

Enclosure 3: Review Table for the for Alexandra Bridge Replacement Project - Initial Project Description (IPD)
IPD submitted on March 15, 2022, by Public Services and Procurement Canada and National Capital Commission (the Proponent). **Response due by: April 18, 2022.**

Please use this document to provide comments on the Alexandra Bridge Replacement Project (the Project). The document consists of two tables.

Table 1 will enable you to describe potential project effects.¹ The Impact Assessment Agency of Canada (the Agency) requires detailed advice to inform the Summary of Issues provided to the Proponent pursuant to subsection 14(1) of the *Impact Assessment Act* (IAA). Please refer to prompts in the table to guide your responses.

Table 2 will facilitate the collection of general or editorial comments.

Table 1: Description of the potential effects of the Project

Comment ID	Document Reference	Valued Component	Project Component	Description of the Potential Effect (Context and Rationale)	Powers, Duties and Functions	Risk Characterization Rating	Instructions to the Proponent	Summary of the Issue
Please identify comments by organization and comment number.	If the comment is related to a specific section of the documentation, please provide a reference (e.g. title, section, subheading, page number). You may also choose to copy the relevant text here.	Identify the valued component(s)—within the mandate of your department, ministry or agency—to which the effect applies. This may include components of the environment, health, social or economic conditions.	If applicable, please indicate the project component that could cause the described effect. If the effect is linked to a power, duty or function, please identify the project component that would be regulated, monitored, or enabled by the power duty or function.	For each effect within your mandate (one effect per row), please provide the context and rationale. In your response, please respond to following points: <ul style="list-style-type: none">Describe whether the Proponent has adequately articulated the effect. Provide rationale. If an effect that could affect a valued component is not described adequately, explain what is lacking or unclear and describe any possible link between the effect and a project activity or component.Describe whether the Proponent has identified and adequately articulated mitigation and/or monitoring measures to address the potential effect. Provide rationale.<ul style="list-style-type: none">If the Proponent has identified mitigation measures, provide your expert opinion of the proposed measures; indicate whether these mitigation measures are well understood and of proven effectiveness.If not, provide advice on how the effect could be managed through well-understood mitigation measures, and identify such measures.Describe whether the Proponent has adequately articulated the potential for residual effects after mitigation has been applied. Provide a rationale. If the Proponent’s description is inadequate, provide advice on the potential for residual effects.	Does your department, ministry or agency have powers, duties or functions associated with this effect? If yes: <ul style="list-style-type: none">Identify the act and associated power, duty or function.Indicate whether the exercise of the associated power, duty or function would <u>mitigate, manage or set conditions</u> that would address the effect.Indicate whether the exercise of the associated power, duty or function would involve public and Indigenous consultation.Where appropriate, reference any standard guidance or industry requirements that the proponent may need to follow to manage effects that fall within your mandate.	Based on the information that you have provided, please characterize the risk by selecting a rating (from [1] to [6]) for the effect (See Enclosure 4 for definitions)	Provide a specific, actionable request for the Proponent. Where applicable, provide instructions for how the Proponent would build confidence in the Detailed Project Description and Response to the Summary of Issues to support or confirm the risk rating selected at left.	Where potential effects have been overlooked or are missing or could be better described and presented by the Proponent, provide a concise synopsis for the Summary of Issues. Please, where possible, use simple (lay) language in your summary.

¹ *effects* in this context means changes to the environment or to health, social or economic conditions and the positive and negative consequences of these changes.

					<ul style="list-style-type: none">Does your department, ministry or agency have any established or emerging policies or directives that are relevant to the Project? Is the Project compatible or incompatible with the relevant policies or directives?			
<p>Please note that these comments have been prepared by the Canadian Conservation Institute (agency status?) on behalf of the Department of Canadian Heritage (PCH). While the Parks Canada Agency are primarily responsible for federal matters relating to built heritage, PCH is concerned for Canadian heritage on a broader perspective including for its conservation and vitality and for respecting federally acknowledged and designate heritage across Canada. As such, general comments will be from this perspective.</p> <p>Risk character rating: Having read “Enclosure 4: A Risk-Based Approach to Describing Potential Effects” it is challenging to designate the types of risks outlined with the comments provided. As such, this column has been left blank.</p>								
PCH-CCI	General Comment		Existing Alexandra Bridge.	<p>Observation:</p> <p>The Alexandra Bridge has been assessed as a “Level II Engineering Asset of National Importance” in 2010, and a Government of Canada plaque has been mounted on the bridge in 2011. (See Alexandra Bridge Engineering Assessment Heritage Value Report prepared by PSPC-HCS, 1910). This bridge, located at the heart of the National Capital, is recognized as a historic landmark and engineering achievement of Canada and may be considered as a “signature” bridge by many.</p>	N/A		Suggest to ensure project documentation is clear and explicit about the 1910 designation status by the Government of Canada/PSPC-HCS of the existing bridge. It may be helpful to include the Alexandra Bridge Engineering Assessment Heritage Value Report with the key documents for the Impact Assessment in regard to heritage impact.	Increasing awareness and understanding of the heritage designation status, heritage character and character defining elements of the Alexandra Bridge.
PCH-CCI	Initial project description. Public Consultation Report. Design Principles and Guidelines.		Existing Alexandra Bridge and bridge replacement options.	<p>Observation and comment:</p> <p>There appears to be little reference to the heritage character and character defining elements of the bridge in the PSPC-NCC documents, which are summarised in Section 5 of the Alexandra Bridge Engineering Assessment Heritage Value Report prepared by PSPC-HCS, 1910.</p> <p>For both bridge rehabilitation options or bridge replacement options this may be a helpful basis for discussing the future of the bridge and/or for the characteristics of a new replacement bridge, which could consider partial reuse of elements and components of the existing bridge eg. Masonry and concrete piers.</p>	N/A		Suggest to include the heritage character and character defining elements of the existing bridge into the Impact Assessment documentation and for use to evaluate intervention options. Review approach to bridge replacement, to consider hybrid options of conservation and new elements, particularly whether existing piers or steel truss form and elements can be integrated based on a heritage conservation approach.	Ensuring understanding of heritage character and character defining elements of the existing bridge, and explore possibility of respecting these characteristics or heritage components.
PCH-CCI	Public Consultation Report		Existing Alexandra Bridge and bridge replacement options.	<p>Observation:</p> <p>In the public consultations undertaken by PSPC and the NCC, it is reported that the single most important issue raised by</p>	N/A		Suggest to consider more fully public interest to conserve the existing historic Alexandra	Public principal project concern to

