Resolving conflicting evidence in a fractional section

Sam Gibson Washington County Surveyor

Resurveying subdivisions in fractional sections requires considerable diligence to faithfully retrace the original surveys. This is especially true in the fractional townships along the St. Croix River that form part of the state's eastern boundary-due to their closure on the state line that was created after the survey was completed.

The established pattern of closing original surveys on state boundaries was not followed in the townships traversed by the St. Croix River north of the 3rd Standard Parallel, in what would become Washington County. These townships were originally surveyed and subdivided as regular townships in Wisconsin Territory, in 1847 and 1848. This created a problem when Wisconsin was admitted as the 30th state to the Union on May 29, 1848 and Minnesota Territory was created on March 3, 1849, described by Surveyor General Caleb Booth in his annual report dated November 30, 1850 under the heading "Separation of the surveys in Wisconsin from those in Minnesota." He wrote,

> The act for the discontinuance of the office of the surveyor general, etc., approved June 12, 1840, requires that whenever the surveys and records within any State shall be completed, the surveyor general shall deliver all the records and papers pertaining thereto to the officer appointed by the proper authorities to receive them.
>
> In order to comply with this law, it is incumbent upon the surveyor general to cause separate returns of surveys, numbering from the same base, but lying in different States. Compliance with this requirement is without difficulty or expense, when the boundaries are defined prior to the survey of the contiguous lands; but when the surveys precede such boundaries, much difficulty may be experienced and expense incurred in causing the requisite separation. An instance of the latter case has occurred in this district. During the year 1847-'48, and before the boundary of Wisconsin and Minnesota was fixed upon, the surveys were pushed rapidly forward, the subdivision surveys being extended along the St. Croix river, from its junction with the Mississippi river, vary nearly or quite to the point where the meridian boundary, as defined by act of 6th of August 1846, will intersect it. The field notes and plats of these surveys consequently embraced lands upon either and both sides of the boundary, wherever a township was traversed by the St. Croix. During the quarter closing on the 30th ultimo, I directed a part of the regular force of my office to the separation of the field-notes and plats above named. The field-notes of three large districts of township lines, the subdivision and traverse of thirteen townships, and the original plats of the same thirteen townships, had to be, and now have been, copied, examined and certified.[1]

The Surveyor General met this requirement by revising the field notes and township plats affected by the Minnesota-Wisconsin boundary and making separate surveys of fractional townships for Wisconsin and Minnesota.[2] (Fig. 1 & 2)

Figure 1. A portion of the plat of T.31N R.19W 4th P.M. St Croix County WI

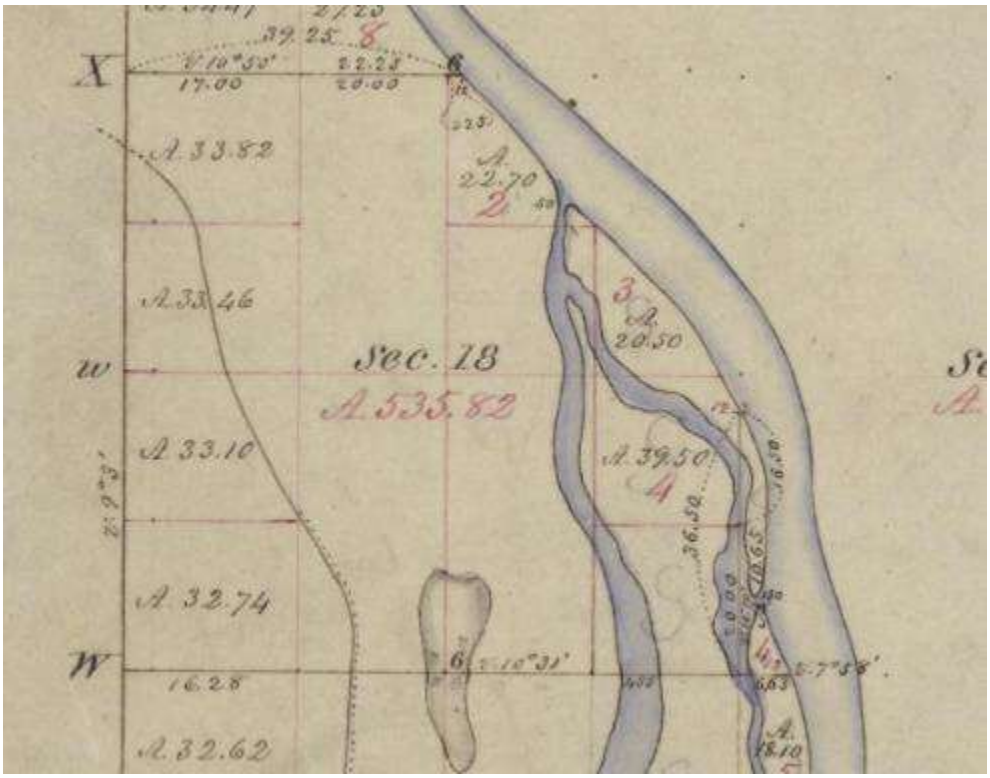


Figure 2. The same portion of the plat of T.31N R.19W 4th P.M. Washington County, MN

