

Township of Douro-Dummer Agenda for a Planning Committee Meeting

Friday, May 27, 2022, 9:00 a.m. Township Douro-Dummer YouTube Channel https://www.youtube.com/channel/UCPpzm-uRBZRDjB89o2X6R_A

Electronic Meetings

Until further notice, Township meetings are being held electronically. Meetings will be recorded and live-streamed on the Township YouTube channel.

Please contact the Acting Clerk if you require an alternative method to virtually attend the meeting. martinac@dourodummer.on.ca or 705-652-8392 x210

			Pages
1.	Call to	o Order by Chair:	
2.	Disclo	sure of Pecuniary Interest:	
3.	Appro	val of Minutes: April 29, 2022	1
4.	Sever	ance Applications:	
	4.1.	B-15-22 - Smith, ClerkPlanning-2022-33	4
		1090 Fourth Line Road Dummer Lot 14, Concession 3, Dummer Ward, Roll No. 1522-020-003-32401 New Lot will front on Rock Road North of Douglas Road Creation of one residential lot	
	4.2.	B-23-22 - Webster, ClerkPlanning-2022-34	171
		1797 County Road 6 Lot 25, Concession 3, Dummer Ward, Roll No. 1522-020-004-09100 Creation of one Residential Lot	

4.3. B-27-22 – Minshall-McGriskin, ClerkPlanning-2022-36

921 Douro First Line Road Pt Lot 12, Concession 1 Douro Ward, Roll No. 010-002-03001 Creation of one residential lot

- 5. Next Meeting Date: June 24, 2022
- 6. Adjournment

Minutes of the Township of Douro-Dummer Planning Committee Meeting

April 29, 2022, 9:00 AM Township Douro-Dummer YouTube Channel https://www.youtube.com/channel/UCPpzm-uRBZRDjB89o2X6R_A

Present:	Chair, Deputy Mayor - Karl Moher
	Member - Wendy Dunford
	Member - Jim Patterson
	Member - Jim Mollohan
	Member - Rod Manley

Staff PresentActing Clerk - Martina Chait-HartwigBuilding Administrator – Leisha Newton

1. <u>Call to Order by Chair:</u>

The Chair called the meeting to order at 9:07 a.m.

2. <u>Disclosure of Pecuniary Interest:</u>

The Chair reminded members of their obligation to declare any pecuniary interest they might have. None were declared.

3. <u>Approval of Minutes:</u>

3.1 Planning Committee Minutes - April 1, 2022

Moved by: Jim Mollohan Seconded by: Wendy Dunford

That the Minutes from the Planning Committee Meeting, held on April 1, 2022, be received and approved, as amended.

4. <u>Severance Applications:</u>

4.1 <u>B-34-22 - Brault, ClerkPlanning-2022-28</u>

Moved By: Wendy Dunford Seconded By: Jim Patterson

Josephine and Donald Brault

Pt Lot 1R, Concession 4

Douro Ward, Roll No. 1522-010-002-13801

Purpose of the application - Creation of one new lot

In attendance:

Josephine and Donald Brault, Owners - Absent

Martina Chait-Hartwig, Secretary, reviewed the planning report for the application.

Resolution

Moved by: Wendy Dunford Seconded by: Jim Patterson

That it be recommended to Council that Severance Application B-34-22 for Josephine and Donald Brault be approved, and if approved by the Peterborough County Land Division Committee that the following condition be imposed:

- That a merger Agreement be entered into between the Transferor, Transferee and municipality, pursuant to Section 51(26) and Section 53(12) of the Planning Act R.S.O. 1990, and registered on title to merge the severed parcel with the abutting land identified by property Roll No. 1522-010-002-13805, such that these 2 parcels shall be considered as one lot and shall not be dealt with separately or the solicitor for the applicant is to provide an undertaking, whereby they inform the Land Division Committee, in writing, that the lands are being conveyed to an abutting property and a merger of title shall take place and that the \$100 fee be paid to the municipality. Carried <u>Next Meeting Date: May 27, 2022</u>
 Planning of Committee Meeting - May 27, 2022

6. <u>Adjournment</u>

Moved by: Wendy Dunford Seconded by: Jim Mollohan

That this meeting adjourn at 9:14 a.m.

Carried

Chair, Karl Moher

Secretary, Martina Chait-Hartwig

Douro-Dummer

Report to Planning Committee From: Martina Chait-Hartwig Date: May 27, 2022

Severance Report

File No: B-15-22 - Smith Name: Peter and Wendy Smith Agent: Marnie Saunders, D.M. Wills Associates Limited Location: 1090 Fourth Line Road Dummer Lot 14, Concession 3, Dummer Ward Roll No. 1522-020-003-32401 New Lot will front on Rock Road North of Douglas Road

Purpose of the application - Creation of one residential lot

Official Plan Designation:

Severed Lot:	Rural, D2
Retained:	Rural, D2

OP Conformity:

Residential uses are permitted uses in the Rural Designation, provided that fragmentation of farm lands and conflict with adjacent farm operations are not created.

The subject property is located within the influence area (i.e. 500 metres) of a closed waste disposal site as identified by the D2 designation. Section 6.2.18.3 (e) of the Official Plan states, "within 500 metres of waste management footprints, only land uses compatible with the potential impacts or their engineered controls shall be permitted and may have to be determined by Official Plan amendment as a result of studies under Section 6.2.18.3 c).

Ministry of Environment (MOE) recommends that the 500 metre assessment area be used as a study area to determine the impact of the landfill on land use proposals in accordance with MOE Guideline D-4: Land Use on or Near Landfills and Dumps." The applicant completed the necessary Land Use Compatibility Study and the study was peer reviewed by Santec with no concerns noted.

Previous Severances:

A maximum of two consents to create new lots may be permitted from a property within the Rural designation, as it existed 25 years prior to the date of application.

Zoning:		Rezoning Required:
Severed:	Rural	No
Retained:	Rural	No

Zoning Conformity:

The severed lot will meet the area and frontage requirements for residential use in the Rural Zone (Section 9.2.4).

The retained lot will meet the area and frontage requirements for residential or agricultural use in the Rural Zone (Section 9.2.1 and 9.2.4).

PPS and Growth Plan Conformity:

The severance application appears to be in conformity with the PPS. The proposed lot is located within 120 metres of mapped key hydrological features. An Environmental Impact Study was provided and reviewed by ORCA on February 28, 2022. ORCA's comments are in agreement with the Opinion Letter and Species at Risk Evaluation Report dated January 25, 2022 which shows that there are no hydrological features on site.

To ensure compliance with the PPS and Growth Plan, staff are recommending that a mitigation measures agreement be entered into based on the recommendations found in Section 5 of the Opinion Letter dated January 25, 2022.

Entrance Report:

Please see the attached entrance report. The severed parcel will use the farm entrance once it has been upgraded to residential standards. A new culvert and a 3m strip will be required.

CBO Report: A report was not available at the time of writing.

Comments: Please see a copy of the County's Preliminary Review which is attached.

All department managers have been circulated for comment on this application.

Recommendation:

That it be recommended to Council that Severance Application B-15-22 for Peter and Wendy Smith be approved, and if approved by the Peterborough County Land Division Committee that the following conditions be imposed:

- \$1250.00 cash-in-lieu of parkland be paid to the municipality

- That a 3-metre strip of frontage from the severed parcel be deeded to the Township for road widening purposes

- That the farm entrance be upgraded to residential standard with new culvert to the satisfaction of the Manager of Public Works

- That a test hole for the septic system be inspected, there is a fee to inspect test holes to ensure a septic system would be viable – current fees are \$150 per lot severed and applicant is responsible for the digging of the test holes

- A Mitigation Measures Agreement is to be entered into between the Owner and the Municipality and registered on title at the owner's expense, which would recognize the recommendations included in Section 5 of the Opinion Letter prepared by D.M. Wills and Associates. dated January 25, 2022

Report Approval Details

Document Title:	B-15-22 Smith.docx
Attachments:	 - 15-22 Application.pdf - Smith (D.M. Wills) - PSR.pdf - 15-22 Planning Justification Report DM Wills.pdf - 15-22 Land Use Compatibility.pdf - 15-22 Opinion Letter Enviromental.pdf - 15-22 SAR Evaluation.pdf - 15-22 Stantec letter.pdf - B-15-22; 1090 4th Line Road South ORCA PPLD-2221.pdf - Mng Pub Works Report on Consent Applications - Smith.doc
Final Approval Date:	May 20, 2022

This report and all of its attachments were approved and signed as outlined below:

No Signature - Task assigned to Elana Arthurs was completed by workflow administrator Martina Chait-Hartwig

Elana Arthurs

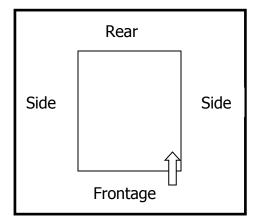
Douro-Dummer Manager of Public Works – Consent Applications

 File Number: B-15-22
 Roll Number: 1522-020-003-32401

 Location of Property: 1090 4th Line Road Dummer

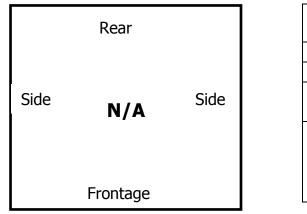
 Owner (s) Name: Smith

Severed



Street/Road Name:	Rock Road		
Safe Entrance Possibl	e:	Yes	No 🗆
Culvert Required whe	n lot developed:	Yes	No 🗆
3 metre strip of front	age from	Yes	No 🗆
severed parcel required:			
Other Requirements (i.e. fill,			
brushing, etc.):			

Retained (if vacant)



Street/Road Name:	
Safe Entrance Possible:	Yes 🗆 No 🗆
Culvert Required when lot developed:	Yes 🗆 No 🗆
3 metre strip of frontage from	Yes □ No □
severed parcel required:	
Other Requirements (i.e. fill,	
brushing, etc.):	

Additional Comments: Use existing farm entrance for severed parcel. This will be required to be upgraded to suit a residential entrance including a new proper sized <u>culvert.</u>

Date Site Visited: <u>May 11, 2022</u>

Owner Present: Yes 🗆

No 🔳

Jake Condon Manager of Public Work Owner's Acknowledgement Page 7 of 355



February 28, 2022

Ann Hamilton Secretary-Treasury Land Division Committee County of Peterborough 470 Water Street Peterborough, ON K9H 3M3

Re: File: B-15-22, 1090 Fourth Line Road (South) Dummer, Township of Douro Dummer; Roll#1522.020.003.32401; ORCA File: PPLD-2221

Dear Ann Hamilton,

The Otonabee Region Conservation Authority (Otonabee Conservation/the Authority) has received the circulation for Consent (severance) for the above noted property. Otonabee Conservation staff have reviewed the information in accordance with our mandate and policies and offer the following comments.

The purpose of the application is to request the consent of the Land Division Office to the conveyance of a parcel of land having a frontage of 60 metres and an area of 0.27 hectares.

Otonabee Conservation's Interest in this application is four-fold:

1. Otonabee Conservation has reviewed this application through our delegated authority from the Province to represent provincial interests regarding natural hazards identified in Section 3.1 of the Provincial Policy Statement (PPS).

Otonabee Conservation mapping indicates that the proposed new residential lot will not be located within a known floodplain. As such, it is the opinion of Otonabee Conservation that the application is consistent with section 3.1 (related to natural hazards) of the PPS.

250 Milroy Drive, Peterborough ON K9H 7M9 P: 705-745-5791 F: 705-745-7488 otonabeeca@otonabeeconservation.com **otonabeeconservation.com** 2. The Authority has reviewed the application as a service provider to the County of Peterborough and the Township of Douro Dummer, in that we provide technical advice on natural heritage matters through a Memorandum of Understanding.

The proposed new residential lot was found to be within 120 metres of a mapped wetland (key hydrological feature). Policy 4.2.4.1 of the GPGGH states that: Outside settlement areas, a proposal for new development or site alteration, [including lot creation] within 120 metres of a key natural heritage feature within a key hydrologic feature will require a natural heritage evaluation or hydrologic evaluation.

The application was supported by the circulated 'Opinion Letter' and 'Species at Risk Evaluation Report' (dated January 25, 2022) and the February 24, 2022 email from D.M. Wills Associates Limited (DM Wills). A review of available provincial mapping data indicates the subject lands are traversed by unevaluated wetland, significant wildlife habitat/SWH (deer), and potential significant woodlands and habitat for threatened and endangered species. The severed parcel is located within the SWH, the 120 adjacent lands of the Warsaw Caves provincial ANSI (across Rock Road), and potential habitat for threatened species (birds).

ORCA Technical staff conducted a site visit April 27, 2021 and do concur with DM Wills that there appears to be no hydrologic features within the severed parcel or the 30-metre adjacent lands (VPZ).

The new residential lot is proposed within a small area of woodland, considered Significant due to its size and supporting role to nearby natural features.

Therefore, technical staff recommend the following mitigations in support of approvals:

- Adhering to EIS recommendations outlined in Section 5.2 (planting plan) and applying a broad-based timing window (e.g., April 1 to October 31) to protect all species known to occur in the area.
- Prior to construction, a Site Plan should be developed to limit the impervious area to less than 10% and indicate the number of trees that will be removed. It is recommended that tree compensation take place at a rate of 2:1 in this area. Plantings should consist of native species found on the Subject Property such as Eastern White Cedar, Green Ash, and American Elm, with the vast majority of planted trees being Eastern White Cedar.

• Vegetation removal within the woodlands should be limited to the area of construction, and the disturbed area (buildings/structures) should not exceed 25% of the Proposed Severance Lot and native tree species should be replanted in as much of the disturbed area as possible.

Provided the construction and site occupancy adheres to the conclusions and recommendations of the EIS and above noted bullets, it is the opinion of Otonabee Conservation that the application is consistent with PPS sections 2.1 and 2.2 and conforms to sections 4.2.3 and 4.2.4 of the GPGGH.

3. Otonabee Conservation has reviewed the application through a regulatory lens. Under Ontario Regulation 167/06, this Authority's 'Development, Interference with Wetlands and Alterations to Shorelines and Watercourses' regulation under Section 28 of the Conservation Authorities Act, any development, interference with or alteration within a flooding hazard, erosion hazard, watercourse, wetland and their adjacent lands/areas of interference requires a permit from the Authority. When an application is circulated under the Planning Act will also require an Otonabee Conservation permit, it is the practice of the Authority to establish the policy requirements of both processes during the planning stage.

Otonabee Conservation mapping indicates the subject property is **not** subject to Ontario Regulation 167/06 Otonabee Conservation's "development, interference with wetlands and alterations to shorelines and watercourses" regulation. **Permits from this agency will not be required prior to any site alteration or construction in these regulated areas.**

4. Otonabee Conservation has reviewed the application in terms of the Revised Trent Source Water Protection Plan (SPP), prepared under the Clean Water Act. The SPP, intended to protect Ontario's drinking water at its source, came into effect on January 1, 2015 and contains policies to protect sources of municipal drinking water supplies from existing and future land use activities.

The application was also reviewed in consideration of the SPP. It was determined that the subject property is not located within an area that is subject to the policies contained in the SPP.

If you have any questions, please do not hesitate to call.

Yours truly,

Mathuw Willim

Matthew Wilkinson Planner



Stantec Consulting Ltd. 100-300 Hagey Blvd, Waterloo, ON N2L 0A4

April 5, 2022 File: 160900933 Task 248

Attention: Iain Mudd, Planner County of Peterborough 470 Water Street Peterborough, ON K9H 3M3 VIA EMAIL: IMudd@ptbocounty.ca

Dear Iain Mudd,

Reference: Peer Review of a Land Use Compatibility Study (D-4) Assessment Lot 14, Concession 3, Township of Douro-Dummer County File No. B-15-22 (Smith)

Peterborough County (the County) retained Stantec Consulting Ltd. (Stantec) to peer review a D-4 Assessment for Lot 14, Concession 3, Township of Douro-Dummer, ON (the Site). The D-4 Assessment was prepared by D.M. Wills. This letter has been prepared to provide comments to the County on the D-4 Assessment. The requirement for a D-4 Assessment was triggered by the presence of a closed Landfill located within 500 m of the Site. The property is about 81.6 ha in size and the proposed severance includes one residential parcel about 0.6 ha in size.

The purpose of a D-4 Assessment is to determine if there will be any negative impacts on the property from the closed Landfill. The Ministry of Environment, Conservation and Parks (MECP) indicates in the D-4 Guideline that they consider the most significant contaminant discharges from a closed landfill to be normally with 500 m of the perimeter of the fill area. As per the D-4 Guideline, the following factors are to be considered when there is a new land use proposed near a non-operating (closed) landfill:

- groundwater and surface water contamination by leachate
- surface water runoff
- ground settlement
- visual impact
- soil contamination and hazardous waste, and
- landfill generated gases

D.M. Wills was not able to find any information about the closed landfill in the publicly available records. D.M. Wills completed the following activities in support of the assessment:

- MECP Water Well Record survey
- An assessment of groundwater conditions

April 5, 2022 lain Mudd. Planner Page 2 of 2

Reference: Peer Review of a Land Use Compatibility Study (D-4) Assessment Lot 14, Concession 3, Township of Douro-Dummer County File No. B-15-22 (Smith)

- Site reconnaissance including a partial site reconnaissance for the closed landfill area
- Groundwater quality monitoring from an onsite residential well
- Landfill gas monitoring from an onsite residential well

Stantec's review comments are as follows:

- D.M. Wills determined that the groundwater flow direction was likely to the southwest towards Quarry • Lake, suggesting the closed landfill is downgradient of the Site. Stantec concurs with this assessment.
- D.M. Wills found no evidence of waste disposal on the Site. Waste disposal appeared to be limited to a • small area adjacent to Quarry Lake.
- Groundwater quality results had elevated iron, turbidity, and hardness; however, these parameters are . not health-related and can be easily managed with standard household treatment systems.
- The landfill gas monitoring data was weak but based on the shallow depth to bedrock and limited evidence of waste disposal, Stantec agrees with D.M. Wills that it is unlikely landfill gas impacts the Site.

In summary, Stantec concurs with D.M. Wills assessment and there are no outstanding items to address.

We trust these comments are sufficient for your purposes; however, if you have any questions or require clarification, please do not hesitate to contact the undersigned.

Regards,

Stantec Consulting Ltd

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Digitally signed by Roger Freymond Date: 2022.04.05 11:34:35 -04'00

Roger Freymond P.Eng. Senior Hydrogeologist

Phone: 519-585-7381 roger.freymond@stantec.com

S. Whitehead Date: 2022.04.05

Digitally signed by Grant 11.22.39 -04'00

Grant Whitehead P.Geo. (Limited) Senior Hydrogeologist

Phone: 519-502-8933 grant.whitehead@stantec.com

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Land Use Compatibility Study

Lot 14, Concession 3 Township of Douro-Dummer, County of Peterborough

D.M. Wills Project Number 20-85104



D.M. Wills Associates Limited Partners in Engineering, Planning and Environmental Services Peterborough

January 2022

Prepared for: Peter and Wendy Smith



Summary of Revisions

Revision No.	Revision Title	Date of Release	Summary of Revisions
0	Draft Report	December 23, 2021	Draft Submission for Client Review and Comment
1	Final Report	January 5, 2022	Final Submission to Client

This report has been formatted considering the requirements of the Accessibility for Ontarians with Disabilities Act.



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- Appendix A MECP Well Record Survey
- Appendix B Photographs
- Appendix C Certificates of Analysis Groundwater



1.0 Introduction

D.M. Wills Associates Limited (Wills) was retained by Peter and Wendy Smith (Client) to complete a Land Use Compatibility Study (Study) in support of a Consent to Sever (severance) application for the property located at 1090 4th Line Road South, Lot 14, Concession 3 (Subject Property) in the Township of Douro-Dummer (Township) in Peterborough County (County). The Subject Property is approximately 81.6 hectares (ha). The proposed severance includes one (1) approximately 0.6 ha parcel (Proposed Severed Parcel) that will be used for residential purposes. The remainder of the Subject Property (Proposed Retained Parcel) is approximately 81 ha.

Wills understands that the County's Planning Department completed a Preliminary Severance Review on December 14, 2020, and identified policy non-conformities with the Growth Plan for the Greater Golden Horseshoe (Growth Plan), 2019, Peterborough County Official Plan, and Township of Douro-Dummer Official Plan.

The non-conformities include the Subject Property's proximity (within 500 metres [m]) to a closed waste disposal site (WDS), which triggered the requirement for the completion of a Land Use Compatibility Study. The closed WDS is located at Lot 15, Concession 3 in the Township of Douro-Dummer, and is approximately 270 m southwest of the Proposed Severed Parcel.

2.0 Purpose and Scope

Wills' Study was completed to satisfy the policies in Section 6.2.18.3 (e) of the Township of Douro-Dummer Official Plan. The Study was conducted on the basis of the Township of Douro-Dummer Policy No. D-1, Development of Lands in Proximity to Closed Landfill Sites and the Ministry of the Environment, Conservation and Parks (MECP) Guideline D-4, Land Use on or Near Landfills and Dumps (Guideline D-4). The Study evaluated any potential impacts on the Proposed Severed Parcel as a result of the closed WDS. Wills' scope of work to complete the Study included the following:

- On the basis of the Guideline D-4 requirements, a desktop review of WDS records is required. Wills submitted an information request to the Township, the County, and the MECP in an attempt to obtain relevant records pertaining to the operations of the WDS. No records were available for the closed WDS located at Lot 15, Concession 3, as described in the Preliminary Severance Review for the Subject Property;
- A site reconnaissance was conducted to confirm existing conditions on the Subject Property, specifically the Proposed Severed Parcel, and any potential impacts associated with the closed WDS with respect to Guideline D-4;
- An Ontario Regulation (O. Reg.) 903 Water Supply Well was installed on the Subject Property by the Client to facilitate groundwater sampling and landfill gas monitoring;
- Two (2) groundwater samples were collected from the O. Reg. 903 water supply well to determine groundwater quality on the Proposed Severed Parcel. The groundwater samples were collected during monitoring events conducted in June and October of

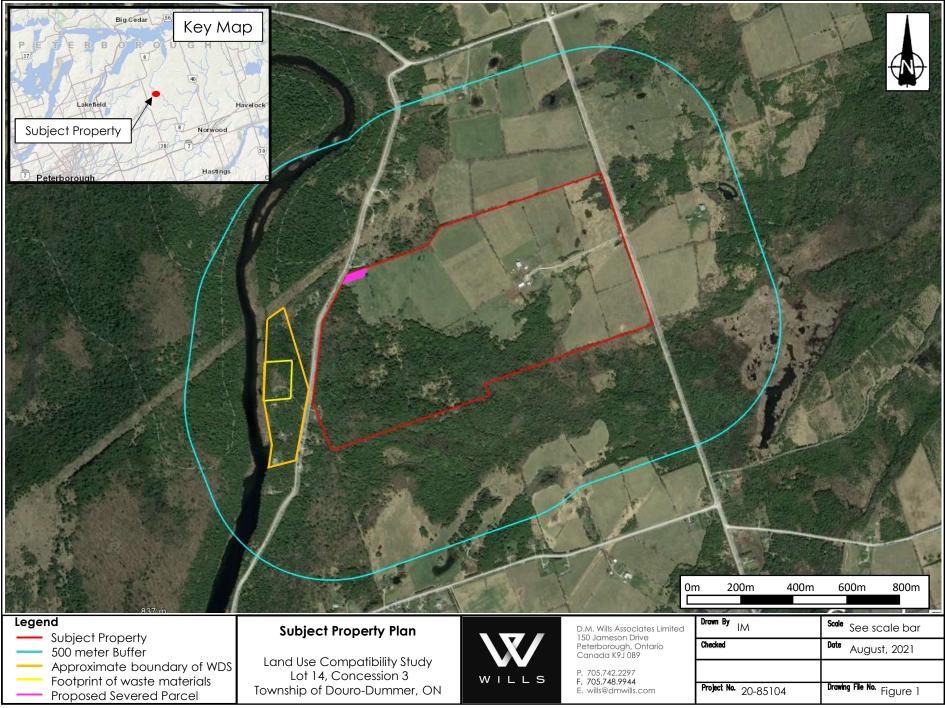


2021. Groundwater samples were analysed by SGS Canada Inc. for parameters selected on the basis of the Township of Douro-Dummer Policy No. D-1, Development of Lands in Proximity to Closed Landfill Sites. Groundwater analytical results were compared against the Ontario Drinking Water Quality Standards (ODWQS); and,

• Landfill gas monitoring was conducted during the June and October 2021 monitoring events using an RKI Instruments Eagle 2 gas detector.

3.0 Subject Property Description

The Subject Property is approximately 81.6 ha, irregular in shape, and is currently developed with one (1) dwelling, one (1) barn, and several accessory structures. The Subject Property maintains a mix of pasturelands (approximately 50%) and wooded areas (approximately 50%). The Proposed Severed Parcel is approximately 0.6 ha, currently undeveloped, and is located on the northwest corner of the Subject Property. A Subject Property Plan showing the Proposed Severed Parcel and WDS location is included as **Figure 1.**





4.0 Review of Background Information

Wills submitted a request for information to the MECP, the County, and the Township for documentation related to the WDS. Although the WDS is identified on the Township's Official Plan and planning documents, all parties were unable to provide any formal record or documentation related to the WDS, including Annual Monitoring Reports, Environmental Compliance Approvals or Operation Records. Wills was unable to locate any readily available records or documents pertaining the WDS, and a result, could not conduct a background information review of the WDS.

4.1 MECP Water Well Record Survey

Wills completed a database review and desktop evaluation of MECP Well Records within 500 m of the Subject Property to provide a preliminary characterization of the local hydrogeological conditions. Within the search area, eight (8) domestic well records were identified, and all wells were screened within the underlying limestone bedrock. The results of the MECP Well Record Survey are summarized in Error! Reference source not found..

	Bedrock
Number of Wells	8
Total Depth Range	12.2 – 35.1 mbg
Average Depth	21.6 mbg
Static Water Level Range	0.6 – 20.7 mbg
Average Static Water Level	7.6 mbg
Recommended Pumping Rate	1 - 20 gpm
Average Recommended Pumping Rate	5.7 gpm

Table 1 – MECP Well Records: Well Construction Summary

*mbg (metres below ground), gpm (gallons per minute)

Pertinent information including MECP Well ID, well depth, depth to encountered groundwater, static groundwater level, recommended pumping rate, depth to bedrock, and general comments on water quality are summarized and included as **APP-A1** in **Appendix A**. An MECP Well Location Plan is included as **APP-A2** in **Appendix A**, and shows the location of the surveyed wells with respect to the Subject Property.

4.1.1 Groundwater Conditions

Static groundwater elevations and flow direction in the vicinity of the Subject Property were inferred using the MECP well record information and published topographic mapping data obtained from the Ontario Ministry of Natural Resources and Forestry



"Make a Topographic Map" application. Based on the available records, groundwater is anticipated to generally flow southwest towards Quarry Lake in the vicinity of the Subject Property. Static water levels and inferred groundwater elevations are summarized d in **Table 2** below. The MECP Well Location Plan, including interpreted groundwater flow direction is included as **APP-A2** in **Appendix A**.

Well ID	Location in relation to Subject Property	Approximate Elevation (masl)	Static Water Level (mbg)	Interpreted Groundwater Elevation (masl)
5116951	Subject Property	257	0.61	256.39
5110557	Up-gradient	255	4.57	250.43
5115953	Up-gradient	255	5.49	249.51
7297260	Up-gradient	255	6.16	248.84
7315662	Up-gradient	250	1.52	248.48
7155126	Up-gradient	246	4.08	241.92
A302204	Subject Property	244	17.37	226.63
7051685	Down-gradient	240	20.72	219.28

Table 2 – Groundwater Conditions

Hydraulic gradients were calculated by triangulating the three outermost wells within the MECP Water Well Record Survey. The steepest hydraulic gradient was 0.07 (east to west) as measured between Well ID# 5116951 (on Subject Property, east of the Proposed Severed Parcel) to Well ID# 7051685 (west of Subject Property). The second steepest hydraulic gradient was 0.06 (north-northeast to south-southwest) as measured between Well #5115953 (north of Subject Property) and Well ID# 7051685 (east of Subject Property). Based on the two (2) comparable gradients, it is inferred that the hydraulic gradient is generally to the southwest. It should be noted that the static groundwater levels were obtained from historic well records (not recorded on the same date), and groundwater elevations were inferred from relatively low-resolution topographic mapping. Groundwater flow calculations are not expected to very precise, however, do support a southwest flow direction, which generally coincides with the natural topographic gradient towards Quarry Lake.

Based on this information, the Subject Property is inferred to be hydrogeologically upgradient from the WDS, and any potential contaminants arising from the historic WDSs are expected to flow down-gradient towards Quarry Lake, away from the Subject Property and Proposed Severed Parcel.



5.0 Site Reconnaissance

Wills staff conducted a site reconnaissance on the Subject Property and surrounding area on June 24, 2021. The site reconnaissance was conducted to determine existing conditions and to identify any potential impacts associated with the WDS.

In addition to investigating the Subject Property (specifically the Proposed Severed Parcel), a hydro corridor to the north of the Subject Property was traversed into the WDS area for further observation. Due to private property restrictions, the full extent of the WDS footprint could not be investigated. A photo log documenting the findings of the site reconnaissance are included in **Appendix B**. The site reconnaissance observations are summarized as follows:

Subject Property

- The Subject Property is topographically upgradient of the WDS, and is characterized by undulating hills. The Proposed Severed Parcel maintains a relatively consistent grade from west to east towards Rock Road, and a local topographic high was observed directly east of the Proposed Severed Parcel.
- Surface water features on the Subject Property were limited to a roadside drainage ditch that extends along Rock Road. Surface water runoff from the Subject Property is expected to be intercepted by this ditch, however, the topography on the southern margin of the Subject Property likely discharges surface water to the south towards adjacent wetland areas.
- The Subject Property is currently used as pastureland for cattle and is primarily open grassland. The Proposed Severed Parcel is bordered to the north and east by hedgerows, and a mixed conifer and deciduous forest extends along the south and west portion of the Subject Property. There was no evidence of stressed vegetation or other indicators of landfill impacts.
- The surrounding land use appears to be a mix of agricultural and rural residential.

Historic Waste Disposal Site

- The east-west topographic gradient extends east of Subject Property towards Quarry Lake to the west, and the WDS. The gradient steepens proximal to Quarry Lake, where exposed limestone shelves are present. Exposed limestone is visible at surface along the hydro corridor and in the vicinity of the historic WDS.
- The WDS is situated in a mixed forest. During the site reconnaissance, there was no evidence of stressed vegetation, and in view of the shallow bedrock conditions, waste was likely never buried on the property.
- Evidence of dumping was found to the west of a small clearing, proximal to the north property boundary of 1074 Rock Road. Dumping appeared to be concentrated on the steep slope to the west, proximal to Quarry Lake. Observed waste materials included metal wire, automobile bodies, cans, car tires, drums, and appliances. The exact waste limits were not determined due to site access restrictions.



6.0 Environmental Monitoring

6.1 Groundwater Quality

Groundwater quality on the Proposed Severed Parcel was assessed during two (2) monitoring events completed on June 24, 2021 (completed in parallel with the site reconnaissance) and on October 27, 2021.

Prior to groundwater sampling, three (3) well volumes were purged from a new O. Reg. 903 Water Supply Well (MECP Tag A302204, "Well A302204") that was installed by the Client on the Proposed Severed Parcel. Groundwater purging was conducted using a submersible pump to ensure representative groundwater sample collection, and approximately 1,000 litres of water was purged prior to sample collection during each monitoring event.

One (1) groundwater sample set was collected from Well A302204 during each monitoring event. The sample was collected in dedicated sample bottles, kept in a cooler with ice and transported to SGS Canada Inc. (an accredited analytical laboratory) in Lakefield, Ontario, immediately following completion of the field activities. Groundwater samples were submitted for analysis of select parameters provided in the Township of Douro-Dummer Policy No. D-1, Development of Lands in Proximity to Closed Landfill Sites. Laboratory analytical results were compared against the ODWQS and are summarized in **Table 3**. Certificates of Analysis from SGS are included in **Appendix C**.



	ODWQS				
Parameter	Spring 2021	Fall 2021	MAC*	AO/OG*	
Biochemical Oxygen Demand (BOD5), (mg/L)	< 4	< 4	-	30-500	
Alkalinity (mg/L as CaCO3)	256	280			
Bicarbonate (mg/L as CaCO3)	256	280	-	-	
Carbonate (mg/L as CaCO3)	< 2	< 2	-	-	
OH (mg/L as CaCO3)	< 2	< 2	-	-	
Colour (TCU)	3	< 3	-	5	
Conductivity (uS/cm)	547	597	-	-	
рН	7.87	7.98	-	6.5-8.5	
Turbidity (NTU)	16.2	5.39	1	5	
Ammonia+Ammonium (N) (as N mg/L)	0.07	0.13	-	-	
Total Kjeldahl Nitrogen (as N mg/L)	< 0.5	0.16			
Phosphorus (total reactive) (mg/L)	< 0.03	< 0.03	-	-	
Total Organic Carbon (mg/L)	1	1	-	-	
Chloride (mg/L)	14	11	-	250	
Fluoride (mg/L)	0.19	0.16	1.5	-	
Bromide (mg/L)	< 0.05	0.06	-	-	
Nitrite (as N) (as N mg/L)	0.014	0.025	1	-	
Nitrate (as N)	0.510	1.34	10	-	
Sulphate (mg/L)	21	23	-	500	
Mercury (µg/L)	< 0.01	< 0.01	1	-	
Hardness (mg/L as CaCO3)	314	343	-	80-100	
Aluminum (µg/L)	52	13	-	100	
Arsenic (µg/L)	< 0.2	< 0.2	10	-	
Boron (µg/L)	39	46	5000	-	
Barium (µg/L)	87.4	78.1	1000	-	
Beryllium (µg/L)	0.015	< 0.007	-	-	
Cobalt (µg/L)	0.520	0.097	-	-	
Calcium (mg/L)	117	128	-	-	
Cadmium (µg/L)	< 0.003	0.003	5	-	
Copper (µg/L)	0.7	0.2	-	1000	
Chromium (µg/L)	0.29	< 0.08	50	-	

Table 3 – Summary of Groundwater Quality



	ODWQS				
Parameter	Spring 2021	Fall 2021	MAC*	AO/OG*	
lron (µg/L)	2720	733	-	300	
Potassium (mg/L)	1.57	1.66	-	-	
Magnesium (mg/L)	5.52	5.77	-	-	
Manganese (µg/L)	42.4	20.3	-	50	
Molybdenum (µg/L)	1.02	6.50	-	-	
Nickel (µg/L)	1.1	0.4	-	-	
Sodium (mg/L)	10.0	12.4	20*	200	
Phosphorus (mg/L)	0.003	0.005	-	-	
Lead (µg/L)	0.65	0.09	10	-	
Silicon (µg/L)	4250	3620	-	-	
Silver (µg/L)	< 0.05	< 0.05	-	-	
Strontium (µg/L)	2250	3050	-	-	
Thallium (µg/L)	0.041	0.014	-	-	
Tin (µg/L)	0.12	< 0.06	-	-	
Titanium (µg/L)	1.61	0.52	-	-	
Antimony (µg/L)	< 0.9	< 0.6	6	-	
Selenium (µg/L)	< 0.04	< 0.04	50	-	
Uranium (µg/L)	0.347	0.376	20	-	
Vanadium (µg/L)	0.17	0.05	-	-	
Zinc (µg/L)	2	3	-	5000	
Cation sum (meq/L)	6.98	7.56	-	-	
Anion Sum (meq/L)	5.96	5.93	-	-	
Anion-Cation Balance (% difference)	7.86	12.1	-	-	
Ion Ratio	1.17	1.28	-	-	
Total Dissolved Solids (calculated) (mg/L)	323	328	-	-	
Conductivity (calculated) (uS/cm)	647	675	-	-	
Langeliers Index 4° C	0.39	0.58	-	-	
Saturation pH 4°C	7.48	7.40	-	-	

Notes:

(<) indicates levels that are below the detectable limits. Bolded values exceed their applicable AO/OG in ODWQS. Bolded and shaded values exceed their applicable MAC in ODWQS.

AO – Aesthetic Objective OG – Operational Guidelines MAC – Maximum Acceptable Concentration



The results from the June and October 2021 monitoring events indicate good overall water quality on the Proposed Severed Parcel with respect to the ODWQS. Exceedances for turbidity, hardness, and iron were observed during both monitoring events, however, are ODWQS operational and aesthetic guideline parameters that are commonly found in exceedance within bedrock wells in the St. Lawrence Lowlands region. This is owing to the nature of the underlying limestone bedrock, and is not associated with landfill leachate.

6.2 Landfill Gas Monitoring Results

Landfill gas monitoring was conducted during the June and October 2021 monitoring events using an RKI Instruments *Eagle* 2 gas detector.

The results of the landfill gas monitoring indicate no significant concentrations of landfill gases are presenting gas on the Proposed Severed Parcel. The results of the landfill gas monitoring are included in **Table 4**.

Parameter	Monitoring Results			
raidmeier	June 2021	October 2021		
Hexane (ppm)	0	0		
lsobutylene (ppm)	2	0		

Table 4 – Landfill Gas Monitoring Results

ppm – parts per million

The 2 ppm isobutylene measurement recorded in June 2021 is considered anomalous, and was not detected during the October 2021 monitoring event. Based on the low concentration, it is possible that this reading may be a result from material (e.g. solvent) that was present on the well materials during well construction/handling, although this cannot be confirmed.

Based on the location of the WDS, the limited extent of waste materials, and the distal and down-gradient location from the Proposed Severed Parcel, it is highly unlikely that these historic activities resulted in landfill gas generation that could be detected on the Proposed Severed Parcel.

7.0 Conclusions and Recommendations

Based on the findings of Wills' Study, the following conclusions are provided:

• Based on the MECP Well Records Survey, it is anticipated that the Subject Property and Proposed Severed Parcel are located hydrologically upgradient from the closed WDS. Hydraulic gradients calculated between O. Reg. 903 water supply wells proximal to the Subject property suggest a southwest groundwater flow direction towards Quarry Lake.



- During the site reconnaissance, no evidence of landfill impacts were found on the Subject Property. In addition, there was no evidence of formal waste disposal within the investigated WDS area, although some informal dumping of waste materials were observed to have taken place approximately 500 m southwest of the Proposed Severed Parcel.
- Waste disposal appears to have been limited to a small area directly adjacent to Quarry Lake. The extent of waste disposal is likely limited to that which was observed at surface, as the shallow overburden and exposed bedrock would have precluded waste burial.
- Results of the June and October 2021 monitoring events indicate good groundwater quality on the Subject Property with respect to the ODWQS.
 Exceedances for iron, turbidity, and hardness are not expected to be associated with landfill leachate impacts from the WDS, and are commonly encountered in groundwater samples collected from limestone bedrock aquifers.
- No negative impacts on the Proposed Severed Parcel are anticipated as a result of the WDS on the basis on the limited amount of waste, groundwater and gas monitoring results, and the distal and down-gradient location of the WDS with respect to the Subject Property and Proposed Severed Parcel.
- Wills concludes that the Study satisfies the policies in Section 6.2.18.3 (e) of the Township of Douro-Dummer Official Plan, and it is our opinion that the findings of this report support the Client's severance application.

We trust that the information contained in and attached to this report meet your current needs. The following Statement of Limitations should be read carefully and is an integral part of this report. Do not hesitate to contact the undersigned if you have any questions or concerns.

Respectfully submitted,

Prepared by:

Lynsey Tuters, B.A., C. Tech Environmental Project Technologist

Reviewed by:

Ian Ames, M.Sc., P.Geo. Environmental Monitoring and Management Lead

LT/IA/avg



8.0 Statement of Limitations

This report is intended solely for the Peter and Wendy Smith (Client) in assessing impacts resulting from a historic WDS at the property identified as the 1090 4th Line Road South, Lot 14, Concession 3 (Subject Property) in the Township of Douro-Dummer, in Peterborough County, and is prohibited for use by others without Wills' prior written consent. This report is considered Wills' professional work product and shall remain the sole property of D.M. Wills Associates Limited. Any unauthorized reuse, redistribution of or reliance on this report shall be at the Client and recipient's sole risk, without liability to Wills. The Client shall defend, indemnify and hold Wills harmless from any liability arising from or related to the Client's unauthorized distribution of the report. No portion of this report may be used as a separate entity; it is to be read in its entirety and shall include supporting drawings and appendices.

The recommendations made in this report are based on Wills' present understanding of the Project, the current and proposed site use, ground and subsurface conditions at the time of the field investigation, and are based on the work scope approved by the Client and described in the report. The services were performed in a manner consistent with the level of care and skill ordinarily exercised by members of geoscience or engineering professions currently practicing under similar conditions in the same locality. No other representations, and no warranties or representations of any kind, either expressed or implied, are made. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the sole responsibility of such third parties.

Groundwater conditions between and beyond the test locations may differ both horizontally and vertically from those encountered at the test locations. Should any conditions on the Subject Property be encountered which differ from those found at the test locations, the recommendations in this report shall be considered invalid until sufficient review and written assessment of said conditions by Wills is completed.

Appendix A

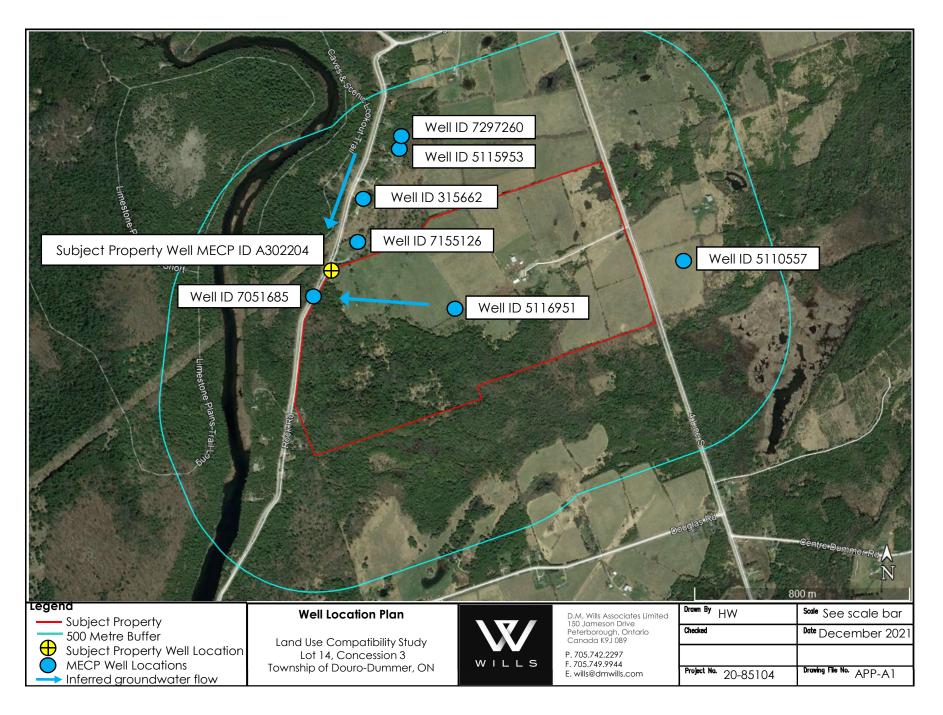
MECP Well Record Survey



Land Use Compatibility Study: MECP Well Record Search Data Lot 14, Concession 3, Township of Douro-Dummer, County of Peterborough

Well ID	Easting	Northing	Well Classification	Bedrock depth (mbg)	Total depth (mbg)	Static Water Level (mbg)	Recommended Pumping rate (gpm)	Depth to Water
5115953	_	_	Domestic	3.05	23.16	5.49	2	5.49
7297260	729596	4926672	Domestic	3.35	20.42	6.16	3	3.35
7315662	729463	4926487	Domestic	3.35	12.19	1.52	10	6.4
7155126	729445	4926329	Domestic	6.10	16.76	4.08	3.5	6.71
7051685	729292	4926125	Domestic	1.22	31.10	20.72	4	25.09
5118801	_	_	Domestic	0	35.05	17.37	20	35.05
5116951	_	_	Domestic	4.88	18.29	0.61	2	5.49
5110557	_	4926300	Domestic	9.14	15.54	4.57	1	9.75

Summary	
Average recommended pumping rate:	5.69
Average depth:	21.56
Average depth to bedrock:	3.89
Average depth to water:	12.17
Average static water level:	7.57



Appendix B

Photographs





Client Name: Peter and Wendy Smith	Site Location: 1090 4 th Line Road South
------------------------------------	---



Photograph No.: 2

Date:

June 24, 2021

Direction: North-east

Description:

Drinking water well on Subject Property (Proposed Severed Parcel).



D.M. Wills Associates Limited 150 Jameson Drive, Page 33 Afn, 35 Fitario, Canada K9J 0B9 P. 705.742.2297 F. 705.748.9944 E. wills@dmwills.com



Appendix B – Photographs

Page 2

Photograph No.: 3

Date:

June 24, 2021

Direction: East

Description:

View towards the eastern boundary of the Proposed Severed Parcel.



Photograph No.: 4

Date:

June 24, 2021

Direction: North

Description:

View towards tree line along the northern property boundary the of Proposed Severed Parcel.



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Page 3

Photograph No.: 5 Date:

June 24, 2021

Direction: West

Description:

View towards mixed conifer and deciduous tree line along the western boundary of the Proposed Severed Parcel.



Photograph No.: 6

Date:

June 24, 2021

Direction: South

Description:

View to the south of the Proposed Severed Parcel across open pasture land and mixed forest.





Page 4

Photograph No.: 7 Date:

June 24, 2021

Direction: East

Description:

Access to the Proposed Severed Parcel from Rock Road.



Photograph No.: 8

Date:

June 24, 2021

Direction: North

Description:

View along Rock Road west of the Proposed Severed Parcel. Drainage ditch at roadside flows south before discharging through a culvert under the right of way towards the west.





Page 5

Photograph No.: 9 Date: June 24, 2021 Direction: South Description: View along Rock Road west of the Proposed Severed Parcel. Drainage ditch discharges under the right of way to the west.

Photograph No.: 10

Date:

June 24, 2021

Direction: Southwest

Description:

View along hydro corridor to the northwest of the Subject Property. Quarry Lake in depression beyond first tower.



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Page 6

Photograph No.: 11 Date:

June 24, 2021

Direction: North

Description:

Exposed bedrock along hydro corridor.



Photograph No.: 12

Date:

June 24, 2021

Direction: North

Description:

Limestone bedrock boulders near WDS, located between Rock Road and Quarry Lake.

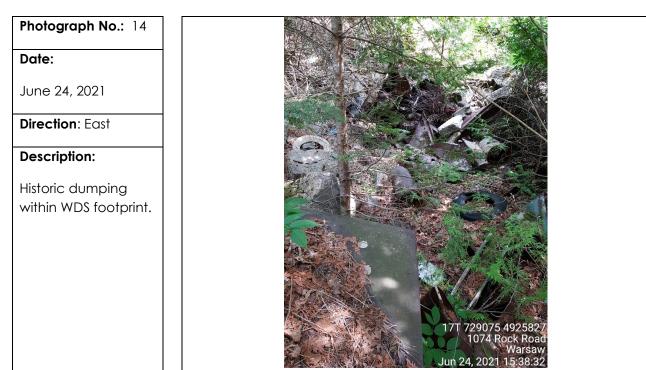




Page 7

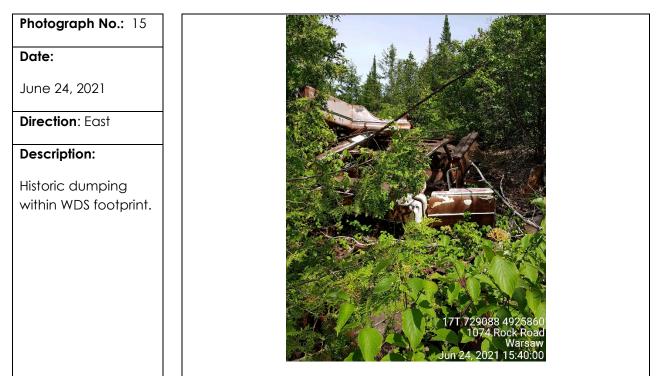
Photograph No.: 13 Date: June 24, 2021 Direction: North East Description: Historic dumping within WDS footprint.







Page 8



Photograph No.: 16

Date:

June 24, 2021

Direction: East

Description:

Historic dumping within WDS footprint.



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Appendix C

Certificates of Analysis - Groundwater









CA14490-OCT21 R1

85104

Prepared for

D.M. Wills -Peterborough



First Page

CLIENT DETAILS		LABORATORY DETAILS	
Client	D.M. Wills -Peterborough	Project Specialist	Maarit Wolfe, Hon.B.Sc
		Laboratory	SGS Canada Inc.
Address	150 Jameson Drive	Address	185 Concession St., Lakefield ON, K0L 2H0
	Peterborough, ON		
	K9J 0B9. Canada		
Contact	Lynsey Tuters	Telephone	705-652-2000
Telephone	289-385-6230	Facsimile	705-652-6365
Facsimile	705-741-3568	Email	Maarit.Wolfe@sgs.com
Email	ltuters@dmwills.com	SGS Reference	CA14490-OCT21
Project	85104	Received	10/27/2021
Order Number		Approved	11/03/2021
Samples	Ground Water (1)	Report Number	CA14490-OCT21 R1
		Date Reported	11/03/2021

COMMENTS

MAC - Maximum Acceptable Concentration

AO/OG - Aesthetic Objective / Operational Guideline

NR - Not reportable under applicable Provincial drinking water regulations as per client.

Temperature of Sample upon Receipt: 13 degrees C Cooling Agent Present:Yes Custody Seal Present:Yes

Chain of Custody Number:023199

SIGNATORIES

Maarit Wolfe, Hon.B.Sc

Luwaye



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First Page	1
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Results	3-10
Exceedance Summary	11
QC Summary	12-20
Legend	21
Annexes	22



Client: D.M. Wills -Peterborough

Project: 85104

Project Manager: Lynsey Tuters

PACKAGE: ODWS_AO_OG - General (Chemistry		Sar	nple Number	7			
(WATER)								
			S	ample Name	85104-DW-01-10			
					-27-2021			
L1 = ODWS_AO_OG / WATER / Table 4 - Drinking Water -	- Reg O.169_03		S	ample Matrix	Ground Water			
ODWS_MAC / WATER / Table 1,2 and 3 - Drinking Water - Reg 0.169_03			Sample Date 27/10/2021					
Parameter	Units	RL	L1	L2	Result			
General Chemistry								
Biochemical Oxygen Demand (BOD5)	mg/L	2			< 4↑			
Alkalinity	mg/L as	2	500		280			
	CaCO3							
Bicarbonate	mg/L as	2			280			
	CaCO3							
Carbonate	mg/L as	2			< 2			
	CaCO3							
ОН	mg/L as	2			< 2			
	CaCO3							
Colour	TCU	3	5		< 3			
Conductivity	uS/cm	2			597			
Turbidity	NTU	0.10	5	1	5.39			
Ammonia+Ammonium (N)	as N mg/L	0.04			0.13			
Total Kjeldahl Nitrogen (N)	as N mg/L	0.05			0.16			
Phosphorus (total reactive)	mg/L	0.03			< 0.03			
Total Organic Carbon	mg/L	1			1			



Client: D.M. Wills -Peterborough

Project: 85104

Project Manager: Lynsey Tuters

PACKAGE: ODWS_AO_OG - Metals and			San	ple Number	7
Inorganics (WATER)			_		
			Sa	ample Name	85104-DW-01-10
			0	manla Materia	-27-2021 Ground Water
L1 = ODWS_AO_OG / WATER / Table 4 - Drinking Water - Re				ample Matrix Sample Date	
L2 = ODWS_MAC / WATER / Table 1,2 and 3 - Drinking Wate					
Parameter	Units	RL	L1	L2	Result
Metals and Inorganics					
Fluoride	mg/L	0.06		1.5	0.16
Bromide	mg/L	0.05			0.06
Nitrite (as N)	as N mg/L	0.003		1	0.025
Nitrate (as N)	as N mg/L	0.006		10	1.34
Sulphate	mg/L	0.04	500		23
Mercury	μg/L	0.01		1	< 0.01
Hardness	mg/L as	0.05	100		343
	CaCO3				
Aluminum	µg/L	1	100		13
Arsenic	μg/L	0.2		10	< 0.2
Boron	μg/L	2		5000	46
Barium	µg/L	0.02		1000	78.1
Beryllium	μg/L	0.007			< 0.007
Cobalt	μg/L	0.004			0.097
Calcium	mg/L	0.01			128
Cadmium	μg/L	0.003		5	0.003
Copper	μg/L	0.2	1000		0.2
Chromium	μg/L	0.08	1000	50	< 0.08
		7	300	50	733
Iron	ug/L		300		1.66
Potassium	mg/L	0.009			
Magnesium	mg/L	0.001			5.77
Manganese	µg/L	0.01	50		20.3

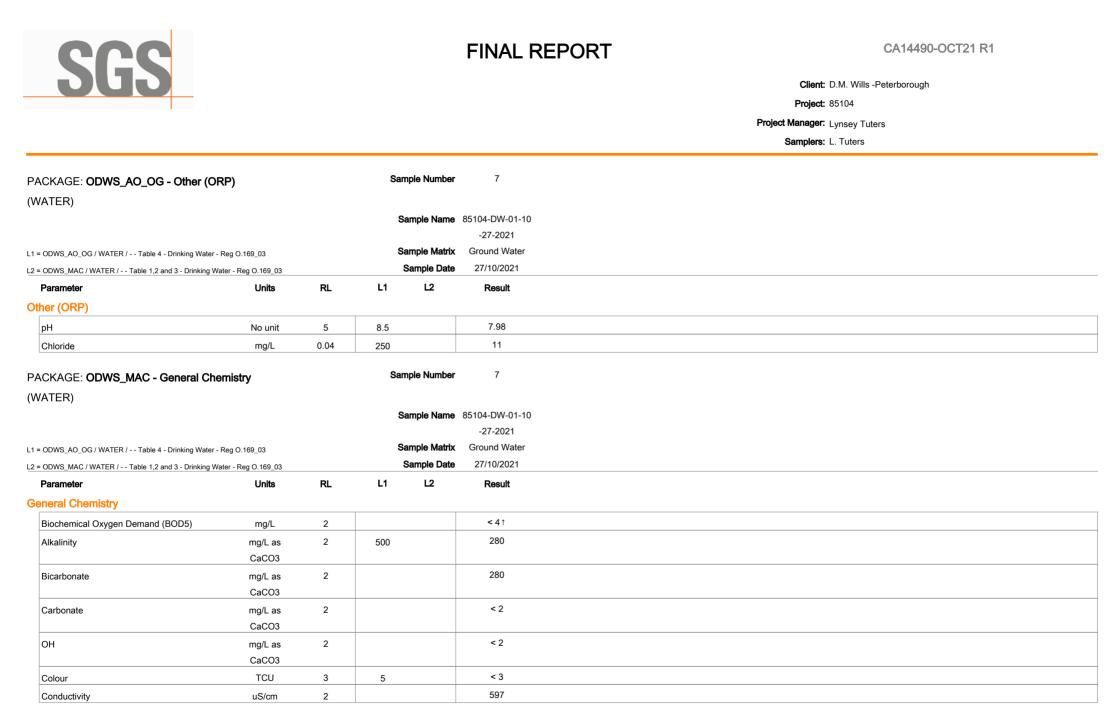


Client: D.M. Wills -Peterborough

Project: 85104

Project Manager: Lynsey Tuters

PACKAGE: ODWS_AO_OG - Metals an	nd		San	nple Number	7
Inorganics (WATER)					
			e	ample Namo	85104-DW-01-10
			3	аттріе матте	-27-2021
L1 = ODWS_AO_OG / WATER / Table 4 - Drinking Water -	Reg () 169, 03		S	ample Matrix	
L2 = ODWS_MAC / WATER / Table 1,2 and 3 - Drinking Water	-			Sample Date	
Parameter	Units	RL	L1	L2	Result
Metals and Inorganics (continued)					
Molybdenum	µg/L	0.04			6.50
Nickel	μg/L	0.1			0.4
Sodium	mg/L	0.01	200	20	12.4
Phosphorus	mg/L	0.003			0.005
Lead	μg/L	0.01		10	0.09
Silicon	ug/L	20			3620
Silver	μg/L	0.05			< 0.05
Strontium	μg/L	0.02			3050
Thallium	μg/L	0.005			0.014
Tin	μg/L	0.06			< 0.06
Titanium	ug/L	0.05			0.52
Antimony	μg/L	0.6		6	< 0.6
Selenium	μg/L	0.04		50	< 0.04
Uranium	μg/L	0.002		20	0.376
Vanadium	μg/L	0.01			0.05
Zinc	μg/L	2	5000		3





Client: D.M. Wills -Peterborough

Project: 85104

Project Manager: Lynsey Tuters

PACKAGE: ODWS_MAC - General C	hemistry		Sar	nple Number	7
(WATER)	-				
. ,			s	ample Name	85104-DW-01-10
					-27-2021
L1 = ODWS_AO_OG / WATER / Table 4 - Drinking Wate	ter - Reg O.169_03		s	ample Matrix	Ground Water
L2 = ODWS_MAC / WATER / Table 1,2 and 3 - Drinking	g Water - Reg O.169_03			Sample Date	27/10/2021
Parameter	Units	RL	L1	L2	Result
General Chemistry (continued)					
Turbidity	NTU	0.10	5	1	5.39
Ammonia+Ammonium (N)	as N mg/L	0.04			0.13
Total Kjeldahl Nitrogen (N)	as N mg/L	0.05			0.16
Phosphorus (total reactive)	mg/L	0.03			< 0.03
Total Organic Carbon	mg/L	1			1
(WATER)					
			s	ample Name	85104-DW-01-10
			S	ample Name	85104-DW-01-10 -27-2021
L1 = ODWS_AO_OG / WATER / Table 4 - Drinking Wate	ter - Reg O.169_03			ample Name ample Matrix	-27-2021
L1 = ODWS_AO_OG / WATER / Table 4 - Drinking Wate L2 = ODWS_MAC / WATER / Table 1,2 and 3 - Drinking	-		s		-27-2021 Ground Water
-	-	RL	s	ample Matrix	-27-2021 Ground Water
L2 = ODWS_MAC / WATER / Table 1,2 and 3 - Drinking	g Water - Reg O.169_03	RL	S	ample Matrix Sample Date	-27-2021 Ground Water 27/10/2021
L2 = ODWS_MAC / WATER / Table 1,2 and 3 - Drinking Parameter	g Water - Reg O.169_03	RL 0.06	S	ample Matrix Sample Date	-27-2021 Ground Water 27/10/2021
L2 = ODWS_MAC / WATER / Table 1,2 and 3 - Drinking Parameter Metals and Inorganics	g Water - Reg O.169_03 Units		S	ample Matrix Sample Date L2	-27-2021 Ground Water 27/10/2021 Result
L2 = ODWS_MAC / WATER / Table 1,2 and 3 - Drinking Parameter Metals and Inorganics Fluoride	g Water - Reg O.169_03 Units mg/L	0.06	S	ample Matrix Sample Date L2	-27-2021 Ground Water 27/10/2021 Result 0.16
L2 = ODWS_MAC / WATER / Table 1,2 and 3 - Drinking Parameter Metals and Inorganics Fluoride Bromide	g Water - Reg O.169_03 Units mg/L mg/L	0.06	S	ample Matrix Sample Date L2 1.5	-27-2021 Ground Water 27/10/2021 Result 0.16 0.06
L2 = ODWS_MAC / WATER / Table 1,2 and 3 - Drinking Parameter Metals and Inorganics Fluoride Bromide Nitrite (as N)	g Water - Reg O.169_03 Units mg/L mg/L as N mg/L	0.06 0.05 0.003	S	ample Matrix Sample Date L2 1.5	-27-2021 Ground Water 27/10/2021 Result 0.16 0.06 0.025
L2 = ODWS_MAC / WATER / Table 1,2 and 3 - Drinking Parameter Metals and Inorganics Fluoride Bromide Nitrite (as N) Nitrate (as N)	g Water - Reg O.169_03 Units mg/L mg/L as N mg/L as N mg/L	0.06 0.05 0.003 0.006	L1	ample Matrix Sample Date L2 1.5	-27-2021 Ground Water 27/10/2021 Result 0.16 0.06 0.025 1.34
L2 = ODWS_MAC / WATER / Table 1,2 and 3 - Drinking Parameter Metals and Inorganics Fluoride Bromide Nitrite (as N) Nitrate (as N) Sulphate	g Water - Reg O.169_03 Units mg/L as N mg/L as N mg/L mg/L mg/L	0.06 0.05 0.003 0.006 0.04	L1	ample Matrix Sample Date L2 1.5 1.5 1	-27-2021 Ground Water 27/10/2021 Result 0.16 0.06 0.025 1.34 23



Client: D.M. Wills -Peterborough

Project: 85104

Project Manager: Lynsey Tuters

PACKAGE: ODWS_MAC - Metals and (WATER)	d Inorganics		Sam	iple Number	7
. ,			Sa	ample Name	85104-DW-01-10
					-27-2021
L1 = ODWS_AO_OG / WATER / Table 4 - Drinking Wate	er - Reg O.169_03		Sa	ample Matrix	Ground Water
L2 = ODWS_MAC / WATER / Table 1,2 and 3 - Drinking	Water - Reg 0.169_03		5	Sample Date	27/10/2021
Parameter	Units	RL	L1	L2	Result
Metals and Inorganics (continued)					
Aluminum	µg/L	1	100		13
Arsenic	µg/L	0.2		10	< 0.2
Boron	µg/L	2		5000	46
Barium	µg/L	0.02		1000	78.1
Beryllium	µg/L	0.007			< 0.007
Cobalt	µg/L	0.004			0.097
Calcium	mg/L	0.01			128
Cadmium	µg/L	0.003		5	0.003
Copper	µg/L	0.2	1000		0.2
Chromium	µg/L	0.08		50	< 0.08
Iron	ug/L	7	300		733
Potassium	mg/L	0.009			1.66
Magnesium	mg/L	0.001			5.77
Manganese	μg/L	0.01	50		20.3
Molybdenum	µg/L	0.04			6.50
Nickel	μg/L	0.1			0.4
Sodium	mg/L	0.01	200	20	12.4
Phosphorus	mg/L	0.003			0.005
Lead	μg/L	0.01		10	0.09
Silicon	ug/L	20			3620
Silver	μg/L	0.05			< 0.05
Strontium	μg/L	0.02			3050



Client: D.M. Wills -Peterborough

Project: 85104

Project Manager: Lynsey Tuters

PACKAGE: ODWS_MAC - Metals and I	PACKAGE: ODWS_MAC - Metals and Inorganics							
(WATER)								
					-27-2021			
1 = ODWS_AO_OG / WATER / Table 4 - Drinking Water - Reg 0.169_03				ample Matrix				
L2 = ODWS_MAC / WATER / Table 1,2 and 3 - Drinking Wa	ater - Reg O.169_03			Sample Date	27/10/2021			
Parameter	Units	RL	L1	L2	Result			
Metals and Inorganics (continued)								
Thallium	µg/L	0.005			0.014			
Tin	µg/L	0.06			< 0.06			
Titanium	ug/L	0.05			0.52			
Antimony	μg/L	0.6		6	< 0.6			
Selenium	µg/L	0.04		50	< 0.04			
Uranium	µg/L	0.002		20	0.376			
Vanadium	µg/L	0.01			0.05			
Zinc	µg/L	2	5000		3			



Client: D.M. Wills -Peterborough

Project: 85104

Project Manager: Lynsey Tuters

PACKAGE: ODWS	_MAC - Other (ORP) (WAT	TER)		Sar	mple Number	7
				s	ample Name	85104-DW-01-10
						-27-2021
L1 = ODWS_AO_OG / WATE	R / Table 4 - Drinking Water - Reg O.16	69_03		S	ample Matrix	Ground Water
L2 = ODWS_MAC / WATER /	Table 1,2 and 3 - Drinking Water - Reg	g O.169_03			Sample Date	27/10/2021
Parameter		Units	RL	L1	L2	Result
Other (ORP)						
рН		No unit	5	8.5		7.98
Chloride		mg/L	0.04	250		11



EXCEEDANCE SUMMARY

Parameter	Method	Units	Result	ODWS_AO_OG / WATER / Table 4 - Drinking Water - Reg 0.169_03 L1	ODWS_MAC / WATER / Tabl 1,2 and 3 - Drinking Water - Reg 0.169_03 L2
5104-DW-01-10-27-2021					
Turbidity	SM 2130	NTU	5.39	5	1
Hardness	SM 3030/EPA 200.8	mg/L	343	100	
Iron	SM 3030/EPA 200.8	µg/L	733	300	



QCR_SubCategory

Method: SM 2130 | Internal ref.: ME-CA-[ENVIEWL-LAK-AN-003

Parameter	QC batch Reference	Units	RL	Method Blank	Duplicate		LC	S/Spike Blank		Matrix Spike / Ref.		
					RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery	Recovery Limits (%)	
								Low	High	(%)	Low	High
Turbidity	EWL0615-OCT21	NTU	0.10	< 0.10	3	10	97	90	110	NA		

Alkalinity

Method: SM 2320 | Internal ref.: ME-CA-IENVIEWL-LAK-AN-006

Parameter	QC batch	Units	RL	Method Blank	Duplicate		LC	S/Spike Blank		Matrix Spike / Ref.		
	Reference				RPD	AC (%)	Spike Recovery (%)	Recovery Limits (%)		Spike Recovery	Recovery Limits (%)	
								Low	High	(%)	Low	High
Alkalinity	EWL0638-OCT21	mg/L as CaCO3	2	< 2	1	20	102	80	120	NA		

Ammonia by SFA

Method: SM 4500 | Internal ref.: ME-CA-[ENV]SFA-LAK-AN-007

Parameter	QC batch	Units	RL	Method	Dup	olicate	LC	S/Spike Blank		N	latrix Spike / Re	f.
	Reference			Blank	RPD	AC	Spike		ery Limits %)	Spike Recovery		ory Limits %)
					(%)	Recovery (%)	Low	High	(%)	Low	High	
Ammonia+Ammonium (N)	SKA0305-OCT21	mg/L	0.04	<0.04	8	10	106	90	110	100	75	125



Anions by IC

Method: EPA300/MA300-Ions1.3 | Internal ref.: ME-CA-[ENV]IC-LAK-AN-001

Parameter	QC batch	Units	RL	Method	Dup	licate	LC	S/Spike Blank		Ma	atrix Spike / Ret	
	Reference			Blank	IK RPD	AC	Spike	Recover (%	•	Spike Recovery	Recove	ry Limits %)
						(%)	Recovery (%)	Low	High	(%)	Low	High
Bromide	DIO0618-OCT21	mg/L	0.05	<0.05	ND	20	104	90	110	110	75	125
Nitrite (as N)	DIO0618-OCT21	mg/L	0.003	<0.003	11	20	99	90	110	95	75	125
Nitrate (as N)	DIO0618-OCT21	mg/L	0.006	<0.006	0	20	102	90	110	95	75	125
Chloride	DIO0619-OCT21	mg/L	0.04	<0.04	NV	20	101	90	110	NV	75	125
Sulphate	DIO0636-OCT21	mg/L	0.04	<0.04	1	20	99	90	110	106	75	125

Biochemical Oxygen Demand

Method: SM 5210 | Internal ref.: ME-CA-IENVIEWL-LAK-AN-007

Parameter	QC batch	Units	RL	Method	Dup	olicate	LC	S/Spike Blank		M	atrix Spike / Re	əf.
	Reference			Blank	RPD	AC	Spike	Recove	ry Limits 6)	Spike Recovery		ery Limits (%)
						(%)	Recovery (%)	Low	High	(%)	Low	High
Biochemical Oxygen Demand (BOD5)	BOD0053-OCT21	mg/L	2	< 2	3	30	90	70	130	NV	70	130



Carbon by SFA

Method: SM 5310 | Internal ref.: ME-CA-[ENVISFA-LAK-AN-009

Parameter	QC batch	Units	RL	Method			LC	S/Spike Blank		м	atrix Spike / Re	f.
	Reference	Blank	RPD	AC	Spike		ry Limits %)	Spike Recovery		ry Limits %)		
						(%)	Recovery (%)	Low	High	(%)	Low	High
Total Organic Carbon	SKA0309-OCT21	mg/L	1	<1	0	10	104	90	110	106	75	125

Carbonate/Bicarbonate

Method: SM 2320 | Internal ref.: ME-CA-[ENVIEWL-LAK-AN-006

Parameter	QC batch	Units	RL	Method	Duj	olicate	LC	S/Spike Blank		M	atrix Spike / Ref	
	Reference			Blank	RPD	AC	Spike	Recover (%	-	Spike Recovery	Recover	ry Limits 6)
						(%)	Recovery (%)	Low	High	(%)	Low	High
Carbonate	EWL0638-OCT21	mg/L as CaCO3	2	<2	ND	10	NA	90	110	NA		
Bicarbonate	EWL0638-OCT21	mg/L as CaCO3	2	< 2	1	10	NA	90	110	NA		
ОН	EWL0638-OCT21	mg/L as CaCO3	2	< 2	ND	10	NA	90	110	NA		



Colour

Method: SM 2120 | Internal ref.: ME-CA-[ENV]EWL-LAK-AN-002

Parameter	QC batch			Dup	olicate	LC	S/Spike Blank		N	latrix Spike / Ref	:	
	Reference			Blank	RPD	AC	Spike		ry Limits %)	Spike Recovery	Recove	ry Limits 6)
						(%)	Recovery (%)	Low	High	(%)	Low	High
Colour	EWL0624-OCT21	TCU	3	< 3	ND	10	100	80	120	NA		

Conductivity

Method: SM 2510 | Internal ref.: ME-CA-IENVIEWL-LAK-AN-006

Parameter	QC batch	Units	RL	Method	Dup	olicate	LC	S/Spike Blank		м	atrix Spike / Ref.	:
	Reference			Blank	RPD	AC	Spike		ery Limits %)	Spike Recovery	Recover	-
						(%)	Recovery (%)	Low	High	(%)	Low	High
Conductivity	EWL0638-OCT21	uS/cm	2	< 2	0	20	99	90	110	NA		

Flouride by Specific Ion Electrode

Method: SM 4500 | Internal ref.: ME-CA-IENVIEWL-LAK-AN-014

Parameter	QC batch	Units	RL	Method	Dup	licate	LC	S/Spike Blank		м	atrix Spike / Ref	
	Reference			Blank	RPD	AC	Spike	10	ry Limits %)	Spike Recovery	Recover	-
						(%)	Recovery (%)	Low	High	(%)	Low	High
Fluoride	EWL0623-OCT21	mg/L	0.06	<0.06	5	10	100	90	110	96	75	125



Mercury by CVAAS

Method: SM3112/EPA 245 | Internal ref.: ME-CA-[ENV]SPE-LAK-AN-004

Parameter	QC batch	Units	RL	Method	Dup	olicate	LC	S/Spike Blank		M	atrix Spike / Re	əf.
	Reference	Blank	RPD	AC	Spike		ery Limits %)	Spike Recovery		ery Limits %)		
						(%)	Recovery (%)	Low	High	(%)	Low	High
Mercury	EHG0039-OCT21	ug/L	0.01	< 0.01	ND	20	93	80	120	109	70	130



Metals in aqueous samples - ICP-MS

Method: SM 3030/EPA 200.8 | Internal ref.: ME-CA-[ENV]SPE-LAK-AN-006

Parameter	QC batch	Units	RL	Method	Dup	licate	LC:	S/Spike Blank		Ma	atrix Spike / Ref	1.
	Reference			Blank	RPD	AC (%)	Spike Recovery	Recover (9	ry Limits 6)	Spike Recovery		ry Limits %)
						(70)	(%)	Low	High	(%)	Low	High
Silver	EMS0007-NOV21	ug/L	0.05	<0.00005	ND	20	105	90	110	106	70	130
Aluminum	EMS0007-NOV21	ug/L	1	<0.001	3	20	100	90	110	90	70	130
Arsenic	EMS0007-NOV21	ug/L	0.2	<0.0002	0	20	104	90	110	109	70	130
Barium	EMS0007-NOV21	ug/L	0.02	< 0.01	0	20	105	90	110	100	70	130
Beryllium	EMS0007-NOV21	ug/L	0.007	<0.00007	ND	20	92	90	110	76	70	130
Boron	EMS0007-NOV21	ug/L	2	<0.002	1	20	102	90	110	101	70	130
Calcium	EMS0007-NOV21	mg/L	0.01	<0.01	0	20	106	90	110	111	70	130
Cadmium	EMS0007-NOV21	ug/L	0.003	<0.000003	13	20	104	90	110	119	70	130
Cobalt	EMS0007-NOV21	ug/L	0.004	<0.000004	1	20	104	90	110	102	70	130
Chromium	EMS0007-NOV21	ug/L	0.08	<0.0008	ND	20	105	90	110	126	70	130
Copper	EMS0007-NOV21	ug/L	0.2	<0.0002	0	20	102	90	110	107	70	130
Iron	EMS0007-NOV21	ug/L	7	<0.007	2	20	107	90	110	125	70	130
Potassium	EMS0007-NOV21	mg/L	0.009	<0.009	1	20	107	90	110	115	70	130
Magnesium	EMS0007-NOV21	mg/L	0.001	<0.001	2	20	105	90	110	71	70	130
Manganese	EMS0007-NOV21	ug/L	0.01	<0.00001	2	20	103	90	110	73	70	130
Molybdenum	EMS0007-NOV21	ug/L	0.04	<0.00004	1	20	105	90	110	101	70	130
Sodium	EMS0007-NOV21	mg/L	0.01	<0.01	3	20	102	90	110	105	70	130
Nickel	EMS0007-NOV21	ug/L	0.1	<0.0001	2	20	102	90	110	108	70	130
Lead	EMS0007-NOV21	ug/L	0.01	<0.00001	9	20	107	90	110	101	70	130
Phosphorus	EMS0007-NOV21	mg/L	0.003	<0.003	ND	20	100	90	110	NV	70	130



Metals in aqueous samples - ICP-MS (continued)

Method: SM 3030/EPA 200.8 | Internal ref.: ME-CA-[ENV]SPE-LAK-AN-006

Parameter	QC batch	Units	RL	Method	Dup	licate	LCS	S/Spike Blank		Ma	atrix Spike / Re	f.
	Reference			Blank	RPD	AC (%)	Spike	Recover (%	ry Limits 6)	Spike Recovery		ery Limits %)
					1	(70)	Recovery (%)	Low	High	(%)	Low	High
Antimony	EMS0007-NOV21	ug/L	0.6	<0.0009	1	20	104	90	110	98	70	130
Selenium	EMS0007-NOV21	ug/L	0.04	<0.00004	7	20	102	90	110	105	70	130
Silicon	EMS0007-NOV21	ug/L	20	<0.02	3	20	95	90	110	NV	70	130
Tin	EMS0007-NOV21	ug/L	0.06	<0.00006	0	20	107	90	110	NV	70	130
Strontium	EMS0007-NOV21	ug/L	0.02	<0.00002	0	20	100	90	110	104	70	130
Titanium	EMS0007-NOV21	ug/L	0.05	<0.00005	3	20	105	90	110	NV	70	130
Thallium	EMS0007-NOV21	ug/L	0.005	<0.000005	ND	20	104	90	110	101	70	130
Uranium	EMS0007-NOV21	ug/L	0.002	<0.00002	1	20	102	90	110	90	70	130
Vanadium	EMS0007-NOV21	ug/L	0.01	<0.00001	7	20	104	90	110	115	70	130
Zinc	EMS0007-NOV21	ug/L	2	<0.002	ND	20	101	90	110	100	70	130

pН

Method: SM 4500 | Internal ref.: ME-CA-[ENV]EWL-LAK-AN-006

Parameter	QC batch	Units	RL	Method	Dup	olicate	LC	S/Spike Blank		M	latrix Spike / Ref	
	Reference			Blank	RPD	RPD AC (%)			ery Limits (%)	Spike Recovery	Recover	-
						Recovery (%)	Low	High	(%)	Low	High	
рН	EWL0638-OCT21	No unit	5	NA	0		100			NA		



Reactive Phosphorus by SFA

Method: SM 4500-P F | Internal ref.: ME-CA-IENVISFA-LAK-AN-004

Parameter	QC batch	Units	RL	Method	Dup	licate	LC	S/Spike Blank		м	atrix Spike / Ref	
	Reference			Blank	RPD	AC	Spike		ery Limits %)	Spike Recovery	Recove	ry Limits %)
						(%)	Recovery (%)	Low	High	(%)	Low	High
Phosphorus (total reactive)	SKA0301-OCT21	mg/L	0.03	<0.03	ND	10	102	90	110	NV	75	125

Total Nitrogen

Method: SM 4500-N C/4500-NO3- F | Internal ref.: ME-CA-IENVISFA-LAK-AN-002

Parameter	QC batch	Units	RL	Method	Duj	olicate	LC	S/Spike Blank		M	atrix Spike / Re	f.
	Reference			Blank	RPD	AC	Spike		ery Limits %)	Spike Recovery		ery Limits %)
						(%)	Recovery (%)	Low	High	(%)	Low	High
Total Kjeldahl Nitrogen (N)	SKA0306-OCT21	mg/L	0.05	<0.05	1	10	107	90	110	118	75	125



QC SUMMARY

Method Blank: a blank matrix that is carried through the entire analytical procedure. Used to assess laboratory contamination.

