



London
CANADA

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March 24, 2022

M. McKillop
Engineer, Environment and Infrastructure

That, the following actions be taken with respect to the 3rd Report of the Environmental and Ecological Planning Advisory Committee, from its meeting held on February 17, 2022:

- a) the Adelaide Wastewater Treatment Plant Working Group comments BE FORWARDED to the Civic Administration for consideration; it being noted that the Environmental and Ecological Planning Advisory Committee heard a verbal presentation from M. McKillop, Environmental Services Engineer and P. De Carvalho, Restoration Specialist and S. Braun, Water Resource Engineer, Matrix Solutions Inc., with respect to the Adelaide Wastewater Treatment Plant Climate Change Resiliency Class Environmental Assessment;
- b) the Greenway Wastewater Treatment Plant Working Group comments BE FORWARDED to the Civic Administration for consideration; it being noted that the Environmental and Ecological Planning Advisory Committee heard a verbal presentation from M. McKillop, Environmental Services Engineer and P. De Carvalho, Restoration Specialist and S. Braun, Water Resource Engineer, Matrix Solutions Inc., with respect to the Greenway Wastewater Treatment Plant Climate Change Resiliency Class Environmental Assessment;
- c) the Working Group report relating to the Oxford Street West/ Gideon Drive Intersection Improvements Environmental Assessment BE REFERRED to the Civic Administration for consideration; it being noted that additional comments may be provided to the Civic Administration by the Working Group;
- d) the Working Group report relating to the Windermere Road Improvements Municipal Class Environmental Assessment - Environmental Impact Study BE REFERRED to the Civic Administration for consideration; and,
- e) clauses 1.1, 2.3, 2.4, 3.1 and 3.2, BE RECEIVED for information. (3.4/5/PEC)

M. Schulthess
City Clerk
/pm

cc: Chair and Members, Environmental and Ecological Advisory Committee
E. Guil, Technologist II, Environment and Infrastructure

Adelaide Waste Water Treatment Plant Flood Management EIS

Preliminary Comments from EEPAC Feb. 7, 2022

Summary

It is important to protect the Adelaide Wastewater Treatment Plant, but it is also important to improve the protection of the natural heritage features in the study area. The study area includes several natural features, is connected to the Thames River and represents an incredible diversity of wildlife. This area is an ESA and should be treated as such.

Comments

Study Area

The description of the study area should note that the study site is 300 m from the Thames River, which is a significant valleylands. The EIS Executive Summary shows that the area meets the criteria to be an ESA, and therefore, work done in the region has the potential to impact the Thames River and SAR that reside there. It is critical to note that all construction in this area should assume that this project has the potential to impact an ESA and take necessary precautions to protect the ESA.

Page 10

A key ecological goal of the *City of London Thames Valley Corridor Plan* is to preserve, enhance, and create ecological corridors and linkages between natural features in order to establish a continuous corridor along the Thames River and enhance linkages to tributary watersheds (Dillon Consulting and D.R. Poulton 2011).

What can this project do to help achieve this goal – anything?

p. 12

Unfortunate that the Dougan SLSR for the TVP which was included in the Scoping document seems not to have been consulted? Why? It included the significant trees to a greater extent than the Dillon EIS. A significant number of trees were removed for the bridge project. Which means the potential bat maternal colonies were reduced then, so no surprise that what is currently there did not meet the threshold. Death by a 1000 cuts. New plantings do not replace habitat trees!

p. 16

Section 5.2 says that there are no ESAs within the study area; however, an outlet channel flows from the study area into an area that is an ESA based on the data provided in this report and others (e.g. Dillon). This should be noted in this part of the EIS.

Any opportunity to address invasives such as Loosestrife and Phragmites as part of this project? And the buckthorn in CUT 1b? Remove it all and replant it.

No breeding bird stations in the Significant Woodland. Why not? Stns 5 and 6 were outside the study area north and west of the PCP. (Figure 2)

p. 23 – sure if you limit it to the study area! Therefore, the forested communities within the study area are not considered SWH for bat maternity roosting.

Which trees are to be removed? The EIS is not clear from page 22-3. table 4? Does Figure 3 show the ones to be removed? There are 8 marked on this figure. P. 22 says seven are high quality snag trees.