Due to this treatment of the original township surveys, retracements by local surveyors of the section subdivision lines have not always been consistent. There are records of surveys that treat individual sections along the boundary as regular rather than fractional by tying in evidence and corners on the Wisconsin side of the river.[3] However, records from the Washington County Surveyor's Office confirm that the majority of surveys conducted in these townships — whether for section line retracement, corner

restoration, or fractional subdivision — relied exclusively on evidence west of the St. Croix River within Minnesota.[4]

Even with the practice of treating the section as fractional being generally accepted, connecting evidence from past surveys to the corner positions maintained today can be challenging. One such example is Section 18, Township 31 North, Range 19 West of the 4th Principal Meridian, one of the sections made fractional by the state boundary. This section was originally subdivided in 1847 as a regular section. The main channel of the St. Croix River cuts across its northeast quarter, leaving most of the section, and all but one Public Land Survey corner in Minnesota. (Figure 3)

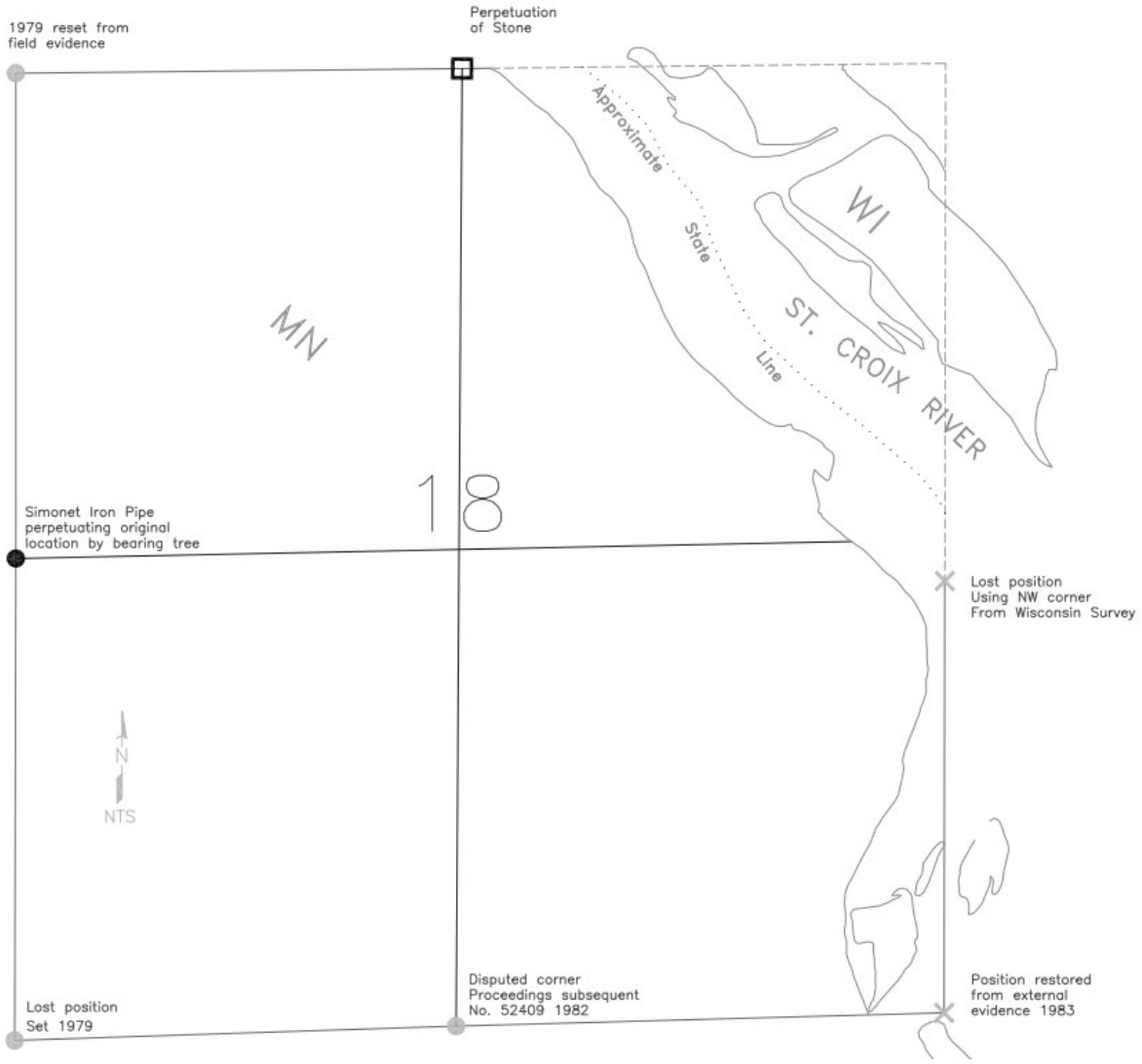


Figure 3 Sketch of current conditions for Section 18 T 31 N, R 19 W, 4th P.M. *Gray symbols represent corner positions accepted after the plat of Williamsport.*

The section's east line largely coincides with the river. The southeast corner, established in the original survey by a witness corner 0.60 chains south of the true corner in a slough of the St. Croix.[5] The east quarter corner, similarly fell within the river, and was evidenced by a meander corner 36.50 chains north of the southeast corner. [6] The northeast corner fell across the main channel into Wisconsin and was thus separated from the rest of the section.

