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WC1H 9QL

BIA – SCREENING STUDY

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1. INTRODUCTION

1.0. General

An extension and refurbishment of an existing residential property is proposed at No 9 Thanet Street, London WC1H 9QL. The subject property is a terraced three-storey structure (including existing lower ground floor level).

An architectural scheme has been prepared for the proposed redevelopment, incorporating the following principal alterations:

- Extension of existing basement to occupy a portion of the existing rear garden.
- Removal of the existing rear wall at lower ground floor level to link the new extension with the existing property.
- Lowering of the existing garden space to create a new rear terraced area.
- Internal alterations at lower ground floor level.

1.1. Brief

Barden Chapman Consulting Engineers (BC) have been commissioned by our client to prepare a Stage 1 Screening Assessment for submission to the London Borough of Camden (LBC) to accompany a planning application for the proposed project.

1.2. Scope

The purpose of this assessment is to provide a Stage 1 Screening Assessment for the proposed development. The report contains a commentary on the available desk study information for the site.

The format of the assessment is primarily based on the recommendations of "Camden Planning Guidance Basements", (March 2018) and on the "Camden geological, hydrogeological and hydrological study: Guidance for Subterranean Development", prepared by Arup.

1.3. Report Author

This report has been prepared by:

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2. SCREENING (STAGE 1)

2.1 Surface Flow and Flooding Screening

Ref.	Screening Question	Reply	Statement
1	Is the site within the catchment of the pond chains on Hampstead Heath?	No	With reference to Figure 14 of the Arup Report, the site is not within the Hampstead Heath pond chains catchment.
2	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	Surface water flows will remain unchanged, as the existing terraced area to the rear of property consists entirely of hardstanding. Therefore, even though the lower ground floor level plan will be extended, it will not result in any change to existing surface water flows.
3	Will the proposed basement development result in a change in the proportion of hard surfaced / paved external areas?	No	There will not be any change in the proportion of hard surfaced paved areas between the existing situation and completion of the proposed works.
4	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?	No	It is proposed to discharge surface water to the public sewer, as per the existing condition. Adjacent properties and downstream watercourses will be unaffected by the proposed basement construction.
5	Will the proposed basement result in changes to the quality of surface water being received by adjacent properties or downstream watercourses?	No	It is not considered that there will be any impact to surface waters in the area.
6	Is the site in an area identified to have surface water flood risk according to either the Local Flood Risk Management Strategy or the Strategic Flood Risk Assessment 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	With reference to Figure 6 of the Camden SFRA, the site is not located within an area of surface water flood risk. The site is not located within 500m of any nearby surface water feature and there is not considered to be any flood risk from such features.

2.2 Subterranean (Groundwater) Flow Screening

Ref.	Screening Question	Reply	Statement
1a	Is the site located directly above an aquifer?	Yes	With reference to Figure 8 of the Arup Report, the site is located above a Secondary A Aquifer, on the boundary with Unproductive Strata.
1b	Will the proposed basement extend beneath the water table surface?	No	The proposed basement will reduce the existing rear garden stratum by approximately 1.5m BGL, to the level of the stratum to the front of the property. The reduced stratum is

			likely to consist of unproductive watercourse material (made ground) to the level of the existing front of property foundations, and it is therefore not considered the proposed basement will extend beneath the water table surface.
2	Is the site within 100m of a watercourse, well (used/disused) or potential spring line?	No	The site is not within 100 m of a current watercourse.
3	Is the site within the catchment of the pond chains on Hampstead Heath?	No	With reference to Figure 14 of the Arup Report, the site is not within the Hampstead Heath pond chains catchment.
4	Will the proposed basement development result in a change in the proportion of hard surfaced / paved areas?	No	There will not be any change in the proportion of hard surfaced paved areas between the existing situation and completion of the proposed works.
5	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 soakaways and/or SUDS)?	No	The site is not considered suitable for infiltration drainage due to the impermeability of the underlying London Clay. There therefore will not be any change in the amount of surface water discharged to the ground.
6	Is the lowest point of the proposed 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 (not just the pond chains on Hampstead Heath) or spring line?	No	There are no known ponds or springlines in the vicinity of the site.

2.3 Slope Stability Screening

Ref.	Screening Question	Reply	Statement
1	Does the existing site include slopes, natural or manmade, greater than 7°?	No	The existing site is flat.
2	Will the proposed re-profiling of landscaping at site change slopes at the property boundary to more than 7°?	No	It is not proposed to re-profile the existing site landscaping.
3	Does the development neighbour land, including railway cuttings and the like, with a slope greater than 7°?	No	The adjacent lands are flat.
4	Is the site within a wider hillside setting in which the general slope is greater than 7°?	No	With reference to Figure 16 of the Arup Report, the site is not shown to be in an area with slope angle greater than 7°.
5	Is the London Clay the shallowest strata at the site?	No	With reference to BGS Borehole records, the shallowest strata at the site is likely to be a thin layer of sand and gravel which is directly

			underlain by the London Clay.
6	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?	Yes	Some small shrubs and trees (< 3m) will be removed from the rear garden. Accordingly, consideration to be given to footings in London clay at the detailed design stage of the project.
7	Is there a history of seasonal shrink-swell subsidence in the local area, and/or evidence of such effects at the site?	Unknown	There is no evidence of cracking to the rear of the property. Other seasonal shrink-swell movements subsidence in the local area is unknown.
8	Is the site within 100m of a watercourse or a potential spring line?	No	The site is not within 100 m of a current watercourse.
9	Is the site within an area of previously worked ground?	No	With reference to Figure 16 of the Arup Report, the site is not shown to be in an area of previously worked ground.
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	Given the shallow nature of the excavation works at the site, it is not considered the proposed basement will extend beneath the water table such that dewatering may be required during construction.
11	Is the site within 50 m of the Hampstead Heath ponds?	No	The site is remote from the Hampstead Heath ponds.
12	Is the site within 5 m of a highway or pedestrian right of way?	No	The rear of the site, where the proposed basement extension is to be constructed in not located within 5m of a highway or pedestrian right of way.
13	Will the proposed basement significantly increase the differential depth of foundations relative to neighbouring properties?	No	The depth of foundations of neighbouring properties are unknown, however, it is considered likely that they are at the same depth as the foundations of the owners property. Given the proposed footings will not extend below the level of the existing foundations, it is unlikely the new footings will extend to a depth lower than neighbouring properties.
14	Is the site over (or within the exclusion zone of) any tunnels, e.g. railway lines?	No	There are no known tunnels or railway lines within the immediate vicinity of the site. It is noted that London Underground lines have been identified circa 500m north of the site; however, the site is not within any exclusion zones.

2.4 Non-Technical Summary

Barden Chapman have completed a screening study in accordance with the questions contained in LBC CPG4 (2015).

The screening study has identified two issues that would normally require consideration at detailed design stage of the project. One of the seven ground water screening questions requires design consideration. Two of the fourteen slope stability screening questions requires detail design consideration.

3. RECOMMENDATIONS

Barden Chapman have prepared a Stage 1 Screening Study for the proposed basement extension at No 9 Thanet Street, London. WC1H 9QL.

Following completion of the screening study, there are two issues which need further consideration at the detailed design stage of the project, once planning has been completed.

In our opinion, the proposed basement can be built safely by a contractor with the right experience and competence, without causing detriment to the local surface water conditions or adjacent structures.

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