Identifying suitable roost trees for Little Brown Myotis and Northern Myotis includes recording the location of all snags that exhibit appropriate attributes including cavities, loose bark, cracks, or knot holes. Identifying suitable roost trees for Tri-Coloured Bats includes recording the location of any Oak trees greater than 10 cm diameter at breast height (DBH), Maple trees greater than 10 cm DBH if the tree includes dead/dying leaf clusters, and any Maple tree greater than 25 cm DBH. A formal leaf-on habitat assessment was not completed, though the presence of appropriately sized Oak and Maple trees were noted during subsequent ELC field studies.

p. 25

Section 5.5.1. Both in the fish and mussel sections, the EIS suggests that because the Thames River is 300m away from the study area and proposed project, it is unlikely to have any impact on the river or water species. However, this is misleading since there is an outlet that flows from the study area to the Thames River. This is particularly concerning given there are SARs identified in the Thames where the outlet enters the river.

p. 26

The works associated with this project are unlikely to have any impact on the river, and therefore, will not impact these species.

However, part of the project is a pumping station to allow sewage to continue to flow when gravity won't work in high water situations. Not clear where this is constructed or if there is a new outlet. Or if this is only treated water? Was told the work was within fence line but the berm seems to be outside, or at least, the construction of it will include outside the fence. It would be helpful to show what areas would be affected directly by construction and where the berm/wall will be. The presentation at PIC 1 shows a nice neat line at the fence line. This is clearly not the case based on the impact table and the text on p. 42-3 – It would be appreciated if this could be shown at the EEPAC meeting

“Along the western side of the proposed berm, there will be some vegetation removal, which is located within 25 m of a stormwater outfall that outlets into the Thames River. Mitigation measures have been put in place to protect this outfall and the Thames River from erosion, sedimentation, and spills. Any trees removed should be replaced at a 3:1 ratio, which will result in a long-term net benefit for the area once the trees and vegetation reach maturity.”

It would be helpful at EEPAC to show the area of disturbance expected – the consultants probably estimated one to do the impacts table. Why there would be any in water work is unclear but mentioned on page 39.

p. 27

Section 6 The EIS reports that neither ESAs or significant valleylands are within the study area, however, they are in close proximity and connected by an outlet from the study area. This should be explained.

p. 29

Section 6.4 Here it states that the outlet channel supports fish habitat within the Thames River through the supply of water and nutrients. This then supports my concern that sediments and toxins from construction during the project could also enter the Thames River.

This section also suggests that the determination of dead fish is done by self-assessment. What does this mean?

Will the wetlands be evaluated? We suspect not despite the policy requirement. Page 43 says: “Confirm wetland boundaries, complete the OWES evaluation and confirm buffer/setbacks. Unevaluated wetlands at the Adelaide study area should be evaluated by a qualified person in accordance with the OWES, with the evaluation approved by the MNRF, to determine its significance. Once the boundaries are confirmed, and evaluation of the appropriate setback should be conducted.”

Under City policy - The wetlands are unevaluated wetlands and should be evaluated by a qualified person in accordance with the Ontario Wetland Evaluation System (OWES; MNRF 2014), with the evaluation approved by the MNRF, to determine its significance.

Page 29 – SAM 2 ecosite? Do you mean MAM2?

p. 31 from recovery strategy for Kentucky Coffee Tree (Ontario species at risk web site)

Sites where Kentucky Coffee-tree has been planted as part of a restoration program will not be considered for critical habitat identification until it can be determined that the plantings are successful. Determination of restoration success and viability, as measured through plant vigour and fitness, must precede identification of critical habitat at restoration sites at this time.

Critical habitat may be identified at restoration sites following long-term monitoring to determine success, extent of suitable habitat and site occupancy.

p. 32

Table 10 Should show that although a significant valleyland is not directly in the study area, the channel outlet connects it to the Thames. Table 10 also shows that this is an ESA.

p. 35

Section 8 Again significant valleylands should be included in the list.

Both direct and indirect impacts on natural heritage features and functions can occur as a result of the preferred alternative. Impacts and residual effects on natural heritage features were assessed based on the following criteria:

- duration: long or short-term
- extent: localized or expansive
- permanent: permanent or temporary
- severity: positive or negative

p. 37

Table 12 A potential impact noted is a spill yet no mitigation measure is described. This is particularly troubling given the channel outlet linking the study area to the Thames and the SAR identified in the Thames River.

