

**TOWNSHIP OF McNAB/BRAESIDE
COMMITTEE OF ADJUSTMENT
AGENDA**

**Thursday, January 30, 2025
Township Municipal Office
2473 Russett Drive**

1. Call to open hearing.
2. Minutes of the previous hearing, December 10, 2024.
3. Declaration of a Pecuniary Interest (Money/Financial).
4. **Consideration of Application No. A-11/24 – 4:00 p.m.**
Part of Lot 24, Concession 9, Brae Loch Road
Owners: Cameron and Amanda McGregor
Agent: John J. McGregor
 - (a) Purpose of the Application
 - (b) Confirmation of Dates
 - (c) Confirmation of Notice
 - (d) Reading of Written Comments
 - (e) Overview of Planning Report
 - (f) Discussion and Public Participation
5. Decision by Committee for Application No. A-11/24, or call for a further hearing if required.
6. Appeal Rights
7. **Consideration of Application No. A-12/24 – 4:30 p.m.**
101 Lindsay Lane
Owners/Applicants: David and Jennifer Lindsay
 - (a) Purpose of the Application
 - (b) Confirmation of Dates

- (c) Confirmation of Notice
- (d) Reading of Written Comments
- (e) Overview of Planning Report
- (f) Discussion and Public Participation

- 8. Decision by Committee for Application No. A-12/24, or call for a further hearing if required.
- 9. Appeal Rights
- 10. Other Business
- 11. Adjournment

CORPORATION OF THE TOWNSHIP OF McNAB/BRAESIDE
2473 Russett Drive, Arnprior, Ontario K7S 3G8

Application for Minor Variance

Note: The "*" identifies prescribed information outlined in Ontario Regulation 200/96

PART I GENERAL INFORMATION

1. APPLICANT/OWNER INFORMATION

- a) *Applicant's Name(s): David and Jennifer Lindsay
*Address: 101 Lindsay Lane, White Lake, ON K0A3L0
*Phone #: Home () Work () Cell (613) 601 5537
E-mail: daveandjen1995@gmail.com
- b) *The applicant is: the registered owner an agent authorized by the owner []
- c) If the applicant is an agent authorized by the owner, please complete the following:
*Name of Owner: _____
*Address of Owner: _____
*Phone #: Home () Work () Cell ()
- d) To whom should correspondence be sent? Owner Applicant [] Both []

2. *PROVIDE A DESCRIPTION OF THE SUBJECT LAND:

Street Address: 101 Lindsay Lane, White Lake, ON

Concession: 2 Lot: 1

Registered Plan No.: _____ Block or Lot No(s). in the Plan: _____

Reference Plan No.: _____ Part No(s): _____

3. *CURRENT DESIGNATION OF THE SUBJECT LAND IN THE OFFICIAL PLAN (IF ANY):

Rural and environmental protected

4. *CURRENT ZONING OF THE SUBJECT LAND:

Rural and environmental protected.

PART II DETAILS OF THE APPLICATION

5. *PLEASE STATE THE NATURE AND EXTENT OF THE RELIEF FROM THE ZONING BY-LAW

Sections 3.34 , SS(L)b . To permit a secondary dwelling unit on a water front lot.

6. *WHAT IS THE REASON WHY THE PROPOSED USE CANNOT COMPLY WITH THE PROVISIONS OF THE ZONING BY-LAW?

Section 3.34(L)b requires a minor variance to permit a Secondary dwelling unit on a water front lot and a supporting study to address private servicing and no impact on the water body.

7. *DIMENSIONS OF THE SUBJECT LAND:

Frontage: 308 M Depth: 528 M Area: 83.02 acres

8. *PLEASE MARK BELOW THE ACCESS TO THE SUBJECT LAND:

Provincial Highway Municipal Road Maintained All Year
 Municipal Road Maintained Seasonally Right Of Way Water
 Other Public Road: _____
X other-private road.

9. *IF THE ONLY ACCESS IS BY WATER, PLEASE STATE BELOW THE PARKING AND DOCKING FACILITIES THAT ARE TO BE USED, AND THE DISTANCE OF THESE FACILITIES FROM THE SUBJECT LAND AND FROM THE NEAREST PUBLIC ROAD:

N/A

10. *WHEN WAS THE SUBJECT LAND ACQUIRED BY THE CURRENT OWNER?

1999

11. *WHAT ARE THE EXISTING USES OF THE SUBJECT LAND AND HOW LONG HAVE THEY CONTINUED?

#1 Residential Since: 1974 / 50 Years

#2 _____ Since: _____ / _____ Years

12. *ARE THERE ANY BUILDINGS OR STRUCTURES ON THE SUBJECT LAND?

Yes No

13. *WHAT ARE THE "PROPOSED" USES OF THE SUBJECT LAND?

Secondary dwelling unit. (rural/residential)

14. *WILL ANY BUILDINGS OR STRUCTURES BE BUILT ON THE SUBJECT LAND?

Yes [] No

15. *PROVIDE THE FOLLOWING DETAILS FOR ALL EXISTING OR PROPOSED BUILDINGS OR STRUCTURES ON THE SUBJECT LAND: (use a separate page if necessary)

Type of building or structure	EXISTING			PROPOSED	
	Existing House	Existing Trailer	Existing Stable	SDU	
Setback from the front lot line	701 M	649 M	99 M	629 M	
Setback from the rear lot line	34 M	64 M	314 M	131 M	
Setbacks from the side lot lines	127 M 133 M	229 M 33 M	600 M 12 M	67 M 149 M	
Height (in metres)	9 M	3.5 M	6 M	9 M	
Dimensions or floor area	58'x35'x2	28'x10'	25'x18'	50'x32'	
Date constructed	1974	1995	1965		

16. *INDICATE HOW WATER IS SUPPLIED AND HOW SEWAGE DISPOSAL IS PROVIDED TO THE SUBJECT LAND:

WATER

SEWAGE

publicly owned and operated piped water system [] publicly owned and operated piped sanitary sewage system []
 privately owned and operated individual well publicly owned and operated communal septic system []
 privately owned and operated communal well [] publicly owned and operated individual septic system []
 lake or other water body [] privately owned and operated individual septic system
 other means: _____ [] privy []
 other means: _____ []

17. *HOW IS STORM DRAINAGE PROVIDED?

Sewers [] Ditches [] Swales [] Other Means overland

18. *IS THE SUBJECT LAND ALSO THE SUBJECT OF AN APPLICATION FOR APPROVAL OF A PLAN OF SUBDIVISION OR CONSENT? Yes [] No Don't Know []

*IF YES, PLEASE STATE, IF KNOWN, THE FILE NO. AND THE STATUS OF THE APPLICATION:

File No.: _____ Status: _____

19. *HAS THE SUBJECT LAND EVER BEEN THE SUBJECT OF AN APPLICATION UNDER SECTION 45 OF THE PLANNING ACT? (i.e. previous minor variance application)

Yes [] No Don't Know []

14. ***WILL ANY BUILDINGS OR STRUCTURES BE BUILT ON THE SUBJECT LAND?**

Yes [] No

15. ***PROVIDE THE FOLLOWING DETAILS FOR ALL EXISTING OR PROPOSED BUILDINGS OR STRUCTURES ON THE SUBJECT LAND: (use a separate page if necessary)**

	EXISTING		PROPOSED	
Type of building or structure	Existing Shop			
Setback from the front lot line	687 M			
Setback from the rear lot line	104 M			
Setbacks from the side lot lines	46 M 195 M			
Height (in metres)	7 M			
Dimensions or floor area	26.6' x 32'			
Date constructed	1985			

16. ***INDICATE HOW WATER IS SUPPLIED AND HOW SEWAGE DISPOSAL IS PROVIDED TO THE SUBJECT LAND:**

WATER

SEWAGE

- | | |
|--|---|
| publicly owned and operated piped water system [] | publicly owned and operated piped sanitary sewage system [] |
| privately owned and operated individual well <input checked="" type="checkbox"/> | publicly owned and operated communal septic system [] |
| privately owned and operated communal well [] | publicly owned and operated individual septic system [] |
| lake or other water body [] | privately owned and operated individual septic system <input checked="" type="checkbox"/> |
| other means: _____ [] | privy [] |
| | Other means: _____ [] |

17. ***HOW IS STORM DRAINAGE PROVIDED?**

Sewers [] Ditches [] Swales [] Other Means overland

18. ***IS THE SUBJECT LAND ALSO THE SUBJECT OF AN APPLICATION FOR APPROVAL OF A PLAN OF SUBDIVISION OR CONSENT?** Yes [] No Don't Know []

***IF YES, PLEASE STATE, IF KNOWN, THE FILE NO. AND THE STATUS OF THE APPLICATION:**

File No.: _____ Status: _____

19. ***HAS THE SUBJECT LAND EVER BEEN THE SUBJECT OF AN APPLICATION UNDER SECTION 45 OF THE PLANNING ACT? (i.e. previous minor variance application)**

Yes [] No Don't Know []

20. **APPLICATION SKETCH**

On a separate page(s), please provide a sketch, preferably prepared by a qualified professional, showing the following: (In some cases, it may be more appropriate to prepare additional sketches at varying scales to better illustrate the proposal.)

- Boundaries and the dimensions of the subject land for which the amendment is being sought.
- The location, size and type of all existing and proposed buildings and structures, indicating the distances from the front yard lot line, rear yard lot line and the side yard lot lines.
- The approximate location of all natural and artificial features on the subject land and on land that is adjacent to the subject land that, in the opinion of the applicant, may affect the application. Examples include buildings, railways, roads, watercourses, drainage ditches, river or stream banks, wetlands, wooded areas, wells and septic tanks.
- The current uses on land that is adjacent to the subject land.
- The location, width, and name of any roads within or abutting the subject land, indicating whether it is an unopened road allowance, a public travelled road, a private road or a right of way.
- If access to the subject land is by water only, the location of the parking and docking facilities to be used.
- The location and nature of any easement affecting the subject land.
- Applicant's Name
- Date of Sketch
- The scale to which the sketch is drafted (e.g. 1 cm = 50 m)
- North Arrow
- The locations and dimensions of off-street parking spaces and off-street loading facilities
- Planting strips and landscaped areas
- Buildings to be demolished or relocated.

PART III AUTHORIZATION OF OWNER FOR AGENT TO MAKE THE APPLICATION:

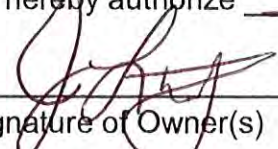
(If affidavit (Part IV) is signed by an Agent on Owner's behalf, the Owner's written authorization below must be completed)

I (we) Jennifer Lindsay

of the Township of McNab/Braeside

in the County of Renfrew

do hereby authorize David Lindsay to act as my/our agent in this application.


Signature of Owner(s)

Dec 20/24
Date

10. DECLARATION OF FEES INCURRED

The Owner/Agent agrees to reimburse and indemnify the Township of McNab/Braeside of all fees and expenses incurred by the Township of McNab/Braeside to process the application, including any fees and expenses attributed to proceeding before the Local Planning Appeal Tribunal or any court or other administrative tribunal if necessary to defend Council's decision to support the application.

The Owner/Agent also agrees to deposit with the Township of McNab/Braeside such monies as required by the Township of McNab/Braeside's Tariff of Fees By-Law as amended to defend appeals brought before the LPAT by parties other than the Applicant/Agent or Township.

The required fee for the processing of this application shall be in accordance with the Township of McNab/Braeside's current Tariff of Fees By-Law pertaining to planning matters. The Fees prescribed do not include professional fees, (ie. legal or engineering) or extra public meetings. Prior to undertaking any of these matters the applicant agrees to reimburse the Municipality for all charges related to the application. Fees required for the processing of this application are required at the time of submission. The amount of the required fees should be confirmed with the Township prior to the submission of the application.

Dec 19/24
Date

Dec 19/24
Date

David Lindsay
Signature of Owner/Agent

[Signature]
Signature of Owner/Agent

PART IV *AFFIDAVIT: (This affidavit must be signed in the presence of a Commissioner)

I (we) David Lindsay
of the Township of McNab/Braeside
in the County of Renfrew

solemnly declare that all of the information required under Ontario Regulation 200/96, and the statements contained in this application are true, and I, (we), make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the **CANADA EVIDENCE ACT**.

DECLARED before me at the Township of McNab/Braeside
in the County of Renfrew this 23 day of December, 2024

David Lindsay
Signature of Owner or Authorized Agent

Dec 23/24
Date

Christina Mulcahey
Signature of Commissioner

Dec 23/24
Date

Christina Catherine Mulcahey, a Commissioner, etc., Province of Ontario, for the Corporation of the Township of McNab/Braeside. Expires July 31, 2027.

NOTE: One of the purposes of the Planning Act is to provide for planning processes that are open, accessible, timely and efficient. Accordingly, all written submissions, documents, correspondence, e-mails or other communications (including your name and address) form part of the public record and will be disclosed/made available by the Township to such persons as the Township sees fit, including anyone requesting such information. Accordingly, in providing any such information, you shall be deemed to have consented to its use and disclosure as part of the planning process.

