



April 2, 2026

**The Corporation of the Town of Caledon**  
6311 Old Church Rd  
Caledon, ON L7C 1J6

Attention: Kyle Munro, Community Planner Policy, Planning Development, Town of Caledon

CC: Genevieve Scott, Snr Planner, Cuesta Planning Consultants Inc.

Subject: **Peer Review of Blasting Report in Support of CBM Quarry OPA/ZBA Applications**  
Caledon, ON  
Client reference: IRFQ # 25-372  
Englobe reference: 02600050

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Englobe Corp. (Englobe) is retained by The Corporation of the Town of Caledon (ToC) to carry out a peer review of WSP (formerly Golder Associates Ltd.) report on Blast Impact Assessment (BIA), dated December 2022 (Revised July 2023), prepared for CBM Aggregates, a division of St. Marys Cement Inc. (Canada) (CBM), with respect to the proposed CBM Caledon Pit and Quarry application for aggregate extraction, and to provide blast consulting services to ToC on a required basis for the project. An initial peer review was completed by RESPEC, however they are no longer able to provide the required services for the project, and as such, Englobe has been retained.

In preparation for this technical peer review, a site visit was conducted February 26, 2026 with Dan Corkery of WSP to verify the existing site conditions and surrounding properties referenced in WSP's BIA report. In addition, the following information has been reviewed:

- “Blast Impact Assessment - Proposed Caledon Pit/Quarry”, dated December 2022 (Revised July 2023) prepared by Golder Associates Ltd. (now WSP)
- Caledon Pit and Quarry Site Plan drawings 1-4, dated July 2025, prepared by MHBC
- “RESPEC Peer Review of Documents for Proposed Canada Building Materials Pit/Quarry”, dated July 23, 2024 prepared by RESPEC
- CAART comment Summary Table Response #1 - Blasting
- Ministry of the Environment, Conservation and Parks (MECP) Model Municipal Noise Control By-law NPC-119
- O. Reg 244/97

## 1 Introduction

The BIA report was prepared by WSP in support of a Class A Licence application to extract aggregate from the proposed CBM Caledon Pit and Quarry located in the Town of Caledon, Ontario. The BIA was prepared by WSP in accordance with the requirements of the Aggregate Resources Act (ARA) in order to assess the impact of the proposed blasting operations and extraction methods on surrounding third-party sensitive and

non-sensitive receptors and waterbodies in the context of the BIA scope with respect to ground and air borne (low frequency component of noise) vibrations induced by the blasting operations during the course of aggregate extraction.

The BIA provides the legal description of the proposed extraction zone as Part of Lots 15-18, Concession 4 WSCR, and Part of Lot 16, Concession 3 WSCR (former Geographic Township of Caledon). The subject site is approximately 261 hectares, with the extraction zone being approximately 200 hectares. The BIA further provides applicable regulatory basis on which the BIA is based and recommends implementation of an ongoing vibration and overpressure monitoring program for the proposed quarry, initiated on commencement of blasting operations and maintained for the duration of all blasting activities to permit timely adjustments to blast parameters as required. It is also noted that blast monitoring is a prescribed condition to any license issued for the proposed quarry under the ARA.

Although it is not mandatory under the ARA with respect to blasting operations, WSP's BIA report also proactively includes thorough discussion on the topics of fish habitat, residential water wells, Enbridge Gas Distribution and Storage pipelines, Heritage Structures and potential impact on pets and livestock.

## 2 Summary of Findings

Englobe has completed a comprehensive review of the above noted documents. Overall the site plans provide a thorough and accurate description of existing conditions, operational plan, technical details and rehabilitation plan. The BIA report provides a thorough assessment of the proposed blasting operations and potential impacts related to the blasting operations. Englobe has reviewed RESPEC's comments and responses of the proponent and provided comments on the CAART Comment Summary Table Response #1 - Blasting. Additionally, Englobe has provided additional comments, request for clarification and recommended adjustments below as well as added to the CAART Comment summary:

- **Site Plans:** Site plans indicate initial sinking cut for Phase 2B and Phase 6 will be located at tunnel locations, however initial sinking cut location in the main area in Phase 1 is not indicated on site plans or in BIA report. If initial blasting is located at the southwest corner of Phase 1, additional flyrock control measures may be required as there is only a 30 m setback between extraction limits and licence boundary, which may require discussion.
- **Site Plans:** Permanent processing area is located in Phase 1 and Phase 5, with the permanent processing plant to be constructed immediately adjacent to the Phase 1 and 5 boundary. Will the whole facility pad be blasted as part of Phase 1? If the permanent processing plant is constructed prior to blasting of Phase 5, it may be difficult to guarantee the safety of the plant while blasting Phase 5. Adjustment of the phasing sequence may be necessary.
- **Blast Impact Assessment, Appendix E:** It is noted the version of the report available to Englobe was completed in 2023, however the revised report should include the newest version of the Enbridge Third-Party Requirements in the Vicinity of Natural Gas Facilities Standard - 2024-01-31
- **Blast Impact Assessment, Appendix D:** POR004 18221 Mississauga Rd is indicated to be 180 m from nearest point of extraction. Based on Site Plan drawings and google earth, this distance should be 150 m
- **Blast Impact Assessment, Appendix D:** POR006 18309 Mississauga Rd is indicated to be 190 m from nearest point of extraction. Based on Site Plan drawings and google earth, this distance should be 150 m

- **Blast Impact Assessment, Appendix D:** POR009 18627 Mississauga Rd is indicated to be 160 m from nearest point of extraction. Based on Site Plan drawings and google earth, this distance should be 150 m
- **Blast Impact Assessment, Appendix D:** POR018 is listed as 18775 Main St. Address should be 18755 Main St. It is indicated to be 320 m from the nearest point of extraction, however this should be 230 m.
- **Blast Impact Assessment, Appendix D:** POR019 18722 Main St. Address in table is 18772. This should be corrected. Table indicates this property is owned by CBM and will be used as an office and quality control lab, however in the report and on the site plan drawings, 1420 Charleston Road is stated to be the building used an office and lab. This should be clarified
- **Site Plan Drawing 3 of 4, Section O.4.d.d.d., Blast Impact Assessment, Page 28, Section 7.1.3, Table 5:** Site Plan Drawing 3 of 4, Technical Recommendations, Section O.4.d.d.d. states that the property at 18722 Main Street shall remain inhabited. If this is the case, that will make this property the closest sensitive receptor to the extraction limits at 104 m according to the Site Plan Drawing. Section 7.1.3, Table 5 will need to be revised to include Maximum Explosive Load to comply with NPC-119 at 100 m as well. In the event this property is vacated, maximum explosive load per delay to ensure a maximum PPV of 50 mm/s would be required.
- **Site Plan Drawing 3 of 5, Blast Impact Assessment, Appendix D:** 1550 Charleston Sideroad is not included on the list of sensitive receptors in Appendix D or on the Site Plans. It is located 150 m from the North Area.

### 3 Conclusion

In Englobe’s professional opinion and in the context of the BIA, the proponent has satisfied the requirements of the ARA as it applies to the effects and impacts of blast induced vibration and overpressure levels on sensitive receptors. Englobe recommends the corrections, clarifications and adjustments detailed in this report which have been added to the CAART Comment Summary Table Response #1 - Blasting. Once these issues are addressed, Englobe can perform a final review and issue an updated peer review letter and summary.

We trust the foregoing will satisfy your present requirements. Please contact the undersigned should you require further assistance.

