30 ELLERDALE ROAD
E0621

Construction Method Statement on behalf of, Mr Susskind

Reference: E0621-EEE-00-XX-RP-S-0001
Date: December 2018
Revision: P1
Description: For Information

Prepared by: LP
Checked by: PG

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CONTENTS

1.0 Introduction

1.0.1 The purpose of this Construction Method Statement (CMS) is to outline our approach to managing the construction works relating to the proposed basement at No. 30 Ellerdale Road consented under planning ref: 2014/2126/P.

1.0.2 Condition 5 requires a Construction Method Statement to be submitted and approved before the basement is implemented. This document includes specific comments on the site establishment, logistics, and the process of managing the overall environment surrounding the property. It will also ensure that the construction works cause the minimum disruption to the adjacent residents with a safe working and living environment maintained.

1.0.3 Liaison with the neighbours and interested parties will continue throughout the project, as information is updated and as the project develops. Particular attention will be paid to ensure that the neighbours are kept appraised of progress and future works on the project. The information provided in this document is an overview of the key project activities at No. 30 Ellerdale Road.

2.0 Site Location & Access

2.1 Site Location and Anticipated Ground Conditions

2.1.1 The subject site is occupied by a 2-storey detached building with hipped roof on the western side of Ellerdale Road. The site slopes down 3m from the front to the rear of the property. The rear garden is currently divided into 3 tiers in response to the slope. The majority of the rear gardens on the western side of Ellerdale Road have been graded such that they step down with the land. The surrounding area is predominantly residential and is typically characterised with Victorian and Edwardian architecture. The site is located in the Redington and Frognal Conservation Area.

2.1.2 From a preliminary desk study considering geological maps and historical borehole records (see Appendix B), it is considered likely that the ground conditions will consist of a stratum of made ground overlying a deep stratum of London Clay. Actual ground conditions will be confirmed at a later project stage.

2.2 Access Arrangements

2.2.0 Access to the site for road traffic, pedestrians and cycles is via Ellerdale Road. It is a two-way street which intersects with Arkwright Road at Fitzjohn's Avenue at its ends.

2.2.1 Access to the site by public transport is by Hampstead Underground Station located approximately 400m to the north of the site. A nearby bus stop at The Fitzjohn's Avenue (stop C) is served by bus routes 46, 603.

2.2.2 Resident's parking is present on Ellerdale Road (see Figure 5 for further details). Limited suspension of parking may be required for deliveries (Subject to confirmation of final deliveries strategy by contractor at a later project stage).

