

Septic Office

3889 Rideau Valley Drive Box 599 Manotick, ON K4M 1A5

Phone: 613-692-3571 PRESS "4" for septic office 1-800-267-3504 Fax: 613-692-1507 Email: septic@rvca.ca

SITE ADDRESS: 4 Campbell Reid Court Township: OSG-HUN-GLO-FIT-CUM-NEP-GOU-RID-KAN-TOR

CONTACT: 1. A/G Clender Holdings Ltd 2. ARCH-NOVA Design Inc 3. PH Robinson Consulting

Attached is your Sewage System Permit. A minimum of two inspections are required before your proposed sewage system can be approved for use (additional inspections may be required for clay soils/bedrock and/or re-inspections). Inspections must be requested in writing. Please see attached:

- Inspection fax request form (all inspections MUST be requested in writing)
As-built components and drawing form
Copy of the approved application and schedule pages
Approved Part 8 permit: \*Electronic copy only - Be sure to INCLUDE in Building Application Package for Plans Examiner at CITY of OTTAWA client services, if NEW or RENO construction project.

Special Note

- A permit is valid for 12 months from the original date of issuance noted in "permit date". If lapsed, it may be renewed only once for a period of 12 months from the date of expiry.
- No person shall make a material change or cause a material change to be made to a plan, specification, document or other information on the basis of which a permit was issued without notifying, filing details with and obtaining the authorization of the Chief Building Official. (Building Code Act 1992, c.23, s.8(12))

Sewage System Permit Construction Requirements

- 1. Clay Soils/Bedrock only (if required per issued Approval)
In clay soils/bedrock, a site preparation inspection is required. The total contact area must be properly prepared. Scarification must be done under dry conditions prior to importing leaching bed fill.
2. Installation Inspection - 2nd inspection
When the sewage system is substantially completed (i.e., before the final fill is placed over the septic tank and leaching bed system) an installation inspection is required. Prior to any inspection request, the following must be submitted:
a) "as-built components" and "as-built drawings" - see attached form
b) "engineer letter" - if the system is engineered
c) grain size analysis and weight bills for all Filter Media types of septic systems
d) Weigh bills for washed septic stone, where applicable
e) Maintenance/service contract for treatment unit installed
3. Final Grading Inspection - 3rd inspection
When construction of the sewage system is complete, a final grading inspection is required. Before a Certificate of Completion can be issued, the following must be complete:
a) The leaching bed and septic tank must be covered with sand fill and topsoil and graded accordingly
b) All conditions of the Sewage System Permit & comments on the installation inspection report must be met
c) The depth of cover & material type must be identified by inspection pipes or holes placed over trenches at 4 corners of bed
d) The 4 corners of the bed must be staked



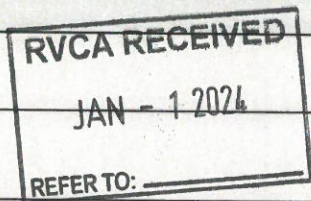
# Application for a Permit to Construct or Demolish

This form is authorized under subsection 8(1.1) of the *Building Code Act, 1992*

SEPTIC FILE #

For use by Principal Authority

|   |                               |
|---|-------------------------------|
| Application number:<br><div style="text-align: center; font-size: 1.2em; font-weight: bold;">23-265</div> | Permit number (if different): |
| Date received:<br><div style="text-align: center; font-weight: bold;">OTTAWA</div>                        | Roll number:                  |



Application submitted to: OTTAWA SEPTIC SYSTEM OFFICE  
(Name of municipality, upper-tier municipality, board of health or conservation authority)

| A. Project information                          |  |                               |  |
|---|--|-------------------------------|--|
| Building number, street name<br>4 Campbell Reid | Unit number                                | Lot/con.<br>Pt Lt 15, C 3     |  |
| Municipality<br>Kanata                          | Postal code<br>K2K 1X7                     | Plan number/other description |  |
| Project value est. \$<br>\$60,000               | Area of work (m <sup>2</sup> )<br>4,864 m2 |                               |  |

| B. Purpose of application   |   |   |                                     |   |
|---|---|---|-------------------------------------|---|
| <input checked="" type="checkbox"/> New construction                      | <input type="checkbox"/> Addition to an existing building | <input type="checkbox"/> Alteration/repair                | <input type="checkbox"/> Demolition | <input type="checkbox"/> Conditional Permit |
| Proposed use of building : Veterinary Clinic (additi<br>Veterinary Clinic |   | Current use of building: existing house<br>Existing house |                                     |   |

Description of proposed work: New construction for a veterinary clinic. Existing house is on the site. Existing septic system to be replaced with a new system to service both buildings.