Duplicate: Paired analysis of a separate portion of the same sample that is carried through the entire analytical procedure. Used to evaluate measurement precision.

LCS/Spike Blank: Laboratory control sample or spike blank refer to a blank matrix to which a known amount of analyte has been added. Used to evaluate analyte recovery and laboratory accuracy without sample matrix effects.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate laboratory accuracy with sample matrix effects.

Reference Material: a material or substance matrix matched to the samples that contains a known amount of the analyte of interest. A reference material may be used in place of a matrix spike.

RL: Reporting limit

RPD: Relative percent difference

AC: Acceptance criteria

Multielement Scan Qualifier: as the number of analytes in a scan increases, so does the chance of a limit exceedance by random chance as opposed to a real method problem. Thus, in multielement scans, for the LCS and matrix spike, up to 10% of the analytes may exceed the quoted limits by up to 10% absolute and the spike is considered acceptable.

Duplicate Qualifier: for duplicates as the measured result approaches the RL, the uncertainty associated with the value increases dramatically, thus duplicate acceptance limits apply only where the average of the two duplicates is greater than five times the RL. Matrix Spike Qualifier: for matrix spikes, as the concentration of the native analyte increases, the uncertainty of the matrix spike recovery increases. Thus, the matrix spike acceptance limits apply only when the concentration of the matrix spike is greater than or equal to the concentration of the native analyte.

LEGEND

FOOTNOTES

NSS Insufficient sample for analysis.

- RL Reporting Limit.
- ↑ Reporting limit raised.
- ↓ Reporting limit lowered.
- $\ensuremath{\textbf{NA}}$ The sample was not analysed for this analyte
- ND Non Detect

Samples analysed as received. Solid samples expressed on a dry weight basis. "Temperature Upon Receipt" is representative of the whole shipment and may not reflect the temperature of individual samples.

Analysis conducted on samples submitted pursuant to or as part of Reg. 153/04, are in accordance to the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act" published by the Ministry and dated March 9, 2004 as amended.

SGS provides criteria information (such as regulatory or guideline limits and summary of limit exceedances) as a service. Every attempt is made to ensure the criteria information in this report is accurate and current, however, it is not guaranteed. Comparison to the most current criteria is the responsibility of the client and SGS assumes no responsibility for the accuracy of the criteria levels indicated. This document is issued, on the Client's behalf, by the Company under its General Conditions of Service available on request and accessible at http://www.sgs.com/terms_and_conditions.htm. The Client's attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any other holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents.

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-- End of Analytical Report --

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16: 289-385-6230				RUSH TAT	Additional	RUSH TAT (Additional Charges May Apply): 1 Day 2 Days 3 Days 4 Days PLEASE CONFIRM RUSH FEASIBILITY WITH SGS REPRESENTATIVE PRIOR TO SUBMISSION	y Apply): .ITY WITH	SGS REF	1 Day]2 Days ATIVE PRI	Days OR TO SU	1 Day 2 Days 3 Days 4 Days EPRESENTATIVE PRIOR TO SUBMISSION			,
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Revision: 1:5 Note: Submission of samples to SGS is acknowledgement that you have been provided direction on samples. (2) Submission of samples to SGS is considered authorization for completion of work. Signatures may appear on this form or be related on file in	knowledgement that you ha	ve been provided dire-	ction on sample cu	Hection/handling	and transportati	on of samples. {2	} Submission	of samples to	SGS is cons	idered author	zation for com	letion of work.	Signatures ma	iy appear on t	his form or be retained on file in



D.M. Wills -Peterborough

Attn : Amanda Tse

150 Jameson Drive Peterborough, ON K9J 0B9, Canada

Phone: 289-385-3286 Fax:705-741-3568

Project : 85104

05-July-2021

Date Rec. :	24 June 2021
LR Report:	CA14406-JUN21
Reference:	85104, Amanda Tse

#1

Copy:

CERTIFICATE OF ANALYSIS **Final Report**

Analysis	1:	2:	3:	4:	5:	6:	7:
	Analysis Start Date	Analysis Start Time C	Analysis ompleted Date Co	Analysis mpleted Time	MAC	AO/OG 85'	104-A302204-2021- 06-24
Sample Date & Time							24-Jun-21 13:06
Temp Upon Receipt [°C]							10.0
BOD5 [mg/L]	24-Jun-21	16:46	29-Jun-21	13:32		30-500	< 4
Alkalinity [mg/L as CaCO3]	25-Jun-21	08:21	05-Jul-21	11:01			256
HCO3 [mg/L as CaCO3]	25-Jun-21	08:21	02-Jul-21	09:56			256
CO3 [mg/L as CaCO3]	25-Jun-21	08:21	02-Jul-21	09:56			< 2
OH [mg/L as CaCO3]	25-Jun-21	08:21	02-Jul-21	09:56			< 2
Colour [TCU]	30-Jun-21	14:22	02-Jul-21	13:37		5	3
Conductivity [uS/cm]	25-Jun-21	08:21	02-Jul-21	09:56			547
pH [No unit]	25-Jun-21	08:21	02-Jul-21	09:56		6.5-8.5	7.87
Turbidity [NTU]	25-Jun-21	11:37	25-Jun-21	12:00	1	5	16.2*
NH3+NH4 [as N mg/L]	44376	0.76	30-Jun-21	14:10			0.07
TKN [as N mg/L]	29-Jun-21	15:11	02-Jul-21	16:56			< 0.5
Tot.Reactive P [mg/L]	25-Jun-21	08:46	25-Jun-21	18:07			< 0.03
TOC [mg/L]	25-Jun-21	10:34	28-Jun-21	14:48			1
CI [mg/L]	26-Jun-21	09:47	28-Jun-21	13:15		250	14
F [mg/L]	28-Jun-21	08:31	28-Jun-21	14:29	1.5		0.19
Br [mg/L]	26-Jun-21	09:31	28-Jun-21	13:39			< 0.05
NO2 [as N mg/L]	26-Jun-21	09:31	28-Jun-21	13:39	1		0.014
NO3 [as N mg/L]	26-Jun-21	09:31	28-Jun-21	13:39	10		0.510
SO4 [mg/L]	26-Jun-21	09:47	28-Jun-21	13:15		500	21

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Page 1 of 7

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Analysis	1:	2:	3:	4:	5:	6:	7
	Analysis Start Date	Analysis Start Time Co	Analysis mpleted Date Cor	Analysis npleted Time	MAC	AO/OG 85104	A302204-2021- 06-2
Hg [µg/L]	25-Jun-21	16:00	29-Jun-21	09:33	1		< 0.0
Hardness [mg/L as CaCO3]	30-Jun-21	09:42	02-Jul-21	16:30		80-100	314
AI [µg/L]	30-Jun-21	09:42	02-Jul-21	16:30		100	5
As [µg/L]	30-Jun-21	09:42	02-Jul-21	16:30	10		< 0.1
Β [μg/L]	30-Jun-21	09:42	02-Jul-21	16:30	5000		3
Ba [µg/L]	30-Jun-21	09:42	02-Jul-21	16:30	1000		87.
Be [µg/L]	30-Jun-21	09:42	02-Jul-21	16:30			0.01
Co [µg/L]	30-Jun-21	09:42	02-Jul-21	16:30			0.52
Ca [mg/L]	30-Jun-21	09:42	02-Jul-21	16:30			11
Cd [µg/L]	30-Jun-21	09:42	02-Jul-21	16:30	5		< 0.00
Cu [µg/L]	30-Jun-21	09:42	02-Jul-21	16:30		1000	0.
Cr [µg/L]	30-Jun-21	09:42	02-Jul-21	16:30	50		0.2
Fe [ug/L]	30-Jun-21	09:42	02-Jul-21	16:30		300	2720
K [mg/L]	30-Jun-21	09:42	02-Jul-21	16:30			1.5
Mg [mg/L]	30-Jun-21	09:42	02-Jul-21	16:30			5.5
Mn [µg/L]	30-Jun-21	09:42	02-Jul-21	16:30		50	42.
Mo [µg/L]	30-Jun-21	09:42	02-Jul-21	16:30			1.0
Ni [µg/L]	30-Jun-21	09:42	02-Jul-21	16:30			1.
Na [mg/L]	30-Jun-21	09:42	02-Jul-21	16:30	20*	200	10.
P [mg/L]	30-Jun-21	09:42	02-Jul-21	16:30			0.00
Pb [µg/L]	30-Jun-21	09:42	02-Jul-21	16:30	10		0.6
Si [ug/L]	30-Jun-21	09:42	02-Jul-21	16:30			425
Ag [µg/L]	30-Jun-21	09:42	02-Jul-21	16:30			< 0.0
Sr [µg/L]	30-Jun-21	09:42	02-Jul-21	16:30			225
TI [µg/L]	30-Jun-21	09:42	02-Jul-21	16:30			0.04
Sn [μg/L]	30-Jun-21	09:42	02-Jul-21	16:30			0.1
Ti [ug/L]	30-Jun-21	09:42	02-Jul-21	16:30			1.6
Sb [µg/L]	30-Jun-21	09:42	02-Jul-21	16:30	6		< 0.
Se [µg/L]	30-Jun-21	09:42	02-Jul-21	16:30	50		< 0.0
U [µg/L]	30-Jun-21	09:42	02-Jul-21	16:30	20		0.34
V [µg/L]	30-Jun-21	09:42	02-Jul-21	16:30			0.1
Zn [μg/L]	30-Jun-21	09:42	02-Jul-21	16:30		5000	
Cation Sum [meg/L]	05-Jul-21		05-Jul-21				6.9
Anion Sum [meq/L]	05-Jul-21		05-Jul-21				5.9
Anion-Cation Balance [% difference]	05-Jul-21		05-Jul-21				7.8
Ion Ratio	05-Jul-21		05-Jul-21				1.1
TDS (calculated) [mg/L]	05-Jul-21		05-Jul-21				32
Conductivity (calc) [uS/cm]	05-Jul-21		05-Jul-21				64

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Analysis	1: Analysis Start Date	2: Analysis Start Time	3: Analysis Completed Date C	4: Analysis completed Time	5: MAC	6: AO/OG 851	7: 104-A302204-2021- 06-24
Langelier's Index [@ 4° C]	05-Jul-21		05-Jul-21				0.39
Saturation pH [pHs @ 4°C]	05-Jul-21		05-Jul-21				7.48
Reactive SiO2 [mg/L]	02-Jul-21	12:13	02-Jul-21	15:04			7.77

MAC - Maximum Acceptable Concentration AO/OG - Aesthetic Objective / Operational Guideline NR - Not reportable under applicable Provincial drinking water regulations as per client.

Temperature of Sample upon Receipt: 10 degrees C Cool i ng Agent Present: Yes Custody Seal Present: Yes

Chain of Custody Number: 022455

Parameter	Description	SGS Method Code
Alkalinity	Alkalinity by Titration	ME-CA-[ENV]EWL-LAK-AN-006
Aluminum	Aluminum by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
Ammonia+Ammonium (N)	NH3+NH4 by Skalar - drinking water to MDL	ME-CA-[ENV]SFA-LAK-AN-007
Anion Sum	Calculation-Anion Sum	
Anion-Cation Balance	Calculation-Anion-Cation Balance	
Antimony	Antimony by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
Arsenic	Arsenic by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
Barium	Barium by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
Beryllium	Beryllium by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
Bicarbonate	Bicarbonate by Titration	ME-CA-[ENV]EWL-LAK-AN-006
Biochemical Oxygen Demand (BOD5)	Biochemical Oxygen Demand (BOD5)	ME-CA-[ENV]EWL-LAK-AN-007
Boron	Boron by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
Bromide	Bromide by Ion Chromatography	ME-CA-[ENV]IC-LAK-AN-001
Cadmium	Cadmium by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
Calcium	Calcium by ICP-MS drinking water	ME-CA-[ENV]SPE-LAK-AN-006
Carbonate	Carbonate by Titration	ME-CA-[ENV]EWL-LAK-AN-006
Cation sum	Calculation-Cation Sum	
Chloride	Chloride by Ion Chromatography	ME-CA-[ENV]IC-LAK-AN-001

Method Descriptions

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Parameter	Description	SGS Method Code
Chromium	Chromium by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
Cobalt	Cobalt by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
Colour	True Colour by colourmetric method	ME-CA-[ENV]EWL-LAK-AN-002
Conductivity	Conductivity by Conductivity Meter	ME-CA-[ENV]EWL-LAK-AN-006
Conductivity (calculated)	Calculation-Conductivity	
Copper	Copper by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
Fluoride	Fluoride by specific ion electrode	ME-CA-[ENV]EWL-LAK-AN-014
Hardness	Hardness (CaCO3) by ICP	ME-CA-[ENV]SPE-LAK-AN-003
Ion Ratio	Calculation-Ion Ratio	
Iron	Iron by ICP-MS drinking water	ME-CA-[ENV]SPE-LAK-AN-006
Langeliers Index 4° C	Calculation-Langelier's Index 4°C	
Lead	Lead by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
Magnesium	Magnesium by ICP-MS drinking water	ME-CA-[ENV]SPE-LAK-AN-006
Manganese	Manganese by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
Mercury	Hg drinking water by CVAAS	ME-CA-[ENV]SPE-LAK-AN-004
Molybdenum	Molybdenum by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
Nickel	Nickel by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
Nitrate (as N)	Nitrate by Ion Chromatography	ME-CA-[ENV]IC-LAK-AN-001
Nitrite (as N)	Nitrite by Ion Chromatography	ME-CA-[ENV]IC-LAK-AN-001
ОН	OH by titration	ME-CA-[ENV]EWL-LAK-AN-006
рН	pH - solution	ME-CA-[ENV]EWL-LAK-AN-006
Phosphorus	Phosphorus by ICP-MS drinking water	ME-CA-[ENV]SPE-LAK-AN-006
Phosphorus (total reactive)	Tot. Reactive Phos. by Skalar or Spec no reagents or heat	ME-CA-[ENV]SFA-LAK-AN-004
Potassium	Potassium by ICP-MS drinking water	ME-CA-[ENV]SPE-LAK-AN-006
Reactive Silica	Reactive Silica by Colourmetry	
Saturation pH 4°C	Calculation-Saturation pH 4°C	
Selenium	Selenium by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
Silicon	Silicon by ICP-MS drinking water	ME-CA-[ENV]SPE-LAK-AN-006
Silver	Silver by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
Sodium	Sodium by ICP-MS drinking water	ME-CA-[ENV]SPE-LAK-AN-006
Strontium	Strontium by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
Sulphate	Sulphate by Ion Chromatography	ME-CA-[ENV]IC-LAK-AN-001
Thallium	Thallium by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
Tin	Tin by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
Titanium	Titanium by ICP-MS drinking water	ME-CA-[ENV]SPE-LAK-AN-006

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Project : 85104 LR Report : CA14406-JUN21

Parameter	Description	SGS Method Code
Total Dissolved Solids (calculated)	Calculation-TDS	
Total Kjeldahl Nitrogen	Tot. kjeldahl Nitrogen by Skalar	ME-CA-[ENV]SFA-LAK-AN-002
Total Organic Carbon	TOC by Skalar	ME-CA-[ENV]SFA-LAK-AN-009
Turbidity	Turbidity - APHA.AWWA.WPCF 18th 2130B	ME-CA-[ENV]EWL-LAK-AN-003
Uranium	Uranium by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
Vanadium	Vanadium by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006
Zinc	Zinc by ICP-MS Drinking Water	ME-CA-[ENV]SPE-LAK-AN-006

Brad Moore Hon. B.Sc Project Specialist, Environment, Health & Safety

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Quality Control Report

				Ino	rganic Analys	is							
Parameter	Reporting	Unit	Method		Dupl			LC	S / Spike Blank	κ	Matrix Spil	ke / Reference	Material
	Ĺimit		Blank	Result 1	Result 2	RPD	Acceptance Criteria	Spike Recovery (%)	Recovery L	imits (%)	Spike Recovery (%)	Recovery L	imits (%)
							%		Low	High		Low	High
QCR_SubCategory - QCBatchID: EWL0520-JUN21													
Turbidity	0.10	NTU	< 0.10			ND	10	99	90	110	NA		
Alkalinity - QCBatchID: EWL0514-JUN21													
Alkalinity	2	mg/L as Ca	< 2			1	20	96	80	120	NA		
Ammonia by SFA - QCBatchID: SKA0291-JUN21													
Ammonia+Ammonium (N)	0.04	mg/L	<0.04			ND	10	96	90	110	95	75	125
Anions by IC - QCBatchID: DIO0466-JUN21													
Bromide	0.05	mg/L	<0.05			ND	20	101	90	110	94	75	125
Nitrate (as N)	0.006	mg/L	<0.006			0	20	99	90	110	100	75	125
Nitrite (as N)	0.003	mg/L	<0.003			ND	20	95	90	110	99	75	125
Anions by IC - QCBatchID: DIO0467-JUN21													
Chloride	0.04	mg/L	<0.04			3	20	101	90	110	93	75	125
Sulphate	0.04	mg/L	<0.04			1	20	98	90	110	91	75	125
Biochemical Oxygen Demand - QCBatchID: BOD0055-JL	JN21												
Biochemical Oxygen Demand (BOD5)	2	mg/L	< 2			11	30	112	70	130	NV	70	130
Carbon by SFA - QCBatchID: SKA0264-JUN21													
Total Organic Carbon	1	mg/L	<1			ND	10	96	90	110	110	75	125
Carbonate/Bicarbonate - QCBatchID: EWL0514-JUN21													
Bicarbonate	2	mg/L as Ca	< 2			1	10	NA	90	110	NA		
Carbonate	2	mg/L as Ca	< 2			ND	10	NA	90	110	NA		
ОН	2	mg/L as Ca	< 2			ND	10	NA	90	110	NA		
Colour - QCBatchID: EWL0592-JUN21													
Colour	3	TCU	< 3			ND	10	105	80	120	NA		
Conductivity - QCBatchID: EWL0514-JUN21													
Conductivity	2	uS/cm	< 2			0	20	99	90	110	NA		
Flouride by Specific Ion Electrode - QCBatchID: EWL054	0-JUN21												
Fluoride	0.06	mg/L	<0.06			2	10	100	90	110	89	75	125
Mercury by CVAAS - QCBatchID: EHG0029-JUN21													
Mercury	0.01	ug/L	<0.01			ND	20	93	80	120	109	70	130
Metals in aqueous samples - ICP-MS - QCBatchID: EMS	0183-JUN21												
Aluminum	1	ug/L	< 1			0	20	99	90	110	110	70	130
Antimony	0.9	ug/L	<0.0009			0	20	101	90	110	102	70	130
Arsenic	0.2	ug/L	<0.0002			ND	20	102	90	110	92	70	130
Barium	0.02	ug/L	<0.00002			5	20	96	90	110	96	70	130
Beryllium	0.007	ug/L	<0.00007			ND	20	93	90	110	92	70	130
Boron	2	ug/L	<0.002			1	20	102	90	110	90	70	130

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Project :	85104
LR Report :	CA14406-JUN21

	Inorganic Analysis												
Parameter					Dupl	icate		LCS / Spike Blank			Matrix Spi	ke / Reference	Material
	Limit		Blank	ank Result 1	Result 2	RPD	Acceptance Criteria	Spike Recovery (%)	Recovery I	∟imits (%)	Spike Recovery (%)	Recovery I	∟imits (%)
							%] [Low	High		Low	High
Cadmium	0.003	ug/L	< 0.000003			ND	20	99	90	110	109	70	130
Calcium	0.01	mg/L	<0.01			8	20	99	90	110	96	70	130
Chromium	0.08	ug/L	<0.00008			11	20	102	90	110	106	70	130
Cobalt	0.004	ug/L	< 0.000004			13	20	98	90	110	95	70	130
Copper	0.2	ug/L	<0.0002			5	20	97	90	110	99	70	130
Iron	7	ug/L	<0.007			11	20	98	90	110	100	70	130
Lead	0.01	ug/L	<0.00001			4	20	97	90	110	97	70	130
Magnesium	0.001	mg/L	<0.001			1	20	102	90	110	96	70	130
Manganese	0.01	ug/L	<0.00001			3	20	102	90	110	93	70	130
Molybdenum	0.04	ug/L	<0.00004			17	20	100	90	110	95	70	130
Nickel	0.1	ug/L	<0.0001			7	20	97	90	110	89	70	130
Phosphorus	0.003	mg/L	<0.003			4	20	100	90	110	NV	70	130
Potassium	0.009	mg/L	<0.009			3	20	101	90	110	99	70	130
Selenium	0.04	ug/L	< 0.00004			ND	20	102	90	110	93	70	130
Silicon	20	ug/L	<0.02			1	20	105	90	110	NV	70	130
Silver	0.05	ug/L	<0.00005			ND	20	98	90	110	88	70	130
Sodium	0.01	mg/L	<0.01			1	20	109	90	110	100	70	130
Strontium	0.02	ug/L	<0.00002			1	20	100	90	110	97	70	130
Thallium	0.005	ug/L	< 0.000005			ND	20	100	90	110	104	70	130
Tin	0.06	ug/L	<0.00006			6	20	99	90	110	NV	70	130
Titanium	0.05	ug/L	<0.00005			ND	20	98	90	110	NV	70	130
Uranium	0.002	ug/L	<0.00002			1	20	94	90	110	90	70	130
Vanadium	0.01	ug/L	<0.00001			ND	20	99	90	110	98	70	130
Zinc	2	ug/L	<0.002			2	20	101	90	110	101	70	130
pH - QCBatchID: EWL0514-JUN21													
рН	5	No unit	NA			0		101			NA		
Reactive Phosphorus by SFA - QCBatchID: SKA0257-JUN21													
Phosphorus (total reactive)	0.03	mg/L	<0.03			ND	10	95	90	110	77	75	125
Reactive Silica by Colourmetry - QCBatchID: EWL0012-J	Reactive Silica by Colourmetry - QCBatchID: EWL0012-JUL21												
Reactive Silica	0.02	mg/L	< 0.02			10	10	107	90	110	97	75	125
Total Nitrogen - QCBatchID: SKA0016-JUL21													
Total Kjeldahl Nitrogen	0.5	as N mg/L	<0.5			1	10	99	90	110	97	75	125

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PARTNERS IN ENGINEERING, PLANNING &

ENVIRONMENTAL SERVICES

Memo

То:	Mr. Peter and Mrs. Wendy Smith
From:	Ben Radford, B.Sc., Project Biologist D.M. Wills Associates Ltd.
Date:	January 25, 2022
Project Name:	1090 4 th Line Road South, Dummer
Project No.:	85104
Subject:	Opinion Letter

1.0 Introduction

D.M. Wills Associates Limited (Wills) was retained by Peter and Wendy Smith (Client) to undertake an Opinion Letter to address any potential environmental impacts associated with a proposed lot severance (Project) at 1090 4th Line Road South, Lot 14, Concession 3, in the Township of Douro-Dummer (Subject Property). Specifically, the Subject Property encompasses approximately 81.6 ha of land. The Project includes a proposed 0.6 ha lot severance (Proposed Severance Lot), with the remaining land being retained. See Figure 1 and Figure 2.

The Otonabee Region Conservation Authority (ORCA) has requested that an Opinion Letter be completed for the proposed severance due to the presence of natural heritage features within 120 m of the Subject Property. The Opinion Letter must demonstrate that there will be no negative ecological or hydrological impacts on the natural heritage system, connectivity and linkages associated with the site and surrounding area. The Subject Property is adjacent to an unevaluated wetland and woodland, which prompted the need for the Opinion Letter.



wsib 2020

The purpose of the Opinion Letter is to identify environmental constraints, Professional Engineers develop appropriate setbacks, consult with regulatory agencies and identify the activities required to address project compliance with Provincial and Federal statutes and policies including but not limited to: the Planning Act (R.S.O. 1995), the Conservation Authorities Act (R.S.O. 1990), the Endangered Species Act (R.O. 2007), the Provincial Policy Statement (2020), and A Place to Grow: Growth plan for the Greater Golden Horseshoe (2020) (Growth Plan).



Opinion Letter – 1090 4th Line Road South, Township of Douro-Dummer Page 2 of 14 January 25, 2022

Wills' biologists undertook two (2) field investigations to collect information on existing conditions.

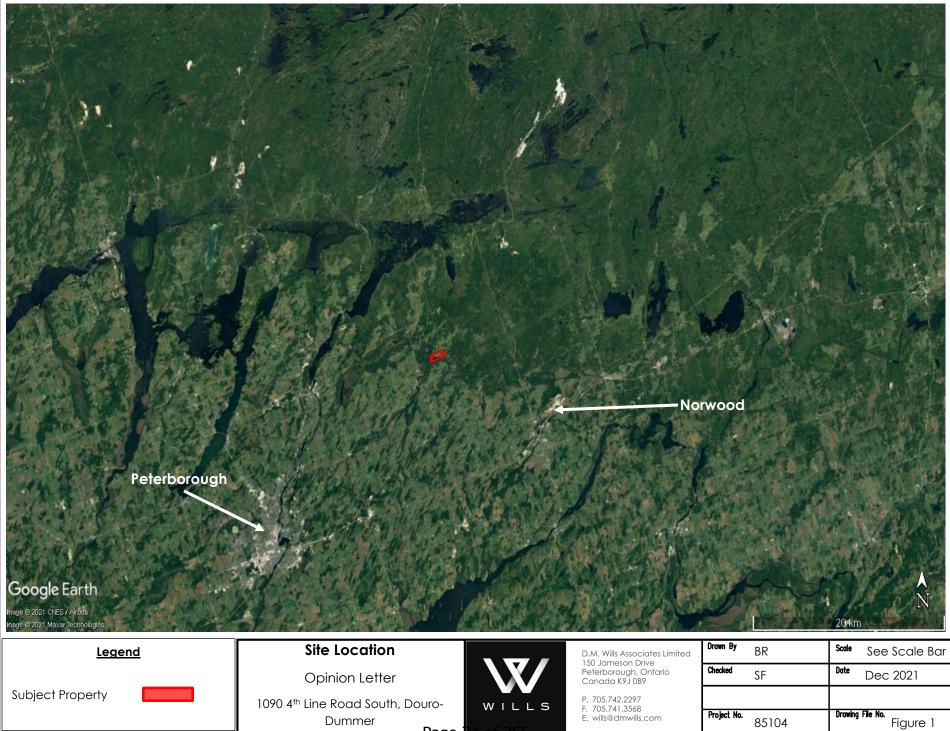
This document provides:

- An existing conditions background review;
- A summary of the observations made during field investigations;
- Description of the potential impacts of the Project; and,
- Recommended measures to mitigate impacts of the Project.

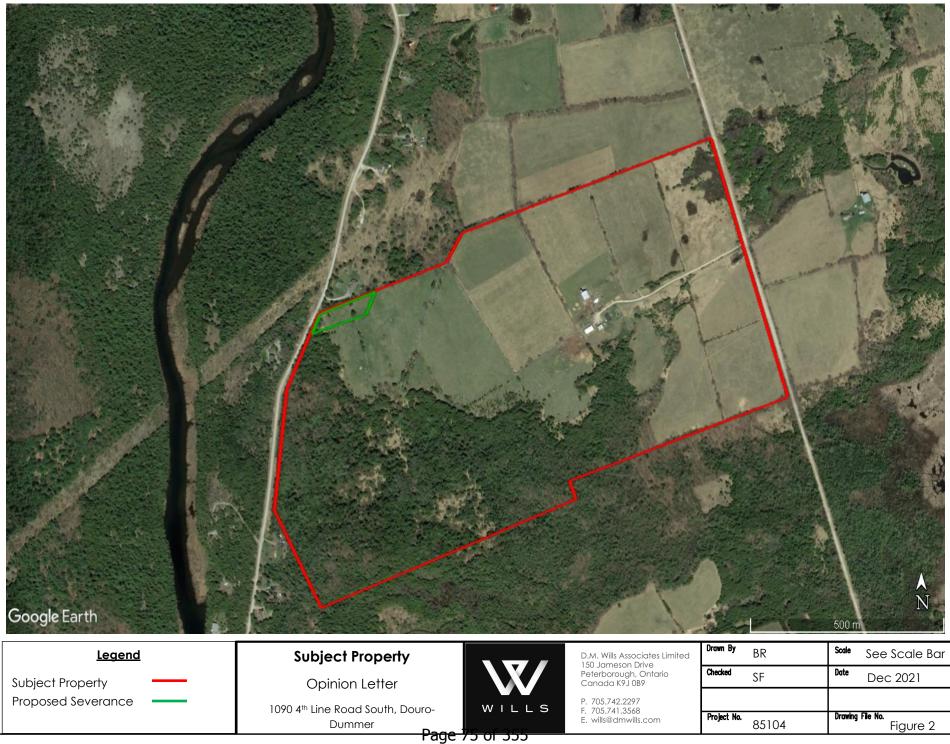
1.1 Subject Property

The Subject Property encompasses approximately 81.6 ha of land located at Lot 14, Concession 3, in the Township of Douro-Dummer. The area surrounding the Subject Property is made up of agricultural lands, an unevaluated wetland, an unevaluated woodland, and a rural residential building.

The Project includes the severance of the Subject Property into two (2) parcels of land. The Proposed Severance Lot will be approximately 0.6 ha, with the remaining 81 ha parcel being retained.



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2.0 Background Review

2.1 Designated Areas

A review of the Ministry of Northern Development, Mines, Natural Resources and Forestry (NDMNRF) natural heritage/resources data obtained through the NDMNRF Natural Heritage Information Centre (NHIC) database was completed to identify the presence, or absence of, any Valued Ecosystem Components (VECs) such as local, provincial and federally Designated Areas (DAs). DAs include lands covered under the Provincial Policy Statement (2020), as well as, other natural heritage features of local or federal interest including Federal Parks, Environmental Sensitive Landscapes or Areas (ESLs, ESAs), such as significant woodlands, locally significant wetlands or otherwise natural heritage feature identified for conservation.

A summary of the results of the database searches is outlined below with reference to DAs:

Significant Wildlife Habitat

No Significant Wildlife Habitat (SWH) records were identified through background review.

Provincially Significant Wetlands

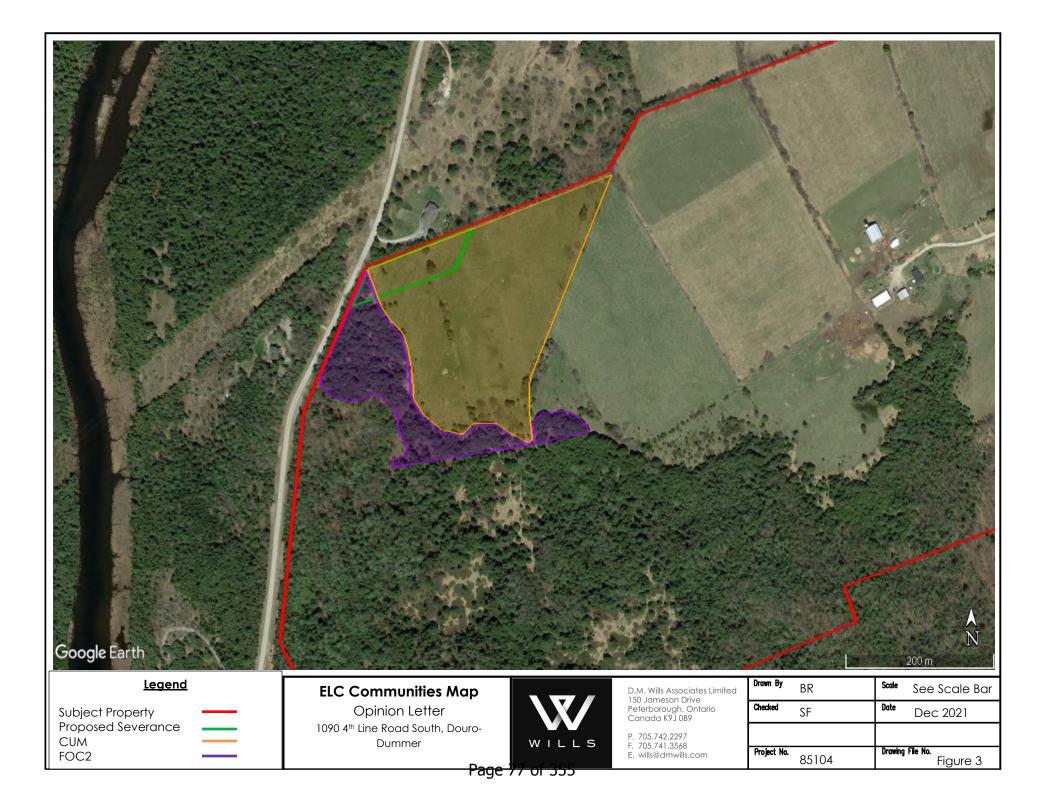
No Provincially Significant Wetlands (PSW) were identified on, or within, 120 m of the Subject Property based on background review.

Significant Woodlands

NHIC mapping indicates woodlands as being present within the Subject Property and area of the Proposed Severance Lot.

Other Wetlands

The NHIC database identifies one (1) unevaluated wetland, west of Rock Road, within 120 m of the Proposed Severance Lot.





3.0 Existing Conditions

3.1 Biophysical Environment

3.1.1 Topography

The Subject Property contains small rolling hills, with the general topography sloping down, towards the west.

3.1.2 Soils

The Subject Property falls within Ecoregion 6E (Lake Simcoe, Rideau), a region underlain by carbonate rich Paleozoic bedrock, and dominated by a wide variety of deep glacial deposits (Ecological Stratification Working Group, 1996).

3.1.3 Hydrology

Groundwater and surface water is expected to flow along the natural topography of the Subject Property. Groundwater at the Subject Property is inferred to generally flow west.

Although surface topography typically has great influence on the groundwater flow, it has been observed in several areas that bedrock topography also has a significant influence. Groundwater flow direction may also be influenced by utility trenches and other subsurface structures and may migrate in the bedding stone of subsurface utility trenches. Groundwater flow direction can only be confirmed with the measurement of groundwater elevation through the Subject Property.

3.2 Field Investigations

Field investigations took place on June 4 and June 23, 2021 to evaluate existing ecological conditions within the Subject Property. The field program included the following surveys:

- Two (2) Breeding Bird Surveys;
- Ecological Land Classification (ELC); and,
- Species at Risk Assessment.

3.2.1 Breeding Bird Surveys and Species at Risk Assessment

Targeted surveys for SAR avifauna were completed on the Subject Property, with a focus on the Proposed Severance Lot. No SAR avifauna were observed at the time of the Breeding Bird Surveys. Full results can be found in the *Species*



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at Risk Evaluation Report (Wills, 2021) (**Appendix A**). Mitigation measures to protect SAR are found in **Section 5.3**.

3.2.2 Ecological Land Classification

ELC mapping was confirmed in the field using the Ecological Land Classification for Southern Ontario (Lee, 1998) protocols for the area within 120 of the Proposed Severance Lot. From this, **Figure 3** was created.

Two (2) ELC units were identified within the Subject Property:

1. Cultural Meadow (CUM)

The majority of the Subject Property is made up of agricultural fields, which is classified as a Cultural Meadow (CUM) through ELC. The vegetation species found within the community were Grass spp. (Poaceae spp.), Bull Thistle (*Cirsium vulgare*), and Asters (Aster spp.). Small numbers of Eastern White Cedar (*Thuja occidentalis*), Red Pine (*Pinus resinosa*), American Elm (*Ulmus americana*), and Green Ash (*Fraxinus pennsylvanica*) were also present within this community.

2. Dry – Fresh Cedar Coniferous Forest (FOC2)

The habitat surrounding the agricultural fields is classified as a Dry – Fresh Cedar Coniferous Forest. This community is dominated by Eastern White Cedars, with the occasional Green Ash, American Elm, and Staghorn Sumac (*Rhus typhina*).

4.0 Regulatory Context

4.1 Provincial Policy Context

The Provincial Policy Statement, 2020, (PPS) was issued under Section 3 of the *Planning Act* and came into effect on May 1, 2020 and replaces the PPS issued April 30, 2014.

The PPS states:

Section 2.1.4: Development and site alteration shall not be permitted in:

- a) Significant wetlands in Ecoregions 5E, 6E and 7E, and
- b) Significant coastal wetlands.

The Proposed Severance Lot will not encroach on a

Section 2.1.5: Development and site alteration shall not be permitted in:

c) significant wetlands in the Canadian Shield north of Ecoregions 5E, 6E and 7E;

D.M. Wills Associates Limited

150 Jameson Drive, Peterborough, Ontario, Canada K9J 0B9

P. 705.742.2297 P. 999.748.94355. wills@dmwills.com



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- d) significant woodlands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River);
- e) significant valley lands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River);
- f) significant wildlife habitat;
- g) significant areas of natural and scientific interest, and;
- h) coastal wetlands in Ecoregions 5E, 6E and 7E that are not subject to policy 2.1.4 (b).

The Proposed Severance Lot is not planned to encroach on any of the above natural heritage features. Further details are provided in **Section 5.1**.

The PPS also states:

Section 2.1.7: Development and site alteration shall not be permitted in habitat of endangered species and threatened species, except in accordance with provincial and federal requirements.

The Proposed Severance Lot is not planned to encroach on the habitat of endangered and threatened species. Mitigation measures to protect SAR that may traverse through the Subject Property or the Proposed Severance are outlined in **Section 5.3**.

Lastly, the PPS states:

Section 2.1.8: Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in policies 2.1.4, 2.1.5, 2.1.6 and 2.1.7, unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on the ecological functions.

The Ontario Natural Heritage Reference Manual for the Provincial Policy Statement defines adjacent lands as:

- 120 m from PSW
- 50 m from significant woodlands; significant valley lands; significant wildlife habitat; significant portions of habitat for threatened or endangered species, significant ANSIs
- 30 m from fish habitat

The assessment to meet regulatory requirements is provided in **Section 5.0** and **Section 5.1**.

D.M. Wills Associates Limited 150 Jameson Drive, Peterborough, Ontario, Canada K9J 0B9 P. 705.742.2297 P.99E.749.94355. wills@dmwills.com



4.2 A Place to Grow: Growth Plan for the Greater Golden Horseshoe (2020)

As outlined in the Growth Plan, the following policies apply to the Subject Property:

Section 4.2.4 Lands Adjacent to Key Hydrologic Features and Key Natural Heritage Features

- 1. Outside settlement areas, a proposal for new development or site alteration within 120 metres of key natural heritage features within the Natural Heritage System for the Growth Plan or a key hydrologic feature will require a natural heritage evaluation or hydrologic evaluation that identifies a vegetation protection zone, which:
 - a) Is of sufficient width to protect the key natural heritage feature or key hydrologic feature and its functions from the impacts of the proposed change;
 - b) Is established to achieve and be maintained as natural selfsustaining vegetation; and
 - c) For key hydrologic features, fish habitat, and significant woodlands, is no less than 30 metres measured from the outside boundary of the key natural heritage feature.
- 2. Evaluations undertaken in accordance with policy 4.2.4.1 will identify any additional restrictions to be applied before, during, and after development to protect the hydrologic function and ecological functions of the feature.
- 3. Development or site alteration is not permitted in the vegetation protection zone, with the exception of that described in policy 4.2.3.1 or shoreline development as permitted in accordance with policy 4.2.4.5.

An unevaluated woodland exists within 120 m of the Proposed Severance Lot on the Subject Property. In addition, an unevaluated wetland located on the west side of Rock Road, exists within 120 m of the Proposed Severance Lot. Further details on the mitigation measures required to protect these features are provided in **Section 5.1** and **Section 5.2**.

5.0 Environmental Protection/Mitigation

No site development works are proposed on the severed or retained lot at this time. However, the PPS and the Growth Plan require lot lines to be setback from the unevaluated wetland that is located off the Subject Property, west of Rock Road. The buffer setbacks are discussed in **Section 5.1**. Mitigation measures to protect the existing wetland, woodland, and SAR from any future



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development beyond the creation of the Proposed Severance Lot are outlined in **Section 5.1, 5.2, and 5.3.**

5.1 Buffer Setbacks

The edge of the wetland located west of Rock Road (as identified by NHIC), is greater than 30 m (minimum distance for a Vegetation Protection Zone) from the Proposed Severance Lot and Subject Property. As shown in **Appendix B**, the wetland boundary is approximately 97 m from the closest edge of the Subject Property/Proposed Severance Lot.

No fragmentation of wetland habitat will occur from the Proposed Severance Lot or any potential future development. Due to the distance from the Proposed Severance Lot, in addition to the presence of Rock Road, it is anticipated that any potential future development will not impact the wetland.

5.2 Woodland

The location of the Proposed Severance Lot will not negatively impact any linkages, nor create any fragmentation of woodland habitat. It is proposed at the northwestern side of the Subject Property, fronting Rock Road, with agricultural lands to the east and south of it. The existing woodland habitat that borders Rock Road within the Proposed Severance Lot is limited to a thin tree line consisting of Eastern White Cedars.

The location of the Proposed Severance Lot is at the northern most point of the woodland complex where there is no linkage to any other woodlands to the north. The severance, and any future development, would only minimally reduce woodland edge habitat and would have no impact on interior habitat, nor would development isolate or break any linkages within the woodland feature.

The woodlands are made up of primarily Eastern White Cedar, a common species that has not experienced major reductions in their representation on the landscape in Ontario. Any potential future development within this community type would have negligible impact to overall woodland diversity and richness in this planning area.

Although anticipated impacts would be minimal, the potential for impacts to the woodland feature exist with any future development and as such, the following measures should be implemented:

• Vegetation removal within the woodlands should be limited to the area of construction, and the disturbed area (buildings/structures) should not exceed 25% of the Proposed Severance Lot.



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- Any future development should limit the amount of impermeable surfaces to 10% of the Proposed Severance Lot.
- It is recommended that future construction activities aim to retain as much native vegetative cover as possible. Following any development, native tree species that are representative of the overall woodland community should be planted in as much of the disturbed area as possible.
- Prior to construction, a Site Plan should be developed that shows the number of trees that will be removed. In order to offset impacts as a result of the removal of trees, it is recommended that tree compensation take place at a rate of 2:1. Plantings should consist of native species found on the Subject Property such as Eastern White Cedar, Green Ash, and American Elm, with the vast majority of planted trees being Eastern White Cedar.

5.3 Species at Risk

Full details of the Species at Risk Evaluation can be found in **Appendix A**. Mitigation measures to protect any potential SAR on the Subject Property and Proposed Severance Lot are found below.

The area of the Proposed Severance Lot contained dense ground cover vegetation, representative of a pasture for grazing cattle. Although ideal habitat for Eastern Meadowlark or Bobolink, none were observed at the time of the Breeding Bird Surveys, indicating that they do not utilize the agricultural fields on the Subject Property for breeding and nesting purposes. No other SAR were observed at the Proposed Severance Lot at the time of the field investigations and Breeding Bird Surveys.

- In order to ensure no migratory bird species are impacted during future construction, it is required that any vegetation removal must take place outside of the breeding bird-timing window of April 15 to July 31. If work cannot be done outside of the timing window, a professional biologist should complete a nest sweep of the property prior to any vegetation removal. Following a bird nest sweep, vegetation removal must be completed within 72 hours. If it is not completed within this time period, an additional sweep is required.
- If, during a nest sweep, any bird nests are encountered, all construction activities should cease and a buffer should be placed around the location until after **July 31**. The size of the buffer will be dependent on the species and should be consulted with the NDMNRF and/or MECP.

The closest turtle habitat to the Subject Property and Proposed Severance Lot is anticipated to be the Indian River, located approximately 350 m to the west.



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If any potential future construction works are planned between May 15 and September 30, turtle exclusionary fencing should be erected around the work area prior to **May 15**, and be maintained until **June 30** to prevent turtles from nesting in the work area. Butternut (*Juglans cinerea*, Endangered) have the potential to be found on the Subject Property and within the Proposed Severance Lot. Since Butternuts and Butternut/Black Walnut (*Juglans nigra*) hybrids are very difficult to tell apart, a certified Butternut Health Assessor (BHA) is required to determine whether any true Butternuts are present on site. The BHA will also determine the health of the trees and whether they can be removed or not, if necessary. Wills recommends that a certified BHA complete an assessment prior to any development taking place, if development is proposed within 50 m of any trees.

If any Butternut trees are found and deemed unhealthy, they can be removed by obtaining a permit from MECP.

If any trees are deemed healthy, a 50 m buffer is typically required. However, a reduction to 25 m can be requested through the MECP permitting process.

6.0 Conclusions

Given the results of the background review and on-site investigations, longterm adverse impacts to natural heritage features, associated habitat, and local wildlife populations are not anticipated to be resultant from the Project and any potential future development. Appropriate implementation of the above will ensure that the proposed severance does not conflict with the natural heritage policies set out by the Province of Ontario (Provincial Policy Statement, 2020) or the Growth Plan (2020).

If you have any further questions please do not hesitate to contact the undersigned.

Prepared by:

Ben Radford, B.Sc. Project Biologist

Reviewed by:

Shawn Filteau, B.Sc. Natural Sciences Group Leader

BR/SF/avg

D.M. Wills Associates Limited 150 Jameson Drive, Peterborough, Ontario, Canada K9J 0B9 P. 705.742.2297 P.995.784.954355 wills@dmwills.com



7.0 References

- Committee on the Status of Species at Risk in Ontario (COSSARO). Last accessed, October 2021; https://www.ontario.ca/page/how-species-risk-are-listed
- Crins, W.J.; Gray, P.A.; Uhlig, P.W.C; Wester, M.C. 2009. The Ecosystems of Ontario, Part 1: Ecozones and Ecoregions. Ontario Ministry of Natural Resources Science and Information Branch. Technical Report SIB TER IMA TR-01.
- Government of Canada. Species at Risk Act S.C. 2002, c. 29., last amended on April 23, 2021. Accessed via: <u>http://lawslois.justice.gc.ca/eng/acts/s-15.3/</u>
- Government of Ontario. Endangered Species Act, S.O. 2007, c. 6. Accessed via: https://www.ontario.ca/laws/statute/07e06
- Lee, H. 1998. Ecological Land Classification for Southern Ontario. First Approximation and Its Application. Ministry of Natural Resources.
- Ministry of Natural Resources (MNR). 2010. Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005. Second Edition. Queen's Printer for Ontario.
- Ontario Ministry of Natural Resources and Forestry Make a Map: Natural Heritage Applications. <u>https://www.ontario.ca/page/make-natural-heritage-area-map. Accessed December 2021</u>

Appendix A

Species at Risk Evaluation Report





January 25, 2022

Via Email: <u>waybackfarm@nexicom.net</u>

1090 4th Line Road South Douro-Dummer, ON KOL 3A0

Attention: Mr. Peter Smith and Mrs. Wendy Smith

Dear Mr. and Mrs. Smith,

PARTNERS IN ENGINEERING, PLANNING & ENVIRONMENTAL SERVICES

Professional Engineers

ASSOCIATION OF CONSULTING ENGINEERING COMPANIES DNTARIO

Ontario

Membe wsib 2020 Re: Species at Risk Evaluation Report 1090 4th Line Road South, Lot 14, Concession 3, Township of Douro-Dummer, County of Peterborough D.M. Wills Associates Project No. 85104

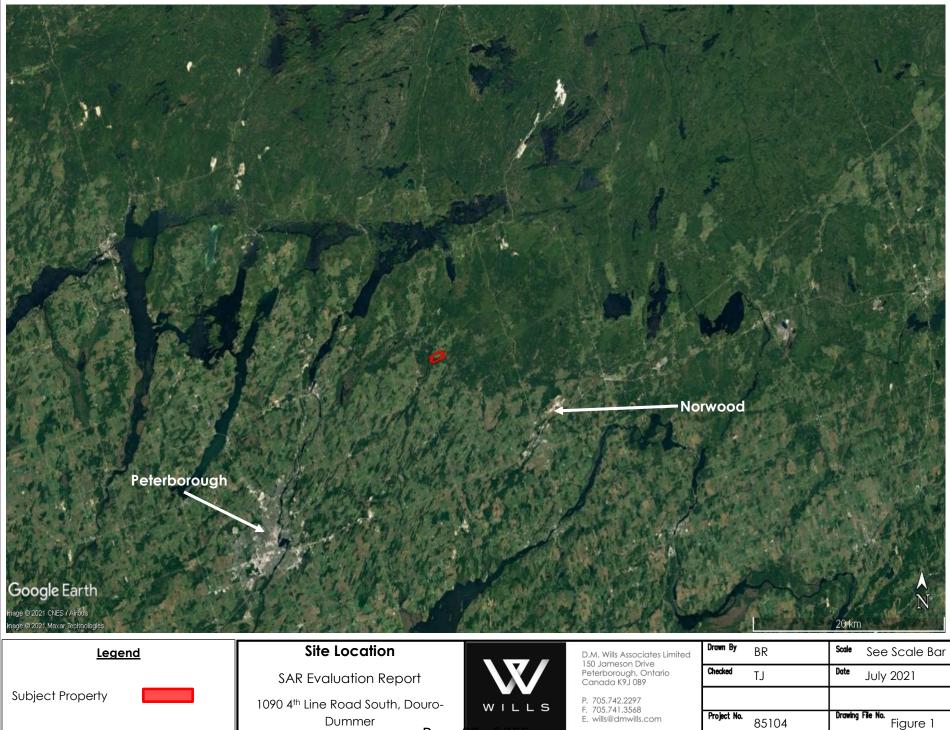
At the request of Peter and Wendy Smith (Client), D.M. Wills Associates Limited (Wills) has completed a Species at Risk (SAR) Evaluation (Evaluation) in support of the property severance for the property located at 1090 4th Line Road South, Lot 14, Concession 3 (Subject Property), in the in the Township of Douro-Dummer, County of Peterborough. See **Figure 1** and **Figure 2** for details on the location of the Subject Property and the location of the Proposed Severance Lot.

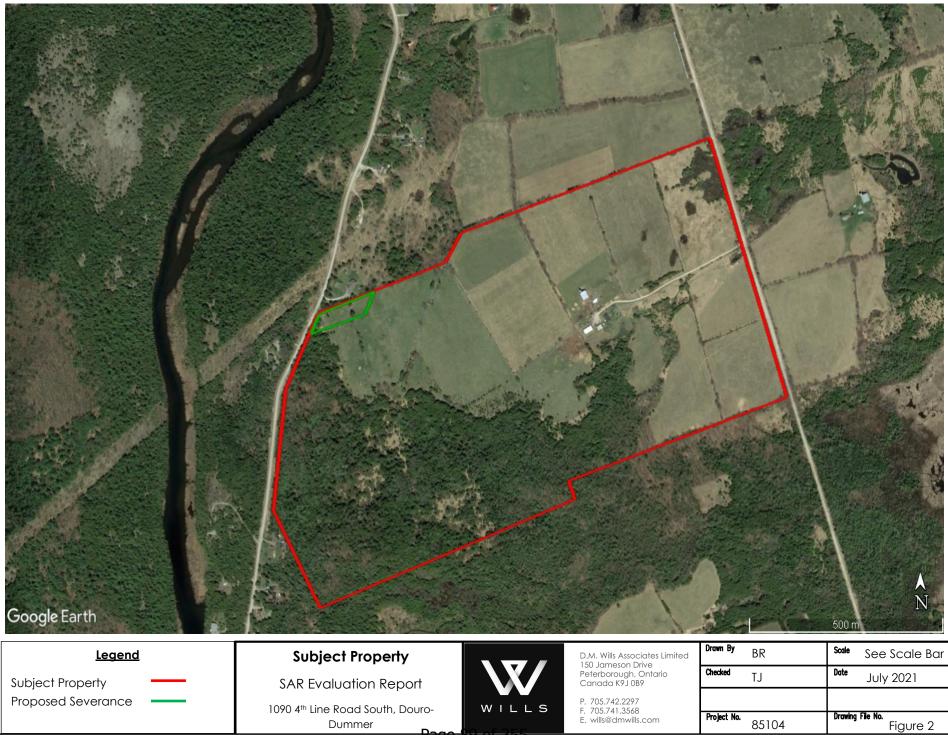
The purpose of this Evaluation is to identify any SAR or SAR habitat on and/or around the Subject Property. An assessment of these features will then be completed with respect to any constraints they may pose to development considering the Endangered Species Act, 2007 (ESA, 2007).

The scope of this report provides the following:

- 1. A review of background information
- 2. Consultation with the Ministry of the Environment, Conservation and Parks (MECP).
- 3. A SAR Evaluation that outlines the results of the Breeding Bird Surveys, Ecological Land Classification (ELC), and SAR Assessment.
- 4. Necessary mitigation measures to offset any impacts to SAR or SAR habitat









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1.0 Policy Review and Relevance to the Subject Property

The Endangered Species Act, 2007 has been reviewed with respect to the Subject Property and the Proposed Development Site.

The following is a summary of the Endangered Species Act, 2007 and where it applies.

1.1 Endangered Species Act, 2007

The Endangered Species Act, 2007 (ESA) was implemented to protect threatened and endangered species in Ontario. An independent body, the Committee on the Status of Species at Risk in Ontario (COSSARO), was developed to classify native plants or animals into one (1) of four (4) categories of at risk status:

Extirpated: lives somewhere in the world, and at one time lived in the wild in Ontario, but no longer lives in the wild in Ontario;

Endangered: lives in the wild in Ontario but is facing imminent extinction or extirpation;

Threatened: lives in the wild in Ontario, is not endangered, but is likely to become endangered if steps are not taken to address factors threatening it; and,

Special Concern: lives in the wild in Ontario, is not endangered or threatened, but may become threatened or endangered due to a combination of biological characteristics and identified threats.

Species at Risk in Ontario (SARO) are provided by the Ministry of Environment, Conservation, and Parks (MECP) who administer the ESA regulations for SAR in Ontario. The ESA applies to native species that have been proven to be in danger of becoming extinct or extirpated from Ontario. The ESA provides protection of both the species and their habitat, as well as provides a recovery strategy and stewardship program for those SAR.

Section 9(1) of the ESA prohibits a person from killing, harming, harassing, capturing or taking a member of a species listed as endangered, threatened or extirpated on the SARO list. In addition, Section 10(1) of the ESA prohibits the damage or destruction of habitat of a species listed as threatened, endangered or extirpated on the SARO list.

D.M. Wills Associates Limited 150 Jameson Drive Peterbarough Ontario, Canada K9J 0B9 P. 705.742.2297 F. 705.748.9944 E. wills@dmwills.com



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A permit from MECP would be required under Section 17(2)(c) of the ESA for any proposed work to be completed within the habitat of species listed as threatened or endangered.

2.0 SAR Screening Assessment

2.1 Ecological Land Classification

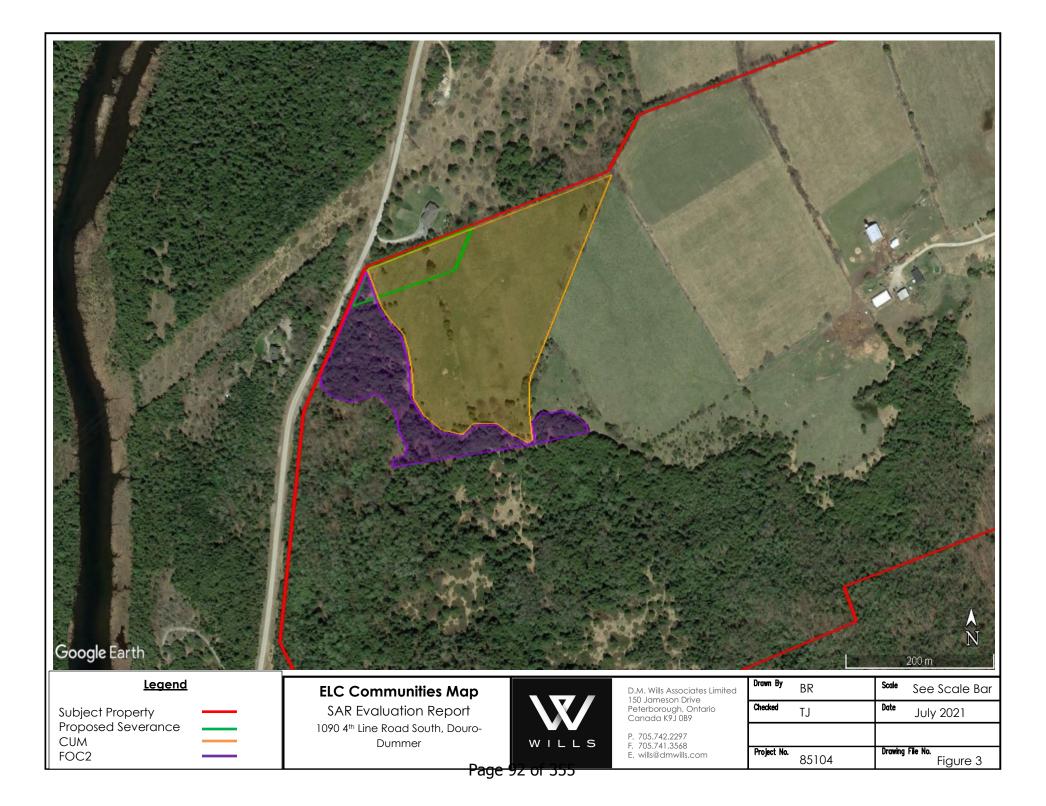
In order to accurately identify potential SAR habitat on the Subject Property, the area surrounding the Proposed Severance Lot was assessed to determine Ecological Land Classification (ELC) communities using the Ecological Land Classification for Southern Ontario (Lee, 1998). From this, two (2) ELC units were identified.

- 1. Cultural Meadow (CUM)
- 2. Dry Fresh Cedar Coniferous Forest (FOC2)

See **Figure 3** for details on the ELC communities surrounding the Proposed Severance Lot.

2.2 Breeding Bird Surveys

As part of the Evaluation, target surveys for SAR avifauna were completed on the Subject Property, with a focus on the Proposed Severance Lot. These surveys took place on June 4 and June 23, 2021. See **Figure 4** for the point count locations used during the surveys. See **Table 1** for the results of the surveys. Surveys were completed in general accordance with the Ontario Breeding Bird Atlas.



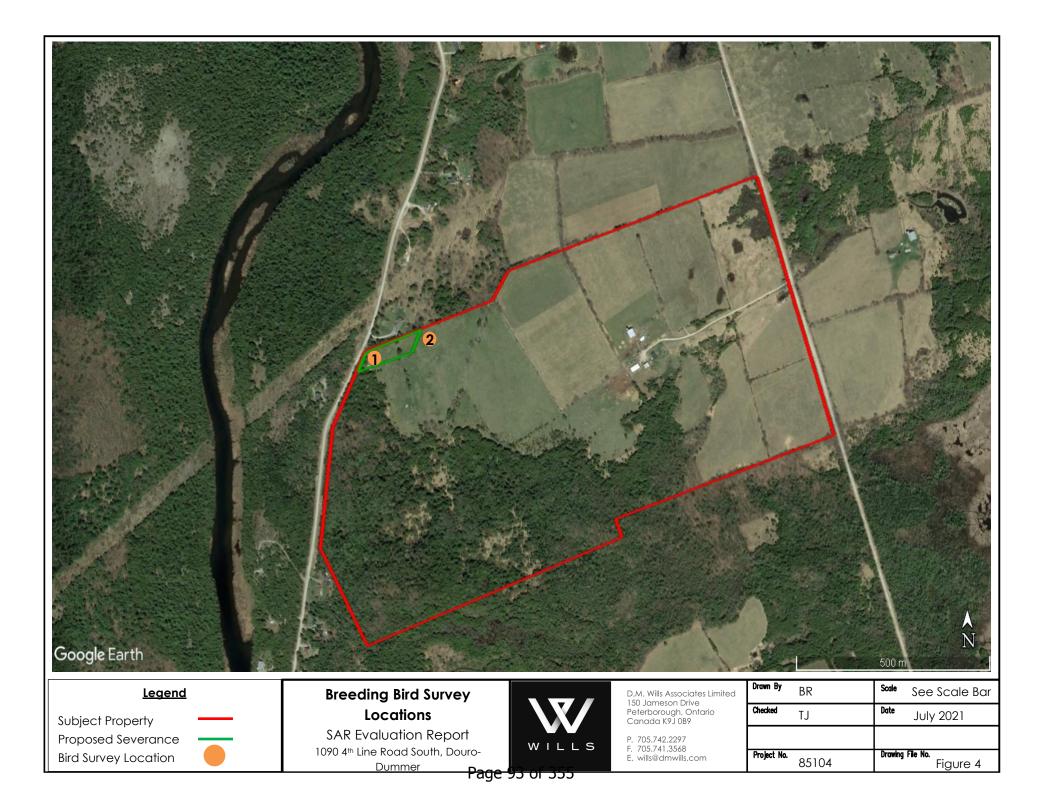




Table 1 – Breeding Bird Survey Results

	June 4	, 2021	June 23, 2021			
Species	BB01	BB02	BB01	BB02		
Brown-headed Cowbird (Molothrus ater)			Х	Х		
American Robin (Turdus migratorius)	Х	Х	Х	Х		
Black-capped Chickadee (Poecile atricapillus)			Х			
Field Sparrow (Spizella pusilla)		Х				
American Redstart (Setophaga ruticilla)		Х				
Blue Jay (Cyanocitta cristata)	Х		Х	Х		
American Crow (Corvus brachyrhynchos)	Х	Х				
Hairy Woodpecker (Leuconotopicus villosus)	Х					
American Goldfinch (Spinus tristis)	Х					
White-breasted Nuthatch (Sitta carolinensis)	х					
Red-winged Blackbird (Agelaius phoeniceus)			Х			
European Starling (Sturnus vulgaris)			Х	Х		
Black-and-White Warbler (Mniotilta varia)			Х			
Rose-breasted Grosbeak (Pheucticus Iudovicianus <u>)</u>			Х			
Red-eyed Vireo (Vireo olivaceus)				Х		
Gray Catbird (Dumetella carolinensis)		Х				

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2.3 SAR Screening Assessment

Table 2 outlines the likelihood of SAR to be found on the Subject Property, based on their specific habitat needs and the habitat that is found on the Subject Property. The results of the Breeding Bird Surveys are also incorporated into **Table 2**. A preliminary SAR list was sent to MECP on January 22, 2021 that was to be confirmed. To date, no response has been received.

See Appendix A for correspondence records.

D.M. Wills Associates Limited 150 Jameson Drive, Peterborough, Ontario, Canada K9J 0B9 P. 705.742.2297 F. 705.748.9944 E. wills@dmwills.com Page 95 of 355



Table 2 – SAR Screening Assessment

Species	Provincial ESA Status	COSEWIC* Status	Federal SARA** Status	Habitat Requirements	Source	Likelihood of Occurrence	Site Area Suitability/ Observations
Bald Eagle (Haliaeetus leucocephalus)	Special Concern	Not at Risk	Not at Risk	Bald Eagles nest in a variety of habitats and forest types, almost always near a major lake or river where they do most of their hunting. While fish are their main source of food, Bald Eagles can easily catch prey up to the size of ducks, and frequently feed on dead animals, including White-tailed Deer. They usually nest in large trees such as pine and poplar. During the winter, Bald Eagles sometimes congregate near open water such as the St. Lawrence River, or in places with a high deer population where carcasses might be found (MNRF, 2019).	OBBA	Low	Habitat conditions are not found on the Subject Property.
Bank Swallow (Riparia riparia)	Threatened	Threatened	Threatened	Bank swallows nest in burrows in natural and human-made settings where there are vertical faces in silt and sand deposits. Many nests are on banks of rivers and lakes, but they are also found in active sand and gravel pits or former ones where the banks remain suitable. The birds breed in colonies ranging from several to a few thousand pairs.	OBBA	Low	Habitat conditions are not found on the Subject Property.
Barn Swallow (Hirundo rustica)	Threatened	Threatened	Threatened	Terrestrial open and man-made structures. Barn Swallow nesting sites include the use of a variety of artificial structures (e.g. beams, posts, light fixtures, ledges over windows and doors) that provide either a horizontal nesting surface or a vertical face, often with some sort of overhang that provides shelter. Often nesting sites are associated with open barns, sheds, garages, and docks.	OBBA	Moderate	Open feeding habitat is present on the Subject Property. No nesting structures were observed at the location of the Proposed Severance Lot.
Black Tern (Chlidonias niger)	Special Concern	Not at Risk	Not listed	Nests on inland marsh complexes, ponds, mouths of rivers and shores of large lakes.	OBBA	Low	Habitat conditions are not found on the Subject Property.
Blanding's Turtle (Emydoidea blandingii)	Threatened	Endangered	Threatened	Blanding's Turtles live in shallow water, usually in large wetlands and shallow lakes with lots of aquatic plants. It is not unusual, though, to find them hundreds of metres from the nearest water body, especially while they are searching for a mate or traveling to a nesting site. Blanding's Turtles hibernate in the mud at the bottom of permanent water bodies from late October until the end of April (MNRF, 2018).	iNaturalist	Moderate	The Indian River is located approximately 350 m west of the Subject Property. The potential for Blanding's Turtles to move onto the Subject Property for nesting purposes exists, but no Blanding's Turtles were observed.
Bobolink (Dolichonyx oryzivorus)	Threatened	Threatened	Threatened	Bobolink prefers tall grass prairies, but is also known to nest in forage crops (e.g. hayfields and pastures dominated by a variety of species such as clover, Timothy, Kentucky Bluegrass, and broadleaved plants).	OBBA	Low	While habitat conditions are present on the Subject Property, no Bobolink were observed during the Breeding Bird Surveys. Bobolink are not anticipated to be present at the Proposed Severance Lot.



Species	Provincial ESA Status	COSEWIC* Status	Federal SARA** Status	Habitat Requirements	Source	Likelihood of Occurrence	Site Area Suitability/ Observations
Canada Warbler (Cardellina canadensis)	Special Concern	Threatened	Threatened	The Canada Warbler breeds in a range of deciduous and coniferous, usually wet forest types, all with a well- developed, dense shrub layer. Dense shrub and understory vegetation help conceal Canada Warbler nests that are usually located on or near the ground on mossy logs or roots, along stream banks or on hummocks. It winters in South America.	OBBA	Low	Habitat conditions are not found on the Subject Property.
Common Five-lined Skink (Plestiodon fasciatus)	Special Concern (Southern Shield population)	Special Concern	Special Concern	Common Five-lined Skinks like to bask on sunny rocks and logs to maintain a preferred body temperature (28-36°C). During the winter, they hibernate in crevices among rocks or buried in the soil. The Southern Shield population can be found underneath rocks on open bedrock in forests (MNRF, 2019).	iNaturalist	Low	Habitat conditions are not found on the Subject Property.
Common Nighthawk (Chordeiles minor)	Special Concern	Special Concern	Threatened	Traditional Common Nighthawk habitat consists of open areas with little to no ground vegetation, such as logged or burned-over areas, forest clearings, rock barrens, peat bogs, lakeshores, and mine tailings. Although the species also nests in cultivated fields, orchards, urban parks, mine tailings and along gravel roads and railways, they tend to occupy natural sites.	OBBA	Low	Habitat conditions are not found on the Subject Property.
Eastern Meadowlark (Sturnella magna)	Threatened	Threatened	Threatened	Native grasslands, pastures and savannahs. Eastern meadowlark also uses a wide variety of other anthropogenic grassland habitats, including hayfields, weedy meadows, young orchards, golf courses, restored surface mines, grassy roadside verges, young oak plantations, grain fields, herbaceous fencerows, and grassy airfields. Eastern Meadowlarks occasionally nest in crop fields such as corn and soybean, but these crops are considered low-quality habitat.	OBBA	Low	While habitat conditions are present on the Subject Property, no Eastern Meadowlark were observed during the Breeding Bird Surveys. Eastern Meadowlark are not anticipated to be present at the Proposed Severance Lot.
Eastern Musk Turtle (Sternotherus odoratus)	Special Concern	Special Concern	Special Concern	Eastern Musk Turtles are found in ponds, lakes, marshes and rivers that are generally slow-moving have abundant emergent vegetation and muddy bottoms that they burrow into for winter hibernation. Nesting habitat is variable, but it must be close to the water and exposed to direct sunlight. Nesting females dig shallow excavations in soil, decaying vegetation and rotting wood or lay eggs in muskrat lodges, on the open ground or in rock crevices (MECP, 2020).	iNaturalist	Low	Habitat conditions are not found on the Subject Property.
Eastern Whip-poor-will (Caprimulgus vociferus)	Threatened	Threatened	Threatened	The Eastern Whip-poor-will is usually found in areas with a mix of open and forested areas, such as savannahs, open woodlands or openings in more mature, deciduous, coniferous and mixed forests. It forages in these open areas and uses forested areas for roosting (resting and sleeping) and nesting. It lays its eggs directly on the forest floor, where its colouring means it will easily remain undetected by visual predators (MNRF, 2018).	OBBA	Low	Habitat conditions are not found on the Subject Property.



