Construction Management Plan For 12-14 Greville Street London EC1N 8SB Planning Ref: 2018/6367/P

pro forma v2.3



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Revisions & additional material

Please list all iterations here:

Date	Version	Produced by

Additional sheets

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

Date	Version	Produced by



Introduction

The purpose of the **Construction Management Plan (CMP)** is to help developers to minimise construction impacts, and relates to 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 <u>Transport for London's</u> (TfL's Standard for <u>Construction Logistics and Community Safety</u> (**CLOCS**) scheme) and <u>Camden's</u> <u>Minimum Requirements for Building Construction</u> **(CMRBC)**.

Camden charges a <u>fee</u> 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 "<u>Demolition Notice.</u>"

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



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

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

Revisions to this document may take place periodically.



Timeframe

COUNCIL ACTIONS

DEVELOPER ACTIONS



Contact

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

Address: 12-14 Greville Street, London, EC1N 8SB

Planning reference number to which the CMP applies: 2018/6367/P

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

Name:	Steve Reed
Address:	Oakdean Construction Ltd, Unit 3 The Oaks, Revenge Road, Lordswood, Chatham, Kent ME5 8LF
Email:	s.reed@oakdeanconstruction.co.uk
Phone:	01634 868282

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

Name: NOTE: PROJECT MANAGER TO BE SELECTED – DETAILS TO BE ADDED

Address:

Email:

Phone:



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 <u>Community Investment Programme (CIP)</u>, please provide contact details of the Camden officer responsible.

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

Name:	Steve Reed
Address:	Oakdean Construction Ltd, Unit 3 The Oaks, Revenge Road, Lordswood, Chatham, Kent ME5 8LF
Email:	s.reed@oakdeanconstruction.co.uk
Phone:	01634 868282



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 situated at the western end of Greville Street close to the junction with Kirby Street; Hatton Garden is a short distance away. Both adjacent to and on the opposite side of the road on Greville Street there are offices/workshops; a public house; café and residential apartments. On the adjacent Kirby Street there is a similar mixture of properties. To the rear of the building, south elevation fronting onto Hatton Garden is Ely Place with a combination of office, restaurant and retail properties.

The site for the proposed redevelopment is currently used as workspace office units, other adjacent buildings/structures include offices, café and workshop units.





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 is to demolish the existing buildings with the exception of the façade to No's 12 & 13, which are to be retained in accordance with the City of London Code of Practice for the Deconstruction and Construction Sites.

The new scheme will provide new buildings on the existing footprint incorporating the retained façade. The top floor is to be extended and existing the floor plate increased to provide a moderate addition to the current office area.

The construction of the new development will provide a small increase in the floor area and includes work to party/boundary walls. Works also include provision of new windows to the retained façade to match the current installation at No.12 – 13, new below ground drainage, mechanical and electrical installation; internal finishes and fitting out.

Access and egress is to be carefully controlled throughout the duration of the construction works in line with the Site logistics Plan, which will take into consideration the offloading of material deliveries together with the removal of waste materials from site, siting of site cabins, location of Tower crane and designated storages bays.

Due to the restrictions on Greville Street including one-way traffic flow, loading and parking bays, we propose to apply for a temporary TMO. The proposal would include for the suspension of the loading bay and some of the parking bays and the partial closure of a section of the pavement on the development side of the street.

The closures will enable access to the site and both traffic and pedestrian management to be organised and managed by the Principal Contractor as shown on the drawing 41237-02A included at 'Highway Intervention' later in this CMP (Please also see site Logistic Plans in Appendix A)





Artistic CGI Impression of the Approved Project



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).

Please see attached proposed program entitled "12-14 Greville Street" Programme Number T0001 Rev. 08 (Appendix B)

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

We can confirm that the standard working hours for the site will be:-

8.00am to 6.00pm on Monday to Friday

8.00am to 1.00pm on Saturdays

No working on Sundays or Public Holidays



Community Liaison

A neighbourhood consultation process must have been undertaken <u>prior to submission of</u> <u>the CMP first draft</u>.

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 <u>specifically relating to construction impacts</u> 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 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.).





Our method statement, logistic plans and programme of works concentrates on a safe method of delivering the development whilst working adjacent to occupied accommodation and facilities. On possession of the site will be secured via a temporary hoarding.

