Construction Management Plan

pro forma v2.2

6 Antrim Grove, Belsize Park

Camden

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Revisions & additional material

Please list all iterations here:

Date	Version	Produced by
19th July 2018	1	Odyssey

Additional sheets

Please note – the review process will be quicker if these are submitted as Word documents or searchable PDFs.

Date	Version	Produced by

Drawing 18187-Fig1: HGV Routing Access/Egress

Drawing 18187-100: Local Highway Network;

Drawing 18187-101: Proposed Temporary Layout to Highway Network;

Drawing 18187-102: Swept Path Analysis – Small Skip Lorry;

Drawing 18187-103: Swept Path Analysis – Concrete Mixer;

Drawing 18187-104: Swept Path Analysis – 7.5T Box Van;

Drawing 18187-105: Swept Path Analysis – Small Tipper.

Introduction

The purpose of the **Construction Management Plan (CMP)** is to help developers to minimise construction impacts, and relates to both on site activity and the transport arrangements for vehicles servicing the site.

It is intended to be a live document whereby different stages will be completed and submitted for application as the development progresses.

The completed and signed CMP must address the way in which any impacts associated with the proposed works, and any **cumulative impacts of other nearby construction sites**, will be mitigated and managed. The level of detail required in a CMP will depend on the scale and kind of development. Further policy guidance is set out in Camden Planning Guidance **(CPG)** 6: Amenity and **(CPG)** 8: Planning Obligations.

This CMP follows the best practice guidelines as described in Transport for London's (TfL's Standard for Construction Logistics and Community Safety (**CLOCS**) scheme) and Camden's Minimum Requirements for Building Construction **(CMRBC)**.

The approved contents of this CMP must be complied with unless otherwise agreed with the Council in writing. The project manager shall work with the Council to review this CMP if problems arise in relation to the construction of the development. Any future revised plan must also be approved by the Council and complied with thereafter.

It should be noted that any agreed CMP does not prejudice or override the need to obtain any separate consents or approvals such as for road closures or hoarding licences.

If your scheme involves any demolition, you need to make an application to the Council's Building Control Service. Please complete the "**Demolition Notice.**"

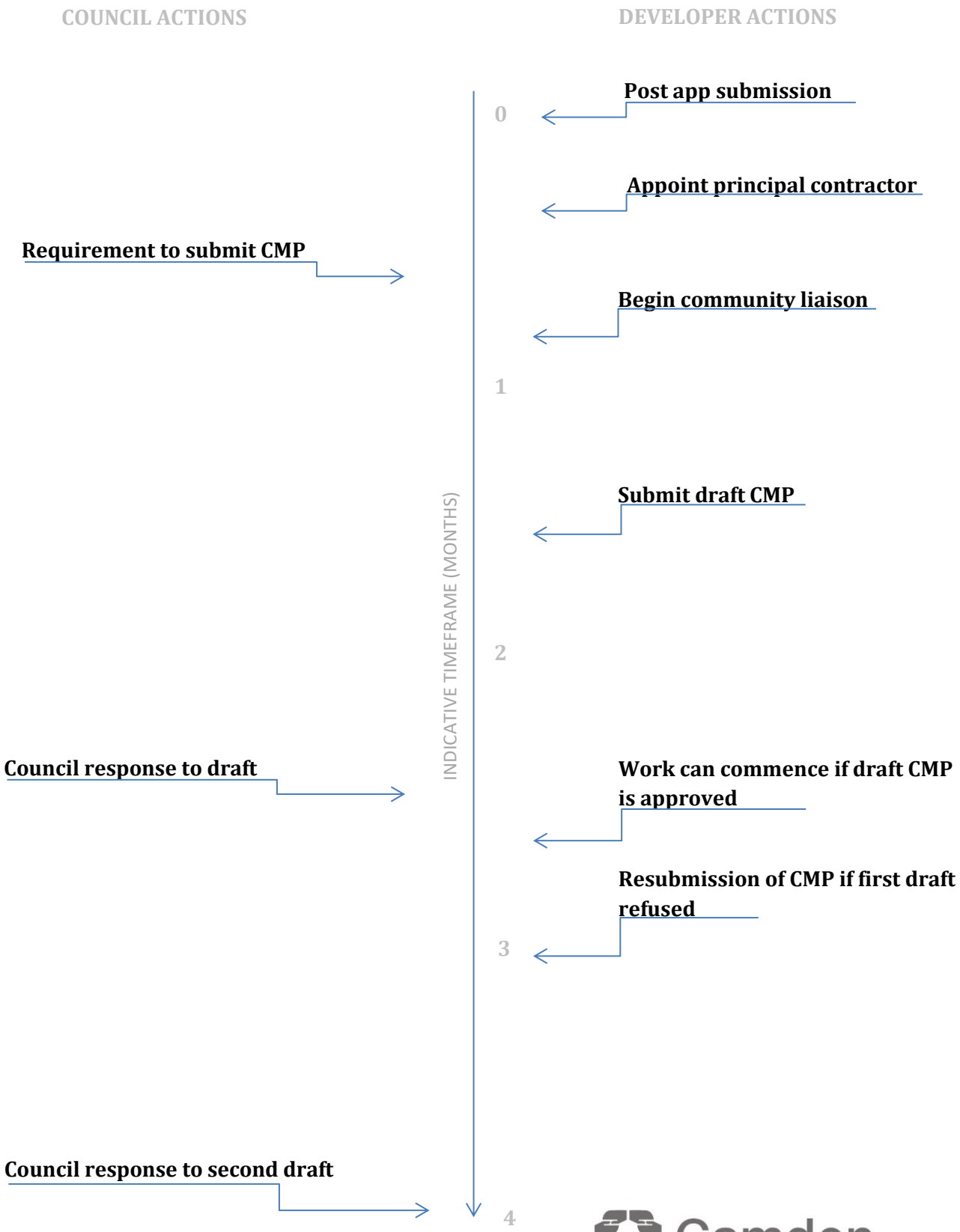
Please complete the questions below with additional sheets, drawings and plans as required. The boxes will expand to accommodate the information provided, so please provide as much information as is necessary. **It is preferable if this document, and all additional documents, are completed electronically and submitted as Word files to allow comments to be easily documented. These should be clearly referenced/linked to from the CMP.**

Please notify that council when you intend to start work on site. Please also notify the council when works are approximately **3 months from completion.**

(Note the term 'vehicles' used in this document refers to all vehicles associated with the implementation of the development, e.g. demolition, site clearance, delivery of plant & materials, construction, etc.)

Revisions to this document may take place periodically.

Timeframe


COUNCIL ACTIONS
DEVELOPER ACTIONS
Post app submission
0
Appoint principal contractor
Requirement to submit CMP
Begin community liaison
1
Submit draft CMP
INDICATIVE TIMEFRAME (MONTHS)
2
Council response to draft
Work can commence if draft CMP is approved
Resubmission of CMP if first draft refused
3
Council response to second draft
4

Contact

1. Please provide the full postal address of the site and the planning reference relating to the construction works.

Address: 6 Antrim Grove, Belsize Park, London, NW3 4XR

Planning reference number to which the CMP applies: 2014/3835/P

2. Please provide contact details for the person responsible for submitting the CMP.

Name:	Chris Brake
Address:	Bell Cornwell LLP, The Print Rooms, 164/80 Union Street, London, SE1 0LH
Email:	cbrake@bell-cornwell.co.uk
Phone:	0203 960 1532

3. Please provide full contact details of the site project manager responsible for day-to-day management of the works and dealing with any complaints from local residents and businesses.

Name:	Zbig Kolacz – Erdol Construction Ltd.
Address:	36 Glebe Road, Finchley, London, N3 2AX
Email:	team@erdolconstruction.co.uk
Phone:	07956676401

4. Please provide full contact details of the person responsible for community liaison and dealing with any complaints from local residents and businesses if different from question 3. In the case of **Community Investment Programme (CIP)**, please provide contact details of the Camden officer responsible.

Name:	Chris Brake
Address:	Bell Cornwell LLP, The Print Rooms, 164/80 Union Street, London, SE1 0LH
Email:	cbrake@bell-cornwell.co.uk
Phone:	0203 960 1532

5. Please provide full contact details including the address where the main contractor accepts receipt of legal documents for the person responsible for the implementation of the CMP.

Name:	Chris Brake
Address:	Bell Cornwell LLP, The Print Rooms, 164/80 Union Street, London, SE1 0LH
Email:	cbrake@bell-cornwell.co.uk
Phone:	0203 960 1532

Site

6. Please provide a site location plan and a brief description of the site, surrounding area and development proposals for which the CMP applies.

The site is located at Number 6 Antrim Grove in Belsize Park in the London Borough of Camden. Antrim Gove is a residential road in the Belsize Park area of Camden, in north-west London. Antrim Grove has an approximately 7.6m wide carriageway with some parking bays on-street. The parking is restricted to permit holders only in the CA-B Camden Controlled Parking Zone. Additionally, motor cycle parking bays and a disabled bay are located a short distance from the site to the north-east, approximately 5m from the site boundary.

The proposed development includes excavation of a new basement level and associated landscaping works including a side lightwell and 3 x rooflights. The photos below show the local highway network in its existing format.

Photo 1: Antrim Grove looking south-west, site to the right.

Photo 2: Antrim Grove looking north-east, site to the left.

Photo 3: Antrim Road

Photo 4: England's Lane junction with Haverstock Hill

7.

Please provide a very brief description of the construction works including the size and nature of the development and details of the main issues and challenges (e.g. narrow streets, close proximity to residential dwellings etc).

The proposed works include excavation of a new basement level and associated landscaping works including a side lightwell and 3 x rooflights. The main constraints with the site are the adjacent properties, the width of the road in front of the property and the accessibility of construction vehicles within the immediate vicinity of the site.

8. Please identify the nearest potential receptors (dwellings, business, etc.) likely to be affected by the activities on site (i.e. noise, vibration, dust, fumes, lighting etc.).

Residents within Antrim Grove, Antrim Road and Haverstock Hill (The dwellings backing on to the north of the site from the main road. The Belsize Community library located at the corner of Antrim Grove and Antrim Road is also within reasonable proximity to the site.

9. Please provide a scaled plan detailing the local highway network layout in the vicinity of the site. This should include details of on-street parking bay locations, cycle lanes, footway extents and proposed site access locations.

Drawing 18187-100 shows the local highway network immediately adjacent to the site. It includes the on-street parking bays, motorcycle bays, disabled bay, and yellow line waiting restrictions. The site will be accessed via a gateway access into the hoarding located at the front of the site where the edge of the red line of the site meets the Antrim Grove highway.

10. Please provide the proposed start and end dates for each phase of construction as well as an overall programme timescale. (A Gantt chart with key tasks, durations and milestones would be ideal).

It is proposed that work will commence in Autumn 2018 subject to contractor availability. Further detail will be submitted to LBC once the works are due to be started and timeframe known. However, a general summary of the planned works is outlined below:

Site setup – 2 weeks

Excavation – 8 weeks

Construction – 8 weeks

Fit out – 6 weeks

Landscaping – 3 weeks

Site close down – 2 weeks

11. Please confirm the standard working hours for the site, noting that the standard working hours for construction sites in Camden are as follows:

- 8.00am to 6pm on Monday to Friday
- 8.00am to 1.00pm on Saturdays
- No working on Sundays or Public Holidays

Confirmed

12. Please indicate if any changes to services are proposed to be carried out that would be linked to the site during the works (i.e. connections to public utilities and/or statutory undertakers' plant). Larger developments may require new utility services. If so, a strategy and programme for coordinating the connection of services will be required. If new utility services are required, please confirm which utility companies have been contacted (e.g. Thames Water, National Grid, EDF Energy, BT etc.) You must explore options for the utility companies to share the same excavations and traffic management proposals. Please supply details of your discussions.

The utility works required are not expected to have an impact on the local highway network. Services and utilities for the development will be taken from the existing sources.

Community Liaison

A neighbourhood consultation process must have been undertaken prior to submission of the CMP first draft. This consultation must relate to construction impacts, and should take place following the granting of planning permission in the lead up to the submission of the CMP. A consultation process specifically relating to construction impacts must take place regardless of any prior consultations relating to planning matters. This consultation must include all of those individuals that stand to be affected by the proposed construction works. These individuals should be provided with a copy of the draft CMP, or a link to an online document. They should be given adequate time with which to respond to the draft CMP, and any subsequent amended drafts. Contact details which include a phone number and email address of the site manager should also be provided.

Significant time savings can be made by running an effective neighbourhood consultation process. This must be undertaken in the spirit of cooperation rather than one that is dictatorial and unsympathetic to the wellbeing of local residents and businesses.

These are most effective when initiated as early as possible and conducted in a manner that involves the local community. Involving locals in the discussion and decision making process helps with their understanding of what is being proposed in terms of the development process. **The consultation and discussion process should have already started, with the results incorporated into the CMP first draft submitted to the Council for discussion and sign off.** This communication should then be ongoing during the works, with neighbours and any community liaison groups being regularly updated with programmed works and any changes that may occur due to unforeseen circumstances through newsletters, emails and meetings.

Please note that for larger sites, details of a construction working group may be required as a separate S106 obligation. If this is necessary, it will be set out in the S106 Agreement as a separate requirement on the developer.

Cumulative impact

Sites located within high concentrations of construction activity that will attract large numbers of vehicle movements and/or generate significant sustained noise levels should consider establishing contact with other sites in the vicinity in order to manage these impacts.

The Council can advise on this if necessary.

13. Consultation

The Council expects meaningful consultation. For large sites, this may mean two or more meetings with local residents **prior to submission of the first draft CMP**.

Evidence of who was consulted, how the consultation was conducted and a summary of the comments received in response to the consultation should be included. Details of meetings including minutes, lists of attendees etc. should be appended.

In response to the comments received, the CMP should then be amended where appropriate and, where not appropriate, a reason given. The revised CMP should also include a list of all the comments received. Developers are advised to check proposed approaches to consultation with the Council before carrying them out. If your site is on the boundary between boroughs then we would recommend contacting the relevant neighbouring planning authority.

Please provide details of consultation of draft CMP with local residents, businesses, local groups (e.g. residents/tenants and business associations) and Ward Councillors.

Consultation has been undertaken in accordance with the requirements with all residents on Antrim Grove, Antrim Road and the management team for the Belsize Community Library. The houses/dwellings on Haverstock Hill immediately to the north of the junction with Antrim Grove have also been contacted. A letter explaining the works proposed and timescales was sent on 6th August 2018 with contact details for the site manager at Erdol Construction Ltd. This was undertaken by Chris Brake, Bell Cornwell Planner, and is included in this CMP at **Appendix A**. As of mid-September 2018, no responses from local residents were received.

14. Construction Working Group

Please provide details of community liaison proposals including any Construction Working Group that will be set up, addressing the concerns of the community affected by the works, the way in which the contact details of the person responsible for community liaison will be advertised to the local community, and how the community will be updated on the upcoming works i.e. in the form of a newsletter/letter drop, or weekly drop in sessions for residents.

The project is likely to commence work in Autumn 2018. Once contractor availability is confirmed it is proposed that the site manager Zbig Kolacz of Erdol Construction Ltd will ensure local residents have his contact details, this will be via a leaflet drop, and contact information (name and contact number) posted on the outside of the site hoardings on Antrim Grove. Additionally, information sheets and timeframes of the works will be located in the Belsize Community Library located on the corner of Antrim Grove and Antrim Road.

15. Schemes

Please provide details of your 'Considerate Constructors Scheme' registration, and details of any other similar relevant schemes as appropriate. Contractors will also be required to follow the "Guide for Contractors Working in Camden" also referred to as "Camden's Considerate Contractors Manual".

Erdol Construction Ltd are CCS approved and registered. The registration number is: TBC

16. Neighbouring sites

Please provide a plan of existing or anticipated construction sites in the local area and please state how your CMP takes into consideration and mitigates the cumulative impacts of construction in the vicinity of the site. The council can advise on this if necessary.

Currently the only work noted within the immediate vicinity of the site is at number 10 Antrim Grove. This currently has hoarding around the edge of the site boundary to facilitate the ongoing works. This scheme is not deemed to be a concern with regard to concurrent operation of both schemes as the works at number 10 do not include any offsite highways works or carriageway suspensions/alterations. No significant construction vehicle movements were noted during a site visit. Once the applicant's works are to be commenced Erdol Construction Ltd will undertake a new assessment of surrounding relevant works and liaison undertaken if in close proximity to 6 Antrim Grove.

Transport

This section must be completed in conjunction with your principal contractor. If one is not yet assigned, please leave the relevant sections blank until such time when one has been appointed.

Camden is a CLOCS Champion, and is committed to maximising road safety for Vulnerable Road Users (VRUs) as well as minimising negative environmental impacts created by motorised road traffic. As such, all vehicles and their drivers servicing construction sites within the borough are bound by the conditions laid out in the CLOCS Standard.

This section requires details of the way in which you intend to manage traffic servicing your site, including your road safety obligations with regard to VRU safety. It is your responsibility to ensure that your principal contractor is fully compliant with the terms laid out in the CLOCS Standard. It is your principal contractor's responsibility to ensure that all contractors and sub-contractors attending site are compliant with the terms laid out in the CLOCS Standard.

Checks of the proposed measures will be carried out by the council to ensure compliance. Please refer to the CLOCS Standard when completing this section. Guidance material which details CLOCS requirements can be accessed here, details of the monitoring process are available here.

Please contact CLOCS@camden.gov.uk for further advice or guidance on any aspect of this section.

Please refer to the CLOCS Overview and Monitoring Overview documents referenced above which give a breakdown of requirements.

CLOCS Contractual Considerations

17. Name of Principal contractor:

Zbig Kolacz – Erdol Construction Ltd. Address:		36 Glebe Road, Finchley, London, N3 2AX	
Email:	team@erdolconstruction.co.uk	Phone:	07956676401

18. Please submit the proposed method for checking operational, vehicle and driver compliance with the CLOCS Standard throughout the duration of the contract (please refer to our CLOCS Overview document and Q18 example response).

The client will ensure that it is a contractual requirement for the contractor to check vehicles accessing the site and to take the appropriate action under the contract.
The client will also undertake regular audits of the contractor's process and compliance checks. This audit will include random vehicle compliance checks undertaken by the client.
The client will request that every reporting period the contractor submits a summary of those checks and details the corrective action taken in case of non-compliance.

Erdol Construction Ltd will ensure that all contractors are fully compliant with CLOCS Standard for construction logistic operators and clients: Managing work related road risk. V2 2015.

As stated in this document, any FORS silver operator will automatically be compliant with CLOCS.

FORS Bronze accreditation as a minimum will be a contractual requirement, FORS Silver and Gold operators will be appointed where possible. Where FORS Bronze operators are appointed, written assurance will be sought from contractors that all vehicles over 3.5t are equipped with additional safety equipment (as per CLOCS standard P13), and that all drivers servicing the site will have undertaken approved additional training (eg. Safe Urban Driving + 1 x e-learning module). CLOCS Compliance will be included as a contractual requirement.

Desktop checks will be made against FORS database of trained drivers and accredited companies as outlined in the CLOCS Standard Managing Supplier Compliance Guide. These will be carried out as per a risk scale based on that outlined in the CLOCS Managing Supplier Guide.

A delivery booking system will be used which will require the entry of a FORS ID number in order for a delivery to be booked onto site. Random spot checks will be conducted every week to ensure compliance.

19. Please confirm that you as the client/developer and your principal contractor have read and understood the CLOCS Standard and included it in your contracts. Please sign-up to join the CLOCS Community to receive up to date information on the standard by expressing an interest online.

I confirm that I have included the requirement to abide by the CLOCS Standard in my contracts to my contractors and suppliers:

Confirmed

Please contact CLOCS@camden.gov.uk for further advice or guidance on any aspect of this section.

Site Traffic

Sections below shown in blue directly reference the CLOCS Standard requirements. The CLOCS Standard should be read in conjunction with this section.

20. Traffic routing: *"Clients shall ensure that a suitable, risk assessed vehicle route to the site is specified and that the route is communicated to all contractors and drivers. Clients shall make contractors and any other service suppliers aware that they are to use these routes at all times unless unavoidable diversions occur."* (P19, 3.4.5)

Routes should be carefully considered and risk assessed, taking into account the need to avoid where possible any major cycle routes and trip generators such as schools, offices, public buildings, museums etc. Where appropriate, on routes that use high risk junctions (i.e. those that attract high volumes of cycling traffic) installing Trixi mirrors to aid driver visibility should be considered.

Consideration should also be given to weight restrictions, low bridges and cumulative impacts of construction (including neighbouring construction sites) on the public highway network. The route(s) to and from the site should be suitable for the size of vehicles that are to be used.

a. Please indicate routes on a drawing or diagram showing the public highway network in the vicinity of the site including details of how vehicles will be routed to the Transport for London Road Network (TLRN) on approach and departure from the site.

