

GUIDELINES

for an

Environmental Preview Report

for the

Embree Residential Subdivision Project

Honourable Perry Trimper

Minister

Department of Environment and Climate Change

January 2017

ENVIRONMENTAL PREVIEW REPORT GUIDELINES

The following guidelines are intended to assist the proponent, Mr. David Nippard, with the preparation of the environmental preview report (EPR) for the proposed Embree Residential Subdivision Project (the Project). The EPR is a report that supplements the information already provided by the proponent upon registration of the undertaking. The purpose of the EPR is to assist the Minister of Environment and Climate Change in making a determination as to whether an Environmental Impact Statement (EIS) will be required for the proposed undertaking. The EPR is expected to be as concise as possible while presenting the comprehensive information necessary to make an informed decision.

The EPR should include and update the information provided in the original registration and focus on the information gaps identified during the government and public review of the registration. The EPR should address the information gaps in sufficient detail to enable the Minister of Environment and Climate Change to make an informed decision as to the potential for significant environmental effects from the undertaking.

The contents of the EPR should be organized according to the following format:

1. NAME OF UNDERTAKING

The undertaking has been given the name “Embree Residential Subdivision Project.”

2. PROPONENT

The following information concerning the proponent will be provided:

- Name the proponent and the corporate body, if any, and state the mailing address.
- Name the chief executive officer if a corporate body, telephone number, and E-mail address.
- Name the principal contact person for purposes of environmental assessment and state the official title, telephone number, and E-mail address.

3. THE UNDERTAKING

The proposed undertaking will be described according to the following:

- State the nature of the Project.
- State the purpose/rationale/need for the Project from the perspective of the proponent. If the proposal is in response to an established need, this should be clearly stated. Identify needs that are immediate as well as potential future needs.

- Identify any broader private or public sector policies, plans or programs to which the objectives of the Project contribute, i.e., job creation programs, equal opportunity employment plans, local employment and recruitment strategies, economic development plans, research opportunities, business innovation programs, etc. Identify any potential opportunities to partner with local business.

4. DESCRIPTION OF THE UNDERTAKING

The proponent is asked to provide complete information concerning the preferred choice of location, design, construction standards, maintenance standards, etc.

4.1 Geographical Location/Physical Components/Existing Environment

- Explain why this location was selected for this development;
- Provide an accurate description of the location of proposed site, access road and causeway, facilities and equipment, including GPS location coordinates. Describe the proposed site and surrounding land and coastal zone environment prior to project development;
- Give a detailed physical description of the Embree area. Clearly indicate proximity of the site relative to existing residential areas, transportation routes, structures, cabins, trails, water bodies, floodplains, coastal zones, wetlands and wildlife migration corridors;

Climate Change

Incorporate local climate change, in particular, precipitation projections and best available information on sea level rise, storm surge and saltwater intrusion into project design, and construction. This is further detailed in the following section of these guidelines.

More information on climate and precipitation data can be provided by contacting Trina Caines (729-1485) or at the following links:

- http://www.exec.gov.nl.ca/exec/ccee/publications/idf_curve_2015.pdf on pages C-56 (current climate) and D-6 (projected climate) for Gander and pages C-25 (current climate) and D-3 for Comfort Cove.

Climate Change Projections:

- http://www.turnbackthetide.ca/whatsnew/2013/NL_Climate_Projections_Full_Report.pdf
Flood Risk Mapping
- <http://www.env.gov.nl.ca/env/waterres/flooding/frm.html>

In addition, coastal erosion and sea-level rise data should be utilized in development stages. Information can be provided by contacting Martin Batterson (729-3419) and is available at the following links:

- <http://www.nr.gov.nl.ca/nr/mines/geoscience/publications/currentresearch/2015/Irvine-2015.pdf>

- http://www.nr.gov.nl.ca/mines&en/geosurvey/publications/CR2010/2010_Batterson-Liverman.pdf
- <http://nlhfrp.ca/wp-content/uploads/2015/01/Coastal-Erosion-in-Newfoundland.pdf>

