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Screening Document to establish whether a full BIA is required for proposed development at

26 West End Lane, London NW6 4PA

BACKGROUND

Nick Baker Architects have been instructed to submit a planning application for “Sub-division to create one additional flat including rear extension at ground floor….” at the above property on behalf of the client. As part of this a pre-application process was followed. Although there are no existing nor proposed basements at this property nor any lightwells, there is a proposal to move an existing 0.9m high retaining wall in the back garden. The Planning officer has suggested that a BIA screening process should be undertaken.

DOCUMENT ORIGINATOR

This document is prepared by Marek Glowinski BSc CEng MIStructE FConsE. Over a period of 25 years he has designed over 300 basements throughout London from very small to large ones in excess of 12m deep. On these projects has been responsible for the design of permanent and temporary structures, drainage, flood defences and ground stabilisation. Relevant sections were done in conjunction with Malcolm Price BSc MSc CEng MICE.

BASIS OF INFORMATION

Paragraphs 234 to *Camden geological, hydrogeological and hydrological study. Guidance for subterranean development state*s : "….. obtain information appropriate to the potential impacts of the proposed basement".

The proposed development (in terms of subterranean development) can only be described as almost non-existent. The amount of groundworks required are no more than might be encountered on a relatively minor gardening project. Impacts on soil, land use, water quality and hydrology are so minimal as to be unquantifiable (the amount of excavation is approximately 5% of that of a basement). Excavation depths are likely to just extend beyond the depth of topsoil.

This screening document is prepared on the above basis.

1. Characteristics of the Project.

1.1. The existing building is an existing semi-detached house of conventional construction. It is proposed to sub-divide the property. As part of this it is proposed to extend an existing courtyard bounded by a 0.9m high retaining wall outwards (at the same depth) by an average of 2.5m.

1.2. Appendix A shows the boundary of the development.

1.3. Appendix B shows the physical form of the development relating to the extended courtyard.

1.3.1. Demolition of the existing retaining wall will take 1 day.

1.3.2. Pouring of the new retaining wall foundation will take 1 hour. The following day the hollow block wall will be constructed (one day). The next day the hollow blocks will be filled with concrete (2 hours).

1.3.3. Total construction time (from start to finish) will be approximately 4 days.

1.3.4. The extent of this project is so small that mitigation measures are not particularly relevant.

2. Location of the project.

2.1. Appendix C includes maps and photographs of the project relative to surrounding buildings, topography, material and man-made features.

3. Characteristics of the potential Impact.

3.1. The nature of scale of impacts in negligible (no excavations will extend below any existing footings, either of the subject building or its adjoining neighbour).

3.2. Permeable surfacing will be utilised so as not to increase impervious surfaces,

4. Groundwater Flow.

4.1a Is the site located directly above an aquifer?

No, see Appendix D.

4.1b Will the proposed basement extend beneath the water table surface?

No, the proposed lowering will not extend below the existing yard level.

4.2. Is the proposed basement within 100m of a:

Watercourse?

No - see Appendix Ei

Spring?

No - see Appendix Eii

Wells?

No - see Appendix Eiii.

4.3. Is the site within the catchment of the pond designs on Hampstead Heath?

No - see Appendix F

4.4. Will the proposed basement development result in a change of proportion of land surface/paved area?

No, permeable surfacing will be utilised.

4.5. As part of the site drainage, will more surface water than at present be discharged to the ground?

No - permeable surfacing will be utilised.

4.6. Is the lowest point of any excavation close to, or lower than, the mean water level in any local pond or spring line?

No - see Appendix G

5. Land Stability.

5.1. In light of paragraph 234:- The land is almost completely flat. The 0.9m deep excavations at this development will not have any effect on any macro topographical features (See Appendix Hi). On a micro level, the proposed excavation will not extend beneath the footings of any adjacent property. (See Appendix Hii).

6. Surface Flow and Flooding.

6.1. Is the site within the catchment of the pond chains on Hampstead Heath?

No - see Appendix F.

6.2. As part of the proposed site drawings will surface water flows be materially changed from the existing route?

No - there is no material change in layout in this regard.

