Bradbrook Consulting

21-008-NDH-22-020-C

5 May 2022

For the attention of Laura Gibbons

Sent by email: laura.gibbons@adur-worthing.gov.uk

Dear Sirs,

Application Reference:	**AWDM/0343/22**
Location:	**5 Commerce Way Lancing Business Park Sompting West Sussex BN15 8T**
Proposal:	**Erection of a building for B8 storage and distribution use (with ancillary offices), car parking, service yard areas and associated works.**

We write in connection with your further email of 25th April 2022 with regards to the above planning application requesting further information is supplied as follows:

22/03/30- AWC Technical Services Comments
22/04/06- Bradbrook Consulting Response
22/04/25- AWC Technical Services Comments
22/05/05- Bradbrook Consulting response.

1. Provide calculations to evidence if infiltration is viable on site utilising a blanket infiltration solution.
Unfortunately, due to the low external levels to the unit and the high groundwater level it is not possible to rely upon infiltration devices as the primary source of surface water discharge. The current proposed level of the drainage channel located within the concrete service yard is 2.230mAOD. This level is the current tie in level with the existing back of footpath and therefore cannot be lifted. The recorded ground water level is 1.940mAOD. Therefore there is not sufficient depth to install a blanket infiltration device whilst ensuring a minimum of 900mm of cover above the tank is maintained based on HGV loadings and ensuring sewers fall sufficiently via an oil separator.
Quoted groundwater level is different to that previously reported. Please note that infiltration could be provided via permeable sub-base too, i.e. removing the requirement for such a depth of cover.
As previously stated, the lowest site level is 2.230. Therefore, the subbase will be constructed within the groundwater and therefore infiltration will not be viable.

4. Provide a revised attenuation design with discharge limited to 2l/s.
See attached our updated drainage layout and microdrainage calculations that allow for 2 l/sec discharge rate.
Calculation results show a discharge rate of 2.2l/s for the 100 year plus 20% event. Please revise specified flow control to ensure 2l/s is not exceeded.
See attached revised calculations to show a maximum discharge rate of 2 l/sec.

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Calculations have some inconsistencies to the layout provided, the key ones which must be addressed now, in addition to the above, are:

a) Consistency of permeable paving area modelled. Layouts show two areas of 102m2, calculations include circa 234m2, i.e. calculations are currently over providing. Please correct this to provide consistency.

Please note the proposed permeable paved sub-base is designed to run below the footpath. See attached revised drainage layout clarifying this.

b) Please apply a cap volume depth to permeable paving within calculations to reflect the 300mm depth of sub-base.

See attached updated drainage layout and calculations including a sub-base cap.

It should also be noted that your CCTV survey identified issues with the private surface water sewer network. Discussions will need to be held with WSCC and ourselves to determine what requirements there may be for repairs to the system.

Please refer to the attached updated drainage layout. We have identified the requirement for repairs to be undertaken during the construction phase and recommended high pressure water jetting is carried out post construction to ensure all sewers are brought back to the original full free flowing condition. Also refer to note 20. of the drainage layout, we request a CCTV survey is carried out following completion of the contract to prove the integrity of the as built drainage systems and any repair works that have been carried out.

We trust the above is sufficient for your current needs however should you have any queries regarding this proposal we would be happy to discuss them at your convenience.

Yours faithfully,

For and on behalf of
HDR | Bradbrook Consulting

[redacted]

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enc.

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