| C. Applicant                            |                        |   |                                   |
|---|------------------------|---|-----------------------------------|
| Applicant is:                           | Owner or               | Authorized agent of owner                                 |                                   |
| Last name<br>Olender                    | First name<br>Andrzej  | Corporation or partnership<br>A & G Olender Holdings Ltd. |                                   |
| Street address<br>1405 Houston Crescent |                        | Unit number   | Lot/con.                          |
| Municipality<br>Ottawa                  | Postal code<br>K2W 1B6 | Province<br>ON  | E-mail<br>aolender.mrvh@gmail.com |
| Telephone number<br>(613) 8582520       | Fax<br>( )             | Cell number<br>( )  |                                   |

| D. Owner (if different from applicant) |             |                            |          |
|--|-------------|----------------------------|----------|
| Last name                              | First name  | Corporation or partnership |          |
| Street address                         |             | Unit number                | Lot/con. |
| Municipality                           | Postal code | Province                   | E-mail   |
| Telephone number<br>( )                | Fax<br>( )  | Cell number<br>( )         |          |



|                              |             |                                 |                      |  |
|------------------------------|-------------|---------------------------------|----------------------|--|
| <b>E. Builder (optional)</b> |             |                                 | <b>SEPTIC FILE #</b> |  |
| Last name                    | First name  | Corporation or partnership name |                      |  |
| Street address               |             | Unit number                     |                      |  |
| Municipality                 | Postal code | Province                        | E-mail               |  |
| Telephone number<br>( )      | Fax<br>( )  | Cell number<br>( )              |                      |  |

**F. Tarion Warranty Corporation (Ontario New Home Warranty Program)**

|  |     |    |
|--|-----|----|
| i. Is proposed construction for a new home as defined in the <i>Ontario New Home Warranties Plan Act</i> ? If no, go to section G. | Yes | No |
| ii. Is registration required under the <i>Ontario New Home Warranties Plan Act</i> ?   | Yes | No |
| iii. If yes to (ii) provide registration number(s): _____  |     |    |

**G. Required Schedules**

i) Attach Schedule 1 for each individual who reviews and takes responsibility for design activities.

ii) Attach Schedule 2 where application is to construct on-site, install or repair a sewage system.

**H. Completeness and compliance with applicable law**

|   |                                      |                          |
|---|--------------------------------------|--------------------------|
| i) This application meets all the requirements of clauses 1.3.1.3 (5) (a) to (d) of Division C of the Building Code (the application is made in the correct form and by the owner or authorized agent, all applicable fields have been completed on the application and required schedules, and all required schedules are submitted).<br>Payment has been made of all fees that are required, under the applicable by-law, resolution or regulation made under clause 7(1)(c) of the <i>Building Code Act, 1992</i> , to be paid when the application is made. | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| ii) This application is accompanied by the plans and specifications prescribed by the applicable by-law, resolution or regulation made under clause 7(1)(b) of the <i>Building Code Act, 1992</i> .   | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| iii) This application is accompanied by the information and documents prescribed by the applicable by-law, resolution or regulation made under clause 7(1)(b) of the <i>Building Code Act, 1992</i> which enable the chief building official to determine whether the proposed building, construction or demolition will contravene any applicable law.   | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| iv) The proposed building, construction or demolition will not contravene any applicable law.   | <input checked="" type="radio"/> Yes | <input type="radio"/> No |

**I. Declaration of applicant**

I, Andrzej Olender (print name) declare that:

- The information contained in this application, attached schedules, attached plans and specifications, and other attached documentation is true to the best of my knowledge.
- If the owner is a corporation or partnership, I have the authority to bind the corporation or partnership.

Date: July 26, 2023 Signature of applicant: [Signature]

Updated 21.12.2023

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 JAN - 1 2024  
 REFER TO: \_\_\_\_\_

Personal information collected under the authority of subsection 8(1.1) of the *Building Code Act, 1992*, and will be used in the administration and enforcement of the *Building Code Act, 1992*. Questions about the collection of personal information may be addressed to: a) the Chief Building Official of the municipality or upper-tier municipality to which this application is being made, or, b) the inspector having the powers and duties of a chief building official in relation to sewage systems or plumbing for an upper-tier municipality, board of health or conservation authority to whom this application is made, or, c) Director, Building and Development Branch, Ministry of Municipal Affairs and Housing 777 Bay St., 2nd Floor. Toronto, M5G 2E5 (416) 585-6666.



## Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

|   |                               |   |                             |
|---|-------------------------------|---|-----------------------------|
| <b>A. Project Information</b>   |                               |   |                             |
| Building number, street name<br>4 Campbell Reid   |                               | Unit no.                                  | Lot/con.<br>P111-15-C3      |
| Municipality<br>Kanata  | Postal code<br>K2K 1X7        | Plan number/ other description            |                             |
| <b>B. Individual who reviews and takes responsibility for design activities</b>   |                               |   |                             |
| Name<br>Zoran Mrdja   |                               | Firm<br>ARCH-NOVA Design Inc              |                             |
| Street address<br>45 Banner Rd  |                               | Unit no.                                  | Lot/con.                    |
| Municipality<br>Ottawa  | Postal code<br>K2H 8X5        | Province<br>ON                            | E-mail<br>zoran@archnova.ca |
| Telephone number<br>(613)7023403  | Fax number<br>( )             | Cell number<br>( )                        |                             |
| <b>C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]</b>  |                               |   |                             |
| House   | HVAC – House                  | Building Structural                       |                             |
| Small Buildings   | Building Services             | Plumbing – House                          |                             |
| Large Buildings   | Detection, Lighting and Power | Plumbing All Buildings                    |                             |
| Complex Buildings   | Fire Protection               | On-site Sewage Systems                    |                             |
| Description of designer's work<br>Design for the new septic tank for the proposed veterinary clinic.  |                               | 23-265<br>OTTAWA                          |                             |
| <b>D. Declaration of Designer</b>   |                               |   |                             |
| I <u>Zoran Mrdja, P.Eng. FEC.</u>   |                               | declare that (choose one as appropriate): |                             |
| (print name)  |                               |   |                             |
| I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4. of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories. |                               |   |                             |
| Individual BCIN: _____  |                               |   |                             |
| Firm BCIN: _____  |                               |   |                             |
| I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5. of Division C, of the Building Code.  |                               |   |                             |
| Individual BCIN: _____  |                               |   |                             |
| Basis for exemption from registration: _____  |                               |   |                             |
| The design work is exempt from the registration and qualification requirements of the Building Code.  |                               |   |                             |
| Basis for exemption from registration and qualification: _____  |                               |   |                             |
| I certify that:   |                               |   |                             |
| 1. The information contained in this schedule is true to the best of my knowledge.  |                               |   |                             |
| 2. I have submitted this application with the knowledge and consent of the firm.  |                               |   |                             |
| Date  |                               | Signature of Designer                     |                             |

**NOTE:**

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) (c) of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of practice, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

## Schedule 2: Sewage System Installer Information

|   |                               |  |                                  |               |
|---|-------------------------------|--|----------------------------------|---------------|
| <b>A. Project Information</b>   |                               |  |                                  |               |
| Building number, street name<br><b>4 Campbell Reid</b>  |                               | Unit number                                | Lot/con.<br><b>Pt Lt 15, C 3</b> |               |
| Municipality<br><b>Kanata</b>   | Postal code<br><b>K2K 1X7</b> | Plan number/ other description             |                                  |               |
| <b>B. Sewage system installer</b>   |                               |  |                                  |               |
| Is the installer of the sewage system engaged in the business of constructing on-site, installing, repairing, servicing, cleaning or emptying sewage systems, in accordance with Building Code Article 3.3.1.1, Division C?   |                               |  |                                  |               |
| Yes (Continue to Section C)   |                               | No (Continue to Section E)                 |                                  |               |
| <div style="border: 2px solid black; padding: 5px; display: inline-block;"> <b>RVGA RECEIVED</b><br/> <b>JAN - 4 2023</b><br/> <small>Installer unknown at time of application (Continue to Section E)</small> </div>   |                               |  |                                  |               |
| <b>C. Registered installer information (where answer to B is "Yes")</b>   |                               |  |                                  |               |
| Name  |                               | BCIN                                       |                                  |               |
| Street address  |                               | Unit number                                | <b>SEPTIC FILE #</b>             |               |
| Municipality  | Postal code                   | Province                                   | E-mail                           | <b>23-265</b> |
| Telephone number<br>( )   | Fax<br>( )                    | Cell number<br>( )                         | <b>OTTAWA</b>                    |               |
| <b>D. Qualified supervisor information (where answer to section B is "Yes")</b>   |                               |  |                                  |               |
| Name of qualified supervisor(s)   |                               | Building Code Identification Number (BCIN) |                                  |               |
|   |                               |  |                                  |               |
| <b>E. Declaration of Applicant:</b>   |                               |  |                                  |               |
| <p>I, <u>Andrzej Olender</u> declare that:</p> <p style="text-align: center;">(print name)</p> <p>I am the applicant for the permit to construct the sewage system. If the installer is unknown at time of application, I shall submit a new Schedule 2 prior to construction when the installer is known;</p> <p><u>OR</u></p> <p>I am the holder of the permit to construct the sewage system, and am submitting a new Schedule 2, now that the installer is known.</p> <p>I certify that:</p> <ol style="list-style-type: none"> <li>The information contained in this schedule is true to the best of my knowledge.</li> <li>If the owner is a corporation or partnership, I have the authority to bind the corporation or partnership.</li> </ol> <p>Date <u>July 26, 2023</u> Signature of applicant <u><i>A. Olender</i></u></p> |                               |  |                                  |               |
| <b>updated 21.12.2023</b>   |                               |  |                                  |               |



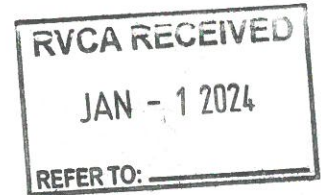
Schedule 4

Proposed Services
Complete Sections 1 thru 7

Do Not Complete
Permit #
Revision #
Date



Ottawa Septic System Office Bureau des systèmes septiques d'Ottawa



1. Engineered

- Yes
No

2. Water supply

- Proposed
Existing

3. Type of work proposed

- New Installation
Replacement
Alteration

4. Type of Well

- Dug/bored/Sandpoint well
Drilled well
Municipal
Other

5. Residential Sewage Design Flow Info.

Table with 2 columns: Category (Bedrooms, House floor area, People, Total Fixture Units, Residential Flow) and Value (4, 2368, 4, 26.5, 2325)

