

Manitoba Consulting Engineer

Official publication of the Association of Consulting Engineering Companies - Manitoba

VOLUME 5 · MMXIV



PM #40065075

2014 Keystone Award Winner

WSP Canada Inc.

Operating Room/Inter-operative Magnetic Resonance Imaging Scanner



ASSOCIATION OF CONSULTING
ENGINEERING COMPANIES
MANITOBA

The Modern Age of DWV is here

Mechanical engineers and contractors are converting from metal piping to System XFR® and System 15®



Proven in non-combustible environments, the advanced material meets all Flame and Smoke code requirements.

PROVEN BENEFITS

IMPROVED FLOW – Larger inside diameter and smoother interior walls for more efficient waste removal

THERMAL PROPERTIES – Storm drains can often be used without insulation

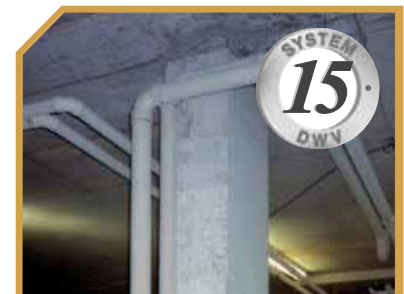
LONGEVITY – Extremely durable, will not rust or corrode

JOINING METHODS – Solvent welding or MJ Grey™ mechanical joint coupling options

PLENUM/HIGH-RISE – System XFR® carries 25/50 Flame/Smoke requirements

LABOUR SAVINGS – Easy to handle, cut and assemble

ENVIRONMENTAL EFFECTS – Local manufacturing minimizes transport and reduces carbon footprint



A cost-effective “workhorse” designed for low-rise, light commercial and underground applications.

PVC Drain, Waste & Vent for Non-Combustible Buildings

www.ipexinc.com Toll Free: 1-866-473-9462



DWV Systems

Products manufactured by/for IPEX Inc.
System XFR®, System 15® and MJ Grey™ are trademarks of IPEX Branding Inc.



BUILDINGS — MUNICIPAL INFRASTRUCTURE
TRANSPORTATION — ARCHITECTURE — ENERGY
ENVIRONMENT (LEED) — INDUSTRIAL — LANDSCAPE
ARCHITECTURE — PLANNING

A CANADIAN COMPANY
OPERATING WORLDWIDE

Zayed National Museum, Abu Dhabi, U.A.E.

17,500

EMPLOYEES

±30

COUNTRIES

300+

OFFICES

5

CONTINENTS

Bill Brant
204-477-6650
bill.brant@wspgroup.com
1600 Buffalo Place
Winnipeg, MB R3T 6B8

www.wspgroup.com/canada



A National Network of **Regional**
Custom Manufactured Electrical Solutions



Made in Canada

Customized Solutions
Customized Service



Custom, Quick-Ship Delivery!
Electrical Solutions for Industry



Water / Waste Water



Mining



Industrial



Petro-Chemical



Agricultural



Commercial / Institutional / Data Centres



Pulp & Paper



Powering Business Worldwide

Satellite Centres specialize in customized solutions and specially modified products, tailored to your individual requirements. Offering greater flexibility and faster turnaround, our eight Canadian Satellite locations are dedicated to delivering answers, engineered, manufactured and assembled to your exact specifications.

www.eatoncanada.ca



ASSOCIATION OF CONSULTING
ENGINEERING COMPANIES
MANITOBA

P.O. Box 1547, Station Main, Winnipeg, MB R3C 2Z4
Ph: 204.774.5258 Fax: 204.779.0788
Web site: www.acec-mb.ca

President

Cameron Dyck, P. Eng.
Stantec Consulting Ltd.

Past President

Steve Reaburn, P. Eng.
MCW/AGE Consulting Professional Engineers

Presiden Elect

Alana Gauthier, P. Eng.
WSP

Vice President

Allyson Desgroseilliers, P. Eng.
AMEC Environment & Infrastructure

Secretary/Treasurer

Mike Houvardas, P. Eng.
Tower Engineering Group Inc.

ACEC-Canada Director

Todd Smith, P. Eng.
AECOM

Directors:

Ralph Kurth, P. Eng.
Teshmont Consultants LP

Jeff Rempel, P. Eng.
SNC-Lavalin Inc.

Richard Tebinka, P. Eng.
MMM Group Limited

Ken Drysdale, P. Eng.
Accutech Engineering Inc.

Rick Martin, P. Eng.
KGS Group

Lin Watt, E.I.T.
Dillon Consulting Limited

James Blatz, P. Eng.
TREK Geotechnical

Brent Wall, P. Eng.
Accutech Engineering Inc.

ACEC-MB Executive Director

Shirley Tillett, TCM-EVM
Association of Consulting Engineering
Companies – Manitoba

The articles printed in this issue represent authors' opinions only and are not necessarily endorsed by the Consulting Engineers of Manitoba. Copyright 2013 by the Consulting Engineers of Manitoba. All rights reserved. Reproduction in whole or in part without written permission is strictly prohibited. Printed in Canada.

Send change of address to:
Consulting Engineers of Manitoba
P.O. Box 1547, Station Main, Winnipeg, MB R3C 2Z4
Publication Mails Agreement #40065075.

Return undeliverable Canadian addresses to: lauren@kelman.ca

Publication management, design and production by:



3rd Floor – 2020 Portage Avenue
Winnipeg, MB R3J 0K4

Phone: 866-985-9780 • Fax: 866-985-9799

E-mail: info@kelman.ca • Web: www.kelman.ca

Managing Editor: Scott Kelman
Design/Layout: Daniel Goulet

Advertising Manager: Jeff Kutny

Advertising Co-ordinator: Stefanie Hagidiakow

Manitoba Consulting Engineer

Official publication of the Association of Consulting Engineering Companies - Manitoba

VOLUME 5 • MMXIV

TABLE OF CONTENTS

Features

Reflections
on our challenges and our milestones _____ page **15**

An Engineer's sonder _____ page **19**

Consulting Engineering is more
important than ever to our prosperity _____ page **23**

2014 Awards of Excellence _____ page **25**

Manitoba's TWICE Committee _____ page **42**

ACEC Manitoba's
Mentorship Program _____ page **48**

CTTAM's Directory
of Certified Members _____ page **50**



Departments

Board of Directors _____ page **6**

Message from the President _____ page **8**

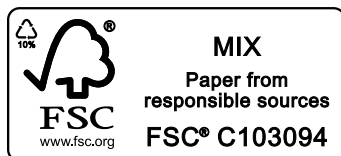
Message from ACEC-Canada _____ page **11**

16th Annual Golf Tournament Recap _____ page **44**

Young Professionals Committee _____ page **45**

Member Services Guide _____ page **51**

Directory of Advertisers _____ page **54**



BOARD

of DIRECTORS



President
Cameron Dyck, PEng.
Stantec Consulting Ltd.



Past President
Steve Reaburn, PEng.
MCW/AGE Consulting
Professional Engineers



President Elect
Alana Gauthier, PEng.
WSP



Vice President
Allyson Desgroseilliers, PEng.
AMEC Environment & Infrastructure



Secretary/Treasurer
Mike Houvardas, PEng.
Tower Engineering Group



ACEC-Canada Representative
Todd Smith, PEng.
AECOM



Director
Ken Drysdale, PEng.
Accutech Engineering Inc.



Director
Ralph Kurth, PEng.
Teshmont Consultants LP



Director
James Blatz, P. Eng.
TREK Geotechnical Inc.



Director
Rick Martin, PEng.
KGS Group



Director
Jeff Rempel, PEng.
SNC-Lavalin Inc.



Director
Richard Tebinka, P. Eng.
MMM Group Limited



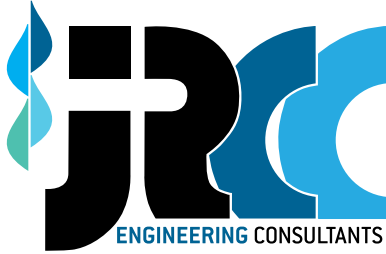
Director
Lin Watt, EIT
Dillon Consulting Limited



Director
Brent Wall, P. Eng.
Accutech Engineering Inc.



ASSOCIATION OF CONSULTING
ENGINEERING COMPANIES
MANITOBA



- Municipal/Civil
- Environmental
- Water and Wastewater Treatment
- Roads
- Drainage
- Solid Waste Disposal
- Land Development



ENGINEERING EXCELLENCE SINCE 1981

JR Cousin Consultants Ltd.

204 489 0474 • info@jrcc.ca • jrcc.ca



Metallurgists and Forensic Engineers



- Metals and Plastics Failure Analysis
- Metallurgical Analysis & Materials Assessment
- Corrosion Engineering
- Cathodic Protection Inspection & Testing
- Product Litigation - Insurance Losses
- Non-Destructive Testing
- Fire Investigations

204-953-3800

1797 Logan Avenue

Winnipeg, Manitoba, R3E 1S9

www.testlabs.ca



CANADIAN INSTITUTE OF STEEL CONSTRUCTION
INSTITUT CANADIEN DE LA CONSTRUCTION EN ACIER

BUILD WITH THE STRENGTH OF STEEL



Reduce your risks • Lower your costs

Accelerate your project • Maximize your revenue • Increase productivity

Enhance design possibilities • Build sustainably

cisc-icca.ca

For more information contact Gordie Tumilson:
204-297-6275 gtumilson@cisc-icca.ca



Cameron Dyck, P.Eng., P.E.

Exciting year ahead

I am honoured to serve as ACEC-Manitoba President for the 2014 -2015 term and I am looking forward to an exciting and productive year working with the board of directors and the membership. My sincere thanks go to Past President Steve Reaburn for his leadership over the last year and I also thank Shirley Tillett and her staff for their outstanding work and dedication that they consistently provide ACEC-Manitoba.

As incoming president I have four key initiatives that I would like to see our organization focus on during the 2014-2015 term.

The first initiative is to continue to lobby the Manitoba government to lower the ultimate liability period from 30 years to a more reasonable 10 or 15 years in the Limitations of Actions Act. Manitoba has the longest ultimate liability periods in North America and our legislation is not consistent with other provinces. Our profession is very mobile and we are continuously exporting our expertise to other jurisdictions outside of Manitoba. This antiquated provision of the act makes us less competitive and we are running the risk of permanently losing our highly skilled professionals to other provinces. The Manitoba government is seemingly not interested in making any changes to the act. However the recent success in BC to reduce the time limit to 15 years gives me hope that we can have the same success here in Manitoba. It should be noted that the Manitoba Association of Architects, the Certified Technicians and Technologists Association of Manitoba, Darren Peters from Oldfield Kirby Esau Insurance, APEGM and the

Winnipeg Construction Association have joined us in our lobbying efforts. And we thank them for their support.

The second initiative is continuing to lobby for the removal of services provided by consulting engineers from the procurement provisions of the New West Partnership Trade Agreement. Currently, Manitoba has not signed onto this agreement. We don't know how much discussion has taken place between the Province of Manitoba and the Governments of Saskatchewan, British Columbia and Alberta. From our conversations with ACEC Canada we are aware that Manitoba may be the next province to sign the agreement. For those not familiar with this agreement's implications to consulting engineers, we need only look to Alberta and BC where the procurement provisions of this agreement have resulted in some public clients treating professional engineering services more as a commodity and not as a value-added professional service. The unintended consequence of this agreement has included reduced taxpayer value via higher construction, life cycle and procurement costs, a greater risk to public health and safety and a weakened consulting industry.

The third initiative is to continue to enhance the profile of consulting engineering in Manitoba through internal and external communications. This is where I would like to see an increase in our use of social media – sites like Twitter are becoming very important tools in dispensing and gathering information. Social media sites have the power to lever all of these initiatives into the public sphere – and that is why they are so vital.

I know all levels of government are very aware of the significance of Twitter and they monitor it continuously. Twitter is a very quick, cost effective and efficient way to get our message out to government and the public. This is where our membership can take an active role in publicizing the strengths of our profession. To this end I am inviting that all members follow ACEC- MB (@ACEC_Manitoba) on Twitter.

The fourth and last key initiative would be to maintain more regular contact with key government ministers and elected officials from all parties. ACEC's mission statement is to be a voice for the consulting engineering industry and we need to ensure that our voice is heard loudly, clearly and more frequently. We want to be the government's trusted advisor, and that the government of Manitoba comes to us to vet important policy changes.

I'm looking forward to an exciting year, full of promise. Over the last few years on the Board I've met many great people in this industry. I am looking forward to meeting and working with many more who are eager to see our profession continue to grow and thrive.

I will end with a message to the ACEC-Manitoba membership as a whole. And my message is "get involved!" We look forward to all of our members finding their place within ACEC-Manitoba, to get engaged and to contribute. As Robert F. Kennedy once said "The purpose of life is to contribute in some way to making things better." 🍌

We Do Everything

Anti-Corrosion Systems & Sealants You Can Depend On



Extend Structure Life, Reduce Maintenance & Repair Costs
For Steel, Concrete & Road Surfaces

Petrolatum Systems are cold applied, require minimal surface prep, are flexible and offer long-life for underground and surface protection of piping, valves, fittings and steelwork. **Bitumen Systems** are cold applied offering applications for pipes, welded joints, bends and fittings and are resistant to cathodic disbonding. **Protal Pipeline Coatings** are designed for protection of girth welds, valves, fabrication and road and river crossings. **Mastics** offer excellent sealing and molding properties and are self-supporting, cold applied and flexible. **Road Products** are cold applied and designed for new road construction, road maintenance programs, airport construction and bridge repair. **SeaShield Marine Systems** offer application for bridge structures, production platforms, marine jetty pilings and wharf structures.

DENSO is known around the world for quality anti-corrosion and sealing systems and offers a full line of products for corrosion protection, sealing and waterproofing. Contact **DENSO NORTH AMERICA INC.** for a complete literature package.
A member of Winn & Coates International



www.densona.com

Toronto • Edmonton • Houston • Philadelphia

Denso North America Inc. 90 Ironside Cres. Unit 12, Toronto, ON M1X 1M3 Tel: 416.291.3435 Fax: 416.291.0898

Notarius digital signature: More than 7,000 engineers already use it!

Notarius has partnered with **more than 20 professional associations** across Canada to offer its digital signature to their respective members. For some time now, engineers and geoscientists from Manitoba and other provinces can subscribe to this secure technology and achieve such benefits as:



Security

- Confirms the identity and the professional status of the signatory
- Guarantees the integrity and long term sustainability of the signed documents
- Reduces risk of error and increases peace of mind, thanks to its proven legal reliability



Productivity

- Reduces time required to sign and seal documents
- Offers bulk signing functionalities



Environment

- Reduces resources used for paper, transportation and space



Savings

- Reduces printing, transportation and archiving costs



Anne Poschmann, P.Eng.
Chair, ACEC-Canada

Exciting times for our industry



I am pleased and honoured and excited to be taking over the leadership of this dynamic organization.