Impacts – Table 12

Technically, this is outside the study area although ELC work was done.

Near-water works to create the floodwall/berm along the western section of the Adelaide WWTP (25m from storm water outfall)

Page 39 – good – will this be in tender/construction docs? - 4B: Enlist an environmental monitor onsite to provide advice and ensure that activities will not have any negative effects. Information for site-specific SAR should be posted in construction trailer.

p. 40 – agree - Retain an Arborist during detailed design to create a tree preservation plan to protect as many healthy, native trees as possible through the process.

p. 41 – agree - Develop a restoration plan to prescribe when and how disturbed areas will be restored. Plantings should consist of native trees, shrubs and seed mixes. Tree replacement should be at a MIN 3:1 tree replacement ratio.

Must also include invasive species removal (Phrag, Loosestrife and Buckthorn)

Also no equipment should be fueled within 30 m of river or wetland

p. 42

Section 9.6 Species at Risk – I am assuming that you mean section 6.6 Table 9 here?

Can you tell us how this is done at detailed design? SAR habitat is protected under the ESA; therefore, at the detailed design stage it will be important to confirm potential occurrence (i.e., location of SAR and SAR habitat) as well as permitting report requirements under the ESA. Permitting and additional studies are discussed further in Section 11.

p. 44 – please explain when this will be done and by who - identified candidate SWH habitat and potential SAR habitat will need to be reviewed in more detail once the area of impact is confirmed for this project.

From: [Sandy](#) Levin

To: mmckillop@london.ca

Cc: ewilliam@london.ca; sbutnari@london.ca; sbraun@matrix-solutions.com; pdecarvalho@matrix-solutions.com

Sent: Wednesday, February 9, 2022 11:33 AM

Subject: Greenway EA - EIS

Hi Marcy, here are the preliminary comments from the Greenway PCP EA working group. Look forward to your feedback at EEPAC next week.

Regards

1 – The EIS identified one Kentucky coffee-tree on the site. The EIS goes from “appeared to be a planted species” to being “a planted species”, meaning it does not receive protection under the ESA... I suppose it’s one of those things that is impossible to prove. However, the report does recommend that the tree be transplanted, and we would agree with that recommendation (section 9.6).

2 – With respect to the Bat Maternity Roosting Survey, the report found a total of 30 snags (of which 20 were high quality) and went onto say that 55 snags would be the minimum based on the forested size (5.51 ha) to be considered SWH for bat maternity roosting habitat. However, the report also mentioned that “large portion of the FOD7-4 ecosite within the WWTP compound was inaccessible due to lack of access within the fenced area of the Greenway WWTP. Snag trees and mature Oak and Maples were identified from a distance, indicating that additional habitat potential is present within this feature beyond that survey findings indicate.” (Section 5.4.3.1) It might be worthwhile to more formally determine whether there are more snags in this area such that the forested area is indeed SWH for bat maternity roosting habitat. Are there alternative ways to better search the area for suitable habitat, for example using drones or something similar?

3 – Several areas were identified as having Buckthorn. As part of the construction of the flood mitigation measures, the EIS states that some vegetation will be removed to erect the proposed berm. While this vegetation is being removed, would it be feasible to also go in and remove any Buckthorn at the same time?

Oxford Street West and Gideon Drive Environmental Assessment (EA) Study's Environmental
Impact Study (EIS)

Comments from EEPAC on EIS Jan. 12, 2022

Berta Krichker, Katrina Moser, Spencer Heuchan, Seun Esan

Summary

The study area is in an ecologically sensitive area, and within an area of rapid development in the city of London. It is in very close proximity to Kains Woods, an ESA, Tributary C (Figure 1, ~<400 m), a rare, cold-water stream that is connected to the Thames River, and significant valleylands. The proposed intersection improvements are required because of increased traffic volumes and a need to address safety issues resulting from rapid development, limited access to public transportation and opportunities for active transportation. EEPAC's concerns are mainly associated with the potential environmental/ecological adverse impacts on Tributary C, which is the only documented cold water stream in the City of London.

