CONSTRUCTION ECONOMIST

Member Review
Natalie Alexander

Leadership Interview
Amanda White

Indigenous Awareness
Robert Laboucane

• Canadian Mining Economics
• Estate Planning – Tax Changes
• New CCDC 30 IPD Contract
• Factoring, Discounting & ABL
• A letter to Premier Horgan
• In memory of Robert Hansford
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The Journal of the Canadian Institute of Quantity Surveyors
Le Journal de l’Institut canadien des économistes en construction

Features

CIQS Congress 2018 ............................... 18
Getting to know our people ..................... 23
Professional Quantity Surveyor leading in heels .... 25
Leadership interview ............................ 26
Indigenous awareness – part 1 .................. 28
Upcoming changes to the Construction Lien Act .... 29
Factors for business liquidity ..................... 32
CCDC introduces integrated project delivery contract .. 34
Estate planning series – part 4 .................. 35
Real estate investing .............................. 36
Reserve fund study .................................. 38
No errors & omission insurance? Really? ........ 39
A letter to Premier Horgan ....................... 41
In memory of Robert Hansford .................... 42

Corners

Legal Corner ............................... 14
Education Corner .................. 24

Messages

Chair’s Message ......................... 6
Executive Director’s Message .......... 9
Editor’s Message .................... 10

 OUR CONCERN FOR THE ENVIRONMENT IS MORE THAN JUST TALK
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CONSTRUCTION ECONOMIST
FALL 2018
am very pleased to inform you that, Friday, August 17, 2018, the CIQS governance restructuring – on which we have been working diligently for over a year – has been approved.

This means that, as of today, all CIQS designation holders in good standing are admitted as corporate members of CIQS. As members, you will now have direct governance oversight of CIQS, which enables you (among other things) to directly elect and remove members of the National Council and directly vote on any fundamental changes that may be proposed for CIQS in the future. We look forward to seeing you at the 2019 Congress!

I would like to thank Sheila Lennon, our Executive Director, and her team for going above and beyond to tirelessly support this restructuring. I would also like to thank all of my fellow members on National Council for their efforts, engagement, patience, and valuable debate throughout this process. Finally, a big thank you to those of you who took the time to complete our surveys, attend the information sessions, vote at the affiliate member meetings and contribute your ideas to help improve CIQS for all of us.

The governance restructuring simplifies national and local activities, reducing the overall costs and complexity of the CIQS governance structure and freeing up resources (both cash expenditures and staff time) to spend more time and money on activities that add more value to designation holders.

Under the new governance structure, there is no longer a need to maintain the regional affiliated corporate entities, which have been responsible for local activities of CIQS. The local activities will be provided by local chapters of CIQS, which are not separate corporations and are much less costly and time-consuming to administer.

The affiliates of BC, the Prairies and Northwest Territories, Quebec, and Newfoundland and Labrador will transfer their surplus cash to CIQS to be used for the benefit of the members in the geographic areas that were previously served by these affiliates, and subsequently dissolve.

Unfortunately, despite unanimous approval of the restructuring by National Council and indications of overwhelming support from designation holders throughout Canada, members of the Ontario and Maritimes affiliates have not voted in favour of the restructuring. For those of you who are members of the Ontario or the Maritimes affiliate, this means:

1. While you have been automatically admitted as members of CIQS with the same rights, privileges and obligations as the designation holders in the rest of Canada, you will also continue to be members of the Ontario or Maritimes affiliate corporation. Continued membership in these entities will not be required to keep your status as designation holders and members of CIQS. For those who remain members of the Ontario or the Maritimes affiliate, your affiliate may require you to pay membership fees (in addition to the CIQS membership fee) and, if CIQS receives a request to collect these fees, we will do so and remit them to the affiliate.
2. CIQS will receive the surplus cash of these affiliates, which will impact our budget forecasts (in particular for chapter activities).

If you have questions, please contact Sheila Lennon at 1-866-345-1168 or execdir@ciqs.org.

I am pleased to report that the following directors will continue to serve on the National Council during the implementation of the restructuring until the 2019 Annual Members’ Meeting, which will be the first annual members’ meeting post- restructuring at which designation holders will vote for their National Council:

- David Dooks
- Craig Bye
- Michael Gabert
- Wassim Sultani
- Indu Elapatha
- Mike Watkinson
- Erin Brownlow
- Roy Lewis

National Council has appointed a nominating committee composed of the following members:

- Roy Lewis, Chair of Committee
- David Dooks
- Craig Bye
- Indu Elapatha
- Michael Gabert
- Mike Watkinson
- Wassim Sultani
- Erin Brownlow
- Wendy Hobbs

To search for candidates who have the skills that can benefit National Council and who fulfill the requirements for regional representation on National Council. Such candidates will be nominated for election to National Council at the 2019 Annual Members’ Meeting. If you are interested in being considered for a position on National Council, please contact the nominating committee at nominations@ciqs.org.

National Council also has adopted the terms of reference, which will govern the local chapters serving the local needs of the designation holders.

continued on page 8
Tous les titulaires de désignation de l’ICÉC maintenant « membres » corporatifs

Je suis très heureux de vous informer que la restructuration de la gouvernance de l’ICÉC, sur laquelle nous travaillons avec diligence depuis plus d’un an, a été approuvée vendredi le 17 août 2018.

Cela signifie qu’à partir d’aujourd’hui, tous les titulaires de désignation de l’ICÉC en règle sont admis comme « membres » corporatifs à l’ICÉC. En tant que membres, vous aurez maintenant une surveillance directe sur la gouvernance de l’ICÉC, ce qui vous permettra (entre autres) d’élire et de supprimer directement les membres du Conseil national et de voter directement sur les changements fondamentaux qui pourraient être proposés à l’ICÉC à l’avenir. Nous nous réjouissons de vous voir au Congrès 2019 !

Je tiens à remercier Sheila Lennon, notre directrice exécutive, ainsi que son équipe, d’aller au-delà afin de soutenir inlassablement cette restructuration.

Je tiens également à remercier tous mes collègues membres du Conseil national pour leurs efforts, leur engagement, leur patience et leur débat précieux tout au long de ce processus. Enfin, un grand merci à ceux d’entre vous qui ont pris le temps de compléter nos sondages, assister aux séances d’information, voter aux réunions des membres affiliés et contribuer vos idées afin d’aider à améliorer l’ICÉC pour nous tous.

La restructuration de la gouvernance simplifie les activités nationales et locales, réduisant ainsi les coûts globaux et la complexité de la structure de la gouvernance de l’ICÉC, libérant des ressources (à la fois les dépenses en espèces et le temps du personnel) pour consacrer plus de temps et d’argent aux activités qui ajoutent plus de valeur aux titulaires de désignation.

Dans le cadre de la nouvelle structure de la gouvernance, il n’est plus nécessaire de maintenir les entités corporatives régionales affiliées qui ont été responsables des activités locales de l’ICÉC. Les activités locales seront effectuées par des chapitres locaux de l’ICÉC, qui ne sont pas des sociétés distinctes, et qui sont beaucoup moins coûteuses, et qui prennent du temps à administrer. Les associations affiliées de la Colombie-Britannique, des Prairies et des Territoires du Nord-Ouest, du Québec et de Terre-Neuve-et-Labrador transféreront leurs liquidités excédentaires à l’ICÉC afin qu’elles soient utilisées au profit des membres des régions géographiques qui étaient auparavant desservies par ces associations affiliées, qui seront ensuite dissous.

Malgré l’approbation unanime de la restructuration par le Conseil national et les indications d’un soutien écrasant des titulaires de désignations partout au Canada, les membres des affiliés de l’Ontario et des Maritimes n’ont pas voté en faveur de la restructuration. Pour ceux d’entre vous qui êtes membres des affiliés de l’Ontario ou des Maritimes, cela signifie :

1. Bien que vous ayez été automatiquement admis comme membres de l’ICÉC avec les mêmes droits, privilèges et obligations que les titulaires de désignation dans le reste du Canada, vous continuerez également d’être membres de l’association affiliée de l’Ontario ou des Maritimes. L’adhésion continue à ces entités ne sera pas exigée afin de conserver votre statut de titulaires de désignation et de membres de l’ICÉC. Pour ceux qui demeurent membres de l’association affiliée de l’Ontario ou des Maritimes, votre affilié pourra vous demander de payer des frais d’adhésion (en sus des frais d’adhésion de l’ICÉC) et, si l’ICÉC reçoit une demande de percevoir ces frais, nous le ferons et les remettrons à l’affilié.

2. L’ICÉC ne recevra pas l’excédent de trésorerie de ces filiales ce qui affectera nos prévisions budgétaires (en particulier pour les activités du chapitre). Si vous avez des questions, veuillez communiquer avec Sheila Lennon au 1 (866) 345-1168 ou execdir@ciqs.org. Je suis heureux d’annoncer que les administrateurs suivants continueront de siéger au Conseil national lors de la mise en œuvre de la restructuration jusqu’à la réunion annuelle des membres en 2019, qui sera la première réunion annuelle des membres après la restructuration, et à laquelle les titulaires de désignation voteront pour leur Conseil national :

• David Dooks
• Craig Bye
• Michael Gabert
• Wassim Sultani
• Indu Elapatha
• Mike Watkinson
• Erin Brownlow
• Roy Lewis

Le Conseil national a nommé un Comité de nomination composé des membres suivants :

• Roy Lewis, Président du Comité
• David Dooks
• Craig Bye
• Indu Elapatha
• Michael Gabert
• Mike Watkinson
• Wassim Sultani
• Erin Brownlow
• Wendy Hobbs

Pour trouver des candidats qui ont les compétences qui pourraient bénéficier le Conseil national et qui rencontrent les exigences pour la représentation gouvernante au Conseil national.

suite à la page 8
There will be six chapters and they will serve the areas previously served by the affiliated corporations. The initial members of the Chapter Executive of each of the chapters are as follows:

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Members of the Chapter Executive</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Columbia</td>
<td>Indu Elapatha, Shane McKernan, Keith Damphousse, Angela Lai, Pasindu Gunathilake, Wanhai Li, Carlos Aquino, James Bell</td>
</tr>
<tr>
<td>Prairies and Northwest Territories</td>
<td>Michael Gabert, Wendy Hobbs, Jerry Crawford, Ryan Devereux, Carl Pedersen, Sudhir Jha, Peter Bhullar, Tom Tamayo, Roger Ward</td>
</tr>
<tr>
<td>Ontario</td>
<td>The Executive Director will be in touch with members of the Ontario chapter to run a process to select the Chapter Executive.</td>
</tr>
<tr>
<td>Quebec</td>
<td>Wassim Sultani, Jerome Tremblay, Remy Vignau, Hiran Dassoruth, Yvon Chabot, John Wang</td>
</tr>
<tr>
<td>Maritimes</td>
<td>The Executive Director will be in touch with members of the Maritimes chapter to run a process to select the Chapter Executive.</td>
</tr>
<tr>
<td>Newfoundland and Labrador</td>
<td>Roy Lewis and such other members as appointed to Chapter Executive.</td>
</tr>
</tbody>
</table>

Should you have any questions or concerns, please reach out to us at 905-477-0008/1-866-345-1168 or chair@ciqs.org.

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**Message du Président du Conseil continued**

Ces candidats seront nommés pour être élus au Conseil national lors de la réunion annuelle des membres en 2019. Si vous êtes intéressé(e) à être considéré(e) pour un poste au Conseil national, veuillez contacter le Comité de nomination à nominations@ciqs.org.

