

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

**Thursday, July 25, 2024  
Township Municipal Office  
2473 Russett Drive**

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1. Call to open hearing.
2. Minutes of the previous hearing, July 10, 2024.
3. Declaration of a Pecuniary Interest (Money/Financial).
4. **Consideration of Application No. A-7/24 – 1:00 p.m.**  
953 Centre Street – Robyn Lamorie & Nicholas Tourangeau  
Agent-RMA+SH architects
  - (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-7/24, or call for a further hearing if required.
6. Appeal Rights
7. **Consideration of Application No. A-8/24 – 1:30 p.m.**  
90A Mitchell Lane – Krista Aselford
  - (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-8/24, 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**

Note: property is under purchase  
and sale agreement between the  
current owner and Krista Aselford,  
scheduled to close on July 3, 2024

**1. APPLICANT/OWNER INFORMATION**

- a) \*Applicant's Name(s): Krista Aselford
- \*Address: 15 Camwood Crescent, Nepean, ON, K2H 7X1
- \*Phone #: Home ( )                      Work ( )                      Cell (613) 884-3614
- E-mail: krista@aselford.ca
- b) \*The applicant is:    the registered owner [ ]    an agent authorized by the owner [x]
- c) If the applicant is an agent authorized by the owner, please complete the following:
- \*Name of Owner: Brenda Lee House and James William Cochrane
- \*Address of Owner: 90 Mitchell Lane
- \*Phone #: Home ( )                      Work ( )                      Cell ( )
- d) To whom should correspondence be sent? Owner [ ] Applicant [x] Both [ ]

**2. \*PROVIDE A DESCRIPTION OF THE SUBJECT LAND:**

Street Address: 90A Mitchell Lane

Concession: 6                      Lot: 12

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

Reference Plan No.: 49R1043                      Part No(s).: 5

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

Rural

**4. \*CURRENT ZONING OF THE SUBJECT LAND:**

Limited Service Residential (LSR)

**PART II      DETAILS OF THE APPLICATION**

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

Zoning By-law requires a Minor Variance application to be filed in relation to a secondary dwelling where the lot is less than 0.8ha. The lot is 0.4ha. See planning justification letter.

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

A servicing study is necessary to support a secondary unit on a lot that is less than 0.8ha. The existing lot area is 0.4ha. 2 variances are also requested in relation the front yard location and building height. See planning justification letter.

7.    **\*DIMENSIONS OF THE SUBJECT LAND:**

Frontage: approx. 61m      Depth: approx. 66m      Area: 4000m<sup>2</sup> (0.4 ha)

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: 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:**

Not applicable

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

Current owners acquired property in November 2017. Property is subject to Purchase and Sale agreement with Krista Aselford

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

#1 Residential      Since: Unknown      /             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?**

No change, adding a secondary dwelling unit.



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

[x] 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	Single detached dwelling	Accessory Structure		Secondary Dwelling Unit	
Setback from the front lot line	approx. 44m	approx. 33m		approx. 10m	
Setback from the rear lot line	approx. 9m	approx. 22m		approx. 50m	
Setbacks from the side lot lines	approx. 16m / 29m	approx. 1.5m / 52m		approx. 19m / 30m	
Height (in metres)					
Dimensions or floor area				96m <sup>2</sup>	
Date constructed	N/A	N/A			

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 [ ]  
 privately owned and operated individual well [x]  
 privately owned and operated communal well [ ]  
 lake or other water body [ ]  
 other means: \_\_\_\_\_ [ ]

publicly owned and operated piped sanitary sewage system [ ]  
 publicly owned and operated communal septic system [ ]  
 publicly owned and operated individual septic system [ ]  
 privately owned and operated individual septic system [x]  
 privy [ ]  
 Other means: \_\_\_\_\_ [ ]

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

Sewers [ ] Ditches [ ] Swales [ ] Other Means [x]

18. **\*IS THE SUBJECT LAND ALSO THE SUBJECT OF AN APPLICATION FOR APPROVAL OF A PLAN OF SUBDIVISION OR CONSENT? Yes [ ] No [x] 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 [x]

## 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.

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### **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) \_\_\_\_\_

of the \_\_\_\_\_

in the \_\_\_\_\_

do hereby authorize \_\_\_\_\_ to act as my/our agent in this application.

\_\_\_\_\_  
Signature of Owner(s)

\_\_\_\_\_  
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.

3 July 2024  
Date

[Signature]  
Signature of Owner/Agent

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Owner/Agent

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

I (we) KRISTA ASELFORD

of the CITY OF OTTAWA

in the PROVINCE OF ONTARIO

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**.

ANGELA PATRICIA YOUNG, a Commissioner, etc.,  
County of Renfrew, for the Corporation of the  
Township of McLeod-Grassie

DECLARED before me at the Township of McLeod/Grassie  
in the County of Renfrew this 03 day of July, 20 24

[Signature]  
Signature of Owner or Authorized Agent

3 July 2024  
Date

[Signature]  
Signature of Commissioner

July 3, 2024  
Date

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)

3,000 Deposit / 1,100 Application Fee

**"COMPLETE" APPLICATION AND FEE OF \$ 4100.- RECEIVED BY THE MUNICIPALITY:**

July 3/24  
Date

[Signature]  
Signature of Municipal Employee

\_\_\_\_\_  
Roll Number

July 15, 2024

Township of McNab/Braeside  
2473 Russett Drive  
Arnprior, ON, K7S 3G8

**Attention: Angela Young, Deputy Clerk**

**Reference: 90A Mitchell Lane  
Application for Minor Variance – Planning Justification Letter  
Our File No.: 124055**

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Novatech has been retained by our client, Krista Aselford, to prepare a planning rationale report for a minor variance application in relation to a proposed secondary dwelling unit to be constructed as a coach house at the above-noted location. The property is currently under a purchase and sale agreement between our client and the current owners, which is scheduled to close on July 3, 2024.

The County of Renfrew Official Plan and Township of McNab/Braeside Zoning By-law permit secondary units but contain provisions for addressing servicing requirements. The following letter describes the proposed application and demonstrates that the proposed minor variance application satisfies the Township's servicing requirement for secondary dwelling units and meets the 'four tests' under subsection 45(1) of the *Planning Act*.

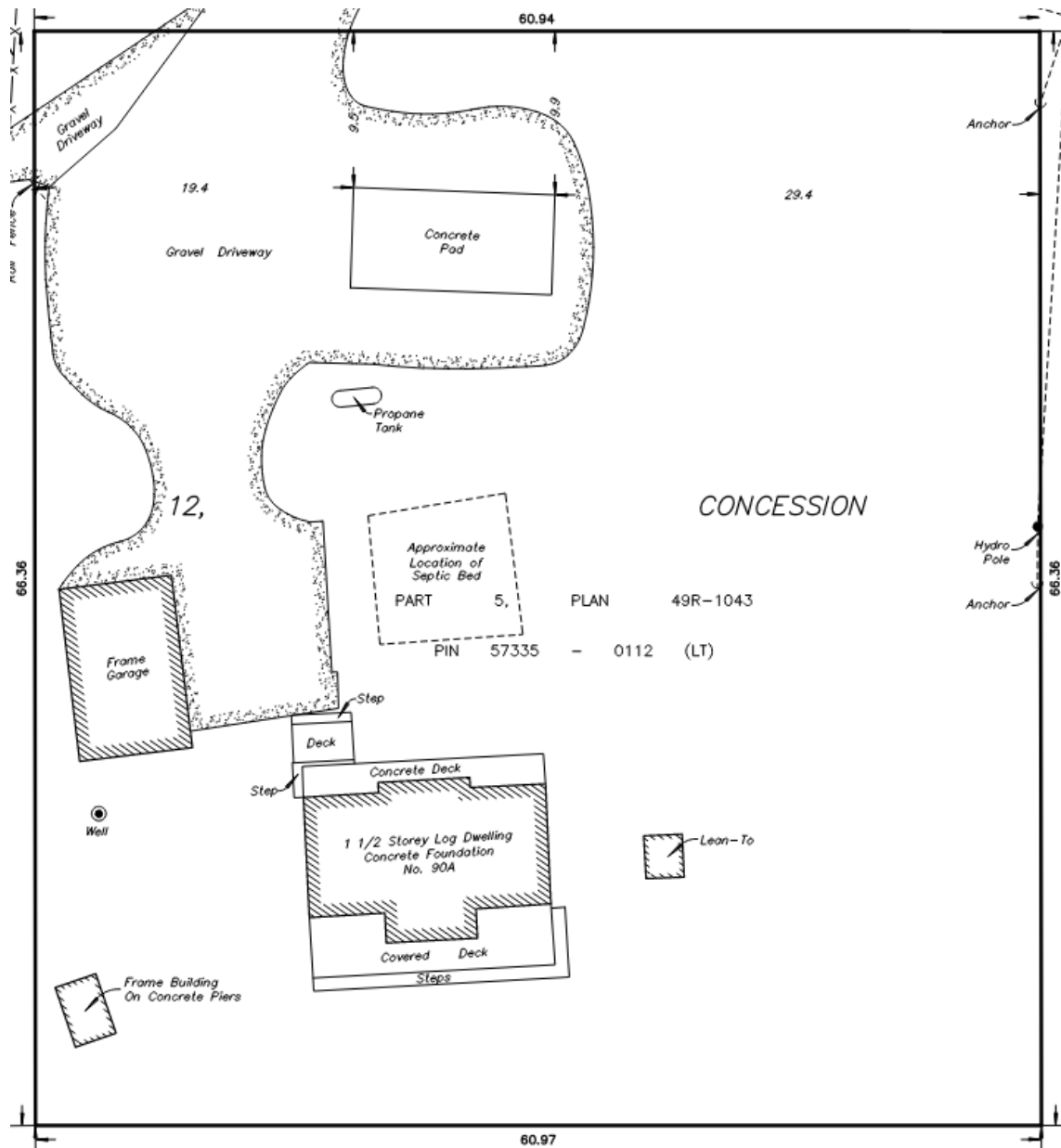
### **Existing Conditions**

The subject property is located at 90A Mitchell Lane in the Township of McNab/Braeside and is legally described as: *PT LT 12, CON 6, PT 5, 49R1043; T/W R364328; MCNAB / BRAESIDE*. The property has a lot area of 4,000m<sup>2</sup> (0.4ha) and has 61m of frontage on Mitchell Lane which is a private road. The property is located approximately 60m away from the Madawaska River and abuts shoreline lands owned by Ontario Power Generation Inc. While the property does not have direct frontage on the Madawaska River, the lot is considered to be a waterfront lot. A single-detached dwelling, detached frame garage, and concrete pad for the proposed coach house currently exist on the subject site, as shown in **Figure 1**.

The subject site is designated as *Rural* on Schedule A Map 1 of the County of Renfrew Official Plan and is zoned Limited Service Residential (LSR) on Schedule A Map 9 of the Township of McNab/Braeside Zoning By-Law No. 2010-49, as amended.

### **Surrounding Context**

The subject property is a rural residential lot that is water-oriented to the Madawaska River and accessed by private road. Besides the two adjacent lots that contain single-detached dwellings, the surrounding context mainly consists of forested area. Nearby amenities can be found in Arnprior, a 15-minute drive away from the subject site.



**Figure 1:** Excerpt of Subject Site Survey (See enclosed for full survey)

## Proposed Development

Our client wishes to construct a secondary dwelling unit in the form of a coach house in the location of the existing concrete pad as shown in Figure 1. The coach house (Figure 2) will have a total floor area of approximately 96m<sup>2</sup> consisting of a 65m<sup>2</sup> ground floor area and a 31m<sup>2</sup> loft. The coach house will be serviced by a private well shared with the principal dwelling and a new septic system designed to accommodate both dwellings. The proposed coach house is supported by the enclosed



Hydrogeological Assessment and Terrain Analysis to address Official Plan and Zoning By-law requirements.

The Survey Sketch attached to this application shows that the lot contains adequate space for the proposed unit to be located in the desired location on the existing concrete pad. The proposed location is in generally conformity with the setback requirement for buildings and will not require any tree removal to accommodate the coach house at this location. Given that the coach house is considered accessory to the principal residential use of the property, minor relief from the Zoning By-law (as described below) is required to accommodate the proposed design and location of the coach house.

On the basis of our discussions with the County, it is understood that in lieu of an Environmental Impact Statement (EIS), it is requested that the planning report that accompanies the minor variance offer specific recommendations for the implementation of best management practices associated with waterfront development. This letter includes such recommendations below.



**Figure 2:** Coach House Rendering

### **Proposed Minor Variance**

The purpose of the Minor Variance application is to permit the development of a secondary dwelling unit as required by Section 2.2.24.3 of the County of Renfrew Official Plan which states *“For lots less than 0.8 Ha in area, but greater than 0.4 Ha, a secondary dwelling unit may be considered on a case-by-case basis through the submission of a minor variance application”*. Section 3.34(b) of the Zoning By-law implements the above-noted Official Plan policy. Given that the property has an area of

precisely 0.4 ha, a scoped Hydrogeological Assessment and Terrain Analysis has been prepared to address Section 2.2.24.3 of the Official Plan and Section 3.34(b) of the Zoning By-law. In addition, Section 2.2.24.7 indicates that on waterfront properties, the study must demonstrate that there will be no negative impacts on the water body. Accordingly, this requirement in relation to waterfront lots is implemented through Section 3.34(l)(b) of the Zoning By-law and is addressed through the hydrogeological assessment and terrain analysis.

Finally, in addition to the requirement to address serving requirements through a minor variance application, this minor variance application also seeks relief from the Secondary Dwelling Units provisions in Section 3.34 of the By-law to accommodate the coach house design at the proposed location. The requested relief is described as follows:

- i. Relief from Section 3.34(d)(a) to permit a coach house to be located in the front yard of a lot located in a Residential zone, whereas the By-law does not permit a coach house within the front yard;
- ii. Relief from Section 3.34(d)(d) to permit a maximum building height of 5.5m, whereas the maximum permitted building height for a coach house is limited to 5m.

The relief for the proposed front yard location identified in Item (i) is indicated on Figure 1 at the location of the existing concrete pad. The relief requested in relation to building height identified in Item (ii) is shown in Figure 3, which indicates a building height, as per the zoning by-law definition, of 18 ft (5.48m).



**Figure 3:** Coach House south elevation indicating building height

The following rationale assesses the appropriateness of the minor variance application and demonstrates that the proposed minor variances meet the 'four tests' of the *Planning Act*.

#### Proposed Minor Variances

Per Section 45(1) of the *Planning Act*, the proposed minor variances must meet the following four tests:



1. Is the general intent and purpose of the Official Plan maintained?

The subject site is designated Rural in the County's Official Plan. Policies of the Plan permit a range of low density residential uses including accessory dwellings. In order to permit a secondary dwelling unit on a lot between 0.4 ha and 0.8 ha, Section 2.2.24.3 requires an engineering report to demonstrate *"that the additional effluent output can be satisfactorily managed and that there is a potable source of water for the secondary unit"*. The required Hydrogeological Assessment and Terrain Analysis included with this application indicates that the subject site can support the proposed coach house with respect to water quality and quantity to serve the dwelling and to provide lake protection. As such, the proposed minor variance maintains the intent and purpose of the Official Plan.

With respect to accessory proposed building location in the front yard and minor height exceedance, it is considered that the proposed coach house will maintain the intent of the Official Plan as the coach house is an accessory use to a permitted residential dwelling type, and will maintain the low density character and residential use of the property.

2. Is the general intent and purpose of the Zoning By-law maintained?

The intent of the Zoning By-law is to regulate the use of lands and use of buildings and structures within the Township of McNab/Braeside. The subject property is zoned Limited Service Residential (LSR). Consistent with the policies of the Official Plan, Zoning By-law Section 3.34(b) requires secondary dwelling units on properties with lot areas of 2 ha and less to share water and septic services with the primary dwelling and requires the submission of a servicing study to address the servicing matters outlined in the Official Plan. Since the servicing study that accompanies this application indicates that the site can support the proposed coach house with respect to water quality and quantity and lake protection, the purpose and intent of Section 3.34(b) is maintained.

Given that the principal dwelling is situated on the southerly portion of the lot, there is limited opportunity to avoid placement of the coach house in the front yard without tree clearance. The proposed location of the coach house in the front yard will not detract from the intent of the By-law which is to maintain the visual presence of the principal dwelling oriented towards the front. It is considered that the proposed coach house location in the front yard and minor building height exceedance of 50cm will not undermine the intent of Section 3.34(d). It is considered that the variances maintain the overall intent and purpose of the Township's Zoning By-law.

3. Is the proposal desirable for the appropriate development or use of the land?

The Hydrogeological Assessment and a Terrain Analysis prepared to support this application demonstrates the appropriateness of this 0.4ha waterfront lot to accommodate a secondary dwelling unit from a servicing perspective. In addition, the proposed location of the coach house in the front yard of the lot is will have no impact on neighbouring land uses and is more desirable than placement of the coach house at a location that would require tree removal. Finally, the small increase in building height is negligible and will accommodate a design that is fitting and appropriate for the proposed building and land use.

4. Is the proposal minor?

**On the basis of the Hydrogeological Assessment and Terrain Analysis, the development of a coach house on private services shared with the principal dwelling will have no impact on the local groundwater supply. Considering the proposed minor variance to accommodate a secondary dwelling unit on this 0.4ha waterfront lot will have no negative impact on the local groundwater supply as well the Madawaska River, as supported in the attached Hydrogeological Assessment and Terrain Analysis, this proposal addresses the Official Plan and Zoning By-law servicing requirements.**

**Further, it is considered that the proposed location of the coach house in the front yard of the lot, which will not require any tree clearance to accommodate construction, will have no impact on the natural environment or on neighbouring land uses. Finally, the small increase in height of 0.5m will have no impact and is also considered minor.**

### **Recommendations**

In addition to the findings of the Hydrogeological Assessment and Terrain Analysis accompanying this application regarding servicing requirements, the following best management practices are offered for consideration. These mitigation measures should be implemented to minimize environmental impacts resulting from the proposed development.

1. All construction work associated with the coach house and septic system installation shall be carried out expeditiously, with good trade practices, as to cause minimal environmental disturbance and nuisance to neighbours.
2. Every effort shall be made to restrict the disturbance of soil and vegetation cover during construction. Vegetation removal shall be limited to the greatest extent possible, and only as necessary to accommodate the placement of the coach house and installation of the replacement septic system.
3. Where adjacent trees are to be retained, sturdy protective fencing is recommended around the perimeter of the work areas to ensure the adjacent vegetation to be retained is not impacted by the construction and to isolate the work area from sensitive wildlife. The protective fencing is to be installed at the outer limits of the critical root zone of the retained adjacent trees.
4. Sediment and erosion control measures, in accordance with best management practices (i.e silt fencing), are to be established adjacent to the construction area and shall be implemented prior to construction and maintained throughout the construction process. Any sediment control works shall remain in place until all disturbed areas have been stabilized and vegetation is well established.
5. Drainage patterns on this property should not be adjusted to allow any further run-off from the site onto adjacent lands or waterbodies. Roof runoff and eavestroughing should be directed to soak-away pits, grass or other permeable surfaces.

## Conclusion

This report has been prepared in relation to the proposed Minor Variance application to accommodate the development of a coach house within a Limited Service Residential zone. In conclusion, the Hydrogeological Assessment and Terrain Analysis addresses servicing requirements and provides evidence that the subject site can support the proposed coach house with respect to water quality and quantity. The recommended mitigation regarding environmental impacts further supports the development and should be implemented during construction.

The proposed variances to building location in the front yard and height are truly minor. The proposed coach house makes efficient use of rural land and poses no impact on the local groundwater supply. It is our opinion that the proposed development represents good land use planning and the proposed variances to accommodate a coach house should be granted.

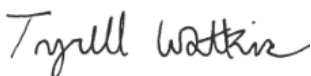
In support of this Minor Variance Application, please find enclosed the following:

- Minor Variance Application
- Servicing Report, prepared by Paterson Group on June 25, 2024
- Survey Sketch, prepared by Adam Kasprzak Surveying Ltd
- Cheque for application fees
- Coach house drawings

Sincerely,

## NOVATECH

Prepared by:



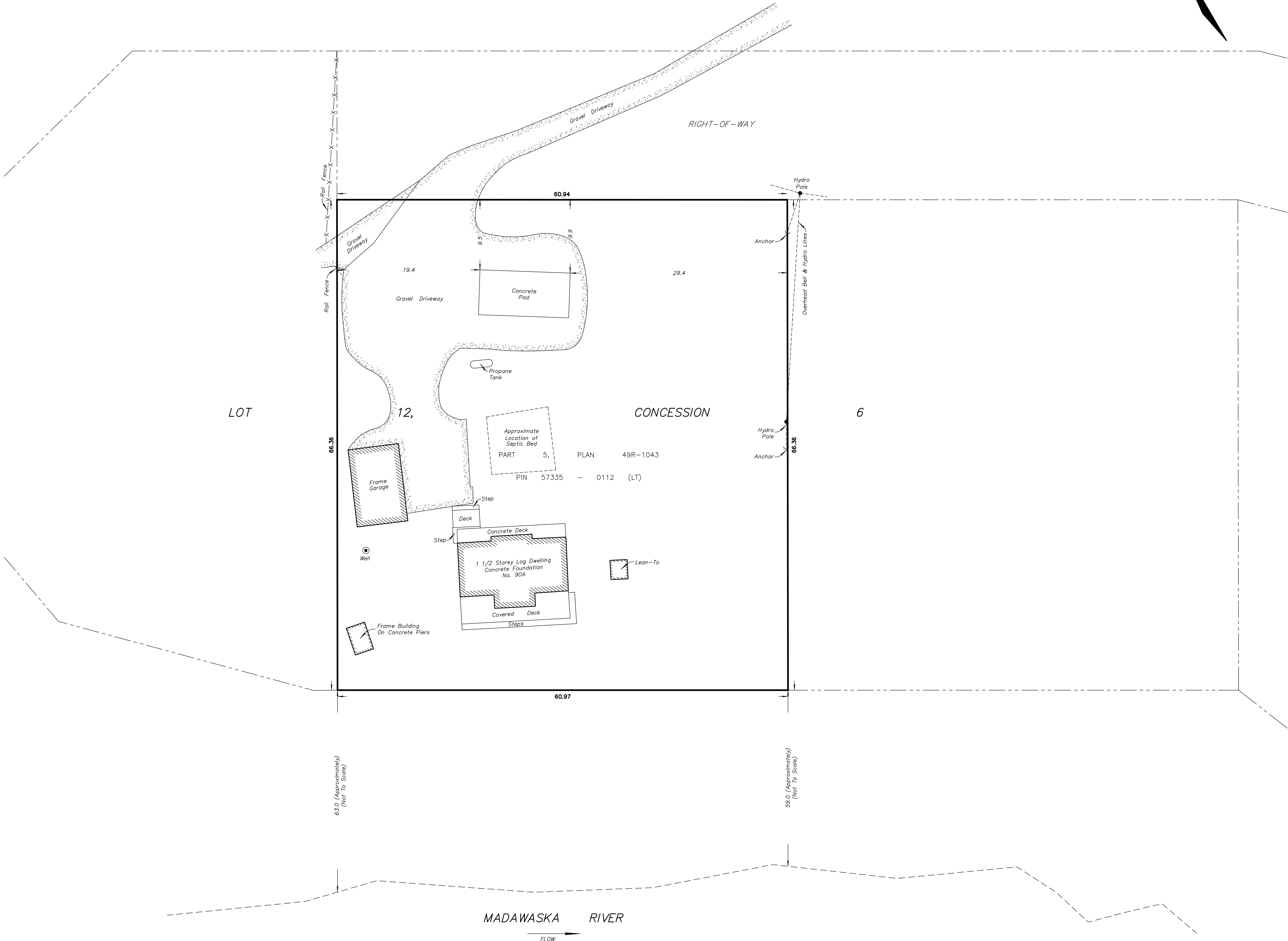
Tyrell Watkins  
Planner

Reviewed by:



Steve Pentz, MCIP, RPP  
Senior Project Manager

Cc: Krista Aselford



SKETCH FOR  
MINOR VARIANCE APPLICATION  
**90A MITCHELL LANE**  
TOWNSHIP OF McNAB/BRAESIDE  
COUNTY OF RENFREW  
SCALE 1 : 250

ADAM KASPRZAK SURVEYING LTD.