The documents pertaining to the alterations at the Gideon intersection and this EIS refers to the potential future widening of Oxford Street and other existing and future development activities in this region. The EIS needs to acknowledge the City's commitment, responsibility and accountability to protect this rare ecologically, extremely sensitive and important stream system by ensuring compliance with the Municipal Class EA Schedule 'C' Storm/Drainage and Stormwater Management, Transportation and Sanitary Trunk Servicing Works for Tributary 'C' (Tributary 'C' Class EA) recommendations that provided provisions to ensure protection and preservation of the Tributary C cold water system, aquatic life and fishery. This Class EA was accepted by the City Council & MECP.

EEPAC's comments on the present EIS report should be viewed as preliminary because EISs typically represent environmental/ecological support information to Class EA projects reports that encompass and identify all components of the project. EEPAC has not received this Oxford Street West and Gideon Drive Class EA project report and we did not have all information required in time to properly and comprehensively review the project in order to report our full comments in time for our February meeting.

Comments

Aquatic

The study area includes Tributary C, a rare, cold-water stream that supports a population of brook trout. The study area also provides habitat and spawning areas for several species at risk. To protect both the stream and its ecosystem, it is imperative that stream water temperatures remain cold (optimum temperatures for growth are between 13° C and 16.1° C) (Hokanson et al. 1973; Dwyer et al. 1983) and the water quality needs to be maintained and protected. As a result of extended road surfaces there will be increased impermeable surfaces, and therefore, increased peak flows and volumes under the post-development conditions. This will result in increased surface/storm water flows from the project catchment areas, and these will require pretreatment to protect the stream if these flows will be discharged into Tributary "C". Any

direct storm/surface discharges to this system will introduce warm waters and contaminants. Under climate change, these problems will be exacerbated as temperatures rise and precipitation increases and becomes more variable, specifically during extreme storm events. Potential changes to the hydrology (surface flows and groundwater) must be considered and addressed in all City's future plans. Maintaining cool temperatures and good water quality conditions are absolutely critical and important for the preservation of this rare and natural cold water system, aquatic life, and fisheries.

Recommendations:

- 1. All proposed design of storm drainage servicing (minor/major surface drainage/stormwater conveyance systems, outlet discharges and SWM) works for the Oxford Street West and Gideon Drive Class EA shall comply with the Municipal Class EA, Schedule 'C' Storm/Drainage and Stormwater Management, Transportation and Sanitary Trunk Servicing Works for Tributary C recommendations to ensure that surface/storm drainage water quality will be maintained and preserved to protect Tributary C environmental/ecological conditions and associated cold water fisheries.*
- 2. All stormwater outlets for minor and major flows should be identified on maps in figure 1 or 2 and will require water quality pre-treatment measures and plans for the removal of silt, sediment and salt need to be identified for the existing and/or proposed surface/stormwater discharges into the Tributary 'C' water resources system.*
- 3. EEPAC should be allowed the time upon receiving a complete package of all reports, including the storm water servicing, hydrologic report, and class EA, to do a thorough review. This would provide EEPAC assurance that the City is sincere in their commitment and responsibilities to protect Tributary C.*
- 4. We note in the geotechnical assessment (pg. 3) that borehole data used in the geotechnical report was collected in 2000-2015. Given the considerable recent housing development occurring in the area and increase in impervious surfaces, this data may not reflect current conditions. We recommend additional time to ensure that there is a comprehensive understanding of the hydrology prior to further construction to ensure that Tributary C is protected.*
- 5. The stream temperature is presumably maintained by groundwater inputs. Although we have not had time to carefully review the geotechnical report, groundwater is very close to the surface in places. Is it possible that changes to drainage in this project could lead to changes in the relative proportion of groundwater relative to surface flows entering Tributary C? How will the city ensure this does not happen? Places in the EIS indicate uncertainty around groundwater and surface flows. For example, on page 25 it says "In support of this new housing development, drainage patterns have been altered, but inputs to Tributary C should be maintained." We need to know that the drainage patterns "will" maintained – it is not an option.*

6. *To ensure no harm comes to the stream, there needs to be a commitment to monitoring. At present, the baseline conditions have been determined using limited or old data. For example, water quality has been measured at two sites collected on one day in Sept. 2021. Water quality includes four variables, temperature, pH, conductivity, and dissolved oxygen. Stream water chemistry is highly variable temporally and can not be captured in a single day measurement. Fish data is from 1999 and 2010; invertebrate data is from 1999-2002. This is insufficient to provide present baseline conditions and shows a lack of commitment to monitoring and stream protection. Were aquatic measurements collected for previous EAs for recent development in this region? How has the stream changed in response? Is a monitoring program implemented as part of the development projects? Is there any sense of how the stream is doing? What is being planned for this project? As pointed out in section 8.4, factors that could impact fish include turbidity and nutrient loads and neither has been measured, despite the potential for these to increase from road construction, fertilizer use etc. Do we know whether ground water or surface flows into Tributary C have changed as a result of housing development projects? Were monitoring plans implemented for previous projects? What are the findings?*

