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the Link MAGAZINE



Looking South over Howe Sound from Mount Garibaldi in Squamish

Photo by Johnny Franko, BCLS



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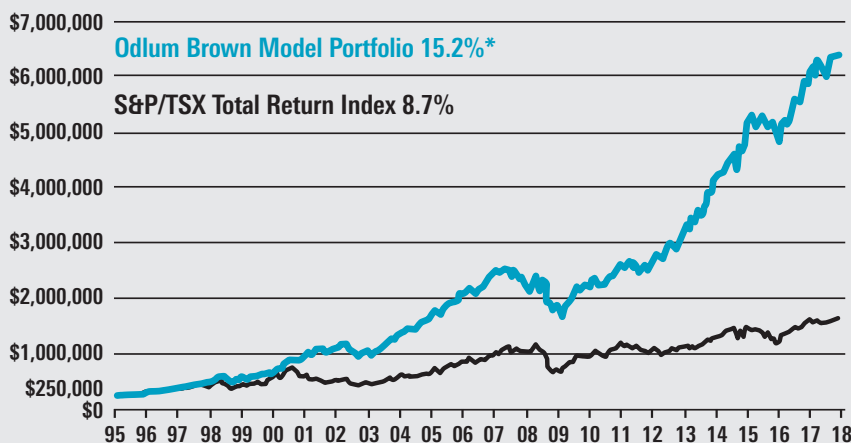
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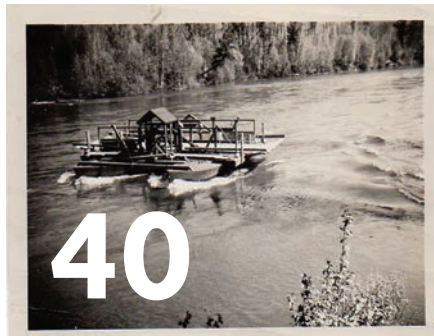
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Message from the **President**

Looking forward to the next year

*By Roger Galibois
BCLS, President*

As I sit down to write this report the 2018 AGM is a week behind us. I congratulate Brian on an excellent meeting and an excellent social and partners program. I know my wife Beatrice and I enjoyed every minute of the week. The CPD program was excellent and well attended and I commend the CPD committee for their hard work and dedication. I know the program was appreciated by all who attended.

Thanks to the staff, Bev, Bonnie and Denise, without whose hard work an event of this magnitude could not succeed. Special thanks go out to Denise Brethour. This is the last convention before she starts her well-deserved retirement. I know the Board, the membership, and above all the students, will all join me in wishing her the best. She will be missed.

Kelly Stofer has been the Secretary and Registrar of the Association for over a year and a half now. In that time Kelly has brought an aptitude and a dedication to the position that is unmatched. We are in good hands with Kelly and Chad's steady hands on the tiller. Without their hard work and guidance, the Board would not function as smoothly and efficiently as we do. I look forward to working closely with both of you over the next year.

Next, I would like to thank the incoming and outgoing Board members. Congratulations to Gina Hidber and Dave Swaile on their election to the Board. You can look forward to a challenging and rewarding couple of years. To our two retiring Board members, Mike Waberski and Ron Johns, I thank you for your service on the board. I have admired your wisdom and your thoughtful participation over the past four years. I have learned a lot from both of you. Congratulations and thank you.

I look forward to the next year with excitement. We are starting the first year of our latest strategic plan and the first item of the plan is a governance review. There has been much discussion in the last year of the effectiveness of the present governance model. This is a chance to review and rejuvenate. I hope you all will actively participate in the consultations and debate. We are fortunate to have a highly engaged membership. Our Board and committee structure is vibrant and strong, however periodic review and change only serves to further strengthen our organization and I look forward to the process.

I am concerned with the present focus of public and government discourse with respect to self-governing

professions. The fate of the Real Estate Council of BC and The Order of Engineers of Quebec must be taken seriously lest we end up in the same position. Public policy demands that the first obligation of any self-governing profession is to ensure the protection of the public. We have taken many steps in the past few years to strengthen this obligation including instituting mandatory CPD, the Practice Advisory Department and Panel, the Complaints Advisory process and naming public members to the Board and the CIC. We must continue the process and be constantly reviewing and interpreting Legislation, By-laws and Policy with the Public Interest as the principle guiding factor. I see this as an immediate challenge this year, and ongoing in coming years. I believe the board and I are up to the challenge and I look forward to the resulting debate.

Beatrice attended her first AGM 15 years ago. In that time, we have noticed a significant shift in the demographics of the Association. A large part of our membership is now young land surveyors at the beginning of their careers and with young families. If we are to engage the young members and benefit from their energy and participation we must first create an atmosphere that can accommodate their families. To that end, we are anxious to organize some events in which families and children can comfortably and enjoyably participate. I encourage anyone with any ideas to let myself or Beatrice know, and we will work to make the next AGM one to remember.

Lastly, I would like to thank the membership for this incredible opportunity. I relish the challenge and I will endeavor to live up to your expectations. Thank you. ❖



Message from the **Chief Administrative Officer**

Enhancing the Association's Governance

By Chad Rintoul
Chief Administrative Officer

My appreciation goes out to the membership for your attendance and participation at the Whistler AGM. Yet again, British Columbia Land Surveyors have proven themselves to be a committed group to their profession.

As noted in my presentation, the Strategic Plan is the map which guides the Association forward. It enables the Board and management to have focus and clarity of direction.

The governance review is a key strategic action item in our 2018-2020 Strategic Plan, as part of an overall goal to enhance the Association's governance.

The scope of this review will encompass the following:

1. A Governance Task Force (GTF) will review committee structure, governance model, board policies and renewal / succession strategies. The GTF will be overseen by the CAO, and will have interaction by teleconference and endeavour to hold one face-to-face meeting during the undertaking.
2. Contractor Kathy McLaughlin and Associates will facilitate a process

*The Strategic Plan is the map which guides the Association forward.
It enables the Board and management to have focus and clarity of direction.*

to efficiently undertake the governance review with optimal member, GTF, Board and stakeholder input.

3. The review will include, but may not be limited to;
 - Analyzing and providing recommendations to the Board on board mandate, and composition, board renewal, cultivation and succession planning processes.
 - Standing committee scope and sizes, potential for implementing term limits on the Board and committees.
 - The process for cultivating and selecting committee members, terms of reference for each committee, seeking ways to enhance committee communication and the reporting process to the board.
 - Board communication to the membership, transparency and member engagement, including the Board election process, and assessment of qualifications and criteria for public member appointees to the Board.

During the process the contractor will undertake external research with comparable organizations to examine their governance structures, voting processes, committee structures, terms, public representation, and other key elements, to understand current practices and identify best practices for professional regulatory associations.

We anticipate that the GTF will submit final recommendations in time for the September board meeting, so that I may provide the members with an update and take feedback during the fall regional group meetings.

At the time of reading, the GTF will have been populated with a diverse group of participants, and a member survey will be well underway. Your participation will help shape the future of this Association. ❖



Message from the **Senior Deputy Surveyor General**

Update on activities at the Land Title and Survey Authority

By *Mike Thomson, BCLS*

Senior Deputy Surveyor General

Land Title and Survey Authority of British Columbia

This Update on the activities of the LTSA is based on the Speaking Notes of the Surveyor General from his report delivered March 15, 2018 at the 113th Annual General Meeting of the Association of British Columbia Land Surveyors, Whistler, BC

Introduction

It is my pleasure to be here with you at the Whistler Convention Centre to provide the ABCLS membership and visiting delegates with a brief update on activities at the Land Title and Survey Authority, with a specific focus on the Surveyor General Division.

I will touch on a number of current activities both inside and outside the LTSA, on ParcelMap BC and provide a short update on Project ACE (Advanced Customer Enhancements). Firstly however, I want to bring your attention to a subtle shift in focus for the LTSA as encouraged by the LTSA Board of Directors.

This shift in focus is addressed in the LTSA Business Plan, a 3-year rolling document that is published near the end of March. The next plan will address the period of the next 3 fiscal years, commencing April 1, 2018 running through to March 31, 2021.

The Business Plan outlines the LTSA's activities over the next three years to continually enhance customer service and employee engagement, and improve the delivery of high quality land title and survey systems for the benefit of real property owners in BC. The strategic objectives stated in the Business Plan reflect the LTSA's commitment to the sustainable and customer-focused administration of BC's land title and survey systems, and to safeguard the integrity of these systems.

The Business Plan also discusses the LTSA's commitment to continually deliver responsive and trusted expertise and reliable land title and survey systems, which are an essential foundation to economic and social prosperity.

There is a shift in focus in this year's plan, where the LTSA has signalled a plan to foster a customer-centric approach in the delivery and development of services to customers. It is a deliberate shift in strategy that requires the organization to excel at understanding customer needs through building long-term learning relationships and providing appropriate customized services to meet the changing needs of customer segments over time.

Maintaining a reliable and secure land title and survey system, that is available when customers need it, will always be a core success factor of this objective and the LTSA will continue its focus on pursuing operational excellence, including increases to land title examination automation and other operational efficiencies. Project ACE will not only create the infrastructure required to maintain modern land title and survey systems, but it will also establish platforms for leveraging technology in the future and to foster growth.

As such, in addition to a deliberate shift to a customer-centric approach, the LTSA is also exploring opportunities in which to invest, grow and improve services to the citizens of British Columbia.

Leveraging the investment in ParcelMap BC presents one such possibility. With the completion of its initial build in 2017, the LTSA will focus on operationalizing the ParcelMap BC technology and refining service delivery efficiencies. We will also action on a plan to encourage widespread adoption of ParcelMap BC as the authoritative cadastral parcel fabric and foundation to support the creation, aggregation and distribution of location based information by all levels of government.

It is early days but this shift will increase opportunities for groups like the Land Surveyors Advisory Task Force to demonstrate their relevance in shaping LTSA priorities and – I believe – opportunities for land surveyors, in general, to increase their relevance to a thriving modern society.

Over the next year, the internal focus will be to:

- Operationalize ParcelMap BC technology and refine service delivery efficiencies;
- Implement Project ACE by investing in technology, achieving operating efficiency and realizing a human capital plan; and
- Continue to improve internal processes to support efficient, customer-focused services.

Much will flow out of the joint LTSA Executive and Board Strategic Planning Session on June 27, 2018. I encourage each of you, in your business model, to find a way to stand-up and be part of these plans.

What are some of the ways you can do that? Let me share a number of disparate thoughts – puzzle pieces – that we can weave together to solve the question.

Firstly, I was recently shocked when our communications people told me it was time for another Customer Satisfaction survey. My immediate thought was that we just did one! It was fall 2016 that we undertook the last survey, so in September 2018 we will be looking for your support in doing another one. Please make a mental note that in September 2018 you will have a direct opportunity to express your opinion on where the LTSA should invest, grow and improve services to the citizens of BC.

I do note that the LTSA Board has indicated there will be no fee increase in April 2018. Business activity has been strong and once the LTSA covers operating costs, incremental increases in business activity, particularly in search services, generally drops to the bottom line, placing the LTSA in a strong cash position, meaning fees will remain exactly where they have been since November 2014.

I recently shared with the ABCLS Board a paper that the Surveyor General has had prepared dealing with “Boundaries” post-Earthquake in BC. We have been very lucky when we consider how long it has been — nearly 300 years — since the last major Earthquake in BC. I am hoping that over the next year we can work with the Province and the ABCLS to develop (at least) preliminary

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legislation and potentially Survey Rules for how we would reconstruct boundaries in the case of a major Earthquake.

In addition to the “Boundaries” post-Earthquake in BC paper, we are working on the possibility of a Boundary Tribunal or something similar that property owners could reach out to when the location of boundaries may be uncertain or in dispute. The court process can be extremely expensive and does not always yield results that are predictable. A simpler administrative process to provide property owners with certainty in regards to boundaries is reasonable in a modern and leading-edge society.

Strata and strata titling continues to occupy an ever-growing portion of the land title register, land surveyors work and indeed discussions in the world of Real Estate. As of January 9, 2018, there were 637,215 active strata titles over approximately 31,100 strata plans in the system. As a land surveyor my interest in strata focuses on strata ownership as a form of tenure. In this regard, I note a number of interesting developments that land surveyors should be aware of.

As part of the fall 2017 Board trip the Secretary lead a discussion about bare-land strata plans that masquerade as building strata plans (in name only), seemingly for the purpose of skirting subdivision controls; the controls that form the cornerstone of land use regulation in British Columbia. We can all point to the failure of (certain)

local governments to take steps to prevent the occurrence, or perhaps to the failure of lawyers who support the practice, but I am disappointed when my fellow land surveyors don't recognize their own culpability in skirting subdivision controls. For the land surveyor, behaviour that is designed to skirt subdivision controls cannot generally be described as a professional acting in the best interest of the public.

I hope you all saw the January 10, 2018 story in the Globe and Mail where the Superintendent of Real Estate is taking the Real Estate Council of BC to court asking a judge to force the council to begin disciplinary proceedings over

the alleged misconduct of a realtor. In 2016, in the midst of a series of public concerns the Superintendent's oversight of the Council was expanded. In simple terms, the Council has chosen to ignore the request of the Superintendent and the Superintendent is now in court asking the court to order the Real Estate Council of BC to comply. Fascinating, but not a good use of money and effort and not the place we, as the ABCLS, would ever want to find ourselves in.

Speaking of strata, on February 1, 2018 the Director of Land Titles (the "DLT") issued Practice Note 01-18 that deals with Requirements for portions of Buildings that Extend Beyond the Limits of the Parent Parcel. The note addresses certain requirements for those strata plan types outlined in Strata Property Act, section 244(1)(f)(ii).

The bulletin results from various different ways that building encroachments, generally onto road, where the building is being strata titled, have been dealt with by land surveyors and others. I would encourage all to be aware of the bulletin. The Practice Advisory Manager will be working on an accompanying Interpretative bulletin, intended to address how the land surveyor will show the encroaching portions of the building and how they might be labelled. Peter Haas will work with Gord on the bulletin.

The Province introduced a budget on February 20, 2018 and I am sure most of you are familiar with a number of the initiatives around "housing affordability" and "foreign ownership" that were addressed in the budget. I am not sure it has been more imperative for land surveyors to understand current government

directions and initiatives and to figure out how you can have a voice at the table.

The LTSA team has much work to do in the next short while to support a number of these initiatives.

Organizational Changes

The biggest change in a very long time for the Surveyor General Division will occur near the end of April, when Jeff Beddoes, moves from his full time role as the Senior Deputy Surveyor General to a part time, about 40%, role. Jeff has indicated he is ready to leave the full-time workforce, but we have secured his services over the next year for about 40% of the time.

I have had the extreme pleasure of working with Jeff over the last 10 and a half years and the service I watch him deliver to land surveyors, to the government and to the public is exemplary. His approach is always calm, measured and his opinions are delivered in way that simply builds trust. Trust that he is always trying to do "what is right". With Jeff it is never "who is right" but it is always about "what is right". I know he cares greatly about the members of the ABCLS and he is passionate in ensuring we collectively, maintain a high quality survey system in BC.

I want to express my gratitude and appreciation to Jeff for his work as the Senior Deputy Surveyor General these last 10 years, for 25 years of public service and some 34 as a BC land surveyor. I have great respect for Jeff and envy many of his characteristics. He has undoubtedly been the right person in the right role for some time. Thank you Jeff.

The other change I should bring to your attention relates to the New

Westminster land title office. The LTSA will be moving the New Westminster land title office to the Anvil Centre at the corner of 8th Street and Columbia Street in New Westminster. The move should take place sometime in September and I know staff are looking forward to the new offices.

Cristin Schlossberger, Dave Swaile, Peter Haas and Katie Hannah remain available to serve you as Deputy Surveyor General's.

LTSA 2017/2018 Year to Date

Our 2017/18 fiscal year will come to an end on March 31, 2018. However, I really only have details on business activity to the end of February.

The land title office, in particular, has had a surprisingly busy year although activity is generally below that of the 2016/17 year.

Looking at the deposit of survey plans in the land title office we note:

In February 2018, 720 total plans were received in the land title office, compared to 698 in February 2017.

Through the first 11 months of the 2017/18 fiscal year 9,169 total plans have been received into the land title office, compared to the 9,461 in the same period in fiscal 2016/17. The 292 less plans is a reduction of 3.1%.

Of the 9,169 plans received by the land title office, only 2 have been mylar plans. As such, this represents only 0.022% of the total plans — therefore we now consider filing of plans to the land title office to be 100% electronic.

In the Surveyor General Division:

Through the first 11 months of fiscal 2016/17, 79 Crown grant requests were

received, five less than the 84 in the same period in fiscal 2016/17.

