

Gordie Howe International Bridge

MOMENTUM

issued by: Windsor-Detroit Bridge Authority



PONT INTERNATIONAL
**GORDIE
HOWE**
INTERNATIONAL BRIDGE

The Gordie Howe International Bridge project between Windsor, Ontario and Detroit, Michigan will help move goods and people more efficiently at this important trade gateway. Managed by Windsor-Detroit Bridge Authority (WDBA) and working in collaboration with the State of Michigan, the project is being delivered through a public-private partnership (P3) which will see Bridging North America design, build, finance, operate and maintain the bridge.

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TOWERS: THEN AND NOW

Two massive towers built on the shorelines of the Detroit River, along with a complex cable system, will support the bridge deck of the Gordie Howe International Bridge. Construction of the towers began in 2019, with the installation of underground caissons. Caissons were drilled to a depth of 37 metres or 121 feet, and then a rebar cage was inserted and filled with concrete.

Summer 2020 Tower cranes are erected at the Canadian and US bridge sites to support crews working on the tower footings. The tower cranes will remain on site and jump in height every few months. The cranes lift heavy materials and are bolted to concrete foundations for support and to provide stability. The cranes are comprised of three essential components: the mast (tower), a slewing unit which holds the machinery allowing the crane to rotate, and the jib – a horizontal arm that carries the load.

Winter 2020 As the towers began to rise from the ground, local artists are selected to create murals on each of the crane tower forms. Funded by the Community Benefits Plan, Indigenous artists from Walpole Island First Nation and Caldwell First Nation provide the Canadian murals while an artist from Southwest Detroit create the US ones that honour the cultural heritage of the area. Each image is displayed on panels that are affixed to the tower crane jump forms – temporary steel structures used to provide access for workers involved with the construction of the two massive towers.

Summer 2021 Workers constructing the towers use a walkway, or catwalk, to move between the two tower legs. The walkway is attached to the jump forms on the north and south tower legs. As the jump forms rise, so does the walkway. Tower legs are currently 40 metres or 120 feet in height.

Winter 2021 The final piece of the foundation for the towers is completed with post-tension work for the tie-beams that connect the tower legs. Post-tensioning is a technique used on large infrastructure projects to reinforce concrete and other material. Post-tensioning tendons are high strength steel cables or strands inside plastic ducts or sleeves that significantly help reduce the structure's weight and foundation load. As part of the post-tension work, 31 steel strands are used in each of the tendons in the tower footings. There are 21 tendons in the Canadian tower footings and 25 tendons in the US tower footings.

Summer 2022 The tower legs, also known as the lower pylons, merge together. It's a major step in the construction of the towers as crews transition from the lower pylons to the top portion of the tower, known as the pylon head. The transition process requires modifications to the jump form systems. Two concrete pours will be completed in the transition area to construct the upper cross beam that will merge the tower legs into a single structure. In preparation for the transition work, the tower legs in Canada and the US were built up to nearly 140 metres or 460 feet.

Fall 2022 The towers have now reached a height of approximately 148 metres or 488 feet. Construction will now begin on the pylon head. It will measure about 80 metres or 262 feet in height, for a total tower height of 220 metres or 722 feet. Critical to the cable-stayed design, anchor boxes within the pylon head will house 216 parallel strand stay cables that will connect the towers to the bridge and decks.

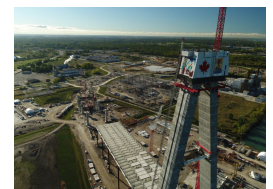
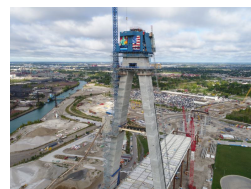
CONTACT US

Have a question about the Gordie Howe International Bridge project?

Make an appointment to meet with our team at our Sandwich Community Office at **3201 Sandwich St.** or Southwest Detroit Community Office at **7744 W Vernor Hwy.**

Available office hours on [GordieHoweInternationalBridge.com](https://www.gordiehoweinternationalbridge.com).

Call us toll-free at **1-844-322-1773**, email us at info@wdbridge.com, or message us through any of the project social media accounts.



PEOPLE PROFILE

MEET JOHNNATHAN QUIJANO

Johnathan is a Senior Engineer focusing on Rail and Road for Windsor-Detroit Bridge Authority. He graduated from Civil Engineering at Western University in London, Ontario, then completed his masters degree in International Construction Management at the University of Bath in the UK. Johnathan was working in Toronto in the transportation industry when he heard about this job opportunity on the Gordie Howe International Bridge project and moved to Windsor after accepting the position.

