Construction Management Plan

pro forma v2.3

81 Swains Lane 'Winter House', Highgate N6 6PJ

CMP pre-construction

Version 4 – 25th April 2022

Camden

Contents

Revisions & additional material

Please list all iterations here:

Date	Version	Produced by
9 May 2018	1	Application Submission
1 February 2022	2	Pre construction submission
29 April 2022	3	Pre construction submission
25 May 2022	4	Pre construction submission

Additional sheets

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

Date	Version	Produced by
9 May 2018	Issue 01	CPA - Air Quality & Dust Risk Assessment
9 May 2018	Issue 01	CPA - Appendix to Question 37 – Dust Mitigation Measures
18/6/18	Issue 01	Acoustics Plus Background Acoustic Survey 8/5/18 (conclusions included in response to Q29

Introduction

The purpose of the **Construction Management Plan (CMP)** is to help developers to minimise construction impacts, and relates to all construction activity both on and off site that impacts on the wider environment.

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 nature 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)**.

Camden charges a fee for the review and ongoing monitoring of CMPs. This is calculated on an individual basis according to the predicted officer time required to manage this process for a given site.

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 during construction. 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 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.**"

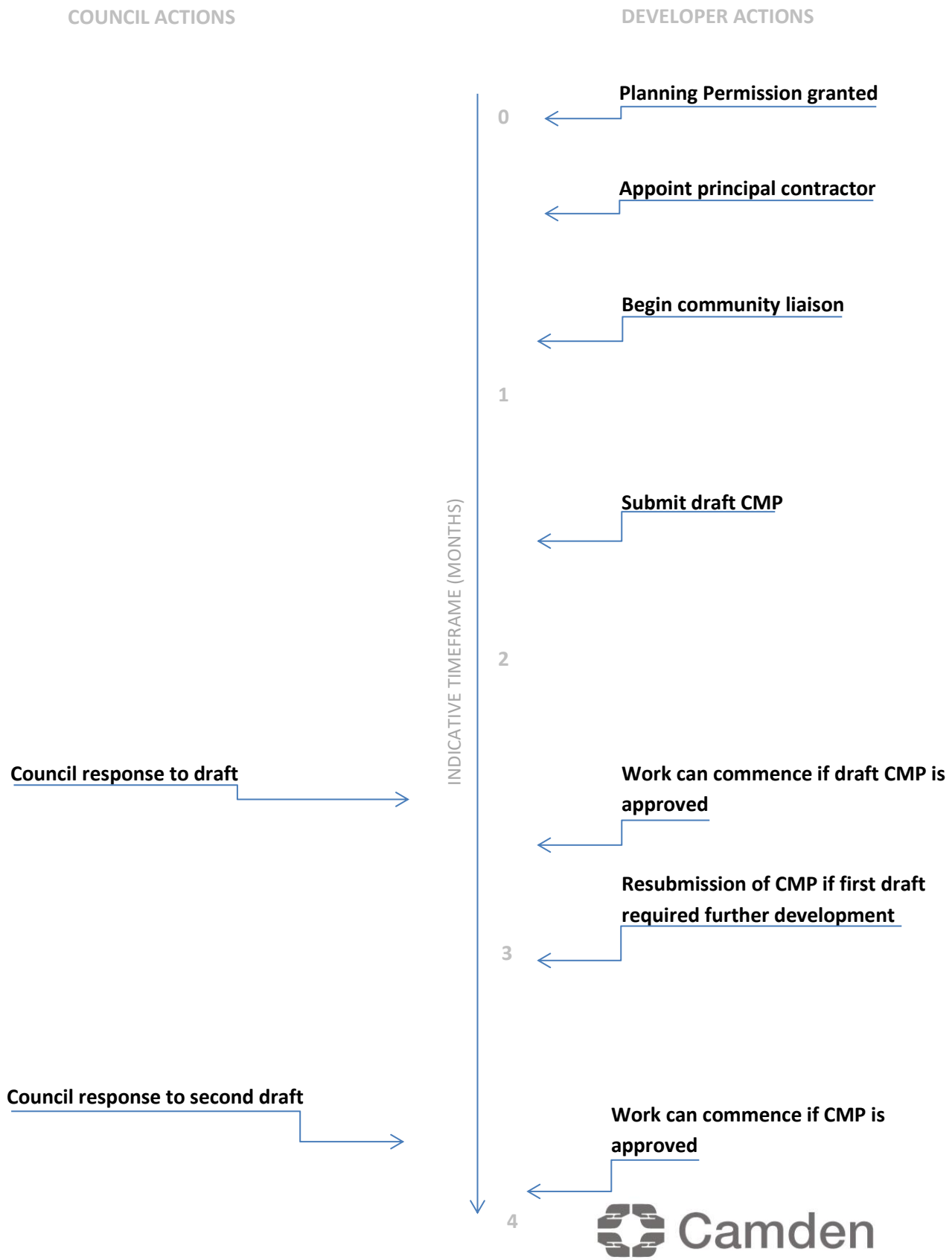
Please complete the questions below with additional sheets, drawings and plans as required. The boxes will expand to accommodate the information provided, so please provide as much information as is necessary. It is preferable if this document, and all additional documents, are completed electronically and submitted as Word files to allow

comments to be easily documented. These should be clearly referenced/linked to from the CMP. Please only provide the information requested that is relevant to a particular section.

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

Revisions to this document may take place periodically.

Timeframe


COUNCIL ACTIONS
DEVELOPER ACTIONS
INDICATIVE TIMEFRAME (MONTHS)
0
1
2
3
4
Planning Permission granted
Appoint principal contractor
Begin community liaison
Submit draft CMP
Council response to draft
Work can commence if draft CMP is approved
Resubmission of CMP if first draft required further development
Council response to second draft
Work can commence if CMP is approved

Contact

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

Address: 81 Swains Lane , London N6 6PJ

Planning reference number to which the CMP applies: 2018/5730/P

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

Name: Andrew House (Project Coordinator)

Address: New Wave London Ltd, New Wave House, 4 Humber Road, London, NW2 6DW

Email: andrew.house@newwave.co.uk

Phone: 02084389817

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: Pawel Makarewicz (Contracts Manager)

Address: 81 Swain's Lane, London, N6 6PJ

Email: paul@newwave.co.uk

Phone: 07714287990

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: Andrew House

Address: New Wave London Ltd, New Wave House, 4 Humber Road, London, NW2 6DW

Email: andrew.house@newwave.co.uk

Phone: 02084389817

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: Andrew House

Address: New Wave London Ltd, New Wave House, 4 Humber Road, London, NW2 6DW

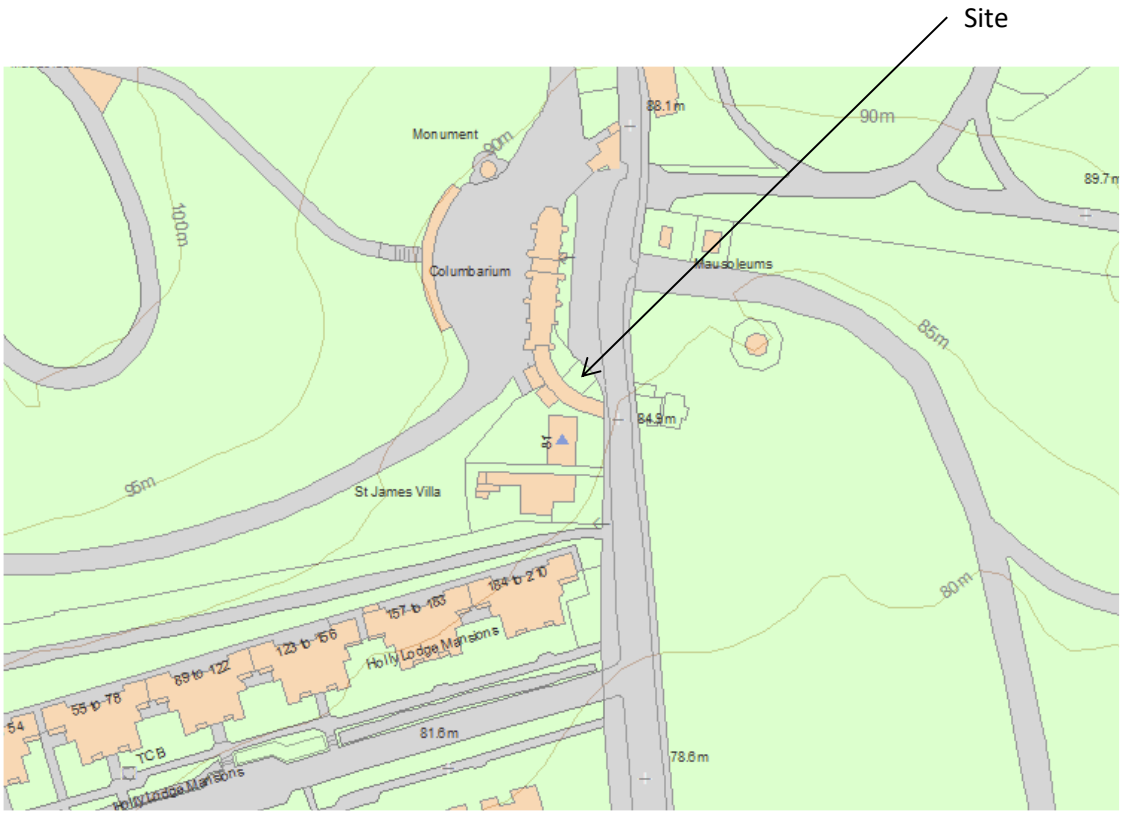
Email: andrew.house@newwave.co.uk

Phone: 02084389817

Site

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

The site is located at 81 Swain's Lane, London N6 6PJ



The site lies 0.6 kilometres southeast of Highgate village centre and adjacent to the Columbarium of Highgate Cemetery, as illustrated on the Site Location Plan.

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 proposal consists of

- the demolition of an existing single storey extension
- erection of a replacement single storey rear extensions following demolition of the existing recent single storey extension,
- Excavation of a previously infill cutting and its conversion into a winter garden, plant room and recreation space.
- Excavation of a tunnel linking the new extension with the winter garden
- Internal re-modelling and refurbishment of the original Grade II* listed building.

The particular issues to be addressed in this project are;
(i) the location of the existing building on a tight site with restricted access
(ii) the adjacency of neighbouring buildings.

8. 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).

Phase 1 (base build) – Start 18th July 2022, Finish 31st June 2023

Phase 2 (fit out) – 1st July 2023, Finish 1st February 2024

9. 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

Noisy works (to include any piling, pneumatic breaking and excavation by machinery will take place between 9.00am and 5pm Monday to Friday There will be no working noisy working on Saturdays, Sundays or Public Holidays.

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.

10. Sensitive/affected receptors

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 nearest noise sensitive locations (NSL's) is 79 Swains Lanes (St James Villa)

The nearest ecological receptor is Highgate Cemetery

11. 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.

The development has been subject to public consultations as part of the submission and determination of the Planning Consent for the scheme. This consultation process included: -

- Consultation with neighbours at Highgate Cemetery & 79 Swains Lane
- Consultation with Heritage England
- Consultation with 20th Century Society
- Consultation with Highgate Society
- Statutory consultation with the Local Planning Authority and a pre-application advice
- Follow up meeting with Officers

Consultation with these interested parties is on-going as part of the development of the scheme prior to the submission of a planning application. The development of the design has incorporated feedback form these consultation and the consultees are all broadly supportive of scheme.

Once appointed the Contractor's Project Manager will keep in regular contact with local residents, affected parties and the Council by sending a regular newsletter update by email, or post. The newsletter will be issued prior to significant events on site which may have a potential impact on the local area, this would include the start on site, any changes to the traffic management regimes, and key events such as the start of basement works.

12. Construction Working Group

For particularly sensitive/contentious sites, or sites located in areas where there are high levels of construction activity, it may be necessary to set up a construction working group.

If so, please provide details of the group that will be set up, the contact details of the person responsible for community liaison and how this 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.

This project is considered not be of sufficient scale to warrant setting up a working group. However, it is proposed that Contractor's Project Manager will be the focal point of contact with local residents and act as the Community Liaison Officer so as to provide information on how the construction works are progressing and to provide them with the opportunity to raise any issues that may arise as they occur. A regular letter drop will be implemented to update residents.

A 'Contact Board' will be displayed prominently at the site and shall include;

1. The title 'Contact Board'
2. The name of the Main Contractor, address and person to whom correspondence should be addressed.
3. Name of the Site Manager
4. Direct dial number of the Site Manager
5. Month and year of completion of the works

13. Schemes

Please provide details of your Considerate Constructors Scheme (CCS) registration. Please note that Camden requires enhanced CCS registration that includes CLOCS monitoring.

Contractors will also be required to follow the "Guide for Contractors Working in Camden" also referred to as "Camden's Considerate Contractors Manual".

New Wave London is registered with the Considerate Constructors Scheme (CCS) with registration number 00290 and is committed to adhering to the Scheme's Code of Considerate Practice.

A copy of the certification will be made available on request and all relevant information relating to the CCS will be displayed in a prominent position on the site hoarding.

The works will be carried out fully in accordance with the "Guide for Contractors Working in Camden".

14. 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.

We have reviewed the recent and current planning applications to assess the extent of any development in the adjoining areas.

There are a number of minor and one medium sized development sites in the neighbouring area however these works are all of a small to medium scale domestic nature and therefore should not have the potential have a cumulative impact on the neighbourhood. The majority of these developments have now been completed.

The developments identified are

a. 42 Swains Lane – Rear extension ref 2017/4233P
b. 40 Swains Lane – Loft Conversion ref 20171846P
c. 1-11A Swains Lane – 3 storey mixed used development ref 2013/6647P

Th identified site are all some distance from the property

In the event that other construction works in the immediate area coincide with works at 81 Swains Lane, there is flexibility to enable vehicle movements to be scheduled so as to limit the cumulative daily impact of construction vehicles associated with this and other development sites.

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 CCS monitors as part of your enhanced CCS site registration, and possibly council officers, 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

15. Name of Principal contractor:

Name:	New Wave London Ltd
Address:	New Wave House, 4 Humber Road, London, NW2 6DW
Email:	info@newwave.co.uk
Phone:	02084389817

16. 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).

CLOCS will be contract requirement that the contractor use a CLOCS compliant system.

Sub-contractors and Suppliers

Where applicable all Sub-contracts and orders will incorporate the following in respect of deliveries;

FORS Bronze accreditation is required as a minimum, with FORS Silver and Gold accreditation where possible. Where FORS Bronze operators are appointed, written assurances will be required from sub-contractors and/or suppliers that all vehicles over 3.5 are equipped with additional safety equipment, and that all drivers servicing the site will have undertaken approved additional training (e.g. SUD, eLearning, Van Smart, on-cycle training etc.) and compliance is mandatory.

Desktop Checks

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

Site Checks

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 the aforementioned risk scale. These will include evidence of further training, license checks, evidence of routing information, and checks of vehicle safety equipment. Results from these checks will be logged and retained, and enforced upon accordingly.

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

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

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

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

Confirmed

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

Site Traffic

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

18. 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, stations, public buildings, museums etc.

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.

Please show vehicle approach and departure routes between the site and the Transport for London Road Network (TLRN). Please note that routes may differ for articulated and rigid HGVs.

Routes should be shown clearly on a map, with approach and departure routes clearly marked. If this is attached, use the following space to reference its location in the appendices.

The site is 1.3 km from the TRLN network.

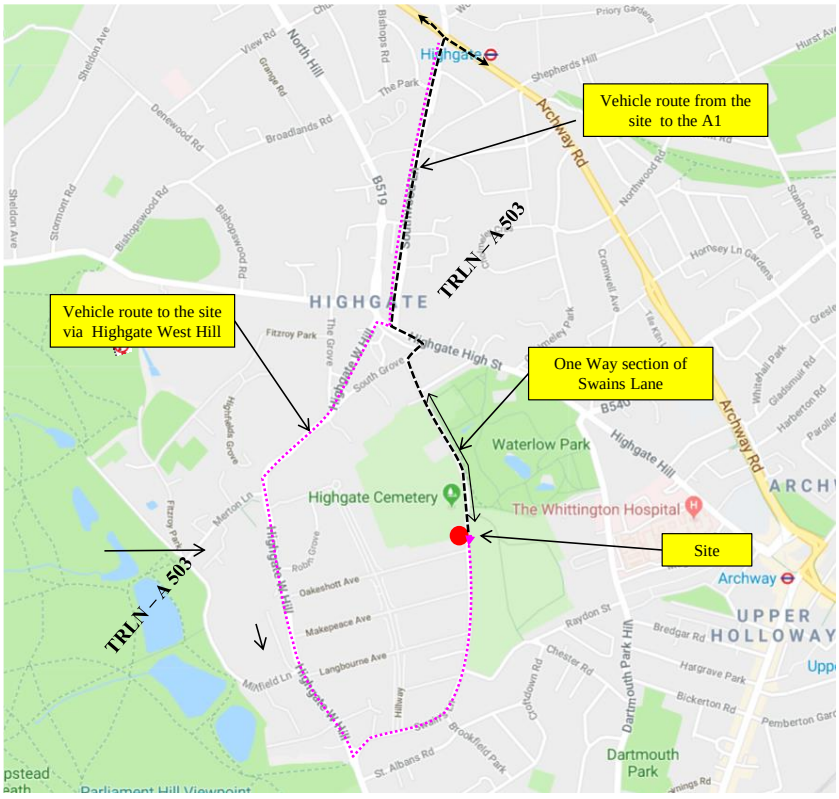
Vehicles approaching the will utilise the A1 Archway, which is part of the Transport for London Road Network (TLRN). Vehicles will leave the A1 at its junction with Southwood Lane and turn right into Highgate High St and proceed for 50m before executing a left hand turn onto Highgate West Hill and follow this road to the junction of Swains Lane. Vehicles will then execute a left turn into Swains Lane and proceed to the site.

Vehicles leaving the site will proceed along northwards along Swains Lane (part one way) to and then turn right into South Grove proceed 100m before turning left onto Highgate High St and then turning right at the junction with Southwood Lane and proceeding northwards to re-join the A1.

A vehicle marshal will meet the delivery on its arrival on site.

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

TLRN Route Plan



19. 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 should be restricted to the hours of 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 the hours of 9.30am and 3pm on weekdays during term time. (Refer to the *Guide for Contractors Working in Camden*).

Vehicles may be permitted to arrive at site at 8.00am if they can be accommodated on site. Where this is the case they must then wait with their engines switched off.

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.

Please provide details of the types of vehicles required to service the site and the approximate number of deliveries per day for each vehicle type during the various phases of the project.

For Example:
32t Tipper: 10 deliveries/day during first 4 weeks
Skip loader: 2 deliveries/week during first 10 weeks

Artic: plant and tower crane delivery at start of project, 1 delivery/day during main construction phase project
18t flatbed: 2 deliveries/week for duration of project
3.5t van: 2 deliveries/day for duration of project

The following list provides detail of the type of vehicles that will need to gain access to the site during the construction process.

The vehicles proposed have been selected to ensure that they are of a size that can be accommodated on the highway network given the constraints of the site access route, whilst minimising the potential number of traffic movements to and from the site.

- General building materials 3.5t LGV's
- Building deliveries HGV 18t gvw 4 wheel
- Excavation Tipper HGV 18t gvw 4 wheel
- Concrete Delivery Vehicle HGV 18t gvw 4 wheel

Typical dwell time at the site will be10 – 30 minutes.

Deliveries will only be made between the hours of 8am and 5pm, Monday to Friday and 8am – 1pm with no deliveries on Sundays and Public Holidays.

The following table provides a breakdown of the number of vehicle movements during each phase of the construction process.

A delivery will comprise of two movements, arrival and departure.

Works Phase	Duration (wks)	Total vehicle movements	Average daily movements
Works Phase	**Duration (wks)**		
Site establishment	2w	8	0.8
Soft strip & demolition	4w	22	1.1
Piling	6w	188	6.3
Foundations & tunnel	14w	692	6.9
Superstructures	8w	106	2.1
Roof structure, windows & doors	8w	42	1.1
1st fix	2w	20	0.3
2nd fix	20w	8	0.2
External landscape	12w	20	0.3
Commissioning	2w	4	0.4
Total period (calendar weeks)	78 wks	1110	
Average daily movements			3.0
Peak daily movements (Foundations & tunnel)			8

Table 2 HGV movements by construction stage

b. Cumulative affects of construction traffic servicing multiple sites should be minimised where possible. Please provide details of other developments in the local area or on the route that might require deliveries coordination between two or more sites. This is particularly relevant for sites in very constrained locations.

There are a number of minor and one medium sized development sites in the neighbouring area however these works are all of a small to medium scale domestic nature and therefore should not have the potential have a cumulative impact on the neighbourhood. The majority of these developments have now been completed.

The developments identified are

a. 42 Swains Lane – Rear extension ref 2017/4233P

b. 40 Swains Lane – Loft Conversion ref 20171846P

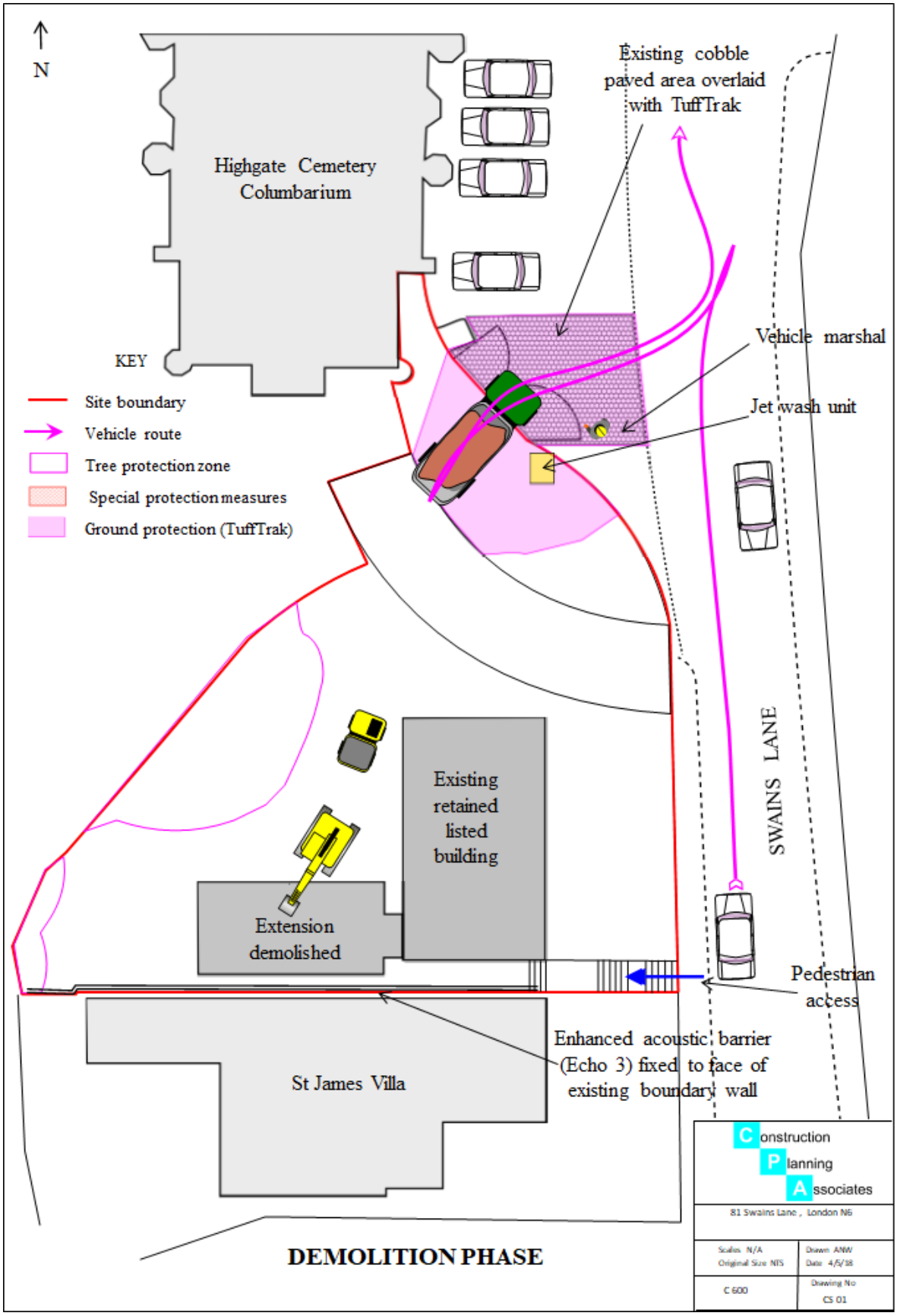
c. 1-11A Swains Lane – 3 storey mixed used development ref 2013/6647P (This property is at the southern end of Swains Lane at its junction with Highgate West Hill and traffic form this site is very unlikely to pass by the site at 81 Swains Lane)