With our new governance model in place and firmly enconced now within our Board meetings, our Board is able to focus on the things that matter; to take the concerns of our member organizations and member firms and work collectively to take action. Working on building that more successful, more sustainable and more trusted consulting engineering business that is in our vision.

This coming year there are steps to be taken in many directions. We have a long list of issues and concerns in front of us. Externally, we are being questioned on the quality of our work, there are strains on the building of our reputation of being a Trusted Advisor, our clients are trying to push risks and uninsurable terms/requirements on us, the consequences of the Charbonneau enquiry – the need to build back the confidence in our industry, and the changing of our clients and our need to be better equipped in understanding this new form of clients. Internally, we need to embark on planning for the next strategic plan beyond 2016, we need to continue the drive to improve member engagement within the organization (both at the national and the provincial/territorial level) and demonstrate the value for our members in the resource sector, and we need to have a close look at our association structure to see if there are innovative ways of restructuring to improve the linkages

Our current Strategic Plan is now in its second year but it is a three year plan and so we must start thinking already of what,

if any, different directions we should be taking based on the trends we see now and the anticipated changes in the near future. We have come a long way in the last couple of years but there is still work to be done. Our member engagement leader Martine is laying the groundwork for one component of a new strategic plan which is to build recognition of value and the first step in this direction is to talk with and listen to our members. We will be pushing this forward quickly this year and use the results to map our path forward in helping Member Organizations and consequently the national organization build membership and retain that membership through engagement.

In concert with this I believe that we must embark on a discussion about our structure as an organization and if that structure is hindering us in the growth and retention of our members. We are committed to getting to a better place in understanding what our members want and what we can do better for them. But, recognizing the diversity of the Member Firms, the Member Organizations and our industry in general, and also recognizing the changes in our industry over the past decade or more, I know that some of the Member Organizations are looking critically at what constitutes a Member Firm in the context of their current By-Laws and

what changes are needed. As an extension of this, we must also look critically at the overall structure of ACEC and the Member Organizations and determine if there are structural changes that would allow us to perhaps act more nimbly and to demonstrate value to our members. This will be explored through a task force and further discussions over the next couple of years.

The Charbonneau Enquiry has shown us how vulnerable we are – even here in Canada – but we also recognize that it is not just Quebec; it is never isolated in our global world any more. And so the magnifying glass is also on the rest of Canada and it is so much more important now to do what is needed to be really recognized as trusted advisors to our clients and hence to our society. This is the first of our long term goals and we must continue to demonstrate that our industry as a whole is committed to betterment of society. In this light, actions like the endorsement just this afternoon of the ACEC Statement of Principles and Policies: Business Integrity and Transparency is just one step in this direction and we look to take more steps this coming year.

We have seen some difficult times within our industry in the last year or so in various parts of the country – from a strained economy to a perception of corruption all of which result in a

"The magnifying glass is also on the rest of Canada and it is so much more important now to do what is needed to be really recognized as trusted advisors to our clients and hence to our society."



"If indeed, by embracing diversity, we are bettering society and hence our contribution to society then we must be an active part of this and other initiatives like it."

competitive environment and has also likely resulted in some accommodation on the part of many of our firms to accept contract conditions that perhaps we would not normally and also to accept lower profits than what we really need to be a sustainable industry. Perhaps because of this in combination with many other factors, we have heard from a number of sources that the quality of our services and deliverables is being questioned

more and more. This undercurrent/ rumbling is most likely another factor which is eroding our ability to build back that trust. Regardless of what we do to change contract terms, if we can, or the delivery model, we cannot begin to build the trust again unless we can remove that concern about quality. We must work to understand the root cause of the concern and establish some quick steps/actions over this coming year to protect against

this potential thorn in our sides getting deeper under our skin. This is one area where we can perhaps look to make the most of some of the alliances we have with other associations and organizations with whom we have common interests – build on them and build more so that we can all work together for mutual benefit. Similar to the concept of open innovation, through discussion with others, we can perhaps find a better faster way of fixing this concern as well as others.

And finally, a few words on the topic of diversity. Prior to our Board meeting we were privileged to be invited to a reception showcasing a marvelous initiative here in Manitoba – TWICE – Technical Women in Consulting Engineering. It was an eye opener to many I think – reinforcing the fact that this is indeed a huge challenge in our industry – to address the issue of diversity and what it means to our businesses. It is not just a question of women; it is a question of diversity in all aspects of our Canadian population. I know that I am very excited by this and would like to see us support more initiatives such as this across the country. If indeed, by embracing diversity, we are bettering society and hence our contribution to society then we must be an active part of this and other initiatives like it – since it is of course building on our mission: to recognize and reward our members' expertise and contributions to society.

These are still exciting times for our industry and I must say that I am looking very much forward to the year and working with the ACEC Board and staff and listening to our members across the country as we go into this year of continued change within our association. 🌐



SNC • LAVALIN



Mining Industrial Municipal Utility

**Studies Engineering Environmental
Project Financing Construction Services**

148 Nature Park Way • Winnipeg, Manitoba • R3P 0X7
P: 204-786-8080 • E: robert.cuthbertson-black@snclavalin.com
www.snclavalin.com

When it just has to work...



In the land of the midnight sun, a bright new star shines. The Rankin Inlet Men's Healing Centre represents a quantum leap ahead in the humane treatment and rehabilitation of offenders in Nunavut Territory.

"The intent of the facility is to heal both the offender and the community, our most important resource in the north is people, we cannot afford to loose even one."

**MEN'S HEALING CENTRE
RANKIN INLET, NUNAVUT, CANADA**

Ken Drysdale, P.Eng.
Project Manager

2013 ACEC Manitoba Award of Excellence
2013 AIA Award of Excellence

Accutech Engineering Inc.

Knowledge, Experience, Perspective

Accutech Engineering Inc. Provides complete Design & Construction Services to Industries Across Canada, the U.S.A. and the World. We commit to our clients that we will assist their companies to reach their fullest potential through the

application of value-added engineering techniques, as well as through the utilization of the latest and most appropriate technologies practical for each unique situation.

Accutech Engineering Inc.
1349 Dugald Road
Winnipeg, Mb, Canada, R2J 0H3
Ph. (204) 944.1555 Fx. (204) 944.1444
www.accutecheng.ca

Member of
Association of Consulting Engineering
Companies Canada - Manitoba

 **Accutech Engineering Inc.**
Tomorrow's Technology Today

BENEFITS OF EMPLOYING THE TECHNOLOGY PROFESSIONALS

Who Are the Technology Professionals?

They are the men and women who hold the professional designations:

C.E.T. and **A.Sc.T Certified Technologists**

or

C.Tech. Certified Engineering Technician

Granted by the Certified Technicians and Technologists Association of Manitoba (**CTTAM**) which has approximately 3000 members joining over 52,000 Certified Technicians and Technologists across Canada. Technical Colleges provide the education and CTTAM provides the certification.

These technology professionals are recognized for their unsurpassed capabilities and professionalism in:

- Meeting national standards for education and work experience.
- Having been evaluated and accepted by their peers. Making a commitment to their profession.
- Making the personal statement that they are a technology professional.
- Agreeing to uphold the Code of Ethics, to protect the public and the profession.
- Holding accountable to CTTAM and its disciplinary process.

How Does the Employer Benefit?

An increasing number of employers support the certification of member employees and support the certification of eligible employees by CTTAM.

By employing a certified engineering technology professional you can be confident that you are employing a competent individual who has made a commitment to professionalism.

You have also removed the guesswork involved in hiring new employees, as these individuals have:

- Met nationally recognized academic requirements
- Had their technical work experience reviewed to ensure it is relevant.
- Had three professional references reviewed regarding character and work experience verification.
- Successfully challenged a professional practice exam.

The designation marks a degree of competency in their chosen field.

By employing certified individuals your organization (and clients) is provided with the credibility afforded an organization that employs competent professionals.

If you wish further information please contact us at:

602 - 1661 Portage Avenue
Winnipeg, Manitoba R3J 3T7
Phone: (204) 784-1088
e-mail: admin@cttam.com
Website: www.cttam.com



Steve Reaburn,
P.Eng., LEED AP, HFDP, CPMP
ACEC-MB Past President

Reflecting on our challenges and our milestones

Q&A with Steve Reaburn, P.Eng., Past President of ACEC-Manitoba

What were your milestones and what did you accomplish in the past year?

My principal goal last year was to continue the push for a more appropriate 'Limitation of Liability.' In Manitoba, Professional Engineers and Architects are liable for a period of 30 years. This is one of the longest liability periods in North America and in my opinion a significant detriment to the business of engineering in Manitoba. We do not object to a period of liability, it is the length of the period that ACEC feels is unfair. The longest period of liability in the United States is 15 years. In Canada, there are three provinces with a period longer than 15 years; these are Manitoba, Quebec, Newfoundland and Labrador, who all have Limitation of Liability periods of 30 years.

This issue is fairly complex in that the Limitation of Liability Act covers a very wide range of issues, the vast majority of which have no impact on the consulting or construction industries. The province also has an independent group called the Manitoba Law Review that studies legislation periodically and makes recommendations. In 2010, the Law Review recommended that the period for the 'recovery of money' in the Limitations Act be reduced from six years, after the cause of action arose, to two years. The same commission recommended that the Ultimate Liability Period be reduced from 30 to 15 years.

Why is the Limitation of Liability such a concern?

ACEC-MB's concern with the 30-year Ultimate Liability Period is that it will be virtually impossible to reasonably defend a design after such a long time

has elapsed. Memories deteriorate, witnesses may not be available, conditions on the site may have changed significantly, maintenance may have been better some years than others; there are a myriad of factors that impact a project that the consultant may not have knowledge of or access to after 30 years. Another concern is that engineers can only obtain error and omission insurance for three years after retirement so in the case where a problem is not apparent immediately, the individual may not be insured any longer.

Personally, I am starting to think that logic and the principles of fairness are not going to be enough to affect the Limitations of Liability. I think we need to drastically increase the number of groups and individuals supporting the change. As the issue affects all aspects of construction, I think we need to approach every construction association and get letters of support to take to the province. I also think we need to make a stronger effort to raise awareness among our own members, as well as all of our allies. When there is enough public interest, change will happen.

The current provincial government is sympathetic and appears to understand our concerns. Last winter they advised that they were in the process of reviewing the Limitations of Liability Act, but that it could be a lengthy process due to the complexity of the issue.

Do you have any other pressing concerns that affect the business of engineering?

Yes, another issue is the New West Partnership Trade Agreement (NWPTA). This is an interprovincial trade agreement that mandates open business opportunities across the signatory provinces. Currently BC, Alberta, and Saskatchewan have adopted this agreement. ACEC-MB supports the agreement generally, but we believe that the public would be better served by exempting engineering consulting firms.

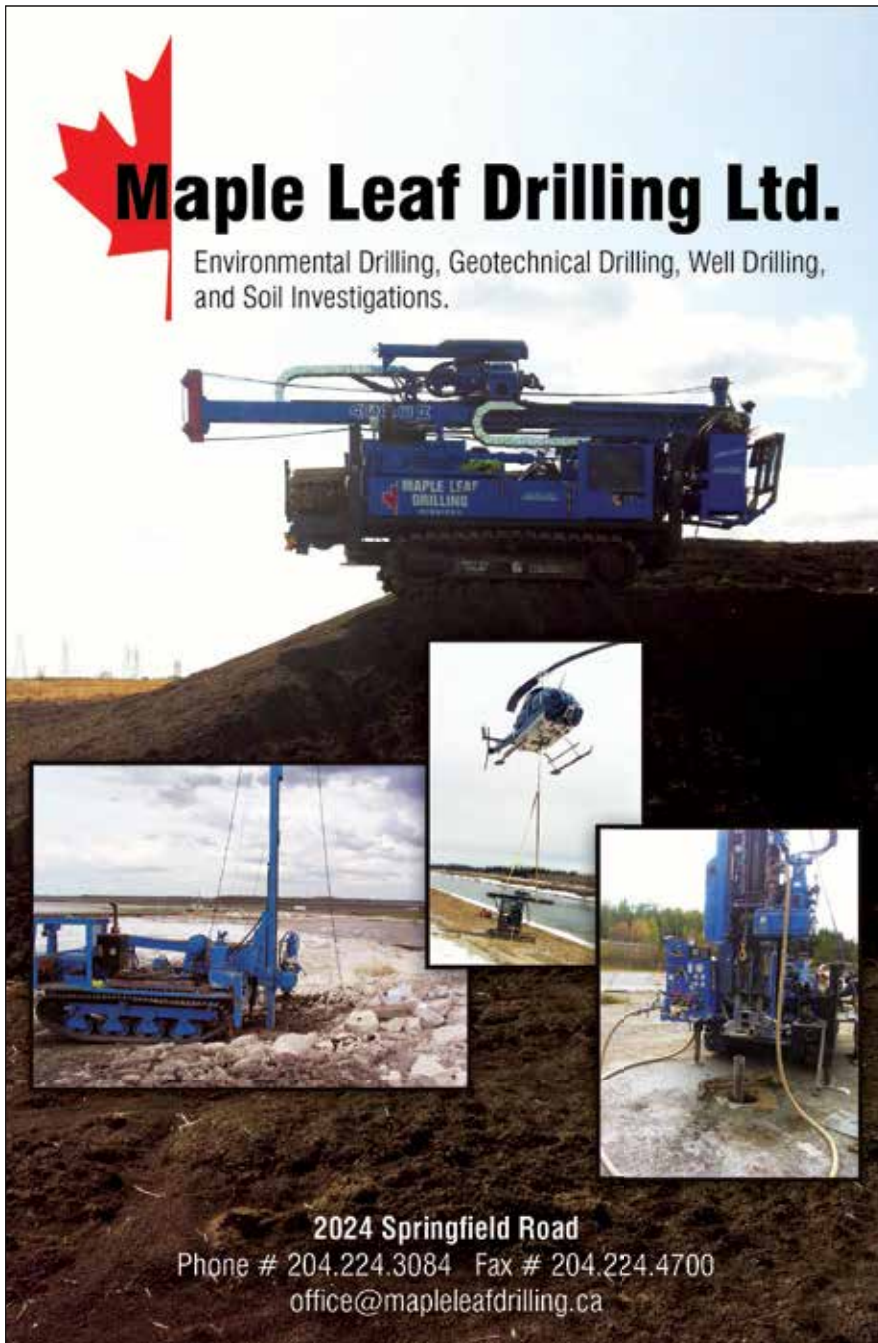
The NWPTA requires that all provincial projects with fees over \$75,000 be openly tendered, and that no preference can be given due to location. As the municipal procurers of services often do not know what the fee will be prior to sending out the proposal, they err on the side of caution, and in the western provinces effectively most projects with fees above \$25,000 are now publically tendered. As a result, municipalities that used to invite three proponents who had specific knowledge of the standards, practices, and local conditions are now obtaining up to 25 proposals. Preparing each of these proposals has a cost for the bidders, which has to be ultimately recovered through higher fees. In the case of smaller projects, the sum total of the bids can exceed the total fee available! The municipalities have limited resources to evaluate proposals and cannot consider location so the decision often devolves to price alone, and the municipality has to endure the reduced service that goes with lowest price.

