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239 Camden High Street
London NW1 7BU

Basement Impact Assessment
Audit

For

London Borough of Camden

Project Number: 12066-28

Revision: D1

September 2015

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Contents

Appendix

1.0 NON-TECHNICAL SUMMARY

1.1. CampbellReith was instructed by London Borough of Camden, (LBC) to carry out an audit on the Basement Impact Assessment submitted as part of the Planning Submission documentation for 239 Camden High Street, London NW1 7BU (planning reference 2015/3044/P). The basement is considered to fall within Category A as defined by the Terms of Reference.

1.2. The Audit reviewed the Basement Impact Assessment for potential impact on land stability and local ground and surface water conditions arising from basement development in accordance with LBC's policies and technical procedures.

1.3. CampbellReith was able to access LBC's Planning Portal and gain access to the latest revision of submitted documentation and reviewed it against an agreed audit check list.

1.4. The BIA has been prepared by Soiltechnics environmental and geotechnical consultants whose Authors possess suitable qualifications as Chartered Civil Engineer and Chartered Geologist.

1.5. The BIA has confirmed that the proposed basement will be founded within the London Clay formation which is accepted as an unproductive aquifer.

1.6. It is not likely that ground water will be encountered during basement foundation excavation.

1.7. The BIA Report discusses an underpinning approach to deepen the existing basement floor level. This is a usual procedure for this type of basement deepening.

1.8. Analysis has been undertaken of horizontal and vertical ground movements which appear to be in the order of 6mm for both. The report author categorises this settlement as likely to cause a Burland Category 0 Negligible level of damage.

1.9. No proposals are provided for a movement monitoring strategy during excavation and construction.

1.10. It is accepted that the development will not impact on the wider hydrogeology of the area and is not in an area subject to flooding.

2.0 INTRODUCTION

2.1. CampbellReith was instructed by London Borough of Camden (LBC) on 24/07/15 to carry out a Category A Audit on the Basement Impact Assessment (BIA) submitted as part of the Planning Submission documentation for 239 Camden High Street, London, NW1 7BU, Camden Reference 2015/3044/P.

2.2. The Audit was carried out in accordance with the Terms of Reference set by LBC. It reviewed the Basement Impact Assessment for potential impact on land stability and local ground and surface water conditions arising from basement development.

2.3. A BIA is required for all planning applications with basements in Camden in general accordance with policies and technical procedures contained within

- Guidance for Subterranean Development (GSD). Issue 01. November 2010. Ove Arup & Partners.
- Camden Planning Guidance (CPG) 4: Basements and Lightwells.
- Camden Development Policy (DP) 27: Basements and Lightwells.
- Camden Development Policy (DP) 23: Water.

2.4. The BIA should demonstrate that schemes:

a) maintain the structural stability of the building and neighbouring properties;

b) avoid adversely affecting drainage and run off or causing other damage to the water environment; and,

c) avoid cumulative impacts upon structural stability or the water environment in the local area.

and evaluate the impacts of the proposed basement considering the issues of hydrology, hydrogeology and land stability via the process described by the GSD and to make recommendations for the detailed design.

2.5. LBC's Audit Instruction described the planning proposal as "*Change of use of first and second floor from part 4 bedroom maisonette (Use Class C3) to restaurant (Use Class A3*)."

2.6. CampbellReith accessed LBC's Planning Portal on 20th August 2015 and gained access to the following relevant documents for audit purposes:

- Basement Impact Assessment Report (BIA)
- Planning Application Drawings consisting of

  Location Plan

  Existing Plans

  Proposed Plans
- Design & Access Statement

3.0 BASEMENT IMPACT ASSESSMENT AUDIT CHECK LIST

Item	Yes/No/NA	Comment
Are BIA Author(s) credentials satisfactory?	Yes	Chartered Civil Engineer and Chartered Geologist
Is data required by Cl.233 of the GSD presented?	Yes	BIA
Does the description of the proposed development include all aspects of temporary and permanent works which might impact upon geology, hydrogeology and hydrology?	Yes	BIA Section 6
Are suitable plan/maps included?	Yes	BIA Section 3
Do the plans/maps show the whole of the relevant area of study and do they show it in sufficient detail?	Yes	BIA Section 3
Land Stability Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	Yes	BIA Section 11
Hydrogeology Screening: Groundwater Have appropriate data sources been consulted? Is justification provided for 'No' answers?	Yes	BIA Section 10
Hydrology Screening: Surface Have appropriate data sources been consulted? Is justification provided for 'No' answers?	Yes	BIA Section 12
Is a conceptual model presented?	Yes	Ground Movement Assessment in BIA Section 6
Land Stability Scoping Provided? Is scoping consistent with screening outcome?	No	Not required

