

April 29, 2022

Riel Contracting Inc.  
213 Lonsberry Lane  
Douro-Dummer, ON  
K0L 3A0

Attention: **Jason Riel**, President/Owner

Re: Addendum #2, Regarding Conceptual Lot Layout Plan.  
Environmental Impact Study (EIS)  
Warsaw Severance and Multi-Residential Development  
Part Lot 13, Concession 2 (Dummer)  
Township of Douro-Dummer, County of Peterborough  
Our Project No. 17-2323

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Dear Mr. Riel:

## 1.0 Introduction

Oakridge Environmental Ltd. is pleased to present this second addendum to our Environmental Impact Study (EIS), Warsaw Severance and Multi-Residential Development report dated July 31, 2019, completed in support of the proposed development within the hamlet of Warsaw, Ontario. In preparation to submit an application for the above-referenced proposed development, it is understood that a *Conceptual Lot Layout Plan* (April 2022) has been prepared by D.M. Wills Associates Ltd ("D.M. Wills"). As a concept plan was not available at the time of our report in July 2019, it is understood that the Project Team has requested that our firm review and provide comment with respect to whether the conceptual servicing plan meets the recommendations provided by our July 2019 report.

## 2.0 Conceptual Servicing Plan Review

### 2.1 General

One of the central recommendations of our July 2019 EIS was the establishment of a Vegetation Protection Area (VPA) that would aim to buffer sensitive environmental features on the property from the proposed development. As a result, the proposed VPA would

establish a minimum 30 m environmental setback from the following identified Natural Heritage Features (NHF):

- Warsaw Cave Complex Provincially Significant Wetland (PSW);
- Unevaluated Wetland Associated with the PSW;
- Indian River / Quarry Lake, and
- Groundwater Recharge / Discharge Areas adjacent to Indian River/Quarry Lake.

In addition to establishing a VPA, Section 9.6 of the July 2019 EIS provided a recommendation that the development footprint on each lot be minimized, especially for forested lots, to retain the natural function of the forested ecosites.

As illustrated on the attached *Conceptual Lot Layout Plan* (April 2022), the recommended environmental setback from our July 2019 EIS (Figure 7) has been correctly superimposed on the plan to establish a suitable VPA. A brief assessment based on the specific NHF or recommendation has been provided below.

## **2.2 Warsaw Cave Complex PSW**

The Warsaw Cave Complex PSW as mapped by Land Information Ontario (LIO), is proposed to occur a minimum of 100 m from the nearest proposed lot within the development and approximately 145 m from the nearest conceptual building footprint shown on the attached. As a result, the Conceptual Lot Layout Plan is in agreement with the recommendations provided by our July 2019 report and may exceed that recommendation, should areas outside the proposed building envelope remain natural or become naturalized.

## **2.3 Unevaluated Wetlands Associated with the PSW**

As provided by Figure 7 of our July 2019 report, additional wetland beyond the boundary of the PSW was identified. For all intents and purposes, this additional wetland area should be considered a part of the PSW. As a result, the attached plan provided by D.M. Wills illustrates that the nearest proposed lot will occur a minimum of 30 m from the identified wetland boundary, with the nearest building envelope occurring approximately 80 m from the wetland. Similar to the above, it is expected that areas outside the development footprint on each lot will be allowed to naturalize or remain natural, further buffering the wetland from the future development.

## **2.4 Indian River / Quarry Lake**

According to the attached plan, the open water fish habitat associated with Indian River /Quarry Lake is proposed to be located a minimum of 185 m from the proposed development. It is expected that all stormwater management facilities and sewage systems will be constructed within the thicker overburden that occurs on the western portion of the site, thereby further increasing the separation distance from the river/lake. As a result, potential impacts to Indian River/ Quarry Lake are unlikely.

## **2.5 Groundwater Recharge / Discharge Area**

The area defined as being a “Groundwater Recharge/Discharge Area” on Figure 9 of the July 2019 EIS contains very thin soil cover in comparison to the western portions of the site. As a result, recharge in this area would be enhanced. Minor seasonal discharge and karstic conditions (i.e., a possible small doline and karst aquifer discharge in the river/lake) were observed in this area. However, no significant karst hazards (e.g., caves, large voids, etc.) were identified through the hydrogeological study also completed by our firm. In any case, the attached illustrates that the proposed development will be able to maintain a minimum 30 m setback from this area, with the closest development footprint illustrated to be approximately 80 m distant. Similar to the above, the risk of potential impacts on this feature as a result of the proposed development is considered low.

## **2.6 Building Envelopes**

The building envelopes (i.e., septic system, residence and well location) on the attached appears to have regard for the recommendation provided by Recommendation 9.6 of our 2019 report. Specifically, the conceptual building envelopes have been placed as close to the proposed internal road of the development as possible in order to maximize the area on the back of each lot. As a result, Lots 6 to 11 offer opportunities to retain existing forest cover and/or encourage additional plantings that will further buffer the development from the NHF identified on and adjacent to the subject site.

## **3.0 Closure**

Overall, the attached *Conceptual Lot Layout Plan* (April 2022) prepared by D.M. Wills appears to have regard for the recommendations provided in our July 2019 EIS and may serve to exceed the recommended minimum setbacks provided by our report.

We trust that this addendum adequately addresses the conceptual plan. Should you have any

questions or concerns, please feel free to contact the undersigned.

–End of Addendum #2–

**Oakridge Environmental Ltd.**

A handwritten signature in black ink, appearing to read "Rob West", with a stylized, cursive script.

Rob West, HBSoc., CSEB  
Senior Environmental Scientist  
cc: file