METRIC NOTE:  
DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES  
AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

DISTANCE NOTE:  
DISTANCES SHOWN ON THIS PLAN ARE GROUND DISTANCES AND  
CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY A  
COMBINED SCALE FACTOR OF 0.99975.

CAUTION NOTE:  
1) THIS IS NOT A PLAN OF SURVEY AND SHALL NOT BE  
USED EXCEPT FOR THE PURPOSE INDICATED ON THE  
TITLE BLOCK.  
2) THIS SKETCH IS PROTECTED BY COPYRIGHT.  
ADAM KASPRZAK SURVEYING LTD. © COPYRIGHT 2024

GEOGRAPHIC NOTE:  
THE LANDS SHOWN ON THIS SKETCH ARE PART OF  
LOT 12, CONCESSION 6, GEOGRAPHIC TOWNSHIP OF  
McNAB, TOWNSHIP OF McNAB/BRAESIDE.

LEGEND (If Applicable)	
IB	IRON BAR
SIB	STANDARD IRON BAR
SSIB	SHORT STANDARD IRON BAR
■	MONUMENT FOUND
□	MONUMENT SET
CP	CONCRETE PIN
WIT	WITNESS
RIB	ROUND IRON BAR
(OU)	ORIGIN UNKNOWN

**AK** ADAM KASPRZAK SURVEYING LTD.  
ONTARIO LAND SURVEYORS  
29 BRIDGE ST., P.O. BOX 633  
RENFREW ONTARIO K7V 4E7  
PHONE (613) 432-3048

SCALE: 1 : 250 REF: 24-2090 B  
FILE No :





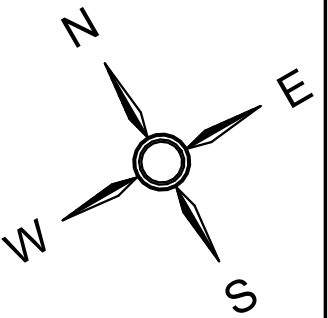
**ASELFORD RESIDENCE**  
90A Mitchell Lane, McNab/Braeside, Ontario



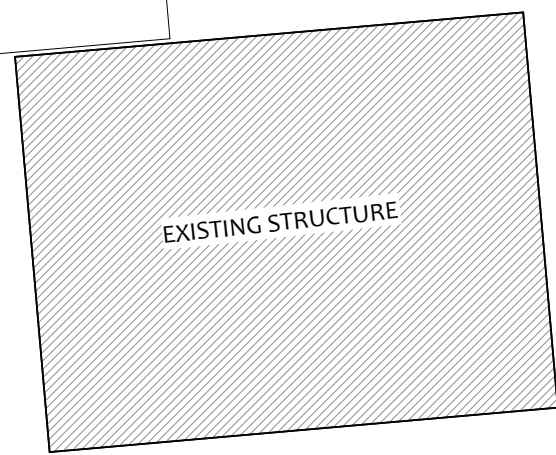
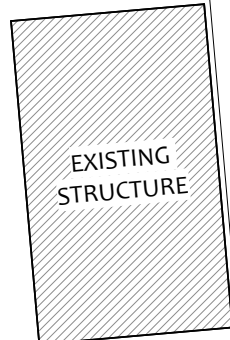
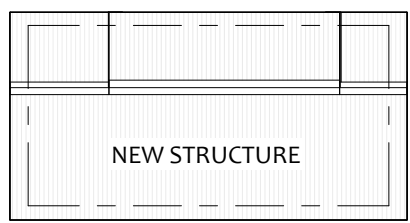
*\*3D CONCEPTUAL RENDERINGS\**  
*\*\*FINAL CONSTRUCTION/MATERIAL  
COLORS MAY VARY\*\**

<b>FINISHED AREAS:</b>	
GROUND FLOOR (ext.):	700.00 sq.ft.
PORCH:	100.00 sq.ft.
LOFT (int.):	335.14 sq.ft.





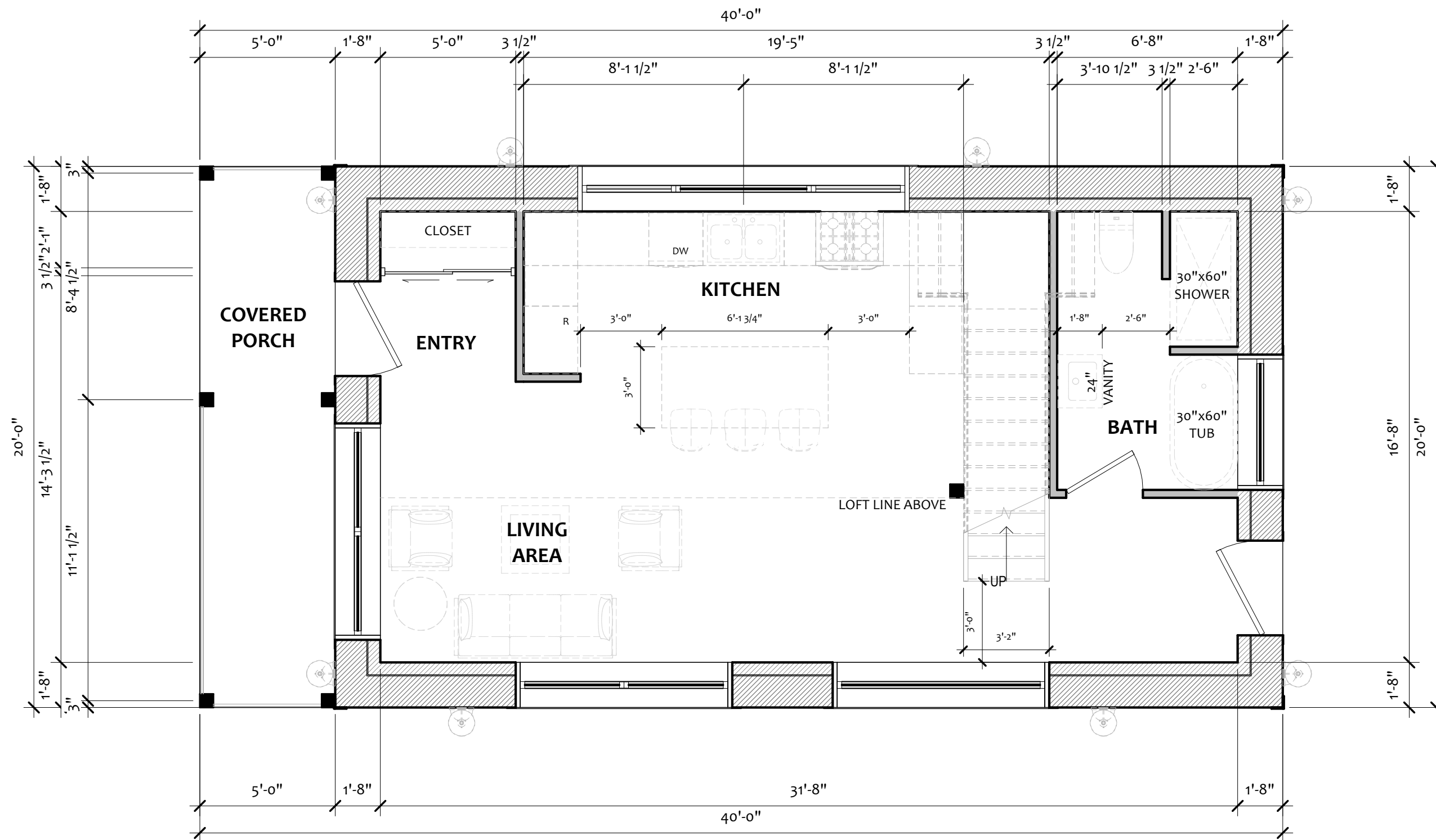
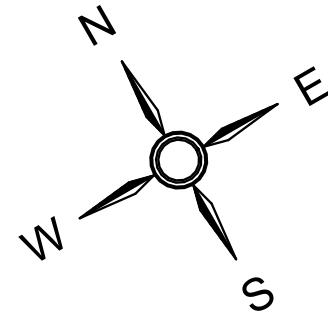
90 A Mitchell Lane



SITE PLAN



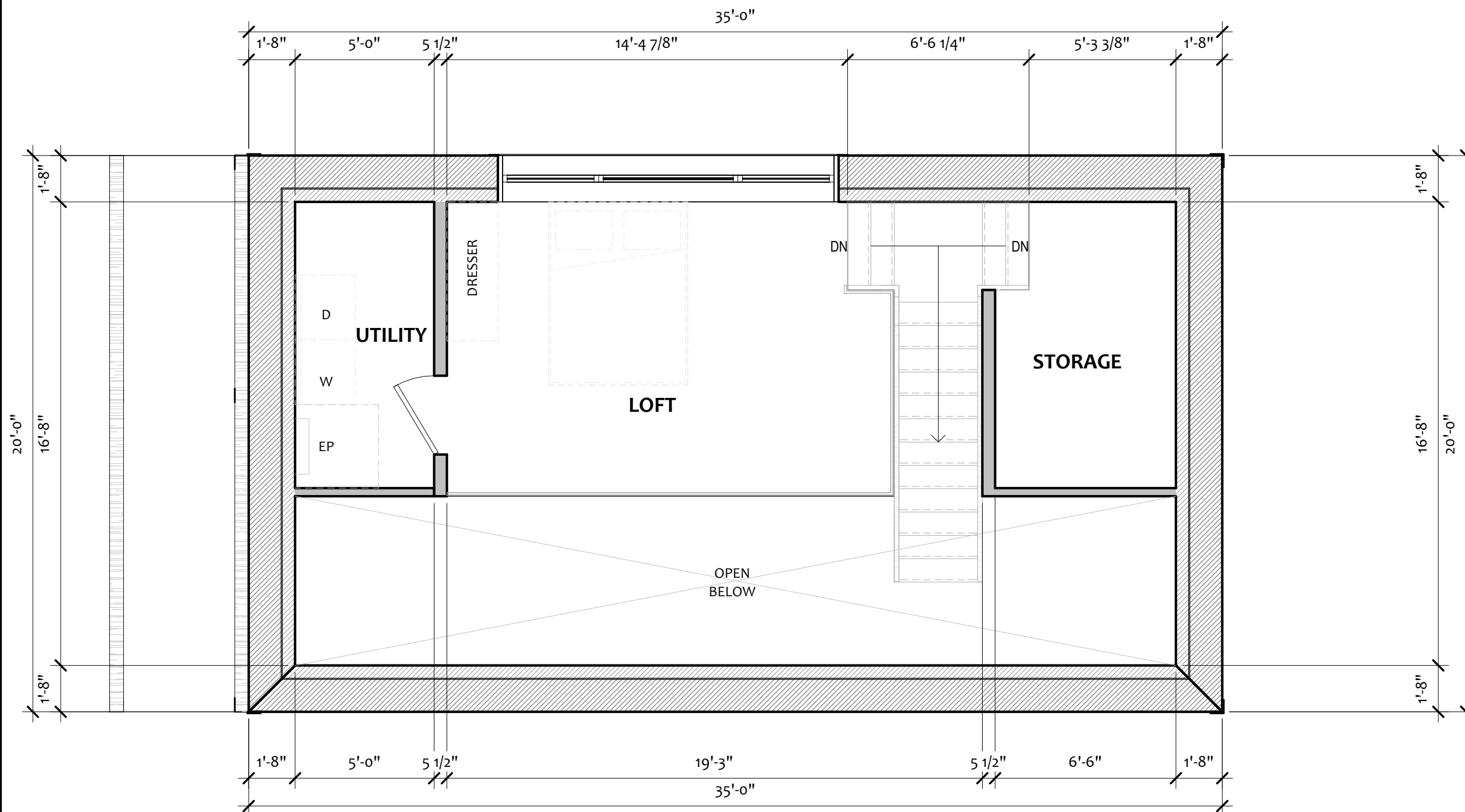
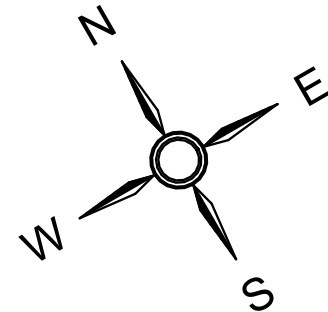
ASELFORD RESIDENCE  
90A Mitchell Lane, McNab/Braeside, Ontario  
Site Plan  
SCALE 3/64" = 1'-0"  
A-1



GROUND FLOOR PLAN



ASELFORD RESIDENCE  
90A Mitchell Lane, McNab/Braeside, Ontario  
Ground Floor Plan  
SCALE 1/4" = 1'-0"



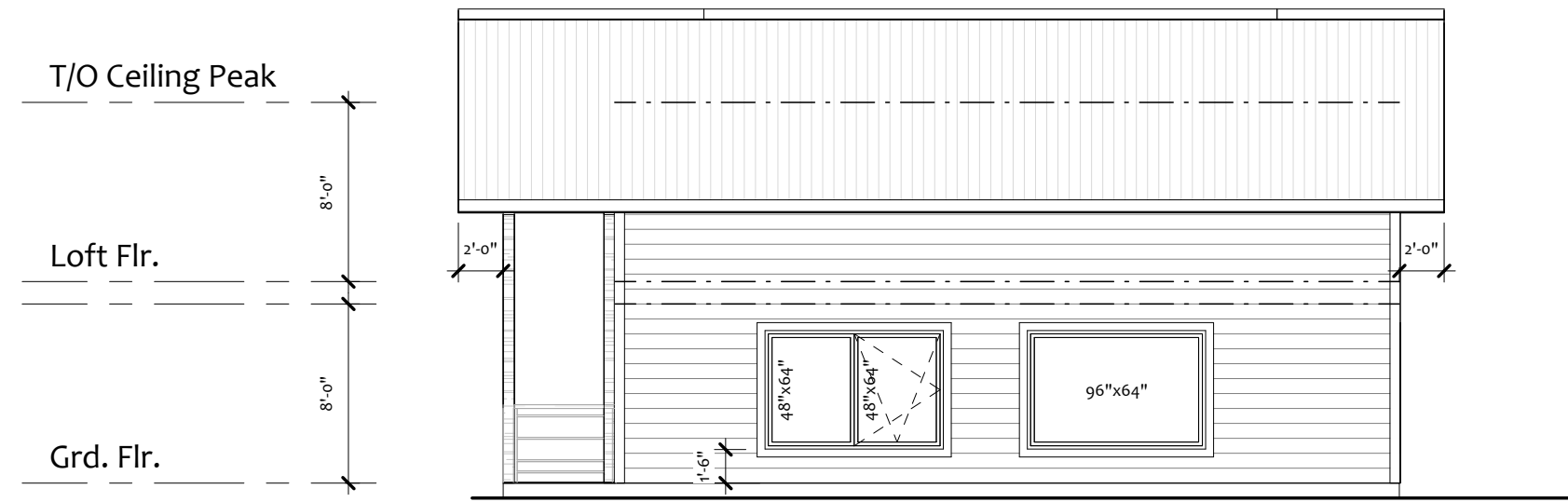
LOFT FLOOR PLAN



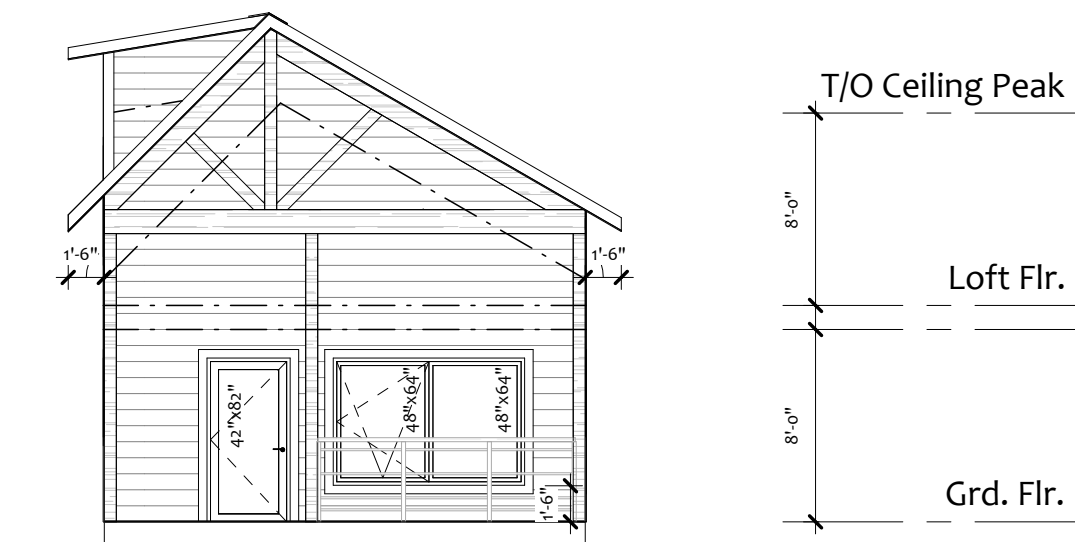
ASELFORD RESIDENCE  
90A Mitchell Lane, McNab/Braeside, Ontario  
Loft Floor Plan  
SCALE 1/4" = 1'-0"



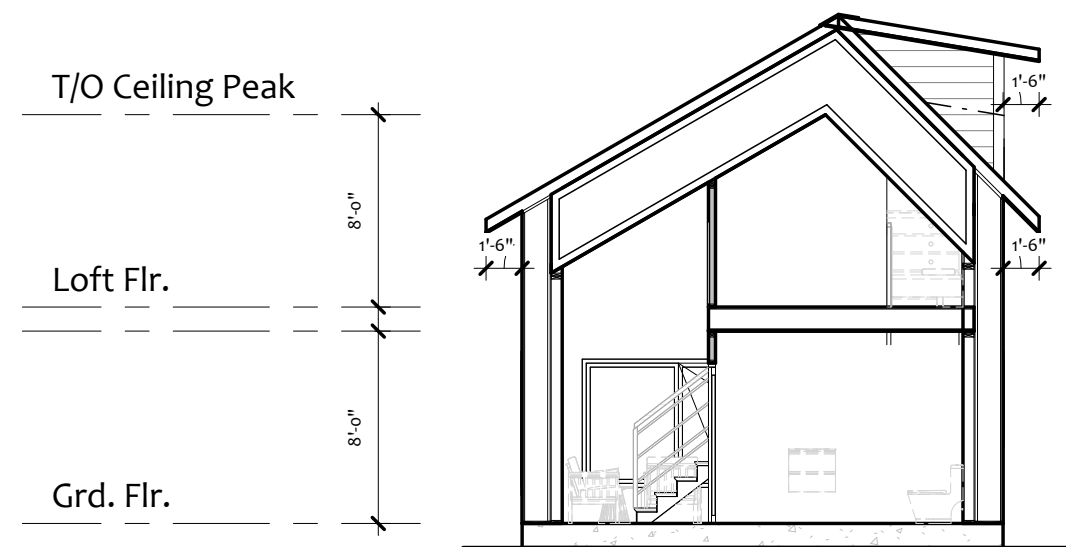




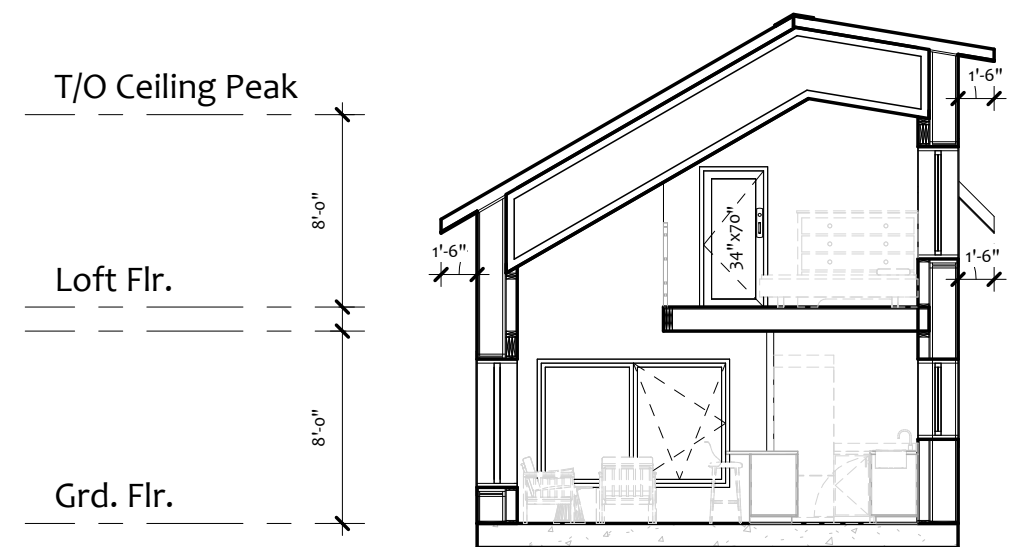
SOUTH ELEVATION



WEST ELEVATION



SECTION 1



SECTION 2



# PATERSON GROUP

## Consulting Engineers

9 Auriga Drive  
Ottawa, Ontario  
K2E 7T9

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Geotechnical Engineering  
Environmental Engineering  
Hydrogeology  
Materials Testing  
Building Science  
Rural Development Design  
Temporary Shoring Design  
Retaining Wall Design  
Noise and Vibration Studies

June 25, 2024

PH4916-LET.01

### **Krista Aselford**

250 Greenbank Road, Suite 230  
Ottawa (Nepean), ON  
K2H 8X4

Attention: Krista Aselford

[patersongroup.ca](http://patersongroup.ca)

Subject: **Scoped Hydrogeological Assessment and Terrain Analysis**

Proposed Coach House  
90A Mitchell Lane  
McNab/Braeside, Ontario

## INTRODUCTION

Further to your request, Paterson has conducted a Scoped Hydrogeological Assessment and Terrain Analysis in support of a proposed addition of a coach house on the subject site located at 90A Mitchell Lane in the Township of McNab/Braeside, Ontario. The purpose of these works has been to determine the suitability of the water supply aquifer underlying the site and the site's ability to service a proposed coach house and existing residential dwelling. Please refer to the Key Plan, attached, for the approximate site location.

The subject site is currently occupied by an existing two-storey residential dwelling located at the rear of the property and a shed to the north-west of the existing dwelling. The property has a grassed area surrounding the house and gravel laneway, while the remainder of the site is treed. The coach house is proposed to be located north of the dwelling, on the eastern side of the property.

The subject site is bordered to the north by forested areas followed by Flat Rapids Road, to the east and west by adjacent residential properties, and to the south by the Madawaska River followed by forested areas and residential dwellings.





## **DESCRIPTION OF POPOSED DEVELOPMENT/BACKGROUND**

The proposed development is anticipated to consist of the addition of a two-storey residential dwelling (coach house) to be located within the eastern portion of the subject site. The subject site has a lot size of approximately 0.40 hectares (ha). A Water Well Record (WWR) was available for the existing well at the subject site. The existing well at the subject site was noted to be installed in 1993 and has a Well ID No. of 5511735. The existing well, hereafter referred to as Test Well 1 (TW1), is to service both the existing dwelling as well as the proposed coach house. A new tertiary treatment septic system will be installed to service both the existing dwelling and the proposed coach house.

The existing dwelling consists of a 1-bedroom house and the proposed coach house will also be a 1-bedroom house.

### **Geological Mapping**

Available Ontario Geological Survey (OGS) bedrock mapping (OGS MRD219) indicates that the subject site is underlain by a crystalline basement from the Precambrian. The available bedrock mapping generally coincides with the well driller's description on the Ministry of the Environment, Conservation and Parks (MECP) Water Well Records (WWR) for the surrounding water well supplies installed within the area.

