Construction/ Demolition Management Plan

pro forma (09.11.2021)

32-34 Avenue Road, NW8 6BU

Draft CMP to Planning Application

Version 1 – April 2022

Camden

Contents

Revisions & additional material

Please list all iterations here:

Date	Version	Produced by
29 April 2022	**1**	**Application 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
29 April 2022	Issue 01	CPA - Air Quality & Dust Risk Assessment Q 36
29 April 2022	Issue 01	CPA - Appendix to Question 36 – Dust Mitigation Measures
10/4/22	Issue 01	Acoustics Plus Background Noise Survey

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 the Construction Logistics and Community Safety (**CLOCS**) Standard and the Guide for Contractors Working in Camden.

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.**"

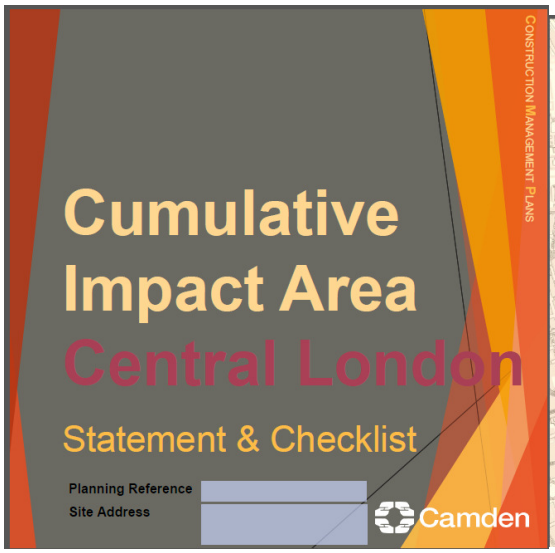
Please complete the questions below with additional sheets, drawings and plans as required. The boxes will expand to accommodate the information provided, so please provide as much information as is necessary. It is preferable if this document, and all additional documents, are completed electronically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

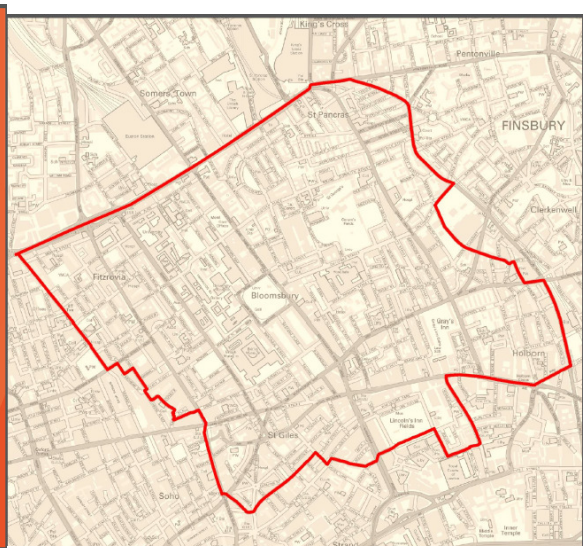
(Note the term 'vehicles' used in this document refers to all vehicles associated with the implementation of the development, e.g. demolition, site clearance, delivery of plant & materials, construction etc.)

Revisions to this document may take place periodically.

IMPORTANT NOTICE: If your site falls within a Cumulative Impact Area *(as of 03/02/2020 to 03/08/2020 there is only one established CIA for the Central London area)* you are required to complete the CIA Checklist and circulate as an appendix to the CMP and included as part of any public consultation – a CMP submission will not be accepted until evidence of this has been supplied.

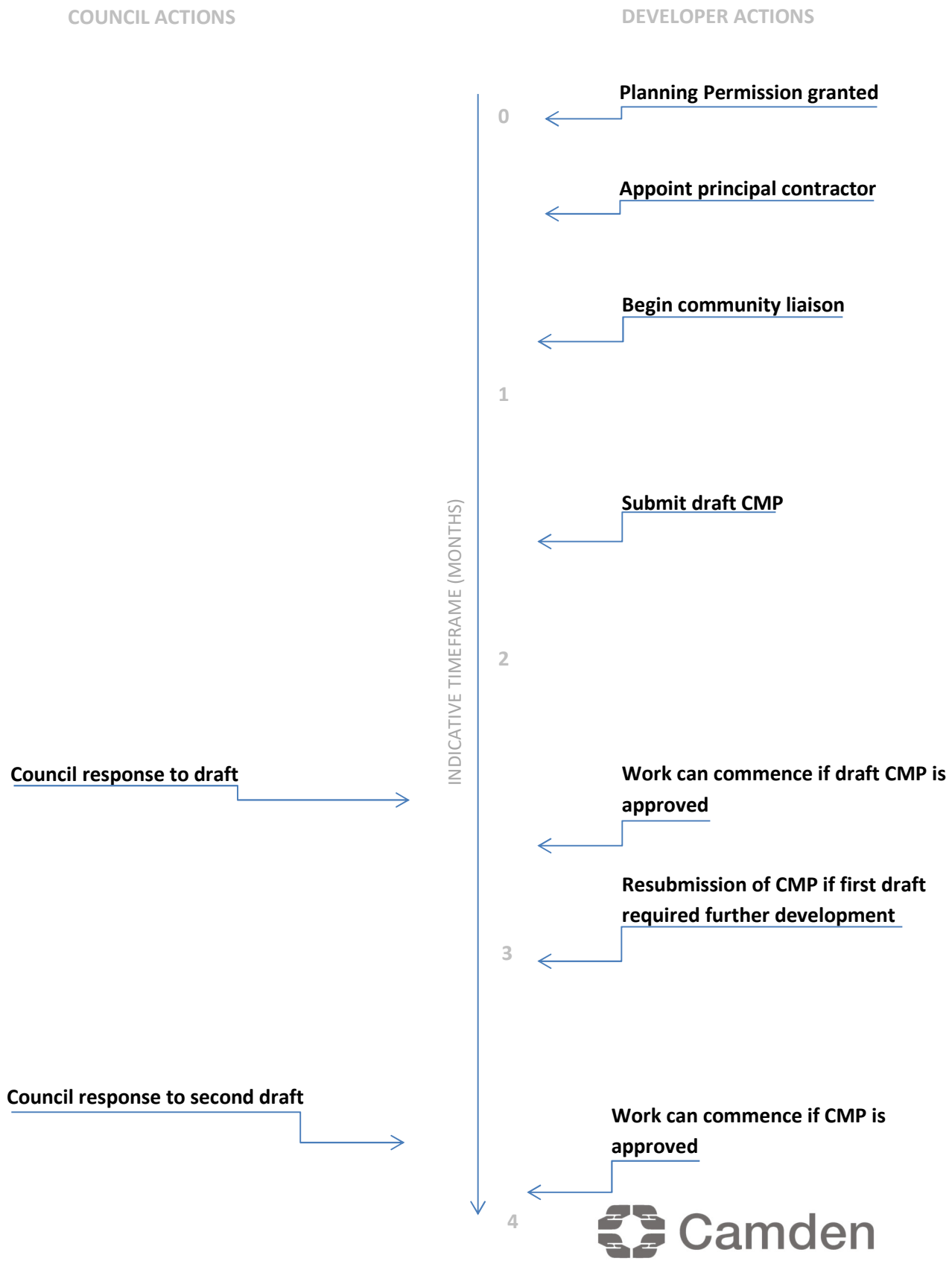
The CIA Checklist can be found at https://www.camden.gov.uk/about-construction-management-plans#sumf





Camden

Timeframe


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

Contact

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

Address: 32-34 Avenue Road NW8 6BU

Initial Planning application

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

Name: Clive Winstanley

Address: Construction Planning Associates, 9 Woodland Green, Gloucester GL4 8BD

Email: clive@constructionplanningassociates.com

Phone: 01452 612719

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.

Prior to appointment of contractor

Name: Pawel Nawojczyk, SHH Architects

Address: 1 Vencourt, Place Ravenscourt Park, London, W6 9NU

Email: paweln@shh.co.uk

Phone: +44 (0) 20 8600 4171

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.

Prior to appointment of contractor

Name: Graham Harris, SHH Architects

Address: 1 Vencourt, Place Ravenscourt Park, London, W6 9NU

Email: graham@shh.co.uk

Phone: +44 (0) 20 8600 4171

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.

Following receipt of a consent the works will be tendered by a number of prequalified competent contractors.

All the tendering contractors will have to confirm during the pre-qualification process that they have reviewed the CMP and are satisfied with the contents and have committed to implement in full the measures and process set out.

The CMP is included with the tendering documentation and forms part contract specification and requirements, with which the contractor is required to comply.

