Township of Howick

Application for a Septic System

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: Township of Howick

(Name of municipality, upper-tier municipality, board of health or conservation authority)

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^2)		

B. Purpose of application

❑ New construction ❑ Addition to an existing building ❑ Alteration/repair ❑ Demolition ❑ Conditional Permit

Proposed use of building	Current use of building
Description of proposed work	

C. Applicant

Applicant is: ❑ Owner or ❑ Authorized agent of owner

Last name	First name	Corporation or partnership		
Street address			Unit number	Lot/con.
Municipality	Postal code	Province	E-mail	
Telephone number ( )	Fax ( )		Cell number ( )	

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 ( )	Fax ( )		Cell number ( )	

E. Builder (optional)

Last name	First name	Corporation or partnership (if applicable)	
Street address		Unit number	Lot/con.
Municipality	Postal code	Province	E-mail
Telephone number ( )	Fax ( )	Cell number ( )	

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

i. Is proposed construction for a new home as defined in the *Ontario New Home Warranties Plan Act*? If no, go to section G.	❑ Yes	❑ No
ii. Is registration required under the *Ontario New Home Warranties Plan Act*?	❑ 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).	❑ Yes	❑ No
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 *Building Code Act, I992*, to be paid when the application is made.	❑ Yes	❑ 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 *Building Code Act, 1992.*	❑ Yes	❑ 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 *Building Code Act, 1992* which enable the chief building official to determine whether the proposed building, construction or demolition will contravene any applicable law.	❑ Yes	❑ No
iv) The proposed building, construction or demolition will not contravene any applicable law.	❑ Yes	❑ No

I. Declaration of applicant

I _____ declare that:
(print name)

1. The information contained in this application, attached schedules, attached plans and specifications, and other attached documentation 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

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.

A. Project Information

Building number, street name			Unit no.	Lot/con.
Municipality	Postal code	Plan number/ other description		

B. Individual who reviews and takes responsibility for design activities

Name		Firm		
Street address			Unit no.	Lot/con.
Municipality	Postal code	Province	E-mail	
Telephone number ( )	Fax number ( )		Cell number ( )	

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

❑ 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

D. Declaration of Designer

I _____ 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) d).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

A. Project Information			
Building number, street name		Unit number	Lot/con.
Municipality	Postal code	Plan number/ other description	

B. Sewage system installer

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) ❑ Installer unknown at time of application (Continue to Section E)

C. Registered installer information (where answer to B is "Yes")			
Name			BCIN
Street address			Unit number / Lot/con.
Municipality	Postal code	Province	E-mail
Telephone number ( )	Fax ( )		Cell number ( )

D. Qualified supervisor information (where answer to section B is "Yes")	
Name of qualified supervisor(s)	Building Code Identification Number (BCIN)

E. Declaration of Applicant:

I _____ declare that:
(print name)

❑ 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

❑ 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

Schedule 3: Soil Design Criteria and Site Evaluation

A. Percolation Rate of Design Soil (T – Time)		
Percolation Rate of Design Soil T =_____min/cm ❑ Native ❑ Imported	Percolation Rate of Mantle Sand T =_____min/cm ❑ Native ❑ Imported	❑ Laboratory Analysis ❑ Lab Report Attached

Note: Documented laboratory reports verifying percolation rate for all soils proposed to be used in a septic bed is required.

B. Percolation Rate and Classification of Native Soil

❑ Laboratory Analysis (Attached Report)	❑ Test on Site (Test Pit)	❑ Estimated (Unified System)

TEST PIT SOIL DATA

TEST PIT #1			TEST PIT #2		
Rock or Ground Water Table	**Depth (metres)**	**Description of Soil**	**Rock or Ground WaterTable**	**Depth (metres)**	**Description of Soil**
	-0-			-0-	
	-0.25-			-0.25-	
	-0.50-			-0.50-	
	-0.75-			-0.75-	
	-1.00-			-1.00-	
	-1.25-			-1.25-	
	-1.50-			-1.50-	
	-1.80-			-1.80-	
Depth to Groundwater	_____m		Depth to Groundwater	_____m	
Seasonal High Groundwater	_____m		Seasonal High Groundwater	_____m	
Depth to Bedrock	_____m		Depth to Bedrock	_____m	

For fill based beds and mantle, attach gradation test report for the material proposed to be used in addition to the report for the existing native soil.

