

77 Avenue Road,
London NW8 6JD

Basement Impact Assessment
Audit

For
London Borough of Camden

Project Number: 13693-29
Revision: F1

February 2022

Campbell Reith Hill LLP
15 Bermondsey Square
London
SE1 3UN

T: +44 (0)20 7340 1700
F: +44 (0)20 7340 1777
E: london@campbellreith.com
W: www.campbellreith.com

Document History and Status

Revision	Date	Purpose/Status	File Ref	Author	Check	Review
D1	January 2022	For comment	EJPemb-13693-29-280122-77 Avenue Road-D1.doc	EP	EMB	EMB
F1	February 2022	For Planning	EJPemb-13693-29-210222-77 Avenue Road-F1.doc	EP	EMB	EMB

This document has been prepared in accordance with the scope of Campbell Reith Hill LLP's (CampbellReith) appointment with its client and is subject to the terms of the appointment. It is addressed to and for the sole use and reliance of CampbellReith's client. CampbellReith accepts no liability for any use of this document other than by its client and only for the purposes, stated in the document, for which it was prepared and provided. No person other than the client may copy (in whole or in part) use or rely on the contents of this document, without the prior written permission of Campbell Reith Hill LLP. Any advice, opinions, or recommendations within this document should be read and relied upon only in the context of the document as a whole. The contents of this document are not to be construed as providing legal, business or tax advice or opinion.

© Campbell Reith Hill LLP 2022

Document Details

Last saved	21/02/2022 10:57
Path	EJPemb-13693-29-210222-77 Avenue Road-F1.doc
Author	E J Pike, MEng (Hons) ACGI CEng MICE RoGEP
Project Partner	E M Brown, BSc MSc CGeol FGS
Project Number	13693-29
Project Name	77 Avenue Road
Planning Reference	2021/4003/P

Contents

1.0	Non-technical summary	1
2.0	Introduction	3
3.0	Basement Impact Assessment Audit Check List.....	5
4.0	Discussion	8
5.0	Conclusions	10

Appendix

- Appendix 1: Consultation Responses
- Appendix 2: Audit Query Tracker
- Appendix 3: Supplementary Supporting Documents

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 77 Avenue Road, London NW8 6JD (planning reference 2021/4003/P). The basement is considered to fall within Category C 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. CampbellReith previously audited a basement scheme at the site (ref 12985-56, October 2019).
- 1.4. The site currently comprises a three storey property with a single storey garage extension to the southeast which is adjoined to No. 73-75 Avenue Road. The proposed development comprises the replacement of the existing structure with a three storey structure plus a two storey basement.
- 1.5. The proposed scheme is considered to broadly reflect the previously audited scheme. As such, this audit will only address the amendment, which is the increase in the footprint of the property, and consider the subsequent impacts.
- 1.6. The previous audit indicated the currently consented scheme met the policy criteria of LBC as presiding at the time. It should be noted that LBC guidance for basement development was updated in 2021.
- 1.7. The BIA Review Technical Note to support the updated submission has been prepared by Pile Designs Ltd. The authors of the document possess suitable qualifications in accordance with LBC guidance.
- 1.8. The conclusions of the previous audit are considered to apply in regard to hydrogeology and hydrology. The proposed revisions will not impact on the hydrogeological environment.
- 1.9. The original Ground Movement Assessment (GMA) concluded a maximum of Category 1 (Very Slight) damage in accordance with the Burland Scale on the adjacent properties at 73-75 Avenue Road and 79 Avenue Road. The original audit concluded that the original GMA was considered to be reasonably conservative. Impacts to identified utilities have not been assessed. Asset protection criteria should be agreed with asset owners.

- 1.10. The BIA Review Technical Note indicates that the proposed revisions will not impact upon land stability or increase the likelihood or magnitude of damage to neighbouring structures than that already considered in the original BIA.
- 1.11. It is accepted that the original BIA is considered applicable to the current scheme, including proposed revisions.
- 1.12. It can be confirmed that the BIA complies with the requirements of CPG: Basements.

2.0 INTRODUCTION

2.1. CampbellReith was instructed by London Borough of Camden (LBC) on 3 December 2021 to carry out a Category C audit on the Basement Impact Assessment (BIA) submitted as part of the Planning Submission documentation for 77 Avenue Road, London NW8 6JD, Camden Reference 2021/4003/P. CampbellReith previously audited a basement scheme at the site (ref 12985-56, October 2019) in relation to planning application reference 2019/1747/P which was approved in 2020.

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. The original scheme was to demolish the existing building on site and construct a new three storey dwelling with a double level basement. The current scheme comprises the same proposed development but with an enlarged basement footprint to form a rectangular shape. Above ground it is proposed to extend the footprint of the property. As such, this audit will only address the amendment, which is the increase in the footprint of the property, and consider the subsequent impacts.

