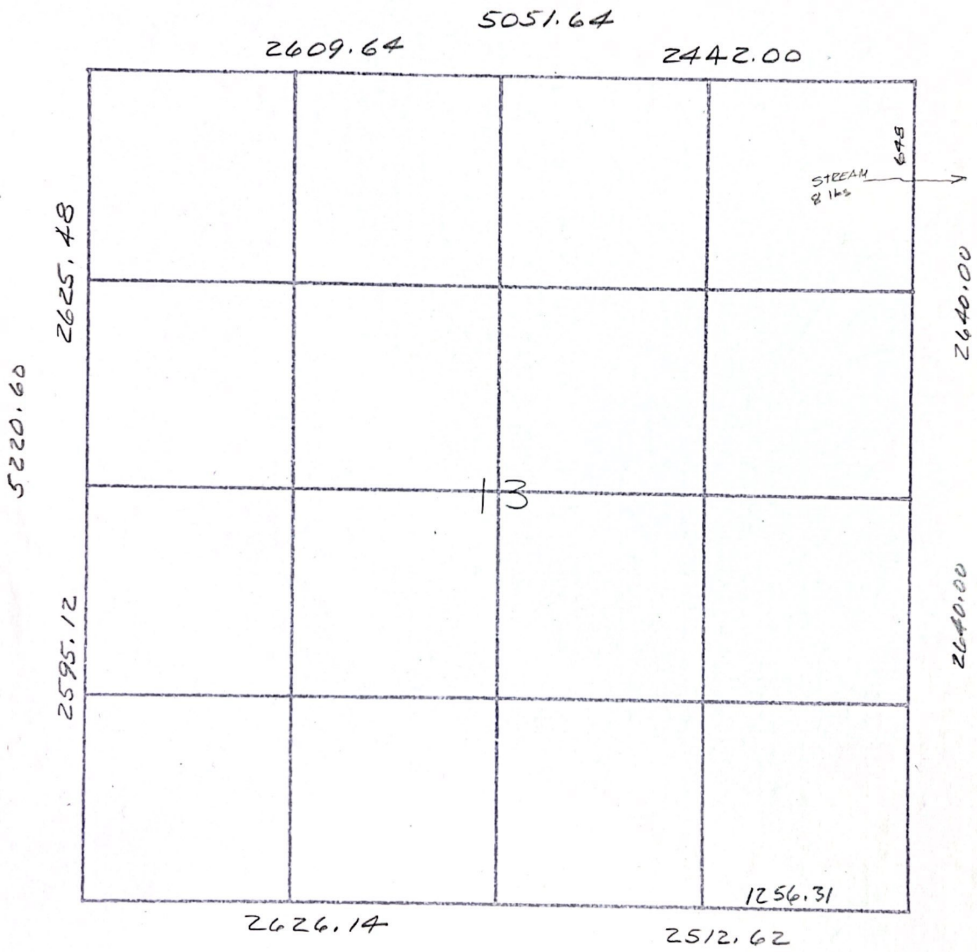


1856 RESURVEY  
Section 13  
T15N R11W



SPOKE w/ NOEM OCHS 4/26/07

REGARDING NE COR SEC 13

APPARENTLY SALSBURY & GRIFFIN REJECTED  
A WRIGHT CORNER 100' NORTH OF THEIR  
REESTABLISHED POSITION. NEWAYGO CO REMOVED  
SALISBURY / GRIFFIN, MRCOSTA CO 2007 APPROVED  
WRIGHT CORNER. I SUGGESTED LOOKING AT  
TOTAL DISTANCE ~~TO~~ SOUTH TO TWP CORNER  
& ALONG ENTIRE RANGE LINE IF AVAILABLE.

Index No. N 835

LAND CORNER RECORD

No. 7-180-4 (Rev. 6/13/87)  
GPO 808-187

T. 15 N R 36 W Mer. N. E. 36 S. E. 36 Sec. 13 and 13 County Ill State Ill

EXISTING SURVEYS

Original-Government Survey

Year surveyed 1900 by Andress

Original monument See plat, corner of sec. 13, T. 15 N., R. 36 W., S. 36 E., Sec. 13.

Bearing Trees

Species	<u>N/A</u>
Diameter	<u>1 1/2"</u>
Bearing	<u>N</u>
Distance	<u>20'</u>
<u>(1923/23 91.50°)</u>	
Subsequent Corner Restoration	
Year surveyed	<u>1966</u> by <u>Wright</u>
Where filed or recorded	<u>Co Rd Comm</u>
Monument	<u>1" X 3" Cast Pipe</u>

Bearing Trees, Reference Objects

Species	<u>W Oak</u>
Diameter	<u>8"</u>
Bearing	<u>N 1/2 W</u>
Distance	<u>26.0'</u>

Original Evidence Found

Year of search 1919 by E F SOUTS

Monument found McC Co Rd Comm

CO. 15 S. 03.30 W 379.6 ft Rd

Original Bearing Trees Found

Species	
Diameter	
Bearing	
Distance	
Evidence of Subsequent Corner Restoration Found	
Year of search	<u>10/23/73</u> by <u>Newberg Eng.</u>
Where filed or recorded	<u>M. T. M. &amp; R. D. H.</u>
Monument	<u>Found 1" X 3" Pipe ± Found &amp; Found by Wright - Found 1" X 3" Pipe</u>
Distance	<u>6" - 8" under ground - Cor. 15</u>
Where filed or recorded	<u>379.6' - Same as above - About 1/2 way to</u>
Monument	<u>1" X 3" Cast Pipe</u>

Bearing Trees, Reference Objects

Species	<u>W Oak</u>
Diameter	<u>12"</u>
Bearing	<u>1/4 W</u>
Distance	<u>50.0'</u>



# Certificate of Survey

I hereby certify that I have surveyed and mapped the following described parcel (s) of land in accordance with Act 132, P.A. 1970. And that the ratio of closure of the unadjusted field traverse is 1 ft. in 5000 ft.