Through the first 11 months of fiscal 2016/17, 805 Crown land survey plans were received, down 13.7% (128) from the 933 plans to the same point in fiscal 2016/17.

Through the first 11 months of fiscal 2017/18, 385 statutory applications were processed, up 67 (21%) from the 318 at the same point in fiscal 2016/17.

The Surveyor General Division continues to see a heavy focus on First Nations treaty settlement matters in our daily business. The Province, Canada and First Nations all remain very active in moving forward with Incremental Treaty Agreements

ParcelMap BC

Let me begin my ParcelMap BC update by thanking the land surveyors in the room for their support as we move to fully operationalize ParcelMap BC. The ParcelMap BC operations team remains fully engaged in trying to reach the target turnaround time of 2 days. We are not there yet; but I am pleased to say the rather large backlog of Survey Plan Datasets that we built-up over time have been steadily reducing since mid-January and I believe we have broken the back of the plan backlog.

We should be at our 2-day turnaround time by the end of the 1st quarter of fiscal 2018/19.

The team continues to see an increased level of compliance with the requirement to submit Survey Plan Datasets. The team does continue to spend too much time chasing missing datasets, although we are starting to see a reduction in this effort. A formal complaint to the Secretary has been

prepared against one land surveyor who was not compliant with the requirement and we are considering two others.

As of March 2, 2018, we were down to 88 missing datasets that were required and had 38 in defect. This was down from 164 missing and 46 in defect just two weeks earlier. The backlog of unmapped datasets has been reduced from 2,351 in early November 2017 to 1,270 on February 9, 2018 to 162 on February 23, 2018 and 71 as at March 2, 2018.

I was recently in Toronto where ParcelMap BC was a finalist in the IPAC / Deloitte Public Leadership Sector Awards. We were not successful in being named a winner, but it was nice to be considered. ParcelMap BC is also a finalist in the ACLS (Association of Canada Land Surveyors) David Thompson awards. That presentation will be March 27, 2018 in Victoria at the ACLS / NSC meetings

We are well into the development of a broad based strategy to support Adoption of ParcelMap BC by the original Participating Stakeholders. The focus will be on local governments, the Provincial government and the major utilities. We expect to operationalize this plan in the new fiscal year. The Province has been clear that they are moving towards adoption of ParcelMap BC as the official cadastral parcel fabric, looking to be fully adopted by 2020.

Speaking of the Province, you will remember that the LTSA has conducted a number of “GNSS Surveys” looking to strengthen the accuracy of various Integrated Survey Areas – so that the published monument coordinates fit better with coordinates acquired through use of

GNSS equipment. The field results have been with GeoBC for review and adjustments for a number of months now, however, it remains a number of months – and well into the fall – before new coordinates in these areas will be published. This includes portions of Vernon, Cranbrook, Powell River, Tumbler Ridge, Elkford, Granisle and Mackenzie. We will look to do a few more surveys to improve ISA's in 2018.

On January 24, Brian Greening presented at an ICI Society User Conference in Nanaimo, and on February 14, 2018, Brian was in Kelowna presenting at an ICI Society User Conference. These presentations are in support of ParcelMap BC adoption. There are many more presentations scheduled over the next few months.

Whistler was the first local government to officially adopt ParcelMap BC as their cadastral parcel fabric, quickly followed by Kimberley. Sooke, the Central Okanagan Regional District and a few others are currently working towards full adoption.

The Land Surveyors Advisory Task Force (LSATF) had a special ParcelMap BC meeting on December 18 and had a regular meeting on January 18, 2018. The LSATF remains very engaged with the LTSA on ParcelMap BC. We will next meet on April 16, 2018.

Project ACE (Advanced Customer Enhancements)

As we have previously discussed Project ACE has three primary objectives:

- replace the ageing Electronic Filing System;

- improve services to stakeholders and customers using modern technology; and
- develop and implement a “people plan” for the future

For a number of complex reasons, often related to resource and capacity issues at our main contractor, MDA, Project ACE has not advanced as it should. I anticipated at this point being able to talk to you about the new “web filing” system, but it remains too early. I suspect this will be a focus of discussions on the Board Trip. It is currently believed that it will be April 2019 before land surveyors are noticeably impacted.

We previously noted that increased automated examination is an internal goal of Project ACE. Even with the delays, the percentage of automatically examined applications in the land title office continues to grow – it being at 56.5% in December 2017.

Miscellaneous

Upcoming Communications to Land Surveyors

There will be a few changes to various processes, communicated to land surveyors soon, in the form of new or revised Circular Letter(s) and Directions to Land Surveyors. A summary of the upcoming changes are:

- A requirement to submit an application to the SG for either parcel designation or survey instructions for all surveys on Crown land except for SRW surveys or wellsite surveys. This will allow us to ensure that the appropriate surveys are being conducted for the Province’s needs, clean up the underlying survey structure where possible

and track all surveys in the Crown Land Registry

- Communication of a new procedure to dedicate highway on untitled Crown land. These procedures have been established with the Province and will require additional steps to ensure that the resultant dedication creates highway under the administration and control of MoTI.
- Surveyors are encouraged to contact the SGD following reading the communication if they have any question about current surveys underway.

CVD28 vs CGVD 2013 or GeoBC and the Move to a New Vertical Datum CGVD2013

As noted earlier we are experiencing delays in the processing of some work we have done to upgrade the quality of certain Mascot information. One reason is that GeoBC is focussed on the move of the vertical datum to CGVD2013 from the current CVD28.

GeoBC presented a plan and a seminar at the 2017 ABCLS AGM and developed a detailed communication plan. Since that time, the target for province wide implementation has moved from January 1, 2018 to August 31, 2018. Look for communications in July or August — keeping in mind that in fall 2018 we will all be working from a new vertical datum — CGVD2013.

Metro Vancouver

I also note the Metro Vancouver committee that looks after the Active Control system in Metro Vancouver has had an extensive field survey done on their High Precision Network. GeoBC continues to work on the adjustment. The target date for this

publication and the appropriate SG Orders is now the same: August 31, 2018.

Boundary Commissioner

In the near future we will be posting some opportunities related to the Alberta-BC Boundary. We anticipate 2 RFQ’s, one for an inspection of monuments survey in the Tent Mountain Pass area and one for restoration of monuments in the Yellowhead Pass area, where a comprehensive inspection was completed last year.

Conclusion

I appreciate you all allowing me to provide this update. BC land surveyors continue to be critical in the growth and development of British Columbia, providing fundamental support to the economic and social fabric of the province through the diligent preparation of quality surveys.

We thank you for commitment to delivering a quality cadastral parcel fabric to the citizens of BC. Brian, and to each of you, thank you for allowing me this time.

Thank you. ❖



Message from the **Secretary**

Professional Regulatory Bodies and Professional Associations

*By Kelly Stofer, BCLS
Secretary*

As a self-governing professional regulatory body, the Association of BC Land Surveyors has to be cautious of its mandate. Members will sometimes bring issues, concerns, or ideas to be taken up by ABCLS, which require careful consideration. In recognizing appropriate concerns of the ABCLS, it is helpful to consider the differences between professional regulatory bodies and professional associations.

The Association of BC Land Surveyors is a regulatory body that is sanctioned under the Land Surveyors Act to govern and regulate the practice of land surveying in British Columbia. In a Human Resource Professionals Association series on Governance for Professional Regulatory Bodies, Claude Balthazard, PhD., CHRL observes that “Self-regulation is based on the concept of an occupational group entering into an agreement with government to formally regulate the activities of its members. As a condition of delegation of such regulatory powers, the governing or regulatory body is required to apply such powers in a manner that is guided by the public interest.” He goes on to note “Self-regulation is an exceptional privilege. The reason why professions are accorded this privilege is that governments trust professionals

to be able to put aside their self-interest in favour of promoting the public interest.”

The College of Kinesiologists of Ontario (CKO) highlights various activities of regulators and professional associations on its website. The CKO notes that, in contrast to itself as a regulator, professional associations advocate on behalf of members, promote the profession, provide continuing professional development opportunities, and represent members’ interests by monitoring developments which may impact scope of practice and employment opportunities. Professional associations also work to enhance relationships with related professions.

As a regulatory body, the ABCLS sets requirements for entry to the profession, maintains a public register, sets practice standards, receives and investigates complaints, administers discipline when necessary, and requires that members participate in continuing professional development. But we also do some of the things an association might do, such as promoting land surveying as a career, raising the profile of the profession with government and industry, and offering professional development seminars at our AGM. The obvious

exception is that the ABCLS does not advocate on behalf of members. As Balthazard notes “... advocacy interferes with the ability of the professional regulatory body to fulfill its regulatory mandate as it erodes the public confidence in the regulator to be able to put the public interest first where it matters.” By avoiding advocacy, the ABCLS mitigates a potential conflict of interest in serving both the public and the profession.

Under the “all-in” model, practising land surveyors in BC are also members of Professional Surveyors Canada (PSC). PSC is not a regulatory body, so it has latitude to get involved in issues that would not be appropriate for the ABCLS to be involved in. According to its mission statement, “Professional Surveyors Canada will work on behalf of its members to encourage and enable an environment where their work is valued as underpinning the fabric of society for the safety and economic well-being of Canadians.”

It is interesting to observe how some other regulated professions are managing expectations and the potential conflict of interest just mentioned.

ABCLS members who are also engineers will know that last summer,

the Association of Professional Engineers and Geoscientists of BC (APEGBC) rebranded itself as Engineers and Geoscientists BC. You can read about the reasons for this change on their website. What I found interesting was that the word “association” caused some confusion. “It led some people to assume that APEGBC was a private club, or an independent group under the Societies Act – not a regulator responsible for maintaining public safety with respect to two important professions.”

Also, just last year, the Society of Notaries Public of BC implemented a new structure, which includes the Society as its regulatory arm and BC Notaries as its trade association. “The primary aim of the trade association is assisting Notaries to

grow their businesses and scope of practice, as well as develop their skills and business acumen.” The new structure could be related to a potential regulatory merger with the Law Society of BC; but the point to be made here is that the new structure goes a long way toward addressing any potential conflict of interest between serving the public and the profession.

The first goal in our strategic plan for 2018-2020 is to increase understanding of the function and value of the land surveying profession and the survey fabric to a civil society, the second goal is to ensure that members practise competently and deliver quality services, and the third goal is to enhance effectiveness of ABCLS governance. There is no question

that the second and third goals relate to the function of a regulator; but what about the first goal?

To some extent, the first goal relates to the function of a professional association. But this is not necessarily an issue. As Balthazard explains “It is not that the interest of the public and the interests of the profession are always in conflict, they are not; but there are a number of situations where those interests are different.” I think, in working on the first goal, we must be certain we can discuss the value of the profession in a way that also benefits the public interest and reinforces an understanding that notwithstanding our name, the ABCLS is first and foremost a professional regulator. ❖

Letter to the Editor

Hello Link:

Mr Allen’s recent article on his ‘expedition’ to Cathedral Park was enjoyable and a worthwhile reminder that, yes, there is life after active surveying (shocking!) – even though he did have to slip in the encounter with an old wood post.

So, in the spirit of encouraging other non-surveying activities, and for when outdoor options are not attractive: creating a personal website can be engaging, challenging and a great time consumer. Why go to the trouble and cost of travelling to far away spots when you can (endlessly) travel the mysterious land of personal quirks and memory (with or without shoeboxes of old photos).

And for those keen to preserve — for all time — some part of themselves: cramming personal e-tidbits into

your own website will totally extend your e-life. Not to mention forcing you to recall just what your past was all about. Where else can you put those hundreds of photos of survey posts or of fine dining (or sleeping) on tropical beaches?

Well, that’s where I’ve been travelling this winter. There’s a bunch of free (or inexpensive) web hosting options. I wound up using Weebly. For anyone so inclined, I’d be happy to offer whatever Weebly assistance or tips I might have. Although anyone under say, 50, likely knows far more about this stuff than I! Happy wandering.

Larry Marshik, BCLS (Ret’d)



Delegate Report

The Association of New Brunswick Land Surveyors' Annual General Meeting

By Brian Brown, BCLS, past President

The Association of New Brunswick Land Surveyors held their 65th Annual General Meeting at the Delta Hotel in Saint John, New Brunswick, from January 18 to 20, 2018, with the Presidents' Forum on January 17. Saint John, NB, is the oldest city in Canada, having been incorporated in 1785 and the only city on the Bay of Fundy with the world's highest tides. It is the second most populous city in New Brunswick.

At the Presidents' Forum we had, starting from the west; myself, Mike Fretwell, President, Alberta Land Surveyors Association (ALSA); Lee Anderson, President, Saskatchewan Land Surveyors Association (SLSA); Kelly Mantik, President, Association of Manitoba Land Surveyors (AMLS); Russ Hogan, President, Association of Ontario Land Surveyors (AOLS); Dave Parkhill, President, Jaret Guimond, Vice President, and Brian Whitehead, Executive Director, Association of New Brunswick Land Surveyors (ANBLS); Ken Cormier, President, Nova Scotia Land Surveyors (ANSLS); Tony Inman, President, and Derek French, Past President, Association of Prince Edward Island Land Surveyors (APEILS); and Tania Bigstone, President, Association of Canada Land Surveyors (ACLS).

Mike Fretwell (ALSA) brought up the State of Cadastral and Land Tenure education in Canada. The University of Calgary Chair of Cadastral Studies are looking for funding to support masters' students and research in regard to Cadastral Studies. They have asked ALSA to ask their members. ALSA is trying to put a charitable foundation together to establish ongoing funding, as \$2-3 million dollars is needed to support the program (\$100,000 per year).

Tania Bigstone (ACLS) discussed the Foreign Credential Recognition Program. Foreign trained land surveyors have no way to be assessed. Discussion included assessment procedures and contact with universities and colleges.

Russ Hogan (AOLS) gave an update on the AOLS Marketing Initiative. The AOLS are stepping back for at least the next 6 months, with a Strategic Planning meeting in May

Professional Land Surveyors in Private Practice per capita by Province based on 2017 data

Province	Population	Surveyors in private practice	Per capita
NL	529,000	53	10,000
PEI	152,000	9	16,900
NS	957,600	125	7,660
NB	750,000	52	14,400
QC	8,215,000	868	9,460
ON	14,190,000	467	30,400
MB	1,278,000	58	22,000
SK	1,120,000	96	11,700
AB	4,310,000	466	9,250
BC	4,648,000	301	15,500
Total	36,149,000	2,495	14,489

This information was provided to help determine if there are enough Land Surveyors to service public demand.

or June. They have determined they need to focus on Public Relations, not advertising.

Dave Parkhill (ANBLS) reviewed Presidents' Forum discussion items, stating that items get dropped and forgotten about when Presidents leave only after one year. Important action items should result in the formation of an ad hoc committee that could help in seeing these items come to a successful conclusion. Dave (who served two consecutive years as President) also mentioned that a 2-year term is very helpful. Dave also compiled some interesting data, provided on page 12.

Dr. Yun Zhang, Ph.D's, presentation was a fascinating view of EarthView3D technology, where using either 3D glasses with a standard monitor or using a special monitor, you may view areas in 3D, like Google Earth but in full 3D.

On Thursday, January 18, we attended their Mandatory Continuing Education, MCE. The first presentation was from the Director of Surveys, Joseph Chessie, NBLS. Discussion ensued regarding *The Need for Field Notes when Conducting a Survey* (very similar to and used many examples from the ABCLS *Fantastic Field Notes & Perfect Plans*).

The next speaker was supposed to be Mark Sampson, speaking on retirement or sale of your business, but unfortunately, Mark's flight from Toronto was cancelled due to the weather system at that time. Tania Bigstone was recruited by Dave Parkhill to step in and gave a talk on Canada Lands and the 1996 Treaty Lands dealing with First Nations.

The next speaker was Dr. Yun Zhang, Ph.D, a faculty member of the Department of Geodesy and Geomatics Engineering at UNB since 2000. His presentation was a fascinating view of EarthView3D technology, where using either 3D glasses with a standard monitor or using a special monitor, you may view areas in 3D, like Google Earth but in full 3D.

The final speaker was Dr. Jason Bond, NSLS, who modernized the coordinate reference system of Nova Scotia through active control technology. Dr. Bond stated that approximately 75% of infrastructure deemed as

critical for daily functionality in Canada relies upon GNSS for position, timing, or navigation information; this dependency upon GNSS without a fallback plan for times of signal disruption poses significant risks. To mitigate these risks, Canadian Geodetic Survey is leading the development of a Position, Navigation, and Timing (PNT) Strategy. The strategy also strives to encourage innovation and economic stimulus by promoting the installation of GNSS augmentation infrastructure (active control stations) as a foundation technology. Dr. Bond presented an overview of this initiative with a particular focus on addressing positioning needs for the survey community over the next 20 years.

