

## Official Plan and/or Zoning By-law Amendment Application

### A. The Amendment

Type of Amendment

☐ Official Plan Amendment ☐ Zoning By-law Amendment ☒ Both

What is the purpose of and reason for the proposed amendment(s)?

Johnston Bros. (Bothwell) Ltd. is proposing an expansion to their Cunningham Pit operation located in the Township of Ashfield Colborne Wawanosh. The subject lands are designated "Extractive" and "Agriculture" in the Township Official Plan. An amendment to the area designated 'Agriculture' is required to permit the proposed pit expansion, The subject lands are currently zoned Agricultural (A1-24). An amendment to the ACW Zoning Bylaw is also required to permit the proposed use.

### B. General information

Name, address, phone of all persons having any mortgage, charge, debenture or encumbrance on the property

Name	Address	Phone
E.S. Johnston Farms	21220 Johnston Line, Wardsville	

What area does the amendment cover?

☐ The "entire" property ☒ Just a "portion" of the property

Area (hectares) 4.7	Depth 190.5 m	Frontage (width) 288.7 m
Is any of the land in wellhead protection area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown		

What is the current planning status?

Official Plan Designation Natural Environment	Zoning Agriculture (AG3)
--------------------------------------------------	-----------------------------

List land uses that are permitted by current Official Plan designation

Uses such as conservation, forestry, wildlife areas, and passive recreation are permitted.



C. Existing and proposed land uses and buildings			
What is the "existing" use of the land? Agriculture			
How long have the existing uses continued on the subject land? 3 years			
What is the "proposed" use of the land? Extractive (sand and gravel pit)			
Provide the following detail for all buildings			
Are any building proposed to be built on subject land? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
		Existing	Proposed
Type of Building(s)	none	none	
Main Building Height	0.0 m	0.0 m	
Lot Coverage	0 %	0 %	
Number of Parking Spaces	0	0	
Number of Loading Spaces	0	0	
Number of Floors	0	0	
Total Floor Area	0.0 m²	0.0 m²	
Ground Floor Area (exclude basement)	0.0 m²	0.0 m²	
Building Dimensions	0	0	
	Date of construction for existing building 2024-11-01	Date of construction for proposed building 2024-11-01	
Setback from Buildings to	Front of Lot Line 0	rear to Lot Line 0	Side to Lot Line 0



D. Existing and Proposed Services		
Indicate the Applicable Water Supply and Sewage Disposal		
Type of Disposal		
Municipal Water	<input type="checkbox"/> Existing	<input type="checkbox"/> Proposed
Communal Water	<input type="checkbox"/> Existing	<input type="checkbox"/> Proposed
Private Well	<input type="checkbox"/> Existing	<input type="checkbox"/> Proposed
Municipal Sewers	<input type="checkbox"/> Existing	<input type="checkbox"/> Proposed
Communal Sewers	<input type="checkbox"/> Existing	<input type="checkbox"/> Proposed
Private Septic	<input type="checkbox"/> Existing	<input type="checkbox"/> Proposed
If the requested amendment would permit development on a privately owned and operated individual or communal septic system, and more than 4500 liters of effluent would be produced per day as a result of the development being completed, the applicant MUST submit a servicing options report and a hydrogeological report.		
How will storm drainage be provided? <input type="checkbox"/> Sewers <input type="checkbox"/> Ditches <input type="checkbox"/> Swales <input checked="" type="checkbox"/> Other	If other, please specify n/a	Is storm drainage present or will it be constructed? <input checked="" type="checkbox"/> Present <input type="checkbox"/> Will be constructed
Type of Access (check appropriate box) <input type="checkbox"/> Provincial Highway <input type="checkbox"/> Municipal Road, seasonally maintained <input type="checkbox"/> County Roads <input type="checkbox"/> Right of Way <input checked="" type="checkbox"/> Municipal Roads, maintained all year <input type="checkbox"/> Water Access <input type="checkbox"/> Private road		



E. Official Plan Amendment		
Proceed to Section F if an Official Plan Amendment is not proposed		
Does the proposed Official plan amendment add a Land Use designation in the Official Plan? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown	Does the proposed Official plan amendment change a Land Use designation in the Official Plan? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	Does the proposed Official plan amendment change a policy in the Official Plan? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown
Does the proposed Official plan amendment replace a policy in the Official Plan? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown	Does the proposed Official plan amendment delete a policy in the Official Plan? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown	Does the proposed Official plan amendment add a policy in the Official Plan? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown
If applicable, and known at time of application, please provide the following information:		
Section Number(s) of Policy to be changed	Has the text of the proposed new policy been uploaded to this application as an attachment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Name of new designation	Has a map of the proposed new Schedule been uploaded to the application as an attachment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
List purpose of amendment and land uses that would be permitted by the proposed amendment Extraction, processing and shipping of mineral aggregate (sand and gravel)		
Does the requested amendment alter or any part of the boundary of an area of settlement in a municipality or establish a new area of settlement in a municipality? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Does the requested amendment remove the subject land from any area of employment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Is the requested amendment consistent with the Provincial Policy Statement issued under Section 3(1) of the Planning Act? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		



F. Zoning By-law Amendment		
Proceed to 'Section H. Related Planning Applications' if a Zoning By-Law Amendment is not proposed		
<p>Does the proposed Zoning By-law amendment add or change zoning designation in the Zoning By-Law?</p> <p><input checked="" type="checkbox"/> Yes   <input type="checkbox"/> No   <input type="checkbox"/> Unknown</p>	<p>Does the proposed Zoning By-law amendment change a zoning provision in the Zoning By-Law?</p> <p><input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No   <input type="checkbox"/> Unknown</p>	<p>Does the proposed Zoning By-law amendment replace the zoning provision in the Zoning By-Law?</p> <p><input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No   <input type="checkbox"/> Unknown</p>
<p>Does the proposed Zoning By-law amendment delete a zoning provision in the Zoning By-Law?</p> <p><input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No   <input type="checkbox"/> Unknown</p>	<p>Does the proposed Zoning By-law amendment add a zoning provision in the Zoning By-Law?</p> <p><input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No   <input type="checkbox"/> Unknown</p>	
If applicable and known at the time of Zoning Application, provide the following information:		
<p>Section Number(s) of provision to be changed</p>	<p>Has the text of the proposed new policy been uploaded to this application as an attachment?</p> <p><input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No</p>	
<p>Name of new zone</p>	<p>Has a map of the proposed new Key Map been uploaded to the application as an attachment?</p> <p><input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No</p>	
List land uses proposed by Zoning amendment		
<p>Has there been a previous application for rezoning under Section 34 of the Planning Act affecting the subject property?</p> <p><input checked="" type="checkbox"/> Yes   <input type="checkbox"/> No</p>	<p>Is the application for an amendment to the Zoning By-Law consistent with Provincial Policy Statement issued under Section 3(1) of the Planning Act?</p> <p><input checked="" type="checkbox"/> Yes   <input type="checkbox"/> No</p>	
<p>Is the intent of this application to implement an alteration to the boundary of an area settlement or to implement a new area of settlement?</p> <p><input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No</p>		
<p>Is the intent of this application to remove land from an area of employment?</p> <p><input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No</p>		



<b>G. Sketch Checklist</b>																	
ACCURATE, TO SCALE, DRAWING OR PROPOSAL:																	
⇒ Please attach a drawing of the proposal, preferably prepared by a qualified professional. In some cases, it may be more appropriate to prepare additional drawings at varying scales to better illustrate the proposal.																	
⇒ This application shall be accompanied by a clean, legible sketch sharing the following information. Failure to supply this information will result in a delay in processing the application.																	
A sketch showing in metric units:																	
<input checked="" type="checkbox"/> The boundaries and dimensions of the subject land;	<input checked="" type="checkbox"/> the location, size and type of all existing and proposed buildings and structure on the subject land, indicating their distance from the front lot line, rear lot line and side lot lines;	<input checked="" type="checkbox"/> the current uses of land that is adjacent to the subject land;															
<input checked="" type="checkbox"/> the location, width and name of any roads within or abutting the subject land, indicating whether it is an unopened road allowance, a public traveled road, or a private road or a right-of-way;	<input checked="" type="checkbox"/> if access to the subject land will be by water only, the location of the parking and docking facilities to be used;	<input checked="" type="checkbox"/> the location and nature of any easement affecting the subject land;															
<input checked="" type="checkbox"/> the approximate location of all natural and artificial features that, are located on the subject land and that is adjacent to it, and in the applicant's opinion may affect the application																	
Examples of natural and artificial features: buildings, railways, roads, watercourses, drainage ditches, banks of river or streams, wetlands, wooded areas, wells and septic tanks																	
<b>The drawings should show: (please use a survey if available)</b>																	
<table><tr><td>- property boundaries and dimensions</td></tr><tr><td>- Dimensions of area of amendment</td></tr><tr><td>- Distance from structures to the lines</td></tr><tr><td>- Easements or restrictive covenants</td></tr><tr><td>- Building dimensions and location</td></tr><tr><td>- Neighbouring adjacent land uses</td></tr><tr><td>- Parking and loading areas</td></tr><tr><td>- Use of neighbouring properties</td></tr><tr><td>- Public roads, allowances, right of way</td></tr><tr><td>- Municipal drains/Award drains</td></tr><tr><td>- Wetlands, forested areas, ANSI's, ESA's</td></tr><tr><td>- Driveways and lanes</td></tr><tr><td>- Other features (bridges, wells, railways, septic systems, springs, slopes, gravel pits)</td></tr><tr><td>- Natural watercourses</td></tr><tr><td>- North arrow</td></tr></table>			- property boundaries and dimensions	- Dimensions of area of amendment	- Distance from structures to the lines	- Easements or restrictive covenants	- Building dimensions and location	- Neighbouring adjacent land uses	- Parking and loading areas	- Use of neighbouring properties	- Public roads, allowances, right of way	- Municipal drains/Award drains	- Wetlands, forested areas, ANSI's, ESA's	- Driveways and lanes	- Other features (bridges, wells, railways, septic systems, springs, slopes, gravel pits)	- Natural watercourses	- North arrow
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- North arrow																	



H. Other related planning applications			
Has the applicant or owner made application for any of the following, either on or within 120 meters of the subject land?			
Official Plan Amendment	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Zoning By-Law Amendment	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Minor Variance	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Plan of Subdivision	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Consent (Severance)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Site Plan Control	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
If the answer to the question above is YES, please provide the following information:			
File number of application	Approval authority ACW		
Lands subject to application 37605 Nile Rd	Status of application Submitted concurrently		
Purpose of application To allow for the expansion of a sand and gravel pit (Cunningham Pit)	Effect on the current application for amendment The applications are part of the same Aggregate Resources Act licence application. The properties that are part of the pit expansion are in separate ownership (same family), so separate zoning and official plan amendment applications are being submitted.		
I. Other supporting information			
Please list the titles of any supporting documentation that has been attached to this application. (It is recognized that the applicant meets with planning stuff to attempt to determine the supporting documents that will be required) Summary Report, Hydrogeology Report, Natural Environment Report, Noise Impact Assessment Report, Archaeology Report			
J. Pre-submission consultation			
Applicants are to contact the County to speak/meet with the Planner assigned to the Municipality before submitting an application.			
Date of Applicant's consultation meeting with County Planner 2020-05-07			
Has the Planner Advised the Applicant that this application needs to be reviewed by the County Biologist for comments on Natural Heritage matters?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, please submit a fee of \$220.00 made payable to the Treasurer, County of Huron		
K. Public Consultation Strategy			
Please outline your proposed strategy for consulting with the public with the respect to this amendment request ARA information session held Feb 20th at the Masonic Hall, Goderich; Notification sent to landowners within 120 m			



## Septic comments

Please answer Section A OR Section B, depending on the type of servicing available. In the following questions, "property" means the subject property or, in the case of a severance, each of the resulting lots.

### Section A - Where Sanitary Sewers are available

Is the property within 183 meters (600 feet) of an abattoir (slaughter house)?

☐ Yes ☒ No

### Section B - Where Septic Systems are required

The application is for the creation of a new lot for which the primary use will be a dew dwelling (other than a new dwelling on a farm)

☐ Yes ☐ No

Is the property less than .4 hectares (1 acre) in area?

☐ Yes ☐ No

Does the property have less than .2 hectares (1/2 acre) of "usable land" for a septic tank and tile bed? See definition of "usable land" below

☐ Yes ☐ No

"Usable land" means an area of land suitable original soil for the installation of a Class 4 subsurface sewage disposal system, free of any buildings, structures swimming pools, etc. and such land is or will be used solely for a septic tank and tie bed and any future replacement of the tile bed, and which area is is at least 3 meters (10 feet) from any property line, at least 15 meters (15 feet) from a top-of-bank of a watercourse or lake, not located in a flood plain, not located in an environmentally sensitive area, and does not contain field tile or other artificial drainage. (Other restrictions may apply according to legislation)

I am uncertain of the location of the existing septic tank and tile bed on the property?

☐ Yes ☐ No

Will there be more than one dwelling unit on each lot?

☐ Yes ☐ No

An industrial or commercial use is proposed which will require a septic system?

