beg at Hat 11669, 85 we
Chain west 1651.25 ft to Hat 1334, 90
Then South 23.84 ft where we place
the live $\frac{1}{16}$ post No BTS.

Apr 12 - 1910

To put in the NE Cor 12-140-27.

On March 27-30, Geo Snell and Cap
Wellison chained south across
Tulibby Lake to get the distance for me, and
find From Moulder Corner No 5. on North
side of Tulibby Lake T 140-27. South on it
to a stake marked "0.0" on the South side is
2572.7 feet. MC No 4 - 140-27 seems to be gone.
The distance across Tulibby Lake from
MC No 5 to MC No 4. is 2577.30 feet 40 ft
Chain.

So Beginning at Stake 0.0. on S. side of
Tulibby Lake set by me, Moulder Lakes
up my old line and continues it S.
over my old cut out line to 4200 pin
4224.10 set hat and quit for dinner
P.M.

Moulder and Geo Snell go to put in the
Corner of sections 5-6-7-8. 140-26
While I take his transit and continue
South. Mack Snell & I chaining Cap Wellison,
Bill Carey, Alex Whitted all men.

@ 4400. pin 4449.70. Hat 4600 set pin
4800 pin 5000 set pin. 5120. Hat
5394.10 Hat 5400 pin 5600 pin 5800 pin
5958.40 Hat 6000 " 6200. " 6377. Hat
6400 pin 6600 pin 6700 pin 6800 pin
6821.50 line corner sets 12. feet East

140-26-27
Island Lake Twp.

at the corner of sections 12 and 13-140-27

on Range line Gout Nails call for

Bk Oak 8 N 23 E 6 LKS = 33.96 ft

WP 28 S 35 E 53 " = 34.98 "

Bk Oak 6 S 16 W 47 " = 31.02 "

" " 8 N 21 W 63 " = 41.58 "

We find the SE WP down and burned
off the stump but plainly marked.also the SW Oak with nothing but
the stump standing. The NE Oak is
down and rotted to a mush but the
NW Oak is gone. We set the stake by
flat measure from face of SE and SW
B.T.S. but as it was dark we had no
time to make any new B.T.S. The old lines
check out fine for course & measure

Apr 13-1910

Correcting back.

2577.30	Gout ch	2572.00	My ch
1570.80	" "	6821.50	" "
5280.00	" "	9393.50	" "
9428.10	" "		

is 34.60 feet short

9428.10 goes N 34.60 ft to Hub 9393.50

2577.30 goes North 91.46 ft to Hub

448.10 goes N 15.22 ft

to Hub 4132.88 and East 5.28 ft

where we place the line NE corner of 12-140

-27 with new B.T.S. 012'

Birch 2 1/2 S 40° 34' E 24.35 feet

" 4 S 46° 40' W 58.00 feet

To look heads: Course taken from Range

line as true meridian at about 8° 30'

Magnetic Var

Hub 1570.80 + 2572.00 = 4142.80

Running up old line run by me last year

from NW cor 12-140-27 @ 5313 Hub + 46.50

@ 5358.50 intersect Range line. The NE

cor of 12-140-27 bears South along Rgl

line 137.60 feet

To lay the road past Snowballs
farm. Going to the quarter point on E.
side of sect 5-140-26 Goat holes call
for Cedar

Cedar

We found the SW cedar green, standing and
plainly marked from which we set
the line $\frac{1}{4}$ from face of B.T. on

The N one is gone.

Cap Withrow, Jim Boyd, Chas Bluhm
Sr. Geo Snell and I were present.

Geo Snell, Cap Withrow, I and also
Whittled Beg. @ true $\frac{1}{4}$ on E side of 5
140-26 run N. 8° W @ 585 feet about
Cedar Hub for road center near the Sec
line Being Sta 1. B.T.S. V_{ij} 8° W
gp 4 N ~~81^{\circ} 4' E~~ $81^{\circ} 4' E$ 29.08 ft
" 4 N $32^{\circ} 19' E$ 42.11 ft marked "A.B.T."

Thence S $53^{\circ} 27' W$ 205 ft to Sta 2.
③ B.T.S. V_{ij} P. Stump $108^{\circ} 4' 34' W$ ~~31~~ 30.40 ft
P Stump $12 S 75^{\circ} 51' E$ 19.98 ft

Sta 3. Thence S $88^{\circ} 50' W$ 570 ft to Sta
3. B.T.S. V_{ij} P. Stump $10 S 58^{\circ} 26' W$
54.35 ft P. Stump $5 S 53^{\circ} 4' E$ 19.68 ft

Sta 4. Thence S $72^{\circ} 21' W$ 515 ft to Sta 4.
B.T.S. V_{ij} Dry Birch $10 S 46^{\circ} 30' E$
25.90 ft W.P. Stake line 2. N $86^{\circ} 49'$
E 25.55 ft.

Sta 5. Thence S $65^{\circ} 37' W$ @ 180 feet the
ventilator (5 make slack) of Chas
Bluhm's Goat House is 1 foot south
of line. at 645 feet set Hub in road
for Sta 5. No. B.T.S.

Road past Snow-balls farm. Continued:
 Thence $S 58^{\circ} 6' W$ 260. feet to Sta 6.
 in road 25. feet North of fence. B.T.S. viz
 Birch $2\frac{1}{2} N 28^{\circ} W$ 35.00. feet
 aspen $S 73^{\circ} 29' E$ 49.45. ft to back
 headr.

Sta 7. Thence $S 47^{\circ} 0' W$ @ 110 feet cross
 old main road (now fenced up)
 bears N and SW. @ 400 wire fence is
 4. feet South @ 500. cross fence bears
 NW. @ 1015 Hob on "Hog back" Sta
 7. B.T.S. viz: Oak 6 $S 20^{\circ} 55' W$
 83.02 feet. aspen 11. $S 83^{\circ} 50' E$ 51.18
 feet to back headr.
 Quit for night.

Sta 8 Thence $S 42^{\circ} 43' W$ 458 ft to Sta
 8. No B.T.S.

Sta 9. Then $S 36^{\circ} 45' W$ @ 273 Cen of
 main road Bears E & W. @ 58 1/3,
 enter creek bottom @ 640. Lv same
 @ 831 Hob Sta 9. B.T.S. viz Oak 12 $N 85^{\circ} 59'$
 $E 30.23$ feet. WP 8 $S 10^{\circ} 44' W$ 52.00 ft

Sta 10 Thence $N 86^{\circ} 54' W$
 Quit for night. Met Dave Adams
 who owns $S 1/2 SE 1/4 25-140-26$

Apr. 1900. Cen of road. $N 86^{\circ} 54' W$
 @ 340. One Indian Mound lays North
 25. feet to base and at 350. another
 Indian Mound lays South 15. feet
 to base of mound. @ 678 Cen of Main
 road Bears NE & SW. 1200 pm 1370.
 enter wet alder ground 1500 pm
 1540. Lv alder enter sand ridge

about

at 1800 fm 2100 fm @ 2104.50 we
 cross the sec line at a point 738.60
 feet North of SE Cor Sec 6-140-26
 at 2253, set Hub for Sta 10, with Bear-
 ing lines as follows:-
 Jack pine 7 S $44^{\circ}54'W$ 43.31 feet
 " " 3 N $8^{\circ}14'W$ 30.00 "

Sta 11, Thence N $78^{\circ}50'W$ 380. feet to a Hub
 above in main road for Sta 11,
 No B.T.S.

Sta 12 Thence S $80^{\circ}49'W$ following main
 road, @ 300 cen of N. end of 4,
 foot culvert box Creek runs North
 Swamp on E each side of road.
 @ 600. Hub station 12, NE of Jack
 Sandbar's house, B.T.S. as follows
 Oak 12 N $3^{\circ}3'E$ 30.90 feet
 Oak 12 S $58^{\circ}28'E$ 39.23 ft
 Quit for night

Sta 13.
 Thence S $87^{\circ}52'W$ 320. ft to Sta 13,
 No B.T.S.

Sta 14,
 Thence N $75^{\circ}14'W$ @ 135 Centre of
 Creek (Bear N) at a point 20 feet S of
 South end of Bridge. @ 600 Hub Sta 14
 40. feet NE of Lake shore, B.T.S viz
 Oak 12 S $41^{\circ}20'W$ 56.56 ft
 " " Slab 11, S $45^{\circ}25'E$ 80.32 ft to Tack

Sta 15 Thence S $82^{\circ}17'W$ 343. ft
 to Sta 15, on hill No B.T.S.

Sta 16, Thence S $77^{\circ}54'W$ down hill
 168. ft to Sta 16, B.T.S viz
 P. slab 14 S $1^{\circ}50'E$ 27.20 ft
 " " 12 S $42^{\circ}42'E$ 36.12 ft

14.

140-26

Sta 17. Thence $S 56^{\circ} 6' W$ 200 ft to Sta
17. No B.T.S.

Sta 18. Thence $S 45^{\circ} 49' W$ 250 ft to Sta
18. Being a point in the old main
road 50. feet west of a little water hole
and near the lake shore. Set Beaing trees
or fallows - Pine Sugar Bears $S 75^{\circ}$
 $36' E$ 31.10 ft A slump $24 N 17^{\circ}$
 $34' W$ 20.92 ft.

Sta 19 Thence $S 39^{\circ} 3' W$ @ 35 ft road
bear SW and N @ 217 ft to Sta
19. No B.T.S.

Sta 20 Thence $S 30^{\circ} 37' W$ 198. ft to
Sta 20. No B.T.S.

Sta 21. Thence $S 10^{\circ} 5' W$ 252.40 ft
to Sta 21. in meadow being a
point on the section line
1992. 75 feet East of $S W$ corner of Sec 6-
140-26 and 175. ft west of water's edge

Moulster's hut N-2147.25 E of
 $S W$ corner Sec 6-140-26 sets in or
near the old main Beaing
wagon road.

This was the last day we worked
being Monday April 18-1910.

I am 39 years old today

The Island Lake Trap Board met
at 10.P.M. but did not get thru
to pay us off until after midnight
so we dated our order April 19-10.

at MC N^o on E side of
 Lake 140-26. Gout noles call for
 Pine \$85 E lbs = ft
 Birch N =

we found the stub of the pine standing from which
 we set the Little Meander Post and drove
 a stake at the point where to Birch B.T.
 originally stood where we found Birch
 roots. Geo. Muel and I set the
 post. April. 1910.

On April 1910. Chas. Bluhm Sr
 (Snowball), Jim Boyd, Geo. Muel and
 I run a compass line from the 1/4
 post on E. side of 5-140-26, North
 to the town line and finding no B.Ts.
 run west to Laura lake where we
 looked for MC. N^o on East side
 of lake but found nothing.

On April 19-10. G.W. Moulton and I
 rode into Pine River on Chas. Muel's
 stage and after I got my check for
 \$60⁰⁰ cashed I gave him \$25⁰⁰.
 expense money and went to bed at
 Bell's hotel. Bell is drunk and
 I did not pay my bed bill 50⁰⁰
 I got my supper at Geo
 Moulton's.

April 20-10. Ld P.R. @ 3. am.
 at Hockensack 3.30 am.

Bill M stays all day at P.R.
 Pd 30⁰⁰ for telephone

April 21-10 Hack to Walker to
run grader for Court House grounds.
Over night with chore got in one day
for Cars Co \$5⁰⁰

April 22nd 10. Run grader for Court
House grounds and caught morn-
ing train to Hack. One day for Cars Co
\$5⁰⁰

April 23rd 10 All day at Hackensack
Spencer went to Walker on
4.11 P M. train.

Sent Gladys Moulster \$5⁰⁰ on
Incubator making in all \$10⁰⁰
paid Bul due \$5⁰⁰

Sent J.C.S. \$10⁰⁰ on account
making in all \$21⁰⁰ paid.

Sunday April 24-10 All day at
Hack. Mrs. B. Over night

Monday April 25-

137-29

Jenkins

Walden Twp.