Species	Provincial ESA Status	COSEWIC* Status	Federal SARA** Status	Habitat Requirements	Source	Likelihood of Occurrence	Site Area Suitability/ Observations
Eastern Wood-pewee (Contopus virens)	Special Concern	Special Concern	Special Concern	In Canada, the Eastern Wood-pewee is mostly associated with the mid- canopy layer of forest clearings and edges of deciduous and mixed forests. It is most abundant in forest stands of intermediate age and in mature stands with little understory vegetation. During migration, a variety of habitats are used, including forest edges, early successional clearings, and primary and secondary lowland (and submontane) tropical forest, as well as cloud forest. In South America in the winter, the species primarily uses open forest, shrubby habitats, and edges of primary forest. It also occurs in interior forests where tree-fall gaps are present. (COSEWIC, 2012)	OBBA	Low	Habitat conditions are not found on the Subject Property.
Grasshopper Sparrow (Ammodramus savannarum)	Special Concern	Special Concern	Special Concern	It lives in open grassland areas with well-drained, sandy soil. It will also nest in hayfields and pasture, as well as alvars, prairies and occasionally grain crops such as barley. It prefers areas that are sparsely vegetated. Its nests are well-hidden in the field and woven from grasses in a small cup-like shape. The Grasshopper Sparrow is a short-distance migrant and leaves Ontario in the fall to migrate to the southeastern United States and Central America for the winter (MNRF, 2018).	OBBA	Moderate	While habitat conditions are present on the Subject Property, no Grasshopper Sparrows were observed during the Breeding Bird Surveys. Grasshopper Sparrow are not anticipated to be present at the Proposed Severance Lot.
Least Bittern (Ixobrychus exilis)	Threatened	Threatened	Threatened	In Ontario, the Least bittern is found in a variety of wetland habitats, but strongly prefers cattail marshes with a mix of open pools and channels. This bird builds its nest above the marsh water in stands of dense vegetation, hidden among the cattails. The nests are almost always built near open water, which is needed for foraging. This species eats mostly frogs, small fish, and aquatic insects (MNRF, 2019).	OBBA	Low	Habitat conditions are not found on the Subject Property.
Northern Map Turtle (Graptemys geographica)	Special Concern	Special Concern	Special Concern	The Northern Map Turtle inhabits rivers and lakeshores where it basks on emergent rocks and fallen trees throughout the spring and summer. In winter, the turtles hibernate on the bottom of deep, slow-moving sections of river. They require high-quality water that supports the female's mollusc prey. Their habitat must contain suitable basking sites, such as rocks and deadheads, with an unobstructed view from which a turtle can drop immediately into the water if startled (MNRF, 2019).	iNaturalist	Low	Habitat conditions are not found on the Subject Property.
Olive-sided Flycatcher (Contopus cooperi)	Special Concern	Special Concern	Threatened	The Olive-sided flycatcher is most often found along natural forest edges and openings. It will use forests that have been logged or burned, if there are ample tall snags and trees to use for foraging perches. Olive-sided flycatchers' breeding habitat usually consists of coniferous or mixed forest adjacent to rivers or wetlands. In Ontario, Olive-sided flycatchers commonly nest in conifers such as White and Black Spruce, Jack Pine and Balsam Fir (MNRF, 2019).	OBBA	Low	Habitat conditions are not found on the Subject Property.



Species	Provincial ESA Status	COSEWIC* Status	Federal SARA** Status	Habitat Requirements	Source	Likelihood of Occurrence	Site Area Suitability/ Observations
Red-headed Woodpecker (Melanerpes erythrocephalus)	Special Concern	Endangered	Threatened	The Red-headed Woodpecker lives in open woodland and woodland edges, and is often found in parks, golf courses and cemeteries. These areas typically have many dead trees, which the bird uses for nesting and perching. The Red-headed Woodpecker is found across southern Ontario, where it is widespread but rare (MNRF, 2019).	OBBA	Low	Habitat conditions are not found on the Subject Property.
Snapping Turtle (Chelydra serpentina)	Special Concern	Special Concern	Special Concern	Snapping Turtles spend most of their lives in water. They prefer shallow waters so they can hide under the soft mud and leaf litter, with only their noses exposed to the surface to breathe. During the nesting season, from early to mid summer, females travel overland in search of a suitable nesting site, usually gravelly or sandy areas along streams. Snapping Turtles often take advantage of man-made structures for nest sites, including roads (especially gravel shoulders), dams and aggregate pits (MNRF, 2019).	iNaturalist	Low	Habitat conditions are not found on the Subject Property.
Wood Thrush (Hylocichla mustelina)	Special Concern	Threatened	Threatened	During the breeding season, the Wood Thrush is found in moist, deciduous hardwood or mixed stands, often previously disturbed, with a dense deciduous undergrowth and with tall trees for singing perches (Gauthier and Aubry 1995; Friesen et al. 1999; Holmes and Sherry 2001; Friesen 2007; Evans et al. 2011; Suarez-Rubio et al. 2011). It is noted that in southern Ontario, the Wood Thrush prefers second-growth over mature forests (Peck and James, 1987).	OBBA	Low	Habitat conditions are not found on the Subject Property.

*Committee on the Status of Endangered Wildlife in Canada (COSEWIC) **Species at Risk Act (SARA)



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3.0 Conclusions

The area of the Proposed Severance Lot contained dense ground cover vegetation, representative of a pasture for grazing cattle. No Eastern Meadowlark or Bobolink were observed at the time of the Breeding Bird Surveys, indicating that they do not utilize the agricultural fields for breeding and nesting purposes. No other SAR were observed at the Proposed Severance Lot at the time of the field investigations and Breeding Bird Surveys.

In order to ensure no bird species are impacted during future construction, it is required that any vegetation removal must take place outside of the breeding bird-timing window of **April 15 to July 31**. If work cannot be done outside of the timing window, a professional biologist should complete a nest sweep of the property prior to any vegetation removal.

Respectfully Submitted,

Ben Radford, B.Sc. Project Biologist

Shawn Filteau, B.Sc. Project Manager

Reviewed by,

the far

Tyler Jones, B.Sc. Senior Biologist

BR/avg

Appendix A

Correspondence Records



 From:
 Ben Radford

 To:
 "Species at Risk (MECP)"

 Subject:
 1090 4th Line - Douro SAR Information Request

 Date:
 January 22, 2021 3:36:00 PM

 Attachments:
 image001.jpg 85104 Consent Sketch 60 Frontage-Layout2.pdf

Good afternoon,

My name is Ben Radford from D.M. Wills Associates in Peterborough. We have been contracted to complete a SAR assessment on a parcel of land located at 1090 4th Line in Douro (see attached figure). Through background research, the following SAR have the potential of being found on the Subject Property:

- Least Bittern (Threatened)
- Black Tern (Special Concern)
- Common Nighthawk (Special Concern)
- Eastern Whip-poor-will (Threatened) Red-headed Woodpecker (Special Concern)
- Olive-sided Flycatcher (Special Concern)
- Eastern Wood-pewee (Special Concern)
- Bank Swallow (Threatened)
 Barn Swallow (Threatened)
 Wood Thrush (Special Concern)
- Grasshopper Sparrow (Special Concern)
- Eastern Meadowlark (Threatened)
- Canada Warbler (Special Concern)
- Bald Eagle (Special Concern)
- Bobolink (Threatened)
- Snapping Turtle (Special Concern)
- Northern Map Turtle (Special Concern)
- Eastern Musk Turtle (Special Concern)
- Blanding's Turtle (Threatened)
- Common Five-lined Skink (Special Concern)

If you could please confirm/add to this list, that would be greatly appreciated.

Thanks, Ben



Ben Radford, B.Sc. · Project Biologist

D.M. Wills Associates Limited 150 Jameson Drive · Peterborough, ON · K9J 0B9 Cell: 705-768-4296 · Fax: (705) 748-9944

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Appendix B

Wetland Location Map



0.1 0	0.04 0.1 Kilometres Absence of a feature in the map does not mean they tes or locations, nor as a guide	v do not exist in this area.	Assessment Parcel Evaluated Wetland Importance provinciale Non-Provincially Significantion considérée d'importance provinciale Importance provinciale Importan
	tes or locations, nor as a guide Forestry(OMNRF) shall not be any information on this map. Imagery Copyright Notices: DRAPE © Aéro-Photo (1961) Inc., 2008	- 2009	
Legend Subject Property	Opinion Letter	Is Associates Limited leson Drive rough, Ontario 1 K9J 0B9 42 2297	BR Scale See Scale Bar SF Date Dec 2021
	1090 4 th Line Road South, Douro- WILLS F. 705.7	41.3568 dmwills.com	85104 Drawing File No. Figure B1



January 25, 2022

Via Email: <u>waybackfarm@nexicom.net</u>

1090 4th Line Road South Douro-Dummer, ON KOL 3A0

Attention: Mr. Peter Smith and Mrs. Wendy Smith

Dear Mr. and Mrs. Smith,

PARTNERS IN ENGINEERING, PLANNING & ENVIRONMENTAL SERVICES Re: Species at Risk Evaluation Report 1090 4th Line Road South, Lot 14, Concession 3, Township of Douro-Dummer, County of Peterborough D.M. Wills Associates Project No. 85104

At the request of Peter and Wendy Smith (Client), D.M. Wills Associates Limited (Wills) has completed a Species at Risk (SAR) Evaluation (Evaluation) in support of the property severance for the property located at 1090 4th Line Road South, Lot 14, Concession 3 (Subject Property), in the in the Township of Douro-Dummer, County of Peterborough. See **Figure 1** and **Figure 2** for details on the location of the Subject Property and the location of the Proposed Severance Lot.

The purpose of this Evaluation is to identify any SAR or SAR habitat on and/or around the Subject Property. An assessment of these features will then be completed with respect to any constraints they may pose to development considering the Endangered Species Act, 2007 (ESA, 2007).

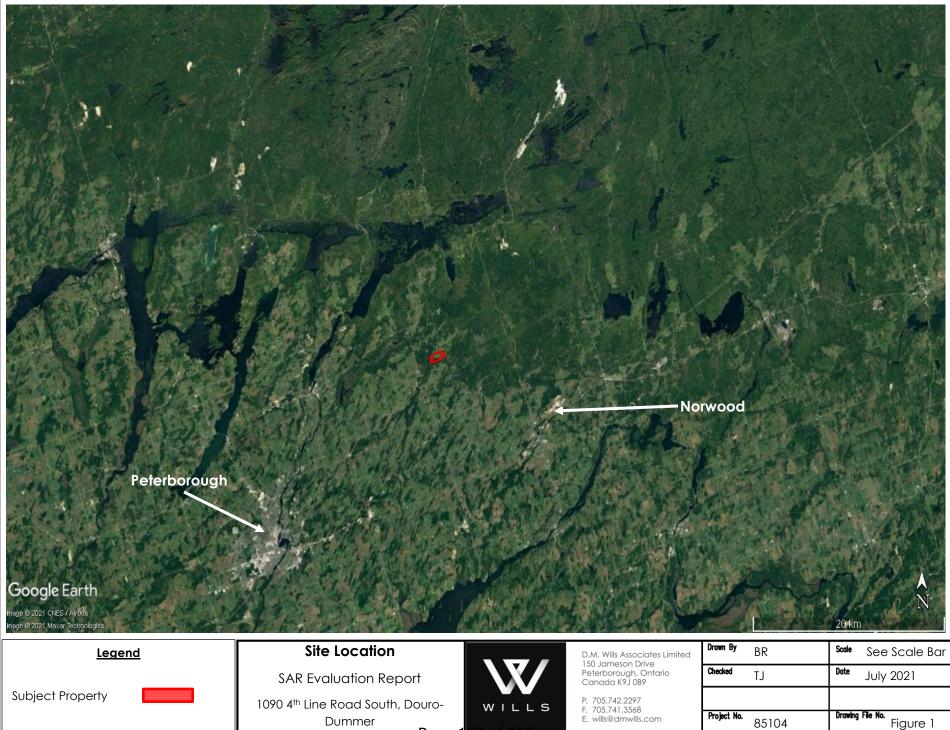
The scope of this report provides the following:

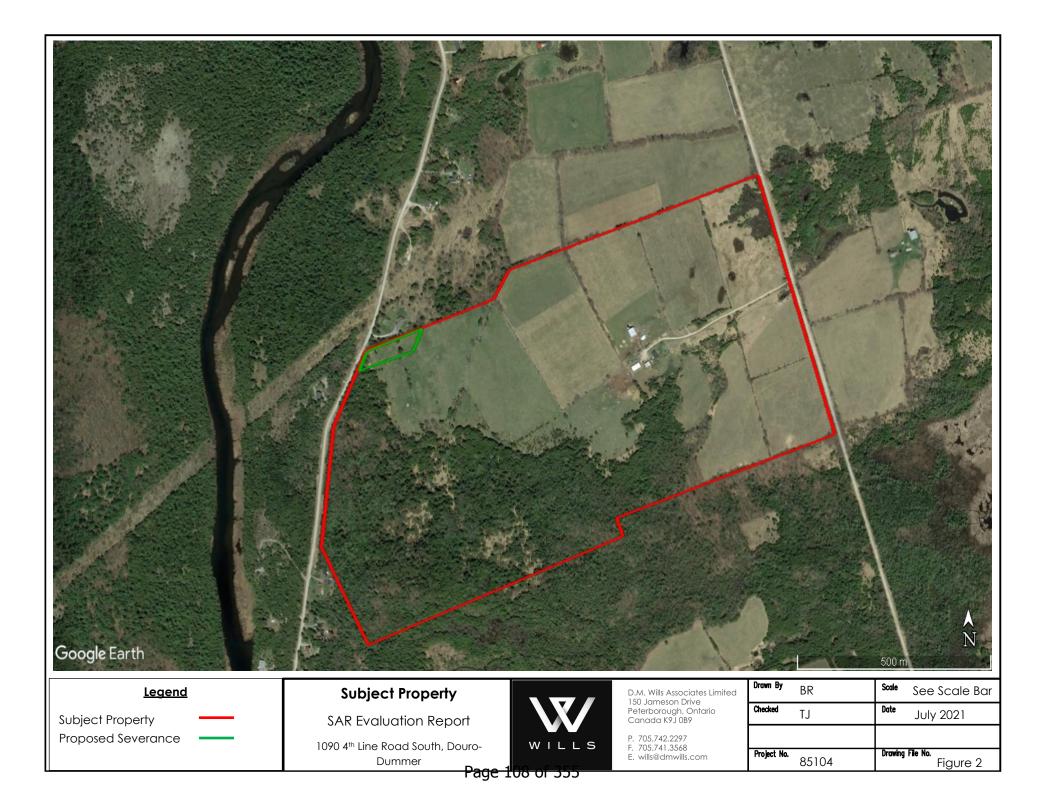
- 1. A review of background information
- 2. Consultation with the Ministry of the Environment, Conservation and Parks (MECP).
- 3. A SAR Evaluation that outlines the results of the Breeding Bird Surveys, Ecological Land Classification (ELC), and SAR Assessment.
- 4. Necessary mitigation measures to offset any impacts to SAR or SAR habitat













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1.0 Policy Review and Relevance to the Subject Property

The Endangered Species Act, 2007 has been reviewed with respect to the Subject Property and the Proposed Development Site.

The following is a summary of the Endangered Species Act, 2007 and where it applies.

1.1 Endangered Species Act, 2007

The Endangered Species Act, 2007 (ESA) was implemented to protect threatened and endangered species in Ontario. An independent body, the Committee on the Status of Species at Risk in Ontario (COSSARO), was developed to classify native plants or animals into one (1) of four (4) categories of at risk status:

Extirpated: lives somewhere in the world, and at one time lived in the wild in Ontario, but no longer lives in the wild in Ontario;

Endangered: lives in the wild in Ontario but is facing imminent extinction or extirpation;

Threatened: lives in the wild in Ontario, is not endangered, but is likely to become endangered if steps are not taken to address factors threatening it; and,

Special Concern: lives in the wild in Ontario, is not endangered or threatened, but may become threatened or endangered due to a combination of biological characteristics and identified threats.

Species at Risk in Ontario (SARO) are provided by the Ministry of Environment, Conservation, and Parks (MECP) who administer the ESA regulations for SAR in Ontario. The ESA applies to native species that have been proven to be in danger of becoming extinct or extirpated from Ontario. The ESA provides protection of both the species and their habitat, as well as provides a recovery strategy and stewardship program for those SAR.

Section 9(1) of the ESA prohibits a person from killing, harming, harassing, capturing or taking a member of a species listed as endangered, threatened or extirpated on the SARO list. In addition, Section 10(1) of the ESA prohibits the damage or destruction of habitat of a species listed as threatened, endangered or extirpated on the SARO list.

D.M. Wills Associates Limited 150 Jameson Drive Peterborough Ontario, Canada K9J 0B9 P. 705.742.2297 F. 705.748.9944 E. wills@dmwills.com



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A permit from MECP would be required under Section 17(2)(c) of the ESA for any proposed work to be completed within the habitat of species listed as threatened or endangered.

2.0 SAR Screening Assessment

2.1 Ecological Land Classification

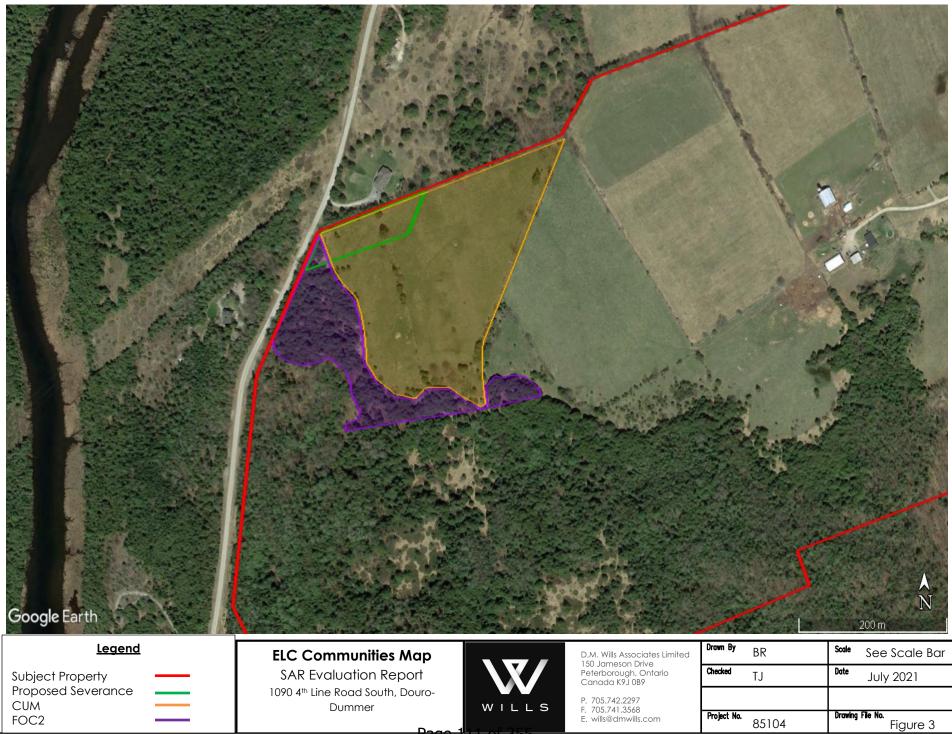
In order to accurately identify potential SAR habitat on the Subject Property, the area surrounding the Proposed Severance Lot was assessed to determine Ecological Land Classification (ELC) communities using the Ecological Land Classification for Southern Ontario (Lee, 1998). From this, two (2) ELC units were identified.

- 1. Cultural Meadow (CUM)
- 2. Dry Fresh Cedar Coniferous Forest (FOC2)

See **Figure 3** for details on the ELC communities surrounding the Proposed Severance Lot.

2.2 Breeding Bird Surveys

As part of the Evaluation, target surveys for SAR avifauna were completed on the Subject Property, with a focus on the Proposed Severance Lot. These surveys took place on June 4 and June 23, 2021. See **Figure 4** for the point count locations used during the surveys. See **Table 1** for the results of the surveys. Surveys were completed in general accordance with the Ontario Breeding Bird Atlas.



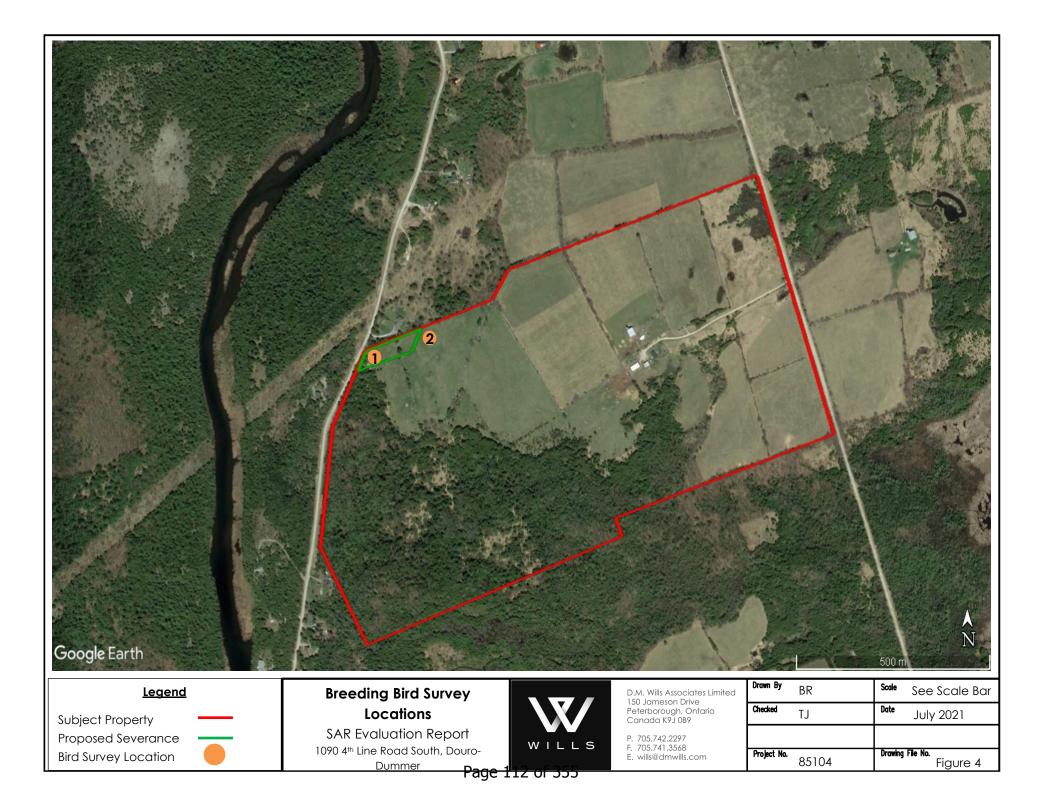




Table 1 – Breeding Bird Survey Results

	June 4	, 2021	June 23, 2021		
Species	BB01	BB02	BB01	BB02	
Brown-headed Cowbird (Molothrus ater)			Х	Х	
American Robin (Turdus migratorius)	Х	Х	Х	Х	
Black-capped Chickadee (Poecile atricapillus)			Х		
Field Sparrow (Spizella pusilla)		Х			
American Redstart (Setophaga ruticilla)		Х			
Blue Jay (Cyanocitta cristata)	Х		Х	Х	
American Crow (Corvus brachyrhynchos)	Х	Х			
Hairy Woodpecker (Leuconotopicus villosus)	Х				
American Goldfinch (Spinus tristis)	Х				
White-breasted Nuthatch (Sitta carolinensis)	х				
Red-winged Blackbird (Agelaius phoeniceus)			Х		
European Starling (Sturnus vulgaris)			Х	Х	
Black-and-White Warbler (Mniotilta varia)			Х		
Rose-breasted Grosbeak (Pheucticus Iudovicianus <u>)</u>			Х		
Red-eyed Vireo (Vireo olivaceus)				Х	
Gray Catbird (Dumetella carolinensis)		Х			



2.3 SAR Screening Assessment

Table 2 outlines the likelihood of SAR to be found on the Subject Property, based on their specific habitat needs and the habitat that is found on the Subject Property. The results of the Breeding Bird Surveys are also incorporated into **Table 2**. A preliminary SAR list was sent to MECP on January 22, 2021 that was to be confirmed. To date, no response has been received.

See Appendix A for correspondence records.

D.M. Wills Associates Limited 150 Jameson Drive, Peterborough, Ontario, Canada K9J 0B9 P. 705.742.2297 F. 705.748.9944 E. wills@dmwills.com Page 114 of 355



Table 2 – SAR Screening Assessment

Species	Provincial ESA Status	COSEWIC* Status	Federal SARA** Status	Habitat Requirements	Source	Likelihood of Occurrence	Site Area Suitability/ Observations
Bald Eagle (Haliaeetus leucocephalus)	Special Concern	Not at Risk	Not at Risk	Bald Eagles nest in a variety of habitats and forest types, almost always near a major lake or river where they do most of their hunting. While fish are their main source of food, Bald Eagles can easily catch prey up to the size of ducks, and frequently feed on dead animals, including White-tailed Deer. They usually nest in large trees such as pine and poplar. During the winter, Bald Eagles sometimes congregate near open water such as the St. Lawrence River, or in places with a high deer population where carcasses might be found (MNRF, 2019).	OBBA	Low	Habitat conditions are not found on the Subject Property.
Bank Swallow (Riparia riparia)	Threatened	Threatened	Threatened	Bank swallows nest in burrows in natural and human-made settings where there are vertical faces in silt and sand deposits. Many nests are on banks of rivers and lakes, but they are also found in active sand and gravel pits or former ones where the banks remain suitable. The birds breed in colonies ranging from several to a few thousand pairs.	OBBA	Low	Habitat conditions are not found on the Subject Property.
Barn Swallow (Hirundo rustica)	Threatened	Threatened	Threatened	Terrestrial open and man-made structures. Barn Swallow nesting sites include the use of a variety of artificial structures (e.g. beams, posts, light fixtures, ledges over windows and doors) that provide either a horizontal nesting surface or a vertical face, often with some sort of overhang that provides shelter. Often nesting sites are associated with open barns, sheds, garages, and docks.	OBBA	Moderate	Open feeding habitat is present on the Subject Property. No nesting structures were observed at the location of the Proposed Severance Lot.
Black Tern (Chlidonias niger)	Special Concern	Not at Risk	Not listed	Nests on inland marsh complexes, ponds, mouths of rivers and shores of large lakes.	OBBA	Low	Habitat conditions are not found on the Subject Property.
Blanding's Turtle (Emydoidea blandingii)	Threatened	Endangered	Threatened	Blanding's Turtles live in shallow water, usually in large wetlands and shallow lakes with lots of aquatic plants. It is not unusual, though, to find them hundreds of metres from the nearest water body, especially while they are searching for a mate or traveling to a nesting site. Blanding's Turtles hibernate in the mud at the bottom of permanent water bodies from late October until the end of April (MNRF, 2018).	iNaturalist	Moderate	The Indian River is located approximately 350 m west of the Subject Property. The potential for Blanding's Turtles to move onto the Subject Property for nesting purposes exists, but no Blanding's Turtles were observed.
Bobolink (Dolichonyx oryzivorus)	Threatened	Threatened	Threatened	Bobolink prefers tall grass prairies, but is also known to nest in forage crops (e.g. hayfields and pastures dominated by a variety of species such as clover, Timothy, Kentucky Bluegrass, and broadleaved plants).	OBBA	Low	While habitat conditions are present on the Subject Property, no Bobolink were observed during the Breeding Bird Surveys. Bobolink are not anticipated to be present at the Proposed Severance Lot.



Species	Provincial ESA Status	COSEWIC* Status	Federal SARA** Status	Habitat Requirements	Source	Likelihood of Occurrence	Site Area Suitability/ Observations
Canada Warbler (Cardellina canadensis)	Special Concern	Threatened	Threatened	The Canada Warbler breeds in a range of deciduous and coniferous, usually wet forest types, all with a well- developed, dense shrub layer. Dense shrub and understory vegetation help conceal Canada Warbler nests that are usually located on or near the ground on mossy logs or roots, along stream banks or on hummocks. It winters in South America.	OBBA	Low	Habitat conditions are not found on the Subject Property.
Common Five-lined Skink (Plestiodon fasciatus)	Special Concern (Southern Shield population)	Special Concern	Special Concern	Common Five-lined Skinks like to bask on sunny rocks and logs to maintain a preferred body temperature (28-36°C). During the winter, they hibernate in crevices among rocks or buried in the soil. The Southern Shield population can be found underneath rocks on open bedrock in forests (MNRF, 2019).	iNaturalist	Low	Habitat conditions are not found on the Subject Property.
Common Nighthawk (Chordeiles minor)	Special Concern	Special Concern	Threatened	Traditional Common Nighthawk habitat consists of open areas with little to no ground vegetation, such as logged or burned-over areas, forest clearings, rock barrens, peat bogs, lakeshores, and mine tailings. Although the species also nests in cultivated fields, orchards, urban parks, mine tailings and along gravel roads and railways, they tend to occupy natural sites.	OBBA	Low	Habitat conditions are not found on the Subject Property.
Eastern Meadowlark (Sturnella magna)	Threatened	Threatened	Threatened	Native grasslands, pastures and savannahs. Eastern meadowlark also uses a wide variety of other anthropogenic grassland habitats, including hayfields, weedy meadows, young orchards, golf courses, restored surface mines, grassy roadside verges, young oak plantations, grain fields, herbaceous fencerows, and grassy airfields. Eastern Meadowlarks occasionally nest in crop fields such as corn and soybean, but these crops are considered low-quality habitat.	OBBA	Low	While habitat conditions are present on the Subject Property, no Eastern Meadowlark were observed during the Breeding Bird Surveys. Eastern Meadowlark are not anticipated to be present at the Proposed Severance Lot.
Eastern Musk Turtle (Sternotherus odoratus)	Special Concern	Special Concern	Special Concern	Eastern Musk Turtles are found in ponds, lakes, marshes and rivers that are generally slow-moving have abundant emergent vegetation and muddy bottoms that they burrow into for winter hibernation. Nesting habitat is variable, but it must be close to the water and exposed to direct sunlight. Nesting females dig shallow excavations in soil, decaying vegetation and rotting wood or lay eggs in muskrat lodges, on the open ground or in rock crevices (MECP, 2020).	iNaturalist	Low	Habitat conditions are not found on the Subject Property.
Eastern Whip-poor-will (Caprimulgus vociferus)	Threatened	Threatened	Threatened	The Eastern Whip-poor-will is usually found in areas with a mix of open and forested areas, such as savannahs, open woodlands or openings in more mature, deciduous, coniferous and mixed forests. It forages in these open areas and uses forested areas for roosting (resting and sleeping) and nesting. It lays its eggs directly on the forest floor, where its colouring means it will easily remain undetected by visual predators (MNRF, 2018).	OBBA	Low	Habitat conditions are not found on the Subject Property.



Species	Provincial ESA Status	COSEWIC* Status	Federal SARA** Status	Habitat Requirements	Source	Likelihood of Occurrence	Site Area Suitability/ Observations
Eastern Wood-pewee (Contopus virens)	Special Concern	Special Concern	Special Concern	In Canada, the Eastern Wood-pewee is mostly associated with the mid- canopy layer of forest clearings and edges of deciduous and mixed forests. It is most abundant in forest stands of intermediate age and in mature stands with little understory vegetation. During migration, a variety of habitats are used, including forest edges, early successional clearings, and primary and secondary lowland (and submontane) tropical forest, as well as cloud forest. In South America in the winter, the species primarily uses open forest, shrubby habitats, and edges of primary forest. It also occurs in interior forests where tree-fall gaps are present. (COSEWIC, 2012)	OBBA	Low	Habitat conditions are not found on the Subject Property.
Grasshopper Sparrow (Ammodramus savannarum)	Special Concern	Special Concern	Special Concern	It lives in open grassland areas with well-drained, sandy soil. It will also nest in hayfields and pasture, as well as alvars, prairies and occasionally grain crops such as barley. It prefers areas that are sparsely vegetated. Its nests are well-hidden in the field and woven from grasses in a small cup-like shape. The Grasshopper Sparrow is a short-distance migrant and leaves Ontario in the fall to migrate to the southeastern United States and Central America for the winter (MNRF, 2018).	OBBA	Moderate	While habitat conditions are present on the Subject Property, no Grasshopper Sparrows were observed during the Breeding Bird Surveys. Grasshopper Sparrow are not anticipated to be present at the Proposed Severance Lot.
Least Bittern (Ixobrychus exilis)	Threatened	Threatened	Threatened	In Ontario, the Least bittern is found in a variety of wetland habitats, but strongly prefers cattail marshes with a mix of open pools and channels. This bird builds its nest above the marsh water in stands of dense vegetation, hidden among the cattails. The nests are almost always built near open water, which is needed for foraging. This species eats mostly frogs, small fish, and aquatic insects (MNRF, 2019).	OBBA	Low	Habitat conditions are not found on the Subject Property.
Northern Map Turtle (Graptemys geographica)	Special Concern	Special Concern	Special Concern	The Northern Map Turtle inhabits rivers and lakeshores where it basks on emergent rocks and fallen trees throughout the spring and summer. In winter, the turtles hibernate on the bottom of deep, slow-moving sections of river. They require high-quality water that supports the female's mollusc prey. Their habitat must contain suitable basking sites, such as rocks and deadheads, with an unobstructed view from which a turtle can drop immediately into the water if startled (MNRF, 2019).	iNaturalist	Low	Habitat conditions are not found on the Subject Property.
Olive-sided Flycatcher (Contopus cooperi)	Special Concern	Special Concern	Threatened	The Olive-sided flycatcher is most often found along natural forest edges and openings. It will use forests that have been logged or burned, if there are ample tall snags and trees to use for foraging perches. Olive-sided flycatchers' breeding habitat usually consists of coniferous or mixed forest adjacent to rivers or wetlands. In Ontario, Olive-sided flycatchers commonly nest in conifers such as White and Black Spruce, Jack Pine and Balsam Fir (MNRF, 2019).	OBBA	Low	Habitat conditions are not found on the Subject Property.



Species	Provincial ESA Status	COSEWIC* Status	Federal SARA** Status	Habitat Requirements	Source	Likelihood of Occurrence	Site Area Suitability/ Observations
Red-headed Woodpecker (Melanerpes erythrocephalus)	Special Concern	Endangered	Threatened	The Red-headed Woodpecker lives in open woodland and woodland edges, and is often found in parks, golf courses and cemeteries. These areas typically have many dead trees, which the bird uses for nesting and perching. The Red-headed Woodpecker is found across southern Ontario, where it is widespread but rare (MNRF, 2019).	OBBA	Low	Habitat conditions are not found on the Subject Property.
Snapping Turtle (Chelydra serpentina)	Special Concern	Special Concern	Special Concern	Snapping Turtles spend most of their lives in water. They prefer shallow waters so they can hide under the soft mud and leaf litter, with only their noses exposed to the surface to breathe. During the nesting season, from early to mid summer, females travel overland in search of a suitable nesting site, usually gravelly or sandy areas along streams. Snapping Turtles often take advantage of man-made structures for nest sites, including roads (especially gravel shoulders), dams and aggregate pits (MNRF, 2019).	iNaturalist	Low	Habitat conditions are not found on the Subject Property.
Wood Thrush (Hylocichla mustelina)	Special Concern	Threatened	Threatened	During the breeding season, the Wood Thrush is found in moist, deciduous hardwood or mixed stands, often previously disturbed, with a dense deciduous undergrowth and with tall trees for singing perches (Gauthier and Aubry 1995; Friesen et al. 1999; Holmes and Sherry 2001; Friesen 2007; Evans et al. 2011; Suarez-Rubio et al. 2011). It is noted that in southern Ontario, the Wood Thrush prefers second-growth over mature forests (Peck and James, 1987).	OBBA	Low	Habitat conditions are not found on the Subject Property.

*Committee on the Status of Endangered Wildlife in Canada (COSEWIC) **Species at Risk Act (SARA)



Species at Risk Evaluation Report Page 14 of 14 January 25, 2022

3.0 Conclusions

The area of the Proposed Severance Lot contained dense ground cover vegetation, representative of a pasture for grazing cattle. No Eastern Meadowlark or Bobolink were observed at the time of the Breeding Bird Surveys, indicating that they do not utilize the agricultural fields for breeding and nesting purposes. No other SAR were observed at the Proposed Severance Lot at the time of the field investigations and Breeding Bird Surveys.

In order to ensure no bird species are impacted during future construction, it is required that any vegetation removal must take place outside of the breeding bird-timing window of **April 15 to July 31**. If work cannot be done outside of the timing window, a professional biologist should complete a nest sweep of the property prior to any vegetation removal.

Respectfully Submitted,

Ben Radford, B.Sc. Project Biologist

Shawn Filteau, B.Sc. Project Manager

Reviewed by,

the far

Tyler Jones, B.Sc. Senior Biologist

BR/avg

Appendix A

Correspondence Records



 From:
 Ben Radford

 To:
 "Species at Risk (MECP)"

 Subject:
 1090 4th Line - Douro SAR Information Request

 Date:
 January 22, 2021 3:36:00 PM

 Attachments:
 image001.jpg 85104 Consent Sketch 60 Frontage-Layout2.pdf

Good afternoon,

My name is Ben Radford from D.M. Wills Associates in Peterborough. We have been contracted to complete a SAR assessment on a parcel of land located at 1090 4th Line in Douro (see attached figure). Through background research, the following SAR have the potential of being found on the Subject Property:

- Least Bittern (Threatened)
- Black Tern (Special Concern)
- Common Nighthawk (Special Concern)
- Eastern Whip-poor-will (Threatened) Red-headed Woodpecker (Special Concern)
- Olive-sided Flycatcher (Special Concern)
- Eastern Wood-pewee (Special Concern)
- Bank Swallow (Threatened)
 Barn Swallow (Threatened)
 Wood Thrush (Special Concern)
- Grasshopper Sparrow (Special Concern)
- Eastern Meadowlark (Threatened)
- Canada Warbler (Special Concern)
- Bald Eagle (Special Concern)
- Bobolink (Threatened)
- Snapping Turtle (Special Concern)
- Northern Map Turtle (Special Concern)
- Eastern Musk Turtle (Special Concern)
- Blanding's Turtle (Threatened)
- Common Five-lined Skink (Special Concern)

If you could please confirm/add to this list, that would be greatly appreciated.

Thanks, Ben



Ben Radford, B.Sc. · Project Biologist

D.M. Wills Associates Limited 150 Jameson Drive · Peterborough, ON · K9J 0B9 Cell: 705-768-4296 · Fax: (705) 748-9944

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Planning Justification Report

Part of Lot 14 Concession 3, Dummer as described in R673425, Township of Douro Dummer County of Peterborough

Consent Application



D.M. Wills Project Number 20-85104

D.M. Wills Associates Limited Peterborough Bancroft

December 2021

Prepared for: Peter Smith



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Appendices

Appendix A - MDS Calculations



1.0 Introduction

D.M. Wills Associates Limited (Wills) has been retained by Peter & Wendy Smith (Client) to prepare this Planning Justification Report (Report) in support of the creation of one (1) new residential lot via Consent to Sever (Consent) application. The Consent applies to the land known municipally as 1090 Fourth Line Road South, Dummer (Subject Property) and legally described as Lot 14, Concession 3, in the Township of Douro-Dummer (Township) in the County of Peterborough (County).

1.1 Purpose of Planning Justification Report

The purpose of this Report is to provide a review and analysis of the proposed Consent in the context of both provincial and municipal planning policies. This Report is submitted in support of the above referenced formal Consent Application.

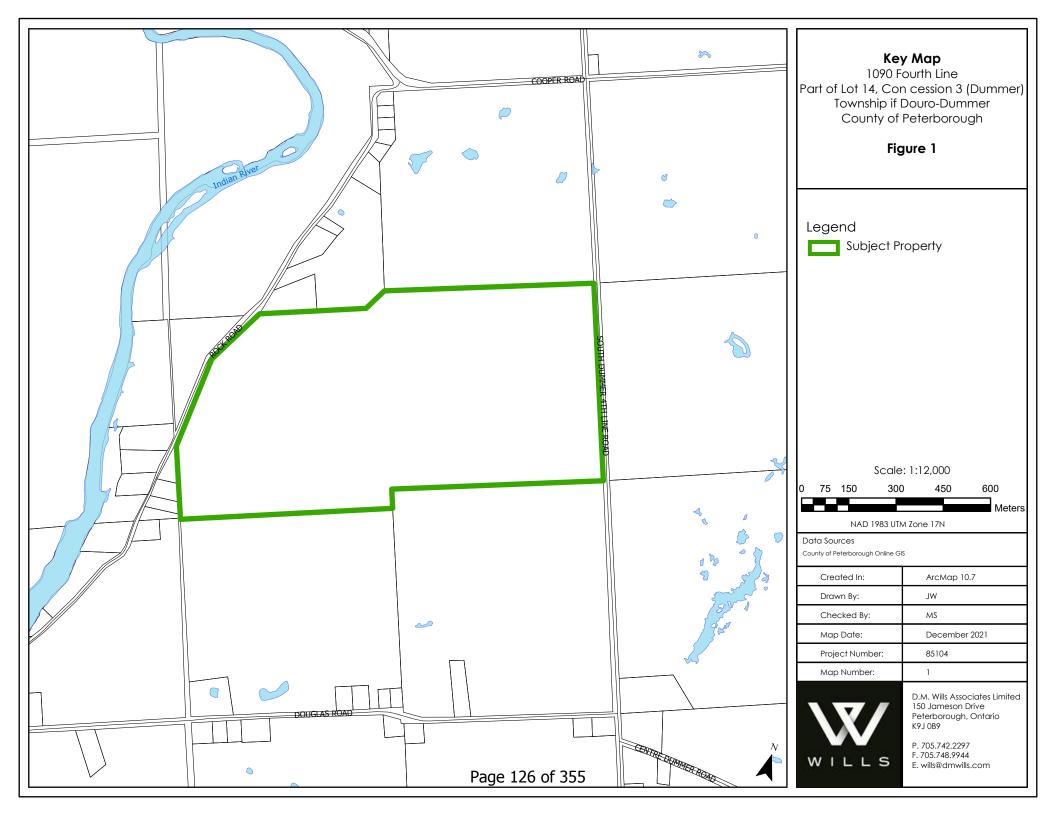
2.0 Property Description

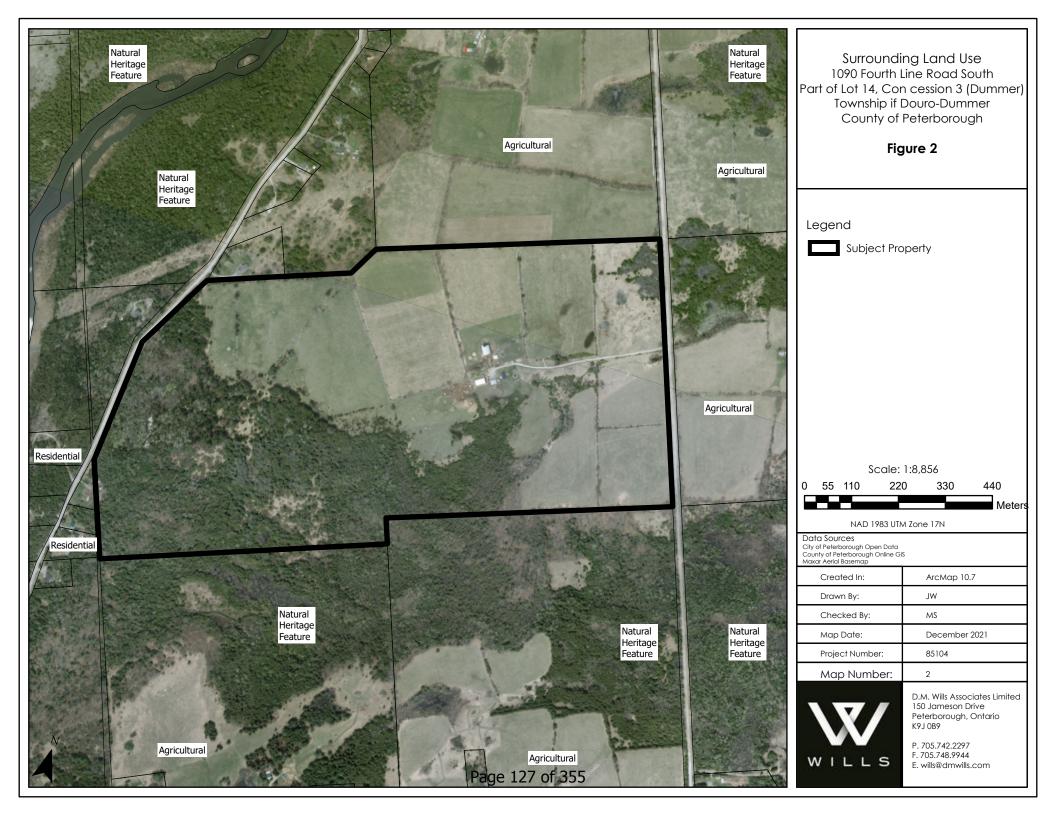
2.1 Property Location and Surrounding Land Uses

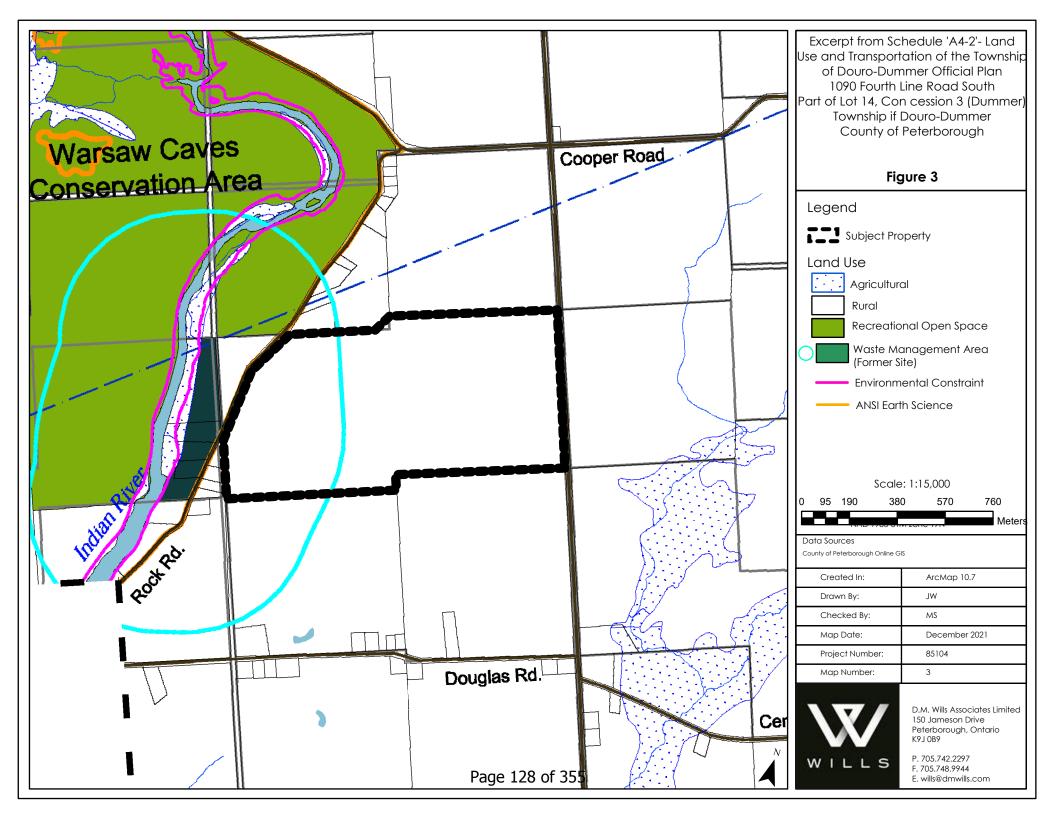
The Subject Property is located between Fourth Line Road South (Dummer) and Rock Road, and south of Cooper Road. Refer to **Figure 1**. The Subject Property has approximately 630m of frontage along Fourth Line South (Dummer) and approximately 520m of frontage along Rock Road, with a total area of 76.9 hectares (190.0 acres).

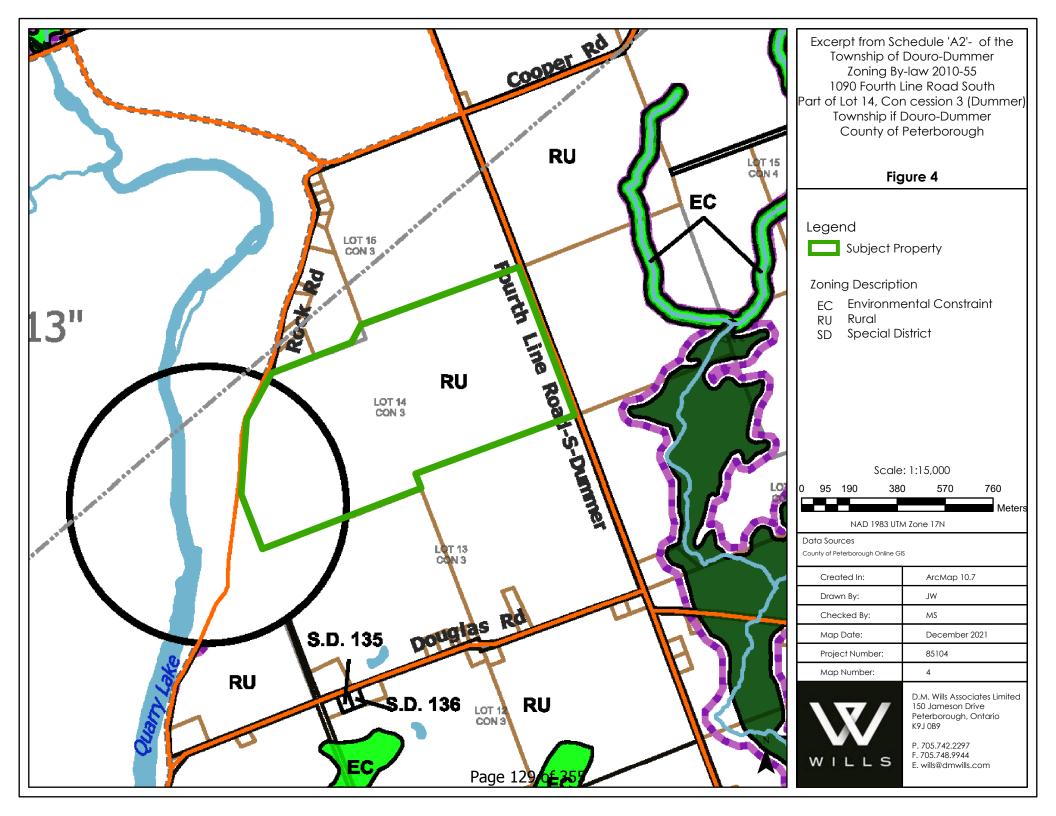
The Subject Property is located northeast of the settlement area of Warsaw in the Township of Douro-Dummer and east of the Indian River. The surrounding land uses consist of a mix of agricultural, rural residential and natural heritage features. Lands west of the Subject Property consists of seven (7) rural residential Properties with the remainder of the land undeveloped due to the natural heritage features, including a provincially significant Wetland, unevaluated wetland and a section of the Indian River, known as Quarry Lake. Unevaluated wetlands are also located to the south and scattered to the east, among the unevaluated wetlands is a provincially significant wetlands located southeast of the Subject Property. Land located to the east and north of the Subject Property consists of pockets of land in agricultural production in various crop rotations. The undeveloped lands surrounding the Subject Property consist of natural heritage features including an unevaluated wetlands and woodlands. Refer to Figure 2.

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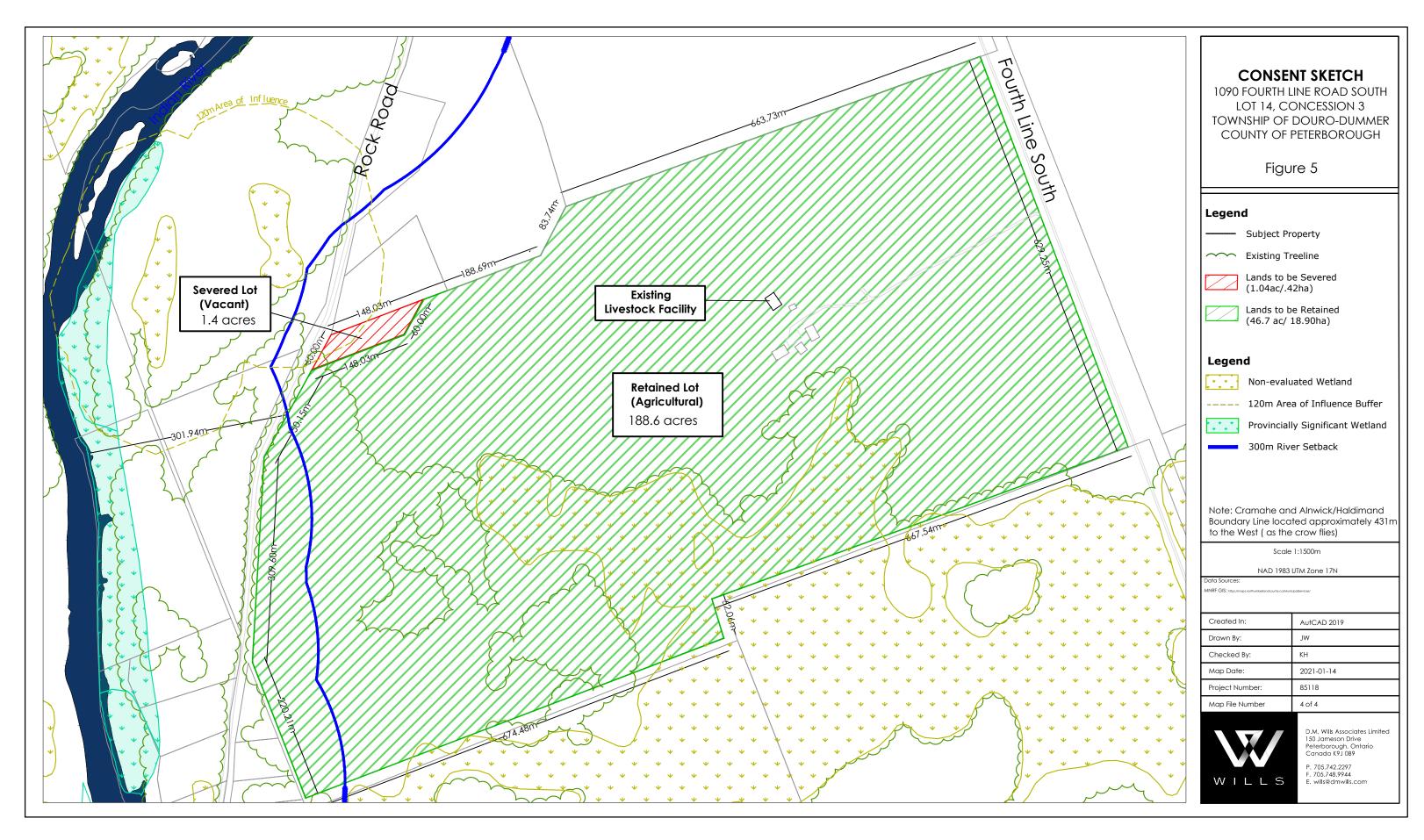






2.2 Existing & Proposed Development and Uses

The Subject Property currently contains a residence, a barn, two (2) sheds/garages, a Quonset hut and some additional outdoor storage and will make up the proposed retained parcel. The remainder of the Subject Property is cultivated fields, undeveloped woodlands, and an unevaluated wetland. The proposed development includes the creation of one (1) severed lot with frontage on Rock Road and one (1) retained lot on the Subject Property maintaining the existing frontage on Fourth Line Road S (Dummer). Refer to **Figure 5**.





3.0 Support Technical Studies

3.1 Species at Risk Evaluation

A preliminary analysis to identify potential Species at Risk (SAR) on the Subject Property was conducted in the spring and summer of 2021 by D.M. Wills Associates Limited. The analysis included a desktop review of information available from LIO, Birds Ontario, eBird, iNaturalist, NHIC, Global Biodiversity Information Facility and information made available from the Government of Canada. As well, communications with the owner of the Subject Property informed existing uses and development on the property. Based on a review of available information, it was concluded that the area of the proposed severed lot contained dense ground cover vegetation, representative of a pasture for grazing cattle. No Eastern Meadowlark or Bobolink were observed at the time of the Breeding Bird Surveys, indicating that they do not utilize the agricultural fields for breeding and nesting purposes. No other SAR were observed at the proposed severed lot at the time of the field investigations and Breeding Bird Surveys.

In order to ensure no bird species are impacted during future construction, it is required that any vegetation removal must take place outside of the breeding birdtiming window of April 15 to July 31. If work cannot be done outside of the timing window, a professional biologist should complete a nest sweep of the property prior to any vegetation removal. Refer to for SAR correspondence included with the application.

3.2 Land Use Compatibility Study

A preliminary analysis of the Subject Property and surrounding area identified a Former Waste Management Area within 500m of the area subject to the proposed severance. The Land Use Compatibility Study was completed to satisfy the policies in Section 6.2.18.3 (e) of the Township of Douro-Dummer Official Plan. The Land Use Compatibility Study was conducted on the basis of the Township of Douro-Dummer Policy No. D-1, Development of Lands in Proximity to Closed Landfill Sites and the Ministry of the Environment, Conservation and Parks (MECP) Guideline D-4, Land Use on or Near Landfills and Dumps.

Wills Study included a background review, site reconnaissance, and two (2) groundwater and landfill gas monitoring events that were conducted in the Spring and Fall of 2021. Documentation of the historic waste disposal site (WDS) were not available from the MECP or the Township that would indicate formal waste disposal at the WDS (i.e. Annual Monitoring Reports, Operations Records, etc.). During the site reconnaissance, isolated waste materials were identified at surface in the west-central area of the WDS footprint, and included automobile bodies, cans, drums, appliances,

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and other metal waste materials. Waste materials were located approximately 500 meters southwest of the proposed severed parcel.

Groundwater samples collected in Spring and Fall 2021 from an Ontario Regulation (O. Reg.) 903 water supply well located on the proposed severed parcel indicated good groundwater quality with respect to the Ontario Drinking Water Quality Standards. Exceedances for hardness, turbidity, and iron were observed during both sampling events, however, are not indicative of landfill leachate and are commonly encountered in wells that are constructed within limestone bedrock formations. Landfill gas monitoring conducted during both monitoring events showed no significant concentrations of landfill gases on the proposed severed parcel. Results of an O. Reg. 903 water well record search in the vicinity of the Subject Property suggests local groundwater flow is to the south/south-west towards Quarry Lake, and the Subject Property and proposed severed parcel are situated hydraulically up-gradient from the WDS footprint.

Wills concludes that the Study satisfies the relevant policies in Section 6.2.18.3 (e) of the Township of Douro-Dummer Official Plan, and that no impacts are anticipated on the proposed severed parcel as a result of the historic down-gradient WDS.

3.3 Environmental Impact Opinion Letter

The Otonabee Region Conservation Authority (ORCA) requested an Opinion Letter for the proposed severance due to the presence of natural heritage features within 120 m of the Subject Property. D.M. Wills Associates Limited (Wills) was retained by the Client to undertake an Opinion Letter to address any potential environmental impacts associated with a proposed lot severance (Project) at 1090 4th Line Road South, Lot 14, and Concession 3, in the Township of Douro-Dummer (Subject Property).

The purpose of the Opinion Letter is to identify environmental constraints, develop appropriate setbacks, consult with regulatory agencies and identify the activities required to address project compliance with Provincial and Federal statutes and policies including but not limited to: the Planning Act (R.S.O. 1995), the Conservation Authorities Act (R.S.O. 1990), the Endangered Species Act (R.O. 2007), the Provincial Policy Statement (2020), and A Place to Grow: Growth plan for the Greater Golden Horseshoe (2020) (Growth Plan). Wills' biologists undertook two (2) field investigations to collect information on existing conditions.

Given the results of the background review and on-site investigations, long-term adverse impacts to natural heritage features, associated habitat, and local wildlife populations are not anticipated to be resultant from the Project and any potential future development. Appropriate implementation of the above will ensure that the proposed severance does not conflict with the natural heritage policies set out by

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the Province of Ontario (Provincial Policy Statement, 2020) or the Growth Plan (2020). Refer to the full Environmental Impact Opinion Letter included with the application.

3.4 Minimum Distance Separation

Minimum Distance Separation calculations were completed for the Subject Property and proposed development. The MDS investigation employed a 750-metre investigation distance to identify nearby livestock\operations, consistent with Guidelines #33 and #35 of the MDS Document, produced by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA). In total, one (1) farms was identified with potential livestock facilities within the required investigation distance. The proposed development is located outside of the required MDS setbacks. Refer to **Appendix A** for MDS Calculation.

4.0 Policy Framework

The Subject Property is governed by the following policy and regulatory documents:

- 1. Provincial Policy Statement (PPS) (2020)
- 2. A Place to Grow: Growth Plan for the Greater Golden Horseshoe (consolidated 2020)
- 3. County of Peterborough Official Plan (March 2020 Office Consolidation)
- 4. Township of Douro-Dummer Comprehensive Zoning By-law (December 2010)

4.1 Provincial

4.1.1 Provincial Policy Statement (2020)

The 2020 Provincial Policy Statement (PPS) provides policy direction on matters of provincial interest related to land use planning and development. Section 3 of the *Planning Act* requires that decisions affecting planning matters "shall be consistent with" policy statements issued under the Act. In general, the PPS seeks to promote the development of communities that are socially, economically, and environmentally resilient.

Given the Subject Property's use and features identified onsite by the Ministry of Northern Development, Mines, Natural Resources and Forestry (NDMNRF) Natural Heritage Area Mapping, Sections 1.1.4, 1.1.5, 1.2.6, 2.1 of the PPS apply.

1.1.4 Rural Areas in Municipalities

1.1.4.1 Healthy, integrated and viable rural areas should be supported by:

a) building upon rural character, and leveraging rural amenities and assets;

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- 1.1.4.3 When directing development in rural settlement areas in accordance with policy 1.1.3, planning authorities shall give consideration to rural characteristics, the scale of development and the provision of appropriate service levels.
- 1.1.4.4 Growth and development may be directed to rural lands in accordance with policy 1.1.5, including where a municipality does not have a settlement area.

1.1.5 Rural Lands in Municipalities

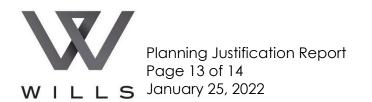
- 1.1.5.1 When directing development on rural lands, a planning authority shall apply the relevant policies of Section 1: Building Strong Healthy Communities, as well as the policies of Section 2: Wise Use and Management of Resources and Section 3: Protecting Public Health and Safety.
- 1.1.5.2 On rural lands located in municipalities, permitted uses are:
 - c) residential development, including lot creation, that is locally appropriate;
- 1.1.5.4 Development that is compatible with the rural landscape and can be sustained by rural service levels should be promoted.
- 1.1.5.5 Development shall be appropriate to the infrastructure which is planned or available, and avoid the need for the unjustified and/or uneconomical expansion of this infrastructure.
- 1.1.5.8 New land uses, including the creation of lots, and new or expanding livestock facilities, shall comply with the minimum distance separation formulae.

1.2.6 Land Use Compatibility

1.2.6.1 Major facilities and sensitive land uses shall be planned and developed to avoid, or if avoidance is not possible, minimize and mitigate any potential adverse effects from odour, noise and other contaminants, minimize risk to public health and safety, and to ensure the long-term operational and economic viability of major facilities in accordance with provincial guidelines, standards and procedures.

2.1 Natural Heritage

- 2.1.1 Natural features and areas shall be protected for the long term.
- 2.1.2 The diversity and connectivity of natural features in an area, and the longterm ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages



between and among natural heritage features and areas, surface water features and ground water features.

- 2.1.3 Natural heritage systems shall be identified in Ecoregions 6E & 7E1, recognizing that natural heritage systems will vary in size and form in settlement areas, rural areas, and prime agricultural areas.
- 2.1.4 Development and site alteration shall not be permitted in:
 - a) significant wetlands in Ecoregions 5E, 6E and 7E1
- 2.1.5 Development and site alteration shall not be permitted in:
 - a) significant wetlands in the Canadian Shield north of Ecoregions 5E, 6E and 7E1;

unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.

- 2.1.6 Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.
- 2.1.7 Development and site alteration shall not be permitted in habitat of endangered species and threatened species, except in accordance with provincial and federal requirements.

2.1.8 Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in policies 2.1.4, 2.1.5, and 2.1.6 unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions.

4.1.2 A Place to Grow: Growth Plan for the Greater Golden Horseshoe (2020)

The Growth Plan for the Greater Golden Horseshoe (Growth Plan) provides additional Provincial policy for lands within one (1) of the fastest growing regions in North America. Its policies are intended to support growth and development while ensuring that it occurs in an orderly and well-planned fashion, so as to protect the social, economic, and environmental interests of Ontario and its residents.

Section 1.2.3 Relationship with the Provincial Policy Statement (PPS)

The PPS provides overall policy directions on matters of provincial interest related to land use and development in Ontario, and applies to the GGH, except where this Plan or another provincial plan provides otherwise.

Like other provincial plans, this Plan builds upon the policy foundation provided by the PPS and provides additional and more specific land use planning policies to address issues facing specific geographic areas in Ontario. This Plan is to be read

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in conjunction with the PPS. The policies of this Plan take precedence over the policies of the PPS to the extent of any conflict, except where the relevant legislation provides otherwise. Where the policies of this Plan address the same, similar, related, or overlapping matters as policies in the PPS, applying the more specific policies of this Plan satisfies the requirements of the more general policies in the PPS. In contrast, where matters addressed in the PPS do not overlap with policies in this Plan, those PPS policies must be independently satisfied.

As provided for in the Places to Grow Act, 2005, this Plan prevails where there is a conflict between this Plan and the PPS. The only exception is where the conflict is between policies relating to the natural environment or human health. In that case, the direction that provides more protection to the natural environment or human health prevails.

Section 2.2.9 Rural Areas

- 3. Subject to the policies in Section 4, development outside of settlement areas may be permitted on rural lands for:
 - a) the management or use of resources;
 - b) resource-based recreational uses; and
 - c) other rural land uses that are not appropriate in settlement areas provided they:
 - i. are compatible with the rural landscape and surrounding local land uses;
 - ii. will be sustained by rural service levels; and,
 - iii. will not adversely affect the protection of agricultural uses and other resource-based uses such as mineral aggregate operations.
- 6. New multiple lots or units for residential development will be directed to settlement areas, but may be allowed on rural lands in site-specific locations with approved zoning or designation in an official plan that permitted this type of development as of June 16, 2006.

Section 4.2 Policies for Protecting What is Valuable

- 4.2.2 Natural Heritage System
 - 3. Within the Natural Heritage System for the Growth Plan:
 - a) new development or site alteration will demonstrate that:
 - i. there are no negative impacts on key natural heritage features or key hydrologic features or their functions;



- ii. connectivity along the system and between key natural heritage features and key hydrologic features located within 240 metres of each other will be maintained or, where possible, enhanced for the movement of native plants and animals across the landscape;
- iii. the removal of other natural features not identified as key natural heritage features and key hydrologic features is avoided, where possible. Such features should be incorporated into the planning and design of the proposed use wherever possible;

4.2.4 Lands Adjacent to Key Hydrologic Features and Key Natural Heritage Features

- 1. Outside settlement areas, a proposal for new development or site alteration within 120 metres of a key natural heritage feature within the Natural Heritage System for the Growth Plan or a key hydrologic feature will require a natural heritage evaluation or hydrologic evaluation that identifies a vegetation protection zone, which:
 - a) is of sufficient width to protect the key natural heritage feature or key hydrologic feature and its functions from the impacts of the proposed change;
 - b) is established to achieve and be maintained as natural self-sustaining vegetation; and,
 - c) for key hydrologic features, fish habitat, and significant woodlands, is no less than 30 metres measured from the outside boundary of the key natural heritage feature or key hydrologic feature.
- 2. Evaluations undertaken in accordance with policy 4.2.4.1 will identify any additional restrictions to be applied before, during, and after development to protect the hydrologic functions and ecological functions of the feature.
- 3. Development or site alteration is not permitted in the vegetation protection zone, with the exception of that described in policy 4.2.3.1 or shoreline development as permitted in accordance with policy 4.2.4.5.
- 4.2.6 Agricultural System
- Where agricultural uses and non-agricultural uses interface outside of settlement areas, land use compatibility will be achieved by avoiding or where avoidance is not possible, minimizing and mitigating adverse impacts on the Agricultural System...



4.2 Municipal

4.2.1 County of Peterborough Official Plan (March 2020 Consolidation)

The Subject Property is described as Rural and Cultural Landscape under the COP. Section 4.3 of the COP states that the intent of the Rural and Cultural Landscape policy is to "preserve and enhance the rural character of the County as a cultural resource and ensure the viability of the agricultural industry." Section 4.3.3.1, provides general policy applicable to Rural lands and allows for "New land uses, including the creation of lots, and new or expanding land use facilities, shall comply with the minimum distance separation formulae and the Source Water Protection policies of Section 5.7 where applicable."

Further, section 4.3.3.1 states that "Rural areas will generally be the focus of resource activity, resource based recreational activity and other rural land uses. The County, recognizing the need for growth on a limited basis, will permit non-agricultural related uses in the rural community outside prime agricultural areas and other agricultural areas designated in local plans in accordance with Section 4.3.3.2 which reflect the cultural and rural character of the area, promote a variety of living and employment opportunities for the rural community and do not negatively impact on the natural environment that cannot be located in settlement areas."

Section 2.6.3 Division of Land, provides general policies for the creation of new lots and states the following;

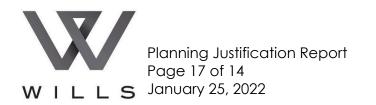
"A plan of subdivision may not be required under the following circumstances:

A) notwithstanding Section 1) above, infilling of up to 4 lots (4 new lots plus the retained lot) having frontage on a public road in areas serviced municipally by water and sanitary sewer systems

B) each of the severed and retained parcels from a land holding which generally represent natural Township lots in most cases being about 40 hectares in area, although they may be smaller due to municipal boundaries, shorelines and other natural features and having public road frontage."

Section 6 and 7 of the County of Peterborough's Official Plan provides Local Plan Policies for the Township of Douro-Dummer's Official Plan. As illustrated on Schedule 'A4-2'- Land Use and Transportation Plan Dummer Ward in the Township of Douro-Dummer Official Plan, the Subject Property is designated Rural. The eastern portion of the Subject Property is also identified as being within a Waste Management 500m Buffer Overlay for a former Waste Management Area. Schedule 'B'- Roads Plan in the Township of Douro-Dummer Official Plan identifies Fourth Line Road South (Dummer) and Rock Road as Township Roads.

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- 6.2 Local Planning Policies Rural Component
- 6.2.2 Rural
- 6.2.2.1 General Principles

The Rural designation applies to areas where Class 4, 5, 6 and 7 and Organic soils under the Canada Land Inventory Soil Capability for Agriculture predominate and areas where previous non-farm development has effectively limited the future of intensive farm activity.

6.2.2.2 - Permitted Uses

The predominant use of land within the Rural designation may include all agricultural uses outlined in Section 6.2.1 of this Plan. Other permitted uses shall include forestry, passive outdoor recreation uses and activities connected with the conservation of soil and wildlife. Development by consent will be permitted within the Rural designation, although that development shall be limited and will be subject to the following policies.

A very limited amount of small-scale commercial uses, or farm-related commercial/industrial uses will also be permitted. Commercial and industrial uses shall be subject to site plan control, and shall require a site-specific amendment to the implementing Zoning By-law, as part of the approval process. Low density residential development as defined by the Policies of Section 6.2.2.3, home occupations and home industries shall be permitted

6.2.2.5 – Residential Consents

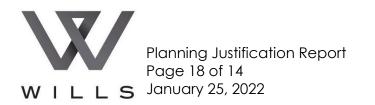
a) A consent may be granted within the Rural designation provided that the consent policies in Section 7.12 and the following policies are addressed.

d) In Douro-Dummer, two consents to create new lots may be granted on a lot as it existed as per Section 6.1.1 provided that the following criteria are met and all other relevant policies of this plan are complied with:

i) The applicant has owned the property for a minimum of 5 years; and

ii) The size of a new lot created by severance specifically and exclusively for a residential use shall not exceed 1 hectare in area. The area may exceed 1 hectare if there are other rural uses in addition to, or separate from, the residential use (i.e. hobby farms, recreational uses). The maximum lot area in such instances will be stipulated in the Zoning By-Law.

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e) The lot shall be located so that it does not interfere with the efficient operation of a neighbouring farm unit. Rural residential uses shall be in conformity with the Minimum Distance Separation requirements of the Provincial Policy Statement (PPS).

6.2.18 Waste Management Area

6.2.18.3 - Waste Management Area Policies

c) Within Waste Management Areas, as designated on Schedule "A", the construction of buildings, structures and hard surface paving shall only be permitted subject to the following policies and in accordance with the underlying land use designation.

- i) studies to investigate, among other things, gas leachate and hydrogeology have been carried out to the satisfaction of the Township and the Ministry of the Environment and those studies shall indicate that development can safely take place;
- ii) the Township shall be satisfied with the required studies with respect to any matter regarding structural stability, safety and the integrity of any structure.
- iii) written approval has been received from the Township;
- iv) the studies shall be carried out by a qualified engineer.

e) Within 500 metres of waste management footprints, only land uses compatible with the potential impacts or their engineered controls shall be permitted and may have to be determined by Official Plan amendment as a result of studies under Section 6.2.18.3 c). MOE recommends that the 500 metre assessment area be used as a study area to determine the impact of the landfill on land use proposals in accordance with MOE Guideline D-4: Land Use on or Near Landfills and Dumps.