6.3. Will the proposed based development result in a change in the proportion of hard surface/paved external areas?

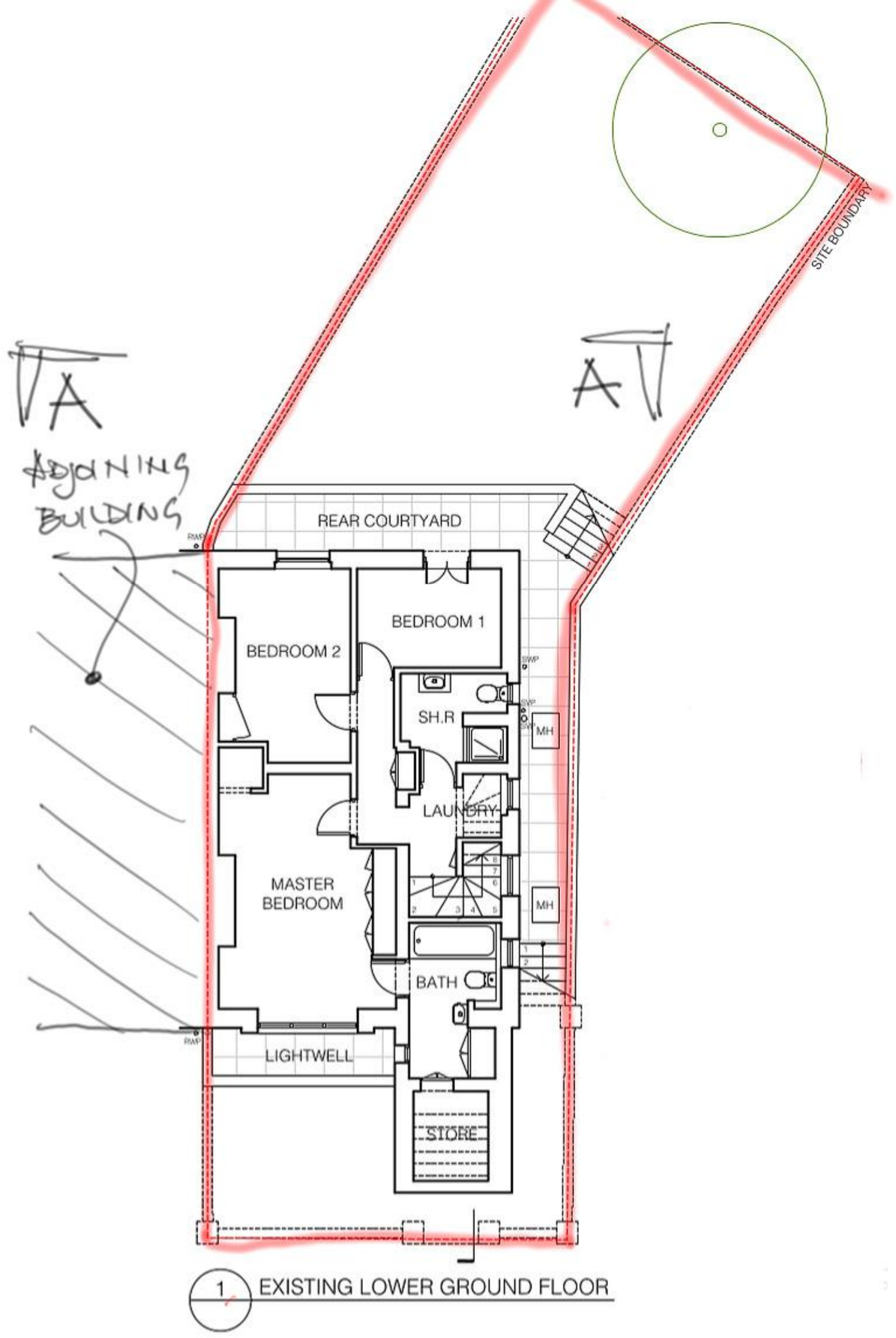
No - permeable surfaces will be provided.

6.4. Will the proposed basement result in change to the profile of the inflows of surface water being received by adjacent properties or downstream watercourses.