19

Monday April 25-1910 Worked all day for Walden Township

Lv. Hackensack 10-10 a.m. at Jenkins
11.30 a.m. RR fare \$0.47⁰⁰ Arrived at
Bryants Hall - 25⁰⁰

I cannot charge for this day
as I left the work about to be
done.

P.M.

Geo Newman, Will Newman Noah Pulchic
and learn L & Jenkins drive to S.W. cor
29-137-29 but find no B.T.S.

Then drive to my old line near
NW corner of same section.

Going to $\frac{1}{4}$ on south side of Sec
19-137-29 to check up my old chain
line we begin at a hub marked
2572.30 and chain west 100.70 feet
to Hub 2673, being a point on my old
line $5284. + 2673 = 7957$,
but west of the line S.E. cor Sec 20-137-29
at which point the $\frac{1}{4}$ on So side of 19
sets North 49.50 feet

To fix the S.W. cor Sec 20-137-29
as to E and W re-tracing my old stake
marker I find the total distance from
the S.E. cor 20-137-29 west to the
 $\frac{1}{4}$ point on So side of 19-137-29 is 5283.96
+ 2640 feet = 7923.96 feet & out chain
and is $5284 + 2673 = 7957$ ft my chain
at which point the $\frac{1}{4}$ on So side of 19
stands N. 49.50 ft This shows the
line 33.04 ft too long As Hub 5284
I set west 22. feet to Hub 5306, which
fixes its position or to E & W.

On night all got in $\frac{1}{2}$ day but me.
Our night with the two men

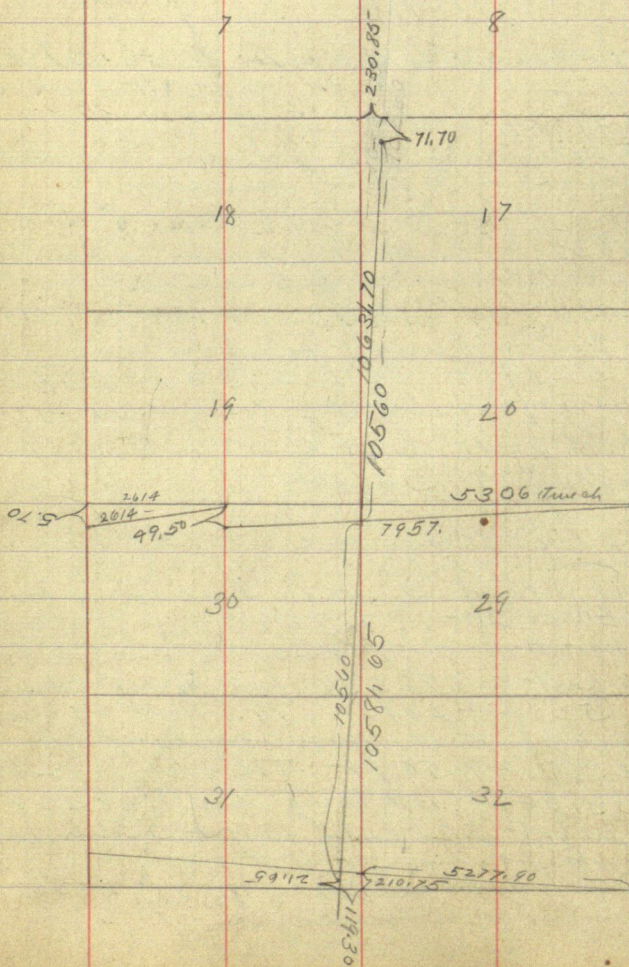
Record

20

137-29

Σ 49.50

7957, u



Tuesday April 26-10.

Wallace Ritchie, Chas Juhla
Ralph Hillen. Lawrence Rush and
I worked all day for Walden Twp

Setting lineant on Hwt 5306 west of
SE Cor Sec 20-137-29 I start two
lines one North and the other south
on 80 deg and after giving the boys two
stakes to start with Rush and I
Correct up my old line on the South
side of the SW 1/4 Sec 19-137-29
at Running west from the 1/4 on S.
side of 19-V my old Volts read as
follow - Run w 80°

@ 300. stake 484 Hwt 600 stake enter
open Bog. 1365 LV same 1424 Hwt
stake's measure across bog.
1650 enter S end of plain Lake layer
NW. @ 1940 LV same 2081 Hwt
stake's measure across Lake
2385 Hwt on hill 2614 stake True
SW Cor 19-137-29 lays North 51.70 ft
correcting back.

2614 goes North 51.70. 2385 goes
North. 51.20 ft 2081. goes N 45.4 ft
1424. goes N 3.10 ft 484 goes N 1.06
ft All done good solid hubs
to mark road center and set
all stakes well into the ground.

Walking back over the 10 13 day
of SE 1/4 19-137-29 I find stakes of my
old survey marked as follows.
2673 True 1114 sets N 49.50 ft @ - Hwt
@ - cross old road 2196 Hwt 2125 LV Bog
1575 enter open bog. 1230.30 Hwt 712.10 Hwt
395.60 Hwt.

Revised

22

137-29 Walden

April 26-10 Cont'd

Sitting Transit on Ht 5306 W.

7 SE on 20-137-29 Run N 800

@ 300, 600, 900, set stakes. @ 1008 on
 main road bear E to, 1200,
 1500, set stake 1672 Ht, 1800, 2100 pin
 2234.80 Ht 2400 stake @ 2640 foot
 Notes call for 1/4 bet sees 19 and 20
 137-29 S. To B at - 3.

Spruce

"

We do not find them and continue north
 @ 2700 stake 2727.60 Ht 3000 stake
 3188.30 Ht 3300 stake 3451. Ht

Quit for night

all set in full day for Walden

Over night with Gus Newman

look dinner out on line

Rutchie & I clearing perfect PB line

K & E Transit 300 ft tape

Wednesday April 27-10

J. Geo Newman, Wallace Ritchie, Chas
Johla, Ralph Killen L. Rush, worked
all day. Beg @ Hub 3451, we continue
north Ritchie + Newman ch. @ 3300 stake
3451, Hub 3600 stake 3700 enter big bog
3900 stake in bog 4200, 4500, 4800,
5100, stake 5400 Hub in meadow
50 ft East of said ground. we look
for the cor to sec 17-18-19-20-137-29
where Gout holes call for
aspen

"

"

they are gone and we continue north
still in meadow, @ 5700, 6000, 6300
6600, 6900, 7200, stake in meadow
7400 L. meadow 7500 stake 7800 Hub
we look for 1/4 post bet sec 17 & 18-
where Gout holes call for

N P S

W

G.P. S

E

They are gone so we continue north
8100, 8400, 8700 stake 8700, 40 Hub west
of little lake. 8800 touch NW cor of lake
9000, 9300, 9600, 9900, stake 10200
Hub, 10500 stake + 131.70 = 10631.70
Hub line on trees 7-8-17-18, stands
west 230, 85 ft. The corner is a
sharp stone just inside the corner
of the fence. Quit for night over-
ing it with Newman.

24

137-30 Walden

Thursday April 28-10

Wallace Ritchie. and I chaining rough
Geo Newnan, Ralph Killin, Chas
Jokla and Lawrence Rush Ax men

Beg at line NE Cor Sec 25-137-30
previously set by me from old BTS. we run
west 8° on N+E transit @ 300, 600,
900, 1200. set stakes at 1430. Hub 1500 stake
1620 Culvert set in narrow draw.

1800 Stake County or far as can be seen
along our line in fairly level sand
soil some stone Norway stumps pop
brush. @ 2100. stake 2388.70 Hub

2400. stake pop brush sand gravel stone
slightly rolling Norway stumps

@ 2651. True 1/4 sets South 68 feet

at the 1/4 cor between Secs 24 and 25

137-30. Mont notes call for

L 15° at "

N Pms 18 S 1 1/2 W 35 lks = 23, 10 feet

Spruce 7. N 70 W 33 " = 21, 78 "

we find the stump of the NP standing

plainly marked "BT" and we find the
Spruce dead and down but plainly marked
from which we set the corner by flat
measure from face of BT. after we mark
the NP stands S 1 1/2 W. 23, 10 ft

spruce 7 N. 64° W 21, 78 "

correcting back we set Hub

2651. South. 68. feet

2388.70 " 61.28 ft

1430. " 36.68 "

at which points - we drive a good
solid hub to mark the road center
and set a tall stake marked "Road Cen"
"True Sec line"

137-30

P.M.

25

with Transit set on $\frac{1}{4}$ port on S side of 24. I focus telescope on a flag set at the true SW cor 24-137-30 and run West $8^{\circ}00'$ @ 227. enter slough 300 stake in marsh 400 LV marsh @ 428 Hub on ridge @ 575 enter big meadow 600 stake, 900 stake still in big open meadow also at Hub 1200, up ditch 1500. plug and stake no lock 1800 "

@ 1900 " LV "big meadow" enter plowed field

2100 stake and plug in ploughing

2400 "

2589.30 the true corner to Secs 23, 24 25, 26-137-30 being a stake previously set by me from old Gout B.T.S.

2653.20 feet Gout chain = 2589.30 ft my chain = 63.90 feet short

Wallace Ritchie and Ralph Killin chained this half mile, and I cannot be sure of its true length. Coffee with Mr. Lohman for Mr. Lufmann's benefit and Jacob H.

Pajumpaa walk East to stake 1200 and chain West 94.70 ft to 1294.70 where I set a stake in the rough for $\frac{1}{16}$ cor in meadow and start a line of stakes N on $8^{\circ}20'00''$ for Mr. Lufmann's line in the rough.

My stake at the SW cor of 24 is about 3 ft N and 1 foot west of Confield's

also Olson and Jacob H. Pajumpaa went with Confield when he set this port and he only found the Birch B.T. which stood E of it.

137-30 Walden

About 2.30 P.M. I get through with my crew and they go back East to finish out the day cutting brush on my new preliminary line running south from point near the cor of sec 19. 20, 29.30-137-29

I take the transit, flag pole, chain etc and walk over to the corner to sec 25-26-35-36 137-30 previously established by James M. Confield about 1962

With Alf J. Olson, Jacob H. Pajampaa as chairman at this point the Court Votes call for

Dead aspen	14 N 10 E	15 LKS
"	10 N 71 W	24 "
"	8 S 75 W	27 "
"	7 S 54 E	28 "

Confield did not find any of the trees at first but later found the red aspen from which he set a stake for the line corner.

Alf. J. Olson and Ole Olson has watched this stake ever since and will certify that it has never been moved.

Ole C. Olson, Alf J. Olson, Conrad Olson, John L. Hallin, John

Myre and Frank Anderson began early this morning and cut a line from this corner south and when I arrive they are half a mile south going to beat the band. I call Alf and Ole back to chain and I run a transit line south along the cutout line needle reads $8^{\circ}20'00''$ Chain perfect

K+E Transit Chicago Tape 300.

Olson & Olson Ch. Perfect line Running
South from Cor to Secs 25-26-35-36.
137-30 @ 300. 600. 900. stake
975 Hat 1150 enter marsh 1200 stake
LV. Marsh 1500 stake enter open meadow
1800. 2100 stake 2101.05 Hat in
meadow which is quite solid Poplar Brush
etc. 2150 ground rises 18 inches above
meadow level. 2400 stake on solid
ground. 2425. LV solid ground enter
meadow 2600 Culvert site 2700 stake
at the 1/4 post bet Secs 35 & 36-137-
30. Goat moles call for. O. to 7 at 1.

Tam 7 N 19 W 7. LKS } gone con South
" 5 N 32 E 5. " }

at 2850. 80 Hat N edge of Beaver Dam
which bears SE & NW 3000, 3300
stake. at which point the swamp begins
to fade and at 3600 we set stake on
solid land. Poplar up-land.