"Personally, I am starting to think that logic and the principles of fairness are not going to be enough to affect the Limitations of Liability."

bockstael.com

Bockstael

Manitoba's Builder



Maple Leaf Drilling Ltd.
Environmental Drilling, Geotechnical Drilling, Well Drilling,
and Soil Investigations.

2024 Springfield Road
Phone # 204.224.3084 Fax # 204.224.4700
office@mapleleafdrilling.ca

Were there other highlights of your term as president last year?

Absolutely, there were many highlights, but a few things really stand out in my mind!

Technical Women In Consulting Engineering (TWICE): This amazing, high-performance group really gained traction over the past year, hosting numerous events including hosting an evening event at the ACEC Summit. I have never seen a group gain so much credibility so fast as TWICE! It speaks volumes about the leadership of Board Member Alana Gauthier and the committee that put so much time and energy into accomplishing so much!

Young Professionals (YPs): This is an outstanding group that had another stellar year. The enthusiasm, energy, and focus of the YPs is rejuvenating to us 'Old Professionals' and their events are just FUN!

The committee members: I had the pleasure to meet many of the committee members over the past year and was astounded by their commitment. For years I had heard all the committee reports monthly, but it was so much more interesting to meet members in person and discuss issues one on one! If I have a regret from the past year, it is that I did not attend at least one meeting with every committee.

What should the chapter focus on next year?

I believe there are a number of issues that the chapter needs to concentrate on. These are:

- Limitations of Liability
- Having engineers exempted from the New West Partnership Trade Agreement
- Managing client expectations of contract liability
- Quality of construction documents

The chapter is already working on all four of these issues, but I see both the opportunities and the risks in all four of the above areas, and I believe that each of these issues will become much larger in the coming years and consume far more of ACEC-MB's resources than in the past. 🇨🇦

A closer look at health and disability insurance

How coverage can help the self-employed, contractual and underinsured

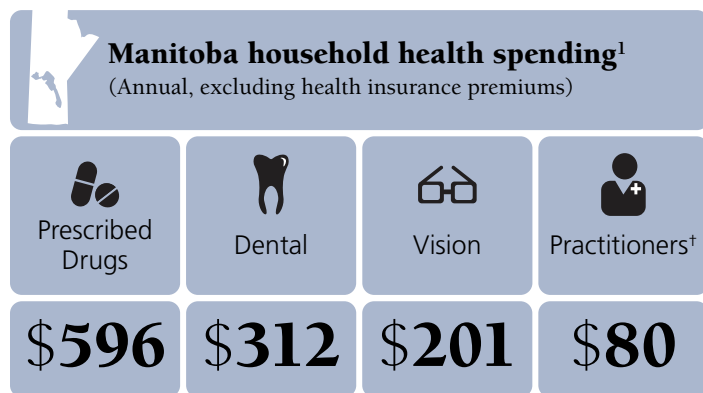
Being ill or injured can be challenging enough without worrying about being driven into debt.

With health and living costs rising steadily, those who are self-employed or don't have coverage at work could face financial hardships. Without an employer's group insurance benefits, you are *left to your own means when it comes to protecting yourself and your family*.

You don't hesitate to insure your home, car and other valuable possessions, so why wouldn't you insure those that are much more valuable than all those things — *your health and your ability to earn an income?*

Health insurance

Supplementary health insurance starts where government coverage ends.



[†]Other than physicians, dental and vision care professionals

With no supplementary health coverage, you would have to pay *out of your own pocket for common expenses* like prescriptions, dental care, vision care, therapeutic services and more.

If your spouse doesn't have coverage at work, your out-of-pocket medical expenses can get even bigger, especially if you have children.

Private health insurance can be *more affordable than you think*. Plus, if you're self-employed, you may be able to deduct the cost of your health insurance premiums from your business income.²

Disability insurance

Disability insurance helps to replace a portion of your income if you become ill or injured and can't work. These plans provide *monthly benefit payments*, based on a percentage of your monthly earnings, while you are disabled and unable to perform your occupation.

Unlike employee disability plans that end when you change jobs, some association-sponsored disability plans can *provide continuation of coverage between jobs* so you are not left without

coverage while unemployed. If you become disabled within 12 months of your last job, you remain eligible for a monthly benefit payment.

Look for a disability plan that offers coverage for different types of disability, such as total disability, partial disability, residual disability (you are able to return to your regular occupation but in a limited capacity), and catastrophic loss.

And if you pay your own premiums (not your partnership), your monthly disability benefits may be tax free.²

Are you among those with protection?

Across Manitoba, many residents have chosen to protect themselves with supplementary health and disability coverage. *Make sure you're protected as well.*

64%

of Manitoba residents have supplementary health coverage³

30%

of Manitoba residents have disability income protection³

Cost is a common reason offered by those who are not covered by any plans to explain the lack of coverage.

Affordable coverage is available for professional engineers through the **Engineers Canada-sponsored plans**. This allows you to enjoy many of the benefits of a group plan (e.g., lower cost) so you can focus on your recovery, not on the bills.

¹ 2012 Average household annual spending (Source: Statistics Canada. *Table 203-0021 - Survey of household spending (SHS), household spending, Canada, regions and provinces, annual (dollars), CANSIM (database)*).

² Contact your financial advisor or the Canada Revenue Agency for details.

³ Percentages are based on persons covered at end of 2012 (Source: Canadian Life and Health Insurance Association, *Facts & Figures, Life and Health Insurance, 2013 Edition*) and 2012 provincial population figures (Statistics Canada, CANSIM, table 051-0001).

ACEC - MB Members can learn more and apply for:

**Health and Dental Care
Disability Income Replacement**

Sponsored by Engineers Canada

www.manulife.com/MCE

1-877-598-2273

(Monday-Friday, 8 a.m. to 8 p.m. ET)



Sponsored by:

engineerscanada
ingénieurscanada



For your future™



TETRA TECH

complex world | **CLEAR SOLUTIONS™**



CLEAR SOLUTIONS FOR WATER, ENERGY AND THE ENVIRONMENT

Tetra Tech's scientists and engineers are developing sustainable solutions for the world's most complex projects. With more than 3,500 employees in Canada and 14,000 total employees worldwide, we have grown to become one of North America's largest engineering firms—and that's just the beginning. From water and transportation projects, to renewable energy and mining services, Tetra Tech provides clear solutions in consulting, engineering, program management, construction management, and technical services worldwide. www.tetratech.com



By **Marcia Friesen, P.Eng.**
President, APEGM

An Engineer's **Sonder**

Sonder: *n.* the realization that each random passerby is living a life as vivid and complex as your own, populated with their own ambitions, friends, routines, worries and successes, their own epic story that continues invisibly around us.

Sonder is a neologism, an emerging word that is not yet a part of mainstream dictionaries but showing up in popular culture. For me, trips by air trigger sonder. When I'm in a plane and it is descending for landing, you can see the city below you on a clear day. I am struck by how each house – for miles & miles – is inhabited by people who are juggling the daily schedule of getting kids to school or daycare, getting to work on time, taking a parent to the doctor, worrying about finances, looking forward to a vacation, dreading a meeting, or hoping for some news. When I see the contrails of an aircraft passing over on a clear day, I imagine that it is full of several hundred people who are the leading characters in the novel of their own lives, travelling with feelings of excitement or dread or tedium, travelling to an adventure, a homecoming, a business meeting, a funeral, a wedding, a new life in another country. We are all so different from one another, with different circumstances, priorities, needs, and goals. That realization is sonder.

In my role as President of the Association of Professional Engineers & Geoscientists of Manitoba (APEGM) in 2013-2014, I've worked with Council to identify three priority areas for APEGM's strategic activity and support. Not surprisingly, one of these priorities is to reflect the diversity of society around us in the recruitment and retention of individuals to the

engineering profession. Beyond recruiting individuals to engineering studies, the scope of the issue is equally focussed on understanding why people – particularly women – are more likely to leave the profession and then supporting the retention of people in rewarding professional engineering careers until their natural and desired time of retirement.



CONSTRUCTION

Triple CCC Construction is a dedicated company for all commercial concrete needs. Our professional experience provides a high standard of quality workmanship in concrete forming, finishing, demolition and excavation. We also provide assistance in budget pricing for upcoming commercial, industrial, institutional, larger residential projects and multi-tenant building projects. Triple CCC Construction will continue to provide its experience to the industry.

Ph: 694-6085
Fax: 694-6104
Email: tripleccc@mts.net

PO Box 651
Stony Mountain, MB
ROC 3A0

"All of us, no matter who we are, want to feel a sense of belonging and identity with the engineering profession and the community that ACEC represents."

Women and Aboriginal peoples are under-represented in the profession, internationally-educated engineers often face considerable challenges during qualifications recognition and career re-entry, and while the profession loses engineers to other careers, we do not necessarily attract the proportional number of individuals who leave their existing careers to join us. There are statistics and research, opinions and ideas on why these situations occur. I won't repeat them here, but they are available to anyone who truly wishes to listen and understand.

The issue of under-representation is not new, but is there a way to understand it anew? Perhaps Brene Brown gives us a clue when she writes that most of us use the terms *fitting in* and *belonging* interchangeably, and most of us are really good at fitting in. We know exactly what to do, how to make people happy, what to say and what not to mention. We all know how to chameleon our way through the day for approval and acceptance. However, fitting in and belonging are not the same thing. Fitting in is about assessing a situation and becoming who you need to be to be accepted¹.

As a female engineer, I've heard many other women in engineering describe their work life as hustling to fit in. I like to think in metaphors, and one that comes to mind is the engineering profession as a sandbox in which certain games are played by a certain set of rules. These rules and the games have worked well in the past. Others are welcome to join the sandbox to play the same games by the same set of rules. They are welcome to come and fit in. How often, though, are new players allowed to really belong – that is, to propose another rule set, or another game altogether, without the welcome turning chilly?

Belonging is an irreducible human need, an innate human desire to be a part of something larger than us. All of us, no matter who we are, want to feel a sense of belonging and identity with the engineering profession and the community that ACEC represents. The ACEC community is a place to hone technical skills, to work through ethical perspectives in one's work, to receive & give mentorship, and to find one's unique contribution to the work of engineering in society. A true sense of

belonging allows each of us to be our best and to advance our best talents toward the ACEC community's objectives. The fact that the profile of engineering doesn't reflect the profile of society around us hints that some people are not finding belonging. Well-intentioned efforts at strict equality also do not foster equity and belonging. Treating everyone the same – as we do when we expect people to all fit in, in the same way – is not treating everyone fairly. For example, parents will generally recognize that their children each have different interests to foster, are motivated in different ways, and need different supports to achieve – even if the end purpose is the same, such as school achievement.

In the profession, we are all diverse. We have diverse personal needs. A simple example is related to caregiving obligations we have toward our children and our parents and perhaps to our partners or ourselves when we experience poor physical or mental health. We also have diverse professional desires. An example is the generational differences between Builders, Boomers, Gen X, and Millennials in terms of our motivators, expectations, and goals in our careers. These needs, expectations, motivators, and goals become the hesitant questions of the players of the game, as to whether there is openness for the rules of the sandbox to change, whether one can really belong.

So, who is responsible for recruitment and retention of underrepresented groups to engineering studies and in professional practice? Recruitment to the profession begins with one's experiences and interactions with engineers and geoscientists in one's family of origin and through childhood. Retention in university studies and in professional practice is shaped most directly by one's individual experiences in university and in the workplace. ACEC can also play a role in encouraging dialogue, in supporting initiatives both internally and externally, and linking local thinking with the national picture.

Yes, but who is *really* responsible for recruitment and retention? It is both individual and systemic, both a personal and a collective responsibility. The 'target groups' have a role in honestly, and at times sensitively and at times forcefully, but always respectfully expressing the situation and the perceived barriers to



**IRELAND
BROS. LTD**

Lorne Ireland | Terry Ireland | Mervin Ireland | Glenn Ireland

R.R. #2, Arthur
Ontario N0G 1A0

Tel: 519-848-3487
Fax: 519-848-5892
Email: terry@irelandbrosLtd.com

**37
YEARS
1977-2014**

www.irelandbrosLtd.com

becoming engineers. Yet, this cannot fall on deaf ears. If systems are found to be flawed, they must be changed by those that at the levels of power and influence to change them, those that hold the keys to policy change and fostering culture change in the profession.

Finally, it is important to recognize that engineering is a conservative profession. It developed from military roots. Its regulatory mandate to protect the public interest biases toward conservative approaches and judgements of all kinds. While engineering outcomes are often novel and innovative, the profession's risk orientation demands prescriptive ways of operating that seek to categorize and standardize. This leads to stability and reliability in many technical contexts but can trend toward policies and perspectives that are equal over being equitable. Equity failures may not be intentional, but that doesn't change the fact that the institutions and the long-standing normative practices of conservative professions often embed and perpetuate these failures. The rules of the games of the sandbox are never critically reviewed.

I am not dismissing that the core purpose of an enterprise is to be profitable and competitive. Employers and industries need to deliver projects and meet client's needs, protect the public interest, innovate and advance technology, and sustain business purposes. In the last decade of engineering labour shortages, employers have started to become innovative in strategies for retaining employees. In that context, what causes people to fall away from the profession or not to join in the first place? Are there ways of acting and thinking that are not valued in the profession? Are there practices that are inflexible and alternatives that are dismissed simply because they've never been tried before? Are we really interested in truly listening to the experiences of under-represented groups in a spirit of openness and non-defensiveness?

As engineers, we know that we need to understand a situation before we can design a solution. In this case, our challenge is to consciously seek sonder. 🌐

¹Brown, B. (2010). The Gifts of Imperfection. Centre City, MN: Hazelden, pp. 25-26.

Smart Control Systems
Smart Final Control
Smart Analytical
Smart Asset Optimization
Smart Machinery Health
Smart Wireless
Smart Measurement
Smart Safety

LAKESIDE
Lakeside Process Controls
7 Sylvan Way
Winnipeg, MB
R2R 2B9
www.lakesidecontrols.ca
info@lakesidecontrols.com
204-633-9197
EMERSON
Process Management



Locally Delivered Solutions

Golder Associates is driven by our purpose to engineer earth's development while preserving earth's integrity. We deliver solutions that help our clients achieve their sustainable development goals by providing a wide range of independent consulting, design and construction services in our specialist areas of earth, environment and energy.