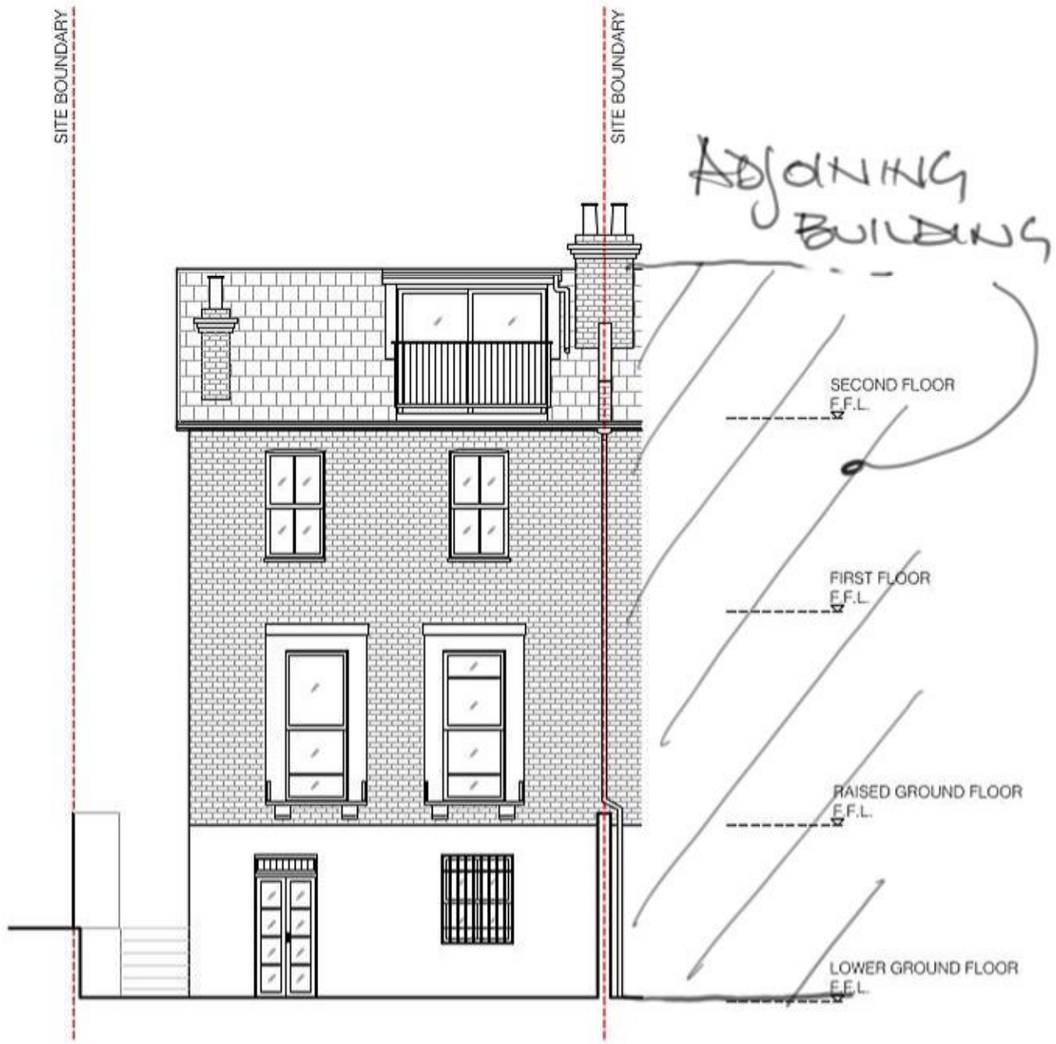
No - there is no basement and the relocation of the retaining wall will not alter any inflows.

APPENDIX A

APPENDIX A.



1 EXISTING LOWER GROUND FLOOR



A — A

APPENDIX B

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---------- TO BE DEMOLISHED

1 PROPOSED SECTION A

PRELIMINARY

26 WEL

26 West End Lane ,NW6 4PA. London

Proposed section.

