COUNCIL REPORT

WELLINGTON BRIDGE (B003) REPLACEMENT PROJECT

Environmental Impact Assessment

Recommendation

That Executive Committee recommend to City Council:

That the Environmental Impact Assessment for the Wellington Bridge (B003) Replacement Project, as outlined in Attachment 1 of the October 30, 2024, Integrated Infrastructure Services report IIS02490, be approved.

Requested Action		Council decision required	
ConnectEdmonton's Guiding Principle		**ConnectEdmonton Strategic Goals**	
CONNECTED This unifies our work to achieve our strategic goals.		**Urban Places**	
City Plan Values	ACCESS		
City Plan Big City Move(s)	A rebuildable city	**Relationship to Council's Strategic Priorities**	Mobility Network
Corporate Business Plan	Serving Edmontonians		
Council Policy, Program or Project Relationships	• Bridge Renewal Program		
Related Council Discussions	• N/A		

Executive Summary

- This report requests City Council's approval of the Environmental Impact Assessment (EIA) included in Attachment 1 for the planned Wellington Bridge (bridge number B003) replacement (the Project) within the River Valley. Construction of the new replacement bridge is anticipated to begin in 2025, funded as part of the Bridge Renewal Program.

- The EIA describes the Project's potential environmental impacts on steep slopes with landslide areas, an unnamed watercourse beneath the bridge, vegetation in Ramsey Ravine, bird nesting habitat and a bat colony maternity roost within the existing bridge. It concludes that any potential adverse effects related to the construction of the replacement bridge can be tempered by applying appropriate mitigation measures during construction.
- Approval of this report demonstrates the City's commitment to environmental reviews, environmental permitting, environmentally sound design, and ensuring the City's environmental stewardship objectives are met during the construction of this Project.

REPORT

Wellington Bridge is a three-span concrete arch bridge that carries traffic along 102 Avenue over Ramsey Ravine between Wellington Crescent NW and Churchill Crescent NW in Edmonton. The bridge was constructed in 1932. It is now in poor condition and has reached the end of its service life. Since 2014, the bridge has been supported by a temporary reinforcement system to safely maintain vehicle traffic until the bridge is replaced. The bridge requires replacement to maintain safe operation. The timing of the replacement has been coordinated with other bridge and neighbourhood renewal projects, the Valley Line West LRT construction and is based on funding availability.

Ramsey Ravine is part of the North Saskatchewan River Valley and is within the North Saskatchewan River Valley Area Redevelopment Plan (ARP), Bylaw 7188. The ravine area under the bridge is located within the river valley's boundaries, triggering the need for an environmental review pursuant to Bylaw 7188.

The replacement bridge will occupy a similar footprint as the existing bridge with a slightly wider north side to accommodate a shared pathway with barriers to ensure the safety of all users. The new bridge and widened approach roads will fit within the existing road right-of-way and, as a result, no land acquisition is required for the enhancement. However, to facilitate construction access into the ravine and for general site operations, additional space will be required during construction beyond the right-of-way width. The affected properties are owned by the City of Edmonton.

The EIA (Attachment 1) outlines current conditions in the project area, evaluates potential risks, and identifies adverse impacts. It is focused on construction activities that must be eliminated, minimized or mitigated through design, landscaping and construction measures. Attachment 2 outlines further environmental background on impacts and mitigations.

Potential environmental impacts are anticipated to be localized within the project area. The project is anticipated to result in minimal cumulative impacts. Localized positive impacts related to slope stability and erosion issues in the project area are expected through slope naturalization and bioengineering designs.

Some of the potential impacts and mitigations identified in the EIA include:

- Steep and unstable slopes in the Ramsey Ravine:

    - Impacts include slope failure from heavy equipment operating on the top of the slopes during construction and/or the improper design and installation of infrastructure resulting in slope failure.
    - Mitigations include completing a detailed slope stability assessment of the proposed construction access into the ravine prior to the construction, implementing geotechnical recommendations, and including native woody plant species with deep binding roots in the restoration plan.
    - A more naturalized approach is planned for restoring the temporary workspaces after construction. The approach will include slope protection and revegetation with plant species appropriate to the ravine and restoration.
- Soil contaminants:
    - Impacts include soil contamination from spills of construction materials or equipment leaks, impacts on soils with existing salinity from historical and current use of road salts, removal and replacement of native topsoil with non-native fill, and erosion of exposed soil resulting in material loss.
    - Mitigations include using double containment for hazardous material storage, installing drip trays beneath stationary equipment, removing and stockpiling native topsoil from the Ramsey Ravine separately from other materials, and using Erosion and Sediment Control (ESC) measures to prevent erosion and loss of native topsoil from the stockpile.
    - Further mitigation includes ensuring the contractor's Environmental Construction Operations (ECO) plan includes material storage and handling protocols, and an ESC plan.
- Groundwater contamination:
    - Impacts include excess groundwater withdrawal from construction dewatering activities and contamination of groundwater within excavations from construction materials.
    - Mitigation measures include material storage and handling practices in the project specific ECO Plan and awareness of groundwater in open excavation.
- Surface water and fish habitat:
    - Impacts include direct stormwater runoff into the Ramsey Ravine, erosion of the watercourse beneath Wellington Bridge due to increased water flow and/or velocity during construction and/or operation phases, sedimentation of the watercourse beneath Wellington Bridge from erosion, and contamination of surface water from spills of construction materials or equipment leaks.
    - Mitigation measures include appropriate design features to prevent stormwater runoff directly into the Ramsey Ravine, ESC measures in the project specific ECO Plan to control the water runoff from the construction areas, material storage and handling practices in the ECO Plan, use of double containment for hazardous materials storage, avoid using hazardous materials near the water course or catch basins, and routine inspection of equipment and construction area to ensure hazardous materials are contained and stored adequately.
    - The open channel in the unnamed watercourse beneath the bridge will be reinstated and daylighted and the natural channel will be established. Successful integration of

daylighting work will improve ecological and hydrological connectivity through Ramsy Ravine.

- Vegetation loss, tree damage and invasive species:
  - Impacts include vegetation loss resulting from construction activities.
  - Mitigations include minimizing native plant removal and a landscape/reclamation plan for revegetation with native species similar to existing conditions.
  - Other mitigations include developing a Tree Protection Plan and cleaning equipment before moving into the project area, which will help reduce weed species' potential transfer and spread.
- Wildlife and wildlife habitat disturbance and loss:
  - Impacts include the loss of a maternity roosting site for little brown bats within the bridge (i.e., an anthropogenic roost), loss of bird nesting habitat from the demolition of the bridge and removal of vegetation for construction and operation.
  - Mitigations include a bat mitigation plan for implementation in advance of construction (e.g., installing new bat boxes) and replanting native plant communities after construction.
  - Further mitigations include reviewing the timing of vegetation clearing and tree removal to minimize disruption to wildlife, including scheduling demolition and vegetation clearing to occur outside the breeding bird period to reduce the risk of roosting individual bats.
  - Further mitigation includes ensuring the contractor's Environmental Construction Operations (ECO) plan includes worker/wildlife encounter protocols.
- Ecological connectivity/ wildlife movement:
  - The proposed replacement bridge will maintain similar conditions for wildlife passage compared to existing conditions. No additional mitigation measures are required.
  - Wildlife passage will be maintained during construction, construction activities will be limited during the day, lighting will be confined within the construction area, and any temporarily disturbed areas within the Ramsey Ravine will be revegetated after the construction.
- Historical Resources:
  - The project received Historical Resources Act Approval (HRA number: 4715-20-0061-003) from Alberta Culture, Multiculturalism and Status of Women (ACMSW) on April 13, 2021. Since the bridge is one of the oldest bridges in Edmonton, documentation of the historic structure would be required prior to the construction. As outlined by ACMSW, there were no requirements for archaeological, palaeontological and aboriginal traditional use sites, and provincially designated historic resources. An amendment to this approval will be required for ground disturbance in the additional project area identified during the preliminary design update.
  - If historical or archaeological resources are discovered during construction, all work will be immediately suspended and ACMSW will be contacted.

Budget/Financial Implications

The replacement of the Wellington Bridge is funded through the City's Transportation: Bridges & Auxiliary Structures - Renewal Capital Profile (CM-24-0000) as part of the 2023-2026 Capital Budget. A standalone capital profile will be submitted for Council approval in the Fall 2024 Supplemental Capital Budget Adjustment.

Legal Implications

Section 3.4.3 of the North Saskatchewan River Valley Area Redevelopment Plan requires City Council to approve the attached EIA (Attachment 1) for the planned construction of the Wellington Bridge replacement before the proposed development can proceed to construction.

Community Insight

Stakeholder engagement was conducted during the preliminary design phase of the project. In addition to internal City stakeholder coordination, introductory project letters were sent to various external stakeholders, including business associations, community leagues, environmental organizations, and river valley and active transportation groups. Meetings were arranged with the groups that indicated interest after receiving the introductory project letter.