6. Sewage Design Flow Other Occupancies

Design Flow 1875 L/day
Detailed sewage flow calculations:

7. Type of System

- Treatment Unit
Class 2 - Leaching Pit
Class 3 - Cesspool
Class 4 - Shallow Buried Trench
Class 4 - Trench (Schedule 9)
Class 4 - Filter Media (Schedule 10)

- Class 4 - BMEC Area Bed (Schedule 11)
Class 4 - "Type A" Dispersal (Schedule 13)
Class 4 - "Type B" Dispersal (Schedule 14)
Class 5 - Holding Tank (9000L min)
Tank/Treatment Unit/Pump Chamber ONLY
Effluent Filter/Risers ONLY



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 Permit No \_\_\_\_\_  
 Revision No \_\_\_\_\_  
 Date \_\_\_\_\_

**Schedule 5  
 Sewage System Details**

Type of System Class 4 Trench (Schedule 4)  
 Septic/Holding Tank Size: 10000 Litres Make: Waterloo  
 Septic Tank Effluent Filter Make: Waterloo Model: BFCN-9400

**SEPTIC FILE #**  
**23-265**  
**OTTAWA**

Treatment Unit – Make & Model Waterloo AD-12260 (anaerobic digester tank)

Number of Units:

Other: \_\_\_\_\_

Refer to Typical Drawing #

Pump(s) required yes

Mantle Information:

Pump Rate manufacturer to provide L/15min

Native or imported = 15m in South direction(s)

**Note: Alarm required for all  
 pumping systems**

Slope subgrade 2.0 % slope  
South direction(s)

Site to be Scarified (If clay) YES NO clay layer may be required. to be confirmed  
 Clay Seal Required (If bedrock) YES NO upon stripping the site.

- Trench**
  - Distribution Pipe Length \_\_\_\_\_ m
  - Loading Area \_\_\_\_\_ m<sup>2</sup>
  - Type of Chamber \_\_\_\_\_
  - Length of Chamber \_\_\_\_\_ m
- Dispersal Bed**
- BMEC**  **Type A**  **Type B**
  - Stone 150 m<sup>2</sup>
  - Sand 475 m<sup>2</sup>
  - Pipe 84 m<sup>2</sup>
  - Linear Loading 50 L/m<sup>2</sup>
- Shallow Buried Trench**
  - Pipe Length \_\_\_\_\_ m
- Filter Media Bed**
  - Stone \_\_\_\_\_ m<sup>2</sup>
  - Extended Base \_\_\_\_\_ m<sup>2</sup>
  - Pipe \_\_\_\_\_ m
  - Weight of Filter Media \_\_\_\_\_ Kg
  - Loading Area \_\_\_\_\_ m

- Tank/Treatment Unit/Pump Chamber Replacement ONLY**
- Effluent Filter & Riser ONLY**

Construction Notes:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_





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 Permit # \_\_\_\_\_  
 Revision # \_\_\_\_\_  
 Date \_\_\_\_\_ **SEPTIC FILE #**

**Schedule 6**  
**Soil and Water Table Information**  
**(Minimum depth of test pit: 2 metres)**

**23-265**

**see attached report: Gemtec HydroGeo report**

**OTTAWA**

|   |   |
|---|---|
| Name of Applicant/Agent: _____<br>Date: _____ Time: _____<br>Applicant/Agent Signature: _____ | Inspector: _____<br>Date: _____ Time: _____<br>Inspector Signature: _____ |
|---|---|

| EG (.....)  | Soil Description | T | EG (.....)  | Soil Description | T |
|---|------------------|---|---|------------------|---|
| <div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">.5m</div> <div style="margin-bottom: 10px;">1.0 m</div> <div style="margin-bottom: 10px;">1.5m</div> <div style="margin-bottom: 10px;">2.0 m</div> </div> |                  |   | <div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">.5m</div> <div style="margin-bottom: 10px;">1.0 m</div> <div style="margin-bottom: 10px;">1.5m</div> <div style="margin-bottom: 10px;">2.0 m</div> </div> |                  |   |
| <div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">.5m</div> <div style="margin-bottom: 10px;">1.0 m</div> <div style="margin-bottom: 10px;">1.5m</div> <div style="margin-bottom: 10px;">2.0 m</div> </div> |                  |   | <div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">.5m</div> <div style="margin-bottom: 10px;">1.0 m</div> <div style="margin-bottom: 10px;">1.5m</div> <div style="margin-bottom: 10px;">2.0 m</div> </div> |                  |   |

Test pits not available for inspection.  
 Engineer assumes all liability for soil  
 and HGWT info/elv's

**LEGEND**  
 BR = Bedrock                      HGWT = High ground water table                      EG = Existing grade  
 GWT = Ground water table                      M = metres                      T = percolation rate