Le Conseil national a également adopté le mandat qui régira les chapitres locaux au service des besoins locaux des titulaires de désignation. Il y aura 6 chapitres et ils serviront les zones précédemment desservies par les associations affiliées. Voici les membres initiaux du Chapitre exécutif pour chacun des chapitres:

<table>
<thead>
<tr>
<th>Chapitre</th>
<th>Membres du Chapitre exécutif</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colombie-Britannique</td>
<td>Indu Elapatha, Shane McKernan, Keith Damphousse, Angela Lai, Pasindu Gunathilake, Wanhai Li, Carlos Aquino, James Bell</td>
</tr>
<tr>
<td>Prairies et Territoires du Nord-Ouest</td>
<td>Michael Gabert, Wendy Hobbs, Jerry Crawford, Ryan Devereux, Carl Pedersen, Sudhir Jha, Peter Bhullar, Tom Tamayo, Roger Ward</td>
</tr>
<tr>
<td>Ontario</td>
<td>Le directeur exécutif sera en contact avec les membres du chapitre de l’Ontario pour exécuter le processus de sélection du chapitre exécutif.</td>
</tr>
<tr>
<td>Québec</td>
<td>Wassim Sultani, Jerome Tremblay, Remy Vignau, Hiran Dassoruth, Yvon Chabot, John Wang</td>
</tr>
<tr>
<td>Maritimes</td>
<td>Le directeur exécutif sera en contact avec les membres du chapitre des Maritimes pour exécuter le processus de sélection du chapitre exécutif.</td>
</tr>
<tr>
<td>Terre-Neuve-et-Labrador</td>
<td>Roy Lewis et autres membres nommés à la direction du chapitre exécutif.</td>
</tr>
</tbody>
</table>

Si vous avez des questions ou soucis, veuillez nous contacter au (905) 477-0008 / 1-866-345-1168 ou chair@ciqs.org.

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At least 5 years of relevant experience in the construction industry;
Strong communication skills;
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If you are interested, please submit your resume/CV to angelalai@coretwo.ca.
Congress 2019 and the Institute’s 60th Anniversary in Quebec City

Sheila Lennon, CAE

The CIQS Board and staff have been very busy over the 2018 summer and into fall: the board met in July at Congress 2018; on August 17 for the Annual General Meeting and Special Meeting at head office; and the weekend of September 14, in Winnipeg, MB.

The 2018/19 CIQS Board of Directors is comprised of:
- David Dooks, PQS(F) – Chair/Secretary Treasurer
- Craig Bye, PQS(F) – Vice Chair
- Roy Lewis, PQS(F) – Assistant Secretary Treasurer
- Indu Elapatha, PQS
- Michael Gabert, PQS
- Mike Watkinson, PQS
- Wassim Sultani, PQS
- Erin Brownlow, PQS

The May 2018 board meeting in Montreal marked the start of rotating the locations of board meetings across the country, in order to meet and network with members of a broader sector of the nation. On September 13, 2018, before its meetings that weekend, the CIQS Board hosted a meet and greet reception with members of the Winnipeg area at the Metropolitan Rooftop. Winnipeg members were pleased to have the opportunity to interact with the national board and vice versa. Thank you to the 20-plus Winnipeg members who joined us. Stay tuned to learn where we will be next!

CIQS Education Committee
In early October, we will be calling for expressions of interest in membership of the CIQS Education Committee.

The primary role of the Education Committee is to organize, implement and facilitate educational policies that will provide prospective members with the opportunity to achieve the level of knowledge and skill necessary to obtain a CIQS professional designation.

The Education Committee is advisory only, and reports to the board. Its responsibilities include:
• Reviewing, updating, and managing of the Education Policy Guidance Notes;
• Managing reciprocity agreements;
• Conducting an ongoing review of the current syllabus and recommendation of revisions to the board as applicable, including development of a new heavy civil syllabus;
• Directing liaisons with associated colleges and universities to ensure their levels of education reflect CIQS needs;
• Performing maintenance and upkeep of CIQS education and membership standards;
• Doing accreditation of current and new college/university programs nationally; and
• Reviewing member issues regarding TPE requirements to obtain designation and provision of recommendations for resolution.

Additional information and submission requirements will be included the call.

CIQS Publications
The Publications Committee and the board have reviewed the list of publications that require updating. A call for expressions of interest for the following publications will be distributed to members in early October:
• Method of Measurement
• Elemental Cost Analysis (to include ICMS)
• Construction Planning & Scheduling – An Introduction

CIQS Congress 2019
We are pleased to announce that Congress 2019 and the Institute’s 60th Anniversary will be held in Quebec City, QC on July 25-28, 2019 at the Hilton Quebec.

We will be looking for members to join either the Congress Education Committee or the Congress Planning Committee. More details will follow in late fall.

The David Lai YQS Bursary Program was a great success in 2018, and we look forward to all Young Quantity Surveyors applying for the bursary, which will launch January 2019.
Recently, I had the opportunity to speak with a representative of the Canadian Minerals and Metals Plan Secretariat. This Secretariat was established by Natural Resources Canada to support the development of the federal-provincial/territorial Canadian Minerals and Metals Plan, which aims to foster a competitive, sustainable and responsible minerals and metals industry adapted to the realities of the modern economy to the benefit of all Canadians.

The infographics below clearly outline the influence of Canada’s mining sector on our economy as a whole in Canada and abroad. In 2017 alone, the minerals sector contributed $72 billion dollars to Canada’s GDP.

With increased understanding of the importance of environmental responsibility, Artificial Intelligence and Hi-Tech in the Canadian economy as a whole, the mining sector is continually adapting and utilizing the latest technology to ensure that the mining sector remains a powerful contributor to Canada’s growth and prosperity.

Canada’s mineral resources are a big driver of wealth across the country and will continue to be so in the future. Canada is one of the world’s largest exporters of minerals and metals, supplying approximately 60 different mineral commodities to over 100 countries around the globe (Source: Natural Resources Canada).

Canada has long been a global mining power. Competition is fierce, the industry is subject to global economic dynamics, and the demand for minerals and metals is growing. In addition, consumers and communities expect that mineral development activities are responsible and sustainable.

The world increasingly relies on minerals and metals to power clean technologies and electronic devices. We also rely on those materials to repair, improve, and expand the infrastructure our society needs. Canada is well-positioned to take advantage of new realities, where there will be a premium on responsibly-sourced minerals and metals to drive the digital, modern economy.

To build on Canada’s competitive position – federal, provincial and territorial governments are developing the Canadian Minerals and Metals Plan. They are engaging with Indigenous peoples, industry, academia, non-governmental organizations, and Canadians across the country to build a national, holistic Plan. It will present a vision for Canada’s mining future, with concrete actions that government, industry and others can pursue to solidify Canada as the leading mining nation.

Learn how you can participate at minescanada.ca and through #yourCMMP.
The infographics clearly outline the influence of Canada's mining sector on our economy as a whole in Canada and abroad. In 2017 alone, the minerals sector contributed $72 billion dollars to Canada's GDP.
Canada is well-positioned to take advantage of new realities, where there will be a premium on responsibly-sourced minerals and metals to drive the digital, modern economy.
I thank you for your support and contribution to the *Construction Economist*. We wish you and your families an exciting fall season as the colourful days of autumn are once again upon us. Feedback, suggestions and articles for consideration are always welcome. Please email: editor@ciqs.org.

Participate at minescanada.ca and through #yourCMMP.
Owners and general contractors that are the ‘obligee’ under a labour and material payment bond have a new legal obligation to disclose the bond’s existence to its beneficiaries – typically subcontractors and suppliers. This is according to an important recent decision by the Supreme Court of Canada in a case called Valard Construction Ltd. v. Bird Construction Co. (Valard Construction).

This outcome signals a noteworthy change in the law. Previously, an obligee under this type of bond was only required to disclose its existence if the information was requested, usually through a demand made pursuant to provincial construction lien legislation. The Valard Construction changes that, by confirming that owners and general contractors are considered under these types of bonds to step into the role of trustee, and must take the initiative to actively notify potential beneficiaries/claimants of the bond’s existence. Otherwise, they may face a court action and legal liability for their failure to do so.

The Facts in Valard Construction

Valard Construction (Valard) was a utility sub-subcontractor that had been hired by what turned out to be an insolvent electrical subcontractor. Although Valard had provided directional drilling work and related materials to an oil sands worksite in Fort McMurray, Alberta, some of its invoices were never paid.

Valard later learned that the now-insolvent electrical subcontractor had obtained a bond from the general contractor, Bird Construction (Bird) as part of their original contract together. Under that bond, Bird was the ‘obligee’, while the electrical contractor was the ‘principal’. A third-party guarantee company acted as the ‘surety’ for paying out any claims. The bond was a standard-form labour and materials bond (CCDC 222-2002), allowing a beneficiary to sue the surety under the bond for any sums that are unpaid within 90 days of the final day on which the beneficiary provided work or materials. To do so, the beneficiary must have first provided notice of its claim within 120 of that same final day, to each of the obligee, the principal, and the surety.

Despite being one of the eligible potential claimants, Valard only learned about the bond about seven months after the 120-day notice period expired. Still, it took steps to bring a claim but was denied by the surety, which resisted on the basis that Valard was out of time.

Valard then launched a legal action against the general contractor Bird, for the amount it would otherwise have claimed under the bond.

How Valard Construction Changed Owners’ and Subcontractors’ Duties

The Supreme Court of Canada, in confirming the prior ruling by the Alberta Court of Appeal, found that the general contractor Bird was indeed liable to Valard for the amount that it would have been eligible to recover under the bond, had Valard been apprised of its rights within the deadline. The Court remitted the matter back to a trial judge, to determine the amount of damages to which Valard was properly entitled.

The Court confirmed, first and foremost, that the bond created an express trust, with the general contractor Bird in the role of trustee. As trustee, Bird had a fiduciary obligation to potential beneficiaries such as Valard, which included timely disclosure of the bond’s existence. The Court added that this legal obligation was particularly pronounced where a potential beneficiary would objectively “suffer an unreasonable disadvantage” by not being informed that the bond existed.

The Court said that whether a beneficiary such as Valard would suffer an unreasonable disadvantage is a question to be assessed after looking at numerous factors, such as:

1) the particular circumstances in which the bond was entered into;
2) the terms of the bond;
3) the beneficiary’s potential entitlement under it; and
4) the nature of the industry.

In Valard’s situation, it was entitled to be proactively informed of the bond’s existence for several reasons: First, labour and material payment bonds were uncommon on private oil sands construction projects. This made it all the more likely that Valard would be entirely unaware of the bond that was in place here. Secondly, Valard’s entitlement to claim under the bond was time-limited, which made its awareness of it critical; indeed, in this case Valard’s entitlement lapsed before it even learned the bond existed. Given its role as trustee, the general contractor’s failure to disclose this crucial information to Valard directly prevented the latter from exercising its potential rights.

In short, the only way Valard could meaningfully exercise its rights to enforce the bond, was by being informed of its existence in the first place. The general contractor Bird failed its duty to Valard in this respect. The Court noted that in this specific case, Bird could have reasonably satisfied its legal duty at a negligible cost, by simply posting a notice about the bond on its on-site trailer, where potential beneficiaries such as Valard regularly attended for daily site meetings.

As the Court explained:

Here, Bird did nothing. It filed the bond offsite, did not post it, and told nobody about it... [W]here the evidence was
that labour and material payment bonds were uncommon, something more than nothing was required from Bird to discharge its duty. Bird therefore committed a breach of trust.

**What are the New Risks to Owners and General Contractors?**

Using the law of trusts as its foundation, the ruling in *Valard Construction* clearly imposes new notice duties on owners and general contractors who are obligees under a labour and material payment bond. Conversely, these same owners and general contractors will also face a newly increased risk of legal liability toward subcontractors, suppliers, or other potential beneficiaries; any failure to meet those duties may result in a finding of breach of trust, giving rise to potential legal claims by disappointed beneficiaries.

But even well-intentioned owners and subcontractors can face needless risk if they remain uncertain as to how their notice duties are to be complied with. Unfortunately, the guiding legal test derived from *Valard Construction* may be easily stated, but somewhat harder to put into practice. According to the Court, the notice obligations are triggered any time the potential beneficiary would ‘suffer unreasonable disadvantage’ if notice is not provided. Arguably, this imprecise wording suggests that notice will be required (or at least be wisely given) in most – if not all – cases.

