



Message from the **Senior Deputy Surveyor General**

The Role of the Surveyor General of British Columbia

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How many of you have perfected the 30 second elevator talk about what a land surveyor does for a living? Over the years I have tried a few different responses to the vacant stare that often results once I announce that I am a land surveyor. I have had limited success.

Similarly the role that the Surveyor General plays in our Province is not well understood.

This was a concern to us, particularly at times of leadership change in the Province and change within the leadership of the Land Title & Survey Authority, for example, as terms of LTSA Board members end and new Board members are appointed.

The health and prosperity of a society rests upon a few fundamental pillars. Like the work of land surveyors, the Surveyor General and his staff work quietly out of the public eye to ensure that one of those pillars, the cadastral fabric, remains healthy and robust.

We decided to put pen to paper and create a succinct paper that describes the modern day role of the Surveyor General. This paper is attached in its entirety.

Perhaps a little of the information contained in the paper will help you with your next elevator conversation.

Role of the Surveyor General

The Surveyor General of British Columbia oversees the provincial land survey system and plays a vital role in the recording of spatial information in the land title register and Crown land registry by maintaining the quality and integrity of the cadastral fabric in the province.

Background – Land Surveys

A land survey is represented by a survey plan, which is a scale-drawing identifying a parcel's location relative to surrounding parcels and provides information on the parcel's boundaries and size. The plan will show survey monuments and other evidence indicating the corners of the parcel and its boundaries.

While historically parcels of land often were established by a written description, in modern times virtually all new parcels must be defined by a survey plan. Land surveys are referred to as 'cadastral', which comes from the French word referring to the register of lands. Land surveys as represented on survey plans make up the foundation of the cadastral fabric of BC.

The land survey system and land title system work in tandem to establish secure ownership of a parcel and ownership of legal interests and

rights to land in BC. Survey plans for titled land are deposited in the land title office and provide the spatial foundation for land title. In the land title system, the ownership of a parcel of land or an interest in a parcel is guaranteed upon registration in the land title register. However, the system does not guarantee the extent of the land contained in the title or the extent of any interest registered against a titled parcel. It is the land surveyor that is charged with accurately defining the geographic extent of parcels of land and interests in land.

Land surveys also define the extent of interests granted by the Crown over provincial land. Survey plans for parcels of Crown land are deposited in the province's Crown land registry and provide the spatial foundation for granting Crown land tenures and other legal interests on Crown land.

The Surveyor General

The Surveyor General is a statutory officer appointed by the Chief Executive Officer of the Land Title and Survey Authority (LTSA) under section 34 of the Land Title and Survey Authority Act. The Surveyor General oversees the LTSA's Surveyor General Division (SGD), which consists of Deputy Surveyors General and technical and administrative staff. The

Surveyor General is responsible for maintaining the quality and integrity of BC's legal survey system and for providing expert opinion and advice on survey matters to the provincial government, BC land surveyors and the land title office. The SGD plays a key role in maintaining public confidence in the land title system and minimizing the costs of conflict and litigation by ensuring that the actual 'on-the-ground' extent of parcels of land and interests in land are delineated in high-quality land surveys.

In order to carry out the Surveyor General's role, the Surveyor General and Deputy Surveyors General require expertise in a number of areas, including:

- Land survey law, both statute and common law, and in particular case law involving natural boundaries, accretion and riparian rights
- The nine systems of primary survey which have been historically used in the province
- Historical survey records and documents, in particular the interpretation of survey records, historical Crown grants and land title documents such as Absolute Fee Books which pre-date the modern land title register
- Historical and contemporary land survey practices and equipment
- Current and historical government policy and practice on the disposition of land and land tenures
- Cadastral mapping practices used by the province and local governments.

Provision of Expert Advice

The SGD provides expert advice and guidance to land surveyors, other professionals, land title office staff and government. In some cases, SGD staff will go into the field to inspect natural boundaries and survey evidence in order to better interpret an historical survey.

The interpretation of historical survey records and the application of historical and current statute and case law to determine the location of boundaries can be extremely complex. Because of the nature of its work and its access to and experience with historical records, the SGD is a source of specialized knowledge and experience that is often beyond that of a land surveyor in private practice.

Through these services, the SGD contributes to improving the accuracy and consistency of land surveys and supports the maintenance of the provincial cadastral fabric.

Maintaining Land Survey Standards

The Surveyor General sits on the Board of Management of the Association of British Columbia Land Surveyors and works to provide executive level guidance to the Association on such matters as entry to the profession and maintenance of the professional standards of its members.

Under section 75 of the Land Surveyor's Act, the Surveyor General approves survey rules that provide direction to land surveyors for all legal surveys and survey plans. The Surveyor General also issues circular letters and policy and practice standards to land surveyors in order to clarify evolving standards and practices.

Statutory Duties and Powers

The Surveyor General and Deputy Surveyors General have statutory decision-making responsibilities regarding survey or boundary related matters in approximately 38 statutory provisions contained in nine different provincial statutes (see the Appendix for a list of provisions). The Surveyor General also exercises statutory decision-making responsibilities delegated by the minister responsible for the Land Act and Land Title Act. In exercising this authority, the Surveyor General ensures that the public interest is served and that boundaries are properly identified and delineated. Examples of these statutory decisions include the adjudication of applications related to:

- Accretions and natural boundary adjustments under section 94 of the Land Title Act
- Deferred posting of new parcels created by subdivision plans under section 69 of the Land Title Act
- Designating a person who may hold a covenant or statutory right of way under sections 218 and 219 of the Land Title Act (under delegated authority from the minister)
- Determining whether a body of water or road was included in a Crown grant or whether it is in the public interest for government to retain a body of water or road shown in a Crown grant under section 58 of the Land Act (under delegated authority from the minister)
- The manner in which portions of land granted to the Esquimalt and Nanaimo Railway Company are surveyed under section 70 of the Land Title Act

- Establishing public road on Crown land to allow access to private land under section 80 of the Land Act.