☐ Yes ☐ No

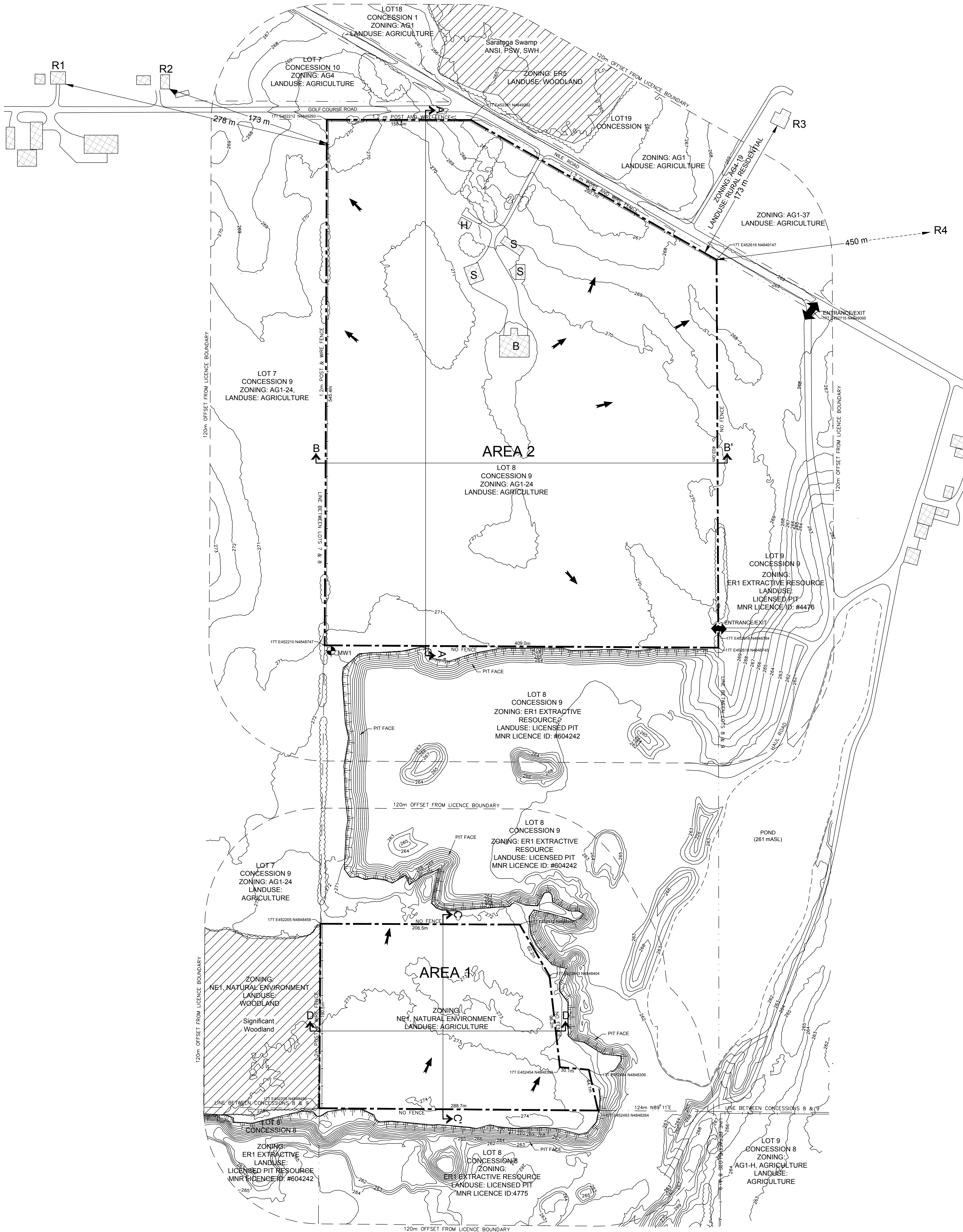
Is the property within 183 meters (600 feet) of an abattoir (slaughter house)?

☐ Yes ☐ No

Is the application for a new Plan Subdivision/Condominium?

☐ Yes ☐ No





EXISTING FEATURES NOTES

GENERAL SITE PLAN INFORMATION

1. This site plan consists of 4 drawings and must be read collectively.
2. All measurements shown on this plan are in metres. Elevations are geodetic, m ASL.
3. This site plan is prepared for submission to the Ministry of Natural Resources and Forestry under the Aggregate Resources Act for a Class 'A' pit above the water table licence.

REFERENCES

4. Existing surface contours and topographic features are derived from 2022 MNRF 1 m resolution digital elevation model (DEM) and photogrammetric mapping utilizing Google Earth 2021 aerial photography.

LICENCE INFORMATION

5. Applicant: Johnston Bros. (Bothwell) Ltd.
6. Total area to be licenced: 25.0 ha (Area 1 = 4.7 ha, Area 2 = 20.3 ha); Total area to be extracted: 20.8 ha; Total area to be rehabilitated: 20.8 ha.
7. Proposed annual tonnage limit is 300,000 tonnes.
8. Zoning information obtained from Township of Ashfield-Colborne-Wawanosh Zoning By-Law 2021 Maps 9 and 14.
9. Adjacent lands are zoned: Extractive Resource (ER1); Agricultural (AG), Natural Environment (NE).
10. The maximum predicted water table is 261.5 mASL to 262.5 mASL (southeast to northwest).
11. The proposed entrance to the site will be through the existing Cunningham pit.
12. There are significant natural heritage features located in the area. The Saratoga Provincially Significant Wetland (PSW) complex is located to the north of the Subject Lands, with a portion within 120 m of the area to be licenced. The Subject Property south of Nile Road borders an adjacent municipally-mapped Significant Woodland that is situated on the lands to the immediate west.
13. There is an existing residence located in area 2 which will be located outside of the proposed area of extraction.
14. There are no other buildings located on the site or adjacent lands.

TECHNICAL REPORTS

15. Natural environment information was obtained from a report by NRSI, revised October 2024.
16. Archaeological information was obtained from report by Lincoln Environmental Consulting, November 2021.
17. Maximum predicted water table information was obtained from the report by Groundwater Science Corp., October 2021.
18. Noise impact assessment information was obtained from a report by Aercooustics Engineering Ltd., October 2023.
19. Stage 1-2 Archaeology Report, TMHC, October 2024.

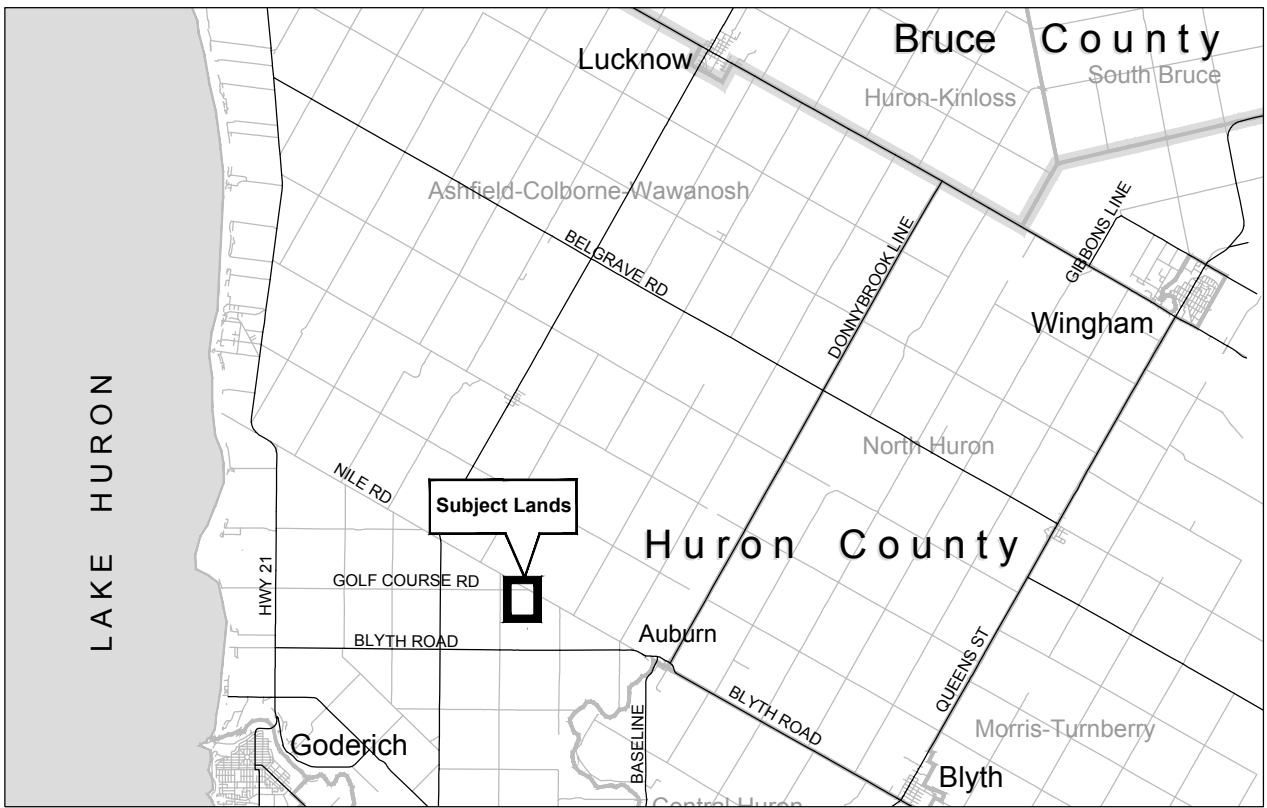
Legal Description

CUNNINGHAM PIT EXPANSION - CARLOW PIT

PART LOT 7, CONCESSION 8 E.D., & PART LOT 8, CONCESSION 9, E.D.  
TOWNSHIP OF ASHFIELD COLBORNE WAWANOSH (GEOGRAPHIC  
TOWNSHIP OF COLBORNE) COUNTY OF HURON

Legend

- Boundary of Area to be Licenced
- Lot Line
- 120m Offset Line from Licensed Boundary
- Existing Contours (m ASL)
- Existing Fence
- Existing Tree Cover
- Existing Pond
- Road
- Buildings: B=Barn, H=House, S=Shed
- Direction of Surface Drainage
- Entrance/Exit
- Monitoring Well
- Cross Section
- Receptor Building
- Existing Pit Face



No.	DATE	DESCRIPTION	APP'D
		AMENDMENTS	

This site plan is prepared for submission to the ministry of natural resources and forestry under the aggregate resources act for a Class 'A' pit above the water table licence.

These site plans have been prepared under the direction of and certified by a person approved by the Minister of Natural Resources and Forestry (as per Section 8(4) of the Aggregate Resources Act.

SIGNATURE:

**Esher Planning Inc.**  
133 Ayton Crescent, Woodbridge ON L4L 7H6

MNRF Approval Stamp



N

Applicant

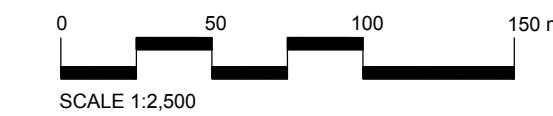
**JOHNSTON BROS. (Bothwell) Ltd.**  
P.O. Box 220, Bothwell ON N0P 1C0

Project

**Cunningham Pit Expansion - CARLOW PIT**

MNRF Licence I.D.

Scale 1:2,500 (Arch D)



Applicant's Signature

Date  
Oct 30, 2024

Checked By M.H. Drawn By A.M.

EXISTING FEATURES

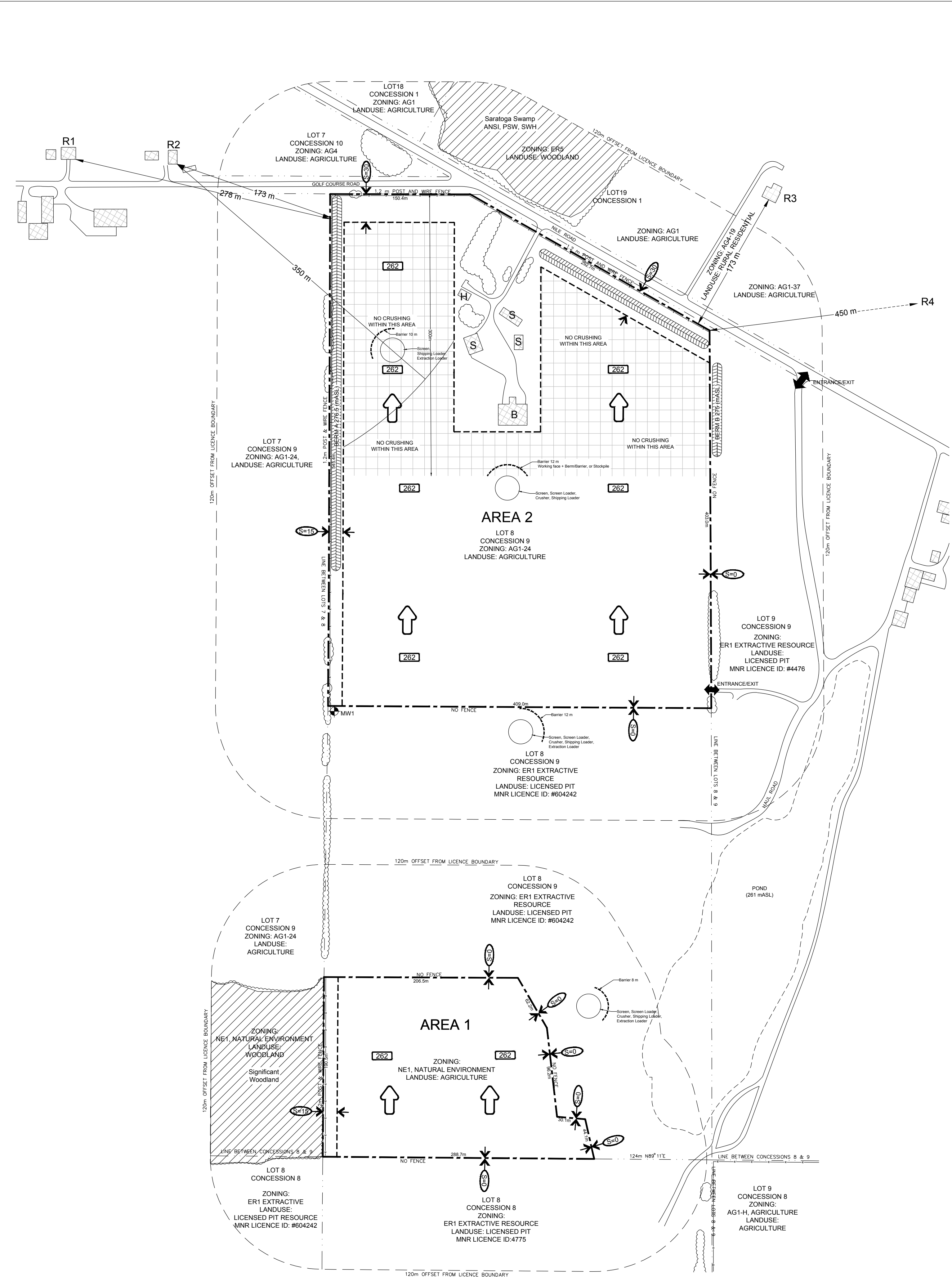
Drawing No.

**1 OF 4**

FILE: H:\JOHNSTON BRO\9638 - Carlow Pit\cad\Carlow Pit WORKING 11.dwg

REV: Oct 30, 2024





OPERATIONS NOTES

GENERAL INFORMATION

- This plan depicts a schematic operations and rehabilitation sequence for this property based on the best information available at the time of preparation. Phases shown are schematic and will be operated according to material quality, site hydrology and hydrogeology or market demand. Phases do not represent any specific or equal time period. Extraction shall follow the sequence shown. When partial rehabilitation of a phase is possible it shall be carried out.
- Site plan variances are listed in the site plan override table shown on this page.
- Total area to be extracted is 20.8 hectares.
- Maximum number of tonnes of aggregate to be removed from the site in any calendar year is 300,000 tonnes.

Extraction of sand and gravel above the water table will take place in one lift with a maximum height of 3 metres, and will comply with OSHA regulations regarding face height. The maximum predicted groundwater table is estimated to be between 261.5 to 262.5 m ASL. Extraction will be a minimum of 1.5 metres above the maximum predicted groundwater table. Front end loaders will be used to extract material and haul trucks will carry material to the processing area in the main pit for further processing. Portable processing equipment for screening may be used on site and will be located near the pit face. Other site activities will include stripping and rehabilitation. Operational equipment may include trucks, loaders, excavator, backhoes, bulldozers, scrapers, conveyors, and other related equipment.

