

# ROAD Builder

FALL 2023  
VOL20 NO2



**ORBA's commitment  
to 2030/2050 net  
zero targets**

**Finding common  
ground on utility  
locates**

A WIRTGEN GROUP COMPANY



# The right paver for every application



**CLOSE TO OUR CUSTOMERS**

**WORLD TESTED. CONTRACTOR APPROVED:** As the global leader in paving technology, we've seen just about everything there is to see. In every climate, every condition, every twist, turn and terrain. And we put that world of experience in your hands, so you can experience exceptional performance and results at every phase of the paving process.

 [www.wirtgen.com](http://www.wirtgen.com)

**WIRTGEN AMERICA, INC.** · 6030 Dana Way · Antioch, TN 37013 · Telephone: (615) 501-0600



The official publication of **ROADBuilder** is published biannually by the **Ontario Road Builders' Association**

Publications Mail Agreement  
#40011181

Return undeliverable items to:  
The Ontario Road Builders' Association  
365 Brunel Road, Unit 1  
Mississauga, ON L4Z 1Z5

Tel: (905) 507-1107  
Fax: (905) 890-8122  
orba.org

**ADVERTISING SALES REPRESENTATIVE**

Patricia Abbas  
416.438.7609  
pabbas8@gmail.com

**EDITOR**

Lara Henry  
laraHenry@sympatico.ca

**DESIGN & EDITORIAL LAYOUT**

pdplante.com  
pdominiqueplante@gmail.com

**COVER PHOTO**

Port Union Road, Toronto. (Sandy Brown)

© 2023 All Rights Reserved.



**TABLE OF CONTENTS**

MESSAGE FROM THE CHIEF EXECUTIVE OFFICER	4
MESSAGE FROM THE EXECUTIVE DIRECTOR	8
2030/2050 NET ZERO TARGETS AND ORBA'S COMMITMENT	10
NRC'S PLATFORM TO DECARBONISE THE CONSTRUCTION SECTOR	14
DANGEROUS DRIVING AROUND SNOW PLOWS BANNED IN ONTARIO	18
FINDING COMMON GROUND ON UTILITY LOCATES	22
ANNUAL MEMBERS' GOLF TOURNAMENT	26
3D MILLING AND ROAD INFRASTRUCTURE SUSTAINABILITY	28
ENHANCING THE WORKPLACE CULTURE IN THE TRANSPORTATION INDUSTRY	33
IMPACT OF INFRASTRUCTURE CHALLENGES ON MUNICIPALITIES	36
ORBA OPINION	40
EDUCATION	44
ORBA CORNER	46
NEW MEMBERS	48
ROAD BUILDING HALL OF FAME	49
LIST OF ADVERTISERS	50



Chief Executive Officer

**MICHAEL McSWEENEY**

It feels like yesterday that I was introducing myself as ORBA's CEO. Now, one year later, I am penning my farewell message in what promises to be another engaging issue of our *RoadBuilder* magazine.

It's been a privilege to work with ORBA/OAPC members and the team here at our offices, and it's with mixed emotions that I submit this final CEO communication. I am proud to have helped advance your association and the work of the ORBA Board, Ontario Asphalt Pavement Council (OAPC) and your team here in Mississauga, and I am pleased that our joint efforts have led to a stronger association that is truly in solid shape.

When I stepped into the role back on November 1, 2022, I did so with a clear mandate from ORBA's Board of Directors to restructure, realign, and refocus our association. There was plenty of work to be done in bringing ORBA and its members off the sidelines and back to the decision-making table with provincial and municipal governments. My mission was to help the association regain its voice and get back to having the influence in the industry that it once had over a decade ago, and it was a challenge I was eager to accept.

# Message from the Chief Executive Officer


Part of our mission over the past year has been to refocus our efforts on building and nurturing relationships within our sector, especially with Ontario's top decision-makers such as the Ontario Ministry of Transportation, Infrastructure Ontario and Metrolinx. Together we have worked hard to strengthen our industry ties and we are very encouraged by the progress we've made to date.

Today, ORBA is not simply on our government and allies' radar, but a vocal agent of change on topics that directly impact the shareholder value for our members. We are actively engaged by the Premier's Office, the Secretary to Cabinet and ministries who seek our insights and opinions on vital transportation infrastructure initiatives, legislation, and regulations. Moreover, we are trusted advisors who are informing real change. I often say if you're not at the table, you're likely to be on the menu and that's not where you want to be.

Looking back over the past year, we have refocused as a team and been working diligently to rebuild the relationship between ORBA and OAPC. This partnership was in need of refreshing, and thanks to efforts on both sides, we now stand as a single, harmonious voice on issues and developments that impact our collective memberships. While there will always be more we can do to improve this relationship, it is up to the ORBA Board and »

# Sales, installation and rentals.



A Ramudden Company 



Barrier Wall Systems



Crash Attenuation



Crowd Control & Fencing



Portable Traffic Signals



PVMS & TC-12 Rentals



Light Towers



Active Transportation Delineation

(416) 640-1442 | [www.ontariobw.ca](http://www.ontariobw.ca)



OAPC Council to surface any issues and resolve them quickly. Our collaboration has also fostered mutual respect, streamlined processes, and fortified our presence in the industry.

Together with the ORBA Board and OAPC Council, we worked closely to restructure and refine ORBA/OAPC's leadership team. What does this mean? It means your team is now client focused and customer centred. We have embraced diversity across our ranks, gaining new skills, perspectives, and strategic approaches as a result. Building a more diverse team underscores our commitment to promoting a more inclusive, equitable, and forward-looking workforce that attracts and empowers talent from all walks of life. We're walking the walk, not just talking the talk, and we're picking up speed. Our team knows they are here to work for you as hard as you work to build the infrastructure across our province.

Lastly, our team worked together with ORBA/OAPC leadership to design and build a new strategic plan that will carry ORBA forward into the future. The new plan, timelines and key performance indicators will guide the association in its continued mission to:

- Raise the profile of ORBA through broader government advocacy with all government agencies municipally and provincially;
- Increase government investment on transportation infrastructure;
- Focus on contract and risk management, and keep a keen focus on sustainability as Ontario and Canada continue to fight climate change;

- Build strong partnerships with affiliated associations to more effectively represent the transportation industry; and
- Ensure the association provides shareholder value to its members through effective and relevant programs and services.

As I mentioned earlier, it has been an honour and privilege to work with you and I am excited to be turning the reins over to your new CEO, Walid Abou-Hamde. Walid has extensive experience and acumen in government, and at a time when government is investing unprecedented dollars in infrastructure, I can think of few more qualified to recommend to ORBA/OAPC as their new CEO. Walid's proven commitment to growing the skilled trades sector and hands-on experience within important provincial ministries make him an ideal choice to guide ORBA down the road ahead. I am confident that his strategic insights and commitment to nurturing relationships will help ORBA grow in influence with the decision makers and influencers we need to help our industry reach its potential.

Undoubtedly, the past year has been one of strategic growth, realignment, and transformation. We have embraced change, expanded our reach, and laid a more durable foundation for continued growth. I want to express my gratitude to each member, partner, and stakeholder who has contributed to our success. Your dedication, feedback, and collaboration have been instrumental in shaping our progress.

Again, thank you for this privilege. ■



416-550-3358 | [www.ucrs.ca](http://www.ucrs.ca)

- ★ Pavement Marking
- ★ Rumble Strips
- ★ Crack Sealing
- ★ RPMs
- ★ Water Blasting
- ★ Decorative Crosswalks

V O L V O



## ENGINEERED FOR EFFICIENCY.

Volvo understands that machines need to perform day in, day out. With strong digging power and various work modes the ECR145D and ECR235D are ideally suited to extracting hard and compact materials. Additional pump flow provides faster cycle times. Trust Volvo to increase your productivity.

Strongco, your one-stop dealer for all your heavy equipment needs.



[WWW.STRONGCO.COM](http://WWW.STRONGCO.COM)

ALBERTA ONTARIO QUEBEC ATLANTIC

**STRONGCO**<sup>®</sup>

NORS



Executive Director

**WALID ABOU-HAMDE**

It is an honour to introduce myself as ORBA's executive director and incoming CEO. After following the association's successes throughout my career, I am now proud to be among the leadership guiding its continuing growth and evolution.

First, a little about me. In case we haven't already shaken hands at an ORBA event, I am a longtime construction industry advocate with years spent on both the public and private sides of the sector. I started my career at a boutique consultancy in Toronto after completing my Honours Bachelor of Applied Science in Chemical Engineering at the University of Ottawa, and advised clients across several industries on government engagement, public and media relations, crisis communications, and association management consulting among other services.

My Ontario government journey began with Minister McNaughton's team in 2018 after his appointment as Ontario's Minister of Infrastructure. During this time, I had the opportunity to advise the minister on key files from natural gas to broadband expansion, and updating infrastructure procurement policy. Following Minister McNaughton's appointment as Minister of Labour, Immigration, Training and Skills Development, I led Ontario's skilled trades

# Message from the Executive Director

transformation as part of the province's workforce development strategy, and played a key role in the ministry's response to the COVID-19 pandemic ensuring construction disruptions were minimal. I later joined Skilled Trades Ontario as the vice president of corporate affairs and partnerships, where I continued to work with industry stakeholders including ORBA members.

All told, I've been fortunate to have had multiple opportunities to support Ontario's transportation infrastructure builders and skilled trades community. The networks and insights I've accrued over those experiences will enable me to hit the ground running on many of the issues that are of timely importance to ORBA members.

It's exciting to be joining ORBA at a time of tremendous growth. The talented team at ORBA have done great work to support my 90-day plan aimed at amplifying ORBA's voice and impact within our industry. My priority will be to continue building on this strong foundation and advancing ORBA's priorities through stronger advocacy and strategic alliances with our many stakeholders. Rest assured, I am no stranger to turning ambitious strategies into action and judging by the pedigree of people at ORBA and within its membership, we'll make good on this renewed vision.