3892. 45 Hat 3900. stake, 4200,
4500, 4800, stake 5100. Hat 5100 +
178.60 = 5278.60 10 feet so of road
The corner to sec 35 & 36-137-30
bears East 24.50 feet

at this point Goat moles call for
"O" Pins 12 N 2 1/2 E 50 LKS = 33 ft
W. Birch 14 N 33 1/2 W 31. = 20.46 ft

We set the Hat for this corner from a pine
stump which Mr John O. Eide (Father of
the Olson Boys) claims was marked
11, or 12 years ago when B.B. Boultlett was
there. However we decide to list this
line in the morning, all got in full day
Over night with Ole Olson.

137-30

287

See Lulu Miller
Covers
June 1913Friday April 29th 1910

Alf Olson, Ole Olson

Conrad Olson and I worked all day
for Walden Tap John L. Hallen worked
3/4 day in R.M.

Going to the SE Cor of Tap 137-

30. Got Vaffer call for.

Pine 11 N 21 E 39 Lks = 22.44 ft

" 12 N 34 1/2 W 39 " = 25.74 "

We found the stump of the NE B.T.
standing green marked "B.T." and a piece
of the V.L.P. marked "S 31-T 137-R. 29"
This new piece has been newly sowed off
and lays near the stump Cut by Nels
Matson winter of 1908 and 1909.Mr John L. Hallen says he is willing to
swear that this tree is the tree old
40 ft B.T. as he and Martin Torkelson
and possibly August Widmark sowed
it before any surveyor ever sowed it or
attempted to make any survey and
before any road was shot.Mr Hallen came here first - 15 years
ago, went back. Moved him with
his family 14 years ago and sowed
the tree in Haying time 13 years
ago. A road was surveyed E & W
past this 12 years ago by B.B. Bart-
lett Co surveyor who used this B.T.
from which to set his true corner.The E & W wagon road runs
29 ft south of the true corner and
as Bartlett surveyed the road Mr
Hallen explains this by saying that
Bartlett ran from the east missed
the line post 29 ft and that when
the road was built they used the old
preliminary by mistake.

the NW B.T. is gone and we set the corner on $8^{\circ}30'$ var from face of NE B.T. Beginning at Hub bet for SE cor of Twp 4, 37-30, being a point 29 feet North of center of main graded road we run west $18^{\circ}30'$ var.

K & E Transit Double center locks
300 ft steel tape plummet line

Conrad Olson and I chained part of the line then Alf J. Olson & I and Ole P. Olson and I chained all perfect Chaining.

@ 50 ft. enter open wet meadow.

300. stake, 600 stake in meadow 640 LV

meadow 900 stake 1049.20 Tack in

J.P. stump about 30 ft N of road

1200 bet stake 1500 stake 1542.30 Hub

20 ft N of road 1740 enter swamp

1800 stake @ 1906 feet cross 10 foot creek

18.50 feet N of N end of Bridge on Eastern

Brook East branch of Mayo Brook

end runs South 2100 stake LV Swamp

2271.95 Hub 12 ft N of road 2400.

stake 12 ft N of road center 2700

stake 9 ft N of road. 3000 stake 6 ft

N of road cen. 3134. Hub 12 ft N of road

center 3300 stake 2 ft N of road at 3500

follow main road west 3600 stake in

road 3900 stake near where road bears

vw around marsh. @ 3985 Hub Quit

for night over night with Ole P. Olson

Mrs. Nulands school is out today

Saturday April 30th 1910

The Town Board of Walden meet at the Olson School House today and I make out the bill I have against them for lost falls work and what I have done up to last night. Bills read as follows

Saturday April 30-1910

Town of Walden Cass Co Minn
To John W. Caro. Sr.

Engineer working survey of wagon roads along West line of sec 21 T. 137. R. 29 and South line of sec 19-137-29 Worked:

Aug 26th 27th 28th 29th 30th 1909
being 5 days @ \$4. per day \$20.00

Saturday April 30th 1910

Township of Walden Cass Co Minn
To John W. Caro. Sr.

Engineer working survey of wagon roads along the South line of Section 20. Township 137, North Range 29. West 5 Principal Meridian and South line of sec 24-137-30 and West line of sec 36-137-30

Worked

April 25th 26th 27th 28th 29th 1910
being 5 days @ \$4. per day \$20.00

Alf and Ole Olson had to attend
the town meeting so Frank Anderson and
Ludvig M. Hallen take their place

With Transit set on Hat 3985 W. and
measuring from stake 3900 we continue
my limit line west

Jalm L Hallen - Conrad Olson & me
Ludvig M Hallen - Frank Anderson & I

Chainman P B Line Double Cen' marks
K. & E Transit 300 ft Chicago steel type

@ 4200 set stake enter big open meadow

@ 4500 stake set near S end of J.P. Point
on account of wet spot alert we break
the chain and at 4600 set stake on
quite solid meadow near S end of J.P. Point

@ 4900 stake LV meadow @ 5050 enter
little slough @ 5150 LV slough. 5200 stake
5280. Hub about a rod south and S. of G.
ft west of my prospective Sec corner.

@ 5500. stake 5753. Took in dead
poplar log 5800 stake Hub 6100 stake
6197. Cross N & S private road of John O. Eide
at a point about 40 ft. S of main EX road

@ 6305.35 Hub on Hill top. @ 6400 stake
6700 stake enter on dinner 7000 stake

P.M.

@ 7300 stake 7351.90 Hub 7600 stake

7792. Hub 7900 stake 7920 Hub trip

1/4 on south side 35-137-30 where
Horn vales call for

at 8050 ft enter meadow

8195. Center of 5 foot creek runs south

8200 stake west edge of creek 8500 stake

LV meadow.

32 Apr 30-10 137-30

John L. Hallon claims to know where the bearing trees stand for the S W cor. of 34-137-30 so we leave the crew cutting line west and we walk to the S W cor. of 34-137-30 where Gout Nates call for. Aspen 11. N 29 E 9. L Ks. Aspen 11. N 38 1/2 W 28 L Ks. Mr. Hallon has seen these trees marked and standing but they are both gone. This was Mr. Hallon's S W corner and he was the first settler in here. 14-years ago we find a 7" tree corner stake set near the corner. Walk back to where the men are working and quit for good.

Old Olson takes me to Geo Newman's place after I have got my two checks for \$20.00 each being payment in full up to and including yesterday (\$4000).

I have one day for today May 30-1910. \$4.00 still due me.

We drive to Jenkins in evening. Wesley Cashes my two checks and I catch night train to Hackensack. \$4.00 due from Walden Twp.

~~Sunday May 1st 1910~~

~~All day at Hackensack~~

~~Monday May 2nd 1910~~

~~J. Hackensack to Walker on 4:10 PM train to run legal on court House grounds got in one day for Carr Co. \$5.00~~

~~Tuesday May 3rd 1910~~

~~Commissioner Met at Walker. I worked all day for Carr Co. and got in full day on court House grounds \$5.00~~

Wednesday May 4 1910

all day for Cass Co on at its grounds \$5.00 Jake Huffman rodmn.

Thursday May 5 1910

Huffman and I worked all day on Court House grounds for Cass Co. at Walker \$5.00 for me

Friday May 6th 1910

Huffman went home on morning train I worked all day for Cass Co on at its grounds made plat of Walker village \$5.00

Saturday May 7th 1910

I worked all day for Cass Co on at its grounds too a few looks at grounds finished up plat of grounds. earned \$5.00 paid Chas \$10.00 for board in full and took midnight train to Hachenrath.

Sunday May 8 1910.

all day at Hachenrath making calculations on at its grounds got in full day for Cass Co \$5.00

Monday May 9th 1910

Bill Moulster and I went to Walker on P.M. train I came back to Hach and Bill to Pine River on mid-night train got in full day for Cass Co on at its grounds \$5.00

Tuesday May 10-10
 Monstén is sick at Pine River
 Can all day at Hack drawing speci-
 fications for side walk on C&H
 grounds got in full day for Con. Co
 \$5.00

Wednesday May 11-1910
 all day at Hackensack

Thursday May 12th 1910
 all day at Hack

Friday May 13th 1910
 all day at Hack

Saturday May 14th 1910
 all day at Hack

Sunday May 15 1910
 all day at Hack

Monday May 16-1910
 Hackensack 15 Walker on PM
 train to run line for Lewis Kruger

Tuesday May 17 1910
 Ches Turner and I worked
 all day for Lewis Kruger

Wed May 18 1910
 Walker to Hack on morning
 train Kruger paid me \$8.00 in full
 for work

Motley

35

Thursday May 19th 1910

Hackensack to Motley on morning train. To work for May Township to set stone monuments

R.R. fare Walker to Motley via Red Bank	\$ 1.67
Dinner at Motley	.50
Livery Motley to Newkirk	1.50
Overnight with Newkirk	
Get in one day for May Twp	
July 4th 100	
Livery 1.50	
Total	8.17

I paid Mr. Bickford \$5.00 on acct. before leaving Hackensack.

Friday May 20th 1910

A.M. Ed Newkirk and I drove to Motley and back and got a load of cement.

P.M.

Ed Newkirk & Team. - Geo Brown and I set a stone post 8x8x36 inches with figures on the sides indicating the corner No 228 8-9-16-17-133-31

Saturday May 21st 1910 Newkirk - Geo Brown and I set the 1/4 corner between sections 10+15-133-31 from old four bearing lines and set an 8x8x36 inch stone monument 15 inch length in the ground. We dug a trench 12 inches wide and 6 feet deep into which we place a mixture of Portland cement and clean sharp sand at a proportion of 5 parts sand and 1 part cement. Dinner with Mrs. Geo Brown

We finish out the P.M. by hauling our sand and stone to the corner of sec 22 over night

36

Mottley

May 22-1910

Geo Brown, Ed Newkirk
Hicks and I set the $8 \times 8 \times 36$
inch stone monument at the NW cor
9 sec 2-133-31

P.M. - We set the Stone 1 on N side of
3-133-31 quit for night

May 23 rd 1910

Geo Brown - Newkirk + I set NW cor of
3-4-5-133-31 and got this by
noon.
Took the team to H. in P.M.
set 7 in sec.

12-140-27 May 25-11 37
State Highway Commission

May 25/1911 This is my first day with
the State Highway Commission. I sat
up all last night and at 3.00 am
writing Cooley am staying at Chas. Hald
Walker. Copy field notes at 10.30
am. Leave Walker on freight train
RR fare Walker to Hack 27°

Get some notes and survey rig at
Hackensack and take freight train to
Pine River. RR fare Hack to PR 35°
Over night with Geo. Bell
Hald dep May 25 1911 100
I got 2 mules from no charge
One day for State H.W. Com. 500

May 26 1911 Pine River to Geo Snells
Via Andrew & Miller Lumber which cost 70°
plus some returning Hald exp
LV Pr. Ovid Le Voy to Lumber 9 am
As I take whittled trail 12 m
Lumber for Lvs & Team 60
LV whittled 2 PM as Snells & PM.
gave 2 woy 100 ft pay board back 100
Team goes back to whittled
I stay over night with mill
another day for State H.W. Com. 500

change, chas 1-29°

May 27. 1911 cloudy
Geo Snell, Mark Snell, Everett P. McVay
Tom Music Beg @ line NW cor 12-14027
run transit line East through a line
of corrected hubs set from a last years
survey. Mark & I changing 7°50' per
@ 700 enter wet draw 725 cut into site 775 LV
draw which is bridge 100 ft SE x 300 NW
900 enter hills which is trail N & S.
2040 enter round Cranberry bog
2140 LV bog which is bridge 50 ft S x 100 ft N
2400 stake quit for night all got in full day at.
Geo Snells Cap willow came out on work.

12-140-27

State Highway Commission

May 28-1911

Mark Snell + Wallace W. Rice Chapman
Geo Snell, Tom Music, E.C. McVay Cap. Withrow &
all working for State HW Com.

Begin @ Hub 2400 Continal limit line East
rough chain

@ 5372.50 rough chain =
our last years true chain, intersect line NE
Cor of Sec 12-140-27.

