

Household minor extension Flood Risk assessment (FRA)

Site: The Chestnuts, Glenside South PE11 3SA

Detailed assessment, the site is classified as being in flood zone 3 which indicates a high risk of flooding. This risk is mitigated with flood prevention measures in place.

The principle risks of flooding are:

River flooding

Property is near the River Glen and has a managed flood embankment in place to remove the risk of river flooding. The Environmental Agency actively manage the River Glen catchment to prevent flooding.

Ground water flooding

Site is in the Welland and Deeping drainage board area and is drained via a series of drains.

Surface water flooding

With climate change the risk of intense rainfall is heightened however the majority of site is grass and is managed to mitigate against this risk with adequate drains to capture surface water run-off.

There are no surface water sewers in the proximity of the site

Proposed development

The additional footprint of the proposed extension is <250m² with the proposed extension footprint totalling 15m². Floor levels within the proposed development will be set at the existing property floor levels.

Property design follows advice for a “resilient” property. Flood proofing and resilience measures will be included in the development in accordance with “improving the flood performance of new dwellings” CLG (2007) guidance. The basis of this approach will be to a resilient standard.

These will include:

Foundation and Suspended concrete floor to match existing property.

Concrete blocks will be sealed with an impermeable material to prevent water movement from the ground into the wall construction.

Sub floor space will slope to external wall for ease of clearing should this be required. Internal floor finish will support ease of access should cleaning be required. DPM will be installed as standard detail at 1200 gauge and will be installed by a competent builder

Closed cell floor insulation to be used in floor construction.

Void to be vented utilising telescopic air bricks.

Internal Floor finish

Floor finish will be a ceramic floor tile to match existing and installed utilising a water resilient grout.

No underground services will be included as part of the proposed extension

Walls

Brick and block construction to match existing property

External face will be pressed facing brick with double course of engineering brick

Internal face concrete block to minimum 0.3m.

Mortar joints to be laid frog up to ensure thoroughly filled to minimum 0.3m

Cavity insulation to include closed cell insulation to minimum of 0.3m

Doors windows

No additional door and windows. Existing window to be relocated to exterior wall and will be adequately sealed

Fittings and services

No service entry points will be included in the proposed extension

Sockets will be raised as appropriate