

Flood Risk Assessment for 103 Elgin Avenue, London, W9 2NP

1. Introduction:

This Flood Risk Assessment (FRA) aims to identify and evaluate potential flood risks associated with the proposed development at 103 Elgin Avenue, London, W9 2NP. The proposed development involves the removal of an existing structure thereby increasing the permeability of the site. The works also include the change of doors to windows.

The site is situated within a surface water flood risk hotspot. The proposed development involves alterations at the lower ground and first-floor levels although no additional bulk or footprint is being added to the dwelling. Indeed, the proposal seeks to remove built form at lower ground floor level.

This assessment will address all forms of flooding, considering the existing surface water flood risk and potential impacts due to climate change.

2. Site Description:

Address: 103 Elgin Avenue, London, W9 2NP.

Flood Risk: Surface water flood risk hotspot.

Proposed Development: Removal of a single-storey rear extension, replacement with a sash window; replacement of the front door with a sash window at both lower ground and first-floor levels.

3. Flood Risk Identification:

3.1. Surface Water Flooding:

The site is located within a surface water flood risk hotspot, indicating a heightened risk of flooding due to heavy rainfall and inadequate drainage.

3.2. Climate Change Considerations:

The assessment acknowledges the potential for increased rainfall and changes in weather patterns associated with climate change, leading to an elevated risk of surface water flooding.

4. Risk Evaluation:

The proposed development involves changes at lower ground and first-floor levels, impacting flood vulnerability. However, as the development is reducing the built footprint, the ability of the site to deal with surface water run off will be increased therefore improving the drainage across the site.

Existing surface water flood risk increases the susceptibility of the site to flooding but the proposed development will be a betterment to the existing.

5. Flood Risk Management:

5.1. Mitigation Measures:

Mitigation measures are not considered necessary as the development will improve the permeability of the site. However, it is good practice to ensure the following:

Elevate Floor Levels: Raise the floor levels at the lower ground floor to minimize the risk of floodwater entering the property.

Flood-Resistant Windows/Doors: Install flood-resistant windows and doors to enhance the building's resilience against surface water.

Permeable Surfaces: Implement permeable surfaces in landscaping to reduce surface water runoff.

5.2. Climate Change Adaptation:

Future-Proof Design: Consider climate change projections in the design phase to ensure resilience against potential future surface water flood events.

Sustainable Drainage Systems (SuDS): Integrate SuDS to manage stormwater runoff effectively and enhance flood resilience.

6. Opportunities for Risk Reduction:

Green Infrastructure: Incorporate green roofs and permeable paving to enhance water absorption and reduce surface water runoff.

Community Engagement: Educate residents about flood risks and encourage the adoption of flood-resilient practices.

7. Conclusion:

This Flood Risk Assessment highlights the surface water flood risk in the area and proposes possible mitigation measures to further enhance the site against the risks of localised flooding. As a development that is removing built form, the above mitigation is not considered necessary but any additional measures that can be incorporated into the scheme would further safeguard the proposed development.

Climate change considerations are essential for designing a resilient development that can adapt to future flood risks.

8. Recommendations:

Collaborate with local authorities to implement SuDS although given the scale of the development this is not considered necessary by planning policies.

Seek professional advice for flood-resistant window and door specifications.

Regularly review and update the flood risk management plan in response to evolving climate change data.

This assessment aims to ensure a comprehensive understanding of flood risks associated with the proposed development, facilitating a resilient and sustainable approach to the project.