

April 19th , 2024

203 - FR 23
Havelock, Ontario
K0L 1Z0

Attention: John and Laurie Deshane

Re: Technical Review - Proposed Cut-Fill Balance for
Single Seasonal Residential Development
85 Fire Route 19C, Belmont Lake
Part of Lot 20, Concession 3 (Belmont)
Township of Havelock-Belmont-Methuen, County of Peterborough
Our File No. 22-3054

This technical review has been prepared to supplement our June 2023 Addendum and our March 2023 *scoped* Natural Heritage Evaluation (sNHE) for the above-referenced property. The Addendum and sNHE report were completed in support of the single residential development proposal on a vacant lot involving the installation of a new driveway, construction of a single residential dwelling, and installation of private services (well and septic) to service the new dwelling.

This letter has been prepared in response to our review of the April 7th, 2024 Jewell Engineering submission - Control of Flooding Letter + Cut-Fill Calculations & Drawing. In their letter, Jewell discusses how the proposed road access into the site can be constructed such that it can occur outside the floodplain. It also explains how an area proximal to the access road can be cut/removed outside the floodplain to compensate for the new volume of fill necessary to construct the shore section of the road within the floodplain. The cut-fill balance scenario would off-set any placement of fill within the floodplain.

To ensure the site alterations from the proposed cut-fill balance do not impact the identified wetlands and watercourse on and adjacent to the subject parcel, the following additional mitigation recommendations would be necessary:

The Cut Area

- The topsoil shall be reapplied to the cut area once the native materials have been excavated and relocated to the proposed fill placement area. The native topsoil materials contain an abundance of dormant seed from many years of local native

tree and groundcover vegetation growth;

- It may be necessary to sow/apply additional native groundcover species within the cut area to stabilize the fresh soils exposed to the elements;
- To prevent the topsoil in the cut area from eroding/washing-out due to precipitation events, a coconut type (biodegradable) matting shall be staked overtop of the surface of the cut area until such time as the groundcover species germinate and take root/stabilize the affected area;
- ORE staff can discuss which native seed mixture should be applied to the area with the contractor completing the cut-fill balance work on-site (provided it is approved by Crowe Valley Conservation (CVC)).

The Fill Placement Area

- To stabilize the side slope of the roadway, the property owner shall apply either stone or vegetate the slopes to prevent erosion and/or instability. The property owner may be able to apply a combination of the two, depending on the depth of the road bed in areas.
- The contractor or property owner may wish to apply additional coconut matting along the side slopes to secure the topsoil. The matting can be staked in place and allowed to degrade naturally while the vegetated slopes germinate and secure the soils.
- The contractor should revisit the site in the post construction era to be sure all of the measures have taken and remove any non-biodegradable measures.

Provided the above mentioned mitigation measures/recommendations are added to the recommendations/measures outlined in the sNHE, there should be no impact to the KHF's as a result of the cut-fill balance proposed by Jewell Engineering.

Yours truly,
Oakridge Environmental Ltd.



Rob West, HBSoc.
Senior Ecologist