Flood risk assessment for a Rear Extension At 38 Cardigan Street, Oxford

Flood Risk

This site is within Flood Zones 2/3 which is classed as a medium risk of flooding. [Environment Agency Records]

The chance of flooding in any year is [1 in 100]. This takes into account the effect of any flood defences that have been constructed around this area, in recent years ie. The Oxford Flood Alleviation scheme. This scheme has been set up to develop proposals to reduce flooding in Oxford.

This site has never been flooded in 38 years and not within the last 15 years, when the worst floods in many years occurred in and around Oxford.

The risk of flooding for this property would come from the surface water drains. The Environment Agency states that flooding of the streets would only occur when the drains are not working as they should.

The rear garden is not at risk from surface water flooding.

Design

The proposed work is a rear extension of approximately 15 sq mts.

The existing ground floor levels within the dwelling are 200mm above the adjacent ground level and 250mm above the road.

The existing roof water and proposed roof water will discharge into the existing surface water drainage system or to approved soakaways. Percolation tests will be carried out when work commences.

The external walls will be constructed of brick, concrete block and semi –engineering brick below dpc level. The internal wall will be finished with a cement render [with added water proofer] with a smooth finish.

All fixings will be stainless steel including wall ties.

The floor will be a ground bearing slab with a sealed damp proof membrane. Any skirting boards will be sealed with oil based paint on all sides before fixing. The floor level to be the same as the existing and with added insulation may be higher than the original.

A hard floor finish is proposed.

Water resistant kitchen base units with solid timber doors internally are proposed. Electrical sockets and wiring will be 500mm minimum above finished floor level.

It is important that extensions do not increase flood risk elsewhere.

In order to ensure our proposal will not increase flood risk elsewhere the finished floor level will be the same height as the existing if not higher. Any patio areas will be constructed with permeable slabs, pavers or gravel. There will be suitable gullies and ACO drains along the rear wall of the dwelling. This will discharge into an approved soakaway system.