Q. What type of work are you doing on the project?

As a Senior Engineer my role is to provide project oversight for design and construction activities for the Bridge component and Michigan Interchange component of the project.

Q. What is the most rewarding part of working on the project?

The most rewarding part about working on the project is being part of a landmark project that will have a positive impact on the lives of thousands, probably millions, of people.

Q. What do you wish other people knew about the project?

Behind the construction fences there is a lot of teamwork happening, not only as several construction companies join forces to build the bridge and other components but there is also an enormous collaborative effort by many stakeholders and governmental organizations working together to achieve this international undertaking. This joint effort is executed by regular people from Windsor, Detroit and other parts of the world which is a true reflection of the Canadian values of hard work and diversity.



JOHNNATHAN QUIJANO

Senior Engineer, Rail and Road – Windsor-Detroit Bridge Authority

LETTER FROM THE CEO

Significant activity has taken place on the Gordie Howe International Bridge project over the past year. The project team has recently celebrated more than 6.5 million hours of work without a lost time injury, which is an important key safety indicator on any construction project. This is a clear testament of the importance that the team puts on safety, which has been further recognized by receiving the John M. Beck Award, for the second consecutive year.

As you've read in this issue of the newsletter, the bridge tower work is now focused on the pylon head, the final part of the tower. Construction on the bridge approaches that connect the main bridge span to the two Ports of Entry is also underway. Main deck construction over the Detroit River is anticipated for early 2023.

At the Ports of Entry, construction on multiple buildings is taking place and will continue over the next few years. Buildings are in various stages of development. Michigan Interchange work is also in progress with the Livernois, Springwells, and Clark Street bridges open to traffic and work underway on various pedestrian bridges. In the delivery of all aspects of our work, safety and quality remain top-of-mind and a priority for WDBA and Bridging North America.

Our Community Benefits Plan, which includes a comprehensive Workforce Development and Participation Strategy and a \$20 million Neighbourhood Infrastructure Strategy, continues to offer enhancements in our host communities. To date, more than 7,135 individuals in Canada and the US have gone through orientation to work on the project, with 43 per cent being local to the City of Detroit or within 100 kilometres of Windsor-Essex.

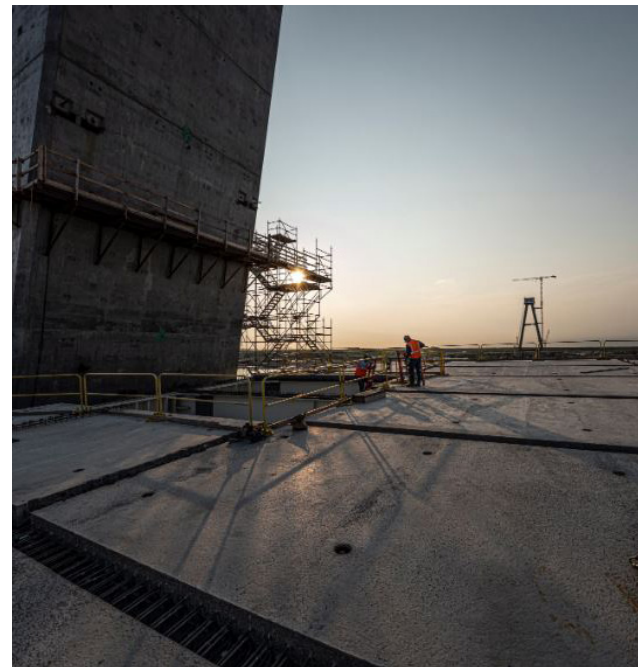
We are committed to keeping the public informed and ensuring opportunities to engage with the project. In October, we were happy to return to in-person quarterly meetings following more than two years of virtual meetings due to pandemic guidelines. We also reopened the two community offices by appointment. We are proud to be part of the communities we serve and of the progress we have made so far on the project.

Bryce Phillips
CEO, Windsor-Detroit Bridge Authority



FROM BRIDGE DECK TO ROAD DECK

Starting from the towers in Canada and the US, the bridge deck will be constructed one segment at a time to meet in the middle over the Detroit River. The road deck, which refers to the piece of the bridge from the towers leading into the Port of Entry, is currently under construction and will have 25 segments in Canada and 26 segments in the US, while the bridge deck over the water will have 27 segments. Construction materials and equipment needed to build the bridge deck will be transported over the road deck onto the bridge deck as it progresses, eliminating the need for equipment to operate from the water. Bridge deck construction is anticipated to begin in 2023. Read more about the progress of these bridge components on [GordieHoweInternationalBridge.com](https://www.gordiehoweinternationalbridge.com).



