

2 Chester Road  
London  
N19 5BP

Basement Impact Assessment  
Audit

For  
London Borough of Camden

Project Number: 12985-89  
Revision: D1

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### Document Details

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## **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 2 Chester Road, London N19 5BP (planning reference 2019/2266/PRE). 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 site is not listed and neither are the adjacent buildings.
- 1.5. The proposed development comprises of the demolition of an existing two storey hostel facility and the construction of new buildings, up to 5 storeys with part basement.
- 1.6. Appropriate site investigation works has been undertaken to prove the current foundations and underlying ground conditions for design purposes.
- 1.7. The report states that neighbouring properties and infrastructure are beyond the zone of influence of the development. Assuming permanent and temporary propping, no significant ground movements are anticipated.
- 1.8. It is accepted that the proposal will not have any impact on the hydrology of the area.
- 1.9. It is accepted the site is at low risk of flooding from rivers and sea, or from surface waters.
- 1.10. It is accepted that there are no slope stability impacts resulting from the proposed development.
- 1.11. The BIA meets the requirements of CPG Basements.

## 2.0 INTRODUCTION

- 2.1. CampbellReith was instructed by London Borough of Camden (LBC) on 04/12/2019 to carry out a Category A Audit on the Basement Impact Assessment (BIA) submitted as part of the Planning Submission documentation for 2 Chester Road, London N19 5BP, Camden Reference 2019/2266/PRE.
- 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. March 2018.
  - Camden Development Policy (DP) 27: Basements and Lightwells.
  - Camden Development Policy (DP) 23: Water.
  - 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 "*Demolition of existing building and erection of new hostel with part basement.*"

The site is not listed and neither are the adjacent buildings.

2.6. CampbellReith accessed LBC's Planning Portal on 19/12/2019 and gained access to the following relevant documents for audit purposes:

- Scoping and Screening Report dated December 2019 by Site Analytical Services Limited (ref. 19/31117).
- Existing and Proposed Plans, Elevations and Section drawings dated November 2019 by Bell Phillips Architects.

### 3.0 BASEMENT IMPACT ASSESSMENT AUDIT CHECK LIST

Item	Yes/No/NA	Comment
Are BIA Author(s) credentials satisfactory?	Yes	
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	Scoping and Screening report, Section 3.8, Table 2
Hydrogeology Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	Yes	Scoping and Screening report, Section 3.8, Table 2
Hydrology Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	Yes	Scoping and Screening report, Section 3.8, Table 2
Is a conceptual model presented?	Yes	Phase 2 ground investigation report, Section 6.1
Land Stability Scoping Provided? Is scoping consistent with screening outcome?	Yes	Scoping and Screening report, Section 4
Hydrogeology Scoping Provided?	Yes	Scoping and Screening report, Section 4

Item	Yes/No/NA	Comment
Hydrology Scoping Provided? Is scoping consistent with screening outcome?	Yes	Scoping and Screening report, Section 4
Is scoping consistent with screening outcome?	Yes	
Is factual ground investigation data provided?	Yes	Appendix A of the Scoping and Screening report.
Is monitoring data presented?	Yes	Ground investigation report.
Is the ground investigation informed by a desk study?	Yes	A Phase I Desk Study has been undertaken at the site.
Has a site walkover been undertaken?	Yes	
Is the presence/absence of adjacent or nearby basements confirmed?	No	However, the report states that neighbouring properties are far enough away not to be affected by the development.
Is a geotechnical interpretation presented?	Yes	Ground investigation report, Section 7.
Does the geotechnical interpretation include information on retaining wall design?	Yes	Ground investigation report, Section 7.
Are reports on other investigations required by screening and scoping presented?	Yes	Ground investigation report.
Are the baseline conditions described, based on the GSD?	Yes	
Do the base line conditions consider adjacent or nearby basements?	N/A	
Is an Impact Assessment provided?	N/A	A full impact assessment is not considered necessary for this development as no stability, hydrological or hydrogeological impacts are anticipated.



