38 Hazel Close, Twickenham, TW2 7NR Flood Risk Assessment

The Flood Risk Map for 38 Hazel Close shows that the property is in Flood Zone 1 an area with low probability of flooding.



Climate change over the next few decades is likely to mean milder wetter winters and hotter drier summers in the UK whilst sea levels will continue to rise. These factors will lead to increased and new risks of flooding within the lifetime of planned development even in low flood risk areas.

The property is located in low flood risk areas ZONE 1 and this document aims to provide details on how to improve flood avoidance, flood resistance, flood resistance, flood resilience and flood repairable on the proposed development at 38 Hazel Close, TW2 7NR by the use of suitable materials and construction details.

Flood avoidance- Floor levels

Site Layout Floor Levels

New construction will avoid it being flooded by maintaining and not lowering the current ground levels.

Flood levels within the proposed development will be set no lower than the existing levels and flood proofing will be incorporated where appropriate.

Landscaping

The land surrounding 38 Hazel Close is designed to encourage drainage away from the property.

Drainage

The site drainage system and management of surface water runoff is designed to reduce the flood risk .

Flood resistance - Flood resilience - Flood repairable

Resistance : The proposal at 38 Hael Close will be constructed to prevent floodwater entering the building and damaging its fabric.

Resilience : The proposal at 38 Hazel Close will be constructed so that although flood water may entering the building its impact is reduced therefore no permanent damage is caused , structural integrity is maintained and drying and cleaning are facilitated.

Repairable : The proposal at 38 Hazel Close will be constructed in such a way that although flood water enters the building, elements that are damaged by flood water can be easily repaired or replaced.

The above will be achieve by the following mitigation measures:

- Materials with low permeability up to 0.3m
- Accept water passage through building at higher water depths
- Design to drain water away after flooding
- Access to all spaces to permit drying and cleaning
- Flood resilient materials and designs
- Materials and constructions with low permeability

Building materials that are effective for a 'water exclusion strategy' and 'water entry strategy' such as engineering bricks, cement-based materials including water retaining concrete and concrete blocks will be used for the construction of this proposal.

In the foundations concrete will be used to seal the blocks placed below groundbearing concrete floor slabs (blocks are considerably more permeable than concrete slabs).

Durable fittings not significantly affected by water and that can be easily cleaned (plastic *I* stainless steel) will be used.

Where possible all services entries will be sealed.