Location: Bicester Eco Town Exemplar Site Phase 2 Charlotte Avenue Bicester

Local Lead Flood Authority

Recommendation:

No objection subject to conditions

Key issues:

Ø Full infiltration testing and groundwater monitoring required to inform the design

Conditions:

Development shall not begin until a detailed surface water drainage scheme for the site, in accordance with the Infrastruct CS Ltd Flood Risk Assessment and Drainage Statement October 2019 Document reference: 2346-BBH-ICS-XX-RP-C-07.001, has been submitted to and approved in writing by the local planning authority. The scheme shall subsequently be implemented in accordance with the approved details before the development is completed. The scheme shall also include:

- A compliance report to demonstrate how the scheme complies with the agreed drainage strategy for the site and the <u>"Local Standards and Guidance for Surface</u> Water Drainage on Major Development in Oxfordshire";
- Full microdrainage calculations for all events up to and including the 1 in 100 year plus 40% climate change;
- Full infiltration testing at depth of proposed soakaway required to BRE 365;
- Extensive Groundwater monitoring
- A Flood Exceedance Conveyance Plan;
- Detailed design drainage layout drawings of the SuDS proposals including cross section details;
- Detailed maintenance management plan in accordance with Section 32 of CIRIA C753 including maintenance schedules for each drainage element; and
- Details of how water quality will be maintained during construction.

Detailed comments:

Further to the email from the applicant's drainage consultant Infrastruct CS on the 8th August 2019, we have no objection to this application subject to the drainage condition above being included on any proposal.

There are concerns over the proposed soakaways which are proposed to be 1.9m and 2.6m deep. The site investigation only carried out trial holes to 1.5m depth at the site. The site is in close proximity to the floodplain and therefore it is likely that

soakaways at this depth will be affected by groundwater. The design is likely to need to be amended to provide shallower soakaways to ensure the depth of the infiltration systems are 1m above groundwater, or an offsite connection to a drainage system is required.

Officer's Name: Richard Bennett
Officer's Title: Flood Risk Engineer

Date: 05 December 2019