### LEGEND

- = SURVEY IRON SET
- = SURVEY IRON FOUND
- ⊙ = CONCRETE MONUMENT
- SCALE: 1" = 200'

BEARINGS FROM PREVIOUS SECTION SURVEY  
 CURVE DISTANCES ARE ARC DISTANCES  
 ROW IRONS SET AT 33 FT. NORMAL TO PHYSICAL CENTERLINE OF M-20 AND MAY DEVIATE FROM COMPUTED POSITION AS SHOWN



**CURVE DATA**

**1-A**  
 $\Delta = 24^{\circ}52'47''$   
 $R = 477.47'$   
 $L = 207.33'$

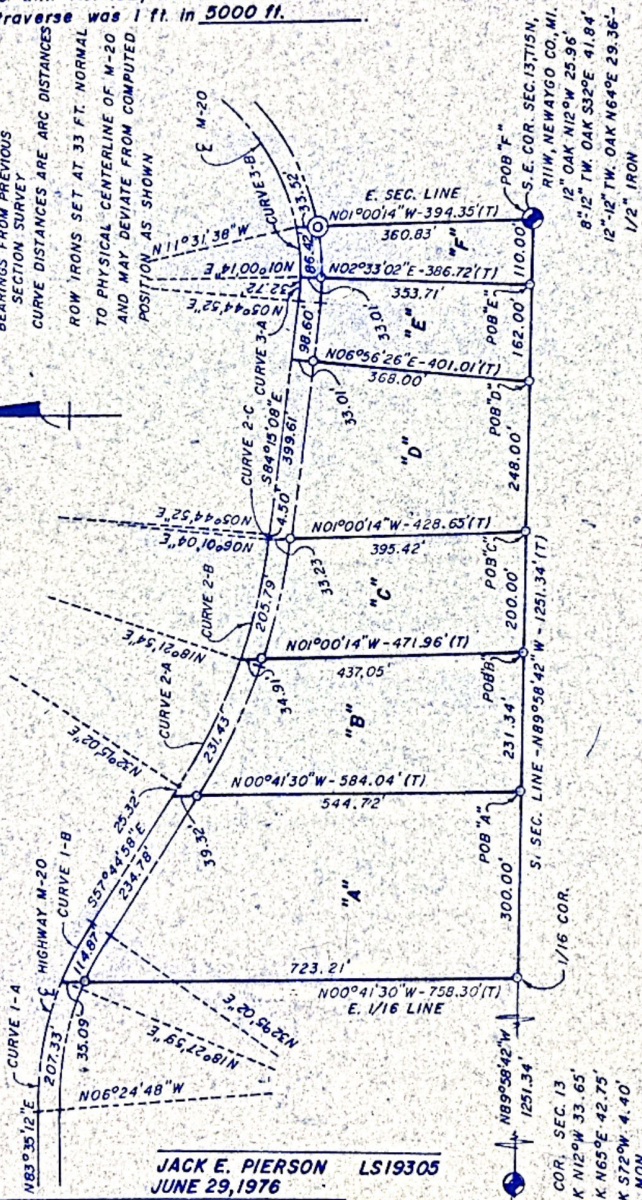
**1-B**  
 $\Delta = 13^{\circ}47'03''$   
 $R = 477.47'$   
 $L = 114.87'$

**2-A**  
 $\Delta = 12^{\circ}20'50''$   
 $R = 954.93'$   
 $L = 231.43'$

**2-B**  
 $\Delta = 10^{\circ}06'12''$   
 $R = 954.93'$   
 $L = 205.79'$

**3-A**  
 $\Delta = 04^{\circ}44'38''$   
 $R = 395.14'$   
 $L = 32.72'$

**3-B**  
 $\Delta = 12^{\circ}31'52''$   
 $R = 395.14'$   
 $L = 86.42'$



S. 1/4 COR. SEC. 13  
 16" OAK N12°0'W 33.65'  
 8" OAK N65°E 42.75'  
 12" OAK S72°0'W 4.40'  
 CONC. MON.

S. 1/4 COR. SEC. 13  
 S.E. COR. SEC. 13 T15N,  
 R11W, NEWAYGO CO., MI.  
 12" OAK N12°0'W 25.96'  
 8" OAK N12°0'W 25.96'  
 12"-12" TW. OAK S32°E 41.84'  
 12"-12" TW. OAK N64°E 29.36'-  
 1/2" IRON

JACK E. PIERSON LS19305  
 JUNE 29, 1976

SURVEYED BY:  
 ESTATE SUR. & ENG.  
 MICHIGAN AVE.  
 DOWIN, MICHIGAN  
 49304

SURVEYED FOR:  
 FLOYD ALLEN  
 9510-1/2 9 MILE RD.  
 BIG RAPIDS, MI. 49307

SHEET 1 OF 3 SHEET(S)  
 FILE NO. 2666-76



By R. Griffin July 29  
1976

Floyd Allen survey

Sec 13 T15N R11W

by Lakestate

NW corner of "A"

