conisbee

51 GLENMORE ROAD, NW3 4DA

Basement Impact Assessment – Screening and Scoping Report.

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Ref: 110689/HH

Date: 14 February 2012

Rev No: Planning

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1.0 INTRODUCTION

1.1 It is proposed to 'square off' an existing basement by extending to the rear, below the ground floor kitchen, this will increase the basement by some 50%, however it will not be the complete footprint of the building.

1.2 This report is in response to The Camden Development Policy DP27, with reference to para. 27.3. It is noted that this proposal is a small scheme, since it is not beyond the footprint of the building, nor is it deeper than one storey (3m).

1.3 Following the format guidance in The Camden Policy Guidance PG4, the stages for a Basement Impact Assessment are:

- Stage 1 - Screening; •
- Stage 2 - Scoping; •
- Stage 3 - Site investigation and study; •
- Stage 4 - Impact assessment; and •
- Stage 5 - Review and decision making.

This report follows the Flow Charts and uses the Figurative information given in the Camden Geological, Hydro-geological and Hydrological Study to submit data with relevance to the small scale of this project to address stages 1 and 2.

1.4 The Flowcharts of the Appendix E to the Camden Geological, Hydro-geological and Hydrological Study are completed in table format in section 3 of this report and form the screening element of this report, including:

- Surface Flow and Flooding Impact Identification
- Subterranean (groundwater) Flow Impact Identification
- Slope Stability screening flowchart

1.5 51 Glenmore Road is located with an arrow on the relevant Figures of the Camden Geological, Hydro-geological and Hydrological Study, appended to this report, Appendix A.

1.6 Again reflecting the size of the scheme, a brief scoping report is provided in section 4, to be commented upon by Camden. It is hoped this will satisfy the requirement of DP27 in terms of consideration to the Geological, Hydro-geological and Hydrological effects of the development.

2.0 SITE INFORMATION

2.1 51 Glenmore Road is a mid terrace Victorian property of 4 stories, including the basement with a lightwell to the front. The properties are handed, i.e. were symmetrical with their neighbours when built.

2.2 The basement/cellar area is the original as built, full width to the front of the property and extending in an 'L' shape to approximately the spine wall.

2.3 Geological maps of the area highlight the strata as being London Clay Formation.

2.4 The neighbouring property, no. 49 also has a basement that was extended in 2006, to the same extend that is being proposed to No.51. Some underpinning to the party wall was exposed with a trial pit along this line. It is understood from planning drawings that the floor level was reduced by some 600mm, similar to this proposal.

2.5 A Structural Scheme for the basement is appended to this report, Appendix B.

3.0 RESPONSE TO BIA SCREENING FLOWCHARTS

Appendix E : Camden geological, hydrological and hydrology study: Guidance for subterranean development.

3.1	Surface Flow and Flooding Impact Identification	
3.1.1	**Is the site within the catchment of the pond chains on Hampstead Heath?**	**No, refer to Figure 15 appended.**
3.1.2	**As part of the site drainage, will surface water flows (e.g. rainfall and run-off) be materially changed from the existing one?**	**No. The ground floor side infill area is presently hard surfaced and drains into the sewer system, as will the proposed run-off from the roof.**
3.1.3	**Will the proposed basement development result in a change in the proportion of hard surface / paved external areas?**	**No. Hard surfaced areas will remain the same, if some have changed from being paved drained areas to roof areas.**
3.1.4	**Will the proposed basement development result in changes to the profile of the inflows (instantaneous and long-term) of surface water being received by adjacent properties or downstream watercourses?**	**No. The area of London clay, therefore there is limited/negligible flow of water and as above the local hard surface/run-off conditions are not being altered by the proposed scheme – above nor below ground.**
3.1.5	**Will the proposed basement development result in a change to the quality of surface water being received by adjacent properties or downstream watercourses?**	**No significant change in water quality is expected.**