- Equipment, scrap and machinery associated with the extraction operations will be removed upon completion of extraction.
- Surface drainage will be directed to low areas/ponds for water to infiltrate into the granular materials on the pit floor. There will be no off-site ditching/discharge.

HOURS OF OPERATION:

- Site preparation and rehabilitation: 06:00-19:00 weekdays; 07:00 - noon Saturdays  
Excavation and processing: 06:00-19:00 weekdays; 07:00 - noon Saturdays  
Shipping: 07:00-19:00 weekdays; 07:00 - noon Saturdays

ENTRANCE/EXIT

- The expansion areas will utilize the entrance/exit through the existing Cunningham Pit onto Blythe Road located at the south end of pit #4775 and at the north end through pit #4776. The extraction face from the existing pit will be advanced along the limits of the expansion area. There is no fixed entrance to Area 1 and Area 2. The pit face will advance along the common boundary with the existing pit.

FENCING

- Post and wire fencing shall be maintained along the Blythe/Nile Road and the west limits of Area 1 and Area 2 at a minimum height of 1.2 metres. Boundary markers will be placed along the limits of the licence between the expansion areas and the existing pit.

DEWATERING/WASHING

- No dewatering shall take place on the site. No washing of aggregate materials will take place on the site.

DUST CONTROL

- The licensee shall mitigate the amount of dust generated at the site to minimize any off-site impacts. Water or calcium chloride will be applied to internal haul roads and processing areas as often as required to mitigate dust.

MAINTENANCE/ PROTECTION OF VEGETATION INFORMATION

- Existing vegetation within the licenced area shall be maintained in a healthy vigorous growing condition until sequential stripping begins or until the rehabilitation is complete. Any vegetation planted as part of site improvements or progressive and final Rehabilitation will also be maintained in a healthy, vigorous growing condition. There are no tree screens proposed around the perimeter of the site.

BOUNDARY DEMARCATION INFORMATION

- Prior to any stripping or preparation, fencing shall be upgraded/installed as shown on the plan. Unfenced boundaries shall be demarcated with highly visible 1.2m high marker posts at inter-visible intervals.

SETBACKS

- In Area 1, extraction setbacks will be 15 metres from the west boundary and 0 metres along the north, east and south limits in the areas adjacent to the existing pit operation (see variance table). In Area 2 the setbacks shall be 30 metres from Blythe/Nile Road along the north limit, 15 metres along the west property boundary and 0 metres along the east and south boundary, adjacent to the existing pit operations. The 15 metre setback adjacent to the significant woodland will be replanted with a shrub and wildflower mix (see Page 3 for details).

TOPSOIL/SUBSOIL/OVERBURDEN STORAGE INFORMATION

- Topsoil and overburden shall be stripped and stored separately in berms where shown and in the stockpiling area as shown.

BERM INFORMATION

- Berms shall be seeded (using grass/ legume mixture) immediately upon completion to minimize noise, dust and erosion.
- On completion of the berms, excess on-site overburden will be used to progressively backfill and rehabilitate the site. Topsoil can be temporarily stockpiled on the pit floor.

SCRAP STORAGE INFORMATION

- All scrap, used machinery and stumps generated through the operations within this Licence will be stored in the scrap area as shown and removed on an ongoing basis. Trees will be harvested and sold as lumber or utilized for firewood and/or their best use. Upon completion of extraction, all scrap equipment and used machinery shall be removed.

PETROLEUM STORAGE INFORMATION

- There will be no fuel storage or handling on site.

SOURCE WATER PROTECTION

- The licenced area is located within the Maitland Valley Source Water Protection Area. The property is not located within an identified wellhead protection area (WHPA) as set out in an applicable source water protection plan under the Clean Water Act. Aggregate extraction is not identified as a significant drinking water threat according to the Source Protection Plan. Activities such as fuel handling and storage will be located outside of the expansion land areas.

SITE PLAN VARIANCE

THE FOLLOWING CONDITIONS ILLUSTRATED ON THESE PLANS VARY FROM THE PROVINCIAL STANDARDS UNDER THE AGGREGATE RESOURCES ACT.

ITEM	SECTION
Fencing omitted along boundary adjacent to the existing licenced area.	0.13(3)(a)
Setback is reduced to 0m along the east and north boundary of Area 1 and the east and south boundary of Area 2, adjacent to the licenced pits under the same ownership.	0.13(1) (10)i

Legal Description

CUNNINGHAM PIT EXPANSION - CARLOW PIT

PART LOT 7, CONCESSION 8 E.D., & PART LOT 8, CONCESSION 9, E.D. TOWNSHIP OF ASHFIELD COLBORNE WAWANOSH (GEOGRAPHIC TOWNSHIP OF COLBORNE) COUNTY OF HURON

Legend

Boundary of Area to be Licenced

Limit of Extraction

Lot Line

120m Offset Line from Licensed Boundary

Existing Fence

Existing Tree Cover

Existing Pond

Road

Buildings: B=Barn, H=House, S=Shed

Entrance/Exit

Monitoring Well

Cross Section

Receptor Building

Direction of Operations and Progressive Rehabilitation

Berm

Depth of Extraction



No.	DATE	DESCRIPTION	APP'D
AMENDMENTS			

This site plan is prepared for submission to the ministry of natural resources and forestry under the aggregate resources act for a Class 'A' pit above the water table licence.

These site plans have been prepared under the direction of and certified by a person approved by the Minister of Natural Resources and Forestry (as per Section 8(4) of the Aggregate Resources Act.

SIGNATURE: \_\_\_\_\_

**Esher Planning Inc.**  
133 Ayton Crescent, Woodbridge ON L4L 7H6

MNRF Approval Stamp

Applicant  
**JOHNSTON BROS. (Bothwell) Ltd.**  
P.O. Box 220, Bothwell ON N0P 1C0

Project  
**Cunningham Pit Expansion - CARLOW PIT**

MNRF Licence I.D.

Applicant's Signature

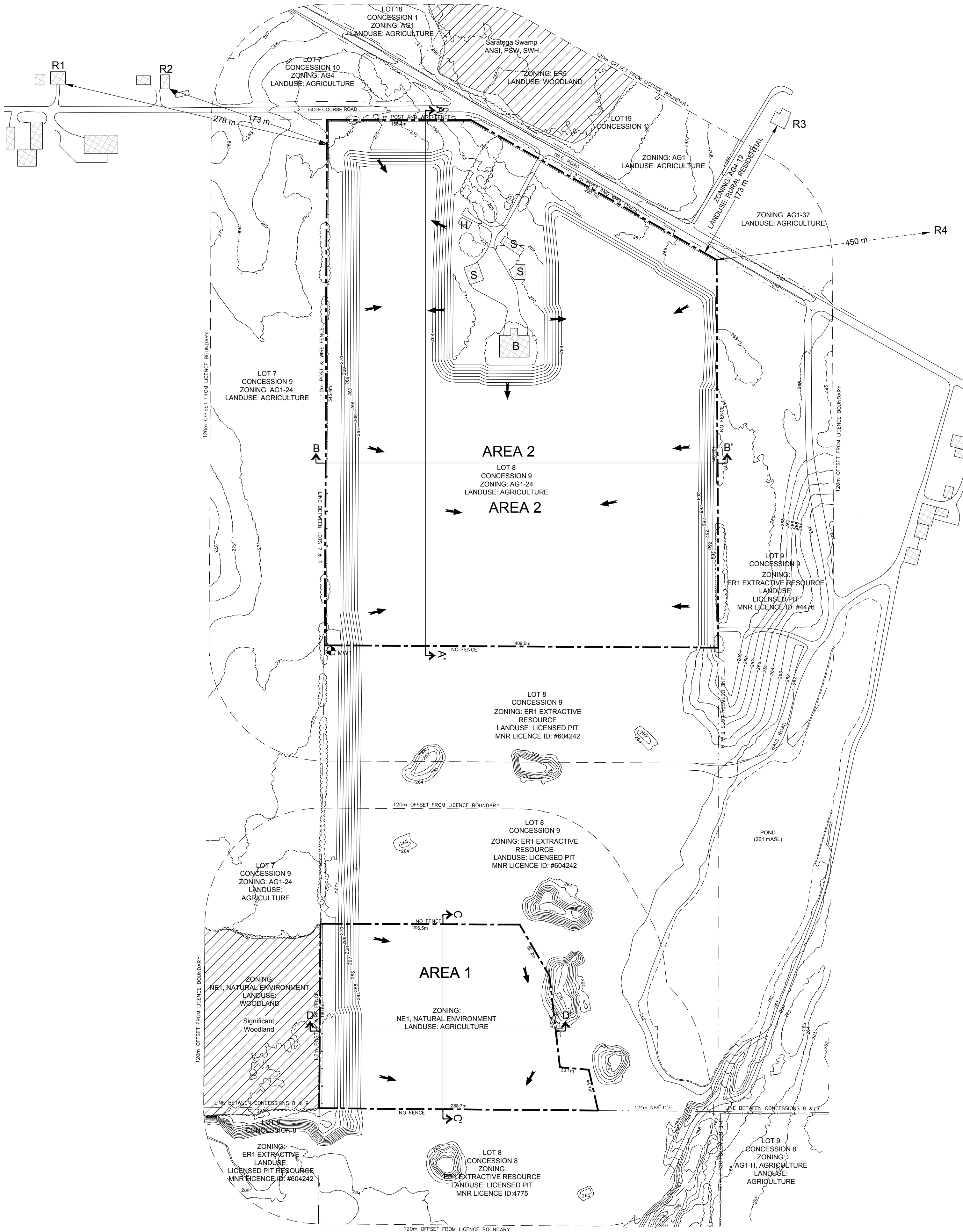
Scale 1:2,500 (Arch D)

Date  
Oct 30, 2024

Checked By  
M.H.

Drawn By  
A.M.





REHABILITATION NOTES

- The extracted area will be rehabilitated to prime agricultural land after use. The total area to be rehabilitated is 20.8 ha. Area 1 = 4.4 ha as Prime Agriculture; Area 2 = 16.4 ha as Prime Agriculture. Rehabilitation outside the area of extraction: 15 m setback in Area 1 = 2.9 ha as Natural Environment.
- All available topsoil and overburden on the site will remain to be used for rehabilitation purposes. Topsoil shall be replaced across the rehabilitated area at a minimum depth of 150 mm.
- Topsoil shall be seeded with available seed sources excluding invasive and non-native species.
- Rehabilitation operations such as stripping and earth moving shall be undertaken when the soil is dry to reduce compaction of soils.
- There is no importation of topsoil or fill proposed.
- During rehabilitation the soils shall be replaced in a manner than approximates the original soil profile so that the same average soil capability will be restored.
- All surface drainage will be directed to the central area of the rehabilitated site, with no off site drainage.
- The sequence and direction of rehabilitation is as follows:
  - Perimeter slopes shall be rehabilitated as the limits of extraction are reached at a minimum slope of 3:1.
  - Deep ripping of fields shall be performed to eliminate compaction (where required).
  - Spreading of available topsoil/overburden and rough grading.
  - Removal of stones larger than 100 mm.
  - The rehabilitated areas shall be seeded with a mixture of grasses and legumes that may include the following at a rate of approximately 125 kg/ha: Buckwheat; red clover; white clover; tall fescue; annual rye, or agricultural crop.
- All vegetation planted during the rehabilitation process will be maintained in a healthy growing condition.
- Progressive rehabilitation of the sideslopes of Area 1 will begin as extraction starts in Area 2. No more than 50 percent of the total licenced area will be disturbed at any time.

RECOMMENDED SEED MIX FOR THE 15 m SETBACK ADJACENT TO THE WOODLOT

Native Seed Mix - Throughout 0.5 kg Applied at 10 kg/ha to area of 0.05 ha.

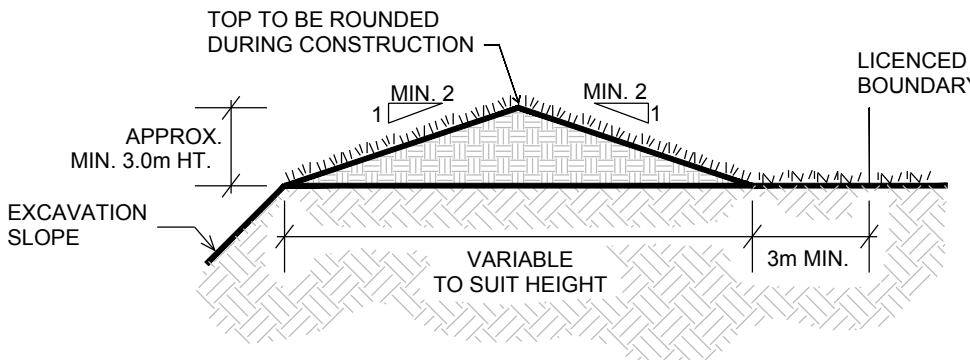
Canada Anemone *Anemone canadensis*  
Common Milkweed *Asclepias syriaca*  
Canada Wild Rye *Elymus canadensis*  
Wild Bergamot *Monarda fistulosa*  
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Common Blackberry *Rubus allegheniensis*  
Blueberry *Vaccinium sect. Cyanococcus*  
Elderberry *Sambucus*  
Riverbank Grape *Vitis riparia*  
Wild Strawberry *Fragaria vesca*

Shrub Species (Stock sizing could be plugs and potted stock 1-3 gallon size).

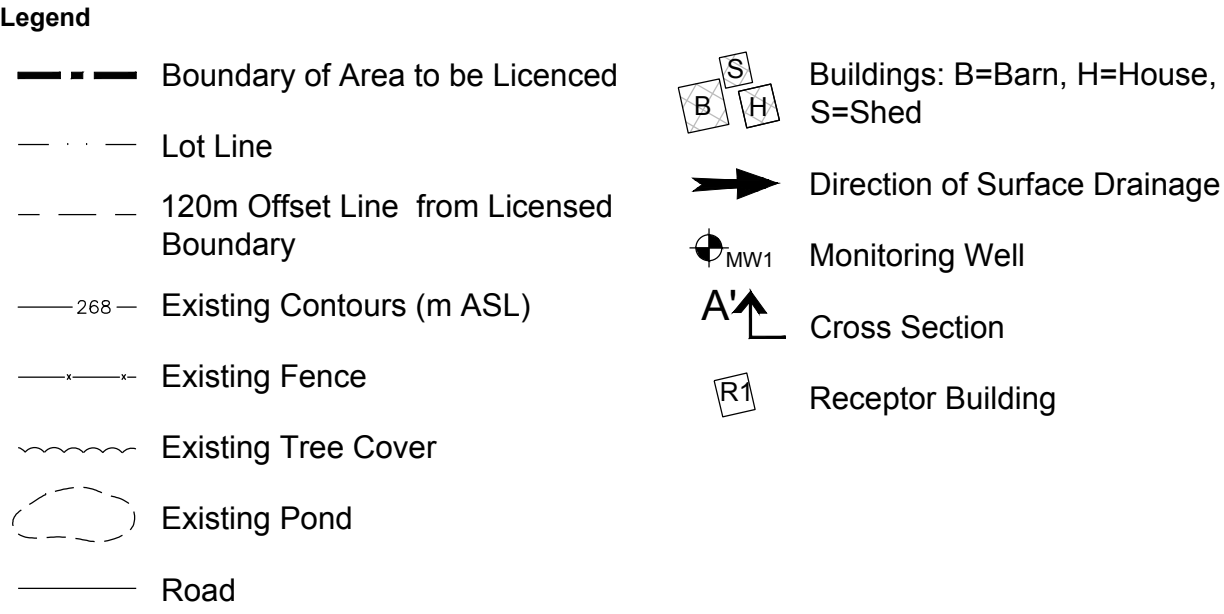
Alternate-leaved Dogwood *Cornus alternifolia*  
Choke Cherry *Prunus virginiana*  
Gray Dogwood *Cornus racemosa*  
Staghorn Sumac *Rhus typhina*  
Red Raspberry *Rubus idaeus*  
Ninebark *Physocarpus opulifolius*

Nurse crop of Annual Ryegrass *Lolium multiflorum*, 25kg/ha.

