

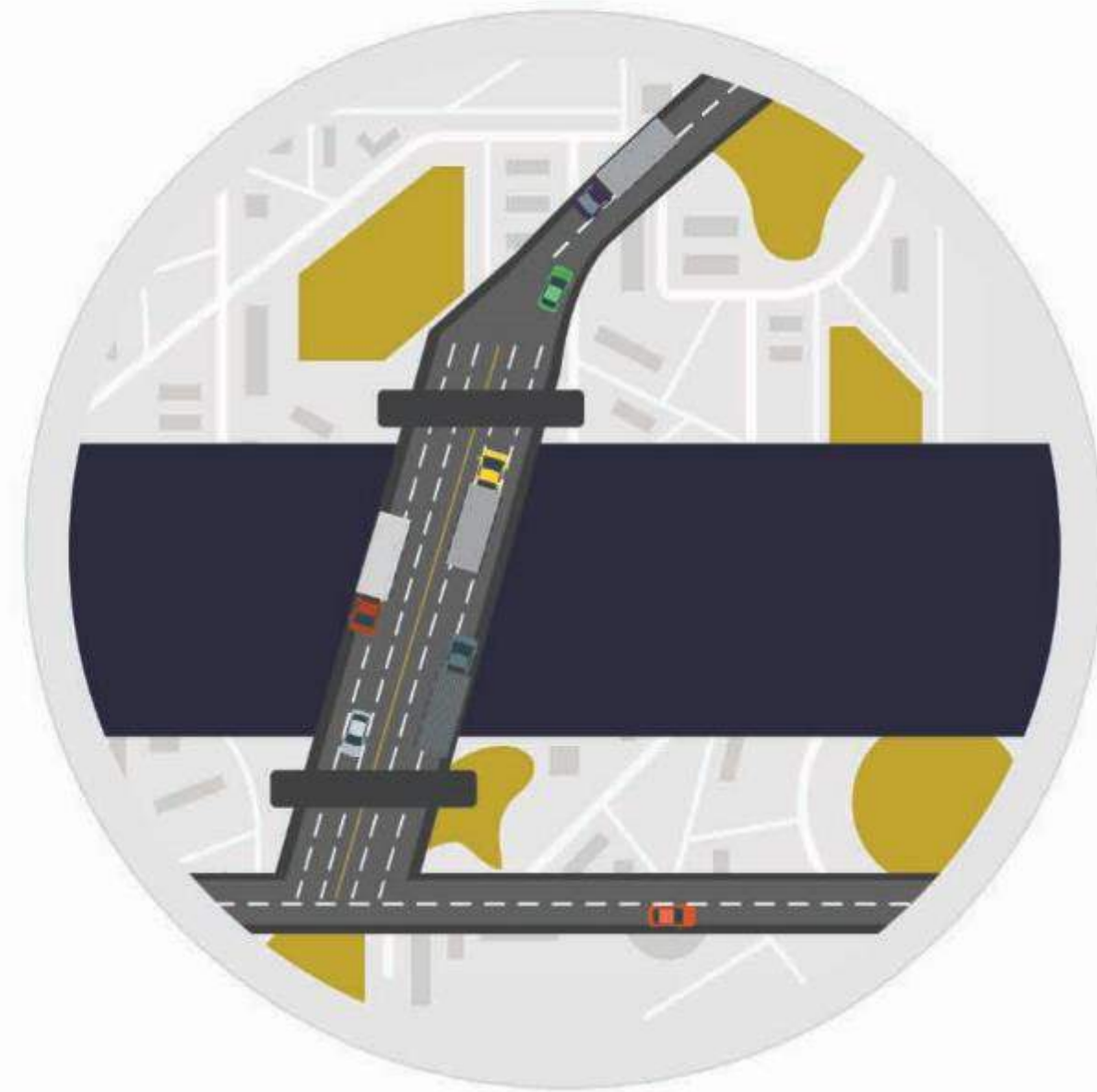
What is Windsor-Detroit Bridge Authority?

Windsor-Detroit Bridge Authority:

- Is a not-for-profit Canadian Crown corporation created in 2012
- Reports to Parliament through the Minister of Infrastructure and Communities
- Created to deliver the Gordie Howe International Bridge project through a public-private partnership (P3)
- Will oversee the work of the P3 partner and will manage the project agreement and payments