3.2	**Subterranean (groundwater) Flow Impact Identification**	
3.2.1	**Is the site located directly above an aquifer?**	**No, the site lies over London Clay, designated 'unproductive strata' on Figure 8, attached.**
	○ **Will the proposed basement extend beneath the water table surface?**	**The basement area is in London Clay, relatively shallow. Therefore the water table is not expected. No water was found in trial pits within the basement.**
3.2.2	**Is the site within 100m of a watercourse, well (used/disused) or potential spring line?**	**No, refer to Figure 11,appended**
3.2.3	**Is the site within the catchment of the pond chains on Hampstead Heath?**	**No, refer to Figure 14 appended**
3.2.4	**Will the proposed basement development result in a change in the proportion of hard surface / paved areas?**	**No, as per answer3.1.3**
3.2.5	**As part of the site drainage, will more surface water ((e.g. rainfall and run-off) than present be discharged to the ground? (e.g. via soak-aways and/or SUDS)**	**No, run off from the existing hard surfaces and new roof will be into the sewer system as per the hard surface run-off presently. London clay is not suitable for a SUDS system, being generally impermeable.**

3.3	Slope Stability screening flowchart	
3.3.1	**Does the existing site include slopes, natural or manmade, greater than 7 degrees (approx. 1 in 8)?**	**No, the site is quite flat.**
3.3.2	**Will the proposed re-profiling of landscaping at site change slopes at the property boundary to more than 7 degrees (approx. 1 in 8)?**	**No, the site is on a relatively flat area of land. A 1:25 000 OS map has been examined.**
3.3.3	**Does the development neighbour land, including railway cutting and the like, with a slope greater than 7 degrees (approx. 1 in 8)?**	**No, as above.**
3.3.4	**Is the site within a wider hillsetting in which the general slope is greater than 7 degrees (approx. 1 in 8)?**	**The general Belsize Hill area is sloped, however this is a more gentle slope of 1 in 15-25, when 1:25 000 maps are examined.**
3.3.5	**Is the London Clay the shallowest strata at the site?**	**No – according to the geological long section, viewed in relation to topographical information from an OS Map, it is likely that some 30m of London Clay overlies the thinner Lambeth group.**
3.3.6	**Will any tree/s be felled as part of the proposed development and/or any works proposed within any tree protection zones where trees are to be retained?**	**No, there are no trees within the site boundary.**
3.3.7	**Is there a history of seasonal shrink-swell subsidence in the local area., and/or evidence of such effects on site?**	**London clay has high shrinkage potential, so it can be concluded there is a seasonal affect, however this causing subsidence without mitigating influence of trees, broken drains etc. is not thought to be a problem in this local area.**
3.3.8	**Is the site within 100m of a watercourse or potential spring**	**No, refer to Figure 11.**

	line?	
3.3.9	**Is the site within an area of previously worked ground.**	**No.**
3.3.10	**Is the site within an aquifer? If so, will the proposed basement extend beneath the water table such that dewatering may be required during construction?**	**No, the site lies over London Clay, designated 'unproductive strata' on Figure 8, attached.**
3.3.11	**Is the site within 50m of Hampstead Heath?**	**No, as indicated on most of the appended maps.**
3.3.12	**Is the site within 5m of a Highway or pedestrian right of way?**	**Yes, it is proposed to extend the lightwell to match the neighbours (to No.49), to the boundary of properties cartilage, next to the pavement.**
3.3.13	**Will the proposed basement significantly increase the differential depth of foundations relative to neighbouring properties.**	**No. The neighbours basements are to similar depths, with any underpinning to be slight, and largely to the properties' internal walls rather than party walls. The existing foundations are either to a basement depth or are relatively deep for a property of this age.**
3.3.14	**Is the site over (or within the exclusion zone of) any tunnels, e.g. railways lines?**	**No**

4.0 SCOPING

4.1 The screening undertaken on the proposed development has only highlighted items with regard to slope stability which are to be addressed in the design, detailing and construction methods of the project.

4.2 Underpinning, where required to the internal and external walls (to the lightwell) will be undertaken as per Conisbee specification in sections of no more than 1m. The lightwell walls will also be designed to retain an appropriate highway loading.

4.3 The site is on London clay, a non-aquifer and as such will have no effect on subterranean water flows.

4.4 The existing basement extends the full width of the property, which with its terraced neighbours' similar basements presents the same conditions to surface flows as the slightly extended basement front and back, with no change in surface conditions.

4.5 In conclusion, it is considered that there are no negative impacts anticipated in this basement proposal on the hydro-geological and hydrological conditions of the local environment.

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