

ECAC WORKING GROUP COMMENTS ON EIS AND HYDROGEOLOGICAL STUDY
for **735 Southdale Road West**

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Received at ECAC's March, 2023 meeting

Comments in yellow are based on revised EIS received after March 2024 meeting which has comments from S. Evans, S. Hall and S. Levin.

Items crossed out from March 2023 are sections from the previous EIS

SUMMARY

1. The development setback from the wetlands is not adequate
2. ~~The of the PSW wetland is unclear, is it surface fed/groundwater fed or combination of both.~~
3. Though the water balance on a site level might be maintained using LID measures, the wetland could be drier for longer periods because groundwater recharge will be reduced. A feature-based water balance calculation should be required instead of a site specific water balance.
4. Groundwater flows SE towards Communities 4 and 5 – impacts are not addressed
5. Storm Water Management - any pre to post requirements that need to be met at this site? It is not clear from the documents

We are not convinced that the EIS and Hydrogeology work make the case that the LID measures such as trails and plantings between the built-up area and the PSW will bring the post development water balance up to 80% as per minimum standards.

ECAC comment on revised EIS: see below, post development water balance is less than 80%.

p. 21-23 of revised EIS

“The proposed development will likely result in increased run-off and decreased infiltration on site due to the construction of impermeable surfaces. The use of Low Impact Development (LID) strategies and secondary infiltration opportunities are recommended in the Hydrogeological Report (EXP, 2024) to maintain pre-development infiltration volumes and sustain the adjacent south wetland. It is proposed that runoff from part of the rooftop of Building A and surface runoff from landscaped/naturalized areas will contribute clean water to the south wetland to maintain appropriate runoff inputs to the south wetland post-development. A feature-based water balance has been completed by EXP to show that 77% of the annual pre-development runoff will be maintained to the south wetland post-development (EXP, 2024). A water balance specific to spring/summer (March to August) was also completed and showed that 98% of the predevelopment runoff would be provided to the south wetland in this time period. It is our opinion that this water balance is appropriate as it avoids overflowing the wetland during the months it currently has standing water. Too much runoff during these months could change the function of the wetland and result in flooding of the surrounding area. The 15 m naturalized buffer can be used to dissipate flows into the south wetland, and more specific details relating to dissipation of flow are to be determined at the detailed design stage.”

ECAC comment on revised EIS: *Is 77% sufficient?*

ECAC comment on revised EIS: Recommendation 12 states in part: “Further LID details will be determined in the detail design phase. Recommendation 13 of the revised EIS also states

“Implement Low Impact Development (LID) measures and secondary infiltration strategies as recommended by EXP (2024) to ensure no net loss of hydrological function from the removal of the two wetland inclusions and the SAS1 pond. Details will be determined at detailed design.”

ECAC recommends: *There must be conditions in the development agreement that the UTRCA and/or City Hydrologist must confirm the LID measures will result in no net loss of the wetland features or their functions.*

Wetland boundary and buffer (Community 4 and Community 5)

ECAC comment on revised EIS: *no staking mentioned but site survey done. Results below:*

“Community 4 is a 0.12 ha Mineral Shallow Marsh Ecosite (MAS2) that is located in a topographic low in adjacent lands, approximately 65 metres south of the Subject Lands. This community was the south section of a PSW but is no longer designated provincially significant. Community 4 is a distinct wetland feature from Community 5; our field studies indicate that, by the 50/50 rule, non-wetland grasses and forbs create a break between the two units. Community 4 is dominated by Broad Cattail, Creeping Bentgrass, Hemp Dogbane, Devil's Beggarticks, and Ditch-stonecrop. The community is wet in the spring but was observed to be dry by August.

Community 5 is a 0.28 ha Maple Mineral Deciduous Swamp Ecosite (SWD3) located adjacent to the south edge of the Subject Lands. This community was part of the same PSW complex as Community 4, but it is no longer designated provincially significant. There is no clear hydrological surface connection with Community 4. No floral groundwater indicators were observed in this community. The canopy of Community 5 is strongly dominated by Silver Maple, but White Willow is also present. The understory is dominated by Eastern Buttonbush, Common Buckthorn, and Gray Dogwood. Community 5 has occasional non-native species growing throughout it with flooding in the spring and little to no standing water by mid-July or August.”