It helps that I'm coming to ORBA at a unique time in the industry. Today, almost all levels of government have committed to long-term infrastructure spending, positioning ORBA to be a critical and influential resource when it comes to allocating that funding and approaching infrastructure development. Again, my job is to ensure ORBA assumes this role and that we remain trusted public sector allies.

Of course, one of my overriding goals as your incoming CEO is to ensure ORBA provides consistently excellent service to every one of our members. That includes strengthening and communicating the association's value proposition of being the leading advocate for Ontario's transportation infrastructure industry. It also means genuinely listening and responding to feedback from my team, board of directors, members, committees, and partners. I believe wholeheartedly in leading by collaboration and prioritizing

consensus-building in any situation. When all parties win, we all move ahead.

I'm not here to reinvent the wheel. ORBA has an impressive legacy and much to be proud of in its long history. I believe there are many elements that have driven its success that should remain firmly in place. Still, as the industry evolves, so does our potential as an association to build upon that legacy in new and innovative ways. I aim to build upon what makes ORBA great while pursuing strategies to take us even further. And believe me, this is not a task I take lightly.

Thank you for the chance to introduce myself in this issue of *RoadBuilder* magazine. I plan to do so in person at one of ORBA's many upcoming events. In the meantime, I welcome you to reach out for a more personal introduction and to begin discussing how I can serve your corner of the transportation infrastructure industry. ■



## Building Confidence. Together.

For more than 90 years, we've been a trusted insurance, risk management and consulting partner for businesses, communities and people around the globe. Customizing programs and solutions tailored to your needs. Driving better outcomes for your people and your organization. Helping you build the confidence to handle whatever comes next.

**Proud supporters of the Ontario Road Builders' Association**

For more information visit our website or call:

**800.265.5956**

[AJG.com/ca](https://www.ajg.com/ca) The Gallagher Way. Since 1927.



Insurance | Risk Management | Consulting

© 2023 Arthur J. Gallagher & Co. | Arthur J. Gallagher Canada Limited



©Shutterstock

# 2030/2050 net zero targets

## Enhancing ORBA's commitment to a sustainable future for road building in Ontario

**Governments the world over are coming to terms with the need to address climate change and are actively committing toward net zero targets with an increased focus on enacting regulations, laws, polices and construction mandates. Consequently, there is a clear and pressing need for more sustainable approaches to road building and highway maintenance.**



**O**RBA understands this drive and has embraced the sustainability concept as a key pillar to meet the needs of the current generation without compromising the needs of future generations, while ensuring a balance between economic growth, environmental care, and social governance. To enhance ORBA's commitment to a sustainable future for road building in Ontario, we continue to encourage members to consider sustainable strategies and practices, as well as advocate on their behalf with governments to support transportation growth and infrastructural development policies and requiring:

- Use of low carbon materials in asphalt and concrete road applications;
- Construction waste reductions;
- Incorporating mandates of more recycled content in road building; and
- Promoting other strategies or solutions to extend pavement performance and reduce future maintenance requirements.

This commitment is enhanced through continuing partnerships, collaborations and investments into education, research, and new and existing technologies capable of advancing the road industry's sustainable strides. One such partnership in development is with the National Research Council Canada (NRC) which seeks to support the construction industry in meeting reduction targets for greenhouse gas (GHG) emissions in Canada by 2030 and 2050 respectively.

In addition to exploring support from the NRC's platform to decarbonize the construction industry at scale, there is also a specific NRC/National Asphalt Pavement Association (NAPA)/Ontario Asphalt Pavement Council (OAPC) initiative with the objective "to generate baseline Environmental Product Declarations (EPDs) data sets for various asphalt mix designs used in Ontario". »

This opportunity integrates well with another potential ORBA/OAPC research partnership to “Quantify GHG emissions, the energy sources, and their corresponding emissions from Ontario asphalt plants” with Carleton University’s Advanced Road & Transportation Engineering Lab (ARTEL). The findings from this study can further assist the integration of asphalt as the pavement of choice in the GreenPave Rating System championed by the Ministry of Transportation (MTO).

Another important consideration in ORBA’s quest for a sustainable future in the transportation industry encompasses various approaches and solutions to maintain and rehabilitate roadways, highways, and airfield pavement infrastructure by adopting the latest advances in technologies, with particular emphasis on innovations in equipment and processes. A recent feature in ORBA’s July webinar series detailed the current and future applications of 3D milling technology, and this edition of *RoadBuilder* delves into the sustainable benefits of 3D milling technology.

The benefits of 3D milling range from improved ride quality, prolonged pavement service life and reduction in future maintenance needs, to accurately forecasting reclaimed asphalt pavement production, trucking, and storage requirements for each job. We encourage service

providers, users and road owners seeking to implement 3D milling technology to ensure the accuracy of the input data from the road surface survey before executing the milling plan; after all, bad inputs mean bad results.

As an organization, we remain committed to promoting quality and sustainable pavements and paving techniques in Ontario, and achieving this takes a strong interest in technologies, protocols and systems that maximize operational performance on construction sites and at production facilities. We are also committed to supporting the industry and other stakeholders through a variety of methods including sustaining consultative dialogue and forums, educational seminars, workshops, and paving demonstrations of new technology.

As we navigate these issues, a standing reminder must be that the changing climate remains our biggest challenge in assessing the performance of sustainable road building technologies. The opportunity lies in our sincere intent and capacity to improve our business practices, design, research and construction methodologies, and our understanding of the competing variables. The future of road building in Ontario is sustainable, and together we can establish and sustain those partnerships and collaborations required to *keep Ontario moving!* ■

*Doubra C. Ambaiwei, Ph.D., P.Eng., MCSCE, is Director of Technical Services for ORBA.*





**M&L TESTING EQUIPMENT (1995) INC.**  
M&L Testing is the industry leader in asphalt, concrete and soil testing equipment, since 1960. Call us for all your testing equipment requirements.

<p><b>Dundas Location</b>  31 Dundas Street East  Dundas, ON L9H 7H8  Tel: (905) 689-7327  Fax: (905) 689-3978  Email: info@mltest.com</p>	<p><b>Alberta Location</b>  4530-14th Street N.E.  Calgary, AB T2E 6T7  Tel: (800) 663-4779  Fax: (403) 250-6803  Email: calgary@mltest.com</p>
--	---


**M&L Testing Equipment**   
One of Canada's largest suppliers of materials testing equipment  
Toll Free (905) 1-800-923-4284 • Toll Free Calgary: 1-800-663-4779  
1960 • 2022



# Our global, reliable fuel supply network drives your projects forward.

Our unique supply chain and terminal network in Ontario enables us to source and supply fuels from multiple sources, minimizing dependence on any specific refiner. This translates into superior supply reliability for our customers.

#### Greenergy offers:

- A range of quality fuels including diesel and biodiesel that is tested by independent third-party labs.
- A wide range of biodiesel blends that can be used to fuel your construction project equipment without requiring any engine modifications.
- Biodiesel can support your carbon reduction targets and help improve air quality by 17.1%\*.
- Compliance expertise that can help you save up to 3.2 cents per litre in Carbon Tax Credits\*.
- Complete fuel management solutions, including tanks, tank monitoring and other related equipment.

\* Based on a B20 biodiesel blend

#### Distribution network

- Marketing terminal
- Supply terminal



## Greenergy

[greenergy.com/canada](http://greenergy.com/canada)

Contact us today  
for a fuel supply consultation at:

[canadacommercial@greenergy.com](mailto:canadacommercial@greenergy.com)

+1 888 834 1980



# NRC's platform to decarbonise the construction sector at scale

**The National Research Council Canada (NRC) has received funding to support the construction industry to meet Canada's 2030 and 2050 greenhouse gas (GHG) reductions. NRC's work is focused on three areas: regulations, codes and standards; providing low carbon technical solutions; and digitalization and productivity. These areas cover a wide range of different activities from research and development through field trials, demonstration projects and support for low carbon procurement to knowledge mobilization.**

**On July 20, 2023, Jon Makar, Senior Research Officer at NRC's Construction Research Centre, presented an ORBA webinar that provided information on a new digital platform and two challenge programs that are being used to deliver it. The purpose of the digital platform is to advance a low-carbon regulatory framework, to provide technical solutions and tools to assess and minimize the carbon impact of construction materials and practices, and increase construction sector productivity through digitalization.**



**N**RC is developing a platform aimed at increasing skillsets and low-carbon solutions which will lead to the transformation of the construction sector, create high-paying jobs and position the sector to achieve 2030 GHG targets while strengthening international competitiveness. The three research paths the council is pursuing include a low carbon regulatory framework, a low carbon built environment, and construction sector digitalization and productivity. NRC partners with private and public sector, academic and other research organizations to develop collaborative pilot and demonstration project funding.

With regard to the road-building industry, NRC is measuring the environmental impact of the industry with life cycle assessments (LCA) including the development of standardized procedures, introducing PCRs (Product Category Rules) and EPDs (Environmental Product Declaration), and appropriate Life Cycle Inventories. (LCIs).

Going forward, the road-building industry also has a mandate to reduce its emissions. There are two main types of emissions created during the construction of a road – the GHG produced to make a road (embodied carbon), and the GHG produced during its operation (operational carbon). This does not include vehicles using the road. The federal government will require GHG reductions for federally-funded construction projects but will include Infrastructure Canada funding to provinces and municipalities in these reductions over time. Negotiation with provinces will be required and the NRC platform is intended to provide technical support with that process. »

### **Areas of NRC research activity in the road-building industry**

- **Collection of LCI data sets for asphalt (funded to help produce EPDs)**
- **Work on recovered materials**
- **Improved mix designs**
- **Tech support for specification changes – demo projects; performance testing; field trials; knowledge mobilization**
- **Open to more ideas – calls for proposals to SME (small and mid-sized enterprises), industry and academia**



To reduce embodied carbon in the short term (by 2030), decisions can be made to choose materials to reduce transportation and material emissions (be aware of trade-offs between embodied carbon and transportation), increase recovered or recycled materials, improve durability, minimize idling time, etc. In the long term (by 2050), opportunities include new approaches to asphalt mix design, electrified or hydrogen powered equipment, etc.