(To be completed by the Municipality)

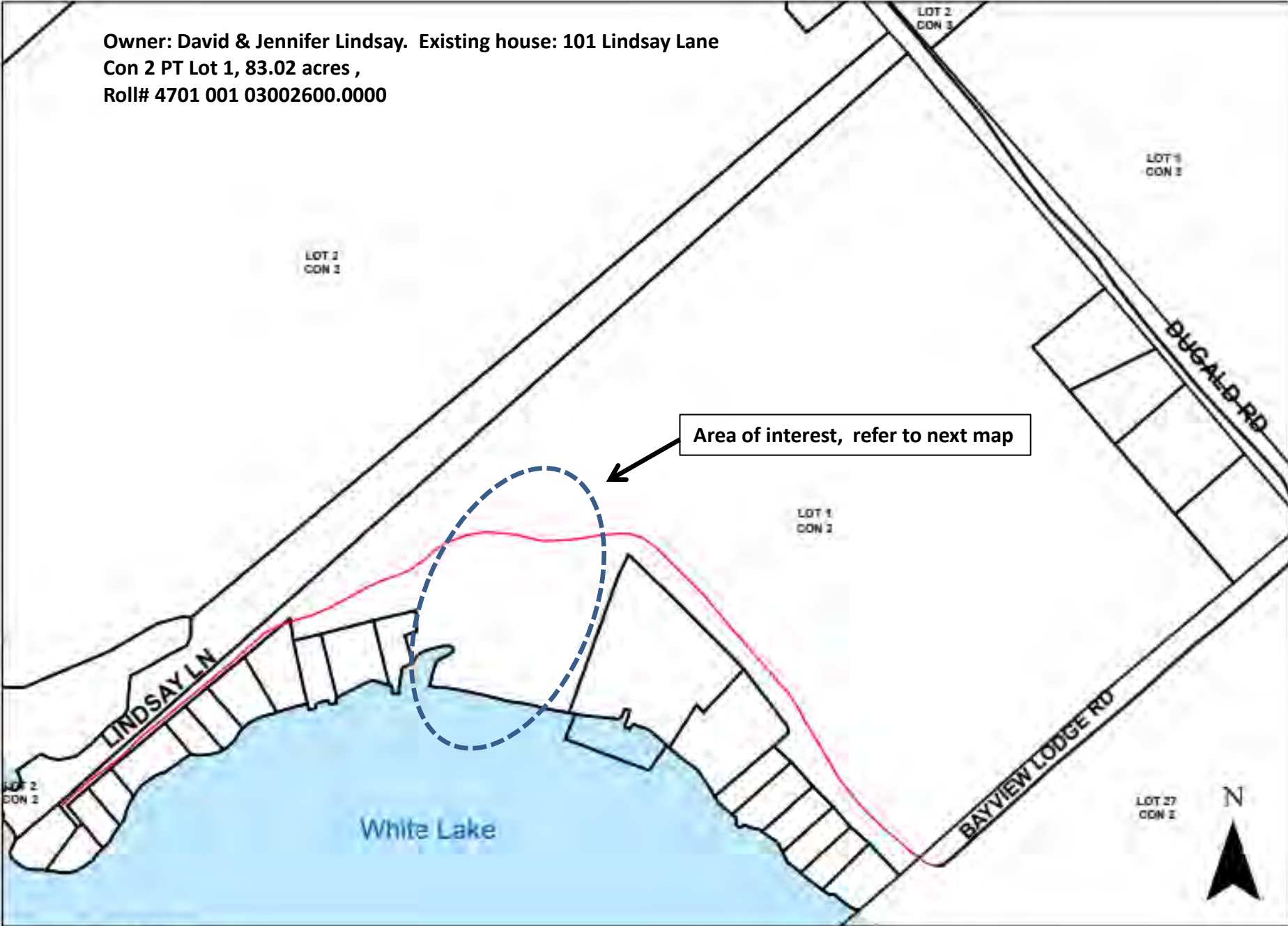
"COMPLETE" APPLICATION AND FEE OF \$ 1300 + 3000 RECEIVED BY THE MUNICIPALITY:

Dec 23/24
Date

Deposit:
Christina Mulcahey
Signature of Municipal Employee

Roll Number

Owner: David & Jennifer Lindsay. Existing house: 101 Lindsay Lane
Con 2 PT Lot 1, 83.02 acres ,
Roll# 4701 001 03002600.0000

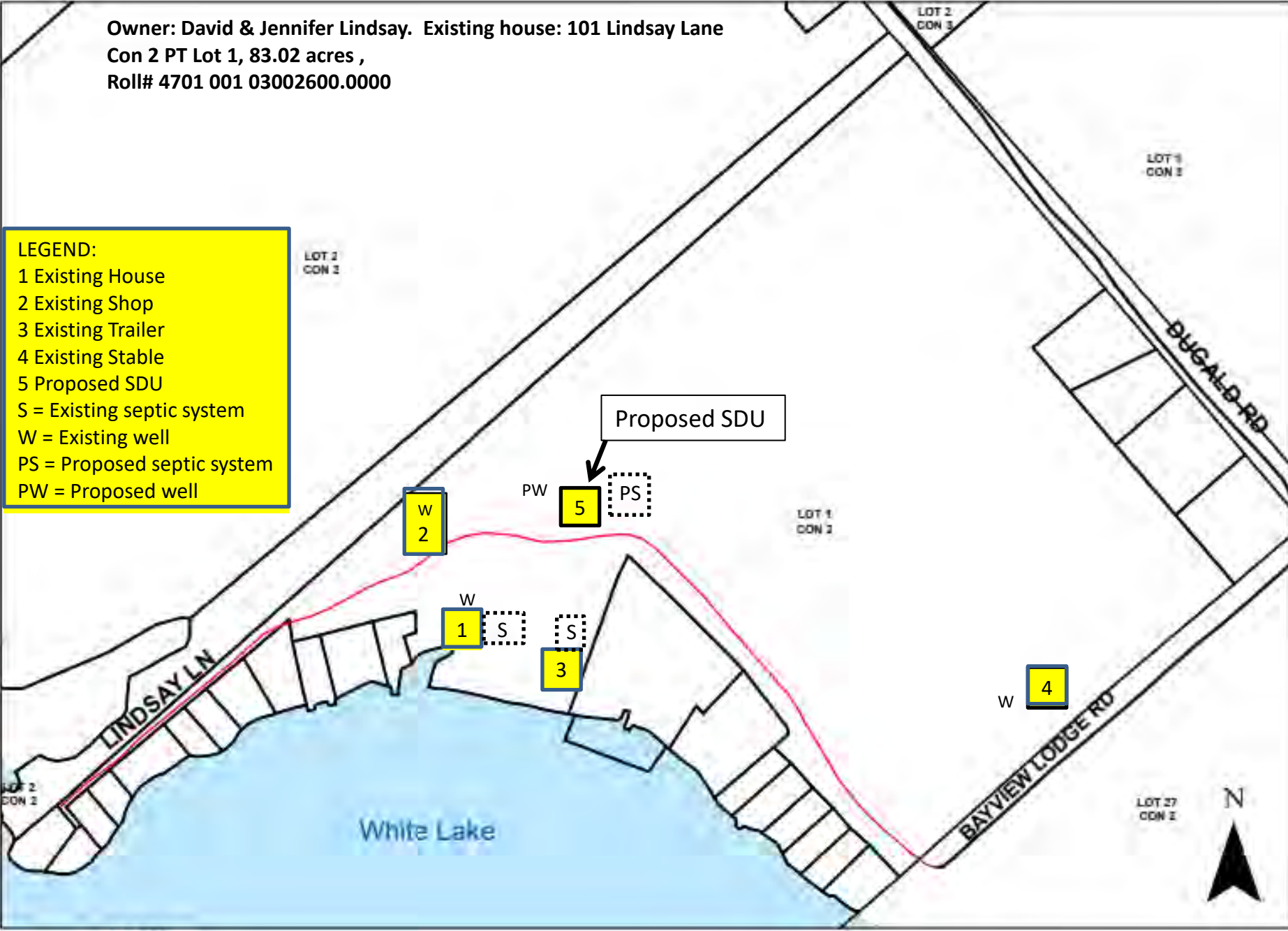


1:4,800

1 inch = 400 feet

Owner: David & Jennifer Lindsay. Existing house: 101 Lindsay Lane
Con 2 PT Lot 1, 83.02 acres ,
Roll# 4701 001 03002600.0000

LEGEND:
1 Existing House
2 Existing Shop
3 Existing Trailer
4 Existing Stable
5 Proposed SDU
S = Existing septic system
W = Existing well
PS = Proposed septic system
PW = Proposed well



1:4,800

1 inch = 400 feet

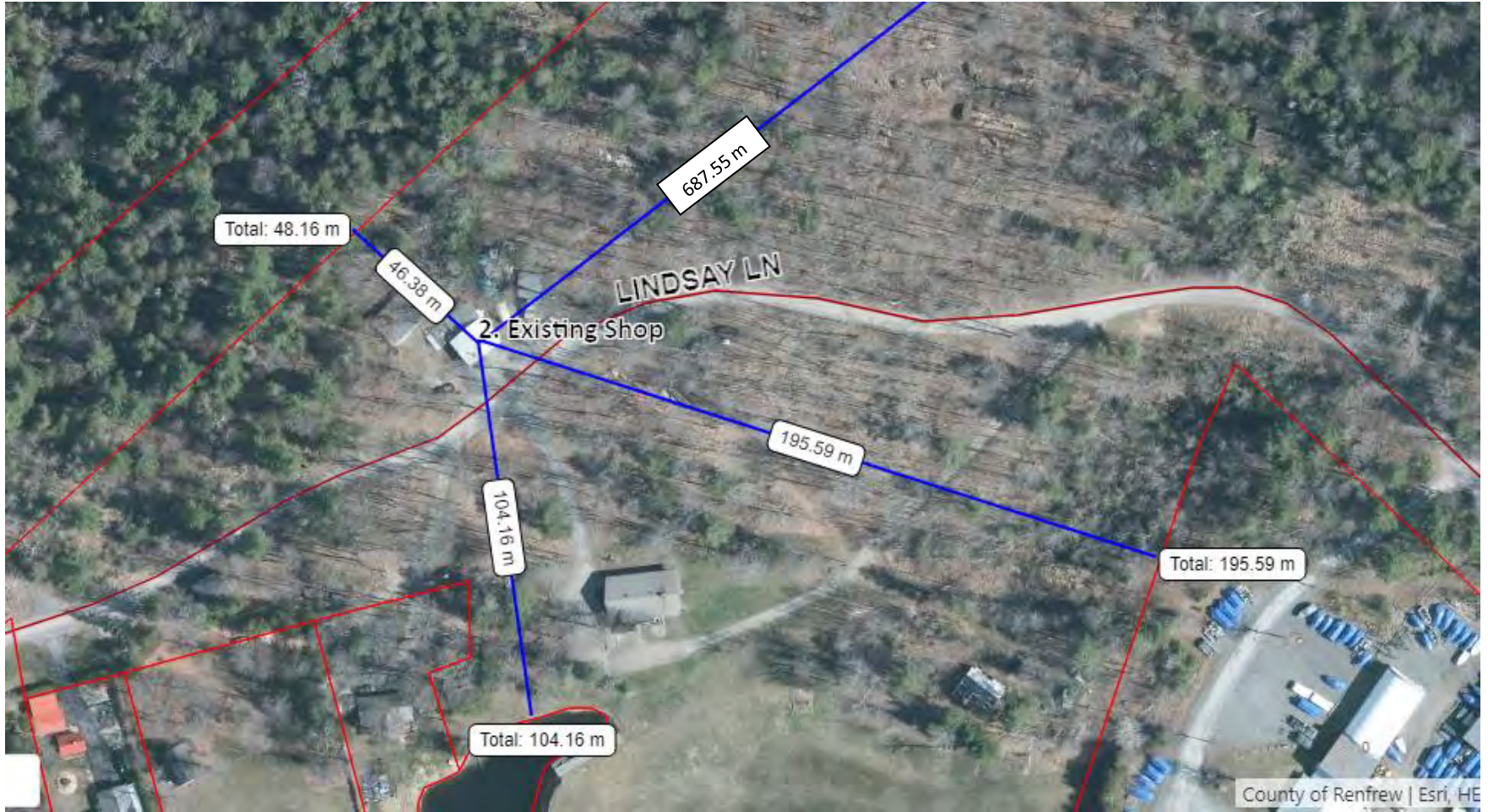
Application Sketch – 1. Existing house

Dec 15, 2024.



Application Sketch – 2. Existing Shop

Dec 15, 2024.



Application Sketch – 3. Existing Trailer

Dec 15, 2024.



Application Sketch – 4. Existing Stable

Dec 15, 2024.



County

Application Sketch – 5. Proposed SDU

Dec 15, 2024.



December 6, 2024

File: 024445

David & Jennifer Lindsay c/o
Jp2g Consultants Inc.
12 International Drive
Pembroke, Ontario
K8A 6W5

Attention: Janine Cik, Junior Planner

RE: SCOPED HYDROGEOLOGICAL EVALUATION
PROPOSED DETACHED SECONDARY DWELLING
101 LINDSAY LANE, WHITE LAKE
TOWNSHIP OF MCNAB/BRAESIDE
COUNTY OF RENFREW, ONTARIO

Dear Janine:

This letter reports the results of a scoped hydrogeological evaluation carried out for a proposed detached secondary dwelling at the above noted site. The purpose of this evaluation was to determine, based on an interpretation of the results of limited groundwater sampling and testing, a review of limited existing available hydrogeological and geological information, and a nitrate impact assessment, if the subject site meets our interpretation of the Ontario Ministry of the Environment, Conservation and Parks (MECP) objectives for development using private services for the proposed detached secondary dwelling.

The reader of this letter is referred to the 'Important Information And Limitations Of This Letter' which follows the text of this letter and forms an integral part of this letter.



BACKGROUND

For discussion purposes White Lake is considered to exist at the south side of the site. It is understood that plans are being prepared for the construction of a detached secondary dwelling (SDU) at 101 Lindsay Lane, in the Township of McNab/Braeside, County of Renfrew, Ontario (see attached Figure 1, Key Map and Figure 2, Aerial View).

The approximate locations of the proposed SDU and existing dwelling at the site (101 Lindsay Lane) are shown on the attached Site Sketch Plan (see Appendix A) and the attached Aerial View, Figure 2. The site is a relatively large irregular shaped parcel of land indicated, by Jp2g Consultants Inc., to be some 33.6 hectares in plan area with some 300 metres of frontage on Dugald Road, some 400 metres of frontage on Bayview Lodge Road, and frontage along the entire length of Lindsay Lane. It is understood, based on discussion/correspondence with the site owner, that the existing dwelling at the site is serviced by an on-site private drilled well and septic system and the proposed SDU is planned to be serviced by a proposed on-site private drilled well and septic system. It is further understood that the proposed SDU development (proposed detached secondary dwelling, proposed private on-site drilled well, proposed private on-site septic system) at the site is planned to be located greater than 100 metres from White Lake.

In general, the site is bordered on the north by woodland and Dugald Road, on the east by Bayview Lodge Road, Bayview Lodge Resort, and White Lake Campground with woodland beyond, on the south by White Lake, the White Lake Marina and existing residential development along Lindsay Lane, and on the west by woodland with White Lake beyond.

Municipal services (watermain and sanitary sewer) are indicated to not be available for the proposed SDU and relatively nearby surrounding area.

PROCEDURE

Jp2g Consultants Inc. (Jp2g) provided to us the results of laboratory testing of a sample of well water indicated to have been obtained from the domestic drilled well servicing the existing dwelling at the site and located less than about 100 metres from the proposed SDU. The well water sample is indicated to have been tested for the MECP "Subdivision Package" list of parameters. The results



of the laboratory testing are provided in the attached Appendix B. Jp2g supplied the results of an interview with the sampled well owner regarding the sampled well condition and well water quality and quantity, the results of which are in the attached Appendix C. The sampled well MECP Well Record was also provided to us by Jp2g and is attached as Appendix D.

Existing available surficial geology and bedrock geology maps for the site were reviewed for information concerning the general subsurface conditions at the site. A reconnaissance of the proposed SDU area and general site area out beyond the proposed SDU area was carried out by a member of our technical field staff on November 15, 2024, to familiarize ourselves with the existing development at and nearby the site, the site topography, shallow subsurface soil conditions, and vegetative cover. Based on the information obtained, a nitrate impact assessment was carried out for the site in view of the proposed SDU development.

RESULTS AND DISCUSSION

WELL WATER QUALITY:

The results of the laboratory testing of the well water sample (raw water sample) are provided in the attached Appendix B. The well water is indicated to have been tested in-situ by Jp2g for temperature, pH, conductivity, turbidity, and free and total chlorine at the time of sampling. The in-situ testing results for free and total chlorine are indicated to be 0. The in-situ testing results for temperature, pH, conductivity and turbidity are indicated to be 13.6°C, 7.3, 730 µs/cm, and 0.76 NTU, respectively (see page 3 - Questionnaire, Appendix C).

The water sample meets all the Ontario Drinking Water Standards (ODWS) health and aesthetic parameters tested for except for hardness and total coliforms.

Hardness

The water sample obtained from the sampled well is considered to be hard by water treatment standards with a hardness level above the ODWS operational guideline of 80 to 100 mg/L. The hardness for the water sample tested was measured at 411 mg/L. The Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines, Revised June 2006, states "*Water*



supplies with a hardness greater than 200 mg/L are considered poor but tolerable. Hardness in excess of 500 mg/L in drinking water is unacceptable for most domestic purposes”.