For any structures to be constructed, please be aware of recent updates (Section 9.36) of the National Building Code (NBC), which now includes energy efficiency requirements for new buildings. Newly constructed buildings must comply with these energy efficiency requirements for new developments in the municipality. A guide to the energy efficiency requirements of the NBC, including section 9.36, is available at:

http://www.exec.gov.nl.ca/exec/ccee/publications/efficient_home_building_guide.pdf

Topography

The proposed development is located in a coastal environment and overlaps with areas of low topography that are potentially hazardous for development. Areas of low topography identified during a field visit by a government representative are identified in red on the attached map, Appendix C, however the inland boundaries of these areas are highly uncertain and other areas of low topography may also be present.

Low-lying terrain would be subject to flooding during high-water (storm) events. The eastern side of the proposed development area is exposed to a fetch of up to 20 km to the northeast; a combination of strong winds from that direction during a high-tide would produce waves that could result in flooding. The risk of flooding will likely increase in the future. Storm surges are likely to increase in intensity and frequency, and this part of the province will likely experience rising sea levels of 80-100 cm by the end of the century (Batterson and Liverman, 2010). There are no visible signs of coastal erosion (i.e., rockfalls or slumping) and the area is underlain by bedrock.

Government considers areas between 0 and 2 m elevation above current sea level to be highly hazardous for development, and between 2 and 4 m elevation to be moderately hazardous for development. Government strongly recommends that development and property boundaries be restricted to areas higher than 4 m above current sea level.

The attached map is provided as an initial guide only. A determination via a topographic survey of precise elevations above sea level for the proposed development site is required.

Government strongly recommends that the access causeway be elevated (>4 m) in order to help ensure safe and uninterrupted access during storm surges and floods and that at least the northern side of the causeway be covered in armourstone (i.e., large boulders) to help prevent erosion.

- A detailed description of the proposed access causeway to be constructed is required;
- The EPR must identify the location of permanent structures, the proposed protection of waterbodies from sedimentation and how buffers will be maintained and managed;
- Due to the area's high historic resource potential and its proximity to known archaeological sites, a Historic Resource Impact Assessment, pursuant to the *Historic*

Resources Act and the Archaeological Investigation Permit Regulations is required to be carried out. The *Historic Resources Act* RSNL1990 CHAPTER H-4 and information on archaeology in the province can be viewed on the Provincial Archaeology Office Website;

- Identify any nearby tourist attractions, hiking trails, scheduled salmon rivers, interpretative sites, look-off points, parks, ecological reserves, wilderness reserves, etc. Attach an original base map (1:25,000 scale) and/or recent air photos, identifying the above-noted features;
- Provide confirmation of the method of sewage disposal that is proposed for the residential subdivision lots. This will help determine the impact of the disposal of human waste into the environment. Under the Sanitation Regulations of the *Health and Community Services Act*, each building lot in an unserved area must be approved for the installation of a sewage disposal system and well. The approval process includes the submission of an application, plot plans and specifications for the installation of an onsite sewage disposal system and well that are prepared by an Approved Designer. A centralized municipal water and sewer serviced is to be approved by the Department of Environment and Climate Change while an on-site sewage disposal system and well for each residential lot requires the approval of the Department of Service NL;
- Embree currently has 3 municipal wastewater outfalls. Please be aware that the additional flow from this subdivision to one of the outfalls may trigger the federal Wastewater System Effluent Regulations.
- Please note that the province does not allow raw discharge from any new municipal wastewater outfall. If a new municipal outfall is considered, a plan to meet this requirement will have to be proposed;
- Provide an assessment of potential water use from the proposed subdivision to ensure there is sufficient supply from the source (Troke's Cove Pond) for Embree, Little Burnt Bay, and this new subdivision;
- A detailed plan for the proposed water and sewer system is to be submitted in the EPR. This plan will include a hydraulic analysis of the Town of Embree's water and sewer system carried out by a private engineering firm. If the present water and sewer system cannot accommodate the additional demand under worst case scenario, a list of infrastructure improvements to achieve this will be provided;
- Please include a discussion of consultations held with both the Town of Embree and Little Burnt Bay to resolve concerns relative to the upgrading of municipal infrastructure that may be needed to support this undertaking;
- As previously indicated, the Department of Municipal Affairs has developed, as part of its capital works program, a mapping known as the Limit of Servicing (LOS) Map. Areas identified on this map are eligible for consideration of capital works funding. If the Town