Available OGS surficial mapping (OGS MRD 218) indicates that the subject site consists of Precambrian bedrock. Available drift thickness mapping shows a drift thickness which varies across the site between 0 and 1 m. The drift thickness mapping indicates that the surrounding lots have a drift thickness of 5 to 15 m.

## **SCOPED HYDROGEOLOGICAL ASSESSMENT**

A scoped pumping test was performed at the subject site using a hose connected to an outdoor spigot. The pumping test was completed at a measured flow rate of 28 L/min for a period of 3 hours. The total amount discharged was 5,040 L and the measured flow rate is greater than the peak demand requirement of 3.75 L/person/min or 450 L/person/day from MECP Procedure D-5-5.

### **Fieldwork Program**

As a means to demonstrate the adequacy of the aquifer underlying the subject lands, with respect to water quality and quantity, the existing onsite well (TW1) was tested. According to the WWR, TW1 has a 158 mm diameter steel casing extending to a depth of approximately 6.7 m below ground surface (bgs). The total depth of the well is approximately 48.7 m bgs. The WWR for the existing onsite well indicated an overburden thickness of 3.05 m which consists of a brown sand and gravel.



The existing drilled well is located in the southwestern portion of the property, just south of the shed and to the west of the dwelling. The existing well will service the existing residential dwelling and the proposed coach house. The existing drilled well is fully accessible with the 158 mm diameter steel casing extending 0.46 m above the existing ground surface. The well stick-up meets the minimum stick up height requirement of 0.40 m of Ontario Regulation 903.

As a means to evaluate the water supply aquifer intercepted by TW1, the existing well was subjected to a 3-hour pumping test. The pumping test was carried out at a pumping rate of 28 L/min for a duration of 3 hours using the existing pump in the well. During the pumping test, the pumping rate was periodically measured using the timed volume correlation method. The pump rate was maintained within 5% of the selected pump rate. The discharge line was placed at a sufficient distance to ensure that the discharge water was directed away from the well.

Recovery data was collected from the well following the completion of the pumping. The well was measured to have recovered 95 % in a half hour after the completion of the pumping test. The pumping test was conducted on May 23, 2024 under the full-time supervision of Paterson personnel.

An untreated groundwater sample was collected 3 hours after the start of pumping test from the base of the pressure tank within the existing dwelling. Prior to the collection of the groundwater sample, the free chlorine residual was verified to be non-detectable. The water sample was submitted for comprehensive testing of bacteriological, chemical and physical water quality parameters consistent with the standard "Subdivision Supply with Trace Metals" suite of parameters.

All samples were collected unfiltered and unchlorinated and were placed directly into clean bottles supplied by the analytical laboratory. Samples were placed immediately into a cooler with ice and were transported to the Eurofins Laboratory in Ottawa. All samples were received by the laboratory within 24 hours of collection.

A series of field tests of the pumped water were carried out on raw water samples obtained from the pressure tank during the 3-hour pumping test. The parameters tested at the pressure tank included: pH, total dissolved solids, conductivity, turbidity, colour (true), and temperature.



## Aquifer Analysis

### Water Quantity

Pumping test data was measured using an electronic water level tape. The results of pumping test are shown in Table 1, below.

<b>Table 1: Summary of Water Supply Aquifer Characteristics of TW1</b>	
<b>Aquifer Parameter</b>	<b>Result Of Analysis</b>
Pumping Rate (L/min)	28
Pre-test Static Water Level (m below TOC)	9.78
Post-test Water Level (m below TOC)	29.26
Available Drawdown (m)	39.42
% Drawdown During Pump Test (%)	49.4
Specific Capacity (L/min/m drawdown)	1.44

The pumping test results show that TW1 has a high yield to support the water demands that may be required. Overall maximum drawdown, at a constant pumping rate of 28 L/min for a period of 3 hours, was approximately 19.5 m (49.4% of the available drawdown). 95 % recovery was achieved 30 minutes after the end of pumping test.

The total volume of water pumped during the 3-hour pumping event was approximately 5,040 L. This is approximately 2.8 times the maximum total daily design volume of water required to support the lot (1,800 L/day, see septic flow calculations below).

Based on the information summarized in Table 1, it is readily apparent that the existing water supply well has intercepted an adequately strong water supply aquifer which has sufficient quantity to service the proposed coach house and existing residential dwelling under typical usage.

Given the analyses presented and summarized above, it is our opinion that there is an adequate supply of water to support the proposed coach house and existing residential dwelling on the property in addition to the other neighbouring lots whose wells may intercept a similar aquifer.

### Water Quality

#### *Field Data*

Turbidity, electrical conductivity, total dissolved solids (TDS), pH, true colour, and temperature were measured at the wellhead during the pumping test performed on TW1. The measurements and time intervals for each of these parameters are summarized on the graphical representation below. In addition, a HACH Pocket Colorimeter II chlorine reader was used to measure the free chlorine residual level. No chlorine residual was detected in the discharge water prior to the collection of the water samples.

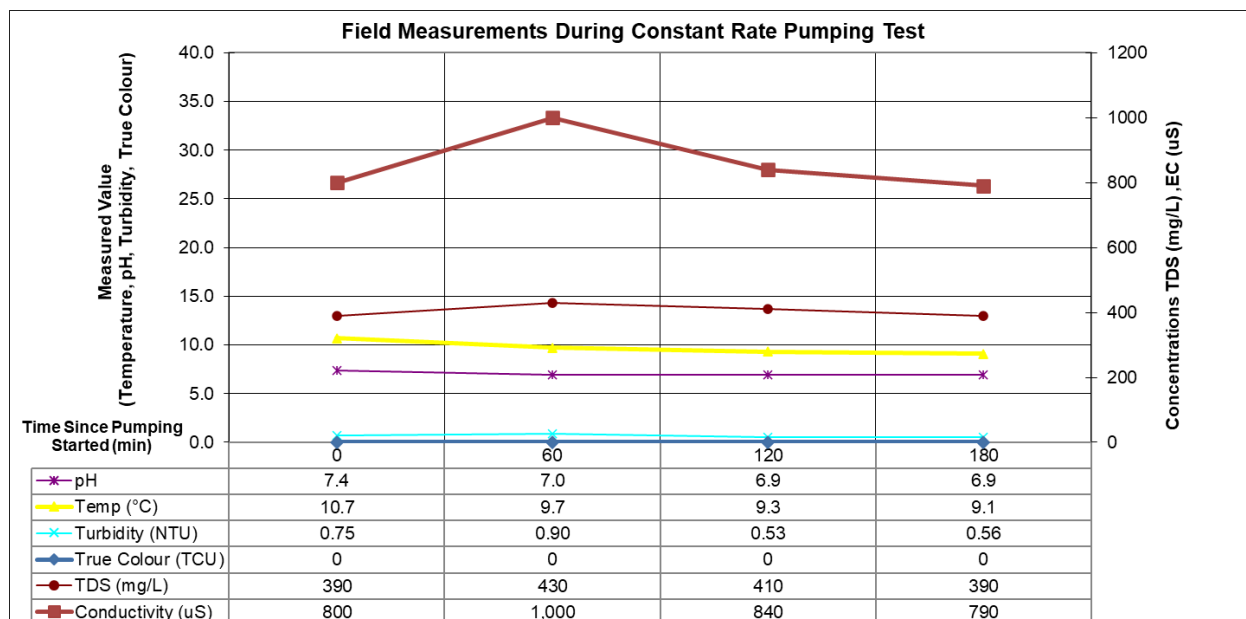


Figure 1 – Field Measurements During Constant Rate Pumping Test

### Laboratory Data

The Subdivision Package and Trace Metals suite of parameters laboratory water quality results obtained from the groundwater sample collected from the pumping test of TW1 is provided in Table 2a and 2b below and the laboratory analyses reports can be found attached.





TABLE 2a: GROUNDWATER MICROBIOLOGY & GENERAL GEOCHEMISTRY				
PARAMETER	UNITS	ODWS		TW1
		LIMIT	TYPE	TW1 GW1 (3 hr)
				5/23/2024
MICROBIOLOGICAL				
Escherichia Coli (E.Coli)	ct/100mL	0	MAC	0
Total Coliforms	ct/100mL	0	MAC	0
GENERAL CHEMICAL - HEALTH RELATED				
Fluoride (F)	mg/L	1.5	MAC	0.33
Ammonia (N-NH <sub>3</sub> )	mg/L	-	-	<0.02
Nitrite (N-NO <sub>2</sub> )	mg/L	1	MAC	<0.1
Nitrate (N-NO <sub>3</sub> )	mg/L	10	MAC	2.35
Total Kjeldahl Nitrogen	mg/L	-	-	0.120
Turbidity (Field)	NTU	1.0 (5.0)	MAC/AO	0.56
Turbidity (Laboratory)	NTU	1.0 (5.0)	MAC/AO	0.3
GENERAL CHEMICAL - AESTHETIC RELATED				
Alkalinity (as CaCO3)	mg/L	30-500	OG	364
Chloride (Cl)	mg/L	250	AO	226
Colour (Apparent)	TCU	5	AO	<2
Colour (Field - True)	TCU	5	AO	0
Conductivity	uS/cm	-	-	749
Dissolved Organic Carbon	mg/L	5	AO	0.7
Hardness (as CaCO3)	mg/L	100	OG	413
Ion Balance	unitless	-	-	1.00
pH	unitless	6.5-8.5	AO	7.56
Phenols	mg/L	-	-	<0.001
Sulphate (SO <sub>4</sub> )	mg/L	500	AO	30
Sulphide (S <sub>2</sub> <sup>-</sup> )	mg/L	0.05	AO	<0.01
Tannin & Lignin	mg/L	-	-	<0.1
Total Dissolved Solids	mg/L	500	AO	487

1. ODWS identifies the following types of parameters:  
MAC = Maximum Allowable Concentration  
AO = Aesthetic Objective  
OG = Operational Guideline
2. Shaded Concentration Indicates an Exceedance of the ODWS Objective



TABLE 2b: GROUNDWATER GEOCHEMISTRY - METALS				
PARAMETER	UNITS	ODWS		TW1
		LIMIT	TYPE	TW1 GW1 (3 hr) 5/23/2024
METALS				
Aluminum (Al)	mg/L	0.1	OG	<0.01
Antimony (Sb)	mg/L	0.006	IMAC	<0.0005
Arsenic (As)	mg/L	0.01	IMAC	<0.001
Barium (Ba)	mg/L	1.0	MAC	0.12
Beryllium (Be)	mg/L	-	-	<0.0005
Boron (B)	mg/L	5.0	IMAC	<0.01
Cadmium (Cd)	mg/L	0.005	MAC	<0.0001
Calcium (Ca)	mg/L	-	-	104
Chromium (Cr)	mg/L	0.05	MAC	<0.001
Cobalt (Co)	mg/L	-	-	<0.0002
Copper (Cu)	mg/L	1.0	AO	0.003
Iron (Fe)	mg/L	0.3	AO	<0.03
Lead (Pb)	mg/L	0.01	MAC	<0.001
Magnesium (Mg)	mg/L	-	-	37
Manganese (Mn)	mg/L	0.05	AO	<0.01
Mercury (Hg)	mg/L	0.001	MAC	<0.0001
Molybdenum (Mo)	mg/L	-	-	<0.005
Nickel (Ni)	mg/L	-	-	<0.005
Potassium (K)	mg/L	-	-	2
Selenium (Se)	mg/L	0.05	MAC	<0.001
Silver (Ag)	mg/L	-	-	<0.0001
Sodium (Na)	mg/L	200	AO	12
Strontium (Sr)	mg/L	-	-	0.27
Thallium (Tl)	mg/L	-	-	<0.0001
Uranium (U)	mg/L	0.02	MAC	0.002
Vanadium (V)	mg/L	-	-	<0.001
Zinc (Zn)	mg/L	5.0	AO	<0.01

- ODWS identifies the following types of parameters:  
MAC = Maximum Acceptable Concentration  
IMAC = Interim Maximum Acceptable Concentration  
AO = Aesthetic Objective  
OG = Operational Guideline
- Shaded Concentration Indicates an Exceedance of the ODWS Objective



The bacteriological test results (Certificate of Analysis – Report No. 3926938) indicated that the sample results were non-detect (0 ct/100 mL) for E.Coli and Total Coliforms.

The water quality of the subject water supply well meets all Ontario Drinking Water Standards maximum acceptable concentrations (MAC). Furthermore, the water meets all Aesthetic Objectives (AO) and Operational Guidelines (OG) with the exception of the following:

- ❑ Hardness (as  $\text{CaCO}_3$ )

Exceedances of the above parameter is not uncommon of the water supply in the subject aquifer. The above groundwater parameter is discussed in detail below.

### **Hardness as $\text{CaCO}_3$**

Hardness, expressed as calcium carbonate, is an operational guideline and does not appear in the ODWS. Rather, it appears in the Technical Support Documents for Ontario Drinking Water Standards, Objectives and Guidelines as a parameter with an operational guideline at 100 mg/L. At the measured concentrations of 413 mg  $\text{CaCO}_3$ /L, the water is considered to be hard, however, it is below the reasonable treatable limit of 500 mg  $\text{CaCO}_3$ /L specified in Table 3 of the MECP guidance document Procedure D-5-5 (1996). The hardness concentration can be treated using conventional softening technologies, if desired by the owner.



## **TERRAIN ANALYSIS**

### **Surficial Geology**

The subject site currently consists of a single detached dwelling surrounded by forested and grassed areas. The proposed coach house is proposed to be serviced by the same private well and septic system as the existing dwelling. All neighbouring residential properties are supported by private services

The subject site is generally sloping to the north towards the front of the property. The inferred direction of groundwater flow within the overburden aquifer is expected to be towards the south to the Madawaska River. There are no downgradient sensitive receivers in this direction as the property backs on to the Madawaska River.

### **Hydrogeological Sensitivity of the Site**

Although general mapping shows shallow overburden over Precambrian Bedrock, the WWR indicates an overburden of sand and gravel extending to a depth of 3 m. Therefore, as site specific information indicates that the overburden is greater than 2 m, the site is not considered hydrogeologically sensitive.

Furthermore, the aquifer intercept is noted to be at approximately 47.2 m bgs. Aquifer intercepts found at greater depths are less likely to be impacted by surficial discharge.

As the existing well was installed in 1993, it can be assumed that the existing septic system has been in operation for a similar time (approximately 31 years). The lack of notable surficial impacts in the groundwater encountered by the existing onsite well over this length of time further corroborates that the subject site is not hydrogeologically sensitive.

### **Conceptual Lot Development**

The building and architectural plans for the existing dwelling and the proposed coach house have been provided and can be found attached. The existing dwelling is a two-story one-bedroom dwelling with 26 fixtures and a floor area of 175 m<sup>2</sup>. The proposed coach house is a two-storey one-bedroom dwelling with 9 fixtures and a floor area of 110 m<sup>2</sup>.

### **Total Daily Design Sewage Flow**

Based on Article 8.2.1.3 of the Ontario Building Code, the total daily design sanitary sewage flow (TDDSSF) for the subject site is calculated as follows:



#### ❑ Existing Dwelling

- Number of bedrooms = 1
    - TDDSF = 750 L/d
  - Number of Fixtures = 26
    - TDDSF for each fixture over 20 = 50 L/d/fixture x 6 = 300 L/d
  - Floor Area = 175 m<sup>2</sup>
    - TDDSF for each 10m<sup>2</sup> over 200 m<sup>2</sup> = 0
- Total flows = 750 L/d + 300 L/d = 1,050 L/d

#### ❑ Proposed Coach House

- Number of bedrooms = 1
    - TDDSF = 750 L/d
  - Number of Fixtures = 9
    - TDDSF for each fixture over 20 = 0
  - Floor Area = 110 m<sup>2</sup>
    - TDDSF for each 10m<sup>2</sup> over 200 m<sup>2</sup> = 0
- Total flows = 750 L/d

The total flows for the site are the combined flows for the two dwellings. Therefore, the TDDSF for the site is **1,800 L/d**.

### Sewage System Design

It is understood that the coach house will be constructed on the property in the future (i.e., upon Township approval).

In order to minimize the risk of long-term contamination of services, a typical minimum separation distance of 15 m is required between any drilled potable supply well and the closest distribution pipe or septic tank of a sewage system.

There is an existing sewage system onsite, however upon Township approval of the coach house, a new sewage system that can accommodate both the existing dwelling and the new coach house will be installed.

In order to maintain the minimum separation distances, and to further protect the underlying aquifer, a new sewage system with tertiary treatment technology capable of a minimum of 50 % nitrate reduction will be required.



## Predictive Nitrate Impact Assessment

Nitrate is considered to be a critical parameter of concern when assessing impacts to groundwater quality downgradient of an onsite sewage system. The MECP Procedure D-5-4 applies for the proposed development. For the purpose of this guideline, the Ontario Drinking Water Objective of 10 mg/L of nitrate is used as an indicator of groundwater impact potential.

Under this guideline, where the lot size is one hectare or larger, a detailed impact assessment may not be required. It has been the MECP's policy that where the lot size of 0.8 ha or larger, a detailed assessment is typically not required since it is considered to be a low-risk development. The subject site has an area of 0.40 ha. As the site is below 0.8 ha in size, a detailed nitrate impact assessment (NIA) was completed.

An NIA was completed below to corroborate our opinion that the property can adequately support the proposed coach house without having adverse impacts on the underlying bedrock aquifer should the minimum separation distances, well construction, and septic system be completed as per the recommendations of this report, O.Reg 903 and the OBC. The values shown in the Predictive Nitrate Impact Assessment attached to this report are summarized below.

<input type="checkbox"/> Site area	0.40 ha
<input type="checkbox"/> Impervious area (%)	12 %
<input type="checkbox"/> Daily sewage flow (Value based on calculated TDDSSF)	1.8 m <sup>3</sup> /d
<input type="checkbox"/> Concentration of nitrate in effluent (Value based on typical effluent concentration and 50% nitrate reduction)	20 mg/L
<input type="checkbox"/> Surplus Water (The surplus water value was estimated based on Environment Canada Climate Office values with a soil type comprised of fine sandy loam (Mature Forests), combined with a fine sand (urban lawn) and anthropogenic sources.)	334 mm/yr
<input type="checkbox"/> Combined infiltration factor based on:	0.675
• Topography infiltration factor	0.10
• Soil texture infiltration factor	0.40
• Cover infiltration factor	0.175

The topography infiltration factor of 0.10 is based upon a hilly land with an average slope of 28 m to 47 m/km with a value of 0.1. The soil texture infiltration factor was based upon an "open sandy loam" with a value of 0.4 which is a reasonable generalization based upon the site investigations and available WWR. The "cover infiltration factor" was calculated at 0.175 based upon the forested areas and open areas at the subject site.



The Predictive Nitrate Impact Assessment was completed to determine the maximum sewage flow volume which could be applied to the subject site using the current site conditions without surpassing the maximum nitrate attenuation concentration of 10 mg/L in the groundwater prior to the property line. As a tertiary treatment system with a minimum of 50 % nitrate reduction technology is required to further protect the underlying aquifer, it was used as part of the NIA.

Based on the existing site conditions and the use of a tertiary treatment system with a minimum of 50 % nitrate reduction technology (20 mg/L nitrate concentration), the predicted maximum allowable sewage flow volume is **1,975 L/day** to attenuate the nitrate concentration to below the 10 mg/L nitrate concentration in the groundwater prior to the property line.

As the TDDSSF for the subject site was calculated to be 1,800 L/day and the predicated maximum allowable sewage flow volume is 1,975 L/day, it is our opinion that the property can adequately support the proposed coach house addition without having an adverse impact on the underlying bedrock aquifer if a tertiary treatment system with a minimum of 50% nitrate reduction is used.



## CONCLUSIONS

Based on the information contained within the body of this report the following conclusions can be drawn:

- ☐ The water supply aquifer intercepted by the existing onsite well is considered to be adequate to support the water quantity demands for the existing dwelling and the proposed coach house.
- ☐ The preferred water supply intercepted by TW1 contains a water supply that is potable and contains only elevated concentrations of hardness. Hardness can be treated with current readily available water conditioning equipment, if desired by the owner.
- ☐ A residential grade water softener is recommended to facilitate the removal of the hardness concentration. If a water softener is used for the proposed development, the owner should be made aware that additional sodium will be added to the water to reduce hardness. If desired, a point-of-use reverse osmosis system can be used to provide a drinking tap source.
- ☐ The results of the water supply assessment have provided satisfactory evidence that the water supply aquifer underlying the subject site can support the proposed coach house addition from both a quality and quantity perspective.
- ☐ Upon approval from the Township, a new tertiary treatment septic system with a minimum of 50% nitrate reduction will be required to be constructed to service both the existing dwelling and the new coach house. A tertiary treatment system would require an annual maintenance contract.
- ☐ The construction of an on-site sewage system should not affect the performance or water quality associated with a drilled well, contingent upon the on-site sewage system being designed in accordance with the Ontario Building Code (i.e properly sized sewage system and conforming to all separation distances).
- ☐ A Sewage System Permit and Building Permit needs to be issued prior to the commencement of construction of the proposed coach house.
- ☐ The results of the Hydrogeological Report and Terrain Analysis have provided satisfactory evidence that the subject site can support the proposed coach house with respect to water quality, quantity and that the site is capable of attenuating nitrates to below the MECP limits by the property boundary.





We trust that the current submission satisfies your immediate requirements.

Best Regards,

**Paterson Group Inc.**

Alexander Schopf, PhD, EIT

**Attachments:**

- ☐ Key Plan
- ☐ MECP Water Well Records
- ☐ Eurofins Certificate of Analysis
- ☐ Nitrate Impact Assessment Calculations
- ☐ Existing Dwelling Floorplan
- ☐ Aselford Residence – Coach House Floor Plan



Erik Ardley, P.Geo





# FIGURE 1

## KEY PLAN











2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

CON

TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE

CON. BLOCK. TRACT. SURVEY ETC

LOT 25-27

6

12

K75368

DATE COMPLETED

DAY 26 MO 07 YR. 88

NG

RC

### ELEVATION

與C

BASIN CODE

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000

IV

## LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

[illegible]

## CASING & OPEN HOLE RECORD

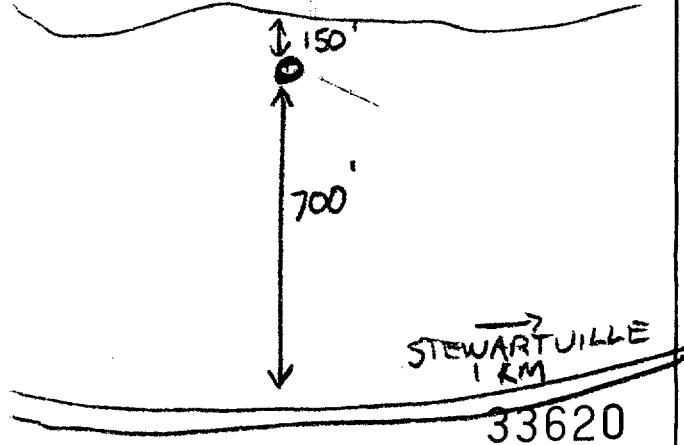
INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	
			FROM	TO
10-11 6 1/4"	<input type="checkbox"/> STEEL <input checked="" type="checkbox"/> GALVANIZED <input type="checkbox"/> CONCRETE <input type="checkbox"/> OPEN HOLE <input type="checkbox"/> PLASTIC	12 -188	0+1	13-14 57'
17-18 6 1/8"	<input type="checkbox"/> STEEL <input type="checkbox"/> GALVANIZED <input checked="" type="checkbox"/> CONCRETE <input checked="" type="checkbox"/> OPEN HOLE <input type="checkbox"/> PLASTIC	19	57'	20-21 100'
24-25	<input type="checkbox"/> STEEL <input checked="" type="checkbox"/> GALVANIZED <input type="checkbox"/> CONCRETE <input type="checkbox"/> OPEN HOLE <input type="checkbox"/> PLASTIC	26		27-30

61		PLUGGING & SEALING RECORD	
DEPTH SET AT - FEET		MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)	
FROM	TO		
8 <sup>10-13</sup>	28 <sup>14-17</sup>	cement grout	
18-21	22-25		
26-29	30-33	80	

<b>FINAL STATUS OF WELL</b>	<b>54</b> 1 <input checked="" type="checkbox"/> WATER SUPPLY 2 <input type="checkbox"/> OBSERVATION WELL 3 <input type="checkbox"/> TEST HOLE 4 <input type="checkbox"/> RECHARGE WELL	5 <input type="checkbox"/> ABANDONED. INSUFFICIENT SUPPLY 6 <input type="checkbox"/> ABANDONED. POOR QUALITY 7 <input type="checkbox"/> UNFINISHED 9 <input type="checkbox"/> DEWATERING
	<b>55-56</b> <b>WATER USE</b> 1 <input checked="" type="checkbox"/> DOMESTIC 2 <input type="checkbox"/> STOCK 3 <input type="checkbox"/> IRRIGATION 4 <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> OTHER _____	5 <input type="checkbox"/> COMMERCIAL 6 <input type="checkbox"/> MUNICIPAL 7 <input type="checkbox"/> PUBLIC SUPPLY 8 <input type="checkbox"/> COOLING OR AIR CONDITIONING <input type="checkbox"/> NOT USED
<b>METHOD OF CONSTRUCTION</b>	<b>57</b> 1 <input type="checkbox"/> CABLE TOOL 2 <input type="checkbox"/> ROTARY (CONVENTIONAL) 3 <input type="checkbox"/> ROTARY (REVERSE) 4 <input checked="" type="checkbox"/> ROTARY (AIR) 5 <input type="checkbox"/> AIR PERCUSSION	6 <input type="checkbox"/> BORING 7 <input type="checkbox"/> DIAMOND 8 <input type="checkbox"/> JETTING 9 <input type="checkbox"/> DRIVING <input type="checkbox"/> DIGGING <input type="checkbox"/> OTHER

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE      INDICATE NORTH BY ARROW.