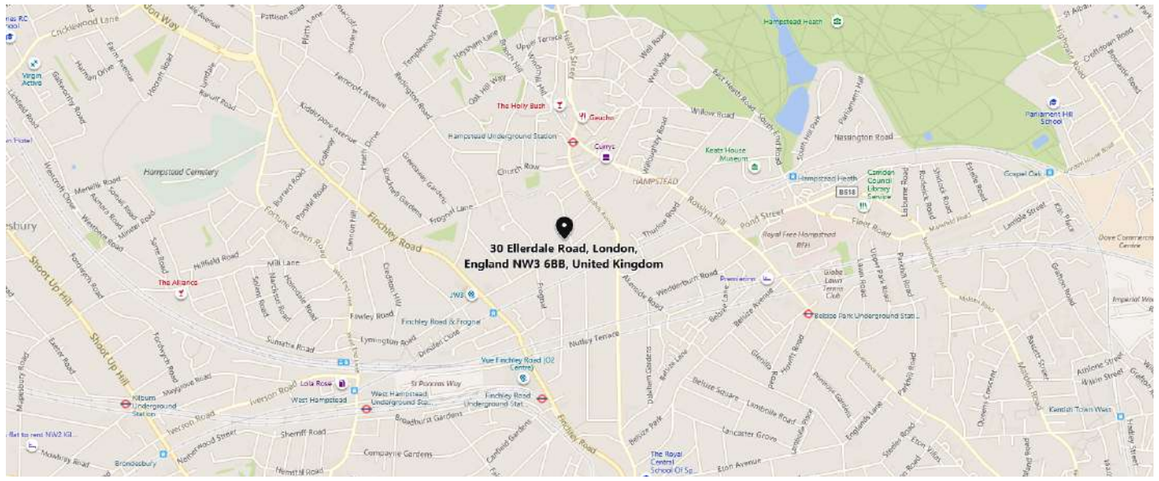

Figure 1 - Site location

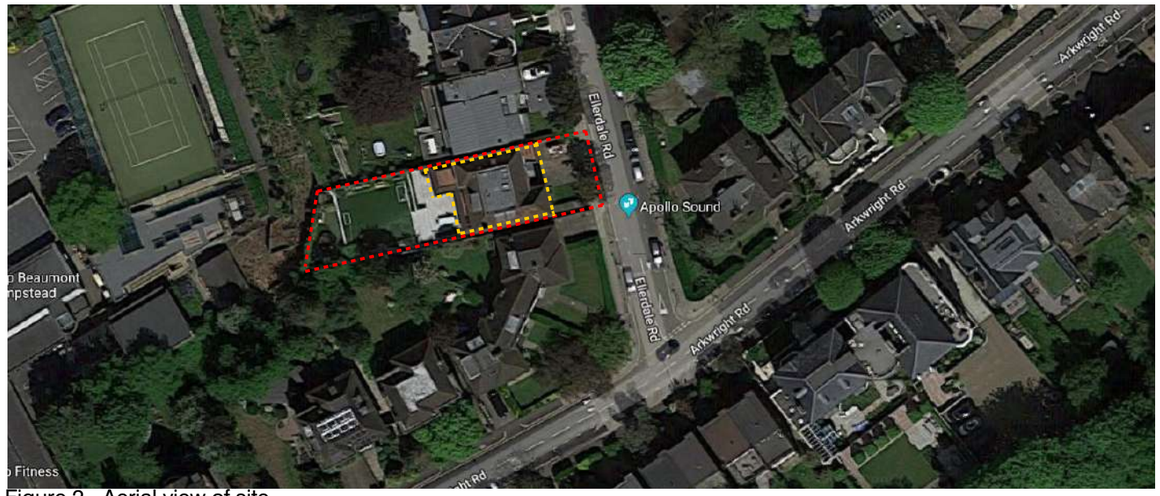

Figure 2 - Aerial view of site

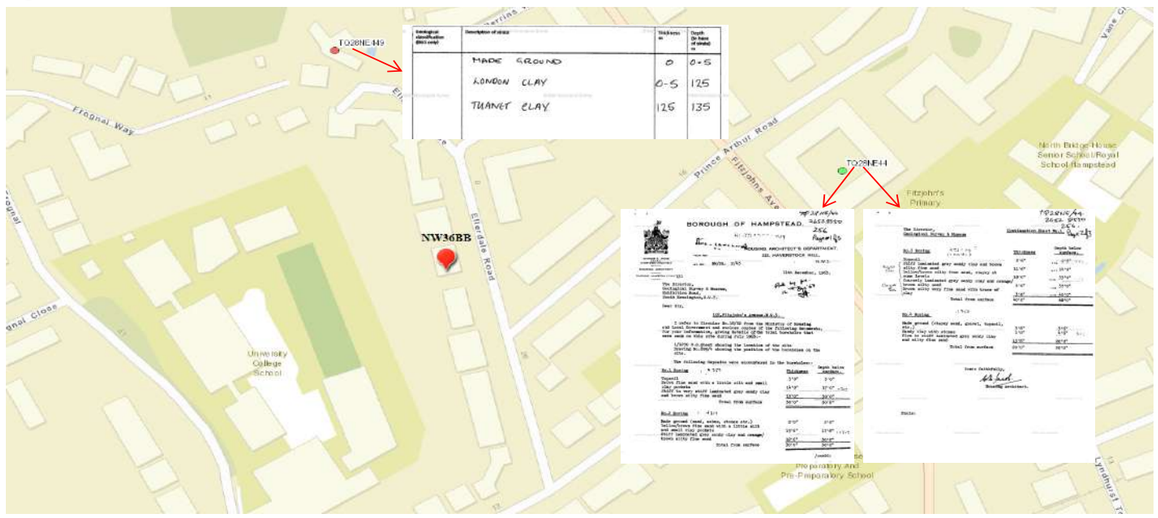

Figure 3 - Local boreholes (information taken from British Geological Survey)

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3.0 The Project

3.0.1 The project consists of the construction of a new basement under the existing property.

4.0 Phasing and Construction Programme

4.0.1 The project will be divided into four phases:

- Minor srip out and site clearance
- Construction of sub-structure
- Construction of super-structure
- External works/landscaping

4.0.2 For the purpose of estimating a construction programme, the following has been assumed:

- Proposed basement under existing building will be constructed using underpinning sequence
- Contiguous piles will be installed along the two sides of the perimeter of the basement
- Excavation will be carried out to the formation level of the basement raft foundation
- The structural solution is likely to be a reinforced concrete frame, with flat slab spanning between RC retaining walls and supported by RC columns

A detailed construction programme is to be developed by the main contractor as part of the tendering process. This will include the details of a 24 hour emergency contact. According to Transport for London guidance document ”Construction logistics plan guidance for developers”, the site is classified as “low impact”.

5.0 Site Establishment and Logistics

5.0.1 At the outset the contractor will establish the site set up in line with the phasing/ logistics plan contained within Appendix A, or an approved alternative proposal developed at a later project stage.

5.1 Hoarding

5.1.1 A solid hoarding will be erected to the front elevation of the site and along the boundary walls, with a personnel site entrance gate at the front. It will be painted and kept in a clean and tidy condition throughout the works. All hoardings/fencing will be regularly checked and maintained in a clean and tidy condition and signage will be positioned so it is clearly visible to warn members of the public of any potential hazards surrounding the site. The site accommodation will be located within the forecourt, leaving the pavement access to remain clear. The site will be maintained in a safe and tidy manner with the implementation of good housekeeping procedures regularly checked by our Health and Safety Advisor on fortnightly site inspections and be set up with temporary power, water and drainage throughout the duration of the works. We will also register the site under the Considerate Constructors scheme and we will therefore comply with the scheme’s Code of Practice.

5.2 Hours of Work

5.2.1 Core working hours will be limited to:

- Monday to Friday, 08:00 to 18:00 hours
- Saturday, 08:00 to 13:00 hours
- No working on Sundays, Bank Holidays or Public Holidays

5.3 Deliveries and Vehicle Routing

5.3.1 Access for deliveries will be via Ellerdale Road.

5.3.2 Due to access restrictions it is not anticipated that deliveries will enter the rear part of the site directly. It is anticipated that due to the nature of the proposed materials, manual handling and simple trolleys/pallet lifters will be sufficient to transport materials from the loading bay into site.

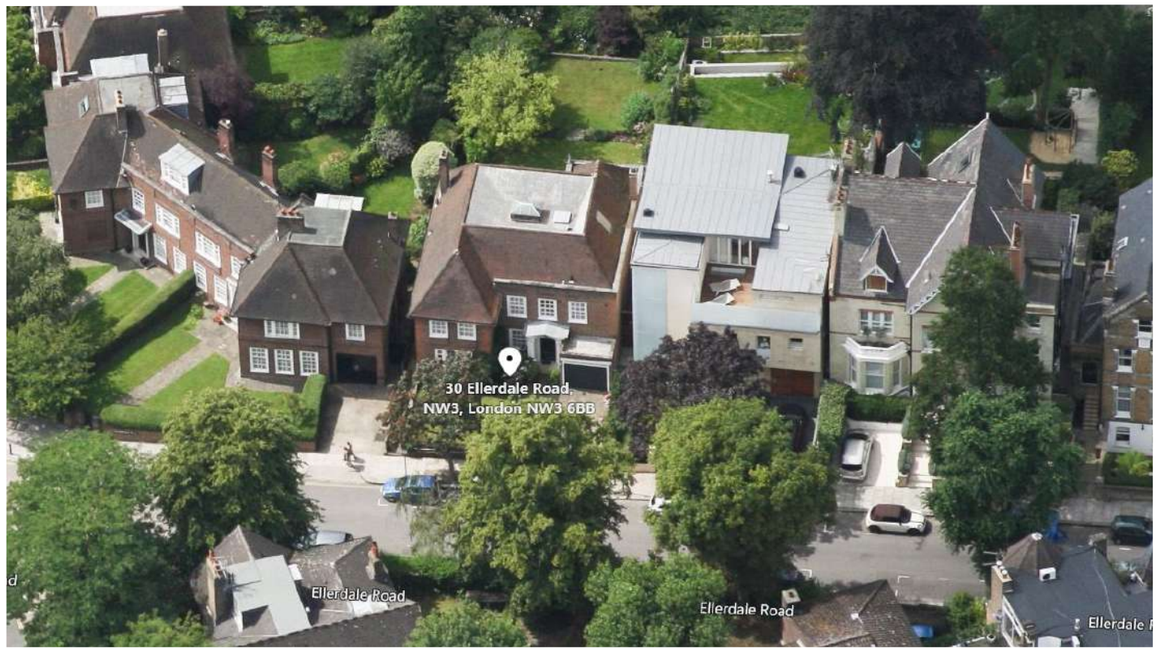


Figure 4 - Bird’s eye view from East, looking West

Figure 5 - Parking conditions are as per the photograph taken outside 30 Ellerdale Road

5.3.3 It is anticipated that delivery vehicles will arrive at the site via Ellerdale Road, as discussed in part 2.2.0 of this report. Upon appointment, the principal contractor is to discuss the exact routing of vehicles with the council's transport planning team and agree exact routing to keep any disruption to neighbouring homes and businesses to a minimum.