The hardness level of the water sample is less than what is considered unacceptable (greater than 500 mg/L) for most domestic purposes. The level of hardness measured for the water sample obtained from the sampled well is well within the acceptable range that is considered reasonably treatable. Water softeners are indicated to be adequate to lower hardness to acceptable levels. Water with hardness above 80 to 100 mg/L as CaCO₃ is often softened for domestic use. Water softening by conventional sodium ion exchange may introduce relatively high concentrations of sodium into the drinking water, which may contribute a significant percentage to the daily sodium intake for a consumer on a sodium restricted diet. Where ion exchange water softeners are used, a separate unsoftened water supply could be used for drinking and culinary purposes.

Total Coliforms

The results of the laboratory testing of the water sample indicate total coliforms of 11 counts per 100mL (and 0 counts per 100mL for E.Coli and fecal coliforms). The MECP Guideline Document, D-5-5 Private Wells: Water Supply Assessment (Updated: June 29, 2021), states the following with regard to total coliforms, *“For private water wells not subject to approval under the OWRA, the MOEE and Health Units have historically used the limit of <5 counts per 100 ml in the absence of a chlorine residual as indicating acceptable water quality. For the purposes of the assessment described by this Guideline, Total Coliform counts of less than 6 per 100 ml of sample (and 0 for E.Coli and fecal coliforms) shall be considered as indicative of acceptable water quality.”*

It is understood, based on discussion/correspondence with Jp2g Consultants Inc., that based on the above mentioned total coliforms laboratory testing results the sampled well was chlorinated by the well owners and then an additional water sample was obtained from the sampled well by Jp2g Consultants Inc. for laboratory testing of the ODWS health-related bacteriological parameters. It is further understood that just prior to obtaining the additional water sample the sampled well was tested in-situ for chlorine residual by Jp2g Consultants Inc. and that in-situ testing resulted in free and total chlorine values of 0. The results of the above mentioned in-situ chlorine residual testing carried out by Jp2g Consultants Inc. and the results of the additional water sample laboratory testing of the ODWS health-related bacteriological parameters is provided in the attached Appendix



B (see “Certificate of Analysis”, report dated 2024-11-05 and see “Drinking Water Chain-Of-Custody” for sample obtained on October 28, 2024).

The results of the laboratory testing of the additional water sample indicate total coliforms of 0 counts per 100mL and 0 counts per 100mL for E.Coli and fecal coliforms. Based on the above, following chlorination of the sampled well, the additional well water sample meets the ODWS health-related bacteriological parameters.

Sampled Well Owner Water Quality Information

The sampled well owner indicates that the sampled well provides water that is excellent with regard to taste, odour, colour, iron, gasoline, and sulphur smell, and that is acceptable with regard to hardness. The sampled well owner further indicates that the sampled well water is treated using a water softener (see Appendix C).

WELL WATER QUANTITY:

The MECP Well Record for the sampled well is attached in Appendix D. The MECP Well Record indicates that the well consists of about a 16 centimetre inside diameter steel casing installed through some 0.5 metres of overburden consisting of loam and stones and was set some 14.8 metres into limestone bedrock and was grouted in place using cement and bentonite. The well is indicated to be some 48.8 metres in depth from the ground surface and advanced into a limestone bedrock aquifer. The well driller indicates on the MECP Well Record a recommended pumping rate of 12 gallons per minute or about 45 litres per minute for the sampled well (conservatively assuming “US” gallons per minute units on the MECP Well Record).

Based on the information provided on the above mentioned MECP Well Record, the sampled well is indicated to be capable of more than meeting the minimum rate suggested by the MECP for domestic use of about 14 litres per minute.

Sampled Well Owner Water Quantity Information

The sampled well owner indicates that the sampled well services 5 occupants and that the sampled well provides an adequate quantity of water for their domestic use.



SEPTIC SYSTEM NITRATE IMPACT ASSESSMENT:

A review of the surficial geology map for the site area (Chapman and Putnam 2007) indicates that the site is underlain by sand plains. A review of the bedrock geology map for the site area indicates that the site is in an area of carbonate metasedimentary rocks; marble, calc-silicate rocks, skarn, tectonic breccias of the Grenville Supergroup and Finton Group (Ontario Geological Survey 2011).

A site reconnaissance was carried out by a member of our technical field staff on November 15, 2024. The ground cover at the site is, in general, mostly treed except the area of the existing dwelling development at the site and the ground surface/topography is, in general, considered to be rolling to hilly. Shallow hand excavated test pits put down within about the proposed SDU development area at the time of the site visit encountered, in general, topsoil over red brown to yellow brown silty sand. Some relatively small localized areas of inferred exposed bedrock at the ground surface was observed at the site.

The MECP Guideline Document, D-5-4 Individual On-Site Sewage Systems: Water Quality Impact Risk Assessment (Updated: July 13, 2021), provides consideration for developments where the lot size for each private residence is one hectare or larger as it relates to groundwater impact. The risk that groundwater impact limits may exceed the MECP guideline limit are considered acceptable for developments with lot sizes of one hectare or larger (per private residence). As previously mentioned, the plan area of the site is indicated to be some 33.6 hectares. It is considered that the site is of sufficient plan area (greater than 2 hectares) that the risk that groundwater impact limits may exceed the MECP guideline limit is acceptable.

Notwithstanding the above, and for a conservative approach, a nitrate impact calculation has been carried out for the existing dwelling and proposed SDU at the site. To obtain a general indication as to the potential impact of septic effluent on the properties adjoining the site a nitrate dilution model was utilized. The net potential infiltration (annual water surplus) was calculated by the Canada Engineering Climate Services Unit (ECS) based on available meteorological records from Environment Canada for the Carleton Place and Appleton meteorological station indicated to be some 30 kilometres south of the subject site with multiple decades of data (1985-2020) and on a water holding capacity (WHC) of 75 millimetres for the subject site soils. The above WHC is considered to be representative of the silty sand subgrade encountered at the above mentioned shallow hand excavated test pits put down at the



site and is in reference to Table 3.1 of the MOE Stormwater Management Planning And Design Manual (2003), Urban Lawns/Shallow Rooted Crops, Fine Sandy Loam. Based on the above the net potential infiltration, as calculated by the ECS, is 383 millimetres.

With regard to nitrate dilution calculations, the MECP Guideline Document, D-5-4 Individual On-Site Sewage Systems: Water Quality Impact Risk Assessment (Updated: July 13, 2021), states *“For the purposes of predicting the potential for groundwater impacts, a nitrate loading of at least 40 grams/lot/day per residential dwelling unit shall normally be used”*. That guideline document also states in relation to the 40 grams/lot/day, *“This is based on expected actual flows of 1000 L/day and a minimum value of 40 mg/L nitrate-nitrogen in the discharge from a Class 4 or Class 6 system treating domestic/household sewage”*. As such, a daily effluent loading of 1000 litres per day was assumed for the existing dwelling and proposed SDU at the site in accordance with the MECP D-5-4 guideline document.

For a conservative approach for the purpose of calculating the potential infiltration at the site, only 1 hectare per private residence at the site was considered (a total of 2 hectares) as opposed to the actual site area of 33.6 hectares.

With regard to treatment and dispersal of effluent from a leaching bed, the expected impact on the groundwater of the existing and proposed septic systems at the site was determined by considering the attenuation of nitrate in the effluent from an assumed 40 mg/L (as N) at the septic tank to 10 mg/L (as N) at the site boundaries by dilution as a result of the infiltration of meteoric water. The results of the calculation indicate that the expected concentration of nitrate at the down gradient boundary of the site is 5.9 mg/L, which meets the MECP nitrate impact limit of 10 mg/L (see Appendix E).



CONCLUSIONS AND RECOMMENDATIONS

SUMMARY AND CONCLUSIONS:

Based on this scoped hydrogeological evaluation the following summary and conclusions are provided.

The information obtained concerning the well water condition at the sampled well indicates a sufficient groundwater supply in the bedrock aquifer to satisfy the water requirements of a detached secondary dwelling at the site.

Based on the laboratory sampled well water testing, the groundwater quality at the sampled well, after chlorination of the sampled well, is indicated to be suitable for a potable water supply as it meets the ODWS concentrations for all health and aesthetic related chemical, physical and bacteriological parameters tested for except for hardness. The level of hardness measured for the sampled well is within the acceptable range that is considered reasonably treatable. Water softeners are indicated to be adequate to lower hardness to acceptable levels. Water softening equipment can reduce hardness levels such that excessive problems associated with encrustation/scaling should not occur.

Based on the results of this present scoped hydrogeological evaluation the proposed SDU development at the site is indicated to meet the MECF criteria, as discussed above, as an acceptable setting for septic sewage disposal systems from a groundwater impact point of view.

Based on the above described proposed SDU development at the site it is considered that no significant adverse affects from the proposed private on-site septic system leaching bed servicing the proposed SDU should occur to White Lake from a water quality point of view.

The overburden subsurface conditions encountered within the proposed SDU development area are considered suitable for a Class 4 septic sewage disposal system with an expected partially to fully raised leaching bed depending on the specific subsurface conditions at the actual leaching bed location. The above mentioned localized areas of inferred bedrock at the ground surface at the site are not considered an ideal location for a proposed Class 4 septic system leaching bed.



RECOMMENDATIONS:

Based on this scoped hydrogeological evaluation the following recommendations regarding the proposed groundwater supply well and proposed septic system leaching bed for the proposed SDU at the site are provided.

- 1) The final landscaping at the proposed SDU development area should be graded such that surface water (including any eavestrough downspout discharge and sump line discharge) is not directed to or ponds around the proposed drilled well and that the proposed drilled well casing height be maintained to greater than 0.4 metres above the ground surface. The proposed drilled well for the proposed SDU at the site should be located up gradient of the proposed septic system leaching bed and existing septic system leaching bed at the site and meet the clearance distances to septic system leaching beds and septic tanks indicated in the most recent version of the Ontario Building Code as amended.
- 2) Consideration could be given by the site owner/site developer to the use of level 4 (“tertiary”) septic treatment systems, which are indicated to produce better quality effluent, from a groundwater impact point of view.
- 3) The proposed septic system leaching bed should not be located in an area of exposed bedrock at ground surface at the site.
- 4) Future residents at the proposed SDU should be made aware of and refer to the Province of Ontario publication titled “Septic Smart! Understanding Your Home’s Septic System (available for download at time of preparation of this letter on the Province of Ontario website, www.ontario.ca/files/2022-10/omafra-septic-smart-understanding-home-wastewater-system-en-2022-10-14.pdf).
- 5) The proposed drilled well for the proposed SDU at the site must be constructed, as a minimum, in accordance with Ontario Regulation 903 (O.Reg 903), as amended, and constructed in accordance with the recommendations outlined below and any municipal requirements.



- 6) The steel well casing should be installed and grouted into place to a depth of at least 15 metres into sound bedrock (not weathered bedrock). The steel casing placed in the drilled hole should be pressure grouted in place for the full length of the casing. The material used to seal the annular space could consist of either a cement grout or a commercially available bentonite grout product. Cement grout mixtures should be allowed to set for a minimum 72 hours for regular cement or 24 hours for quick set cement (i.e.: high early cement) prior to advancing the well further into the bedrock. If a bentonite grout product is used, drilling need only be suspended for a few hours depending on the product used. Bentonite grout has the additional advantage of remaining flexible when set and therefore should not crack or shrink thereby ensuring as well as possible that surface water or shallow groundwater will not migrate along the annular space and into the well bore.
- 7) Once the steel well casing has been suitably sealed, the well should be advanced uncased in the bedrock. The proposed well may have to be drilled to a depth of up to some 48.8 metres below the ground surface (based on the sampled well depth). However, due to possible changes in topography and because it is impossible to predict with certainty the depth(s) at which water-producing fractures will be encountered during drilling, the above mentioned depth of 48.8 metres below the ground surface should be considered an approximate target depth only. Drilling the proposed well to a depth significantly deeper than 48.8 metres should be avoided, if possible. Should the proposed well be drilled significantly deeper than 48.8 metres depth, then additional water quality testing and review to ensure the well water quality is in keeping with the findings of this present scoped hydrogeological evaluation is recommended.
- 8) The completed well should be developed to maximize the yield. It is recommended that the newly constructed well be pumped for a minimum of 6 hours after construction to reduce turbidity levels prior to connection to the proposed SDU water supply plumbing and well casings should be fitted with a pit less adapter to facilitate below ground plumbing and electrical connections and be completed with a vented and vermin proof well cap.
- 9) In order to encourage domestic supply well education and best management practices future residents at the proposed SDU at the site should be made aware of and refer to the



province of Ontario web-doc-publication: <https://www.ontario.ca/document/water-supply-wells-requirements-and-best-practices>

- 10) Future residents at the proposed SDU at the site should be made aware that it is considered prudent to adhere to the regulatory well maintenance requirements, general maintenance for well owners (Table 11-1: Well Maintenance Checklist Items), and well water quality laboratory testing outlined in the above mentioned province of Ontario web-doc publication.
- 11) Future residents at the proposed SDU at the site should be made aware that the use of a water softener for treatment of hardness may be desired based on the results of the water quality testing carried out for this present scoped hydrogeological evaluation and that the use of conventional sodium ion exchange water softeners may introduce relatively high concentrations of sodium into the drinking water, which may contribute a significant percentage to the daily sodium intake for a consumer on a sodium restricted diet. Where ion exchange water softeners are used, a separate unsoftened water supply could be used for drinking and culinary purposes.
- 12) In addition to the above mentioned recommendation (recommendation No. 11) and as per the MECP D-5-5 Guideline Document, if water softening is utilized, a warning should be registered on title with a recommendation that a separate tap, which by-passes the softener, be installed to supply unsoftened drinking water.
- 13) Future residents at the proposed SDU at the site should be made aware that the proposed drilled well should be adequately disinfected prior to domestic use and that the proposed drilled well must be accessible in perpetuity for maintenance, repair and replacement, as per O.Reg 903.



SIGNATURE

We trust this letter provides sufficient information for your present purposes. If you have any questions concerning this letter, please do not hesitate to contact our office.

Yours truly,
Morey Associates Ltd.

D. G. Morey, P.Eng.
Principal | Consulting Engineer



Attachments: Important Information And Limitations Of This Letter
Figure 1, Key Map
Figure 2, Aerial View
Appendices A, B, C, D and E

File: 024445

IMPORTANT INFORMATION AND LIMITATIONS OF THIS LETTER

This letter provides a summary of work that was carried out with generally accepted professional standards at the time and location in which the services were provided and in a manner consistent with a level of care and skill normally exercised by other professional engineering firms practicing under similar conditions and subject to the time limits and financial and physical constraints applicable to the services. No other warranty, expressed or implied, is made.

It is understood based on instruction given to Morey Associates Ltd. by the client and/or by other professionals associated with and/or retained by the client for this project and/or by municipal/county/provincial/regulatory approval agency personnel that this letter may be used for a specific proposed lot development application process. Any other use of this letter by the client and/or by others is prohibited and is without responsibility of Morey Associates Ltd. Morey Associates Ltd. accepts no responsibility for damages, whether direct or indirect, suffered by any third party as a result of any third party use of this letter. Further, Morey Associates Ltd. cannot be responsible for use of only portions of this letter by the client and/or by others without reference to the entire letter.