Up-to-date, consistent specifications are also essential for decarbonisation. They reduce the effort required in developing benchmarks and asphalt mixes with new materials, increase road durability and performance, support the use of recovered/recycled materials, and lower the environmental impacts from changing asphalt mixes. To this end, NRC has started to update the NMS (National Master Specifications) where, for example, asphalt specifications still refer only to the Marshall method for mix designs.

To view the webinar, please visit the ORBA website under [Education/ORBA Webinars](#). ■

*Lara Henry is a communication specialist and editor of ROADBuilder.*

- **Canada's commitment is to reduce GHG emissions by 40 to 45% below 2005 levels by 2030 and achieve net-zero emissions by 2050.**
- **The built environment (construction + operation) is Canada's third highest source of GHG emissions.**
- **Canada has > 14.5 million residential/commercial buildings; we must retrofit 1 building/minute to achieve 2050 targets.**
- **The construction industry has increased in productivity by ~5% in last 20 years; retrofits can't keep pace without further improvements.**

**A paradigm shift is required – tools and skilled resources developed; wide-scale adoption of new technologies; updated practices and regulation.**

# Full-service work zone safety solutions provider.



Traffic Control Service & Training



Traffic Control Plans & Drawings



Work Zone Traffic Management Consulting



Installation Services



Smart Work Zone Technologies



Work Zone Rentals

1-877-391-7544 | [www.ramudden.services](http://www.ramudden.services)

A Ramudden Company



# Your best choice for traffic safety solutions.



Smart Work Zone Products



Barricades & Fencing



Signs & Delineators



Truck Safety Systems



Rental Equipment




Maintenance & Repair Services

1-800-561-6639 | [www.stinson.ca](http://www.stinson.ca)

A Ramudden Company





The government of Ontario  
handles the year-round highway  
maintenance of

16,900  
kilometres

of provincial highways and 2,880 bridges,  
overseeing winter maintenance work  
completed in 31 contract areas across  
the province, including four Public-  
Private-Partnership maintenance  
areas.

# Provision banning dangerous driving around snow plows is enacted in Ontario

**It won't be long before we'll be hearing meteorologists predicting the next winter storm with heavy snowfalls. And that means snow-covered roads, delays, and snow clearing equipment.**

**T**he safest and most efficient snow removal method for multi-lane highways is echelon plowing where snow plows are staggered, operating across all lanes of a highway in one direction and clearing all lanes at once by passing snow from one plow to the next. Snow plows travel slower than regular traffic and visibility near a working snow plow is significantly reduced by blowing snow. Drivers may get stuck behind this snow-plowing conga line and be tempted to pass. However, whiteout conditions and the ridge of snow being passed between plows can make this a dangerous move resulting in accidents that shut down highways and cause serious injuries.

ORBA has been advocating for a provision prohibiting the passing of snow plows in certain conditions and has been working closely with the Ministry of Transportation (MTO) to ensure the inclusion of this crucial safety measure. On June 8, 2023, the Less Red Tape Stronger Economy Act 2023 received Royal Assent and, as

**Under the new law, on highways with multiple traffic lanes and a speed limit of 80km per hour or more, it is illegal for drivers to pass snow plows travelling in echelon formation unless a full lane is available and is clear of any part of the snow plow.**

part of this legislation, a Highway Traffic Act (HTA) provision prohibiting passing plows was included.

A new driving law would ban drivers from overtaking slow-moving snow plows on Ontario highways, except in specific circumstances.

Under the new law, on highways with multiple traffic lanes and a speed limit of 80 km per hour or more, it is illegal for drivers to pass snow plows travelling in echelon formation unless a full lane is available and is clear of any part of the snow plow. If drivers are caught violating this law, they could face a fine of between \$150 and \$1,000.

The government believes this new law will reduce the number of unsafe passing manoeuvres and collisions involving snow plows, leading to improved safety for snow plow operators and the travelling public. »

The *Less Red Tape Stronger Economy Act 2023* received Royal Assent on June 8, 2023. As part of this legislation, a *Highway Traffic Act (HTA)* provision prohibiting passing plows was included. The Bill includes the following language:

## SCHEDULE 15

### HIGHWAY TRAFFIC ACT

1 The Highway Traffic Act is amended by adding the following section:

#### No overtaking a snow plow

**148.1 (1)** On a highway on which the speed limit is 80 kilometres per hour or more and which is divided into clearly marked lanes for traffic, no person shall, while travelling in a direction that has two or more such lanes, overtake a snow plow that is travelling in echelon with another plow or plows unless the lane of travel that is used by the overtaking vehicle to overtake the snow plow is entirely clear of any part of the snow plow, including any part of an attachment or the plow blade.

#### Offence

**(2)** Every person who, while driving a motor vehicle, contravenes this section is guilty of an offence and on conviction is liable to a fine of not less than \$150 and not more than \$1,000.

#### Definitions

**(3)** In this section, “snow plow” means a road service vehicle that requires a lamp in accordance with subsection 62 (31, intermittent flashes of blue light).

#### Commencement

This Schedule comes into force on a day to be named by proclamation of the Lieutenant Governor.

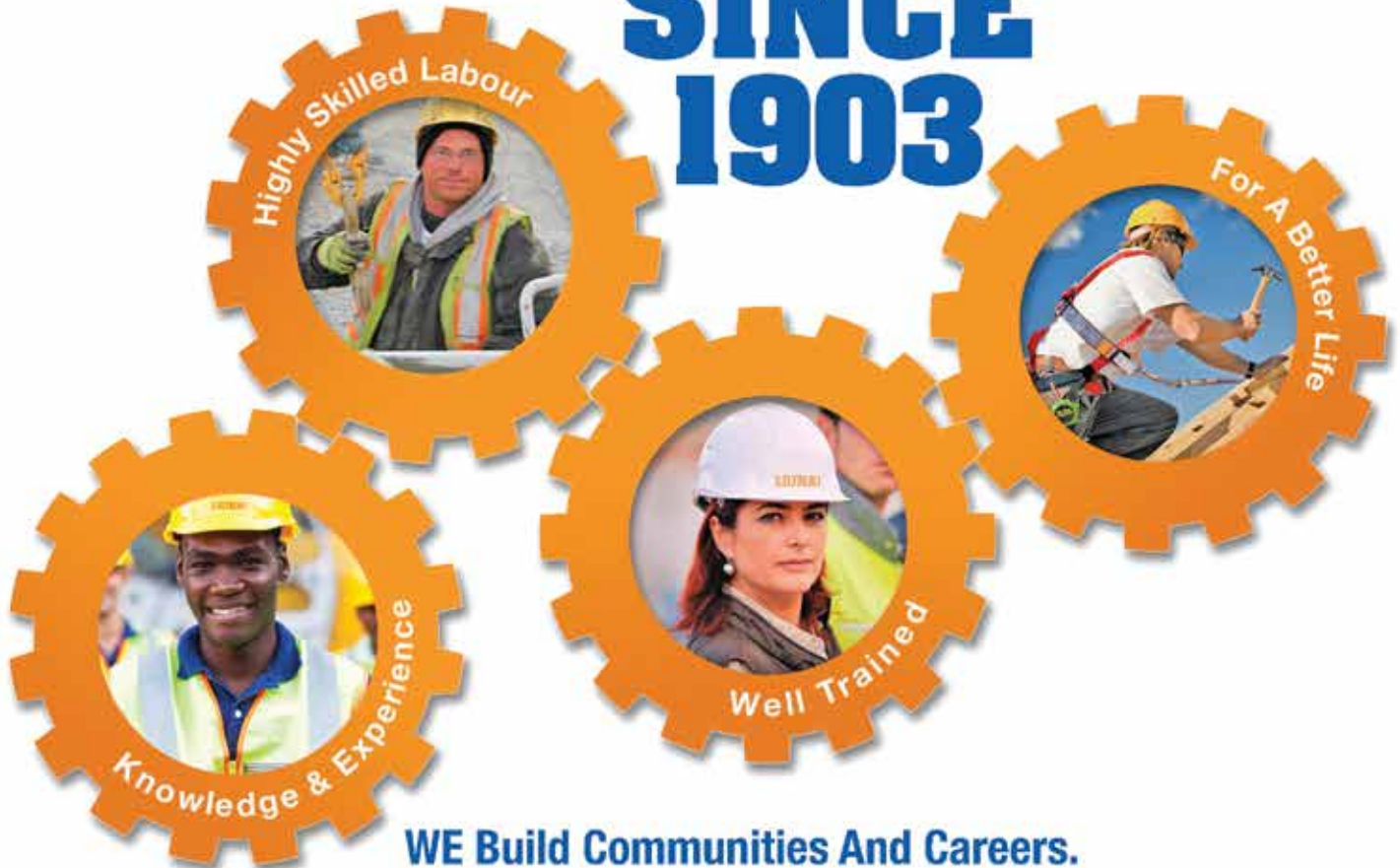
**Snowplows typically plow snow at 60 km/h or less so that the blade doesn't bounce and can take a smooth cut of snow and ice from the road.**

**When spreading sand, salt or liquid de-icer, trucks travel at 50 km/h or less, which ensures even distribution and a thorough coverage.**

**When plowing the shoulders, trucks need to be extremely precise and travel at 30 km/h or less. This allows the operator to adjust for obstacles like signs, mailboxes and guardrails.**

*Lara Henry is a communication specialist and editor of ROADBuilder.*

# BUILDING ONTARIO SINCE 1903



## WE Build Communities And Careers.

When a community is built from the ground up, there is no labour force on the planet, better skilled to get the job done right the first time. LiUNA members and retirees made a commitment to their careers, which means a commitment to our communities. A commitment to build the BEST schools, airports, hospitals, office buildings, pipelines, tunnels, power plants, roads, bridges, low rise and high rise housing in the country. When the work is done, LiUNA members and retirees continue to live, play and grow in their communities, with the guarantee of a pension that is also....simply the BEST!

