

# Sewage System Application Instructions:

## 1. Complete the application in full:

- This smart form will automatically populate most calculations
- Insert signatures electronically or manually
- Sewage System Designs can be cut and pasted onto the design page or attached as a separate document.

## 2. Supporting Documents Required:

- Lot Diagram & Sewage System Plan must be accurate and to scale. It must indicate north point and show the location of sewage system components (e.g. tanks, leaching bed, direction of mantle, etc), locate and show horizontal distance from system to adjacent existing or proposed buildings, water supplies (including neighbours) existing on-site systems, driveways, centreline of road, side and rear property lines, lakes, rivers, springs, water courses, swimming pools, lot dimensions and topographic features (e.g. swamps, steep slopes) near system
- Depending on the location, written approval from other governing agencies may be required (ie MTO and/or Conservation Authority)

## 3. Submitting the application:

- Complete applications can be submitted to [permits@greaternapanee.com](mailto:permits@greaternapanee.com) or, if in person, to our front desk between 9:00 am and 4:00 pm, where a receptionist will scan the application, on your behalf.

## 4. Process:

- Once a complete application has been received an inspector will contact you within 10 business days to advise you of a permit issuance and of fees owing.
- Once the permit has been picked up and fees have been paid, the initial site visit will take place to view the test holes, determine the height of the system above grade and ensure the placement of the sewage system meets the Ontario Building Code requirements. Inspection must be booked at least 3 days prior to requiring one.
- A final inspection will be done when the sewage system is installed but not covered.
- A final grading inspection will be done once the sewage system has been backfilled, the slopes stabilized, and the system has been seeded.
- Final paperwork will be emailed or mailed to the owner.

## 5. Payment:

- Payment, due at time of permit issuance, can be made by cash, debit or cheque.

**If you have any questions, please contact us at:**

[permits@greaternapanee.com](mailto:permits@greaternapanee.com)

Phone (613) 776-1150 or (613) 354-3351 ext 4008

# Application for a Permit to Install a New Sewage System as Result of a Performance Review

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

For use by Principal Authority			
Application number:		Permit number (if different):	
Date received:		Roll number:	
Application submitted to: <u>TOWN OF GREATER NAPANEE</u> <small>(Name of municipality, upper-tier municipality, board of health or conservation authority)</small>			
A. Project information			
Building number, street name		Unit number	Lot/con.
Municipality	Postal code	Plan number/other description	
Project value est. \$		Area of work (m <sup>2</sup> )	
B. Purpose of application			
<input type="radio"/> New Construction <input type="radio"/> Addition to an existing building <input type="radio"/> Alteration/repair <input type="radio"/> Demolition <input type="radio"/> Conditional Permit			
<div style="background-color: yellow; display: inline-block; padding: 2px;">Original Review File Number</div>			
Description of proposed work			
C. Applicant      Applicant is: <input type="radio"/> Owner    or <input type="radio"/> Authorized agent of owner			
Last name		First name	
Corporation or partnership			
Street address		Unit number	Lot/con.
Municipality		Postal code	Province
Telephone number		Cell number	
Email			
D. Owner (if different from applicant)			
Last name		First name	
Corporation or partnership			
Street address		Unit number	Lot/con.
Municipality		Postal code	Province
Telephone number		Cell number	
E-mail			

E. Builder (optional)				
Last name		First name	Corporation or partnership (if applicable)	
Street address			Unit number	Lot/con.
Municipality			Postal code	Province
Telephone number		Cell number		
Email				
F. Tarion Warranty Corporation (Ontario New Home Warranties 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.			<input type="checkbox"/> Yes	<input type="checkbox"/> No
ii. Is registration required under the <i>Ontario New Home Warranties Plan Act</i> ?			<input type="checkbox"/> Yes	<input type="checkbox"/> 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). 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 type="checkbox"/> Yes	<input type="checkbox"/> 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 type="checkbox"/> Yes	<input type="checkbox"/> 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 type="checkbox"/> Yes	<input type="checkbox"/> No
iv) The proposed building, construction or demolition will not contravene any applicable law.			<input type="checkbox"/> Yes	<input type="checkbox"/> No
I. Declaration of applicant				
<p>I _____ declare that:</p> <p>(print name)</p> <ol style="list-style-type: none"> <li>The information contained in this application, attached schedules, attached plans and specifications, and other attached documentation 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>_____</p> <p>Date Signature of applicant</p>				

