

From: Andrew . <andrew@vkhpc.co.uk>
Sent: 09 August 2024 10:29:23 UTC+01:00
To: "Joe Martin" <jmartin@mka-architects.co.uk>
Subject: Hevercourt

Joe

Please see below

1. *We appreciate the information provided however would ask for clarification regarding the hydraulic calculations as to why all the nodes/pipes are not represented. For example, the hydraulic calculations only show pipe numbers 1.000, 2.000 and 1.001. Pipe numbers 1002, 1.003 and 1.004 do not appear in the calculations and as such we cannot be confident that the hydraulic analysis provided reflects the design proposed, we ask for the final full network analysis to be provided.*

It is standard on smaller developments to check just the head of the runs in causeway, this is to check that the soakaways are adequate and that there are no flooding issues in the pipework. By putting larger volumes in at the head of the run, this gives a worse case scenario. We have model the whole surface water drainage and there are no flooding issues.

2. *With regards to the climate change allowances, in this location the allowance for the 2050s epoch is higher than that for the 2070s epoch for the 100 (1%) year storm scenario. We would expect that for a development that has a lifetime beyond 2061, the higher of the two allowances is to be used. In this location the climate change allowance to apply to the design is 45% for the 100 year (1% AEP) rainfall event, rather than the 40% currently applied within the calculations dated September 2023.*

The changes to climate change were introduced post planning, so should not be applied. However, we have now run the calculation for 45% climate change with no flooding issues.

3. *We are still unable to locate the results of the infiltration testing as previously requested, although the soakaway design sheet utilising the final infiltration rates has been submitted. Some confusion may have been caused by our request for the results of infiltration testing, to clarify we require for the ground investigation report, which we assume includes the full results of the infiltration testing, undertaken on site to be provided. In order to demonstrate compliance with the requirements of BRE365 we would expect for the report to include a location plan confirming the location at which testing was undertaken and for it to demonstrate the depths at which the testing was also undertaken. Upon review of the soakaway design report submitted there is some confusion with regards to the information supplied which we would appreciate clarified:*

Infiltration testing to Bre 365 should be relevant to the size of the development. The depth of the tests carried out were limited by how safe a hand dug trench can be safely excavated, under normal circumstances this would satisfy Building Control. We have revised the tank to limit the depth to 2m bgl, which has increased the overall area, but this may not satisfy the requirements of the LLFA. We therefore suggest that a further deeper infiltration test is carried out in the area of the proposed tank

4. *The report supplied references a soakaway/infiltration trench 9098mm deep and that the depth of the trial pit used was 400mm. On reviewing drawing number 539121-100, dated 27.07.23 and the Hydraulic calculations dated September 2023 the depth of the soakaway feature is given as 1.6m. We would expect for the depths of soakaway and the trial pit utilised within the soakaway design report to be reflective of the final feature proposed.*

This is generic calculation provided by the Tedds software to assist in the initial sizing of the trench and is a default print option. The causeway flow calculation are the final calculation to be used.

Kind Regards

Andrew Bird

MICE

Principal Civil Engineer

vkhp-consulting
civil and structural

T: 01306 881012

M: 07359 154404

E: Andrew@vkhp.co.uk

W: www.vkhp.co.uk



THIS E-MAIL (INCLUDING ANY ATTACHMENTS) IS MEANT ONLY FOR THE INTENDED RECIPIENT. IT MAY ALSO CONTAIN CONFIDENTIAL AND PRIVILEGED INFORMATION. IF YOU ARE NOT THE INTENDED RECIPIENT, ANY RELIANCE ON, USE, DISCLOSURE, DISTRIBUTION OR COPYING OF THIS E-MAIL OR ATTACHMENT IS STRICTLY PROHIBITED. PLEASE NOTIFY THE SENDER IMMEDIATELY BY E-MAIL. IF YOU HAVE RECEIVED THIS MESSAGE BY MISTAKE DELETE THE E-MAIL AND ALL ATTACHMENTS. FOR GDPR STATEMENT [CLICK HERE](#)