

Review of: **Courtney Subdivision Environmental Impact Study**

Prepared for York Development Group

By Stantec Consulting, Ltd., 24 July 2014

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London's Environmental and Ecological Advisory Committee (EEPAC)

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The document under review is an Environmental Impact Study for the proposed Courtney Subdivision development. Environmental impacts of the proposed development are of heightened importance due to its location, directly adjacent to the Dingman Creek ESA. The report is well written and presents a generally well thought out assessment of impacts of the proposed project, however, it is lacking in some key areas:

- Some aquatic habitat connected to the ESA within the proposed development site has not properly been surveyed;
- Some buffer areas are questionable, and the ESA boundary would be infringed by lots 22 and 23;
- The EIS refers to an external Environmental Assessment for a SWM Facility proposed within the same development, however, no such EA is appended to the EIS.

The following sections detail EEPACs comments and recommendations, organized by topics of concern. It is not recommended that this development be approved until these key points have been addressed.

SMALL TRIBUTARY (WEST ARM)

The west arm of the small tributary, i.e. as found on *Figure 2 Existing Natural Features*, needs greater attention. The proposed Development Plan seems intent on eliminating the west arm of the tributary, burying it with pipe. Drawing attention to Field Notes from April 2013, it appears the watercourse is partly defined in this location. The west arm is identified by the EIS in some cases as an “intermittent watercourse” and in some cases as “existing underground pipe”. This discrepancy puts the accuracy of the EIS regarding this feature into question.

More work should be done to assess the impacts of eliminating this watercourse. Understanding that although it may be intermittent, it likely still provides important ecosystem functions, i.e. fish spawning and amphibian breeding. Section 4.11 of the EIS notes this is “seasonally direct fish habitat”. Even as an “intermittent watercourse” it is clearly the only surface flow connecting the marsh north of Pack Road to the tributary entering Dingman Creek ESA. What sort of habitat does this watercourse contain?

Recommendation 1 The EIS should clearly describe the habitat of the west arm of the tributary entering Dingman Creek ESA, proposed for elimination. Impacts of this aspect of the proposed development are not adequately addressed by the EIS.

It is understandable that because the West Arm is currently surrounded by agricultural land, it may appear to serve less importance than other tributaries. It is also made apparent by the Daft Plan of the subdivision that the west arm is in a rather inconvenient location. However, it may serve important functions to the Dingman Creek ESA, i.e. fish spawning or amphibian breeding habitat. No surveys have been done on the West Arm.

The EIS does not adequately assess the ecological function of the tributaries in general. Amphibian surveys were conducted elsewhere, but not along the tributaries as they enter the ESA, and none were conducted on the west arm *or* the marsh that it connects to the ESA.

Impacts on terrestrial crayfish by elimination of the west arm tributary are not considered.

The west arm does appear to have been surveyed for Bank Swallow breeding (a Species at Risk).

Recommendation 2 Proper ecological surveying of the tributaries entering the ESA should be done to assess their ecological function, and the importance they might play for the ecology of the ESA. Fish spawning, amphibian breeding, and bank swallow nesting, should be given special attention.

Removing this watercourse also increases fragmentation and leaves the marsh north of Pack Road disconnected. The question of drainage for this marsh, once the watercourse is removed, is not addressed by the EIS. Does the development propose the removal of this wetland? If the development is indeed set on eliminating the west arm connecting the marsh north of Pack Road to the Dingman Creek ESA, alternative connectivity should be considered.

Recommendation 3 Suitable drainage must be provided for the marsh situated north of Pack Road and connected to Dingman Creek ESA via the west arm tributary. Suitable drainage should allow connectivity, but without draining that removes the wetland altogether.

Recommendation 4 Consider alternatives to eliminating the west arm of the intermittent watercourse entering Dingman Creek ESA. Impacts associated with its elimination should be first measured and assessed, and weighed against possible alternatives.

