

Lead Local Flood Authority Planning Application Response

Lead SCC Officer	Caroline Parkin
Local Planning Authority	Staffordshire Moorlands District Council (SMDC)
Planning application name	Erection of 12 no. Bungalows. Land at Bridge End, Macclesfield Road, Leek.
Planning application reference	SMD/2021/0113
Type of application	Full
Date consulted	20/02/2023
Date of response	08/03/2023

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	The site is within Flood Zone 1
Surface water risk	No, the EA Risk of Flooding from Surface Water maps (RoFfSW) does not affect the proposed development area itself. However, Bridge End, which forms part of the access to the site, is shown to be located within the 1 in 1000 year zone.
Past flooding within 20m of site	Flooding hotspot instances on Macclesfield Road to the south of the development. 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	None known.
Other observations	The development site is currently the location of two water storage ponds which are assumed to be disused.



RESPONSE

Thank you for re-consulting us on this application for full planning permission at Bridge End, Leek. Our response is detailed below.

Staffordshire County Council Flood Risk Management position

We have reviewed the submitted information including the updated Flood Risk Statement and Surface Water Management Report (Rev B, dated January 2023) in conjunction with our previous comments submitted on 11/01/2022, and the LLFA still recommends that planning permission is **not** granted on the grounds of flood risk and drainage.

We note that there have been significant updates to the plans for the site, most notably the proposed route for surface water discharge from the site, which has raised further questions. At this stage, there is insufficient detail to fully demonstrate that an acceptable drainage strategy is proposed, and further clarification is required in order to determine whether the proposals are feasible.

Our main concerns and observations are outlined below:

1. Site Boundary (General observation):

Drawing No. 12553/30 – Boundary, Access and Surface Water Management Areas Layout (January 2023) presents the ownership boundary area and development site boundary area. This indicates that only the part of the access track to the site that falls within the ownership boundary is from the existing track gate up to the site entrance. The updated plans show that the part of the access track within the ownership boundary will remain as existing and that no amendments will be made to the access road from Macclesfield Road and along Bridge End to the existing track gate entrance, or, from the track gate entrance up to the main point of entry into the site. Note that review of topographic data suggests that a flow path from the north may cross the upper most part of the access road into the site, which should be considered as part of the surface water drainage design (please refer to comments under point 3 below). Should alterations be proposed to any part of the access road into the site, we would request to see details of the proposals given the existing flood risk highlighted along Bridge End.

2. Proposed point of Surface Water discharge:

Drawing No.s 12553/31 and 12553/32 – Surface Water Management Layout, Sheets 1 and 2 respectively (June 2020) show a revised point of discharge for the surface water runoff from the site. The drawing demonstrates that surface water from the site will be conveyed to the proposed attenuation pond and then flow via a surface water sewer to the River Churnet approximately 150m to the south east.



We require further details regarding this proposed discharge route. Information presented within the topographical survey presented in Appendix A (Drg.No. 3173ib, 15/09/2004) suggests that there is an existing outfall pipe (diameter 100mm) to the east of the proposed attenuation pond. Please confirm whether this surface water pipe forms part of an existing network or whether it is proposed to lay a new surface water pipe down to the River Churnet. Also, please provide details of any other land drainage which may discharge into this surface water sewer/be connected to the existing outfall shown on the topographical survey plan. If the proposed surface water discharge route forms part of an existing pipe, please provide further details and evidence demonstrating its downstream connectivity to the River Churnet, including capacity and condition of the existing pipe down to its point of discharge (e.g. CCTV condition and location report). This is to ensure that there is a viable point of discharge for surface water from the site.

We note that whilst the majority of the proposed surface water network is within the ownership boundary of the site, a small section at the downstream end of the outfall pipe crosses third party land. Please confirm ownership of this section of the pipe and whether it is proposed for any part of the surface water network to be adopted.

The proposed point of discharge is into the River Churnet which is classified as Main River. Please provide evidence of discharge consent from the Environment Agency.

