

FOR IMMEDIATE RELEASE

Ontario Consulting Engineers Honoured at National Awards Gala

(OTTAWA) October 29, 2019 – From iconic bridges, design-forward buildings and innovative methodologies, to setting precedence and developing the next generation of building systems consulting engineers from Ontario were celebrated for these outstanding achievements at the 2019 Canadian Consulting Engineering (CCE) Awards gala on Tuesday night in Ottawa.

Recognized as the industry's highest honours, the awards are presented to projects by Canadian firms that showcase the most remarkable engineering feats. “This is an opportunity to recognize the valuable contributions that Canadian consulting engineers make both here at home and around the world on a national stage,” said ACEC President and CEO John Gamble, “they highlight the role that consulting engineers play in our daily lives and the important impact that their work has on all Canadians.”

A library of the future and one of Alberta’s most important and distinctive cultural institutions



In addition to receiving an **Award of Excellence**, for best showcasing how engineering enhances the social, economic or cultural quality of life of Canadians **Entuitive’s** Toronto office was honoured with the **Engineering a Better Canada Award** for its *Calgary’s New Central Library*.

Named one of Architectural Digest’s Libraries of the Future, and one of the World’s 12 Most Anticipated Buildings of 2018, Calgary’s new Central Library is one of Alberta’s most important and distinctive cultural institutions. The building, which sits over Calgary’s busiest LRT line, presented many unique structural challenges which

Entuitive addressed with various cost-effective structural solutions.



The library has been celebrated for incorporating design-forward features, including an interlocking hexagonal façade and a western cedar clad grand entryway portal inspired by Alberta’s Chinook Arches. For the jurors, this project represents the library of the future - a hub located in the middle of the city that showcases Calgary and is accessible to the entire community. “Calgary’s New Central Library has been a labour of love for my team and everyone else who has worked on it. It is amazing to see how the community has embraced this truly democratic building where anyone can visit, seek, and share knowledge, learn a new language – all for free!” - Ian Washbrook, P.Eng, Senior Associate Project Principal and Structural Engineer of Record for the New Central Library.

The future of commercial building design and sustainability



Stantec Consulting Ltd. sought to inspire development of regenerative buildings by producing an economically-viable prototype that is designed as a repeatable model. The result was its **Award of Excellence** winning *evol1*, an office building targeting net-positive energy, zero carbon, and LEED® Platinum which has already been awarded as the first Zero Carbon Building – Design certified project in Canada. To meet the client’s environmental goals, a multi-pronged low energy design was used.



To achieve the net zero targets, the team used an Integrated Design Process (IDP), taking advantage of varied discipline collaboration from an early stage. Jurors agreed that this project, which offers real potential for scalability, represents the future of commercial building design, particularly because of its net positive energy design and the unique geothermal heating system. “It’s an exciting time to be in the business of sustainable buildings and our entire design team is thrilled to see firsthand how evol1 is setting a new standard for net-zero and zero-carbon buildings. evol1 is proof that a truly sustainable building can be cost effective and attractive,” said Kaid Al-Ani, a Principal on Stantec’s Mechanical Engineering Team in Toronto and the lead Mechanical Engineer for evol1. “Our client, the Cora Group, challenged us to rethink our design process and tap into the creativity and knowledge of a multi-disciplinary team. That challenge inspired us. Thank you CCE for recognizing the innovation and hard work that went into this revolutionary building.”

Improving resiliency, community and marine accessibility while respecting the project’s heritage



For its *Johnson Street Bridge Replacement* project **WSP** was presented with an **Award of Excellence**. The City of Victoria selected WSP to provide project management, design and construction administration services for a new iconic structure to replace its historic Johnson Street Bridge. A unique feature of this new 100-year bridge is the rolling bascule design with hidden counterweights which allow the main span of the bridge to rotate on the outer surface of its two rings about a “virtual” centre axle. The overall project involved the creation of a myriad of new roadway, walkways, cycling paths and public gathering spaces that have created vibrancy and renewal in the area. As Canada's largest single leaf bascule bridge, it provides improved seismic resiliency, community connections and marine access while respecting the heritage legacy of the old “Blue” bridge. In selecting this project, the jury noted how it differed significantly with traditional lift-bridge design. The team created an elegant landmark that incorporates operations into its architecture to replace an iconic, community-valued structure.