All these schemes are some considerable distance from the property

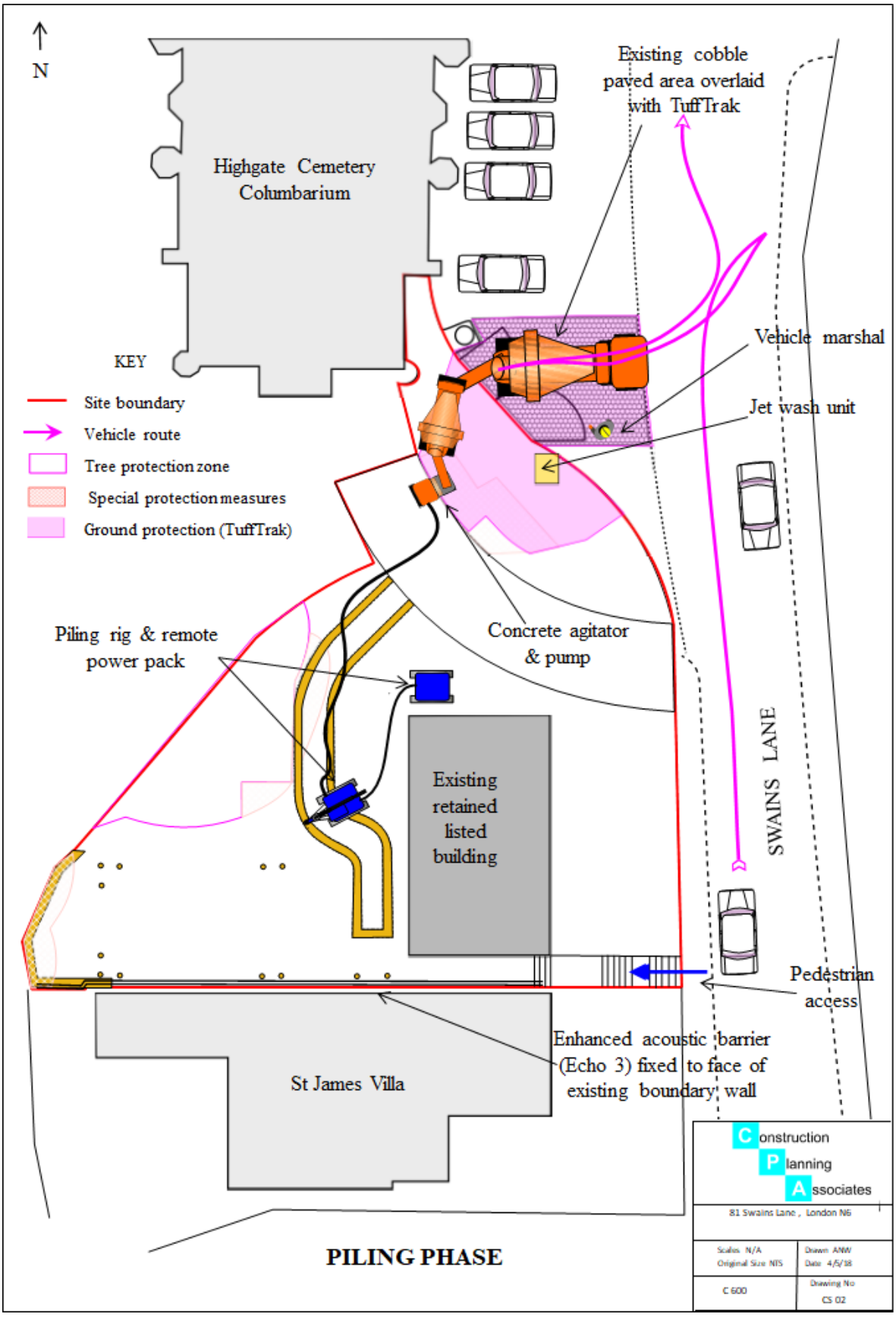
In the event that other construction works in the immediate area coincide with works at 81 Swains Lane, there is flexibility to enable vehicle movements to be scheduled so as to limit the cumulative daily impact of construction vehicles associated with this and other development sites.

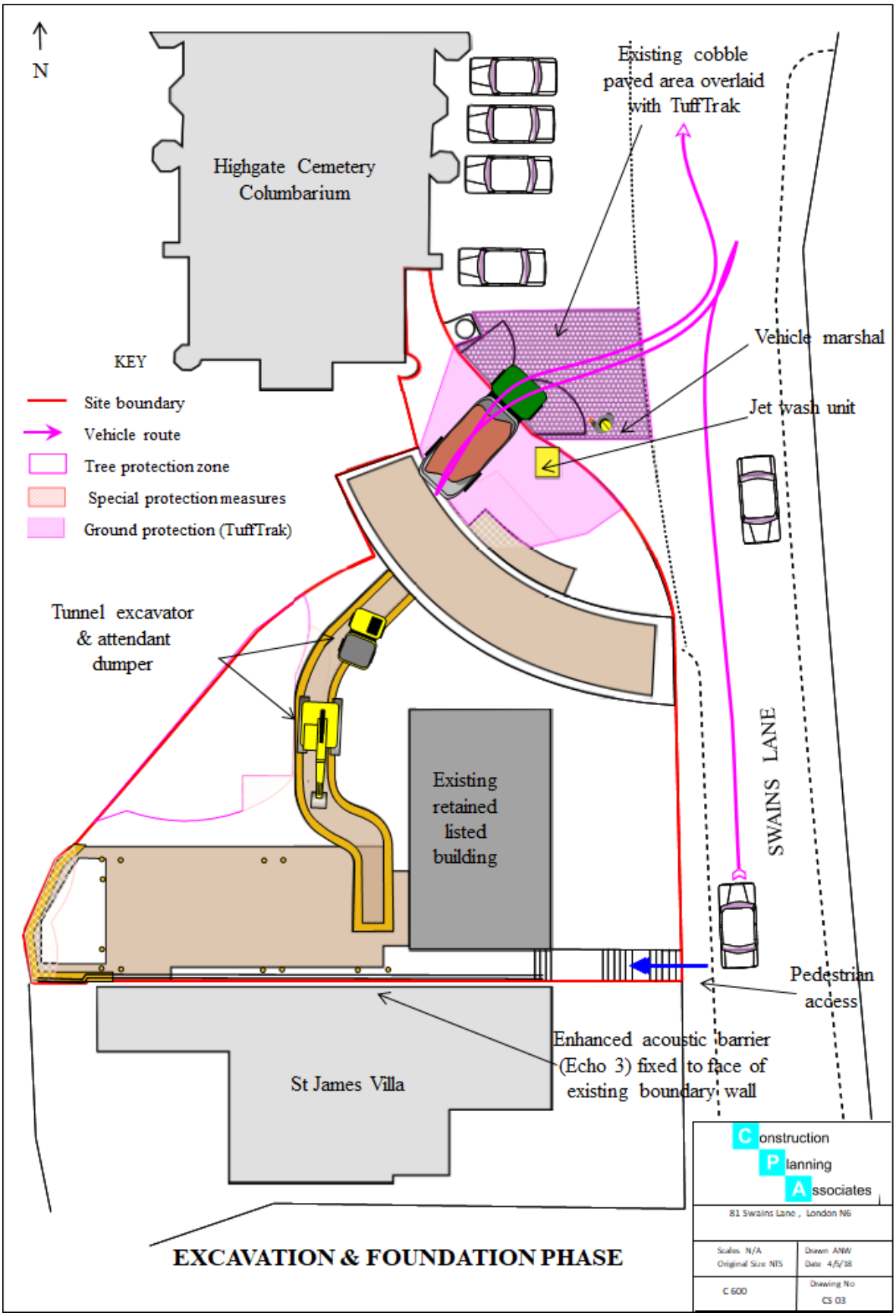
c. Please provide swept path analyses for constrained manoeuvres along the proposed route.