TYPICAL BERM / STOCKPILE DETAIL



Legal Description  
CUNNINGHAM PIT EXPANSION -  
CARLOW PIT  
PART LOT 7, CONCESSION 8 E.D., & PART LOT 8, CONCESSION 9, E.D.  
TOWNSHIP OF ASHFIELD COLBORNE WAWANOSH (GEOGRAPHIC  
TOWNSHIP OF COLBORNE) COUNTY OF HURON



No.	DATE	DESCRIPTION	APP'D
AMENDMENTS			

This site plan is prepared for submission to the ministry of natural resources and forestry under the aggregate resources act for a Class 'A' pit above the water table licence.  
These site plans have been prepared under the direction of and certified by a person approved by the Minister of Natural Resources and Forestry (as per Section 8(4) of the Aggregate Resources Act.

SIGNATURE: \_\_\_\_\_

**Esher Planning Inc.**  
133 Ayton Crescent, Woodbridge ON L4L 7H6

MNR Approval Stamp

N

Applicant  
**JOHNSTON BROS. (Bothwell) Ltd.**  
P.O. Box 220, Bothwell ON N0P 1C0

Project  
**Cunningham Pit Expansion -  
CARLOW PIT**

MNR Licence I.D. \_\_\_\_\_

Applicant's Signature

Scale 1:2,500 (Arch D)

Date  
Oct 30, 2024

Checked By  
M.H.

Drawn By  
A.M.

REHABILITATION PLAN

Drawing No.  
**3 OF 4**



TECHNICAL RECOMMENDATIONS

ACOUSTIC RECOMMENDATIONS

GENERAL:

- The proposed hours of extraction, processing, and shipping operations shall be limited to the daytime hours only (07:00 to 19:00)
- The extraction, processing, and shipping equipment operating in the quarry is limited to:
  - One Extraction Loader
  - One Shipment Loader
  - One Processing Plant (crushing)
  - One Screen
  - One Screen Loader
  - 15 Highway truck trips/hr (30 passes/hr)
- The aggregate quarry equipment shall satisfy the noise emission levels listed in Table A:

Table A: Reference Sound Pressure Levels of Aggregate Quarry Equipment.

Reference Sound Pressure Level at 30m (dBA)
Processing Plant 83
Shipping Loader 67 <sup>1</sup>
Extraction Loader 70
Screen 71
Screen Loader 70
Highway Truck - 20 km/hr 71.

<sup>1</sup> The shipment loaders were assumed to operate at a 50 % duty cycle.

- The sound emissions of all construction equipment involved in site preparation and rehabilitation activities shall comply with the sound level limits specified in the MECF publication NPC-115 "Construction Equipment".
- New equipment technology or different configurations may allow proposed changes to any portion of the extraction and processing operations including additional equipment to operate on the site, equipment to be substituted, and/or different berm heights, while still meeting the applicable sound level limits. Changes may be permitted to the site operations and noise controls provided that the changes still meet the sound level limits, as confirmed through documentation prepared by a Professional Engineer specializing in noise control.
- An acoustic barrier is required to be solid, with no gaps or openings, and shall satisfy a minimum area density of 20 kg/m<sup>2</sup>. It could take the form of a working Johnston Bros. (Bothwell) Cunningham Pit - NIS Appendices face, stockpile, acoustic fence, ISO containers, a combination of these, or any construction satisfying the requirements of an acoustic barrier.
- The operation shall take place in one lift and shall proceed in the directions indicated on the Operational Plan.
- Prior to crushing in Area 2, an acoustic barrier with a top-of-barrier height of 276.5 meters above sea level (mASL) shall be installed along the west boundary of the property extending 400 m south from the northmost extent of Area 2 as shown on the Operation Plan (Berm A). This barrier shall remain in place for the remainder of the lifetime of the pit.
- Prior to crushing in Area 2 within 300 m of the northmost extent of the Area 2 area, a 100 m long acoustic barrier with a top-of-barrier height of 275 MASL shall be installed along the east boundary of the property between the Processing Plant and R04 as shown on the Operational Plan (Berm B). This barrier shall be maintained for the remainder of the lifetime of the pit.
- AREA 1
  - During crushing in Area 1 or within the lands between Area 1 and Area 2, an acoustic barrier with a minimum height of 8 m shall be maintained at a maximum of 50 m from the Processing Plant between the plant and receptors R04 and R05.
- AREA 2
  - During crushing in Area 2 an acoustic barrier with a minimum height of 12 m shall be maintained between the plant (Processing Plant and Screen) and R01, R02, and R04. This barrier may take the form of a stockpile or may consist of a combination of the working face and a berm, stockpile, or barrier atop the working face. This barrier must be established at a setback of no greater than 50 m from the Processing Plant in the direction of R01, R02, and R04.
  - Crushing is prohibited within 300 m of the northmost extent of Area 2.
  - When the Screen is operating within 300 m of the northmost extent of Area 2, the crusher shall be prohibited from operating within Area 2 simultaneously.
  - When the Screen is operating within Area 2, an acoustic barrier with a maximum setback of 50 m from the Screen shall be established between the Screen and R01 and R02, with the following minimum continuous height:
    - If more than 350 m from R02, the barrier shall have a minimum height of 8 m; or Johnston Bros. (Bothwell) Cunningham Pit - NIS Appendices.
    - If within 350 m of R02, the barrier shall have a minimum height of 10 m. If a dwelling is constructed on the noise sensitive zoned lot VL13.
  - During crushing operations in Area 2, an acoustic barrier with a minimum height of 12 m shall be maintained at a maximum setback of 50 m from the Processing Plant and Screen between that equipment and receptor VL13.
  - During crushing or screening operations in Area 2, an acoustic barrier with a top-of-barrier height of 279 MASL shall be installed along the west boundary of the property extending 200 m south from the northmost extent of Area 2. This barrier shall remain in place for the lifetime of the pit.
  - If a dwelling is constructed on the noise sensitive zoned lot VL14 during crushing operations in Area 1, Area 2, or the lands between these areas, an acoustic barrier with a minimum height of 10 m shall be maintained at maximum 50 m from the Processing Plant between the plant and receptor VL14

HYDROGEOLOGY CONDITIONS

- Prior to extraction within the northern portion of the proposed licence a water table monitor shall be installed at the north edge of the licenced area (along Golf Course Road). Quarterly (spring, summer, fall, winter) water level monitoring shall be undertaken for 2 years to confirm the water table elevation in that area. After the 2 year monitoring period is complete the water level data shall be reviewed, and adjustments made as needed to planned extraction depths/elevations to ensure the extraction remains 1.5 m or more above the water table.
- If extraction is to occur in the immediate area of the private water well servicing the existing farm buildings within the proposed licence, that well shall be decommissioned by a licenced water well contractor prior to extraction in that area.

NATURAL ENVIRONMENT

- All tree and vegetation removals must occur outside of the period (April 1-August 31) to avoid contravention of the MBCA. Trees identified as potential bat habitat trees (cavity trees) must be removed outside the period April 1-September 30 to avoid the migratory bird nesting window as well as to avoid the killing, harming or harassment of bats.
- Designated truck haul routes and areas of equipment storage/staging, and materials stockpiling should not be located within 15 m of the off-site Significant Woodland or its buffer so as to limit potential to indirectly impact the feature.
- ESC measures must be implemented at the south expansion zone, adjacent to the offsite woodland, during site clearing and preparation activities in accordance with an approved ESC Plan to effectively mitigate erosion and sedimentation impacts on the adjacent natural features.
- Any artificial lighting should be turned off at night or directed away from the adjacent natural features.
- No vehicle/machinery refueling should be undertaken within 15 m of the off-site woodland or on areas of the pit floor that are within 1.5 m of the groundwater table.

RECOMMENDATIONS FROM SAUGEEN OJIBWAY NATION (SON)

Species At Risk: Training of Employees/Contractors

The Licencee shall provide training to all employees, contractors and any persons expected to have access to and conduct work at the Project Site. The training shall include the following:

- How to effectively document and report (i.e. photographs) significant wildlife observation and specifically turtle Species At Risk;
- How to move animals to safety should they breach fencing and enter the Project Site;
- How to move vulnerable animals to safety, from roadways within the Project Site and from access roads.

Training shall be implemented in consultation with a qualified environmental consultant. The Proponent's environmental consultant, a local conservation organization and/or SON may be able to assist in connecting the proponent to in-person training options and/or online resources. The Proponent shall ensure this training is completed prior to any construction or improvements to access roads at the Project Site. Training shall continue to be provided to any new employees, contractors or persons accessing and conducting work at the Project Site and shall be completed by new employees, contractors or persons accessing and conducting work at the Project Site prior to them being granted access to the Project Site.

Control of Invasive Species

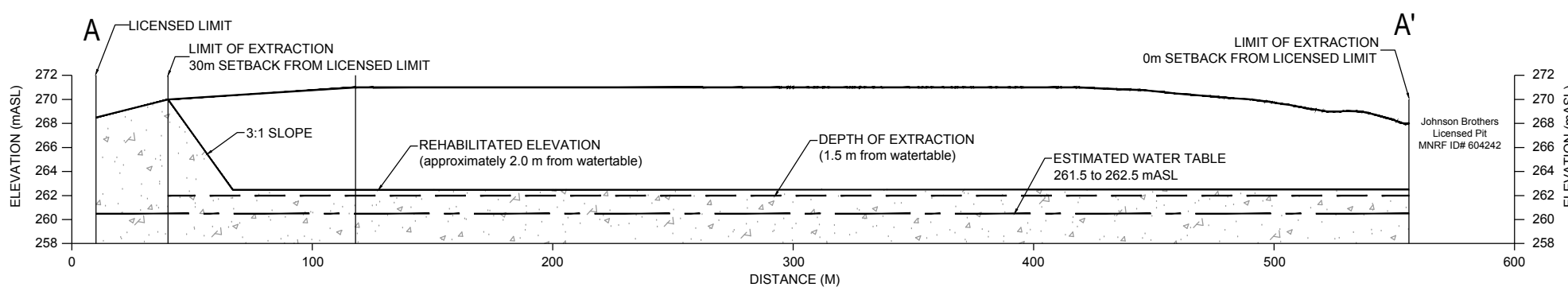
To reduce the spread of invasive plant species, the Licencee shall:

- Prior to any rehabilitation planting, remove any existing Common Buckthorn (Rhamnus cathartica), European Reed (Phragmites australis) and other problematic invasive plants from setback areas to prevent their spread during naturalization;
- Post rehabilitation, monitor and remove any terrestrial invasive plants (i.e. before they establish and become a problem).

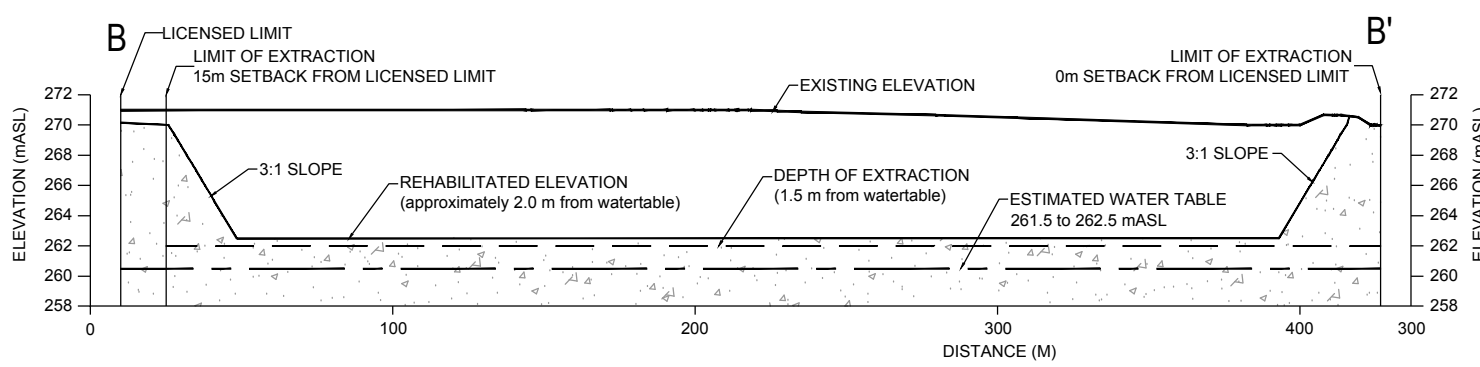
Annual Updates

By the end of each calendar year, the Licencee shall provide the Saugeen Ojibway Nation (SON) with copies of all monitoring reports and updates on the progress of its progressive rehabilitation activities, and shall upon request from SON, provide access to the Project Site to SON representatives for the purpose of monitoring.

