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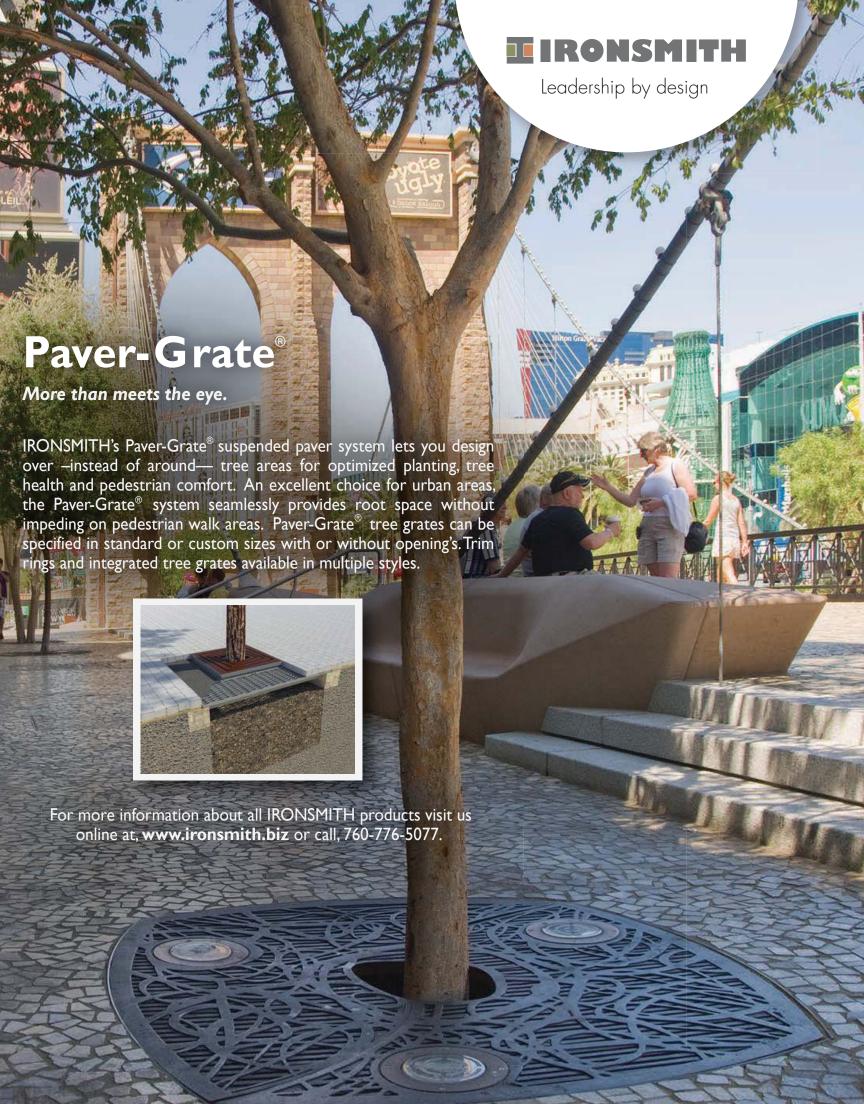
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PHOTO MATTHEW SAWATZKY

### GLEN MANNING GUEST EDITOR | RÉDACTEUR INVITÉ

# RISKY BUSINESS AFFAIRE RISQUÉE

AT AN ACTIVE TRANSPORTATION CONFERENCE I attended last spring, one of the most fascinating bits of information came from an unlikely source. Public health researcher Michelle Meade presented a recent survey where kids were asked to rank their favourite outdoor activities. Most kids put walking at the bottom of their lists. Hiking, however, was consistently among the top three. I wondered: why is hiking not just cooler than walking, but massively cooler? What is behind this disparity in how we perceive essentially the same activity? I suspect it has a lot to do with the prospect of adventure. Everyone knows what to expect from a walk. But hiking – now that has some possibilities!

As much as we value safety and predictability in our lives, parts of us will always be drawn to edgier experiences. Many have argued that the appetite for risk and adventure is basic to the human spirit. Philosopher Alfred North Whitehead went further, claiming, "Without adventure, civilization is in full decay."

And yet, there are clear signs that, in our working lives at least, our way of thinking about risk is changing. Anyone who has practiced for longer than a decade will remember when "go/no go" decisions were based largely on experience and instinct. The rise of the project management industry and alternate project delivery models such as design/build and P3s introduced an actuarial mindset to the design and construction fields, replacing the gut-feeling approach with a systematic objectification of risk – it is now measured, priced and traded like a commodity. Some welcome this change, as it provides a level of rigour and protection that is increasingly important in these litigious times. Others see it as the end of innovation.

In a climate where security (or insecurity) is driving business decisions and politics worldwide, this issue of LANDSCAPES I PAYSAGES focuses on how our complicated relationship with risk and reward is creating new business opportunities, challenging assumptions and reshaping the places we live, work and play.

Content for this issue was solicited from many sources outside the LA profession, because the risk management arena is vast and has many agents. When the editors reached out to a few insurers to give us their take on the topic, there was initial reluctance to provide anything other than canned, vetted content. Was it too risky to write about risk? Welcome to the brave new world!

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### LORS D'UNE CONFÉRENCE SUR LE TRANSPORT ACTIF à

laquelle j'ai assisté le printemps dernier, l'une des informations les plus fascinantes est venue d'une source improbable. Michelle Meade, chercheuse en santé publique, a présenté un récent sondage dans lequel on demandait aux enfants de classer leurs activités extérieures préférées. La plupart des enfants inscrivent la marche au bas de leur liste. La randonnée pédestre, cependant, se classait régulièrement parmi les trois premiers. Je me demandais : pourquoi la randonnée est-elle massivement plus prisée? Je soupçonne que cela a beaucoup à voir avec la perspective de *l'aventure*. Tout le monde sait à quoi s'attendre d'une promenade. Mais la randonnée, c'est tout un monde de possibilités!

Même si nous valorisons la sécurité et la prévisibilité, nous serons toujours attirés aussi par des expériences plus stimulantes. Beaucoup ont fait valoir que l'appétit du risque et de l'aventure est fondamental pour l'esprit humain. Le philosophe Alfred North Whitehead est allé plus loin, affirmant : « Privée d'aventure, la civilisation se dégrade. »

Et pourtant, il y a des signes évidents que notre façon de concevoir le risque est en train de changer. Quiconque a pratiqué pendant plus d'une décennie se souviendra de l'époque où les décisions étaient fondées en grande partie sur l'expérience et l'instinct. L'essor de l'industrie de la gestion de projet et de nouveaux modèles d'exécution, comme la conception-construction et les PPP, ont introduit un état d'esprit actuariel, remplaçant l'approche intuitive par une objectivation systématique du risque.

Dans un climat où la sécurité (ou l'insécurité) est le moteur des décisions, ce numéro de LANDSCAPES I PAYSAGES se concentre sur la façon dont notre relation complexe avec le risque et la récompense crée de nouvelles perspectives commerciales, remet en question les hypothèses et remodèle les lieux où nous vivons, travaillons et jouons.

Le contenu de ce numéro a été sollicité auprès de nombreuses sources extérieures à la profession d'AP, car le domaine de la gestion des risques est vaste et compte de nombreux agents. Lorsque les rédacteurs en chef ont demandé à quelques assureurs de nous donner leur point de vue sur le sujet, ils ont d'abord hésité à fournir autre chose que du contenu en conserve et approuvé. Était-ce trop risqué d'écrire sur le risque? Bienvenue dans le meilleur des mondes!

# **OUR WRITERS | NOS RÉDACTEURS**



**OUR GUEST EDITOR I NOTRE RÉDACTEUR INVITÉ** 

### **GLEN MANNING**

Glen, FCSLA, is the managing principal at HTFC Planning and Design in Winnipeg. He has worked there since 1990, interrupted by a two-year adventure in Botswana designing a rainwater harvesting system for the main hospital. Glen specializes in the design of urban public spaces, but his work often veers outside the traditional bounds of landscape architecture departures include environmental graphic design, advocating for inclusive housing, interpretive planning, and some risky math for the wind harp and astronomical armatures he designed at The Forks.

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### **RON LAUSMAN**

Ron, B.Sc., M.L.Arch., MALA, CSLA, is Vice President Business **Development-Architectural Services** for Whitewater Head Office in Vancouver and an integral part of the senior management team. He is a registered landscape architect with over 27 years of mixed use and entertainment design/development experience. Over 22 years of that time have been directly involved with the design and development of water parks around the globe. Many of these parks are associated with major resort aquatic facilities, entertainment companies, hotel water parks and other recreation amenities across North America and around the world.

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### **ALISON MADDAUGH**

Alison is a landscape architect and a lead designer with space2place. Alison has developed a unique understanding of outdoor play environments for children, informed by her academic research and her professional design experience.

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### **JEREMY STURGESS**

With over forty years of experience as an architect in Calgary, Jeremy Sturgess has contributed colourful and vast portfolio of work to the Canadian architectural landscape. Jeremy is known for his ability to create buildings that foster community and ones that establish a sustainable urban design vision. He has been recognized locally, nationally and internationally for his work.

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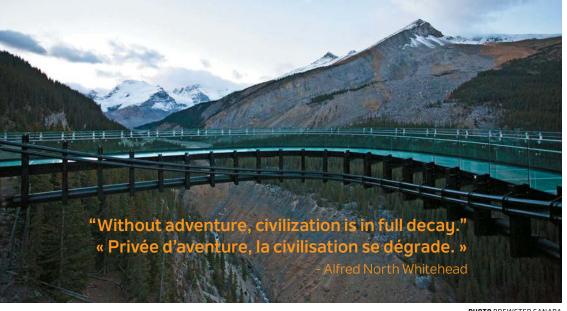


PHOTO BREWSTER CANADA



### **RYAN WAKSHINSKI**

Ryan is a CSLA Award winning landscape architect who has worked for Manitoba Parks in Winnipeg for the past nine years. His interest in thoughtful, contextual design, prairie landscapes, golf, photography and quilting keeps him serious. His five-year-old daughter keeps him silly.

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**OUR LP+ CONTRIBUTOR** 

### **MATTHEW SAWATZKY**

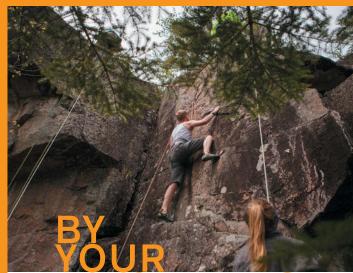
Matthew is a landscape architecture graduate from the University of Manitoba. He splits his time between photography, landscape design, and rock climbing. Living in the prairies has forced him to get creative with where he climbs, so he's always looking for new locations.

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After 33 years on the faculty of The University of British Columbia, Kay Teschke is now Professor Emeritus. In 2004, she initiated the Cycling in Cities program of research to investigate route infrastructure that encourages or discourages bicycling and increases or decreases risks of cycling injuries. This continues to be a post-retirement area of policy work and some research including participation in the OECD International Transport Forum Roundtable on Cycling Safety, two BC Road Safety Strategy Working Committees (Safe Roads and Communities, Research and Data), and the BC Road Safety Law Reform Group.

cyclingincities.spph.ubc.ca

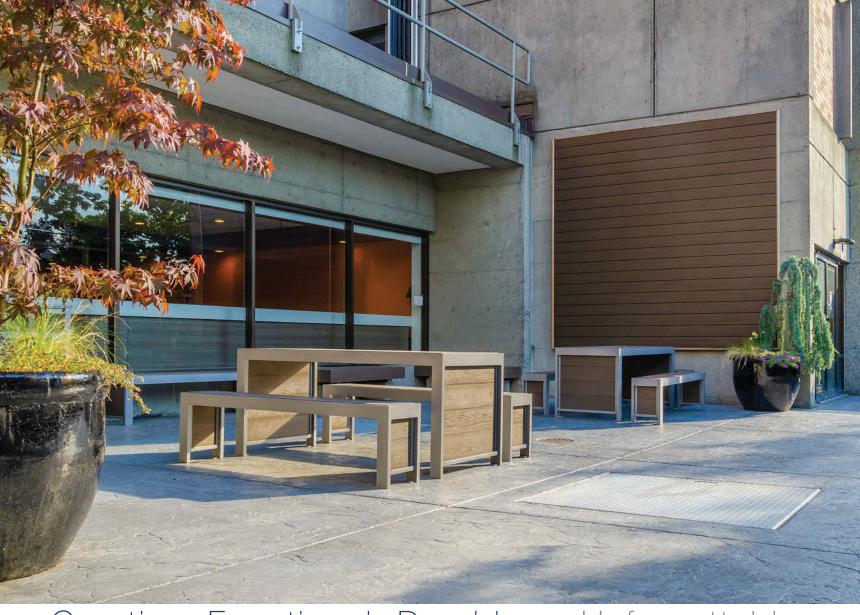


Half way up a granite wall in northern Ontario with nothing but a harness, a rope and some chalk on my hands I'm suddenly hyper aware of the shape and texture of the rock in front of me, scanning it with my fingers to find anything to hold on to...

...I had not thought about the connection between landscape architecture and climbing until late in my schooling when I started to seek out practicum topics. I had kept them separate in my mind. Climbing provided a temporary escape from the stresses of schoolwork. Then I realized that one of the aims we had for one of our park design assignments was to create a space where visitors could relax and unwind away from their fast-paced city lives. If the climbing gym was so relaxing space for me, a space that provided much needed exercise, fun and mental relief, then why not develop spaces that were more than a little indoor room at the university?

### **READ THE FULL ARTICLE IN LP+**





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**Gordon** was a consultant for 17 years in Manitoba, Ontario, and Atlantic Canada and 8 years in Botswana, Africa, before embarking on a new adventure as the Director of Planning with the Province of Nova Scotia three-and-a-half years ago, where he is working on climate change issues and some of the largest changes to planning legislation in 20 years.

1 HOARUSIB RIVER, NAMIBIA, 2009 2 WHALER'S GRAVE, KEKERTEN, NUNAVUT, 2011 PHOTOS GORDON SMITH I AM TOLD THAT I am a risk taker.

My sister thought I was "brave" to study landscape architecture just because I wanted to and that I wasn't worried about job prospects. Colleagues thought I was nuts moving to Botswana, Africa, in 1994 to practice my profession.

It's not just at work, either. People think I am crazy to have taken up snowboarding at age 50. Neighbours tell me they think it was dangerous to have put my children by themselves on public transit at ages 7 and 8 to get to school. My financial advisor has me sign papers acknowledging my risk profile because I have all my investments in equities. I race sailboats in overnight open ocean races. I took my family to see Taksim Square amidst the protests when I was in Turkey in 2013, so we could teach our kids about actions we sometimes need to take to preserve democracy.