The quarter corners along the east line of the section, falling among the islands and meanders of the river were subjected to significant disruption and obliteration of original evidence. The remaining quarter corners of the section were on the upland portions of the St. Croix Valley, they too were affected by time and changing conditions. All three corners representing the west line of the section have been disputed over the years. [7] The position now maintained as the southwest corner was reestablished as lost in 1979. By the mid-20th century, and the south quarter corner was the subject of litigation in the 1980s. [8] Several local surveys reflect these differing interpretations of the section lines and corners.

The plat of Williamsport (Figure 4) was surveyed by James F. Simonet (MN Reg. No. 705) in the northwest quarter of the southeast quarter of Section 18 and recorded on November 19th, 1963. Determining the location of this plat relies on establishing the quarter-quarter line, which itself depends on correctly subdividing this difficult fractional section. Without consistent and stable positions for the section corners, the direction and position of that quarter line are subject to differing interpretations. Ambiguity in section and quarter corner positions becomes even more pronounced when trying to locate property farther from the monumented corners, as is the case with the plat of Williamsport.

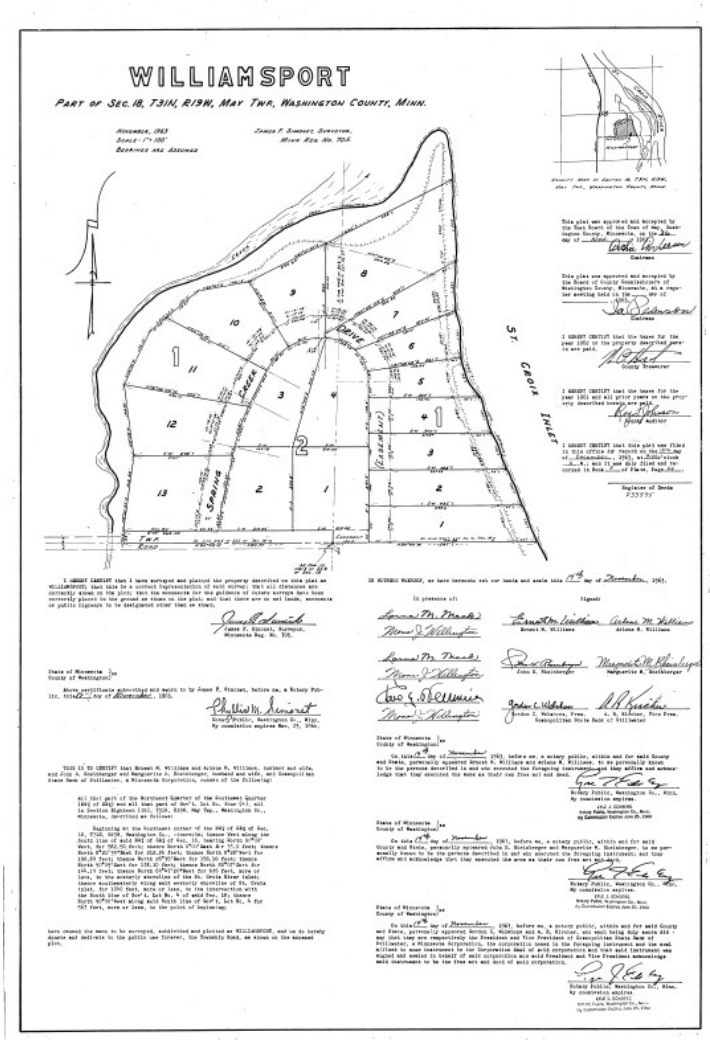


Figure 4 A copy of the plat of Williamsport by James Simonet 1963

A recent survey of the northwest quarter of the southeast quarter of Section 18 revealed that the plat of Williamsport does not match current county mapping and conflicts with other surveys in the area.