On Friday, January 19, the business portion of the meeting commenced. Joseph Chessie, Director of Surveys, NBLS, gave his report. New Brunswick is consolidating thirteen Land Registry Offices into one office; they will be operating both systems for a grace period. They are embarking on digital plans where they will be using a scanned version of a mylar plan, showing the various signatures. This will be done using a "trust" system, trusting that the Land Surveyors will ensure only using the original signed plan.

This portion of the meeting was followed by Committee Reports. The Board of Examiners report stated that they have had no new members in the last three years, and they have 9 SITs (Surveyors In Training). The Administrative Committee report introduced the new Executive Director, Brian Whitehead. The Governance Committee had three members nominated for one council position, and at the last minute, had one member allow his name to stand for Vice President.

After the committee reports, members accepted and voted on a motion to ratify the actions of council. Matt Hayes, a lawyer acting on behalf of the ANBLS, gave a presentation explaining their new Land Surveyors Act, which they are hoping will be in place this year. They seem to be in a holding pattern waiting for their new act to create a new set of By-Laws. ❖

The Association of Ontario Land Surveyors' Annual General Meeting

By Brian Brown, BCLS

The Association of Ontario Land Surveyors held their 126th Annual General Meeting at the Sheraton on the Falls, Niagara Falls, Ontario, from Wednesday February 28 to Friday March 2, 2018, with the Presidents' Forum on March 2. Niagara Falls is relatively quiet in late February/early March.

On the evening of Tuesday, February 27, they held their "Meet and Greet." The business portion of the meeting started on Wednesday, February 28. The meeting started with the Standard of Measure brought in by their Sergeant at Arms in the uniform of the North West Mounted Police; he remained in that uniform for the duration of the meeting. They held the meeting under the Sturgis Code of Conduct. They also drove home the point: "Participate, it is your meeting and only as good as you make it."

Russ Hogan is the retiring President, Past President for this year. The incoming President is Dan Dzaldov from the Greater Toronto Area.

Ontario is moving towards a Principle/Ethics based legislation and re-investigating the expanded profession. Their Career Awareness is working with secondary schools trying to get students to take the right courses in secondary schools to be able to get into applicable courses in colleges and universities. They had 17 new land surveyors this year, with 88 articling students. This is good, but they are still in tough shape for demographics — of the 504 active land surveyors, only 25

percent are under 50 years of age, and 38 percent are over 60. They want to create an exit interview to find out why such a large number of students (50 percent) don't complete and get their commissions. The Career Awareness report was given by Natalie Vibart, who noted that she had received her commission 22 hours previously. It was announced that York University is now accredited with CBEPS. They are working towards having a Property Survey Records Index. This will be an index only; it will tell you who has worked in an area, and therefore, who you need to go ask for field notes, with no central repository for plans. The Property Survey Records Index will be mandatory. The OALS has an annual operating budget of approximately \$2.4 million/year.

Sue McGregor, Ontario Surveyor General, gave a report, and she noted that the majority of their work is in indigenous land claims. They are also working on defining the Ontario/Quebec border along the Ottawa River. Apparently Ontario's mapping shows the border differently than Quebec's mapping does. Their Professional Development was done on March 1 with multiple concurrent learning sessions. The first three learning sessions were offered in the morning and again in the afternoon. The sessions were as follows:

1. Teraview on the Web & On Land Presentation (Teranet & ServiceOntario)

Teraview is a secure one-stop solution

to accessing data in the Government of Ontario's land records database, and is used by lawyers, paralegals, title searchers, and land surveyors. In the 2018 release of Teraview, the application is moving to the web, and land surveyors will be able to submit reference plans and subdivision plans for deposit or registration quickly and easily, without having to visit a ServiceOntario Office.

2. Policy on Sketches Overview (Bob Halliday, Professional Standards Committee Chair)

The Professional Standards Committee has submitted its recommendations for updating our Guidelines for Sketches. A panel of committee members reviewed the new guidelines and explained the considerations that led to the Committee's recommendations. There was plenty of opportunity for questions and answers. Information was provided regarding the effect of the updated Guidelines, when to use sketches, and how to format them properly.

3. Lightning and the Lightning Bug: A Workshop in Clear, Effective Writing (Charles Wilkins)

Mark Twain wrote that the difference between "the almost right word and the right word" is "the difference between the lightning bug and the lightning." This 1.5-hour seminar encouraged participants in the art of clear writing, stressing the avoidance of clichés, the choice of fresh images,

and the creation of the compelling sentence. Tailored to surveyors, participants engaged in writing and editing exercises, discussion, and brief case studies in good and not-so-good writing. No total stations were required.

4. Council Q&A

This panel consisted of the senior members of Council (Russ Hogan, AOLS President; Dan Dzaldov, AOLS Vice-President; Al Jeraj, Finance Councillor), along with some of the AOLS Staff (Blain Martin, Executive Director; Bill Buck, Registrar). There were short presentations about the issues of the day to start the session, followed by questions related to the presentations, as well as to any matters that were of concern to those in the audience.

5. Complaints (Dave Kovacs, Complaints Committee Chair)

Dave Kovacs, Chair of the Complaints Committee explained the complaints process and the options available to the Committee. The presentation included examples of the most common complaints and suggestions on how they might have been avoided, as well as provided advice on how to respond to an official complaint.

6. Province-Wide SRI (Brian Maloney, PSRI Task Force Chair)

The Provincial Survey Records Index is finally moving forward after being delayed pending access to Parcel Data. This session described the plans for implementation and allowed attendees to provide input into potential functionality, data inclusion, and implementation expectations. Depending on the state of development, a demonstration of some of the functionality was included.

7. SRD Field Notes (Tim Hartley, SRD Manager)

Tim Hartley of the Survey Review Department discussed the statutory duty and the obligation to the surveyor of the future to make proper field notes. As there is no app for field notes, a good field note is the foundation of a correct survey plan. He stated that making field notes is a learned art that appears to be a dying art.

On Friday afternoon, March 2, the Presidents' Forum was held. We had, starting from the west: myself, Mike Fretwell, President, and Bruce Clark, Vice President, Alberta Land Surveyors Association (ALSA); Lee Anderson, President, Saskatchewan Land Surveyors Association (SLSA); Kelly Mantik, President, Association of Manitoba Land Surveyors (AMLS); Russ Hogan, President, Dan Dzaldov, Vice President, and Blain Martin, Executive Director, Association of Ontario Land Surveyors (AOLS); Jaret Guimond, President, Association of New Brunswick Land Surveyors (ANBLS); Ken Cormier, President, Nova Scotia Land Surveyors (ANSLS); Dominique Fecteau, Vice President, Association of Canada Land Surveyors (ACLS), and Wilson Phillips, Chair of Professional Surveyors Canada (PSC). The AOLS recorded the Presidents' Forum, which was very helpful in getting the minutes out. The group was encouraged to invite their Vice Presidents to future Presidents' Forum meetings.

We received an update on the Foreign Credential Recognition Initiative. Highlights were as follows:

- They got the funding in November.
- Marie Robideau has been hired to the job to foresee the project.

- At this time there is no other information on the call for other Associations.
- It is unclear at this point the amount of effort that would be required.
- Marie Robideau has contacted Blain Martin (AOLS Exec. Director) and has asked for all the AOLS information on the Pathways Project, and they have sent it to her.

We received an update on the ACLS Examination Enhancement Project (EEP). Highlights were as follows:

- They received the \$100K contribution from NRCan.
- Marie Robideau was hired to get this project going.
- Marie will write a formal letter to every Association to advise them of the modifications that they want to do to the examination program accordingly to Labor Mobility.
- The challenge at this time is trying to find some people that will present those classes in French.
- ACLS will send a letter for the modifications they want to have for those exams to send to sister associations to get some feedback.
- This is for CBEPS and ACLS.
- It is suggested that they might want to consider the model used for appraisers.
- It standardizes the program across Canada.

We received an update on the ACLS Book Project. Highlights were as follows:

- The ACLS sent a Survey Monkey

to all their members asking them if it is a good idea to do a book about ACLS.

- There were a lot of people that agreed and thought it was a good idea.
- They studied the approximate cost of this project; estimation was about \$205K.
- Since the ACLS does not wish to fund this book project, survey participants (Survey Monkey) were asked if they would give a contribution for this project.
- They have a 3 or 4 Member Task Force to try and get funding of up to 85 percent of the \$205K before they go ahead.
- If they do not reach the 85 percent, they will not pursue the project.
- Blain Martin is a member of the Task Force.
- Charlie Wilkins, author of Great Lengths for the AOLS, wrote a proposal.
- The AOLS had asked some of their members and vendors to fund their book.

The AOLS is putting together a salary survey and trying to get all the associations onboard for this. The purpose of the survey is to get more accurate numbers than shown by Statistics Canada. A problem exists when trying to get students interested in the profession. The first question that is asked is, "How much can I make?" They check Statistics Canada and see inaccurate results.

Other highlights were as follows:

- The AOLS have tried to engage the other provinces in this endeavor.
- They have moved it to a point where it has been put out in a Survey Monkey.
- AOLS had sent it out to all of the Presidents and Executive Directors for feedback.
- Ontario has Regional Groups, and Nova Scotia has Regional Groups also.
- They were careful that the people who replied to the Survey Monkey would remain anonymous, similar to StatsCan.
- The AOLS have used their accounting firm to process the data.
- The AOLS have set up the Survey Monkey, and their accounting firms have changed the passwords so they can access the data. Any identifiable entries were taken out.
- We seem to get a good buy-in for a National Survey.
- The AOLS have only sent it out a couple of weeks ago.
- The AOLS has hired someone to do an analysis of the survey.
- It would be great to combine the results with the demographics.
- The Demographics talks about the need for young people to come into the profession, and combined with the salary survey, this provides a very attractive story.
- We would be able to use the results of our own salary survey to approach StatsCan to say that their numbers are misleading, causing concern.

- It would also get StatsCan to understand the correct designations.
- It was stated that it will be impossible to change StatsCan because there are firms that are not licensed surveyors that self-identify with land surveying.

A round table discussion followed; some key issues that came up were as follows:

Alberta – Someone working for the Government using the title of Land Survey Technologist is giving direction to surveyors on how to do their surveys; there is no such distinction.

Nova Scotia – They are trying to adopt a Boundary Resolution process but are struggling to get it in place; it may turn into a six-year process.

Saskatchewan – There is concern with confidentiality and security with emails. This came up during with their Professional Conduct Committee with respect to communication.

Ontario's comment on this is they try to discourage emailing for any issues dealing with discipline or complaints. They use their restricted area on their website.

New Brunswick – In my report on New Brunswick, I mentioned that they were expecting to get their new Act in place early this year, but it has hit a snag. Now there is doubt as to when or even if it will happen. Their Act went in front of a Standing Committee. A person wrote against it – she had a 37-page document. Prior to going in front of the Standing Committee, a lawyer told Dave Parkhill (NB Past President) that he was 95 percent sure that their Act would go through. After it was over, he said it was probably 50/50. ❖

Land Surveyors Association of Washington Conference - March 7th to 9th, 2018

By Ron Johns, BCLS,CLS

On behalf of President Brian Brown, I had the pleasure to represent the ABCLS at the 65th annual Land Surveyors Association of Washington (LSAW) conference. The conference was held at the Davenport Grand Hotel in Spokane, Washington. The city boasts plenty of history and the hotel was situated directly across the street from the Spokane River.

There is no requirement for land surveyors in Washington State to belong to the LSAW. Licensing of surveyors is administered by the State. The association currently has a membership of 800 representing about 35% of the total number of registered land surveyors.

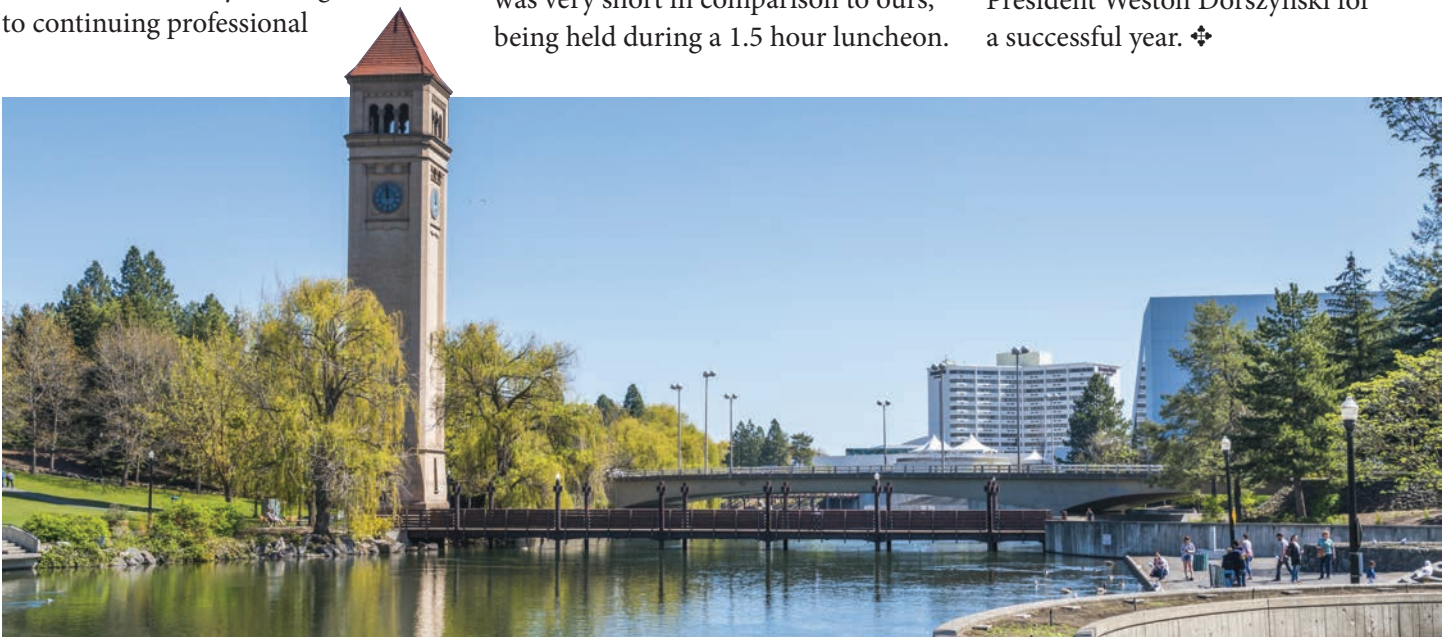
Apart from the Annual General Meeting and networking with other land surveying professionals, the conference was very much geared to continuing professional

development. CPD sessions were held on all three days, including half day and full day opportunities. The quality and quantity of the presentations were impressive. I found it difficult to choose which topics to attend, as there was over 8 different sessions running simultaneously at any given time. A number of sessions were devoted to the emerging use of drones for mapping surveys and how the related technology and software could be utilized by the small business owner. One presentation I found interesting was on using a solar compass and solar transit. This “hands on” session included using one or more of the 15 available instruments. After a short history lesson and a review of the theory, outside we went in small groups to conduct an actual survey. Luckily the sun was shining!

The business session on Wednesday was very short in comparison to ours, being held during a 1.5 hour luncheon.

That evening the opening reception was held in the exhibitor area. An awards recognition luncheon was held on Thursday where various merit awards were presented, in addition to the issuing of a number of scholarships to land surveying students. The Annual Banquet took place on Thursday evening. The new President and Council were officially installed at this event and two exemplary service awards were presented, honoring long and distinguished service to the profession. Guest speaker, Gina Campbell, delivered an entertaining history of some of Spokane’s more “notable” characters.

Next year’s meeting will be held in Tulalip Washington from February 27th to March 1st. Thank you to outgoing President Carla Meritt for hosting Marna and I at your meeting. Best wishes to incoming President Weston Dorszynski for a successful year. ❖





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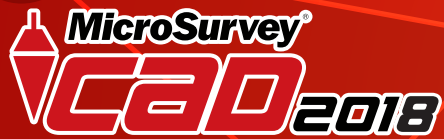
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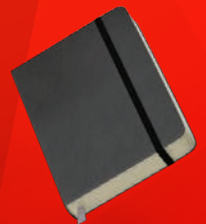
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Continuing Professional Development Report – 113th AGM in Whistler, BC

By Dan Machon, BCLS

The mountainside Whistler Conference Centre provided a beautiful setting for the Continuing Professional Development (CPD) events at the 113th AGM March 14 and 15, 2018. The turnout for the CPD seminars was outstanding with approximately 299 members, guests and students taking part in all, or portions, of the one and half days of CPD sessions.