Refer to **Drawing 18171-Fig 1** for access and egress routes respectively. This shows a heavy goods vehicle route for accessing and egressing the site, to and from the principle road network.

b. Please confirm how contractors, delivery companies and visitors will be made aware of the route (to and from the site) and of any on-site restrictions, prior to undertaking journeys.

All major deliveries will be managed and co-ordinated by key members of the site team. Weekly Delivery Schedules will be agreed with the contractor to ensure Haverstock Hill does not become congested with 'waiting' vehicles. The delivery schedules will take account of peak traffic times on and around the site and delivery times will need to be limited. Traffic marshals will control the movement of HGV's adjacent to the site.

All deliveries will be given prior notification of the time restrictions when an order/delivery is scheduled during the works. Any delivery that arrives outside of the specified time will be sent away.

21. Control of site traffic, particularly at peak hours: "*Clients shall consider other options to plan and control vehicles and reduce peak hour deliveries"* (P20, 3.4.6)

Construction vehicle movements are generally acceptable between 9.30am to 4.30pm on weekdays and between 8.00am and 1.00pm on Saturdays). If there is a school in the vicinity of the site or on the proposed access and/or egress routes, then deliveries must be restricted to between 9.30am and 3pm on weekdays during term time. (Refer to the *Guide for Contractors Working in Camden*).

A delivery plan should ensure that deliveries arrive at the correct part of site at the correct time. Instructions explaining such a plan should be sent to all suppliers and contractors**.** Consideration should be given to the location of any necessary holding areas for large sites with high volumes of traffic. Vehicles must not wait or circulate on the public highway. Whilst deliveries should be given set times to arrive, dwell and depart, no undue time pressures should be placed upon the driver at any time.

a. Please provide details of the typical sizes of all vehicles and the approximate frequency and times of day when they will need access to the site, for each phase of construction. You should estimate the average daily number of vehicles during each major phase of the work, including their dwell time at the site. High numbers of vehicles per day and/or long dwell times may require vehicle holding procedures.

It is anticipated that the following construction vehicles would be utilised during the works:

- Small skip lorry – 6.26m in length;
- Concrete mixer – 8.36m in length;
- 7.5t Box Van – 8.01m in length;
- Small tipper – 10.2m in length.

No vehicles will access the site itself but will wait in the adjacent on-street construction loading area. Materials being collected/unloaded will be lifted over the footway from the adjacent storage area within the site boundary. A scaffold and hoarding gantry with hoist/conveyor will be constructed over the footway, this will protect pedestrians and ensure continued use of the footway throughout the works, as well as making the movement of materials and deliveries to and from the site boundary more efficient. Use of the footway will be managed and made safe by constant vigilance from the on-site and on-street marshalls. The hoarding and gantry will be adequately lit throughout the works, with appropriate warning signage.

It is reasonably assumed that the maximum number of heavy vehicles would not exceed 5 HGVs per day during the peak periods of the construction phase. These vehicles would include tipper-type vehicles, delivery and concrete mixer trucks. The number of heavy vehicles accessing the site is expected to be considerably less during the site set up, fit out and close down phases. In view of the strict management of construction vehicle activity at the site it is considered unlikely that more than one large vehicle would access the site simultaneously.

Due consideration has been given to determining the most sustainable manner of carrying out the work, disposing of the waste and sourcing new building materials. All site deliveries will be pre-booked and allocated set arrival times between 9.30am and 3.00pm from Monday to Friday during term time and between 9.30am and 4.30pm from Monday to Friday during school holidays. Special consideration has been given to the local library opening hours on Tuesdays and Wednesdays from 10.00am to 6.00pm, and where possible deliveries will be scheduled before opening or on other days of the week. Delivery instructions will be sent to all suppliers and contractors including the maximum dwell times and the requirement to check 20 minutes before arrival to confirm that the loading area is available and ensure they do not wait on any road within the Borough. The engines of contractors' vehicles shall not be kept idling.

b. Please provide details of other developments in the local area or on the route.

Currently the only work noted within the immediate vicinity of the is at number 10 Antrim Grove, and some minor works on the block of flats to the north of the site. Number 10 Antrim Grove currently has hoarding around the edge of the site boundary and ongoing works. This scheme is not deemed to be a concern with regard to concurrent operation of both schemes as the works at number 10 do not include any offsite highways works or carriageway suspensions/alterations. No significant construction vehicle movements were noted during a site visit. Once the applicant's works are to be commenced Erdol Construction Ltd will undertake a new assessment of surrounding relevant works and liaison undertaken if in close proximity to 6 Antrim Grove.

c. Please outline the system that is to be used to ensure that the correct vehicle attends the correct part of site at the correct time.

Pre-arranged delivery times will be set by the site manager and will be strictly adhered to in order to prevent more than one delivery vehicle accessing the site at any one time. The site manager will detail out weekly deliveries so all of the site team are aware of what will be arriving. The above requirement will form part of all contract documentation with suppliers. In view of the above procedure, no 'wider' off-site vehicle holding areas are proposed in association with the proposed works. Fully trained and competent Traffic Marshalls/banksmen will be in attendance at all times to coordinate deliveries. Traffic Marshals will be instructed to turn away any un-scheduled delivery, with follow-up contact by the logistics manager to the delivery company involved to ensure adherence to contracts.

d. Please identify the locations of any off-site holding areas (an appropriate location outside the borough may need to be identified, particularly if a large number of delivery vehicles are expected) and any measures that will be taken to ensure the prompt admission of vehicles to site in light of time required for any vehicle/driver compliance checks. Please refer to question 24 if any parking bay suspensions will be required for the holding area.

Not applicable. All deliveries/vehicle movements will access the site directly. Apart from a small bay suspension to accommodate a skip/storage of materials.

e. Please provide details of any other measures designed to reduce the impact of associated traffic (such as the use of construction material consolidation centres).

The site manager, and by delegation the site foreman, will take ownership of the final/ approved CMP and will ultimately be responsible for implementing the measures set out therein. The Contractor will contact Camden Highways Officers prior to commencement of works to agree any final matters relating to the Construction Management strategy.

Delivery Times

Pre-arranged delivery times will be set by the site manager and will be strictly adhered to in order to prevent more than one delivery vehicle accessing the site at any one time. The above requirement will form part of all contract documentation with suppliers. In view of the above procedure, no off-site vehicle holding areas are proposed in association with the proposed works.

Co-ordination with Other Construction Activity

The site manager will, prior to commencement on site and at regular intervals during the construction and in liaison with relevant officers at Camden, check for other local construction activity for the purpose of liaising with those sites on matters relating to construction activity (including vehicle movements). Camden Council should inform the Site Manager of any other construction activity in the vicinity of the site.

Co-ordination with Domestic Waste Collections

The LB Camden's website states that domestic rubbish and recycling collection activity in the vicinity of the site takes place on Tuesday's. The Contractor, all sub-contractors and suppliers will be made aware of the existing collection activity and will ensure that waste collection vehicles are not unduly obstructed by the construction works. To this end, priority will be given by banksmen to waste collection vehicles where relevant.

Road Sweeping and Wheel Washing

An adhoc wheel wash, in accordance with good practice, will be carried out as and when vehicles are dirty and undertaken within the construction loading area on-street throughout the construction period. Any mud or debris that might be on the public highways will be removed by a dedicated member of the Contractor's staff (road sweeper).

General Management

The following general measures will be in place:

- All parties to sign In & Out (name / time) at main entrance;
- A daily record of visitors will be kept on site;
- Deliveries to site will be restricted between the hours of:
  - 09.30 – 15.00hrs Monday to Fridays during term time, 09:30-16:30 during school holidays;
  - 09.30 – 13.00hrs Saturdays and no other times, including Sundays and Public Holidays;
- Trade Contractors are to submit material delivery requests to the Site Manager a minimum of 24 hours in advance;
- The main Contractor, once appointed, is to liaise with all sub-Contractors to inform them of the agreed vehicle route to and from the site;
- The Contractor is to notify all suppliers that no waiting or queuing is permitted on local roads;
- No vehicles will be left unattended. No stacking of vehicles or parking within parking bays is permitted. Vehicles not adhering to the above can and will be turned away by the Contractor;
- All vehicles will access the site off Haverstock Hill. The Contractor is to maintain safe control of traffic and deliveries across the public highway off site;
- A banksman will be provided to manage the construction loading area. The banksman will additionally be tasked with ensuring that pedestrian/cycle movement can be safely provided whilst works are taking place;
- All vehicles loading/ off-loading materials to and from high level bedded vehicles will need to provide suitable guard rail protection;
- Implementing an effective procedure to deal with complaints from third parties to ensure issues are dealt with efficiently and quickly, via the site manager.

Pollution and Dust Control

Camden Council require the control of construction vehicle and plant emissions, with particular emphasis on PM10 and NOx emissions. Upon appointment of a Contractor, and prior to any works taking place, a Method Statement will be prepared and submitted in line with the minimum recommendations set out in Camden's Local policy guidance.

Similarly, the Method Statement will include details relating to the control of dust emissions from demolition and construction activity.

The method Statements should include measures to reduce dust pollution and other airborne debris such as:

- Ensuring that all materials transported to and from site are in enclosed containers or fully sheeted;
- Ensuring stock piles of topsoil etc. are kept below hoarding heights and kept damp in dry windy conditions;
- All vehicles removing dust generating materials or waste are to be completely sheeted with tarpaulin/ netting;

- Ensuring materials have a minimum of packaging;
- Ensuring all polystyrene and similar lightweight materials are weighted down;
- Making sure all dust generating materials are adequately packaged;
- Ensuring all vehicles leaving the construction loading area are clean, or using the wheel wash prior to departure;
- Keeping the loading drop heights of soil into lorries as low as possible;
- Establish air quality procedures to minimise dust generation and control plant and vehicle dust emissions;
- Undertaking regular air quality sampling to monitor air quality levels.

In addition to the above provisions, the following measures will be taken to reduce any further negative effects on the environment:

- Ensuring all contaminants on site are safely stored with the necessary procedures put in place for leaks and spillages etc.
- A waste management system will be implemented on site.

Noise / Vibration

A variety of measures will be used to minimise the noise levels at the site, including:

- Coordinated delivery times and efficient traffic management to prevent queuing of traffic accessing the site;
- Ensuring all plant has sound reduction measures (mufflers, baffles or silencers);
- Utilising construction techniques that minimise the production of noise;
- Strict adherence to the site working hours;
- Implement an action plan where noise levels exceed acceptable levels;
- Positioning plant away from properties;
- Machines not in use will be throttled down to a minimum;
- Cutting operations will be kept off site as much as possible by pre-fabrication;
- Localised shrouding of plant in accordance with BS5228; and
- Toolbox talks to site operatives.

Competent Heavy Vehicle Operators

All contractors and sub-contractors operating vehicles over 3.5 tonnes will meet all of the following conditions:

- Operators must be a member of TfL's Fleet Operator Recognition Scheme (www.tfl.gov.uk/fors) or similar at the Bronze level;
- All vehicles associated with the construction of the Development must:
  - Have Side Guards fitted unless it can be demonstrated to the reasonable satisfaction of the Contractor that the vehicle will not perform the function for which it was built if Side Guards are fitted;
  - Have a close proximity warning system fitted comprising of a front mounted, rear facing CCTV camera (or Fresnel Lens where this provides reliable alternative), a Close Proximity Sensor, an in-cab warning device (visual or audible) and an external warning device to make the road user in close proximity aware of the driver's planned manoeuvre;
  - Have a Class VI Mirror;
  - Bear prominent signage on the rear of the vehicle to warn cyclists of the dangers of passing the vehicle on the inside.

Construction Management Plan Review

The site manager will deal with any complaints from local residents and businesses. To this end, contact details of the project team will be displayed at the site entrance on the hoarding and will be detailed on regular newsletters.

The site manager will also review the CMP, in liaison with the foreman and will update the Plan as and when required. This will take into account local resident, business and Council views on how the operation may be improved. Any significant changes to the CMP will be reported to the Borough's Department of Planning and Borough Development by the main Contractor. It is highlighted that the main Contractor will be a member of the 'Considerate Constructors Scheme'. The Principal Contractor shall follow the recommendations and requirements set out in LB Camden's *"Guide for Contractors Working in Camden"*.

22. Site access and egress: *"Clients shall ensure that access to and egress from the site is appropriately managed, clearly marked, understood and clear of obstacles."* (P18, 3.4.3)

Vehicles entering and leaving the site should be carefully managed, using gates that are clearly marked and free from obstacles. Traffic marshals must ensure the safe passage of all traffic on the public highway, in particular pedestrians and cyclists, when vehicles are entering and leaving site, particularly if reversing.

Traffic marshals, or site staff acting as traffic marshals, should hold the relevant qualifications required for directing large vehicles when reversing. Marshals should be equipped with 'STOP – WORKS' signs (not STOP/GO signs) if control of traffic on the public highway is required. Marshals should have radio contact with one another where necessary.

a. Please detail the proposed access and egress routes to and from the site

The site compound will be the edge of the site, a hoarding will bound the entire site boundary, with the front boundary onto Antrim Grove being the main point of access with a lockable gate within the hoarding. Figure 1 (**18187-Fig1**) shows the access route to and from the site.

Access

From the principle road network to the north (north circular/M1) vehicles will travel south on Hendon Way (A41), then Finchley Road (A41), before turning left to the north at Swiss Cottage, towards Hampstead on Fitzjohn's Avenue. At Hampstead a tight turn south-east on to Hampstead High Street (A502) leads towards Haverstock Hill and access through a right turn onto Antrim Grove.

Egress

For returning to the principle road network vehicles will continue along Antrim Grove, as it becomes Antrim Road, then turn left onto England's Lane, a right turn leads back on to Haverstock Hill south-east bound. At Chalk Farm, a right turn on to Regent's Park Road, leading to Bridge Approach and a left turn on to Adelaide Road allows access west bound towards the A41. At Swiss Cottage a right turn northbound allows access north on the A41 back towards the north circular and Junction 1 of the M1.

b. Please describe how the access and egress arrangements for construction vehicles will be managed.

It is anticipated that the following construction vehicles would be utilised during the works:

- Small skip lorry – 6.26m in length;
- Concrete mixer – 8.36m in length;
- 7.5T Box Van – 8.01m in length; and
- Small tipper – 6.52m in length.

Site Access/ Internal Highways

All vehicles will arrive at the site from Haverstock Hill, using the construction loading area that is located in front of the property to load/unload. This area is created by the temporary suspension of 15m of parking bays (3 no.) in front of the site on Antrim Grove. No vehicles will access the site boundary directly. 15m is required for the successful manoeuvre of an 8m box van (largest expected vehicle) whilst a skip is in situ at the eastern end of the suspension.

Conflict Management

Traffic marshalls/banskmen will be on hand at all times during construction to manage and direct vehicles, and assist with pedestrian/cycle movements near to the construction loading area. The gantry and hoardings above the footway will protect pedestrians and retain the use of the footway throughout the works.

Materials Unloading / Storage

The site will accommodate the majority of plant and material storage areas free of the public highway during the entirety of the works, at the front of the site. A small skip/materials storage area (3m x 2m) will be located within the carriageway, as part of the 15m parking bays suspension.

Diversion on the Public Highway/ Car Parking Bay Suspension

The expected volume and type of construction traffic required for the considered works will not lead to the requirement for diversion of traffic on the public highway. It is expected that 15m of on-street parking bay is expected to require suspension owing to the proposed construction loading area. 15m is required for the successful manoeuvre of an 8m box van (largest expected vehicle) whilst a skip is in situ at the eastern end of the suspension.

Provision for Pedestrians

Pedestrian movement past the site will continue throughout the works with the provision of a raised gantry and hoarding. This will keep pedestrians safe during the works and will enable the footway to remain open. It is considered that the loading and unloading of materials/deliveries will be more efficient under this arrangement.

Contractor's Vehicles

The Principal Contractor will actively discourage contractors parking. All staff and sub-contractors will be informed that on-street parking in the vicinity of the site is restricted. It is thus anticipated that the amount of staff-related traffic resulting from the construction works at the development will not result in any material impact on the operation of the public highway.

All construction staff will be encouraged to use public transport, with the nearest underground station being Belsize Park on the Northern Line and the nearest rail station being Kentish Town West. Buses operating on Haverstock Hill to the north-east additionally provide access to the site which has a PTAL of 3.

c. Please provide swept path drawings for any tight manoeuvres on vehicle routes to and from the site including proposed access and egress arrangements at the site boundary (if necessary).

Please see the following drawings:

Drawing 18187-100 – Local Highway Network

Drawing 18187-101 – Proposed Construction Loading Area and Highway Layout

Drawing 18187-102 – Small Skip Lorry

Drawing 18187-103 – Concrete Mixer

Drawing 18187-104 – Box Van

Drawing 18187-105 – Small Tipper

d. Provision of wheel washing facilities should be considered if necessary. If so, please provide details of how this will be managed and any run-off controlled.

Given that most of the deliveries will be undertaken from on-street it is not envisaged that a full wheel wash facility will be required. Any debris/dirt will be cleaned and collected on an adhoc basis when necessary to ensure that it does not enter the on-street gullies and drains.

23. Vehicle loading and unloading: *"Clients shall ensure that vehicles are loaded and unloaded on-site as far as is practicable."* (P19, 3.4.4)

If this is not possible, Traffic Marshalls must ensure the safe passage of pedestrians, cyclists and motor traffic in the street when vehicles are being loaded or unloaded.

Please provide details of the parking and loading arrangements for construction vehicles with regard to servicing and deliveries associated with the site (e.g. delivery of materials and plant, removal of excavated material). This is required as a scaled site plan, showing all points of access and where materials, skips and plant will be stored, and how vehicles will access and egress the site. If loading is to take place off site, please identify where this is due to take place and outline the measures you will take to ensure that loading/unloading is

carried out safely. Please outline in question 24 if any parking bay suspensions will be required.

Approximately 15m of on-street parking bays will be suspended adjacent to the site. The space at the front of the site is not large enough for onsite vehicle waiting or manoeuvring. Therefore, a loading area and over footway gantry and hoist/conveyor will enable the materials and goods to be transferred whilst retaining the use of the footway and protecting pedestrians. The gantry and hoardings will be adequately lit and provided with warning signage. Please refer to the answers shown at 21d and e. 15m is required for the successful manoeuvre of an 8m box van (largest expected vehicle) whilst a skip is in situ at the eastern end of the suspension.

Highway interventions

Please note that Temporary Traffic Orders (TTOs) and hoarding/scaffolding licenses may be applied for prior to CMP submission but won't be granted until the CMP is signed-off.

If the site is on or adjacent to the TLRN, please provide details of preliminary discussions with Transport for London in the relevant sections below.

- **24. Parking bay suspensions and temporary traffic orders**

Please note, parking bay suspensions should only be requested where absolutely necessary. Parking bay suspensions are permitted for a maximum of 6 months, requirement of exclusive access to a bay for longer than 6 months you will be required to obtain Temporary Traffic Order (TTO) for which there is a separate cost.

Please provide details of any proposed parking bay suspensions and TTO's which would be required to facilitate construction. **Building materials and equipment must not cause obstructions on the highway as per your Considerate Contractors obligations unless the requisite permissions are secured.**

Information regarding parking suspensions can be found here.

A Temporary Traffic Regulation Order is required for the suspension of three parking bays on Antrim Grove as shown on **Drawing 18187-101.** This will enable space for a skip/storage area within the carriageway, and space for construction vehicles to manoeuvre and wait whilst loading and unloading with use of the hoist/gantry/conveyor. This will allow the operation of the Antrim Grove carriageway to continue throughout the works.

25. Scaled drawings of highway works

Please note that use of the public highway for storage, site accommodation or welfare facilities is at the discretion of the Council and is generally not permitted. If you propose such use you must supply full justification, setting out why it is impossible to allocate space on-site. You must submit a detailed (to-scale) plan showing the impact on the public highway that includes the extent of any hoarding, pedestrian routes, parking bay suspensions and remaining road width for vehicle movements. We prefer not to close footways but if this is unavoidable, you should submit a scaled plan of the proposed diversion route showing key dimensions.

- a. Please provide accurate scaled drawings of any highway works necessary to enable construction to take place (e.g. construction of temporary vehicular accesses).

Not applicable.

b. Please provide details of all safety signage, barriers and accessibility measures such as ramps and lighting etc.

Road works warning signs TSRGD Diagram 7001 will be located on each side of the construction area within the footway and carriageway. Barriers and ramps will be provided if applicable depending on the stage of the works and deliveries, these will be managed and overseen by traffic marshals/banksmen at all times.

26. Diversions

Where applicable, please supply details of any diversion, disruption or other anticipated use of the public highway during the construction period (alternatively a plan may be submitted).