Terrestrial

1. This study area includes several species at risk including the Eastern Peewee, which relies on the walnut tree habitat. Based on a previous EA, the walnut inclusion area is being lost. (see Figures 8 and 9 - Figure 3 and 4 below).

Recommendation:

An additional 20 trees are targeted for removal. EEPAC recommends walnut trees be avoided. However, if walnut trees are removed how will they be compensated. EEPAC recommends that the species planted must be native. This should improve habitat for woodland birds like the Eastern Wood-Peewee.

2. Barns Swallows have been spotted in the past within the study area foraging for food.

Recommendation

It appears from the air photos (figure 2) that there is a barn on the subject lands. EEPAC recommends a check for Barn Swallow nests/roosts to be undertaken before the structure is removed. If nests are found, it is recommended that a kiosk be built using materials from the old barn be used as compensation. Cole Engineering has a history of successful kiosk construction. <https://www.thespec.com/news/hamilton-region/2017/07/07/inside-ontario-s-fight-to-save-declining-barn-swallows-one-bird-house-at-a-time.html>

3. There is the potential presence of nesting bats within the subject area since there were reported occurrences of SAR bats in the surrounding area.

Recommendation

EEPAC recommends to perform a tree cavity search prior to tree removal as some trees have been noted as potential nesting habitat.

4. Monarch butterflies have been spotted in subject area along with potential larva feeding habitant (milk weed) also in subject area. Milkweed is the only source of food for the growing Monarchs.

Recommendation

EEPAC recommends milkweed planting in nearby subject area to compensate for any loss of potential habitant (milkweed) for monarch larva.

Alternatives

The preferred alternate has the greatest impact on the ecological integrity and preservation of the existing environmental/ecological conditions of the area. Potentially, it also contributes to increased air and noise pollution, road kill and safety concerns for cyclists and pedestrians. The EIS suggests that idling cars at a stop light increase pollution, but having no light will increase speeds and road kill. At the presentation, it was explained that cyclists would have to walk their bikes at the round about – we are uncertain that many cyclists will adhere do this. How safe will this really be for cyclists and pedestrians? The plan is unclear about the connectivity of sidewalks for pedestrians. Will there be a sidewalk all the way down Oxford and Kains Road? How safe are round abouts for pedestrians? Gideon Road has become a popular running and cycling route – how will this be taken into consideration as the area expands? Are there plans for bike paths and sidewalks on Gideon Road? Widening roads increases individual automobile use, which is the number one greenhouse gas emitter on London (<https://getinvolved.london.ca/climate/widgets/49286/photos/19337>). This alternative, therefore, is in direct conflict with finding ways to reduce greenhouse gases.

We also note a private property just to the west of the planned intersection that is within the study area. Figure 1 of the geotechnical report shows that this driveway and property will lead to problems with traffic flow at the intersection, yet no mention is made of this home.

Recommendations: Reduce the need for individual vehicles by having a public transportation plan in place and an effective active transportation network, which would negate the need to accommodate so many cars. Instead consider option 1 or 2, which has less ecological impact, increases safety and reduces vehicular traffic and helps address the climate change emergency.

Recommendations: If there hasn't been, there should be a discussion with the home owner regarding the planned alternatives. This driveway and property need to be considered in a review of the alternatives. As well, the safety of this entryway at a roundabout should be part of the considerations of the proposed alternatives.

