

Construction Management Plan

pro forma v2.2

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Revisions & additional material

Please list all iterations here:

Date	Version	Produced by
21 November 2017	R01	MY Construction and Carpentry Ltd

Additional sheets

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

Date	Version	Produced by

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**

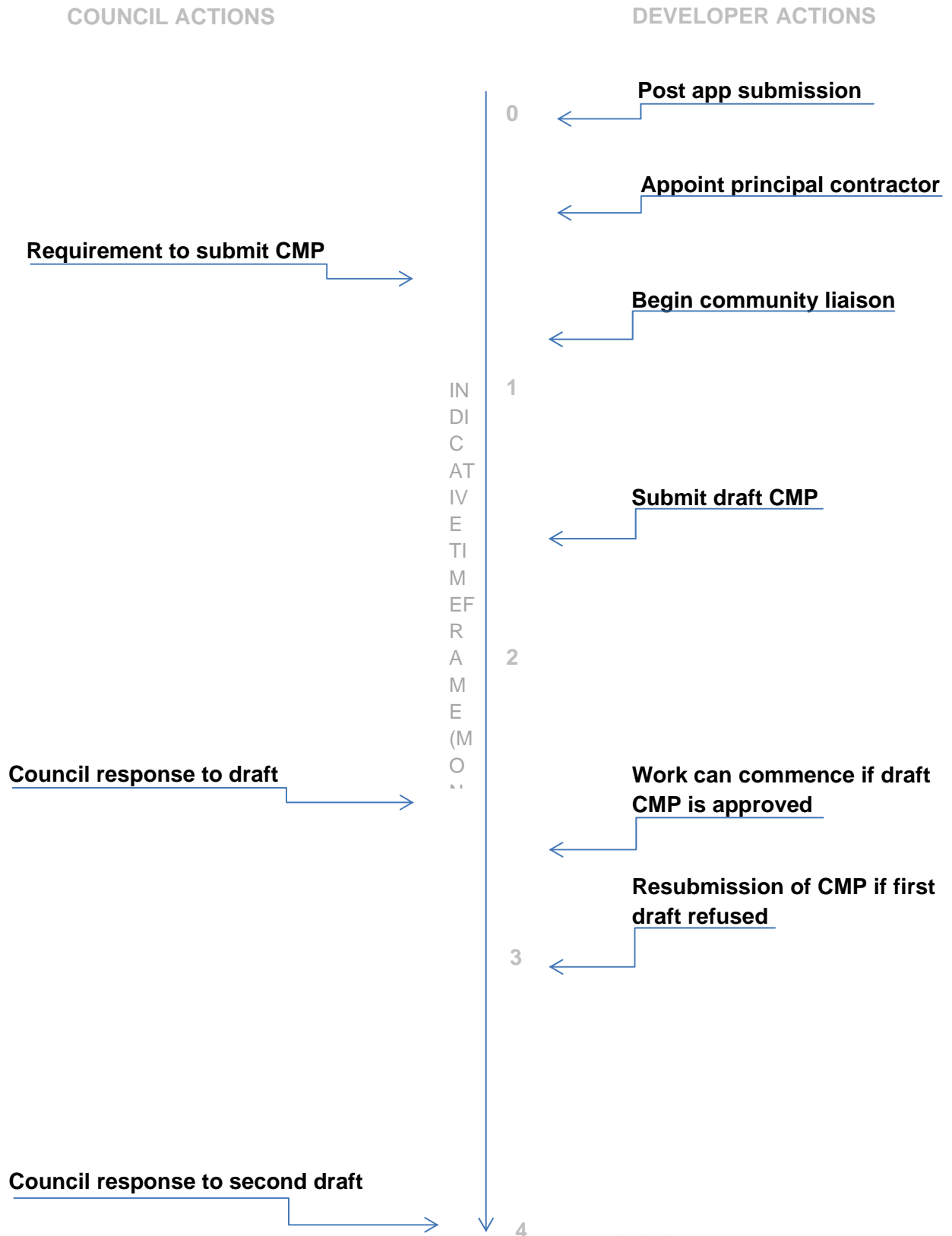
document, and all additional documents, are completed electronically and submitted as Word files to allow comments to be easily documented. These should be clearly referenced/linked to from the CMP.

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



Contact

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

Address: [Garage, Rear of 36-52 Fortress Road, Fortress Grove London NW5 2HB](#)

Planning reference number to which the CMP applies:

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

Name: [Michael Brown](#)

Address: [MY Construction and Carpentry Ltd](#)

Email: michael@myconstruction.co.uk

Phone: [02084505747](tel:02084505747)

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: [Guy Finkelstein](#)

Address: [MY Construction and Carpentry Ltd](#)

Email: guy@myconstruction.co.uk

Phone: [02084505747](tel:02084505747)

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: [as question 3 above](#)

Address:

Email:

Phone:

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: [MY Construction and Carpentry Ltd](#)

Address: [5 Sayer House, Horseshoe Close, Oxgate Lane, London, NW2 7JN](#)

Email: info@myconstruction.co.uk

Phone: [02084505747](tel:02084505747)

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.

A Site Location Plan is attached in Appendix.

The project consists of alterations and extension of an existing vehicle repair workshop which is in the rear of 39-49 Leverton Street and adjoining 1 Railey Mews and 19 and 20 Fortess Grove. The site covers approximately 0.075ha and sits between Fortess Road and Leverton Street, which is just North of Kentish Town Station in the London Borough of Camden.

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 works consist of the:
Removal of the existing roof and the construction of a single-storey roof extension;
Alterations to window openings on the south elevation;
Provision of a new window opening on the west elevation;
Provision of new and refurbished window frames and glazing;
Enclosure and incorporation of the small triangular yard at the south-east corner.

The site is approached by a narrow street and is in close proximity to residential dwellings.

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.).

The residential building 1 Railey Mews and neighbouring residential buildings on Fortess Grove, Leverton Road and Railey Mews.

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.

A site plan is attached in Appendix.

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).

The overall timescale is anticipated to be 38 weeks, provisionally from March to December 2018

The following phases are envisaged:

Site preparation and demolition of existing roof - May 18	March -
Excavation in existing rear yard: new floor slab and foundations - 2018	May - June
Formation of new external walls and roof to rear yard enclosure- 2018	June - July
Formation of new upper floor and roof structure, brickwork - Roofing, windows etc and completion of superstructure - Sept 2018	June - Aug 2018 August-
Fittings and Finishes to Completion -	Sept - Dec 2018

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

8.00am to 6pm on Monday to Friday

8.00am to 1.00pm on Saturdays

No working on Sundays or Public Holidays

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.

There are not expected to be any changes to services as a result of the development proposals.

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.

Local residents will be circulated with a newsletter advising the nature of the development and programme details when these become known, together with notification of particular events.

The letters will include contact details for the site Managers responsible for neighbour liaison, and a register of responses and complaints will be maintained.

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 scale of the development is not considered sufficient to require the establishment of a Construction Working Group.

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 Constructors Manual](#)".

MY Construction will follow the Guide for Contractors Working in Camden.

MY Construction will register the site with the Considerate Constructors Scheme, and the registration reference will be provided in due course.

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.

Details of other local construction sites to be provided in due course in the development of the construction phase CMP, with advice from the council.

The Construction Project Manager will liaise with the Project Managers of the consented developments to ensure that deliveries are coordinated where possible. The MY Construction will continue to monitor the progress of planning applications in the area and will ensure that deliveries are coordinated with any consented schemes if appropriate.

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:

MY Construction and Carpentry Ltd

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](#)).

FORS Bronze accreditation as a minimum will be a contractual requirement, FORS Silver or 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, and that all drivers servicing the site will have undertaken an approved Safe Urban Driving course. This will be included as a contractual requirement.

Where doubt exists, desktop checks will be made against the FORS database for relevant training details as outlined in the CLOCS Standard Managing Supplier Compliance 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. Where this isn't appropriate, checks of FORS ID numbers will form part of the periodic checks and will be carried out as per an appropriate risk scale.

Random spot checks will be carried out by site staff on vehicles and drivers servicing the site at a frequency based on this risk scale.

Where MY Construction own vehicles and drivers are used the above approach will be modified accordingly.

Collision reporting will be requested periodically from operators and acted upon when necessary.

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 by MY Construction and Carpentry Limited on behalf of Alephco Developments Limited

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.

A routing plan is attached in Appendix.

Vehicles will approach the site via Fortess Road [A 400]. Vehicles will be advised to travel on Junction Road and Fortess Road from the TfL Red Route Archway Road A1 at Highgate, and vice versa.

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.

Details of agreed access / egress routes will be issued to all suppliers and subcontractors by email with order.

There is very limited public parking in the area, and contractors or visitors will be advised/ instructed to travel to the site by public transport, by foot or cycle. The CPM will provide all site personnel with details of local public transport services and locations where parking can occur away from the site.

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.

Numerous types of delivery vehicles will be used to bring materials to and from the site. These are expected to include:

Skip lorries including roll on roll off (approx. size 7.5m long and 4.4m wide)
Standard 8 yard skips for waste (approx. size 7m long and 2.4m wide)
Ready mix lorries (approx. size 8.25m long and 2.45m wide)
Flatbed delivery vehicles for the delivery of various materials including scaffolding, steelwork, reinforcement, bricks/blocks, timber, roofing materials, plaster, joinery etc. (approx. size 8.5m long and 2.45m wide)
Transit vans (approx. size 4.9m to 5.8m long) for the delivery of various materials, sub-contractors equipment etc

It is anticipated that there will be in the region of 6-8 vehicles per day, although it may be necessary to increase this number at certain stages of the project.