1/2" by 18" REROD w/plastic cap

Power Pole S69E 9.34

W. Oak 8" S3E 23.37

4" x 7' Pine Post N 1.0

SW Cor of "A"

1/2" x 18" REROD w/plastic cap # 17615

W. Oak 9" N59E 19.20

Tw Maple 7" S56E 12.59

R. Oak 14" S40W 4.31

Fd spikes in BTs also Fd

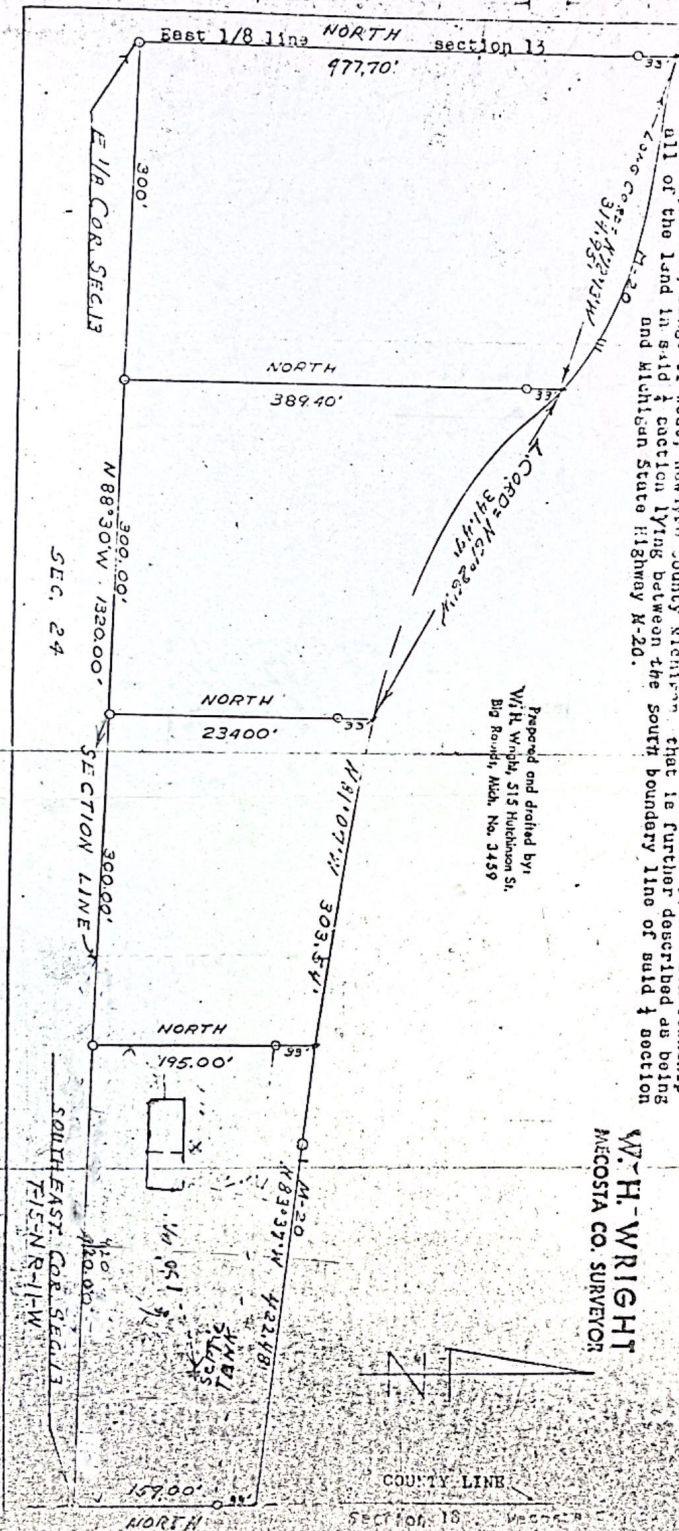
"V" cut in each BT

SURVEY FOR MR. FLOTT C. ALLEN, BIG RAPIDS, MICHIGAN.  
 CLAUDE SMILES, BROKER AGENT.

LAND SURVEYER:-  
 A parcel of land in the south east 1/4 of section 13, Norwich Township  
 town 15 north, range 11 west, Nowyena County Michigan that is further described as being  
 all of the land in said 1/4 section lying between the south boundary line of said 1/4 section  
 and Michigan State Highway M-20.

Prepared and drafted by:  
 W.H. Wright, 515 Hutchison St.,  
 Big Rapids, Mich. No. 3459

