

ON SITE WASTE WATER DISPOSAL

SITE INVESTIGATION, ASSESSMENT AND EVALUATION CHECKLIST.

Please refer to AS/NZS 1547:2012 to help with your design. Evaluators should make themselves aware of all the potential restrictions under this Standard in order to show compliance with the NZBC clause G13/VM4 and Hawke's Bay Regional Council Rules.

1.0 Site Evaluator

1.1	Name:	Registration No.
	Company	Address
	Phone:	First point of contact:
	Cell:	
	Fax:	
	E-mail	

2.0 Site Information

2.1	Location Address:
	Owner: Owners Address:
	Phone: Fax:
	Mobile: E-mail
2.2	<u>Legal Description</u> Lot No:Dp:BLK: Valuation No: (as per your rate demand) Total site area:(ha)
2.3	Shape, Contour and layout of site is accurately described in design and shown on site plan? Yes <input type="checkbox"/> Flat site Yes <input type="checkbox"/> No <input type="checkbox"/> Gentle slope Yes <input type="checkbox"/> No <input type="checkbox"/> Moderate to steep Yes <input type="checkbox"/> No <input type="checkbox"/> Steep Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
2.4	Are photographs of site attached? Yes <input type="checkbox"/> No <input type="checkbox"/>
2.5	Illustration of soil structure attached? Yes <input type="checkbox"/> No <input type="checkbox"/>

3.0 Hydraulic Loading Information

3.1	Number of bedrooms	Number of persons	Design flow allowance per person (Refer: NZS 1547)
3.2	Waste Disposal Unit Installed	Yes <input type="checkbox"/>	No <input type="checkbox"/>
3.3	Water saving devices installed	Yes <input type="checkbox"/>	No <input type="checkbox"/>
3.4	Potable water supply <input type="checkbox"/> Rain water <input type="checkbox"/> Bore water <input type="checkbox"/> Reticulated <input type="checkbox"/>	(Tick supply used)	
3.5	Distances from system to bore or well in metres: Shown on Site Plan Yes <input type="checkbox"/> No <input type="checkbox"/>		

4.0 Site Assessment

4.1	Has the reserve field been identified on the site plans Yes <input type="checkbox"/> No <input type="checkbox"/> If no, please explain.
4.2	Does the topography of the site suit the system design Yes <input type="checkbox"/> No <input type="checkbox"/>
4.3	Are there any drainage flow paths that have to be considered Yes <input type="checkbox"/> No <input type="checkbox"/>
4.4	Has surface water run- off been taken into account Yes <input type="checkbox"/> No <input type="checkbox"/>
4.5	Are there cut off drains / Collector drains required Yes <input type="checkbox"/> No <input type="checkbox"/>
4.6	Is the winter high water table known Yes <input type="checkbox"/> No <input type="checkbox"/> Height of water table: (if known) How close will this be to bed floor approx.? mm.
4.7	Are there site constraints with boundary or water course distances from the proposed field Yes <input type="checkbox"/> No <input type="checkbox"/> (please explain)

5.0 Sub-Soil Investigation.

5.1	How was the soil profile determined? Bore holes Dug Test Holes Earlier Site Excavation Soil pit Other (please specify):
5.2	Have the soil tests been assessed by a third party Yes <input type="checkbox"/> No <input type="checkbox"/>
5.3	Has the soil structure profile been completed Yes <input type="checkbox"/> No <input type="checkbox"/> Have photographs been supplied Yes <input type="checkbox"/> No <input type="checkbox"/> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; width: 40px; text-align: center;">900</div> <div style="border: 1px solid black; padding: 5px; width: 60px; text-align: center;">GROUND LEVEL</div> </div>
5.4	Has a percolation test been carried out Yes <input type="checkbox"/> No <input type="checkbox"/> If YES please specify the method: (As described and shown by AS/NZS 1547:2012)

5.5	Are the percolation test results attached Yes <input type="checkbox"/> No <input type="checkbox"/>
5.6	Do the tests match the DLR expectations from the tables and soil categorization Yes <input type="checkbox"/> No <input type="checkbox"/>
5.7	Tick the appropriate soil type: 1. Gravel, coarse sand, rapid draining Yes <input type="checkbox"/> No <input type="checkbox"/> 2. Coarse to medium sandy loams, free draining Yes <input type="checkbox"/> No <input type="checkbox"/> 3. Medium-fine-loams, moderately good drainage Yes <input type="checkbox"/> No <input type="checkbox"/> 4. Clay loam, loam and silt loam, imperfect drainage Yes <input type="checkbox"/> No <input type="checkbox"/> 5. Light clays slow drainage Yes <input type="checkbox"/> No <input type="checkbox"/> 6. Medium to heavy clays very poor draining Yes <input type="checkbox"/> No <input type="checkbox"/>

