



SPECIAL FEATURE

April 24, 2020

DEMOLITION & ENVIRONMENTAL ENGINEERING

www.dailycommercialnews.com

Daily Commercial News
by ConstructConnect®

Lessons Learned

TRCA undertakes flood mitigation project on Toronto Islands



TRCA

Pictured here is the finalization of shoreline protection west of the Wards Island Ferry Dock.

DAN O'REILLY
CORRESPONDENT

Overshadowed by the magnitude of COVID-19, another crisis may be in store for Lake Ontario waterfront communities later this year, which is why the Toronto and Region Conservation Authority (TRCA) has been undertaking a series of proactive flood control measures on the Toronto Islands.

Defined as an essential service under provincial legislation, the flood and erosion mitigation project requires transporting equipment, materials and work crews to the islands, which are a popular day-trip destination attracting thousands of visitors, especially during the summer months.

However, as a result of excessive rainfall in the spring and summer of 2017, there was excessive flooding on the islands and many businesses catering to those visitors had to close for all or most of the season. In 2019, the water levels were even higher and the rainy season longer. But the detrimental effects weren't as severe thanks to interim measures undertaken by the city and the authority the year before as well as the lessons learned from the 2017 experience, says TRCA senior project manager Jet Taylor.

ator, a TRCA crew built a 75-metre-long backshore beach curb on the east side of the Ward's Island ferry dock and a second 50-metre-long curb along the shore on the west side.

Consisting of 420 tonnes of armour stone, with individual pieces weighing between three to five-tonnes, and 400 to 500 millimetre riprap, the beach curbs will provide protection to the high-traffic dock terminal, adjacent park paths and other infrastructure. Work on this phase ended at the end of March and in early April the crew began the site set-up for raising the two road sections, Taylor says.

Estimated to take a month to complete and requiring additional workers, the road construction won't eliminate flooding of those roads. It will, however, raise those sections to a level that will allow emergency vehicle travel including access to a water treatment facility, he says.

"The lake is now 22 centimetres higher than it was at the same time in 2019,"

Jet Taylor
TRCA

Now there are concerns those scenarios could be repeated this year. Based on factors such as heavy rainfall, runoff and record high levels in Lake Erie, which inflows into Lake Ontario, the International Lake Ontario-St. Lawrence River Board is predicting high Lake Ontario water levels for this spring and summer. "The lake is now 22 centimetres higher than it was at the same time in 2019," says Taylor, underlining the preemptive measures that are intended to provide long-term protection.

Earlier this year the authority hired a number of different consulting firms to prepare flood control and protection plans. Coastal engineering firm Shoreplan Engineering was retained to develop detailed design for defensive walls or "beach curbs" at the heavily used Ward's Island ferry docks.

Geotechnical engineering firm Grounded Engineering Inc. was retained as the lead consultant for raising portions of two roads on different parts of the islands and an assessment of a seawall on the north shore of Algonquin Island to determine if it should be raised. Its sub-consultant partners include Lithos Group Inc. and W.F. Baird and Associates.

As for the actual construction, it commenced in February and has been restricted to a small workforce to limit COVID-19 spread, says Taylor.

With the assistance of one Valefield Contracting Inc. heavy equipment oper-

Just a sampling of the materials and equipment that has to be delivered to the islands include an excavator, loader, the armour stone, the riprap, silt fencing, recycled concrete and asphalt, says Taylor.

This is a logistical challenge and is being achieved in two different ways depending on the type and amount of material and where it has to go, he says.

"The key is determining the right approach for the specific job," he adds.

One method is to have delivery trucks drive directly onto ferries heading directly to the project site, but there has to be enough space to lower ramps.

For sites where ramps can't be used barges are used. An excavator on the mainland loads the material on the barges, while on-board excavators unload it once the barge reaches the islands, he says.

All of the construction is occurring along the Inner Harbour, or north side of the islands where most of the park and emergency service infrastructure is located. The Lake Ontario side is already relatively well protected in many areas by a concrete seawall, says Taylor.