7.12 Criteria for Assessing Consent Applications

Land development, particularly residential, shall wherever possible and practical, occur by registered plan of subdivision. Where a plan of subdivision is not necessary for proper and orderly development, an application for consent to a land severance may be considered by the consent granting authority in accordance with the Planning Act and the policies of this Plan. In assessing the suitability of an application for a consent, the consent granting authority, being the County of Peterborough, shall have regard for the following considerations:

7.12.16 One application for consent shall not create more than two lots; those being the severed and the retained lots. The lot to be severed shall be an existing lot of record that existed in:

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Douro-Dummer: A parcel of land will be eligible for consent if it has been recorded as a separate parcel in the Land Registry Office for a minimum of 25 years prior to the date of severance application.

4.2.3 Township of Douro-Dummer Comprehensive Zoning (December 2010)

As illustrated on Schedule 'B13' of the Township of Douro-Dummer Comprehensive Zoning By-law (December 2010), the Subject Property is zoned Rural (RU) with a Development (D2) Zone located on approximately a quarter of the east side of the parcel where the Subject Property has frontage on Rock Road. Refer to **Figure 4**.

20.2 Permitted Uses - D2 Zone

20.2.1 An existing permanent dwelling

20.2.2 An existing agricultural use or farm

20.2.3 Existing uses in addition to or other than those listed above.

20.3.1 Regulations for Uses Permitted in Sections 20.1 and 20.2

- a) Minimum Lot Area: as existing
- b) Minimum Lot Frontage: as existing
- c) Minimum Front Yard: 15 m
- d) Minimum Interior Side: Yard 6 m
- e) Minimum Exterior Side: Yard 15 m
- f) Minimum Rear Yard: 15 m
- g) Minimum Water Yard: 30 m
- h) Minimum Floor Area: 100 m²
- i) Minimum First Storey Floor Area: 60 m²
- j) Maximum Lot Coverage: 15%
- k) Maximum Building Height: 9 m
- I) Maximum Number of Dwellings per Lot: 1

5.0 Planning Rationale

The proposed Consent application is consistent with the aforementioned applicable provincial and municipal policies as outlined in **Section 4.0**, with the exception of the Zoning By-law Sections 20.2 "Permitted Uses – D2 Zone" and 20.3 "Regulations for Uses Permitted". Therefore, as a condition of approval, it is expected that a Zoning By-law Amendment application will be required in order to meet the requirements of the Townships Zoning By-law.

The proposed new lot is consistent with Section 1.1.5 of the PPS, as lot creation for the purpose of residential development is a permitted use on rural lands within municipalities, where it is locally appropriate and that it "is compatible with the rural landscape and can be sustained by rural service levels". With respect to Section

D.M. Wills Associates Limited 150 Jameson Drive, Peterborough, Ontario, Canada K9J 0B9 P. 705.742.2297 F. 705.748,9944 E. wills@dmwills.com Page 142 of 355



1.1.5.8 where the creation of lots shall comply with minimum distance separation (MDS), it was determined that the proposed lots meet the minimum distance separation requirements determined through the MDS calculation included in **Appendix A**.

The relevant policies of the Growth Plan relate to the protection of key hydrologic features. The identified unevaluated wetland on the northern side of Pipeline Road is considered a key hydrologic feature as defined in Growth Plan. For development or site alteration proposed within 120 metres of any key hydrologic feature anywhere in the Growth Plan area, a hydrologic evaluation by a qualified professional to identify a vegetation protection zone (VPZ) is required. As per Growth Plan definitions, a vegetation protection zone means "a vegetated buffer area surrounding a key natural heritage or key hydrologic feature". This zone is to be established to achieve and be maintained as natural self-sustaining vegetation.

A Township road separates the key hydrologic feature and the proposed severed lot. Further, the additional key hydrologic features that exist on the southern portion of the Subject Property and on the adjacent properties are well outside the 120 metres of the proposed lots.

Section 4.2.4 of the Growth Plan requires a hydrologic evaluation to ensure proper and adequate buffering between new development and key heritage features. Given the location of the existing road and its interference with the key heritage feature in proximity to the proposed lot, the need for a hydrologic evaluation is not required and the impact already established. A letter written on behalf of a qualified biologist accompanied by a constraints map has been completed to demonstrate the proposed severance will not impact the key feature.

With respect to the relevant local policy, the proposed Consent application is consistent with the County Official Plan. Section 6.2.6.3 d), applies to Rural Lands in Douro Dummer and allows for the creation of a maximum of two new lots facilitated by Consent applications, on lands that have been owned by the current owner for a period of at least 5 years. Section 7.12.16 provides a criteria for consents and provides that in Douro Dummer "A parcel of land will be eligible for consent if it has been recorded as a separate parcel in the Land Registry Office for a minimum of 25 years prior to the date of severance application". The permitted uses under Section 6.2 Rural allow for "permanent single detached dwellings". With regard to the Waste Management Area located within 500m of the Subject Property, a Land Use Compatibility Study was completed to determine that only land uses compatible with the potential impacts or their engineered controls shall be permitted and may have to be determined by Official Plan amendment as a result of studies under Section 6.2.18.3.

Section 20, of the Township of Douro Dummer Comprehensive Zoning By-law, identifies Existing Single Detached Dwellings as a permitted under the Development

D.M. Wills Associates Limited 150 Jameson Drive, Peterborough, Ontario, Canada K9J 0B9 P. 705.742.2297 F. 705.748,9944 E. wills@dmwills.com Page 143 of 355



D Zone. However, the site specific Development D2 Zone only permits existing Single Detached Dwellings. Therefore, as a condition of approval, a Zoning By-law Amendment Application will be submitted as a condition of approval of provisions of consent in order to meet the requirements of the Townships Zoning By-law.

6.0 Closing

This Planning Justification Report has been prepared in support of the Consent to Sever application to permit the creation of one (1) residential lot from the Subject Property. This report has provided an analysis of the applicable provincial and municipal policy documents in the context of the proposed development.

Based on the background information, the features on site and the forgoing review of the relevant policies, it is our opinion that the proposed Consent is consistent with and conform to provincial and municipal policies and constitutes as good planning.

Respectfully Submitted,

Written By:

duelus

Marnie Saunders, B.E.S., CPT. Land Use Planner

MS/DK/hd

Reviewed By:

Diana Keay, MCIP RPP Manager, Planning Services

Appendix A

Minimum Distance Separation Calculation



Minimum Distance Separation I

Worksheet 1 Prepared By: Katherine Howes, Land Use Planner, D.M. Wills Associates Ltd.

Description:	1090 4th Line Road	d South, Douro-Dummer
Application Date:	Wednesday, Septe	mber 23, 2020
Municipal File Number:		
Proposed Application:	Lot creation for a m Type A Land Use	naximum of three non-agricultural use lots
Applicant Contact Infor Peter Smith		Location of Subject Lands County of Peterborough, Township of Douro-Dummer DUMMER, Concession: 3, Lot: 14
Phone #1: 705-933-226	09	Roll Number: 152202000332401

Calculation Name: Description:

1090 Fourth Line Road South, Douro-Dummer

Farm Contact Information Peter Smith

Location of existing livestock facility or anaerobic digester County of Peterborough, Township of Douro-Dummer DUMMER, Concession: 3, Lot: 14 Roll Number: 152202000332401 Total Lot Size: 199 ha

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	12	12.0	56 m²
Solid	Chickens, Layer hens (for eating eggs; after transfer from pullet barn), floor run	99	0.7	9 m²
Solid	Sheep, Ewes & rams (for meat lambs; includes unweaned offspring & replacements), Outside Access	10	1.3	14 m²
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	4	4.0	93 m²

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Farm 1

Design Capacity (NU): 17.9

Potential Design Capacity (NU): 53.7

Factor A	۱.	Factor B		Facto	r D	Fa	actor E	Building Base Distance F'	
(Odour Poten	tial)	(Size)		(Manure	Type)	(Encroach	ning Land Use)	(minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	х	267.46	Х	0.7	Х	1.1	=	144 m (473 ft)	553 m (1814 ft)

Storage Base Distance 'S' (minimum distance from manure storage) (actual distance from manure storage) 144 m (473 ft)

553 m (1814 ft)

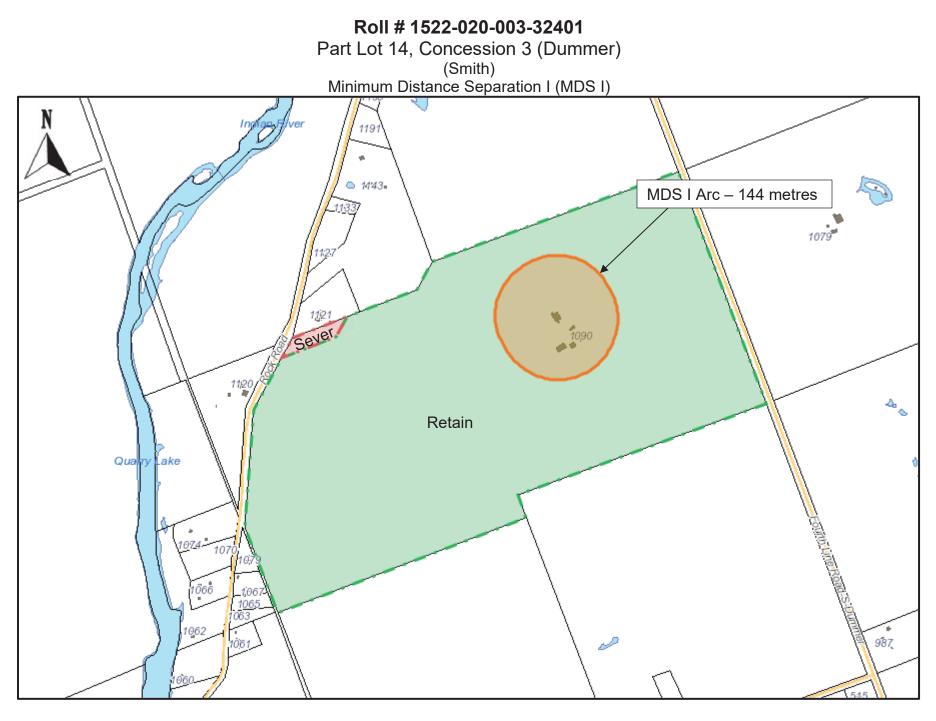


Minimum Distance Separation I

Worksheet 1 Prepared By: Katherine Howes, Land Use Planner, D.M. Wills Associates Ltd.

Preparer Information				
Katherine Howes				
Land Use Planner D.M. Wills Associates Ltd.				
150 Jameson Drive				
Peterborough, ON, Canada K9J 0B9				
Phone #1: 705-742-2297 Fax: 705-748-9944				
Email: khowes@dmwills.com	~ 11			
1	4/ 1/			
2	ATA		September	28 2020
Signature of Preparer:		Date: _	oupternue	20 20
Katherine Howes	, Land Use Planner			

NOTE TO THE USER: The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) has developed this software program for distribution and use with the Minimum Distance Separation (MDS) Formulae as a public service to assist farmers, consultants, and the general public. This version of the software distributed by OMAFRA will be considered to be the official version for purposes of calculating MDS. OMAFRA is not responsible for errors due to inaccurate or incorrect data or information; mistakes in calculation; errors arising out of modification of the software, or errors arising out of incorrect inputting of data. All data and calculations should be verified before acting on them.



1:9600(1"=800') Page 148 of 355

County of Peterborough Land Division 470 Water Street, Peterborough, Ontario K9H 3M3 email: AHamilton@ptbocounty.ca T-705-743-3718 or 800-710-9586, Ext. 2406 Fax: 705-876-1730



Application for Consent

Note to Applicant: All questions must be answered or application may be returned. Application Fee: \$1150.00 must accompany fully completed	
application and 6 copies. It is strongly advised the applicant complete a Preliminary	File No. B - 15.22
Y/N Y Date: December 14th, 2020	Date Received RECEN/ED
If yes, were there any Studies required? Y/N Y (i.e. Traffic Study, Archaeological Study and	JAN 2 5 2022
Environmental Impact Analysis (EIA). Have you attached 4 copies of each to this application? Y/N <u>N (digital copies provided)</u>	LAND DIVISION
1. Owner Information	
Name(s): Peter & Wendy Smith	Address: 1090 Fourth Line Road (South) Dummer
P.O. Box: <u>N/A</u>	City/Province: Township of Douro Dummer (Dummer Ward)/ ON
Phone: (H) <u>705-933-2269</u> (B) <u>N/A</u>	Postal Code: K0L3A0
E-mail: waybackfarm@nexicom.net	
Do you wish to receive all communications? Ves No	
2. Authorized Agent/Solicitor Information	
Name(s): Marnie Saunders	Address: 150 Jameson Drive
P.O. Box: <u>N/A</u>	City/Province: Peterborough, ON
Phone: (H) (705) 742-2297 (B) N/A	Postal Code: K9J 0B9
E-mail: msaunders@dmwills.com	
Do you wish to receive all communications?	
3. Property Description	
Ward: <u>Dummer</u> Township: <u>Douro-Dummer</u> Municipal (911) Address: <u>1090 Fourth Line Road (South) Dumm</u>	
Registered Plan #: n/a	ner Tax Roll #: <u>152202000332401</u> Block/Lot: <u>n/a</u>
4. Type and Purpose of Proposed Transaction	
	to a Lot (moving/adjusting lot line)
Other: Right-of-Way Easeme	nt Correction of Title Charge Lease
5. Transferee If known, the name of the person(s), to whom land or interest	in land is intended to be transferred, charged or leased
	relationship to owner: <u>va</u>
Address: _n/a	
Phone: (H) <u>n/a</u> (B) <u>n/a</u>	E-mail: ^{n/a}

County of Peterborough Land Division

Page	2
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6. Descrip	tion of Severed Lot (provide both	metric & imperia	I measurements and	d include all dimensions on sketch)
Frontage	e (metres):	Depth (metres):	148.0m	Area (m ² or hectares): 2737.2sm
Frontage	(feet): <u>196.85</u>	Depth (feet): 48	35.564	Area (ft ² or acres): 0.68 Acres
Existing	Use: (i.e. residential, commercial,	recreational)	Proposed Use: (i	.e. residential, commercial, recreational)
Rural			Residential	
	kisting Buildings & Structures, includi ow on sketch with setbacks)	ng well & septic		uildings & Structures, including well & septic tch with setbacks)
Type of	Type of Access:			
🗹 Munici	Municipal maintained road County Ro			Provincial Highway
🗖 Seaso	Seasonally maintained municipal road			□Other
□Water	Parking/docking faci	lities – distance fro	om these to the neare	est road :
☑ Private ☑ Private ☑ Lake c	upply: ly owned/operated piped water syste ely owned/operated individual well ely owned/operated communal well or other water body	m	Publicly owned/o Privately owned/	(if existing, show on sketch) perated sanitary sewage system operated individual septic tank operated communal septic tank
If a septi	c system exists on the severed parce	el, when was it insi	talled and inspected?	n/a
	is it located from the lot line(s) & well			
	u shown the well & septic locations a			

If the severed lot is an "Addition" or "Lot Line Adjustment", please provide the following information. If not, please skip this section and move onto Section 8:

Frontage (metres): N/A	Depth (metres):	N/A	Area (m² or hectares): N/A	
Frontage (feet): N/A	Depth (feet): <u>N</u>	/A	Area (ft² or acres): <u>N/A</u>	
Existing Use: (i.e. residential, commercial, N/A	recreational)	Proposed Use: N/A	(i.e. residential, commercial, recreational)	
Name Existing Buildings & Structures, includ (and show on sketch with setbacks)	ling wells & septic	ic Name Proposed Buildings & Structures, including wells & sep (and show on sketch with setbacks) N/A		
N/A		•		
N/A Official Plan Designation: <u>N/A</u>		•	N/A	
		N/A	N/A	
Official Plan Designation: N/A	County Ro	N/A Current Zoning:	N/A	
Official Plan Designation: <u>N/A</u> Type of Access:		N/A Current Zoning:		

County of Peterborough Land Division

. .

8. Description of Retained Lot (provide bo	oth metric & imperia	al measurements a	and include all dimensions on sketch)
Frontage (metres): 629.3m	Depth (metres):	1,342m	Area (m ² or hectares): 763,237.12sm
Frontage (feet): 2064.6m	Depth (feet): 44	02.89	Area (ft ² or acres): <u>188.6 Acres</u>
Existing Use: (i.e. residential, commercia	l, recreational)	Proposed Use:	(i.e. residential, commercial, recreational)
Rural		Rural	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>
Name Existing Buildings & Structures, inclu (and show on sketch with setbacks) (1) dwelling, (1) barn, (2) sheds/garages	•		Buildings & Structures, including wells & septic setch with setbacks)
Type of Access:			
Municipal maintained road	County Roa	ad	Provincial Highway
Seasonally maintained municipal road	Private roa	d or right-of-way	Other N/A
☐Water	ng facilities – distanc	e from these to the	nearest road : <u>N/A</u>
Water Supply: Publicly owned/operated piped water sys: Privately owned/operated individual well Privately owned/operated communal well Lake or other water body Other MA		Publicly owned Privately owned	II: (if existing, show on sketch) /operated sanitary sewage system d/operated individual septic tank d/operated communal septic tank
If a septic system exists on the retained par	cel, when was it inst	alled and inspected	<u>nknown</u>
How far is it located from the lot line(s) & we	ell? <u>N/A (</u> ft. or mete	ers)	
Have you shown the well & septic locations	and setbacks on the	e sketch? No	
9. Local Planning Documents			
What is the current Township Official Plan			
What is the current County Official Plan de (this information is available from the Prelir			
Explain how the application Conforms with t	•		
What is the current zoning on this property, (this information is available from the Prelir	as found in the Tow	nship Zoning By-L	aw? RU & D2 Zones
10. Provincial Policy			

Is the subject property within an area of land designated under any provincial plan(s)? X Yes (Oak Ridges Moraine Conservation Plan applies to portions of Cavan Ward only; Growth Plan applies to the entire County of Peterborough so answer should be yes) If yes, explain how the application conforms or does not conflict with provincial plan(s)? N/A	Provincial Policy Statements? Provincial Policy Statements? Preliminary Severance Review and/or from the County Planning Dept.) stent: See Planning Justification submitted with application.	No
If yes, explain how the application conforms or does not conflict with provincial plan(s)? N/A	Plan applies to portions of Cavan Ward only;	No
	onforms or does not conflict with provincial plan(s)? <u>N/A</u>	

11.	Restrictions of Subject Land			
	Are there any easements or restrictive covenants (i.e. hydro, Bell) affecting the subject land?	☐ Yes	✓ No	
	If yes, describe the easement or covenant and its effect: <u>N/A</u>			

1

12.	Previous Pla	anning Act Applications				
		land now, or has it been, the subject of nt under Section 53 of the <i>Planning Act</i>	an application for a Plan of Subdivision ι ?	Inder Section	□Yes	🖸 No
	Has the owne	r of the subject land severed any land fr	om the original acquired parcel?		🛛 Yes	✓ No
	If yes, indicate File No. B- <u>N</u> A	e this information on the required sketch	and provide the following (if known): Date of Transfer: <u>NA</u>			
	File No. B- N/A	Transferee: <u>MA</u> , Transferee: <u>MA</u> , Transferee: <u>MA</u>	Date of Transfer: MA			
			on under the Planning Act, such as an a t, Minor Variance, Minister's Order, or Po		□ Yes	🗹 No
	If yes, please Type: <u>N/A</u>	provide the following: File No. <u>MA</u>	Status: _N/A			
			· · · · · · · · · · · · · · · · · · ·			
13.	Minimum Di	stance Separation (MDS)				
	house, or are Are there any	capable of housing, livestock?	4,921 feet) of the subject property which metres (2,460-4,921 feet) of the subject ach barn.	-	⊡Yes ⊡Yes	☐ No ☑ No
14.	Agricultural	Severances (for lands within the agri	icultural designation only)			
					Ī	∕7N/A
			a farming operation (must have 2 houses	s)?	□Yes	=
	Is this severar	nce to create a new farm parcel approxi	mately 40 hectares (100 acres) in size?		□Yes	
	Is this severar	nce for a commercial or industrial "agrice	ulture-related" use?		C Yes	□ No
15.	Adjacent La	nds Surrounding the Landholding				
	landholding.		e land and buildings existing on the land he sketch , and can be obtained from th age.			
	Direction	Name of Owner (only when known to the applicant)	Use of Land – (must be filled in) (i.e. farm, residential etc.)	Buildings (i (mus	.e. house at be filled	
	North	Unknown	Agricultural		N/A	
	South	Unknown	Unevaluated wetlands		N/A	ž

East	Unknown	Agricultural	N/A
West	Unknown	Seven (7) rural residential Properties	Seven (7) rural residential dwellings

16. Driving Directions

Please describe in detail driving directions to the subject property: The Subject Property is located between Fourth Line Road South (Dummer) and Rock Road, and south of Cooper Road

The Subject Property is located between Fourth Line Road South (Dummer) and Rock Road, and south of Cooper Road

The Subject Property is located between Fourth Line Road South (Dummer) and Rock Road, and south of Cooper Road

The Subject Property is located between Fourth Line Road South (Dummer) and Rock Road, and south of Cooper Road

County of Peterborough Land Division

Signatures Page

If the applicant is not the owner of the subject land, a written authorization of the owner that the applicant is authorized to act as agent and make the application on his/her behalf is required (original please).

If the applicant is a Corporation acting without agent or solicitor, the application must be signed by an Officer of the Corporation with a declaration indicating that the said Officer has the authority to bind the Corporation and the <u>Corporation's Seal</u> (if any) must be affixed.

Signature(S)
Dated at the (City, Township) of <u>PETERBOROUGH</u> this <u>25</u> day of <u>JANUARY</u> , 20 <u>722</u> .
MARNIE SAUNDERS - D. M. WILLS
M. Security Signature of owner(s) or authorized solicitor/agent Signature of owner(s) or authorized solicitor/agent
Declaration
This section must be signed before a Commissioner for Taking Affidavits or a designated Official of the Municipality (i.e. Reeve, Clerk, Secretary-Treasurer of the Land Division Committee, lawyer, etc.)
I/we, <u>MARNIE SAMADERS</u> of the Township, City, etc. of <u>PETERBOROUGH</u> , in the County/Region/Municipality, etc. of <u>PETERBOROUGH</u> , solemnly declare that all the statements contained in this application are true, and I make this solemn declaration as if made under oath and by virtue of the Canada Evidence Act.
Declared before me at the <u>CITT</u> of <u>PETERBOROUGH</u> Name of City, etc. in the <u>COUNTY</u> Mane of City, etc.
County, Region, etc. Owner or authorized Agent
this 25 th day of <u>JANMARY</u> , 2022. <u>Kory Christopher O'Brien, a Commissioner, etc.,</u> <u>Kory Christopher O'Brien, a Commissioner, etc.,</u> <u>Province of Ontario,</u> for D.M. Wills Associates Limited. Expires June 17, 2022.
Personal information contained on this form is legally authorized under Sec.53 of the Planning Act and O.Reg.197/96 for the purpose of processing your planning application and will become part of a public record.
Pursuant to Sec.1.0.1 of the Planning Act, and in accordance with Sec.32(e) of the Municipal Freedom of Information and Protection of Privacy Act the County of Peterborough may make all planning applications and supporting material available to the public in hard copy or electronically. If you have any questions about the collection, use or disclosure of this information by the County of Peterborough, please contact the CAO or Clerk, County of Peterborough, 470 Water Street, Peterborough, Ontario K9H 3M3

An "original" signed copy of the application and sketch must be submitted, together with 6 copies of both the application and sketch, each copy stapled individually with a sketch. All copies of the sketch or survey must be coloured – red for severed lots, green for retained. Copies may be double-sided. Please submit application with a cheque for \$1150.00 payable to the "County of Peterborough".

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December 22, 2021

County of Peterborough Planning Department 470 Water Street Peterborough, Ontario K9H 3M3

Attention: Land Division, County of Peterborough

PARTNERS IN ENGINEERING PLANNING & ENVIRONMENTAL SERVICES Re: Written Authorization – Severance Application 1090 Fourth Line S (Dummer) Township of Douro-Dummer D.M. Wills Project No. 85104

D.M. Wills Associates Limited (Wills) is pleased to submit the enclosed Consent to Sever application on behalf of Peter and Wendy Smith, property owners, for the lands located municipal known as 1090 Fourth Line S (Dummer), Township of Douro-Dummer.

As per the application requirements, please be advised that D.M. Wills Associates Limited has written authorization to submit the application on behalf of Peter and Wendy Smith.

Peter Smith

Wendy Smith

2022 - 01 - 2000

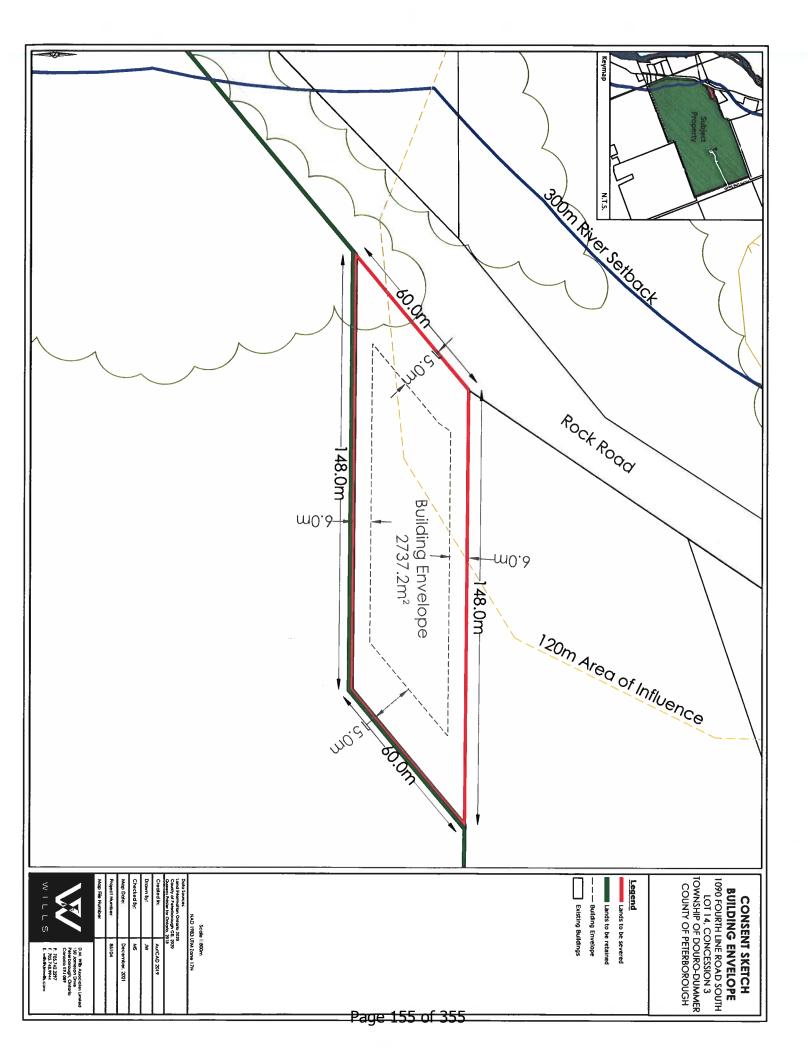
Date

2022-01-20

Date

We trust the information provided above is sufficient and meets the application requirements.

D.M. Wills Associates Limited 150 Jameson Drive, Peterborough, Ontario, Canada K9J 0B9 **P**. 705.742.2297 **F**. 705.748.9944 **E**. wills@dmwills.com



Preliminary Severance Review

Prepared by the Peterborough County Planning Department



Name: Peter & Wendy Smith	Agent: Katherine Wills)	Howes (D.M.	Date: December 14, 2020
Lot: 14	Concession: 3	Municipality: Township of D	Dummer Ward ouro-Dummer
Description: 10	90 Fourth Line Road (South	h) Dummer	

Phone:	Email:	Office Phone:
705.933.2269(O)	waybackfarm@nexicom.net(O)	705.742.2297 x 252 (A)
	khowes@dmwills.com(A)	
Communication Sent	Owner:	Agent: 🖂

Communication Sent Owner:

	Severed	Retained
County O.P. Description	Rural Area	Rural Area
Municipal O.P. Designation (effective April 2014)	Rural	Rural
Municipal Zoning	(D2) & (RU)	(D2) & (RU)
(By-Law No.2000-21)		
Area/Lot Dimensions	±0.58 hectares with ±60 m of	±81.06 hectares with
	frontage on Rock Road	±442 m of frontage
		on Rock Road
Existing Use/Buildings	Vacant	Agricultural/Single
		detached dwelling,
		barn & accessory
		structures

Intent: To sever a residential lot. Roll No.(s) 1522-020-003-32401.

County Official Plan Policy Review: The subject property is described as Rural Area in the County of Peterborough Official Plan.

Section 2.6.3.5 of the Plan suggests that residential severances for land holdings located in the Rural Area should be discouraged in favour of development in Settlement Areas in an effort to promote orderly growth and development. However, severances in the Rural Area may be considered provided Health Unit, road frontage and access and Minimum Distance Separation requirements can be met (Ss.2.6.3.5 (A), (C) & (G)) and provided the applicable policies of Sections 2.6.3.1, 2.6.3.5, 4.1.3 and 4.3 are complied with (S.2.6.3.5 (H)).

The proposed severed lot is located within 500 metres of a former waste management area as shown on Schedule 'A4-2' of the Township's Official Plan (see map attached). To ensure that new development will not be negatively impacted by the disposed waste prior to the approval of new development, local municipalities shall identify a 500 metre radius around all operating and closed landfill sites in their local Official Plans. This 500

metre radius will serve as an assessment area to require testings and studies, which deal with such issues as methane gas, leachate, hydrogeology and structural stability by qualified professionals unless exempted by the Ministry of the Environment (S. 4.7.3.3). The need for a land use compatibility study should be confirmed with the Ministry of Environment, Conservation and Parks (MECP). Until the land use compatibility is confirmed, the proposal does not appear to conform to the County Official Plan. Please note that any technical study submitted to the County (i.e. EIS, traffic impact study, hydrogeological study etc.) will be peer reviewed at the County's request. Both the cost of the study and the peer review will be at the applicant's expense.

Municipal Official Plan Policy Review: The subject property is designated 'Rural' in the Local Component of the County Official Plan (i.e. Township Official Plan). Agricultural uses as well as low density residential development in the form of one single detached dwelling per lot are permitted in the 'Rural' designation (S. 6.2.2.2 & 6.2.2.3(b)).

In the 'Rural' designation, a maximum of two severances are permitted in the Township of Douro-Dummer from a property as it existed 25 years prior to the date of application (Ss.6.1.1 & 6.2.2.5(d)). Peterborough County Land Division records indicate that the subject property has not received any severances for a new lot in the last 25 years and therefore the lands appear to be eligible for consent.

In addition to the above requirement, for a residential lot in the 'Rural' designation, the landowner must have owned the property for a minimum of 5 years, and the size of the new lot created specifically for a residential use shall not exceed 1 hectare in area (S.6.2.2.5(d)(i)&(ii)). Based on the property's assessment information and sales history provided to the County by MPAC, the property owner appears to have owned the property for the required minimum of 5 years.

The subject property is located within the influence area (i.e. 500 metres) of a closed waste disposal site. Section 6.2.18.3 (e) of the Official Plan states, "within 500 metres of waste management footprints, only land uses compatible with the potential impacts or their engineered controls shall be permitted and may have to be determined by Official Plan amendment as a result of studies under Section 6.2.18.3 c). Ministry of Environment (MOE) recommends that the 500 metre assessment area be used as a study area to determine the impact of the landfill on land use proposals in accordance with MOE Guideline D-4: Land Use on or Near Landfills and Dumps." As such, studies to investigate, among other things, gas leachate and hydrogeology may be required to be completed to the satisfaction of the Township and the Ministry of Environment, Conservation and Parks (MECP) in order to demonstrate that the development can safely take place. Until the land use compatibility is confirmed, the proposal does not appear to conform to the Township's Official Plan. Please note that any technical study submitted to the County (i.e. EIS, traffic impact study, hydrogeological study etc.) will be peer reviewed at the County's request. Both the cost of the study and the peer review will be at the applicant's expense.

As applicable, consents must meet road frontage & access, Zoning By-law, Health Unit and Minimum Distance Separation (MDS) requirements (Ss. 7.2.3, 7.12.4, 7.12.1, 7.12.12).

Municipal Zoning By-Law Review: The severed parcel is zoned Rural (RU) Zone and is marginally within the Development (D2) Zone in the Township's Zoning By-Law. Where a lot which existed at the date of passing of this By-law is divided into more than one zone the provisions of each of the applicable zones, save and except lot area and lot frontage, shall apply to each portion of such lot (S. 3.27). A single detached dwelling is permitted in the (RU) zone (S.9.1.5) provided the parcel has a minimum lot area of 0.4 hectares and a minimum lot frontage of 45 metres (S. 9.2.4(a)&(b)). An existing permanent dwelling is permitted in the (D2) Zone (S.20.2.1). The minimum lot area and frontage requirements of the (D2) Zone are described as 'as existing' (S. 20.3.1(a)&(b)). The severed parcel appears to meet the minimum lot area and frontage requirements of the (RU) Zone.

The retained parcel is zoned Rural (RU) Zone and Development (D2) Zone in the Township's Zoning By-Law. Where a lot which existed at the date of passing of this By-law is divided into more than one zone the provisions of each of the applicable zones, save and except lot area and lot frontage, shall apply to each portion of such lot (S. 3.27). A farm including a single detached dwelling is permitted in the (RU) zone (S.9.1.1), provided the parcel has a minimum lot area of 20 hectares and a minimum lot frontage of 135 metres (S.9.2.1(a)&(b))). Existing uses are permitted in the (D2) Zone (S. 20.2). The minimum lot area and frontage requirements of the (D2) Zone are described as 'as existing' (S. 20.3.1(a)&(b)). The retained parcel appears to meet the minimum lot area and frontage requirements of the (RU) Zone.

Provincial Policy Review: The 2020 Provincial Policy Statement (PPS) and Growth Plan for the Greater Golden Horseshoe, 2019 (GPGGH) apply to this proposal.

The following key natural heritage features and/or key hydrologic features have been identified on or adjacent to the subject property: unevaluated wetlands and an Area of Natural and Scientific Interest (ANSI).

*Sections 4.2.3.1, 4.2.4.1(c) & 4.2.4.3 of the GPGGH state that outside settlement areas, development, including lot creation, and site alteration, is not permitted in key hydrologic or key natural heritage features or their related minimum 30 metre vegetation protection zone (VPZ). Section 4.2.4.1 of the GPGGH states that outside settlement areas, development, including lot creation, and site alteration within 120 metres of a key natural heritage feature or a key hydrologic feature will require a natural heritage evaluation and/or a hydrologic evaluation that identifies a vegetation protection zone (VPZ). Since the new lot appears to be located within 120 metres of an unevaluated wetland located on the opposite side of Rock Road, a natural heritage/hydrologic evaluation (NHE) appears to be required, however, this should be confirmed with the Otonabee Region Conservation Authority (ORCA). Please note that any technical study submitted to the County (i.e. EIS, traffic impact study, hydrogeological study etc.) will be peer reviewed at the County's request. Both the cost of the study and the peer review will be at the applicant's expense.

*The subject property is located within an area identified for habitat of endangered species and threatened species, as shown on the attached sketch. Policy 2.1.7 of the Provincial Policy Statement prohibits development and site alteration, including lot creation, within habitat of endangered species and threatened species, except in accordance with provincial and federal requirements. Species at Risk data available to the County has identified a possible species at risk on or adjacent to the proposed severed lot, therefore, a Species at Risk (SAR) assessment in accordance with S. 4.1.3.1 of the County Official Plan is required to support the severance application. Please note that any technical study submitted to the County (i.e. EIS, traffic impact study, hydrogeological study etc.) will be peer reviewed at the County's request. Both the cost of the study and the peer review will be at the applicant's expense.

*The subject property is located within 50 metres of an Area of Natural and Scientific Interest (ANSI). The County Planning Department notes that this ANSI is located on the west side of Rock Road opposite the proposed severed parcel. Policy 2.1.5 (e) of the Provincial Policy Statement (PPS) states that development and site alteration shall not be permitted in significant areas of natural and scientific interest (ANSIs) unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions. Development and site alteration shall not be permitted on adjacent lands to provincially significant ANSIs unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions (S. 2.1.8). An Environmental Impact Study (EIS) for this feature in accordance with Section 4.1.3.1 of the County Official Plan does not appear to be since the ANSI is not located on lands that are contiguously adjacent to the proposed severed parcel (PPS - 'Adjacent Lands'), however, this should be confirmed with the Otonabee Region Conservation Authority (ORCA). Please note that any technical study submitted to the County (i.e. EIS, traffic impact study, hydrogeological study etc.) will be peer reviewed at the County's request. Both the cost of the study and the peer review will be at the applicant's expense.

*Minimum Distance Separation Formula I (MDS I) as per policy 1.1.5.8 of the 2020 Provincial Policy Statement has been calculated by D.M. Wills (agent for the proponent) for the livestock facilities (i.e. barns) at 1090 Fourth Line Road (South) Dummer (see calculations and map attached). The proposal appears to meet MDS I setback requirements.

Additional Notes:

*The lands appear to be regulated by Regulation 167/06, the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation of the Otonabee Conservation Authority. Therefore, the proposal should be discussed with Matt Wilkinson at (705) 745-5791 ext.213 to determine what, if any permits may be necessary.

*The applicant and any prospective owners are advised that endangered and/or threatened species exist in the area and may exist on the site. It is the responsibility of the landowner to identify endangered and threatened species and their habitat within

the property prior to undertaking work, and to ensure that the work/activity will not result in negative impacts. Landowners are encouraged to consult with the Ministry of Environment, Conservation and Parks (MECP) if they have questions about the *Endangered Species Act, 2007 (ESA)*. Any sightings of a threatened or endangered species during development and construction on the property must be reported in accordance with the ESA.

This Preliminary Severance Review has been circulated by the Planning Department to the following agencies (marked with an X):

Local Municipality of Douro-Dummer

County Infrastructure Services (i.e. Roads);

Conservation Authority;

First Nations;

Other

Agencies to be Contacted by Owner/Agent (marked with an X):						
🖂 Township	🖂 Health Unit					
Conservation Authority	Trent-Severn Waterway					
Source Water Risk Management Officer	First Nations					
Ministry of Environment, Conservation and Parks (RE: New lot with 500 m of former waste management area)	Other					

Proposal does not appear to conform to the Growth Plan for the Greater Golden Horseshoe (GPGGH) and/or Provincial Policy Statement (PPS) policies.

The severance proposal does not appear to conform to the Provincial Plan(s). An Environmental Impact Study (EIS) and/or Natural Heritage/Hydrolic Evaluation (NHE) may be required with regard to an Area of Natural and Scientific Interest (ANSI) and an unevaluated wetland located in proximity to the proposed severed parcel. Please contact the Otonabee Region Conservation Authority (ORCA) to confirm the requirement for these reports (PPS S. 2.1.8 and GPGGH S. 4.2.4.1). Furthermore, a Species at Risk Assessment is required in accordance with PPS S. 2.1.7. Please note that any technical study submitted to the County (i.e. EIS, traffic impact study, hydrogeological study etc.) will be peer reviewed at the County's request. Both the cost of the study and the peer review will be at the applicant's expense.

Proposal does not appear to conform to County Official Plan policies.

The severance proposal does not appear to conform to the County Official Plan. The proposed severed lot is located within 500 metres of a former waste management area. A land use compatibility study may be required to be completed to the satisfaction of the Township and the Ministry of Environment, Conservation and Parks (MECP) in order to demonstrate that the development can safely take place. Until the land use compatibility

is confirmed, the proposal does not appear to conform to the County Official Plan (S. 4.7.3.3). A Species At Risk Assessment in accordance with S. 4.1.3.1 of the County Official Plan is also required. Please note that any technical study submitted to the County (i.e. EIS, traffic impact study, hydrogeological study etc.) will be peer reviewed at the County's request. Both the cost of the study and the peer review will be at the applicant's expense.

Proposal does not appear to conform to Township Official Plan policies.

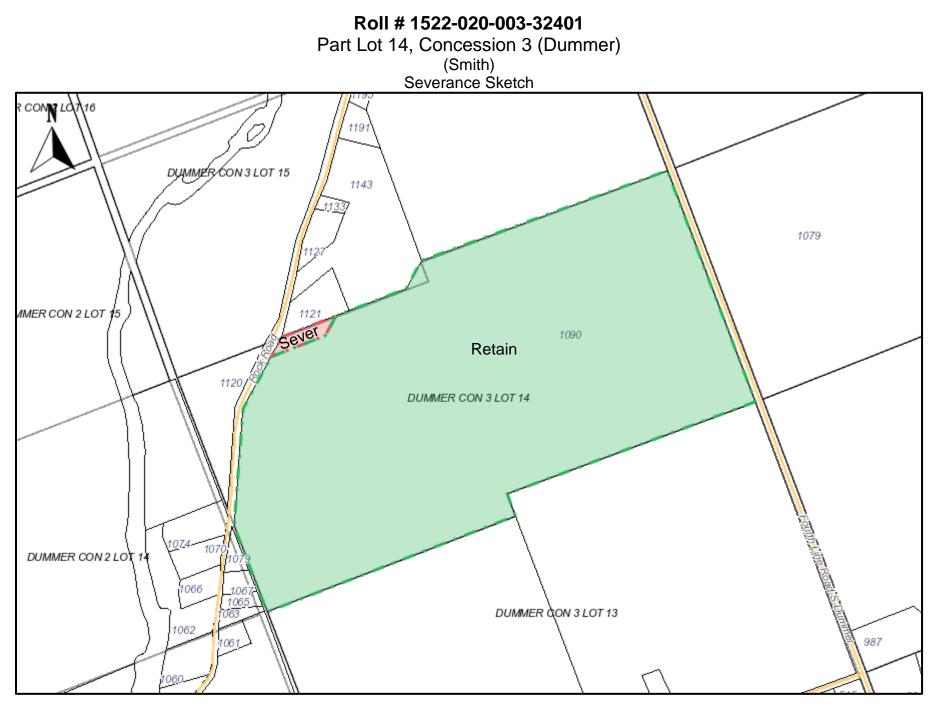
The severance proposal does not appear to conform to the Township Official Plan. The proposed severed lot is located within 500 metres of a former waste management area. A land use compatibility study may be required to be completed to the satisfaction of the Township and the Ministry of Environment, Conservation and Parks (MECP) in order to demonstrate that the development can safely take place. Until the land use compatibility is confirmed, the proposal does not appear to conform to the Township's Official Plan (S. 6.2.18.3(e)). Please note that any technical study submitted to the County (i.e. EIS, traffic impact study, hydrogeological study etc.) will be peer reviewed at the County's request. Both the cost of the study and the peer review will be at the applicant's expense.

Application requires confirmation from the Township or identified agency regarding policy conformity. <u>**Please note that the landowner should be aware that members of the local council may not support a rezoning or minor variance to create a lot that is not in compliance with the provisions of the zoning by-law.**</u>

Reviewed By: Per Lundberg

Important

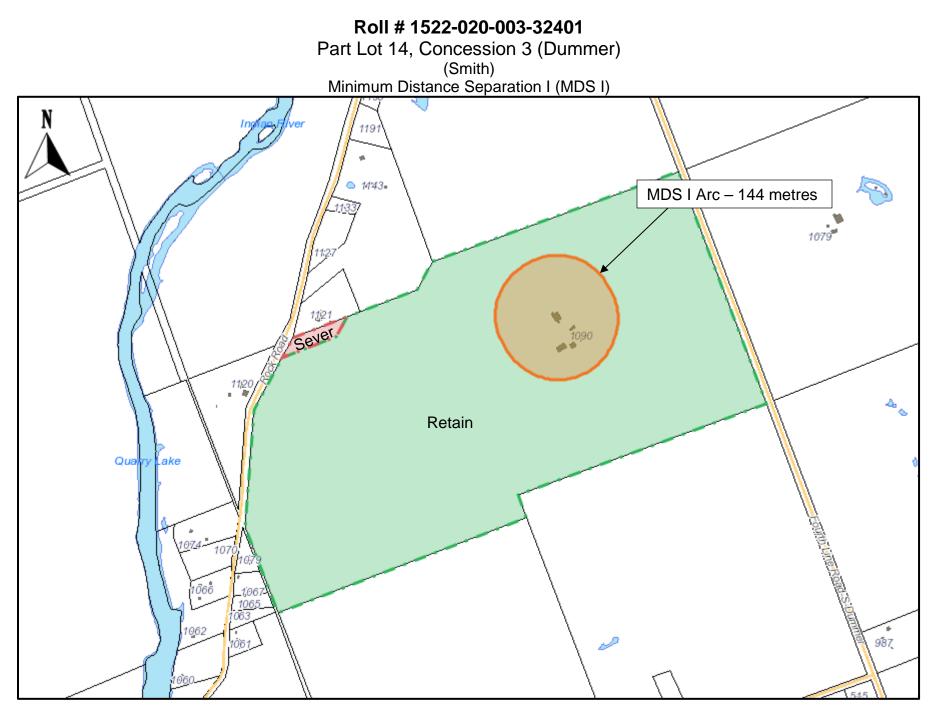
Our position on the overall conformity of the proposal is based on information available at the time of review. Subsequent information from commenting agencies can change our comments relating to any formal application for severance which is subsequently filed. Therefore, the above-noted comments should not be construed as preliminary approval or denial of a proposal but recognized as a position of the County Planning Department based on the availability of current information.



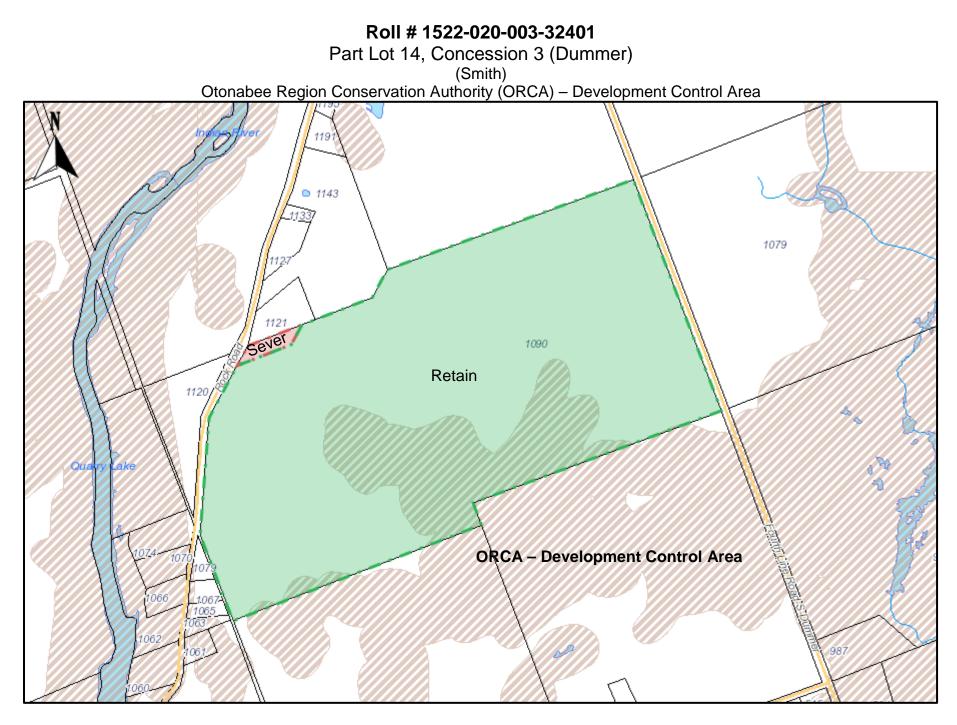
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Roll # 1522-020-003-32401 Part Lot 14, Concession 3 (Dummer) (Smith) Species At Risk India iver 119 1143 Species At Risk 1079 1121 Sever 1090 Retain 1120 Quarry lake $\mathcal{V}_{\mathcal{C}}$ Ł FounthLine 991 107 1066 1061 1065 1062 987

1:9600(1"=800') Page 163 of 355



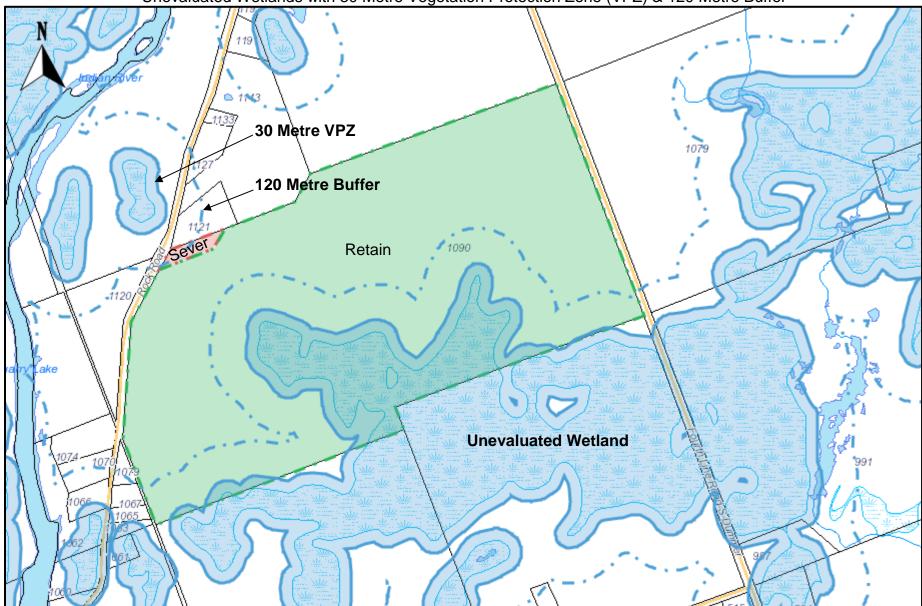
1:9600(1"=800') Page 164 of 355



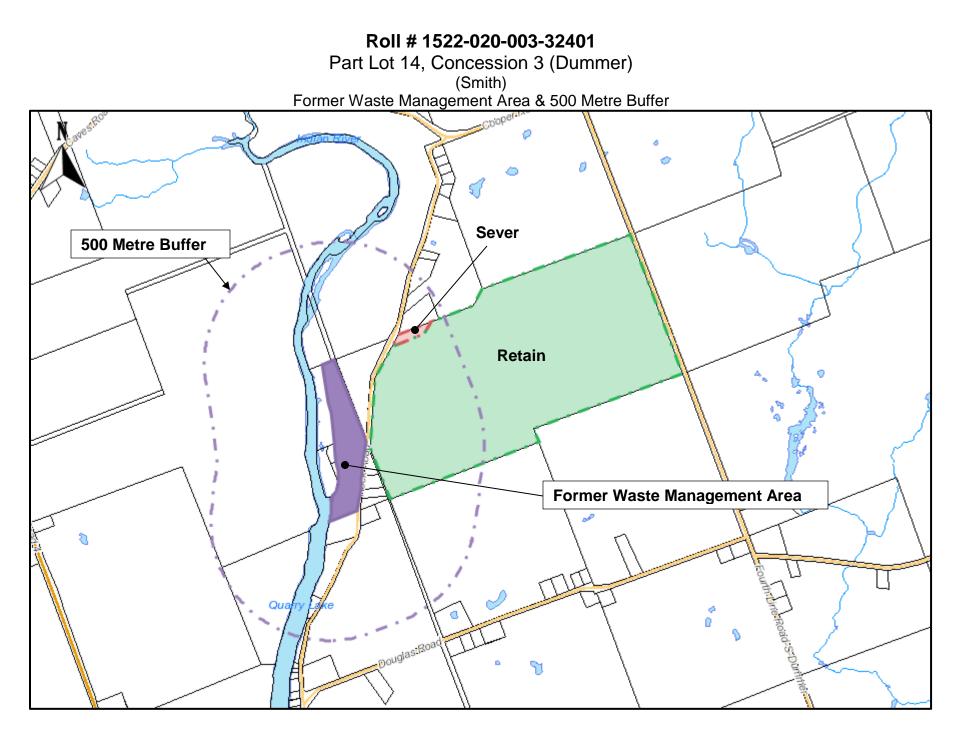
1:9600(1"=800') Page 165 of 355 Roll # 1522-020-003-32401

Part Lot 14, Concession 3 (Dummer)

(Smith) Unevaluated Wetlands with 30 Metre Vegetation Protection Zone (VPZ) & 120 Metre Buffer



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1:9600(1"=800') Page 167 of 355



Minimum Distance Separation I

Worksheet 1 Prepared By: Katherine Howes, Land Use Planner, D.M. Wills Associates Ltd.

Description:	1090 4th Line Road South, Douro-Dummer
Application Date: Municipal File Number:	Wednesday, September 23, 2020
Proposed Application:	Lot creation for a maximum of three non-agricultural use lots Type A Land Use
Applicant Contact Inform Peter Smith	County of Peterborough, Township of Douro-Dummer DUMMER, Concession: 3. Lot: 14
Phone #1: 705-933-226	89 Roll Number: 152202000332401

Calculation Name: Description:

1090 Fourth Line Road South, Douro-Dummer

Farm Contact Information Peter Smith

Location of existing livestock facility or anaerobic digester County of Peterborough, Township of Douro-Dummer DUMMER, Concession: 3, Lot: 14 Roll Number: 152202000332401 Total Lot Size: 199 ha

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area	
Solid	Beef, Cows, including calves to weaning (all breeds), Yard/Barn	12	12.0	56 m²	
Solid	Chickens, Layer hens (for eating eggs; after transfer from pullet barn), floor run	99	0.7	9 m²	
Solid	Sheep, Ewes & rams (for meat lambs; includes unweaned offspring & replacements), Outside Access	10	1.3	14 m²	
Solid	Horses, Medium-framed, mature; 227 - 680 kg (including unweaned offspring)	4	4.0	93 m²	

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Farm 1

Design Capacity (NU): 17.9

Potential Design Capacity (NU): 53.7

Factor A	Factor B		Factor	r D	Fa	ctor E	Building Base Distance F	
(Odour Potential)	(Size)		(Manure	Type)	(Encroach	ing Land Use)	(minimum distance from livestock barn)	(actual distance from livestock barn)
0.7 X	267.46	(0.7	Х	1.1	=	144 m (473 ft)	553 m (1814 ft)

Storage Base Distance 'S' (minimum distance from manure storage) (actual distance from manure storage) 144 m (473 ft)

553 m (1814 ft)



Minimum Distance Separation I

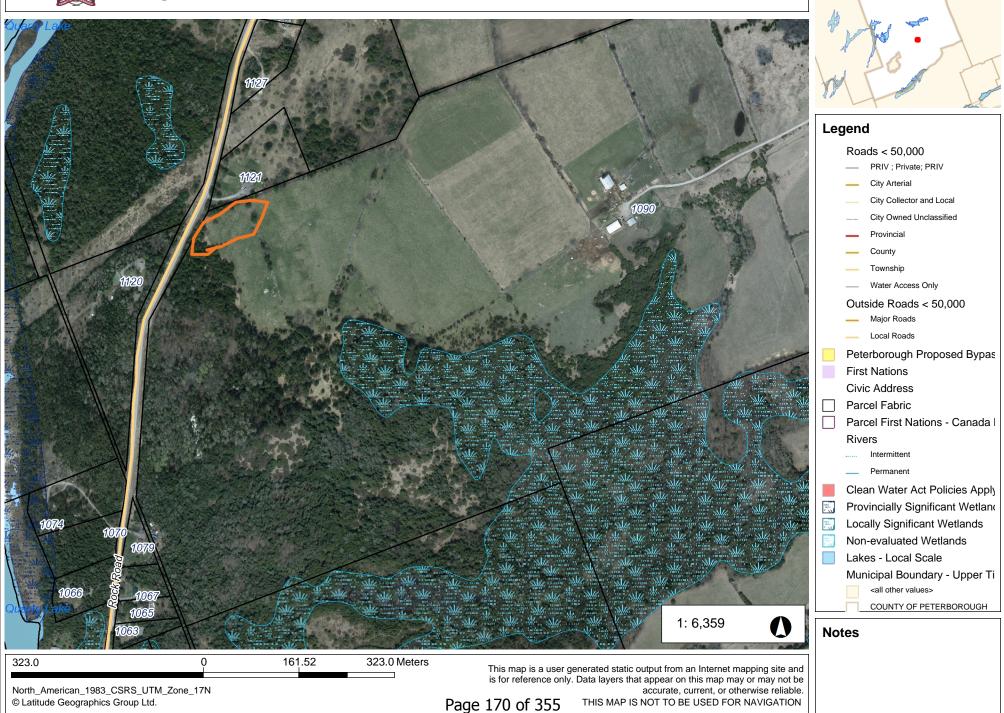
Worksheet 1 Prepared By: Katherine Howes, Land Use Planner, D.M. Wills Associates Ltd.

Preparer Information			
Katherine Howes			
Land Use Planner D.M. Wills Associates Ltd.			
150 Jameson Drive			
Peterborough, ON, Canada K9J 0B9			
Phone #1: 705-742-2297 Fax: 705-748-9944			
Email: khowes@dmwills.com			
		September	28 2020
Signature of Preparer:	Date:	otpreiniber	<u>20 20</u> 2
Katherine Howes, Land Use Planner		1	

NOTE TO THE USER: The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) has developed this software program for distribution and use with the Minimum Distance Separation (MDS) Formulae as a public service to assist farmers, consultants, and the general public. This version of the software distributed by OMAFRA will be considered to be the official version for purposes of calculating MDS. OMAFRA is not responsible for errors due to inaccurate or incorrect data or information; mistakes in calculation; errors arising out of modification of the software, or errors arising out of incorrect inputting of data. All data and calculations should be verified before acting on them.



Location of B-15-22



Douro-Dummer

Report to Planning Committee From: Martina Chait-Hartwig Date: May 27, 2022

Severance Report

File No: B-23-22 - Webster Name: Sherry Webster Location: 1797 County Road 6 Lot 25, Concession 3, Dummer Ward Roll No. 1522-020-004-09100

Purpose of the application – One Residential Lot

Official Plan Designation:

Severed Lot:	Rural
Retained Lot:	Rural

OP Conformity:

Residential uses are permitted uses in the Rural Designation, provided that fragmentation of farm lands and conflict with adjacent farm operations are not created.

A maximum of two consents to create new lots may be permitted from a property within the Rural designation, as it existed 25 years prior to the date of application.

Previous Severances:

One severance has been completed in the last 25 years therefore the property is eligible to have one more severance.

Zoning:		Rezoning Required:		
Severed:	Rural	Yes		
Retained:	Rural	No		

Zoning Conformity:

The severed lot will meet the area and frontage requirements for residential use in the Rural Zone (Section 9.2.4) but the severed lot will need to be rezoned to recognize the natural heritage features identified in the Environmental Impact Study completed by Cambium dated January 24, 2022 and reviewed by Otonabee Region Conservation Authority (ORCA) via their letter dated April 25, 2022.

The retained lot will meet the area and frontage requirements for residential or Hobby farm use in the Rural Zone (Sections 9.2.4 and 9.2.6.1).

PPS and Growth Plan Conformity:

The severance application appears to be in conformity with the PPS. The proposed lot is located within 120 metres of mapped key hydrological features. An Environmental

Impact Study was provided and reviewed by ORCA - see their comments attached dated April 25, 2022.

In order to comply with provincial policy (PPS and Growth Plan), and address any impacts on key hydrologic features and natural heritage features, the Vegetative Protective Zone (VPZ) on the severed parcel will need to be rezoned to prevent any development within this area. Further, to ensure that there will be no negative impacts on these natural heritage features, all of the recommendations contained in Section 7 of the Environmental Impact Study completed by Cambium are required to be followed and a mitigation measures agreement will be entered into to provide direction to future owners.

Entrance Report: The property is located on a County Road.

CBO Report: A report was not available at the time of writing.

Comments: Please see a copy of the County's Preliminary Review which is attached.

All department managers have been circulated for comment on this application.

Recommendation:

That it be recommended to Council that Severance Application B-23-22 for Sherry Webster be approved, and if approved by the Peterborough County Land Division Committee that the following conditions be imposed:

- \$1250.00 cash-in-lieu of parkland be paid to the municipality

- That a test hole for the septic system be inspected, there is a fee to inspect test holes to ensure a septic system would be viable – current fees are \$150 per lot severed and applicant is responsible for the digging of the test holes

- A Mitigation Measures Agreement is to be entered into between the Owner and the Municipality and registered on title at the owner's expense, which would recognize the recommendations included in Section 7.0 of the Environmental Impact Study prepared by Cambium Inc. dated January 24, 2022.

- That the Vegetative Protective Zone identified by Cambium on Figure 4 of the EIS, on the severed lot be zoned Environmental Constraint (EC) in the Township Zoning By-law.

Report Approval Details

Document Title:	B-23-22 Webster.docx
Attachments:	 - 23-22 Application.pdf - B-23-22, 1797 County Road 6; ORCA PPLD-2224.pdf - Webster - PSR.pdf
Final Approval Date:	May 20, 2022

This report and all of its attachments were approved and signed as outlined below:

Elana Arthurs



April 25, 2022

Ann Hamilton Secretary-Treasury Land Division Committee County of Peterborough 470 Water Street Peterborough, ON K9H 3M3

Re: File: B-23-22, Webster, 1797 County Road 6, Dummer Ward; Roll# 1522 020 004 09100; ORCA File: PPLD-2224

Dear Ann Hamilton,

The Otonabee Region Conservation Authority (Otonabee Conservation) has received the circulated *Planning Act* application noted above. The circulated application requests the consent for a new residential parcel of land having a frontage of 76.2 metres and an area of 0.4 hectares.

Otonabee Conservation staff have reviewed the available information in accordance with our mandate and policies and now offers the following comments.

Otonabee Conservation's Interest in this application is four-fold:

1. Otonabee Conservation has reviewed this application through our delegated authority from the Province to represent provincial interests regarding natural hazards identified in Section 3.1 of the Provincial Policy Statement (PPS).

Existing mapping indicates that the proposed new residential lot will not be located within a known floodplain. As such, it is the opinion of Otonabee Conservation that the application is consistent with PPS section 3.1.

2. The Authority has reviewed the application as a service provider to the Township of Douro Dummer, in that we provide technical advice on natural heritage matters through a Memorandum of Understanding.

The Otonabee Region Conservation Authority 250 Milroy Drive, Peterborough, ON K9H 7M9 Phone: 705-745-5791 Fax: 705-745-7488 Email: otonabeeca@otonabeeconservation.com



m www.otonabeeconservation.com Page 174 of 355 The proposed parcel is within 120 metres of mapped key hydrological features (wetlands). As such a Natural Heritage Evaluation (NHE) was submitted in support of the application by Cambium Inc., dated January 24, 2022. Otaonbee Conservation staff attended the site on April 20, 2022 and confirmed that the proposed lot is beyond 30 metres of wetland boundary.

In keeping with Otonabee Conservation Planning Policy 2.2.1(4), ORCA recommends adding appropriate protective zoning to the identified wetland area in the local Zoning By-law.

Therefore, it is the opinion of Otonabee Conservation staff that the application can be considered consistent with PPS Sections 2.1. and 2.2 and in conformity to Sections 4.2.3 and 4.2.4 of the Growth Plan for the Greater Golden Horseshoe provided development/construction approvals should adhere to the EIS recommendations outlined in Section 7.0 including: avoiding natural features, applying timing windows, and installing exclusionary fencing (ESCs).

Technical staff would recommend extending the 'no tree clearing timing windows' (recommendation #8) to October 31 to protect potential endangered bats that may use treed wetlands and adjacent lands as habitat. Please note that Landowners are responsible to demonstrate compliance with the Endangered Species Act (ESA) prior to commencement of any on-site development (grading, roads, buildings) regardless of previous planning approvals.

3. Otonabee Conservation has reviewed the application through a regulatory lens. Under Ontario Regulation 167/06, this Authority's 'Development, Interference with Wetlands and Alterations to Shorelines and Watercourses' regulation under Section 28 of the Conservation Authorities Act, any development, interference with or alteration within a flooding hazard, erosion hazard, watercourse, wetland and their adjacent lands/areas of interference requires a permit from the Authority. When an application is circulated under the Planning Act will also require an Otonabee Conservation permit, it is the practice of the Authority to establish the policy requirements of both processes during the planning stage.

Both the retained and severed parcels are subject to Ontario Regulation 167/06, Otonabee Conservation 'Development, interference with wetlands and alterations to shorelines and watercourses' regulation. Permits from this agency will be required prior to any site alteration, construction, or demolition on the proposed parcel. Otonabee Conservation staff note that a lot grading and drainage plan may be requested to ensure the site hydrology will be maintained and directed appropriately. Any proposed building on the retained lands may require an update to the EIS.

4. Otonabee Conservation has reviewed the application in terms of the Revised Trent Source Water Protection Plan (SPP), prepared under the Clean Water Act. The SPP, intended to protect Ontario's drinking water at its source, came into effect on January 1, 2015 and contains policies to protect sources of municipal drinking water supplies from existing and future land use activities. The application was also reviewed in consideration of the SPP. It was determined that the subject property is not located within an area that is subject to the policies contained in the SPP.

Please contact me if you have any further questions or concerns. Best Regards,

Matthew William

Matthew Wilkinson Planner, Otonabee Conservation Environmental Impact Study - 1797 County Road 6, Township of Douro-Dummer, County of Peterborough, Ontario



January 24, 2022

Prepared for: Sherry Webster

Cambium Reference: 12929-001

CAMBIUM INC.

866.217.7900

cambium-inc.com

Peterborough |Barrie | Oshawa | Kingston |Calgary

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- Figure 4 Proposed Development Constraints

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- Appendix A Correspondence
- Appendix B Vegetation Species List
- Appendix C Species Of Conservation Concern Screening



Cambium Inc. (Cambium) was retained by Sherry Webster to conduct an Environmental Impact Study - 1797 County Road 6, Township of Douro-Dummer, County of Peterborough, Ontario (Figure 1). The proposed development includes a single residential lot severance on the northwest corner of the property and potential development of a dwelling and garage on the retained property. Based on the proposed development, the proposed severance and within 120 m of the proposed development will be considered the Site for this report.

The Environmental Impact Study (EIS; the Study) is required to address potential negative impacts to natural heritage features identified during the preliminary development review process, as required by the Provincial Policy Statement, 2020 (PPS) and the Growth Plan for the Greater Golden Horseshoe, 2020 (GPGGH). The Site contains or is adjacent to (within 120 m) the following natural heritage and/or hydrologic features: unevaluated wetlands and potential significant wildlife habitat. The Site is within Ecoregion 6E of Ontario (Crins, Gray, Uhlig, & Wester, 2009). The property is located outside of any Settlement Area.

The Site is within the jurisdiction of the Otonabee Region Conservation Authority (ORCA) and their regulated area does overlap the Site due to the presence of mapped unevaluated wetlands on-Site. As the Site contains wetlands, the Study will consider regulations on development as imposed by the local Conservation Authority's Regulation under the *Conservation Authorities Act, 1990.*

The *Endangered Species Act, 2007* (ESA) protects endangered or threatened species and their habitats from harm or destruction. Habitat of endangered and threatened species is protected under provincial natural heritage policy; however, it is also the landowner's responsibility to ensure that no harm to these species occurs on their property. This Study includes a habitat-based screening for species of conservation concern to determine if the Site has suitable habitat for any provincial or federal species at risk (SAR).

In order to address the requirements of the approval authorities, Cambium has conducted this Study to provide an evaluation of reasonably anticipated ecological impacts, positive or negative, that may arise as a result of this proposed development to guide the decision making process.



1.1 Terms of Reference

The Terms of Reference (ToR) for this Study were circulated to ORCA and an email response with comments with respect to the ToR was received from Matt Wilkinson, Planner, on June 30, 2021. Relevant correspondence and documentation are provided in Appendix A.

1.2 Proposed Development

The Site is an irregular shape, is approximately 20 ha in size, and fronts County Road 6, Township of Douro-Dummer along the north and west property lines. Currently, the lot is vacant. Adjacent land uses include residential and agricultural.

The proposed development involves a single residential lot severance to front on County Road 6, at the northwest edge of the Site. In addition, the development of a single dwelling and garage is proposed within the central portion of the retained lot; this development would be accessed using an existing laneway entrance from County Road 6.

Site Plans have not yet been prepared, as the Client is awaiting the information provided herein to establish appropriate development limits.



2.0 Applicable Natural Heritage Policy and Regulation

2.1 Provincial Policy Statement, 2020

Section 2.1 of the Provincial Policy Statement (PPS) (Ministry of Municipal Affairs and Housing, 2020) protects the form and function of natural heritage features as defined by the PPS. Natural heritage features included in the PPS are provincially significant wetlands (PSW), significant coastal wetlands, significant woodlands, significant valleylands, significant wildlife habitat (SWH), significant areas of natural and scientific interest (ANSI), fish habitat, and the habitat of endangered and threatened species. Given their significant coastal wetlands. Development in fish habitat and the habitat of endangered and threatened species and threatened species shall only be permitted in accordance with provincial and federal requirements. Development within other natural heritage features and on lands adjacent to all natural heritage features are permitted only if demonstrated that there will be no negative impacts on the feature or their ecological function. Development includes the creation of a new lot, a change in land use, or the construction of buildings and structures requiring approval under the *Planning Act*.

Section 2.2 of the PPS protects the quality and quantity of water, including the form and hydrologic function of sensitive surface water features and sensitive ground water features. Focus is given to maintaining hydrologic linkages and functions at the watershed scale to minimize potential negative impacts, including cross-jurisdictional and cross-watershed impacts of development. Mitigative measures and/or alternative development approaches should be considered for development near water features.

2.2 Growth Plan for the Greater Golden Horseshoe, 2020

The Greater Golden Horseshoe is one of the most dynamic and fast-growing regions in North America. To address the challenges of increased development within the area, the Growth Plan for the Greater Golden Horseshoe, 2020 (GPGGH) builds on the PPS "to establish a unique land use planning framework for the Greater Golden Horseshoe that supports achievement of complete communities, a thriving economy, a clean and healthy environment,



and social equity" (Ministry of Municipal Affairs and Housing, 2020). In general, the GPGGH seeks to preserve agricultural lands, water resources, and natural areas by directing growth to settlement areas as defined in municipal Official Plans. The GPGGH contains policies regarding a provincial Natural Heritage System (NHS), key hydrologic features (KHFs), key hydrologic areas (KHAs), and key natural heritage features (KNHFs) (Table 1). Policies that reference the provincial NHS apply once the municipal Official Plan has incorporated the provincial NHS into their schedules; until that time, the policies that reference the NHS will apply outside settlement areas to the natural heritage systems identified in Official Plans that were approved and in effect as of July 1, 2017. Section 4.2.3 of the GPGGH states that, outside of settlement areas, development or site alteration is generally not permitted in KNHFs that are part of the NHS or in KHFs. Section 4.2.4 states that, outside of settlement areas, a proposal for new development or site alteration within 120 metres of a KNHF within the NHS or a KHF will require a natural heritage evaluation or hydrologic evaluation that identifies a suitable vegetation protection zone (i.e., a development setback). For KHFs, fish habitat, and significant woodlands the vegetation protection zone can be no less than 30 m measured from the outside boundary of the feature.

Key Hydrologic Features	Key Natural Heritage Features		
Permanent Streams	Habitat of Endangered and Threatened Species	Significant Wildlife Habitat	
Intermittent Streams	Fish Habitat	Sand Barrens	
Inland Lakes and their Littoral Zones	Wetlands	Savannahs	
Seepage Areas and Springs	Life Science Areas of Natural and Scientific Interest (ANSI)	Tallgrass Prairies	
Wetlands	Significant Valleylands	Alvars	
	Significant Woodlands		

Table 1 Protected Features of the GPGGH



2.3 Official Plan and Zoning By-Law

Peterborough County Official Plan, 1994

According to the Peterborough County Official Plan, the land designation of the Site is 'Rural'. The adjacent properties are also designated as 'Rural'. The Peterborough County Official Plan also functions as the Official Plan for the Township of Douro-Dummer.

Township of Douro-Dummer Comprehensive Zoning By-law, 2010

According to the Township of Douro-Dummer, the zoning of the Site is 'Rural' (RU). The adjacent properties are designated as 'Rural' (RU), 'Special District' (SD), and 'Residential' (R). Per policy 9.2.4 of the Zoning By-law, the minimum lot size for a single residential use in the RU zone is 0.4 ha, with 45 m of road frontage.

2.4 Conservation Authority Regulation

"Conservation Authorities are local watershed management agencies that deliver services and programs to protect and manage impacts on water and other natural resources in partnership with all levels of government, landowners and many other organizations" (Conservation Ontario, 2021). Conservation Authorities each have their own Ontario Regulation under the *Conservation Authorities Act, 1990.* In general, they regulate development within and adjacent to river or stream valleys, Great Lakes and inland lakes shorelines, watercourses, hazardous lands (flood, erosion, unstable soils) and wetlands.

