

11 Ullswater - SW13 9PL

Flood Risk Assessment

Report



In support of Planning Application to: **London Borough of Richmond upon Thames**

0180-CSE-REP-002-S3-P01

2024 July

1 Introduction

- 1.1 This Flood Risk Assessment (FRA) has been prepared to assess the potential flood risk associated with the proposed two-storey side extension at 11 Ullswater Road, SW13 9PL. The property lies within Flood Zone 3. For the purposes of this assessment, only the ground floor wall opening to enlarge the existing kitchen/lounge is relevant.

2 Site Description and Proposed Development

- 2.1 The property is a detached house located in the London Borough of Richmond upon Thames. The relevant proposed extension does not alter the existing floor levels and the wall demolition to create a kitchen enlargement does not create any real additional area or impact on the water drainage.

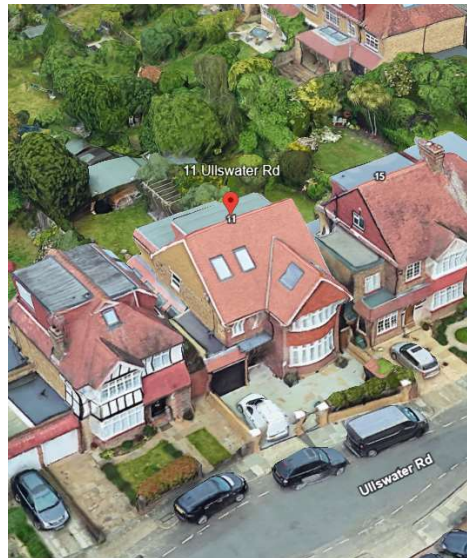


Figure 1 - 11 Ullswater Aerial View - Google Earth



Figure 2 - 11 Ullswater Aerial View - Google Earth

3 Flood Risk Assessment Methodology

3.1 The following sources of information were used to assess flood risk:

- Environment Agency Flood Map for Planning: The property is located in Flood Zone 3, indicating a high probability of flooding – See Figure 3.
- Surface Water Management Plan for London Borough of Richmond upon Thames: This plan identifies the property as being out of a high-risk surface water flooding area – See Figure 4.
- Site visit and observations: A site visit was conducted to assess the topography, drainage, and potential flood pathways.