Table 8.2.1.3.A

C. Septic System Design Flow

Design Criteria:

- Total Finished area: _____
- Number of Bedrooms: _____
- Fixture Units *(O.B.C. Table 7.4.9.3):*

Description			Number	Fixture Units
Bathroom Group				
Watercloset (with flush tank)	6	X	_____	_____
Watercloset (with direct flush)	8	X	_____	_____
Urinal (wall hung)	3	X	_____	_____
Domestic Sink	1 ½	X	_____	_____
Shower (one head)	1 ½	X	_____	_____
Bathtub (with or without shower)	1 ½	X	_____	_____
Laundry Tub	1 ½	X	_____	_____
Clothes Washer (domestic)	1 ½	X	_____	_____
Dishwasher	1 ½	X	_____	_____
Toilets	4	X	_____	_____
Kitchen Sink	1 ½	X	_____	_____
Additional items (not listed above)				
_____			_____	_____
_____			_____	_____
TOTAL FIXTURE UNITS			_____	_____

Residential Occupancy
Forming Part of Sentence 8.2.1.3.(1)

Dwellings	
(a) 1 bedroom dwelling	750
(b) 2 bedroom dwelling	1100
(c) 3 bedroom dwelling	1600
(d) 4 bedroom dwelling	2000
(e) 5 bedroom dwelling	2500
(f) Additional flow for ²	
i) Each bedroom over 5.	500
ii) A) each 10m² (or part of it) over 200m² up to 400m²	100
B) each 10m² (or part of it) over 400m² up to 600m², and	75
C) each 10m² (or part of it) over 600m², or	50
iii) each fixture unit over 20 fixtures units	50

Sewage System Design Flow (O.B.C. 8.2.1.3 – Tables 8.2.1.3.A & B):

Calculations:

Q -_____litres per day.

D. System Design

Treatment Unit:

Septic Tank to conform to O.B.C. 8.2.2.2. Tanks and O.B.C. 8.2.2.3 Septic Tanks
Minimum tank is larger of 2 X Residential Design Flow or 3 X non-residential design flow or 3600 L or provide BMEC approval documentation for other treatment units.

Calculations:

Size:_____litres or_____imp. gal.

Absorption Trench Construction:

General description: (e.g. pipe and stone or model of chambers etc.)

Length of Distribution Pipe – formula from O.B.C. 8.7.3.1: $L = \frac{QT}{200}$

_____ L =_____m (_____ft.)

Propose using_____runs X_____m (_____ft.) =_____m (_____ft.)

Proposed spacing of runs_____m

For Fill Based Absorption trenches (O.B.C. 8.7.4)

15 m mantle required in any direction the effluent will flow horizontally (O.B.C. 8.7.4.2 (1)(b)).

All side slopes to be no greater than 1 unit vertically to 4 units horizontally (O.B.C. 8.7.4.2 (8)).

Minimum clearances to be increased by (O.B.C. 8.7.4.2.(9)). The distances as set out in Column 2 of Table 8,2,1,6, B) shall be increased by twice the height that the leaching bed is raised above the original grade.

If leaching bed is being dosed by pump (>150 m)

Dosing Volume =_____Litres

High Float Elev =_____Cm Above Tank Bottom

Low Float Elev =_____Cm Above Tank Bottom

Pump Model = _____

Table 8.2.1.6.A
Minimum Clearances for Treatment Units
Forming Part of Sentence 8.2.1.6.(1)

Object	Minimum Clearance, m
Structure	1.5
Well	15
Lake	15
Pond	15
Reservoir	15
River	15
Spring	15
Stream	15
Property Line	3
Column 1	2

Table 8.2.1.6.B
Minimum Clearances for Distribution Piping
Forming Part of Sentence 8.2.1.6.(2)

Object	Minimum Clearance, m
Structure	5
Well with a watertight casing to a depth of 6 m	15
Any other well	30
Lake	15
Pond	15
Reservoir	15
River	15
Spring not used as a source of potable water	15
Stream	15
Property Line	3
Column 1	2

Loading rate for filter bed = L.R. per OBC 8.7.5.2. =_____ $L/m^2/day$

Loading Area for filter bed (<3,000L) $A = \frac{Q}{75}$ =_____ m2

Loading Area for filter bed (>3,000L) $A = \frac{Q}{50}$ = _____ m2

Expanded Contact Area of Filter = $\frac{QT}{850}$=_____ m^2

Base area per loading rate OBC 8.7.4.1. A =_____ m^2

Source/Supplier of Filter Media_____(Attach graduation chart)

Table 8.7.4.1.A.

Loading Rates for Fill Based Absorption Trenches and Filter Beds

Forming Part of Sentences 8.7.4.1.(1) and 8.7.5.2.(2)

Percolation Time (T) of Soil, min.cm	**Loading Rates, (L/m^2)/day**
$1 < T \leq 20$	10
$20 < T \leq 35$	8
$35 < T \leq 50$	6
$T > 50$	4
Column 1	2

For other OBC approved treatment units listed in OBC SB-5 please specify the unit make and model plus attach a copy of the approval documentation to support the design of the system.