The Wednesday morning keynote address was from Dr. Bill Hazelton who spoke on the future of surveying. The profession of surveying is undergoing rapid and uncertain changes. Change is inevitable, but participants were encouraged to create their own future or someone else will change it for them — and it will probably not be a surveyor! Areas explored included the history and disruptive technologies associated with surveying. Land Surveyors must remember they play a critical role in our land-based economies; making sure that the titles match the reality of the land on the ground.

For the balance of the morning Dr. Brian Ballantyne presented a seminar on the application of natural boundaries in BC. In an engaging three hour session the important aspects of natural boundaries, including the determining factors in erosion and accretion, important case law, approaches to apportioning accretion, and natural boundary law as it applies to meandering streams / oxbow lakes were discussed. A session highlight was a discussion of the “12 steps to water

boundary bliss” which, unexpectedly, included a 13th step. “Bonus bliss!”

Through his keen sense of humour and deep knowledge of the subject material, Dr. Ballantyne kept the participants engaged and entertained.

The Wednesday afternoon session started with two concurrent seminars. A student seminar for survey students and LST’s consisted of four topics presented in a rotating “speed dating”

With great enthusiasm, Diane managed to entice her audience further by offering small rubber ducks stenciled with the saying “shut the duck up”. People were actually dancing on the tables for one of her ducks or books!

format. Topics included: Land Act and Mineral Tenure Act, Oil and Gas Surveys, Applications to the Surveyor General, Strata Surveys, and Board Advisory note 2013-1. The student session saw 44 people in attendance and a big thank you to the combined efforts of Mr. Mark Rossmann, Ms. Katie Hannah, Mr. Patrick Korabek and Mr. Peter Goodier.

The student seminar was scheduled prior to the Ice Breaker to allow the students to meet some of the professionals whom they could approach with further questions in an informal environment that evening. The presenters were available at the Ice Breaker and many were approached by the students with further topic and/or exam questions. All in all, it was a success in opening up the lines of communication and letting the students know the

Association is invested in their education and success.

The other concurrent seminar was on data security and virtual offices. Members were reminded of the continuous threat that computer viruses, malware and ransomware pose to small and large businesses and corporations. Best practices include: proper backup and restore procedures, education of staff and up to date computer software and infrastructure.

The story of starting a virtual office was shared by Jeremy Park of Core Geomatics. Some of the benefits of a virtual office included: better employee flexibility with lifestyle and hours, and the financial savings of a company with no physical office in place. The negatives included employee isolation, lack of office culture and proper supervision of staff in such an environment.

The lessons learned in a virtual office startup include not being afraid to try new ideas, setting proper expectations of staff and enjoying the learning experience of running your own business.

The final event on Wednesday afternoon was on the new Rules for Surveys and Plans. Chuck Salmon, BCLS and Life Member, gave an overview of the latest version of the re-write of the survey rules. Reviewing

each part, he highlighted the changes to date, how the rules are being reorganized and how the rules will eventually be linked to the Electronic Checklist Registry with topic search ability functions. The work on the survey rules is a result of the 2015-2017 Association's Strategic Plan which identified a goal to restructure the General Survey Instruction Rules to be results based rather than prescriptive of specific technologies.

This seminar was based on a motion made by the membership at the 2017 AGM. The motion requested consideration for setting agendas for AGM's that promoted a culture of obtaining feedback and input from members on key topics. Much discussion resulted during the seminar on each proposed part, with many members providing their thoughts and ideas for Chuck and his working group to consider as they move towards the final version.

On Thursday afternoon approximately 240 people attended a lively session by Diane Ross on having difficult conversations. Diane confirmed that learned communication skills are applicable to many life situations, not just work. One take away was to not avoid these difficult conversations and have a plan in place before you have them. Diane was filled with a consistent energy, walking the length and breadth of the floor to better engage her audience. To everyone's amazement, David Hardwicke remained miraculously un-involved, obviously intimidated by this dynamo!

With great enthusiasm, Diane managed to entice her audience further by offering small rubber ducks stenciled with the saying "shut the duck up". People were actually dancing on the tables for one of her ducks or books!

The final two CPD sessions were concurrent sessions. Dr. Bill Hazelton presented on Drone Technology and the important considerations to be made before working with UAV's or drones. The presentation was multi-faceted; practical considerations were discussed (are you prepared to deal with the terabytes of data?), photogrammetric theory was reviewed. Bill shared some of his misadventures from his extensive experience in this rapidly changing field.

A session on "Building and Selling a Professional Survey Business" was presented to over 150 people. There was a wide mix in the audience including students and long practicing members. This was a one-time event that included four volunteer presenters in two parts: First ABCLS members Mike Waberski and Neil Bennett spoke, based on their personal experience from selling their own successful firms. This included a frank discussion of company revenues, enterprise valuation, and transaction issues. Next Adam Brash and Jay Wronko (both from Global Raymac Surveys, Calgary) spoke on the topics of advance Due Diligence and post-deal Business Integration based on their experience in multiple corporate transactions. A strong question and answer session followed. Thanks again to Mike, Neil, Adam and Jay for all your efforts.

Most of the seminars had accompanying PowerPoint slides that can be obtained through the ABCLS website, in the Continuing Professional Development section. The Natural Boundary seminar was video and audio recorded with the intention of providing the material through GeoED in the future.

Following the CPD events of March 14 and 15 in Whistler, the Continuing

Professional Development Committee recommends claiming the following hours for each CPD session;

- AGM - Members should claim actual hours accrued
- Seminar 1 - Keynote Address - Bill Hazelton = 1 hour
- Seminar 2 - Natural Boundaries = 2.5 hours
- Seminar 4 - Data Security & Virtual Offices = 1.5 hours
- Seminar 5 - Rules for Surveys & Plans = 1.5 hours
- Seminar 6 - 3 Secrets for Managing Reactions in Difficult Conversations = 1.5 hours
- Seminar 7 - Drone Technology = 1.5 hours
- Seminar 8 - Building and Selling a Professional Land Surveying Business = 1.5 hours

As a reminder, these hours can be claimed using the GeoEd Canada portal which can be found through the ABCLS website. To use the tool, go to 'Members Area' then select 'Continuing Professional Development' (found under the 'Land Surveyors' tab), and look for the green 'CPD Reporting Tool' icon. Once in the GeoEd online environment, select 'Add CPD' from the CPD icon on the lower right hand side of your screen and follow the prompts to add your hours.

The CPDC wishes to thank you all for your continued support of professional development. Members and students are encouraged to send your suggestions to the Committee and in this way we can provide timely, relevant professional development opportunities for members and students. ❖

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What's been missing from *The Link* for the past five years? The Puzzle Page!

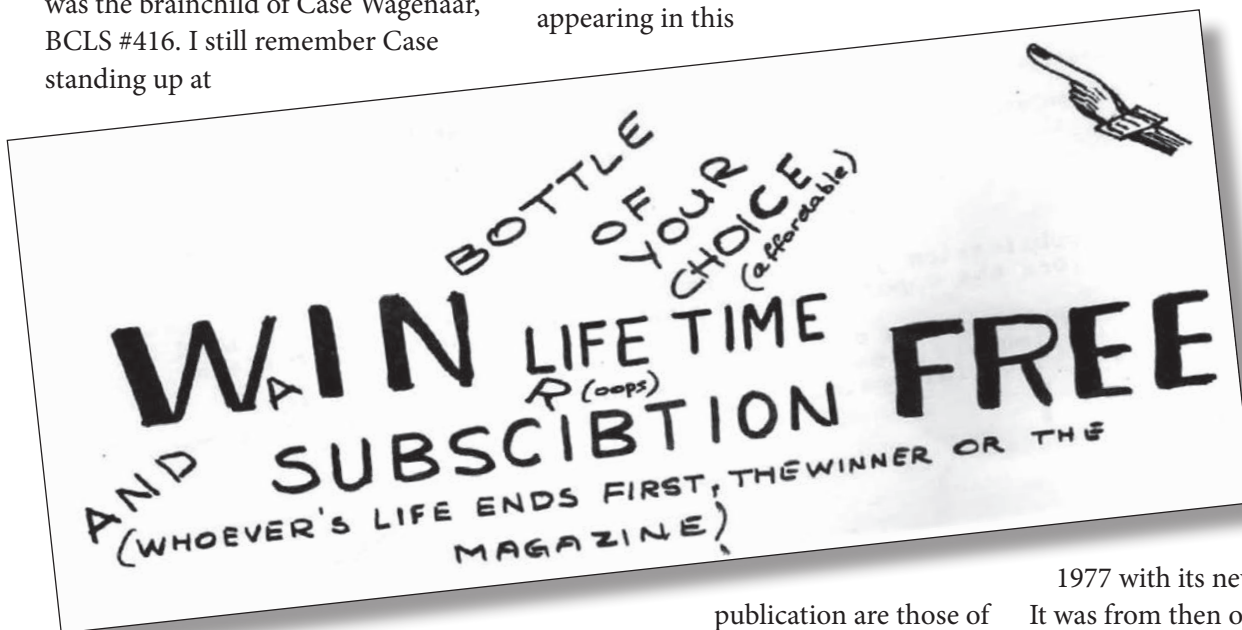
Much of the following came from an article I wrote for the June 2007 issue of *The Link*. I decided to use some of that article rather than re-invent the wheel.

Volume 1, Number 1 of "The Magazine" (For Now), now known as *The Link*, rolled off the presses in June 1977 – 41 years ago! *The Link* was the brainchild of Case Wagenaar, BCLS #416. I still remember Case standing up at

They were: Case Wagenaar, Editor, Ernie McMinn, Assistant Editor, Neil Bennett, Ann Berting, Ray Chapman, Gerry Emerson, Walter Frith, Terry Jones, Don Watson, and Margaret Wagenaar as Secretary/Treasurer.

A note at the bottom of the first page said: "This publication gives members of the Corporation of B.C. Land Surveyors the opportunity to express their views and opinions. Views and opinions expressed in articles appearing in this

and a column by Bill Taylor, Surveyor General. There were also committee comments, a women's page, buy and sell, book reviews, business column, more 'Dialogue' from Case, an article on personal tax savings, a lengthy article on the "Competition Policy and the Self-Regulating Profession" and an interesting article on integrated survey areas written by Ken Bridge. The last few pages were dedicated to full-page advertisements.



Page 2 of this first issue was devoted to announcing a contest to "Name the Magazine and Design its Logo". There were some basic rules with a prize offered to the winner. This was the prize offer.

Volume 1, Number 2 came out in September

the January 1977 AGM extolling the virtues of a magazine for our membership. In our Association, like so many others, when one makes a suggestion for something new, it is soon suggested that 'they put their money where their mouth is' and that was the situation in this instance. Case was quickly volunteered by the members to be the editor. The first editorial board consisted of some well-known land surveyors and/or their wives: some of whom are unfortunately no longer with us.

publication are those of the authors, and not necessarily those of the editorial board." Similar words are still in each issue.

Page 2 of this first issue was devoted to announcing a contest to "Name the Magazine and Design its Logo". There were some basic rules with a prize offered to the winner. This was the prize offer: (see above).

The first issue also included a message from our President, John Matthews, an editorial by Case Wagenaar, some Corporation news by Walter Frith,

1977 with its new name and logo. It was from then on officially known as *The Link*. Sandy Watts, BCLS, was the winner of the contest and we hope he enjoyed his free bottle and is still enjoying his "free" copies of the magazine. Other names submitted for the magazine were: *The Survey Post* (Rita Lemaster), *The Compass* (Rick Clendenning), *The Telescope* (Steve Hoefsloot), B.C. "Cols" (Ron Stothers), and *The BCLS* (Bob Lea).

This second issue contained similar articles to the first one including Anne Berting's: "Women's Page – No New Name Yet?" This issue also contained

the first article of Historical and Biographical importance, something close to my heart. It was a four-page article on Frank Swannell.

A lot of ink has spilled onto the pages of *The Link* since 1977 thanks to a series of dedicated editors and contributors. Case stayed at the helm until March 1985 when Board duties started taking up more of his time. He was followed by Denis Noonan from the June/September 1985 issue to July 1986, and then by Jon Magwood from March 1987 to April 1995. Bob Griffith then took over from the July 1995 issue to February 1996 and he was followed by a joint collaboration between himself, Jon Magwood, and the Association Office from July 1996 to January 1997. Brad Cunnin stepped in from April 1997 to January 1998 and then Dave Morton took over starting with the April 1998 issue and gracefully retired after an eighteen

year stint with the August 2016 issue. The editorship was then taken over by the Association Office and they have done a great job with it and have taken it to an even higher level than Dave had.

Our hats are off to all those past editors, especially to Case for starting "*The Magazine*" (*For Now*), Denis Noonan, Jon Magwood, Bob Griffith, Brad Cunnin, and Dave Morton for taking on the challenge when no one else would step forward.

One of the pages that graced many an issue of *The Link* was the Puzzle Page. The first puzzle was by Bryan Berting in the December 1978 issue and by March 1980 the puzzles took up a full page and the name was officially changed to the Puzzle Page. Bryan had puzzles in each issue until the September 1983 issue. I took over the page in December 1983 and ran with

it until January 1989, the same time as I was sworn in as President of our Association. At that time "I managed to coerce my associate, John Theed, into taking over the reins starting with the next issue." John did a terrific job starting with the March 1989 issue and for twenty-four years he had Puzzle Pages in nearly each issue right up to the August 2013 issue when he decided to 'hang up his calculator' in the hopes that someone else would take over. No one took over the torch and the Puzzle Page has sat dormant for nearly five years and I'm hoping that some young fireball will step up to the plate and take on the job of looking after the Puzzle Page. If you are interested in this and want more information on what is involved, please contact me.

The Link has had a great first forty-one years and we certainly look forward to many more. ❖



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Surveyor Participation in the Ecological Gifts Program

By David Cunningham and Elizabeth Jordan, Ecological Gifts Program, Environment and Climate Change Canada

Occasionally a surveyor may encounter a landowner who has a particular love for a wetland, a stand of old trees, or a stretch of native prairie, and wants to protect it from development. A surveyor in the right place at the right time could inform the landowner of some valuable income tax benefits offered by the Ecological Gifts Program, an initiative of Environment and Climate Change Canada in partnership with land trusts and various levels of government. The surveyor can also help the landowner or recipient of the donation to navigate Ministry of Transportation and Infrastructure or Agricultural Land Reserve approval processes, or to locate land use zones in legally-binding conservation covenants.

The motivation to conserve a property often comes from an emotional or altruistic place, whether it is a personal or family attachment to the land, or the desire to leave a legacy for the future. Once the decision is made however, the path to making it a reality needs to follow a number of more practical steps, often involving the services of professionals. Land surveyors, as well as real estate appraisers, lawyers, estate planners, and tax experts, are frequently part of the process. A subdivision or

severance may be required, or it may be necessary to create reference plans. Professional advisors who understand the requirements and benefits of the program are able to determine whether the Ecological Gifts Program is appropriate for their clients and help guide them through the process. Here is some practical information about the program to help you better advise your clients.

Recipients

Landowners can donate gifts of ecologically sensitive land, or certain interests in land, to environmental charities approved by the federal Minister of the Environment and Climate Change, as well as to federal, provincial, territorial and municipal governments. The recipient ensures that the biodiversity and environmental heritage features of the gift are maintained and managed in perpetuity. Before it can be included under the Ecological Gifts Program, each donation of land or a partial interest in land must be certified as ecologically sensitive according to specific national criteria. This certification is carried out by the federal Minister of the Environment and Climate Change or a delegated authority.

Donatable Interests in Land

There are many reasons for donating an ecological gift and the Ecological Gifts Program offers several options to allow landowners to choose the type of gift that best suits their circumstances. The majority of donors choose a fee simple gift, in which landowners donate all or part of their land and receive income tax benefits based on its fair market value. This type of donation provides both the greatest ecological protection and the largest tax benefit.

Donors may also use a “life estate” to donate ownership of the land, but retain the right to live on the land throughout their lives.

For landowners wishing to protect their land while keeping their connection with it, the best option may be to register a conservation covenant on the title. The covenant would protect the conservation values of the property, or a surveyed portion of the property, while donors could continue to live on the land, sell it, or pass it on to their heirs. The covenant is registered on title, and protects a property’s conservation values by permanently placing terms and conditions on the land use in perpetuity. Covenants are often



Getting Started

You can advise your client to begin with these simple steps:

- Contact the Ecological Gifts Program where staff can provide more information and Facilitate contact with a government or conservation organizations to discuss options.
- Consult with a lawyer to tax expert about the legal and financial implication of the various options.
- Talk to family and anyone.

