

Flood Risk Assessment / Statement

Blackwater Hall, St Mary's Road, Creeting St Mary IP6 8LX

Prepared by Tim Moll Architecture



Introduction

This document has been produced in support of a planning application for extensions and alterations to an existing dwelling. It has been produced with particular reference to the guide 'Preparing for floods Interim guidance for improving the flood resistance of domestic and small business properties.

It appears that the site lies within Flood Zone 3 – land assessed as having a 1 in 100 or greater annual probability of river **flooding** (>1%), or a 1 in 200 or greater annual probability of **flooding** from the sea (>0.5%) in any year.

It is known that the house itself has twice been subjected to flooding in previous years. This was in the living room which has a floor level lower than other areas. The following statement is made by the applicants:



Tim Moll Architecture Ltd, Trenance, Norton Road, Tostock, Suffolk, UK. IP30 9PY.

T:+44 (0)1359 270 841 **M:** +44 (0)7818 087 280 **E:** tim@timmoll.com

Reg No. 4678845. 22 Friars Street, Sudbury Suffolk.

'When we purchased Blackwater Hall the vendor had been associated with the property for 52 years. He reported that there had only been two flood incidents that affected the property, one in 1974 and another in 2012. The flood in 2012 came up through the floor boards in the sitting room but did not affect the rest of the property. River level information from the Environment Agency states that the highest recorded level at the Stonham water course at Creeting was 1.52m. On 24/12/20 the water level reached 1.37m and we witnessed that the house was secure although the garden was flooded. Our proposed building plan is designed to mitigate any flood issue within the house going forward.'

Measures To Be Taken

1. Levels

The finished floor level of the extensions is to be set no lower than the higher floor level of the existing house and the existing lower floor levels are proposed to be raised to match. The new floor level is 205mm higher than the known maximum flood level of 1.52m.

2. Flood resistant construction techniques

The ground floor construction will be a solid concrete floor. The reason for this is concrete floors generally suffer less damage than suspended floors and are less expensive and faster to restore following exposure to floodwater. The floor is to have the dpm between the surface screed and the concrete slab, allowing it to dry out more quickly than floors with the dpm below the concrete slab. Insulation for the floor will take the form of rigid boards with low water absorption. The floor is to have a screed and not chipboard finish.

External walls are to be constructed from cavity brick and block walls. A water-resistant clear paint is to be applied to the outer face of the brickwork plinth external walls to help prevent floodwater soaking into the external face of the wall, thus allowing the wall to dry out more quickly. Measures to improve water resistance are to be compatible with the wall materials and must allow adequate water vapour transmission to avoid trapping moisture within the wall.

Inside face of external walls. An internal water-resistant render and lime based plaster finish is to be used at ground floor level.

Wall ties are to be stainless steel.