Otonabee Region Conservation Authority regulates these features under Ontario Regulation 167/06: *Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses.*

2.5 Endangered Species Act, 2007

Species listed as endangered or threatened on the Species at Risk in Ontario (SARO) list are protected under the provincial *Endangered Species Act*, 2007 (ESA) (Government of Ontario, 2007). Section 9(1) of the ESA prohibits a person from killing, harming, harassing, capturing or taking a member of a species listed as endangered, threatened, or extirpated. Section 10(1) of the ESA prohibits the damage or destruction of habitat of species listed as endangered or



threatened. Protection of special concern species is provided through designation of their habitat as significant wildlife habitat, a provincially protected natural heritage feature.



3.0 Technical Approach and Data Collection Methods

3.1 Background Information Review

Existing background information pertaining to the Site and surrounding landscape was compiled and reviewed, as part of a comprehensive desktop exercise, to better understand local biophysical conditions. In southern Ontario, readily available data includes orthoimagery, topographic base mapping, and geological records. Natural environment and land use schedules prepared in support of Official Plans and Zoning By-Laws were reviewed to acquire municipal data. Natural area records and species occurrences were obtained from digital resources and reference materials. The comprehensive desktop review for this Site included the following resources:

- Natural Heritage Areas: Make-a-map (Ministry of Natural Resources and Forestry, 2018);
- Ontario Reptile and Amphibian Atlas (ORAA) (Ontario Nature, 2018);
- Ontario Breeding Birds Atlas (OBBA) (2001-2005) (Bird Studies Canada, 2005);
- Peterborough County Official Plan, 1994
- Township of Douro-Dummer Comprehensive Zoning By-law, 2010

Figure 2 shows the mapped natural heritage features present in the general area of the Site.

3.1.1 Ministry Consultation

Depending on the natural feature of the Site, ministry consultation may include the Ministry of Northern Development, Mines, Natural Resources, and Forestry (NDMNRF) and/or the Ministry of Environment, Conservation, and Parks (MECP), as applicable.

In early 2019, the Government of Ontario made changes to the regulating authority on matters related to SAR in the province. The MECP is now responsible for administering the ESA and providing direction on potential compliance issues. MECP has prepared a guidance document titled *Client's Guide to Preliminary Screening for Species at Risk* (Ministry of the Environment,



Conservation and Parks, 2019). This document aims to "help clients better understand their obligation to gather information and complete a preliminary screening for SAR before contacting the Ministry". This document was used to guide the SAR habitat-based screening for the Study.

3.2 Field Investigations

Information gathered through the background information review was used to guide the development of the fieldwork program. The purpose of the site visit(s) was to verify information acquired through existing documentation and to gather additional site-specific information. The following sections provide the methods that were used to gather site-specific information.

3.2.1 Ecological Land Classification and Vegetation Inventory

The Ecological Land Classification (ELC) System for Southern Ontario (Lee, et al., 1998) was used to classify vegetation communities on the Site. Definitions of vegetation types are derived from the ELC for Southern Ontario First Approximation Field Guide (Lee, et al., 1998) and the revised 2008 tables. ELC units were initially delineated and classified by orthoimagery interpretation. Field investigations served to confirm the type and extent of communities on the Site through vegetation inventory and soil assessment with a hand auger. Where vegetation communities extend off the Site, classification is done through observation from property boundaries and publicly accessible lands.

3.2.2 Wetland Boundary Delineation

Wetland boundaries were initially delineated and classified by orthoimagery interpretation. The presence/absence of wetlands on the Site was confirmed through field investigations during the growing season (late May through October). Wetland boundaries were determined using the 50% wetland vegetation rule. Where vegetation-based delineation was inconclusive, soil assessment with a hand auger was used to confirm wetland boundaries. Wetland boundaries on the Site were marked with a hand-held GPS unit. Where wetland communities extend off the Site, classification was done through observation from property boundaries and publicly accessible lands.



3.2.3 Habitat-Based Wildlife Surveys

Given the scale of the proposed development, a habitat-based approach was used to assess potential impacts to wildlife, consistent with standard practice. General habitat information gathered through the field investigations was used to assess the connectivity of the Site with the surrounding landscape and evaluate the ecological significance of the local area. Cambium staff actively searched for features that may provide specialized habitat for wildlife. These searches included inspecting tree cavities, overturning logs, rocks and debris, and scanning for scat, browse, sheds, fur, etc. Any evidence of breeding, forage, shelter, or nesting was noted. Species and habitat observations were documented and photographed.



4.0 Characterization of Natural Features and Functions

Background information and field investigation data is provided in the following sections. Based on the background and field data, an assessment of significance has been completed to identify protected natural heritage features on and/or adjacent to the Site.

The following field investigations were carried out on the Site and are summarized in Table 2. Soil auger locations are shown on Figure 3.

Date	Time On Site	Weather	Observer	Activities
2021-07-22	0930-1430	24°C, sun and cloud Wind: 1 Noise: 1	T. Jamieson	Ecological Land Classification Wetland Boundary Delineation Habitat-Based Wildlife Survey

Table 2 Summary of Field Investigations

Notes:

Wind speed is reported as a Beaufort Wind Scale value (0 = 0.2 kph, 1 = 3.5 kph, 2 = 6.11 kph, 3 = 12.19 kph, 4 = 20.30 kph, 5 = 31.39 kph, 6 = 40.50 kph)

Noise is reported based on background noise levels: Index 0 – no appreciable effect, 1 – slightly affecting sampling, 2 – moderately affecting sampling, 3 – seriously affecting sampling, 4 – profoundly affecting sampling.

4.1 Landscape Position and Topography

The Site is within the Mixedwood Plains Ecozone: Lake Simcoe Rideau Ecoregion 6E, which extends southward from a line connecting Lake Huron in the west to the Ottawa River in the east, including Ottawa, Kingston, Peterborough, Barrie, Tobermory, Kitchener, and Toronto. This ecoregion is characterized by a mixed geology that includes both shallow soil areas such as alvar and bedrock plains, as well as deep soil areas such as the Oak Ridges Moraine. It falls within the Great-Lakes St. Lawrence Forest Region, including deciduous and mixed forests; however, over 50% of the landscape in this Ecoregion is currently in use as agricultural land (Lee, et al., 1998).

The Site is relatively flat, consisting of gentle rolling hills with minor elevation decreases where wetland areas exist, as detailed in Section 4.3.



4.2 Vegetation Communities

Utilizing aerial imagery dating back to 1985, it appears that no major changes to vegetation cover have occurred at the Site. Currently, the Site contains an existing driveway, forested areas to the east and west of the driveway, and open areas near the centre of the Site. The surrounding area is mainly residential or forested areas and have been this way since 1985.

The vegetation communities on the Site are summarized in Table 3 and are mapped on Figure 3. A list of identified species and representative photos for each community are provided in Appendix B.

Table 3	Vegetation	Communities
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No.	ELC Code	Community Description	Community Type	S -Rank
1	CUT1	Mineral Cultural Thicket	Terrestrial	SNA
2	FOC4-1	Fresh – Moist White Cedar Coniferous Forest	Terrestrial	S5
3	SWD2-2	Red/Green Ash Mineral Deciduous Swamp	Wetland	S5
4	MAS2-1	Cattail Mineral Shallow Marsh	Wetland	S5
5	FOM7-2	Fresh – Moist White Cedar – Hardwood Forest	Terrestrial	S5
6	FOD2-4	Dry – Fresh Oak – Hardwood Deciduous Forest	Terrestrial	S5
7	FOD3-2	Dry – Fresh White Birch Deciduous Forest	Terrestrial	S5
8	CUT1	Mineral Cultural Thicket	Terrestrial	SNA
9	FOD3-1	Dry – Fresh Poplar Deciduous Forest	Terrestrial	S5
10	SWT2-5	Red-osier Mineral Thicket Swamp	Wetland	S5
11	SWD3-2	Silver Maple Mineral Deciduous Swamp	Wetland	S5
12	SWD2-2	Red/Green Ash Mineral Deciduous Swamp	Wetland	S5



A search for butternut (*Juglans cinerea*; provincially endangered) was completed as part of the vegetation survey; no butternut were identified.

4.2.1 Significant Woodlands

Significant woodlands are natural heritage features that are afforded protection under provincial policy. The PPS defines woodlands as: treed areas, woodlots or forested areas, and states that woodlands may be delineated according to the Forestry Act definition or the Province's ELC system definition for "forest". According to the provincial ELC system, Vegetation Communities 2, 5, 6, 7, and 9 meet the woodland definition. Although not considered a woodland, swamps are treed areas and may also be considered part of significant woodlands. Vegetation Communities 3, 10, 11, and 12 are swamps and may be considered part of the significant woodlands.

Currently, according to their respective Official Plan Schedules, the planning authority has not explicitly defined or designated significant woodlands within their jurisdiction. In the absence of local criteria for evaluating woodlands, the NHRM provides guidance on evaluating woodlands (Ministry of Natural Resources, 2010). In addition, the Greenbelt Plan provides evaluation criteria: *Technical definitions and criteria for key natural heritage features in the Natural Heritage System of the Protected Countryside Area* (Ministry of Natural Resources, 2012). While the Site is outside the Greenbelt Plan area, the North Area of the Greenbelt Plan (i.e., north of the Oak Ridges Moraine) is representative of the geographic and planning context for this Site, and these technical definitions can be used to guide evaluations in the absence of local criteria.

The Greenbelt Plan defines a woodland as significant if any of the following conditions are met:

- Size: woodland is larger than 10 ha
- Natural composition: area of the woodland composed of naturally occurring species is greater than 4 ha
- Age of trees: equal 10 or more trees per ha that are either 100 years old or 50 cm in diameter



- Woodlands of 4 ha or more that are within 30 m of a significant wetland, significant habitat, or significant woodland
- Any woodlands 0.5 ha or greater containing provincially rare treed vegetation with a S1, S2, or S3 ranking.

Woodlands on the Site can be divided into two main areas; west of the existing laneway (referred to as the west woodland), and east of the existing laneway (referred to as the east woodland). Please note that the distinction of the two woodlands is for discussion purposes only. As the woodland features are not disconnected by an area of 20 m or more, the woodlands are considered connected and thus are evaluated as one woodland.

The west woodland is approximately 3.6 ha in area, does not contain any interior habitat, and is bounded by a roadway (County Road 6) to the north and west, a historically cleared area on the Site toward the east, and developed areas to the south of the Site.

The east woodland is contiguous with woodlands to the south and is larger than 10 ha (approximately 20 ha). The east woodland also contains interior habitat as well as wetlands within the Site and adjacent lands.

Based on this review, the woodlands on the Site are considered candidate significant woodland in accordance with the Greenbelt Plan.

4.3 Wetland Delineation

There is mapped unevaluated wetland on and adjacent to the Site. The field investigations confirmed that wetlands are present on the Site, however, field verification identified discrepancies with the mapped features. A total of five wetland communities are present on-Site, as detailed in Table 3 and shown on Figure 3.

Wetland Communities 3 and 4 are located along slightly lower topography within the west woodland area, are connected, and exist directly adjacent the proposed severed area. A culvert was observed north of Community 4 under County Road 6 providing a connection to wetlands across the road north (Figure 3).



Communities 11 and 12 are connected and exist east of the proposed development area. These wetlands almost span the property boundaries, near the centre of the property. Community 10 covers a small area along the southern property boundary, south of the proposed development.

Wetland boundaries were determined in accordance with the OWES, as outlined in Section 3.2.2. Soil moisture regime, as determined through soil assessment using a hand auger, was used to confirm the plant-based evaluation. Wetlands observed on-Site and their connectivity were not completely consistent with mapped unevaluated wetlands. The boundaries were marked by GPS and are presented in Figure 3.

4.4 Species of Conservation Concern

A list of species of conservation concern, including SAR, with potential to occur in the general vicinity of the Site has been compiled based on known species' ranges, habitat requirements, and review of background information sources (as listed in Section 3.1). In addition, the list has been augmented with direct field observations from the current study, as detailed in the previous sections. Cambium has employed a habitat-based screening, supplemented with targeted field surveys when necessary, in order to identify suitable habitat for species located on or adjacent to the Site. A detailed habitat suitability analysis is provided in Appendix C and a discussion of the results is provided below.

4.4.1 Endangered and Threatened Species

During the background review, the Natural Heritage Areas: Make-a-map (Ministry of Natural Resources and Forestry, 2018) tool was used to determine if any known SAR have been previously identified on or adjacent to the Site. The Natural Heritage Information Centre (NHIC) report noted that Bobolink have been identified within the 1 km grid square of the Site. Bobolink require grassland or meadow habitat types. As no grassland or meadow communities exist on the Site, their habitat also does not exist and will not be discussed further herein.

Cavity trees / roosting trees that provide habitat for endangered bat species such as the Tri-coloured Bat, Eastern Small-footed Myotis, Little Brown Myotis, and Northern Myotis may



exist in some of the forested / treed swamp habitats on the Site; however, no cavity trees were observed in the proposed development areas or forest edges during the field visit. As such, no impacts to bats anticipated, and bats are not discussed further in this report.

The Western Chorus Frog is listed as threatened federally, but currently not listed provincially. Due to the wetlands and adjacent forested areas, potential habitat for Western Chorus Frog exists on the Site. No Western Chorus Frog were observed during the field visit. Given that this species is not provincially regulated and wetland habitats will be protected as detailed in Section 5.1, this species is not discussed further in this report.

4.4.2 Special Concern Species

The Canada Warbler is most abundant in moist, mixed forests, with a dense shrub layer, consistent with vegetation characteristics in Communities 2 and 5. No Canada Warbler were observed during the field visit.

The Eastern Wood-pewee lives in the mid-canopy layer of forest clearings and edges of deciduous and mixed forests with little understorey vegetation, as available in woodlands throughout the Site. No Eastern Wood-pewee were observed during the field visit.

Golden-winged Warbler prefer forest edges and shrub cover to use for perching, singing, and searching for food. Forest edge exist throughout the Site and adjacent lands. The proposed development areas are comprised partly of thicket habitats (Communities 1 and 8), which provide shrub cover that may be utilized by this species. No Golden-winged Warbler were observed during the field visits.

Wood Thrush uses deciduous and mixed forests with moist stands of trees, moderate understories, shade, and abundant leaf litter, as can be found in the entire east woodland. No Wood Thrush were observed during the site visit.

Eastern Milksnake prefer open areas such as fields and forest edges, as what is presented in Community 5 and 8. Eastern Milksnake are a listed species federally but are not protected provincially. No Eastern Milksnake were observed during the site visit. Given that this species is not provincially regulated and forest edges will generally be protected as they fall within



wetland boundaries as detailed in Section 5.1, this species is not discussed further in this report.

Eastern Ribbonsnakes are typically found adjacent to wetlands and shallow water to find their main source of prey such as frogs and small fish. All wetlands on the Site represent potential habitat features that Eastern Ribbonsake may use to find prey. No Eastern Ribbonsnakes were observed during the site visit.

The Monarch Butterfly uses a variety of habitats with wildflowers, including habitats such as Community 8, but requires milkweed plants as a food source for their caterpillars. Common Milkweed was observed on the Site in Community 8; however, Monarch Butterflies were not observed during site visits. Recommendations to reduce the potential for impact to this species are included in Section 5.3.

The Yellow-banded Bumble Bee is a habitat generalist but are a pollinator species and therefore require wildflower and pollen generating species and therefore could use Community 1, 4, and 8. Yellow-banded Bumble Bees were not observed during site visits.



5.0 Impact Assessment and Mitigation Measures

The proposed development involves a single residential lot severance to front on County Road 6, at the northwest edge of the Site. In addition, the development of a single dwelling and garage is proposed within the central portion of the retained lot; this development would be accessed using an existing laneway entrance from County Road 6.

The following sections address potential impacts to protected features identified on and adjacent to the Site that may result from the proposed development and site alteration:

- Wetlands
- Significant Woodlands
- Potential Significant Wildlife Habitat for Special Concern Species

No other natural heritage features protected by provincial policy were confirmed on or adjacent to the Site.

Mitigation measures and best management practices have been recommended to ensure that the integrity of the current existing natural features are protected and/or enhanced and furthermore that their functions are not negatively impacted during or following construction.

5.1 Wetlands

As detailed in Section 4.3, wetlands were confirmed on the Site. Wetland boundaries were delineated as shown on Figure 3. No direct impacts to wetlands are expected as all development, including lot line placement, is recommended to occur outside of the wetlands. The following mitigation measures are provided to ensure there are no indirect impacts to wetlands.

A 30 m setback/Vegetation Protection Zone (VPZ) is recommended for all wetlands, as shown on Figure 4, in accordance with the natural heritage policies of the GPGGH. The 30 m VPZ is considered sufficient to protect the existing form and function of local wetland features provided that the area be maintained as the existing natural cover and be allowed to naturally self-sustain (i.e., a buffer area where no vegetation removals or grading is allowed).



Prior to any construction activities taking place, it is essential that perimeter sediment fencing be installed around construction areas. Fencing should be properly keyed into the ground and securely fastened to vertical supports spaced ≤ 2 m apart. This key control measure will help prevent sediment from entering surface water features (i.e., wetlands) in the surrounding landscape. All sediment fencing should be regularly maintained and kept in good working condition, until the area has been stabilized and/or successfully revegetated. Any observed overland drainage channels originating from Site, that may or may not have arisen as a result of erosion, should be directed to a check dam structure, prior to discharging to off-site areas.

Runoff from the Site is expected to increase with the introduction of impermeable surfaces (i.e., building roofs, roadways, and walkways) and compacted surfaces with reduced infiltration capacity. Measures to increase infiltration of run-off from these surfaces should be encouraged and, where possible, included in the Site Plan for the development. Eavestrough downspouts should be directed to vegetated areas (such as lawn, or gardens) and not onto hardened surfaces, to encourage infiltration.

Provided these recommendations are adhered to, no indirect impacts to the wetland are anticipated.

5.2 Significant Woodlands

As detailed in Section 4.2.1, candidate significant woodlands were identified based on provincial criteria within the Site and are illustrated on Figure 4. It is the responsibility of the Planning Authority to designate significant woodlands within their jurisdiction; therefore, these woodlands will be presumed candidate significant woodlands for the purpose of this Study.

The proposed severance lot lines may pass through the areas identified as candidate significant woodland. As lot lines are administrative in nature, direct and indirect impacts are not expected. Additionally, the proposed severance is at the western edge of the woodland and adjacent to a roadway. As the proposed severance would not impact an area considered interior habitat and minimal tree clearing is expected, the form and function of the woodland would not be impacted.



The western edge of the candidate significant woodland, adjacent to the developable area as shown on Figure 4, is fairly consistent with the 30 m wetland VPZ; as such the wetland VPZ will provide some protection to the candidate significant woodland edge. The proposed development within the retained lot will require some tree/vegetation removal within the candidate significant woodland (Community 5) in order to upgrade the existing laneway access to the retained lands from County Road 6. Vegetation removals represent a direct impact to the woodland and should be limited to the amount required for construction. Existing cleared areas should be used to the greatest extent possible. The tree removal will be located along an existing edge and interior habitat does not exist within this portion of the woodland. The upgrade to the laneway is not expected to significantly alter canopy cover from existing conditions. Compensation plantings have been recommended to offset the loss of vegetation that may be required during the upgrade to the laneway and is discussed in Section 5.5. Provided these recommendations are adhered to, these impacts are not anticipated to affect the overall form and function of the candidate significant woodland. Further, indirect impacts will be appropriately mitigated following the ESC recommendations as provided in Section 5.1.

5.3 Potential Significant Wildlife Habitat for Special Concern Species

As detailed in Section 4.4.2, the Site provides suitable habitat for seven species of special concern. These species are addressed under the appropriate measures below. Provided the recommendations herein are adhered to, no impacts to Significant Wildlife Habitat (SWH) for Special Concern species is anticipated in relation to the proposed developments on the Site.

Vegetation Clearing

Various woodland and thicket habitats on the Site have potential to support special concern bird SAR. In addition to SAR, other nesting birds are protected under the *Migratory Birds Convention Act, 1994.* To protect migratory birds during the development process, vegetation removals should be limited to the amount required for construction; existing cleared areas should be used to the extent possible. Furthermore, vegetation clearing on the Site should occur outside the breeding bird season, which extends from April 15 to August 15 in the local area (as per Environment and Climate Change Canada Guidelines).



If vegetation clearing is to occur between April 15 and August 15, the vegetation should be investigated by a qualified biologist to confirm if any nests are present. Vegetation clearing can proceed provided there are no active nests. If active nests are confirmed, the nests should be left undisturbed until young have fledged or the nest is determined to be inactive.

In the event that construction is planned to proceed during the breeding season, the area should be investigated for the presence of breeding birds and nests containing eggs and/or young, prior to Site alteration. Nests discovered should be left undisturbed until young have fledged or the nest is determined to be inactive.

Wildlife Exclusion

Small wildlife including snakes, amphibians, and small mammals are particularly vulnerable to construction-related impacts on sites adjacent to wetlands and woodlands. The ESC fencing detailed in Section 5.1 can also function as wildlife exclusion fencing. Fencing should be installed around the entire perimeter of the construction area prior to the earlier of May 1 or the commencement of Site preparation, in order to keep turtles and snakes from entering the construction area. This fencing should be made of light-duty silt fence, staked at regular intervals, trenched-in at least 10-20 cm below ground, with an above ground height of at least 60 cm.

The fencing should be inspected regularly to ensure that it remains in good condition: and any downed areas, rips, or holes should be repaired or replaced immediately. The area of construction should also be actively inspected for turtles and snakes each day prior to the start of work, throughout the duration of construction.

If any wildlife are encountered, they should be photographed and allowed time to move out of harm's way. If any SAR are discovered on the property, they should be left undisturbed as dictated by the Endangered Species Act, 2007. If any SAR individuals are encountered, they should be photographed and allowed time to move out of harms way. SAR observations should be reported to the Natural Heritage Information Centre (NHIC).



Native Pollinator Plants

As the Site may provide habitat for pollinator species such as Monarch Butterfly and Yellowbanded Bumble Bee Vegetation, vegetation removal should be limited to the amount required for construction. If feasible, vegetation clearing should occur after August 31, to protect the Monarch Butterfly during the last hatch of the season.

Including native flowering herbaceous plants in the future landscaping plans will aid in maintaining habitat for these pollinator species. Cambium recommends applying suitable native plant seed mixtures that include Common Milkweed, the Monarch Butterfly's host plant, where possible. The Ontario Seed Company (OSC) based out of Waterloo, Ontario carries a variety of seed mixtures. Specialized mixtures such as an 'erosion control mixture' and the 'early successional dry prairie meadow mix' contain wildflowers and grass species, which provide rapid vegetation cover and a diversity of habitat for pollinators. These mixtures provide an excellent method of rehabilitating areas with a diverse composition of plant species suitable for the conditions documented.

5.4 Best Management Practices

5.4.1 Invasive Species

Invasive species are becoming problematic throughout Ontario and can adversely impact our natural landscapes, including wetlands and woodlands. No vegetation dumping or yard waste disposal should occur within the wetlands or forested areas of the Site to maintain the natural state and avoid the introduction or spread of non-native or invasive species. Landscape Plans should focus on native or non-invasive species. Additional best management practices to reduce the spread of invasive species include:

- Revegetate with species native to the local area.
- Request fill and compost from reputable sources that are conscious of the potential for the spread of invasive species via these media.
- Get to know the most common invasive species in the area.



- Brush off or clean any shoes, boots and equipment that have encountered invasive species before returning to the property.
- Immediately eradicate invasive species if they are observed on the property.
- Do not compost invasive species; put them in plastic bags and dispose of them in the garbage.
- Do not dispose of lawn or garden clippings in the forest or wetlands to avoid species introductions.

5.4.2 Noise and Artificial Lighting

Noise is not expected to increase significantly because of the proposed residential development as it is consistent with the land use on the surrounding properties. Maintaining the wooded areas surrounding the wetland will serve to buffer wildlife within the natural areas from any noise-related impacts.

Artificial lighting can have an impact on nocturnal movement of wildlife within natural areas. To minimize impacts to wildlife, it is recommended that outdoor lights be operated on timers, rather than by motion detection. Outdoor lighting associated with the development should be directed at the ground, rather than into the adjacent natural areas. Bulb wattage should be as low as practical while meeting the safety intent of the lighting.

5.5 Opportunities for Enhancement

Physical development of the Site should be limited to cleared areas and remain as close to the building footprint as possible, to reduce disturbance to the natural areas of the Site. Vegetation clearing for upgrades to the existing laneway should be minimized.

As site alteration is anticipated within areas in which forest bird SAR habitat may exist, Cambium recommends planting 10 each of the following species, within the vicinity of the new dwelling: Eastern White Cedar (*Thuja occidentalis*), Nannyberry (*Viburnum lentago*), Ninebark (*Physocarpus opulifolius*), and Red Elderberry (*Sambucus racemosa*). These plantings can be used to supplement the existing forest edge, or to create habitat patches within 10 m of the



forest edge. If planted greater than 10 m from the existing forest edge, the plantings should be installed in random groupings of at least 3 individuals to better replicate natural species associations. The selected species provide a diverse habitat and food source for local birds and wildlife, as well as added visual appeal. Furthermore, it is recommended that any future landscaping surrounding the proposed developments should be comprised of native tree and shrub species consistent with the composition of the surrounding woodlands (see botanical species list within the ELC data contained in Appendix B).



6.0 Policy Compliance

Based on the key natural heritage and/or hydrologic features identified on or adjacent to the Site and the findings of the field investigations detailed herein, the proposed development of the Site is in compliance with the PPS and GPGGH. Compliance with applicable natural heritage policy is summarized Table 4.

Key Natural Heritage / Hydrologic Feature	On Site	On Adjacent Lands	Meets Associated Policy	
Wetland	Yes	Yes	Yes; GPGGH: 4.2.3.1 & 4.2.4.1-3	
	Explanation: No impacts to wetlands are expected. Development is not proposed within wetlands or associated 30 m setbacks (Figure 4).			
Significant Wildlife Habitat (including	Potentially	Potentially	Yes; PPS: 2.1.5 & 2.1.8	
habitat of special concern species)	Explanation: Potential SWH for special concern species exists on the Site and adjacent lands. Direct and indirect impacts can be appropriately avoided or mitigated through the recommendations provided herein.			
Significant Woodland	Yes	Yes	Yes; PPS: 2.1.5 & 2.1.8	
	Explanation: No negative impacts to the significant woodland are anticipated related to the proposed residential severance. Limited vegetation removals within the significant woodland may be required in order to upgrade the existing laneway access from County Road 6 to the identified Developable Area on the retained lot. Due to the proposed limited clearing required and absence of interior habitat in that area, the form and function of the significant woodland is not expected to be impacted. Recommendations for supplemental plantings made herein will enhance the existing woodland, and compensate for any small-scale effects to the existing habitat.			

Table 4 Policy Compliance Summary



7.0 Summary of Mitigation, Compensation, and Best Practices

The following measures area recommended for the proposed development:

- Site Plans developed for the proposed development, including severances and building envelopes, should show the location of all confirmed natural features and setbacks (Figure 4).
- 2. In order to preserve the candidate significant woodland, tree and vegetation clearing should be limited to the area necessary for construction.
- 3. ESC fencing should be installed around development areas to contain potential impacts from construction. ESC fencing can also function as exclusion fencing. ESC fencing should then be installed around the perimeter of construction areas prior to May 1 (or commencement of Site preparation) in order to isolate the area from wildlife. All ESC fencing should be removed once the development is complete and the soils are stabilized.
- 4. In order to limit the spread of invasive species, vegetation or yard waste dumping should not occur within the wetlands or forested areas of the Site.
- 5. With proposed future development in the retained lot, runoff from the Site is expected to increase with the introduction of impermeable surfaces. Measures to increase infiltration of run-off from these surfaces should be encouraged and, where possible, included in the Site Plan for the development.
- 6. Outdoor lights should be operated on timers, rather than by motion detection, directed at the ground and bulb wattage should be as low as practical.
- 7. Cambium recommends planting 10 each of the following species, within the vicinity of the new dwelling. Eastern White Cedar (*Thuja occidentalis*), Nannyberry (*Viburnum lentago*), Ninebark (*Physocarpus opulifolius*), and Red Elderberry (*Sambucus racemosa*) would provide a diverse habitat and food source for local birds and wildlife, as well as added visual appeal. Plantings should be installed within 10 m of the existing forest edge, or if greater than 10 m from an edge should be planted in groups of 3 individuals to replicate natural species associations.



- 8. Nesting birds are protected under the Migratory Birds Convention Act, 1994. In the event that construction is planned to proceed during the breeding season (April 1 to August 31), the construction area should be investigated regularly for the presence of breeding birds and nests containing eggs and/or young (some birds nest on man-made structures/machinery or in recently cleared areas). Nests discovered should be left undisturbed until young have fledged or the nest is determined to be inactive by a certified biologist.
- To protect Monarch Butterfly during vulnerable life stages, it is recommended that herbaceous vegetation clearing be completed after August 30, and that Common Milkweed be included in native seed mixes for revegetating disturbed areas.
- 10. During the construction phase, the work area should be actively checked for the presence of wildlife. Reptiles are particularly vulnerable to construction-related impacts on sites adjacent to wetlands, watercourses, and waterbodies.
- 11. Any SAR discovered on the property should be left undisturbed as dictated by the Endangered Species Act, 2007. If any SAR individuals are encountered, they should be photographed and allowed time to move out of harms way. SAR observations should be reported to the Natural Heritage Information Centre.



8.0 Closing

In closing, potential negative impacts associated with the proposed development and site alteration can be appropriately minimized, provided that the recommendations outlined in Section 7.0 are adhered to. The information presented herein demonstrates that the proposed development can be carried out in a way that will not adversely impact natural heritage and hydrologic features and function identified on or adjacent to the subject Site. Furthermore, the proposed development complies with applicable provincial policy.

Respectfully submitted,

Cambium Inc.

Myles Latter, Hons. B.A., Dipl. Project Coordinator

Kinn Jenni

Kristina Domsic, B.E.S. Ecologist/Project Coordinator

Andrea Coppins, B.A. Hon., Dipl. Project Manager/Senior Ecologist

ML/kd/azc

\camfile\Projects\12900 to 12999\12929-001 Sherry Webster - EIS - 1797 County Road 6, Douro-Dummer/Deliverables\REPORT - EIS\Final\2022-01-24 RPT EIS 1797 County Rd, Douro-Dummer - FINAL docx



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10.0 Glossary of Terms

ANSI: Area of Natural and Scientific Interest ARA: Aquatic Resources Area	GIS: Geogra GLSL: Grea
ARA: Aggregate Resources Act	GPGGH: Gr Horseshoe
AS: Agricultural System ATK: Aboriginal Traditional Knowledge BMA: Bear Management Area BMP: Best Management Practice CA: Conservation Authority CEAA: Canadian Environmental Assessment	GPS: Globa HSA: Habita HIS: Habitat KHA: Key H KHF: Key H KNHF: Key
Act/Agency	•
CFA: Canadian Forestry Association	LCFSP: Lice Purposes
CFIP: Community Fisheries Involvement Program CFS: Canadian Forestry Service CHU: Critical Habitat Unit CH: Cultural Heritage CLI: Canada Land Inventory	LIO: Land In LRIA: Lake LUP: Land U MA: Manage MAFA: Moo
CLU: Crown Land Use	MCEA: Mun Assessment
COSSARO: Committee on the Status of Species at Risk in Ontario	MECP: Onta Conservatio
CR: Conservation Reserve	MNDMRF: (Resources a
CWIP: Community Wildlife Involvement Program CWS: Canadian Wildlife Service DFO: Fisheries and Oceans Canada EA: Environmental Assessment EAA: Environmental Assessment Act EAB: Emerald Ash Borer EBR: Environmental Bill of Rights	NER: Natura NHIC: Natur NHIS: Natur NHIS: Natura OBM: Ontar OFIS: Ontar OLI: Ontario
EIA: Environmental Impact Assessment	OMAFRA: C
EIS: Environmental Impact Study/Statement ELC: Ecological Land Classification System ELUP: Ecological Land Use Plan END: Endangered species EPA: Environmental Protection Act ER: Environmental Registry ESA: Endangered Species Act (2007) ESA: Environmentally Sensitive Area ESC: Erosion and Sediment Control	and Rural A OWES: Ont PPS: Provin PSW: Provin RLUP: Regi RMP: Regio R.P.F.: Regi SAR: Specie SARO: Speciel SC: Special

raphic Information System at Lakes – St. Lawrence rowth Plan for the Greater Golden al Positioning System at Suitability Analysis at Suitability Index lydrologic Areas **Hydrologic Features Natural Heritage Features** ence to Collect Fish for Scientific nformation Ontario and Rivers Improvement Act Use Permit or Plan ement Area ose Aquatic Feeding Area nicipal Class Environmental nt ario Ministry of Environment, on and Parks Ontario Ministry of Natural and Forestry al Environment Report Iral Heritage Information Centre ral Heritage Information System ral Heritage System rio Base Map rio Fisheries Information System o Land Inventory Ontario Ministry of Agriculture, Food **Affairs** tario Wetland Evaluation System ncial Policy Statement (2014) incially Significant Wetland ional Land Use Plan onal Management Plan gistered Professional Forester ies at Risk ecies at Risk in Ontario al Concern species



F&W: Fish and Wildlife FA: Fisheries Act (Federal) FEC: Forest Ecosystem Classification FMP: Forest Management Plan FRI: Forest Resources Inventory FWCA: Fish and Wildlife Conservation Act GGH: Greater Golden Horseshoe GHP: General Habitat Protection SWH: Significant Wildlife Habitat SWM: Stormwater Management THR: Threatened species TOR: Terms of Reference TPP: Tree Preservation Plan WIA: Woodlands Improvement Act WMU: Wildlife Management Unit



11.0 Standard Limitations

Limited Warranty

In performing work on behalf of a client, Cambium relies on its client to provide instructions on the scope of its retainer and, on that basis, Cambium determines the precise nature of the work to be performed. Cambium undertakes all work in accordance with applicable accepted industry practices and standards. Unless required under local laws, other than as expressly stated herein, no other warranties or conditions, either expressed or implied, are made regarding the services, work or reports provided.

Reliance on Materials and Information

The findings and results presented in reports prepared by Cambium are based on the materials and information provided by the client to Cambium and on the facts, conditions and circumstances encountered by Cambium during the performance of the work requested by the client. In formulating its findings and results into a report, Cambium assumes that the information and materials provided by the client or obtained by Cambium from the client or otherwise are factual, accurate and represent a true depiction of the circumstances that exist. Cambium relies on its client to inform Cambium if there are changes to any such information and materials. Cambium does not review, analyze or attempt to verify the accuracy or completeness of the information or materials provided, or circumstances encountered, other than in accordance with applicable accepted industry practice, Cambium will not be responsible for matters arising from incomplete, incorrect or misleading information or from facts or circumstances that are not fully disclosed to or that are concealed from Cambium during the provision of services, work or reports.

Facts, conditions, information and circumstances may vary with time and locations and Cambium's work is based on a review of such matters as they existed at the particular time and location indicated in its reports. No assurance is made by Cambium that the facts, conditions, information, circumstances or any underlying assumptions made by Cambium in connection with the work performed will not change after the work is completed and a report is submitted. If any such changes occur or additional information is obtained, Cambium should be advised and requested to consider if the changes or additional information affect its findings or results.

When preparing reports, Cambium considers applicable legislation, regulations, governmental guidelines and policies to the extent they are within its knowledge, but Cambium is not qualified to advise with respect to legal matters. The presentation of information regarding applicable legislation, regulations, governmental guidelines and policies is for information only and is not intended to and should not be interpreted as constituting a legal opinion concerning the work completed or conditions outlined in a report. All legal matters should be reviewed and considered by an appropriately qualified legal practitioner.

Site Assessments

A site assessment is created using data and information collected during the investigation of a site and based on conditions encountered at the time and particular locations at which fieldwork is conducted. The information, sample results and data collected represent the conditions only at the specific times at which and at those specific locations from which the information, samples and data were obtained and the information, sample results and data was at other locations on times. To the extent that Cambium's work or report considers any locations or times other than those from which information, sample results and data was specifically received, the work or report is based on a reasonable extrapolation from such information, sample results and data but the actual conditions encountered may vary from those extrapolations.

Only conditions at the site and locations chosen for study by the client are evaluated; no adjacent or other properties are evaluated unless specifically requested by the client. Any physical or other aspects of the site chosen for study by the client, or any other matter not specifically addressed in a report prepared by Cambium, are beyond the scope of the work performed by Cambium and such matters have not been investigated or addressed.

Reliance

Cambium's services, work and reports may be relied on by the client and its corporate directors and officers, employees, and professional advisors. Cambium is not responsible for the use of its work or reports by any other party, or for the reliance on, or for any decision which is made by any party using the services or work performed by or a report prepared by Cambium without Cambium's express written consent. Any party that relies on services or work performed by Cambium or a report prepared by Cambium without Cambium's express written consent, does so at its own risk. No report of Cambium may be disclosed or referred to in any public document without Cambium's express prior written consent. Cambium specifically disclaims any liability or responsibility to any such party for any loss, damage, expense, fine, penalty or other such thing which may arise or result from the use of any information, recommendation or other matter arising from the services, work or reports provided by Cambium.

Limitation of Liability

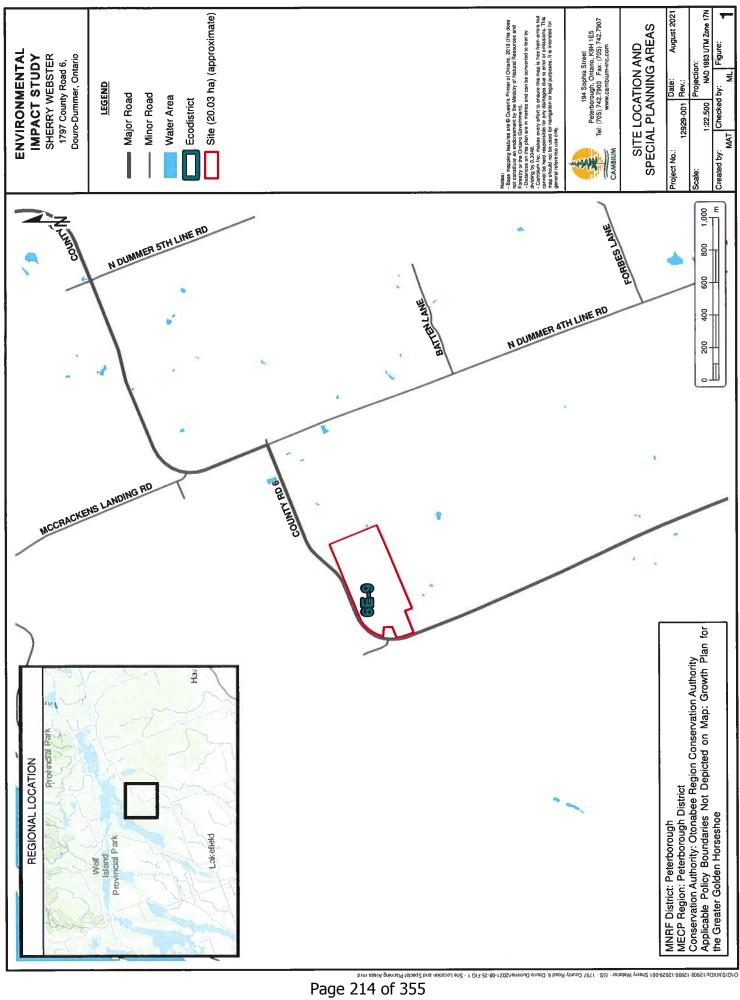
Potential liability to the client arising out of the report is limited to the amount of Cambium's professional liability insurance coverage. Cambium shall only be liable for direct damages to the extent caused by Cambium's negligence and/or breach of contract. Cambium shall not be liable for consequential damages.

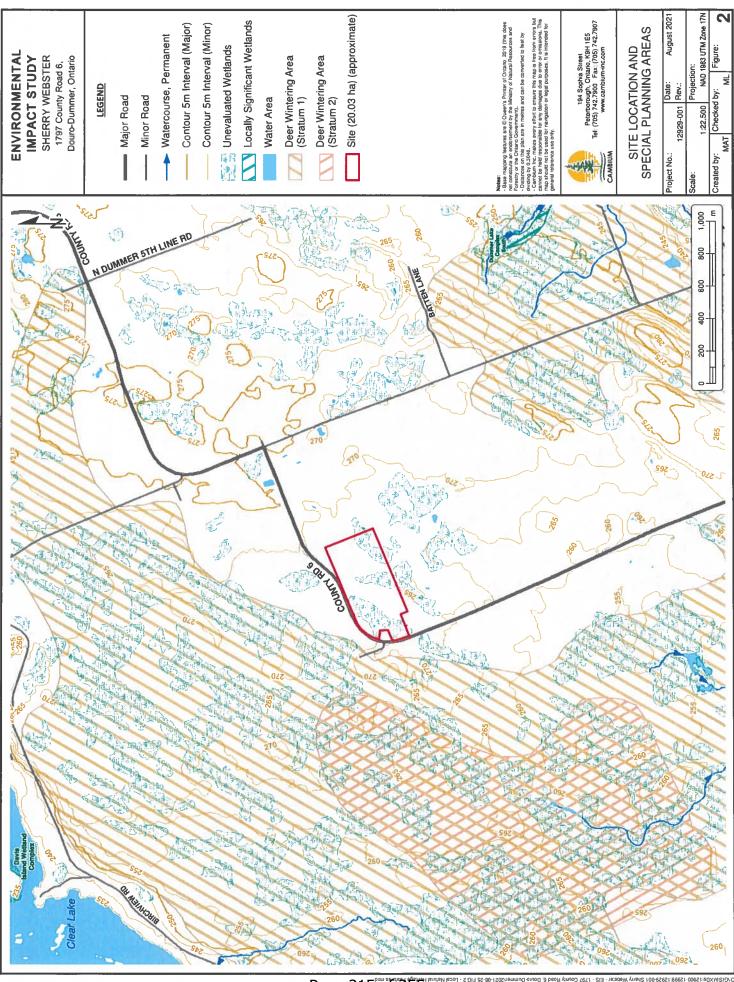
Personal Liability

The client expressly agrees that Cambium employees shall have no personal liability to the client with respect to a claim, whether in contract, tort and/or other cause of action in law. Furthermore, the client agrees that it will bring no proceedings nor take any action in any court of law against Cambium employees in their personal capacity.

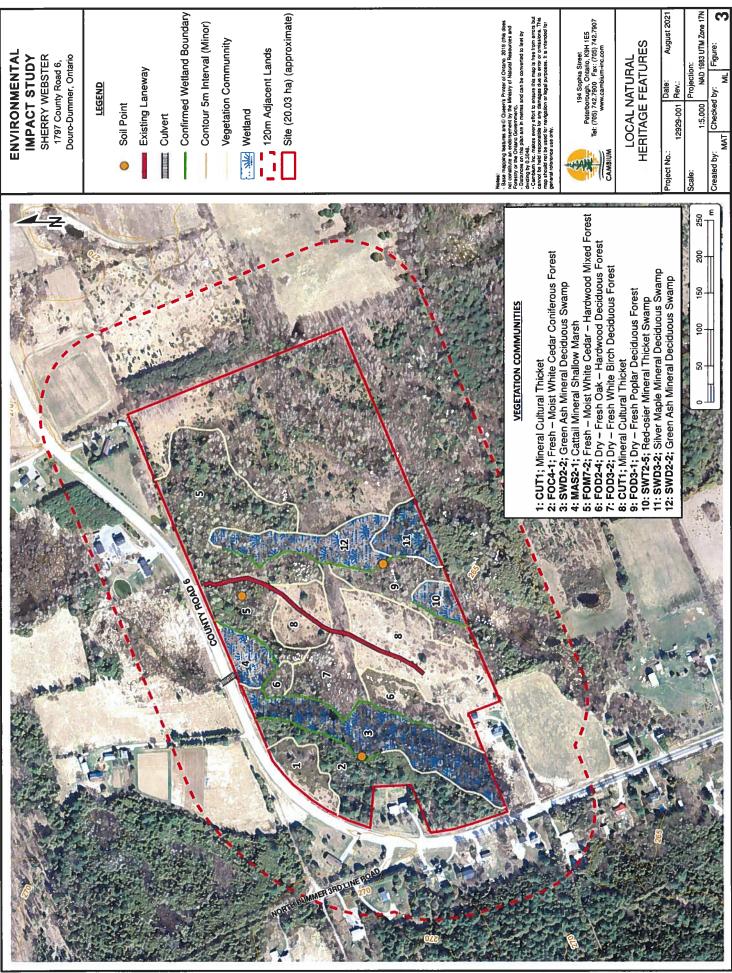


Appended Figures

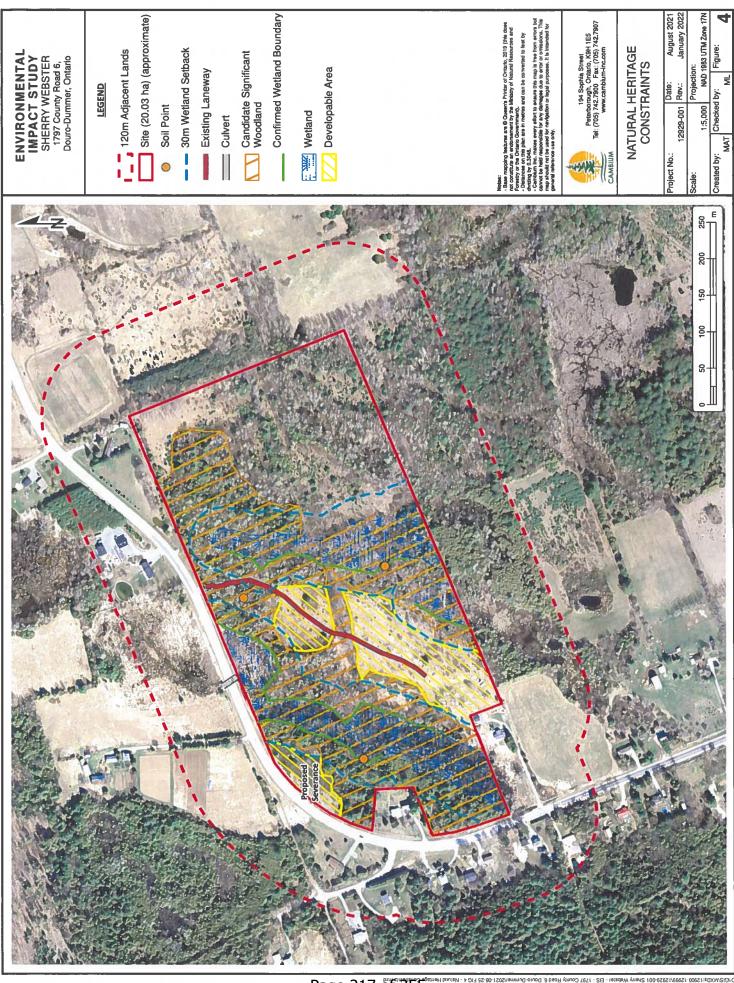




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Douto-Dui

D 2621



Appendix A Correspondence

Myles Latter

From:	Matt Wilkinson <mwilkinson@otonabeeconservation.com></mwilkinson@otonabeeconservation.com>
Sent:	July 2, 2021 6:04 AM
То:	Myles Latter
Cc:	Cambium File; Jasmine Gibson
Subject:	RE: 2021-06-30 ToR 1797 County Road 6, Douro-Dummer (12929-P)

Hi Myles,

I've been out to this property.

We would recommend a phased approach. Maybe start with a constraint map that could be updated. I would recommend discussing this with the county and get a PSR completed.

The proposed severed lot looks quite close to the wetlands, considering it will require a 30 metre setback.

Based on the imagery it appears the wetlands may be more extensive than mapped – The field work needs to be a two-fold approach, spring for wetland mapping to ensure cedar swamps are appropriately designated, including soil sampling, in support of the Otonabee Conservation permit, AND secondly field work should be considerate of 'habitat-use' by regulated ESA species through presence/not detected on site review.

Best, Matt



Matt Wilkinson Planner 705-745-5791 x213 mwilkinson@otonabeeconservation.com

ARE YOU PLANNING AN UPCOMING CONSTRUCTION PROJECT ON YOUR PROPERTY? Submit a Property Inquiry Form so we can help you understand how natural hazards may affect your property.

This e-mail is confidential. If you are not an addressee named above, please immediately delete and notify the sender. Thank you.

From: Myles Latter <Myles.Latter@cambium-inc.com> Sent: June 30, 2021 2:05 PM To: Matt Wilkinson <mwilkinson@otonabeeconservation.com> Cc: Cambium File <file@cambium-inc.com> Subject: 2021-06-30 ToR 1797 County Road 6, Douro-Dummer (12929-P)

Good afternoon Matt,

Can I please confirm the Terms of Reference with you for this project? No PSR has been conducted from my knowledge. The only natural heritage features that are mapped are unevaluated wetlands. I have attached some images from the client regarding their proposed severance and building area on the retained lands.

The following scope has been provided:

One Site visit in summer 2021 to document natural features on the property that were not identified in Task 1, if any, including:

- Delineate the boundaries of the wetland based on the Ontario Wetland Evaluation System (OWES) for Southern Ontario (Ministry of Natural Resources, 2013). The Site visit will capture appropriate wetland delineation characteristics, including vegetation species and wetted limits.
- Classify existing vegetation communities on the Site, according to the Ecological Land Classification (ELC) System for Southern Ontario (Lee, et al., 1998), and evaluate them for sensitivity, rarity, and botanical quality.
- Document drainage connectivity and/or watercourse characteristics including riparian vegetation, erosion prone areas, and special habitat features.
- Record observations of wildlife occurrences and assess wildlife habitat function on the Site. Any evidence
 of breeding, forage, shelter or nesting sites, and/or travel corridors will be noted. A habitat-based screening
 for SAR will be completed for the Site.

Please let me know if there is anything that I have missed.

Thanks and take care,



Myles Latter, B.A. Hons., Dipl. Project Coordinator

Cambium Inc. - Peterborough

Environmental | Building Sciences | Geotechnical | Construction Monitoring p: 705.742.7900 x 252 | c: 705.957.5571 | toll: 866.217.7900 | w: <u>cambium-inc.com</u>

Under modified work conditions in response to the current pandemic and government directives, Cambium continues to provide the professional services you have come to expect to guide good decisions. The well-being and safety of our teams, clients, and communities are a top priority. We ask for your patience and look forward to working together as we evolve into the "new normal". Stay safe. Better days are ahead.

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Appendix B Vegetation Species List

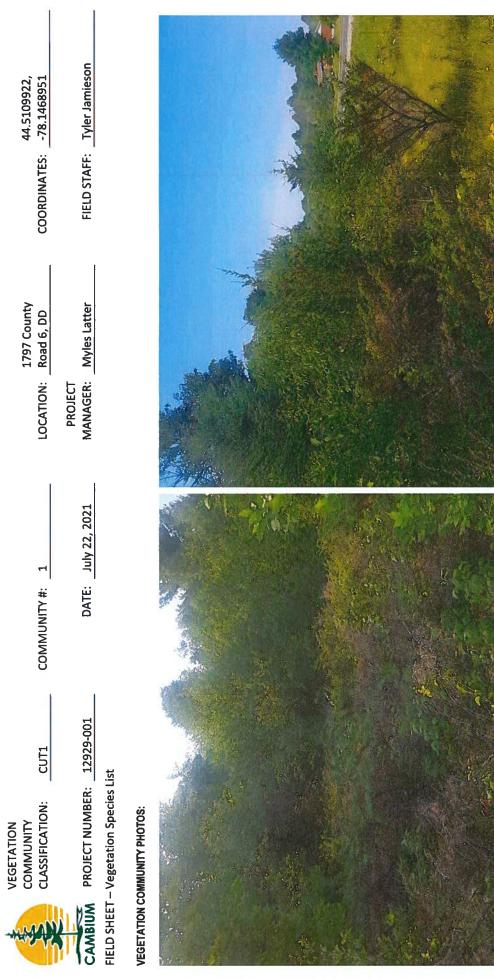
44.5109922, -78.1468951	Tyler Jamieson		S-Rank	SS	SS	SS	S5	S5	SNA	SNA	SNA	SNA	SNA	SNA	S5	S5	S5	SNA	S5	S5	S5	SNA	SNA	S5	S5	S5	SNA
COORDINATES:	FIELD STAFF:		SARO																								
1797 County Road 6, DD	Myles Latter		SARA																								
LOCATION:	PROJECT MANAGER:		ပူလ	ę	0	-	2	3							4	4	4		2	2	2			2	2	2	
#	DATE: July 22, 2021		CoW	æ	e	3	3	3	5	в	5	0	5	3	3	-3	3	3	0	S	ņ	3	5	0	5	3	ŵ
COMMUNITY #	1		Family	Rosaceae	Asteraceae	Asteraceae	Rosaceae	Celastraceae	Rosaceae	Cupressaceae	Oleaceae	Lamiaceae	Clusiaceae	Poaceae	Cupressaceae	Cupressaceae	Pinaceae	Fabaceae	Asteraceae	Asteraceae	Asteraceae	Poaceae	Asteraceae	Anacardiaceae	Ровсеве	Rosaceae	Poaceae
VEGETATION COMMUNITY CLASSIFICATION: CUT1	PROJECT NUMBER: 12929-001		Scientific Name	Prunus serotina var. serotina	Rudbeckia hirta var. pulcherrima	Solidago canadensis var. canadensis	Prunus virginiana var. virginiana	Celastrus scandens	Malus pumila	Juniperus communis var. communis	Syringa vulgaris	Prunella vulgaris ssp. vulgaris	Hypericum perforatum ssp. perforatum	Phleum pratense ssp. pratense	Juniperus virginiana	Thuja occidentalis	Pinus strobus	Lotus comiculatus	Euthamia graminifolia	Solidago nemoralis ssp. nemoralis	Symphyotrichum novae- angliae	Dactylis glomerata	Leucanthemum vulgare	Toxicodendron radicans	Danthonia spicata	Rubus idaeus	Agrostis gigantea
VEGETATION COMMUNITY CLASSIFICATI	CAMBIUM PROJEC	FIELU SHEET - Vegetation species List	Common Name	Black Cherry	Black-eyed Susan	Canada Goldenrod	Chokecherry	Climbing Bittersweet	Common Apple	Common Juniper	Common Lilac	Common Self-heal	Common St. John's-wort	Common Timothy	Eastern Red Cedar	Eastern White Cedar	Eastern White Pine	Garden Bird's-foot Trefoil	Grass-leaved Goldenrod	Grey-stemmed Goldenrod	New England Aster	Orchard Grass	Oxeye Daisy	Poison Ivy	Poverty Oatgrass	Red Raspberry	Redtop

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44.5109922, NATES:78.1468951	FIELD STAFF: Tyler Jamieson		0 S-Rank	S5	S5	SNA	SNA	S5	S5	SNA	SA	S5	SNA	SS	SNA
COORDINATES:	FIELD		SARO												1
1797 County LOCATION: Road 6, DD	T :: Myles Latter		SARA												13
LOCATION	PROJECT MANAGER:		ပူဝ	0	4			1	4		4	4		4	
ITY #:	DATE: July 22, 2021		CoW	0	0	3	5	3	3	5	3	3	3	5	S
COMMUNITY #:	1		Family	Vitaceae	Asteraceae	Pinaceae	Poaceae	Anacardiaceae	Aceraceae	Fabaceae	Oleaceae	Asteraceae	Fabaceae	Lamiaceae	Apiaceae
VEGETATION COMMUNITY CLASSIFICATION: CUT1	PROJECT NUMBER: 12929-001	tion Species List	Scientific Name	Vitis riparia	Solidago rugosa	Pinus sylvestris var. sylvestris	Bromus inermis	Rhus typhina	Acer saccharum	Vicia cracca	Fraxinus americana	Symphyotrichum ericoides var. ericoides	Melilotus albus	Clinopodium vulgare ssp. vulgare	Daucus carota
COMMUNITY COMMUNITY CLASSIFICATION	CAMBIUM PROJEC	FIELD SHEET – Vegetation Species List	Common Name	Riverbank Grape	Rough-stemmed Goldenrod	Scots Pine	Smooth Brome	Staghorn Sumac	Sugar Maple	Tufted Vetch	White Ash	White Heath Aster	White Sweet-clover	Wild Basil	Wild Carrot

NOTES: Cultural Thicket

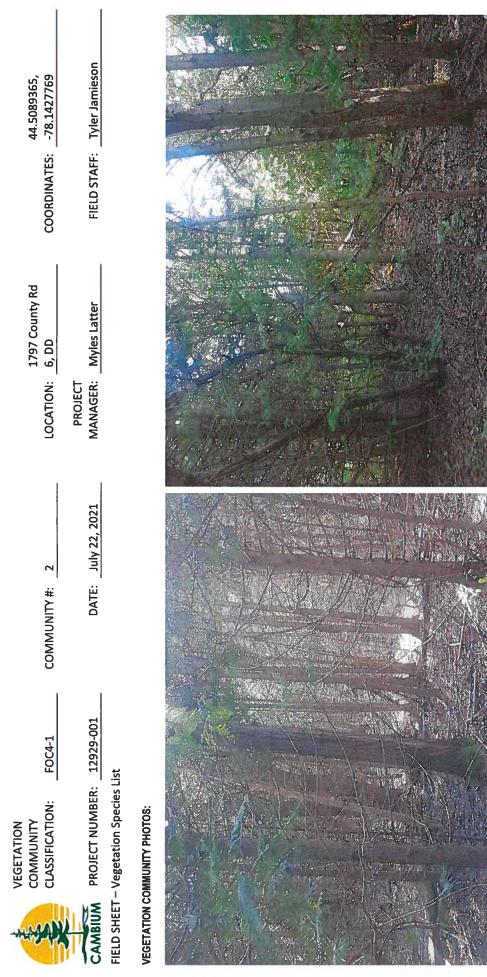
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44.5089365, -78.1427769	FIELD STAFF: Tyler Jamieson	S-Rank	S5	SNA	S5	S5	SNA	S4	S5	S5	S5	S5
44.5089365, COORDINATES: -78.1427769	FIELD STAFF:	SARO										
1797 County Rd 6, DD	PROJECT MANAGER: Myles Latter	SARA										
1797 LOCATION: 6, DD	PROJECT MANAGER:	CoC	3		4	4		6	0	4	2	3
ΓX#: 2	DATE: July 22, 2021	CoW	3	3	Ŷ	3	0	5	0	3	0	-3
COMMUNITY		Family	Rosaceae	Orchidaceae	Cupressaceae	Pinaceae	Rhamnaceae	Monotropaceae	Vitaceae	Асегасеве	Salicaceae	Ulmaceae
VEGETATION COMMUNITY CLASSIFICATION: FOC4-1	PROJECT NUMBER: 12929-001 Vegetation Species List	Scientific Name	Prunus serotina var. serotina	Epipactis helleborine	Thuja occidentalis	Pinus strobus	Rhamnus cathartica	Hypopitys monotropa	Vitis riparia	Acer saccharum	Populus tremuloides	Ulmus americana
VEGETATION COMMUNITY CLASSIFICATI	CAMBIUM PROJECT NUMBER: 1 FIELD SHEET – Vegetation Species List	Common Name	Black Cherry	Broad-leaved Helleborine	Eastern White Cedar	Eastern White Pine	European Buckthom	Pinesap	Riverbank Grape	Sugar Maple	Trembling Aspen	White Elm

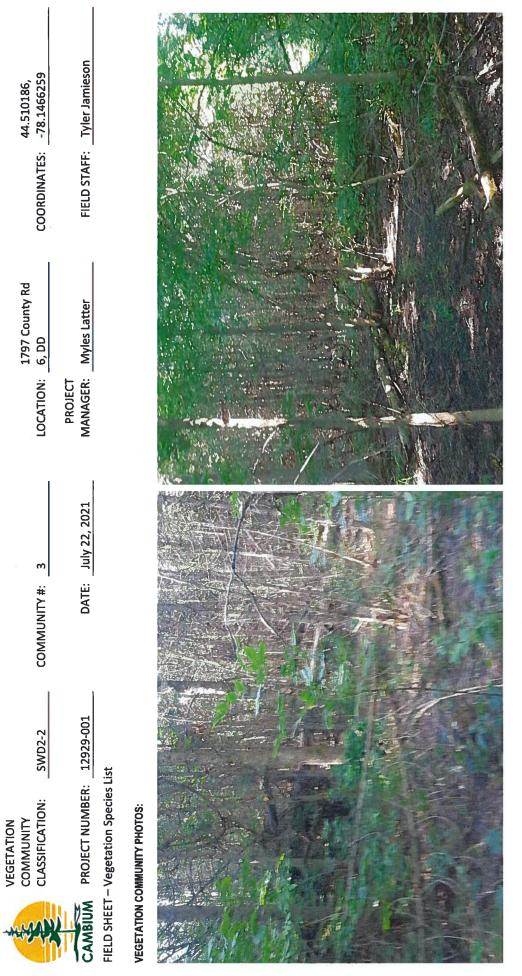
NOTES: Coniferous Forest, cedar dominates.



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#: 3 LOCATION: 6, DD COORDINATES: -78.1466259	TE: July 22, 2021 MANAGER: Myles Latter FIELD STAFF: Tyler Jamieson		CoW CoC SARA SARO S-Rank	-5 7 S5	-5 S	-3 4 S5	0 SNA	3 5 S5	-3 6 S5	-3 3 S4		-3 4 SS	-3 5 SS	-3 4 S5	3 6 S4?	ی د	
COMMUNITY #:	DAT		Family	Rhamnaceae	Lamiaceae	Salicaceae	Solanaceae	Fagaceae	Urticaceae	Oleaceae	Cyperaceae	Dryopteridaceae	Dryopteridaceae	Balsaminaceae	Vitaceae	Ulmaceae	
VEGETATION COMMUNITY CLASSIFICATION: SWD2-2	PROJECT NUMBER: 12929-001	ion Species List	Scientific Name	Endotropis alnifolia	Lycopus americanus	Populus balsamifera	Solanum dulcamara	Quercus macrocarpa	Laportea canadensis	Fraxinus pennsylvanica	Carex spp.	Onoclea sensibilis	Dryopteris carthusiana	Impatiens capensis	Parthenocissus quinquefolia	Ulmus americana	
VEGETATION COMMUNITY CLASSIFICATI	CAMBIUM PROJECT	FIELD SHEET – Vegetation Species List	Common Name	Alder-leaved Buckthom	American Water-horehound	Balsam Poplar	Bittersweet Nightshade	Bur Oak	Canada Wood Nettle	Red Ash	Sedge Species	Sensitive Fem	Spinulose Wood Fem	Spotted Jewelweed	Virginia Creeper	White Elm	

NOTES: Deciduous swamp. Red (green) ash dominates.

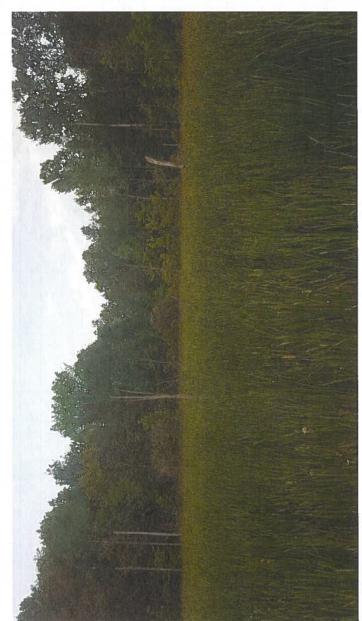


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44.5129201, -78.1430284	FIELD STAFF: Tyler Jamieson		S-Rank	SNA	SNA	S5	S5	S5
44.5129201, COORDINATES: -78.1430284	FIELD STAFF:		SARO					
1797 County Rd 6, DD	PROJECT MANAGER: Myles Latter		SARA					
1797 (LOCATION: 6, DD	PROJECT MANAGER:		ပူး			4	0	e
4	July 22, 2021		CoW	-5	-5	0	0	ę.
COMMUNITY #:	DATE:		Family	Typhaceae	Lythraceae	Aceraceae	Vitaceae	Ulmaceae
MAS2-1	12929-001	List	Name	ustifolia	alicaria	mna	aria	ericana
VEGETATION COMMUNITY CLASSIFICATION:	PROJECT NUMBER: 12929-001	tation Species l	Scientific Name	Typha angustifolia	Lythrum salicaria	Acer rubrum	Vitis riparia	Ulmus americana
COM	CAMBIUM PROJ	FIELD SHEET – Vegetation Species List	Common Name	Narrow-leaved Cattail	Purple Loosestrife	Red Maple	Riverbank Grape	White Elm

NOTES: Cattails dominate

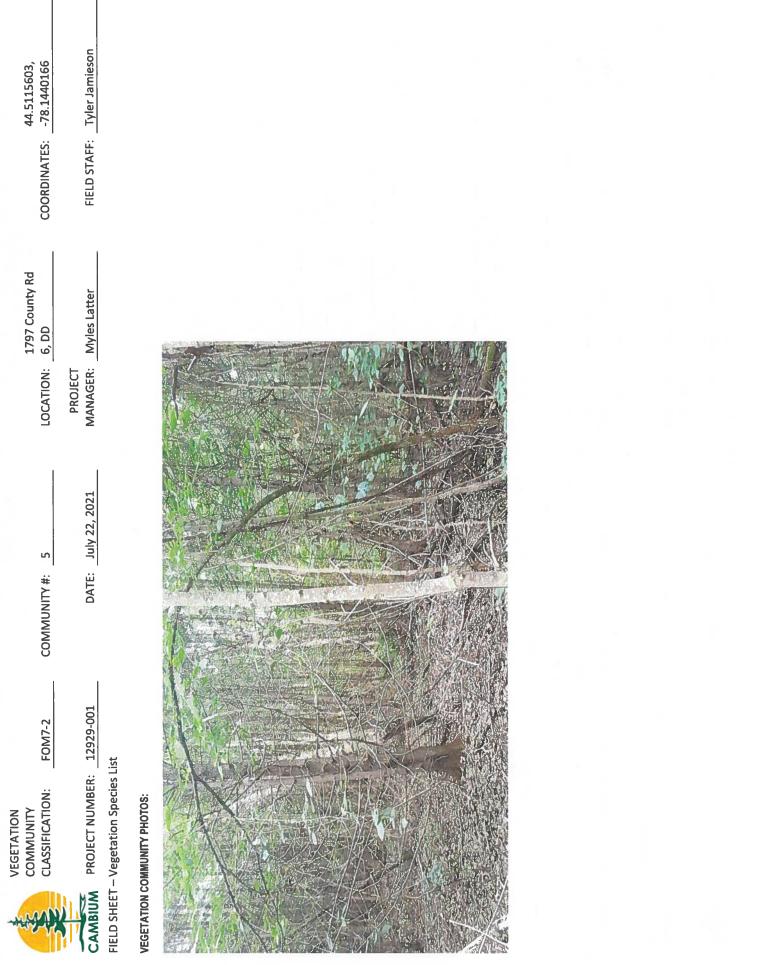
VEGETATION COMMUNITY PHOTOS:



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44.5115603, -78.1440166 Tyler Jamieson	S-Rank	SNA	S5	S5	SNA	S5	S5	S5	S4	S5	S5	S5	Ss
44.5115603, COORDINATES: -78.1440166 FIELD STAFF: Tyler Jamieson	SARO												
1797 County Rd LOCATION: <u>6, DD</u> PROJECT MANAGER: <u>Myles Latter</u>	SARA												
1797 LOCATION: 6, DD PROJECT MANAGER: <u>Myles</u>	ပ္ပ		4	4		9	2	2	3	4	0	2	£
#: 5 Iuly 22, 2021	CoW	ę	ę	3	5	3	3	0	-3	0	0	0	ę
COMMUNITY	Family	Orchidaceae	Cupressaceae	Pinaceae	Crassulaceae	Monotropaceae	Betulaceae	Anacardiaceae	Oleaceae	Aceraceae	Vitaceae	Salicaceae	Ulmaceae
VEGETATION COMMUNITY CLASSIFICATION: <u>FOM7-2</u> PROJECT NUMBER: <u>12929-001</u> Vegetation Species List	Scientific Name	Epipactis helleborine	Thuja occidentalis	Pinus strobus	Hylotelephium telephium	Monotropa unifiora	Betula papyrifera	Toxicodendron radicans	Fraxinus pennsylvanica	Acer rubrum	Vitis riparia	Populus tremuloides	Ulmus americana
VEGETATION COMMUNITY CLASSIFICATION: F CLASSIFICATION: F CLASSIFICATION: 1 PROJECT NUMBER: 1	Common Name	Broad-leaved Helleborine	Eastern White Cedar	Eastern White Pine	Garden Stonecrop	Indian-pipe	Paper Birch	Poison lvy	Red Ash	Red Maple	Riverbank Grape	Trembling Aspen	White Elm

NOTES: Mixed forest. Cedar and poplar dominate.



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44.5111288, -78.1451789	FIELD STAFF: Tyler Jamieson	S-Rank	S5	S5	S5	SNA	S5	SNA	SS	S5	S4	S5	S5	S5	S4?	S5	S5
COORDINATES	FIELD STAFF:	SARO				- - - - -											
LOCATION: 1797 County Rd 6	PROJECT MANAGER: Myles Latter	SARA															
LOCATION:	PROJECT MANAGER:	CoC	4	5	2		4		0	9	3	4	9	2	9	3	2
ور	DATE: July 22, 2021	CoW	ę	3	3	0	ę	0	0	3	ę	0	-3	0	3	ę	0
COMMUNITY #:	DATE	Family	Salicaceae	Fagaceae	Rosaceae	Lamiaceae	Rosaceae	Rhamnaceae	Equisetaceae	Fagaceae	Oleaceae	Asteraceae	Onagraceae	Salicaceae	Vitaceae	Ulmaceae	Rosaceae
VEGETATION COMMUNITY CLASSIFICATION: FOD2-4	PROJECT NUMBER: 12929-001 Vegetation Species List	Scientific Name	Populus balsamifera	Quercus macrocarpa	Prunus virginiana var. virginiana	Prunella vulgaris ssp. vulgaris	Rubus pubescens	Rhamnus cathartica	Equisetum arvense	Quercus rubra	Fraxinus pennsylvanica	Solidago rugosa	Circaea alpina ssp. alpina	Populus tremuloides	Parthenocissus quinquefolia	Ulmus americana	Geum aleppicum
VEGETATION COMMUNITY CLASSIFICATI	CAMBIUM PROJECT NUMBER: 1 FIELD SHEET – Vegetation Species List	Common Name	Balsam Poplar	Bur Oak	Chokecherry	Common Self-heal	Dwarf Raspberry	European Buckthom	Field Horsetail	Northern Red Oak	Red Ash	Rough-stemmed Goldenrod	Small Enchanter's Nightshade	Trembling Aspen	Virginia Creeper	White Elm	Yellow Avens

NOTES: Small area of oak/poplar forest.