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

To be confirmed at the date of construction.

The Construction Project Manager will liaise with the Project Managers of any consented developments to ensure that deliveries are coordinated where possible. There are no known large developments or works in prospect in, or accessed from, Fortess Grove. The contractor will continue to monitor the progress of planning applications in the area and will ensure that deliveries are coordinated with any consented schemes if appropriate.

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.

It will be required that all HGVs call a minimum of 20 minutes prior to arrival at the site to ensure that the loading area on site is available, and arrange to be met by a traffic marshal.

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.

If loading space is unavailable on site then construction vehicles shall not proceed to the site and will be given an alternative delivery slot. Therefore, there will be no requirement for any off-site holding areas.

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 Contractor will investigate the potential for using construction material consolidation centres and other measures such as electric vehicles to reduce the impact of traffic associated with the development works, but no conclusions have yet been reached.

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

Access to the site will be via Fortess Grove. The existing forecourt on the site which currently serves the existing building will be used for deliveries.

Large vehicles will reverse from Fortess Road into the entrance of Fortess Grove, and thence straight into the existing forecourt. They will leave the site in forward gear to the junction with Fortess Road, then turn to right or left . A banksman will ensure that traffic flow on both roads is maintained at all times.

Smaller vehicles may drive in forwards, and then reverse out into Fortess Grove under the supervision of the banksman, then turn towards the junction with Fortess Road.

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

Access / egress for delivery and removal of materials will be planned, scheduled and coordinated by the Site Manager. There will be appointed banksmen to guide delivery vehicles.

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).

No tight manoeuvres are envisaged as vehicles will be reversing straight into the existing vehicular entrance and straight out again.

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.

Vehicles will enter only on the existing hard surface, and there will therefore be no debris tracked outside the site boundary.

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.

All construction vehicles will park and load within the site boundary.

All materials, site accommodation and plant will be stored on site, either in the entrance courtyard or within the existing building.

Demolition material and the small amount of spoil will be removed from the site by grab lorries, and concrete delivered directly to the site using ready mix lorries.

It is not anticipated that any parking bay suspensions will be required.

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](#).

At this stage, it is not anticipated that parking bay suspensions or temporary traffic management orders are required.

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).

No highway works will be necessary to enable construction to take place. All materials, site accommodation and welfare facilities will be stored on site.

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

The Contractor will ensure that all mandatory safety signage will be displayed at the site access. As all deliveries will take place on site no ramps, signage or barriers are considered necessary on the public highway.

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).

No diversions to the public highway are expected during construction

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.

At the junction with Fortress Road, when large vehicles are entering the site, a second traffic marshal will be deployed and both marshals will supervise turning and reversing manoeuvres into Fortress Grove and manage the interaction between construction vehicles, other vehicles and pedestrians. The second traffic marshal will escort the reversing HGV back to the entrance gateway at walking pace.

Smaller vehicles may drive in forwards, and then reverse out into Fortress Grove under the supervision of the traffic marshal, then turn towards the junction with Fortress Road.

All marshals will be senior, trained personnel who are able to communicate clearly in English. Traffic marshals will wear high visibility yellow clothing with the contractors name and the words "traffic marshal" front and back. All marshals will communicate with the site, and with each other, by mobile phones or radios.

Secure 2.4m high painted ply hoardings with a lockable access will be erected to all open boundaries.

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.

No temporary structures will overhang the public highway.

Secure and lockable hoarding will be provided along the frontage of the property within the boundary of the site.

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 following measures will be implemented:

Noisy work will be restricted to between 08:00 and 18:00 Monday to Friday and between 08:00 and 13:00 on Saturdays. No works will be carried out on Sundays and Bank Holidays.

Where possible and practical, contractors will use well-maintained and silenced plant and equipment including compressors, generators and power tools.

The Best Practicable Means (BPM), as defined in Section 72 of the Control of Pollution Act 1974, shall be employed at all times to reduce noise (including vibration) to a minimum, with reference to the general principles contained in British Standard BS5228: 2009 'Noise and Vibration Control on Construction and Open Sites'.

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 carried out on 13th-17th June 2017 by Clarke and Saunders, and a copy is included in their attached report AS9808.170725.NIA1.1 - signed.1

30. Please provide predictions for [noise](#) and vibration levels throughout the proposed works.

Noise levels will be monitored in accordance with Camden's Minimum Requirements, with reference to Predicted Levels in BS 5228:2009 Part 1, to be confirmed in due course.

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.

General measures:

Coordinated delivery times and efficient traffic management to prevent delays accessing the site.

Ensuring all plant has sound reduction measures (mufflers, baffles or silencers).

Utilising construction techniques that minimise the production of noise.

Utilisation, where possible of pre-fabricated components.

Utilisation of baffle system during the demolition process.

Strict adherence to the site working hours.

Devise and implement an action plan if noise levels exceed acceptable levels:

Specific noise mitigation measures will be incorporated during the demolition and construction if considered necessary as indicated in the Noise Report in due course.

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

Following formal and/or informal training, the site management staff will be familiar with the recommendations in BS 5228:2009 and will be able to pursue solutions to any excessive noise levels in consultation with the Contractor's appointed consultants.

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

Hoardings bordering the frontage of the property along Fortess Grove will help contain any dust. Where required, scaffolding and sheeting can be erected to further contain dust. Water dampening will also be used if considered necessary.

Air quality procedures will be established to minimise dust generation and control plant and vehicle exhaust emissions.

The principal contractor will undertake regular air quality sampling to ensure that works do not impact on existing air quality levels.

Ensure 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. Once weeds and grass have grown again on the piles this will reduce the risk.

Loose materials will be stored in separated bays, and the division partitions will be lower than any adjacent boundary hoardings.

During dry periods, the works will be dampened down to control the generation of dust.

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.

Ensure all vehicles leaving the site have been through the wheel wash and that loads are covered where spoil or demolition material is being removed.

Provide road cleaning using road sweepers or brushes to control dust and mud as required.

Keeping the loading drop heights of spoil into lorries as low as possible.

Implementing an effective procedure to deal with complaints from third parties to ensure issues are dealt with efficiently and quickly, via an advised and dedicated telephone number.

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.

It is not anticipated that any significant amounts of dirt or dust will be spread on to the public highway as the site area is hard surfaced.

Operatives will brush down the highway and footpath after each delivery to remove any debris.

35. Please provide details describing arrangements for monitoring of [noise](#), vibration and dust levels.

Monitoring will be carried out as prescribed by the Noise/vibration and Air Quality consultants in due course, in accordance with the findings of their reports.

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.

A Dust Risk Assessment will be carried out before work commences, and a copy will be provided to the council

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](#).

These measures will be addressed by compliance with the mitigation measures listed in the proposed Dust Risk Assessment, relative to the level of risk identified.

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.

To be determined in due course according to the findings of the proposed Dust Risk Assessment

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).

A site survey will be carried out by an approved Pest Control specialist before commencement of construction.

A Method Statement for pest control will be prepared and implemented by the specialist, in accordance with Camden's Minimum Requirements.

Any redundant drains will be removed and any connections sealed with concrete.

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

A demolition asbestos survey was carried out on 10th August 2016 by Mike Colborn Associates, and a copy of their report is attached. All licensed asbestos has been removed

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.

Contractors and site personnel will be required to behave in a considerate and respectful manner towards neighbouring residents and members of the public at all times. Contractors and personnel will not smoke in Fortress Grove. All litter and waste will be disposed of on site and meals consumed in on-site welfare facilities.

Smoking will not be permitted in working areas. If possible, a compliant smoking area may be provided in a remote area of the site which does not cause nuisance to workers or neighbours.

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 (mm/yy - mm/yy): **anticipated 03/18 - 12/18**
- 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): **Tes**
- 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:
N/A
- 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: **N/A**
- 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:
N/A

NOTE

The Construction time period is anticipated from 03/18 to 12/18.

The site is not within the CAZ.

The Development is of 370 sq.m floor area, and is therefore not a major Development, and we understand that the GLA NRMM Regulations do not therefore apply at this time.

