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FLOOD RISK ASSESSMENT

LONGSHAWE PACAKING, LEEKBROOK INDUSTRIAL ESTATE, LEEKBROOK WAY LEEKBROOK

(photo curtesy of google images)

January 2018

INTRODUCTION

This flood risk assessment is to identify any current and potential flooding issues at Longshawe Packaging, Leekbrook Industrial estate, Leekbrook.

The assessment is prepared to accompany the full planning application for the extension and internal alterations at Longshawe packaging, Leekbrook. This document is written in accordance with the requirements of technical guidance to the national planning policy framework that states a flood risk assessment is required as support for the above application.

Within this document the aims are to establish the following:

-will the proposal be affected by current or future flooding

-will the proposal increase flooding elsewhere

-are the measures taken to manage flooding appropriate

The site is under a hectare however it lies within flood zone 2 and 3.

DEVELOPMENT SITE AND LOCATION

The site is located at Longshawe Leekbrook Industrial Estate, Leekbrook Way Leekbrook.

The site is currently used as Longshawe Packaging Ltd is a manufacturer of cosmetic and personal care products since 1977. Longshawe also offers formulation; brand consultation; contract manufacturing and distribution services for leading brands, with a strong focus on the future of their own stable of brands. At present, the current size of the building limits its output capacity and therefore restricts the growth potential of the company.

The existing site is finished with tarmac throughout, rainwater currently runs into the gullies which run into a storm water drain.

DEVELOPMENT PROPOSALS

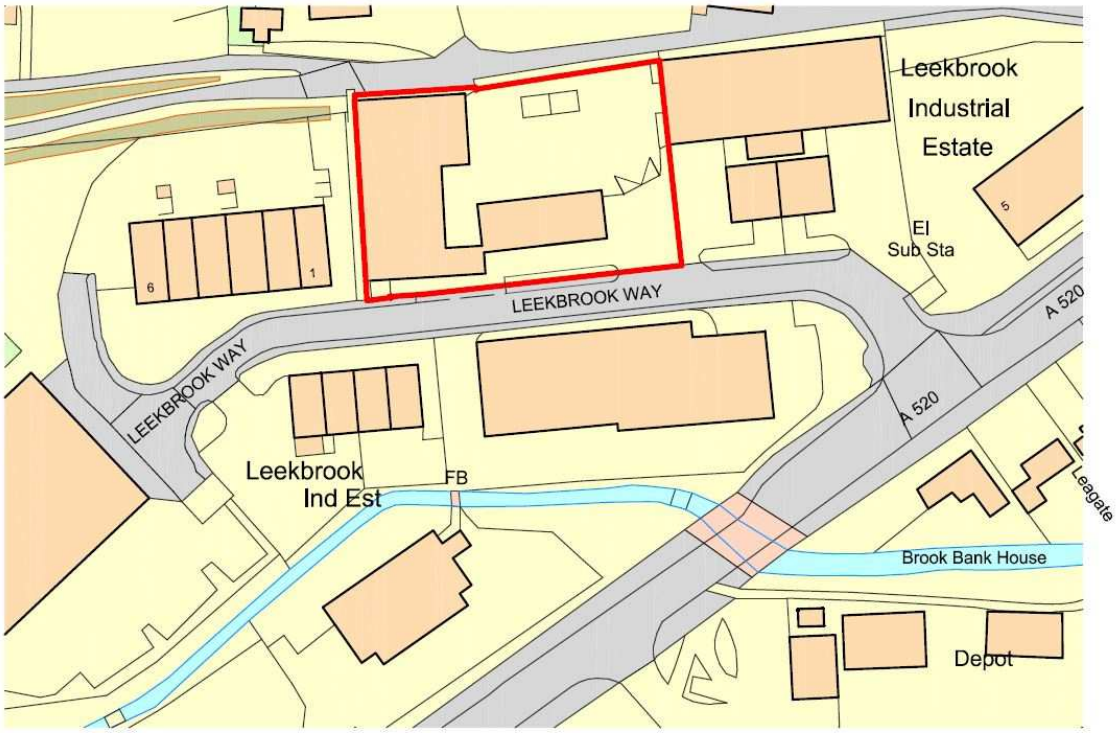
The full planning application is for an extension with internal alterations. The application comprises of two distinct extensions. The first is at the back of the site and provides an extension to the existing storage distribution area, and will allow for internal modifications to result in materials in/goods out approach to the process. The extension shall allow for further packing/storage areas with 3 proposed roller door access points for loading/unloading and distribution.

