REQUIRED SEPTIC DRAWINGS

The following list of drawings should be used as a guide when preparing drawings for submission for a septic permit, for a project designed under (Part Eight) of the Ontario Building Code, which does not require professional design but must be qualified (BCIN).

The Designer that prepares the permit drawings is responsible to ensure that they provide sufficient information to ensure compliance with the requirements of the Ontario Building Code. As of January 1st, 2006, all Designers will be required to show proof of meeting the qualifications required by the Ministry of Housing.

1. The Site Plan:

- The proposed septic location and dimensions.
- The location of all existing or proposed buildings on the lot.
- Access routes; roads, driveways, right of way.
- The setbacks to lot lines.
- The existing and proposed drainage patterns should be illustrated, (provide geodetic elevations if in a flood plain).
- The plan must be to scale and show all property boundaries, adjacent road and water bodies. The location of site services, wells, power lines.

2. Sections and Details:

- Cross sections will illustrate all the materials that make up the septic system, load rate area, filter medium and contact area (mantle).
- Adequate information shall be included to be able to determine the location of; the load rate area, filter medium and contact area.
- Adequate information on a cross section shall include the depth of the excavation, rock or water table and soil type and the depth of materials to be used with pipe.
- Adequate information on a top elevation showing tank location, pump chamber (if required) bed size showing the number of runs and spacing of piping or other and location of distribution box if used.
- Show proposed grade of the septic system.

*** The above information is required when making an application for a septic permit, before the application can be considered complete when receiving it in the office.

Should any of the above information be missing at the time when the application is received in the office, the application will be considered incomplete and will delay the turnaround time to process the application.

NOTE: Any application that requires a septic system for a new Single Family Dwelling/Seasonal Dwelling must be approved before the permits can be issued for the dwellings.

Application for a Permit to Construct or Demolish This form is authorized under subsection 8(1.1) of the Building Code Act, 1992

| | | For use | by Prir | ncipal | Authority | | | | |
|------------------------------|----------------------------|-------------------------|---------------------------|-------------------------------|--------------------------------|--------|-----------------|-----------------------|--|
| Application number: | | | Pe | Permit number (if different): | | | | | |
| Date received: | | | Ro | Roll number: | | | | | |
| | TOWN OF BRA | ACEBRID y, upper-tie | OGE er municipa | ality, boa | ard of health or conse | rvatio | n authority) | | |
| A. Project information | | | | | | | | | |
| Building number, street name | | | | | | | Unit number | Lot/con. | |
| Municipality | | Postal co | ode | | Plan number/othe | r des | cription | | |
| Project value est. \$ | | | | | Area of work (m ²) | | | | |
| B. Purpose of application | n | | | | | | | | |
| New construction | Addition to an existing bu | uilding | | | on/repair | De | molition | Conditional Permit | |
| Proposed use of building | | | Current | use of | building | | | | |
| Description of proposed work | | | | | | | | | |
| C. Applicant A | pplicant is: | Owner o | or | | Authorized ager | | | | |
| Last name | | First nan | ne | | Corporation or pa | rtners | hip | | |
| Street address | | | | | | | Unit number | Lot/con. | |
| Municipality | | Postal co | ode | | Province | | E-mail | | |
| Telephone number () | | Fax () | | 1 | | | Cell number () | | |
| D. Owner (if different fro | m applicant) | | | | | | | | |
| Last name | | First nan | ne | | Corporation or pa | rtners | hip | | |
| Street address | | | | I | | | Unit number | Lot/con. | |
| Municipality | | Postal co | ode | | Province | | E-mail | | |
| Telephone number () | | Fax () | | <u>I</u> | | | Cell number | | |

