

**Table B.6 Infiltration assessment checklist**

Requirements	
Site ID	
Asset ID	
Infiltration component location	
Infiltration component type	

Infiltration capacity	Details	Acceptable submission?	Further requirements
Confirm that infiltration test results have been provided, along with trial pit records with soil/rock descriptions of the materials in which the test has been completed in accordance with BS EN ISO 14688-1:2002+A1:2013 or BS EN ISO 14689-1:2003			
Confirm that the infiltration tests have been undertaken at the location, depth and with a head of water that replicates the proposed design			
Confirm that infiltration tests state which stratum the results are appropriate to and any limitations in the test. For example, has the infiltration rate been estimated by assuming water only infiltrates into one particular stratum such as a discrete layer of limestone?			
Confirm that the infiltration tests follow BRE (1991) or Bettess (1996) as far as is relevant to the design. If not, state what variations have been made to the test and why			
Confirm that the head of water in the infiltration test falls to less than 25% of the initial head of water. (Note: if this does not occur the results should not be extrapolated – the results should state “Infiltration test cannot be determined.”)			
Confirm that account has been taken of the soil descriptions and an assessment of the likely impact of water on the soil and long-term infiltration rate has been included (eg high initial infiltration rates in dry mudstone may not be representative of long-term values when soaking water has caused weathering)			
Confirm what measures are necessary to prevent construction activities (especially compaction) changing the infiltration characteristics			
Confirm that the test infiltration capacity is likely to be representative of the wider ground mass (eg the test has not been undertaken in a limited extent of sand within a mass of clay)			
Groundwater levels			
Confirm that evidence has been provided of groundwater levels and seasonal variations (eg via relevant groundwater records or on-site monitoring in wells)			

Infiltration capacity	Details	Acceptable submission?	Further requirements
Confirm that the maximum likely groundwater levels are >1 m below the base of the infiltration device			
<b>Ground stability</b>			
Confirm that it has been demonstrated that infiltration will not cause significant risk of instability (eg retaining walls, slopes, solution features or loosely consolidated fill) or movement that could adversely affect any nearby buildings or other structures. Where infiltration is proposed closer than 5 m to the foundations of buildings or structures that this assessment should be approved by a suitably qualified professional such as a registered ground engineering adviser. The BGS Infiltration SuDS Map is a useful source of information. Some local authorities have solifluction maps			
Confirm that an assessment has been taken of the potential for subsidence due to infiltration			
<b>Ground contamination</b>			
Confirm that an assessment of the potential for deterioration in groundwater quality due to infiltration, such as due to mobilisation of contamination, has been undertaken. Note: this assessment should be undertaken by a qualified geo-environmental engineer or similarly qualified person, and may require a site investigation with contamination testing. The BGS Infiltration SuDS Map can provide useful preliminary information			
Confirm that a suitable treatment train has been provided before the runoff reaches the soil (to reduce risks of groundwater contamination to an acceptable level) – see National SuDS Standards and this manual			
<b>Flood risk</b>			
Confirm that an assessment has been undertaken of the potential effect of infiltration on groundwater levels local to any infiltration component and the potential wider impact of multiple infiltration components within the site, with respect to groundwater flood risk			
Confirm that an assessment has been undertaken of the risk of springs developing in layered geology/steep topography due to the proposed infiltration			
Confirm that details of overflows or additional discharge points if total infiltration cannot be relied on for all return period events have been provided			
<b>Combined sewer risk</b>			
Confirm that an assessment has been undertaken of the risk of groundwater leakage into any local combined sewers			