

Environmental Assessment Approval

Approval Date: April 28, 2020

Spicer North Mountain Quarry Expansion

B. Spicer Construction Ltd.

Upper Granville, Annapolis County, Nova Scotia

Terms and Conditions for Environmental Assessment Approval

1 Definitions

- 1.1 Approval means the environmental assessment (EA) Approval terms and conditions, which relates to the Approval Holder and their Project situated at or near Upper Granville, Annapolis County, Nova Scotia.
- 1.2 Environment Act means Environment Act 1994-95, c.1, s.1, and includes, unless the context otherwise requires, the regulations made pursuant to the Act, as amended from time to time.
- 1.3 Department means the Department of Environment (unless otherwise specified in the Approval conditions), and the contact for the Department for this Approval is: Inspection, Compliance and Enforcement Division; Western Region; Regional Inspector.
- 1.4 Minister means the Minister of Environment.
- 1.5 Commencement of the Project means the same as to commence work, as defined in the Environmental Assessment Regulations.

2 Scope

- 2.1 This Approval relates to the Approval Holder and their Registration Information (Registration Document submitted to the Department during the EA review) for the Spicer North Mountain Quarry Expansion Project.

3 General

- 3.1 The Approval Holder shall, within two years of the date of issuance of this Approval, commence work on the Project unless granted a written extension by the Minister.
- 3.2 The Approval Holder shall provide written notification to the Department of the commencement date of the Project, at a minimum 30 days prior to the commencement.
- 3.3 The Approval Holder shall provide to the Department a concordance table detailing the status of the EA terms and conditions on January 31 of each year until released in writing by the Department.
- 3.4 Any proposal by the Approval Holder for expansion, modification or relocation of any aspect of the Project from that proposed in the Registration Information shall be submitted to the EA Branch for review and may require an EA.
- 3.5 Nothing in this Approval relieves the Approval Holder of the responsibility for obtaining and paying for all other licenses, permits, approvals or authorizations necessary for carrying out the Project which may be required by municipal by-laws or provincial or federal legislation. The Minister does not warrant that such licenses, permits, approvals or authorizations will be issued.
- 3.6 The Approval Holder shall 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 this Approval from a parent company to a subsidiary or an affiliate is deemed to be a transfer requiring consent.
- 3.7 If there is a discrepancy between the Registration Information and the terms and conditions of this Approval, the terms and conditions of this Approval shall apply.
- 3.8 Upon any changes to the Registry of Joint Stock Companies information related to the Approval Holder, the Approval Holder shall provide a copy to the Department within 5 days of the changes.
- 3.9 Where a timeline is associated with a condition(s) of the Approval, the Approval Holder shall fulfil the requirements of the condition(s) within the prescribed timeline, unless otherwise authorized in writing by the Department.

- 3.10 The Approval Holder shall notify the Department in writing within 48 hours of any incidents of non-compliance with this Approval.
- 3.11 The Approval Holder shall bear all expenses incurred in carrying out the environmental management and monitoring required under the terms and conditions of this Approval.
- 3.12 Unless specified otherwise in this Approval, all samples required to be collected by this Approval shall be collected, preserved and analyzed, by qualified personnel, in accordance with recognized industry standards and procedures that are deemed acceptable to the Department.
- 3.13 The Approval Holder shall ensure that this Approval, or a copy, is present at the Project site while personnel are on site and that personnel directly involved in the Project are made fully aware of the terms and conditions which pertain to this Approval.
- 3.14 The Approval Holder shall update and/or revise any of the plans, programs or other documents required in this Approval to reflect the progressive development of and/or changes to the Project at a schedule acceptable to, or upon the request of, the Department.
- 3.15 Based on the results of the monitoring plans required in this Approval, the Approval Holder shall make necessary modifications to mitigation plans and/or changes to Project operations to prevent unacceptable environmental effects, as required by the Department.
- 3.16 Where a condition of this Approval requires the Approval Holder to consult a particular party or parties regarding the content of a document, the Approval Holder shall: provide a written notice to each such party inviting comments on the document within a reasonable timeframe, provide a written explanation to each party how the comments are addressed and considered, as well as maintain a record of consultation with each party and provide a copy of such consultation to the Department.

