



## Sewage System Permit Guide

A building permit is required from the City to construct or alter an onsite sewage system with a capacity of 10,000 litres a day or less. The sewage system Permit Application will be reviewed to ensure compliance with Part 8 of the Ontario Building Code and associated applicable law such as the City of Kingston zoning bylaws, and Cataraqui Region Conservation Authority.

This Guide is intended as a reference document to assist you in submitting a Sewage System Permit Application, and to outline the process after the permit application has been submitted. Please note that failure to submit a complete permit application may result in delays in issuing the permit. If you have any questions about the Sewage System Permit Application process, please contact the building department at 613-546-4291 extension 3280.

It is an offence to construct or alter a sewage system without a permit. Any person who commences construction or alteration of a sewage system prior to the issuance of a Permit to Construct or Demolish shall, in addition to any other penalty imposed under the Act or Building Code, pay a non-refundable administrative surcharge fee as set out in Schedule "A" of the City of Kingston, Building By-law.

### **New, Alteration or Repair of a Sewage System for an Existing Building:**

1. Create an account and apply for a "Plumbing" permit through DASH, our online public permit application portal at <https://apps.cityofkingston.ca/DASH/>
2. Application Fee: [Refer to fee schedule](#)
3. Submit a site evaluation that includes:
  - a. Date evaluation completed
  - b. Contact information of person completing the evaluation
  - c. Depth to rock, and soil saturation
  - d. Soil properties including soil permeability
  - e. Soil conditions including the potential for flooding
4. Submit a current site plan indicating:
  - a. Dimensions of property and lot size, legal description, existing rights-of-way, or easements
  - b. Location of all building(s) proposed or existing
  - c. Location of the proposed sewage system including tank, filter bed, trenches or any other septic component with dimensions to buildings, property lines and any water body (lakes, ponds, streams, high water line)
  - d. Location of well with dimensions to the proposed sewage system components

5. Upload the completed Sewage System Calculation Page for Class 3,4,5, Sewage Systems or Class 2 Sewage Systems as applicable.

### **New, Addition or Alteration of a Sewage System in Conjunction with a Building Permit:**

1. A separate record for the sewage system is not required where an applicant has submitted an application for a new home, addition or alteration as the sewage system will be reviewed in conjunction with the building permit.
2. The applicant will upload to the new home, addition or alteration permit record all plans and specifications as noted in sentences 3 and 4 above
3. Additional fees for septic review will be added as applicable

### **Approximate Timeline**

Based on the building category as set out in the Ontario Building Code the timeline for the first permit review will be ten business days.

### **Sewage Systems Adjacent to a Water Body**

It is the responsibility of the owner to ensure that a Permit is obtained from the Cataraqui Region Conservation Authority (CRCA) prior to the issuance of a building permit for sewage systems within the CRCA jurisdiction. Please call 613-546-4228.

### **Required Inspections**

The owner of a property on which the construction, addition or alteration of a sewage system will take place, or their contractor, must book inspections through the online DASH portal for the following inspections:

1. Evaluation of soil conditions, percolation test
2. Excavation
3. Prior to backfilling a sewage system
4. Final inspection