The gantry above the footway adjacent to the site on Antrim Grove will be located in highway land. The use of the gantry and hoarding with hoist/conveyor is the safest way of moving materials and deliveries from vehicles to the site or vice versa, whilst also retaining the use of the footway.

27. VRU and pedestrian diversions, scaffolding and hoarding

Pedestrians and/or cyclist safety must be maintained if diversions are put in place. Vulnerable footway users should also be considered. These include wheelchair users, the elderly, those with walking difficulties, young children, those with prams, the blind and partially sighted. Appropriate ramping must be used if cables, hoses, etc. are run across the footway.

Any work above ground floor level may require a covered walkway adjacent to the site. A licence must be obtained for scaffolding and gantries. The adjoining public highway must be kept clean and free from obstructions. Lighting and signage should be used on temporary structures/skips/hoardings etc.

A secure hoarding will generally be required at the site boundary with a lockable access.

a. Please provide details describing how pedestrian and cyclist safety will be maintained, including any proposed alternative routes (if necessary), and any Traffic Marshall arrangements.

A site hoarding will be provided around the site boundary and over the gantry above the Antrim Grove footway, this will include warning signage, lights and a lockable access gate. Road Works warning signs (TSRGD Diagram 7001) will be present on the footway on each side of the site (as well as further away within the carriageway). When vehicles are manoeuvring to and from the construction loading area, two banskmen will assist, one at the front and one at the rear of the vehicles. The gantry and hoarding mean pedestrians are safe to continue using the footway, however if necessary they can choose to use the footway to the southern side of Antrim Grove which will be unaffected during the works.

b. Please provide details of any temporary structures which would overhang the public highway (e.g. scaffolding, gantries, cranes etc.) and details of hoarding requirements or any other occupation of the public highway.

As above, the site hoarding and gantry will be present over the footway and require a supporting structure on the Antrim Grove footway. Adequate pedestrian movement space will be retained under the gantry. The gantry will include signage and lighting throughout the works. The gantry will allow for a hoist and/or conveyor to be used to move materials/deliveries during the works.

SYMBOL IS FOR INTERNAL USE

Environment

To answer these sections please refer to the relevant sections of **Camden's Minimum Requirements for Building Construction (CMRBC).**

28. Please list all noisy operations and the construction method used, and provide details of the times that each of these are due to be carried out.

The main sources of noise on the project are likely to be:

- Excavation
- Groundworks
- Fit Out
- Site Vehicles and Site Plant operating near/adjacent to the site

29. Please confirm when the most recent noise survey was carried out (before any works were carried out) and provide a copy. If a noise survey has not taken place please indicate the date (before any works are being carried out) that the noise survey will be taking place, and agree to provide a copy.

A baseline noise survey was undertaken between 20th and 23rd of July 2018, and the report from the survey is included at **Appendix B**.

Measures to avoid noise issues will include:

- Building work which can be heard at the boundary of the site will not be carried out on Saturdays, Sundays or Bank Holidays.
- Noise limits are to be set according to BS5228-1 2009. The contractor is to select plant, methodology and controls in order to keep within these limits and avoid disruption to adjacent premises.
- The works are to take place within the hoarded confines of the site. Above the 6 foot plywood hoarding line (approx. 1.2m off the face of the front elevation) any scaffolding is to be clad with fire rated monoflex sheeting. As well as providing a visual screen this will help to contain noise and dust from the works.

30. Please provide predictions for noise and vibration levels throughout the proposed works.

Potential noise levels generated by the construction works have been calculated using the guidance of BS 5228. Noise levels generated are dependent on a variety of factors, which include plant used, distance between source and receptor and % on-time for each item ofplant.

The following phases and plant are assumed for a typical similar project:

	Phase	Plant Used
1	Cutting section of existing floor slab	Electric conveyor. Electric breaker
2	Hand digging Electric	Electric conveyor
3	Breaking down of firm soil	SDS spade, electric conveyor
4	Removal of hard material, small area	Electric saw/hammer, electric conveyor
5	Removal of hard material, large area	Electric saw/hammer, electric conveyor
6	Concreteing concrete	Concrete mixer

Source noise data for the plant has been obtained from the plant manufacturers or taken from the database contained in BS 5228. The calculations assume an electric motor driven conveyor is located within the site hoarding. The calculations allow for break-out from inside the building through an open window of dimensions 1.5 m x 1.2 m.

As sites are often in close proximity to neighbouring properties, a distance of 6 m between the site and the receiver has been assumed. Calculations (with all assumptions) are summarised below:

	Phase	Façade Construction Noise Level, dB LAeq,12 hour
1	Cutting section of existing floor slab	61
2	Hand digging Electric	60
3	Breaking down of firm soil	65
4	Removal of hard material, small area	62
5	Removal of hard material, large area	61
6	Concreteing concrete	58

Where properties are spaced further apart, noise levels are reduced. The predicted noise level for the normal excavation method of hand digging and conveyor operation is 60 dB LAeq,12hr which is well below the assumed limit of 65 dB LAeq, 12hr allowing ample headroom for a contribution from ambient noise. During concreting operations, a noise level of 58 dB LAeq, 12hr is predicted which is considerably lower than the assumed noise limit.

This is a small residential project where vibration impact to the nearest receptor is not expected to be significant, however vibration levels will be kept in line with the London Good Practice Guide for Noise and Vibration. If vibration complaints are received, live monitoring will be undertaken such that any vibrations in excess of 30mms- ppv. 1st action 5.00mms ppv will result in works being stopped. Significant vibration is not expected to be an ongoing or regular occurrence, only likely to occur at all during the first demolition phase where concrete may be excavated. 30min respite windows will be provided in the event of any complaint.

31. Please provide details describing mitigation measures to be incorporated during the construction/demolition works to prevent noise and vibration disturbances from the activities on the site, including the actions to be taken in cases where these exceed the predicted levels.

The measures we will take to reduce noise pollution will be as follows:

- The contractor will work closely and cooperate fully in terms of working in normal site hours,as set out by London Borough of Camden which also takes into account the planning condition that has been stipulated regarding working hours.
- Well maintained, sound attenuated plant will be used to carry out all operations reducing plant noise to acceptable levels
- Solid hoarding will be used along the boundary to the residential properties. This will reflect sound back into the site to a significant extent. This will be supplemented locally to machinery with movable sound reflecting/absorbing barriers.
- Noise arising from Site Vehicles and plant will be managed first of all by rigorously implementing the site hours.

Careful selection of plant and vehicles is essential. All plant used on the site will be sound attanuated and will be regularly serviced/maintained to ensure it is operating correctly. The site induction for plant operators will cover the issue of noise specifically and they will be warned against over revving of plant and the operation of horns in all but necessary situations. Machine operatives will be advised to isolate plant/ equipment during idle periods reducing not only noise levels but encouraging efficient running of equipment and reduced fumes.

In terms of misbehaviour of operatives and staff on the site this will be guarded against by strict rules being out in place that will form part of Supply Chain method statements and will be covered in site induction and tool box talks. Any operative found in contravention of the required standards will be warned for a first offence and removed from the site should there be a re-occurrence.

All the measures mentioned above and others will be captured and monitored in our proposals under the Considerate Contractors scheme.

As part of the CCS requirement and in line with our Company Policy, we will put in place a complaints procedure which will include 24/7 contact details for the Site Management Team, a logging system for complaints and a process for remedial action to be identified and implemented.

32. Please provide evidence that staff have been trained on BS 5228:2009

Contractor confirms this requirement will be met and provided once start date is confirmed.

33. Please provide details on how dust nuisance arising from dusty activities, on site, will be prevented.

In relation to dust, groundworks & demolitions is again likely to be the main source of disruption. Prior to starting daily operations wind speed and direction will be assessed and method/ sequence of works adjusted if necessary. Water spraying techniques will be utilised in necessary to suppress dust.

Apart from groundwork activities dust is likely to present a problem during long dry spells and in these periods damping down across the site will be employed to avoid windborne dust crossing the site boundary and causing inconvenience.

Please also refer to the answers shown at 21e.

34. Please provide details describing how any significant amounts of dirt or dust that may be spread onto the public highway will be prevented and/or cleaned.

With regard to the risk of mud being spread to the adjacent Antrim Grove highway, an adhoc wheel wash/clean will be available from the construction loading area within the carriageway. Dirt/ debris will be cleaned up at the end of each day that works are undertaken on site.

35. Please provide details describing arrangements for monitoring of noise, vibration and dust levels.

Please also refer to the answers shown at 21e.

36. Please confirm that a Risk Assessment has been undertaken at planning application stage in line with the GLA policy. The Control of Dust and Emissions During Demolition and Construction 2104 (SPG), that the risk level that has been identified, and that the appropriate measures within the GLA mitigation measures checklist have been applied. Please attach the risk assessment and mitigation checklist as an appendix.

The contractor will, where possible need to keep gaseous and particulate emissions to the atmosphere to a minimum. This will be particularly important during the demolition phase. The most important mitigation measure is the provision of effective hoarding which must extend one level above the working floor during demolition. Additional precautions include:

- A ban on burning of waste
- Stripping the inside of buildings prior to demolition of structure
- Regular cleaning of hard standings and adjacent footways and roadways using wet sweeping methods
- Keep stockpiles of demolished materials on site to a minimum and damp down what is present.
- Ensure water suppression is used during any demolition
- Use enclosed rubble chutes
- Use prefabrication to avoid the need for grinding, sawing or cutting on site where reasonably practicable
- Avoid unnecessary running of exhaust-producing plant

37. Please confirm that all of the GLA's 'highly recommended' measures from the SPG document relative to the level of risk identified in question 36 have been addressed by completing the GLA mitigation measures checklist.

Please see **Appendix C.**

38. If the site is a 'High Risk Site', 4 real time dust monitors will be required. If the site is a 'Medium Risk Site', 2 real time dust monitors will be required. The risk assessment must take account of proximity to sensitive receptors (e.g. schools, care homes etc), as detailed in the SPG. Please confirm the location, number and specification of the monitors in line with the SPG and confirm that these will be installed 3 months prior to the commencement of works, and that real time data and quarterly reports will be provided to the Council detailing any exceedances of the threshold and measures that were implemented to address these.

The site is assessed as a 'Low Risk, Domestic Site' according to the Camden SPG; the significant majority of work is confined under the footprint of the house and working with low dust emission, dampened spoil and waste. However, dust will be monitored on a regular basis and dust mitigation measures used as per Q37 will be implemented which in most cases are measures appropriate for higher risk sites.

39. Please provide details about how rodents, including rats, will be prevented from spreading out from the site. You are required to provide information about site inspections carried out and present copies of receipts (if work undertaken).

Pest survey found no evidence of pests on site. Please see **Appendix D**.

40. Please confirm when an asbestos survey was carried out at the site and include the key findings.

Asbestos survey found no evidence of asbestos at the property, please see **Appendix E**.

41. Complaints often arise from the conduct of builders in an area. Please confirm steps being taken to minimise this e.g. provision of a suitable smoking area, tackling bad language and unnecessary shouting.

In terms of misbehaviour of operatives and staff on the site this will be guarded against by strict rules being out in place that will form part of Supply Chain method statements and will be covered in site induction and tool box talks. Any operative found in contravention of the required standards will be warned for a first offence and removed from the site should there be a re-occurrence.

42. If you will be using non-road mobile machinery (NRMM) on site with net power between 37kW and 560kW it will be required to meet the standards set out below. The standards are applicable to both variable and constant speed engines and apply for both PM and NOx emissions.

From 1st September 2015

(i) Major Development Sites – NRMM used on the site of any major development will be required to meet Stage IIIA of EU Directive 97/68/EC

(ii) Any development site within the Central Activity Zone - NRMM used on any site within the Central Activity Zone will be required to meet Stage IIIB of EU Directive 97/68/EC

From 1st September 2020

(iii) Any development site - NRMM used on any site within Greater London will be required to meet Stage IIIB of EU Directive 97/68/EC

(iv) Any development site within the Central Activity Zone - NRMM used on any site within the Central Activity Zone will be required to meet Stage IV of EU Directive 97/68/EC

Please provide evidence demonstrating the above requirements will be met by answering the following questions:

a) Construction time period (TBC once start date confirmed):

b) Is the development within the CAZ? (Y/N): No

c) Will the NRMM with net power between 37kW and 560kW meet the standards outlined above? (Y/N): Yes

d) Please provide evidence to demonstrate that all relevant machinery will be registered on the NRMM Register, including the site name under which it has been registered: Confirmed if applicable once a contractor is appointed.

e) Please confirm that an inventory of all NRMM will be kept on site and that all machinery will be regularly serviced and service logs kept on site for inspection: Confirmed if applicable.

f) Please confirm that records will be kept on site which details proof of emission limits, including legible photographs of individual engine plates for all equipment, and that this documentation will be made available to local authority officers as required: Confirmed

SYMBOL IS FOR INTERNAL USE

Agreement

The agreed contents of this Construction Management Plan must be complied with unless otherwise agreed in writing by the Council. This may require the CMP to be revised by the Developer and reapproved by the Council. The project manager shall work with the Council to review this Construction Management Plan if problems arise in relation to the construction of the development. Any future revised plan must be approved by the Council in writing and complied with thereafter.

It should be noted that any agreed Construction Management Plan does not prejudice further agreements that may be required such as road closures or hoarding licences.

Please notify that council when you intend to start work on site. Please also notify the council when works are approximately 3 months from completion.

Signed: ……

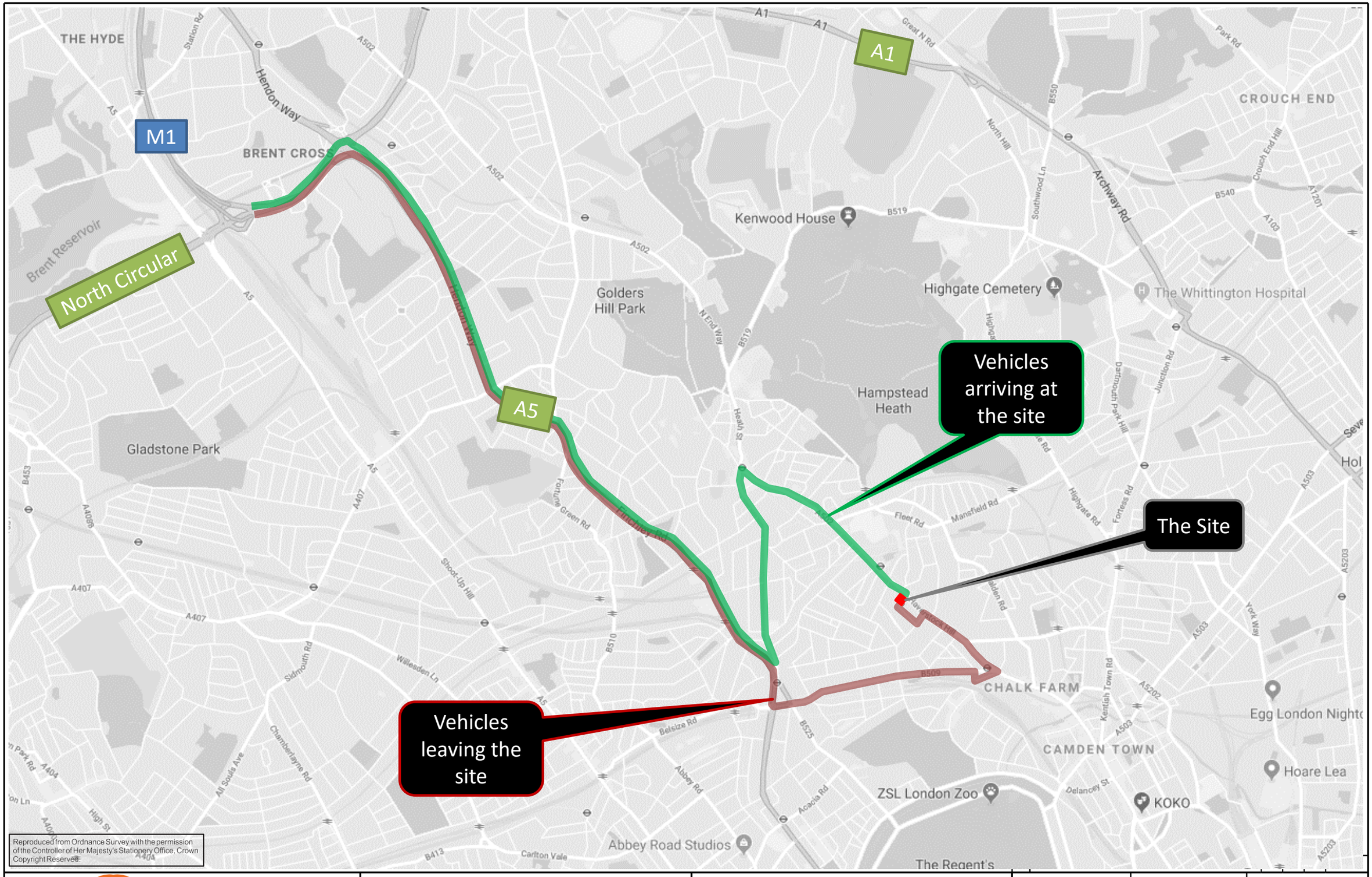
Date: ……12/09/18……..

Print Name: ……TIM NORMAN……

Position: ……SENIOR TRANSPORT PLANNER……

Please submit to: planningobligations@camden.gov.uk

End of form.