This letter is of a summary nature and is not intended to stand alone without reference to the instructions given to Morey Associates Ltd. by the client and/or by other professionals associated with and/or retained by the client for this project and/or by municipal/county/provincial/regulatory approval agency personnel. This letter has been prepared based on our interpretation of the instructions given to Morey Associates Ltd. by the client and/or by other design professionals associated with and/or retained by the client for this project and/or by municipal/county/provincial/regulatory approval agency personnel only. Regulatory agency/Municipal review/County review requirements may change in real time during a proposed lot development application process and regulatory agency/Municipal review/County review requirements are subject to interpretation and these interpretations may change over time. As such, no warranty, expressed or implied, is made by Morey Associates Ltd. that this letter meets others' interpretations of any regulatory agency and/or Municipal review and/or County review requirements.

The conclusions provided herein represent an opinion of Morey Associates Ltd. as of the time of preparation of this letter. It is recognized that the passage of time affects the information provided in this letter. This letter should not be construed as legal advice, nothing in this letter is intended to provide a legal opinion. If new information is discovered during future work, including excavations, borings or other studies, Morey Associates Ltd. should be requested to evaluate the conclusions presented in this letter and provide amendments as required.

Any letter recommendations/engineering guidelines are applicable only to the project described in the letter. Any changes in the scope of the project will require a review by Morey Associates Ltd., to ensure compatibility with any letter recommendations/engineering guidelines contained in this letter.

The professional services for this project include only the limited hydrogeological aspects of the scoped/limited evaluation described above/in the letter. Hydrogeological aspects of the subject site not discussed/described above/in the letter are outside the terms of reference for this present scoped evaluation. The presence or implications of possible surface and/or subsurface contamination resulting from previous uses or activities at this site or adjacent/nearby properties, and/or resulting from the introduction onto the site of materials from offsite sources are outside the terms of reference for this letter and have not been addressed.

This scoped hydrogeological evaluation does not address the design/construction of earth/groundwater energy systems at the site. Should earth/groundwater energy systems be considered for construction at the site additional hydrogeological studies and subsurface investigations may be required for obtaining approvals of such systems.

KEY MAP

FIGURE 1



Reference: Base Map from County of Renfrew Public GIS Viewer website

NOT TO SCALE

AERIAL VIEW

FIGURE 2



Reference: Aerial photograph from County of Renfrew Public GIS Viewer Website

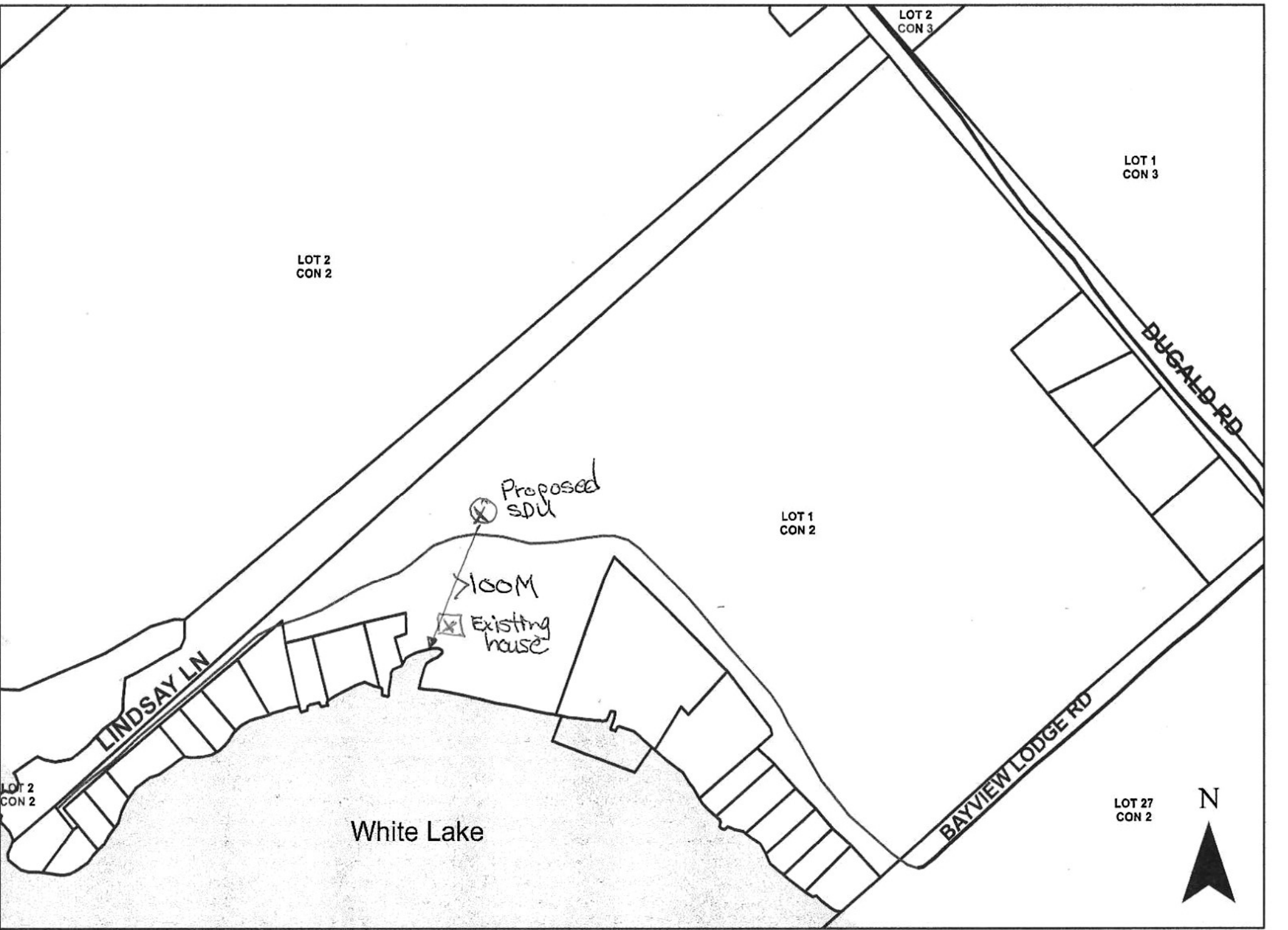
NOT TO SCALE



APPENDIX A

SITE SKETCH PLAN

SUPPLIED BY JP2G CONSULTANTS INC.



1:4,800

1 inch = 400 feet



APPENDIX B

RESULTS OF LABORATORY TESTING OF WELL WATER FROM SAMPLED WELL SUPPLIED BY JP2G CONSULTANTS INC.

Client: Jp2g Consultants Inc.
12 International Dr.
Pembroke, ON
K8A 6W5
Attention: Mr. Perry Larochelle
PO#:
Invoice to: Jp2g Consultants Inc. (Pembroke)

Report Number: 3010063
Date Submitted: 2024-08-08
Date Reported: 2024-08-15
Project: Lindsay Hydro G. 24-7055A
COC #: 916001

Page 1 of 7

Dear Perry Larochelle:**Please find attached the analytical results for your samples. If you have any questions regarding this report, please do not hesitate to call (613-727-5692).**

Report Comments:



Emma-Dawn
Ferguson
2024.08.15 15:13:51
-04'00'

APPROVAL:

Emma-Dawn Ferguson, Chemist

All analysis is completed at Eurofins Environment Testing Canada Inc. (Ottawa, Ontario) unless otherwise indicated.

Eurofins Environment Testing Canada Inc. (Ottawa, Ontario) is accredited by CALA, Canadian Association for Laboratory Accreditation to ISO/IEC 17025 for tests which appear on the scope of accreditation. The scope is available at: <https://directory.cala.ca/>.

Eurofins Environment Testing Canada Inc. (Ottawa, Ontario) is licensed by the Ontario Ministry of the Environment, Conservation, and Parks (MECP) for specific tests in drinking water (license #2318). A copy of the license is available upon request.

Eurofins Environment Testing Canada Inc. (Ottawa, Ontario) is accredited by the Ontario Ministry of Agriculture, Food, and Rural Affairs for specific tests in agricultural soils.

Please note: Field data, where presented on the report, has been provided by the client and is presented for informational purposes only. Guideline values listed on this report are provided for ease of use (informational purposes) only. Eurofins recommends consulting the official provincial or federal guideline as required. Unless otherwise stated, measurement uncertainty is not taken into account when determining guideline or regulatory exceedances.

Certificate of Analysis

Client: Jp2g Consultants Inc.
 12 International Dr.
 Pembroke, ON
 K8A 6W5
 Attention: Mr. Perry Laroche
 PO#:
 Invoice to: Jp2g Consultants Inc. (Pembroke)

Report Number: 3010063
 Date Submitted: 2024-08-08
 Date Reported: 2024-08-15
 Project: Lindsay Hydro G. 24-7055A
 COC #: 916001

Lab I.D. 1738962
 Sample Matrix GW
 Sample Type
 Sampling Date 2024-08-07
 Sample I.D. 101

Group	Analyte	MRL	Units	Guideline	
Anions	Cl	1	mg/L	AO 250	27
	F	0.10	mg/L	MAC 1.5	0.81
	N-NO2	0.10	mg/L	MAC 1.0	<0.10
	N-NO3	0.10	mg/L	MAC 10.0	<0.10
	SO4	1	mg/L	AO 500	13
General Chemistry	Alkalinity as CaCO3	5	mg/L	OG 30-500	363
	Colour (Apparent)	2	TCU	AO 5	<2
	Colour (True)	2	TCU		<2
	Conductivity	5	uS/cm		717
	DOC	0.5	mg/L	AO 5	1.2
	pH	1.00		6.5-8.5	7.77
	Phenols	0.001	mg/L		<0.001
	S2-	0.01	mg/L	AO 0.05	<0.01
	Saturation pH	0.01			6.73
	Tannin & Lignin	0.1	mg/L		<0.1
	TDS (COND - CALC)	1	mg/L	AO 500	466
Turbidity	0.1	NTU	AO 5	0.4	
Hardness	Hardness as CaCO3	1	mg/L	OG 80-100	411*
Indices/Calc	Ion Balance	0.01			1.04
	Langelier Index	-10.00			1.04
	Ryznar Stability Index (RSI)	0.01			5.70
Metals	Ca	1	mg/L		125
	Fe	0.03	mg/L	AO 0.3	0.05
	K	1	mg/L		1
	Mg	1	mg/L		24

Guideline = ODWSOG

* = Guideline Exceedence

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

Results relate only to the parameters tested on the samples submitted.
 Methods references and/or additional QA/QC information available on request.

Certificate of Analysis

Client: Jp2g Consultants Inc.
 12 International Dr.
 Pembroke, ON
 K8A 6W5
 Attention: Mr. Perry Larochelle
 PO#:
 Invoice to: Jp2g Consultants Inc. (Pembroke)

Report Number: 3010063
 Date Submitted: 2024-08-08
 Date Reported: 2024-08-15
 Project: Lindsay Hydro G. 24-7055A
 COC #: 916001

Lab I.D.	1738962
Sample Matrix	GW
Sample Type	
Sampling Date	2024-08-07
Sample I.D.	101

Group	Analyte	MRL	Units	Guideline	
Metals	Mn	0.01	mg/L	AO 0.05	<0.01
	Na	1	mg/L	AO 200	10
Microbiology	Escherichia Coli	0	ct/100mL	MAC 0	0
	Faecal Coliforms	0	ct/100mL		0
	Total Coliforms	0	ct/100mL	MAC 0	11*
Nutrients	N-NH3	0.020	mg/L		<0.020
	Total Kjeldahl Nitrogen	0.100	mg/L		0.150

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*** = Guideline Exceedence**

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Certificate of Analysis

Client: Jp2g Consultants Inc.
 12 International Dr.
 Pembroke, ON
 K8A 6W5
 Attention: Mr. Perry Larochelle
 PO#:
 Invoice to: Jp2g Consultants Inc. (Pembroke)

Report Number: 3010063
 Date Submitted: 2024-08-08
 Date Reported: 2024-08-15
 Project: Lindsay Hydro G. 24-7055A
 COC #: 916001

QC Summary

Analyte	Blank	QC % Rec	QC Limits
Run No 464148 Analysis/Extraction Date 2024-08-09 Analyst L V Method AMBCOLM1			
Escherichia Coli			
Faecal Coliforms			
Total Coliforms			
Run No 464216 Analysis/Extraction Date 2024-08-11 Analyst SKH Method EPA 350.1			
N-NH3	<0.020 mg/L	112	80-120
Run No 464249 Analysis/Extraction Date 2024-08-12 Analyst SKH Method EPA 351.2			
Total Kjeldahl Nitrogen	<0.100 mg/L	91	70-130
Run No 464260 Analysis/Extraction Date 2024-08-12 Analyst AaN Method EPA 200.8			
Iron	<0.03 mg/L	100	80-120
Manganese	<0.01 mg/L	104	80-120
Run No 464263 Analysis/Extraction Date 2024-08-12 Analyst IP Method SM5530D/EPA420.2			
Phenols	<0.001 mg/L	113	50-120

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* = Guideline Exceedence

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Results relate only to the parameters tested on the samples submitted.
 Methods references and/or additional QA/QC information available on request.

Certificate of Analysis

Client: Jp2g Consultants Inc.
 12 International Dr.
 Pembroke, ON
 K8A 6W5
 Attention: Mr. Perry Larochelle
 PO#:
 Invoice to: Jp2g Consultants Inc. (Pembroke)

Report Number: 3010063
 Date Submitted: 2024-08-08
 Date Reported: 2024-08-15
 Project: Lindsay Hydro G. 24-7055A
 COC #: 916001

QC Summary

Analyte	Blank	QC % Rec	QC Limits
Run No 464278 Analysis/Extraction Date 2024-08-13 Analyst AsA Method C SM2120C			
Colour (Apparent)	<2 TCU	101	90-110
Colour (True)	<2 TCU	101	90-110
Run No 464290 Analysis/Extraction Date 2024-08-13 Analyst Z S Method M SM3120B-3500C			
Calcium	<1 mg/L	108	90-110
Potassium	<1 mg/L	112	87-113
Magnesium	<1 mg/L	103	76-124
Sodium	<1 mg/L	107	82-118
Run No 464300 Analysis/Extraction Date 2024-08-13 Analyst AnK Method C SM2130B			
Turbidity	<0.1 NTU	104	70-130
Run No 464330 Analysis/Extraction Date 2024-08-13 Analyst AsA Method SM2320,2510,4500H/F			
Alkalinity (CaCO3)	<5 mg/L	97	90-110
Conductivity	<5 uS/cm	101	90-110
F	<0.10 mg/L	106	90-110
pH		100	90-110

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Results relate only to the parameters tested on the samples submitted.
 Methods references and/or additional QA/QC information available on request.

