

**City of Port Colborne
Public Meeting Agenda**

Date: Tuesday, March 7, 2023
Time: 6:30 pm
Location: Council Chambers, 3rd Floor, City Hall
 66 Charlotte Street, Port Colborne

Pages

1. Call to Order
2. Adoption of Agenda
3. Disclosures of Interest
4. Statutory Public Meetings

Statutory public meetings are held to present planning applications in a public forum as required by the Planning Act. Requests to delegate, both written and appearing virtually, will be accepted until noon the day of the meeting by contacting deputyclerk@portcolborne.ca. Material accepted after this time will be circulated with the minutes and included as public record.

- | | | |
|-----|---|----|
| 4.1 | Proposed Official Plan and Zoning By-law Amendment – Port Colborne Quarries Pit 3 Expansion – Files: D09-02-21 & D14-09-21, 2023-42 | 1 |
| | a. Delegation from David Sisco, IBI Group, applicant | 26 |
| | b. Delegation from Robert Handerson, resident | |
| | c. Delegation from Sharon Ladd and Kevin Ladd, residents | |
| | d. Delegation from Gary Gaverluk, resident | |
| | e. Virtual Delegation from Gail Babion, resident | |
| | f. Written delegation material from Jessie Fehrman, resident | 50 |

5. Procedural Motions
6. Information Items
7. Adjournment



PORT COLBORNE

**Subject: Proposed Official Plan and Zoning By-law Amendment –
Port Colborne Quarries Pit 3 Expansion – Files: D09-02-21
& D14-09-21**

To: Council - Public Meeting

From: Development and Legislative Services Department

Report Number: 2023-42

Meeting Date: March 7, 2023

Recommendation:

That Development and Legislative Services Department – Planning Division Report 2023-42 be received for information.

Purpose:

The purpose of this report is to provide Council with information regarding applications received for proposed Official Plan and Zoning By-law Amendments to facilitate the expansion to the Port Colborne Quarries' ("PCQ") Pit 3.

Background:

Applications

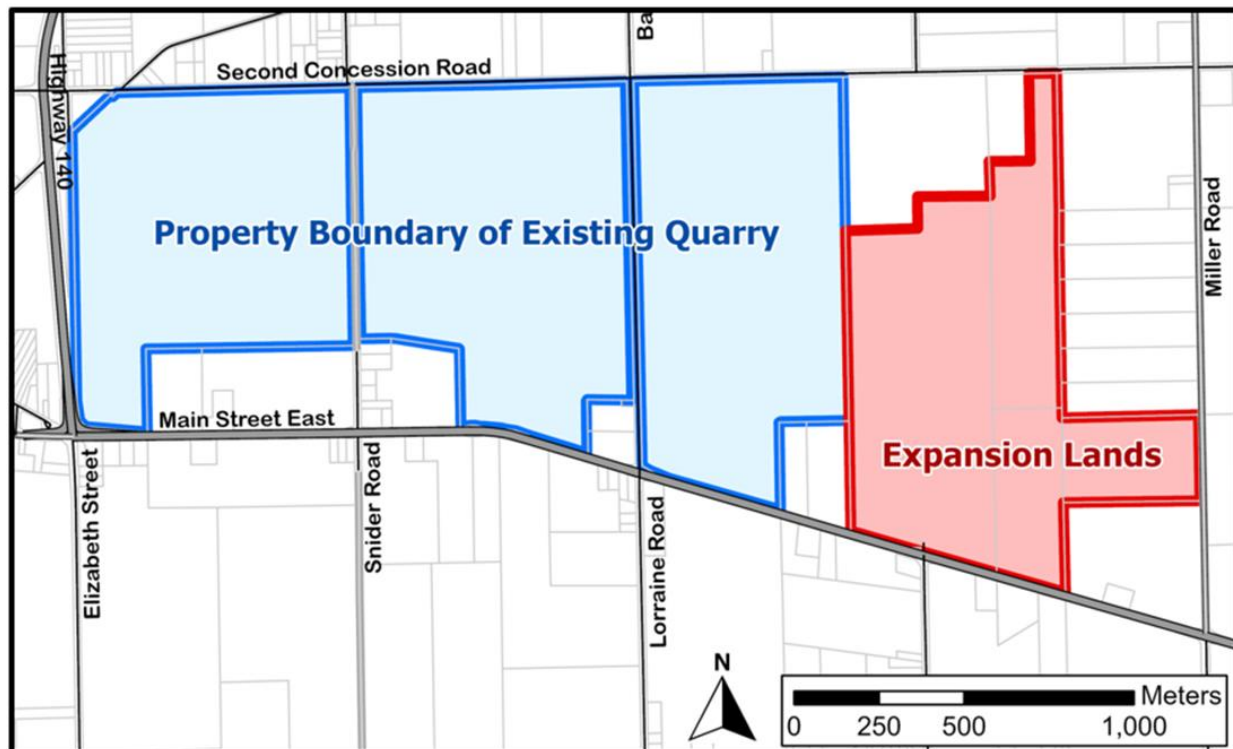
The City of Port Colborne (the "City") received applications for Official Plan and Zoning By-law Amendments on March 17, 2021. The applications were deemed complete on July 8, 2021. A public open house was held jointly with the Niagara Region (the "Region") on September 9, 2021, to hear comments from interested members of the public. Port Colborne Quarries Inc. is represented by their authorized agent, David Sisco of IBI/Arcadis Group (the "applicant").

The application for Official Plan Amendment (OPA) proposes to change the designation of the subject lands from Agricultural to Mineral Aggregate Operation. The application also proposes to add a Special Policy Area to permit the proposed expansion of the quarry.

The application for Zoning By-law Amendment (ZBA) proposes to change the zoning of the subject lands from Agricultural (A) to Mineral Aggregate Operation (MAO), as well as reduce the minimum setback from a Provincial Highway from 90 metres to 30 metres.

Location

The lands are immediately adjacent to the PCQ operation to the west along Highway 3. Legally the lands are described as Part Lot 17, 18, 19, Concession 2, and located on the north side of Main Street East/Highway 3, south of Second Concession Road, and west of Miller Road. The total area to be licensed is 106.29 hectares, of which 71.12 hectares is proposed to be extracted. The lands subject to the applications (in red) are shown below.



Associated Applications

In addition to the Local OPA and ZBA, the applicant has also submitted a complete application for a Regional Official Plan Amendment (ROPA) to the Niagara Region to permit the proposed quarry expansion. A separate Public Meeting for the ROPA application will be held at the Regional Planning and Economic Development Committee on Wednesday, March 8, 2023.

The applicant has also applied for a Category 2 (Below Water Quarry) – Class A Licence to the Ministry of Natural Resources and Forestry (MNR) under the *Aggregate*

Resources Act (ARA). The ARA application process includes a separate public consultation and notification process. Any comments or objections submitted to the Region or City with respect to the Planning Act applications should also be submitted to the MNRF referencing the ARA application.

JART Process

To coordinate the technical review of the applications - a Joint Agency Review Team (JART) was formed. The JART is a team of planning staff from the Region, the City, and the Niagara Peninsula Conservation Authority (NPCA). The purpose of the JART is to share information, resources, and expertise so that the application and the associated studies are reviewed in a streamlined and coordinated manner. Staff from applicable provincial ministries have been engaged through the JART process as well.

The JART does not make a recommendation on the application, rather the JART works to:

- ensure that the required range of studies and work is completed by the applicant;
- ensure that the studies are sufficient in terms of their technical content;
- review of the studies and work of the applicant either by technical staff or by peer reviewers;
- ensure a coordinated public and stakeholder consultation and engagement process; and
- prepare a technical JART report on the application once all reviews are complete.

The JART report will be used independently by planning staff at the Region and City as the technical basis to develop a recommendation report.

Materials Submitted in Support of the Applications

In support of the applications, the applicant has provided numerous technical studies and reports. The Region, on behalf of the JART has retained an Aggregate Advisor and several third-party peer reviewers to assist with the review of many of the technical studies.

In addition to the technical studies/reports, the ARA Site Plans have been under review as part of the application process. If approved, the ARA Site Plans are the primary tool used by the Province to enforce the conditions and other aspects of the quarry's ongoing operations. The mitigation measure and recommendations of each of the technical studies/reports are included as part of the Site Plans and/or associated Site Plan Notes.

An index of all materials submitted to date has been attached as Appendix C. The materials can be accessed via the Port Colborne Quarries website at www.portcolbornequarries.ca.

Discussion:

These applications will be reviewed with consideration of applicable polices under the *Provincial Policy Statement (2020)*, *A Place to Grow: Growth Plan for the Greater Golden Horseshoe (2019)*, the *Regional Official Plan (2014)*, the *City of Port Colborne Official Plan* and the *City of Port Colborne Comprehensive Zoning By-law 6575/30/18*.

Provincial Policy Statement (2020)

The *Provincial Policy Statement (PPS)* provides policy direction on matters of provincial interest related to land use planning and development. The PPS provides for the long-term protection of mineral aggregate and petroleum resources and limits what can and cannot be done in areas with known resources. The proposed amendments will be predominantly evaluated under Section 2.5 – Mineral Aggregate Resources of the PPS, however, a review of the amendments against the entirety of the PPS will also be conducted as part of the recommendation report to be considered at a future Council meeting.

Growth Plan for the Greater Golden Horseshoe (2019)

The *Growth Plan for the Greater Golden Horseshoe (Growth Plan)*, much like the PPS, directs municipalities to implement and maintain polices and other strategies to conserve mineral aggregate resources. The proposed amendments will be predominantly evaluated specifically under section 4.2.8 – Mineral Aggregate Resources of the Growth Plan through the future recommendation report.

Niagara Region Official Plan (2014)

The new Niagara Official Plan (NOP) was recently approved on November 4, 2022, with modifications by the Ministry of Municipal Affairs and Housing. Policy 7.12.2.5 of the NOP states that development applications deemed complete prior to the date of the NOP approval shall be permitted to be processed under the 2014 Regional Official Plan (ROP) policy regime. As the applications for ROPA, Local OPA, and ZBA were all deemed complete on July 8, 2021, the applications will be reviewed under 2014 ROP.

Chapter 6 of the 2014 ROP provides policy direction on Mineral Aggregate Operations to lower-tier municipalities to implement Provincial objectives for Mineral Aggregate Operations. It is also noted that Schedules D1, D2, and D3 of the ROP identify potential resource areas across the Region and local municipal official plans are required to conform to the schedules and policies of the ROP. The applications will be reviewed under the above-noted chapter.

City of Port Colborne Official Plan

As noted above, the application for OPA proposes to change the land use designation of the subject lands from Agricultural to Mineral Aggregate Operation, along with a special policy area to permit the expansion of the quarry. The application will be reviewed against the policies provided in Section 10 - Mineral Aggregate and Petroleum Resources of the Official Plan. The draft Official Plan Amendment can be found in Appendix A.

City of Port Colborne Comprehensive Zoning By-law 6575/30/18

The application proposes to change the zoning of the subject lands from Agricultural (A) to Mineral Aggregate Operation (MAO). Additionally, a special provision of the MAO zone has been proposed, requesting the minimum setback from a Provincial Highway to be reduced from 90 metres to 30 metres. The draft Zoning By-law Amendment can be found in Appendix B.

Internal Consultations:

As referenced in the Background section of this report, the applications have been actively reviewed by relevant staff and departments from the Niagara Region, NPCA and City through the JART process. Additionally, the JART has retained peer reviewers to review several of the technical studies referenced in Appendix C.

Financial Implications:

Currently, there are no financial implications with respect to this information report. Through the Region's Cost Acknowledgement Agreement with the applicant, it has been agreed upon that the costs associated with the application, including the JART's Aggregate Advisor and peer reviewers, will be borne by the applicant. In accordance with the City's 2021 Rates and Fees that were in place at the time of the application, the City has received \$75,239 to offset the City's staff time involved in the application.

Public Engagement:

The Notice of Public Meeting has been circulated in accordance with Sections 21 and 34 of the *Planning Act*. Notice was provided via the Niagara This Week newspaper on February 9, 2023. Additionally, Notices were mailed to property owners within 120 metres of the lands subject to the applications, and the applicant placed a Public Notice sign on the property. The Notice was also posted on the City's website under "Current Applications", and individual notices were mailed or emailed to any members of the

public that have submitted comments on the applications to date. Comments received from the public on this application will be included and responded to in the future recommendation report.

Strategic Plan Alignment:

The initiative contained within this report supports the following pillar(s) of the strategic plan:

- Service and Simplicity - Quality and Innovative Delivery of Customer Services
 - Attracting Business Investment and Tourists to Port Colborne
 - People: Supporting and Investing in Human Capital
 - Governance: Communications, Engagement, and Decision-Making
-

Conclusion:

Planning staff are not providing a recommendation on the proposed Official Plan and Zoning By-law Amendments at this time to allow all agency, public and Councillor comments to be received and considered prior to a decision being made. The recommendation report will return to a future regular meeting of Council.

Appendices:

- a. Draft Official Plan Amendment
- b. Draft Zoning By-law Amendment
- c. Index of Application Materials

Prepared by,

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Respectfully submitted,

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Chief Planner
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Report Approval:

All reports reviewed and approved by the Department Director and also the City Treasurer when relevant. Final review and approval by the Chief Administrative Officer.

The Corporation of the City of Port Colborne

By-law no. _____

Being a by-law to adopt amendment no. ____ to
the Official Plan for the City of Port Colborne

Whereas it is deemed expedient to further amend the Official Plan, heretofore adopted by Council for the City of Port Colborne Planning Area;

Therefore the Council of The Corporation of the City of Port Colborne under Section 17(22) of the Planning Act, hereby enacts as follows:

1. That Official Plan Amendment No. ____ to the Official Plan for the City of Port Colborne Planning Area, consisting of the attached map and explanatory text is hereby adopted.
2. That the Clerk is hereby authorized and directed to make application to the Regional Municipality of Niagara for approval of the aforesaid Amendment No. ____ to the Official Plan for the Port Colborne Planning Area.
3. That this By-law shall come into force and take effect on the day of passing thereof.

Enacted and passed this ____ day of _____, 2023.

William C Steele
Mayor

Nicole Rubli
Acting Clerk

**AMENDMENT
NO. ____ TO THE
OFFICIAL PLAN
FOR THE
PORT COLBORNE PLANNING AREA**

PREPARED BY:

**CITY OF PORT COLBORNE DEPARTMENT OF
DEVELOPMENT AND LEGISLATIVE SERVICES**

February 2023

**AMENDMENT NO.
____ TO THE
OFFICIAL PLAN
FOR THE
PORT COLBORNE PLANNING AREA**

AMENDMENT NO.
___ TO THE OFFICIAL
PLAN FOR THE
CITY OF PORT COLBORNE

This Amendment to the Official Plan for the City of Port Colborne, which has been adopted by the Council of the Corporation of the City of Port Colborne, is hereby approved in accordance with Sections 17 and 21 of the Planning Act R.S.O. 1990, c. P.13, as Amendment No. ___ to the Official Plan for the City of Port Colborne.

Date: _____

**AMENDMENT NO. ____ TO THE OFFICIAL
PLAN FOR THE
PORT COLBORNE PLANNING AREA**

INDEX

The Statement of Components

Part A – The Preamble

Purpose

Location

Basis

Part B – The Amendment

Part C – Definitions

STATEMENT OF

COMPONENTS PART A

The Preamble does not constitute part of this Amendment.

PART B

The Amendment, consisting of the following map and text changes, constitutes Amendment No. ____ to the Official Plan for the Port Colborne Planning Area.

PART C

Definitions which also constitutes a part of this Amendment.

PART A - THE PREAMBLE

Purpose

The purpose of this Amendment is to add to add a Special Policy Area to permit the proposed Port Colborne Quarries Inc. - Pit 3 Extension quarry. The amendment also includes the addition of the subject lands on Schedule C - Mineral Aggregate and Petroleum Resources as a Mineral Aggregate Operation.

Location

The lands affected by this amendment are legally described as Part of Lots 17, 18, 19, Concession 2, formerly in the Township of Humberstone, now in the City of Port Colborne, Regional Municipality of Niagara, and located on the north side of Main Street East/Highway 3, south of Second Concession Road, and west of Miller Road.. A detailed map of the subject lands is attached as Schedule "A" to this Official Plan Amendment No. ____.

Basis

- a) The Amendment was the subject of a Public Meeting held under the Planning Act, 1990 on _____. Public and agency comments were addressed as part of the preparation of this Amendment.
- b) The Amendment will allow the Council of the City of Port Colborne to make a decision on the rezoning from Agriculture to Mineral Aggregate Operation and subsequently allow the Minister of Natural Resources and Forestry to make a decision to issue a quarry licence under the Aggregate Resources Act.
- c) Based on the City's review of the Planning Act, 1990, the Provincial Policy Statement (2020), the Provincial plans (2019), the Regional Official Plan, the City's Official Plan and public and agency consultation, City staff is of the opinion that the Amendment is consistent, or does not conflict, with Provincial, Regional policies and City policies plans and, therefore, represents good planning.