Surveyors play an important role in establishing new protected areas through the Ecological Gifts Program.

the preferred option for working properties, such as ranches or farms. By restricting activities such as subdivision and development, or by binding titles together, a covenant lowers the value of the property, and the owner can receive tax benefits based on the reduction of the property value.

If the landowner receives an advantage (partial payment) in return for the donation, the provision known as split-receipting is used to assess the amount of the gift which is eligible for a tax benefit.

Tax Benefits

For most people donating ecological gifts, interests in conservation outweighs financial motivations. However, benefits offered by the Income Tax Act can provide an

additional incentive for those who choose to donate through the Ecological Gifts Program.

Either individuals or corporations may donate ecological gifts. Individual donors are eligible for a non-refundable tax credit, while corporations may claim a deduction directly from their taxable income. In both cases the eligible amount is determined by the assessed fair market value of the gift supported by a real estate appraisal prepared by a qualified appraiser. Ecological gifts may be claimed in the year of the donation and any unclaimed amount may be carried forward for a period of ten years.

Unlike most other charitable gifts, there is no capital gain tax on ecological gifts and no limit on the

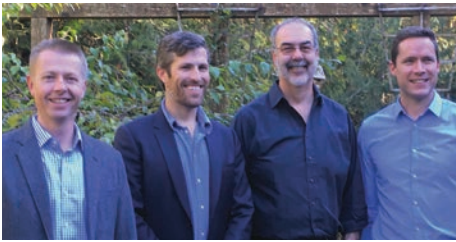
total value of ecological gifts eligible for deduction or credit in a single year.

Thanks to the generosity of private and corporate landowners in British Columbia, over 68,000 hectares of ecologically sensitive land worth over \$250 million have been protected through the Ecological Gifts Program. The area of the donations range from less than a hectare to 55,000 hectares, and in many cases the professional services of a surveyor were required to realize the landowner's dream. ❖

Inquiries about the program in British Columbia may be directed to the program co-ordinator for BC:

David.Cunnington@canada.ca
office: 604-350-1987
cell: 604-329-7716
www.canada.ca/ecological-gifts

New Commissions



Kelly Stofer, Andrew Christian, Brent Taylor,
Jordan Litke

Andrew Christian, BCLS #980

Andrew Christian was commissioned on October 27, 2017 in Duncan by Kelly Stofer. Andrew was born in Edmonton and grew up in Cold Lake Alberta. He chose land surveying after his father convinced him to try engineering because he was good at math and physics. However he became interested in Geomatics Engineering at the University of Calgary during his second year. Andrew would like to thank Brent Taylor, Jordan Litke and Bruce Drake for helping him along the way. When Andrew is not land surveying he enjoys spending time with his kids, hiking, biking, fishing and golfing when there is time.



Brock Williamson, Kelly Stofer, Tyler Hansen,
Brian Henning

Tyler Hansen, BCLS #985

Tyler Hansen was commissioned on December 15, 2017 by Kelly Stofer in Nanaimo. He was born and grew up all over Alberta where he became an ALS on July 13, 2009. He chose to become a land surveyor because he wanted to work outdoors, and indoors with math and science. Tyler would like to thank his wife Kaya, Brock Williamson, Brian Henning and Andrew Christian for helping him along the way. Outside of surveying, Tyler enjoys cross-country skiing, downhill skiing, running, hiking and baseball.



Roger Galibois, Brock Pendergraft, Brad Pendergraft

Brock Pendergraft, BCLS #986

Brock Pendergraft was commissioned on December 16, 2017 by Roger Galibois in Kelowna, BC. He grew up in Osoyoos and returned back after his studies at BCIT. Brock chose to become a land surveyor as he liked to help out his dad as a kid. Land Surveying looked fun and you got to be outside hiking around the hillsides in the sunshine. He decided to stay with it as a career and his intuitions were not wrong: land surveyors are glorified pirates on treasure hunts. They stumble around digging for evidence, and when they find it, they promptly re-bury it, then make a map showing its location for the next person!

When not land surveying, Brock enjoys motorcycling, soccer, volleyball, swimming and snowboarding. As a good make work project, he bought his first house in Osoyoos recently and is busy renovating with the help of family and friends. He is also looking forward to doing a SOB (Surveyors on Bikes) tour.

Brock would like to thank his parents for helping with his education (and putting up with him); Sim Porcellato for helping him through the LST and exam process; the Okanagan Mainline Regional Group for awarding him the group scholarship to help with education costs; and Marcus Werstiuk and fellow BCIT classmates for making four years of BCIT seem a lot shorter.

New Commissions



Damine Nee and Kelly Stofer

Damien Nee, BCLS #981

Damien was commissioned in Sidney on December 7, 2017 by Kelly Stofer. He was born and grew up in Halifax, NS. Damien chose to become a land surveyor for the unparalleled opportunities to get dirty, wet, cold and tired!

Damien would like to give a special thanks to Brian Sansom, as he would not be where he is today without Brian's unconditional support and encouragement. He would also like to thank David Hardwicke, Dave Dediluke, Ian Lloyd, Don Highe and all the other land surveyors, co-workers and teachers who shared their knowledge, regaled him with survey tales and answered his many, many questions. He would also like to thank his parents for their support and encouragement. And most importantly his wife, Kate, to whom he sincerely apologizes for all the evenings and weekends he was absent while studying or preparing projects.

When Damien is not land surveying you can find him chasing his two sons around the ski hill or bike trails.



Damien's Family



Roger Galibois, Jennifer Ashton, Rob Macdonald

Jennifer Ashton, BCLS #984

Jen Ashton was commissioned on December 15, 2017 by Roger Galibois in Kelowna, BC. She was born and grew up in Melbourne, Australia. Jen chose to become a land surveyor because of the varied applications possible within the profession as well as the mixture of outdoor work. She would like to thank all the people who have helped her along the way and answered her never ending questions. She gives a special shout out to Rob Macdonald for his continual mentorship as well as the extended support team at WSP over the last 3 years. When Jen is not land surveying she enjoys skiing, mountain biking, hiking and travel.



Mike Bernemann, Gargy Banerjee, David Rutherford

Gargy Banerjee, BCLS #987

Gargy Banerjee was commissioned on December 18, 2017 by David Rutherford in North Vancouver. She was born in Calcutta, India and grew up in Burnaby, BC. Land surveying chose Gargy: she was about to apply to the Civil Engineering program when a friend suggested she try out surveying. At that time she had never heard of the profession, but after a couple of days of field work, she fell in love with land surveying. The job requires such a variety of skill sets and really forces oneself to continuously think outside the box and evolve, in order to be successful.

Gargy would like to thank Mike Bernemann; her mom, Sudipta; and her partner, Shawn for helping her along the way. When she is not land surveying Gargy enjoys anything outside — cycling, hiking, camping.

New Commissions



Mike Waberski, Merlyn Browne, Mark Mason, Joe Johnson, Brad Cooper, Nicole Bird, Greg Browne, Rob Tupper

Bradley Cooper, BCLS #988

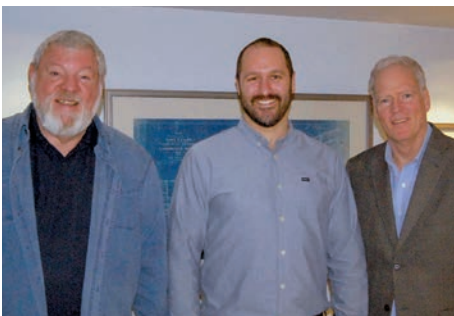
Brad was commissioned on December 21, 2017 by Mike Waberski in Salmon Arm. He was born and grew up in Vernon, BC. Brad initially planned to be a civil engineer but was fortunate enough to be studying at the University of Calgary and working summers as a survey assistant. He found land surveying to be more alluring than civil engineering. He would like to thank his parents, Marlaine and Cyril Cooper; his partner, Morgan Smith; his colleagues, Joe Johnson, Nicole Bird, Mark Mason; his master, Rob Tupper; and his EIT supervisor Mark Budgen for helping him get where he is today.

When Brad is not land surveying he enjoys motorcycling, skiing, photography, canoeing, fishing and mountain biking.

Brad was one of the surveyors for the Mica Dam 5/6 project where two new generating units (500 megawatts each) and associated infrastructure were installed underground. He surveyed from 2014 through 2016 in Christchurch, New Zealand to help with the rebuild of the city following the 2010 through 2011 earthquakes.



Brad Cooper and Morgan Smith at the summit of Mt. Luxmore on the Kepler Track near Te Anau, NZ.



Mike Sims, Neil Bauder, Ron Johns

Neil Bauder, BCLS #989

Neil Bauder was commissioned on December 21, 2017 in Qualicum Beach by Ron Johns. He was born in Kelowna, and grew up in Brentwood Bay before moving to Surrey for high school.

Neil's interest in surveying began because of a BCIT pamphlet describing the work as ideal for someone with a proficiency for mathematics combined with a rigorous outdoor lifestyle. Being an avid outdoorsman, the prospect of being paid to work outdoors was appealing so he enrolled. After graduation from BCIT he was able to work for a few different firms throughout BC, Alberta and California performing a variety of types of surveys. He realized that the only way he would be able to complete all these types of surveys would be to become a licensed land surveyor. He enjoys the research of historical documents combined with the use of modern technology and field procedures to retrace old surveys.

He would like to thank his wife, Laura for her patience and support throughout the long articling process; his son, Olin for being a beacon of happiness in his life; his parents for listening and providing good guidance throughout his life; all the various land surveyors, coworkers and colleagues who have shared their knowledge of surveying with him over the years; and, Mike and Helen Sims, for giving him an opportunity to return to work on Vancouver Island.

When Neil is not surveying he enjoys mountain biking, snowboarding, hiking and camping with his family.

New Commissions



Chris Cryderman & Connor Embleton



Connor Embleton dirt biking in the mountains

Connor Embleton, BCLS #982

Connor Embleton was commissioned on December 13, 2017 in Delta by Chris Cryderman. He was born and raised in Fredericton NB. Connor chose land surveying when a friend put him on to the Geomatics Department at school and told him how land surveying was the greatest occupation in Canada. He was so intrigued the he went to check out the department and staff — he enrolled in the program the following week!

Connor would like to thank McElhanney and Watson & Barnard for the work experience. He would also like to thank Warren Barnard, Gurp Kooner, Andrew Jenkins, Aaron Creamer and all the people who helped him get where he is today. When Connor is not land surveying you can find him out on the golf course, camping in his Westfalia or dirt biking in the mountains; and during the winter months skiing and playing drums.



Chris Cryderman, Andrew Jenkins



Andrew Jenkins playing golf

Andrew Jenkins, BCLS #983

Andrew Jenkins was commissioned on December 13, 2017 by Chris Cryderman in Delta, BC. He was born in Victoria, BC but grew up in Fredericton, NB. He chose to become a land surveyor to maintain the public cadastre. He would like to thank Jenna for all the support and dinners. When Andrew is not land surveying you can find him playing golf or fantasy football — both equally frustrating!



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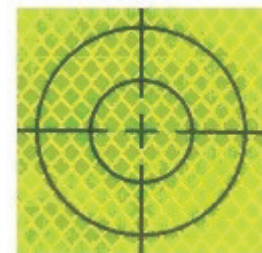
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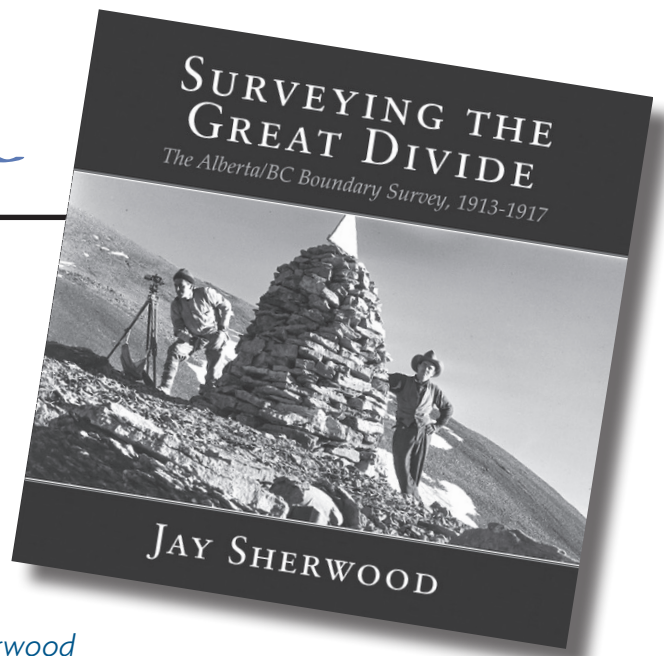
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Book Review

Surveying the Great Divide

The Alberta/BC Boundary Survey, 1913-1917



Author: Jay Sherwood
Publisher: Caitlin Press
Reviewer: Robert Allen

As with all of Jay Sherwood's other books, he has written another well researched and illustrated part of British Columbia and Alberta history. The surveying of the boundary between the two western provinces was no easy feat and the boundary, at 1842 kilometres long, is the longest inter-provincial boundary in Canada, consisting of two distinctly different parts. The northern part follows along a 'man-defined' feature, the 120th meridian of longitude. The southern part, and the focus of this book, follows along a natural feature, the Continental Divide – the spine of the Rocky Mountains, more commonly referred to at the time of the survey as the Great Divide.

From the time that British Columbia became a province in 1871 until near the end of the 19th century, the province was continually in debt and very little money was allocated to surveying any boundaries, let alone



the Provincial boundaries. That started to change near the end of that century with the Klondike Gold Rush as British Columbia's northern and northwestern boundaries became important given the routes to the Klondike gold fields passed over them. In the first decade of the 20th century the British Columbia Governments became more interested in knowing where its boundaries were, due to the

economic development from mining, timber interests, and tourism near its eastern boundary. In April 1912, and shortly after Richard McBride won his fourth Provincial election in British Columbia, the Provincial Government decided to commit to surveying its eastern boundary and George Herbert Dawson, the British Columbia Surveyor General contacted Edouard Deville, the Dominion

Surveyor General, and entered into discussions regarding timing, methods of surveying and cost sharing.

The survey was funded by the Dominion Government as well as the British Columbia and Alberta Governments, through a tripartite agreement, and in June 1913 the final agreement was signed by the two Provinces and the Federal government. British Columbia appointed Arthur Oliver Wheeler as its commissioner, Alberta appointed Richard William (Bill) Cautley as its commissioner, and Deville appointed James Nevin Wallace as the Dominion commissioner. The three of them met in Banff on June 9, 1913 and signed a memorandum outlining the organization of the survey and the scope of work. Wheeler was to “be in charge of the topographical portion of the survey and the establishment of boundary monuments on the peaks adjacent to the passes.” Cautley was to “be in charge of the surveying party required to take levels and make the preliminary survey of the boundary in the various passes and the erection of permanent boundary monuments therein.” Wallace’s position was to be part time; he was to be an advisor and to check the accuracy of the work, and be an arbitrator if there was any disagreement about the location of the boundary. As this was nearing the middle of June, the field parties had to organize very quickly in order to get started on the project in the now shortened 1913 season.

Deville had previously listed the mountain passes that he thought should be surveyed and the first one chosen by the boundary commissioners was the Kicking Horse Pass even though the Crowsnest Pass had the most economic importance.

The Kicking Horse offered them ease of access by railroad and was close to Banff and Calgary, and men and supplies could easily be moved to the site. Each Pass was designated a letter as it was surveyed. Kicking Horse Pass was Pass A, Vermillion Pass was Pass B, Simpson Pass was Pass C, and the list continued on to Pass S, the

was snow in the summer months, swollen creeks and rivers to cross, steep mountains to climb, extreme weather on the mountain tops, and difficulty in finding gravel and water in some areas with which to use to make the concrete monuments. Jay has meticulously gone through all the available material to write a detailed



Yellowhead Pass. The monument that was set at the lowest point of Kicking Horse Pass was numbered 1A. All other monuments set going southerly were with odd numbers and as such were 3A, 5A, 7A, etc. The monuments that were set going northerly were with even numbers and as such were 2A, 4A, 6A, etc. As each of the following passes was surveyed the same numbering system was retained but the letter designated for the Pass was changed to B, C, D, etc.

Fortunately, a number of the field party members kept diaries, good field notes, and wrote letters to family and friends. Most of these are extant and Jay was able to review them and withdraw from them copious amounts of information about the surveys and the conditions under which the crew worked. There

chapter about each year’s fieldwork from 1913 to 1917. Besides these five yearly chapters, there are additional chapters on the “Background”, the “Cast of Characters”, the “Surveying Methods”, and “Geographical Names”, as well as an “Afterword”, a list of the “Survey Crews”, “Acknowledgements” and a lengthy list of “Sources” and an “Index”.