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

- Camden Local Plan 2017 - Policy A5 Basements.
- Camden Planning Guidance (CPG): Basements. January 2021.
- Guidance for Subterranean Development (GSD). Issue 01. November 2010. Ove Arup & Partners.

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 dwelling and erection of replacement three-storey detached dwelling with basement."*

2.6. CampbellReith accessed LBC's Planning Portal on 26 January 2022 and gained access to the following relevant documents for audit purposes:

- Piling: Basement Impact Assessment Review Technical Note (ref 24412 St John's Wood – 77 Avenue Road) dated 17 August 2021 by Pile Designs.
- 77 Avenue Road NW8 6JD Planning Application dated August 2021 by KSR Architects & Interior Designers.
- Existing and proposed plans, elevations and sections dated April and August 2021 by KSR Architects & Interior Designers.
- Basement Impact Assessment (ref J19197) dated August 2019 by GEA Ltd.

3.0 BASEMENT IMPACT ASSESSMENT AUDIT CHECK LIST

Item	Yes/No/NA	Comment
Are BIA Author(s) credentials satisfactory?	Yes	BIA Review Technical Note and GEA original BIA Report.
Is data required by Cl.233 of the GSD presented?	Yes	As part of original submission.
Does the description of the proposed development include all aspects of temporary and permanent works which might impact upon geology, hydrogeology and hydrology?	Yes	As part of original submission.
Are suitable plan/maps included?	Yes	As part of original submission.
Do the plans/maps show the whole of the relevant area of study and do they show it in sufficient detail?	Yes	As part of original submission.
Land Stability Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	Yes	As part of original submission.
Hydrogeology Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	Yes	As part of original submission.
Hydrology Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	Yes	As part of original submission.
Is a conceptual model presented?	Yes	As part of original submission.
Land Stability Scoping Provided? Is scoping consistent with screening outcome?	Yes	As part of original submission.

Item	Yes/No/NA	Comment
Hydrogeology Scoping Provided? Is scoping consistent with screening outcome?	Yes	As part of original submission.
Hydrology Scoping Provided? Is scoping consistent with screening outcome?	Yes	As part of original submission.
Is factual ground investigation data provided?	Yes	As part of original submission.
Is monitoring data presented?	No	Original BIA confirms that monitoring standpipes were installed in BH1 and BH2 in February 2017 and return monitoring was completed/planned. No such data has been provided for review.
Is the ground investigation informed by a desk study?	Yes	As part of original submission.
Has a site walkover been undertaken?	Yes	As part of original submission.
Is the presence/absence of adjacent or nearby basements confirmed?	Yes	As part of original submission.
Is a geotechnical interpretation presented?	Yes	As part of original submission.
Does the geotechnical interpretation include information on retaining wall design?	Yes	As part of original submission.
Are reports on other investigations required by screening and scoping presented?	Yes	As part of original submission.
Are the baseline conditions described, based on the GSD?	Yes	As part of original submission.
Do the base line conditions consider adjacent or nearby basements?	Yes	As part of original submission.
Is an Impact Assessment provided?	Yes	As part of original submission.

Item	Yes/No/NA	Comment
Are estimates of ground movement and structural impact presented?	Yes	As part of original submission.
Is the Impact Assessment appropriate to the matters identified by screening and scoping?	Yes	As part of original submission.
Has the need for mitigation been considered and are appropriate mitigation methods incorporated in the scheme?	Yes	As part of original submission.
Has the need for monitoring during construction been considered?	Yes	As part of original submission.
Have the residual (after mitigation) impacts been clearly identified?	Yes	As part of original submission.
Has the scheme demonstrated that the structural stability of the building and neighbouring properties and infrastructure will be maintained?	Yes	As part of original submission.
Has the scheme avoided adversely affecting drainage and run-off or causing other damage to the water environment?	Yes	As part of original submission.
Has the scheme avoided cumulative impacts upon structural stability or the water environment in the local area?	Yes	As part of original submission.
Does report state that damage to surrounding buildings will be no worse than Burland Category 1?	Yes	As part of original submission.
Are non-technical summaries provided?	Yes	As part of original submission.