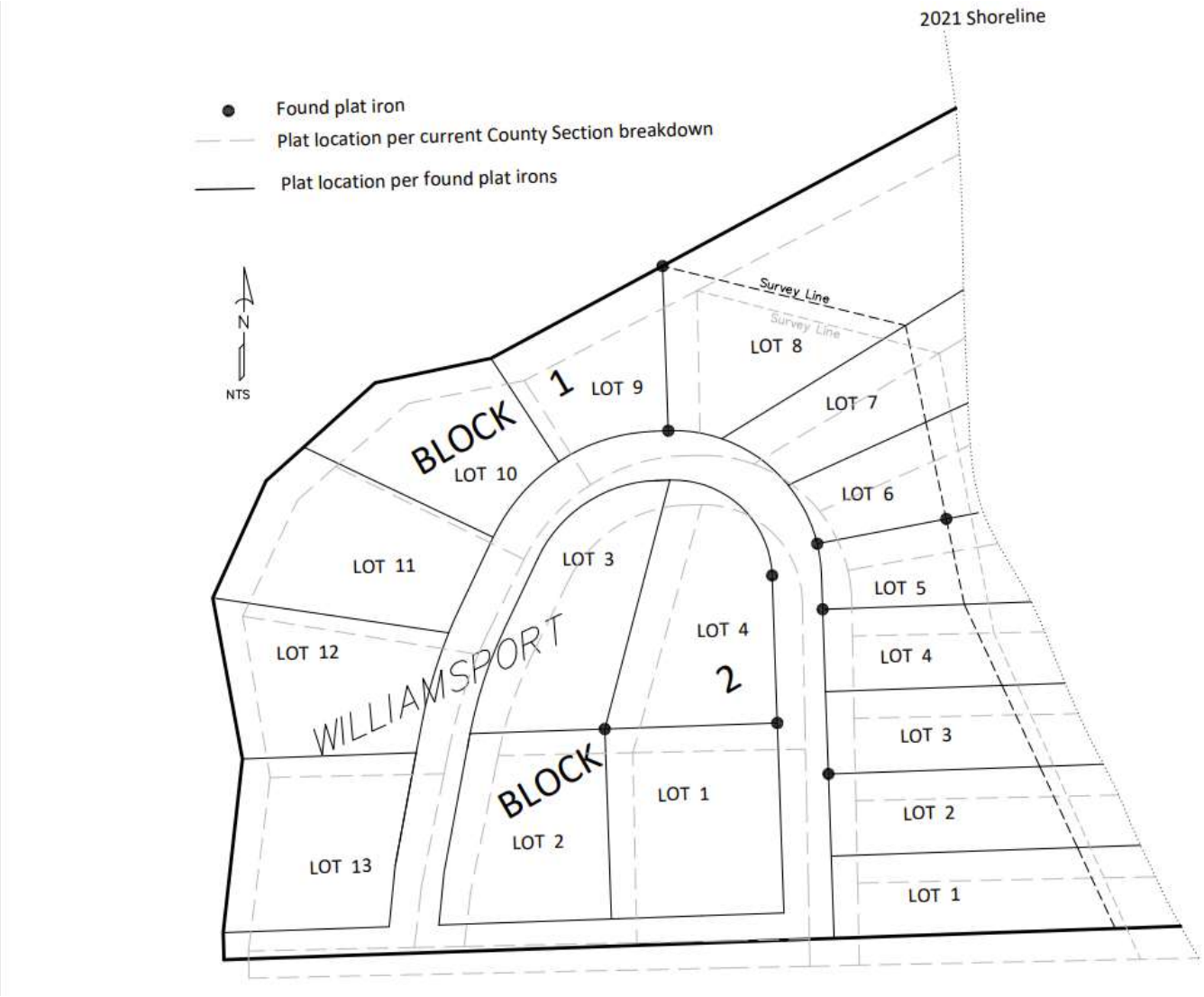


Figure 5 Sketch of recently recovered survey evidence.

This survey indicates that the found monuments, set by Mr. Simonet as part of the plat, are consistent with the dimensions shown on the plat for its internal lots and blocks, but rotated approximately 26 minutes counterclockwise and offset roughly 28 feet north from where the county maps place the centerline of the township road intended to follow the sixteenth line. (Figure 5)

In many cases, a discrepancy between older plat evidence and modern section mapping may justify giving greater weight to the plat, as it may better reflect the original section line locations. This can be particularly true when modern interpretations rely on corners reestablished through lost methods.