5.3.4 Should any large or exceptional loads be involved in any deliveries, all relevant permits will be obtained from the council and/or Highways Agency.

5.3.5 The contractor will liaise closely with neighbours, local businesses and the council's transport planning team to ensure restrictions are identified and adhered to and deliveries are well managed.

5.3.6 Wheel wash stations will be provided at the exit to the site (see Appendix A) to prevent mud being tracked onto the public highway by vehicles exiting site.

5.3.7 Anticipated number of vehicles during construction phase and the type which will be used is presented on the figures 10-11.

5.4 Suspensions and closures

5.4.1 A temporary suspension of resident's parking on Ellerdale Road may be required (Refer to appendix A).

5.5 Storage of Materials on Site

5.5.1 Secure plant and material storage will be provided (see Appendix A).

5.5.2 There will be separate storage for flammable liquids.

5.5.3 No material will be stored outside the site boundary.

5.5.4 Materials will be ordered on a 'just in time' basis wherever possible to minimise the amount of material to be stored on site.

5.6.1 All deliveries to site are to be pre-arranged using a booking system, to avoid vehicles having to queue or wait outside the site boundary.

5.6 Distribution of Materials on Site

5.6.1 Delivered and offloaded materials will be distributed around site by manual handling and pallet lifters + trolleys.

5.6.2 Due to the anticipated method of construction and site constraints, it is anticipated that a block and tackle system will be sufficient for any lifting.

5.7 Parking

5.7.1 Some suspension of residents' parking bays may be required in Ellerdale Road for deliveries. Appropriate licenses will be sought as required.

5.7.2 Site personnel will be encouraged to use alternative means (public transport, cycling) to travel to site.

5.7.3 Site vehicles will not be allowed to park outside the site compound, unless in emergency situations or short term for deliveries in designated bays.