Begin at true NE Cor 12 We run N. along
range line 80 feet and set turn in
revenge. Then to find a pass thro the
mountains we run a trial line
and cut it out N 83° W 2000 feet and
quit for night
we run no levels State HW Com
500

May 29-1911

Mark Snell run levels up to Sta 30 as
given on page 44 and quit for dinner

Tom Music Cap. Withrow
Wallace Rice Begun at NE Cor of 12-140
-27 and cut back East along true line
thro corrected hub to Bond Lake

p.m.

we began in lowest spot of old stage
road near NE Cor of 12-140-27 and run
level line around foot of big hill
along N. side, went half a mile to
about where we quit running levels
and find that Station 30 is about 25 ft
above Sta 50. So we will be able to get
through the hills with about 1% grade

Quit for night and for
last week or so as I am going to
walk

State HW Com 500

12-14027

39

May 30 - 1911 State Highway Commission

I pay Geo Brill 2.50 and on acct
of no change I owe him 1.00 in board

Take stage for Pine River
Dinner at Whittleds 25^c
arrive Pine River 9 P.M. Stage fare 1.50

My wife is waiting for me and we go

Pine River to Walker on midnight train
Over night at Chas Hotel Rk fm .61 Cent

pd Bill 50^c for supper State HW Com 5.00

May 31st 1911

Pine River to Walker on morning
train all day at Walker on north

One day for State HW Com 5.00

40.

12-140-27

May 27

Sta	+ S	HI	- S	Elev
B.M. 1	1.27	1001.270		1000.000

0			5.3	996.000
---	--	--	-----	---------

1			1.3	1000.
---	--	--	-----	-------

T.P.	11.950	1012.170	10.050	1000.220 ✓
------	--------	----------	--------	------------

2			5.87	1006.8
---	--	--	------	--------

3			4.65	1007.5
---	--	--	------	--------

B.M. 2			12.170	1000.010
--------	--	--	--------	----------

4			10.3	1001.87
---	--	--	------	---------

+75			17.5	994.67
-----	--	--	------	--------

5			12.5	999.7
---	--	--	------	-------

+25			11.00	1001.17
-----	--	--	-------	---------

T.P.	8.120	1009.540	10.750	1001.420 ✓
------	-------	----------	--------	------------

May 29-1911 Continuing

6			10.50	999.04
---	--	--	-------	--------

7			18.8	990.74
---	--	--	------	--------

+25			20.00	989.54
-----	--	--	-------	--------

8			10.60	998.94
---	--	--	-------	--------

T.P.	13.940	1023.400	0.080	1009.460 ✓
------	--------	----------	-------	------------

9			4.7	1018.70
---	--	--	-----	---------

+25			1.5	1021.90
-----	--	--	-----	---------

+75			8.3	1015.10
-----	--	--	-----	---------

10			2.3	1021.80
----	--	--	-----	---------

T.P.	8.140	1031.460	0.080	1023.320 ✓
------	-------	----------	-------	------------

+50			3.3	1028.16
-----	--	--	-----	---------

11			8.7	1022.76
----	--	--	-----	---------

+20			12.	1019.46
-----	--	--	-----	---------

12			11.4	1020.06
----	--	--	------	---------

Being back in root of 8 in paper lies standing
 N $84^{\circ}10'E$ of NW $\frac{1}{4}$ sec 12-14-27 thinned from other side

Left 33 ft Elev 1000

Right 33 ft Elev 1000.

L 33-S 365 Elev

R 33-S 10.50 Elev

L 33-S 200 Elev

R 33-S 10.00 "

Being a 7 in N Pin 50 ft 10 R of Sta 3+50 "

L 33-S 6.2 Elev

R 33-S 11.50 "

" " " 11.50 "

" " " 12.00 "

" " " 10.00 "

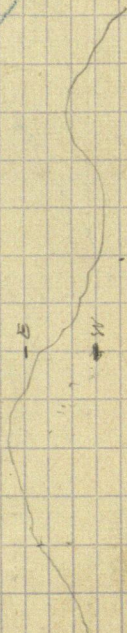
" " " 10.00 "

1 foot 10 R of Sta 5+30

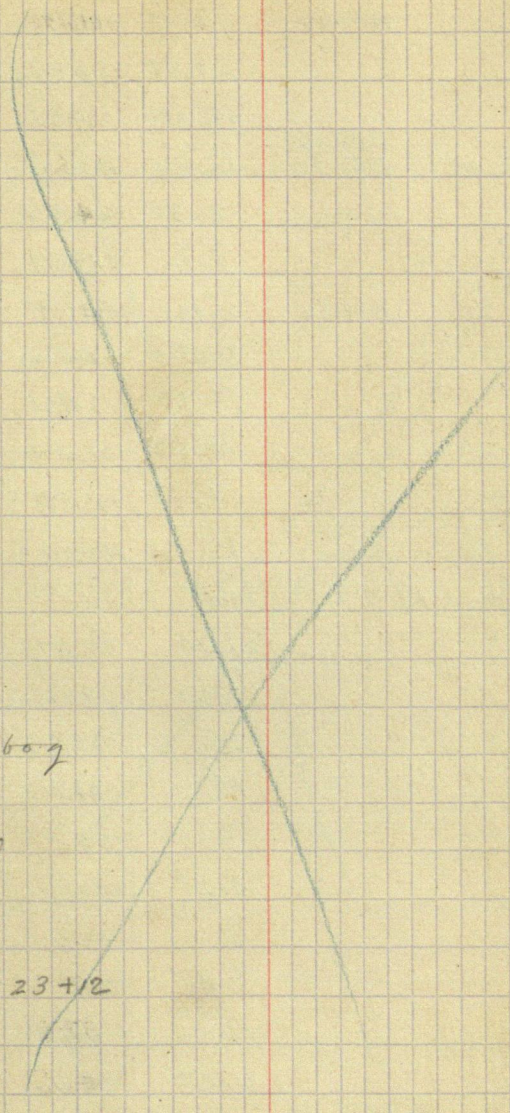
culvert site

on line at 8+60

on line at Sta 10+10



86a	+S	H.I	-S	ELW
+30		1031.460	12.5	1018.96
13.			6.0	1025.46
14			8.7	1022.76
+50			11.8	1019.66
15			6.7	1024.76
✓ T.P.	13,950	1038.86	6.550	1024.91 ✓
16			10.	1028.86
+40			11.5	1027.36
17			9.	1029.86
+40			6.7	1032.16
18			9.4	1029.46
+50			6.5	1032.36
19.			9.	1029.86
+85			2.80	1036.06
20.			4.	1034.86
+40			15.5	1023.36
21.			16.	1022.86
+			15.5	1023.36
22.			5.2	1033.66
23.			2.6	1036.26
✓ T.P.	11.80	1049.61	1.050	1037.81 ✓
+75			12.	1037.6
24			8.	1041.6
+30			2.30	1047.1
25			18.	1034.6



enter-bog

LV bog

on line at $23 + 1/2$

44

10491.61

Ma	+ S	H I	- S	Elw
+50		1038.86	32.00	17.6
26.			28.00	21.6
27			19.00	30.6
✓ TP	1.00	1037.36 1026.61	13.25	1025.61 = 1036.36
+50			2.50	34.9
28			9.2	28.2
TP	0.210	1025.11 ✓ 1014.36	12.460	1014.15 = 1024.90
29			9.50	15.6
+70			21.00	4.1
30			18.00	7.1
+60			12.40	12.7
✓ T.P.	0.80	1013.63 ✓ 1002.88	12.280	1002.08 = 1012.80

June 13 1911 Continuing

31			7.70	5.9
BM.3			7.26	985.62 1006.87
+90			25.	988.6
32			19.	994.6
33			7.	1006.6
+50			4.50	1009.1
34			8.	1005.6
35			9.30	1004.3
+60			17.	996.6
36			11.50	1002.1
T.P.	14.62	1028.04	0.21	1002.67 1013.42
37			0.60	1027.4

on top of tall slabs at 27. + 50

at 28 + 20

at 30 + 60

Marknell Rodman

on 30 in W

on 30 in WP slabs at 31 + 4.

on line at 36 + 50

46

Ma

+S

1028.04

HI

-S

Elev

T.P. 14.10 1041.87 0.27 1027.77

+20 12.30 129.6

38 13. 28.9

39 1. 40.9

+30 2.30 139.6

T.P. 11.30 1052.96 0.21 1041.66

40 5. 47.9

41. 2. 50.9

42. 13. 39.9

T.P. 0.44 1039.46 13.94 1039.02

43. 12.20 127.3

T.P. 0.38 1026.15 13.69 1025.77

44. 20. 6.2

T.P. 0.33 1014.78 11.70 1014.45

45 15. 999.8

T.P. 1.17 1002.15 13.80 1000.98

46 8.40 993.8

T.P. 1.03 989.46 13.72 988.43

BM 4. 5.30 984.2

47 7.00 982.5

+20 ^{100 T.} 14.00 975.5
Left

48 22.00 967.5

49 30. 959.5

50 35.00 954.5

+40 40.00 949.5

on line at 37+3.

at 39+60

at 42+8.

at 43+10

on 2 in pop 3-ft Hi 6 ft R at 44+30

at 45+15

36+50

3 ft 2 ft at 46+95

Can of main road W or NE Sd

100 ft ft. left at 47+20 in can of main road low place

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

1000

9 15

48

Sta

+S

HI

-S

ELW

51.

989.46

36.

953.5

52

10.

979.5

T.P.

0.30

989.16

Village of Walker

at iron mon at SE Cor of Archie Leagoner corner being SW Cor Lat

Block - Walker we put in the following bearings 10° Mag Var

SE
Corner of porch bears N 43° 4' W 30.67 feet to a lock head driven in floor of porch corner. 2" apple tree bears North 8.95 to South side of tree

Nearest corner top of 4 foot wall bears S 0° 42' E 5.72 feet

From rim at SE Cor Lat

Block run S 15° 55' E Var 10° or assumed right angle to the street and put a lock in the side walk. at 10 feet drive another lock in side walk at 25 feet drive a hut made of half a bat stick and drive lock

50

June 15 - 1911 Mark and Rod
Geo " Arch

LEVELS ON ROAD LINE BET.

T.P.	+	H.I.	-5	Elev
	3.10	1040.91		1037.81
BM			5.27	1035.64
19			10.5	30.4
20			10.3	30.6
21			13.2	27.7
T.P.	0.71	1028.31	13.31	1027.60
22			6.0	22.3
23			10.5	17.8
+50			16.0	12.3
24			16.0	12.3
25			16.0	12.3
+50			13.5	14.8
BM			13.65	1014.66
26			15.5	12.8
27			12.0	16.3
T.P.	6.77	1023.18	11.90	1016.41
+50			4.7	18.5
28			9.0	14.2
+60			5.0	18.2
29			8.0	15.2
+50			11.0	12.2
30			12.0	11.2
+50			16.0	7.2
31			13.0	10.2
T.P.	0.88	1010.68	13.38	1009.80

PART OF STATE ROAD No 5. (57)
Sec. 1+12, Tp. No. Rg.