Recommendation 5 The application should be considered incomplete until the effects of the proposed piping on the west arm of the tributary and the impacts on the marsh north of the property are determined.

ESA BOUNDARY, SETBACKS AND ECOLOGICAL BUFFERS

City of London's Environmental Management Guidelines set standards for determining suitable setbacks and ecological buffers. Pg 121 of the guidelines recommends 30m setbacks from wetlands and permanent watercourses, and 15m setbacks from intermittent watercourses. Although generally well thought out, the proposed development does not adequately meet the recommendations of the guidelines in *all* cases.

On *Figure 3 ESA Boundary*, most tributaries entering Dingman Creek ESA are given suitable setbacks, however, the West Arm of the small tributary seems to have been neglected. Notably, whereas the east arm (also referred to as Reach 2) *does* receive setbacks for flood and erosion hazard, the west arm does not, although both arms of the tributary are classified as "intermittent watercourse" on Figure 2. Also concerning, on Figure 3, the marsh that drains into the west arm receives no setbacks at all.

Recommendation 6 Clearly define flood and erosion hazard boundaries for the marsh north of Pack Road, which is defined as MAM2-5 (Narrow-leaved Sedge Mineral Meadow Marsh) on Figure 2. IE, amendments should be made to *Figure 3 ESA Boundary*.

Recommendation 7 A 15m setback is recommended for the intermittent watercourse described as the West Arm tributary, which enters the Dingman Creek ESA.

Recommendation 8 The City's Environmental Management Guidelines seem to encourage walking trails for additional setbacks, and *not* within the buffer zone itself (i.e., Fig 1, pg 118). It is therefore recommended the proposed development remove walking trails from the planned buffer zones around the ESA, and extends an additional setback to include any trails.

In reviewing the Draft Plan of the Subdivision, it seems the ESA would be infringed upon by lots 22 and 23. As an alternative, combining these into a single, wide and shallow lot, may allow suitable development while keeping the ESA off of private property.

Recommendation 9 Revise the lot dimensions for lot 22 and lot 23, so they do not cross into the ESA boundary.

STORMWATER MANAGEMENT

A stormwater management pond is proposed by the development, to the north-west corner of site. As stated in Section 6.1, this would be “directly adjacent to the Lower Dingman Corridor ESA”. It appears from *Figure 2 Existing Natural Features*, that this would be located approximately 50m from Dingman Creek itself, as well as designated “open aquatic” space within the ESA. This SWM Pond is proposed to “discharge to the existing Tributary ravine”. Likewise, the project proposes stormwater controls for the eastern portion of the site “that discharge directly to the Tributary”.

There obviously are impacts on the ecology of the ESA expected from these development activities, which go completely unaddressed by the EIS. What measures will be in place to mitigate impacts of this stormwater on the adjacent ESA and Dingman Creek? Currently, the EIS lacks adequate information about these engineering features.

A clear definition of the proposed SWM Pond design should be provided. An effort must be given by the EIS to address the potential impacts, with special attention to those impacts on the adjacent ESA. Instead, the EIS states that:

An Environmental Assessment Study for the SWM facility is being prepared under a separate cover in accordance with the City of London’s SWM Design Specifications and Requirements and the Dingman Creek Subwatershed Study.

Recommendation 10 The EIS should include the results of the Environmental Assessment Study for this SWM facility. Furthermore, receipt of the EIS for Courtney Subdivision development should be postponed until a complete assessment of the impacts of the development, including any and all potential impacts of the proposed SWM Pond on the adjacent ESA, has been completed.

The proposal for direct discharge of stormwater from the eastern portion of the development, directly into the tributary of Dingman Creek ESA, is inadequately addressed by the EIS. Unlike the stormwater management pond noted above, there appears to be no planned or existing assessment for these impacts.

Recommendation 11 The EIS should be updated to assess and mitigate impacts of the proposed stormwater discharge from the eastern portion of the site, on Dingman Creek ESA.