Certificate of Analysis

Client: Jp2g Consultants Inc.
 12 International Dr.
 Pembroke, ON
 K8A 6W5
 Attention: Mr. Perry Larochelle
 PO#:
 Invoice to: Jp2g Consultants Inc. (Pembroke)

Report Number: 3010063
 Date Submitted: 2024-08-08
 Date Reported: 2024-08-15
 Project: Lindsay Hydro G. 24-7055A
 COC #: 916001

QC Summary

Analyte	Blank	QC % Rec	QC Limits
Run No 464332 Analysis/Extraction Date 2024-08-13 Analyst AsA			
Method SM 5310B			
DOC	<0.5 mg/L	88	80-120
Run No 464344 Analysis/Extraction Date 2024-08-14 Analyst IP			
Method SM 4110			
Chloride	<1 mg/L	100	90-110
N-NO2	<0.10 mg/L	100	90-110
N-NO3	<0.10 mg/L	107	90-110
SO4	<1 mg/L	95	90-110
Run No 464350 Analysis/Extraction Date 2024-08-14 Analyst AET			
Method C SM2340B			
Hardness as CaCO3			
Ion Balance			
TDS (COND - CALC)			
Run No 464353 Analysis/Extraction Date 2024-08-14 Analyst AsA			
Method C SM5550B			
Tannin & Lignin	<0.1 mg/L	80	80-120
Run No 464431 Analysis/Extraction Date 2024-08-15 Analyst AsA			
Method C SM4500-S2-D			

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Results relate only to the parameters tested on the samples submitted.
 Methods references and/or additional QA/QC information available on request.

Certificate of Analysis

Client: Jp2g Consultants Inc.
 12 International Dr.
 Pembroke, ON
 K8A 6W5
 Attention: Mr. Perry Larochelle
 PO#:
 Invoice to: Jp2g Consultants Inc. (Pembroke)

Report Number: 3010063
 Date Submitted: 2024-08-08
 Date Reported: 2024-08-15
 Project: Lindsay Hydro G. 24-7055A
 COC #: 916001

QC Summary

Analyte	Blank	QC % Rec	QC Limits
S2-	<0.01 mg/L	88	80-120
Run No 464441 Analysis/Extraction Date 2024-08-15 Analyst AET Method Calculations			
Langelier Index			
Saturation pH			
Run No 464442 Analysis/Extraction Date 2024-08-15 Analyst AET Method Calculations			
Ryznar Stability Index (RSI)			

Guideline = ODWSOG

*** = Guideline Exceedence**

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 Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range



Certificate of Analysis

Client: Jp2g Consultants Inc.
12 International Dr.
Pembroke, ON
K8A 6W5
Attention: Mr. Perry Larochelle
PO#:
Invoice to: Jp2g Consultants Inc. (Pembroke)

Report Number: 3012090
Date Submitted: 2024-10-29
Date Reported: 2024-11-05
Project: Lindsay Minor Variance
COC #: 917306

Dear Perry Larochelle:

Please find attached the analytical results for your samples. If you have any questions regarding this report, please do not hesitate to call (613-727-5692).

Report Comments:

Patrick Jacques
2024.11.05
18:19:42 -05'00'

APPROVAL: _____

Patrick Jacques, Organics Technician

All analysis is completed at Eurofins Environment Testing Canada Inc. (Ottawa, Ontario) unless otherwise indicated.

Eurofins Environment Testing Canada Inc. (Ottawa, Ontario) is accredited by CALA, Canadian Association for Laboratory Accreditation to ISO/IEC 17025 for tests which appear on the scope of accreditation. The scope is available at: <https://directory.cala.ca/>.

Eurofins Environment Testing Canada Inc. (Ottawa, Ontario) is licensed by the Ontario Ministry of the Environment, Conservation, and Parks (MECP) for specific tests in drinking water (license #2318). A copy of the license is available upon request.

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Certificate of Analysis

Client: Jp2g Consultants Inc.
12 International Dr.
Pembroke, ON
K8A 6W5
Attention: Mr. Perry Larochelle
PO#:
Invoice to: Jp2g Consultants Inc. (Pembroke)

Report Number: 3012090
Date Submitted: 2024-10-29
Date Reported: 2024-11-05
Project: Lindsay Minor Variance
COC #: 917306

Lab I.D. 1748635
Sample Matrix Water
Sample Type
Sampling Date 2024-10-28
Sample I.D. 101

Table with 6 columns: Group, Analyte, MRL, Units, Guideline, and a numerical result column. Rows include Microbiology, Escherichia Coli, Faecal Coliforms, Faecal Streptococcus, and Total Coliforms.

Guideline = ODWSOG

* = Guideline Exceedence

Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

Certificate of Analysis

Client: Jp2g Consultants Inc.
 12 International Dr.
 Pembroke, ON
 K8A 6W5
 Attention: Mr. Perry Larochelle
 PO#:
 Invoice to: Jp2g Consultants Inc. (Pembroke)

Report Number: 3012090
 Date Submitted: 2024-10-29
 Date Reported: 2024-11-05
 Project: Lindsay Minor Variance
 COC #: 917306

QC Summary

Analyte	Blank	QC % Rec	QC Limits
Run No 467730 Analysis/Extraction Date 2024-10-30 Analyst L V Method AMBCOLM1			
Escherichia Coli			
Faecal Coliforms			
Faecal Streptococcus			
Total Coliforms			

Guideline = ODWSOG

*** = Guideline Exceedence**

Results relate only to the parameters tested on the samples submitted.
 Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

DRINKING WATER CHAIN-OF-CUSTODY

146 Colonnade Road, Unit #8, Ottawa, ON, K2E 7Y1 - Phone: 613-727-5692, Fax: 613-727-5222

Eurofins Workorder #: 3012090

CLIENT INFORMATION		DRINKING WATER SYSTEM (DWS) INFORMATION	
Company: JPS		DWS Name: [Redacted]	
Contact: Perry Larachelle		DWS #: [Redacted]	
Address: 12 International Drive, Pembroke		Contact: [Redacted]	
Telephone: 613-281-0253		Address: [Redacted]	
Email #1: perry@jps.com	#2:	Telephone: [Redacted]	
Project: Lindsay Minor Variance		Cell Phone: [Redacted]	
PO #:	Quote #: 192067	Email #1: [Redacted]	

REGULATION/GUIDELINE REQUIRED	TURN-AROUND TIME (Business Days)
<input type="checkbox"/> O. Reg. 170/03 <input type="checkbox"/> O. Reg. 170/03, Sch. 15.1, Lead <input checked="" type="checkbox"/> Non-Regulated (Ontario) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 Day* (100%) <input type="checkbox"/> 2 Day** (50%) <input type="checkbox"/> 3-5 Days (25%) <input checked="" type="checkbox"/> 5-7 Days (Standard)
<input type="checkbox"/> O. Reg. 319/08 <input type="checkbox"/> O. Reg. 243/07 <input type="checkbox"/> Non-Regulated (Federal)	Please contact the laboratory in advance to determine rush availability. Surcharges may apply to rush service. Note that some tests (i.e. O. Reg. 170/03 Schedule 24 pesticides may take up to 3 weeks to analyze). Please see notes (on reverse) about TAT policies.
<input type="checkbox"/> Has an LSN form been submitted to MECP or MOHLTC (if applicable)? Public Health Unit:	

Sample ID	Date/Time Collected	Sample Details				Sample Analysis Required				Field Measurements				Sample RN# (Lab Use Only)		
		Sample Type Code (see below)	Resample? Y = Yes N = No	MECP/MOH Reportable (adverse notification required)? Y/N	# of Containers	SPL Code/Watertrax	Sample Location (i.e. Kitchen, POE)					pH	Total Chlorine		Free Chlorine	Turbidity
101	Oct 28, 2024	RW	Y	N	2		Pressure Tank									1748635

Sample Type Codes for Drinking Water: RW = Raw Water, TW = Treated Water at POE to distribution, TW-NT = Untreated Water at POE to distribution, DW = Distribution, RP = Residential Plumbing, NRP = Non-Residential Plumbing, S = Standing, F = Flushed, PW = Private Well

Notice of Subcontracting: Occasionally, situations arise in which Eurofins Environment Testing Canada (Ottawa) is unable to process a sample after receipt. By signing this chain-of-custody form, the client agrees that Eurofins Environment Testing Canada (Ottawa) may subcontract samples to a laboratory that is accredited and, where applicable, holds a drinking water license. Agreements made in advance to subcontract to a specific laboratory will be honored.

PRINT	SIGN	DATE/TIME	TEMP (°C)	COMMENTS:
Sampled By: Perry Larachelle	[Signature]	Oct 28, 2024		Bacteria only Report EC, TC, FC, FS
Relinquished By: " "	[Signature]	Oct 29, 2024		
Received By: Shirley Yin	[Signature]	10/29/24 300	12	



APPENDIX C

SAMPLED WELL OWNER QUESTIONNAIRE SUPPLIED BY JP2G CONSULTANTS INC.

QUESTIONNAIRE

Coords: Zone <i>18T</i> N= <i>5020134</i> E = <i>383285</i>
Email: [REDACTED]
Well Tag: <i>A252416</i>
Date: <i>July 7, 2024</i>
Time: <i>10:00 AM</i>
Interviewer: <i>Derry Baruchette</i>

PROPERTY INFORMATION		
Name of Owner: [REDACTED]		
Address: <i>101 Lindsay Lane</i> <i>White Lake Ontario KOA 3L0</i>		
Mailing Address if Different:		
Phone No. [REDACTED]	Cell	No. of Occupants: <i>5</i>
Occupant (if other than owner)		
Name:		
How Long at Present Address: <i>25</i>	Phone No. (Home)	Phone No. (Work)
Type of Dwelling	<input checked="" type="checkbox"/> Single Family	<input type="checkbox"/> Commercial <input type="checkbox"/> Multiple Unit <input type="checkbox"/> Institutional
Type of Business		
Basement	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

WATER SUPPLY					
Type	<input checked="" type="checkbox"/> Drilled Well	<input type="checkbox"/> Dug Well	<input type="checkbox"/> Municipal	<input type="checkbox"/> Other	
Is the well casing pressure grouted?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No			
No. of homes served by well?	<i>1</i>				
Well:	Total Depth: <i>160'</i>	Diameter: <i>6 1/4"</i>	Age: <i>5 years</i>	Depth of Water:	
End of Rock	Sand/Gravel		Both		
Pump Type:	<input checked="" type="checkbox"/> Submersible	<input type="checkbox"/> Jet	<input type="checkbox"/> Piston	<input type="checkbox"/> Other	
Type of Well Casing:	<input checked="" type="checkbox"/> Above ground surface	<input type="checkbox"/> Buried inside a well pit	<input type="checkbox"/> Buried, but not in a well pit		
The accurate location of the well is:			<input checked="" type="checkbox"/> Known	<input type="checkbox"/> Unknown	
Do you have a copy of the MOE Water Well Record?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Treatment:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No			
Chlorination	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No			
Softener	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No			
Filter	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No			
Other					
ATTACH A COPY OF WATER WELL RECORD, IF POSSIBLE				WELL RECORD NO.	

WATER WELL AND SEWAGE DISPOSAL SYSTEM SURVEY QUESTIONNAIRE

Reference No.: _____

WATER QUALITY			
Do you drink the water?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If no, since when:	
Have you ever run out of water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Did you ever have your well deepened or cleaned, or a new well constructed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
If so, why?			
Quality: Taste	<input checked="" type="checkbox"/> Excellent	<input type="checkbox"/> Acceptable	<input type="checkbox"/> Poor
Odour	<input checked="" type="checkbox"/> Excellent	<input type="checkbox"/> Acceptable	<input type="checkbox"/> Poor
Colour	<input checked="" type="checkbox"/> Excellent	<input type="checkbox"/> Acceptable	<input type="checkbox"/> Poor
Hardness	<input type="checkbox"/> Excellent	<input checked="" type="checkbox"/> Acceptable	<input type="checkbox"/> Poor
Iron	<input checked="" type="checkbox"/> Excellent	<input type="checkbox"/> Acceptable	<input type="checkbox"/> Poor
Gasoline	<input checked="" type="checkbox"/> Excellent	<input type="checkbox"/> Acceptable	<input type="checkbox"/> Poor
Sulphur Smell	<input checked="" type="checkbox"/> Excellent	<input type="checkbox"/> Acceptable	<input type="checkbox"/> Poor
Comments:			
Has your water quality been tested previously? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
If yes, for what?	<input checked="" type="checkbox"/> bacteriological How often?	<input type="checkbox"/> chemical analyses How often?	<input type="checkbox"/> Other How often?
ATTACH COPY OF ANY PREVIOUS CHEMICAL AND/OR BACTERIOLOGICAL ANALYSIS RESULTS ON THE WELL WATER, IF APPLICABLE			

WATER QUANTITY			
Does your well supply enough water for your use? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
If No, is this the case: <input type="checkbox"/> All the time <input type="checkbox"/> Some of the time <input type="checkbox"/> Seasonally <input type="checkbox"/> Other			
Use: Domestic	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	No. of persons using water from well: <u>5</u>	
Livestock	<input type="checkbox"/> No <input type="checkbox"/> Yes	Lawn Watering	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
Other Uses:		Daily Usage (if known):	

WATER WELL AND SEWAGE DISPOSAL SYSTEM SURVEY QUESTIONNAIRE

Reference No.: _____

WATER SAMPLING INFORMATION			
Water Quality Field Observations:			
Appearance	<input checked="" type="checkbox"/> clear	<input type="checkbox"/> cloudy	
Field Measured Parameters:			
Temperature °C = 13.6	PH = 7.3	Chlorine Total = \emptyset	
Conductivity us/cm = 730	Turbidity = 0.76 NTU	Chlorine Free = \emptyset	
Other Comments: No Colour observed - Hach Colour Test Kit ID # 0902			
Water Sample Collected:	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	If no, why?
Note: Collect Sample of "untreated" water only ✓			
Duplicate Water Sample Collected (10% of Locations for Project QA/AC)		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Location where samples collected	Pressure Tank		
Sample Water By-Pass Any Treatment Unit		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Type of Samples Submitted for Analysis	<input checked="" type="checkbox"/> Bacteria	<input checked="" type="checkbox"/> Chemical	

SEWAGE SYSTEM INFORMATION			
Type of sewage system	<input type="checkbox"/> Septic Tank and Raised Bed	<input type="checkbox"/> Partially Raised Bed	
<input checked="" type="checkbox"/> Septic Tank and Inground Leaching Bed	<input type="checkbox"/> Holding Tank	<input type="checkbox"/> Other	
If Septic Tank and Leaching Bed:	Does Leaching bed discharge directly to ditch or sewer?	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes
Number of Chambers	<input type="checkbox"/> one	<input checked="" type="checkbox"/> two	<input type="checkbox"/> unknown
Septic Tank Location	Zone: 18T	Northing:	Easting:
Type of Septic Tank:	<input type="checkbox"/> Steel	<input checked="" type="checkbox"/> Concrete	<input type="checkbox"/> Other
What is the Length of Distribution Pipe:	unknown		
If Holding Tank:	What is the Capacity? 1000	When was the last time the Tank was Pumped Out? 2023	
If Other, provide description and comments: Septic tank flows into a pump chamber and then to the bed.			
What is the age of the sewage system?	19 years old		
What is the Approximate Distance between the Well and the Sewage System?			15m T
Was the System Approved by the Health Unit or the MOE?		<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes
Have there been any Problems with the Sewage System?		<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes
Please comment:			

Multimeter Used to Record Field Parameter ID # _____ Verification of Calibration Yes No
 Turbidity Meter Used for Field Recording ID # 0110 Verification of Calibration Yes No

Technician Signature A. Churchill Date: Aug 7, 2024



APPENDIX D

SAMPLED WATER WELL RECORD SUPPLIED BY JP2G CONSULTANTS INC.