At sta 23+12.

sta 19+0

sta 21+50

Enter swamp

In

"

Leave

"

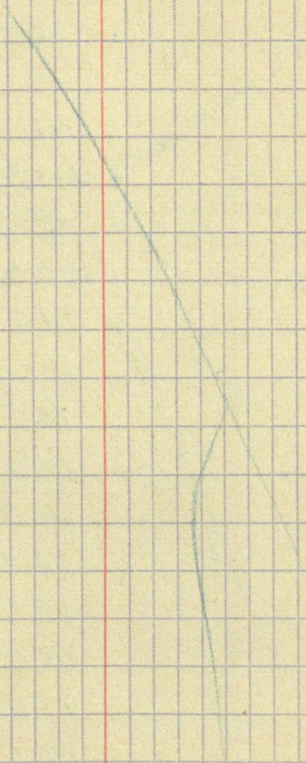
sta 27+2

Enter Hills

between hills

52)	+S	HI	-S	Elev
		1010.68		
BM			4.38	1006.30
32			9.7	1001.0
+50			13.6	997.1
33			12.0	998.7
34			2.3	1008.4
T.P.	4.10	1013.11	1.67	1009.01
35			8.4	4.7
+50			6.4	6.7
+75			5.3	7.8
36			7.2	5.9
+25			7.6	5.5
37			21.0	992.1
38			13.5	99.6
+40			11.2	1001.9
39			15.0	998.1
+50			17.0	996.1
40			20.0	993.1
+50	16.1		17.0	996.1
41			19.0	994.1
TP	1.61	1002.42	12.30	1000.81
+20			9.7	992.7
+75			16.0	986.4
42			14.0	988.4
43			13.3	989.1
+30			12.2	990.2

on side hill



54)

+S

HI

-S

Elev

1002.42

44			14.0	988.4
T.P.	6.66	996.66	12.42	990.00
45			13.5	983.2
+60			12.2	984.5
46			16.0	980.7
+50			13.3	983.4
+75			9.80	986.9
47			11.0	985.7
T.P.	3.60	988.14	12.12	984.54 ✓
48			10.0	78.1
49			14.0	74.1
+45			13.0	75.1
50			14.0	74.1
51			15.0	73.1
52			19.0	69.1
+70			16.0	72.1
53			15.5	72.6
+40			13.0	75.1
54			17.0	71.1
55			12.0	76.1
+51			9.3	978.8

sta 44+11

sta 47+30

In road.

In road.

See 12-140-27

0	E	1900
---	---	------

19 $S 70^{\circ} E$ $20^{\circ} R$ $650'$

25+50 174°E 36°L 200'

27+50 1162° E 12° L 850'

36+0 586°E 32°R 520'

41+20 S 73° E 13° R ~ 580'

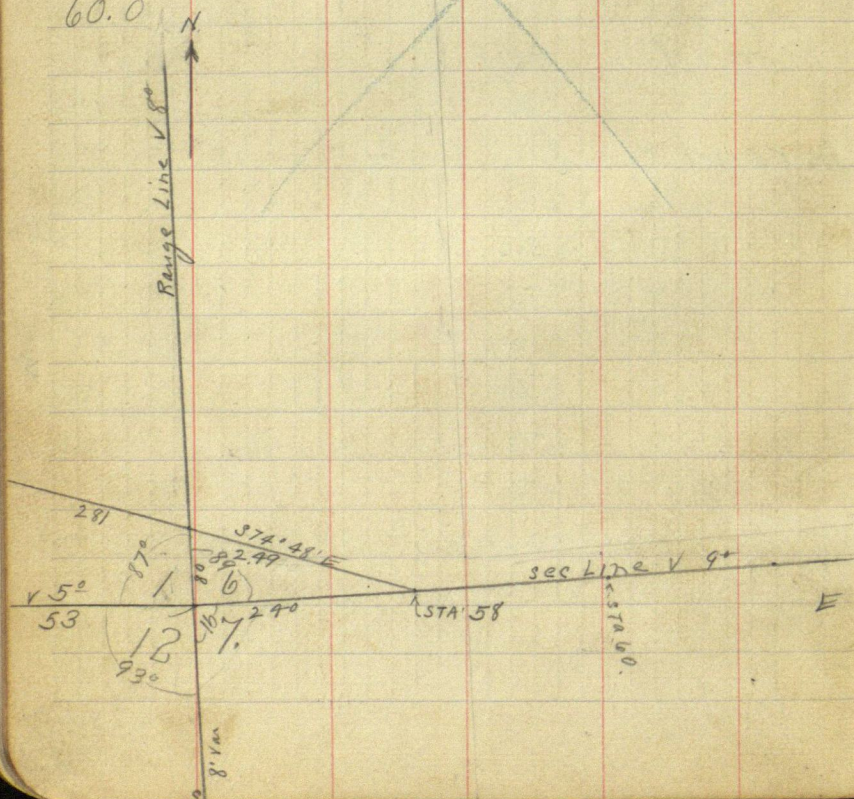
47+0 N 77°E 30°L 570

52+70 S 74°48'E 28 1/2 R 281'

55+51 S 74° 48' E 249

58.0 N 86° E 200

60.0



- @ 18+50 put in a T.P. Elev 1032.36
 @ Sta 19 Tack in B.M. bears N32°58'E 33.90 ft
 @ Sta 25+5 Tack in B.M. bears N10°5'E 55.35 ft
 @ Sta 31+6 cross sec line 3019.60 ft E of NW cor
 of sec 12.
 @ 49+43 intersect old main road @ 51.00. cen of road
 51+50 LV road which bears NE
 @ Sta 52+70 B.M. bears N89°51'W
 @ Sta 55.51 intersect Range line at a point 80 feet
 N of NE cor sec 12 set Hub
 @ Sta 58 intersect sec line 240 ft E of sec cor.
 Thence following sec line 200 ft to Sta 60.
- May 11-1911 Sunday: Geo + Mark Snell, Schneider, Rice
 worked up. Bill Carey + team got iron
 posts from Shipards.
- May 12-11 Geo + Mark Snell, Rice, Schneider, Geo
 Bluhm, Peet M^cVay, Tom Music, Wm
 Carey worked.
- May 13-11: Geo Bluhm, Tom Music, Peet M^cVay,
 Mark Snell, Wallace Rice, Bill Carey worked.
- May 14-1911: Mark Snell, Wallace Rice, Peet M^c
 Vay worked.
- May 15-1911: Geo Snell, Mark Snell, M^cVay Music
 Rice & day

Cross section Notes

Sta.	Left	Center	Right
0		F. 4.	
1		F. 1.4	
2		C. 3.8	
3		C. 3.5	
4		F. .4	
+75		F. 5.9	
5		F. .3	
+25		C. 1.3	
6		C. .6	
7		F. 6.0	
+25		F. 9.6	
8		F. 4.6	
9		C. 8.5	
+25		C. 9.8	
+75		C. .3	
10		C. 3.3	
+50		C. 8.0	
11		C. 2.5	
+20		F. .8	
12		0.0	
+30		F. 1.8	
13		C. 3.4	
14		F. 1.5	

Sta.	Left	Center	Right
+50		F. 5.1	
15		F. 1.9	
16		0.0	
+40		F. 2.1	
17		C. .3	
+40		C. 2.1	
18		F. 1.0	
+50		C. 2.1	
19		F. .6	
+85		F. .3	
20		0.0	
+40		C. .3	
21		C. 1.3	
22		C. .7	
23		0.0	
+75		F. 4.2	
24		F. 4.1	
+30		F. 4.3	
25		F. 4.2	
+50		F. 1.2	
26		F. .9	
27		C. 1.4	
+50		C. 3.4	
28		0.0	

(62)

Sta	Left	Center	Right
29		C. 3.9	
+70		C. 3.0	
30		C. 3.4	
+60		C. 1.2	
31		C. 5.1	
+90		C. 3.0	
32		F. 4.0	
33		F. 6.3	
+50		F. 3.2	
34		C. 2.9	
35		0.0	
+60		C. 3.9	
36		C. 3.4	
37		F. 7.6	
+20		F. 6.1	
38		C. 1.1	
39		C. 1.8	
+30		C. 1.2	
40		F. 1.3	
41		C. 1.9	
42		F. 1.7	
43		C. 1.1	
44		C. 2.0	
45		F. 8	

abandoned

~~Sta.~~~~Left Center Right~~~~46~~~~47~~~~+20~~~~48~~~~49~~~~50~~~~+40~~~~51~~~~52~~

Sta.

Left Center Right

20

0.0

21

C. 1.3

22

C. .7

23

0.0

+50

F. 4.2

24

F. 4.1

25

F. 4.2

+50

F. 1.1

26

F. .9

27

C. 1.4

+50

C. 3.4

28

0.0

+60

5.6

66

Sta.	Left	Center	Right
29		C. 3.9	
+50		C. 2.8	
30		C. 3.4	
+50		C. 1.4	
31		C. 5.1	
32		F. 4.0	
+50		F. 7.8	
33		F. 6.3	
34		C. 2.9	
35		0.0	
+50		C. 2.4	
+75		C. 4.5	
36		C. 3.4	
+25		C. 3.6	
37		F. 7.6	
38		C. 1.1	
+40		C. 4.0	
39		C. 1.8	
+50		C. 1.0	
40		F. 1.0	
+50		C. 2.5	
41		C. 1.9	
+20		C. 1.1	
+75		F. 4.1	

Sta.	Left	Center	Right
42		F. 1.7	
43		C. 1.1	
+30		C. 2.5	
44		C. 2.0	
45		F. .8	
+60		C. 1.3	
46		F. 1.8	
+50		C. 2.1	
+75		C. 5.8	
47		C. 6.1	
48		0.0	
49		F. 2.1	
+45		0.0	
50		F. .3	
51		0.0	
52		F. 3.7	
+70		F. 1.2	
53		F. 1.0	
+40		C. 1.1	
54		F. 2.3	
55		C. 2.0	
+51		C. 4.8	

Cross section Notes

on
Changed Grade

Left Center Right

Sta.	
0	F. 1.3
1	F. .3
2	C. 1.9
3	C. .9
4	F. .7
+ 75	F. 4.8
5	C. 1.0
+ 25	C. 3.1
6	C. 3.0
7	F. .4
+ 25	F. 2.0
8	F. 3.0
9	C. 1.1
+ 25	C. .4
+ 75	C. 6.4
10	C. 1.9
+ 50	C. 5.9
11	. 0.0
+ 20	F. 3.0
12	F. 2.3
+ 30	F. 2.9
13	C. 3.1
14	0.0

Sta	Left Center Right
+50	F. 3.5
15	F. .3
16	C. 1.8
+40	0.0
17	C. 1.4
+40	C. 2.4
18	F. .8
+50	C. 1.1
19	F. 2.0
20	C. .7
21	C. 2.3
22	C. 1.0
23	C. .7
+50	F. 2.0
24	F. .8
25	F. 2.0
+50	F. .5
26	F. .7
27	0.0
+50	C. 2.4
28	F. 2.2
+60	C. .7
29	F. .6
+50	F. 1.6

Sta.	Left	Center	Right
30		0.0	
+50		0.0	
31		C 3.1	
32		F 1.1	
+50		F 1.4	
33		F 1.0	
34		C .7	
35		0.0	
+50		C 4.3	
+75		C 5.0	
36		C 4.1	
+25		C 3.2	
37		F 7.3	
38		0.0	
+40		C 4.0	
39		C .8	
+50		0.0	
40		F 1.3	
+50		C 2.1	
41		C .4	
+20		F 2.2	
+75		F 4.3	
42		F 2.8	
43		0.0	

Stg

Left Center Right

+30

C 2.0

44

C 1.0

45

F 1.1

+60

F 2.9

46

F 1.8

+50

C. 4.2

+75

C. 4.1

47

C. 4.0

48

F. 3

49

F 2.6

+45

F 1.0

50

F 1.8

51

C. 6

52

F 1.0

+70

C. 1.9

53

C. 1.2

+40

C. 3.2

54

F 1.8

55

C. 1.0

+51

C. 2.7

78

Yardage Notes for State Road

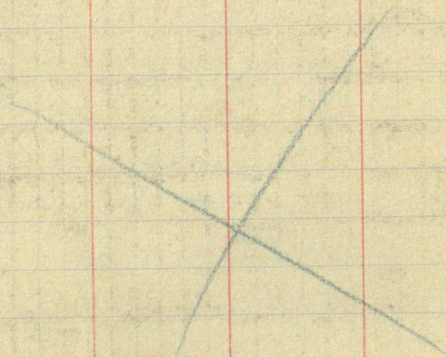
Sta

0

1 - F 62.8

2 - C. 72.4

3 - C. 114.5



(79)

(1)

Walker

145-31

Cass Lake

Oct 3rd 1911. Commissioners met at Walker. I work all day copying field notes of Twp 145-31 and 144-31 so I am going to Cass Lake with Commissioners Swanberg to run some road ditch on state road No 1. and do not know just how long it will take me or how much line I will have to run

Walker to Cass Lake via I N Ry. Bus + drayage on instruments.	25 ⁰⁰
R.R. fare Walker to Cass Lake	65 ⁰⁰
Supper at restaurant	50
Lodging at Endion	50
One day for Cass Co	400
	<u>\$59 00</u>

(2) Cass Lake

(80)

145-31
Oct 4-1911

Andrew J. Swanberg and
I Lv Cass Lake with team
of James Kennedy at 8 a.m.
and drive 3 miles South and
 $1\frac{1}{2}$ miles West or near there
Swanberg goes West further
to take care of the team while
I take a road crew to assist
me. John Dahl (Foreman)

Axel Johnson (Cook)

Peter Lindquist (Laborer)

Begin at 9:30 A.M.