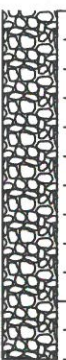



# RECORD OF TEST PIT 23-265

CLIENT: TSH Custom Homes  
 PROJECT: Proposed Commercial Building-4 Campbell Reid Court  
 JOB#: 65103.01  
 LOCATION: See Test Pit Location Plan, Figure 1

SHEET: 1 OF 1  
 DATUM: CGVD28  
 BORING DATE: Jun 23 2021

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| DEPTH SCALE METRES | SOIL PROFILE   |   |                 | SAMPLE NUMBER | SAMPLE TYPE | REFER TO: SHEET STRENGTH (Cu), kPa |    |    |    |    |                  |    |    |    |  | ADDITIONAL LAB. TESTING            | WATER LEVEL IN OPEN TEST PIT OR STANDPIPE INSTALLATION                              |
|--------------------|--|---|-----------------|---------------|-------------|------------------------------------|----|----|----|----|------------------|----|----|----|--|------------------------------------|---|
|                    | DESCRIPTION  | STRATA PLOT   | ELEV. DEPTH (m) |               |             | + NATURAL ⊕ REMOULDED              |    |    |    |    | WATER CONTENT, % |    |    |    |  |                                    |   |
|                    |  |   |                 |               |             | 10                                 | 20 | 30 | 40 | 50 | 60               | 70 | 80 | 90 |  |                                    |   |
| 0                  | Ground Surface<br>Dark brown to grey gravelly sandy silt with organics, rootlets, roots, cobbles, boulders and construction debris (FILL MATERIAL) |  | 93.21           | 1             | GS          |                                    |    |    |    |    |                  |    |    |    |  | Backfilled with excavated material |  |
| 1                  | Dark brown silty clay with organic material (FORMER TOPSOIL)   |  | 92.21<br>1.00   | 2             | GS          |                                    |    |    |    |    |                  |    |    |    |  |                                    |   |
|                    | Test pit terminated due to practical shovel refusal on inferred bedrock surface  |   | 92.01<br>1.20   |               |             |                                    |    |    |    |    |                  |    |    |    |  |                                    |   |
| 2                  |  |   |                 |               |             |                                    |    |    |    |    |                  |    |    |    |  |                                    |   |
| 3                  |  |   |                 |               |             |                                    |    |    |    |    |                  |    |    |    |  |                                    |   |
| 4                  |  |   |                 |               |             |                                    |    |    |    |    |                  |    |    |    |  |                                    |   |
| 5                  |  |   |                 |               |             |                                    |    |    |    |    |                  |    |    |    |  |                                    |   |

GEO.-TESTPIT LOG 65103.01\_GINT\_V01\_2021.07\_05.GPJ GEMTEC 2018.GDT 9/7/21



# RECORD OF BOREHOLE 22-02

CLIENT: Dr. Andrzej Olender  
 PROJECT: Phase Two ESA, 4 Campbell Court, Kanata ON  
 JOB#: 65103.01  
 LOCATION: 4 Campbell Court, Kanata, ON

SHEET: 1 OF 1  
 DATUM: Unknown  
 BORING DATE: Mar 28 2022

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| DEPTH SCALE METRES | BORING METHOD | SOIL PROFILE                     |             |                 | SAMPLE DATA |      |               |            | COMBUSTIBLE VAPOUR CONCENTRATION (ppm) | ODOUR             | TPH (mg/kg) | MONITORING WELL INSTALLATION AND NOTES |
|--------------------|---------------|----------------------------------|-------------|-----------------|-------------|------|---------------|------------|--|-------------------|-------------|--|
|                    |               | DESCRIPTION                      | STRATA PLOT | ELEV. DEPTH (m) | NUMBER      | TYPE | RECOVERY (mm) | BLOWS/0.3m |  |                   |             |  |
| 0                  | Direct Push   | Ground Surface                   |             | 93.27           |             |      |               |            |  |                   |             |  |
| 1                  |               | Brown sand (FILL)                |             |                 | 1           |      | 558.8         |            | Metals, PAHs, PHCs, PCBs, VOCs         | HEX: 0;<br>IBL: 1 |             | Native backfill                        |
|                    |               | Dark organic matter (PEAT)       |             | 92.18<br>1.09   |             |      |               |            |  |                   |             |  |
|                    |               | End of borehole<br>Auger refusal |             | 92.05<br>1.22   |             |      |               |            |  |                   |             |  |

SEPTIC FILE #  
 23-265  
 OTTAWA

ENV - BOREHOLE LOG CAMPBELL COURT GINT.GPJ GEMTEC 2018.GDT 5/3/22



LOGGED: EW  
 CHECKED: MB





# RECORD OF BOREHOLE 22-04

CLIENT: Dr. Andrzej Olender  
 PROJECT: Phase Two ESA, 4 Campbell Court, Kanata ON  
 JOB#: 65103.01  
 LOCATION: 4 Campbell Court, Kanata, ON