**Jack Oliveira**  
*Business Manager*

**Joseph S. Mancinelli**  
*President*

**Luigi Carrozzi**  
*Secretary-Treasurer*

**Carmen Principato**  
*Vice President*

**Robert Petroni**  
*Recording Secretary*

**Brandon MacKinnon**  
*Executive Board Member*

**Terry Varga**  
*Executive Board Member*

Labourers'  
International  
Union of  
North America

# LiUNA!

*Ontario Provincial District Council*

visit [www.liunaopdc.ca](http://www.liunaopdc.ca) today



# Finding common ground on utility locates

**Efforts are underway to enhance Ontario's underground infrastructure location system ("locates"). ORBA has joined the Residential & Civil Construction Alliance of Ontario (RCCAO) and the Ontario Sewer & Watermain Construction Association (OSWCA) in advocating for strategies to address mounting delays within the Ontario One Call system and locates process without adding undue financial and logistical stress to the construction community.**



Reducing locate response times and the overall volume of utility locate requests is very important to our critical infrastructure work,” ORBA wrote in a statement to the Ministry of Public and Business Service Delivery earlier this summer. “As consultations have made clear, late locate deliveries remain an impediment to our members’ ability to complete infrastructure projects promptly and efficiently, resulting in financial, labour, and social challenges.”

Current legislation dictates that locates be provided within five business days following the initial request. The issue, says Nadia Todorova, Executive Director of the RCCAO, is that this timeline is rarely met: “We know through both data from Ontario One Call, and anecdotally from speaking to our members, that about 85 per cent of locates are late. In fact, Ontario One Call’s own data shows that about 49 per cent of the locates took longer than 15 days to be delivered.”

“These are eye-opening stats,” she continues. “If your locate is late, you cannot dig. That creates huge consequences in terms of labour, costs, and the timelines of the project.”

ORBA has been collaborating with RCCAO and other industry associations to address this issue on many fronts. Together, they have joined in government consultations to discuss changes to locate timelines, penalties, and logistics. »

## Building & preserving safe roads for communities across Ontario.

- Hot Mix Paving
- Surface Treatment
- FiberMat®
- Cold Recycled Paving
- Bonded Wearing Course
- Granular Sealing
- Scrub Seal
- Tack Coat
- Chip Seal
- Ready Mix Concrete
- General Contracting & Roadbuilding
- Equipment/Truck Rentals

NIAGARA | 905-371-0809    GREY-BRUCE | 519-376-5698

Building a sustainable future, **together.**



[walkerconstruction.ca](http://walkerconstruction.ca)

Formerly operating as Norjohn Contracting & Paving  
and Sutherland Construction.



Their recommendations include creating a certified training program that would enable new locate service providers to enter the market and allowing construction companies to train their own workforce to locate utilities safely.

Relief appears en route in the form of *Bill 93, Getting Ontario Connected Act*. Tabled in 2020, the Act proposes several measures to mitigate locate delays by extending and standardizing the validity period of locates to a minimum of 60 days, mandating the use of a dedicated locator model for certain projects, and allowing contractors on the same jobsite to share locates. Moreover, the Act proposes a monetary fine for locate providers who deliver late locates at \$300 per day for regular locates and \$1,000 for emergency locates.

The *Getting Ontario Connected Act* was initially slated to come into effect on April 1, 2023, but that, says Tordova, is when “things got interesting.”

“In March 2023, Enbridge announced they were going to start charging \$200 per locate as of May 1,” she recalls. “We were very taken aback, not just because of the financial implications but because of the precedent this sets. If one locate provider starts to charge fees, it would have a cascading effect, and others will start to follow suit.”

“No one saw this coming,” Tordorova adds. “I cannot emphasize how monumental this change was going to be to the industry.”

In March 2023, Enbridge announced they were going to start charging

\$200

per locate as of May 1.

Enbridge agreed to pause its plans due to industry backlash, but the spectre of a potential locate fee prompted the Ontario government to re-assess its plans. As a result, the administrative penalty regulation has been pushed back to April 1, 2024, and the Ontario government held additional industry consultations over the summer to take a deep dive into proposed enhancements. Those consultations closed in June and new regulatory changes are slated to be tabled when the House of Commons returned on September 25.

“What Enbridge tried to do in spring really threw a wrench in the plans, and if that is in the proposal that we are to see in the fall, I don’t think the industry would be happy with that,” Todorova notes. “If fees were to happen, it would fundamentally change how the locate system in Ontario works. Also, we would be one – if not the only – jurisdiction in North America that charges for locates.”

When the new regulations do come down, ORBA and its partners hope they will reflect the industry’s calls for a faster, more efficient, and equitable system.

“This is an industry-wide effort to make sure that the locate process is predictable, fair, and it moves construction along,” Todorova says. “At the end of the day, we just want to build.” ■

*Matt Bradford is an industry writer for the Canadian construction industry. He can be reached at [mirbradford@gmail.com](mailto:mirbradford@gmail.com).*

**GIP** Green Infrastructure Partners

Building Our Future

Green Infrastructure Partners is one of Canada’s largest and most diversified infrastructure companies. We offer vertically integrated solutions for public and private projects of every size and scale.



949 Wilson Avenue, Toronto ON M3K 1G2

☎ 416 633 9670

✉ [info@gipi.com](mailto:info@gipi.com)

🌐 [www.gipi.com](http://www.gipi.com)

# 2023 ANNUAL MEMBERS' GOLF TOURNAMENT



Wow, what a day on the greens! The ORBA/OAPC Annual Members' Golf Tournament this year was a resounding success, and with nearly 400 golfers spread across three courses, the energy and enthusiasm were unparalleled. Our heartfelt thanks go out to our amazing sponsors whose unwavering support was pivotal in making this event shine. To everyone who participated, supported, and cheered – thank you. Here's to even more drives and putts next year. Until then, keep those swings sharp!





# 3D road milling and road infrastructure sustainability

3D technology is intensively utilized across various industrial sectors and the construction industry is no exception. The road building industry is adopting 3D technology not only in the construction of transportation infrastructure but also in its maintenance and repair. The primary objective of road repairs using 3D milling technology is to enhance the quality of the repairs such as achieving longitudinal smoothness, proper drainage, and consistent thickness of newly-laid asphalt layers.



One positive impact of 3D milling on the environment is the increased time between road repairs.

**H**igh-quality repairs not only extend the lifespan of the road but also have a significant positive ecological impact. For instance, studies conducted by the University of California's Pavement Research Center have shown that driving on a smooth road surface, as opposed to a rough one, can result in a two to five per cent improvement in fuel economy (John Harvey, Principal Investigator at the University of California's Pavement Research Center). However, a much more important factor contributing to the positive impact of 3D milling on the environment is the increased time between repairs.

A specific issue of the relationship between the International Roughness Index (IRI) and its influence on pavement longevity is addressed by The Long-Term Pavement Performance (LTPP) program conducted by the Federal Highway Administration (FHWA) in the United States. This extensive research began in the 1980s. The research is primarily based on monitoring the evolution of IRI over time on several thousand sections of roads and highways across the U.S. and Canada.

Higher IRI values are often associated with accelerated pavement deterioration. Pavements with rough surfaces are more susceptible to distresses such as cracking, rutting, and pothole formation. These distresses can compromise the structural integrity of the pavement and reduce its service life.

From the LTPP data on the evolution of IRI over time in monitored sections in Ontario, it can be deduced that a road repaired to achieve an IRI of 0.6 m/km will last several years longer than a road repaired to an IRI of 1 m/km, representing a significant extension of lifespan by tens of percent.

The utilization of 3D technologies in road repairs should be implemented throughout the entire process from start to finish. Precision in the 3D model of the original road before repair (its digital twin) plays a crucial role here and depends on the accuracy of the road survey. »






The minimum requirement for using 3D milling technology is a GPS system on the milling machine. (Vítězslav Obr)

time.” This underlines the importance of precision and attention to detail in the preparation phase. No shortcuts and speeding up the preparation process, such as using 3D technology only in the final part of the repair with 3D paving, are worthwhile here.

It is also important to note that repairs of road surface irregularities after standard milling are not suitable for repair with 3D paving technology because different thicknesses of the new hot pavement mat have different compressibility during compaction, either during construction or by later traffic loads, and the irregularities in a standard milled surface are reflected in the final pavement surface. As Kevin Garcia, General Manager of Civil Specialty Construction for Trimble, says, “I’m a firm believer in fixing everything with the mill and making the asphalt paver’s life easier instead of trying to fix it with the last piece of equipment. Fix it with 3D mill and there’s no need to 3D pave.”