The assessment of risk is a highly personal consideration. But, it is not an adrenalin rush I am seeking. With risk, comes learning. So, accepting risk and managing it is necessary to acquire knowledge. Thinking about what I am putting at risk – what's the downside of this course of action, what's my plan B... or C or D? at what points can I bail safely? – helps me to make personal and professional decisions that open doors to novel experiences and relationships and also allows me to contribute positively to society.

What is one person's risk is another person's adventure. Becoming a landscape architect and living in Botswana for eight years have turned out to be two of the best choices I have made in my life.

So my advice: Do the things that scare you. Go talk to the people you don't know during the breaks at a conference – you never know who you will meet or what you will learn. Identify the best person in the world to help you with a project and ask them to partner with you – the worst that can happen is they say "No"... but if they say yes, wow, what a ride!

Do the unexpected. Surprise people. Life will be fun and interesting people will come find you.

Always take the path less travelled. You'll learn more, see amazing things, meet interesting people, have a hell of a lot of fun... and have great stories to share on long drives in faraway places with strangers.



# 02 / REHABBING PARLIAMENT HILL'S WOODED SLOPES



JOHN ZVONAR

**FOR THOSE IN THE PUBLIC SECTOR**, one risk to any project is a change in government. Priorities are set, but priorities can (and often do) change. On Parliament Hill, the risks are myriad, and now increased security, although not *yet* to the detriment of the visitor experience. But one thing that the Authorities Having Jurisdiction *do* agree upon, is that of protecting the fundamental values embodied there, including the iconic image of the character-defining forested Escarpment that envelopes, sets off and symbolizes the "Hill." Today, the Hill looks fine from a distance, but it was not always thus, and "fine" is a relative term.

Read about Parliament's "risky business" in LP+

THE WINTER PANOR AMA





# 03 / TALUBI – CAN WE REALLY DO THIS?

RYAN WAKSHINSKI

JUNE 27, 2018, 10:00 AM: Tulabi Falls Campground, Yurt 4, goes live on the Manitoba Provincial Parks Campground Reservation Service. It's booked solid for the rest of the season within hours. One of six yurts in the newest yurt 'village' in the Manitoba Parks System, Tulabi Falls is the 10th such development in the province, and surely the most spectacular, with Yurt 4 standing head and shoulders above the rest, figuratively and literally.

Perched on top of a granite outcrop 15 metres above the Bird River, just below Tulabi Falls in the Canadian Shield of southeast Manitoba, Yurt 4 had been in development for over 3 years to get to this point. From the beginning, the entire design team had concerns regarding the safety of some of the sites, particularly this one, but were determined to take advantage of the stunning views from the cliff top and unique qualities of the location. Often posed, the question "Can we really do this?" was always turned into the more positive statement: "We can really do this!"

Instead of placing the yurts (a catalogue item that is part tent and part cabin, sleeping five), on existing campsites as had been done often during previous yurt developments in Manitoba Parks campgrounds, designers chose a secluded peninsula as the location to elevate the experience from ordinary to extraordinary. Yurt placement and creation of the individual yards, where the picnic table and fire pit are located, maximize the experience of the site and environment. Starting with standard deck details, the team then customized plans to suit specific sites, taking advantage of existing features such as views, lakefront sites, a granite island and the point of the peninsula and, of course, the Yurt 4 rock outcrop.

1 YURT 2 BRIDGE FROM ISLAND 2 YURT 2 AND 3 FROM PENINSULA 1.
PHOTOS RYAN WAKSHINSKI

# 04 / SAVE THE DATE! | RÉSERVE CETTE DATE!

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We planned, designed and redesigned yurt deck shapes to achieve a degree of uniformity, but then tweaked angles and sizes on site to accentuate features unique to each location, such as wrapping. For the foundations, a variety of applications were tested and implemented to suit ground conditions, including in-ground timber posts, posts on concrete pads, "ground hog" screw piles in wet areas, as well as rock anchors for the sites on exposed granite bedrock. Simple, robust timber railings provide protection from dangerous drops without compromising views out over the clear cool water of the Bird River and the mixed boreal forest.

Achieved using in-house Parks construction expertise, this approach saved money on contractor markup for a remote site and allowed constant back-and-forth communication between Parks Branch designers and regional operations staff carpenters and labourers to ensure the ideal fit to actual conditions as work continued on the ground. The result is a camping adventure like no other in Manitoba, and at \$60 per night are an affordable way to experience the Canadian wilderness without giving up the comforts of home. Book your yurt getaway today (http://prspub.gov.mb.ca)!

ryan.wakshinski@gov.mb.ca

3 YURT 3 FROM LAKE 4 4 YURT 2 AND 3 FROM PENINSULA 1 5 YURT 4 DECK 6 YURT 4 ROCK OUTCROP PANORAMA



6



**WHEN DISCUSSING RISK, NOT** many people immediately begin to think about those piles of paper that just seem to accumulate in most office environments. This practice may seem benign and maybe a little messy at worst, but as a records manager I look at these piles and see potentially ticking time bombs.

We live in an era of incredibly privileged information retrieval. The ubiquitous search bar has changed our expectations of how information storage and retrieval works: type something in, press go and get an answer within seconds. Done. So when it becomes time to physically hunt something down it can really catch people off guard how many hours (and hours and hours...) it may take to find that one record from years ago, if you can even find it at all. This is a terrible position to find oneself in, and is increasingly being punished by the courts.

At LEES+Associates we are managing this often invisible risk by actively engaging in and shaping our records landscape so that it suits our specific business context. During this process we discovered that much of the guidance out there regarding records management is overwhelming for small-to-medium-sized firms because it is highly generalized to accommodate both different juridical contexts and business sizes. For example, telling a company of less than 10 people to ask their legal or IT departments for ongoing support and guidance is often not feasible. However, this lack of a "one size fits all" approach has not stopped us from realizing the importance of a records management system.

Over the last year we have been working on developing a methodology that has been trimmed of all extraneous considerations and have found ourselves left with four essential guiding questions:

- 1. What are our key business functions?
- 2. What records makes these functions go?
- 3. How long do we need to maintain these records?
- 4. What are the consequences if these records are compromised?

By using these questions we have been able to begin the process of assessing the risk surrounding our records and systematically codifying our approach to records retention and disposition, without getting overwhelmed by the complexity of record keeping systems designed for larger businesses. Creating the framework for getting started is the most difficult part of any information-related work, but breaking it down into something specifically scaled for us – rather than trying to fit ourselves into a system designed for business larger than us – has made the task far more palatable. Information, and the control over it, grows organically. You have to gain a solid, foundational level of control over your records before moving on to more complex systems, just like having to learn to walk before you can run. By using these questions to create a foundation we will be able to design a system that is scalable depending on our firms particular size and the risk profiles attached to the work that we do.

**Cailin Bartlett** is the Records Manager for LEES+Associates. She is currently pursuing both her Master of Archival Studies and Master of Library and Information Science at the University of British Columbia. Her previous experience was in public policy research with a focus on critical infrastructure security.

# 06 / PRIMERS AVAILABLE AS A FREE DOWNLOAD

FROM THE CSLA WEBSITE









### **COLLEEN S.L. MERCER CLARKE** and

Alexander J. Clarke have shared valuable research on climate adaptation the adaptation, turning the research into Primers, which are now available to CSLA members and the wider public. The Primers can be viewed on the CSLA website at www.csla-aapc.ca/primers.

CSLA President Nastaran Moradinejad says the primers "will provide basic information on the most complex challenge facing decision-makers in this first half of the 21st century."

Perhaps the most important component of the Primers is the reference material provided for each Chapter. The resources cited are intended to deepen understanding, share experience and, ultimately, provide inspiration for innovative approaches to policy, planning, and design.

### > download at : csla-aapc.ca/primers

Watch for more articles and projects focusing on Climate Change in the Spring 2019 issue of LANDSCAPES I PAYSAGES.

Surveillez les autres articles et projets portant sur les changements climatiques dans le numéro du printemps 2019 de LANDSCAPES I PAYSAGES.



07 /

### PLAYGROUND DESIGN – AS SAFE AS NECESSARY

LAURA WILLIAMS

**EARTHSCAPE, A CANADIAN** custom playground design-build firm, has a design office that includes a few of us trained in landscape architecture. We tackle the risky business of creating playscapes that are safe and compliant, but still unique and challenging for all children. It's a kind of balancing act that is familiar to landscape architects. Deviation from traditional standardized equipment is a risky practice



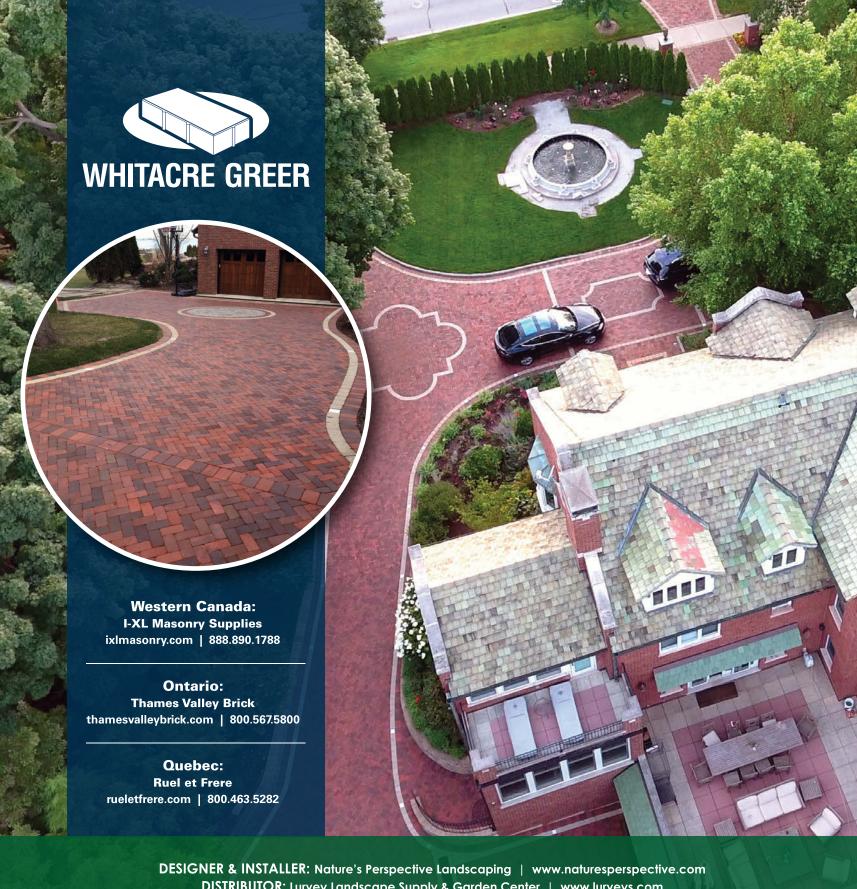
that regularly encounters speed bumps and dead ends, but it comes with the job of designing custom playgrounds.

To incorporate opportunities for risk into our designs, Earthscape similarly accepts a certain level of risk. We are heavily invested in the research and development of new technologies to push the envelope of playground design. Non-prescriptive equipment and irregularities built into our designs require and encourage creative thinking and adaptation during play. Introducing non-standard products to the market means that many of our conversations with clients begin with clarifying the difference between risks and hazards. We believe that the controlled environments of playgrounds are ideal places for kids to assess their abilities, test their limits and build confidence physically, cognitively and socially. As our designer Nathaniel Grant puts it, "We design playgrounds to be as safe as necessary, not as safe as possible."

While playground safety standards are important and have undoubtedly saved lives, our approach is to work within these guidelines to realize the vision of the client and create exceptional play spaces that will be adored by children. Modelling our playgrounds on European precedents and incorporating aspects of our landscape architectural training, the playground equipment we design often defies categorization, but still adheres to safety standards. Our risk-taking in business affords opportunities for risk-taking by children on the playground, which we think is well worth the effort.

Laura Williams graduated from the Master of Landscape Architecture program at the University of Guelph program in 2016. She is an Associate member of the OALA. She has been with for Earthscape, a Canadian custom playground company, since 2016 working on a variety of projects across North America.

1 MITCHELL PARK IN WINDSOR 2 LISGAR PARK IN TORONTO



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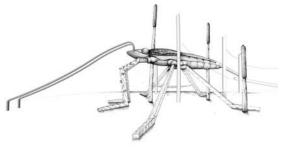
Steve Miller is a Bartlett Tree Experts champion. He, like all on his team, is the best in the business. An expert who champions the trees, landscapes and property investments of the customers in his care. He leaves no detail unexplored and no question unanswered.





**EARTHSCAPE** designs and builds custom play sculptures and structures in collaboration with some of the most prestigious Landscape Architecture firms in North America.

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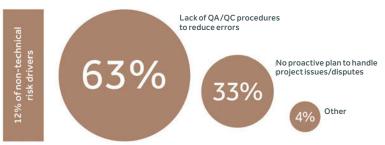


# DESIGN PROFESSIONAL CLAIMS TRENDS\*

From time to time, XL Catlin shares an overview of current design and construction claim trends the U.S. and Canada. Randy Lewis, Vice President, Loss Prevention and Client Education for XL Catlin's Design Professional team offers his thoughts about these trends, their causes, and the fact that the average payout has escalated by approximately 25 per cent over the past five years.

"Most of the issues we're seeing today are very similar to those we've been seeing for the past five years," Lewis says. "In terms of business practices, we continue to see contract, communication, staff and client selection issues at the root of many claims. In addition, over the period of 2016–2017, we saw issues in quality management and construction phase services drive more claims."

### **Risk Driver: Quality Management**



### **QUALITY MANAGEMENT**

The influence of quality management on claims has become even more prevalent the past couple of years (see Figures 1 and 2). "I think what we're seeing is the result of the dramatic economic downturn in 2008, when firms began doing things they normally didn't, such as limiting their scope, reducing their fees, or understaffing their internal project management processes," Lewis says. "Those kinds of shortcuts have become common practices for some firms."

Lewis recommends that firms evaluate each project's quality management process to see whether it aligns with the objectives and needs of that project's client. For example, if sustainable design features are important to the client, but LEED certification is not, then the firm should adjust its quality process so that it's concentrating on the client's goal and not wasting time on something the client doesn't value.

When one large firm took a hard look at its quality management process, it involved the entire organization as a way of helping everyone understand the role each could play in improving the process. The firm encouraged employees to submit suggestions on how outcomes could be improved. Of the 600 suggestions submitted, the firm decided that about 50 could realistically be implemented. A year later, the firm found that implementing those improvements had not only helped it achieve better outcomes for the client, but also increased the firm's bottom line. A reduction in quality management problems led to fewer claims and more profit.

Lewis adds that quality management affects more than the documents you send out the door. "It also affects, for example, how well you select clients that align with your firm's strengths and how successful you are at negotiating balanced agreements," he says. "It really touches on every aspect of your operations."