Scale <1:100@A3>

Date <22 01 016>

1601-SK-160128-009

APPENDIX C

See also Appendices A and B

APPENDIX D

524000 526000 528000 530000 532000 534000

188000 186000 184000 182000

SITE

Environment Agency Aquifer Designation based on BGS Mapping

N

Scale at A3: 1:30,000

Coordinate System:
British National Grid
GCS_OSGB_1936

0 0.5 1 2 3
Kilometers

Legend

Borough of Camden
Railway Lines
A Roads

Aquifer Designation

Secondary A Aquifer
Unproductive Strata

Source Protection Zone

Outer Source Protection Zone
Inner Source Protection Zone

NB. Aquifer boundaries are indicative based on available geological mapping data

Camden Geological, Hydrogeological and Hydrological Study

Camden Aquifer Designation Map

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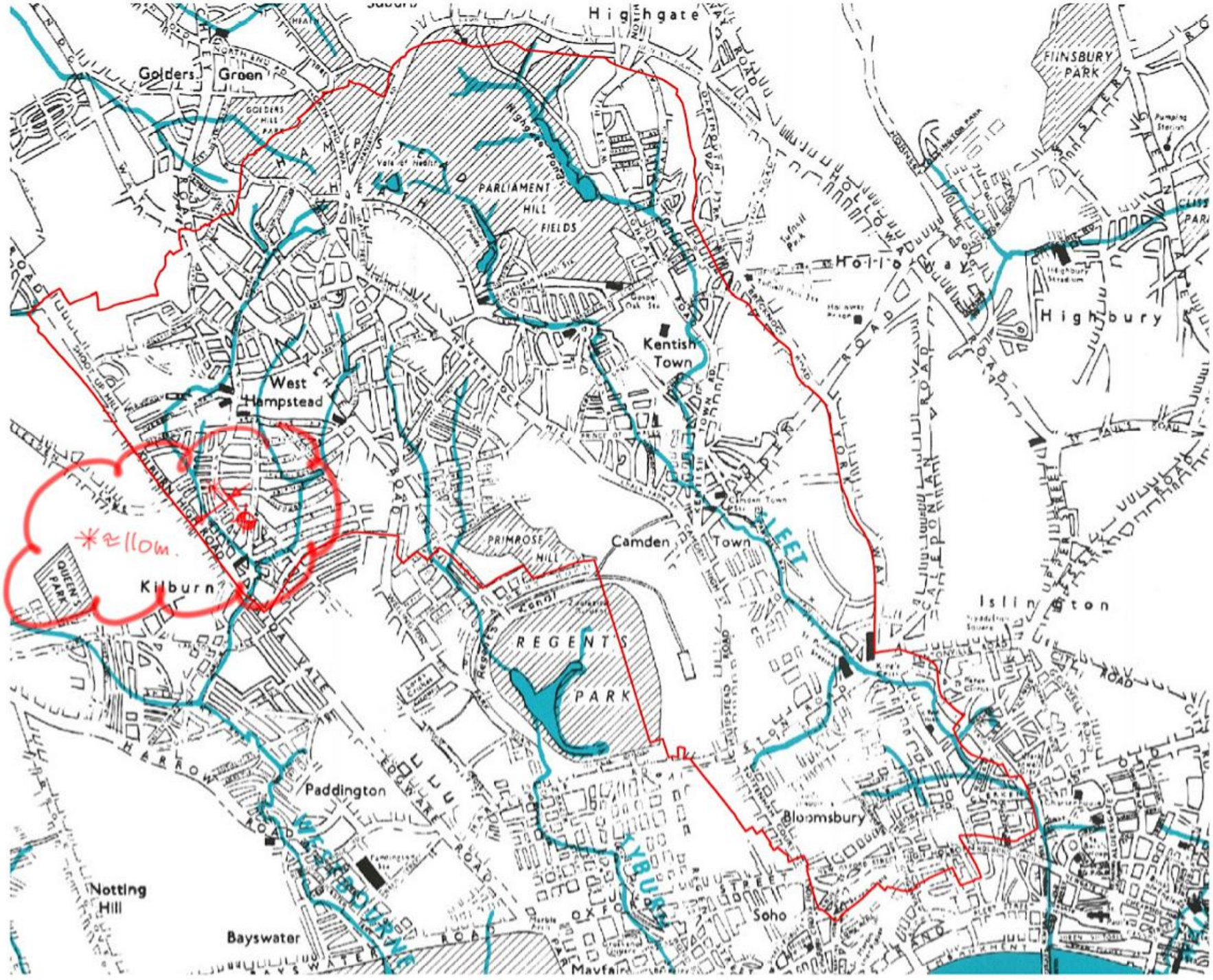
FIGURE **8**