Name: To be advised on appointment of contractor

Address: TBC

Email: TBC

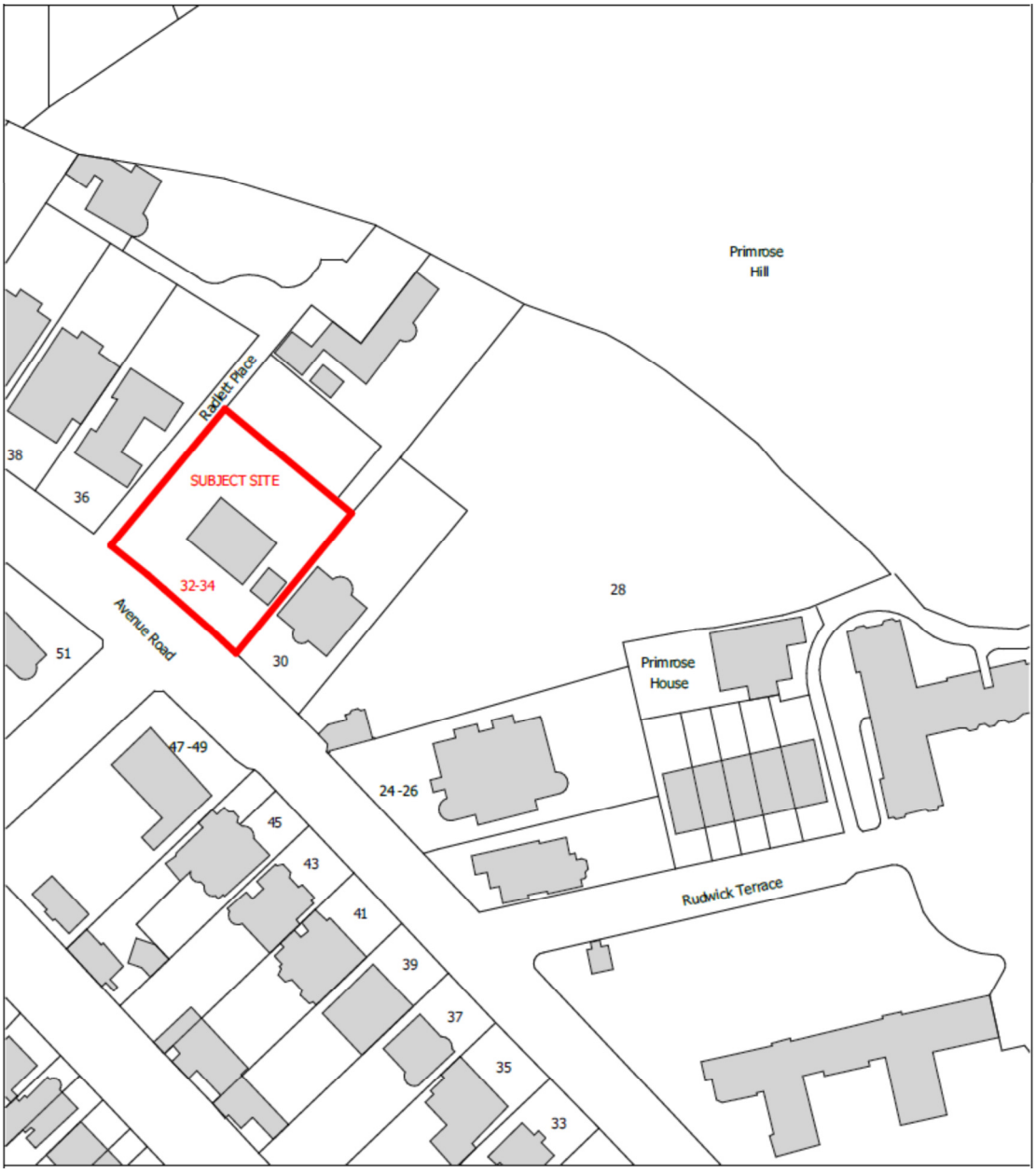
Phone: TBC

Until the appointment of the main contractor, SHH will be responsible for receiving documents in respect of the implementation of the CMP.

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 32 -34 Avenue Road NW8 6BU



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 three storey property
- erection of a replacement 3 storey building with a basement,
- external landscaping works

The particular issues to be addressed in this project are;
(i) the high quality of local residential amenity
(ii) the adjacency of neighbouring buildings.

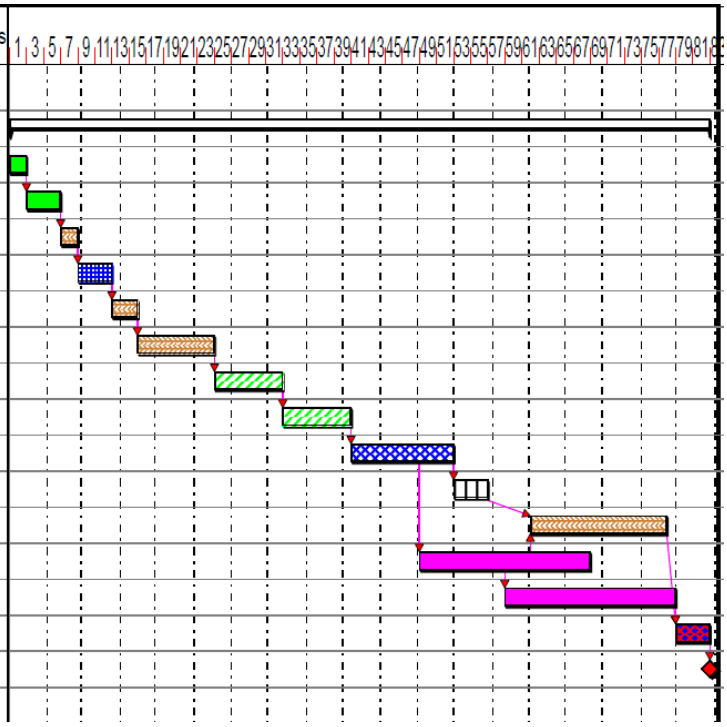
8. Please provide the proposed start and end dates for each phase of construction as well as an overall programme timescale. (A Gantt chart with key tasks, durations and milestones would be ideal).

The proposed start date for the development is anticipated to be in 2023 but this will depend upon the timing of the planning consent and discharge of the S106 conditions.

The overall construction of the works is anticipated to take 19 months

Phase	Duration (week)	Anticipated Start	Anticipated finish
Site Preparation	2w	Week 1	Week 2
Demolition	4w	Week 3	Week 6
Pile mat & probing	2w	Week 7	Week 8
Piling	4w	Week 9	Week12
Crop piles & form capping beam	3w	Week 13	Week 15
Basement Excavation	9w	Week 16	Week 24
Basement slab & walls	8w	Week 25	Week 32
RC superstructure frame	8w	Week 33	Week 40
External envelope	12w	Week41	Week 52
Strike scaffold	4w	Week 53	Week 56
External works & landscape	16w	Week 61	Week 77
Internal carcass	20w	Week49	Week 68
Internal finishes & commission	20w	Week59	Week 78
Handover	4w	Week 79	Week 82
Project Completion		Week 82	
Total period	82		

Line	Name	Start	Finish	Duration	Movements
	Construction programme				
1	**Overall build period**	**Week 1**	**Week 82**	**82w**	
2	Site Preparation	Week 1	Week 2	10d	20
3	Demolition	Week 3	Week 6	20d	142
4	Pile mat & probing	Week 7	Week 8	2w	16
5	Piling	Week 9	Week 12	4w	252
6	Crop piles & form capping beam	Week 13	Week 15	3w	20
7	Basement Excavation	Week 16	Week 24	9w	676
8	Basement slab & walls	Week 25	Week 32	8w	76
9	RC superstructure frame	Week 33	Week 40	8w	122
10	External envelope	Week 41	Week 52	12w	118
11	Strike scaffold	Week 53	Week 56	4w	10
12	External works & landscape	Week 61	Week 77	16w	48
13	Internal carcass	Week 49	Week 68	20w	120
14	Internal finishes & commission	Week 59	Week 78	20w	80
15	Handover	Week 79	Week 82	20d	12
16	Project Completion	Week 82	Week 82		1712
	Total Movements (1 del'y = 2 moves)				



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

Standard working hours will be Monday to Friday 8am to 6pm, Saturday 8am to 1 pm

Noisy works (to include any piling, pneumatic drilling and excavation by machinery will take place between 09.30 and 16.30 Monday to Friday There will be no 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 30 Avenue Road

The nearest ecological receptor is Primrose Hill 1.0km from the site

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.

Initial contact and discussions have been held with the adjoining property leaseholders, tenants and freeholders as noted below:-

1. 36 Avenue Road NW8 6BU -
   Property currently vacant – not able to contact owner
2. 30 Avenue Road NW8 6BU
   Property currently vacant – not able to contact owner
3. 1 Radlett Place NW8 6BU
   Peter Hasenson, who acts for residents.
   Phone conversation on 25.4.2022. Information pack sent 26.4.2022

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.

During the construction phase 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 contract 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. Please provide a CCS registration number that is specific to the above site.

Contractors will also be required to follow the Guide for Contractors Working in Camden. Please confirm that you have read and understood this, and that you agree to abide by it.

The Contractor will register the Project with the Considerate Constructors Scheme upon award of the Main Contract.

The CCS registration number for the contractor undertaking the works will be advised in the final CMP

The works will be audited on a regular basis by the scheme inspectors and the site notice board will include details of the site registration, the scheme administrator contact details as well as those of the Contractor's Site Management team.

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 similar sized development sites in the neighbouring area. The scale of this project could have a potential cumulative impact on the neighbourhood, the closest site at Nr 28 and is being developed by the same design team as this scheme such that the co-ordination of the two can be managed to avoid peak activities happening at the same time. The site at Nr 77 is some distance from this site and the development at Nr 79 is already commenced and will be completed prior to the start of the work in this application

The developments identified are

a. 77 Avenue Road -Demolition of existing building and three-storey detached dwelling with double basement 2019/1747/P

b. 28 Avenue Road - Erection of a two-storey plus basement and mansard dwelling with outbuildings, vehicular access, parking, landscaping and associated works

c. 79 Avenue Road -Demolition of existing building and three-storey detached dwelling 2020/0519/P

In the event that other construction works in the immediate area coincide with works at the land adjacent to 32 -34 Avenue Road 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.

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

CLOCS Contractual Considerations

15. Name of Principal contractor:

Following granting of consent the works will be tendered by a number of prequalified competent contractors.

All the tendering contractors will have to confirm during the pre-qualification process that they have reviewed the CMP and are satisfied with the contents and have committed to implement in full the measures and process set out.

The CMP is included with the tendering documentation and forms part contract specification and requirements, with which the contractor is required to comply.

Name:	To be advised on appointment of contractor
Address:	TBC
Email:	TBC
Phone:	TBC

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).

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

Sub-contractors and Suppliers

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.

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.

