EEPAC Review of: 704 AND 706 BOLER ROAD

EIS, Slope Stability Report and Water Balance

Reviewers: B. Gibson, R. Trudeau

August 2015

KEY RECOMMENDATIONS

Wooded area previously identified as Significant Woodland needs to be reestablished through planting and protected inside the development area. Amphibian studies previously performed are inadequate, new studies are needed to properly establish amphibian populations on site. Branches in some back yards are identified, tree drip line needs to be assessed again, and a minimum setback buffer of 10 metres beyond the drip line needs to be created.

4.1.3: Topography

The study notes slope ranges of 16%-35%, while the exp slope stability study ranges from 6 horizontal to 1 vertical to 3 horizontal to 1 vertical. What is the relation to these numbers? Where on the site do these slopes occur?

Report references inclination of the slope to be 6H:1V to 3H:1H, but does not specify where the 6H:1V area is.

 EEPAC assumes it is the area between the woodland and the Block 101 area set aside for parkland/future development. It would have been helpful if the report was clearer. If this area had been included, the Slope Inclination Rating Value would increase from 0 to 16, changing the Slope Instability Rating to 38, which is Moderate Potential.

RECOMMENDATION:

Clarification and further detail of the slope positions is needed. This is related to further clarification and detail needed for swale positions and site grading (see below) as well as the Slope Instability Rating.

EEPAC also questions if the photographs are correctly labelled.

Photograph 1:

- The placement of the trees to the right in the picture looks more like the viewer is looking west, given the long vista to the houses in the distance. If the viewer were looking south from Longview Crt., the trees would be on one's left.
- If looking east, with Apricot Dr. on the viewer's right, the woodlot trees would be on the viewer's left.
- The only location that this picture could have been taken is within Block 101 looking south towards the backs of the houses on Apricot Dr somewhere opposite Lots 68-72. This area of the Slope Study is not addressed.

Photograph 2:

Clearly taken looking west. There is a house on Apricot Dr. with a distinctive rear façade, and the view from this photo is not taken "from" Lot 4, but looking towards Lot 4. Again as in Photograph 1, the slope being pictured is not the slope addressed in the Study for Lots 1-9, as they are in the distance in the photograph, about halfway in the picture. This corroborates with the woodlot trees on the viewer's right and the ornamental trees fronting Boler Rd on the horizon.

RECOMMENDATION:

The City and the proponent meet on site to clarify the photographs and if they support the conclusions in the EIS.

4.2.1: Vegetation

EEPAC is surprised to note that woodland previously identified on site at a scoping meeting as Significant Woodland has been removed from the site, before site plan approval. This drastically changes the site under consideration.

RECOMMENDATION:

Remove all previously wooded areas from the development design, and plant new trees to re-establish the area previously identified as Significant Woodland.

RECOMMENDATION:

London City Council amend the Tree Conservation By-law to ensure that a similar situation doesn't occur again, i.e. when a Significant Woodland is identified at a scoping meeting, the Tree Conservation By-law should immediately apply.

4.2.4: Fauna

For the amphibian study (Appendix G), the times were listed as follows:

Study 1: April 14, sunset at 8:06pm, survey at 7:00-7:30pm

Study 2: May 28, sunset at 8:54pm, time of survey not recorded

Study 3: July 4, sunset at 9:07pm, survey done 9:45-10:15pm

Amphibian studies need to be completed beginning half an hour after sunset as per the Marsh Monitoring Program. Study 1 concluded half an hour before sunset, and it is impossible to determine if study 2 was performed properly, as no time of study is given.

The description of what qualifies as Significant Wildlife Habitat is incomplete.

Presence of breeding population of 1 or more of the listed newt/salamander species or 2 or more of the listed frog/toad species (*grey tree frog and western chorus frog are on the list*) with at least 20 individuals (adults or eggs masses) or **2 or more of the listed frog/toad species with Call Level Codes of 3 or**; Wetland with confirmed breeding Bullfrogs are significant.