⊛ 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: 21 MAR 2017

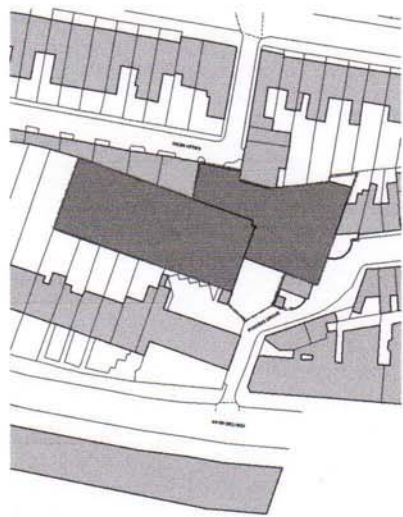
Print Name: YOAV TAL

Position: DIRECTOR

Please submit to: planningobligations@camden.gov.uk

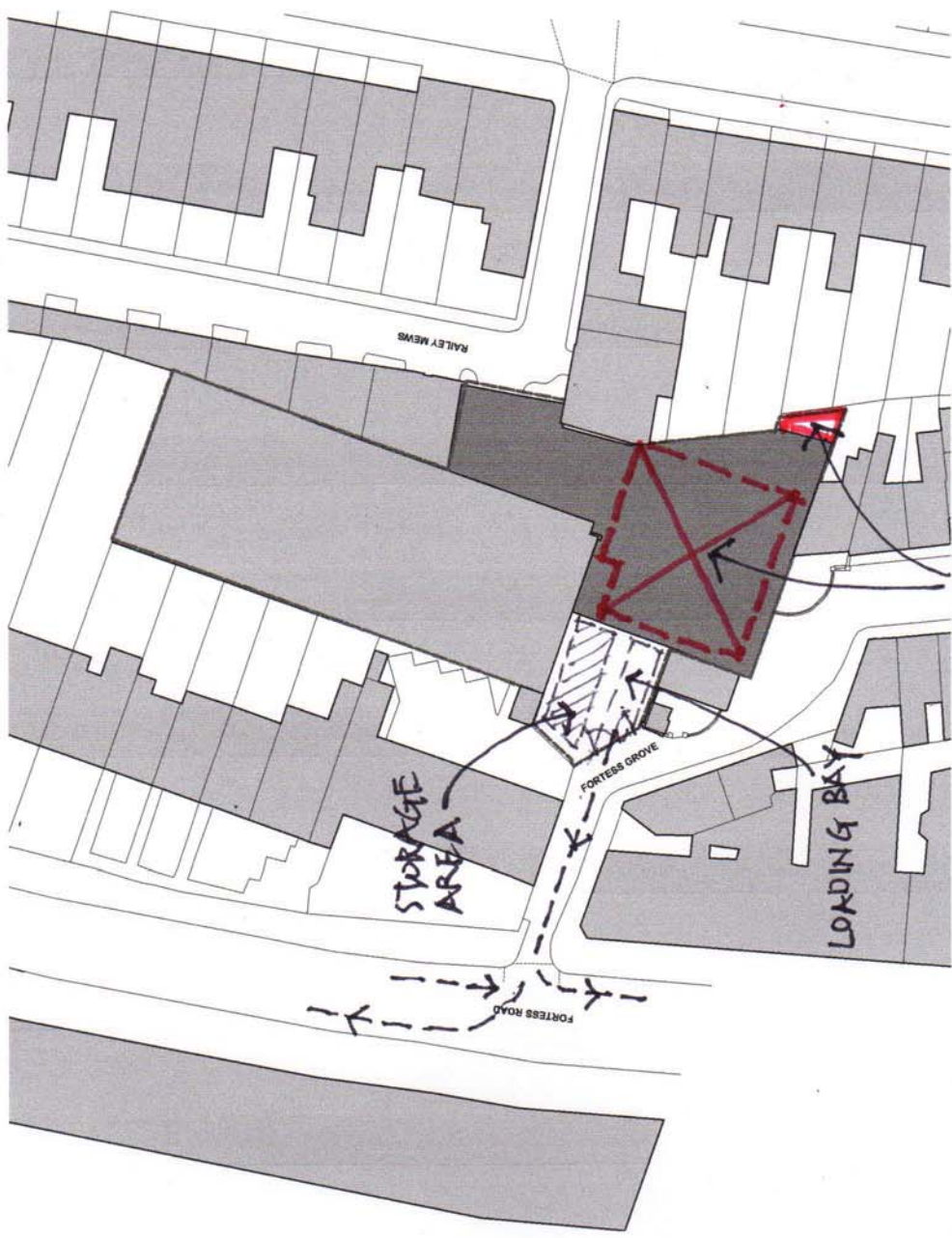
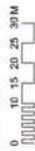
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Location Plan

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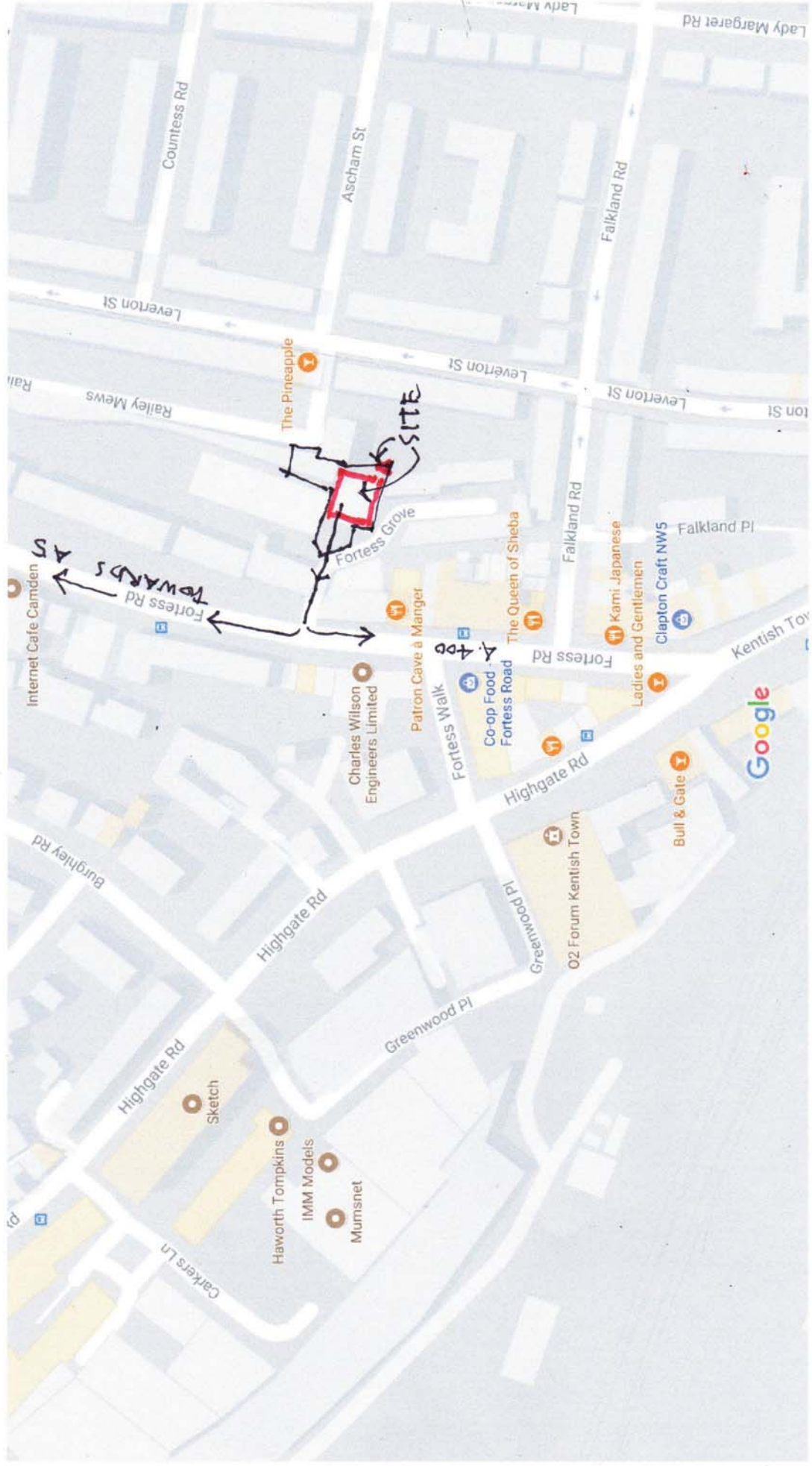
AREA OF WORKS

Site Plan

1:500



Google Maps Rear of 36-52 Fortress Grove - ROUTING PLAN





REPORT AS9808.170725.NIA1.1

FORTESS GROVE
28-34 FORTESS ROAD
LONDON



NOISE IMPACT ASSESSMENT



Prepared: 20 October 2017



Fortess 2016 Limited

c/o WPP Group
51 Staines Road
Sunbury on Thames
Middlesex
TW16 7AH



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List of Attachments

AS9808/SP1	Indicative Site Plan
AS9808/TH1-TH2	Environmental Noise Time Histories
Appendix A	Acoustic Terminology
Appendix B	Acoustic Calculations

1.0 INTRODUCTION

Planning approval is being sought for the installation of new plant at Fortress Grove, 28-34 Fortress Road, London.

Clarke Saunders Associates has been commissioned by WPP on behalf of Fortress 2016 Limited to undertake an environmental noise survey in order to measure the prevailing background noise climate at the site.

The background noise levels measured will be used to determine daytime and night-time noise emission limits and, subsequently, to assess the noise impact of proposed building services plant, in accordance with the planning requirements of Camden Council.

2.0 SURVEY PROCEDURE & EQUIPMENT

A survey of the existing background noise levels was undertaken at 1st floor level of the existing building at the location shown in site plan AS9808/SP1. A suitable monitoring location was not available on the eastern elevation of the building. The inspection of the site and relative proximity of dominant noise sources suggest that the lowest night-time background noise levels at the monitoring position would be consistent with those in Railey Mews to the east of the proposed plant area.

Measurements of consecutive 5-minute L_{Aeq} , L_{Amax} , L_{A10} and L_{A90} sound pressure levels were taken between 15:00 hours on Tuesday 13th June and 12:00 hours on Thursday 17th June 2017.

These measurements will allow suitable noise criteria to be set for the new building services plant, dependent on hours of operation.

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

- Rion data logging sound level meter type NA28;
- Rion sound level calibrator type NC-74.

The calibration of the sound level meter was verified before and after use. No significant calibration drift was detected.

The weather during the survey was dry with light winds, which made the conditions suitable for the measurement of environmental noise.