4 Water Resources

- 4.1 The Approval Holder shall not conduct any Project activities or remove vegetation within 30 metres of a watercourse and/or a wetland unless otherwise authorized in writing by the Department.
- 4.2 Refueling shall not be conducted within 30 metres of any surface water resource.

- 4.3 Prior to commencement of Project, the Approval Holder shall complete a functional assessment for Wetland 7, and a field delineation and functional assessment for Wetland 8 (as identified in the Registration Information). Results shall be provided to the Department for review and acceptance.
- 4.4 The Approval Holder, as part of the application for Part V Approval under the *Environment Act*, shall develop a comprehensive wetland monitoring plan for Wetlands 1, 3, 7 and 8 (as identified in the Registration information), including groundwater table monitoring. The Approval Holder shall implement the plan once the plan is deemed acceptable by the Department.
- 4.5 Based on the results of the wetland monitoring plan, if the Department determines that adverse effects have occurred from indirect wetland alteration, compensation shall be required for loss of wetland area and function.
- 4.6 Prior to Project commencement, the Approval Holder shall submit a surface water quality and quantity monitoring plan, including sampling locations, parameters and frequency to the Department for review and acceptance. The plan shall include provisions to verify the efficacy of mitigation measures and to validate conclusions provided in the Registration information regarding insignificant impacts to surface water quality and quantity. The Approval Holder shall develop the plan in consultation with the Department's Sustainability and Applied Science Division, and Fisheries and Oceans Canada and shall implement the plan once the plan is deemed acceptable by the Department.
- 4.7 The Approval Holder, as part of the application for the Part V Approval under the *Environment Act*, shall develop and submit a surface water management plan to the Department for review and acceptance. This plan, as well as the new and enhanced water management infrastructure, shall be developed by a qualified professional engineer licensed to practice in the Province of Nova Scotia and shall include, at minimum design details for the following:
 - a) new surface water management infrastructure (e.g., settling ponds, ditches, seep away) and enhancements to existing surface water management infrastructure to mitigate sediment loading and flooding with consideration for different operational phases, seasonality and potential impacts of climate change on sizing requirements;
 - b) quantitative assessment of existing surface water management infrastructure to confirm adequacy to mitigate sediment loading and flooding for the Project activities;
 - c) diversion of upstream areas from both active and future quarry footprints;

- d) measures to minimize changes to contributing drainage areas for the surrounding surface water resources.
- 4.8 Prior to Project commencement, the Approval Holder shall implement a comprehensive erosion and sedimentation control plan, developed by a qualified professional engineer or geoscientist licensed to practice in the Province of Nova Scotia. The plan shall be provided to the Department upon request.
- 4.9 The Approval Holder shall update the erosion and sedimentation control plan throughout the life of the quarry to address the state of development or reclamation, site specific conditions and reasonable and foreseeable weather events. Revisions shall be dated and made available to the Department upon request.
- 4.10 The Approval Holder, as part of the application for the Part V Approval under the *Environment Act*, shall submit a plan for water use for the purpose of dust suppression, including the water source(s) and its estimated volumes to determine whether requirements for water withdrawal approvals will be triggered.
- 4.11 Prior to Project operations ceasing, the Approval Holder shall submit an updated surface water management plan that includes maintenance of surface water runoff quality and quantity during the reclamation phase and plans to minimize scour and erosion potential, to the Department for review and acceptance. Prior to Project operations ceasing, the Approval Holder shall implement the approved updated surface water management plan.
- 4.12 The Approval Holder, as part of the application for the Part V Approval under the *Environment Act*, shall develop a groundwater monitoring plan including the design and location of multi-level monitoring wells and monitoring parameters to the Department for review and acceptance. The plan shall be designed, implemented and assessed by professional hydrogeologist licensed to practice in Nova Scotia. The groundwater monitoring plan shall be designed to evaluate potential impacts to both shallow water table and deeper groundwater levels and groundwater quality, define groundwater flow pattern and direction at the site and local scale, and shall include, at minimum: a permanent industry-standard multi-level monitoring well network (including decommissioning of currently damaged wells), full chemical analyses at residential wells within 1 km of the quarry expansion area to provide a baseline for future comparison, and updated sampling protocols that are based on industry-standard methodologies. The Approval Holder shall implement the approved plan prior to advancing to the quarry expansion area.
- 4.13 The Approval Holder shall contact the Department should sulphide bearing material be encountered on the Project site, and at the request of the Department implement a plan to manage the sulphide material.