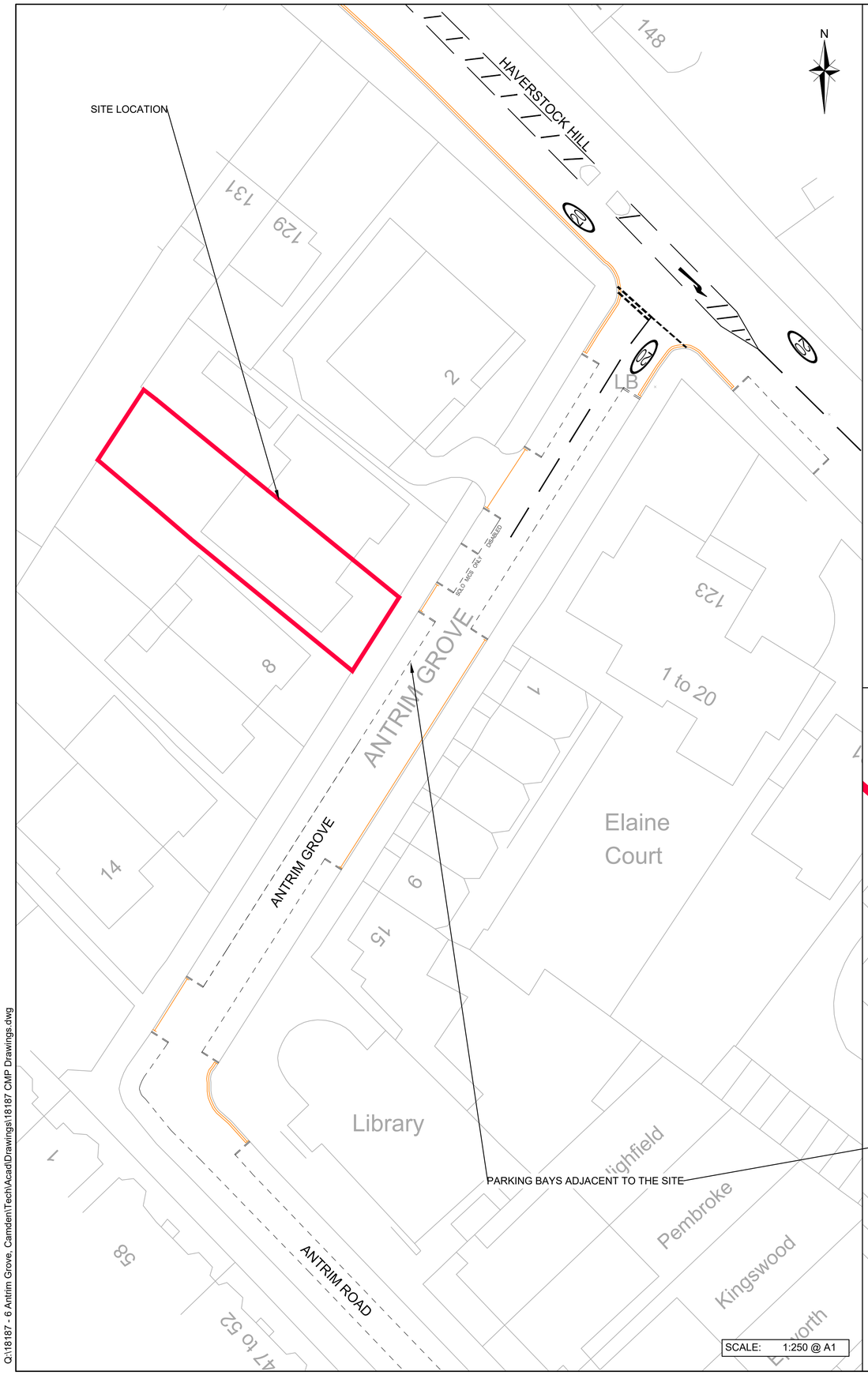
ODYSSEY
DEVELOPING JOURNEYS

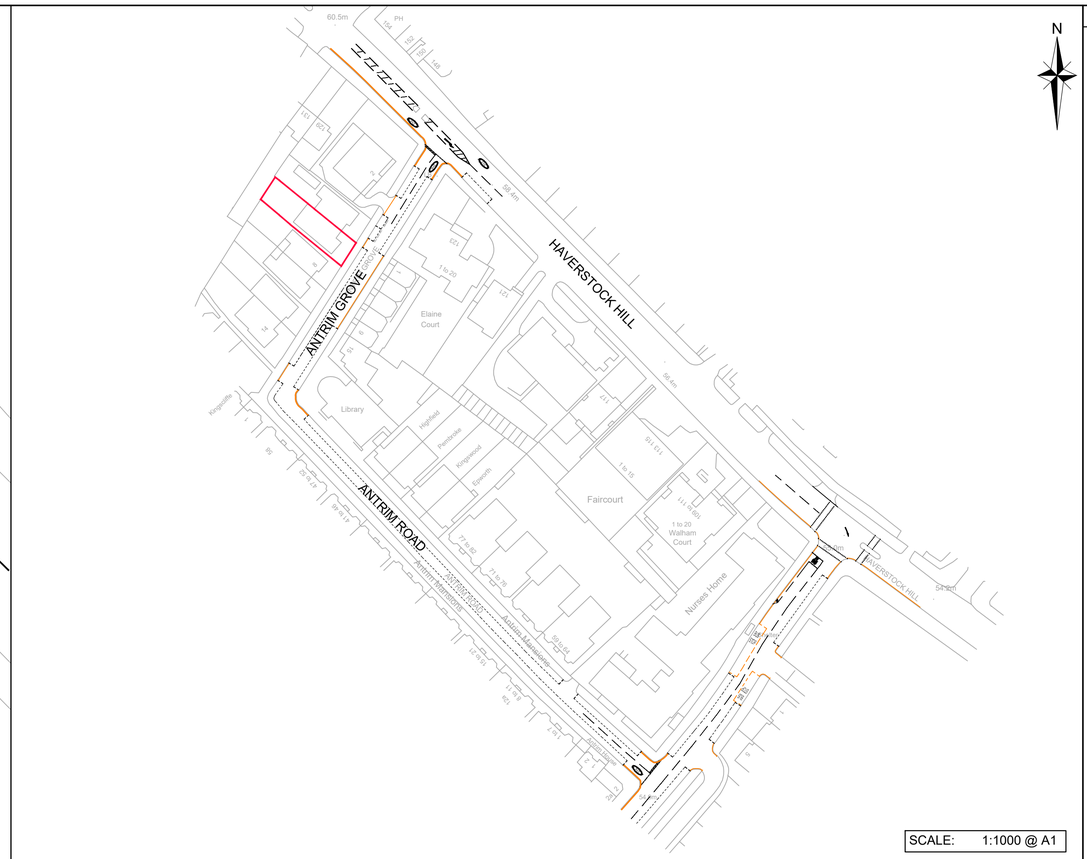
Elizabeth House
39 York Road
London
SE1 7NQ

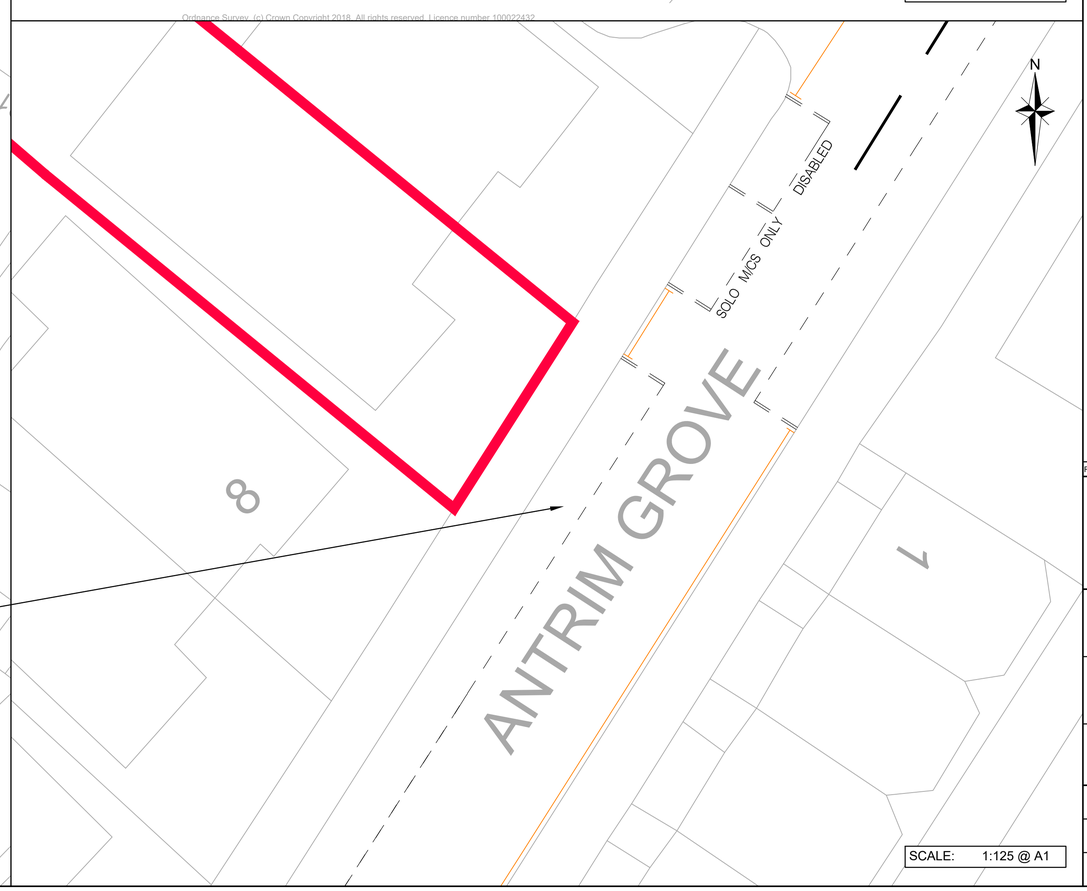
Telephone: 0207 620 2444
Fax: 0207 620 1168
E: info@odysseyconsult.co.uk
W: www.odysseyconsult.co.uk

Job Title: 6 ANTRIM GROVE	Client: PBO	Scale: NTS	Date: JULY 18	Designed: TN
Drawing Title: HGV ROUTEING PLAN		Drawn: TN	Checked: MJB	Approved: MJB
		Job No: 18187	Figure No: FIGURE No.1	Rev:

DRAWING-NO 18187-Fig 1







NOTES

KEY

SITE BOUNDARY

Rev	Amendments	Drn	Chk	App	Date

ODYSSEY

Elizabeth House,
39 York Road,
London,
SE1 7NQ

Telephone: 02076 202444
Fax: 02076 201168
E: info@odysseyconsult.co.uk
W: www.odysseyconsult.co.uk

Job Title
6 ANTRIM GROVE
BELSIZE PARK

Drawing Title
CMP DRAWINGS
EXISTING LAYOUT

Client
PBO

Scale	Date	Designed
AS SHOWN	JULY 18	TN
Drawn	Checked	Approved
TN	MJB	MJB
Job No	Drawing No	Rev
18187	18187-100	-

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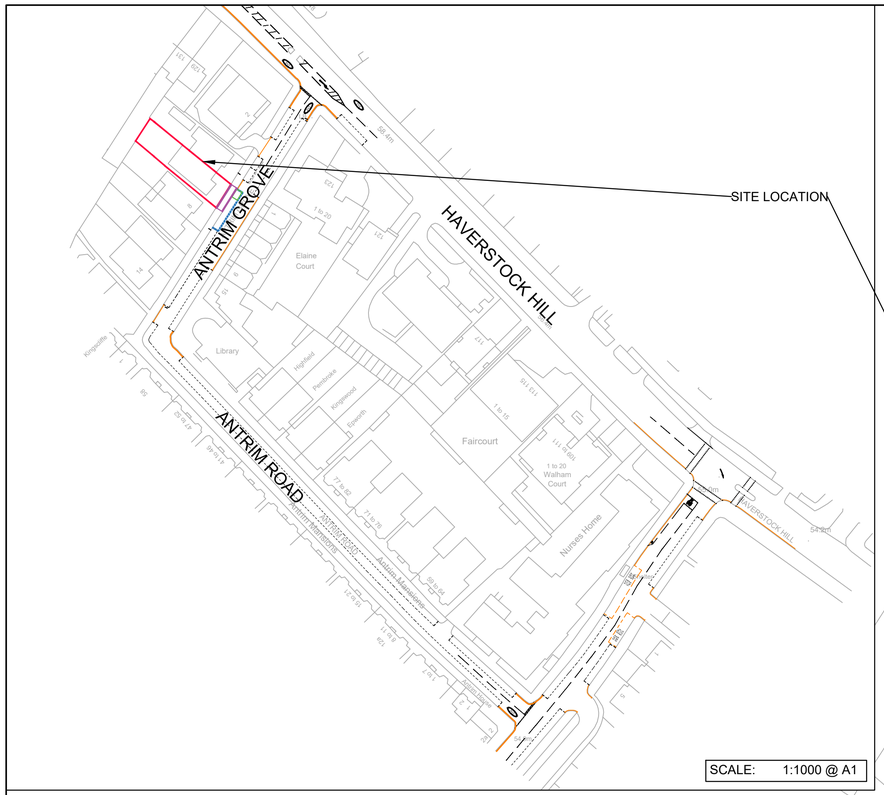

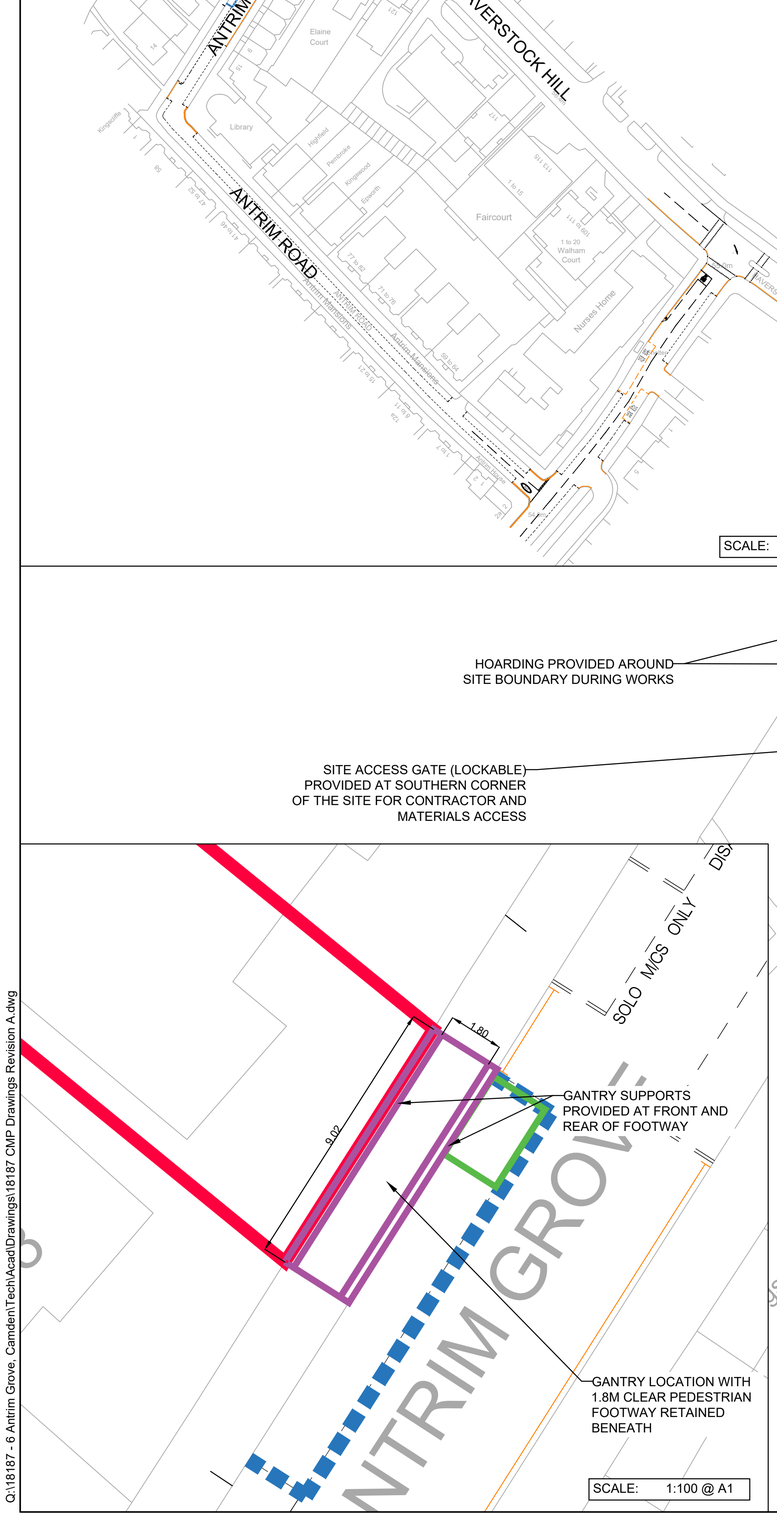

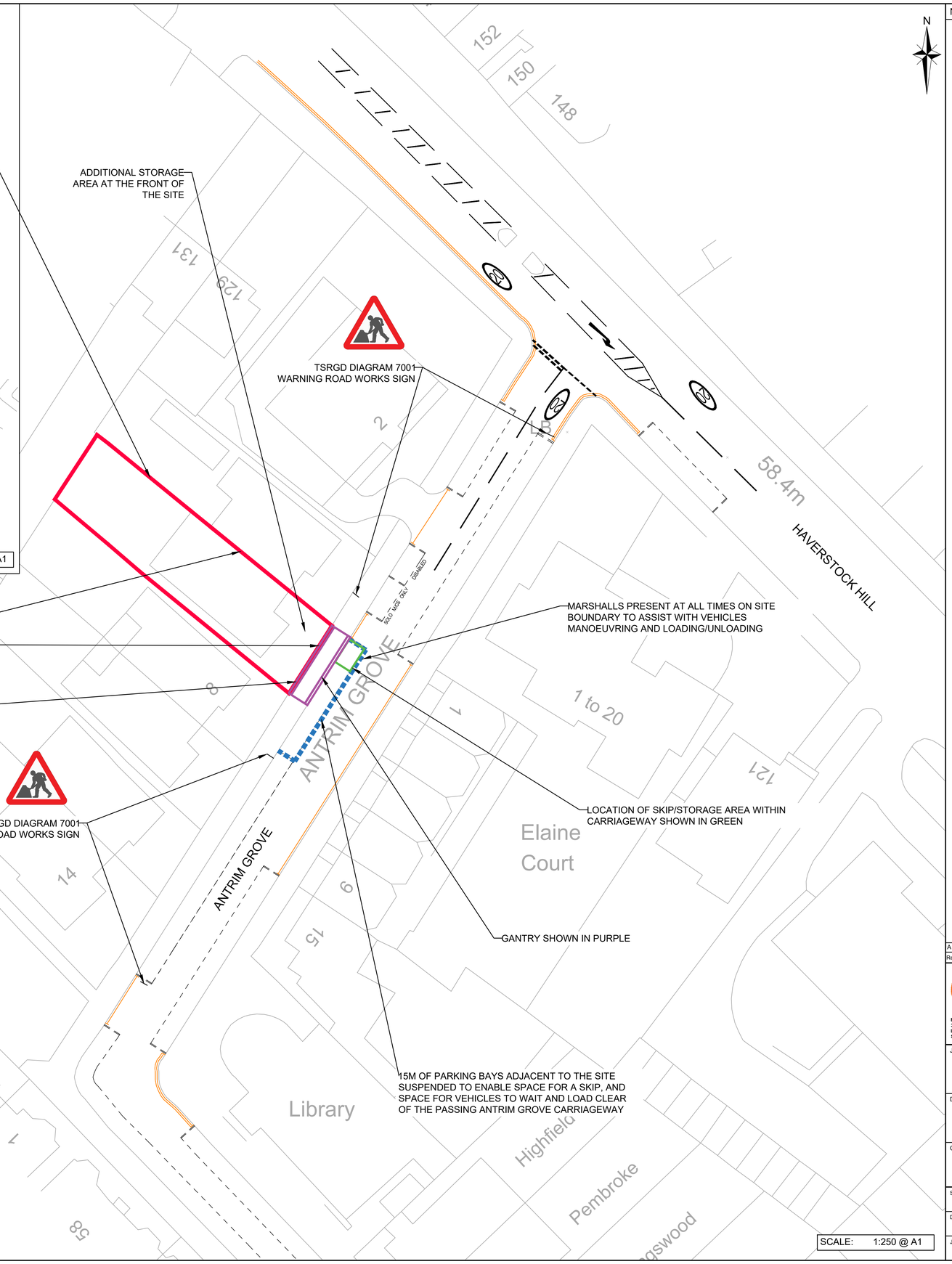

NOTES

KEY

- SITE BOUNDARY
- SUSPENDED PARKING BAYS
- SKIP/MATERIALS STORAGE AREA
- GANTRY LOCATION

Rev	Amendments	Drn	Chk	App	Date
A	Minor Amendment	TN	MJB	MJB	25/07/18

ODYSSEY
Elizabeth House,
39 York Road,
London,
SE1 7NQ
Telephone: 02076 202444
Fax: 02076 201168
E: info@odysseyconsult.co.uk
W: www.odysseyconsult.co.uk

Job Title
6 ANTRIM GROVE
BELSIZE PARK

Drawing Title
CMP DRAWINGS
PROPOSED TEMPORARY LAYOUT

Client
PBO

Scale	Date	Designed
AS SHOWN	JULY 18	TN
Drawn	Checked	Approved
TN	MJB	MJB
Job No	Drawing No	Rev
18187	18187-101	A

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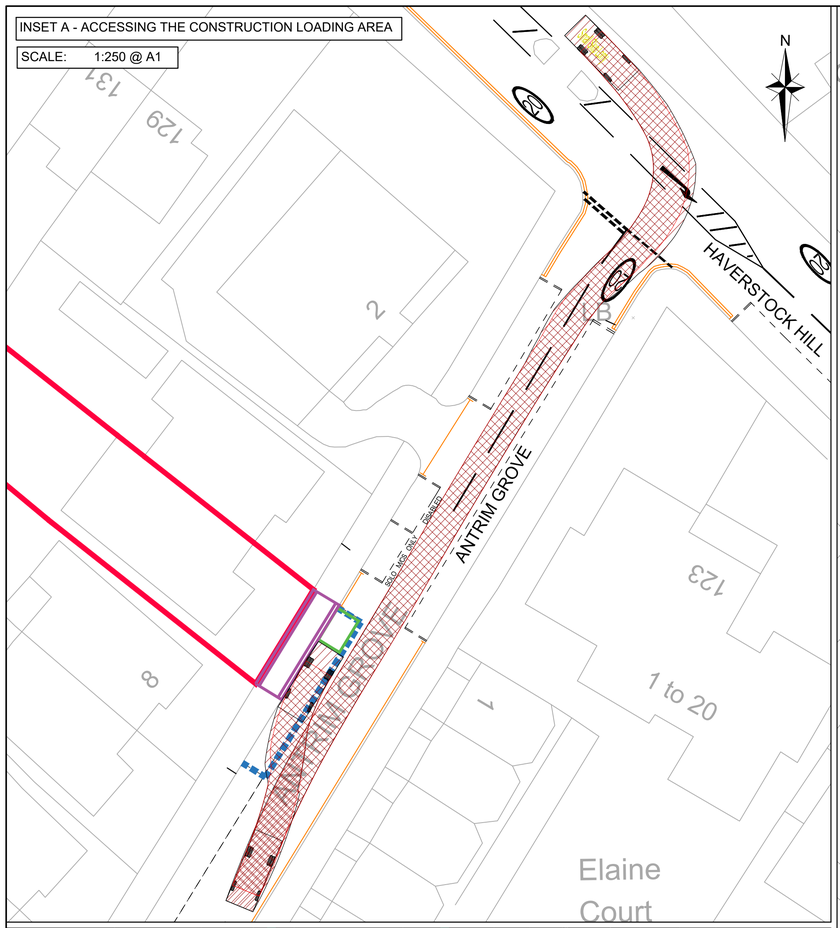
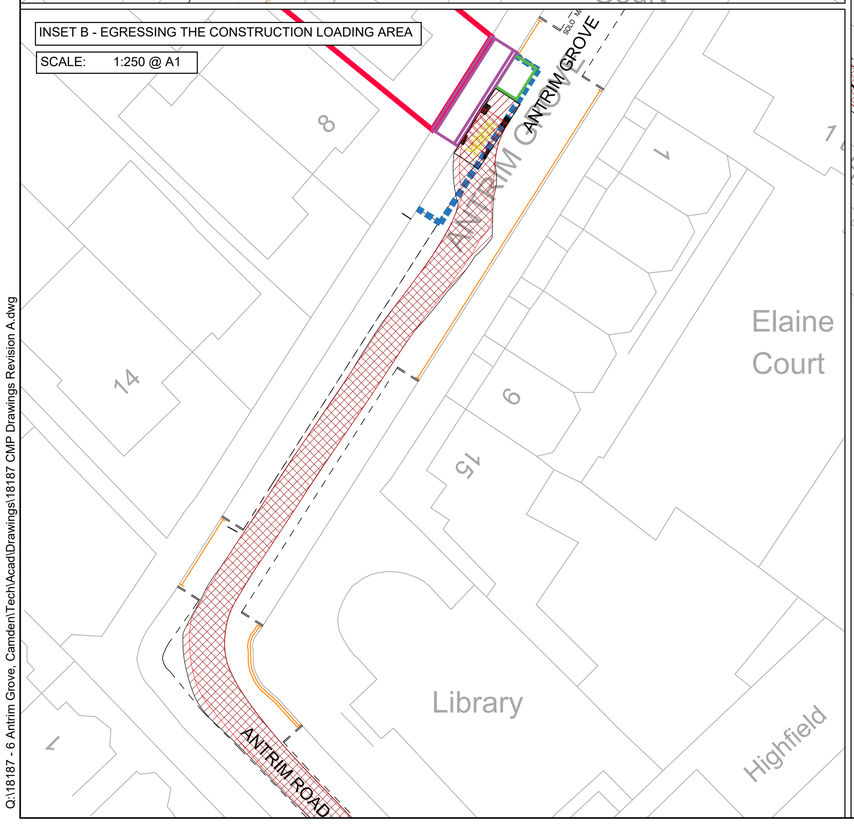
INSET A - ACCESSING THE CONSTRUCTION LOADING AREA

SCALE: 1:250 @ A1



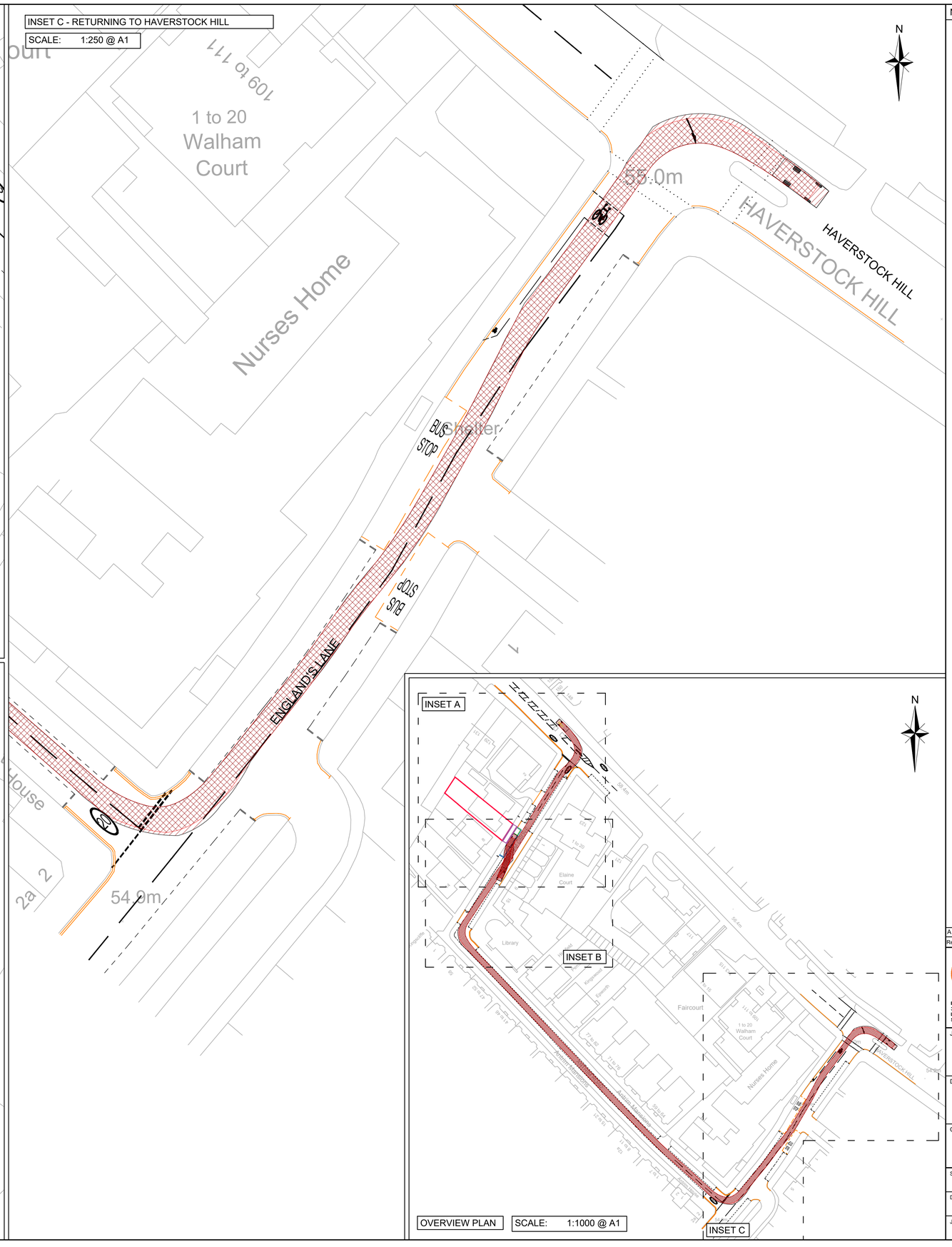
INSET B - EGRESSING THE CONSTRUCTION LOADING AREA

SCALE: 1:250 @ A1



INSET C - RETURNING TO HAVERSTOCK HILL

SCALE: 1:250 @ A1



OVERVIEW PLAN SCALE: 1:1000 @ A1

NOTES

SWEPT PATH ASSESSMENT BASED ON VEHICLE PROFILE BELOW:

Small Skip Lorry	
Overall Length	6.265m
Overall Width	2.390m
Overall Body Height	3.650m
Min Body Ground Clearance	0.396m
Max Track Width	2.435m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	6.340m

KEY

- SITE BOUNDARY
- SUSPENDED PARKING BAYS
- SKIP/MATERIALS STORAGE AREA
- GANTRY LOCATION

Rev	Amendments	Drn	Chk	App	Date
A	Minor Amendment	TN	MJB	MJB	25/07/18

ODYSSEY

Elizabeth House,
39 York Road,
London,
SE1 7NQ

Telephone: 02076 202444
Fax: 02076 201168
E: info@odysseyconsult.co.uk
W: www.odysseyconsult.co.uk

Job Title

6 ANTRIM GROVE
BELSIZE PARK

Drawing Title

CMP SWEPT PATH ANALYSIS
SMALL SKIP LORRY

Client

PBO

Scale	Date	Designed
AS SHOWN	JULY 18	TN
Drawn	Checked	Approved
TN	MJB	MJB
Job No	Drawing No	Rev
18187	18187-102	A

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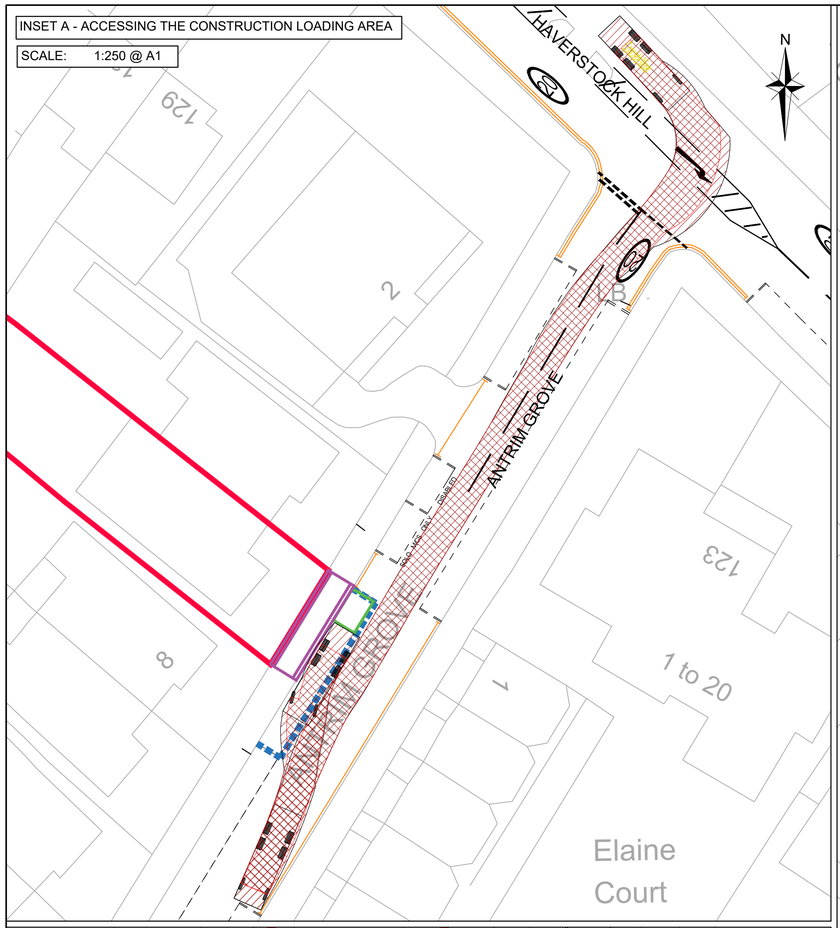
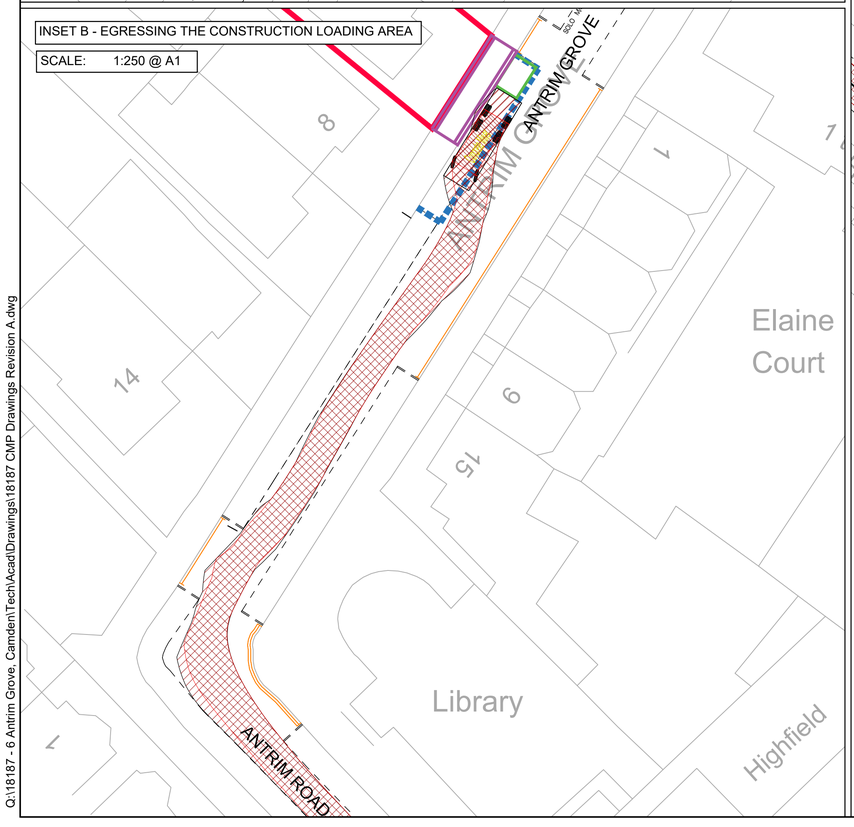
INSET A - ACCESSING THE CONSTRUCTION LOADING AREA

SCALE: 1:250 @ A1



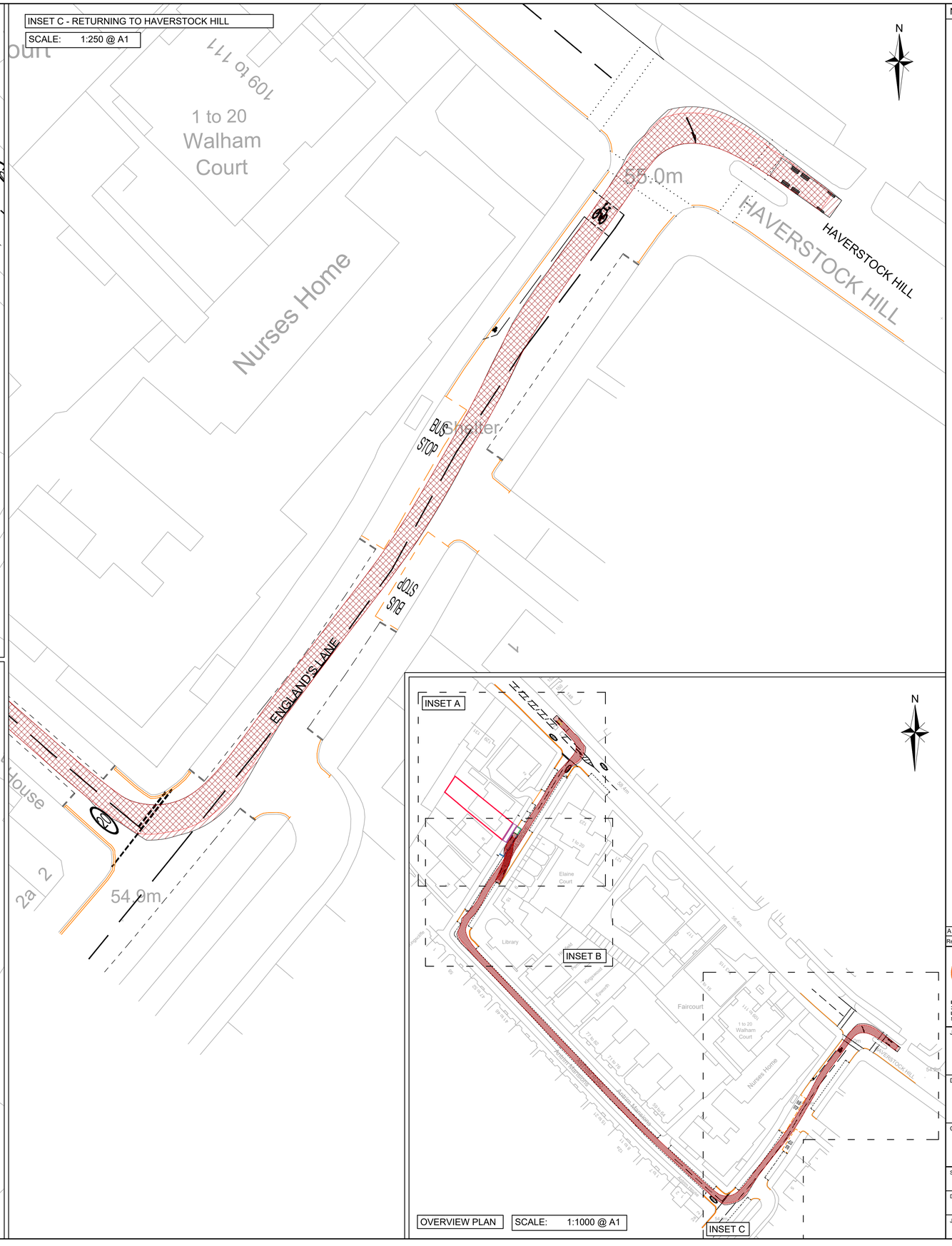
INSET B - EGRESSING THE CONSTRUCTION LOADING AREA

SCALE: 1:250 @ A1



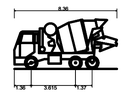
INSET C - RETURNING TO HAVERSTOCK HILL

SCALE: 1:250 @ A1



NOTES

SWEPT PATH ASSESSMENT BASED ON VEHICLE PROFILE BELOW:



Concrete Mixer	
Overall Length	8.360m
Overall Width	2.390m
Overall Body Height	4.027m
Min Body Ground Clearance	0.358m
Max Track Width	2.413m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	8.210m

KEY

- SITE BOUNDARY
- SUSPENDED PARKING BAYS
- SKIP/MATERIALS STORAGE AREA
- GANTRY LOCATION

Rev	Amendments	Drn	Chk	App	Date
A	Minor Amendment	TN	MJB	MJB	25/07/18

ODYSSEY

Elizabeth House,
39 York Road,
London,
SE1 7NQ

Telephone: 02076 202444
Fax: 02076 201168
E: info@odysseyconsult.co.uk
W: www.odysseyconsult.co.uk

Job Title

6 ANTRIM GROVE
BELSIZE PARK

Drawing Title

CMP SWEPT PATH ANALYSIS
CONCRETE MIXER

Client

PBO

Scale	Date	Designed
AS SHOWN	JULY 18	TN
Drawn	Checked	Approved
TN	MJB	MJB
Job No	Drawing No	Rev
18187	18187-103	A

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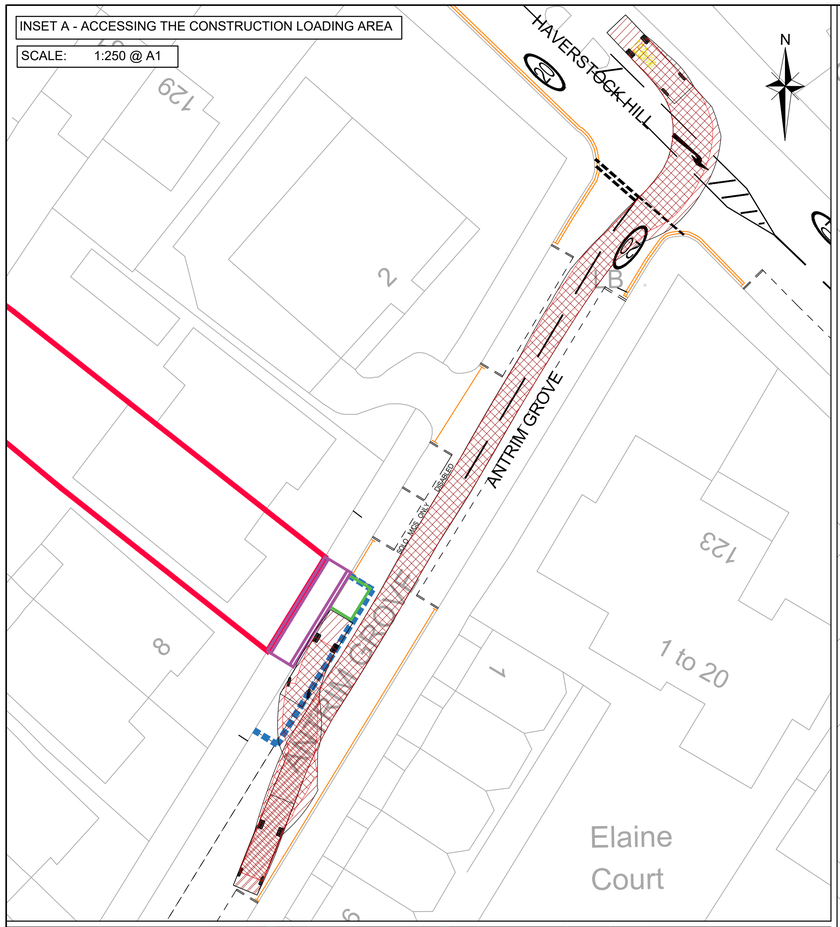
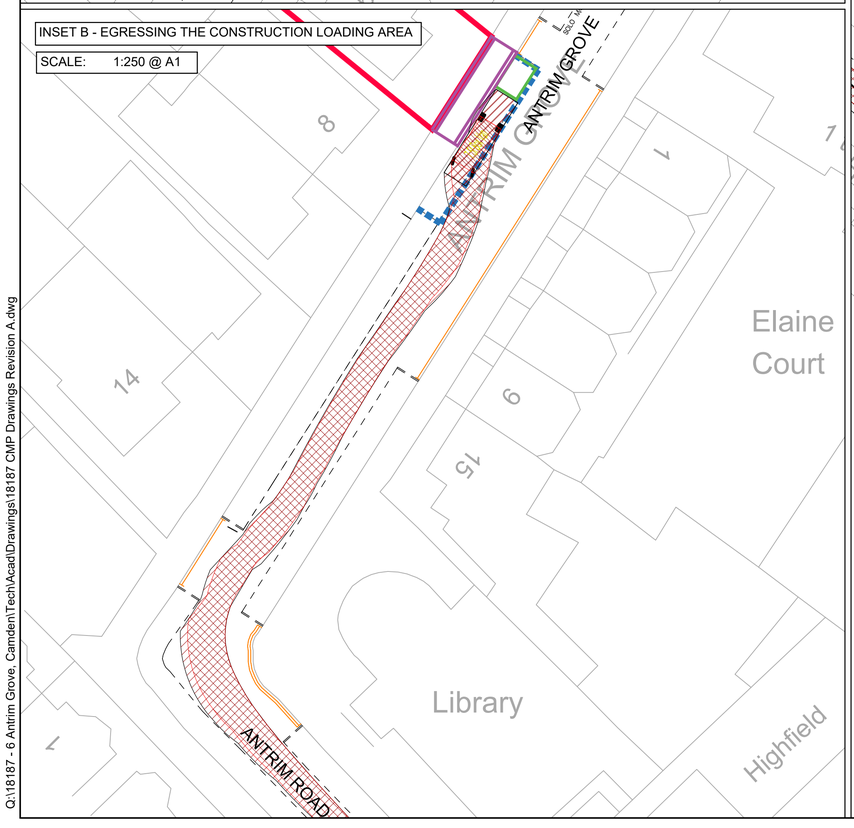
INSET A - ACCESSING THE CONSTRUCTION LOADING AREA