One of the requirements of Wheeler was to take a ‘round’ of photographs at each of his survey stations. He took nearly 2,000 of them, and Jay has incorporated a number of those photographs in each chapter. During this past decade members of the Mountain Legacy Project have returned to some of those survey stations and “the repeat photographs that they have taken are being used by scientists to document a variety

of changes that have occurred in the landscape during the past century.” Jay has used a number of these repeat photographs to show these changes himself. Not only have the members of the Mountain Legacy Project taken a number of photographs but Jay has taken many repeat photographs himself and they, too, are used extensively throughout the book. In the summer of 2017, a large wild fire burned in the Akamina Pass altering its landscape and ecosystem. Between the photographs taken by Wheeler and Cautley, as well as those taken by the Mountain Legacy Project and by the author, Jay Sherwood, scientists will be able to document “the regeneration of the ecosystem and landscape changes in this scenic location”.

This boundary survey took place during the worst part of World War 1 and “despite the rugged terrain, financial restraints caused by World War 1, and the shortage of qualified personnel, A.O. Wheeler, R.W. Cautley and their assistants succeeded in producing an accurate survey and maintaining the project during these five difficult years”. From 1918 to 1924, Wheeler continued to add more to the survey of the Great Divide, while Cautley moved further north to survey the 120th meridian northward from the Great Divide through the Peace River area. That latter portion of work undertaken by Cautley could probably fill a book of its own.

I moved from the Coast to Fort St. John to work in February 1968 and I still remember being awestruck by the Rocky Mountains as I drove through the Pine Pass. This was the first time I had ever seen them. While the Pine Pass isn’t near the British Columbia/Alberta boundary, the mountains are nearly as massive as those Wheeler and Cautley had to

work in. While living in Fort St. John I drove across the 120th meridian on numerous occasions, both for work and for pleasure. In later years, I have driven across our southern border and the northern boundary into the Yukon and across the north western boundary following the Yukon Gold Rush trail but I am still spellbound each time I drive through the Yellowhead, Kicking Horse, Vermillion, or Crowsnest Passes, thinking of the hardships involved in surveying that border. I am sure we have all driven by the signs that say “Welcome to Alberta” and after reading this book, it will give a better appreciation into what was involved in determining where along the highway those signs should be placed. The next time through one of those passes, I will actually stop and give a tip of my hat to Wheeler, Cautley, and their crews.

Thank you Jay Sherwood for putting this book together to commemorate these great men and this great country on Canada’s 150th birthday and on the 100th anniversary of the completion of the survey of this part of the British Columbia/Alberta boundary. ❖

This book review is also available online through The Ormsby Review website at www.bcbooklook.com/2018/02/25/the-divide-of-mountains-and-wine/

The book review editor for The Ormsby Review is Richard Mackie and our Association had talked to Richard about writing the book on the history of Land Surveying in British Columbia but in the end, Katherine Gordon wrote the book, *Made to Measure*, for us. Richard has written numerous historical books including

one on George Drabble, BCLS, (see the book review I wrote in the July 1996 issue of The Link), *Island Timber* and *Mountain Timber*, both about the Comox Logging Company. More can be read about Richard at:

www.bcbooklook.com/2016/09/28/about-the-editor-richard-mackie/

The Ormsby Review is a new journal for serious coverage of British Columbia literature and other arts and can be found here:

www.bcbooklook.com/

Robert Allen is a Life Member of the Association of British Columbia Land Surveyors (ABCLS), a Life Member of the Canadian Institute of Geomatics, and a Canada Lands Surveyor and is now retired from active practice. He is a past president of both the ABCLS and the Association of Canada Lands Surveyors and he has served as the Chair of the ABCLS Historical and Biographical Committee for the past 25 years. He was raised in Courtenay and spent most of his working career in Sechelt. In his retirement, he is active in Sunshine Coast Search and Rescue (Team Leader and Treasurer), the Sunshine Coast Lions Club (Past President), and the Sunshine Coast Lions Housing Society (President). This latter Society runs a 20 million dollar, soon to be 40 million dollar, subsidized housing complex in Sechelt for Seniors and others with disabilities.



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BIOGRAPHY

Leta Best

Leta was born, raised, and spent her entire life in Victoria, where both her parents were born.

In June 1968, she established Best Bookkeeping Service. In July 1972, Frank L. Kitto—then one of Leta’s accounting clients—and Leta were working in Frank’s Notary office when he commented, “Do you know of a good young man to become my son’s partner when I retire?”

“Yes. Me!” she answered.

In 1976, Leta was the first woman to establish a Notary practice in Victoria. She was a strong role model for young women of today. Leta worked hard to succeed in her profession. Upgrading her skills was always a high priority and she always took the time to give back to her community. She said,

“While many of us aspire to greatness, few achieve great heights. It is, however, within each of our grasps to make a difference. Be a mentor, be a coach, and by natural extension, you will be a role model.”

A highly capable and enthusiastic individual, Leta served as a Director on the Board of The Society from 1988 and chaired many committees to serve her fellow members. She was President from 2002 to 2004 and Chair of The Notary Foundation from 2004 to 2006. She was also a Trustee for the BC Land Surveyors Foundation.

A familiar adage says if you want something done, get a busy person to do it. Leta Best certainly qualified. And through the constant pressure and large workload of her businesses,

she managed to stay collected, efficient, courteous, and patient. The questions were answered; calls and emails were returned; the work was done.

Leta enjoyed other commitments—community activities and relationships with loved ones and friends—that added balance, texture, and a high level of satisfaction to her life. She also scheduled time to get away on an annual vacation. Looking ahead to that break each year may have been part of her secret for being able to work late hours, yet bounce back the next day refreshed and ready for more.

For many years, Leta volunteered her expertise to the United Way of Victoria and to Zonta, an international association whose local chapters are dedicated to helping women better themselves and find job opportunities. www.zonta.org.

Leta was recognized as Canadian Woman Entrepreneur of the Year—First Place for British Columbia in the category of Lifetime Achievement. To be eligible for that award, you must be in business for at least 20 years and be a beacon for others to follow. Leta Best qualified on both accounts.

In her Spring 2002 interview in The Scrivener,* when asked what she valued most in life, this was Leta’s response: “Number one—without any qualification—is my family. My children and grandchildren are my greatest joy. I can’t even begin to imagine what my life would be without them. All that I have achieved and all that I have done pales in comparison to my love for my family.”



Her children Gary and Elizabeth, her grandchildren, friends, and associates will miss her very much.

**www.notaries.bc.ca/scrivener
Archives: Spring 2002*

Chuck Salmon, BCLS, Retired

I am very sorry to hear of Leta Best’s passing as I have known her for many years. About 30 or 40 years ago, she notarized some documents for me. In recent times I worked with her when she served as a Trustee on the BC Land Surveyor’s Foundation from 2001 to 2006. In her role as Trustee, she participated fully and provided valuable insight into the operation of the Foundation and its fundraising efforts. Her service was well respected by the other Trustees. Those of us in the land surveying profession who worked closely with her will miss her ... a wonderful person who always had time to stop and chat! ❖



Reprinted with permission from the Winter 2017 issue of the Scrivener Magazine

40th Anniversary of McElhanney, Fort St. John

By Kerry Lawson, BCLS

On November 30, 2017 McElhanney celebrated 40 years of operation in Fort St. John. For this event multiple stations within our office were set up, showcasing the people, processes and equipment used in our profession. We also had a career station for employment, and of course, a station for entry into our profession.

We had invited high school students to attend and officially had 210 students from the Energetic Learning Campus of North Peace Secondary School. The students with their teachers visited our office stations for a couple hours in the morning and again in the early afternoon. For the most part the students were amazed to view our equipment presentations and sit in on some hands-on events demonstrating equipment, processes and our final products.

Evan Hsiao and I presented to groups of students on behalf of our Association. We spoke about our profession and the ethics and passion we have as an Association. The handouts supplied to us by the ABCLS were distributed to students. We received responses from the students and the teachers that the career event was very informative and a well-liked outing for this group. ❖



Kerry Lawson, BCLS and Evan Hsiao, BCLS



Information Station on Route Planning



Display of Survey equipment and supplies



Information Station on Geomatics Technologies

The Mystery of the J. Underhill Chisel

By Robert Allen, BCLS (Life member); CLS (Ret'd)

On December 23, 2015, Chris Cryderman sent me an email that said in part: “Here is a little historical puzzle for you. We were contacted by a treasure hunter named David Gunner. He dug up a chisel at Lone Butte Ranch in Ashcroft. Photos are attached. It appears to be stamped “J. Underhill”, and has either an arrow, or tripod, cut into it. Ivan Royan is going to go meet him up there over the holidays and get a GPS position for where it was found. We should be able to establish if it was associated with a survey done by J.T. Underhill. The stamping seems to me to be far too regular to be done with individual dies one at a time. Have you ever come across chisels like this? From the mushrooming it looks like it may have been used as a rock drill.”

That did set a little treasure hunt in motion. I had not seen anything like that before but I was interested in its history as well. After a few other emails back and forth with Chris over an eighteen month time period, he did find Ivan's notes as to its location and sent me another email on August 2, 2017, which read in part: “Finally found Ivan's old “X” marks the spot plan where David Gunner found the Chisel. Estimated coordinates N50.7463, W121.2329. I did a search through Underhill's records in the area and could not find anything. The only connection I found was the Railway Plan A241. It was surveyed by G.M. Christie, July 10, 1917. Christie worked for the CNR. We have some of his old notes, and his Spiral Tables. I believe his connection was that after he retired he used to work for

Underhill & Underhill in the summer, running the Vancouver office while Clare and Jim were out of town. Probably just a coincidence. Maybe J. T.

Underhill just threw it off the train.” The last sentence was in jest of course.

I plotted Ivan's location on my mapping and found it was within metres of the location of a now-archived geocache called Butte Ranch (GC1TWTM) that I had found on July 5, 2010. I might have even stepped on it myself but at the time I wasn't looking for chisels; I was looking for a geocache ‘treasure box’ and trying to avoid possible rattlesnakes. On September 13, 2017 I sent a note to Chris along with copies of the two pages from the geocaching book that described the Butte Ranch geocache.

Part of the write-up for the geocache said: “In 1909, Mrs. Lewell [sic], a recent widow with two young sons also settled here. “Mrs. Lewell [sic] has moved into her fine house which she had built on her land at the Butte Ranch. The house, a modern ten room structure, was erected by Bob Stoddard.” According to her son Bernard (Bill), “Mother had the house designed around the carpet that was to go in the living room.”

I didn't think too much about the Lewell [sic] connection until Chris got back to me that same day and said: “Very interesting info about the Butte Ranch. So was Mrs. Lewall the mother of Bernard Cecil (Bill) Lewall? Bill Lewall articulated to J.T. Underhill. J.T. and Bill worked together on The Underhill Island Survey and J.T. named an Inlet after him. It was a surveyor in Edmonton that first called and asked about Underhill Island that got me digging through our old records, and eventually the



J. Underhill chisel (with a pen beside to indicate size)

A close-up of the chisel on top of part of the plan for the survey of Underhill Island.

Underhill Island is in the centre above the chisel and Lewall Inlet is the L-shaped inlet above the chisel on the left side.





The Lewall House not long after it was built.

have ended up there. She quickly dove into files and came up with interesting information and photographs, including the same Lewall family history that Russell Shortt had provided me that prompted my article about Bernard (Bill)

when Bill Lewall was working for Underhills at the time, he might have visited his mother and accidentally dropped the chisel only to be found nearly 100 years later. Chris also said to me: "JT (Underhill) was known for writing his name on everything. We have a number of pieces of drafting equipment with his initials on them. Bill Chapman has as well. He must have been good at losing stuff, or afraid of it being nicked. I guess we all did the same thing with calculators."

Soon after returning home, I sent Kathy the article from The Link that I had put together about Bill Lewall and because I mentioned a connection to Duncan Cran, BCLS #193, in it she soon got back to me and wondered: "The name Duncan Cran is also familiar to me, was he in Ashcroft also at one time?" About a month later and after a few more emails, Kathy got back to me to say that according to the 1901 census records, Duncan Cran lived in Ashcroft with his family as a young boy while his father was a bank manager there.

In one of my discussions with Kathy, I mentioned that it might have been

The Lewall home was on this flat by the Thompson River and is the location where the chisel was found.



Provincial Archives. You found another connection!" For information about the survey of Underhill Island and surrounding area, see: <http://www.underhill.ca/land-survey-project/13/underhill-island-bc>

Lewall, BCLS #237, in the March 2007 issue of The Link. Kathy also sent me a few photographs of the Butte Ranch area amongst some other tidbits.

Things were now falling into place. Between Chris and me, we think that

Two days later on September 15, 2017, I was in Ashcroft and went to the Ashcroft Museum in hopes of finding out more about the Butte Ranch. Prior to that, I had noted the write-up about Butte Ranch on the geocaching webpage was by Kathy Paulos. The doors to the Museum were locked but a note on the door said "Back in 15 minutes, Kathy Paulos." I didn't know when the 15 minutes started but as I was walking back to my car, a woman came jogging down the road to say she would open the doors for me and, as luck would have it, it was Kathy Paulos! I felt like I had hit the jackpot; she was just the person I was looking for. I told her of the chisel and that I was trying to find out some information about how it might



The red arrow shows the approximate location of the Lewall House. A postcard compliments of the Ashcroft Museum

G(erry) M Christie who had left the chisel behind and one of the tidbits she sent on to me was the fact that Gerry Christie and his older brother, Reg Christie, both lived the early parts of their lives in Ashcroft and, as we know, they also both went on to become British Columbia Land Surveyors. So that takes us full circle back to near the beginning of this story. To further the story a little bit more though, while looking up the Christie brothers in the BCLS Nominal Roll, another name jumped off the page and that was

(Hugh) Cornwall, another well-known family name in the Ashcroft area. It turns out that Hugh Cornwall, BCLS #166 was from Ashcroft as well and was the son of an early Lieutenant-Governor of British Columbia, Clement Francis Cornwall.

While Ashcroft doesn't quite enjoy the stature it once did, it is still an interesting village, full of history and the home town of five British Columbia Land Surveyors: Reg Christie, Hugh Cornwall, Gerry Christie, Duncan Cran, and Bill

Lewall. This group deserves a write-up of their own in a future issue.

Again, between Chris and me, we think that Bill Lewall probably visited his mother and accidentally dropped the chisel only for it to be found nearly 100 years later. Thanks go to David Gunner for finding the chisel and helping bring back some old history and to Chris Cryderman, Ivan Royan, and especially Kathy Paulos for helping solve the puzzle. What mystery should we work on next? ❖

OIP Group Luncheon

The OIP Group had its first luncheon of the new year on Monday, January 8, 2018 at the Creekside Grill. The Creekside Grill is located at the EagleQuest golf course in Surrey and this was our first visit to this eating establishment. At the beginning of the year it looked like the weather might be a problem for some members to access the luncheon but things turned around and there was a great turn out with 21 surveyors in attendance.

Present were George Fenning, Larry Achtemichuk, John Nash, Robert Allen, Bill Chapman, Don Watson, Keith Errington, George Robertson, Dai Yates, Dick Mak, Ralph Turner, Denny De Meyer, Stan Nickel, Wayne Griffith, Martin Schulze, Dave Liddle, Dave Dyck, Chris James, Helge Jacobsen, Ron Scobbie and our newest member Allen Olsen.

Our first order of business was to have a moment of silence to remember Gordon Cameron. From there Wayne

went on to introducing our newest retired member to the luncheon, Allen Olsen. Allen told us a little bit about himself before we got on with eating and socializing.

The luncheon passed quickly and Dick Mak, Ralph Turner and Keith Errington found time for jokes before Ralph Turner tossed out a challenge. Ralph challenged the Group to tell about the dumbest thing you had ever done in your life. After Ralph's tale, there were

several other takers but no clear-cut winner was declared before it was time to call it a day and head for home.

Everyone had a good time and the new location seemed acceptable to all. The food and service were excellent and it was decided our next luncheon would be on Monday, May 7th at the same location. Remember that new members are always welcome and if you would like to join the OIP Group contact Wayne Griffith at wmgiffith@shaw.ca ❖



Keith Errington sharing a joke.

Our newest OIP Group member: Allen Olsen

Larry Achtemichuk (left) Dave Liddle (center) and George Robertson (right) enjoying the luncheon humour.