In this case, however, other surveys conducted contemporaneously with Mr. Simonet's work depicted the section similarly to today's section breakdown. This suggests that, even at the time of the plat, there were differing interpretations of the section subdivision lines.

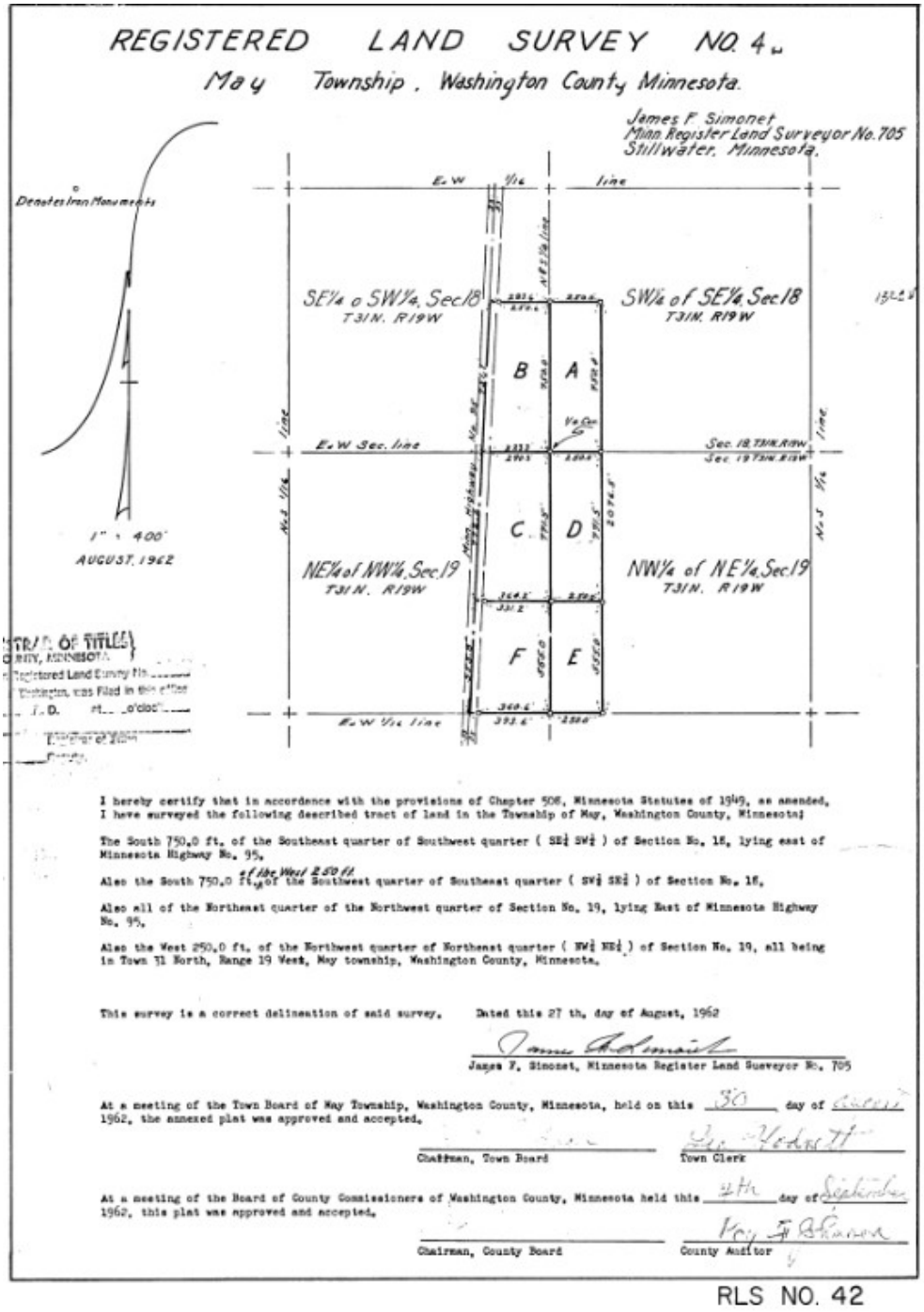
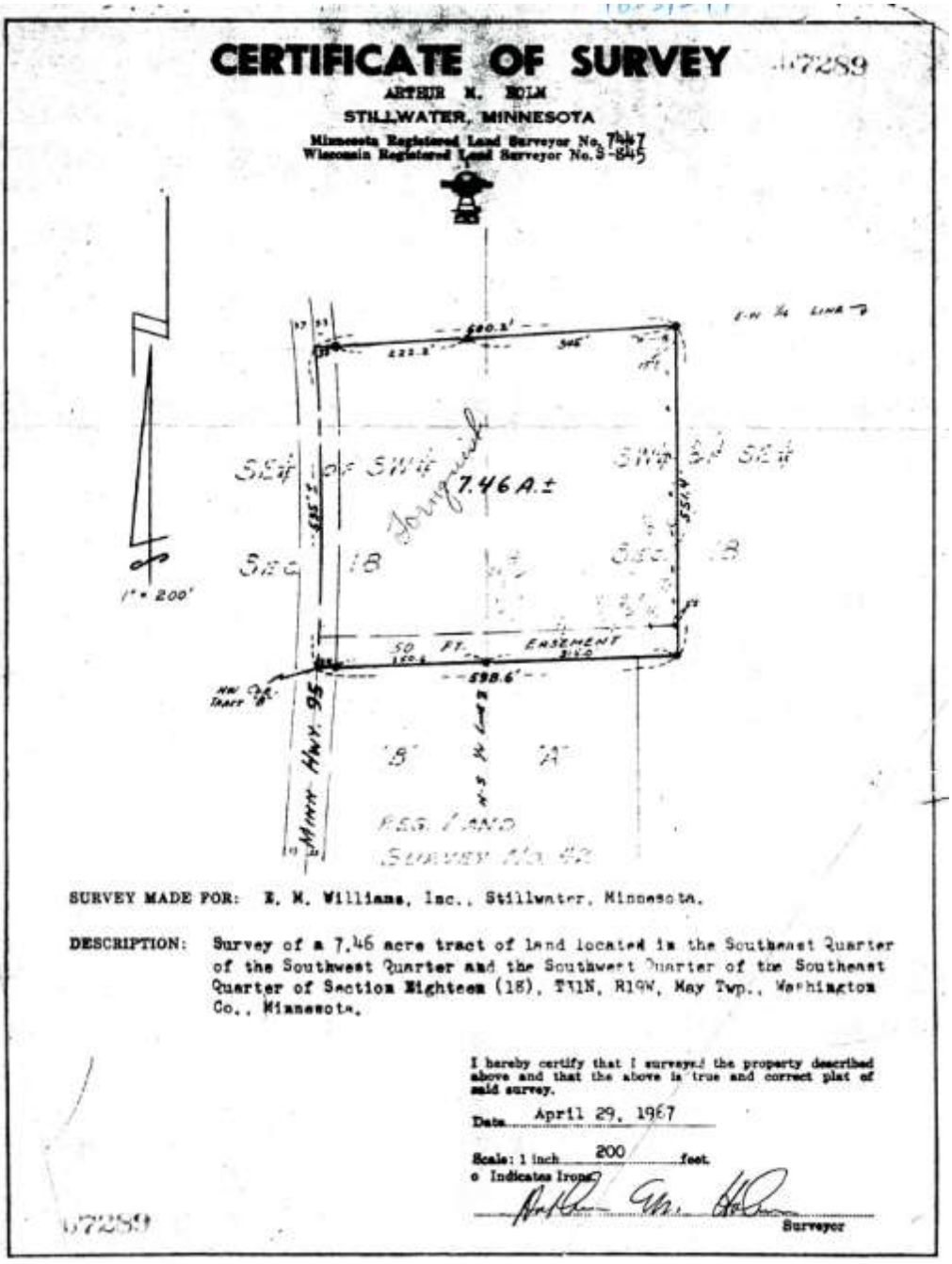