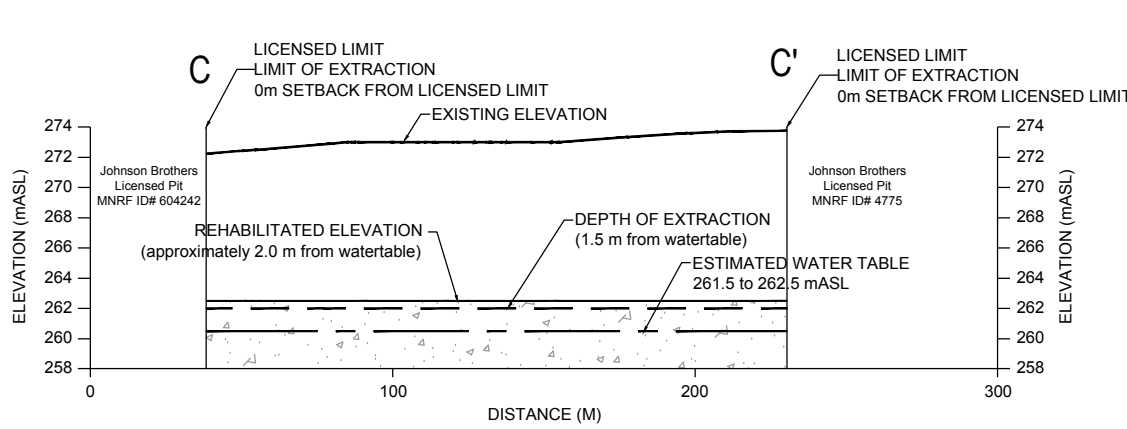
CROSS SECTION A-A'  
HORIZONTAL SCALE: 1:2,500 VERTICAL EXAGGERATION 5x



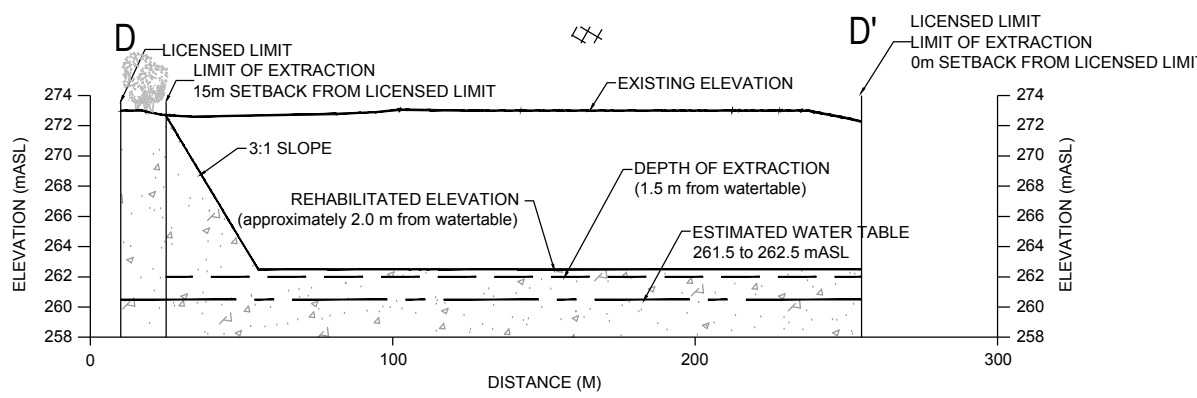
CROSS SECTION B-B'  
HORIZONTAL SCALE: 1:2,500 VERTICAL EXAGGERATION 5x



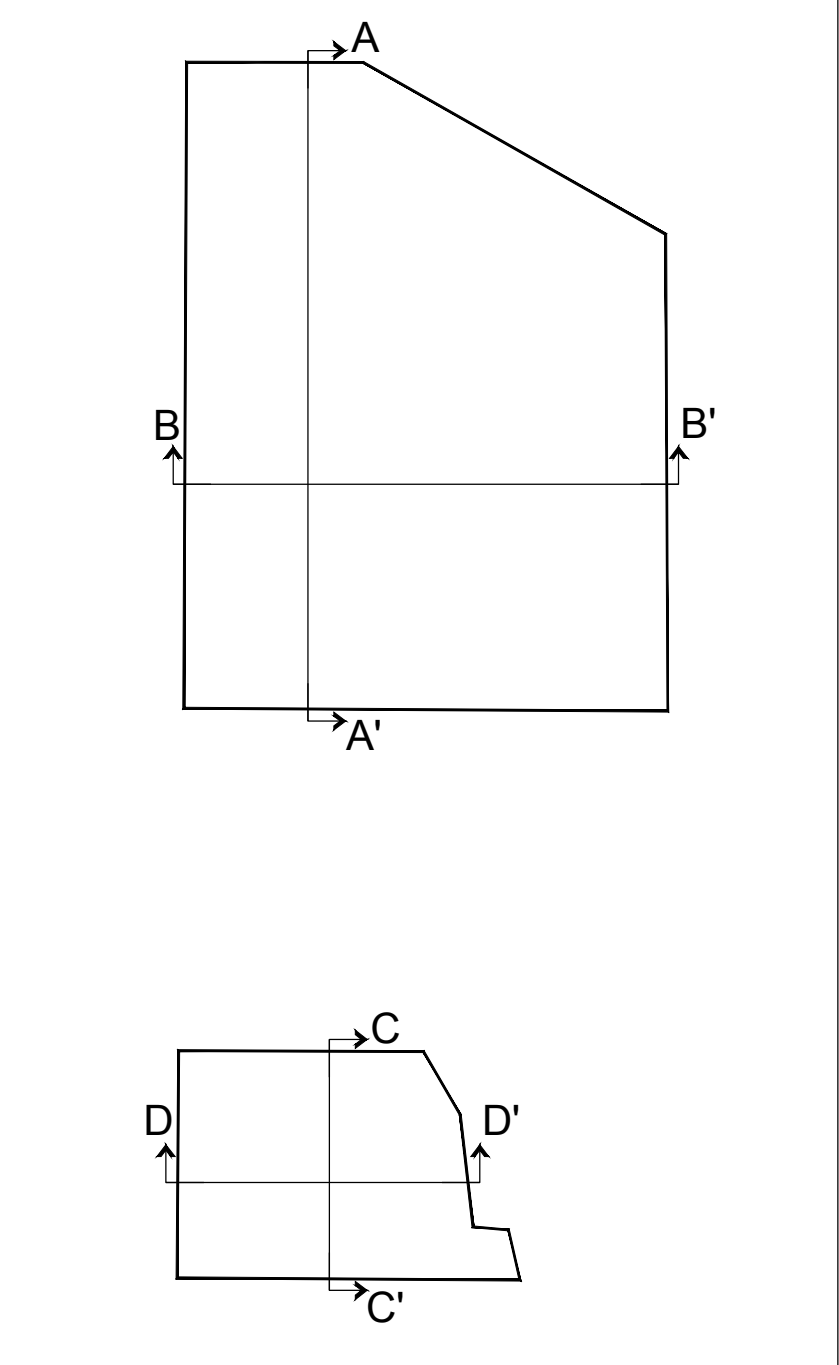
CROSS SECTION C-C'  
HORIZONTAL SCALE: 1:2,500 VERTICAL EXAGGERATION 5x



CROSS SECTION D-D'  
HORIZONTAL SCALE: 1:2,500 VERTICAL EXAGGERATION 5x



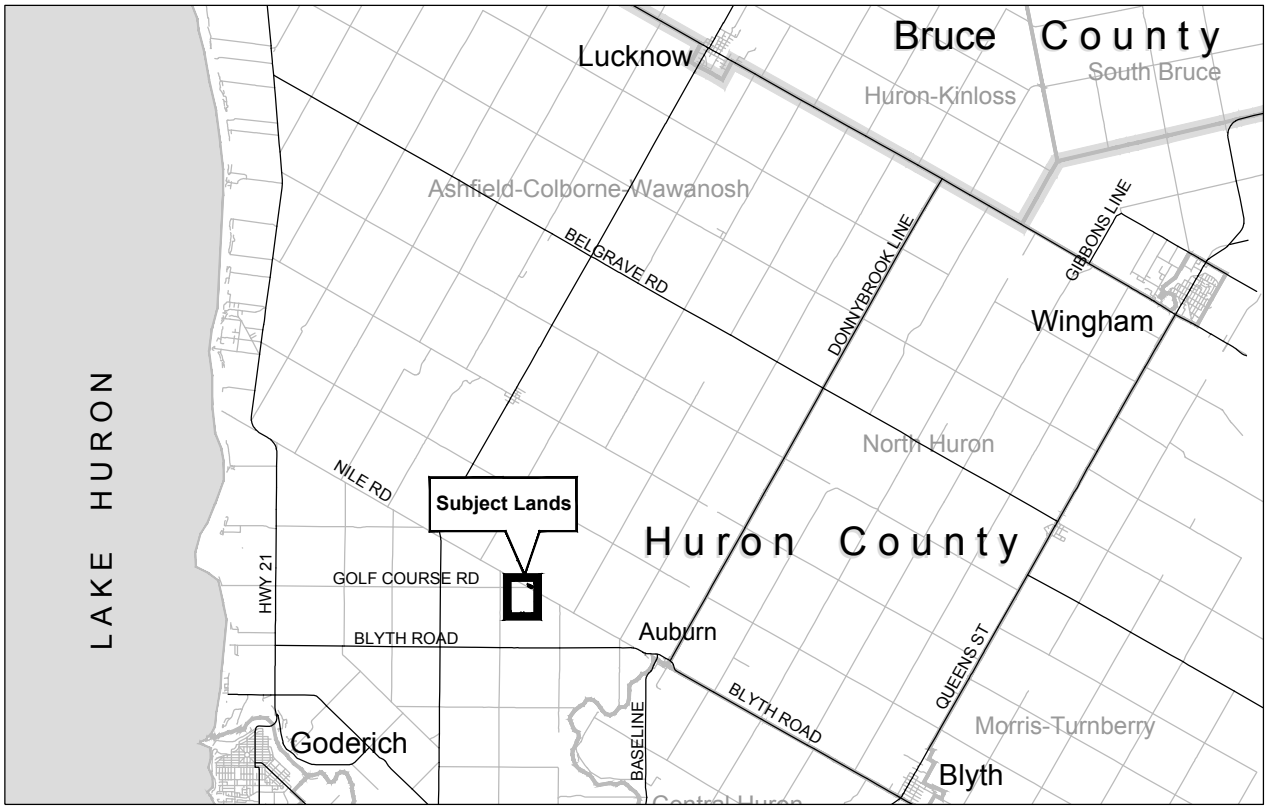
LOCATION OF CROSS-SECTIONS



Legal Description

CUNNINGHAM PIT EXPANSION - CARLOW PIT

PART LOT 7, CONCESSION 8 E.D., & PART LOT 8, CONCESSION 9, E.D. TOWNSHIP OF ASHFIELD COLBORNE WAWANOSH (GEOGRAPHIC TOWNSHIP OF COLBORNE) COUNTY OF HURON



No.	DATE	DESCRIPTION	APP'D
AMENDMENTS			

This site plan is prepared for submission to the ministry of natural resources and forestry under the aggregate resources act for a Class 'A' pit above the water table licence.

These site plans have been prepared under the direction of and certified by a person approved by the Minister of Natural Resources and Forestry (as per Section 8(4) of the Aggregate Resources Act.

SIGNATURE:

Esher Planning Inc.  
133 Ayton Crescent, Woodbridge ON L4L 7H6



Applicant  
**JOHNSTON BROS. (Bothwell) Ltd.**  
P.O. Box 220, Bothwell ON N0P 1C0

Project  
**Cunningham Pit Expansion - CARLOW PIT**

MNRF Licence I.D.	Applicant's Signature 
Scale 1:2,500 (Arch D) 0 50 100 150 m SCALE 1:2,500	Date Oct 30, 2024
Checked By M.H.	Drawn By A.M.

CROSS-SECTIONS and TECHNICAL RECOMMENDATIONS



## GENERAL SITE PLAN INFORMATION

1. This site plan consists of 4 drawings and must be read collectively.
2. All measurements shown on this plan are in metres. Elevations are geodetic, m ASL.
3. This site plan is prepared for submission to the Ministry of Natural Resources and Forestry under the Aggregate Resources Act for a Class 'A' pit above the water table licence.

## REFERENCES

4. Existing surface contours and topographic features are derived from 2022 MNRFP 1 m resolution digital elevation model (DEM) and photogrammetric mapping utilizing Google Earth 2021 aerial photography.
- #### LICENCE INFORMATION
5. Applicant: Johnston Bros. (Bothwell) Ltd.
  6. Total area to be licenced: 25.0 ha (Area 1 = 4.7 ha, Area 2 = 20.3 ha); Total area to be extracted: 20.8 ha; Total area to be rehabilitated: 20.8 ha.
  7. Proposed annual tonnage limit is 300,000 tonnes.
  8. Zoning information obtained from Township of Ashfield-Colborne-Wawanosh Zoning By-Law 2021 Maps 9 and 14.
  9. Adjacent lands are zoned: Extractive Resource (ER1); Agricultural (AG), Natural Environment (NE).
  10. The maximum predicted water table is 261.5 mASL to 262.5 mASL (southeast to northwest).
  11. The proposed entrance to the site will be through the existing Cunningham pit.
  12. There are significant natural heritage features located in the area. The Saratoga Provincially Significant Wetland (PSW) complex is located to the north of the Subject Lands, with a portion within 120 m of the area to be licenced. The Subject Property south of Nile Road borders an adjacent municipally-mapped Significant Woodland that is situated on the lands to the immediate west.
  13. There is an existing residence located in area 2 which will be located outside of the proposed area of extraction.
  14. There are no other buildings located on the site or adjacent lands.
- #### TECHNICAL REPORTS
15. Natural environment information was obtained from a report by NRSI, revised October 2024.
  16. Archaeological information was obtained from report by Lincoln Environmental Consulting, November 2021.
  17. Maximum predicted water table information was obtained from the report by Groundwater Science Corp., October 2021.
  18. Noise impact assessment information was obtained from a report by Aeroustics Engineering Ltd., October 2023.
  19. Stage 1-2 Archaeology Report, TMHC, October 2024.

### Legal Description

## CUNNINGHAM PIT EXPANSION - CARLOW PIT

PART LOT 7, CONCESSION 8 E.D., & PART LOT 8, CONCESSION 9, E.D.  
TOWNSHIP OF ASHFIELD COLBORNE WAWANOSH (GEOGRAPHIC  
TOWNSHIP OF COLBORNE) COUNTY OF HURON



This site plan is prepared for submission to the ministry of natural resources and forestry under the aggregate resources act for a Class 'A' pit above the water table licence.