PART B - THE AMENDMENT

Introductory Statement

All of this part of the document entitled **PART "B"** – "The Amendment" consisting of the following text and map designated Schedule "A" constitutes Amendment No. ____ to the Official Plan for the City of Port Colborne. The Official Plan of the City of Port Colborne is hereby amended as follows:

Details of the Amendment

The Official Plan for the City of Port Colborne Planning Area is hereby amended as follows:

The following text is inserted into Policy G.12 of the Official Plan for the Port Colborne Planning Area:

() An expansion to the existing Port Colborne Quarries Inc. quarry is permitted and referred to as Pit 3 Expansion being eastwardly on approximately 71.12 hectares (175 acre) site located on the lands bounded by Regional Road 84 (Miller Road), Provincial Highway 3 (Main Street) and Second Concession Road, on Part Lot 17, 18, 19 Concession 2 and Plan 59R-16702 in the City of Port Colborne.

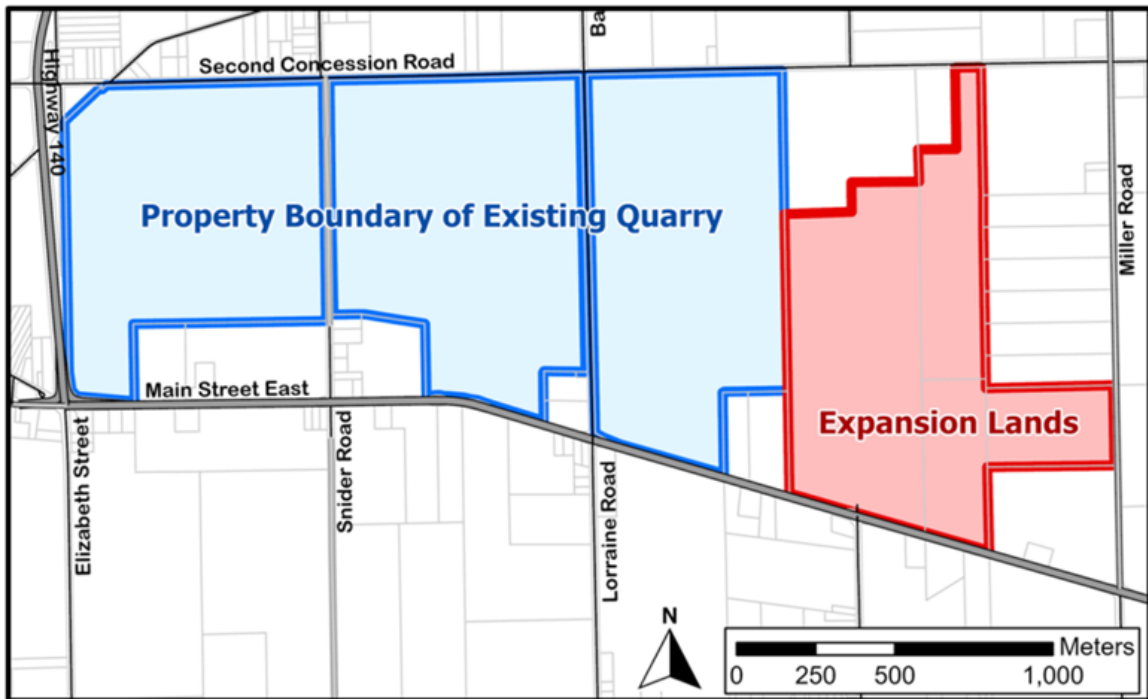
The following changes are made to Schedule C: Mineral Aggregate and Petroleum Resources:

1. That the area be shown as Mineral Aggregate Operation and corresponding to the Legend.

PART C – DEFINITIONS

Also constitutes a part of this Amendment.

Schedule "A"



The Corporation of the City of Port Colborne

By-law no. _____

Being a by-law to amend Zoning By-law 6575/30/18 respecting lands legally described as Part Lot 17, 18, 19, Concession 2, and located on the north side of Main Street East/Highway 3, south of Second Concession Road, and west of Miller Road.

Whereas By-law 6575/30/18 is a by-law of The Corporation of the City of Port Colborne restricting the use of land and the location and use of buildings and structures; and

Whereas, the Council of The Corporation of the City of Port Colborne desires to amend the said by-law.

Now therefore, and pursuant to the provisions of Section 34 of the *Planning Act, R.S.O. 1990*, The Corporation of the City of Port Colborne enacts as follows:

1. This amendment shall apply to those lands described on Schedule "A" attached to and forming part of this by-law.
2. That the Zoning Map referenced as Schedules "A4" and "A5" forming part of By-law 6575/30/18 is hereby amended by changing those lands described on Schedule A from Agriculture (A) to MAO-XX (Mineral Aggregate Operation with special provision).
3. That Section 37 entitled "Special Provisions" of Zoning By-law 6575/30/18, is hereby further amended by adding the following:

MAO-XX

Notwithstanding the provisions of the Mineral Aggregate Operation (MAO) zone, the following regulations shall apply:

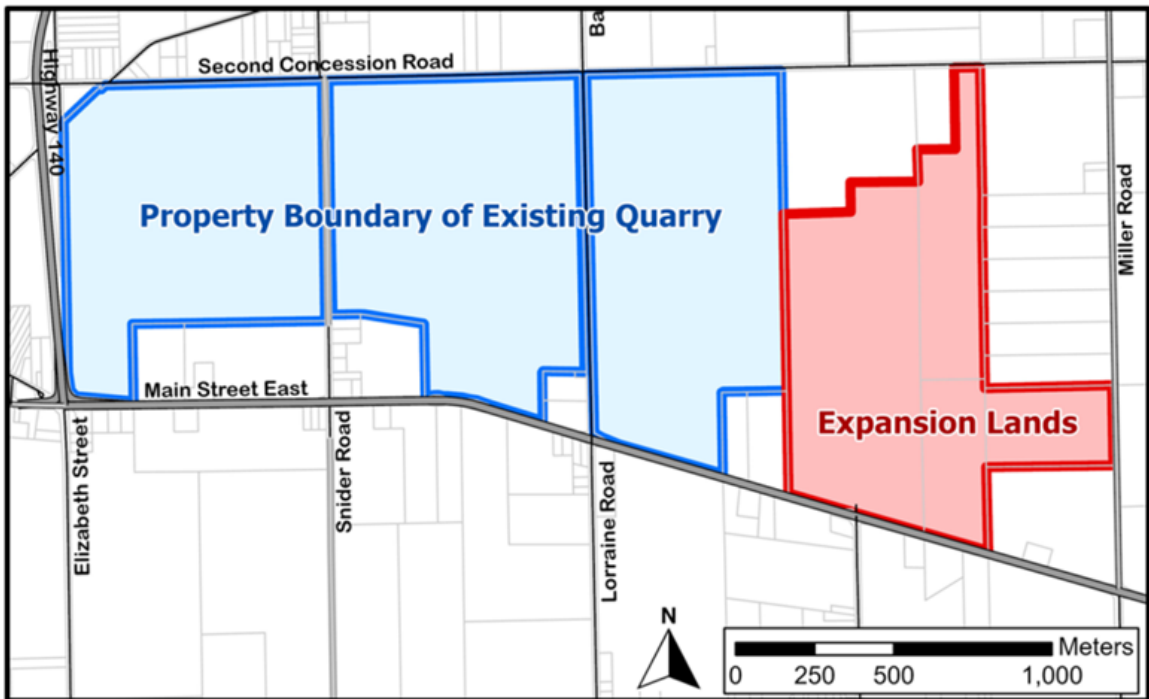
- a) No pit, quarry or excavation shall be made or established within 15 metres of any lot line which does not abut a public street or 30 metres of any lot line which abuts any other public street.
4. That this by-law shall come into force and take effect on the day that it is passed by Council, subject to the provisions of the *Planning Act*.
5. The City Clerk is hereby authorized and directed to proceed with the giving notice of the passing of this by-law, in accordance with the *Planning Act*.

Enacted and passed this day of , 2023.

William C Steele
Mayor

Nicole Rubli
Acting Clerk

Schedule "A"



Appendix C to Report 2023-42

Port Colborne Quarries – Proposed Pit 3 Extension

ROPA, LOPA, ZBLA Applications – List of Technical Material Submitted

Documents can be accessed on the Port Colborne Quarries Website:

[Port Colborne Quarry PIT 3 Application](https://portcolbornequarries.ca/quarry-expansion-document) (https://portcolbornequarries.ca/quarry-expansion-document)

Item	Date Submitted
1. Planning Justification Report, prepared by IBI Group (dated February 17, 2021)	• March 17, 2021 (1 st Submission)
2. Agricultural Impact Assessment, prepared by Colville Consulting Inc. (dated September 22, 2020)	• March 17, 2021 (1st Submission)
3. Stage 1 and 2 Archaeological Assessment, prepared by Golder Associates Inc. (dated November 24, 2020)	• March 17, 2021 (1st Submission)
4. Stage 1 and 2 Archaeological Assessment - Supplementary Documentation, prepared by Golder Associates Inc. (dated November 24, 2020)	• March 17, 2021 (1st Submission)
5. Cultural Heritage Screening Report, prepared by Golder Associates Inc. (dated July 17, 2020)	• March 17, 2021 (1st Submission)
6. Land Use Compatibility / Sensitive Land Use Study, prepared by IBI Group (dated January 8, 2021)	• March 17, 2021 (1st Submission)

Item	Date Submitted
7. Air Quality Impact Assessment, prepared by Golder Associates Inc. (dated December 2020)	• March 17, 2021 (1st Submission)
8. Best Management Practices Plan for the Control of Fugitive Dust (BMPP), prepared by Golder Associates Inc. (dated December 2020)	• March 17, 2021 (1st Submission)
9. Noise (Acoustical) Impact Study, prepared by Golder Associates Inc. (dated December 2020)	• March 17, 2021 (1st Submission)
10. Blasting (Vibration) Impact Assessment, prepared by Golder Associates Inc. (dated July 2020)	• March 17, 2021 (1st Submission)
11. Financial Impact Assessment / Economic Benefits, prepared by IBI Group (dated June 8, 2020)	• March 17, 2021 (1st Submission)
12. Hydrological Assessment, prepared by Golder Associates Inc. (dated November 2020)	• March 17, 2021 (1st Submission)
13. Hydrogeological Assessment, Level 1 / 2 Water Resources Study, prepared by Golder Associates Inc. (dated October 2020)	• March 17, 2021 (1st Submission)
14. Natural Environment Level 1 & 2 Report (EIS), prepared by Golder Associates Inc. (dated October 2020)	• March 17, 2021 (1st Submission)
15. Tree Preservation Plan, prepared by IBI Group (dated October 16, 2020);	• March 17, 2021 (1st Submission)
16. Comprehensive Rehabilitation Strategy, prepared by IBI Group (dated October 30, 2020)	• March 17, 2021 (1st Submission)

Item	Date Submitted
17. Social Impact Assessment, prepared by IBI Group (dated January 8, 2021)	• March 17, 2021 (1st Submission)
18. Traffic Impact Study, prepared by IBI Group (dated October 19, 2020)	• March 17, 2021 (1st Submission)
19. Visual Impact Assessment, prepared by IBI Group (dated December 23, 2020)	• March 17, 2021 (1st Submission)
20. Completed Application to Amend the Regional Official Plan	• March 17, 2021 (1st Submission)
21. Draft Regional Official Plan Amendment	• March 17, 2021 (1st Submission)
22. City of Port Colborne – Application for Official Plan Amendment	• March 17, 2021 (1st Submission)
23. Draft City of Port Colborne Official Plan Amendment	• March 17, 2021 (1st Submission)
24. City of Port Colborne – Application for Zoning By-Law Amendment	• March 17, 2021 (1st Submission)
25. Draft City of Port Colborne Zoning By-Law Amendment	• March 17, 2021 (1st Submission)
26. Public Consultation Plan, prepared by IBI Group (dated March 15, 2021)	• March 17, 2021 (1st Submission)
27. Site Plan Drawings (1-8), prepared by IBI Group (dated February 9, 2021)	• March 17, 2021 (1st Submission)
28. Landscaping Plans (1-2), prepared by IBI Group (dated December 21, 2020)	• March 17, 2021 (1st Submission)
29. Phase One Environmental Site Assessment (ESA), prepared by Golder Associates Inc. (dated June 16, 2021)	• June 2021

Item	Date Submitted
30. Conceptual Soil Management Plan, prepared by Golder Associates Inc. (dated June 28, 2021)	<ul style="list-style-type: none"> • June 2021
2nd Submission	
31. PCQ Application – 2nd Submission Cover Letter, prepared by IBI (dated January 31, 2022)	<ul style="list-style-type: none"> • January 31, 2022 (2nd Submission)
32. Revised Planning Justification Report, prepared by IBI Group (dated January 28, 2022)	<ul style="list-style-type: none"> • January 31, 2022 (2nd Submission)
33. AIA Response to JART Comments Letter, prepared by Colville Consulting Inc. (dated October 5, 2021)	<ul style="list-style-type: none"> • January 31, 2022 (2nd Submission)
34. Updated Agricultural Impact Assessment, prepared by Colville Consulting Inc. (dated October 18, 2021)	<ul style="list-style-type: none"> • January 31, 2022 (2nd Submission)
35. Financial Impact Assessment / Economic Benefits – Revised Report, prepared by IBI Group (dated October 20, 2021)	<ul style="list-style-type: none"> • January 31, 2022 (2nd Submission)
36. Response to JART Hydrology Peer Review Comment – Technical Memorandum, prepared by Golder Associates Inc. (dated January 28, 2022)	<ul style="list-style-type: none"> • January 31, 2022 (2nd Submission)
37. Response Letter to MTO Comments, prepared by IBI Group (dated October 20, 2021)	<ul style="list-style-type: none"> • January 31, 2022 (2nd Submission)
38. Revised Hydrogeological Assessment, Level 1 / 2 Water Resources Study, prepared by Golder Associates Inc. (dated October 2021)	<ul style="list-style-type: none"> • January 31, 2022 (2nd Submission)

Item	Date Submitted
39. Revised Land Use Compatibility / Sensitive Land Use Study, prepared by IBI Group (dated December 15, 2021)	<ul style="list-style-type: none"> • January 31, 2022 (2nd Submission)
40. Addendum to the Noise Impact Assessment Report – Technical Memorandum, prepared by Golder Associates Inc. (dated January 21, 2022)	<ul style="list-style-type: none"> • January 31, 2022 (2nd Submission)
41. Response to the Joint Agency Review Team Letter - Air Quality Impact Assessment – Technical Memorandum, prepared by Golder Associates Inc. (dated December 10, 2021)	<ul style="list-style-type: none"> • January 31, 2022 (2nd Submission)
42. Addendum to the Air Quality Impact Assessment Report – Technical Memorandum, prepared by Golder Associates Inc. (dated January 14, 2022)	<ul style="list-style-type: none"> • January 31, 2022 (2nd Submission)
43. Response to Comment Letter from Joint Agency Review Team (JART) [Blasting (Vibration) Impact Assessment], prepared by Golder Associates Inc. (dated October 4, 2021)	<ul style="list-style-type: none"> • January 31, 2022 (2nd Submission)
44. Flyrock Impact Assessment – Technical Memorandum, prepared by Golder Associates Inc. (dated January 7, 2022)	<ul style="list-style-type: none"> • January 31, 2022 (2nd Submission)
45. Response to JART Comments on the Natural Environment Level 1 & 2 Report (EIS) – Technical Memorandum, prepared by Golder Associates Inc. (dated November 24, 2021)	<ul style="list-style-type: none"> • January 31, 2022 (2nd Submission)
46. Supplemental Bat Survey in Support of the Natural Environment Level 1 & 2 Report (EIS) – Technical Memorandum, prepared by Golder Associates Inc. (dated January 31, 2022)	<ul style="list-style-type: none"> • January 31, 2022 (2nd Submission)

Item	Date Submitted
47. Revised Comprehensive Rehabilitation Strategy, prepared by IBI Group (dated December 15, 2021)	<ul style="list-style-type: none"> January 31, 2022 (2nd Submission)
48. Revised Social Impact Assessment, prepared by IBI Group (dated December 15, 2021)	<ul style="list-style-type: none"> January 31, 2022 (2nd Submission)
49. Revised Visual Impact Assessment, prepared by IBI Group (dated December 15, 2021)	<ul style="list-style-type: none"> January 31, 2022 (2nd Submission)
50. Revised Site Plan Notes (dated January 13, 2022)	<ul style="list-style-type: none"> January 31, 2022 (2nd Submission)
51. Revised Site Plan Notes – with changes noted (dated January 13, 2022)	<ul style="list-style-type: none"> January 31, 2022 (2nd Submission)
52. Revised Site Plan Drawings (1-9), prepared by IBI Group (dated November 15, 2021)	<ul style="list-style-type: none"> January 31, 2022 (2nd Submission)
53. Response to JART Hydrogeology Peer Review Comments, prepared by Golder (dated October 1, 2021)	<ul style="list-style-type: none"> May 16, 2022
54. Additional Response to Updated Peer Review Hydrogeological/Ground Water Study, Port Colborne Quarries Pit 3 Extension – Technical Memorandum, prepared by Golder (dated May 16, 2022)	<ul style="list-style-type: none"> May 16, 2022
55. Review and Entry into the Ontario Public Register of Archaeological Reports: Stage 1 & 2 Archaeological Expansion – PCQ Expansion, prepared by the Ministry of Heritage, Sport, Tourism, and Culture Industries (dated February 15, 2021)	<ul style="list-style-type: none"> May 30, 2022