SCALE: 1:250 @ A1



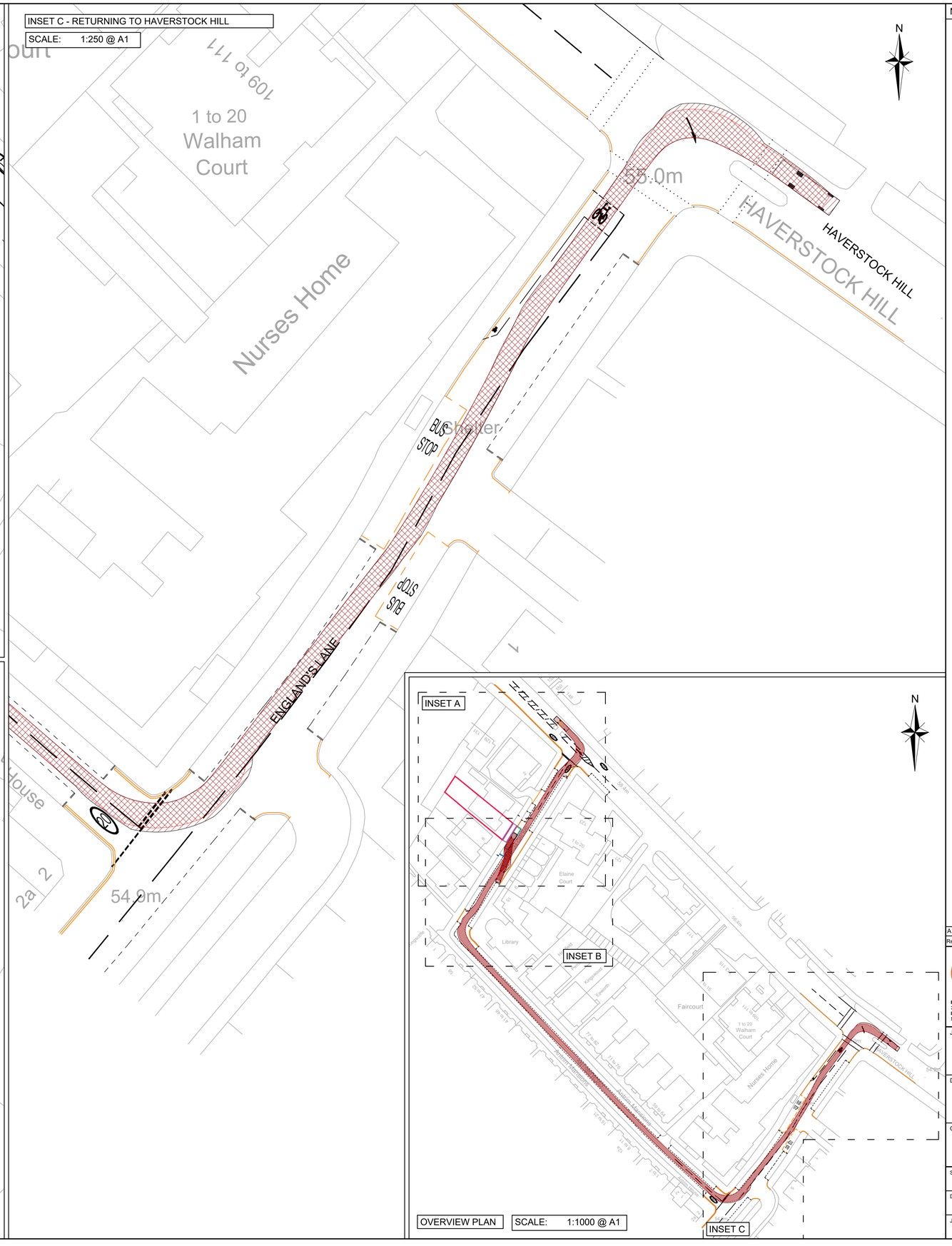
INSET B - EGRESSING THE CONSTRUCTION LOADING AREA

SCALE: 1:250 @ A1



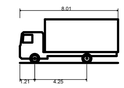
INSET C - RETURNING TO HAVERSTOCK HILL

SCALE: 1:250 @ A1



NOTES

SWEPT PATH ASSESSMENT BASED ON VEHICLE PROFILE BELOW:



7.5t Box Van	
Overall Length	8.010m
Overall Width	2.100m
Overall Body Height	3.556m
Min Body Ground Clearance	0.351m
Track Width	2.064m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	7.400m

KEY

- SITE BOUNDARY
- SUSPENDED PARKING BAYS
- SKIP/MATERIALS STORAGE AREA
- GANTRY LOCATION

Rev	Amendments	Drn	Chk	App	Date
A	Minor Amendment	TN	MJB	MJB	25/07/18

ODYSSEY

Elizabeth House,
39 York Road,
London,
SE1 7NQ

Telephone: 02076 202444
Fax: 02076 201168
E: info@odysseyconsult.co.uk
W: www.odysseyconsult.co.uk

Job Title

6 ANTRIM GROVE
BELSIZE PARK

Drawing Title

CMP SWEPT PATH ANALYSIS
7.5T BOX VAN

Client

PBO

Scale	Date	Designed
AS SHOWN	JULY 18	TN
Drawn	Checked	Approved
TN	MJB	MJB

Job No	Drawing No	Rev
18187	18187-104	A

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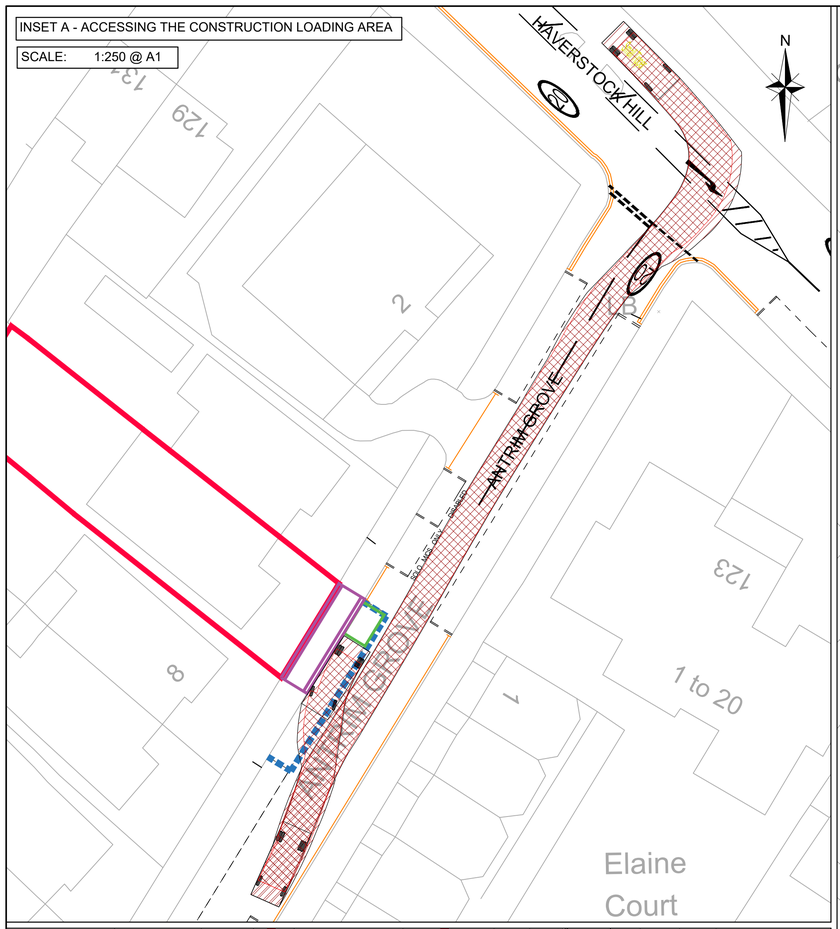
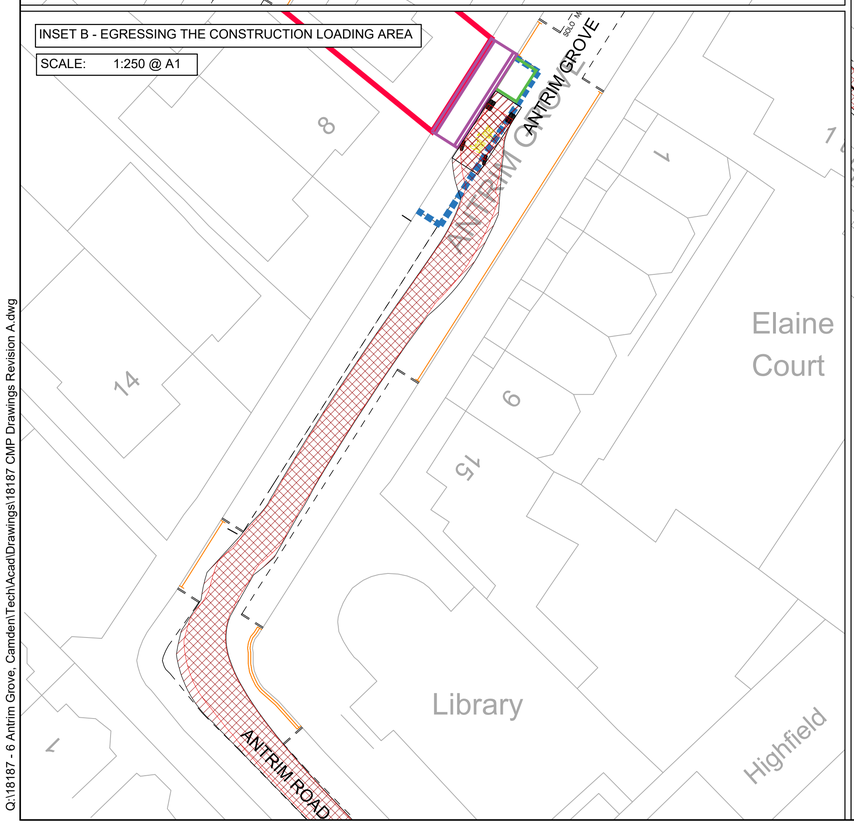
INSET A - ACCESSING THE CONSTRUCTION LOADING AREA

SCALE: 1:250 @ A1



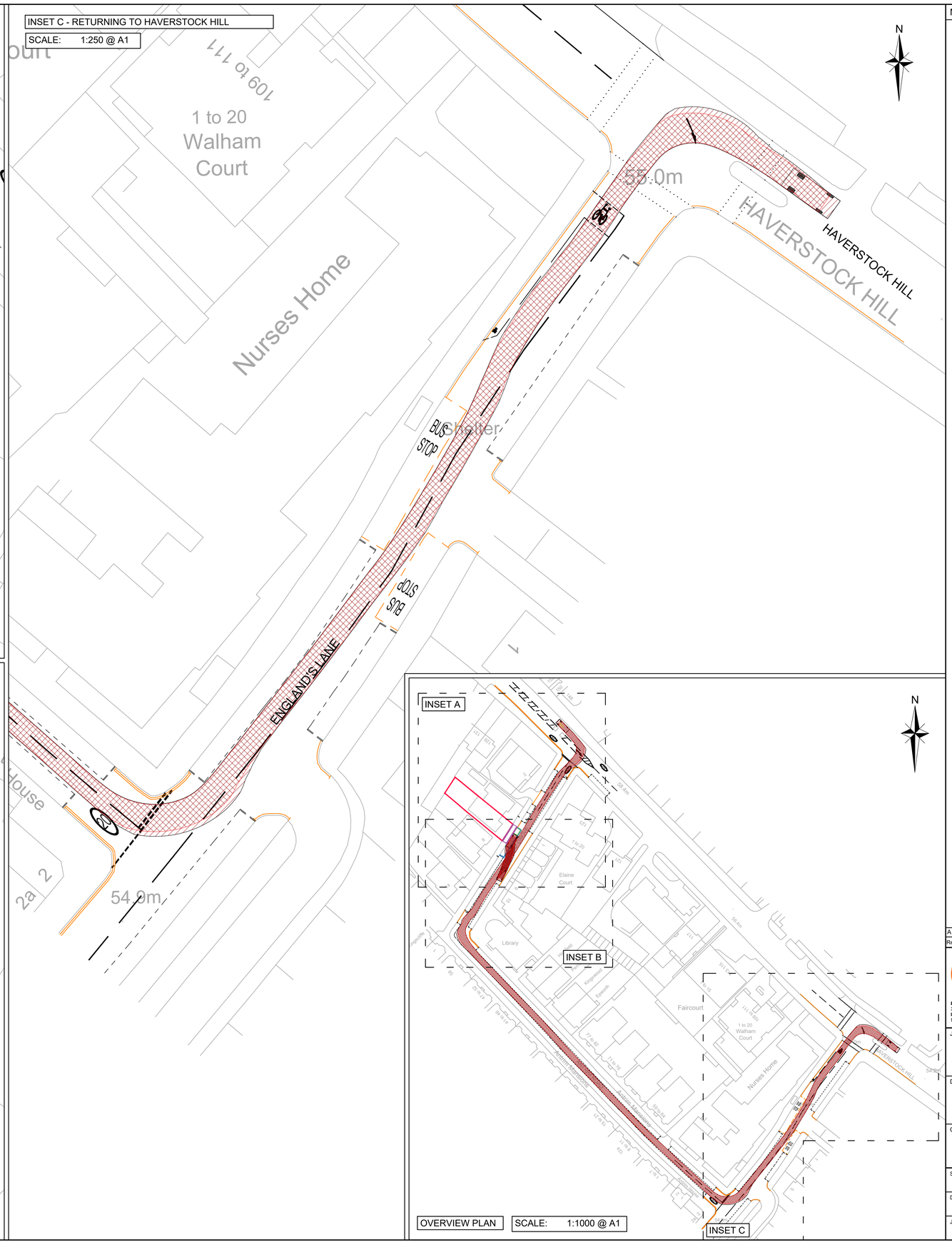
INSET B - EGRESSING THE CONSTRUCTION LOADING AREA

SCALE: 1:250 @ A1



INSET C - RETURNING TO HAVERSTOCK HILL

SCALE: 1:250 @ A1



OVERVIEW PLAN SCALE: 1:1000 @ A1

NOTES

SWEPT PATH ASSESSMENT BASED ON VEHICLE PROFILE BELOW:

Small Tipper	
Overall Length	6.528m
Overall Width	2.500m
Overall Body Height	2.877m
Min Body Ground Clearance	0.327m
Track Width	2.393m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	7.850m

KEY

- SITE BOUNDARY
- SUSPENDED PARKING BAYS
- SKIP/MATERIALS STORAGE AREA
- GANTRY LOCATION

Rev	Amendments	Drn	Chk	App	Date
A	Minor Amendment	TN	MJB	MJB	25/07/18

ODYSSEY

Elizabeth House,
39 York Road,
London,
SE1 7NQ

Telephone: 02076 202444
Fax: 02076 201168
E: info@odysseyconsult.co.uk
W: www.odysseyconsult.co.uk

Job Title

6 ANTRIM GROVE
BELSIZE PARK

Drawing Title

CMP SWEPT PATH ANALYSIS
SMALL TIPPER

Client

PBO

Scale	Date	Designed
AS SHOWN	JULY 18	TN
Drawn	Checked	Approved
TN	MJB	MJB

Job No	Drawing No	Rev
18187	18187-105	A

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Appendix A – Consultation Letter

6th August 2018

To whom it may concern

Re: New basement development to 6 Antrim Grove, London NW3 4XR

The owner of No. 6 Antrim Grove has been granted planning consent by Camden Council to excavate a new basement under the existing dwelling (Ref 2014/3835/P). In compliance with the requirements of that consent, a full Construction Management Plan (CMP) has been prepared for submission to Camden Council. The purpose of this CMP is to minimise the impact of this project on the surrounding community both from construction activities on site and from transport arrangements for servicing the site. Having learned lessons from other basement projects carried out on Antrim Grove, the team appointed to carry out the works to 6 Antrim Grove have carefully planned the new works. This newsletter offers a summary of the main impacts of the project and mitigation measures which will be put in place by the Contractor to minimise their effect on neighbours.

The potential structural impact on neighbours will be addressed appropriately through Party Wall Agreements and the underpinning of the host property has been professionally designed by qualified engineers. A specialist engineer has designed the temporary works to support the building during construction and will carry out an agreed series of inspections during the project.

The appointed contractor Erdol Construction Ltd has broad experience working on a number of basement projects for both new build and refurbishment including underpinning and piling with a short list of experienced and skilled building contractors. The works have been carefully programmed to minimise the disruption to neighbours from noisy work, deliveries and removals, dust and dirt.

Due consideration has been given to determining the most sustainable manner of carrying out the work, disposing of the waste and sourcing new building materials. All site deliveries will be pre-booked and allocated set arrival times between 9.30am and 3.00pm from Monday to Friday during term time and between 9.30am and 4.30pm from Monday to Friday during school holidays. Special consideration has been given to the local library opening hours on Tuesdays and Wednesdays from 10.00am to 6.00pm, and where possible deliveries will be scheduled before opening or on other days of the week. Delivery instructions will be sent to all suppliers and contractors including the maximum dwell times and the requirement to check 20 minutes before arrival to confirm that the loading area is available and ensure they do not wait on any road within the Borough. The engines of contractors' vehicles shall not be kept idling.

It is intended to suspended three parking bays outside 6 Antrim Grove throughout the duration of the structural works (estimated at 20 weeks) to accommodate a skip and delivery vehicles. Delivery and spoil removal vehicles will be able to pull into the loading area next to the site to allow traffic to pass on the left hand side of construction vehicles. The maximum dwell time for loading/unloading will be 15 minutes. Emergency access will be maintained at all times. Combined with timed deliveries and our vehicle call up procedure, we do not expect any disruption to traffic.

The site layout will take into account the need to avoid impact to passing traffic, which should be able to pass any pedestrians and vehicles whilst loading/unloading. The footpath outside of 6 Antrim Grove will not be closed, however a temporary diversion of pedestrian passage will be necessary during scheduled deliveries. This will be achieved by placing footway diversion signs and deploying a banksman and trained staff wearing hi-viz to ensure that safe pedestrian passage is maintained.

A secure hoarding will be built to the front garden, both to the front and flank boundaries, 2400mm above ground level to enclose the site, with suitable WBP ply sheeting and sturdy posts and framing, forming a secure access door with 5 lever high security lock. Appropriate health & safety signage and red lights will be placed on the hoarding enclosing the site.

In order to minimise disruptive noise from the works a hand demolition technique will be used in lieu of heavy demolition plant. Other specific measures including the selection of 'silenced' plant, the pre-cutting of materials off site, and prefabrication will be used. The site manager will be provided hand held noise measuring equipment to ensure the operation of plant remains within the predicted levels.