“Based on the review in Section 5.3, the most critical component of the natural heritage system is the Wetland (Communities 4 and 5) to the south. The EMG suggests, as a starting point, a buffer width of 30 metres between development and wetlands, with adjustments based on the sensitivity and value of the wetland functions (2021). In this case, a 15 m buffer is considered appropriate based on the feature size and functions, and as supported by the EMGs. The EMGs suggest that buffers less than 30 m are appropriate as it is a non-significant wetland that is less than 0.5 ha in total. The wetland provides general wildlife habitat, hydrological functions, and SWH (Terrestrial

MTE Consultants | 42128-200 | 735 Southdale Road West | February 22, 2024

19

Crayfish, woodland-breeding amphibians, unconfirmed SOCC) and these functions need to be protected, but none of these functions require a larger buffer. Buffers and other protection measures are discussed in greater detail in Section 7.1.2.”

FROM THE EMGs

4The City may accept a buffer less than the required minimums for Wetlands less than 0.5 ha, Significant Woodlands less than 2 ha, and Woodlands where it is supported through an Environmental Impact Study that is accepted by the City in consultation with the other applicable agencies where appropriate.

ECAC comment on revised EIS: *Unclear if other agencies have been consulted. It is completely unclear as to why 15m was selected. While this buffer is better than any other distance less than 15m, there is no explanation for why 15m was selected.*

ECAC comment on revised EIS: *There are no updated amphibian surveys reported in the revised EIS. All data is from the 2019 season.*

p.20 revised EIS

5.5.3 Stewardship

“Under the stewardship policies 1408-1411 of the London Plan, protection is encouraged for natural heritage systems that remain in private lands. These protection efforts can include stewardship agreements, Conservation easements, education, land trusts, tax incentives, signage and other suitable techniques. Such efforts will be discussed in conjunction with the post development setting in context of mitigation measures and their contribution to the refinement of setbacks and buffers.”

ECAC comment on revised EIS: *Who will the efforts be discussed with? What is meant by “the post development setting?”*

Terrestrial Crayfish

p.19 (table) revised EIS

“Confirmed Terrestrial Crayfish SWH – Subject Lands (1a inclusion) and adjacent lands (Communities 4 and 5) • Confirmed breeding amphibian habitat (woodland) SWH – adjacent lands (Community 4 and 5)”

Page 25 revised EIS (**ECAC has highlighted a contradiction between page 19 and 25 as there are two SWH identified in the EIS**): The **only SWH identified** in the Subject Lands is confirmed Terrestrial Crayfish habitat in the 1a inclusion (MAM2) where a single chimney was observed. The south adjacent wetland provides far more Terrestrial Crayfish habitat (2 chimneys along the Subject Lands border and multiple others observed throughout Communities 4 and 5). This larger area of habitat will be retained and protected, and therefore the net loss of Terrestrial Crayfish SWH is considered minimal and therefore easily mitigated. The 15 m Open Space buffer will also provide more naturalized area around the retained south wetland that is no longer mowed or used for residential purposes, and this may allow further expansion by Terrestrial Crayfish. No significant loss of SWH is anticipated to result from the development.

ECAC comment on revised EIS relating to SWH: *Page 5-8 (table) of the EMGs states: Greater than minimum buffer width may be required when Significant Wildlife Habitat in accordance with criteria schedules for Ecoregion 7e are present (MNRF, 2015a).*

The presence of Significant Wildlife Habitat (SWH) indicates specific conditions that are enabling that type of habitat to be present and therefore, a higher degree of protection may be required.

Consultation with the City of London is required. (highlighting ECAC's)

ECAC comment on revised EIS: It is unclear if such consultation has taken place. This section of the EMG also begs the question why the EIS recommends only a 15 m buffer.

ECAC comment on revised EIS: The SWH Criteria Schedule for Ecoregion 7E states that SWH Mitigation Support Tool (MIST) Index #36 provides development effects and mitigation measures where terrestrial crayfish have been identified. Index #36 states in part for this form of development:

A water balance study needs to be undertaken to ensure that there will be no measurable change in the water table level or in surface water quality or quantity. Drainage of wet meadows and marshy wetlands should always be avoided.

Vegetation should never be removed immediately adjacent to crayfish habitat, as this is important forage.

Surface water runoff needs to be directed away from potential crayfish burrows to avoid sedimentation that adversely affects the crayfish's ability to dig burrows. Maintenance of drainage ditches (e.g., clearing of ditches) should be scheduled for periods when the crayfish are less likely to be present (e.g., early spring, when adults are often found in streams, lakes, and rivers) (Crocker and Barr 1968).