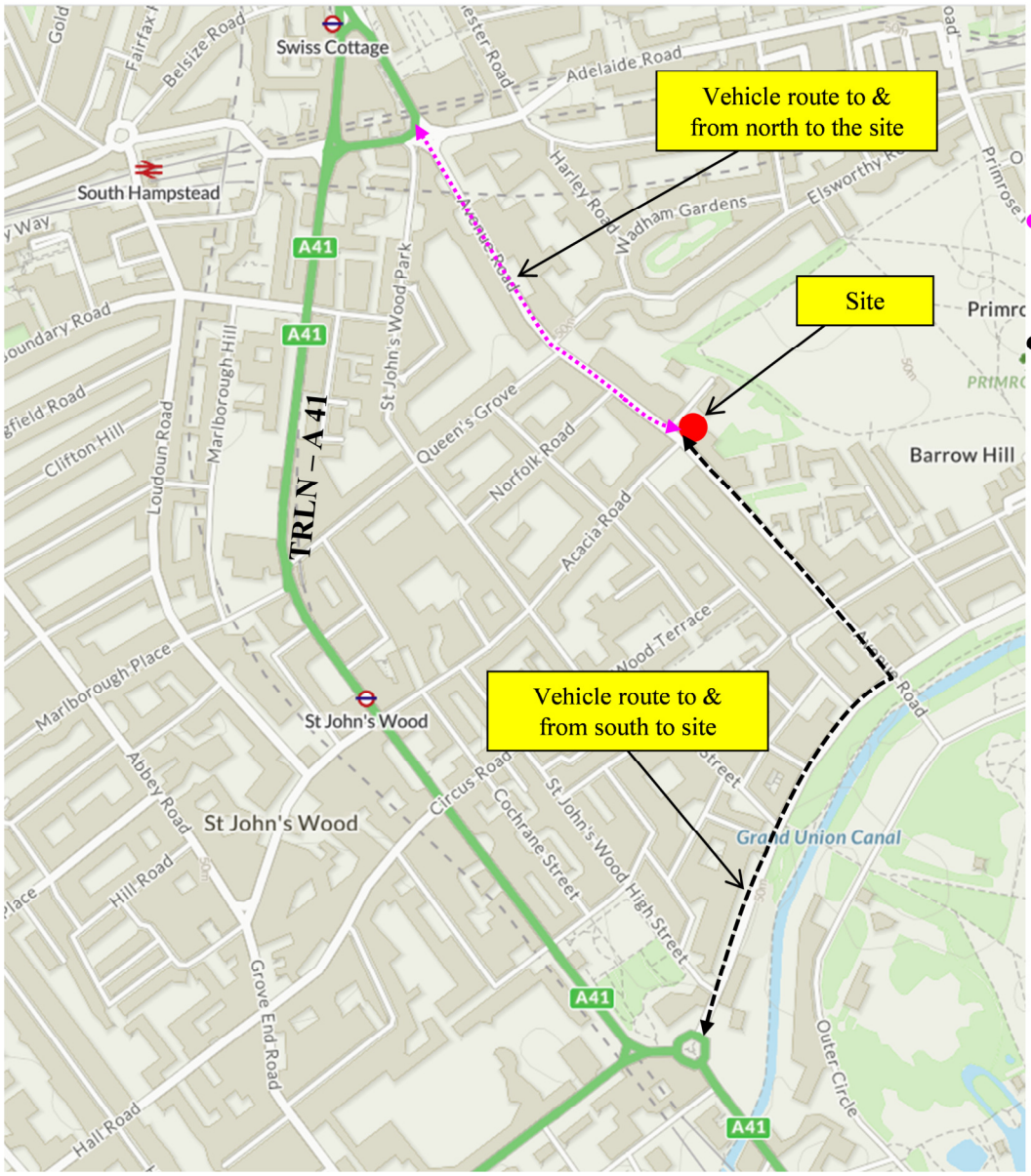
Routes should be shown clearly on a map, with approach and departure routes clearly marked. If this is attached, use the following space to reference its location in the appendices.

The site is 0.58 km form the TRLN network on the Finchley Road (A41).

Vehicles will approach the site from the A41 Finchley Road in a southerly direction from the Swiss Cottage gyratory system. Vehicles will continue southerly along Avenue Road (B525) to the site location. A vehicle marshal will meet the delivery on its arrival on site.

Vehicles will approach the site from the A41 Park Road in a northerly direction from the Park Road roundabout and will continue north-easterly along Prince Albert Road (A5205) before turning left in to Avenue Road (B525) and driving northerly to the site location. A vehicle marshal will meet the delivery on its arrival on site.

Vehicles leaving the site will exit the site and take the reverse of the inbound routes to suite the intended destination



VEHICLE ROUTES BETWEEN SITE AND TRANSPORT FOR LONDON ROAD NETWORK (TLRN)

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.

All deliveries will be managed using a 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.

To minimise the potential impact of construction workers travelling to the area a Travel Plan will be implemented to promote and encourage the use of sustainable modes of travel to and from the site and minimise the use private cars. Construction workers will be instructed not to park private vehicles in the residential areas in the adjacent streets. The local area is also subject to residents parking zones and restrictions on street parking by non-residents.

32-34 Avenue Road is 600m from St John's Wood Underground station and 520m from bus stops on Prince Albert Road.

In view of these good existing provisions is likely that all operatives using attending the site will utilize public transport.

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.

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.

- Skip Lorry 4 Wheel, 17 Tonne, G.V.W
- Skip Lorry 8 Wheel, 30 Tonne, G.V.W
- Plant delivery Rigid back flatbed , 20 Tonne, G.V.W
- Concrete Delivery Vehicle 8 Wheel, 30 Tonne, G.V.W
- Building Deliveries 4 Wheel, 17 Tonne, G.V.W Panel body
- Ballast and Loose Materials 8 Wheel, 30 Tonne, G.V.W, Tipper
- General Building Materials 4 Wheel, 17 Tonne, G.V.W, HIAB Flat Bed
- Rebar, Masonry - Rigid back flatbed , 20 Tonne, G.V.W
- Bulk delivery Articulated flatbed , 40 Tonne, G.V.W

Typical dwell time at the site will be 20 – 40 minutes.

Deliveries will only be made between the hours of 09.30 and 16.30, Monday to Friday with no deliveries at weekends on 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	2	20	2.0
Soft strip & demolition	4	142	7.1
Piling	6	268	8.9
Basement excavation and slabs	20	772	7.7
Superstructures	8	198	4.9
Roof structure, windows & doors	16	52	0.7
Internal carcass	20	120	1.2
Internal finishes	20	80	0.8
External landscape	16	48	0.6
Commissioning & Handover	4	12	0.6
Total period (calendar weeks)	82	1712	
Average daily movements			6.2
Peak daily movements (Basement excavation)			16

Table 2 HGV movements by construction stage

b. Cumulative effects 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 similar sized development sites in the neighbouring area. The scale of this project could have a potential cumulative impact on the neighbourhood, the closest site at Nr. 28 and is being developed by the same design team as this scheme such that the co-ordination of the two can be managed to avoid peak activities happening at the same time. The site at Nr. 77 is some distance from this site and the development at Nr. 79 is already commenced and will be completed prior to the stat of the work in this application

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In the event that other construction works in the immediate area coincide with works at the land adjacent to 32 -34 Avenue Road 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.

No swept path required

d. Consideration should be given to the location of any necessary holding areas/waiting points for sites that can only accommodate one vehicle at a time/sites that are expected to receive large numbers of deliveries. Vehicles must not queue or circulate on the public highway. Whilst deliveries should be given set times to arrive, dwell and depart, no undue time pressures should be placed upon the driver at any time.

Please identify the locations of any off-site holding areas or waiting points. This can be a section of single yellow line that will allow the vehicle to wait to phone the site to check that the delivery can be accommodated.

Please refer to question 24 if any parking bay suspensions will be required to provide a holding area.

A holding area will not be necessary for this development.

The peak number of movements occurs during the excavation phase when the movement comprise taking materials off site.

The muck away vehicles will be operating on turnaround with only vehicles on site at any one time, with the next vehicle called forward from the disposal site to suit the departure of the loading vehicle. Average daily movements during this phase are 16, equating to one vehicle per hour. The site is however large enough to accommodate up to 3 vehicles on site at any one time

e. Delivery numbers should be minimised where possible. Please investigate the use of construction material consolidation centres, and/or delivery by water/rail if appropriate.

As this is a residential development, it is considered that such that a consolidation centre would not result in any net reduction in movements.

f. Emissions from engine idling should be minimised where possible. Please provide details of measures that will be taken to reduce delivery vehicle engine idling, both on and off site (this does not apply to concrete mixers).

All deliveries will be made from within the site. On arrival the vehicle marshal will ensure than the delivery vehicle engine is switched off prior to commencing any loading or unloading operations.

Details of the anti–idling requirements of the site will be circulated to all suppliers as part of the delivery instruction pack issued as part of the advance delivery booking process.

The site induction pack that all operative must undertake before commencing works on the site will include specific reference to the requirement that no plant should be left idling when not in operation.

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 A41 Finchley Road/ Park Road

A Vehicle marshal will meet the deliveries at the entrance of the site on Avenue Road and control the pedestrians and cyclists during these operations.

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.

A vehicle marshal will be responsible for managing vehicle access to/from the site via Avenue Road 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 appropriate vehicle movements will be suspended to allow the passage of pedestrians or cyclists

All deliveries will be managed using an electronic 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.

No swept path required

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.

A wheel washing facility will be installed at the site entrance during the initial site mobilisation phase and will comprise a newly constructed graded concrete apron with dedicated drainage gullies connected to a 'siltbuster' separation unit to ensure a clean water discharge into the local stormwater drainage system. Wheel cleaning and under vehicle washing will be provided using an electrically powered jet wash unit with a dedicated operative working with the vehicle marshals.

