Southdale Road West Improvements (Pine Valley to Colonel Talbot Road) September 10, 2018 (received at August 2018 EEPAC meeting) Reviewed by: Carol Dyck, Peter Ferguson, Sandy Levin, Randy Trudeau

# **Major Concerns:**

Lack of clarity regarding location of and impact to plant species with high coefficient of conservation.

Loss of 1.3 ha of Eastern meadowlark habitat with no consideration for overall loss of habitat in the Southwest of London, nor a Habitat Management Plan for the required compensatory mitigation.

Lack of clarity regarding responsibility for the culvert structure south of Southdale Road West and plans for improvement.

EIS did not include looking for barn swallow nests in the culvert.

Loss of and/or disturbance to wetlands.

High potential for spreading invasive species.

Overall high levels of development in the area as well as potential for several future projects requires a holistic look at species and habitat management in southwestern London. Three consultants did work in the area for three different projects.

## 1. Lack of Clarity regarding plant species

The reviewers found that the list of sensitive species in this EIS was unclear. In particular, it was not clear (e.g., page 17, North Talbot PSW – Patch 10059 and page 18, Patch 10063) as to where in the vegetation communities some of the plant species with a high co-efficient of conservation are located and therefore, it is not clear what the impacts of construction activities and/or the widened road will be regarding these species. The EIS did not make a clear statement either way. For instance, the EIS notes that through construction a small part of 10063 will be removed. However, it fails to note that roughly 180m of new edge will be created. The EIS also does not indicate whether or not any of the sensitive species will be affected as we know only that certain species like Wood Horsetail were found in the significant woodland but not specifically where.

Similarly, on pages 21-22 the report discusses the importance of the North Talbot Provincially Significant Wetland, which scored 250 points "within the Special Features Component due to the presence of END false hop sedge". The EIS does not make clear whether or not the false hop sedge was found within or outside the study area, nor whether this plant species would be affected by the construction.

<u>Recommendation:</u> To be considered complete the EIS must clearly state whether the plant species with a high coefficient of conservation are found within or outside the study area, and whether these species will be affected by construction. And if affected, what compensatory mitigation will be required.

<u>Recommendation:</u> In the cases where these sensitive plant species are found within the study area and will be negatively impacted by construction, clearly specify what actions will be taken to reduce harm and/or to compensate any loss either in the EIS or at detailed design.

# 2. Invasive Species

Phragmites is prevalent in south western London. Indeed, the EIS makes reference to the "phragmites choked swale" (p.13) and provides photographic evidence (Appendix D p. 4). Moreover, the road widening will create roughly 180 metres of new edge along a significant woodland, and as it is not the area but the *length* of this edge that is relevant when considering the spread of invasives and the creation of new edge effect, more attention should be paid to this issue. The reviewers are concerned that with the proposed road widening a very real risk exists of spreading phragmites further along the disrupted edges and into the wetlands and Thornicroft Drain.

<u>Recommendation:</u> Clean equipment protocol should be closely adhered to during construction.

<u>Recommendation:</u> An invasive species management plan including monitoring **must** be included in the project budget and contract documents.

<u>Recommendation</u>: The detailed design must include recommendations for mitigation caused by creating new edge.

#### 3. Barn Swallows

This monitoring for this EIS noted fly-overs by barn swallows (at stations GR01, GR02 and GR03) and suggested that suitable habitat may be found in the barn to which AECOM was not granted access. The report states that "no nesting structures have been observed" (p. 44). However, a previous development study in that same area by Duggan they found that barn swallows were nesting in the culvert.

<u>Recommendation:</u> AECOM should examine the culvert coming from the Storm Water Management Facility within Southwest Optimist Park for evidence of barn swallows nesting. If nesting, alternative nesting kiosks must be included in the project.

#### 4. Culvert related to Thornicroft Drain

The EIS leaves many questions in regards to the culvert associated with Thornicroft Drain. On page 12 the report notes that "[t]he culvert under Southdale Road creates a permanent barrier to fish passage as the upstream section appears to be buried". We wondered at the wording "appears to be" and would like to know if AECOM investigated to determine whether or not

this was actually the case. Housing development is slated for 3080 Bostwick Road and the reviewers wondered whether it would be the responsibility of those developers or the City, in regards to this road widening, to address the situation with the culvert. It is our belief that likely the housing development will go forward before the road expansion occurs. An EIS carried out by StanTec, for the development at 3080 Bostwick, which included a fluvial geomorphological study of the Thornicroft Drain by Parish dated May 2016, noted that turbidity from the north is causing problems to the south where the watercourse passes through a Significant Woodland and provides warm water fish habitat. Given that fish inhabit the Thornicroft Drain, a plan must be in place to ensure that species are protected and damage downstream is minimized.

<u>Recommendation:</u> Work that impacts on the Thornicroft Drain must have a plan to avoid damage downstream and reduce erosion. (The downstream section of the Thornicroft Drain is remarkably "natural", and it would be advantageous to keep it in that state or even enhance it through improvements to the north (i.e. the culvert).

<u>Recommendation:</u> It is noted that it is the City's storm sewers which are causing high flows in the Thornicroft Drain, resulting in high turbidity and it is noted that the culvert is insufficient, therefore, it is recommended that it is the City's duty to fix the submerged culvert *prior* to the road expansion and perhaps even *prior* to the other development projects slated for the area.

<u>Recommendation</u>: If work is not done prior to the road project, then funds to reduce the impact or eliminate erosive flows during storm events must be included in the contract documents for the road project.