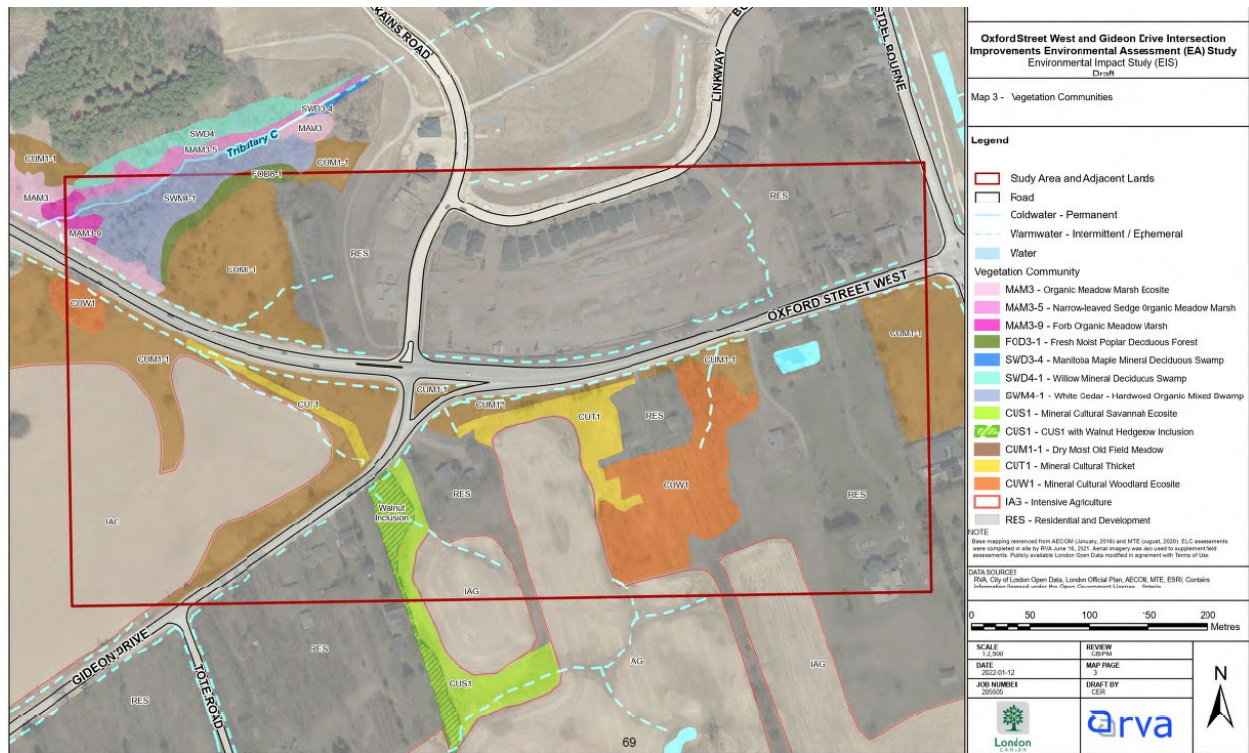


Figure 1



Figure 2

Figure 3



Figure 9: Tree Preservation and Compensation
(2017 City of London Air Photo)

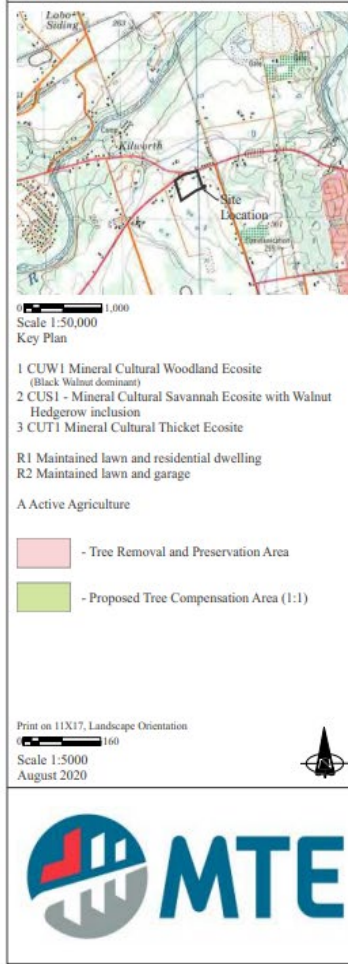




Figure 4

EEPAC Working Group Comments re: Windermere Rd EIS

EIS Received at the January 2022 EEPAC meeting

Comments Submitted February 10, 2022

Working Group Members: Ian Arturo, Susan Hall, Sandy Levin, Katrina Moser, Brendon Samuels

1. Point in text: Appendix table, Habitat Suitability Screening and Species Impact Assessment for SAR and SOCC Identified as Potentially Present in the Study Area, Birds, Barn Swallow

Comment: As identified, Barn Swallows may nest under the Richmond St Bridge. Cliff swallows historically also bred here. We disagree with the statement, “The Project Area does not impact the bridges, no impacts are anticipated) as loud noise associated with construction activities may negatively impact breeding success for SAR under the bridge, which is within the study area.