Work with Golder in Winnipeg to gain the advantage of local solutions backed by global knowledge.

Canada + 800 414-8314
solutions@golder.com
www.golder.com



PADDOCK DRILLING LTD.

GEOTECHNICAL AND ENVIRONMENTAL INVESTIGATIONS



BRANDON
WINNIPEG
SASKATOON

4100 RICHMOND AVE. EAST
BRANDON, MB R7A 7P8

GROUNDWATER &
SOIL EXPLORATION

www.paddockdrilling.com

Phone: 204-725-0657 • Toll Free: 1-800-339-4908 • Fax: 204-727-4926



**A proud member of Manitoba's
consulting engineering community
for more than 60 years**

From our heritage building in Winnipeg's vibrant Exchange District, our local engineers, planners, and scientists deliver exceptional transportation, civil engineering, planning and development, environmental management, building, GIS, and project management services.

We take pride in developing creative and personalized solutions that carefully integrate the cultural, environmental, and historical values unique to Manitoba.



Photo: Gerry Kopelow



www.mmmgrouplimited.com

Follow us:    

Investing in Success



John D. Gamble, PEng,
President & CEO
ACEC - Canada



Consulting Engineering is *more important than ever* to our prosperity

The contribution of the consulting engineer is an important investment in the success of any project. Even though the planning and design of a project represents less than 2% of the total life-cycle cost, decisions made during planning and design have ramifications over the entire service life of a project. The owner will have to live with those decisions for decades, even generations. For much of the last century this was generally understood by most clients. Engineering was viewed to be an investment to be leveraged, rather than an expense to be minimized.

However, when the economic boon of the 1980's abruptly gave way to the harsh realities of the 1990's recession, everything changed. The consequences of government deficits started in the 1960's and 1970's (without adequate foresight on how to manage debt) came home to roost. As a society, in order to pay the bills, we stopped investing in our future. We stopped investing in the very things that create prosperity. Public investments in infrastructure dramatically decreased from about 6% of GDP to less than 2-3% of GDP. Similar short-term thinking even began influencing the private sector. Private sector clients shelved or outright cancelled projects (or went out of business). Work dried up.

For those projects that did proceed, value became confused with price and consequently, emphasis on lowest short-term cost replaced long-term savings value. In this economic environment, consulting engineering companies downsized or folded. Some dating back to the turn of the century disappeared as the result of mergers and acquisitions. Post-secondary enrollment in engineering and other

scientific and technological disciplines plummeted. Many skilled professionals and experts were lost to the sector forever.

Fast forward to today: underinvestment has grown the infrastructure deficit in Canada. Fiscal deficits at all levels of government are consuming tax dollars and curtailing the ability to invest sufficient capital into infrastructure programs. A fixation on low-price over value and quality has become entrenched in the procurement practices in much of the public sector. Downsizing in the 1990's and fiscal austerity have conspired to erode the amount of experience and expertise available to deliver infrastructure projects and programs in both the public and private sectors.

But as of late, it is not all bad news. For the first time in decades, political leaders have begun to acknowledge infrastructure as an investment in prosperity. The recent commitment by the federal government to a ten-year infrastructure investment program is an example of

how the public sector is starting to understand the importance of considering life-cycle in infrastructure economics.

Public investment in infrastructure is on the upswing. But with the ongoing fiscal challenges facing governments, how do we ensure that taxpayers and the Canadian public receive value?

The selection of a consulting engineering firm for a project, regardless of the delivery model, it is more important and more cost effective to focus on the qualifications of the project team and the merits of the proposal rather than on fees. An appropriate investment in professional services at the onset of a project can potentially reduce capital, maintenance and operating costs while improving reliability and extending service life. Conversely, reducing the investment at the design stage can result in significant higher capital, operating and maintenance costs throughout the service life of the project. 🇨🇦

About the Association of Consulting Engineering Companies - Canada

The Association of Consulting Engineering Companies - Canada (ACEC) is a national business association representing nearly 450 companies that offer professional engineering and related services to a wide range of public and private sector clients. Organizationally, ACEC is a federation of twelve provincial and territorial consulting engineering associations, including ACEC-Manitoba. Collectively, ACEC member companies directly employ nearly 75,000 Canadians.

The mission of ACEC is to promote a business and regulatory climate that recognizes and rewards the expertise of its members and their contribution to the quality of life in Canada. ACEC supports this mission with a strong advocacy program that engages with federal government and other national stakeholders to shape public policy and to raise the profile of the consulting engineering sector.

The Manitoba Ready Mix Concrete Association (MRMCA) is comprised of members from producers, associates and cement manufacturers. With a membership of approximately 100 members companies, MRMCA is recognized as the authoritative voice of the ready mix concrete industry in the province.

MEMBER SERVICES

- Website
- Membership Directory
- Safety Seminars, Manuals, WHMIS information
- Technical Seminars & Support
- Certification Programs
- Concrete Technology Courses
- Promotional Information & Brochures
- Representation to all levels of government & industry
- Annual General Meeting
- Annual Golf Tournament
- Scholarships

GOVERNSHIP

MRMCA is governed by a Board of ten elected Directors from producer, associate and cement manufacturer members.

GOALS

Market and promote the use of concrete. Provide a consolidated industry approach to regulatory bodies. Provide networking opportunities. Provide education and training.



www.mrmca.com



MANITOBA READY MIX
CONCRETE ASSOCIATION

204.667.8539 | info@mrmca.com

WWW.MRMCA.COM



The MRMCA's Mission is to "Provide industry representation for the advancement of quality concrete in Manitoba."

15th Annual Awards of Excellence in Consulting Engineering



All awards photos courtesy of Joel Ross Photography

[CLICK HERE](#) to return to Table of Contents

Thanks to our sponsors

Title Sponsors

XL Group
Insurance



Award Category Sponsors



Faculty of
Engineering



UNIVERSITY
OF MANITOBA

Faculty of
Science



UNIVERSITY
OF MANITOBA



Wine Sponsors



Entertainment Sponsor



2014 Judging Panel

ACEC-Manitoba would like to thank the judging panel for volunteering their time and expertise in support of this event. Without their time and effort there would be no Awards Gala.

Dustin Booy, P. Eng.

Manitoba Infrastructure and Transportation

Ruth Eden, P. Eng.

Manitoba Infrastructure and Transportation

Dave Ennis, P. Eng.

Small Pond Inc.

Lawrence Ferchoff, P. Eng., FEC

Manitoba Hydro

Barry MacBride, P. Eng.

BDM Projects Ltd.

Doug McNeil, P. Eng.

Manitoba Infrastructure and Transportation

B.J. (Bernie) Osiowy, P. Eng.

Consultant

Douglas Ruth, P. Eng., Ph.D.

University of Manitoba

Ahmed Shalaby, Ph.D., P. Eng.

University of Manitoba



Back row: Lawrence Ferchoff, Doug McNeil, Barry MacBride, Douglas Ruth and B.J. (Bernie) Osiowy
Sitting: Dave Ennis, Ahmed Shalaby and Dustin Booy
Missing from photo: Ruth Eden

Keystone Award



Project Name: Operating Room/
Inter-operative Magnetic
Resonance Imaging
Scanner (OR/IMRIS)
Firm: WSP Canada Inc.
Client: Winnipeg Regional
Health Authority
Category: Building Engineering



The project is a 1,000 square metre inter-operative theatre, the first of its kind in Canada, featuring the latest hardware and software technology available in the world. The traditional operating theatre procedure uses biopsy and MRI techniques to inform the doctor where to perform surgery. Following the operation the patient would undergo an MRI to verify the surgery was successful at removing all parts of the tumor and if not, would have to reschedule the surgery. The new facility has a movable MRI that moves between an Angio suite to the north and a Neuro suite to the south. This enables the patient to undergo an MRI while still in surgery to verify and

validate the effectiveness of the operation. The MRI is mounted on tracks in the ceiling and moves from the 'garage' into either OR as required.

This is the first of many projects that will be installed worldwide, with the pilot project in Winnipeg. The design process can be described as unique and challenging as many of the control procedural systems were changing on the fly as the project unfolded. The result was a highly successful ground breaking project that will benefit all who require such operations and the families of those affected. The cutting edge nature of equipment planned and installed in the facility required

significant consideration for flexibility and "future proofing" of infrastructure. In addition to this, the magnet can be used for both outpatient diagnostic services accessed from an adjacent clinic or from a 'clean' corridor connecting patients to the ICU. Because of this Angio/Neuro dual use, the ORs require multiple protocols for movement of patients, staff, materials and waste. The suites are enclosed by shielded structure that is independent of the base building concrete construction. Above this shell is an interstitial space and adjacent mezzanine that provides the mechanical and electrical infrastructure required to support the medical program below.





Background

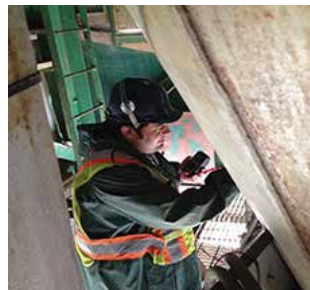
Standard MRI's produces black +white 3-D images to verify the information about the tumour for diagnosis, decision making, treatment and monitoring. Now for the first time in Canada, advanced MRI technology produces multicolor images indicating normal blood flow levels in the brain and tumorous areas, with high levels of blood flow in a particular area being evidence of a very aggressive and very dangerous malignant growth. A computer converts the radio frequencies into an image of the patient's organs, tissue and blood flow, to indicate whether this is malignant or benign and to better predict the grade of the tumour.

The technology implements a movable MRI, developed by IMRIS in Winnipeg, so the magnet can be moved into an adjoining operating room to the patient, sometimes two or three times during a procedure and before the conclusion of the operation, to determine whether the malignant tissue has been removed. Doctors will remove cancerous growths with greater precision by helping them distinguish what is normal tissue and what isn't. The distinction is so fine that it's impossible for a human eye to tell the difference.

This facility will greatly advance training and research in Manitoba, all the while improving care for patients, especially neurological care. These new imaging techniques are implemented for the greatest benefit of patients and to combine clinical work with academic work in an optimal environment.

Quality You Can Measure.

Engineered Weighing & Process Control Systems



Agriculture • Mining • Manufacturing • Legal for Trade
Bulk Loadout • Data Collection • HMI Integration

superiortech.com 1673 Dugald Rd, Winnipeg, MB | 204-661-6482

SUPERIOR
TECHNOLOGIES
WEIGHING & CONTROLS INC.

Summary

3-D Perspective View



What's inside?

The surgical suite is made up of four rooms. Room "A" in the image above houses the MRI. Room "B" is used for neurosurgery and Room "C" is for catheter angiography, a procedure used to treat strokes and brain aneurysms. Room "D" is the control centre. Because the MRI is mounted on tracks built into

the ceiling, it can slide into either of the operating rooms to provide scans during a procedure without disturbing the patient. So far, more than 30 patients have been treated on the neurosurgery side, while more than 60 have been treated in the angiography suite. The suite is one of only seven in the world and the first of its kind in Canada.



Industrial Technology Centre

Environmental and Building Noise Studies

- Vibration Analysis
- Product & Material Testing
- Calibration
- 3D Laser Scanning
- 3D Printing

www.itc.mb.ca
 E-mail: tech@itc.mb.ca
 Phone: 204.480.3333
 Toll Free: 1.800.728.7933

An Agency of the Province of Manitoba

**Measure
Model
Mitigate**

Noise level Lden in dB(A)	
-1.0 <	<= -1.0
-0.5 <	<= 0.0
0.0 <	<= 0.5
0.5 <	<= 1.0
1.0 <	<= 1.5
1.5 <	<= 2.0
2.0 <	<= 2.5
2.5 <	<= 3.0
3.0 <	<= 3.5
3.5 <	<= 4.0
4.0 <	<= 4.5
4.5 <	<= 5.0
5.0 <	<= 5.5
5.5 <	<= 6.0
6.0 <	<= 6.0

Award of Excellence



Project Name: James A. Richardson International Airport, Elevated Roadway - Departure Level Bridge
Firm: AECOM
Client: Winnipeg Airports Authority
Category: Infrastructure/Transportation



The Airport Site Redevelopment program had three main components, the Terminal Building and Parkade, the Groundside Site Development and the Airside Site Development. The Groundside Development included a 506 metre long Elevated

Roadway, consisting of the Departures Level Bridge and Up and Down Ramps. The Elevated Roadway was designed to complement the open concept of the new Airport Terminal Building. The structure consists of well-spaced columns and a

post-tensioned ribbed beam superstructure in order to meet the architectural and functional requirements. The Upper Departures Level Bridge and Lower Arrivals Level help to provide Winnipeg with a truly modern airport facility.



CREATING A BETTER TOMORROW

AECOM is proud to have the following projects honoured by the Association of Consulting Engineering Companies – Manitoba. We extend congratulations to all of the award recipients.

James A. Richardson International Airport, Elevated Roadway – Departures Level Bridge – Award of Excellence: Infrastructure/Transportation

Condition Assessment of the City of Winnipeg Sewer Interceptor Network – Award of Excellence: Municipal and Water Technology

Rehabilitation of Deacon Reservoir Box Culverts – Award of Merit: Municipal and Water Technology

www.aecom.ca

Award of Excellence



Project Name: Investors Group Field
Firm: SMS Engineering Limited
Client: Raymond S.C. Wan Architect
Category: Building Engineering



Investors Group Field is an open air stadium designed for sports and concert events with a capacity of up to 40,000 spectators. Integrating sophisticated lighting, public address systems, and innovative heating and cooling systems; it provides the Winnipeg Blue Bombers and the University of Manitoba Bisons with a state-of-the-art playing field. Its primary design feature are the two 140 meter long trusses which support a canopy; these trusses are two of the largest in Canada that are not supporting a bridge. The roofs, which sit nearly 60 metres above the playing field, undulate to form a unique expression amongst the local flat landscape and act as acoustical lenses to amplify the ambient noise during an event.

