

Arun District Council, Civic Centre, Maltravers Rd
Littlehampton, West Sussex, BN17 5LF
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From: Sarah Burrow <Sarah.Burrow@arun.gov.uk>

Sent: 03 January 2023 11:31

To: Planning.Responses <Planning.Responses@arun.gov.uk>

Cc: Kathryn Welch <Kathryn.Welch@arun.gov.uk>; Neil Crowther <Neil.Crowther@arun.gov.uk>

Subject: LU/338/21/PL - Further Engineers Comments

Further Engineers Comments Regarding Surface Water Drainage

Thank you for reconsulting us on this application following the submission of further documents. The applicant has now supplied evidence that groundwater was monitored during February and March 2022 to a depth of 4m with the boreholes remaining dry. They have also supplied infiltration testing results from March 2022, these appear to have been conducted in accordance with BRE DG 365 and the slowest recorded infiltration rate was 1.23×10^{-5} m/s. The proposed design uses a rate of 1×10^{-5} m/s (0.036m/h). On the basis of the ground investigations that have been supplied no further monitoring or infiltration testing is required.

However, I have picked up on the following points that require amendment before I can recommend that condition 17 imposed under LU/338/21/PL is discharged:

1. Calculations to support the design have now been supplied. However the calculations require some adjustment to their inputs, this will likely affect the size of the proposed soakaway.
 - a. The infiltration rate is currently applied to both the base and the sides of the soakaway for the purposes of the design. This is against the adopted policy for the management of surface water, policy 1 paragraph 5.2.2 – see link and extract below. Please adjust the design so that the design infiltration rate is applied to the sides only.
 - b. CV Values (both winter and summer) should be set to 1 for all events and all drainage structures.
2. It is not clear exactly how the MUGA is to be drained. The general arrangement and drainage layout EX.01 rev C1 shows a soakaway S2 but the calculations appear to model a blanket permeable subbase. There is also no construction detail for the drainage for the MUGA. Please clarify.
3. The drainage layout requires further detail. The drawings must be appropriately detailed so that a contractor can build the drainage from these drawings without any interpretation. Please include the following:
 - a. Please give the invert (base) level and cover level of the soakaway(s).
 - b. List cover types for inspection chamber covers. Note 10 says these should be adjusted to suit final surface levels but gives no indication of which covers should be used in which circumstances.
 - c. Manhole S1 is listed in the schedule as a catch pit, please list the sump depth.
4. Please provide the following construction detail drawings:
 - a. Permeable paving.
 - b. Pipe bed and surround – appropriate for the depth of construction.

Full guidance on our policies and how to discharge conditions can be found at:

- Arun District Council Surface Water Drainage Guidance - <https://www.arun.gov.uk/surfacewater>
- WSCC Policy - https://www.westsussex.gov.uk/media/12230/ws_llfa_policy_for_management_of_surface_water.pdf
 - Extract referenced above: “For the purpose of design, the percolation rate must be applied to the sides of the infiltration structure only and the rate for the base must be zero, unless otherwise agreed with the LPA engineer. This does not apply to infiltration basins or permeable pavements, whereby the percolation rate is applied to the base only.”

Please reconsult me once further information to address these comments has been supplied.

Many thanks

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Usual working pattern: 8am – 2:30pm Monday to Friday

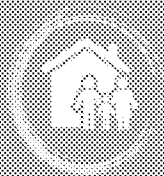
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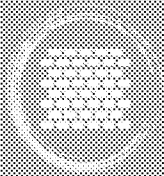
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