

Ponts JACQUES CARTIER + CHAMPLAIN Bridges Canadä

Planning 2021 Presentation of Major Work

Technical Media Briefing

May 4, 2021



Presenters

- + Sandra Martel Chief Executive Officer JCCBI
- Nathalie Lessard
 Director, Communications
 JCCBI
- Dominique Blouin
 Senior Director, Projects
 JCCBI
- + Simon Hébert
 Assistant Project Director
 NHSL

Outline

- + Our Mission and Work
- + Projects Planned for 2021
- + Deconstruction of the Original Champlain Bridge: Update
- + Question Period

Our Mission and Work Sandra Martel, Eng., Chief Executive Officer

Our mission and work



+ The four key aspects of our mission:

- Mobility: Help users get where they need to go
- Safety: For users and our infrastructure
- Longevity: Make sure our structures last long into the future
- Sustainable development: An approach that guides our actions

+ This work is part of our proactive asset management:

- Avoid corrective work
- Perform planning to limit impacts on mobility
- Plan work and developments as part of a network
- Optimize investments



4 Ponts JACQUES CARTIER + CHAMPLAIN Bridges

Investments planned for 2021-2022







S108 Champlain Bridge Deconstruction



Bonaventure

Expressway



Total planned investment of \$230M and creation of 675 direct jobs. Contribution to the economic recovery! ⁵ Ponts JACQUES CARTIER + CHAMPLAIN Bridges

Two awards of excellence



IAP2 Excellence in Public Participation Awards

Honourable Mention Participatory Approach, Champlain Bridge Deconstruction 5,000 participants (2019)



Grand Prix d'excellence en transport from the AQTr

Winter Viability Winter operation simulation project, Jacques Cartier Bridge multipurpose path and sidewalk (2019-2020)



Projects Planned for 2021 Dominique Blouin, Eng., Senior Director, Projects





9 Ponts JACQUES CARTIER + CHAMPLAIN Bridges



Work to revitalize the land under the Jacques Cartier Bridge (Zones B to H)

- Installation of bioretention basins to manage drainage water from the bridge
- Creation of pedestrian paths
- Planting of trees, shrubs and perennials
- Street furniture and lighting

Local traffic hindrances expected







Steel reinforcement and painting

- Partial closure of 2 lanes in each direction (7 nights)
- **Complete** closure of the sidewalk (5 nights)
- **Complete** closure of the multipurpose path (5 nights)





Construction of the new JCCBI Maintenance Centre:

- Offices for the Operations and Maintenance Team
- Storage space for equipment (signs, construction parts, etc.)
- Workshops (welding, electrical)
- Garage for maintenance vehicles
- Outdoor parking and refuelling area for vehicles

Work start: 2019 Building to be occupied: **Fall 2021** Deconstruction of the existing building (former toll station): Spring 2025



Honoré Mercier Bridge

=

Honoré Mercier Bridge





CHAMPLAIN Bridges



Honoré Mercier Bridge



Levelling and paving of on-ramps and off-ramps

- 8 weekend blitzes and 15 weekday night closures: complete closure of on-ramps and off-ramps (between June and September)
- 2 periods of 19 days: partial closure of the Hwy. 138 East access ramp (toward Montreal)



Bonaventure Expressway



Repairs to box beams

Toward downtown:

- **Complete** closure at Exit 2 (3 weekends and 27 nights)
- Partial closure at Exit 2 (12 weekends)
- **Partial** closure of 2 right-hand lanes (22 weeks)

Toward Samuel De Champlain Bridge:

- Complete closure at Wellington (3 weekends and 26 nights)
- Partial closure at Wellington (12 weekends)



Deconstruction of the Original Chappain Bridge Update Dominique Blouin, Eng., Senior Director, Projects Simon Hébert, Assistant Project Director, NHSL

Summary of the deconstruction project

5 components:

- 1. Deconstruction work
- 2. Environmental measures
- 3. Material reuse
- 4. 11 research and development projects
- 5. Héritage Champlain (shoreline redevelopment)

Deconstruction duration: 43 months

Scheduled end date: January 2024



43 months for the deconstruction



Work Update

TATATA

ANNUAL ST

Simon Hébert, Assistant Project Director NHSL



Deconstruction: Île des Sœurs sector

Bridge abutment and 9 spans deconstructed over Île des Sœurs and the jetty

- + Construction of two fish migration corridors
- Approximately 100 items for reuse and for the R&D projects were removed



The construction site in pictures









Removal of permanent reinforcements (modular trusses) under the edge girders Start-up of marine equipment: cranes, catamaran barges, tugs, lifting equipment





Deconstruction over the river

65% of the project: Away from residences

Method: System of platforms attached to lifting towers installed on a catamaran barge

- 1. Preparatory work dismantling and removal of:
 - Signage, street lights, etc.
 - R&D components
 - Permanent reinforcements
- 2. Span recovered with the platform system and deconstructed on the barge
- 3. Barge-based mechanical deconstruction of the piers and footings above and below the water level
- 4. Debris disposal by barge



Other Aspects of the Deconstruction Project Dominique Blouin, Eng., Senior Director, Projects

TZVALZY

Residents' quality of life

On-site measures in place

- Marked transportation routes
- Restricted transportation hours: about 20 trucks/day
- Dust control (foggers, windbreaks, road maintenance, etc.)
- + Sound level meters (sound levels)
- + Air-quality measuring stations
- + Real-time monitoring at the site

Only 1 complaint during 9 months of work!



Environmental protection measures

- Fish habitat compensation project: Redevelopment of a piece of farmland in Saint-Ignace-de-Loyola (Saint-Pierre Lake) into a floodplain
- Minimizing GHG emissions: Takers of recyclable materials located within a 150-km radius of the deconstruction site
- + Creation of two fish migration corridors around the IDS jetty
- + Material traceability program: Real-time tracking of materials, from the construction site to the taker's site





For the second secon

- Projects involving structural components from the bridge (concrete, steel and reinforcements)
- + Recovery of some bridge components for the program
- R&D projects planned as per NHSL's schedule
- Research project on the efficacy of fish migration corridors (INRS)



Material reuse





250,000 tonnes of concrete 25,000 tonnes of steel 12,000 tonnes of asphalt

- + Reuse of 400 steel components: online catalogue
- Call for participation in progress: competition submission form
- + Personal, corporate or public projects: artistic, recreational, cultural, infrastructure or urban ecology projects



To follow the progress of the project

A CINERAL

Nathalie Lessard, Director, Communications

Communication tools

Various platforms:

- Website: champlaindeconstruction.ca
 - Details about all aspects of the project
 - Cameras with live images from the site
 - Work advisories



Newsletter

- Public meetings with the residents of Brossard and IDS
- Questions and complaints : communications@pjcci.ca
- Social media







Les Ponts Jacques Cartier et Champlain Inc. The Jacques Cartier and Champlain Bridges Inc.

Participez à la conversation / Join the conversation JacquesCartierChamplain.ca