Dahl. Rodman. Lindquist &
Dahl Chainmen. Johnson at

Beginning at station "0."
in a small meadow
in centre of new road fill
where the E & W road appears
to run on 12° Var

Beginning
the corner 12° Var section
run $N 37^\circ 28' E$ @ 0 + 18 feet
Hub B.M. flush with meadow
level @ 1, 2, stake in bog
@ 300 feet E. edge of bog

Cross Lake

145-31

(81)

(3)

Oct 4th 1911

@ 400. stake 4 + 65 tall stake LV
meadow Thence N $31^{\circ}15'E$. $\sqrt{12}$
Sta 5. Sta 6 set stake + 60 enter
meadow, 700 tall stake in second
meadow Thence N $17^{\circ}10'W$
8. 9. stake 10. stake in narrow
11, 11 + 50, tall stake in meadow
Thence N $18^{\circ}34'E$ up the big
meadow @ 12. 13. 14. 15. 16. 17
18 set stakes in meadow
Thence N $8^{\circ}5'W$ $\sqrt{12}$ rough @
139 paces set instrument at
sta 19. Thence N $32^{\circ}45'E$ 139
paces to sta 20. Thence N $17^{\circ}35'E$
146 paces to sta 21. set transit
Then N. $10'E$ 146 Paces and set
Sta 22. Thence N $20^{\circ}30'W$
55 Paces + set transit at sta 23
Continue N $20^{\circ}30'W$ 60 feet from
sta 23 + set sta 24. in old
Creek bed. runs North on solid
ground @ 150 feet set Sta 25
in new swamp @ 300 feet set
Sta 26 and quit

(4) Cross Lake

(82)

145-31

Oct 4th 1911

B.M. slu Leveling

	+ S	- S	H I	Elev	
1.	4.25		104.25	100.	Hole @ 0+18
0		4.00		100.25	Road
+ 18		4.25		100.	
1		4.60			
2		4.50			
3		5.00			
4		5.00			
+ 65		4.30			
TP	5.64	3.48	106.41	100.77	at 4.68
5		5.50			
6		5.00			
+ 60		6.00			cut
7		6.40			Surf
TP	3.75	5.74	104.42	100.67	at 5.65
8		4.40			7.
9		4.50			
+ 70		4.10			Brown
10		5.2			Dam
11		5.8			
+ 50		6.		98.40	
TP	4.55	5.56	103.41	98.86	at 5.0
12		5.10			
13		5.10			
14					

Cross Lake

145-31

(83)

B.M.

Sta	+ 9	- 5	HI	Elev	
15		4.8			
16		5.2			
17		5.1			
18		5.		98.41	
TP	5.60	4.70	104.31	98.71	at slot 18.
19					
20		6.2		98.11	
TP	5.90	5.71	104.50	98.60	at slot 20
21	7.				

(84)

(00)

Co job No 12

Section Road No 16

Sta	Eleva	grade	Cut or Fill	Left C. Right
-----	-------	-------	-------------	---------------

May 31 1914 Sunday

Walker to Jenkins on 1 am train

Gates Alma and J. RR fare

Gates and Curo set Sec Corps for
Walden Twp - at JenkinsJune 1st 1914 MondayAlma & J. Jenkins to Pillager Dinner
at City Hotel 25 + 25 = 50⁰⁰ RR farePM. Pillager to N B Clow farm
Jones team & dinner supper and over
night with Clow Alma & J.June 2nd Clow & Curo to Pillager & back

Clow's Auto - Worked in PM. Billy 1/2

Wed Jan 3 Curo & ^{at Curo} Billy Fitchin PM

Thurs " 4 Curo Billy Chanick PM - 1/2

Fri " 5 Curo Wallis Scholtz Billy PM

Sat " 6

Sun " 7

Co Job No 12
Road No 16

© 85

Area
Exps Emb

B.M. + S H.E. - S TP. 2-77 E
99.33 741 106.74 EL 103.97

+ S 318

Job 12 At Rd No 16 June 1914

Sum 7 8 9 10

Sum

6 7

5 6

4 5

3 4

2 3

1 2

1 1

0 0

0 0

0 0

0 0

0 0

0 0

0 0

0 0

0 0

0 0

Gasman's

Wm

Wm Fackler

W.B. Clow

Walter Achnelt

(86) ①

County Job N^o 12 Plan N^o 1131

Sta

BS +

HI

FS -

Σ Elev

BM

0

7.15

107.15

100.00

0

8.55

98.60

0

9.20

98.70 ?

1

98.20 ?

2

95.60 ?

+20

94.50

3

94.50

+

- -

4

96.50

5

98.50

6

100.60

6+70

Tumpiking

7

Tumpiking

102.0

7+70

Tumpiking

102.00

8

102

9

102.00

10

100

+12

11

100

12

100

13

98.90

14 1300 culvert

97.80

15

96.70

16

① 15 + 69 @ 12 X 287 →

96.70

(L) 10'

(R) 10'

87
(2)

Rod

Sta Elev

Rod

Sta Elev

Remarks

Spikes in oak fence post
35' NE of Sta 0.00 Elev 100.00

iron see cor = grade

Tamping

6+70 to 7+70

Tamping

12' X 34' Metal Culvert
Elev Invert 96.00Sta 13 - 12' X 30' Metal Culvert
Elev inlet 96.4@ 15+69 we find a
12' X 2' Culvert
16W and 8' E of line

(88)³

Sta	BS+	HI	FS-	SE	BM
17				96.70	
18				96.70	
19				96.70	
+					
20				99.10	
21				101.5	
21+20		Turnpike		102.9	
22		"		102.9	
23		"			
23+45		"			99.33
		"			
23.70		"			
23+85					
24				98.5	
25				97.5	
26				97.5	
27				98.5	
28				98.	
29				98.5	
30		Turnpike		100.	
31		Turnpike		98.79	
31+70		"		—	
32				97.5	
32+40				97.	
33				97.30	

Rod (L) SE^{10'}

Rod (P) S E

Remarks (89) (Z)

Turnpiking 21+20
to 23+70
Turnpiking

Turnpiking 23
BM Spikorn 9° fence
Post 33'W of 23+45
Elev 99.33

Turnpiking
12x28 culvert or
remain 97.40?

90

Sta	BS+	HI	FS-	SE	B.M.
34				98.	
35				100.66	
36				103.3	
37				106	
38				107	
39				104.83	
40				102.66	
41		Turning		100.5	
42		"			
43		"			
44		"		94.	
45				90.5?	
46				87.	
47				83	
48				79	
49				76.5	

R04

SE^{10'}

R04

SE^{10'}

Remarks

91
6

927

Auto Fill

Sta	BM	Elev	Grade	Left	Center	Right
	1	100.0				
	2	98.60				
0		97.60	98.60	Left 15.5 C 1.55	F 1.00	Right 15.5 C 0.25
1		97.90	98.20	15.50 C 1.55	F 0.30	15.50 C 1.55
2		95.80	95.60	15.00 C 1.05	C 0.20	17.50 C 3.55
+ 20			94.50			
3		93.85	94.50	15.25 C 1.25	F 0.65	16.75 C 2.75
4		95.75	96.50	14.65 C 0.65	F 0.75	16.25 C 2.25
5		97.15	98.50	14.10 C 0.10	F 1.41	16.10 over C 2.14
6		100.95	100.60	16 C 1.90	C 0.35	17.50 C 3.55
+ 70						
7		100.40	102	14.50 C 0.40	F 1.60	15.70 C 1.70
+ 70			102			
8		102.75	102	16.50 C 2.45	C 0.75	17.65 over C 3.65
9		103.30	102	15 C 0.90	C 1.30	18.30 C 4.30
10		96.35	100	18.50 F 3.00	F 3.65	18.15 F 2.75
+ 12			96.00			
11		101.90	100	20.30+ C 6.30	C 1.90	18.15+ C 4.15
12	TP	103.97 on stone 100.68	100	17.30+ C 3.28	C 0.68	15.70+ C 1.68
13		96.08	98.90	18.75 F 3.17	F 2.82	19.13+ F 3.42
13			96.40		C 0.00	
14		100.48	97.80	19.75 C 5.73	C 2.68	18.50 C 4.53

Note { BM N-3 nail in corner 5' oak 40' to N
@ 7+10 Elev 103.48. N 107.15 - S
3.67

Rod Reading

L	C	R.	H [±]	Remarks
			107.15	at H [±] 0. Spike in oak fence post 35' NE
	8.55	✓		Top of iron sec. Cor @ H [±] 0.
9.00	9.55	9.60 ✓		on ground
9.40	9.25	9.40 ✓		
12.50	11.35	10.00 ✓		
13.40	13.30	11.90 ✓		
12.1	11.40	10.40 ✓		
10.50	10.	8.45 ✓		
6.65	6.20	5. ✓		
			6+70	
6.75	6.75	5.45 ✓	To	
			7+70	Turning
4.70	4.40	3.50 ✓		
4.25	3.85	2.85 ✓		
11.15	10.80	10.90 ✓		
			10+12 = 12" X 34' Metal Culvert Elev H [±] End	
			96.00 Elev Low end Elev	Elev H [±]
✓ 2.85	5.25	5. ✓		
✓ 5.20	5.80	6.80	106.48	TR - 53.18 Elev TR 103.97
			+ S 2.51 H [±] 106.48	
✓ 11.75	10.90	12.00		
			13+00 = 12" X 30' Metal Culvert Elev H [±] End	
			96.40 Elev Low end	Elev H [±]
			0.00 Elev H [±]	
4.95	6.00	6.15		

Cut n Fill

Sta	BM	Elev	Grade	Left	Center	Right
15		94.88	96.70	@ ^{15.30} 1.30	F 1.82	F ^{16.25} 1.50
+ 69						
16		94	96.70	F ^{17.00} 2.00	F 2.70	F ^{18.00} 2.60
17		95.6	96.70	F ^{14.15} 0.10	F 1.10	C ^{15.20} 1.20
18		97.9	96.70	@ ^{18.70} 4.70	@ 1.20	C ^{16.20} 2.20
19		95	96.70	F ^{14.60} 0.40	F 1.70	F ^{16.00} 1.30
20		99.9	99.10	C ^{16.20} 2.20	C 0.80	C ^{15.80} 1.80
21		102	101.50	@ ^{16.30} 2.30	C 0.50	C ^{16.70} 2.70
22		100.80	102.7	C ^{15.70} 1.70	F 1.20	C ^{14.3} 0.30
23		99.50	100.30	@ ^{15.70} 1.70	F 1.00	C ^{14.00} 0.60
+ S 6.95	HI					
23						
24		97.70	98.50	C ^{15.30} 1.30	F 0.80	C ^{15.} 0.90
25		97.90	97.50	C ^{17.00} 1.80	C 0.40	C ^{15.10} 1.10
26		95.73	97.50	C ^{14.50} 0.50	F 1.80	F ^{14.15} 0.10
27		98.40	98.50	C ^{16.} 1.80	F 0.10	C ^{16.} 1.80
28		97.40	98.00	0.00	F 0.60	F ^{14.50} 0.20
29		99.30	98.50	C ^{18.} 3.60	C 0.80	C ^{14.} 1.40
30		99	100.00	C ^{15.} 0.70	F 1.00	C ^{14.5} 0.50
31		98.50	98.60	C ^{15.7} 1.20	F 0.10	C ^{15.} 0.90
32		97.50	97.50	C ^{16.} 1.70	0.00	C ^{15.5} 1.40
33		97	97.30	C ^{15.} 0.80	F 0.30	F ^{15.} 0.70