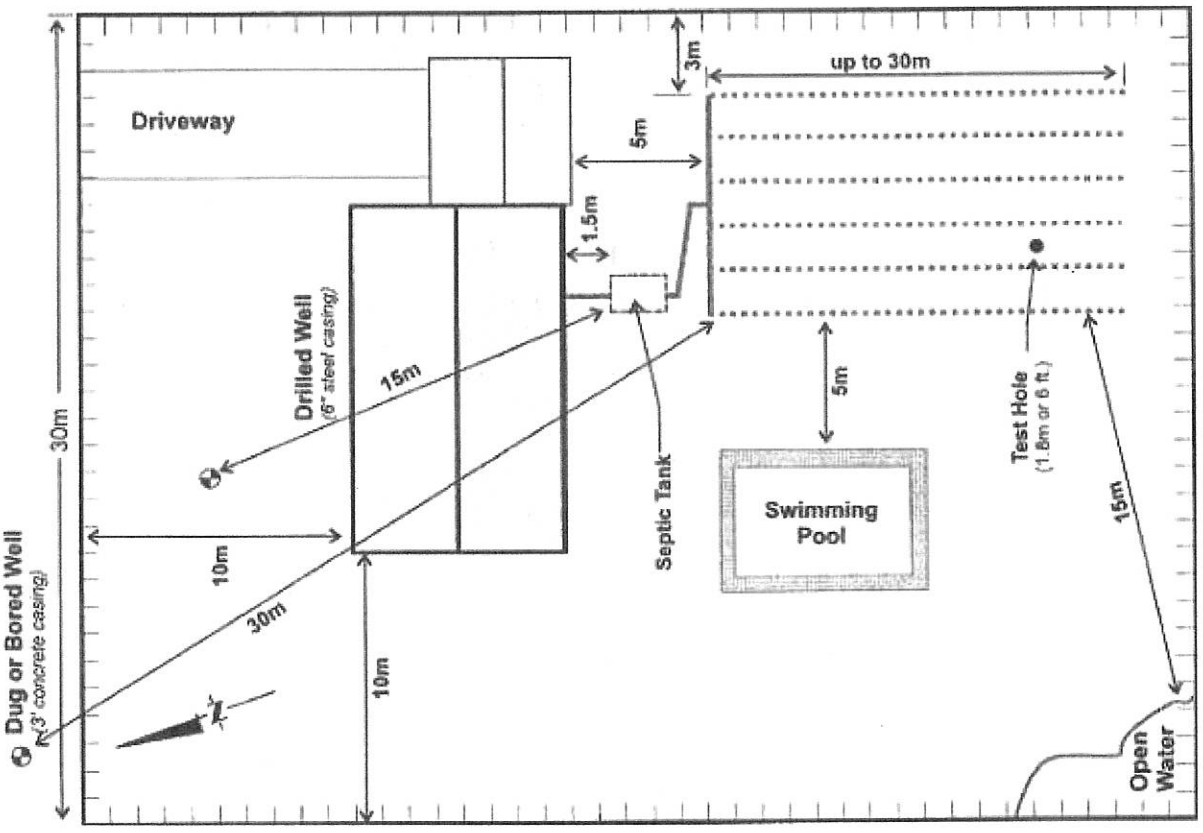
E. Site Plan Requirements

As part of your application you are required to provide a site plan which must be an accurate scaled or proportioned drawing. This diagram must be completed in detail and be presented as part of your application.