Prior to the commencement of the demolition and construction operations Oakdean Construction will ensure we have all the necessary Statutory Notifications and Consents in place, including Section 61 Agreements/Consents. We have considered the impact of the noise, dust and vibration generated on the neighbouring projects and as such will undertake the introduction of suitable mitigation measures:

• Construction hours are to be limited to hours stipulated with Planning Conditions;

• The use of quieter alternative methods or mechanical plant, where reasonably practical;

• Locating plant, equipment, site offices, storage areas and worksites away from neighbouring properties where reasonable practical.

• Machines and equipment, in intermittent use will be shut down or throttled down to a minimum when not in use;

• The use of hoardings or portable acoustic enclosures/screens where practical;

• Maintaining and operating all vehicles, plant and equipment such that unnecessary noise and vibration from mechanical plant is kept to a minimum;

• All temporary site lighting will be faced into the site, and not directed towards any neighbouring properties.

• During works the main air pollution emissions, dust, noise and vibration generated are to be monitored through the use of specialist equipment. Should these levels exceed permitted guideline levels, the works are to be stopped and the appropriate measures taken to reduce construction emissions as far as reasonably practicable.

Refer to further on in this CMP for full details in relation to the proposed construction monitoring strategy for the development.



11. Consultation

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

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

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

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

The CMP has been provided to local residents businesses and Ward Councillors via a webpage <u>www.oakdeanconstruction.co.uk/grevillestreetcmp</u> responses from local residents etc. are received and acted upon though an email address <u>grevillestreet@oakdeanconstruction.co.uk</u>

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.

Oakdean Construction will undertake a neighbourhood consultation process prior to submission of the first draft of the Construction Management Plan.

This process will be carried out in the spirit of cooperation, involving the local community thereby helping them with their understanding of what is being proposed in terms of the development process. This consultation and discussion process with neighbours and community liaison groups will be continued throughout the construction phase to keep all abreast with the programmed works and changes that may occur due to unforeseen circumstances through newsletters, emails and meetings.



A detailed newsletter will be issued by Oakdean Construction 14 days prior to works commencing on site. A newsletter will also be issued every 4 weeks after the initial newsletter has been produced.

If and when required, members of Oakdean Construction will attend meetings with local Residents; Business and Community Associations, as appropriate.

Oakdean Construction will keep residents and others informed about unavoidable disturbance such as from unavoidable noise, dust, or disruption of traffic. Clear information shall be given well in advance and in writing.

A Contact Board shall be displayed prominently; this is to ensure that problems can be rectified quickly, and that residents and others can channel their questions and complaints to a member of staff who has the authority to take action.

The Contact Board shall include the following materials:

- (a) The title 'Contact Board'
- (b) Name of the main contractor, address and person to whom correspondence should be addressed.
- (c) Name of the site manager.
- (d) Month and year of completion of works.
- (e) Names and telephone numbers of staff who can take immediate action, so that contact can be made at any time.

Occupiers in the vicinity who may be affected by noise from these works shall be notified of the nature of the works, a contact name, telephone number (including that to be used outside normal working hours), and address to which any enquiries should be directed. Such notification shall take place, where possible within, 2 weeks but, in any event, at least a week prior to the works commencing.

A staffed telephone enquiry line is maintained at all times when site works are in progress to deal with enquiries and complaints from the local community. The telephone number (and any changes to it) shall be publicised widely in the local community affected by the works. This telephone number shall also be notified to the Noise and Licensing Enforcement Team on 0207 974 4444.

Should noise/vibration/dust complaints arise from the building construction/building works, these complaints must be recorded in a complaint's register and make available to the Local Authority, if requested. The complaint register shall provide information on day, time, details of complaint, details of monitoring carried out and any additional mitigation works.

Should complaints be received concerning works/activities, then all works/activities being the cause of complaint must cease (Tasks in progress accepted due to structural integrity issues), until such time as further agreement to work is negotiated.



13. Schemes

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

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

Oakdean Construction register all schemes with the Considerate Constructors Scheme, details of site specific registration will be issued when received to the Local Authority.

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.

Other Construction projects in the general vicinity of the site are Farringdon Station improvements for Cross Rail and No. 17 Charterhouse Street. Farringdon Road is the main thorough fare. Construction traffic for 12-14 Greville Street will leave Greville Street onto Kirby Street, right onto Cross Street then onto Farringdon Road.



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 <u>CLOCS Standard</u>.