<sup>\*</sup>These excerpts from the June 2018 issue of XL Communique were used with permission from XL Catlin. To read the full article or learn more about XL Catlin, please visit https://xlcatlin.com/dp-ca. The information contained herein is intended for informational purposes only and does not constitute legal advice. For legal advice, seek the services of a competent attorney.

### CONSTRUCTION PHASE SERVICES

Construction phase services are now second among the six top non-technical claims drivers (see Figure 1). Just a few years ago, it hadn't appeared in the top six and now it's responsible for approximately 18 per cent of claims (see Figure 3).

Again, in an attempt to survive the economic downturn of the late 2000s, some design firms seem to have made some ill-advised practices the "new normal." To survive the recession, many firms cut some of their most experienced

scope. "In short, firms need to send the right people, with the appropriate skills and body of knowledge, to provide construction phase services," Lewis says. "We are always amazed – and enlightened – by the types of questions we get from younger professionals during our workshops, questions you might normally assume every professional would know the answer to. It's up to the more experienced professionals to help the less experienced understand what falls under a design professional's responsibilities and what doesn't."

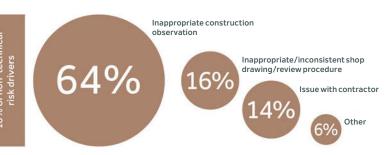
### **BACK TO BASICS**

Lewis and his colleagues believe that firms that want to make a serious effort to reduce disagreements and claims need to review the loss prevention basics to begin. "There's no new technology or methodology you need to buy or learn in order to move in the right direction," he says. "The fundamentals still matter – things like client selection and documentation."

Adopting strict documentation practices can be especially effective. Documenting who did what, which options were offered to the client, what was discussed and decided in project meetings, what was found on the site during construction phase services, what changes were made to the scope of services, and more will always serve you well, whether or not a dispute or claim ever arises.

"Firms that rededicate themselves to closely following best practices in risk management and loss prevention have the best shot at reducing the frequency and severity of claims," Lewis concludes. "The time to incorporate those practices is now, while the economy is thriving. Firms will then find themselves in a much better position to weather the storm the next time the economy takes a hit."

### **Risk Driver: Construction Phase Services**



- i.e., most highly paid – staff, leaving much less knowledgeable staff to make site visits. "You could regard some of the people making site visits as 'project tourists' rather than 'project witnesses,' based on their relative lack of experience," Lewis says. "They don't know what they don't know."

For example, XL Catlin has seen a few recent claims situations in which an inexperienced staff person visited a site, took lots of photos, but didn't realize that he or she was documenting problems the design firm needed to address. Sadly, the problems weren't addressed and eventually became the subject of a claim. The ability to recognize a problem at the site comes only from experience.

Claims also arise from site visits during which someone, by word or deed, commits the firm to accept some degree of responsibility for worker safety or to provide services beyond the contracted

### **TECHNICAL ERRORS**

Technical errors are causing claims more frequently, which raise some questions: Are these errors the result of inadequate staffing, faulty quality management issues, or both? "You could argue it's both," Lewis says. "Firms may be making people responsible for things before they have the requisite knowledge or perhaps they do have the knowledge but things are moving so fast that they make mistakes. That's where an old saying comes in handy in terms of quality management: Trust, but verify."

### TROUBLED PROJECT TYPES

As the economy has steadily improved, certain project types have seen a resurgence. There's been an uptick in claims related to schools, hospitals and other medical facilities, resort and hospitality facilities, and single-family homes and condominiums.

### TOP SIX NON-TECHNICAL RISK DRIVERS

- 1. CLIENT SELECTION
- 2. CONSTRUCTION PHASE SERVICES
- 3. PROJECT TEAM CAPABILITIES
- 4. COMMUNICATION
- 5. NEGOTIATIONS AND CONTRACTS
- 6. QUALITY MANAGEMENT

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**LIEU MAL AIMÉ** des Montréalais depuis trop d'années, le square Viger nouveau cru devait renverser les perceptions et constituer un legs majeur des célébrations du 375e anniversaire de la Ville de Montréal. L'annonce du projet, en juin 2015, a provoqué un débat populaire inattendu et fort médiatisé sur l'identité et la valeur de cet espace public. Plusieurs critiques portèrent sur le devenir du corpus d'œuvres d'art public qui caractérise le site depuis près de 40 ans. Le défi au cœur de cette controverse était donc de rendre ce plateau autoroutier sécuritaire et attrayant tout en préservant l'intégrité des œuvres conçues par trois artistes phares du Québec moderne.

À l'écoute des citoyens, la Ville de Montréal revit sa stratégie en septembre 2015. En réponse aux critiques et à la mobilisation citoyenne elle élabore avec l'Atelier Christian Thiffault et Relief Design un diagnostic et une vision portant sur l'ilot Daudelin, l'un des deux îlots du square appelée à être réaménagée prioritairement. Cet exercice avait pour but de guider la relance du projet et d'amorcer un processus d'embauche professionnelle. La Ville pris alors la décision d'intégrer au mandat les quatre îlots qui composent le square Viger d'aujourd'hui.

La firme retenue, NIPPAYSAGE, fût mandatée pour à la fois développer une vision d'ensemble du square Viger et élaborer les documents d'exécution (plans et cahier des charges) du réaménagement des îlots Chénier et Daudelin. NIPPAYSAGE a donc dirigé l'opération délicate de proposer un aménagement conservant les composantes fondamentales des œuvres originales, recontextualisées au sein d'une nouvelle trame assurant la cohérence spatiale et identitaire du lieu à l'échelle du grand square. Une aventure qui s'est échelonnée sur plus de trois ans, avec la réouverture de la première moitié du square prévue au printemps 2021.

Sous la canicule de Montréal, nous avons discuté des défis rencontrés tout au long de ce parcours périlleux. Et puisque ce numéro de LANDSCAPES I PAYSAGES porte sur le risque, et qu'il faut bien avoir la force de ses convictions, nous avons donné carte blanche à NIPPAYSAGE pour illustrer ce processus de conception aux multiples détours.

### une entrevue avec Relief Design et **NIPPAYSAGE**

### **AUTOUR DE LA TABLE, EN** ORDRE D'ENTRÉE EN SCÈNE :

Éric St-Pierre (ESP) – Agence Relief Design Michel Langevin (ML) - NIPPAYSAGE

Mathieu Casavant (MC) - NIPPAYSAGE Josée Labelle (JL) – NIPPAYSAGE France Cormier - Illustratrice

### **MODÉRATEUR:**

Jean Trottier (JT) - Président, Comité éditorial de LANDSCAPES | PAYSAGES Magazine

Développement des faubourgs, le site du futur square Viger est situé dans un creux linéaire traversé par le ruisseau Saint-Martin et d'un marais.

JT – Éric, l'agence Relief Design et l'atelier Christian Thiffault se sont impliqués rapidement dans le dossier, à un moment où le projet était sur un terrain sérieusement glissant. C'était quoi le risque pour ton équipe?

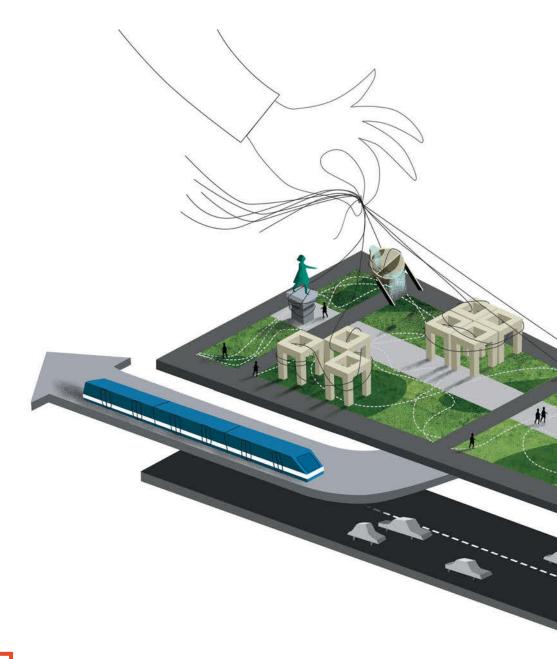
ESP - Dès le début, on a eu peur de se casser la gueule. La proposition initiale de la Ville de Montréal avait suscité pas mal d'opposition. Pour relancer le projet, notre mandat s'est amorcé avec un exercice de caractérisation et de diagnostique du square existant ainsi que qu'une analyse de précédents. Cela a permis de mieux encadrer la démarche de transformation. On nous donnait peu de temps pour proposer des alternatives consensuelles. En quelque sorte, on a fait partie des intervenants qui ont dénoué l'impasse. Vu la notoriété du projet, l'échec aurait été un sacré coup dur pour nos firmes, alors on n'a pas beaucoup dormi durant cette période charnière!



### 1860-1890

Inauguration du square Viger, premier jardin public pour Montréal et agrandissement du square vers l'est.

ML - Voyant cet appel d'offres et la controverse qui l'entourait, on a hésité à y répondre. Même avec les balises que les équipes d'Éric et de Christian avait développées, le risque de ne pas réussir à faire converger les opinions vers un consensus était grand. À cet effet, le début du mandat a porté sur une approche collective visant à tester les idées, à décortiquer les craintes et les inquiétudes. Il fallait faire cheminer tout le monde, autant notre équipe que la Ville, mais aussi les familles des artistes et des acteurs importants des milieux de l'aménagement et de la culture. Ce moment a été crucial à la réussite du projet.



### 1898-1900

Inauguration de la Gare ferroviaire Viger. À la fin du 19e siècle, le square Viger détient le titre du plus grand square du Canada.

### 1973

Début des travaux de construction de l'autoroute Ville-Marie, sur le site de l'ancien square Viger.

### 1985

Inauguration du nouveau square, « Triple parc urbain multifonctionnel » conçu par les artistes artistes Charles Daudelin (Agora), Claude Théberge (Parc ornemental) et Peter Gnass (Aire de jeux et de repos).

### 1964

Début des travaux du métro de Montréal, démolition d'une portion du square Viger.



### Décembre 2015-2018

NIPPAYSAGE et une importante équipe multidisciplinaires sont mandatés de concevoir et planifier le réaménagement du square, incluant une vision d'ensemble pour les 4 îlots.



### Mai 2015

Les firmes Atelier Christian Thiffault et Relief Design sont mandatés d'élaborer un nouveau concept pour la portion ouest du square Viger (îlots 1 et 2).

### Printemps 2015

Importante mobilisation citoyenne et débat public sur l'avenir du square Viger et de son legs d'art public. Plusieurs institutions et personnalités demandent une réflexion approfondie.

### Entre 1985 et 2015

Le square Viger est graduellement délaissé par les Montréalais et devient associé à plusieurs problématiques sociales. Toutefois, son emplacement stratégique et son échelle permettent la tenue occasionnelle d'événements culturels ou artistiques.

### 2013-2017

Inauguration du Centre de recherche du CHUM, situé à l'ouest du square Viger, revitalisation multi-usages de la Gare Viger, Inauguration du nouveau CHUM.

### 2016-2018

Travaux de préparation du site et imperméabilisation de la dalle du tunnel de l'autoroute Ville-Marie.

MC - Heureusement, l'étape faite en amont par les équipes d'Éric et de Christian a réussi à regagner la confiance des principaux intervenants, en montrant une plus grande ouverture par rapport aux œuvres originales. Ça aurait été impossible pour NIPPAYSAGE et la Ville de faire le projet sans cette étape. La peur de dénaturer les œuvres d'art était forte. Il a fallu rassurer tout le monde: six mois à échanger avec divers groupes, dont la famille des artistes, avec Héritage Montréal, etc. La clé fut de déplacer le débat sur l'intégrité des œuvres d'art vers la problématique d'ensemble de l'espace public urbain; celle des quatre ilots qui composent le square Viger et lie les œuvres d'art entre elles.

ESP – Charles Daudelin lui-même avait pris beaucoup de risques à l'époque, avec son parti de faire de l'urbanisme contreautomobile au-dessus d'une autoroute. C'est certain qu'il a dû accepter des contraintes, notamment les murs qui séparent l'espace piéton des voies routières périphériques qui étaient un réflexe de l'époque, et non son idée d'origine. Le contexte urbain était difficile et il a misé sur l'animation à l'aide de fontaines et de sculptures pour compenser.

« Dès le début, on a eu peur de se casser la gueule. La proposition initiale de la Ville de Montréal avait suscité pas mal d'opposition. »

Éric St-Pierre

ML – Miser sur l'animation pour faire vivre un espace c'est toujours un risque, l'appropriation doit se faire d'abord à partir des aménagements intégrés au lieu et l'animation s'ajoute ensuite pour ouvrir le lieu à de multiples propos de divertissement.

### Automne 2018

Début des travaux de réaménagement de la portion ouest du square (îlots 1 et 2).

### Automne 2020

Fin prévue des travaux de réaménagement du secteur ouest, renaissance du square Viger.

**ESP** – Et pourtant le référent le plus cité pour le réaménagement du square Viger c'est Bryant Park, à New York. Ce dernier fut aussi, au tournant des années '70-'80, occupé par des clientèles marginales; un espace délaissé que la police devait fermer le soir venu. Or il faut bien comprendre que son réaménagement du début des années '80 n'a pas changé de façon fondamentale la configuration de l'espace d'origine. Il aura fallu une prise en charge systématique de sa programmation quotidienne par un organisme privé, doublé de certains réaménagements, pour réanimer l'espace. Tout ça au cœur du plus dense quartier urbain en Amérique du Nord, bénéficiant de la présence d'un bâtiment public (bibliothèque municipale de Manhattan) en son centre qui assure un achalandage constant dans le parc. On peut penser que la requalification urbaine périphérique du square Viger pourra aussi contribuer à son succès mais sans une offre de services adéquate est-ce que l'introduction d'aménagements intégrés au lieu est suffisante?

ML – Le risque avec square Viger c'est de dépenser des millions sans considérer le problème fondamental créé par le contexte urbain et l'emplacement sur une autoroute. Idéalement, les rues périphériques auraient été réduites et la bretelle de sortie du tunnel aurait été déplacée vers l'est pour permettre aux gens d'accéder plus facilement au site. Malgré tout, un travail d'interface avec le contexte a été fait, et le développement du quartier ne risque que d'avoir un effet positif sur la vitalité du lieu. Le quartier se transforme à grande vitesse, le nouvel hôpital [le CHUM], l'aménagement de la place des Montréalaises, et les projets de développements immobiliers à proximité animent les abords du square. Déjà les travailleurs du CHUM cherchent des espaces pour pique-niquer; c'est plein de monde qui attend que le square redevienne accessible.