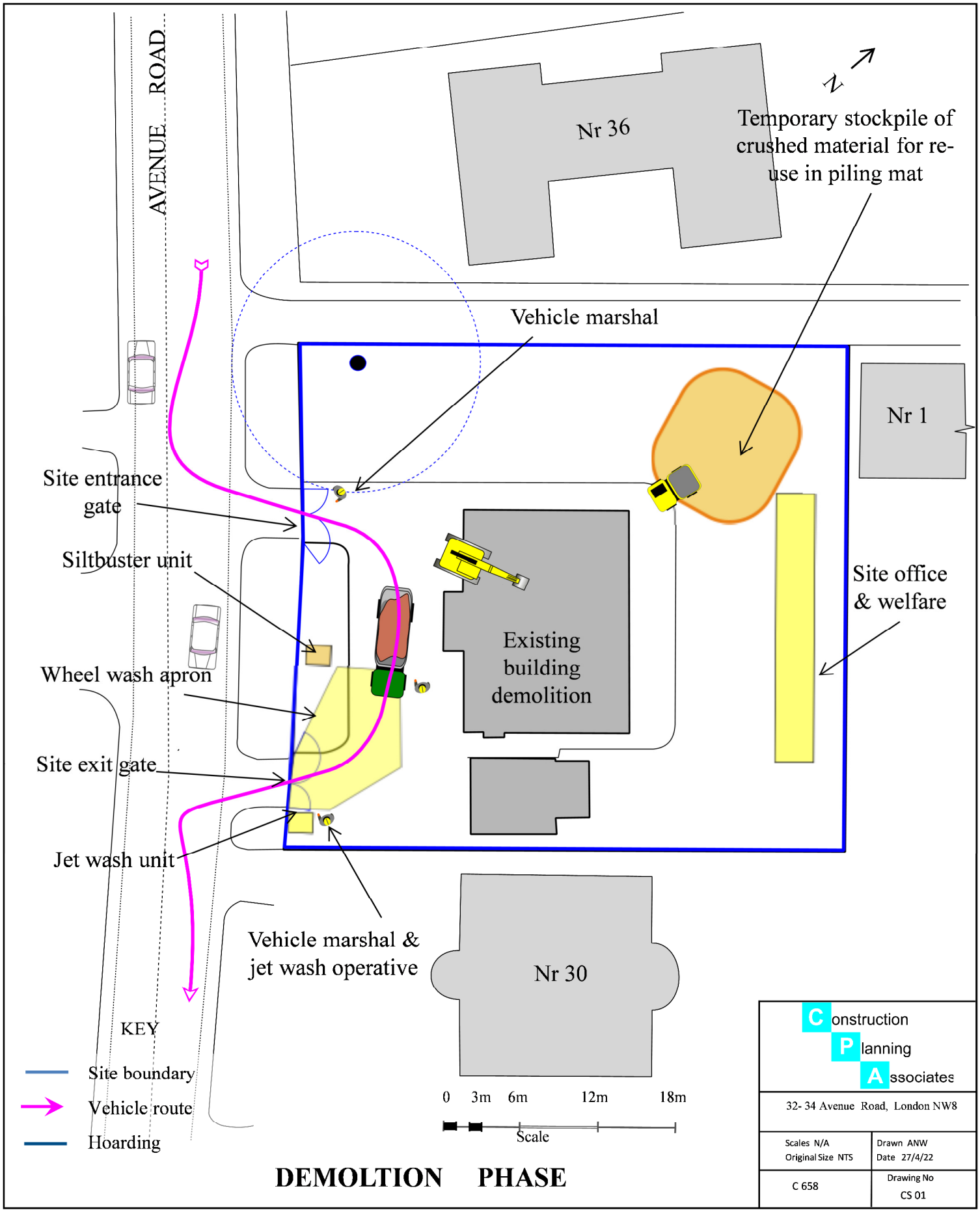
In the event of wet weather occurring during the highest risk piling and basement excavation phases a road sweeper unit will also be employed to ensure that Avenue Road is maintained clear of all debris.

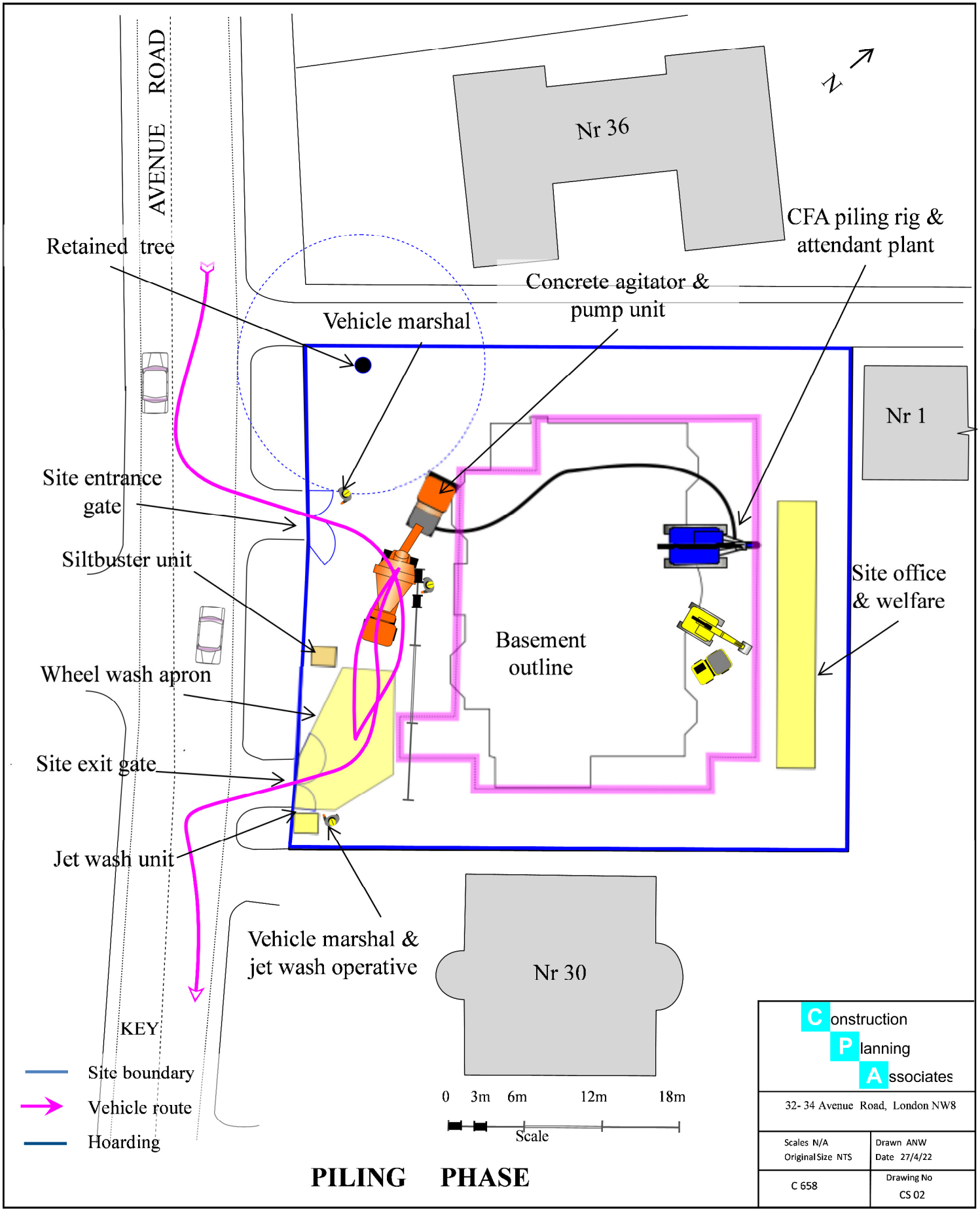
21. Vehicle loading and unloading: *"Clients shall ensure that vehicles are loaded and unloaded on-site as far as is practicable."* (P19, 3.4.4)

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 A41 to Avenue Road via the route detailed in Q18 above.
All vehicles will be met by a vehicle marshal and the marshal will direct vehicles on to the site. All loading/unloading will take place from within the site boundary.
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.
The site is sufficient large to accommodate up to 3 vehicles on site at any one time, however the delivery schedule will be planned to limit this to a single vehicle to ensure there is capacity for unforeseen events and potential breakdowns.


AVENUE ROAD
Nr 36
Temporary stockpile of crushed material for re-use in piling mat
Vehicle marshal
Nr 1
Site entrance gate
Siltbuster unit
Site office & welfare
Existing building demolition
Wheel wash apron
Site exit gate
Jet wash unit
Vehicle marshal & jet wash operative
Nr 30
KEY
Site boundary
Vehicle route
Hoarding
0 3m 6m 12m 18m
Scale
DEMOLTION PHASE
Construction Planning Associates
32- 34 Avenue Road, London NW8
Scales N/A
Original Size NTS
Drawn ANW
Date 27/4/22
C 658
Drawing No
CS 01



