

3RD REPORT OF THE
ENVIRONMENTAL AND ECOLOGICAL PLANNING
ADVISORY COMMITTEE

Meeting held on February 18, 2016, commencing at 5:05 PM, in Committee Rooms #1 and #2, Second Floor, London City Hall.

PRESENT: S. Levin (Chair), E. Arellano, A. Boyer, E. Boynton, L. Des Marteaux, C. Dyck, P. Ferguson, S. Hall, D. Hiscott, S. Madhavji, K. Moser, M. Murphy, S. Peirce, N. St. Amour, M. Thorn, R. Trudeau, M. Watson and N. Weerasuriya and H. Lysynski (Secretary).

ABSENT: K. Doughty, B. Gibson, Dr. N. Huner, C. Kushnir and J. Stinziano.

ALSO PRESENT: J. Bruin, L. MacDougall, J. MacKay and M. Snowsell.

I. CALL TO ORDER

1. Disclosures of Pecuniary Interest

That it **BE NOTED** that S. Levin disclosed a pecuniary interest in clause 8 of this Report, having to do with the application of Corlon Properties Inc. relating to the property located at 259 Sunningdale Road West, by indicating that he is a member of the Upper Thames River Conservation Authority Hearing Committee and this application may be heard by the Hearing Committee.

II. SCHEDULED ITEMS

2. EIS for Richmond-Adelaide Thames Valley Parkway

That a Working Group consisting of E. Anello, C. Dyck, S. Madhavji, K. Moser, S. Peirce and N. Weerasuriya **BE ESTABLISHED** to provide comments on the Environmental Impact Study for the Richmond Street to Adelaide Street portion of the Thames Valley Parkway; it being noted that the Environmental and Ecological Planning Advisory Committee heard a presentation from J. Bruin, Landscape Architect and S. Stanlake-Wong, Dillon Consulting, with respect to this matter.

III. CONSENT ITEMS

3. 2nd Report of the Environmental and Ecological Planning Advisory Committee

That it **BE NOTED** that the 2nd Report of the Environmental and Ecological Planning Advisory Committee from its meeting held on January 20, 2016, was received.

4. 2nd Report of the Trees and Forests Advisory Committee

That it **BE NOTED** that the 2nd Report of the Trees and Forests Advisory Committee from its meeting held on January 14, 2016, was received.

5. 3rd Report of the Advisory Committee on the Environment

That it **BE NOTED** that the 3rd Report of the Advisory Committee on the Environment from its meeting held on February 3, 2016, was received.

6. Municipal Council Resolution - 1st Report of the EEPAC

That it **BE NOTED** that the Municipal Council resolution adopted at its meeting held on January 26, 2016, with respect to the 1st Report of the Environmental and Ecological Planning Advisory Committee was received.

7. Planning and Design Standards for Trails in ESAs (2012) Document Review and Update

That it **BE NOTED** that the Environmental and Ecological Planning Advisory Committee heard a verbal presentation from L. Des Marteaux with respect to the first meeting of the Trails Focus Group relating to the Planning and Design Standards for Trails in ESA's (2012) review and update.

IV. SUB-COMMITTEES & WORKING GROUPS

8. Property located at 259 Sunningdale Road West

That the following actions be taken with respect to the application by Corlon Properties Inc., relating to the property located at 259 Sunningdale Road West:

- a) the attached Working Group comments with respect to the application by Corlon Properties Inc., relating to the property located at 259 Sunningdale Road West **BE FORWARDED** to the Civic Administration for consideration; and,
- b) the Working Group **BE PROVIDED** with the addendums to the Environmental Impact Study to review in order to provide additional comments.

9. Multi-Year Budget Submission

That the following actions be taken with respect to the Environmental and Ecological Planning Advisory Committee (EEPAC) comments on the Multi-Year Budget:

- a) the attached, revised, Working Group comments relating to the Multi-Year Budget, **BE FORWARDED** to the Municipal Council for consideration; and,
- b) S. Levin, Chair, EEPAC **BE REQUESTED** to present the above-noted comments at the Strategic Priorities and Policy Committee Budget meeting on behalf of the EEPAC.

10. Property located at 2001 and 2215 Sunningdale Road West

That the attached Working Group comments with respect to the application by Nelson Morphy and Glen and Lianne Ruby, relating to the properties located at 2001 and 2215 Sunningdale Road West **BE FORWARDED** to the Civic Administration for consideration.