**JL** – On a voulu amenuiser l'isolement du square. Notre idée originale était d'établir un large trottoir bordé d'un double alignement d'arbres pour définir le pourtour du site tout en augmentant sa perméabilité visuelle et la superficie du couvert végétal. Cela aurait requis l'enlèvement d'une voie de circulation, mais les études de circulation n'ont pas permis de donner suite. En dernier recours, on a quand même réussi à reconstituer un simple alignement avec des espaces de transition vers le square. On a travaillé fort, de concert avec la Ville, pour donner un minimum de 25m3 de sol à chaque arbre, pour leur donner des conditions de croissance optimales. On s'est aussi inspiré de l'histoire horticole du site à travers les époques pour redéfinir la composition et la plantation de l'espace central du square, qu'on a appelé les jardins « hypernature ».

**MC** – Le projet c'était fondamentalement un exercice de gestion du risque. D'un côté on nous demandait de renouveler et de l'autre de conserver. Ce fut difficile de ne pas se perdre dans la liste d'épicerie, il fallait trouver l'équilibre. Dans certains cas, on a tenté d'amenuiser le risque, par exemple en réactualisant la sculpture de Théberge. Dans d'autres cas, on a tenté de transformer le risque en atout, par exemple en déplaçant et en stabilisant la sculpture-fontaine Mastodo de Daudelin pour qu'elle s'intègre à un nouveau bassin d'eau interactif ou encore au travers de la mise en valeur des pergolas de béton qui couvrent une importante partie du site. Au début les pergolas étaient prévues d'être démolies pour ouvrir l'espace au maximum et le rendre plus sécuritaire. Mais, en cours d'évolution du plan d'ensemble, les pergolas apparaissaient essentielles à l'intégrité du design original et au caractère identitaire du lieu. Nous avons plutôt allégé la composition en enlevant les toits pleins, en éliminant les murets, et en replantant les bacs aériens. Au fil des discussions avec la Ville et divers intervenants, on est passé de 13, à 18, puis à 20 pergolas conservées.



JT – C'est comme un barème de la tolérance du client envers le risque, non?

MC – Ouais. Le processus a permis à tous de gérer et d'assumer ce risque, autant pour la famille de l'artiste, que la Ville, et les concepteurs.

JT – Revenons à la problématique d'intervenir sur une œuvre d'art. Est-ce que les artistes qui exécutent des commandes publiques, mêmes lorsqu'il s'agit de place publique comme le square Viger, sont autorisés à prendre plus de risques que le seraient les architectes paysagistes dans le cas inverse?









ML - C'est souvent difficile d'identifier où s'arrête l'œuvre d'art et où commence le paysage. Pour ce projet, on était sensible au geste et aux œuvres artistiques, mais en même temps, les trente dernières années avaient démontrées que le manque de perméabilité visuelle et physique en faisaient un site difficilement appropriable et donc peu accueillant. D'autant plus qu'à l'époque, les concepts d'animation des structures comme l'avait imaginé l'artiste, n'ont pas été mis de l'avant. De plus, imperméabiliser la voûte de l'autoroute a rendu difficile la question d'actualisation du sol en relation avec les pergolas. Cela est devenu un enjeu d'aménagement important.

MC – C'est une question difficile puisque chaque projet possède ses contraintes et opportunités et que les temps changent. Les façons de concevoir les espaces publics aujourd'hui se font dans de plus en plus à travers un processus de conception intégré et donc en collaboration entre plusieurs intervenants; autant architectes paysagistes, architectes, artistes, ingénieurs, biologistes, mais aussi usagers et politiciens par l'entremise de consultations citoyennes.

ML – Le square Viger a fait couler beaucoup d'encre depuis sa fondation. Marché public devenu haut lieu de la bourgeoisie francophone au 19e siècle, avant d'être graduellement délaissé au 20e, l'espace public fut démoli, puis transformé par des artistes visionnaires, opération qui n'a pas eu le pouvoir de réanimer le square. Aujourd'hui, on a misé le tout pour le tout pour que le square Viger du 21e siècle revive des années glorieuses à la hauteur de son importance dans la métropole. Nous sommes à l'aube de voir ce projet devenir réalité et malgré le risque qu'il implique, nous souhaitons passionnément qu'il gagne enfin le cœur des Montréalais.

PHOTOS NIPPAYSAGE



**RON LAUSMAN** 

FROM RATHER HUMBLE aquatic roots, the growth and transformation of the waterpark industry has been nothing short of amazing. The global appetite for them shows no signs of slowing as new offerings compete to be the world's best, biggest, most thrilling. Fuelled by media coverage, reality shows, social media and blogs, there is an ever-increasing awareness of higher levels of thrill, the best of, and a desire of enthusiasts to be a part of these venues and park experiences. New and higher benchmarks drive better parks with enhanced theme overlays, interactivity, immersive experiences, sound and lighting effects, new technologies and rides that are further transforming this industry with no limits in sight.

With all this innovation and enhanced entertainment value comes an override of mitigated risk that is ever changing and requires a high level of knowledge and diligence unmatched in traditional forms or recreation. The implementation of these high-level projects requires a teams of specialist planners, engineers, designers, theme specialists, effects people, lighting specialists and manu others akin to a production in the movie industry. Through the duration of this industry, Landscape Architects have largely been the creative lead, harnessing their skill set to bridge the teams of design professionals that are needed to execute these parks to the highest of level.



Risk mitigation comes in many forms in this type of design challenge – addressing traditional park planning risks but also those intangibles that are inherent in custom rides and guest experiences.

Traditional waterparks have taken on new forms in recent years and challenges abound to create enhanced environments, pushing the limits and integrating parks into non-traditional areas and spaces while keeping them safe and fun. The "what ifs" become drivers for the unconventional and create the new normal, which now occurs regularly in our amusement park world.

### THE SKY'S THE LIMIT

This trend started for us early in 2011, when customer of ours in the U.S. had a desire to create a 6500 m² (70,000 square foot) indoor aviation-themed waterpark for a resort and museum that he owned in McMinnville, Oregon. The owner of the project, Mr. Smith, was a somewhat eccentric elderly chairman of the Evergreen International Aviation Corporation, with a desire to do something significant and the means to do it. After an early conventional solution for the park design from the architectural, engineering and GC team was rejected, they approached us to help them with a new vision for the park.



The idea was sparked by a somewhat off-the-cuff request from the chairman to incorporate one of his planes into the park. The drawings that supported this revised approach and the request for help that followed was a full scale Boeing 747 placed on top of the already fully designed building, not unlike the candles on a birthday cake. The "what ifs" became rapidly tangible when arrangements were being made to surplus an aging transport jet and determine the logistics of transporting it to site. Several months of feverish design ensued to model the plane, building and rides, as well as to re-plan

the entire park layout.

Further diligence ensued to determine project do-ability with a team of international architects, engineers, general contractors and ride-design professionals to thread the rides through a forest of columns and roof trusses to create a fun and entertaining park plan confined to the building footprint. The complications arose when the request to start the rides inside the 747 sitting on the roof become a requirement, with a plane that would want to continue to fly with the slightest breeze. With many design iterations, park layout adjustments and a multitude of engineering hours, a plan began to gel and the impossible began to feel almost doable.

Through the duration of this industry, Landscape Architects have largely been the creative lead.

The modelling and testing results were compiled into a full animation and presentation to the chairman where the initial grain of an idea had its origin. Within hours of the presentation, instructions were given to redesign the building and begin the process of decommissioning one of the Evergreen Corporations' transport 747s for use in the new waterpark. Many months later, a repainted 747 was flown on a one-way trip to the site and lifted to its new home atop the Wings and Waves Waterpark, fitted with four waterslides for its new passengers. The park was also fitted out with many themed aquatic elements to enhance the entertainment value, interpretive potential and overall park aviation aesthetic. Today, the park represents an innovation in the industry and a start to a new type of parks that push the limits for mitigated risk entertainment.





PHOTOS WHITEWATER



### **BATTEN DOWN THE HATCHES**

Pushing the boundaries and reinventing for projects such as Wings and Waves, have allowed us to become true innovators for our industry and have placed us at the forefront of others seeking to drive their visions. Shortly after innovating for the Evergreen Corporation, we were requested by ship builder Meyer Werft to help them with a new project aboard a set of two sister ships under construction at Papenburg, Germany, for WDI. In true shipbuilding fashion, the main modules of the ship were in construction as many of the other elements at the top of the ship were still being contemplated, considered and planned. The meetings were struck and after a short presentation by the ship design team and a Disney Imagineering team who came up with the waterpark idea, we were asked the magic question: "Can you build one of these?" At the time, the "idea" consisted of a name (agua duck) and a small white drinking straw that was bent into a

curved shape around the entire top deck, and proudly displayed on a large scale model of the ship that was under construction. The obvious response to our client's question was "Sure we can build it... but what is it?"

These question and answers began a multiyear adventure that merged ideas, tested new materials, invented new ways of doing things and saw patents developed for new engineering approaches and details to make this vision and idea come true. The initial challenge was where, in what physical space, could something occupy onboard a ship under construction. The modules of shipbuilding dictated where heavy objects could be placed, regularity of support and connections between ship support and corridors of use. A short course on shipbuilding and design was required for all involved in planning this new waterpark and attraction. Planning and ride design led the placement and configuration of the park, while advanced design and engineering



"Sure we can build it... but what is it?"



PHOTOS WHITEWATER

demanded we seek out ways to create a ride, a vehicle system and the transparency of materials for visual requirements. Complications arose out of the need to mitigate bending and twisting inherent in ships, massive winds and waves on the open seas, and logistics of appealing to all ages and capacities to allow all guests to use it once during a cruise interval.

The planning and design that drove the onboard waterpark was immensely complicated and required a comprehensive team approach to deal with all aspects of this three dimensional park. Engineering and park planning went hand-in-hand to detail all components of the park layout incrementally through the design process

waterpark and ride creates the ultimate family experience for the sea bound vacation traveller and has become one of the world's best park experiences for this niche market.

### PLANNING AND DESIGNING THE UNCONVENTIONAL

The planning and design work within the realm of waterparks continues to break new ground in creating water recreation experiences and parks that appeal to an ever changing market demographic and the desire of patrons to maximize their entertainment value. Planning the content in these parks is a highly specialized, knowledge-based endeavour, where it's necessary to integrate measured



to ensure structure, materials, joints and connections could be optimized for quest experience, playability, operations, safety and just the right amount of thrill value for those guests wanting a bit of enhanced fun. The parks and ride systems that were developed for this onboard waterpark resulted in patent applications for engineering systems and structural connections and was successfully implemented on both of the cruise line sister ships.

Since the launch of the two ships in 2011 and 2012, the waterpark and rides aboard have set a benchmark in the cruise line industry. The main ride in the onboard park has been named the AquaDuck and consists of a 765 foot (approximately 233 m) water coaster with two-thirds of the ride featuring massive clear acrylic sections suspended high above deck 12. The adaptation of the

risk and fun and create the recreational value necessary to maximise the guest experience. Innovation in park designs comes with customization of products, integration of rides, place making and support engineering evaluations to ensure a blend of creativity, thrill and safety are in concert. The design world of waterparks is creating new venues of recreation that have not been seen within traditional water recreation or leisure facilities. Landscape Architects are at the forefront of these new directions, taking on the challenges of "what if" with clients and adapting their skills and knowledge to bridge ideas with teams of other professionals, engineers and designers to create these new worlds. There are many new directions on the horizon that will take this avenue of waterpark recreation many steps forward. For those of you that are waterpark fans - hold your breath, the fun is just starting!

# GREAT HEIGHT, GREAT SPEED, GREAT PLAY

# Rethinking the design of children's play spaces

ALISON MADDAUGH



1ENTRY POLES AT GARDEN CITY PARK PLAY ENVIRONMENT, RICHMOND BC 2 CONCRETE 'WAVE', MOOD PARK PLAYGROUND, NEW WESTMINSTER BC 3 ZIPLINE AT KINSMEN PARK, SASKATOON SK PHOTOS 52P **AS OUR CITIES** become more dense with little room for residential yards, there is more pressure on public parks and playgrounds to meet the needs of the diverse communities they serve, especially the children that regularly visit these places.

The current interest in "risky play" has been spurred by our failures to deliver play environments that meet the developmental needs of children, let alone engage them. Since the 1980s, changes to playground safety standards have resulted in lower heights of play equipment, with an expanded zone of protective surfacing. As a result, the urban landscape is dotted with ubiquitous "islands" of catalogue-based play equipment set in the middle of a large, flat plane of safety surfacing (Herrington



et al, 2007). These sites are static, void of character and fail to sustain children's interest over time.

In studies of outdoor childcare environments, a Canadian study found that the play equipment was only occupied 13 per cent of the time, and only 3 per cent of the time was it used for its intended purpose (Herrington). When play environments are understimulating, children often make up new activities to elevate their interest, such as climbing on, jumping over and hanging from nearly anything in the play space. This is one of the primary arguments in support of risk provision, as summarized by play researcher Tim Gill: "Children have an appetite for risk taking that, if not fed somehow, will lead them to seek out situations in which they may be exposed to greater risks" (Gill, 2007, p. 16).

The quality of a play environment is elevated by providing a broader range of play experiences, including opportunities for risk-taking. The value of risky play is supported by a growing body of research that identifies "numerous positive impacts on health, behaviour and development" (Brussoni et al., 2015, p. 6447). Further, the same researchers indicate that "built

When play environments are under-stimulating, children often make up new activities to elevate their interest ...

environment solutions are also necessary" in providing opportunities for risk-taking in public play environments.

### **ELEMENTS OF RISKY PLAY**

So what does "risky play" mean in the context of designing public park environments? About a decade ago, as the notion of risky play was gaining attention, Helen Sandseter recognized the need to more clearly define what is meant by the term, and identified risky play as "thrilling and exciting forms of play that involve a risk of physical injury." Through observational studies of Norwegian preschoolers, she then identified seven categories of risky play: great heights, great speed, dangerous tools, dangerous elements, rough and tumble play and getting lost/disappearing (Sandseter, 2009).

Some categories, such as "rough and tumble play" are activities that may be introduced to a site rather than inherent in the design of the built environment. Others, such as "play where children can disappear/get lost" are constrained by the amount of space available, as well as safety concerns related to sightlines, such



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as CPTED (Crime Prevention Through Environmental Design) criteria. While European adventure playgrounds have a history of incorporating "dangerous tools" such as knives, hammers, along with saws and "dangerous elements" such as fire or open bodies of water, precedents are limited in North America. Moreover, adventure playgrounds typically have pedagogically trained staff to oversee the play activities, which is beyond the current norm for public parks.

This leaves the first two of Sandseter's categories of risky play, namely "great heights" and "great speed," as the elements most accessible to North American designers looking for opportunities to integrate risk-exposure into public outdoor play environments.