Measurements were made following procedures in BS 7445:1991 (ISO1996-2:1987) *Description and measurement of environmental noise Part 2- Acquisition of data pertinent to land use*.

Please refer to Appendix A for details of the acoustic terminology used throughout this report.

3.0 RESULTS & ANALYSIS

Figures AS9808/TH1-TH2 show the L_{Aeq} , L_{Amax} , L_{A10} and L_{A90} sound pressure levels as time histories at the measurement position.

The background noise climate at the property is determined by road traffic noise in the surrounding streets.

Measured minimum background and average noise levels are shown in Table 3.1 below.

Monitoring period	Minimum $L_{A90,5mins}$
07:00 - 23:00 hours	40 dB 15/06/2017 07:55
23:00 - 07:00 hours	31 dB 15/06/2017 03:25
24 hours	31 dB

Table 3.1 - Minimum measured background and average noise levels

[dB ref. 20 μ Pa]

Measured spectral noise levels for these periods are shown in Table 4.2 below.

Freq (Hz)	63	125	250	500	1k	2k	4k	8k
Daytime L_{A90}	53	46	39	37	35	29	24	16
Night time L_{A90}	43	37	33	29	26	20	13	12

Table 3.2 – Minimum L_{90} linear spectral levels

[dB ref. 20 μ Pa]

4.0 DESIGN CRITERIA

4.1 Local Authority Requirements

Camden Council typically requires new plant to be 5dB below the background level. In addition, the background level must not be exceeded by more than 1dB in any octave band between 63Hz and 8kHz¹.

¹ NB The Camden Local Plan was adopted 3/7/17. This appears to suggest at 'Appendix 3: Noise Thresholds' that a BS4142:2014 *Rating Level* 10dB below background is required, with a more onerous criterion required for situations where plant may have tonal content.

Noise levels at a point 1 metre external to sensitive facades shall be at least 5dB(A) less than the existing background measurement (L_{A90}), expressed in dB(A) when all plant/equipment (or any part of it) is in operation unless the plant/equipment hereby permitted will have a noise that has a distinguishable, discrete continuous note (whine, hiss, screech, hum) and/or if there are distinct impulses (bangs, clicks, clatters, thumps), then the noise levels from that piece of plant/equipment at any sensitive façade shall be at least 10dB(A) below the L_{A90} , expressed in dB(A).

Cooling plant is not expected to have any of these characteristics at the noise sensitive receptor and on this basis, the plant noise emissions criteria that should not be exceeded at the nearest noise sensitive receiver should be set to the proposed levels detailed in Table 4.1 and Table 4.2.

Daytime (07:00 – 23:00 hours)	Night-time (23:00 – 07:00 hours)	24 hours
L_{Aeq} 35 dB	L_{Aeq} 26 dB	L_{Aeq} 26 dB

Table 4.1 - Proposed design noise criteria

[dB ref. 20 μ Pa]

Freq (Hz)	63	125	250	500	1k	2k	4k	8k
24-hour spectral Criterion	44	38	34	30	27	21	14	13

Table 4.2 - Spectral design criterion

[dB ref. 20 μ Pa]

4.2 BS8233:2014 *Guidance on sound insulation and noise reduction for buildings*

The guidance in this document indicates suitable noise levels for various activities within residential and commercial buildings.

The relevant sections of this standard are shown in the following table:

Activity	Location	07:00 to 23:00	23:00 to 07:00
Resting	Living Room	35 dB L_{Aeq} , 16 hour	-
Dining	Dining Room	40 dB L_{Aeq} , 16 hour	-
Sleeping (daytime resting)	Bedroom	35 dB L_{Aeq} , 16 hour	30 dB L_{Aeq} , 8 hour

Table 4.3 - Excerpt from BS8233: 2014

[dB ref. 20 μ Pa]

5.0 PREDICTED NOISE IMPACT

5.1 Proposed plant

The selected plant has been confirmed as:

- 14 no. Daikin Condensing Units Type RXYSQ4TV1
- 5 no. Daikin Condensing Units Type 20HP Single (REYQ20T)
- 1 no. Daikin Condensing Units Type 32HP Multi (REYQ16T / REYQ16T)
- 1 no. Daikin Condensing Units Type 34HP Multi (REYQ16T / REYQ18T)
- 1 no. Daikin Condensing Units Type 36HP Multi (REYQ16T / REYQ20T)

The approximate location of the plant to be installed is shown in site plan AS9808/SP1. The plant has been arranged in order to minimise noise impact on nearby noise sensitive-receptors.

Noise levels generated by the type REYQ16T condenser to be installed have been confirmed by the manufacturer as follows:

Freq (Hz)	63	125	250	500	1000	2000	4000	8000	dB(A)
Lp @ 1m (dB)	69	67	66	62	57	53	47	42	64

Table 5.1 - Source noise data for the type REYQ16T condenser

[dB ref. 20µPa]

Noise levels generated by the type REYQ18T condenser to be installed have been confirmed by the manufacturer as follows:

Freq (Hz)	63	125	250	500	1000	2000	4000	8000	dB(A)
Lp @ 1m (dB)	66	65	67	64	59	55	50	44	65

Table 5.2 - Source noise data for the type REYQ18T condenser

[dB ref. 20µPa]

Noise levels generated by the type REYQ20T condenser to be installed have been confirmed by the manufacturer as follows:

Freq (Hz)	63	125	250	500	1000	2000	4000	8000	dB(A)
Lp @ 1m (dB)	65	65	66	65	60	56	52	45	66

Table 5.3 - Source noise data for the type REYQ20T condenser

[dB ref. 20µPa]

Noise levels generated by the type RXYSQ4TV1 condenser to be installed have been confirmed by the manufacturer as follows:

Freq (Hz)	63	125	250	500	1000	2000	4000	8000	dB(A)
Lp @ 1m (dB)	59	52	51	49	45	38	31	23	50

Table 5.4 - Source noise data for the type RXYSQ4TV1 condenser

[dB ref. 20µPa]

5.2 Predicted noise levels

Following an inspection of the site, the nearest noise sensitive receiver is situated on Railey Mews at 2nd floor level, as shown on the indicative site plan AS9808/SP1. This window is at least 6 metres away from the proposed plant location.

The cumulative noise level at the nearest noise sensitive receiver has been assessed using the noise data above. Screening losses afforded by the parapet upstand which surrounds the plant area have been included in the prediction of the cumulative plant noise level at the nearest receiver. The plant will be located behind a new acoustically rated louvre over the top of the plan enclosure.

The insertion losses for the Proposed Caice CS600 louvre used in the calculations are as follows;

Frequency (Hz)	63	125	250	500	1k	2k	4k	8k
Insertion (Caice CS600)	6	8	13	23	38	32	32	32

Table 5.5 - Insertion Losses of Louvred Enclosure

[dB ref. 20 µPa]

The cumulative plant noise level predictions, shown against the corresponding spectral and overall design criteria are shown in Table 5.6 below.

Freq (Hz)	63	125	250	500	1k	2k	4k	8k	dB(A)
Criterion	44	38	34	30	27	21	14	13	26
Predicted level at 1m from receiver	41	35	28	14	0	0	0	0	23

Table 5.6 - Predicted noise level and criteria at nearest noise sensitive location

[dB ref. 20 µPa]

The assessment shows that cumulative plant noise emissions would comply with the requirements of Camden Council².

A summary of the calculations is shown in Appendix B.

Any other air handling and extract plant will be fitted with acoustically specified splitter silencers in order that the cumulative noise level does not exceed the 24-hour design noise criterion.

² With the mitigation measures in place, compliance is achieved relatively comfortably, and the more onerous BS4142 rating level objective intimated in the new Camden Local Plan would also be achieved.

5.3 Comparison to BS8233:2014 Criteria

Depending on window type, and frequency content/orientation of incident sound, Appendix G.2.1 of BS8233:2014 indicates that a loss of approximately 15dB is appropriate for external noise ingressing through a partially open window.

Even disregarding any such loss, the overall predicted level shown in Table 6.6 indicates that internal noise levels due to ingressing plant noise would be significantly lower than the level recommended in Table 4.3 for sleeping in bedrooms at night.

6.0 CONCLUSION

An environmental noise survey has been undertaken at Fortress Grove, 28-34 Fortress Road, London by Clarke Saunders Associates between Tuesday 13th June and Thursday 17th June 2017.

Measurements have been made to establish the current background noise climate. This has enabled a 24-hour design criterion to be set for the control of plant noise emissions to noise sensitive properties, in accordance with Camden Council's requirements.

Data for the new Daikin condensing units have been used to predict the noise impact of the new plant on neighbouring residential properties, both in spectral terms and in overall dB(A).

Compliance with the noise emission design criterion has been demonstrated including insertion losses provided by a proprietary acoustically louvred enclosure. No further mitigation measures are required for control of external plant noise emissions.



