

38 Chester Terrace
London NW1 4ND

Basement Impact Assessment
Audit

For
London Borough of Camden

Project Number: 13398-87
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1.0 NON-TECHNICAL SUMMARY

- 1.1. CampbellReith was instructed by the London Borough of Camden (LBC) to carry out an audit on the Basement Impact Assessment submitted as part of the Planning Submission documentation for 38 Chester Terrace (planning reference 2020/5801/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 subject property and the neighbouring properties are Grade I Listed, located within a Conservation Area.
- 1.5. The BIA has been prepared by Jomas Associates Ltd. Supporting structural information and duplicate Screening responses are provided by Form Structural Design. The qualifications of the authors are not consistent with LBC guidance.
- 1.6. The proposed development includes lowering the existing Lower Ground Floor slab. The proposed works will not go deeper than the existing foundations and no underpinning of foundations is required. If excavation below the level of the existing foundations becomes necessary, additional assessment and revision of the BIA will be required.
- 1.7. The screening exercise indicates there are no land stability impacts to surrounding structures or highways. However, some of the comments in the BIA regarding ground movement require further clarification.
- 1.8. The screening indicates that there will be no impacts to the hydrogeological environment.
- 1.9. The screening indicates that there will be no impacts to the wider hydrological environment.
- 1.10. In order for the BIA to comply with the requirements of CPG: Basements, the screening exercise should be approved by authors with the specified qualifications and the statements in regard to ground movements should be clarified

2.0 INTRODUCTION

- 2.1. CampbellReith was instructed by London Borough of Camden on 24 January 2020 to carry out a Category A Audit on the Basement Impact Assessment (BIA) submitted as part of the Planning Submission documentation for 38 Chester Terrace, London NW1 4ND (planning reference 202/5801/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: Basements. January 2021.
 - Local Plan Policy A5 Basements.
- 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;
 - 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 *"External and internal works to existing residential dwelling including creation of a plant room and wine cellar within pavement vaults, lowering of floor at lower ground floor level, lowering of the floor level of the lightwell rear terrace; installation of new metal staircase and vestibule entrance to front lightwell; creation of roof terrace at existing roof level and installation of external air condition units on the roof with associated enclosure."*
- 2.6. LBC's instruction confirms the subject is Grade I Listed and adjoins Grade I Listed buildings.
- 2.7. CampbellReith accessed LBC's Planning Portal on 18 March 2021 and gained access to the following relevant documents for audit purposes:

- Geo-Environmental Desk Study and Basement Screening Assessment (ref P3201J2126/CLP, Final v.1.2), by Jomas Associates Ltd, dated 11 December 2019.
- Stage 2 Planning Report (ref 203380), by Form Structural Design, dated December 2020.
- Proposed and Existing Drawings, by Marek Wojciechowski Architects Ltd, dated December 2020.

3.0 BASEMENT IMPACT ASSESSMENT AUDIT CHECK LIST

Item	Yes/No/NA	Comment
Are BIA Author(s) credentials satisfactory?	No	The qualifications of the authors are not consistent with LBC guidance (see CPG Basements, January 2021, Section 4.7).
Is data required by Cl.233 of the GSD presented?	Yes	
Does the description of the proposed development include all aspects of temporary and permanent works which might impact upon geology, hydrogeology and hydrology?	Yes	
Are suitable plan/maps included?	Yes	
Do the plans/maps show the whole of the relevant area of study and do they show it in sufficient detail?	Yes	
Land Stability Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	Yes	
Hydrogeology Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	Yes	
Hydrology Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	Yes	
Is a conceptual model presented?	Yes	In the context of the proposals, sufficient detail is provided.
Land Stability Scoping Provided? Is scoping consistent with screening outcome?	NA	Not required.

Item	Yes/No/NA	Comment
Hydrogeology Scoping Provided? Is scoping consistent with screening outcome?	NA	Not required.
Hydrology Scoping Provided? Is scoping consistent with screening outcome?	NA	Not required.
Is factual ground investigation data provided?	NA	Reference made to trial pits to identify existing foundation depths.
Is monitoring data presented?	NA	
Is the ground investigation informed by a desk study?	NA	
Has a site walkover been undertaken?	Yes	Site description and photos provided.
Is the presence/absence of adjacent or nearby basements confirmed?	Yes	Adjacent buildings have lower ground floors to the same level as the existing / proposed development.
Is a geotechnical interpretation presented?	NA	
Does the geotechnical interpretation include information on retaining wall design?	NA	
Are reports on other investigations required by screening and scoping presented?	NA	
Are the baseline conditions described, based on the GSD	Yes	
Do the baseline conditions consider adjacent or nearby basements?	Yes	
Is an Impact Assessment provided?	NA	Screening concludes no impacts.
Are estimates of ground movement and structural impact presented?	NA	