As of mid-April, COVID-19 was having a minimal impact on the pace of the project, which is proceeding according to measures spelled out in a Pandemic Incident Management System Procedure for Field Work manual developed by the TRCA, he says.

Economic Snapshot

Toronto is knocked down but not out by COVID-19



John Clinkard

Hit head on by the COVID-19 virus, Toronto's economy shifted into reverse in mid-March for the first time in recent history. This observation was clearly reflected by Statistics Canada's *March Labour Force Survey* (LFS) report on the metro area's job numbers. Based on the LFS conducted between March 15 and 21, the agency painted a very grim picture. Following little change (-3,400 jobs) in February, employment in the Toronto census metro area dropped by an unprecedented -72,000 jobs. The combination of this sharp drop in hiring and a 54,000 shrinkage of the labour force pushed the metro area's unemployment rate up from 5.4% to 6.0%, a 10-month high.

These numbers probably significantly underestimate the actual drop in hiring for two reasons. First, following the LFS survey on March 21, uncertainty about the impact of COVID-19 escalated sharply, causing firms' full-time staffing plans to plunge sharply. Second, on March 17, the Ontario government announced the mandatory closure of "non-essential" business enterprises, effective March 24. Subsequently, on April 3, the government expanded the list of non-essential businesses and extended its lockdown for another 14 days. And on April 11, it extended them further to May 12.

Across industries, the hardest hit was 'accommodation and food services' which lost 24,000 employees. Other industries which were hit hard in March included 'business, building and support services' (-18,000), 'education services' (-15,000) and retail and wholesale' (-14,000). Across age groups, given the large number of young employees in the food service industry, it is not surprising that approximately a third of the laid-off workers were 15 to 24 years old.

Private sector loses eight times more jobs than public sector

Assuming that the distribution of private- vs public-sector jobs lost in the Toronto CMA is similar to the province as a whole, by far the majority of jobs lost in March were in the private sector, where employment dropped by -64,000, close to eight times the estimated -8,000 decline in the public sector.

According to the LFS, employment in the industry dropped by -5,800 jobs (-2.6% m/m), approximately three times more than it has fallen, on average, over the past 18 years. However, the fact that construction employment was still up by 3,200 compared to a year ago suggests that, until the March 15-21 LFS survey week, it was not significantly impacted by COVID-19.

Weakening consumer confidence and extended lockdown to flatten home sales into May

COVID-19 has also had a significant impact on existing home sales. After posting a very strong year-over-year gain (almost +50%) in the first two weeks of March, the heightened uncertainty regarding individual health, a concomitant drop in hiring due to government lockdown and the strong recommendation by the Toronto Regional Real Estate Board to stop conducting open houses caused home sales to drop by 16% in the second half of the month compared to the same period a year earlier.

Given the fact that the lockdown of non-essential activities has been extended to mid-May and, also, given the significant erosion of consumer confidence reported by Bloomberg, we expect home sales will probably stagnate throughout May and early June.

Govt lockdown to sideline 125,000 to 150,000 construction workers in April and May

Going forward, there is no doubt that construction employment will contract sharply in April and remain depressed in May, for the following reasons. First, the Ontario government has locked down the majority of construction projects in the province with the exception of those it considers critical, including hospitals, roads and bridges, into mid-May. All residential construction is suspended except for projects near completion.

Second, the suspension of both residential and non-residential permit issuances in late March will create a regulatory hurdle that will delay the start of new projects, once the government does lift its lockdown on new construction.

