#### **APPROXIMATE SOIL PERCOLATION RATES (T-time)**

The following are **estimated** ranges of soil percolation rates (T-times) measured in a rate of min/cm. Actual on-site soil conditions may vary significantly from estimates; it can be difficult to tell a 30 from a 50 just by looking at it.

Estimated T-times shall be determined by samples analyzed by the Unified Soil Classification System, the Soil Texture Classification from the USDA Soil Survey Manual, or percolation tests being conducted on in-situ soils.

Disputes about estimated T-times shall be resolved by sending in-situ soil samples to a Canadian Council of Independent Laboratories testing firm at the applicant's cost. The T-time will be determined by the falling head test and grain size analysis; the percent passing the 75  $\mu$ m #200 sieve is to be included for silt content.

Soil Type	Sand	Sandy Loam	Loam	Silty Loam	Clay Loam	Silt - Clay	Clay
T-time (min/cm)	10	12 - 20	17 - 25	20 - 30	30 - 40	40 - 50	50+

Sub-surface conditions encountered:			Approved by Inspector
Depth (m)	Soil type	<u>T-time</u>	
			☐ Yes
			□ No
		Donth (m)	Dooth (m)

#### IMPORTED SEPTIC STONE AND LEACHING BED FILL CERTIFICATION

1	, certify that the materials used to construct the
',	<del></del> ,
sewage system, under the application herein, meet	Ontario Building Code requirements, and
correspond to the percolation rate on the applicatio	n and the soils analysis provided to the
Township of Cavan Monaghan:	

NAME / NUMBER OF LICENSED AGGREGATE PIT	TYPE OF MATERIAL	T-TIME / SILT CONTENT	TESTING DATE (mm/dd/yyyy)
		/	
		/	
		/	

**Note:** Leaching bed fill means soil used to construct 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 Township of Cavan Monaghan may require you to submit soil samples for analysis.							
Signature of Authorized Agent or Owner	Date						

4A: Design Criteria

		DWE	LLING		OTHER:			
DESCRIPTION	Total # of Existing	Total # of Proposed	#UNITS PER FIXTUR	TOTAL FIXTURE UNITS	Total # of Existing	Total # of Proposed	#UNITS PER FIXTURE	TOTAL FIXTURE UNITS
Bathroom group – 3 piece (toilet, sink, tub/shower)			x 6.0 =				x 6.0 =	
Additional toilet		x 4.0 =					x 4.0 =	
Bathtub or shower			x 1.5 =				x 1.5 =	
Additional sinks			x 1.5 =				x 1.5 =	
Kitchen sink	Citchen sink x		x 1.5 =				x 1.5 =	
Dishwasher			x 1.0 =				x 1.0 =	
Clothes Washer			x 1.5 =				x 1.5 =	
Laundry tub			x 1.5 =				x 1.5 =	
Other:			x =				x =	
FIXTURE UNITS			Tota	d:			Total	
FINISHED FLOOR AREA m <sup>2</sup>	Existing	Proposed	Тс	tal	Existing	Proposed	Tota	ıl
# OF BEDROOMS			То	tal:			Tota	al:

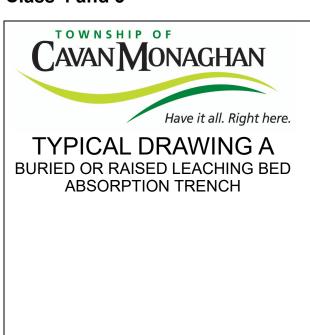
DESIGN FLOW CALCULATION TABLE								
	Residential Occupancy		Volume (L)	Flows				
	1 bedroom dwelling		750					
(A) Bedroom flow	2 bedroom dwelling		1100					
	3 bedroom dwelling		1600					
	4 bedroom dwelling		2000					
	5 bedroom dwelling		2500					
(B) Extra bedroom flow	Each bedroom over 5,		500					
	Each 10 m <sup>2</sup> (or part thereof) over 200 m <sup>2</sup> up to 400 m <sup>2</sup> ,		100					
(C) Living area flow	Each 10 m <sup>2</sup> (or part thereof) over 400 m <sup>2</sup> up to 600 m <sup>2</sup> , and		75					
<b>3</b>	Each 10 m <sup>2</sup> (or part thereof) over 600 m <sup>2</sup> , or		50					
(D) Fixture count flow	Each fixture unit over 20 fixture units		50					

Daily Design Sewage Flow, Q = liters/day A + (B or C or D)	
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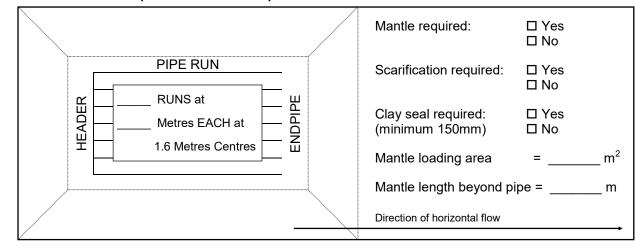
#### Class 4 and 5