Item	Date Submitted
56. Comment Letter on ARA Application, prepared by the Ministry of Natural Resources and Forestry (dated May 5, 2021)	<ul style="list-style-type: none"> September 7, 2022
3rd Submission	
57. 3rd Submission Covering Letter and Updates to Planning Justification Report, prepared by IBI (dated October 4, 2022)	<ul style="list-style-type: none"> October 4, 2022 (3rd Submission)
58. Revised Site Plan Drawings, prepared by IBI (various dates)	<ul style="list-style-type: none"> October 4, 2022 (3rd Submission)
59. Revised Site Plan Notes (with changes highlighted), prepared by IBI Group (dated October 3, 2022)	<ul style="list-style-type: none"> October 4, 2022 (3rd Submission)
60. Updated Financial Impact Assessment and Economic Benefits Analysis, prepared by IBI Group (dated June 20, 2022)	<ul style="list-style-type: none"> October 4, 2022 (3rd Submission)
61. Hydrology/Surface Water Comment Table, prepared by WSP/Golder (dated August 25, 2022)	<ul style="list-style-type: none"> October 4, 2022 (3rd Submission)
62. Additional Response to Updated Peer Review Hydrogeological/Groundwater Study, Port Colborne Quarries Pit 3 Extension – Technical Memorandum, prepared by Golder (dated August 18, 2022)	<ul style="list-style-type: none"> October 4, 2022 (3rd Submission)
63. Response to JART Comments on the Natural Environment Level 1 & 2 Report - Technical Memorandum, prepared by WSP/Golder (dated August 31, 2022)	<ul style="list-style-type: none"> October 4, 2022 (3rd Submission)
64. Revised Figure 5 for the Comprehensive Rehabilitation Plan, prepared by IBI Group (dated August 29, 2022)	<ul style="list-style-type: none"> October 4, 2022 (3rd Submission)

Item	Date Submitted
65. Copy of the IBI Group E-mail dated May 30, 2022 addressing traffic related concerns & Updated Traffic Impact Study, prepared by IBI Group	<ul style="list-style-type: none"> October 4, 2022 (3rd Submission)
66. Updated Memo to Paul Marsh re: Wignell Drain Realignment, prepared by IBI Group (dated October 3, 2022)	<ul style="list-style-type: none"> October 4, 2022 (3rd Submission)
67. Air Quality Study Response E-mail (dated August 22, 2022)	<ul style="list-style-type: none"> October 5, 2022
68. Technical Memorandum – Response to JART – Request for Supplemental Information Related to the Noise Impact Assessment (dated December 3, 2021)	<ul style="list-style-type: none"> October 5, 2022
69. Response to JART Letter – Air Quality Impact Assessment, prepared by Golder (dated December 10, 2021)	<ul style="list-style-type: none"> October 20, 2022
70. Addendum to the Hydrological Assessments, prepared by WSP/Golder (dated December 5, 2022)	<ul style="list-style-type: none"> December 5, 2022
71. Response to MNRF Comments on the Natural Environment Report, prepared by WSP/Golder (dated December 6, 2022)	<ul style="list-style-type: none"> December 8, 2022
72. Technical Memorandum documenting 2022 Natural Environment Surveys, prepared by WSP/Golder (dated December 16, 2022)	<ul style="list-style-type: none"> December 19, 2022

Port Colborne Quarries Inc. Pit 3 Extension

City of Port Colborne
Statutory Public Meeting
Tuesday March 7th, 2023

Official Plan Amendment D09-02-21
Zoning By-law Amendment D14-09-21



IBI GROUP

Introductions



Shawn John

John MacLellan



Sean McFarland



David Sisco

IBI GROUP

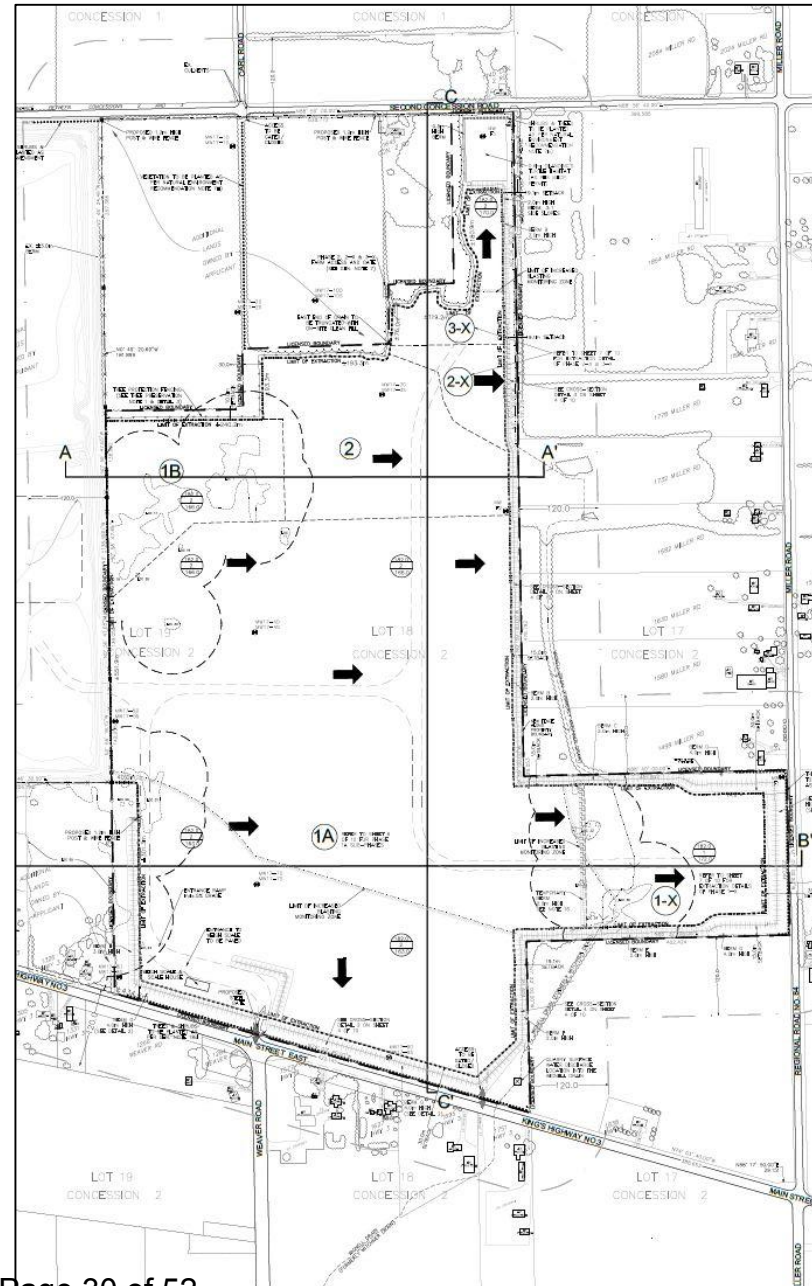
Aerial Image of PCQ Inc. Pit 2 & Pit 3



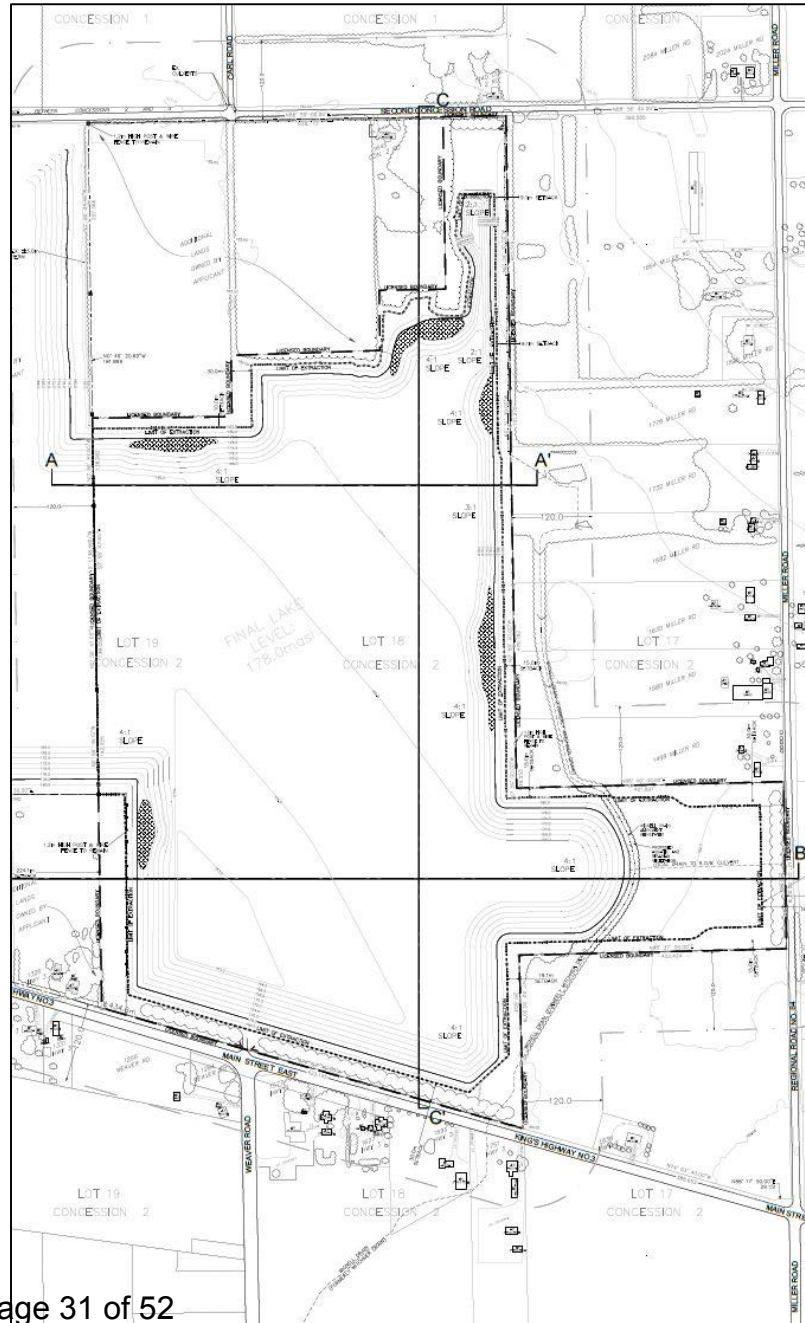
Aerial Image of PCQ Inc. Pit 2 & Pit 3 and Proposed Pit 3 Extension



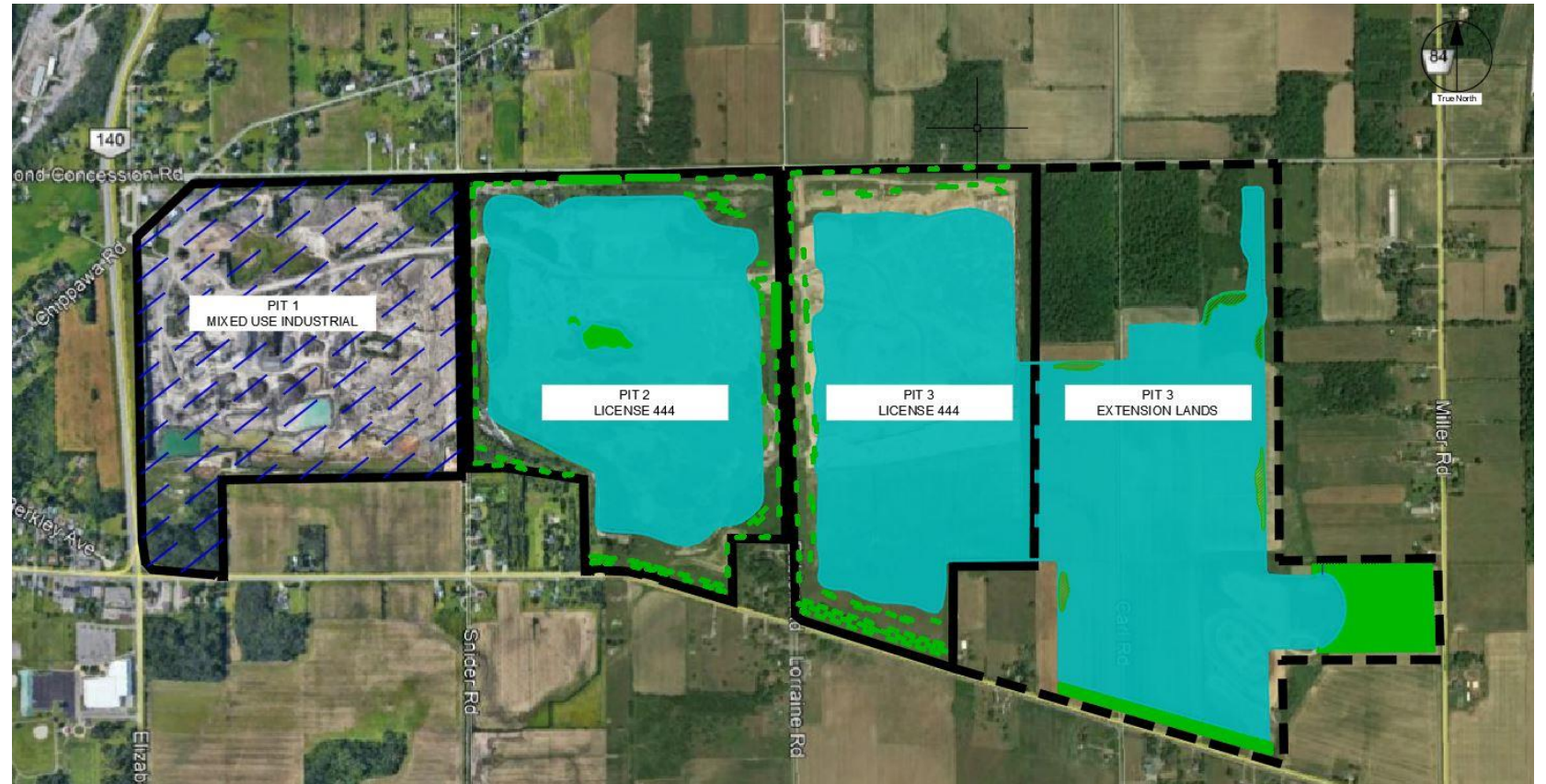
Operational Plan



Rehabilitation Plan



Comprehensive Rehabilitation



Submission Documents

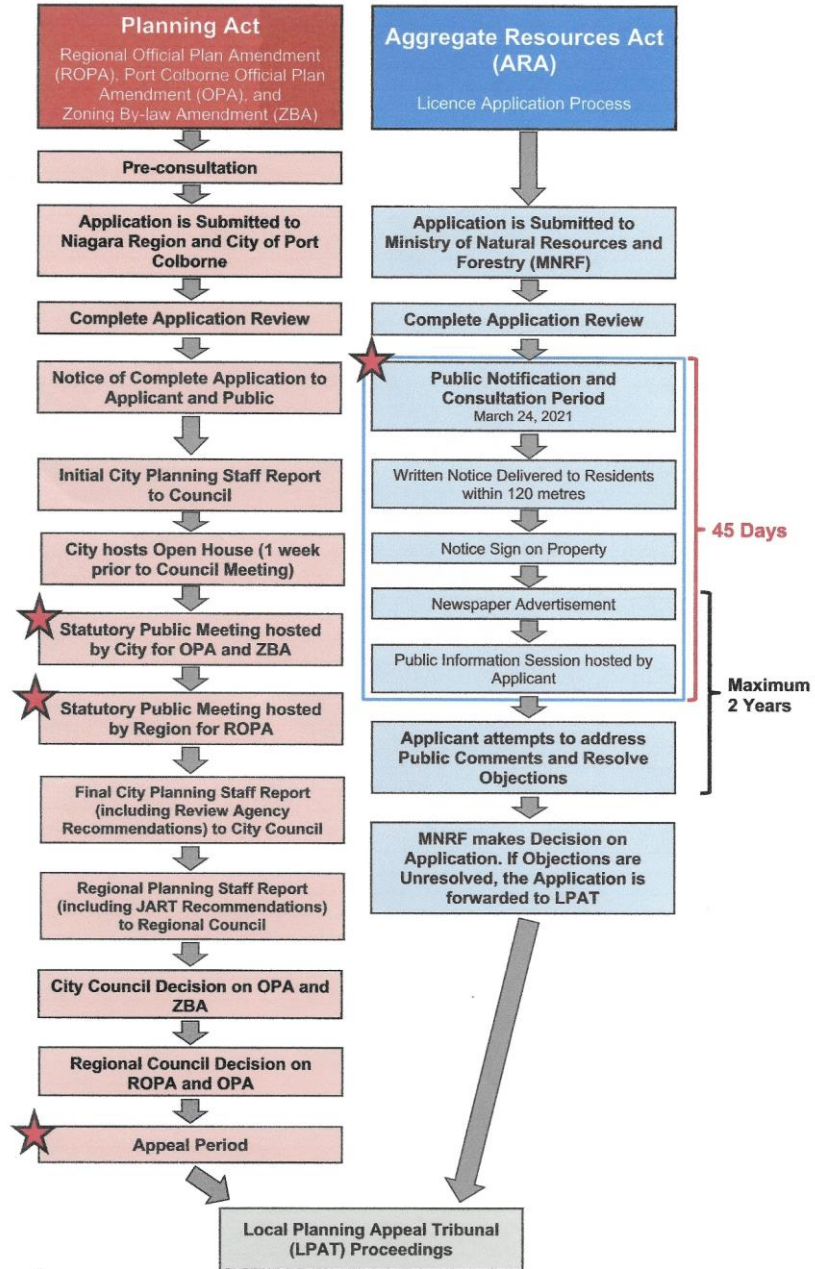


Project Status

Summary of next steps

Questions

APPROVAL PROCESS FOR AGGREGATE OPERATIONS IN ONTARIO



★ = Public Involvement

PIT 3 EXTENSION

SURROUNDING LAND USES

SHEET 1 OF 10



APP. NO. 01
PORT COLBORNE QUARRIES INC.