IN THE COMMUNITY

OPEN STREETS WINDSOR

The Gordie Howe International Bridge project team was happy to participate in the City of Windsor's annual Open Streets event in September. The team hosted a booth in the Sandwich hub where people could compete in a hockey shootout activity and learn about the project.



INNOVATION STATION: ENGINEERING YOUR LIFE 2022

In October, the project team hosted a table at Innovation Station: Engineering Your Life 2022, hosted by the Professional Engineers of Ontario Windsor-Essex chapter. Members of the engineering team provided project information to event attendees.



ELDERCOLLEGE PRESENTATIONS

Over the month of October, Windsor-Detroit Bridge Authority (WDBA) held two educational sessions about the project for Canterbury ElderCollege in Windsor. ElderCollege is dedicated to lifelong learning by offering courses that are useful, sociable, and entertaining to people over the age of 55. ElderCollege participants learned about the design and aesthetics of the bridge, environmental aspects, and the Community Benefits Plan.



HALLOWEEN FUN

On the weekend before Halloween, the project team participated in two Halloween events for some holiday fun. The project team took part in the Town of LaSalle's annual Truck or Treat event, where families dressed in costumes and visited a lineup of unique vehicles including project construction equipment. The project team also took part in the Urban Neighborhoods Initiative's Spooktacular Halloween Party in Detroit, where families went Trunk or Treating and participated in other fun activities such as face painting.



2023 COMMUNITY ORGANIZATION INVESTMENT

In its first two years, the Community Organization Investment (COI) initiative provided a total of \$200,000 (CDN) to 17 organizations in Sandwich/west Windsor and Delray/Southwest Detroit to support events, programming, and infrastructure improvements. The Community Benefits project team is excited to launch the third year of funding with a call for applications in November. Registered non-profits or charitable organizations that serve the residents of Sandwich/west Windsor or Delray/Southwest Detroit can learn more about the program on the project website.



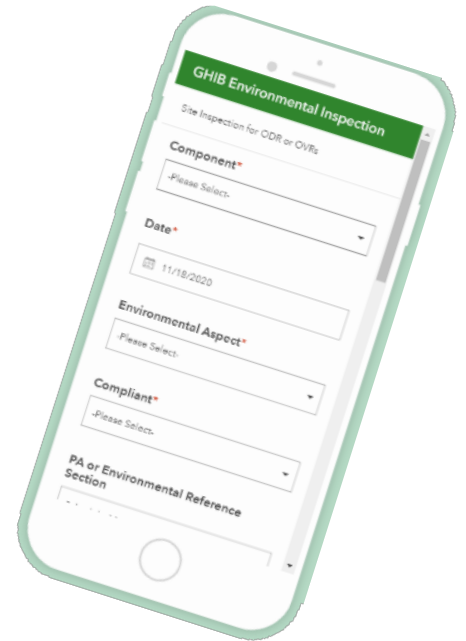
PUBLIC INFORMATION MEETINGS

Windsor-Detroit Bridge Authority and Bridging North America will hold Public Information Meetings on December 6, 2022, in Windsor at Mackenzie Hall and on December 7, 2022, in Detroit at Kiosco Banquet Hall. The meetings will provide the latest updates on Canadian and US construction activities and the implementation of the Gordie Howe International Bridge Community Benefits Plan. Presentations will begin promptly at 3:30 p.m. and 5:15 p.m. followed by a question-and-answer session. Questions will be accepted both in advance and at the meetings. To submit your questions in advance, email info@wdbridge.com.



ENVIRONMENTAL MITIGATION

We are committed to protecting the environment surrounding the Gordie Howe International Bridge project. A diverse approach is being implemented to limit potential adverse effects on the natural environment and neighbouring residents and businesses. Through daily inspections, dust, noise, vibration, and air quality are regularly assessed to determine the effectiveness of current actions and to guide improvements. The various mitigation measures used on the project can be found under the Environmental tab on the project website.



KID ZONE

DESIGN A BRIDGE CHALLENGE

Use the box to design your own cable-stayed bridge. Write the name of your bridge below. Take a photo of your design and post it to Instagram, tagging [@GordieHoweBrg](https://www.instagram.com/GordieHoweBrg).

BRIDGE NAME:

