

Mr David Elmore  
Local Planning Authority  
Welwyn Hatfield Borough Council  
The Campus  
Welwyn Garden City  
Hertfordshire  
AL8 6AE

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

Contact Katherine Ashworth  
Email [FRMConsultations@hertfordshire.gov.uk](mailto:FRMConsultations@hertfordshire.gov.uk)

Date 26 April 2023

Dear David

**RE 6/2022/01853/MAJ - Eisai Europe Limited, European Knowledge Centre,  
Mosquito Way, Hatfield, AL10 9SN**

Thank you for your re-consultation received on 3 March 2023 on the above application for the construction of a 4,012sqm extension to the existing warehouse space (Use Class E) with associated plant and works including the relocation of a bicycle shelter, re-routed internal access road and landscaping at the Eisai Europe Limited site in Hatfield.

The application is to seek a full planning permission for the extension and redevelopment of existing commercial buildings / warehousing.

We have reviewed the additional information submitted by the applicant in support of the planning application. Based on the information provided we fail to see all our previous comments being addressed to in the proposed surface water drainage solutions for the site. No amended Flood Risk Assessment has been re-submitted therefore, failing to provide the additional information we have requested. Therefore, we **maintain our objection** to this planning application in the absence of an acceptable supporting information as listed in our objection letter dated 27 October 2022 and 10 November 2022.

In order for the Lead Local Flood Authority to advise the relevant local planning authority that the proposal will comply with NPPF, where it will not increase flood risk to the site and / or elsewhere, plus provide appropriate sustainable drainage surface water management, **the information referred to in our previous comments and the following additional information are needed:**

- Discussion on how the new extension building will be manage the risk of surface water flooding from elsewhere on the site.
- Updated Flood Risk Assessment.

- A SuDS Drainage strategy and detailed design.
- Updated surface water modelling calculations using FEH2022.
- Evidence of infiltration testing to BRE Digest 365 standards.
- Surface water overland flow exceedance plans.
- Details of who will maintain the drainage network including a Maintenance Plan and Maintenance Schedule.

### **Overcoming our objection**

1. Provision of evidence to show the surface water flood risk noted within the Flood Risk Assessment (FRA) will not impact the extension. This may include consideration of ground levels around of the existing and proposed buildings, access points to buildings and how the existing drainage network will interact with the new extension (e.g. surcharge of a network designed to out of date standards). As no updated Flood Risk Assessment has been provided, this point remains outstanding.
2. It is acknowledged the preliminary Drainage Strategy plans and pre/post development runoff rates and storage calculations have been provided. A full SuDS Drainage Strategy and detailed design is requested to be provided to include the following:
  - a. Evidence of how the Drainage Hierarchy was applied in line with the Defra Non-Statutory Technical Standards, industry best practice and HCC SuDS Policies within the Local Flood Risk Management Strategy 2 (LFRMS2). This includes evidence on why infiltration is not possible for the extension drainage network, such as evidence of ground conditions / underlying geology and permeability including BRE Digest 365 infiltration tests as referred to as undertaken for the site in the submitted Flood Risk Assessment. Further evidence demonstrating consideration of any ground contamination or source protection zones which is highlighted by the Environment Agency to prevent infiltration and deep infiltration soakaways as a surface water drainage disposal location. We note that Thames Water have highlighted there are capacity issues in the sewer system due to ingress of groundwater. Therefore, further information and evidence identifying the site-specific groundwater levels.
  - b. Provide evidence of the pre and post development runoff rates and volumes and how these rates and volumes are calculated. This would include pre-development greenfield runoff rates and volumes.
  - c. For a full planning application the quick storage estimate is not acceptable. Detailed calculations for pre and post development runoff rates and volumes should be evidenced. We require the discharge is limited to greenfield runoff rates and volumes unless discharge rates lower than the greenfield rates are required to prevent surcharge of the existing drainage system. Evidence of this assessment should be submitted. The Quick Storage Estimate in Appendix C of the Drainage Strategy uses FEH 1999 rather than FEH 2022 and uses an impermeable area of 1.6 ha when the area within the site boundary equates to 1.38 ha. The LLFA requires the proposed design calculations to be updated.

