

Memorandum

To: Lisa-Beth Bulford, Lake Simcoe Region Conservation Authority

Shauna Fernandes, Lake Simcoe Region Conservation Authority

From: Kim Baker, Carolyn Glass and Don Fraser

Date: September 2, 2015

Ref: 213346

Re: Response to LSRCA Comments - Aurora Highlands Comments (August 11, 2015)

The purpose of this memo is to provide a response to the comments received from the Lake Simcoe Region Conservation Authority (LSRCA) during the meeting held August 31, 2015 to discuss Beacon's response (dated August 11, 2015) to the LSRCA comments, dated April 10, 2015.

The following responses are provided for clarification:

A. Significant Valleyland (Comment #13a)

As previously indicated, the valleyland associated with the area on the Western Tributary east of Bathurst and the Eastern Tributary does not meet the ORMCP criteria for significant valleyland.

Although the entire valleyland associated with the Central Block on the West Tributary does not meet the criteria for significant valleyland, there is a small area in the vicinity of the western pond that does meet the ORMCP criteria for significant valleyland. While the ORMCP is silent on whether portions of a contiguous reach of valleyland can be significant, the LSRCA are of the opinion that portions meeting the criteria can be identified and treated as significant.

As Schedule E of the Official Plan does not indicate a significant valleyland in this area, the identification of this feature is an addition to the documented environmental features (i.e., watercourse and fish habitat) in the central valley. Section 12.5.2 of the Official Plan permits minor adjustments or refinements to key natural heritage features without amendment of the Official Plan.

The ORMCP prescribes a Minimum Vegetation Protection Zone (MVPZ) of 30 m from the long-term stable top of slope of significant valleylands. The ORMCP provides for adjustment of the MVPZ within Settlement areas through the completion of an Environmental Study as per Section 21.

Section 21. of the ORMCP reads:

21. (1) For the purposes of this Part,

(a) the minimum area of influence that relates to a key natural heritage feature or hydrologically sensitive feature described in Column 2 of the Table to this Part is the area referred to in the corresponding item in Column 3 of the Table; and

(b) the minimum vegetation protection zone that relates to a key natural heritage feature or hydrologically sensitive feature described in Column 2 of the Table is the area determined in accordance with the corresponding item in Column 4 of the Table.

(2) If land falls within more than one item in Column 1 of the Table, the provisions that are more restrictive apply.

(3) With respect to land that is in a Settlement Area on April 22, 2002, any provision referred to in subsection (4) prevails, to the extent of any conflict, over clause (1) (b) and subsection (2).

(4) Subsection (3) applies with respect to a provision of the applicable official plan or zoning by-laws, as the case may be, that is adopted on the basis of,

(a) environmental studies; or

(b) infrastructure planning including, without limitation, environmental assessments, infrastructure servicing studies and master environmental servicing studies.

Section 21 allows for a minor refinement in the prescribed buffer (MVPZ) for areas within Settlement when the appropriate buffer is determined through an environmental study. The proposed development of three lots (180 to 182) is an extension of the existing development backing on to the valley. The three new lots are coincident with, however shorter in depth, than the existing development and provide a buffer from the stable top of slope ranging from 6 m to approximately 20 m. The minimum setback from the edge of the valley has been established as 6 m from the stable top of slope, as determined through a geotechnical analysis (i.e., the erosion hazard limit). This reduced buffer of the proposed new lots reflects the limit of the existing adjacent development. The minor refinement of the buffer in this case is reasonable as it is in keeping with the existing development.

The ecological rationale for a reduction of the buffer in this area of the central valleyland is as follows:

- The valley system has been substantially altered over time due to the former golf course and the long-term presence of many existing homes backing on to both sides of the remainder of the valley. In the vast majority of cases the minimum distance from the valley top of slope to the rear lot lines of the adjacent lots is far less than 30 m.
- Given the very small section of significant valleyland adjacent to the three proposed lots, the provision of a 30 m buffer in this location will not provide any meaningful additional protection

to the valley system, particularly considering that a far narrower buffer is provided for elsewhere. Improvements to the water quality and aquatic habitat associated with the watercourse within the valley will be achieved through the removal of two on-line ponds, natural channel design and active restoration of adjacent riparian areas. With the exception of the three proposed lots, all of the tableland areas adjacent to the naturalized riparian corridor/valleyland are proposed to be retained as Open Space (public parkland). Furthermore, the rear lot lines of lots 180 to 182 will be fenced to prevent any extension/encroachment of the lots closer to the valley and pedestrian access to a trail system in the valley will only be allowed at designated locations.

- With respect to the other factors identified in the ORMCP Technical Paper, wherein significant valleylands *function as or have the potential to function as*:
 - *Passageways for water demonstrating flowing or standing water for a significant portion of time...including intermittent flow but not including presence of water associated with a single storm event;*

The watercourse through the central valley is permanent.

