

## GROUND INVESTIGATION PRELIMINARY FINDINGS

Project Name:	95 Avenue Road, London NW8 6HY	Date of fieldwork	10-June-22
Client:	95 Avenue Road (Freehold) Limited	Date of preliminary report:	21-June-22
GEA ref:	J22086	Proposed date of final report:	TBC
GEA Project Engineer and contact details:	George Clifton Office tel 01727 824666 Mobile no 07894 585903 Email george@gea-ltd.co.uk	Preliminary logs attached	Y / <del>N</del>
		Site plan attached	Y / <del>N</del>

### Summary of Desk Study Findings:

The earliest map studied, dated 1850, shows the existing road network had partially been established, including Avenue Road (then known as Upper Avenue Road), Finchley Road, St John's Wood Park and Adelaide Road (then known as Tunnel Road) in their existing locations. The Primrose Hill Tunnels are shown running from the portal 250 m to the west, eastwards beneath Tunnel Road, passing approximately 20 m north of the site. The next available map, dated 1871, shows the site to be split into two plots, each developed with a detached house and associated gardens dotted with trees. By 1895, the tunnel portal to the west had been widened, with a second line running south of the original line and this tunnel is understood to pass directly beneath the centre of the site, as shown on the map dated 1954. On the same map, the buildings on site and a number of the surrounding buildings are labelled as "Ruin". It is considered likely that these had been vacated in preparation for future development because by 1962, the ruins had been demolished and the existing buildings on site and in the surrounding area had been constructed. The site and surrounding area have since remained essentially unchanged.

A tributary of the "Lost" River Tyburn formerly flowed approximately 100 m to the east of the site, which now flows through a culvert. The site is within Zone II of a Source Protection Zone (SPZ). One of the Primrose Hill Tunnels passes east-west beneath the building, while the Jubilee London Underground Line passes beneath St John's Wood Park to the west and a Thames Water sewer flows beneath Avenue Road to the east.

### Brief description of the site:

The site is located in the London Borough of Camden, approximately 225 m southeast of Swiss Cottage London Underground station and 380 m east of South Hampstead train station. It fronts onto and is accessed from Avenue Road to the northeast and is bounded by St John's Wood Park to the west and by a four-storey apartment block to the south. The site is roughly triangular shaped and is occupied by an eight-storey apartment block, with a single level basement beneath the building. A row of lock up garages adjoins the building to the south via an undercroft. Paved driveways are located to the east and west of the building while a communal garden area covers the northern corner of the site. The site slopes down towards the southeast, in keeping with the surrounding topography. Numerous deciduous trees of up to 20 m in height, line the northeastern and western boundaries of the site.

### Summary of ground conditions:

The ground investigation generally encountered the expected ground conditions, in that beneath a variable thickness of made ground, London Clay extended to the full depth of the investigation, of 10.00 m (41.10 m OD). The made ground comprised dark brown sandy gravelly clay to clayey gravelly sand with occasional bricks and fragments of brick, concrete, clinker and flint and roots and rootlets. It was found to extend to depths of between 1.20 m (49.65 m OD) and 3.00 m (48.43 m OD). The London Clay comprised an initial weathered horizon of firm orange-brown mottled grey slightly sandy slightly gravelly clay with sandy lenses, which extended to depths of 3.10 m (47.75 m OD) and 3.50 m (47.93 m OD). This was underlain by stiff fissured brown mottled grey becoming dark brownish grey silty clay with sandy lenses to the full depth of the investigation, of 10.00 m (41.10 m OD).

### Summary of groundwater conditions:

Groundwater was only encountered as seepage from a granular pocket in Borehole No 3 at a depth of 3.50 m (47.93 m OD). This is thought to be associated with a high proportion of surface water infiltrating into the shallow soils through the communal garden, rather than being representative of a shallow ground water table. Standpipes were installed in all boreholes to enable future groundwater monitoring, which will be carried out prior to the issue of our final report.

### Details of the proposed development, upon which preliminary design recommendations are based:

It is understood that it is proposed to redevelop the basement of the existing block for residential use, including the excavation of new lightwells around the building. Additionally, the existing garages will be converted into two semi-detached houses with a single level basement. The excavations are assumed to be approximately 3 m deep.

### Preliminary foundation recommendations:

Formation level for the proposed basement and lightwells will be within the stiff clay of the weathered London Clay. Excavations for the proposed basement structure will require temporary support to maintain stability and to prevent any excessive ground movements. Perched water may be encountered towards the base of the made ground or from granular pockets within the weathered London Clay, but significant groundwater inflows are not anticipated. New spread foundations at basement formation level of approximately 3.00 m may be designed to apply a net allowable bearing pressure of 120 kN/m<sup>2</sup>.

### Details of any other ground related issues (inc contamination) that may affect the site:

The made ground in Borehole No 3 at a depth of 2.80 m was locally stained black and emitted a diesel odour. A sample of this malodorous soil and a number of other samples of the made ground have been submitted for testing to identify any contaminants present.

*The information provided by this summary and any attached sheets is preliminary and is subject to change in the light of any laboratory testing which will be completed prior to the issue of the final report and following a full review of all of the information from the investigation as part of our Quality Management procedures. Any design decisions made on the basis of this information are therefore made at the risk of the client and GEA accepts no liability in this respect.*