of Embree is planning at some point to take over this development area, including the infrastructure systems and roads, they need to ensure it is designed and installed as per today's standards along with as-built designs provided in order for the department to consider any amendment to the Town of Embree's LOS map if requested;

- Provide information regarding ownership and/or zoning of the land upon which the Project is to be located and any restrictions imposed by that ownership or zoning, i.e., municipal land and zoning, private land, crown land, etc;
- Provide a certification of the subdivision design and infrastructure, prepared by an independent engineer (revised) of the proposed residential subdivision development area, identifying all features, including:
 - areas available for development, i.e., above 4 m above current sea level;
 - buildings and structures;
 - water and sewer system components;
 - site lighting structures;
 - perimeter fencing (if applicable);
 - 30 m naturally vegetated buffer around all water bodies and shorelines and within the proposed lot development (measured from the high water/tide mark). Please note that the high tide mark is defined in Section 48 of the Water Resources Act as the level that includes “maximum waves, wind setup, storm surge, and ultimate mean sea levels under current global climatic forecasts for a 1:100 year design”, and not, as appears to be the case on the project sketch in the registration document, measured from a location more seaward;
 - the publicly accessible road and causeway.

4.2 Construction

- State the total project construction period (if staged, list each stage and its approximate duration) and proposed date of first physical construction-related activity;
- Provide details, materials, methods, schedule, and location of all planned construction activities;
- The EPR must describe how water and sewer management will be ensured for all lots identified after the appropriate buffers have been incorporated;
- Indicate site preparation activities that will be undertaken including vegetative clearing, grubbing, topsoil stripping, excavating and landscaping;
- Describe any new road construction and upgrading of existing roads that will be required to accommodate vehicular access to and within the proposed project area;
- A detailed description of the proposed access causeway to be constructed is required. Government strongly recommends that the access causeway be elevated (>4 m) in order to help ensure safe and uninterrupted access during storm surges and floods and that at

least the northern side of the causeway be covered in armourstone (i.e., large boulders) to help prevent erosion;

- Describe measures that will be undertaken to ensure that activities associated with the construction of the Project are conducted in compliance with the *Occupational Health and Safety Act, O.C. 2012-005* and its Regulations. This includes the responsibility for ensuring that contractors hired to perform work also comply with this legislation, as per *OHS Act s.10*.

4.3 Operation and Maintenance

All aspects of the operation and maintenance of Project shall be presented in detail, including those related to site utilities and infrastructure, buildings and structures, site drainage, solid waste disposal, site security, and fire protection services.

Although a complete list of Project activities is required by the EPR, the emphasis should be on those with the greatest potential to have environmental effects. Sufficient information should be included to predict the environmental effects of operating and maintaining a residential subdivision.

5. ALTERNATIVES

The EPR must identify and describe alternative means and locations of carrying out the Project that are technically and economically feasible. The following steps for addressing alternative means and locations are recommended:

- Identify any alternative means and locations to carry out the Project;
- Provide reasons for the rejection of alternative sites.

6. POTENTIAL ENVIRONMENTAL EFFECTS and MITIGATION

The proponent will provide detailed information regarding the potential effects of the proposed facility on the environment and details of proposed mitigations.