Rod Reading

L	C	R	H/E	Remarks
9.48	11.60	12.28	106.48	
	12.30			
✓ 12.75	12.50	13.40	✓	
✓ 10.85	10.85	9.60	✓	
✓ 7.10	8.55	9.60		
✓ 11.15	11.50	12.10	✓	
✓ 7.20	6.60	7.55	✓	
✓ 4.65	4.50	4.30		
✓ 4.80	5.65	6.15		
✓ 6.30	7.00	7.40		
		106.28		
✓ 6.15	6.85	7.00	✓	
✓ 8.45	8.60	8.85	✓	
✓ 9.	8.35	9.65	✓	
✓ 10.25	10.55	10.85	✓	
✓ 7.95	7.85	7.95	✓	
✓ 10.30	8.95	10.45	✓	
✓ 6.15	7.	8.40	✓	
✓ 7.58	7.30	7.78		
✓ 8.48	7.78	8.78		
✓ 9.08	8.78	9.38		
✓ 10.18	9.28	11.68		

TP-5 7.10 Elev 99.82 = 99.30
 on spikes in rock face post #23-47
 being 13 m H = 2. check with H/rod
 OK

96

B 94 H I

- 5 2.53 =

Cut or Fill

Stn	BH	Elev	Grade	Left	Pen	Right
34		97.90	98,	C ¹⁵ 1.20	F 0 10	C ¹⁵ 1.10
35		99.20	100.66	F ¹⁶ 1.56	F 1.46	F ¹⁶ 1.36
36			103.30			
37			106,			
38			107			
	4	103.75	Shingle wall in weather gravel even with top of cement Foundation soil			
39			104.83			
40			102.66			
41			100.50			
42			98.30			
43			96.?			
44			94,			
45			90.50			
46			87,			
47			83,			
48			79,			
49			76.50			
50						

-56.85m by sta 30' LK
 @ 34+40 on

97

Rod Reading

L	C	R	Dist out	Remarks
9.08	8.38	9.18		
8.18	7.08	7.98		

Cor of Clow's house

TP HI 100.25 - 6.85 = 99.43 on
 top of by sta 30' LK @ 34+40

Rod reads @ Sta

98

①

Hackensack Min.

M+I Ry.

Station - S

HI

+ S

Elev

B.M.

1395.09

3.50

1391.5892

0 5.80

89.30

1 5.70

89.40

2 5.60

89.50

3 5.40

89.70

4 5.32

89.80

+45 5.25

89.90

5 5.08

90.00

6 5.10

90.00

+60 3.90

91.20

2.20

92.90

7 5.05

91.00

5.50

89.60

8 5.20

89.40

6.10

89.00

4.30

85.80

7.20

87.40

6.10

89.00

+06 5.20

89.90

9 5.40

89.70

6.20

88.90

7.70

87.40

10.00

85.10

Station 0 is a point on RR 500' South of
Center of Sec 19-140-30

over creek

725 E track center

Sec House 40' to right of track
Door slip of Section House

720 Center of siding 15' Right

on siding 27' R.

50' $\frac{1}{2}$ Left

100' " L

130' " L

South Line Whippel Ave

on siding 40' $\frac{1}{2}$ R

50' Left

• 130' "

100

③

	- S	H I	+ S	Elev
10	5.40	1345.09		1389.70
	5.50			89.60
	8.20			86.90
TP	5.14	1394.17	422	1389.95
+50	2.80			91.40
	2.00			92.20
11	4.70			89.50
	4.70			89.50
	7.60			86.60
+90	4.80			78.40 89.40
12	4.90			89.30 89.30
	4.80			89.40
	7.90			86.30
13	5.00			89.20
	5.01			89.20
	14.25			79.95
14	5.20			89.00
	5.15			89.05
15	5.20			89.00
	5.30			88.90
16	4.70			89.50
	5.10			89.10
+10	5.10			89.10
17	4.50			89.70
	4.70			89.50

50' R.

50' L

Platform Station

Below "

on siding 50' R

50' L

South line Lake Ave

on siding 40' R

50' L

on siding 30' R

120' L Vtop of water

on siding 18' R

" " 15' R

" " 15' R

" " 15' R Cattle Shoot

102

(5)

	-S	HI	+S	Elev
TP	5.62	139246	3.91	1388.55
18	580			86.70
19	510			87.40
20	430			88.20
21	350			89.00
22	260			89.90
23	160			90.90

m R.R. Going North.

104 First M

(7)

Hackensack

	- S	HI	+ S	Elev
BM		1394.98	3.37	1391.5892
0	780			87.20
1	720			87.80
2	750			87.50
3	740			87.60
4	930			85.70
+75	10.00			85.00
				76.40
5	9.30			85.70
6	700			88.00
7	4.85			90.15
+35	3.03			92.00
8	720			87.80
+06	720			87.80
+06	7.40			87.60
-	8.40			86.60
-	8.60			86.40
+86	6.90			88.10
+86	9.25			85.80
9	7.70			87.30
-	9.00			^{86.00} 84.00
-	6.60			88.40
+80	8.45			86.60
+80	6.00			89.00

First Street

0 = a point on County road 500' S of Cen 19-140-30

on fill over creek
Top of water in creek

Door jamb Bartlett's Store

South line Whippel Ave.

50' R. on side walk in line with Front St

on ground in line with Front St

Cen Whippel Ave

on side walk SW Cen Bk. C

On ground " " " "

32' $\frac{1}{2}$ R. on ground

32' " " side walk

32' R. on ground

32' R. on side walk

106

⑨

	- S	HI	+ S	Elev
+ 80	5.70	1394.98		1389.30
10.	6.80			88.20
	8.20			86.80
	6.00			89.00
	5.90			89.10
+ 70	5.60			89.40
	7.50			87.50
	5.10			89.90
	4.20			90.80
+ 80	4.10			90.90
11	5.40			89.60
	7.00			88.00
	4.50			90.50
T.P.	5.31	1396.29	6.62	1389.67
+ 80	5.35			91.00
+ 90	5.78			90.50
+ 70	3.39			92.90
+ 90	6.54			89.80
+ 90	3.83			92.50
12	5.56			90.70
	4.91			91.40
+ 70	5.18			91.10
	5.16			91.10
	2.62			93.70
	3.84			92.20

First St

40' Rt door jamb Hotel Garrity

32' R on ground

32' Rt side walk

40' R. door jamb warehouse Hotel

32' R on ground

32' R on side walk

40' R. Door jamb Spains store

40' R " " " Warehouse

32' R on ground

32' R. on side walk

32' L. top of scales

40' R. Dennis door jamb

32' R

32' R on side walk NW Cor Bk 6

32' R on ground

32' R

32' R on side walk

40' R on ground SW Cor Bk 7.

108

11

	- S	HI	+ S	Elev
13	4.88	1396.29		1391.40
	483			91.50
	247			93.80
	290			93.40
+ 80	0.66			95.60
14	3.38			92.90
	338			92.90
	241			93.90
	239			93.90
15	439			91.90
	439			91.90
	207			94.20
	338			92.90
+ 40	1.07			95.20
+ 50	1.25			95.00
+ 70	2.02			94.30
+ 70	3.70			92.60
TP	485	1400.07	8.63	1391.44
16	863			91.50
	751			92.60
+ 50	852			91.60
	649			93.60
	754			92.60
17	732			92.80
	7.41			92.70

First St

30' R on ground

40' R on Side walk

40' R on ground

40' R 400 ft jamb Wagons Land Office

30' R on ground

40' R Side walk

40' R ground

30' R on ground

40' R Side walk

40' R ground

40' R door jamb Woods Ware House

40' R " " " Store

32' R Sidewalk NW Co Bk 7

40' R ground

40' R + ground Murry Ave

30' R "

40' R Sidewalk

40' R ground SW Co Bk 8

30' R on ground

110

(13)

	- S	H I	+ S	Elev
17	439	1400.07		1395.7 1396.70
+ 10	380			96.30
+ 50	392			96.20
18	451			95.60
	256			97.50
+ 60	232			97.80
19	436			95.70
	188			98.20
+ 50	376			96.30
+ 60		1400.07		1402.07
20	555			94.50
21	760			92.50
22	442			95.70
23	547			94.60

First St

28

111

40' R on side walk

Door Saloon

End of side walk

40' R

40' R 400 Pfremer B149

40' R on ground

40' R on ground

112

(13)

1914

Hackensack June
Whipple Ave

	-S	HI	+S	Elev
B.M.		1392.53	00.94	1391.59
0	5.17			1387.30
	4.42			88.10
	6.35			86.10
	4.81			87.70
	5.54			87.00
	3.37			89.10
1	5.31			87.20
2	3.82			88.70
	3.93			88.60
3	4.57			87.90
	3.88			88.60
	4.82			87.70
+ 80	6.60			85.90
	7.35			85.20
	7.71			84.80
4	7.12			85.40
5	5.02			87.50
T.P.	4.51	1400.35	12.33	1388.02
6	12.40			88.00
+ 80	11.60			88.80
+ 80	11.60			88.80

Running East

0 = Can of Whipple Ave Run East

40' L on ground

40' L " sidewalk

35' R. on ground

40' R sidewalk

100' R on ground

70' R door of house

40' L ground

40' R

40' L

40' R

40' R ground

114 Whipple Ave (17) Hackensack

	- S	H I	+ S	Elev
+ 80	11.60	1400.35		1388.80
7	12.42			88.00
+ 60	9.60			90.80
	10.30			90.10
	9.15			91.20
8	9.34			91.10
	9.34			91.10
	7.19			93.20
9.	3.02			97.40
	5.84			94.60
	2.73			97.70
10	5.03			95.40
TP	11.23	1389.48	0.36	1389.12
11	9.07			80.40
+ 50	14.00			75.50

40' L on ground

40' L. sidewalk

40' R. ground

40' L. ground

40' R. "

40' L. on gd

40' R. "

water level @ swamp

116

Second Street ⁽¹⁹⁾

Hackinsack

	TS	HI	- S	Elev
BM.	6.10	1394.88		1388.28
0				
1				
2				about 73.00
3				79.30
"			7.30	87.10
"				78.90
"				1375.00
4			7.90	86.50
"			5.50	88.90
"			10.20	84.20
5			6.50	87.90
"			4.50	89.90
"			9.20	85.20
6			8.10	86.30
"			6.10	88.30
"			9.20	85.20
7			9.10	85.30
"			8.50	85.90
"			8.30	86.10
8			9.10	85.30
"			9.20	85.20
"			6.70	87.70
+06				

②

Running North

BM is lamp post S/E on Bk 6.

