



### **Document History and Status**

Revision	Date	Purpose/Status	File Ref	Author	Check	Review
D1	08/01/2018	Comment	ABrm12727-15 -081217-Ort House Conference Centre-D1.doc	A Brittan	R Morley	R Morley
F1	19/01/2018	Comment	ABrm12727-15 -190118-Ort House Conference Centre-F1.doc	A Brittan	R Morley	R Morley

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 2015

### **Document Details**

Last saved	19/01/2018 10:44
Path	ABrm12727-15 -190118-Ort House Conference Centre-F1.doc
Author	Adam Brittan
Project Partner	E M Brown, BSc MSc CGeol FGS
Project Number	12727-15
Project Name	Ort House Conference Centre
Planning Reference	2017/5071/P

Structural u Civil u Environmental u Geotechnical u Transportation

Date: January 2018

Status: F1

i



### **Contents**

1.0	Non-technical summary	1
2.0	Introduction	2
3.0	Basement Impact Assessment Audit Check List	4
4.0	Discussion	7
5.0	Conclusions	9

Date: January 2018

Status: F1

# **Appendix**

Appendix 1: Residents' Consultation Comments 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 120-126 Albert Street, also known as Ort House. (planning reference 2017/5071/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 submitted documents have been authored by those holding suitable qualifications.
- 1.5. The proposal consists of constructing a lightwell to an existing basement, at the same level as the existing basement.
- 1.6. Appropriate site investigations have been undertaken to identify the ground conditions, which consist of made ground overlaying London Clay.
- 1.7. The proposed form of construction consists of a piled wall that is installed via a piling rig before the lightwell excavation is carried out. No additional temporary works are proposed.
- 1.8. No ground water was identified during the site investigations and ground water flows are not anticipated to be disrupted.
- 1.9. It has been concluded that negligible damage (category 0) will not be exceeded given the distance to the neighbouring properties, including the nearby listed buildings.
- 1.10. It has been demonstrated that the surface water discharge will not be significantly altered.
- 1.11. It is accepted that the surrounding slopes to the development site are stable.
- 1.12. It is accepted that the development is not in an area subject to flooding.
- 1.13. It can be confirmed that the applicant has demonstrated that the proposal complies with CPG4.

Date: January 2018



# 2.0 INTRODUCTION

- 2.1. CampbellReith was instructed by London Borough of Camden (LBC) on 10/11/2017 to carry out a Category A Audit on the Basement Impact Assessment (BIA) submitted as part of the Planning Submission documentation for 120-126 Albert Street, also known as Ort House. (planning reference 2017/5071/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.
  - Local Plan Policy A5 Basements.

### 2.4. The BIA should demonstrate that schemes:

- a) maintain the structural stability of the building and neighbouring properties;
- avoid adversely affecting drainage and run off or causing other damage to the water environment;
- 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 "*Proposed refurbishment including extension at second floor and third floor, excavation of lightwell and installation of new plant at lower ground and third floor.*"
- 2.6. CampbellReith accessed LBC's Planning Portal on 07/12/17 and gained access to the following relevant documents for audit purposes:

Date: January 2018



- Basement Impact Assessment Report (BIA), Conisbee, 02 Aug 2017
- Site Investigation Report (SI), Ground Engineering, June 2017
- · Planning Application Drawings consisting of

Location Plan

**Existing Plans and Sections** 

Proposed Plans and Sections

Arbocultural Assessment and Method Statement, Barrell, 13 July 2017

Date: January 2018

- Design & Access Statement, Starc-Architects, September 2017
- · Construction management Plan, Knights Building
- Noise Survey, EEC
- · Planning Comments and Response



# 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	See Environmental Database Search.
Do the plans/maps show the whole of the relevant area of study and do they show it in sufficient detail?	Yes	See Environmental Database Search.
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	Borehole logs and ground water monitoring logs provided.
Land Stability Scoping Provided? Is scoping consistent with screening outcome?	Yes	