The site manager will be responsible for the control and management of dust and dirt at the site. Water sprays or poured water will be used to suppress dust during cutting, angle grinding or other dust generating activities. The loading bay will be swept after each load or delivery and a portable jet wash will be used to keep the front pavement clean. Use will be made of low emission plant fitted with catalysts, diesel particulate filters or similar devices and wherever possible generators will be powered using mains electricity or battery power rather than diesel or petrol power. Appropriate measures will be taken to protect the public highway from damage arising from construction related activity and to prevent concrete and other detritus from being washed into the public highway drainage system.

The Erdol Construction Manager will make personal contact with the immediate neighbours and a letter drop will include his telephone number together with the office contact details and the names of the people responsible for the project. The site will be registered with the 'Considerate Constructors Scheme' and contractors will follow the 'Guide for Contractors Working in Camden'.

If you have comments on this Newsletter or suggestions for how the project could be better managed please send these to:

Jim Biek / Bchitecture 11a Beresford Road, London N2 8AT bchitecture@gmail.com

Yours sincerely

Zbig Kolacz, Director, Erdol Construction Ltd.

Appendix B – Noise Survey

Report VA2310.180731.NIA

6 Antrim Grove, London

Sound Survey Report

31 July 2018

Peter Braslavsky
6 Atrium Grove
London
NW3 4XR

Venta Acoustics

01962 461016
0203 8650332
mail@ventaacoustics.com

registered company no. 10139494

Contents

1. Introduction 1
2. Site Description 1
3. Environmental Noise Survey 1
3.1 Survey Procedure & Equipment 1
3.2 Results 2
4. Conclusion 2

Attachments

VA2310/SP1	Indicative Site Plan
VA2310/TH1 - TH4	Environmental Noise Time Histories
Appendix A	Acoustic Terminology

1. Introduction

It is proposed to undertake works to form a new basement at 6 Antrim Grove, London.

Venta Acoustics has been commissioned by Peter Braslavsky to undertake an environmental noise survey to determine the pre-existing noise climate in the locality. This is to accompany the Construction Management Plan, as required by Camden Council.

2. Site Description

As illustrated on attached site plan VA2310/SP1, the site is situated to the north of Antrim Grove in a predominantly residential area. The building consists of a semidetached house with a rear garden.

To the north west of the site is a multi-storey apartment block. Construction works were noted on this apartment block as well as other houses off Antrim Grove during the survey.

The receivers expected to be most affected during works are the immediate neighbours at 4 & 8 Antrim Grove.

3. Environmental Noise Survey

3.1 Survey Procedure & Equipment

In order to establish the existing background noise levels at the site, a noise survey was carried out between Friday 20th and Monday 23rd July 2018 in the rear garden of the property at the location shown in site plan VA2310/SP1. This location was chosen to be representative of the background noise level at the surrounding dwellings.

Continuous 5-minute samples of the L_{Aeq}, L_{Amax}, L_{A10} and L_{A90} sound pressure levels were undertaken at the measurement location.

The weather during the survey period was generally dry with light winds. The measured noise data is not considered to have been compromised by these conditions.

Measurements were made generally in accordance with ISO 1996 2:2017 *Acoustics - Description, measurement and assessment of environmental noise – Part 2: Determination of sound pressure levels*.

The following equipment was used in the course of the survey:

Manufacturer	Model Type	Serial No	Calibration	
			Certificate No.	Date
NTi Class 1 Integrating SLM	XL2	A2A-11586-E0	UCRT18/1582	7/6/18
Larson Davis calibrator	CAL200	13049	UCRT18/1431	20/4/18

Table 3.1 – Equipment used for the tests

The calibration of the sound level meter was verified before and after use with no significant calibration drift observed.

3.2 Results

The measured sound levels are shown as time-history plots on the attached charts VA2310/TH1-4.

Noise levels are generally determined by traffic on the surrounding roads with some construction noise from activities on surrounding sites, particularly the apartment block to the rear of the site.

The typical noise levels measured were:

Monitoring Period	Typical $L_{A90,5min}$	Average L_{Aeq}
07:00 – 23:00 hours	35 dB	52 dB
23:00 – 07:00 hours	28 dB	49 dB
Camden Weekday Construction hours (08:00 – 18:00 hours)	39 dB	62 dB

Table 3.2 – Typical background and average ambient noise levels

4. Conclusion

A baseline noise survey has been undertaken by Venta Acoustics to establish the pre-existing noise climate in the locality 6 Antrim Grove, London to accompany a Construction Management Plan for a basement extension as required by Camden Council.

The results of the noise survey have been recorded for further reference if required.

Steven Liddell MIOA

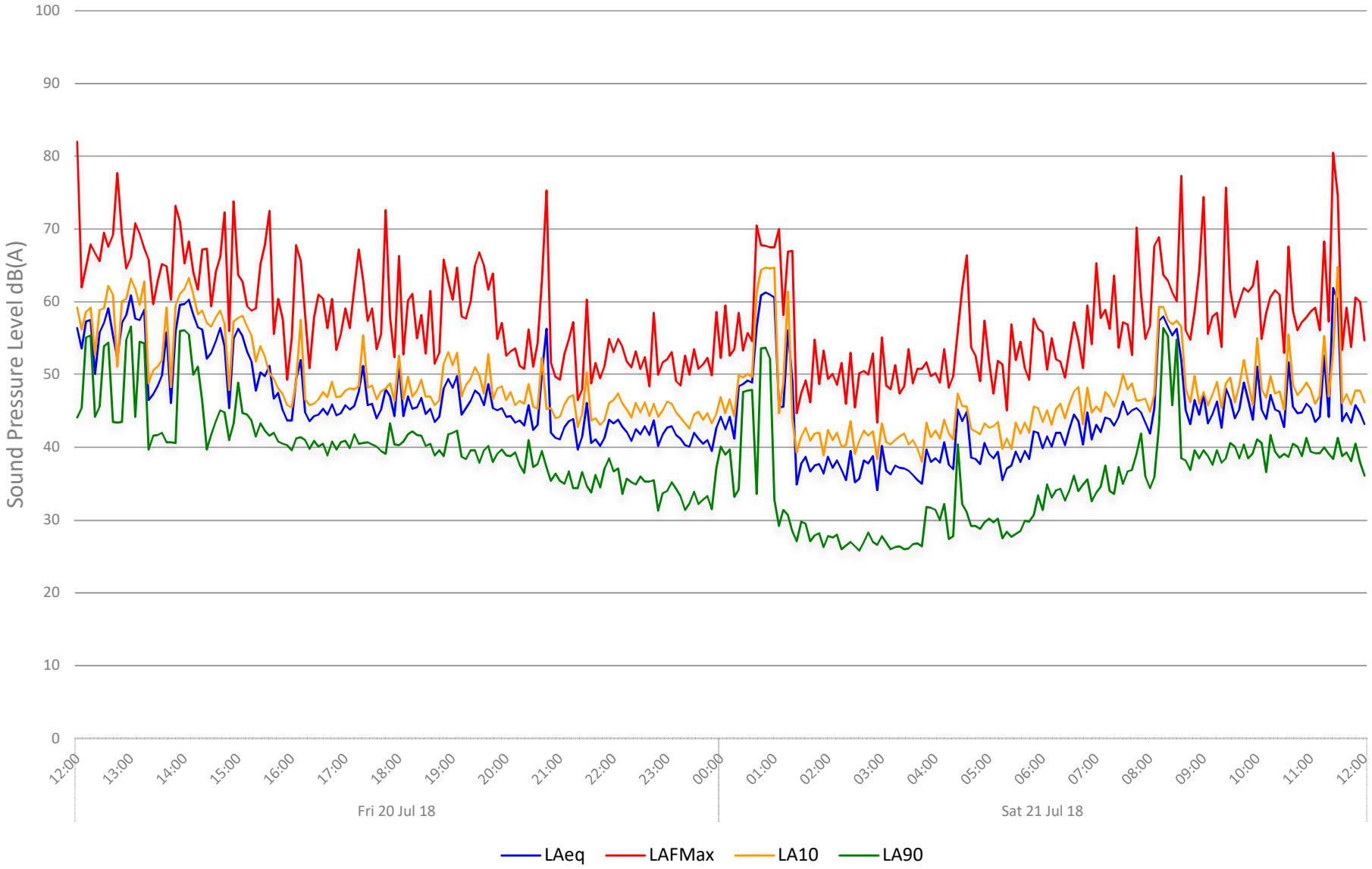

Noise monitoring location

6 Antrim Grove, London

Environmental Noise Time History: 1

Venta Acoustics

Figure VA2310/TH1

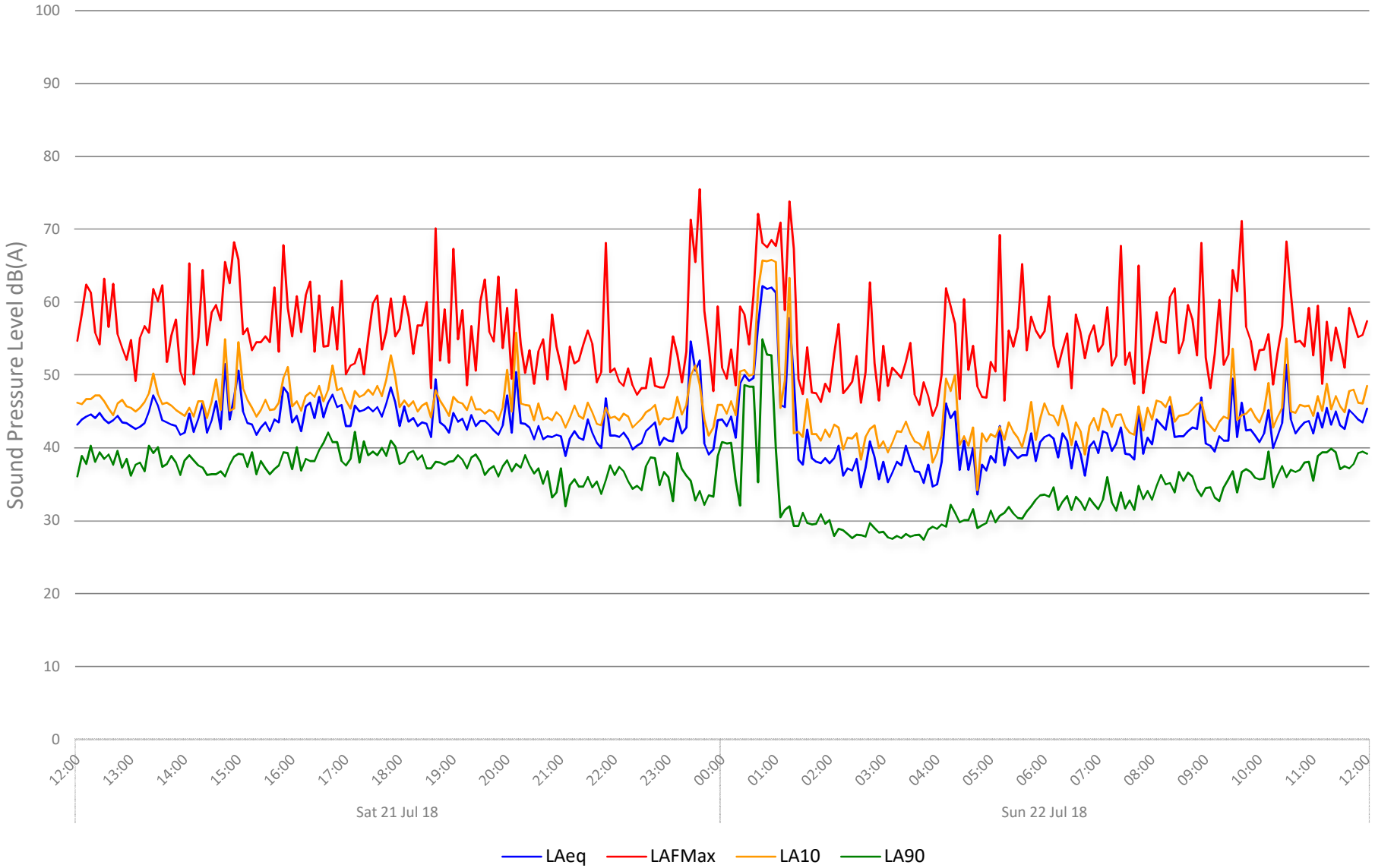


6 Antrim Grove, London

Environmental Noise Time History: 2

Venta Acoustics

Figure VA2310/TH2

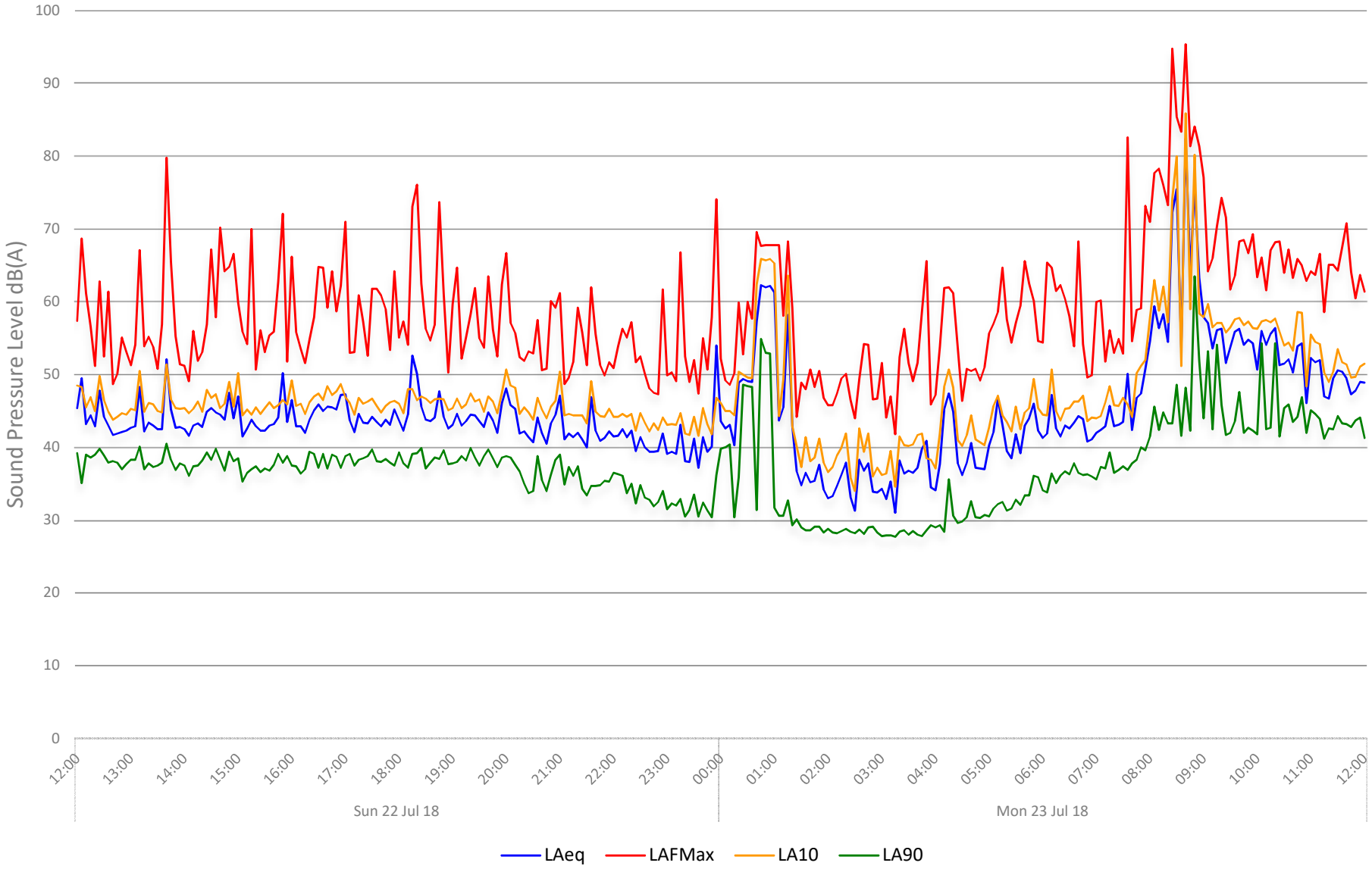


6 Antrim Grove, London

Environmental Noise Time History: 3

Venta Acoustics

Figure VA2310/TH3

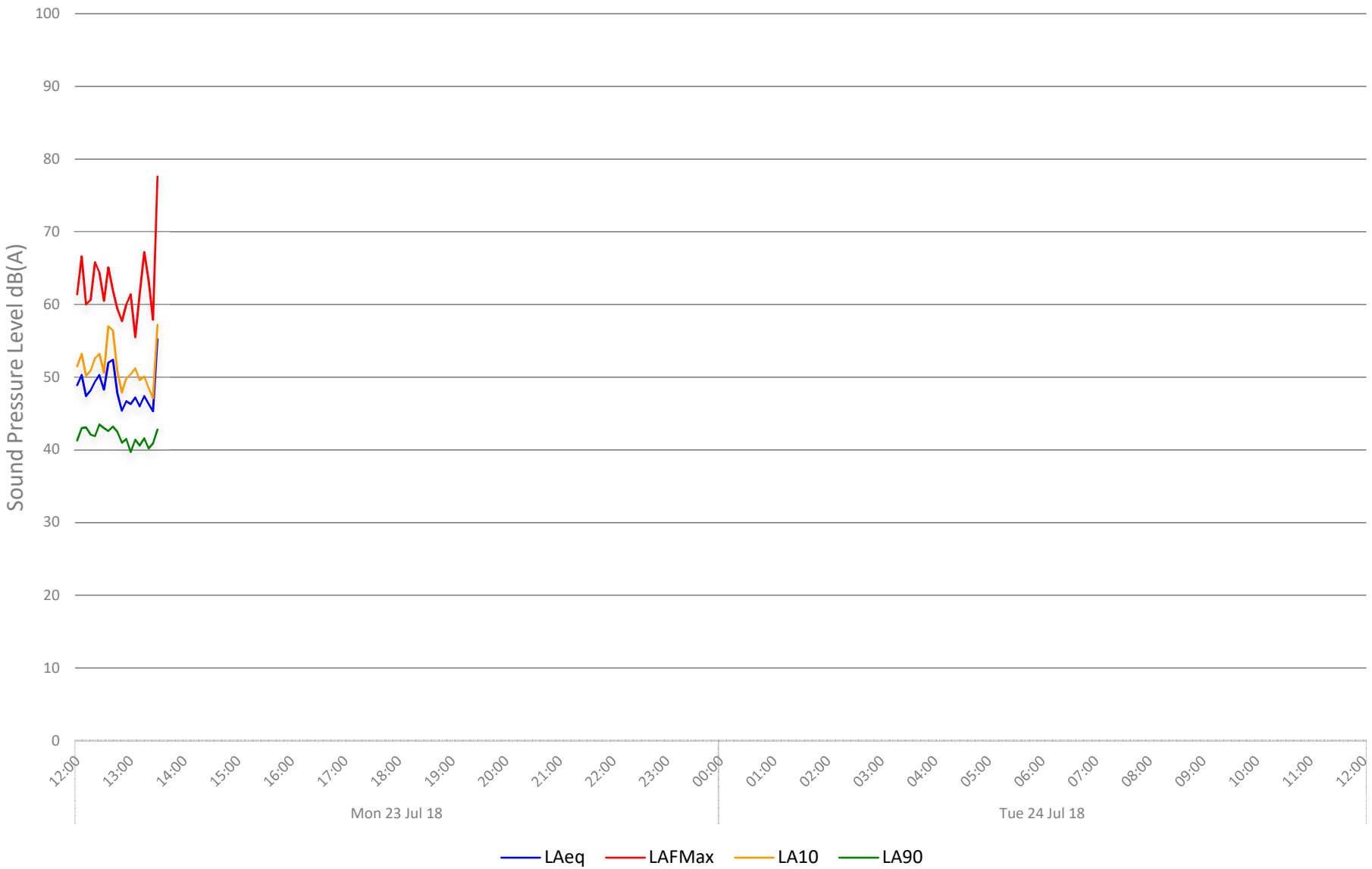


6 Antrim Grove, London

Environmental Noise Time History: 4

Venta Acoustics

Figure VA2310/TH4



APPENDIX A

Venta Acoustics

Acoustic Terminology & Human Response to Broadband Sound

1.1 Acoustic Terminology

The human impact of sounds is dependent upon many complex interrelated factors such as 'loudness', its frequency (or pitch) and variation in level. In order to have some objective measure of the annoyance, scales have been derived to allow for these subjective factors.