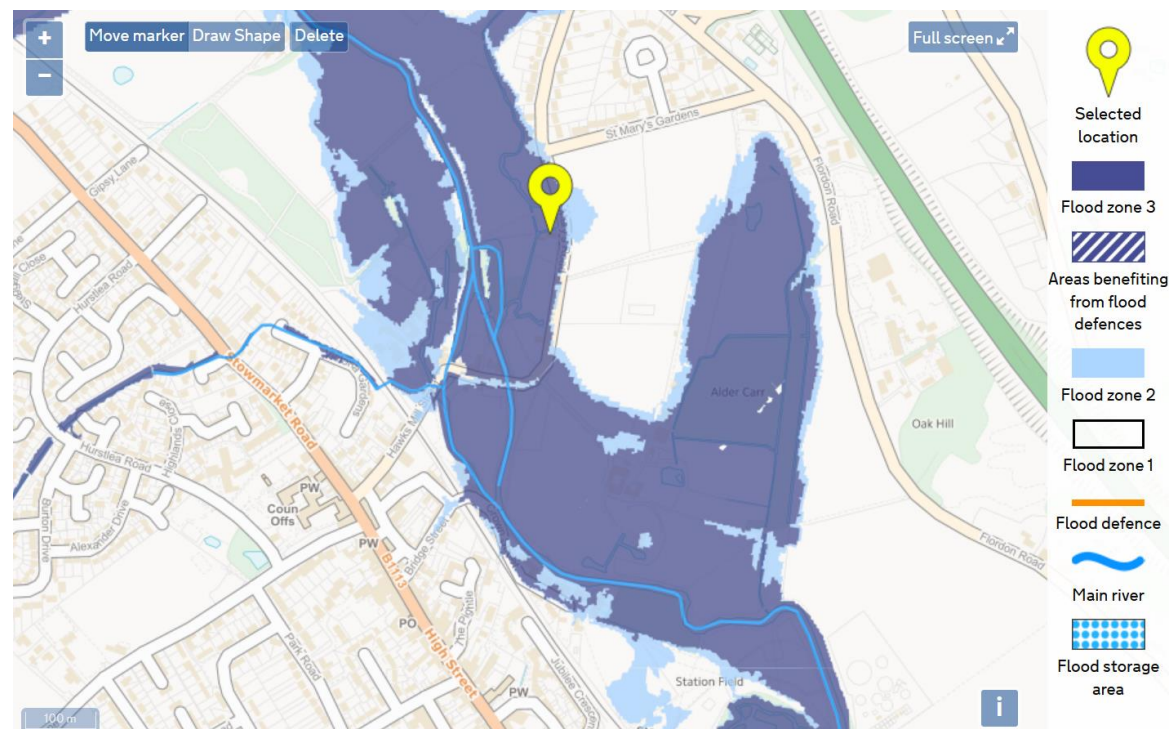
No fitted carpets on the floor.

Electricity sockets, telephone points and electric and gas meters are to be raised above likely flood levels.

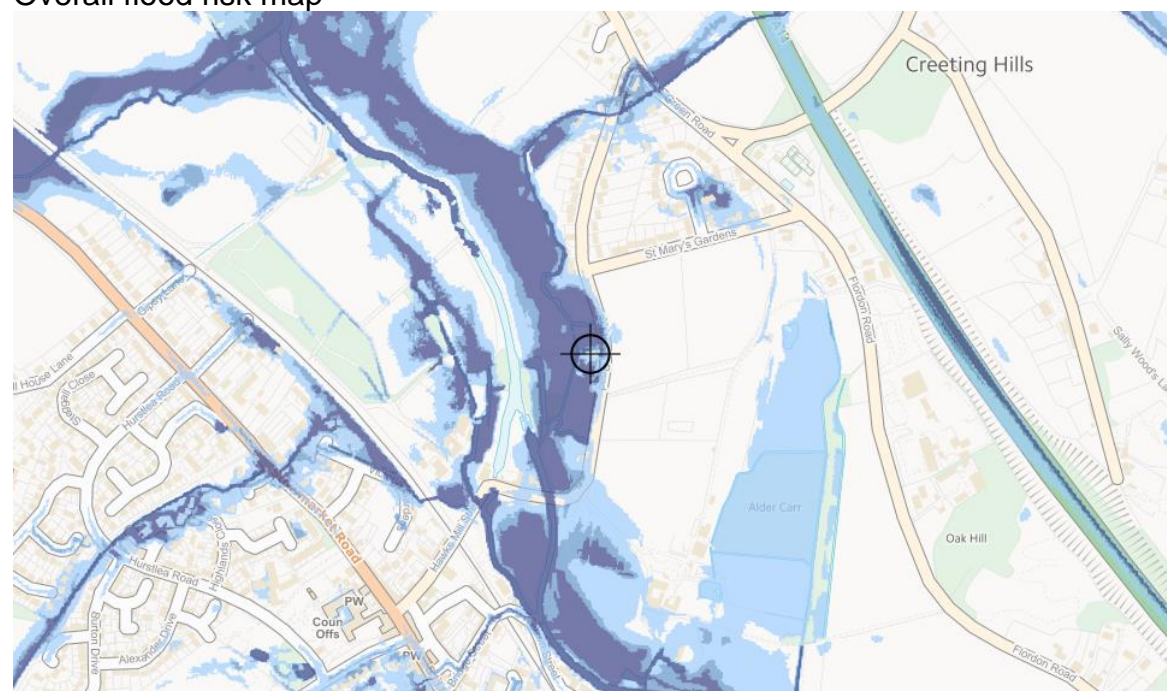
The skirting boards are to be made of treated timber, and to have been painted all over so that they don't absorb water and warp.

