Summary of Issues
Eastern Bridge Project

The Summary of Issues outlines the key issues that the Impact Assessment Agency of Canada (IAAC) considers relevant for the federal impact assessment process for the Eastern Bridge Project (the project). The proponent's response to the Summary of Issues will support decision-making by IAAC on whether further assessment is required under section 16 of the *Impact Assessment Act* (IAA). If further assessment is required, the key issues outlined below and the proponent's response will inform the scope of the impact assessment, and the development of the Tailored Information and Studies Guidelines and plans, as appropriate.

As the project is a *federal work or undertaking* and is partially being carried out on federal lands, the definition of adverse effects within federal jurisdiction under section 2 of the IAA encompasses a broader range of potential environmental, health, social and economic effects. This broader scope is reflected in the key issues identified below.

The Summary of Issues was informed by input from federal, provincial and municipal authorities, Indigenous groups, and the public received during the comment period on the proponent's Summary of the Initial Project Description. The proponent is encouraged to read all submissions on the Canadian Impact Assessment Registry Internet site for the project (Reference Number 90709).

The proponent is required to describe how it intends to address the key issues identified below as part of the development of its project. A high-level description is sufficient. Where relevant, the proponent is encouraged to identify if the key issues will be addressed through existing legislative and regulatory frameworks (i.e., legislation or regulation), by proponent commitments to best practices, policies or standards, or both.

Key Issues

Fish and fish habitat

- Concerns regarding harmful alteration, disruption or destruction of fish habitat in the Ottawa River, including loss or damage of riverbed substrate and bank vegetation, and changes to flow conveyance, sediment transport, turbidity, scour and deposition, from permanent bridge structures and temporary in-water construction works such as dredging, site isolation, dewatering, possible cofferdams, barges, marine cranes and temporary docks or jetties.
- Concerns regarding disturbances or harm to fish in the Ottawa River due to underwater noise and vibration from engines, pile driving, excavation and other construction activities.
- Concerns that equipment contact and dewatering of in-water work areas could injure or kill fish in the Ottawa River through physical contact, stranding, impingement or entrainment.

- Concerns regarding effects to fish and fish habitat due to operational runoff from the bridge and approach roads carrying suspended sediments, road salts, hydrocarbons, metals and other pollutants into the Ottawa River and other watercourses.
- Concerns regarding destruction or alteration of fish habitat or passages in potential fish-supporting ponds and smaller tributaries to the Ottawa River due to bridge approach and other road works in Ottawa and Gatineau.

Migratory birds

- Concerns regarding harm to migratory birds, nests and eggs, including colonial nesting areas, due to vegetation clearing and construction activities.
- Concerns about loss of nesting, feeding, migration and stopover habitat along the Sir George-Etienne Parkway-Aviation Parkway corridor, Kettle Island and the Ottawa River due to vegetation clearing and construction activities.
- Concerns about increased mortality or injury to migratory birds using the Sir George-Etienne Parkway-Aviation Parkway corridor, Kettle Island and the Ottawa River due to increased vehicle traffic.
- Concerns about sensory disturbance to migratory birds due to construction and operational light, noise and vibration.
- Concern that migratory birds nesting on new bridge structures may be harmed during operational maintenance activities.

Indigenous Peoples' current use of lands and resources for traditional purposes

- Concerns about effects to current and historical use, harvesting resources and access around Kettle Island, the Ottawa River and shorelines.
- Concerns that historic and ongoing use of Ottawa River for navigation have been overlooked and the need for the inclusion of an Algonquin-led navigation study.
- Concerns about safe access to Ottawa River, and impacts to movement between places used for traditional and cultural purposes.
- Concerns regarding effects to Lake sturgeon, American eel and other sensitive fish, with potential implications for species of cultural and ecological importance to Indigenous Peoples.

Structures, sites, or things of historical, archaeological, paleontological, or architectural significance to Indigenous Peoples

- Concerns about effects to terrestrial and underwater archaeological resources, including potential burial grounds, and requests for meaningful involvement in surveys, protection, artifact handling and chance-find responses.

