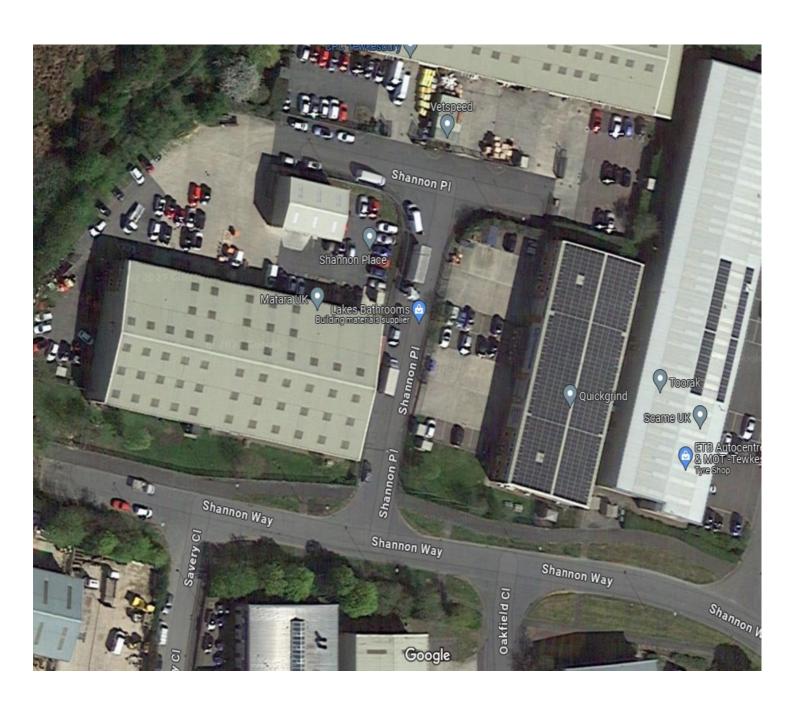
MARGARET'S COTTAGE SANDHURST GLOUCESTER GL2 9NP TEL/ 01452 730818 email: david@three-counties-flood-risk-assessment.co.uk

FLOOD RISK ASSESSMENT

FOR PROPOSED DEVELOPMENT AT INDUSTRIAL SITE SHANNON PLACE TEWKESBURY GLOUCESTERSHIRE GL20 8SL

DATED: 6 DECEMBER 2023



GEOGRAPHICAL LOCATION

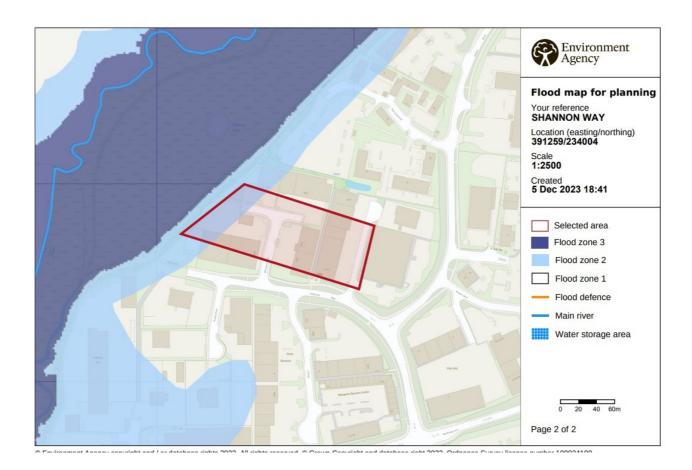


Flood map for planning

Your reference Location (easting/northing) Created

SHANNON WAY 391259/234004 5 Dec 2023 18:41

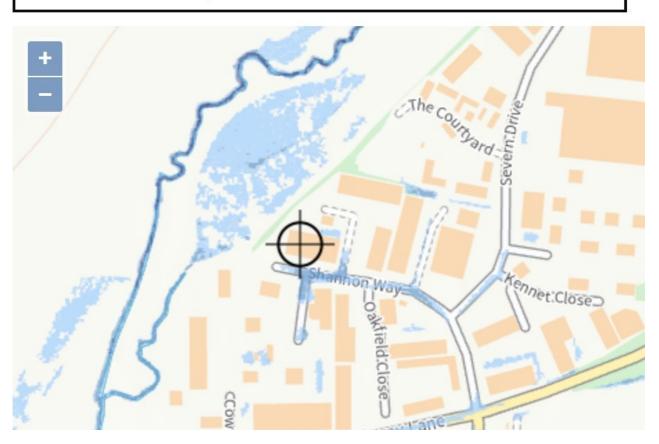
Your selected location is in flood zone 2, an area with a medium probability of flooding.