44.5111288, COORDINATES: -78.1451789	FIELD STAFF: Tyler Jamieson			
LOCATION: 1797 County Rd 6	Myles Latter			
LOCATION:	PROJECT MANAGER:			
COMMUNITY #: 6	DATE: July 22, 2021			
FOD2-4	12929-001 ist			
VEGETATION COMMUNITY CLASSIFICATION:	CAMBIUM PROJECT NUMBER: 1 FIELD SHEET – Vegetation Species List	VEGETATION COMMUNITY PHOTOS:		
-WAAP	CAMBIUM FIELD SHEET	VEGETATION C	Page 233 of 355	

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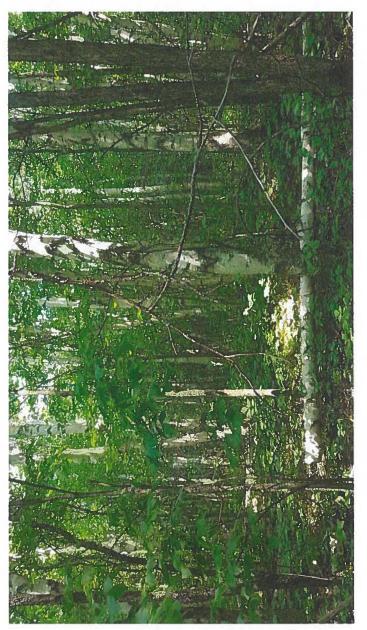
44.5102574, -78.1455899	Tyler Jamieson	S-Rank	SS	SS	SNA	SS	SS	SNA	SNA	SNA	SNA	SS	S5	S5	S4	S5	S5	S5	S4?	S5
COORDINATES:	FIELD STAFF: _	SARO												-						
1797 County Rd 6, DD	Myles Latter	SARA																		
LOCATION:	PROJECT MANAGER:	2002	4	£		2	2					9	2	2	3	0	4	2	9	2
7 # Y	DATE: July 22, 2021	CoW	3	Э	£	m	ę	0	3	0	5	3	3	0	-3	0	3	0	3	0
COMMUNITY #		Family	Tiliaceae	Rosaceae	Orchidaceae	Onagraceae	Rosaceae	Lamiaceae	Oxalidaceae	Rhamnaceae	Crassulaceae	Fagaceae	Betulaceae	Anacardiaceae	Oleaceae	Vitaceae	Aceraceae	Salicaceae	Vitaceae	Rosaceae
VEGETATION COMMUNITY CLASSIFICATION: FOD3-2	PROJECT NUMBER: 12929-001 Vegetation Species List	Scientific Name	Tilia americana	Prunus serotina var. serotina	Epipactis helleborine	Circaea canadensis ssp. canadensis	Prunus virginiana var. virginiana	Prunella vulgaris ssp. vulgaris	Oxalis comiculata	Rhamnus cathartica	Hylotelephium telephium	Quercus rubra	Betula papyrifera	Toxicodendron radicans	Fraxinus pennsylvanica	Vitis riparia	Acer saccharum	Populus tremuloides	Parthenocissus quinquefolia	Geum aleppicum
VEGETATION COMMUNITY CLASSIFICATI	CAMBIUM PROJECT NUMBER: 1 FIELD SHEET – Vegetation Species List	Common Name	Basswood	Black Cherry	Broad-leaved Helleborine	Canada Enchanter's Nightshade	Chokecherry	Common Self-heal	Creeping Wood-sorrel	European Buckthom	Garden Stonecrop	Northern Red Oak	Paper Birch	Poison Ivy	Red Ash	Riverbank Grape	Sugar Maple	Trembling Aspen	Virginia Creeper	Yellow Avens

NOTES: Paper birch dominates

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FIELD STAFF: Tyler Jamieson 44.5102574, COORDINATES: -78.1455899 1797 County Rd PROJECT MANAGER: Myles Latter 6, DD LOCATION: DATE: July 22, 2021 COMMUNITY #: CAMBIUM PROJECT NUMBER: 12929-001 FOD3-2 FIELD SHEET – Vegetation Species List VEGETATION COMMUNITY CLASSIFICATION:

VEGETATION COMMUNITY PHOTOS:



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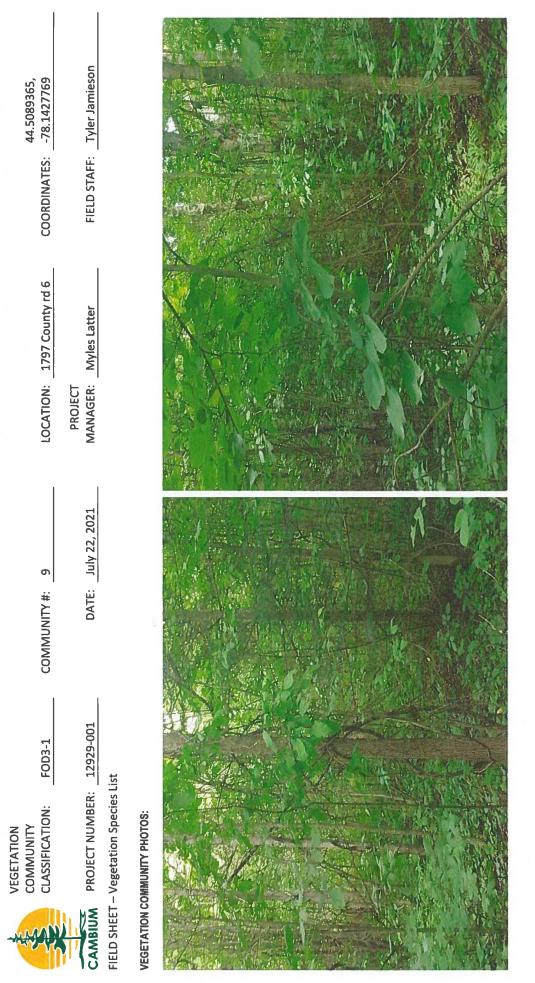
1797 County Rd 44.5089365, 6, DD COORDINATES: -78.1427769	Myles Latter FIELD STAFF: Tyler Jamieson		SARA SARO S-Rank	8	SNA	Ss	SNA	S5	SNA	S5	SNA	S5	SNA	SNA	S5	S5	SNA	Ss	SNA	SNA	S4	Ss	SNA	SS	SNA	S5	SS
LOCATION:	PROJECT MANAGER:		ပူစ္ပ	0		F		2		0	11 20 5 1	0			4	2		2			3	2		2		3	4
8 #	DATE: July 22, 2021		CoW	3	e	3	3	3	5	3	e	5	ъ	3	3	0	5	ę	5	5	-3	-3	-3	0	5	-3	ю
COMMUNITY #:	Ĩ		Family	Asteraceae	Poaceae	Asteraceae	Asteraceae	Rosaceae	Rosaceae	Onagraceae	Cupressaceae	Apocynaceae	Clusiaceae	Poaceae	Pinaceae	Asteraceae	Fabaceae	Asteraceae	Asteraceae	Asteraceae	Oleaceae	Comaceae	Ровсеве	Salicaceae	Fabaceae	Rosaceae	Lamiaceae
VEGETATION COMMUNITY CLASSIFICATION: CUT1	PROJECT NUMBER: 12929-001	ion Species List	Scientific Name	Rudbeckia hirta var. pulcherrima	Poa compressa	Solidago canadensis var. canadensis	Cirsium arvense	Prunus virginiana var. virginiana	Malus pumila	Oenothera biennis	Juniperus communis var. communis	Asclepias syriaca	Hypericum perforatum ssp. perforatum	Phleum pratense ssp. pratense	Pinus strobus	Euthamia graminifolia	Trifolium campestre	Symphyotrichum novae- angliae	Pilosella aurantiaca	Leucanthemum vulgare	Fraxinus pennsylvanica	Comus sericea	Agrostis gigantea	Populus tremuloides	Vicia cracca	Spiraea alba var. alba	Clinopodium vulgare ssp. vulgare
VEGETATION COMMUNITY CLASSIFICATI	CAMBIUM PROJECT	FIELD SHEET – Vegetation Species List	Common Name	Black-eyed Susan	Canada Bluegrass	Canada Goldenrod	Canada Thistle	Chokecherry	Common Apple	Common Evening-primrose	Common Juniper	Common Milkweed	Common St. John's-wort	Common Timothy	Eastern White Pine	Grass-leaved Goldenrod	Low Hop Clover	New England Aster	Orange Hawkweed	Oxeye Daisy	Red Ash	Red-osier Dogwood	Redtop	Trembling Aspen	Tufted Vetch	White Meadowsweet	Wild Basil



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44.5089365, -78.1427769	FIELD STAFF: Tyler Jamieson	S-Rank	S5	S5	S5	S5	SS	S5	S4	SS	S5	S5	SS	S5	S5	S4?
COORDINATES:	FIELD STAFF:	SARO														
LOCATION: 1797 County Rd 6	PROJECT MANAGER: Myles Latter	SARA														
LOCATION:	PROJECT MANAGER:	CoC	5	4	2	9	9	2	e	2	0	4	5	4	2	9
6 ;# X	DATE: July 22, 2021	CoW	ę	3	3	3	3	0	ę	3	0	-3	ę	3	0	ę
соммили		Family	Pinaceae	Tiliaceae	Onagraceae	Monotropaceae	Fagaceae	Anacardiaceae	Oleaceae	Rosaceae	Vitaceae	Dryopteridaceae	Dryopteridaceae	Aceraceae	Salicaceae	Vitaceae
VEGETATION COMMUNITY CLASSIFICATION: FOD3-1	PROJECT NUMBER: <u>12929-001</u> Vegetation Species List	Scientific Name	Abies balsamea	Tilia americana	Circaea canadensis ssp. canadensis	Monotropa unifiora	Guercus rubra	Toxicodendron radicans	Fraxinus pennsylvanica	Rubus idaeus	Vitis riperie	Onoclea sensibilis	Dryopteris carthusiana	Acer sacchanum	Populus tremuloides	Parthenocissus quinquefolia
VEGETATION COMMUNITY CLASSIFICATIO	CAMBIUM PROJECT NUMBER: 1 FIELD SHEET – Vegetation Species List	Common Name	Balsam Fir	Basswood	Canada Enchanter's Nightshade	Indian-pipe	Northern Red Oak	Poison Ivy	Red Ash	Red Raspberry	Riverbank Grape	Sensitive Fem	Spinulose Wood Fem	Sugar Maple	Trembling Aspen	Virginia Creeper

NOTES: Poplar with Ash. Red Oak and Sugar Maple.



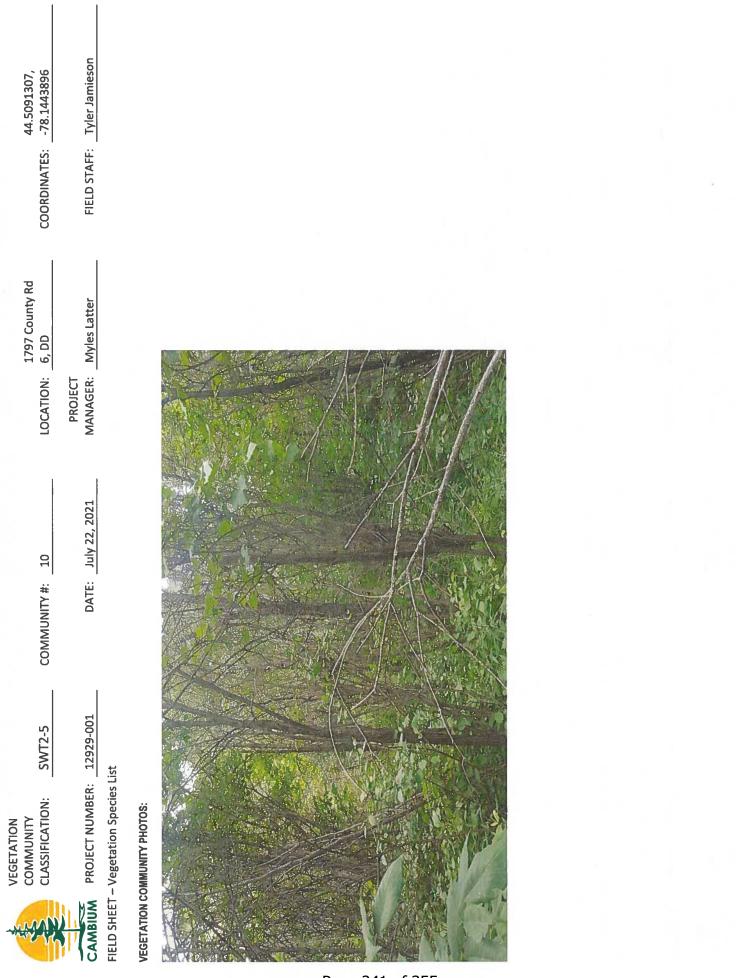
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44.5091307, -78.1443896	FIELD STAFF: Tyler Jamieson		S-Rank	S5	S5	S5	S5	S5	S5	S5
44.5091307, COORDINATES: -78.1443896	FIELD STAFF:		SARO							
1797 County Rd 6, DD	PROJECT MANAGER: <u>Myles Latter</u>		SARA							
1797 C LOCATION: 6, DD	PROJECT MANAGER:		CoC	4	2	4	4	4	3	3
10	DATE: July 22, 2021		CoW	-3	-3	0	-3	ę	-3	ę
COMMUNITY #:	DATE:		Family	Salicaceae	Comaceae	Asteraceae	Dryopteridaceae	Balsaminaceae	Ulmaceae	Rosaceae
	1		Far	Salici	Com	Aster	Dryopte	Balsam	Ulms	Rose
SWT2-5	12929-00	ist	Name	biana	nicea	ngosa	nsibilis	apensis	nicana	var. alba
COMMUNITY CLASSIFICATION:	PROJECT NUMBER: 12929-001	ion Species l	Scientific Name	Salix bebbiana	Comus sericea	Solidago rugosa	Onoclea sensibilis	Impatiens capensis	Ulmus americana	Spiraea alba var. alba
COMMUNITY CLASSIFICATI	PROJEC	– Vegetat	ame	low	jwood	Goldenrod	em	weed	F	vsweet
the state	CAMBIUM	FIELD SHEET – Vegetation Species List	Common Name	Bebb's Willow	Red-osier Dogwood	Rough-stemmed Goldenrod	Sensitive Fem	Spotted Jewelweed	White Elm	White Meadowsweet

VEGETATION

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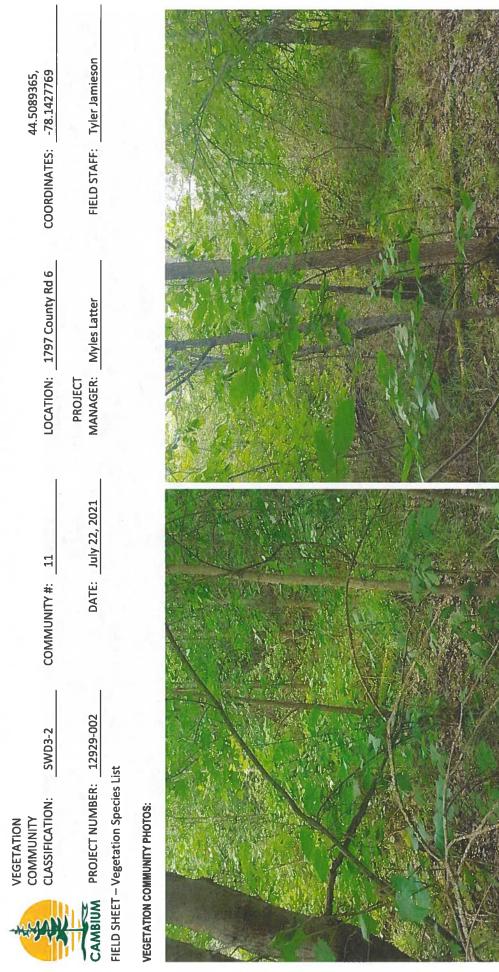
NOTES: Rod and willow dominant



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44.5089365, -78.1427769	FIELD STAFF: Tyler Jamieson		S-Rank	S4	S5	SS	•	S5	S5	S5	
44.5089365, COORDINATES: -78.1427769	FIELD STAFF:		SARO								
LOCATION: 1797 County Rd 6	PROJECT MANAGER: Myles Latter		SARA								
LOCATION:	PROJECT MANAGER:		CoC	3	2	0	ŀ	4	5	3	
11	DATE: July 22, 2021		CoW	-3	?	0		-3	-3	3	
:# \ TII	DATE:										
COMMUNI			Family	Oleaceae	Comaceae	Vitaceae	Cyperaceae	Dryopteridaceae	Aceraceae	Ulmaceae	
SWD3-2	929-002			nica				s	n	8	
NC.	CAMBIUM PROJECT NUMBER: 12929-002 FIELD SHEET – Vegetation Species List		Scientific Name	Fraxinus pennsylvanica	Comus sericea	Vitis riparia	Carex spp.	Onoclea sensibilis	Acer saccharinum	Ulmus americana	
VEGETATION COMMUNITY CLASSIFICATIO	PROJEC - Vegetat	0	Name	ų,	роомбс	Grape	ecies	Fem	aple	ĥ	
	CAMBIUM FIELD SHEET -		Common Name	Red Ash	Red-osier Dogwood	Riverbank Grape	Sedge Species	Sensitive Fem	Silver Maple	White Elm	

NOTES: Silver Maple and Ash.



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44.5105436, -78.143304	FIELD STAFF: Tyler Jamieson		S-Rank	83	SNA	55	S5		S5			
44.5105436 COORDINATES: -78.143304	FIELD STAFF:		SARO									
1797 County Rd 6, DD	PROJECT MANAGER: Myles Latter		SARA									
1797 (LOCATION: 6, DD	PROJECT MANAGER:		CoC	7		3	4		3			
: 12	DATE: July 22, 2021		CoW	3	0	-3	0	•	Ŷ			
COMMUNITY #:	1		Family	Oleaceae	Rhamnaceae	Oleaceae	Asteraceae	Cyperaceae	Ulmaceae			
VEGETATION COMMUNITY CLASSIFICATION: <u>SWD2-2</u>	PROJECT NUMBER: 12929-001	יסון סאברובא בואר	Scientific Name	Fraxinus nigra	Rhamnus cathartica	Fraxinus pennsylvanica	Solidago rugosa	Carex spp.	Ulmus americana		PHOTOS:	
VEGETATION COMMUNITY CLASSIFICATIO	CAMBIUM PROJECT NUMBER: 1	נוררה אוררו - אבפרומר	Common Name	Black Ash	European Buckthom	Red Ash	Rough-stemmed Goldenrod	Sedge Species	White Elm	NOTES: Green and Black Ash.	VEGETATION COMMUNITY PHOTOS:	



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Appendix C Species Of Conservation Concern Screening



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COMMON	CLENTIEL	Fodoral	Drove	Drawingt		CLITADEE	CDFFIFE	
NAME	NAME	SARA	SARO	SARO S-RANK	SPECIES DESCRIPTION AND HABITAT REQUIREMENTS	HABITAT	OBSERVATIONS	ASSESSMENT
Birds	- Comparison	Sand Bar		- Second			Contracts of the	
Bald Eagle	Haliaeetus leucocephalus	No Status	SC	S2N,S4B	The Bald Eagle is a bird of prey with a white head, neck and tail, a massive bright yellow beak, powerful legs, and a wingspan of over 2 m. It nests in a variety of habitats and forest types, almost always near a major lake or river where they do most of their hunting. These nests are usually on islands in freshwater lakes or in large trees such as the pine and poplar. During the winter, they may also be found near open bodies of water that do not freeze (1).	Ŷ	Known to occur in the general area	No further consideration required
Bank Swallow	Riparia riparia	ТНК	THR	S48	The Bank Swallow is a small songbird of around 12 cm long with a distinctive dark breast band, that files with quick and erratic wingbeats (1). It nests in burrows in natural and human-made settings where there are vertical faces in silt and sand deposits. This can include banks of rivers and lakes, bluffs, active sand and gravel pits, road cuts and stockpiles of soils. However, they prefer sand-silt substrates for excavating their nest burrows. They often use large wetlands as communal nocturnal roosts post-breeding or during wintering periods (2).	Ŷ	Known to occur in the general area	No further consideration required
Barn Swallow	Hirundo rustica	ТНК	THR	S48	The Barn Swallow is a mid-sized songbird with steel-blue backs and wings, glossy in males, and a line of white spots across its upper tail. It lives in a variety of open habitats for foraging, such as grassy fields, pastures, certain agricultural crops, shorelines, cottage areas, wetlands, or subarctic tundra (2). They prefer to nest within human made structures such as barns, bridges, and culverts. Barn Swallow nests are cup-shaped and made of mud, typically attached to horizontal beams or vertical walls underneath an overhang (1).	Ŷ	Known to occur in the general area	No further consideration required
Black Tern	Chlidonias niger	No Status	sc	23B	The Black Tern is a small waterbird with a forked tail, straight pointed bill, slender shape, and black head during breeding season. It builds floating nests in loose colonies in shallow marshes, with a preference for cattails. They breed primarily in the marshes along the edges of the Great Lakes, but may also use wetlands further north if suitable (1).	No	Known to occur in the general area	No further consideration required
Bobolink	Dolichonyx oryzivorus	ТНК	ТНК	848	The Bobolink is a mid-sized songbird of tan colour with black stripes, except for males during summer breeding season who are black with a white back and yellow collar. It prefers tall, grassy meadows, hayfields and some croplands, and feeds (largely on insects) on the ground in dense grasses (1). It tends to nest in forage crops: hayfields and pastures dominated by species including clover, bluegrass, and broadleaf plants (2).	Ŷ	Known to occur in the general area	No further consideration required
Canada Warbler	Cardellina canadensis	THR	S	54B	The Canada Warbler is a small songbird with bright yellow underparts and bluish-grey back and tail (1). It can be found in a variety of forest types, but is most abundant in moist, mixed forests with a well-developed, dense shrub layer. Nests are usually located on or near the ground on mossy logs, and along stream banks (3).	Yes: on-site	Known to occur in the general area	Potential significant wildlife habitat on- site
Cerulean Warbler	Cerulean Warbler Setophaga cerulea	END	THR	S3B	The Cerulean Warbler, a small songbird, is blue-green with white eyebrows and two prominent white wing bars (1). It requires relatively large tracts of mature deciduous forest (>100 ha), and nests in older, second-growth deciduous forests. During breeding season, it is found in relatively large tracts of mature deciduous forests that feature large, tall trees and an open understorey (4).	N	Known to occur in the general area	No further consideration required
Chimney Swift	Chaetura pelagica	Тнк	ТНК	S4B,S4N	The Chimney Swift is a small bird, between 12 and 14 cm, with a brown, cigar-shaped body, slender wings, and an erratic flight pattern. Prior to settlement, the Chimney Swift would mainly nest in cave walls and hollow trees. Now, it is found mostly near urban and suburban areas where the presence of chimneys or other manmade structures provide nesting and roosting habitat. They also tend to stay in habitat close to the water (1).	QN	Known to occur in the general area	No further consideration required

CAMBIUM

APPENDIX: Spe	APPENDIX: Species of Conservation Concern - County of Peterborough	tion Conc	ern - Co	unty of F	'eterborough			
COMMON NAME	SCIENTIFIC NAME	Federal SARA	Prov SARO	Provincial SARO S-RANK	SPECIES DESCRIPTION AND HABITAT REQUIREMENTS	SUITABLE HABITAT	SPECIES OBSERVATIONS	ASSESSMENT
Common Nighthawk	Chordeiles minor	ТНК	sc	S4B	The Common Nighthawk is a medium-sized bird with long, pointed wings, a long tail with a notch, and and large eyes. Its plumage of dark brown with black and white specks blends with its roost site. It is typically found in open areas such as gravel beaches, rock outcrops and burned woodlands, that have little to no ground vegetation. This species can also be found in highly disturbed locations such as clear cuts, mine tailing areas, cutivated fields, urban parks, gravel roads, and orchards (1).	Ŷ	Known to occur in the general area	No further consideration required
Eastern Meadowlark	Sturnella magna	ТНК	THR	54B	The Eastern Meadowlark is a medium-sized migratory songbird with a bright yellow throat and belly, a black V shape on its chest, and a pointed bill. It prefers pastures and hayfields, but is also found to breed in orchards, shrubby fields, human-use areas such as airports and roadsides, or other open areas. The Eastern Meadowlark can nest from early May to mid-August, in nests that are built on the ground and well- camouflaged with a roof woven from grasses (1).	N	Known to occur in the general area	No further consideration required
Eastern Whip-poor- will	Antrostomus vociferus	ТНК	ТНК	54B	The Eastern Whip-poor-will is a medium-sized bird with mottled brown and grey feathers to blend in with its surroundings, a large flattened head, and small bill. They are usually found in areas with a mix of open and forested areas such as patchy forests with clearings, forests that are regenerating after major disturbances, savannahs, open woodlands or openings in more mature forests. Breeding habitat is dependent on forest structure rather than composition, although common tests structure rather than composition, although common treas prefers to nest in semi-open or patchy forests with clearings as it forages in open areas and uses forested areas and and areas are areas and areas and areas and areas for rosting (1).	Ŷ	Known to occur in the general area	No further consideration required
Eastern Wood- Pewee	Contopus virens	X	У	54B	The Eastern Wood-pewee is a species of 'flycatcher', a bird that eats flying insects. It grows to approximately 15 cm, has greyish-olive upper parts and pale bars on its wings. This species lives in the mid-canopy layer of forest clearings and edges of deciduous and mixed forests. It prefers intermediate-age forest stands with little understory vegetation (1). It typically creates nests on tree branches 2-12 m in height (2).	Yes: on-site and adjacent lands	Known to occur in the general area	Potential significant wildlife habitat on- site
Evening Grosbeak	Coccothraustes vespertinus	No Status	SC	54B	The Evening Grosbeak is a large songbird with a thick greenish bill. It is a social bird that is often found in flocks, particularly during the winter months. Their preferred habitat is thick coniferous forest. During their breeding season, they are generally found in open, mature mixed forests dominated by Firs, White Spruce, or Trembling Aspen (1).	No	Known to occur in the general area	No further consideration required
Golden Winged Warbler	Vermivora chrysoptera	THR	X	54 8	The Golden-winged Warbler is a small songbird with distinctive yellow wing patches and patches behind their eyes. It inhabits early successional habitat of old fields and favour areas where trees are spread out or forest edges to use for perching, singing, and searching for food. They seem to prefer regeneration zones with young shrub growth, surrounded by mature forest, locations that have recently been disturbed, such as field edges, hydro or utility right-of-ways, or logged areas for their breeding sites; often frequenting dusters of herbaceous plants and low bushes (1).	Yes: on-site	Known to occur in the general area	Potential significant wildlife habitat on- site
Grasshopper Sparrow	Ammodramus savannarum	sc	S	ξξ	The Grasshopper Sparrow is a small songbird with a streaked back, a white stripe down the center of its crown, a flattish head, and a conical beak. It inhabits open grasslands and prairies with well-drained soil, preferring areas that are sparsely vegetated. It will also nest in hayfields and pastures, as well as alvars and occasionally grain crops such as barley (1).	Q	Known to occur in the general area	No further consideration required



Commun Commun APPENDIX: Species of Conservation Concern - County of Peterborough

APPENDIA: Species of Conservation Concern - County of Peterborougn			2 - III - C	חוזנא טו ד				
COMMON	SCIENTIFIC	Federal	5	Provincial	SPECIES DESCRIPTION AND HABITAT REQUIREMENTS	SUITABLE	SPECIES	ASSESSMENT
NAME Least Bittern	INAIVIE Ixobrychus exilis	2AKA THR	THR	S-KANK S4B	The Least Bittern is a small member of the heron family, reaching around 30 cm in length. It has brown and beige plumage with chestnut patches on its wings (1). The species nests in marshes (> 5 - 10 ha) and swamps dominated by emergent vegetation, preferably cattalis, interspersed with patches of woody vegetation and open water. They require dense vegetation and open water with stable levels within 10 m for nesting, and access to clear, open water for foraging (4).	No	UBSERVATIONS Known to occur in the general area	No further consideration required
Loggerhead Shrike	Lanius Iudovicianus	END	END	S2B	The Loggerhead Shrike is a small bird with a black, hooked bill, grey crown, and white throat and chest. This species has specific habitat requirements that are dependent on active livestock grazing, or grassland areas that have naturally short grass cover (i.e. alvar communities). They also require spiny, multi-branched shrubs, or barbed fencing, to catch prey. They prefer grassland habitats that have sporadic occurrences of low trees and shrubs; particularly hawthorn species, which are used as part of their feeding behaviour (1).	2	Known to occur in the general area	No further consideration required
Olive-sided Flycatcher	Contopus cooperi	ТНК	SC	S4B	The Olive-sided Flycatcher is a medium-sized songbird with olive colouring, often seen perching on top of tall trees waiting to catch their prey. It prefers open areas along natural mature forest edges, forest edges near natural openings such as rivers or swamps, human-made openings, or burned forest openings with numbers of dead trees. Breeding habitat usually consists of coniferous or mixed forests adjacent to rivers or wetlands, in Ontario often nesting in White and Black Spruce, Jack Pine, and Balsam Fir (1).	N	Known to occur in the general area	No further consideration required
Red-headed Woodpecker	Melanerpes erythrocephalus	THR	sc	54B	The Red-headed Woodpecker is a mid-sized bird, at around 20 cm long, with a vivid red head, neck and breast as well a strong bill. The species can be found in open woodland and woodland edges, often near man-made landscapes such as parks, golf courses and cemeteries. These areas must contain a large number of dead trees for perching and nesting (1).	N	Known to occur in the general area	No further consideration required
Short-eared owl	Asio flammeus	S	SC	S2N,54B	The Short-eared Owl has a large round head with small tufts of feathers, long wings, a short tail, and cryptic colouring of brown streaks. This species is found in scattered pockets across the province where suitable open habitat, including grasslands, tundra, peat bogs and marsh, can be found in sufficient quantities. Adults build nests on the ground in grassy areas and occasionally agriuitural fields (1). The main factor influencing their choice in habitat is believed to be an abundance of their food source, primarily rodents and other small mammals (2).	No	Known to occur in the general area	No further consideration required
Wood Thrush	Hylocichia mustelina	THR	Х	85	The Wood Thrush is a medium-sized songbird of around 20 cm with rusty brown coloured upper parts and white underparts with large dark spots. It breeds in deciduous and mixed forests with moderate understories, shade and abundant leaf litter where it forages for food, including larval and adult insects as well as plant material. They prefer moist stands of trees with well-developed undergrowth and tall trees for perches (1).	Yes: on-site and adjacent lands	Known to occur in the general area	Potential significant wildlife habitat on- site
Fish		State of					The second s	
American Eel	Anguila rostrata	No Status	END	51 7	The American Eel is a long, slender bodied fish, with one long fin extending down the back and around the tail, and two small pectoral fins. It has thick lips, and a protruding lower jaw that extends out above the upper jaw. At the juvenile stage, they swim up the St. Lawrence River to reach Lake Ontario and connected tributaries where they will remain for 8 to 23 years before migrating back to their spawning grounds. In Will remain for 8 to 23 years before migrating back to their spawning grounds. In Ontario, the American eel prefers mud, sand or gravel substrates during the juvenile stage when they reside primarily in the benthic zone of waterbodies. More mature eels are able to thrive in most environments provided there is available cover during daylight hours, and the habitat is accessible (2).	ê	known to occur in the general area	No further consideration required

APPENDIX: Spe	APPENDIX: Species of Conservation Concern - County of Peterborough	ation Con	cern - Co	unty of P	eterborough			
COMMON NAME	SCIENTIFIC NAME	Federal SARA	Prov SARO	Provincial SARO S-RANK	SPECIES DESCRIPTION AND HABITAT REQUIREMENTS	SUITABLE HABITAT	SPECIES OBSERVATIONS	ASSESSMENT
Lake Sturgeon	Acipenser fulvescens	No Status	END	23	The Lake Sturgeon, a large freshwater fish, has an extended snout with four whisker- like organs hanging near the mouth and is dark to light brown or grey on its back and sides with a lighter belly. In Ontario, this fish is found in the rivers of the Hudson Bay Basin, the Great Lakes basin, and their connecting waterways. Lake Sturgeon's live almost exclusively in freshwater lakes and rivers with soft bottoms of mud, sand or gravel and are usually found at depths of 5 to 20 m. They spawn in relatively shallow, fast-flowing water or if available deeper water habitat as well (1).	N	Known to occur in the general area	No further consideration required
Herptiles								
Blanding's Turtle	Emydoidea blandingii	ТНК	ТНК	ß	Blanding's Turtles are identifiable by their bright yellow throat and chin and domed shell. They spend the majority of their life cycle in the aquatic environment, usually in large wetlands or shallow lakes with high densities of water plants (1). These turtles prefer shallow, nutrient rich water with organic sediment and dense vegetation. They use terrestrial sites for travel between habitat patches and to lay clutches of eggs, often going hundreds of meters from their nearest water body. Blanding's Turtles nest in dry confictence and mixed forest habitats, as well as fields and roadsides (2). From late October until the end of April, they hibernate in the mud at the bottom of permanent water bodies (1).	2	Known to occur in the general area	No further consideration required
Eastern Musk Turtle	Sternotherus odoratus	SC	SC	ß	The Eastern Musk Turtle is small with a narrow carapace, a dark brown body and two light stripes on each side of their head (5). It is a small freshwater turtle found primarily in slow moving water bodies with abundant emergent vegetation and mucky bottoms along the southern edge of the Canadian Shield within which they burrow into overwinter. Nesting sites vary, but must be close to the water and exposed to direct sunlight (1).	°N N	Known to occur in the general area	No further consideration required
Midland Painted Turtle	Chrysemys picta marginata	sc		S.	The Midland Painted Turtle has a olive to black carapace with red or dark orange markings on the marginal scutes, as well as red and yellow stripes on the head and neck. The species uses a variety of waterbodies including, ponds, marshes, lakes and slow-moving creeks with a soft bottom and an abundance of basking sites and aquatic vegetation. This species usually hibernates on the bottom of waterbodies (5).	N	Known to occur in the general area	No further consideration required
Northern Map Turtle	Graptemys geographica	SC	SC	ß	The Northern Map Turtle is a medium sized turtle identified by its carapace's map contour-like patterning. It lives in larger lakes and rivers, requiring high water quality to support their primary prey species: molluscs. This species can often be seen in large groups basking together on rocks and logs. In the winter, the Northern Map Turtle can be found hibernating on the bottom of slow-moving rivers (1).	No	Known to occur in the general area	No further consideration required
Snapping Turtle	Chelydra serpentina	sc	sc	23	The Snapping Turtle, with its large serrated carapace, small plastron, and spiked tail, is Canada's largest freshwater turtle (5). It spends the majority of its life in water, preferring shallow water with soft mud and leaf litter, and will travel upland to gravel or sandy embankments, roadsides, along railway lines or beaches to lay their eggs (1).	No	Known to occur in the general area	No further consideration required
Spotted Turtle	Clemmys guttata	END	END	S2	The Spotted Turtle is named after the distinct yellow spots on its carapace. The species is semi-aquatic and prefers ponds, marshes, bogs and even ditches with slow-moving, unpolluted water and an abundant supply of aquatic vegetation. This species usually hibernates in wetlands or seasonally wet areas with structures such as overhanging banks, hummocks, tree roots, or aquatic animal burrows (1).	ON N	Known to occur in the general area	No further consideration required



CAMBIUM APPENDIX: Species of Conservation Concern - County of Peterborough

COMMON	SCIENTIFIC NAME	Federal SARA	Provi	Provincial RO S-RANK	SPECIES DESCRIPTION AND HABITAT REQUIREMENTS	SUITABLE HABITAT	SPECIES OBSERVATIONS	ASSESSMENT
Wood Turtle	Glyptemys inscuipta	ТНК	END	22	The Wood Turtle has orange coloured front legs, neck and chin and a sculpted carapace with raised, pyramidal scutes (5). They prefer clear rivers and streams that have moderate current, and sandy or gravelly substrates. This species spends more time on land than other turtle species including in meadows, swamps and fields. Wooded areas are an essential habitat component, and the species uses aquatic babitats for hilernation and mating. Nesting occurs in areas with sandy soil and abundant light (1).	N	Known to occur in the general area	No further consideration required
Eastern Hog-nosed Snake	Heterodon platirhinos	ТНК	ТНК	, X	The Eastern Hog-nosed Snake can be a variety of colours and patterns so is most easily identified by its flattened, upturned nose. They prefer sandy well-drained habitats such as beaches and dry forests because they lay their eggs, hibernate and burrow in these areas. The main diet of this snake is toads and frogs, so they usually stay close to water including marshes and swamps, where they have an increased chance of finding their preferred prey (1).	oz	Known to occur in the general area	No further consideration required
Eastern Milksnake	Lampropeltis triangulum	SC	NAR	प्र	The Eastern Milksnake's colouration is grey or tan with reddish alternating blotches otlines in black along its back and sides (5). It has recently been delisted from being a species at risk in Ontario (1). This species tends to use open habitars such as rocky outcrops, fields and forest edges. The preferred prey of milksneks are mice, small docents, and ground nesting birds which are amply found in and surrounding agricultural outbuilding. The milksnake is secretive and is not likely to be encountered during the day or at night while hunting (5).	Yes: on-site and adjacent lands	Known to occur in the general area	No further consideration required
Eastern Ribbonsnake	Thamnophis sauritus	SC	SC	ষ্ঠ	The Eastern Ribbonsnake is slender with three bright yellow stripes running down its back and sides and a white crescent in front of each eye. This snake is usually found close to water as they are strong swimmers, often fleeing predators by diving into shallow water. It prefers wetland habitats where its prey species, frogs and small fish, are abundant. Over winter, they congregate in underground burrows or rock crevices to hibernate (1).	Yes: on-site and adjacent lands	Known to occur in the general area	Potential significant wildlife habitat on- site
Common Five- lined Skink (Southern Shield Population)	Plestiodon fasciatus	SC	S	S3	The Common Five-lined Skink is Ontario's only lizard species. Its Southern Shield population can be found underneath rocks on open bedrock in forests and like to bask on sunny rocks and logs. They hibernate in crevices among rocks or buried in the soil (1). They hibernate in groups under rocks and tree stumps or in rotting wood (5).	N	Known to occur in the general area	No further consideration required
Western Chorus Frog	Pseudacris triseriata	ТНК	ı	ß	The Western Chorus Frog is small with a dark stripe running through its eye and a light stripe underneath (5). It is primarily a lowland terrestrial species that requires access to terrestrial and aquatic habitats in close proximity to one another. Relying on marshes and wooded wetlands adjacent to forested habitats, this species also requires isolated, predator free pools for breeding. Temporary pools, such as vernal pools in wooded area, are preferred. This species hibernates terrestrially in avariety of environments, including leaf litter, wood debris, and vacant animal burrows (2).	Yes: on-site	Known to occur in the general area	No further consideration required
Invertebrates								
Monarch Butterfly Danaus plexippus	Danaus plexippus	S	S	S2N,54B	The Monarch is an orange and black butterfly with small white spots and a wingspan of around 10 cm. It relies on milkweed plants as a food source for growing caterpillars, but the aduit butterflies forage in diverse habitats for nectar from wildflowers (1).	Yes: on-site	Known to occur in the general area	Potential significant wildlife habitat on- site

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CAMBIUM APPENDIX: Spe	APPFNDIX: Species of Conservation Concern - County of P	ation Conc	tern - Co	untv of P	eterborough				
COMMON NAME	SCIENTIFIC NAME	Federal SARA	Prov SARO	Provincial SARO S-RANK		SUITABLE HABITAT	SPECIES OBSERVATIONS	ASSESSMENT	
Mottled Duskywing	Erynnis martialis	No Status	END	23	The mottled duskywing is a medium-sized butterfly in the skipper family with a wingspan of 25-42 mm. It is dark grey with yellow-brown spots on its hind wings that give the species its mottled appearance and its name. The wings of freshly emerged aduits have a purplish indescence that fades with age. The mottled duskywing tends to live in dry habitats with spars vegetation. These include open barrens, sandy patches among woodlands, and alvars. In Ontario, the mottled duskywing will only deposit their eggs on two closely-related plants: New Jersey tea and prairie redroot (1).	Q	Known to occur in the general area	No further consideration required	
West Virginia White	Pieris virginiensis	No Status	SC	S3	The West Viginia White is a small, dingy white butterfly. This species is found in moist deciduous woods, and requires a supply of toothwort, a small, spring-blooming plant, which provides the only source of food for its larvae. The West Virginia White is found mostly in the central and southern parts of Ontario, but its range extends north to Manitoulin and St. Joseph islands (1).	Ŷ	Known to occur in the general area	No further consideration required	
Yellow-banded Bumble Bee	Bombus terricola	X	Х	SSES	The Yellow-banded Bumble Bee is a medium-sized bumble bee with a distinct yellow and black abdominal band pattern found on its queens, males, and workers. This species is a forage and habitat generalist, able to use a variety of nectaring plants and environmental conditions. It can be found in mixed woodlands, particularly for nesting and overwintering, as well as a variety of open habitat such as native grasslands, farmlands and urban areas. The Yellow-banded Bumble Bee ranges from the Mixedwood Plains of southern Ontario to the Hudson Bay Lowlands in the north (1).	Yes: on-site	Known to occur in the general area	Potential significant wildlife habitat on- site	
Mammals				No. of States					
Tri-colored Bat	Perimyotis subflavus	END	END	53?	The Tri-colored Bat is small, with pale brown with orange-red forearms, muzzle, and ears. It is named for the black, yellow, and brown hairs on its back. It is considered rare in this region of Ontario which is at the northernmost limit of the natural range. These bats prefer to nest in foliage, tree cavities and woodpecker holes, but are occasionally found in buildings; though this is not their preferred habitat. Winter hibernation takes place in caves, mines and deep crevices. Tri-colored Bats prefer an open forest habitat type in proximity to water (6).	°N S	Known to occur in the general area	No further consideration required	
Eastern Small- footed Myotis	Myotis leibii	No Status	END	\$2S3	The Eastern Small-footed Myotis has fur with black roots and shiny brown tips as well as very small feet. In the spring and summer, the Eastern Small-footed Myotis will roost in a variety of habitats, including in or under rocks, in rock outcrops, in buildings, under bridges, or in caves, mines, or hollow trees. They change their roosting locations daily and hunt at night for insects. They hibernate in winter, often in caves and abandoned mines choosing colder and drite sites than other similar bats (1).	Q	Known to occur in the general area	No further consideration required	
Little Brown Myotis	Myotis lucifugus	END	END	\$	The Little Brown Myotis has glossy brown fur and a fleshy projection covering the entrance to its ears. This species roosts in trees and buildings, often selecting attics, abandoned buildings and barns for summer colonies where they can raise their young. Little Brown Bats hibermate from October/November to March/April, most often in caves or abandoned mines that are humid and remain above freezing (1).	°N N	Known to occur in the general area	No further consideration required	
Northern Myotis	<i>Myotis</i> septentrionalis	END	END	ß	The Northern Myotis has dull yellow-brown fur with pale bellies and long, rounded ears. This species is found in boreal forests, roosting under loose bark and in the cavities of trees. These bats hibernate from October/November to March/April, most often in caves or abandoned mines (1).	Ň	Known to occur in the general area	No further consideration required	



APPENDIX: Species of Conservation Concern - County of Peterborough

COMMON	SCIENTIFIC	Federal	Prov	Provincial		SUITABLE	SPECIES	
NAME	NAME	SARA	SARO	SARO S-RANK	SPECIES DESCRIPTION AND HABITAL REQUIREMENTS	HABITAT	OBSERVATIONS	ASSESSIMENT
Algonquin Wolf	Canis Iycaon	S	ТНК	ß	Formerly called the Eastern Wolf, this canine was recently renamed the Algonquin Wolf. In the southern portion of the province, this species prefers deciduous and mixed forest landscapes while their northern range include mixed and coniferous forests. It is most prevalent in areas with abundant prey species which include Beaver, White-tailed Deer and Moose. Dens sites are usually found in coniferous forests with easily excavated soil types like sand and close to a permanent water source (1).	Ŷ	Known to occur in the general area	No further consideration required
Trees, plants, fi	Trees, plants, fungi and lichens							
American Ginseng	Panax quinquefolius	END	END	23	American Ginseng is a perennial plant which grows up to 60 centimetres in height. The leaves typically have five leaflets arranged in a whorl at the end of the leaf stem. The root looks like a gnarty parsnip. The flowers are an inconspicuous green-white in colour, but the berries are bright red and arranged in a cluster. In Ontario, the American Ginseng typically grows in rich, moist, and mature deciduous woods dominated by Sugar Maple, White Ash, and American Basswood. It typically grows in deep, nutrient rich soil over limestone or marble bedrock (1).	Ŷ	Confirmed absent through targeted surveys	No further consideration required
Butternut	Juglans cinerea	END	END	527	The Butternut is a medium sized tree reaching 30 m in height. It has large compound leaves with 11 to 17 leaflets. The fruit is oval, fuzzy and sticky. In Ontario, the Butternut prefers moist, well-drained soil, often along streams, or occasionally well- drained gravel sites. It grows alone or in small groups in deciduous forests (1).	No	Confirmed absent through targeted surveys	No further consideration required
Pale-bellied Frost Lichen	Physconia subpallida	END	END	S	The Pale-bellied Frost Lichen resembles a light dusting of frost on a dark tree trunk. This species is found throughout eastern North America, growing in wooded areas rich in hardwood species, such as White Ash, Hop Hornbeam (Ironwood), Black Walnut, and American Elm. It is also common to find this species growing on fenceposts or boulders within or near these wooded areas. In Ontario, this species has been found in the following counties: Frontenac, Haliburton, Hastings, Peterborough, Lanark and Renfrew (1).	ON	Confirmed absent through targeted surveys	No further consideration required
References	nment Conservatio	n and narks	(2019) So	eries at rist	References 1 Ministru of Environment Concensation and narke (2019) Socies at rick in Ontario Betrieved from https://www.ontario.cs/pase/snariae-rick-ontario			

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County of Peterborough Land Division 470 Water Street, Peterborough, Ontario K9H 3M3

470 Water Street, Peterborough, Ontario K9H 3M3 email: AHamilton@ptbocounty.ca T-705-743-3718 or 800-710-9586, Ext. 2406 Fax: 705-876-1730



Application for Consent

Note to Applicant: All questions must be answered or	Office Use:			
application may be returned. Application Fee: \$1150.00 must accompany fully completed application and 6 copies. It is strongly advised the applicant complete a Preliminary	File No. B - 23.22			
Planning Department. Have you done so: Y/N Y	Date Received: RECEIVED			
If yes, were there any Studies required? Y/N Y (i.e. Traffic Study, Archaeological Study and	FEB 2 2 2022			
Environmental Impact Analysis (EIA). Have you attached 4 copies of each to this application? Y/N Y	LAND DIVISION			
1. Owner information				
Name(s): SHERRY WEBSTER	Address: 1715 COUNTY RD 6			
P.O. Box:	City/Province: DOURO DUMMER			
Phone: (H) 705-740-4452 (B)	Postal Code: K0L 3A0			
E-mail: swebster1715@gmail.com				
Do you wish to receive all communications? 🗹 Yes 🔲 No				
2. Authorized Agent/Solicitor Information				
Name(s):	Address:			
Name(s):	City/Province:			
Phone: (H) (B)	Postal Code:			
E-mail:				
Do you wish to receive all communications?				
3. Property Description				
Ward: dummer Township: Douro Dummer	Lot: 25 Concession: 3			
Municipal (911) Address: 1797 COUNTY RD 6 Tax Roll #: 1522-020-004-09100				
Registered Plan #:				
4. Type and Purpose of Proposed Transaction				
Transfer: 🗹 Creation of a New Lot 🔲 Addition	to a Lot (moving/adjusting lot line)			
Other: Right-of-Way Easeme	nt Correction of Title Charge Lease			
5. Transferee	······			
If known, the name of the person(s), to whom land or interest				
Address:	relationship to owner:			

6.	Description of Severed Lot (provide both metric & imperial	measurements and	d include all dimensions on sketch)
	Frontage (metres): 76.2 Depth (metres):	45.72	Area (m ² or hectares): <u>.4</u>
	Frontage (feet): 250 Depth (feet): 15	0	Area (ft ² or acres): <u>1 AC</u>
	Existing Use: (i.e. residential, commercial, recreational) RESIDENTIAL	Proposed Use: (i RESIDENT	.e. residential, commercial, recreational) IAL
	Name Existing Buildings & Structures, including well & septic (and show on sketch with setbacks) NONE		uildings & Structures, including well & septic tch with setbacks)
	Type of Access:	ad	□Provincial Highway
	□ Seasonally maintained municipal road □ Private road □ Water □ Parking/docking facilities – distance fro		
	Water Supply: Publicly owned/operated piped water system Privately owned/operated individual well Privately owned/operated communal well Lake or other water body Other If a septic system exists on the severed parcel, when was it inst How far is it located from the lot line(s) & well?(ft. or mete Have you shown the well & septic locations and setbacks on the	Publicly owned/o Privately owned/o Privately owned/o Privately owned/o Privy Other	
	If the severed lot is an "Addition" or "Lot Line Adjustme If not, please skip this section and move onto Section 8:		e the following information.
7.	7. Description of Lot Being Added To (provide both metric & imperial measurements and include all dimensions on sketch)		
			Area (m ² or hectares):
	Frontage (feet): Depth (feet):		Area (ft ² or acres):
	Existing Use: (i.e. residential, commercial, recreational)	Proposed Use: (i	.e. residential, commercial, recreational)
	Name Existing Buildings & Structures, including wells & septic (and show on sketch with setbacks)		uildings & Structures, including wells & septic tch with setbacks)

 Official Plan Designation:
 Current Zoning:

 Type of Access:
 Image: County Road

 Municipal maintained road
 Image: County Road

 Seasonally maintained municipal road
 Image: Private road or right-of-way

 Roll # of Lot Being Added to:
 Image: County Road

8.	Description of Re	tained Lot (provide bo	th metric & imperia	al measurements	and include all dimensions on	sketch)
	Frontage (metres):	500 M	Depth (metres):		Area (m ² or hectares):	3.5 H
	Frontage (feet):	1640 feet	Depth (feet):	irregular	Area (ft ² or acres): (i.e. residential, commercial, re	
	Existing Use: (i.e.	residential, commercial	, recreational)	Proposed Use:	(i.e. residential, commercial, re	ecreational)
	VAC	ANT		Ré	SIDENTIAL	
	Name Existing Build (and show on skete	lings & Structures, incluc ch with setbacks)	ling wells & septic	(and show on sl	Buildings & Structures, includin tetch with setbacks)	g wells & septic
	Type of Access:					
	Municipal maintai	ned road	🕅 County Ro	ad	Provincial Highway	
	Seasonally mainta	ained municipal road	Private roa	d or right-of-way	Other	
	Water	Parking/dockin	g facilities – distand	ce from these to the	nearest road :	
	Privately owned/o		^{em} N/B	Publicly owned Privately owned Privately owned Privately owned Privately owned	II: (if existing, show on sketch /operated sanitary sewage syst d/operated individual septic tan d/operated communal septic tan	k k
		from the lot line(s) & we well & septic locations				
0	Legal Planning D					
9.	What is the current (this information is a	Township Official Plan (County Official Plan des available from the Prelim	ignation on this pro inary Severance Re	perty? 1994 eview and/or from t	he Township)	
	Explain how the app	lication Conforms with th	ne current Official P	lans: SEE ATTA	CHED meets relea	unt relien
	What is the current a	zoning on this property, a available from the Prelim	as found in the Tow	nship Zoning By-L	aw? 2010	
0 0	rovincial Policy					
ls (1	the application cons	sistent with the Provincia ailable from the Prelimin cation is consistent:			County Planning Dept.)	⊡Yes □No
_		meets	re leviant	- policia	<u> </u>	_
(Dak Ridges Moraine	within an area of land d Conservation Plan appli to the entire County of	es to portions of Ca	van Ward only;		X Yes 🗆 No
lf	yes, explain how the	application conforms or	does not conflict w	vith provincial plan(s	s)?	
		m	ets pulicie	>		
			1			
11.	Restrictions of Su	ibject Land				

Are there any easements or restrictive covenants (i.e. hydro, Bell) affecting the subject land?

If yes, describe the easement or covenant and its effect: _

⊡ No

Yes

Is the subject land now,	or has it been, the subject of an a	application for a Plan of Subdivision under Section		
51 or a consent under S	ection 53 of the Planning Act?	···	🗆 Yes	🖸 No
Has the owner of the sul	bject land severed any land from	the original acquired parcel?	C Yes	₽No
If ves, indicate this infor	mation on the required sketch and	provide the following (if known):		
File No. B-	, Transferee:	Date of Transfer: Date of Transfer:		
léves plasse provids th	e fellouine.			
If yes, please provide the Type:	e following: File No	Status:		
If yes, please provide the Type:	File No	Status:		
Type: Minimum Distance Se Are there any barns with	File No eparation (MDS) hin 750-1,500 metres (2,460-4,92	Status: 1 feet) of the subject property which currently		
Type:	Eparation (MDS) hin 750-1,500 metres (2,460-4,92 f housing, livestock?	1 feet) of the subject property which currently	□Yes	⊡ No
Type: Minimum Distance Set Are there any barns with house, or are capable of Are there any anaerobic	File No eparation (MDS) hin 750-1,500 metres (2,460-4,92 f housing, livestock? c digesters within 750-1,500 metr	1 feet) of the subject property which currently res (2,460-4,921 feet) of the subject property?		
Type: Minimum Distance Set Are there any barns with house, or are capable of Are there any anaerobic	Eparation (MDS) hin 750-1,500 metres (2,460-4,92 f housing, livestock?	1 feet) of the subject property which currently res (2,460-4,921 feet) of the subject property?	□Yes	⊡ No
Type: Minimum Distance Set Are there any barns with house, or are capable of Are there any anaerobic	File No eparation (MDS) hin 750-1,500 metres (2,460-4,92 f housing, livestock? c digesters within 750-1,500 metr	1 feet) of the subject property which currently res (2,460-4,921 feet) of the subject property?	□Yes	
Type:	File No eparation (MDS) hin 750-1,500 metres (2,460-4,92 f housing, livestock? c digesters within 750-1,500 metr	1 feet) of the subject property which currently res (2,460-4,921 feet) of the subject property? barn.	□Yes □Yes	

	⊡N/A
Is the severance to dispose of a residence surplus to a farming operation (must have 2 houses)?	🛛 Yes 🔲 No
Is this severance to create a new farm parcel approximately 40 hectares (100 acres) in size?	🛛 Yes 🗖 No
Is this severance for a commercial or industrial "agriculture-related" use?	🛛 Yes 🛛 No

15. Adjacent Lands Surrounding the Landholding

Please state the names of the owners, the use of the land and buildings existing on the lands surrounding the applicants' entire landholding. **This information should also be on the sketch,** and can be obtained from the Township or Land Division Office. If more room is needed, please add extra Schedule page.

Direction	Name of Owner (only when known to the applicant)	Use of Land – (must be filled in) (i.e. farm, residential etc.)	Buildings (i.e. house, barn etc.) (must be filled in)
North		agr	house, barn
South		agr	house, barn
East		agr	house, barn
West		agr	

16. Driving Directions

Please describe in detail driving directions to the subject property: PROPERTY IS NORTH ON CR & AND LOT IS BETWEEN THE ENTRANCE OF 1757 AND 1797

PROPERTY IS NORTH ON CR 6 AND LOT IS BETWEEN THE ENTRANCE OF 1757 AND 1797

PROPERTY IS NORTH ON CR 6 AND LOT IS BETWEEN THE ENTRANCE OF 1757 AND 1797

PROPERTY IS NORTH ON CR 6 AND LOT IS BETWEEN THE ENTRANCE OF 1757 AND 1797

Page 4

Signatures Page

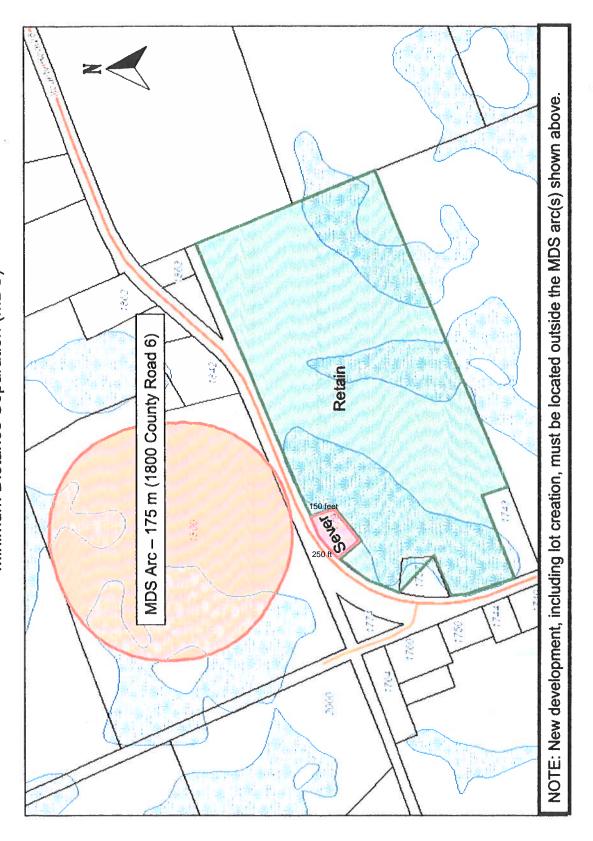
If the applicant is not the owner of the subject land, a written authorization of the owner that the applicant is authorized to act as agent and make the application on his/her behalf is required (original please).

If the applicant is a Corporation acting without agent or solicitor, the application must be signed by an Officer of the Corporation with a declaration indicating that the said Officer has the authority to bind the Corporation and the <u>Corporation's Seal</u> (if any) must be affixed.

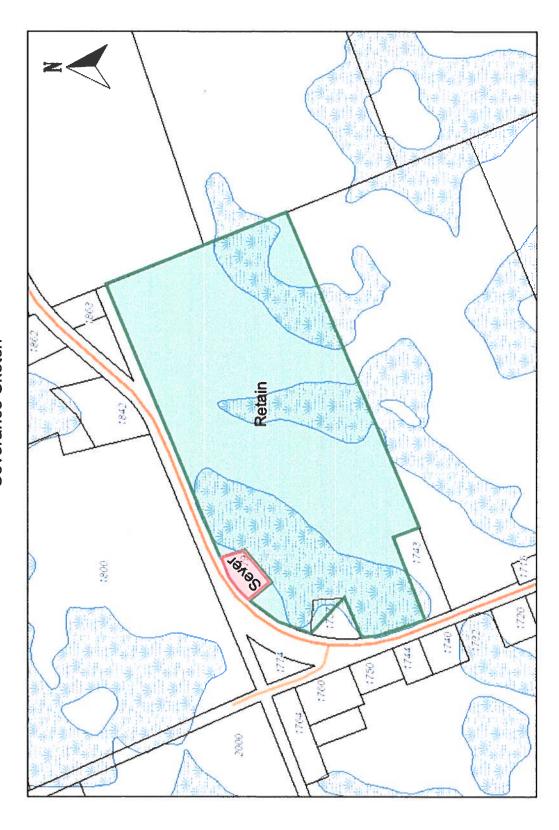
Signature(S) Keli day of Dated at the (City, Township) of Signature of owner(s) or authorized solicitor/agent Signature of owner(s) or authorized solicitor/agent Declaration This section must be signed before a Commissioner for Taking Affidavits or a designated Official of the Municipality (i.e. Reeve, Clerk, Secretary-Treasurer of the Land Division Committee, lawyer, etc.) of the Township, City, etc. of 🎢 ohode l/we. nn application are true, and I make this solemn declaration as if made under oath and by virtue of the Canada Evidence Act. Declared before me at the or authorized Agen City. Townshill on in the ountv. Rea Owner or authorized Agent on, etc 20 22 Adrienne Buchanan Commissioner of Oath sioner, etc. for taking affidavits Township of Asphodel-Norwood 705-639-5343 Personal information contained on this form is legally authorized under Sec.53 of the Planning Act and O.Reg.197/96 for the purpose of processing your planning application and will become part of a public record. Pursuant to Sec.1.0.1 of the Planning Act, and in accordance with Sec.32(e) of the Municipal Freedom of Information and Protection of Privacy Act the County of Peterborough may make all planning applications and supporting material available to the public in hard copy or electronically. If you have any questions about the collection, use or disclosure of this information by the County of Peterborough, please contact the CAO or Clerk, County of Peterborough, 470 Water Street, Peterborough, Ontario K9H 3M3

An "original" signed copy of the application and sketch must be submitted, together with 6 copies of both the application and sketch, each copy stapled individually with a sketch. All copies of the sketch or survey must be coloured – red for severed lots, green for retained. Copies may be double-sided. Please submit application with a cheque for \$1150.00 payable to the "County of Peterborough".

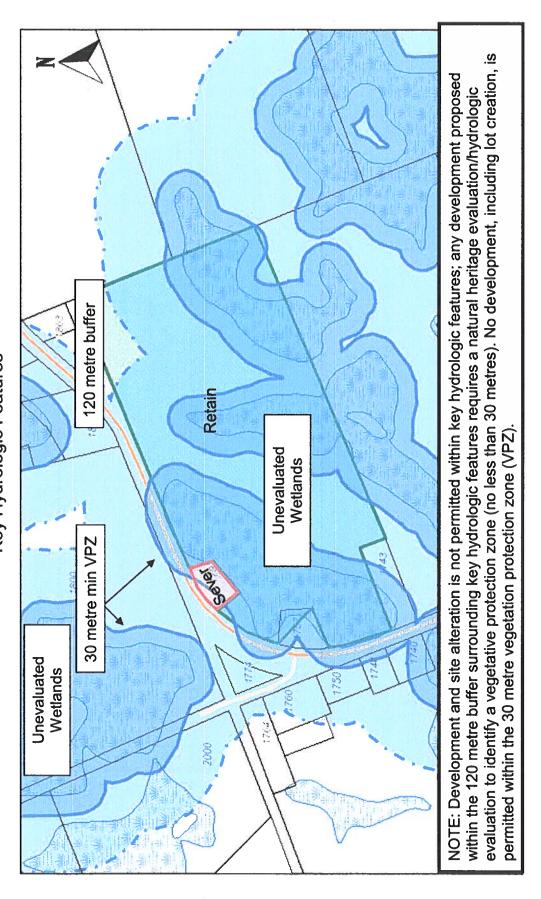
Roll #1522-020-004-09100 Lot 25, Concession 3, Dummer (Webster) Minimum Distance Separation (MDS)



Roll #1522-020-004-09100 Lot 25, Concession 3, Dummer (Webster) Severance Sketch

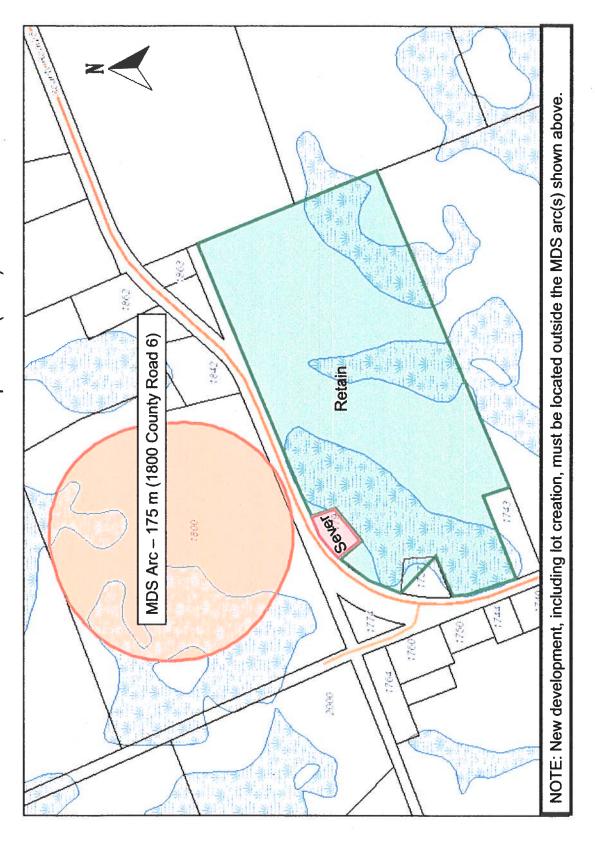


Roll #1522-020-004-09100 Lot 25, Concession 3, Dummer (Webster) Key Hydrologic Features



Scale (metric) 1:6000 Roll #1522-020-004-09100 Lot 25, Concession 3, Dummer (Webster) Minimum Distance Separation (MDS)

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Scale (metric) 1:6000

Preliminary Severance Review

Prepared by the Peterborough County Planning Department



Date: January 28, 2022 Name: Sherry Webster Email: swebster1715@gmail.com

Agent: n/a **Phone:** 705-740-4452

Municipality: Douro-Dummer, Dummer Ward

Lot: 25 Concession: 3

Roll No.: 1522-020-004-09100

Municipal Address: 1797 County Road 6

Type of Severance: residential lot(s)

	Severed	Reta	ined
County Official Plan	Rural	Ru	ral
Municipal Official Plan	Rural	Ru	ral
Municipal Zoning	Rural (RU)	Rural	(RU)
Area and Frontage	± 0.3 ha, ± 84m frontage on	± 18.5 ha, ± 5	00 m frontage
_	County Road 6	on Count	y Road 6
Existing Use/Buildings	Vacant	Vac	ant
Conforms to Provincial	policies?	🛛 Yes	🗌 No
Conforms to County Off	icial Plan policies?	🛛 Yes	🗌 No
Conforms to Township	Official Plan policies?	🛛 Yes	🗌 No
Conforms to Township	Zoning By-Law?		
Severed parcel mee	🖂 Yes	🗌 No	
Retained parcel mee	ets Zoning requirements:	🛛 Yes	🗌 No
Studies required to sup	port the application?	🛛 Yes	🗌 No

- Natural Heritage / Hydrologic Evaluation - already undertaken

Provincial Policy Review:

The following key natural heritage features and/or key hydrologic features have been identified on or adjacent to the subject property:

⊠ Wetlands	Significant Wildlife Habitat	Area of Natural and Scientific Interest (ANSI)
E Fish habitat	Significant Woodlands	Other key hydrologic feature (stream, pond, lake)
Species at Risk	Habitat of Endangered o	
Does the proposal re	quire a Natural Heritage Evalu	uation to address the features

Does the proposal require a Natural Heritage Evaluation to address the fea

🛛 Yes 🗌 No

Section 4.2.4.1 of the Growth Plan (2020) states that development and site alteration, including lot creation, within 120 metres of a key hydrologic feature will require a natural heritage evaluation/hydrologic evaluation that identifies a vegetation protection zone (VPZ) that is no less than 30 metres. Since the severed parcel is located within 120 metres of the above key hydrologic features, a natural heritage evaluation and/or hydrologic evaluation was required. The applicant submitted the NHE confirming that the proposed severance can be located outside the wetlands and 30 metre VPZ.

Please note that any technical study submitted to the County will be peer reviewed at the County's request. Both the cost of the study and the peer review will be at the applicant's expense. ORCA will be requested to peer review this study during the formal severance review process.

Does the proposal meet Minimum Distance Separation requirements?

Yes No Not Applicable

Minimum Distance Separation Formula I (MDS I) as per policy 1.1.5.8 of the 2020 Provincial Policy Statement has been calculated for the livestock facilities in the vicinity of the proposed severed lands. MDS I setbacks must be calculated for any livestock facilities reasonably capable of housing livestock regardless as to whether or not it is currently being used for such purposes. The proposal appears to meet MDS setbacks for the barns located on the property across the road at 1800 County Road 6.

County Official Plan Policy Review:

Section 2.6.3.5 of the Plan suggests that residential severances for land holdings located in the Rural Area should be discouraged in favour of development in Settlement Areas in an effort to promote orderly growth and development. However, severances in the Rural Area may be considered provided Health Unit, road frontage and access and Minimum Distance Separation requirements can be met (Ss.2.6.3.5 (A), (C) & (G)) and provided the applicable policies of Sections 2.6.3.1, 2.6.3.5, 4.1.3 and 4.3 are complied with (S.2.6.3.5 (H)).

Section 2.6.3.1 of the Plan states that "under no circumstances shall severances be recommended for approval where proposed severances are contrary to this Plan and/or the respective local Official Plan."

Municipal Official Plan Policy Review:

Permitted uses in the Rural designation include agricultural uses and low-density residential development. In the Rural designation a maximum of two severances are permitted from a property as it existed 25 years prior to the date of application (S. 6.1.1 & 6.2.2.5(d)). Peterborough County Land Division records indicate that the subject property has received one severance, and therefore the property remains eligible for one more severance.

In addition to the above requirement for a residential lot in the Rural designation, the landowner must have owned the property for a minimum of 5 years, and the size of the new lot created specifically for a residential use shall not exceed 1 hectare in area (S. 6.2.2.5(d)(i)&(ii)). Based on a review of records available to Peterborough County Staff, the property owner has owned the property for a minimum of 5 years. In addition, the lot meets the maximum 1 hectare size requirement.

The subject property fronts onto County Road 6. Section 7.12.11 states that "the creation of lots fronting on and having access to a County Road should generally be discouraged where an alternative access is available from a Township road. A consent shall not be granted where the consent does not comply with the policies of the applicable road authority." Please see attached comments from the County's Public Works Department.

As applicable, consents meet road frontage & access, Zoning By-law, Minimum Distance Separation and Health Unit requirements (S. 7.12.2, 7.12.4, 7.2.3 & 7.12.12). As proposed, the parcel does not meet the minimum lot area requirement of the zoning bylaw. It is recommended that that proposed lot be increased in size to 0.4 ha in order to comply. There appears to be sufficient developable area to accommodate a 0.4 ha sized lot. The proposal meets the minimum lot frontage requirements.

Reviewed By: Amanda Warren

Additional Notes

Agencies to be contacted by landowner or agent ((marked with an X):
⊠ Township	Peterborough Public Health
Conservation Authority	Trent-Severn Waterway
Source Water Risk Management Officer	First Nations
Ministry of Environment, Conservation and Parks	Other

Proposal requires confirmation from the Township or identified agency regarding policy conformity.

* The landowner should be aware that local council may not support a rezoning or minor variance to create a lot that is not in compliance with the provisions of the Zoning By-law.

* The lands may be within the watershed of a local Conservation Authority. It is recommended that you contact the Authority to determine what, if any, permits may be necessary:

No Conservation Authority in the area

Otonabee Region Conservation Authority (ORCA), (705) 745-5791

Crowe Valley Conservation Authority (CVCA), (613) 472-3137

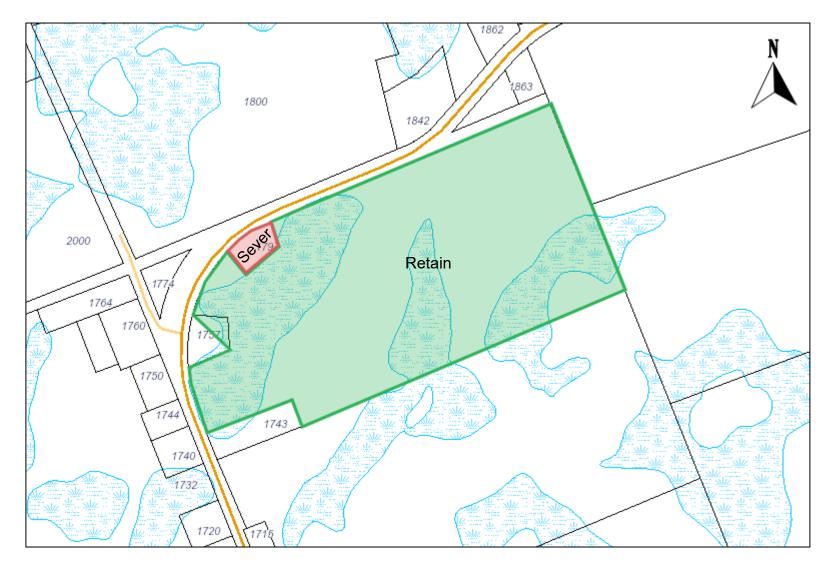
Kawartha Region Conservation Authority (KRCA), (705) 328-227

* It is the responsibility of the landowner to identify endangered and threatened species and their habitat on the property prior to undertaking work, and to ensure that the work/activity will not result in negative impacts. Landowners are encouraged to consult with the Ministry of Environment, Conservation and Parks (MECP) if they have questions about the *Endangered Species Act, 2007 (ESA)*. Any sightings of a threatened or endangered species during development and construction on the property must be reported in accordance with the ESA.