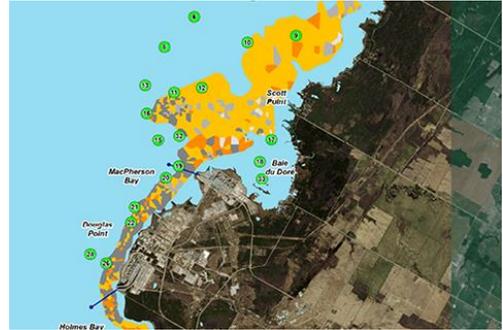
“At WSP, our teams are constantly pushing the boundaries of innovation to support the communities where we operate. Being recognized for our work in the Transportation and Infrastructure sectors speaks to the world-class expertise and talent of our people” said Ryan Brain President and CEO, WSP in Canada.

Developing innovative solutions to protect our natural resources and environment



For its *Bridging the Hydrometric Data Gap, Lake Huron* project an **Award of Excellence** was presented to **Golder**. The sustainability of Bruce Power’s nuclear operations, located on the shores of Lake Huron, are closely tied to the lake’s hydrodynamic, thermodynamic and biochemical states. As acquiring the necessary field data to resolve these complex processes is extremely challenging Golder was retained to develop a methodology to determine the operational thermal effects on

area fish habitats from background atmospheric heating influences. In response Golder developed a comprehensive hydro-thermodynamic modelling platform. The innovative approach provides several advantages over previous modelling exercises and enables Bruce Power to maintain site operations by providing the required information to meet regulatory requirements while educating interest groups about the thermal and hydrodynamic impacts associated with plant operations.



Looking forward, this modelling platform opens a number of opportunities to look at climate-change forecasting, ecological modelling and a range of other applications. It also establishes a technical approach for other aquatic environments. The jury felt the project’s ability to manage thermal impacts is important to protecting our Great Lakes as a natural resource and ecosystem. “At Golder, we recognize our client’s success is increasingly dependent on embedding sustainable development principles into our projects and activities,” said Greg Herasymuk, President Golder, Canada. “Receiving an Award of Excellence at the 2019 Canadian Consulting Engineering Awards, is a testimony to Golder’s commitment to helping our clients achieve their financial, social and environmental goals. We are extremely proud to have accepted this prestigious award in partnership with Bruce Power.”

Overcoming significant challenges and setting precedence for future projects



Hatch’s Award of Excellence winning *Oxec II Hydroelectric Project*, a complete 56 MW greenfield installation in Rio, is a key project supporting Guatemala’s mandate to energize the nation with clean power. Hatch was originally engaged to develop the project’s conceptual design, with scope later expanded to detailed design-build engineering. Oxec II success hinged on the constructability and economy of the design. Through Hatch’s optimization efforts, an alternative layout was proposed to reduce construction costs and improve design reliability.

Many of the features in the Oxec II project are unique in that region and have already set precedence for future projects. It also helped strengthen the country’s skills capacity, ensuring it is equipped for future ventures. The significant knowledge transfer impressed the jurors, who applauded how the project has become a prototype for future development of the country’s infrastructure. “Hatch has been active in developing hydroelectric sites in Guatemala for over 20 years. The Oxec II hydroelectric project was another opportunity to help deliver on Guatemala’s mandate to transition the nation to clean power.



The fact that we were able to overcome significant challenges—unstable ground, frequent flash flooding, and high seismicity—to deliver this project on time and under budget speaks to the team’s expertise and history of innovation. It is truly an honor to be recognized for this accomplishment at the highest level and we look forward to continuing our work in the region.” Said Ian Ainslie, Project Sponsor

Combining existing components and processes into intelligent products



As building construction materials and techniques have remained largely unchanged in the last 50 years the vision for the **Award of Excellence** winning *Intelligent Structural Panel (ISP)* was simple: take all the components and processes that go into constructing a floor and shear wall and combine them into one intelligent product. **Quasar**

Consulting Group Inc., in partnership with **Stephenson Engineering, WZMH Architects** and **C3PoE**, developed the ISP in

response to a need for the next generation of smart building systems. A prefabricated smart building component that is installed on-site with minimal labour, the ISP is modular energy-efficient, and reduces construction waste. It includes the infrastructure to power, monitor and control most key building systems including mechanical, electrical, and IT.