The Court also noted that in the role of trustee, the standard that an owner or subcontractor must meet in terms of disclosing the bond’s existence is one of honesty, as well as reasonable skill and prudence. How that standard plays out in any given scenario is highly dependent on the facts and circumstances – which the owner or subcontractor ought to reasonably know at the time the bond is given. Nor are the owners’ and subcontractors’ duties eliminated because it is impossible to know who all the potential beneficiaries are at the time the bond is procured: They must nonetheless take all reasonable steps to identify and notify them.

**What Does Valid Notice Look Like?**

The next important question is what constitutes effective notice to potential beneficiaries such as subcontractors and suppliers, and how it should be conveyed to them. As before, it likely depends on the circumstances.

Although in *Valard Construction*, the Court suggested that a posted sign would have sufficed, this is not a universal standard. Indeed, the Court expressly acknowledged that a
different method might have also sufficed, and refrained from identifying any generalized minimum characteristics for what constitutes adequate notice.

This suggests that the requirements for giving proper notice can vary from case-to-case, and will likely depend on several factors – such as the particular workplace configuration, the likelihood that a significant portion of the potential beneficiaries would receive notice at a particular physical location, and the existence of multiple job-sites.

The format of the notice may also be relevant. While a posted notice was sufficient in Valard Construction, other scenarios may call for notice to appear in the written contract, or perhaps be given by email or other electronic communication.

What Can Owners and Contractors Do?
For owners and contractors with existing bonds on current projects, the Valard Construction decision signals the need to take immediate steps to ensure that all potential bond beneficiaries have been notified of the bond’s existence, to the extent this is reasonable and practicable.

Owners and contractors may also want to consider whether their existing contract documentation should be revised, so that for those who obtain bonds in the future there is an added requirement to identify potential bond beneficiaries, and possibly to take over the task of notifying those beneficiaries of the bond’s existence themselves, on behalf of the owners and contractors.

What’s the Bottom Line?
For obligees of labour and material payment bonds, the Valard Construction decision imposes a new legal notice obligation towards potential beneficiaries such as subcontractors and suppliers, especially where there is risk that the beneficiary might be significantly disadvantaged, or where the bond arises in an industry where these kinds of contractual obligations are not usually insisted-on. A failure to comply with these duties could see owners/general contractors facing a court action by beneficiaries, for damages stemming from that failure to disclose the bond.

Conversely, from the perspective of these bond beneficiaries, the decision represents a significant new avenue for potentially recovering amounts due, even where the bond existed unbeknownst to them and has already expired.

About the author
Emilio Bisceglia is the principal of the law firm of Bisceglia & Associates Professional Corporation. Emilio’s practice focuses on the resolution of business disputes through trial, appeal, mediation and arbitration. He has an extensive commercial litigation practice involving shareholder disputes, construction law litigation, construction liens, insolvencies, and advising in connection with construction and commercial disputes. He represents developers, suppliers, general contractors, subcontractors, and owners during all phases of a construction project. Emilio has appeared before various tribunals in the Province of Ontario. In addition, he has appeared in the Ontario Superior Court of Justice, Ontario Divisional Court and the Ontario Court of Appeal. Emilio completed his education at Osgoode Hall at York University in 1992 and was called to the Bar in 1993 at the Law Society of Upper Canada.
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The CIQS Congress was held in Halifax, Nova Scotia, hosted by CIQS – Maritimes. The theme of the 2018 Congress was ‘Building the Maritimes – Where Tradition Meets Innovation’. Congress 2018 also marked another remarkable anniversary for the CIQS Maritimes, which celebrated its 50th anniversary!

A great program of education and social events was put together by the local planning committee. A big thank you to all of them, and to their Chair, Amanda White, for her leadership.

TECHNICAL SESSIONS

The Future of Energy in Atlantic Canada

The political and economic realities of energy are changing at a dramatic pace – from global climate agreements and plummeting renewable energy prices to local electric vehicle charging networks and smart meters. This presentation aimed to help summarize both global trends and local efforts, and help paint a picture of what the future of energy in Atlantic Canada will look like.

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Integrated Project Delivery

In January 2013, The Canadian Construction Documents Committee (CCDC) convened a meeting for the sole purpose of exploring the potential of developing a uniquely Canadian version of a standard Integrated Project Delivery contract for use throughout Canada. The Task Team has completed its work and has the endorsement of Canadian Construction Association, Construction Specification Canada, Association of Consulting Engineers of Canada, and the Royal Architectural Institute of Canada, for acceptance as a CCDC document. While owners do not have official endorsing bodies to sanction the document, their extensive participation and input in the Task Team is considered substantial support and objective acceptance in principle. The session introduced CCDC 30 and provide highlights of its guiding principles and significant provisions.

Introduction to ICMS

At present, the way construction projects are reported and costed varies significantly from one market to the next. These differences make it difficult to compare projects around the world, increasing investment risk and impeding transparency. Organizations that set standards and guidelines on how construction projects are measured came together at the International Monetary Fund (IMF) in Washington D.C. in 2015 to launch the ICMS Coalition. The Coalition has developed and implemented a common standard for construction measurement which enhances transparency, investor confidence and public trust in the sector. ICMS was launched at PAQS 2017 Congress. Since the launch, Canada has taken significant strides in the promotion and adoption of ICMS and is considered one of the leading advocates. This presentation provided an introduction to ICMS highlighting the importance, the aim, the benefits, the challenges and what things look like one year later.

PANEL DISCUSSION: GROWING HALIFAX

A discussion of the challenges, opportunities, and future possibilities for growth in Halifax and the region. The panel looked at development in the city and changes more recently, particularly in the Downtown Halifax core.

Walter Strachan, FCSC, RSW, PQS

Vice President, Risk Management

CBCL Limited Consulting Engineers

Susan Neil, MRICS, PQS(F)

Executive Vice President

Hanscomb Limited

John Spinelli, CET, PQS, C.MGR, PMP, LEED AP

Director, Cogswell Redevelopment Program

City of Halifax

Daniel Roscoe, P.Eng.

Smarter Spaces

Colin Gillis

Partner at Roswall Inc.

Dan MacIntosh

Partner at Roswall Inc.

Sandra Cooke, BA, MLA, APALA, OALA, CSLA

Landscape Architect

Ekistics Plan + Design

David Sobey, P. Eng., PMP

Construction Manager

Ellis Don

Terry Doran, BA

Vice President, Office Properties

Crombie REIT
AWARDS

Lois McCalfe Fellowship Award
The CIQS Board of Directors is pleased to announce that three new fellows were elected this year. Sheri Thompson’s award was presented at the CIQS Information Session and the other three presented at the Chair’s dinner by Roy Lewis, PQS(F), CIQS Board Director.
Congratulations to:
David Dooks: CIQS – Maritimes
Sheri Thompson: CIQS – Ontario
Susan Neil: CIQS – Ontario
Wendy Hobbs: CIQS Prairies and Northwest Territories

Gordon Pattison Award of Merit
Congratulations to Craig Bye, PQS(F) who was awarded the 2018 CIQS Gordon Pattison Award of Merit for extraordinary service to the CIQS.
David Dooks, PQS(F), Chair introduced the award and Susan Neil, PQS(F) accepted the award on Craig’s behalf. Susan spoke to Craig’s dedicated service to the CIQS over the past many years.
Craig joined the Institute in 2005. He was a licensed Electrician and obtained his PQS status in 2007 through the Direct Finalist route. He received his Fellowship in 2016.
He joined the Central Hamilton Chapter in 2010 and served as Chair for two years. Craig was also the Central Hamilton representative on the CIQS – Ontario Board from 2011–2018, where he served as Secretary/Treasurer in 2012 and President in 2013.
Craig joined the CIQS National Board in 2013 and was elected as the Chair in 2015. During his time on the board, he has served on the Membership, Governance, Staffing, and Business and Long Term Planning committees. He also offers his time to set and mark CIQS examinations, and conducts interviews as required.
In 2015, Craig was elected to serve as a Trustee of the International Construction Measurements Coalition and has recently become the Vice Chair.
Craig has always operated with the best interests of the Institute at heart and has been a dedicated member, always availing himself for whatever task is necessary.

BUILDING THE MARITIMES
Where Tradition Meets Innovation
CIQS Exam Winners
At Congress 2018 we were fortunate to have two of our four recipients of the CIQS Exam Awards attend and receive their award from David Dooks, PQS(F), Chair.

SOCIAL ACTIVITIES

Wine Tour of Annapolis Valley.
Some delegates enjoyed a full day tour of the Annapolis Valley wine region on Saturday. The tour included visits to two wineries, Luckett Vineyards and Gaspereau Vineyards, and a cidery, Annapolis Cider Company, in the heart of the Annapolis Valley.

Chair’s Dinner
Delegates enjoyed a wonderful buffet dinner alongside friends and colleagues. The Gordon Pattison Award of Merit and the Lois Metcalfe Fellowship Awards were presented to the recipients at the dinner.

Farewell Breakfast
Congress delegates said farewell to one another at the Sunday drop in breakfast. Delegates had one last opportunity to network and say goodbye to friends old and new before heading back home.

Clive Evans Living Golf Tournament
The 2018 tournament took place at The Links at Brunello Golf Course, located a short 15 minutes from downtown Halifax.

Attendance was lower than usual, but eight people still ventured out on a rather wet Saturday morning for a round of golf. Hopefully next year the weather will be kinder to the golfers! The winner with the lowest gross scores was George Evans.

YOUNG QUANTITY SURVEYORS
YQS delegates arrived Thursday evening for a meet and greet reception followed by a brain storming session. Bursary recipients and others sat down for an open discussion on how they envision the new YQS program, their expectations, leadership and how the program would be managed committee wise.

The group then headed out for a tour of the Alexander Keith’s Brewery, learning the history of the 198 year old establishment and sampling its wares.

The YQS presence at Congress 2018 and CIQS looks to build on this in Quebec City and look forward to rolling out the official Young Quantity Surveyor Program.

DAVID LAI YQS CONGRESS BURSARY PROGRAM
Congratulations to the inaugural recipients of the David Lai YQS Congress Bursary!

Shane McKernan – CIQS – British Columbia
Carl Pedersen – CIQS – Prairies and Northwest Territories
Anurag Sharma – CIQS – Ontario
Florian Poix – CIQS – Quebec
Teaira Cain – CIQS – Maritimes

As part of the requirements for receiving the bursary, recipients must provide a report on their experience to CIQS and may be featured in the Construction Economist. CIQS will feature these reports in the next issue of Construction Economist.

CIQS Congress 2018 Wine Tour

Frank Helyar Memorial Award – Jamie MacGillivray
Graham Randall Award – Jian Yang
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What is your role at CIQS and to whom are you accountable?
As the Web Administrator at CIQS, I assume leadership and accountability for the development, implementation, and maintenance of the CIQS websites and social media channels to increase our online presence and maximize website traffic. I answer to Sheila Lennon (Executive Director), David Dooks (President), and Michael Gabert (Marketing Director).

What does a typical day look like in your position?
I wake up, make coffee, and spend two hours on current projects. My goal is to avoid interruptions and do ‘deep work’ on a single project at a time.

I check my email around nine am to check for emergencies or last-minute schedule changes. After, I browse social media for brand mentions, keywords, notifications, comments, reviews, questions, feedback, etc.

Throughout the day, I complete administrative duties like working on website-related projects; publishing new content; keeping prior work current; translating content, documents, and communications into French; processing emails and calls; drafting e-blasts; and coordinating with affiliates and chapter reps to plan and promote events, seminars, and workshops.

Every day is not the same. The variety keeps me on my toes and makes every day new and exciting.

Has your role changed since you started?
I have almost 15 years of experience in the web development industry, and I have been working for CIQS since April 2014. At first, I was hired to work “part-time” for CIQS National matters only, but this commitment has been expanded over time to also include our affiliates’ websites and social media. I made myself available on a full-time basis since then.