Item	Yes/No/NA	Comment
Hydrogeology Scoping Provided? Groundwater Is scoping consistent with screening outcome?	No	Not required
Hydrology Scoping Provided? Surface Is scoping consistent with screening outcome?	No	Not required
Is factual ground investigation data provided?	Yes	BIA Section 3
Is monitoring data presented?	No	Not required
Is the ground investigation informed by a desk study?	Yes	BIA Section 3
Has a site walkover been undertaken?	NA	Unknown
Is the presence/absence of adjacent or nearby basements confirmed?	Yes	Confirmed as adjacent properties have similar basements to the proposed.
Is a geotechnical interpretation presented?	Yes	BIA Section 3
Does the geotechnical interpretation include information on retaining wall design?	No	Not Required
Are reports on other investigations required by screening and scoping presented?	No	Not Required
Are baseline conditions described, based on the GSD?	Yes	To extent commensurate with scale of basement proposals
Do the base line conditions consider adjacent or nearby basements?	No	Not Required
Is an Impact Assessment provided?	Yes	Supplementary document to the BIA

Item	Yes/No/NA	Comment
Are estimates of ground movement and structural impact presented?	Yes	Appear to be within acceptable limits
Is the Impact Assessment appropriate to the matters identified by screen and scoping?	Yes	
Has the need for mitigation been considered and are appropriate mitigation methods incorporated in the scheme?	No	Not required
Has the need for monitoring during construction been considered?	No	The amount of predicted movement is small and not considered a matter of concern to neighbouring properties.
Have the residual (after mitigation) impacts been clearly identified?	No	Not required
Has the scheme demonstrated that the structural stability of the building and neighbouring properties and infrastructure will be maintained?	Yes	
Has the scheme avoided adversely affecting drainage and run-off or causing other damage to the water environment?	Yes	
Has the scheme avoided cumulative impacts upon structural stability or the water environment in the local area?	Yes	
Does report state that damage to surrounding buildings will be no worse than Burland Category 2?	Yes	Anticipated to be Burland Category 0
Are non-technical summaries provided?	Yes	

4.0 DISCUSSION

4.1. The current scheme described in the Basement Impact Assessment (BIA) describes the lowering of an existing basement with varying degrees of restricted headroom into a more useable space using traditional mass concrete underpins.

4.2. A limited investigation undertaken by Soiltechnics revealed the existing corbelled foundations to bear in 'firm dry clay', anticipated to be the London Clay.

4.3. The proposed lowered basement will be founded in London Clay, which is an unproductive aquifer for water. Ground water is not anticipated to be encountered.

4.4. The ground levels in the vicinity are relatively level and slope instability is not considered to be an issue.

4.5. Ground movements have been predicted and associated building damage is considered likely to be in the least severe category 0 of the Burland table. Ground Movement Monitoring is not recommended by the report authors Soiltechnics. As the proposed basement reduced level to number 239 is commensurate to the neighbouring properties (Numbers 237 and 241), we can accept this proposal.

4.6. The proposals will not increase the hardstanding area thus will not enhance the risk of flooding.

5.0 CONCLUSIONS

5.1. The BIA has been carried out by Soiltechnics environmental and geotechnical consultants using suitable qualified individuals.

5.2. The BIA has confirmed that the proposed basement will be founded within London Clay, and the ground water table is unlikely to be encountered during basement foundation lowering / excavation.

5.3. Traditional mass concrete underpinning will be required to the perimeter and internal loadbearing walls. It is accepted that associated ground movements will be small and any building damage is predicted to fall into the least severe category of the Burland table, provided the surrounding structures are in sound condition.

5.4. The BIA report does not contain any recommendations for monitoring nearby properties but this is not considered necessary.

5.5. The proposed works are not expected to have any effect on the existing hydrology in terms of Ground water and Surface water.

Appendix 1: Resident's Consultation Comments

None

Appendix 2: Audit Query Tracker

None

Appendix 3: Supplementary Supporting Documents

None

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