Yours very truly,

**Englobe Corp.**



James Hicks, P. Eng.  
Director of Operations, Engineering - Northern Ontario

## APPENDICES

Appendix A          Blasting Consultants Curriculum Vitae

### Revisions and publications log

REVISION No.	DATE	DESCRIPTION
00	April 2, 2026	Preliminary version published for comments

### Distribution

1 PDF copy	Mr. Kyle Munro, Town of Caldeon
1 PDF copy	Ms. Genevieve Scott, Cuesta Planning Consultants Inc.

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# Appendix A Blasting Consultants Curriculum Vitae





## James Hicks P. Eng. Director of Operations Engineering Group - Northern Ontario

Mr. James Hicks, P. Eng. is the Director of Operations for Engineering services for Northern Ontario with 17 years of experience specializing in rock blasting and vibrations, rock face stability, and blast impact analysis. He is a seasoned Project Manager who has managed blasting and construction projects from start to finish with responsibilities such as project bidding, project team coordination, client liaison and technical input. Working out of the Sudbury office, Mr. Hicks is also responsible for overall project management and delivery of blasting and geotechnical instrumentation services to the construction, demolition, mining, pipeline, open pit and quarry applications, energy and public service sectors, including blast design, control and monitoring, vibration, overpressure and noise monitoring, locally and remotely; pre-condition and post-condition surveys; blast and vibration damage claim investigations for insurance companies, contractors, government agencies and law firms.

Mr. Hicks started as a Project Manager for DST Consulting Engineers Inc. (DST) in 2008, progressing into a Key Client Liaison role before becoming Regional Manager. In 2018 DST became a Division of Englobe where he became Director of Operations for the Engineering Group in Northern Ontario. DST became fully integrated into Englobe in 2022. Mr. Hicks oversees the delivery of blasting and geotechnical instrumentation services to government, mining, energy and private sectors across Northern Ontario and Manitoba.

### Professional experience

#### FIELD OF ACTIVITY - QUARRIES - KEY PROJECTS

##### Multiple Blasting Contractors - Quarry Blast Vibration and Overpressure Monitoring, Multiple Quarries across Northern Ontario (2008-Present)

Project Manager, on-site support. Responsibilities: Blast consulting engineer responsible for vibration and overpressure monitoring, pre-blast surveys, reporting, blast design, and overseeing of staff delivering services.

##### Broda Properties Inc. - North Perimeter Aggregates Blast Impact Assessment, Rural Municipality of Rosser, Manitoba, Canada (2018-2021)

Part of engineering team responsibility for Blast Impact Assessment for North Perimeter Aggregates Quarry application including report preparation, review and in-person delivery of Community Consultation Meeting Presentation on quarry blasting.

##### Halton Region - James Dick Hidden Quarry Blast Impact Assessment Peer Review, Rockwood, Ontario, Canada (2015-2019)

Part of engineering team responsible for Peer Review of Blast Impact Analysis including report preparation and review.

##### Halton Region - Reid Road Reservoir Quarry Blast Impact Assessment Peer Review, Milton, Ontario, Canada (2018 - 2024)

### Years of experience

18

### Profession

Director of Operations, Engineering - Northern Ontario

### Education

2008 – Bachelor of Engineering, Civil Engineering, McMaster University, Hamilton, Ontario

### Professional associations

Professional Engineers of Ontario (PEO)  
License #10013490

Association of Professional Engineers and Geoscientists Manitoba - License #46496

Engineers Nova Scotia - License #20250788

### Languages

English

### Board of Directors

Board Member - International Society of Explosive Engineers Eastern Canada Chapter, 2023-Present

Part of engineering team responsible for Peer Review of Blast Impact Analysis including report preparation, review and question/comment throughout the application process.

**Halton Region - Nelson Aggregate Burlington Quarry Extension Blast Impact Assessment Peer Review, Burlington, Ontario, Canada (2020 - 2024)**

Part of engineering team responsible for Peer Review of Blast Impact Analysis including report preparation, review and question/comment throughout the application process.

**Halton Region - Milton Quarry East Extension Blast Impact Assessment Peer Review, Milton, Ontario Canada (2021 - 2023)**

Part of engineering team responsible for Peer Review of Blast Impact Analysis including report preparation, review and question/comment throughout the application process.

**Township of Melancthon - Strada Pit and Quarry Blast Impact Assessment Peer Review, Township of Melancthon, Ontario Canada (2025 - Present)**

Blast consulting engineer responsible for Peer Review of Blast Impact Analysis including report preparation, review and question/comment throughout the application process.