Daniel Saunders MIOA

CLARKE SAUNDERS ASSOCIATES

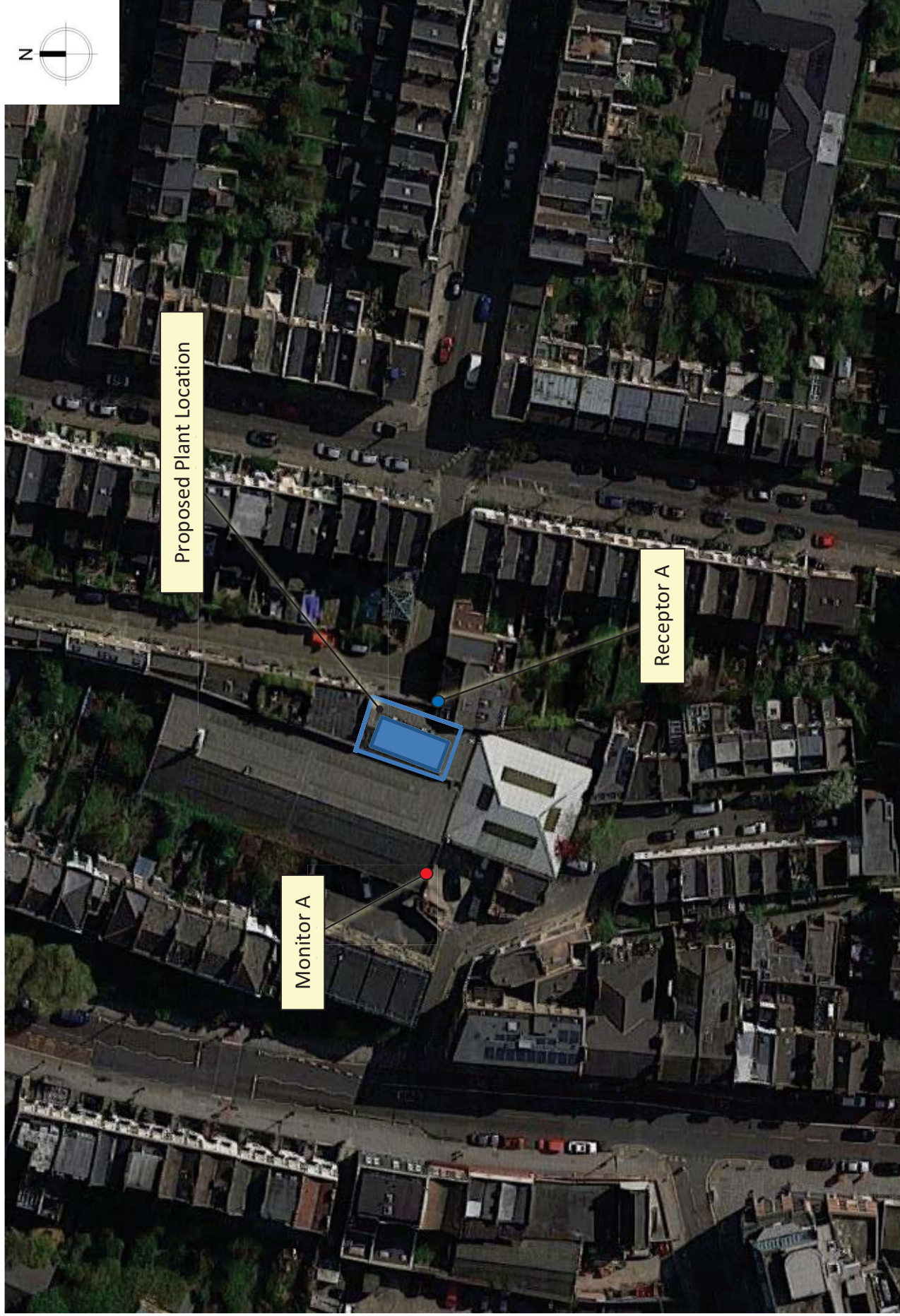
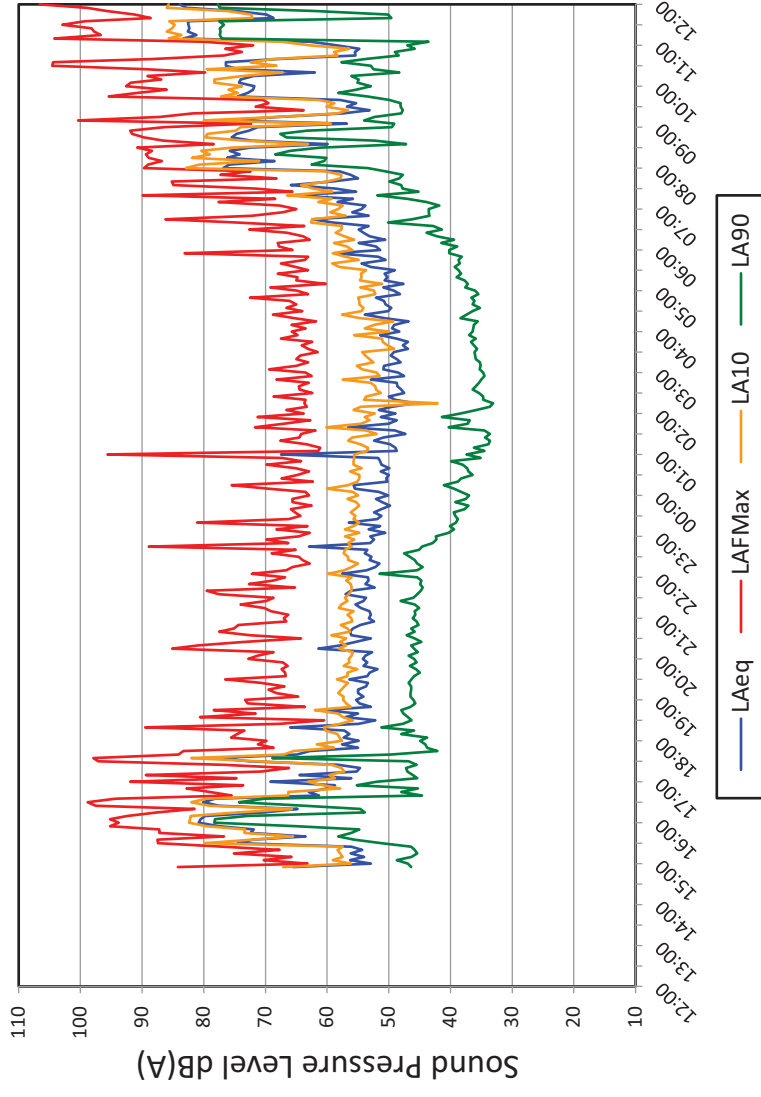


Figure AS9808/SP1

Fortress Grove, 28-34 Fortress Road, London

Environmental Noise Time History: Inner Courtyard

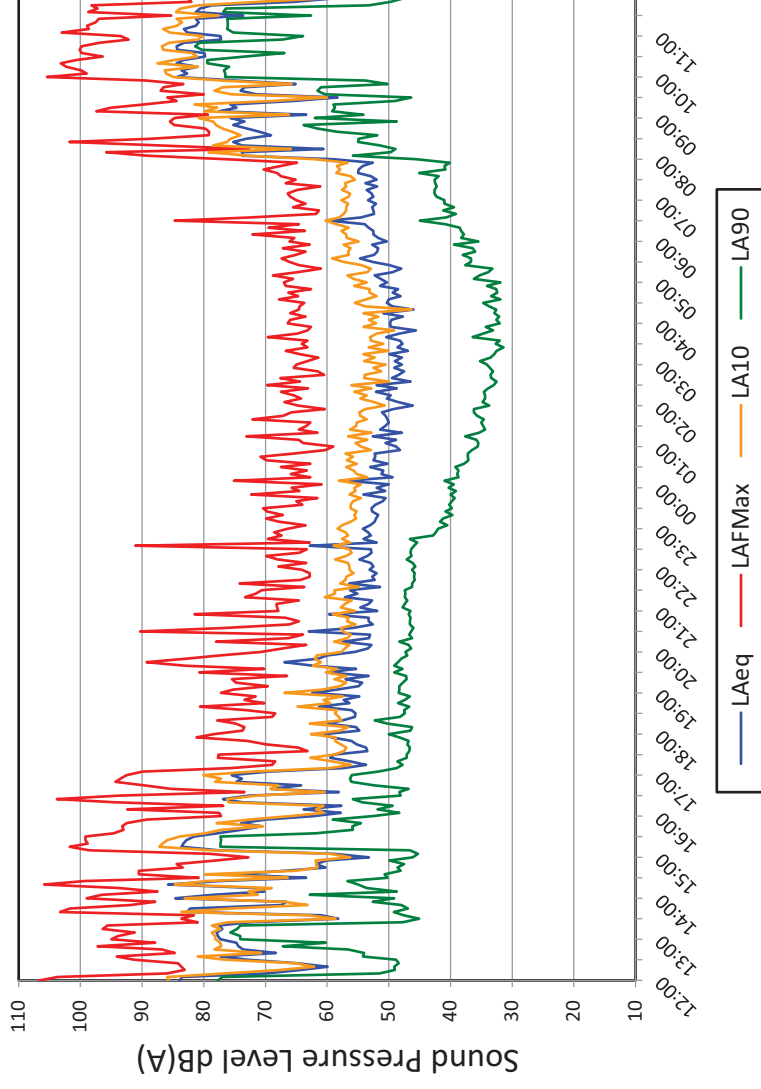


Tuesday 13 June to Wednesday 14 June 2017

Figure AS9808/TH1

Fortress Grove, 28-34 Fortress Road, London

Environmental Noise Time History: Inner Courtyard



Wednesday 14 June to Thursday 15 June 2017

Figure AS9808/TH2

APPENDIX A

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
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1.3 Human Perception of Broadband Noise

APPENDIX A

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.

