

Lead Local Flood Authority - (LLFA)

Planning Application - Consultation Response

Flood Risk Management Team
Staffordshire County Council

Lead Local Flood Authority - (LLFA)

Planning Application Response

Local Planning Authority	Staffordshire Moorlands District Council
Planning application name	Solar farm with ancillary infrastructure, security fence, access, landscaping and designed to allow continued agriculture. New Buildings Farm Sandon Road, Sharpley Heath, Stone, ST15 8SL
Planning application reference	SMD/2025/0388
Type of application	FULL
Date consulted	08/10/2025
Date of response	29/10/2025

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	The site is located in Flood Zone 1, but note that this doesn't include watercourses with a catchment of less than 3km ² and hence this will need to be verified with hydraulic modelling.
Surface water risk	There are high risk areas of surface water flooding across the south and centre of the site, mostly associate with the unnamed ordinary watercourse here. There are high-low risk areas that follow the site contours into the central watercourse and the additional watercourses in the north of the site and the east of the 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	There are several unnamed ordinary watercourses within the site. • A small area of the north of the site drains to the north with two small unnamed tribs issuing on site. • The reminder of the site draining to the east via a network of unnamed ordinary watercourses feeding a central unnamed ordinary watercourse within the site. Both catchments eventually drain to the River Blithe to the east of the site.
Other observations	• There are two ponds within the site boundary. • There is a moat feature shown on the mapping in the south of the site. • Bromley Woods (SBI) borders the south of the site. • The ordinary watercourses draining to the north flow via Hose Wood SBI.

Response:

Thank you for consulting us on this FULL planning application, our response is as follows:

Staffordshire County Council Flood Risk Management position

We have reviewed the submitted information and there is insufficient detail provided assessing flood risk on site AND there is not a detailed drainage strategy provided. As the site is major and over 0.5ha a detailed drainage strategy is required. We would therefore recommend that planning permission is not granted until this has been resolved. Any strategy presented should be commensurate with the requirements a FULL Application in the [Staffordshire SuDS Handbook](#). Specific issues are listed below:

General Requirements

In general, any surface water drainage scheme should demonstrate, but not necessarily be limited to, the following:

- Surface water drainage system(s) designed in accordance with the National Standards for Sustainable Drainage Systems (DEFRA, 2025).
- Provision of surface water runoff attenuation storage.
- Full design calculations to demonstrate conformity with the national non-statutory technical standards for SuDS and Local Standards, to include attenuation storage calculations. Using MicroDrainage software or similar, we would expect to see detailed background calculations provided for the drainage strategy. A range of results should be provided, but as a minimum including the 100-year plus 40% climate change and 30-year and 1-year returns periods for a range of event durations.
- Plans illustrating flooded areas and flow paths in the event of exceedance of the drainage system
- Provision of supporting information to demonstrate that sufficient water quality measures have been incorporated into the design. This should be in accordance with the CIRIA SuDS Manual Simple Index Approach and SuDS treatment design criteria.
- 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.
- Our preference is for above ground SuDS. Guidance on Flood Risk and Coastal Change (August 2022) states 'For major developments, if multifunctional sustainable drainage systems are not being provided, what evidence is there that such techniques are not possible?'
- Evidence of compliance with the principles of the drainage hierarchy, as described in Part H of the Building Regulations. If applicable, evidence of infiltration testing in accordance with BRE365 should be provided. If discharge is proposed to a surface water sewer then evidence should be provided regarding permission to connect.

Site Specific Requirements:

Flood Risk

- The FRA provided states that the site has no risk of fluvial flooding and is located within Flood Zone 1. EA flood risk mapping does not include watercourses with a catchment of less than 3km² so the watercourses within the site are not represented in detailed modelling. In order to evaluate the flood risk associated with these watercourses; and the impact of the proposals, we need to see detailed hydraulic modelling of all ordinary watercourses within the site.
- Site sensitive equipment should be located outside of modelled flood zones including the relevant allowance for climate change.
- The FRA does not address **how** you will ensure fluvial and surface water flood risk is not increased as a result of the proposals to both your site and to third parties.
- The FRA doesn't consider the climate change outputs on the surface water flooding and it looks like it has used superseded SW flood risk data - please update to give us the most up to date picture of risk.

Drainage Strategy

- Please provide drainage plans demonstrating:
 - A 6m easement around ALL ordinary watercourses on site to ensure adequate access for maintenance e.g. this watercourse shows panels across it in the General Plan.



- An overlay of the EA climate change surface water risk areas on the plan to demonstrate this point from the FRA: 'Solar panels and associated infrastructure to be located outside of any areas shown to be at risk of SW flooding to mitigate the risk of flooding'

- An overlay of the EA Probable Surface Water Flow Pathways on the plan to demonstrate this point from the FRA: 'The direction of movement of water will be maintained within the site'.
- A good estimate for the impact of solar panels on the surface water runoff of the site that we have used for previous sites in this area is assuming 40% impermeable area in drainage calculations.
- Please provide detailed design of all drainage elements being proposed (including conveyance features and attenuation features).
- Provide pre and post development flow paths for surface water (including exceedance) and a demonstration of how these flow routes will be managed including relevant ground levels.

Solar Panel Specific

Please provide a temporary plan to prevent erosion between panels before vegetation becomes established.

Please note that this list is not necessarily exhaustive and that new revisions of documents often raise further questions.

Please re-consult us at flood.team@staffordshire.gov.uk when amended details are received. If you are minded to approve the application contrary to this advice, we request that you contact us again to allow further discussion.

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