All ground floor doors are to be painted, including the underside.

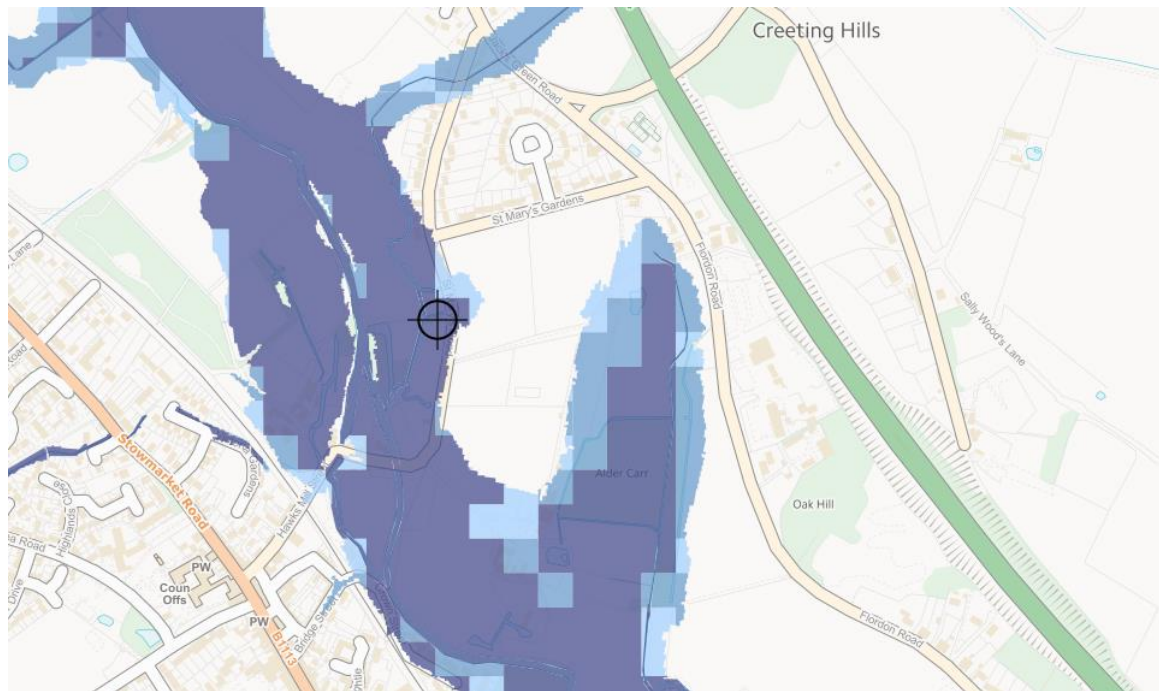
A non-return valve, often called anti-flooding devices, is to be installed within the foul water pipework of the building to stop the possibility of foul water contamination in a flood event.



Overall flood risk map



Surface water flood risk map



River water flood risk map

3. Conclusion

The proposed new build floor levels are at a safe height relative to known flood risk levels and in addition existing floor levels that are currently liable to flood will be raised to a safe level. Combined with the precautionary construction measures, this proposal satisfies risk assessment requirements.