#### 5. Loss of Wetlands

According to the monitoring that was done for this EIS, there appears to be a lot of bird activity around the small wetland south of Southdale, which demonstrates its ecosystem function even if it is small. We would also like to note that a number of development projects that have been undertaken recently or have been approved for future development involve the loss of wetlands, which is concerning even if these wetlands do not cover a great area. Wetlands provide numerous ecosystem services, such as storm management, water filtration and serve as habitat for numerous species.

<u>Recommendation:</u> Minimize disturbance and/or removal of the small wetland south of Southdale and ensure that the North Talbot Provincially Significant Wetland is not adversely affected. Moreover, through the process of widening the road, the City should ensure that the flow of water into small wetland is maintained.

<u>Recommendation:</u> In the event of loss of wetland area, the road project include sufficient budget to compensate for the loss of wetland through creation of a wetland of at least 4 ha, elsewhere close to the disturbance site.

#### 6. Meadowlark Habitat

This project will result in the loss of 1.3 hectares of Meadowlark habitat. Consequently, a minimum of 4 hectares of replacement habitat is required according to the consultant who spoke at the August EEPAC meeting. The report makes mention on p. 70 of the creation of a Habitat Management Plan for the Meadowlark but one does not currently exist. The reviewers also take exception to the rating of "low-no effect" regarding the removal of SAR habitat on p. 70.

Recommendation: The City should not approach habitat loss and its replacement/offsetting in a piecemeal fashion, especially given the high level of development in that corner of the City. In most EIS work in the southwest, meadowlark and/or bobolink are noted in the field work. Therefore, we recommend that the City begin purchasing land in and around that area to offset the loss of habitat for species like the Meadowlark. The City could consider purchasing land using money from either development charges or infrastructure projects, outside the growth boundary, west of Colonel Talbot and south of Southdale which would enlarge the close to development project to protect significant woodland, significant valley land and cultural meadows.

Recommendation: No construction works or removal of habitat should occur before a Habitat Management Plan is submitted as part of the permitting process for this project. EEPAC would appreciate the opportunity to be involved in the creation of this plan. We would also like to suggest that the City follow the example of the Brantford and Grand River Conservation Authority which is a 20-year plan (dated August 22, 2017) which requires a five-year monitoring period after the implementation of a habitat management plan.

### 7. Species and Habitat Management Plan

The southwest corner is currently experiencing rapid development. Indeed, three development projects -- road widening, community centre and housing development -- each which hired a different consulting firm to undertake an environmental impact study or assessment, are completed or currently expected to occur in the near future. As a consequence, significant areas meadowland, woodland and wetland will be affected, either directly (due to loss as a result of land conversion) or indirectly (through increased particulate pollution, noise pollution and light pollution). Significant valley lands will be heavily impacted around Southdale. With London's growing population, the trend towards greater development in this area is unlikely to slow. It is therefore important to work now to protect some of the important relatively wild areas in this area.

<u>Recommendation:</u> The City should take a holistic, integrated approach when looking at southwestern London to ascertain which areas would be beneficial to preserve, particularly as a result of this road widening project.

<u>Recommendation:</u> A Habitat Management Plan for SAR birds must be created *prior* to the start of construction on the new road and approved by the Ministry.

<u>Recommendation:</u> The City should start purchasing land in the southwest corner of London now to take a proactive approach to conservation amidst all the construction. These lands could become part of a future ESA or an enlargement to the Lower Dingman ESA. A 20-year management plan for this area should be considered.

<u>Recommendation:</u> The City should consider the acquisition and creation of wildlife corridors in the area to connect bird species (and other species) inhabiting that region to the various valley lands, woodlands, wetlands and meadow lands in the area.

### **Final Queries:**

1. On p. 69-70, the report makes mention of "integrated restoration plantings". We would like to know what exactly is meant by this phrase.

Recommendation: A significant number of trees and other plants will be lost as a result of this project. We would like to suggest that replacement species are **native** to south western Ontario. For instance, a number of Norway maples will be removed; these could be replaced by native varieties such as sugar or red maple. Native species will prove more beneficial for insects and birds. In addition, though cities often like to have a uniform tree species lining streets, we would like to suggest that the City replace trees with a variety of species. Recent pet outbreaks (i.e. emerald ash borer) and diseases demonstrate that it is not to have a monoculture of species should a new threat target a particular tree.

2. According to this EIS, there are no cavity trees within the ROW, but there is possibility of cavity trees within the woodland. We appreciate the precautionary approach that will be used in regards to candidate habitats for bats and that any vegetation removal occur outsides of bat roosting season.

<u>Recommendation:</u> Though bats may not have been observed, a buffer should be applied for species that are in recovery, i.e. bats and recent outbreaks of disease. For that reason, we recommend that any cavity trees that are found during the construction phase retained to serve as future habitat when the species rebounds.

3. Figure 5 on p. 38 shows several amphibian monitoring stations located near the small wetland south of Southdale and near the Storm Water Management facility, but only two by the North Talbot Provincially Significant Wetland. We would like to know the rationale behind this decision. Moreover, amphibians got a low rating for activity and presence but these findings seem contrary to comments made by others working and studying the area, as well as anecdotal reports.

<u>Recommendation:</u> New amphibian surveys may be necessary to establish their level of presence in the affected area.

4. Reference is made to the "detailed design" stage of the development, such as on p. 58 regarding how to deal with the loss of vegetation. As it is difficult to determine how sound mitigation policies are or will be without access to this information, it would be beneficial if EEPAC could be included at the Detailed Design phase.

<u>Recommendation:</u> That EEPAC be offered the opportunity to comment on the Detailed Design for this project to ensure that mitigation recommendations – such as dealing with loss of habitat or vegetation – meet high standards given this is a city project.