W.H. WRIGHT  
 MEGOSTA CO. SURVEYOR





TWILIGHT EY2000 TIMBER SALE

CM

SW COR SEC 23, T15N, R11W

F0 PK OVER 3/4" PIPE IN E-N-S RD & FENCE LINE WEST

N/4 COR SEC 26, T15N, R11W

F0 60d Nail OVER RR : 2' E of & N-S RD WRTS FB

SW COR SEC 26, T15N, R11W

F0 1/2" RR IN & PAVED RDS N-S-E-W

SE COR SEC 26, T15N, R11W

F0 1/2" RR 1' N of E-W RD & 2' E of RD S

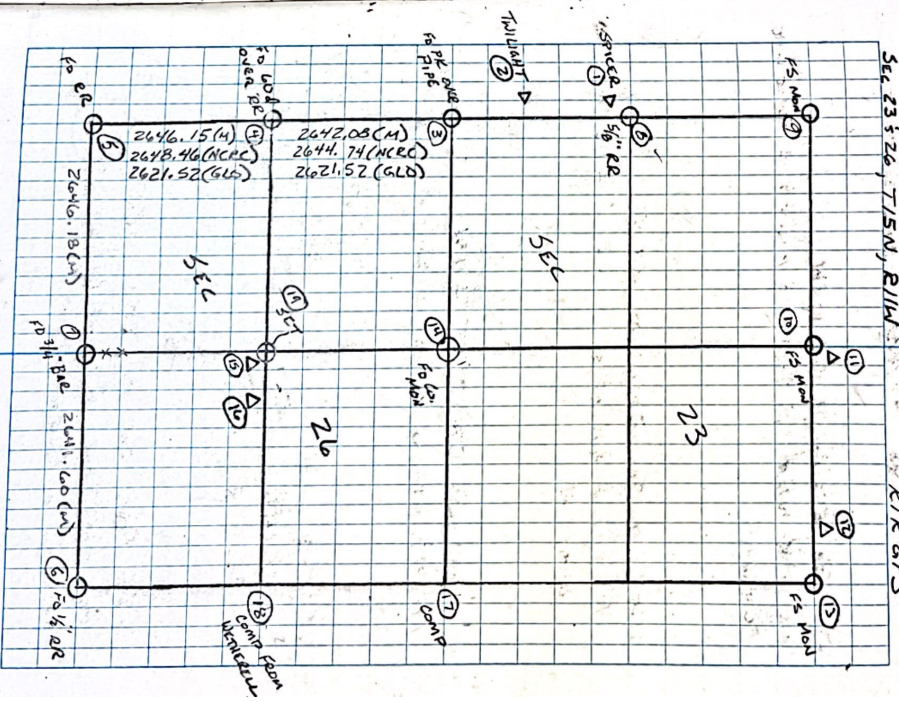
S 1/4 COR SEC 26, T15N, R11W

F0 3/4" IRON 2' N of & E-W RD IN LINE w/ FENCES N S S

2/25/00

SEC 23 & 26, T15N, R11W

RTK GPS



Twilight FY2000 Timbale Sale

CW

W 1/4 Cor Sec 23, T15N, R11W

FB 5/8" RR in E-N-S Rd, Heavy Fenced

RE West

NW Cor Sec 23, T15N, R11W

FB FS Mon 4' S of E-W Rd

in E Rd S

N 1/4 Cor 23, T15N, R11W

FB FS Mon 2' S of E-W Rd

NE Cor 23, T15N, R11W

FB FS Mon 1' N of E-W Rd

S 1/4 Cor Sec 23, T15N, R11W

FB Nemoaco Co. Mon Pae Loc 1 S 193

18" N. Oak w/rt Hog Back Cut, stump in situ

Remains.

SEC 23 & 26, T15N, R11W

RTK GPS

Base @ Pt 2 - Twilight

43-40-26, 79252

85-36-07, 19922

1156' Ht

HI - 5.41

Circle To Pt 4 0.04' Ht 0.04' West

Project Grid Factor = 1.00000965155

C/4 Cor Sec 26, T15N, R11W

SET 5/8" RR w/ GAP & 43074 @ INT of 1/4 LINES

3' S of E/W Fence, 12' W of N-S

Fence 542° E 135' from Center 15" Stump

0.7' SW of Steel Post & Sign

60d in NW Face 28" Turn MARK N82° E 21.32'

60d in NE Face 41' MARK S28° E 17.65'

60d in S Face 14" Turn MARK S75° W 54.00'

60d in N Face 14" Turn MARK N50° W 55.05'

NOTE: FENCINGS WITHIN SECTION DO NOT FIT SECTION SUBDIVISION E-W

BY 12-60'



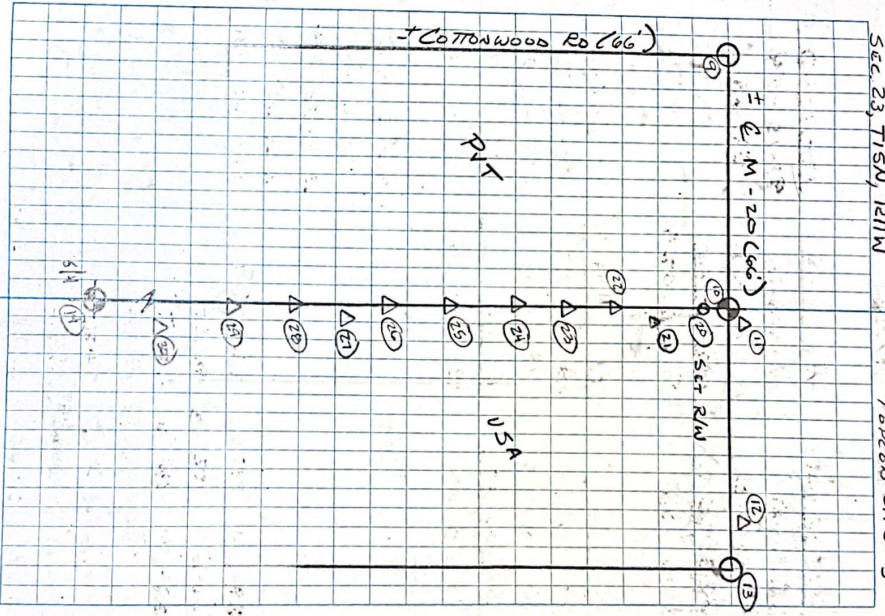
TWILIGHT EYBROOD Timber Sale

CM DV

11-12-13	NE	12-11-10	N14	12-11-20	SECT R/W
182-33-05		92-46-15		91-15-44	
2-39-10		272-46-10		52.65	
180-60-10		180-00-10			
182-39-05		92-46-07.5			
12-11-21	SRK	11-21-22	SRK	21-22-23	SRK
89-20-25		182-20-25		178-46-20	
269-20-40		2-20-35		358-46-30	
180-00-10		180-00-10		180-00-10	
89-20-27.5		182-20-25		178-46-20	
23-24		249.090		75.922	
22-23		296.255		90.299	
21-22		388.86		118.525	
11-21		462.75		141.05	
11-10		19.66	TARCD		
12-13		485.445		148.028	
11-12		2135.47		650.893	
PTS	H/D	M		2135.62	6PTS

