

Flood Risk Statement

Client: Mr and Mrs Swain

Project: Householder Application - Erection of first floor extension to the whole property and erection of single storey rear extension.

Site Address: 15 Abbey Road,
Sudbury,
Suffolk,
CO10 1LA

Date: 18th April 2024

Reference: 1440-01-FRA

Revision:



Description of project:

The proposal involves the addition of an extra storey above the existing bungalow and the erection of a single storey rear extension, following the removal of the existing conservatory.

Environment Agency Flood Risk Map:

Prior to submitting the application, the Environment Agency Flood Maps were consulted.

The Environment Agency Flood maps identify the Site as being in flood zone 1 with a very low probability (less than 0.1% each year) of flooding from rivers or sea.



Fig 1: Environment Agency Flood Map-Rivers and sea

This is reflected in the site's elevated position relative to the highway and river beyond. These confirm that the property is not at any risk and the proposed works will not alter this.

The Environment Agency Surface Water Flood maps identify parts of the garden as being at high/medium and low risk (between 0.1% and more than 3.3% each year) of flooding as a result of surface water.

This flood area is outside of the area being developed, but within the site boundary.



Fig 2: Environment Agency Flood Map -surface water

Following on from feedback from the local authority's validation team, it has been confirmed that it would be appropriate to provide this FRA along with appropriate flood mitigation measures.

Flood mitigation Strategy:

With regards to flood risk, there are two distinct area of the project that require different consideration. Firstly, the first-floor extension on top of the existing ground floor. Due to the high-level nature of the extension (between 2.7-3.2m above ground level dependant on ground slope), this extension can be excluded from considerations of flood damage or ground water displacement within a flood zone, since it is all at first floor on top of an existing ground floor structure.

The second area to consider therefore is the extension to the rear. It is important to note that this sits outside of the indicated flood area. This extension replaces an existing conservatory; therefore, the extra footprint is only 23m². This extra footprint currently sits between the garage

and the conservatory, and is in an area laid with a mixture of poured concrete and concrete patio slabs, likely sitting on an impervious concrete base.

Therefore, the extension in this area will not result in the reduction of any further permeable area that contributes to existing surface water drainage.

The floor level of the extension will be to match the existing, which sits between 250mm - 500mm above the existing ground level, depending on the slope of the site.

Throughout the rear extension, the insulation to the walls and floors will be a PIR closed cell material which is impervious to water ingress.

Where this is located in a wall cavity, appropriate weep holes will be introduced in according with building regulation requirements to aid water runoff.

The internal wall faces will not be cement rendered. Instead, plasterboard will be installed, horizontally, so the bottom layer can be easily replaced in the extremely unlikely event of flooding.

The floor to the rear extensions will be concrete faced and then tiled. Should floorboards or carpet be introduced these will sit above a screed finish. The floorboards can then be considered a sacrificial element that can easily be replaced as a carpet could.

Sockets in the rear extension will be set a minimum of 450mm above the finished floor level. Any wiring installed for communication purposed will be insulated to protect them from damage.

Summary:

- No reported floods on site on Environment Agency's records.
- No reported floods within 50m of site (nearest sited on another road)
- First floor extension not relevant to flood risk
- Single storey rear extension is:
 - Outside the flood risk zone
 - Built 250mm - 500mm above ground level.
 - Constructed to be flood resilient.

We would be happy to work with the local authority to address any concerns that may be raised and request that should, the local authority wish to discuss these details, they feel free to contact us prior to the final planning decision.

With these points in mind, we hope the Council will support us with our proposals on this application.