Item	Yes/No/NA	Comment
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?	NA	Excavations will go no deeper than existing foundations; no underpinning or new retaining structures required.
Has the need for monitoring during construction been considered?	Yes	
Have the residual (after mitigation) impacts been clearly identified?	Yes	No residual impacts.
Has the scheme demonstrated that the structural stability of the building and neighbouring properties and infrastructure will be maintained?	Yes	Screening has not identified any impacts to stability.
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 1?	No	Comments made in the BIA in regard to control of ground movements require clarification.
Are non-technical summaries provided?	Yes	

4.0 DISCUSSION

- 4.1. The BIA has been prepared by Jomas Associates Ltd. Supporting structural information and duplicate Screening responses are provided by Form Structural Design.
- 4.2. The qualifications of the authors are not consistent with LBC guidance. CPG: Basements Section 4.7 sets out author qualification requirements for each impact assessment criteria. The screening assessment should be approved by authors with the specified qualifications.
- 4.3. The subject property and the neighbouring properties are Grade I Listed, located within a Conservation Area.
- 4.4. The proposed development includes lowering the existing Lower Ground Floor slab by 300mm across the site. The floor slab in the existing vaults will be lowered to the depth of the existing foundations. The maximum depth of excavation is inconsistently presented between the Form report, proposal drawings and Jomas report, however it is consistently stated that excavation will not extend deeper than the existing foundations, and that no underpinning or cutting of the existing foundations will be required. If excavation below the level of the existing foundations is required, additional assessment and revision of the BIA will be required.
- 4.5. Although site specific investigation data is not provided, BGS mapping data indicates London Clay underlies the site, and local borehole data is referenced. Foundation inspection pits have been undertaken, indicating corbelled brick footings at shallow depth below the existing Lower Ground Floor level.
- 4.6. The screening exercise indicates there are no land stability impacts to surrounding structures or highways. Should proposals change and excavations be required to exceed the current foundation depths, with associated underpinning and retaining structures constructed, then the BIA should be updated.
- 4.7. Paragraph 6.6.2 of the BIA states that “Unavoidable lateral ground movements associated with excavations must be controlled during temporary and permanent works so as not to impact adversely on the stability of the surrounding ground and any associated services”. In paragraph 6.6.5, the first bullet point recommends the “establishment of the likely ground movements arising from the temporary and permanent works and the mitigation of excessive movements”. If ground movements are anticipated as a result of the proposed development the magnitude of these movements and associated impact should be established as part of the BIA. It should be clarified whether ground movements are expected based on the current development proposals.

- 4.8. The screening indicates that there will be no impacts to the hydrogeological environment. The site is underlain by very low permeability London Clay, designated as Unproductive Strata, and the proposed development will not exceed the existing foundation depths.
- 4.9. The screening indicates that there will be no impacts to the wider hydrological environment. The site is identified as being of very low risk of flooding. The impermeable site area will remain unchanged as a result of the development. It's noted that the site is within a Critical Drainage Area and a final drainage design should be approved by LBC and Thames Water.

5.0 CONCLUSIONS

- 5.1. The qualifications of the authors are not consistent with LBC guidance.
- 5.2. The screening exercise indicates there are no land stability impacts to surrounding structures or highways. However, some of the comments in the BIA regarding ground movement require further clarification.
- 5.3. The screening indicates that there will be no impacts to the hydrogeological environment.
- 5.4. The screening indicates that there will be no impacts to the wider hydrological environment.
- 5.5. If excavation below the level of the existing foundations becomes necessary, additional assessment and revision of the BIA will be required.
- 5.6. In order for the BIA to comply with the requirements of CPG: Basements, the screening exercise should be approved by authors with the specified qualifications and the statements in regard to ground movements should be clarified.

Appendix 1: Residents' Consultation Comments

None

Appendix 2: Audit Query Tracker

Audit Query Tracker

Query No	Subject	Query	Status	Date closed out
1	BIA	Author qualifications to be in accordance with CPG Basements, Section 4.7.	Open	
2	Stability	It should be clarified whether ground movements are expected based on the current development proposals and, if so, what the impacts will be and what mitigation will be required.	Open	

Appendix 3: Supplementary Supporting Documents

None

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