3. Surface water runoff flow routes & Impermeable Area Plan

Drawing No. 12553/30 presents the impermeable area plan for the site, demonstrating that approximately 0.488ha will drain into the proposed surface water network. The surface water network plan and MicroDrainage calculations shows a small area of impermeable are (0.028ha) comprising part of the site access road into the site will discharge into MHS1.

Review of LiDAR data and topographical survey information shows potential overland flow routes onto the site from the land to the north of the development boundary, including one which crosses the access point onto the site and follows the prevailing topography along the access track down to Bridge End. The upstream catchments for these overland flow routes are calculated to be in excess of 2.6ha. Further clarification is required to determine how these flow routes will be managed within the site. Please confirm whether these flows will be intercepted by the site drainage, and demonstrate at which point they will be intercepted within the network and how (e.g. aco drains, gully connections etc). Any additional surface water flows likely to be intercepted by the network should be accommodated within the surface runoff calculations and taken into account within the MicroDrainage calculations.

4. MicroDrainage Calculations:

MicroDrainage calculations have been provided within Appendix H for the proposed surface water network. Whilst the calculations include proposed impermeable areas within the site, any additional surface water flows likely to be intercepted by the network should be accommodated within the surface runoff calculations and taken into account within the MicroDrainage calculations (please refer to point 3 above).

We note that a 'Maximum Rainfall' value of 0mm/hr has been used. The default value within MicroDrainage is 50mm/hr and it is normally recommended to increase this to 99mm/hr. Is there a reason as to why this has been set to zero? Also, we note that only output results have been provided for 'Winter' storms. Please also provide output results for Summer Storms.

5. Exceedance/Failure Plan:

Drawing No. 12553/34 presents an Exceedance/Failure Plan for the proposed site demonstrating finished floor levels, surface water manhole cover levels and flow direction arrows. The topographical data included onto the plan appears to represent the existing site levels and opposed to the proposed post-development levels. Please update the plan to include proposed ground levels around properties, proposed levels along the highway and proposed kerb heights/levels. Proposed contours for the site would also be useful in combination with the above to demonstrate that surface water flows will be directed away from residential units and will not increase flood risk elsewhere. As discussed in point 3 above, potential overland flow routes from the cricket club/fields to the north have been identified around the access road within the north western part of the site. Further clarification is required to demonstrate how surface water will enter the proposed surface water network within this part of the site to prevent water following the prevailing topography down the access track towards Bridge End Lane.

6. Management & Maintenance Plan:

Section 13 of the updated Flood Risk Statement and Surface Water Management Report (Rev B) outlines the maintenance requirements for the site covering the key elements of the SUDS (drainage network, flow control chamber, filter drain and permeable surfacing and attenuation pond). The report states that management and maintenance will be by contractors appointed by the site owners. Please provide name and contact details of the body responsible for maintenance and management of the surface water drainage system over the lifetime of the development. If no management company is known at this stage, the developer should be named as the nominated provider during the construction phase and prior to further contracting arrangements being put in place.

Some elements of the drainage network appear to sit outside of the ownership boundary for the site, notably the downstream extent of the pipe. Please confirm who will be responsible for the maintenance of this element of the network. Please also confirm whether it is proposed for any part of the drainage network to be adopted.

Regarding the overflow chamber within the rear garden of Plot 10, it is understood from the latest information that this will not be utilised as part of the updated drainage strategy. Section 3.6 of the updated Flood Risk Statement and Surface Water Management Report (Rev B) states that this known to be the cover for the overflow pipe/surface water drainage systems from the reservoirs. Please confirm what is proposed to happen to this structure and whether any other land drainage within the site discharges to this point. Please also clarify the legal status for the overflow chamber and associated pipework.

Reason

The proposed development may present risks of flooding on-site and/or offsite if surface water runoff is not effectively managed.

Please re-consult us at flood.team@staffordshire.gov.uk when amended details are received. Please note that the list of deficiencies above is not necessarily exhaustive and further queries/observations may be raised following clarification to the points above. 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.

