Essex Region Conservation

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Information to Assist Applicants for Development on Properties located along the Southeast Leamington Shoreline between Wheatley Harbour and Point Pelee National Park:

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In order to undertake new development (construct a new building, major building addition/renovation or building reconstruction) along a shoreline within the Province of Ontario, all Provincial and local Conservation Authority guidelines/policies for new development within hazard lands must be satisfied. Due to the severity of the hazards in the Southeast Leamington area, a proposal for new development would need to be considered by the Essex Region Conservation Authority (ERCA) Executive Committee. All proposals for new construction must satisfy **all** Provincial and Conservation Authority guidelines/policies for new development within shoreline hazard areas. The Conservation Authority guidelines and policies are consistent with the following Provincial policies:

- Development and site alteration is carried out in accordance with floodproofing standards, protection works standards/erosion standards, and access standards
- Vehicles and people have a way of safely entering and exiting the area during times of flooding, erosion and other emergencies
- New hazards are not created and existing hazards are not aggravated
- No adverse environmental impacts will result.

These issues must be addressed through a shoreline engineering study that is prepared by a qualified professional engineer. The commissioning of this study is the responsibility of the proponent. In general, the following are minimum requirements that the shoreline engineering study must include:

- The shoreline engineering study must identify how the erosion hazard is being addressed. The proposed breakwall and building setback distance from the breakwall must provide 100 years of protection for the building. It is anticipated that lake bottom profiles in the vicinity of the subject property will be required to design the shoreline protection works.
- The shoreline engineering study must identify how the flood hazard is being addressed including wave run-up. It must be identified how the building is being floodproofed.

The shoreline engineering study must identify how flankage (side) protection is being addressed and how future maintenance access is being provided to the shoreline protective works.

The proposed shoreline protection works must be designed to minimum policy requirements and criteria/findings provided in the Baird Sustainable Management Strategy for Southeast Leamington – Phase 2 Report (April 20, 2007) (ie. average shoreline recession rate = 1.250 metres/year, cohesive shoreline, deepening nearshore, etc.). Based on the Baird Report, the minimum setback from this shoreline to a new building, on a property that does not have shore protection, is approximately 125 metres (410 feet). Furthermore, the lowest allowable opening into a new building with a 125 metre setback is 176.300 metres Geodetic Survey

Canada. Generally, the installation of an engineered breakwall that is designed to address the erosion hazard may reduce the required building setback distance. Depending on the design height of the breakwall, a reduced setback may result in a higher lowest opening elevation to address wave runup. Alternative setback distances and lowest opening elevations would have to be quantified in the required shoreline engineering study.

- Supporting calculations must be provided regarding the proposed breakwall height, breakwall depth, breakwall rock sizing, shoreline recession analysis, building setback, wave run-up, stable slope analysis (if required), etc. All supporting calculations must be signed and sealed by the design engineer.
- Design drawings must include breakwall details, site plan, drainage plan, etc. All design drawings must be signed and sealed by the design engineer.
- The submission must identify how safe access to and from the site during times of flooding, erosion or other emergencies is being addressed.
- The submission must confirm that no new hazards are being created, existing hazards are not being aggravated and that no adverse environmental impacts will result.

To make application for permit, a proponent is required to submit a completed application for permit, the application fee, the above noted shoreline engineering study and all other development related plans to the ERCA office at 360 Fairview Avenue West, Suite 311, Essex, Ontario, N8M 1Y6. This application will then be considered by the ERCA Executive Committee. Members of the ERCA Board of Directors are appointed to sit on the ERCA Executive Committee. Hearings are conducted in a quasi-judicial forum. Members of the ERCA Executive Committee are not informed of the applications being considered prior to the hearing. At the hearing, the applicant is asked to present his/her proposal to the ERCA Executive Committee. Applicants can represent themselves or applicants can be represented by others (ie. engineering consultant, legal representative, etc.). Following the applicant's presentation, the ERCA Technical Staff is asked to respond. The ERCA Technical Staff will advise the ERCA Executive Committee if the application satisfies all related hazard management requirements and may provide a recommendation to the ERCA Executive Committee. The ERCA Executive Committee will then make a decision on whether a permit can or cannot be issued for the proposal. In all cases where a hearing is required, the outcome cannot be predetermined. If a proponent does not agree with the decision of the ERCA Executive Committee, the proponent can appeal the decision to the Ontario Mining and Lands Commissioner.