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

Checks of the proposed measures will be carried out by CCS monitors as part of your enhanced CCS site registration, and possibly council officers, to ensure compliance. Please refer to the CLOCS Standard when completing this section. Guidance material which details CLOCS requirements can be accessed <u>here</u>, details of the monitoring process are available <u>here</u>.

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

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



CLOCS Contractual Considerations

15. Name of Principal contractor:

Oakdean Construction Ltd

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 <u>CLOCS Overview document</u> and <u>Q18 example response</u>).

- During the procurement and construction period Contractors, sub-contractors and suppliers will be required to evidence compliance of CLOCS standards. Oakdean Constructions Traffic Marshall will be fully briefed in CLOCS expectations and have full responsibility for ensuring that all delivery vehicles are CLOCS compliant. A checklist will be completed for all delivery vehicles by our trained Traffic Marshall. Any issues with non-compliance will be brought to the attention of the Projects Manager to action. Item to be checked at the time of placing orders or when vehicles are attending site are, but not limited to:
- Provision of current certification of approval through the registration with the Fleet Operators Recognition Scheme. The certification is to be renewed annually and documentation issued to Oakdean Construction.
- Provide a log of collisions, which are required to provide evidence of investigation of incidents that have resulted in injury or damage to vehicles and property.
- To reduce the probability of collisions on routes to and from site delivery vehicles are
 to ensure all specified vehicular routes to and from the site are adhered to unless
 otherwise directed. Operators are required to provide signed evidence from the
 drivers that they have been briefed on the specified routes to site and from site. This
 documentation is to be issued to Oakdean Construction to demonstrate the required
 route to site has been understood.
- Vehicles exceeding 3.5 tonnes gross vehicle weight are to have prominent signage fitted to visually warn other road users not to get too close to the vehicle. The text to the signage should be legible to a cyclist at a reasonable distance from the vehicle.
- Vehicles exceeding 3.5 tonnes gross vehicle weight are required to have fitted to both sides of the vehicle side-guards to all rigid mixer, tipper and waste vehicles to minimise the probability and severity of under-run collisions with vulnerable road users.



- To improve visibility for drivers and reduce the risk of close proximity blind-spot collisions vehicles exceeding 3.5 tonnes gross vehicle weight are required have front, side and rear blind-spots completely eliminated or minimised as far as is practical and possible through a combination of fully operational direct and indirect vision aids and driver audible alerts.
- To reduce the risk of close proximity collisions by audibly alerting vulnerable road users to vehicle hazards, vehicles over 3.5 tonnes gross vehicle weight should be fitted with operational equipment to audibly warn vulnerable road users when a vehicle is turning right or reversing.
- Drivers Training and Development Operators are required to ensure that all drivers have the knowledge, skills and attitude required to recognise, assess, manage and reduce the risks that their vehicle poses to vulnerable road users.
- Driver licensing Operators are required to ensure that a system is in place to ensure all drivers hold a valid licence for the category of vehicle they are tasked to drive and any risks associated with endorsements or restriction codes are effectively managed. Oakdean Construction can request driver produce driving licence on request when attending site to check for validity.

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

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

Oakdean Construction confirms that the CLOCS standards are to be read and understood and that the requirements to abide by CLOCS standards will be extended to all contractors and suppliers.

Please contact <u>CLOCS@camden.gov.uk</u> 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 <u>Transport for</u> <u>London Road Network</u> (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.







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.

Details of construction vehicle access route, will be discussed with contractors and suppliers at the time of placing sub-contract and material supply orders. This information will include at the time any on-site restrictions. The Construction Project Manager will ensure that this route is adhered to. All deliveries and vehicle manoeuvres at the site will be supervised by a trained traffic Marshal and Banksmen in order to manage the interaction between vehicles, pedestrians, cyclists and other users.

Access and egress to the site for operators/site personnel/vehicles throughout the duration of the constructional works will be gained off Greville Street. These points will be controlled by barriers/gates and manned by security during the hours of site operations. Vehicle access to Greville Street will be off Hatton Garden, limited access for smaller deliveries may also be possible via Kirby Street.

The delivery of constructional materials, plant and equipment and the removal of waste etc., shall be restricted to approved working hours in line with any requirements of the Local Authority, unless in exceptional circumstances where agreement of the Local Authority has been received in advance.

As noted earlier, details of access arrangements to and from the site will be distributed in advance to any suppliers servicing the construction works. The Size of delivery vehicles will also have to be considered in relation to the width of Greville Street and due to it being one-way traffic.

