

Flood Risk Assessment for proposed outbuilding to 62 Conway Gardens, Grays, RM17 6HG

Submitted as part of the Planning Application

Introduction

This flood risk assessment (FRA) is in support of a planning application for an outbuilding in the rear garden of 62 Conway Gardens, Grays, RM17 6HG. The aim of the FRA is to identify and assess the risk of the building becoming flooded and also the risk of the development work affecting and increasing the risk of flooding to other properties. The FRA will also demonstrate how any flood risk will be mitigated. This assessment is based upon the Environment Agency guidance.

Existing Site Information

The site is situated on the Western side of Conway Gardens and is located within a street of similar terraced properties. The site is situated in a predominantly residential area of similar type and sized terraced properties. The host property is a 2-storey building in C2 care home use. The site has an area of 176 m².

The site lies in the Flood Risk Zone 3, as illustrated by the Environment Agency's Flood Zone maps. In accordance with NPPF a site specific Flood Risk Assessment (FRA) is required to be submitted with this planning application.

The Proposed Development

This application is to erect an outbuilding in the rear garden for use as a playroom.

The proposed building has a footprint of 13m² in area and a maximum height of 2500mm.

Assessment of Flood Risk Flood Risk from surface water

According to the Thurrock Surface Water Management Plan Surface (TSWMP) water flood risk is widespread across Thurrock, with the highest risk located in the more urbanised areas of the administrative area. The mapping shown within the TSWMP does not identify the proposed development area as vulnerable to surface water flooding. The TSWMP also shows that the site is located in an area that is not an Area of Critical Drainage.

Flood Risk from rivers and sea

According to the Thurrock council local plan this area benefits from The River Thames Tidal Defence (TTD) mechanisms that have been put in place.

According to Core Strategy policy CSTP27, the tidal floodplain associated with the River Thames is considered to be defended from tidal flooding to the 1 in 1000 year standard including climate change. The SFRA therefore concludes that the greatest flood risk posed to the Borough would result from the residual risk associated with a failure of those defences during an extreme tidal event. This residual risk has also been assessed in the Thurrock SFRA and includes the identification and classification of areas of flood hazard and also the times to inundation in the event of a breach of the defences. The studies show that this particular site is at a very low risk. Data from the core strategy shows that there is a low risk for this site with regards to tidal breaches within the lifetime of this building.

Risk from ground water flooding

The mapping shown within the TSWMP does not identify the area as vulnerable to ground water flooding.

Flood Risk in the Planning Context

In accordance with the National Planning Policy Framework (NPPF) flood risk vulnerability classifications this proposed development is classified as “More Vulnerable”, which is the same as the current existing classification, therefore there is no increased risk of flooding because of this new proposal.

In accordance with council guidance the proposed developments are classified as “Minor Development”, therefore a Sequential Test and Exception test will not be required for this site-specific flood risk assessment. The proposed development is considered to be very minor that it is unlikely to have any impact of flooding elsewhere.

Managing and Mitigating Proposed Development flood risk Building Design & Construction

The proposed development will have the same inherent flood risks as the current one. This proposed development adopts the same flood risk measures that are currently on the site. The proposed Finished Floor Levels for the ground is the same as the host dwelling. The proposed development retains the same amount of permeable areas of the site.

The extent and size of the proposed development will not increase the surface water runoff rates. The proposed development will not increase the demand on the current surface water drainage system. It is proposed the new building is constructed with a green roof to manage surface water runoff. The construction methods and materials for the proposed outbuilding will be flood resistant.

Surface Water Management

Bearing in mind the extent and size of the proposed development, the ability of the proposed green roof and garden soil to receive surface water runoff generated on site will not be affected. The Surface water will be managed in the same way that it is being

managed now. The proposed layout of the development will not affect the current drainage systems. The current Sustainable Drainage Systems (SuDS) will be used to reduce and manage surface water runoff to and from proposed developments as near to source as possible in accordance with the requirements.

Risk to life

There will be no extra risk posed to the occupants of this proposed development. The Access and Egress to the site will not be changed or affected.

Conclusion

The proposed development falls wholly within Flood Zone 3. In accordance with the National Planning Policy Framework this is the highest probability flood risk. The site has been assessed for flood risk from a variety of flood sources and the overall flood risk of the site is considered to be very low. The site is not identified as being within a Critical Drainage area with high risk of flooding from surface water.

The proposed development increases the built area onsite footprint however, the proposed green roof negates this along with the existing permeable areas. The proposed development is considered very minor that it is highly unlikely to increase the flood risk to the site and surroundings. This report concludes that the proposed development can be constructed without increasing the risk to the site itself or other sites in the vicinity, inline with the Councils', NPPF, and Environment Agency standing advice for developments of this type.