Figure 6 A copy of RLS No. 42 by James Simonet 1962

In 1962, a year before the plat, Mr. Simonet surveyed Registered Land Survey No. 42 in the same section (Figure 6). Evidence of this survey was recently found to align with the monuments from the plat of Williamsport, indicating Mr. Simonet was working from a consistent framework within the section. However, this framework is inconsistent with the county's current section mapping.



CERTIFICATE OF SURVEY

ARTHUR M. HOLM

STILLWATER, MINNESOTA

Minnesota Registered Land Surveyor No. 7447
Wisconsin Registered Land Surveyor No. S-845

7.46 A.±

Sec. 18

50 FT. EASEMENT

MINN. HWY. 95

'B' 'A'

SURVEY MADE FOR: E. M. Williams, Inc., Stillwater, Minnesota.

DESCRIPTION: Survey of a 7.46 acre tract of land located in the Southeast Quarter of the Southwest Quarter and the Southwest Quarter of the Southeast Quarter of Section Eighteen (18), T31N, R19W, May Twp., Washington Co., Minnesota.

I hereby certify that I surveyed the property described above and that the above is true and correct plat of said survey.

Date April 29, 1967

Scale: 1 inch 200 feet

o Indicates Iron

Surveyor

Figure 7 A copy of Certificate of Survey by Art Holms 1967

Shortly thereafter in 1967, Art Holms (MN Reg. No. 7447) surveyed part of the southwest quarter of the southeast quarter of Section 18, adjacent to Simonet's Registered Land Survey No. 42 and the east–west quarter line presumed to coincide with the south boundary of the Williamsport plat (see Figure 7). Although Holms's survey does not depict PLSS corners or provide quantitative directional data, a subjective review shows a significant difference between the orientation of the sixteenth line he represents and the direction of the north line of Tracts A and B of Simonet's RLS. This contrasts with the apparent parallel arrangement suggested by Simonet's RLS. However, because neither survey provides quantitative directional data, this observation cannot be confirmed solely based on the record surveys.

The only direction shown on the plat of Williamsport is for the south line of the northwest quarter of the southeast quarter, recorded as N 90°00' W, without quantitative ties to other section subdivision lines or

PLS corners. The southeast corner of this quarter is marked with a filled circle, suggesting the possibility of an existing monument. Unfortunately, this monument was not recovered in the recent survey nor was it tied quantitatively to any other PLSS point or line on the plat. These deficiencies limit the utility of the plat's dimensions in explaining the disagreement with other surveys.

Several other subdivisional surveys by Holms and Simonet in the south half of Section 18 and the north half of adjacent Section 19 also lack sufficient quantitative data to confirm how they were determined. Taken together, these surveys do demonstrate, however, that differing approaches to subdividing this section were in use at the time.

Fortunately, many monuments from these earlier surveys have been recovered by recent fieldwork, providing valuable evidence of how each surveyor interpreted the section lines. Analyzing these recovered monuments in relation to the current understanding of section corners suggests two possible frameworks. The direction of the east–west quarter line based on found monuments, from adjacent Art Holms surveys, aligns well with a mean bearing of the north and south section lines, which would be typical in a fractional section. In contrast, projecting the quarter line based on the monuments associated with Simonet's surveys fits reasonably with a quarter line extending from the westerly corner to the east corner of the section, as might have been determined by holding the 36.50-chain distance to the meander corner established by the original survey along the east line of the section, similar to a regular section subdivision.

Which of these determinations is correct or whether either is in error is important in interpreting the evidence. In Beardsley v. Crane[9], a case also involving a fractional section, the court held that where a surveyor made an error in laying out lines called for in a deed, the deed language controlled over the location determined by the erroneous survey, cautioning against accepting incorrect surveys. Was Simonet's plat of Williamsport in error?

Simonet's work is not consistent with the county's current mapping which projects the quarter line as a mean bearing originating from the west quarter corner, nor is it consistent with guidance in the 2007 position paper. Meanwhile, BLM guidance[10] presumes that a section line has been "actually run" if its bearing and distance were reported in the official survey record. [5] If Mr. Simonet was retracing the lines actually run as reported in the official record, current interpretations cannot retroactively induce an error in his work.[11]

Surveyors in the St. Croix Valley have routinely worked in both Minnesota and Wisconsin, so it is reasonable to imagine that Mr. Simonet was aware of Wisconsin's official records and used that information to guide his effort to retrace the footsteps of the original surveyors as they actually ran the lines. Although Holms's surveys are more consistent with modern practice, neither the BLM guidance nor the 2007 position paper were available to Mr. Simonet at the time. Therefore, it is difficult to characterize Simonet's surveys as erroneous rather than as a reasonable professional judgment on what was, then, an open question of how to treat the surveys in these townships.

Being unable to determine an error in the survey we are left with the question of how the found irons for the plat of Williamsport should be treated in determining boundaries between various lots in the plat and adjacent properties. Looking to boundary case law for guidance, Dittrich v. Ubl[12] considered the relative

value of monuments set as part of a plat compared to other monuments set later and supposed to control the platted lines. The court reaffirmed the principle that *"Monuments are the best evidence of the lines and corners actually made by a survey, and, when ascertained, are satisfactory and conclusive evidence of the location of the lines as originally run."* [13] This supports holding the found original monuments when locating lots within the plat of Williamsport.

But if the work is not in error, and the found original monuments do not fit with the current understanding of the section subdivision lines, how should those positions be reconciled? This is where it becomes necessary to understand who was creating the plat and what they were including in the plat.

On November 16th 1962 Ernest Williams took title to several parcels in the south half of Section18 and in the north half of Section 19 Township 31 North Range 19 West of the 4th Principal Meridian.[14] This deed conveyed all of the property platted as Williamsport the following year and notably included the entirety of the northwest quarter of the southeast quarter of Section 18.