V. ITEMS FOR DISCUSSION

11. Work Plan

That it **BE NOTED** that the Environmental and Ecological Planning Advisory Committee held a general discussion with respect to its 2016 Work Plan; it being noted that this will be a regular item on the Agenda.

12. 2016 Provincial Environmental Advisory Committee Symposium

That it **BE NOTED** that the Environmental and Ecological Advisory Committee (EEPAC) approved the expenditure of up to \$100.00 from its 2016 Budget allocation for E. Arellano, C. Kushnir and P. Ferguson to attend the 2016 Provincial Environmental Advisory Committee Symposium, on behalf of the EEPAC; it being noted that the EEPAC have sufficient funds in its 2016 Budget to support this expenditure.

13. EEPAC representative to TFAC

That the appointment of an Environmental and Ecological Planning Advisory Committee representative to the Trees and Forests Advisory Committee for the term ending February 28, 2019 **BE POSTPONED** to the May 19, 2016 meeting.

14. EEPAC representative to ACE

That the appointment of an Environmental and Ecological Planning Advisory Committee representative to the Advisory Committee on the Environment for the term ending February 28, 2019 **BE POSTPONED** to the next meeting.

VI. DEFERRED MATTERS/ADDITIONAL BUSINESS

15. ESA Management Committee Meeting Minutes

That it **BE NOTED** that the ESA Management Committee Minutes from their meeting held on February 4, 2016, were received.

VII. ADJOURNMENT

The meeting adjourned at 7:07 PM.

NEXT MEETING DATE: March 17, 2016

SUNNINGDALE GOLF & COUNTRY CLUB LTD – GOLF HOLE RE-LOCATION, ADDITIONAL COMMENTS

Reviewers: Brian Gibson, Susan Hall, Caitlin Kushnir, Katrina Moser, Joe Stinziano, Michael Thorn, Randy Trudeau

Date: February 18, 2016

PREAMBLE

It is noted that Sunningdale Golf & Country Club was certified as an Audubon Cooperative Sanctuary in the fall of 2005. Although there are many elements in the Scoped EIS that seem to continue the goals of Audubon International, specifically Sunningdale's efforts to compensate for disturbed natural heritage features resulting from the re-location of six golf holes, there are also elements in the report that do not go far enough or even do the opposite.

1.0 CONCERNS and OBJECTIONS

1.1 The wetland (SWD4) is a distinct ecosystem that is saturated with water, either permanently or seasonally. It is comprised of a wetland ecosystem and despite proposed mitigation, constructing a golf hole through its middle would alter the water balance and disrupt wetland ecosystem services. This seems in direct conflict with the Audubon International goals, and other guidelines to protect wetlands. Is there no way to avoid this area, perhaps by moving the hole eastward? It is unclear why this hole has to cross over the seep. If it is agreed that this is the only option, then compensation (not based on land lost, but function lost) should be provided by planting native riparian and wetland vegetation along the waterways.

1.2 It is impossible to judge, based on storm quantity and well head data the effect of this new golf hole on wetlands, seeps and base flow. Additional factors not included are the consideration of changing a wetland to a golf course (expect runoff coefficient to change) and changing contours of the region (affecting runoff, standing water and drainage pathways). The report does offer general assurances, but is insufficient. The absence of a sense of topography and how it will be altered makes it difficult to predict the impact of altering this large seep. The wetland surrounding the seep will be negatively affected. A concern is that the False Rue-anemone to the east may be threatened by these changes as well.

1.3 A part of FOD6 will be removed and another part (flyover) will be altered. The flyover areas will not retain their natural features. Once you remove the canopy and understory (next generation) what remains are shade-tolerant groundcover and wildflowers that complete their life cycle before the leaves appear. This ecosystem will not retain any of its natural features. It

is hoped that monitoring timelines will increase so that the replacement for the removed 80 year old forest component has a chance to thrive.

1.4 The proposed location of golf hole #7 eliminates any viable riparian zone in that area. This zone is an integral interface between the land and Medway Creek, characterized by specialized hydrophilic plants. Its presence enhances the water quality of the creek and serves as a corridor for wildlife. A suitable width to this zone should be established for it to function properly. More on this concern later.

1.5 Similarly, possibilities of protecting the tributary with a riparian buffer are limited because the area of grading and ground disturbance actually crosses over the tributary (near hole 3 and 8).