While Sandseter cites preschoolers climbing trees to nearly four metres in height, our local public play environments come nowhere near that height exposure. Across Canada and the United States, elevated play surfaces are routinely secured by guardrails. Some of the tallest elements on playgrounds, such as the "spacenet" rope climbers, are constructed in layers to limit the maximum possible fall height. Equipment such as ziplines invite children to experience "great speed." After a period of removing ziplines from playgrounds due to safety concerns, they are being reintroduced to some play environments, and their reappearance clearly delights children.

### MANIPULATING TOPOGRAPHY

However, "great height" and "great speed" do not necessarily have to come from equipment. As landscape architects, one of our best tools for generating heights and speed is topography. Through the careful manipulation of landform, designers can shape play environments to generate

open-ended play features that invite risky play. The two-metre high bulbous concrete "wave" at Moody Park in New Westminster, BC, provides children with a wide range of risk-taking opportunities: different faces of the wave are sloped at varying degrees, so children can use the routes they feel comfortable with and build their skill over successive turns. Older children also try to climb up the face of the wave, usually relying on a helping hand from a friend to make it up. Even as an adult, being on top of the form and contemplating the steep slide down can generate a distinct thrill.

The well-considered manipulation of topography can also generate risk challenges for young children. Tall cones of rubber surfacing were introduced to a rooftop childcare play space at the Surrey City Hall Childcare Facility. These playful mounds help break up the monotonous flat surface of the rooftop, and accommodate growing media for trees that help shade the site. The preschoolers work hard to climb up the steep slopes to access the hill slide, or they simply log-roll down the embankment.

Topography is also a means to generate "great speed." At the UniverCity Childcare Facility at Simon Fraser University in Burnaby, BC, a long ramp slopes at

five per cent to create an accessible connection between the ground level play area and the mezzanine. Children quickly began rolling their trikes down the ramp – some only going part-way up so their descent is shorter and slower, while others ride all the way from the top, lifting their feet up to get more speed, then lowering their feet to brake.

### **OPEN-ENDED DESIGN**

Designers also have the opportunity to create custom play features that invite open-ended play. In contrast to fixed or themed equipment, which has a predetermined function and limited play value, custom features can be designed in response to the unique attributes of the site itself. Such features can strengthen connections to the site's surrounding physical and social context, and help shape a memorable play environment. A line of bright yellow, undulating poles mark the entry at Garden City Play Environment in Richmond, BC. Designed as an entry feature to help wayfinding while adding character to the park, teenagers have been seen walking adeptly along the tops of these poles, hovering over planting and concrete. Oberserving park visitors often reinforces that people engage with public space in a myriad of unanticipated ways – especially children at play.

As landscape architects, one of our best tools for generating heights and speed is topography.





These opportunities for children to choose how steep a slope to slide down, regulate their speed cycling down a ramp, or balancing on poles are key for children's successful management of the risks they encounter. In each of these examples, the child has the autonomy to control their own response to a risky situation, which is what they need in order to learn from the experience. This self-directed response to a challenge is absolutely distinct from a hazard in the play environment, which a child might not be aware of.

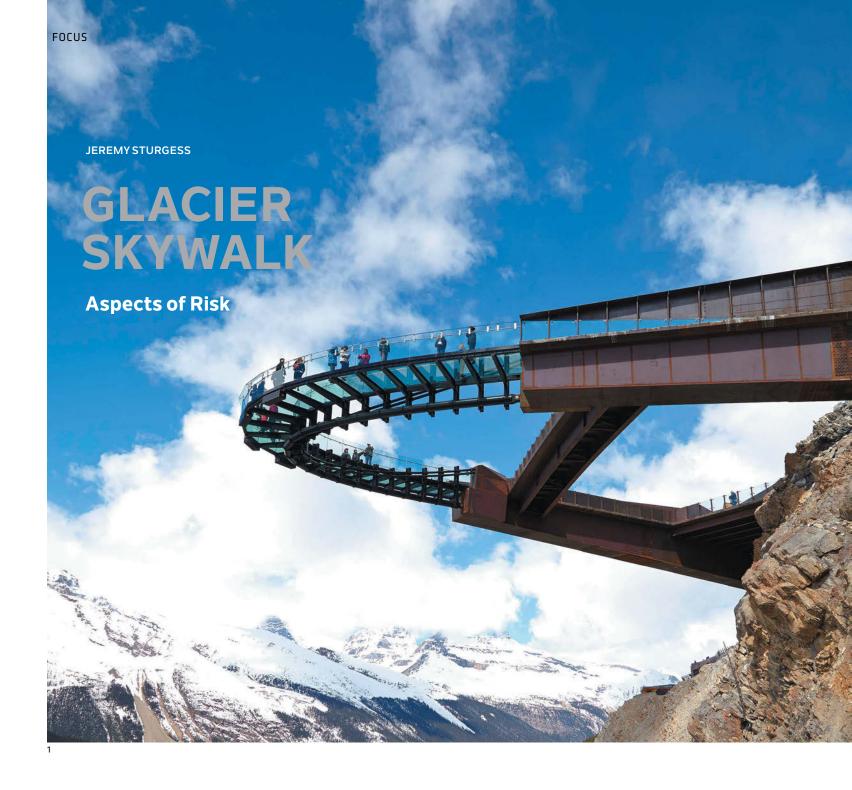
The distinction between *risk* and *hazard* is key in navigating the territory of risky play. One unattributed definition in circulation is: "A Hazard is something a child does not see. A Risk is a challenge a child can see, and chooses to undertake or not." As designers shaping public spaces, we have a clear responsibility to eliminate hazards within the play environment. We need to become adept at identifying risk versus hazard, and to provide opportunities for risk-taking that children can clearly see and have the option to engage with

or not. The 2008 Position Statement on Risky Play produced by the Play Safety Forum recommends that designers "make the risks as apparent as possible to children," especially in unsupervised play environments.

As designers of public play environments, our work will be strengthened by working across disciplines and collaborating with our clients to learn about precedents for risky play, its benefits, and our responsibilities. Current research, from data on injury prevention to findings on holistic child development, can provide valuable guidance to inform our designs for engaging play environments that successfully meet the developmental needs of children. This broad-based, collaborative approach will support our shift towards keeping children "as safe as necessary, not as safe as possible" (Brussoni, Olsen, Pike, & Sleet, 2012, p. 3134), and return children to their rightful place at the centre of the design process.

### PLEASE SEE LP+ FOR FULL CITATIONS.

4 STEEP RUBBER MOUNDS AT SURREY CITY HALL CHILDCARE, SURREY BC 5 PRESCHOOLERS CYCLING DOWN THE LONG RAMP, SFU CHILDCARE, BURNABY BC PHOTOS S2P



"I have long been fascinated by the choreography of human movement across sloping landscapes"

-Jeremy Sturgess

I LIVE IN Calgary, a city of risk-takers. Boom and bust, no bullshit, no corporate hierarchy; a good idea could connect directly to the right people to implement it. Projects could develop from a vision for a site, a cold call and a meeting. Self-confidence and passion, along with the good idea, often were enough to convince someone to become a client.

I have always been a risk taker – although not necessarily by design. I started my first office when I was 27, financed by my wife's student loan. Rather than a heroic vision of professional independence, my employers had dissolved their partnership, and I wasn't on either of their new staff lists.

We were unabashed about self-promotion in a city that thrived on it. We recognized early on that if we created work that was worthy, and connected to the right publishers, we could develop a relationship that served us both and expand our reach. We strived to form strong relationships, based on trust and quality work, with our clients, our consultants, the city and the public.

Accordingly, when a Design Build competition was organized by Brewster Canada in 2010, we were invited by PCL Contractors and RJC Structural Engineers to join their team. Brewster had responded to a call by Parks Canada to propose privately-funded initiatives in the National Park that would encourage tourists to get out of their cars and, ideally, to witness firsthand the impact of climate change.

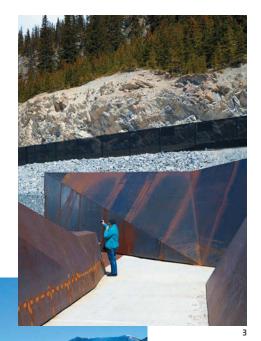
Scott Updegrave, of PCL, is a mountain climber and bridge builder. Prior to our engagement he had climbed 280 metres down the mountainside, from the highway to the creek bed below. Unconvinced about the functional practicality of traditional bridge structures, or their aesthetic appropriateness in this context, he worked with Dr. Simon Brown of RJC to come upon the notion of a horseshoe-shaped structure that would use the mountainside as its support. Joining the team to enter the competition, we visited the site above Tangle Falls on the Jasper Highway.

The construction of the highway in 1964 had disrupted the natural landscape. We chose to work within this scarred context, to avoid further activity in virgin territory. We were fascinated by the colours of the landscape – slates and grays and sages with intermittent flashes of iron oxide and glistening white calcified extrusions from the rocks. We worked in a charrette

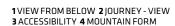
process with the design team to explore the horseshoe-shaped structure, which we bent to better address the view to the glacier. We then began to explore the concept of a journey, a pragmatic response to the location of the arrival to the site (a former viewpoint parking lot), in relation to the proposed location of the skywalk structure, about 150 metres southward along the mountainside.

I have long been fascinated by the choreography of human movement across sloping landscapes – the interaction of ramped surfaces that, when carefully considered, can create kinetic patterns of human traffic. The walk along the mountain edge is designed to thrust the tourist, including the disabled, into the

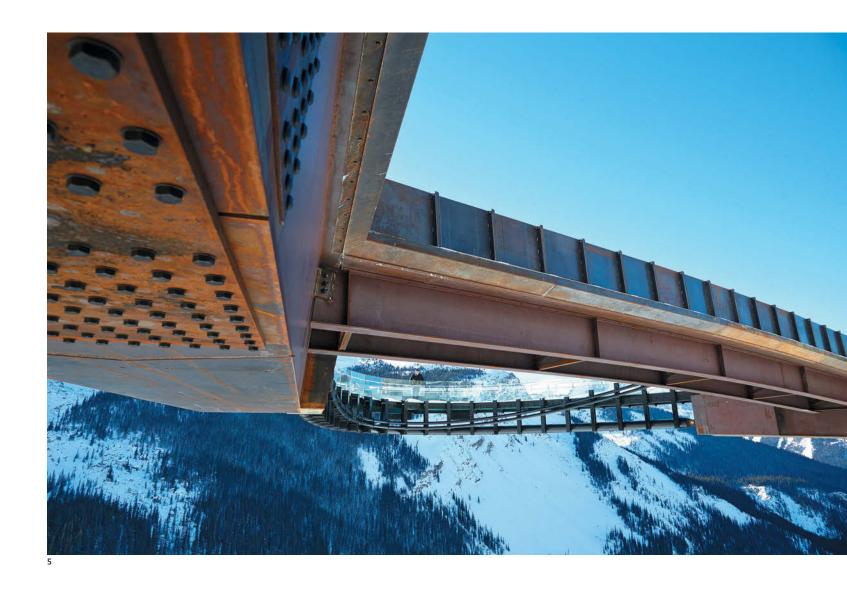
realm of the mountain hiker; to experience firsthand the pristine environment and how it is changing. The journey begins at the arrival point, strategically controlled by bus-only access to the site. You are greeted by a kiosk, and the journey begins as a gently sloping, meandering walk downward along the mountainside. En route, a sequence of structures encourage you to pause and to begin to engage in the spectacular context, and in aspects of local flora, fauna, geology, ethnology and the story of the construction of the Skywalk itself. These structures also serve to temper the journey, to build anticipation for the skywalk, and to transplant the visitor from the realm of the vehicle and the highway into the context of this extraordinary environment.







PHOTOS ROBERT LEMERMEYER, WWW.LEMERMEYER.CA



Eventually the path comes to a taller structure that diverts the traveller onto the Skywalk, the climax of the journey. One crosses a cattle-guard, onto a stretch of pavement where guests linger as they build courage to proceed. You venture onto the Skywalk.

The floor and handrails are made entirely of glass, standing 280 metres above the creek below. While you are nervous about the glass floor ahead, you remain unaware that you are already on a cantilevered structure suspended high above the valley floor. While the floor is scary, the steel-sheathed arms of the structure embrace and comfort you. The cap of the handrails

is designed as a wind deflector. The floor consists of three layers of structural glass, with a fourth sacrificial layer on top that serves no structural purpose, but can be replaced if breakage occurs. Vibration dampers are tempered musically to control the exact amount of *frisson* desired to create just enough movement in the floor to excite, but not overly alarm visitors. A straight, solid-floored cross bridge provides bracing to the horseshoe, a "chicken" bridge for those not capable of, or interested in walking on the glass floor.

The journey continues after the circuit around the Skywalk, when one comes upon a set of tiered wooden seats: an

amphitheatre that acts as a place of contemplation, of rest, a place for waiting for family members still on the Skywalk, for performances and lectures about the environment, and for meeting others who have come from afar for the experience. The journey then continues along an upper ramped walkway that overlooks and interacts at times with the entry walk below. Finally, visitors return to the kiosk, and wait under the sheltering eaves for their return bus ride.

Initially, there was some public resistance to the idea of building a tourist attraction on this site, even when it was a site originally formed by the development of a highway





While the floor is scary, the steelsheathed arms of the structure embrace and comfort you.

and consisted exclusively of a viewpoint and a parking lot. Extensive public engagement and the explanation of our rationale for universal access to witness the reality of climate change resulted in political support for the project.

Apart from Parks Canada's concern that greater numbers of tourists needed encouragement to get out of their vehicles, there was a genuine conviction that access to the splendour of the mountains should not be limited to the skilled mountaineer. Careful consideration was given to how far we go to protect the novice, the infirm, the timid, without going so far as to build a fortress. We had to create an atmosphere of relative safety, within a context of risk, such that there was an awareness by all of the significance of the place and the care and caution necessary to fully embrace the experience. While a handrail along the mountainside is necessary given the numbers of visitors, the design is less a barrier than a gesture to respect the edge, and the fragility of its context.

The project is entirely off the grid. Photovoltaic panels on the kiosk roof operate ticket sales and local staff requirements, such as lecture amplification. A singular composting toilet is provided in the kiosk for emergency use. No other services are provided.

When entering a design competition we miss the collaborative involvement with a client regarding their vision and aspirations for their project, yet we enjoy the unfettered clarity that total control delivers. The risk associated with this control is that we are "only as good as our jury," and the assumptions we make about the correct approach are only valid if the client can embrace them as a viable extension of their preconception for the project.

5 CLASSIC VIEW 6 KIOSK 7 REPOSE -AMPHITHEATER 8 PATHWAY PHOTOS 5, 6 ROBERT LEMERMEYER, WWW.LEMERMEYER.CA 7, 8 JEREMY STURGESS









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A particular benefit of the horseshoe structure was the heroic subtlety of the concept – the fact that to the untrained eye the structure is not visible from afar.