6.1 Site Evaluation

6.1	Are there any environmental constraints Yes <input type="checkbox"/> No <input type="checkbox"/> If YES please specify
6.2	Are there any Hawkes Bay Regional Council or Central Hawkes Bay District Council Constraints <i>(please check this prior to building consent application as this could materially affect the work on site)</i> Yes <input type="checkbox"/> No <input type="checkbox"/> If YES please specify HBRC discharge permit number:
6.3	Type of sewer treatment system best suited to this ground type including the minimum septic tank size, make and model
6.4	Type of disposal system considered best use for this site
6.5	Minimum disposal area recommended (for trenches and beds see 6.8 below and table 4.2A 1 NZS1547 Area= square meters
6.6	Minimum size of reserve area (see HBRC and CHBDC requirements) Area: M ²
6.7	Minimum septic tank size required from AS/NZS 1547
6.8	Trench and bed calculations from NZS 1547 2000

Calculations (*Trenches and beds only example*)

Length of drain = Q+ (SUM of DLR x W)

Example:

Q= Litres per day used = number of bedrooms
x 2 *people per bedroom* x *litres used per person per day*.

(Therefore 3 bedrooms = 6 people)

6 people x 180litres p.p per day =1080litres used

(180 litres is an example, consult NZS 1547 for minimum allowances to be used, or local and regional councils for minimum and maximum daily discharges)

Length of drain (Q) = 1080

Assume type 2 massive soil: 15x (trench width proposed) 0.6m

Therefore Q (Length of drain) = 1080+ 9 = 1201m *OF DRAIN @0.6M WIDE*

This equals 72m² of drainage.

7.0 General Comments

7.1	AS/NZS 1547:2012 "On site domestic waste water management" can be used for guidance in the on site assessment and soil evaluation. This standard can provide options for 'on site' waste water treatment and land application systems. The 2000 version is still the version automatically acceptable to G13NM4.
7.2	AS/NZS 1546: 1998 "Septic tanks" has been adopted by the Central Hawkes Bay District Council. Unless a manufacturer has built their tanks to comply with this standard, and has had an engineer verify that the tanks comply with the same, then those tanks are unlikely to be permitted for used in Central Hawkes Bay as an alternative solution to G13NM4.
7.3	Where it is necessary to make contact with the Hawkes Bay Regional Council in relation to an on sight waste water disposal design 06 835 9200 www.hbrc.govt.nz
7.4	Please be aware that although 'holding tanks' may be permitted under the building code and regional council rules, the discharge from them will not be accepted into the Central Hawkes Bay oxidation ponds from septic tanks cleaners. Please take this into consideration when designing your system.
Applicants Name	
Signature	
Date	

Important notes

1. Further attached are the tables required for ETA / ETS, mound and irrigation systems and field size calculations.
2. Please show reserve areas required including sizes as required by AS/NZS:1547
3. If the reserve area is to be less than 100% this must be justified by your design.
4. All site plans must show datum heights and overland flow path directions for any surface or shallow sub surface irrigation and drip-line systems.
5. All systems must show cross sectional drawings of how the system will be installed, whether they are standard trenches or AWTP systems.
6. All systems that require signage, fencing and planting in any form must be indicated on the drawings. Who does this work is between the applicant and designer, however, a code compliance certificate may not be issued unless all components are completed.
7. Anything other than full compliance with AS/NZS 1547 must be applied for as an alternative solution to the New Zealand building code clause G13NM4.
8. If the total domestic waste water flow design allowances are to be reduced from the standard quantities, then itemization of the water reduction fixtures within the dwelling will be required to be shown as part of the application, not just generic reference.
9. Please use AS/NZS 1547 in conjunction with this form to supply an accurate design. The tables supplied are a guide only. Other site constraints may indicate alternative systems are required, or that a specialist waste water engineer be employed.
10. Please use the blank calculations sheet attached to show calculations for systems other than trenches and beds.
11. It is not acceptable to leave questions on this form blank. If the information is not known then justification for why not must be supplied. *eg: Winter high water table*
12. Hawkes Bay Regional Council also has rules regarding the disposal of on-site wastewater. It is highly recommended that you check these guidelines as well. You cannot proceed with work even under a building consent if it would contravene other legislation!!

Calculation sheet for ETA/ETS, mounds, sub-surface and surface irrigation systems

Type of system best suited:

Type of soil (category):

Dir or dir from tables (mm/d):

Number of bedrooms:

Occupants: (minimum of 2 per bedroom):

Total litres per day:

Size of field required m^2 :

Size of reserve area required (see AS/NZS:1547):

Water saving devices (see notes in tables):

Cross sectional construction details of field & site plan (including all slopes and overland flow paths with locations of water tank overflows, construction details of cut off drains and any other elements that may affect the system. Also show any signage, planting, marking, & all setbacks for both EAA and Reserve field).