

FLOOD RISK ASSESSMENT

PROPOSAL : Erection of two warehouse units
ADDRESS : Brooklands Way, Leekbrook, ST13 7QF
APPLICANT : Highfields Stud Properties Ltd
DATE : June 2021 **JOB No.** : 2020-2479

DESIGN **ASSESSMENT** **Assessment Area**

The application proposes the erection of two new warehouse units on the site of a redundant concrete plant at Brooklands Way, Leekbrook. The application site extends to some 3,420 sq metres. It is located within an existing and established industrial estate on the northern side of Brooklands Way. Immediately to the north of the application site lies a small watercourse with woodland and open countryside beyond whilst existing industrial units lie to the east, south and west.

Building A would have a footprint of 48.8m long x 22m wide giving a resultant floor area of 1,073 sq metres whilst the smaller unit, Unit B would measure 30.5m long x 15m wide providing a unit with 457 sq metres of floor area. Both of the buildings would comprise of portal frame single span buildings which would be clad in profiled powder coated steel side sheeting (Red Brown RAL 8002) and a Albatross Grey (RAL 240 80 05) steel sheeted roof.

The northern elevation of warehouse building A would be blank with vehicle access points in both the southern and eastern elevations and pedestrian access points in all but the northern elevation. Warehouse building B would have three blank sides with pedestrian and vehicle access points located in the northern elevation. The proposed units have been laid out across the northern perimeter of the site with parking and turning areas to the front of each of the units.

The proposed buildings would provide additional storage facility for existing businesses on the Brooklands Way development. A sequential test has not been carried out as the site constitutes brownfield land. The land use proposed for this development, as set out above would be acceptable within flood zones 1, 2 and 3a

Definition of Flood Hazed

The application site lies on the southern side of a small brook that drains the valley to the east and towards Bradnop. Surface water is drained to a storm sewer that discharges into the brook downstream of the culvert. The EA have no record of any historic flooding on the site.

Probability

The area adjacent to the brook and its tributary is indicated as lying within Flood Zone 2 with the application site in an area of zone 2 flood risk on the current Environment Agency map. Staffordshire Moorlands District Council have a Level 1 Strategic Flood Rise Assessment (dated 208) that deals with the flooding in this area. The applicants consider, having regard to the information available that there is no probability of flooding of the site as existing. The maximum monthly rainfall in the area is 78.5mm. The proposed development will not increase the area of surface water run off as the site is already concrete surfaced. The Staffordshire Moorlands District Council website does not identify any additional risk from climate change.

Detailed Design Considerations

The floor levels of the proposed buildings would be contiguous with the existing ground levels. No vulnerable processes will be carried out within the building at floor level. No additional flood risk management measures are proposed.

Conclusion

This flood risk assessment document has looked at the implications of the development with respect to flooding and established that the application site lies within an area designated as Flood Zone 3.

As the surface water run off would not be increased and the volume of the floor plain is not reduced it is not considered that there will be any off site impacts of the development.