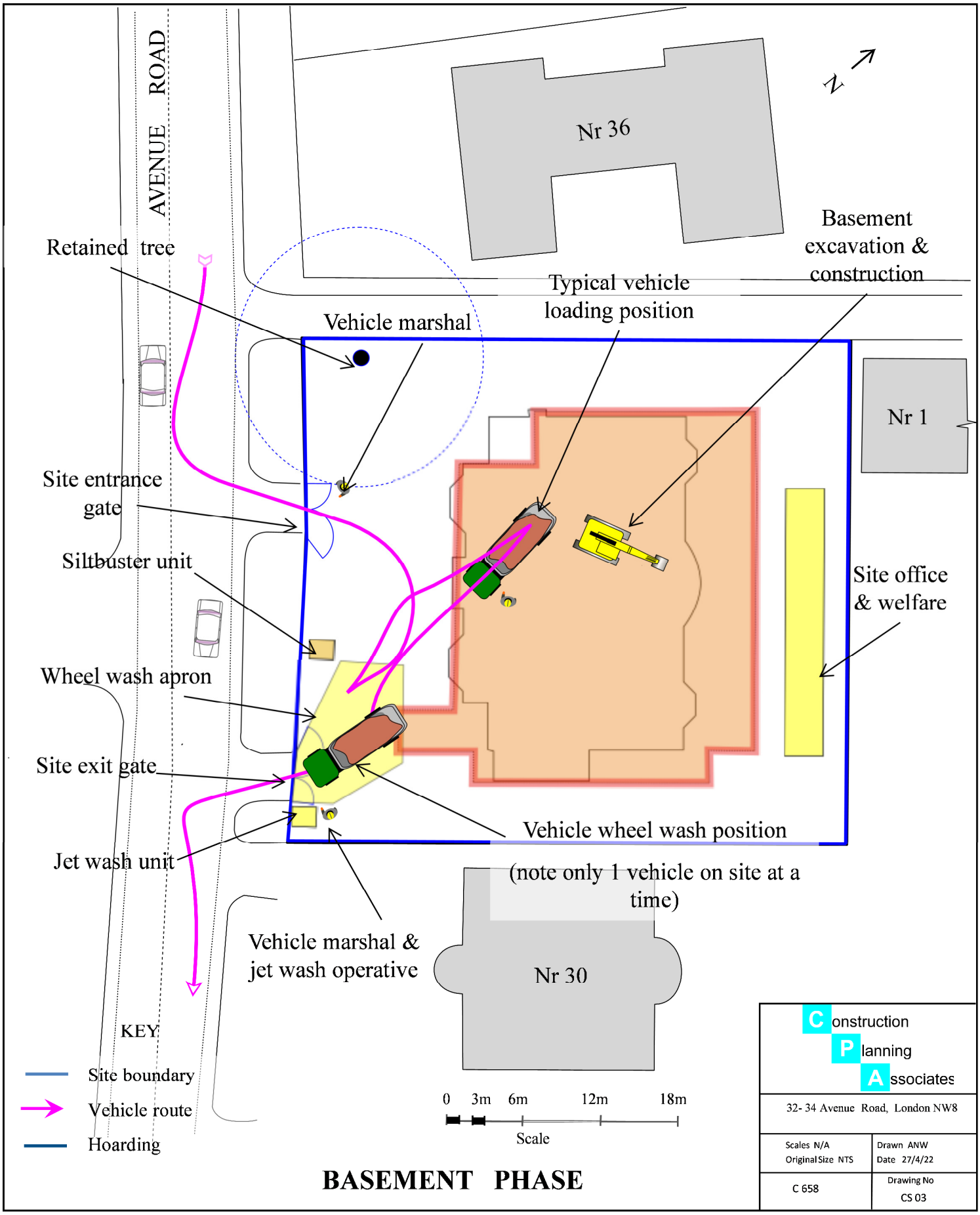
PILING PHASE

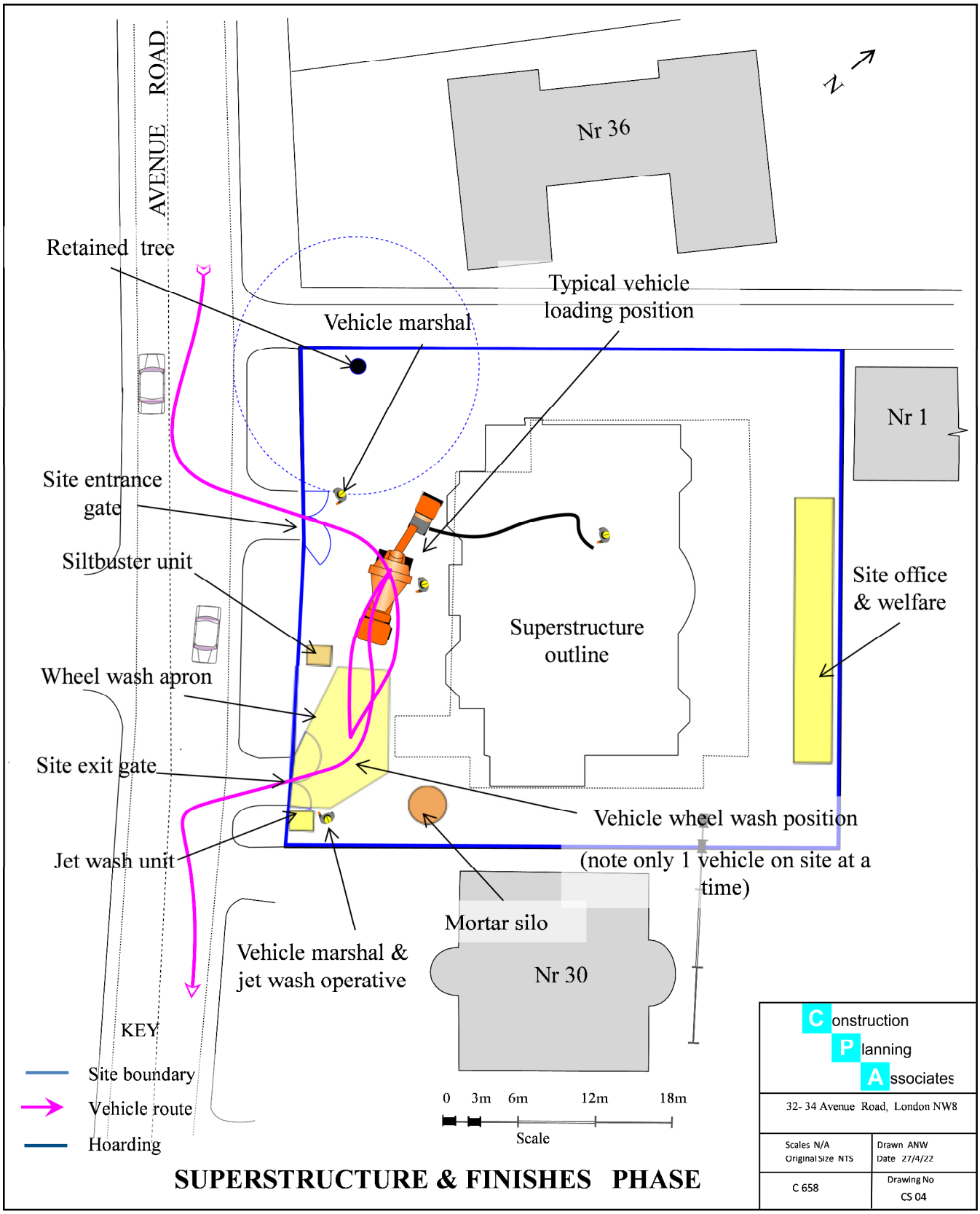
Construction Planning Associates

32- 34 Avenue Road, London NW8

Scales N/A Original Size NTS	Drawn ANW Date 27/4/22
C 658	Drawing No CS 02

Camden


AVENUE ROAD
Nr 36
Retained tree
Basement excavation & construction
Typical vehicle loading position
Vehicle marshal
Nr 1
Site entrance gate
Siltbuster unit
Site office & welfare
Wheel wash apron
Site exit gate
Vehicle wheel wash position
(note only 1 vehicle on site at a time)
Jet wash unit
Vehicle marshal & jet wash operative
Nr 30
KEY
Site boundary
Vehicle route
Hoarding
0 3m 6m 12m 18m
Scale
BASEMENT PHASE
Construction Planning Associates
32- 34 Avenue Road, London NW8
Scales N/A
Original Size NTS
Drawn ANW
Date 27/4/22
C 658
Drawing No
CS 03



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.

As described in answer to Q 20b

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.

The site set up is shown on drawing CS05 below.

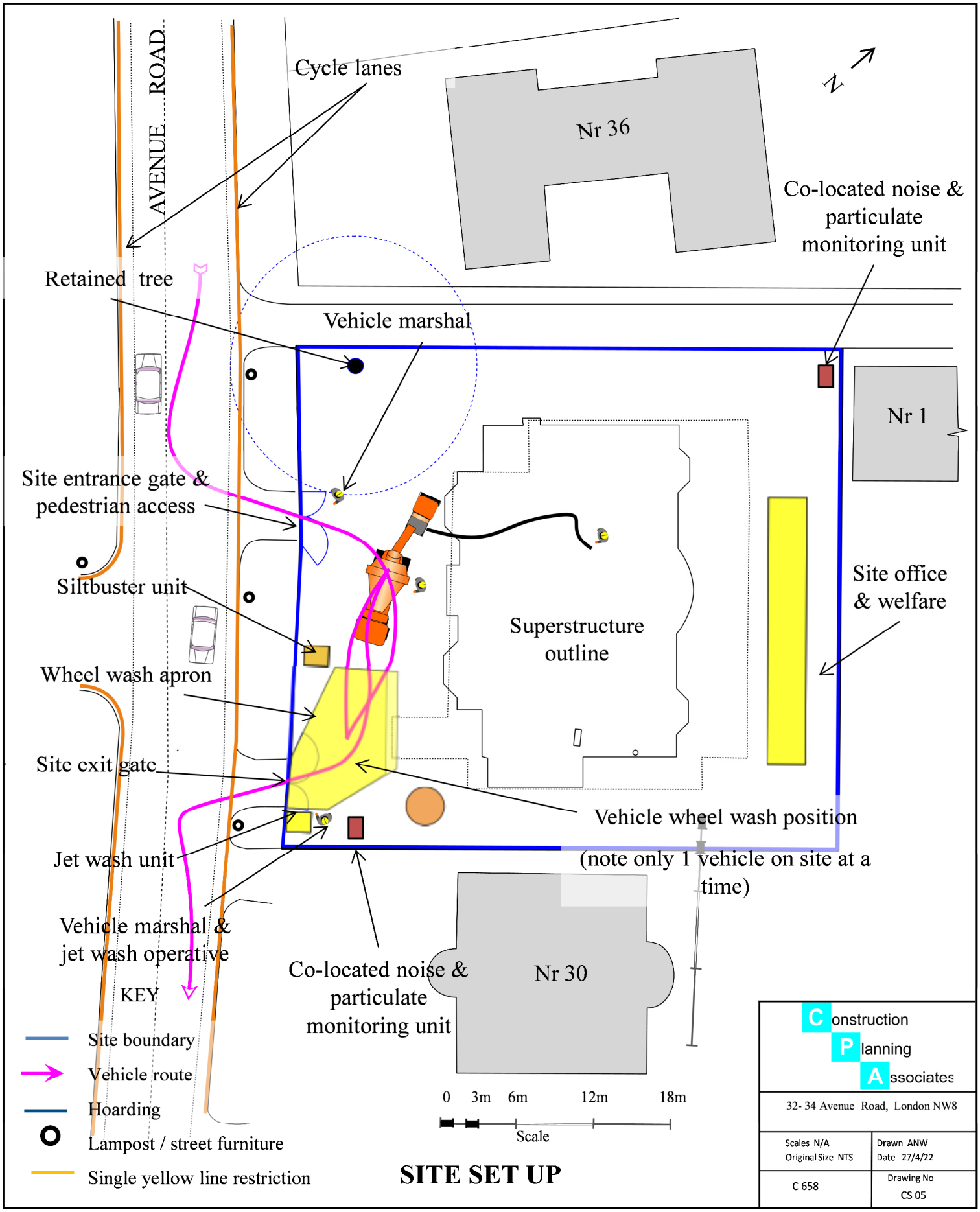
This indicates the location of the site entrance and exit which utilize the existing site access and crossovers.