A252416

 Measurements recorded in: Metric Imperial

Well Owner's Information

Last Name /		E-mail Address		<input type="checkbox"/> Well Constructed by Well Owner	
Mailing Address (Street Number/Name)		Municipality	Province	Postal Code	Telephone No. (inc. area code)
101 LINDSAY LANE		WHITE LAKE	ONT.	K0A1B0	

Well Location

Address of Well Location (Street Number/Name)		Township	Lot	Concession
101 LINDSAY LANE		M McNAB/BRAESIDE	1 PART	2
County/District/Municipality		City/Town/Village	Province	Postal Code
RENFREW		WHITE LAKE	Ontario	K0A1B0
UTM Coordinates Zone, Easting	Northing	Municipal Plan and Sublot Number		Other
NAD 83 18383285	5020134			

Overburden and Bedrock Materials/Abandonment Sealing Record (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft)
				From To
BROWN	LOAM	STONES		0 1 1/2
GREY	LIMESTONE			1 1/2 160

Annular Space		
Depth Set at (m/ft)	Type of Sealant Used (Material and Type)	Volume Placed (m ³ /ft ³)
0 30	BENTONITE GROUT	0.256
30 50	CEMENT GROUT	0.260

Method of Construction		Well Use	
<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Diamond	<input type="checkbox"/> Public	<input type="checkbox"/> Commercial
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Jetting	<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Municipal
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Driving	<input type="checkbox"/> Livestock	<input type="checkbox"/> Test Hole
<input type="checkbox"/> Boring	<input type="checkbox"/> Digging	<input type="checkbox"/> Irrigation	<input type="checkbox"/> Cooling & Air Conditioning
<input checked="" type="checkbox"/> Air percussion		<input type="checkbox"/> Industrial	<input type="checkbox"/> Monitoring
<input type="checkbox"/> Other, specify		<input type="checkbox"/> Other, specify	

Construction Record - Casing				Status of Well	
Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft)		
			From	To	
6 1/4	STEEL	0.188	0 + 1/2	50	<input checked="" type="checkbox"/> Water Supply
					<input checked="" type="checkbox"/> Replacement Well
					<input type="checkbox"/> Test Hole
					<input type="checkbox"/> Recharge Well
					<input type="checkbox"/> Dewatering Well
					<input type="checkbox"/> Observation and/or Monitoring Hole
					<input type="checkbox"/> Alteration (Construction)
					<input type="checkbox"/> Abandoned, Insufficient Supply
					<input type="checkbox"/> Abandoned, Poor Water Quality
					<input type="checkbox"/> Abandoned, other, specify
					<input type="checkbox"/> Other, specify

Construction Record - Screen			
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft)
			From To

Water Details		Hole Diameter	
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested	Depth (m/ft)	Diameter (cm/in)
		From To	
74 1/2	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify	50 160	6 3/8
142	<input type="checkbox"/> Gas <input type="checkbox"/> Other, specify		

Well Contractor and Well Technician Information			
Business Name of Well Contractor		Well Contractor's Licence No.	
SAUNDERS WELL DRILLING LTD		4879	
Business Address (Street Number/Name)		Municipality	
1680 SCHEEL DR		BRAESIDE	
Province	Postal Code	Business E-mail Address	
ONT.	K0A1G0		

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
6136235648	SAUNDERS TROY
Well Technician's Licence No.	Signature of Technician and/or Contractor
T5117	Joy Saunderson
	Date Submitted
	20190220

Results of Well Yield Testing			
After test of well yield, water was:			
<input type="checkbox"/> Clear and sand free			
<input type="checkbox"/> Other, specify CLEARING			
Draw Down		Recovery	
Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:			
Static Level	120.10		
1	21.90	1	40.0
2	26.0	2	35.0
3	28.50	3	29.40
4	32.80	4	25.60
5	34.30	5	22.10
10	47.25	10	16.80
15	43.50	15	15.80
20	45.0	20	15.40
25	46.0	25	15.20
30	46.35	30	15.10
40	46.80	40	15.04
50	47.0	50	15.0
60	47.25	60	14.90

Map of Well Location

Please provide a map below following instructions on the back.

Well owner's information package delivered	Date Package Delivered	Ministry Use Only
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	20190121	
	Date Work Completed	Audit No. 2292772
	20190121	Received



APPENDIX E

SEPTIC SYSTEM NITRATE IMPACT ASSESSMENT



NITRATE DILUTION CALCULATION FOR PROPOSED SDU AND EXISTING DWELLING AT SITE

Net Potential Infiltration (NPI) = 383 millimetres
(as calculated by the Canada Engineering
Climate Services Unit)

Infiltration Reduction Factor (IRF)

Rolling to hilly	0.15
Silty sand subgrade	0.35
Assumed cleared of trees (conservative)	<u>0.10</u>
IRF	0.60

Volume of Available Annual Infiltration

$$20,000 \text{ m}^2 \times 0.383 \text{ m}^3/\text{m}^2 \text{ (NPI)} \times 0.60 = 4596 \text{ m}^3$$

Annual Volume of Effluent for 2 Septic Systems (i.e.: 1 existing, 1 proposed)

$$2 \times 365 \times 1 \text{ m}^3 \text{ per system per day} = 730 \text{ m}^3$$

Concentration of Nitrate at Boundary =

$$\frac{730 \times 40}{(1^* \times 365) + 4596} = 5.9 \text{ mg/L}$$

*Number of Lots is used as per MECP D-5-4 guideline document, section 5.6.2.(b)(v) which states "The volume of sewage effluent, if used as dilution water in mass balance calculations, should not exceed 1000 L/day/lot"



TOWNSHIP OF McNAB/BRAESIDE
COMMITTEE OF ADJUSTMENT

McNab/Braeside NOTICE OF HEARING AND REQUEST FOR COMMENTS

To: CAO/Clerk

Date: January 10, 2025

Place: McNab/Braeside Municipal Office
2473 Russett Drive, Arnprior

File: Minor Variance Application
A-12/24

Hearing Date: Thursday, January 30, 2025

Owner/Agent: David & Jennifer Lindsay
(Owners)

Time: 4:00 p.m.

Property Location: 101 Lindsay Lane
Part of Lot 1, Concession 2

Application A-12/24 has been received and will be heard by the Township of McNab/Braeside Committee of Adjustment on the above noted date. So that the application can be properly considered in accordance with the requirements of The Planning Act, the Committee requests that the information requested below is completed and one copy returned to the Committee.

Nicole Moore, Junior Planner
nmoore@countyofrenfrew.on.ca

1. BUILDING DEPARTMENT COMMENTS:

Raised septic bed required due to bedrock. Proposed building height greater than 5m [3.33(d)(d)].

Chief Building Official

Building Inspector

2. PUBLIC WORK COMMENTS

Yes No N/A

(a) Are the following services available to this land?

- Municipal Water
- Sanitary Sewers
- Electricity
- Garbage Collection

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(b) Does the subject lot have direct access to a public road maintained by the Municipality?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

(c) If direct access is to a municipal public road:

- (i) Would access be obtained where a traffic hazard would be created because of limited sight lines, curves or grades?
- (ii) Is the Municipality willing to issue an entrance permit?
- (iii) Is road widening or dedication required?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

} See Comments.

Comments:

THE SUBJECT PROPERTY DOES HAVE FRONTAGE ON AN OPEN PUBLIC ROAD (BATVIEW LODGE RD) HOWEVER THE APPLICANT HAS PROPOSED THAT THE SOU BE LOCATED ON AN EXISTING PRIVATE ROAD (LINDSAY LANE). THE TOWNSHIP PUBLIC WORKS DEPT. HAVE NO COMMENTS WITH REGARDS TO ACCESS VIA A PRIVATE ROAD.


Director of Public Works

3. FIRE DEPARTMENT COMMENTS:

Fire Department has no comments or concerns


Fire Chief

4. COUNCIL/PLANNING ADVISORY COMMITTEE COMMENT

Yes No

- (a) Does Council recommend minor variance be given?
- (i) If not, outline reasons why.

- (b) Should the minor variance be granted, what conditions, if any, would Council wish to see applied?

Date

CAO/Clerk



MINOR VARIANCE PLANNING REPORT

PART A – BASIC INFORMATION

1. FILE NO.: A-12/24
2. APPLICANT: David & Jennifer Lindsay (Owners)
3. MUNICIPALITY: Township of McNab/Braeside
(geographic Township of McNab)
4. LOT: 1 CONCESSION: 2 STREET: 101 Lindsay Lane

SUBJECT LANDS

5. COUNTY OF RENFREW OFFICIAL PLAN
Land Use Designation(s): Rural
Environmental Protection
6. TWP OF McNAB/BRAESIDE
ZONING BY-LAW 2010-49
Zone Category(s) Rural (RU)
Environmental Protection (EP)

7. **DETAILS OF MINOR VARIANCE REQUEST**

The minor variance application requests a variance from Section 3.34(I)(b) of Zoning By-law No. 2010-49, to permit a secondary dwelling unit on a waterfront lot.

The proposed secondary dwelling unit will be 9 metres in height with a floor area of 148.64 square metres, and will be setback approximately 130 metres from the shoreline of White Lake.

8. **SITE PERFORMANCE STANDARDS**

<u>Zoning By-law Standard</u>	<u>Permitted/Required</u>	<u>Proposed</u>
Section 3.34(I)(b)	No secondary dwelling units on waterfront lots.	A secondary dwelling unit be permitted on a waterfront lot, subject to conditions outlined in the Hydrogeological Evaluation.

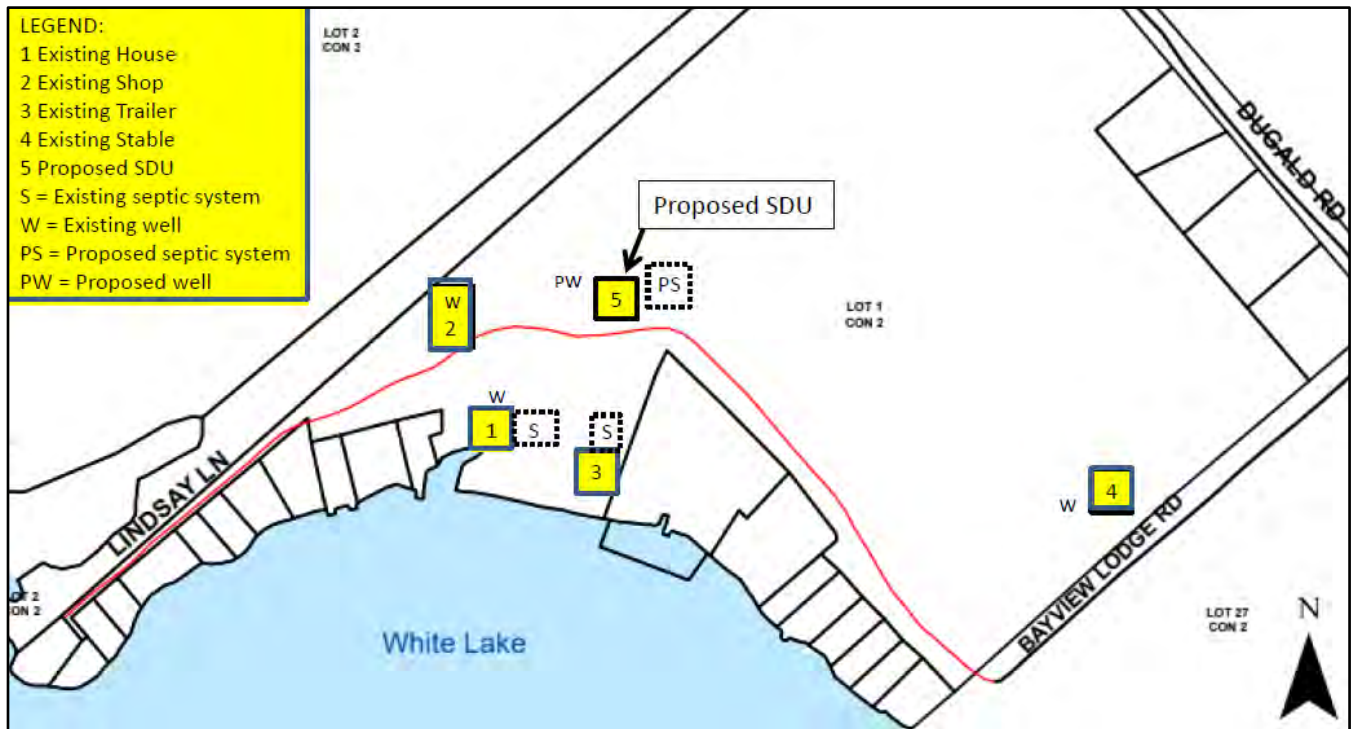
9. **SITE CHARACTERISTICS AND SETTING**

The subject property is located approximately 2.5 kilometres south of the hamlet of White Lake, and abuts both White Lake and the neighbouring municipality of Mississippi Mills (see right). It is approximately 33.6 hectares in area, fronts onto Dugald Road, and contains a private road known as Lindsay Lane.

The lot also contains a dwelling with a private workshop, a trailer, and a stable (see below). Lands on the property generally slope from Dugald Road to White Lake, with some steeper slopes present along the north and west lot lines of the parcel.

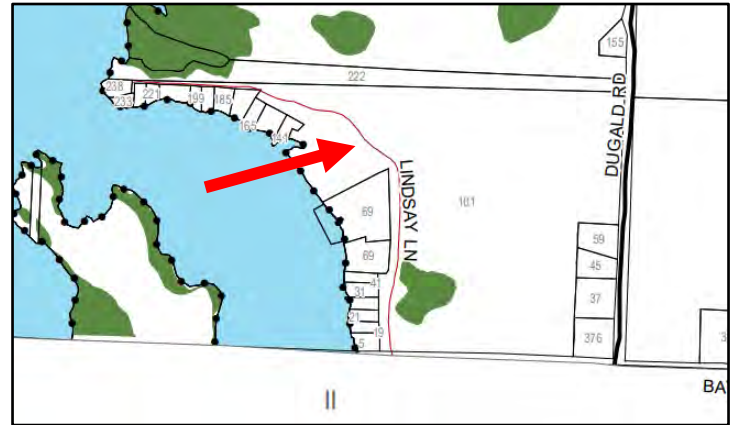


A number of small waterfront residential lots abut the rear lot line of the property and front onto Lindsay Lane. Several other residential lots are present to the northeast, along with larger rural lots. To the north and west are additional large, rural properties that contain a mix of farmlands and natural bush. Lastly, to the south and east are several tourist commercial uses, followed by White Lake and more tracts of rural land.



10. **OFFICIAL PLAN**

The subject lands are primarily designated Rural in the County of Renfrew Official Plan, with a small portion designated Environmental Protection. Section 5.3(1) of the Rural designation permits a range of rural uses, including low density residential uses.



Section 2.0 - General Development Policies, contains various general policies that apply to this property and the proposed application.