Working closely with the Structural Engineer and the Contractor, we developed the horseshoe concept into the crown jewel of the necklace of supporting structures that together demarcated the journey along the mountainside. We expressed these elements in a limited palate of building materials that would be harmonious with the natural landscape. And we did so in a compelling set of fractal planes evocative, yet not a mimic of, the mountainside. A particular benefit of the horseshoe structure was the heroic subtlety of the concept – the fact that to the untrained eye the structure is not visible from afar; an aspect embraced by Parks Canada and entirely unexpected by the jury. As such, our submission shattered conventional thinking and, supported by our team's assurance of structural and economic integrity, the project won the competition.

It was important to establish a design concept as rugged and as resilient as the landscape itself, yet clearly in a manufactured, rather than a faux-natural expression. To that end, four strategic materials were employed to build the project:

- CorTen steel was selected for its durability, strength, versatility and, most importantly, for its ability to rust naturally, progressively, and artfully over time, creating a mnemonic connection between this structure and the iron ore deposits of the mountainside.
- Local stone was mined from the site and relocated by hand into gabion baskets that are the retaining for the ramped walkways. Gabion baskets are a typological retaining system along the highway; the refinement of a hand-made process with local selected stone raises them here to an artful interpretation.

- Glass is used firstly to exploit the views and the experience, but more importantly, to create the extraordinary, to provide an experience untried, to venture into another world. And as it extrudes from the CorTen jaws of the Skywalk, it is visually reminiscent of the calcified extrusions in the rock below.
- Larch wood clads those areas where humans interact directly with the structure – the amphitheatre, the kiosk- to sit, to wait, to linger.

The excitement of a competition win is tempered by the reality of the task ahead – the development of the design that: must be refined to the specific requirements of the client; must respond to the requirements of the Parks Canada Approving Authority; must withstand a host of technical and environmental standards; and, most important, must come under the scrutiny of a Design Build budget. Our experience in the Design Build world is historically disappointing, since typically the design aspect of the Design Build budget is marginalized in favour

of budget acuity. In this case, however, while the budget was indeed paramount, the client, the structural engineer, and in particular, the contractor (the mountain climber) were themselves champions of the winning design so that when any one of us came up with potential cost saving design changes everyone fought for the preservation of the integrity of the winning concept. This was, for us, an unprecedented collaborative and iterative process throughout both the design development and construction documentation phases. During construction, this process continued with real-time communication between the manufacturers and the designers to craft and install the sculptural forms in the most economically efficient manner. Only through the hands-on involvement of the designers working together with the fabricators and installers was it possible to fully realize the design intent.

Risk is present in every project we encounter. The nature of architecture, and development, is risky at every level: risk of approval; risk of life safety during the construction and for the finished project; risk of liability; risk of financial success, both for the project and for the designer; risk to one's reputation. Architecture involves so many components, so many jurisdictions, so many stakeholders, that risk is both inevitable, and essential. The successful architect will gently guide this process, and be the custodian of the approved design concept, throughout the hurdles that threaten to undermine the project at every turn. It is by understanding, and embracing risk, through an awareness, or experience that imparts appropriate mechanisms to temper and manage it, that a project can succeed and perhaps, perhaps, become extraordinary.

9 MATERIAL 10 ON SITE ASSEMBLY 11 ON SITE ASSEMBLY, CLOSE UP 12 ENTERING THE WALK PHOTOS 9, 12 ROBERT LEMERMEYER, WWW.LEMERMEYER.CA 10, 11 PCL CONTRACTORS



**KAY TECHKE** 

# OFF-STREET BIKE PATHS AND MULTIUSE PATHS

# Lessons in safe design from street engineering



**ASK CANADIANS WHERE** they want to ride their bikes and the most important features are to be away from traffic – its safety risk, noise and air pollution – and to be near beautiful scenery. Given those priorities, their top route choices are off-street bike or multi-use paths. In our research, paths were preferred over routes on city streets and rural roads, including those with bike lanes. BUT... in our route safety research, we were surprised to find that certain onstreet bike facilities were safer. How could this be?

This is the type of question we've tackled in our Cycling in Cities (cyclingincities.spph.ubc.ca) research group at the School of Population and Public Health at UBC. Faculty and students have worked together to examine the relative safety of bike route types, the effectiveness of helmet laws and what factors attract more women to cycle.

Back to our question – first it's important to put bike and multiuse paths in context with other route types. The graph below does that by combining the results of our research on route preferences and route safety. You can see that overall, the most preferred route types are also the safest, and vice versa, the least preferred are the least safe. But look within the

green-banner group "bike-specific facilities" and you'll see that "bike only path" has the highest preference, but it is only moderate in safety. More worrisome are the multiuse paths (grey banner), next highest in preference, but towards the bottom in safety. Why?

We decided to have a closer look at the characteristics of off-street paths and the circumstances of injuries on them. We compared them to the safest route types that were also among the most preferred: "protected bike lanes alongside major streets" and "residential street bikeways with traffic diversion." Here's a list of the important differences in characteristics:

- Off-street paths were more likely to be curvy and have poor sightlines.
- Off-street paths were more likely to have obstacles like bollards, posts and street furniture.
- Off-street paths were less likely to have street lighting.
- Off-street multiuse paths mixed people walking and cycling.
- Off-street multiuse paths were more likely to be unpayed.

When we looked at the circumstances that led to crashes in our injury study, we found the following:

- Crashes on off-street bike paths and paved multiuse paths were more likely to involve obstacles and to involve other people (walking or cycling) or animals.
- · Crashes on unpaved multiuse paths were more likely to involve uneven surfaces, for example potholes and tree roots

The good news is that the crashes along off-street paths almost never involved a motor vehicle.

Given these research results, what should we do? Should we just accept that off-street paths may not be as safe as people think? That would miss a huge opportunity. People love off-street paths. It is the job of designers to make them not only comfortable and inviting places to walk and ride, but also as safe (or safer) than the safest on-street routes. The research shows clearly what to do and what not to do.

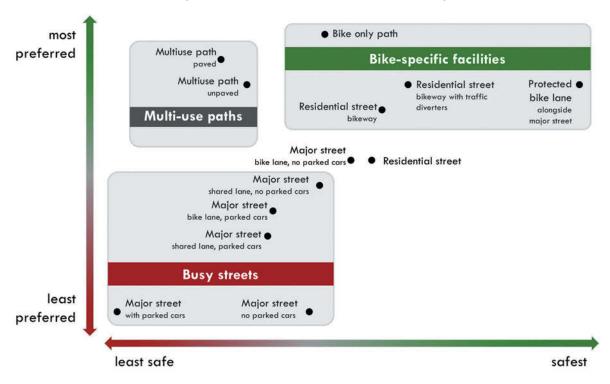
The photo (lower right, facing page) illustrates a common problem in path design. The bollard narrows the path and increases injury risk to people biking from hitting both the bollard itself and the bridge railings. The purpose of the bollard may be multifaceted – but its presence overweights liability posed by a very low

probability event (a motor vehicle crossing the bridge) and in so doing, underweights liability from its ongoing hazard to people riding. If the bollard is also meant to slow cycling speeds, this is already well signalled by the visual narrowing of the path by the bridge railings.

In contrast, the photo on the upper right on the facing page shows a wonderful example of an off-street path, more in line with how we design city streets. One side is for people on foot and the other for people cycling – separating traffic with different masses and speeds. The bike path is wide enough for side-byside riding and comfortable passing, the surfaces are paved, there is lighting for visibility at night, and there are no obstacles. The path is straight, making the sight lines good. As a bonus, the plantings make it a beautiful and welcoming space.

We hope this overview of our research and the two examples show how we can build Canadians' top choice cycling routes in a way that also makes them the safest. Off-street bike and multiuse paths could be in the top right corner of our preferences vs. safety graph if we were rigorous with their design using the safety experience of designing roads.

### Route preferences vs. route safety. These usually align, but there are some surprising exceptions ... we need to understand why.



# **GEORGE F. DARK**

# Governor General's Medal Winner Says Embrace Geography, Leave Your Comfort Zone

**ON AUGUST 22, 2018,** the Canadian Society of Landscape Architects (CSLA) announced that George F. Dark, OALA, FCSLA, FASLA, was selected by the jury as the 2018 recipient of the Governor General's Medal in Landscape Architecture. The Governor General's Medal in Landscape Architecture (GGMLA) is the highest honour bestowed on a landscape architect by the CSLA. The medal is intended to honour exceptional landscape architects whose lifetime achievements and contributions to the profession have had a unique and lasting impact on Canadian society.

LANDSCAPES I PAYSAGES editor
Laurie Blake caught up with George
shortly before he received the medal
during an official presentation in Winnipeg.
As we talked, the theme underlying most
of his remarks was not only his love for his
profession, but his enjoyment in meeting
and working with LAs, young and old, on
the many and varied projects he has been
involved with over the years.

**LB /** The issue of L|P we're working has an overall theme of risk – taking risks, risk management, risky business, risky play. I'm sure you've taken risk, or embarked on a risky project, said to people – let's just...

GD / The firm I own has almost 80 employees – risk is a daily occurrence.

**LB /** Did you know you were nominated for the Governor General's Medal?

GD / Not initially, but it did slip to me eventually. I'd been working in Charlottetown, on the waterfront project, and I was remarkably tired, sitting in an airport with an associate. When I got the phone call, I was quite speechless because I've won lots of awards in my life. I love every one of them and they are all hard work but there is something about being recognized by your peers, the people around you who actually know best if I'm doing something properly or improperly and that's a very specific and quite humbling honour to me. These are the people who have known me for 40 years.

I have to say – the only other person who has this award is a venerable character in the industry, Cornelia [Hahn Oberlander] – and the thought I would share an award with her is humbling, as well. I know her very well and she's a remarkable person who has several more decades at this than I do!

**LB** / You mentioned 40 years in the profession – why did you decide to become an LA/urban designer?

GD / It's a very interesting thing and people ask me this a lot. I don't know if I know the answer. I grew up in a small town called Stratford, which is a small but remarkably beautiful small southern Ontario city. When I was growing up, the Festival was there, the central parkway was there, the river parks were in place. It had a very large central European layout of the central portion of city. All of which was very intact. A solid example of urbanism of its kind. A beautiful relationship of open space.

When I went to Landscape Architecture school in 1972/3, landscape architecture was not a big thing in Canada. It was a little bit fledgling. I was not sure what I was going to do, either architecture or landscape architecture. I think it's just a twist of fate I went into LA. Actually, I didn't immediately go right into LA, I went into technology at Ryerson, because at that time I thought the technology side

of the world would be more interesting. The LA program shared profs with the architectural technology program, and we learned a lot of the same stuff. So, I went to Ryerson first, and later went to the University of Guelph to do a BLA in design.

Urban design is a very different story. My trajectory was fairly typical. I did work while in University, where I became aware of fairly severe limitations about what people thought LA was and could do. Then I changed gears and went to work for a very large engineering firm -Marshall Macklin Monaghan; eventually going to work for their Master Planning Group, called CanSult. It was an LA group, but in a very large planning group. At Cansult, I noticed a whole lot of doors opening up. Working with architects, LAs, engineers – it was a much bigger world, the pie was bigger than what is offered simply in LA. I did that for quite a few years and travelled extensively. Working for a large firm breaks you out of the notion that all your work is in one place. I worked all over the country and even overseas – they had work in a lot of different places; if you were willing to travel, you could go.

That's how I started working in the Arctic. They had a project studying tourism on Baffin Island – really nothing to do with LA. There was a notice on the bulletin board for anyone who wanted to go there. I went down to HR and I said I'd go.



HONOURABLE JANICE FILMON, C.M., O.M., L.L.D, LIEUTENANT GOVERNOR OF MANITOBA PRESENTS THE GOVERNOR GENERAL'S MEDAL TO GEORGE DARK. PHOTO J. LANDRY

Then I went to work for a very urban version of a planning group - the IBI Group. And I worked almost exclusively on urban projects in the City of Toronto. They actually had a group called Urban Design and I went into that group as an urban designer. That's when my practice started to change – because I had learned about geography, that the world was a lot bigger. I had learned that LA is a very interesting thought process that you can apply to all sorts of things. It doesn't just have to be to the "core" landscape architecture.

Sometime later, a friend approached me and asked if I was interested in joining him and another friend in starting a firm. So, I went to my wife and said I'm going to leave a stable firm to go with these two characters who have no work but were sure they would! Frank Lewinberg and Joe Berridge – that's where Urban Strategies came from: a group of people who had no limitations as to what they thought their practice would be. Joe is an economist/planner with a lot of work experience in New York and England; Frank is South African, a planner with degrees in architecture. Today, our work is all over the world.

# If you want to expand your practice and push the envelope of what you do - embrace geography as there is never enough work in one place.

If you want to expand your practice and push the envelope of what you do - embrace geography as there is never enough work in one place. This is one of reasons I have worked in so many places. The nature of diverse practice, means you've got to travel. It all sounds wonderful and romantic, but trust me, it's still work. I've done work in Barbados twice now, 20 years apart. People say it must be wonderful. But, in reality, you fly to Barbados, put on a suit and work all day in an air-conditioned office – you look outside at the blowing palm trees. It is work.

I always encourage younger people to embrace geography. There's a lot of work out there.

Just because you live in Toronto or Vancouver, it is not a restriction for you participating in the rest of the world...

**LB /** Looking at the Urban Strategies website, I was impressed by how many young faces I saw among your staff and colleagues.

GD / I'm one of the oldest guys walking around the office for sure these days! Years ago, we developed an attitude that we wanted to have a very robust internship project. Not one with interns working on projects for free, but hiring interns on a very regular basis. Over the years it's grown a lot - I'd say this semester, we have seven or eight interns who we work very closely with - from U Guelph, Waterloo, even some from U.S. schools, such as Penn, Harvard, even one this year from Singapore – to allow people to come up into our system and work with us. Some come once, some come for a few terms, some work for us permanently now.

It's always been my belief that there's a bit of a responsibility for those people running design practices to help young people get their careers in place. As you know, it's a very, very hard industry now to break into, to understand and to get breaks in. And, we've always felt that we have a bit of a responsibility to open up those channels to people. I would say that over the 30 years I've been at Urban Strategies,

we've sponsored interns in the hundreds. It's been mutually beneficial – we get just as much from them as they do from us. You know, people who are good go off to do wonderful things. We've had interns who are now clients.

It's all about a big continuum, about sharing. But I also think the nature of the work we do has a lot of very strong thinking about urbanism, the creation of places where people under 30 want to live. We're naturally attractive to them as a place to come and work. This has been one of things I enjoy most. You know, they do different things than I do, they listen to different things than I do, they have an understanding of the computer and digital realm of our industry that I do not have. I've learned more from them than they have from me.