At the time he executed the plat Mr. Williams had title to both the property included in the plat of Williamsport and the property immediately adjoining. Because Mr. Williams held ownership of both sides of the lines surveyed by Mr. Simonet on the plat of Williamsport, the boundary between the unplatted portions of the section and the platted lots became that which was evidenced by plat monuments set as part of the survey. As stated in Dittrich v. Ubl[15] *"Purchasers of town lots generally have the right to locate their lot lines according to the stakes as actually set by the platter of the lots, and no subsequent survey can unsettle such lines."*[6]

As described above, the found monuments fit closely with the interior dimensions shown on the plat, demonstrating sound technical precision and supporting the conclusion that these positions represent the intent of Mr. Simonet and the proprietor, Ernest Williams. These monuments are the best evidence of the intended internal boundaries between lots in the plat as well as the external boundary between the plat and the remainder of the quarter section.

That Mr. Ernst subsequently conveyed the property surrounding the plat using descriptions specifically excepting the Simonet plat from the conveyance is indication of both an acknowledgement of the ambiguity in the section and his intent to accept the plat location.

Much of the land within the plat of Williamsport remains undeveloped, with only a few lots along the river converted to residential use. However, the patterns of use and occupation on these lots are consistent with the original plat monuments, further indicating long-standing acceptance of the plat's boundaries. If a subsequent survey was made and attempted to realign the plat lines to match a modern interpretation of the section subdivision, it could plunge the "whole neighborhood into quarrels and litigation[16]

Lloyd E. Pew L.S. wrote in 1991.[17], "Resurveying a lot in a plat is a matter of determining the location of the platted lot lines as originally run upon the ground. A surveyor must carefully follow the footsteps of the original surveyor. If a survey was made upon the ground and a plat was based on that survey, then the lines as run on the ground show the intent of the parties to the deed."

As surveyors, our role is not simply to measure precisely, or to rigidly apply mathematical rules to boundaries that can be chaotic, unclear, or obscured by time. Our responsibility is to protect the real

property rights of landowners by perpetuating the true boundaries of their property. As Williamsport demonstrates, doing so can draw on the full range of a surveyor's expertise, recovering and evaluating physical evidence in the field, analyzing and resolving conflicts in that evidence by researching historical records, and applying an understanding of statutes and case law.

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[1] Annual report of Commissioner of General Land Office, 1850 [H. Exec. Doc. 31-9] U.S. Congressional Serial Set v. 597 (1850) p. 49-50

[2] C.H. Booth, Surveyor General of Iowa and Wisconsin, Dubuque. Letter to J. Butterfield, July 20, 1849. Surveyor General Letter Book, Iowa Historical Society, Des Moines, IA. YOU MIGHT LIKE TO INCUDE THIS REFERENCE Rod Squires & March Senjem) The public land survey lines and the St. Croix River in Washington County Minnesota Surveyor v.18 no.1 (Spring, 2010) p. 14-19

[3] Lawrence S. Nybeck, Certificate of Government Corner No. 4-83 – Statement of evidence; Washington County Surveyor's Office November 22nd, 1983.

[4] Michael J. Welling, Washington County MN Report on the Direction of the East-West Quarter Line Section 30, T. 32 N., R .19 W. Washington County Surveyor's Office, November 2007 p.11

[5] GLO records Bureau of Land Records field notes of the 4th PM - 1831 MN/WI Twp 031.0N-019.0W Subdiv. Lines Volume 42 P 244 Field Note Volume Details - BLM GLO Records

[6] GLO records Bureau of Land Records field notes of the 4th PM - 1831 MN/WI Twp 031.0N-019.0W Subdiv. Lines Volume 42 P 245

[7] Lawrence S. Nybeck, Certificate of Government Corner No. 4-85 – Statement of evidence; Washington County Surveyor's Office May 2nd, 1983.

[8] Terence G. Obrien v. Richard How; Minnesota Tenth Judicial District File No. 41529

[9] Beardsley v. Crane 52 Minn. 537 (1893)

[10] BLM Manual of Survey instruction 2009 p. 69 Section 3-119

[11] Chan v. Brandt 45 Minn. 93, 47 N.W. 461

[12] Dittrich v. Ubl. 216 Minn. 396 (1944)

[13] Id. p. 402

[14] Warranty deed document number 231012, Washington County Deeds Book 260, Page 568.

[15] Dittrich v. Ubl. see endnote 8 p. 405

[16] Cooley, Thomas M. "The judicial functions of land surveyors"

[17] Lloyd E. Pew L.S. "Resurvey of Lots in a Subdivision plat in Minnesota" Dis-Closures spring 1991 p. 14