| E. Builder (optional) | | | | |
|---|--|---|---------------------|------------------|
| Last name | First name | Corporation or partnersh | nip (if applicable) | |
| | | | | |
| Street address | | | Unit number | Lot/con. |
| | | | | |
| Municipality | Postal code | Province | E-mail | |
| | | | | |
| Telephone number | Fax | | Cell number | |
| () | () | | , | |
| F. Tarion Warranty Corporation (Ontario | | <u>, , , , , , , , , , , , , , , , , , , </u> | | |
| i. Is proposed construction for a new hom Plan Act? If no, go to section G. | | | Yes | No |
| ii. Is registration required under the Ontar | io New Home Warranties | s Plan Act? | Yes | No |
| | | | L | L |
| iii. If yes to (ii) provide registration number | (s): | | | |
| G. Required Schedules | | | | |
| i) Attach Schedule 1 for each individual who rev | iews and takes responsi | bility for design activities. | | |
| ii) Attach Schedule 2 where application is to con- | struct on-site, install or re | epair a sewage system. | | |
| H. Completeness and compliance with a | applicable law | | | |
| i) This application meets all the requirements of | clauses 1.3.1.3 (5) (a) t | o (d) of Division C of the | Yes | No |
| 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 schedules are submitted). | application and required | d schedules, and all require | ed | |
| Payment has been made of all fees that are r | equired, under the applic | cable by-law, resolution or | Vaa | Nie |
| regulation made under clause 7(1)(c) of the E | | | Yes | No |
| application is made. | | | | |
| ii) This application is accompanied by the plans resolution or regulation made under clause 7 | | | ·law, Yes | No |
| iii) This application is accompanied by the inform | | | | No |
| law, resolution or regulation made under clau the chief building official to determine whethe | | | | |
| contravene any applicable law. | r the proposed building, | construction of demonton | Will | |
| iv) The proposed building, construction or demol | ition will not contravene | any applicable law. | Yes | No |
| I. Declaration of applicant | | | <u>'</u> | |
| | | | | |
| | | | | |
| I | | | dec | lare that: |
| (print name) | | | | |
| 4. The information contained in the | ation attached bedre t | a attached blace and | aifiantinus arat () | - u - ett el el- |
| The information contained in this applic documentation is true to the best of my | ation, attached schedule knowledde. | s, attached plans and spe | cincations, and oth | ei attached |
| If the owner is a corporation or partners | | to bind the corporation or p | oartnership. | |
| | | | | |
| | Signature of | applicant | | _ |
| | 2.3 | 11 12 1 | | |

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 Plan number/ other description Postal code 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 Cell number Fax number C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C1 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 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.

NOTE:

Date

- 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.
- 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.

Signature of Designer

Schedule 2: Sewage System Installer Information

| A. Project Information | | | | | | | | |
|---|--------------------|---------------------------------|-----------------------|---------------------------|--|--|--|--|
| Building number, street name | | | Unit number | Lot/con. | | | | |
| Municipality Postal code | | Plan number/ other descri | ption | | | | | |
| B. Sewage system installer | | | | | | | | |
| Is the installer of the sewage system enga emptying sewage systems, in accordance Yes (Continue to Section C) | with Building Co | | ?? | ervicing, cleaning or | | | | |
| , | <u> </u> | , | application | n (Continue to Section E) | | | | |
| C. Registered installer informatio | n (where answ | ver 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 | on (where answ | wer to section B is "Yes' | ") | | | | | |
| Name of qualified supervisor(s) | | Building Code Identification | Number (BCIN) | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| E. Declaration of Applicant: | | | | | | | | |
| L. Deciaration of Applicant. | | | | | | | | |
| | | | | | | | | |
| (print name) | | | | declare that: | | | | |
| I am the applicant for the permit to submit a new Schedule 2 prior to | | | is unknown at time o | of application, I shall | | | | |
| OR I am the holder of the permit to corknown. | nstruct the sewag | ge system, and am submitting | g a new Schedule 2, | now that the installer is | | | | |
| I certify that: | | | | | | | | |
| 1. The information contained in this | schedule is true | to the best of my knowledge | ٠. | | | | | |
| 2. If the owner is a corporation or p | artnership, I have | e the authority to bind the cor | poration or partnersl | nip. | | | | |
| Date | | Signature of applicant | | | | | | |

SEWAGE SYSTEM CALCULATIONS

(to be submitted with application) (see Chart on reverse)

Q = Total Daily Design Sewage Flow in Litres

T = Percolation Time of Soil

SEPTIC TANK SIZE = Working Capacity of Septic Tank

Residential = Q x 2 = _____ Litres Commercial = Q x 3 = ____ Litres

Note: In no case shall the working capacity of septic tank be less than 3600 litres.

ABSORPTION TRENCHES = Length of Distribution Pipe

(for systems with septic tank)

$$\begin{array}{rcl}
L & = & \underline{Q} & \underline{x} & \underline{T} \\
& & \underline{200} \\
& = & \underline{x} \\
& \underline{200} & = \\
\end{array}$$

Note: The total length of distribution pipe shall be not less than 40 metres.