Important

Our position on the overall conformity of the proposal is based on information available at the time of review. Subsequent information from commenting agencies can change our comments relating to any formal application for severance which is subsequently filed. The above-noted comments should not be construed as preliminary approval or denial of a proposal but recognized as a position of the County Planning Department based on the availability of current information. Roll #1522-020-004-09100

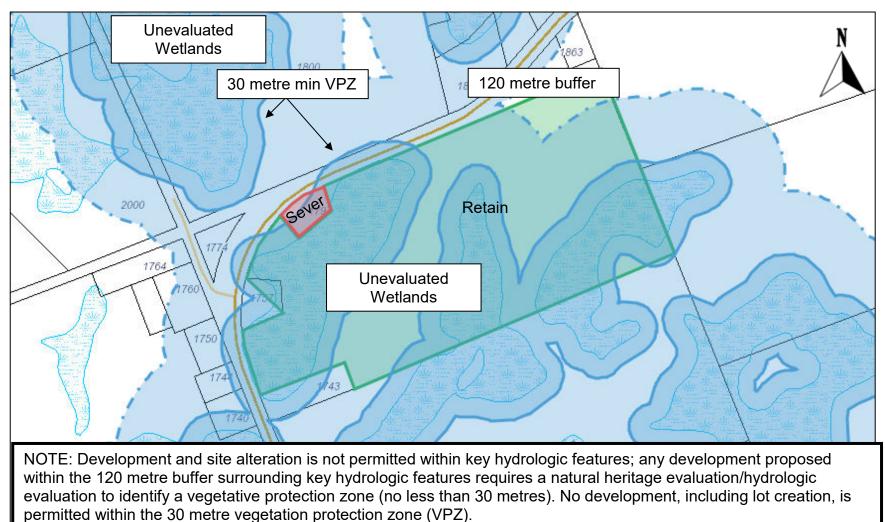
Lot 25, Concession 3, Dummer (Webster) Severance Sketch



Scale (metric) Page¹266 of 355

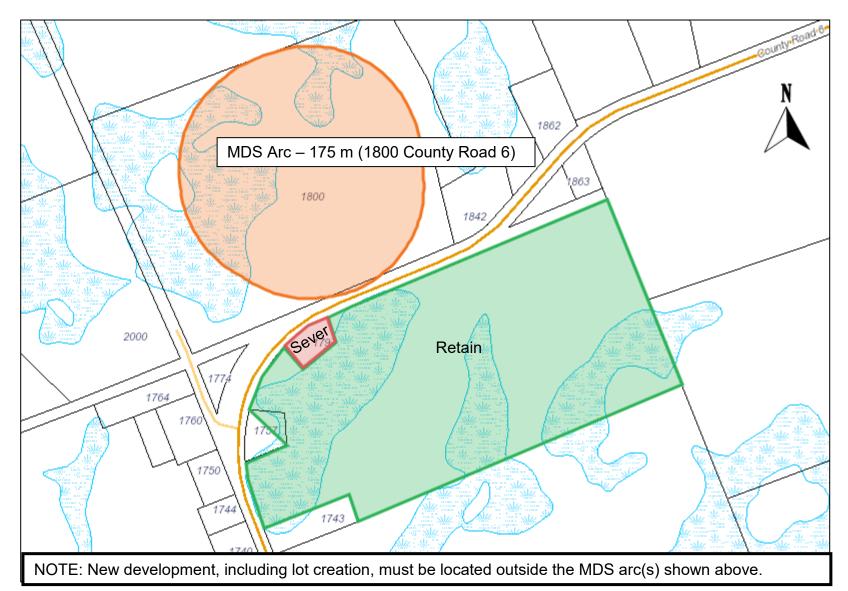
Roll #1522-020-004-09100

Lot 25, Concession 3, Dummer (Webster) Key Hydrologic Features

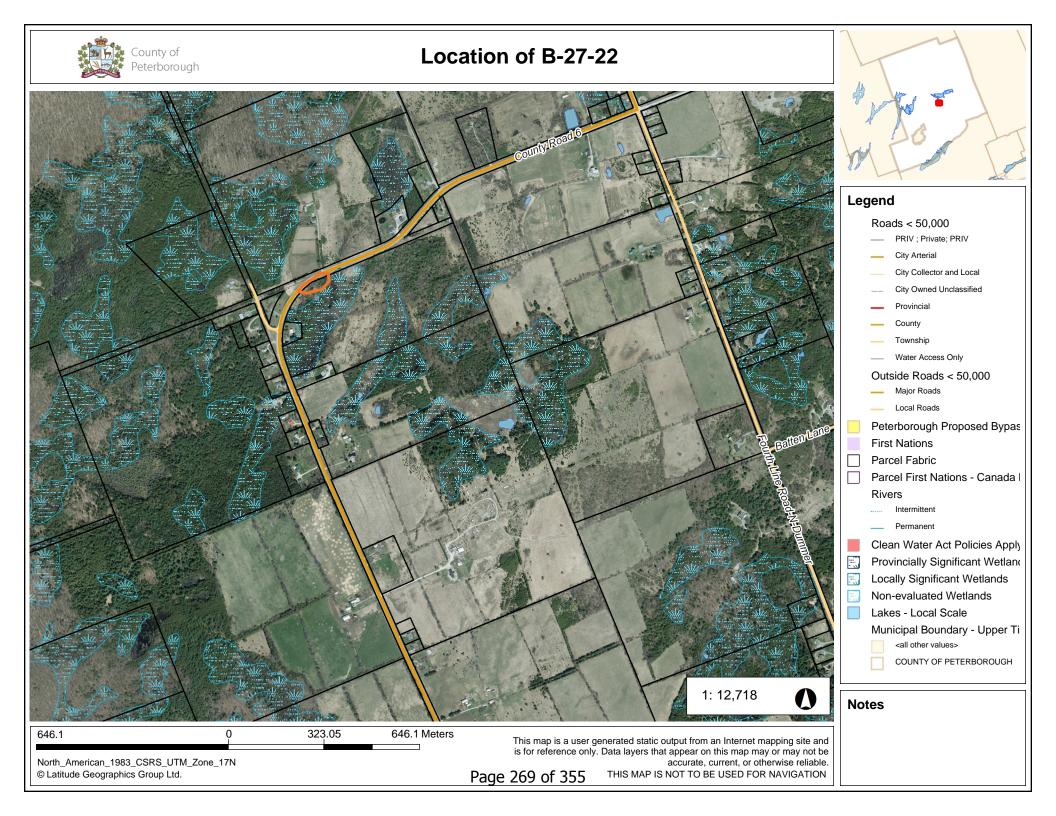


Scale (metric) Page¹267 of 355 Roll #1522-020-004-09100

Lot 25, Concession 3, Dummer (Webster) Minimum Distance Separation (MDS)







Douro-Dummer

Report to Planning Committee From: Martina Chait-Hartwig Date: May 27, 2022

Severance Report

File No: B-27-22 – Minshall-McGriskin Name: David Minshall and Valerie McGriskin Location: 921 Douro First Line Road Lot 12, Concession 1, Douro Ward Roll No. 010-002-03001

Purpose of the applications – Creation of one residential lot

Official Plan Designation:

Severed Lot:	Rural
Retained Lot:	Rural

OP Conformity:

Residential uses are permitted uses in the Rural Designation, provided that fragmentation of farm lands and conflict with adjacent farm operations are not created.

Previous Severances:

A maximum of two consents to create new lots may be permitted from a property within the Rural designation, as it existed 25 years prior to the date of application.

Zoning:		Rezoning Required:
Severed:	Rural	No
Retained:	Rural	No

Zoning Conformity:

The severed lot will meet the area and frontage requirements for residential use in the Rural Zone (Section 9.2.4).

The retained lot will meet the area and frontage requirements for residential or agricultural use in the Rural Zone (Section 9.2.1 and 9.2.4).

PPS and Growth Plan Conformity:

The severance application appears to be in conformity with the PPS. The proposed lot is located within 120 metres of mapped key hydrological features. A Natural Heritage Evaluation provided and reviewed by ORCA on April 7, 2022.

To ensure compliance with the PPS and Growth Plan, staff are recommending that a mitigation measures agreement be entered into based on the recommendations found in Section 5 and 7 of the Natural Heritage Evaluation, completed by Cambium dated

December 20, 2021. As the proposed lot is located outside of the 30 metre Vegetative Protective Zone a re-zoning application is not required.

Entrance Report:

A safe entrance is possible but a new culvert and a 3-metre road widening strip is required.

CBO Report: A report was not available at the time of writing

Comments: Please see a copy of the County's Preliminary Review which is attached.

All department managers have been circulated for comment on this application.

Recommendation:

That it be recommended to Council that Severance Application B-27-22 for David Minshall and Valerie McGriskin be approved, and if approved by the Peterborough County Land Division Committee that the following conditions be imposed:

- \$1250.00 cash-in-lieu of parkland be paid to the municipality

- That a 3-metre strip of frontage from the severed parcel be deeded to the Township for road widening purposes

- That a new entrance with new culvert be installed to the satisfaction of the Manager of Public Works

- That a test hole for the septic system be inspected, there is a fee to inspect test holes to ensure a septic system would be viable – current fees are \$150 per lot severed and applicant is responsible for the digging of the test holes

- A Mitigation Measures Agreement is to be entered into between the Owner and the Municipality and registered on title at the owner's expense, which would recognize the recommendations included in Section 5 and 7 of Natural Heritage Evaluation, completed by Cambium dated December 20, 2021.

Report Approval Details

Document Title:	B-27-22 - Minshall-McGriskin.docx
Attachments:	 - 27-22 Application.pdf - 27-22 ORCA.pdf - McGriskin Minshall - PSR.pdf
Final Approval Date:	May 20, 2022

This report and all of its attachments were approved and signed as outlined below:

Elana Arthurs

County of Peterborough Land Division 470 Water Street, Peterborough, Ontario K9H 3M3 email: AHamilton@ptbocounty.ca T-705-743-3718 or 800-710-9586, Ext. 2406 Fax: 705-876-1730



Application for Consent

Note to Applicant: All questions must be answered or application may be returned. Application Fee: \$1150.00 must accompany fully completed application and 6 copies. It is strongly advised the applicant complete a Preliminary	office Use: File No. B - 27-22			
Severance Review with the County of Peterborough Planning Department. Have you done so:	Date Received: RECEIVED			
If yes, were there any Studies required? Y/N	FEB 2 2 2022			
Have you attached 4 copies of each to this application?	LAND DIVISION			
1. Owner Information				
Name(s) DAY 10 MINSHALL VALERIE	Address: 921 DOURS FIRST LINE			
P.O. Box:	City/Province: DUCO DUMMER Postal Code: KOL 3A0			
E-mail: <u>dwminshall</u> <u>B</u> <u>mail</u> com Do you wish to receive all communications? Wes I No				
2. Authorized Agent/Solicitor Information				
Name(s):	Address:			
P.O. Box:	City/Province:			
Phone: (H) (B) Postal Code: E-mail:				
Do you wish to receive all communications?				
3. Property Description Ward: DOVRO Township VR DUMMER Municipal (911) Address: 921 DOURO FIRST LINE Lot: 2 Concession: 1 Tax Roll #: 1522-010-002-0300				
Registered Plan #: Block/Lot:				
4. Type and Purpose of Proposed Transaction				
Transfer: Creation of a New Lot Addition to a Lot (moving/adjusting lot line)				
Other: Right-of-Way Easeme	nt Correction of Title Charge Lease			
5. Transferee If known, the name of the person(s), to whom land or interest Address:	in land is intended to be transferred, charged or leased: relationship to owner:			
Phone: (H) (B)	E-mail:			

	Frontage (metres):	Depth (metres):	50	_ Area (m ² or hectares): <u>65</u>	
	Frontage (feet): 360	Depth (feet):	164	Area (ft ² or acres):6	
	Existing Use: (i.e. residential, commercial	•	Difference in the second se	(i.e. residential, commercial, recreational)	
	None		TESIDO	entiad	
	Name Existing Buildings & Structures, includ (and show on sketch with setbacks)		(and show on s	Buildings & Structures, including well & seption ketch with setbacks)	
	NONE		NO	SE	
	Type of Access:	_		_	
	Municipal maintained road	County Ro		Provincial Highway	
	Seasonally maintained municipal road			Other	
	Water Parking/docking fac	cilities – distance fro	om these to the nea	arest road :	
	Water Supply: Publicly owned/operated piped water syst Privately owned/operated individual well Privately owned/operated communal well Lake or other water body Other		Publicly owned	al: (if existing, show on sketch) //operated sanitary sewage system d/operated individual septic tank d/operated communal septic tank	
	If a septic system exists on the severed pare	cel, when was it inst	alled and inspecte		
	How far is it located from the lot line(s) & well?				
			irs)		
	Have you shown the well & septic locations	and setbacks on the	e sketch? NA		
7.		and setbacks on the .ot Line Adjustme ve onto Section 8	e sketch? <u>NA</u> ent", please prov :	ide the following information.	
7.	Have you shown the well & septic locations If the severed lot is an "Addition" or "I If not, please skip this section and mo Description of Lot Being Added To (provide both metric & imperial measurem	and setbacks on the .ot Line Adjustme ve onto Section 8 nents and include a	e sketch? <u>NA</u> ent", please prov : all dimensions on	ide the following information.	
7.	Have you shown the well & septic locations If the severed lot is an "Addition" or "I If not, please skip this section and mo Description of Lot Being Added To (provide both metric & imperial measurem Frontage (metres):	and setbacks on the Lot Line Adjustme ve onto Section 8 nents and include a Depth (metres):	e sketch? <u>NA</u> ent", please prov : all dimensions on	ide the following information. sketch) Area (m² or hectares):	
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7.	Have you shown the well & septic locations If the severed lot is an "Addition" or "I If not, please skip this section and mo Description of Lot Being Added To (provide both metric & imperial measurem Frontage (metres): Frontage (feet): Existing Use: (i.e. residential, commercial Name Existing Buildings & Structures, include	and setbacks on the Lot Line Adjustme ve onto Section 8 ments and include a Depth (metres): Depth (feet): , recreational) ding wells & septic	e sketch? NA ent", please prov : all dimensions on Proposed Use: Name Proposed (and show on s	ide the following information. <pre>sketch)Area (m² or hectares):Area (ft² or acres): (i.e. residential, commercial, recreational) Buildings & Structures, including wells & sept</pre>	
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	Have you shown the well & septic locations If the severed lot is an "Addition" or "I If not, please skip this section and mo Description of Lot Being Added To (provide both metric & imperial measurem Frontage (metres): Frontage (feet): Existing Use: (i.e. residential, commercial Name Existing Buildings & Structures, include (and show on sketch with setbacks)	and setbacks on the Lot Line Adjustme ve onto Section 8 ments and include a Depth (metres): Depth (feet): , recreational) ding wells & septic	e sketch? NA ent", please prov : all dimensions on Proposed Use: Name Proposed (and show on s Current Zoning:	ide the following information. <pre>sketch)Area (m² or hectares):Area (ft² or acres): (i.e. residential, commercial, recreational) Buildings & Structures, including wells & september (etch with setbacks)</pre>	
	Have you shown the well & septic locations If the severed lot is an "Addition" or "I If not, please skip this section and mo Description of Lot Being Added To (provide both metric & imperial measurem Frontage (metres): Frontage (feet): Existing Use: (i.e. residential, commercial Name Existing Buildings & Structures, inclue (and show on sketch with setbacks) Official Plan Designation: Type of Access:	and setbacks on the Lot Line Adjustme ve onto Section 8 ments and include a Depth (metres): Depth (feet): , recreational) ding wells & septic	e sketch? NA ent", please prov : all dimensions on Proposed Use: Name Proposed (and show on s Current Zoning:	ide the following information. <pre>sketch)Area (m² or hectares):Area (ft² or acres): (i.e. residential, commercial, recreational) Buildings & Structures, including wells & septement ketch with setbacks)</pre>	

			_ Area (m ² or hectares): <u>35_14</u> _	
Frontage (feet):	Depth (feet):		Area (ft² or acres):	
Existing Use: (i.e. residential, commercial, r	ecreational)	Proposed Use:	(i.e. residential, commercial, recreational)	
RESIDENTIAL		RESIDE	NTIAL	
Name Existing Buildings & Structures, includir (and show on sketch with setbacks)	ig wells & septic		Buildings & Structures, including wells & septic ketch with setbacks)	
Type of Access:			_	
Municipal maintained road	County Roa	ad	Provincial Highway	
Seasonally maintained municipal road	Private road	d or right-of-way	Other	
Water Parking/docking	facilities – distanc	e from these to the	e nearest road :	
Water Supply: Publicly owned/operated piped water system Privately owned/operated individual well Privately owned/operated communal well Lake or other water body Other		Sewage Disposal: (if existing, show on sketch) Publicly owned/operated sanitary sewage system Privately owned/operated individual septic tank Privately owned/operated communal septic tank Privy Other		
If a septic system exists on the retained parce	l, when was it inst	alled and inspecte	d? 1986	
	How far is it located from the lot line(s) & well?(ft. or meters)			

Have you shown the well & septic locations and setbacks on the sketch?

9.	Local Planning Documents	
	What is the current Township Official Plan designation on this property?	
	What is the current County Official Plan designation on this property?	
	(this information is available from the Preliminary Severance Review and/or from the Township)	
	Explain how the application Conforms with the current Official Plans: RESIDENTIAL LOT ALLOWED 4	R
	What is the current zoning on this property, as found in the Township Zoning By-Law ?	

8. Description of Retained Lot (provide both metric & imperial measurements and include all dimensions on sketch)

10. Provincial Policy			
Is the application consistent with the Provincial Policy Statements? (this information is available from the Preliminary Severance Review and/or from the County Planning Dept.) Explain how the application is consistent:	¥Yes □ No		
MEETS INTENT OF PROJINCIAL POLLCY STATEMENT & GEOWAH	PLAN		
Is the subject property within an area of land designated under any provincial plan(s)? (Oak Ridges Moraine Conservation Plan applies to portions of Cavan Ward only; Growth Plan applies to the entire County of Peterborough so answer should be yes)			
If yes, explain how the application conforms or does not conflict with provincial plan(s)? COMPLETED EIG			
TO MEET REQUIREMENTS OF PODUMPIAL PLANS.			

11. Restrictions of Subject Land	
Are there any easements or restrictive covenants (i.e. hydro, Bell) affecting the subject land?	🗌 Yes 🛛 No
If yes, describe the easement or covenant and its effect:	

Is the subject land now, or has it been, the subject of an application for a Plan of Subdivision under Section 51 or a consent under Section 53 of the <i>Planning Act</i> ?	∐Yes	No
Has the owner of the subject land severed any land from the original acquired parcel?	🗋 Yes	K No
If yes, indicate this information on the required sketch and provide the following (if known): File No. B, Transferee: Date of Transfer: File No. B, Transferee: Date of Transfer:		
Is this land currently the subject of any other application under the Planning Act, such as an application for Official Plan Amendment, Zoning By-Law Amendment, Minor Variance, Minister's Order, or Power of Sale?	Yes	Z No
If yes, please provide the following: Type: Status:		
3. Minimum Distance Separation (MDS)		
Are there any barns within 750-1,500 metres (2,460-4,921 feet) of the subject property which currently house, or are capable of housing, livestock? Are there any anaerobic digesters within 750-1,500 metres (2,460-4,921 feet) of the subject property? If yes, please complete an "MDS Data Sheet" for each barn.	□Yes □Yes	No
4. Agricultural Severances (for lands within the agricultural designation only)		
	10	QN/A
	□Yes	🗋 No
Is the severance to dispose of a residence surplus to a farming operation (must have 2 houses)?		
Is the severance to dispose of a residence surplus to a farming operation (must have 2 houses)? Is this severance to create a new farm parcel approximately 40 hectares (100 acres) in size? Is this severance for a commercial or industrial "agriculture-related" use?	☐Yes ☐Yes	

15. Adjacent Lands Surrounding the Landholding

Please state the names of the owners, the use of the land and buildings existing on the lands surrounding the applicants' entire landholding. **This information should also be on the sketch**, and can be obtained from the Township or Land Division Office. If more room is needed, please add extra Schedule page.

Direction	Name of Owner (only when known to the applicant)	Use of Land – (must be filled in) (i.e. farm, residential etc.)	Buildings (i.e. house, barn etc.) (must be filled in)
North	KANSTRA	RESIDENTIAL	HOUSE
South	MCKINLEY	RESIDENTAL	HOUSE/HOLDING
East	?	FARM	
West	RENTAL	FARM	

16. Driving Directions					
Please describe in detail driving directions to the subject property:					
NOFF COUNTY ROAD 4 (WARSAW CB)					
TURN NORTH ON FIRST CONCESSION OF JOURD					
2ND DRIVEWAY AT TOP OF THE HLLL ON EAST					
SIDE					

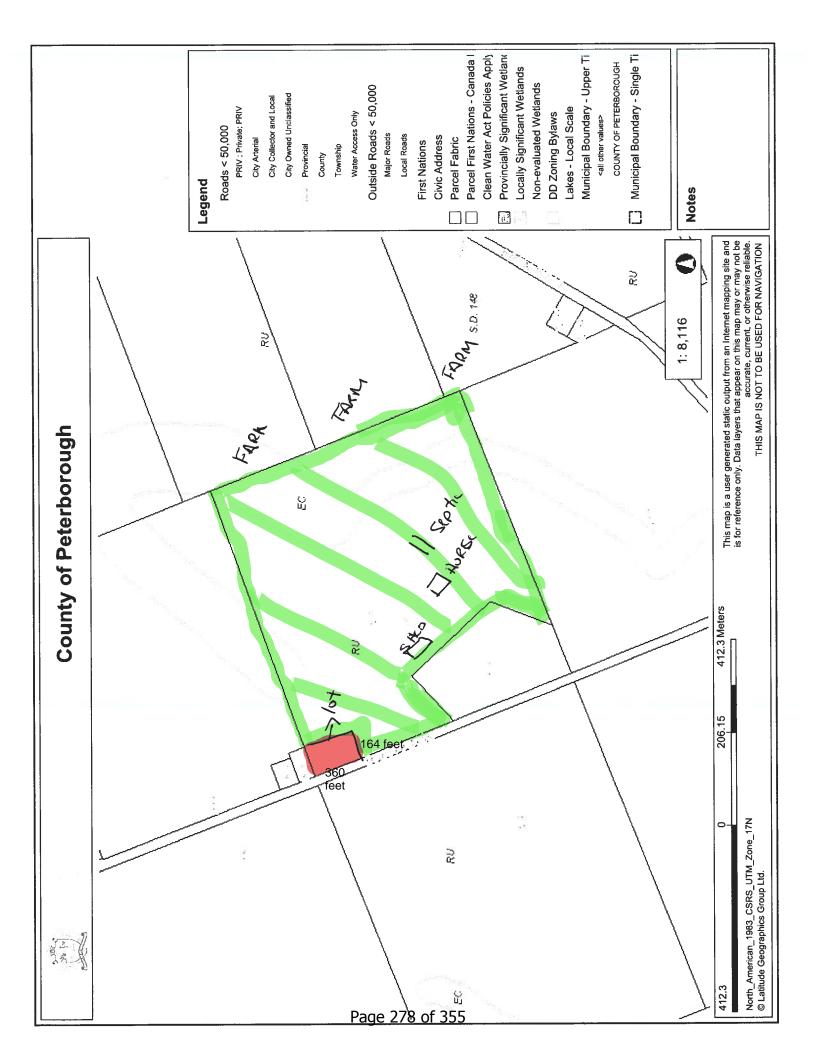
Signatures Page

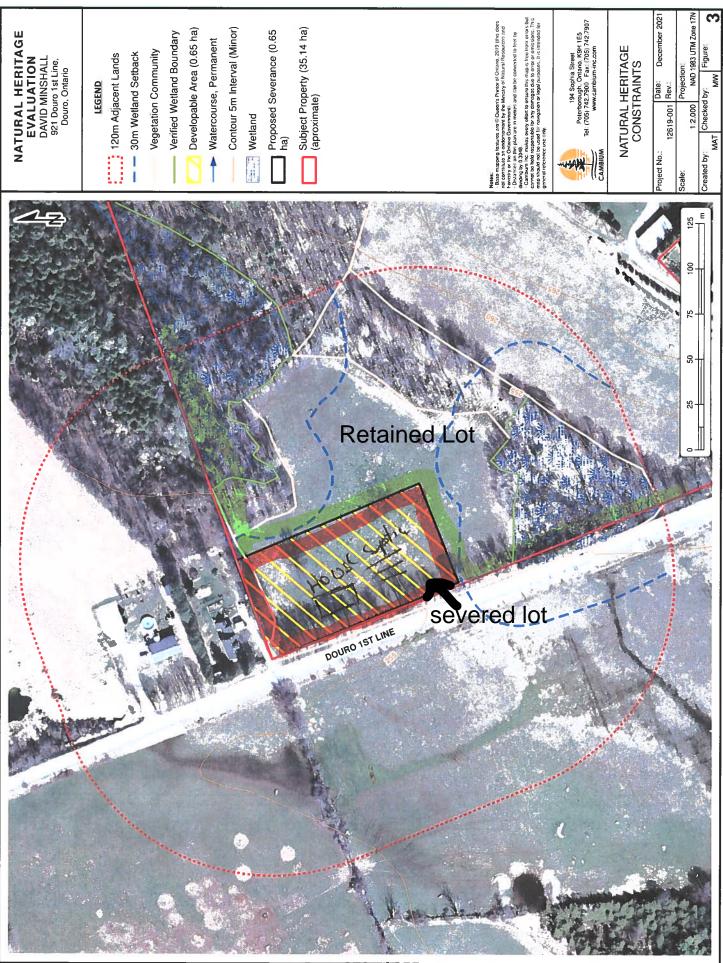
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If the applicant is a Corporation acting without agent or solicitor, the application must be signed by an Officer of the Corporation with a declaration indicating that the said Officer has the authority to bind the Corporation and the <u>Corporation's Seal</u> (if any) must be affixed.

Signature(S)			
Dated at the (City, Township) of	_ this day of,201		
N/A			
Signature of owner(s) or authorized solicitor/agent	Signature of owner(s) or authorized solicitor/agent		
De	claration		
(i.e. Reeve, Clerk, Secretary-Treasure DAVID MINSHALL	or Taking Affidavits or a designated Official of the Municipality r of the Land Division Committee, lawyer, etc.)		
I/we, VALER K. M. GKSKIN of the Town in the County/Region/Municipality, etc. of of the Town application are true, and I make this solemn declaration as if ma	nship, City, etc. of <u>bue, ^ but near</u> , <u>bell</u> , solemnly declare that all the statements contained in this ade under oath and by virtue of the Canada Evidence Act.		
Declared before me at the <u>Tourship</u> of <u>Dove Domme</u> Name of City, etc. in the <u>County, Region, etc.</u>	Valun Mattastin		
of Dorro Domme City, Township	Owner or authorized Agent		
in the County	Daw "Inglall		
of County, Region, etc.	Owner or authorized Agent		
of <u><u>Petrony</u></u> , 20 <u>22</u> .	Martina Chait-Hartwig Deputy Clerk		
Commissioner, etc. for taking affidavits	Commissioner of Oath Township of Douro-Dummer		
Personal information contained on this form is legally authorized under Sec.53 of the Planning Act and O.Reg.197/96 for the purpose of processing your planning application and will become part of a public record.			
of Privacy Act the County of Peterborough may make all planning	vith Sec.32(e) of the Municipal Freedom of Information and Protection ing applications and supporting material available to the public in hard collection, use or disclosure of this information by the County of borough, 470 Water Street, Peterborough, Ontario K9H 3M3		

An "original" signed copy of the application and sketch must be submitted, together with 6 copies of both the application and sketch, each copy stapled individually with a sketch. All copies of the sketch or survey must be coloured – red for severed lots, green for retained. Copies may be double-sided. Please submit application with a cheque for \$1150.00 payable to the "County of Peterborough".







April 7, 2022

Ann Hamilton Secretary Treasurer, Land Division County of Peterborough 470 Water Street Peterborough, ON K9H 3M3

Dear Ann Hamilton,

Re: File: B-27-22, David Minshall and Valerie McGriskin; 921 Douro First Line, Lot 12, Concession 1, Township of Douro-Dummer; Roll#152201000203001 (ORCA File: PPLD-2225)

The Otonabee Region Conservation Authority (Otonabee Conservation/the Authority) has received the circulation for a Consent for the above noted property. In support of this application, the proponent has submitted the following document:

• Natural Heritage Evaluation – 921 Douro 1st Line, Douro-Dummer, County of Peterborough, Ontario, prepared by Cambium Inc., dated December 20, 2021

Otonabee Conservation staff have reviewed the information in accordance with our mandate and policies and offer the following comments.

The purpose of the above noted application is to request the consent of the Land Division Office to the conveyance of a parcel of land having a frontage of approximately 110 metres (360 feet) and an area of approximately 0.65 hectares (1.6 acres) with the effect of creating a new residential lot.

250 Milroy Drive, Peterborough ON K9H 7M9 P: 705-745-5791 F: 705-745-7488 otonabeeca@otonabeeconservation.com **otonabeeconservation.com** Otonabee Conservation's interest in this application is four-fold:

1. Otonabee Conservation has reviewed this application through our delegated responsibility from the Province to represent provincial interests regarding natural hazards identified in Section 3.1 of the Provincial Policy Statement (PPS).

The proposed new development is located outside of any known flooding and/or erosion hazard. It is the opinion of Otonabee Conservation staff that the application is consistent with section 3.1 of the PPS.

2. Otonabee Conservation has reviewed the application through our responsibilities as a service provider to the municipality in that we provide planning and technical advice on natural heritage matters through a Memorandum of Understanding.

Based on available mapping, the area of Consent is within 120 metres of a known key hydrologic feature (non-evaluated wetland). The Natural Heritage Evaluation (NHE) confirms unevaluated wetlands (Figure 2, communities 3 and 5) adjacent to the severed parcel. Additional wetlands and watercourses traverse the retained lands.

Provided approvals adhere to the NHE's Figure 3 and the mitigation measures outlined in Sections 5.0 and 7.0, the application appears consistent with the provincial and regulatory policies. In accordance with the NHE, staff recommend development and site alteration be prohibited in the wetlands and the 30 metre Vegetation Protection Zone (VPZ)/buffer on site, and a naturally, self sustaining/undisturbed 30 metre VPZ/buffer is maintained. Staff note this type of protection has been achieved elsewhere on the retained parcel by zoning key hydrologic features Environmental Conservation (EC), which prohibits development.

Technical staff concur with Sections 5.0 and 7.0 of the NHE as appropriate measures to mitigate impacts to species and habitat from disturbances, which demonstrates consistency with Growth Plan policy 4.2.4 (1 to 3) and PPS policies 2.15 and 2.18.

Staff note given the potential for turtles on site, it is recommended that ESCs/exclusionary fencing be installed prior to May 15 and monitoring of the work area for reptile activity be conducted May 1 to September 30.

It should also be noted that landowners are responsible to demonstrate compliance with the Endangered Species Act (ESA)/consistency with PPS policy 2.17, as well as other regulations, prior to commencement of any on-site development (grading, roads, buildings) regardless of previous planning approvals or field efforts documented in the NHE.

3. Otonabee Conservation has reviewed the application through a regulatory lens. Under Ontario Regulation 167/06, this Authority's 'Development, Interference with Wetlands and Alterations to Shorelines and Watercourses' regulation under Section 28 of the Conservation Authorities Act.

Otonabee Conservation mapping shows the proposed lot severance falls outside of the regulated area. A permit is NOT required from the Authority for the new development.

4. Otonabee Conservation has reviewed the application in terms of the Revised Trent Source Water Protection Plan (SPP), prepared under the Clean Water Act. The SPP came into effect on January 1, 2015 and contains policies to protect sources of municipal drinking water supplies from existing and future land use activities.

Upon review, it was determined that the subject property is not located within an area that is subject to the policies contained in the SPP.

Best Regards,

Katie Jane Harris

Preliminary Severance Review

Prepared by the Peterborough County Planning Department

Name:Valerie McGriskinAgent:& David MinshallLot: 12Concession: 1



Date: May 8, 2020

Municipality: Douro Ward Township of Douro-Dummer

Description: 921 Douro First Line

Phone: 705-917-0161

Email: dwminshall@gmail.com Office Phone:

Communication Sent To: Owner:

Agent:

	Severed	Retained
County O.P. Description	Rural Area	Rural Area
Municipal O.P. Designation (effective April 2014)	Rural	Rural
Municipal Zoning	(RU)	(RU) & (EC)
(By-Law No. 10-1996)		
Area/Lot Dimensions	2 lots, eac ± 0.4 hectares	± 34.8 hectares with
	with ± 45m of frontage	± 147m of frontage
Existing Use/Buildings	Vacant	House, Barn, Outbuilding

Intent: To sever more than one residential lot. Roll No.(s) 1522-010-002-03001.

County Official Plan Policy Review: The subject property is described as Rural Area in the County of Peterborough Official Plan. Section 2.6.3.5 of the Plan suggests that residential severances for land holdings located in the Rural Area should be discouraged in favour of development in Settlement Areas in an effort to promote orderly growth and development. However, severances in the Rural Area may be considered provided Health Unit, road frontage and access and Minimum Distance Separation requirements can be met (Ss.2.6.3.5 (A), (C) & (G)) and provided the applicable policies of Sections 2.6.3.1, 2.6.3.5, 4.1.3 and 4.3 are complied with (S.2.6.3.5 (H)).

Municipal Official Plan Policy Review: The subject property is designated Rural in the Local Component of the County Official Plan. In the Rural designation a maximum of two severances are permitted from a property as it existed 25 years prior to the date of application (S. 6.1.1 & 6.2.2.5(d)). Peterborough County Land Division records indicate that the subject property has not received any previous severances, therefore the property remains eligible for consent.

In addition to the above requirement for a residential lot in the Rural designation, the landowner must have owned the property for a minimum of 5 years, and the size of the new lot created specifically for a residential use shall not exceed 1 hectare in area (S. 6.2.2.5(d)(i)&(ii)). The landowners appear to meet the minimum length of ownership requirements, and the severed parcels are both less than 1 hectare in area.

All consents must also meet road frontage & access, Zoning By-law, Minimum Distance Separation and Health Unit requirements (S.7.12.2, 7.12.4, 7.2.3 & 7.12.12). Minimum Distance Separation (MDS) has been calculated for livestock facilities on both the retained parcel and neighbouring properties. As can be seen on the attached sketch, the severed parcels are entirely within the MDS arc from these facilities and do not meet Minimum Distance Separation requirements. The applicant should be aware that MDS requirements are greater where the severance proposal will result in a cluster of four or more residential lots.

Municipal Zoning By-Law Review: The severed parcels are zoned Rural (RU) in the Municipal Zoning By-law. A single detached dwelling is permitted in the (RU) zone (S.9.1.5), provided the parcel has a minimum lot area of 0.4 hectares and a minimum lot frontage of 45 metres (S.9.2.4(a)&(b)). Both severed parcels appear to meet these minimum requirements.

The retained parcel is zoned Rural (RU) and Environmental Conservation (EC) in the Municipal Zoning By-law. An agricultural use is permitted in the (RU) zone (S.9.1.1), provided the parcel has a minimum lot area of 20 hectares and a minimum lot frontage of 135 metres (S.9.2.1(a)&(b)). The retained parcel appears to meet these minimum requirements. The portion of the retained parcel within the (EC) zone will not be impacted as a result of this proposal.

Provincial Policy Review: The Provincial Policy Statement (PPS) and Growth Plan for the Greater Golden Horseshoe (GPGGH) apply to this proposal.

The following key natural heritage features and/or key hydrologic features have been identified on or adjacent to the subject property: wetlands and stream.

Sections 4.2.3 and 4.2.4.1(c) of the Growth Plan (2019) state that development and site alteration, including lot creation, is not permitted in key hydrologic features or the minimum 30 metre vegetation protection zone (VPZ) surrounding the feature. In addition, Section 4.2.4.1 of the Growth Plan (2019) states that development within 120 metres of a key hydrologic feature will require a natural heritage evaluation/hydrologic evaluation. Given the proximity of the severed parcels to the wetlands on the property, the lot lines will be required to be adjusted to ensure that the severed parcel is located outside the key hydrologic feature and its associated VPZ in order to comply with Growth Plan policy. If the lots lines are adjusted, but the severed parcels remain within the 120 metre buffer surrounding the feature, a natural heritage evaluation and/or hydrologic evaluation is required. Evaluations undertaken in accordance with these policies will identify the boundaries of the key natural heritage feature, vegetation protection zones, and any additional restrictions to be applied before, during and after development to protect the hydrologic and ecological functions of the feature.

A portion of the subject property is traversed by an area identified for habitat of endangered species and threatened species, as shown on the attached sketch. Policy 2.1.7 of the Provincial Policy Statement prohibits development and site alteration, including lot creation, within habitat of endangered species and threatened species, except in accordance with provincial and federal requirements. A Species at Risk (SAR) assessment is required as part of the natural heritage evaluation, referenced above.

Minimum Distance Separation Formula I (MDS I) as per policy 1.1.5.8 of the 2020 Provincial Policy Statement has been calculated for the livestock facilities (i.e. barns) at 999 Douro First Line, 996 Douro First Line and on the retained parcel (see map attached). In accordance with Guideline #34 of the Provincial Guidelines for Minimum Distance Separation, MDS setback requirements are greater where the proposal will result in a cluster of 4 or more residential lots located in close proximity to each other. Based on the calculation using a Type B land use, the proposal does not appear to meet MDS I setback requirements and therefore does not conform to the Provincial Policy Statement.

The subject property is located within a Prime Agricultural Area, as identified in the new Agricultural System for the Greater Golden Horseshoe (Growth Plan, 2019). Outside of the Greenbelt Area, provincial mapping of the agricultural land base does not apply until it has been implemented in the County Official Plan and until such time, the current designation applies.

Additional Notes:

* The lands appear to be regulated by Regulation 167/06, the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation of the Otonabee Conservation Authority. Therefore, the proposal should be discussed with Matt Wilkinson/Don Allin at (705) 745-5791 ext.213/ext.225 to determine what, if any permits may be necessary.

* The applicant and any prospective owners are advised that endangered and/or threatened species exist in the area and may exist on the site. It is the responsibility of the landowner to identify endangered and threatened species and their habitat within the property prior to undertaking work, and to ensure that the work/activity will not result in negative impacts. Landowners are encouraged to consult with the Ministry of Environment, Conservation and Parks (MECP) if they have questions about the *Endangered Species Act, 2007 (ESA)*. Any sightings of a threatened or endangered species during development and construction on the property must be reported in accordance with the ESA.

This Preliminary Severance Review has been circulated by the Planning Department to the following agencies (marked with an X):

⊠ Local Municipality of Douro-Dummer

County Infrastructure Services (i.e. Roads);

Conservation Authority;

First Nations ;

Other

Agencies to be Contacted by Owner/Agent (marked with an X):		
🖂 Township	🖂 Health Unit	
Conservation Authority	Trent-Severn Waterway	
Source Water Risk Management Officer	First Nations	
Ministry of Environment, Conservation and Parks	☐ Other	

Proposal does not appear to conform to the Growth Plan for the Greater Golden Horseshoe and/or Provincial Policy Statement policies.

The severance proposal does not appear to conform to the Provincial Plan(s). The severed parcels are located entirely within the MDS arcs from barns in the area; MDS requirements are greater where the effect of the proposal will result in a cluster of four or more residential lots. The severed parcels also appear to be within the 30 metre vegetation protection zone surrounding a nearby wetland and new lots are not permitted in this area.

Proposal does not appear to conform to County Official Plan policies.

The severance proposal does not appear to conform to the County Official Plan. Section 2.6.3.1 of the Plan states that "under no circumstances shall severances be recommended for approval where proposed severances are contrary to this Plan and/or the respective local Official Plan."

Proposal does not appear to conform to Township Official Plan policies.

The severance proposal does not appear to conform to the Township Official Plan. The severed parcels are located entirely within the MDS arcs from barns in the area.

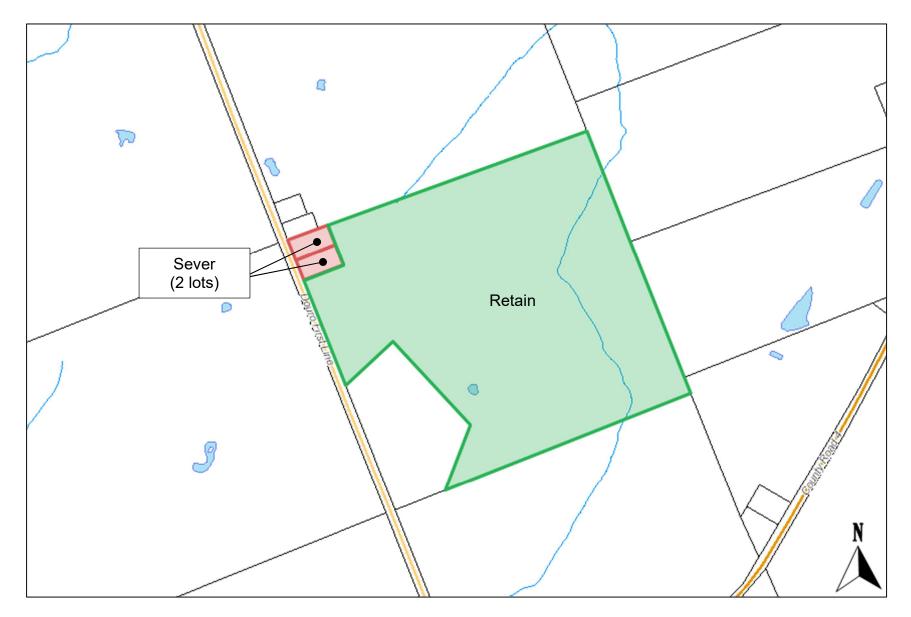
Application requires confirmation from the Township or identified agency regarding policy conformity. <u>**Please note that the landowner should be aware that members of the local council may not support a rezoning or minor variance to create a lot that is not in compliance with the provisions of the zoning by-law.**</u>

Reviewed By: Keziah Holden

Important

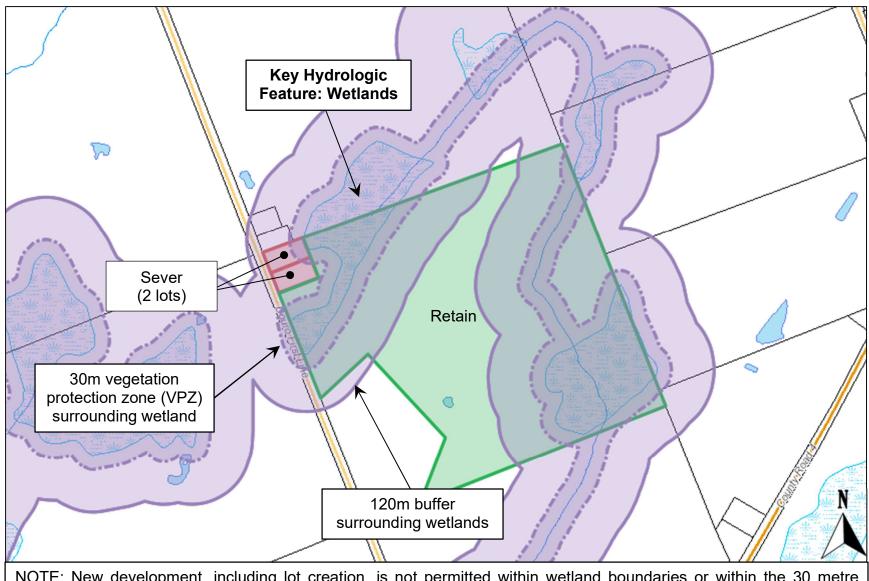
Our position on the overall conformity of the proposal is based on information available at the time of review. Subsequent information from commenting agencies can change our comments relating to any formal application for severance which is subsequently filed. Therefore, the above-noted comments should not be construed as preliminary approval or denial of a proposal but recognized as a position of the County Planning Department based on the availability of current information. Roll # 1522-010-002-03001

Lot 12, Concession 1, Douro Ward



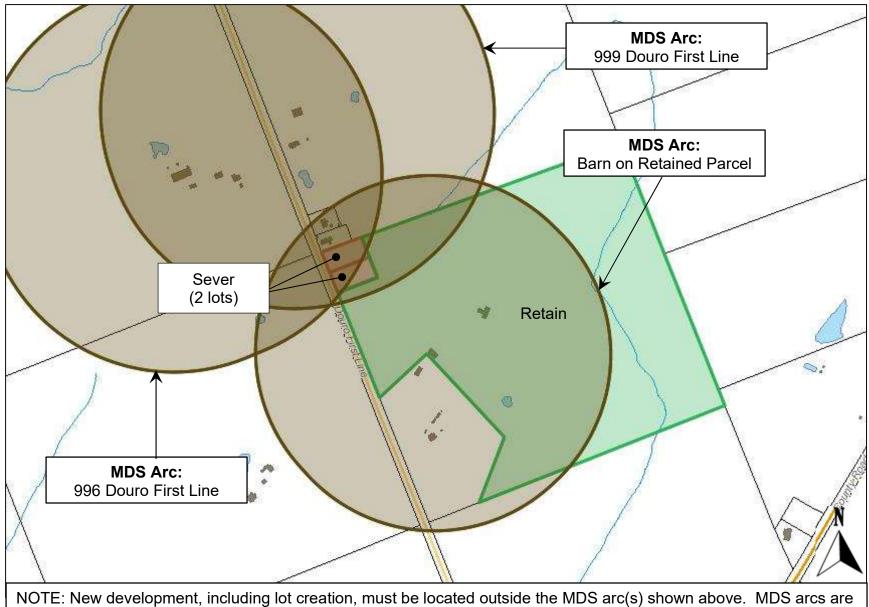
Scale (metric) Page¹289007 355

Roll # 1522-010-002-03001 Special Features Mapping: Key Hydrologic Features



NOTE: New development, including lot creation, is not permitted within wetland boundaries or within the 30 metre vegetation protection zone; any development proposed within the 120 metre buffer surrounding the wetland and/or stream will require a Natural Heritage Evaluation (NHE).

Roll # 1522-010-002-03001 Minimum Distance Separation (MDS) Requirements

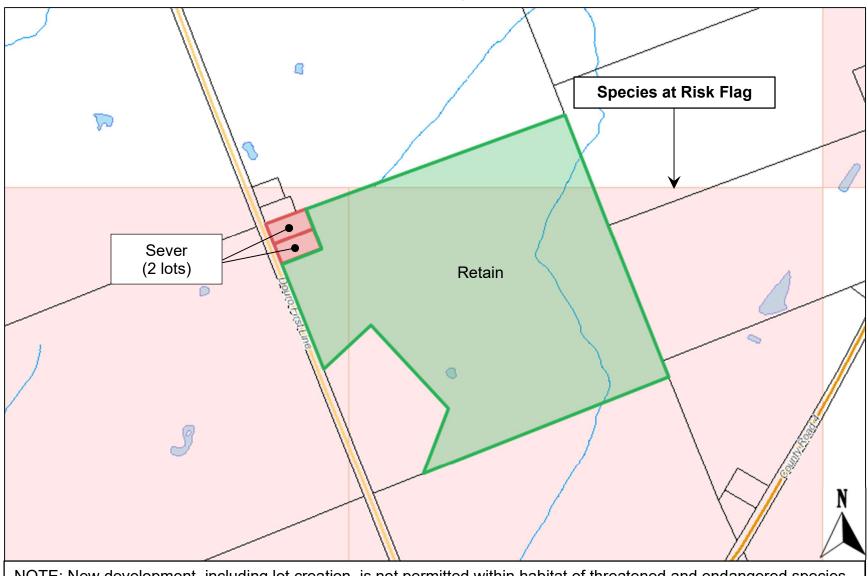


larger where the severance proposal will result in a cluster of four or more residential lots.

Scale (metric) Page¹28900 355

Roll # 1522-010-002-03001

Special Features Mapping – Species at Risk



NOTE: New development, including lot creation, is not permitted within habitat of threatened and endangered species, except in accordance with provincial and federal requirements. Species at Risk Data available to the County has identified an observation or potential habitat that may require a Species at Risk (SAR) Assessment to support the severance application.

Scale (metric) Page¹290 of 355 Natural Heritage Evaluation - 921 Douro 1st Line, Douro-Dummer, County of Peterborough, Ontario



2021-12-20

Prepared for: David Minshall

Cambium Reference No.: 12619-001

CAMBIUM INC. 866.217.7900 cambium-inc.com

Peterborough | Barrie | Oshawa | Kingston

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1.0 Introduction

Cambium Inc. (Cambium) was retained by David Minshall to conduct an Natural Heritage Evaluation - 921 Douro 1st Line, Douro-Dummer, County of Peterborough, Ontario (Figure 1). The proposed development includes a single residential lot severance on the northwest corner of the property. Based on the proposed development, the northwest corner of the property including the proposed severed lot and its surrounding 120 m buffer, as shown in Figure 1, will be considered the Site for this report.

The Natural Heritage Evaluation (NHE; the Study) is required to address potential negative impacts to natural heritage features identified during the preliminary development review process, as required by the Provincial Policy Statement, 2020 (PPS) and the Growth Plan for the Greater Golden Horseshoe, 2020 (GPGGH). The Site contains or is adjacent to (within 120 m) of the following natural heritage and/or hydrologic features: unevaluated wetland, and potential habitat for endangered or threatened species. The Site is within Ecoregion 6E of Ontario (Crins, Gray, Uhlig, & Wester, 2009). The property is located outside the Douro-Dummer Settlement Area.

The Site is within the jurisdiction of the Otonabee Region Conservation Authority (ORCA) and their regulated area overlaps the Site due to the presence of mapped wetlands. As the Site contains wetlands, the Study will consider regulations on development as imposed by the local **Conservation Authority's Regulation under the** *Conservation Authorities Act, 1990*.

The *Endangered Species Act, 2007* (ESA) protects endangered or threatened species and their habitats from harm or destruction. Habitat of endangered and threatened species is protected under provincial natural heritage policy; however, it is also the landowner's responsibility to ensure that no harm to these species occurs on their property. This Study includes a habitat-based screening for species of conservation concern to determine if the Site has suitable habitat for any provincial or federal species at risk (SAR).

In order to address requirements of the approval authorities, Cambium has conducted this Study to provide an evaluation of reasonably anticipated ecological impacts, positive or



negative, that may arise as a result of this proposed development to guide the decision-making process.

1.1 Terms of Reference

A Preliminary Severance Review (PSR) prepared by Peterborough County dated November 23, 2020, was provided to Cambium and is included in Appendix A. The PSR details the Terms of Reference (ToR) required to complete the NHE for this project. Cambium subsequently confirmed the ToR with ORCA (Appendix A).

1.2 Proposed Development and Conceptual Site Plan

The proposed residential severance lot is approximately 0.65 ha in size, and is rectangular with the broader side fronting on Douro 1st Line, as shown on Figure 2. The Site includes the proposed severed lot, and the adjacent lands within 120 m of the proposed severance boundary. The Site does not contain any existing structures and is currently zoned as a Rural Area. Adjacent land uses include residential and agricultural.



2.0 Applicable Natural Heritage Policy and Regulation

2.1 Provincial Policy Statement, 2020

Section 2.1 of the Provincial Policy Statement (PPS) (Ministry of Municipal Affairs and Housing, 2020) protects the form and function of natural heritage features as defined by the PPS. Natural heritage features included in the PPS are provincially significant wetlands (PSW), significant coastal wetlands, significant woodlands, significant valleylands, significant wildlife habitat (SWH), significant areas of natural and scientific interest (ANSI), fish habitat, and the habitat of endangered and threatened species. Given their significant coastal wetlands. Development in fish habitat and the habitat of endangered and threatened species and threatened species shall only be permitted in accordance with provincial and federal requirements. Development within other natural heritage features and on lands adjacent to all natural heritage features are permitted only if demonstrated that there will be no negative impacts on the feature or their ecological function. Development includes the creation of a new lot, a change in land use, or the construction of buildings and structures requiring approval under the *Planning Act*.

Section 2.2 of the PPS protects the quality and quantity of water, including the form and hydrologic function of sensitive surface water features and sensitive ground water features. Focus is given to maintaining hydrologic linkages and functions at the watershed scale to minimize potential negative impacts, including cross-jurisdictional and cross-watershed impacts of development. Mitigative measures and/or alternative development approaches should be considered for development near water features.

2.2 Growth Plan for the Greater Golden Horseshoe, 2020

The Greater Golden Horseshoe is one of the most dynamic and fast-growing regions in North America. To address the challenges of increased development within the area, the Growth Plan for the Greater Golden Horseshoe, 2020 (GPGGH) builds on the PPS "to establish a unique land use planning framework for the Greater Golden Horseshoe that supports achievement of complete communities, a thriving economy, a clean and healthy environment,



and social equity" (Ministry of Municipal Affairs and Housing, 2020). In general, the GPGGH seeks to preserve agricultural lands, water resources, and natural areas by directing growth to settlement areas as defined in municipal Official Plans. The GPGGH contains policies regarding a provincial Natural Heritage System (NHS), key hydrologic features (KHFs), key hydrologic areas (KHAs), and key natural heritage features (KNHFs) (Table 1). Policies that reference the provincial NHS apply once the municipal Official Plan has incorporated the provincial NHS into their schedules; until that time, the policies that reference the NHS will apply outside settlement areas to the natural heritage systems identified in Official Plans that were approved and in effect as of July 1, 2017. Section 4.2.3 of the GPGGH states that, outside of settlement areas, development or site alteration is generally not permitted in KNHFs that are part of the NHS or in KHFs. Section 4.2.4 states that, outside of settlement areas, a proposal for new development or site alteration within 120 metres of a KNHF within the NHS or a KHF will require a natural heritage evaluation or hydrologic evaluation that identifies a suitable vegetation protection zone (i.e., a development setback). For KHFs, fish habitat, and significant woodlands the vegetation protection zone can be no less than 30 m measured from the outside boundary of the feature.

Key Hydrologic Features	Key Natural Heritage Features				
Permanent Streams	Habitat of Endangered and Threatened Species	Significant Wildlife Habitat			
Intermittent Streams	Fish Habitat	Sand Barrens			
Inland Lakes and their Littoral Zones	Wetlands	Savannahs			
Seepage Areas and Springs	Life Science Areas of Natural and Scientific Interest (ANSI)	Tallgrass Prairies			
Wetlands	Significant Valleylands	Alvars			
	Significant Woodlands				



2.3 Official Plan and Zoning By-Law

The County of Peterborough Official Plan has designated the Site as 'Rural Area'. The Natural Heritage System (NHS) online mapping tool indicates that the Site is located outside the NHS.

The Municipality of Douro-Dummer has also designated the Site as 'Rural'. Adjacent lands, including the retained lot are designated 'Rural' with a small corridor of land designated 'Environmental Conservation Zone'.

According to the Municipal Official Plan, a maximum of two residential severances may be permitted on the conditions that the landowner has owned the property for a minimum of five years and the size of the new lot does not exceed 1 ha. The proposed severance meets these criteria.

2.4 Conservation Authority Regulation

"Conservation Authorities are local watershed management agencies that deliver services and programs to protect and manage impacts on water and other natural resources in partnership with all levels of government, landowners and many other organizations" (Conservation Ontario, 2021). Conservation Authorities each have their own Ontario Regulation under the *Conservation Authorities Act, 1990.* In general, they regulate development within and adjacent to river or stream valleys, Great Lakes and inland lakes shorelines, watercourses, hazardous lands (flood, erosion, unstable soils) and wetlands.

Otonabee Region Conservation Authority regulates these features under Ontario Regulation 167/06: Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses.

2.5 Endangered Species Act, 2007

Species listed as endangered or threatened on the Species at Risk in Ontario (SARO) list are protected under the provincial *Endangered Species Act*, 2007 (ESA) (Government of Ontario, 2007). Section 9(1) of the ESA prohibits a person from killing, harming, harassing, capturing or taking a member of a species listed as endangered, threatened, or extirpated. Section 10(1) of



the ESA prohibits the damage or destruction of habitat of species listed as endangered or threatened. Protection of special concern species is provided through designation of their habitat as significant wildlife habitat, a provincially protected natural heritage feature.



3.0 Technical Approach and Data Collection Methods

3.1 Background Information Review

Existing background information pertaining to the Site and surrounding landscape was compiled and reviewed, as part of a comprehensive desktop exercise, to better understand local biophysical conditions. In southern Ontario, readily available data includes orthoimagery, topographic base mapping, and geological records. Natural environment and land use schedules prepared in support of Official Plans and Zoning By-Laws were reviewed to acquire municipal data. Natural area records and species occurrences were obtained from digital resources and reference materials. The comprehensive desktop review for this Site included the following resources:

- Natural Heritage Areas: Make-a-map (Ministry of Natural Resources and Forestry, 2018); Accessed March 03, 2021
- Ontario Reptile and Amphibian Atlas (ORAA) (Ontario Nature, 2018); Accessed August 11, 2021
- Ontario Breeding Birds Atlas (OBBA) (2001-2005) (Bird Studies Canada, 2005): Accessed August 11, 2021
- Peterborough County Official Plan (County of Peterborough, 2020); Accessed September 03, 2021
- County of Peterborough Let me Map (County of Peterborough, 2021); Accessed September 03, 2021

Figure 2 shows the mapped natural heritage features present in the general area of the Site.

3.1.1 Ministry Consultation

Depending on the natural feature of the Site, ministry consultation may include the Ministry of Northern Development, Mines, Natural Resources, and Forestry (NDMNRF) and/or the Ministry of Environment, Conservation, and Parks (MECP), as applicable.

In early 2019, the Government of Ontario made changes to the regulating authority on matters related to SAR in the province. The MECP is now responsible for administering the ESA and providing direction on potential compliance issues. MECP has prepared a guidance document titled *Client's Guide to Preliminary Screening for Species at Risk* (Ministry of the Environment, Conservation and Parks, 2019). This document aims to "help clients better understand their obligation to gather information and complete a preliminary screening for SAR before contacting the Ministry". This document was used to guide the SAR habitat-based screening for the Study.

3.2 Field Investigations

Information gathered through the background information review was used to guide the development of the fieldwork program. The purpose of the site visit(s) was to verify information acquired through existing documentation and to gather additional site-specific information. The following sections provide the methods that were used to gather site-specific information.

3.2.1 Ecological Land Classification and Vegetation Inventory

The Ecological Land Classification (ELC) System for Southern Ontario (Lee, et al., 1998) was used to classify vegetation communities on the Site. Definitions of vegetation types are derived from the ELC for Southern Ontario First Approximation Field Guide (Lee, et al., 1998) and the revised 2008 tables. ELC units were initially delineated and classified by orthoimagery interpretation. Field investigations served to confirm the type and extent of communities on the Site through vegetation inventory and soil assessment with a hand auger. Where vegetation communities extend off the Site, classification is done through observation from property boundaries and publicly accessible lands.

3.2.2 Wetland Boundary Delineation

Wetland boundaries were initially delineated and classified by orthoimagery interpretation. The presence/absence of wetlands on the Site was confirmed through field investigations during the growing season (late May through October). Wetland boundaries were determined using the 50% wetland vegetation rule. Where vegetation-based delineation was inconclusive, soil



assessment with a hand auger was used to confirm wetland boundaries. Wetland boundaries on the Site were marked with a hand-held GPS unit and staked in the field. Where wetland communities extend off the Site, classification was done through observation from property boundaries and publicly accessible lands.

3.2.3 Grassland Bird Surveys

Bobolink (*Dolichonyx oryzivorus*) and Eastern Meadowlark (*Sturnella magna*) are SAR listed as threatened on the SARO list. These species prefer natural grasslands and agricultural fields, including pasture, hayfields and abandoned fields (CUM vegetation type under ELC), for breeding and nesting sites. One or both of these species have been recorded in the vicinity of the Site within recent years. Bobolink is an area sensitive species that requires a minimum area of 5 ha to support breeding habitat, with larger areas generally providing additional habitat benefits (Ministry of Natural Resources and Forestry, 2018). Eastern Meadowlark are not as strongly area sensitive; however, a minimum area of 5 ha is also required to support preferred breeding habitat (Ministry of Natural Resources and Forestry, 2018).

In order to determine if the Site is being used as nesting habitat by Bobolink or Eastern Meadowlark, avian surveys were conducted following the approved MNR protocol for Eastern Meadowlark (Ontario Ministry of Natural Resources, 2013). This protocol is suitable for use with both of these species. This method involves recording Bobolink and Eastern Meadowlark observations via both point count location(s) and traveling transects between points. The protocol requires that the Site be visited three times between May 21 and July 3 (the nesting season for both of these species) with survey dates being evenly distributed within this period and conducted within 7-10 days of each other. Surveys are conducted between sunrise and four hours after sunrise when wind speed is low (<19 km/h; Beaufort Wind Scale of 3 or lower) and with light or no precipitation.

3.2.4 Habitat-Based Wildlife Surveys

Given the scale of the proposed development, a habitat-based approach was used to assess potential impacts to wildlife, consistent with standard practice. General habitat information



gathered through the field investigations was used to assess the connectivity of the Site with the surrounding landscape and evaluate the ecological significance of the local area. Cambium staff actively searched for features that may provide specialized habitat for wildlife. These searches included inspecting tree cavities, overturning logs, rocks and debris, and scanning for scat, browse, sheds, fur, etc. Any evidence of breeding, forage, shelter, or nesting was noted. Species and habitat observations were documented and photographed.



4.0 Characterization of Natural Features and Functions

Background information and field investigation data are provided in the following sections, and an assessment of significance has been completed to identify protected natural heritage features on and adjacent to the Site.

The following field investigations were carried out on the Site and are summarized in Table 2.

Date	Time On-Site	Weather	Observer	Activities
2021-05-28	7:30-9:00	7°C, light rain Wind: 3	K. McKitterick	Ecological Land Classification Wetland Delineation Grassland Breeding Bird Survey
2021-06-04	6:00-7:00	12°C, Clear Wind: 1	K. McKitterick	Ecological Land Classification Wetland Delineation Grassland Breeding Bird Survey
 2021-07-07	6:30-8:00	19°C, drizzling Wind: 1 Noise: 1	K. McKitterick	Grassland Breeding Bird Survey

Table 2 Summary of Field Investigations

Notes:

Wind speed is reported as a Beaufort Wind Scale value (0 = 0-2 kph, 1 = 3-5 kph, 2 = 6-11 kph, 3= 12-19 kph, 4 = 20-30 kph, 5 = 31-39 kph, 6 = 40-50 kph)

Noise is reported based on background noise levels: Index 0 – no appreciable effect, 1 – slightly affecting sampling, 2 – moderately affecting sampling, 3 – seriously affecting sampling, 4 – profoundly affecting sampling.

4.1 Landscape Position and Topography

The Site is within the Mixedwood Plains Ecozone: Lake Simcoe Rideau Ecoregion 6E, which extends southward from a line connecting Lake Huron in the west to the Ottawa River in the east including Ottawa, Kingston, Peterborough, Barrie, Tobermory, Kitchener, and Toronto. This ecoregion is characterized by mixed geology that includes both shallow soil areas such as alvar and bedrock plains, as well as deep soil areas such as the Oak Ridges Moraine. It falls within the Great Lakes-St. Lawrence Forest Region, including deciduous and mixed forests;



however, over 50% of the landscape in this Ecoregion is currently in use as agricultural land (Lee, et al., 1998).

The Site is relatively flat, with topography approximately 255 m above sea level.

4.2 Vegetation Communities

The vegetation communities on and adjacent to the Site are summarized in Table 3 and are mapped on Figure 2. A list of identified species and representative photos for each community are provided in Appendix B.

Table 3 Vegetation Communities

No.	ELC Code	Community Description	Community Type	S –Rank
1	CUM1	Cultural Meadow	Terrestrial	SNA
2	FOD5-8	Fresh Sugar Maple – White Ash Deciduous Forest	Terrestrial	S5
3	SWM1-1	White Cedar – Mixed Mineral Swamp	Wetland	S5
4	CUW	Cultural Woodland	Terrestrial	SNA
5	SWD2-2	Red / Green Ash Mineral Deciduous Swamp	Wetland	S5
6	FOD	Deciduous Forest	Terrestrial	

A search for Butternut (*Juglans cinerea*; provincially endangered) was completed as part of the vegetation survey; no Butternut trees were identified.

4.2.1 Significant Woodlands

Significant woodlands are natural heritage features that are afforded protection under provincial policy within Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River). According to their respective Official Plan Schedules, the planning authority has not explicitly defined or designated significant woodlands within their jurisdiction. In the absence of local criteria for evaluating woodlands, the Natural Heritage Reference Manual (NHRM) provides guidance on evaluating woodlands (Ministry of Natural Resources, 2010).



A summary of the significant woodlands assessment is provided in Table 3. An explanation of the results is presented in the following sections.

Table 4 Summary of Woodland Significance Evaluation

Woodlands Significance	Percent Cover of Woodland in Planning Area					Meets
Criteria	<5%	5-15%	16-30%	31-60%	>60%	Criteria (Yes/No)
Woodland Size Criterion						
Woodland Size	2 ha	4 ha	20 ha	50 ha	n/a	No
Ecological Functions Criter	ia					
Woodland Interior	any	any	2 ha	8 ha	20 ha	No
Proximity to Other Woodlands and Other Habitats	0.5 ha	1 ha	4 ha	10 ha	50 ha	No
Linkages	0.5 ha	1 ha	4 ha	10 ha	50 ha	No
Water Protection	0.5 ha	0.5 ha	2 ha	4 ha	4 ha	No
Woodland Diversity (composition)	0.5 ha	1 ha	4 ha	10 ha	20 ha	No
Uncommon Characteristics	Uncommon Characteristics Criteria					
Unique Species Composition	0.5 ha	1 ha	2 ha	4 ha	10 ha	No
Rare Vegetation Community	0.5 ha	1 ha	2 ha	4 ha	10 ha	No
Rare or Uncommon Plant Species	0.5 ha	1 ha	2 ha	4 ha	10 ha	No
Older Woodland Characteristics	0.5 ha	1 ha	2 ha	4 ha	10 ha	No
Economic and Social Functions Criteria						
High Economic or Social Value	n/a	n/a	n/a	n/a	n/a	No

Note: *woodlands must meet characteristics listed in the criterion and the corresponding area threshold



Bold values indicate the area threshold relevant to this Site

The woodlands adjacent to the Site do not meet the criteria for woodland size, ecological functions, uncommon characteristics, or economic and social functions. Thus, the woodlands adjacent to the Site are not considered significant, in accordance with the guidelines outlined in the NHRM.

4.3 Wetland Delineation

There is one mapped unevaluated wetland overlapping the Site. Provincial mapping shows these two wetlands are connected by a strip of wetland between two fields (Ministry of Natural Resources and Forestry, 2018). However, the field investigations determined the provincial wetland mapping was generally correct, except that wetland communities (SWD1-1 and SWD2-2) are separated by a Cultural Woodland (CUW).

The Swamp White Oak Mineral Deciduous Swamp (SWD1-1) was delineated based on the abundance of wetland species, in particular Sensitive Fern (*Onoclea sensibilis*). The Green Ash Mineral Deciduous Swamp (SWD2-2) was delineated based on the abundance of wetland species including Sensitive Fern, Spotted Jewelweed (*Impatiens capensis*), Dark-green Bulrush (*Scirpus atrovirens*), and Mannagrass spp. (*Glyceria spp.*). The boundaries of both wetlands were GPS marked, as shown Figure 2.

4.4 Wildlife Survey Results

Aside from migratory birds (discussed in the following section), no incidental wildlife observations were made on the Site.

4.4.1 Birds

OBBA breeding bird surveys were completed as a part of this Study, as detailed in Appendix C. Bird species observed on or adjacent to the Site, breeding evidence, federal and provincial status and s-ranks are provided in Appendix C. In total, three species had probable or confirmed breeding evidence **on and adjacent to the Site** (shaded cells in Appendix C), and included:



 American Robin (*Turdus migratorius*), Mourning Dove (*Zenaida macroura*) and Common Yellowthroat (*Geothlypis trichas*).

No SAR or area-sensitive bird species were observed on or adjacent to the Site.

Grassland breeding bird surveys were completed as a part of this Study. The area of potentially suitable habitat included the Cultural Meadow (CUM1), consisting of Smooth Brome (*Bromus inermis*) up to 1 m in height and Wild Chicory (*Cichorium intybus*) up to 0.5 m in height. Bobolinks or Eastern Meadowlarks were not observed during the targeted surveys completed to identify grassland bird breeding habitat. Therefore, the Cultural Meadow (CUM1) is not habitat for Eastern Meadowlark or Bobolink.

4.5 Species of Conservation Concern

A list of species of conservation concern, including SAR, with the potential to occur in the general vicinity of the Site, has been compiled based on known species' ranges, habitat requirements, and review of background information sources (as listed in Section 3.1). In addition, the list has been augmented with direct field observations from this Study, as detailed in the previous sections. Cambium has employed a habitat-based screening, supplemented with targeted field surveys when necessary, to identify suitable habitat for species located on or adjacent to the Site. A detailed habitat suitability analysis is provided in Appendix D, and a discussion of the results is provided below.

4.5.1 Endangered and Threatened Species

As noted in Section 4.4.1, targeted surveys for Eastern Meadowlark and Bobolink confirmed the absence of these species on the Site. Habitat for other Endangered and/or Threatened species was not documented on the Site.

The Western Chorus Frog (*Pseudoacris triseriata*) is listed as threatened federally but currently not listed provincially. This species has the potential to utilize wetland habitats on the Site and adjacent lands. The proposed severance will not interfere with the habitat of this species; therefore, it will not be discussed further in this report.



4.5.2 Special Concern Species

The field investigations confirmed that no habitat is present for special concern species on or adjacent to the Site.

4.5.3 Locally Important Species

The field investigations confirmed that no habitat is present for locally important species on or adjacent to the Site.



5.0 Impact Assessment and Mitigation Measures

The proposed residential severance lot is approximately 0.65 ha in size, and rectangular with the broader side fronting on Douro 1st Line, as shown on Figure 2. The Site is currently vacant. The following sections address potential impacts to protected features identified on and adjacent to the Site that may result from the proposed development and site alteration:

• Wetlands

No other natural heritage features protected by provincial policy were confirmed on or adjacent to the Site.

Mitigation measures and best management practices have been recommended to ensure that the integrity of the existing natural features is protected or enhanced and that their functions are not negatively impacted during or following construction.

5.1 Wetlands

Wetlands are not present on the proposed severance parcel. Wetlands are present on adjacent lands within 120 m of the severance parcel. The proposed lot lines are located entirely outside the wetland and associated 30 m wetland setback, as shown on Figure 3. No development or site alteration is proposed within the wetland or 30 m wetland setback.

Cambium recommends that the 30 m wetland setback should be maintained as a Vegetation Protection Zone (VPZ). This area includes portions of Communities 3 and 5, as shown on Figure 3. The portion of the 30 m VPZ being used as agricultural lands (CUM1) can continue to be used for agricultural purposes until the Site is developed with a residential dwelling. At the time of the residential development, the lands within the VPZ can remain as a cultural meadow to provide a natural self-sustaining vegetation community. The 30 m VPZ is considered sufficient to protect the existing form and function of the wetland, provided that no vegetation removals or grading occur.

Before any construction activities occur, it is essential that perimeter Erosion and Sediment Control (ESC) fencing be installed around construction areas. Fencing should be properly keyed into the ground and securely fastened to vertical supports spaced ≤ 2 m apart. This key



control measure will help prevent sediment from entering the wetlands. All sediment fencing should be regularly maintained and kept in good working condition until the area has been stabilized and successfully revegetated. Any observed overland drainage channels originating from the Site that may or may not have formed by erosion should be directed to a check dam structure before discharging to off-site areas.

Provided that the new severance lines are located outside the wetland and its 30 m VPZ and all recommendations herein are adhered to, no direct or indirect impacts on the wetland are anticipated.

5.2 Best Management Practices

Best management practices are provided for birds on the Site. Nesting birds are protected under the *Migratory Birds Convention Act*, 1994. Vegetation clearing on the Site should occur outside the breeding bird season, extending from April 15 to August 15 in the local area (as per Environment and Climate Change Canada Guidelines).

If vegetation clearing must occur between April 15 and August 15, the area should be investigated for the presence of breeding birds and nests containing eggs and/or young by a qualified biologist, before Site alteration. Nests discovered should be left undisturbed until young have fledged or the nest is determined to be inactive. Note that many birds nest on the ground or in low shrubs and herbaceous vegetation, and that these features should be included in the active search. Vegetation clearing can proceed provided there are no active nests.



6.0 Policy Compliance

Based on the key natural heritage and hydrologic features identified on or adjacent to the Site and the findings of the field investigations detailed herein, the Site's proposed development complies with the PPS and GPGGH. Compliance with applicable natural heritage policy is summarized in Table 5.

Key Natural Heritage / Hydrologic Feature	On-Site	On Adjacent Lands	Meets Associated Policy		
Wetland	Yes	Yes	Yes, 4.2.3.1(e,f)		
	Explanation: The proposed severance is located outside of the wetlands and their 30 m VPZ. The VPZ is of sufficient width to protect the wetland features and will be maintained with natural self-sustaining vegetation.				

Table 5 GPGGH Policy Compliance Summary



7.0 Summary of Mitigation, Compensation, and Best Practices

- 1. All required permits and approvals should be obtained before any Site alteration or construction.
- 2. Site Plans should include the wetland limits and 30 m VPZs, as shown on Figure 3; the lot lines and development envelope should be fully located outside of these setbacks.
- The portions of the 30 m VPZ that are currently occupied by a cultural meadow can remain as this self-sustaining vegetation community; no vegetation removals or grading should occur within the VPZ.
- 4. Perimeter ESC fencing should be erected before the commencement of any Site alteration or development, including vegetation clearing, grading, stockpiling, and/or storage of equipment and materials. This measure should be maintained in proper working order until the Site has been successfully revegetated or all loose substrates have been stabilized. All ESC fencing should be removed following construction.
- 5. The silt fence should be inspected regularly to ensure that it remains in good condition: and any downed areas, rips, or holes should be repaired or replaced immediately.
- 6. Vegetation clearing on the Site should occur outside the breeding bird season, extending from April 15 to August 15 in the local area. If vegetation clearing must occur between April 15 and August 15, the area should be investigated for the presence of breeding birds and nests containing eggs and/or young by a qualified biologist, before Site alteration. Nests discovered should be left undisturbed until young have fledged or the nest is determined to be inactive.



8.0 Closing

In closing, potential negative impacts associated with the proposed development and site alteration can be appropriately minimized, provided that the recommendations outlined in Section 7.0 are followed. The information presented herein demonstrates that the proposed development can be conducted in a way that will not adversely impact natural heritage and hydrologic features and functions identified on or adjacent to the Site. Furthermore, the proposed development complies with applicable provincial policy.

Respectfully submitted,

Cambium Inc.

