

VIA EMAIL

August 11, 2021

Matt Coffey, Planning Coordinator
The Corporation of the County
Of Prince Edward
332 Main Street
Picton, ON
K0K 2T0

Dear Mr. Coffey:

**Re: Application for Subdivision, Official Plan and Zoning By-law Amendment
Cressy Bayside Estates
1041 County Road 7
North Marysburgh**

The staff of the Conservation Authority has reviewed the Environmental Impact Study by Ainley Group dated November 2020, the Hydrogeological Assessment by Blu Metric dated February 4, 2020, the Storm Water Management Brief by Ainley Group dated November 2020, the Planning Justification Report by RFA Planning dated December 2020, the Geotechnical Report by Ainley dated November 2020 and drawing LG by Ainley rev. 0 dated 11/11/2020. The Conservation Authority has reviewed the application with particular attention to the applicability of Ontario Regulation #319/09 (Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses), the Quinte Source Protection Plan, stormwater management and the natural hazard and heritage components of the Provincial Policy Statement. We would like to offer the following comments:

The proposed development is located on a 13.24 ha. vacant site in a residential area on the north side of County Road 7 in North Marysburgh. The site includes 347 meters of frontage on Adolphus Reach. The property is a mix of forest, field and a former sand pit. There is a steep limestone escarpment parallel with County 7 and some of the shoreline is steep with evidence of erosion. There is an existing access lane leading to the former sand pit. The proposal is for 8 single detached lots and a common block that contains the access road and the limestone escarpment. The lots will range from 0.89 ha. to 1.7 ha. in size.

Stormwater Management

The overall impervious coverage will be very low. Storm water controls include two collection swales and flow spreaders at the outlets. Design criteria used in the proposal have been correctly interpreted (quality and conveyance only).

Quinte Conservation has no concerns with the proposed stormwater strategy outlined in the report.

This site requires quality controls only. The Design Criteria used in the storm water design is level 1, 80% TSS removal for quality control. These criteria will be sufficiently achieved with the proposed design. Discharge from the site will be directly towards the Bay of Quinte. The stormwater report should be considered as high level, with detailed final engineering drawings and calculations not included. Quinte Conservation does not foresee any significant engineering concerns or difficulties arising from the final design.

Conveyances of major flows during a regulatory event could be further reviewed. As the drainage swales pass close to dwellings enroute to the discharge point, the ability of the swale and drainage easement to safely pass the 100 yr event should be checked to ensure proposed dwellings are protected. Also, the flow spreaders appear to be located on the shoreline and within the floodplain. The spreaders must be located above the floodplain and preferably on level ground beyond the top of the bank. Preferably the flow spreaders should outlet at the section of shoreline that is gently sloped.

Environmental Impact Study

Staff have visited the site and have reviewed the EIS by Ainley and are satisfied that appropriate field and desktop studies were performed. Field surveys were completed on June 5 and July 17, 2018 to survey the vegetation. Surveys for migratory and breeding birds were performed May 31, June 8 and June 14, 2018. Wildlife observations were completed May 28, June 1, 5, 14, 20 and 28 and July 17, 2018. The potential for the presence of bats was also part of the study. Some of the results of the studies include the following:

- Vegetation communities include perennial crop cover, former sand pit, mixed forest, hardwood deciduous forest, White Birch forest, Oak Deciduous Forest and Sugar Maple/Ironwood Forest. No SAR vegetation was observed with exception of 18 Butternut trees. Some vegetation clearing had been performed.
- The east and west section of the shoreline is steep with evidence of erosion. The central part of the site includes a more gradual shoreline.
- Adolphus Reach is known fish habitat. However, the shoreline is not suitable habitat for Pugnose Shiner, Eastern Pondmussel, Rainbow Mussel.
- A minimum 36 m vegetated buffer as measured from the shoreline is recommended. However, due to existing steep slopes and erosion staff recommend that the 36 m setback extend from the top of the bank rather than the high water mark.
- It is anticipated that individual lots will desire some degree of water access. Please note that staff from this office cannot issue permits for new permanent structures within the floodplain. Further, much of this shoreline is steep and eroding. Therefore, typically only a cantilever type dock would be permitted. A slope stability analysis may be required.
- Three SAR, Butternut, Eastern Wood-Pewee and Northern Map Turtle were observed on or adjacent to the property. Turtle nesting sites (Northern Map Turtle) were also observed in the former sand pit near the shoreline.
- Development within 25 m of a Butternut must adhere to requirements of O. Reg. 242/08.
- The property does not meet the minimum snag density requirement for bat maternity colony use.
- The Northern Map Turtle utilizes the former sand pit area. However, this species and their habitat are not protected under the ESA.

- No significant wetlands, woodlands, valley lands or ANSI's have been identified on the site.
- The site is not considered to meet the requirements for candidate turtle nesting area significant wildlife habitat.
- A 30 m setback from the top and toe of the escarpment was applied. However, a Slope Stability Study was not completed.

With the exception of the bullets above that are underlined, staff have no concerns with the EIS. Much of the site was historically disturbed by the former sand pit. Further, some of the site is agricultural field. The road down the escarpment is existing and evidence of serious failure or erosion was not observed. The setback from proposed structures to the bay is reasonable.

Hydrogeological Assessment

Staff attended the site and observed the test wells to be constructed as shore wells near the shoreline of the Bay of Quinte. Such wells draw from a surface water source and are vulnerable to contamination. Our normal review process entails assessment of compliance with Ministry of the Environment Guidelines D-5-5. These guidelines are applicable to private serviced developments that are proposing the use of groundwater as supply. The guidelines are not applicable to surface water supplies. In the absence of applicable provincial guidelines staff are not able to provide comments regarding the water supply for the proposed development. We would recommend that the Municipality contact the Ministry of the Environment Conservation and Parks to discuss this proposal.

Also, the septic system impact assessment contains errors relative to MECP Guideline D-5-4. However, upon review of the EIS completed by Ainley we concur with their assessment that compliance with MECP guideline D-5-4 is achieved due to the proposed large lot sizes that average greater than 1 hectare. However we note that the Ainley Assessment also mentions that the septic systems are a source of phosphorus to the Bay of Quinte. We would recommend that assurance be provided that loading of phosphorus to the adjacent surface water feature will not be an issue.

Geotechnical Assessment

The geotechnical report by Ainley included a slope stability analysis. Although staff disagree with the statement that the shoreline does "not exhibit any signs of erosion or undermining", staff concur with the overall setback of 36 meters. However, this setback should be measured from the top of the bank and not the high water mark as suggested.

Quinte Source Protection Plan

The subject property is not located within an 'Intake Protection Zone – 1' for drinking water. Source protection staff have no concerns with the proposed development.

Regulation #319/09

A portion of the subject lands lie within the regulated area of the Bay of Quinte. By virtue of Ontario Regulation, #319/09 - Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses) the owners will need to apply to the Conservation Authority for a permit prior to development (construction and site grading) within 60 metres of the Bay . Through the permit application process, the Authority will identify any potential concerns associated with any natural hazards on the subject lands, and review the permit application in light of Regulation #319/09 and Authority policies before deciding to issue or deny the permit.

If you have any questions or require additional information.

Sincerely,



Paul McCoy
Planning & Regulations Manager

/pm