Loading Rate Area (unsaturated suitable soil in area of bed and mantle)

Loading Rate Area required = Q ÷ 6

= \longrightarrow \div = \longrightarrow Sq. Metres

Metres

FILTER BED = Size of filter required

If Q is 3000 litres or less = \dot{Q} ÷ 75

 $\frac{1}{2}$ \div 75 = Sq. Metres

If Q is more than 3000 litres = $Q \div 50$

Base of Filter Medium - shall extend to a thickness of 250mm over the following area:

$$AREA = \underbrace{\frac{Q \quad x \quad T}{850}}_{x \quad \underline{x}}$$

$$\underline{850} \quad = \quad \underline{\qquad} \quad Sq. \text{ Metres}$$

NOTE: "T" is the Percolation Time of the Native Soil upon which the filter material is placed.

Loading Rate Area (unsaturated suitable soil in area of bed and mantle)

Loading Rate Area Required = Q ÷ Loading Rate (based on "T" Time of native soil)

____ ÷ = ____ Sq. Metres

NOTE: Suitable soil, existing or imported, in the loading rate area must have a "T" of 15 minutes or less, if imported material is used for the leaching bed or filter.

SEWAGE SYSTEM INSTALLATION PROPOSAL

| OTAL # OF BEDROOMS : | | | | | | TOTAL FLOO | R AREA : | | m² | | | |
|---|---|--|-------------|---------|-----------------|---|--|--------|---------|---------|--------------------------------|------|
| AL PLUMBING | G FIXTUR | RE UNITS: | | | | | | • | | | | |
| AL DAILY DES | SIGN FLO | W RATE | (Expre | essed i | in Litres | s/day): | | | | Q= | • | |
| alculatio | ns for | propo | osal | mus | st be | e provided (| on a se | parat | e sheet | - | | |
| | | | | | | | | | | | | |
| ST HOLE | Sub- | surface | condi | itions | s enco | ountered | | | | | | |
| | | Rock | & G.W. | .T. | | Depth (n | n) | Soil T | уре | æ | T" Time | |
| | | | | | | - 0 - | | | | | | |
| | | | | | | - 0.25 - - 0.50 - | | | | | | |
| | | | | | | - 0.75 - | | | | | | |
| | | | | | | - 1.00 - | - | | | | | |
| | | | - 1.25 - | | | |] | | | | | |
| | | | | | | | | | | | | |
| OSE TO C | CONSTI | RUCT: | | | | - 1.50 - | - | | | | | |
| POSE TO C CLASS 4 Dug Into Exis | FILTI | ER BE | D | PROC | | - 1.50 - APPROVED FILTER ised, How Far Abov | MATERIAL I | | | RIOR TO | O FINALINSPECT | |
| CLASS 4 | FILTI | ER BE | aised | PROC | | APPROVED FILTER | MATERIAL I | | | | | TION |
| CLASS 4 | FILTI | ER BE | aised | PROC | | APPROVED FILTER | MATERIAL I | | | | | |
| CLASS 4 | FILTI | RE BE | aised | PROC | If Ra | APPROVED FILTER | MATERIAL N | Soils? | | etres | | |
| CLASS 4 Dug Into Exis | FILTI sting Soil TREN | RE BE | SED ised | | If Ra | APPROVED FILTER ised, How Far Above | MATERIAL N | Soils? | m | etres | Contact Area | |
| CLASS 4 Dug Into Exis CLASS 4 Dug Into Exis | FILTI sting Soil TREN | RE BE | SED ised | | If Rais | APPROVED FILTER ised, How Far Above | MATERIAL Notes that the second | Soils? | m | etres | Contact Area | |
| CLASS 4 Dug Into Exis CLASS 4 Dug Into Exis | sting Soil TREN sting Soil Of Tile | Ra Ra NCH B | SED ised Le | ngth o | If Rais | APPROVED FILTER ised, How Far Above sed, How Far Above | MATERIAL Notes that the second | Soils? | m | etres | Contact Area | |
| CLASS 4 Dug Into Exis CLASS 4 Dug Into Exis # Of Runs 0 | I FILTI sting Soil TREN sting Soil Of Tile | Rai | SED ised Le | ngth o | If Rais | APPROVED FILTER ised, How Far Above sed, How Far Above | MATERIAL Notes that the second | Soils? | m | etres | Contact Area | |
| CLASS 4 Dug Into Exis CLASS 4 Dug Into Exis # Of Runs 0 | sting Soil TREN Sting Soil Of Tile REY-WA e Conci | Rai | SED ised Le | ngth o | If Rais If Runs | APPROVED FILTER ised, How Far Above sed, How Far Above me | MATERIAL Nove Existing Some Existing Sometres Other: | Soils? | m | Tota | Contact Area | |
| CLASS 4 Dug Into Exis CLASS 4 Dug Into Exis # Of Runs 0 CLASS 2 GI Wall Structure | sting Soil TREN Sting Soil Of Tile REY-WA e Concord | Ra NCH B Rai ATER PI rete Block Length: | SED ised Le | ngth o | If Rais If Runs | APPROVED FILTER ised, How Far Above sed, How Far Above me ESSPOOL Rock | MATERIAL Nove Existing Some Existing Sometres Other: | Soils? | m | Tota | Contact Area I length of Tile | |