Section 2.2(24) – Additional Dwelling Units, outlines criteria that must be satisfied in order for a secondary dwelling unit(s) to be permitted. For properties on private well and septic services, criteria applicable to the present application are as follows:

- a. One secondary dwelling unit may be considered per lot;
- c. A secondary dwelling unit shall be permitted on lots greater than 0.8 Ha in area. The secondary dwelling is required to share the same water and septic/sewer services as the primary dwelling unit. Secondary dwelling units on properties that are greater than 2 Ha are not required to share the same water and septic systems;
- e. A secondary dwelling unit may not be severed from the lot with the primary dwelling;
- g. A secondary dwelling shall not be permitted on ‘at capacity lakes’ or ‘lakes near capacity’; and
- h. A secondary dwelling may be permitted on waterfront properties by minor variance provided a study is submitted demonstrating no negative impacts on the waterbody, the availability of potable drinking water (quantity and quality), and that addresses septic effluent.

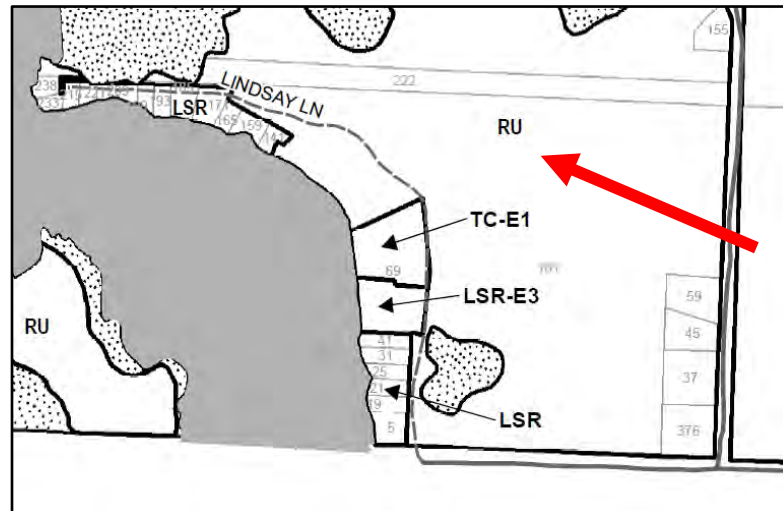
11. **ZONING BY-LAW**

The majority of the subject lands are zoned Rural (RU) in the Township’s Zoning By-law, with a small portion zoned Environmental Protection (EP) (see below). Section 17.1(a) of the RU Zone permits a range of uses, including a single detached dwelling.

Section 17.2(c) states that the minimum front yard depth is 7.5 metres.

Section 17.2(d) states that the minimum side yard width is 3 metres.

Section 2.0 provides definitions for various terms used within the Zoning By-law.



Section 2.84 defines FLOOR AREA, GROSS in part as, "...the total area of the storeys exclusive of basements, cellars, attic, garages, sunrooms, unenclosed verandas or porches... only that floor area having a clear height to the ceiling of at least 2.25 metres may be used to calculate floor area."

Section 3.0 of the Zoning By-law outlines various General Provisions that may apply to a property and development proposal.

Section 3.3.6 provides maximum heights for accessory structures in residential, commercial, and industrial zones. Notably, it does not list any maximum height for accessory structures in the RU zone.

Section 3.34 lists provisions related to secondary dwelling units. This use is generally permitted where other residential uses are permitted, subject to the following applicable criteria:

- a. A secondary dwelling unit shall only be permitted where adequate servicing is or can be made available to accommodate the secondary dwelling unit, including but not limited to water, waste water, stormwater, and electricity.
- b. A minimum 0.8 hectare lot area shall be required for a secondary dwelling unit on lots with private (well and/or septic) services.
- c. The gross floor area of the secondary dwelling unit must be less than the gross floor area of the primary dwelling unit.
- d. A secondary dwelling unit which is a Coach House, or is located in an accessory building to the primary dwelling unit shall be subject to the following provisions:
 - a. The minimum side yard width and rear yard depth applicable to the primary dwelling unit shall also apply to the Coach House.
 - b. The Coach House shall not be located in the minimum front yard setback in a Rural (RU) or Agriculture (A) zone, or within a front yard in all other zones.
 - d. The maximum height shall be the permitted height of an accessory building.

- f. A minimum of one (1) parking space is required for a secondary dwelling unit.
- g. A maximum of one secondary dwelling unit shall be permitted per primary dwelling.
- l. Secondary dwelling units on waterfront lots:
 - a. Secondary dwellings shall not be permitted on lots within 300 metres of a lake identified as 'At Capacity'.
 - b. For Lots with water frontage on a waterbody that is not identified as 'At Capacity', secondary dwellings shall not be permitted. A secondary dwelling may be considered through the submission and approval of a minor variance application. The proponent of the application is required to submit a study addressing matters outlined in the Official Plan.

12. **STUDIES**

A scoped Hydrogeological Evaluation and several additional sketches were submitted with the application. A summary of the evaluation is provided below. To view the additional sketches, please refer to Appendix 1.

Scoped Hydrogeological Evaluation, Morey Associates Ltd., December 6, 2024

The purpose of this evaluation was to determine if the property can accommodate a secondary dwelling unit on separate private well and septic services.

In determining the suitability of the property, the following work was undertaken:

- Testing of water well samples obtained by Jp2g Consultants Inc.;
- Review of well records and well owner interview provided by Jp2g Consultants Inc.;
- Review of available surficial geology and bedrock geology maps;
- A site visit by technical field staff on November 15, 2024 to evaluate existing site conditions (ie. existing development, site topography, soil conditions, and vegetative cover); and
- A nitrate impact assessment based on the above information.

The evaluation found that there is a sufficient potable groundwater supply within the bedrock aquifer to support a detached secondary dwelling unit. The groundwater meets all Ontario Drinking Water Standards with the exception of water hardness, which can be treated with water softeners to lower the hardness to acceptable levels.

It was determined that the proposed development meets provincial criteria for septic effluent. From a groundwater impact and water quality perspective, the site is suitable for an additional private septic system. No significant adverse effects on White Lake are anticipated from the proposed septic system.

A Class 4 septic sewage disposal system with a partially to fully raised leaching bed is recommended for installation, based on the overburden subsurface conditions encountered on site. The report further notes localized areas of inferred surface bedrock are not ideal locations for this type of septic system and should be avoided.

The report concludes by providing a list of 13 recommendations related to the proposed private well and septic system for the secondary dwelling unit. Please refer to Section 15 of this report to view all recommendations.

13. **AGENCY COMMENTS**

As required by the Planning Act, all property owners within 60 metres of the subject property have been notified of the application. The applicant has also posted notice on site. Public agencies have been notified, as required, including the Township of Mississippi Mills.

As of writing this report, the only comments received are those from the Township of McNab/Braeside staff, received January 21, 2025. The Public Works Department and the Fire Department expressed no concerns with the requested variance. The Building Department noted that a raised septic bed will be required due to the presence of bedrock. Additionally, the Building Department was concerned that the proposed height of the secondary dwelling unit would not comply with the accessory height requirements of the Zoning By-law. Due to timing issues, the Township of McNab/Braeside Council was unable to comment on the application.

Should any additional comments be received, they will be provided at the Hearing.

14. **GENERAL PLANNING COMMENTS**

As noted above, comments were provided by the Township of McNab/Braeside Building Department. With regard to the raised septic bed, this will be addressed at the building permit stage and in accordance with the recommendations of the Hydrogeological Evaluation.

The proposed development will meet the accessory height provisions of the Zoning By-law. This is because the proposed development is located with the Rural (RU) Zone, which permits residential and non-residential uses. This is a large rural lot with residential uses, and the potential for other non-residential uses to be present. Further, the proposed height of 9 metres is no higher than what is permitted for a primary dwelling in the Rural Residential (RR) Zone. Section 3.3.6 of the Zoning By-law only provides maximum heights for accessory buildings within primarily residential, commercial, and industrial zones. As such, the proposed 9-metre secondary dwelling unit height is considered appropriate.

Section 45(1) of the Planning Act states that a Committee of Adjustment may authorize a minor variance from the provisions of the Zoning By-law if: the request maintains the general intent and purpose of both the Official Plan and the Zoning By-law; the development is desirable and appropriate for the lands, building or structure; and the variance is in fact minor. The present application is evaluated on each of these matters in the subsections below.

Intent of the Official Plan and Zoning By-law

Both Section 2.2(24) of the Official Plan and Section 3.34 of the Zoning By-law outline criteria that secondary dwelling unit proposals must meet in order to be permitted. The

following paragraphs examines each of these applicable criteria. Please refer to Sections 10 and 11 of this report to view the applicable secondary dwelling unit criteria of the Official Plan and the Zoning By-law.

Official Plan – Section 2.2(24)

- a. Only one secondary dwelling unit is proposed. *Criteria met.*
- c. The concerned property is 33.59 hectares in size. This exceeds the 0.8 hectare minimum required to permit a secondary dwelling unit. It also exceeds the minimum 2.0 hectare requirement for a detached secondary dwelling unit to be permitted on separate private well and septic services. The proposed secondary dwelling unit is seeking to be detached with separate private services, which is permitted in this provision. *Criteria met.*
- e. The applicants are not proposing to sever the secondary dwelling unit. *Criteria met.*
- g. The concerned property abuts White Lake. White Lake is not a provincially designated At-Capacity lake under Section 9.3 of the Official Plan. Therefore, the proposed secondary dwelling unit is not considered to be on an At-Capacity lake. *Criteria met.*
- h. The concerned property is considered a waterfront lot, as it directly abuts White Lake. The present minor variance application, along with a scoped Hydrogeological Evaluation, have been submitted to propose that a secondary dwelling unit be permitted. The evaluation determined that: there is sufficient water quantity and quality available; that no significant negative impacts should occur to the adjacent waterbody (White Lake); and that the proposed development on the concerned property meets provincial criteria for septic effluent. *Criteria met.*

Zoning By-law – Section 3.34

- a. The secondary dwelling unit is proposing to be serviced by a private well and septic system, and will be accessed by a private road (Lindsay Lane). The submitted Hydrogeological Evaluation has demonstrated that the secondary dwelling unit can be adequately serviced by a well and septic system without causing any significant negative impacts. Additionally, the evaluation provides recommendations on how stormwater is to be managed on site, which will be made a condition of this variance request. No significant impacts are anticipated from a municipal road perspective, as the proposed unit will be accessed by a private road. Staff are of the opinion that there will be adequate servicing to support the secondary dwelling unit. *Criteria met.*
- b. The concerned property is 33.59 hectares in size, which meets the minimum 0.8 hectare lot area requirement. *Criteria met.*
- c. The gross floor area of the secondary dwelling unit is proposed to be 148.64 m². In contrast, the existing primary dwelling has approximately 188.59 m² of gross floor area. Therefore, the secondary dwelling unit will be smaller than the primary dwelling unit by approximately 39.95 m². *Criteria met.*
- d. As indicated in the additional sketches (see Appendix 1), the minimum side and rear yard requirements of the RU zone will be met. The secondary dwelling unit is not proposed in the minimum front yard setback of 7.5 metres. Further, the

proposed height of 9 metres is considered appropriate, as per the explanation provided in response to the Building Department's comments. *Criteria met.*

- f. Both the proposed location of the secondary dwelling unit (see Appendix 1) and the substantial size of the property (33.59 hectares) indicate there will be adequate area available to create at least one parking space. *Criteria met.*
- g. Only one secondary dwelling unit is proposed. *Criteria met.*
- l. (a) As mentioned in the examination of the Official Plan policies, White Lake has not been identified as an At-Capacity lake by the Province. Therefore, this subsection does not apply.
 (b) The present minor variance application has been submitted to request that a secondary dwelling unit be permitted on the property known as 101 Lindsay Lane, which is considered a waterfront lot. A scoped Hydrogeological Evaluation was submitted with the application, which was determined in the previous analysis to meet the relevant additional dwelling unit policies of the Official Plan. *Criteria met.*

Through this examination, staff have determined that all relevant criteria relating to secondary dwelling units have been met. As such, the variance is considered to have fulfilled the intent of the Official Plan and Zoning By-law.

Is the variable desirable?

The variance being sought will permit an additional dwelling unit on the subject property. This will add additional housing stock to the Township, while avoiding further division of the concerned lands.

Additionally, the submitted Hydrogeological Evaluation indicates that the property can support the proposed development without creating any significant negative impacts to White Lake or adjacent properties. Any potential impacts will be mitigated by following the recommendations of the evaluation, which will be included as conditions of this minor variance. In consideration of this information, the variance is desirable.

Is the variance minor?

As previously noted, the scoped Hydrogeological Evaluation supports the secondary dwelling unit in its proposed location on the property. There is sufficient potable groundwater supply to service the additional dwelling, and septic effluent from the proposed septic system will meet provincial standards. Again, no significant impacts are anticipated, and any potential impacts will be mitigated through the recommended conditions.

The notable lot size and abundant vegetation on the concerned lot will minimize any visual impacts to adjacent properties. Further, the proposed development will meet all yard setbacks of the RU zone. Based on these factors, the variance is considered minor.

Overall, based on the above review, it is staff's opinion that the proposed variance to permit a secondary dwelling unit on a waterfront lot at 101 Lindsay Lane meets the four tests of the Planning Act.

15. **RECOMMENDATIONS**

That subject to any additional concerns or information raised at the Committee of Adjustment Hearing, the Committee approve the requested variance to Section 3.34(l)(b) of the Zoning By-law, to permit a secondary dwelling unit on a waterfront lot known municipally as 101 Lindsay Lane, subject to the following conditions:

1. The final landscaping at the proposed secondary dwelling unit development area should be graded such that surface water (including any eavestrough downspout discharge and sump line discharge) is not directed to or ponds around the proposed drilled well and that the proposed drilled well casing height be maintained to greater than 0.4 metres above the ground surface. The proposed drilled well for the proposed secondary dwelling unit at the site should be located up gradient of the proposed septic system leaching bed and existing septic system leaching bed at the site and meet the clearance distances to septic system leaching beds and septic tanks indicated in the most recent version of the Ontario Building Code as amended.
2. Consideration could be given by the site owner/site developer to the use of level 4 ("tertiary") septic treatment systems, which are indicated to produce better quality effluent, from a groundwater impact point of view.
3. The proposed septic system leaching bed should not be located in an area of exposed bedrock at ground surface at the site.
4. Future residents at the proposed secondary dwelling unit should be made aware of and refer to the Province of Ontario publication titled "Septic Smart! Understanding Your Home's Septic System (available for download at time of preparation of this letter on the Province of Ontario website, www.ontario.ca/files/2022-10/omafra-septic-smart-understanding-homewastewater-system-en-2022-10-14.pdf).
5. The proposed drilled well for the proposed secondary dwelling unit at the site must be constructed, as a minimum, in accordance with Ontario Regulation 903 (O.Reg 903), as amended, and constructed in accordance with the recommendations outlined below and any municipal requirements.
6. The steel well casing should be installed and grouted into place to a depth of at least 15 metres into sound bedrock (not weathered bedrock). The steel casing placed in the drilled hole should be pressure grouted in place for the full length of the casing. The material used to seal the annular space could consist of either a cement grout or a commercially available bentonite grout product. Cement grout mixtures should be allowed to set for a minimum 72 hours for regular cement or 24 hours for quick set cement (i.e.: high early cement) prior to advancing the well further into the bedrock. If a bentonite grout product is used, drilling need only be suspended for a few hours depending on the product used. Bentonite grout has the additional advantage of remaining flexible when set and therefore should not crack or shrink thereby ensuring as well as possible that surface water or shallow groundwater will not migrate along the annular space and into the well bore.