# **5A: Proposal to Construct**

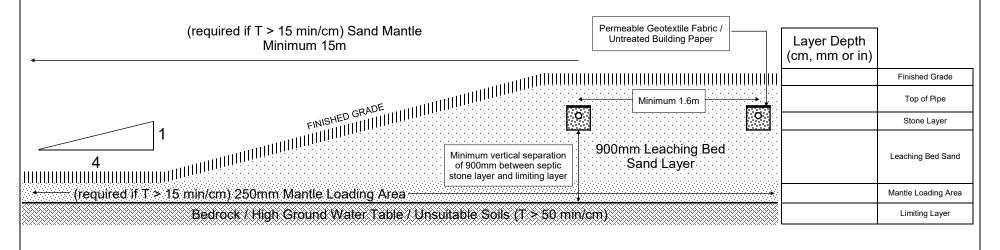
Water Supply:	□ Pr	oposed		☐ Existing						
□ Lake	☐ Drilled	well		☐ Dug well		Other (ene	oif.().			
☐ Shore well Casing depth:			m	□ Sandpoint	u	Other (specify):				
Provide proposed information instead of minimum re					equ	uirements:				
☐ Septic Ta	ınk	☐ Clas	ss 5	<b>Holding Tank</b>		☐ Treatm	ent Unit	<b>-</b>	Dige	ster Tank
☐ New – proposed working capacity: litres					res	☐ Level II	☐ Le	vel III		Level IV
☐ Use existing	– size:	[	Perm	it		Make / mod treatment u	nit:			
						I		) Na		
T-time (min/cm) of existing soil:		Subsurfaction		od:		Pump requ	IIIrea /	I No I TBD		facerating ffluent
								T		
Mantle Lo Trench Bed, Leachin	oading Area			ercolation Time (T) of existing Soil, min/cm		1 < T ≤ 20	20 < T ≤ 35	35 < T s	≤ 50	T > 50
	nly	iller bed	Load	ding Rates, (L/m²)/	day	10	8	6		4
☐ Existing Soil (☐ Imported Lea	(T ≤ 15) ching Bed Fill		Q÷	Loading Rate = _		m² L	ength	m x \	Width	m
-										
Class 4 Trend		_	Tota	al pipe length: QxT	=	m	Raised heigh	nt (above g	rade):	m
Class 4 Leac Typical Drawing		nbers	Conventional & Type I Leaching Chambers $\frac{Q \times T}{200}$ Type II Leaching Chambers $\frac{Q \times T}{300}$							
Class 4 Filter Typical Drawing			Loadi	ng area: Q ÷ 75 / 50	=_	m²	If over 50 m <sup>2</sup> ,	# of filter	beds:	
If Q ≤ 3000 L/d If Q > 3000 L/d			C	Contact area: $\frac{Q \times T}{850}$	=	m <sup>2</sup>	Raised heig	ht (above (	grade)	:m
-										
Class 4 BME			Spec	ified sand area: $\frac{Q \times}{40}$	$\frac{T}{0} =$	m²	Length	m x	Width	n m
Typical Drawing	C, D of E		Numb	per of modules: Q ÷		=	Raised heig	ht (above	grade)	: m
Type A Dispe Typical Drawing			Ston	e area: Q ÷ 75 / 50	) = _	m <sup>2</sup>	Raised heigh	nt: (above	grade)	:m
If Q ≤ 3000 L/d If Q > 3000 L/d			1 <t≤< th=""><th>15 sand area: <math>\frac{Q {x} T}{850}</math></th><th>=_</th><th> m²</th><th>T &gt; 15 sand</th><th>area: <math>\frac{Q \times 1}{400}</math></th><th><math>\frac{\Gamma}{\Gamma} = </math></th><th> m²</th></t≤<>	15 sand area: $\frac{Q {x} T}{850}$	=_	m²	T > 15 sand	area: $\frac{Q \times 1}{400}$	$\frac{\Gamma}{\Gamma} = $	m²



# Plan View (not to scale)

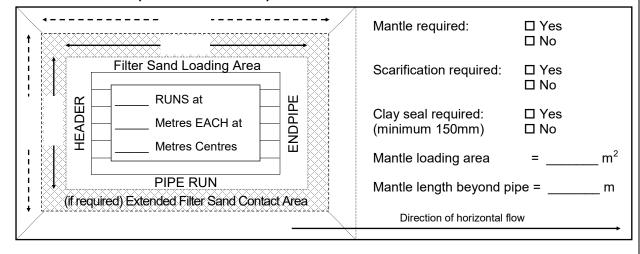


## Cross-Section Profile (not to scale)

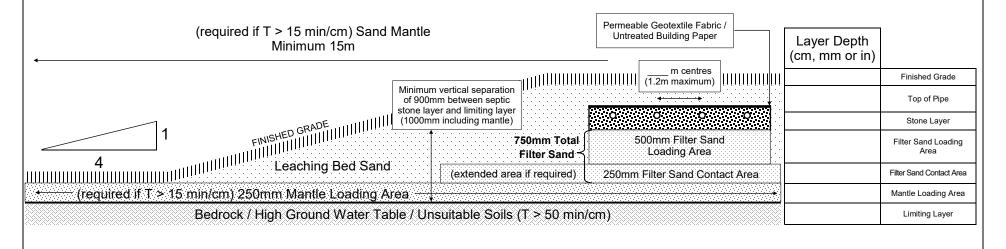




#### Plan View (not to scale)



## Cross-Section Profile (not to scale)





Building Department 988 County Road 10 Millbrook ON, L0A 1G0

#### **Agent/Owner Authorization Form**

A. Project Information
Street Address:
Proposed project:
3. Party to be authorized
Name:
Corporation or Partnership:
Address: Lot/Con:
Phone #: Cell #: Email:
C. Declaration of Owner
,, being the Registered Owner of the above
property hereby authorize the party stated in Section B of this form to make application
or permit on my behalf to Building Department of the Township of Cavan Monaghan in
accordance with the applicable requirements of the Ontario Building Code for the
ourpose of the identified project.
Date: Signature:

The Ontario Building Code states that "owner includes, in respect of the property on which the construction or demolition will take place, the registered owner, a lessee or mortgagee in possession".

**Note:** This form is valid only for one access to Building Permit record application. Subsequent applications by an authorized agent will require a new agent authorization form completed by the current property owner.