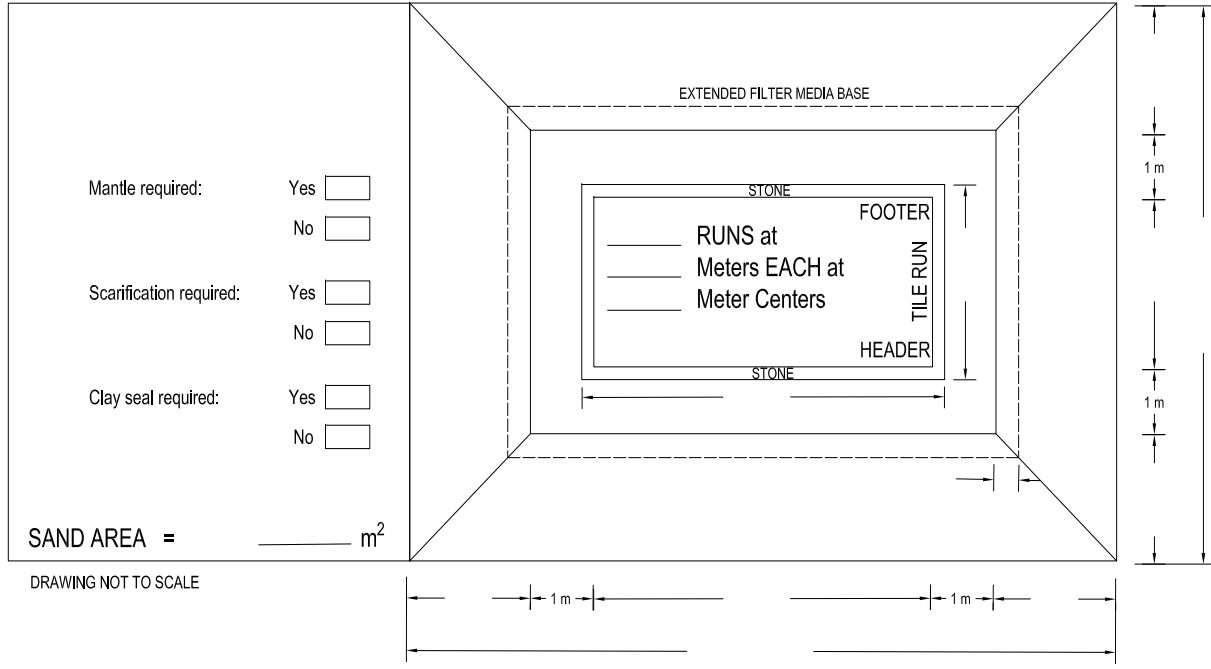
# Plan View

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

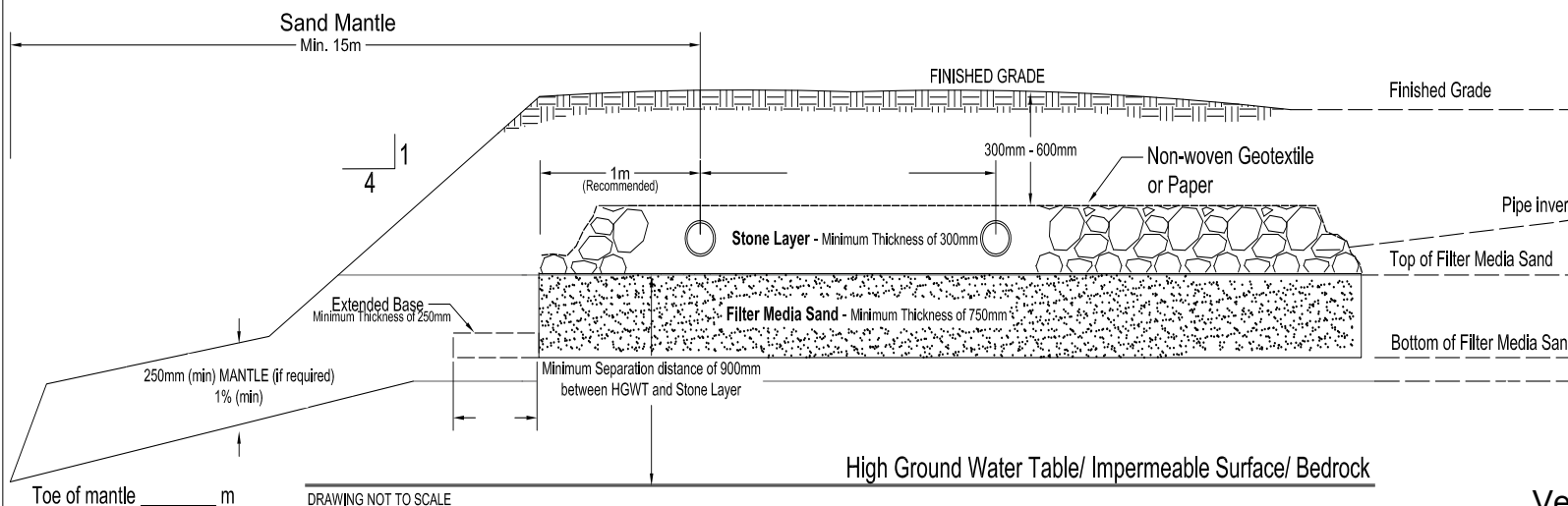


Ottawa Septic System Office Bureau des systèmes septiques d'Ottawa

## TYPICAL DRAWING B BURIED OR RAISED TILE BED FILTER MEDIA METHOD



# Cross-Section Profile



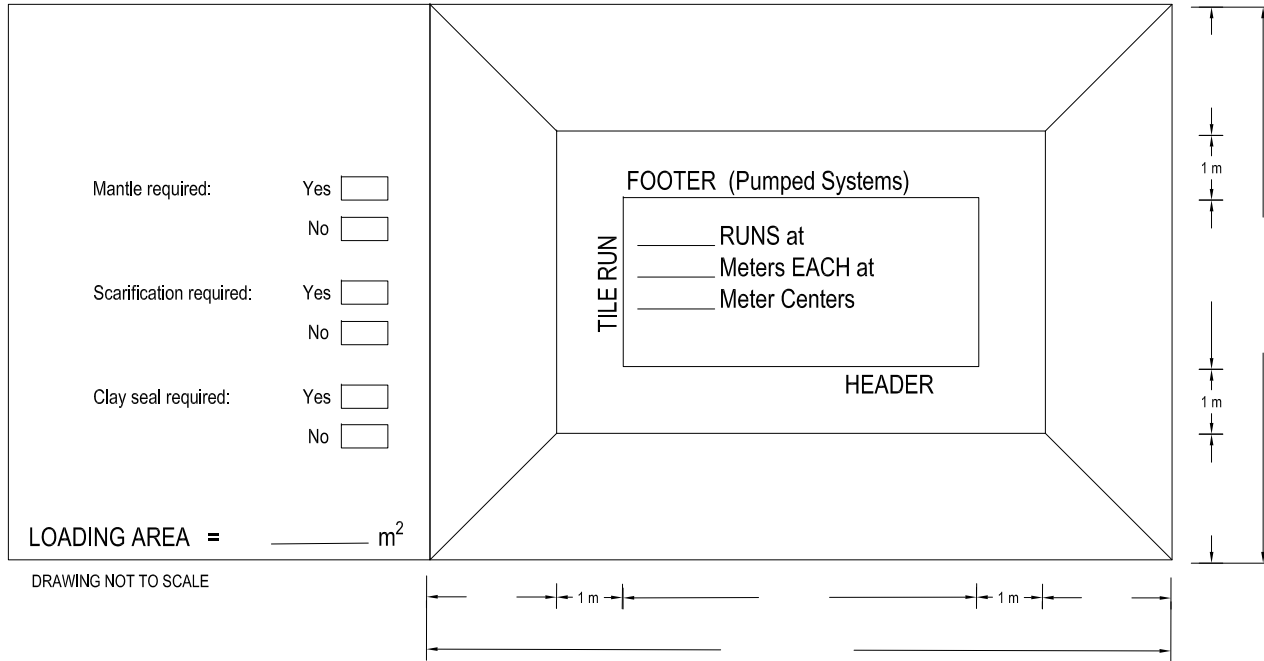
Proposed Installation Grades	Approved Installation Grades	Existing Grade