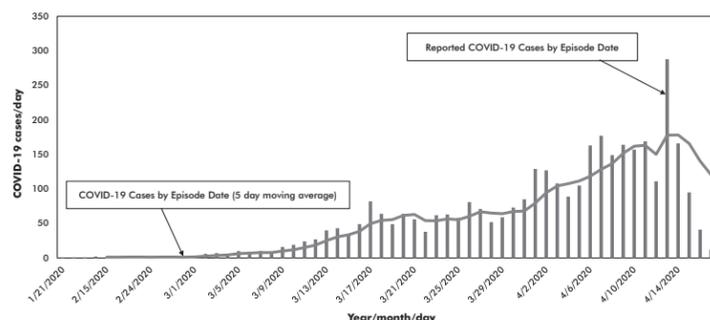
A third factor which is likely to hobble both residential and non-residential construction in the Toronto CMA is lingering uncertainty about whether the COVID crisis has really passed.

Declining incidence of COVID-19 locally and globally bodes well for H2 rebound

The near-term outlook for the Toronto economy in general and its construction sector is, for want of a better word, grim. However, given the steady decline in the incidence of the coronavirus locally, in the United States and in Europe, and the easing of lockdowns in several countries, we expect the province to follow suit by mid-May or early June. Assuming this happens, both construction and home sales should pick up steam. However, their return to pre-COVID levels will likely take several quarters and extend into next year.

John Clinkard has over 35 years' experience as an economist in international, national and regional research and analysis with leading financial institutions and media outlets in Canada.

COVID-19 Cases by Episode Date – City of Toronto*



* Data for the most recent few days understates the number of COVID-19 cases because it is preliminary, reflecting testing and report processing lags.

Data Source: Ontario Ministry of Health / Chart: ConstructConnect — CanaData.

ARE YOU PLANNING AN UPCOMING DEMOLITION, HAZARDOUS MATERIAL ABATEMENT OR REMEDIATION PROJECT?



Our contractors provide a team that is highly qualified in scope intensive demolition & abatement services. We offer a wide range of qualified services that include:

- Structural and interior demolition
- Hazardous material demolition
- Emergency response services
- Asset recovery and salvage
- Engineered safe work plans
- Soil remediation



ONTARIO ASSOCIATION OF
DEMOLITION CONTRACTORS (OADC)



70 Leek Crescent, Richmond Hill, Ontario L4B 1H1
TEL: 289-485-1017 FAX: 416-613-0227 www.oadc.ca



DELSAN

We prepare the future...

A Canadian company since 1994

DEMOLITION | ABATEMENT | DECOMMISSIONING

- | Complete Decommissioning and Demolition
- | Civil Demolition
- | Hazardous Material Abatement
- | Metal Recycling

THE KEY TO OUR SUCCESS:

- | Unwavering Commitment to Health and Safety
- | Personalized Project Management
- | Innovative Solutions
- | Specialized, Experienced and Dynamic Team

416.494.9898 | WWW.DELSAN-AIM.COM

Comprehensive Clean Up

Taking action to tackle Canada's contaminated sites

GRANT CAMERON
CORRESPONDENT

Illegal dumping, unauthorized activities and mining, oil and gas developments have left behind countless contaminated sites in harbours, industrial areas and First Nations communities across Canada.

The sites range from small areas of soil polluted by spilled fuel or leaking batteries to large abandoned mine sites and other properties spoiled by heavy metals and substances dangerous to human health.

The federal government, however, has been tackling the problem with a great degree of success. A Federal Contaminated Sites Action Plan (FCSAP) has so far restored nearly 17,000 sites across the country.

There were 23,710 sites on the list of properties when the program was launched in 2005. Today, that number has been whittled down to 6,865 active or suspected sites — a 70 per cent decrease in 15 years.

“Activities over the last century have left an environmental legacy that includes uncontrolled dump sites, abandoned mines, contaminated military installations, leaking fuel tanks and other hazards to human health and the environment,” said Veronica Petro, spokesperson for Environment and Climate Change Canada.

“The federal government established the Federal Contaminated Sites Action Plan in 2005 to address legacy contaminated sites located on federal land and to respond to the need for a co-ordinated approach identified by the auditor general and the commissioner of the Environment and Sustainable Development.”