MADGWASKA RIVER.



DRILLERS REMARKS

OFFICE USE ONLY	DATA SOURCE	58	CONTRACTOR	59-62	DATE RECEIVED	63-68	80
			4879		AUG 23 1988		
	DATE OF INSPECTION		INSPECTOR				
	REMARKS						



Ministry  
of the  
Environment  
Ontario

The Ontario Water Resources Act  
**WATER WELL RECORD**

1. PRINT ONLY IN SPACES PROVIDED  
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11

5509815

MUNICIPALITY  
55022

CON. 12

06

COUNTY OR DISTRICT Renfrew	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE McNab	CON. BLOCK, TRACT, SURVEY, ETC. 6	LOT P. 12
R#2 Arnprior ONT.			DATE COMPLETED DAY 29 MO 12 YR 89

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
Brown	Hard pan	stones	compacted	0	30
white	Dolomite	quartzite, serpentine	med soft	30	120
Brown	Ochre	infillings of Dolomite	soft	120	125

31	32
----	----

41	WATER RECORD
WATER FOUND AT - FEET	KIND OF WATER
10-13 120	1 <input checked="" type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input checked="" type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
15-18	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
20-23	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
25-28	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
30-33	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL

51	CASING & OPEN HOLE RECORD		
INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET
10-11 6 1/4	1 <input checked="" type="checkbox"/> STEEL 2 <input type="checkbox"/> GALVANIZED 3 <input type="checkbox"/> CONCRETE 4 <input type="checkbox"/> OPEN HOLE	1/88	0 32
12-18 6 1/8	1 <input type="checkbox"/> STEEL 2 <input type="checkbox"/> GALVANIZED 3 <input type="checkbox"/> CONCRETE 4 <input checked="" type="checkbox"/> OPEN HOLE		32 125
19-25	1 <input type="checkbox"/> STEEL 2 <input type="checkbox"/> GALVANIZED 3 <input type="checkbox"/> CONCRETE 4 <input type="checkbox"/> OPEN HOLE		

SCREEN	SIZE(S) OF OPENING (SLOT NO.)	DIAMETER 34-38 INCHES	LENGTH 39-40 FEET
		DEPTH TO TOP OF SCREEN 41-44 FEET	

61	PLUGGING & SEALING RECORD
DEPTH SET AT - FEET	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)
10-13 32	14-17 5 Cement Grout
18-21	22-25
26-29	30-33

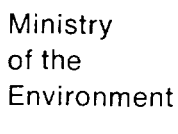
71	PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 <input checked="" type="checkbox"/> PUMP 2 <input type="checkbox"/> BAILER	7.5 GPM	15-16 HOURS	17-18 MINS
STATIC LEVEL	WATER LEVEL END OF PUMPING	WATER LEVELS DURING	1 <input checked="" type="checkbox"/> PUMPING 2 <input type="checkbox"/> RECOVERY
19-21 20	22-24 100	15 MINUTES 26-28 20	30 MINUTES 29-31 42
IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST	
	120	1 <input checked="" type="checkbox"/> CLEAR 2 <input type="checkbox"/> CLOUDY	
RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE	
<input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/> DEEP	120	5	

LOCATION OF WELL
IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.
DRILLERS REMARKS

FINAL STATUS OF WELL	1 <input checked="" type="checkbox"/> WATER SUPPLY 5 <input type="checkbox"/> ABANDONED, INSUFFICIENT SUPPLY 2 <input type="checkbox"/> OBSERVATION WELL 6 <input type="checkbox"/> ABANDONED, POOR QUALITY 3 <input type="checkbox"/> TEST HOLE 7 <input type="checkbox"/> UNFINISHED 4 <input type="checkbox"/> RECHARGE WELL
WATER USE	1 <input checked="" type="checkbox"/> DOMESTIC 5 <input type="checkbox"/> COMMERCIAL 2 <input type="checkbox"/> STOCK 6 <input type="checkbox"/> MUNICIPAL 3 <input type="checkbox"/> IRRIGATION 7 <input type="checkbox"/> PUBLIC SUPPLY 4 <input type="checkbox"/> INDUSTRIAL 8 <input type="checkbox"/> COOLING OR AIR CONDITIONING 9 <input type="checkbox"/> NOT USED
METHOD OF DRILLING	1 <input type="checkbox"/> CABLE TOOL 6 <input type="checkbox"/> BORING 2 <input type="checkbox"/> ROTARY (CONVENTIONAL) 7 <input type="checkbox"/> DIAMOND 3 <input type="checkbox"/> ROTARY (REVERSE) 8 <input type="checkbox"/> JETTING 4 <input checked="" type="checkbox"/> ROTARY (AIR) 9 <input type="checkbox"/> DRIVING 5 <input checked="" type="checkbox"/> AIR PERCUSSION

CONTRACTOR	NAME OF WELL CONTRACTOR Giffin Well Drilling LTD	LICENCE NUMBER 2307
	ADDRESS RR #2 Renfrew ONT	
	NAME OF DRILLER OR BORER Paul Giffin, Kevin Strmichael	LICENCE NUMBER T-0271
	SIGNATURE OF CONTRACTOR Paul Giffin	SUBMISSION DATE DAY 20 MO 12 YR 89

OFFICE USE ONLY	DATA SOURCE 2307	DATE RECEIVED DEC 29 1989
	DATE OF INSPECTION	INSPECTOR
	REMARKS	



551 0980

MUNICIPALITY OF ...

CON

55022

CON.  
CON

106

**1. PRINT ONLY IN SPACES PROVIDED**

2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11

COUNTY OR DISTRICT

TOWNSHIP, BOROUGH, CITY TOWN, VILLAGE

CON	BLOCK	TRACT	SURVEY	ETC
-----	-------	-------	--------	-----

LOT	25-27
-----	-------

DEFINITION

M'NAB.

6

12<sup>25</sup>

RR# 1 WHITE LAKE ONT.

DATE COMPLETED

DAY 10 MO 8 YR 92

NG

RC.

**ELEVATION**

RC

BASIN CODE

10

141

iv

## LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

OFFICE USE ONLY	DATA SOURCE	58	CONTRACTOR	59-62	DATE RECEIVED	63-68	80
	4879		AUG 18 1992				
	DATE OF INSPECTION		INSPECTOR				
	REMARKS						





Ontario

Ministry  
of the  
Environment

The Ontario Water Resources Act

# WATER WELL RECORD

1. PRINT ONLY IN SPACES PROVIDED  
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11

5511582

55022 CON  
Plan 815043-8066

COUNTY OR DISTRICT <i>Simcoe</i>	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE <i>W. H. H. Tab</i>	CON. BLOCK, TRACT, SURVEY ETC. <i>6</i>	LOT <i>12</i>
DATE COMPLETED DAY <i>30</i> MO <i>6</i> YR <i>93</i>		DATE COMPLETED DAY <i>30</i> MO <i>6</i> YR <i>93</i>	
BASIN CODE <i>11</i>		BASIN CODE <i>11</i>	

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)				
GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET
				FROM TO
	<i>sand/stones</i>			0' 3'
<i>gray</i>	<i>limestone</i>			3' 95'
<i>brown</i>	<i>limestone</i>			95' 97'
<i>gray</i>	<i>limestone</i>			97' 101'

31	32
----	----

<b>41 WATER RECORD</b>	<b>51 CASING &amp; OPEN HOLE RECORD</b>	<b>61 PLUGGING &amp; SEALING RECORD</b>																																				
<table><tr><td>WATER FOUND AT - FEET</td><td>KIND OF WATER</td></tr><tr><td>96'</td><td>1 <input checked="" type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 4 <input type="checkbox"/> MINERALS 6 <input type="checkbox"/> GAS</td></tr><tr><td>15-18</td><td>1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 4 <input type="checkbox"/> MINERALS 6 <input type="checkbox"/> GAS</td></tr><tr><td>20-23</td><td>1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 4 <input type="checkbox"/> MINERALS 6 <input type="checkbox"/> GAS</td></tr><tr><td>25-28</td><td>1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 4 <input type="checkbox"/> MINERALS 6 <input type="checkbox"/> GAS</td></tr><tr><td>30-33</td><td>1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 4 <input type="checkbox"/> MINERALS 6 <input type="checkbox"/> GAS</td></tr></table>	WATER FOUND AT - FEET	KIND OF WATER	96'	1 <input checked="" type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 4 <input type="checkbox"/> MINERALS 6 <input type="checkbox"/> GAS	15-18	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 4 <input type="checkbox"/> MINERALS 6 <input type="checkbox"/> GAS	20-23	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 4 <input type="checkbox"/> MINERALS 6 <input type="checkbox"/> GAS	25-28	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 4 <input type="checkbox"/> MINERALS 6 <input type="checkbox"/> GAS	30-33	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR 4 <input type="checkbox"/> MINERALS 6 <input type="checkbox"/> GAS	<table><tr><td>INSIDE DIAM. INCHES</td><td>MATERIAL</td><td>WALL THICKNESS INCHES</td><td>DEPTH - FEET</td></tr><tr><td>6"</td><td>1 <input type="checkbox"/> STEEL 2 <input type="checkbox"/> GALVANIZED 3 <input type="checkbox"/> CONCRETE 4 <input type="checkbox"/> OPEN HOLE 5 <input type="checkbox"/> PLASTIC</td><td>188</td><td>0' 22'</td></tr><tr><td>17-18</td><td>1 <input type="checkbox"/> STEEL 2 <input type="checkbox"/> GALVANIZED 3 <input type="checkbox"/> CONCRETE 4 <input type="checkbox"/> OPEN HOLE 5 <input type="checkbox"/> PLASTIC</td><td></td><td>20-23</td></tr><tr><td>24-25</td><td>1 <input type="checkbox"/> STEEL 2 <input type="checkbox"/> GALVANIZED 3 <input type="checkbox"/> CONCRETE 4 <input type="checkbox"/> OPEN HOLE 5 <input type="checkbox"/> PLASTIC</td><td></td><td>27-30</td></tr></table>	INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET	6"	1 <input type="checkbox"/> STEEL 2 <input type="checkbox"/> GALVANIZED 3 <input type="checkbox"/> CONCRETE 4 <input type="checkbox"/> OPEN HOLE 5 <input type="checkbox"/> PLASTIC	188	0' 22'	17-18	1 <input type="checkbox"/> STEEL 2 <input type="checkbox"/> GALVANIZED 3 <input type="checkbox"/> CONCRETE 4 <input type="checkbox"/> OPEN HOLE 5 <input type="checkbox"/> PLASTIC		20-23	24-25	1 <input type="checkbox"/> STEEL 2 <input type="checkbox"/> GALVANIZED 3 <input type="checkbox"/> CONCRETE 4 <input type="checkbox"/> OPEN HOLE 5 <input type="checkbox"/> PLASTIC		27-30	<table><tr><td>DEPTH SET AT - FEET</td><td>MATERIAL AND TYPE (CEMENT GROUT LEAD PACKER ETC.)</td></tr><tr><td>0' 22'</td><td><i>Cement</i></td></tr><tr><td>18-21</td><td></td></tr><tr><td>26-29</td><td></td></tr></table>	DEPTH SET AT - FEET	MATERIAL AND TYPE (CEMENT GROUT LEAD PACKER ETC.)	0' 22'	<i>Cement</i>	18-21		26-29	
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17-18	1 <input type="checkbox"/> STEEL 2 <input type="checkbox"/> GALVANIZED 3 <input type="checkbox"/> CONCRETE 4 <input type="checkbox"/> OPEN HOLE 5 <input type="checkbox"/> PLASTIC		20-23																																			
24-25	1 <input type="checkbox"/> STEEL 2 <input type="checkbox"/> GALVANIZED 3 <input type="checkbox"/> CONCRETE 4 <input type="checkbox"/> OPEN HOLE 5 <input type="checkbox"/> PLASTIC		27-30																																			
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0' 22'	<i>Cement</i>																																					
18-21																																						
26-29																																						

<b>71 PUMPING TEST</b>	<b>10 PUMPING RATE</b>	<b>11 DURATION OF PUMPING</b>																
<table><tr><td>STATIC LEVEL</td><td>WATER LEVEL END OF PUMPING</td></tr><tr><td>34'</td><td></td></tr><tr><td>IF FLOWING, GIVE RATE</td><td>PUMP INTAKE SET AT</td></tr><tr><td></td><td>101</td></tr><tr><td>RECOMMENDED PUMP TYPE</td><td>RECOMMENDED PUMP SETTING</td></tr><tr><td><input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/> DEEP</td><td>80</td></tr></table>	STATIC LEVEL	WATER LEVEL END OF PUMPING	34'		IF FLOWING, GIVE RATE	PUMP INTAKE SET AT		101	RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	<input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/> DEEP	80	<table><tr><td>8 GPM</td><td>15-16 HOURS</td></tr></table>	8 GPM	15-16 HOURS	<table><tr><td>1</td><td>15-16 HOURS</td></tr></table>	1	15-16 HOURS
STATIC LEVEL	WATER LEVEL END OF PUMPING																	
34'																		
IF FLOWING, GIVE RATE	PUMP INTAKE SET AT																	
	101																	
RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING																	
<input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/> DEEP	80																	
8 GPM	15-16 HOURS																	
1	15-16 HOURS																	

<b>FINAL STATUS OF WELL</b>	<table><tr><td>1 <input checked="" type="checkbox"/> WATER SUPPLY</td><td>5 <input type="checkbox"/> ABANDONED, INSUFFICIENT SUPPLY</td></tr><tr><td>2 <input type="checkbox"/> OBSERVATION WELL</td><td>6 <input type="checkbox"/> ABANDONED POOR QUALITY</td></tr><tr><td>3 <input type="checkbox"/> TEST HOLE</td><td>7 <input type="checkbox"/> UNFINISHED</td></tr><tr><td>4 <input type="checkbox"/> RECHARGE WELL</td><td><input type="checkbox"/> DEWATERING</td></tr></table>	1 <input checked="" type="checkbox"/> WATER SUPPLY	5 <input type="checkbox"/> ABANDONED, INSUFFICIENT SUPPLY	2 <input type="checkbox"/> OBSERVATION WELL	6 <input type="checkbox"/> ABANDONED POOR QUALITY	3 <input type="checkbox"/> TEST HOLE	7 <input type="checkbox"/> UNFINISHED	4 <input type="checkbox"/> RECHARGE WELL	<input type="checkbox"/> DEWATERING		
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3 <input type="checkbox"/> TEST HOLE	7 <input type="checkbox"/> UNFINISHED										
4 <input type="checkbox"/> RECHARGE WELL	<input type="checkbox"/> DEWATERING										
<b>WATER USE</b>	<table><tr><td>1 <input checked="" type="checkbox"/> DOMESTIC</td><td>5 <input type="checkbox"/> COMMERCIAL</td></tr><tr><td>2 <input type="checkbox"/> STOCK</td><td>6 <input type="checkbox"/> MUNICIPAL</td></tr><tr><td>3 <input type="checkbox"/> IRRIGATION</td><td>7 <input type="checkbox"/> PUBLIC SUPPLY</td></tr><tr><td>4 <input type="checkbox"/> INDUSTRIAL</td><td>8 <input type="checkbox"/> COOLING OR AIR CONDITIONING</td></tr><tr><td><input type="checkbox"/> OTHER</td><td>9 <input type="checkbox"/> NOT USED</td></tr></table>	1 <input checked="" type="checkbox"/> DOMESTIC	5 <input type="checkbox"/> COMMERCIAL	2 <input type="checkbox"/> STOCK	6 <input type="checkbox"/> MUNICIPAL	3 <input type="checkbox"/> IRRIGATION	7 <input type="checkbox"/> PUBLIC SUPPLY	4 <input type="checkbox"/> INDUSTRIAL	8 <input type="checkbox"/> COOLING OR AIR CONDITIONING	<input type="checkbox"/> OTHER	9 <input type="checkbox"/> NOT USED
1 <input checked="" type="checkbox"/> DOMESTIC	5 <input type="checkbox"/> COMMERCIAL										
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3 <input type="checkbox"/> IRRIGATION	7 <input type="checkbox"/> PUBLIC SUPPLY										
4 <input type="checkbox"/> INDUSTRIAL	8 <input type="checkbox"/> COOLING OR AIR CONDITIONING										
<input type="checkbox"/> OTHER	9 <input type="checkbox"/> NOT USED										
<b>METHOD OF CONSTRUCTION</b>	<table><tr><td>1 <input type="checkbox"/> CABLE TOOL</td><td>6 <input type="checkbox"/> BORING</td></tr><tr><td>2 <input type="checkbox"/> ROTARY (CONVENTIONAL)</td><td>7 <input type="checkbox"/> DIAMOND</td></tr><tr><td>3 <input type="checkbox"/> ROTARY (REVERSE)</td><td>8 <input type="checkbox"/> JETTING</td></tr><tr><td>4 <input checked="" type="checkbox"/> ROTARY (AIR)</td><td>9 <input type="checkbox"/> DRIVING</td></tr><tr><td>5 <input type="checkbox"/> AIR PERCUSSION</td><td><input type="checkbox"/> DIGGING <input type="checkbox"/> OTHER</td></tr></table>	1 <input type="checkbox"/> CABLE TOOL	6 <input type="checkbox"/> BORING	2 <input type="checkbox"/> ROTARY (CONVENTIONAL)	7 <input type="checkbox"/> DIAMOND	3 <input type="checkbox"/> ROTARY (REVERSE)	8 <input type="checkbox"/> JETTING	4 <input checked="" type="checkbox"/> ROTARY (AIR)	9 <input type="checkbox"/> DRIVING	5 <input type="checkbox"/> AIR PERCUSSION	<input type="checkbox"/> DIGGING <input type="checkbox"/> OTHER
1 <input type="checkbox"/> CABLE TOOL	6 <input type="checkbox"/> BORING										
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3 <input type="checkbox"/> ROTARY (REVERSE)	8 <input type="checkbox"/> JETTING										
4 <input checked="" type="checkbox"/> ROTARY (AIR)	9 <input type="checkbox"/> DRIVING										
5 <input type="checkbox"/> AIR PERCUSSION	<input type="checkbox"/> DIGGING <input type="checkbox"/> OTHER										

<b>LOCATION OF WELL</b>
IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.
125747

<b>CONTRACTOR</b>	<b>WELL CONTRACTOR'S LICENCE NUMBER</b>
<i>Thief Hall Ltd</i>	<i>2558</i>
<b>ADDRESS</b>	<b>WELL TECHNICIAN'S LICENCE NUMBER</b>
<i>Mc Donalds Corners Ont.</i>	<i>10417</i>
<b>SIGNATURE OF TECHNICIAN/CONTRACTOR</b>	<b>SUBMISSION DATE</b>
<i>Lynn Cooper</i>	DAY <i>30</i> MO <i>6</i> YR <i>93</i>

<b>OFFICE USE ONLY</b>	<b>DATE RECEIVED</b>
<b>DATE OF INSPECTION</b>	<i>JUL 13 1993</i>
<b>REMARKS</b>	

**Print only in spaces provided.**

Mark correct box with a checkmark, where applicable.