SMS ENGINEERING

PROUD RECIPIENT OF THE FOLLOWING
2014 ACEC AWARDS

AWARD OF EXCELLENCE

Investors Group Field

AWARD OF MERIT

Health Sciences Centre Central Utility Plant 2



ASSOCIATION OF CONSULTING
ENGINEERING COMPANIES
MANITOBA

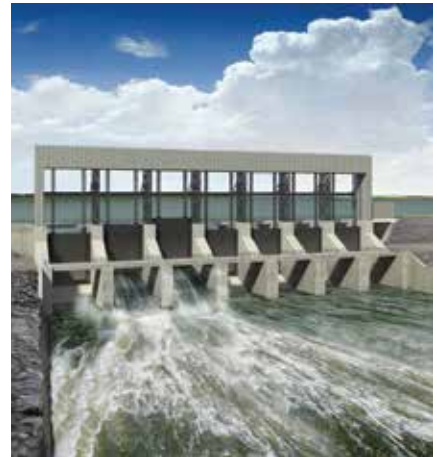


Mechanical and Electrical Consulting Engineers
1.888.775.0291 www.smseng.com

Award of Excellence



Project Name: Keeyask Generating Station Planning Studies
Firm: Hatch Ltd.
Client: Manitoba Hydro
Category: Energy Resource Development



From 1999 to 2013, Hatch teamed with Manitoba Hydro and its partner First Nations to develop preliminary designs for the 695 MW Keeyask Generating Station to be constructed in northern Manitoba. The designs were imperative for verifying the economics and to advance the project into the licensing process. The work included field explorations, design development, cost estimating and environmental assessment support. The studies utilized state-of-the-art computer modelling to design structures, design environmental mitigations measures and assess environment impacts. The generating station is designed to minimize flooding and to limit the fluctuation of forebay water levels during operation.



SAFETY *with* SHELLY

CONSULTING SERVICES

Work Safely. Your family is waiting for you.

- COR Program
- ISNetwork
- On Site Safety
- Manuals
- Training
- Audits

Shelly Plett cso

splett@safetysHELLY.com
(204) 799-4712
www.safetysHELLY.com

MHCA WorkSafe Approved External AuditorExternal Auditor # 070607SP



Award of Excellence



Project Name: Souris Swinging Bridge Replacement
Firm: Stantec Consulting Ltd.
Client: The Town of Souris
Category: Infrastructure/Transportation



Stantec was engaged by the Town of Souris to develop a replacement structure for the iconic swinging bridge that was destroyed due to record flooding in 2011. To reduce the risk of flood damage, the design called for the elimination of all piers and the construction of a single span across the river. The replacement structure developed is a 184 metre long clear span pedestrian suspension bridge, the longest of its kind in Canada. The combination of site influence, design considerations, type and length of the bridge resulted in a complex engineering challenge.

Design with community in mind



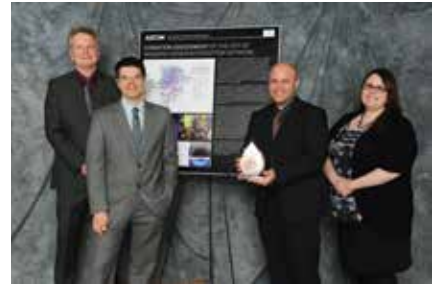
stantec.com



ENGINEERING AND TESTING SOLUTIONS THAT WORK FOR YOU

Unit 6-854 MARION STREET, WINNIPEG, MANITOBA, R2J 0K4
 PHONE: (204) 233-1694 FAX: (204) 235-1579 ENG_TECH@MTS.NET WWW.ENG-TECH.CA

Award of Excellence

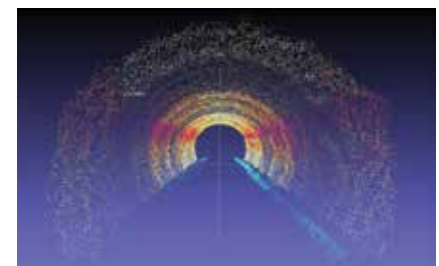
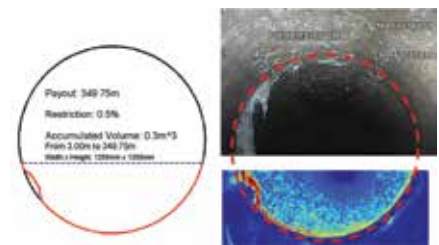


Project Name: Condition Assessment of the City of Winnipeg Sewer Interceptor Network

Firm: AECOM Canada Ltd.

Client: The City of Winnipeg, Water and Waste Department

Category: Municipal & Water Technology



Winnipeg's Interceptor Sewer Network includes 119 kilometers of pipe up to 2250 mm in size and at depths approaching 20 meters. It is full of pipes that are very complex to access, under high flow regimes and it contains the most critical wastewater pipelines in the City's system. The oldest pipes in the system were built as monolithic tunnels in the 1930's and prior to 2009 very little was known about the physical condition of the overall system as logistically it was no possible to inspect it by conventional means. AECOM in conjunction with the City, implemented a program from 2010 – 2013 that used advanced multi-sensor technology platforms to enable the assessment of the inventory.

KGS

GROUP

CONSULTING ENGINEERS

Science
Imagination
Collaboration

THE CORE OF EVERY CUSTOMIZED PROJECT

WINNIPEG
REGINA
THUNDER BAY
TORONTO

www.ksgroup.com



Local Presence. Global Reach.

Discover how a local Winnipeg company became a global leader in power delivery engineering at: teshmont.com/globalreach



Shaping the Future Delivering excellence in Manitoba

Follow Us  



AMEC is a leading supplier of consultancy, engineering and project management services to our customers in the world's oil and gas, mining, clean energy, environment and infrastructure markets.

Come join our team!

Visit www.amec.com/careers for more information.

amec.com

Awards of Merit



EECOL
ELECTRIC

Proudly Serving the Electrical Industry since 1919

Full Line Electrical Distributor offering:

- Automation
- Data & Communication
- International
- Lighting
- MRO
- Renewable Energy Solutions
- Utility
- Wire & Cable



Visit us at www.eecol.com



Project Name: Disraeli Active Transportation Bridge Project
Firm: Tetra Tech
Client: City of Winnipeg
Category: Infrastructure/Transportation



The Disraeli Active Transportation (AT) Bridge was designed as an integral link in the City of Winnipeg's Active Transport Plan. It links the Point Douglas and Elmwood communities with a pedestrian/cyclist friendly corridor that enhances and promotes alternative transportation. As part of the successful Plenary Roads Winnipeg team Tetra Tech, teamed up with

PCL Constructors Ltd. to be the primary consultant and design team lead. The AT spans the Red River east of the new Disraeli Bridge and is built on the original Disraeli Bridge pier foundations. The AT Bridge features a custom pedestrian/cycling railing, pier overlooks, and LED lit art panels, which provide for an aesthetic addition to the Active Transportation Network.

**TOGETHER
WE BUILD
SUCCESS.**



University College of the North
Thompson, MB





Project Name: Rehabilitation of Deacon Reservoir Box Culverts
Firm: AECOM Canada Ltd.
Client: City of Winnipeg, Water and Waste Department
Category: Municipal & Water Technology



The City of Winnipeg's Cell 1 and 2 reservoirs at Deacon contain over 4.2 billion litres of water that is over eight metres deep. Their interconnecting pipes have leaked extensively for many years to the point where there were

concerns over long-term stability of the installation. The City desired a long-term solution to fix the pipes without dewatering the reservoirs. AECOM developed a very innovative solution of using diver installed bulkheads to

isolate the pipes, the largest solid wall HPDE pipe in North America installed as a float-in-place slip liner and a carefully designed controlled density fill (CDR) resulting in virtually no disruption to operations or to the reservoir levels.




Project Name: Health Sciences Centre Central Utility Plant 2
Firm: SMS Engineering Limited
Client: Health Sciences Centre
Category: Industrial



The new \$37.9 M state-of-the-art central energy plant owned by the Health Sciences Centre reinforces its mission of putting Patients First by providing a reliable and efficient source of campus cooling. Almost twice as efficient as the old, the plant features three 1,500 ton chillers integrated with the existing central energy plant in a parallel variable primary flow configuration. Designed and managed by SMS Engineering Ltd., the performance based system is a result of careful planning between

the project owner, designers, facility operators and systems' manufacturers and reinforces HSC's commitment to energy efficiency and quality.





ELECTRICAL POWER PRODUCTS
*Motor + Control Solutions
 Rugged & Reliable Products*

TOSHIBA
 Electric Motors - EQP GLOBAL
 Adjustable Speed Drives - to 20,000 HP
 5 kV Starters - to 5,500 HP
 Uninterruptible Power Supplies - to 750 KVA

BENSHAW
 Solid State Starters - 20V to 13.8kV

EATON-MOELLER
 Motor Control Centres
 Contractors, Relays & Pushbuttons

- Application Support & On-Site Services
- Training & Startup Assistance
- Electro-Mechanical Repair Specialists
- Switchgear & Substation Maintenance
- 24/7 Availability

Regina Distribution Center: **306.586.000**
 Saskatoon Distribution Center: **306.651.0400**
 Winnipeg Service Center: **204.237.4490**

Formerly **KVA DYNAMO inc.** &
B+B DYNAMO + Armature Ltd.

www.ips.ca

Rising Star Award

The *Rising Star Award* is intended to recognize exceptional achievements in the early years of a persons' career. This award was established in 2008 in recognition of the 30th anniversary of the Consulting Engineers of Manitoba. The award is intended to celebrate a young individual who has demonstrated excellence in business practices, outstanding achievements in their applicable fields, leadership in the community and the active participation in the association. The award was first presented to Daniel Zaborniak in 2008, Jason Cousin in 2009, Beth Phillips in 2010, Owen Van Wallegghem in 2011, Jonathan Epp in 2012 and Kimberly Yathon in 2013. This year ACEC-Manitoba congratulates Kristen Poff, P. Eng. as the 2014 recipient.



Kristen Poff, EIT (centre)

Kristen Poff is a civil EIT with over seven years of progressive engineering experience in the design, construction, and commissioning of municipal (civil) engineering works, in both the private and public sector. Kristen graduated as a technologist in 2008, and then as an engineer in 2011. She has gained valuable practical and technical experience and has become a vital member of the WSP [formerly GENIVAR] engineering team. Kristen has taken post-graduate courses in Project Management from RRC and is currently pursuing a M.Sc. in Civil Engineering at U of M, with interest in asset management, rail transport, and freight movement.

While at the University of Manitoba, Kristen has become involved in the Institute of Transportation Engineers – Student Chapter (ITE) as the Technical Coordinator. In this role, Kristen is responsible for organizing and executing

presentations showcasing the engineering profession. These opportunities help promote the profession while highlighting the various opportunities available to graduate engineers.

Kristen has been involved in numerous professional and technical societies, both during her time at university and post-graduation. She is an active participant in the activities of ACEC-MB sitting on the Image Committee as Co-Chair, Young Professionals Committee, Business Practices Committee, and as Chair of the Technical Women in Engineering Committee (TWICE) she continues to promote the profession while providing a much needed service to members.

Additionally, Kristen has recently joined the APEGM – Committee for Increasing the Participation of Women in Engineering (CIPWIE), hoping to continue to pursue opportunities for increased

retention and diversity in the profession. She also sits on the 2015 MCWESTT planning committee. As Chair of the WSP – Young Professionals Group, Kristen also organizes internal events showcasing various colleagues and projects, and training and growth opportunities.

Kristen has always been involved in the community, through volunteer work with her church and local inner city outreach programs, as a youth coordinator and mentor. Additionally, she has taught ballet and has studied with the Royal Winnipeg Ballet for over 16 years. Kristen regularly participates in the Manitoba Marathon, raising money for citizens with MS, and prepares Christmas hampers for the Winnipeg Cheer Board. Through her involvement with the University of Manitoba ITE Student chapter, Kristen participated in projects supporting the Winnipeg Harvest.

Engineering Action Award

Established in 2005, the *Engineering Action Award* recognizes outstanding service and dedication to the association, the Canadian consulting engineering profession and the community through volunteer activities to an engineer who is actively practicing in the industry. Previous recipients include Garry Bolton in 2005, John Woods in 2006, Roger Rempel in 2008, Ken Anderson in 2009, Ralph Kurth in 2010, William (Bill) H. Brant in 2011, Tom Wingrove in 2012 and Ron Typliski in 2013. ACEC-Manitoba congratulates Alan Gauthier, P. Eng. as the 2014 recipient.



Alana Gauthier, P. Eng. (right)

Alana Gauthier graduated with a B.Sc. in Chemical Engineering in 1989 from Queen's University. At her first full time job at Albany International, Alana saved the company \$60,000 per month ongoing from a project after being there for a year. She moved to Thompson, Manitoba in 1991 and worked in both the Smelter and Refinery as a process engineer. Alana switched from private industry to consulting in 2000 and joined the Winnipeg office of WSP (previously GENIVAR) in 2007. Her responsibilities have grown over time as she developed a significant industrial client base and was promoted to Manager, Industrial Engineering and she has mentored EITs at WSP for the past four years.

Alana has been an active participant in engineering associations throughout her career. She helped form the Thompson chapter of APEGM in 1993. She

served as vice-chair, chair and past chair for the Thompson chapter. Alana was a Board member on CEMF (Canadian Engineering Memorial Foundation) from 2008 to 2010. She served on several bilingual judging committees to determine award of engineering scholarships.

In 2012, Alana was chosen by the Minister for the Status of Women in Manitoba to give a presentation to a crowd of 300 at the Manitoba Legislature Building, on the subject of Women's Role as Mentors.

Alana has been a very active member of ACEC-MB serving in a number of Board capacities since 2009. She has served on the ACEC Energy, Science and Technology committee; as a Board member and Board liaison for the Image committee and T.W.I.C.E. committee and was elected Vice President of ACEC-MB in 2013.

Alana believes in giving back to the community and has fundraised for charity since the age of nine (Heart & Stroke foundation, YM-YWCA, MS, Rotary club, Cancer Care Manitoba). She raised over \$5000 to fight multiple sclerosis by participating in the Rona MS Bike Tour for the past five years. When not working, Alana loves to take jazz, ballet and contemporary dancing classes, play the piano, cross-country ski and cycle long distances with her family.

Alana has demonstrated initiative and leadership throughout her career, both in the workplace and in the various technical and professional associations with which she has been involved. She is an exceptional role model and mentor to many young professionals. She represents all of the stellar qualities, which would be expected to a candidate for the Engineering Action Award.

Lifetime Achievement Award

As part of the Awards of Excellence Program, the Consulting Engineers of Manitoba acknowledge the individual achievements of Manitoba's consulting engineers through the *Lifetime Achievement Award*. This award is presented to a Manitoba engineer in recognition of his or her leadership, achievements and contributions to consulting engineering.

Previous recipients include Les Wardrop in 2002, Bill McKay in 2003, William Mitchell in 2004, Russell Hood in 2005, Al Dyregrov in 2006, Alfred Poetker in 2007, Norman Ulyatt in 2008, Peter Washchyshyn in 2009, George Rempel in 2011, Garry Bolton in 2012, Tim Stratton in 2013 and this year the Association of Consulting Engineers of Manitoba honors William H. (Bill) Brant, P. Eng.



