

# feedback

## Surveyor's Cocaine

C. Barton Crattle's point #15: "Math to a surveyor is like cocaine to a dopehead" (June, 2014 issue of American Surveyor) was like an exclamation point for our current survey.

In the year 1893, at the south line of Section 13, T31N, R4E, BM, a County surveyor recorded in his Survey #3 that he found all three 1871 GLO stones and that the south  $\frac{1}{4}$  stone "had been moved 0.05 ch. (3.3') W and .14  $\frac{1}{2}$  ch N (9.9') of proper point. Placed a stone at proper point and marked it 1/4 A". This otherwise remarkable County Surveyor had fallen victim to Euclid's "numbers are the ultimate reality" delusion manifested in our profession's weakness for allowing math to override evidence.

Lest we modern surveyors break our arms patting our own backs, in 1983 a PE/LS reports of the northwest corner of the same section: "No original evidence was found of this GLO corner. A County road runs N-S perpetuating the E-W location of this corner. I therefore re-established this corner by (single) proportion and using the existing county road as perpetuating evidence." He reports the resulting distance east to the found GLO  $\frac{1}{4}$  corner stone to be 2,640.00'. A perfect  $\frac{1}{2}$  mile! However, anyone visiting his brass cap at the NW corner feels as though they have entered a vortex for his brass cap is not in the middle of the road. Neither is it at the split between

the right-of-way fences (the correct method of splitting a road), it is in fact 3.5 feet to the east of centerline. Another victim.

Truly, "Math to a surveyor is like cocaine to a dopehead". Mr. Crattle said in ten words what we have tried to say in 10,000. Good show Bart.

It took Chad 20 years to recover from his two year Land Surveying degree. Now our state requires a four year degree, and that in a school headed by a Doctor of math with little to no survey experience, prompting another metaphor: "When you find yourself in a hole, stop digging."

—Chad & Linda Erickson

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## Claim Jumping Surveyors Meet the Drop Kickers Part III

We enjoy your writing style and subjects. Of particular interest in this current issue is 'footnote #9', page 37, where you mention three items of concern to this reader.

1. Fictitious Field notes
2. Short cut methods (township subdivisions) and
3. Fraudulent notes

On item #1, my 'home area', the northern part of Michigan's Lower Peninsula, had well over 300 fraudulent township subdivision surveys in a strip between Saginaw Bay and Grand Traverse Bay. When eventually discovered, these required either complete resurveys or at least dependent resurveys. These are detailed in the publication "Special Instructions to Deputy Surveyors in Michigan 1808-1854" by Prof. Berry and which I had the pleasure of being the 'editor'.

Item #2, this writer, following publication of our biographical book "Surveyors of the Public Lands in Michigan", has searched available records in an attempt to find or develop a typical or 'standard' short-cut method with the intent of publishing a few of the techniques. About all we have discovered is that the so-called 'method' does not seem to be consistent. Rather, it seems to be based upon an assumption of who the "examiner" will be and the probability that he will follow a typical route in the examinations.

The most consistent method seems to be a disregard for the Instruction of, after arrival at the north line of the township, returning to the southern town line, moving west a mile, then running northerly on the second column, etc. There is evidence indicating that several Deputies would, upon reaching the northern town line simply move west, assume a 'closing', and run south, recording their field notes in

reverse. This technique would save walking back over their just completed 6 mile line. When paid by the mile, this results in a considerable savings. The 'stubby-in' of the Quarter Corners from one direction is also quite common in the 1815 & 1833 instructions as the east/west half mile segments are quite erratic plus topo calls on the half mile not run are mostly fictitious.

Several writers from the 'Great Plains' area have shared their observations of apparent 'serpentine' routes (plus stubs) through a township which serves to monument a high percentage of the required positions.

And, item #3, we do have a fraudulent township subdivision in this County (T28N/R01E) as was discovered by the elected County Surveyor in 1883 when the timber harvesting was at its' highest activity. Apparently this Township was not examined, but 28/2 adjoining was, where some inconsistencies were noted but did not require a resurvey. In the case of 28/1,



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the County Surveyors have established the 'Government Corners' by single proportion, running 6 mile lines from South to North then the Quarter Corners on the East/West lines also by S.P. The "Government Corners" of this Township have been processed through our State-Wide Remonumentation program.

Maybe the "short-cut" methods will be the subject of one of your future articles?

—Norman C. Caldwell, PS

## More

I found your Part III article in American Surveyor interesting and informative but perhaps not enjoyable due to the arrogant attitudes of the BLM surveyors and their willingness to contravene multiple court decisions.

It reminds me of a close-to-home incident which occurred in a Dependent Resurvey of part of T.27S. R.36E., in Brevard County, Florida. The survey was performed starting in 1961 and the plat says it was finished in 1966. At the SE corner of Sec. 34, the field notes indicate that a 2"x2" hub was found and appeared to be accepted by affected landowners. Of course, the BLM guys set a typical 2" diam. galvanized pipe with bronze marker cap. Unfortunately there was no mention of, nor recognition of any knowledge of, a ±300 acre subdivision in the south half of Section 25, which had been platted and recorded in 1925. This subdivision was prominently shown on the Tax Assessor Map of Section 35.

In this plat, which referenced the SW corner of Section 35 (same as SE corner of Sec. 34), there was a Permanent Reference Monument (PRM) in the form of a 6"x6" coquina stone, 131 feet east and 92 feet north of the section corner, allowing for Canal and Street R/W's. Similar Permanent Reference Monuments were in place about 1200 feet east and north, as also shown on said subdivision plat.

Their placement of the BLM monument about 5 feet away from the correct corner location, as projected from the plat's PRM's, makes a mockery of the statement on the BLM plat that the survey represents the "best available evidence" of the original corners. I am one who believes that the engineer/surveyor who made the 1925 plat did not simply

pick his corner location out of the air and that he would very well have had a better chance of finding one of the original 1857 corners.

As you might well imagine, many of the current crop of younger surveyors are much more inclined to accept the BLM monument because it looks so official. Oddly enough, and perhaps fortunately, the conflict is somewhat swallowed up in the Canal R/W's and may never be contested in litigation.

Never-the-less, this case has convinced me that at least this Dependent Survey was perpetrated without even any consideration of available record evidence of that particular corner.

Keep up the good work, in spite of the bureaucracy.

—Bill Powell

Florida Registered Land Surveyor No. 1812

PS—I began my surveying career as a "grunt" rodman/chainman trainee in 1955, became licensed through experience, self-study and the state licensing exam in 1962, and still feel useful enough at 80 years old to stay involved in surveying (mostly office work) for about 6 or 7 hours per day.

## Chad & Linda Respond:

You make two points of which our "current crop of youngsters" should take note:

1. Given two surveys performed forty years apart, the earlier one had a much better chance of finding the original GLO corner. This is also buffered by the principle of repose.
2. When restoring the exterior boundaries of a section, many private surveyors and most BLM surveyors fail to consider and utilize what has gone on INSIDE the sections. This is as simple a function as "If A+B=C then C-B=A". It is sad when our Surveyors are more Mathematician than Surveyor, but reprehensible when the Mathematician doesn't know how to work his formulas backward.

## Got some feedback?

Contact us via [www.amerisurv.com](http://www.amerisurv.com), or send a letter to: The American Surveyor, P.O. Box 4162, Frederick, MD 21705-4162. We reserve the right to edit letters for clarity and length. ■

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