January 18, 2018

Yves Dagssie, PMP, Special Project Officer
Environmental Approvals Branch, Ministry of the Environment and Climate Change
135 St. Clair Avenue West, 7th Floor
Toronto ON
M4V 1P5

Re: City of Ottawa Environmental Project Report for Bayshore to Moodie Bus Rapid Transit (BRT) Conversion to Light Rail Transit (LRT)

Dear Mr. Dagssie,

The Crystal Beach Lakeview Community Association (CBLCA) is making a submission under the Transit Project Assessment Process (TPAP) to the Minister of the Environment and Climate Change in response to the Notice of Completion filed by the City of Ottawa for the Bayshore to Moodie Bus Rapid Transit (BRT) Conversion to Light Rail Transit (LRT).

This project in its entirety borders the community of Crystal Beach Lakeview. It also is unique in the transit system of Ottawa in that it is built mostly within a precious greenspace under the protection and oversight of the National Capital Commission. We are submitting under the TPAP process on the basis of this project being a matter of provincial importance. We believe that the EPR is incomplete as well as requiring changes because of the following:

- Extirpated, endangered, threatened, or species of special concern and their habitat
- A wetland, woodland, habitat of wildlife or other natural heritage area
- A stream, creek, river or lake containing fish and their habitats
- An area or region or surface water or groundwater or other important hydrological feature

The LRT project from Bayshore Station to Moodie Drive is a project that goes from “point A to point B”. However, it is also very much a project within natural areas rich in wildlife and their habitat and the watersheds of two important waterways, Graham Creek and Stillwater Creek. Stillwater Creek alone drains a 23 square kilometer area and both creeks ultimately flow into the Ottawa River.

This EPR is missing assessment data and detailed plans to adequately manage: 1) protections for wildlife and their movements; and 2) storm water flows and pollution controls for these waterways. Beyond this, the city fails to take a systems approach in its assessment of the project, fails to seize upon the critical importance of treating this unique area in its geographic entirety, and fails to take the opportunity to work with critical public bodies in preserving and protecting woodlands, wetlands, wildlife habit and corridors.

The EPR notes that Stillwater Creek acts as the drainage basin for 23 square kilometers of land including the Stoney Swamp, a Provincially Significant Wetland (PSW). The Stillwater Creek Valley is described as an undesignated wetland, unevaluated by the Ontario Ministry of Natural Resources and Forestry

(MNRF). The EPR also states that Stillwater Creek is a regional Area of Natural and Scientific Interest (ANSI) due to very large specimens of regionally uncommon Black Maple trees.

Storm water management (SWM)

As noted in the 2013 McCormick Rankin report in the addenda, SWM includes mitigation for flooding, erosion and water quality. Overall, we are concerned by the superficial level of design discussion on storm water management and by the use of earlier studies without current detailed design proposals

Were BRT recommendations carried out? Successfully?

The EPR includes in the Appendices a number of documents dating back to the 2012 EPR with projections on flows into Graham Creek and Stillwater Creek. The McCormick Rankin (MR) report includes recommendations from 2013 with respect to drains, catch basins, flow velocities and culvert extensions along the BRT course. There is nowhere in the report either to confirm that all of these recommendations were carried out or measurements to confirm the efficacy of the recommended design

Engage in a systems approach

Where the CBLCA supports in general the recommendation to achieve flow velocity of less than 0.225 m/s, the MR report also says that overall maximum peak flow in Stillwater Creek will be produced from the large upstream drainage basin. We believe the city must engage in a systems approach whereby in collaboration with other government or agency, additional drainage capacity is achieved upstream of the immediate Moodie Drive corridor.

Collaborate to benefit the wetlands

For example, the NCC property west of Moodie Drive is recognized to have had alterations to its drainage basin that would benefit from mitigation. The LRT project provides an opportunity for collaboration to the overall benefit of the wetland area.

We note with approval the decision not to encase Stillwater Creek in a culvert through the proposed site for the Light Maintenance and Storage Facility. Further work with the NCC on its property north of Corkstown Rd. could provide further assurance that storm waters resulting from both anticipated increased frequency and severity of storms as well as upstream drainage can be better mitigated in addition to the proposed cut and fill approach being taken east of Moodie Drive.

Plan needed to mitigate downstream erosion

The BRT construction resulted in installation of an extension of the culvert under highway 417 for the main tributary of Stillwater Creek, located east of the current Corkstown BRT station. This has resulted in increased volume and velocity of flow that has caused downstream erosion of creek banks and threat to the “heritage” trees on those banks. There is no mention of this in the EPR nor any commitment to mitigate this increased flow on a priority basis—indeed, in advance of the LRT construction. We encourage a recommendation from the MOECC for an immediate collaboration between the city and the Rideau Valley Conservation Authority to develop and implement a mitigation plan for the downstream erosion as well as for the increased velocities and volumes. This mitigation may include actions for storm water management upstream of the tributary south of Highway 417.