ENVIRONMENT AGENCY MAPPING SURFACE WATER THREAT

Flood risk

Medium risk: depth



Surface water flood risk: water depth in a medium risk scenario Flood depth (millimetres)



PROPOSED INDUSTRIAL UNIT, ADJACENT TO UNIT 5800, SHANNON PLACE, TEWKESBURY, GLOUCESTERSHIRE GL20 8SL

FLOOD RISK ASSESSMENT / DESKTOP STUDY

This report is compiled to accompany a planning application. Detailed plans are provided to the planning department by the applicant.

It adheres to the criteria within the National Planning Policy Framework (NPPF) and its guidance notes as well as the Environment Agency (EA) Advice notes to local authorities.

According to the EA flood mapping for planning the proposed site lies in Flood Zone 2 which means that there is very low threat from fluvial flooding.

The definition of Flood zone 2 (Medium probability of flooding) is Land having between a 1% and 0.1% annual probability of river flooding; or land having between a 0.5% and 0.1% annual probability of sea flooding. (Land shown in light blue on the Flood Map)

The proposed industrial unit would be classed as CB2 light industrial. In the flood zone categorises under NPPF it would be seen as "less vulnerable."

Under NPPF criteria it states that all possible sources of flooding should be considered in a flood risk assessment of flooding.

In a legend to the EA mapping it states:

- Rivers and the sea . Very low risk.
- Surface Water. Very low risk.
- Groundwater. Any threat is unlikely
- ❖ Reservoirs. Technically there is a threat from this source but the EA is on record as saying that this is hardly likely to happen because of the history of husbandry and regular inspections of reservoirs throughout the country,.

The site lies to the West of the Carrant Brook which poses the possible threat. But the reason that the EA legend states the risk is very low from this source is because the flood mapping shows that most of the site lies in Flood Zone 1

However the NPPF criteria states that in cases such as this the higher flood category should be used which is why the mapping shows that a small part of the site lies in Flood Zone 2.

This would be at the full extent of the flood pattern and would be more akin to pooling of water at no appreciable velocity.

All other sources are at low to very low threat.

The proposed new unit will not have the effect of increasing workers on site because it would act in concert with the other site facilities.

Evacuation Measures.

These are not considered necessary as most of the site lies in Flood Zone 1 and there is dry access to the road network in Flood Zone 1.

Flood Resilience Measures

These are not considered necessary but the threshold entry level and the floor ground floor level should be set 350mm above the ground level to take climate change into consideration.

The sustainable lifetime of the new unit is considered to be 40 years and during that time any rise in the flood level would not be of a significant nature. DERA guidelines state that flood water up to 300mm is allowable for safe passage.

Sustainable Drainage

The applicants wish the drainage to be part of the existing on-site drainage and they are in a position to supply the local authority with detailed plans.

Offsite Implications

There will be none with the drainage as planned.

Private impounded water sources.

There are none local to the site.

NPPF compatibility chart

Flood Flood Risk

This shows how sites are judged under the different zones and their categories. The site in question is shown to be acceptable under NPPF criteria

Table 2: Flood risk vulnerability and flood zone 'incompatibility'

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

Key:

✓ Exception test is not required

It also shows that the exception test is not required.

The sequential test is the responsibility of the local authority . NPPF advises

that all LAs should be pragmatic in their thinking in what is considered to be a minor development – as in this case.

The proposed unit is an extension to an existing building and, of course, fundamental to the continued usage of the site. It would stand on an established industrial /commercial park developed for this use and agreed by the local authority for just this usage.

A planning permission must have been gained for this site and this application is completely in accord with that.

Signed

David Eggleton

Managing Director