What is the most satisfying part of your job?
For me, my job is satisfying in two very different ways. The first way is just pure nerd joy. I love working on web projects. I love learning new technologies. I love using computers. The every day work is a joy for me. The second aspect that makes my job satisfying is that I work with a bunch of awesome people and my work is being recognized and valued.

What are the challenges and opportunities of your role?
On the opportunities side, the web is a dynamic medium with untapped potential. When there is a problem, I look around and see if someone has already solved it. If that solution does not work, I can always come up with a solution, executed in an original way.

What else can you tell us about yourself?
Spending quality time with my family and friends is very important to me. I also love to travel and there are plenty of places to explore, and often roads without destinations lead us to most beautiful places.

Patrice Beaulieu
Web Administrator

About the author
Interview conducted by Arif Ghaffur, PQS, Editor of Construction Economist.
The new school year is always filled with nostalgia. Memories of getting ready for the first day, wondering who’s going to be in your homeroom, catching up with the friends you didn’t see all summer. You also tried your best to forget that a new school year meant new learning.

Adulthood gives us a different perspective on learning. Now we can learn what we want to learn. No more of those classes that didn’t interest you – and moreso, learning becomes fun.

The CIQS podcast, hosted by your humble narrator and released this fall, will give you ‘back to school’ nostalgia combined with your love of learning. We have interviews with exciting guests who are passionate about topics that will interest just-about everyone. Presented in a fun, casual format, it’s perfect for learning on the go. Also, they are not very long so even if you’re not a ‘learning is fun’ person yet, they’ll keep you interested.

Did I mention that you get one CPD point for every podcast you listen to? Quick, fun, interesting topics, and CPD points? That’s a win on all fronts.

Have a great fall everyone!

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Who is Natalie as a career professional?
Natalie is currently a PhD Candidate, seeking to link the relationship between sustainable development and green building practices in the construction industry to economic growth and viability. Evoking that ideology, real change happens only when sustainable development practices simultaneously contribute to economic growth and the improvement of our standards of living, especially in developing and emerging nations. As quantity surveyors, it is imperative that we recognize the influence that the green building industry has on a country’s economy and its impact on the lives of the people, so we can be prepared for the ever-changing global construction market.

As a Chartered Quantity Surveyor and LEED Professional, Natalie has been engaged in several construction projects over the past 11 years, where her roles diversified from Quantity Surveyor to Project Coordinator or Construction Project Manager. Her project portfolio includes a high concentration of high-rise condominium developments in Toronto, a range of retail buildings, custom homes, subdivision developments, commercial properties across many cities in Canada, commercial buildings in St. Vincent, and world-renowned hotels in St. Lucia.

Who is Natalie personally?
Throughout her career, Natalie has made strides in breaking the glass ceiling and expectations that were placed on her as a young girl born and raised in the tropical island of St. Lucia. Daring to dream bigger, Natalie immigrated to Canada in 2003 in pursuit of her education and career aspirations. A now thriving career professional, PhD candidate, and author, Natalie believes that the pursuit of her career should not be limited to growing only herself. As such, she uses her experience from working in a male-dominated industry to inspire and motivate young professionals (especially women and immigrants) to find their voice and create an identity for themselves.

Natalie’s book, How To Be A Leader In Heels: Rules of the Game, is for young women and new immigrants. It offers helpful tips and advice on all the unspoken rules in business that if applied wisely, can assist in advancing their career. Through the art of strategic application of soft-skills and emotional intelligence, Natalie takes the reader through all the lessons she has learnt from being both an immigrant and a woman working in a male-dominated industry. She also writes how she used her knowledge to successfully get ahead of the game.

Though the saying goes “Luck is what happens when preparation meets opportunity”; your credentials and technical skills get your foot in the door, and your soft skills are the gateway to keeping those doors open. Natalie delivers some hard punches within the chapters of her book, as she discusses the importance of strategizing and prioritizing one’s goals, shredding victimhood mentality, and how to manage career goals more effectively.

Drawing heavily on her own experiences, lessons she has learnt, mistakes she has made, and all the advice she wishes she had when she first started in her career, Natalie shares her book with the hopes of helping other women and immigrants along their own journeys.

Natalie can be reached on her email at info@natalie-alexander.com or her website www.natalie-alexander.com.
When did you begin your Quantity Surveying career?

I began my QS career right after taking the Construction Administration Technology Program (now Construction Management Technology) at Nova Scotia Community College in 2009. If someone had told me at the beginning of the college program that I was going to be a quantity surveyor, I wouldn’t have known what that was. Luckily, I had the pleasure of being taught by instructor Sheldon Doyle, who did know about the career path and thought I would be a good fit. Sheldon invited me to a Christmas party in Halifax where I met members of the Canadian Institute of Quantity Surveyors. Months later, I started as Junior Cost Consultant at Hanscomb Limited in Halifax. And the rest is history. Before leaving Hanscomb in 2017, I obtained my Professional Quantity Surveying designation and was working as a Senior Cost Consultant in the Halifax office.

What is your current role and how you see it evolving?

In the summer of 2017, I established Foresight Atlantic Inc. and started working as an Independent Consultant. Most of my work involves project loan monitoring, cost planning and quantity take-off for small and medium-sized construction projects in Atlantic Canada. To be honest, since starting, I have not had a lot of time to think about where this adventure will go. I will say this: my passion has always been project loan monitoring. I enjoy the interaction with people working on active construction projects and getting out on site. Being able to do this is a privilege and has taught me more than I could have ever learned behind a desk. So even though I am not exactly sure how my role will evolve, but it may be toward project loan monitoring and real estate finance.

What types of projects have you worked on?

I have worked on many different types of projects over the years – both new-build and renovation projects – including schools, hospitals, hotels, museums, universities, office and retail buildings, multi-residential, land developments, recreational, historical properties, and government.

Is there a particular project that stands out to you?

In the first few years of my career, I had the opportunity to lead the renovation of the Canadian Museum of Immigration at Pier 21 in Halifax. It involved large renovations to the existing building, which included structural reinforcement and adding floor-space to areas of the building. Being at the pre-tender stage of the design, the amount of work was immense. I had not been involved with the previous high-level budget plan, therefore I was starting fresh and mostly from scratch. If memory serves right, there was not much information provided for the preliminary cost plan that had been done prior to my getting involved with the project. To date, this had been the largest project I have taken on – a renovation to boot. When the project tender closed, the budget we had prepared was very close to the bid price. But this is not why I remember this project. This good experience taught me about renovation work, what goes into structural reinforcement of an existing building, more methods used by contractors, and the interaction with the mechanical and electrical cost consultants to bring the budget plan together. The most challenging projects are the ones where you learn the most.

What has been your approach to Continuing Professional Development?

I am a people person so I like to get out and network, take refresher courses in a classroom setting, attend conferences, and talk to others in the industry. I reinforce this with reading and following influencers to stay on top of current events and news. More recently, I have had the opportunity to chair the 2018 CIQS Congress Committee in Halifax and am now a board member with CIQS Maritimes in the Registrar (membership) position. I think being involved in the profession is a great way to develop outside of formal learning.

Beyond staying current in your own industry, it is important to step outside of your comfort zone and learn from people in other industries. This past year, while starting my own business, I have had the opportunity to attend events and courses for small business and have built great relationships with people outside the construction industry. It has given me a chance to gain new perspectives that may differ widely from my own. This is particularly important because the world is bigger than just what is going on in our own industry. Our industry is intertwined with the world.

What challenges do you see for Quantity Surveying?

The biggest challenge I see now is awareness. I was unaware that QS existed until I was in my late 20s. I will never know if I would have been interested if it had been introduced earlier, but it would have been good to know of the option. There are so many people who could be benefiting from the career and people who could be benefiting from QS services – but do not know that we exist.
Do you have any concluding thoughts?
As a woman in a highly male-dominated profession (and industry), I often get asked about how I handle it. Do I get a lot of push-back from clients and colleagues because I am a woman? Have I experienced discrimination in any way? Have I been held back? I tell them that I am too busy loving every minute of my experience, growth, and connections to have time to stop and notice. It is the love of what I do that my colleagues and clients see, not my gender. I believe if you are passionate about and good at what you do, that is what matters at the end of the day – man or woman.

What opportunities do you see for Quantity Surveying?
We have an opportunity to get out in front of the technology changes and expand upon what we do as Quantity Surveyors. There are so many different roles within the industry that we could get more involved with like scheduling and planning. Since money and time are directly related in construction projects, it might be worthwhile for some Quantity Surveyors to get more involved in the time aspect of construction – not just the cost aspect. As a Quantity Surveyor you should not limit yourself to traditional roles. You should seek out secondary skills and stay informed on trends. Being able to spot opportunities to help the profession grow and stay relevant in a fast-changing world is important.

Amanda owns and operates Foresight Atlantic Inc, a boutique QS firm located just outside of the city of Halifax.
Amanda has worked in various industries including food service, retail, media, customer service and administration, but found later that her true passion was construction.
When Amanda is not working or participating in the CIQS, she is active in the community. She recently became a member of the Canadian Progress Club, volunteering and helping to raise awareness and funds for local charities in Halifax. Amanda is a mom, wife and daughter, fourth generation Haligonian and action movie fanatic.

About the author
Interview conducted by Arif Ghaffur, PQS, Editor of Construction Economist.
In survey after survey, 76% of Canadians concede they know almost nothing about the history, circumstances, issues, and challenges facing Canada's Indigenous peoples. This lack of understanding between cultures in a country that prides itself on being so supportive of diversification has led to ignorance, stereotyping, discrimination, and outright racism.

Isolation, separation, segregation, and marginalization of Indigenous peoples by geography, law, legislation, and policy combine as an ongoing and ineffective process that must end.

The terms Aboriginal, Native, and Indigenous refer to the same overall group of people. Most Canadians and other populations lump this diverse group together under the name ‘Indian’ or First Nations.

That is not accurate. I, for example, am an Indigenous person – but I am not an Indian or a First Nations person. This mistake in terminology is only one example of a strong need for much more education about Indigenous peoples and their communities.

It should be understood that the term Indian is only truly accurate when it refers to people from India – not to Canada’s founding people. Imagine what the Indigenous people of the Americas would be called if Christopher Columbus had been looking for Turkey rather than India.

Still, the terminology is so ingrained in Canadian law and culture that I need to describe the different groups of Indigenous peoples in Canada. There are three such groups: Indians (now First Nations people), Métis, and Inuit.

Most of the 60,000 Inuit live north of the tree line in Canada’s Arctic, and make up the majority of the residents of Inuvialuit, Nunavut, Nunavik, and Nunatsiavut (Labrador). The 600,000 self-identified Métis in Canada are located in Ontario and the four western provinces and have representation in every part of Canada.

There are now four categories of ‘Indians’: registered status First Nations people, Bill C-31, Bill C-3, and non-status. Status Indians are registered in the Indian Registry, which is maintained by the federal government’s (formerly Indian and Northern Affairs Department), then later called Aboriginal Affairs and Northern Development, and now known as Indigenous Affairs. These registered status First Nations members are the only Indigenous group made up of members of ‘Indian bands’ or tribes. And they are the only Indigenous group of people in Canada referred to as First Nations. They make up less than half of Canada’s Indigenous population.

Registered status First Nations persons are governed by antiquated, racist-based legislation called the Indian Act.

Elected chiefs and councilors govern the over 630 separate First Nations in Canada. The Assembly of First Nations, whose former leader was Grand Chief Shawn Atleo, represents most First Nations nationally.

There are 920,000 registered status Indians in Canada, although since 1985 an additional 120,000 names have been added to this number as a result of Bill C-31. This federal statute allows those Indigenous peoples who had lost their status (rights and benefits) because of racist-based marriage laws to make application to become ‘Indian’ again. This legislation, Bill C-31, receives much criticism from the First Nations leadership and community. It is extremely confusing and complicated with many definitions, categories, and classifications of people.

In 2011, Canada’s Supreme Court ruled Bill C-31 unconstitutional and passed Bill C-3, which then brought into being a new group called Bill C-3 Indians, currently numbering 45,000. These are the third generation, the grandchildren of those deprived of their ‘Indian Status’.