11

5514657

Municipality  
**55022**

Con.  
**CON**

08

County or District RENFREW	Township/Borough/City/Town/Village MUNAB	Con. block tract survey, etc. 8	Lot 13
Address 822 FLAT RAPIDS RD. ARMPRIOR OUT.		Date completed 7 day 12 month 01 year	

## LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)

[illegible]

31

32

41		10		14		15		21	
WATER RECORD									
Water found at - feet		Kind of water							
10-13		<del>UNTESTED</del>							
32		1	<input type="checkbox"/> Fresh	3	<input type="checkbox"/> Sulphur			14	
		2	<input type="checkbox"/> Salty	4	<input type="checkbox"/> Minerals				
				6	<input type="checkbox"/> Gas				
15-18		<del>UNTESTED</del>							
42		1	<input type="checkbox"/> Fresh	3	<input type="checkbox"/> Sulphur			19	
		2	<input type="checkbox"/> Salty	4	<input type="checkbox"/> Minerals				
				6	<input type="checkbox"/> Gas				
20-23		<del>UNTESTED</del>							
107		1	<input type="checkbox"/> Fresh	3	<input type="checkbox"/> Sulphur			24	
		2	<input type="checkbox"/> Salty	4	<input type="checkbox"/> Minerals				
				6	<input type="checkbox"/> Gas				
25-28		1	<input type="checkbox"/> Fresh	3	<input type="checkbox"/> Sulphur			29	
		2	<input type="checkbox"/> Salty	4	<input type="checkbox"/> Minerals				
				6	<input type="checkbox"/> Gas				
30-33		1	<input type="checkbox"/> Fresh	3	<input type="checkbox"/> Sulphur			34	
		2	<input type="checkbox"/> Salty	4	<input type="checkbox"/> Minerals				
				6	<input type="checkbox"/> Gas				

CASING & OPEN HOLE RECORD				
Inside diam inches	Material	Wall thickness inches	Depth - feet	
			From	To
6 7/8	<input checked="" type="checkbox"/> Steel <input type="checkbox"/> Galvanized <input type="checkbox"/> Concrete <input type="checkbox"/> Open hole <input type="checkbox"/> Plastic	0.188	0'	19
6	<input type="checkbox"/> Steel <input type="checkbox"/> Galvanized <input type="checkbox"/> Concrete <input checked="" type="checkbox"/> Open hole <input type="checkbox"/> Plastic		19	120
	<input type="checkbox"/> Steel <input type="checkbox"/> Galvanized <input type="checkbox"/> Concrete <input type="checkbox"/> Open hole <input type="checkbox"/> Plastic			

SCREEN	Sizes of opening (Slot No.)	31-33	Diameter	34-38	Length	39-40
			inches		feet	
	Material and type			Depth at top of screen 41-44		
				feet		

61		<b>PLUGGING &amp; SEALING RECORD</b>	
<input checked="" type="checkbox"/> Annular space		<input type="checkbox"/> Abandonment	
Depth set at - feet		Material and type (Cement grout, bentonite, etc.)	
From	To		
0-13	19	cement grout	
18-21	22-25		
26-29	30-33		
	80		

71	Pumping test method <sup>10</sup> 1 <input type="checkbox"/> Pump 2 <input type="checkbox"/> Bailer		Pumping rate <sup>11-14</sup> 8 GPM		Duration of pumping <sup>15-18</sup> 15-Hours 0-Mins	
	Static level		Water level end of pumping		25 Water levels during 1 <input type="checkbox"/> Pumping 2 <input checked="" type="checkbox"/> Recovery	
	19-21 192 feet	22-24 119 feet	26-28 20 feet	29-31 192 feet	32-34 192 feet	35-37 192 feet
	If flowing give rate <sup>38-41</sup> GPM		Pump intake set at <sup>42</sup> feet		Water at end of test <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Cloudy	
	Recommended pump type <input type="checkbox"/> Shallow <input checked="" type="checkbox"/> Deep		Recommended pump setting <sup>43-45</sup> feet		Recommended pump rate <sup>46-49</sup> feet	
	50-53		110 feet		7 GPM	

**FINAL STATUS OF WELL** 54

1 <input checked="" type="checkbox"/> Water supply	5 <input type="checkbox"/> Abandoned, insufficient supply	9 <input type="checkbox"/> Unfinished
2 <input type="checkbox"/> Observation well	6 <input type="checkbox"/> Abandoned, poor quality	10 <input type="checkbox"/> Replacement well
3 <input type="checkbox"/> Test hole	7 <input type="checkbox"/> Abandoned (Other)	
4 <input type="checkbox"/> Recharge well	8 <input type="checkbox"/> Dewatering	

**WATER USE** 55-56

1 <input checked="" type="checkbox"/> Domestic	5 <input type="checkbox"/> Commercial	9 <input type="checkbox"/> Not use
2 <input type="checkbox"/> Stock	6 <input type="checkbox"/> Municipal	10 <input type="checkbox"/> Other .....
3 <input type="checkbox"/> Irrigation	7 <input type="checkbox"/> Public supply	
4 <input type="checkbox"/> Industrial	8 <input type="checkbox"/> Cooling & air conditioning	

### METHOD OF CONSTRUCTION 57

1 <input type="checkbox"/> Cable tool	5 <input checked="" type="checkbox"/> Air percussion	9 <input type="checkbox"/> Driving
2 <input type="checkbox"/> Rotary (conventional)	6 <input type="checkbox"/> Boring	10 <input type="checkbox"/> Digging
3 <input type="checkbox"/> Rotary (reverse)	7 <input type="checkbox"/> Diamond	13 <input type="checkbox"/> Other .....
4 <input type="checkbox"/> Rotary (air)	8 <input type="checkbox"/> Jetting	

**LOCATION OF WELL**

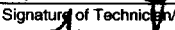
In diagram below show distances of well from road and lot line.  
Indicate north by arrow.

110'

180'

822 FLAT RAPIDS RD.

240507

Name of Well Contractor <b>T. SAUNDERS DRILLING LTD</b>	Well Contractor's Licence No. <b>4879</b>
Address <b>RR#1 BRANESIDE ONT. K0A1G0</b>	
Name of Well Technician <b>TROY SAUNDERS</b>	Well Technician's Licence No. <b>T-517</b>
Signature of Technician/Contractor 	Submission date <b>7 / 1 / 02</b> day mo yr

MINISTRY USE ONLY	Data source	58	Contractor	59-62	Date received	63-68	80
			4879		JAN 16 2002		
	Date of inspection		Inspector				
	Remarks						

Instructions for Completing Form

- For use in the Province of Ontario only. This document is a permanent legal document. Please retain for future reference.
- All Sections must be completed in full to avoid delays in processing. Further instructions and explanations are available on the back of this form.
- Questions regarding completing this application can be directed to the Water Well Management Coordinator at 416-235-6203.
- All metre measurements shall be reported to 1/10<sup>th</sup> of a metre.
- Please print clearly in blue or black ink only.

Ministry Use Only

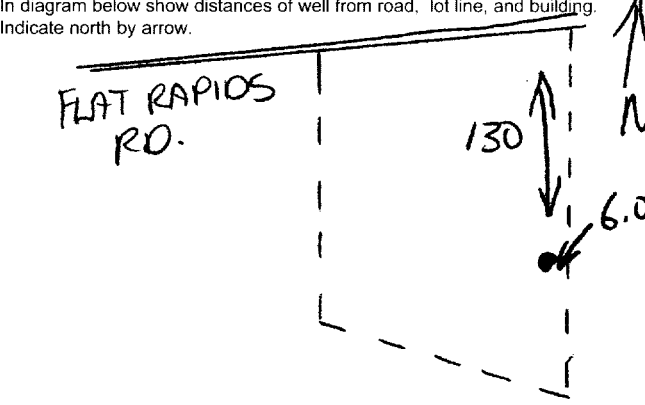
Address of Well Location (County/District/Municipality) **RENFREW** Township **MCNAB** Lot **13** Concession **6**  
RR#/Street Number/Name **795 FLAT RAPIDS RD** City/Town/Village **ARNPRIOR** Site/Compartment/Block/Tract etc.  
GPS Reading NAD **83** Zone **18** Easting **383178** Northing **5029374** Unit Make/Model **MAGELLAN** Mode of Operation: Undifferentiated ☒ Averaged ☒ Differentiated, specify

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth From	Metres To
BROWN	CLAY		DENSE	0	6.85
GREY	LIMESTONE	BROWN LIMESTONE	FRACTURED	6.85	9.29
BROWN	LIMESTONE			9.29	19.81
GREY	LIMESTONE	LAYERS OF BROWN + WHITE LIMESTONE		19.81	96.92

Hole Diameter	Construction Record	Test of Well Yield
Depth From To Metres Centimetres 0 10.36 24.77 10.36 96.92 15.23	Inside diam centimetres Material Wall thickness centimetres Depth From To Metres <b>Casing</b> 15.87 Steel Fibreglass 48 0'-60 10.36 Plastic Concrete Galvanized Steel Fibreglass Plastic Concrete Galvanized Steel Fibreglass Plastic Concrete Galvanized <b>Screen</b> Outside diam Steel Fibreglass Slot No. Plastic Concrete Galvanized <b>No Casing or Screen</b> Open hole 10.36 96.92	Pumping test method <b>PUMP</b> Draw Down Recovery Time min Water Level Metres Time min Water Level Metres Pump intake set at (metres) 60.96 Static Level 17.09 Pumping rate (litres/min) 27.3 1 17.40 1 46.51 Duration of pumping 1 hrs + 0 min 2 19.01 2 45.14 Final water level end of pumping 47.88 metres 3 20.14 3 44.31 Recommended pump type 4 21.09 4 43.46 Recommended pump depth 91.44 metres 5 21.97 5 42.73 Recommended pump rate 27.3 (litres/min) 10 25.35 10 39.98 If flowing give rate - 15 28.84 15 36.63 (litres/min) 20 32.05 20 33.84 25 35.32 25 31.36 If pumping discontinued, give reason. 30 37.12 30 28.55 40 41.48 40 25.17 50 44.95 50 23.50 60 47.88 60 20.17
Water Record		
Water found at Metres Kind of Water 13.1 Fresh Sulphur Gas Salty Minerals Other: UNTESTED 73.1 Fresh Sulphur Gas Salty Minerals Other: UNTESTED 94.1 Fresh Sulphur Gas Salty Minerals Other: UNTESTED After test of well yield, water was X Clear and sediment free Other, specify Chlorinated X Yes No		

Plugging and Sealing Record	Method of Construction	Water Use	Final Status of Well	Well Contractor/Technician Information
Depth set at - Metres From To Material and type (bentonite slurry, neat cement slurry) etc. Volume Placed (cubic metres) 0 10.36 BENTONITE SLURRY 0.64	<input type="checkbox"/> Cable Tool <input type="checkbox"/> Rotary (air) <input type="checkbox"/> Diamond <input type="checkbox"/> Digging <input type="checkbox"/> Rotary (conventional) <input checked="" type="checkbox"/> Air percussion <input type="checkbox"/> Jetting <input type="checkbox"/> Other <input type="checkbox"/> Rotary (reverse) <input type="checkbox"/> Boring <input type="checkbox"/> Driving	<input checked="" type="checkbox"/> Domestic <input type="checkbox"/> Industrial <input type="checkbox"/> Public Supply <input type="checkbox"/> Other <input type="checkbox"/> Stock <input type="checkbox"/> Commercial <input type="checkbox"/> Not used <input type="checkbox"/> Irrigation <input type="checkbox"/> Municipal <input type="checkbox"/> Cooling & air conditioning	<input checked="" type="checkbox"/> Water Supply <input type="checkbox"/> Recharge well <input type="checkbox"/> Unfinished <input type="checkbox"/> Abandoned, (Other) <input type="checkbox"/> Observation well <input type="checkbox"/> Abandoned, insufficient supply <input type="checkbox"/> Dewatering <input type="checkbox"/> Test Hole <input type="checkbox"/> Abandoned, poor quality <input type="checkbox"/> Replacement well	Name of Well Contractor <b>T. SAUNDERS DRILLING LTD</b> Well Contractor's Licence No. <b>4879</b> Business Address (street name, number, city etc.) <b>RR#1 BRASIDE CRT. K0A 1G0</b> Name of Well Technician (last name, first name) <b>SAUNDERS TROY</b> Well Technician's Licence No. <b>1-517</b> Signature of Technician/Contractor <b>x Troy Saunders</b> Date Submitted <b>04 05/12</b>

Location of Well	Ministry Use Only
In diagram below show distances of well from road, lot line, and building. Indicate north by arrow. 	Audit No. <b>Z 10630</b> Date Well Completed <b>04 04/12</b> Was the well owner's information package delivered? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Date Delivered <b>04 04/12</b> Data Source Contractor <b>4879</b> Date Received <b>MAY 27 2004</b> Date of Inspection <b>04 04/12</b> Remarks <b>CSS. ESS</b> Well Record Number <b>5515540</b>

### Instructions for Completing Form

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- **All metre measurements shall be reported to 1/10<sup>th</sup> of a metre.**
- Please print clearly in blue or black ink only.

## Well Owner's Information and Location of Well Information

\_\_\_\_\_

RR#/Street Number/Name		City/Town/Village		Site/Compartment/Block/Tract etc.	
713. Flat Rapids Rd.		McNab		13 6	
GPS Reading	NAD	Zone	Eastings	Northings	Unit Make/Model
8 3	18	383353	5029452	Muridan	Mode of Operation: <input type="checkbox"/> Undifferentiated <input type="checkbox"/> Averaged
					<input checked="" type="checkbox"/> Differentiated, specify _____

**Log of Overburden and Bedrock Materials (see instructions)**

[illegible]

Hole Diameter			Construction Record					Test of Well Yield					
Depth	Metres	Diameter	Inside diam centimetres	Material	Wall thickness centimetres	Depth		Pumping test method	Draw Down		Recovery		
From	To	Centimetres				From	To		Time min	Water Level Metres	Time min	Water Level Metres	
0	16.74	27.28						Pump intake set at - (metres)	Static Level				
16.74	43.40	15.86						Pumping rate - (litres/min)	1	9.20	1	15.20	
								Duration of pumping hrs + min	2	9.78	2	13.80	
								Final water level end of pumping metres	3	10.42	3	13.14	
								Recommended pump type.	4	10.82	4	12.54	
								<input type="checkbox"/> Shallow <input checked="" type="checkbox"/> Deep					
								Recommended pump depth	5	11.15	5	12.09	
								Recommended pump rate	10	12.60	10	18.12	
								(litres/min)	15	13.50	15	9.10	
								If flowing give rate -	20	14.24	20	8.49	
								(litres/min)	25	14.79	25	8.96	
								If pumping discontinued, give reason.	30	15.24	30	8.26	
									40	15.72	40	7.80	
									50	16.03	50	7.66	
									60	16.21	60	7.57	

Plugging and Sealing Record		<input checked="" type="checkbox"/> Annular space	<input type="checkbox"/> Abandonment
Depth set at - Metres	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)	
From	To		
0	16.74 Cement Grout	.35	

Method of Construction			
<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Rotary (air)	<input type="checkbox"/> Diamond	<input type="checkbox"/> Digging
<input type="checkbox"/> Rotary (conventional)	<input checked="" type="checkbox"/> Air percussion	<input type="checkbox"/> Jetting	<input type="checkbox"/> Other
<input type="checkbox"/> Rotary (reverse)	<input type="checkbox"/> Boring	<input type="checkbox"/> Driving	

Water Use			
<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Industrial	<input type="checkbox"/> Public Supply	<input type="checkbox"/> Other
<input type="checkbox"/> Stock	<input type="checkbox"/> Commercial	<input type="checkbox"/> Not used	
<input type="checkbox"/> Irrigation	<input type="checkbox"/> Municipal	<input type="checkbox"/> Cooling & air conditioning	

Final Status of Well			
<input checked="" type="checkbox"/> Water Supply	<input type="checkbox"/> Recharge well	<input type="checkbox"/> Unfinished	<input type="checkbox"/> Abandoned, (Other)
<input type="checkbox"/> Observation well	<input type="checkbox"/> Abandoned, insufficient supply	<input type="checkbox"/> Dewatering	
<input type="checkbox"/> Test Hole	<input type="checkbox"/> Abandoned, poor quality	<input type="checkbox"/> Replacement well	

Well Contractor/Technician Information	
Name of Well Contractor	Well Contractor's Licence No.
George H. Law + Son Ltd	3323
Business Address (street name, number, city etc.)	
Box 155 Calabogie, Ont K0J-1H0	
Name of Well Technician (last name, first name)	Well Technician's Licence No.
Fougeré Allan	T-0432
Signature of Technician/Contractor	Date Submitted
George H. Law	2655/2011

**Location of Well**

In diagram below show distances of well from road, lot line, and building. Indicate north by arrow.

Stewartville Rd.

Flat Rapids Rd.

Well → 79.05 M off road.

↑ N

Audit No. <b>Z 24409</b>	Date Well Completed 2005 MM DD 06 16
Was the well owner's information package delivered? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Date Delivered 2005 MM DD 06 11

Ministry Use Only			
Data Source	Contractor <b>8323</b>		
Date Received <b>JUL 20 2005</b> <small>YYYY MM DD</small>	Date of Inspection <small>YYYY MM DD</small>		
Remarks	Well Record Number		





Ontario

Ministry of  
the Environment

Well Ta **A 070964** (Print Below)

**A070964**

Well Record

Regulation 903 Ontario Water Resources Act

Page \_\_\_\_\_ of \_\_\_\_\_

Well Owner's Information

Part A Construction and/or Major Alteration of a Well

Address of Well Location (Street Number/Name, RR)		Township	Lot	Concession
112A Mitchell Lane		McNab	12	6
County/District/Municipality	City/Town/Village	Province	Postal Code	
Renfrew		Ontario		
UTM Coordinates	Zone	Easting	Northing	GPS Unit Make
NAD 83	18	383572	5028922	Muridan
Mode of Operation:		<input type="checkbox"/> Undifferentiated <input type="checkbox"/> Averaged		
<input checked="" type="checkbox"/> Differentiated, specify				

Overburden and Bedrock Materials (see instructions on the back of this form)

General Colour	Most Common Material	Other Materials	General Description	Depth (Metres) From To
gray	Clay + Sand			0 6.20
Brown	gravel			6.20 10.54
gray	limestone			10.54 31

Annular Space/Abandonment Sealing Record

Depth Set at (Metres) From To	Type of Sealant Used (Material and Type)	Volume Placed (Cubic Metres)
11.78 0	Cement Grout	.28

Method of Construction

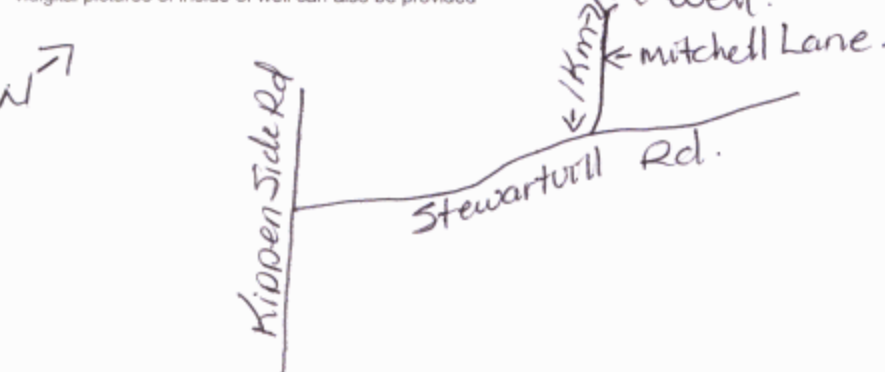
<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Diamond	<input type="checkbox"/> Public	<input type="checkbox"/> Commercial	<input type="checkbox"/> Not used
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Jetting	<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Municipal	<input type="checkbox"/> Dewatering
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Driving	<input type="checkbox"/> Livestock	<input type="checkbox"/> Test Hole	<input type="checkbox"/> Monitoring
<input type="checkbox"/> Rotary (Air)	<input type="checkbox"/> Digging	<input type="checkbox"/> Irrigation	<input type="checkbox"/> Cooling & Air Conditioning	
<input checked="" type="checkbox"/> Air percussion	<input type="checkbox"/> Boring	<input type="checkbox"/> Industrial		
<input type="checkbox"/> Other, specify		<input type="checkbox"/> Other, specify		

Status of Well

<input checked="" type="checkbox"/> Water Supply	<input type="checkbox"/> Dewatering Well	<input type="checkbox"/> Observation and/or Monitoring Hole
<input type="checkbox"/> Replacement Well	<input type="checkbox"/> Abandoned, Insufficient Supply	<input type="checkbox"/> Alteration (Construction)
<input type="checkbox"/> Test Hole	<input type="checkbox"/> Abandoned, Poor Water Quality	<input type="checkbox"/> Other, specify
<input type="checkbox"/> Recharge Well	<input type="checkbox"/> Abandoned, other, specify	

Location of Well

Please provide a map below showing:  
- all property boundaries, and measurements sufficient to locate the well in relation to fixed points,  
- an arrow indicating the North direction  
- detailed drawings can be provided as attachments no larger than legal size (8.5" by 14")  
- digital pictures of inside of well can also be provided



Date Well Completed (yyyy/mm/dd)	Was the well owner's information package delivered? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Date the Well Record and Package Delivered to Well Owner (yyyy/mm/dd)
2008/09/08		2008/09/16

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
George H. Law + Son Ltd	3323
Business Address (Street No./Name, number, RR)	Municipality
4848A Calabogie Rd, Box 155	Calabogie
Province	Postal Code
ON	K0J1H0
Business E-mail Address	

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)
613 752 2208	Faugere Allan
Well Technician's Licence No.	Signature of Technician
0432	Allan Faugere
Date Submitted (yyyy/mm/dd)	
2008/09/16	

Results of Well Yield Testing

Check box if after test of well yield, water was: <input checked="" type="checkbox"/> Clear and sand free <input type="checkbox"/> Cannot develop to sand-free state If pumping discontinued, give reason: Pumping test method Submersible pump Pump intake set at (Metres) 9.30 Pumping rate (Litres/min) 45 Duration of pumping 1 hrs + min Final water level end of pumping (Metres) 7.39 Recommended pump type <input type="checkbox"/> Shallow <input checked="" type="checkbox"/> Deep Recommended pump depth 9.30 Metres Recommended pump rate (Litres/min) 45 If flowing give rate (Litres/min)	Draw Down		Recovery	
	Time (Min)	Water Level (Metres)	Time (Min)	Water Level (Metres)
Static Level	7.24	Static Level		
1	7.30	1	7.24	
2	7.32	2		
3	7.32	3		
4	7.34	4		
5	7.36	5		
10	7.38	10		
15	7.39	15		
20	7.39	20		
25		25		
30		30		
40		40		
50		50		
60	7.39	60	7.24	

Water Details

Water found at Depth	Kind of Water
27 Metres <input type="checkbox"/> Gas	Untested <input type="checkbox"/> Fresh <input type="checkbox"/> Salty <input type="checkbox"/> Sulphur <input type="checkbox"/> Minerals
Water found at Depth	Kind of Water
Metres <input type="checkbox"/> Gas	<input type="checkbox"/> Fresh <input type="checkbox"/> Salty <input type="checkbox"/> Sulphur <input type="checkbox"/> Minerals
Water found at Depth	Kind of Water
Metres <input type="checkbox"/> Gas	<input type="checkbox"/> Fresh <input type="checkbox"/> Salty <input type="checkbox"/> Sulphur <input type="checkbox"/> Minerals

Casing Used

<input type="checkbox"/> Galvanized	<input type="checkbox"/> Galvanized	Casing and Well Details
<input checked="" type="checkbox"/> Steel	<input type="checkbox"/> Steel	
<input type="checkbox"/> Fibreglass	<input type="checkbox"/> Fibreglass	
<input type="checkbox"/> Plastic	<input type="checkbox"/> Plastic	
<input type="checkbox"/> Concrete	<input type="checkbox"/> Concrete	
No Casing and Screen Used		
<input type="checkbox"/> Open Hole		Diameter of the Hole (Centimetres)
Disinfected? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2728
		Depth of the Hole (Metres)
		31
		Wall Thickness (Metres)
		.48
		Inside Diameter of the Casing (Metres)
		15.55
		Depth of the Casing (Metres)
		12.40

Ministry Use Only

Audit No.	Well Contractor No.
z 75728	
Date Received (yyyy/mm/dd)	Date of Inspection (yyyy/mm/dd)
OCT 14 2008	
Remarks	



Ministry of  
the Environment

Well T:

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3elow)

Well Record

Regulation 903 Ontario Water Resources Act

Measurements recorded in: ☐ Metric ☐ Imperial

#### Well Location

Address of Well Location (Street Number/Name) 712 Flat Radrds.		Township McNab	Lot SWPT442	Concession 7
County/District/Municipality Renfrew		City/Town/Village	Province Ontario	Postal Code
UTM Coordinates NAD 83	Zone 18	Easting 383238	Northing 5028898	Municipal Plan and Sublot Number

#### 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	gravel			0	.62.
gray	limestone			.62	46.50

Annular Space			
Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m³/ft³)
6.20	0	Cement Grout	.14.