The idea originated in 1989 when the Canadian Council of Ministers of the Environment, comprised of environment ministers from the federal, provincial and territorial governments, and the federal government negotiated a National Contaminated Sites Remediation Program with all the provinces and territories. The program helped remediate orphaned, high-risk contaminated sites for which a responsible party could not be found, or where the property owner was unable or unwilling to finance remediation.

Years later, the federal government formally established the present-day action plan as a co-ordinated approach to the problem. So far, more than \$4.54 billion has been spent on the plan. The government recently renewed the plan for another 15 years and will be investing another \$1.16 billion between 2020 and 2024.

With the new funding, it is estimated that 242 sites will be assessed, and remediation activities will be undertaken on 1,316 sites. Of these, remediation activities will be carried out on about 475 sites in First Nations communities. The investment is expected to support 6,400 new and existing jobs over five years.

The FCSAP funds 85 per cent of total remediation costs for projects under \$90 million, with responsible departments, agencies and consolidated Crown corporations funding the balance. Remediation projects with total cost estimates of more than \$90 million may be funded entirely by FCSAP.

Remediation of B.C.'s Victoria Harbour was recently completed under the program. In all, 3,000 tonnes of contaminated sediment were removed from the harbour and 75,000 tonnes of contaminated soil, or 52 barge loads, weighing the equivalent of 700 blue whales, were removed from Laurel Point Park.

“The successful completion of the Victoria Middle Harbour remediation project was achieved due to the ongoing collaboration and support of the Songhees and Esquimalt Nations, the City of Victoria, neighbouring



TOM FISK

Mining sites like the one pictured here can leave lands polluted by spilled fuel, leaking batteries and heavy metals.

businesses and residents of Victoria,” said Transport Canada spokesperson Alexandre Desjardins.

“This important work improves the overall health of the harbour and ecosystem, ensuring residents, tourists and marine species can enjoy a clean Victoria harbour for generations to come.”

Desjardins said Transport Canada has been conducting environmental investigations and remediation projects in Victoria Harbour for several decades and takes environmental stewardship of the harbour seriously.

“Transport Canada recognizes the ongoing industrial, commercial and recreational needs associated with the area and we are working to develop a comprehensive plan that manages the environmental health of Victoria Harbour by seeking to limit recontamination, while encouraging ongoing harbour activity,” he stated.

Gabrielle Boivin, spokesperson for Crown-Indigenous Relations and Northern Affairs Canada, said Indigenous Services Canada has about 2,000 contaminated sites in its active inventory although not all sites are in close proximity to residents in the 3,194 First Nations communities across the country.

The relatively high number of contaminated sites identified in First Nations communities is due to a number of reasons, she said, as there are several ways reserve lands can become polluted.

“Notably, many First Nations communities, in particular northern and remote communities, can be highly dependent on diesel and heating fuel for heating, transportation, and electricity,” she said. “Due to the remoteness of some communities, significant fuel storage capacity is required. The improper storage, transfer and handling of these fuels can result in the contamination of land.”

Other factors such as inadequate waste management support or disposal practices, unauthorized industrial development, illegal dumping and other activities can contribute to contamination, she said.

In addition to First Nations communities, the federal government is also responsible for the management of a portfolio of contamin-

ated sites in the Yukon, Northwest Territories and Nunavut.

“The contamination of these properties is primarily the result of private-sector mining and oil and gas activities and government military activity that occurred more than

50 years ago, when environmental impacts were not fully understood,” explained Boivin. “Crown-Indigenous Relations and Northern Affairs Canada inherited these sites as manager of public lands and owner of last resort in the territories.”

Manufacturer and Distributor

of hot forged bolts, specialty threaded products and fasteners in accordance with the highest quality standards — Niagara Fasteners.



Our manufacturing range is from 1/2" to 2 1/2" diameter, and M16 to M36.

Larger diameter blanks and, all common grades are stocked and ready for threading to your specifications.

All Major Head Configurations

Hex; Heavy Hex; Square Carriage; Guard Rail; Specials.