These new registered First Nations persons receive a reduced bundle of benefits compared to their full status counterparts, and since their creation by your federal government, they are considered an endangered species. Most of them will all but disappear in a short time frame of two generations, due to limits imposed by your federal government.

Of the First Nations people, 65% live off-reserve, and the migration to urban centres continues at a torrid pace. Why is this so? Many First Nations people are simply trying to break free of the yoke of the repressive and controlling Indian Act, to seek out safety, security, and opportunities.

About 50% of the First Nations populations are actually treaty Indians. Whether or not a registered status First Nations person is treaty is determined by where his or her home reserve is located, not by whether he or she is on or off-reserve. Why do non-treaty First Nations members receive the same treaty benefits as treaty First Nations when they have never signed any treaties?

There are only a few treaty areas in BC and none in the Yukon. Treaty 11, signed in 1921 in the Northwest Territories, was never implemented. There are no historical numbered treaties in Quebec or Labrador.

About the author
Robert Laboucane, originally from Ft. McMurray Alberta, is Director of the Calgary-based Indigenous Awareness Canada. He and his staff facilitate one-day workshops and offer a number of exciting online training programs for companies and organizations across Canada including local, provincial, and federal government departments, small businesses, service agencies and major corporations for 34 years.

Indigenous Awareness Canada
Indigenous Awareness Canada has been working for over 30 years to provide training programs that help people connect, create greater understanding, and to enhance communications between Indigenous and non-Indigenous people. Indigenous awareness training is an important first step and a foundational building block for developing long-term committed relationships and achieving better outcomes. Trusting and respectful relationships are built through improved awareness, comfort, confidence, and communications. www.indigenousawarenesscanada.com
The construction industry should be alive to the imminent changes to the laws that affect them. In December 2017, the Construction Lien Amendment Act (Bill 142) received Royal Assent, confirming that the current construction lien regime would be significantly updated. Bill 142 provides for a variety of changes to the Construction Lien Act (the CLA), including amendments to lien rights and holdback payments, and the introduction of prompt payment and adjudication provisions. These changes respond to the need to reduce delays in construction projects and to expedite the adjudication of construction disputes. This paper will alert individuals to some of the significant legislative amendments that will be coming into effect and will suggest how members of construction industry can prepare for these changes.

When will these changes come into effect?
Upon Royal Assent of Bill 142, some minor changes came into force, however, the majority of the amendments will come into effect in two phases. On July 1, 2018, some amendments that introduce substantive changes to the CLA – such as amendments to lien rights and holdback payments – will come into effect. On October 1, 2019, amendments that introduce new provisions on prompt payment and a new framework for dispute resolution in the construction industry will come into effect. These reforms will significantly expand the reach of the CLA and correspondingly, the CLA will be renamed the Construction Act (the Act).

Who will be affected?
The Act will not apply retroactively to construction contracts. The CLA will continue to apply where:

a. A contract for improvement was entered into before July 1, 2018, regardless of when any subcontract under the contract is entered into;
b. Procurement process was commenced before July 1, 2018;
c. Premises are subject to a leasehold interest and the lease was first entered into before July 1, 2018.

The Act identifies examples of a procurement process as the making of a request for qualifications, a request for proposals, or a call for tenders.

As mentioned, some amendments, including the prompt payment and adjudication provisions, will not come into effect until October 1, 2019. Such provisions will only apply to contracts entered into on the day that the amendments come into effect or afterwards.

Phase 1 Changes:
Amendments that come into effect July 1, 2018

Updated definitions
(i) **Improvement**: The Act modifies the definition of improvement to capture a ‘capital repair’. Capital repairs will be defined in the Act as repairs that are intended to extend the normal economic life or improve the value or productivity of the land or any building or structure on the land. The definition excludes maintenance work.

(ii) **Price**: The Act expands the current definition of price under the CLA. The definition of price will include any direct costs incurred as a result of an extension of the duration of the supply of services or materials to the improvement for which the contractor or subcontractor is not responsible.

Substantial performance
Substantial performance will be found where an improvement is ready for use or is being used for the purposes intended and where it is capable of completion at a cost of no more than 3% of the first $1,000,000 of the contract price, 2% of the subsequent $1,000,000 of the contract price, and 1% of the balance. Prior to this amendment, the thresholds for substantial performance were $500,000.

When contract deemed completed
A contract will be deemed completed when the price of completion, correction of a known defect or last supply is not more than the lesser of 1% of the contract price and $5,000.

Increased lien rights
Firstly, the termination of a construction contract will be added to the list of events that trigger the clock for lien preservation. The time for preserving a lien will increase from 45 to 60 days and the 45-day deadline for perfecting liens will extend to 90 days from the last day on which the lien could have been preserved. This will result in a new total period of 150 days, rather than 90 days as previously legislated.

Lien rights against condo common elements
The Act will require a person who preserves a lien related to the common elements of a condominium to give notice of their lien to both the condominium corporation and each unit owner. Where the lien in question implicates a common elements condominium corporation, notice must be provided to the corporation and each owner of a parcel of land mentioned in subsection 139(1) of the Condominium Act, 1998.

Vacating liens by payment into court
The Act will increase the maximum amount that is required when vacating a claim for lien. The maximum portion for security for costs will be increased from $50,000 to $250,000.

Landlord liability for liens
A new provision in the Act will provide that if a landlord funds a tenant improvement, Contractors completing the improvement will have a lien right against the landlord’s interest in the land. The lien will be able to cover up to 10% of the amount of the landlord funded tenant improvement.

Exaggerated or false lien claims
The Act provides for an increased standard of liability for exaggerated or false lien claimants. As of July 1, 2018, a
lien claimant may be held liable for damages if the claimant preserves a claim for lien or gives written notice of a lien and either knows or ought to know that the amount of the lien has been willfully exaggerated or knows or ought to know that he or she does not have a lien.

**Holdbacks**
The Act will allow holdbacks to take a form other than cash. After proclamation, a holdback may be established by a letter of credit, bond or other prescribed form.

**Release of holdbacks**
Two changes will occur with regards to the release of holdbacks. First, a basic holdback or a holdback for finishing work will have to be released at the end of the applicable lien period. Second, if a contract exceeds $10 million and it is agreed to by the parties, the amendments will allow a holdback to be paid out annually or as stages of the work are completed so long as there are no outstanding, registered liens on the payment date.

**Trust accounting**
On July 1, 2018, the Act will add new rules about trust accounting practices. Trust funds received for all new projects after July 1, 2018 must be deposited into a trust account that bears the name of all trustees. The changes will also impose duties on contractors to keep diligent records of their trust accounts. Trustees will have to keep a written record of all amounts paid into the trust account and amounts paid out, and of any other transfers. These changes will strengthen the claims of subcontractors who assert that certain funds held by contractors were held in trust for their benefit.

**Mandatory surety bonds**
The Act will require a contractor to a public contract, if the contract price is $500,000 or greater, to provide a labour and material payment bond and a performance bond. If the contract price is between $500,000 and $100 million, each bond must be equal to 50% of the contract price. If the contract price is over $100 million, each bond must be equal to $50 million in coverage.

**Phase Two Changes: Amendments that come into effect October 1, 2019**

**Prompt payment**
The Act introduces the concept of a ‘proper invoice’ and various provisions relating to payment. The Act provides for payment deadlines where a proper invoice has been submitted. For example, an owner will have to pay a contractor within 28 days of receipt of a proper invoice. Parties can create their own payment schedule, however, if the construction contract is silent on proper invoices, they will be presumed to be due on a monthly basis.

If an owner disputes a proper invoice, the owner will have to provide notice of non-payment to the payee within 14 days of receiving a proper invoice. In this notice, the owner will be required to state the amount not being paid and set out reasons for why the owner refuses to pay.

When a contractor submits a proper invoice and receives payment flowing from that invoice, the contractor will have seven days to pay each subcontractor who supplied services or materials under a subcontract with the contractor that were included in the proper invoice, unless it provides notice of non-payment.

If the contractor has not received some or the entire amount owed to it by the owner, the contractor will be able to provide notice of non-payment to the subcontractor. In such an event, the contractor will have to undertake to refer the matter to adjudication within 21 days after providing notice to the subcontractor. Alternatively, if the contractor disputes the entitlement of the subcontractor to any payment, the contractor will have to provide a notice of non-payment that states the amount not being paid and the reasons for the refusal of payment.

Even if an owner makes no payment, a contractor has 35 days after it sends its proper invoice to pay its subcontractors, unless the contractor provides a notice of non-payment. If a party fails to pay an amount due after the non-payment is adjudicated, the party entitled to payment may suspend work or terminate its contract.

**Construction dispute interim adjudication**
On October 1, 2019, parties to a construction contract will have an alternative dispute resolution mechanism available to them. Parties may establish their preferred forum for dispute resolution in advance. As of October 1, 2019, a party may refer a matter for interim adjudication.
adjudication by the Authorized Nominating Authority (Authority) at any time prior to the completion of the contract or subcontract, even if the matter is already the subject of a court action or arbitration. With the consent of the other party, a matter can be referred for adjudication after completion of the contract. Parties will not be able to contract out of this interim adjudication mechanism.

The Act will empower the Authority to adjudicate disputes concerning:
(a) Value of services or materials under the contract;
(b) Payment under the contract or change of services under the contract;
(c) Non-payment disputes arising under the prompt payment regime;
(d) Set-off amounts; and
(e) Payment or non-payment of holdback amounts.

The jurisdiction of the Authority is not comprehensively defined and other disputes will be addressable under this mechanism.

Who will adjudicate the dispute?
Parties will be able to agree upon an adjudicator in advance and enter such agreement into their contract. If parties cannot agree on an adjudicator or if the adjudicator does not accept a request to adjudicate the matter within four days, the referring party must request the appointment of an adjudicator by the Authority. The Authority will then appoint an adjudicator within seven days of receiving the request.

Adjudicators will provide their decisions within 30 days of receiving any requested documents related to the matter. Parties will split adjudication fees, regardless of the outcome and each party will bear their own costs. Parties and their adjudicator will be able to consent to an adjudication fee. If an agreement cannot be reached, fees established by the Authority will apply. Established fees will be publicly available on the Authority’s website.

The decisions that flow from this dispute mechanism will be enforceable by the courts. There is no appeal process available within the adjudication regime, so parties will have to appeal these decisions by seeking judicial review.

Municipal interest (October 1, 2019)
On October 1, 2019, liens will no longer attach to municipal lands.

Implications
Owners and contractors should familiarize themselves with the requirements of a proper invoice and seek agreement on payment schedules in their construction contracts to manage the expectations of all parties involved. Additionally, the Act empowers a court to discharge a lien that is frivolous, vexatious or an abuse of process.

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About the authors
Kenneth W. Movat: As a partner in Fogler, Rubinoff’s construction law group, Ken practises solely in the area of construction law with an emphasis on claims and dispute management. Certified as a Specialist in Construction Law by the Law Society of Ontario since 2002, Ken has provided legal counsel to owners, architects, engineers, contractors, subcontractors, material suppliers and surety bonding companies for over 30 years.

Working together with other members of the firm, Ken provides clients with services that include: assistance with bidding, tendering and the RFP/RFQ process, contract review and negotiation, construction liens, claims for negligence, extended duration, delay and claims management including early detection and timely resolution of disputes through mediation, arbitration and litigation.

Ken regularly chairs and participates in Law Society of Upper Canada Continuing Legal Education programs and speaks to industry groups including the Canadian Institute, EPIC, Infonex and numerous Ontario Bar Association (OBA) programs on construction. He is past chair of the Ontario Bar Association’s Construction Law section and is a sessional lecturer for the University of Toronto’s Engineering Master’s Program on construction law and contract administration.