- 4.14 Prior to any blasting in the expansion area, the Approval Holder shall provide for review and acceptance, an updated blasting plan to the Department. The plan shall consider a completed pre-blast survey for structures within 800 metres of the point of the blast, including water quality analysis for water wells within the same area. A blast monitoring plan and a blast damage response shall also be provided.
- 4.15 The Approval Holder, at their expense, shall replace any water supply which has been lost or damaged as a result of Project operations, as required by the Department.
- 4.16 The Approval Holder shall not excavate within 0.5 metre of the measured maximum annual water table level unless otherwise authorized in writing by the Department.

5 Flora and Fauna

- 5.1 Prior to commencement of the Project, the Approval Holder shall provide Nova Scotia Department of Lands and Forestry, Wildlife Division with digital way points and shape files revealing precise locations for wetlands and species listed under the Species at Risk Act and/or Endangered Species Act as well as all S1, S2 and S3 listed species under the Atlantic Canada Conservation Data Center, identified during field work within the area of the Project. The date of the above noted field data shall also be provided. The Approval Holder shall provide written notification to the Department that the files have been provided and deemed acceptable by the Department of Lands and Forestry.
- 5.2 Prior to commencement of work, the Approval Holder shall develop, in consultation with the Department of Lands and Forestry (Regional Services and Wildlife Divisions) and with Environment and Climate Change Canada (Canadian Wildlife Services), a wildlife management plan to address the following points:
 - a) measures to protect all identified species listed under the Species at Risk Act and/or Endangered Species Act as well as all S1, S2 and S3 listed species under the Atlantic Canada Conservation data Centre;
 - b) bats and common nighthawk (*Chordeiles minor*) preconstruction field surveys and development of appropriate mitigation measures should them be discovered;

- c) measures to protect other species listed under the Species at Risk Act and/or Endangered Species Act which have the potential to be encountered in the area: Barn Swallow (*Hirundo rustica*), Bank Swallow (*Riparia riparia*), and Bobolink (*Dolichonyx oryzivorus*);
- d) measures to avoid avian species nests during the breeding season in the event Project operations and/or facilities create nesting habitat, and procedures to follow should an active nest be eventually found;
- e) appropriate measures to minimize the risk of impacts on birds listed under the Migratory Birds Conservation Act and processes to follow should an active nest be found at any time of the year;
- f) measures to ensure protective buffers are maintained around wetlands to provide habitat to accommodate breeding pairs of Canada Warbler (*Cardellina canadensis*);
- g) measures to mitigate adverse effects of noise, light and dust on wildlife;
- h) measures to ensure ecological integrity of Wetland 8 is maintained;
- i) measures to manage non-native (alien invasive) plant species during all project phases;
- j) measures to ensure compliance with all relevant provincial and federal Acts and Regulations pertaining to wildlife species and species at risk;

Prior to commencement of the Project, the Approval Holder shall ensure the wildlife management plan is deemed acceptable by the Department. The Approval Holder shall begin to implement the plan immediately following the acceptance of the wildlife management plan by the Department.