APPENDIX Ei



Source – Barton, Lost Rivers of London

Camden Geological, Hydrogeological and Hydrological Study
Watercourses

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FIGURE **11**

APPENDIX Eii

524000 526000 528000 530000 532000 534000

188000 186000 184000 182000

Data source - BGS Mapping - Scale 1:10,000

N

Scale at A3: 1:30,000

Coordinate System:
British National Grid
GCS_OSGB_1936

0 0.5 1 2 3
Kilometers

Legend

- London Borough of Camden
- Railway Lines
- A Roads

BGS 1:10K Artificial Ground

- MADE GROUND
- WORKED GROUND

BGS 1:10K Drift Geology

- ALLUVIUM
- HACKNEY GRAVEL FORMATION
- LANGLEY SILT FORMATION
- LYNCH HILL GRAVEL FORMATION
- STANMORE GRAVEL FORMATION

BGS 1:10K Solid Geology

- BAGSHOT FORMATION
- CLAYGATE MEMBER
- LAMBETH GROUP
- LONDON CLAY FORMATION

NB: Geological boundaries are largely indicative based on available geological mapping data

Camden Geological, Hydrogeological and Hydrological Study

Camden Geological Map

213923 FIGURE **3**

APPENDIX Eiii

RECTANGLE',
ttons to draw a
ap.

'QUERY' button
e attributes.

CIRCLE QUERY

Brondesbury
West Hampstead (Thameslink)
West Hampstead
Kilburn
Brondesbury
Brondesbury Park
Kensal Rise
Kilburn
Kilburn Park
Queen's Park
SITE
A41
A5
A4003
B520
B510
B509
B507
B451
Gartinge Rd
Maygrove Rd
Loveridge Rd
Netherwood St
Broadhurst Gdns
Compayne Gdns
Cleve Rd
Canfield Gdns
Dynham Rd
Cotleigh Rd
Messina Ave
Woodchurch Rd
Greencroft Gdns
Aberdare Gdns
Goldhurst Terrace
Belsize Rd
Acol Rd
Priory Rd
Gladys Rd
Hilltop Rd
Coverdale Rd
Mowbray Rd
Cavendish Rd
Dyne Rd
Callcott Rd
Torbay Rd
Burton Rd
Gascony Ave
Kingsgate Pl
Mazenod Ave
Douglas Rd
Glengall Rd
Esmond Rd
Brondesbury Villas
Kilburn Priory
Greville Rd
Greville Pl
Oxford Rd
Andover Pl
Princess Rd
Albert Rd
Denmark Rd
Victoria Rd
Lonsdale Rd
Hopefield Ave
Montrose Ave
Salusbury Rd
Chevening Rd
The Ave
Aylestone Ave
Keslake Rd
Winchester Ave
Boundary Rd
Springfield Rd
Clifton Hill
Marlborough Pl
Contains OS data © C

APPENDIX F

526000

528000

188000

186000

SITE

Catchments and Drainage after Haycock, 2010

N

Scale at A3: 1:10,000

Coordinate System:
British National Grid
GCS_OSGB_1936

0 0.125 0.25 0.5 0.75 1

Kilometers

Legend

- London Borough of Camden
- Railway Lines
- A Roads
- Surface Water
- Highgate Chain Catchment
- Golders Hill Chain Catchment
- Hampstead Chain Catchment
- Hampstead Heath Extension Chain Catchment