The second extension will provide a link between the existing production areas which is currently an open yard space, which prevents a practical and organised process flow of product through the building. This extension will offer a flexibility within the building to alter the manufacturing and processing plant within the building.

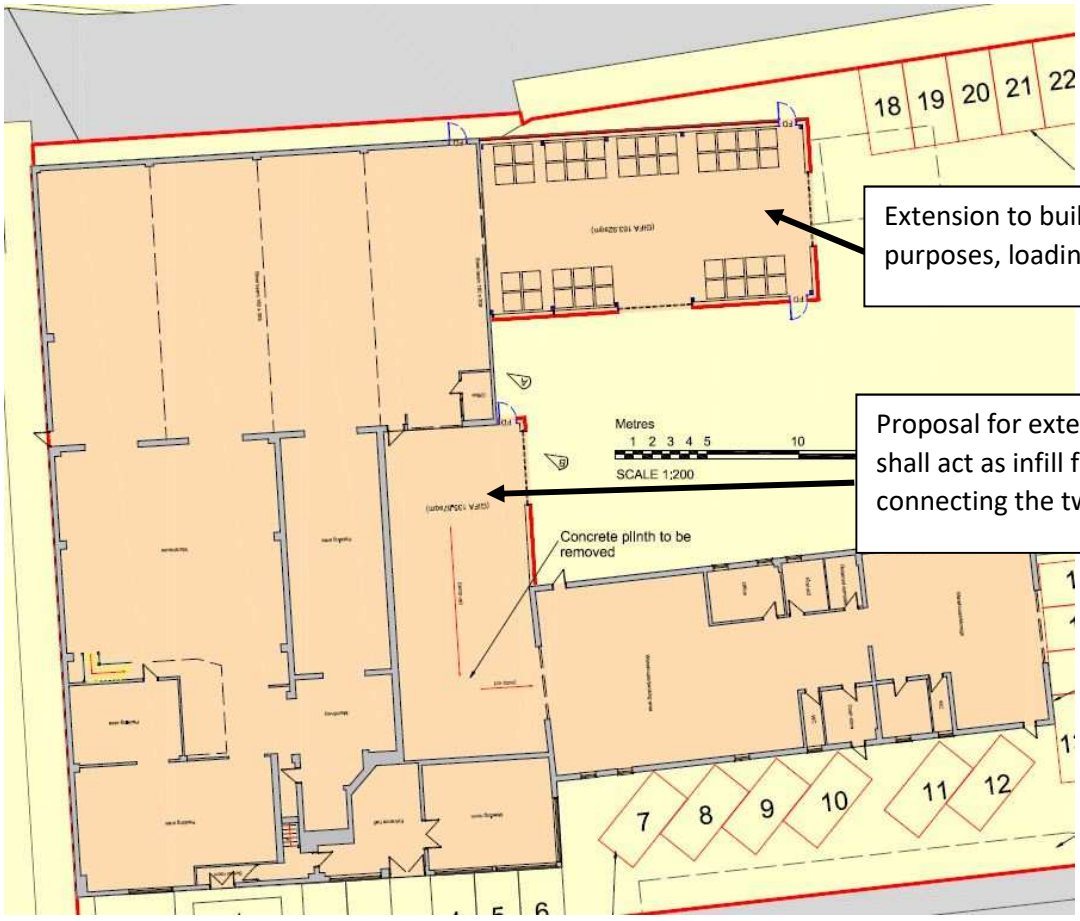
There shall be no change of use to the site.