Sound	Vibrations propagating through a medium (air, water, etc.) that are detectable by the auditory system.
Noise	Sound that is unwanted by or disturbing to the perceiver.
Frequency	The rate per second of vibration constituting a wave, measured in Hertz (Hz), where 1Hz = 1 vibration cycle per second. The human hearing can generally detect sound having frequencies in the range 20Hz to 20kHz. Frequency corresponds to the perception of 'pitch', with low frequencies producing low 'notes' and higher frequencies producing high 'notes'.
dB(A):	Human hearing is more susceptible to mid-frequency sounds than those at high and low frequencies. To take account of this in measurements and predictions, the 'A' weighting scale is used so that the level of sound corresponds roughly to the level as it is typically discerned by humans. The measured or calculated 'A' weighted sound level is designated as dB(A) or L_A.
L_{eq} :	A notional steady sound level which, over a stated period of time, would contain the same amount of acoustical energy as the actual, fluctuating sound measured over that period (e.g. 8 hour, 1 hour, etc). The concept of L_{eq} (equivalent continuous sound level) has primarily been used in assessing noise from industry, although its use is becoming more widespread in defining many other types of sounds, such as from amplified music and environmental sources such as aircraft and construction. Because L_{eq} is effectively a summation of a number of events, it does not in itself limit the magnitude of any individual event, and this is frequently used in conjunction with an absolute sound limit.
L_{10} & L_{90} :	Statistical L_n indices are used to describe the level and the degree of fluctuation of non-steady sound. The term refers to the level exceeded for n% of the time. Hence, L_{10} is the level exceeded for 10% of the time and as such can be regarded as a typical maximum level. Similarly, L_{90} is the typical minimum level and is often used to describe background noise. It is common practice to use the L_{10} index to describe noise from traffic as, being a high average, it takes into account the increased annoyance that results from the non-steady nature of traffic flow.
L_{max} :	The maximum sound pressure level recorded over a given period. L_{max} is sometimes used in assessing environmental noise, where occasional loud events occur which might not be adequately represented by a time-averaged L_{eq} value.

1.2 Octave Band Frequencies

In order to determine the way in which the energy of sound is distributed across the frequency range, the International Standards Organisation has agreed on "preferred" bands of frequency for sound measurement and analysis. The widest and most commonly used band for frequency measurement and analysis is the Octave Band. In these bands, the upper frequency limit is twice the lower frequency limit, with the band being described by its "centre frequency" which is the average (geometric mean) of the upper and lower limits, e.g. 250 Hz octave band extends from 176 Hz to 353 Hz. The most commonly used octave bands are:

Octave Band Centre Frequency Hz	63	125	250	500	1000	2000	4000	8000

1.3 Human Perception of Broadband Noise

APPENDIX A

Venta Acoustics

Acoustic Terminology & Human Response to Broadband Sound

Because of the logarithmic nature of the decibel scale, it should be borne in mind that sound levels in dB(A) do not have a simple linear relationship. For example, 100dB(A) sound level is not twice as loud as 50dB(A). It has been found experimentally that changes in the average level of fluctuating sound, such as from traffic, need to be of the order of 3dB before becoming definitely perceptible to the human ear. Data from other experiments have indicated that a change in sound level of 10dB is perceived by the average listener as a doubling or halving of loudness. Using this information, a guide to the subjective interpretation of changes in environmental sound level can be given.

Change in Sound Level dB	Subjective Impression	Human Response
0 to 2	Imperceptible change in loudness	Marginal
3 to 5	Perceptible change in loudness	Noticeable
6 to 10	Up to a doubling or halving of loudness	Significant
11 to 15	More than a doubling or halving of loudness	Substantial
16 to 20	Up to a quadrupling or quartering of loudness	Substantial
21 or more	More than a quadrupling or quartering of loudness	Very Substantial

Appendix C – Air Quality Mitigation Measures

Air Quality Control

Mitigation Measures Checklist – Low Risk Sites

6 Antrim Grove, Belsize Park

Site Management

1. Person responsible for Air Quality pollutant emissions and dust issues on the site boundary: Zbigniew Kolacz / Erdol Construction Ltd, 07956676401
2. Head Office Contact Details:
   36 Glebe Road, London N3 2AX, team@erdolconstruction.co.uk
3. A record log will be maintained of all dust and air quality complaints – this will be maintained on the daily site diary and made available to the local authority at any time.
4. Regular site inspections will be made by the site foreman – the results of these inspections will be recorded and made available to the local authority at any time.
5. The site foreman will increase the frequency of his inspections during times of increased likelihood of dust such as during dry and windy conditions.
6. A record of any exceptional incidents which cause dust and air quality pollutant emissions will be taken, together with remedial actions. These will be recorded in the site diary and made available for inspection.

Preparing and Maintaining the Site

7. The site layout will be planned to ensure that machinery and dust causing activities are located away from receptors
8. Solid screens will be erected around dust creating activities, or at site boundaries, that are at least as high as any stockpiles on site.
9. Site runoff of water and mud will be managed to ensure that none pollutes the drainage or waste water system, or builds up to prevent the free-flow of rainwater.
10. Waste materials will be removed from site at the earliest opportunity.

Operating Vehicle/Machinery and Sustainable Travel

11. All on-road vehicles serving the project will comply with the requirements of the London Low Emission Zone.
12. All non-road mobile machinery (NRMM), if used, will comply with the standards set within this guidance.
13. No vehicle idling will be permitted – all vehicles attending site will switch engines off when stationary.
14. Wherever possible the contractor will use mains electricity or battery power instead of diesel or petrol powered generators.
15. All workers and sub-contractors on site are instructed to use public transport wherever possible; they will not be permitted to park on site or nearby in their own vehicles.

Operations

16. Use of mechanical cutting equipment will only be permitted in conjunction with suitable dust suppression techniques such as water sprays or local extraction.
17. An adequate water supply will be made available on site for effective dust/particulate matter mitigation (using recycled water wherever possible).
18. The site will use enclosed chutes, conveyors and covered skips.
19. Drop heights from conveyors, loading shovels, hoppers and other handling equipment will be minimised. Fine water sprays on such equipment will be used wherever appropriate.

Waste Management

20. All waste will be reused or recycled wherever possible in order to reduce from such materials.
21. Bonfires and burning of waste on site will be avoided at all times.

Demolition Mitigation Measures

22. Soft strip and as much hard strip as possible will be done with windows intact and dust prevention sheets fitted at all exits.
23. Water suppression will be used to keep dust to a minimum during demolition.
24. No blasting will be allowed on site.
25. Any biological debris will be either damped down or removed in bats prior to demolition.

Earthworks and Construction Mitigation Measures

26. There will be no significant stockpiling of earth or building materials likely to cause dust.
27. Scabbling of concrete will not be allowed except under controlled circumstances where sound and dust emissions are mitigated as outlined above by sound-proofing and water dampening.

Trackout Mitigation Measures

28. Sweeping up after vehicles have departed will be damped down and any vehicle with a ductile load will be covered.

Appendix D – Pest Survey

Appendix E – Asbestos Survey

Asbestos Refurbishment Survey

6 Antrim Grove
NW3 4XR

UKAS INSPECTION
9875

salvum
safe in any language

9 Springfield
Lyons Approach
Chelmsford
Essex
CM2 5LB

Client:	Peter Braslavsky
Job Reference:	J002012
Survey Date:	24 Jul 2018
Report Date:	27 Jul 2018
Property Address:	6 Antrim Grove NW3 4XR
Survey Type:	Refurbishment Survey
Surveyor Name:	Daniel Jones
Surveyor Signature:	
Report Prepared By:	Summer Yon
Signature:	
Report Authorised By:	Nicola Kingham
Signature:	

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Duty holder's use of survey information

The survey report needs to meet the requirements of the client and comply with the tender/contractual obligations. The report should be fit for purpose and the client should check that this is the case. Therefore the client should examine the report and carry out a number of checks to make sure that the survey has been adequate and that the report is suitable and accurate.

The client/duty holder should do to check the accuracy of the survey report

- Check the report against the original tender.
- Check for un agreed caveats or disclaimers.
- Check that the survey is as requested: Management or refurbishment/demolition (or a combination).
- Check diagrams and plans are clear and accurate.
- Check all rooms and areas have been accessed.
- Check sufficient samples have been taken (usually 1-2 per area/room) and that sample numbers are not disproportionate (e.g. dominated by one ACM type).
- Check sample numbers reflect variations in the same ACMs, e.g. different ceiling tiles in the same room.
- Check for any obvious discrepancies and inconsistencies.

1. Introduction

1.1 An asbestos Refurbishment Survey of the premises was carried out on behalf of Peter Braslavsky. The survey and all sampling was carried out in accordance with the requirements of the HSE document 'Surveying, sampling and assessment of asbestos containing material' HSG 264. It was the intention to survey all areas of the premises were surveyed on at the time of survey for materials suspected of containing asbestos.

1.2 Scope of Works:

The scope of works was to carry out an asbestos Refurbishment Survey to the domestic premises.

The scope of the Asbestos Refurbishment Survey was agreed and discussed between Salvum Limited and Jim Biek prior to the survey being undertaken.

The content of this survey report is intended to provide the client with the information necessary to manage the risks arising from ACMs present within the area.

However, there remains a possibility that further ACMs may be present and exposed and possibly disturbed during any alterations, refurbishment or demolition works.
It is now recognised that even with 'complete' access demolition surveys, all ACMs may not be identified and this only becomes apparent during demolition itself.

1.3 The areas described in the scope of works were surveyed at the time of the survey. Please refer to the specific exclusions/non-accessed table below for areas not included in this survey.

1.4 Executive Summary

General Information:

Salvum Ltd were instructed by Jim Biek to carry out an asbestos Refurbishment Survey to inspect for the presence of asbestos containing materials at the following site: 6 Antrim Grove, NW3 4XR.

No Asbestos containing materials have been identified during this survey, however the report must be read in its entirety as there may be non-accessed areas or access restrictions.

(See below for full list of areas inspected) The building was constructed circa 1930s and is of brick, timber. The survey was carried out on 24 Jul 2018 by Daniel Jones.

Floor Level	Room / Area	Survey Type	Accessed	Room Construction
Ground Floor	G.001 - Kitchen diner	Refurbishment/Demolition	Yes	Ceiling: Plaster Ceiling: Suspended Ceiling: Modern Internal Wall: Plaster Board Internal Wall: Brick Floor: Ceramic tiles
Ground Floor	G.002 - Utility room	Refurbishment/Demolition	Yes	Ceiling: Plaster Ceiling: Suspended Ceiling: Modern Internal Wall: Plaster Board Internal Wall: Brick Floor: Ceramic tiles
Ground Floor	G.003 - WC	Refurbishment/Demolition	Yes	Ceiling: Plaster Ceiling: Suspended Ceiling: Modern Internal Wall: Plaster Board Internal Wall: Brick Floor: Ceramic tiles
Ground Floor	G.004 - Living room	Refurbishment/Demolition	Yes	Ceiling: Plaster Ceiling: Suspended Ceiling: Modern Internal Wall: Plaster Board Internal Wall: Brick Floor: Carpet Floor: Wood
Ground Floor	G.005 - Hall	Refurbishment/Demolition	Yes	Ceiling: Plaster Ceiling: Suspended Ceiling: Modern Internal Wall: Plaster Board Internal Wall: Brick Floor: Ceramic tiles

1.5 Specific Exclusions/Non-Accessed:

Floor Level	Room	Reason	Photo
No inaccessible areas were recorded during the course of this survey.			

1.6 Specific exclusions relating to surveying;

1.6.1 No report has been made on any concealed spaces which may exist within the fabric of the building where the extent and presence of these is not evident due to inaccessibility or insufficient knowledge of the structure of the building at the time of the survey. Unless specifically agreed by Salvum Limited and the client. Please refer to Appendix A for further details.

1.6.2 Any area not accessed (and where no other information exists) must be presumed to contain asbestos and be managed on that basis.

1.7 Specific exclusions relating to sampling;

1.7.1 Samples have not been taken where the act of sampling would endanger the Surveyor or affect the functional integrity of the item concerned e.g. fuses within electrical boxes unless isolation certificates are made available to the surveyor, fire doors unless the integrity of the door will not be compromised, gaskets unless pipework has been made safe and is redundant, glazing where the integrity of the frame may be compromised and power plant unless redundant and made safe.

1.7.2 Samples have not been taken where prohibited by the client (see 1.5 specific exclusions/Non-accessed).

1.7.3 Samples have been taken from all materials which, upon initial visual inspection, appeared to contain asbestos with the exception of some items of mastic, resin or rubber, which contain asbestos where the quantity of those materials and the content of asbestos within the material is insignificant in terms of risk to health and safety.

1.7.4 Materials have been referred to as Asbestos Insulation Board or Asbestos Cement based on their asbestos content and visual appearance alone. Density checks have not been carried out unless otherwise stated.

1.8 Caveat

Every effort has been made to identify all asbestos materials so far as was reasonably practical to do so within the scope of the survey and attached report. Methods used to carry out the survey were agreed with the client prior to any works being commenced.

Survey techniques used involves trained and experienced surveyors using the combined approach with regard to visual examination and necessary bulk sampling. It is always possible after a survey that asbestos based materials of one sort or another may remain in the property or area covered by the survey, this could be due to various reasons:

- Asbestos materials existing within areas not specifically covered by this report are therefore outside the scope of the survey.
- Materials may be hidden or obscured by other items or cover finishes, i.e. paint, over boarding, disguising etc., where this is the case then its detection will be impaired.

2 Recommendations

2.1 The recommendations detailed in the register in Appendix A are based on each item's potential for releasing fibres as described in the Health and Safety Executive guideline HSG 264.

2.2 A quantifiable assessment of the risk of fibre release has been made by using an algorithm which takes into account all factors relevant to the item and the normal activities of the building occupants. Recommendation will then normally involve removal, encapsulation or management as described below;

2.3 The recommendations made in this report may need to be reviewed should the identified Asbestos Containing Materials not be removed within three months.

- Removal of items vulnerable to damage or in such poor condition that removal is the only practical option, or where refurbishment or demolition work is planned whereby the work will affect the asbestos materials present and render removal necessary.
- Enclosure or encapsulation where the material is in poor condition or is vulnerable to damage.
- Management of the asbestos material present by labelling, registering and periodic inspection as necessary.

2.3.1 Definition of terms;

- ***Enclosure*** - Provision of a physical barrier to provide mechanical protection of the material to prevent it being disturbed or damaged.
- ***Encapsulation*** - Provision of paint type coating to create a continuous seal to the surface of the material and thereby prevent fibre release.
- ***Labelling*** - Fixing of labels to the surface of the material to warn of the hazard
- ***Registering*** - Entering the details, including type, location and extent in a register which is bought to the attention of all persons who might plan or undertake works in the building.
- ***Periodic*** - Inspection of the material at defined intervals to check that its condition hasn't deteriorated to require enclosure, encapsulation or removal.
- ***Repair*** - Addition of a seal to the material to prevent the further deterioration of the material. Carried out in conjunction with labelling.
- ***Removal*** - Complete removal of a material in compliance with CAWR 1998.
- ***Manage in situ*** - a policy of regular inspections to ensure that the ACM is maintained in good condition.

3. Material Assessment Algorithm

In the material assessment process, the main factors influencing fibre release are given a score which can then be added together to obtain a material assessment rating. The four main parameters which determine the amount of fibre released from an ACM when subject to disturbance are:

- Product type;
- Extent of damage or deterioration;
- Surface treatment; and
- Asbestos type.

Each parameter is scored between 1 and 3. A score of 1 is equivalent to a low potential for fibre release, 2 = Medium and 3 = high. Two parameters can also be given a nil score (equivalent to a very low potential for fibre release). The value assigned to each of the four parameters is added together to give a total score of between 2 and 12. Presumed or strongly presumed ACMs are scored as crocidolite (i.e. score = 3) unless there is strong evidence to show otherwise. Examples of scoring for each parameter are given in below.

Materials with assessment scores

Scores of 4 or less have a very low potential to release fibres	< 4	Very Low
Scores of 5 and 6 a low potential	5 - 6	Low
Scores of between 7 and 9 are regarded as having a medium potential	7 - 9	Medium
Scores of 10 or more are rated as having a high potential to release fibres	10+	High
Non--asbestos materials are not scored	0	Not Recorded

Material Assessment Algorithm Table

Sample Variable	Score	Examples of scores(see notes for more details)
Product type (or debris from product)	1	Asbestos-reinforced composites (plastics, resins, mastics, roofing felts, vinyl floor tiles, semi--rigid paints or decorative finishes, asbestos cement etc.).
	2	AIB, millboards, other low--density insulation boards, asbestos textiles, gaskets, ropes and woven textiles, asbestos paper and felt.
	3	Thermal insulation (e.g. pipe and boiler lagging), sprayed asbestos, loose asbestos, asbestos mattresses and packing.
Extent of damage/deterioration	0	Good condition: no visible damage
	1	Low damage: a few scratches or surface marks, broken edges on boards, tiles etc.
	2	Medium damage: significant breakage of materials or several small areas where material has been damaged revealing loose asbestos fibres.
	3	High damage or delamination of materials, sprays and thermal insulation. Visible asbestos debris.
Surface treatment	0	Composite materials containing asbestos: reinforced plastics, resins, vinyl tiles.
	1	Enclosed sprays and lagging, AIB (with exposed face painted or encapsulated) asbestos cement sheets etc.
	2	Unsealed AIB, or encapsulated lagging and sprays.
	3	Unsealed lagging and sprays.
Asbestos type	1	Chrysotile.
	2	Amphibole asbestos excluding crocidolite.
	3	Crocidolite.

4. References

- Work with materials containing asbestos. Control of Asbestos Regulations 2012. Approved Code of Practice and guidance L143 Second Edition 2013
- Managing health and safety in construction. Construction (Design and Management) Regulations 2015. Approved Code of Practice L153 HSE Books
- A comprehensive guide to managing asbestos in premises HSG227 HSE Books 2002 ISBN 978 0 7176 2381 5
- Asbestos: The Survey Guide HSG264 HSE Books 2012 ISBN 978 0 7176 6502 0
- Asbestos: The licensed contractors' guide HSG247 HSE Books 2006 ISBN 978 0 7176 2874 2
- The management of asbestos in non-domestic premises. Regulation 4 of the Control of Asbestos Regulations 2012.
- Health and Safety at Work etc. Act 1974 (c.37) The Stationery Office 1974 ISBN 978 0 10 543774 1
- BS EN ISO/IEC 17020: 2012 General criteria for the operation of various types of bodies performing inspection British Standards Institution
- BS EN ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories British Standards Institution
- Asbestos: The analysts' guide for sampling, analysis and clearance procedures HSG248 HSE Books 2005 ISBN 978 0 7176 2875 9
- Accreditation of bodies surveying for asbestos in premises Edition 4 February 2015 RG8 8 (for the application of ISO/IEC 17020)

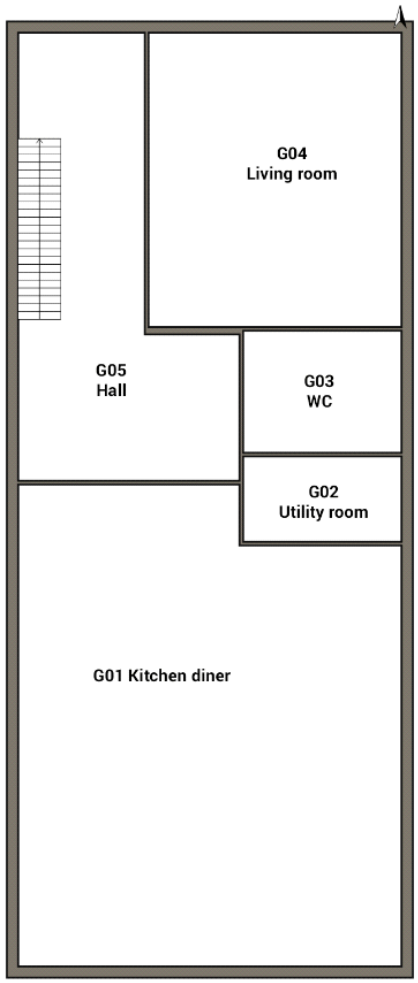
Appendix A

Asbestos Register
Material Assessment Record

Asbestos Register

Item	Level	Location	Product Type	Quantity	Accessibility	Condition	Asbestos Type	Sample No.	Material Assessment and Score
There were no positive items									

Material Assessment Record



SITE PLAN	THIS SITE PLAN SHOULD BE READ IN CONJUNCTION WITH THE FULL ASBESTOS SURVEY REPORT	**KEY**	**Sample Numbers**	salvum safe in any language	9 Springfield Lyons Approach, Chelmsford, CM2 5LB.	**NOT TO SCALE**	Limitations of reported information The information contained within this report which identifies the locations of asbestos containing materials (ACMs) should not be treated as either exhaustive or definitive. It should always be assumed that there may be other ACMs present, hidden or undetected within the fabric of the building. Further investigations may be necessary when carrying out works likely to disturb the fabric of the building.
		Black Text	Negative Sample Number				
		Red Text	Positive Sample Number				

Appendix C - Laboratory Sample Certificates

No samples were taken during the course of this survey.