5.8 Access/egress to site and manoeuvring of vehicles

5.8.1 Routes for ambulances and fire engines will be kept clear at all times.

5.8.2 The access gates to site will be securely locked outside normal working hours.

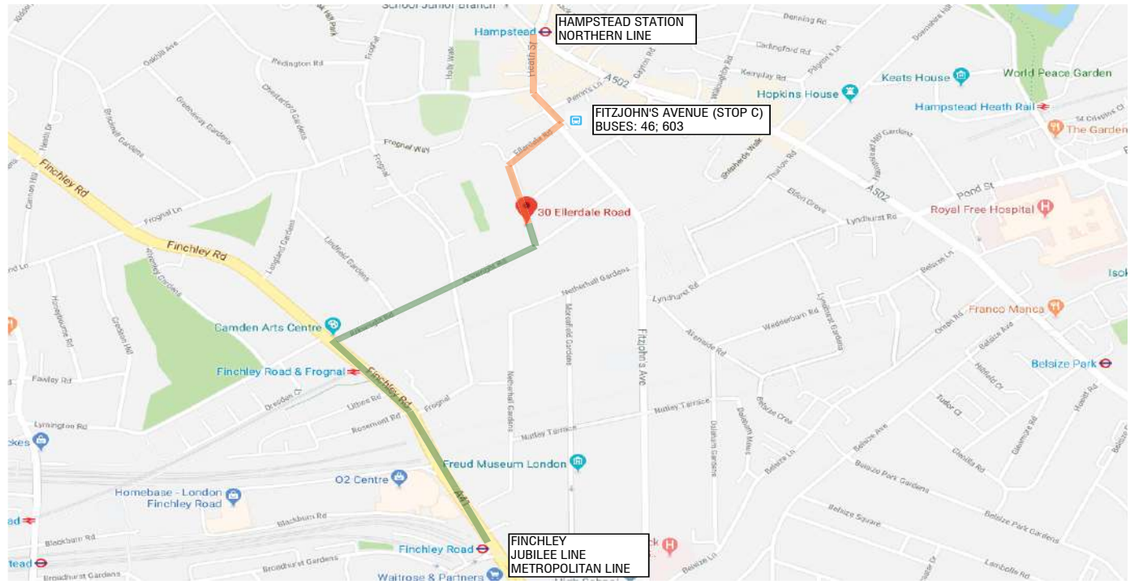


Figure 6 - Location of Transport for London assets

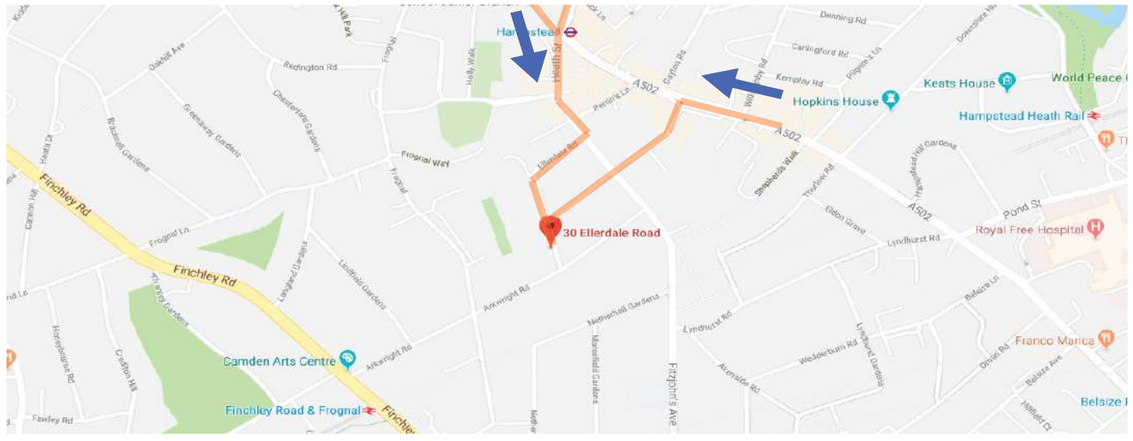


Figure 7 - Proposed access route

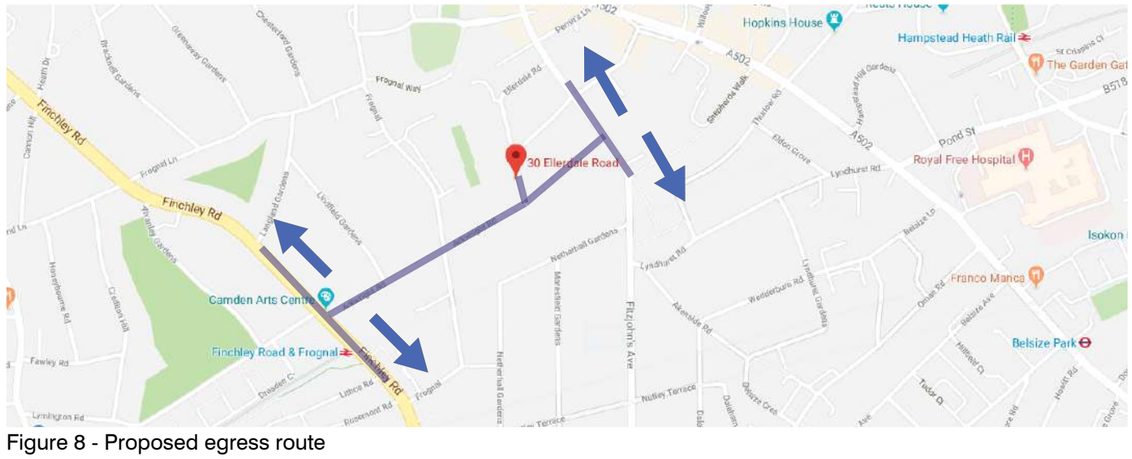


Figure 8 - Proposed egress route

5.9 Number and Type of Vehicles

5.9.1 Deliveries will be programmed between 9.00am and 6.00pm.

5.9.2 Numerous types of delivery vehicles will be used to bring materials to and from the site. This include:

- Small vans and pickups trucks (approximate size 6m long x 2.1m wide)
- Pump sets for concrete works, depending on the quantity of concrete being poured
- Ready mix concrete lorries (approximate size 9.5m long and 2.6m wide)

5.9.3 The projected vehicle movements are approximate and all delivery patterns will vary in dependence of day-to-day site needs, work progress, material availability etc.

- Demolition works and site set-up - up to 2 per day
- Basement excavation and piling – up to 4 per day
- Substructure – up to 4 per day
- Superstructure – up to 3 per day

5.9.4 We have carried out a preliminary assessment of vehicle movements against the programme. The anticipated figures are as follows:

- Average anticipated vehicle movements per day = 3 no
- Maximum anticipated daily vehicle movements = 5 no.

5.9.5 The dwell time will be a maximum of 20 minutes. Any vehicle arriving at site before or after the hours of delivery may be turned away.

5.10 Health and Welfare Facilities

5.10.1 Good quality health and welfare facilities will be established on site throughout the construction phase. The welfare facilities will consist of:

- Male, female and disabled toilets
- Shower
- Drying Room
- Emergency eye wash station

5.10.2 The site facilities will be shown on a welfare plan which will be displayed in the site offices and within the Health & Safety file.

5.10.3 Welfare facilities will be maintained daily in good order. The First Aid box will be maintained.

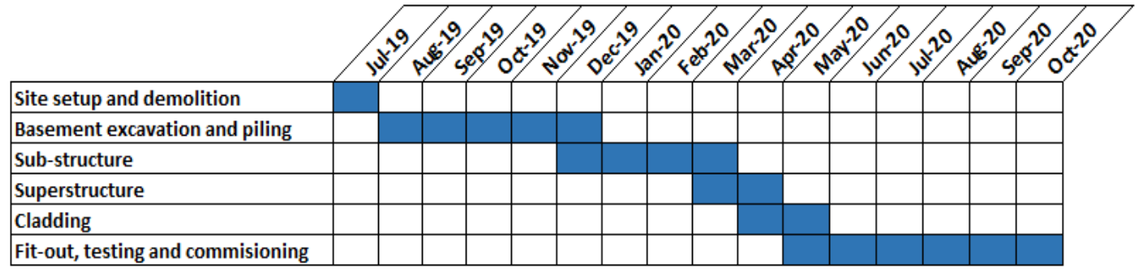


Figure 9 - Proposed construction programme

Construction phase	Schedule				Jul-2019	Aug-2019	Sep-2019	Oct-2019	Nov-2019	Dec-2019	Jan-2020	Feb-2020	Mar-2020	Apr-2020	May-2020	Jun-2020	Jul-2020	Aug-2020	Sep-2020	Oct-2020
	Start month (mmm/yyyy)	End month (mmm/yyyy)	Duration (Number of months)	Month number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Site setup and demolition	Jul-2019	Jul-2019	1	1	40															
Basement excavation and piling	Aug-2019	Dec-2019	5	2		75	60	70	80	60										
Sub-structure	Dec-2019	Mar-2020	4	6						30	70	80	40							
Super-structure	Mar-2020	Apr-2020	2	9									40	55						
Cladding	Apr-2020	May-2020	2	10										30	40					
Fit-out, testing and commissioning	May-2020	Oct-2020	6	11											40	50	50	30	30	20
				Monthly total	40	75	60	70	80	90	70	80	80	85	80	50	50	30	30	20
				Average daily total	2	3	3	3	3	4	3	3	3	4	3	2	2	1	1	1

Figure 10 - Anticipated number of vehicles during construction phase

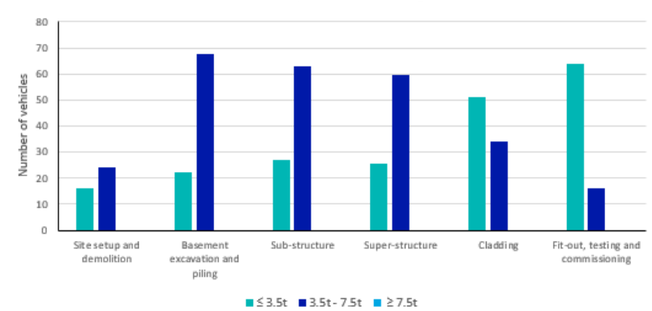


Figure 11 - Number of vehicles by types during peak of phase

Figure 12 - Typical Light Weight Vehicle (<3.5t)