INTERPRETATION

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 B
AS9808 - Fortress Grove, 28-34 Fortress Road, London
Noise Impact Assessment

To Railey Mews

REYQ16T	Group E	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dB(A)
Level measured	Lp @ 1m	69	67	66	62	57	53	47	42	64
Number of Plant	4	6	6	6	6	6	6	6	6	
Night time duty setback		-3	-3	-3	-3	-3	-3	-3	-3	
Distance Loss	To 10m	-20	-20	-20	-20	-20	-20	-20	-20	
Louvre Insertion Loss		-6	-8	-13	-23	-38	-32	-32	-32	
Screening loss		-8	-10	-13	-15	-18	-18	-18	-18	
Level at receiver		38	32	24	7	-16	-14	-20	-25	19
REYQ18T	Group E	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dB(A)
Level measured	Lp @ 1m	66	65	67	64	59	55	50	44	65
Number of Plant	1	0	0	0	0	0	0	0	0	
Night time duty setback		-3	-3	-3	-3	-3	-3	-3	-3	
Distance Loss	To 10m	-20	-20	-20	-20	-20	-20	-20	-20	
Louvre Insertion Loss		-6	-8	-13	-23	-38	-32	-32	-32	
Screening loss		-8	-10	-12	-15	-18	-18	-18	-18	
Level at receiver		29	24	19	3	-20	-18	-23	-29	13
REYQ20T	Group D / E	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dB(A)
Level measured	Lp @ 1m	65	65	66	65	60	56	52	45	66
Number of Plant	6	8	8	8	8	8	8	8	8	
Night time duty setback		-3	-3	-3	-3	-3	-3	-3	-3	
Distance Loss	To 10m	-20	-20	-20	-20	-20	-20	-20	-20	
Louvre Insertion Loss		-6	-8	-13	-23	-38	-32	-32	-32	
Screening loss		-8	-10	-12	-15	-18	-18	-18	-18	
Level at receiver		35	31	25	12	-11	-9	-13	-20	20
RXYSQ4TV1	Group A	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dB(A)
Level measured	Lp @ 1m	59	52	51	49	45	38	31	23	50
Number of Plant	6	8	8	8	8	8	8	8	8	
Night time duty setback		-3	-3	-3	-3	-3	-3	-3	-3	
Distance Loss	To 8m	-18	-18	-18	-18	-18	-18	-18	-18	
Louvre Insertion Loss		-6	-8	-13	-23	-38	-32	-32	-32	
Screening loss		-9	-11	-14	-16	-18	-18	-18	-18	
Level at receiver		30	19	11	-4	-24	-25	-32	-40	8
RXYSQ4TV1	Group B	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dB(A)
Level measured	Lp @ 1m	59	52	51	49	45	38	31	23	50
Number of Plant	6	8	8	8	8	8	8	8	8	
Night time duty setback		-3	-3	-3	-3	-3	-3	-3	-3	
Distance Loss	To 6m	-16	-16	-16	-16	-16	-16	-16	-16	
Louvre Insertion Loss		-6	-8	-13	-23	-38	-32	-32	-32	
Screening loss		-10	-13	-15	-18	-18	-18	-18	-18	
Level at receiver		31	19	11	-3	-22	-23	-30	-38	8
RXYSQ4TV1	Group C	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	dB(A)
Level measured	Lp @ 1m	59	52	51	49	45	38	31	23	50
Number of Plant	2	3	3	3	3	3	3	3	3	
Night time duty setback		-3	-3	-3	-3	-3	-3	-3	-3	
Distance Loss	To 11m	-21	-21	-21	-21	-21	-21	-21	-21	
Louvre Insertion Loss		-6	-8	-13	-23	-38	-32	-32	-32	
Screening loss		-8	-10	-12	-15	-18	-18	-18	-18	
Level at receiver		24	13	5	-10	-31	-33	-40	-48	2
Specific Noise Level	L_{eq} 15min	41	35	28	14	-9	-7	-12	-18	23

* Screening loss limited to 18dB

Night Time Design Criterion

26 dB(A)

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Asbestos Survey Report Pre-Refurbishment /Demolition



Warehouse 1&2, Fortess Grove, London, NW5 2HR

Fortess 2016 Ltd

Survey Date	10 th August 2016
Report Date	15 th August 2016

Leading Surveyor	Timothy Pullan

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1. INTRODUCTION

Mike Colborn Associates were commissioned by Davis Brown, on behalf of Fortess 2016 Ltd to undertake an asbestos survey, Specific Pre-Refurbishment/Pre-demolition (HSG264) and to compile a report and identify, as far as reasonably practical, all Asbestos Containing Materials (ACMs) at Warehouse 1&2, Fortess Grove, London, NW5 2HR. This survey inspection was commissioned as a pre-cursor to future planned major refurbishment / demolition of the property.

The purpose of this survey is to produce a basis for tendering the removal of ACMs from the Premises prior to demolition or major refurbishment. The survey DOES NOT assess the condition of asbestos for management purposes, other than note areas of damage or debris.

The extent of the premises surveyed within the scope of these inspections and any specific access requirements or limitations were agreed between Mike Colborn Associates Ltd and Davis Brown prior to the survey being commenced.

Information on the results of these inspections is detailed in this report, appendices and annotated drawings. The report and asbestos register must be maintained as one document, as both sections record information on the surveyor's opinions, findings and limitations.

The room descriptions referred to in this report correspond with those on the attached drawings (not applicable).

Whilst every effort has been made to detect all sources of asbestos, without extensive demolition work, Mike Colborn Associates Ltd cannot be held liable for any omissions to this report.

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2. SURVEY TYPE AND METHOD

Pre-Refurbishment / Pre-Demolition Survey

Full access sampling and identification survey (pre-demolition/major refurbishment survey).

This type of survey is used to locate and describe, as far as reasonably practical, Asbestos containing materials (ACM's) in the building and may involve destructive inspection, as necessary, to gain access to areas, including those that may be difficult to reach. The survey is designed to be used as a basis for tendering the removal of ACMs from the Premises prior to demolition or major refurbishment. (HSG264).

The aim of these inspections is to produce a pre-refurbishment/pre-demolition destructive survey of the Premises.

The pre-refurbishment/pre-demolition destructive survey is based on visual and intrusive inspection of suspected materials on site confirmed by bulk sampling and analysis of materials obtained. The purpose of the survey is to locate, as far as reasonably practical, ACMs at the Premises.

Due to inherent risk to health, pre-refurbishment/pre-demolition surveys are only conducted in unoccupied premises or sites which will remain unoccupied until any remedial or removal measures have been undertaken. Pre-refurbishment/pre-demolition surveys will not be undertaken within premises that are closed overnight but will be required to open the following day unless specific emergency procedures are put in place.

Pre-demolition surveys require substantial disruption to the building, i.e. partial demolition of risers, ducts, opening up of access hatches, locked or blocked doors, etc. This cannot be accomplished without safeguards being in place and the building been unoccupied, otherwise limitations must be employed.

Although every effort is made to access all areas of the premises it is possible that concealed cavities, floor voids etc. will only be accessible during demolition and, therefore, contingencies must be made to include these potential risks.

All sampling is undertaken so as to cause the minimum possible nuisance, disruption or risk to health. These factors may limit the sampling strategy.

All samples are submitted for analysis in accordance with HSG264 & UKAS testing and incorporate the use of polarised light microscopy & dispersion staining techniques to

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determine asbestos type – Blue (Crocidolite), Brown (Amosite) or White (Chrysotile). The comments, opinions and recommendations in this report do not fall within the scope of UKAS Accreditation.

Samples from each suspected material inspected are collected to confirm or refute the surveyor's judgment. If materials sampled are found to contain asbestos, other similar homogenous materials used in the same way in the relevant building can be presumed to contain asbestos. Other less homogenous materials and non-asbestos materials are sampled more frequently to confirm whether or not asbestos is present.

The surveyor shall take all reasonable steps in order to conclude that ACMs are not present. Opinions on asbestos content, or presumed lack of, will be noted in the report.

The destructive element of inspection surveys will normally be completed by two surveyors in full RPE and PPE unless a site specific risk ` deems otherwise.

Materials are described as strongly presumed where the material appears to contain asbestos but analysis has not been undertaken, and presumed where there is insufficient evidence to suggest it does not contain asbestos.

Each room or designated area is inspected individually noting any building materials which may contain asbestos. All heating, ventilation, services, riser, voids etc., will be accessed where possible and safe to do so.

Pre-refurbishment/pre-demolition surveys will not normally assess accessibility, damage or deterioration (except to note debris), or surface treatment.

All reasonable efforts are made to access and find any concealed asbestos, e.g. below floor ducts, in ceiling voids and inside convactor heaters. However, because of the way that asbestos is used in composite structures and inaccessible places it cannot be guaranteed that all ACMs have been located during surveys. All non-accessible materials or parts of the building will be noted for special access requirements beyond those deemed necessary for a pre-refurbishment/pre-demolition survey (i.e. demolition, structural etc.).

Where materials are suspected to contain asbestos fibres, but not sampled due to restrictions, they will be reported as presumed where there is no evidence to the contrary, or strongly presumed where sampling and analysis have not been undertaken but various factors indicate the material is likely to asbestos bearing (i.e. fibrous appearance of the material, knowledge of the material's manufacture, fire retardant purpose, etc.). These materials should be treated as asbestos materials until otherwise identified. The surveyor's justifications for these presumptions are noted accordingly within the report.

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Areas of the premises or materials not readily identifiable as non-asbestos are left undisturbed until material content can be ascertained, i.e. inaccessible voids, sealed rooms, etc.

