Basement Impact Assessment
Preliminary Screening

1.1 This preliminary review has been undertaken by Doyle Town Planning and Urban Design and based on published information. It is subject to review/ confirmation by the appointed basement impact engineer (Knapp Hicks and Partners).

Scale of basement development

1.2 Section 27.3 of DP27 states that for larger schemes, where a basement development extends beyond the footprint of the original building or is deeper than one full storey below ground level (approximately 3 metres in depth), the Council expects that 'The level of information required will be commensurate with the scale and location of the scheme.'

1.3 Section 27.9 of DP27 suggests a basic 'envelope' within which basement development may be considered appropriate. In summary basement development should:

- not extend beyond the footprint of the original building;
- be no deeper than one full storey below ground level (approximately 3 metres in depth);
- not take up the whole rear and/or front garden of a property;
- provide sufficient margins between the site boundaries and any basement construction to sustain growth of vegetation and trees;
- provide an appropriate proportion of planted material above the structure to mitigate the reduction in the natural storm water infiltration capacity of the site and/or the loss of biodiversity caused by the development and;
- provide a minimum of 0.5 metres of soil above the basement development, where this extends beyond the footprint of the building, to enable garden planting.

1.4 The extent of the proposals fully accord with DP27 guidance:

- The proposed basement does not extend beyond the footprint of the original building.
- The existing semi- basement level is proposed to be extended outwards towards the front of the property. The existing and proposed semi-basement will be no deeper than one full storey below ground level and less than 3 metres in depth.
- The proposed basement extension is entirely confined within the existing building footprint and will not intrude upon either the rear or front garden areas.
- There will be no effect upon the potential to sustain vegetation growth and trees.
- There will be no reduction in the natural storm water infiltration capacity of the site and no loss of biodiversity (because the building footprint will not be extended) so that there is no requirement for mitigation.
- The proposed basement does not extend beyond the footprint of the building or below the area of garden so there is no need to provide soil above the basement development to enable garden planting.

1.5 The proposed basement does not extend beyond the footprint of the original building and is a lateral extension of the existing semi-basement, so that it cannot be classified as a 'larger scheme' according to DP27.

1.6 The modest physical scale and extent of the proposed basement does not, of itself, trigger a need for basement impact assessment. A full BIA may however be triggered if there is evidence of potential impacts that require further assessment. This is examined through desk top study in stages one and two of the BIA process.

Impact Assessment

1.7 Development Policy DP27 states that the Council will require an assessment of the impact on drainage, flooding, groundwater conditions and structural stability for basement and underground developments, where appropriate. Camden Planning Policy Guidance 4 (CPG4) gives detailed advice on how the LPA will apply planning policies (including DP27) when making decisions on new basement development or extensions to existing basement accommodation.

1.8 A preliminary screening exercise (Stage 1 of the BIA process) is normally required in accordance with DP27 and CPG4 to determine if there are potential impacts that require further assessment, triggering a full Basement Impact Assessment (BIA).

1.9 The purpose of the BIA is to demonstrate that the proposals comply with detailed criteria set out in CPG4 and will:

- maintain the structural stability of the building and neighbouring properties;
- avoid adversely affecting drainage and run-off or causing other damage to the water environment;
- avoid cumulative impacts upon structural stability or the water environment in the local area.

1.10 Stages one and two of the BIA process equate to screening and scoping for environmental impact assessments.

1.11 The following sheets set out a preliminary desk-top assessment based upon published information. This indicates that a number of the screening questions are not directly answered by published sources without the need to apply professional judgements.

1.12 A full BIA stage 1 and 2 assessment is currently nearing completion and will be submitted with this application shortly.

1.13 Further assessments (stage 3 onwards) will be carried out and submitted with the application where issues are identified that require further assessment.

Surface flow and flooding screening flowchart

Is the site within the catchments of the pond chains on Hampstead Heath?	No	
As part of the proposed site drainage, will surface water flows (e.g. volume of rainfall and peak run-off) be materially changed from the existing route?	No	The proposed basement is entirely contained within the footprint and external envelope of the building.
Will the proposed basement development result in a change in the proportion of hard surfaced / paved external areas?	No	The proposed basement is entirely contained within the footprint and external envelope of the building.
Will the proposed basement result in changes to the profile of the inflows (instantaneous and long-term) of surface water being received by adjacent properties or downstream watercourses?	TBC	Subject to review by the appointed engineer (Knapp Hicks & Partners Ltd.).
Will the proposed basement result in changes to the quality of surface water being received by adjacent properties or downstream watercourses?	No	
Is the site in an area known to be at risk from surface water flooding, or is it at risk from flooding, for example because the proposed basement is below the static water level of a nearby surface water feature?	No	The flood risk and CPG4 reports suggest the property is not at risk from surface water flooding.

Subterranean (groundwater) flow screening flowchart

Is the site located directly above an aquifer?	No	The site is within an area of unproductive strata. A secondary aquifer is indicated approx. 50m to the north (Fig. 8 Camden Hydo Study)
Will the proposed basement extend beneath the water table surface?	TBC	Was ground water encountered during excavation that required pumping?
Is the site within 100m of a watercourse, well (open/disused) or potential spring line?	TBC	Fig 12 (Camden Hydro Study) shows no surface water features in the vicinity. Subject to review by the appointed engineer (Knapp Hicks & Partners Ltd.).
Is the site within the catchment of the pond chains on Hampstead Heath?	No	
Will the proposed basement development result in a change in the proportion of hard-surfaced/paved areas?	No	
As part of the site drainage, will more surface water (e.g. rainfall and run-off) than at present be discharged to the ground (e.g. via soak-away and/or SUDS)?	No	
Is the lowest point of the excavation (allowing for any drainage and foundation space under the basement floor) close to, or lower than, the mean water level in any local pond or spring line?	No	Fig 12 (Camden Hydro Study) shows no surface water features in the vicinity. The site is located within unproductive strata

Slope stability screening flowchart

Does the existing site include slopes, natural or manmade, greater than 7o? (approximately 1 in 8)	No	Fig 16 Slope Angle Map (Camden Hydro Study)
Will the proposed re-profiling of landscaping at site change slopes at the property boundary to more than 7o? (approximately 1 in 8)	No	
Does the development neighbour land, including railway cuttings and the like, with a slope greater than 7o? (approximately 1 in 8)	No	
Is the site within a wider hillside setting in which the general slope is greater than 7o? (approximately 1 in 8)	No	
Is the London Clay the shallowest stratum at the site?	TBC	The site is shown within the area of Claygate Beds (Claygate Member) on the 1920's geological map, Subject to review by the appointed engineer (Knapp Hicks & Partners Ltd.).
Will any trees be felled as part of the proposed development and/or are any works proposed within any tree protection zones where trees are to be retained? (Note that consent is required from LB Camden to undertake work to any tree/s protected by a Tree Protection Order or to tree/s in a Conservation Area if the tree is over certain dimensions).	No	
Is there a history of seasonal shrink-swell subsidence in the local area (Claygate Beds), and/or evidence of such effects at the site?	TBC	Subject to review by the appointed engineer (Knapp Hicks & Partners Ltd.).
Is the site within 100m of a watercourse or a potential spring line?	TBC	The site is within an area of unproductive strata. A secondary aquifer is indicated approx. 50m to the north (Fig. 8 Camden Hydo Study). Watercourses are indicated to the west on Netherhall Gardens and to the east on St Johns Avenue (Fig 11 Camden Hydro Study).
Is the site within an area of previously worked ground?	TBC	Subject to review by the appointed engineer (Knapp Hicks & Partners Ltd.).