

15th December 2020

Our Reference
60613881

Shane Baker
London Borough of Hounslow
Bath Road
Hounslow
TW3 3EB

**Syon Gardens
Homebase Brentford Site, TW7 5QE
Flood Risk Assessment - Addendum**

Dear Mr. Baker,

A Flood Risk Assessment (FRA), titled as per the subject of this letter (and dated September 2020), has previously been submitted to the London Borough of Hounslow (LBH) as part of a planning application (ref. P/2020/3099) for the above site. This letter acts as an Addendum to that FRA, and provides details of amendments and updates that have been made since it was issued.

The submitted FRA included a Drainage Assessment Form as an appendix; this form was produced by Waterman Structures Ltd (part of the Waterman Group), and informed the chapter of the FRA related to the management of surface water (Chapter 6).

Following the submission of the FRA, comments were received from Hounslow's Flood & Drainage officer, Emma Rowlands MSc, regarding the Drainage Assessment Form and the associated attenuation volume, and a meeting was subsequently held on the 7th December 2020 to discuss these matters. The meeting attendees were Emma Rowlands (LBH), Tom Fox (Berkley Homes Ltd) and James King (Waterman Structures Ltd). As agreed with Hounslow's Flood & Drainage officer, the outcome of the meeting discussions has resulted in the following agreements/ confirmations, or amendments/ additions being made to the Drainage Assessment Form:

- **Drainage Hierarchy**

Correspondence with Thames Water has confirmed that they would accept a restricted discharge of 5 l/s into the public surface water sewer at the requested location, provided that the hierarchy of disposal methods have been examined. A copy of this correspondence (letter dated 12th November 2019) was included in the submitted FRA (September 2020) as part of Appendix A. This letter remains the latest correspondence that has been received from Thames Water and therefore remains valid.

Proposals to discharge at a rate of 5 l/s (a rounded-up greenfield runoff rate based on HR Wallingford advice to avoid blockages) are fully justified since this is under the 1:30 year greenfield runoff rate for the site (5.1 l/s). Furthermore, the 5 l/s proposal shall provide the benefit of reducing the amount of flooding occurring within the site should the system be overwhelmed during storm events exceeding the 1:100 year + 40% CC. When compared to the 2.2 l/s discharge rate (QBAR greenfield), it shall also provide an increased drain down rate to reduce the risk of flooding during back-to-back storm events. Crucially, the proposal shall reduce the runoff rate from the site compared to the existing scenario by 95% in the 1-year storm event and up to 98.7% in the 100-year storm event representing a significant betterment.

This does not constitute a change from the submitted FRA, and the above provides confirmation that this was discussed and agreed with Hounslow's Flood & Drainage officer.

- **Attenuation**

The proposed attenuation tank volume, required to provide surface water attenuation and the management of flooding on-site, has been reduced from 1,400 m³ to 1,080 m³. As requested by Hounslow's Flood & Drainage officer, drainage model calculations have been undertaken to determine this volume and have been included in the updated Drainage Assessment Form (replacing the previous 'quick storage' estimate). In addition, the ground floor drainage layout has been updated to align.

The reduction in required attenuation for the site by 340m³ results in reduced embodied carbon during the construction phase of the development due to importing of materials and removal of soil from the site.

- **Maintenance**

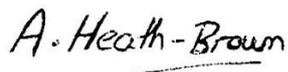
A statement on the proposed inspection and maintenance of green roofs has been added to Section 7 (Adoption & Maintenance) of the updated Drainage Assessment Form.

- **Other**

A drawing of the exceedance flooding routes has been included within the updated Drainage Assessment Form.

AECOM has carefully reviewed the submitted FRA, and aside from the amendments summarised above, consider that in our professional opinion there are no other changes to the assessed flood risk both to and from the site. The latest version of the submitted FRA therefore remains valid in all respects, with the above amendments causing only minor variations to the FRA content (e.g. attenuation tank volume); as such, it is considered that the FRA does not require updating. The revised Drainage Assessment Form (Appendix B of the submitted FRA) would be considered a significant change, and therefore the revised version is included with this letter.

Yours sincerely,



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