Indigenous Peoples' physical and cultural heritage

- Concerns about changes to cultural landscapes, and effects to spiritual significance and continuing relationships with Kettle Island and the Ottawa River, and requests to seek community-informed identification and protection of these values before alignment and construction decisions.

Indigenous Peoples' health, social, and economic conditions

- Concerns about Indigenous health and community well-being, including effects on drinking water, contaminated resources and food security.

Indigenous Peoples' Rights

- Concerns about impacts to the exercise of rights of Indigenous peoples resulting from effects on Kettle Island and the Ottawa River watershed, including the project's contribution to adverse cumulative effects on exercise of rights to lands, waters, and resources used for traditional purposes.

Other Key Issues Related to Federal Lands and Federal Undertaking

Accidents and malfunctions

- Concerns that accidental releases of contaminants during construction, and accidental releases of dangerous or hazardous substances from vehicle collisions during operation, could adversely impact Gatineau's downstream drinking water intake and aquatic species and their habitats within Ottawa River.

Alternatives to the project / alternative means of carrying out the project

- Concerns that route options with fewer community and environmental effects, such as corridors and alignment choices that are east or west of the proposed corridor, regional bypasses, ring roads and alternative approach alignments, have been overlooked or dismissed without a transparent comparison.
- Concerns that a tunnel under the Ottawa River, including a downtown truck tunnel or depressed and tunneled approach-road sections, have not been adequately considered as an alternative to bridge infrastructure.

Effects of the environment on the project

- Concerns that limited site-specific geological, geotechnical and hydrogeological information may not adequately support seismic hazard assessment, project design or effects conclusions.

Human health and well-being

- Concerns about increased noise and vibration at nearby residences, land-use areas and sensitive receptors, including Montfort Hospital, due to temporary construction and permanent operational disturbance from ground-disturbing activities, heavy trucks and equipment, increased traffic and nighttime movements.
- Concerns about local health effects to people in nearby residences, schools, childcare facilities, parks and Montfort Hospital, including cumulative exposure, from construction dust, equipment emissions and traffic-related air pollutants released during operation (e.g., NO_x, SO_x, CO, ozone, VOCs, particulate matter).
- Concerns that interacting noise, air pollution, lighting, traffic and loss of green space will reduce tranquility, sense of safety, opportunities for physical activity and overall mental health and well-being of neighbouring residents.
- Concerns about compromised public safety along the corridor, particularly for children, pedestrians and cyclists at crossings and along active-transportation routes due to increased vehicle and heavy-truck traffic.
- Concerns that construction activities, including possible blasting, would disturb groundwater levels, contaminate wells or affect septic systems in neighbouring communities.
- Concerns that excavation, dewatering and the management of waste, soil, sediment and other excess materials could mobilize existing contamination and affect lands, waters, and communities, creating exposure risks to nearby neighbourhood and land-users.

Navigation

- Concerns that bridge structures, alignment, approaches and tall construction equipment could constrain protected airspace and could compromise Rockcliffe Airport operations.
- Concerns that temporary construction and permanent infrastructure could restrict, alter or endanger commercial and recreational navigation in Ottawa River, including navigation activities associated with public facilities (i.e., NCC River House and the Blair Road boat launch).

Social and economic conditions

- Concerns about access to, use and operation of, federal and other public facilities near the proposed corridor, including the RCMP Musical Ride grounds, the Canada Aviation and Space Museum, Rockcliffe Airport, the NCC River House, the Blair Road boat launch, Montfort Hospital and Collège La Cité, due to construction and operation activities.
- Concerns that the bridge alignment, elevated approaches and noise barriers on roadways could reduce or fragment green spaces, pathways and recreational areas, such as the Ottawa River Pathway, Aviation Pathway, Sir George-Étienne Cartier Park, and Club de Golf Tecumseh, and alter river views, landscape character and enjoyment of public and residential spaces.

Species at risk

- Concerns that habitat loss and disturbance from construction activities could adversely affect terrestrial species at risk (e.g., bank swallow, western chorus frog, butternut, little brown myotis, tri-coloured bat) and their habitats, including federally listed critical habitat.
- Concerns regarding harm to hickorynut and other aquatic species of conservation concern, or alteration of habitat, due to substrate disturbance, dewatering, sedimentation, changed flows, scour, noise, contamination, and changes to food availability resulting from permanent and temporary in-water works.