Materials

SAE Grades 2,5,8; ASTM Grades A307-B; A193-B7-B8; A320-L7; A325; A354-BC or BD; A449; A490; Stainless.

Threading

Fully threaded rods and studs from 1/4" to 6" diameter UNC - UNF - ACME - Metric - British - Rope.

Anchor Bolts

Custom to your specifications: straight; bent; re-bar; multi-unit.

ISO 9001
Registered
TSSA QA 423
CSA Z299.3

Precision Machining

We have CNC lathes with live tooling and bar feeding capabilities, and a fully equipped machine shop with presses, benders, saws, drills and mills, welders and conventional lathes. With our in house capabilities and our standard off the shelf fasteners we are able to offer a complete line of structural bolting, on time and at a competitive price.


Niagara Fasteners
INC.

6095 Progress Street, P.O. Box 148, Niagara Falls, ON Canada L2E 6S8 905.356.6887
1.800.263.3602 fax 905.356.5747 nfsales@niagarafasteners.com www.niagarafasteners.com

Museum on the Move

Heavy lifting required for Sudbury lift station project

DAN O'REILLY
CORRESPONDENT

Needed sewage infrastructure and heritage preservation have been seamlessly integrated into a three phase project in Sudbury, Ont.'s historic Flour Mill community, which dates back to the 1890s and is considered the heart of the city's Franco-Ontarian community.

In a closely co-ordinated operation last fall, its Flour Mill Museum, comprised of a heritage house and log cabin, were excavated, lifted onto large trucks and transported a kilometre away to O'Connor Park and placed on new foundations. The contractor was Greater City Concrete Works.

Erected several decades ago, the frame house-sized buildings are considered of historic value and the relocation was the only way they could be saved while allowing Sudbury to proceed with its St. Charles Lift Station project.

Tentatively scheduled to get underway later this year, the project will include the construction of a new lift station and a 1,000-metre-long, 660-millimetre forcemain to connect with the city's sanitary rock tunnel via a shaft which will have to be excavated through rock, says Sudbury's water and wastewater projects engineer Akli Ben-Anteur.

In 2009, the old station and existing forcemain were deemed to be nearing the end of their useful life and the building was slated for demolition as it was considered unsafe.

"The lift station is the oldest and largest in Sudbury and the existing forcemain is in bad condition," he says.

An environmental assessment completed a few years later recommended rebuilding a new onsite station and the construction of a new forcemain. As the museum buildings are on the same site, the recommendation presented some major complications.

"There simply was not enough available room to build the new station," he explains.

Rather than simply taking the easy route of demolishing the buildings, the city was committed to saving them right from the start, Ben-Anteur says.

In the long lead-up to last fall's relocation there was considerable consultation and preparation among various municipal departments, the city's heritage committee, R. V. Anderson Associates Limited, the overall consultant for the lift station pro-



CITY OF GREATER SUDBURY

Trucks transport the Flour Mill Museum to its new home in Sudbury's O'Connor Park. The museum, comprised of the Heritage House and the Log Cabin, was relocated in September 2019 to make room for the new St. Charles Lift Station.

ject and the community at large.

There were several issues that had to be resolved including the cataloguing, handling and temporary storage of the museum artifacts which include antique furniture, tools, household items and memorabilia. As well, a structural engineering assessment had to be conducted to determine if it was feasible to move the buildings and some structural reinforcement of one building was necessary, he says.

Although the museum's new home is within the same neighbourhood, the relocation was challenging and lengthy as roads had to be closed and hydro lines disconnected, while keeping the disruption to area residents as minimal as possible. But the move only took a day and hydro service resumed that same day. For now, the structures remain closed while the city prepares integrated approaches that will enhance the experience of visitors to the museum and the park's other facilities, he says.

Of equal complexity will be the erection of the new lift station and the simultaneous decommissioning of the existing one which has to be kept operating until construction has been completed.

"To do this, we will have to design a bypass system capable of handling existing flows without any impact to residents, businesses and the environment," he adds.