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Doug Roy's Photo Albums (Album #2)

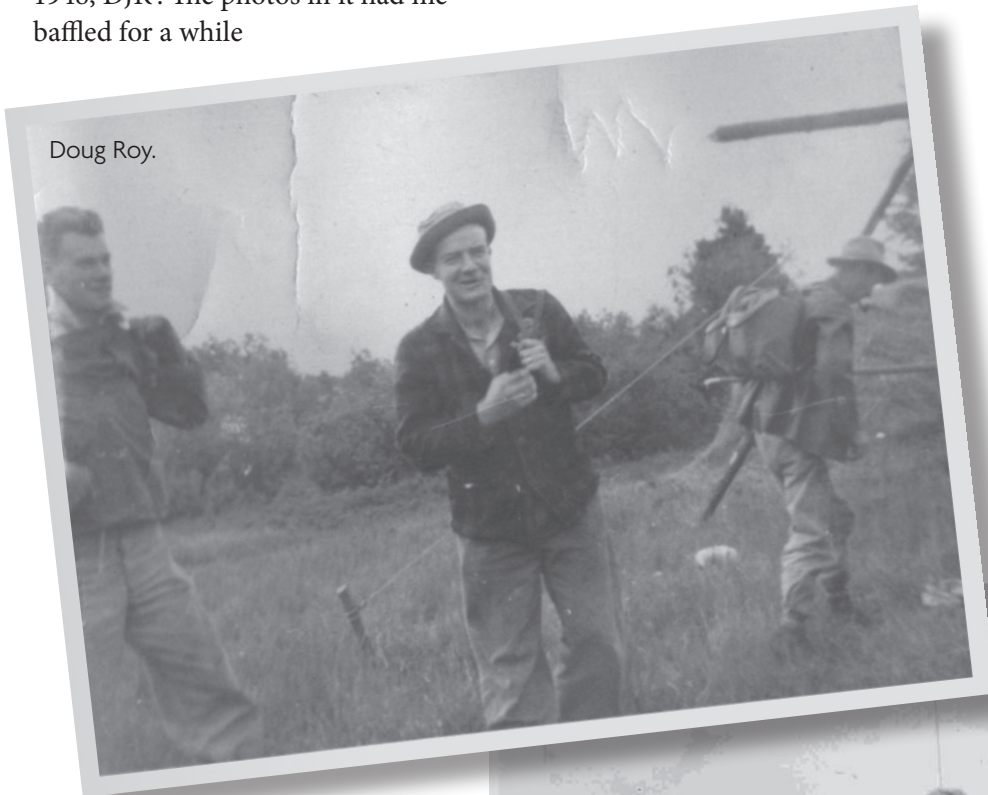
By Robert Allen, BCLS (Life member); CLS (Ret'd)

In the April 2017 issue of The Link I had an article about two of Doug Roy's photo albums and, in particular, about his album from 1943 and his time in northern Quebec and Nunavut. His second album was titled "Prince George, BC, Summer 1948, DJR". The photos in it had me baffled for a while

J/2 and 93 J/3 and his album actually covers both years. His 1948 report is titled: "Topographic Survey of Isle Pierre Area by D.J. Roy, B.Sc., C.E." and his 1949 report is titled: "Topographic Survey of Prince George Area by D.J. Roy, B.Sc., C.E." Both

surveys and reports were done before Doug became a BCLS and a DLS.

As was the case for all field work done in those years for the Provincial Government, in addition to the specific requirements for the summer season, the field parties were to make note of any physical characteristics, the type of forest, any minerals, the type of game animals, the climate, access to and throughout the area, any settlement, possible tourist trade, etc. In both years, "The purpose of the survey was to establish horizontal and vertical control sufficient for compilation, from vertical air photographs, of a topographical map at a plotting scale of 2 inches to the mile. Contour interval to be 100 feet." In his report, Doug goes on to say: "The terrain did not lend itself to the photo-topographic approach,



until Jay Sherwood dug out some information from the Office of the Surveyor General and from there, they all, or mostly all, made sense.

In 1948, Doug was working a short distance west of Prince George in the area of NTS Mapsheet 93 G/14 and in 1949, he was working north and north-west of Prince George in the area of NTS Mapsheets 93

Survey party, Doug Roy is second from right, the rest of survey party is unidentified.



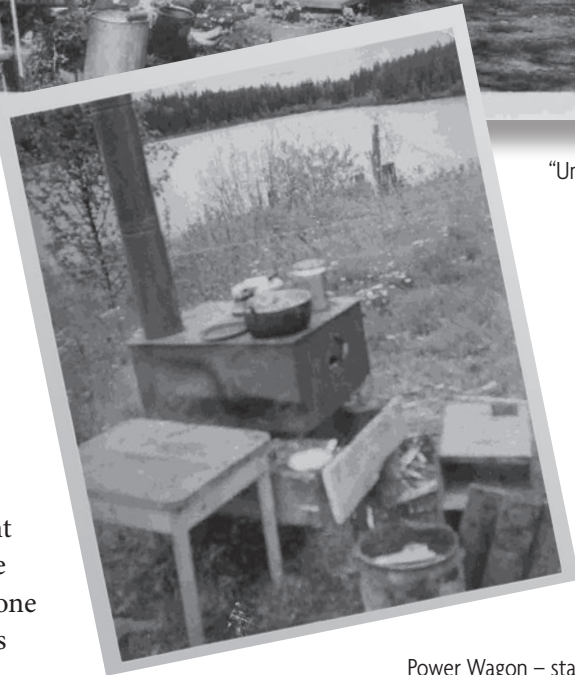
so horizontal control was established through the medium of transit and tape traverse of third order accuracy.” They started their survey from existing triangulation stations and from there they set out photo control points and tied to any nearby cadastral surveys. Vertical control was established off benchmarks along the Canadian National Railway and was carried along by spirit level, trigonometric levels, and barometers. There were sufficient roads in the areas and they were able to traverse along them, making the work not too difficult.

In 1948, there were seven on staff; Doug, five assistants, and a cook, and they spent most of the season “under canvas” (in tents) at Isle Pierre which was the centre of their work area. In 1949, they “... were camped under canvas and occupied six main camps during the course of the season” and their work commenced in the Finmoore area in the west in late May and ended to the east in Willow River near the middle of September. In 1948 they ran 125 miles (200 km) of traverse, and in 1949 they ran 90 miles (145 km) of traverse, and nearly the same length of spirit levels each year.

Having spent four years surveying in the Peace River country from 1968 to 1972, I got an appreciation for travel in remote areas and so I am always interested in how others managed to get around. In 1948 Doug and his crew had a one-ton “express” (truck) and a half ton “light delivery” (pick up). In 1949 they had three trucks: “... a half-ton Ford, a 1-ton Mercury, and an army-type power-wagon. The latter deserves a special word of commendation — a more versatile, rugged, and serviceable form of transport would be difficult to imagine.” How true! Those power-wagons could go almost anywhere.



“Under canvas”.
A typical
tent camp.



Outside
cook stove,
complete
with oven.

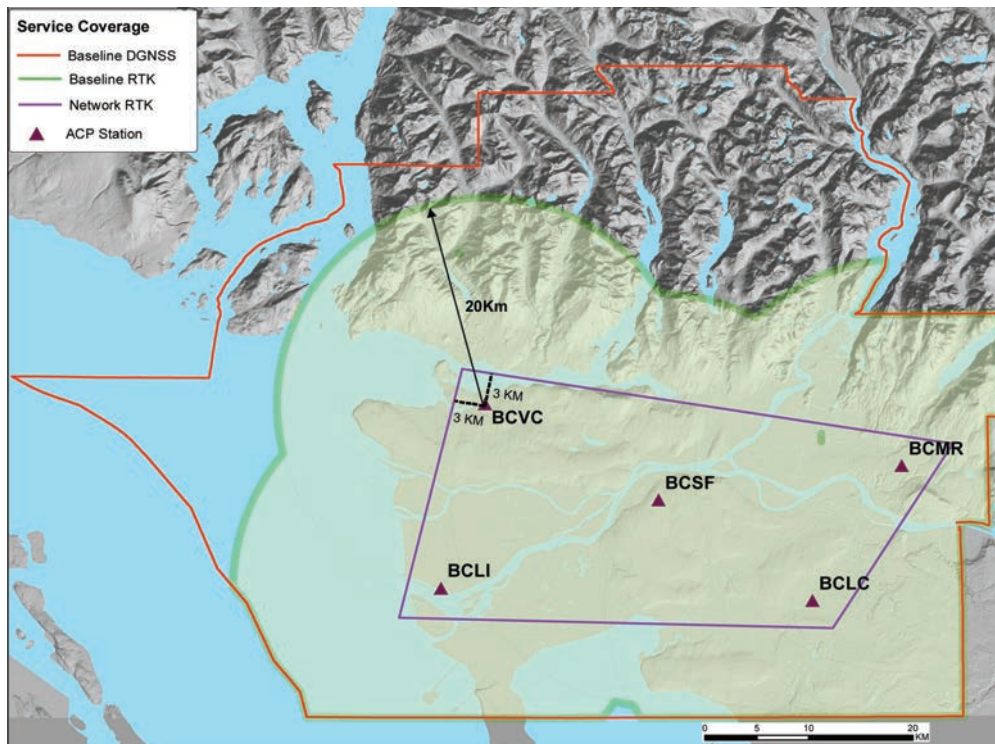
There was a ferry at Isle Pierre, a reaction or current ferry, and Doug described it as “... the landings for which are a continual source of trouble.” A reaction ferry uses the current and the direction the bow points to cross one way or the other. It is

Power Wagon – staff unidentified.



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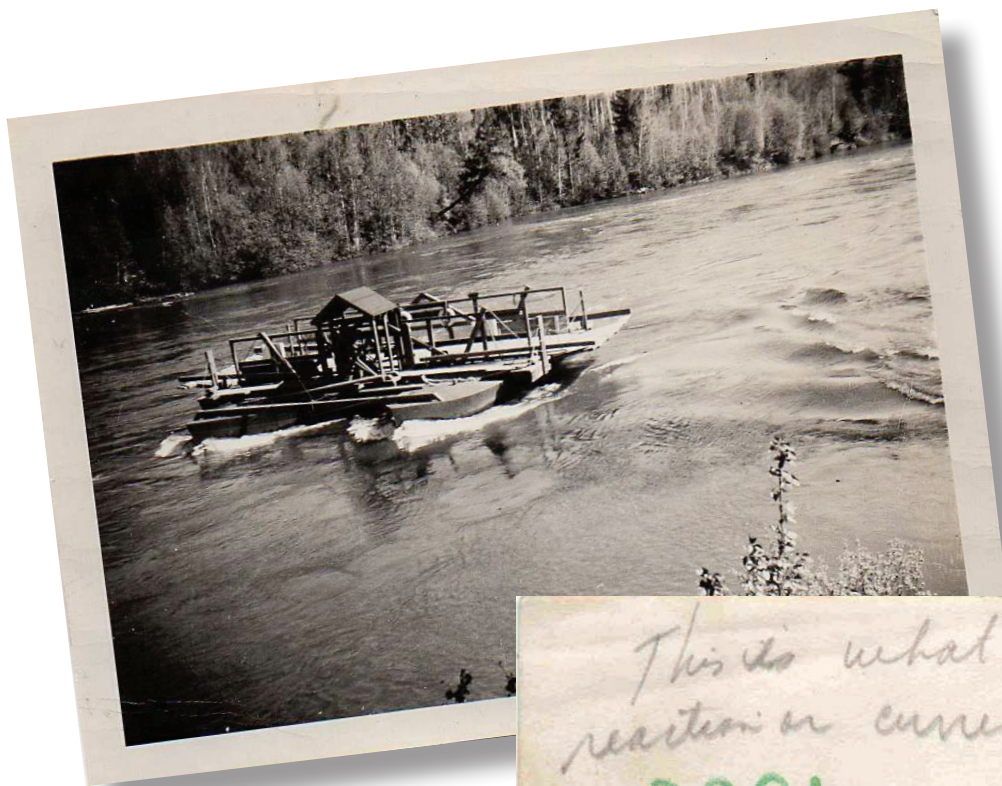
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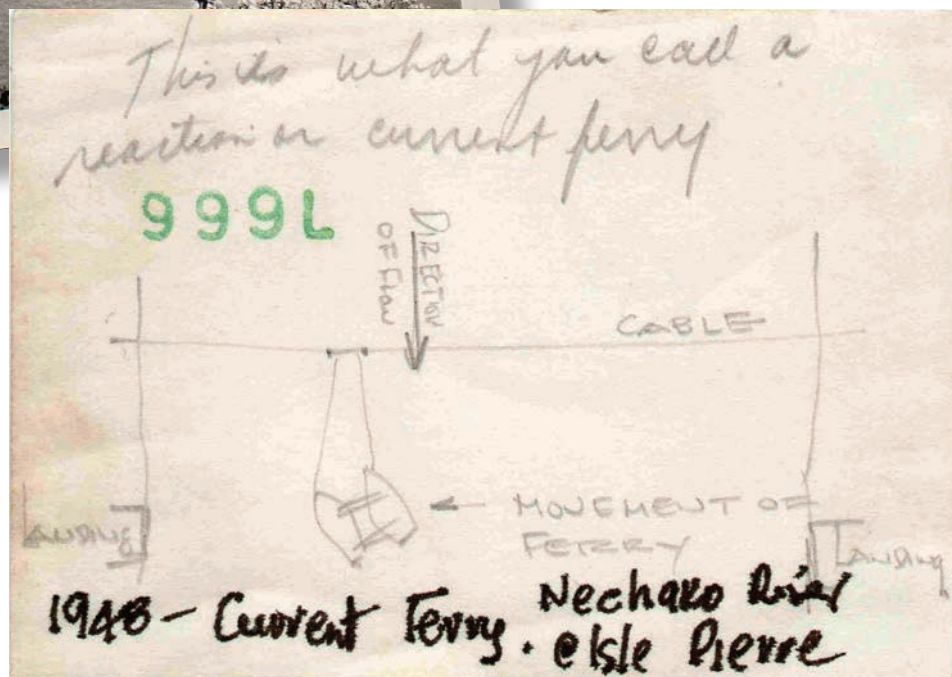


Reaction ferry at Isle Pierre.

Explanation on how a reaction ferry works.

connected by a cable and is tied to both sides of the river. Doug took a photo of it and described on the back of the photo how the ferry worked. See the accompanying photos for his description.

The photo album doesn't identify very many people or locations where the photos were taken but some of the survey party noted, from what I think is the 1948 season, are: Bud Temple, Buck Jones, R.K. Blakely, Don Layar, and Wilf Douglas. The names are hard to read in Doug's album so the photos accompanying this article may not be completely correct. If anyone knows any of these people, I would be interested in hearing from you. Wilf Douglas went on to become British Columbia Land Surveyor #286 in 1950 and he passed away in 1999. Doug Roy went on to become British Columbia Land Surveyor #295, also in 1950, and Dominion Land Surveyor #801 in 1951. Doug was elected to Life membership in the Association of British Columbia Land Surveyors in 2013 and passed away a short time later.



The location of the next three photos is a bit of a mystery that I am hoping a reader might be able to solve for me. Looking at the photos and the location and shortness of the shadows, it looks like they were taken about noon in the summer and the first one on the left is looking easterly and the second and third ones are looking westerly and taken from the same location. The railroad, which I am assuming is the GTP/CNR, is to the north of the road which I am also assuming is Highway 16 but I don't know for sure. Could it be Highway 97? It looks

like a tunnel along the railroad on the eastern end of the eastward looking photo and on the same photo, it looks like a substantial river to the south of the road. The road appears to be going through a canyon going easterly and there is a substantial mountain to the immediate north.