# Plan View

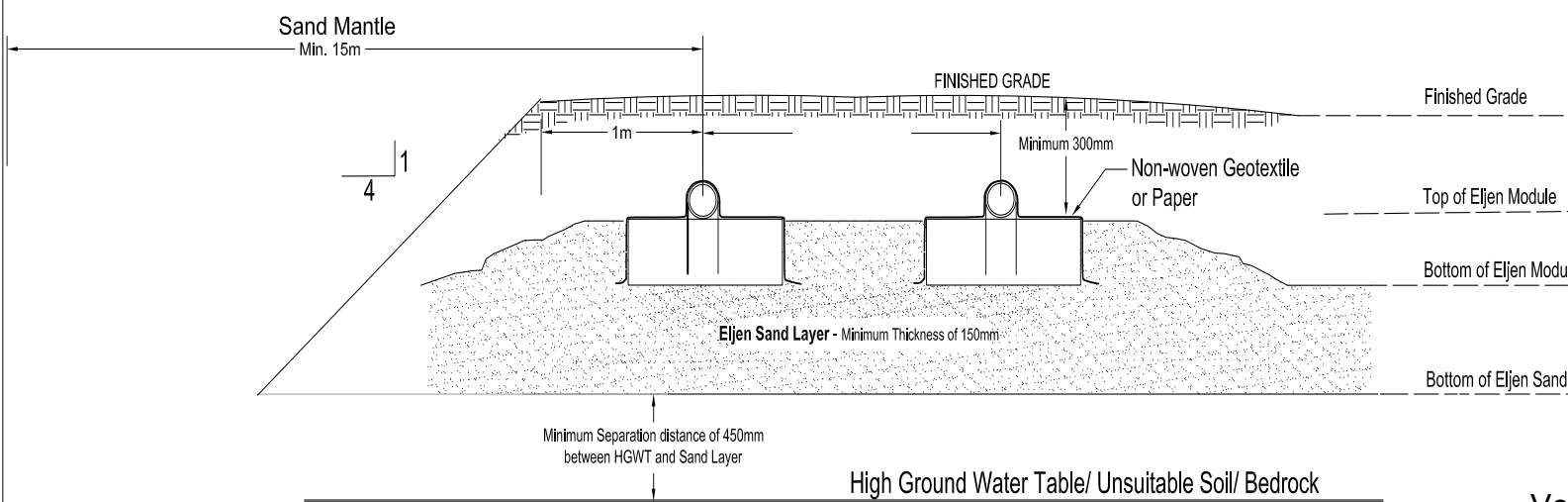
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 Permit # \_\_\_\_\_  
 Revision # \_\_\_\_\_  
 Date \_\_\_\_\_



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**TYPICAL DRAWING C**  
 BURIED OR RAISED BED - BMEC ELJEN System



# Cross-Section Profile



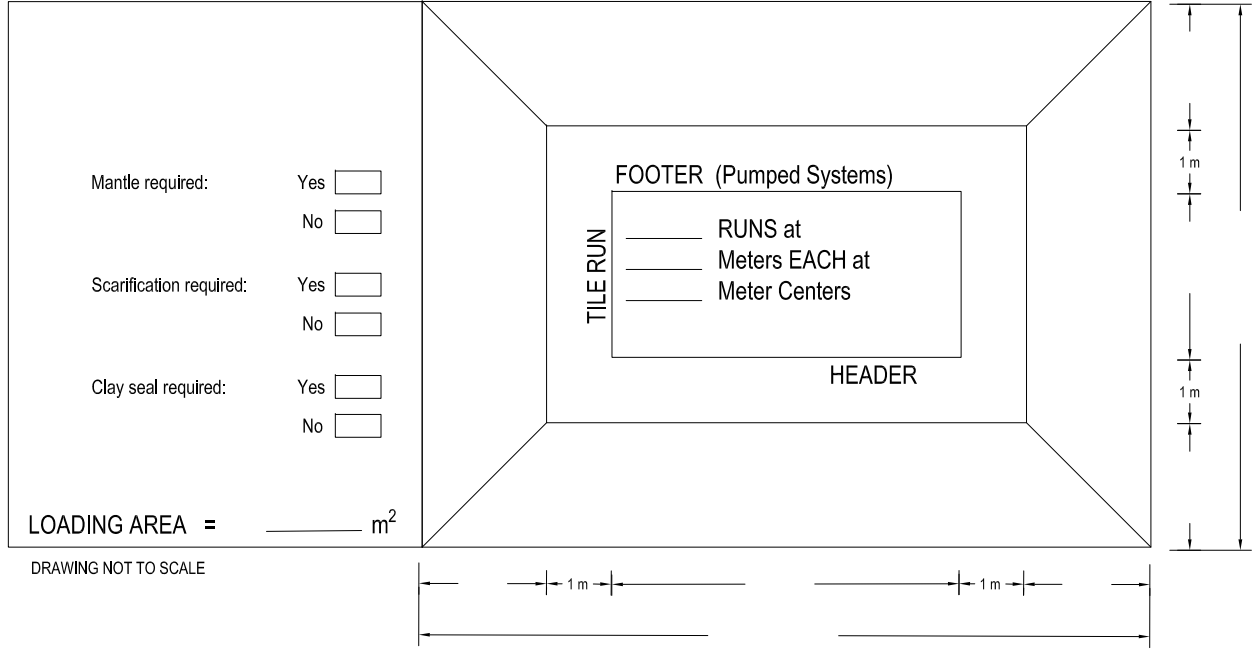
Proposed Installation Grades	Approved Installation Grades	Existing Grade
		Finished Grade
		Top of Eljen Module
		Bottom of Eljen Module
		Bottom of Eljen Sand