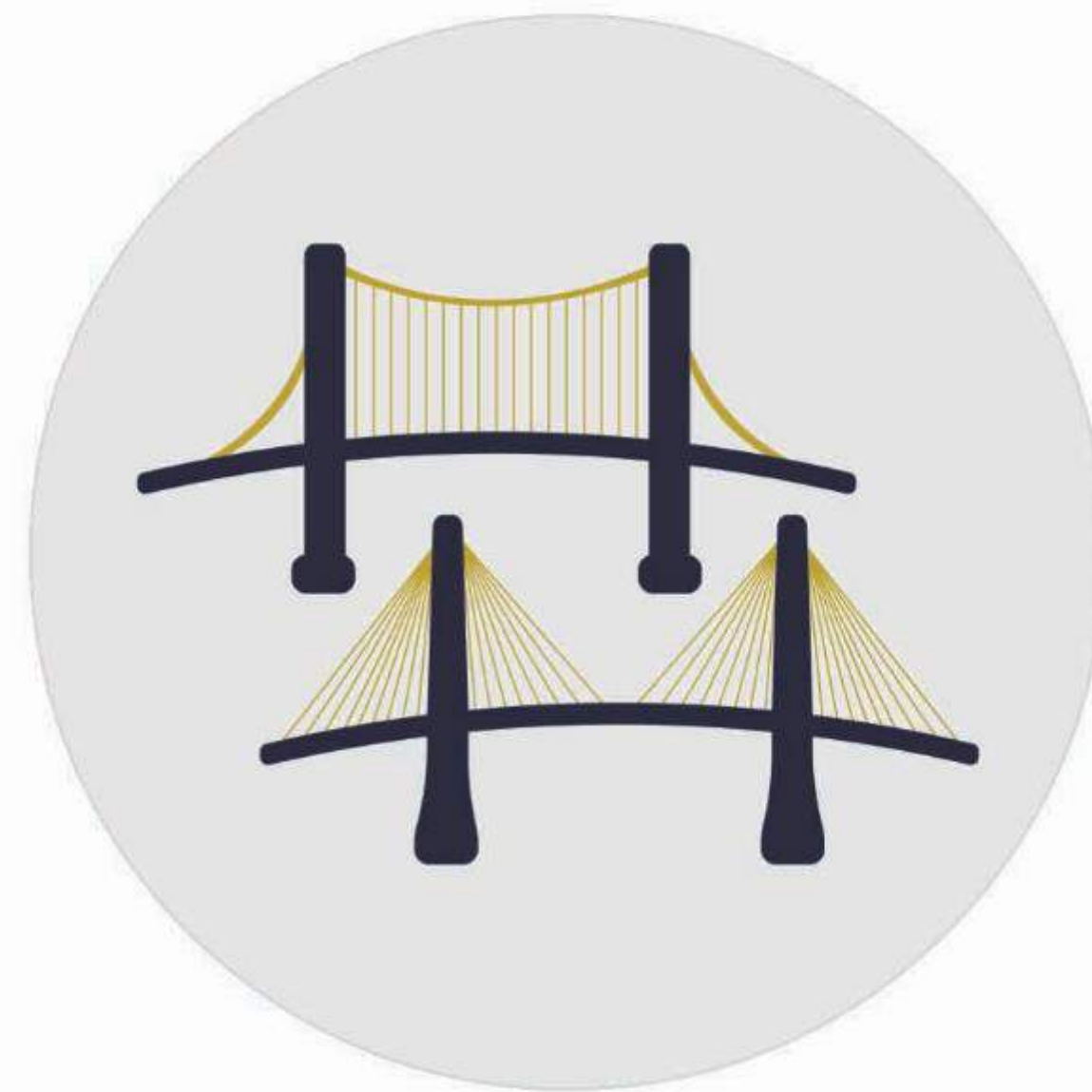


Project Purpose and Need



The Gordie Howe International Bridge will enhance the Canada-US trading relationship and personal travel by providing:

- Redundancy
- Improved border processing capabilities
- Capacity
- Improved system connectivity



Project Collaboration and Structure



The Procurement Process: What is a P3



The Gordie Howe International Bridge project will be delivered through a public-private partnership or a P3.

What is a P3?

A P3 is a co-operative venture between a public-sector entity and a private-sector partner for the provision of infrastructure or services. The partnership is built on the expertise of each partner that best meets clearly defined public needs, with the private sector assuming a major share of the risks in terms of financing, construction and maintenance.

Who is involved in the P3?

A P3 is a co-operative venture between a public-sector entity (Windsor-Detroit Bridge Authority) and a private-sector partner (a consortium of companies with different areas of expertise).

Why use the P3 model?

A P3 transfers a major share of the risk associated with the project (such as the costs associated with overruns, schedule delays, unexpected maintenance, and/or latent defects in the assets) to the private sector. As well, the private sector's expertise, efficiencies and innovation are utilized in delivering the project.

Where does the P3 partner come from?

WDBA's Proponent teams are comprised of Canadian, American and international companies. Once selected, the private-sector partner will establish offices locally. It is anticipated that many local resources will be required from both Windsor-Essex and Detroit to deliver the project. In addition to jobs created during the construction phase, the new bridge will result in many permanent jobs for the future operation of the crossing.

When does the P3 partner start working?

At the end of the P3 procurement process, a private-sector partner will be identified. This partner will start work immediately – setting up local offices, completing their design and engaging local contractors. They will construct the project according to the schedule included in their proposal. Once construction is completed, the private-sector partner will operate and maintain the POEs and bridge for 30 years.



Procurement Milestones

WDBA's procurement process was designed to choose a private-sector partner with the skills, experiences and resources necessary to design, build, finance, operate and maintain the Gordie Howe International Bridge project.

Milestones achieved:



RFQ issued July 2015 and closed October 2015. Six submissions received. Three short-listed respondents announced in January 2016.

RFP issued to Proponents in November 2016. Proposal submissions received in May 2018. Bridging North America selected as WDBA's Preferred Proponent on July 5, 2018.

Financial Close was reached in September 2018 marking the end of contractual negotiations with Bridging North America and completion of the P3 procurement process.

October 5, 2018, marked the official start of Gordie Howe International Bridge construction.



Contract Value Highlights

Length of contract: 36 years

Total fixed contract value: \$5.7 billion (nominal)

Fixed-price cost: WDBA will repay Bridging North America the value of the contract over the contract term

Risk: Bridging North America assumes market risk (examples: interest, foreign exchange)

Source of funding: Government of Canada

Design



Build



Finance



Operate



Maintain



Project Components



Legend

1. Michigan Interchange
2. US Port of Entry (POE)
3. Gordie Howe International Bridge
4. Canada Port of Entry (POE)



Key Project Features: Bridge



- **6 lanes: 3 Canadian-bound, 3 US-bound**
- **2.5 kilometres / 1.5 miles**
- **Clear span of 853 metres / 0.53 miles**
- **Multi-use path for pedestrians and cyclists 3.6 metres / 11.8 feet wide**

Key Project Features: US Port of Entry

Once constructed, this port will be one of the largest ports of entry in North America

- 68 hectare / 167 acre site
- 36 primary inspection booths
- Outbound inspection facilities
- Commercial exit control booths