Personal information contained in this form and schedules is 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		Unit no.	Lot/con.
Municipality	Postal code	Plan number/ other description	
<b>B. Individual who reviews and takes responsibility for design activities</b>			
Name		Firm	
Street address		Unit no.	Lot/con.
Municipality		Postal code	Province
Telephone		Cell number	
Email			
<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			
<b>D. Declaration of Designer</b>			
<p>I _____ declare that (choose one as appropriate):</p> <p style="text-align: center;">(print name)</p> <p><input type="checkbox"/> 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.</p> <p style="margin-left: 40px;">Individual BCIN: _____</p> <p style="margin-left: 40px;">Firm BCIN: _____</p> <p><input type="checkbox"/> 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.</p> <p style="margin-left: 40px;">Individual BCIN: _____</p> <p style="margin-left: 40px;">Basis for exemption from registration: _____</p> <p><input type="checkbox"/> The design work is exempt from the registration and qualification requirements of the Building Code.</p> <p style="margin-left: 40px;">Basis for exemption from registration and qualification: _____</p> <p>I certify that:</p> <ol style="list-style-type: none"> <li>1. The information contained in this schedule is true to the best of my knowledge.</li> <li>2. I have submitted this application with the knowledge and consent of the firm.</li> </ol> <p style="margin-top: 20px;"> <span style="float: left;">_____</span> <span style="float: right;">_____</span> </p> <p style="margin-top: 5px;"> <span style="float: left;">Date</span> <span style="float: right;">Signature of Designer</span> </p>			

**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 practice, a limited license to practice, 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				Unit number	Lot/con.
Municipality	Postal code	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?					
<input type="checkbox"/> Yes (Continue to Section C) <input type="checkbox"/> No (Continue to Section E) <input type="checkbox"/> Installer unknown at time of application (Continue to Section E)					
<b>C. Registered installer information (where answer to B is "Yes")</b>					
Name				BCIN	
Street address				Unit number	Lot/con.
Municipality	Postal code	Province	E-mail		
Telephone number ( )	Fax ( )	Cell number ( )			
<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>					
I _____ declare that: (print name)					
<input type="checkbox"/> 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;					
OR					
<input type="checkbox"/> 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.					
I certify that:					
1. The information contained in this schedule is true to the best of my knowledge.					
2. If the owner is a corporation or partnership, I have the authority to bind the corporation or partnership.					
_____ Date			_____ Signature of applicant		

<b>Directions:</b>                     	<b>Map:</b>                    
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### **SOILS CERTIFICATION**

I, \_\_\_\_\_ (Licensed Installer under Section 3.3 of the Building Code Act), verify that the material used in the construction of the sewage system, under the permit herein, meets the requirements of the Ontario Building Code, the percolation rate identified on the permit and the soils analysis submitted to The Town of Greater Napanee from:

\_\_\_\_\_  
(Name of pit)

*Note: Leaching bed fill* means soil used for the construction of conventional and chamber leaching beds, filter beds, dispersal beds, and area beds as prescribed under specific Building Materials Evaluation Commission authorizations. It may not include a requirement for other soils as prescribed by treatment unit manufacturers; check with the manufacturer before installation. The silt content of leaching bed fill must be included in the analysis.

The Town of Greater Napanee may require you to submit soil samples for analysis.

\_\_\_\_\_  
Licensed Installer's Signature

\_\_\_\_\_  
Date

### **OWNER AUTHORIZATION**

I/we, \_\_\_\_\_, being the legal owner(s) of the property described as Lot \_\_\_\_\_, Concession \_\_\_\_\_, Parts(s)/Sublot(s) \_\_\_\_\_ of Plan \_\_\_\_\_, in the Municipality of \_\_\_\_\_, located at Civic Address \_\_\_\_\_, certify that \_\_\_\_\_ is authorized to submit an Application to Construct or Demolish to The Town of Greater Napanee for the purposes of installing a sewage system in accordance with Ontario Regulation 332/12, and to act as my/our representative for any associated site inspections.

I/we certify that all information and material provided for the purpose of this application is accurate.

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

OFFICE USE ONLY		Application #
Name:		Date Submitted:
Fee #		Fee \$
Renewal Date:		Entered:

## SEWAGE SYSTEM SPECIFICATIONS PAGE

<b>Structure:</b> New      Residential      If the sewage system is non-residential, attach a Existing      Commercial      separate copy of the specifications and plans.		
<b># of Bedrooms:</b> _____ <b>Fixture Units:</b> Complete Table 2 _____ <b>Total Finished Area:</b> _____ m <sup>2</sup> <input type="checkbox"/> Walkout basement	<b>Daily Design Sewage Flow (Q)*:</b> _____ L/day <b>Septic Tank Capacity (2 x Q):</b> _____ L <small>Calculated Size      Install Size if Different</small> minimum 3600L	
<b>Water Supply:</b> Proposed Existing	*Backwash water from any water treatment unit (i.e. water softener) must be accounted for in the sewage system design. Drilled Well      Dug/Bored/Blasted Well      Municipal      Surface Water Casing Depth      Sandpoint/Drivepoint      Cistern      Shore Well	
<b>Soils</b> Indicate soil types (sand, silt, clay), bedrock, and the high ground water table below.  (m) Test Pit 0.0 _____ 0.3 _____ 0.6 _____ 0.9 _____ 1.2 _____ 1.5 _____  Estimated Percolation Rate of Native Soil: T = _____ min/cm      Tested Percolation Rate of Imported Soil: T = _____ min/cm	<b>Holding Tank Capacity (7 x Q): (Class 5 Only)</b> _____ L (minimum of 9000L)	<b>Conventional Leaching Bed: (minimum 40m)</b> Total distribution pipe = _____ m Mantle required      Pump required
	<b>Class 4 Sewage System Type:</b> Conventional Leaching Bed Chamber System Leaching Bed Filter Media Bed Shallow Buried Trenches Type A Dispersal Bed* Type B Dispersal Bed*  * These sewage systems <b>require</b> a Level IV treatment unit certified to the CAN/BNQ 3680-600 standard, or a treatment unit described in Supplementary Standard SB-5.	<b>Chamber System Leaching Bed: (minimum 40m)</b> Total chamber length = _____ m Manufacturer: _____ Model: _____ # of pieces: _____ Mantle required      Pump required
	<b>Treatment Unit:</b> Level II      Level III      Level IV Service Agreement Provided  Manufacturer: _____ Model: _____ BMEC Authorization Provided	<b>Filter Media Bed:</b> Loading Area: _____ m <sup>2</sup> Contact Area: _____ m <sup>2</sup> Total distribution pipe = _____ m Mantle required      Pump required
	<b>Method of Subsurface Detection:</b> Magnetic Tracer wire (14 gauge plastic coated) Other means: _____	<b>Shallow Buried Trenches: (minimum 30m)</b> Total trench length = _____ m
<b>Type A Dispersal Bed:</b> Stone Layer Area: _____ m <sup>2</sup> Sand Layer Area: _____ m <sup>2</sup> Mantle required	<b>Type B Dispersal Bed:</b> Stone Layer Area: _____ m <sup>2</sup> Linear Loading Rate: 50 L/m      40 L/m Pump Chamber Capacity: _____ L	<b>Loading Rate (from Table 3):</b> Q _____ ÷ _____ L/m <sup>2</sup> /day = _____ area (m <sup>2</sup> )
<b>Recommendations/Conditions (for office use only):</b> <div style="height: 150px;"></div>		

# SEWAGE SYSTEM CALCULATION PAGE

## 1. Daily Design Sewage Flow (Q)

Table 1 DDSF for bedrooms: \_\_\_\_\_ L/day (A)

Table 2 Total fixture units: \_\_\_\_\_

Each fixture unit over 20: \_\_\_\_\_ x50

= \_\_\_\_\_ L/day (C)

Total finished area: \_\_\_\_\_ m<sup>2</sup> **ENTER VALUES AS REQUIRED**

For every 10m<sup>2</sup> over 200m<sup>2</sup>, up to 400 m<sup>2</sup>: \_\_\_\_\_ x 100 = \_\_\_\_\_ L/day

For every 10m<sup>2</sup> over 400m<sup>2</sup>, up to 600 m<sup>2</sup>: \_\_\_\_\_ x 75 = \_\_\_\_\_ L/day

For every 10m<sup>2</sup> over 600m<sup>2</sup>: \_\_\_\_\_ x 50 = \_\_\_\_\_ L/day

For total DDSF, add (A) to the larger of (B) or (C):

(B) Total DDSF for floor area: \_\_\_\_\_ L/day

DDSF (Q): (A) \_\_\_\_\_ + (B or C) \_\_\_\_\_ = \_\_\_\_\_ L/day (Q)

## 2. Leaching Bed Size (m)

L = total length of distribution pipe

T = percolation time of native or imported soil

Q = Daily Design Sewage Flow

Conventional

Treatment Systems/Chambers

L = (Q) \_\_\_\_\_ x \_\_\_\_\_ (T) = \_\_\_\_\_ m  
200

L = (Q) \_\_\_\_\_ x \_\_\_\_\_ (T) = \_\_\_\_\_ m  
300

## 3. Filter Bed Loading Area (m<sup>2</sup>)

If Q ≤ 3000 L/day, use Q ÷ 75

If Q > 3000 L/day, use Q ÷ 50

Level II-IV treatment unit only, use Q ÷ 100

Loading Area = (Q) \_\_\_\_\_ ÷ \_\_\_\_\_ = \_\_\_\_\_ m<sup>2</sup>

## 4. Filter Bed Contact Area (m<sup>2</sup>)

Contact Area = (Q) \_\_\_\_\_ x \_\_\_\_\_ (T) = \_\_\_\_\_ m<sup>2</sup>  
850

\*Use T of native soil; if Contact Area < Loading Area, use Loading Area for both values

## 5. Shallow Buried Trenches (m)

See Table 4.