Figure 13 - Typical Heavy Weight Vehicle (>3.5t)

6.0 Construction and Demolition

6.1 Anticipated Activities

6.1.1 The anticipated activities to be performed on site are as follows:

- Site establishment
- Ground excavation (including temporary supports as required)
- Construction of new substructure
- Construction of underground drainage and buried services
- MEP service installation
- Internal fit out
- External works and landscaping
- Snagging, testing and commissioning

6.2 Control of Noise, Dust and Vibration

6.2.1 Following appointment, the main contractor is to prepare a detailed method statement for each construction and demolition activity, outlining the specific measures to be employed to control the emission of noise, vibration and dust, in accordance with the best practice guidance given in BS5288:2009.

6.2.2 As a minimum, dust emission mitigation measures will include using a fine mist water spray on site to reduce airborne dust during demolition and plant movements, and providing sheeting to all lorries and skips leaving site.

6.2.3 As a minimum, measures to mitigate noise and vibration will include the use of silencing equipment and baffles on plant. Cutting and grinding will be avoided wherever possible. Demolition of the existing wall will be undertaken by disassembling its existing frame. If unavoidable cutting, grinding and breaking techniques will be undertaken in such a way as to minimise noise and dust.

6.2.4 Regular reviews and consulations will be done, as required.

6.3 Impact of construction traffic with respect to other development

6.3.1 Upon appointment, and at a later stage in the project, if other projects will take place, the contractor will collaborate with others in order to coordinate planning and traffic management with other developments.

6.4 Highway safety & congestion measures

6.4.1 Impacts on the local community from construction traffic for the proposed developments will be minimised and public access will be maintained where reasonably practicable.

6.4.2 Following appointment, the main contractor is to prepare a detailed construction traffic management plan containing measures to minimise the risk or traffic congestion.

6.4.3 Measures are likely to include:

- Deliveries being phased and controlled on a ‘just in time’ basis
- The setting of specific delivery and collection times
- Traffic marshalling while vehicles enter and exit construction areas
- Consolidation of deliveries where possible
- Prior authorisation to be scheduled with the logistics manager when visiting the site via vehicle;
- In the event of unusual activities or events that can be anticipated, London Borough of Camden and other relevant adjacent property owners or occupiers would be notified, in advance of the activity, wherever possible.

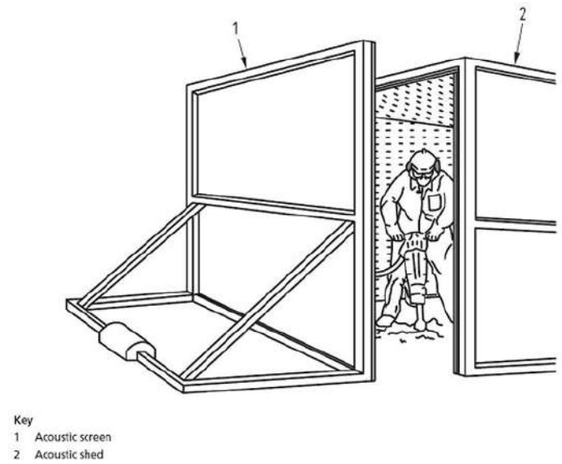


Figure 12 - Temporary Noise Barrier

Figure 13 - Temporary Dust Partition on site

6.5 Protection of Existing Environmental Features

6.5.1 Temporary fencing will be provided to protect existing environmental features to be retained, including existing trees which will be protected in accordance with BS5837 2012 - 'Trees in relation to design, demolition and construction - Recommendations'. The fencing will be established prior to the start of the construction works. The location will be agreed on site with the Construction Environmental Manager and client. The fencing will be of sufficient durability to be in place for the duration of the works.

6.6 Measures to safeguard amenity of surrounding residential and other sensitive uses

6.6.1 The measures detailed in part 6 of this report will be adopted in order to avoid causing any adverse effect on residential amenity or local environmental quality, limiting the impact of noise, vibration, smells, increased late night activity, increased parking and traffic.

6.6.2. The construction method will look to balance reducing the number of vehicular movements on the network whilst ensuring those vehicles are of a size that will not give rise to adverse impact on residential amenities or highways.

6.7 Health and Safety

6.7.1 Personal protective equipment (PPE) suitable to prevailing conditions will be used by all operatives and visitors.

6.7.2 A full briefing will be given to all operatives working on site and visitors as part of their site induction process.

6.8 Environmental Management Plan

6.8.1 The principal contractor is to prepare all environmental management method statements following appointment.

6.9 Site Waste Management Plan

6.9.1 A full asbestos survey may be required prior to strip out activities beginning on the existing commercial premises. Should asbestos be found, it is to be safely removed by a specialist and disposed of at a licensed facility.

6.9.2 All materials arising from strip out will be broken down into constituent materials for recycling.

6.9.3 Surplus/waste materials will be placed in segregated skips for removal from site to a registered waste processing centre and will be recycled where possible.

6.9.4 No fires will be permitted on site for the burning of materials.

6.9.5 Upon appointment, and at a later stage in the project, the contractor is to develop a detailed scheme for the disposal and recycling of all arising from demolition and excavation.

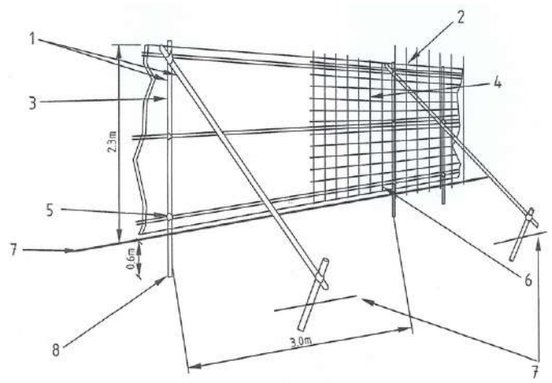


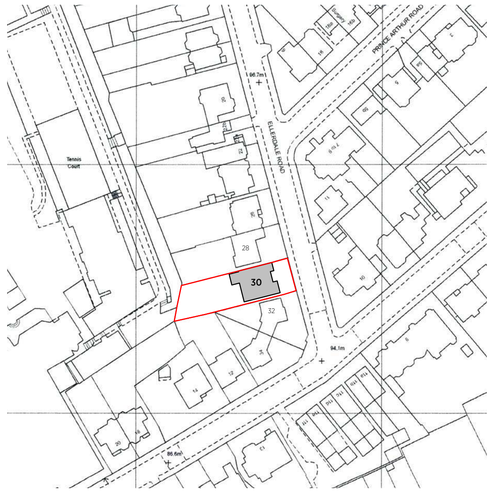
Figure 14 - Protective Fencing for Root Protection Area