Key Project Features: Canadian Port of Entry

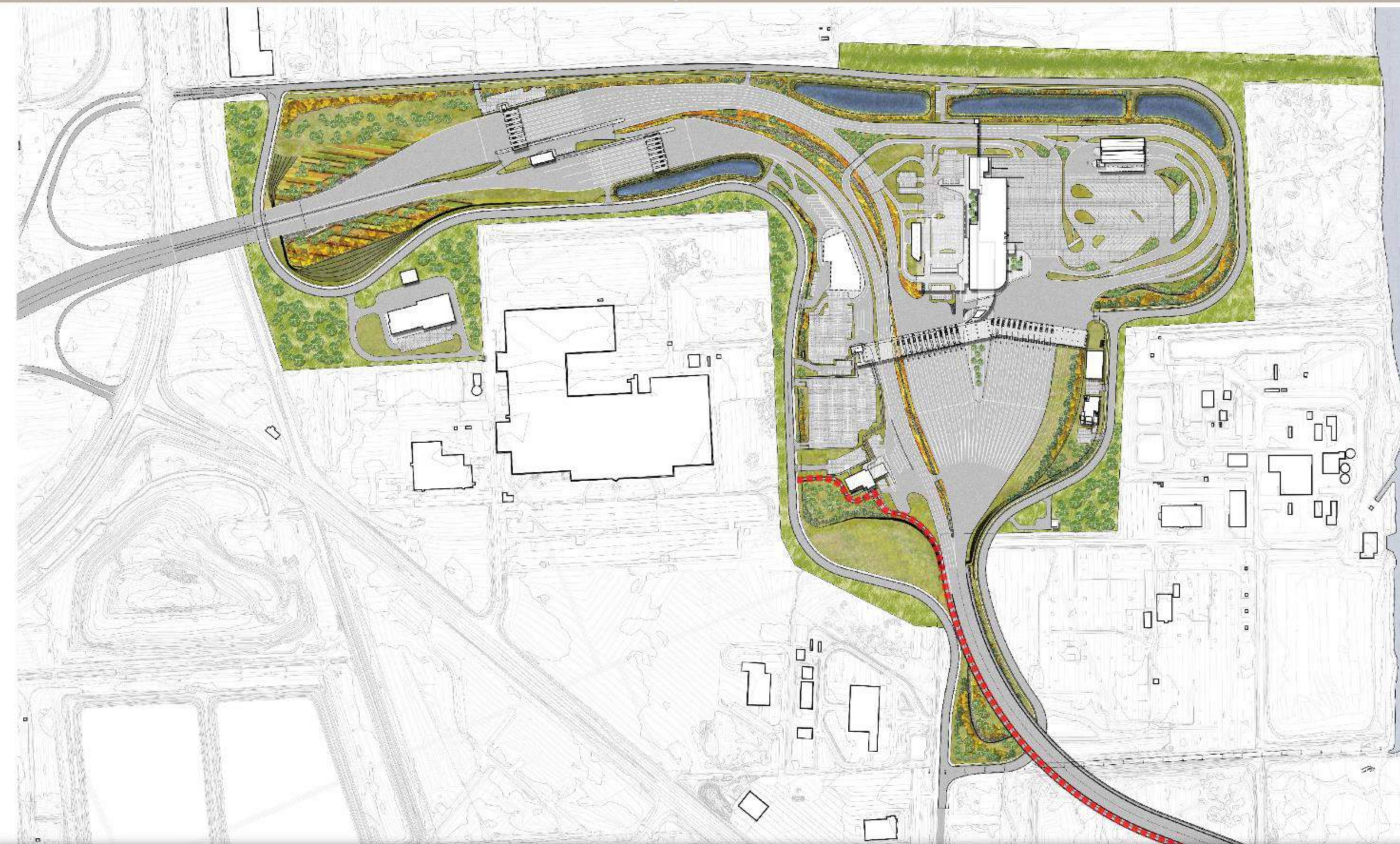
- Once constructed, this port will be the largest along the Canada - US border
- 53 hectare / 130 acre site
- 24 inspection booths
- Outbound inspection facilities
- Toll collection facilities for US and Canada-bound traffic