# Plan View

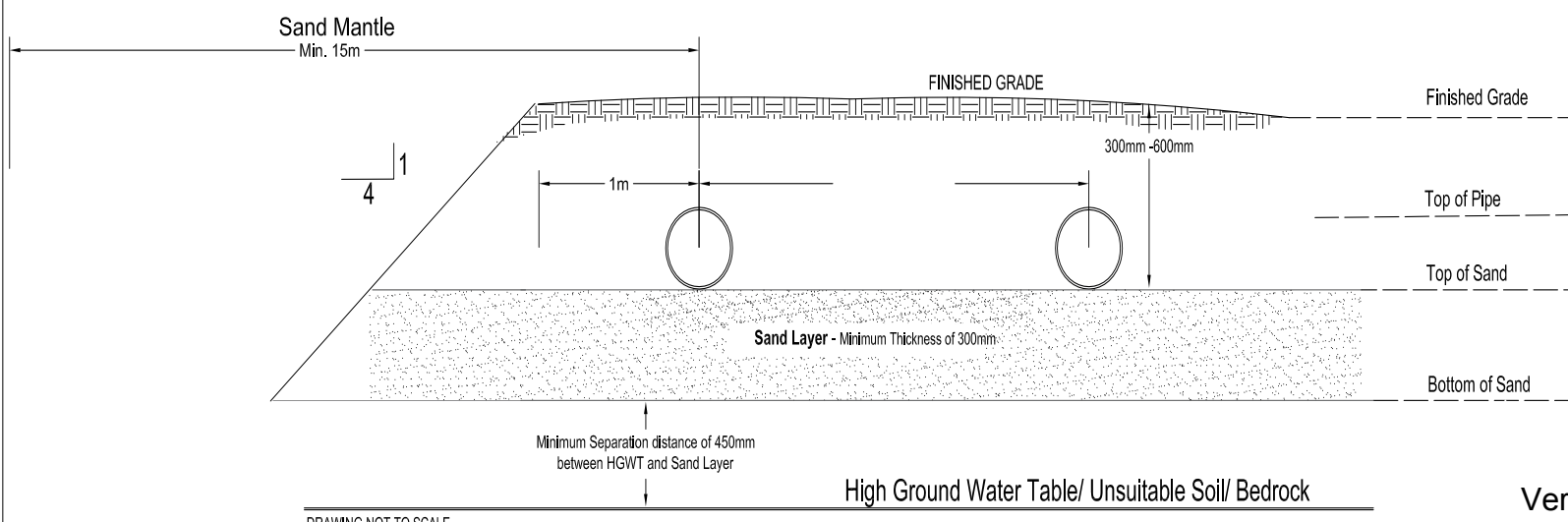
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 Revision # \_\_\_\_\_  
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**TYPICAL DRAWING D**  
 BURIED OR RAISED BED - BMEC ENVIRO SEPTIC



# Cross-Section Profile



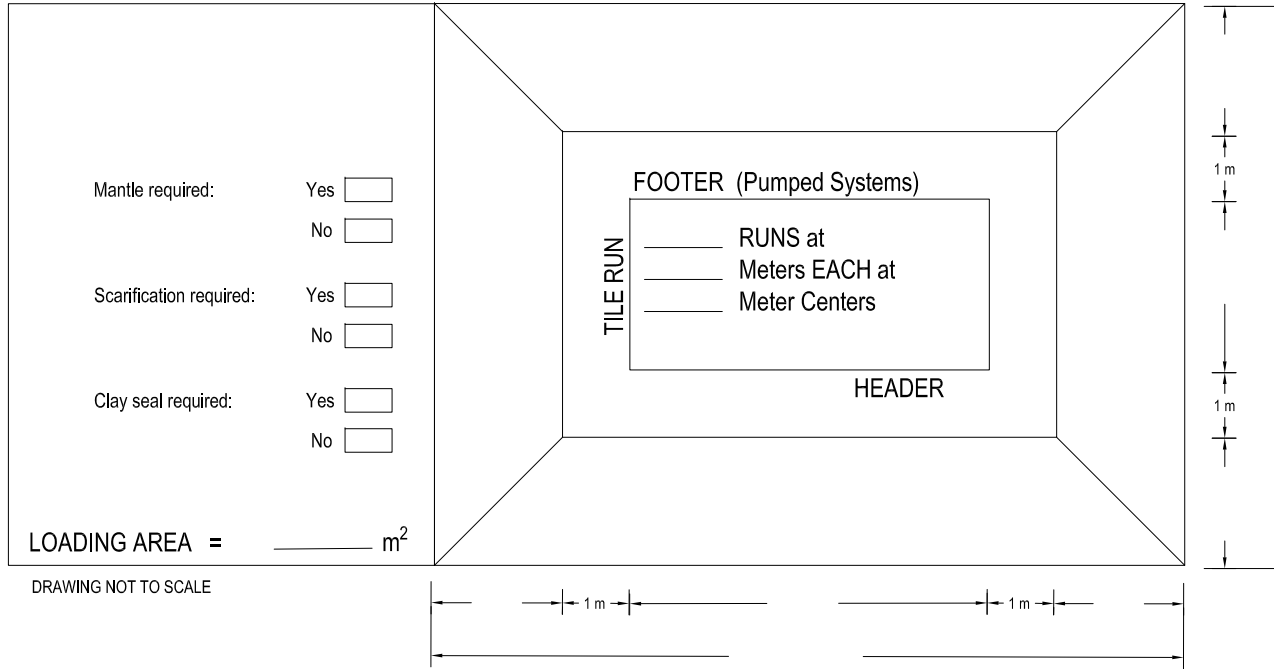
Proposed Installation Grades	Approved Installation Grades	Existing Grade

# Plan View

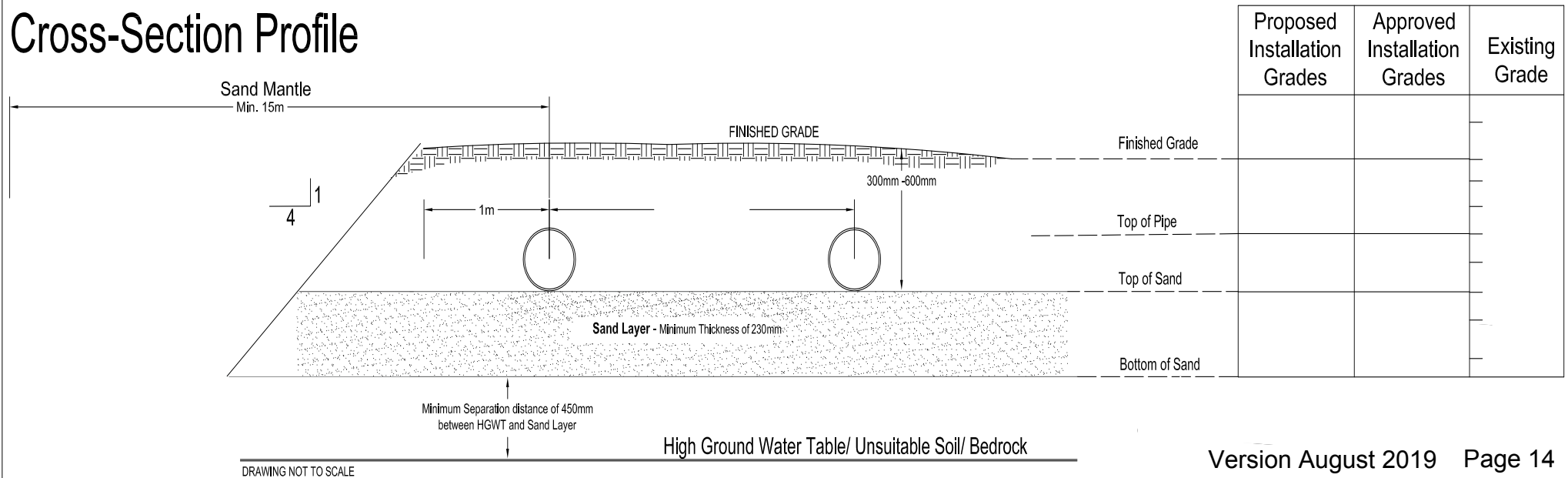
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 Revision # \_\_\_\_\_  
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**TYPICAL DRAWING E**  
 BURIED OR RAISED BED - BMEC ATL