Figure 15 - PPE safety equipment

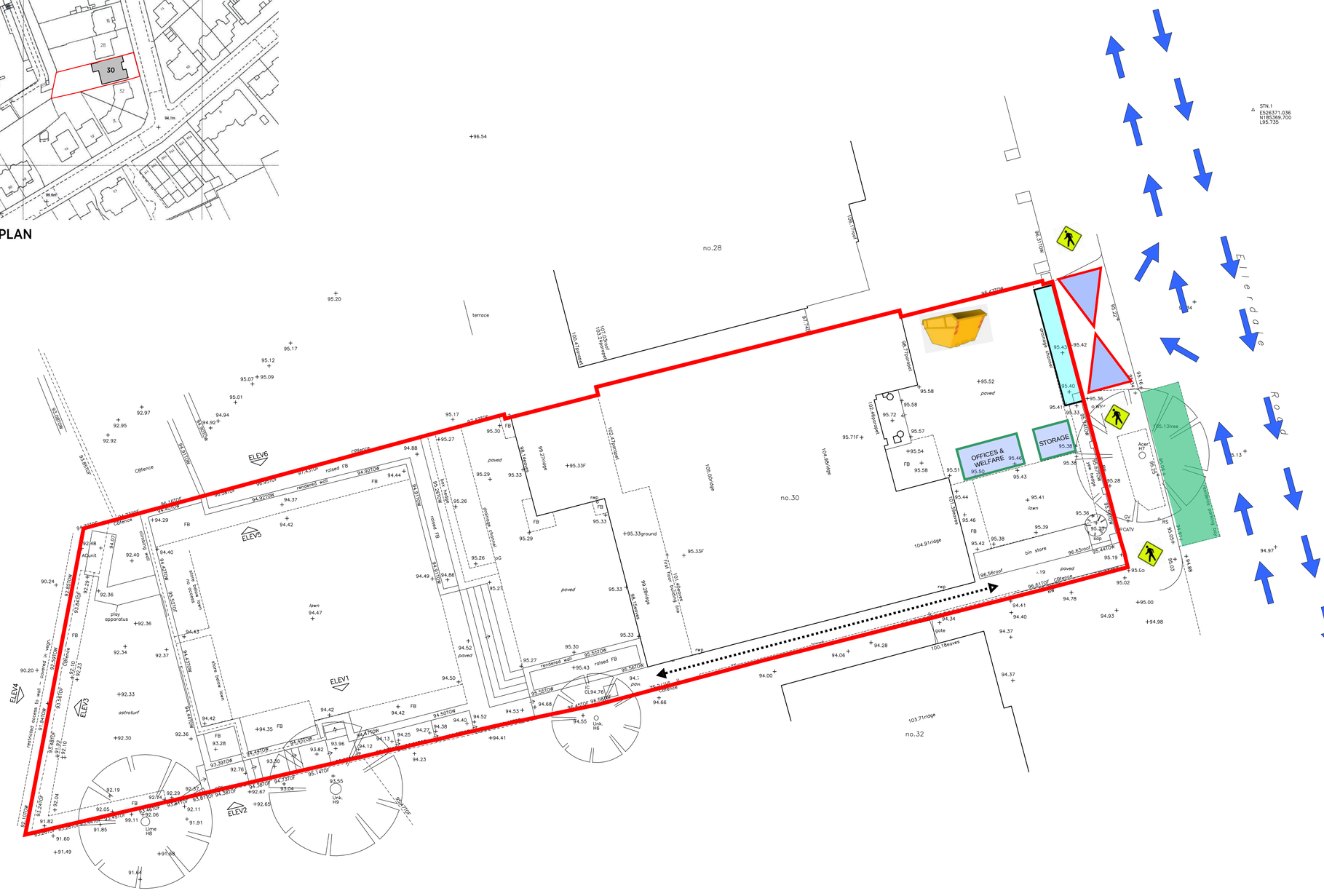
Figure 16 - Personal Protective Equipment symbols

Appendix A - Anticipated Site Logistics Plan - Construction Phase

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL ENGINEER'S AND ARCHITECT'S DRAWINGS, SPECIFICATIONS AND RISK REGISTERS.
2. DO NOT SCALE FROM THIS DRAWING. USE ONLY DIMENSIONS AS INDICATED. CHECK ALL SITE DIMENSIONS PRIOR TO PLACING ANY ORDER OR FABRICATION. WHERE A CONFLICT OF INFORMATION EXISTS SEEK CONFIRMATION FROM CONSULTANTS PRIOR TO PROCEEDING FURTHER WITH THE WORKS
3. TEMPORARY STABILITY OF THE EXISTING STRUCTURE AND ANY NEWLY CONSTRUCTED ELEMENTS OF PERMANENT WORKS DURING CONSTRUCTION IS SOLELY CONTRACTOR'S RESPONSIBILITY
4. ONLY DRAWINGS AND SPECIFICATIONS ISSUED FOR **CONSTRUCTION** CAN BE USED FOR THE WORKS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEEK THE INFORMATION FROM CONSULTANTS.
5. ALL PROPRIETARY ITEMS TO BE INSTALLED STRICTLY IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS AND SPECIFICATIONS
6. ALL WATERPROOFING SUCH AS TANKING DETAILS, DAMP PROOF MEMBRANES, DAMP PROOF COURSES, CAVITY TRAYS ETC. ARE TO BE INSTALLED AS PER ARCHITECT'S DETAILS



LOCATION PLAN
1 : 1250



KEY:

- Site Speed Limit
- Access for Site traffic
- Site Boundary Line + Hoarding
- Site Welfare Accommodation
- Access for general public
- Site Pedestrian Routes
- Wheel wash station
- Pedestrian Turnstile
- Pedestrian/Vehicle Gates
- Temporary Hardstanding
- Segregated Waste Area
- Parking of vehicles
- Potential car parking spaces suspended and used for deliveries