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"/> Not used
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Jetting	<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Municipal	<input type="checkbox"/> Dewatering
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Driving	<input type="checkbox"/> Livestock	<input type="checkbox"/> Test Hole	<input type="checkbox"/> Monitoring
<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"/> 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	
15.55	Steel	.48	0	6.22	<input checked="" type="checkbox"/> Water Supply
					<input type="checkbox"/> Replacement Well
					<input type="checkbox"/> Test Hole
					<input type="checkbox"/> Recharge Well
					<input checked="" 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

☐ Abandoned, Poor Water Quality

☐ Abandoned, other, specify

☐ Other, specify

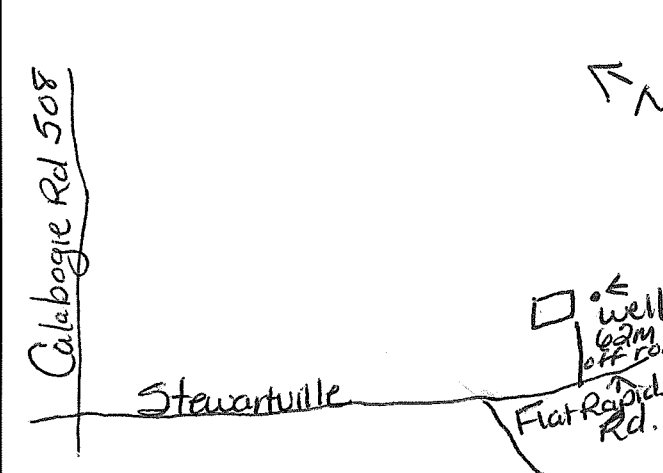
Water Details		Hole Diameter	
Water found at Depth 43.40 (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested	Depth (m/ft) From	To
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested	0	6.20
Water found at Depth (m/ft)	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested	6.20	46.50
			15.55

Well Contractor and Well Technician Information			
Business Name of Well Contractor George H. Law + Son Ltd		Well Contractor's Licence No. 3323	
Business Address (Street Number/Name) 4848A Calabogie Rd, Box 155		Municipality Calabogie	
Province ON	Postal Code K0J1H0	Business E-mail Address	
Bus. Telephone No. (inc. area code) 6137522080	Name of Well Technician (Last Name, First Name) Fougere Allan		
Well Technician's Licence No. 0432	Signature of Technician and/or Contractor Allan Fougere		Date Submitted 20100622

Results of Well Yield Testing					
After test of well yield, water was: <input checked="" type="checkbox"/> Clear and sand free <input type="checkbox"/> Other, <i>specify</i>		Draw Down		Recovery	
		Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level	7.10		
		1	8.76	1	14.97
Pump intake set at (m/ft) 44.95		2	9.17	2	13.87
Pumping rate (l/min / GPM) 13.50		3	9.63	3	13.33
Duration of pumping 1 hrs + min		4	10.04	4	12.80
Final water level end of pumping (m/ft) 17		5	10.44	5	12.32
If flowing give rate (l/min / GPM)		10	12	10	10.41
Recommended pump depth (m/ft) 44.95		15	13.12	15	9.12
Recommended pump rate (l/min / GPM) 13.50		20	14	20	8.43
Well production (l/min / GPM)		25	14.63	25	8.04
Disinfected?		30	15.17	30	7.75
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		40	15.95	40	7.10.
		50	16.56	50	7.10
		60	17	60	7.10

#### Map of Well Location

Please provide a map below following instructions on the back.



Well owner's information package delivered <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Date Package Delivered 20100622 Date Work Completed 20100526	Ministry Use Only Audit No. Z 105997 JUL 21 2010
--	---	---



Measurements recorded in: ☐ Metric ☒ Imperial

Address of Well Location (Street Number/Name) 499 STEWARTVILLE RD			Township MCNAB/BRAESIDE			Lot		Concession	
County/District/Municipality RENFREW			City/Town/Village ARNPRIOR			Province Ontario		Postal Code 	
UTM Coordinates		Zone		Easting		Northing		Municipal Plan and Sublot Number	
NAD 83		18		382919		5029010			
						Other			

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

[illegible]

Annular Space			
Depth Set at (m/ft)		Type of Sealant Used (Material and Type)	Volume Placed (m <sup>3</sup> /ft <sup>3</sup> )
From	To		
0	3	BENTONITE GROUT	.032
3	10	CEMENT GROUT	.210
10	54½	BENTONITE GROUT	.384

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"/> Not used
<input type="checkbox"/> Rotary (Conventional)	<input type="checkbox"/> Jetting	<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Municipal	<input type="checkbox"/> Dewatering
<input type="checkbox"/> Rotary (Reverse)	<input type="checkbox"/> Driving	<input type="checkbox"/> Livestock	<input type="checkbox"/> Test Hole	<input type="checkbox"/> Monitoring
<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"/> Other, specify <b>MUD ROTARY</b>		<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)		<input checked="" type="checkbox"/> Water Supply <input 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
			From	To	
6 $\frac{1}{4}$	STEEL	0.188	0 $\frac{1}{2}$	54 $\frac{1}{2}$	
6	OPEN HOLE		54 $\frac{1}{2}$	140	

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

☐ Abandoned, Poor Water Quality  
☐ Abandoned, other, *specify* \_\_\_\_\_  
☐ Other, *specify* \_\_\_\_\_

Water Details		Hole Diameter		
Water found at Depth 89½ (m/ft) <input type="checkbox"/> Gas	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested <input type="checkbox"/> Other, specify _____	Depth (m/ft)		Diameter (cm/in)
		From	To	
Water found at Depth 25½ (m/ft) <input type="checkbox"/> Gas	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested <input type="checkbox"/> Other, specify _____	0	140	6"
Water found at Depth 130 (m/ft) <input type="checkbox"/> Gas	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested <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							4   8   7   9				
Business Address (Street Number/Name)							Municipality				
RR#1							BRAESIDE				
Province			Postal Code		Business E-mail Address						
ONT			K0A1G0								
Bus. Telephone No. (inc. area code)					Name of Well Technician (Last Name, First Name)						
513 623 5648					SAUNDERS TROY						
Well Technician's Licence No.			Signature of Technician and/or Contractor				Date Submitted				
T517			Troy Saunders				2015/1/26				

## Results of Well Yield Testing

After test of well yield, water was:		Draw Down		Recovery	
<input type="checkbox"/> Clear and sand free <input type="checkbox"/> Other, specify <b>CLEARING</b>		Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
If pumping discontinued, give reason:		Static Level	03		
		1	6.75	1	9.13
Pump intake set at (m/ft) 135		2	9.26	2	6.0
Pumping rate (l/min / GPM) 15		3	11.30	3	4.75
Duration of pumping 1 hrs + 0 min		4	12.39	4	4.23
Final water level end of pumping (m/ft) 18.0		5	13.20	5	3.89
If flowing give rate (l/min / GPM) <del>15</del>		10	15.0	10	3.10
Recommended pump depth (m/ft) 70		15	15.75	15	2.91
Recommended pump rate (l/min / GPM) 15		20	16.33	20	2.70
Well production (l/min / GPM) 20*		25	16.53	25	2.32
Disinfected?		30	16.86	30	2.0
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		40	17.30	40	1.85
		50	17.65	50	1.71
		60	18.0	60	1.62

## Map of Well Location

Please provide a map below following instructions on the back.

Comments:

Well owner's information package delivered  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Date Package Delivered 20151026	<b>Ministry Use Only</b> Audit No. Z193274 NOV 23 2015 Received
	Date Work Completed 20151026	





A252384

Measurements recorded in: ☐ Metric ☒ Imperial

Page of

Address of Well Location (Street Number/Name) 466 STEWARTVILLE RD		Township MCNAB/BRAESIDE		Lot	Concession
County/District/Municipality RENFREW		City/Town/Village ARMUPRIOR		Province Ontario	Postal Code K7S3G8
UTM Coordinates Zone Easting Northing NAD 83 18 383229 5028840		Municipal Plan and Sublot Number		Other	

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)	
BROWN	CLAY		DENSE	0	18
GREY	CLAY		SOFT	18	25
GREY	TILL			25	110 1/2
GREY	SANDSTONE	RED SANDSTONE LAYERS		110 1/2	220

Annular Space				Results of Well Yield Testing			
Depth Set at (m/ft)		Type of Sealant Used (Material and Type)	Volume Placed (m <sup>3</sup> /ft <sup>3</sup> )	Draw Down		Recovery	
From	To			Time (min)	Water Level (m/ft)	Time (min)	Water Level (m/ft)
0	15	BENTONITE GROUT	0.128				
15	50	CEMENT GROUT	0.384				
50	112 1/2	BENTONITE GROUT	0.512				

After test of well yield, water was:		Draw Down		Recovery	
<input type="checkbox"/> Clear and sand free producing		Time (min)		Water Level (m/ft)	
<input checked="" type="checkbox"/> Other, specify small amounts of silt		Static Level			
If pumping discontinued, give reason:		1		31.10	
Pump intake set at (m/ft)		2		36.60	
Pumping rate (l/min / GPM)		3		38.10	
Duration of pumping		4		39.40	
1 hrs + 0 min		5		40.45	
Final water level end of pumping (m/ft)		10		48.0	
If flowing give rate (l/min / GPM)		15		56.05	
Recommended pump depth (m/ft)		20		62.25	
Recommended pump rate (l/min / GPM)		25		67.55	
Well production (l/min / GPM)		30		72.23	
Disinfected?		40		79.0	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		50		84.90	
		60		89.35	

Method of Construction		Well Use	
<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Diamond	<input type="checkbox"/> Public	<input type="checkbox"/> Commercial
<input checked="" 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"/> 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	<input checked="" type="checkbox"/> Water Supply	
6 1/4	STEEL	0.188	0 to 112 1/2	<input 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				Status of Well	
Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From To	<input type="checkbox"/> Water Supply	
				<input 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	

Water Details		Hole Diameter	
Water found at Depth	Kind of Water: <input type="checkbox"/> Fresh <input checked="" type="checkbox"/> Untested	Depth (m/ft) From To	Diameter (cm/in)
140-220	<input type="checkbox"/> Gas <input checked="" type="checkbox"/> Other, specify HYDRO FRACK	112 1/2 220	6"
Water found at Depth	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested		
(m/ft) <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify			
Water found at Depth	Kind of Water: <input type="checkbox"/> Fresh <input type="checkbox"/> Untested		
(m/ft) <input type="checkbox"/> Gas <input type="checkbox"/> Other, specify			

Well Contractor and Well Technician Information			
Business Name of Well Contractor SAUNDERS WELLDRIILLING LTD		Well Contractor's Licence No. 4 8 7 9	
Business Address (Street Number/Name) 1680 SCHEEL DR.		Municipality BRAESIDE	
Province ONT.	Postal Code K0A 1G0	Business E-mail Address	

Bus. Telephone No. (inc. area code) 613 623 5648	Name of Well Technician (Last Name, First Name) SAUNDERS TROY		
Well Technician's Licence No. T 5 1 7	Signature of Technician and/or Contractor Troy Smith		Date Submitted 2018/11/30

Map of Well Location	
Please provide a map below following instructions on the back.	
Comments:	

Well owner's information package delivered		Ministry Use Only	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Audit No. 2292763	Received
Date Package Delivered 2018/10/30		DEC 04 2018	
Date Work Completed 2018/10/30			

**OFFICIAL CERTIFICATE OF ANALYSIS : 3926938**
**WORK REQUEST : 100284372**
**Report Date : 2024-05-29**
**Paterson Group**

9 Auriga Dr

Nepean, Ontario

K2E 7T9

Attention : Alex Schopf

Reception Date : 2024-05-23

Project : PH4916

Sampler : NA

PO Number : 60260

Temperature : 16 °C

Analysis	Quantity	External Method
Alkalinity (Water, Automated)	1	Modified from SM 2320 B
Ammonia, Total (Water, Colorimetry)	1	Modified from EPA 350.1
Chloride (Water, IC)	1	Modified from SM 4110 B and C
Colour, Apparent (Water, Spectrophotometry)	1	Modified from SM 2120 C
Conductivity (Water, Automated)	1	Modified from SM 2510 B
DOC (Water, IR)	1	Modified from SM 5310 B
Escherichia coli (DC Plate)	1	Modified from MECP E3407
Fluoride (Water, Auto/ISE)	1	Modified from SM 4500-F A and 4500-F C
Hardness (Water, Calculation Only)	1	SM 2340 B
Ion Balance (Water, Calculation)	1	Modified from SM1030 E
Metals Scan (Water, ICP/MS)	1	Modified from EPA 200.8
Metals Scan (Water, ICP/OES)	1	Modified from SM 3120 B
Nitrate (Water, IC)	1	Modified from SM 4110 B and C
Nitrite (Water, IC)	1	Modified from SM 4110 B and C
pH (25°C) (Water, Automated)	1	Modified from SM 4500-H+ B
Phenols (Water, Colorimetry)	1	Modified from EPA 420.2
Sulphate (Water, IC)	1	Modified from SM 4110 B and C
Sulphide (Water, Colorimetry)	1	Modified from SM 4500-S2 D
Tannin and Lignin (Water, Spec)	1	Modified from SM 5550 B
TDS (Estimated)	1	Modified from SM 2510 A
Total Coliforms (DC Plate)	1	Modified from MECP E3407
Total Kjeldahl Nitrogen (Water, Colorimetry)	1	Modified from EPA 351.2
Turbidity (Water, Turbidimeter)	1	Modified from SM 2130 B

**Criteria :**
**A :** Ontario Regulation 169/03 (Non-Regulated Drinking Water)

**Sample status upon receipt :**

7720381

**Compliant**
**Certificate Comments :**

7720381

**Ba, Hg, and B spike not available due to high native analyte concentration in the mother sample.**
**Notes :**

- All analysis is completed at Eurofins Environment Testing Canada Inc. (Ottawa, Ontario) unless otherwise stated.
- Eurofins Environment Testing Canada Inc. 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/>
- Please note: Field data, where presented on the report, has been provided by the client and is presented for informational purposes only. Guideline or regulatory limits listed on this report are provided for ease of use (informational purposes) only. Eurofins recommends consulting the official guideline or regulation as required. Unless otherwise stated, measurement uncertainty is not taken into account when determining guideline or regulatory exceedances.

**Legend :**

RL : Reporting limit

QC : Reference material (QC)

N/A : Not applicable

1 : Results in annex

\* : Analysis conducted by external subcontracting

^ : Analysis not accredited

OFFICIAL CERTIFICATE OF ANALYSIS - EXCEEDENCE SUMMARY

Client : Paterson Group  
Project : PH4916

Reception Date : 2024-05-23

Eurofins Sample No	Client Sample Identification	Analyte	Result	Units	Exceeded Criteria		
					A	B	C
Hardness (Water, Calculation Only)							
7720381	TW1 - GW1	Hardness as CaCO3 (Calculation)	413	mg/L	80-100		

## OFFICIAL CERTIFICATE OF ANALYSIS - RESULTS

Client : Paterson Group  
Project : PH4916

Reception Date: 2024-05-23

			Eurofins Sample No : <b>7720381</b>						
			Matrix : Drinking water						
			Sampling Date : 2024-05-23						
			Client Sample Identification : TW1 - GW1						
Anions	RL	Unit	Criteria						
			A	B	C				
Chloride	0.5	mg/L	250			25.3			
Nitrate (as Nitrogen)	0.1	mg/L	10.0			2.35			
Nitrite (as Nitrogen)	0.1	mg/L	1.0			<0.1			
Sulphate	1	mg/L	500			30			

			Eurofins Sample No : <b>7720381</b>						
			Matrix : Drinking water						
			Sampling Date : 2024-05-23						
			Client Sample Identification : TW1 - GW1						
Calculations	RL	Unit							
Ion Balance (Calculation)^	0.1		1.00						

			Eurofins Sample No : <b>7720381</b>						
			Matrix : Drinking water						
			Sampling Date : 2024-05-23						
			Client Sample Identification : TW1 - GW1						
General Chemistry	RL	Unit	Criteria						
			A	B	C				
Alkalinity (as CaCO3)	5	mg/L	500			364			
Colour (Apparent)	2	TCU	5			<2			
Conductivity @ 25°C	5	uS/cm				749			
Dissolved Organic Carbon	0.5	mg/L	5			0.7			
Fluoride	0.1	mg/L	1.5			0.33			
Hardness as CaCO3 (Calculation)	1	mg/L	80-100			413			
pH @ 25°C	1		6.5-8.5			7.56			
Phenols-4AAP	0.001	mg/L				<0.001			
Sulphide (S2-)	0.01	mg/L	0.05			<0.01			
Tannin and Lignin	0.1	mg/L				<0.1			
TDS (Estimated)^	5	mg/L	500			487			
Turbidity	0.1	NTU	5			0.312			

## OFFICIAL CERTIFICATE OF ANALYSIS - RESULTS

Client : Paterson Group  
Project : PH4916

Reception Date: 2024-05-23

Eurofins Sample No : 7720381										
Matrix : Drinking water										
Sampling Date : 2024-05-23										
Client Sample Identification : TW1 - GW1										
Metals	RL	Unit	Criteria							
			A	B	C					
Metals Scan (Water, ICP/MS)										
Aluminum	0.01	mg/L	0.1			<0.01				
Antimony	0.0005	mg/L	0.006			<0.0005				
Arsenic	0.001	mg/L	0.01			<0.001				
Barium	0.001	mg/L	1			0.118				
Beryllium	0.0005	mg/L				<0.0005				
Boron	0.01	mg/L	5			<0.01				
Cadmium	0.0001	mg/L	0.005			<0.0001				
Chromium	0.001	mg/L	0.05			<0.001				
Cobalt	0.0002	mg/L				<0.0002				
Copper	0.001	mg/L	1			0.003				
Iron	0.03	mg/L	0.3			<0.03				
Lead	0.001	mg/L	0.01			<0.001				
Manganese	0.01	mg/L	0.05			<0.01				
Mercury	0.0001	mg/L	0.001			<0.0001				
Molybdenum	0.005	mg/L				<0.005				
Nickel	0.005	mg/L				<0.005				
Selenium	0.001	mg/L	0.05			<0.001				
Silver	0.0001	mg/L				<0.0001				
Strontium	0.001	mg/L				0.270				
Thallium	0.0001	mg/L				<0.0001				
Uranium	0.001	mg/L	0.02			0.002				
Vanadium	0.001	mg/L				<0.001				
Zinc	0.01	mg/L	5			<0.01				
Metals Scan (Water, ICP/OES)										
Calcium	1	mg/L				104				
Magnesium	1	mg/L				37				
Potassium	1	mg/L				2				
Sodium	1	mg/L	200			12				

			Eurofins Sample No :			7720381				
			Matrix :			Drinking water				
			Sampling Date :			2024-05-23				
			Client Sample Identification :			TW1 - GW1				
Microbiology	RL	Unit	Criteria							
			A	B	C					
Escherichia coli (DC)	0	CFU/100mL	0			0				
Total Coliforms (DC)	0	CFU/100mL	0			0				

## OFFICIAL CERTIFICATE OF ANALYSIS - RESULTS

Client : Paterson Group  
Project : PH4916

Reception Date: 2024-05-23

Eurofins Sample No :		7720381						
Matrix :		Drinking water						
Sampling Date :		2024-05-23						
Client Sample Identification :		TW1 - GW1						
Nutrients	RL	Unit						
Ammonia (Total, as Nitrogen)	0.02	mg/L	<0.020					
Total Kjeldahl Nitrogen	0.1	mg/L	0.120					

Approved by :

  
Emma-Dawn Ferguson, M.Sc.  
Environmental Chemist

Approved by :

  
Jason Kennedy,  
Project Manager

## OFFICIAL CERTIFICATE OF ANALYSIS - QUALITY CONTROL

Client : Paterson Group  
Project : PH4916

Reception Date: 2024-05-23

Parameter	Unit	RL	Blank	QC		Matrix Spike		Duplicate	
				Recovery %	Range %	Recovery %	Range %	RPD %	Range %
Alkalinity (Water, Automated)									
Method : Alkalinity (water, titration to pH 4.5, automated). Internal method: OTT-I-AT-WI45398.									
Alkalinity (as CaCO3)	mg/L	5	<5	96	95-105			-	0-20
Associated Samples : 7720381								Prep Date: 2024-05-28 Analysis Date: 2024-05-29	
Ammonia, Total (Water, Colorimetry)									
Method : Ammonia (Water, Colorimetry). Internal method: OTT-I-NUT-WI46201.									
Ammonia (Total, as Nitrogen)	mg/L	0.02	<0.020	98	80-120	105	80-120	-	0-20
Associated Samples : 7720381								Prep Date: 2024-05-28 Analysis Date: 2024-05-28	
Chloride (Water, IC)									
Method : Anions (Water, Ion Chromatography). Internal method: OTT-I-IC-WI45985.									
Chloride	mg/L	0.5	<0.5	100	80-120	104	80-120	-	0-20
Associated Samples : 7720381								Prep Date: 2024-05-28 Analysis Date: 2024-05-29	
Colour, Apparent (Water, Spectrophotometry)									
Method : Colour (Water, Spectrophotometric). Internal method: OTT-I-SPEC-WI45980.									
Colour (Apparent)	TCU	2	<2	102	39-159			-	0-40
Associated Samples : 7720381								Prep Date: 2024-05-29 Analysis Date: 2024-05-29	
Conductivity (Water, Automated)									
Method : Conductivity (Water, Autotitrator). Internal Method: OTT-I-AT-WI45398.									
Conductivity @ 25°C	uS/cm	5	<5	99	98-102			-	0-20
Associated Samples : 7720381								Prep Date: 2024-05-28 Analysis Date: 2024-05-29	
DOC (Water, IR)									
Method : Organic carbon (water, IR, combustion). Internal method: OTT-I-DEM-WI46148.									
Dissolved Organic Carbon	mg/L	0.5	<0.5	99	84-116	87	80-120	-	0-15
Associated Samples : 7720381								Prep Date: 2024-05-28 Analysis Date: 2024-05-29	
Escherichia coli (DC Plate)									
Method : Total Coliforms and E.Coli by MF (Water, DC plate). Internal method: OTT-M-BAC-WI45296.									
Escherichia coli (DC)	CFU/100mL	0	0					-	0-30
Associated Samples : 7720381								Prep Date: 2024-05-24 Analysis Date: 2024-05-25	
Fluoride (Water, Auto/ISE)									
Method : Fluoride by autotitrator, ion selective electrode. Internal method: OTT-I-AT-WI45398.									
Fluoride	mg/L	0.1	<0.1	102	90-110			-	0-20
Associated Samples : 7720381								Prep Date: 2024-05-28 Analysis Date: 2024-05-29	



## OFFICIAL CERTIFICATE OF ANALYSIS - QUALITY CONTROL

Client : Paterson Group  
Project : PH4916

Reception Date: 2024-05-23

Parameter	Unit	RL	Blank	QC		Matrix Spike		Duplicate	
				Recovery %	Range %	Recovery %	Range %	RPD %	Range %
Metals Scan (Water, ICP/MS)									
Method : Metals (Water, ICP/MS). Internal method: AMMTFQE1.									
Aluminum	mg/L	0.01	<0.01	100	80-120	116	70-130	-	0-20
Antimony	mg/L	0.0005	<0.0005	85	80-120	89	70-130	-	0-20
Arsenic	mg/L	0.001	<0.001	94	80-120	103	70-130	-	0-20
Barium	mg/L	0.001	<0.001	90	80-120			0	0-20
Beryllium	mg/L	0.0005	<0.0005	101	80-120	103	70-130	-	0-20
Boron	mg/L	0.01	<0.01	100	80-120			3	0-20
Cadmium	mg/L	0.0001	<0.0001	96	80-120	88	70-130	-	0-20
Chromium	mg/L	0.001	<0.001	100	80-120	111	70-130	-	0-20
Cobalt	mg/L	0.0002	<0.0002	100	80-120	101	70-130	1	0-20
Copper	mg/L	0.001	<0.001	100	80-120	96	70-130	2	0-20
Iron	mg/L	0.03	<0.03	100	80-120	103	70-130	-	0-20
Lead	mg/L	0.001	<0.001	100	80-120	82	70-130	-	0-20
Manganese	mg/L	0.01	<0.01	100	80-120	101	70-130	2	0-20
Mercury	mg/L	0.0001	<0.0001	99	80-120			-	0-20
Molybdenum	mg/L	0.005	<0.005	90	80-120	105	70-130	-	0-20
Nickel	mg/L	0.005	<0.005	100	80-120	99	70-130	2	0-20
Selenium	mg/L	0.001	<0.001	98	80-120	92	70-130	-	0-20
Silver	mg/L	0.0001	<0.0001	97	80-120	-	70-130	-	0-20
Strontium	mg/L	0.001	<0.001	90	80-120	93	70-130	1	0-20
Thallium	mg/L	0.0001	<0.0001	98	80-120	84	70-130	-	0-20
Uranium	mg/L	0.001	<0.001	100	80-120	88	70-130	-	0-20
Vanadium	mg/L	0.001	<0.001	100	80-120	115	70-130	-	0-20
Zinc	mg/L	0.01	<0.01	100	80-120	82	70-130	-	0-20
Associated Samples : 7720381								Prep Date: 2024-05-28 Analysis Date: 2024-05-29	
Metals Scan (Water, ICP/OES)									
Method : Metals (Water, ICP/OES). Internal method: OTT-I-MET-WI48491.									
Calcium	mg/L	1	<1	104	86-115	96	70-130	0	0-20
Magnesium	mg/L	1	<1	98	91-109	99	70-130	0	0-20
Potassium	mg/L	1	<1	104	87-113	109	70-130	-	0-20
Sodium	mg/L	1	<1	100	85-115	102	70-130	0	0-20
Associated Samples : 7720381								Prep Date: 2024-05-27 Analysis Date: 2024-05-24	
Nitrate (Water, IC)									
Method : Anions (Water, Ion Chromatography). Internal method: OTT-I-IC-WI45985.									
Nitrate (as Nitrogen)	mg/L	0.1	<0.1	100	80-120	103	80-120	-	0-20
Associated Samples : 7720381								Prep Date: 2024-05-28 Analysis Date: 2024-05-29	
Nitrite (Water, IC)									
Method : Anions (Water, Ion Chromatography). Internal method: OTT-I-IC-WI45985.									
Nitrite (as Nitrogen)	mg/L	0.1	<0.1	96	80-120	101	80-120	-	0-20
Associated Samples : 7720381								Prep Date: 2024-05-28 Analysis Date: 2024-05-29	
pH (25°C) (Water, Automated)									
Method : pH (Water, Automated Meter). Internal method: OTT-I-AT-WI45398.									
pH @ 25°C		1	6.25	99	97-103			1	0-20
Associated Samples : 7720381								Prep Date: 2024-05-28 Analysis Date: 2024-05-29	