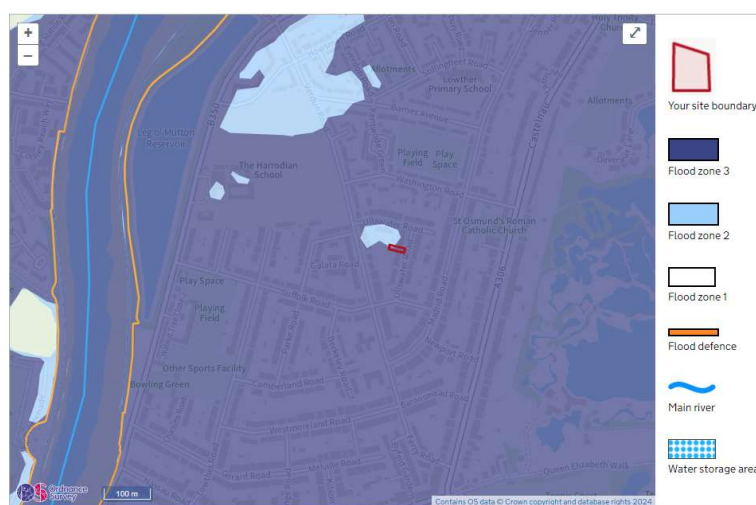


Figure 3 - Environment Agency Flood Map - 11 Ullswater Road

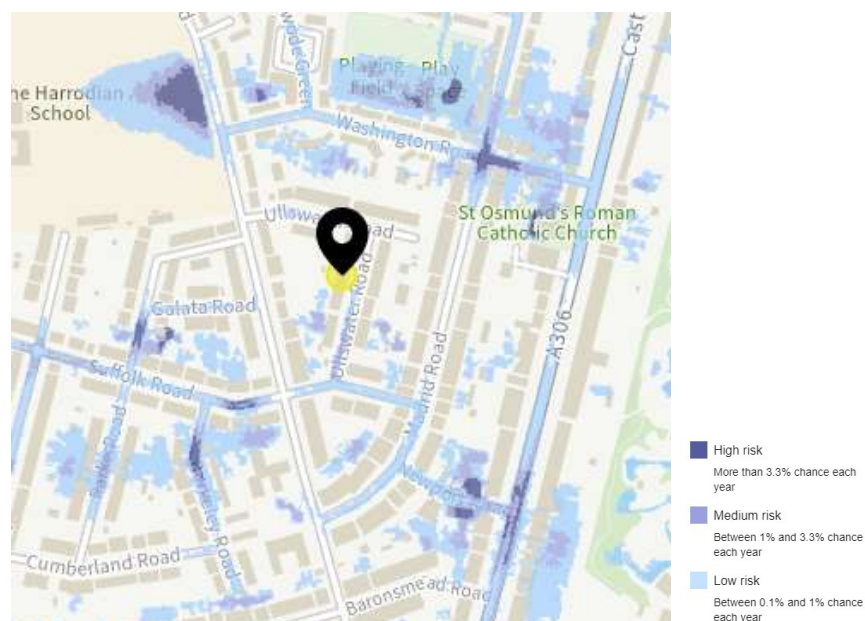


Figure 4 - Surface Water Risk Map - 11 Ullswater Road

4 Sequential Test / Exception Test

- 4.1 In accordance with the National Planning Policy Framework (NPPF), new planning applications typically require a Sequential Test. Under the NPPF, this proposed development would be classified as "More Vulnerable" due to its location within Flood Zone 3, as defined by the Environment Agency (EA). However, a Sequential Test is not deemed necessary in this instance as the development is considered to have negligible impact on the existing property's flood risk, consisting solely of a ground floor wall demolition.
- 4.2 In summary therefore, the proposed development does not require further implementation of the Sequential Test. In any case, recommendations have been made and are described in Section 5.



Figure 5 - Existing Rear View – 11 Ullswater Road

5 Flood Mitigation Measures

- 5.1 Below the following should be followed for this proposed ground floor enlargement:
- The proposed extension and alterations will not lower the existing floor levels, thus maintaining the current level of flood resilience.
 - The floor slab damp-proof membrane and external wall damp-proof course will be seamlessly joined to provide unbroken protection
 - At ground level to the rear side wall to incorporate a continuous damp-proof course positioned at least 150mm above ground level.

- d. Non-return valves will be Installed in all new plumbing (sinks/toilets) to prevent backflow in cases of flooding.
- e. Water efficient washing machines and toilet cisterns will be recommended throughout the proposed development works.
- f. Regular Maintenance: Regularly maintain drainage systems, gutters, and downpipes to ensure they are clear and functioning properly
- g. The occupants will be advised to subscribe to the Environment Agency flood warning service

6 Conclusion

- 6.1 The proposed two-storey side extension, while situated in flood zone 3 as per the Environment Agency's classification, does not increase the property flood risk.
- 6.2 The inclusion of non-return valves, water-efficient appliances, and a recommendation for flood warning service subscription further enhances the property's resilience to flood events. Regular maintenance of drainage systems will be essential in ensuring the long-term effectiveness of these measures.
- 6.3 Within the above proposed parameters and considering the following:
 - a. the proposed development is located within an existing developed area;
 - b. the proposed extension is a minor development (<250m²);
 - c. the proposed extension will be constructed on the second floor and the ground floor wall demolition should not increase the property flood risk.
 - d. other mitigation measures will be put in place as described in the above section, within the proposals;
- 6.4 Based on the implemented flood mitigation measures, the proposed two-storey extension is deemed to not exacerbate the existing flood risk of the property. Especially as no extension on the ground floor is proposed. Regardless, it is anticipated that the proposed measures will adequately address any potential surface water runoff due to the existing impermeable footprint.
- 6.5 It is important to note that while the risk of flooding cannot be completely eliminated, the proposed measures will significantly reduce the vulnerability of the property and its occupants to flood events.