RECOMMENDATION:

The EIS be considered incomplete until another set of amphibian studies is completed as the ones submitted in the report were not completed properly. Mapping the location(s) of the stations would also be helpful.

7.1: Indirect Impacts

The report states that "The draft plan has been configured so all rear lot lines are beyond the woodland trees (however in some locations, there is some branch overhang into the rear lots)". This makes the location of the woodland drip line unclear – are the rear lot lines inside the drip line in places?

For lots 37-43, the report recommends a "zero buffer through mitigation" with a homeowners' brochure and rear yard fencing." City of London Guidelines for

Determining Ecological Buffers (2007) notes that "An absolute minimum of 5m buffer should be included to allow for variability along ecological edges." and that the minimum buffer width recommended for a woodland is "10m beyond the drip line of trees (protects the rooting zone)". A zero buffer through the proposed "mitigation" is unacceptable. The buffer should be consistent with the Guidelines as the proponent has not provided an acceptable reason for varying the buffer.

RECOMMENDATION:

Re-examine the dripline as identified to ensure that all construction takes place entirely outside of the woodland dripline.

No lots or blocks should be within the dripline. Lots 37-43 and the condo block should not be within the drip line (see page 24).

The trail should be outside the calculated buffer.

RECOMMENDATION:

Establish a minimum 10m buffer beyond the dripline of the woodland. The root zone of trees extends 1.5-3 times beyond the furthest extents of the tree canopy, so a further buffer may be appropriate.

7.2: Construction Related Impacts

The report recommends "All stormwater should be directed away from the woodland feature through a system of swales during construction, preferably adjacent to the road pattern."

RECOMMENDATION:

Full details of the swale design are needed to assess protection of the woodland feature and slope integrity. Approval by the City of same must be a condition in the development agreement.

Water Balance

The water balance report was done in 2013, prior to the tree clearing. This was a clearly stated as being a pre-development assessment with limited design data, therefore, no data is presented to evaluate the impact to the areas of standing water, which based on previous studies are "sourced from surface run-off and shallow groundwater" (actually in the Slope Study report) post-construction.

If this report only addresses the water balance from the groundwater status with the six boreholes, all on relatively high ground, then the surface run-off impact has yet to be addressed.

It is unclear as to how post development surface flows will be comparable to pre development. If they are not, the areas of standing water may dry out.

RECOMMENDATION:

The EIS be considered incomplete until a post development water balance report is completed to the satisfaction of the City. The areas of standing water must be maintained as amphibian habitat.

Post Construction

1. Re-seeding areas of disturbance to maximize erosion protection and minimize volunteer populations of invasive species.

RECOMMENDATION:

This should be done with native species and not hydro-seeding.

GENERAL COMMENTS

Homeowner information material

RECOMMENDATION:

The required information for homeowners include the reason why no gates have been installed in the fences.

Evaluation of Ecologically Significant Woodlands

2015 pg. 22 says that "it is our opinion the City of London Evaluation of Ecologically Significant Woodlands (2006) should not be applied to small patches of this size as the evaluation process was not created for these very small features."

In the introduction to the Woodland Evaluation, it says in the introduction:

These guidelines will apply to all vegetation patches outside ESA's and wetlands as identified on Schedule B and designated as Environmental Review on

Schedule A. These patches, generally 4 ha in size or larger, were identified through the Subwatershed Planning Studies.

Also see 1.2.4 and 1.2.7 and 1.2.8 and 2.0 of appendix A, all of which indicate the **woodland is significant.**

Incorrect information regarding species at risk in Ontario

Page 9 says as follows:

"American Chestnut (END) and Butternut (END), while not listed by MNR, can be found in virtually any woodland setting in this region."

This is simply wrong and should be removed or reworded. Both trees are on the Provincial Species at Risk Act. There is a recovery strategy for American Chestnut.