## OFFICIAL CERTIFICATE OF ANALYSIS - QUALITY CONTROL

Client : Paterson Group

Project : PH4916

Reception Date: 2024-05-23

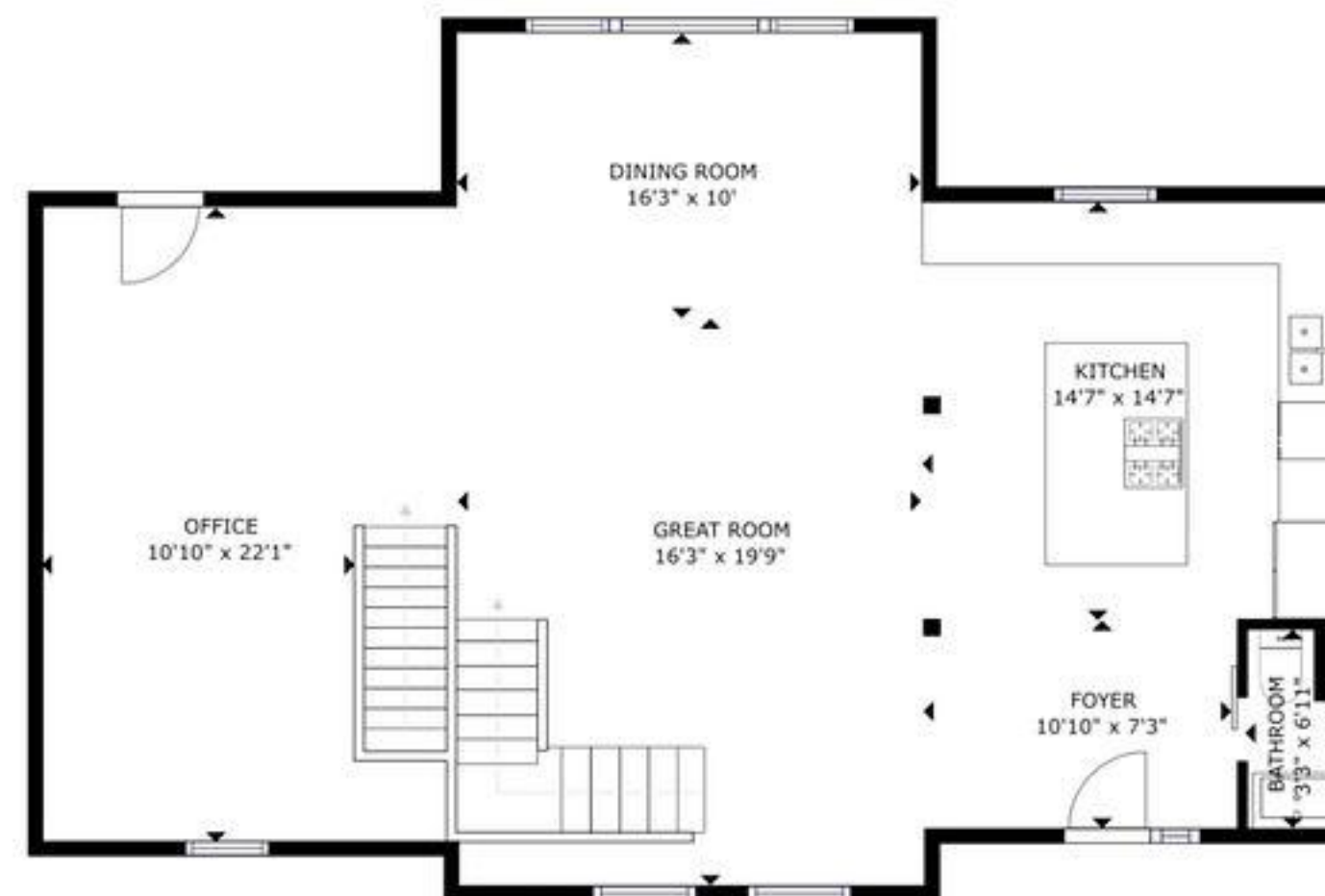
Parameter	Unit	RL	Blank	QC		Matrix Spike		Duplicate	
				Recovery %	Range %	Recovery %	Range %	RPD %	Range %
Phenols (Water, Colorimetry)									
Method : Phenols (Water, Colorimetry). Internal method: OTT-I-4AAP-WI46150.									
Phenols-4AAP	mg/L	0.001	<0.001	105	75-125	104	70-130	-	0-20
Associated Samples : 7720381								Prep Date: 2024-05-27 Analysis Date: 2024-05-27	
Sulphate (Water, IC)									
Method : Anions (Water, Ion Chromatography). Internal method: OTT-I-IC-WI45985.									
Sulphate	mg/L	1	<1	95	90-110	93	80-120	-	0-20
Associated Samples : 7720381								Prep Date: 2024-05-28 Analysis Date: 2024-05-29	
Sulphide (Water, Colorimetry)									
Method : Sulphide, S2- (Water, Colorimetry). Internal method: OTT-I-SPEC-WI45931.									
Sulphide (S2-)	mg/L	0.01	<0.01	115	80-120			-	0-20
Associated Samples : 7720381								Prep Date: 2024-05-28 Analysis Date: 2024-05-28	
Tannin and Lignin (Water, Spec)									
Method : Tannin and Lignin (Water, Spec), Internal method: OTT-I-SPEC-WI57693.									
Tannin and Lignin	mg/L	0.1	<0.1	94	80-120			-	0-20
Associated Samples : 7720381								Prep Date: 2024-05-28 Analysis Date: 2024-05-28	
Total Coliforms (DC Plate)									
Method : Total Coliforms and E.Coli by MF (Water, DC plate). Internal method: OTT-M-BAC-WI45296.									
Total Coliforms (DC)	CFU/100mL	0	0					-	0-30
Associated Samples : 7720381								Prep Date: 2024-05-24 Analysis Date: 2024-05-25	
Total Kjeldahl Nitrogen (Water, Colorimetry)									
Method : TKN (Water, colorimetry). Internal method: OTT-I-NUT-WI46201.									
Total Kjeldahl Nitrogen	mg/L	0.1	<0.100	103	70-130	112	70-130	-	0-20
Associated Samples : 7720381								Prep Date: 2024-05-28 Analysis Date: 2024-05-29	
Turbidity (Water, Turbidimeter)									
Method : Turbidity (Water, Turbidimeter). Internal method: OTT-I-TUR-WI46288.									
Turbidity	NTU	0.1	<0.1	99	80-120			-	0-30
Associated Samples : 7720381								Prep Date: 2024-05-25 Analysis Date: 2024-05-25	

Where RPD % is reported as "-" the calculation is not available because one or both of the duplicates is within 5 times the RL.

PREDICTIVE NITRATE IMPACT ASSESSEMENT		
<b>Infiltration Factors</b>		
Topography	0.10	
Soil	0.40	
Cover	0.175	
<b>Total</b>	<b>0.675</b>	
<b>Site Characteristics</b>		
Area of Site :	4046	m <sup>2</sup>
Total of roof areas:	221	m <sup>2</sup>
Total area of paved driveway areas:	273	m <sup>2</sup>
Roof + paved driveway areas	494	m <sup>2</sup>
Impervious Area	494	m <sup>2</sup>
Percent Impervious Area =	12	%
Infiltration Area =	3552	m <sup>2</sup>
<b>Septic Effluent</b>		
Concentration of Effluent (Cs) =	20	mg/L
Daily Sewage Flow (Qs)=	1.975	m <sup>3</sup>
See Notes below.		
<b>Infiltration Calculation</b>		
Nitrate concentration in precipitation (C <sub>i</sub> ) =	0	mg/L
Surplus Water (Environment Canada)	300	mm/yr
Factored Water Surplus =	203	mm/yr
Infiltration % due to stormwater management measures	-	%
Infiltration rate from stormwater management measures =	0	mm/yr
Infiltration Flow Entering the System (Q <sub>i</sub> ) =	1.98	m <sup>3</sup> /day
<b>Mass Balance Model (MOEE, 1995)</b>		
$C_T = (Q_b C_b + Q_e C_e + Q_i C_i) / (Q_b + Q_e + Q_i)$ = Cumulative Nitrate Concentration		
Q <sub>b</sub> = flow entering the system across the upgradient area	0	m <sup>3</sup> /day
C <sub>b</sub> = background nitrate concentration	0	mg/L
Q <sub>e</sub> = flow entering the system from the septic drainfield	1.975	m <sup>3</sup> /day
C <sub>e</sub> = concentration of nitrates in the septic effluent	20	mg/L
Q <sub>i</sub> = flow entering the system from infiltration	2	m <sup>3</sup> /day
C <sub>i</sub> = Concentration of nitrates in the infiltrate	0	mg/L
<b>C<sub>T</sub> =</b>	<b>10.00</b>	<b>mg/L</b>
Estimate Number of Lots	1	lots
Notes: Site characteristic values were measured as approximate values from the available site plan. Daily Sewage Flow volume was calculated by Paterson Group as a preliminary design flow.		



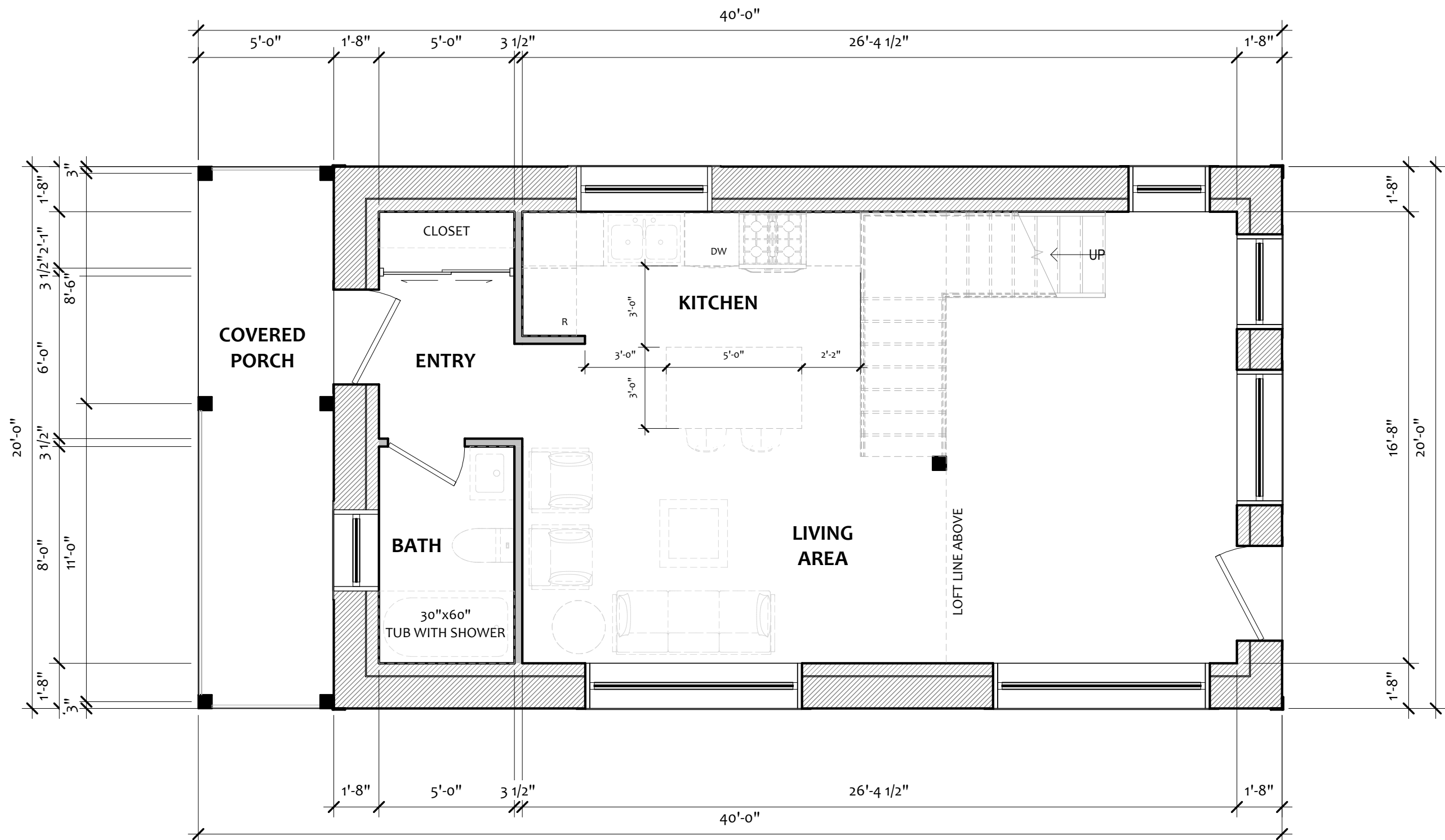
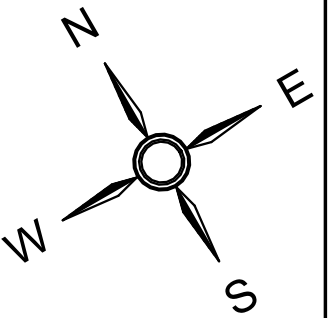
FLOOR 1



FLOOR 2



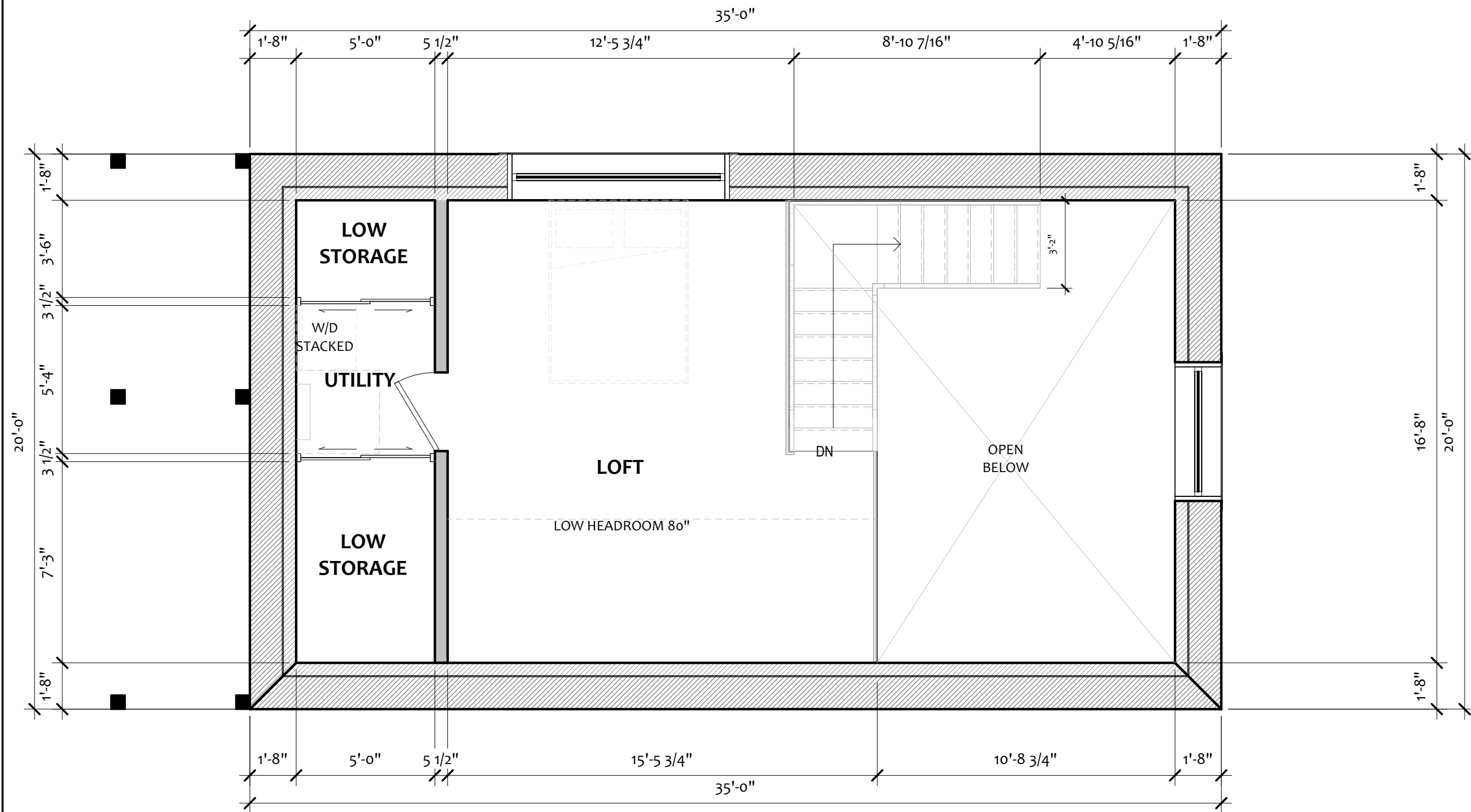
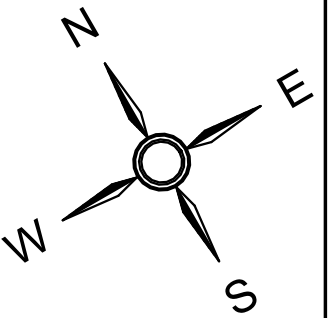
FLOOR 3



GROUND FLOOR PLAN



ASELFORD RESIDENCE  
90A Mitchell Lane, McNab/Braeside, Ontario  
Ground Floor Plan  
SCALE 1/4" = 1'-0"

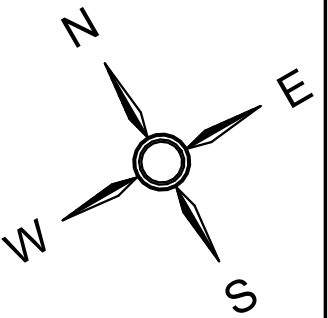


LOFT FLOOR PLAN

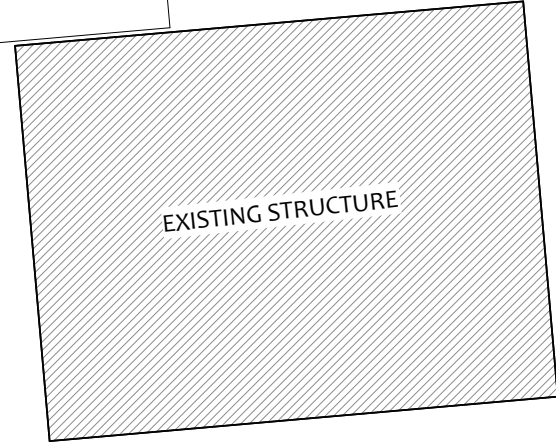
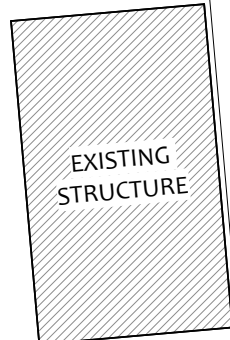
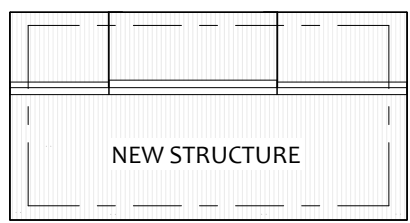


ASELFORD RESIDENCE  
90A Mitchell Lane, McNab/Braeside, Ontario  
Loft Floor Plan  
SCALE 1/4" = 1'-0"





90 A Mitchell Lane



SITE PLAN



ASELFORD RESIDENCE  
90A Mitchell Lane, McNab/Braeside, Ontario  
Site Plan  
SCALE 3/64" = 1'-0"  
A-1

# MINOR VARIANCE PLANNING REPORT

## **PART A – BASIC INFORMATION**

1. FILE NO.: A-8/24
2. APPLICANT: Krista Aselford (Owner)
3. MUNICIPALITY: Township of McNab/Braeside  
(geographic Township of McNab)
4. LOT: 12 CONCESSION: 6 STREET: 90A Mitchell Lane

### SUBJECT LANDS

5. COUNTY OF RENFREW  
OFFICIAL PLAN Rural  
Land Use Designation(s):
6. TWP OF McNAB/BRAESIDE  
ZONING BY-LAW 2010-49 Limited Service Residential (LSR)  
Zone Category(s):

## **7. DETAILS OF MINOR VARIANCE REQUEST**

The minor variance application requests a variance from the following provisions:

- Section 3.34(b) to permit a privately serviced secondary dwelling (coach house) on a lot 0.4 hectares in size;
- Section 3.34(d)(b) to permit a coach house in the front yard of a Limited Service Residential (LSR) Zone; and
- Section 3.34(d)(d) to increase the maximum height of a coach house from 5 to 5.5 metres.
- Section 3.34(l)(b) to permit a secondary dwelling (coach house) on a waterfront lot

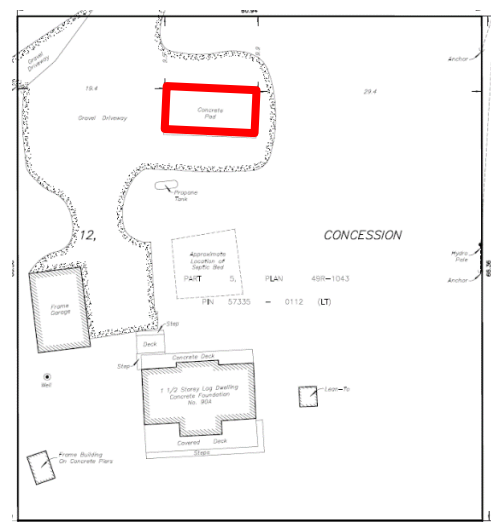
## **8. SITE PERFORMANCE STANDARDS**

<u>Zoning By-law Standard</u>	<u>Permitted/Required</u>	<u>Proposed</u>
Section 3.34(b)	Privately serviced secondary dwellings on a lot 0.4 to 0.8 hectares in size may be	A privately serviced secondary dwelling be

	considered through a minor variance	permitted on a lot 0.4 hectares in size
Section 3.34(d)(b)	The Coach House shall not be located within the minimum front yard setback in a Rural (RU) or Agriculture (A) Zone, or within a front yard in all other zones.	Coach House will be located in the center front yard of a lot zoned Limited Service Residential (LSR).
Section 3.34(d)(d) - The maximum height shall be the permitted height of an accessory building.	Maximum accessory building height of 5 metres in any Residential Zone	Maximum accessory building height of 5.5 metres in a lot zoned Limited Service Residential (LSR)
Section 3.34(l)(b)	Secondary dwellings not permitted on waterfront lots	A secondary dwelling be permitted on a waterfront lot, subject to the conditions outlined in the Planning Justification letter

## 9. **SITE CHARACTERISTICS AND SETTING**

In the aerial photo below (left) is the subject property, outlined in yellow. The lot is described as Part 5 in 49R-1043, which confirms a lot area of 1 acre (4046 square metres). It fronts on Mitchell Lane and is developed with a single detached dwelling near the rear of the property. A detached garage and two small accessory sheds are situated adjacent to the dwelling on the west side of the property. The location of the proposed coach house is outlined in red on the sketch provided below (right).