Catherine Palmer: Catherine, currently a Law Student at Fogler, Rubinoff, is studying at the University of Toronto, Faculty of Law. Prior to attending Law School, she received her undergraduate degree from Queen’s University where she completed a major in Political Studies and a minor in French Studies.
Factors for Business Liquidity: IT’S NOT THE F WORD
Alternative finance available for services to the construction industry

The Final Frontier – to boldly go BIG!
Canada is at the final frontier of alternative finance. Common European funding practices have been ignored or seen as lenders of last resort. Interest rates have been at an historic low for years, yet they are now rising again. Amongst other dynamics, we have seen the surge in Canadian construction fuelled by low interest rates, but we are now seeing changes in the traditional banks’ appetite for lending to each and every project.

We now stand at the brink of a possible NAFTA apocalypse and a trade war with our biggest trading client. The USA accounts for approximately 76% of Canada’s exports and, although we are the top customer for 36 of the 50 US states we account for only 18% of the American export market. Domestic infrastructure projects won’t pick up the slack, and conventional liquidity sources will evaporate.

So where do Canadian businesses go for finance when the banks simply won’t lend? Alternative sources based on long-established European funding mechanisms have come to our shores. They are invoice factoring and asset-based lending. Factoring is a flexible funding solution for businesses looking to improve cash flow by releasing working capital from outstanding invoices. If a business cannot or does not want to wait for 30 to 120 plus days to be paid, then funds can be advanced. Simply, a business sells its accounts receivable to a factoring company at a discount and receives the balance of funds immediately. The factoring company becomes a funder and will chase the accounts receivable, often on a non-disclosure basis so that customers never need to know that the accounts receivable have been sold. Not having to wait for up to 120 days for payments helps businesses continue to plan and grow by:

• Giving immediate funding for expansion, enabling a business to provide goods and services to other businesses.
• Letting management focus on the business and looking after customers, not collecting debts.
• Alleviating a tight cash flow.

Factoring offers a fast, flexible sourcing line with business sales. The more a business invoices, the more funds become available. A business can get access to cash in 24 hours and access to local decision makers who understand the requirements of the local business markets.

How Factoring Works:

Your company’s assets will help you generate the financing you need as we advance funds against:

Accounts receivable: up to 90% of your eligible invoices, including foreign A/R
Inventory: up to 80% of net orderly liquidation value
Machinery and equipment: up to 80% of net orderly liquidation value
Real estate: up to 70% of net orderly liquidation value
Up to 90% of an invoice is advanced and when the funder receives payment from a customer, the business receives the remainder. Some funders provide credit insurance and bad debt protection for managements’ operational peace of mind.

**How to Factor**

The included figures show how a funder will factor accounts receivable.

The other similar option is *invoice discounting* (ID), a quick and easy way to get cash that is tied in a business’s outstanding invoices, while a business maintains the full accounts receivable management process (i.e. collecting payments from customers, cash allocation, etc.). The funder makes available an agreed upon value of your accounts receivable and availability can be adjusted daily, weekly, or monthly, depending on a business’s requirements.

ID can be more cost-effective than loans because you only pay for the funds you need, not for the full amount available. This makes ID a flexible solution, as a business only uses the funds it requires and the funding line can grow alongside sales.

*Asset based lending* (ABL) is a secured loan based on the value of a company’s assets. This form of lending gives a business the opportunity to finance its accounts receivable, machinery and equipment, inventory, and real estate to gain the working capital.

Whether your company is experiencing a rapid growth or needs more operating capital, ABL allows you to tap into a company's assets to generate cash.

QS, plant hire, project management, and staff hire businesses can benefit from these flexible working capital solutions. You borrow what you need, when you need it, and management retains control of the costs of the finance.

**QS expansion via increased liquidity**

We met a QS firm that had expanded a team to work on several sites at a multi-residential development in Mississauga, Ontario. The QS team had done the work and the QS firm had to pay the biweekly wages, but payment from the contractor was on usual net 60 day terms, leaving a 45 day cash-flow gap. The QS firm’s bank could not support the growth within the constraints of its traditional lending criteria, and an alternative financing arrangement was required. The work was profitable, but the cash had not levelled with the expenses.

The solution was an *accounts receivable* program put in place to allow the QS firm to immediately receive up to 80% of the invoice value. This instantaneous funding more than covered the QS firm’s costs, and as full payment was received from the contractor, the funding advance was repaid and the profit margin retained by the QS firm. As the QS firm’s cash-flow improved, the cost of finance reduced as the firm required lower advances. Interest costs were reduced, resulting in the firm receiving higher profit margins. The finance enabled the QS firm to punch above its weight, expand, and become entirely self-financing within a short time, based upon the increased profit that had been generated. Everyone was happy.

**Crane Company reaches to the sky**

We also met a company that owned and leased a significant number of cranes, and employed the operators. The assets were significant on paper, but the value was tied up in the plant. The recent construction boom meant that every single crane was in demand. The bank could not keep up with the company’s growth and expansion, and the line of credit was insufficient. Not only did finance and lease payments have to be made, maintenance and safety requirements met, but also the operators needed their wages biweekly.

The solution was a combination of accounts receivable finance and a term loan against unencumbered equipment. Using a *borrowing base certificate* (BBC), similar to a line of credit from a traditional bank, we generated funds at 85% of the accounts receivable and 50% against the appraised equipment value within 45 days.

This allowed the company to pay leases and wages on time, and generated enough working capital for it to put down deposits to lease more cranes to meet the increasing demands of its customers, which led to further growth and expansion.

The company remains an ABL client as it can use the flexibility of controlling costs during the varied seasons.

**Change can be good**

Alternative financing via invoice factoring, discounting, or ABL is not bad. They are short to medium-term financial tools for a business for flexibility in today’s markets. They are part of a decades-old mature European industry, now entering North America. Change can be good.

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**About the authors**

Michael Baigel is the President of Baigel Corp. in Toronto. Michael provides creative corporate recovery expertise gained from his experience of rescuing hundreds of businesses over three decades in both Canada and the UK. Saving businesses, jobs, and families drives him on. Michael is a federally Licensed Insolvency Trustee in Canada; a Chartered Insolvency and Restructuring Professional, Canada; a Fellow of the Chartered Accountants in England & Wales; a Fellow of the Insolvency Practitioners Association (UK); and has a BA (Honours) degree in Economics.

Outside of work, Michael’s passion is soccer, and particularly Manchester United.

Calum Williamson is the Managing Director and President of Bibby Financial Services (Canada), Inc. Calum has more than two decades of commercial finance experience. Before immigrating to Canada in 2013, Calum served as Managing Director at Bibby Financial Services in Scotland. Since 2006, Bibby has provided more than $2.25 billion in debts factored to over 800 Canadian companies representing virtually every industry including staffing, manufacturing, distribution, and transportation and logistics.

Outside of work, Calum’s passion is soccer, and particularly Glasgow Rangers Football Club.
CCDC Introduces Integrated Project Delivery Contract

A new standard construction contract called the Integrated Project Delivery Contract, also known as CCDC 30 will soon be released by the CCDC**. This will introduce a new model of contract for construction projects. The standard form contract guides owners, architects, contractors, and other parties in making a single, collaborative contract among all involved.

What is Integrated Project Delivery?
Integrated Project Delivery (IPD) is a method of project delivery that attempts to align the interests of all parties while leveraging the values of collaboration, communication and trust. The IPD contract includes a mechanism for parties to share the risks and rewards associated with the project and there is a waiver of most claims against each party, with a few exceptions. A Project Management Team (PMT) is created and consists of appointees by each of the parties to the contract. This team, along with a senior management team, provides guidance and oversight for the project while the project implementation teams (PITs) execute the project objectives.

IPD is achieved across four key phases:

I. The Validation Phase. This phase involves defining the project objectives, determining a base target cost, and establishing a risk pool. The risk pool is the profit that will be shared among all the parties to the contract, other than the owner, once the project objectives are complete. At the end of this first phase, a validation report is prepared and, if approved by the owner, the project proceeds to the next phase. If it is not approved by the owner the parties are reimbursed for their costs only.

II. The Design/Procurement Phase. During this phase the design is completed; necessary materials, systems, and equipment are procured; and the project’s final target cost is determined. The PMT also creates a project schedule and organizes the PITs.

III. The Construction Phase. This phase requires collaboration and problem-solving among the parties as the PMT oversees construction of the project.

IV. The Warranty Phase. This phase occurs once construction is complete. The parties work together to ensure all work was completed according to the contract and a final review of the project is conducted before determining the final distribution of the risk pool.

Benefits of IPD
IPD’s emphasis on collaboration is an effort to reduce inefficiency, costs and disputes that can occur during construction projects. From the beginning, each party is involved in planning and understands its role within the contract as well as the expectations for the project.

A single project contingency is included in the base target cost, which is intended to reduce construction costs overall, because there is no ‘layering’ of contingency costs added to the contractor’s and subcontractors’ estimated prices. Additionally, risk-sharing encourages the parties to act as a team to problem-solve in all areas of the project, instead of promoting the pursuit of individual incentives and the resulting creation of conflict.

Risks of IPD
Owners must be involved in all stages of the project because with the final target cost being determined before the construction phase, there may be an incentive for parties to compromise the project design to remain within the target cost amount.

Though IPD encourages collaboration and inclusion between contributors to the project, the leadership teams consist of only a few key members. This may create the risk of other project contributors continuing to engage in more traditional, individualistic behaviours if leadership is not strong.

While IPD contracts are not prevalent in Canada, it will be interesting to see how this will develop as a project delivery model. 

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Miller Thomson LLP is one of Canada’s leading national law firms. Our Construction and Infrastructure industry group represents domestic and foreign owners, developers, engineers, architects, contractors, and subcontractors in the project development process and in dispute resolution. Our experience extends from simple to complex projects involving a variety of delivery models.

** The Canadian Construction Documents Committee (CCDC) is a national committee made up of construction owner representatives from both the public and private sectors and members representing national organizations. The CCDC develops, releases, and reviews standard construction documents to ensure consistency and reduce costs in bidding and contracting procedures.

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About the authors

Leanna Olson advises clients on litigation and construction law matters, focusing on the construction industry including residential, commercial, infrastructure, and industrial projects. Leanna helps clients at the initial stage of projects by reviewing contracts, assisting with contract negotiations, and drafting custom-built contracts. When disputes arise, Leanna will review and advise on the issues, and will navigate her clients through negotiation, mediation, arbitration, or litigation when necessary. Prior to joining Miller Thomson LLP, Leanna practiced construction law in Ontario.

Alissa Ricioppo is working to complete her JD at the University of Alberta, with an expected graduation year of 2020. She is a member of Student Legal Services’ Criminal Law Project and has volunteered as a Child Advocate at the Zebra Child Protection Centre since 2014.

Prior to law school, Alissa obtained a Bachelor of Arts in Criminology at the University of Alberta in 2017. While completing her degree, Alissa spent a summer semester abroad studying Art History in Cortona, Italy. She has also spent time working as a rural Probation Officer in Wetaskiwin, Alberta. She is currently a summer student at Miller Thomson LLP.
In the first three editions of *Estate Planning – Regular Check-Ups Required!*, we discussed how changes in your assets, changes in your family life and relationships, and changes in estate laws may require that you review and revise your estate planning documents.

As a general rule of thumb, we suggested that if your estate planning documents are more than three to five years old, it's time to review and update them.

Another reason to review your estate planning on a regular basis is that the tax laws applicable to estates change from time to time, which may make prior plans and strategies no longer effective.

A number of recent changes in our tax laws have also affected estate planning strategies:

1) Prior to 2016, income earned in an estate and any trust arising as a result of death (a testamentary trust) was taxable at the graduated rates of tax applicable to an individual. As of January 1, 2016, graduated tax rates are available only for a graduated rate estate (GRE) that meets certain requirements and for a maximum of 36 months after death.

What this means is that for ongoing trusts created by a will, after the first 36 months, any income that is not taxed in the hands of a beneficiary will be taxed at the top tax rate, which is approximately 46% in Ontario. This puts an end to the income-splitting opportunity that made the establishment of many testamentary trusts attractive and as well, made many spousal trusts attractive. These allowed the potential for income splitting between the adult child and the trust or the spouse and the trust. Such structures will have to be rethought.