The SGD processes an approximate average of 325 statutory applications annually.

The Surveyor General is responsible for maintaining the provincial Integrated Survey Area program.

Surveys of Crown Land

The SGD provides the legal description for all new parcels of Crown land.

As part of its quality verification responsibilities, the SGD reviews all survey plans over Crown land. This includes plans of new parcels of land, highways and roads, mineral leases, oil and gas well-sites, and pipeline and utility corridors. This review ensures that initial surveys of Crown land are conducted correctly and that re-surveys of existing parcels are conducted in accordance with appropriate survey standards and techniques. It also ensures that the plan resulting from a survey is prepared according to established standards for survey plans.

The SGD reviews an approximate average of 1900 Crown land survey plans annually.

The SGD assists the provincial government by maintaining survey and parcel records in the government's Tantalus database, the electronic representation of the Crown land registry, and working with government to correct historical inaccuracies in the Crown land registry to improve the overall cadastral fabric.

Crown Grants

The provincial government conveys land owned by the Crown to individuals and companies using an

instrument called a Crown grant. A Crown grant is deposited into the land title register which results in the first certificate of title to a parcel of land being registered. The SGD prepares all Crown grants at the direction of the province.

The SGD prepares and issues an approximate average of 100 Crown grants each year. The number of Crown grants issued was much higher when the LTSA was created in 2005. Since then, the number has decreased as a result of policy related to First Nations consultation and other operational changes within government.

Maintenance and Provision of Historical Land Survey Information

The SGD has responsibility to maintain the official survey plans for all parcels surveyed out of Crown land, copies of all Crown grants and historical field books containing the field notes compiled by land surveyors as they conducted surveys of Crown land. This material is retained in a climate controlled, fire protected vault.

The SGD provides both access to these records and research services. Land surveyors and those working in land and resource industries often need access to these historical records to obtain cadastral information required to define boundaries and complete surveys.

On average, the SGD processes 700 information requests each year.

Support for Provincial Government Operations

The SGD acts as the provincial government's land surveyor by providing professional advice

and technical support to various government ministries. This advice and support includes:

- Survey-related advice and technical support regarding grants of Crown land and tenures
- Advice and support for the implementation of First Nation treaty settlements
- Policy advice on provincial legislation related to survey matters
- Expert opinion and evidence to support the province in litigation.

The SGD provides a significant amount of advice and support related to the management of Crown land. This includes advice on survey requirements and methodology for the disposition of Crown land and resolving issues regarding boundaries between Crown and private land, particularly the location of natural boundaries. The SGD regularly provides support to the following ministries:

- Forests, Lands, Natural Resource Operations & Rural Development
- Transportation and Infrastructure
- Attorney General
- Energy, Mines & Petroleum Resources
- Environment & Climate Change Strategy
- Indigenous Relations & Reconciliation.

The resources provided to support the Ministry of Indigenous Relations & Reconciliation in the implementation of First Nation treaty settlements is considerable and include:

- Advising on survey requirements and standards
- Creating survey instructions for surveys of treaty settlement parcels
- Advising on the selection and management of contract land surveyors
- Providing a technical review of survey-related language in treaties and related side agreements

- Reviewing all completed survey plans of treaty settlement lands and certifying approved plans.

As Boundary Commissioner, the Surveyor General represents the province on the inter-governmental AB-BC Boundary Commission (BC, Alberta, and federal government) to address Alberta-BC boundary issues. This includes providing explicit direction to land surveyors for the re-survey of portions of the boundary

and working with the provincial government to create Orders-in-Council required for boundary survey confirmation.

The Surveyor General sits on the Canadian Council on Geomatics (CCOG), a major federal-provincial-territorial consultative body for geographic information management relevant to geomatics and takes a leading role on the CCOG Cadastral Committee.

Appendix

Statutory-decision making responsibilities of the Surveyor General

The Surveyor General has statutory decision-making responsibilities or has been delegated decision-making responsibilities by the minister responsible in the following statutes.

1. Land Act

- Section 7
- Section 49
- Section 41
- Section 52
- Section 53
- Section 69
- Section 73
- Section 75
- Sections 77 and 77.1
- Section 78
- Section 79
- Section 80

- Section 81
- Section 82
- Section 83
- Section 84
- Section 86 and 87
- Section 88
- Section 93.901
- Section 93.92
- Section 93.93
- Section 93.94
- Section 93.95 and 93.96
- Section 103

2. Land Title Act

- Section 59
- Section 69
- Section 70
- Section 84
- Section 94
- Section 118
- Section 323
- Section 363
- Section 373.73
- Schedule 1, sections 25 & 26

3. Land Survey Act

- Section 12
- Section 14.1

4. Land Surveyors Act

- Section 75

5. Maa-nulth First Nations Final Agreement Act

- Schedule, chapter 2, section 2.5.1

6. Mineral Tenure Act

- Sections 42 and 44

7. Ministry of Forests and Range Act

- Section 5

8. Nisga'a Final Agreement Act

- Chapter 3, section 87

9. Protected Areas of British Columbia Act

- Section 3 ❖