Public awareness about the presence of burrowing crayfish and the importance of maintaining their habitat is also an important conservation strategy.

ECAC recommends that MiST Index #36 requirements be included in any conditions of development:

It is unclear if the detail design for this and the development to the south will undertake the necessary steps to protect the SWH. ECAC reiterates its previous recommendations that there be clear and strong conditions regarding the construction measures taken to protect the Natural Heritage Features as well as specific monitoring requirements in any development related agreements including site plan agreements.

MONITORING

Section 7.3 page 29-30 deals with monitoring. It points to the proponent for the construction and long-term monitoring such as maintenance of boundary delineation measures. As properties may change hands over time, **ECAC recommends** that the conditions for monitoring be included on title as well as in the development agreement. Elements that must be included in the agreed to monitoring plan include but not be limited to ongoing invasive species management, measures to avoid encroachment into the wetland, maintenance of the naturalized buffer, and snow storage.

ECAC also recommends that the monitoring period be 5 years to confirm no loss of the wetland feature or its function. Monitoring should continue every 2 – 3 years. This aligns with recommendations from Sean Spisani at Stantec who did the 905 Sarnia monitoring.

ECAC notes that this section of the revised EIS also mentions the relocation of the SAS which is the responsibility of the City and the landowner to the south as part of the road widening and conditions of

development of those lands to the south. This requires a separate monitoring plan to the satisfaction of the City. **ECAC recommends that:** Guidance from the lessons learned from the 905 Sarnia wetland relocation as recommended by Stantec, must be applied to this relocation.

Small wetland community 3 (SAS)

While known it is to be removed and relocated to the property to the South under that plan of subdivision, the statement on page 23 (“It is our opinion that small ponds such as these are not under-represented in London and not biologically important to be considered in this context,” should be considered suspect especially when there is city policy to permit the relocation of small wetlands. Also, the 2006 inventory of Regionally Significant Vegetation Communities done by Bergsma and DeYoung indicated that **SAS made up only 0.21% of ecosites in London.**

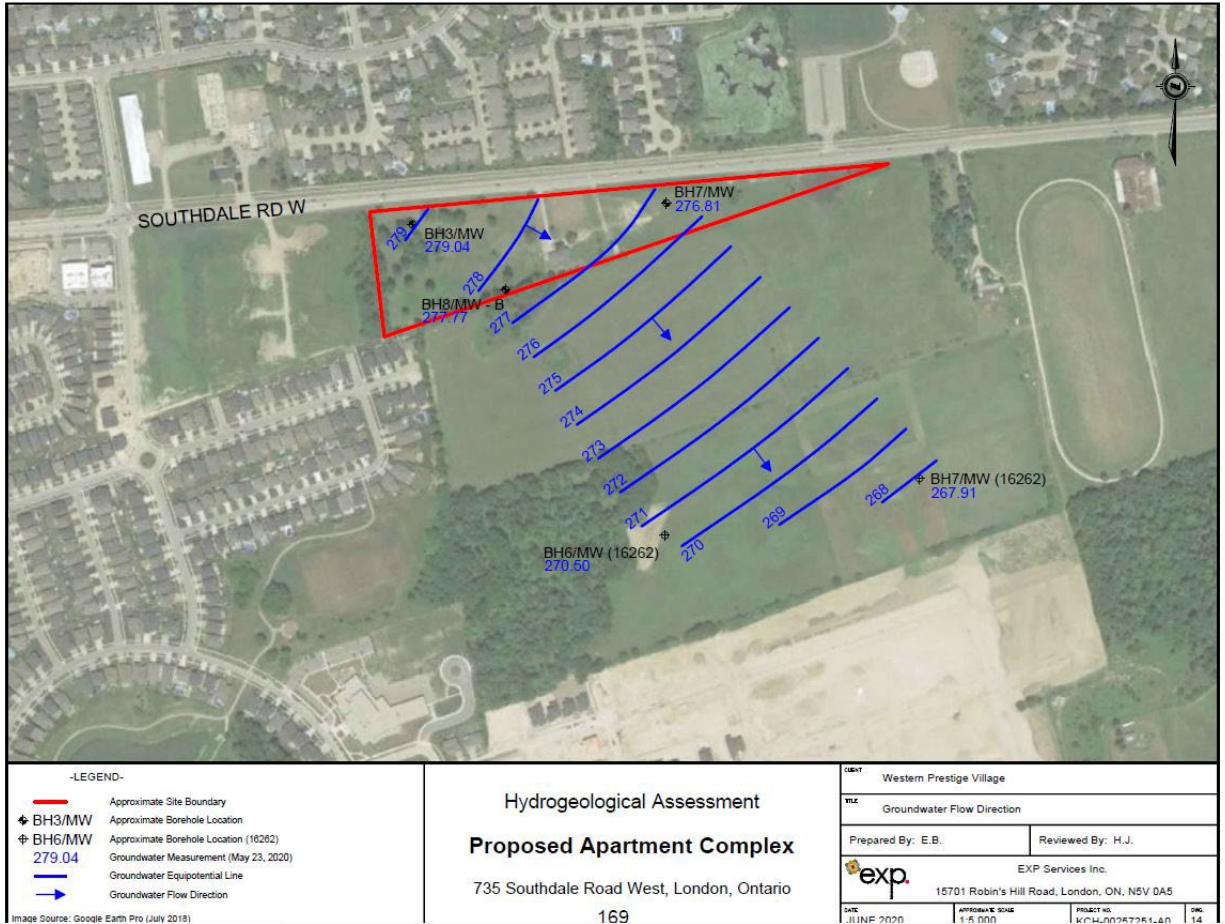
ECAC comment on revised EIS: MTE still takes the position that it is not an under-represented site. However, the issue remains the success of the planned relocation and the type of wetland that will be recreated. City staff are working with the proponent on this matter and ECAC has been given to understand that a City Ecologist is involved in this work.