SEC 23, T15N, R11W

TORCON GTS-3

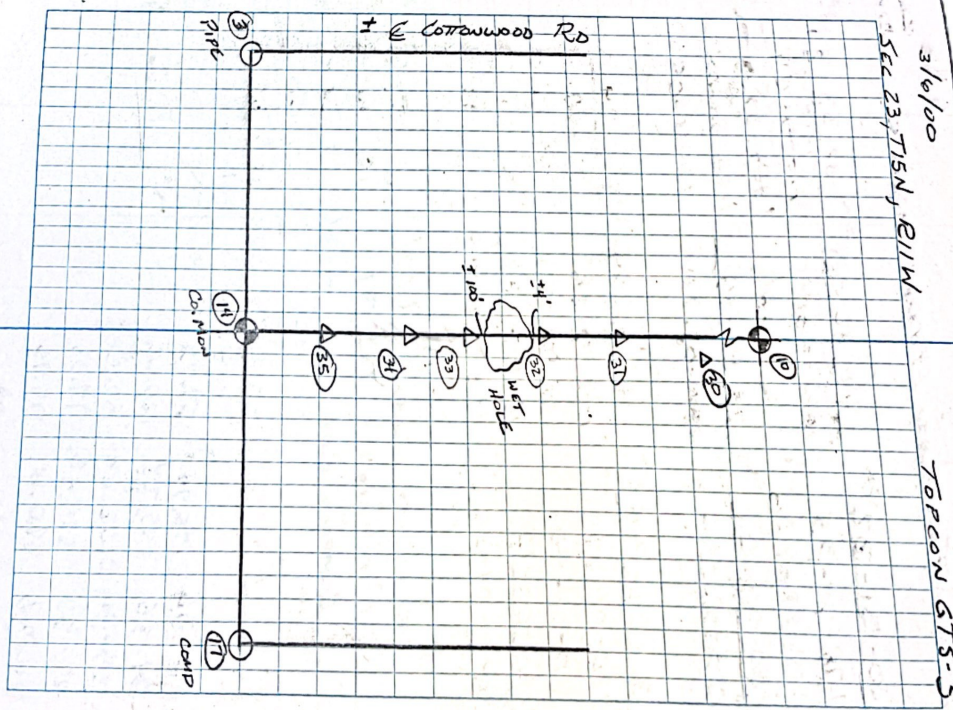


TWILIGHT FY2000 TANGRA SW  
Q0 DV

23-24-25	SRK	24-25-26	SRK	25-26-27	SRK
180-05-20		180-02-25		178-41-05	
0-05-20		0-02-40		358-41-10	
180-00-05		180-00-15		180-00-05	
180-05-17.5		180-02-25		178-41-05	
26-27-28	SRK	27-28-29	SRK	28-29-30	SRK
182-13-25		178-52-25		179-40-50	
2-13-35		358-52-35		359-40-55	
180-00-10		180-00-05		180-00-20	
182-13-25		178-52-27.5		179-40-42.5	

29-30-31 SRK  
181-36-45 SRK  
1-36-55  
180-00-05  
181-36-47.5

30-31	312.71	95.32
24-30	580.68	176.99
28-29	358.00	109.12
27-28	270.81	82.55
26-27	229.47	69.94
25-26	392.835	119.736
24-25	319.715	115.756
P40	110	M





TWILIGHT PLYWOOD TIMBER SALE CW  
DV

16-15-19  
207-48-00  
41.05 -  
STAKE-OUT To Jct. of 1/4 Lines.  
15-16: 158.32' (M) 158.30' (GPS)