Over the duration of the design process, meetings (a combination of virtual and in-person) were held with the following stakeholders to better understand local knowledge and feedback. This input was then considered as part of the design process.

- Old Glenora Conservation Association
- Edmonton Historical Board
- Paths for People
- Bike Edmonton
- 124 Street Business Association
- Edmonton Historical Board
- COE Heritage Resources
- Edmonton River Valley Conservation Coalition (ERVCC)
- Edmonton Arts Council (EAC)

Other stakeholders who were provided information about the project but did not request meetings as of the time of this report preparation included:

- Glenora Community League
- Grovenor Community League
- Wîhkwêntôwin Community League
- Schools: Progressive Academy, St. Vincent Catholic School, Westminster School, Glenora School
- Alberta Historic Resources Branch

Stakeholders generally supported the Project, while some expressed the importance of honouring the existing bridge structure. The bridge is included in the inventory of historic resources, though it is neither a provincial nor a municipal historic resource. Although the

existing bridge is not a historically designated structure, the project team is exploring features that will enhance its aesthetics, such as the use of Glenora street lamps.

The project team is committed to ensuring continued communication and information sharing with members of the public, area residents and stakeholders. The project webpage will continue to be updated with the most up-to-date information. Pre-construction communications will also be available to outline construction impacts or detours in advance of the construction start date.

GBA+

During the preliminary design phase of the project, a diverse range of communication tactics and public engagement strategies were implemented for stakeholders and members of the public to learn about the project and to share input. This included innovative ways to communicate with stakeholders during the COVID-19 pandemic. The project team shared an introductory letter to advise the stakeholders about the project intent, opportunities, timeline and potential outcomes. Based on the stakeholder interest, the project team met with them via one-on-one virtual meetings in order to collect their comments while complying with the COVID-19 requirements. This allowed the project team to gather feedback from different perspectives to identify additional design considerations to mitigate or remove barriers to equity and support equality of outcomes. In addition to this, the project team updated the project website regularly and communicated through project newsletters as the project progressed.

In addition to the stakeholder engagement activities noted above, another specific example of GBA+ consideration includes homelessness.

- Who is impacted?
  - Administration is aware that unhoused persons have gathered beneath the Wellington Bridge to shelter from the elements.
- Why are they impacted?
  - Construction related activities, including bridge demolition and securing a worksite, could impact any people who may use the area under and near the bridge.
- What is the impact?
  - Connection to services for any people who use the area under and near the bridge.

During the detailed design and construction phases of the project, people requiring housing and/or support services will be connected through our encampment response team. The encampment response process, in combination with education, awareness and training opportunities for construction workers will help them understand how to interact respectfully and appropriately with vulnerable people on the construction site or in laydown areas.

Environment and Climate Review

The EIA report for the Wellington Bridge replacement project has effectively described the pre-construction environmental conditions for the valued ecosystem and social components and has outlined the mitigation to impacts expected to affect the environmentally sensitive areas. The mitigative actions will be implemented during both the planning and detailed design phases. The following is of note:

- Removal of public trees is proposed as part of the project. Affected trees will be determined through detailed design, in consultation with the City's Urban Forester and Natural Area Operations team. The community's tree canopy is an asset that is carefully and respectfully stewarded. Tree removals are guided by City Policy C456C - Corporate Tree Management Policy, Bylaw 18825 - Public Tree Bylaw and includes:
    - Completion of Tree Removal Inventory at end of design;
    - Completion of Tree Preservation Plan, along with restoration and landscaping plan; and
    - Communication with stakeholders and the public on tree removals when tree preservation and restoration plans are finalized.
- The little brown bat, which is an endangered species under both federal and Alberta laws due to threats from the white-nose syndrome disease,[1] was identified in the project area. A bat management plan was prepared and approved by the regulator - Fish and Wildlife Stewardship Branch of the Government of Alberta. This plan considers technical and scheduling aspects of the project to avoid handling and salvaging bats and would need to be reevaluated if avoidance is not possible. The noted conditions that the project must comply with, as per the letter of authorization dated June 5, 2024, are:
    - Timing and exclusion techniques during the roosting season.
    - Blocking of the roost entry point.
    - Distance for bat boxes (alternative habitat) placement.
    - The approval timeframe noted in the letter of authorization may lapse, and an updated amendment to the approval may be required.

Attachments

1. Wellington Bridge Replacement Environmental Impact Assessment - Update
2. Wellington Bridge Replacement Environmental Impact Assessment Report

[1]Alberta Community Bat Program. Bat Profiles: An introduction to the bats of Alberta. Accessed from: https://www.albertabats.ca/batprofiles