222 MARTINDALE ROAD, P.O. BOX 1116
 ST. CATERINE, ON, L9M 7A3

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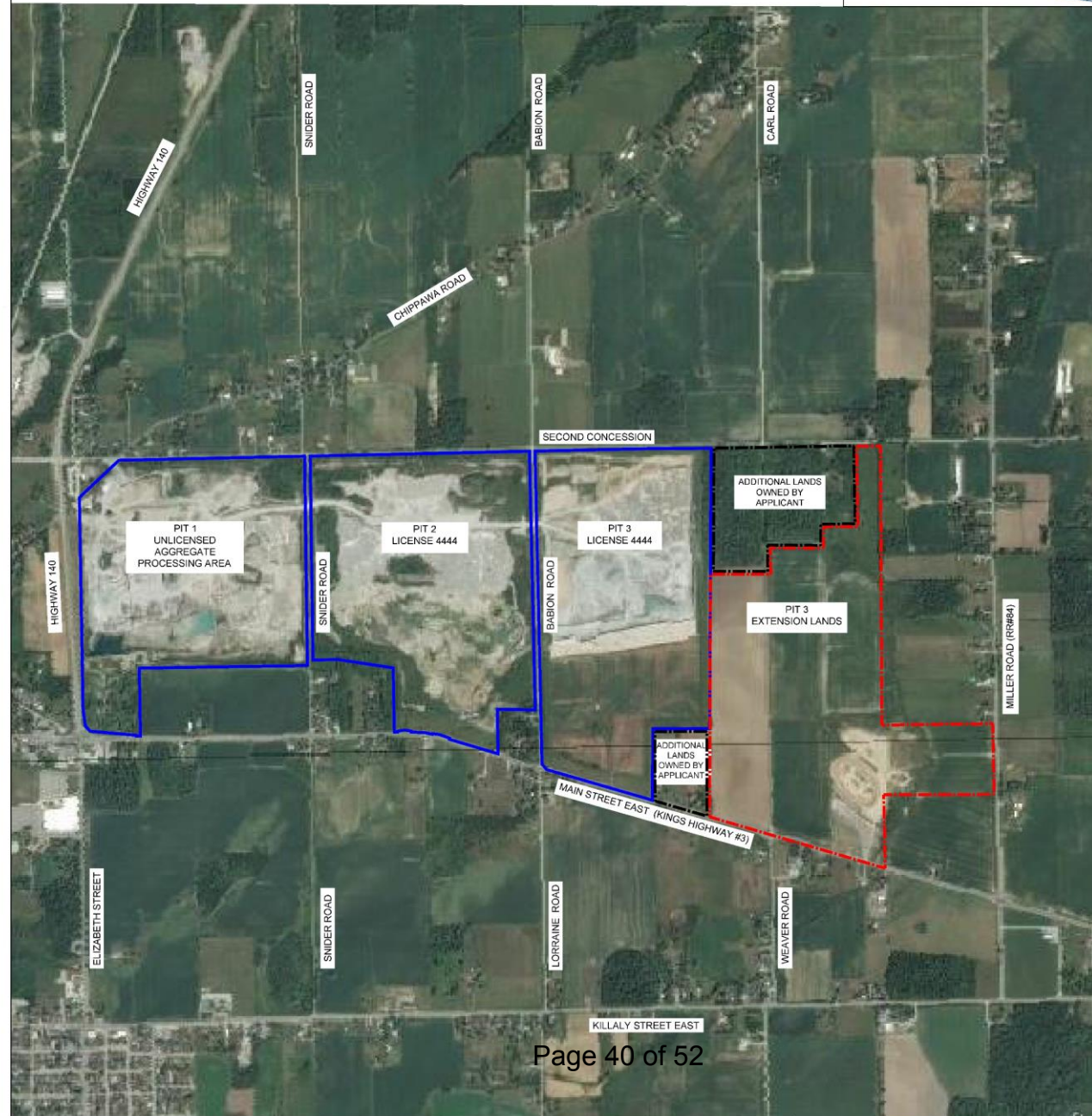


Part of Lot 17, T2S 10 Concession 2
 and 87, 100, 102 Part of Block 100
 between Lot 18 & 19 Concession 2,
 a former Township of Catherine,
 The City of Port Colborne
 2014.01.13.2014



LEGEND

- PROJECT BOUNDARY
- PROPERTY BOUNDARY OF SUBDIVISION
- PROPERTY BOUNDARY OF ADJACENT LANDS OWNED BY APPLICANT



THIS SITE PLAN HAS BEEN PREPARED UNDER THE AUTHORITY OF THE ENGINEER OF PORT COLBORNE QUARRIES INC. AND IS SUBJECT TO THE APPROVAL OF THE MUNICIPAL ENGINEER AND THE MUNICIPAL ENGINEER.

IBI CONSULTING
 1000 SHEPPARD AVENUE EAST, SUITE 100
 SCARBOROUGH, ONTARIO M1S 1T7
 416-291-2200

PORT COLBORNE QUARRIES INC.
 PIT 3 EXTENSION

SCALE
 1:1000
 PROJECT NO.
 115774
 DRAWN BY: [Signature]
 E.T. [Signature] CHECKED BY: [Signature]
 PROJECT M.O.A. APPROVED BY: [Signature]
 D.S. [Signature]

SHEET TITLE
 SURROUNDING LAND USES

SHEET NUMBER
 1 of 10

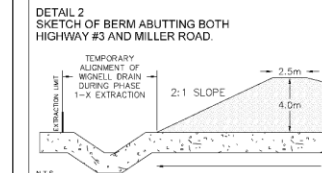
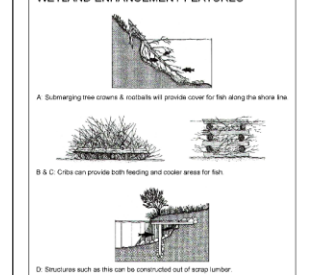
GENERAL OPERATIONAL NOTES

- 1. Tonnage:** It is a condition of this licence that no more than 1,000,000 tonnes of material shall be removed from this property annually and no more than 1,815,000 tonnes of material annually combined with Licence 4444, which is also operated by Port Colborne Quarries Inc. The area to be extracted is 71.1 hectares.
- 2. Hours of Operation:**
 - The hours of operation shall be from 7:00 a.m. to 7:00 p.m. Monday to Friday excluding statutory holidays and 8:00 a.m. to 3:00 p.m. on Saturdays. At no time shall crushing, rock breaking or blasting take place on a Saturday, Sunday or public holiday, and any blasting between the hours of 8:00 p.m. and 5:00 a.m. Maintenance and, where required for highway construction night contracts, any blasting and waste operations may take place outside of normal operating hours.
 - Refer to the Recommendations from the Dust Study (Sheet 5 of 10) regarding further restrictions to the operational hours for dust abatement.
- 3. Fencing and Gates:**
 - Prior to the siting and extraction, a minimum 1.2 metre high post and wire fence shall be in place along all external boundaries to ensure the site is secure. Site Plan: Variance of Operation Standard 5.1 provides that the west boundary abutting ARA Licence 4444 is not required to be fenced since three tonnes are also covered by Port Colborne Quarries Inc.
 - A gate will be erected at the main quarry access onto the Highway 3 entrance and be locked at all times when the quarry is not operational.
 - The existing entrance/exit to the Humberton Speedway will be permanently closed.
 - Former Car Lot Road onto Second Concession Road will be permanently closed.
 - Refer to Note 1 for farm equipment access and gates.
 - Tree Protection Fencing shall be installed around the northern woods, (SMD-2 and SMD-3) as per the Recommendations from the Tree Preservation Plan (See Sheet 6 of 10).
- 4. Existing Buildings:**

The limits of the removal of the following buildings will occur during Phase 1A:

 - Specular opening stand at the Humberton Speedway.
 - All ancillary buildings and structures at the Humberton Speedway.
- 5. Site Access:**
 - During Phase 1A Initial Extraction Stage Haul Truck access during Phase 1(A) will be routed internally westward via the Port Colborne Quarries Inc. Licence 4444 (IP 2 and 3) to the P1.1 entrance/exit onto Ramsey Road and to Highway 10.
 - Subsequent Extraction Stages (Prior to Phase 1(A)) and all subsequent Phases a new aggregate processing plant wash plant shall be installed within Licence 4444 (IP 3), and subsequently a new quarry entrance will be established directly onto Highway 3. All aggregate entrance permits and design approvals for a deceleration lane shall be secured from the Ministry of Transportation prior to the construction and use of the access.
- 6. Entrance/Exit:** Once the Highway 3 entrance/exit has been established:
 - A road sweep will be maintained outside (or within Licence 4444) and used on a year-round basis as required. The entrance and associated paved shoulders will be swept to pick up and dispose of any related debris at least once per week, and as frequently as conditions warrant.
 - A steering system will be installed at the weigh scale area, and designed regularly.
 - The scale entry and exit areas will be paved for a minimum distance to the weigh scale to minimize dust/mud drag-out on truck tires.
- 7. Farm Access:**
 - For Phase 1A farm equipment will access the site via Licence 4444 (IP 3).
 - Phase 1B, 2, 2-X and 3-X farm equipment will access via 1645 Second Concession Road. A locked gate will be erected at the Licence Boundary.
 - Internal Haul Road: Internal haul routes will be constructed and distanced as required to access the active quarry face. The location of the internal roads shown on the Site Plans are general and anticipated but will vary depending on changing site conditions and truck traffic flow requirements.
- 8. Weigh Scale:** The weigh scale to be used for this Licence will initially be located off-site at the Port Colborne Quarries Inc. P1.1. During Phase 1A extraction, once a new processing plant is relocated to Licence 4444 (IP 3), a weigh scale and scale house will be established near the Highway 3 entrance/exit generally as shown on the Site Plans.
- 10. Groundwater Status:** The groundwater elevation across the site has been determined by Golder to be approximately 170.0 m.
- 11. Scrap:** No scrap will be stored onsite but will be stored either in the Port Colborne Quarries Inc. P1.1 or within Licence 4444 (IP 3).
- 12. Fuel Storage:** Fuel Storage: There will be no on-site fuel storage. Fuel storage will continue to be located in the Port Colborne Quarries Inc. P1.1. Portable equipment within the quarry (i.e. crushers, screeners, etc.) will be refueled by a mobile fuel truck or equivalent and follow all applicable Liquid Fuel Handling code requirements.
- 13. Equipment:** Site preparation, extraction and rehabilitation on the site will be undertaken using scrapers, front-end loaders, haul trucks, dozers, excavators, till-logs etc. as necessary. As well, portable crushers, screener may be used on occasion at the quarry face.
- 14. Tree Removal:** Any trees removed within the Limit of Proposed will be either:
 - Chipped with the material distributed within protected vegetation zones.
 - Burned on-site subject to an applicable municipal burn permit.
 - Cut and relocated to the quarry adobe/stacks within the aquatic habitat littoral zones to facilitate post-extractive fish habitat.
- 15. Topsoil/Subsoil/Overburden Stripping:**
 - In advance of extraction, a sufficient area of topsoil, subsoil and overburden will be stripped to allow for approximately 2-3 years of extraction. The stripped topsoil, subsoil and overburden will be used for:
 - Berm construction.
 - Rehabilitation of final quarry slopes.
 - Once operations cease for the Humberton Speedway and PCD is prepared to begin development of the property as a limestone quarry, there will be an intrusive investigation completed to prepare a Phase Two ESA report for the Site in accordance with O. Reg.

DETAIL 1 WETLAND ENHANCEMENT FEATURES



- 15. Quarry Stipulations:**
 - Final Quarry Stipulations will vary from a maximum 2:1 slope and increase to 3:1 - 4:1 slope generally within those areas shown on the Plan.
 - The Licence will create the side slopes by:
 - Angled blasting.
 - Use of broken shale.
 - On-site overburden.
 - All berms shall be seeded as per the Level 1 and 2 Natural Environment Report Recommendations (See Sheet 10 of 10).
 - Rehabilitated side slopes shall be vegetated with native, non-invasive seed mixture capable of:
 - Rapid germination and growth.
 - Controlling erosion.
 - Maintaining or enhancing soil fertility.
 - The seeding is to be established in a timely manner and, if necessary, facilitated by the application of fertilizer, water and/or additional seedling.
 - During the initial stage of Phase 1 the Licence will plant a mixture of native deciduous and coniferous trees (red maple, sugar maple, black oak, white pine, black spruce, white pine and black spruce) along the Highway 3 frontage and Miller Street frontage to create a long-term shade canopy. The tree stock at the time of planting shall be:
 - For coniferous a minimum of 1.5 metres in height and for deciduous trees, a minimum of 50 cm tall.
 - Monitoring of all vegetation within the setbacks and on berms will continue throughout the life of the quarry and if any vegetation dies, it will be replaced immediately during the proper planting season.
 - Blasting: The maximum blasting depth will be 0.0 metres resulting in two (2) extraction benches. In locations where the rock continues deeper, a shallowest bench may be required.
 - Direction of Extraction: Extraction of each phase shall be in the direction as shown on the plan, with an intent to be working towards the nearest sensitive receptor.
 - Aggregate Processing: Aggregate processing will initially occur off-site in the Port Colborne Quarries Inc. P1.1. During Phase 1A extraction, the processing plant and wash plant will be relocated to Licence 4444 (IP 3) and as appropriate to the site. A Site Plan amendment for Licence 4444 will be initiated. A conveyor system may be used to transport material within the subject lands to Licence 4444. As well, a portable crusher / screener may be used on occasion at the quarry face but any such equipment and/or structures shall be located a minimum of 30.0 metres from all property boundaries.
 - Stockpiles: Aggregate stockpiles will be located primarily off-site however, when initial processing does occur at the quarry face, it shall occur on the lowest available floor available and be exposed to the active quarry face and not exceed 20 metres in height.
 - On-Site Equipment: Proposed extraction equipment to be used on site is defined by the Noise Assessment as noted under the Technical Recommendations.
 - Drainage: Runoff of asphalt and concrete will not be permitted on site.
 - Dust Control: Dust will be mitigated on-site as per the Air Quality Assessment as noted under the Technical Recommendations.
 - Blasting: Blasting impacts will be mitigated as per the Blast Impact Analysis as noted under the Technical Recommendations. Blasting will occur as required to provide a suitable inventory, but on average approximately twice per week.
 - Phase 2
 - Final Quarry Elevation: The final quarry floor will vary from 162.0 m a.s.l. at the south limit to 159.0 m a.s.l. at the north. The quarry floor will blend in with the quarry floor of Licence 4444 which will be at approximately 159.0 m.
 - Extraction Area: The total area to be extracted is 71.1 hectares.
 - Refer to Sheet 6 of 10 and 9 of 10 for cross sections.
 - Refer to Sheet 6 of 10 and 7 of 10 for progressive extraction and progressive rehabilitation.
 - Extraction will follow the following phasing schedule:
 - Phase 1A, Phase 1A-X, Phase 1A-II
 - Phase 2

The City of Port Colborne is actively (Dec. 2022) undertaking a review of the Wignell Drain under the provincial Drainage Act. This includes both a general relocation of the drain south of Second Concession Road involving Phases 2-X and 3-X, and a temporary realignment within the eastern 1/3 of Phase 1, followed by wetland banking and the ultimate relocation of that portion of the Wignell Drain to its original location. Extraction in these areas is subject to the final design / approval of the Wignell Drain - Drainage Region by the City of Port Colborne and any approval of the Drainage Tribunal.

Subject to the above noted approval, Phase 1-X will be undertaken in advance of Sub-Phase 1B and 1-C. Phase 2-X will be undertaken after Phase 2 and Phase 3-X will be undertaken after Phase 2-X.