A GRE is only available to an estate. Prior to this change, an insurance trust created outside of the will not only provided savings of probate fees, but also qualified as a testamentary trust to which the graduated rates of tax applied. This is no longer the case and such a trust does not qualify to be designated as a GRE. These strategies have to be revisited to determine whether the probate fee savings on the value of the insurance outweighs the income tax savings in the first 36 months if the funds form part of the GRE.

Finally, you will quite likely want your estate to qualify for GRE status so that it can take advantage of 36 months of graduated tax rates on income earned and, more importantly, because only a GRE can carry back estate losses to the deceased’s terminal return, access new flexible charitable donation credit rules, and benefit from 0% capital gain inclusion on terminal return for donations of marketable securities. For these reasons, many estate planners are now including clauses in the will specifically directing the executor to consider electing that the estate should have GRE status, as well as a clause to preserve the testamentary trust status for 36 months after death.

2) If a beneficiary qualifies for the disability tax credit, a new trust called a ‘Qualified Disability Trust’ or ‘QDT’ can be established and should now be considered.

3) The major changes announced October 3, 2016 for the Principal Residence Exemption (PRE) now affects trusts that hold the home. For tax years that begin after 2016, only eligible trusts may claim the PRE and if the trust acquires the property on or after October 3, 2016, the terms of the trust MUST also provide the eligible beneficiary with a right to the use and enjoyment of the property as a residence throughout the year in which the trust owns the property. This requires re-visiting wills in which homes were set aside in trust to ensure that they will not be off-side of the new rules.

Your estate planning documents do not adapt to your changed circumstances or to changes in the applicable laws. Regular check-ups will ensure that your objectives (or changed objectives) will be met and that they will be met in a cost-effective and tax efficient manner.

**About the author**

Mary Wahbi, JD, TEP is a partner at Fogler Rubinoff LLP and a member of the Advisory Committee of Wellspring. Her practice focuses on estate planning, estate administration, corporate reorganizations and business succession planning.
REAL ESTATE INVESTING –
A Review of IRR as a Profitability Metric

Although the past decade has shown us a booming real estate market, property development is still a high-risk game – especially with assessing feasibility and profitability, a critical step to undertaking any venture.

Currently, we are witnessing the private real estate sector staying strong with municipalities flooded with rezoning and permit applications, but we are also seeing residential sales on a plateau trend. This, however, does not stop strong international investors from coming to Canada to look for real estate investment opportunities.

You are most likely to encounter a foreign investor within the last year that is excited to start his/her journey developing multi-family buildings in your city. At this time, the investor would consider themself as a real estate developer; however, after your initial discussion with the investor, they will soon realize that it may not be as simple as they initially thought. Even having strong equity backing is not enough to become a successful developer and build successful projects.

Shortly after, you will most likely be engaged to assist with sourcing land opportunities, creating feasibility studies, and eventually be an essential part of the development team for the investor. It is important that these investors are aware of the Canadian economy and, even more so, how to do proper due diligence when planning to develop in Canada.

WHAT IS IRR?
When working with experienced real estate investors, one of the most important calculations is that focused on the Internal Rate of Return (IRR). While performing a detailed feasibility study along with a proforma and an investment strategy, there are many calculations that determine whether a subject property is considered to be an investment opportunity, one of which being the IRR that evaluates potential profits over a given amount of time. IRR is a key calculation for investors in evaluating investment opportunities because it helps to equate cash flow over different periods (their investment holding period) to their net present value, which applies the concept of money time-value.

Although there are some limitations to IRR, it can give us an estimated figure of what we can expect to earn for a fixed point in time.

CALCULATING IRR
The IRR is the discount interest rate that brings a series of cash flows to a Net Present Value (NPV) of zero. In real estate, it can also be interpreted as the discounted interest rate that makes your total project costs equal to the total revenue over the project period. To clarify terms, levered IRR is with financing; unlevered is without.

\[ NPV = -C_0 + \sum_{i=1}^{T} \frac{C_i}{(1 + r)^i} \]

To use the formula, you will need to take the sum of the net cash flow (Ci) divided by one plus the rate (r) for the overall investment holding period (i). This amount will then need to be added to your initial investment (Co) to give the NPV. The purpose is to determine what discount rate (r) is used to make the NPV zero or to make the net cash flow equal to your initial investment.

Fortunately, Microsoft Excel has a built-in function to calculate IRR to make the process faster. The IRR function calculates the IRR based on equally spaced periods (usually in years), whereas the XIRR function calculates IRR based on specific dates.

UNDERSTANDING IRR
To understand IRR, the following tables are examples of Scenarios (A to H) with similar profits and IRR percentage.

In Table 1, when profits are distributed, they affect the overall IRR, even though the net profit remains the same throughout. In Table 2, each scenario has similar IRR; however, the profits and the timing of those profits being distributed are different.

However, the investor may prefer Scenario H even though there is less profit. They will receive the majority of the funds in Year 1, which they can then enter into another investment opportunity. An investor that is able to wait and does not need the funds for another opportunity will more likely prefer Scenario A.

At the end of the day, it comes down to what meets investors’ needs, and what opportunities they have planned for in the future.

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IRR IN REAL ESTATE PROFORMAS

During the initial stages of a project, a developer will be required to create a comprehensive investment package for either their own investment team or to raise funds from outside investors. This package not only identifies the project design strategy, it also outlines the investment strategy. The investment strategy identifies the required equity from the investors and the expected IRR.

In order to calculate an accurate IRR, the developer needs to complete the following:

• A detailed capital budget;
• A projection of cash flow and monthly project costs;
• A preliminary project schedule;
• A project financing strategy outlining anticipated land/construction financing;
• A projection of anticipated revenue during the course of the project;
• A projection of anticipated sales proceeds at completion.

With the above information, we are able to accurately calculate both levered and unlevered IRR.

LIMITATIONS OF IRR

There are some limitations of which investors should be aware when analyzing an IRR, including the following:

The IRR requires assumptions about future events which may or may not end up being true. Assumptions are being made about how the overall market is going to perform and the amount of revenue the project will generate.

The investors rely on the IRR without considering the assumptions used in the calculation. They end up oversimplifying a complex investment.

The IRR does not take into account the duration and size of the projects. When comparing solely on the IRR percentages with investment opportunities, the projects should be similar in size and time-frame, otherwise they will need to review all other factors.

“The market is constantly changing, and the investors need to be able to stay one step ahead and plan for future events that will affect their investment.”

BENEFITS OF USING A QUANTITY SURVEYOR IN DEVELOPMENT ECONOMICS

A Quantity Surveyor is suited to review all financial aspects of a project including capital and operating costs, as well as analyzing cash flow and investment projections. It is key to understanding the investors’ investment strategy (the target IRR) to guide a project more effectively.

With that in mind, a Quantity Surveyor can complete a detailed budget, cash flow projection, schedule, and financial/investment analysis. These items are essential at the initial stages of a project they will determine the project’s challenges but will also assist with obtaining project financing from financial institutions or private lenders. The initial step is to determine investors’ objectives, identify how they can meet their objectives, and what challenges they may face along the way.

As mentioned above, there are many factors that will support the project’s feasibility, and there are limitations to calculating the IRR. As well, the market is constantly changing, and the investors need to be able to stay one step ahead and plan for future events that will affect their investment. A Quantity Surveyor is able to work closely with the investor to ensure all of these aspects have been reviewed, and to create a strategy to reduce risk.

CONCLUSION

It is expected that more new investors will migrate to Canada and pursue a path of developing private real estate. The challenges the investors will face are to complete proper due diligence, and to form an exceptional group of local experts. As Quantity Surveyors in Canada, we can provide our expertise as an essential part of their development team, and support them with early studies prior to land purchase.

About the author

Chris Chin, PQS, GSC is a Partner with Core Two, a property and construction cost consultancy based in Vancouver, BC. Chris has over 10 years’ experience in the construction and development industry in Canada. Chris’s experience is diverse; he has worked as an estimator, loan monitor and real estate developer. He is also a past Director of CIQS-BC.

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www.qsonlinecostconsultants.com
A reserve fund is the best line of defence when it comes to the financial success of a real estate portfolio. A reserve fund is an effective cost planning and forecasting tool of monthly expenditures, and a report on what money is reserved. It can also be used to record the general, physical, and financial conditions of certain elements, such as architectural, structural, and building services.

A luxurious property may have higher monthly expenditures than a mid-scale property; however, an older property may have higher cost implications due to structural repairs or repairs needed for building services. No matter the property type or size, there are always several unknowns, and finding efficiencies in a property’s reserve fund may yield greater benefit in unforeseen circumstances.

A reserve fund undergoes several iterations throughout the lifecycle of a building. Methods of identifying efficiencies in a corporation’s reserve fund could involve ruling out what costs are “need-to-have” and what costs are “nice-to-have”, similar to the process that Owners’ Representatives undergo when approving project scope amendments with the Owners. Identifying these cost efficiencies may involve meeting with the property manager and reviewing every expenditure pertinent to the property. An example of an iteration of this process may involve reviewing an individual vendor, any upcoming projects and related scope, then finding opportunities for cost savings by way of discounts for bundled services. Further, an asset manager may find efficiencies by also defining and validating project scope.

To ensure that the right budget value is allocated in the reserve fund for capital repairs, it may yield some benefit to obtain a Building Condition Assessment (BCA), which will evaluate the condition of all building elements and services, and help determine (to some extent) the scope of the required repairs. Performing a BCA provides visibility for planning, and perhaps some rough costs, as well as allowing for strategic allocation of funds in the required accounts.

Another way to find efficiencies in a reserve fund is to look at the corporation’s portfolio in entirety and consider vertical integration. Every property requires maintenance, either indoor or outdoor, and sometimes both concurrently. Depending on the demand for the outsourced service and the size of the real estate portfolio, a corporation could vertically integrate such services to recover any premiums due to procurement. An example of vertical integration for asset managers is hiring a team of inhouse repair technicians, or inhouse cleaning staff. This trend is common in more dense cities like New York City or Toronto, where asset managers hold greater portfolios. There could be other costs involved due to vertical integration that need to be considered, including but not limited to workers compensation, insurance premium changes, possible need for facilities and vehicles; however, integration may still be a beneficial option.

A more technical approach for cost-efficiency is to review the operating account (‘spending account’) of the reserve fund study, and determine if there is an operating surplus. This operating surplus could be transferred into the capital reserve (‘savings account’) which will help reduce risk and grow the contingency. These are some ways of ensuring financial success of a real estate portfolio. By reviewing the individual corporation’s reserve fund, a person could discover opportunities for cost-efficiency, and reviewing the entire portfolio will prove further benefit. That is also why updating the reserve fund per the local condominium act will ensure accurate records, increase visibility and inevitably lower costs across the board.

**Highlights:**
1. A reserve fund is an effective cost planning tool.
2. Building Condition Assessments (BCA) can assist in portfolio cost planning.
3. Requirement to assess nice-to-have vs. need-to-have expenses.
4. Vertical integration will improve cost efficiency in some areas.
5. Maintaining reserves and operating accounts could help uphold an appropriate contingency.

**About the author**
Simon Gagula, B. Tech., PQS, is Principal Advisor and founder of ADVANT Construction Solutions. Simon’s expertise includes delay, loss of productivity, and change impact analysis, including quantification of additional costs and damages on civil, infrastructure, commercial and residential construction projects. Simon is also a member of good-standing with the Canadian Institute of Quantity Surveyors (CIQS) and alumni of George Brown College. Simon can be contacted at the following address: sgagula@advantcs.com.
When acting as a Subconsultant or a Subcontractor, one should be aware of the risks associated with these assignments, regardless of the value of such contracts. The purpose of this article is to provide insight and awareness of what an individual’s potential exposures are when engaging or tendering work on this basis, and how to manage such exposures – specifically for professionals such as Quantity Surveyors providing services during the course of their vocation.