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3. LIMITATIONS, NON-ACCESSIBLE AREAS AND INSURER'S CAVEAT

LIMITATIONS

Electrical Switchgear:	Limited internal access is made to electrical plant where 'live'. Assumptions as to typical asbestos in electrical plant are made in the report.
Accessibility:	Access limitations and requirements are pre-determined in accordance with client requirements.
Plant Machinery:	No internal access is made to plant machinery unless it has been proven to be isolated/disused and escape of hazardous fluids has been discounted. Assumptions as to typical asbestos in plant machinery are made in the report.
Fire Doors:	Doors are only destructively inspected where doing so will not adversely affect the security or safety of the premises.
Plans:	If plans of the premises to be inspected are not made available, it cannot be ascertained if all areas have been identified or accessed. Complex premises will not be had sketched in order to avoid misrepresentation.

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INSURER'S CAVEAT

Every effort is made to identify all ACMs so far as reasonably practical to do so within the scope of the survey and report. Methods used to carry out the survey are agreed with the client prior to any works being commenced.

Survey techniques used involve 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 ACMs or one type or another may remain within the area covered by the survey, this could be due to various reasons:

- ACMs existing within areas not specifically covered by the report are therefore outside the scope of the survey.
- Materials may be hidden or obscured by other items or cover finishes, i.e. paint, overboarding, disguising, etc. Where this is the case, then detection will be impaired.
- ACMs may well be hidden as part of the structure to a building and not visible until the structure is dismantled at a later date.
- Debris from previous asbestos removal projects may well be present in some areas (general asbestos debris does not form part of the survey, however all good intentions are made for its discovery).
- Where an area has been previously stripped of asbestos, i.e. plant rooms, ducts, etc., and new coverings added, it should be noted that asbestos removal techniques have improved steadily over the years since its introduction. Most notably would be the Control of Asbestos Regulations (2006) laying down certain enforceable guidelines. Asbestos removal prior to this regulation would not be of today's standard and therefore debris may be present below new coverings.
- The survey will detail all areas accessed and all samples taken, where an area is not covered by the survey it will be due to 'no access' for one reason or other, i.e. working operatives, sensitive location, or just simply no access. It may be necessary for the limits of the surveyor's authority to be confirmed prior to survey.
- Access for the survey may be restricted for many reasons beyond our control, such as height, inconvenience to others, immovable obstacles or confined space. Where electrical equipment is present and presumed in the way of the survey no access will be attempted until proof of its safe state is provided. Operatives have a duty of care under the Health & Safety at Work Act (1974) to themselves and others.

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- Where asbestos has been located and it is clear that not all areas have been investigated, any material that is found to be suspicious and not detailed as part of the survey will be treated with caution and sampled accordingly.
- Certain materials contain asbestos to varying degrees and some may be less densely contaminated at certain locations (e.g. Artex). Where this is the case the sample taken may not be representative of the whole product throughout.
- Where a survey is carried out under the guidance of the owner of the premises, or his representative, then the survey will be as per the owner's instructions and guidance at that time.
- Mike Colborn Associates Ltd cannot accept any liability for loss, injury, damage or penalty issues due to errors or omissions within the report. Mike Colborn Associates Ltd cannot be held responsible for any damage caused as part of the survey. Due to the nature and necessity of sampling for ACMs some damage is unavoidable and will be limited to that necessary for the taking of the sample.

**AGREED SURVEY LIMITATIONS: INTRUSIVE INSPECTIONS TO ALL AREAS AS DEEMED
REASONABLY PRACTICAL**

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4. OVERVIEW ASBESTOS PRE-REFURBISHMENT/PRE-DEMOLITION SURVEY

Site Location: Warehouse 1&2, Fortess Grove, London, NW5 2HR

Location/Description	Material	Comments	Priority Code
<i>Warehouse 1, Rear Section, External</i>	<i>Roof Sheeting (Chrysotile)</i>	<i>Non Licensed</i>	<i>Low</i>
<i>Warehouse 2, Throughout Roof</i>	<i>Roof Sheeting (Chrysotile)</i>	<i>Non Licensed</i>	<i>Low</i>
<i>Warehouse 2, Office 1&2, Floor</i>	<i>Floor Tiles & Adhesive</i>	<i>Non Licensed</i>	<i>Low</i>
<i>Warehouse 2, Office 1&2, Walls & Ceiling Internal & External</i>	<i>Asbestos Insulation Board Wall & Ceiling Cladding</i>	<i>Fully Licensed</i>	<i>High</i>

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4. OVERVIEW ASBESTOS PRE-REFURBISHMENT/PRE-DEMOLITION SURVEY

Site Location: Warehouse 1, Fortess Grove, London, NW5 2HR

OBSERVATIONS: Internal – Warehouse 1

Warehouse / Workshop

Walls:	Brick, Block, Plasterboard, Timber
Ceiling:	Box Metal Roof Sheeting, Timber Close Boarding
Floors:	Concrete
Comments:	<i>No ACM's were located.</i>

Store Room

Walls:	Timber, Plasterboard
Ceiling:	Timber, Box Section Metal Roof Sheeting
Floors:	Timber
Comments:	<i>No ACM's were located.</i>

Kitchen & Toilet

Walls:	Timber, Plasterboard, Brick, Plaster
Ceiling:	Timber, Plasterboard
Floors:	Ceramic Tile, Concrete
Comments:	<i>No ACM's were located.</i>

Office

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Walls:	Timber, Plasterboard, Brick, Plaster
Ceiling:	Timber, Plasterboard
Floors:	Ceramic Tile, Concrete
Comments:	<i>No ACM's were located.</i>

4. OVERVIEW ASBESTOS PRE-REFURBISHMENT/PRE-DEMOLITION SURVEY

Site Location: Warehouse 1, Fortess Grove, London, NW5 2HR

OBSERVATIONS: Internal – Warehouse 1

Toilet Block

Walls:	Brick
Ceiling:	Timber
Floors:	Concrete
Comments:	<i>Derelict toilet block.</i>

External

Walls:	Brick, Block
Roof:	Box Section Metal To Front <i>Sample 1, Rear Section, Asbestos Roof Sheeting (Chrysotile)</i>
Floors:	Concrete
Comments:	<i>External roof sheeting is positive and is a low risk, non licensed product. Removal should be carried out should building be demolished.</i>

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4. OVERVIEW ASBESTOS PRE-REFURBISHMENT/PRE-DEMOLITION SURVEY

OBSERVATIONS EXTERNAL

Site Location **Warehouse 1, Fortess Grove, London, NW5 2HR**

Sample 1, external rear section roof sheeting (Chrysotile)
Asbestos Cement

Other Comments: Non licensed. Remove if demolishing building.

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4. OVERVIEW ASBESTOS PRE-REFURBISHMENT/PRE-DEMOLITION SURVEY

Site Location: Warehouse 2, Fortess Grove, London, NW5 2HR

OBSERVATIONS: Internal – Warehouse 2

Warehouse / Workshop

Walls:	Brick, Block
Ceiling:	Sample 2, Asbestos Roof Sheeting (Chrysotile)
Floors:	Concrete
Comments:	<i>Roof sheeting is positive and is a low risk, non licensed product. Removal should be carried out should building be demolished. Please note that there are 2 large spray booth units installed to the rear of the warehouse which were inspected as far as is reasonably accessible and no acm's located</i>

Store Room

Walls:	Brick, Plaster
Ceiling:	Concrete
Floors:	Concrete
Comments:	<i>No ACM's were located.</i>

Toilets

Walls:	Brick, Plaster, Timber
Ceiling:	Concrete
Floors:	Concrete
Comments:	<i>No ACM's were located.</i>

Lobby & Oil Tank Store

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Walls:	Brick, Plaster, Timber
Ceiling:	Concrete
Floors:	Concrete
Comments:	<i>No ACM's were located.</i>

4. OVERVIEW ASBESTOS PRE-REFURBISHMENT/PRE-DEMOLITION SURVEY

Site Location: Warehouse 2, Fortess Grove, London, NW5 2HR

OBSERVATIONS: Internal – Warehouse 2

Offices x2

Walls:	<i>Sample 4, Asbestos Insulation Board Wall Cladding (Amosite)</i>
Ceiling:	<i>Sample 4, Asbestos Insulation Board Ceiling Cladding (Amosite)</i>
Floors:	<i>Timber, Sample 3, Floor Tiles & Adhesive (Chrysotile)</i>
Comments:	<i>Asbestos insulation board is a fully licensed product and is in a poor condition therefore medium risk and access to the area should be avoided until safely removed. It is also located to both sides of the partition walls. Floor tiles are non licensed and low risk.</i>

Mezzanine & Office

Walls:	Brick, Plasterboard, Timber
Ceiling:	Plasterboard
Floors:	Timber
Comments:	<i>No ACM's were located.</i>

External

Walls:	Brick, Block
Roof:	<i>Reference Sample 2, Throughout, Asbestos Roof Sheeting (Chrysotile)</i>
Floors:	Concrete
Comments:	<i>External roof sheeting is positive and is a low risk, non licensed product. Removal should be carried out should building be demolished.</i>

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4. OVERVIEW ASBESTOS PRE-REFURBISHMENT/PRE-DEMOLITION SURVEY

OBSERVATIONS EXTERNAL

Site Location **Warehouse 2, Fortess Grove, London, NW5 2HR**

Sample 2, external roof sheeting (Chrysotile) Asbestos Cement

Other Comments: Non licensed. Remove if demolishing building.

