DOUBLE MONUMENTATION

BY DENNIS MOULAND

The following is an American article, reprinted from the Professional Surveyor (Volume 10 Number 6, November/December 1990 Issue). While some of the terminology is not applicable to surveying in Ontario, the comments regarding double monumentation do apply. The Survey Review Department is finding that the practise of rejecting monuments on the basis of accuracy, measurement or precision alone is fairly common in

Ontario. As this article suggests, we should consider the consequences of this practise.

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Can you imagine the consternation of a person who has just driven many miles to his newly-purchased (and surveyed) country estate for the purpose of fencing it in, and, having left his plat at home, discovers that the corners all have two or three monuments, some several feet apart? Can you imagine the phone call that surveyor is going to get on Monday?

Most people believe that once they hire a surveyor, their boundaries are fixed and certain. As surveyors, we should recognize that this is often not the case. We can report the facts. Sometimes the facts are quite clear and a boundary is very safe and secure. Other times the appearance of possible unwritten rights, both for or against a client, can lead the surveyor to a less certain conclusion. Such problems should be thoroughly represented on the plat and also explained to the client.

Occasionally surveyors themselves create or perpetuate illogical conclusions or grey areas that need not exist. These actions cause a great deal of justifiable heartburn to the client. It is the practice of double monumentation.

Double monumentation occurs in two basic ways. One occurs when surveyors disagree with found monuments and so decide to "set the correct" corner. Another occurs when surveyors note on a plat that found monuments are certain distances or moves from the "true point", but do not set other monuments.

This article analyzes these two common practices.

To allow the setting of double monuments is one of the most damaging things the surveying profession can do to itself. As many surveyors have seen, it can result in three or more monuments, all claiming the same corner point. This sends a terrible message to the public. We look like a bunch of prima donnas. all trying to out-brag each other about our accuracies. Some even brag on their plats how they adjusted their traverses, or how well they closed. While, on the surface, this may all seem professional, it is actually highly unprofessional.

The heart of the issue is simple: when should a surveyor accept an existing monument and when should it be rejected? This is basically why we have surveyors and why we license them. It is my observation that most second monuments are set for entirely the wrong reasons.

If a deed description calls for a monument, and you find that monument, some very basic principles of land law say you should accept it, even if it is not at the called-for distance or bearing. The call for a monument is the most powerful call in any description. But some "measurers" are apparently not aware of this concept. They will set their own "superior" monument half-a-foot away, and create confusion where none need exist.

Often an uncalled-for monument is found at a point where a deed has taken the surveyor. We must not automatically reject such a monument simply because it does not fit our precise measurements. An element of common sense must enter in when dealing with the uncalled-for monument. Does the position monumented mark the corner point within reason?

For example, consider a description your are retracing that calls for "thence North 150 feet" to a property corner. Your survey locates an iron pipe at this approximate point. But you calculate the pipe to be 6 minutes off of bearing and .30 feet too far. Should you set another? You must ask some questions about this uncalled-for monument:

- * Is there a record of this monument?
- * Where did it come from? Who set it?
- * What deed (or deeds) were being used to establish this position?
- * Is there a conflict with those deeds and your deed?
- * How long has it been in place?
- * Was it set with reasonable accuracy given all the circumstances?
- * Will it better serve the public to set an additional monument?
- * Who and what has relied upon this position, and for how long?
- * Has acquiescence taken place?

In the previous example, the bearing error is meaningless unless you have been very prudent to know the basis of bearings you are retracing. and the factors that may have influenced the "precision" of the record bearings. Let's face it, 6 minutes in 150 feet is only 0.26 feet on the ground. Might not this monument be a reasonable attempt to mark the corner point? Was the distance so unreasonable? Do you really think your traverse, after being adjusted, is all that significantly different? A pipe in the ground for 25 years should carry a lot of weight with the present-day surveyor if it reasonably marks the originally intended corner point.

There are situations where surveyors must set other monuments. When an uncalled-for monument is not within reason, or appears to have been set incorrectly (I did not say inaccurately), then a second monument may need to be set, and the plat should clearly state your rejection of the found corner, and why. The multiple-monument syndrome is usually not a result of careful consideration, research, or professionally-based common sense. Rather, it is the result of measurement, adjustment or technique disagreements.

In short, a second monument is only needed when there is clear reason why the found point should be rejected. It should never be based on reasons of accuracy, measurement, or precision alone. When you consider the principles of why a monument is so "sanctified" in land boundary law, you will understand why precision was never a factor in land surveying. The major test is harmony with record angles, distances and areas, but these must be realistic and reasonable.

Some will misread this to say that I am not in favor of good survey practices or precision. Not true! The real issues in property surveying are legal, not mathematical. When we cross the line and worry more about precision than "right", we undo the purpose of our profession. and literally curse the public whom we are supposedly protecting.

Some very good reading on this subject is found in sections 4.22 and 5.16 of Boundary Control and Legal Principles, 2nd edition, by Curtis Brown. He discusses the uncalled-for monument in metes and bounds and simultaneous conveyance situation.

The second type of double monumentation occurs, for instance, when a plat states the surveyor found a rebar, but the true point is ".04 North. .07 West of the rebar." Really? I know of firms that do this all the time, and yet have never heard of a prism offset. They never adjust their tribrachs and they have no concept of positional tolerances. Their traverse closed 1:20000 over a four-mile length, but is not on the state plane coordinate system. There is no way their work is even remotely accurate enough to make this kind of judgement. These licensed computation artists (COGO slaves) are a further detriment to an honorable profession.

This practice defies all logic. The public cries out, where is the corner? The rebar, or the theoretical point? What service does this do the client, the adjoiners, or the public in general? None! At what point does the monument finally take its rightful sanctity and become the corner? When every surveyor in town agrees to it within .01 foot? Within .001 foot? When will it end?

Some surveyors cannot seem to make a commitment. Is it the corner or not? That is what they were hired to determine. When certain circumstances are present, there may be good reason to set a second monument, but this should be the exception rather than the rule.

While various groups and organizations for surveyors continue to roam the country preaching the paths to professionalism, there has always been only one true test - the quality of the work performed. The setting of double monuments is almost always a sure sign some amateur has been there before. Perhaps they left a real record of "why" on a plat. But usually it is simply a game of multiple choice at the corner point. Choosing the oldest is not always the solution.

These games are creating more and more disputes, controversies, and ill will toward the surveying profession. I urge all who read this to consider what they are doing. Are you really practising surveying? Or just a mathematical shadow of the profession?

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