Logistics – Material Deliveries & Unloading/Loading – Demolition

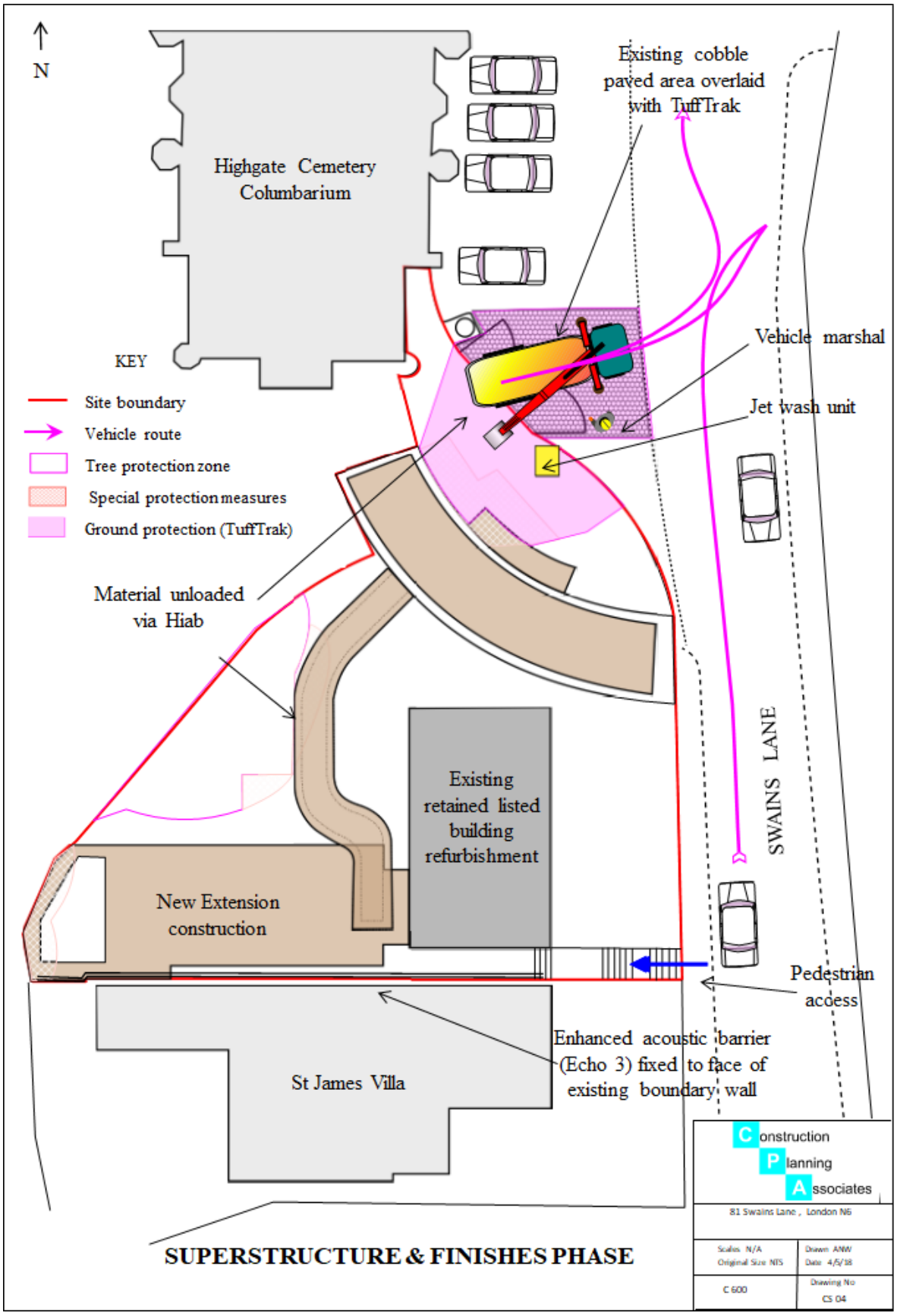


Logistics – Material Deliveries & Unloading/Loading – Piling




N
Highgate Cemetery Columbarium
Existing cobble paved area overlaid with TuffTrak
Vehicle marshal
Jet wash unit
KEY
Site boundary
Vehicle route
Tree protection zone
Special protection measures
Ground protection (TuffTrak)
Tunnel excavator & attendant dumper
Existing retained listed building
SWAINS LANE
Pedestrian access
Enhanced acoustic barrier (Echo 3) fixed to face of existing boundary wall
St James Villa
Construction Planning Associates
81 Swains Lane , London N6
Scales N/A
Original Size NTS
Drawn ANW
Date 4/5/18
C 600
Drawing No
CS 03
EXCAVATION & FOUNDATION PHASE

Logistics – Material Deliveries & Unloading/Loading



20. 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)

This section is only relevant where vehicles will be entering the site. Where vehicles are to load from the highway, please skip this section and refer to Q23.

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 site access and egress points on a map or diagram. If this is attached, use the following space to reference its location in the appendices.

Access to the site will be via the previously described vehicle route from the A1 (TLRN) to Swains Lane in Q20.

Site access and egress points are shown on the previously attached (19c) logistics plans.

b. Please describe how the access and egress arrangements for construction vehicles in and out of the site will be managed, including the number and location of traffic marshals where applicable. If this is shown in an attached drawing, use the following space to reference its location in the appendices.

Vehicle marshals will meet the deliveries at the entrance of the site on Swains Lane and control the pedestrians and cyclists during these operations. See previously attached (Q19 c) logistics plans.

A vehicle marshal will be responsible for managing vehicle access to/from the site via Camden Mews and unloading operations.

The marshal will be in radio communication with site manager to ensure that vehicle movements are co-ordinated with other site operations.

The vehicle marshal will also control and co-ordinate any pedestrian movements with the crossover into the site during deliveries/unloading operations. When appropriated vehicle loading or unloading operation will be suspended to allow the passage of pedestrians or cyclists

All deliveries will be managed using a manual booking in system where all deliveries will have an assigned delivery slot. No vehicles will be permitted to wait in the surrounding streets. This requirement will be included into the Contractor's appointment and transmitted downstream to the suppliers and sub-contractor's orders. This information will also include a map of the permitted delivery route and mobile phone of the Site Agent so drivers can contact the site directly if any issues arise during the journey to site.

c. Please provide swept path drawings for vehicles accessing/egressing the site if necessary. If these are attached, use the following space to reference their location in the appendices.

See previously attached (Q19 c) logistics plans.

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. Please note that wheel washing should only be used where strictly necessary, and that a clean, stable surface for loading should be used where possible.

During the demolition and tunnel excavation phases vehicles will be loaded and unloaded within the site on a temporary access road form the garden gateway. A temporary 'TuffTrak' hardstanding will be provided just inside the garden gateway and will include a drainage point to a temporary 'siltbuster' separation unit located within the cutting. This hardstanding will also provide the tree protection required by the Arboricultural Report. A jet wash unit will be installed at this location to provide wheel cleaning for all vehicles before they leave the site. The siltbuster separation unto will be discharged into the combined sewer system.

In later phases vehicles will be generally unloaded on the paved access driveway outside the site. A tarpaulin cover will be placed on the TuffTrack protection mat overlaying the cobble driveway surface prior to the arrival of the vehicle to control any contamination of the cobbled road surface. Any residual materials/dust will be removed with a brush with wheel washing / jet washing as required.

In addition, a road sweeper will be in attendance at regular periods as the works progress to ensure that all the adjoining streets are maintained in a clear condition free from any wheel borne debris and mud.

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

This section is only relevant if loading/unloading is due to take place off-site on the public highway. If loading is taking place on site, please skip this section.

a. 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 this is attached, use the following space to reference its location in the appendices. Please outline in question 24 if any parking bay suspensions will be required.

All vehicles will travel from the A1 into Swains Lane via the route detailed in Q20.

All vehicles will be met by a vehicle marshal and the marshal will direct vehicles to the site. Where the vehicle is parked on the driveway outside the building adjacent to the Highgate Cemetery parking bays the marshal will erect the Chapter 8 barriers to ensure segregation form passing pedestrians.
The vehicle marshal will control the unloading of the vehicle and co-ordinate movements of resident's vehicles, pedestrians and cyclists. All plant, skips and associated plant will be stored on site within the confines of the hoarding, and positioned to suit the works being undertaken. See Q19 c for logistics plans.

b. Where necessary, 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 detail of the way in which marshals will assist with this process, if this differs from detail provided in Q20 b.

See Q20 b.

Street Works

Full justification must be provided for proposed use of the public highway to facilitate works. Camden expects all options to minimise the impact on the public highway to have been fully considered prior to the submission of any proposal to occupy the highway for vehicle pit lanes, materials unloading/crane pick points, site welfare etc.

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.

Please note that there is a two week period required for the statutory consultation process to take place as part of a TTO.

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.

If the site conflicts with a bus lane or bus stop, please provide details of preliminary discussions with Transport for London in the relevant sections below.

22. Site set-up

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, relevant street furniture, and proposed site access locations. If these are attached, use the following space to reference their location in the appendices.

For proposed site access locations see Q19 c logistics plans.

23. Parking bay suspensions and temporary traffic orders

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

Please provide details of any proposed parking bay suspensions and/or TTO's which would be required to facilitate the construction - include details of the expected duration in

months/weeks. Building materials and equipment must not cause obstructions on the highway as per your CCS obligations unless the requisite permissions are secured.

Information regarding parking suspensions can be found here.

No parking suspension will be required

24. Occupation of the public highway

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. 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 justification of proposed occupation of the public highway.

No occupation of the public highway will be required

b. Please provide accurate scaled drawings of any highway works necessary to enable construction to take place (e.g. construction of temporary vehicular accesses, removal of street furniture etc). If these are attached, use the following space to reference their location in the appendices.

No highways works are required. The alteration the existing fencing and garden gateway and are all undertaken on private land.

25. Motor vehicle and/or cyclist diversions

Where applicable, please supply details of any diversion, disruption or other anticipated use of the public highway during the construction period. Please show locations of diversion

signs on drawings or diagrams. If these are attached, use the following space to reference their location in the appendices.

No traffic diversions will be required.

26. Scaffolding, hoarding, and associated pedestrian diversions

Pedestrians 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 ramps 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, and hoarding should not restrict access to adjoining properties, including fire escape routes. 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.

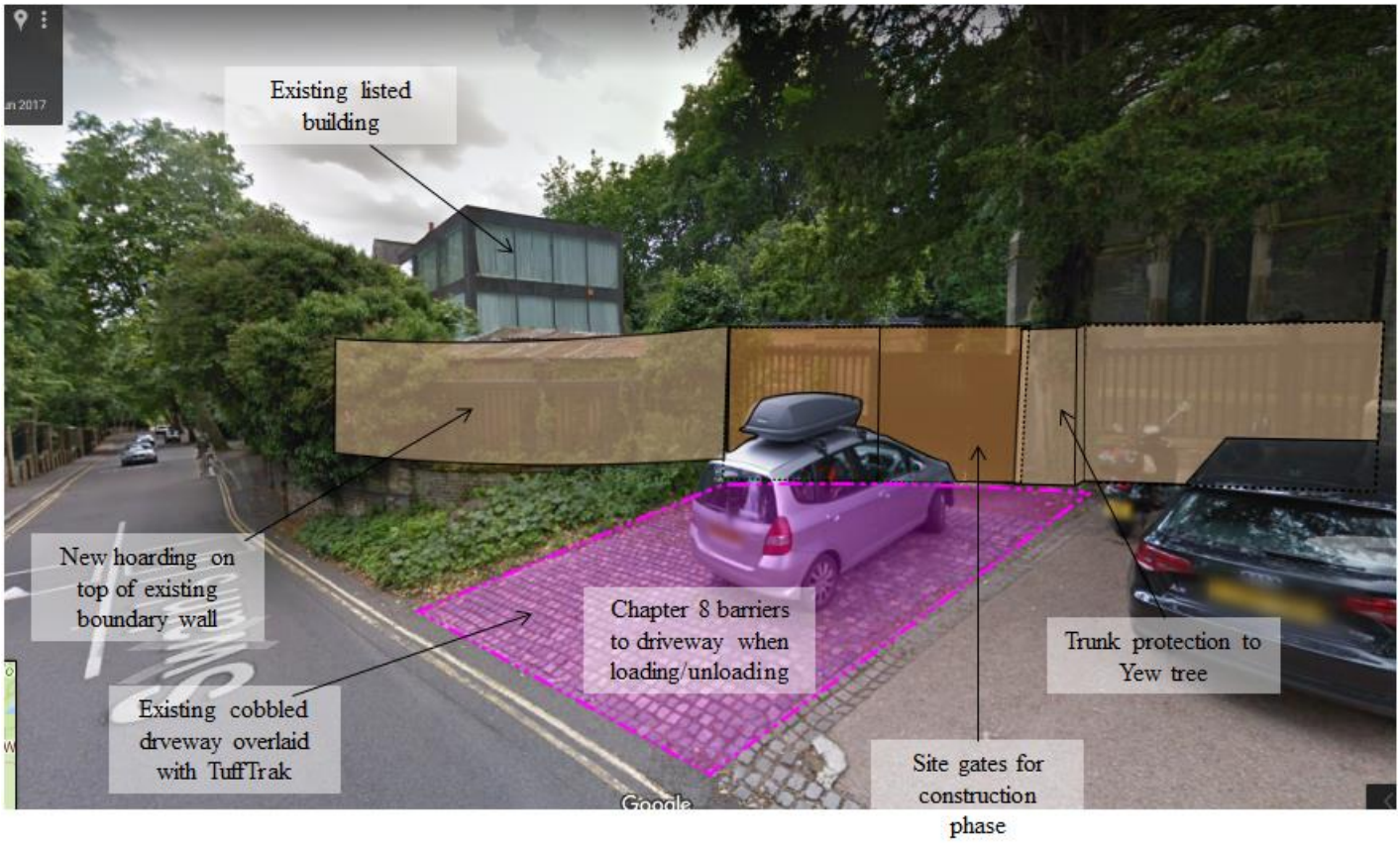
a. Where applicable, please provide details of any hoarding and/or scaffolding that intrudes onto the public highway, describing how pedestrian safety will be maintained through the diversion, including any proposed alternative routes. Please provide detailed, scale drawings that show hoarding lines, gantries, crane locations, scaffolding, pedestrian routes, parking bay suspensions, remaining road width for vehicle movements, temporary vehicular accesses, ramps, barriers, signage, lighting etc. If these are attached, use the following space to reference their location in the appendices.