William H. [Bill] Brant, P. Eng. (left)

Bill Brant has had a long and distinguished career in his chosen field of Engineering. Bill started his career when he graduated from the University of Manitoba with a B.Sc. in Civil Engineering in 1973. He started work right after graduation with Toman Engineering in Boissevain, Manitoba. After a brief time he moved to Manitoba Water Resources for several years and then on to the Manitoba Water Services Board where he worked for six years. He then joined his long-time associate Alf Poetker at Poetker Engineering; which was later acquired in 1990 by Cochrane Engineering where he rose to the position of Vice President in charge of the Manitoba Region. Cochrane Engineering was acquired in 2007 by GENIVAR [now rebranded as WSP] and Bill is currently Vice President, Manitoba Region. He also continues with his role as a Senior Water Supply Specialist for WSP's Manitoba operations. Bill has played a key role in the development

of regional water systems in Manitoba since 1986 and has won several awards including:

- The ACEC-MB Engineering Action Award
- The George Warren Fuller Award from the American Water Works Association
- The H.C. Lindsten Award from the Western Canada Water & Wastewater Association
- He has twice been awarded a Service Award from the Western Canada Water & Wastewater Association.

Bill has been a very active member of the ACEC-MB serving in a number of capacities including President, Director and Manitoba Representative to ACEC-Canada. Bill's other professional affiliations include:

- Member of APEGM
- Member and Past Chair of AWWA (American Water Works Association)
- Member and Past President of WC-WWA (Western Canada Water and Wastewater Association)

- Designated Representative and Past Director of CWWA (Canadian Water and Wastewater Magazine)
- Founder and long-time [18 years] Editor of Western Canada Water Magazine

Bill has always strived for a balance between his professional and personal life. He is a very dedicated family man to his wife Bertha, daughters Ruth and Jessica and sons William and Joseph. He maintains a strong volunteer commitment to his church, having served in many capacities in the Church organization, including Warden [chair of Parish council], in which position he is entering his 10th year of service. He has shown commitment to his community in many ways at both the local and provincial level.

Bill always sets a great example in community and professional involvement to his peers and staff, and is always looking for ways to encourage and support this involvement in others. He has successfully encouraged many members of his team to become actively involved in ACEC.

Our concern for the environment



is more than just talk

As we continue to deliver valuable information through the pages of this magazine, in a printed format that is appealing, reader-friendly and not lost in the proliferation of electronic messages that are bombarding our senses, we are also well aware of the need to be respectful of our environment. That is why we are committed to publishing the magazine in the most environmentally-friendly process possible. Here is what we mean:

- We use lighter publication stock that consists of recycled paper. This paper has been certified to meet the environmental and social standards of the Forest Stewardship Council® (FSC®) and comes from responsibly managed forests, and verified recycled sources making this a RENEWABLE and SUSTAINABLE resource.
- Our computer-to-plate technology reduces the amount of chemistry required to create plates for the printing process. The resulting chemistry is neutralized to the extent that it can be safely discharged to the drain.
- We use vegetable oil-based inks to print the magazine. This means that we are not using resource-depleting petroleum-based ink products and that the subsequent recycling of the paper in this magazine is much more environment friendly.
- During the printing process, we use a solvent recycling system that separates the water from the recovered solvents and leaves only about 5% residue. This results in reduced solvent usage, handling and hazardous hauling.
- We ensure that an efficient recycling program is used for all printing plates and all waste paper.
- Within the pages of each issue, we actively encourage our readers to REUSE and RECYCLE.
- In order to reduce our carbon footprint on the planet, we utilize a carbon offset program in conjunction with any air travel we undertake related to our publishing responsibilities for the magazine.

So enjoy this magazine...and KEEP THINKING GREEN.

Technical Women in Consulting Engineering



By Kristen Poff, PEng.

Increasing Diversity in Consulting Engineering

Sheila Widnall, Professor of Aerospace Engineering at Massachusetts Institute of Technology and the first female Secretary of the US Air Force, made a bold statement while addressing the National Academy of Engineering in 2000: “if women don’t belong in engineering, then engineering, as a profession is irrelevant to the needs of our society. If engineering doesn’t make welcome space for them and

embrace women for their wonderful qualities, then engineering will become marginalized as other fields expand their turf to seek out and make a place for women.”

Many people have said that engineering has an image problem. Traditionally, engineering has been seen as a career choice for those strong in the hard sciences, projecting the image that you have to be a genius to be an engineer, that

work environments are inflexible and uncompromising, and that the culture is one of boys-will-be-boys. I believe that engineering is for those who are curious about how things work and those who want to be problem solvers and I will let the cat out of the bag ... women are phenomenal problem solvers.

Sometimes, though, perception IS reality! The numbers still show that whether it is at the educational level, the early career level, or the senior level, women’s representation never exceeds 20% of the engineering

Too many projects, not enough time for training.

Not enough training, too many projects run over.

IMAGINiT
TECHNOLOGIES
A RAND Worldwide Company

IMAGINiT Training
YOUR PROBLEM. SOLVED.
800-356-9050 www.imaginit.com

AUTODESK
Gold Partner

Specialization
Building
Civil Infrastructure
Product Design & Manufacturing
Government
Education

Value Added Services
Consulting Specialized
Product Support Specialized
Authorized Training Center

"Sometimes, though, perception IS reality! The numbers still show that whether it is at the educational level, the early career level, or the senior level, women's representation never exceeds 20% of the engineering population."

population. Any profession, which does not include nearly half of its population, suffers in its creativity and creative potential. When asked why they leave the profession, female engineers cite experiencing isolation, unclear advancement, and an unsupportive work environment. Many institutions and organizations have begun to recognize the need to address this issue, from the development of paternity, maternity, and return to work policies, to university and college committees aimed at increasing the enrollment of females in the STEM fields. Despite these advancements, 41% of women employed in technical fields exit the Profession after 10 years, compared to only 17% of their male colleagues.

Diverse teams are a smart business decision – the best ideas and the greatest innovations come from individuals and teams that actively seek out different points of view. They know that diverse perspectives lead to different thinking. And thinking differently is what solves

problems and advances innovation. When we encourage and embrace the different ways of thinking, we unlock the real potential of the human mind and create new opportunities to shape the future. Embracing diversity is a business imperative as it drives innovation and performance.

TWICE – Technical Women in Consulting Engineering was created in 2013, under the ACEC-MB umbrella to provide strategic advice on increasing diversity in the consulting engineering industry. Specifically, TWICE's vision is to foster increased representation of women in our profession and the consulting engineering sector. TWICE will guide the industry in the development of best practices for life - work balance and help facilitate opportunities to encourage networking, mentoring, and professional development for women in the consulting engineering industry. TWICE represents a call to action, for individuals and organizations to actively lead change and foster an environment of diversity and inclusion.

To borrow the words of Marillyn Hewson, CEO of Lockheed Martin:

- Change happens when we deliberately challenge ourselves to include diverse perspectives, ideas and experience in our work.
- Change happens when our leaders go beyond mentoring and start promoting qualified women, and supporting their growth and development at the most senior levels.
- Each and every one of us at all levels of our organizations have the ability – and, quite frankly, the responsibility – to lead change and unlock the power of diversity and inclusion.

I challenge you – as individuals, as leaders and as organizations – to take action and lead the change we need to drive the innovations and performance of the future of consulting engineering.

Imagine the possibilities of what we can accomplish together if we are willing to open our minds, broaden our perspectives and think differently. 🌍

DILLON
CONSULTING

www.dillon.ca

1558 Willson Pl.
Winnipeg,
Manitoba
204.453.2301

**FACILITIES
ENVIRONMENT
INFRASTRUCTURE
COMMUNITIES**

16th Annual ACEC- Manitoba Golf Tournament

The Association of Consulting Engineering Companies – Manitoba held their 16th annual golf tournament on Wednesday May 14, 2014 at the Pine Ridge Golf and Country Club. This year's tournament had an attendance of 83 registered golfers. Our golfers arrived in the morning to a snow-capped clubhouse; the morning temperature was a brisk 2C with the daily maximum reaching only 5C, with the occasional flurry. Hot chocolate and coffee were served up on the course from the beverage carts. Once everyone was safely inside the Club house, a fabulous prime rib dinner was served, including a variety of desserts. The awarding of prizes completed the evening festivities.



We congratulate the first place team from Lewis Instruments Ltd: Nolan Klassen, Justin Wiebe and Jeff Richmond shown with David Fuchs, Golf Chair.



Second Place Winners: Shown with David Fuchs are Wally Jackson (MMM Group Ltd); Mike Houvardas and David Poole (Tower Engineering) and Derek Johnson (Oldfield Kirby Esau).



Third Place Winners: Shown with David Fuchs are John Highmoor (Tri-Core Projects), Kent Bannister and Michael Van Helden (TREK Geotechnical) and James Betke (Associated Engineering)



The Association of Consulting Engineering Companies – Manitoba would like to thank the players, prize sponsors, hole sponsors and event sponsors for making this event successful. This year ACEC is proud to donate \$1,000 to Winnipeg Harvest from this year's tournament proceeds.

From left to right: Jim Kilgour, Golf Co-Chair; Michael Van Helden, Committee Member; Cameron Dyck, ACEC-MB President; David Northcott, Winnipeg Harvest Executive Director; David



Fuchs, Golf Chair and Dianne Casar, Event Coordinator.

In addition, ACEC-Manitoba presented backpacks and duffel bags to Siloam Mission. Pictured are Lindsay Smith, Director of Volunteer Services & Human Resources; Jim Kilgour, Golf Co-Chair and Dianne Casar, Event Coordinator.

Keep your calendars open for the 17th annual tournament next May at the Pine Ridge Golf and Country Club. 🇨🇦

2013-2014 YPC Events Summary

The 2013-2014 year of ACEC-MB Young Professionals Committee events kicked off with a bang on August 27 with a sold-out mixer at the new Clay Oven patio overlooking right field at Shaw Park. Fifty young professionals from consulting, client groups, construction, manufacturing, and beyond gathered to watch the Winnipeg Goldeyes battle the St. Paul Saints. Although the Goldeyes lost, the attendees still had a great time enjoying lively conversation, a few drinks, and the opportunity to grow their professional networks.

September brought an excellent seminar on varied consulting career paths and international work led by John Herbert,

a Senior Program Manager at CH2M HILL with 40 years of experience in the design and construction of large multi-disciplinary projects. John discussed his own personal career path; international experiences in locations as diverse as the UK, Singapore, Malaysia, Barbados and China; and the changing face of consulting engineering. This rare opportunity to meet with and obtain advice from an industry titan like John was greatly appreciated by those YPs in attendance.

On October 16, the YPC hosted its 5th Annual Gala at the newly renovated Metropolitan Entertainment Centre. The theme of the sold-out event was “Rejuvenating the Heart of Winnipeg” and featured an inspiring keynote address by

Ross McGowan, President and CEO at CentreVenture Development Corporation, the City of Winnipeg’s arm’s length development agency responsible for revitalizing downtown Winnipeg. Ross presented information on recently completed projects, such as the Waterfront condominiums; in progress projects such as the new Stantec office building; and planned future projects in the Sports, Hospitality and Entertainment District (SHED) of downtown.

November marked the launch event for our new student mentorship program at the University of Manitoba Faculty of Engineering. Seventy program participants, mentors and students alike, came together to meet their matches for the





first time, set expectations for the program interactions, and enjoy an evening of Dilbert icebreakers and roundtable discussions with other program participants. The participants then capped off a highly successful evening by joining other industry professionals and students at the University of Manitoba Engineering Society annual Wine and Cheese.

In December, the YPC took a break from public facing events to close the year by officially welcoming three new committee members to our ranks, just in time to start the first week of January off by hosting an open information session (H.I.R.E.D.) at the University of Manitoba on consulting engineering as a career choice.

Professional development was the focus in February, featuring a well-attended breakfast seminar on “How to

Give a Great Presentation” hosted by Bev Doern, the Past District Governor of Toastmasters and Chief Thought Generator at A Thought Worth Sharing. Bev provided clear, concise and practical tips on connecting with the audience, developing strong introductions and conclusions, and working with presentation aids, such as PowerPoint. Bev both discussed, and demonstrated, how to give a great presentation!

On the evening of March 26, the YPC held a Meet the Board networking event at the Winnipeg Free Press News Café. The YPs in attendance briefly heard about the role of the ACEC Board members, what ACEC is currently doing in Manitoba, as well as a quick introduction to the Young Professional Committee. The presentations were followed by great appetizers and friendly conversation.

The final event of the year was the mentorship closing event, held on April 3. Mentors and students had the chance to reflect back on their interactions throughout the program and share feedback on their most valuable interactions as well as ask/impart any last knowledge before the program’s end. Attendees also got a chance to meet and mingle with other program participants through a “speed-networking” activity that got everyone moving, talking, and laughing! The energy was high and participants left looking forward to next year’s mentorship program (and roster of YP events!).

The YP committee would like to thank all those who volunteered their time and energy to make the events of the past year a success, and we look forward to another eventful year ahead! 🍷



Use Paper Responsibly

Today's forest industry is working hard to become one of the greenest industries on earth.

- ♻️ What other industry plants hundreds of millions of trees every year?
- ♻️ What other industry actually grows more of its main resource than it consumes?
- ♻️ What other industry generates most of its own energy needs from renewable resources, including waste biomass, biogas, hydro and wind?
- ♻️ What other industry uses a renewable resource and recycled stock as its main ingredients?
- ♻️ What other industry has worked harder on improving its environmental performance with partners and advocates including governments, customers and environmental groups?

Paper is an essential part of human civilization. While we all use and depend upon electronic communications, it is easy to ignore that it comes at an environmental cost. Worldwide spam email traffic creates greenhouse gases equivalent to burning two billion gallons of gasoline yearly, with numbers rising. More than 200 million items of toxic e-waste are thrown away every year in the US alone, with a recycling rate of only 18% compared to 57% for paper. Estimates are that North Americans throw out more than 500,000 toxic computers and cell phones every day.

No industry is perfect. But the paper industry has made, and continues to make, huge investments in environmental responsibility. Specifying and buying paper from certified sources ensures the continuation and growth of carbon-absorbing forests. Using paper with appropriate amounts of recycled fibre helps preserve forests, conserve energy, and maximize fibre usage through paper lifecycles.

Paper is a powerful communications medium. Use it responsibly... and recycle the paper that you use.



ACEC Manitoba's Mentorship Program

*Introducing
Students to
the Consulting
Engineering Sector*



By Kristen Poff, P.Eng.

The concept of mentoring comes from Homer's *Odyssey*; it was the earliest form of hands-on teaching where the experienced master educated novices into a trade. The primary motivation to be a good mentor was understood by Homer: the natural human desire to share knowledge and experience. When you look at the career paths of highly successful people, they're usually littered with formative mentors.