**Town of Caledon - Proposed Caledon Pit and Quarry Blast Impact Assessment Peer Review, Caledon, Ontario Canada (2026 - Present)**

Blast consulting engineer responsible for Peer Review of Blast Impact Analysis including report preparation, review and question/comment throughout the application process.

## FIELD OF ACTIVITY - MINING - KEY PROJECTS

**Multiple Mine Sites in Northern Ontario - Mine site surface infrastructure blast consulting services (2008 - Present)**

Project manager, on-site support. Responsibilities: Blast consulting engineer responsible for blast design for blasting near existing infrastructure, vibration monitoring, pre-blast surveys, reporting, overseeing of staff delivering services. Key projects noted below.

**Laari Construction - Vale Big Eddie Dam Spillway Reconstruction, Worthington, Ontario, Canada (2001)**

Project manager. Responsibilities: Blast consulting engineer responsible for blast design review for blasting at foot of the dam, pre-blast survey, and vibration monitoring.

**Rhude Drilling and Blasting Inc. - Vale Filter Plant Sump Hole, Copper Cliff, Ontario, Canada (2015)**

Project manager. Responsibilities: Blast consulting engineer responsible for blast design for blasting inside of a building, pre-blast survey requirements, blast vibration and crack monitoring of steel and concrete columns adjacent to blasting.

**Rhude Drilling and Blasting Inc. - Vale Clarabelle Lake Pump House, Creighton, Ontario Canada (2016)**

Project manager. Responsibilities: Blast Consulting engineer responsible for blast design for pump house building, leaving rock dam between building footprint and lake for construction, then final in-water blaster after construction of pump house was complete to open intake channel, vibration monitoring and pre-blast survey requirements.

**Vale Copper Cliff #4 Substation - Bestech/Rhude Drilling and Blasting Inc., Copper Cliff, Ontario, Canada (2017-2018)**

Project Manager, Responsibilities - Bestech: Blast consulting engineer responsible for preparing site specific blasting specification for blasting in close proximity to oxygen lines and operating plant activities. Responsibilities - Rhude: Blast Consulting Engineer responsible for development of blasting procedure, pre-blast surveys and vibration monitoring requirements.

**Rhude Drilling and Blasting Inc./Stuart Olson - Vale Wabagishik Dam Reconstruction, Narme Centre, Ontario Canada (2019-2022)**

Project manager. Responsibilities: Blast consulting engineer responsible for blast design for close in blasting to existing dam and tower crane base prior to construction of new dam, and blast procedure for blasting demolition of existing dam piers once new dam was constructed, pre-blast survey, vibration and hydrophone monitoring.

**Vale 5 Million Gallon Potable Water Tank - J. L. Richards (2019) - Castonguay Blasting Ltd (2023), Copper Cliff, Ontario Canada**

Project Manager - J.L. Richards. Responsibilities: Blast consulting engineer responsible for development of site-specific blasting specification for blasting in close proximity to existing infrastructure including Vale Vermillion water mains.

Senior Blasting Engineer - Castonguay. Responsibilities: Blast consulting engineer responsible for reviewing client blast design and overseeing pre-blast survey and vibration monitoring.

**FIELD OF ACTIVITY - PIPELINE KEY PROJECTS****Union Gas (now Enbridge) - Sudbury Lateral Section 2 and 3 Replacement, Sudbury, Ontario, Canada (2017-2018)**

Project manager. Project involved replacement of 18 km of pipeline throughout Sudbury community and Vale Mine site, 10 km of which required blasting. Responsibilities: Blast consulting engineer responsible for Blasting - Rock Excavation Specification, blasting procedure for trench blasting new 12-inch mainline within 5 m of 10-inch operating mainline, pre-blast survey and vibration monitoring requirements of existing pipeline and surrounding infrastructure for both mine site and residential as well as damage claim investigation and reporting.