# Cross-Section Profile



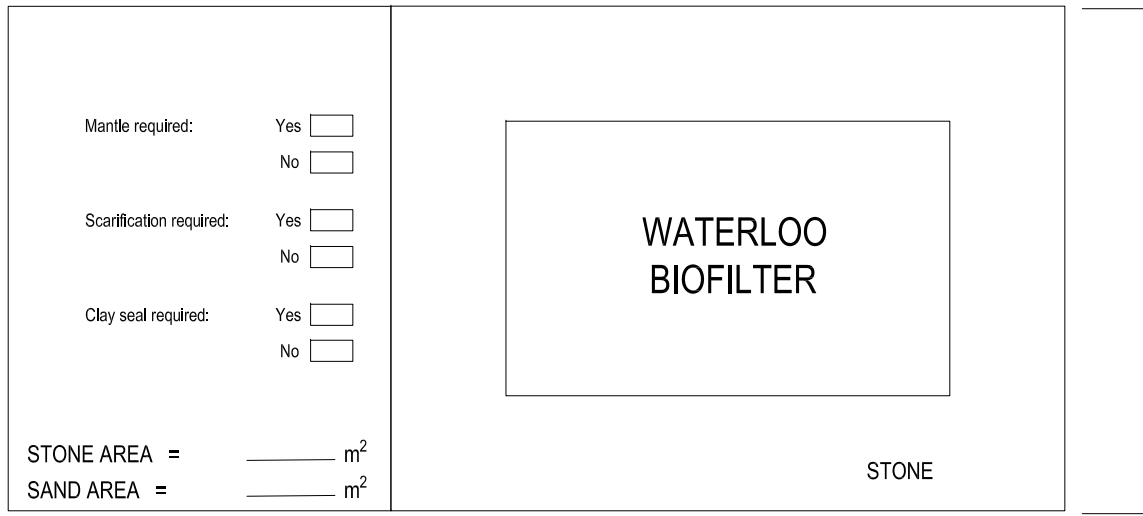
# Plan View

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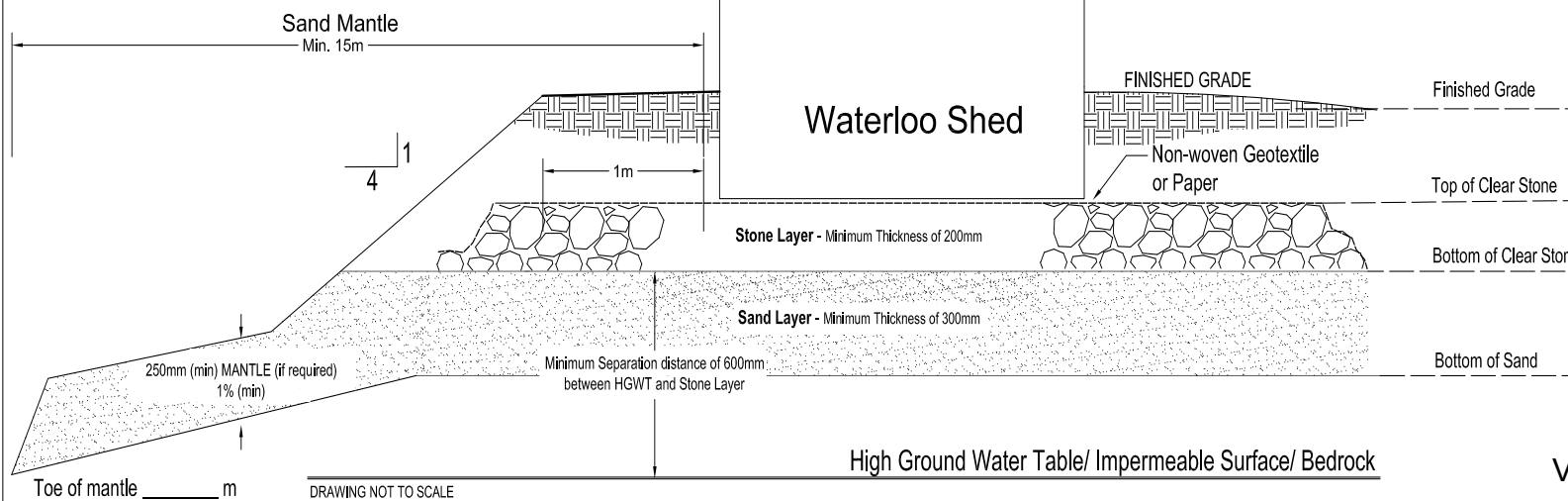
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## TYPICAL DRAWING F WATERLOO BIOFILTER SHED