We see no specific detail with respect to appropriate planting of riparian vegetation. This is essential so as to reduce the threat of erosion upstream in the study area east of Moodie Drive as well as bringing other environmental benefits to be discussed later.

Remediate BRT damage

The LRT construction will result in the termination of the BRT design, including the need for some infrastructure. We see nowhere in the EPR a commitment to remediate and renaturalize those infrastructure sites to the benefit of both storm water management and habitat restoration. For example, the bi-directional BRT at Holly Acres Rd. resulted in the removal of a drainage ditch well used by wildlife on the north side of the 417 onramp. It also resulted in the extension of a large culvert for a Graham Creek tributary. Both of those sites require remediation once the BRT is closed. This will also have the benefit of restoration of the wildlife corridor in that area.

What are specific measures for removal of suspended solids?

The identified goal of 80% removal of total suspended solids (TSS) is welcomed. At the same time, there is no specificity within the EPR as to location for oil, salt and grit capture along the LRT corridor and in the vicinity of the LRT station at Moodie Drive. Again, it is unknown from the EPR whether measures were put in place with the BRT construction so as to achieve the 80% level over the length of the BRT. We note with concern, for example, that the noise barrier wall at its western edge ends at the main tributary for Stillwater Creek. We believe this will result in contaminants from the BRT/LRT roadbed that will make their way into this tributary and ultimately into Stillwater Creek itself. We are unaware of mitigation measures that should exist in the EPR.

Wildlife

Outdated flora and fauna surveys

We note the outdated surveys of flora and fauna while also noting within the EPR that "The Stillwater Creek Valley north of Highway 417 can be expected to support a greater number of wildlife species given the higher habitat quality and diversity. This valley also likely serves wildlife movement." While noting the various mitigations for wildlife during construction as outlined in the EPR, we do not see specific measures to protect wildlife and their movements within the study area after construction and on the whole.

No specific measures to address wildlife movement

While wildlife movement within the study area is acknowledged in the EPR, there are no specific measures to address the needs of wildlife to move within the corridor. Mention is made of the ability of aquatic species to move along existing waterways and culverts; small and larger mammals are not dealt with. The two sites of most concern are their crossing of Moodie Drive north and south of the Corkstown intersection and across Corkstown Rd. immediately east of the Moodie Station. While the LRT team has successfully created a 30 meter buffer to the west of Stillwater Creek, this buffer zone breaks down at Corkstown Rd. due to the road's repositioning north of its existing site.

Increased danger at Moodie Drive and on Corkstown

With respect to Moodie Drive and wildlife crossing, an argument has been made that this is outside of the LRT study area. While technically correct, the EPR is happy to describe the overall catchment area and Greenbelt and its importance to Ottawa. This crossing is an opportunity to ameliorate a problem that is going to worsen directly as a result of the LRT presence at Moodie Drive. The consequent increase in vehicular traffic on Moodie both from the DND site and

Kanata North will result in increased Animal Vehicular Collisions (AVC). The human, animal and property cost will grow. It also has already an established solution if one is willing to look at this with a systems approach. Already in Ottawa, we have a wildlife underpass at Terry Fox Drive resulting from need to protect Blanding's Turtles and other small mammals. Equally, elsewhere in Canada we have underpasses and overpasses for wildlife with documented success, particularly through Parks Canada. Moodie Drive affords an opportunity yet again for collaboration between the NCC and the City of Ottawa to significantly mitigate multiple risks by installing a wildlife underpass north of the Corkstown Road/Moodie Drive intersection.

Wildlife underpasses a solution

At Corkstown Rd. east of the Moodie Station, the MUP crossing of the road is another bottleneck for wildlife. We believe a wildlife underpass jointly used by the MUP pathway and wildlife will solve this problem. A potential alternative approach given this is a floodplain area, is to move the underpass to east of the Stillwater Creek while retaining the MUP as an at-grade crossing. Here again, collaboration with the NCC affords a unique opportunity

Restoration of wildlife corridor at Holly Acres

The remediation of the ditch on the north side of the 417 onramp at Holly Acres, removed in the BRT construction, and the remediation of the culvert extension for the Graham Creek tributary west of Holly Acres Rd. requested as part of storm water management, also has a second but equal benefit of restoring the wildlife corridor at Holly Acres Rd.

We note with approval Table 8.4 "Impact and Mitigation". The "devil will remain in the details". The absence of current studies with respect to Species at Risk and Endangered Species is a concern. We request a recommendation from MOECC that updated herpetofauna, SAR and other wildlife studies be completed prior to initiation of construction of the LRT project with updating of mitigation measures at that time.

Recommendation

The CBLCA requests that the Minister direct that the city provide additional documentation and engage in further consultation with respect to storm water management and protections for wildlife as outlined in this submission.

On behalf of the Crystal Beach Lakeview Community Association

Monica Patten, President
Ian McConnachie, Chair, Transportation Committee