1.6 Three mussel species, the Silver Shiner and False Rue-anemone were observed either outside the study area or within the study area but outside of the footprint and grading area of the project. Each species has a 'threatened' status in Ontario and even though adult members of these species may not be at risk, the project is potentially destroying suitable habitat for future generations of each species. Habitat loss leads to the inability of each species to establish new communities. Aquatic measurements are limited and fail to provide adequate baseline data.

2.0 THE SPECIAL POLICY

2.1 The concerns and objections listed are but a few as the special policy makes this exercise mostly redundant. EEPAC commends Sunningdale on their plan to restore and enhance land and the proposed mitigation efforts. Because EEPAC believes that Sunningdale and its membership strongly believe in environmental stewardship we enthusiastically make the following recommendation.

3.0 RECOMMENDATION

3.1 As noted in the Scoped EIS, one of your goals is to improve the natural riparian vegetation along Medway Creek. As mentioned, the restoration and enhancement scheme could lead to some improvements to the proposed new golf holes. However, focusing on a sufficiently wide riparian zone along the entire stretch of Medway Creek (EAST and WEST) and its tributary would have a far greater impact. This would result in a riparian zone that would function properly and therefore enhance the water quality of the creek, creating a continuous corridor through the property for wildlife and establishing links with neighbouring natural heritage features.

4.0 RATIONALE

4.1 The riparian buffer along the north eastern section of fairway seven near the tee boxes is too narrow to be ecologically relevant and is much less than the 30m buffer recommended for a permanent watercourse (City of London, 2007). Furthermore, the golf course development plan calls for the buffer to be cleared of trees to the edge of Medway Creek. The clearing of trees within the buffer zone will increase the exposure of Medway Creek to solar radiation, which will increase the water temperatures of Medway Creek within the cleared buffer area as well as areas downstream. River ecosystems are highly sensitive to temperature fluctuations and the removal of buffer areas will increase diurnal temperature variations and lead to higher maximum summer temperatures (Malcolm et al., 2004; Gomi et al., 2006; Cole and Newton, 2013). The riparian buffers of Medway Creek have already been heavily eroded by development and the continued degradation of its riparian buffers is unwise and irresponsible.

4.2 A recent case study by Mah et al.; (2015) on exploited riparian corridors and appropriate riparian buffer width, suggests that to maintain the health of riparian corridors, buffers of at least 40 m are required. The net benefits are four-fold: enhance the buffering and health of the riparian corridor, eliminate the impact of the relocation on the seep, the butternut tree, and the wetland (SWD4). Ideally, widening the riparian buffer on both sides of the stream would be best.

4.3 Zedler and Kercher et al.; (2004) state that nutrient (nitrate) runoff into wetlands can increase the risk of invasive plant species into wetlands. This would pose a particular issue for the remaining remnants of SDW4. Generally, wetlands in riparian zones can absorb a significant amount of the nutrient runoff, but at the risk of encouraging the growth of invasive species.

4.4 Lin et al.; (2002) use modeling to investigate the effects of riparian buffer width in attenuating pesticide runoff. Depending on the type(s) of pesticide used and their solubility, a larger buffer zone may be required to prevent pesticide contamination in waterways. Buffers of 30 m to even 60 m may be required depending on the intensity of soluble pesticide use. This further supports the value of an enhanced wetland buffer which would complement the Audubon integrated pest management program initiated in 2005.

5.0 SUMMARY OF RECOMMENDATIONS

5.1 Agree to preserve a large riparian buffer along Medway Creek near the new construction.

5.2 Commit to reclaiming the original Medway Creek Riparian Zone (EAST and WEST) and its tributary from the golf course.

5.3 Educate your membership on the importance of a healthy Medway Valley.

5.4 Place signage on the course, display posters in the clubhouse and provide pamphlets to new members reminding golfers of the ongoing restoration project.

5.5 Discard the two year monitoring program. This restoration project is a 10 -20 year affair and monitoring should reflect the complex nature of EEPAC's recommendation.

5.6 Employ Audubon Cooperative Sanctuary Program guidelines to restore a "living, breathing" riparian zone along Medway Creek.