Key Project Features: Michigan Interchange

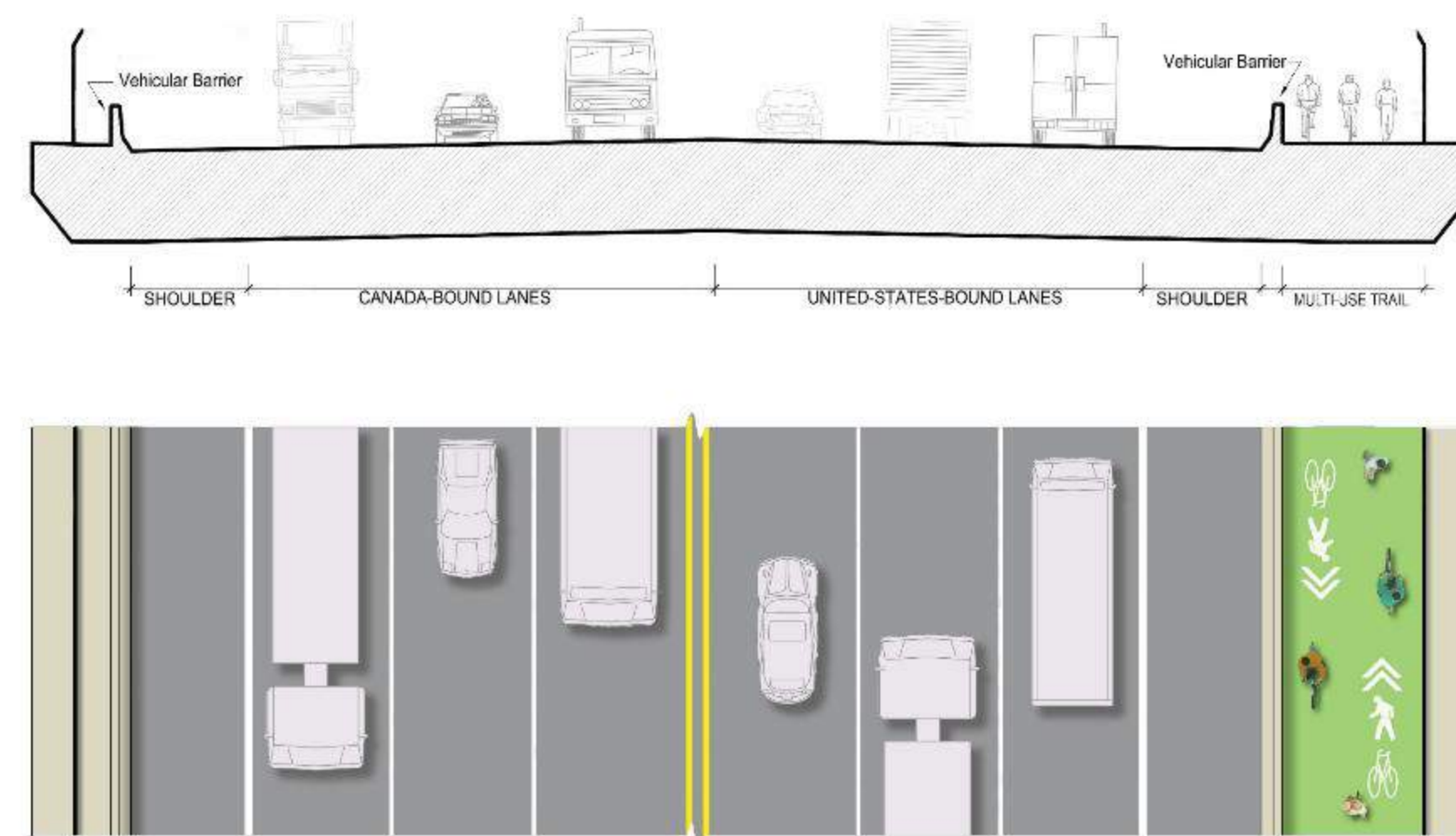
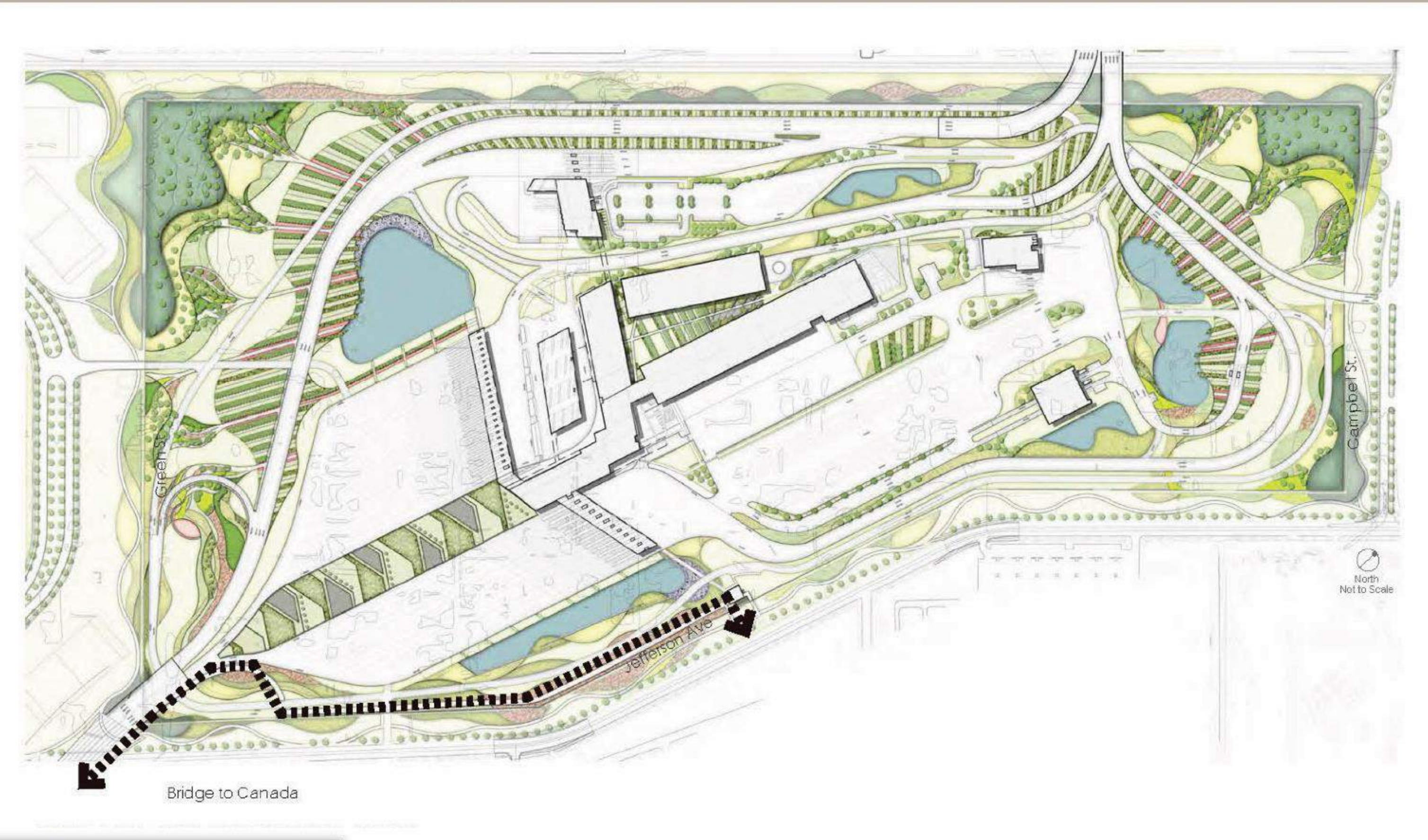
- 3 kilometres or 1.8 miles of I-75 and interchange ramps
- 4 new road bridges
- 5 new pedestrian bridges
- 4 long ramp bridges connecting I-75 to the US POE
- Local road improvements

Dedicated Multi-Use Path

Canadian Port of Entry



US Port of Entry



- 3.6 metres / 11.8 feet wide
- Barriers separating vehicular traffic from pedestrians
- Connections to local road networks in Canada and the US



Designing for Commercial Users

Bridge design:

- ✓ Demand-driven dedicated lanes
- ✓ Roadway lighting meeting MTO and MDOT standards
- ✓ Accommodate truck breakdowns with minimal traffic impact
- ✓ Onsite weather monitoring station
- ✓ Hazardous materials will be accepted with safe and secure holding areas
- ✓ Agri-food considerations incorporated into design
- ✓ Travel Time Detection Systems for Border Wait Time

Advanced technology:

- ✓ ITS intelligent video will capture unauthorized movement near trucks
- ✓ Video feeds for traffic monitoring
- ✓ E-manifest programs and other trusted traveller programs
- ✓ VIN recognition
- ✓ Trucking companies geofencing / supply chain security programs
- ✓ Traffic Surveillance System
- ✓ Lane Control and Traveller Information Systems
- ✓ Most up-to-date large scale imaging will provide more efficient and timely throughput
- ✓ Traffic conditions to be on highway video display boards long before arrival at bridge to allow for alternate route planning
- ✓ Intelligent video hook ups will provide first responders another tool to facilitate responses to incidents impacting commercial traffic



Building Elegance Through Aesthetics: Project Goals

The following project goals define the desired outcome to be achieved through the project aesthetic design:

- An **impressive** and **inspiring** new gateway symbol for Canada and United States
- A **distinctive design** that reinforces the owner's brand and responds to its unique Windsor/Detroit context
- A bridge design that achieves a **high level of aesthetic quality**, at a distance and up close, by day and by night
- Port of Entry architecture and landscape design that showcases **functionality, design excellence, sustainability** and **barrier-free accessibility**.