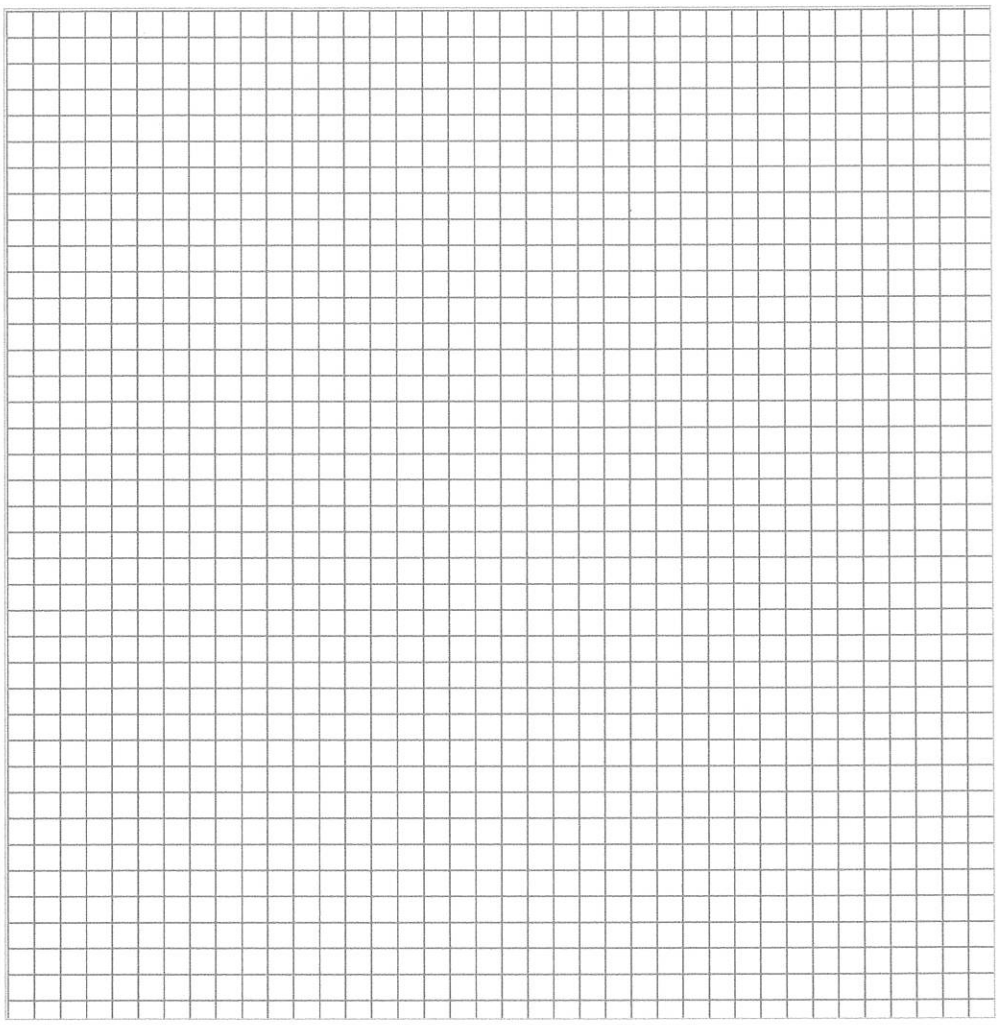
Site Plan and Typical Section – please attach copy with the following information:

- Date site evaluation was completed
- Name, address, telephone number of Owner and Designer
- Legal description of property, property lines and easements
- Show utility corridors (as applicable).
- Proposed location of sewage system
- Location of items in Column 1 of Tables 8.2.1.6.A & B
- Location of any unsuitable, disturbed or compacted areas.
- Access route for tank maintenance
- Depth to bedrock, high water table or unacceptable soil
- List soil properties and conditions
- Outline any potential for flooding (as applicable)

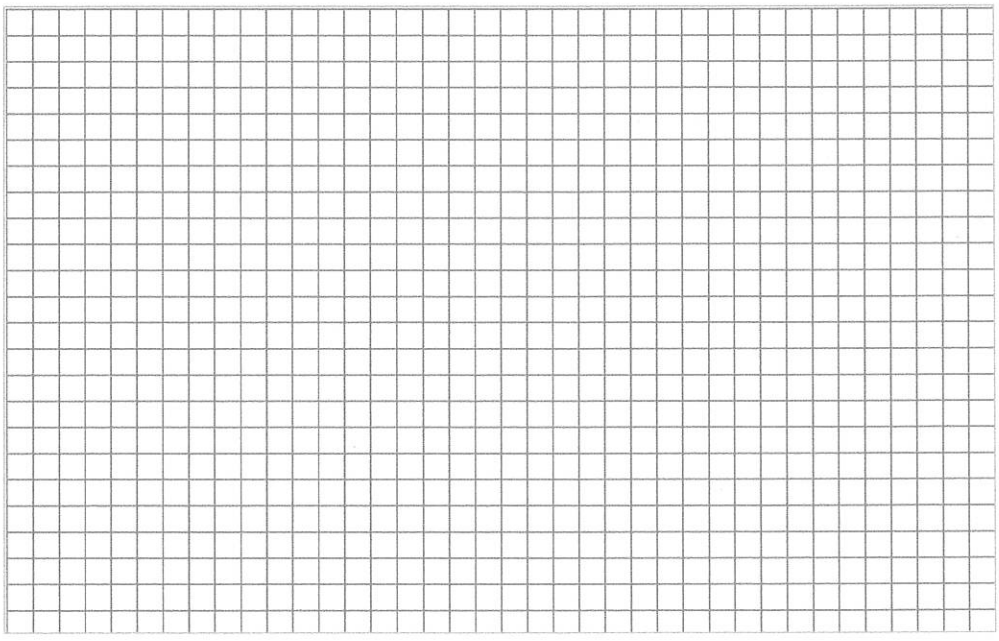
Typical Site Plan Drawing



Sewage System Site Plan



Sewage System Cross Section (house,tank and tile bed elevations with existing and proposed grades)



Inspector's Comments _____

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