- 5.3 The Approval Holder shall clear vegetation outside of the breeding season for most bird species (April 15 to August 15), unless otherwise authorized in writing by the Department. Vegetation clearing shall be recorded in a daily log that shall be available for review by the Department indicating the date and time of the clearing operation and the contractor.
- 5.4 The Approval Holder shall report sightings of avian species at risk as listed on Schedule 1 of the Species at Risk Act to Environment Canada Climate Change, Canadian Wildlife Service. The Approval Holder shall also report sightings of avian species listed under the Nova Scotia Endangered Species Act to the Department of Lands and Forestry. The Approval Holder shall provide written notification to the Department that sightings have been reported to the Canadian Wildlife Service and to the Department of Lands and Forestry.

6 Air Quality & Noise Levels

- 6.1 At the request of the Department, the Approval Holder shall develop and implement an air quality and/or dust monitoring plan. This plan shall include, but not be limited to, sampling locations, parameters, monitoring methods, protocols and frequency.
- 6.2 Prior to Project commencement, the Approval Holder shall develop and implement a plan to monitor noise levels. The plan shall include, but not be limited to, sampling locations, parameters, monitoring methods, protocols and frequency.
- 6.3 The Approval Holder shall ensure that noise emissions at the property boundaries do not contribute to an exceedance of the maximum permissible sound levels limits specified in the Nova Scotia Environment and Labour “Guidelines for Environmental Noise Measurement and Assessment” dated 18, 2005, as amended from time to time.

7 Archaeological and Heritage Resources

- 7.1 The Approval Holder shall cease work and contact the Special Places Coordinator, Nova Scotia Department of Communities, Culture and Heritage (CCH) immediately upon discovery of an archaeological, or paleontological site, artifact or fossil specimen unearthed during any phase of the Project. If the find is of certain or possible Mi’kmaq origin, the Approval Holder shall also contact the appropriate Mi’kmaq representatives as advised by CCH.

8 Public Engagement

- 8.1 Prior to commencement of the Project, the Approval Holder shall establish a complaint resolution plan for receiving and responding to complaints related to the Project, including a reporting system which records and documents steps taken to determine the cause of complaint and the corrective measures taken to alleviate the cause and prevent its recurrence. The Approval Holder shall implement the plan once deemed acceptable by the Department.

- 8.2 Prior to commencement of the Project, the Approval Holder shall appoint a contact person designated to deal with complaints and shall provide the contact information to the Department.
- 8.3 At the request of the Department, the Approval Holder shall develop and implement a plan for the formation and operation of a Community Liaison Committee (CLC) including terms of reference, which meets the Department's Guide for the Formation and Operation of a Community Liaison Committee. The Approval Holder shall operate the CLC for the duration of the Project or until released in writing by the Department.

9 Engagement with the Mi'kmaq of Nova Scotia

- 9.1 At the request of the Department, the Approval Holder shall develop and implement a Mi'kmaq Communication Plan for the Project, which will include a process for communicating Project details and seeking input from the Mi'kmaq community.

10 Contingency Plan

- 10.1 Prior Project commencement, The Approval Holder shall develop a comprehensive contingency plan which meets the Department's Contingency Planning Guidelines. The plan shall provide prevention measures and address 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. The Plan shall be maintained and updated over the life of the project.
- 10.2 The contingency plan shall be kept on Project site at all times when personnel are on site and made available to the Department upon request.

11 Rehabilitation

- 11.1 This Approval is subject to progressive rehabilitation at the existing Project site being completed as required by the Department.
- 11.2 Project operations shall be completed and rehabilitated as required by the Department.
- 11.3 Re-vegetation shall be limited to the use of native species, unless otherwise authorized in writing by the Department.

A handwritten signature in blue ink, reading "Gordon Wilson". The signature is written in a cursive style with a horizontal line underneath.

Gordon Wilson, MLA
Minister of Environment