Camden Geological, Hydrogeological and Hydrological Study

Hampstead Heath Surface Water Catchments and Drainage

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FIGURE **14**

APPENDIX G

522000 524000 526000 528000 530000 532000

186000 184000 182000

Data Source: London Borough of Camden, 2010

N

Scale at A3: 1:30,000

Coordinate System:
British National Grid
GCS_OSGB_1936

0 0.5 1 2 3
Kilometers

Legend

- London Borough of Camden
- Surface water
- Railway Lines
- A Roads

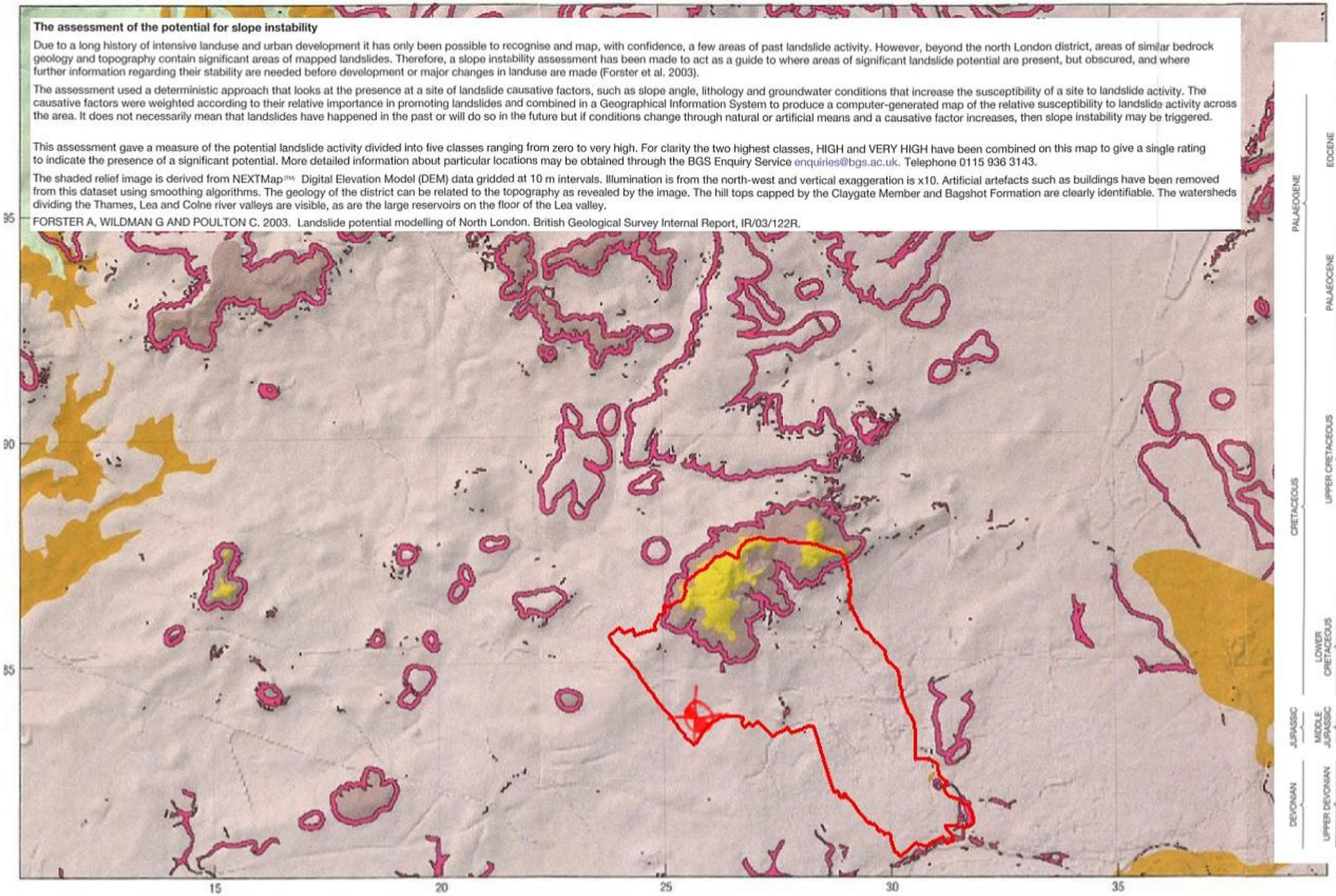
Camden Geological, Hydrogeological and Hydrological Study

Camden Surface Water Features

213923 FIGURE **12**

APPENDIX Hi

Areas of greatest potential for slope instability



The assessment of the potential for slope instability

Due to a long history of intensive landuse and urban development it has only been possible to recognise and map, with confidence, a few areas of past landslide activity. However, beyond the north London district, areas of similar bedrock geology and topography contain significant areas of mapped landslides. Therefore, a slope instability assessment has been made to act as a guide to where areas of significant landslide potential are present, but obscured, and where further information regarding their stability are needed before development or major changes in landuse are made (Forster et al. 2003).