Recommendation: The breeding season for the Barn Swallow spans from May through July. The underside of the Richmond St Bridge should be surveyed regularly during this period for signs of Barn Swallow breeding activity (i.e., nests) especially prior to commencing construction activities that produce loud noise. If active nests are found, construction activities producing loud noise should be paused until nestlings have fledged (19-24 days after hatching).

2. Point in text: Page 6, methods, “not yet come into full force and effect”

Comment: The environmental policies and Map 5 for this area are already in full force and effect

3. Point in text: Pages 6-7, 3.1, 3.1.1

Comment: Why does this list not include data gathered for the BRT project?

4. Point in text: Page 8, 3.2.2

Comment: How will EEPAC comments be reviewed?

5. Point in text: Page 29, 4.2.5, re: Queensnake

Comment: Where Queensnake is noted (p. 7), the EIS be updated to reflect the finding of a Queensnake by a member of the public and confirmed by the SAR biologist at UTRCA in 2012/13 west of the Medway bridge near Corley Drive. This finding was also noted in the CMP Phase 1 document (Natural Heritage inventory by Dillion).

6. Point in text: Page 30, 4.2.6, Habitat for Species of Conservation Concern

Comment: Black Redhorse should be presumed present. “In the Medway creek between its mouth and Collip Circle, I have observed Black redhorse spawning in late April and early May. I have also observed the spawning of walleye, rainbow trout, greater redhorse, white sucker, and shorthead redhorse. I have also caught smallmouth bass in that stretch of river.” (personal communication with S. Levin with Christian Therrien, M.Sc., Ph.D. Student, Swanson & Neff labs, Department of Biology, University of Waterloo, C3therrien@uwaterloo.ca)

7. Point in text: Page 32, 4.2.8 Tributary to Medway Creek

Comment: What dissipation will be needed for the larger pipes? Particularly for this outlet? Please see detailed comments at the end of this document.

8. Point in text: Page 33, 4.2.8, Tallwood Valley Creek

Comment: Much more up to date data should be used in this section - it states that the data on fishing and mussels is from 1998 UTRCA data. EEPAC believes there is more recent data available. This should be confirmed with the UTRCA

9. Point in text: Page 34, 6.0, Active Transportation Improvements

Comment: This will have an indirect impact on SAR in the river. The bridge has increased the number of people in proximity to SAR turtles in the area (Scott Gillingwater, per comm). From the bridge crossing the Thames River at Ross Park, Katrina Moser (EEPAC) reports frequently observing spiny softshell turtles sunning themselves on a concrete pipe. Directly adjacent to the pipe she has also observed people fishing from shore posing a risk for the turtles. This connection will add to these threats to the turtles.

Recommendation: Increased education and signage to limit fishing near turtles. Perhaps similar to signage used in Killaly Woods after the osprey was killed in fishing line.

Recommendation: Consult with the Species at Risk biologist at the UTRCA to actively work to reduce risks to SAR turtles related to the indirect impacts of this and other recent city projects in the area. This may include planting of replacement trees in Ross Park rather than within the study area.

10. Comment: EEPAC agrees with the recommendation *"to introduce a variety of native vegetation species that are beneficial to wildlife such as nectar-bearing plants for pollinators; however, in this case, nut and berry producing species will be lower in quantity to avoid attracting wildlife to the wooded edge where there is more of a likelihood of vehicle/wildlife interaction."*

11. Comment: EEPAC agrees with the recommendation that *"any invasive species control be implemented at the transition zone between the active tree removal and the remaining forest to the extent possible. Invasive species management strategies should be included during the development of the detail design for the project, and should be based on best available science such as the Best Management Practices developed by the Ontario Invasive Plant Council."*

12. Point in text: Page 40, 7.4, 7.4.1.1

Comment: Work should be done by a biologist, not a contractor. There should also be training and photos in the construction trailer of species with a phone number to call if encountered. How else would they be notified to come and move wildlife?

13. Point in text: Page 40, 7.4.2

Comment: Will this be a requirement in the tender docs and detailed design?