806 ft So of South side of Whipple Ave

706 " " " "

606 So of Whipple Ave and about in creek
Center

40' R on West slope of hill

40' L

50' L in creek Top of water
Can

40' R

40' L

Can

40' R

40' L

Can

40' R

40' L

Can

40' R

40' L

Can

40' R

40' L

Cross S. line of Whipple Ave

118

(21)

	+ S	HI	- S	Elev
BM	4.65	1392.93		1388.28
+ 86				—
9.			5.70	87.20
10			4.80	88.10
"			6.70	86.20
"			4.60	88.30
11			6.50	86.40
"			7.40	85.50
"			6.40	86.50
+ 86				
" "			7.90	85.00
" "			6.65	86.30
12			6.90	86.00
+ 66				
" "			8.15	84.80
" "			6.40	86.50
13			7.20	85.70
TP	11.11	1396.14	7.90	1385.03
14			10.30	85.80
"			11.20	84.90
"			8.60	87.50
15			7.20	88.90
			9.00	87.10
			5.20	90.90

Second St (23)

119

BM on lamp post SE Cor Bk 6
= N. side Whipple Ave

Cor

Cor

40' R

40' L

Cor

40' R

40' L

= Cross S Line Lake Ave

40' R @ NW Cor Bk 3

40' L @ NE Cor Bk 6

Cor

Cross N Line Lake Ave

40' R @ SW Cor Bk 2

40' L @ SE Cor Bk 7

25' NE 9 NW Cor Bk

Cor

40' R

40' L

Cor

40' R

40' L

120

+

HI

(23)

Second St

- s

Elev

+ 66

1396.14

—

—

" "

7.45 88.70

" "

3.65 92.50

16

5.10 91.00

+ 46

6.70 89.40

" "

4.00 92.10

17

4.70 91.40

18

4.70 91.40

" "

5.70 90.40

" "

3.50 92.60

19

2.40 93.70

" "

4.50 91.60

" "

1.80 94.30

+ 50

2.50 93.60

20

2.70 93.40

+ 50

2.50 93.60

21

2.30 93.80

+ 50

2.50 93.60

22

2.30 93.80

+ 50

2.30 93.80

23

3.40 92.70

Second H young N.

Cross 1 Line Murray HV

40' R @ NW Cor Bk 2

40' L @ NE Cor Bk 7

Cor

40' R @ SW Cor Bk 1

40' L @ SE Cor Bk 8

Cor

Cor

40' R

40' L

Cor

40 R

40 L

Cor @ E & W fence Limit of Tamarisks

Cor in field

Cor

Cor

Cor

Cor

Cor

Cor

122

Murry

Ave

(25)

	+ S	H. I	- S	Elev
BM	11.11	1396.14		1385.03
0			3.50	92.60
1			1.10	95.00
"			1.10	95.00
"			1.10	95.00
2			2.30	93.80
"			0.00	96.00
"			2.00	94.00
3			4.15	92.00
+ 80			6.80	89.30
TP	5.05	1391.06	10.13	1386.01
6				
+ 80			8.80	82.30
+ 80			9.40	81.70
7.				
+ 60			7.80	83.30
+ 60			9.60	81.50
8			8.00	83.10
9			5.60	85.50
10			9.60	81.50
11			13.00	1378.00
			12.43	1378.63

Running E

Worked Murray Ave E. side of 1st St on corner
Cen

40' R

40' L

Cen

40' R

40' L

Cen Works 2nd St

Cen Cross E side 2nd St

major log

40' R @ NE Cen Bk 2

40' L @ SE Cen Bk 1

40' R @ NW Cen Outlet 2

40' L @ SW Cen " 1

Cen

Cen some clear R & L.

but mouth

~~at mouth~~ Redwood down in mud by Harold
in mouth

124	Third	(27)	81	
	+ S	HI	- S	Elev
BM	4.35	1392.32		1387.97
0				
1				
+70				
2.				
3				
+80				
6.				
+80			4.70	87.60
" "			5.50	86.80
7				
+60			5.00	87.30
" "			5.60	86.70
8.			5.50	86.80
9			5.50	86.80
+50			5.70	86.60
10			6.60	85.70
+60			-	
" "			-	
11			-	
+40				
" "				
12			9.40	82.90
13			4.80	87.50
14			3.10	89.20
15			2.40	89.90
"			2.20	89.10

good grade

Running north

300' S. of S. side Whipple Ave

End of 3rd St

S. side Whipple Ave

40' R @ NW Cor Outlet 3

40' L NE Cor Bk 3

40' R SW Cor Outlet 2

40' L SE Cor Bk 2

Both sides same

40' R NW Cor Outlet 2

40' L NE Cor Bk 2

40' R SW Cor Outlet 1

40' L SE Cor Bk 1

Ne edge of marsh

40' R @ NW Cor W side outlet 1 post for grade

126 Lake Ave

(29)

	+S	HT	-S	Elev	
B.M.	4.35	1392.32		1387.97	
0				91.60	
1				91.20	can
"				89.30	40' R.
"				92.80	40' L
2				86.80	can
"				86.40	41' R
"				87.80	40' L
3					
+80					
" "					
6					
+80					
" "					
7					
+60					
" "					
8			2.80	89.50	
9			2.80	89.50	
+50			2.40	89.90	

Running East

= Wind Lake Ave E side 1st st

40' R = NE cn Bk 6

40' L = SE cn " 7

40' R = NW cn " 3

40' L = SW cn " 2

40' R = NE cn Bk 3

40' L = SE " " 2

40' R = NW cn Outlot 3

40' L = SW " " 2

Con about same on each side

" " " " " "

" " " " " "

128

(31)

To get Elev of Mud Lake

	+ S	HI	- S	Elev
BM	4.35	1392.32		1387.97
T.P.	2.51	1388.08	6.75	1385.57
1			9.45	1378.63

(32) Hack Levels 129

Run NE from Hack village

on iron run

lip of water in lake

Level notes Village of

+5	H.I	-5	Elev	Obj
5.25	1396.84		1391.59	B.M.
		5.84	1391.	
		4.2	1392.64	Bank step
		3.3	1393.54	State Cor
		3.44	1393.4	Cor. Tree
		3.44	1393.4	" "
		5.64	1391.2	Lot 13 Block
		5.44	1391.4	14 "
		5.24	1391.6	15 "
		5.04	1.8	16 "
		4.84	1392.0	17 "
		4.64	2.2	18 "
		4.44	2.4	19 "
		4.24	2.6	20 "
		4.04	2.8	21 "
		1393.84	3.0	22 "
		1393.64	3.2	23 "
		1393.44	3.4	24 "

Hackensack

May 2, 1917

John M. Greene - Levee

E. B. Horst - Road

M. R. C.

Transit

Woods store set by Curo

Grade Block 7 N.W. Cor

" 8 S.E. Cor.

7 " "

N.W. Cor

" "

" "

" "

" "

" "

" "

" "

" "

" "

" "

132

Street bears $N 3^{\circ} 30' E$ Mag

+ S

H.1

Elev

Obj.

1396.84

- S

1391.59

B.M.
Lot

5.84 1391.0 24 N.W.

5.94 1390.9 23 S.W.

6.04 908 22 N.W.

6.14 907 21 "

6.24 906 20 "

6.34 905 19 "

6.44 904 18 "

6.54 903 17 "

6.64 902 16 "

6.74 901 15 "

6.84 1390.0 14 "

6.94 1389.90 13 "

7.04 1389.80 13 S.W.

7.14 1389.70 12 "

Block 6

11 6

11 11

11 11

11 11

11 11

11 11

11 11

11 11

11 11

11 11

11 11

11 11

11 11

134

May-3-1917Level Notes Village

+ S	H-I.	- S	elev	obj
+5.15	1396.74.		1391.59	B.M.
		4.09	1392.65	BANK step.
		5.74	1391.00	N.W. COR
		5.84	1390.9	N.W. COR
		5.94	1390.8	" "
		6.04	1390.7	" "
		6.14	1390.6	" "
		6.24	1390.5	" "
		6.34	1390.4	" "
		6.44	1390.3	" "
		6.54	1390.2	" "
		6.64	1390.1	" "
		6.74	1389.0	" "
		6.84	1389.9	" "
		6.94	1389.8	S.W. COR

set center line of First

+5.21 1396.80 1391.59 B.M. —

of Hockensack

E.B. Horst. level. (transit)
Leon Fleisher, rod.

M.R.C. Iron Mon.

of Block 6

of Lot 23

" " 22

" " 21

" " 20

" " 19

" " 18

" " 17

" " 16

" " 15

" " 14

" " 13

of Block 6 = 0.4 to grade
St same elev. as sidewalk

~~M.R.C. I.M.~~

First St. West side.

+ S H-1 - S elev Obj

5.21 1396.80

1391.59 B.M.

5.80 1391.00 S.W. Cor

5.60 1391.20 S.W. Cor

5.40 1391.40 " "

5.20 1391.60 " "

5.00 1391.80 " "

4.80 1392.00 " "

4.60 1392.20 " "

4.40 1392.40 " "

4.20 1392.60 " "

4.00 1392.80 " "

3.80 1393.00 " "

3.60 1393.20 " "

3.40 1393.40 N.W. Cor

3.40 1393.40 S.W. Cor

3.20 1393.60 S.W. Cor

3.00 1393.80 " "

2.80 1394.00 " "

2.60 1394.20 " "

of Block 7 Sidewalk only

M.P.C. 1M.

Block 7

of lot 14 - Block 7

" " 15

"

" " 16

"

" " 17

"

" " 18

"

" " 19

"

" " 20

"

" " 21

"

" " 22

"

" " 23

"

" " 24

"

Block 7 = 0.8 of grade

of Block 8

of lot 7. (Block 8)

" " 8

" " 9

" " 10

138

Whipple

+ S H.I. - S elev obj

2.00 1391.80 1389.80 S.W.

2.40 1389.40 S. side

" " " " N. "

2.80 1389.00 S "

3.00 " " " " N "

3.20 1388.60 N.E. cor

" " 1388.60 S.E. cor

Avenue

139

cor of Lot 6 at estab grade
Whipple Ave 100 ft E of 1st St.

" " " " " "

" " " 200 F+E

" " " "

Block 5.

Block 6.

140

Lake Ave

+ S. H-1 - S. elev Obj

5.41. 1397.00 1391.59 B.M.

6.00 1391.00 S.W. cor

7.50 1389.50

9.00 1388.00

10.50 1386.50

M.R.C. I.M.

Block. 7.

Boy River Dam.
 Hackensack Minn.
 Sec. 19. Twp. 140.-Rge. 30.
 in the N.E. $\frac{1}{4}$ of the S.W. $\frac{1}{4}$ S. 19.

	+ S	H.I.	- S.	elev.	obj.
				1391.59	
F.P.	3.20	1394.79			
1 T.P.			12.10	1382.69	
	5.35	1388.04			
			8.90	1379.14	
			9.80		
			7.00		
	5.16			1382.69	
			-11.15		

1379.14	1382.65
1376.70	5.16
<u>2.44</u>	<u>1387.85</u>
	15.15
	<u>1376.70</u>

~~M.R.C.~~

M.R.C. Monument. 1391.59

Water level, Birch Lake,
bottom of creek

on T.P. No. 1.

Water level at Windovers Bridge

144

1

40 20 20 10 10 10 20 30 40
 1 - - - 052 - - 1
 1 - 37 - -
 1 - 28 - -
 1 - 18 - -
 1 - 12 - -



146

Sidewalk & st. grades,
Village of Hackensack.
July 1st. 1922

Level. Rod.
E.B. Horst, & B.M. Beach.

+S.	H.I.	-S.	elev.	
3.85	1395.44		1391.59	=
	1390.0	9.00	1386.44	=
		-3.80	1386.20	
		-4.90	1385.10	
		4.85	1385.15	

Horst & Bartlett complete
grades of 2-3 sts
and Murray Lake and
Whipple avenues
July 13-14 & 15-1922.
E.B. Horst

M.R.C. P.B.M. at section House.

N.W. cor. Lake & 2nd. st. Top of 1.M.

S.W.	"	"	"	"	"
------	---	---	---	---	---

S.E.	"	"	"	"	"
------	---	---	---	---	---

N.E.	"	"	"	"	"
------	---	---	---	---	---

{ R.D. Gaston,
Hastings, Neb. }

{ P.A. Wendorer, 10674
(508 Diversey Parkway) Chicago, Ill. }

c/o Wendorer - Ryer

Jewelry Co.

Minneapolis

Minn.

107.15 42

9.50

97.65

+ 8.52 in min

- 8.20 in min 1 98.60

- 5

107.15-

8.55

98.60

10-18-28-37-52

1397

4503

17 250

1386.44

"3554"

1st. st. 1389.80

~~1385.99~~ see S.T. 1385.60

1290.

1.20

1389.60

46

1389.20

6

1389.180

1391.80

6

1391.20

6

1390.59

5-41

1390.00

2.00

1.20

.80

1391.59

3.61

1395.44

7

1396.44