SIGNATURE: MM

  
**Esher Planning Inc.**  
133 Ayton Crescent, Woodbridge ON L4L 7H6



**JOHNSTON BROS. (Bothwell) Ltd.**  
P.O. Box 220, Bothwell ON N0P 1C0

## Cunningham Pit Expansion - CARLOW PIT

MNRFLicence I.D

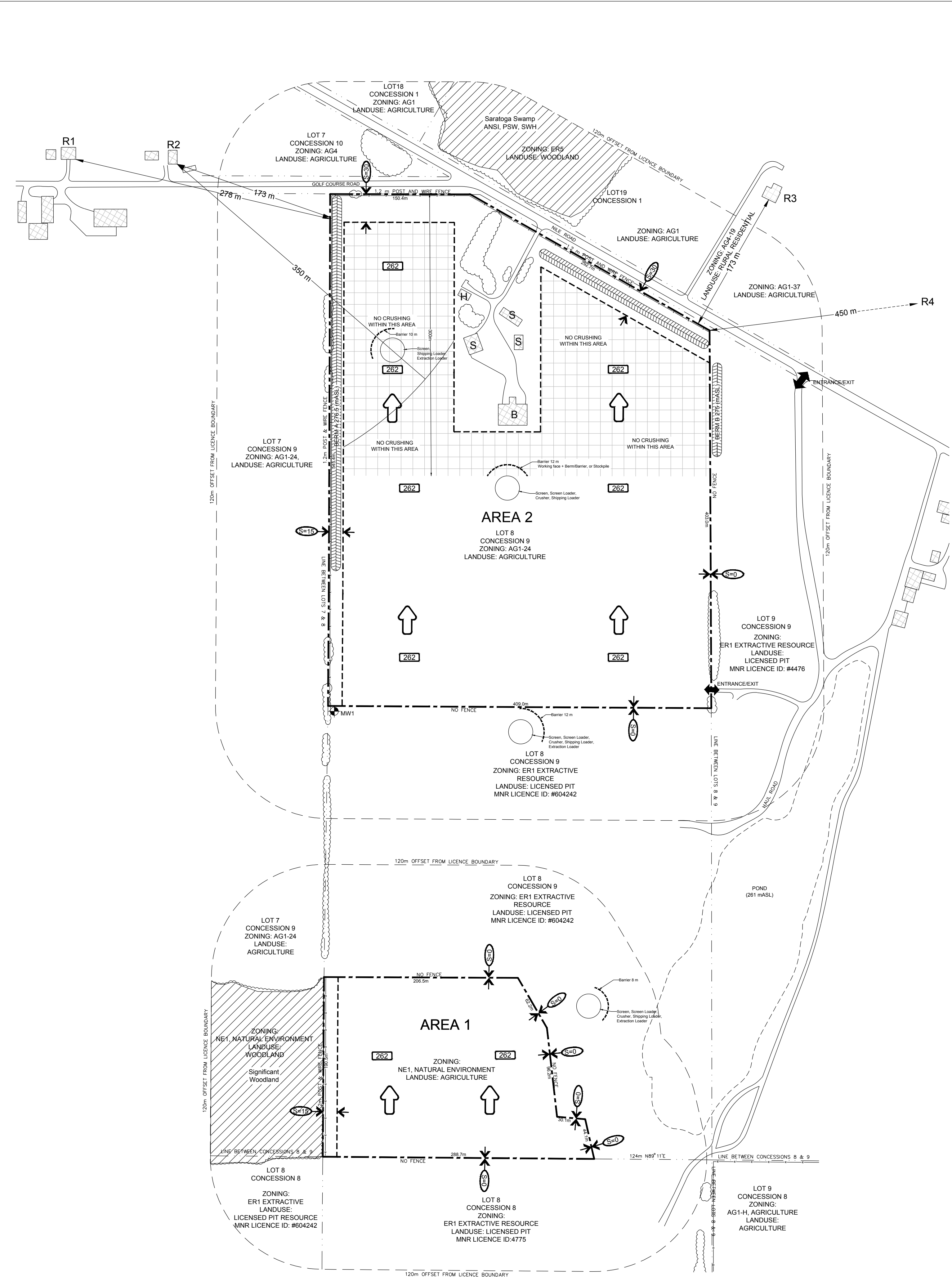
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Checked By	M.H.	Drawn By	A.M.
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## EXISTING FEATURES

FILE: H:\JOHNSTON BRO\9638 - Carlow Pit\cad\Carlow Pit WORKING 11.dwg REV: Oct 30, 2024





OPERATIONS NOTES

GENERAL INFORMATION

- This plan depicts a schematic operations and rehabilitation sequence for this property based on the best information available at the time of preparation. phases shown are schematic and will be operated according to material quality, site hydrology and hydrogeology or market demand. phases do not represent any specific or equal time period. Extraction shall follow the sequence shown. When partial rehabilitation of a phase is possible it shall be carried out.
- Site plan variances are listed in the site plan override table shown on this page.
- Total area to be extracted is 20.8 hectares.
- Maximum number of tonnes of aggregate to be removed from the site in any calendar year is 300,000 tonnes.

Extraction of sand and gravel above the water table will take place in one lift with a maximum height of 3 metres, and will comply with OSHA regulations regarding face height. The maximum predicted groundwater table is estimated to be between 261.5 to 262.5 m ASL. Extraction will be a minimum of 1.5 metres above the maximum predicted groundwater table. Front end loaders will be used to extract material and haul trucks will carry material to the processing area in the main pit for further processing. Portable processing equipment for screening may be used on site and will be located near the pit face. Other site activities will include stripping and rehabilitation. Operational equipment may include trucks, loaders, excavator, backhoes, bulldozers, scrapers, conveyors, and other related equipment.

- Equipment, scrap and machinery associated with the extraction operations will be removed upon completion of extraction.
- Surface drainage will be directed to low areas/ponds for water to infiltrate into the granular materials on the pit floor. There will be no off-site ditching/discharge.

HOURS OF OPERATION:

- Site preparation and rehabilitation: 06:00-19:00 weekdays; 07:00 - noon Saturdays  
Excavation and processing: 06:00-19:00 weekdays; 07:00 - noon Saturdays  
Shipping: 07:00-19:00 weekdays; 07:00 - noon Saturdays

ENTRANCE/EXIT

- The expansion areas will utilize the entrance/exit through the existing Cunningham Pit onto Blythe Road located at the south end of pit #4775 and at the north end through pit #4776. The extraction face from the existing pit will be advanced along the limits of the expansion area. There is no fixed entrance to Area 1 and Area 2. The pit face will advance along the common boundary with the existing pit.

FENCING

- Post and wire fencing shall be maintained along the Blythe/Nile Road and the west limits of Area 1 and Area 2 at a minimum height of 1.2 metres. Boundary markers will be placed along the limits of the licence between the expansion areas and the existing pit.

DEWATERING/WASHING

- No dewatering shall take place on the site. No washing of aggregate materials will take place on the site.

DUST CONTROL

- The licensee shall mitigate the amount of dust generated at the site to minimize any off-site impacts. Water or calcium chloride will be applied to internal haul roads and processing areas as Often as required to mitigate dust.

MAINTENANCE/ PROTECTION OF VEGETATION INFORMATION

- Existing vegetation within the licenced area shall be maintained in a healthy vigorous growing condition until sequential stripping begins or until the rehabilitation is complete. Any vegetation planted as part of site improvements or progressive and final Rehabilitation will also be maintained in a healthy, vigorous growing condition. There are no tree screens proposed around the perimeter of the site.

BOUNDARY DEMARCATION INFORMATION

- Prior to any stripping or preparation, fencing shall be upgraded/installed as shown on the plan. Unfenced boundaries shall be demarcated with highly visible 1.2m high marker posts at inter-visible intervals.

SETBACKS

- In Area 1, extraction setbacks will be 15 metres from the west boundary and 0 metres along the north, east and south limits in the areas adjacent to the existing pit operation (see variance table). In Area 2 the setbacks shall be 30 metres from Blythe/Nile Road along the north limit, 15 metres along the west property boundary and 0 metres along the east and south boundary, adjacent to the existing pit operations. The 15 metre setback adjacent to the significant woodland will be replanted with a shrub and wildflower mix (see Page 3 for details).

TOPSOIL/SUBSOIL/OVERBURDEN STORAGE INFORMATION

- Topsoil and overburden shall be stripped and stored separately in berms where shown and in the stockpiling area as shown.

BERM INFORMATION

- Berms shall be seeded (using grass/ legume mixture) immediately upon completion to minimize noise, dust and erosion.
- On completion of the berms, excess on-site overburden will be used to progressively backfill and rehabilitate the site. Topsoil can be temporarily stockpiled on the pit floor.

SCRAP STORAGE INFORMATION

- All scrap, used machinery and stumps generated through the operations within this Licence will be stored in the scrap area as shown and removed on an ongoing basis. Trees will be harvested and sold as lumber or utilized for firewood and/or their best use. Upon completion of extraction, all scrap equipment and used machinery shall be removed.

PETROLEUM STORAGE INFORMATION

- There will be no fuel storage or handling on site.

SOURCE WATER PROTECTION

- The licenced area is located within the Maitland Valley Source Water Protection Area. The property is not located within an identified wellhead protection area (WHPA) as set out in an applicable source water protection plan under the Clean Water Act. Aggregate extraction is not identified as a significant drinking water threat according to the Source Protection Plan. Activities such as fuel handling and storage will be located outside of the expansion land areas.

SITE PLAN VARIANCE

THE FOLLOWING CONDITIONS ILLUSTRATED ON THESE PLANS VARY FROM THE PROVINCIAL STANDARDS UNDER THE AGGREGATE RESOURCES ACT.

ITEM	SECTION
Fencing omitted along boundary adjacent to the existing licenced area.	0.13(3)(a)
Setback is reduced to 0m along the east and north boundary of Area 1 and the east and south boundary of Area 2, adjacent to the licenced pits under the same ownership.	0.13(1) (10)i

Legal Description

CUNNINGHAM PIT EXPANSION - CARLOW PIT

PART LOT 7, CONCESSION 8 E.D., & PART LOT 8, CONCESSION 9, E.D. TOWNSHIP OF ASHFIELD COLBORNE WAWANOSH (GEOGRAPHIC TOWNSHIP OF COLBORNE) COUNTY OF HURON

Legend

Boundary of Area to be Licenced

Limit of Extraction

Lot Line

120m Offset Line from Licensed Boundary

Existing Fence

Existing Tree Cover

Existing Pond

Road

Buildings: B=Barn, H=House, S=Shed

Entrance/Exit

Monitoring Well

Cross Section

Receptor Building

Direction of Operations and Progressive Rehabilitation

Berm

Depth of Extraction

No.	DATE	DESCRIPTION	APP'D
AMENDMENTS			

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SIGNATURE: \_\_\_\_\_

**Esher Planning Inc.**  
133 Ayton Crescent, Woodbridge ON L4L 7H6

MNRF Approval Stamp

Applicant  
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P.O. Box 220, Bothwell ON N0P 1C0

Project  
**Cunningham Pit Expansion - CARLOW PIT**

MNRF Licence I.D.

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Scale 1:2,500 (Arch D)

SCALE 1:2,500

Date  
Oct 30, 2024

Checked By  
M.H.

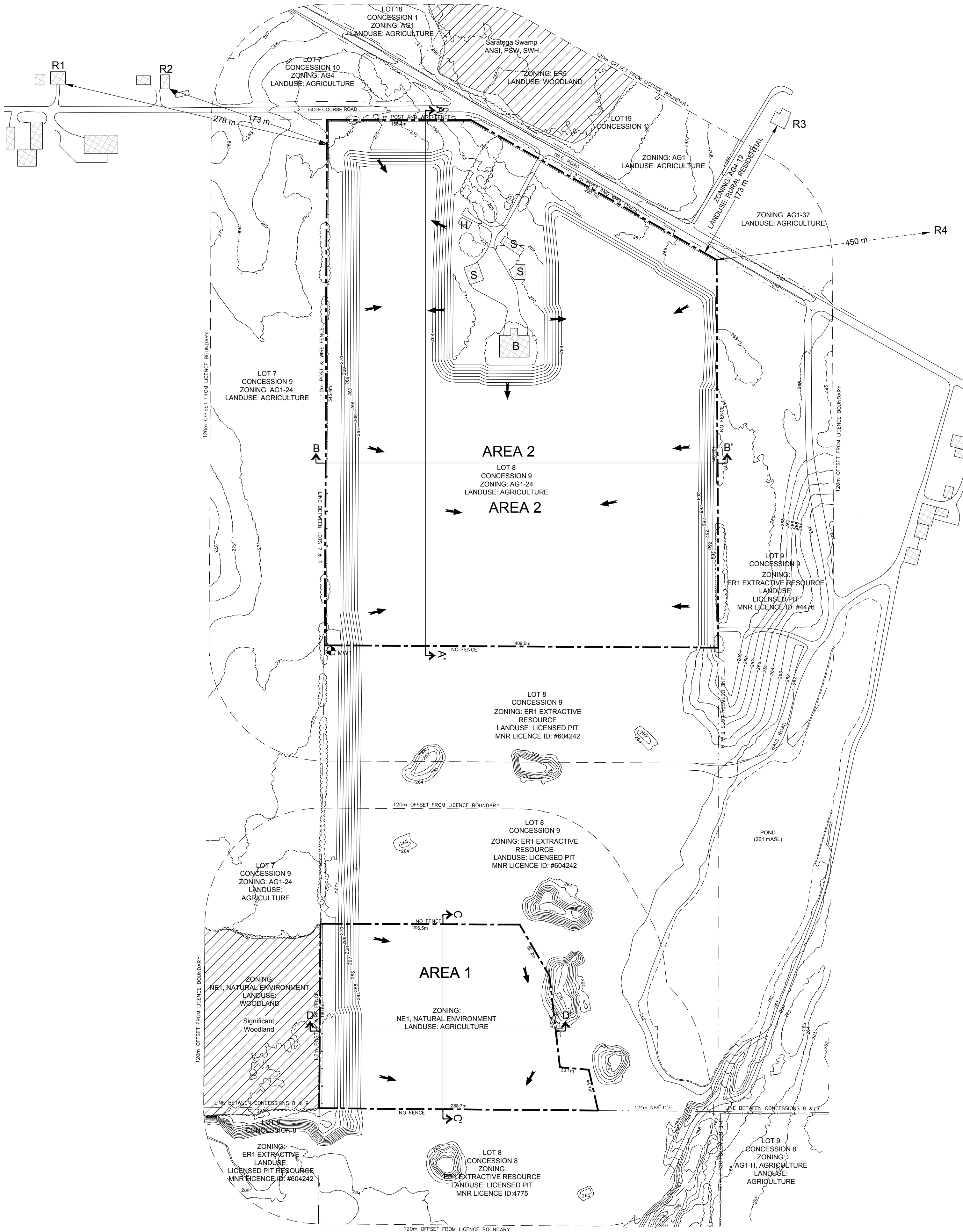
Drawn By  
A.M.

OPERATIONAL PLAN

Drawing No.  
**2 OF 4**

FILE: H:\JOHNSTON BRO\9638 - Carlow Pit\cad\Carlow Pit WORKING 11.dwg REV: Oct 30, 2024





REHABILITATION NOTES

- The extracted area will be rehabilitated to prime agricultural land after use. The total area to be rehabilitated is 20.8 ha. Area 1 = 4.4 ha as Prime Agriculture; Area 2 = 16.4 ha as Prime Agriculture. Rehabilitation outside the area of extraction: 15 m setback in Area 1 = 2.9 ha as Natural Environment.
- All available topsoil and overburden on the site will remain to be used for rehabilitation purposes. Topsoil shall be replaced across the rehabilitated area at a minimum depth of 150 mm.
- Topsoil shall be seeded with available seed sources excluding invasive and non-native species.
- Rehabilitation operations such as stripping and earth moving shall be undertaken when the soil is dry to reduce compaction of soils.
- There is no importation of topsoil or fill proposed.
- During rehabilitation the soils shall be replaced in a manner than approximates the original soil profile so that the same average soil capability will be restored.
- All surface drainage will be directed to the central area of the rehabilitated site, with no off site drainage.
- The sequence and direction of rehabilitation is as follows:
  - Perimeter slopes shall be rehabilitated as the limits of extraction are reached at a minimum slope of 3:1.
  - Deep ripping of fields shall be performed to eliminate compaction (where required).
  - Spreading of available topsoil/overburden and rough grading.
  - Removal of stones larger than 100 mm.
  - The rehabilitated areas shall be seeded with a mixture of grasses and legumes that may include the following at a rate of approximately 125 kg/ha: Buckwheat; red clover; white clover; tall fescue; annual rye, or agricultural crop.
- All vegetation planted during the rehabilitation process will be maintained in a healthy growing condition.
- Progressive rehabilitation of the sideslopes of Area 1 will begin as extraction starts in Area 2. No more than 50 percent of the total licenced area will be disturbed at any time.