Hoarding will be erected to replace the existing fencing adjacent to the driveway to provide a clearly visible site entrance and as part of the adjustments to the existing garden gateway.

The existing fencing along the remaining Swains Lane boundary will remain in place as existing.

Chapter 8 barriers will be erected during unloading/loading operations to delineate these works from vehicles, pedestrians and cyclists.

Signage will be placed at the entrance of Swains Lane to inform the public of construction work ahead. Although there is no public footpath actually in front of the site so all pedestrians naturally use the footpath on the opposite side of the road.



b. Please provide details of any other temporary structures which would overhang/oversail the public highway (e.g. scaffolding, gantries, cranes etc.) If these are attached, use the following space to reference their location in the appendices.

There will be no temporary structure overhanging or encroaching on the public highway

27. Services

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.

No new utilities connections will be required during the Phase 1 base build.

Details of new utilities connection (if required) can be provided with details of Phase 2 when these become available.

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.

Potential worst case noise generation scenarios have been investigated by reviewing the demolition and construction activities for each phase of the works as summarised in the following tables. Green colouring is used where there is not considered likely to be a significant noise impact, yellow where some impact may occur and orange where the greatest potential for noise impact exists. This is based on the type of plant and duration of the works.

Times of noise generation works will be limited to site working hours with best practice and mitigation measures implemented so the impact of any noisy operations is minimised to local residents.

Demolition Noise Generation Activity Table

Demolition Activities	
Demolition of Existing Extension	360 tracked excavators with munchers – short duration
Load and remove demolition rubble (crushing and screening to be undertaken off-site)	360 tracked excavators, 20 tonne tipper trucks – short duration

Construction Noise Generation Activity Table

Construction Activities	
Placement of piling mat	Excavator
Piling& Ground source heating piles	1 No Klemm 708 or similar Mini Rig for structural piles, concrete lorries and excavator,
Groundworks	Breaking down & forming pile caps Excavations for drainage and services Concrete pour for floor slab & pile cap Lorries and excavators in use daily Compressors, breakers and hand power tools

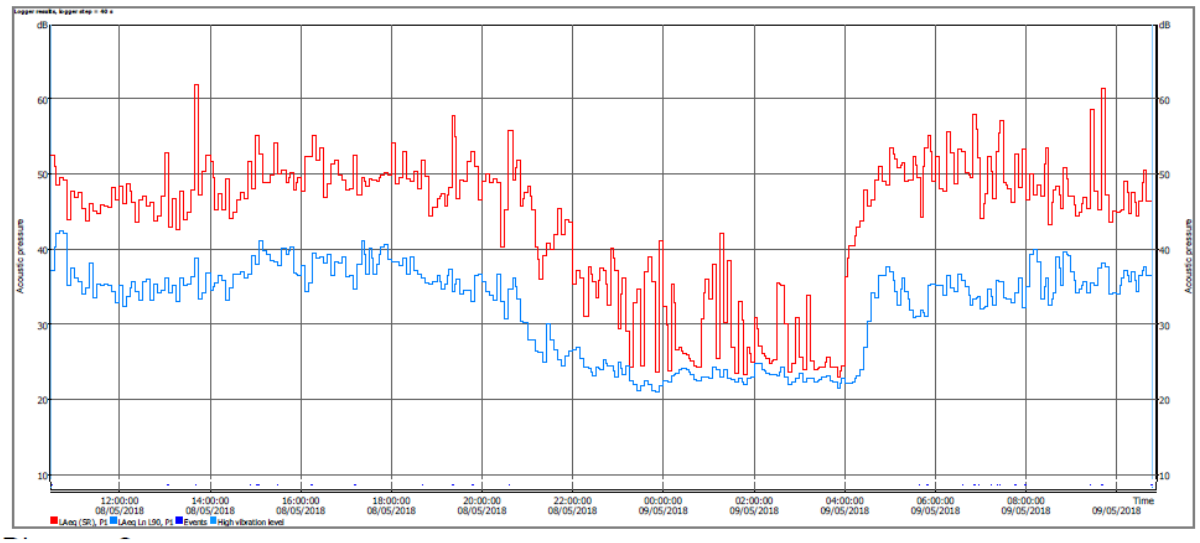
Construction Noise Generation Activity Table

Masonry Works	Laying bricks and blocks by hand Materials lifted and moved around site by small hoist Mortar mixed by portable 'on site mixer' Occasional use of petrol masonry saw
Scaffolding	Traditional scaffold to be erected and struck by hand
Roofing	Materials movement by hoist
External Works	Mini Excavator and small plant
Internal Trades	Cutting tools, skill saws, drills

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.

An Ambient Noise Survey was conducted on 08/05/2018 and a copy of the results is appended to this CMP.
Average daytime LAeq levels at the site ranged between 46 to 50 dB(L_{Aeqt})

LOG01 Noise monitoring position		
Time period	**Lowest $L_{A90,15min}$**	**Average $L_{Aeq,T}$**
07:00-19:00hrs	33	50
19:00-23:00hrs	24	48
23:00-07:00hrs	21	46



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

The noise sensitive locations identified are St James Villa the property adjoining the site.

BS 5228 Significance Criteria

Assessment category and threshold value period (LAeq)	Threshold value, in decibels (dB)		
	Category A	Category B	Category C
Night-time (23:00-07:00)	45	50	55
Evenings (19:00-23:00 weekdays and weekends (13:00-23:00 Saturdays and 07:00-23:00 Sundays)	55	60	65
Daytime (07:00-19:00) and Saturdays (07:00-13:00)	65	70	75

The site is a Category A location as the ambient noise is less that 65dB during the relevant construction working period.

As the background ambient noise levels are less that 65dB, the following noise limit will be adopted throughout the scheme:
Noise levels at the nearest sensitive façade should aim to be within a daily level of 70 dB (LAeq, 10hr) for airborne noise, and that first Action Level Trigger of 73 dB (LAeq, 5 minutes) should be used to ensure daily levels are within the 70dB (LAeq, 10hr) level.

Predictions for noise levels are provided in the table below.

Calculation of specific noise levels at Noise Sensitive location (81 Swains Lane, London NW6 6PJ) as BS 5228 Table F.4												
Activity	Plant type	LAeq at 10m	Dist.	Adjustments			Resultant Laeq	Dur'n of activity	Dur'n as %	Correction to $L_{Aeq(10)}$	Activity $L_{Aeq(10)}$	Total $L_{Aeq(10)}$
				Dist	Screen	Refl'n						
		dB	m	m	dB	dB	dB	h	%	dB	dB	dB
Enabling Works & Demoltion	Mini excavator	75		0	-10	3	68	6	60%	-2	66	70
	Concrete breaking (electric percusssion)	82		0	-10	3	75	2	20%	-7	68	
	Mini excavator	75		0	-10	3	68	4	40%	-4	64	
	Skid steer loader	75		-4.5	-10	3	63.5	6	60%	-2	61.5	
	Lorry	80		-10	-5	3	68	3	30%	-5	63	
	Boarding up / Demolition - hand hammer	84		0	-15	3	72	3	25%	-6	66	
Piling	Mini excavator	75		-4	-10	3	64	6	60%	-2	62	67
	Skid Steer loader	75		-4	-10	3	64	8	80%	-1	63	
	Klemm-704 piling rig	76		-4	-10	3	65	8	80%	-1	64	
	Lorry	80		-10	-5	3	68	4	40%	-4	64	
Bulk Excavation	Mini excavator	75		-4	-10	3	64	10	100%	0	64	68
	Skid Steer loader	75		-4	-10	3	64	10	100%	0	64	
	Lorry	80		-10	-5	3	68	6	60%	-2	66	
Concrete works	Mini excavator	75		-4	-10	3	64	8	80%	-1	63	69
	Skid Steer loader	75		-4	-10	3	64	8	80%	-1	63	
	Poker vibrators x 2	81		0	-10	3	74	2	20%	-7	67	
	Compressor	72		-4	-10	3	61	2	20%	-7	54	
	Lorry	80		-10	-5	3	68	4	40%	-4	64	
General Construction	Elec circular saw	77		0	-10	3	70	6	60%	-2	68	70
	Skid Steer loader	75		0	-10	3	68	3	30%	-5	63	
	Boarding windows - hand hammer	84		0	-10	3	77	1	10%	-10	67	
	Lorry	80		-10	-5		65	2	20%	-7	58	
Note Screen attenuation based on BS5228, + 5to 10db for proprietary acoustic blankets, 3dB reflection addition to allow for façade enhancement												

The noise mitigation measures are described in more detail in Q31 below, and include the use of an acoustic enhanced site hoarding using Echo Barrier H3 panels fixed to existing boundary walls adjacent to St James Villa.

The calculations show that the noise levels will not exceed the define limits in any of these conditions for the durations of the works.

It should be noted that the 'actual' conditions will be monitored in real time by the noise measuring equipment at the receptor locations.

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.

Site management - The general control of noise will be managed by the Principal Contractor. Close liaison will be maintained with LBC Environmental Health Department. The Site Agent will keep a site diary which will record any noise / vibration nuisances and correlate these with the activities taking place at this time.

Other specific measures which will be adopted will include selection of 'silenced' plant, the pre-cutting of materials off site, prefabrication of plant or service containment and prefabrication and pre-cutting of 1st and 2nd fix materials and elements. The site manager will be provided with hand held noise measuring equipment and will be trained in the operation of this equipment to ensure that the operation of plant remains within the predicted levels.

i. Non- standard works (to include any piling, pneumatic breaking and excavation by machinery will take place between 09.00 and 17.00 Monday to Friday There will be no noisy working on Saturdays, Sundays or Public Holidays.
ii. The perimeter boundary walls to ST James Villa and Cemetery boundaries and hoarding at the front elevations are considered to provide a sufficient acoustic barrier, however noise levels will be continuously monitored and if hoarding is found to be ineffective at reducing noise to tolerable levels for local residents then an enhanced acoustic barrier (Echo Barrier H3), will be fixed to the inside face of the hoarding/ boundary wall. This will significantly improve the attenuation provided by the site boundary.
iii. For demolition works, preference shall be given to equipment that breaks concrete by munching or pulling rather than by percussive methods;
iv. All access gates will be controlled to minimise flanking noise;
v. All hand held and portable equipment, where practicable, will be electrically powered;
vi. All plant and equipment should be maintained in good working order
vii. Plant, when in operation intermittently, will be switched off during periods of inactivity
viii. . Stationary equipment and plant will be placed so as to provide screening to other items of plant and located to provide minimum noise emissions in the direction of Noise Sensitive Locations (NSLs);
ix. Care will be taken when loading and unloading materials to limit impact noise
x. Vehicles will not be permitted to queue on the road or pavement outside the site access;
xi. Activities which can produce significant levels of noise will be arranged for times which are less likely to cause disturbance e.g. avoiding summer weekends and early mornings.

Where any complaint is received, the Contractor will incorporate 2hr on/off respite periods subject to the agreement of the receptor party.

In addition, the proximate receptors/neighbours will be advised at each stage of construction if any particular action is likely to incur noise, dust or vibration nuisance of any kind.

The contractor will measure noise levels with a Class 1 decibel meter, taking readings on site and building up a log of readings throughout the project duration. The contractor will aim to achieve a daily limit of 70dB (LAeq, 10hr) at the nearest sensitive façade (79 Swains Lane/ St James Villa) and 73dB (LAeq, 5 minutes) at the first action level trigger.