Terrestrial wildlife and their habitat

- Concerns regarding the loss, degradation and reduced ecological connectivity of wooded, riparian and other terrestrial habitats along the project corridor, such as Kettle Island, Montfort Woods, and the Sir George-Étienne Cartier Park, due to project construction and associated activities.
- Concerns about sensory disturbances to terrestrial wildlife due to construction and operational light, noise and vibration.
- Concerns about increased wildlife injury or mortality during construction and operation due to new road barriers and higher traffic volumes.
- Concerns about the spread of invasive species, and the resulting competition and degradation of native species and habitats, due to construction activities and equipment.

Wetlands

- Concerns about the loss, alteration and fragmentation of wetlands due to construction and operation through changes in their hydrological, ecological and abiotic functions.

Appendix – Other comments, advice, and recommendations

The Impact Assessment Agency of Canada (IAAC) is providing the following list of other comments, advice, and recommendations at this time for information purposes only. The proponent is encouraged to consult the Canadian Impact Assessment Registry Internet site for the project (Reference Number 90709) to review the original comments. If further assessment is required, then comments, advice, and recommendations listed below may inform the scope of the impact assessment, and the development of the Tailored Information and Studies Guidelines and plans, as appropriate.

Indigenous engagement and consultation

- Concerns about consultation and engagement, with requests for early, substantive and adequately funded ongoing participation, clear treatment of collaboration commitments, and involvement in developing, reviewing and implementing mitigation, compensation, restoration and monitoring.
- Concerns that distance to an Indigenous community's administrative centre is used as a proxy for rights, current use, cultural relationships or the potential related effects of the project.
- Requests for inclusive and safe participation for women, youth, Elders and harvesters, also recognizing women's roles as water keepers.
- Requests for Indigenous Knowledge and community-led studies to inform baseline conditions and alternatives, and for community-informed assessments of potential effects on rights, interests and responsibilities relating to Kettle Island and the Ottawa River, with community control, confidentiality and data-governance protections for knowledge and study information.
- Requests for community-specific assessments of social and economic effects, alongside meaningful employment, training, procurement and other economic participation opportunities developed directly with each community.

Public engagement

- Concerns that public and stakeholder engagement has not been timely, transparent, inclusive or sufficiently representative of directly affected communities and user groups, and that limited notice, gaps in participation and the apparent advancement of a preferred corridor could prevent public input from meaningfully informing route selection, project design and decision-making.

Acoustic environment

- Concerns about the effectiveness of noise mitigation measures, such as the placement of barriers, buffers, and setbacks, and whether depressed or tunneled approaches and roadways have been considered to mitigate effects of noise.

Climate change and greenhouse gas emissions

- Concerns that additional road capacity, car dependence, truck idling and induced travel could increase greenhouse gas emissions and conflict with the Government of Canada's climate commitments.

Cumulative effects

- Concerns that the bridge, induced development, existing roads and river pressures, and other regional infrastructure projects, such as the Alto High-Speed Rail Project, could produce overlapping, permanent effects on communities, noise, air quality, habitats and watersheds.

Effects of the environment on the project

- Concerns that climate vulnerability, flood exposure and future drainage demands may not be adequately reflected in the selection and design of the bridge and its approaches.
- Concerns about slope instability and the possible recurrence and extent of retrogressive landslides near the corridor from ground disturbance, including the marine-terrace escarpment along Boulevard de la Verendrye.

Follow-up and monitoring

- Concerns about the implementation and effectiveness of proposed mitigation measures and how follow-up monitoring would address unexpected effects, ineffective mitigation measures and proponent accountability.

Land acquisition

- Concerns about which properties are required (permanently or temporarily), expropriation, relocation, and fair compensation, and requests from landowners for early, property-specific information and transparent valuation and timing that do not disadvantage them through project-related uncertainty.