INPUT FROM ADVISORY COMMITTEES

Name of Advisory Committee

Environmental and Ecological Planning Advisory Committee (**EEPAC**)

Mandate of Advisory Committee

The Environmental and Ecological Planning Advisory Committee reports to the Municipal Council, through the Planning and Environment Committee. The Environmental and Ecological Planning Advisory Committee provides technical advice to the City of London on matters which are relevant to the City of London's Official Plan, including London's natural heritage systems as it relates to Environmentally Significant Areas, woodlands, stream corridors, etc.

What areas of the 2016 – 2019 multi-year budget are most important to your committee?

Building a Sustainable City with a strong and healthy environment are part of Council's Strategic Plan. EEPAC is most involved in the protection and enhancement of London's Natural Heritage System. Funding is found in the Parks and Urban Forestry sections of the operating and capital budgets.

Do you have any comments about how your priorities are addressed in the base budget?

There are many positives that the City can be proud of. These include having: a Woodland Acquisition Fund; strong Official Plan Policies that survived challenges all the way to the Supreme Court of Canada; EEPAC as a technical advisory committee; two staff ecologists; and a supportive City Council. Yet, we should strive to do more to protect and enhance our Natural Heritage System.

OPERATING BUDGET

ESA Management Contract (purchased services, page 93).

The Coves has been added to the management contract with the UTRCA. Eight of 10 city owned ESA lands have some management. Not included in the contract are a section of the Stanton Stream corridor (see last page); the newly identified Pottersburg Valley ESA (which does have \$50K budgeted for capital in 2016); and the City owned portions of the Lower Dingman Corridor ESA (see second air photo on last page). It is not clear what additional service (30 h /yr shown on page 123) will be added and where the service will be added. EEPAC points out that in 2014, **\$72K was cut from this budget** which reduced the UTRCA management team complement by one.

EEPAC notes that there are no additional staff budgeted for by law enforcement which is one way encroachments in ESAs are handled. While a staff ecologist is the point of contact for issues, and most major issues have been worked on, responsibility for encroachment has "bounced" between By Law Enforcement and Development Services (where there was no staff for the role). Can you clarify where this responsibility lies today? If this is the responsibility of by law enforcement, and Council decides not to add staff, then this is really a net decrease in service level over four years, given the increase of lands in City ownership and management, and the number of people living adjacent to natural areas. While we are glad to see staff plan to mail "Living With Natural Areas" to all owners abutting an ESA, EEPAC has a recommendation, particularly if no additional management or enforcement is added to the budget:

EEPAC Recommends:

Extending the 2016-19 service adjustment proposed in the Animal Services base operating budget (p. 140) to include ESAs in the service proposed.

There was a 2015 pilot under Parks Patrol and Proactive enforcement, where Animal Control Officers monitored bike accessible parks, off leash parks and city bike paths. Why not ESAs as well?

On a related note, the Chair of EEPAC, has been before PEC to discuss the lack of management or inventory or Conservation Master Plan for the Lower Dingman Corridor ESA. EEPAC notes that in the 2019 growth capital plan, there is \$450K for the Dingman Creek Trail. EEPAC remains concerned that if recreational amenities precede the management of the adjacent natural features and functions, there will be problems such as inappropriate trail locations, erosion and encroachment as experienced in other parts of the city where infrastructure and development precede management. **Prevention is less expensive.**

Invasive Species Management

EEPAC **recommends**, at **no additional cost** to the base budget:

A one-time diversion of the contribution to the Woodland Acquisition Fund (up to \$262K) to deal with invasive species management in ESAs. Alternatively, Council consider a 4 year diversion of half of the contribution. (see Detailed Budget pp. 547 and 555)

The City is a provincial leader in this area in demonstrating “a proactive approach to the management and control of invasive species in protected natural areas.” (Dillon Consulting, 2016)

At its January EEPAC meeting, Mr. Macpherson indicated that roughly \$70K has been spent and that “a million” might be necessary to deal with invasive species such as the new public enemy #1 - Phragmites (see photo following). The ESA management team, under City staff direction, is addressing this invasive and other invaders but the problem is large. There are no draws from this reserve fund forecasted through the 4 year budget period, hence the recommendation.



HYDROGEOLOGIST

The City has recognized the significant benefit gained from having ecologists on staff. EEPAC notes, however, a distinct void in City of London support for evaluating both Environmental Impact Studies and Environmental Assessments which have potential impacts on ground water features, hydrologic functions, surface water features such as wetlands and watercourses, and the linkages between them. Protecting and improving vulnerable surface and ground water, sensitive surface water features and sensitive ground water features and their hydrologic functions are a requirement of Provincial Policy (Provincial Policy Statement - Sections 2.1.2, 2.2.1d, 2.2.1e, 2.2.2). Building a Sustainable City with a strong and healthy environment are part of Council's Strategic Plan.