The vulnerability of classification of the proposed development is ‘less vulnerable’

The expected/estimated lifetime of the proposed development is likely to be within the excess of 10 years.



Site location plan of the site (not to scale)



Site plan as proposed (not to scale)

SEQUENTIAL TESTING

Other locations have not been considered due to the nature of the proposal which is for infill within an industrial building. The proposal will connect the two existing units together therefore a different location cannot be used as the proposal is connecting onto an existing building. The alterations to the site are minimal to allow a greater utilisation of the existing site. This class is deemed suitable without the requirement to carry out an Exception test for the site.

The River Churnet borders the town of Leek to the north, west and the primary bands of Flood Zone 3 are centred upon this river and its main tributaries, with occasional run-off areas of Flood Zone 2 at the tighter bends in the river, as shown in the picture below.

The majority of the centre of Leek, Cheddleton, and Biddulph to the west are entirely outside any Flood Zone. However, these areas are dense residential areas, due to the same topography that raises them above the Flood Zones, and an Industrial or Commercial site seeking approval within these areas would face considerable opposition.

Furthermore, a large portion of Leek falls within the Leek Conservation Area, and the northmost part of Cheddleton, nearest to the currently proposed site, falls within the Cheddleton Conservation Area, and therefore large sections of both areas would be inappropriate for a building of this type.

Leekbrook Industrial Estate is the most significant Industrial / Commercial site in the area, which the proposed site falls within. However, the entirety of the Industrial Estate falls solidly within Flood Zone 3a, therefore there is no suitable sites that would be an improvement to the flood zone that exist within the surrounding areas of this site.

Longshawe packaging is an established business on the site, and relocation elsewhere is not commercially viable at present which is why my client wishes to extend.

One of the main reasons for the proposal is to create an undercover link between various aspects of the manufacturing process to make the overall business more efficient. Therefore, a separate unit cannot be built elsewhere as it would no longer be fit for purpose and would be less environmentally friendly travelling to and from units.

There are several large areas to the north-west, between the settlements of Leek and Biddulph that fall outside the Flood Zones. However, these areas are rural areas, falling outside the development boundaries of the two settlements, and due to the topography of the region, not ideal for a commercial concern where large vehicles are required to regularly visit.

The site location has been taken into account when preparing an application as it upon tarmac. Currently any rain falling on the surface will drain off into the sewers. We believe taking in consideration the comments made above there Is no alternative option for the relocation of the proposal.

SURFACE WATER MANGEMENT

The existing surface water drainage arrangements are that the rain water falls onto the tarmac surface which runs down into the storm water drain.

OCCUPANTS AND USERS OF THE DELEVOPMENT

The proposal shall provide employment for a further three members of staff. The time of use will be the same as existing.