DRAWING NOT TO SCALE

# Cross-Section Profile



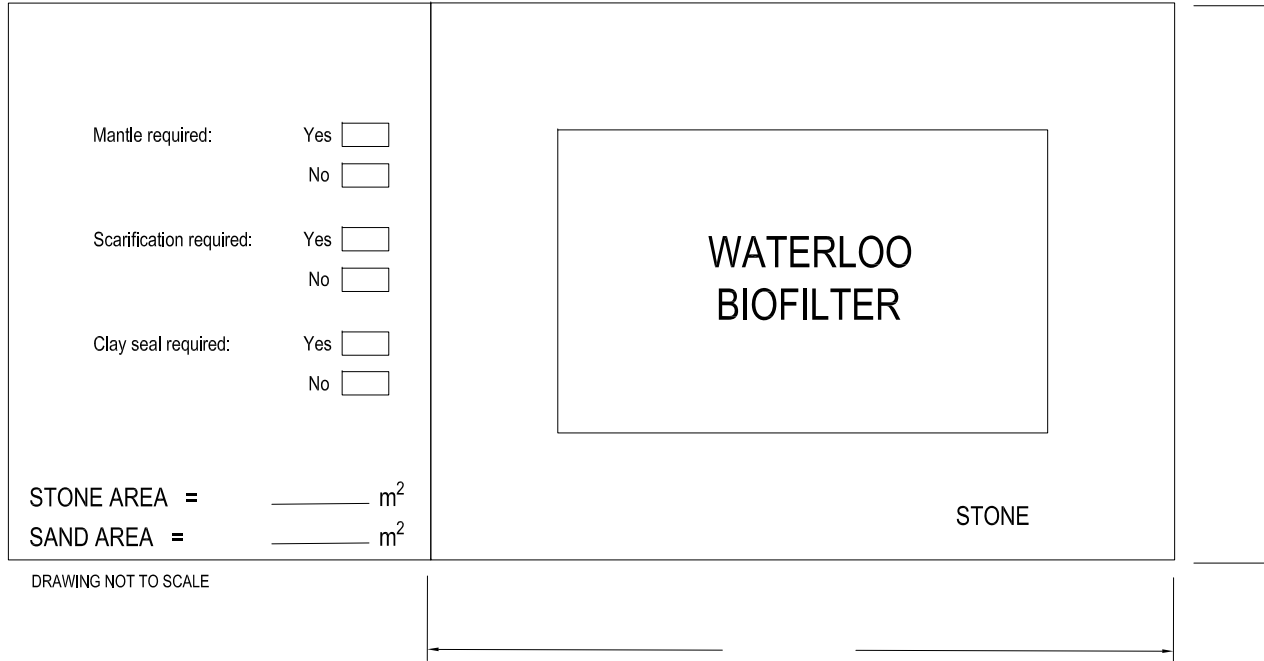
Proposed Installation Grades	Approved Installation Grades	Existing Grade

DRAWING NOT TO SCALE

High Ground Water Table/ Impermeable Surface/ Bedrock

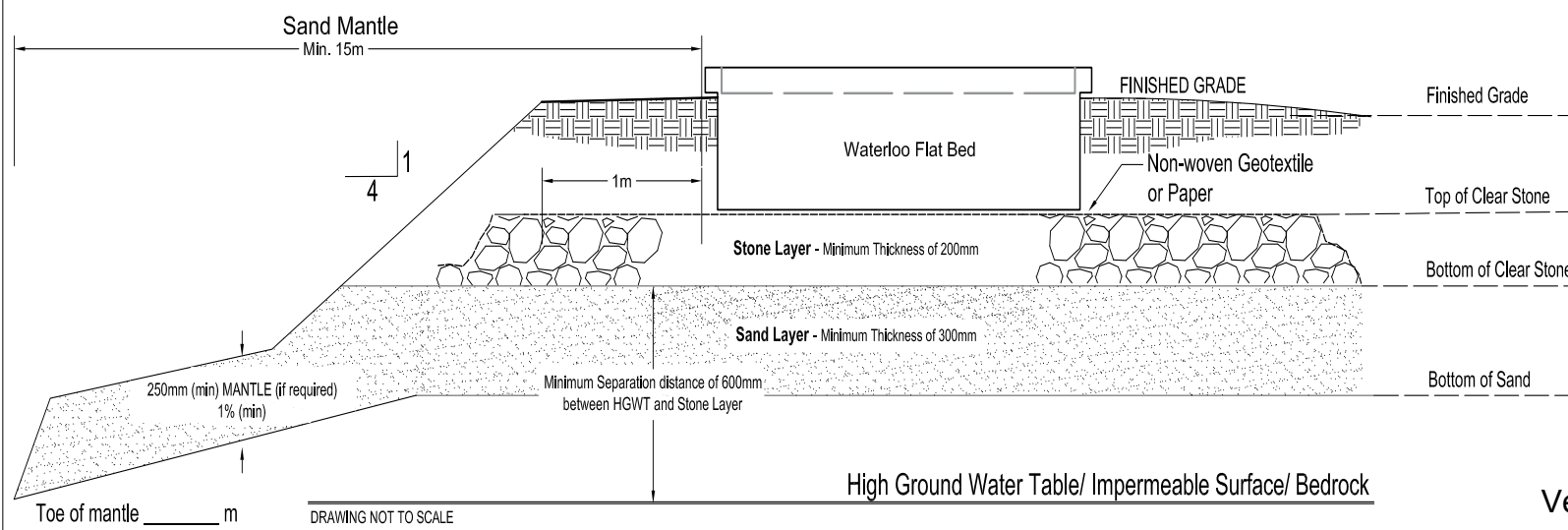
# Plan View

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 Permit # \_\_\_\_\_  
 Revision # \_\_\_\_\_  
 Date \_\_\_\_\_



