October 9, 2015



Township of East Garafraxa 191282 13th Line East Garafraxa, ON L9W 7B4

ATTN: Christine Gervais
Township Planner

ARA Application for a Category 3 – Class A Pit Above Water and associated Official Plan Amendment and Zoning By-Law Amendment for Tri-County Aggregate Part Lots 2 and 3, Concession 18 Township of East Garafraxa

Staff of the Credit Valley Conservation (CVC) have had an opportunity to review the above – noted applications and provide the following comments for your consideration.

Material Reviewed

- !) Tri-County Pit Site Planning Report February 2015 prepared by Long Environmental
- 2) Site Plan Drawings 1-3 dated February 2015 prepared by Long Environmental

The subject site contains no watercourses or associated hazards (floodplain or erosion). Furthermore, the property contains no significant natural heritage features of concern to CVC. However, a tributary of Shaws Creek traverses north of the site on lands own by the Licensee. In addition, a portion of a significant woodland is located on the lands own by the Licensee. The woodland also contains wetlands.

CVC has worked with the proponent with respect to locating the site outside of the hazards associated with the tributary of Shaws Creek. CVC has reviewed the site boundaries and has no objection to the location of the boundary with respect to the floodplain and erosion hazards.

The site is located within the 25 year time of travel zone of the Well Head Protection Area (WHPA) of the Alton supply well. The regional mapping undertaken for the Source Water Protection studies does infer a different groundwater flow direction than that concluded

through this study. Although there are differences between the 2 studies, CVC has no concerns with the proposed pit from a Source Water Protection perspective.

In general, CVC is satisfied with the methodology, monitoring network, and the analysis that the consultant employed to identify the groundwater system. Although 2014 was a wet year, CVC recommends that the Operation Plan contain a condition that explicitly states that groundwater monitoring will continue on site until excavation is complete and that the pit floor will remain 1.5 metres above the identified high groundwater level.

CVC is generally satisfied with the methodology applied to undertake the water balance assessment and the results that were generated. The major surface water features is Shaws Creek Tributary. The water balance concludes that aggregate extraction will decrease future runoff into Shaw Creek Tributary by 0.59L/s (0.07%). The report suggests that given the intermittent nature of the creek and the fact that it receives runoff mostly during snowmelt (800L/s) and heavy precipitation, the reduction of runoff as a result of aggregate extraction does not represent a significant impact. The water balance shows that in the existing condition, runoff into the Shaw Creek Tributary is 1.52 L/s. In respect of this, we do not fully understand how a post-development run-off reduction of 0.59 L/s is assessed as representing a loss of only 0.07%. Why is the runoff amount in the post-situation being compared against the snowmelt amount, but not against the run-off assessed in the pre-condition? Please explain.

A preliminary water taking assessment for aggregate wash was undertaken. The study shows that consumptive use of water is 382.9L/min for 182 days. The simulation for pumping from wash pond will result in approximately 80 cm drawdown of groundwater in the creek, which was indicated to happen only during the period that groundwater levels are naturally below the creek bed. It is expected that a detailed review of water taking will take place at the stage of the PTTW application, where a pointed water taking assessment will be conducted with more field study, aquifer tests and monitoring. CVC requests an opportunity to review and comment on the reports submitted in support of the PTTW in order to confirm that the water taking will not result in negative impacts to the watercourse and wetlands.

It should be noted that any infrastructure required for the mitigation measures for the water taking within area subject to Ontario Regulation 160/06 that is not part of the ARA application would require a permit from CVC. It is also not clear how the mitigation measure would mitigate the impacts to the shallow groundwater system. Further discussion is required both from a technical perspective and a policy perspective.

The Shaws Creek tributary is identified as direct fish habitat. Section 2.1.6 of the Provincial Policy Statement states:

Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.

CVC no longer has an agreement with Fisheries and Oceans Canada (DFO) to review applications to determine impacts to fish habitat. As a result, CVC recommends that confirmation be received by the municipality from (DFO) that the proposal meets all federal requirements with respect to fish habitat.

The Natural Environment Report identified 1 Endangered Species (Butternut) and 3 threatened species (Bank Swallow, Barn Swallow and Bobolink) on the property. Section 2.17 of the Provincial Policy states:

Development and site alteration shall not be permitted in habitat of threatened and endangered species except in accordance with provincial and federal requirements.

CVC recommends that confirmation be received by the municipality that the proposal meets the requirements of the Province and that there are no implications to the planning act applications. It should be noted that although there may not be suitable breeding habitat for Bank Swallow on the subject property, all life stages should be considered.

The report addresses Significant Wildlife Habitat based on the Criteria outlined in the Significant Wildlife Habitat Technical Guide 2002. CVC would recommend that Significant Wildlife Habitat Eco-region Criteria Schedules for Eco-region 6E (2015) be used. CVC recognizes that this document has only recently been finalized; however, drafts of the document have been in use for a number of years. We recommend that this document be referenced in determining Significant Wildlife Habitat. Two areas of potential concern are habitat of eastern Wood Pewee (Species of Concern) and potential that the wetland (Unit 6) is significant due to amphibian breeding. The report should identify all significant wildlife habitat, buffers and potential impacts and mitigation measures.

CVC would recommend that the significant woodland, significant wildlife habitat and associated buffers be zoned appropriately.

CVC is supportive of working with the proponent and MNRF for the development of the Restoration Plan as identified on Drawing 3 of 3.

At the present time, CVC cannot support the application until the above noted items are appropriately addressed. We are willing to work with the proponent, municipality and MNRF to address these issues.

Please do not hesitate to contact me if you have any additional questions.

Yours truly,

Liam Marray

Manager Planning Ecology

Cc Ministry of Natural Resource and Forestry

Guelph District

1 Stone Road West

Guelph, ON N1G 4Y2

ATTN: Seana Richardson

Aggregate Inspector

Long Environmental

43 Forest Park Road

Orangeville, ON L9W 1A1

ATTN: Bob Long

Stovel and Associates Inc.

297 Briarhill Drive

Stratford, ON N5A 7T1

ATTN: Rob Stovel

Regional of Peel

ATTN: Mark Schiller

ATTN: Luis Lasso