Currently all reports relating to the protection of groundwater, aquifers, and sensitive surface features are directed through the UTRCA. This slows down the review process.

EEPAC recommends that Council include in the four year budget either the creation of a City of London Hydrogeologist position shared by Engineering and Planning and/or Development Services, or budget sufficient funds in these areas for retaining or contracting the necessary expertise on a regular basis. This would enable the city to better and more quickly move through the regulatory processes related to development.

LIFECYCLE CAPITAL BUDGET

EEPAC is also concerned that despite the forecasted average addition of 30 hectares of city owned ESA lands each year, the lifecycle capital spending on ESAs is fixed at \$200K per year. This amount has been the same or less, (with one exception) since 2011 (see following table). This is essentially a reduction particularly when there is an invasive species problem and significant recommendations contained in completed Conservation Master Plans (CMPs) and for CMPs underway. This is less than \$1/person each year for the protection and enhancement of the 10 City owned ESAs. Double is spent on street tree planting which is really just standing still as this budget (p. 276) is to “Replace trees on City boulevards due to age, hazard etc. and as requests are received.”

The \$200K per year means a very slow implementation of the recommendations of the completed CMPs such as for invasive species management in Westminster Ponds/Pond Mills ESA. The lion’s share of the meagre \$200K in 2016 and 2017 is for the Coves (\$50K in each year) and Westminster Ponds (\$100K in each year). However, this means little for the recommendations that will come from the CMPs underway for the Medway Valley Heritage Forest ESA and for Meadowlily Woods ESA (\$50K in each of 2018 and 2019 for both of these). Our assumption is that some money from authorized projects in previous budgets remains available, but are concerned that the amounts are not sufficient.

Yr	Woodland Parks/Management	Major Open Space	Neighbourhood Park Infrastructure	ESAs	Street tree planting
2009	170	235	450	270	260
2010	140	320	430	280	260
2011	0	135	380	190	260
2012	150	70	450	200	260
2013	200	150	410	200	260
2014	150	220	400	200	211
2015	150	270	220	350	411
2016	100	350	180	200	411
2017	100	230	450	200	411
2018	100	450	500	200	411
2019	100	450	500	200	411

RECOMMENDATION: Council ask staff to review the life cycle capital budget for ESAs and to report back during the next year’s budget review on the cost to achieve the objectives of the completed and in progress Conservation Master Plans, and the Natural Heritage Policies of the Official Plan within a 5 year or 10 year time frame. This could be achieved through zero based budgeting.

EEPAC notes some growth capital dollars are budgeted for new ESAs (\$400K over the multi-year budget). EEPAC remains concerned that it is insufficient, for example, to ensure trails are located away from sensitive ecological features and functions or areas of erosion. **It is also unclear if there is any plan to carried out any additional Conservation Master Plans. Is there?**

GROWTH CAPITAL BUDGET

In 2017, there is \$700K for “CPRI Link to Riverbend” (p. 313 Detailed Budget) and \$60K for CPRI ESA in 2018 (Detailed Budget p. 315). Map 4 of the draft London Plan shows ESA designation along the valley slope within the CPRI lands. The woodlot between the valley and CPRI buildings is shown as “Potential ESA”. The Thames Valley Corridor Plan shows two patches of “existing ESA” in this area. The Corridor Plan also shows a multi-use path through there. In all cases, there appears to be a gap between the Potential ESA and the ESA in the valley. Is this the case? If the city wishes to pursue this route, presumably it will carry out an Environmental Assessment that will identify and avoid these parts of the Natural Heritage System and will recommend ways to protect these parts of the Natural Heritage System from encroachment. **While most people are respectful, when you increase the raw number of people, you also bring more of those people who are not respectful. EEPAC is unclear how the \$60,000 will be spent.**

In addition to this \$60,000, there is another \$340K in the Growth Capital Budget (p. 315) for new ESAs over the 4 year budget, with another \$500K from 2020 to 2025. Most of this is for new ESAs identified in area plans. In other words, to be determined. Of this remaining \$340K, there is \$125K for Kain’s Woods ESA in the westerly portion of this ESA. EEPAC looks forward to being involved in the planning of how this money will be spent (and hopes that it will be added to the ESA management contract in a timely manner). Worrisome, EEPAC has seen preliminary subdivision planning for this area. It includes part of the paved TVP **within** part of this ESA. (There is \$780K budgeted for 2018 for the Norquay/Riverbend portion of the TVP on page 314). This appears to be incompatible with the objectives of the London Plan to protect and enhance the Natural Heritage System and past comments by members of Council during its last term while debating pavement in the Medway Valley Heritage Forest ESA.