As for the forcemain, it will have to cross Notre Dame Avenue, a major road with heavy traffic and pass through some challenging terrains along the route to the existing sewer tunnel. To minimize the disruption, trenchless technologies will be used, he says.

At this stage, a contractor has not been selected. But the design is being finalized and the hope is that construction will start later this year. Of course, that depends on how and when the COVID-19 crisis is resolved, says Ben-Anteur.

A partner you can trust

Managing the success of your construction business can be challenging in today's evolving marketplace.

When you partner with Aviva for your surety needs, you can count on us to provide you with:

- Expert advice and consultation for your specific project
- Our commitment to help you meet your business goals
- A stable partnership focused on the long-term

With more than 100 years of expertise behind us, you can trust Aviva as your valued business partner.

Contact your broker to learn more.



avivacanada.com    

Insurance – Home | Auto | Leisure & Lifestyle | Business | Surety

Aviva and the Aviva logo are trademarks used under license by the licensor.



Avenue

SOILS & WASTE RECOVERY

Complete Environmental Services

- **Impacted non-hazardous soils transportation & disposal**

- **Clean fill procurement transportation & disposal**

- **Complete earthworks service & full site remediation**

CONTACT US   

T: 416.476.1790

F: 416.255.6333

soils@bell.net

www.avenuesoils.com



Making Room for Innovation

Banting and Best demo a hands-on job with logistical challenges

IAN HARVEY
CORRESPONDENT

To clear the way for another glassy addition to the Toronto skyline, two structures built to honour a pair of iconic Canadian doctors have been demolished.

The Banting and Best Department of Medical Research, known as the Banting and Best building at 112 College St., were taken down by Priestly Demolition over the winter.

In its place two trapezoid glass towers will rise, the Schwartz Reisman Innovation Centre, designed by New York-based Weiss/Manfredi Architects in collaboration with Teeple Architects of Toronto.

The buildings are not the University of Toronto labs where doctors Frederick Banting and Charles Best discovered insulin in 1923 but were erected in 1951 to 1954 in their honour. Banting worked with newly graduated Best in Professor John Macleod's labs in the 1920s to find a cure for diabetes, as a diagnosis at the time was a death sentence. James Collip eventually worked with them to perfect a process of extracting insulin from animal pancreases. Banting and Macleod won a Nobel Prize for their work in 1923.

The innovation centre will bring 750,000 square feet to the University of Toronto to replace the 50,000 square feet of the Banting and Best buildings.

"They were two buildings joined by a bridge," says Brian Priestly, vice-president of operations at the family business. "That we had to take down by hand. We had to expose the steel by chipping away at the bricks and then cut the steel with a torch."

In fact, the demolition of the four-storey brown brick structures was full of challenges for what is a relatively small project, compared to some Priestly has tackled over the decades.

"SickKids was probably more of a logistical challenge," says Priestly. "But this one was very labour intensive."

The interior floors were too weak to support machinery so only small Bobcats could be used sparingly. The unexpected discovery of asbestos led to the demolition being shut down while it was abated.

Work resumed around Christmas 2019 and wrapped in early March of this year, but the company will be back this summer to take out the foundations once the caissons have been placed.

"We had to chip away all the terracotta and other masonry by hand," he says. "We took hundreds of tons of masonry rubble out and down to the lake. But getting vehicles and trailers in and out was also a challenge."

The site is on the east side of College Street at University, smack dab at the head of Hospital Alley at the crossroads of the University of Toronto's corridor of buildings. It's packed with

traffic, people and transit and as such is another one of those inner city sites where logistics play a huge role.

With the advent of new transit lines across Eglinton Avenue, plans are already in motion to demolish and replace a lot of the 1950s and 1960s mid and low rises across the Yonge and Eglinton area which will mean a lot of more tight site locations and logistical challenges for both demolition and reconstruction.