During the 2013-2014 academic year, the Young Professionals Committee of ACEC-MB introduced the ACEC-MB Mentorship Program. The Program paired industry professionals with University of Manitoba engineering students allowing the students to gain insight and understanding of the consulting engineering sector. The goal of the ACEC-MB Mentoring Program is to give students an introduction to the challenging and rewarding career opportunities that exist

in consulting engineering. The program was a great success; connecting approximately 50 students and 35 mentors, allowing both to build new skills, build self-confidence, and grow professionally.

The Mentorship Program provides an opportunity for ACEC member firms to interact with tomorrow's engineers, today.

As a Mentor, you will introduce your student to the exciting and rewarding consulting engineering sector; only one of the 2013 ACEC-MB Mentorship Program applicants had been employed by an ACEC-MB member firm. Additionally, you will help your student prepare for the transition from university life to the workplace, by offering insight into the hiring practices and the practical application of university knowledge. All of the mentors from the 2013 ACEC-MB Mentorship Program said they would consider returning to the Program. The ACEC-MB Mentorship Program is an

opportunity for Mentors to share their passion for engineering and to give back to the engineering community, while making an impact on a young engineer's future career choice.

The Mentorship Program is a Fantastic Opportunity for all parties, the Student, the Mentor, and the ACEC-MB Member Firm.

The ACEC-MB Mentorship Program allows the member firm to increase their brand awareness within the University of Manitoba - Faculty of Engineering. A Mentor performs a critical role in encouraging young students to pursue a career in consulting engineering. A Mentor can be a vital resource to entry-level engineers, helping them develop a professional network and learn the practical side of the profession. They provide a crucial first impression of the opportunities available in consulting engineering and a positive image of the professional engineer. A dynamic, engaged Mentor will have a lasting, positive impression on students, influencing their future decisions to pursue careers in consulting engineering.

The success of the ACEC-MB Mentorship Program depends on industry involvement. For more information and to access the 2014 Program Application, visit www.acec-mb.ca/mentorship.

"I did not know too much about consulting engineering prior to the program, and now I am motivated to work in the field of consulting engineering after graduation. Everyone was positive about their careers and that is very refreshing!"

CTTAM's Directory of Certified Members

The Certified Technicians and Technologist of Manitoba (CTTAM) are excited to announce the roll out of "Directory of Certified Members" found under the Membership drop-down menu at www.cttam.com. This directory is a tool that will allow the public access for verifying individuals with the designations of C.E.T. (Certified Engineering Technologists),

C.Tech (Certified Technician) and AScT. (Applied Science Technologist).

For the protection of the public and CTTAM Members, the Certified Applied Science Technology Act of Manitoba restricts the use of these designations to only those who are registered with CTTAM and are "in good standing". Like other professional organizations, individuals who are not registered with

CTTAM cannot use these designations. CTTAM will take legal action with individuals and their employers who are using these designations unlawfully.

If anyone has any knowledge of the miss use of these designations, please contact Terry Gifford Executive Director at (204) 784-1080. All discussions are confidential.



Specializing in

- Asphalt Paving/Concrete Paving
- Site Development
- Sewer & Water Services
- Diamond Grinding



**COR Certified
Gold Seal Employer
& Supporter**



777 Erin St. Winnipeg, MB R3G 2W2 | Phone: 204-783-7091 | Fax: 204-786-3106 | www.mapleleafconstruction.mb.ca

Member Services Guide



ASSOCIATION OF CONSULTING
ENGINEERING COMPANIES
MANITOBA

Company listings by category

Aerospace

Boge & Boge Ltd.
Tetra Tech WEI Inc.
Tower Engineering Group Inc.
WSP Canada Inc.

Agriculture

Accutech Engineering Inc.
AECOM
Associated Engineering
Boge & Boge Ltd.
Burns Maendal Consulting
Engineers Ltd.
DGH Engineering Ltd.
Golder Associates
J.R. Cousin Consultants Ltd.
SNC-Lavalin Inc.
Stantec Consulting Ltd.
Tower Engineering Group Inc.
WSP Canada Inc.
Building Science
Accutech Engineering Inc.
AECOM
AMEC Environmental & Infrastructure
Associated Engineering
Boge & Boge Ltd.
Burns Maendal Consulting
Engineers Ltd.
Crosier Kilgour & Partners Ltd.
DGH Engineering Ltd.
Dillon Consulting Limited
Golder Associates
MMM Group Limited
Morrison Hershfield Limited
Neegan Burnside Ltd.
SMS Engineering Ltd.
SNC-Lavalin Inc.
Stantec Consulting Ltd.
Tetra Tech WEI Inc.
Tower Engineering Group Inc.
WSP Canada Inc.

Chemical Engineering

SNC-Lavalin Inc.
Stantec Consulting Ltd.
Tower Engineering Group Inc.
WSP Canada Inc.

Communications/ Telecommunications

Dillon Consulting Limited
MMM Group Limited
Morrison Hershfield Limited
SNC-Lavalin Inc.
Tower Engineering Group Inc.
WSP Canada Inc.

Computer Science

Golder Associates
Tower Engineering Group Inc.

Electrical

Accutech Engineering Inc.
AECOM
Associated Engineering
DGH Engineering Ltd.
Dillon Consulting Limited
HATCH Ltd.
KGS Group
MCW/AGE Consulting
Professional Engineers
MMM Group Limited
Neegan Burnside Ltd.
SMS Engineering Ltd.
SNC-Lavalin Inc.
Stantec Consulting Ltd.
Teshmont Consultants
Tetra Tech WEI Inc.
Tower Engineering Group Inc.
WSP Canada Inc.

Energy

Accutech Engineering Inc.
AECOM
AMEC Environmental &
Infrastructure
Associated Engineering
CH2M HILL Canada Limited
Dillon Consulting Limited
G-MECH Engineering Inc.
Golder Associates
HATCH Ltd.
JBB Consultants & Engineers Inc
KGS Group
MCW/AGE Consulting
Professional Engineers
MMM Group Limited
Neegan Burnside Ltd.
SMS Engineering Ltd.
SNC-Lavalin Inc.
Stantec Consulting Ltd.
Teshmont Consultants
Tetra Tech WEI Inc.
Tower Engineering Group Inc.
WSP Canada Inc.

Environmental

AECOM
AMEC Environmental &
Infrastructure
Associated Engineering
Boge & Boge Ltd.
Burns Maendal Consulting
Engineers Ltd.
CH2M HILL Canada Limited
DGH Engineering Ltd.
Dillon Consulting Limited
ENG-TECH Consulting Limited
Golder Associates
HATCH Ltd.
J.R. Cousin Consultants Ltd.

KGS Group
MMM Group Limited
Neegan Burnside Ltd.
SNC-Lavalin Inc.
Stantec Consulting Ltd.
Tetra Tech WEI Inc.
Tower Engineering Group Inc.
WSP Canada Inc.

Fisheries

AECOM
AMEC Environmental &
Infrastructure
Dillon Consulting Limited
Golder Associates
SNC-Lavalin Inc.
Stantec Consulting Ltd.
Tetra Tech WEI Inc.
WSP Canada Inc.

Forestry

Boge & Boge Ltd.
Dillon Consulting Limited
Golder Associates
SNC-Lavalin Inc.
Stantec Consulting Ltd.
Tetra Tech WEI Inc.
WSP Canada Inc.

Geotechnical

AECOM
AMEC Environmental &
Infrastructure
Boge & Boge Ltd.
CH2M HILL Canada Limited
Dyregrov Robinson Inc.
ENG-TECH Consulting Limited
Golder Associates
HATCH Ltd.
J.R. Cousin Consultants Ltd.
KGS Group
SNC-Lavalin Inc.
Stantec Consulting Ltd.
Tetra Tech WEI Inc.
Tower Engineering Group Inc.
TREK Geotechnical Inc.
WSP Canada Inc.

Industrial

Accutech Engineering Inc.
AECOM
AMEC Environmental &
Infrastructure
Associated Engineering
Boge & Boge Ltd.
Burns Maendal Consulting
Engineers Ltd.
CH2M HILL Canada Limited
Crosier Kilgour & Partners Ltd.
DGH Engineering Ltd.
Dillon Consulting Limited

G-MECH Engineering Inc.
Golder Associates
HATCH Ltd.
JBB Consultants & Engineers Inc
J.R. Cousin Consultants Ltd.
KGS Group
MCW/AGE Consulting
Professional Engineers
SNC-Lavalin Inc.
Stantec Consulting Ltd.
Tetra Tech WEI Inc.
Tower Engineering Group Inc.
WSP Canada Inc.

Marina and Coastal

AECOM
CH2M HILL Canada Limited
Dillon Consulting Limited
ENG-TECH Consulting Limited
Golder Associates
MMM Group Limited
SNC-Lavalin Inc.
Stantec Consulting Ltd.
Tetra Tech WEI Inc.
WSP Canada Inc.

Materials

AECOM
AMEC Environmental &
Infrastructure
Boge & Boge Ltd.
Crosier Kilgour & Partners Ltd.
ENG-TECH Consulting Limited
Golder Associates
SNC-Lavalin Inc.
Stantec Consulting Ltd.
Tetra Tech WEI Inc.
Tower Engineering Group Inc.

Mechanical

Accutech Engineering Inc.
AECOM
Associated Engineering
Boge & Boge Ltd.
DGH Engineering Ltd.
Dillon Consulting Limited
G-MECH Engineering Inc.
HATCH Ltd.
JBB Consultants & Engineers Inc
KGS Group
MCW/AGE Consulting
Professional Engineers
MMM Group Limited
Neegan Burnside Ltd.
SMS Engineering Ltd.
SNC-Lavalin Inc.
Stantec Consulting Ltd.
Tetra Tech WEI Inc.
Tower Engineering Group Inc.
WSP Canada Inc.

Mining

AECOM
AMEC Environmental
& Infrastructure
Associated Engineering
Boge & Boge Ltd.
CH2M HILL Canada Limited
Dillon Consulting Limited
HATCH Ltd.
J.R. Cousin Consultants Ltd.
KGS Group
SNC-Lavalin Inc.
Stantec Consulting Ltd.
Tetra Tech WEI Inc.
WSP Canada Inc.

Municipal

AECOM
Associated Engineering
Burns Maendal Consulting
Engineers Ltd.
CH2M HILL Canada Limited
DGH Engineering Ltd.
Dillon Consulting Limited
ENG-TECH Consulting Limited
Golder Associates
J.R. Cousin Consultants Ltd.
KGS Group
MMM Group Limited
Morrison Hershfield Limited
Neegan Burnside Ltd.
Sison Blackburn Consulting Inc.
SNC-Lavalin Inc.
Stantec Consulting Ltd.
Tetra Tech WEI Inc.
Tower Engineering Group Inc.
WSP Canada Inc.

Planning

AECOM
AMEC Environmental
& Infrastructure
Associated Engineering
Burns Maendal Consulting
Engineers Ltd.
CH2M HILL Canada Limited
Dillon Consulting Limited
Golder Associates
HATCH Ltd.
J.R. Cousin Consultants Ltd.
KGS Group

MMM Group Limited
Neegan Burnside Ltd.
SNC-Lavalin Inc.
Stantec Consulting Ltd.
Tetra Tech WEI Inc.
WSP Canada Inc.

Project Management

Accutech Engineering Inc.
AECOM
Associated Engineering
Burns Maendal
Consulting Engineers Ltd.
CH2M HILL Canada Limited
Crosier Kilgour & Partners Ltd.
DGH Engineering Ltd.
Dillon Consulting Limited
ENG-TECH Consulting Limited
Golder Associates
HATCH Ltd.
JBB Consultants & Engineers Inc.
J.R. Cousin Consultants Ltd.
KGS Group
MCW/AGE Consulting
Professional Engineers
MMM Group Limited
Morrison Hershfield Limited
Neegan Burnside Ltd.
Sison Blackburn Consulting Inc.
SMS Engineering Ltd.
SNC-Lavalin Inc.
Stantec Consulting Ltd.
Tetra Tech WEI Inc.
Tower Engineering Group Inc.
TREK Geotechnical Inc.
WSP Canada Inc.

Structural – Buildings

Accutech Engineering Inc.
AECOM
Associated Engineering
Boge & Boge Ltd.
Burns Maendal Consulting
Engineers Ltd.
CH2M HILL Canada Limited
Crosier Kilgour & Partners Ltd.
DGH Engineering Ltd.
Dillon Consulting Limited
HATCH Ltd.
KGS Group
MMM Group Limited

Neegan Burnside Ltd.
SNC-Lavalin Inc.
Stantec Consulting Ltd.
Tetra Tech WEI Inc.
Tower Engineering Group Inc.
WSP Canada Inc.

Structural – Other

Accutech Engineering Inc.
AECOM
Associated Engineering
Boge & Boge Ltd.
Burns Maendal Consulting
Engineers Ltd.
CH2M HILL Canada Limited
Crosier Kilgour & Partners Ltd.
DGH Engineering Ltd.
Dillon Consulting Limited
ENG-TECH Consulting Limited
HATCH Ltd.
KGS Group
MMM Group Limited
Morrison Hershfield Limited
Neegan Burnside Ltd.
SNC-Lavalin Inc.
Stantec Consulting Ltd.
Tetra Tech WEI Inc.
WSP Canada Inc.

Surveying

AECOM
Associated Engineering
CH2M HILL Canada Limited
Dillon Consulting Limited
ENG-TECH Consulting Limited
HATCH Ltd.
J.R. Cousin Consultants Ltd.
KGS Group
MMM Group Limited
Morrison Hershfield Limited
Neegan Burnside Ltd.
Sison Blackburn Consulting Inc.
SNC-Lavalin Inc.
Stantec Consulting Ltd.
Tetra Tech WEI Inc.
TREK Geotechnical Inc.
WSP Canada Inc.

Temporary Works

AECOM
Associated Engineering

Boge & Boge Ltd.
CH2M HILL Canada Limited
DGH Engineering Ltd.
Golder Associates
KGS Group
MCW/AGE Consulting
Professional Engineers
MMM Group Limited
Morrison Hershfield Limited
Neegan Burnside Ltd.
SNC-Lavalin Inc.
WSP Canada Inc.

Transportation

AECOM
Associated Engineering
Boge & Boge Ltd.
CH2M HILL Canada Limited
Dillon Consulting Limited
Golder Associates
J.R. Cousin Consultants Ltd.
KGS Group
MMM Group Limited
Morrison Hershfield Limited
Neegan Burnside Ltd.
SNC-Lavalin Inc.
Stantec Consulting Ltd.
Tetra Tech WEI Inc.
WSP Canada Inc.