HydroGeology, Stormwater Management and infiltration

ECAC is unconvinced that stormwater will be managed in a way that will protect the existing features and functions, let alone provide a net benefit.

ECAC also recommends that there be water quality monitoring requirements that go beyond the usual three years.

The groundwater flows SE from this site to the portions of the PSW to the south.



Construction Impacts

ECAC comments on the revised EIS: The document states on page 22 construction will be within the area 15m - 30 m from the feature. Although Recommendation 3 and 19 – 27 of the revised EIS recommend controls on sediment and erosion and access, it remains to be seen what protocols will be adopted and monitored during construction (Recommendation 23). **ECAC recommends specific ESC conditions must be included in the development agreement.**

How much excavation and dewatering will be done? Recommendation 24 of the revised EIS (Sediment control measures should be provided at the discharge point of the dewatering system (EXP, 2024) is the same recommendation that appeared in the previous version of the EIS. The EXP Hydrogeological Final Report February 21, 2024 **only** states “the need for a more detailed dewatering assessment should be reassessed at the detailed design stage of the project.”

ECAC comments on the revised EIS: We are not clear as to where dewatering will flow or when it will be undertaken. Any dewatering from late March to June will have a negative impact on the amphibian breeding in Community 5 which is SWH. Construction will also likely have impacts on groundwater flows

causing much drier than natural conditions. **ECAC recommends** that the conditions in the development agreement must be clear such that dewatering activities avoid negative impacts on the feature and its functions and be included in the detail design for interim stormwater management required during construction as noted in Recommendation 18 and 24 of the revised EIS.

As noted in the document, all the important information as to avoidance of these negative impacts is awaiting detailed design.

There will likely also be additional digging for the sanitary outlet. Where is the hook up to the system? The revised EIS only says "The proposed development will be connected to the future Talbot Village subdivision sanitary outlet to the south. Further details are provided in the Initial Proposal Report (Zelinka Priamo Ltd. et al, 2020). "

ECAC recommendation: The sanitary servicing construction corridor and installation be at least 30 m away from the wetland and woodland on the property to the south.

Post construction

Snow removal and salting will likely run off into the buffer. There will be a path in the buffer and there will be easy access to the site by dogs off leash unless an off leash site (such as the Alto site on Fanshawe Park Road) is included as a requirement of the site plan

ECAC comment on revised EIS: including an off leash site as part of the development is not included in the revised EIS.

OTHER COMMENTS ON CONSULTANT'S RECOMMENDATIONS IN SECTION 7.0 of the REVISED EIS

ECAC strongly supports:

Recommendation 6:

Provide a landscape plan for the south wetland buffer as part of the Site Plan approval process...