INPUT FROM ADVISORY COMMITTEES (cont'd)

Do you have any comments about how your priorities are addressed in the strategic initiatives section of the 2016-2019 multi-year budget?

Business Case #3 – Urban Forest Strategy

Tree planting on boulevards and parks. The strategic investment is to increase it by less than 8000 in total (2017 – 1150, 2018 – 2500, 2019 – 3850) over the 4 years above base case of 1600 per year. Much of the current budget is to replace lost ash trees. EEPAC notes that it is the developers who plant trees in new subdivisions. Both the Urban Forest Strategy and the developers' tree planting are admirable. **But street trees do not a forest make.** The budget notes it takes 30-40 years for a new tree to provide significant cover while a clear cut can remove hundreds of mature trees in a matter of days. The Urban Forest Strategy is more than just planting replacement trees and new trees. It is also about the retention of mature woodland. Loss of canopy continues. **However, there has been NO movement on a city wide tree cutting on private land by law.** How many more Teeple Terraces and 704/706 Boler Roads are we to see?

EEPAC also notes that the draft London Plan includes this following section (320). It does not appear that the present base budget would allow Council to achieve this part of the London Plan:

Progress toward meeting these targets will be monitored as follows: A tree canopy cover analysis will be prepared every five years to determine if tree canopy targets are being achieved.

An analysis of the structure, function, and value of the Urban Forest will be prepared at least once every ten years.

An inventory update and analysis of trees in boulevards, rural streets, manicured portions of parks and municipal properties, will be completed at least once every ten years.

Business Case #4 - \$1.2 M for TVP

EEPAC has commented on this project through the Environmental Assessment process and just received the Environmental Impact Study to review. Given the presentation by staff and consultant at EEPAC, EEPAC notes it is likely funds will be needed to compensate for loss of Natural Heritage, closure of informal trails and a long term and meaningful Monitoring Program due to the conflict with Species at Risk that must be mitigated.

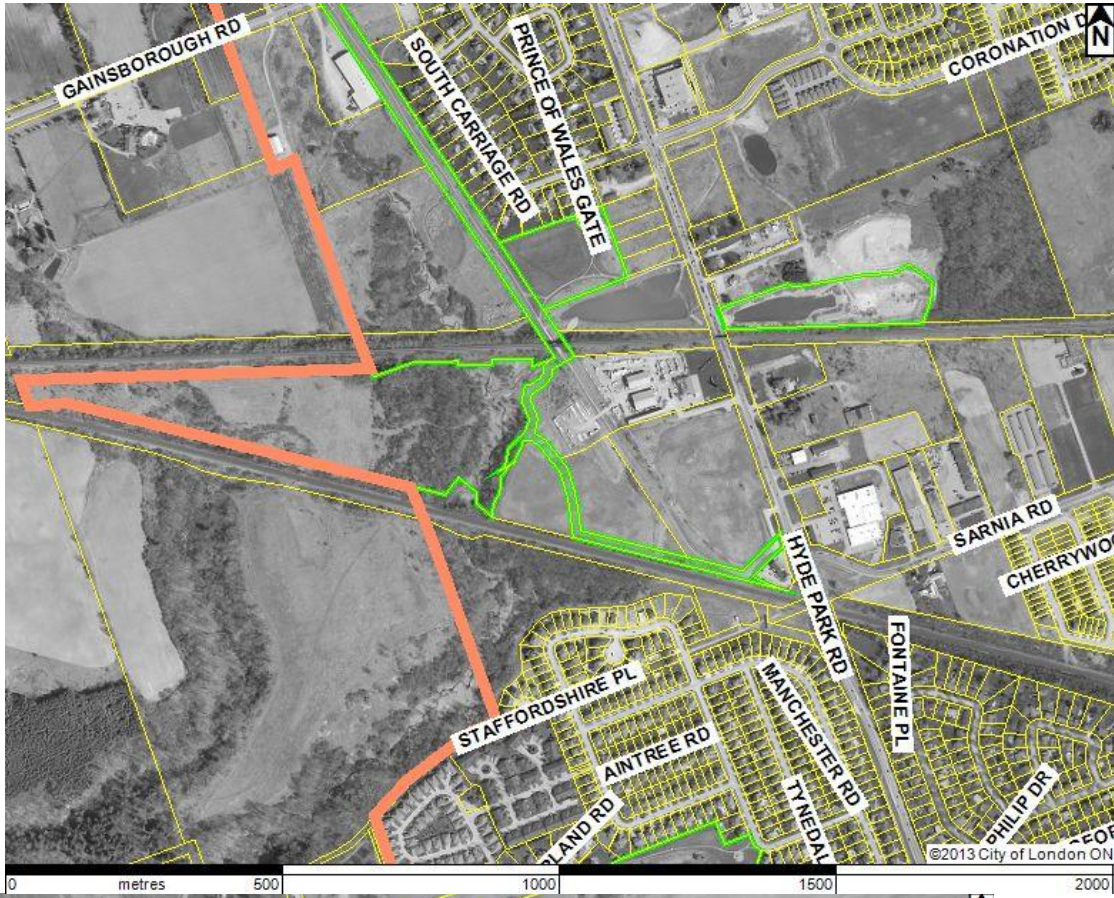
Business Case - #17 – Winter Maintenance

