

Director of Environment & Infrastructure:  
Mark Kemp



Mark Peacock  
Welwyn Hatfield Borough Council,  
The Campus,  
Welwyn Garden City,  
Herts,  
AL8 6AE

**Lead Local Flood Authority**  
**Post Point CHN 215**  
**Hertfordshire County Council**  
**County Hall, Pegs Lane**  
**HERTFORD SG13 8DN**

Contact Sana Shaikh  
Email [FRMConsultations@hertfordshire.gov.uk](mailto:FRMConsultations@hertfordshire.gov.uk)

Date 08 December 2020

**RE: 6/2020/2981/COND - Plot 6000, Land Adjacent to Porsche Garage, Hatfield House, Hatfield Business Park, Hatfield, AL10 9UA**

Dear Mark,

Thank you for re-consulting us on the above application for the submission of details pursuant to condition 2 (SUDS Drainage) on planning permission 6/2019/2782/VAR

Condition 2 states;

*Notwithstanding the Flood Risk Assessment & Development Drainage Strategy (prepared by MJA Consulting, reference number CP/17/0248/5040, dated June 2017), Surface Water Strategy drawing, (dated July 2017, drawing number SK601) and attenuation calculations for building and permeable paving (dated 26.07.2017), all submitted and approved under planning permission reference: 6/2017/0550/MAJ, development must not commence until an updated surface water drainage scheme has been submitted to and approved in writing by the Local Planning Authority. The scheme must be based on drainage strategy approved under planning permission reference: 6/2017/0550/MAJ and sustainable drainage principles. The updated drainage strategy must demonstrate that the surface water run-off generated up to and including 1 in 100 year + climate change critical storm will not exceed the run-off from the undeveloped site following the corresponding rainfall event. The updated drainage strategy must include:*

- a) *Infiltration tests in the exact place of proposed underground storage and permeable paving, conducted to BRE Digest 365 Standards.*
- b) *Detailed engineered drawings of the proposed Sustainable Drainage System (SuDS) features including their size, volume, depth and any inlet and outlet features including any connecting pipe runs.*
- c) *Mitigation measures*
- d) *Final detailed management plan to include arrangements for adoption and any other arrangements to secure the operation of the scheme throughout its lifetime.*

*The development must not be carried out other than in accordance with the updated approved drainage strategy and the approved mitigation measures must be fully implemented prior to first occupation of the development.*

*REASON: To reduce the risk and impact of flooding by ensuring the satisfactory storage and disposal of surface water from the site and to ensure surface water can be managed in a sustainable manner in accordance with Policy R7 and R10 of the Welwyn Hatfield District Plan 2005, Policy SADM14 of the Welwyn Hatfield Borough Council Draft Local Plan Proposed Submission August 2016 and the National Planning Policy Framework 2019.*

The applicant has provided the following information in support of the application:

- Drainage Strategy, reference 8906, dated August 2020, prepared by Charles Scott & Partners

We would advise the LPA that the information submitted in support of the discharge of Condition 2, does not comply with Condition 2. We would therefore recommend that the LPA should not discharge Condition 2.

From a review of the Drainage Strategy report we note that the drainage scheme has been changed from the original planning application. It is no longer proposed to infiltrate as the ground conditions are not suitable for infiltration. Infiltration testing has been carried out to confirm this. Therefore, it is proposed to discharge into the Thames surface water sewer network located on Manor Way at 1.4l/s (QBar). The discharge into the sewer will be via a pumped connection as the site levels do not allow for gravity discharge. We note that soakaway designs and calculations have also been submitted therefore the drainage strategy should be clarified as it has been shown that ground conditions are not suitable for infiltration.

It is assumed that the existing site currently discharges to the sewer with current brownfield discharge rate calculated at 37l/s. Whilst it is acknowledged that proposed discharge rate provides a significant betterment, we required confirmation from Thames Water that they are happy with the proposed connection, discharge rates and volumes and ensuring that the condition of the outfall connection is suitable location. We note that Thames Water were consulted as part of the original application and raised no objections as the scheme was based on infiltration. However, as the scheme has now changed, the applicant should seek a Pre-planning agreement from Thames Water.

The drainage strategy provides an approximate attenuation storage volume of 161m<sup>3</sup> within a cellular attenuation tank and permeable paving located in the car parking spaces. The drainage strategy layout drawing shows that the cellular attenuation tank is located within an area of open space. The use of crates and tanks is not acceptable, especially when described as to be used in areas of greenspace. As LLFA we may accept additional storage in the base of attenuation basins. However, we would not accept tanks in green space, when on surface, above ground features could be provided. An underground system is likely to increase the cost of maintenance, increase the risk of blockage and unknown problems with the system in the future.

The use of permeable paving has been limited to a section of the car parking area. As part of the original planning application, permeable paving was proposed for the whole car park. Where possible the use of above ground SuDS such as permeable paving should be maximised thereby reducing the need for a large underground tank.

It should be demonstrated that the most appropriate SuDS have been provided by giving priority to above ground methods utilising the management and treatment train approach by providing a series of techniques which will slow the rate of surface water, will attenuate the surface water in stages, provide a water quality benefit and improve biodiversity and amenity within the site. Above ground measures such as permeable paving, swales etc. could be used on impermeable sites and utilised within green space and areas of landscaping can ensure that surface water run-off can be treated in a sustainable manner.

The drainage strategy states that there is no information relating to the location and condition of the existing drainage network and connection. Where it is proposed reuse the existing infrastructure, we would expect this be shown on the layout plan along with any condition surveys.

Following a review of the engineering drawing, the permeable paving and attenuation tank are shown to infiltrating. It should be confirmed whether partial infiltration (Type B) or no infiltration (Type C). We note that the Micro-drainage calculations have accounted for no infiltration.

We note a maintenance plan and details are described with the drainage strategy report, however it is not clear who will responsible for the SuDS/drainage features. The applicant will need to satisfy the LPA that the proposed drainage scheme can be adopted and maintained for its lifetime by providing a maintenance plan, detailing key operations and management. The maintenance of storage structures must be appropriate to prevent the risk of failure or reduction of its capacity.

For further advice on what we expect to be contained within the FRA to support a planning application, please refer to our Developers Guide and Checklist on our surface water drainage webpage

<http://www.hertfordshire.gov.uk/services/envplan/water/floods/surfacewaterdrainage/>

Please note if the LPA decide to grant planning permission, we wished to be notified for our records should there be any subsequent surface water flooding that we may be required to investigate as a result of the new development.

Yours sincerely,

Sana Shaikh

Sustainable Drainage Systems Officer

[www.hertfordshire.gov.uk](http://www.hertfordshire.gov.uk)

Environmental Resource Planning