Aesthetics – Guiding Principle

The design shall provide a primary aesthetic framework of “*contemporary minimalism*” with secondary layers of materiality, colour, texture and public art that responds to site specific context-related themes.

Simplicity • Clean lines • Good proportions • Openness • Transparency • Lightness

Aesthetics have been considered for all aspects of the project:

BRIDGE: modern expression of the bridge form, derived of modern design and construction techniques “clearly of its time”. Will be a unique and identifiable structure.



LANDSCAPING: includes elements of continuity and variation creating a unified experience and expresses themes of the site location. Will build upon functional requirements to support safety and security.



PEDESTRIAN SPACE: private and public spaces provide an opportunity for a finer grained landscape with more colour and amenities.

BUILDINGS: material palette of curtain wall, precast concrete panels, metal and composite. Will create clean lines, pleasing proportions and elegant simplicity that support the development of an open, transparent and welcoming facility.



LIGHTING: will create a cohesive and aesthetically pleasing visual effect by night throughout the crossing. Lighting will be incorporated on the bridge, roadways, pedestrian walkways, architecture and landscape.



CANOPIES: the canopies create the primary architectural gesture for the Ports of Entry.



Detroit Street Improvements

In recognition of Southwest Detroit's role as a gateway community to the US and in accordance with requirements set out in the Final Environmental Impact Statement, WDBA is investing in street improvements near the US Port of Entry. Here are just a few highlights of the work to be undertaken by Bridging North America:

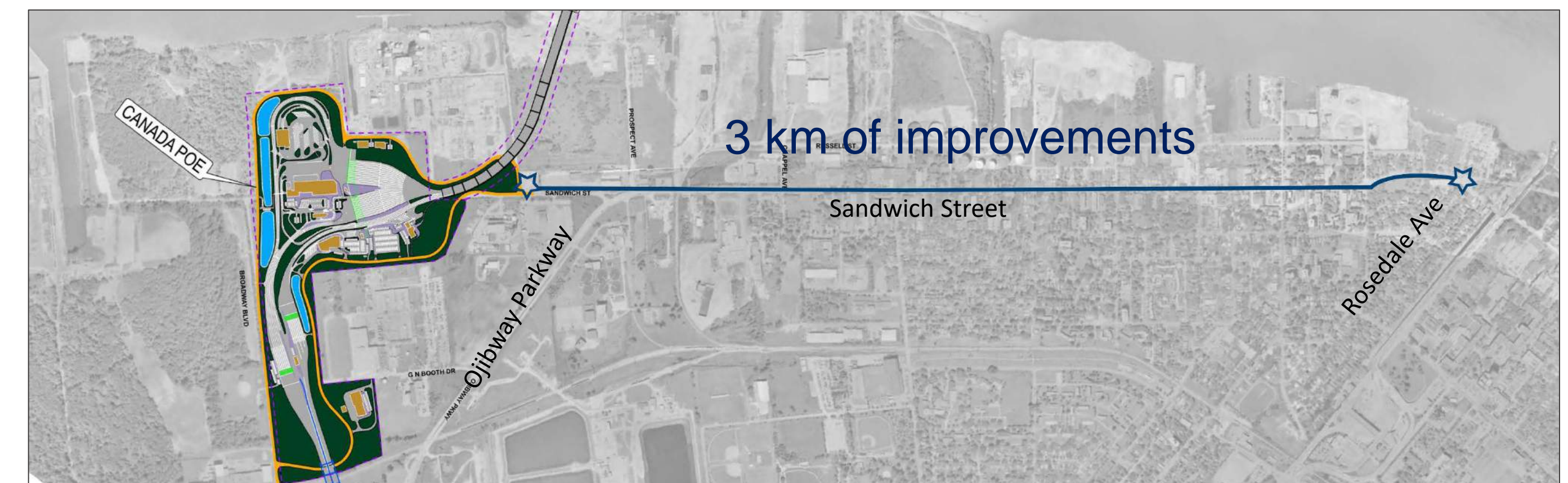
- **PEDESTRIAN BRIDGES:** Five new pedestrian bridges will be constructed over I-75 and in some cases, over the service drives. Each bridge will align with any multi-use trails in the area. Access points include Beard, Waterman, Solvay, Junction and Lansing Streets. The pedestrian bridge identified through the 2008 Environmental Impact Statement at Morrell Street has been moved to Junction Street in response to extensive community consultation.
- **DECORATIVE BARRIERS:** Decorative security fencing will be provided around the north, east and west perimeter of the US POE with irrigated landscaping to provide an additional buffer to the community. An aesthetic perimeter wall will be installed along Jefferson Avenue that complements neighbouring facilities. New decorative security fencing will also be installed along the south side of West Jefferson Avenue adjacent to Historic Fort Wayne that meeting State Historic Preservation Office review..
- **FORT STREET CYCLE TRACK:** A six-foot protected cycle track will be installed along both sides of Fort Street between Green and Junction Streets. The cycle tracks will be separated from traffic by a minimum three-foot raised buffer. Bicycle signals will also be required at intersections to separate vehicles.
- **TREES:** Deciduous shade trees will be planted along the parkway between the sidewalk and road every 25 feet between Springwells and Clark Streets. A similar treatment will be provided from the US POE to Interstate-75 crossings at Green, Campbell and Junction Streets, along Jefferson Avenue and along Fort Street between Green and Junction Streets.
- **CONTINUOUS ACCESSIBLE SIDEWALKS:** A continuous fully accessible sidewalk will be constructed along the City side of the Service Drive and between the Service Drive and I-75 main line to connect the entrance of each pedestrian bridge to the nearest intersection or to a signalized block crossing. Pedestrian countdown signals will be installed at all signalized intersections and mid-block crossings along the service drives.
- **GREENWAY:** A greenway will be constructed to connect pedestrians and cyclists from the Gordie Howe International Bridge to the I-75 Freeway crossings at Green Street and the new pedestrian bridge to be installed at Junction Street. Street design will include safe transition points from off-road paths to on-street bike lanes with appropriate wayfinding to make the transitions easy for users.