- Potential environmental effects associated with the construction and operation of a residential subdivision include, but are not limited to, the following:
 - Disturbance to avifauna if construction activities are undertaken during key breeding periods;
 - New road construction and upgrading of existing roads;
 - Erosion and sedimentation to waterbodies resulting from on land activities;
 - Flooding of the development;
 - inadequate water well and sewage management system;
 - Inadequate buffer zones around waterbodies resulting in water quality degradation, increased access and riparian zone degradation;
- Describe methods and materials that will be used to suppress dust during site preparation activities;

- Describe mitigative measures that will be implemented to minimize and prevent destruction and harm to nests, eggs and nesting birds (avifauna breeding season, which is April 15th through August 15th) during construction and operations;
- Identify provisions for the disposal of construction and other non-hazardous wastes (wood, concrete, steel). Identify opportunities for reuse and recycling. Final disposal of materials, if required, should be at an approved site;
- Describe mitigative measures that will be undertaken to minimize and control soil erosion and sedimentation during construction activities including vegetative clearing, grubbing, topsoil stripping, road and causeway construction, excavating and landscaping;
- Define measures that will be implemented to control the release or re-suspension of sediments in waterbodies;
- Please refer to the Fisheries Protection Program website of the federal Department of Fisheries and Oceans (DFO) to obtain guidance on how to carry out a self-assessment of the proposed project (<http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html>). This self-assessment will help determine if this project requires a review by the DFO. This site also provides advice on various mitigation measures that will help avoid causing harm and comply with the *Fisheries Act* (<http://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures/index-eng.html>). If after completing a self-assessment of the proposed works/undertaking/activity and it is determined that a review by DFO is required, the Request for Review form located at: <http://www.dfo-mpo.gc.ca/pnw-ppe/reviews-revues/index-eng.html> should be completed. Please note that in-water project activities listed on the DFO “Projects near Water” website as “not requiring review by DFO” should be avoided in certain time periods in some waters in Newfoundland and Labrador in order to reduce the risk of harm to salmon and trout populations during important or sensitive life stages. If you **cannot** avoid working in water during those periods, you should also submit a Request for Review form. Please refer to the NL timing windows document (Appendix B);
- Consider the sensitivity of the Project to long-term climate variability and provide a discussion of the potential environmental effects of the environment (e.g., increases in precipitation) on the Project. The EPR shall provide details of planning, design and construction strategies intended to minimize the potential environmental effects of the environment on the Project.

6. PROJECT- RELATED DOCUMENTS

Provide a bibliography of all project-related documents already generated by or for the proponent (e.g., feasibility study, engineering reports, etc). Provide information contained in previous studies specific to this project, which will be helpful in filling in gaps identified in the assessment of the initial registration document.

7. PUBLIC INFORMATION MEETING

An Open House Public Information Session is required to be held in a centralized location to present the information gathered to fulfill the requirements of Section 5 of these guidelines. You are required to notify the Minister and the public of the scheduled meeting not fewer than 7 days before that meeting. Public concerns should be addressed in a separate section of the EPR. Protocol for these public sessions will comply with Section 10 of the Environmental Assessment Regulations, 2003. Public notification specifications are outlined in Appendix A.

8. APPROVAL OF THE UNDERTAKING

List the main permits, licences, approvals, and other forms of authorization required for the undertaking, together with the names of the authorities responsible for issuing them (e.g., federal government department, provincial government department, municipal council, etc.).

Additional regulatory, permitting and licensing requirements, as well as technical advice from the Government Screening Agency relative to mitigative measures related to the construction and operation of the Embree Residential Subdivision Project are attached.

The determination that an environmental preview report is required remains in force for three years after the minister has advised the proponent of the requirement. If, after the expiration of three years, a report that complies with the Act and guidelines and requiring no further work has **not** been submitted, that determination shall be considered to be void and the undertaking must be registered again. The required 10 copies of the EPR and an electronic version for posting to the Environmental Assessment website should be sent, together with a covering letter, to:

Minister
Environment and Climate Change
P.O. Box 8700
St. John's NL A1B 4J6
Attention: Director of Environmental Assessment

APPENDIX A

Public Notices

Under the provisions of the *Environmental Assessment Regulations 2003*, Section X, and where the approved Guidelines require public information session(s), the following specified public notification requirements must be met by the proponent prior to each meeting.

