

Flood Risk Assessment
For Property
45 Thornhill Road
Ickenham UB10 8SQ

3rd February 2025

Introduction

This Flood Risk Assessment has been prepared in conjunction with the guidance provided in the publication 'Technical Guidance to the National Planning Policy Framework' produced by the Department for Communities and Local Government in order to meet the objectives of the 'National Planning Policy Framework'. It has been produced in regards to 45 Thornhill Road, Ickenham UB10 8SQ development for which Householder planning permission is required.

The site area is 513m² (0.00513 HA)

Application Planning Policy

National Planning Policy Framework (NPPF), issued by the Department for Communities and Local Government in December 2023, deals with development planning and flood risk based on planning zones and the Environment Agency Flood Map. The requirement of the policy is for flood zones and vulnerability classification relevant to the proposed development to be established and identified, based upon an assessment of existing and future conditions.

Site Description and Location

45 Thornhill Road is a bungalow with an existing first floor within the roof space. The existing development manages surface water through gutters and rainwater pipes that drain to the public sewer.

Proposed Development

Our proposal is to convert the existing garage to a habitable area that will consist of a bathroom, utility room and a study, including enclosure of the existing porch area. The existing ground floor area of building coverage is 106.6m². This area will remain and not be increased with our proposed works.

Flood Zones and what they mean.

Flood zone 1

Locations in flood zone 1 have a low probability of flooding. This means in any year land has a less than 0.1% chance of flooding from rivers or the sea.

Flood zone 2

Locations in flood zone 2 have a medium probability of flooding. This means in any year land has between a 1% and 0.1% chance of flooding from rivers and between a 0.5% and 0.1% chance of flooding from the sea.

Flood zone 3

Locations in flood zone 3 have a high probability of flooding. This means in any year land has a 1% or more chance of flooding from rivers, or a 0.5% or more chance of flooding from the sea.

The property is in the flood zone 2 and if you look at the 'Extent of flooding map' attached below, it shows the property is in the very low section of zone 2.

The nearest potential source of flooding to the site is from the River Pen

Sequential and Exceptional Test.

The proposed site falls into the Flood Zone 2 and 3. However, the development falls into the Minor Development Category and the National Planning Policy Framework' states: '...applications for minor development and changes of use should not be subject to the Sequential or Exception Tests but should still meet the requirements for site- specific flood risk assessments...'.

The purpose of this Flood Risk Assessment is to demonstrate that the proposed development will not increase the flood risk to the area or the existing property.



Flood map for planning

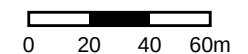
Your reference
<Unspecified>

Location (easting/northing)
507092/185892

Scale
1:2500

Created
4 Feb 2025 10:52

-  Selected area
-  Flood zone 3
-  Flood zone 2
-  Flood zone 1
-  Flood defence
-  Main river
-  Water storage area



Sources of Flooding

1. Fluvial Flooding.

The nearest possible source is the River Penn.

As shown on the 'Extent of flooding map' below, it shows the property is in the very low section of zone 2.

2. Tidal Flooding.

In this area where the property is located, it is unlikely to be affected.

3. Flood defences.

There are no flood defences for this site area for the property.

4. Climate Change.

The predicted extent and depth of surface water / rain flooding for this location is 1 in 100 year and 1 in 1000 year. Therefore, it is below 150mm.

5. Surface water flooding.

The OS Mapping and the EA's Mapping shows that there are no indications of large canals in the area of the site, therefore the flood risk is minimal.

6. Drainage and infrastructure.

The drainage and infrastructure, already in place as existing. There will not be any change to the existing main drains and there will not be any drainage passing below the building.

7. Groundwater.

There have not been any historic flooding incidents within this area of the property. The property is largely situated on soft landscaping and any all new external material will be permeable. For example, a rear patio, this will have permeable etc.

8. Canals, lake and reservoirs.

There are none in the area. Only the River Penn as noted above, where the property is in the section of zone 2 and zone 3.

Historic Flooding.

The strategic flood risk documents by London Borough of Hillingdon does not indicate any historic flooding.

Surface Water Flooding.

In the area of this property which is identified as Level 2 and Level 3. Level is a high risk scenario were the flood depths are predicted to be between 300 and 900mm with flood velocities both under and over 0.25m/s

Our design is not increasing the footprint of the building and the garage we propose to convert to a habitable space is within the main building.

Our typical construction methods are generally very minimal and we confirm the following which are existing. Any new items within the garage area will be as follows.

Existing Floor.

To receive 1500 gauge damp proof membrane for extra protection.

Doors and windows

All doors and windows will be of Upvc and sealed around all edges that will minimise any water entering the building.

Electrics

All sockets, switches, utility lines etc. will be a minimum of 450mm above the internal floor level. (Note: This is a Building Regulations requirement)

Drainage

All new drainage will remain as existing.

Currently the site is largely with soft landscape (grass). This will remain.

Conclusion.

The property / site is in the zone 2 and 3. Flooding has been identified it is most unlikely to happen. The internal floor level of the property is approximately 150mm above external ground level.

This is large site which is 513m² (0.00513 HA) with a large amount of soft landscaping. There is no increase of volume of water run-off.

Therefore, we consider that our proposed scheme is suitable for this site.



Surface water map

Yearly chance of flooding

-  Flood area (extent)
-  High chance
-  Medium chance
-  Low chance

Yearly chance of flooding between 2040 and 2060

-  Flood area (extent)

Map details

- ☒ Show flooding
- ☒  Selected address