RECOMMENDED SEED MIX FOR THE 15 m SETBACK ADJACENT TO THE WOODLOT

Native Seed Mix - Throughout 0.5 kg Applied at 10 kg/ha to area of 0.05 ha.

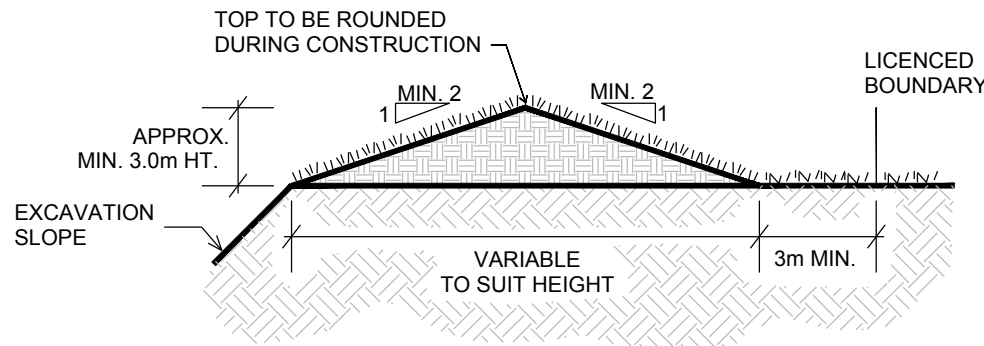
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Red Raspberry *Rubus idaeus*  
Ninebark *Physocarpus opulifolius*

Nurse crop of Annual Ryegrass *Lolium multiflorum*, 25kg/ha.

TYPICAL BERM / STOCKPILE DETAIL



Legal Description

CUNNINGHAM PIT EXPANSION - CARLOW PIT

PART LOT 7, CONCESSION 8 E.D., & PART LOT 8, CONCESSION 9, E.D. TOWNSHIP OF ASHFIELD COLBORNE WAWANOSH (GEOGRAPHIC TOWNSHIP OF COLBORNE) COUNTY OF HURON

Legend

- Boundary of Area to be Licenced
- Lot Line
- 120m Offset Line from Licenced Boundary
- Existing Contours (m ASL)
- Existing Fence
- Existing Tree Cover
- Existing Pond
- Road
- Buildings: B=Barn, H=House, S=Shed
- Direction of Surface Drainage
- Monitoring Well
- Cross Section
- Receptor Building



No.	DATE	DESCRIPTION	APP'D
		AMENDMENTS	

This site plan is prepared for submission to the ministry of natural resources and forestry under the aggregate resources act for a Class 'A' pit above the water table licence.

These site plans have been prepared under the direction of and certified by a person approved by the Minister of Natural Resources and Forestry (as per Section 8(4) of the Aggregate Resources Act.

SIGNATURE: \_\_\_\_\_

**Esher Planning Inc.**  
133 Ayton Crescent, Woodbridge ON L4L 7H6

MNRF Approval Stamp



N

Applicant

**JOHNSTON BROS. (Bothwell) Ltd.**  
P.O. Box 220, Bothwell ON N0P 1C0

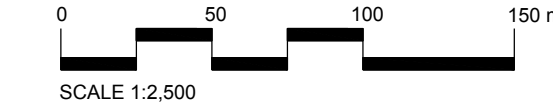
Project

**Cunningham Pit Expansion - CARLOW PIT**

MNRF Licence I.D.

Applicant's Signature

Scale 1:2,500 (Arch D)



Date  
Oct 30, 2024

Checked By M.H. Drawn By A.M.

REHABILITATION PLAN

Drawing No.

**3 OF 4**

FILE: H:\JOHNSTON BRO\9638 - Carlow Pit\carlow Carlow Pit WORKING 11.dwg

REV: Oct 30, 2024



TECHNICAL RECOMMENDATIONS

ACOUSTIC RECOMMENDATIONS

GENERAL:

- The proposed hours of extraction, processing, and shipping operations shall be limited to the daytime hours only (07:00 to 19:00)
- The extraction, processing, and shipping equipment operating in the quarry is limited to:
  - One Extraction Loader
  - One Shipment Loader
  - One Processing Plant (crushing)
  - One Screen
  - One Screen Loader
  - 15 Highway truck trips/hr (30 passes/hr)
- The aggregate quarry equipment shall satisfy the noise emission levels listed in Table A:

Table A: Reference Sound Pressure Levels of Aggregate Quarry Equipment.

Reference Sound Pressure Level at 30m (dBA)
Processing Plant 83
Shipping Loader 67 <sup>1</sup>
Extraction Loader 70
Screen 71
Screen Loader 70
Highway Truck - 20 km/hr 71.

<sup>1</sup> The shipment loaders were assumed to operate at a 50 % duty cycle.

- The sound emissions of all construction equipment involved in site preparation and rehabilitation activities shall comply with the sound level limits specified in the MECF publication NPC-115 "Construction Equipment".
- New equipment technology or different configurations may allow proposed changes to any portion of the extraction and processing operations including additional equipment to operate on the site, equipment to be substituted, and/or different berm heights, while still meeting the applicable sound level limits. Changes may be permitted to the site operations and noise controls provided that the changes still meet the sound level limits, as confirmed through documentation prepared by a Professional Engineer specializing in noise control.
- An acoustic barrier is required to be solid, with no gaps or openings, and shall satisfy a minimum area density of 20 kg/m<sup>2</sup>. It could take the form of a working Johnston Bros. (Bothwell) Cunningham Pit - NIS Appendices face, stockpile, acoustic fence, ISO containers, a combination of these, or any construction satisfying the requirements of an acoustic barrier.
- The operation shall take place in one lift and shall proceed in the directions indicated on the Operational Plan.
- Prior to crushing in Area 2, an acoustic barrier with a top-of-barrier height of 276.5 meters above sea level (mASL) shall be installed along the west boundary of the property extending 400 m south from the northmost extent of Area 2 as shown on the Operation Plan (Berm A). This barrier shall remain in place for the remainder of the lifetime of the pit.
- Prior to crushing in Area 2 within 300 m of the northmost extent of the Area 2 area, a 100 m long acoustic barrier with a top-of-barrier height of 275 MASL shall be installed along the east boundary of the property between the Processing Plant and R04 as shown on the Operational Plan (Berm B). This barrier shall be maintained for the remainder of the lifetime of the pit.

AREA 1

- During crushing in Area 1 or within the lands between Area 1 and Area 2, an acoustic barrier with a minimum height of 8 m shall be maintained at a maximum of 50 m from the Processing Plant between the plant and receptors R04 and R05.

AREA 2

- During crushing in Area 2 an acoustic barrier with a minimum height of 12 m shall be maintained between the plant (Processing Plant and Screen) and R01, R02, and R04. This barrier may take the form of a stockpile or may consist of a combination of the working face and a berm, stockpile, or barrier atop the working face. This barrier must be established at a setback of no greater than 50 m from the Processing Plant in the direction of R01, R02, and R04.
- Crushing is prohibited within 300 m of the northmost extent of Area 2.
- When the Screen is operating within 300 m of the northmost extent of Area 2, the crusher shall be prohibited from operating within Area 2 simultaneously.
- When the Screen is operating within Area 2, an acoustic barrier with a maximum setback of 50 m from the Screen shall be established between the Screen and R01 and R02, with the following minimum continuous height:
  - If more than 350 m from R02, the barrier shall have a minimum height of 8 m; or Johnston Bros. (Bothwell) Cunningham Pit - NIS Appendices.
  - If within 350 m of R02, the barrier shall have a minimum height of 10 m. If a dwelling is constructed on the noise sensitive zoned lot VL13.
- During crushing operations in Area 2, an acoustic barrier with a minimum height of 12 m shall be maintained at a maximum setback of 50 m from the Processing Plant and Screen between that equipment and receptor VL13.
- During crushing or screening operations in Area 2, an acoustic barrier with a top-of-barrier height of 279 MASL shall be installed along the west boundary of the property extending 200 m south from the northmost extent of Area 2. This barrier shall remain in place for the lifetime of the pit.
- If a dwelling is constructed on the noise sensitive zoned lot VL14 during crushing operations in Area 1, Area 2, or the lands between these areas, an acoustic barrier with a minimum height of 10 m shall be maintained at maximum 50 m from the Processing Plant between the plant and receptor VL14

HYDROGEOLOGY CONDITIONS

- Prior to extraction within the northern portion of the proposed licence a water table monitor shall be installed at the north edge of the licenced area (along Golf Course Road). Quarterly (spring, summer, fall, winter) water level monitoring shall be undertaken for 2 years to confirm the water table elevation in that area. After the 2 year monitoring period is complete the water level data shall be reviewed, and adjustments made as needed to planned extraction depths/elevations to ensure the extraction remains 1.5 m or more above the water table.
- If extraction is to occur in the immediate area of the private water well servicing the existing farm buildings within the proposed licence, that well shall be decommissioned by a licenced water well contractor prior to extraction in that area.

NATURAL ENVIRONMENT

- All tree and vegetation removals must occur outside of the period (April 1-August 31) to avoid contravention of the MBCA. Trees identified as potential bat habitat trees (cavity trees) must be removed outside the period April 1-September 30 to avoid the migratory bird nesting window as well as to avoid the killing, harming or harassment of bats.
- Designated truck haul routes and areas of equipment storage/staging, and materials stockpiling should not be located within 15 m of the off-site Significant Woodland or its buffer so as to limit potential to indirectly impact the feature.
- ESC measures must be implemented at the south expansion zone, adjacent to the offsite woodland, during site clearing and preparation activities in accordance with an approved ESC Plan to effectively mitigate erosion and sedimentation impacts on the adjacent natural features.
- Any artificial lighting should be turned off at night or directed away from the adjacent natural features.
- No vehicle/machinery refueling should be undertaken within 15 m of the off-site woodland or on areas of the pit floor that are within 1.5 m of the groundwater table.

RECOMMENDATIONS FROM SAUGEEN OJIBWAY NATION (SON)

Species At Risk: Training of Employees/Contractors

The Licencee shall provide training to all employees, contractors and any persons expected to have access to and conduct work at the Project Site. The training shall include the following:

- How to effectively document and report (i.e. photographs) significant wildlife observation and specifically turtle Species At Risk;
- How to move animals to safety should they breach fencing and enter the Project Site;
- How to move vulnerable animals to safety, from roadways within the Project Site and from access roads.

Training shall be implemented in consultation with a qualified environmental consultant. The Proponent's environmental consultant, a local conservation organization and/or SON may be able to assist in connecting the proponent to in-person training options and/or online resources. The Proponent shall ensure this training is completed prior to any construction or improvements to access roads at the Project Site. Training shall continue to be provided to any new employees, contractors or persons accessing and conducting work at the Project Site and shall be completed by new employees, contractors or persons accessing and conducting work at the Project Site prior to them being granted access to the Project Site.

