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# SIDE SHOTS

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## THE STORY OF TWO LIMESTONE MONUMENTS

BY GABY NEUNZERT

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# Rule of the Month: Asking Questions

By Earl Henderson, PLS

So...I've been wondering lately if we, as a profession, are asking the right questions of ourselves when we're performing our boundary determinations. Or more particularly, I'm wondering if we're asking ourselves the questions in the right direction. For instance, if we're measuring to a particular corner location and find a monument in that vicinity (which brings up the question of "How far off is too far?") often the question that comes up about the previous surveyor is "How far off were they?" Should we instead be asking ourselves "How far off are we?" Let's ignore, for the moment, the issue of making boundary decisions based on measurements and focus solely on the measurements... just this once. So if the measurements are being analyzed don't we first need to know how much error is in our measurements before we can even ask if the previous surveyor was off at all? Just because we measured to a location 0.20' different from the found monument doesn't mean that found monument is outside our error ellipse, right? So if it's inside our error ellipse why would we not accept it as marking the corner? And how large was the error ellipse when that monument was set? Does that ellipse overlap our ellipse? Where is Euclid when we need him, right? I try to approach this issue as if I'm the one with the error and the previous surveyor did a better job of measuring than I have. I don't know that, but if I think of it from that point of view, the evidence I find tends to be more acceptable, even if the found monument is more than 0.20' away from my measured location.

So now that we've used our measurements and dimensions to get us to a location where we've found some evidence of a property corner, let's say a monument, what's the next question? It should be, "Is that the original monument?" Because if we have found the original monument then by law it has no error in measurement and has been defining the corner location since it was set. Sometimes we can answer this question easily with an absolute and resounding "yes". If so, then Yee Haa and let's go home. But many times we can't be that definitive. And when we can't we then need to ask some more questions. "Could it be the original monument?" "Is there something that makes me feel it is, or is not the original monument?" And as we all know those questions often don't have definitive answers either. So in that situation I try turning the questions around and ask, "Can I prove it is NOT the original monument?" Or, "Is there any reason not to accept this found monument as the original monument?" Or, "Would accepting, or not accepting, this as the original monument agree or disagree with other evidence I see of where the property line might lie?" It can get confusing for sure when these question start mudding the cranial waters. But hey, that's why we get paid the big bucks.

If we have determined that our found monument is not the original monument we need to return to the "How far" question and ask if the monument was set "within the standards of measurement at the time". But I think we'd be better off asking if we can prove if the monument was NOT set within the standards of the time. By asking that question we may be more likely to accept existing monuments rather than set a pincushion monument nearby. "Standards" in this instance can be equated to "error" and let's face it, there's a lot of error floating around in the breeze out there. There's our error and the previous surveyor's error just to name the two most obvious. The Compass Rule, Least squares and error ellipses exist because of known errors in measurements in order to balance out the errors to produce a more likely determination of where the measurement was taken than an unbalanced location. Did you notice the words "more likely"? The balanced location determination is NOT the absolutely true location. It's just more likely, that's all. So be careful if you're ever making a decision based on your measurements being more precise than they really are. And be especially careful if you're making decisions based on your measurements being more precise than the previous surveyor (which they may be) or the original surveyor (which they likely are).

In fact, you should be extremely careful if you're making legal decisions based on measurements at all. And even though that issue needs to be addressed in several more articles, let's return again to "How far off is too far?" It turns out that the law is not about perfection in measurements but the preponderance of evidence. And measurements, either ours in the field or those shown on a plat or described in a deed, are merely evidence of where a corner exists on the earth. Measurements give us a good spot to start looking for physical evidence. Measurements, in other words, don't get to be the defining factor when answering the question of "How far off is too far?" unless there's absolutely no other evidence available. And if you find yourself in that situation then you're not looking hard enough, IMHO.

I try to simplify all these questions by remembering that I read somewhere (and I apologize for not making a reference to the original author here) that "The basis of civilization is a stable boundary system." Through 98% of civilization there has been a major military conflict somewhere and I'd bet that 99% of those conflicts have been over a boundary of some sort, the Trojan War being possibly the sole exception. So why conclude that evidence creating conflict among neighbors is superior to evidence supporting harmony among neighbors? If you are like me, you lean toward harmony rather than conflict whenever possible. If you're asking the right questions that is. Are you?

Be safe out there. ■