And Visual

Describe Platform:

IS A PUMP REQUIRED?

Size (L)

| _ | | | | | |
|---|-----|----|------------|----------|--|
| | Yes | No | Raw Sewage | Effluent | |

Alarm Is - Audio

THE CHARTS BELOW ARE FOR GUIDANCE PURPOSES ONLY

You Should Always Refer To The Ontario Building Code For Current Regulations

| (Litres/Day) | |
|---|--|
| Dwellings: a) 1 bedroom dwelling b) 2 bedroom dwelling c) 3 bedroom dwelling d) 4 bedroom dwelling e) 5 bedroom dwelling f) Additional flow for i) each bedroom over 5 ii) A) each 10m² (or part thereof) over 200m², up to 400m²(3), B) each 10m² (or part thereof) over 400m² up to 600m²(3), and C) each 10m² (or part thereof) over 600m²(3), or iii) each fixture unit over 20 fixture units | Using a 4 bedroom, 235m² home with 22 fixture units. From Chart on left: 4 bedroom home > 200m² or > 20 fixture units = 2,000ℓ/day additional 35m² = 400ℓ/day (additional 2 fixture units = 100ℓ/day) * Q (total daily design flow rate) = 2,400 litres/day If, as in the example above, there is a choice in arriving at the flow rate (e.g., fixture units vs. floor area) use the one calculation that provides the greatest daily flow rate value. |

| APPROXIMATE SOIL PERCOLATION RATES "T" The following are <u>estimated typical ranges</u> of "T" times. <u>Actual "T" times</u> may vary significantly due to <u>on-site</u> soil | | | | | | | | | | | | |
|--|-------------|---------------|---------------------------------------|----|-------|----|-------|------|--|--|--|--|
| | conditions. | | | | | | | | | | | |
| Soil Type * | Clean Med - | Silty Gravely | Silty Gravely Silty Sands Sandy Silty | | | ty | Silty | Clay | | | | |
| Course Sand Sands | | Sands | Sandy Silts | | Clays | | Clays | | | | | |
| "T" (min/cm) * | 1 3 | 6 8 | 10 16 | 20 | 25 29 | 33 | 38 44 | 50+ | | | | |

| CLEARANCE DISTANCES FOR COMPONENTS OF SEWAGE SYSTEMS (metres) | | | | | | | | | | |
|---|-----------|----------|---------|---------|---------------|----------|------------|--|--|--|
| | Wells | Wells | Springs | Springs | Surface Water | Property | Dwellings | | | |
| \Rightarrow If the bed is raised, add 2 | (with 6 m | (not 6 m | Potable | Not | (lake, river, | Lines | Structures | | | |
| metres for every 1 metre of rise | casing) | casing) | | Potable | etc.) | | | | | |
| Class 4 Distribution Pipe | 15 | 30 | 30 | 30 | 15 | 3 | 5 | | | |
| Class 4 Septic Tank | 15 | 15 | 15 | 15 | 15 | 3 | 1.5 | | | |
| Class 5 Holding Tank | 15 | 30 | 30 | 15 | | 3 | 1.5 | | | |
| Class 1 Privy | 15 | 30 | 30 | 30 | 15 | 3 | | | | |
| Class 2 Grey-Water Pit | 15 | 30 | 30 | 15 | 15 | 3 | | | | |