

BOSTWICK ROAD IMPROVEMENTS

Dated August 2017, received at EEPAC's August meeting

Reviewers: Chris Evans and Sandy Levin
Submitted to September 28, 2017 EEPAC meeting

EEPAC is generally supportive of the outcome of the City's work on this site as it relates to the protection of the Significant Woodland (Patch 10064).

In addition, EEPAC has some other recommendations.

THEME #1 – Patch 10065

1) The wetland associated with patch 10065 (MAM2-2 Reed Canary Grass Mineral Meadow Marsh) "very likely meets the minimum requirements for significant wildlife habitat (SWH)" and therefore should not be impacted by development. This area qualifies as woodland amphibian breeding SWH (wetland plus a 230 m radius of woodland area). Two or more frog species listed in the criteria (significant wildlife habitat technical guide) schedule were observed with 20 or more total individuals qualifying the patch as SWH (P 16).

"Amphibians are known to move between wetland (breeding) and upland (non-breeding) habitats; both habitat types are critical for supporting the animals' life cycle (P 17). This habitat is isolated from the other patches within the study area (~ 300 m separation between wetland and nearest section of Thornicroft drain), therefore the necessary upland habitat function is likely provided by patch 10065 - making the patch even more significant to sustaining these populations.

This patch does not seem to be clearly labelled on 'Map 5 - Natural Heritage' of the London Plan. Parsons writes, "there is evidence to suggest this unit qualifies for significance based on the City's criteria, even without a detailed site analysis (P 19)". See page 20 for further explanation of sites significant ecological features.

Based on Parsons findings patch EEPAC would contest that Patch 10065 is not of low or degraded ecological value.

RECOMMENDATION #1: The OMB be advised that this patch has been evaluated and should be noted as Significant on Map 5 of the London Plan

Theme #2 – Connectivity of Patches

Furthermore, As per page 349 of the London Plan,

1334) Development or site alteration shall not be permitted within a wetland. There shall be no net loss of the wetland features or functions. In some instances, and in consultation with the conservation authority having jurisdiction, the City may consider the replacement of wetlands where the features and functions of the wetland may be provided elsewhere and would enhance or restore the Natural Heritage System.

2) EEPAC's primary concern is the impact from the proposed Bradley extension. Patches 10065 (East) and Patch 10064 (North) will be impacted. Habitat connectivity is of paramount value in urban spaces due to the highly fragmented landscape. Crossing over Thornicroft drain, constructing a new culvert and impacting the connectivity of Patch 10064 ought to be avoided.

If the road does cross Thornicroft drain, what will the net loss in habitat be? How will this loss be compensated for?

While EEPAC agrees with Parsons determinations:

2i. Culvert should be sized up (increasing culvert openness ratio) to improve riparian connectivity and facilitate wildlife crossings (P 23).

2ii. "The surrounding successional areas provide a buffer between the watercourse channel and both Bostwick Road and surrounding agricultural fields (P20)"

RECOMMENDATION #2 - Expand the vegetated buffer around Thornicroft Drain to protect and improve water quality. This watercourse will face increased pressures as a result of adjacent development.

RECOMMENDATION #3 - EEPAC supports Parsons' recommendation that Vegetation Unit #5 (between Bostwick Road and the Thornicroft be included within the boundary of Patch 10064 and be considered part of the Significant Woodland designation. (P 20) and that Map 5 of the London Plan be altered to reflect this change from unevaluated vegetation patch to Significant Woodland.

Theme #3 – Buffering of Patch 10064

EEPAC agrees with Parsons recommendation to set a buffer of 30m along the southern edge of the woodland adjacent to the Bradley avenue extension. This is greater than the 10m buffer from drip line of woodlands outlined in the City's Environmental Management Guidelines. However, "Setting an appropriate buffer width will be a primary concern along the southern edge of Patch #10064, since the proposed Bradley Avenue extension follows this southern edge. Patch #10064 contains SWH in the form of terrestrial crayfish burrows, provides nesting habitat for Special Concern bird species Eastern Wood-pewee ... (P 22)" Removal in veg, changes in drainage, light and noise inputs will all impact the species within the woodlot.

RECOMMENDATION #4 –

- a. Sufficient funding be included in the capital budget for the project for enhanced naturalization and invasive species control.
- b. The detail design include a naturalization and buffering plan (Restoration Landscape Plan is mentioned on p. 29) to the satisfaction of a City Ecologist.
- c. Plantings should be appropriate for the ecosite, i.e. floodplain species for areas near the Drain.
- d. The Clean Equipment Protocol be followed by the contractor

Other comments

RECOMMENDATION #5 – Planning and Development Services staff be notified of the Butternut trees identified in this project (p. 23) so that they may be protected from the impacts of future development by appropriate buffering.

Map 7 of Preferred Alternative is a poor map. Unclear how roads connect to larger transportation network.

Review of historical air photos of Area 8a show significant disturbance to wetland features by the property owner(s).