# **Topographic Surveys**

A Topographic Survey is a survey prepared to certify the location of specific visible, permanent structures, elevations and features on or below the surface of the earth (i.e. trees, buildings, streets, walkways, manholes, utility poles, sewers, retaining walls, etc.). All Topographic Surveys issued must be up-to-date and based on a current field survey and an up-to-date title search.

Be aware that when referring to a Topographic Survey, the client may require additional information in addition to the scope of work outlined below. It is prudent to confirm the client’s requirements and expectations when preparing an estimate and prior to commencing the project.

Section 51 of the Canada Lands Surveyors Act states, “No member of the Association, other than a member who is a licence holder, may engage in surveying on Canada Lands or private lands in a territory.”

Scope of work for preparing a Topographic Survey:

* Title search to identify boundaries, easements, rights-of-way and other registered interests
* When topographic information will be related to the boundaries, locate and verify sufficient survey monumentation to re-establish property boundaries,
* Place monuments, if necessary, to ensure that sufficient corners of the property are monumented to satisfy the contract with the client.
* A minimum of two vertical control points should be used to determine the elevations shown on the plan.
* The elevations should be referenced to the datum currently accepted by the jurisdiction you are working in, unless specifically requested by your client to use a different datum, i.e. a local site datum.

Other work is determined by the clients’ needs, based on the end use of the plan. It may include:

* Locating all permanent structures, such as buildings, sheds, pools, retaining walls and fences, with respect the boundaries of the property
* Locating any encroachments onto or from the property, including both structures and evidence of occupation
* Locating underground and/or above ground utility lines, sewer lines, water lines, manholes, catch basins, power boxes and on the property, as required by the client
* Determining the elevations throughout the property, in accordance with the agreed upon grid or format as determined by the client’s needs
* Setting a minimum of 2 temporary bench marks on permanent, stable features such as top of fire hydrants or other non-movable objects.

If boundaries are shown on a Topographic Survey then it is considered a legal survey plan and should include the following:

* The legal description, lot and plan number, municipality and/or geographic identifier of the subject property and abutting properties
* The surveyed boundaries of the property with dimensions and azimuths or bearings, (drawn to scale, where reasonable)
* all survey information relating to the measurements and the verification/placement of the monumentation
* The locations and dimensions of all easements, rights-of-way and other registered interests that affect the property
* The locations of any encroachments onto or from the property and their minimum distances from the boundaries
* The date of the field survey
* A certification of the plan by date, signature, and embossed or digital seal
* The copyright symbol and year (unless plan is to be registered in the CLSR)
* Your company’s name, contact information and file number.
* A north arrow and a scale
* The units of measurement
* A statement of the elevation datum used and reference to the control monuments used to derive the elevations shown on the plan.
* The statement: “This Topographic Survey was prepared for (name of client) and is not valid unless it is a sealed original copy issued by the surveyor.
* A statement of disclaimers and warnings with respect to underground utilities locations.
  + Information shown pertaining to underground services is approximate only.
  + Exact locations of underground services should be staked prior to any grading, excavation or other ground disturbance.
* A statement regarding the location of underground utilities:
  + The underground utilities are not shown, or
  + The location of underground utilities is based on:
    - Records of a third party (naming the source), or
    - Locates performed by (name of locate provider)
    - and that you provide no assurances as to its correctness and accept no responsibility for its use.

# **Digital Distribution of Topographic Surveys**

A digital copy of a Topographic Survey should be sent to a client only if:

* It is up-to-date
* It is recommended that the digital file is in a format that cannot be edited or altered
* The client signs or otherwise acknowledges, in writing, a disclaimer regarding the limitations of its use

## **Sample Disclaimer for Digital Distribution:**

*The attached Topographic Survey is prepared by (name of surveyor and company) and is intended for use solely by (name of client) for transactions involving (name of client). The parties recognize that this information, recorded on or transmitted by electronic media, is subject to undetectable alteration, intentional or unintentional, due to media degradation, software error, or human alteration. Any reliance on this information in this electronic format is unenforceable and unreasonable. The signed, sealed, original, up-to-date hard copies, obtained from (name of surveyor and company), on behalf of (name of client) are the only true versions of this Topographic Survey.*