Matthew Wheeler, B.A. Hons. Senior Ecologist / Project Manager

Japan Metitterik

Keegan McKitterick Ecologist / Project Coordinator

Tessa Radimer, B.Sc. Technician

P.\12600 to 12699\12619-001 David Minshall - NHE - 921 Douro 1st Line - Douro\Deliverables\REPORT - NHE\Final\2021-12-20 RPT NHE 921 Douro 1st Line.docx



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Glossary of Terms

ANSI: Area of Natural and Scientific Interest ARA: Aquatic Resources Area

ARA: Aggregate Resources Act

AS: Agricultural System ATK: Aboriginal Traditional Knowledge BMA: Bear Management Area BMP: Best Management Practice CA: Conservation Authority CEAA: Canadian Environmental Assessment Act/Agency

CFA: Canadian Forestry Association

CFIP: Community Fisheries Involvement Program CFS: Canadian Forestry Service CHU: Critical Habitat Unit CH: Cultural Heritage CLI: Canada Land Inventory CLU: Crown Land Use

COSSARO: Committee on the Status of Species at Risk in Ontario

CR: Conservation Reserve

CWIP: Community Wildlife Involvement Program CWS: Canadian Wildlife Service DFO: Fisheries and Oceans Canada EA: Environmental Assessment EAA: Environmental Assessment Act EAB: Emerald Ash Borer EBR: Environmental Bill of Rights EIA: Environmental Impact Assessment EIS: Environmental Impact Study/Statement ELC: Ecological Land Classification System

ELC: Ecological Land Classification System ELUP: Ecological Land Use Plan END: Endangered species EPA: Environmental Protection Act ER: Environmental Registry ESA: Endangered Species Act (2007) ESA: Environmentally Sensitive Area ESC: Erosion and Sediment Control GIS: Geographic Information System GLSL: Great Lakes – St. Lawrence GPGGH: Growth Plan for the Greater Golden Horseshoe GPS: Global Positioning System HSA: Habitat Suitability Analysis HIS: Habitat Suitability Index KHA: Key Hydrologic Areas KHF: Key Hydrologic Features KNHF: Key Natural Heritage Features LCFSP: Licence to Collect Fish for Scientific

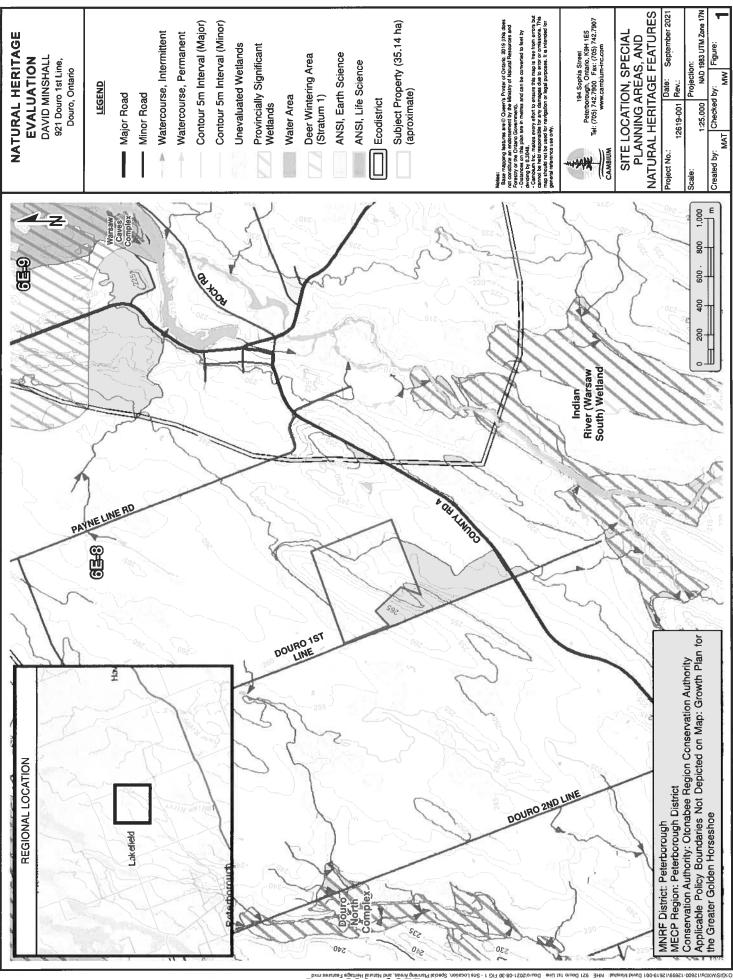
Purposes LIO: Land Information Ontario LRIA: Lake and Rivers Improvement Act LUP: Land Use Permit or Plan MA: Management Area MAFA: Moose Aquatic Feeding Area MCEA: Municipal Class Environmental Assessment MECP: Ontario Ministry of Environment, **Conservation and Parks** MNDMRF: Ontario Ministry of Natural Resources and Forestry NER: Natural Environment Report NHIC: Natural Heritage Information Centre NHIS: Natural Heritage Information System NHS: Natural Heritage System OBM: Ontario Base Map **OFIS: Ontario Fisheries Information System** OLI: Ontario Land Inventory OMAFRA: Ontario Ministry of Agriculture, Food and Rural Affairs OWES: Ontario Wetland Evaluation System PPS: Provincial Policy Statement (2014) **PSW: Provincially Significant Wetland** RLUP: Regional Land Use Plan **RMP: Regional Management Plan** R.P.F.: Registered Professional Forester SAR: Species at Risk SARO: Species at Risk in Ontario SC: Special Concern species



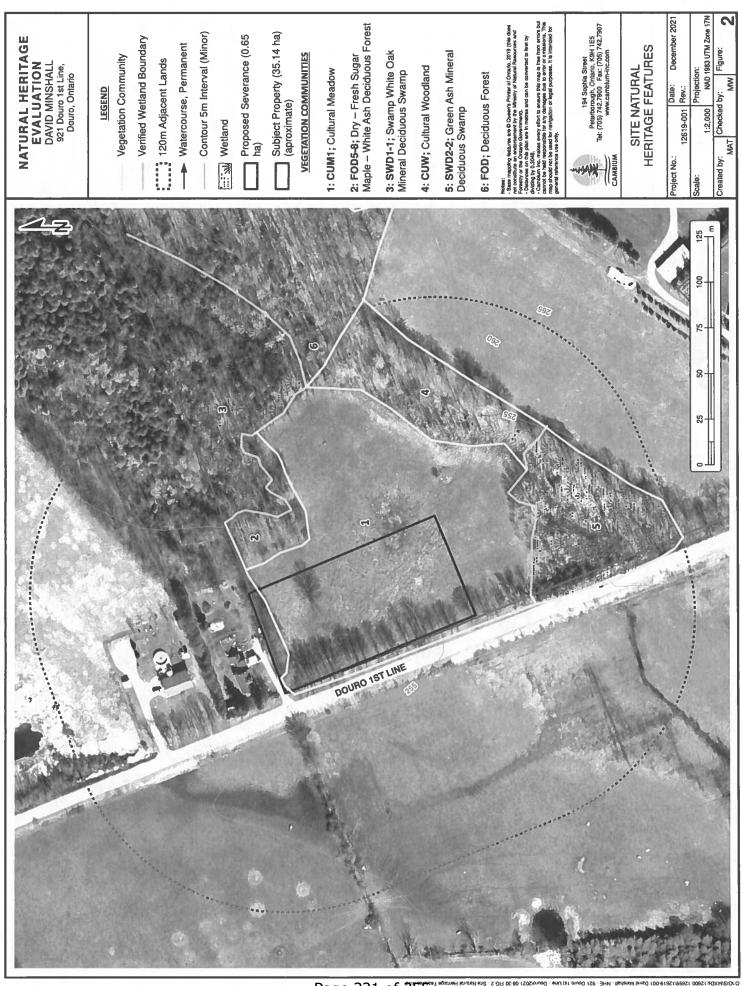
F&W: Fish and Wildlife FA: Fisheries Act (Federal) FEC: Forest Ecosystem Classification FMP: Forest Management Plan FRI: Forest Resources Inventory FWCA: Fish and Wildlife Conservation Act GGH: Greater Golden Horseshoe GHP: General Habitat Protection SWH: Significant Wildlife Habitat SWM: Stormwater Management THR: Threatened species TOR: Terms of Reference TPP: Tree Preservation Plan WIA: Woodlands Improvement Act WMU: Wildlife Management Unit



Appended Figures



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Appendix A Correspondence

Matthew Wheeler

From:	Matthew Wheeler
Sent:	July 27, 2021 9:00 AM
То:	Matt Wilkinson
Cc:	Cambium File
Subject:	Terms of Reference921 Douro First Line, Duoro (12619-001)
Attachments:	McGriskin & Minshall (revised) - PSR.PDF; severance.pdf

Hi Matt,

I hope you're doing well. I'm writing you regarding a proposed single lot severance for the property at 921 Douro First Line, Douro. Originally the owner was pursuing the severance of two lots but they have since decided to only severe the northern lot (see attached file: "severance.pdf"). I have attached the Preliminary Severance Review (PSR) for your consideration.

I would greatly appreciate if you could review and comment on the suitability of the following proposed Terms of Reference for the EIS;

- Consult with the ORCA staff, as required, to determine their interest/concerns regarding the proposed works and scope of work requirements.
- Compile and review applicable background information and environmental mapping pertaining to the Site.
- Conduct two (2) vascular plants surveys on the Site; one in late spring and another in summer, to provide a twoseason vegetation inventory.
- Classify existing vegetation communities on the Site, according to the Ecological Land Classification System for Southern Ontario (Lee et. al., 1998), and evaluate them for sensitivity, rarity, and botanical quality.
- Delineate wetland boundaries following the Ontario Wetland Evaluation System (OWES) for Southern Ontario (Ministry of Natural Resources, 2013).
- Undertake a Species at Risk (SAR) screening to assess for potential SAR habitat and evaluate compliance with the provincial *Endangered Species Act*, 2007.
- Record observations of wildlife occurrences and assess wildlife habitat function, including significant wildlife
 habitat on the Site. Any evidence of breeding, forage, shelter or nesting sites, and/or travel corridors will be
 noted. This includes three (3) grassland bird surveys.
- Identify, assess, and include detailed descriptions of the natural features and functions identified on the Site and adjacent lands.
- Map key natural heritage and hydrologic features, vegetation communities, and other environmental features (watercourses, wetlands, areas of groundwater discharge, wildlife habitat, etc.) and proposed development on current, high quality aerial imagery.
- Provide an assessment of the potential impacts of the proposed development on natural features and their related ecological and hydrologic functions.
- Demonstrate conformity with the applicable policies and plans within the ORCA watershed, including: Conservation Authorities Act and O. Reg. 167/06.
- Develop an appropriate avoidance, mitigation, and/or restoration strategy, to address the potential impacts identified.
- Complete one (1) final report with supporting figures for circulation for approval to ORCA, which includes a CV of all qualified practitioners.

Please let me know if you have any comments or suggested revisions to the above.

Kind regards, Matthew Wheeler



Matthew Wheeler Project Manager/Senior Ecologist

Cambium Inc. - Kingston

Environmental | Building Sciences | Geotechnical | Construction Monitoring p: | c: 613.876.1515 | toll: 866.217.7900 | w: cambium-inc.com

Under modified work conditions in response to the current pandemic and government directives, Cambium continues to provide the professional services you have come to expect to guide good decisions. The well-being and safety of our teams, clients, and communities are a top priority. We ask for your patience and look forward to working together as we evolve into the "new normal". Stay safe. Better days are ahead.

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Preliminary Severance Review

Prepared by the Peterborough County Planning Department



Name:Valerie McGriskinAgent:& David MinshallLot:12Concession:1

Date: November 23, 2020

Municipality: Douro Ward Township of Douro-Dummer

Office Phone:

Description: 921 Douro First Line

Phone: 705-917-0161

Email: dwminshall@gmail.com

Communication Sent To: Owner:

Agent: 🗌

	Severed	Retained
County O.P. Description	Rural Area	Rural Area
Municipal O.P. Designation (effective April 2014)	Rural	Rural
Municipal Zoning (By-Law No. 10-1996)	(RU)	(RU) & (EC)
Area/Lot Dimensions	2 lots, each ± 0.4 hectares with ± 45m of frontage	± 34.8 hectares with ± 147m of frontage
Existing Use/Buildings	Vacant	House, Barn, Outbuilding

Intent: To sever more than one residential lot. Roll No.(s) 1522-010-002-03001.

County Official Plan Policy Review: The subject property is described as Rural Area in the County of Peterborough Official Plan. Section 2.6.3.5 of the Plan suggests that residential severances for land holdings located in the Rural Area should be discouraged in favour of development in Settlement Areas in an effort to promote orderly growth and development. However, severances in the Rural Area may be considered provided Health Unit, road frontage and access and Minimum Distance Separation requirements can be met (Ss.2.6.3.5 (A), (C) & (G)) and provided the applicable policies of Sections 2.6.3.1, 2.6.3.5, 4.1.3 and 4.3 are complied with (S.2.6.3.5 (H)).

Municipal Official Plan Policy Review: The subject property is designated Rural in the Local Component of the County Official Plan. In the Rural designation a maximum of two severances are permitted from a property as it existed 25 years prior to the date of application (S. 6.1.1 & 6.2.2.5(d)). Peterborough County Land Division records indicate that the subject property has not received any previous severances, therefore the property remains eligible for consent.

In addition to the above requirement for a residential lot in the Rural designation, the landowner must have owned the property for a minimum of 5 years, and the size of the new lot created specifically for a residential use shall not exceed 1 hectare in area (S. 6.2.2.5(d)(i)&(ii)). The landowners appear to meet the minimum length of ownership requirements, and the severed parcels are both less than 1 hectare in area.

All consents must also meet road frontage & access, Zoning By-law, Minimum Distance Separation and Health Unit requirements (S.7.12.2, 7.12.4, 7.2.3 & 7.12.12). MDS requirements appear to be met; the applicant has provided written confirmation from the Township that the barn on the retained lands is not suitable for housing livestock.

Municipal Zoning By-Law Review: The severed parcels are zoned Rural (RU) in the Municipal Zoning By-law. A single detached dwelling is permitted in the (RU) zone (S.9.1.5), provided the parcel has a minimum lot area of 0.4 hectares and a minimum lot frontage of 45 metres (S.9.2.4(a)&(b)). Both severed parcels appear to meet these minimum requirements.

The retained parcel is zoned Rural (RU) and Environmental Conservation (EC) in the Municipal Zoning By-law. An agricultural use is permitted in the (RU) zone (S.9.1.1), provided the parcel has a minimum lot area of 20 hectares and a minimum lot frontage of 135 metres (S.9.2.1(a)&(b)). The retained parcel appears to meet these minimum requirements. The portion of the retained parcel within the (EC) zone will not be impacted as a result of this proposal.

Provincial Policy Review: The Provincial Policy Statement (PPS) and Growth Plan for the Greater Golden Horseshoe (GPGGH) apply to this proposal.

The following key natural heritage features and/or key hydrologic features have been identified on or adjacent to the subject property: wetlands and stream.

Sections 4.2.3 and 4.2.4.1(c) of the Growth Plan (2019) state that development and site alteration, including lot creation, is not permitted in key hydrologic features or the minimum 30 metre vegetation protection zone (VPZ) surrounding the feature. In addition, Section 4.2.4.1 of the Growth Plan (2019) states that development within 120 metres of a key hydrologic feature will require a natural heritage evaluation/hydrologic evaluation. The southern-most severed parcel is well within the 30 metre vegetation protection zone surrounding a wetland and does not conform to the Growth Plan. The northern-most severed lot is slightly within the 30 metre vegetation protection zone. The lot lines of this proposed lot should be adjusted to ensure that the severed parcel is located outside the key hydrologic feature and its associated VPZ in order to comply with Growth Plan policy. Both severed lots are within the 120 metre buffer surrounding the wetland, therefore a natural heritage evaluation and/or hydrologic evaluation is required. Evaluations undertaken in accordance with these policies will identify the boundaries of the key natural heritage feature, vegetation protection zones, and any additional restrictions to be applied before, during and after development to protect the hydrologic and ecological functions of the feature.

A portion of the subject property is traversed by an area identified for habitat of endangered species and threatened species, as shown on the attached sketch. Policy 2.1.7 of the Provincial Policy Statement prohibits development and site alteration, including lot creation, within habitat of endangered species and threatened species, except in accordance with provincial and federal requirements. A Species at Risk (SAR) assessment is required as part of the natural heritage evaluation, referenced above. Minimum Distance Separation Formula I (MDS I) as per policy 1.1.5.8 of the 2020 Provincial Policy Statement has been calculated for the livestock facilities (i.e. barns) at 999 Douro First Line and 996 Douro First Line (see map attached). The MDS arcs are smaller than those shown in a Preliminary Severance Review dated May 8, 2020 since the revised lot configuration no longer results in a cluster of 4 or more residential lots. Based on the calculation using a Type A land use, and the removal of the MDS arc from the retained parcel (not suitable for housing livestock as determined by Township), the proposal appears to meet Minimum Distance Separation requirements.

The subject property is located within a Prime Agricultural Area, as identified in the new Agricultural System for the Greater Golden Horseshoe (Growth Plan, 2019). Outside of the Greenbelt Area, provincial mapping of the agricultural land base does not apply until it has been implemented in the County Official Plan and until such time, the current designation applies.

Additional Notes:

* The lands appear to be regulated by Regulation 167/06, the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation of the Otonabee Conservation Authority. Therefore, the proposal should be discussed with Matt Wilkinson/Don Allin at (705) 745-5791 ext.213/ext.225 to determine what, if any permits may be necessary.

* The applicant and any prospective owners are advised that endangered and/or threatened species exist in the area and may exist on the site. It is the responsibility of the landowner to identify endangered and threatened species and their habitat within the property prior to undertaking work, and to ensure that the work/activity will not result in negative impacts. Landowners are encouraged to consult with the Ministry of Environment, Conservation and Parks (MECP) if they have questions about the *Endangered Species Act, 2007 (ESA).* Any sightings of a threatened or endangered species during development and construction on the property must be reported in accordance with the ESA.

This Preliminary Severance Review has been circulated by the Planning Department to the following agencies (marked with an X):

Local Municipality of Douro-Dummer

County Infrastructure Services (i.e. Roads) ;

Conservation Authority;

First Nations;

Other

Agencies to be Contacted by Owner/Agent (marked with an X):

Township

Health Unit

Conservation Authority	Trent-Severn Waterway
Source Water Risk Management Officer	First Nations
Ministry of Environment, Conservation and Parks	Other

Proposal does not appear to conform to the Growth Plan for the Greater Golden Horseshoe and/or Provincial Policy Statement policies.

The severance proposal does not appear to conform to the Provincial Plan(s). The severed parcels appear to be within the 30 metre vegetation protection zone (VPZ) surrounding a nearby wetland and new lots are not permitted in this area. The lot lines should be reconfigured to stay outside of the 30 metre VPZ. A Natural Heritage Evaluation will be required for any future application since both lots are within 120 metres of a wetland.

The applicant should be aware that the Provincial Growth Plan and Provincial Policy Statement take precedence over local Official Plans.

Proposal appears to conform to County Official Plan policies.

The severance proposal appears to conform to the County Official Plan, provided road frontage and access, and Health Unit requirements can be met.

Proposal appears to conform to Township Official Plan policies.

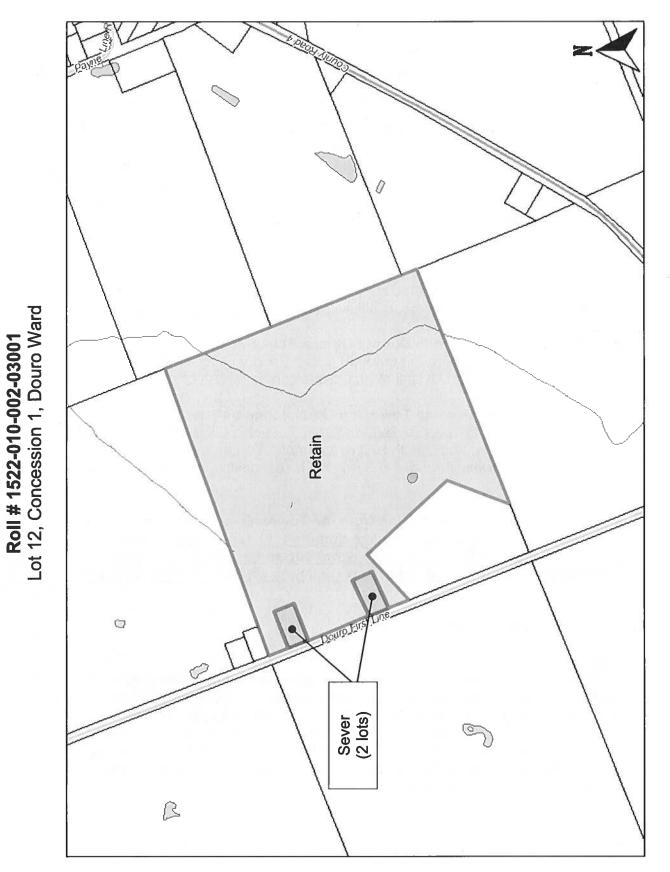
The severance proposal appears to conform to the Township Official Plan, provided road frontage and access, and Health Unit requirements can be met. Since the property fronts on a Township road, the Township is responsible for issuing entrance permits.

Application requires confirmation from the Township or identified agency regarding policy conformity. <u>**Please note that the landowner should be aware that members of the local council may not support a rezoning or minor variance to create a lot that is not in compliance with the provisions of the zoning by-law.**</u>

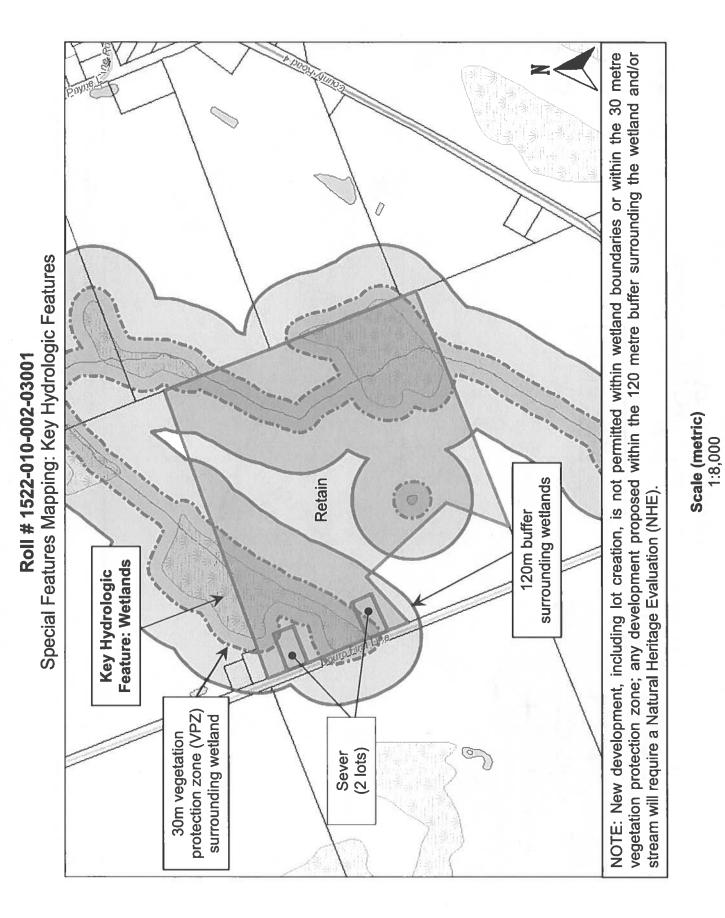
Reviewed By: Keziah Holden

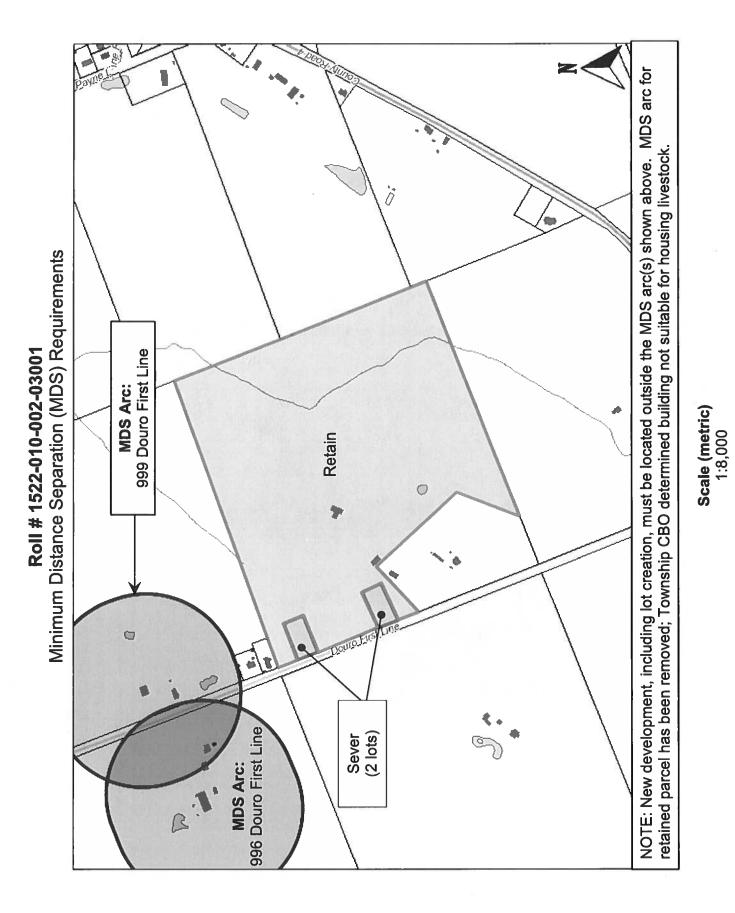
Important

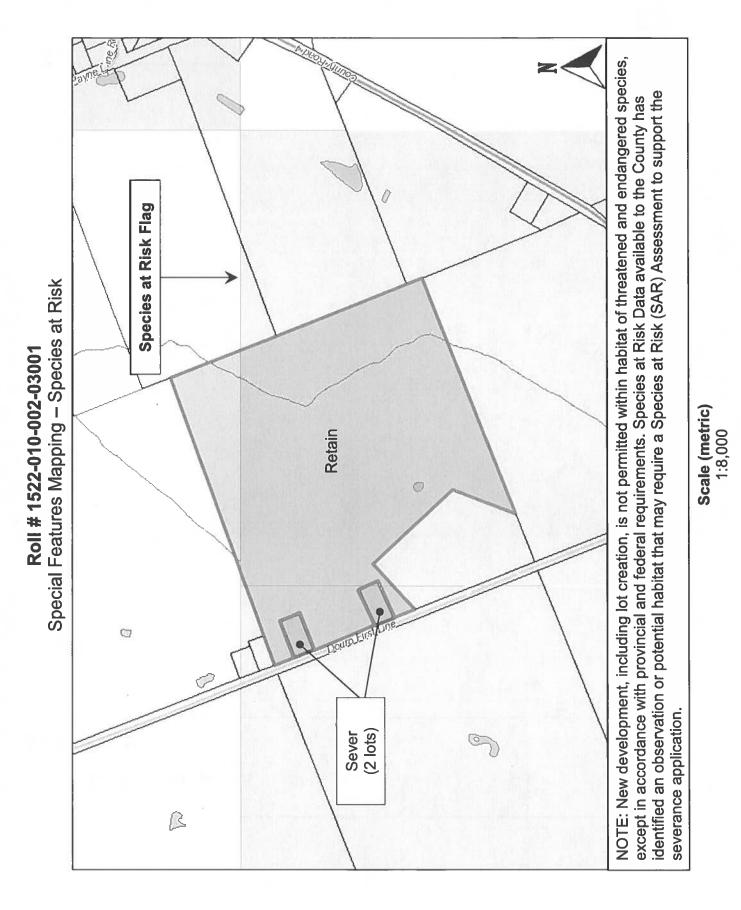
Our position on the overall conformity of the proposal is based on information available at the time of review. Subsequent information from commenting agencies can change our comments relating to any formal application for severance which is subsequently filed. Therefore, the above-noted comments should not be construed as preliminary approval or denial of a proposal but recognized as a position of the County Planning Department based on the availability of current information.



Scale (metric) 1:8,000









Appendix B Vegetation Species List

44.5973454, VTES: -78.1955781	FIELD STAFF: Keegan McKitterick	S-Rank	SNA	SNA	SNA	SNA	SNA	SNA	SNA	SNA	S5	SNA	SNA	S5	S5	SNA	SNA
COORDINATES:	FIELD ST	SARO								20							
LOCATION: 1st line, Warsaw	Matt Wheeler	SARA															
LOCATION:	PROJECT MANAGER:	၁၀၁									0			Ŧ	2		
1	June 04, 2021	CoW	e	e	5	3	5	5	3	3	-3	5	5	3	0	3	5
COMMUNITY #:	DATE:	Family	Asteraceae	Asteraceae	Scrophulariaceae	Poaceae	Boraginaceae	Asteraceae	Poaceae	Fabaceae	Poaceae	Роасеае	Asteraceae	Asteraceae	Salicaceae	Fabaceae	Asteraceae
COMMUNITY Cultural CLASSIFICATION: Meadow	PROJECT NUMBER: 12619-001 Vegetation Species List	Scientific Name	Arctium minus	Taraxacum officinale	Verbascum thapsus ssp. thapsus	Phleum pratense ssp. pratense	Echium vulgare	Pilosella caespitosa	Dactylis glomerata	Trifolium pratense	Phalaris arundinacea var. arundinacea	Bromus inemis	Centaurea stoebe	Solidago attissima	Populus tremuloides	Melilotus albus	Cichorium intybus
COMMUNITY	CAMBIUM PROJECT NUMBER: 1 FIELD SHEET – Vegetation Species List	Common Name	Common Burdock	Common Dandelion	Common Mullein	Common Timothy	Common Viper's Bugloss	Meadow Hawkweed	Orchard Grass	Red Clover	Reed Canarygrass	Smooth Brome	Spotted Knapweed	Tall Goldenrod	Trembling Aspen	White Sweet-clover	Wild Chicory

NOTES: Cultural meadow, common European meadow grass and old field spp. Old rubble pile indicates could have been structure present

VEGETATION COMMUNITY PHOTOS:

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44.5973454, -78.1955784	FIELD STAFF: Keegan McKitterick		S-Rank	S5	SNA	SNA	SNA	SNA	SNA	S5	S4	S5	
44.5973454, COORDINATES: -78.1955784	FIELD STAFF: Ke		SARO										
LOCATION: 1st line, Warsaw	Matt Wheeler		SARA										
LOCATION:	PROJECT MANAGER:		CoC	2						2	4	9	
: 2	TE: July 07, 2021		CoW	3	5	3	0	3	5	0	3	3	
COMMUNITY #:	LAD		Family	Onagraceae	Rosaceae	Rosaceae	Rhamnaceae	Роасеае	Роасеае	Salicaceae	Oleaceae	Asteraceae	
VEGETATION COMMUNITY CLASSIFICATION: FOD5-8	PROJECT NUMBER: 12619-001	tion Species List	Scientific Name	Circaea canadensis ssp. canadensis	Malus pumila	Crataegus monogyna var. monogyna	Rhamnus cathartica	Dactylis glomerata	Bromus inermis	Populus tremuloides	Fraxinus americana	Solidago flexicaulis	
	CAMBIUM PROJEC	FIELD SHEET – Vegetation Species List	Common Name	Canada Enchanter's Nightshade	Common Apple	English Hawthom	European Buckthom	Orchard Grass	Smooth Brome	Trembling Aspen	White Ash	Zigzag Goldenrod	

NOTES:

44.5973454, -78.1955784	FIELD STAFF: Keegan McKitterick		S-Rank	S5	S5	S5	S5	S5	S5	S4	S5	S5	S5	ß
COORDINATES:	FIELD STAFF:		SARO											
LOCATION: 1st line, Warsaw	Matt Wheeler		SARA											
LOCATION:	PROJECT MANAGER:		CoC	3	9	5	2	2	4	3	4	4	4	a
m	: July 07, 2021		CoW	ų	-3	3	3	0	ę	-3	0	-5	ę	Ş
COMMUNITY #:	DATE:		Family	Cyperaceae	Cyperaceae	Fagaceae	Onagraceae	Equisetaceae	Cupressaceae	Oleaceae	Aceraceae	Cyperaceae	Dryopteridaceae	Роасеае
VEGETATION COMMUNITY CLASSIFICATION: SWM1-1	PROJECT NUMBER: 12619-001	ion Species List	Scientific Name	Carex bebbii	Carex intumescens	Quercus macrocarpa	Circaea canadensis ssp. canadensis	Equisetum hyemale ssp. affine	Thuja occidentalis	Fraxinus pennsylvanica	Acer rubrum	Scirpus microcarpus	Onoclea sensibilis	Glyceria grandis var. grandis
	CAMBIUM PROJEC	FIELD SHEET – Vegetation Species List	Common Name	Bebb's Sedge	Bladder Sedge	Bur Oak	Canada Enchanter's Nightshade	Common Scouring-rush	Eastern White Cedar	Red Ash	Red Maple	Red-tinged Bulrush	Sensitive Fem	Tall Mannagrass

NOTES: Wet area visible on spring airphoto, not wet at time of field visit but dominated by sensitive fern and unvegetated patches

1												
Keegan McKitterick		S-Rank	S5	S5	S5	S5	S5	SNA	SS	S5	S4?	SS
FIELD STAFF:		SARO	-									
Matt Wheeler		SARA										
PROJECT MANAGER:		200	4	2	4	9	0		4	2	9	5
: July 07, 2021		CoW	3	3	-3	3	3	5	3	0	e	3
DATE		Family	Tiliaceae	Rosaceae	Cupressaceae	Fagaceae	Poaceae	Ровсеве	Aceraceae	Salicaceae	Vitaceae	Liliaceae
12619-001	s List	ic Name	lericana	jiniana var. Nana	cidentalis	is rubra	ndinacea var. inacea	inermis	scharum	emuloides	locissus Jefolia	Maianthemum canadense ssp. canadense
ECT NUMBER	ation Species	Scientifi	Tilia am	Prunus virgir virgir	Thuja occ	Quercu	Phalaris arun arundi	Bromus	Acer sac	Populus tr	Parthen quinqu	Maianthemur ssp. car
CAMBIUM PROJE	FIELD SHEET – Veget	Common Name	Basswood	Chokecherry	Eastern White Cedar	Northern Red Oak	Reed Canarygrass	Smooth Brome	Sugar Maple	Trembling Aspen	Virginia Creeper	Wild Lily-of-the-valley
	PROJECT NUMBER: 12619-001 DATE: July 07, 2021 M.	PROJECT NUMBER: 12619-001 DATE: July 07, 2021 MANAGER: Matt Wheeler Vegetation Species List	2619-001 DATE: July 07, 2021 PROJECT Anader: MANAGER: Matt Wheeler ne Family CoW CoC SARA	2619-001 PROJECT 2619-001 DATE: July 07, 2021 MANAGER: Matt Wheeler ne Family CoW CoC SARA e Tiliaceae 3 4 4	2619-001 PROJECT 2619-001 DATE: July 07, 2021 MANAGER: Matt Wheeler ne Family CoW CoC SARA ne Family CoW CoC SARA narr Rosaceae 3 4 1 narr Rosaceae 3 2 1	Induct PROJECT 2619-001 DATE: July 07, 2021 MANAGER: Matt Wheeler ne Family Cow Coc SARA ne Family Cow Coc SARA ne Tiliaceae 3 4 1 var. Rosaceae 3 2 1 lis Cupressaceae -3 4 1	2619-001 PROJECT 2619-001 DATE: July 07, 2021 MANAGER: Matt Wheeler ne Family CoW Co ne Family CoW Co a Tiliaceae 3 4 nar. Rosaceae 3 4 alis Cupressaceae 3 4 a Fagaceae 3 6	PROJECT 2619-001 DATE: July 07, 2021 MANAGER: MALAMeeler n	PROJECT 2619-001 DATE: July 07, 2021 MANAGER: MATWheeler ne Family Colspan="4">CO ne Family Col SARA ne Family Col Col ne SaRA SaRA SaRA ne SaRA SaRA SaRA ne SaRA SaRA ne SaRA ne <	2619-001 PROJECT PROJECT ne Family DATE: July 07, 2021 MANAGER: ne Family Cow Com SARA a Tiliaceae 3 4 A a Tiliaceae 3 4 A alis Cupressaceae 3 4 A alis Cupressaceae 3 2 A alis Cupressaceae 3 6 A alis Cupressaceae 3 6 A alis Poaceae 3 0 0 alis Poaceae 3 0 alis Poaceae 3 4 m Acreaceae 3 6	PROJECT PROJECT DATE: July 07, 2021 MANAGER: Matt Wheeler me Family CoW CoM SARa n Tilleceae 3 4 Natt n Tilleceae 3 2 Natt n Cupressaceae 3 2 Nat n Fagaceae 3 6 Nat n Fagaceae 3 6 Nat n Poaceae 3 6 Nat n Aceraceae 3 4 n Aceraceae <th< td=""><td>Jetion Procession Jetion Procession DATE: July 07, 2021 MANGGR: Matt Wheeler me Family Colyperstance e Tilliaceae 3 4 list Cupressaceae 3 4 list Cupressaceae 3 4 and Tilliaceae 3 6 and Tilliaceae 3 4 and Tilliaceae 3 6 and Tilliaceae 3 4 and Tiliaceae 3 4</td></th<>	Jetion Procession Jetion Procession DATE: July 07, 2021 MANGGR: Matt Wheeler me Family Colyperstance e Tilliaceae 3 4 list Cupressaceae 3 4 list Cupressaceae 3 4 and Tilliaceae 3 6 and Tilliaceae 3 4 and Tilliaceae 3 6 and Tilliaceae 3 4 and Tiliaceae 3 4

NOTES:

44.5973455, -78.1955786	FIELD STAFF: Keegan McKitterick		S-Rank	SS	S5	S5	S5	S5	S5	S4	S5	S5	S5	S5	S5
COORDINATES:	FIELD STAFF:		SARO												
1st line Warsaw	Matt Wheeler		SARA												
LOCATION:	PROJECT MANAGER:		CoC	9	2	3	4	3	0	3	4	0	4	4	5
\d #:5	DATE: July 07, 2021		CoW	ę	3	Ş	Ŷ	-5	0	-3	ų	-3	-3	Ŷ	ų
COMMUNITY			Family	Cyperaceae	Onagraceae	Сурегасеае	Cupressaceae	Ровсеве	Aceraceae	Oleaceae	Cyperaceae	Ровсеве	Dryopteridaceae	Balsaminaceae	Ровсеве
COMMUNITY COMMUNITY CLASSIFICATION: SWD2-2	PROJECT NUMBER: 12619-001	tion Species List	Scientific Name	Carex intumescens	Circaea canadensis ssp. canadensis	Scirpus atrovirens	Thuja occidentalis	Glyceria striata var. striata	Acer negundo	Fraxinus pennsylvanica	Scirpus microcarpus	Phalaris arundinacea var. arundinacea	Onoclea sensibilis	Impatiens capensis	Glyceria grandis var. grandis
COMMUNITY COMMUNITY CLASSIFICATI	CAMBIUM PROJEC	FIELD SHEET – Vegetation Species List	Common Name	Bladder Sedge	Canada Enchanter's Nightshade	Dark-green Bulrush	Eastern White Cedar	Fow! Mannagrass	Manitoba Maple	Red Ash	Red-tinged Bulrush	Reed Canarygrass	Sensitive Fem	Spotted Jewelweed	Tall Mannagrass

NOTES: Wet area near rd



Appendix C Bird Species List

	DATES: JUNE 04, 2021
amily	Family
rdidae	Turdidae
aridae	Paridae
Imbidae	Columbidae
eridae	Icteridae
erellidae	Passerellidae
	-
amily	Family
rdidae	Turdidae
iridae	Paridae
rulidae	Parulidae
nlidae	Parulidae
Imbidae	Columbidae
eridae	Icteridae

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H = Species observed in its breading season in suitable nesting habitat
 S= Singing male present, or breading calls heard, in its breading season in suitable nesting habitat
 P= Pair observed in their breading season in suitable nesting habitat
 T= Permanent territory presumed through registration of territorial song on at least 2 days, a week apart, at the same place
 D= Courtship or display between a male and a female or 2 males, including courtship feeding or copulation

DD-Distraction display or injury faigning NU= Used nest or egg shell found (occupied or laid within the period of study) FY= Recently fledged young or downy young, including young incapable to sustain flight AE= Adults leaving or entering nest site in circumstances indicating occupied nest FS= Adult carrying faecal sac NY= Nest with young seen or heard

N= Nest-building or excavation of nest hole

X = Species observed in its breeding season (no breeding evidence) CF= Adult carrying food for young

NE= Nest containing eggs

Shaded cells indicate probable or confirmed breeding by the species within the vegetation community.

NOTES: Tree line along 1st Line - Road behind (west)

	VEGETATION COMMUNITY CLASSIFICATION:	Cultural Meadow	LOCATION:	1st Line Warsaw	COORDINATES:	44.5973388, -78.1956049	POINT COUNT #:	2
CAMBIUM	PROJECT NUMBER: 12619-001	12619-001	DATES:	May 28, 2021 June 04, 2021	PROJECT MANAGER:	Matt Wheeler	FIELD STAFF:	FIELD STAFF: Keegan McKitterick
FIELD SHEET -	FIELD SHEET – Bird Species List							
May 28, 2021								
Common Name		Scientific Name	Family	SARA		SARO	S-Rank	Breeding Evidence
Blue Jay		Cyanocitta cristata	Corvidae				S5	×
Chestnut-sided Warbler		Setophaga pensylvanica	Paulidae				S5B	I
Common Yellowthroat		Geothlypis trichas	Panlidae				S5B	S
Indigo Bunting		Passerina cyanea	Cardinalidae				S4B	т
Red-breasted Nuthatch		Sitta canadensis	Sittidae		-		S5	T
Ruby-crowned Kinglet		Reguius calendula	Regulidae				S4B	S
June 04, 2021								
Common Name		Scientific Name	Family	SARA		SARO	S-Rank	Breeding Evidence
American Robin		Turdus migratorius	Turdidae				S5B	٩
Black-capped Chickadee		Poecile atricapillus	Paridae				S5	×
Blue Jay		Cyanocitta cristata	Corvidae				S5	×
Chestnut-sided Warbler		Setophaga pensylvanica	Parulidae				S5B	н
Common Yellowthroat		Geothlypis trichas	Panlidae				S5B	1
Mouming Dove		Zenaida macroura	Columbidae				S5	٩
Red-winged Blackbird	_	Agelaius phoeniceus	Icteridae		-		S4	×

A = Agitated behaviour or anxiety calls of an adult B= Brood patch on adult female or cloacal protuberance on adult male N= Nest-building or excavation of nest hole DD= Distraction display or injury feigning NU= Used nest or egg shell found (occupied or laid within the period of study) FY= Recently fledged young or downy young, including young incapable to sustain flight AE= Adults leaving or entering nest site in circumstances indicating occupied nest FS= Adult carrying faecal sac NY= Nest with young seen or heard X = Species observed in its breeding season (no breeding evidence) H = Species observed in its breeding season in suitable nesting habitat S= Singing male present, or breeding calls heard, in its breeding season in suitable nesting habitat P= Pair observed in their breeding season in suitable nesting habitat T= Permanent territory presumed through registration of territorial song on at least 2 days, a week apart, at the same place D= Courtship or display between a male and a female or 2 males, including courtship feeding or copulation V= Visiting probable nest site

X = Species observed in its breeding season (no breeding evidence) CF= Adult carrying food for young NE= Nest containing eggs

Shaded cells indicate probable or confirmed breeding by the species within the vegetation community.

NOTES: E side of Meadow with treed area behind (east) of point count location



Appendix D

Species Of Conservation Concern Screening

APPENDIX: Species of Conservation Concern - County of Peterborough

COMMON	SCIENTIFIC	Federal	Prov	Provincial	- -	SUITABLE	SPECIES	
NAME	NAME	SARA	SARO	S-RANK	SPECIES DESCRIPTION AND HABITAT REQUIREMENTS	HABITAT	OBSERVATIONS	ASSESSMENT
Birds			State Color			ato escrete.	Real Party and	APPENDENCE IN
Bald Eagle	Haliaeetus leucocephalus	No Status	SC	S2N,S4B	The Bald Eagle is a bird of prey with a white head, neck and tail, a massive bright yellow beak, powerful legs, and a wingspan of over 2 m. It nests in a variety of habitats and forest types, almost always near a major lake or river where they do most of their hunting. These nests are usually on islands in freshwater lakes or in large trees such as the pine and poplar. During the winter, they may also be found near open bodies of water that do not freeze (1).	N	Known to occur in the general area	No further consideration required
Bank Swallow	Riparia riparia	THR	THR	S4B	The Bank Swallow is a small songbird of around 12 cm long with a distinctive dark breast band, that files with quick and erratic wingbeats (1). It nests in burrows in natural and human-made settings where there are vertical faces in silt and sand deposits. This can include banks of rivers and lakes, bluffs, active sand and gravel pits, road cuts and stockpiles of soils. However, they prefer sand-silt substrates for excavating their nest burrows. They often use large wetlands as communal nocturnal roosts post-breeding or during wintering periods (2).	Ŷ	Known to occur in the general area	No further consideration required
Barn Swallow	Hirundo rustica	THR	ТНК	S48	The Barn Swallow is a mid-sized songbird with steel-blue backs and wings, glossy in males, and a line of white spots across its upper tail. It lives in a variety of open habitats for foraging, such as grassy fields, pastures, certain agricultural crops, shorelines, cottage areas, wetlands, or subarctic tundra (2). They prefer to nest within human made structures such as barns, bridges, and culverts. Barn Swallow nests are cup-shaped and made of mud, typically attached to horizontal beams or vertical walls underneath an overhang (1).	Yes: on-site and adjacent lands	Confirmed absent through targeted surveys	No further consideration required
Black Tern	Chlidonias niger	No Status	SC	538	The Black Tern is a small waterbird with a forked tail, straight pointed bill, slender shape, and black head during breeding season. It builds floating nests in loose colonies in shallow marshes, with a preference for cattails. They breed primarily in the marshes along the edges of the Great Lakes, but may also use wetlands further north if suitable (1).	N	Known to occur in the general area	No further consideration required
Bobolink	Dolichonyx oryzivorus	ТНК	THR	S4B	The Bobolink is a mid-sized songbird of tan colour with black stripes, except for males during summer breeding season who are black with a white back and yellow collar. It prefers tall, grassy meadows, hayfields and some croplands, and feeds (largely on insects) on the ground in dense grasses (1). It tends to nest in forage crops: hayfields and pastures dominated by species including clover, bluegrass, and broadleaf plants (2).	Yes: on-site and adjacent lands	Confirmed absent through targeted surveys	No further consideration required
Canada Warbler	Cardellina canadensis	ТНК	S	S4B	The Canada Warbler is a small songbird with bright yellow underparts and bluish-grey back and tail (1). It can be found in a variety of forest types, but is most abundant in moist, mixed forests with a well-developed, dense shrub layer. Nests are usually located on or near the ground on mossy logs, and along stream banks (3).	Ŷ	Known to occur in the general area	No further consideration required
Cerulean Warbler	Cerulean Warbler Setophaga cerulea	END	THR	S3B	The Cerulean Warbler, a small songbird, is blue-green with white evebrows and two prominent white wing bars (1). It requires relatively large tracts of mature deciduous forest (>100 ha), and nests in older, second-growth deciduous forests. During breeding season, it is found in relatively large tracts of mature deciduous forests that feature large, tail trees and an open understorey (4).	Ŷ	Known to occur in the general area	No further consideration required



921 Douro 1st Line, Douro-Dummer, County of Peterborough, Ontario David Minshall Cambium Reference: 12619-001

COMBILIAN

APPENDIX: Spe	APPENDIX: Species of Conservation Concern - County of Peterborough	tion Conc	ern - Cot	intv of Pe	sterborough			
COMMON NAME	SCIENTIFIC NAME	Federal SARA	Prov SARO	Provincial RO S-RANK	SPECIES DESCRIPTION AND HABITAT REQUIREMENTS	SUITABLE HABITAT	SPECIES OBSERVATIONS	ASSESSMENT
Chimney Swift	Chaetura pelagica	ТНК	ТНК	S4B,S4N	The Chimney Swift is a small bird, between 12 and 14 cm, with a brown, cigar-shaped body, slender wings, and an erratic flight pattern. Prior to settlement, the Chimney Swift would mainly nest in cave walls and hollow trees. Now, it is found mostly near urban and suburban areas where the presence of chimneys or other manmade structures provide nesting and roosting habitat. They also tend to stay in habitat close to the water (1).	ĝ	Known to occur in the general area	No further consideration required
Common Nighthawk	Chordeiles minor	ТНК	S	S4B	The Common Nighthawk is a medium-sized bird with long, pointed wings, a long tail with a notch, and and large eyes. Its plumage of dark brown with black and white specks blends with its roost site. It is typically found in open areas such as gravel beaches, rock outcrops and burned woodlands, that have little to no ground vegetation. This species can also be found in highly disturbed locations such as clear cuts, mine tailing areas, cultivated fields, urban parks, gravel roads, and orchards (1).	Ŷ	Known to occur in the general area	No further consideration required
Eastern Meadowlark	Sturnella magna	ТНК	ТНК	S4B	The Eastern Meadowlark is a medium-sized migratory songbird with a bright yellow throat and belly, a black V shape on its chest, and a pointed bill. It prefers pastures and hayfields, but is also found to breed in orchards, shrubby fields, human-use areas such as airports and roadsides, or other open areas. The Eastern Meadowlark can nest from early May to mid-August, in nests that are built on the ground and well-camouflaged with a roof woven from grasses (1).	Yes: on-site and adjacent lands	Confirmed absent through targeted surveys	No further consideration required
Eastern Whip-poor- will	Antrostomus vociferus	H	ТНК	54B	The Eastern Whip-poor-will is a medium-sized bird with mottled brown and grey feathers to blend in with its surroundings, a large flattened head, and small bill. They are usually found in areas with a mix of open and forested areas such as patchy forests with clearings, forests that are regenerating after major disturbances, savannahs, open woodlands or openings in more mature forests. Breeding habitat is dependent on forest structure rather than composition, although common tree associations are pine and oak, and it nests directly on the forest floor (2). The species prefers to nest in semi-open or patchy forests with clearings as it forages in open areas and uses forested areas for roosting (1).	8	Known to occur in the general area	No further consideration required
Eastern Wood- Pewee	Contopus virens	S	S	54B	The Eastern Wood-pewee is a species of 'flycatcher', a bird that eats flying insects. It grows to approximately 15 cm, has greyish-olive upper parts and pale bars on its wings. This species lives in the mid-canopy layer of forest clearings and edges of deciduous and mixed forests. It prefers intermediate-age forest stands with little understory vegetation (1). It typically creates nests on tree branches 2-12 m in height (2).	g	Confirmed absent through targeted surveys	No further consideration required
Evening Grosbeak	Coccothraustes vespertinus	No Status	S	54B	The Evening Grosbeak is a large songbird with a thick greenish bill. It is a social bird that is often found in flocks, particularly during the winter months. Their preferred habitat is thick coniferous forest. During their breeding season, they are generally found in open, mature mixed forests dominated by Firs, White Spruce, or Trembling Aspen (1).	No	Known to occur in the general area	No further consideration required

Combility

921 Douro 1st Line, Douro-Dummer, County of Peterborough, Ontario David Minshall Cambium Reference: 12619-001

APPENDIX: Species of Conservation Concern - County of Peterborough

NOMMON	SCIENTIELC	Federal	Prov	Provincial		STITTABLE	SPECIES	
NAME	NAME	SARA	SARO	S-RANK	SPECIES DESCRIPTION AND HABITAT REQUIREMENTS	HABITAT	OBSERVATIONS	ASSESSMENT
Golden Winged Warbler	Vermivora chrysoptera	ТНК	SC	548	The Golden-winged Warbler is a small songbird with distinctive yellow wing patches and patches behind their eyes. It inhabits early successional habitat of old fields and favour areas where trees are spread out or forest edges to use for perching, singing, and searching for food. They seem to prefer regeneration zones with young shrub growth, surrounded by mature forest, locations that have recently been disturbed, such as field edges, hydro or utility right-of-ways, or logged areas for their breeding sites; often frequenting clusters of herbaceous plants and low bushes (1).	ê	Confirmed absent through targeted surveys	No further consideration required
Grasshopper Sparrow	Ammodramus savannarum	sc	SC	54B	The Grasshopper Sparrow is a small songbird with a streaked back, a white stripe down the center of its crown, a flattish head, and a conical beak. It inhabits open grasslands and prairies with well-drained soil, preferring areas that are sparsely vegetated. It will also nest in hayfields and pastures, as well as alvars and occasionally grain crops such as barley (1).	Yes: on-site and adjacent lands	Confirmed absent through targeted surveys	No further consideration required
Least Bittern	Ixobrychus exilis	ТНК	ТНК	S4B	The Least Bittern is a small member of the heron family, reaching around 30 cm in length. It has brown and beige plumage with chestnut patches on its wings (1). The species nests in marshes (> 5 - 10 ha) and swamps dominated by emergent vegetation, preferably cattails, interspersed with patches of woody vegetation and open water. They require dense vegetation and open water with stable levels within 10 m for nesting, and access to clear, open water for foraging (4).	Q	Known to occur in the general area	No further consideration required
Loggerhead Shrike	Lanius Iudovicianus	END	END	52B	The Loggerhead Shrike is a small bird with a black, hooked bill, grey crown, and white throat and chest. This species has specific habitat requirements that are dependent on active livestock grazing, or grassland areas that have naturally short grass cover (i.e. alvar communities). They also require spiny, multi-branched shrubs, or barbed fencing, to catch prey. They prefer grassland habitats that have sporadic occurrences of low trees and shrubs; particularly hawthorn species, which are used as part of their feeding behaviour (1).	Ŷ	Known to occur in the general area	No further consideration required
Olive-sided Flycatcher	Contopus cooperi	ТНК	S	S4B	The Olive-sided Flycatcher is a medium-sized songbird with olive colouring, often seen perching on top of tall trees waiting to catch their prey. It prefers open areas along natural mature forest edges, forest edges near natural openings such as rivers or swamps, human-made openings, or burned forest openings with numbers of dead trees. Breeding habitat usually consists of coniferous or mixed forest adjacent to rivers or wetlands, in Ontario often nesting in White and Black Spruce, Jack Pine, and Balsam Fir (1).	Ŷ	Known to occur in the general area	No further consideration required
Red-headed Woodpecker	Melanerpes erythrocephalus	THR	x	S48	The Red-headed Woodpecker is a mid-sized bird, at around 20 cm long, with a vivid red head, neck and breast as well a strong bill. The species can be found in open woodland and woodland edges, often near man-made landscapes such as parks, golf courses and cemeteries. These areas must contain a large number of dead trees for perching and nesting (1).	Ŷ	Known to occur in the general area	No further consideration required
Short-cared owl	Asio flammeus	SC	X	52N,54B	The Short-eared Owl has a large round head with small tufts of feathers, long wings, a short tail, and cryptic colouring of brown streaks. This species is found in scattered pockets across the province where suitable open habitat, including grasslands, tundra, peat bogs and marsh, can be found in sufficient quantities. Adults build nests on the ground in grassy areas and occasionally agriultural fields (1). The main factor influencing their choice in habitat is believed to be an abundance of their food source, primarily rodents and other small mammals (2).	Ŷ	Known to occur in the general area	No further consideration required



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NAME	NAME	SARA	SARO	S-RANK	SPECIES DESCRIPTION AND HABITAT REQUIREMENTS	HABITAT	OBSERVATIONS	ASSESSMENT
Wood Thrush	Hylocichla mustelina	ТНК	sc	54B	The Wood Thrush is a medium-sized songbird of around 20 cm with rusty brown coloured upper parts and white underparts with large dark spots. It breeds in deciduous and mixed forests with moderate understories, shade and abundant leaf litter where it forages for food, including larval and adult insects as well as plant material. They prefer moist stands of trees with well-developed undergrowth and tall trees for perches (1).	ę	Confirmed absent through targeted surveys	No further consideration required
American Eel	Anguilla rostrata	No Status	END	S1?	The American Eel is a long, slender bodied fish, with one long fin extending down the back and around the tail, and two small pectoral fins. It has thick lips, and a protruding lower jaw that extends out above the upper jaw. At the juvenile stage, they swim up the St. Lawrence River to reach Lake Ontario and connected tributaries where they will remain for 8 to 23 years before migrating back to their spawning grounds. In Ontario, the American eel prefers mud, sand or gravel substrates during the juvenile stage when they reside primarily in the benthic zone of waterbodies. More mature eels are able to thrive in most environments provided there is available cover during daylight hours, and the habitat is accessible (2).	ê	Known to occur in the general area	No further consideration required
Lake Sturgeon	Acipenser fulvescens	No Status	END	23	The Lake Sturgeon, a large freshwater fish, has an extended snout with four whisker-like organs hanging near the mouth and is dark to light brown or grey on its back and sides with a lighter belly. In Ontario, this fish is found in the rivers of the Hudson Bay Basin, the Great Lakes basin, and their connecting waterways. Lake Sturgeon's live almost exclusively in freshwater lakes and rivers with soft bottoms of mud, sand or gravel and are usually found at depths of 5 to 20 m. They spawn in relatively shallow, fast-flowing water or if available deeper water habitat as well (1).	Ŷ	Known to occur in the general area	No further consideration required
Herptiles								
Blanding's Turtle	Emydoidea blandingii	ТН	ТТ Н	ß	Blanding's Turtles are identifiable by their bright yellow throat and chin and domed shell. They spend the majority of their life cycle in the aquatic environment, usually in large wetlands or shallow lakes with high densities of water plants (1). These turtles prefer shallow, nutrient rich water with organic sediment and dense vegetation. They use terrestrial sites for travel between habitat patches and to lay clutches of eggs, often going hundreds of meters from their nearest water body. Blanding's Turtles nest in dry coniferous and mixed forest habitats, as well as fields and roadsides (2). From late October until the end of April, they hibernate in the mud at the bottom of permanent water bodies (1).	Ŷ	Known to occur in the general area	No further consideration required
Eastern Musk Turtle	Sternotherus odoratus	SC	S	ß	The Eastern Musk Turtle is small with a narrow carapace, a dark brown body and two light stripes on each side of their head (5). It is a small freshwater turtle found primarily in slow moving water bodies with abundant emergent vegetation and mucky bottoms along the southern edge of the Canadian Shield within which they burrow into overwinter. Nesting sites vary, but must be close to the water and exposed to direct sunlight (1).	ê	Known to occur in the general area	No further consideration required

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ASSESSMENT	No further consideration required	No further consideration required	No further consideration required	No further consideration required	No further consideration required	No further consideration required	No further consideration required
SPECIES OBSERVATIONS	Known to occur in the general area	Known to occur in the general area	Known to occur in the general area	Known to occur in the general area	Known to occur in the general area	Known to occur in the general area	Known to occur in the general area
SUITABLE HABITAT	No	No	No	No	°2	No	Ŷ
SPECIES DESCRIPTION AND HABITAT REQUIREMENTS	The Midland Painted Turtle has a olive to black carapace with red or dark orange markings on the marginal scutes, as well as red and yellow stripes on the head and neck. The species uses a variety of waterbodies including, ponds, marshes, lakes and slow- moving creeks with a soft bottom and an abundance of basking sites and aquatic vegetation. This species usually hibernates on the bottom of waterbodies (5).	The Northern Map Turtle is a medium sized turtle identified by its carapace's map contour-like patterning. It lives in larger lakes and rivers, requiring high water quality to support their primary prey species: molluscs. This species can often be seen in large groups basking together on rocks and logs. In the winter, the Northern Map Turtle can be found hibernating on the bottom of slow-moving rivers (1).	The Snapping Turtle, with its large serrated carapace, small plastron, and spiked tail, is Canada's largest freshwater turtle (5). It spends the majority of its life in water, preferring shallow water with soft mud and leaf litter, and will travel upland to gravel or sandy embankments, roadsides, along railway lines or beaches to lay their eggs (1).	The Spotted Turtle is named after the distinct yellow spots on its carapace. The species is semi-aquatic and prefers ponds, marshes, bogs and even ditches with slow-moving, unpolluted water and an abundant supply of aquatic vegetation. This species usually hibernates in wetlands or seasonally wet areas with structures such as overhanging banks, hummocks, tree roots, or aquatic animal burrows (1).	The Wood Turtle has orange coloured front legs, neck and chin and a sculpted carapace with raised, pyramidal scutes (5). They prefer clear rivers and streams that have moderate current, and sandy or gravelly substrates. This species spends more time on land than other turtle species including in meadows, swamps and fields. Wooded areas are an essential habitat component, and the species uses aquatic habitats for hibernation and mating. Nesting occurs in areas with sandy soil and abundant light (1).	The Eastern Hog-nosed Snake can be a variety of colours and patterns so is most easily identified by its flattened, upturned nose. They prefer sandy well-drained habitats such as beaches and dry forests because they lay their eggs, hibernate and burrow in these areas. The main diet of this snake is toads and frogs, so they usually stay close to water including marshes and swamps, where they have an increased chance of finding their preferred prey (1).	The Eastern Milksnake's colouration is grey or tan with reddish alternating blotches otlines in black along its back and sides (5). It has recently been delisted from being a species at risk in Ontario (1). This species tends to use open habitats such as rocky outcrops, fields and forest edges. The preferred prey of milksnakes are mice, small rodents, and ground nesting birds which are amply found in and surrounding agricultural outbuildings. The milksnake is secretive and is not likely to be encountered during the day or at night while hunting (5).
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SARA	sc	SC	sc	END	ТНК	ТНК	S
SCIENTIFIC NAME	Chrysemys picta marginata	Grapternys geographica	Chelydra serpentina	Clemmys guttata	Glyptemys insculpta	Heterodon platirhinos	Lampropeltis triangulum
COMMON NAME	Midland Painted Turtle	Northern Map Turtle	Snapping Turtle	Spotted Turtle	Wood Turtle	Eastern Hog-nosed Snake	Eastern Milksnake

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COMMON NAME	SCIENTIFIC NAME	Federal SARA	Provi SARO	Provincial RO S-RANK	SPECIES DESCRIPTION AND HABITAT REQUIREMENTS	SUITABLE HABITAT	SPECIES OBSERVATIONS	ASSESSMENT
Eastern Ribbonsnake	Thamnophis sauritus	SC	sc	z	The Eastern Ribbonsnake is slender with three bright yellow stripes running down its back and sides and a white crescent in front of each eye. This snake is usually found close to water as they are strong swimmers, often fleeing predators by diving into shallow water. It prefers wetland habitats where its prey species, frogs and small fish, are abundant. Over winter, they congregate in underground burrows or rock crevices to hibernate (1).	Ŷ	Known to occur in the general area	No further consideration required
Common Five-lined Skink (Southern Shield Population)	Plestiodon fasciatus	SC	sc	23	The Common Five-lined Skink is Ontario's only lizard species. Its Southern Shield population can be found underneath rocks on open bedrock in forests and like to bask on sunny rocks and logs. They hibernate in crevices among rocks or buried in the soil (1). They hibernate in groups under rocks and tree stumps or in rotting wood (5).	°N N	Known to occur in the general area	No further consideration required
Western Chorus Frog	Pseudacris triseriata	ТНК	•	ß	The Western Chorus Frog is small with a dark stripe running through its eye and a light stripe underneath (5). It is primarily a lowland terrestrial species that requires access to terrestrial and aquatic habitats in close proximity to one another. Relying on marshes and wooded wetlands adjacent to forested habitats, this species also requires isolated, predator free pools for breeding. Temporary pools, such as vernal pools in wooded areas, are preferred. This species hibernates terrestrially in a variety of environments, including leaf litter, wood debris, and vacant animal burrows (2).	Yes: on-site and adjacent lands	Known to occur in the general area	No further consideration required
Invertebrates								
Monarch Butterfly	Danaus plexippus	sc	sc	S2N,S4B	The Monarch is an orange and black butterfly with small white spots and a wingspan of around 10 cm. It relies on milkweed plants as a food source for growing caterpillars, but the adult butterflies forage in diverse habitats for nectar from wildflowers (1).	° Z	Known to occur in the general area	No further consideration required
Mottled Duskywing	Erynnis martialis	No Status	END	23	The mottled duskywing is a medium-sized butterfly in the skipper family with a wingspan of 55-42 mm. It is dark grey with yellow-brown spots on its hind wings that give the species its mottled appearance and its name. The wings of freshly emerged adults have a purplish iridescence that fades with age. The mottled duskywing tends to live in dry habitats with sparse vegetation. These include open barrens, sandy patches among woodlands, and alvars. In Ontario, the mottled duskywing will only deposit their eggs on two closely-related plants: New Jersey tea and prairie redroot (1).	8	Known to occur in the general area	No further consideration required
West Virginia White	Pieris virginiensis	No Status	sc	S	The West Viginia White is a small, dingy white butterify. This species is found in moist deciduous woods, and requires a supply of toothwort, a small, spring-blooming plant, which provides the only source of food for its larvae. The West Virginia White is found mostly in the central and southern parts of Ontario, but its range extends north to Manitoulin and St. Joseph islands (1).	°2	known to occur in the general area	No further consideration required
Mammals								

David Minshall Cambium Reference: 12619-001 921 Douro 1st Line, Douro-Dummer, County of Peterborough, Ontario

APPENDIX: Species of Conservation Concern - County of Peterborough CAMBIUM

SPECIES OBSERVATIONS ASSESSMENT	Known to occur in the consideration general area	Known to occur in the consideration general area required	Known to occur in the consideration general area required	Known to occur in the Consideration general area required	Known to occur in the consideration general area		Confirmed absent No further through targeted consideration surveys required	Confirmed absent No further
SI OBSE	Known 1 ger	Known	Known	Known	Known ger		Confii throu	Confirmed absent through targeted
SUITABLE HABITAT	2	â	Ň	N	Ŷ		Ŷ	Voc: on cito
SPECIES DESCRIPTION AND HABITAT REQUIREMENTS	The Tri-colored Bat is small, with pale brown with orange-red forearms, muzzle, and ears. It is named for the black, yellow, and brown hairs on its back. It is considered rare in this region of Ontario which is at the northernmost limit of the natural range. These bats prefer to nest in foliage, tree cavities and woodpecker holes, but are occasionally found in buildings; though this is not their preferred habitat. Winter hibernation takes place in caves, mines and deep crevices. Tri-colored Bats prefer an open forest habitat type in proximity to water (6).	The Eastern Small-footed Myotis has fur with black roots and shiny brown tips as well as very small feet. In the spring and summer, the Eastern Small-footed Myotis will roost in a variety of habitats, including in or under rocks, in rock outcrops, in buildings, under bridges, or in caves, mines, or hollow trees. They change their roosting locations daily and hunt at night for insects. They hibernate in winter, often in caves and abandoned mines choosing colder and drier sites than other similar bats (1).	The Little Brown Myotis has glossy brown fur and a fleshy projection covering the entrance to its ears. This species roosts in trees and buildings, often selecting attics, abandoned buildings and barns for summer colonies where they can raise their young. Little Brown Bats hibernate from October/November to March/April, most often in caves or abandoned mines that are humid and remain above freezing (1).	The Northern Myotis has dull yellow-brown fur with pale belies and long, rounded ears. This species is found in boreal forests, roosting under loose bark and in the cavities of trees. These bats hibernate from October/November to March/April, most often in caves or abandoned mines (1).	Formerly called the Eastern Wolf, this canine was recently renamed the Algonquin Wolf. In the southern portion of the province, this species prefers deciduous and mixed forest landscapes while their northern range include mixed and conferous forests. It is most prevalent in areas with abundant prey species which include Beaver, White-tailed Deer and Moose. Dens sites are usually found in coniferous forests with easily excavated soil types like sand and close to a permanent water source (1).		American Ginseng is a perennial plant which grows up to 60 centimetres in height. The leaves typically have five leaflets arranged in a whorl at the end of the leaf stem. The root looks like a gnarty parsnip. The flowers are an inconspicuous green-white in colour, but the berries are bright red and arranged in a cluster. In Ontario, the American Ginseng typically grows in rich, moist, and mature deciduous woods dominated by Sugar Maple, White Ash, and American Basswood. It typically grows in deep, nutrient rich soil over limestone or marble bedrock (1).	The Butternut is a medium sized tree reaching 30 m in height. It has large compound leaves with 11 to 17 leaflets. The fruit is oval, fuzzy and sticky. In Ontario, the Butternut
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Federal SARA	END	No Status	END	END	S	pallacer 19	END	
SCIENTIFIC NAME	Perimyatis subflavus	Myotis leibii	Myotis lucifugus	Myotis septentrionalis	Canis Iycaon	Frees, plants, fungi and lichens	Panax quinquefolius	lindran oʻzanan
COMMON NAME	Tri-colored Bat	Eastern Small- footed Myotis	Little Brown Myotis	Northern Myotis	Algonquin Wolf	Trees, plants, fu	American Ginseng	

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921 Douro 1st Line, Douro-Dummer, County of Peterborough, Ontario David Minshall Cambium Reference: 12619-001

APPENDIX: Species of Conservation Concern - County of Peterborough

COMMON	SCIENTIFIC	Federal		Provincial		SUITABLE	SPECIES	
NAME	NAME	SARA		SARO S-RANK	SPECIES DESCRIPTION AND HABITAT REQUIREMENTS	ΗΑΒΙΤΑΤ	OBSERVATIONS	ASSESSMENT
Pale-bellied Frost Lichen	Physconia subpallida	EN EN	END	Z3	The Pale-bellied Frost Lichen resembles a light dusting of frost on a dark tree trunk. This species is found throughout eastern North America, growing in wooded areas rich in hardwood species, such as White Ash, Hop Hornbeam (fronwood). Black Walnut, and American Elm., It is also common to find this species growing on fenceposts or boulders within or near these wooded areas. In Ontario, this species has been found in the following counties: Frontenac, Haliburton, Hastings, Peterborough, Lanark and Renfrew (1).	Yes: on-site	Confirmed absent through targeted surveys	No further consideration required
References								
1 Ministry of Enviro	Ministry of Environment Concernation and narks (2019) Species at risk in	n and narke	(2010) Sno	vries at rick i	n Ontario. Retrieved from https://www.ontario.ca/oage/species-risk-ontario			

 Ministry of Environment, Conservation and parks. (2019). Species at risk in Ontario. Retrieved from https://www.ontario.ca/page/species-risk-ontario
 Government of Canada. (2019). Species at risk public registry. Retrieved from https://species-registry.canada.ca/index-en.html#/species-risk-ontario 3. Committee on the Status of Endangered Wildlife in Canada. (2008).

4. Environment Canada. (2018).
 5. Ontario Nature. (2020). Reptiles and amphibians. Retrieved from https://ontarionature.org/programs/citizen-science/reptile-amphibian-atlas/species/ 6. University of Michigan Museum of Zoology. (2004).



Vanessa Sweeting

From: Sent: To: Subject: Martina Chait Thursday, January 7, 2021 2:39 PM Vanessa Sweeting FW: Minshall/McGriskin severance, 921 Douro First line

Please file, thanks.

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From: David Minshall <dwminshall@gmail.com> Sent: Thursday, January 7, 2021 10:16 AM To: Holden, Keziah <KHolden@ptbocounty.ca> Cc: Crystal McMillan <crystal@dourodummer.on.ca>; mwilkinson@otonabeeconservation.com; Valerie McGriskin <vmcgriskin@gmail.com>; Martina Chait <MartinaC@dourodummer.on.ca> Subject: Re: Minshall/McGriskin severance, 921 Douro First line

Hello Keziah,

My wife and I have taken your counsel and have decided to reduce this application to one lot. That would be the one in the northwest corner of our property.

We will adjust the boundaries to comply with all directives.

I'm trusting that this should move this file along. At least I hope so.

I'm not sure what the next step is.

Your advice is appreciated.

Thanks and regards,

David Minshall

On Mon, Nov 23, 2020 at 12:49 PM Holden, Keziah <<u>KHolden@ptbocounty.ca</u>> wrote:

Hello David,

I have taken the opportunity to complete a Preliminary Severance Review for the revised proposal based on the information you have provided. The Review, attached, has found that while the proposal appears to meet the requirements of the Official Plans, it does not appear to conform to the Provincial Growth Plan, which takes precedence over the local Plans. The severed parcels appear to be within the 30 metre vegetation protection zone (VPZ) surrounding a nearby wetland and new lots are not permitted in this area. The lot lines should be reconfigured to stay outside of the 30 metre VPZ.

I would suggest that the northernmost lot be adjusted to be entirely outside of the 30m VPZ surrounding the wetland. There looks to be plenty of room to accommodate this. If you wish, it could also be moved to the corner to abut the neighbours property (Kampstra). With only one lot being proposed in this location the MDS arcs are smaller since the larger arcs are triggered by a group of 4 or more lots. A single lot looks like it could easily be accommodated in the northwest corner, but would still require a Natural Heritage Evaluation (environmental study) to be submitted in support of the application. I would recommend speaking to the Conservation Authority about the content of the study. The Township should also be consulted to ensure safe access is available.

The second lot, further south, is constrained by the wetland and its 30m VPZ. Trying to maintain the minimum area to meet zoning requirements may be difficult in this area.

Please read through the attached review carefully and feel free to contact me if you have any questions.

Take care,

Keziah Holden, B.A. Senior Planner, Peterborough County

From: David Minshall <<u>dwminshall@gmail.com</u>> Sent: November 18, 2020 8:33 PM To: Holden, Keziah <<u>KHolden@ptbocounty.ca</u>> Cc: McMillan, Crystal DD Clerk <<u>crystal@dourodummer.on.ca</u>>; <u>mwilkinson@otonabeeconservation.com</u> <<u>mwilkinson@otonabeeconservation.com</u>>; Valerie McGriskin <<u>vmcgriskin@gmail.com</u>> Subject: Minshall/McGriskin severance, 921 Douro First line

Keziah,

This email is in response to your email from May 2020, regarding our proposed severance for 921 Douro First

Line.

We have made the following changes to our original request to comply with your letter.

Change 1

• Instead of severing two lots at the north end of our property, we are reducing that to one. The eliminated lot would be the one closest to our current neighbor, (Kamstra).

Change 2

• I had an inspection report completed to confirm that the barn noted on the retained parcel has never been, and never will be, used as a barn. I will attach a copy of that report.

Change 3

• We have moved the second proposed severance further south. I am also attaching a (primitive) copy based on the original you provided.

Hopefully, these changes initiate the next steps. I'm not sure how to proceed and would appreciate your guidance. If any more information is required, please ask.

In these strange times I'm certain that a meeting won't happen but if a phone call is needed, I shall make myself available.

Thanks and regards, David Minshall 705-917-0161