35-14-37  
175-50-05  
355-50-00  
180-00-10  
175-49-57.5

14-37-38  
188.30-30  
8.30-35  
180-00-00  
188.30-32.5

37-38-39  
176-44-40  
8.30-35  
180-00-00  
176-44-45

39-40-41  
181-22-35  
1.22-45  
180-00-00  
40-41-42

40-41-42  
180-37-05  
180-37-15  
180-00-05  
180-37-07.5

41-42-43  
143.84  
103.85  
143.87  
157.13

42-43  
164.54  
143.84  
103.85  
143.87  
157.13

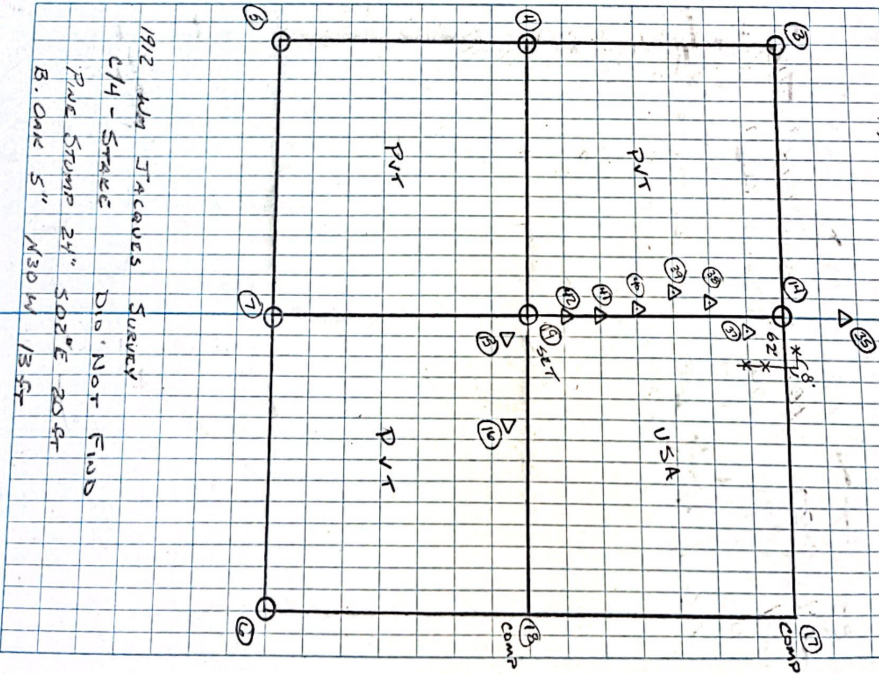
43-44  
143.84  
103.85  
143.87  
157.13

44-45  
143.84  
103.85  
143.87  
157.13

45-46  
143.84  
103.85  
143.87  
157.13

46-47  
143.84  
103.85  
143.87  
157.13

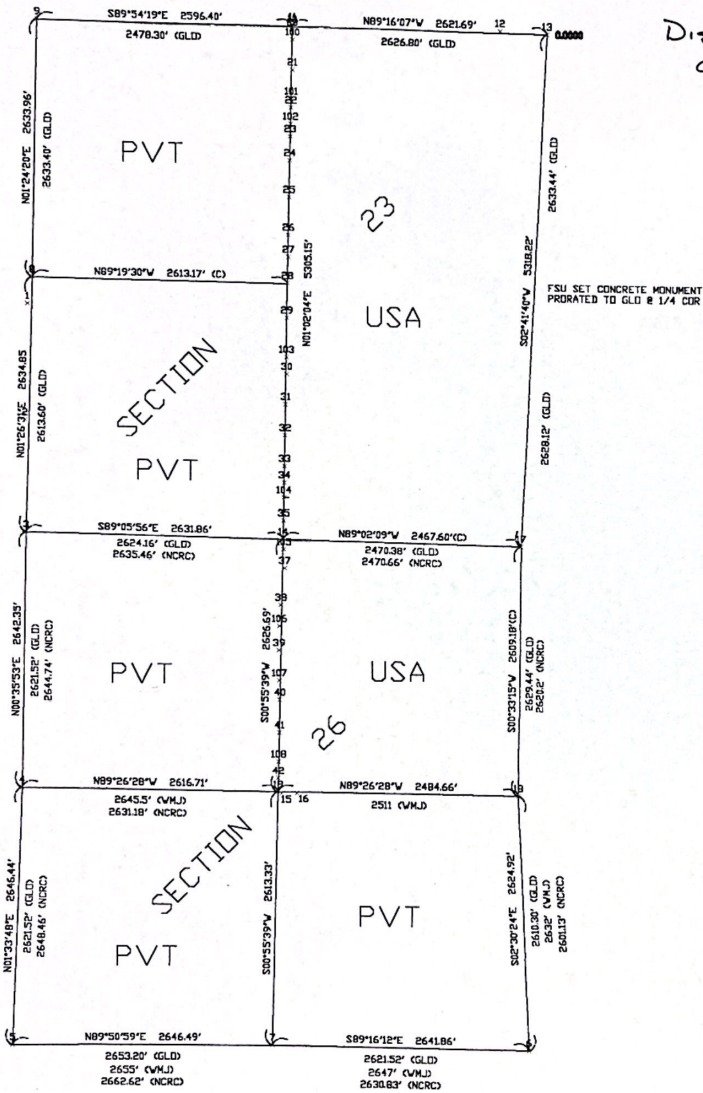
3-22-00  
SEC 26, T15N, R11W  
TOPCON GTS-3



# T15N R11W

SURVEY BY CARL WAITE MARCH 2000  
 SECTION BREAK PERFORMED USING RTK GPS  
 LINE WORK RAN WITH TOTAL STATION GRAN VALLEY ASSISTING