For unattended long term noise monitoring, the contractor shall ensure the installation of two semi-permanent Class 1 sound level meters at appropriate site boundary locations, continuously monitoring a range of noise metrics. The provision of alerts via SMS or email can be provided to notify high levels of noise. Furthermore, monthly noise reports can be provided to the council, on request, detailing daily noise emissions and discussing any noise trigger levels by text or email alert.

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

Project acoustician:

Acoustics Plus

Noise & Vibration Consultants

Principal Consultant: Phil Huffer B.Sc. (Hons) MIOA

Senior Consultant: Andy Dodd

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

Dust mitigation measures are set out and below.

With regard to construction:

- Construction of a 2.4 m high timber hoarding around the perimeter of each site prior to commencement of construction, if not already in place;
- Before any demolition works take place the structure will be enclosed in monarflex or similar reinforce polythene sheeting to prevent as far as possible dust from escaping form the demolished areas to neighbouring premises
- Keep site fencing, barriers and scaffolding clean using wet methods;
- Site personnel shall be trained in dust mitigation and a manager shall be present for managing dust on site;
- Use of low emission plant fitted with catalysts, diesel particulate filters or similar devices;
- Plant shall be well maintained, with routine servicing of plant and non-road mobile machinery (NRMM) to be completed in accordance with the manufacturers recommendations;
- Plant and vehicles to be located away from the closest receptor or house in closed environments wherever possible;
- Damp down site during working day and again at the end of the day to reduce the amount of re-suspended dust;
- Ensuring that all plant equipped with dust suppression equipment is checked on first use at site, to ensure that this equipment is functional and is being used;
- Avoidance of diesel or petrol powered generators using mains electricity or battery powered equipment wherever possible; and
- Use of water sprays or poured water to suppress dust during cutting, angle-grinding or other dust-generating activities;
- Store materials with dust producing potential away from site boundaries and sheet, seal or damp down stockpiles of excavated materials held on site;

With regard to vehicle movements on and off the site:

- All delivery vehicles will be switched off when making deliveries or being held at the waiting point, and delivery instruction will include a requirement that vehicle engine idling is not permitted.
- Any mechanical plant using on site will switched off when not in use and engines will not be left idling.
- Covering of all loads entering or leaving site;
- Ensuring that road and construction vehicles comply with or exceed the requirements for the Low Emission Zone (LEZ): currently Euro IV as of 3 January 2012.

- Wet cleaning of haul routes and public roads at least weekly, with more frequent cleaning when found to be necessary under the measures specified in the next section
- Provision of jet-washing facilities at the site exit where vehicles leave site onto public roads.
- Provision of an area of hard surfacing where tracked vehicles can be cleaned/checked after cleaning before leaving site;

With regard to reducing CO_2 emissions for construction vehicles:

- Use of low carbon vehicles wherever practicable such as hybrid electric, electric and bio-methane;
- Switch off vehicles when not in use rather than continuously idling;

Driver training such as SAFED accreditation run by the DfT.

The Contractor recognises dust is a major cause of concern to those in the immediate environment of any building site, both to receptors and operatives. Particularly during dry summer periods, we ensure that all soil and mud inadvertently dropped onto the pavement or roadway are washed away into main drainage within 5 minutes of delivery or haulage.

Skips housing spoil and waste are covered and any passage via conveyor of excavated material is dampened as it heads to the housing skip/lorry for storage before despatch. In addition, where it is likely that neighbours will be affected at any time by dust we offer to wash down their cars and windows on a regular basis. Haulage vehicles carrying waste/spoil will be dampened and covered during dry and windy conditions.

Where working above ground we ensure that our scaffolding is wrapped with a polythene cover, both to reduce dust, but also noise to a certain extent.
Large open basement constructions have greatest potential to generate significant dust problems, however at 85 Camden Mews the majority of excavation work will take place beneath the existing building. Site hoardings and dust-proof plastic sheeting will be erected to further minimise the release of dust from the site.

In addition, it is proposed to:

- Clean / sweep the footpath and external areas around the site every evening and or as required during the day.
- Dampen excavated material as it leaves the site, this is particularly important during dry or windy periods.
- No smoking by site operatives in public.
- All dust emitting power-tools (such as drills, saws and grinders) will have vacuum filters attached
- Daily dust inspections will be undertaken by the foreman, with spot-checks by external Health & Safety consultants

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.

i. Where material are loading within the site or on the adjacent driveway hardstanding a jet wash facility will be provided.
ii. For vehicles being loaded on the driveway , a tarpaulin cover will be placed on the road surface prior to the arrival of the delivery / removal vehicle to minimise debris contaminating the road surface. Any residual debris will be removed with wheel washing / jet washing equipment following the departure of the vehicle.
iii. Wet cleaning of public roads when found to be necessary under the measures specified in the next section;
iv. Covering of all loads entering or leaving site;
v. Ensuring that road and construction vehicles comply with or exceed the requirements for the Low Emission Zone (LEZ): currently Euro IV as of 3 January 2012.

Site inspections are a minimum of twice daily by the foreman to ensure that dust and dirt are kept to a minimum. All deliveries are followed by an inspection with the street and pavement swept clean if required.

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

For all potential environmental impacts the contractor's site manager will

i. Record any exceptional incidents that cause dust and/or air emissions, either on- or off- site, and the action taken to resolve the situation in the log book.
ii. Hold regular liaison meetings with high risk construction sites within 500m of the site boundary, to ensure plans are co-ordinated and dust and particulate matter emissions are minimised.

Dust monitoring will be performed as GLA SPG for Medium Risk sites:

a) Throughout the Construction Phase continuous particulate matter (PM10) monitoring shall be undertaken. Two instruments will be deployed at the site boundary in a transect orientated to the prevailing wind direction, with a third monitor located at the nearest sensitive receptor. One monitor shall be co-located with an anemometer.
b) Adequate quality assurance/quality control procedures shall be in place including monitor maintenance and calibration as well and data checking. PM10 data shall be collected automatically on an hour basis.
c) A trigger action level for PM10 concentrations of 200µg.m^{-3} (15 minute average) shall be used to identify incidences of elevated dust emissions at the site boundary. The development site shall comply with the trigger action throughout the demolition and construction phases.
d) An on-site alert system (email or SMS) shall be in place to notify appropriate staff that the trigger action level has been reached. Immediate and appropriate measures can be put in place to rectify abnormal particulate emissions. A procedure shall be established to deal with abnormal dust emissions. All incidences of abnormal particulate emissions leading to breaches of the trigger action level, shall be documented in the site log book (date and time), with details of the action take to remediate dust emissions. This will be integrated with the sound level monitors described in Q 32 above
e) An e-mail specifying details of any alert to be sent out to the Council's air quality officer as soon as practicable following any breach of the site trigger action level.
f) An electronic report shall be submitted to the Council's air quality officer every three months summarising the following information from each monitoring site – 24 hour average PM10 concentration, date and time of any breach of the trigger action level with the 15 minute mean concentration, prevailing wind direction and details of the cause of elevated dust emissions and mitigation measures.
g) The Council shall be notified of any changes to the location and operation of dust PM10 monitoring instrumentation.
h) Undertake daily on-site and off-site inspection, and carry out regular dust soiling checks of surfaces such as street furniture and cars with a 100m of the site.
i) When activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions increase the frequency of inspections

With regard to noise monitoring

i. All the Contractor's operatives shall be trained weekly by Toolbox talks with CITB Compliant training beyond BS 5228:2009 and revised standard 2015 – all Foremen and Project Managers are equipped with noise monitoring equipment and manage levels to maintain safe working conditions.

ii. Noise monitors will be co-located with the dust monitors positioned on the transect of the site in the direction of the prevailing wind

iii. The positioning of the monitoring equipment will be agreed with the relevant parties including LBC environmental officers, and boundary nose limits will be set to align with the target levels at the NSL

iv. A trigger action level for noise will be 73dB(LAeq 5 mins) at the noise sensitive locations and shall be used to identify incidences of elevated noise emissions at the site boundary. The development site shall comply with the trigger action throughout the demolition and construction phases.

v. An on-site alert system (email or SMS) shall be in place to notify appropriate staff that the trigger action level has been reached. Immediate and appropriate measures can be put in place to rectify abnormal particulate emissions. A procedure shall be established to deal with abnormal noise emissions. All incidences of abnormal noise emissions leading to breaches of the trigger action level, shall be documented in the site log book (date and time), with details of the action take to remediate noise emissions.

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 risk assessment is presented in appendix A. The Summary Table of Risk Impacts is set out below:

	Demolition	Earthworks	Construction	Trackout
Dust Soiling	Medium	Medium	Medium	Negligible
Human Health	Low	Low	Low	Negligible
Ecological	Negligible	Negligible	Negligible	Negligible

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.

Confirmed.

See Appendix B

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

The site has been identified as Medium Risk, two real time dust monitors will be deployed as outlined in Q 35 above and in the Q37 Checklist at Appendix B.

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).

Rodent Control - An initial investigation to establish the existence of rodents on the site will be carried out before works on site commence.

The rodent control measures will be implemented prior to start of construction works, with test baiting being undertaken at least 28 days prior to the start of works.

Further investigations following demolition works will cover the capping of any old redundant drains that may exist on the site.
The intercepting chamber to current system will be secured and the system seen to running freely and that rodding eye caps are securing in place that open ends have an earthenware bung (not a plastic cap) securely fitted

If there is evidence of a rodent population on the site during the works than detailed proposals on rodent control and dispersion will be agreed with Camden Environmental Health.

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

A Refurbishment/Demolition Asbestos Survey has been carried out to determine if there are any Asbestos Containing Materials (ACM's) before works the start of demolition.

ACM's have been identified within the façade of the building and these will be dealt with in accordance with the survey recommendations and statutory notifications to the HSE as appropriate.

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.

The contract documents for the construction works will include obligations that the contractor ensures that site rules are made obligatory for all operative attending the site and the any breach of these rules will be grounds for immediate removal of the individual for the site.

The site rules require

- No smoking on site except within the designated smoking shelter provided by the contractor
- No radios allowed on site
- No burning of rubbish on site
- No congregation outside the site boundaries during break periods
- No offensive language or unnecessary shouting to be used on site
- Hi-viz jackets or tabards to worn at all times on site to easy identification of site operatives

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): May 2022 to March 2023

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

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

d) Please provide evidence to demonstrate that all relevant machinery will be registered on the NRMM Register, including the site name under which it has been registered:

   The CMP will be will form part of the contract specification and requirements, with which the contractor is required to comply. The contractor will provide evidence of registration prior to final submission for S106 discharge of the CMP

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:
   COMFIRMED

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:
   COMFIRMED

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.

Signed: *AJHouse*

Date: 29th April 2022

Print Name: Andrew House

Position: Project Coordinator

Please submit to: planningobligations@camden.gov.uk

End of form.

APPENDIX A

Air Quality & Dust Risk Assessment

Site Location
81 Swains Lane, Camden, London N6 9PJ

Date of Assessment
May-18

This Air Quality & Dust Risk Assessment is based upon the methodology set out in the Institute of Air Quality Management's (IAQM) 2014 Guidance on the Assessment of dust from demolition and construction.
This assessment also follows the guidance in the Greater London Authority Supplementary Planning Guidance (June 2014)

STEP 1 - SCREENING		
1a	Is human receptor site within	
	50 m of site boundary	Y
	50 m of the route(s) used by construction vehicles on the public highway, up to 500m from the site entrance(s)	Y/N
1b	Is ecological receptor site within	
	50 m of site boundary	Y
	50 m of the route(s) used by construction vehicles on the public highway, up to 500m from the site entrance(s)	Y/N
	IF ANSWERS TO 1A OR 1B ARE 'YES' COMPLETE 1C & COMPLETE ASSESSMENT	

1c Provide a description of the description of the proposed demolition and construction activities, their location and duration, and any phasing of the development. include:
- the proximity and number of receptors;
- the specific sensitivity of the receptor(s),eg a primary school or hospital;
- the duration for which the sources of dust emissions may be close to the sensitive receptors
- in the case of PM10, the local background concentration.