Based on the findings of the Baird Sustainable Management Strategy for Southeast Leamington – Phase 2 Report (April 20, 2007), the ability of a proponent to satisfy **all** Provincial and Conservation Authority guidelines/policies for new development within shoreline hazard areas may be very challenging within the Southeast Leamington area. The Baird Report identifies that severe down cutting of the nearshore area is occurring along this reach of shoreline and that the average shoreline recession rate is approximately 1.250 metres/year. In addition, as noted above, vehicles and people must have a way to safely enter Essex Region

Conservation Authority

and exit during times of flooding, erosion and other emergencies. Many of the existing municipal roads within the Southeast Leamington area do not meet the provincial requirements for safe ingress and egress (access). For example, as a result of a May 2004 rain event, many of the dykes protecting the floodprone lands located between Hillman Marsh and Point Pelee National Park were damaged. Many of the municipal roads that provide access to the interior farmlands and the East Beach/Marentette Beach properties are located on top of the drainage scheme dykes. As a result of the 2004 damages to the dykes, the Municipality closed Mersea Road 1 and the north lane of Mersea Road C. Today, the only fully open road providing access to the East Beach/Marentette Beach shoreline properties is Mersea Road B. Neither Mersea Road B nor the remaining portions of Mersea Road C satisfy Provincial or Conservation Authority guidelines/policies for safe ingress and egress (access) during times of flooding. Furthermore, portions of shoreline roads located north of Hillman Marsh do not meet minimum access requirements.

For additional information regarding typical requirements for new development, please refer to Sections 6.2 and 6.7 of the Baird Report. The Baird Sustainable Management Strategy for Southeast Leamington – Phase 2 Report (April 20, 2007) is available on the ERCA web site by following the instructions below:

https://essexregionconservation.ca/reports/sustainable-management-strategy-southeast-leamington/

Please note that the Municipality of Leamington is currently undertaking additional studies to further assess options for this area. As a result, the Municipality has not selected the recommended option in the Baird report as a move forward course of action at this time.

The above information relates to new development proposals that are required to satisfy all Provincial and Conservation Authority guidelines/policies for new development in hazard zones.

The following activities require a permit or clearance from the Conservation Authority but in general are not required to satisfy all Provincial and Conservation Authority guidelines/policies for new development in hazard zones.

- Detached structures less than 100 ft² (9.29 m²) in size.
- Building additions, up to 50 percent of the size of the original building, provided that the number of dwelling units is not increased and provided that the floodproofing elevation and setback from the shoreline are not less than the original building. (Note: Previous additions will be included as part of the 50% calculation.)
- Shoreline protection construction or maintenance.
- Placement and grading of fill.
- Open decks.
- Minor maintenance, repairs, renovations.
- Landscaping.

In addition to the above, the Southeast Leamington area is not serviced by municipal sanitary sewers and, as a result, on-site septic systems are required for new development. Depending on the size of the proposed Essex Reg



building and the type of septic system, substantial lot area may be required for an appropriately sized septic system. Sanitary servicing does not fall under the jurisdiction of the Conservation Authority, however, applications for permit must include a site plan showing the location of the septic envelope so that the related placement and grading of fill can be addressed in the Conservation Authority permit. Contact should be made with the Municipality's Building Department to determine all municipal requirements, including septic system requirements. Also, please note that in accordance with Part 8 of the Ontario Building Code and as confirmed by the Municipal Building Department, holding tanks are not an acceptable method for dealing with sanitary waste for new development.

For site specific information, we encourage proponents to contact ERCA for information regarding flood and erosion issues. Please note, however, that we cannot provide site specific information to a third party without a letter of permission from the current property owner.