SHEET: 1 OF 1  
 DATUM: Unknown  
 BORING DATE: Mar 28 2022

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**JAN - 1 2024**

| DEPTH SCALE METRES | BORING METHOD | SOIL PROFILE                                 |   |                 | SAMPLE DATA |      |               |            |                     |  |       | MONITORING WELL INSTALLATION AND NOTES |             |   |
|--------------------|---------------|--|---|-----------------|-------------|------|---------------|------------|---------------------|--|-------|--|-------------|---|
|                    |               | DESCRIPTION                                  | STRATA PLOT   | ELEV. DEPTH (m) | NUMBER      | TYPE | RECOVERY (mm) | BLOWS/0.3m | LABORATORY ANALYSES | COMBUSTIBLE VAPOUR CONCENTRATION (ppm) | ODOUR |  | TPH (mg/kg) |   |
| 0                  | Direct Push   | Ground Surface                               |   | 93.25           |             |      |               |            |                     |  |       |  |             |   |
|                    |               | Dark grey brown sand with some gravel (FILL) |  | 92.72           |             |      |               |            |                     |  |       |  |             |   |
| 1                  |               | End of borehole<br>Auger refusal             |   | 0.52            | 1           | SS   | 444.5         |            |                     | HEX:10;<br>IBL: 1                      |       |  |             |  Native backfill |

SEPTIC FILE #  
 23-265  
 OTTAWA

ENV - BOREHOLE LOG CAMPBELL COURT GINT.GPJ GEMTEC 2018.GDT 5/3/22



LOGGED: EW  
 CHECKED: MB






# RECORD OF BOREHOLE

CLIENT: Dr. Andrzej Olender  
 PROJECT: Phase Two ESA, 4 Campbell Court, Kanata ON  
 JOB#: 65103.01  
 LOCATION: 4 Campbell Court, Kanata, ON

SHEET: 1 OF 1  
 DATUM: Unknown  
 BORING DATE: Mar 28 2022

RECEIVED  
 JAN - 1 2024  
 REFER TO:

| DEPTH SCALE METRES | BORING METHOD | SOIL PROFILE                           |   |                 | SAMPLE DATA |      |               |            |                               |  |       | MONITORING WELL INSTALLATION AND NOTES |   |                 |
|--------------------|---------------|--|---|-----------------|-------------|------|---------------|------------|-------------------------------|--|-------|--|---|-----------------|
|                    |               | DESCRIPTION                            | STRATA PLOT   | ELEV. DEPTH (m) | NUMBER      | TYPE | RECOVERY (mm) | BLOWS/0.3m | LABORATORY ANALYSES           | COMBUSTIBLE VAPOUR CONCENTRATION (ppm) | ODOUR |  | TPH (mg/kg)   |                 |
| 0                  | Direct Push   | Ground Surface                         |   | 93.64           |             |      |               |            |                               |  |       |  |   |                 |
|                    |               | Brown coarse sand with gravel (FILL)   |  | 93.13           | 1           | CA   | 092.2         |            | Metal, PAHs, PHCs, PCBs, VOCs | HEX: 0;<br>IBL: 0                      |       |  |  | Native backfill |
| 1                  |               | grey clay and silty clay with organics |  | 0.51            | 2           |      |               |            | Metal, PAHs, PHCs, PCBs, VOCs | HEX: 5;<br>IBL: 0                      |       |  |   |                 |
|                    |               |  |   | 92.55           |             |      |               |            |                               |  |       |  |   |                 |
|                    |               |  |   | 1.09            |             |      |               |            |                               |  |       |  |   |                 |

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ENV - BOREHOLE LOG CAMPBELL COURT GINT.GPJ GEMTEC 2018.GDT 5/3/22



LOGGED: EW  
 CHECKED: MB



REVISED  
JAN - 1 2024  
REFER TO: \_\_\_\_\_

Do Not Complete  
Permit # \_\_\_\_\_  
Revision # \_\_\_\_\_  
Date \_\_\_\_\_

Scale: 1Block = \_\_\_\_\_

### Schedule 7 Layout Section

N

SEPTIC FILE #  
23-265  
OTTAWA

○Dug Well ●Drilled Well ▲ Neighbouring Homes ◇Benchmark ---Tile Drainage —Property Line

Elevations (metric only)  
B.M. \_\_\_\_\_ m

B.M.Description \_\_\_\_\_

Exact Location \_\_\_\_\_

Min. of 5 elevations in proposed system area (in X pattern)

|                      |                            |
|----------------------|----------------------------|
| X <sub>1</sub> _____ | X <sub>2</sub> _____       |
| X <sub>3</sub> _____ | X <sub>4</sub> _____       |
| X <sub>5</sub> _____ | X <sub>6</sub> (toe) _____ |
| X <sub>7</sub> _____ | X <sub>8</sub> _____       |





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Do Not Complete  
Permit # \_\_\_\_\_  
Revision # \_\_\_\_\_  
Date \_\_\_\_\_