	Initial Project Description (p.20)			nearly 2/3 of those consulted was the conservation of the existing Alexandra Bridge.			Bridge, and/or to provide greater reasoning for decision to replace.	conserve the existing bridge.
PCH-CCI	Initial project description (IPD)		Existing Alexandra Bridge and replacement options.	<p>Observation and comment:</p> <p>There are many historic through truss steel cantilever bridges which are older, conserved, and remaining in use, such as the Forth Rail Bridge (1883-90) in Edinburgh of the Quebec City Rail Bridge, 1917, which is the longest of its type in the world. It is unclear why the Alexandra Bridge is considered to be beyond repair or rehabilitation. This does not appear to be well explained though may be important to clarify in the course of the Impact Assessment. Neither does it appear that the project team has consulted engineering experts in historic bridges to assist with developing rehabilitation options. It may be important to develop rehabilitation options for comparison purposed with replacement bridge options to enable well informed decision making regarding the type of intervention approach is most appropriate for this bridge crossing in central Ottawa.</p>	N/A		Suggest to broaden range of intervention approaches under consideration for the Alexandra Bridge crossing, including rehabilitation options, which can be subject to the impact assessment.	Inclusion of bridge rehabilitation options among intervention approaches under consideration.
PCH-CCI			Existing Alexandra Bridge and replacement options.	<p>Observation and comment:</p> <p>Cost estimates of maintaining the existing bridge for 75 years vs replacement costs date to 2017. Since then, there have been significant increases in material and construction costs in the past two years due to Covid-19 and currently fast-rising inflation. It is suggested that these costs be reviewed and updated.</p>	N/A		Suggest to review and update cost estimates which are now 5 yrs old and are likely to have risen significantly, particularly since Covid-19.	Cost estimates update.
PCH-CCI	Public Consultation Report		Replacement bridge options.	<p>Observation and comment:</p> <p>The various options for a replacement bridge do not appear to be developed to schematic design stage, including general technology, form, dimensions, number and location of piers within the river. It appears challenging to undertake an Impact Assessment of intervention options, river and ecological impact, cost estimates, visual and heritage impact on the heart of Ottawa-Gatineau and the setting of the Rideau Canal UNESCO-World Heritage Site without such information. For public and aboriginal first nations consultation such schematic design stage information may also be important.</p>	N/A		Suggest to develop all Alexandra Bridge intervention options to schematic design stage with updated cost estimates to facilitate the Impact Assessment, including public and aboriginal consultation.	Develop intervention options to schematic design stage to facilitate the Impact Assessment including public consultation.
PCH-CCI			Existing Alexandra Bridge and bridge replacement options.	<p>Comment:</p> <p>The use by PSPC-NCC of an Independent Design Review Panel (IDRP) comprising professionals in the field including expertise in heritage bridge engineering at key project design stages may be useful to consider for important reviews and decisions by PSPC and the NCC. Such IDRP reviews have demonstrated to be helpful for the Centre Block Rehabilitation project.</p>	N/A		Suggest to engage an Independent Design Review Panel to assist addressing and resolving challenging design issues – similar to the process undertaken with the Centre Block Rehabilitation.	Independent Design Review Panel.

Please insert additional rows as necessary.

Table 2: General and editorial comments - include comments such as formatting, layout or grammar

Comment ID	Document Reference	Context and Background	Instructions to Proponent
Example: TC-01	Example: Initial Project Description Part D, section 17 Pg. 11	Example: The Proponent has identified the Navigation Protection Act under the list of federal powers, duties, or function; however, the section appears to be consistent with changes to the legislation introduced in 2019.	Example: In 2019, the Navigation Protection Act was amended and renamed the Canadian Navigable Waters Act please ensure that the correct title is used.

Please insert additional rows as necessary.