**Enbridge - Greenstone Gold Mine Pipeline, Geraldton, Ontario, Canada (2022)**

Project Manager. Responsibilities: Blast consulting engineer responsible for blast design for new pipeline from Hwy 11 north to mine site, in close proximity to hydro poles, towers, new mine infrastructure and highway, pre-blast survey requirements, vibration monitoring.

**FIELD OF ACTIVITY - INFRASTRUCTURE - KEY PROJECTS****Municipal and Ministry of Transportation Ontario Projects - Multiple Blasting and General Contractors - Northern Ontario, Canada (2008-Present)**

Project manager. Projects include road reconstruction for roads and highways, Highway 69/400 and 11 four-laning, municipal infrastructure replacement. Responsibilities: Blast procedure design and review for multiple types of blasting including bulk rock, pre-shear, trench blasting in close proximity to existing infrastructure such as gas lines and utility undercrossing as well as pre-blast survey and vibration monitoring requirements and damage claim investigation and reporting.

**Laurentian University Cliff Fielding RIE Building - Sullivan & Sons Limited. Sudbury, ON. 2017**

Project Manager, Responsibilities: Blast consulting engineer responsible for blasting procedure incorporating final blasted walls to be part of basement construction, completing pre-blast survey requirements, vibration monitoring and damage claim investigation.

**Maley Drive Extension Phases 1 and 2 - Consbec Inc. and Teranorth Construction and Engineering Ltd. Sudbury, ON. 2016-2019**

Project Manager, Responsibilities: Blast consulting engineer responsible for blasting procedure, vibration monitoring, pre-blast survey requirements, and damage claim investigations.

**McCulloch Hospice Expansion - Yallowega Belanger Salach Architecture, Sudbury, Ontario, Canada (2017)**

Project Manager. Responsibilities: Blast consulting engineer responsible for blasting procedure, pre-blast survey requirements, vibration monitoring, final rock face inspection and certification.

**District Municipality of Muskoka General Blasting Specification (2019)**

Project Manager. Responsibilities: Blast consulting engineer responsible for developing general blasting specification for District of Muskoka projects which require rock excavation via blasting.

**Martindale Animal Hospital - Yallowega Belanger Salach Architecture, Sudbury, Ontario, Canada (2019)**

Project Manager. Responsibilities: Blast consulting engineer responsible for blasting procedure for blasting in close proximity to existing building which was required to remain open during blasting/construction operations, pre-blast survey requirements, vibration monitoring, and final rock face inspection and certification.

**IAMGOLD Falconbridge Road Parking Lot - Tulloch Engineering, Sudbury, Ontario, Canada (2021)**

Project Manager. Responsibilities: Blast consulting engineer responsible for blasting procedure, pre-blast survey requirements, vibration monitoring and final rock face inspection and certification.

**Coniston Seniors Residence - R.M. Belanger Construction Limited, Coniston, Ontario, Canada (2021)**

Project Manager. Responsibilities: Blast consulting engineer responsible for blasting procedure, pre-blast survey requirements, vibration monitoring and final rock face inspection and certification.

**Extendicare Algonquin Road Care Facility - Extendicare Canada Inc., PCL Constructors Northern Ontario Inc., Sudbury, Ontario, Canada (2017-2022)**

Project Manager. Responsibilities: Blast consulting engineer responsible for participation in public information sessions, blasting procedure, pre-blast survey requirements, vibrations monitoring, and final rock face inspection and certification.

**Manitou Apartments - Caneagle, Sudbury, Ontario, Canada (2023-Present)**

Project Manager. Responsibilities: Delivery of geotechnical and blast consulting services including blasting procedure for blasting in Sudbury downtown core and creation of new city roadway, pre-blast survey requirements, vibration monitoring, delivery of geotechnical recommendations, rebar inspection, compaction and concrete testing, and final rock face inspection and certification for city roadway.



**Peace Tower Housing Development - Northern Construction Technology Inc., Sudbury, Ontario, Canada (2023-Present)**

Project Manager. Responsibilities: Blast consulting engineer responsible for blasting procedure, pre-blast survey requirements, vibration monitoring, rock face inspections for worker safety during construction, delivery of geotechnical services and recommendations.