The case studies FHWA-HIF-17-027 illustrated that the survey data was a significant factor in both the usability of the original design data and the root cause of construction issues. The conclusion on page 178 states: “It was surprising to find that the issues with design data—such as inconsistency with the design intent in the plans—took time to resolve, but had a minor impact on construction outcomes. The construction issues were a result of the unreliable original ground survey that the design was based on.” Another statement on page 123 states that “static lidar provided the most complete and most precise data in the shortest amount of

However, 3D milling can have a negative impact: milling at different depths in different areas to achieve optimal smoothness and cross slopes can lead to milling through multiple structural layers and mixing various materials, complicating material recycling. Therefore, there is growing discussion



**WE BUILD MORE WITH LESS.**

Lafarge offers aggregates, recycled aggregates, engineered soil, roller compacted concrete, fill management services and logistics solutions. Our technical expertise and state-of-the-art plants, and commitment to innovation allow us to produce a wide range of performance materials. Lafarge is committed to sustainable construction and delivers environmentally responsible solutions for your needs.



learn more at [www.lafarge.ca](http://www.lafarge.ca)

about the necessity of using a method called “multiple shallow milling,” where the primary goal is to gradually separate various material layers during the milling process itself through repeated milling at different depths.

Euro standard EN 13108-8:2016 (Bituminous mixtures - Material specifications - Part 8: Reclaimed asphalt) specifies general requirements for the classification and description of reclaimed asphalt as a constituent material for asphalt mixtures. Additional requirements for technological procedures of recycled material usage and processing, including requirements for selective milling, may be covered by standards linked to this Euro standard, such as the Czech standard ČSN 73 6141. For instance, Wirtgen is preparing for this approach by filing its patent EP3839146A1.

Progressive milling in multiple layers may seem more costly, but analyses by companies such as Wirtgen show that milling in multiple shallow layers can be more economically advantageous than milling in a single thick layer. Some of the key arguments include:

- Significant reduction in wear on the milling drum, which tends to overheat when milling at greater depths; and
- Deeper milling requires more time, equipment, and energy to remove larger volumes of material, leading to increased operating costs.

Considering the quality and sustainability of the repair, advantages include:

- Preservation of pavement structure: Multiple shallow milling passes maintain the underlying pavement structure by removing thinner layers, ensuring better structural integrity. Deep milling runs can be more aggressive and risk compromising the pavement’s base or sub-base layers.
- Reduced risk of damage: Deep milling runs, with their higher stress levels, can increase the risk of cracking and structural damage to the pavement. Shallow milling passes evenly distribute milling forces, reducing the likelihood of creating new defects. »

**Protection  
Built Over Time**

Your trusted insurance and bonding partners, since 1966.

 **masters**  
INSURANCE | FINANCIAL  
*for generations.*  
mastersinsurance.com

**Wade Corby** | Vaughan  
1 888 673 6495 ext. 2151  
wcorby@mastersinsurance.com

**Doug Corby** | Hamilton  
1 888 673 8008 ext. 4208  
dcorby@mastersinsurance.com

**Justin Burke** | Ottawa  
1 888 669 6606 ext. 4105  
jburke@mastersinsurance.com

**Adam Beck** | Windsor  
1 888 673 6525 ext. 4301  
abeck@mastersinsurance.com

Milling in multiple shallow layers can be more economically advantageous than milling in a single thick layer.

- Extended pavement life: By preserving the structural integrity of the pavement and addressing localized distresses, multiple shallow milling runs can help extend the overall life of the road. This can defer the need for more extensive and costly repairs or reconstruction.

Is it possible to combine 3D milling and multiple shallow milling for better recycling? Yes, it is not only possible but also advantageous. Control System CA and its parent company, Exact Control System, are developing technology in collaboration with the European Space Agency that will effectively use physical models of milling machine tool motion combined with satellite technology to calculate accurate real-time 3D models for milling in multiple shallow passes. These models will be calculated and refined during the milling process based on predefined requirements. The result will allow both the separation of layers of different construction materials for more efficient recycling and the realization of all the advantages of 3D milling described above.

Current trends in the world market are pushing for the automation of processes and their sustainability. Pavement milling requires optimization of surface milling using 3D data and simultaneous separation of different material layers for environmentally-friendly recycling. This places extreme demands on the preparation of the repair and the management itself. The Control System CA technology under development will fundamentally simplify or fully automate this repair preparation and management process for the user. Furthermore, at the same time, all layer interfaces are accurately recorded during the repair process, which will be used to advantage to streamline the plan for future repairs. ■

Vítězslav Obr, Ing. (M.Sc.), Ph.D., is Technical Director of Exact Control System and Control System CA.

# CANADIAN

## Truck Scales and Computer Systems

For technology you can rely on...

**1-800-461-0634**

We custom build our heavy duty scales and computer systems to best suit your applications.

Your choice:

- PIT
- PITLESS
- PORTABLE
- HYTRONIC
- ELECTRONIC
- MECHANICAL



**5 YEAR WARRANTY**

- LIGHTNING
- FLOODING
- HUMIDITY
- R.F.I.

HAVE NO EFFECT ON "HYDRAULIC" LOAD CELLS

**LIFE / 10 WARRANTY**



Manufacturers of  
**Electronic ■ Hytronic ■ Mechanical**  
 Scales and Weighing Systems  
**SALES ■ SERVICE ■ RENTALS**



**canscale.com**  
 Head Office & Manufacturing  
 305 Horner Avenue, Toronto, Ontario, Canada M8W 1Z4  
 (416) 259-1111

# How Ontario's transportation infrastructure industry is enhancing workplace culture

**In Ontario, the construction industry isn't just about bricks and mortar; it's about establishing a robust and progressive culture that prioritizes its workers. Construction companies across the province are not just participating in this transformation — they're leading it. By implementing best practices that foster a positive, safe, and inclusive environment, these companies are setting benchmarks for others to follow. »**



## 1. Safety first, always

In the world of construction, the safety of every worker is paramount. Many Ontario construction firms are championing a culture where safety is embedded in every process. Regular safety drills, up-to-date training sessions, clear and multilingual signage, access to premium personal protective equipment (PPE), and creating platforms for workers to voice safety concerns have become industry norms.

## 2. Pioneering diversity and inclusion

Ontario, with its rich multicultural tapestry, is seeing its construction industry reflect this diversity. Not only are companies actively recruiting a diverse workforce, they're also investing in inclusivity training. This training aids teams in understanding the unique strengths each individual brings, fostering mutual respect and collaboration.

## 3. Lifelong learning is the motto

To stay ahead in a rapidly changing environment, leading construction companies in Ontario are becoming hubs of continuous learning. This includes embracing cutting-edge technologies, green building practices, and innovations in project management. Soft skills training, such as conflict resolution, effective communication, and leadership development, are also widely emphasized.

## 4. Communication: A two-way street

Gone are the days of top-down directives. Today's progressive firms promote dialogue and feedback. Tools like



suggestion boxes, town hall sessions, digital feedback platforms, and open-door policies are common, ensuring that every worker feels valued, heard, and involved.

## 5. Celebrations and recognitions galore

Beyond project completions and contract acquisitions, companies are finding moments to celebrate every achievement, big or small. Regular recognition events, performance bonuses, and even spontaneous celebrations on the job site are making work more than just a pay cheque for many.

An advertisement for Jade Equipment Company Ltd. The top section features four images of construction equipment: a yellow Volvo wheel loader, a yellow John Deere wheel loader, a yellow JCB telehandler, and an orange Forax roller. The Jade Equipment logo, featuring a green maple leaf and the text 'Jade EQUIPMENT COMPANY LTD.', is centered. Below the images are logos for Volvo, Champion, John Deere, Jade Equipment, JCB, Easi-Pour, Forax, and Wille. The bottom section contains the text 'SALES | SERVICE | RENTALS | NEW, USED, REBUILT PARTS', contact information (Toll Free: 1-866-404-5233, Tel: 705-325-2777, Fax: 705-325-9777), and the address (47 Forest Plain Road, Oro-Medonte, ON L3V 0R4). Social media icons for LinkedIn and Facebook are also present.



## 6. Work-life harmony over balance

Understanding the physically demanding nature of construction work, companies are going beyond the traditional work-life balance concept. Initiatives like flexible hours, child-care support, wellness programs, and mental health days are gradually becoming part of the industry's fabric.

## 7. Teams that play together, stay together

Team-building isn't just an HR buzzword in Ontario's construction scene. Companies often organize events, from adventure outings and workshops to casual picnics, ensuring teams bond and understand each other beyond work roles.

## 8. Mental health at the forefront

The industry's progressive approach is evident in how mental well-being is prioritized. Many companies

partner with counseling services, offer workshops on stress management, and ensure that there's a strong support system available for any worker facing mental health challenges.

## 9. A beacon of ethics and fairness

A cornerstone of the industry's success in Ontario is its unwavering commitment to ethical practices. Beyond competitive wages, this extends to transparent contractual agreements, ethical sourcing of materials, and responsible environmental practices.

## 10. Green building and sustainability

With the global shift towards sustainability, many construction companies in Ontario are embracing green building practices. This involves using sustainable materials, reducing waste, and optimizing energy usage. Not only does this benefit the environment, but it also creates a sense of pride and purpose among workers.

Ontario's construction industry is not merely adapting to change — it's pioneering changes that are making a significant difference in workers' lives and the broader community. As these best practices become standard, the industry is not only showcasing its commitment to its workforce, but also paving the way for a brighter, more inclusive future. ■

*Guru Missar is Director, Marketing & Communications for ORBA.*

**AVIVA** GLOBAL CORPORATE SPECIALTY

### A partner you can trust

Managing the success of your construction business can be challenging. Count on Aviva to provide you with strategic surety bond solutions, backed by extensive knowledge, expertise and strong partnerships focused on the long-term.

Contact your broker to learn more.