14. Point in text: Page 41, 7.4.4

Comment: EEPAC supports the Salt Management Plan goals; however it notes that the City generally does not have site specific salt application plans for areas this small. EEPAC does

support that detail design include design approaches to reduce salt impacts, including site grading and use of vegetated swales within the right-of-way

15. Point in text: Page 42, 7.5, third paragraph, “*At detail design, the need for encroachment...*”

Comment: What about better than standard mitigation? What about Tallwood Creek which is presumed fish habitat?

16. Point in text: Page 43, 8.0, 8.1

Comment: There is an error here, “Reference source not found”

Comment: What about Tallwood? Tallwood Creek is largely missing from the engineering drawings shown in the EA. Is this an oversight?

Recommendation: Given Tallwood Creek is fish habitat and a more sensitive environmental feature, detail design should be closely reviewed to ensure a net benefit.

17. Point in text: Page 44, 8.3

Comment: Consultation with UTRCA during detailed design should be *required* given the presence of SAR. Current text says consultation is recommended, not required.

18. Point in text: Appendix Table, Habitat Suitability Screening and Species Impact Assessment for SAR and SOCC Identified as Potentially Present in the Study Area, Fish, Black Redhorse

Comment: Black Redhorse were seen spawning from the Western Road bridge by a former EEPAC member who is a PhD candidate in aquatic biology.

19. Point in text: Appendix Table, Habitat Suitability Screening and Species Impact Assessment for SAR and SOCC Identified as Potentially Present in the Study Area, Reptiles, Spiny Softshell

Comment: We anticipate there will be indirect impacts. Basking turtles on the Thames Valley Trail pathway leading south from Richmond Street. Turtles have been observed basking in the sun along this pathway. With increased accessibility to and therefore use of this portion of the path, a basking turtle is at increased risk of injury from bicyclists. Increased access to habitat and nesting locations has occurred since the city built the Ross Park bridge (per commu with Scott Gillingwater). Efforts to screen have been ignored by the city up to now.

Recommendation: City of London staff liaise with the UTRCA to develop ways to increase public awareness about the importance of protecting the turtles, such as installing signage for cyclists and pedestrians.

20. Point in text: Mitigation Measures slide, Vegetation Mitigation

Recommendation: To ensure there is no increase in sediment inputs to any of the three water courses, additional ESC measures are needed during the project. Standard ESC measures seemed not to work during the sidewalk installation on the south side of Windemere east of Richmond.

Recommendation: In addition to the mitigation measures outlined on p. 38, p.42 recommend water quality testing to measure turbidity changes.

21. Comment re: Infrastructure Replacement. Improvements will include various storm sewer, sanitary sewer and force main replacements of the existing infrastructure within the municipal ROW. p.35

Recommendation: Assess diameter of stormwater pipes for possible slope instability and erosion at their outlet.

22. Comment: EEPAC recommends that the proposed Municipal Class EA for Windermere Road Improvement incorporates all applicable design, construction and maintenance mitigation/remediation measures required given the existing and post construction conditions.

These should include:

- Storm/drainage minor/major peak flows discharges;
- Storm/drainage outlet locations and its hydraulic conditions;
- Erosion/slope stability protection and energy dissipation systems;
- Erosion sediment control plan and measures

All of the above-noted requirements are necessary to eliminate or minimize potential adverse impacts on erosion control, slope stability and erosion sediment control of watercourses/tributaries, and associated unevaluated wetlands related to Tallwood Creek, east of Richmond.

23. Comment: Given the magnitude and duration of the project and extent of the proposed improvements, EEPAC recommends that the proposed Municipal Class EA for Windermere Road Improvement work be required to include, but not be limited to:

1. mitigation measures to address and eliminate the existing erosion and slope stability deficiencies associated with the storm/drainage discharges from the subject project catchment areas;
2. mitigation measures to address storm drainage storages and/or energy dissipation measures/systems to minimize and/or eliminate adverse effects of additional (post-construction) storm/drainage surface peak flows discharges, which are outletting into the receiving water resources system due to increases in peak flows and velocities (energy of discharges) that may adversely affect the existing erosion slope stability conditions; and
3. erosion sediment control plan and measures together with the water quality monitoring program spanning pre-construction and during construction activities, aiming to minimize impacts of sediment on fish and fish habitat, and the risk of sediment being conveyed to Medway Creek, the Thames and their tributaries.