Flood Risk Assessments for Householder and other minor extensions in Flood Zones 2 & 3

Project:

Juniper House, The Street, WOODTON, Norfolk, NR35 2LZ

The project is to construct a single storey kitchen extension to the rear of an existing dwelling.

In addition, flood gates are to be installed to the front of the property to divert flood water away from the dwelling.

Existing Site:

Juniper House is located on the eastern side of The Street in Woodton and close to the junction with Hempnall Road.

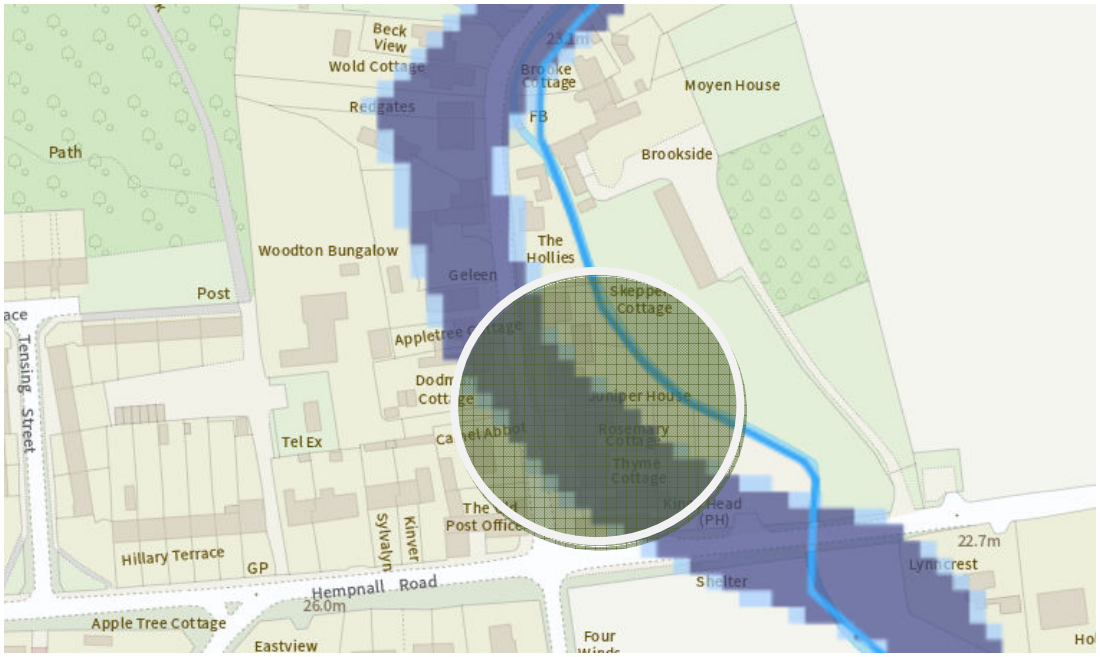
The site elevation is approximately 25m above sea level.

The property is detached with a semi-detached double garage with Skeppers Cottage to the north.

The property is of masonry cavity construction with solid floors. The garage is clad with timber boarding above a masonry plinth.

Photograph 1: Aerial view showing the site (Image courtesy of Google)

In consulting the flood map, the site falls in Zone 1 to the rear of the site, Zone 2 to the middle and Zone 3 to the front.



Map 1: *Flood risk data taken from Environment Agency Map*

The proposed site is in Flood Zone1, Zone 2 and 3 – low, medium and high probability of flooding.

During a serious flood event in December 2020, the property was significantly damaged by flood water that crossed the boundaries and entered the dwelling. Extensive damage was caused internally. Flooding also severely affected the neighbouring property, Skeppers Cottage. Planning approval has now been granted for flood gates at Skeppers Cottage to mitigate the effects of any future flooding events.

Proposal & Flood Mitigation Measures:

The proposal is to construct a single storey extension to the rear of the property to extend the kitchen. With reference to the flood maps, in the main, the location of the proposed extension is within Zone 1.

To help mitigate the effects of future flooding, the floor level will match the existing and will include a solid concrete ground bearing oversite slab with closed cell insulation layer and finished with a sand/cement screed.

The walls will be constructed in masonry with a brick outer skin and blockwork inner skin. The cavity will be partially filled with a closed cell insulation board and the internal walls will be finished with gypsum or lime plaster over sand / cement render to internal wall surface.

In addition to the extension of the dwelling, the applicants propose to install a similar flood gate arrangement to, and alongside, those to be installed at Keppers Cottage. Due to the installation of the flood gates to Skeppers Cottage, when there is another flood event, the flood gates at Keppers Cottage will exacerbate the effects at Juniper House, hence the need to provide a similar level of protection.

The proposal is to install a set of flood divert gates across the entrance to the site between the site boundary with Skeppers Cottage and the existing raised bank/verge and hedge line across the front of the site.

The gates will be located to match those approved for the neighbouring property. Due to the proximity to the highway boundary, the gates will only be closed when there an imminent risk of flooding. This will allow the usual minimum distance before an obstruction to any vehicle entering/leaving the site of 5m to be maintained.

The gates will include two large gates for vehicular traffic and one small gate for pedestrian use. Details of the proposed gates are shown on drawing W0590/002.

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