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**TYPICAL DRAWING G**  
 WATERLOO BIOFILTER FLAT BED

# Cross-Section Profile

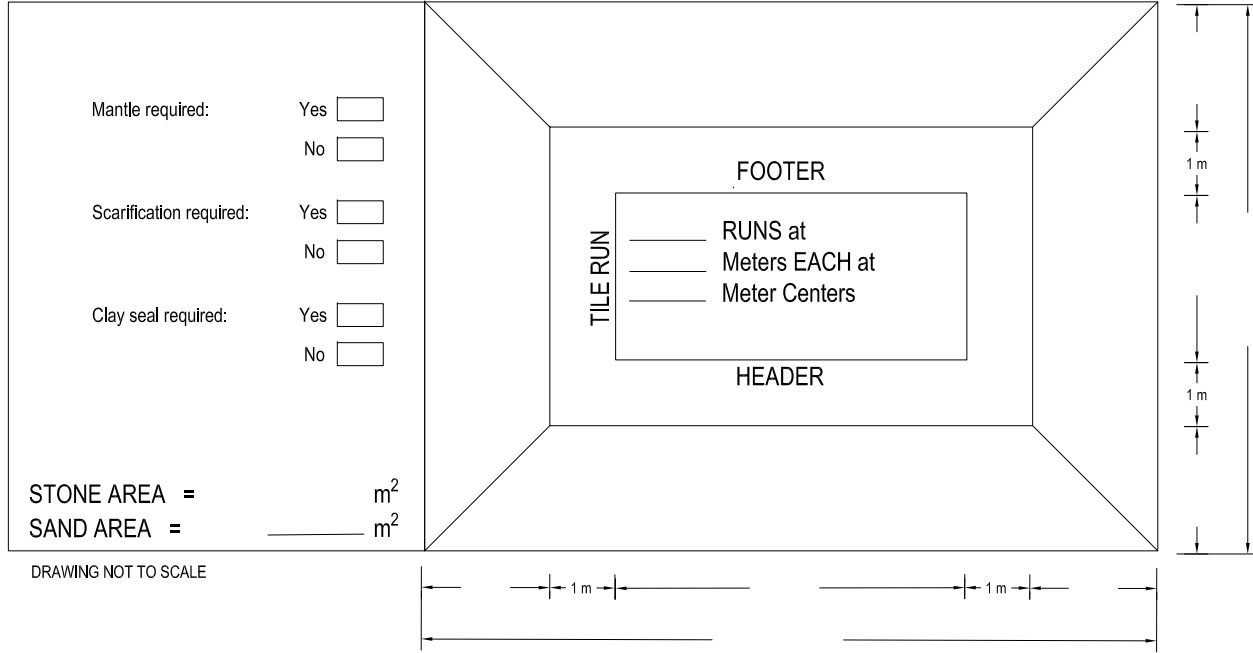


Proposed Installation Grades	Approved Installation Grades	Existing Grade

High Ground Water Table/ Impermeable Surface/ Bedrock

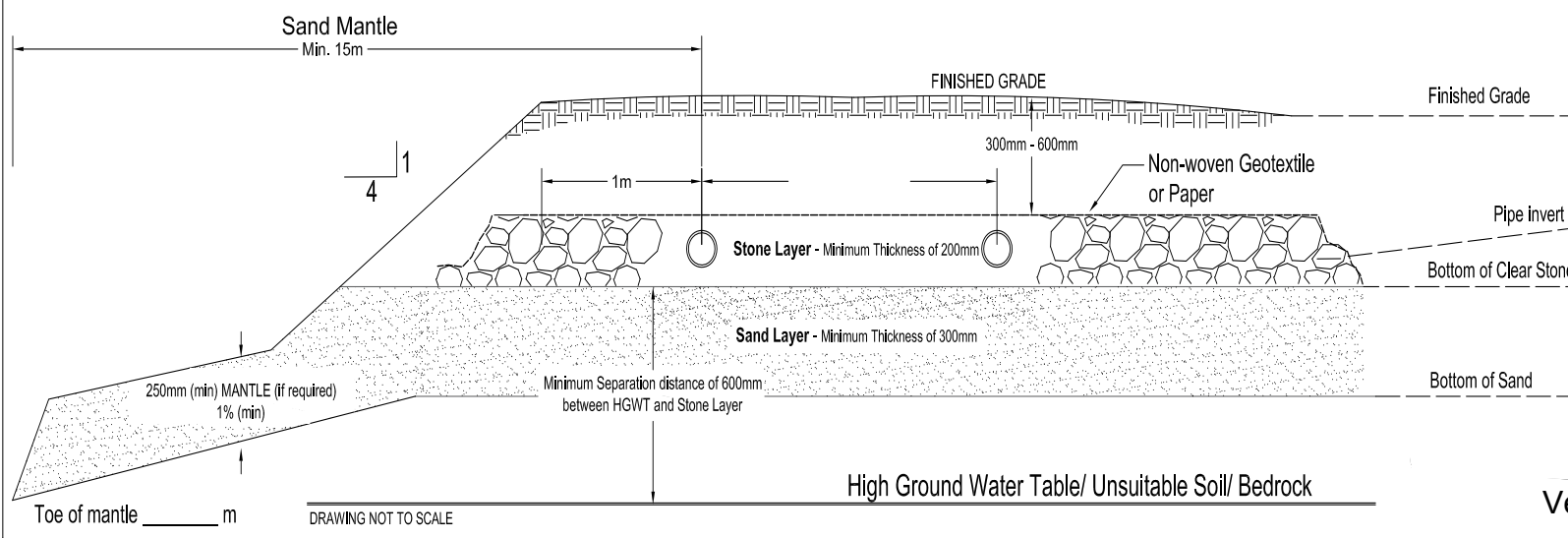
# Plan View

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



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**TYPICAL DRAWING H**  
 TYPE A DISPERSAL BED