The location of existing street furniture and lamppost are shown, these will remain in place without alteration.

Avenue Road cycle lane markings on both sides of the carriageway and the vehicle marshals will be briefed to ensure that specific consideration is given to cyclists using these lanes when vehicles are entering or leaving the site.

The new wheel wash apron and associated jet wash and siltbuster separation units are indicated. The site offices and welfare will be located along the rear boundary of the site.

The location of the particulate and noise monitoring units is also indicated (See also answer to Q31 & 35)


AVENUE ROAD
Cycle lanes
Nr 36
N
Co-located noise & particulate monitoring unit
Retained tree
Vehicle marshal
Nr 1
Site entrance gate & pedestrian access
Siltbuster unit
Site office & welfare
Superstructure outline
Wheel wash apron
Site exit gate
Vehicle wheel wash position
(note only 1 vehicle on site at a time)
Jet wash unit
Vehicle marshal & jet wash operative
Co-located noise & particulate monitoring unit
Nr 30
KEY
Site boundary
Vehicle route
Hoarding
Lampost / street furniture
Single yellow line restriction
0 3m 6m 12m 18m
Scale
SITE SET UP
Construction Planning Associates
32- 34 Avenue Road, London NW8
Scales N/A
Original Size NTS
Drawn ANW
Date 27/4/22
C 658
Drawing No
CS 05

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 bays 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 closures or suspensions of the public highway or pedestrian footway 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 closures or suspensions of the public highway or pedestrian footway will be required

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 motor vehicle or cyclist 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.

The site will be contained within a secure solid 2.4m high hoarding painted in a neutral colour.

No closures or suspensions of the public highway or pedestrian footway will be required

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 oversailing of 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.

Services connections to the existing main services will utilise the existing services within the site

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 structures	Long reach excavators with crushing jaws Hand held tools and electro-percussive tools
Load and remove demolition rubble	On site crushing of concrete and masonry for localised reused in piling mat Mechanical loading to 30t HGV
Construction Activities	
Placement of piling mat	Excavator
Piling	1 No Soilmec SR30or similar CFA Rig for structural piles, concrete lorries and excavator,
Basement excavation & 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
Superstructure concrete frame	Concrete pour for floor slabs, columns and walls Lorries and RMC deliveries in use daily Compressors, breakers and hand power tools
Masonry Works	Laying bricks and blocks by hand Materials lifted and moved around site by material handlers Mortar mixed by electric silo unit with weekly HGV change over. Occasional use of petrol masonry saw
Scaffolding	Scaffold to be erected and struck by hand
Roofing	Materials movement by hoist
External Works	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 carried out on 28 & 29/3/22 by Acoustics Plus Ltd, Acoustic Consultants. Measurements of background noise were obtained over a 24 hour period at a location deemed representative of background noise levels experienced at the nearest noise sensitive façades. The data obtained during the exercise was captured at ground floor roof level at the rear of the property, indicative of the noise climate experienced at the noise sensitive façades that would need to be considered. The survey indicates that the background noise levels are as detailed in the table below

Time period	Lowest $L_{A90,15min}$	Average $L_{Aeq,T}$
07:00 to 23:00hrs	40	50
23:00 to 07:00	34	52[1]

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

The noise sensitive locations identified are at 30 Avenue Road adjacent to 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

It is anticipated that the background acoustic survey will indicated that 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 (30 Avenue Road, London NW8 6BU) 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
Demolition & site preparation	Tracked excavator with pulverizer	85	21	-6	-10	3	72	3	25%	-6	66	71
	Boarding windows - hand hammer	84	21	-6	-10	3	71	2	17%	-10	61	
	Petrol chain saw	86	21	-6	-10	3	73	1.5	13%	-10	63	
	Lorry	80	21	-6	-10	3	67	3	25%	-6	61	
	Skid steer loader	75	21	-6	-10	3	62	6	50%	-3	59	
Piling	Tracked excavator	76	21	-6	-5	3	68	3	30%	-5	63	70
	Dumper	75	21	-6	-5	3	67	4	40%	-4	63	
	CFA piling rig Solimec SF3(	80	21	-6	-5	3	72	4	40%	-4	68	
	Lorry	80	21	-6	-5	3	72	3	30%	-5	67	
	RMC discharge	83	21	-6	-5	3	75	2	17%	-10	65	
Bulk Excavation	Tracked excavator	76	21	-6	-5	3	68	6	60%	-2	66	70
	Skid steer loader	75	21	-6	-5	3	67	3	30%	-5	62	
	Lorry	80	21	-6	-5	3	72	4	40%	-4	68	
	RMC discharge	83	21	-6	-5	3	75	1	10%	-10	65	
	Lorry mounted concrete pump	81	21	-6	-10	3	68	1	10%	-10	58	
Concrete works	RMC discharge	83	21	-6	-5	3	75	2	20%	-7	68	70
	Lorry mounted concrete pump	81	21	-6	-5	3	73	2	20%	-7	66	
	Poker vibrators x 2	81	21	-6	-5	3	73	1	10%	-10	63	
	telehandler	71	21	-6	-5	3	63	4	40%	-4	59	
	Compressor	72	21	-6	-5	3	64	2	20%	-7	57	
	Lorry	80	21	-6	-5	3	72	4	40%	-4	68	
General Construction	Elec circular saw	77	21	-6	-5	3	69	1	10%	-10	59	70
	mobile crane	82	21	-6	-5	3	74	3	30%	-5	69	
	Elec circular saw	77	21	-6	-5	3	69	1	10%	-10	59	
	Lorry	80	21	-6	-5	3	72	2	20%	-7	65	
	telehandler	71	21	-6	-5	3	63	4	33%	-5	58	
	Electric hoist	68	21	-6	-5	3	60	4	33%	-5	55	
Note Screen attenuation based on BS5228, + 5to 10db for proprietary acoustic blankets, 3dB reflection addition to allow for façade enhar												

The noise mitigation measures are described in more detail in Q31 below,

The calculations show that the noise levels for the demolition phases could exceed the defined limits and that therefore additional acoustic blankets will be added to the perimeter hoarding during this phase to ensure that noise levels at the noise sensitive location are contained within the proscribed limits

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

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 - A noise monitoring regime will be established with monitoring undertaken using real time noise monitors co-located with the PM10 dust monitor sensors and connected via monitoring software with the capability to export data to the Local Authority Environmental Protection Team in an agreed format. This system will form part of the Section 61 noise monitoring regime. (see also Site Layout Q 22 above)

In addition at the start of each new operation which has the potential to generate a noise nuisance at the adjoining residents noise readings will be taken using handheld monitoring devices at the façade of the adjoining buildings which are identified as the sensitive receptor sites. A recording of readings taken at the two receptor sites will be made in the Environmental Register.

The trigger action level is proposed to be set at 70dB(A) L eq (10hour) 10hr = 08.00 – 18.00hrs and 80dB(A) L eq (15min) , measured at the facade of the closest noise sensitive receptor.

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 drilling and excavation by machinery will take place between 09.30 and 16.30 Monday to Friday There will be no working on Saturdays, Sundays or Public Holidays.
ii. The perimeter boundary walls to solid site hoarding to the site boundaries 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. It is anticipated that the enhanced acoustic barrier blankets will be required during the demolition phase of the works and these blankets will be installed on the noise sensitive boundary at the commence of the works
iv. 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. For demolition works, preference shall be given to equipment that breaks concrete by munching or pulling rather than by percussive methods;
v. All access gates will be controlled to minimise flanking noise;
vi. All hand held and portable equipment, where practicable, will be electrically powered;
vii. All plant and equipment should be maintained in good working order
viii. items of plant and located to provide minimum noise emissions in the direction of Noise Sensitive Locations (NSLs);

ix. Plant, when in operation intermittently, will be switched off during periods of inactivity
x. Stationary equipment and plant will be placed so as to provide screening to other noise generating equipment
xi. Care will be taken when loading and unloading materials to limit impact noise
xii. Vehicles will not be permitted to queue on the road or pavement outside the site access;

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 (30 Avenue Road/ I Radlett Place /36 Avenue Road) 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. The contactor will also provide monthly noise reports 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

The contractor' s staff and all operative will be provided with training on BS5228:2009 as part of the site induction process before commencing works on the site.

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).
- 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. 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 materials are loading within the site a jet wash facility will be provided.
ii. All vehicles will be loaded and unloaded within the site boundary
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.

During the medium risk phases of the works covering the demolition and structural works a monitoring regime will be established to measure PM10 levels with two automatic particulate monitors at either end of a transect across the site in the direction of the prevailing wind, with one unit on the south elevation of building adjacent to the boundary with 30 Avenue Road and the second unit at the boundary of site adjacent to 1 Radlett Place. As well as providing measurements over the site transect these will monitor levels at the nearest sensitive receptor sites. (See also site layout Q 22 above)

The automatic particulate monitors will be able to download data onto personal computer and facilitate data transmission via monitoring software with the capability to export data to the Local Authority Environmental Protection Team in an agreed format.

The trigger level for the automatic monitors will be set at 250ug/m3 at 15 minute intervals in accordance with the 2014 SPG.

In addition to the monitoring described above, a visual check will be made daily by the environmental controls manager, who will ensure that excess levels of dust are not being generated and migrating off-site. Visual checks will be made more frequently during adverse weather conditions (dry with strong winds).

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

a) 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.
b) 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. Two automatic noise monitors will be co-located with the particulate monitors at either end of a transect across the site in the direction of the prevailing wind, with one unit on the south elevation of building adjacent to the boundary with 30 Avenue Road and the second unit at the boundary of site adjacent to 1 Radlett Place . As well as providing measurements over the site transect these will monitor levels at the nearest sensitive receptor site
ii. 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.
iii. Hand held noise meters will be available for use on site when potential noisy operations are underway, such as demolition and piling
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. .Should the trigger action noise level be 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, which classifies the site as medium risk.