Very large or articulated vehicles may only be able to service the site by prior arrangement, which may entail operating out of normal hours and be subject to prior agreement with the Local Authority.

Due to the restricted nature of the site, deliveries will be planned and made on a 'just in time' basis to avoid congesting the site and to help maintain clear plant and personnel access on the site itself.

Site pedestrian access onto site will be via Greville Street via a secured gated system.

Segregation of pedestrian and vehicular movements will be paramount, therefore all traffic movements accessing and egressing the site will be marshalled, in order to minimise potential health and safety issues.



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

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

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



Anticipated Vehicle Movements are set out below:

Stage 1 Demolition – There will be approximately 5 lorry movements per day. The loading bay opposite the site entrance will be used to site a 40 yard skip, to allow loading of waste and access for removal.

Stage 2 Basement excavation – It is anticipated there will be 10 muck away vehicles per day.

Stage 2 and 3 Concrete Pours – 10 concrete vehicles per day, pumping of concrete will be done from the front entrance of the site, we will be able to hold the pump and concrete vehicle within the hoarding line loading bay. Mobile crane and tower crane erection commences in Stage 3. Greville Street will need to be fully closed to day-to-day traffic for one working day.

Stage 4 Deliveries of masonry; façade panels, glazing for façade construction; core fit out and extension.

• Delivery vehicle type 1 5m x 2.15m (Dwell time 30 min to 1 hour) • Delivery vehicle type 2 7m x 2.15m (Dwell time 30 min to 1 hour) • Delivery vehicle type 3 10m x 2.500m (Dwell time 30 min to 1 hour)

Stage 5 Deliveries for office fit outs.

- Debris/rubble/waste 40 yarder skip
- Muck away Lorry 9m x 2.5m (Dwell time 30min per load)
- Concrete Lorry 9m x 2.5m (Dwell time 20 min per delivery)
- Mobile crane 12.300m x 2.430m (Dwell time 8 hours)
- Delivery vehicle type 1 5m x 2.15m (Dwell time 20 min to 1 hour)
- Delivery vehicle type 2 7m x 2.15m (Dwell time 20 min to 1 hour)
- Delivery vehicle type 3 10m x 2.500m (Dwell time 20 min to 1 hour)
- Delivery vehicle type 4 14.154m x 2.520m (Dwell time 20 min to 30 min)

Oakdean Construction will maintain a clear path down Greville Street, with the exception of the date of the tower crane erection, which the Local Authority will be advised off during the application process.



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

We are currently not aware of any other construction projects that will follow the same construction traffic route as our proposal. As soon as we are aware of any projects commencing in the vicinity we will ensure that the site project team liaise with the other sites to attempt to co-ordinate deliveries.

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

Please refer to the drawings below - 141237-TK01B, TK02B, TK03A, TK04A, TK05A and TK06A showing a swept path analysis of construction and non-construction traffic passing the loading area for access and egress.













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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.

Due to the size of the development, it is considered off-site holding areas are not required. To ensure safe access to the site, signage will be used in advance of and throughout the construction works. Warning signage will be erected to the approval of Camden Council, in advance of construction activities commencing. This will be supplemented with further signage warning motorists and pedestrians of forthcoming works and alterations to road/footpath layouts, all as previously agreed with Camden Council.

Construction and site related traffic will be prohibited from using routes other than Greville Street. Warning signage will be posted at all local road junctions, indicating that access by any related construction traffic is prohibited.

Prominent signage will be displayed on site to enforce routing to and from the site. This will include "One Way Only" and 20mph speed restriction signage when moving away from the site onto Greville Street. The number, location and nature of off-site and on site signage will be determined by the Site Traffic Management Plan, approved by Camden Council.

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

Due to the nature of this project, and the construction phasing, off-site material storage areas will not be possible. Deliveries can only come by road.

Oakdean will programme the deliveries to run in conjunction with the construction phasing and installation schedules to prevent any logistical issues and congestion.



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 managed by the full time Gate Keeper. As well as all delivery drivers being advised via Subcontract and Supplier Orders the Gate Keeper will ensure that all delivery drivers turn their engines off whilst making deliveries.

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.

Please refer to the drawings above - 141237-TK01B, TK02B, TK03A, TK04A, TK05A and TK06A showing a swept path analysis of construction and non-construction traffic passing the loading area for access and egress. Please also refer to our Logistic Plans in Appendix A

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.



