***FLOOD RISK ASSESSMENT.***

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| **LOCATION:** | **102 GREEN LANE Northwood HA6 1AJ** |
| **PROPOSAL:** | **GROUND FLOOR REAR EXTENSION AND LOWER GROUND FLOOR REAR EXTENSION WITH REAR LIGHTWELL AND PATIO TO RESIDENTIAL DWELLING** |

**The site:**

The site is defined as a large single dwelling house with large drop level to garden from current patio level. The proposal to retain current garden level and make rear extension to premises by ground floor and lower ground level to form the playroom and gym of the family dwelling.

The proposal to create residential rear ground and lower ground level extensions to existing detached dwelling house is required compliance with Hillingdon Policies BH1 (Part One - Strategic Policies (2012), Policies DMH 6, DMHB 11 and DMHB 12 of the Hillingdon Local Plan: Part 2 - Development Management Policies (2020), Policy D3 of the London Plan (2021) and the National Planning Policy Framework (2023)).

The proposal with associated amenity and landscaping meet Policies DMHB 11 and DMHB 18 of the Hillingdon Local Plan: Part 2 - Development Management Policies (2020), Policy D3 of the London Plan (2021) and Paragraph 135f) of the National Planning Policy Framework (2023).

The EXISTING areas of the premises as follows:

*Residential unit:* Net internal floor area of current house:
Ground floor area: 114M-SQ
First Floor area: 101M-SQ
Total unit area: 215m-sq with overall site area noted as 671m-SQ

*Proposed new self-contained end of terrace unit:*
Net internal floor area:
Lower Ground area: 59M-SQ
Ground floor area: 141M-SQ
First Floor area: 101M-SQ
Total unit area: 301m-sq with overall site area noted as 671m-SQ

All works to site by making back rear ground and lower ground level to form a rear patio level in same height to existing and new rear light well to form natural light to lower ground level to form residential unit with soft landscaping and hardstanding to ensure the premises has suitable means of surface water.

The proposed plans indicate the hardstanding areas to have permeable porous block paving to allow soakaway of any surface water. The proposal also demonstrate an Aco-drain channel to front of new unit to collect all surface water and as noted on proposed plans to dispense all new flat roof surface water and amenity surface water as result of collection into Aco-drain channel to discharge into front landscape soak-away trench in order to create water attenuation and recycling the surface water into soft landscaping areas. The existing site is accessible from main front entrance via main road. The garden and associate landscape areas proposed to consist of hedges and new planting serving residential units. The area is predominately a residential usage. As shown in the attached map, I can confirm that the area of the site is located in Flood Zone 1 Environment Agency Department.

The proposed scheme is to carry redevelopment of the site to erect new residential unit. As part of the proposed scheme, the new ground floors' internal finish level will be at 300mm above external level at the external level to the rear garden. Therefore the new houses will be designed to overcome the flooding & local surface water drainage.

Based on Environment Agency Data, the site is located in the flood zone 1 as shown.

**The Proposal:**

It is proposed to carry new REAR ground and lower ground level extension to residential dwelling building. The new extension finish floor level to be at the same level as ambulant accessibility to compliance with Part-M. Therefore the ground floor's FFL will be at 300mm above the external level at the main amenity and garden area.

The flood levels within the proposed development will be set no lower than existing levels & flood proofing of the development has been incorporated where applicable. Details of the flood resilience & resistant techniques are given below & attached as sections & plans for the new scheme, in accordance with "Preparing for floods" (ODPM 2003). The given details & specifications are generated in compliance with Building Regulations & British Standards as well as Environment Agency Guidelines.

(i) The proposed floor levels will be as existing and above external level by minimum of 300mm. The floor level is more than 300mm above external level.

(ii) Providing damp proof coarse at min. 150mm above external level & providing gullies at the corners of the building to discharge the surface water into front soakaway system set within front landscape and garden areas to form part of recycling surface water. The drainage scheme will be submitted to Thames Water as part of Build over Agreement & Approval prior to construction.

(iii) Providing cavity wall construction with air bricks below DPC level & using Airbricks covers as given in EA documents. The external walls consist of facing bricks & cavity insulation with inner block wall & plastered. All brick works to have pointing & repair to the existing façade in order to minimize any seepage. Providing Lime based plaster over water resistant render such as sand/cement render.

(iv) The proposed floor to level above new damp proof membrane and meet building regulations standards. The floor board to be WBP plywood which has better resistance to water.

(v) All windows & openings to be adequately sealed at the edges & in compliance to British standards.

All workmanship & designs are carried out in accordance to British Standard & Building Regulation's approval.