RECOMMENDATIONS FROM TECHNICAL REPORTS

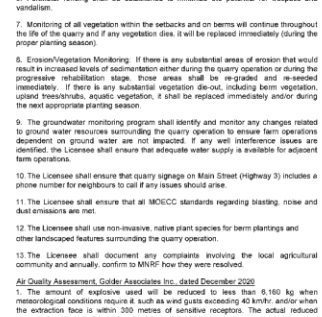
- Noise (Acoustical) Impact Study, Golder Associates Inc., dated December 2020**
- The following minimum perimeter berms (or acoustically equivalent measure/berm) will be implemented prior to extraction:
 - A 4 metre high (above existing grade) berm along the south property line.
 - A minimum 2 metre high (above existing grade) berm along the east and north property lines of the extraction area.
 - Refer to Visual Impact Assessment Recommendations for berm construction details.
 - The location of the berms is shown on the Operational Plan. In addition to 1 above, specific berm requirements including additional height will be determined through both noise and blast monitoring as the areas of extraction move towards the Points of Receptor (PORs) as shown on the Operational Plan within the Increased Blast Monitoring Zone.
 - Areas requiring additional and/or specific noise controls and/or quieter types of equipment are shown on the Operational Plan as Noise Zone 1, Noise Zone 2 and Noise Zone 3. The local barrier height and alternative controls required to achieve compliance with applicable noise limits within the identified areas are noted below:

Noise Zone	Equipment Specific Noise Controls	Overall Sound Power Levels (SWL)
1	DH - local barrier extending 2.0 m above major noise source associated with the drill.	127
2	DH - local barrier extending 2.0 m above major noise source associated with the drill.	127
3	DH - attenuated equipment (e.g. reduced noise emissions or replace with quieter equipment)	123

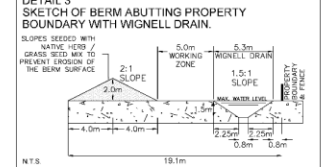
4. Extraction and processing operations will occur only during the daytime period (7:00 am to 7:00 pm) on weekdays, IP 1, IP 2 and IP 3 levels.
5. The general extraction progression to be followed is shown on the Operational Plan.
6. Setback distances between the drilling rig / blasting and receptors will be determined/confirmed through the blast monitoring program.
7. All existing on-site external perimeter berms shall remain in place for the Port Colborne Quarries Inc. IP 1, IP 2 and IP 3 levels.
8. Extraction equipment will not exceed the following Overall Sound Power Levels (Equipment set):

Source Description	Overall Sound Power Levels (SWL)
Screen 115E - Upper deck west	127
Screen 115E - Lower deck west	127
Screen 115E - Upper deck east	123
Screen 115E - Lower deck east	123
Impact Crusher 197 - west	104
Impact Crusher 197 - east	104
Wash plant 155E - west screen walls	111
Wash plant 155E - west screen walls	107
Wash plant 155E - east screen top	111
Wash plant 155E - east side walls	107
Loader Extraction	107
Haul Truck empty	112
Haul Truck loaded	116
Highway Truck	102
9. On-site haul trucks will not exceed 35 km/h.
10. Equipment will be maintained in good condition.
11. All on-site roadways will be maintained to limit noise resulting from trucks over ruts and potholes.

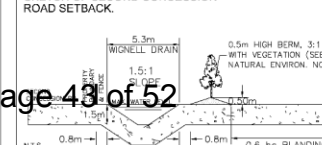
12. As noted in General Note 5(b), during the extraction of Phase 1A, a new processing plant will be located on-site at the quarry face. The Licence has completed a Noise Impact Assessment (NIA) based on a specific plant configuration and equipment that includes air purification filters, or alternate equipment is used, the Licence shall update the NIA.
13. Agricultural Impact Assessment, Coville Consulting Inc., dated September 2020:
 - Excise topsoil not required for berm construction or post-extractive rehabilitation and which would otherwise be available for use to improve the agricultural conditions for cultivation at other locations where opportunities exist.
 - Lands not immediately required for extraction shall remain available for agricultural production when possible.
 - The licensed boundary area should be aligned with existing property boundaries where possible.
 - Appropriate buffering abutting agricultural lands shall employ such things as:
 - Vegetated berms, which can offer both visual and physical buffers.
 - Dust suppression techniques and noise management according to appropriate regulations.
 - When agricultural vehicles utilize interior quarry roads to access agricultural lands, a safety program will be developed to ensure the safety of all farm traffic through the licensed area, or alternate access shall be provided.
 - Perimeter fencing shall be established to minimize the potential for trespass and vandalism.
 - Monitoring of all vegetation within the setbacks and on berms will continue throughout the life of the quarry and if any vegetation dies, it will be replaced immediately during the proper planting season.
14. Erosion/Vegetation Monitoring: If there is any substantial areas of erosion that would result in increased levels of sedimentation either during the quarry operation or during the progressive rehabilitation stage, those areas shall be repaired and re-seeded immediately. If there is any substantial vegetation lost, including berm vegetation, windbreaks, aquatic vegetation, it shall be replaced immediately and during the next appropriate planting season.
15. The groundwater monitoring program shall identify and monitor any changes related to ground water resources surrounding the quarry operation to ensure farm operations do not impact ground water and if any interference issues are identified, the Licence shall ensure that adequate water supply is available for adjacent farm operations.



DETAIL 2 SKETCH OF BERM ABUTTING PROPERTY BOUNDARY WITH WIGNELL DRAIN.



DETAIL 5 SKETCH OF SECOND CONCESSION ROAD SETBACK.

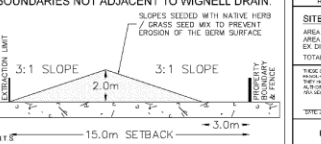


PIT 3 EXTENSION OPERATIONAL NOTES PLAN SHEET 4 OF 10

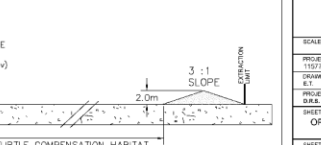
2. The amount of material handling at the extraction face will be reduced to less than 4,500 kg per day when meteorological conditions require, e.g. such as wind gusts exceeding 40 km/h, and/or extraction face approaches the property line and/or sensitive receptor.
3. The licence shall use water as a dust suppressant to control fugitive emissions as necessary and during dry periods.
4. The Best Management Practices Plan for the Control of Fugitive Dust (BMPF) prepared by Golder Associates Ltd. dated December 2020, and as amended, shall be posted in the on-site pit administration office. Compliance with the BMPF is deemed to be a site Plan condition.
5. Archaeological Assessment, Stage 1 and 2, Golder Associates Inc., dated July 2020:
 - The archaeological sites on the attached Site Plan identified as Location 1 (ARQ-296), Location 17 (ARQ-300), Location 25 (ARQ-307), Location 30 (ARQ-308), Location 31 (ARQ-309), Location 32 (ARQ-312), Location 33 (ARQ-313), Location 34 (ARQ-314) and Location 36 (ARQ-315) and Location 38 (ARQ-316) have been determined to have further cultural heritage value or interest. As such, they have been recommended by Heritage Stage 3 archaeological assessment prior to any intrusive activity that may result in their destruction or disturbance. The Stage 3 assessment must be conducted in accordance with the Ministry of Heritage, Sport, Tourism and Culture Industries' (MHSTCI) Standards and Guidelines for Consultant Archaeologists to derive the extent of each site, gather a representative sample of artifacts, and in determining the need for Stage 4 mitigation of impacts.
 - Until such time that Location 1 (ARQ-296), Location 17 (ARQ-300), Location 25 (ARQ-307), Location 30 (ARQ-308), Location 31 (ARQ-309), Location 32 (ARQ-312), Location 33 (ARQ-313), Location 34 (ARQ-314), Location 36 (ARQ-315) and Location 38 (ARQ-316) have been determined to have further cultural heritage value or interest, the sites shall be protected and protected by establishing 700-metre zones consisting of the sites plus a 70 metre protective buffer as shown in the attached Site Plan.
 - Should the Stage 3 archaeological assessments of Location 1 (ARQ-296), Location 17 (ARQ-300), Location 25 (ARQ-307), Location 30 (ARQ-308), Location 31 (ARQ-309), Location 32 (ARQ-312), Location 33 (ARQ-313), Location 34 (ARQ-314), Location 36 (ARQ-315) and Location 38 (ARQ-316) require a recommendation for Stage 4 mitigation of impacts, the site in question will require the development and implementation of a long-term avoidance and protection plan to preserve the site, risk of development and implementation of an archaeological excavation plan to recover and document the value of the site to be impacted. The development of any Stage 4 mitigation strategy must include the engagement of interested Indigenous communities as well.
6. The protected sites must be fenced post and wire prior to commencing extraction.
7. All alterations prohibited within the limits of the protected areas of the sites and/or such time that the MHSTCI has entered a report in the Ontario Public Register of Archaeological Records where the report recommends that the archaeological site is of further cultural heritage value or interest.
8. Any archaeological site that is of further cultural heritage value or interest that remains within the licensed area at the time of surrender of the licence will be protected through a restrictive covenant on site.
9. Overall Quarry Site: Should previously unknown or unassessed deeply buried archaeological resources be uncovered during the development, they may be a new archaeological site and therefore subject to section 48 (1) of the Ontario Heritage Act. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed archaeologist to carry out archaeological work, in compliance with section 48 (1) of the Ontario Heritage Act.
10. Any person discovering human remains must immediately notify the police or coroner and the registrar of coroners, Ministry of Government Services. All work in the vicinity of the discovery will be suspended immediately. Other government staff may be contacted as appropriate however, media contact shall not be made in regard to the discovery.
11. Blast (Vibration) Impact Assessment, Golder Associates Inc., dated July 2020:
 - The entire series of test blasts, occurring with approximately one month of the commencement of blasting shall be monitored at a minimum of five (5) locations at varying distances from each blast to refine the ground and air vibration attenuation characteristics and confirm that MECP - NPC 119 of the Model Municipal Noise Control By-law is being met. This will entail establishing monitoring stations between the blast site and neighbouring receptors/residences, during the entire cut and development of the initial bench face. The site-specific attenuation data developed during this monitoring period shall be used to better define ground vibration and air circulation effects at the nearest receptors.
 - Routine monitoring of all blasting operations shall be carried out in the vicinity of the closest receptor to the proposed blasting operations. An extraction continues with the quarry and blasting operations now, the actual monitoring site shall be routinely and regularly reviewed so that the closest receptor is always being monitored for ground and air vibration effects.
 - Maintained a record of all blasting details including a seismic record of the ground and air vibration monitoring results. The blast details and monitoring results shall be made available to the Ministry of Natural Resources and Forestry (MNRF) and the Ministry of Environment, Conservation and Parks (MECP) upon request.
 - Prohibit blasting on Saturdays, Sundays and Statutory holidays.
 - When blasting within approximately 300.0 metres of adjacent residences (as shown on Site Plans as Limit of Increased Blast Monitoring) the quarry shall regularly review their blast procedures in conjunction with the blast monitoring results areas when necessary to reduce the maximum exposure weight detonation per day period with the blast. The termination point for the blasting operations will be governed by the results of the on the monitoring program.

continued on Sheet 5 of 10 - Additional Operational Notes Plan

DETAIL 4 SKETCH OF BERMS ABUTTING PROPERTY BOUNDARIES NOT ADJACENT TO WIGNELL DRAIN.



DETAIL 4 SKETCH OF BERMS ABUTTING PROPERTY BOUNDARIES NOT ADJACENT TO WIGNELL DRAIN.



APPLICABLE

PORT COLBORNE QUARRIES INC.

222 MAIN TOWNLINE ROAD, P.O. BOX 1119 ST. CATHARINES, ON, L7R 7A5

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2. Until such time that Location 1 (ARQ-296), Location 17 (ARQ-300), Location 25 (ARQ-307), Location 30 (ARQ-308), Location 31 (ARQ-309), Location 32 (ARQ-312), Location 33 (ARQ-313), Location 34 (ARQ-314), Location 36 (ARQ-315) and Location 38 (ARQ-316) have been determined to have further cultural heritage value or interest, the sites shall be protected and protected by establishing 700-metre zones consisting of the sites plus a 70 metre protective buffer as shown in the attached Site Plan.

3. Should the Stage 3 archaeological assessments of Location 1 (ARQ-296), Location 17 (ARQ-300), Location 25 (ARQ-307), Location 30 (ARQ-308), Location 31 (ARQ-309), Location 32 (ARQ-312), Location 33 (ARQ-313), Location 34 (ARQ-314), Location 36 (ARQ-315) and Location 38 (ARQ-316) require a recommendation for Stage 4 mitigation of impacts, the site in question will require the development and implementation of a long-term avoidance and protection plan to preserve the site, risk of development and implementation of an archaeological excavation plan to recover and document the value of the site to be impacted. The development of any Stage 4 mitigation strategy must include the engagement of interested Indigenous communities as well.

4. The protected sites must be fenced post and wire prior to commencing extraction.

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8. Any person discovering human remains must immediately notify the police or coroner and the registrar of coroners, Ministry of Government Services. All work in the vicinity of the discovery will be suspended immediately. Other government staff may be contacted as appropriate however, media contact shall not be made in regard to the discovery.

11. Blast (Vibration) Impact Assessment, Golder Associates Inc., dated July 2020:

- The entire series of test blasts, occurring with approximately one month of the commencement of blasting shall be monitored at a minimum of five (5) locations at varying distances from each blast to refine the ground and air vibration attenuation characteristics and confirm that MECP - NPC 119 of the Model Municipal Noise Control By-law is being met. This will entail establishing monitoring stations between the blast site and neighbouring receptors/residences, during the entire cut and development of the initial bench face. The site-specific attenuation data developed during this monitoring period shall be used to better define ground vibration and air circulation effects at the nearest receptors.
- Routine monitoring of all blasting operations shall be carried out in the vicinity of the closest receptor to the proposed blasting operations. An extraction continues with the quarry and blasting operations now, the actual monitoring site shall be routinely and regularly reviewed so that the closest receptor is always being monitored for ground and air vibration effects.
- Maintained a record of all blasting details including a seismic record of the ground and air vibration monitoring results. The blast details and monitoring results shall be made available to the Ministry of Natural Resources and Forestry (MNRF) and the Ministry of Environment, Conservation and Parks (MECP) upon request.
- Prohibit blasting on Saturdays, Sundays and Statutory holidays.
- When blasting within approximately 300.0 metres of adjacent residences (as shown on Site Plans as Limit of Increased Blast Monitoring) the quarry shall regularly review their blast procedures in conjunction with the blast monitoring results areas when necessary to reduce the maximum exposure weight detonation per day period with the blast. The termination point for the blasting operations will be governed by the results of the on the monitoring program.

NO.	DATE	DESCRIPTION
1	2022-10-10	ISSUED FOR REVIEW
2	2022-10-10	ISSUED FOR REVIEW
3	2022-10-10	ISSUED FOR REVIEW
4	2022-10-10	ISSUED FOR REVIEW
5	2022-10-10	ISSUED FOR REVIEW
6	2022-10-10	ISSUED FOR REVIEW
7	2022-10-10	ISSUED FOR REVIEW
8	2022-10-10	ISSUED FOR REVIEW
9	2022-10-10	ISSUED FOR REVIEW
10	2022-10-10	ISSUED FOR REVIEW
11	2022-10-10	ISSUED FOR REVIEW
12	2022-10-10	ISSUED FOR REVIEW
13	2022-10-10	ISSUED FOR REVIEW
14	2022-10-10	ISSUED FOR REVIEW
15	2022-10-10	ISSUED FOR REVIEW
16	2022-10-10	ISSUED FOR REVIEW
17	2022-10-10	ISSUED FOR REVIEW
18	2022-10-10	ISSUED FOR REVIEW
19	2022-10-10	ISSUED FOR REVIEW
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23	2022-10-10	ISSUED FOR REVIEW
24	2022-10-10	ISSUED FOR REVIEW
25	2022-10-10	ISSUED FOR REVIEW
26	2022-10-10	ISSUED FOR REVIEW
27	2022-10-10	ISSUED FOR REVIEW
28	2022-10-10	ISSUED FOR REVIEW
29	2022-10-10	ISSUED FOR REVIEW
30	2022-10-10	ISSUED FOR REVIEW
31	2022-10-10	ISSUED FOR REVIEW
32	2022-10-10	ISSUED FOR REVIEW
33	2022-10-10	ISSUED FOR REVIEW
34	2022-10-10	ISSUED FOR REVIEW
35	2022-10-10	ISSUED FOR REVIEW
36	2022-10-10	ISSUED FOR REVIEW
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42	2022-10-10	ISSUED FOR REVIEW
43	2022-10-10	ISSUED FOR REVIEW
44	2022-10-10	ISSUED FOR REVIEW
45	2022-10-10	ISSUED FOR REVIEW
46	2022-10-10	ISSUED FOR REVIEW
47	2022-10-10	ISSUED FOR REVIEW
48	2022-10-10	ISSUED FOR REVIEW
49	2022-10-10	ISSUED FOR REVIEW
50	2022-10-10	ISSUED FOR REVIEW



PORT COLBORNE QUARRIES INC.

PIT 3 EXTENSION

SCALE: 1:2000

PROJECT NO: 115774

DRAWN BY: B.R.

CHECKED BY: B.R.

PROJECT MANAGER: B.A.B.

DESIGNED BY: B.A.B.

DATE: 2022-10-10

SCALE: 1:2000

PROJECT NO: 115774

DRAWN BY: B.R.

CHECKED BY: B.R.

PROJECT MANAGER: B.A.B.

DESIGNED BY: B.A.B.

DATE: 2022-10-10

SCALE: 1:2000

PROJECT NO: 115774

DRAWN BY: B.R.

CHECKED BY: B.R.

PROJECT MANAGER: B.A.B.

DESIGNED BY: B.A.B.

