

Environmental Assessment Approval

Approval Date: *Original Dated 09 April, 2010*

Highway 113

Nova Scotia Transportation and Infrastructure Renewal, Proponent

**Halifax Regional Municipality
Nova Scotia**

Highway 113 at Halifax, Halifax Regional Municipality (the “Undertaking”), proposed by Transportation and Infrastructure Renewal (the “Approval Holder”), is approved pursuant to Section 40 of the *Environment Act*. This Approval is subject to the following conditions and obtaining all other necessary approvals, permits or authorizations required by municipal, provincial and federal acts, regulations, by-laws, guidelines, policies or standards before commencing work on the Undertaking. It is the responsibility of the Approval Holder to ensure that all such approvals, permits or authorizations are obtained before commencing work on the Undertaking.

This Environmental Assessment Approval is based upon the review of the conceptual design, environmental baseline information, impact predictions, and mitigation presented in the Registration Information.

Terms and Conditions for Environmental Assessment Approval

1.0 General Approval

- 1.1 The Environmental Assessment Approval for the Undertaking is limited to the project as described in the Registration Information. Any proposal by the Approval Holder for expansion, modification or relocation of any aspect of the Undertaking from that proposed in the Registration Information must be submitted to the Environmental Assessment Branch for review and may require an environmental assessment.
- 1.2 The Approval Holder must not transfer, sell, lease, assign or otherwise dispose of this approval without the written consent of the Minister. The sale of a controlling interest of a business or a transfer of an approval from a parent company to a subsidiary or an affiliate is deemed to be a transfer requiring consent.
- 1.3 The Approval Holder must implement all mitigation and commitments in

the Registration Information, unless approved otherwise by Nova Scotia Environment (NSE).

2.0 Environmental Management and Monitoring

- 2.1 No later than one year prior to construction, or at a schedule to be approved by NSE, the Approval Holder, must submit for review and approval of the NSE Central Region, an Environmental Protection Plan (EPP) for the Undertaking, to be implemented through all phases of construction and operation.
- 2.2 The Approval Holder must update and revise the EPP at the request of NSE, at anytime during construction or operation of the Undertaking.

3.0 Terrestrial Resources

- 3.1 No later than one year prior to construction, or at a schedule to be approved by NSE, the Approval Holder must update wildlife surveys and take appropriate mitigative action, to the satisfaction of NS Department of Natural Resources (NSDNR) Wildlife Division and the Canadian Wildlife Service.
- 3.2 No later than one year prior to construction, or at a schedule to be approved by NSE, the Approval Holder must prepare for NSDNR Wildlife Division's review and approval, a management plan for vascular plants that are known to be at-risk and within the area of the Undertaking, based on the most current information.
- 3.3 No later than one year prior to construction, or at a schedule to be approved by NSE, the Approval Holder must develop for NSDNR Wildlife Division's review and approval, an adaptive management plan for moose, based on the most current information.
- 3.4 The Approval Holder must work with NSDNR, Halifax Regional Municipality (HRM) and NSE to find ways to optimize terrestrial and aquatic ecological flows, to the satisfaction of NSDNR, HRM and NSE.
- 3.5 Clearing of vegetation must be conducted outside of the breeding season for most bird species (April 15 to August 31), unless otherwise approved by NSE.
- 3.6 The Approval Holder must provide plans to NSDNR which precisely identify any Crown lands which would be required for the Undertaking.

- 3.7 Blue Mountain Hill must not be used as a borrow pit for the purposes of aggregate extraction.

4.0 Wetland Resources

- 4.1 Further field surveys must be undertaken following detailed design work, to define the areas and extent of impacts on wetlands.
- 4.2 The Approval Holder must provide NSDNR Wildlife Division and NSE Central Region, for review and approval, a mitigation and monitoring plan for wetlands.
- 4.3 At a schedule to be approved by NSE, the Approval Holder must develop a wetland compensation plan, for review and approval by NSDNR Wildlife Division and NSE Central Region, to help mitigate the loss of wetland habitat as a result of this Undertaking.
- 4.4 If wetland habitat is constructed, then the wetland's water quality function must be preserved, and follow-up monitoring including functional analysis must be conducted on the created habitat. Monitoring parameters must be established in consultation with NSDNR Wildlife Division and NSE Central Region.

5.0 Public Consultation

- 5.1 The Approval Holder must form, at least two years prior to the commencement of any construction activity on this Undertaking, a Community Liaison Committee (CLC) in consultation with NSE and with municipal and community representatives. The NSE *Process for the Formation of a Community Liaison Committee*, or most current procedure, must be used for the guidance of the Approval Holder and community.
- 5.2 The Approval Holder must form, at least two years prior to the commencement of any construction activity on this Undertaking, an Intergovernmental Liaison Committee (ILC) which includes NSDNR, HRM and NSE.
- 5.3 The Approval Holder must provide to NSE, for review and approval, prior to initiation of any site work, a policy, for the resolution of disputes relating to the Undertaking.