[Aviva.ca/gcs](http://Aviva.ca/gcs)



©iStock

# The impact of infrastructure challenges on Ontario's municipalities

**Ontario's transportation infrastructure is one of the foundations of our province's prosperity. It doesn't merely serve as a logistical network, but also acts as a significant economic driver, pumping an astounding \$5.5 billion into our annual GDP. The province boasts over 140,000 km of municipal roads, emphasizing the role of municipalities in facilitating and supporting both the immediate economic activities and anticipating long-term growth.**



**T**he Ontario Road Builders Association (ORBA) and Ontario Asphalt Paving Council (OAPC) stand at the helm of this infrastructural evolution, ensuring that Ontario's transportation infrastructure is resilient and adaptive. At the recent AMO (Association of Municipalities of Ontario) Annual General Meeting, the unified voice of both entities underscored the significance of timely, cost-efficient transportation infrastructure that both serves the present and paves the way for flourishing future generations.

Municipalities in Ontario are pivotal in orchestrating the province's infrastructural metamorphosis. Along with this responsibility comes a number of industry challenges ranging from the tangible—like labour shortages—to the intangible, such as evolving stakeholder dynamics. Grasping the nuances of these challenges is imperative for the sustained viability of our municipalities.

### **Labour and talent shortages: an immediate concern for municipalities**

Municipal initiatives, tailored to localized needs, are particularly vulnerable to the prevalent labour challenges. A scarcity of skilled professionals and trades not only disrupts project schedules but also has repercussions on the quality and longevity of these projects. For local governing bodies, this could signify extended delays in rolling out crucial amenities such as roads, schools, or healthcare facilities.

Initiatives are underway to elevate the prominence of infrastructure vocations. But the onus also falls on municipalities to champion workplaces that are inclusive, forward-thinking, and conducive to harnessing the talents that align with Ontario's ambitions. The success of our community-centric projects largely depends on ushering the right human resources into our municipalities. »

## Challenges in transportation infrastructure



### Labour shortages

- Persistent challenge in sourcing talent
- Collaboration with public and private sectors to bolster our industry's reputation
- Striving for more appealing, empowering, and inclusive workspaces



### Economic challenges

- Unpredictable commodity prices add risk affecting contractors and municipal budgets
- Transition to zero-carbon practices may bring added costs



### Stakeholder complexities

- Potential bureaucratic delays
- Stakeholder conflicts affecting project timelines
- Public sector contract models and claim difficulties impeding budget adherence

### Additional risk factors

- Complex industry standards
- Time-consuming conflict resolution processes

### The cost equation: an intricate dance for municipal coffers

Operating within predetermined budgetary confines, municipalities feel the pinch of erratic and escalating infrastructure expenses more acutely. Swings in commodity pricing can suddenly render projects nonviable or stretch financial resources thin, potentially jeopardizing other vital community initiatives.

Compounding this is the global impetus towards sustainable, zero-carbon practices. For local administrations, this entails weaving in sustainability while being mindful of budgetary realities. Striking this delicate balance between immediate infrastructure requirements and overarching environmental imperatives becomes a paramount task.

### Navigating stakeholder dynamics: the multifaceted municipal challenge

Municipalities are a microcosm of diverse stakeholder interests, encompassing local residents, business ecosystems, and various community groups. This vibrant mix ensures holistic project outcomes, but it also brings with it challenges seldom seen in private-sector initiatives.

Bureaucratic snags or divergent stakeholder views can protract projects and cause prolonged delays. Traditional contract methodologies and resolution strategies, which may be efficient at the broader provincial or national level, might stumble amidst the distinct municipal backdrop. Thus, creating solutions that honour this eclectic mix, yet expedite project execution, becomes essential.

## LABOUR: A strategic priority in infrastructure

### ONTARIO NEEDS 71,800 NEW WORKERS BY 2027

- ORBA is developing public campaigns, partnering with educational institutions and promoting trades.
- ORBA's Road Building Academy is preparing a future-ready workforce.
- There is a need for better-suited immigration strategies and improved visa processing.
- Industry has to focus on talent attraction/retention, immigration strategy refinement, succession planning, and fostering safe/inclusive sites.





## FUNDING: A cornerstone for economic growth

### INVESTMENT IN INFRASTRUCTURE A WIN FOR ECONOMY AND COMMUNITY

#### Economic Impact of infrastructure investment

- \$1 in infrastructure boosts GDP by up to \$6 long-term
- \$0.44 of each dollar reinvested through tax revenue
- Effective transportation contributes \$5.5 billion to GDP annually
- Less congestion results in greater productivity in businesses and communities

## The road ahead: charting a resilient path for Ontario's municipalities

Municipalities are the bedrock of Ontario's infrastructure future. As they grapple with direct and indirect industry repercussions, recognizing and remedying these impediments is pivotal. By zeroing in on labour dynamics, cost equations, and intricate stakeholder liaisons, municipalities can bolster their resilience, adaptability, and proactiveness. In doing so, they lay the groundwork for a prosperous, harmonious, and forward-looking community ecosystem. ■

*With contributions by ORBA staff.*



#### **HANDY HITCH MANUFACTURING INC.**

1179 Kapelus Drive  
Winnipeg, MB Canada R4A 5A8  
Toll Free: (800) 665-2490  
Fax: (204) 661-5338  
reception@rancangroup.com

[www.handyhitch.com](http://www.handyhitch.com)



## Safety that fits: a case for form-fitting PPE

**Canada's skilled labour shortage is a topic that gets a lot of traction at ORBA. And inevitably, whenever the conversation turns toward solutions, the message is clear: we can (and should) do more to accommodate underrepresented demographics in the trade.**



Making the transportation infrastructure sector more inclusive requires multiple strategies. One of the less obvious, however, is ensuring that the personal protective equipment (PPE) our employers provide to industry workers fits everyone who shows up for the job. This is a necessity that cannot be taken for granted, particularly as more women enter the field.

As industry safety champion Lisa Laronde, President RSG International, aptly notes: “There’s no such thing as a uniform body shape, and that’s especially true with women who are simply built differently.”

The problem, she continues, is that there aren’t always form-fitting PPE for women and the jackets made to fit men don’t typically fit women: “What ends up happening, then, is women wear larger-sized jackets to accommodate their body shape, leaving them with a lot of excess material.”

More than a matter of comfort, ill-fitting PPE can compromise safety by increasing the risk of material entanglement in machinery, tripping hazards, and inadequate protection from sparks and

debris. Form-fitting PPE tailored to women's body shapes ensures a secure and proper fit, minimizing these risks and enhancing overall safety for female workers.

"It goes beyond vests and pants and into making sure women who are pregnant have access to PPE that fits and allows them to move safely through a site," Laronde notes. "By offering form-fitting PPE, companies send a clear message that they value and support the inclusion of women in the industry."

Safety and comfort are strong arguments for form-fitting PPE. They also tie into the simple fact that providing the right safety assets makes industries like ours more welcoming, inclusive, and appealing to potential recruits. And in a time

when we need all hands on deck, the industry can't afford to dissuade the men and women who share our job sites.

There is a strong case for ensuring form-fitting PPE is available to everyone in our trades. And while safety apparel tailored for women (e.g., vests, pants, shoes, and other supplies) was difficult to source or more expensive in the past, the good news is that PPE manufacturers and suppliers are beginning to answer the call. Today, we are seeing more companies come to market with a broader range of PPE that reflects the greater diversity we welcome in this industry. And as more form-fitting PPE options fill the shelves, this seemingly small but important consideration will help raise the profile and reputation for construction industry careers.

**NATIONAL** CONSTRUCTION • ROAD BUILDING • LAND IMPROVEMENT • INFRASTRUCTURE  
**HEAVY EQUIPMENT SHOW**  
TORONTO • ONTARIO • CANADA

**CANADA'S LARGEST HEAVY EQUIPMENT SHOW**  
**April 11-12, 2024**

THE INTERNATIONAL CENTRE

DON'T MISS OUT,  
RESERVE YOUR  
SPACE TODAY!

Photo courtesy of:  
Equipment Journal

For more information about this premier event, please contact:

**MARK CUSACK**, National Show Manager  
mcusack@mpltd.ca  
506.333.1064

**ANDREW BURNS**, Show Associate  
aburns@mpltd.ca  
506.649.0025

**www.NHES.ca**

Produced by: **M** Master Promotions Ltd.

## Shaping Ontario's future: transforming perceptions of infrastructure careers

**In the ever-evolving landscape of career choices, it's time we challenge the misconceptions and outdated stereotypes that surround jobs in infrastructure. For far too long, this critical industry has been unfairly labeled as back-breaking manual labour.**

However, the truth is that the world of infrastructure is experiencing a revolution of technological advancements, creative problem-solving, and a growing need for the next generation of visionary leaders.

There is incredible potential within our industry; an industry that is not only dynamic but also offers promising opportuni-

ties for advancement and the chance to shape the future of Ontario.

### **The technological revolution**

Our infrastructure industry is in the midst of an extraordinary technological revolution. We stand at the forefront of adopting cutting-edge tools and techniques that are



fundamentally reshaping the way we build and maintain Ontario's transportation networks. From advanced surveying technologies to data-driven decision-making, we are driving innovation.

### **The art of creative problem solving**

Creative problem-solving is the beating heart of our industry. Each project presents unique challenges that demand inventive solutions. Whether it's the optimization of traffic flow, the design of eco-friendly structures, or the enhancement of safety measures, infrastructure professionals are the vanguard of pioneering solutions that enrich our communities.