EXCEPTION TEST

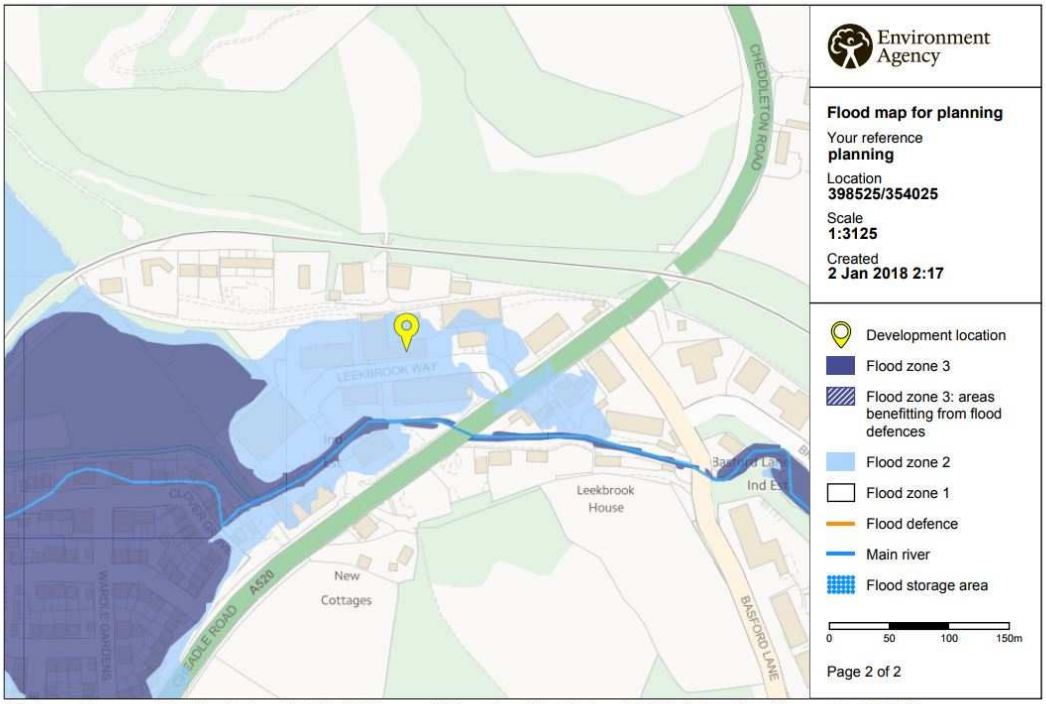
Not required as it considered less vulnerable.

CONCLUSION

A surface water drainage system is already in place upon the proposed site which we will connect to as part of the proposal, Therefore the development will not increase the risk of flooding either within the site or elsewhere.

ENVIRONMENT AGENCY INFORMATION

Your proposed development is in an area with a medium probability of flooding



FLOOD ZONE	FLUVIAL FLOOD ZONE DEFINITION	PROBABILITY OF FLOODING
Flood Zone 1	Land having a less than a 0.1% Annual Exceedance Probability (AEP) (1 in 1,000 chance of flooding in any one year). Shown as clear on the Flood Map – all land outside Flood Zones 2 and 3.	Low
Flood Zone 2	Land having between a 1% AEP (1 in 100 chance of flooding in any one year) and 0.1% AEP (1 in 1,000 chance of flooding in any one year).	Medium
Flood Zone 3a	Land having a 1% AEP 1 in 100 chance of flooding in any one year) or greater.	High
Flood Zone 3b (Functional Floodplain)	Land where water has to flow or be stored in times of flood based on flood modelling of a 5% AEP event (1 in 20 chance of flooding in any one year) or greater, or land purposely designed to be flooded in an extreme flood event (0.1% AEP). Where detailed modelling is not available, it is assumed that the extent of Flood Zone 3b is equal to Flood Zone 3a. The identification of the functional floodplain takes into account local circumstances, but for the purposes of this SFRA, land modelled to flood during a 5% AEP (1 in 20 chance of flooding in any one year) or greater has been mapped.	Very High

The Environmental agency states that the proposal at Longshawe Packaging falls under 'Less Vulnerable'
offices; general industry, storage and distribution; non-residential institutions not included in the 'more vulnerable' class

The table below shows the Flood risk vulnerability and flood zone compatibility table. The table suggests that due to our proposal falling within the less vulnerable category, the proposed development is appropriate as It is located within flood zone 2 and 3.

Flood Zones	Flood Risk Vulnerability Classification				
	Essential infrastructure	Highly vulnerable	More vulnerable	Less vulnerable	Water compatible
Zone 1	✓	✓	✓	✓	✓
Zone 2	✓	Exception Test required	✓	✓	✓
Zone 3a †	Exception Test required †	✗	Exception Test required	✓	✓
Zone 3b *	Exception Test required *	✗	✗	✗	✓*

Key:

✓ Development is appropriate

✗ Development should not be permitted.