Sandwich Street Improvements

In recognition of Sandwich's role as a gateway community to Canada and in response to public consultation, WDBA is investing in improvements to Sandwich Street as part of the Gordie Howe International Bridge project. Here are just a few highlights of the work to be undertaken by Bridging North America along the Sandwich Street corridor:

- **DELIVERY:** These improvements are being delivered in addition to the initiatives to be undertaken as part of the Community Benefits Plan. This work is estimated to be a \$12 million investment. Construction is anticipated to begin in 2020 subject to consultation.
- **LOCATION:** Approximately 3 km of Sandwich Street from the intersection of Sandwich Street and Ojibway Parkway to the Rosedale Avenue roundabout will see improvements to the current infrastructure.
- **DESIGN:** Improvements to the Sandwich Street Corridor design will align with the Sandwich Town Community Improvement Plan, Sandwich Heritage Conservation District Plan and Sandwich Town Urban Design Guidelines.
- **ROAD IMPROVEMENTS:** The Sandwich Street Corridor will be fully re-paved in accordance with municipal standards. All commercial and residential driveway approaches within the municipal right of-way will also be replaced.



- **STREETSCAPING:** Attractive streetscaping such as planters, benches, garbage receptacles, etc. will be considered for incorporation into the Sandwich Street Corridor improvements.
- **ACCESSIBILITY:** All sidewalks within the Sandwich Street Corridor will be replaced and will meet accessibility standards.
- **INTERSECTION IMPROVEMENTS:** Bump outs will be incorporated at some intersections to enhance pedestrian safety when crossing the roadway. Some intersections within the designated truck route section will also see enhancements to accommodate local truck movements.



Preparatory Work Achievements

Significant progress has been made to turn over a construction-ready site to Bridging North America. Over \$350 million has been invested to date in readying the Canadian and US lands required for construction. Take a look at some of the progress:

Canadian Port of Entry

- **3 km (1.8 miles)** of new access road for adjacent businesses and properties completed
- Over **1 million tonnes** of fill has been placed to grade and sculpt the site
- More than **27 km (almost 16 miles)** of cabling has been relocated
- Over **902 tonnes** of waste material has been collected
- **Three** transmission towers have been constructed as part of the hydro transmission and distribution activities
- Construction of **two** new stormwater management ponds and rehabilitation of the Broadway Drain is complete
- Over **6 km (over 3.5 miles)** of gas lines have been installed
- More than **4.6 km (almost 3 miles)** of exclusion fence has been erected to limit access to the site by species at risk, wildlife and people.

US Port of Entry

- **96 percent** of properties required for US project components have been acquired/under control
- **93 percent** of required resident and business relocations have been completed
- **263** buildings have been demolished on properties under MDOT's control
- Over **30,000 ft (almost 6 miles)** of electric cables have been installed
- Over **6,640 cubic yards** of debris have been removed from vacant parcels of land
- Over **4,600** trees have been removed from lands already acquired for the project
- Construction of **eight** new sewer crossings on a portion of I-75 have been completed
- Over **1,600 ft (over half a mile)** of pipes and box culverts have been installed
- Over **7,700 ft (over 1.5 miles)** of gas lines have been installed to meet current and future needs.



US Works: Property Acquisition

- An extensive environmental study (EIS) completed as part of the DRIC study in 2005-2009 identified the properties that would be required for the construction of the US Port of Entry, the required Gordie Howe International Bridge foundations and the Michigan Interchange.
- 636 land parcels are required for the Gordie Howe International Bridge project.
- To date, MDOT has acquired and/or has control of 96 per cent of the required parcels.
- Relocation assistance and support will continue to be provided.
- The condemnation process will be carried out as needed on a parcel-by-parcel basis.

Property by the Numbers

636 total land parcels required

229 residential relocations required

88 business relocations required

96 per cent of total property acquired/in control

263 structures demolished or in demolition process as of November 18, 2018



Construction Schedule

	2018	2019	2020	2021	2022	2023	2024
Project Start-up	█						
Design	█	█	█				
Construction	█	█	█	█	█	█	█
Turnover and Commissioning						█	█

- Estimated construction duration is **74 months**
- It is anticipated that we will have the Gordie Howe International Bridge open to traffic by the end of **2024**.



Construction Look Ahead

Work in Progress in Canada and the US

Design: Advancing design from 30% to construction ready

Survey: Crews review property lines, site details, verify conditions

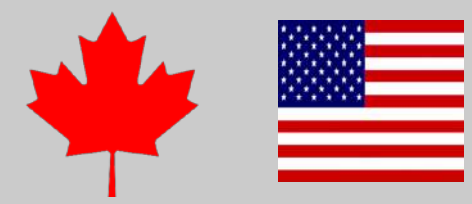
Geotechnical Exploration: Crews drill into the ground to survey and verify conditions

Site Prep: Clearing and grubbing, install construction fencing and erosion and sedimentation controls

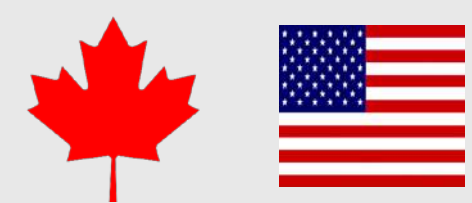
Public Consultation

Construction monitoring and mitigation

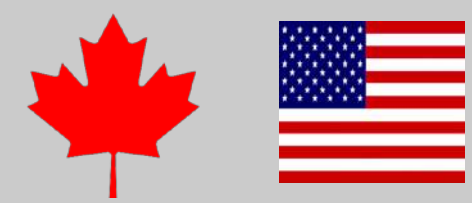
Upcoming Activities in Quarter 1, 2019



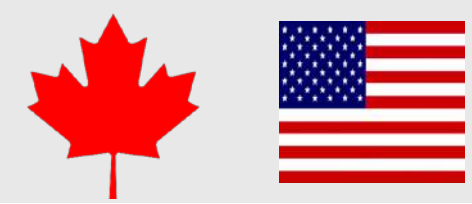
Design Continues: Advancing design from 30% to construction ready



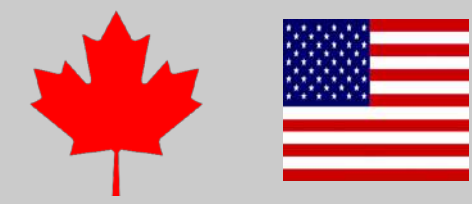
Survey: Crews review property lines, site details, verify conditions



