

1 BIA Author qualifications Open - to be demonstrably in accordance with CPG4 Section 3.6.

The main BIA report, including information on surface flow, flooding and land stability has been produced by Franco Di Pietro and Ian Jewison, CEng MISTrucE.

Information on subterranean groundwater was provided by Jon Race of Southern Testing, CGeol.

2 Stability Underground infrastructure Open – underground utility infrastructure information should be provided. The impact assessment should be updated, if required.

It is believed that a Thames Water sewer is running underneath the road (Grove Terrace) at the front of the property. A CCTV survey will be carried out at the start of the detailed design stage to establish the position and condition of the existing connection to the sewer.

3 Stability Neighbouring basements structures Open – to be confirmed and impact assessment updated, if required.

The adjacent property (No 19) has a rear basement structure/extension with curved glass walls and a flat glass roof. The structure extends out from the lower ground floor of No 19 into the rear garden area. In plan the extension is oval shaped with curved glass walls which are approximately 1metre (at the closest point) from the shared garden wall to No.19. Given the depth of the existing adjacent basement (approx. 2m from the planning drawing), the distance from this to the party wall and the proposed shallow retaining wall to the rear, it is assumed that the construction of the shallow retaining walls at the rear will not have an impact on the existing adjacent structures.

4 Stability Ground conditions / geotechnical parameters at the basement location.

2 Window samples within the rear garden, formed as part of the site investigation, have been excavated down to 6m below ground level and therefore well below the proposed new foundation formation level.

5 Hydrology Change in impermeable site area and assumptions made on drainage design (inconsistencies in drawings and text)

There is no change to the impermeable site area. There are existing vaults to the front of the site which are being underpinned, and hard paving to the rear of the building within which the small concrete box (base and walls) will be formed. Please refer to the attached picture showing the new basement area.

6 Stability Outline retaining wall calculations

Please refer to attached calculation for the retaining wall to the stair well to the rear of the property

7 Stability Ground Movement and Damage Impact Assessments for Party Walls and Grove Terrace

A heave/settlement analysis using PDISP has been carried out as part of the geotechnical works for the original scheme which utilised a larger basement to the rear of the existing building and it is included within the site investigation report. Southern Testing provided an estimate of the net heave based on the new scheme and this is approx. 4mm.

Appendix F within the BIA shows the Damage Category Calculation. This shows that the works fall within category 1. The calculation was carried out based on the previous scheme, when the extent of the basement was bigger. It is therefore assumed the damage category for the current scheme will be less onerous.

8 Stability Monitoring Strategy Open – to be updated based on ground movement assessment, including trigger levels and contingency actions.

The brick vaults to the front of the property are to be lowered by approx.. 700mm. Based on the results of the site investigation, it is expected that the existing footings are founded within the clay strata, and that lowering the base of the vaults will extend these footings into the same strata. Any movements of the existing structure are expected to be negligible, given there is no change in loading and the existing founding strata is expected to remain the same.

Within the rear garden, we are expecting negligible movement of the existing boundary walls on either side due to the formation of the concrete box to the rear of the property.

9 Stability Confirmation of presence, size and location of trees

Existing vegetation within the rear garden consists of borders containing a variety of ornamental shrubs, various fruit trees (pear and apple) and a grape vine. Vegetation within the neighbouring gardens includes maple, cherry, yew, cyprus, silver birch and various ornamentals shrubs/trees.

Given the small dimension of the trees and their distance from the proposed works these will not be affected.

10 BIA Outline construction programme Open – to be provided.

Paragraph 10 of the BIA outlines the assumed sequence of construction.

The final construction sequence and programme will be produced by the contractor, once appointed.

11 BIA Conceptual Site Model Open – to be provided.

Section 3,4,8 and 9 of the BIA clearly identifying any risks and impacts related to the proposed development.

12 BIA Non-technical summaries Open – to be provided.

Please find attached summaries.