DATE: 2022-10-10

- Detailed test records shall be maintained and shall include:
 - Location, date and time of test.
 - Dimensions sketch including photographs, if necessary, of the location of the blasting operation, and nearest point of reception.
 - Physical and topographical description of the ground between the source and the receptor location.
 - Type of material being blasted.
 - Sub-soil conditions, if known.
 - Prevailing meteorological conditions including wind speed in m/s, wind direction, air temperature in °C, relative humidity, degree of cloud cover and ground moisture content.
 - Number of drill holes.
 - Pattern and place of test holes.
 - Size of holes.
 - Depth of drilling.
 - Depth of collar (or stemming).
 - Weight of charge per delay.
 - Number and times of delays.
 - The results and calculated value of Peak Pressure Level in dB_L and Peak Vibration in mm/s.
 - Applicable limits.
 - The excess, if any over the prescribed limit.

Flyrock Assessment by Golder Associates Inc., dated December 2021
 1. The Licensee shall undertake an assessment of proposed blast design(s) for flyrock potential using an industry standard distance model which shall be conducted:
 a) Prior to commencement of blasting.
 b) Following required future modifications of the blast design.

- The Licensee shall ensure that the orientation of each blast is to direct flyrock away from residences.
- The Licensee shall provide training of drilling and blasting to crew(s) to ensure they understand the FCOZ approach to flyrock prevention.
- The Licensee shall provide quality control of drilling and blasting operation by:
 - Prior to loading any material and communicated to the blasting supervisor so an engineer with experience in quarries and blasting.
 - Drilling accuracy and deviation will be monitored. The use of face mapping tools (e.g., laser contouring) is required to ensure face surfaces are controlled.
 - The use of high-speed video is required to enable estimation of the fragment launch velocity which will be used in the refinement of flyrock models (i.e., bench top and bench face).
- Detailed drill logging program will be designed. Anomalous indicating potential problematic zones will be recorded and communicated to the blasting supervisor so that measures can be taken to prevent the potential impact of those zones.
 - The blast site will be reviewed to ensure compliance with the detailed drill program design.
 - All blasts will be reviewed and approved to ensure blast performance quality.
 - Periodic third-party audits shall be carried out twice per year, to complement contractor quality control.

Hydrological Study by Golder Associates Inc., dated October 2020
 1. All monitoring requirements with respect to the quarry discharges and the receiving system will be regulated by the Industrial Sewage Works Environment Compliance Approval (MSCE) to be issued prior to the start of Phase 3 Extension.
 2. The increased runoff under operational and rehabilitated conditions will be directed to the east and west branches of the Wignall Drain, ensuring that the increased runoff does not impact the water features.

Hydrological Study by Golder Associates Inc., dated October 2020
 1. The following existing on-site monitoring wells shall be monitored with groundwater levels taken monthly and water quality samples taken every five years, using quality parameters to be tested for below:

General Chemistry	pH, EC, TDS, Hardness
Nutrient/Organic Indicators:	Total ammonia, Nitrate, Nitrite, DOC, Orthophosphate
Trace Metals:	Aluminum, cadmium, cobalt, copper, lead, manganese, molybdenum, nickel, selenium, silver, strontium, thallium, titanium, uranium, vanadium, zinc

Monitoring Well Number	Depth
MW17-1S, MW17-2S, MW17-3S, MW17-4S, MW17-5S	1.5m
MW17-6S, MW17-7S, MW17-8S, MW17-9S, MW17-10S	3.0m
MW17-1D, MW17-2D, MW17-3D, MW17-4D, MW17-5D, MW17-6D, MW17-7D, MW17-8D, MW17-9D, MW17-10D	6.0m

2. Three additional monitoring wells are to be installed prior to quarrying and are shown on the Site Plans and include: (a) on the Second Concession Road frontage midway along the northern limit of extraction; (b) mid-way along the eastern property boundary; and (c) at the northern extent of the Miller Road frontage. These wells will be also be monitored at the same frequency as the existing wells.

3. The results of the Groundwater Quality Monitoring will be used to evaluate potential changes in water quality as the proposed quarry expands. The groundwater level monitoring will be used to assess the groundwater level drawdown associated with quarry dewatering as the quarry expands. The monitoring will also be used to evaluate potential impacts on surrounding wells and used as part of the hydrogeological and ecological studies to confirm no unanticipated effects on the natural environment.

4. In order to implement appropriate response actions in a timely manner, the Licensee will retain qualified personnel in the areas of hydrogeology and will have water level contractors and a plumbing contractor on retainer in the event that the need for these services arises.

5. The monitoring program will be discontinued once the quarrying is completed and the quarry will be allowed to flood through natural surface water and groundwater inflows, and the groundwater will recover to its natural conditions.

Private Well Complaints Response Program
 The following description illustrates the decision process to be followed when a well owner/complainant is notified:

- The well will be inspected by a Hydrogeologist and/or a Licensed Well Contractor to initially evaluate the complaint. An analysis and impact assessment will then be conducted by a Hydrogeologist to evaluate potential impacts for groundwater level drawdown to affect the water supply of the well. An assessment of the well system performance will then be carried out by the Hydrogeologist and/or the Licensed Well Contractor.
- If it is determined by a Hydrogeologist that there is a significant potential for interruption of the water supply of the well or the water supply of the well has been interrupted, then the water supply restoration program will be initiated. If the initial measures are not successful, then mitigation measures will be implemented and the owner will be notified of the status of the program. If a successful response is achieved, this could involve the implementation of additional contingency measures until a successful result is achieved.
- If there is no significant potential for the interruption of water supply, then no restoration action will be undertaken and the water supply will be discontinued. The actions and responses undertaken, as determined by a Hydrogeologist, will be documented for the annual report, and reported to the agencies as required.

Potential Mitigation Options
 There are several mitigation strategies that could be implemented to affect the supply of surrounding water wells to counteract the effect of quarry-related groundwater level drawdown, if required, based on the results of the monitoring and complaints response program:

- Well Deepening: This would be effective, for example, for shallow bedrock wells that no longer have a sufficient water column due to quarry-related groundwater level drawdown. The results of the hydrogeological program indicate that well deepening is feasible, since water supply is obtained from duplicate private water wells and municipal wells.
- Well Replacement: This measure could be introduced for wells where well deepening was not sufficient and could also be positioned further from the quarry.
- Additional Water: Additional wells could be installed and connected to plumbing into the residence by piping so that there is a common feed of water from multiple wells.
- Trickle Wells: This would involve the pumping of the well into a storage system such as a subsurface cistern.

- Grouting: The bedrock along the quarry wall could be grouted to seal the fractures and remove the hydraulic connection to adjacent wells.
- Low Permeability Soil Slopes: The quarry walls could be sloped with low permeability clay materials to seal the fractures on the quarry wall.
- Recharge Wells: Recharge wells could be installed to maintain groundwater levels in areas affected by groundwater level drawdown.

The requirement for any of these mitigation measures would be determined based on the results of the groundwater monitoring program. The results of the monitoring and response program will be incorporated into a report that will be submitted to the MSCE on an annual basis as part of the future requirements for a site-specific Permit To Take Water (PTTW).

Permit To Take Water
 1. Any future Permit to Take Water (PTTW) application by the Licensee to MSCE and annual monitoring reports, shall be subject to peer review by the Regional Municipality of Niagara.

Natural Environment Report, Golder Associates Inc., dated October 2020
 1. Setbacks: All extraction setbacks for Phases 1B, 2 and 3 shall be clearly marked where they are contiguous to environmental features and specifically those identified as CV14, FOD7, CUM1-1, FOD7-2, SWB3-2.

2. Bird Breeding Habitat: The Licensee shall avoid vegetation removal including agricultural fields during the active breeding season for birds between April 15 and August 15 unless construction disturbance is provided by a resident. If a resident is found, a buffer will be installed around the nest and not removed until young have fledged the nest.
 Prior to removal of vegetation in agricultural fields, the Licensee shall confirm that there is no suitable habitat for bobolink or eastern meadowlark present. If present, permitting under the ESA may be required to remove the habitat.
 All vegetation communities with the potential to provide nesting sites to migratory birds will require nesting surveys if they are removed between April 15 and August 15. This will include the FOD7-2 extraction area, the CUM1-1 extraction area, 2 north of the FOD7-2, and the CUM1-1 extraction area 1A around the Humberstone Speedway. If any areas of the open agricultural lands have transitional low-lying agricultural lands, nesting surveys will also be required in those areas if clearing is to take place during the nesting season.

3. Fish Habitat: The ponds within the former Humberstone Speedway lands may contain fish, and if present, they shall be removed during construction. If present, the ponds will require a MNR permit to collect fish and a shall be obtained prior to relocation to avoid contamination of the fish. Fish relocation to suitable nearby habitat and non-native fish are to be authorized.

4. Sediment/Erosion Control: Sediment and erosion control measures shall be implemented prior to and during construction, and implemented throughout the entire site specifically in areas adjacent to the deciduous swamp and the East Branch of the Wignall Drain. This may include the use of silt fencing, chain drains, silted banks, riprap and/or other techniques when and where as required.

5. Noise and Dust Mitigation: Appropriate noise and dust mitigation measures shall be implemented during both site preparation and during the extraction operation.

6. Wetland Vegetation Monitoring Program: A 'Wetland Vegetation Monitoring Program' shall be implemented to monitor the deciduous swamp to accurately document any changes in the wetland community cover time and to measure the success of management practices. These long-term monitoring plots and/or monitoring points shall be established to include a count of the number of stems and percent cover for all plant species present. Baseline monitoring shall be conducted in the year prior to the commencement of extraction of Phase 1B or 2, whichever occurs first. Monitoring shall be conducted annually at a similar time of year (i.e., late July) for the duration of the extraction of Phases 1B, 2 and 3.

For all plants identified as part of Wetland Vegetation Monitoring Program, they shall be categorized by the witness index based on the Floristic Quality Assessment System for Southern Ontario.

The groundwater monitoring program installs and specifically the groundwater quality levels and surface groundwater monitoring results will be used in demonstrating any potential impacts to the deciduous swamp.

Annually, the results of the Wetland Vegetation Monitoring Program will be submitted to MNR prior to December 31 and available to the Region of Niagara, NCA and City of Port Colborne upon request.
 The monitoring program will also include annual breeding bird surveys and annual call count surveys within the deciduous swamp following the same methods used for the NEI-2 baseline studies. The purpose of the wildlife monitoring is to document whether the proposed extraction activities negatively impact species diversity and abundance. Monitoring should be conducted for the duration of the extraction of Phases 1B, 2 and 3.

Following installation, annual call count surveys will be completed within the wetland habitat, around the periphery of the extraction of Phases 1B, 2 and 3. The purpose of these surveys is to evaluate the success of these actions as breeding habitat for amphibians. Monitoring will be conducted for a period of three years. Following installation, the wetland habitat will be evaluated for suitability as snags for tree foraging and overwintering habitat. Because it cannot be determined how long it may take for snags to colonize the habitat, the evaluation will focus on the suitability of the habitat rather than the presence or absence of snags for turtles. However, any turtles observed will be documented.

7. Proposed Vegetation:
 (i) Wetland and aquatic plants that may be planted in the nearshore or shoreline areas will include shrubs such as reedspike dogwood (Cornus sericea) and slender yellow (Saxifraga), and herbaceous plants such as water plantain (Alisma plantago-aquatica) species listed above will be planted deep and extend 10 to 15 metres from the shore and be interspersed with cover structures (e.g., boulders and root wads) in the shallow adjacent wetland areas. Organic material and topsoil will be added to the shoreline areas to promote shoreline vegetation. Basking logs, nesting platforms and boulders will be added to foster waterfowl and avian nesting respectively. This habitat will be designed to be suitable as snags for tree foraging and nesting.

(ii) Upland areas will be seeded with a mix of grasses and legumes consisting of native, non-invasive species. The removal of existing habitat for Monarch can be offset by incorporating common milkweed where appropriate. It is recommended that common milkweed be planted in upland areas to provide host plant for monarch caterpillars. Where terrestrial nodal plantings are included, native sedge (Carex lasiocarpa), swamp milkweed (Asclepias tuberosa), softstem burdock (Schoenoplectus bioretii), blackberry (Rubus occidentalis) and common reed (Typha sp.). Deciduous wetland habitats will be created through construction of submerged trenches, approximately 0.25 to 0.75 metres deep. Shallow emergent marsh vegetation (i.e., herbaceous) will be added to create a mixture of emergent and deciduous tree species to promote species diversity and provide a variety of species to compensate for any suitable habitat loss. Other species may include white pine, sugar maple, red oak, trembling aspen, and white birch, with a secondary focus on species such as choke cherry (Prunus virginiana), alternate-leaved dogwood (Cornus alternifolia), highbush cranberry (Viburnum corymbosum), and common reed (Typha sp.). Deciduous wetland habitats will be created through construction of submerged trenches, approximately 0.25 to 0.75 metres deep. Shallow emergent marsh vegetation (i.e., herbaceous) will be added to create a mixture of emergent and deciduous tree species to promote species diversity and provide a variety of species to compensate for any suitable habitat loss. Other species may include white pine, sugar maple, red oak, trembling aspen, and white birch, with a secondary focus on species such as choke cherry (Prunus virginiana), alternate-leaved dogwood (Cornus alternifolia), highbush cranberry (Viburnum corymbosum), and common reed (Typha sp.). Deciduous wetland habitats will be created through construction of submerged trenches, approximately 0.25 to 0.75 metres deep. Shallow emergent marsh vegetation (i.e., herbaceous) will be added to create a mixture of emergent and deciduous tree species to promote species diversity and provide a variety of species to compensate for any suitable habitat loss. Other species may include white pine, sugar maple, red oak, trembling aspen, and white birch, with a secondary focus on species such as choke cherry (Prunus virginiana), alternate-leaved dogwood (Cornus alternifolia), highbush cranberry (Viburnum corymbosum), and common reed (Typha sp.).

(iii) The segment of Carl Road that bisects the deciduous swamp is to be rehabilitated following the decommissioning of the road. Excavations in three or four areas along the width of the road shall be created to improve surface water drainage. Plantings along this segment of Carl Road shall include the common reed tree and other species found in the deciduous swamp including silver maple, pin oak, swamp white oak, bur oak, red maple, and sycamore.

Invasive shrub species including multiflora rose, common buckthorn, and Tatarian honeysuckle have become established in this area and may prevent the successful establishment of the native plantings. These invasive shrubs shall be removed prior to the planting of Carl Road.

(iv) The setback area at the north end of extraction area 3X and east of the deciduous swamp (Licence 4444) shall be supplemented with additional plantings to enhance connectivity and wildlife movement opportunities between the deciduous swamp and the heptocarp located east of the wetland located northeast of the site access 2nd Concession Road. This area currently consists of a cultural meadow. The establishment of a wooded area will create a corridor linking the north end of the deciduous swamp to the forested areas offsite, including the significant woodland located between Carl Road and Station Road. These additional plantings will also enhance connectivity and facilitate wildlife movement between these features. Native tree and shrub species plantings shall be selected based on their suitability for the soils and moisture regime in those areas and may include oak, trembling aspen, eastern white pine, sugar maple, basswood, bur oak, white pine, serviceberry species, and gray dogwood (Cornus racemosa).

(v) The area north of the existing quarry (PI13) and west of the northern end of the deciduous swamp is to be rehabilitated to enhance connectivity and wildlife movement between the deciduous swamp and the significant woodland located northeast of the site access 2nd Concession Road. This area currently consists of a cultural meadow. The establishment of a wooded area will create a corridor linking the north end of the deciduous swamp to the forested areas offsite, including the significant woodland located between Carl Road and Station Road. These additional plantings will also enhance connectivity and facilitate wildlife movement between these features. Native tree and shrub species plantings shall be selected based on their suitability for the soils and moisture regime in those areas and may include oak, trembling aspen, eastern white pine, sugar maple, basswood, bur oak, white pine, serviceberry species, and gray dogwood (Cornus racemosa).

(vi) All plantings (i.e., nodal plantings) included in the rehabilitation plan will be locally native, non-invasive species that create habitat in the short term and promote long-term ecological resilience. The sourcing of regional species will be considered.

described genetics of the species. Plantings from local sources are likely to be well adapted to the local climate and growing conditions and may have a higher likelihood of successful establishment. Therefore, plantings will be procured from local sources to the extent possible.

- All rehabilitated side slopes are to be vegetated with a seed mixture capable of:
 - Rapid germination and growth.
 - Establishment of a diverse plant community.
 - Maintaining or enhancing soil fertility.

The seeding is to be established in a timely manner and if necessary, facilitated by the application of fertilizer, water and/or additional seeding.

8. Wignall Drain: Prior to undertaking operational activities that have the potential to result in a Wignall Drain incision, the Wignall Drain shall be maintained and retro-vegetated west of the drain within approximately 30 m. The appropriate agencies shall be contacted and any necessary approvals shall be obtained. An ecologist will be retained to determine the appropriate course of action at that time.