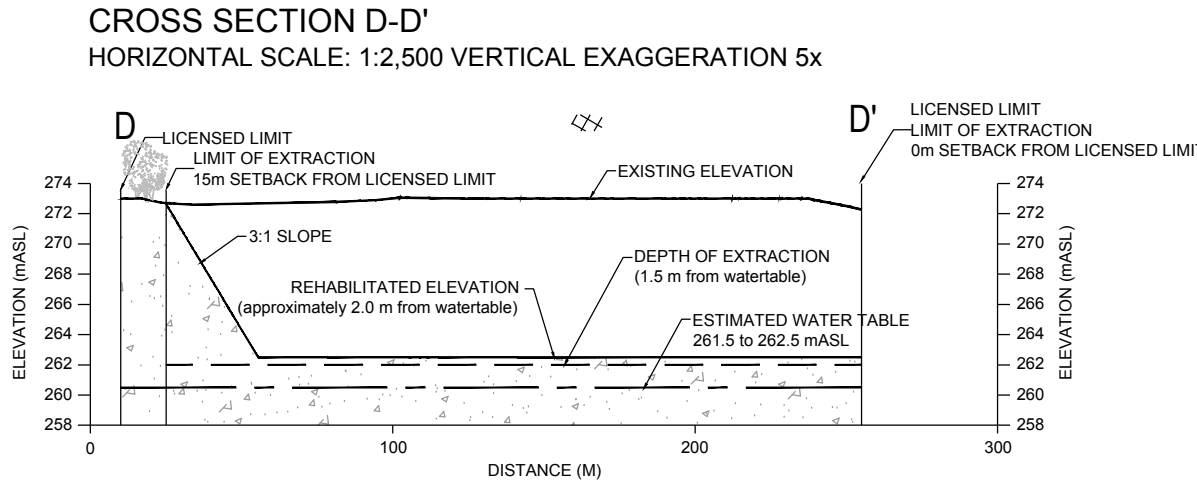
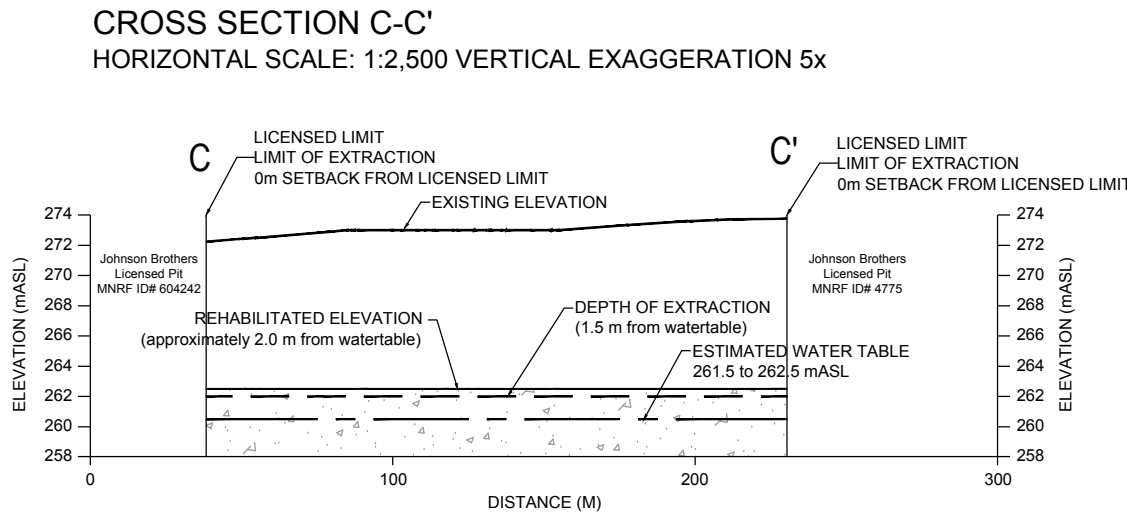
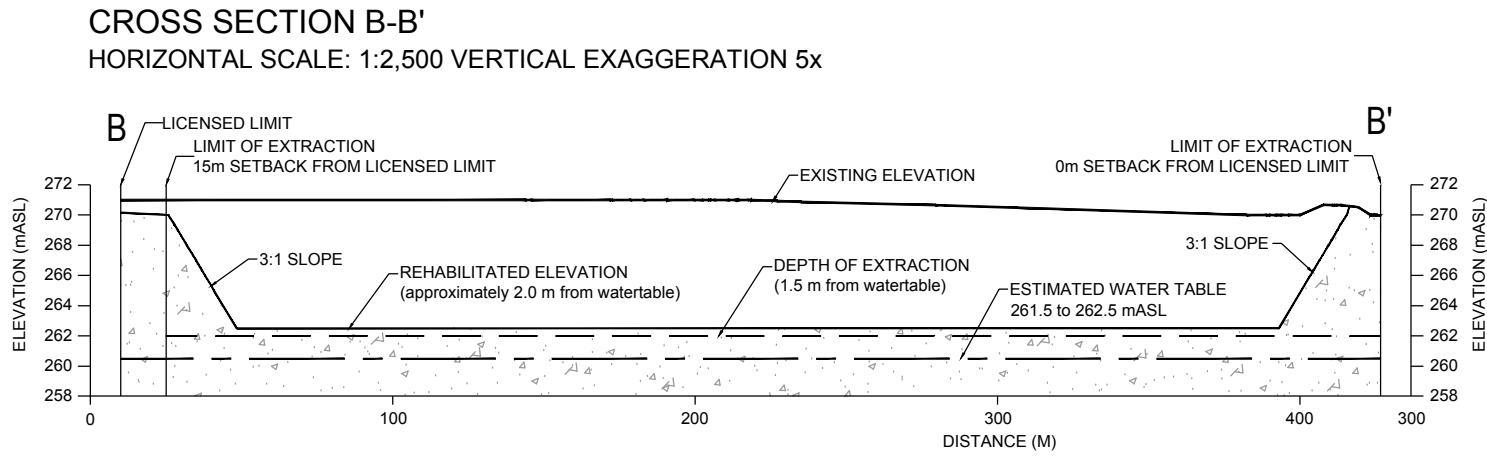
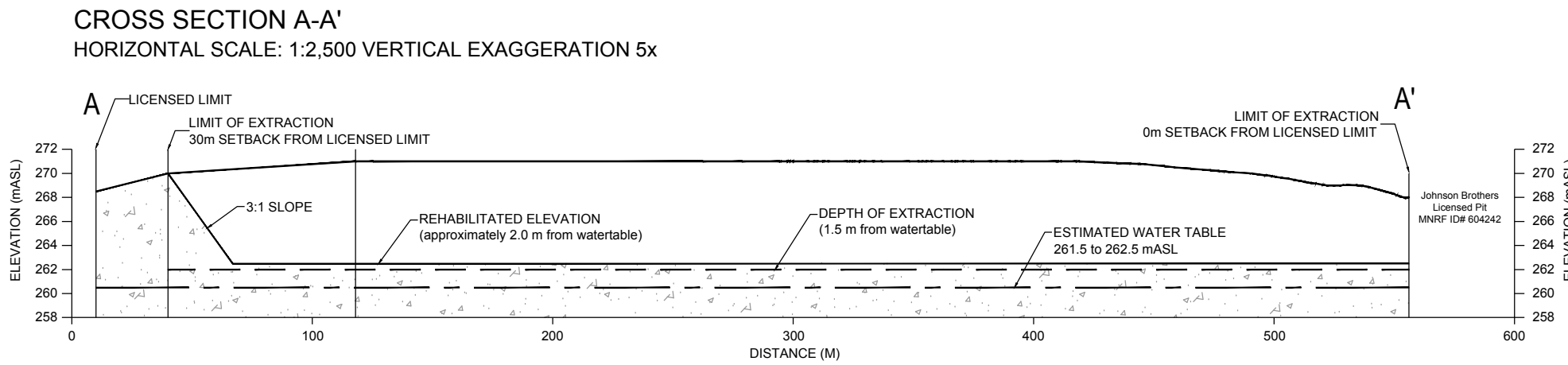
Control of Invasive Species

To reduce the spread of invasive plant species, the Licencee shall:

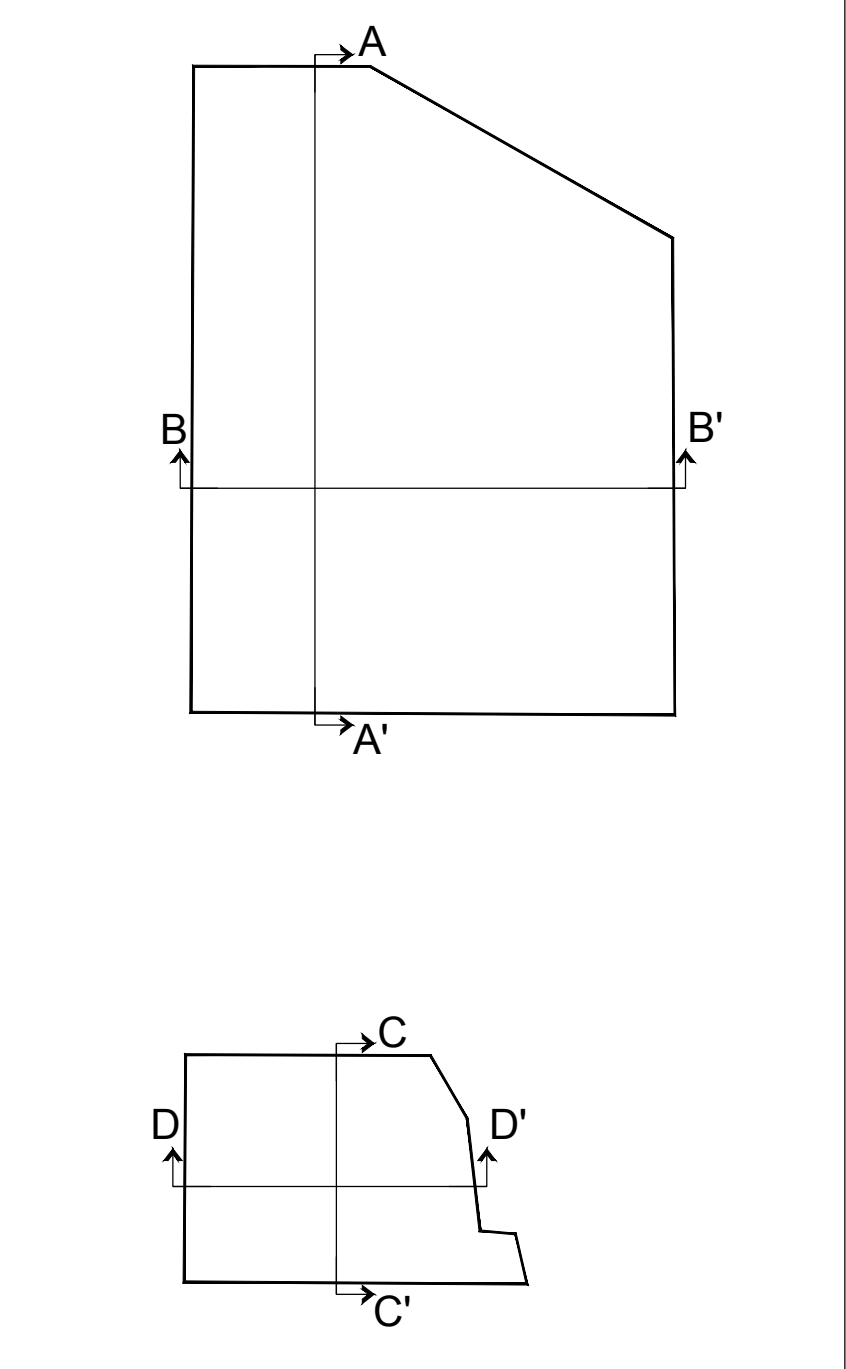
- Prior to any rehabilitation planting, remove any existing Common Buckthorn (Rhamnus cathartica), European Reed (Phragmites australis) and other problematic invasive plants from setback areas to prevent their spread during naturalization;
- Post rehabilitation, monitor and remove any terrestrial invasive plants (i.e. before they establish and become a problem).

Annual Updates

By the end of each calendar year, the Licencee shall provide the Saugeen Ojibway Nation (SON) with copies of all monitoring reports and updates on the progress of its progressive rehabilitation activities, and shall upon request from SON, provide access to the Project Site to SON representatives for the purpose of monitoring.



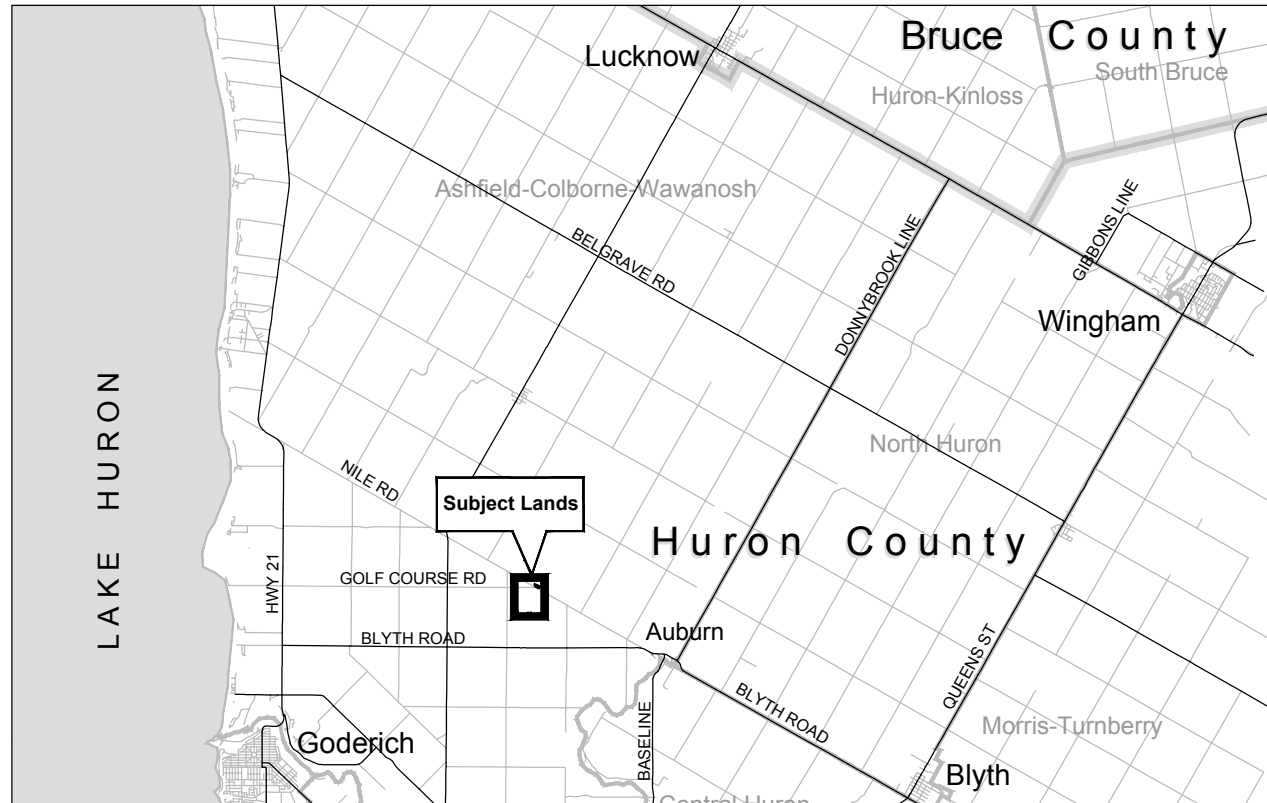
LOCATION OF CROSS-SECTIONS



Legal Description

CUNNINGHAM PIT EXPANSION - CARLOW PIT

PART LOT 7, CONCESSION 8 E.D., & PART LOT 8, CONCESSION 9, E.D. TOWNSHIP OF ASHFIELD COLBORNE WAWANOSH (GEOGRAPHIC TOWNSHIP OF COLBORNE) COUNTY OF HURON



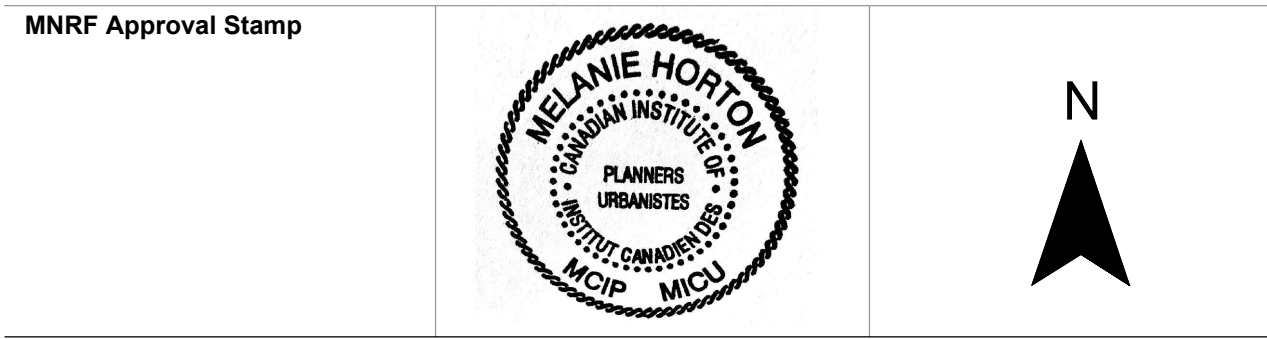
No.	DATE	DESCRIPTION	APP'D
		AMENDMENTS	

This site plan is prepared for submission to the ministry of natural resources and forestry under the aggregate resources act for a Class 'A' pit above the water table licence.

These site plans have been prepared under the direction of and certified by a person approved by the Minister of Natural Resources and Forestry (as per Section 8(4) of the Aggregate Resources Act.

SIGNATURE:

**Esher Planning Inc.**  
133 Ayton Crescent, Woodbridge ON L4L 7H6



Applicant  
**JOHNSTON BROS. (Bothwell) Ltd.**  
P.O. Box 220, Bothwell ON N0P 1C0

Project  
**Cunningham Pit Expansion - CARLOW PIT**

MNRF Licence I.D.	Applicant's Signature 
Scale 1:2,500 (Arch D) 0 50 100 150 m SCALE 1:2,500	Date Oct 30, 2024
Checked By M.H.	Drawn By A.M.

**CROSS-SECTIONS and TECHNICAL RECOMMENDATIONS**