# Cross-Section Profile

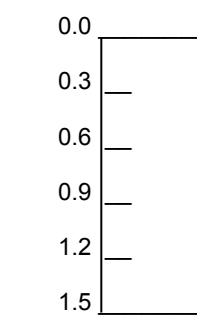


Proposed Installation Grades	Approved Installation Grades	Existing Grade





# Sewage System Specifications Page

<b>Structure</b>	<input type="checkbox"/> New <input type="checkbox"/> Existing	<input type="checkbox"/> Residential <input type="checkbox"/> Commercial	If the sewage system is non-residential, attach a separate copy of the specifications and plans.	
<b>Number of bedrooms</b>	<b>Number of fixture units</b>	<b>Total finished area</b> _____ (metres <sup>2</sup> ) <input type="checkbox"/> Including walkout basement	<b>Daily design sewage flow (Q)</b> _____ (litres per day) Account for backwash water from any water treatment unit (i.e. water softener)	<b>Septic tank capacity (2 x Q)</b> _____ (litres) (minimum of 3600 litres)
<b>Water supply</b>				
<input type="checkbox"/> Proposed <input type="checkbox"/> Drilled Well <input type="checkbox"/> Dug, bored, or blasted well <input type="checkbox"/> Municipal <input type="checkbox"/> Surface water <input type="checkbox"/> Existing    Casing depth _____ (metres) <input type="checkbox"/> Sandpoint or drivepoint <input type="checkbox"/> Cistern <input type="checkbox"/> Shore well				
<b>Soils</b> Indicate soil types (sand, silt, clay), bedrock, and the high ground water table below.  Test Pit (metres) 		<b>Holding tank capacity (7 x Q) (Class 5 only)</b> (minimum of 9000 litres)  _____ (litres)		<b>Conventional leaching bed (minimum 40 metres)</b>  Total distribution pipe _____ (metres) <input type="checkbox"/> Mantle required <input type="checkbox"/> Pump required
		<b>Class 4 sewage system type</b> <input type="checkbox"/> Conventional leaching bed <input type="checkbox"/> Chamber system leaching bed <input type="checkbox"/> Filter media bed <input type="checkbox"/> Building Materials Evaluation Committee area bed <input type="checkbox"/> Shallow buried trenches* <input type="checkbox"/> Type A dispersal bed* <input type="checkbox"/> Type B dispersal bed*		<b>Chamber system leaching bed (minimum 40 metres)</b>  Total chamber length _____ (metres) Manufacturer _____ Model _____ Number of pieces _____ <input type="checkbox"/> Mantle required <input type="checkbox"/> Pump required
		<b>Treatment unit</b> <input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> Level IV <input type="checkbox"/> Service agreement provided Manufacturer _____ Model _____		<b>Filter media bed</b>  Loading area _____ (metres <sup>2</sup> ) Contact area _____ (metres <sup>2</sup> ) Total distribution pipe _____ (metres) <input type="checkbox"/> Mantle required <input type="checkbox"/> Pump required
		<b>Method of subsurface detection</b> <input type="checkbox"/> Magnetic <input type="checkbox"/> Tracer wire (14 gauge plastic coated) <input type="checkbox"/> Other _____		<b>Shallow buried trenches (minimum 30 metres)</b>  Total trench length _____ (metres)
<b>Building Materials Evaluation Committee area or type A dispersal bed</b> Stone layer area _____ (metres <sup>2</sup> )    Sand layer area _____ (metres <sup>2</sup> ) <input type="checkbox"/> Mantle required				
<b>Type B dispersal bed</b> Stone layer area _____ (metres <sup>2</sup> )    Linear loading rate <input type="checkbox"/> 50 litres per metre <input type="checkbox"/> 40 litres per metre Pump chamber capacity _____ (litres)				
<b>Loading rate (from Table 3) = _____ (Q) ÷ _____ (litres per metres<sup>2</sup> per day) = _____ area (metres<sup>2</sup>)</b>				

## 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 City of Kingston

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.

City of Kingston may require you to submit soil samples for analysis.

Licensed installer's signature

Date:

# Application for Review of Performance Level of Existing On-Site Sewage System

1. Owner (mailing address)										
Last name		First name		E-mail						
Street address		Municipality		Postal code		Province				
Telephone number ( )		Fax ( )		Cell number ( )						
2. Location of property										
Building number, street name			Lot/con.		Municipality					
Plan number/other description		Part	Plan		Roll number					
3. Proposal										
<input type="checkbox"/> Building Addition		<input type="checkbox"/> Garage		<input type="checkbox"/> Pool		<input type="checkbox"/> Other*				
* If other, please explain proposal or need for review:										
4. Building addition										
Existing number of bedrooms:		Additional number of bedrooms:		New total number of bedrooms:						
Existing total floor area of dwelling: m <sup>2</sup>		Proposed additional floor area of dwelling: m <sup>2</sup>		New total floor area: (existing + proposed) m <sup>2</sup>						
5. Existing Fixture Units (see OBC Table 7.4.9.3. for non-residential)			6. Additional Fixture Units – for proposed additions/renovations			7. Water supply				
		# of Units	Total			# of Units	Total	<input type="checkbox"/> Proposed <input type="checkbox"/> Existing		
Bathroom Group (3-4 piece bathroom)		_____ x 6.0 = _____		Bathroom Group (3-4 piece bathroom)		_____ x 6.0 = _____		<input type="checkbox"/> Drilled well Casing depth _____m		
Bathtub (with or without shower)		_____ x 1.5 = _____		Bathtub (with or without shower)		_____ x 1.5 = _____		<input type="checkbox"/> Dug, bored, or blasted well		
Toilet		_____ x 4.0 = _____		Toilet		_____ x 4.0 = _____		<input type="checkbox"/> Sandpoint or drivepoint well		
Clothes Washer		_____ x 1.5 = _____		Clothes Washer		_____ x 1.5 = _____		<input type="checkbox"/> Surface water		
Dishwasher		_____ x 1.0 = _____		Dishwasher		_____ x 1.0 = _____		<input type="checkbox"/> Shore well		
Laundry Tubs		_____ x 1.5 = _____		Laundry Tubs		_____ x 1.5 = _____		<input type="checkbox"/> Municipal water		
Shower Drain		_____ x 1.5 = _____		Shower Drain		_____ x 1.5 = _____		<input type="checkbox"/> Cistern		
Sinks		_____ x 1.5 = _____		Sinks		_____ x 1.5 = _____		<input type="checkbox"/> Other: _____		
Other		_____ x . = _____		Other		_____ x . = _____				
<b>TOTAL EXISTING</b> = _____			<b>TOTAL EXISTING</b> = _____							
8. Current sewage system information										
<input type="checkbox"/> Septic tank _____ litres					<input type="checkbox"/> Holding tank _____ litres					
<input type="checkbox"/> Leaching bed _____ metres of distribution piping					<input type="checkbox"/> Treatment unit type _____					
<input type="checkbox"/> Filter bed loading area _____ m <sup>2</sup>					<input type="checkbox"/> Class 1 and 2 (outhouse/privy and leaching pit)					
9. Previous permit information *										
Permit / Certificate of Approval number(s):				Year installed:		* If unknown, please attach a list of previous owners:				
10. Directions to lot (municipal address, secondary roads, signs to follow, etc.)					11. I certify that the foregoing information is true and accurate:					
					X					
					Signature of Legal Owner			Date		
					X					
					Signature of Agent			Date		