### **Leadership in an evolving landscape**

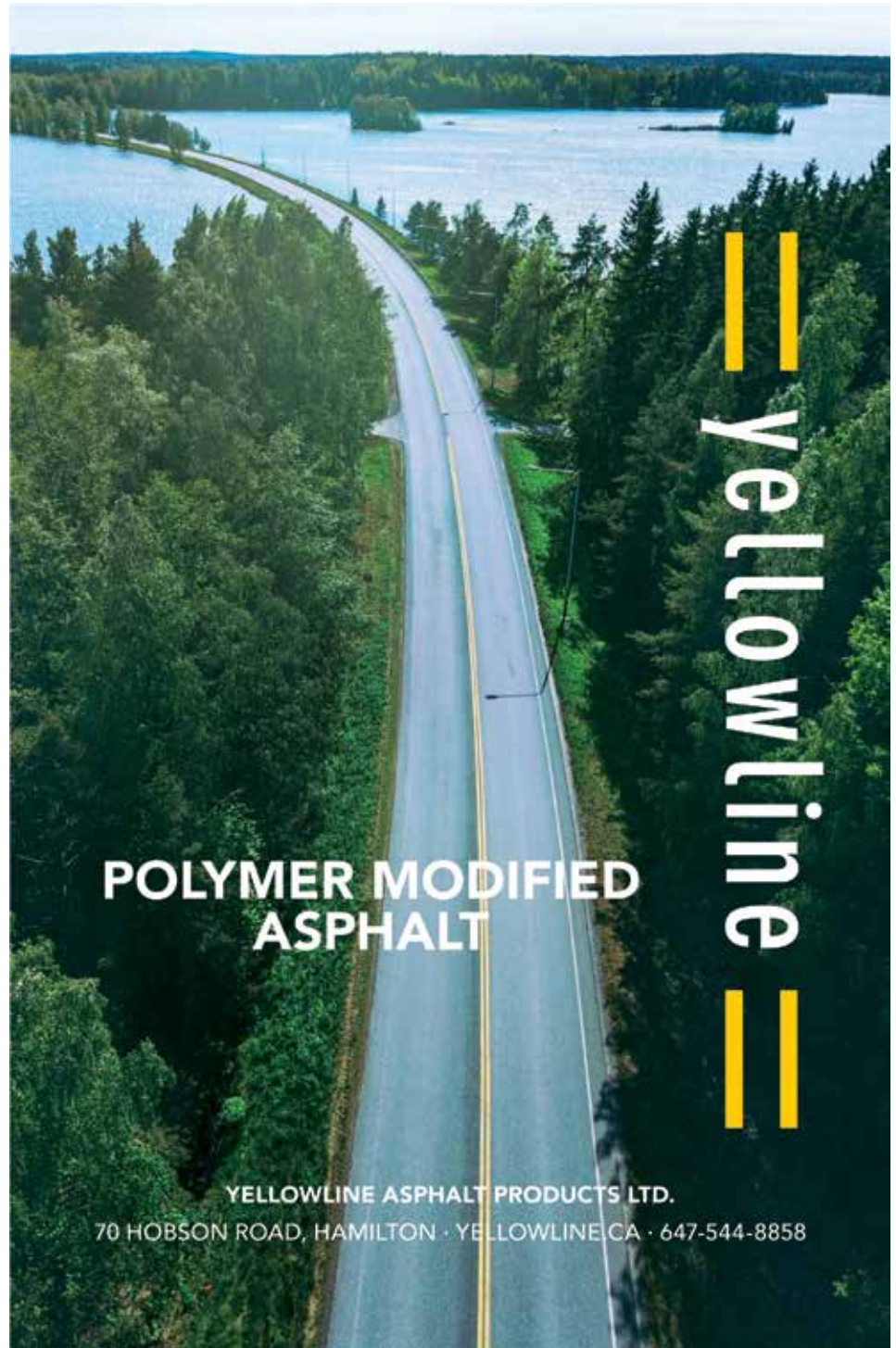
In an era where automation and artificial intelligence are reshaping traditional office roles, infrastructure careers offer something exceptional: stability and abundant opportunities for advancement. As Ontario experiences an infrastructure boom, the demand for skilled professionals at all levels is soaring. This presents a golden opportunity for employees to cultivate their skills, lead teams, spearhead projects, and even guide entire organizations toward success.

### **Crafting Ontario's future**

Our work in infrastructure transcends the mere construction of roads, bridges, and buildings; it's about sculpting the very future of Ontario. It's about crafting the intricate transportation networks that weave together our communities, drive economic prosperity, and safeguard the well-being of our citizens. It's a legacy that we can take immense pride in.

Let's dispel the misconceptions surrounding infrastructure careers and unlock the limitless potential they hold. It's a world of boundless innovation,

creative problem-solving, leadership opportunities, and the unparalleled satisfaction of building Ontario's future. Join us in reshaping perceptions and becoming part of a brighter tomorrow through transportation infrastructure. ■



# EDUCATION



**ORBA SCHOLARSHIPS**

Shaping Futures, Shaping Transportation:  
Scholarships for Tomorrow's Infrastructure Trailblazers

ORBA

## INVESTING IN TOMORROW'S TRANSPORTATION LEADERS WITH ORBA'S SCHOLARSHIPS PROGRAM

In the world of civil engineering, where roads, bridges, and transit systems weave the tapestry of modern life, nurturing the next generation of leaders is more than a mere commitment; it's an imperative. This is where the ORBA Scholarships Program takes center stage.

## EMPOWERING FUTURE ENGINEERS

ORBA doesn't just build infrastructure – it invests in the builders of the future. The ORBA Scholarships Program, backed by a substantial commitment of \$10,000, is designed to empower Ontario's budding civil engineers. It's not just about financial assistance but also about recognizing potential and passion.

## THE RIPPLE EFFECT

These scholarships aren't just about financial aid; they are a catalyst for change in the field of civil engineering:

- **Encouraging excellence:** Beyond easing financial burdens, these scholarships inspire students to strive for excellence, fostering dedication and hard work.
- **Fueling innovation:** By supporting students early in their educational journey, ORBA introduces fresh ideas and perspectives into the industry, igniting innovation that drives progress.
- **Building a skilled workforce:** These scholarships address the workforce gap in civil engineering by attracting more students to the field and facilitating their education, ensuring we have the right people to tackle complex infrastructure challenges.
- **Showcasing excellence:** ORBA doesn't just support students; it celebrates them. At the annual convention, scholarship winners and their schools take the stage, not only acknowledging their achievements but also inspiring more young minds to consider careers in civil engineering.
- **Long-term impact:** The investment in these students has a ripple effect. As they graduate and enter the workforce, they become the architects of Ontario's future transportation infrastructure, leaving an enduring mark on the communities they serve.

**The ORBA Scholarships Program isn't just a financial gesture; it's an investment in the future vitality of Ontario's transportation infrastructure. It's a testament to ORBA's commitment to fostering innovation, supporting talent, and ensuring a brighter, better-connected, and more sustainable future for our communities. Through this program, ORBA doesn't just build roads; it paves the way for a stronger, more resilient Ontario. ■**

**PAVING & COMPACTION SPECIALISTS**

**YOUR PAVING PARTNER PROFESSIONALS**

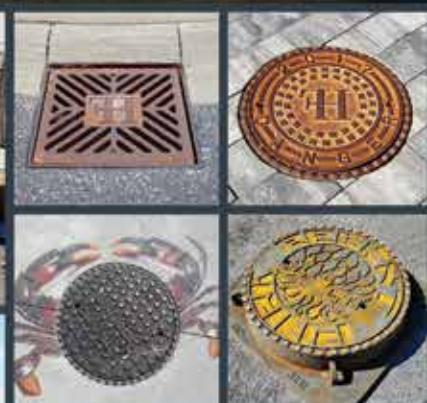
RENTALS | SALES | SERVICE

**INSTA-MIX**

**905 857-4649**

45, COMMERCIAL ROAD, BOLTON (ON) L7E 1R6  
[contacto@insta-mix.com](mailto:contacto@insta-mix.com)  
[INSTA-MIX.COM](http://INSTA-MIX.COM)

[f](#) [@](#) [v](#)



**MAINTENANCE HOLE FRAMES & COVERS**  
**CATCH BASIN FRAMES & GRATES**  
**VALVE CHAMBER FRAMES & COVERS**  
**DETECTABLE WARNING PLATES**  
**TREE GRATES**  
**VALVE & SERVICE BOXES**  
**ORIFICE/INLET CONTROL DEVICES**

**PRECAST STRUCTURES**  
**OGS UNITS**  
**PRECAST ADJUSTMENT UNITS**  
**PVC PIPING & FITTINGS**  
**CSP & HDPE CULVERT**  
**SUBDRAIN**  
**DITCH INLET & RODENT GRATES**

## ORBA WEBINARS

### MTO'S EXPERTISE ON CROSS-SLOPE SPECIFICATIONS

Spearheaded by Mike Pearsall of the Ontario Ministry of Transportation, this webinar featured in-depth discussions on the latest updates pertaining to SP103F56 and CAIS 313-06. The session delved into critical areas such as crossfall/cross slope tolerance, exemption applications, and tangible contract examples.

For industry professionals, such detailed discussions are pivotal for navigating the ever-evolving landscape. We at ORBA remain committed to facilitating such knowledge-sharing forums. Watch this space for more!



### EXPLORING 3D MILLING TECHNOLOGY

This ORBA webinar offered a captivating exploration into 3D milling technology. We addressed its global evolution and its particular nuances in Canada, with a spotlight on OPSS 510. Attendees acquired insight on the application of 3D milling and paving technologies and got a glimpse into the prospective trends of 3D road repair.

Dr. Vítězslav Obr, with over a decade's expertise in 3D road repair technologies, discussed the European Union's emphasis on "green technologies" and the potential ripple effects on Canadian practices.

His collaborations, notably with the European Space Agency, enriched the discussion, ensuring our ORBA community left well-informed and future-ready.

### NRC'S PLATFORM TO DECARBONIZE THE CONSTRUCTION INDUSTRY AT SCALE

In a compelling ORBA webinar, we delved into the National Research Council Canada's (NRC) significant strides in championing greenhouse gas (GHG) reductions for Canada's 2030 and 2050 milestones. The focus of NRC's endeavours is tri-pronged:

- Streamlining regulations, codes, and standards;
- Propagating low-carbon technical solutions; and
- Championing digitalization and productivity.