DISTANCES ARE GRID  
 GF = 1.0000969155

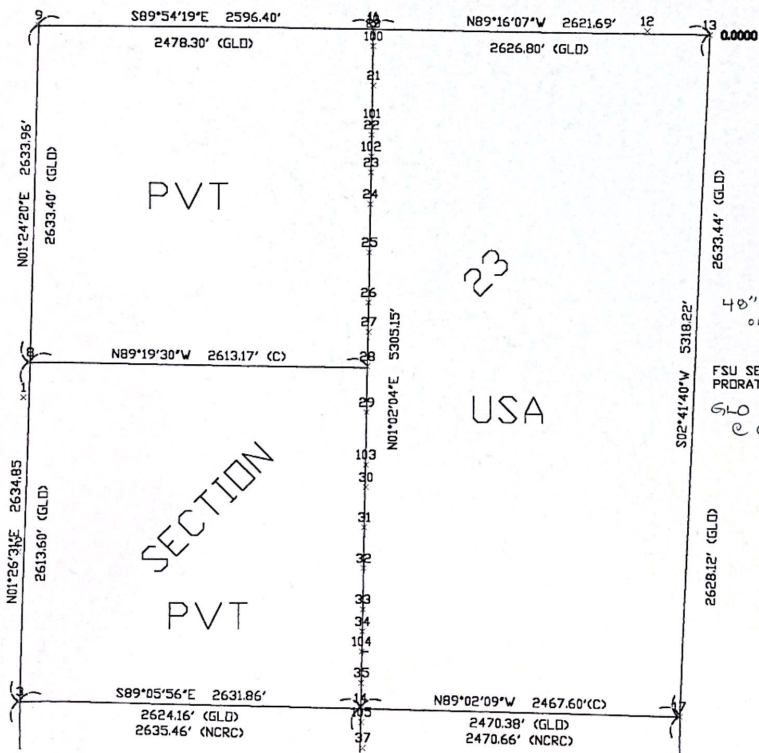




DISTANCES ARE GRID  
 GF = 1.0000965155

# T15N R11W

SURVEY BY CAROL WAITE MARCH 2000  
 SECTION BREAK PERFORMED USING RTK GPS  
 LINE WORK RAN WITH TOTAL STATION (DAN VALLEY ASSISTING)



40" PINE LT 10, 21, 4 N  
 OF 1/4 CORNER

FSU SET CONCRETE MONUMENT  
 PRORATED TO GLD @ 1/4 COR  
 GLO HAD 23' DEFLECTION  
 @ OLD POST

## List Points Report

File&gt; c:\surv\work\t15nr11w\twilight.crd

Job Description&gt;

NAD83 MI CENTRAL INTL FT

Job Number&gt; 0.000 Job Date&gt; 2000.0229

PointNo.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	134007.365	19358186.481	1280.00	
2	132810.331	19358157.079	0.00	
3	131649.880	19358170.420	0.00	
4	129007.670	19358142.840	0.00	
5	126362.218	19358070.640	0.00	
6	126335.500	19363358.770	0.00	
7	126369.158	19360717.120	0.00	
8	134283.896	19358236.720	0.00	
9	136917.062	19358301.330	0.00	
10	136912.774	19360897.731	0.00	
11	136932.401	19360898.910	0.00	
12	136907.442	19363034.380	0.00	
13	136879.306	19363519.256	0.00	
14	131608.488	19360801.950	0.00	
15	128964.345	19360796.410	0.00	
16	128970.135	19360954.600	0.00	
17	131566.971	19363269.201	0.00	
18	128957.912	19363243.967	0.00	
19	128982.147	19360759.427	0.00	
20	136879.780	19360897.135	0.00	
21	136469.639	19360898.909	0.00	
22	136081.095	19360883.027	0.00	
23	135784.889	19360877.274	0.00	
24	135535.828	19360873.125	0.00	
25	135156.107	19360866.215	0.00	
26	134763.333	19360858.792	0.00	
27	134533.858	19360859.723	0.00	
28	134263.206	19360850.314	0.00	
29	133905.239	19360844.908	0.00	
30	133324.570	19360839.397	0.00	
31	133012.075	19360827.628	0.00	
32	132691.425	19360822.118	0.00	
33	132372.146	19360816.580	0.00	
34	132200.071	19360813.392	0.00	
35	131804.393	19360805.886	0.00	
36	131608.488	19360801.950	0.00	
37	131309.675	19360817.704	0.00	
38	130924.975	19360780.723	0.00	
39	130453.253	19360762.299	0.00	
40	129937.769	19360771.541	0.00	
41	129597.034	19360769.456	0.00	
42	129125.149	19360761.473	0.00	
43	128964.345	19360796.410	0.00	
100	136779.436	19360898.910	0.00	Page 1 of 2

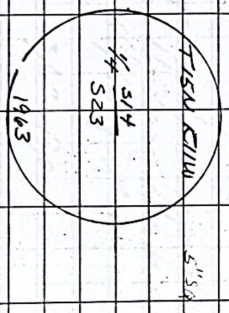
PROTECT GRID FACTOR  
1.0000945155



101	136170.999	19360886.702	0.00
102	135911.911	19360879.741	0.00
103	133499.358	19360841.056	0.00
104	132045.484	19360809.816	0.00
105	131504.264	19360807.445	0.00
106	130706.288	19360766.627	0.00
107	130139.473	19360767.925	0.00
108	129295.168	19360764.349	0.00

Number of points listed> 52

I replaced (in the exact location) the 3/4" Iron Pipe with a 5" square by 3 ft long set 20" ft below the surface of the road. A 3" diam. brass tablet is cast flush with the top of the monument and is stamped:



10" Oak spike driven 1/2 ft above ground in the NW side of a 12" Red Oak N14E 44.40 ft. This is a bearing tree used by E. Smith in 1956.

10" Oak spike driven 1/2 ft above ground in the SW side of a 7" Ash S25E 38.40 ft. This is a bearing tree used by E. Smith in 1956.

10" Oak spike driven 1/2 ft above ground in the NW side of a 7" Red Oak scrubbed "87" S 31W 78.70 ft. STUMP REMAINS - NO NAIL

Found 4" diameter by 36" long concrete monument placed by E. Smith in 1956. North 33 ft.