This project led to a paradigm shift in system integration which impressed the jurors, who were also enthusiastic about the prospects for applications to other types of projects. “On behalf of the ISP Team, Quasar Consulting Group is honoured to have been selected for this prestigious Award. This is a result of a truly collaborative, multi-disciplinary team-based development process. We look forward to continuing to integrate design and technology toward our shared vision, where the Integrated Structural Panel is the benchmark for all Building Construction Projects” said Kenan Huskovic, CEO Quasar Consulting Group Inc.

In November, follow ACEC’s national and international award winning [#20DaysOfExcellence](#) in Engineering campaign on social media. Visit www.acec.ca/20daysofexcellence to view videos of the winning projects and to learn more about the impact of consulting engineering on our quality of life.

About award-winning firms

Entuitive is a consulting engineering practice operating in seven offices across Canada, the UK, and the United States. The practice is performance-focused and encompasses integrated structural engineering, building envelope, restoration, special projects, renovations consulting, and fire consulting services for both new and existing structures. <http://www.entuitive.com/>

Golder is an employee-owned, global organization providing consulting, design, and construction services in their specialist areas of earth, environment, and energy through technical excellence, innovative solutions and award-winning client service. Today, their clients represent the world’s major industries and drivers of development: Oil and Gas, Mining, Manufacturing, Power, and Infrastructure. Employee owned since being founded in 1960, Golder’s more than 6,500 people operating from 165 offices worldwide deliver deep

technical understanding, cross-disciplinary thinking and a passion to help their clients succeed. www.golder.com

Hatch - Whatever Hatch's clients envision; their engineers can design and build. With over six decades of business and technical experience in the mining, energy, and infrastructure sectors, Hatch knows their clients' business and understand that their challenges are changing rapidly. Hatch responds quickly with solutions that are smarter, more efficient and innovative. They draw upon their 9,000 staff with experience in over 150 countries to challenge the status quo and create positive change for their clients, their employees, and the communities they serve. www.hatch.com

Quasar Consulting Group Inc. is an employee-owned mechanical, electrical and ICAT consulting engineering firm with a vision for attracting, retaining and motivating top talent in the industry. Quasar was founded by industry leaders passionate about doing things differently in the consulting engineering universe, one where people and core principles come first. Their core principles are infused into the DNA of every employee. www.quasarcg.com

Stantec Consulting Ltd. - The Stantec community collaborates across disciplines and industries to make buildings, infrastructure, and energy and resource projects happen. Stantec's work—professional consulting in planning, engineering, architecture, interior design, landscape architecture, surveying, environmental sciences, project management, and project economics—begins at the intersection of community, creativity, and client relationships. www.stantec.com

WSP, a Canadian company and one of the world's leading professional services firms, provides technical expertise and strategic advice to clients in the Transportation & Infrastructure, Property & Buildings, Environment, Industry, Resources and Energy sectors. WSP is uniquely positioned to deliver successful and sustainable projects wherever their clients need them. www.wsp.com

About Awards co-sponsors

ACEC represents companies in Canada that provide professional engineering services to both public and private sector clients. These services include the planning, design and execution of all types of engineering projects, as well as providing independent advice and expertise in a wide range of engineering and engineering-related fields. For more information about ACEC and the 2019 Canadian Consulting Engineering Awards, please visit www.acec.ca.

Canadian Consulting Engineer is a privately-owned magazine for professional engineers working as consultants in the construction field. It is a division of Annex Publishing & Printing Inc. The award-winning projects are described in full in the October-November 2019 issue of *Canadian Consulting Engineer* at <http://www.canadianconsultingengineer.com/digital-edition/>.

Multimedia (photos, project descriptions, videos)

Entuitive project [page](#) & [photo](#)

Hatch project [page](#) & [photo](#)

Stantec Consulting Ltd. project [page](#) & [photo](#)

Golder project [page](#) & [photo](#)

Quasar Consulting Group Inc., in partnership with Stephenson Engineering, WZMH Architects, and C3PoE project [page](#) & [photo](#)

WSP project [page](#) & [photo](#)

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