- d. A full detailed drainage layout plan showing the proposed SuDS features, any associated manhole cover and invert levels, proposed ground levels, pipe sizes and gradients, all online controls, online and offline storage structures, water quality mitigation and outfall details has been provided however, based on the proposed phasing plan (Drainage Strategy Figure 2-3) it is unclear whether all relevant areas are included in the proposals in the Appendix D. We await clarification and recommend an impermeable areas plan is prepared.
  - e. Provision of supporting calculations to demonstrate there is no flooding of the drainage network at the 1 in 30 year rainfall event and that no flooding occurs of building at the 1 in 100 year plus climate change event. All supporting calculations and modelling scenarios should use FEH2022 rainfall parameters and include a summary of results, showing all the modelling criteria and summary network results for critical design storm events. The results will show maximum water level, flow and velocity. Currently, the calculations have used the outdated FEH and are only provided for the 1 in 2 year, 1 in 30 year plus climate change and 1 in 100 year plus climate change. We require the standalone 1 in 1 year, 1 in 30 year and 1 in 100 year in addition to those previously mentioned. We also require pipe lengths to be included in the calculations to be able to correlate with the drainage drawing to ensure the system, is not over or underestimating storage. We await further information.
  - f. The applicant shall provide comment to demonstrate as to how freeboard has been provided to any finished ground floor levels of buildings or essential infrastructure (e.g., plant rooms). This shall be added to the drainage drawing. We await further information.
3. A Phase 1 Geotechnical Desk Study Report has been provided. Section 9.3.4 of the Drainage Strategy states that two infiltration tests were carried out during the 2006 investigations leading to the conclusion they are potentially unsuitable for the use of soakaways but that this will need to be further examined by carrying out more infiltration testing during the new ground investigation. The LLFA requires these further results to be submitted as previously discussed.
  4. A plan showing exceedance flood flow routes in the event of a failure of the drainage system or storm event in excess of the 1 in 100 year return period with an allowance for climate change has been provided. This has been provided however, the drawing incorporates a *'proposed valley adjacent to footpath to protect buildings and convey overland flows within the site'*. We require further information on what this valley is, its proposed design, its topographic levels and whether it is a low point in the site. Additionally flooded volume is present in two areas of the access road, the applicant shall state how this is to be mitigated and managed on site and how long the access road is likely to remain flooded for.
  5. We require clarification on why the permeable paving along the road is broken up into two sections given the topographic survey does not highlight any steep area. We require justification why permeable paving cannot be used throughout the whole of the proposed internal road to add an additional layer of treatment. We require the application to provide clarification on the levels of treatment for the proposed road which ties into the existing road to the west and south of the site.

Additionally, the applicant shall provide detailed engineering drawings for the proposed site which includes each of the proposed drainage elements.

6. We require details of the proposed construction phase drainage control measures to ensure that during construction, and prior to the main drainage system being installed and operating, that there is no increase in flood risk to adjacent properties or the public highway or pollution generated. These proposals must consider a reasonable plan of how water will be managed and consider where the most vulnerable receptors are e.g. adjacent dwellings or the water environment.
7. We require confirmation of the proposed maintenance activities and schedules of any surface water drainage structures and who will be maintaining or adopting these features for the lifetime of the development. Part of this has been provided for the permeable paving and attenuation tank, however, no information is provided for the piped drainage, manhole chambers nor flow control devices. We await further information to be submitted. We note that should Thames Water or any other third party be proposed for adopting the structures the LLFA will require a written agreement in principle to be submitted by the applicant.

### **Informative and Advice**

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 <https://www.hertfordshire.gov.uk/services/recycling-waste-and-environment/water/surface-water-drainage/surface-water-drainage.aspx> this link also includes HCC's policies on SuDS in Hertfordshire.

Erection of flow control structures or any culverting of an ordinary watercourse requires consent from the appropriate authority, which in this instance is Hertfordshire Lead Local Flood Authority and the Local Council (if they have specific land drainage bylaws). It is advised to discuss proposals for any works at an early stage of proposals.

In December 2022 it was announced FEH rainfall data has been updated to account for additional long term rainfall statistics and new data. As a consequence, the rainfall statistics used for surface water modelling and drainage design has changed. In some areas there is a reduction in comparison to FEH2013 and some places an increase (see [FEH22 - User Guide \(hydro-solutions.co.uk\)](https://www.hydro-solutions.co.uk/FEH22-User-Guide)). Any new planning applications that have not already commissioned an FRA or drainage strategy to be completed, should use the most up to date FEH22 data. Other planning applications using FEH2013 rainfall, will be accepted in the transition period up to the 1<sup>st</sup> April 2023. This includes those applications that are currently at and advanced stage or have already been submitted to the Local Planning Authority. For the avoidance of doubt the use of FSR and FEH1999 data has been superseded by FEH 2013 and 2022 and therefore, use in rainfall simulations are not accepted.

Please note if, you the Local Planning Authority review the application and decide to grant planning permission, you should notify the us, the Lead Local Flood Authority, by email at [FRMConsultations@hertfordshire.gov.uk](mailto:FRMConsultations@hertfordshire.gov.uk). This is 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

Katherine

Katherine Ashworth  
SuDS and Watercourses Support Officer  
Environment & Transport and Sustainable Growth

## **Annex**

The following documents were reviewed by LLFA during preparation of this response:

- Drainage Strategy by AECOM Limited, Ref: ESL-ACM-XX-XX-RP-C-0002 Rev P04, dated 3 February 2023.
- Phase 1 Geotechnical and Geo-environmental Desk Study Report, Project no. 60681916, dated 15 November 2022.
- Memo – Proposed Ground Investigation at Eisai Europe Limited, European knowledge Centre, Mosquito Way, Hatfield, AL10 9SN prepared by AECOM, Project Ref 60681916, dated 02 March 2023.
- Affinity Water Consultee Comment, Ref 6/2022/1853/MAJ, dated 14 March 2023.
- Flood Risk Assessment by AECOM Limited, Ref: ESL-ACM-XX-XX-RP-C-0001, dated 22 July 2022
- Proposed Location Plan by AECOM Limited, Ref: ESL-ACM-XX-ZZ-DR-A-00310, rev. P05, dated 23 August 2022