The proposed development of the site involves the demolition of the rear extension, a replacement rear extensions, a new winter garden fromed in an existing infilled brick cutting and constructio of a new tunne linking the new extensio to the winter garden .

The new extension has a pile foundation and suspended salb and included a contiguous pile retaining to form an lightwell at the boundary with. The new linking tunnel is formed in open cutt between contiguous piles walls and is then lined in conrete and backfilled. The Winster garden in form in an existing Victorian cutting which has previousy been infll and wil be re excavated and has a mezzanine floor insterted and a new glazed roof to a winter garden with a screening room at the lower level. .

The existing listed main building remains and will be re-glazed and internally refurbished.

The nearest human receptors to the site are within 1m south of the site in the terrance building (St James Villa). Other receptors include pedestrians on the adjoining roads. 10 - 15 receptors within 20m, 35-40 receptors within 50m, 80-100 receptors within 100m.
The nearest ecological receptor is Highgate Cemetry ~2m west of the site.
The anticipated overall duration of the works is 17 months, of which sources of dust emission may be close to the receptors for 12 months.

The Air Quality Progress Report for Camden 2014 indicates the background annual mean PM10 levels are in the range 18-29 ug/m3 which is below the annual mean objective level.

STEP 2 ASSESS THE RISK OF DUST IMPACTS		
	STEP 2A: Define the Potential Dust Emission Magnitude	
Demolition Phase		
2A i	Is the volume of demolition **Large** •total volume of building to be demolished >50,000m3, or • potentially dusty construction material • (e.g. concrete), or • on-site crushing and screening, or • demolition activities >20m above ground level;	Y/N
	Medium • total volume of building to be demolished 20,000m3 – 50,000m3, or • potentially dusty construction material, or • demolition activities 10-20m above ground level;	Y/N
	Small • total volume of building to be demolished <20,000m3, or • construction material with low potential for dust release (e.g. metal cladding or timber), or • demolition activities <10m above ground demolition during wetter months	Y
Earthworks Phase		
2A ii	Is the scale of the Earthworks **Large** • total site area >10,000m2, • potentially dusty soil type (e.g. clay, which will be prone to suspension when dry to due small particle size), or • >10 heavy earth moving vehicles active at any one time on site, or • Formation of stockpile enclosures • >8m in height; • total material moved >100,000 tonne (where known).	Y/N
	Medium • total site area 2,500m2 – 10,000m2, • moderately dusty soil type (eg. silt), or • 5-10 heavy earth moving vehicles active at any one time, or • formation of stockpile enclosures 4m –8m in height, or • total material moved 20,000 tonnes –100,000 tonnes (where known).	Y/N
	Small • total site area <2,500m2, or • soil type with large grain size (e.g. sand), or • <5 heavy earth moving vehicles active at any one time, formation of stockpile enclosures <4m in height, or • total material moved <10,000 tonnes (where known), or earthworks during wetter months.	Y

Construction Phase		
2A iii	Is the scale of the works **Large** • total building volume >100,000m3, or • piling, or • on site concrete batching; or • sandblasting	Y/N
	Medium • total building volume 25,000m3 – 100,000m3, or • potentially dusty construction material (e.g. concrete), or • on-site concrete batching;	Y/N
	Small • total building volume <25,000m3, or • construction material with low potential for dust release (e.g. metal cladding or timber).	Y
Trackout		
2A iii	Only receptors within 50 m of the route(s) used by vehicles on the public highway and up to 500 m from the site entrance(s) are considered to be at risk from the effects of dust. Will the trackout be:- **Large** • >50 HDV (>3.5t) outward movements in any one day, • potentially dusty surface material (e.g. high clay/silt content), • unpaved road length >100 m;	Y/N
	Medium • 10-50 HDV (>3.5t) outward movements in any one day, • moderately dusty surface material (e.g. high clay content), • unpaved road length 50 m – 100 m (high clay content);	Y/N
	Small • <10 HDV (>3.5t) trips in any one day, • surface material with low potential for dust release, • unpaved road length <50 m.	Y
	STEP 2B: Define the Sensitivity of the Area	
2B i	Sensitivity of People to Dust Soiling Effects (see Table 4.2 for guidance) - **DEMOLITION**	
	Is the location a **High** sensitivity receptor • Users can reasonably expect an enjoyment of a high level of amenity; or • the appearance, aesthetics or value of their property would be diminished by soiling and the people or property would reasonably be expected to be present continuously, or at least regularly for extended periods as part of the normal pattern of use of the land. • Indicative examples include dwellings, museums and other culturally important collections, medium and long term car parks and car showrooms.	Y
	Medium sensitivity receptor • Users would expect to enjoy a reasonable level of amenity but would not reasonably expect to enjoy the same level of amenity as in their home; or • The appearance, aesthetic or value of their property could be diminished by soiling; or • The people or property would not reasonably be expected to be present here continuously or regularly for extended periods as part of the normal pattern of use of the land; • Indicative examples include parks and places of work.	Y/N

	Low sensitivity receptor • The enjoyment of amenity would not reasonably be expected; or • Property would not reasonably be expected to be diminished in appearance, aesthetics or value by soiling; or • There is transient exposure, where the people or property would reasonably be expected to be present only for limited periods of time as part of the normal pattern of use of the land. • Indicative examples include playing fields, farmland (unless commercially-sensitive horticultural), footpaths, short-term car parks and roads.	Y/N
	Sensitivity of People to Dust Soiling Effects (see Table 4.2 for guidance) - **EARTHWORKS**	
	Is the location a High sensitivity receptor	Y
	Medium sensitivity receptor	Y/N
	Low sensitivity receptor	Y/N
	Sensitivity of People to Dust Soiling Effects (see Table 4.2 for guidance) - **CONSTRUCTION**	
	Is the location a High sensitivity receptor	Y
	Medium sensitivity receptor	Y/N
	Low sensitivity receptor	Y/N
	Sensitivity of People to Dust Soiling Effects (see Table 4.2 for guidance) - **TRACKOUT**	
	Is the location a High sensitivity receptor	Y/N
	Medium sensitivity receptor	Y
	Low sensitivity receptor	Y/N
2B ii	Sensitivities of People to the Health Effects of PM10 (See Table 4.3 for guidance) - **DEMOLTION**	
	High sensitivity receptor • Locations where members of the public are exposed over a time period relevant to the air quality objective for PM10 (in the case of the 24-hour objectives, a relevant location could be one where individuals may be exposed for eight hours or more in a day). • Indicative examples include residential properties. Hospitals, schools and residential care homes should also be considered as having equal sensitivity to residential areas for the purposes of this assessment.	Y/N
	Medium sensitivity receptor • Locations where the people exposed are workers, and exposure is over a time period relevant to the air quality objective for PM10 (in the case of the 24-hour objectives, a relevant location would be one where individuals may be exposed for eight hours or more in a day). • Indicative examples include office and shop workers, but will generally not include workers occupationally exposed to PM10, as protection is covered by Health and Safety at Work legislation	Y
	Low sensitivity receptor • Locations where human exposure is transient. • Indicative examples include public footpaths, playing fields, parks and shopping streets	Y/N
	Sensitivities of People to the Health Effects of PM10 - **EARTHWORKS**	
	Is the location a High sensitivity receptor	Y/N
	Medium sensitivity receptor	Y
	Low sensitivity receptor	Y/N
	Sensitivities of People to the Health Effects of PM10 - **CONSTRUCTION**	
	Is the location a High sensitivity receptor	Y/N
	Medium sensitivity receptor	Y
	Low sensitivity receptor	Y/N
	Sensitivities of People to the Health Effects of PM10 - **TRACKOUT**	
	Is the location a High sensitivity receptor	Y/N
	Medium sensitivity receptor	Y/N
	Low sensitivity receptor	Y

2B iii	Sensitivities of Receptors to Ecological Effects (See Table 4.4 for guidance) **DEMOLTION**	
	High sensitivity receptor • Locations with an international or national designation and the designated features may be affected by dust soiling; or • Locations where there is a community of a particularly dust sensitive species such as vascular species included in the Red Data List for Great Britain. • Indicative examples include a Special Area of Conservation (SAC) designated for acid heathlands or a local site designated for lichens adjacent to the demolition of a large site containing concrete (alkali) buildings.	Y/N
	Medium sensitivity receptor • Locations where there is a particularly important plant species, where its dust sensitivity is uncertain or unknown; or • Locations with a national designation where the features may be affected by dust deposition. • Indicative example is a Site of Special Scientific Interest (SSSI) with dust sensitive features	Y/N
	Low sensitivity receptor • Locations with a local designation where the features may be affected by dust deposition. • Indicative example is a local Nature Reserve with dust sensitive features	Y
	Sensitivities of Receptors to Ecological Effects - **EARTHWORKS**	
	Is the location a High sensitivity receptor	Y/N
	Medium sensitivity receptor	Y/N
	Low sensitivity receptor	Y
	Sensitivities of Receptors to Ecological Effects - **CONSTRUCTION**	
	Is the location a High sensitivity receptor	Y/N
	Medium sensitivity receptor	Y/N
	Low sensitivity receptor	Y
	Sensitivities of Receptors to Ecological Effects - **TRACKOUT**	
	Is the location a High sensitivity receptor	Y/N
	Medium sensitivity receptor	Y/N
	Low sensitivity receptor	Y

Air Quality & Dust Risk Assessment

Site Location
81 Swains Lane, Camden, London N6 9PJ

Date of Assessment
May-18

Summary of Appraisal & Conclsion of Site Specific Dusk Risk

Table 4.1 - Summary of Dust Emission Magnitude for Site

Combine Answers to Step 2a i) ii) & iii)

Activity	Dust Emission Magnitude
Demoltion	Medium
Earthworks	Small
Construction	Medium
Trackout	Medium

Table 4.5 - Summary of Site Sensitivity

Combines Answers to Step 2B i) ii) & iii) with Tables 4.2 - 4.4

Receptor Sensitivity	Sensitivity of Surrounding Area			
	Demoltion	Earthworks	Construction	Trackout
Dust Soiling	High	High	High	Medium
Human Health	Medium	Medium	Medium	Low
Ecological	Low	Low	Low	Low

STEP 2C Combine Outputs from Steps 2A & 2B

Combine Answers to Table 4.1 with Table 4.5 and Risk Impacts in Tables 4.6 - 4.9

Summary of Site Specific Dust Risk

Potential Risk	Risk			
	Demoltion	Earthworks	Construction	Trackout
Dust Soiling	Medium	Medium	Medium	Negligible
Human Health	Low	Low	Low	Negligible
Ecological	Negligible	Negligible	Negligible	Negligible

APPENDIX B

Dust Mitigation Measures

Appendix to Question 37 – Dust Mitigation Measures

81 Swains Lane, London N6 6PJ

Applicants must complete the table below (extracted from the Mayors 'control of dust and emissions during construction and demolition' SPG).

Applicants should include all 'highly recommended measures' as a minimum.