4.0 DISCUSSION

- 4.1. The BIA Review Technical Note to support the updated submission has been prepared by Pile Designs Ltd. The authors of the document possess suitable qualifications in accordance with LBC guidance.
- 4.2. The site currently comprises a three storey property with a single storey garage extension to the southeast which is adjoined to No. 73-75 Avenue Road. The proposed development comprises the replacement of the existing structure with a three storey structure plus a two storey basement.
- 4.3. CampbellReith previously audited the basement scheme at the site (ref 12985-56, October 2019) in relation to planning application reference 2019/1747/P which was approved in 2020. The proposed scheme is considered to broadly reflect the previously audited scheme. As such, this audit will only address the amendment, which is the increase in the footprint of the property, and consider the subsequent impacts.
- 4.4. The BIA Review Technical Note summarises the proposed revisions as follows:

A change in footprint of the proposed basements at the rear of the property, with the basements extending up to approximately 8m beyond the consented scheme. The consented scheme extended further to the rear along the northern boundary than along the southern boundary; the proposed scheme 'squares off' the rear boundary, so there is no extension along the northern boundary with the maximum extension at the southern boundary.

The deepening of the plant room situated at the north-eastern corner of the house, bringing the formation level down to match the second basement formation level across the rest of the footprint.

There is no change to the proposed construction methodology for the basement works, with the majority of retaining walls formed by contiguous piling, with one section of wall formed by underpinning (already completed, under the Party Wall Award with 73 – 75 Avenue Road).

- 4.5. The previous audit indicated the currently consented scheme met the policy criteria of LBC as presiding at the time. It should be noted that LBC guidance for basement development was updated in 2021.
- 4.6. The conclusions of the previous audit are considered to apply in regard to hydrogeology and hydrology. The scheme is to implement SUDS in accordance with original BIA and the final drainage scheme and off-site discharge rates to public sewers are to be discussed and approved by Thames Water and LBC. The proposed revisions will not impact on the hydrogeological environment.

- 4.7. The original Ground Movement Assessment (GMA) concluded a maximum of Category 1 (Very Slight) damage in accordance with the Burland Scale on the adjacent properties at 73-75 Avenue Road and 79 Avenue Road. The original audit concluded that the original GMA was considered to be reasonably conservative. However, no impact assessment has been undertaken for the identified utilities running under the carriageway. Consultation with asset owners is still recommended, with asset protection criteria agreed, as applicable.
- 4.8. The BIA Review Technical Note indicates that the proposed revisions will not impact upon land stability or increase the likelihood or magnitude of damage to neighbouring structures than that already considered in the original BIA.
- 4.9. It is accepted that the original BIA is considered applicable to the current scheme, including proposed revisions.

5.0 CONCLUSIONS

- 5.1. CampbellReith previously audited a basement scheme at the site (ref 12985-56, October 2019) in relation to planning application reference 2019/1747/P which was approved in 2020.
- 5.2. The previous audit indicated the currently consented scheme met the policy criteria of LBC as presiding at the time. It should be noted that LBC guidance for basement development was updated in 2021.
- 5.3. The BIA Review Technical Note to support the updated submission has been prepared by Pile Designs Ltd. The authors of the document possess suitable qualifications in accordance with LBC guidance.
- 5.4. The conclusions of the previous audit are considered to apply in regard to hydrogeology and hydrology. The proposed revisions will not impact on the hydrogeological environment.
- 5.5. The original Ground Movement Assessment (GMA) concluded a maximum of Category 1 (Very Slight) damage in accordance with the Burland Scale on the adjacent properties at 73-75 Avenue Road and 79 Avenue Road. The original audit concluded that the original GMA was considered to be reasonably conservative. Impacts to identified utilities have not been assessed. Asset protection criteria should be agreed with asset owners.
- 5.6. The BIA Review Technical Note indicates that the proposed revisions will not impact upon land stability or increase the likelihood or magnitude of damage to neighbouring structures than that already considered in the original BIA.
- 5.7. It is accepted that the original BIA is considered applicable to the current scheme, including proposed revisions.
- 5.8. It can be confirmed that the BIA complies with the requirements of CPG: Basements.

Appendix 1: Consultation Responses

None

Appendix 2: Audit Query Tracker

None

Appendix 3: Supplementary Supporting Documents

None

London

15 Bermondsey Square
London
SE1 3UN

T: +44 (0)20 7340 1700
E: london@campbellreith.com

Birmingham

Chantry House
High Street, Coleshill
Birmingham B46 3BP

T: +44 (0)1675 467 484
E: birmingham@campbellreith.com

Surrey

Raven House
29 Linkfield Lane, Redhill
Surrey RH1 1SS

T: +44 (0)1737 784 500
E: surrey@campbellreith.com

Manchester

No. 1 Marsden Street
Manchester
M2 1HW

T: +44 (0)161 819 3060
E: manchester@campbellreith.com

Bristol

Unit 5.03,
HERE,
470 Bath Road,
Bristol BS4 3AP

T: +44 (0)117 916 1066
E: bristol@campbellreith.com

Campbell Reith Hill LLP. Registered in England & Wales. Limited Liability Partnership No OC300082
A list of Members is available at our Registered Office at: 15 Bermondsey Square, London, SE1 3UN
VAT No 974 8892 43