Recommendation 7: Invasive species removal.

Recommendation 8: Use of permeable materials for the proposed path.

Recommendation 9: Permanent boundary demarcation, preferably physical barrier across the entire property as this property will develop before the lands to the south.

Recommendation 11:

Snow storage should be discussed at detailed design and potential meltwater impacts on the south wetland should be discussed with EXP. Snow storage should not be directly adjacent to the south wetland.

ECAC comments on revised EIS: It will be much easier to deal with meltwater than to rely on the property owner/manager to avoid salt and other additives to remove snow and ice. Detail design must be reviewed by a City Ecologist for approval of measures for avoidance/mitigation of meltwater and fertilizer runoff.

Recommendation 12:

Garbage collection and dumpsters should not be located directly adjacent to the Open Space buffer.

ECAC agrees that no trash or other materials be stored near the buffer and that reviewing this during the monitoring period be included in any development or site plan agreements.

Based on experience at 905 Sarnia Road, the new location for the wetland must be prepared ahead of time and perhaps as long as a year should pass before species in the SAS are relocated to the new site.

The relocated wetland site should be naturalized with native wetland species and include wildlife habitat features (variable water depths, logs, brush/rock piles, emergent vegetation, bird nesting boxes). Wetland relocation will need to be coordinated with the City of London and the south adjacent landowner.

ECAC comments on revised EIS: Recommendations 13-15 touch on the removal of wildlife and the relocation of the SAS feature. However, none of the concerns above previously raised by ECAC about timing of the relocation or the suitability of this storm pond for “temporary” relocation have been addressed. The lessons learned from the 905 Sarnia Road wetland relocation must be applied and embedded in the conditions of development.

The following recommendations in the revised EIS are commendable but completely unenforceable.

Recommendation 32:

The use of chemical applications (such as commercial fertilizers) in landscaped and grassed areas should be limited. Consider using heartier grass varieties that require less extensive watering or fertilizers (EXP, 2024).

Recommendation 33:

Limit the use of salts or other additives for ice and snow control on the roadways and parking areas (EXP, 2024).

Where will the plowed snow from the roads within the complex be stored during the winter as to minimize runoff with potential higher concentration of salt into the PSW? Recommendation 11 of the revised EIS leaves this for a later date:

Recommendation 11:

Snow storage should be discussed at detailed design and potential meltwater impacts on the south wetland should be discussed with EXP. Snow storage should not be directly adjacent to the south wetland.

ECAC recommends: Snow storage be indicated in the site plan and/or other design drawings such that it is no closer than 30 m from the retained wetland feature.

Recommendation 34:

As per recommendations by EXP Services, additional water testing during or post-development should be considered to ensure the quality of surface water features (i.e., south wetland) is maintained (EXP, 2024).

ECAC recommends water quality testing be a requirement of any development agreement that water quality be tested during construction and for a period of time after construction as recommended by the UTRCA and/or City Hydrologist. It is also important to note that water quality parameters and testing be carried out PRIOR to work taking place in order to establish baseline conditions.

OTHER

From the revised EIS recommendations:

Recommendation 40:

Provide an information package in the apartment lobby to educate future residents on ways to protect the natural heritage components beyond the property boundaries. The “Living with Natural Areas” brochure put together by UTRCA (2005) could be provided as it includes information on proper landscape waste disposal, the impact of pets on wildlife and natural areas, and potential impacts of recreational activities in natural features. The brochure is provided in **Appendix I**.

Recommendation 41:

The installation of educational signage along the pathways adjacent to the south wetland is recommended to inform residents of the significance of the adjacent habitat. Signage discussing the natural heritage feature present may be effective as some studies show people are more likely to avoid damaging activities if they are aware of the link between their actions and the subsequent negative impacts, if they feel they are responsible for the stewardship of a natural area (Gamman et al., 1995; Johnson and Van de Kamp, 1996), and if they understand the reason for a barrier (Johnson, 1989).

ECAC comments on revised EIS: We would also recommend the “Living with Natural Areas” brochure prepared by EEPAC (attached) be included in all apartment lobbies or mail area.

Figure 11 of the EIS provides some suggestions for demarcating the proposed 15m buffer and discouraging access to the feature to the south which may develop after this site. ECAC supports the intent. It also asks however, that the City Ecologists working on this and the project to the south ensure coordination of protection of the identified features from both developments (see Recommendation 9 of the revised EIS).