Lead Local Flood Authority

Recommendation:

Objection

Detailed comments:

Prior to the approval of any phase specific reserved matters, a detailed Surface Water Management Scheme for that phase or sub-phase of development, shall be submitted to and approved in writing by the Local Planning Authority. The scheme shall be undertaken in accordance with the details approved as part of the strategic scheme (Strategic Surface Water Management Scheme). Heyford Masterplan description of development FINAL 30.06.2020 (3) HPH-HYD-XXX-XX-RP-D-0001_P2-S2 Drainage Response HPH-HYD-XXX-XX-RP-D-5001_P5-S2

The following information is required to enable the LLFA to undertake a full technical assessment of the sustainable surface water drainage strategy:

a) The SuDS hierarchy for discharging surface water drainage should be followed and demonstrated thoroughly;

Private areas proposed drainage needs to be shown. At discharge of condition stage all drawings should be detailed and reflect the final design. This is for all infrastructure and SuDS within the phase which the application is referring to.

b) Permeability testing to BRE365 to be carried out, to determine the soakage potential for SuDS for the proposed development. Where this methodology is not used, full justification must be provided as to why this is;

Not provided. The condition specifically mentioned infiltration testing regardless of other phases. In order for this to be discharged infiltration testing needs to be provided.

c) Should infiltration be found unfeasible for SuDS purposes, surface water should be attenuated and discharged to Greenfield run-off rates. Evidence that the proposed flows from the site will be restricted to 4.5l/s/ha for all events up to and including the 1% AEP + 40% climate change event, to be demonstrated as Greenfield run-off rate in Qmed, l/s, for each parcel;

Catchment plan has been provided however the area for the 10% urban creep has not been illustrated. Provide the total area after allowing for 10% urban creep for the different areas. This can be shown as a table on the catchment plan.

d) The submission of evidence relating to accepted outfalls from the site, particularly from any third-party network owners and sequencing for implementation; Submission of evidence has not been provided.

e) Design calculations for the proposed SuDS features, for all relevant return periods, including the 1 in 1 year, 1 in 30 year and 1 in 100 year +40% (climate change) storm events, demonstrating the critical duration used for design. Calculations should use the FEH methodology;

f) Details of how the drainage scheme has been designed to incorporate SuDS techniques to manage water quantity and maintain water quality as set out in the FRA, and in accordance with adopted policy and best practice guidance including the SuDS Manual C753;

g) Detailed drainage plan showing the location of the proposed SuDS features, catchment areas for each SuDS feature, pipework with direction of the flow, pipe sizes, manholes and other drainage accessories (including the specification and size) and the red line boundary;

Catchment plan has been provided however the area for the 10% urban creep has not been illustrated. Provide the total area after allowing for 10% urban creep for the different areas. This can be shown as a table on the catchment plan.

h) Detailed cross sections and construction details of the proposed SuDS features and other drainage items;

Discharged according to: Drainage details drawing.

i) Details of how water quality shall be maintained during and after construction; Discharged

j) Details of the future maintenance and management plan of all SuDS features in accordance with the SuDS Manual C753, to be prepared and submitted as a standalone document;

Discharged.

k) Information on overland flood flow paths and their maintenance should be demonstrated. An exceedance flow route plan for the entire site should be provided with levels to indicate that all surface water falls away from buildings and that exceedance flows are contained within the site boundary;

Discharged

The scheme shall be implemented in accordance with the approved details and timetable.

Reason: To ensure that the principles of sustainable drainage are incorporated into this proposal and maintained thereafter. And to ensure the SuDS drainage features have been constructed in accordance with the approved plans.

Officer's Name: Kabier Salam Officer's Title: LLFA Engineer Date: 20/02/2023