"There's also a daycare to the north of the site at the Ministry of Infrastructure building, so we had to build a canopy there and we couldn't move trucks in and out or do some work during certain hours because of the kids. We had five people just to direct traffic when the trucks were moving because we didn't want to disrupt transit," Priestly says. "And we had to keep the dust down because of the kids and the location, so lots of water for dust suppression."

They did manage to get a Volvo 700 excavator into the location, which is also fitted with a dust suppression system, he adds.

As of March, the buildings were razed to the foundations at ground level and the two level basement backfilled with aggregate so that construction crews can move into stable ground and start sinking their caissons for the new building.

"Once they're done with the caissons they'll pull out the aggregate and we'll move in to take the foundations out," says Priestly.

Our COVID-19 construction resource hub is open for you



MARKHAM, ONT.

The COVID-19 pandemic has resulted in unprecedented impacts and challenges for the construction industry to deal with. From designating construction as an essential service to ensuring worksites are safe and construction supply chains keep flowing, there is a lot of information to find, distil and absorb.

Currently on our website you will find a COVID-19 feature page which we have built for you, our clients, subscribers and readers.

This page is designed to be your one-stop-shop, catch-all resource when it comes to COVID-19 and how it impacts construction.

On this page you can explore the issues, trends, obstacles and solutions you need to tackle this crisis and ensure construction remains viable and strong.

If there is information you would specifically like to see on the COVID-19 feature page, please let us know by emailing us at editor@dailycommercialnews.com.



Leading the way.

We are specialists in the Demolition sector, focusing on technically challenging and environmentally sensitive projects. Whether it be Demolition, Concrete Cutting, or Robotics we get it done right...

the first time.

2465 Cawthra Road, Suite 204
Mississauga, Ontario
info@controldemolition.ca
Phone: 289-232-6566





When facing a demolition or asbestos abatement project, choose UNITED WRECKING INC. for prompt and professional service customized to fit your specific needs. Serving clients in Mississauga and throughout Ontario, our experienced team has the knowledge and resources necessary to ensure you receive industry leasing service at a competitive price. Our crew is ready to completely demolish your building or prepare it for renovation. Always responsible, always on the cutting-edge of service, that's UNITED WRECKING INC.

308 – 1515 Britannia Rd E, Mississauga, Ontario L4W 4K1 • Phone (905) 795-6099 • Fax (905) 795-9040

www.unitedwrecking.ca



A G&L COMPANY

DRIVEN TO ELIMINATE WASTE AND WORRIES

As a leader of complete and comprehensive waste management and waste removal services, Draglam Waste provides disposal bins, recycling services, LEED® processing and reporting, and multiple conveniently located Transfer and Recycling Stations across the GTA. With prompt and efficient service, an emphasis on environmental sustainability, and a deep understanding of environmental regulations, Draglam eliminates your waste and with it, any worries.



DRAGLAMWASTE.COM

DRAGLAMTM
WASTE&RECYCLING

20V^{MAX*}
LITHIUM ION

200+
PRODUCTS

OUR
FASTEST GROWING
SYSTEM



GET MORE DONE™** with **200+ PRODUCTS** in the DEWALT 20V MAX* line. All tools come with upgraded features, superior ergonomics and use Lithium-Ion batteries. For extreme performance, step up to the XR® series and get advanced electronics, extended runtime and faster application speeds.



Learn More at www.DeWALT.ca

GUARANTEED TOUGH.®

Copyright ©2019 DEWALT. The following are examples of trademarks for one or more DEWALT power tools and accessories: The yellow and black color scheme; the "D"-shaped air intake grill; the array of pyramids on the handgrip; the kit box configuration; and the array of lozenge-shaped humps on the surface of the tool. *With respect to the DEWALT 20V MAX*: Maximum initial battery voltage (measured without a workload) is 20 volts. Nominal voltage is 18 **DeWALT 20V MAX* vs. DeWALT 18V NiCad..



Working together to build a future for your community



VISIT ORIN.CA
100 MacIntosh Blvd Vaughan, ON, L4K 4P3
Phone: +1-905-738-6655 Email: estimating@orin.ca