SET	5/8"	RR	W/CAP	=	45074
SECT		33	00'		
		124YT			



1/4 Section Corner corner common to  
Sections 14 & 23

T15X1 R 11W

1837 GLO survey by John Allard.

Monument - Maple 6" in dia for the  
corner

Witnesses -

#1 Maple 12" N73W S1/4  
(one only)

From Newaygo County Surveyor's  
Records (Probably 1920 N.S.H.D.  
Plans for Highway M-20

Monument - 3/4" Pipe

Witnesses

#2 Pine sfp. 40" N70 1/2 E 98.5

#3 Pine sfp 36" N12W 97.5

Station 7875027

CERTIFICATE TYPED

V.H.H.

1856 survey by Edith Smith PLS #

3421. Newaygo County Surveyor  
Monument - 3/4" Pipe

Witnesses -

#1 4" Ash S 30 E 38.4 PL

#2 6" B. Oak N12 E 43.7

April 8 1963

I Robert A Griffin Survey Tech  
USFS, Edward Shawmire &

Pat Walsh found a 3/4" by 1/2"

Iron Pipe 2 feet S of the

apertant & of Highway M-20

found recorder witnesses in

the following condition

#1 Not found

#2 Good condition

#3 Good condition

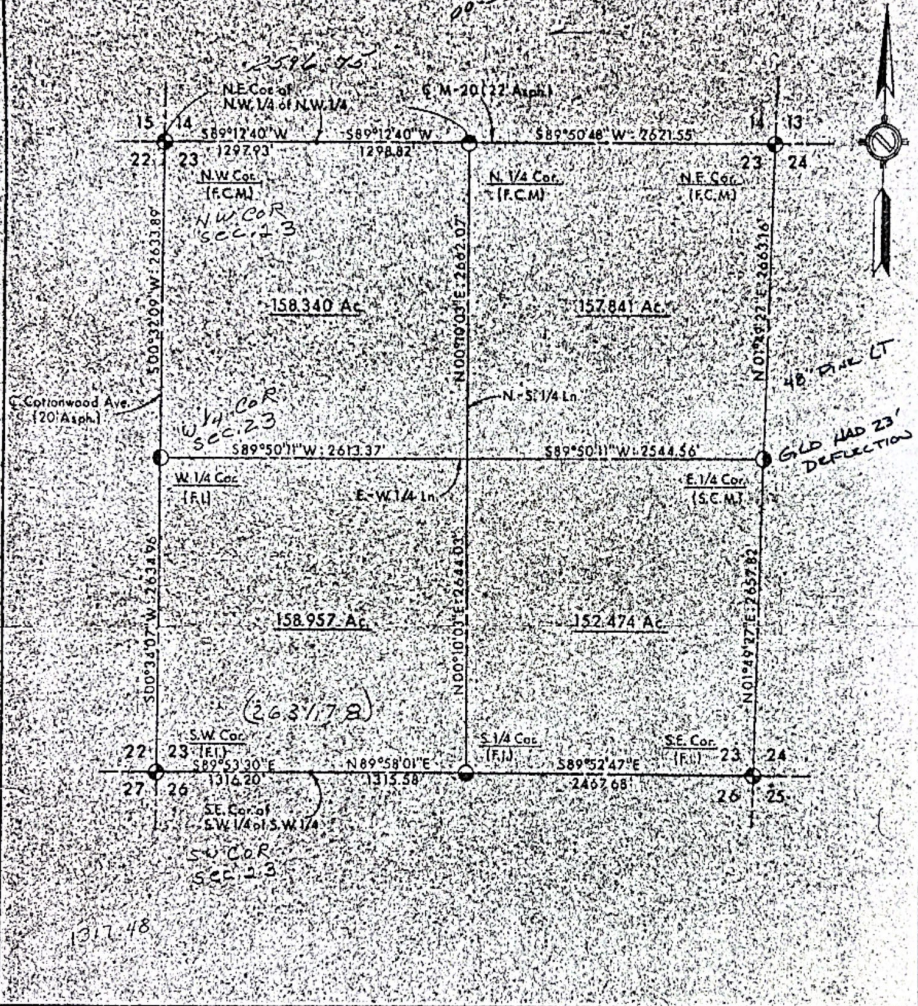
#4 Good new witnesses

#5 See new witnesses



# CERTIFICATE OF SURVEY

*00-38-23*



I HEREBY CERTIFY THAT THIS PLAT AND DESCRIPTION IS A TRUE REPRESENTATION OF A SURVEY MADE UNDER MY DIRECTION, AND THAT THE RATIO OF CLOSURE ON THE UNADJUSTED FIELD OBSERVATIONS OF SUCH SURVEY WAS LESS THAN 1 IN 5000, AND THAT ALL OF THE REQUIREMENTS OF PA 137, 1970 HAVE BEEN COMPLIED WITH EXCEPT AS SHOWN ON THIS SURVEY WHICH WERE DETERMINED IN THE FOLLOWING MANNER: POLARIS OBSERVATION: 4-11-74.		SIGNATURE: _____ DATE: _____
SCALE: 1" = 40' (GRAPHIC) 1" = 40' (TEXT) 1" = 40' (TEXT) 1" = 40' (TEXT) 1" = 40' (TEXT) 1" = 40' (TEXT) 1" = 40' (TEXT)	<b>FERRIS STATE COLLEGE</b> <b>BIG RAPIDS MICHIGAN</b>  <b>ADVANCED SURVEYING</b> <b>PROBLEMS PROJECT</b>  <b>SECTION 23 TOWN 15N. RANGE 11W.</b> <b>NORWICH TOWNSHIP</b> <b>NEWAYGO COUNTY MICHIGAN</b>	DRAWING NO. <b>SUR 403-01</b> SHEET 1 OF 1