Minimum information content of public advertisement - (Proponent to substitute appropriate information for italicized items):

<p style="text-align: center;">PUBLIC NOTICE</p> <p style="text-align: center;">Public Information Session on the Proposed</p> <p style="text-align: center;"><i>Name of undertaking</i> <i>Location of undertaking</i></p> <p style="text-align: center;">shall be held at <i>Date and Time</i> <i>Location</i></p> <p style="text-align: center;">This session shall be conducted by the Proponent, <i>Proponent name and contact phone number,</i> as part of the environmental assessment for this Project.</p> <p style="text-align: center;">The purpose of this session is to describe all aspects of the proposed Project, to describe the activities associated with it, and to provide an opportunity for all interested persons to request information or state their concerns.</p> <p style="text-align: center;">ALL ARE WELCOME</p>

Minimum newspaper ad size: 2 column widths; Minimum posted ad size: 7" x 5"

Minimum newspaper ad coverage: Weekend preceding meeting and 3 consecutive days prior to meeting date; to be run in newspaper locally distributed within meeting area or newspaper with closest local distribution area.

Minimum posted ad coverage: Local Town or City Hall or Office, and local Post Office, within town or city where meeting is held, to be posted continually for 1 full week prior to meeting date.

APPENDIX B

Measures to Avoid Causing Harm to Fish and Fish Habitat – **Timing**

Newfoundland and Labrador
Region

In-water project activities listed on the DFO **Projects Near Water** website as “not requiring review by DFO” should be avoided in certain time periods in some waters in Newfoundland and Labrador in order to reduce the risk of harm to salmon and trout populations during important or sensitive life stages.

If you **cannot** avoid working in water during the periods set out below for those project activities, you should submit a Request for Review form for your work to the DFO Fisheries Protection Program at FPP-NL@dfo-mpo.gc.ca:

WATER BODY TYPE/AREA	PERIOD TO <u>AVOID</u> IN-WATER WORK	REASON
Atlantic salmon		
Estuaries and the main stems of scheduled salmon rivers*	May 1 to September 30	Work may disrupt migration of Atlantic Salmon (i.e. smolt, kelt, adults).
Tributary and headwater areas of scheduled salmon rivers on the island of Newfoundland	October 1 to May 31	Work may disrupt spawning of Atlantic Salmon in the fall, or harm eggs and newly hatched fish.
Tributary and headwater areas of scheduled salmon rivers in Labrador	September 15 to June 15	
Brown trout		
Estuaries and the main stems of Brown Trout rivers**	October 1 to November 30	Work may disrupt migration of adult Brown Trout.

* Scheduled salmon waters are identified in the NL Anglers’ Guide available on-line at <http://www.nfl.dfo-mpo.gc.ca/NL/AG/ScheduledSalmonRivers>. They are also set out in the *Newfoundland & Labrador Fishery Regulations* at <http://laws-lois.justice.gc.ca/eng/regulations/SOR-78-443/page-12.html#h-16>

** Brown trout waters are identified in the NL Anglers’ Guide <http://www.nfl.dfo-mpo.gc.ca/NL/AG/BrownTrout>

As of June 1, 2016

APPENDIX C

Map showing Coastal Areas of less than ≈ 2.5 m asl

Mines Branch response EA 1858 (Embree Residential Subdivision)

red areas = sketch of coastal areas less than ~ 2.5 m elevation above high tide mark, inland boundaries highly uncertain, other similar areas may be present

* This map is provided for initial guidance only and should not be relied upon as an indication of topography for planning purposes (see Mines Branch EA response comments). The proponent should have a topographic survey carried out to determine the precise extent of low lying areas (< 4 m elevation).



APPENDIX C
Map showing Coastal Areas of less than ≈ 2.5 m asl