Item	Yes/No/NA	Comment
Are estimates of ground movement and structural impact presented?	N/A	As above.
Is the Impact Assessment appropriate to the matters identified by screen and scoping?	N/A	As above.
Has the need for mitigation been considered and are appropriate mitigation methods incorporated in the scheme?	Yes	Scoping and Screening report, Section 5.2
Has the need for monitoring during construction been considered?	Yes	Scoping and Screening report, Section 5.2
Have the residual (after mitigation) impacts been clearly identified?	N/A	
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 1?	Yes	Neighbouring properties are beyond the zone of influence of the works.
Are non-technical summaries provided?	Yes	

## 4.0 DISCUSSION

- 4.1. The Screening and Scoping Report (SSR) was undertaken by Site Analytical Services Limited. The qualifications of the authors are in accordance with LBC guidance.
- 4.2. The site currently comprises a two storey hostel facility, located at 2 Chester Road, London N19 5BP. Proposals for the site include the demolition of an existing two storey hostel facility and the construction of new buildings, up to 5 storeys, providing temporary accommodation for families. The proposed development includes the construction of a single storey basement beneath the current property with a maximum excavation of c. 3.1m below ground level (bgl), within the London Clay, which is considered to be a suitable bearing stratum.
- 4.3. The LBC Instruction to proceed with the audit identified that the basement proposal does not involve a listed building and is not adjacent to listed buildings.
- 4.4. The BIA states that neighbouring properties and underground infrastructure are beyond the zone of influence of the development. Assuming permanent and temporary propping is adopted to retaining walls, it is accepted that impacts to neighbouring structures and the highway will be within the limits stipulated by LBC guidance.
- 4.5. A site investigation has been carried out in August 2019 that indicates the Made Ground, with a maximum thickness of 2.2m, underlain by the London Clay Formation (proven to 20m bgl).
- 4.6. The basement will be founded in the London Clay Formation, which is designated as 'non-productive strata' with respect to groundwater. It is accepted there will be no impact to the wider hydrogeological environment. However, the potential for groundwater ingress from discrete pockets in the London Clay into the excavation cannot be discounted and the SSR recommends continued groundwater monitoring to determine equilibrium levels and the extent of any seasonal variations.
- 4.7. The scheme will result in a significant increase of permeable site area (c. 1,000m<sup>2</sup>). Whilst the increase of permeable areas reduces the drainage demand on the local sewers, it may increase water percolating into the ground and potentially therefore into neighbouring gardens or cellars. The SSR proposes green-roofs will be utilised as a mitigation measure. The final drainage design should be agreed with Thames Water and LBC.
- 4.8. An independent check indicates a lost river to run c. 50m to the west of the site, although this is according to recent mapping that has not been referenced in the SSR. It is accepted this distance is too great for it to have an impact on the basement and vice-versa and that alluvial deposits are not identified from the site investigation.

- 4.9. It is accepted the site is at low risk of flooding from rivers and sea, or from surface waters.
- 4.10. The SSR references the Arup maps and correctly states the site is in an area where slopes have a gradient less than 7°. It is accepted that there are no slope stability impacts resulting from the proposed development.

## **5.0 CONCLUSIONS**

- 5.1. The Screening and Scoping Report (SSR) was undertaken by Site Analytical Services Limited. The qualifications of the authors are in accordance with LBC guidance.
- 5.2. The proposed basement level will be at 64.4mOD with a maximum excavation of c. 3.1m below ground level, within the London Clay, which is considered to be a suitable bearing stratum.
- 5.3. It is accepted that the proposed development will not impact the stability of surrounding structures and infrastructure.
- 5.4. The proposed development will not impact the wider hydrological or hydrogeological environments.
- 5.5. It is accepted that there are no slope stability concerns resulting from the proposed development.
- 5.6. The information presented meets the requirements of CPG Basements.

## **Appendix 1: Residents' Consultation Comments**

None

## Appendix 2: Audit Query Tracker

None

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