A professional is someone who typically possesses distinctive qualifications such as education or training who is usually perceived to be an expert in the field. In many cases, professionals such as architects, engineers, accountants, doctors, lawyers and even insurance brokers must be registered or licensed in order to practise their professions and are required to conform to certain technical or ethical standards. Yet, this is not necessarily required in order for an individual or organization to be recognized as a professional and being perceived to be providing a professional service.

Due to professionals’ superior expertise in their fields, they are subjected to higher expectations with respect to the work, advice and counsel that they provide. Professionals are expected to uphold a legal ‘standard of care’, which requires them to perform their services in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practising under similar circumstances. In the event that a professional does not meet the standard of care, then the professional is said to have committed professional negligence.

From a risk management perspective, as the Subconsultant/ Subcontractor undertaking this work, one would always have to accept responsibilities for negligent acts, which is part of the cost of doing business. An alternative to accepting or holding all of this risk is to transfer some of these exposures to a third party via the use of insurance. Professional liability insurance, commonly referred to as errors and omissions (E&O) insurance, is regularly used by professionals as a risk transfer tool with respect to the liability that could arise from the provision of professional services.

E&O insurance affords coverage to an insured for errors, omissions or negligent actions that are committed when providing professional services. The policy generally requires the policyholder to be a professional with proper licensing or qualifications, as applicable, but the language can be adapted to ensure consistency with the nature of the work performed by the insured individual or organization. The policy can extend to provide coverage to the professional’s company or employer, in most cases limited to the entity’s vicarious liability, or to temporary staff and subcontractors. However, every E&O policy is different and the extent of the coverage will vary from carrier to carrier.

The policy provides third party liability coverage. As such, it is triggered when a client alleges they have suffered loss as a result of the insured’s professional services. In contrast to claims covered by a general liability insurance policy, claims alleging professional liability often involve loss that is not the direct result of an accident or occurrence that causes injury or physical damage. Professional liability policies are generally designed to provide coverage to the insured for both the cost of defending against a claim as well as any alleged damages.

Most E&O insurance policies are written on a ‘claims made and reported’ basis which means that the policy in place at the time that a claim is made against an insured is the policy that will respond, so long as the claim arises from wrongful acts committed after the retroactive date on the policy and is reported during the same policy period. This is beneficial to the policyholder because, as long as E&O insurance is maintained and the retroactive date on the E&O insurance policy does not change, the insured will have coverage for a claim even if it arises many years after the professional service was provided.

In order to understand what this policy truly covers, let’s take a closer look at how this policy works and responses to claims or alleged claims. The key features of an E&O policy include:

- Insuring agreements – what’s covered.
- Definitions – who’s covered.
- Exclusions – what’s not covered.
- Terms and conditions – how the policy works.

Insuring Agreements

The Insuring agreements section sets out the scope of the coverage provided by an E&O policy. This section is commonly found at the front of the policy document and will include:

- Professional services – Loss that an insured individual is legally obligated to pay on account of a claim as a result of any act, error or omission in the performance of professional services.
Exposures and Risks

• Vicarious liability – Loss that a policyholder becomes legally obligated to pay as a result of a claim alleging a policyholder’s vicarious liability incurred in performance of professional services by an insured individual.
• Failure to supervise – Loss that a policyholder becomes legally obligated to pay as a result of a claim alleging a failure to supervise an insured individual in the performance of professional services.
• Regulatory investigation – Defence costs that an insured individual or organization incurs when required to appear before a governing regulatory body.

Definitions
The Definitions section of the policy will set out whom the policy will defend, and for what type of allegations, such as:
• Claim – This can include all types of proceedings, civil, criminal, administrative or regulatory investigation and coverage for non-monetary relief.
  - Insured persons could include:
    - Insured individuals and an insured organization.
    - The individuals must have a contractual relationship with the policyholder or be employees of the policyholder acting in that capacity.
• Professional services – The definition must be consistent with the services that are being offered.
• Loss – Not restricted just to damages but to amounts owing to ensure remittances covered. Generally, taxes, fines or penalties, investigative costs (other than defence costs), matters that are uninsurable under the law, or amounts covered under another insurance policy, are not included in this definition.
• Wrongful act – The coverage under the policy is triggered by allegations of an error, omission, or negligence in the provision of professional services.

Exclusions
Generally, there are four types of events or categories that are not covered by a professional liability policy:
• Matters covered under other policies, such as bodily injury resulting from an accident, bodily injury to employees, pollution, or pension liability.
  - Bodily injury and property damage exclusions can be carved back or deleted such that coverage exists for third party bodily injury, or property damage that results from the provision of professional services.
• Matters uninsurable under the law, such as fraud, dishonest acts, fines and penalties.
  - Coverage extensions are available on some policies to provide coverage for professional negligence claims arising out of dishonest or fraudulent acts of employees of the insured.
• Uninsurable risks such as war or nuclear liability and consequences of deliberate and intentional wrongdoings.
• Matters too precarious to underwrite such as insured vs. insured or prior and pending litigation.
  - Coverage is excluded for loss arising from a legal action initiated by an associated company or individual.
  - Claims that are ongoing at the time insurance is purchased, or matters that the insured is aware might give rise to a claim at the time insurance is purchased, will not be covered.

Terms and Conditions
The Terms and Conditions portion of a policy governs how a policy works. It includes:
• Provisions addressing when and how to give notice of a claim.
• Circumstances that could give rise to a claim.
• The territory in which the policy will respond.
• What to do in the event of a dispute between the insurer and the insured.
• How to address a claim which contains covered and uncovered matters or insureds.
• How to cancel the policy.

This article provides a brief overview of how one can manage some of the business risks as professional by transferring some of the fortuitous and unintentional acts via the procurement of insurance, as noted.

As the old saying goes – without risk there is no reward. Another truism is that we are humans, and humans make mistakes.

About the author
Barrie Ngeh is an Account Executive with Aon Construction Services Group. He has over 18 years of experience working in the insurance industry, and has been specializing within the construction sector for over a decade. Barrie has had extensive experience on project insurance placements ranging from P3s to complex manufacturing/residential projects. Presently, he is responsible for leading a portfolio of construction accounts, which include multi-national constructors, developers, and property owners. He has completed the Canadian Accredited Insurance Broker program, Canadian Risk Management and Enterprise Risk Management designations, and is presently working on obtaining his Construction Risk and Insurance Specialist (CRIS®) designation.
Dear Premier Horgan,

The Community Benefit Agreement will come with a big price tag. The amount will depend on the implementation by the bureaucratic administrators. Contractors are currently suffering from ‘regulation burn-out’ as a result of the overwhelming burden of regulations from all levels of government. It has increased relentlessly over the past 20 years with a corresponding increase in construction cost. This new set of regulations is Trump-ian in its audacity. The cost increase will match the audaciousness of the regulations.

Contractors now comprise teams of highly qualified professionals. The increase of specialization has resulted in an ever-larger number of subcontractors and suppliers. It is now an industry dominated by small business. Your policy will have a negative impact on small business.

General contractors operate both as professional consultants and construction managers. Few have large workforces hired directly. Subcontracting is standard practice. Your approach to bids is not applicable to many specialized projects that demand input from contractors from the conceptual stage of a project.

This contractor expertise is in high demand and very mobile both nationally and to the US. It could result in reverse discrimination: non-union contractors and their highly qualified staff may boycott your projects. The flight of this expertise from BC could be an unintended consequence.

Contractors and subcontractors maintain their own teams and work crews on a permanent basis. Hiring is done online, through personnel agencies or for the larger firms their own human resources department. The construction workforce is in constant flux throughout a project. Interfere with this dynamic process and the consequences will be costly.

Your government intends to insert itself between the contractor and its workforce. This is gross interference in the construction process with serious cost and schedule negatives. The dead hand of the state will lie across the construction projects, suffocating ingenuity, productivity, and performance. It will have a paralyzing effect.

Construction prices have spiked in the past year. The industry is busy. This reality will complicate the implementation of this new policy and amplify the negatives.

For all government projects, project delivery systems need to be flexible. Even for smaller projects such as schools, exploring different project delivery methods is now common because a ‘one-size fits all’ approach is considered ‘old thinking’. School districts have to maximize what they buy for their construction dollar. This policy would box them in, and force them to pay more and get less.

Regarding your ‘union-only’ plan: as a general guide, anytime a client restricts supply, the price increases. Your restrictions go way beyond ‘union-only’ – they almost nationalize the workforce. This will have a huge negative impact on construction cost: inflexibility equals higher cost, which is an established fact in the industry. It will reduce the contractor’s ability to manage its workforce, effectively leading to delays and extra costs.

For the potential cost impact, I can only give you my ‘gut feeling’ based on my experience with similar policies in the 90s. I suggest that you plan for an increase of 10% to 20% on all projects affected by this policy. The actual increase will vary on a project-by-project basis.

Implementation will be important. If poorly implemented, this could result in high volatility in bid prices. Poor bid responses for the affected projects could result in project delays, rebidding, and even mothballing of much-needed projects.

I speculate that, over a three-year period, this policy – depending on the scope and implementation – could absorb one to three billion dollars of your capital funds. There is a high risk that this amount could increase dramatically due to current heated market conditions, poor implementation, or a negative response from non-union contractors. It is a policy with a very high-cost risk.

The cost of these projects will not be based on competitive market prices, as the term is commonly understood in the construction industry. It will be ‘fake competition’. The defenestration of this mainstay of cost management could have unintended cost consequences: out-of-control costs could be in the cards. Since contractors base their estimates on historical data of their work crews’ productivity on previous projects, this unknowable new system will result in a roulette wheel method of estimating.

Disclaimer
This article does not reflect the opinions of the CIQS or CIQS-BC.

About the author
Denis Walsh has been a Quantity Surveyor/Construction Cost Consultant for almost 50 years and has been in private practice since 1979. Most of his clients have been in the public sector: this includes all levels of government from municipal to federal, hospital boards, school districts, universities and housing corporations. He has extensive experience as a Senior Construction Cost Specialist over many years in a wide range of market conditions. This includes all aspects of construction cost consulting from inception to completion of a project including bills of approximate quantities for unit price contracts, conceptual cost estimates, cost plans, risk assessment, cost escalation, market research, and evaluation of contractors’ claims, progress payment evaluations, litigation support services, and value analysis. His experience includes the implementation of green initiatives and LEED. His practice is in the Vancouver area of BC.
In memory of Robert Frederick Hansford

We are saddened to announce the passing of Robert Frederick Hansford, following his battle with IPF, a battle he fought with great stoicism and grace. Rob peacefully passed away at home on June 28, 2017, with family by his side. Robert was the beloved husband of Vivienne for 42 years; happy and loving father to Sarah (Gallagher) and Lisa (Gray); father-in-law to David and Shawn; and very proud grandfather of William, Matthew, Landon and Ethan. Robert will be greatly missed by many, including his family in England who encouraged him as he studied for his quantity surveyor’s qualifications, which he gained in 1974 while at Wainwright and Partners in Mount Street, London. Vivienne and Robert met in this time when Vivienne was over for a year from Australia, working for the Solicitors in the same beautiful old building.

By Susan Neil, Executive Vice President, Hanscomb Limited

When married in Canada in 1975, Rob worked for Hanscomb Roy & Associates on Bloor Street, later moving to Begg & Daigle in 1979, and then Spantec (UMA Group), until starting with Watson & Associates in 1988. Rob returned to Hanscomb in 2002, before joining the Glynn Group in February 2005 where he retired in 2013. Rob was generous with his time in providing guidance and support to other quantity surveyors.

One of Rob’s great pleasures throughout his life was photography, which was also useful in his role as a QS. Over many years he focused on nature and took some wonderful pictures of animals, birds, and various flora in whichever country he and the family visited. In later life in Thornhill, he enjoyed being Chairman on the Heintzman House Board and volunteered at the Thornhill Seniors Club. His sense of humour and warm manner endeared him to many throughout his lifetime.
Managing Change

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