Status: F1



Item	Yes/No/NA	Comment
Hydrogeology Scoping Provided? Is scoping consistent with screening outcome?	Yes	
Hydrology Scoping Provided? Is scoping consistent with screening outcome?	Yes	
Is factual ground investigation data provided?	Yes	
Is monitoring data presented?	Yes	
Is the ground investigation informed by a desk study?	Yes	
Has a site walkover been undertaken?	Yes	
Is the presence/absence of adjacent or nearby basements confirmed?	Yes	It is noted multiple neighbours have basements.
Is a geotechnical interpretation presented?	Yes	
Does the geotechnical interpretation include information on retaining wall design?	Yes	Outline piled wall designs have been completed using reasonable geotechnical parameters
Are reports on other investigations required by screening and scoping presented?	N/A	
Are the baseline conditions described, based on the GSD?	Yes	
Do the base line conditions consider adjacent or nearby basements?	N/A	Groundwater levels are shown to be below the existing and proposed basement.
Is an Impact Assessment provided?	N/A	



Item	Yes/No/NA	Comment
Are estimates of ground movement and structural impact presented?	Yes	However these have not been calculated, and have been induced by judgement.
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?	N/A	
Has the need for monitoring during construction been considered?	No	
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	However not demonstrated by calculation.
Are non-technical summaries provided?	Yes	



#### 4.0 DISCUSSION

- 4.1. The Basement Impact Assessment (BIA) has been carried out by a firm of civil and structural engineering consultants, Conisbee, and the individuals concerned in its production have suitable qualifications.
- 4.2. The Ground Engineering report has been carried out by a well-known firm of engineering consultants, Ground Engineering, and the individuals concerned in its production have suitable qualifications.
- 4.3. LBC have identified listed buildings extending from 118 Albert Street, the closest being 24m from the proposed excavation. Although a ground movement assessment has not been produced it is accepted that damage to the neighbouring buildings will be negligible given the distance to the nearest building as discussed further in paragraph 4.9.
- 4.4. It is proposed to form a light-well along the east side of the existing property, which contains an existing basement to a depth of approximately 3.8m in depth below ground level. The existing building is described as a concrete framed building constructed off a 1m thick ground bearing raft foundation.
- 4.5. The proposed lightwell is proposed as being formed from a contiguous piled wall with a reinforced concrete liner wall. The existing concrete basement retaining wall where the lightwell is to be formed is to be demolished to allow access between the lightwell and the existing basement. A suspended slab is to be constructed between the piled wall and existing basement foundation. The capping beam to the piled wall is to be propped
- 4.6. The contiguous piles and capping beam will be installed prior to excavation; therefore the permanent retaining structure is in place as the ground level is excavated. No additional temporary works are proposed, and it is indicated that the piled wall will be designed to accommodate both permanent and construction loading conditions.
- 4.7. A site specific ground investigation was undertaken with two window sampled boreholes taken to depths of 1.7m and 8m below ground. Trial pits were also excavated to identify any obstructions or services within the ground. A standpipe was installed in one borehole which was monitored on two return visits, with further monitoring visits to take place prior to construction.
- 4.8. The BIA has identified made ground to 3.1m below ground level, overlaying The London Clay Formation. No ground water was identified during the initial readings or subsequent monitoring visits.
- 4.9. It has been stated that no damage is anticipated of the neighbouring buildings, the closest of which is located some 8.4m away. No Ground Movement Analysis has been provided, with the

Date: January 2018

Status: F1

7



conclusion based on the neighbouring properties being located outside of a 45 degree line as taken from the base of the piled wall. It is accepted that damage to neighbouring buildings will negligible given the distance to the nearest building.

