



THE AOLS PROFESSIONAL LIABILITY PROGRAM

Common Errors and Loss Prevention Advice

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Co-presenters of the seminar, from left to right: Dan Dzaldov, John Breese and Mark Sampson.

I had the pleasure of attending the AOLS AGM in Toronto this past February. I also had the opportunity to co-present a seminar on common mistakes made by surveyors (over and over again), and suggestions by the Insurance Advisory Committee on how to avoid/prevent these errors.

The co-presenters were: John Breese, Maltman Group International, Primary Adjuster for the Professional Liability Insurance Program, and Dan Dzaldov, B.Sc., O.L.S., O.L.I.P., Chair, Insurance Advisory Committee.

For those members who did not have a chance to attend, here is a summary of our presentation.



1. Layout and Elevation Errors

A significant source of claims relates to errors in setting elevations and how elevation information is used during the layout process.

A significant source of claims under the AOLS Professional Liability Insurance Program relates to errors in setting elevations and how elevation information is used during the layout process. This includes:

- Setting of benchmarks for use by clients or other subtrades and entities.
- Incorrect cut information being provided to clients for foundation excavation caused by calculation errors, i.e. adding or subtracting errors or use of an incorrect reference, i.e. top of footing elevation instead of underside of footing elevation.
- Errors in establishing elevations during topographic surveys which result in problems with locating structures, or issues with the calculation of earthworks, i.e. adding or subtracting errors in calculation of overburden, etc.
- Relying on benchmark or elevation information provided by other parties. These elevations are sometimes marked on moveable objects such as fire hydrants, tops of curbs, tops of manholes, etc.

What can you do to avoid Layout / Elevation errors?:

- Look around, the most common issues could have been avoided by noticing that what was staked does not fit in. When the Committee reviews layout errors, we often say: “Did they not notice that it looked so wrong”?
- Ask, ask, ask. Surveyors can bring in benchmarks to a site but why not ask for a temporary benchmark from the engineer, or site super to check into. Clearly, don’t just check into the supplied temporary benchmark - as you do not want to rely on their benchmark and possible error. Crews should advise their office of any discrepancy.
- Write cut on notes FROM STAKE so that when they are checked in the office you will know what was written. Provide cuts on the stake-out sheet so there is a back-up for what was done. Take a picture of the stake after noting cut, showing cut and the conditions around the stake...this will provide proof of cut and of stake in case it is moved, which is often the case.



2. Setback Errors

Many claims involving surveyors involve errors with regards to calculation of setbacks.

Many claims involving surveyors involve errors with regards to calculation of setbacks, i.e. front, rear or side yard setbacks. This is very common in residential layouts and some commercial layouts. These result from:

- Mistakes made in locating boundaries.
- Errors in mathematical calculations.
- Failing to check house plans or changes in model or reversal of elevation.
- Failure to check for prior minor variances or subdivision agreement variations regarding local bylaws because of special circumstances or unique topography.

Most front and rear yard setback issues can be resolved by minor variances. Very minor side yard issues can be resolved in the same way; however, more serious setback infringements can result in demolition and reconstruction of existing structures. In some cases where buildings are completed before the issue is discovered, this results in significant upgrades being required to windows and doors to comply with fire separation requirements and/or building code issues.

What can you do to avoid Setback errors?:

Put the onus on the client to provide setbacks. Put it in writing that if they do not provide the setbacks then they acknowledge that you are not responsible.

Do not rely on the architects. Ask, ask, ask. When site plans and architect floor plans do not match, it is not the surveyor's job to figure it out. Usually it means someone gave the surveyor the wrong version. It is also important to have good communication within your survey office so that whoever is calculating a building has all the latest plans that include such things as road widenings, which may have just been approved or requested by the client.

Another issue which causes significant claims for surveyors relates to layouts involving complex commercial buildings.



3. Commercial Layout Errors

Another issue which causes significant claims for surveyors relates to layouts involving complex commercial buildings. These problems include:

- Gridline errors.
- Foundation issues.
- Errors re piles and/or caissons, etc.

Many times, these problems can be traced to plans being out of date, surveyors using plans not intended for construction or being provided with preliminary plans which might have been used for obtaining building permits. Problems have also been found to relate to the use of different formats in reproducing plans, i.e. digital, pdf and AutoCad. Also, many claims arise out of poor communication between the surveyor, the architect, the engineer and/or the contractor which results in errors or mistakes which require correction.

What can you do to avoid Commercial Layout errors?:

- Similar to Setback Errors: put the onus on the client, do not rely on the architects, Ask, ask, ask, and insist on good internal communication.
- Do not rely only on the CAD files, get the paper set and make sure they match. Keep a paper trail of the versions;, normally construction starts before they are finished or they have checked the drawings. The paper is what governs. If they say use the CAD, get it in writing and then decide if you agree to do so.
- Do not calculate buildings on site. Do not provide notes or cut sheets without an office check. Be careful what you give at the site. Consider a different (client only) layout sheet with only offsets and points numbers.
- Keep track of when the work has been checked and docket the time as a back-up.



4. Water Boundaries

Some of the more complex and expensive claims made against surveyors arise out of surveys of properties bordering lakes and rivers.

Some of the more complex and expensive claims made against surveyors arise out of surveys of properties bordering lakes and rivers. These claims include:

- Setback errors for new construction.
- Failing to identify title issues, i.e. the existence of Crown reserves or shore road allowances.
- Boundary issues created by failing to identify encroachments or adverse possession.
- Errors in the interpretation of historical plans such as Crown patents, original land grants.
- Poor research of older surveys.
- Confusion regarding interpretation of the meanings of terms such as high water mark, top of bank, accretion or erosion and their effect on the location of water boundaries. We have also seen problems regarding opinions and surveys of the existence or non-existence of excess lands created by the subdivision of lands and whether or not it was the intent of the landowner or surveyor to include excess lands or beach front in the subdivided lands or retain same.

What can you do to avoid Water Boundary errors?:

- Water Boundary surveys require proper research. If a surveyor does not normally do water boundaries and still wants to take on a job, then it is recommended that he/she seek advice or consult with other surveyors who are more familiar with these surveys.
- Consider ramifications to stating on a plan that a body of water is Navigable. Get an opinion from the Ministry of Natural Resources and refer to it when communicating with your client.

If you have any other questions with regards to the Professional Liability Program, please contact:

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