SITE LOCATION PLAN
1:100

rev	date	description	by	checked
P1	2018-12-13	ISSUED FOR INFORMATION	LP	DP

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PROJECT TITLE: 30 ELLERDALE ROAD
CLIENT: MR & MRS SUSSKIND
PROJECT No: E0621

DRAWING No: E0621-SK905
REVISION: P-1
DRAWING TITLE: APPENDIX A - ANTICIPATED SITE LOGISTIC PLAN - CONSTRUCTION PHASE
STATUS: PRELIMINARY
DRAWN: LP
CHECKED: DP
SCALE: NTS @A1

Appendix B - Site Analysis - Ground Conditions

Fig 1. Local Borehole Records

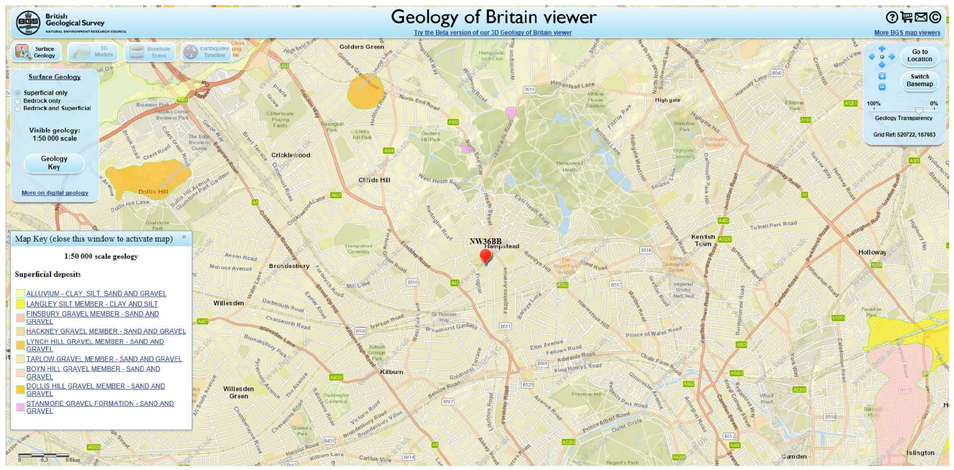


Fig 2. Local Superficial Geology

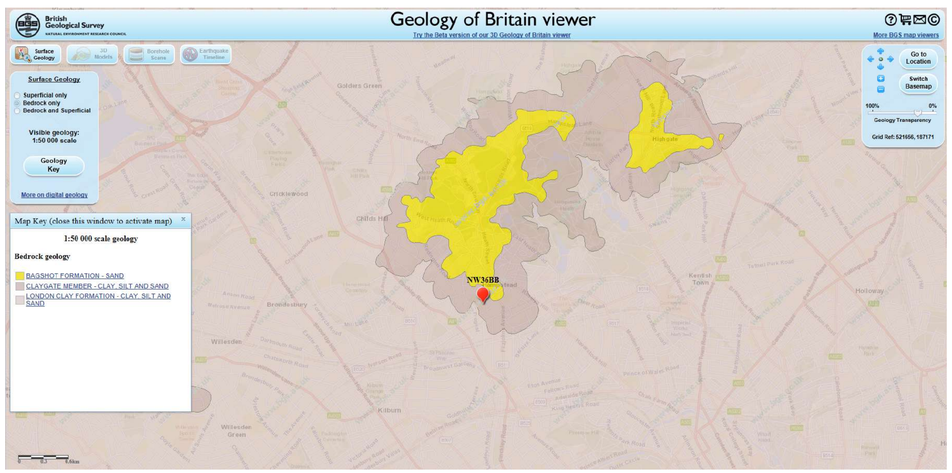
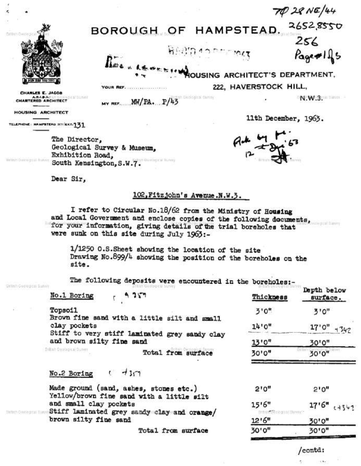


Fig 3. Local Bedrock Geology

Geological classification (BGS only)	Description of strata	Thickness m	Depth (to base of strata) m
	MADE GROUND	0	0.5
	LONDON CLAY	0.5	125
	THANET CLAY	125	135

Fig 4. Borehole TQ28NE449



BOROUGH OF HAMPSTEAD.

HOUSING ARCHITECT'S DEPARTMENT.

222, HAVERSTOCK HILL, N.W.3.

11th December, 1963.

The Director,
Geological Survey & Museum,
Exhibition Road,
South Kensington, S.W.7.

Dear Sir,

108, Fitzjohn's Avenue, N.W.3.

I refer to Circular No.18/62 from the Ministry of Housing and Local Government and enclose copies of the following documents, for your information, giving details of the trial boreholes that were sunk on this site during July 1963:-

1/1250 O.S.Sheet showing the location of the site
Drawing No.899/4 showing the position of the boreholes on the site.

The following deposits were encountered in the boreholes:-

No.1 Boring

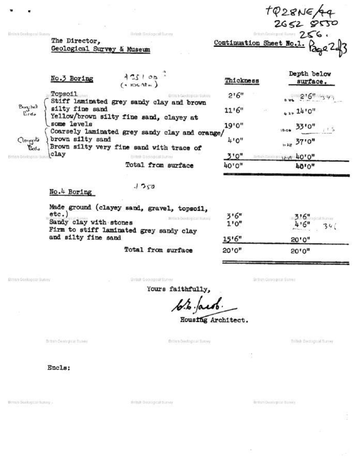
	Thickness	Depth below surface.
Topsoil	3'0"	3'0"
Brown fine sand with a little silt and small clay pockets	14'0"	17'0"
Stiff to very stiff laminated grey sandy clay and brown silty fine sand	13'0"	30'0"
Total from surface	30'0"	30'0"

No.2 Boring

	Thickness	Depth below surface.
Made ground (sand, ashes, stones etc.)	2'0"	2'0"
Yellow/brown fine sand with a little silt and small clay pockets	15'6"	17'6"
Stiff laminated grey sandy clay and orange/ brown silty fine sand	12'6"	30'0"
Total from surface	30'0"	30'0"