**LB /** How have computers changed LA?

GD / When I went to school in the early 70s, there was no such thing as computers and we drew everything, over and over. The process of design, immersing oneself in drawing – that teaches things, you learn things and, perhaps, explore more. Computers now are capable of creating so many things, or the algorithms can. Part of evolutionary process of design is starting to come away from humans and more invested in the machine. The bad part of that is the human loses some of the understanding capacity that traditional methods used to impart.

I don't say it's all negative. The "olden days" were not necessarily better. Younger people these days have a massive capacity to do things when they are able to harness the digital power behind them, their ability to create, to modify, to explore and to generate material is phenomenal.

The work is easier to do now in this digital age, but there's also an acceptability for talent that "comes from away," as it were. For example, the new LRT in Minneapolis/St. Paul – my partner, Melanie Hare and I worked on it for four years. They were perfectly happy to hire people from Toronto. We structured the whole process and did all their community engagement

processes. Also, the waterfront in Charlottetown, they kind of like that you're from away...

If you want to talk about risk – getting out of your comfort zone may feel risky but it's actually one of the best ways to get substantial gain in your career.

**LB /** Do you have some projects that are particular favourites?

GD / They are all learning experiences. Big ones, small ones. I don't know if I have favourites. As you go through all of this stuff, there is a list of people I have grown very fond of... who are always going to stand out with me. The people from St. Paul are really quite wonderful. I've worked with most LAs in Canada; I've set the stage for a lot of work for people. I'm the beginning of the process. I setup the ideas that people have, which subsequently LAs can work on for years. High points are the people I work with. I'm more attracted to the people, really, rather than the work to project.

That said, something like Evergreen Brickworks, is something I'm really fond of. It's a little bit of a life project that I've been working on close to 17 years. I was chairman of the board for 12 years through the whole building process, and I'm now chair emeritus. I still sit on the buildings and programs committee — I still volunteer, I am still very involved. Really, it's less of a project and more a little segment of my life.

I like projects where you are able to take an idea, put it in place and have some longevity to it. Something such as the initial opening public realm framework for Waterfront Toronto, which we were involved with before anything happened, is still very much alive 15 years later. The parks that are being built are all created out of that framework. I like when a structure can come forward that everyone can agree to and a lot of other individuals can come and participate very robustly to make it become a reality. Less an individual thing created by one person; more of a collective piece of work. The collective results of all the work on Waterfront

Toronto from all the people working on it are wonderful.

Bridgepoint Health would be another one of those projects. I think you'd be hard pressed to find a design firm that hasn't worked on it. We created the original idea, but it's not done yet. We created the original idea and got it to a place where others could come and work on it. The results of all that collective work are magnificent.

My most, most favourite part of it all is Urban Strategies. The organism of Urban Strategies, is my favourite part. It has an odd culture — not necessarily all just to make money. It's the largest collection of smart people you'll find anywhere from the practice side of it, I think I'm much more attracted to that.

I'm attracted to young professionals who I think are really going to make a difference – and you have to watch some of these young people because they are going to be on the world stage. I think Canada's lucky it's fostering that group of people. The wonderful thing about this profession is that there are a lot of younger people coming up. There's a lot of remarkable talent sitting under us older guys. It's just interesting to think about those people – who are starting at such a sophisticated level – in 20 years they will be amazing international practitioners.

Projects come and go. Outcomes are more important to me; personal relationships are more important to me. Unlike a normal LA, who creates projects, I don't. I create circumstances, I'm kind of an enabler of things. So, I'm less inclined to be attached to a particular object, such as a park or a building, but rather a circumstance or a process. It's then the people around it that are attractive.

**LB /** How do you see the profession changing?

**GD** / Quite a bit. I go back to the '70s when you could probably count the practitioners on a couple of hands. And the schools were limited and a bit narrow in their scope. LA really began as a kind of service industry.

# It's always been my belief that there's a bit of a responsibility for those people running design practices to help young people get their careers in place.

The practice now has kept pace with the evolution of the kind of world we have going. It's sophisticated. There's a society of LAs in Africa. Canadian LAs are go-to folks for much expertise globally. The CSLA is as large and robust as it's ever been, and the provincial associations are growing stronger. The schools have unprecedented applications. My undergrad class had 13 people – now, today it's more like 70.

Also interesting is that I think it's going to be a profession dominated by women. I think that the percentage of women is much higher than perhaps in architecture or engineering. I think that has a real measure on the evolution of the profession. There are a lot of women LAs and they are all really good.

To get back to risk – we need to be robust in expanding LA's vision. Moura Quayle's book, *Design Leadership*, which is largely talking about decision-making through the process of how an LA would see it... LAs need to expand a little bit. LAs need to lose the inferiority complex and become a little bit more assertive or aggressive. I think LAs need to participate in the world a bit more outside of our own realm.

But I wouldn't suggest that the profession is in danger or unhealthy, sometimes you read it's the hot profession – I think there might be something in that.

**LB /** Are there some issues – climate change, overpopulation, etc. – in which LA plays, or should play, a significant role?

GD / On environmental front – we are facing challenges at a pace we can't even measure. If you look at the destruction of storms, you can't even tell they're coming. We in Toronto have had almost apocalyptic floods. Brickworks was designed in a floodplain that everyone knew would flood. And, it's included all kinds of internalized flood mitigation measures to survive, sustain it and get back into business. It's

not been destroyed every time because of a remarkable system of resiliency that the designers put into place – the world needs more of that. If you look at East Harbour, West Donlands, Villiers island and other places, they are examples of multi-million dollar projects designed to limit flooding of Don River. If you put in flood infrastructure – there are hundreds of years of work for LAs...

Canada is headed to being an urban population – 85% of people in Canada live in urban centres and its climbing. But it's not the historic version of front and backyard and a cottage; now you own a very small unit and you live socially in the city. Look, for instance at Claude Cormier's Berzy Park – it's phenomenal. Toronto has moved to an official plan for rail deck park – lots of work to come there. Getting the balance between the city that exists and one you could have – of 5 million people – is another couple hundred years work.

Leadership roles for LAs are there in the greenbelts and how they should be administered. The development industry is interested in what LAs bring to table, the sensibilities they bring to these projects.

LA needs to be in large decisionmaking roles – advisors, on the board of something. Metrolinx has architects on board. Toronto does. LAs need to be there on decision-making bodies. LAs should be politicians – Mayor Joe Riley of Charleston is an LA. I think more LAs could make good politicians.

We need to open all the doors we can walk through – open them all and walk in.

**LB /** What's your advice for those who are at the start of their practice?

GD / Get out, get involved. Get out of your own tribe. Lots of people make decisions on whether LA should or shouldn't happen – get to know who. Participate in the

world and take risks. Writing proposals for projects in other countries is a big risk. It takes money, you have to spend money to go there... and you may get nothing. Our success rate is only about four out of 10. But, the only reason we work all over world is we send proposals all over world.

**LB /** Is there something else you want to say to your young colleagues?

GD / There is a tendency among young people to think that professional associations are not important. That they are too linear. That maybe going through and getting certification or participating in professional associations, is not important. They are 100% wrong.

The people that I spend most time with, my ultimate peers, are all participating members of lots of associations. I think that this idea that professional organizations are not important to your career is short-sighted. If you want to play the end game get into peer groups. Not that it will make you a better LA, but participation with your peers is very important. Create relationships though those connections.

Life-long learning is really important. This means getting outside of your own comfort zone to learn something you don't already know. The more you do that, the more interesting you become and the more people you meet. I'm a trustee of the McMichael Gallery – the other trustees have nothing to do with my daily life, but are some of the most fascinating people I know – VPs of business, captains of industry – every board member is an incredible experience.

Membership has its rewards. I'm a fellow of both the CSLA and the American Society of LAs – without my membership in these organizations, I certainly would not have that distinction. Nor, without being a member of the CSLA, would I have gotten the Governor General's medal!

**RYAN WAKSHINSKI** 



# The Forks Receives CSLA Legacy Project Award

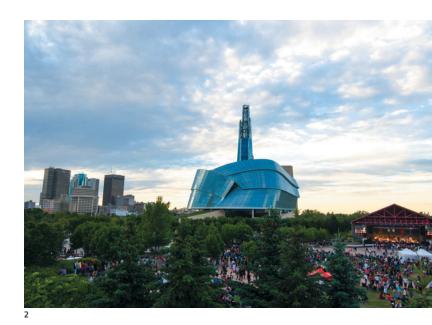
The urban environment at The Forks has been developed through the consistent collaboration of city planners, developers, landscape architects, architects, engineers, builders, craftspeople, artists, and the public. The richness and diversity of these inclusive development processes has made The Forks a leader in winter city, healthy city and sustainable city living — a place that truly responds to and reflects Winnipeg's natural and cultural heritage.

Mayor of Winnipeg, the Honourable Brian Bowman. I'VE KNOWN BOB SOMERS – former president of the Manitoba Association of Landscape Architects, current LACF Board Member, Principal at Scatliff+Miller+Murray in Winnipeg – for 20 years now. We had gone through our Master's program together at the University of Manitoba starting in 1998, and worked together in various capacities throughout the first "half" of our respective careers.

1 HISTORIC RAIL BRIDGE AND PORT 2 SCOTIA BANK STAGE AND CMHR PHOTOS THE FORKS



We held many tongue-in-cheek conversations when discussing the recipient of this year's CSLA Legacy Project Award Winner, the place in Winnipeg where everything seems to happen. In late 2015, we were both on MALA Council discussing which Manitoba landscape project to nominate for a Legacy Project Award. There was a choice to make between Assiniboine Park, Frederick Todd's fantastic, sprawling suburban homage to the English style of his mentor Frederick Law Olmsted and The Forks, a reclaimed collection of railway maintenance buildings on an industrial site at the city centre.



A mixed-use development combining public and private space, commercial and recreational facilities, built form, paving and planting.

Assiniboine Park seemed like the obvious choice for a "legacy" project when you talk about landscape architecture in Winnipeg or Manitoba. But... haven't there **always** been parks? They are in every city. While Assiniboine Park is great and very popular in the city (and in no way should this detract from its chances of winning a Legacy Project Award in the future), a classic romantic park just felt too "safe" to enter into a cross-Canada "best of all time" competition.

Conceivably, you could also say there has always been The Forks. The junction of the Red and Assiniboine Rivers in Winnipeg has been visited, settled and used by various cultural groups for thousands of years; but the Forks as a work of landscape architecture is relatively new and fresh, representing a new land ethic and approach to urban design and planning in our city. It is something we can learn a lot more from at this point in history, I think, and something that can better illustrate to the modern public what landscape architecture is really all about - mixed-use development combining public and private space, commercial and recreational facilities, built form, paving and planting.

So, even though this award recognizes long-standing and outstanding works of landscape architecture, Assiniboine Park just seemed like too safe a bet. The safe bet is the surest way to split the vote across the country; you need to do something unique to be noticed. Some of the sections of the application form were difficult to fill out. Perfect! The master plan is constantly changing? Intriguing and true to life! There is not one lead designer? Awesome, many voices! It's a reclaimed brownfield site? Yes, environmentally responsible. They are still doing new development on the site? You mean it's not done? A living laboratory! It just had to be The Forks.

The Forks is a meeting place: a special and distinct all-season gathering and recreational place in Winnipeg. From the beginning, The Forks North Portage Partnership (TFNPP), which is responsible for the site, has had the foresight to hire Winnipeg's premier designers for the development of its property. We were happy to get the results in February 2018, which we had to keep under wraps (nearly impossible!) until a formal announcement was made in



September 2018, which just happens to be Manitoba Landscape Architecture Month.

Many hands made light work of bringing the package of information and images together that made up this CSLA Legacy Project Award Submission. From MALA, Valerie Lindberg, Executive Director, Monica Geisbrecht, former MALA President, Chantal Alary, former MALA President, Bob Somers, former MALA President, as well as Jason Syvixay, member of the Manitoba Professional Planners Institute – thanks to all for their editing and insight.

Thanks to the supporting letter writers, including John Young, President and CEO for The Canadian Museum for Human Rights, Danya Spring, President & CEO of Economic Development Winnipeg Inc., Marilyn K. Peckett, Parks Canada Superintendent for the Manitoba Field Unit, Jim August, Chair of the Winnipeg Arts Council (and former Forks CEO), Brian Bowman, the Mayor of Winnipeg, and Brian Pallister, the Premier of Manitoba.

Of course, none of this would have been possible without the support of the Forks, including Paul Jordan, CEO of the Forks, Dave Pancoe, The Forks Special Projects Coordinator, and Chelsea Thomson, The Forks Marketing and Communications Manager.

The greatest credit goes to all the architects, city planners, interior designers, and landscape architects who had a hand in shaping and guiding the development of the Forks. This award is for all of you for turning vacant land **at** the heart of the City of Winnipeg **into** the Heart of the City of Winnipeg.

3 OODENA CELEBRATION CIRCLE PHOTO THE FORKS



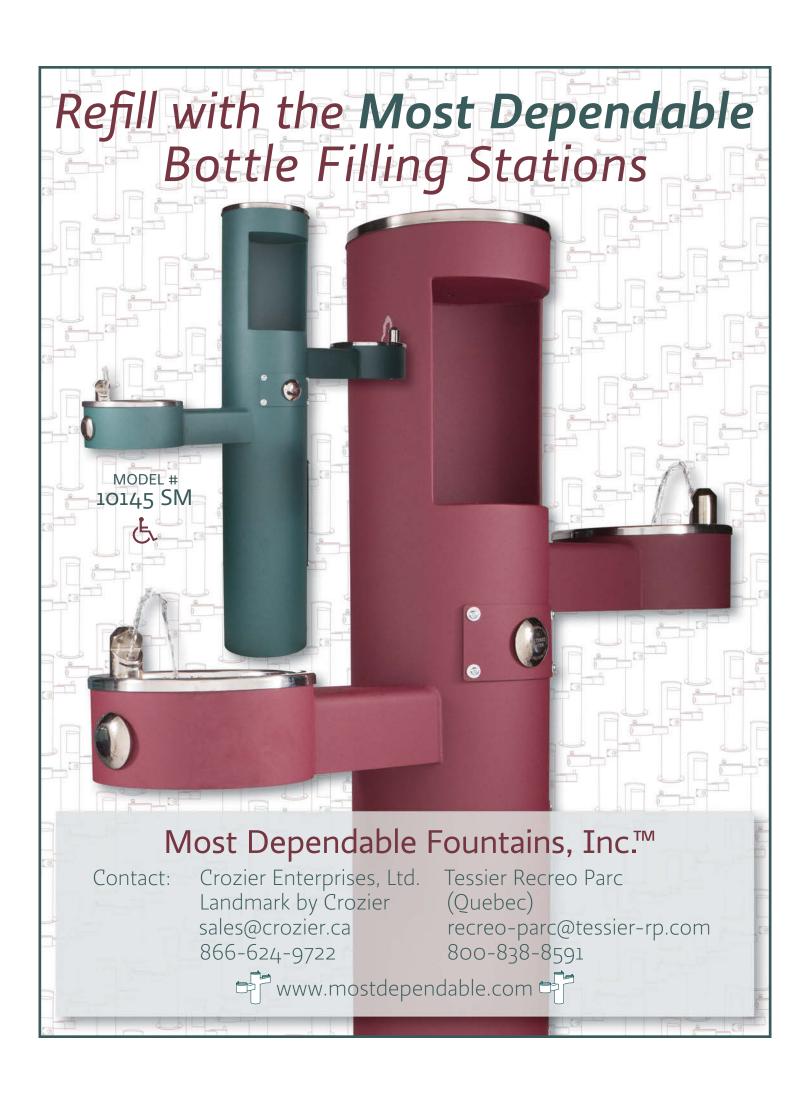
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**ROB LEBLANC** 

# PROJECTED LANDSCAPES

# Uncovering the technologies that will shape the practice of landscape architecture in Canada

### LANDSCAPE ARCHITECTS TYPICALLY

design places of permanence or landscapes that change at the pace of a growing plant. New light projection and computer vision technologies offer designers the opportunity to tell stories and animate landscapes using a form of augmented reality that doesn't require glasses. The technology offers architects and landscape architects the opportunity of bringing landscapes, buildings or objects to life in a way that was previously unimaginable.