Summary of Site Specific Dust Risk				
Potential Risk	Risk			
	Demoltion	Earthworks	Construction	Trackout
Dust Soiling	Medium	Medium	Medium	Low
Human Health	Low	Low	Low	Low
Ecological	Low	Low	Low	Low

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, the measures outline in the GLA mitigation check list as applicable to a medium risk site will be implemented as detail above in the responses to Q33 and Q35

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 prior to submission of the final CMP once a planning consent has been obtained

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 then 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.

An initial investigation to establish the existence of asbestos on the site will be carried out prior to submission of the final CMP once a planning consent has been obtained

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 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. See the Mayor of London webpage 'Non-Road Mobile Machinery (NRMM)' for more information, a map of the Central Activity Zone, and for links to the NRMM Register and the NRMM Practical guide (V4): https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/nrmm

Direct link to NRMM Practical Guide (V4):
https://www.london.gov.uk/sites/default/files/nrmm_practical_guide_v4_sept20.pdf

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 May 2023 to November 2025 (indicative subject to consent timing)
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): Y

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 registration references will be provided in the final CMP once a consent has been obtained

e) Please confirm that an inventory of all NRMM will be kept on site and that all machinery will be regularly serviced and service logs kept on site for inspection:
CONFIRMED
f) Please confirm that records will be kept on site which details proof of emission limits, including legible photographs of individual engine plates for all equipment, and that this documentation will be made available to local authority officers as required:
CONFIRMED

43. Vehicle engine idling (leaving engines running whilst parked or not in traffic) produces avoidable air pollution and can damage the health of drivers and local communities. Camden Council and City of London Corporation lead the London **Idling Action Project** to educate drivers about the health impacts of air pollution and the importance of switching off engines as a simple action to help protect the health of all Londoners.

Idling Action calls for businesses and fleet operators to take the **Engines Off pledge** to reduce emissions and improve air quality by asking fleet drivers, employees and subcontractors to avoid idling their engines wherever possible. Free driver training materials are available from the website: https://idlingaction.london/business/

Please provide details about how you will reduce avoidable air pollution from engine idling, including whether your organisation has committed to the Engines Off pledge and the number of staff or subcontractors who have been provided with free training materials.

All deliveries will be made from within the site. On arrival the vehicle marshal will ensure than the delivery vehicle engine is switched off prior to commencing any loading or unloading operations.

Details of the anti–idling requirements of the site will be circulated to all suppliers as part of the delivery instruction pack issued as part of the advance delivery booking process.

The site induction pack that all operative must undertake before commencing works on the site will include specific reference to the requirement that no plant should be left idling when not in operation.

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: ……

Date: ……..

Print Name: ……..

Position: ……

Please submit to: planningobligations@camden.gov.uk

End of form.

APPENDIX A

Air Quality & Dust Risk Assessment

Site Location
32-34 Avenue Road NW8 6BU

Date of Assessment
Apr-22

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 and exisitng dwelling and garage and construction of a new 3 storey house with a basement, The new building has a pile foundation and RC suspended slabs and included a contiguous pile retaining walls. The new superstructure is in the form in reinforced concrete frame with a steel framed mansard roof with perimter masonry walls. The nearest human receptors to the site are within 10m east of the site boundary in the adjacent building (30 Avenue Road). Other receptors include adjoining properties at 36 Aveenue Road and 1 Radlett Place and pedestrians on the adjoining roads. 1 - 10 receptors within 20m, 10-20 receptors within 50m, 20-60 receptors within 100m. The nearest ecological receptor is Primrose Hill 125m norhteast of the site. The anticipated overall duration of the works is 19 months, of which sources of dust emission may be close to the receptors for 12 months. The Air Quality Progress Report for Camden 2020 indicates the background annual mean PM10 levels in hte Swiss cottage area are i 16 ug/m3 which is below the annual mean objective level.	

Site Location
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Date of Assessment
Apr-22

STEP 2 ASSESS THE RISK OF DUST IMPACTS

The proposed development of the site involves the demolition of and exisitng garage and garden walls and construction of a new 2 storey hosue with a basement,
The new building has a pile foundation and RC suspended slabs and included a contiguous pile retaining walls on two side and underpiined basememt walls on tow side to form a new basment which includes two lightwell elements . The new superstructure is ofrm in reinforced concrete with perimter masonry walls and a flat accessible roof terrace.

The nearest human receptors to the site are within 2m south of the site in the terrance building (39 Priory Terrace). 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 Old Paddington Cemetery 1.0km from the site.
The anticipated overall duration of the works is 13 months, of which sources of dust emission may be close to the receptors for 9 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 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
	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/N

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

	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/N
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
	Small • <10 HDV (>3.5t) trips in any one day, • surface material with low potential for dust release, • unpaved road length <50 m.	Y/N

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	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

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Date of Assessment
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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	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
	Low sensitivity receptor	Y/N

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
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Apr-22

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	Medium
Construction	Small
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	Medium	Medium	Medium	Medium
Human Health	Low	Low	Low	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	Low
Human Health	Low	Low	Low	Low
Ecological	Low	Low	Low	Low

APPENDIX B

Dust Mitigation Measures

Appendix to Question 37 – Dust Mitigation Measures

32-34 Avenue Road London NW8 6BU

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	XX	XX	XX	Yes

recorded in the log book.				
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		X	XX	Yes

air quality pollutant monitors across the site and ensure they are checked regularly.				
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	Yes
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,		XX	XX	Yes

which are regularly damped down with fixed or mobile sprinkler systems and regularly cleaned.				
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	Yes
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	Yes
Access gates to be located at least 10m from receptors where possible.		XX	XX	Yes
Apply dust suppressants to locations where a large volume of vehicles enter and exit the construction site		X	XX	Yes

Appendix C

Asbestos Report

To be inserted in Final CMP following obtain Planning Consent

APPENDIX D

PEST CONTROL REPORT

To be inserted in Final CMP following obtain Planning Consent

Appendix D

Background Noise Survey

Noise & Vibration Consultants
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ACOUSTICS PLUS

Proposed Installation of Mechanical Plant

32-34 Avenue Road, London, NW8 6BU.

Environmental Noise Assessment

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

Proposed Installation of Mechanical Plant	
Project Address:	32-34 Avenue Road London, NW8 6BU
Project Reference:	104304

Issue/Revision Record			
Issue:	**Date:**	**Remarks:**	**Author:**
1	05/04/2022	First Issue	Andy Dodd
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	Signature:	Print:	Title:	Date:
Author:		**Phil Huffer**	**Senior Consultant**	**21/04/2022**
Reviewer:		**Andy Dodd**	**Principal Consultant**	**21/04/2022**

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. 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).

1.2 APL has been instructed by the applicant's agent SHH Architects, to consider and advise upon the noise implications of a proposed installation of mechanical plant.

1.3 It is understood the Local Planning Authority (LPA) require further information on noise levels from the proposed installation in order to fully assess the noise impact upon the surrounding neighbourhood. This report provides the response to the LPA, on behalf of the Applicant.

1.4 This report has been prepared by Acoustics Plus Limited (APL) with all reasonable skill, care, and diligence in accordance with generally accepted acoustic consultancy principles and taking account the services and terms agreed between APL and our client.

1.5 Any information provided by third-parties and referred to herein may not have been checked or verified by APL unless expressly stated otherwise. Certain statements made in the report are predictions based on reasonable assumptions and good industry practice.

1.6 Such statements involve risk and uncertainty which could cause measured and predicted results to differ materially. APL does therefore not guarantee or warrant any prediction contained in this report.

2. BASELINE SITUATION

2.1 The Application Site (the "site") is situated at 32-34 Avenue Road, London, NW8 8BU. The site is a single detached house located on the northern side of Avenue Road at the junction with Acacia Road.

2.2 The site is to undergo full redevelopment and it is now the intention to install a number of items of external mechanical plant.

2.3 The scheme is still under development and the number of items of mechanical plant and their final location are yet to be confirmed.

2.4 The hours of operation of the system will be on demand and as such could operate at any time during the daytime and night-time periods.

2.5 The nearest noise sensitive façades to any proposed mechanical plant could be the adjacent neighbouring properties located at 30 and 36 Avenue Road or the dwelling located behind the site accessed via Radlett Place.

2.6 The surroundings can be seen in Figures 1-8 included within the appendix section of this report.

2.7 The measurement position is indicated within Figure 6.

3. NOISE OUTLINE

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

3.2 Measurements of background noise were obtained over a 24 hour period at a location deemed representative of background noise levels experienced at the nearest noise sensitive façades. The data obtained during the exercise was captured at ground floor roof level at the rear of the property, indicative of the noise climate experienced at the noise sensitive façades that would need to be considered. The measurement position is highlighted in Figure of this report.

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

Date: 28th & 29th March 2022.
Start Time: 11:00 hrs.
Location: Rear ground floor level.

3.4 Minimum background and average noise levels over the day and night-time periods are shown in Table 1 below with the full 24 hour level vs time history shown in Diagram 1 (L_{Aeq} and L_{A90}).