- *Significant wildlife corridors within the ORM or between the ORM and adjacent natural features;*

The downstream corridor through the former golf course and residential areas provides limited wildlife habitat that would not meet the test of “significant wildlife corridor”. The riparian corridor does not connect natural features as the downstream portion is an existing residential area.

- *Natural buffers between adjacent land uses and hydrological features either within or downstream of the significant valleylands.*

Within the central block the valleyland had been part of the former golf course.

- *Significant riparian wildlife habitat;*

Portions of riparian corridor within the central block have some natural vegetation closely associated with the watercourse. Based on field surveys and professional judgment, this area would not constitute “significant riparian wildlife habitat”.

B. Fish Habitat (Comment #14b)

ORMCP Technical Paper # 1 indicates that in the case of streams with well defined valley features, minimum vegetation protection zones must be established next to all fish habitat. The recommended MVPZ is 30 m from the stable top of the valley wall, as defined by the conservation authority.

However, as with significant valleyland discussed above, Section 21 of the ORMCP permits buffers to be established based on environmental studies (i.e., an NHE).

In our opinion the application of a reduced buffer, as described above, will not adversely impact fish habitat. In fact, fish habitat in the watercourse will be greatly improved by the removal of two on-line ponds, natural channel design and restoration of the riparian zone.

C. Thermal Regime (Comment #15a)

The LSRCA indicated confirmation of the thermal regime should be investigated. As indicated in the August 11, 2015 response, there are temperature loggers in all watercourses, the data from which will be retrieved and analysed in the fall. Vegetation Protection Zones of 30 m have been applied to watercourses on the Oak Ridges Moraine. Guidance on determining buffers to watercourses off the Oak Ridges Moraine is provided through the Official Plan, in consultation with the LSRCA.

Section 2.16.1b) of the Aurora Official Plan states that *the minimum vegetation protection zone for all key natural heritage features, key hydrologic features and woodlots shall be established by an Environmental Impact Statement, subject to the approval of Council, in consultation with any relevant agency.*

Typically, the LSRCA requires 30 m from coldwater watercourses to provide adequate protection for these more sensitive features. However, appropriate setbacks to all watercourses are applied based on current conditions, potential impacts, mitigation and protection measures. Should the thermal regime for watercourses within the site be identified as coldwater, it is our opinion that a 15 m buffer would be adequate to protect these features, given the existing conditions and proposed restoration.

The subject property is within an urban area and the watercourses have been impacted upstream and downstream of the subject property as a result of past developments, online ponds, crossings and infrastructure encroachments. As identified in the NHE, in many areas the current watercourse condition on the subject property is heavily degraded, and mowed to the edges. Little native riparian vegetation is provided. Currently, watercourse corridors immediately upstream, downstream and within the subject property are approximately 10 to 25 m in width. Setbacks of 15 m from the watercourse would provide, at a minimum, a 30 m corridor for watercourses within the subject property.

As well as the large scale restoration efforts (i.e., online pond removal), it is proposed that localized channel restoration be undertaken to remove instream engineered bed protection and damaged infrastructure, to restore natural cover to the riparian native species, and to introduce more diverse bed morphology and habitat structure. These measures will be detailed in the Restoration and Compensation Plan, to be provided as a Draft Plan condition. The proposed restoration of the watercourses and associated 30 m minimum corridors would increase protection of the watercourse, improve fish habitat conditions, and maintain or improve upon the current thermal regime.

D. Reduced Woodland Buffer (Comment #17a)

As indicated in our previous response (August 11, 2015), the portion of the staked woodland adjacent to Lots 29 and 30 in the extreme northeastern corner of this woodland includes the area of trees in the rear yards in the existing residential lots to the south. Therefore, as the vast majority of the woodland

edge has a 30 m buffer, a reduced buffer in this very small portion of the woodland, with a minimum width of approximately 6 to 7 m, will be sufficient to ensure the features and functions of the larger woodland are maintained post-development. This variable buffer will contain a granular (i.e., permeable) trail, to be located at the outermost edge of the buffer and dense plantings will be installed adjacent to the edge of the woodland feature. An additional trail connection between the proposed trail adjacent to the woodland and Petch Crescent, within the reduced buffer, is being reviewed with Town staff.

The provision for a reduction in the buffer in this particular area is provided in Section 21 of the ORMCP (see above) and supported by Section 12.5.2 of the Official Plan. This section of the ORMCP permits a reduction in the prescribed buffer (MVPZ) for areas within Settlement when the appropriate buffer is determined through an environmental study. An addendum will be provided to the NHE/Environmental Impact Study that provides the rationale as described above for a reduction of the buffer on this small, narrow extension of the woodland.