L = (Q) \_\_\_\_\_ ÷ \_\_\_\_\_ = \_\_\_\_\_ m

## 6. Type A Dispersal Bed (m<sup>2</sup>)

Stone Layer: If Q ≤ 3000 L/day, use Q ÷ 75

If Q > 3000 L/day, use Q ÷ 50

Sand Layer: If 1 < T ≤ 15 if T > 15  
use:850 use:400

Stone Layer = (Q) \_\_\_\_\_ ÷ \_\_\_\_\_ = \_\_\_\_\_ m<sup>2</sup>

Sand Layer = (Q) \_\_\_\_\_ x \_\_\_\_\_ (T) = \_\_\_\_\_ m<sup>2</sup>

\*Use T of native soil; if Sand Layer area < Stone Layer area, use Stone Layer area for both values

## 7. Type B Dispersal Bed (m<sup>2</sup>)

Linear Loading Rate: If T < 24 min, use 50 L/m  
If T ≥ 24 min, use 40 L/m

Area = (Q) \_\_\_\_\_ x \_\_\_\_\_ x (T) = \_\_\_\_\_ m<sup>2</sup>  
400

Pump chamber capacity: Q = \_\_\_\_\_ L

**Table 1 – DDSF Values for Bedrooms**

(Ontario Building Code, Division B, Part 8, Table 8.2.1.3.A.)

Bedrooms	L/day	Bedrooms	L/day
1	750	4	2000
2	1100	5	2500
3	1600	Per bedroom over 5	500

**Table 2 – Fixture Units**

(Ontario Building Code, Division B, Part 7, Table 7.4.9.3.)

Bathroom Group (3-4 piece bathroom)	# of Units	Total
Bathtub (with or without shower)	_____ x 6.0 =	_____
Toilet	_____ x 1.5 =	_____
Clothes Washer	_____ x 4.0 =	_____
Dishwasher	_____ x 1.5 =	_____
Laundry Tubs	_____ x 1.0 =	_____
Shower Drain	_____ x 1.5 =	_____
Sinks	_____ x 1.5 =	_____
Other	_____ x _____ =	_____
<b>TOTAL</b>		<b>= _____</b>

**Table 3 – Loading Rates for Fill Based Absorption Trenches/Filter Beds**  
(Ontario Building Code, Division B, Part 8, Table 8.7.4.1.)

Percolation Time (T) of Soil, min	Loading Rates, (L/m <sup>2</sup> )/day
1 < T ≤ 20	10
20 < T ≤ 35	8
35 < T ≤ 50	6
T > 50	4

**Table 4 – Shallow Buried Trench Length**  
(Ontario Building Code, Division B, Part 8, Table 8.7.3.1.)

Percolation Time (T) of Soil, min	Length of Distribution Pipe, m
1 < T ≤ 20	Q/75
20 < T ≤ 50	Q/50
50 < T < 125	Q/30

## APPLICATION NO: \_\_\_\_\_

NAME: \_\_\_\_\_

(a) Location of sewage system components (e.g. tanks, leaching bed, direction of mantle, etc). Locate and show horizontal distances from system to adjacent existing or proposed buildings, water supplies (including neighbours), existing on-site systems, driveways, property lines, lakes, rivers, springs, water courses, swimming pools

**(b)** Lot dimensions, topographic features (e.g. swamps, steep slopes) near system.

1 square = \_\_\_\_\_ (m / ft)

**DRAW TO SCALE**

A full-page sheet of white graph paper with a light gray grid. The grid consists of small squares, approximately 10 units wide by 10 units high. There are no margins or additional markings on the page.

### SEWAGE SYSTEM CROSS SECTION (FOR NEW SEWAGE SYSTEMS ONLY)

[illegible]

(See recommendations on previous page.)

This permit is issued to the owner to construct, install, alter, extend, enlarge or continue to use a Class\_\_\_\_\_Sewage system.

Approved by:

**Inspector:** \_\_\_\_\_ / AS PER CBO

Date: \_\_\_\_\_



The Town of Greater Napanee has a duty to protect employees from all forms of harassment and violence while in the workplace. By signing this application, I agree that all dealings with employees will be handled in a respectful and appropriate manner. I further agree that I and/or persons acting on my behalf, will conform to all applicable policies of the Town of Greater Napanee, which can be provided on request. Breach of a policy could result in processing delays, denial of service or other remedies contained in the approved policy.

Thank you for your cooperation.

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date