EEPAC does not support winter maintenance on pathways in parts of the Natural Heritage System due to environmental impact of materials used (even if salt is not used) as well as the impact of increased activity when the ground is most sensitive. Big sloppy footsteps in mud break up and loosen soil making it more prone to washing away in melting snow and rain. If you go around mud, the trail gets wider, starting the cycle all over again.

Do you have any other comments from the Committee with respect to the budget?

Although outside our mandate, EEPAC would like to comment on the Goal of Building a Sustainable City. EEPAC would recommend that council include in its budget including in new building projects such as the new community centres in the SE and E and new library in the NW, that there be **green walls and green roofs and if not green roofs, solar panels**. Alternatively, there could be a dedicated budget all areas could draw from for initiatives such as butterfly gardens on under-utilized city property such as Reg Cooper Square.

STANTON STREAM CORRIDOR (1) / DINGMAN CREEK CORRIDOR (2)



Z-8558 - 2001 and 2215 Sunningdale Road West Application

EEPAC Review of Planning Justification Report dated November 2015

Reviewers: S. Levin, J. Stinziano, (Ph.D. Candidate, Way Lab, Western University)

While there is a net benefit of increasing the tree cover, EEPAC notes that on the City's Official Plan Schedule B-1, there are Potential Naturalization Areas indicated for the areas between the Significant Woodlands at the north end of these properties. (Patches 15001, 15004, and 15005 noted on page 34 of the Report meet the City Woodland Guideline tests to be designated Significant Woodlands.) These patches are part of larger woodlands across the City / County boundary that have been identified in the Middlesex County Natural Heritage Study as Significant.

There would be a greater net benefit if the areas between the woodlands on the subject property were naturalized with natural species appropriate to conditions. In landscapes with relatively low forest cover overall, species diversity and survivorship increase where the remaining habitat patches are larger and more clumped or aggregated. The current literature also points to the higher effectiveness (i.e., levels of use) of natural or existing features versus purpose-created corridors, which supports the preservation and integration of remaining habitat fragments (wooded riparian areas, use of "stepping stone" woodlots, hedgerows, etc.) over the creation of new corridors, particularly to facilitate movement of forest-dwelling species.

Based on the Arborist's letter and the application, the 10 m wide strip of trees would have a lesser net environmental benefit than renaturalizing the areas at the back of the subject lands. If the proponents do not renaturalize these areas, but plant to the west, EEPAC would like to encourage the proponents to think about the intended purpose of this strip of vegetation. If the proponents would like to construct wildlife habitat to extend to Patch 15005 to the north, the strip would be more effective with a minimum width of 30 m. The determination of optimum corridor widths for wildlife movement is challenging, and the literature provides limited guidance with respect to appropriate minimum widths, lengths or width-to-length ratios. Wooded corridors 50 metres in width can facilitate movement for common generalist species.

Source: *How Much Habitat is Enough?* - 3rd edition, Environment Canada, 2013