XX Highly Recommended
X Desirable

MEASURES RELEVANT FOR DEMOLITION, EARTHWORKS, CONSTRUCTION AND TRACKOUT

	CIRCLE RISK LEVEL IDENTIFIED FOR SITE			TICK TO CONFIRM MITIGATION MEASURE WILL BE IMPLEMENTED
MITIGATION MEASURE	**LOW RISK**	**MEDIUM RISK**	**HIGH RISK**	
Site management				
Develop and implement a stakeholder communications plan that includes community engagement before work commences on site.		XX	XX	Yes
Develop a Dust Management Plan.		XX	XX	Yes
Display the name and contact details of person(s) accountable for air quality pollutant emissions and dust issues on the site boundary.	XX	XX	XX	Yes
Display the head or regional office contact information.	XX	XX	XX	Yes
Record and respond to all dust and air quality pollutant emissions complaints.	XX	XX	XX	Yes
Make a complaints log available to the local authority when asked.	XX	XX	XX	Yes
Carry out regular site inspections to monitor compliance with air quality and dust control procedures, record inspection results, and make an inspection log available to the local authority when asked.	XX	XX	XX	Yes

Increase the frequency of site inspections by those accountable for dust and air quality pollutant emissions issues when activities with a high potential to produce dust and emissions and dust are being carried out, and during prolonged dry or windy conditions.	XX	XX	XX	Yes
Record any exceptional incidents that cause dust and air quality pollutant emissions, either on or off the site, and the action taken to resolve the situation is recorded in the log book.	XX	XX	XX	Yes
Hold regular liaison meetings with other high risk construction sites within 500m of the site boundary, to ensure plans are co-ordinated and dust and particulate matter emissions are minimised.			XX	
Preparing and maintaining the site				
Plan site layout: machinery and dust causing activities should be located away from receptors.	XX	XX	XX	Yes
Erect solid screens or barriers around dust activities or the site boundary that are, at least, as high as any stockpiles on site.	XX	XX	XX	Yes
Fully enclosure site or specific operations where there is a high potential for dust production and the site is active for an extensive period.	X	XX	XX	Yes
Install green walls, screens or other green infrastructure to minimise the impact of dust and pollution.		X	X	n/a
Avoid site runoff of water or mud.	XX	XX	XX	Yes
Keep site fencing, barriers and scaffolding clean using wet methods.	X	XX	XX	Yes
Remove materials from site as soon as possible.	X	XX	XX	Yes
Cover, seed or fence stockpiles to prevent wind whipping.		XX	XX	Yes

Carry out regular dust soiling checks of buildings within 100m of site boundary and cleaning to be provided if necessary.		X	XX	Yes
Provide showers and ensure a change of shoes and clothes are required before going off-site to reduce transport of dust.			X	
Agree monitoring locations with the Local Authority.		X	XX	Yes
Where possible, commence baseline monitoring at least three months before phase begins.		X	XX	Yes
Put in place real-time dust and air quality pollutant monitors across the site and ensure they are checked regularly.		X	XX	Yes
Operations				
Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems.	XX	XX	XX	Yes
Ensure an adequate water supply on the site for effective dust/particulate matter mitigation (using recycled water where possible).	XX	XX	XX	Yes
Use enclosed chutes, conveyors and covered skips.	XX	XX	XX	Yes
Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.	XX	XX	XX	Yes
Ensure equipment is readily available on site to clean any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.		XX	XX	Yes
Waste management				
Reuse and recycle waste to reduce dust from waste materials	XX	XX	XX	Yes

Avoid bonfires and burning of waste materials.	XX	XX	XX	Yes

MEASURES SPECIFIC TO DEMOLITION

MITIGATION MEASURE	LOW RISK	MEDIUM RISK	HIGH RISK	TICK BELOW WHERE MITIGATION MEASURE WILL BE IMPLEMENTED
Soft strip inside buildings before demolition (retaining walls and windows in the rest of the building where possible, to provide a screen against dust).	X	X	XX	Yes
Ensure water suppression is used during demolition operations.	XX	XX	XX	Yes
Avoid explosive blasting, using appropriate manual or mechanical alternatives.	XX	XX	XX	Yes
Bag and remove any biological debris or damp down such material before demolition.	XX	XX	XX	Yes

MEASURES SPECIFIC TO EARTHWORKS

MITIGATION MEASURE	LOW RISK	MEDIUM RISK	HIGH RISK	TICK BELOW WHERE MITIGATION MEASURE WILL BE IMPLEMENTED
Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces.		X	XX	Yes
Use Hessian, mulches or trackifiers where it is not possible to re-vegetate or cover with topsoil.		X	XX	Yes
Only remove secure covers in small areas during work and not all at once.		X	XX	n/a

MEASURES SPECIFIC TO CONSTRUCTION

MITIGATION MEASURE	LOW RISK	MEDIUM RISK	HIGH RISK	TICK BELOW WHERE MITIGATION MEASURE WILL BE IMPLEMENTED
Avoid scabbling (roughening of concrete surfaces) if possible	X	X	XX	Yes
Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place	X	X X	XX	Yes
Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery.		X	XX	n/a
For smaller supplies of fine powder materials ensure bags are sealed after use and stored appropriately to prevent dust.		X	X	Yes

MEASURES SPECIFIC TO TRACKOUT

MITIGATION MEASURE	LOW RISK	MEDIUM RISK	HIGH RISK	TICK BELOW WHERE MITIGATION MEASURE WILL BE IMPLEMENTED
Regularly use a water-assisted dust sweeper on the access and local roads, as necessary, to remove any material tracked out of the site.	X	XX	XX	Yes
Ensure vehicles entering and leaving sites are securely covered to prevent escape of materials during transport.	X	XX	XX	Yes
Record all inspections of haul routes and any subsequent action in a site log book.		XX	XX	Yes

Install hard surfaced haul routes, which are regularly damped down with fixed or mobile sprinkler systems and regularly cleaned.		XX	XX	Yes
Inspect haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable;		XX	XX	Yes
Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable).	X	XX	XX	n/a
Ensure there is an adequate area of hard surfaced road between the wheel wash facility and the site exit, wherever site size and layout permits.		XX	XX	n/a
Access gates to be located at least 10m from receptors where possible.		XX	XX	n/a
Apply dust suppressants to locations where a large volume of vehicles enter and exit the construction site		X	XX	n/a

APPENDIX C

Background Acoustic Survey

Noise & Vibration Consultants
4 Mulberry Place, Pinnell Road, London, SE9 6AR
Tel: 020 8859 0303
Email: **info@acousticsplus.co.uk** Web: www.acousticsplus.co.uk

ACOUSTICS PLUS

Proposed Installation of Mechanical Plant

Winter House, 81 Swain's Lane London, N6 6PJ

Environmental Noise Assessment

Author: Phil Huffer B.Sc. (Hons) MIOA
Principal Consultant

Doc Ref: 103606.ph.Issue1

Company Registration Number: 4304440
VAT Registration Number: 788 2610 94

Proposed Installation of Mechanical Plant	
Project Address:	Winter House 81 Swain's Lane London N6 6PJ
Project Reference:	103606

Issue/Revision Record			
Issue:	**Date:**	**Remarks:**	**Author:**
1	11/06/2018	First Issue	Phil Huffer

	Signature:	Print:	Title:	Date:
Author:		**Phil Huffer**	**Principal Consultant**	**11/06/2018**
Reviewer:		**Andy Dodd**	**Senior Consultant**	**11/06/2018**

1. INTRODUCTION

1.1 Acoustics Plus Ltd (APL) is an independent firm of multi-disciplinary acoustic engineers. APL is engaged by both private and public sector clients.

1.2 APL is a registered member of The Association of Noise Consultants (ANC) and the author is a corporate member of The Institute of Acoustics (IOA).

1.3 APL has been instructed by the client, Plum Projects Ltd, to consider and advise upon the noise implications of the proposed installation of mechanical plant.

1.4 During the design phase of the building services, it is necessary to determine plant noise emission limits. The object of this report is to set out those limits following an environmental noise survey carried out at the site.

2. BASELINE SITUATION

2.1 The site (the "site") is located at 81 Swain's Lane, London, N6 6PJ. The site is fully detached and is located to the west of Waterlow Park on the fringes of Highgate Cemetery. The main house is Grade II listed.

2.2 The house is steel framed and arranged over three-storeys. The ground floor is entered from the street through the south-east corner, with a bathroom, stair and guest bedroom to the left. An open-plan family kitchen/dining/playroom occupies two thirds of the floor space, and opens directly on to the garden.

2.3 It is understood that the neighbouring property at no. 79 is in residential use.

2.4 Environmental noise levels at the site are particularly low for an urban area and consist largely of local road traffic movements along Swain's Lane, which directly affects the external amenity areas of the site. To a much lesser extent, noise from aircraft can also be distinguished from time to time. There are no significant sources of industrial or mechanical noise affecting the development site.

2.5 Detailed measurements have been taken at the site to quantify the environmental noise levels at the site. These levels will inform the building services engineer in terms of plant noise emission limits.

4. NOISE OUTLINE

4.1 In order to produce an environmental noise assessment, consideration must be given to the prevailing background noise in the locality of the proposed plant.

4.2 Measurements of background noise were obtained over a 24 hour period at 1No. location deemed representative of background noise levels experienced at the nearest noise sensitive façade. The specific location of the measurements obtained during the exercise are shown in Diagram 1 below.

Diagram 1 – LOG01 monitoring position

4.3 The particulars of the measurement exercise are recorded below. The weather conditions were considered appropriate to monitor environmental noise.

Date:	8th – 9th May 2018
Start Time:	10:45 hrs
Location:	rear garden (see Diagram1)

Weather conditions

Date	Precipitation	Temperature
08/05/18	0.0mm	18 ºC
09/05/18	0.0mm	19 ºC

4.4 Minimum background and average noise levels are shown in Table below. The full level vs time history can be seen in Diagram 2.

LOG01 Noise monitoring position		
Time period	**Lowest $L_{A90,15min}$**	**Average $L_{Aeq,T}$**
07:00-19:00hrs	33	50
19:00-23:00hrs	24	48
23:00-07:00hrs	21	46

Table 1

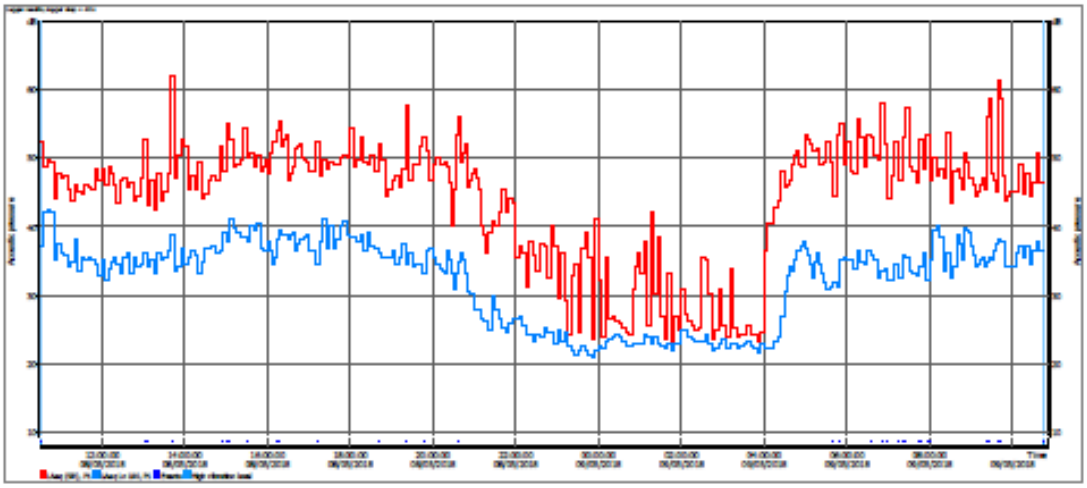


Diagram 2

5. EQUIPMENT

5.1 All background noise measurements were obtained using the following equipment:

- Svantek Svan971 Class 1 Serial No. 51704
- Rion Calibrator Type NC-74 Class 1 Serial No. 00410215

5.2 The relevant equipment carries full and current traceable calibration. The equipment, where necessary, was calibrated prior to and after the measurements were carried out.