

Lead Local Flood Authority Planning Application response

Lead SCC Officer	[REDACTED]
Local Planning Authority	Sandwell Metropolitan Borough Council (SMBC)
Planning application name	Proposed 150 dwellings, a countryside park and associated works (Outline application for access only). Land Adjacent To Q3 Academy Wilderness Lane Great Barr Birmingham
Planning application reference	DC/23/68822
Type of application	Outline
Date consulted	21/11/2023
Date of response	12/12/2023

Disclaimer

This response is made by the County Council in its capacity as a Lead Local Flood Authority as a statutory consultee. As a Lead Local Flood Authority, we respond to Planning Applications where resources allow and considering where development has the greatest ability to affect flood risk.

These comments should be taken as general comments on flood risk and drainage only. A detailed review of any technical methodology and results has not been undertaken by the Council. Liability for such technical work therefore rests with organisation(s) who have undertaken the said work.



General observations/ local flooding information

Flood Zone	Flood Zone 1.
Surface water risk	Yes, flow path shown on updated Flood Map for Surface Water affects site.
Past flooding	None Known Our information about past flooding is based on data that the Flood Risk Management team holds. Where other authorities (such as LPAs) have been made aware of issues, we cannot guarantee they have passed this information on to us.
Watercourse within 5m of site	Yes, there is an unnamed ordinary watercourse located on the eastern and southern site boundaries.
Other observations	N/a



RESPONSE

Thank you for consulting us on this outline planning application.

Our response is detailed below.

We have reviewed the Flood Risk Assessment and Drainage Strategy (Document Ref: 06832-WR-0001-E, dated October 2023) which outlines the development of a 27ha parcel of land for the promotion of 150 residential dwellings.

The FRA demonstrates that the Site is at low risk of fluvial flooding but is potentially at risk of surface water flooding due to the presence of existing depressions/ valleys which convey surface water through the site along the sites natural topography (generally sloping from east to west towards the Rushall Canal system). As such, the layout of the development has been designed to direct all development away from existing land drainage paths and any topographic depressions to mitigate against the risk of surface water flooding as much as possible. Further mitigation measures, such as the provision of raised Finished Floor Levels are presented in Section 5 of the Flood Risk Assessment.

In terms of the surface water drainage system, no detailed ground investigation or infiltration testing has been undertaken at this time and the design has reasonably assumed that no infiltration is possible. Considering this, the design demonstrates that a connection to a watercourse shall be sought, with rates restricted to the existing Q/BAR Greenfield runoff rate for the Site for each parcel of the development Site.

The design also demonstrates that there is space within the site to provide the required volume of attenuation storage for all events up the 100-year return period, including 40% for climate change and an allowance of 10% for urban creep. Attenuation is shown to be provided by a mixture of swales and detention basins. At the detailed design stage, the LLFA will expect that the proposed swales and basins be designed to allow for infiltration (if proven viable following additional investigation) whilst also incorporating additional source control features into the final drainage design. The use of water butts, rain gardens, tree catchment pits, permeable paving etc., will reduce the required volume of attenuation needed in the final drainage design regardless of whether infiltration is viable or not.

Staffordshire County Council Flood Risk Management position

We have no objection to the application at this stage subject to the pre-commencement condition below being attached to any planning permission, to ensure that the full detailed drainage design (including management and maintenance plan) is submitted for review and that sufficient measures will be put in place to ensure no increase in flood risk occurs during the construction phase and that mitigation measures control the potential for



release of sediment/ contaminants/ pollutants to downstream receptors.

We ask to be consulted on the details submitted for approval to your Authority to discharge this condition and on any subsequent amendments/alterations. Please also consult us again on any future major changes to the proposed development or drainage scheme.

Condition

No development shall begin until the final detailed surface water drainage design has been submitted to and approved by the Local Planning Authority in consultation with the Lead Local Flood Authority.

The final design must conform to the design detail and mitigation measures as outlined in the approved Flood Risk Assessment and Drainage Strategy (Ref: 06832-WR-0001-E, October 2023) and as shown upon the indicative drainage strategy drawing within Appendix E of the FRA document.

The design must further demonstrate:

- A surface water drainage system designed in accordance with the non-technical standards for sustainable drainage systems (DEFRA, March 2015).
- Evidence of BRE-365 Infiltration Testing to confirm whether infiltration is a viable method for full/ partial disposal of surface waters.
- Offsite discharges are to be limited to the calculated Q/bar greenfield runoff rates for the Site, as detailed in Tables 6-2 and 6-3 of the FRA Document.
- Provision of surface water runoff attenuation storage to achieve the limited discharge.
- The use of SuDS features to promote the full (or partial) discharge of surface water to ground via infiltration.

If infiltration cannot achieve the full or partial discharge of surface water generated by the proposed development, the final design shall connect to the ordinary watercourse within the Site.

The final design shall incorporate the use of above ground storage features in addition to the use of water butts, rain gardens, permeable paving, tree catchment pits etc., to maximise source control of runoff.

All SuDS measures are to be demonstrated on the drainage plan.

All SuDS features shall be located in areas of the site allowing for adequate access to provide management and maintenance.



No shared SuDS features shall be in private gardens.

- The design shall include SuDS features to provide sufficient water quality treatment, in accordance with the CIRIA SuDS Manual Simple Index Approach and SuDS treatment design criteria. Mitigation indices are to exceed pollution indices for all sources of runoff.
- A plan showing the total impermeable/ permeable areas of the development layout shall be submitted alongside the drainage design to confirm the contributing areas within the hydraulic model.

The total impermeable area of the Site shall be increased by a factor of 10% to include the impact of urban creep over the lifetime of the development.

- Detailed design (plans, network details and full hydraulic calculations) in support of any surface water drainage scheme, including details on any attenuation system, SuDS features and the outfall arrangements.

Performance calculations should demonstrate the performance of the designed system and attenuation storage for a range of return periods and critical storm durations (15 mins up to 48 hours), to include as a minimum the 1:2 year, 1:30 year and the 1:100-year plus climate change return periods.

The hydraulic modelling design shall use FEH Rainfall Data and shall apply a 40% allowance upon rainfall to model the impact of climate change.

- Plans illustrating flooded areas and flow paths in the event of exceedance of the drainage system. Where reasonable, finished floor levels are to be set 150mm higher than ground levels to mitigate the risk from exceedance flows (i.e., blocked gullies etc). In all cases, the surrounding ground level shall slope away from the finished floor level of properties and any entrances to mitigate against the risk of surface water inundation.
- Provision of an acceptable management and maintenance plan for surface water drainage to ensure that surface water drainage systems shall be maintained and managed for the lifetime of the development.

To include the name and contact details of the body(-ies) responsible.

- Provision of an acceptable Surface Water Management Plan (SWMP) to demonstrate what measures are to be implemented to mitigate against the release of surface water runoff, pollutants and



contaminates from the Site during the construction phase.

Please contact us on flood.team@staffordshire.gov.uk if you have any queries about this response.