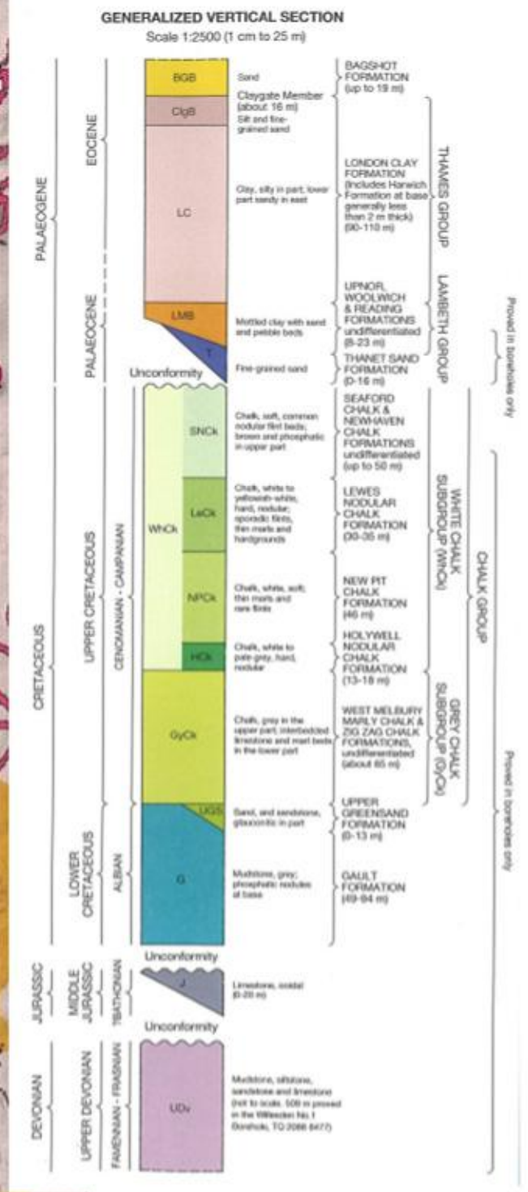
The assessment used a deterministic approach that looks at the presence at a site of landslide causative factors, such as slope angle, lithology and groundwater conditions that increase the susceptibility of a site to landslide activity. The causative factors were weighted according to their relative importance in promoting landslides and combined in a Geographical Information System to produce a computer-generated map of the relative susceptibility to landslide activity across the area. It does not necessarily mean that landslides have happened in the past or will do so in the future but if conditions change through natural or artificial means and a causative factor increases, then slope instability may be triggered.

This assessment gave a measure of the potential landslide activity divided into five classes ranging from zero to very high. For clarity the two highest classes, HIGH and VERY HIGH have been combined on this map to give a single rating to indicate the presence of a significant potential. More detailed information about particular locations may be obtained through the BGS Enquiry Service enquiries@bgs.ac.uk. Telephone 0115 936 3143.

The shaded relief image is derived from NEXTMap(TM) Digital Elevation Model (DEM) data gridded at 10 m intervals. Illumination is from the north-west and vertical exaggeration is x10. Artificial artefacts such as buildings have been removed from this dataset using smoothing algorithms. The geology of the district can be related to the topography as revealed by the image. The hill tops capped by the Claygate Member and Bagshot Formation are clearly identifiable. The watersheds dividing the Thames, Lea and Colne river valleys are visible, as are the large reservoirs on the floor of the Lea valley.

FORSTER A, WILDMAN G AND POULTON C. 2003. Landslide potential modelling of North London. British Geological Survey Internal Report, IR/03/122R.

Areas of significant landslide potential



Source - British Geological Society, 1:50,000 Series
England and Wales Sheet 256 – North London

Camden Geological, Hydrogeological and Hydrological Study
Areas of landslide potential

213923

FIGURE **17**

APPENDIX Hii

APPENDIX Hii

PROPOSED DORMER WINDOW WITH FLAT ROOF TO MATCH EXISTING

WALK IN WARDROBE

ST

SECOND FLOOR F.F.L.

BALCONY AREA TO UPPER GROUND FLOOR

NG & KITCHEN & DINING

FIRST FLOOR F.F.L.

PROPOSED FLAT ROOF FOR LOWER GROUND EXTENSION

NG & KITCHEN & DINING

RAISED GROUND FLOOR F.F.L.

REAR COURTYARD EXTENSION

LIVING & KITCHEN & DINING

LOWER GROUND FLOOR F.F.L.

EXS FNDN. LVL

EXS FNDN.

EXCAVATION.

EXS RETAINING WALL