The Fifteen Commandments

By Steven S. Brosemer (Reprinted with permission)

I would like to take this opportunity to once again climb up on my soap box and expound upon several of the Fifteen Commandments for Boundary Surveying that I listed two issues ago. For review, they were:

- 1) Thou shall perpetuate monuments and locations of record.
- 2) Thou shall re-establish corners to their original position.
- 3) Thou shall make a thorough search of the public record.
- 4) Thou shall make a thorough ground search for record monuments.
- 5) Thou shall honour and obey the results of Permanent Surveys.
- Thou shall view quarter corners as independent corners that are not dependent upon adjacent section corners for an identity.
- Thou shall not substitute mathematics and technical accuracy for judgement.
- 8) Thou shall know the difference between a "corner" and a "monument".
- 9) Thou shall know the difference between "lost" and, "obliterated" and "original " corners.
- 10) Thou shall only deem a corner "lost" as a last resort.
- 11) Thou shall not "re-establish" a corner that has never been "established"
- 12) Thou shall approach unfamiliar areas with extreme caution.
- 13) Thou shall understand the difference between "surveyed" and "protracted" plats.
- 14) Thou shall provide the client with documents that make your survey retraceable in the distant future.
- 15)Thou shall leave a record of section corners found or re-established, including methodology.

I am constantly amazed at how secretive we seem to be (#14 & 15). I have read the Reports of hundreds of permanent surveys from pre World War II and have found several things that most of them have in common. Although their measuring devises do not even come close to

what we can do today, you usually knew exactly how section corners were reset or established and what control was found or not found. Today practically no one writes a report of survey and most plats or drawings that I have seen do not show enough collateral control to make the survey retraceable. The method (read justification) used for the resetting or setting corners seems to be a closely guarded secret. What good are bearings to seconds of arc and distances to hundreds of a foot when the plat consists of a rectangle with four set corners? Are we a profession so unsure our ourselves that we feel that we must hide our judgement or is the quality of the work really that bad? We must make sure that our surveys are retraceable with sufficient information so that a surveyor can understand from the documents alone what went on out there! I have been told that if I want to know what went on, I could just call or write the surveyor involved and ask. The only problem with this philosophy is that it requires all of us to live forever and never more.

I am shocked at how many licensed surveyors do not know and understand the terms **OBLITERATED OR LOST AND ORIGINAL** corner (#2, 4, 6, 9 10 & 11). These concepts are so fundamental that I think that there is no excuse for not knowing the meaning of these terms and their significance and ramifications. Of course, this ties in with and includes understanding the difference between a "corner" and "monument" (#8). A "corner" that was once created always exists, whether or not a "monument" physically marks the spot.

There also seems to be problems concerning the re-establishment of quarter corners (#6). Our primary obligation is to monument the position of record by retracement (#1). That record position of record may be from the original General Land Office (GLO) survey, a subsequent permanent survey (#5), a road survey, or a private survey. To those of you that always deemed a quarter corner "lost" and reset it on true line and half way

Upcoming Events

August

17 Signing of Articles and Workshop

September

- 13 Joint Regional Group Meeting of Council AOLS Office, Toronto
- 21-23 AERC Lecture Course
- 30 Business of Professional Surveying Seminar Okeechobee Lodge, Little Current

October

- North Eastern Regional
 Group Meeting
 Okeechobee Lodge, Little Current
- 14 Business of Professional Surveying Seminar The Airlane, Thunder Bay
- 17 Business of Professional Surveying Seminar The Talisman, Ottawa
- 21 Business of Professional Surveying Seminar Ramada Inn 401, London
- 28 Business of Professional Surveying Seminar Toronto Airport Hilton, Toronto

(single proportionate measure), I will ask: do you also deem all other section corners "lost" and reset them by double proportionate measure? I have seen many cases where the section corners were "heeled-in" and the quarter corners between the section corners were then treated as "lost" when the physical evidence for the quarter corner was the only decent evidence in the entire section (#2). Our license give us the right to make decisions involving pure judgement (#7). In fact, if there was no judgement involved, then there would be no need to license land surveyors! Only by research (3), retracement, sampling possession lines and excavation (#4) can we then determine when a corner is not merely "obliterated", but is indeed "lost" (#10). Any methodology that results in replacement of the monument to its original position is justifiable (#9). That would include a "mix and match" approach of deeming a corner "lost" in north-south position, for example, and "obliterated" in east-west position.

Centre of sections also seem to be an area in surveying that needs attention. If there is centre corner of record, we are required to search for the monument (#1). Only then may we deem the corner obliterated and accept the physical evidence if it is supported by measurement and alignment. If there is no centre corner of record, we cannot accept the physical evidence (#11). If all you need is the north line of the SW or SE quarters, then it is proper to have the West and East quarter corners only. If all you need is the East line of the NW or SW quarters, then it is proper to have the North and South quarter corners only. In other words, just because you need the quarter line does not mean you must establish the centre of the section.

There can almost always be circumstances that require a different methodology than those stated in the Fifteen Commandments. Number twelve states that "Thou shall approach unfamiliar areas with extreme caution". Our world is full of contradictions, perculiarities and

exceptions. I know of several surveys that I have done if I had known what I know now about the area, I would have done the survey differently! Most of these surveys involved accepting controlling monuments that later proved to be not in the record positions. Some others involved accepting the recorded plat verbatim when the actual survey of the town or addition was different (#13).

Do your homework especially in new areas!

What's the moral of the story? Learn and grow. Learn from your mistakes and those of others. Learn from the record. Learn the names, chain and methodology of the old GLO and County Surveyors whose work you encounter. Learn the concepts behind the Commandments and philosophy behind the concepts. Learn how you fit in with history of this state. Learn all you can and grow. Maybe this is why Continuing Education isn't such a bad idea!