The immediate surrounding land uses are depicted below, and consist of:

- North: natural bush and several accessory structures on the large abutting property. There is also a smaller property with a limited service dwelling located approximately 113 metres away. Mitchell Lane travels through the natural bush and connects to Flat Rapids Road, located north of the concerned property.
- East: natural bush and a limited service residential dwelling;
- South: a vegetated embankment owned by Ontario Power Generation Inc. and Lake Madawaska. The concerned property is located downstream of a power generation dam; and
- West: natural bush, a limited service dwelling (approximately 45 metres away), a vegetated embankment owned by Ontario Power Generation Inc., Lake Madawaska, and the TransCanada Pipeline (approximately 160 metres away).

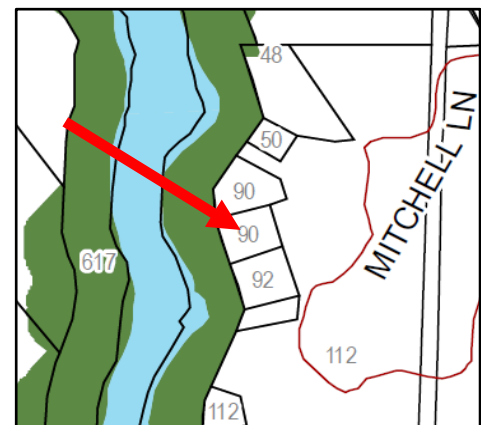


#### 10. **OFFICIAL PLAN**

The subject lands are designated Rural in the County of Renfrew Official Plan.

Section 5.3(1) & (2) of the Rural designation permits low density residential uses on private services, provided the lot is not smaller than 4000 square metres (1 acre).

Section 2.2(12)(a)(iii) and 2.2(12)(a)(iv)(f) are servicing policies that apply to the subject lands. Under the Provincial servicing hierarchy, where municipal and communal services are not feasible,



development may be serviced by individual on-site systems where site conditions are suitable over the long term with no negative impacts.

Section 2.2(24) speaks to Additional Dwelling Units such as basement apartments, in-law flats, granny suites and coach houses. Subsection (2) establishes the criteria for these uses on lands with private well and septic services:

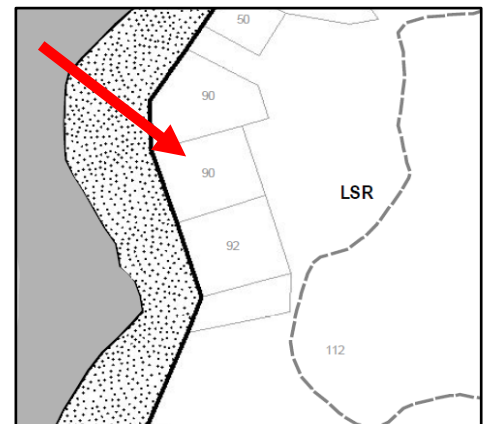
- a. one secondary dwelling unit may be considered per lot;
- b. the local Zoning By-law may include standards including but not limited to dwelling unit area, minimum lot size parking and servicing;
- c. not applicable to this lot scenario;
- d. for lots between 0.4 and 0.8 ha in size, a secondary dwelling may be considered through a minor variance. The applicant is required to demonstrate that the site is suitable for the secondary dwelling in regards to matters such as: dwelling unit area, minimum lot area, surrounding land uses, parking and servicing. Additionally, an engineering report is to be submitted with the application, demonstrating that the additional septic effluent can be managed, and that there is a potable source of water for the secondary dwelling;
- e. a secondary dwelling unit may not be severed from the lot with the primary dwelling;
- f.-g. not applicable to this lot scenario;
- 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 addresses septic effluent; and
- i. not applicable to this lot scenario.

## 11. **ZONING BY-LAW**

The subject land is zoned Limited Service Residential (LSR) in the Township's Zoning By-law. Section 7.1(a) of the LSR Zone permits a limited service dwelling on an existing lot of record.

Section 7.2 of the LSR Zone sets out various lot development requirements, including the following:

- d. a minimum front yard depth of 7.5 metres, measured back from the front lot line;
- e. a minimum side yard depth of 3 metres, measured back from a side lot line; and
- i. a maximum lot coverage of 33%, including main and accessory buildings.



Section 2.0 Definitions lists various terms used within the Zoning By-law and provides definitions.

Section 2.84 defines Floor Area, Gross as for a dwelling, the total area of the storeys exclusive of basements, cellars, attic, garages, sunrooms, unenclosed verandas or porches; and for a building other than a dwelling, the total area of all the floors contained within the outside walls of the building. 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 2.99 defines Height as when used with reference to a building, the vertical distance between the average elevation of the finished surface of the ground at the front of the building and, (c) in the case of a gable, hip or gambrel roof, the mean height between the eaves and the ridge.

Section 2.222 defines Yard, Front as a yard extending across the full width of a lot between the front lot line and the nearest part of any building, structure or excavation on the lot. Front Yard Depth means the shortest horizontal distance between the front lot line of the lot and nearest part of any building, structure or excavation on the lot. Section 3.0 General Provisions contains various, general land use planning matters that must be applied to a development proposal, as required.

Section 3.3.6 states that accessory buildings and structures shall not exceed 5.0 metres in height in any Residential Zone.

Section 3.34 sets out the zoning provisions for Secondary Dwelling Units. It states that a secondary dwelling unit is permitted in all zones that permit a single detached dwelling, semi-detached dwelling unit or townhouse dwelling unit, unless specifically prohibited elsewhere in the By-law, and are subject to the following criteria:

- a. secondary dwellings shall only be permitted where adequate servicing is or can be made available
- 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. Properties with 2 Ha or less, the secondary dwelling unit is required to share the same water and/or septic services with the primary dwelling. For lots on private services that are greater than 0.4 ha but less than 0.8 ha, a secondary dwelling may be considered through the submission and approval of a minor variance. The proponent of the application is required to submit a study addressing matters outlined in the Official Plan.
- 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 that is a Coach house, or is located in an accessory building to the primary dwelling unit shall be subject to the following:
  - 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.
  - c. not applicable to this lot scenario.



- d. the maximum height shall be the permitted height of an accessory building.
- e. not applicable to coach houses.
- f. a minimum of one parking space is required for a secondary dwelling unit.
- g. a maximum of one secondary dwelling unit shall be permitted per primary dwelling.
- h.-k. not applicable to this lot scenario.
- l. Secondary dwellings on waterfront lots:
  - a. not applicable to this lot scenario.
  - b. secondary dwellings are not 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 matter outlined in the Official Plan.

## 12. **STUDIES**

Pursuant to Section 2.2(24)(2)(d) and (h) of the Official Plan, the applicant is required to submit a study(s) demonstrating:

- the availability of potable drinking water;
- that the additional septic effluent can be managed; and
- that the proposed secondary dwelling will have no negative impacts on the waterbody.

A scoped Hydrogeological Assessment and Terrain Analysis (HATA) conducted by the Paterson Group and dated June 25, 2024 was submitted with the application.

The assessment concludes that the water supply aquifer underneath the concerned property is sufficient in water quantity and quality to support the existing dwelling and proposed coach house. It recommends that a residential-grade water softener or point-of-use reverse osmosis system be installed to address water hardness.

Regarding septic effluent, the assessment notes that a new tertiary treatment septic system, with a minimum of 50% nitrate reduction, will be required to service both the existing dwelling and new coach house. A septic system is not expected to affect the water quality or performance of the existing well, provided it is designed in accordance with the Ontario Building Code. Lastly, it states that a Sewage System Permit and Building Permit will need to be issued before constructing the proposed coach house. Apart from these recommendations, the assessment confirms that the concerned property is capable of managing nitrates to below MECP limits by the property boundary.

An amended Planning Justification letter conducted by NOVATECH and dated July 15, 2024 was also submitted with the application. It provides details about the application, the surrounding context, how the application meets the four tests of a minor variance, notes there will be no negative impacts to the adjacent waterbody (Lake Madawaska), and makes recommendations on how any potential impacts to the waterbody during construction can be mitigated.

### 13. **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, as of July 9, 2024. Public agencies have been notified, as required, including Ontario Power Generation Inc. The application was recirculated on July 12, 2024 to more clearly specify the requested variance to Section 3.34(b).

Amended comments were received from Township of McNab/Braeside staff on July 15, 2024. The Chief Building Official noted that an engineered design will be required for the new tertiary sewage treatment system. The Director of Public Works noted that a second garbage levy on the property will be required due to the secondary dwelling. The Fire Chief had no comments or concerns.

A resident of 90B Mitchell Lane inquired if the meeting could be moved until they were available to attend, and if additional information on the application could be provided.

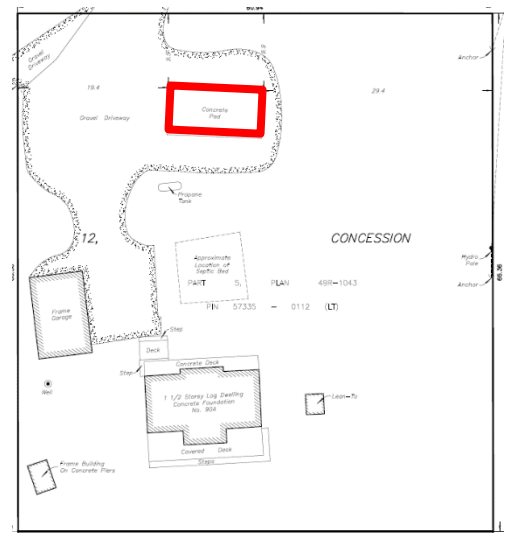
Should any additional comments be received, they will be provided at the Hearing.

### 14. **GENERAL PLANNING COMMENTS**

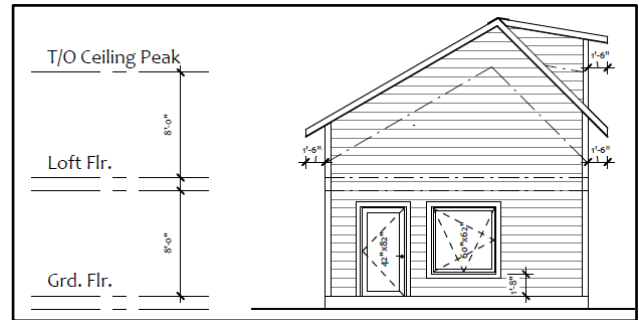
Section 45(1) of the Planning Act provides that a Committee of Adjustment may authorise a minor variance from the provisions of the zoning by-law if the request maintains: the general intent and purpose of both the Official Plan and the Zoning By-law, if the development is desirable and appropriate for the lands, building or structure, and the variance is in fact minor.

The applicant has provided a Planning Justification letter and sketches of the coach house, which provide an overview and justification for the proposed application. The application details are summarized as follows:

- secondary dwelling (coach house) will be located on the existing concrete pad (see red parcel on the right) and have the following setbacks :
  - Front Yard: 9.5 metres
  - Side Yards: 19.4 and 29.4 metres
- coach house will have a total floor area of approximately 96 squared metres
- private well and septic services will be shared with the principle dwelling



- no tree removal will be required
- surrounding land uses include two single detached dwellings and forested area
- coach house's height will be 5.48 metres (18 feet) (see right)



### Official Plan and Zoning Requirements

The Official Plan policies and Zoning By-law provisions largely mirror one another. In evaluating the proposed minor variance, the following policies regarding privately serviced secondary dwellings from Section 2.2(24)(2) of the Official Plan must be considered, as follows:

- (a) *One additional (a secondary dwelling) unit may be considered per lot*

Only one secondary dwelling unit is being considered with this application. No other secondary dwelling units are proposed.

- (b) *The local Zoning By-law may include minimum standards for secondary dwelling units including (but not limited to): dwelling unit area, minimum lot area, parking, and servicing.*

Zoning provisions concerning secondary dwellings are addressed later in this report.

- (c) *Not applicable.*

- (d) *For lots less than 0.8 Ha in area, but greater than 0.4 Ha, a secondary dwelling unit may be considered on a case-by-case basis through the submission of a minor variance application. The proponent of the application will be required to demonstrate that the site is suitable for the proposed secondary unit including matters such as (but not limited to): dwelling unit area, minimum lot area, surrounding land uses, parking, and servicing. An engineering report prepared by a qualified professional shall be submitted with the minor variance application that demonstrates that the additional effluent output can be satisfactorily managed and that there is a potable source of water (quantity and quality) for the secondary unit.*

The subject property is exactly 0.4 hectares in area, and as such the applicant has submitted a Planning Justification letter and scoped HATA.

Within the letter, details of the site are provided, including dwelling unit area, lot area, surrounding land uses, and servicing (see previous application summary). The HATA demonstrates that, provided the recommendations of the report are followed, the site can support a secondary dwelling on shared private water and sewage services. As such, this policy has been met.

- (e) *A secondary dwelling unit may not be severed from the lot with the primary dwelling.*

The applicant will be unable to sever the secondary dwelling in accordance with Official Plan policies.

- (f) *Not applicable.*

- (g) *Not applicable.*

- (h) *A secondary dwelling may be permitted on waterfront properties by minor variance provided a study is submitted demonstrating no negative impacts on the water body, the availability of potable drinking water (quantity and quality), and that addresses septic effluent.*

The scoped HATA demonstrates that there is sufficient potable water available and that the site can adequately manage septic effluent, provided the recommendations of the report are implemented.

The Planning Justification letter notes that the findings of the HATA indicate the subject site can support the proposed coach house with respect to water quality, quantity, and lake protection. As such, this policy has been met.

- (i) *Not applicable.*

The application must also be evaluated against the zoning provisions of Section 3.34 - Secondary Dwelling Units, and is as follows:

- (a) *[Secondary dwellings] shall only be permitted where adequate servicing is or can be made available*

The subject property has an existing well and septic system that services the existing (main) dwelling. The well is proposed to also service the secondary dwelling, while a new septic system will be implemented in order to accommodate both dwellings, in accordance with the recommendations of the HATA. As such, this provision is met.

- (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. Properties with 2 Ha or less, the secondary dwelling unit is required to share the same water and/or septic services with the primary dwelling. For lots on private services that are greater than 0.4 ha but less than 0.8 ha, a secondary dwelling may be considered through the submission and approval of a minor variance. The proponent of the application is required to submit a study addressing matters outlined in the Official Plan policy.*

A scoped HATA has been submitted in support of the application that addresses the matters outlined in the corresponding Official Plan policy. Consideration of this application is to be addressed in the following sections.

**This provision is not met. The variance requests permission for the secondary dwelling to be permitted on a privately serviced lot 0.4 hectares in size.**

- (c) *The gross floor area of the secondary dwelling unit must be less than the gross floor area of the primary dwelling unit.*

The main dwelling has an approximate 174 square metre footprint and is two-storeys. The proposed secondary dwelling unit has an approximately 96 square metre footprint, consisting of a 65 square metre ground floor area and 31 square metre loft. Since the secondary dwelling proposes less floor space than the existing house, this provision is satisfied.

- (d) *A secondary dwelling unit that is a Coach house, or is located in an accessory building to the primary dwelling unit shall be subject to the following:*
- a. *The minimum side yard width and rear yard depth applicable to the primary dwelling unit shall also apply to the coach house.*

The secondary dwelling exceeds the minimum 3.0 side yard setback by 16.4 and 26.4 metres, and exceeds the minimum 7.5 metre rear yard setback by more than 50 metres. This provision is satisfied.

- 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.*

The secondary dwelling unit exceeds the minimum 7.5 metre front yard setback by 3 metres however, it is located in the front yard in the Limited Service Residential (LSR) Zone. Section 2.222 Yard, Front is defined as:

" means a yard extending across the full width of a lot between the front lot line and the nearest part of any building, structure or excavation on the lot; FRONT YARD DEPTH means the shortest horizontal distance between the front lot line of the lot and the nearest part of any building, structure or excavation on the lot."

**This provision is not met. The variance requests permission for the dwelling in the front yard.**

- c. *Not applicable to this lot scenario.*
- d. *The maximum height shall be the permitted height of an accessory building.*

A maximum 5.48 metre height is proposed for the secondary dwelling unit. This extends beyond the maximum 5 metre accessory building height required by Section 3.3.6 of the Zoning By-law.

**This provision is not met. The variance requests permission for the maximum secondary dwelling height maximum height of a coach house to be increased from 5 to 5.5 metres.**

(e) *Not applicable.*

(f) *A minimum of one parking space is required for a secondary dwelling unit.*

The survey sketch prepared by Adam Kasprzak Surveying Ltd. shows a separate parking area to accommodate at least one vehicle for the secondary dwelling unit. This provision is met.

(g) *A maximum of one secondary dwelling unit shall be permitted per primary dwelling*

Only one secondary dwelling unit is proposed. This provision is met.

(h) *Secondary dwellings shall not be permitted on lands within a floodway or within 30 metres of the high water mark.*

The floodway along the Madawaska River between the Arnprior dam and the Stewartville dam is defined in Section 3.27 as lands below the 100.58 metre geodetic contour. GIS mapping indicates that the entire property is located above the 115 metre geodetic contour and over 50 metres away from the high water mark. Therefore, this provision has been met.

(i) to (k) *not applicable.*

(l) *Secondary dwellings on waterfront lots:*

a. *Not applicable.*

b. *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 policy.*

The scoped HATA submitted with the application addresses the availability of potable drinking water (quantity and quality), and septic effluent. The Planning Justification letter reiterates these findings and note that they indicate there will be no negative impacts on Lake Madawaska/Madawaska River. Consideration of this application through the four tests of a minor variance is to be addressed in the following sections.

**This provision is not met. The variance if approved would allow the secondary dwelling to be permitted on a waterfront lot.**



### Response to Resident Inquiries

In response to the resident of 90B Mitchell Lane's inquiry:

- Section 45 of the *Planning Act* and the associated O. Reg 200/96 require that a minor variance application be heard within 30 days of receiving the application. The application for this file no. A-8/24 was received July 3, 2024, and must be heard before August 2, 2024. Therefore, the initial hearing cannot be delayed.
- The resident was provided with a copy of the amended Planning Justification letter for additional information on the application.

### Intent of the Official Plan and Zoning By-law

The policies of the Official Plan and the Township's Zoning By-law for secondary dwelling units largely mirror each other in their requirements. The zoning establishes more specific requirements relating to setbacks, building height and parking requirements, which have been reviewed.

All requirements of the Official Plan have been met. The applicant has demonstrated through the Planning Justification letter, HATA, and sketches that the subject property can support a secondary dwelling on shared private services in regards to water portability, septic effluent, and minimal to no anticipated impacts on the surrounding context, provided that the noted recommendations are implemented.

The majority of the Zoning provisions are met, with the exception of those which the subject application seeks variance from. The HATA and Planning Justification letter indicate that by sharing private services with the main dwelling, installing a new tertiary treatment septic system, and following the recommendations of the provided documents, no impacts are anticipated from the proposed secondary dwelling on a 0.4 ha waterfront lot. Thus, the intent of Section 3.34(b) and (l)(b) are met.

Prohibiting coach houses in the front yard of a residential zone was established with the assumption that there would be adequate space and visual screening to accommodate a coach house in the rear yard. The rear yard in the present situation is limited in space compared to the front yard, and there is a notable amount of vegetation along the front lot line to provide screening (see right). As such, the present proposal meets the intent of Section 3.34(d)(b).



Lastly, the proposed height increase of 0.5 metres maintains the intent of the Zoning by-law, as it can still be screened from adjacent uses and indicates the building is clearly secondary to the principle dwelling. Based on these considerations, the proposed use meets the intent of the Official Plan and Zoning By-law.

Is the variance minor

The scoped HATA states that the coach house on shared private services can be supported by the existing water supply aquifer, indicating there will be minimal to no impact to the groundwater supply of the surrounding lands. The Planning Justification letter goes on to note that the results of the HATA also indicate there will be no impact on Lake Madawaska/Madawaska River. With the installation of the new septic system, septic effluent is not expected to affect water portability, and nitrates are expected to be below MECP limits by the property boundary.

Given the size of the lot, the abundance of trees on site, and the location of the existing dwelling, the secondary dwelling is proposed in the only practical location on the property that would not require any additional tree clearance for construction. It will exceed all minimum set back requirements and be located away from the primary dwelling. The size of the new dwelling will be secondary to the principle dwelling. Additionally, the increase in height of 0.5 metres is negligible and will be screened by the surrounding vegetation (see conceptual photo above).



Based on this, the variance can be considered minor.

Is the variance desirable

The proposed dwelling will provide an additional housing unit in the Township. The scoped HATA has demonstrated the lot is of sufficient size to accommodate the use on private services. Further, the additional dwelling unit will be screened from the abutting dwellings on either side by existing vegetation. No tree removal will be required in its proposed location, and the increase in building height will enable an appropriate design for the proposed building and land use. For these reasons, the variance can be considered desirable.

Overall, based on the above review, it is staff's opinion that the proposed variance to permit a privately serviced secondary dwelling (coach house) in the front yard of a 0.4 hectare waterfront lot, that has a height of 5.5, in the Limited Service Residential (LSR) Zone 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 following variances for 90A Mitchell Lane, subject to the conditions outlined below:

That a variance be granted to Section 3.34(b) to permit a privately serviced secondary dwelling (coach house) on a lot 0.4 hectares in size;

That a variance be granted to Section 3.34(d)(b) to permit a secondary dwelling unit (coach house) in the front yard of 90A Mitchell Lane;

That a variance be granted to Section 3.34(d)(d) to increase the maximum height of a secondary dwelling (coach house) from 5 to 5.5 metres;

That a variance be granted to Section 3.34(l)(b) to permit a secondary dwelling (coach house) on a waterfront lot.

The following conditions are recommended:

1. A new tertiary treatment septic system with a minimum of 50% nitrate reduction shall be constructed to service both the existing dwelling and the new coach house.
2. An annual maintenance contract for the tertiary treatment system shall be established – confirmation is to be provided to the Township.
3. The on-site sewage system shall be designed in accordance with the Ontario Building Code.
4. A Sewage System Permit and Building Permit shall be issued prior to the commencement of construction of the proposed coach house.
5. All construction work associated with the coach house and septic system installation shall be carried out expeditiously, with good trade practices, as to cause minimal environmental disturbance and nuisance to neighbours.
6. Every effort shall be made to restrict the disturbance of soil and vegetation cover during construction. Vegetation removal shall be limited to the greatest extent possible, and only as necessary to accommodate the placement of the coach house and installation of the replacement septic system.
7. Where adjacent trees are to be retained, sturdy protective fencing is recommended around the perimeter of the work areas to ensure the adjacent vegetation to be retained is not impacted by the construction and to isolate the work area from sensitive wildlife. The protective fencing is to be installed at the outer limits of the critical root zone of the retained adjacent trees.
8. Sediment and erosion control measures, in accordance with best management practices (i.e silt fencing), are to be established adjacent to the construction area and shall be implemented prior to construction and maintained throughout the construction process. Any sediment control works shall remain in place until all disturbed areas have been stabilized and vegetation is well established.

9. Drainage patterns on this property should not be adjusted to allow any further run-off from the site onto adjacent lands or waterbodies. Roof runoff and eavestroughing should be directed to soak-away pits, grass or other permeable surfaces.

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Date: July 16, 2024  
Prepared by: Nicole Moore, Junior Planner  
Reviewed by: Bruce Howarth, MCIP, RPP.  
Manager of Planning Services

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