Time period	Lowest $L_{A90,15min}$	Average $L_{Aeq,T}$
07:00 to 23:00hrs	40	50
23:00 to 07:00	34	52[1]

Table 1

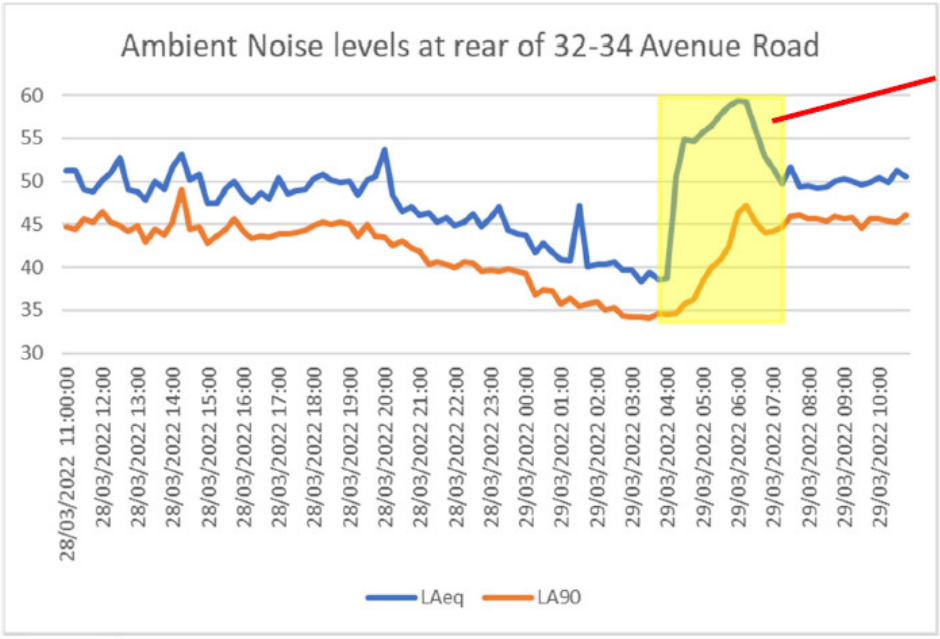

Diagram 1

[1] The measurement data during the period between 04:00 and 07:00 was contaminated by an anomalous event that was not able to be identified as audio recordings were not obtained, it may be prudent to investigate this further to ensure this is was an atypical event and not due to any adjacent installation of mechanical plant operating as this clearly and significantly impacts on the amenity of neighbouring receptors.

4. DESIGN CRITERIA

4.1 Information regarding the noise levels not to be exceeded by the proposed installation was extracted from the LPA (London Borough of Camden) Local Plan Adopted version June 2017 (Appendix 3 Noise thresholds).

Industrial and Commercial Noise Sources

A relevant standard or guidance document should be referenced when determining values for LOAEL and SOAEL for non-anonymous noise. Where appropriate and within the scope of the document it is expected that British Standard 4142:2014 'Methods for rating and assessing industrial and commercial sound' (BS 4142) will be used. For such cases a 'Rating Level' of 10 dB below background (15dB if tonal components are present) should be considered as the design criterion).

Table C: Noise levels applicable to proposed industrial and commercial developments (including plant and machinery)

Existing noise sensitive receptor	Assessment Location	Design Period	LOAEL (green)	LOAEL to SOAEL (Amber)	SOAL (Red)
Dwellings**	Garden used for main amenity (free field) and outside living or dining or bedroom window (façade)	Day	'Rating level' 10dB* below background	'Rating level' between 9dB below and 5dB above background	'Rating level' greater than 5dB above background
Dwellings**	Outside bedroom window (façade)	Night	'Rating level' 10dB* below background and no events exceeding 57dB L_{Amax}	'Rating level' between 9dB below and 5dB above background or noise events between 57dB and 88dB L_{Amax}	'Rating level' greater than 5dB above background and/or events exceeding 88dB L_{Amax}

*10dB should be increased to 15dB if the noise contains audible tonal elements. (day and night). However, if it can be demonstrated that there is no significant difference in the character of the residual background noise and the specific noise from the proposed development then this reduction may not be required. In addition, a frequency analysis (to include, the use of Noise Rating (NR) curves or other criteria curves) for the assessment of tonal or low frequency noise may be required.

**levels given are for dwellings, however, levels are use specific and different levels will apply dependent on the use of the premises.

The periods in Table C correspond to 0700 hours to 2300 hours for the day and 2300 hours to 0700 hours for the night. The Council will take into account the likely times of occupation for types of development and will be amended according to the times of operation of the establishment under consideration.

4.2 The procedure contained in BS4142 is to quantify the "specific sound level", which is the measured or predicted level of sound from the source in question over a one hour period for the daytime and a 15 minute period for the night-time. Daytime is defined in the standard as 07:00 to 23:00 hours, and night-time as 23:00 to 07:00 hours.

4.3 The specific sound level is converted to a rating level by adding penalties to account for either tonality or impulsivity. The standard sets out objective methods for determining the presence of tones or impulsive elements, but notes that it is acceptable to subjectively determine these effects.

4.4 The commentary to paragraph 9.2 of BS 4142:2014+A1:2019 suggests the following subjective methods for the determination of the rating penalty for tonal, impulsive and/or intermittent specific sounds:

Intermittency

4.5 When the specific sound has identifiable on/off conditions, the specific sound level should be representative of the time period of length equal to the reference time interval which contains the greatest total amount of on time. If the intermittency is readily distinctive against the residual acoustic environment, a penalty of 3 dB can be applied.

Impulsivity

4.6 A correction of up to +9 dB can be applied for sound that is highly impulsive, considering both the rapidity of the change in sound level and the overall change in sound level. Subjectively, this can be converted to a penalty of 3 dB for impulsivity which is just perceptible at the noise receptor, 6 dB where it is clearly perceptible, and 9 dB where it is highly perceptible.

Tonality

4.7 For sound ranging from not tonal to prominently tonal the Joint Nordic Method gives a correction of between 0 dB and +6 dB for tonality. Subjectively, this can be converted to a rating penalty of 2 dB for a tone which is just perceptible at the noise receptor, 4 dB where it is clearly perceptible, and 6 dB where it is highly perceptible.

4.8 If the subjective method is not sufficient for assessing the audibility of tones in sound or the prominence of impulsive sounds, BS4142:2014 suggests using the one-third octave method and/or the reference methods, as appropriate.

4.9 The ⅓ octave method tests for the presence of a prominent, discrete-frequency spectral component (tone) and typically compares the LZeq,T sound pressure level averaged over the time when the tone is present in a ⅓ octave band with the time-average linear sound pressure levels in the adjacent ⅓ octave bands. For a prominent, discrete tone to be identified as present, the time-averaged sound pressure level in the ⅓ octave band of interest is required to exceed the time-averaged sound pressure levels of both adjacent ⅓ octave bands by some constant level difference. The level differences between adjacent ⅓ octave bands that identify a tone are:

- *15 dB in the low-frequency one-third-octave bands (25Hz to 125Hz);*
- *8 dB in the middle-frequency one-third-octave bands (160Hz to 400Hz); and*
- *5 dB in the high-frequency one-third-octave bands (500Hz to 10,000Hz).*

Other Sound Characteristics

4.10 Where the specific sound features characteristics that are neither tonal nor impulsive, nor intermittent, though otherwise are readily distinctive against the residual acoustic environment, a penalty of 3 dB can be applied.

4.11 An initial estimate of the impact of the specific sound is obtained by subtracting the measured background sound level from the rating level of the specific sound. In the context of the Standard, adverse impacts include, but are not limited to, annoyance and sleep disturbance. Typically, the greater this difference, the greater is the magnitude of the impact:

- *A difference of around +10 dB or more is likely to be an indication of a significant adverse impact, depending on the context.*
- *difference of around +5 dB is likely to be an indication of an adverse impact, depending on the context.*
- *The lower the rating level is relative to the measured background sound level, the less likely it is that the specific sound source will have an adverse impact or a significant adverse impact. Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context.*

4.12 The background noise levels were assessed using statistical analysis of the measured data, as directed in BS4142. The histogram can be seen in Diagram 2.

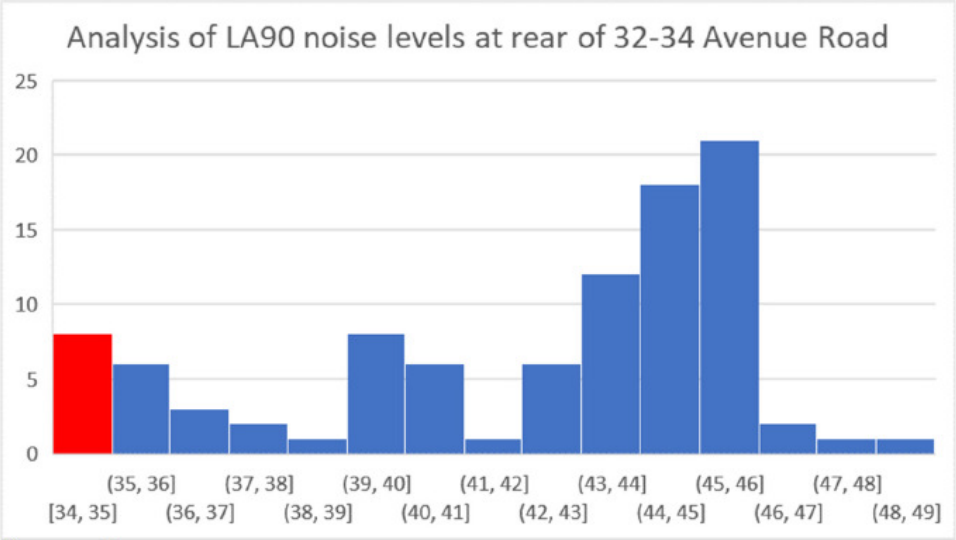

Diagram 2

4.13 The background noise level varied during the measurement period and consideration was given that the unit could operate on demand at any given time. The most commonly occurring background noise level during the measurement period was 45dB $L_{A90,15min}$ but in this instance consideration has been given to 34dB $L_{A90,15min}$ as being indicative of the noise climate during the more noise sensitive night-time period.

4.14 The plant noise emission criteria that should not be exceeded is therefore based on Table 1 and is shown in Table 2 below. This level should not be exceeded at the nearest noise sensitive façade and is indicative of being 10dB less than the considered measured background noise. At such a level, there is an indication that the specific sound source will have a low impact.

Noise emission limit for mechanical plant
L_{Aeq} ≤24dB

Table 2

5. EQUIPMENT

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

- Svantek Svan 958 Class 1 Serial No. 45530
- 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.

6. CONCLUSION

6.1 The foregoing assessment indicates that any proposed installation of mechanical plant should not result in a noise impact greater than L_{Aeq} 24dB at the nearest considered noise sensitive receptor. At such a level, there is an indication that the specific sound source will have a low impact and would meet the London Borough of Camden's planning requirements.