Utility Surveys and Relocations



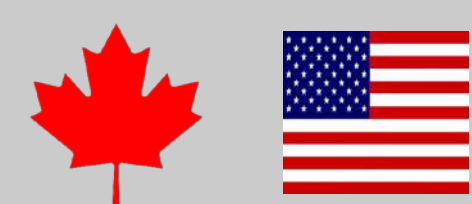
Site Clearing & Pre-Construction Activities



Fence Installation



Establish field offices and staging areas: Install fencing and office trailers



Test piles for bridge foundation: Integrity and quality assurance of pile and soil conditions



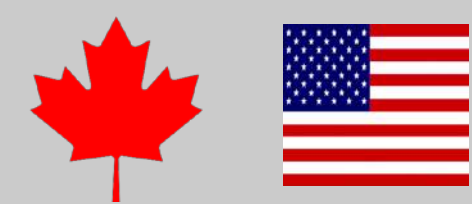
I-75 Interchange Early Works



US POE Road Closures



Sewer and siphon work near US POE: Strengthening work of existing lines near the POE and I-75 Interchange



Construction monitoring and mitigation



Mitigating Construction Impacts

The Detroit River International Crossing (DRIC) study was a comprehensive bi-national environmental study that identified requirements to mitigate potential negative impacts from a new crossing. WDBA and Bridging North America are committed to minimizing disruptions to communities and the environment and will implement steps to mitigate environmental disturbances and limit impacts to nearby residents, people traveling through the construction zone and nearby businesses.

The following list represents some of the mitigation measures that are required in Canada and/or US as appropriate.

Noise Mitigation

- Ensure all construction equipment is in good repair, fitted with functioning mufflers and complies with noise emission standards
- Limit noisy activities to daytime hours and in accordance with municipal noise bylaws
- Where possible, install noise barriers or berms in the early construction phases
- Maximize the distance between the construction staging areas and nearby receptors
- Provide regular updates to nearby residents and businesses on possible activities that will affect them

Dust Management

- Periodic watering or stabilization of disturbed and exposed soils
- Limit speed of vehicular traffic
- Use water sprays during loading/unloading of materials
- Sweep or water flush entrances to construction zones

Erosion and Sediment Control

- Develop and implement erosion and sediment control plans to protect surface waters, adjacent ecosystems and properties
- Follow provincial and state environmental guidelines for road construction
- Create temporary stormwater management ponds to manage water quality

Water Quality Protection and Management

- Protect and manage groundwater regimes for fish habitat and wetlands through design
- Develop salt management plans for construction and operation phases
- Create and maintain permanent stormwater management plans to control water quality

Archaeology/Cultural Resource Protection

- Continue to undertake archaeological and heritage investigations
- Report unexpected archaeological finds to the appropriate agencies during the construction phase

Traffic Disruptions

- Alert nearby residents and businesses of temporary traffic disruptions in advance when possible
- Ensure alternate routes are available
- Provide signage to alert drivers and pedestrians of closures or detours



Canada: Recognizing the Environment

The land around the Canadian Port of Entry is home to many species at risk plants and wildlife. WDBA is required develop and implement environmental mitigation plans as part of the Bridge to Strengthen Trade Act.



- SAR plants and habitat features found and removed prior to construction included:
 - 2,127 Willowleaf Aster Rhizomes
 - 497 Dense Blazing Star corm clusters
 - 10 Kentucky Coffee-trees
 - 2000+ seeds from many native prairie species
- Two SAR snakes – the Eastern Foxsnake and Butler’s Gartersnake – are known to live in the area of the POE.
- Snake salvages completed in 2016 did not find any SAR snakes within the POE perimeter
- Crews working within the POE lands are trained to respond appropriately if a SAR snake or other species is encountered.
- Enhancements to Broadway Drain play a key role in the POE’s stormwater management (SWM) system. SWM ponds collect and clean water from the perimeter access road and empty into the Broadway Drain, where the water flows into the Detroit River.
- The existing drain was re-constructed to provide fish and wildlife habitat, including snake hibernacula.



Community Benefits: Integrating the Gordie Howe International Bridge into the Region

A key project feature is the inclusion of a Community Benefits Plan that will have a positive impact on communities in Windsor and Detroit and reflects what our stakeholders have told us is important to them. Community benefits are identified opportunities that can advance economic, social or environmental conditions for the local communities. The inclusion of a Community Benefits Plan as an integral part of the Gordie Howe International Bridge project originates in the 2012 Canada-Michigan Crossing Agreement.

VISION: For the Gordie Howe International Bridge project, the Community Benefits Plan will:

- Provide economic opportunities in the host communities
- Contribute positively to workforce development programs
- Deliver neighbourhood improvements
- Ensure clear commitments and accountability from all parties for its delivery.

FRAMEWORK: Since 2015, more than 230 suggestions from Michigan and Ontario stakeholders have been received for consideration. To help ensure their vision is achieved, the principles of the I-Care Framework will be followed.

INTEGRATED

Community Benefits shall be an integral component of the Project carried out during the construction and operation periods.

COLLABORATIVE

Community Benefits shall reflect the input of the host communities and be delivered through partnerships, ensuring that the interests of the respective communities are taken into account.

ACCESSIBLE

Community Benefits shall be easy to understand, easily accessible, regularly measured and publicly reported.

REGIONAL

Community Benefits shall be reflective of the character of the region, tailored specifically for the region and provide value to the region.

ENTERPRISING

Community Benefits shall be comprised of new methods, ideas and innovative approaches to engage and benefit the neighbouring communities.



Community Benefits: Plan Components

The Community Benefits Plan for the Gordie Howe International Bridge project is comprised of two components:



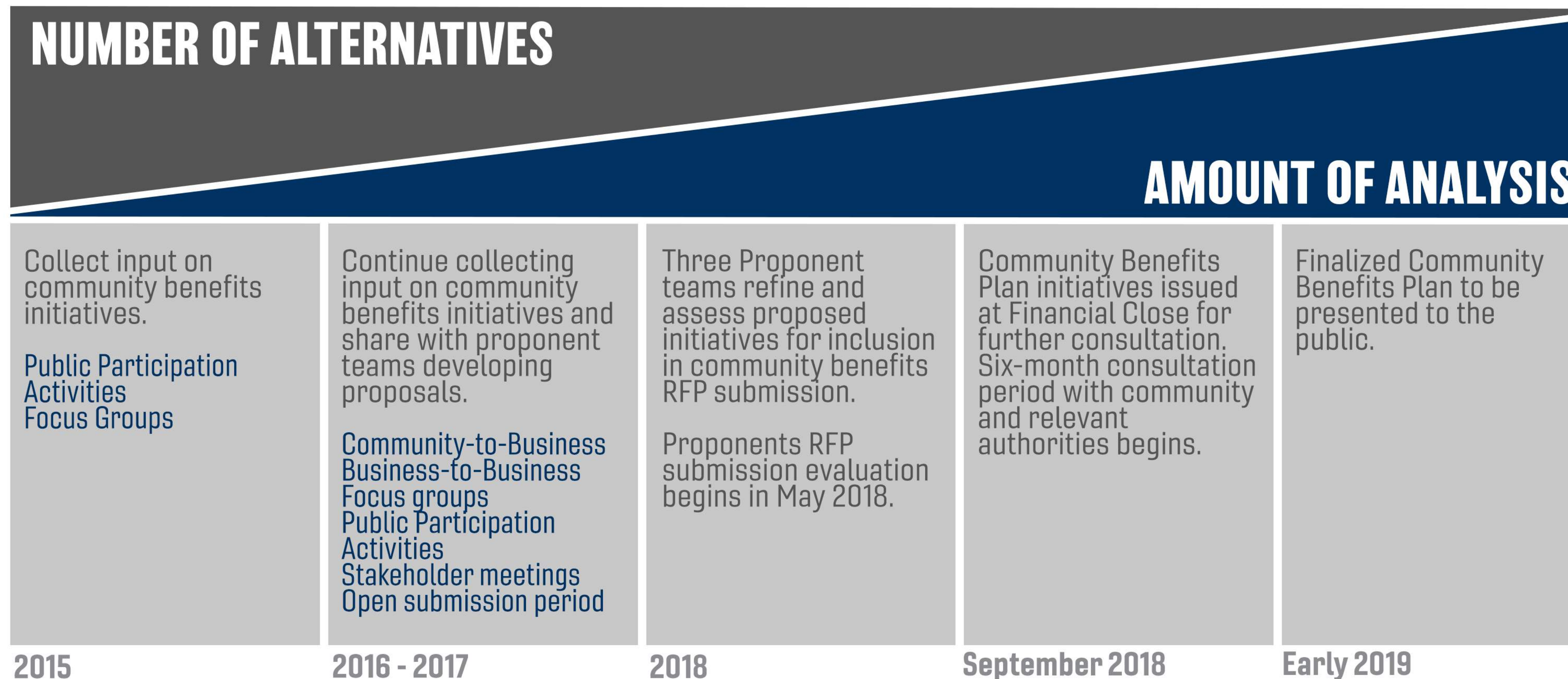
To effectively deliver the Workforce Development and Participation Strategy, BridgingNA will partner and collaborate with organizations and workforce development agencies with the experience and resources in place to support training and skills development initiatives. Further consultation will help shape the delivery.



Community Benefits: Consultation

EVALUATION OF COMMUNITY BENEFITS INITIATIVES

TIME 
 STEPS IN EVALUATION PROCESS 



CONTINUED CONSULTATION

Further consultation will be undertaken with the community and relevant authorities to discuss the proposed community benefits initiatives over a six-month period following Financial Close. The Final Community Benefits Plan will be presented to the public in early 2019.

PUBLIC PARTICIPATION

A Local Community Group composed of stakeholders will be formed to work as informal partners in the implementation phase of the Community Benefits Plan.

REPORTING

The Community Benefits Plan will include a robust documenting, tracking and reporting structure that demonstrates accountability to the region. The Community Benefits Plan will be posted on the project website once finalized as will quarterly reports.



Consultation and Communication

Public consultation will continue in Canada and the US throughout the project phases on many items prior to implementation, including:

- Aesthetics, Lighting, Visual Effects
- Sediment Erosion
- Air Quality
- Species at Risk/Invasive Species/Wildlife/Migratory Birds
- Archaeology
- Traffic/Local Roads
- Fish/Aquatics
- Vegetation/Trees
- Infrastructure
- Vibration
- Noise
- Waste/Spills/Excavated Materials
- Pedestrians/Bicycling Bridges at Michigan Interchange
- Water Quality/Groundwater/Stormwater/Surface Water

COMPLAINTS MANAGEMENT PROTOCOL

WDBA will act as the “one-window” source to address all public and stakeholder inquiries.

Have a question or concern?

- 1-844-322-1773
- info@wdbridge.com
- Arrange one-on-one meeting.

Our goal is to acknowledge all public inquiries within 24 hours and provide a detailed response within three-to-five business days.

All information will be collected in accordance with the *Freedom of Information Act, Access to Information Act* and the *Privacy Act* (Canadian Federal) and *Protection of Privacy Act* (Michigan).



Stay Connected

WDBA is engaging the community and its stakeholders as it works to build the Gordie Howe International Bridge project. There are many ways to stay connected with us.



Follow us
[@GordieHoweBrg](#)



Like us at
[@GordieHoweBridge](#)



Follow us at
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Connect with us at
WDBA-APWD



Subscribe to
[YouTube.com/GordieHoweBridge](#)



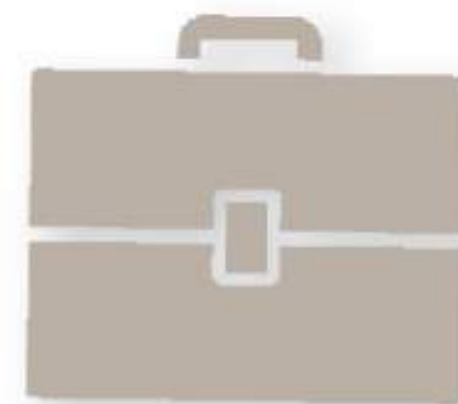
WDBA Website

Our website, [wdbridge.com](#), is your main source for up-to-date information on construction activities, news, P3 procurement process, employment opportunities and corporate reports.



Public Inquiries

Have a question about the project? Not only can you message us through social media, you can call us at 1-844-322-1773 or email us at info@wdbridge.com.



Our Office

WDBA's office provides a place where you can find information, talk to the team, ask questions and provide feedback. Our offices are located at:
100 Ouellette Avenue, Suite 400
Windsor, ON N9A 6T3



Join the Email list

Join our electronic mailing list by visiting our website and receive up-to-date information delivered right to your inbox.