Water Resources

AECOM
AMEC Environmental &
Infrastructure
Associated Engineering
Burns Maendal Consulting
Engineers Ltd.
CH2M HILL Canada Limited
Dillon Consulting Limited
Golder Associates
HATCH Ltd.
J.R. Cousin Consultants Ltd.
KGS Group
MMM Group Limited
Neegan Burnside Ltd.
SNC-Lavalin Inc.
Stantec Consulting Ltd.
Tetra Tech WEI Inc.
WSP Canada Inc.

Company listings by name



Accutech Engineering Inc.
Tel: (204) 944-1555
Fax: (204) 944-1444
Email: bwall@accutech.ca
Contact: Brent Wall
Website: www.accutech.ca



AECOM
Tel: (204) 928-8318
Fax: (204) 284-2040
Email: leisa.krawchuk@aecom.com
Contact: Leisa Krawchuk
Website: www.aecom.com



**AMEC Environment
& Infrastructure**
Tel: (204) 488-2997
Fax: (204) 489-8261
Email: a.desgroselliers@amec.com
Contact: Allyson Desgroselliers
Website: www.amec.com



Associated Engineering
Tel: (204) 942-6391
Fax: (204) 942-6399
Email: odriscollj@ae.ca
Contact: Jeff O'Driscoll, P.Eng.,
Div. Manager
Website: www.ae.ca



Boge & Boge (1980) Ltd.

Tel: (204) 942-7276
Fax: (204) 942-7288
Email: hanseb@boge-boge.com
Contact: Hans E. Boge
Website: www.boge-boge.com



Burns Maendel Consulting Engineers Ltd.

Tel: (204) 728-7364
Fax: (204) 728-4418
Email: d.burns@bmce.ca
Contact: Daniel Burns
Website: www.bmce.ca



CH2M HILL Canada Limited

Tel: (204) 488-2214
Fax: (204) 488-2245
Email: ed.sharp@ch2m.com
Contact: Ed Sharp, P.Eng.
Website: www.ch2m.com



Crosier Kilgour & Partners Ltd.

Tel: (204) 943-7501
Fax: (204) 943-7507
Email: ckp@ckpeng.com
Contact: Kelly J. Hearson, P.Eng.
Website: www.ckpeng.com



DGH Engineering Ltd.

Tel: (204) 334-8846
Fax: (204) 334-6965
Email: dougs@dgengineering.com
Contact: Doug Small P.Eng.
Website: www.dgengineering.com



Dillon Consulting Limited

Tel: (204) 453-2301
Fax: (204) 452-4412
Email: tpeters@dillon.ca
Contact: Taran Peters
Website: www.dillon.ca

Dyregrov Robinson Inc.

Tel: (204) 632-7252
Fax: (204) 632-1442
Email: gilrobinson@drgeotechnical.com
Contact: Gil Robinson
Website: www.drgeotechnical.com



ENG-TECH Consulting Limited

Tel: (204) 233-1694
Fax: (204) 235-1579
Email: eng_tech@mts.net
Contact: Clark Hryhoruk
Website: ENG-TECH.ca

G-MECH Engineering Inc.

Tel: (204) 888-8992
Fax: (204) 895-4443
Email: gwright@g-mechengineering.com
Contact: Graeson Wright



Golder Associates Ltd.

Tel: (204) 489-9600
Fax: (204) 489-9339
Email: kevin_beechinor@golder.com
Contact: Kevin Beechinor
Website: www.golder.com



Tel: (204) 786-8751
Fax: (204) 786-2242
Email: rahshan@hatch.ca
Contact: Rajib Ahsan
Website: www.hatch.ca



JBB Consultants & Engineers Inc

Tel: (204) 995-9975
Email: Brian@jbbengineers.com
Contact: J. Brian Blahey, CEA, MBA, P.Eng
Website: www.JBBengineers.com



J.R. Cousin Consultants Ltd.

Tel: (204) 489-0474
Fax: (204) 489-0487
Email: info@jrcc.ca
Contact: Jeff Dyck
Website: www.jrcc.ca



KGS Group

Tel: (204) 896-1209
Fax: (204) 896-0754
Email: hgraumann@ksgsgroup.com
Contact: Helmut Graumann
Website: www.ksgsgroup.com



MCW/AGE Consulting Professional Engineers

Tel: (204) 779-7900
Fax: (204) 779-1119
Email: egarfinkel@mcw.com
Contact: Elliott Garfinkel
Website: www.mcw.com



MMM Group Limited

Tel: (204) 943-3178
Fax: (204) 943-4948
Email: tebinkar@mmm.ca
Contact: Richard Tebinka, P.Eng.
Website: www.mmmgrouplimited.com



Morrison Hershfield Limited

Tel: (204) 977-8370
Fax: (204) 487-7470
Email: bbiglow@morrisonhershfield.com
Contact: Bruce Biglow, P.Eng.
Website: www.morrisonhershfield.com



Neegan Burnside Limited

Tel: (204) 949-7110
Fax: (204) 949-7111
Email: gerry.popowich@neeganburnside.com
Contact: Gerry Popowich
Website: www.neeganburnside.com

Sison Blackburn Consulting Inc.

Tel: (204) 505-0855
Fax: (204) 505-0850
Email: dblackburn@sbcinc.ca
Contact: Darren Blackburn
Website: www.sbcinc.ca



SMS Engineering Ltd.

Tel: (204) 775-0291
Fax: (204) 772-2153
Email: jhorrocks@smseng.com
Contact: Jeff Horrocks
Website: www.smseng.com



SNC-LAVALIN SNC-Lavalin Inc.

Tel: (204) 786-8080
Fax: (204) 786-7934
Email: robert.cuthbertson-black@snclavalin.com
Contact: Robert Cuthbertson-Black
Website: www.snclavalin.com



Stantec Consulting Ltd.

Tel: (204) 489-5900
Fax: (204) 453-9012
Email: eric.wiens@stantec.com
Contact: Eric Wiens
Website: www.stantec.com



Teshmont Consultants

Tel: (204) 284-8100
Fax: (204) 475-4601
Email: information@teshmont.com
Contact: Robyn Koropatnick
Website: teshmont.com



Tetra Tech WEI Inc.

Tel: (204) 954-6800
Fax: (204) 988-0564
Email: mario.scerbo@tetrattech.com
Contact: Mario Scerbo, M. Sc., P.Eng.
Website: www.tetrattech.com



Tower Engineering Group

Tel: (204) 925-1150
Fax: (204) 925-1155
Email: mhouvardas@towereng.ca
Contact: Mike Houvardas
Website: www.towereng.ca



TREK Geotechnical Inc.

Tel: (204) 975-9433
Fax: (204) 975-9435
Email: jblatz@trekgeotechnical.ca
Contact: James Blatz
Website: www.trekgeotechnical.ca



WSP Canada Inc

Tel: (204) 477-6650
Fax: (204) 474-2864
Email: bill.brant@wspgroup.com
Contact: W H [Bill] Brant, P.Eng., FEC
Website: www.wspgroup.com

DIRECTORY of ADVERTISERS

COMPANY	PAGE	NUMBER	WEB ADDRESS
Accutech Engineering Inc.	13	204.944.1555	www.accutecheng.ca
AECOM	30		www.aecom.com
AMEC Earth and Environmental	35	204-488-2997	www.amec.com
Bockstael Construction Limited	16	204-233-7135	www.bockstael.com
Canadian Institute for Steel Construction	7	204-297-6275	www.cisc-icca.ca
Crosier Kilgour & Partners Ltd.	49	204.943.7501	www.ckpeng.com
CTTAM	14	204-784-1088	www.cttam.com
Denso North America Inc.	9	416-291-3435	www.densona.com
Dillon Consulting	43	204-453-2301	www.dillon.ca
Eaton Electrical (Canadian Operations)	4	204-694-0569	www.eatoncanada.ca
EECOL Electric	36	204-774-2800	www.eecol.com
ENG-TECH Consulting Limited	34	204-233-1694	www.eng-tech.ca
Golder Associates	21	204-489-9600	www.golder.com
IMAGINiT Technologies	42	800-356-9050	www.imaginit.com
Industrial Technology Centre (ITC)	29	204-480-3333	www.itc.mb.ca
Integrated Power Services	37	204-237-6066	www.ips.ca
IPEX	IFC	866-473-9462	www.ipexinc.com
Ireland Bros. Ltd.	20	519-848-3487	www.irelandbrosLtd.com
J.R. Cousin Consultants Ltd.	7	204-489-0474	www.jrcc.ca
KGS Group Consulting Engineers	34	204.896.1209	www.kgsgroup.com
Lakeside Process Controls	21	204-633-9197	www.lakesidecontrols.ca
Manitoba Ready Mix Concrete Association	24	204-667-8539	www.mrmca.com
Manulife Financial	17		www.manulife.com/acec
Maple Leaf Construction Ltd.	50	204 783-7091	www.mapleleafconstruction.mb.ca
Maple Leaf Drilling Ltd.	16	204-224-3084	www.mapleleafdrilling.ca
MCW/AGE Consulting Professional Engineers	49	204-779-7900	www.mcw.com
MMM Group Limited	22	204-943-3178	www.mmm.ca
Nilex Inc.	IBC	888-543-5454	www.nilex.com
Notarius	10	888-588-0011	www.notarius.com/apegm
Oldfield Kirby Esau Inc.	OBC	204-943-1441	www.oldfieldkirby.com
Paddock Drilling Ltd. (incorporated 1982)	22	800-339-4908	www.paddockdrilling.com
PCL Constructors Canada Inc.	36	204-949-8900	www.pcl.com
Safety with Shelly Consulting Services	32	204-799-4712	www.safetyshelly.com
SMS Engineering Ltd.	31	204-775-0291	www.smseng.com
SNC-Lavalin Inc.	12	204-786-8080	www.snclavalin.com
Stantec	33	204-489-5900	www.stantec.com
Superior Technologies Weighing & Controls	28	204-661-6482	www.superiortech.com
Teshmont Consultants LP	35	204.284.8100	www.teshmont.com
Testlabs International Ltd.	7	204-953-3800	www.testlabs.ca
TETRA TECH	18	905-369-3000	www.tetrattech.com
Triple CCC Construction	19	204-694-6085	tripleccc@mts.net
University of Manitoba, Faculty of Engineering	49	204-474-9034	www.umanitoba.ca/engineering
WSP	3	204- 477-6650	www.wspgroup.com

To reach the engineering profession through *Manitoba Consulting Engineer* magazine and its targeted readership, contact Jeff at your earliest convenience to discuss your company's promotional plans for 2015.

Jeff Kutny, Marketing Manager

P: 1-866-985-9789 F: 1-866-985-9799 jeff@kelman.ca



Join the TriAx[®] Revolution

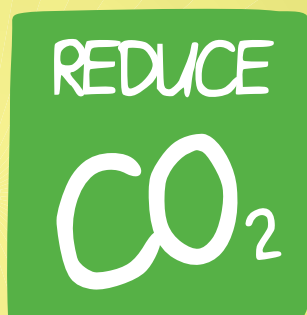
Here's what we saved a client in a single road rehabilitation project using TriAx.



Savings of over \$340,000 on total project costs.



Aggregate base reduced by 4,500 m³ (eliminating 267 truck loads).



86 tonnes of carbon kept out of the atmosphere.



Optimize pavement thickness, simplify construction and lower long-term maintenance costs.

With lower maintenance budgets and increasing material costs, road builders are under escalating pressure to deliver improved performance for less money.

TriAx Geogrids offer superior performance in paved and unpaved applications resulting in a cost-effective and sustainable alternative to conventional road construction materials and practices.

To find out more, contact us at 1.888.543.5454 or visit www.nilex.com

Tensar[®]

NILEX
CIVIL ENVIRONMENTAL GROUP

Unearthing better results.

Education Pays

XL Group
Insurance



Contract eGuide

LMS

CE Credits

up to 10% Premium Credit

Design Professional

Do More.

Don't just cover your risks! Our Design Professional insurance program teaches you how to reduce the cost of loss.

Earn More.

With XL Group the more you learn, the more you can earn—up to a 10% premium credit (up to a maximum of \$10,000 on the first \$5 million of coverage). Our exclusive Learning Management System (LMS) gives you 24/7 access to free, hands-on courses that help you improve business practices and stay ahead of emerging trends.

Learn More.

Get FREE learning units & risk management tools.

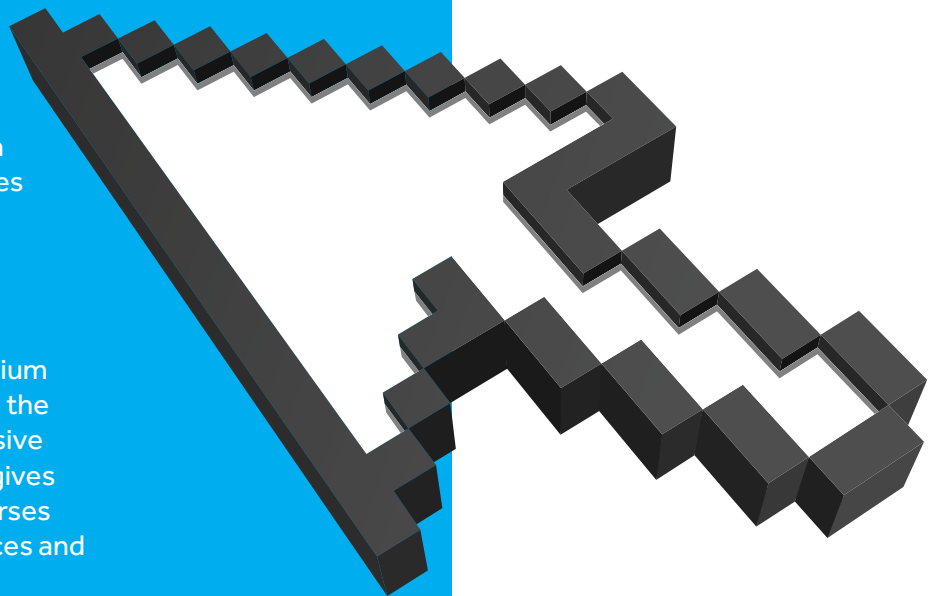
Get More.

Test drive the *Contract eGuide* and discover how we can help you stay on top of negotiations with current contract information and "copy and paste" language.

Find out more.

Visit us online:

xldp.com/Learn More



Oldfield Kirby Esau Inc.

200-330 St. Mary Avenue
Winnipeg, MB R3C 2L2

Tel: 204 943 1441

Fax 204 957 5561

www.oldfieldkirby.com

Contact:

Darren Peters, President & COO
dpeters@oldfieldkirby.com

XL Group is the global brand used by XL Group plc's insurance subsidiaries. Coverages are underwritten by XL Insurance Company Limited—Canadian Branch, an XL Group plc insurance company. Coverages not available in all jurisdictions.