Consultation Response from KC, Lead Local Flood Authority
2022/90280 The Homestead, Hurst Knowle, Almondbury, Huddersfield, HD5 8SG
Demolition of existing Homestead care home and ancillary buildings and erection of single storey dementia day care facility, landscaping works and associated parking with alterations to vehicle and pedestrian access to the site
Date Responded:28/02/2022 Responding Officer: Martin Stephenson Responding Ref: 0

Documents reviewed by the LLFA:

HSP Consulting:

- Document Refs:
  HSP2020-C3257-C&S-FRAS1-12, Preliminary Flood Risk Review, Rev -, dated 16/09/2020
  HSP2021-C3257-C&S-TR-304, Drainage Strategy & Suitability Report, Rev B, dated 26/01/2022

- Drawing Ref: 20309-HSP-XX-XX-DR-C-2001, Drainage Strategy, Rev P09 dated 26/01/2022

Drainage Summary:

The LLFA has the following comments on the submitted Preliminary Flood Risk Review and Drainage Strategy & Suitability Report:

- The attenuated surface water drainage should be discharged to the culverted watercourse that crosses Hurst Knowle immediately south of the proposed site. HSP Consulting states the watercourse is now part of the YW network, however Kirklees Council's records show that the culvert was surveyed in 2011.
- Should it be proven that the culvert is part of the combined sewer network, the discharge point for the surface water drainages should still be to the culvert in case future works restore the culvert to convey surface water only.
- The LLFA accepts the proposed allowable surface water discharge rate of **7.3 l/s**, however this should be discharged into the culverted watercourse to the south of the site and not into the existing combined sewer MH (designated SMH 100 on the Drainage Strategy Plan).
- The diameter of the flow control outlet should be not less than 75mm.
- Hydraulic calculations (MicroDrainage or similar) will need to be submitted at the next stage to show that the critical 1 in 100 year (plus CC) rainfall event is contained within the site without causing flooding to existing or proposed buildings.
- A flood routing plan showing the route of flooding during exceedance events should also be submitted at the next stage.

The LLFA has the following comments on the submitted Drainage Strategy drawing:

- The construction stage drawings should state the design vertical loading on the attenuation tank in line with the expected maximum future wheel loading, taking into account vehicles running off the designated roadways.
- The attenuation tank should have concrete MHs at either end to allow easy inspection and maintenance of the tank – please refer to SuDS Guidance CIRIA C753 for the national recommended design of cellular storage tanks, Figures 21.4, 21.6 to 21.7).
- The MHs immediately upstream of the tank should be of the silt trap type to reduce the risk of siltation of the tank.
- Concrete MHs in place of the indicated PPIC's should be provided at the head of surface water drainage runs and at changes in direction to allow easy inspection and maintenance of the pipelines.

- It is noted that on-site cooking facilities are proposed, therefore a means of preventing oils and grease from entering the drainage system should be provided.

Kirklees Flood Management & Drainage does NOT OBJECT to this application provided the above comments are addressed in the detailed design and recommends the following conditions.

Suggested Drainage Conditions:

DR01 Drainage Details
Development shall not commence until a detailed design scheme detailing foul, surface water and land drainage, (including agreed discharge rates with the LLFA indirectly or directly to watercourse, attenuation for the critical 1 in 100 plus climate change rainfall event, attenuation construction details /design, plans and longitudinal sections, hydraulic calculations, phasing of drainage provision) has been submitted to and approved in writing by the Local Planning Authority. The scheme shall include a risk assessment and method statement, in accordance with CDM Regulations 2015, for access to and into the attenuation structure, and an itinerary of maintenance tasks with schedules. No part of the development shall be occupied until such approved drainage scheme has been provided on the site to serve the development or each agreed phasing of the development and retained thereafter.

DR07 Overland Flow Routing
The development shall not commence until an assessment of the effects of 1 in 100 year storm events, with an additional allowance for climate change, blockage scenarios and exceedance events on drainage infrastructure and surface water run-off pre and post development between the development and the surrounding area (both upstream and downstream of the development), has been submitted to and approved in writing by the Local Planning Authority. No part of the development shall be brought into use (dwellings shall not be occupied) until the works comprising the approved scheme have been completed and such approved scheme shall be retained thereafter.

DR10 Construction Phase Surface Water Flood Risk and Pollution prevention plan.
Development shall not commence until a scheme, detailing temporary surface water drainage for the construction phase (after soil and vegetation/site strip) has been submitted to and approved in writing by the Local Planning Authority. The scheme shall detail:

- phasing of the development and phasing of temporary drainage provision.
- include methods of preventing silt, debris and contaminants entering existing drainage systems and watercourses and how flooding of adjacent land is prevented.
- the strategy shall include a plan showing the location of the attenuation storage and supporting calculations, which shall be based on the critical 1 in 2-year storm. It should be assumed that once the site has been stripped that the percentage run-off will be 100 %. The maximum allowable off-site discharge rate shall not exceed 2.5 litres per second per ha, unless otherwise agreed with the LLFA.

The temporary works shall be implemented in accordance with the approved scheme and phasing. No phase of the development shall be commenced until the temporary works approved for that phase have been completed. The approved temporary drainage scheme shall be retained until the approved permanent surface water drainage system is in place and functioning in accordance with written notification to the Local Planning Authority.

DR08 Pollution Prevention – Fats, Oils and Grease
Development shall not commence until a scheme to prevent fats, oils, and grease entering the drainage network serving commercial food preparation and dish-washing areas has been submitted to and approved in writing by the Local Planning Authority. The scheme shall be implemented prior to first operation of the development and shall be retained throughout the lifetime of the development.