9. Blanning's turtle habitat:
 a) To provide compensation habitat for Blanning's turtle, the Licensee shall create a minimum 0.6 ha habitat located between Second Concession Road and the Wignall Drain. This habitat shall be established within the area of the former Carl Road right-of-way where it traverses the Silver Maple Mineral Deciduous Swamp (SWB3-2).

b) The design of the habitat must be approved by the Ministry of Environment Conservation and Forestry. The habitat shall be established within the area of the former Carl Road right-of-way where it traverses the Silver Maple Mineral Deciduous Swamp (SWB3-2).

c) Prior to the potential for turtles to overwinter in the Humberstone Speedway grass, removal of Category 2 habitat (aquatic habitat) will occur during the active season when turtles can be captured and relocated outside of the footprint.

d) A turtle relocation program will be implemented prior to removal of existing Category 2 habitat. Any Blanning's turtle individuals captured will be relocated to the proposed habitat, which will be established and verified immediately in accordance with the Ontario S&R Handling Manual for ESA Authorized Habitats.

e) A turtle awareness program will be implemented for all personnel traveling or working on the site to mitigate lawn care activities.

Tree Preservation Plan
 1. All woodlands, forests and hedgerow corridors beyond the defined proposed extraction limits shall be preserved and protected in their entirety. Tree Protection Fencing shall be installed in accordance with the proposed tree protection plan and extends north of the Site Plans.

2. Tree Removal: Trees located within FOD7-2 are recommended for removal to permit the Phase 2 extraction work of the proposed quarry expansion. The presence of Emerald Ash Borer damage, high occurrence of Ash trees, pioneer species and possible retention plantings, within the study area as well as the relatively young age of the trees shall be taken into account in the tree removal plan. The FOD7-2 feature A1 removals shall be in accordance with the following notes:

Construction Impact Mitigation
 a) Potential Construction Impacts to Trees
 Trees are living organisms that react to changes in their environment. Trees can be damaged or even killed as a result of construction activities. Construction activities may cause tree stress. Most of the impacts relate to the removal of roots that results in the slow death of the tree as a result of the inability to transport water and nutrients. Construction activities may also cause tree stress through the removal of soil and vegetation plant between the stem and boundary fence as per Natural Environment Report Recommendation Note 7iv).

Soil Compaction and Root Damage
 The leading cause of construction damage to trees is compaction of the soil around the roots or within the Tree Protection Zone (TPZ). The TPZ is the area around the tree or group of trees in which no grading or construction activity may occur. Equipment entering into a TPZ compresses the air pockets around the roots inhibiting the tree from absorbing nutrients and water. This damage ultimately reduces the health of the tree. Accordingly, during the removal stage, equipment used within the preservation zones shall be restricted to ensure that the trees roots are not disturbed, thereby assisting in maintaining their health. The TPZ is proposed and determined by the Tree Protection Fencing.

Mechanical Damage
 Equipment can physically damage the trees through striking the trunk, limbs, and/or roots. Felled trees can also cause damage to the tree removal stage of construction. Some damage is unavoidable due to the proximity of adjacent trees; however, through the use of proper equipment and best management practices the damage can be minimized. The Contractor shall be held responsible for all avoidable damage to the trees during the tree removal operation. Note: Trees shall always be felled away from adjacent trees to be retained.

Root Damage
 The success of tree preservation is dependent not only on protecting the root zone from construction and damage, it is also contingent upon the ability to ensure that the structural roots of the trees are not cut. Impacts to this area may result in the structural failure of these trees. Excavating soil 1 metre outside a tree's drip line, or within a one cm damage roots by tearing and pulling back to the stem. This damage can lead to not that can kill the tree. All work within the drip line of an existing tree shall be approved by an Arborist. When excavating the top 30 cm of soil adjacent to trees, care must be taken. Excavation shall clearly sever the roots prior to stripping and removal of soil. Removing roots with a diameter greater than 2.5 cm (1 inch) shall be approved by an Arborist. When excavating the top 30 cm of soil adjacent to trees, care must be taken. Excavation shall clearly sever the roots prior to stripping and removal of soil. Removing roots with a diameter greater than 2.5 cm (1 inch) shall be approved by an Arborist. When excavating the top 30 cm of soil adjacent to trees, care must be taken. Excavation shall clearly sever the roots prior to stripping and removal of soil. Removing roots with a diameter greater than 2.5 cm (1 inch) shall be approved by an Arborist.

b) Protection and Logging Trees During Construction
 The following recommendations are presented to provide appropriate tree protection and management during the future development and construction of this project:

1. Tree Protection Fencing (TPF) shall be installed to protect all trees identified for preservation. Tree Protection shall conform to City of Port Colborne standards. Upon installation of the tree protection fencing, the Contractor shall contact the Project Arborist to review and approve the fencing and its location prior to commencement of any site work. A Tree Protection Fencing Plan (TPFP) will be provided to the City. The protection fencing shall remain intact throughout the duration of the quarry activities and shall be replaced and repaired as required. The fencing shall be removed in its entirety at the completion of all rehabilitation works.

2. Upon receiving the necessary project approvals and prior to the commencement of tree removals, all trees designated for preservation must be flagged in the field. All designated preservation trees shall be identified and unambiguously marked during the works. Removals are to be completed outside of migratory bird nesting season, generally from April 1 to August 31. If removal occurs within the restricted activity period, they shall be in place until (Fraxinus sp.) species in rehabilitation plantings be avoided due to their high value as a qualified parent such as a wildlife biotope or ombrotroph.

3. All trees to be removed shall be removed in a timely manner and if necessary, facilitated by the application of fertilizer, water and/or additional seeding.

4. Wignall Drain: Prior to undertaking operational activities that have the potential to result in a Wignall Drain incision, the Wignall Drain shall be maintained and retro-vegetated west of the drain within approximately 30 m. The appropriate agencies shall be contacted and any necessary approvals shall be obtained. An ecologist will be retained to determine the appropriate course of action at that time.

5. Blanning's turtle habitat:
 a) To provide compensation habitat for Blanning's turtle, the Licensee shall create a minimum 0.6 ha habitat located between Second Concession Road and the Wignall Drain. This habitat shall be established within the area of the former Carl Road right-of-way where it traverses the Silver Maple Mineral Deciduous Swamp (SWB3-2).

b) The design of the habitat must be approved by the Ministry of Environment Conservation and Forestry. The habitat shall be established within the area of the former Carl Road right-of-way where it traverses the Silver Maple Mineral Deciduous Swamp (SWB3-2).

c) Prior to the potential for turtles to overwinter in the Humberstone Speedway grass, removal of Category 2 habitat (aquatic habitat) will occur during the active season when turtles can be captured and relocated outside of the footprint.

d) A turtle relocation program will be implemented prior to removal of existing Category 2 habitat. Any Blanning's turtle individuals captured will be relocated to the proposed habitat, which will be established and verified immediately in accordance with the Ontario S&R Handling Manual for ESA Authorized Habitats.

e) A turtle awareness program will be implemented for all personnel traveling or working on the site to mitigate lawn care activities.

Tree Preservation Plan
 1. All woodlands, forests and hedgerow corridors beyond the defined proposed extraction limits shall be preserved and protected in their entirety. Tree Protection Fencing shall be installed in accordance with the proposed tree protection plan and extends north of the Site Plans.

2. Tree Removal: Trees located within FOD7-2 are recommended for removal to permit the Phase 2 extraction work of the proposed quarry expansion. The presence of Emerald Ash Borer damage, high occurrence of Ash trees, pioneer species and possible retention plantings, within the study area as well as the relatively young age of the trees shall be taken into account in the tree removal plan. The FOD7-2 feature A1 removals shall be in accordance with the following notes:

Construction Impact Mitigation
 a) Potential Construction Impacts to Trees
 Trees are living organisms that react to changes in their environment. Trees can be damaged or even killed as a result of construction activities. Construction activities may cause tree stress. Most of the impacts relate to the removal of roots that results in the slow death of the tree as a result of the inability to transport water and nutrients. Construction activities may also cause tree stress through the removal of soil and vegetation plant between the stem and boundary fence as per Natural Environment Report Recommendation Note 7iv).

PIT 3 EXTENSION

ADDITIONAL OPERATIONAL NOTES PLAN

SHEET 5 OF 10

The following is the process that shall be carried out if tree removals are requested during the restricted time frame indicated in the Migratory Birds Convention Act:

- Contact a qualified individual (i.e., wildlife biologist or ornithologist), to determine if nesting birds are within the tree removal disturbance area.
- If the bird specialist has determined that there are nesting birds on site, there will be no tree removals conducted within the boundary set out by the specialist. Tree removals can resume within this once the migratory bird specialist has determined that the nest is no longer utilized.
- If the bird specialist determines there are no migratory birds nesting within the disturbance area, the contractor will have a pre-determined clearance window to conduct removals (as determined by the specialist); in the event the clearance window, if removals and chipping are not complete, the bird specialist will return to the site and proceed with another assessment sweep. This process will continue until all removals and chipping is complete.

3. The TPZ is the area around a retained tree that is to be protected by tree protection fencing. The TPZ is not to be used for any type of storage (e.g. storage of debris, construction material, surplus soils, and construction equipment). No trenching or tunnelling for underground services shall be located within the TPZ. Construction equipment shall not be allowed to drive or exhaust within the TPZ.

4. Trees shall not have any rigging cables or hardware of any sort attached or wrapped around them, nor shall any contaminants be dumped within the protective areas. Further, no contaminants shall be dumped or flushed where they may come into contact with the leader roots of the trees. In the event that roots from retained trees are exposed, or if it is necessary to remove limbs or portions of trees after construction has commenced, the Project Arborist shall be advised and the proper actions conforming to City Policies and By-Laws shall be carried out.

5. Upon completion of the tree removals, refer to Operational Note 12. Any chipping, cutting or brush clearance is to be completed outside of the tree nesting season. If these activities are to occur within the restricted activity period, due diligence measures, including pre-clearing nest sweeps will be employed to reduce risk to nesting birds protected under the Migratory Birds Convention Act, 1994 and Migratory Birds Regulations. These surveys will be completed by a qualified biologist.

6. Excavation adjacent to trees to be preserved must be completed with due care and attention. Excavation shall clearly reveal the roots prior to stripping and removal of soil. Should roots be encountered during excavation all exposed roots with a diameter greater than 2.5 cm (1 inch) shall be pruned back to the soil face to prevent damage to the tree. Roots smaller than 2.5 cm (1 inch) shall be clearly cut using a sharpened spade or bypass pruners at the limits of excavation.

Visual Impact Assessment, III Group dated December 2020
 2. The Bemis is a 4.0 metre-high berm along the Second Concession frontage be built with a 3:1 slope on the external side and will vegetation plant between the berm and boundary fence as per Natural Environment Report Recommendation Note 7iv).

3. The Bemis is a 2.0 metre-high berm along the northern portion of the eastern property boundary. Where it will be adjacent to the proposed permanent realignment of the Wignall Drain, (Phase 2X and Phase 2C) it will be built with a 2:1 slope, per Detail 2. The balance (Phase 1E) will have a 2:1 slope.

3. Bemis C is a 2.0 metre-high berm along the northern portion of the 'eastern-lab' built with a 3:1 slope (see also note 9 below).

4. Bemis D is a 4.0 metre-high berm along the Miller Road frontage and extending laterally for 100 m, meeting along the northern and southern property limits of the 'eastern-lab' with a 4:1 slope on the external side and 2:1 on the internal side. Both confederate and deciduous trees are to be planted between the berm and the Miller Road boundary fence (refer to Detail 2 and also Note 9 below).

5. Bemis E is a 2.0 metre-high berm along the southern portion of the 'eastern-lab' built with a 3:1 slope (see also Note 9 below).

6. Bemis F is a 2.0 metre-high berm along the eastern boundary of the property extending south to Main Street and built with a 3:1 slope.

7. Bemis G is a 4.0 metre-high berm along the Main Street frontage built with a 4:1 slope on the external side with deciduous and coniferous trees planted between the berm and boundary fence (see Detail 2).

8. Bemis H is a 2.0 metre-high berm along the western property boundary associated with 1200 Main Street.

9. Temporary Berms: During the extraction of Phases 1-1-1-1, a temporary berm will be erected just west of the Wignall Drain and be 2.0m high with 3:1 side slopes. The berm will necessitate only 100 m of Berms C and E to be constructed at their western extent. Subject to approval of Phase 1-X and the completion of Phase 1-1, the temporary berm will be removed and the full extent of Berms C, D and E will be constructed.

10. During the initial 8.0 m deep excavation lift, all stockpiles within 200.0 m of Miller Road and Highway 1 (Main Street), shall not exceed 10.0 m in height.

11. Both confederate and deciduous trees are to be planted between the berm and the Highway 1 (Main Street) and Miller Road boundary fence.

12. Existing hedgerow vegetation is to be retained where possible.

13. That all berms be immediately vegetated with a grass type mixture ground cover to avoid erosion, sedimentation and dust.

14. All trees to be removed shall be removed in a timely manner and if necessary, facilitated by the application of fertilizer, water and/or additional seeding.

15. Wignall Drain: Prior to undertaking operational activities that have the potential to result in a Wignall Drain incision, the Wignall Drain shall be maintained and retro-vegetated west of the drain within approximately 30 m. The appropriate agencies shall be contacted and any necessary approvals shall be obtained. An ecologist will be retained to determine the appropriate course of action at that time.

16. Blanning's turtle habitat:
 a) To provide compensation habitat for Blanning's turtle, the Licensee shall create a minimum 0.6 ha habitat located between Second Concession Road and the Wignall Drain. This habitat shall be established within the area of the former Carl Road right-of-way where it traverses the Silver Maple Mineral Deciduous Swamp (SWB3-2).

b) The design of the habitat must be approved by the Ministry of Environment Conservation and Forestry. The habitat shall be established within the area of the former Carl Road right-of-way where it traverses the Silver Maple Mineral Deciduous Swamp (SWB3-2).

c) Prior to the potential for turtles to overwinter in the Humberstone Speedway grass, removal of Category 2 habitat (aquatic habitat) will occur during the active season when turtles can be captured and relocated outside of the footprint.

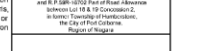
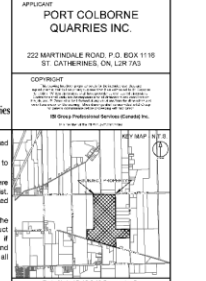
d) A turtle relocation program will be implemented prior to removal of existing Category 2 habitat. Any Blanning's turtle individuals captured will be relocated to the proposed habitat, which will be established and verified immediately in accordance with the Ontario S&R Handling Manual for ESA Authorized Habitats.

e) A turtle awareness program will be implemented for all personnel traveling or working on the site to mitigate lawn care activities.

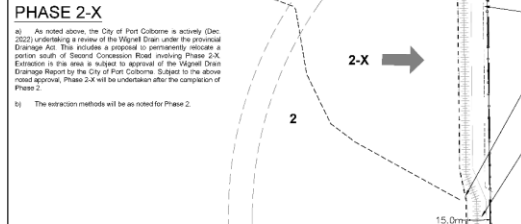
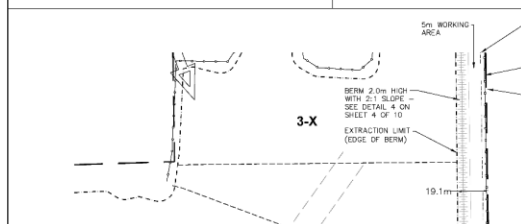
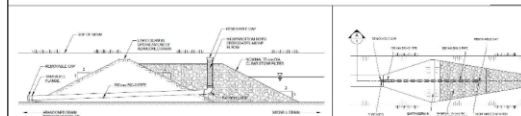
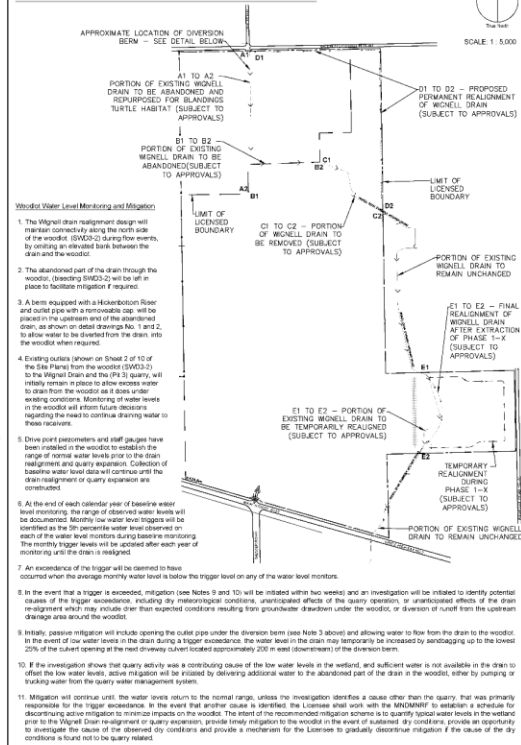
Tree Preservation Plan
 1. All woodlands, forests and hedgerow corridors beyond the defined proposed extraction limits shall be preserved and protected in their entirety. Tree Protection Fencing shall be installed in accordance with the proposed tree protection plan and extends north of the Site Plans.

2. Tree Removal: Trees located within FOD7-2 are recommended for removal to permit the Phase 2 extraction work of the proposed quarry expansion. The presence of Emerald Ash Borer damage, high occurrence of Ash trees, pioneer species and possible retention plantings, within the study area as well as the relatively young age of the trees shall be taken into account in the tree removal plan. The FOD7-2 feature A1 removals shall be in accordance with the following notes:

Construction Impact Mitigation
 a) Potential Construction Impacts to Trees
 Trees are living organisms that react to changes in their environment. Trees can be damaged or even killed as a result of construction activities. Construction activities may cause tree stress. Most of the impacts relate to the removal of roots that results in the slow death of the tree as a result of the inability to transport water and nutrients. Construction activities may also cause tree stress through the removal of soil and vegetation plant between the stem and boundary fence as per Natural Environment Report Recommendation Note 7iv).