SEPTIC FILE #  
23-265

**Schedule 8  
Fixture unit count**

| Fixtures  | # Existing + # Proposed X unit count = Fixture Count |   |  |   |     |       |
|---|--|---|--|---|-----|-------|
| <b>Bathroom</b>   |  |   |  |   |     |       |
| Bathroom group (toilet, sink and tub or shower) installed in the <u>same</u> room                                 | 2  | + |  | X | 6   | = 12  |
| Bathtub with/without overhead shower  | 1  | + |  | X | 1.5 | = 1.5 |
| Shower stall  |  | + |  | X | 1.5 | =     |
| Wash basin (SINK) (1½inch trap)   | 2  | + |  | X | 1.5 | = 3   |
| Watercloset (TOILET) tank operated  | 1  | + |  | X | 4   | = 4   |
| Bidet   |  | + |  | X | 1   | =     |
| <b>Kitchen</b>  |  |   |  |   |     |       |
| Dishwasher  | 1  | + |  | X | 1   | = 1   |
| Sink with/without garbage grinder(s), domestic and other small type single, double or 2 single with a common trap | 1  | + |  | X | 1.5 | = 1.5 |
| <b>Other</b>  |  |   |  |   |     |       |
| Domestic washing machine  | 1  | + |  | X | 1.5 | = 1.5 |
| Combination sink and laundry tray single or double (Installed on 1½ trap)   | 1  | + |  | X | 1.5 | = 1.5 |

**\*Total: 26.5**

**\*Insert the TOTAL in section 5 of Schedule 4 (0.Reg 151/13 Table 7.4.9.3)**

- Sump pumps and floor drains are not to be connected to the sewage system.** Connection of such fixtures to a sewage system may lead to a hydraulic failure of the said system. The above mentioned fixtures should be discharged separately to an approved Class 2 (leaching pit) sewage system.
- Where laundry waste is not more than 20% of the total daily design sanitary sewage flow, it may discharge to a sewage system (Part 8, OBC, 8.1.3.1(2)).

\_\_\_\_\_  
Agent/Owner signature 04.10.2023  
Date

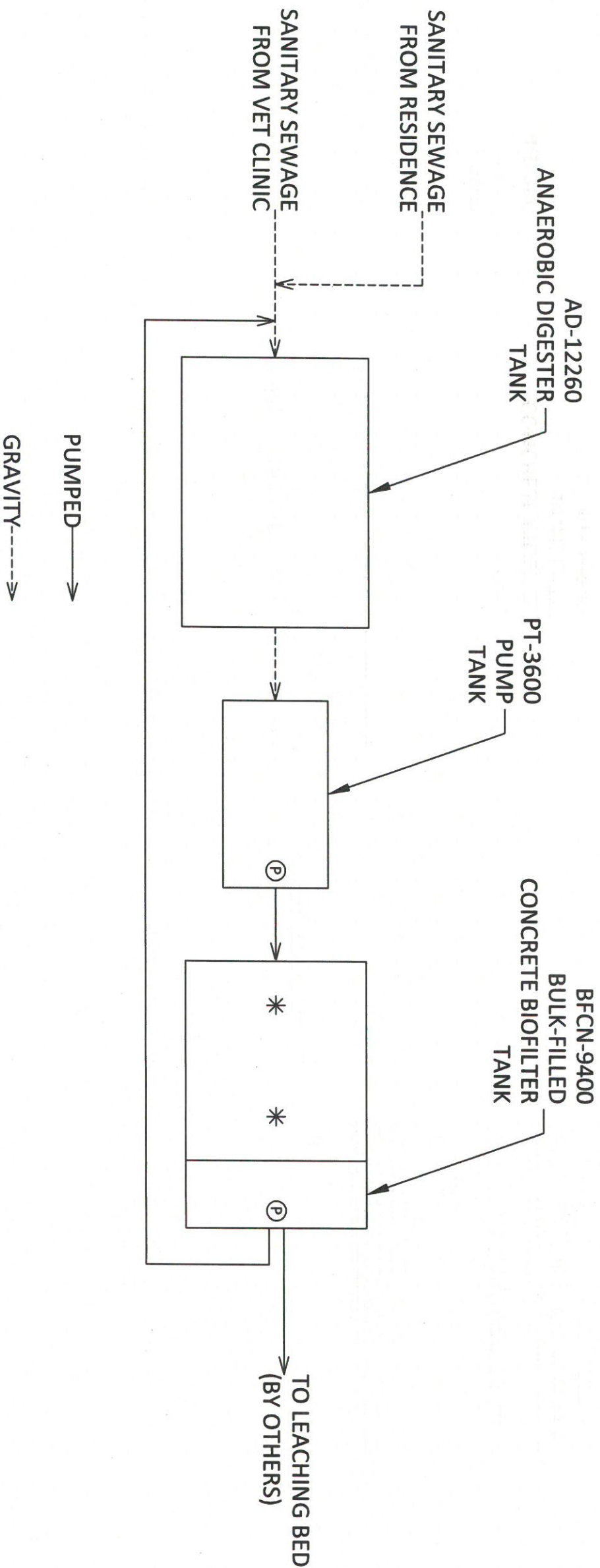




# PRELIMINARY SCHEMATIC ONLY

SEPTIC FILE #  
23-265  
OTTAWA

RVCA RECEIVED  
JAN - 1 2024  
REFER TO:



**NOTES:**

1. THIS IS A PRELIMINARY SCHEMATIC FOR A WATERLOO BIOFILTER SEWAGE TREATMENT SYSTEM. THIS IS FOR PLANNING PURPOSES ONLY AND IS NOT AN ENGINEERED DESIGN. WATERLOO BIOFILTER HAS NOT VISITED THE SITE TO CONFIRM SITE PARAMETERS. ALL FINAL DESIGN SPECIFICATIONS SUBMITTED FOR PERMIT ARE THE RESPONSIBILITY OF ARCH-NOVA DESIGN.
2. THE PEAK DAILY DESIGN SANITARY SEWAGE FLOW FOR THIS SITE IS 3,900 L/day. THIS CONSISTS OF A 2,325 L/day RESIDENCE AND A 1,575 L/day VET CLINIC. DESIGN FLOW PROVIDED BY ARCH-NOVA DESIGN, UNDER NO CIRCUMSTANCE SHOULD ANY PROCESS WATER OR PET WASTE GENERATED AT THE SITE BE DISCHARGED TO THE SANITARY SEWAGE TREATMENT SYSTEM.
3. THE RAW SANITARY SEWAGE IS EXPECTED TO HAVE THE FOLLOWING CHARACTERISTICS:  
BOD = 190 mg/L  
TSS = 210 mg/L
4. SANITARY SEWAGE FROM THE VET CLINIC AND THE RESIDENCE FLOW BY GRAVITY INTO AN AD-12260 ANAEROBIC DIGESTER TANK. THE INLET OF THE TANK IS EQUIPPED WITH A WATERLOO INNER TUBE. THE OUTLET OF THE TANK IS EQUIPPED WITH AN EFFLUENT FILTER.
5. EFFLUENT FROM THE AD-12260 TANK FLOWS BY GRAVITY INTO A PT-3600 PUMP TANK. THE TANK IS EQUIPPED WITH A SUBMERSIBLE EFFLUENT PUMP (P) OPERATING ON A TIMER.
6. THE PT-9000 TANK EFFLUENT IS DOSED TO A 2-COMPARTMENT BFCN-9400 BULK-FILLED CONCRETE BIOFILTER TANK. THE FIRST COMPARTMENT OF THE TANK IS FILLED WITH 6.3 m<sup>3</sup> BIOFILTER MEDIUM. THE PT-3600 EFFLUENT IS EVENLY DISTRIBUTED OVER THE SURFACE OF THE MEDIUM AND TREATED AS IT TRICKLES THROUGH THE INTERIOR OF THE MEDIUM. THE TREATED EFFLUENT COLLECTS ON THE FLOOR OF THE FIRST COMPARTMENT AND DRAINS INTO THE SECOND COMPARTMENT. THE SECOND COMPARTMENT OF THE TANK IS EQUIPPED WITH A SUBMERSIBLE EFFLUENT PUMP (P) OPERATING ON DEMAND.
7. EACH DOSE, THE PUMP IN THE SECOND COMPARTMENT OF THE BFCN-9400 TANK Doses A PORTION OF THE EFFLUENT TO THE INLET OF THE AD-12260 TANK.
8. EACH DOSE, THE PUMP IN THE SECOND COMPARTMENT OF THE BFCN-9400 TANK Doses THE REMAINING EFFLUENT TO A LEACHING BED (BY OTHERS).
9. ADHERENCE TO BEST MANAGEMENT PRACTICES (PROVIDING THE APPROPRIATE STRENGTH SEWAGE, PERFORMING ROUTINE MAINTENANCE, LIMITING TOXINS ENTERING THE SYSTEM, ETC.) IS NECESSARY FOR THE OPTIMAL PERFORMANCE OF THE WATERLOO BIOFILTER TREATMENT SYSTEM, WHICH IS DESIGNED FOR THE FOLLOWING EFFLUENT OBJECTIVES:  
CBOD = 10 mg/L  
TSS = 10 mg/L



65 MASSEY ROAD, SUITE C, GUELPH ON N1H 7M6  
TEL: 519-856-0757 FAX: 519-856-0759  
EMAIL: INFO@WATERLOO-BIOFILTER.COM

TITLE: PRELIMINARY PROCESS SCHEMATIC

FOR: ARCH-NOVA DESIGN

PROJECT: VET CLINIC AND RESIDENCE

|                 |                   |                |                |
|-----------------|-------------------|----------------|----------------|
| PROJECT NUMBER: | SEWAGE FLOW:      | CONFIGURATION: | DATE:          |
| ON-C-2023-0041  | 3,900 L/day       | BFCN           | MARCH 10, 2023 |
| DRAWN BY:       | PERCOLATION RATE: | DISPOSAL:      |                |
| B. STRAW        | N/A               | LEACHING BED   | 1 OF 1         |