The sign on the westward looking photos says: "End of Construction, Thank you, British Columbia Dept. of Public Works, Highway Construction Co. Ltd." The white coloured car, second from the front in the two westward looking photos looks to me like a 1947

L to R:
R.K. Blakely,
Buck Jones,
Don Laya



Studebaker. The other cars I'm not sure of. I am assuming the road is Highway 16 given the long line up of cars and the construction is to the east of the photos. I did receive one suggestion from a long-time Prince George resident and historian who said:

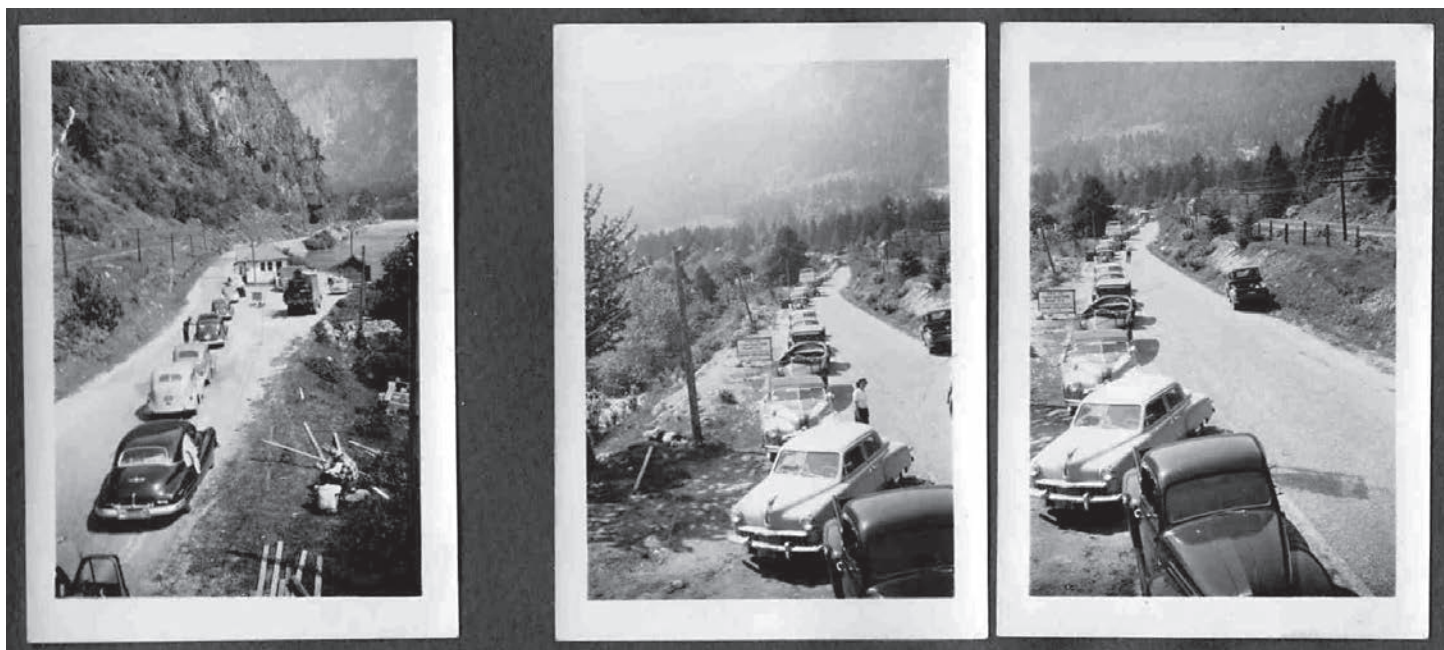
"I would put this activity out in the Tete Jaune area. In 1948 there was the beginnings of a push to get a road through to Jasper. Cavalcades were common too — whenever a certain

point was reach in the Post-War road building program, there seemed to be a celebration. The date is too early to be connected to the Prince George/McBride road, it was not put through until the mid-60s."

I'm not sure that Doug would have travelled that far afield (Tete Jaune area) from where he was working but he might have. If anyone else has ideas about where it might be, I would really appreciate knowing.

In due course, I plan to donate Doug Roy's album and all of my own old northern British Columbia photos to the Northern BC Archives in the Geoffrey R. Weller Library at the University of Northern British Columbia in Prince George. ❖

*Robert Allen, BCLS (Life member);
CLS (Ret.) Sechelt, BC.
robert.allen.bcls@gmail.com*



Where am I?

Old 1887 Bearing Tree – Found 1986 on Haida Gwaii (Queen Charlotte Island)

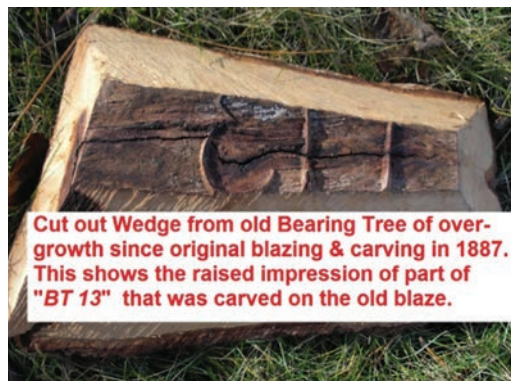
Submitted by Larry Marshik, BCLS (Ret'd)

1887 Bearing Trees

Found on Haida Gwaii (Queen Charlotte Islands) during the first resurvey (in 1986) of Kose I.R. 9 on the Naden River, Graham Island.

This is a small unoccupied isolated Reserve. These two Bearing Trees were the first 1887 boundary evidence we found — finally — after several days of searching at or along all of the four Reserve corners and boundaries

Both Larry Achtemichuk and myself worked in the field on this Canada Lands survey. ❖



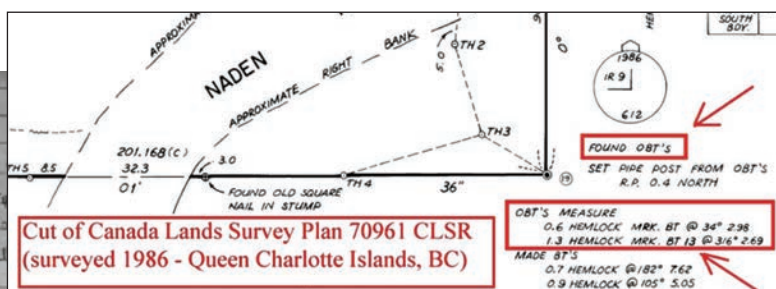
Original 1887 Survey Field Notes Showing 2 Bearing Trees made (at SE corner of Indian Reserve

Transcription

BT Hemlock 4 lks diam
N43 45' W 13 lks dist

BT Hemlock 2 lks diam
N32 E 15 lks dist

In 1887 the surveyor would have axe cut a smooth blaze on the tree and carved "BT 13" and "BT 15" on the appropriate tree. Which is the distance (in links) from the blaze to the wooden corner post.



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Complaint Inquiry Committee

It Isn't All Statutory

The membership may not be aware, but CIC often deals with complaints about so-called “non-statutory” work carried out by BC Land Surveyors; that is, surveys which do not result in a plan prepared pursuant to a provincial statute for filing in the Land Title Register or Crown Land Registry. In the last several years, there have been complaints dealing with such things as volumetric calculations affecting allowable building sizes, incorrect use of location certificates and topographic surveys, delineation of yard areas in a multi-unit rental situation, and conflict of interest, to name a few. Many jurisdictions already have, or are in the process of adopting, bylaws requiring BC Land surveyors to produce sketches and documents in support of land use applications, and care must be taken to avoid problems which may arise. Many of the situations that have resulted in complaints to the CIC could have been avoided by following a few simple procedures, and the CIC recommends they be adopted into your standard business practice.

The Professional Reference Manual (PRM) is a valuable resource that can help you overcome potential problems if the recommendations in it are implemented. As an example, one of the complaints dealt with in 2017 resulted from a client's contractor using a topographic survey plan produced for building design and approval purposes, as the basis for removing a hedge that was in close proximity to the property line. This

seriously affected the privacy of a neighbour who had planted the hedge many years ago along the boundary, when the corner posts were in place. Over the years, the hedge appeared to have grown onto both properties. When challenged by the neighbour, the land surveyor's client produced the topographic survey plan showing the hedge symbolically; but perhaps offset more to the client's side of the boundary than the neighbour's side. The precise location of the stems of the trees comprising the hedge was never determined or plotted because the purpose of the survey did not require it. In this case, the member had followed recommendations from the Manual including statements regarding the purpose of the plan and clearly indicating that the plan shall not be used to define property lines. The CIC decided to take no further action.

The following items, if implemented, can greatly assist members when undertaking non-statutory work, and minimize any potential for a complaint being made after work is complete:

1. Have a clear understanding of why the client wants the survey and how it will be used after it is completed. This will initially be based on discussions with the client but should be followed with a written statement of the scope of the services that will be provided and what the deliverables can be used for. By following this simple procedure it is clear to all, at the start, what will be provided and how

it can be used. This isn't an onerous task, as over time, you will develop templates for these engagement letters and it will go a long way in preventing future liabilities should your work be misused in the future. Too often the CIC sees examples where this wasn't done and the scope of work is just a short note or telephone message put into the file as it is opened ... if even that is done.

2. Land surveyors should have a clear understanding of municipal bylaw requirements when conducting non-statutory work. Not all municipalities have the same requirements and it is not uncommon to have different definitions for the same thing. Spend some time understanding the specific needs of the municipality, document them, and most importantly, make sure your field crew understands them as well. Things like drip line determinations, at what height tree diameters get measured, and setbacks to natural boundaries, do change from jurisdiction to jurisdiction. Requirements related to natural boundaries can often be confusing because different bylaws within a single municipality may have different setback distances, or different methods by which setbacks are determined. What does the zoning say, and is there something different in the Official Community Plan or another bylaw? And are these setbacks different from those in the Riparian Area Regulation?



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3. Be open, clear and honest with your client about any potential conflict of interest you may have even if it is just previous work done on the land or adjacent properties. Often, we see this as an advantage because we can come off that work and reduce the client's costs; but you do not know if your client will view it the same way. They may perceive that you have a bias, or perhaps they have an issue with your previous client. Let the new client know this history and let them be the one to decide if there is a conflict of interest. It is the ethical and professional thing to do.
4. Document discussions you have with the client, especially when it involves the scope or changes to the scope of the work you will do. For significant items, your notes

outlining your understanding of the request or requested change should be given to the client. By doing this it will be clear to you and your client what your understanding of the project is, what the deliverables will be, and how they can be used.

5. Take the time to read and understand the suggestions made in the PRM for non-statutory work. As BC Land Surveyors, we sometimes tend to just concentrate on our statutory obligations but this other work is just as important because the client is coming to you for your expertise and professional knowledge. The suggestions provided in the PRM go an extremely long way to minimizing problems that may result in a complaint being filed to the CIC.

The PRM also provides suggested statements to consider placing on non-statutory plans to reduce misunderstandings and prevent future problems. The Practice Advisory Department has checklists posted on the Association web site that can assist in the preparation of non-statutory plans.

Important chapters within the PRM for non-statutory work are:

- Chapter 5 Code of Ethics
- Chapter 12 Building Location Certificates which also includes construction layout surveys
- Chapter 13 Plans of Topography

For those of you that have taken any of the Continuing Professional Development seminars in the last few years provided by our liability insurers, most of the above points have also been presented at those and are not new. These are suggestions, which go a long way to minimizing liabilities and complaints being made to the CIC about the services and products you deliver to your clients. ❖

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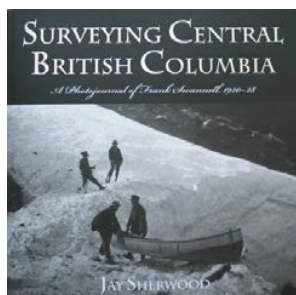
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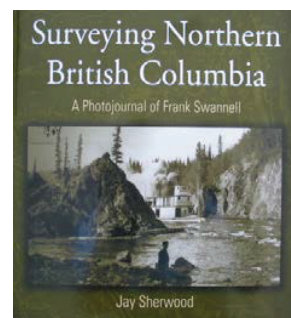
FINANCIAL CONTRIBUTIONS TO THE BC LAND SURVEYORS FOUNDATION

The two primary objectives of the BC Land Surveyors Foundation are to create and maintain a library that houses historical and current reference material related to the surveying industry in British Columbia and financially assist students who wish to pursue careers in surveying by providing scholarships and bursaries.

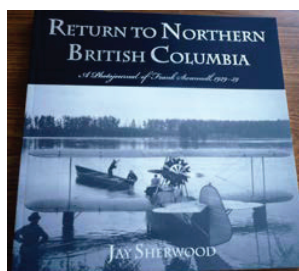
The Foundation has a number of books for sale - consider purchasing them for members of your staff, local schools, or libraries. They will make a wonderful gift and at the same time, your contributions will help support the Foundation. The following books are available from the ABCLS office:



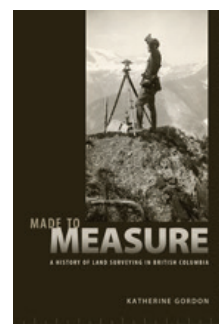
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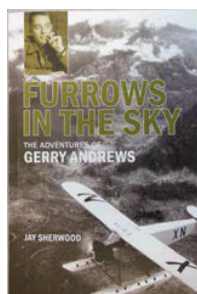
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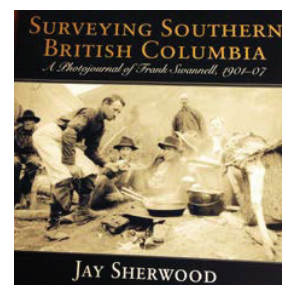
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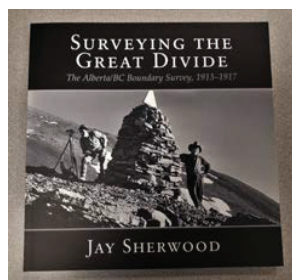
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Additional information on these books can be found on the [Foundation/Books for Sale](#) page of the ABCLS website.

The BCLS Foundation Trustees would like to invite all land surveyors to help support these worthy causes through financial contributions. If you are interested and willing to donate, you may contribute by cheque or credit card. You might also like to consider

leaving a **Legacy Donation** through your will to contribute to existing scholarships - or to establish a new scholarship in your name. You can do this by stating in your will that the bequest should be made to: *The BC Land Surveyors Foundation, Suite 301-2400 Bevan Avenue, Sidney, BC V8L 1W1*. Donations by credit card can be given by calling our Association office: 250-655-7222. All cheques should be made payable to the BC Land Surveyors Foundation and mailed to the Association office. Please provide your name(s) and mailing address so a receipt can be forwarded to you.

Our thanks to you for helping to ensure the future of the land surveying profession.

Digital Signatures on Non-Statute Survey Plans

Background

BC land surveyors prepare plans that fall into two broad categories:

1. Those that are prepared pursuant to a provincial statute and are filed in the Land Title Register or the Crown Land Registry (“statutory plans”); and
2. Those plans that are not prepared pursuant to a statute, like building location certificates and topographic survey plans (“non-statute plans”).

BC land surveyors are required to apply their Juricert issued digital certificate to statutory plans. When a statutory plan is submitted into the Land Title and Survey Authority’s (LTSA) myLTSA, the system reads the digital certificate and then sends certain information to Juricert, (i.e. the Law Society of BC), who in turn checks the credentials against information, (that the ABCLS maintains in the case of a land surveyor), and confirms, or otherwise, that the land surveyor who signed the plan was authorized to do so on the day the electronic signature was applied.

It is important to remember that the online identity and professional credentials associated with a Juricert digital certificate are third-party verified only during the submission of a statutory plan or document to the LTSA; a Juricert digital certificate used for submissions to entities outside of the LTSA is not checked by Juricert.

One of the benefits of digital signatures is that they enable locking of a document so that it cannot be altered

in a non-permitted manner without invalidating the digital signature.

The Issue

Increasingly, land surveyors are preparing electronic documents, including electronic non-statute plans. As with signed hardcopies, many end users will be comfortable accepting electronic plans that are electronically signed without undertaking a process which confirms the authenticity of the digital signature, (i.e. is the electronic signatory that of a practising land surveyor in good standing?)

Other end users may prefer to undertake some type of validation process. For these end users, some digital signature validation steps are suggested below.

Suggestions for Digital ID Validation

1. The land surveyor creates a self-signed digital ID in Adobe Acrobat to be used with non-statute plans. This process is described in the Adobe help section; query “Digital ID FAQ” and select “Create a self-signed digital ID”.

The appearance of Digital ID’s are customizable, and some land surveyors have noted that there is less uncertainty about their digital signatures from end users if the appearance includes a graphic of a physical signature.

2. If desirable, the end user may request that the land surveyor export his or her digital certificate from Adobe Acrobat to the end

user. The end user can then add the land surveyor to their list of Adobe “trusted identities”. This process is described in the Adobe help section; query “Manage trusted identities”, and select “Import and export a certificate”.

Alternatively, an end user may validate a signature manually by selecting the digital signature on the non-statute plan and then selecting “Signature properties”, then “Show Signer’s Certificate” and then “Add to Trusted Certificates” under the trust tab. Finally, select “Validate signature”. If the signature status shows as invalid, then the signer should be contacted about the problem.

A digital signature only needs to be added to the list of trusted certificates once. From that point on, all future submissions which include that digital signature will appear as valid as long as the content has not changed in a prohibited manner.

3. End users who wish to confirm that a person is a practising land surveyor in good standing with the Association of BC land surveyors (ABCLS) may do so at the following link: www.abcls.ca

The ABCLS is not involved with the authentication process for non-statute plans — the process and agreement is between the land surveyor and the end user. If a land surveyor is working with an end user for the first time, then it is recommended that the surveyor contact the end user to discuss acceptance of digital submissions and related protocols. ❖



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