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Appendix 1 – General Recommendations

Work with Asbestos that does not normally require a licence (CAR2012 L27)

Work with asbestos cement, materials of bitumen, plastic, resin or rubber which contain asbestos, the thermal and acoustic properties of which are incidental to its main purpose and minor work with asbestos insulation, asbestos coatings and asbestos insulation board which, because of its limited duration, does not require a licence (as defined in Asbestos Essentials: Task Manual HSG213) does not fall under the provision of Asbestos (Licensing) Regulation 1983, but is covered by the requirements of the Health & Safety at Work Act 1974 and the Control of Asbestos Regulations 2012.

As assessment of the proposed work should be undertaken to determine the level of risk presented and the precautions to take for preventing and controlling exposure whether for maintenance and repair or removal. In some cases the 4 stage clearance testing and certificate of reoccupation will be required following removal/treatment work. (CAR 2012, regulation 16.) For further clarification see ACoPs L27 and L28, also Asbestos Essentials Task Manual (HSG227) and Introduction to Asbestos Essentials (HSG213).

Attention should be paid to the following general principles:

- Notify HSE
- Where work on AC cannot be avoided, keep the materials wet during work and avoid breakage.
- Avoid the use of pneumatic or abrasive power tools. Where their use is unavoidable, they should be used on their lowest setting with additional LEV such as cowls fitted to drill bits and shadow vacuuming with an H-type unit (BS5415).
- Carry out higher risk jobs (cutting, drilling) in a single location, where practicable, to make supervision and control more straightforward.
- Use cleaning methods which minimize dust disturbance/creation. Avoid methods such as sweeping which will make the dust airborne.
- Ensure persons working with the materials are suitably trained and informed in the correct working practices, control methods and risks.
- Area segregation – physical barriers where disturbance of AC is likely to be significant. The use of an enclosure and polythene to restrict the spread of asbestos dust.

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- Warning notices preventing access to unauthorized persons. Denoted respirator zones where the control limit is likely to be exceeded and denoted asbestos area where the action level is likely to be exceeded.
- Avoid attachment to AC or routing through it.
- Wear suitable RPE/PPE.
- Keep the work area clean during work and thorough clean on completion.
- Dispose of waste and debris safely at the appropriate waste disposal sites.
- Items remaining in situ should be clearly identified by suitable warning signs and routinely inspected for damage.

Work with Asbestos requiring a licence (CAR2012 L28): Asbestos Insulation, Asbestos Coating, Asbestos Insulation Board (AIB)

Where the risk of interference is unlikely the materials can be maintained on site. They should be maintained in a safe condition and should be clearly identified by suitable warning signs and routinely inspected for damage. They must not be drilled or abraded in any way. Asbestos materials should be removed prior to refurbishment, where damage is likely to be sustained, and where they are vulnerable to damage during the occupants' activities, where deterioration is likely.

A contractor licensed by the Health & Safety Executive must carry out any work on asbestos bearing materials as listed above. The current notification period to the Health & Safety Executive ('HSE') is 14 days, and must be carried out in accordance with current legislation. Unless the work is of a minor nature, as covered by HSG213, the 4 state clearance testing and certificate of reoccupation will be required following removal/treatment work, CAR 2012, regulation 16. For further clarification see ACoPs L27 and L28, also Asbestos Essentials Task Manual (HSG213) and Introduction to Asbestos Essentials (also HSG213).

Prior to the start of work an assessment of risk and plan of work should be made in writing and submitted to the HSE. This should include, as a minimum standard:

- A description of the work, type and duration.
- Type, quantity and location of asbestos.

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- Steps taken to prevent and reduce exposure to the lowest level reasonably practicable and to control the release of asbestos into the environment.
- Reason/justification for work methods, i.e. where controlled/wet-stripping methods cannot be used.
- Expected exposure limits and likely people affected.
- Procedures for selection, use, provision and decontamination of RPE/PPE.
- Procedures for waste removal and disposal.
- Procedures for dealing with emergencies.
- Enclosure details, location, LEV, warning signs.
- Training of employees and their suitability to the work environment.

Appendix 2 – Laboratory Certificate



ASBESTOS BULK ANALYSIS TEST REPORT

ams
management (GB) LLP
Unit 1, 8 Cannon Lane
Tonbridge, Kent TN11 1PP
Tel: 01732 368359
Fax: 01732 368361
Web: www.ams-management.co.uk
Registered in England and Wales 06511295

TEST REPORT NUMBER: J027031	Issue No: 01	Report Date: 12.08.16	
Client: SPS Environmental Ltd 97 Imperial Way, Ashford, Kent, TN23 5HT		Site/Location:-	Warehouse Units x2, Fortress Grove, Kentish Town NW5 2HR
Samples collected by:-	Client	Your Order:-	no order given
Date samples received by Lab:-	10.08.16	Date Sampled:-	N/A
Laboratory Samples Analysed at:-	Tonbridge	Analysed By:-	Pete Everard
Total Number of Samples:-	4	Date Analysed:-	12.08.16

TEST RESULTS

AMS Ref No.	Client Sample ID	Sample Location/Details	Sample/Material Type	Analysis Result	Content
B8079707	1	Warehouse 1, Rear External - Roof Sheeting	Asbestos Cement	Chrysotile	Positive
B8079708	2	Warehouse 2 - Roof Sheeting	Asbestos Cement	Chrysotile	Positive
B8079709	3	Warehouse 2, Office 1 & 2 - Floor Tiles	Plastic Product and Bitumen Adhesive	Chrysotile	Positive
B8079710	4	Warehouse 2, Office 1 & 2 - Wall & Ceiling Cladding	Asbestos Insulating Board	Amosite	Positive

.....END.....

Key to fibre content: Trace = Trace asbestos identified (1 to 2 fibres present); Positive = Asbestos identified (more than 2 fibres present).


Method: The analysis has been performed using the AMS 'In House' method of transmitted/polarised light microscopy and centre stop dispersion staining (Ref Appendix 2-Technical Procedure of Quality Manual), based on HSG248 and is covered by our UKAS Accreditation.

The following are outside the scope of our UKAS Accreditation:

1. Quantitative fibre content (Guidance on the percentages of asbestos used in various products is available in HSG264)
2. Sample Locations/Details supplied by the client. (AMS do not accept any responsibility for any discrepancy or inaccuracy arising from samples labelled or collected by clients or third parties)
3. Material Type/Description.
4. Any Interpretations or Opinions expressed in this Test Report

Samples are retained for not less than 6 months from date of analysis unless specifically requested otherwise.

This report relates only to the samples tested. This report may not be reproduced except in full, without prior approval of the laboratory

For and on behalf of AMS Management (GB) LLP
Pete Everard 

Mike Colborn Associates

Appendix 3 – Photo Analysis Sheets

Site Location: Warehouse 1&2, Fortess Grove, London, NW5 2HR

Pre-refurbishment/pre-demolition Survey:

Location: Warehouse 1, Rear Section, External

Description: Asbestos Cement Roof Sheeting



CHRYBOTILE DETECTED

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Appendix 3 – Photo Analysis Sheets

Site Location: Warehouse 1&2, Fortess Grove, London, NW5 2HR

Pre-refurbishment/pre-demolition Survey:

Location: Warehouse 2, Internal & External

Description: Asbestos Cement Roof Sheeting



CHRYOSOTILE DETECTED

Mike Colborn Associates

Appendix 3 – Photo Analysis Sheets

Site Location: Warehouse 1&2, Fortess Grove, London, NW5 2HR

Pre-refurbishment/pre-demolition Survey:

Location: Warehouse 2, Offices 1&2

Description: Asbestos Floor Tiles & Adhesive



CHRYSOTILE DETECTED

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Appendix 3 – Photo Analysis Sheets

Site Location: Warehouse 1&2, Fortess Grove, London, NW5 2HR

Pre-refurbishment/pre-demolition Survey:

Location: Warehouse 2, Offices 1 & 2, Internal & External

Description: Asbestos Insulation Board Wall & Ceiling Cladding



AMOSITE DETECTED

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Appendix 4 – Register

Location: Warehouse 1&2, Fortress Road, London, NW5 2HR

Survey Date: 10th July 2016

Survey Type: Pre-Refurbishment Specific

Material assessment	Material Key	THIS REGISTER SHOULD BE READ IN CONJUNCTION THE ENTIRE REPORT THAT DETAILS THE SCOPE AND LIMITATIONS OF THE SURVEY
10+ High potential to release fibres	Asbestos thermal insulations	Asbestos paper
7-9 Medium potential to release fibres	Asbestos insulation board	Asbestos gaskets, ropes, textiles
5-6 Low potential to release fibres	Asbestos cement materials	Asbestos lagging
2-4 Very low potential to release fibres	Asbestos textured coatings	Asbestos bitumen products
	Asbestos flooring materials	Asbestos reinforced composites

Suspect Material Identification

	LOCATION/ DESCRIPTION	IDENTIFICATION METHOD	APPROX QUANTITY	PRIORITY CODE
1	Warehouse 1, Rear Section, External – Asbestos Cement Roof Sheeting	Sampled	130m ²	Low
2	Warehouse 2, Throughout, Internal & External – Asbestos Cement Roof Sheeting (double skinned)	Sampled	750m ²	Low
3	Warehouse 2, Offices 1&2 - Asbestos Floor Tiles & Adhesive	Sampled	25m ²	Very Low
4	Warehouse 2, Offices 1&2 - Asbestos Insulation Board Wall Cladding (double sided)	Sampled	50m ²	Medium