6.0 Groundwater Resources

- 6.1 Within one year prior to construction, or at a schedule to be approved by

NSE, the Approval Holder must complete a pre-construction/pre-blast water well survey to document baseline conditions of water wells in the vicinity of the proposed highway. The water well survey must be completed as described in the Procedure for Conducting a Pre-Blast Survey (NSE, 1993), or most current procedure.

6.2 The Approval Holder must develop a detailed groundwater monitoring plan, acceptable to NSE, after the pre-construction water well survey is complete and prior to highway construction. The Plan must address pre and post-construction groundwater monitoring and must include the following:

- a description of the well survey and pre/post-construction monitoring plans;
- a map showing locations of all proposed monitoring sites
- a table identifying the name, location, monitoring frequency and parameters for each monitoring site (provide a table for both pre and post-construction monitoring):
- monitoring well decommissioning procedures; and
- the duration of the proposed monitoring plans

6.3 No later than one year prior to construction, or at a schedule to be approved, by NSE, a contingency plan, acceptable to NSE, must be prepared to provide details on the following: how water well complaints will be processed; what situations will trigger corrective action; and, how disputes will be resolved. If the highway causes water quality and quantity problems with any existing water wells, the Approval Holder must rectify the problem to the satisfaction of NSE.

7.0 Surface Water Resources

7.1 The Approval Holder must apply for Part V Approvals under the *Environment Act* for watercourse and wetland alterations.

7.2 The Approval Holder must provide Halifax Water Commission, for review and approval, a plan to ensure the main trunk waterline is protected from construction and blasting activity.

7.3 The Approval Holder, as part of the EPP, must provide to NSE Central Region, for review and approval:

- erosion and siltation control measures
- a program for monitoring surface water including: locations, sampling parameters and sampling frequency.

7.4 The Approval Holder must follow the mitigation measures as presented in the Registration Information, should acid generating bedrock be encountered.

8.0 Archaeological and Historical Resources

8.1 The Approval Holder must cease work and contact the Director, Heritage Division, Nova Scotia Department of Tourism, Culture and Heritage immediately upon discovery of an archaeological site, artifact or human remains unearthed during any phase of the proposed Undertaking. If the find is of certain or suspected Mi'kmaq origin, the Approval Holder must also contact the Executive Director of the Kwilmu'kw Maw-klusuaqn Negotiation Office.

8.2 Any ground impacts in the area of the narrow ridge on the western side of Maple Lake Run must be monitored by an archaeologist. This must be scheduled to occur as early as possible in the construction sequence, in case a burial site is found and mitigation becomes necessary.

8.3 The remainder of the Highway 113 Right of Way as described and illustrated in the EA Report (Figures 1 & 2) , must be cleared of any requirement for future archaeological investigation.

8.4 Signs must be posted to mark the suspected original alignments of the Lunenburg Road and the Annapolis Road at the points where they are crossed by Highway 113.

8.5 Any expansion of the impact zone beyond the study area described and illustrated in the EA Report (Figures 1 & 2) must be addressed by an archaeological assessment, prior to ground disturbance. This includes impact areas for access roads, alignment changes, borrow material excavation, staging areas, etc.

9.0 Highway Construction and Operation

9.1 The Approval Holder must meet all regulatory requirements at the time of construction.

9.2 The Approval Holder, as part of the EPP, must prepare a dust monitoring to be implemented during construction.

- 9.3 All equipment is to be operated with standard noise suppression exhaust systems and kept in good repair.
- 9.4 During the design stage of the highway, an assessment of the projected noise must be completed and appropriate mitigation measures must be implemented.
- 9.5 The Approval Holder must monitor noise levels, at the request of NSE. Based on the results of monitoring program as proposed, the Approval Holder must make necessary modifications to mitigation plans and/or operations as required by NSE.

10.0 Blasting

- 10.1 At a schedule to be approved by NSE, the Approval Holder must provide details of an updated blasting plan, for NSE review and approval.

11.0 Contingency Plan

- 11.1 The Approval Holder, as part of the EPP, must submit to NSE Central Region for review and approval, a contingency plan that addresses accidental occurrences including, but not limited to, spills of hydrocarbons or other hazardous materials; failure of erosion and sediment control measures; fires; and vehicular collisions.

Original Signed By

Sterling Belliveau
Minister of Environment