/contd:

Fig 5. Borehole TQ28NE44



The Director,
Geological Survey & Museum

Continuation Sheet No.1

No.3 Boring

	Thickness	Depth below surface.
Topsoil	2'6"	2'6"
Stiff laminated grey sandy clay and brown silty fine sand	11'6"	14'0"
Yellow/brown silty fine sand, clayey at some levels	19'0"	33'0"
Coarsely laminated grey sandy clay and orange/ brown silty sand	4'0"	37'0"
Brown silty very fine sand with trace of clay	3'0"	40'0"
Total from surface	40'0"	40'0"

No.4 Boring

	Thickness	Depth below surface.
Made ground (clayey sand, gravel, topsoil, etc.)	3'6"	3'6"
Sandy clay with stones	1'0"	4'6"
Firm to stiff laminated grey sandy clay and silty fine sand	13'6"	20'0"
Total from surface	20'0"	20'0"

Yours faithfully,

Housing Architect.

Encls:

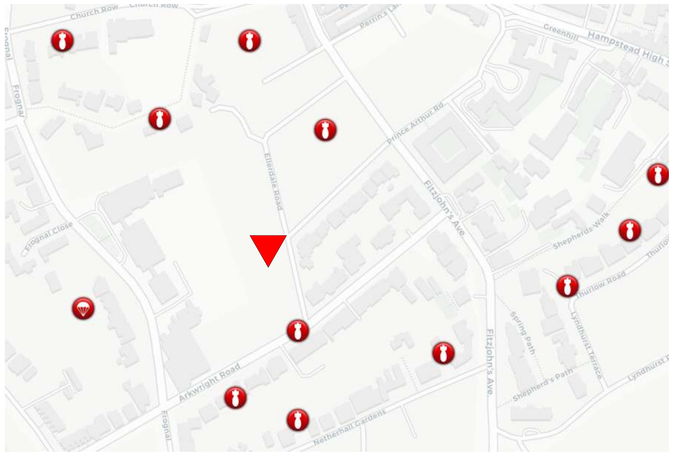


Fig 6. Second World War Bomb hits recorded in nearby area (taken from Bombsight.org)

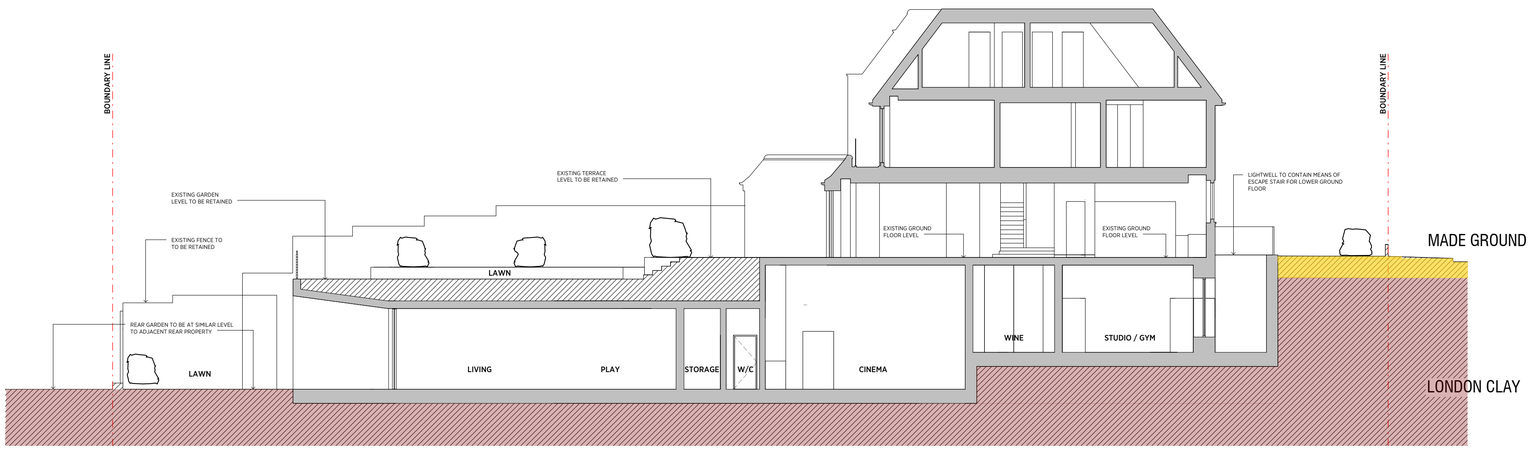


Fig 7. Assumed Site Ground Conditions

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL ENGINEER'S AND ARCHITECT'S DRAWINGS, SPECIFICATIONS AND RISK REGISTERS.
2. DO NOT SCALE FROM THIS DRAWING. USE ONLY DIMENSIONS AS INDICATED. CHECK ALL SITE DIMENSIONS PRIOR TO PLACING ANY ORDER OR FABRICATION. WHERE A CONFLICT OF INFORMATION EXISTS SEEK CONFIRMATION FROM CONSULTANTS PRIOR TO PROCEEDING FURTHER WITH THE WORKS
3. TEMPORARY STABILITY OF THE EXISTING STRUCTURE AND ANY NEWLY CONSTRUCTED ELEMENTS OF PERMANENT WORKS DURING CONSTRUCTION IS SOLELY CONTRACTOR'S RESPONSIBILITY
4. ONLY DRAWINGS AND SPECIFICATIONS ISSUED FOR **CONSTRUCTION** CAN BE USED FOR THE WORKS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEEK THE INFORMATION FROM CONSULTANTS.
5. ALL PROPRIETARY ITEMS TO BE INSTALLED STRICTLY IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS AND SPECIFICATIONS
6. ALL WATERPROOFING SUCH AS TANKING DETAILS, DAMP PROOF MEMBRANES, DAMP PROOF COURSES, CAVITY TRAYS ETC. ARE TO BE INSTALLED AS PER ARCHITECT'S DETAILS

rev	date	description	by	checked
P1	2018-12-13	ISSUED FOR INFORMATION	LP	DP

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PROJECT TITLE: 30 ELLERDALE ROAD
CLIENT: MR & MRS SUSSKIND
PROJECT No: E0621

DRAWING No: E0621-SK906
DRAWING TITLE: SITE ANALYSIS - GROUND CONDITIONS
REVISION: P-1
STATUS: INFORMATION
DRAWN: LP
CHECKED: DP
SCALE: NTS @A1

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