### **EARLY 3D PROJECTION**

Almost every office uses a projector to present onto a flat 2D surface using tools like PowerPoint or Keynote. Some creative landscape architects have turned to using those same projectors to project onto 3D terrain models to illustrate complex planning ideas onto more tactile, legible surfaces that people can reach out and touch.

This approach was recently used as part of the public engagement for the Moncton Downtown Plan by the author and Jim Scott of Trace Studio, in Moncton. A large-scale, white-washed model of downtown was constructed as a 3D screen to project onto during a recent public engagement event. A map of the downtown was loaded onto an iPad and the projector and model were "georeferenced" so that drawing onto the iPad map, projected the sketches onto the 3D model in real time.

The team was able to sit with the public to test out various urban design scenarios with the results projected directly onto a 3D model as the designer worked. Each version of the plan could be saved after sketching and the results could be pulled up to be projected onto the model for a public presentation later in the day. The model clearly helped people understand the issues of scale better than a traditional plan and the experience of allowing people

The model clearly helped people understand the issues of scale better than a traditional plan...



to draw indirectly onto 3D surfaces made the entire experience much more novel and memorable for the public.

Pat Morello and Walter Khem of LANDinc used a similar approach to project environmental inventory maps onto a scaled 3D terrain model of a new resort community proposed for Oukaimeden, Morocco, making the opportunities and constraint maps more tangible and understandable for their developer clients.

Some offices have gone so far as to mount a vertical projector above their boardroom table so that teams and clients can benefit from mapping plans and images directly onto the boardroom table (or onto 3D models set on top of the table). It's a little like the trace-table of old days but the image comes from the front rather than the back. The wow factor is indisputable and with 4K projectors approaching the sub-\$1,000 mark, the setup is very cost effective.

2 HALIFAX EXPLOSION MONUMENT
3 AR PUBLIC ART\_PHYSICAL PLUS
DIGITAL 4 LIGHTFORM-LF1-STARTERKIT 5 MONCTON PUBLIC ENGAGEMENT
6 HYBYCOZO PUBLIC ART
PHOTOS 2, 5 ROB LEBLANC
3, 4, 6 LIGHTFORM IMMERSIVE AR



# AUGMENTED REALITY WITHOUT THE GLASSES

Augmented reality (AR) will eventually change how people interact with and understand the spaces around them, but while most AR companies are working to build headsets or glasses to deliver virtual content, one company is using projected light, or "glasses-free" AR, to project AR content onto real landscapes.

Lightform (www.lightform.com) has built a 3D scanner that can be mounted onto an off-the-shelf projector to create AR content for real landscapes. The camera's sensors use a form of light scanning (not unlike LIDAR) to quickly scan a 3D environment and create a depth map of the scene. Once the depth map is created, Lightform has developed a very simple software platform to animate the various 3D surfaces in the scene. The new animated 3D scene is then projected back onto the real 3D environment. The result is not just a static light scene projected





Architectural projection technology offers an intriguing way to bring 3D landscapes to life and the technology has never been more cost effective or easy to use.

onto a 3D landscape, but instead, a fully animated landscape that can change over time creating some startling lighting effects to bring landscapes and objects to life. A photograph in a magazine doesn't do the impact justice so interested readers should visit the website to see some of the creative ways that the technology can be used by landscape architects.

We recently worked with Jason Glass, a projection lighting designer from Winnipeg, to complete a similar 3D mapping approach to project a variety of lit scenes onto the Halifax Explosion monument in downtown Halifax. This approach used computer triggered LED lights rather than a colour projector but the effect of changing lighting scenes on a 70s monument is no less impressive.

One of the drawbacks of this light projection approach is the intensity of light that can be projected. Off-the-shelf projectors with about 3000 lumens of light work fine in a moderately lit room lighting objects the size of a car, but larger objects or landscapes require much more powerful and costly high-resolution projectors such as a Christie Projector (www.christiedigital.com), which can cost tens of thousands of dollars.

Architectural projection technology offers an intriguing way to bring 3D landscapes to life and the technology has never been more cost effective or easy to use.

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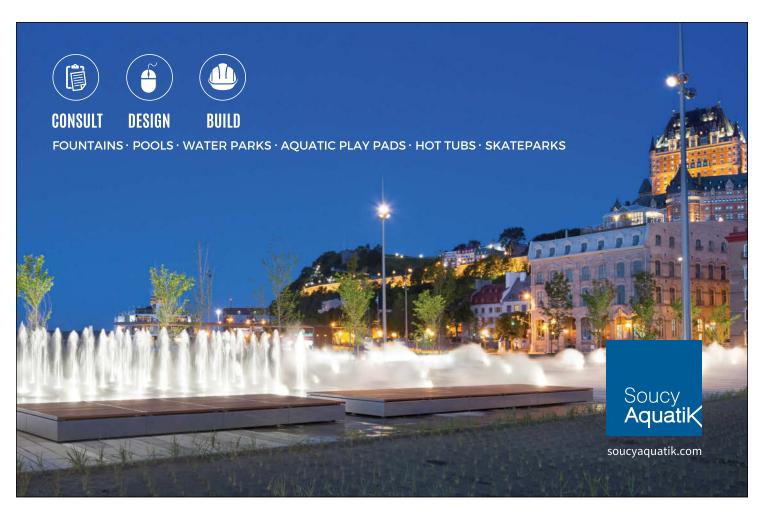


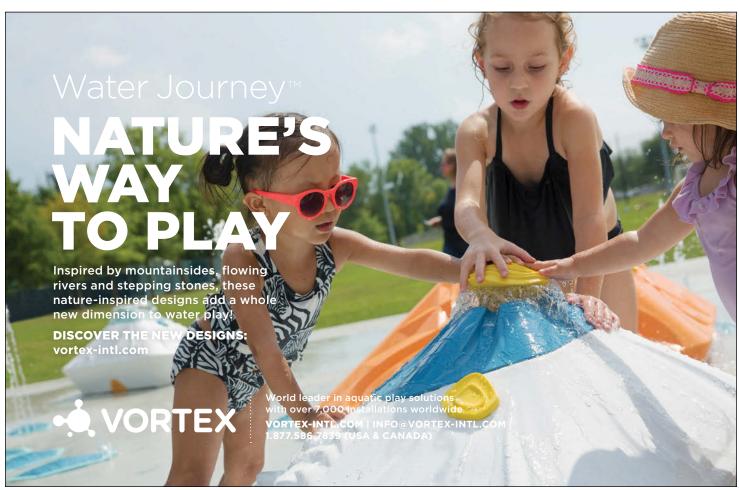














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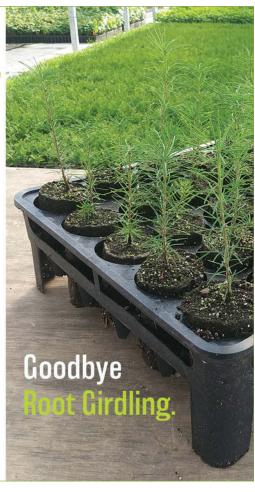
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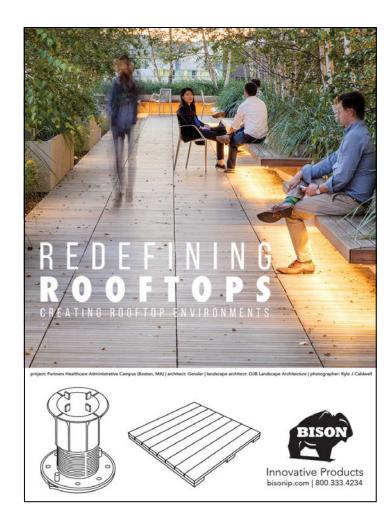


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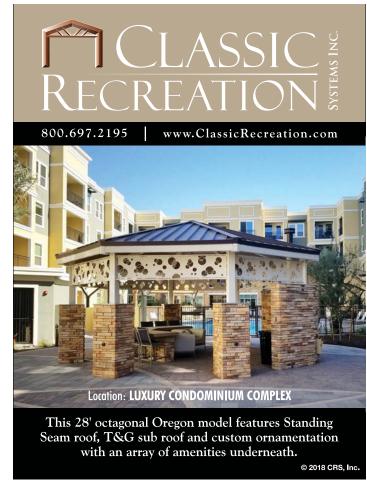




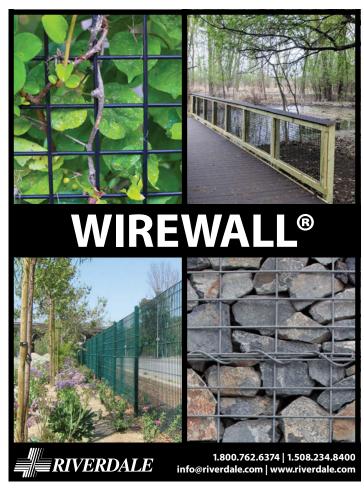


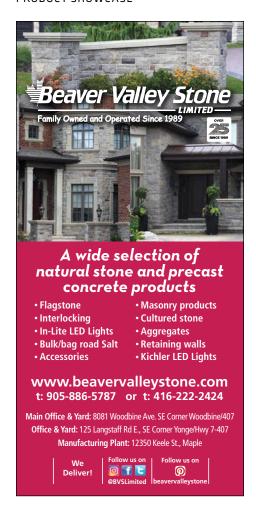










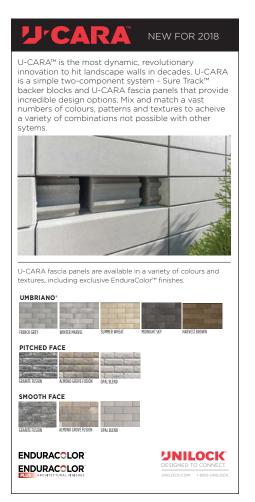






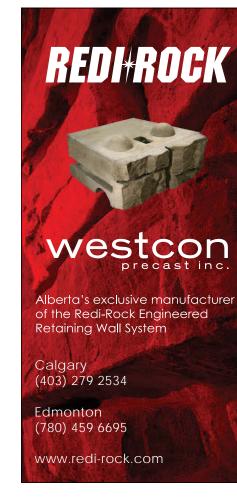
















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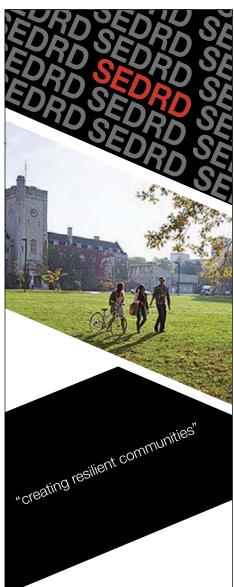
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# **VENTURED...**

NOTHING

**ALAN TATE** 

AFTER SWITCHING TO IndyCar racing, former Formula One champion Nigel Mansell, commented that there are only two types of IndyCar drivers – those who have hit the wall... and those who are going to. He did.

Some students express disbelief when I tell them that the same can be said of private practitioners – and that they therefore need professional indemnity (PI) insurance. They expect never to make a mistake. In practice, the PI insurance bill probably comes third – after salaries and rent – for most firms.

The legal standard for acceptable performance is no more (or less) than what might be expected of a reasonably competent practitioner. And while most practitioners are keen to ensure that they are not found to have been negligent or otherwise at fault, most insurers are more interested in minimizing the cost of any claims and, quite frankly, do not prioritize reputation or feelings.

One of the normal ways of testing reasonable competence is to assess whether practitioners followed normal or standard procedures – often termed "best practice". But, as Lisa Diedrich,

Professor of Landscape Architecture at the Swedish University of Agricultural Sciences, and fellow researchers have argued, "'best practices', typically applied, limit innovation and obscure site-specific values." Diedrich et al. support "professional and academic practices that engage divergent points of view and acknowledge their own blindspots." In short, best practice promotes standardization.

There is, of course, a cogent argument that if the rationale for landscape architecture being a legally recognised profession is its contribution to human health, safety and welfare, then the public has a right to expect a best practice. But, as insurers will be swift to point out, "... and nothing more."

When the UK Landscape Institute was seeking a royal charter in the 1990s it was obliged to consult related professional bodies in order to establish landscape architects' unique skills and abilities. When it was reported to the Institute's Council that fellow professions regarded this as being the preparation and running of planting contracts, the incredulous response was "... and nothing more?"

The full scope of landscape architects' activities is, of course, far wider, but that was seen as their unique competency. It is only by extending outward from that core competency and combining landscape architects' skills with the skills of other disciplines – as Diedrich *et al.* argue, "engaging divergent points of view" – that we can offer something more than standard solutions.

Back in 2005, I wrote an essay arguing that "the achievement of utility with beauty is the product of a radical approach based on a clear understanding of the place to be changed" and that "only with such an approach can landscape architecture make places different." Over two of the intervening years, while running the CSLA Awards program, one of the more uplifting comments I have heard from jurors has been about the importance of recognizing projects that move beyond competency projects that make places different. In other words, if you don't risk hitting the wall, you are unlikely to produce much beyond safety... you are unlikely to create beauty.

**Alan Tate** is Professor and Head of Landscape Architecture at the University of Manitoba. He has run the CSLA Awards of Excellence program since 2002.

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