Social and economic conditions

- Concerns that changes in accessibility could influence consumer spending, the location and pace of housing, employment and commercial development, affecting household and business location decisions, densification, urban sprawl and long-term growth. Participants emphasize the need to align the project with municipal and provincial planning priorities, including protected green spaces, waterfront plans, planned neighbourhoods and infrastructure investments.
- Concerns that construction and permanent traffic disturbances could reduce residents' property values, and that property-specific studies, effective mitigation and provisions for compensation or protection may not adequately address these effects.
- Concerns that the project may provide uneven economic benefits to Gatineau and Ottawa in terms of construction and operational employment, local procurement, investment, and workforce mobility.

Transportation

- Concerns that a new bridge would shift congestion onto already constrained highways, intersections and residential streets, while more traffic is generated due to added capacity and development.
- Concerns that traffic forecasts may not adequately account for current conditions, population and employment growth, induced demand, truck destinations, route choice and planned development, creating uncertainty regarding anticipated traffic and congestion benefits.
- Concerns that constrained approaches, intersections and highway ramps could exceed local capacity or require unsuitable truck movements resulting in queueing, unsafe turning movements, traffic spillover and reduced access to adjacent neighbourhoods.

- Concerns that the project may prioritize the movement of private vehicles and heavy trucks, without providing effective integration with OC Transpo, STO, O-Train and other cross-river transit services, and without considering improvements to existing crossings, transit, rail, walking and cycling, and measures to reduce or better manage traffic.

Terrestrial wildlife and their habitat

- Concerns that the existing baseline information may be insufficient to characterize terrestrial wildlife, vegetation and habitat conditions across the full project alignment, including the presence and seasonal use of habitats by turtles, snakes, amphibians and other wildlife.

Vulnerable population groups (and GBA+)

- Concerns that GBA+ considerations have not meaningfully informed the project design, and that lower-income communities, children, mobility-device users and other affected groups may bear disproportionate burdens and experience access barriers to community infrastructures, the Montfort Hospital, and services in proximity to the project area.

Permits, authorizations and guidance

- Fisheries and Oceans Canada (DFO) noted the likely requirement for a *Fisheries Act* authorization to address permanent and temporary effects on fish and fish habitat, and requests sufficient information on in-water works and associated habitat effects to establish avoidance, mitigation, restoration, offsetting and monitoring requirements.
- DFO noted the potential requirement for a *Species at Risk Act* permit if the Project is likely to affect Hickorynut, and requests occurrence mapping against alternatives and proposed works, assessment of direct and indirect effects, and species-specific avoidance and mitigation measures.
- Environment and Climate Change Canada (ECCC) noted the potential requirement for permits under the *Species at Risk Act* for terrestrial species at risk and requested mapping of project footprints relative to species at risk, residences and critical habitat, together with species-specific effects and mitigation information, to determine applicable permitting requirements for species at risk on federal lands.
- ECCC requested a preliminary assessment of permit requirements under the *Migratory Birds Convention Act, 1994*, supported by information on habitat loss, collision risks, lighting impacts and residual effects. Incorporate appropriate nest-protection measures and bird-safe design principles.
- Transport Canada (TC) identified the *Canadian Navigable Waters Act* review and approval process as a means of addressing navigation effects and requested information on navigation use, channel dimensions, bridge clearances, pier locations and construction activities, together with measures to maintain safe navigation during construction and operation.
- TC requests an aeronautical assessment of obstacle surfaces, flight procedures, airport infrastructure and mitigation, with coordination among the proponent, TC, NAV CANADA and airport operators.
- DFO recommends using the *Méthode de classification des habitats fluviaux* (French only) to classify and map fish habitat and quantify permanent and temporary effects by habitat type and function.
- ECCC recommends considering the *Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities*, supported by construction- and operation-phase air quality assessments, emission-reduction measures and follow-up monitoring to verify effectiveness and identify corrective actions.

- ECCC recommends correcting the reference to suspended-solids thresholds and using the Canadian Council of Ministers of the Environment (CCME) Canadian Water Quality Guidelines for the Protection of Aquatic Life — Total Particulate Matter when assessing ambient water quality and related mitigation measures.