Attendees were introduced to the spectrum of activities under NRC's umbrella, spanning R&D, field trials, demonstration projects, and more. Key insights were shared on NRC's platform and their two distinct challenge programs aimed at achieving these sustainability goals.



**If you missed our recent webinars, recordings of all past sessions can be accessed on the ORBA website at [orba.org/webinars](https://orba.org/webinars) or simply by scanning the QR code.**



# SAVE THE DATE

## FALL GALA

- October 21, 2023

## ORBA PRESIDENT'S TOUR

- November 13 - 16, 2023

## OAPC FALL ASPHALT SEMINAR

- November 30, 2023

## ORBA CONVENTION

- February 4 - 6, 2024

## ORBA ACADEMY

- February 26 - March 1, 2024



Mark your calendars and save the date for extraordinary upcoming events that you won't want to miss!

SCAN TO SEE ALL OF OUR EVENTS!



ORBA  
CORNER



Providing safe and reliable flatbed and float service across Ontario. Specializing in standard, wide and over length loads.

- 48' and 53' flatbed trailers
- Drop-deck
- Trombone trailers
- Float service for equipment and machinery
- Trailer-mounted forklifts for on-site unloading

Infrastructure Logistics  
180 Ram Forest Rd  
Stouffville, ON L4A 2G8

Phone: 905.900.0001  
Fax: 800.450.0181  
[www.infrastructurelogistics.ca](http://www.infrastructurelogistics.ca)

WELCOME  
ABOARD!

# SPOTLIGHT ON NEW MEMBERS!

## Cassels

### CASSELS BROCK & BLACKWELL LLP

Cassels is a full-service Canadian law firm focused on serving the transaction, advocacy, and advisory needs of the country's most dynamic business sectors. Cassels offers one of the largest business law practices in Canada, advising clients from startups to multi-national organizations – across the street and around the world. Among Cassels' practice areas are areas of particular interest to the road-building sector, including Construction Law, Infrastructure Law, Competition Law, Municipal Law, Employment & Labour Law, Mergers & Acquisitions, Taxation, and Real Estate. A full list of Cassels' practice areas can be found at <https://cassels.com/our-expertise/>



### PM ERA INC.

For over a decade, PMERA has been at the forefront of providing advanced project management services offering:

- **Project Scheduling:** Utilizing industry-leading tools such as Primavera P6, MS Project, Turbo Chart and Powerproject (4D BIM schedule).
- **Earned Value Analysis:** Our skilled team conducts thorough earned value analysis, providing valuable insights into project performance.
- **Claims Management:** From schedule delay analysis and time impact analysis to loss of productivity and change impact analysis, our experts are well-versed in preparing robust claims/defence packages to protect your interests.
- **Customized Dashboards and Reporting:** Our team develops tailored dashboards and reporting systems, allowing you to assess project performance, make informed decisions, and drive success.
- **Risk Management:** We assist you in developing a comprehensive risk register, perform quantitative risk analysis (QSRA and QCRA), and conduct qualitative risk assessment.

For more information, please visit: [www.pmera.com](http://www.pmera.com)



### SANY HEAVY MACHINERY CANADA LTD.

Over the last three decades, Sany has grown and evolved, and today stands as an \$20 billion heavy equipment manufacturer with a presence in countries around the world, including global R&D and manufacturing facilities in India, Brazil, Germany and the newest \$60 million U.S. facility on 272 acres in Peachtree City, Georgia. Sany Canada offers a range of excavators, wheeled loaders through our expert dealer partner network, and supports our full line of construction, port and material handling equipment. But that's just the beginning. Sany offers the comprehensive service and support your work demands. And the personal touch that comes from a true partner in your business. And backs it all up with an industry-leading warranty to keep your equipment where it belongs: in the dirt making money, handling materials and cargo at the port, or moving soil and supplies across the worksite. For more information, please visit: <https://www.sanycanada.com/>



## RENEW YOUR MEMBERSHIP TODAY!

Joining ORBA is an investment in your company and in the future of road building. Get inside access to exclusive events, continuous education, sponsorships and exhibitions. Have an impact on government and contribute to a great industry.

# ONTARIO ROAD BUILDING HALL OF FAME CELEBRATING LEGENDS AND INVITING NOMINATIONS!

In the vast landscape of Ontario's transportation infrastructure, certain individuals leave an indelible mark. To recognize these luminaries, ORBA established the Ontario Road Building Hall of Fame in 2005. It's not merely an award — it's a testament to enduring excellence and transformative leadership.

What makes someone a candidate for this illustrious honour? Inductees have demonstrated consistent and exemplary service to the road-building community, both in their professional achievements and community involvement. From promoting ORBA's objectives to spearheading innovations within their companies and aiding local communities, their contributions have been far-reaching.

Nominees aren't limited to ORBA members. Whether a road-building contractor, a dedicated government official, or an insightful researcher, the key criterion is a significant positive influence on the industry.

Recent honouree, Ted Arcsott, co-founder of Roto-Mill Inc. in 1979, was inducted into the Hall of Fame earlier this year.

Arcsott joined the ORBA Board in 2003 and stayed on as an active director until 2020. He immersed himself in the development and support of ORBA during his time on the Board, and ORBA members and the industry have benefited greatly from his commitment and generosity.



**Do you know someone who fits the bill?**

Someone whose contributions to the road-building industry in Ontario stand out? It's time they received the recognition they deserve.

**Nominate your chosen legend now!**

Scan the QR code to put forward a name. Let's celebrate the pillars of our industry together and ensure their legacy is enshrined in the Ontario Road Building Hall of Fame.





# ROAD Builder LIST OF ADVERTISERS



**ARTHUR J. GALLAGHER**

[www.ajg.com/ca](http://www.ajg.com/ca)

9

**ATS TRAFFIC**

[www.atstraffic.ca](http://www.atstraffic.ca)

51

**AVIVA**

[www.aviva.ca/gcs](http://www.aviva.ca/gcs)

35

**CANADIAN SCALE COMPANY LIMITED**

[www.canscale.com](http://www.canscale.com)

32

**CEDAR INFRASTRUCTURE**

[www.cedarcip.com](http://www.cedarcip.com)

45

**GIP**

[www.gipi.com](http://www.gipi.com)

25

**GREENERGY**

[www.greenenergy.com/canada](http://www.greenenergy.com/canada)

13

**HANDY HITCH MANUFACTURING**

[www.handyhitch.com](http://www.handyhitch.com)

39

**INFRASTRUCTURE LOGISTICS**

[www.infrastructurelogistics.ca](http://www.infrastructurelogistics.ca)

47

**INSTA-MIX**

[www.insta-mix.com](http://www.insta-mix.com)

44

**JADE EQUIPMENT COMPANY LTD.**

[www.jadeequipment.com](http://www.jadeequipment.com)

34

**LAFARGE CANADA INC.**

[www.lafarge.ca](http://www.lafarge.ca)

30

**LIUNA! ONTARIO PROVINCIAL DISTRICT COUNCIL**

[www.liunaopdc.ca](http://www.liunaopdc.ca)

21

**M&L TESTING EQUIPMENT**

[www.mltest.com](http://www.mltest.com)

12

**MASTERS INSURANCE**

[www.mastersinsurance.com](http://www.mastersinsurance.com)

31

**NATIONAL HEAVY EQUIPMENT SHOW**

[www.nhes.ca](http://www.nhes.ca)

41

**NUCOR SKYLINE**

[www.nucorskyline.com](http://www.nucorskyline.com) · [www.nucorskyline.com/coldformed](http://www.nucorskyline.com/coldformed)

52

**ONTARIO BARRIER WALL**

[www.ontariobw.ca](http://www.ontariobw.ca)

5

**RAMUDDEN SERVICES**

[www.ramudden.services](http://www.ramudden.services)

17

**STINSON OWL-LITE**

[www.stinson.ca](http://www.stinson.ca)

17

**STRONGCO CORPORATION**

[www.strongco.com](http://www.strongco.com)

7

**THE GEAR CENTRE**

[www.gearcentre-offhwy.com](http://www.gearcentre-offhwy.com)

50

**UPPER CANADA ROAD SERVICES INC.**

[www.uppercanadaasphalt.com](http://www.uppercanadaasphalt.com)

6

**WALKER CONSTRUCTION**

[www.walkerconstruction.ca](http://www.walkerconstruction.ca)

23

**WIRTGEN AMERICA**

[www.wirtgen-group.com](http://www.wirtgen-group.com)

2

**YELLOWLINE ASPHALT PRODUCTS LTD.**

[www.yellowline.ca](http://www.yellowline.ca)

43



Safely Building  
Infrastructure Since 1966



**MINIMUM  
SPACE  
OCCUPIED**

**TOTALLY MADE OF  
STEEL**

**REPAIRABLE  
AFTER IMPACT**



**HERCULES**

Contact our  
team for details

T: 800.661.7346  
E: [info@atstraffic.ca](mailto:info@atstraffic.ca)

Delivered already assembled, the Hercules Crash Cushion offers maximum safety for the passengers of light and heavy vehicles.



## COLD FORMED STEEL SHEET PILING

# STEEL FOUNDATION SOLUTIONS

- Premier manufacturer of cold formed steel sheet piles with 30+ years of experience
- Wide range of shapes available for all applications
  - Elastic Section Modulus: 137 cm<sup>3</sup>/m to 3,350 cm<sup>3</sup>/m
  - Moment of Inertia: 615 cm<sup>4</sup>/m to 76,588 cm<sup>4</sup>/m
  - Thickness: 4 mm to 14 mm
- Available in numerous steel grades including ASTM A572, ASTM A588, and ASTM A690
- Manufactured in custom lengths with industry leading delivery times



[nucorskyline.com/coldformed](http://nucorskyline.com/coldformed)

**NUCOR**<sup>®</sup>  
**SKYLINE**