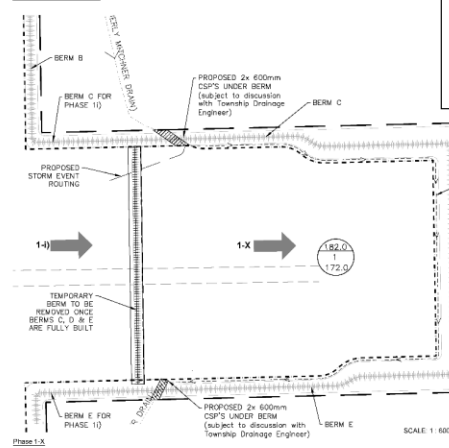


SKETCH 1 - EXISTING, TEMPORARY AND FINAL ALIGNMENT OF THE WIGNELL DRAIN

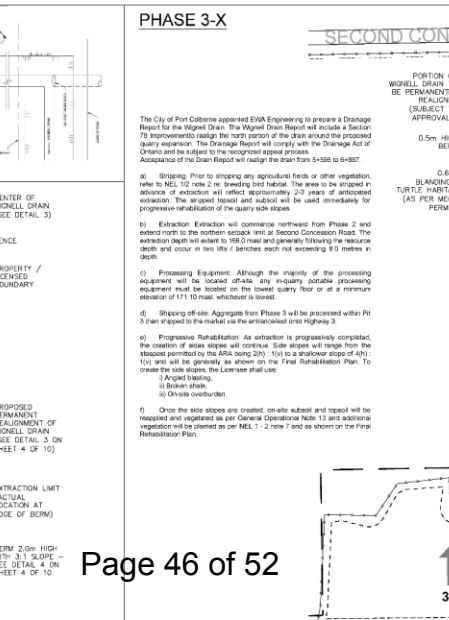


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PHASE 1-X



- The City of Port Colborne has approved a Drainage Engineer for the preparation of a Drainage Report for the Wignell Drain Council Report 2014-910. The Final Main 70' End of EWA Engineers Inc. is appointed under Section 4 Chapter 17 of the Drainage Act R. O. 1990 for the new work contemplated and any additional portions under Section 4 related to the Wignell, Mahanor Port Colborne and Beaver Dam Dams, that may come forward during the Drainage Act process. The Wignell Drainage Report will address the realignment of the northern portion of the drain as a Section 4 improvement. Proposed works will be completed according to the regulations for the Drainage Act by the City of Port Colborne.
- The proposed temporary bypass of the existing alignment of the Wignell Drain consistent with the extraction identified as 1-X will be prepared as a proposed works subject to the approval of the City of Port Colborne along with the Drainage Act and any other approvals as may be required including but not limited to DFO, NPCA and WSP. The Licensee will submit for approval any and all plans as required by the City of Port Colborne and obtain approval prior to undertaking any changes impacting the existing Wignell Drain.
- The temporary bypass will be designed to convey the 1.5 year design storm without exceeding the banks of the channel. Excess flows greater than the 1.5 year will be conveyed into the quarry without negative impacts to other adjacent landowners. Any culverts as may be required will meet the design flow specified.
- Create an overflow channel that will take all storm water generated from storm events greater than a 1.5 year storm. The storm water will be directed to spill into the quarry and specifically into a stormwater retention pond where possible. All work will be subject to NPCA, PCID Inc. will pump the water back into the Wignell Drain downstream from the quarry site as part of their MCEP - ECA permit.
- Notwithstanding that this sketch of the Wignell Drain is classified by the Department of Fisheries and Oceans as Level F, being the lowest quality for fish habitat. As part of the overflow channel it will be designed with riprap from CCR/PCPA to address erosion related to flood risk, capacity, retention and. Work design to limit upstream fish stock from being routed into the quarry. After each major storm event, the setting point will be inspected for fish stock and if observed they will be caught by trained staff and returned to the Wignell Drain downstream.
- The perimeter berms (berms C, D and E) will be constructed as shown on the Site Plans. To accommodate the Wignell Drain, two 600mm CSP culverts will be installed under both berm C and E.
- With the existing Wignell Drain alignment still in place and functioning, the temporary ditch alignment will be constructed but not connected to the drain. The retaining wall inside the outer perimeter of the subject lands and because of the minor grade difference from the upstream that will be constructed actual grading will be critical to ensure constant positive down-slope flow. Refer to the Site Plans and specify the Progression and Final Rehabilitation Plan to the temporary alignment of the Wignell Drain.

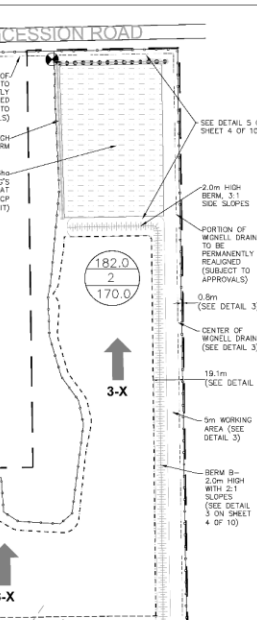
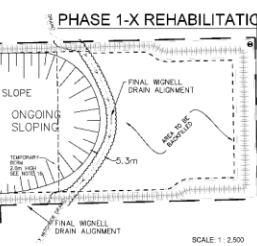
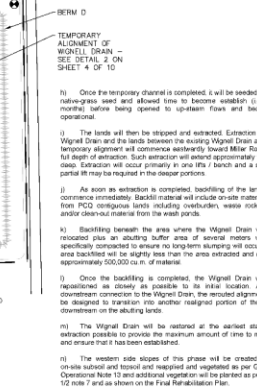


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PIT 3 EXTENSION

EXTRACTION PHASES CONTINGENT ON WIGNELL DRAIN APPROVALS PLAN

SHEET 7 OF 10



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APPLICANT: PORT COLBORNE QUARRIES INC.

222 MARITIMALE ROAD, P.O. BOX 1118
ST. CATHARINES ON, L7R 7A5

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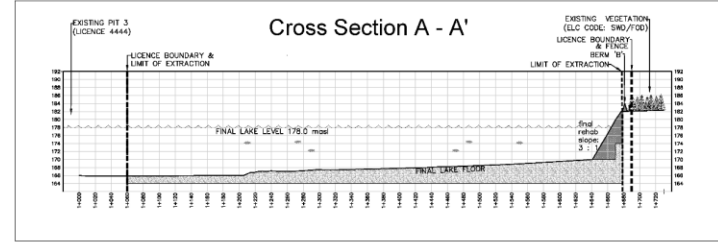
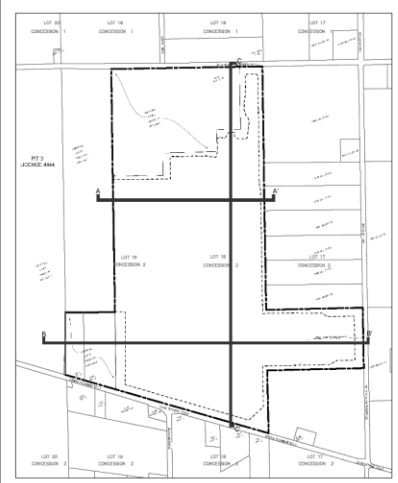
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PIT 3 EXTENSION REHABILITATION CROSS-SECTION PLAN

SHEET 9 OF 10



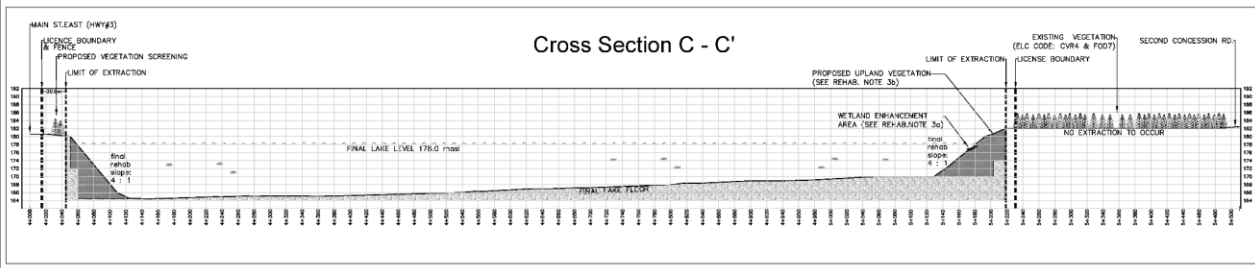
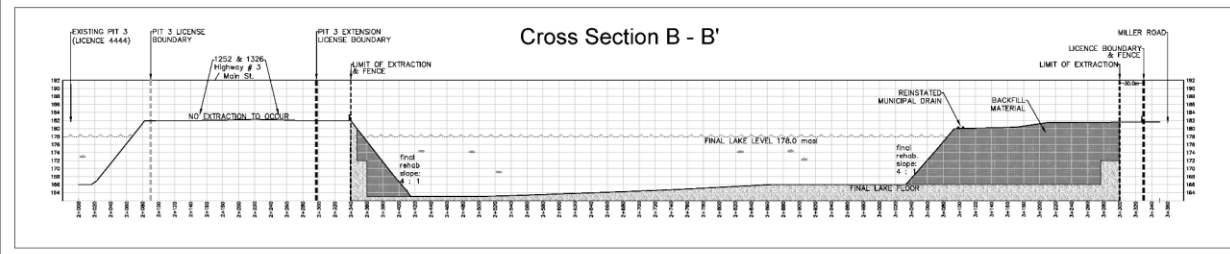
PORT COLBORNE
QUARRIES INC.
222 MARINDALE ROAD, P.O. BOX 1118
ST. CATHERINES, ON, L2R 7A5



LEGEND

- EXISTING VEGETATION (LIC CODE: SMO/OD)
- LIMIT OF EXTRACTION
- PROPOSED FENCE
- EXISTING SOIL / SUBSOIL
- BACKFILL / GROUND
- REHABILITATED AREA
- FINAL LAKE WATER LEVEL
- FINAL LAKE FLOOR
- PROPOSED UPLAND VEGETATION
- REINSTATED MUNICIPAL DRAIN
- NO EXTRACTION TO OCCUR

VERTICAL SCALE 1:40
HORIZONTAL SCALE 1:200



DATE	BY	DESCRIPTION

SITE PLAN AMENDMENTS

REVISIONS PRIOR TO APPROVAL

SITE DATA

AREA TO BE LICENSED	4 85.34 ha
AREA TO BE EXTRACTED	4 71.12 ha
EX. DISTURBED AREA	4 361
TOTAL LAKE PANEL	4 188.29 ha

THESE SITE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MINING ACT AND REGULATIONS THEREUNDER AND THE ENVIRONMENTAL PROTECTION ACT AND REGULATIONS THEREUNDER. THE CLIENT HAS REVIEWED AND APPROVED THESE SITE PLANS FOR THE PURPOSES INDICATED.

IBI CONSULTANTS INC.

PORT COLBORNE QUARRIES INC.
PIT 3 EXTENSION

SCALE: VERTICAL 1:40
HORIZONTAL 1:200

PROJECT NO. 118774
DRAWN BY: B.R.S.
PROJECT MGR. APPROVED BY: D.A.S.
SHEET TITLE: REHABILITATION CROSS-SECTIONS
SHEET NUMBER: 9 of 10

From: [Jessie Fehrman](#)
To: [Deputy Clerk](#)
Subject: Re: Notice of Public Meeting: Questions
Date: March 2, 2023 1:03:41 PM

You don't often get email from [REDACTED] [Learn why this is important](#)

My apologies,
My previous email should have been addressed to the City of Port Colborne City Clerk.

Sincerely,

Jessie

On Thu, Mar 2, 2023 at 12:55 PM Jessie Fehrman [REDACTED] wrote:

Hello Office of the Regional Clerk,

My name is Jessie Fehrman, and I am sending the following questions and considerations for the public meeting for the Official Plan and Zoning by-Law Amendment on the lands legally known as Part of Lots 17, 18, 19 Concession 2 for the Port Colborne Pit 3 extension. **I want to state that our family has lived in this area, and on property surrounding the quarry for many generations, and we know better than most how accessible the rock is for an operation like a Quarry. We are supportive of the development of Port Colborne Quarries, Pit 3, and the progress this can contribute to. We have some questions to ensure the sustainability of the quarry project, our home, and farm business, but overall, hope that both the quarry operations and the surrounding residents can prosper.**

Please confirm that you have received these questions and if there is anything else that is needed to consider them.

Well Water Questions:

1. On page 20 of the Hydrogeological Impact Assessment section 6.3 it states "The closest water wells to the proposed extension are at five houses situated south of Highway No. 3 ranging from approximately 75 m to 110 m from the proposed extension (Figure 16). The predicted drawdown for the distances of 100 m and 150 m from the quarry are approximately 2.6 m and 2.8 m respectively. The potential for drawdown will be assessed based on the groundwater monitoring program, including monthly groundwater level monitoring of monitoring wells MW17-8 and MW17-9. Any complaints will be addressed by the complaint response program". With the proposed setback from the highway being 30 meters (instead of the 90 meters that the assessment was based on) would this change the distance of the 5 houses located south of Highway 3, and the predicted drawdown of the well water?
2. On page 88 of the hydrogeological assessment it states "A monitoring and response program is in place for the existing quarry to detect groundwater level drawdown at the monitoring well locations. A response program will be initiated, if required, to evaluate potential impacts and implement operational measures, or contingency measures, to prevent an interruption of the water supply or to restore the supply. This monitoring and

response program will include all residences within 1,000 meters of the licence.” Is there a phone number, email, or process for contacting PCQ to access their “water restoration program” or “complaint response program”? Has this process already been initiated for Pit 1 or 2? Have any residences worked through the “water restoration program from the extraction from Pit 1 or 2?

3. Within the Hydrogeological Assessment document in Table 6 – “Water Well Survey Summary, Port Colborne Quarries” is the list of wells on properties within 1km of the expansion property. Our wells are not listed on this list, and I am wondering if they should be and if others may be missing? On page 20 of the document it states that “Properties that were included in the water well survey by WSP were not included in this survey.” and we wondered why they were not included as we filled out this survey? With our wells not being listed, will this affect our ability to seek assistance through the “water restoration program”?

Blast Impact Questions:

1. In the Blast Impact Assessment Document, on page 7 it states that “Sixty-three (63) sensitive receptors near the Site have been identified. These are listed in APPENDIX C, Table C1 and displayed in Figure 2. Separation distances, from the receptor to the extraction limit, shown in Table C1 are based on a 15 m extraction setback within the Quarry property limits and a 90 m setback from Hwy 3 within the Quarry Property limits”. With the calculations of the blast impact on sensitive receptors (homes nearby) being done with 90 meters as the proposed setback from the highway, is there any data to show that reducing the setback to 30 meters will not affect the “sensitive receptors” /homes?
2. In table C1 on page 1, the distance that 1577 Highway 3 is listed at is 100 meters, which the document states include a 90 meter setback. Based on Figure 4 and Table 2 (page 10) in the Blast Impact Assessment, there is no listed safe “Max. explosive charge weight” for this reduced distance. What is the “Max. Explosive Charge Weight” that could be used at this distance, and is it possible to reduce the explosive charge weight this much and still effectively blast?
3. On page 12 of the Blast Impact Assessment it states that “Assuming a single hole per delay period, the maximum explosive weight per delay of 92 kg, the MECP guideline limit of 128 dBL may be complied with for all blasting beyond a minimum distance of about 284 m from adjacent receptor residences.”. It appears that our home and other residences are within 284 meters with the 90 m setback and even closer with the proposed 30 m setback from the highway. Will this mean that the guideline limit for blasting will be exceeded by blasting within this distance? The above quote states “assuming a single hole delay” but table 1 on page 6 of the Blast Impact Assessment states the number of holes per delay for Pit 3 is listed at a max of 4. Will this increase in "delays" affect the impact of the blasts?
4. On page 14 of the Blast Impact Assessment it states that “The termination point for the blasting operations will be governed by the results of the on-site monitoring program.” Will there be any monitoring of the residences off-site? Will there be any monitoring of the surrounding homes and residences that are built on the rock?

Planning Justification Questions:

1. In the Planning Justification Report on page 5 it states that the surrounding land uses are

“South: To the south is Highway 3 (Main Street) fronting onto the south side of Highway 3 are numerous rural land uses including farmland, non-farm rural residences, and light industrial uses (sales/servicing of farming machinery, kennel / pet grooming). Has the farm property and retail location at 1577 Highway 3 (called Fehrhaven Farms) been considered in the traffic assessment and decision to move the PCQ entrance to Carl road? With the Fehrhaven Farms sometimes seeing 100s of customers on busy days between the months of June – October we are wondering if this traffic was considered in the traffic study, and what the impact was on the farm operation. If the traffic assessment was done when our farm operation is not operational, the traffic from the business has the potential to cause issues with proposed travel from quarry operations.

Sincerely,

Jessie Fehrman