7. Once the steel well casing has been suitably sealed, the well should be advanced uncased in the bedrock. The proposed well may have to be drilled to a depth of up to some 48.8 metres below the ground surface (based on the sampled well depth). However, due to possible changes in topography and because it is impossible to predict with certainty the depth(s) at which water-producing fractures will be encountered during drilling, the above mentioned depth of 48.8 metres below the ground surface should be considered an approximate target depth only. Drilling the proposed well to a depth significantly deeper than 48.8 metres should be avoided, if possible. Should the proposed well be drilled significantly deeper than 48.8 metres depth, then additional water quality testing and review to ensure the well water quality is in keeping with the findings of this present scoped hydrogeological evaluation is recommended.
8. The completed well should be development to maximize the yield. It is recommended that the newly constructed well be pumped for a minimum of 6 hours after construction to reduce turbidity levels prior to connection to the proposed additional dwelling unit water supply plumbing and well casings should be fitted with a pit less adapter to facilitate below ground plumbing and electrical connections and be completed with a vented and vermin proof well cap.
9. In order to encourage domestic supply well education and best management practices future residents at the proposed secondary dwelling unit at the site should be made aware of and refer to the province of Ontario web-doc-publication: <https://www.ontario.ca/document/water-supplywells-requirements-and-best-practices>
10. Future residents at the proposed secondary dwelling unit at the site should be made aware that it is considered prudent to adhere to the regulatory well maintenance requirements, general maintenance for well owners (Table 11-1: Well Maintenance Checklist Items), and well water quality laboratory testing outlined in the above mentioned province of Ontario web-doc publication.
11. Future residents at the proposed secondary dwelling unit at the site should be made aware that the use of a water softener for treatment of hardness may be desired based on the results of the water quality testing carried out for this present scoped hydrogeological evaluation and that the use of conventional sodium ion exchange water softeners may introduce relatively high concentrations of sodium into the drinking water, which may contribute a significant percentage to the daily sodium intake for a consumer on a sodium restricted diet. Where ion exchange water softeners are used, a separate unsoftened water supply could be used for drinking and culinary purposes.
12. In addition to the above mentioned recommendation (recommendation No. 11) and as per the MECP D-5-5 Guideline Document, if water softening is utilized, a warning should be registered on title with a recommendation that a separate tap, which by-passes the softener, be installed to supply unsoftened drinking water.

13. Future residents at the proposed secondary dwelling unit at the site should be made aware that the proposed drilled well should be adequately disinfected prior to domestic use and that the proposed drilled well must be accessible in perpetuity for maintenance, repair and replacement, as per O.Reg 903.

Date: January 22, 2024

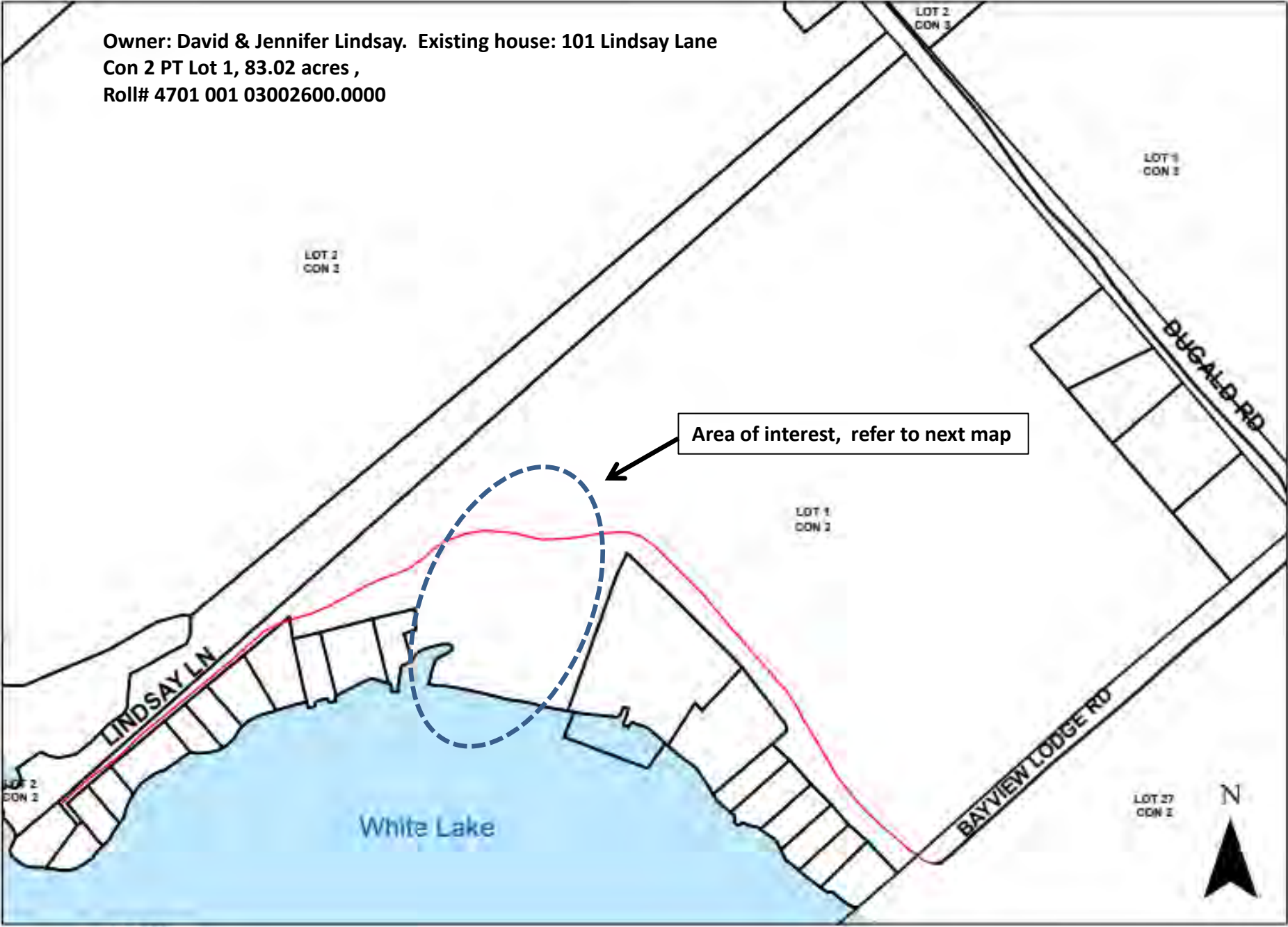
Prepared by: Nicole Moore, Junior Planner

Reviewed by: Bruce Howarth, MCIP, RPP
Manager of Planning Services

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APPENDIX 1

Owner: David & Jennifer Lindsay. Existing house: 101 Lindsay Lane
Con 2 PT Lot 1, 83.02 acres ,
Roll# 4701 001 03002600.0000



Area of interest, refer to next map

White Lake

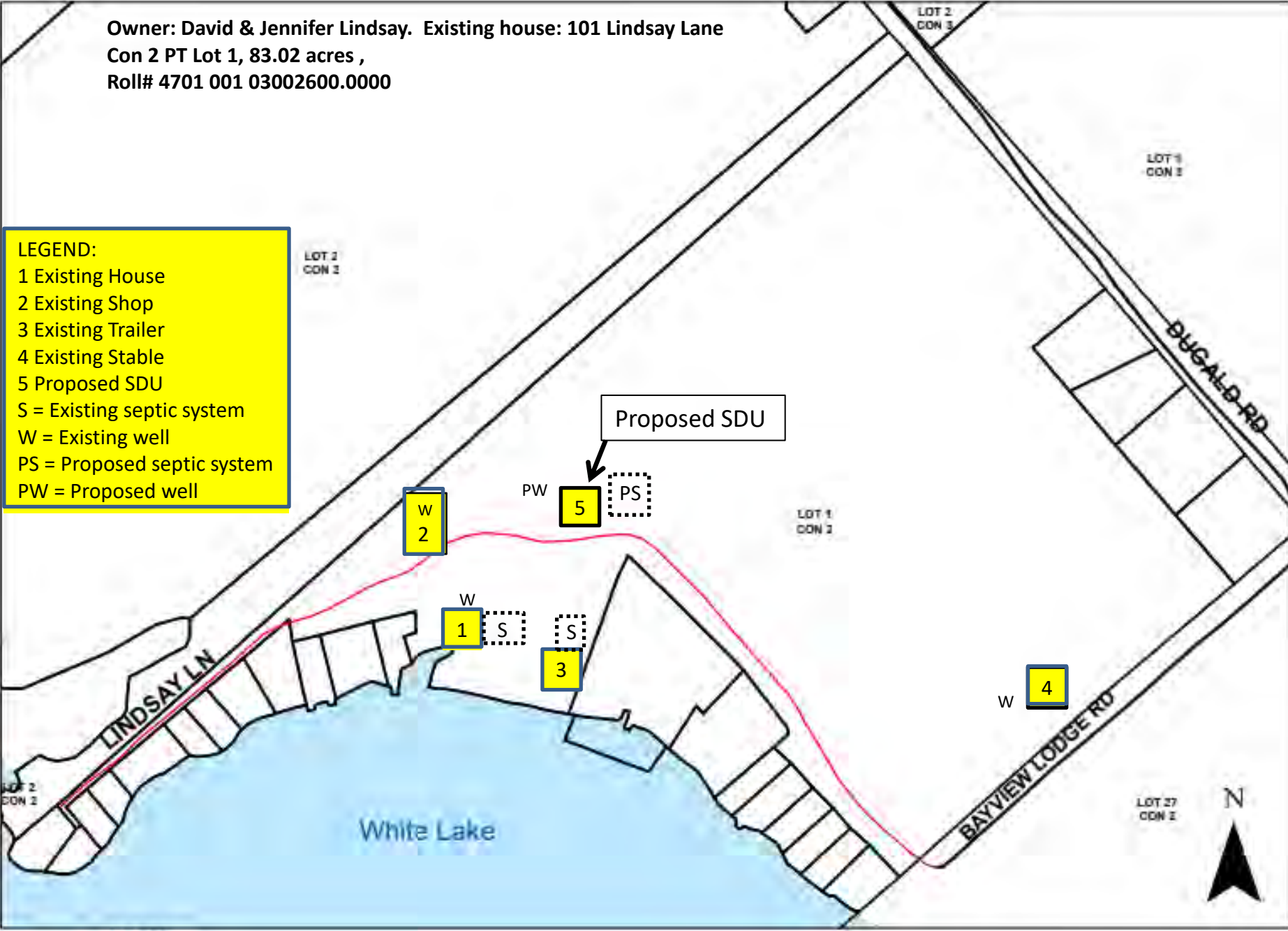
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1:4,800

1 inch = 400 feet

Owner: David & Jennifer Lindsay. Existing house: 101 Lindsay Lane
Con 2 PT Lot 1, 83.02 acres ,
Roll# 4701 001 03002600.0000

LEGEND:
1 Existing House
2 Existing Shop
3 Existing Trailer
4 Existing Stable
5 Proposed SDU
S = Existing septic system
W = Existing well
PS = Proposed septic system
PW = Proposed well



1:4,800

1 inch = 400 feet



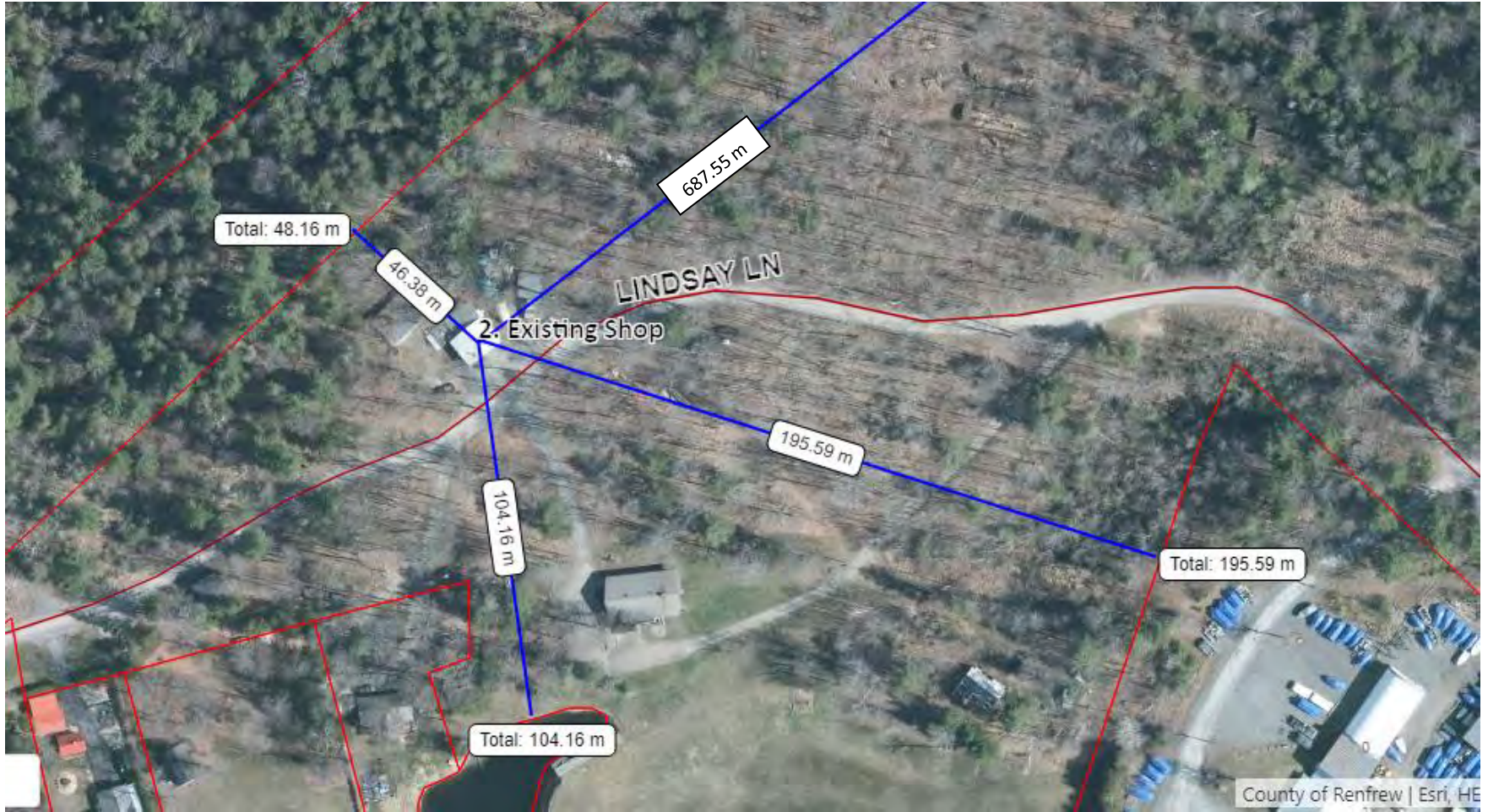
Application Sketch – 1. Existing house

Dec 15, 2024.



Application Sketch – 2. Existing Shop

Dec 15, 2024.



Application Sketch – 3. Existing Trailer

Dec 15, 2024.



Application Sketch – 4. Existing Stable

Dec 15, 2024.



County

Application Sketch – 5. Proposed SDU

Dec 15, 2024.