- 4.10. The Site Investigation report states that no groundwater was encountered in the 5m deep standpipes while monitoring twice in May. The report later states that further investigation are to be done prior to construction.
- 4.11. While the basement will extend through a moderate depth of made ground it has been concluded that ground water flows are unlikely to be disrupted, due to ground water not being unidentified during the site investigations, and the nature of the basement extension onto the side of an existing larger basement.
- 4.12. No proposals are provided for a movement monitoring strategy during excavation and construction. It is accepted that the risk to either the existing building or neighbouring buildings is negligible.
- 4.13. It is stated that the existing site is generally hard standing, however details of if these areas drain to the surface water system are not provided. It is stated that surface water within the proposed lightwell will discharge to the existing sewer system, however planters will be provided to attenuate flow, which is commented as being similar to the existing. While a direct comparison of surface water discharge has not been produced it is accepted that any additional discharge will be small compared to the size of the existing discharge, and will be attenuated via planting.
- 4.14. It is accepted that change in the site's hard surface areas is to be ignored due to the removal of the existing mechanical plant hard surface area as well as planting within the light well area.
- 4.15. The BIA has shown that the site is not within a 100m of a watercourse or within the Hampstead Heath catchment areas.
- 4.16. It is accepted that there are no slope stability concerns regarding the proposed development and it is not in an area prone to flooding.

Date: January 2018



#### 5.0 CONCLUSIONS

- 5.1. The BIA and Ground Engineering report have been carried out by engineering consultants using individuals who possess suitable qualifications.
- 5.2. The BIA has confirmed that the proposed light-well will be contiguous piled wall with RC liner wall and suspended basement slab, which is to form a lightwell to an existing much larger basement.
- 5.3. Appropriate site investigations have been undertaken consisting of two borehole window samplers and trial pits and a period of ground water monitoring.
- 5.4. The geology has been identified as a moderate depth of made ground overlaying London Clay.

  The existing and proposed basement will be founded within the London clay.
- 5.5. No temporary works are proposed as the piled will is to be designed to withstand loading in the temporary case.
- 5.6. It is concluded that ground water flows are not anticipated to be disrupted by the basement, however local perched water may be present.
- 5.7. It has been concluded by inspection, rather than calculation, that negligible damage will occur to the neighbouring properties. This is accepted given the distance to neighbouring properties, and the proposed construction method.
- 5.8. Any increase in surface water discharge will be small compared to the existing building and will benefit from some attenuation.
- 5.9. No proposals are provided for a movement monitoring strategy during excavation and construction.
- 5.10. It is accepted that the surrounding slopes to the development site are stable.
- 5.11. It is accepted that the development is not in an area subject to flooding.
- 5.12. It can be confirmed that the applicant has demonstrated that the proposal complies with CPG4.

Date: January 2018



**Appendix 1: Residents' Consultation Comments** 

None



**Appendix 2: Audit Query Tracker** 

None

ABrm12727-15 -190118-Ort House Conference Centre-F1.doc

Date: January 2018



Ap	pendix	3: Supr	olementary	Supporting	<b>Documents</b>

None

ABrm12727-15 -190118-Ort House Conference Centre-F1.doc

Status: F1

# Birmingham London Friars Bridge Court Chantry House 41- 45 Blackfriars Road High Street, Coleshill London, SE1 8NZ Birmingham B46 3BP T: +44 (0)20 7340 1700 T: +44 (0)1675 467 484 E: london@campbellreith.com E: birmingham@campbellreith.com Manchester Surrey No. 1 Marsden Street Raven House 29 Linkfield Lane, Redhill Manchester Surrey RH1 1SS M2 1HW T: +44 (0)1737 784 500 T: +44 (0)161 819 3060 E: manchester@campbellreith.com E: surrey@campbellreith.com **Bristol** UAE Office 705, Warsan Building Hessa Street (East) Wessex House Pixash Lane, Keynsham PO Box 28064, Dubai, UAE Bristol BS31 1TP T: +44 (0)117 916 1066 E: bristol@campbellreith.com T: +971 4 453 4735 E: uae@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: Friars Bridge Court, 41- 45 Blackfriars Road, London SE1 8NZ VAT No 974 8892 43