The size and location of this project allows only one vehicular access into a very small unloading area as indicated on the Logistic Plans in Appendix A. The Vehicle gate will be manned at all times during site hours by the dedicated Gateman. As and when deliveries arrive the Gateman will be assisted by a HSE recognised trained Traffic Marshal who will with the use of a Stop/Go board temporarily halt the traffic on Greville Street to allow delivery vehicle to drive past the site and then reverse into the small compound with the Gateman acting as Banksman. As vehicles leave the small compound the Traffic Marshall will first ensure that the road is clear from vehicles, cyclists and pedestrian before allowing the vehicle to leave the site onto the highway.

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

See 20 a) above

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.

Wheel washing is not required as vehicles entering the site compound will in fact stay on the existing carriageway which has been taken over as the compound.

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.

Please see appendix A for the Site Logistic Plans.

b. Where necessary, Traffic Marshalls must ensure the safe passage of pedestrians, cyclists and motor traffic in the street when vehicles are being loaded or unloaded. Please provide detail of the way in which marshals will assist with this process, if this differs from detail provided in Q20 b.

See Q20 b



Street Works

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

Please note that Temporary Traffic Orders (TTOs) and hoarding/scaffolding licenses may be applied for prior to CMP submission but <u>won't</u> 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.

A scaled plan detailing the current local highway network layout in the vicinity of the site is provided below. This should include details of on-street parking bay locations, cycle lanes, footway extents and proposed site access locations.

Motion Drawing Number 141237-01 on the following page shows the current local highway arrangement.





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 <u>Temporary Traffic Order (TTO)</u> 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.

Due to the 'one way' traffic operation in existence on Greville Street and the close proximity to the site of both loading and parking bays opposite, prior to the commencement of site operations, Oakdean Construction will apply for a Traffic Management Order in order to secure the suspension of the required parking bays.

We would also like an opportunity to apply for a temporary alteration to increase the road width just prior to the Kirby Street junction all of which would be fully compliant with all council standards and reinstated to its current layout on the completion of the project.

Please refer to diagram 141237-02A, below detailing the highway works including the area of the required suspension of unloading and parking bays and the temporary alteration to the existing street layout.





Camden

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.

As part of the planning approval we are required to retain and repair the existing façade to No. 12 & 13 Greville Street. The façade will require temporary support whilst the existing building is demolished and until such time as the new frame is constructed to provide the final support. The temporary support structure will be in the form of structural steelwork and will sit on the footpath of Greville Street outside Nos. 12 & 13. Please see attached façade support detail drawings appended to this CMP.

Scaffold will be erected to Greville Street, and the site hoarding is to be erected to the back edge of the footpath which will require scaffold and hoarding license from Camden Council, the scaffold is to be lit and alarmed. Please see scaffold drawings and logistics plan appended to this CMP

Additionally the crane will be required to overhang the highway for the purposes of unloading of materials. All other structures will be retained within the hoarding line.

As previously noted we will procure a Raptor 84 Crane, which not permanently overhang either the highway or adjacent properties unless required to do so for the purpose of hoisting materials or components.

All lifting operations are to be undertaken in accordance with the provided Construction Lifting Plan. The Lifting Plan will be provided by an external Appointed Person. All lifting operations on site will be overseen and supervised by the appointed crane supervisor and banksman.

The site will be securely hoarded prior to the commencement of any site operations. The hoarding will be 2.4m high to Greville Street and a minimum of 1.8m high to the remainder of the site and of a standard to prevent trespassers entering the site. The hoarding will be lit and a CCTV security system installed. All fences/hoardings will be inspected daily by the site team. Any defects or breaches identified will be rectified immediately.

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.



See Question 23

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.

See Question 23

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.



Details of all safety signage, barriers and accessibility measures such as ramps and lighting etc.

All boundaries of the project will be closed off using timber hoarding. All hoardings are to be illuminated, decorated and maintained and kept in good repair at all times. The hoarding will also be illuminated, as appropriate; during the evenings.

Following the award of hoarding licence, the temporary hoarding will be erected at demolition stage. Internal access routes and storage compounds will be segregated utilizing 'Heras' type fencing panels.

To mitigate the impact of noise and vibration created during the construction works the following will be adopted:

• Erection of acoustic site hoarding

• Utilisation of a baffle systems to Plant and Machinery where practicable during noisy works (e.g. demolition).

The site's boundary will be adequately signed with relevant Health & Safety warning signs, which are to be inspected on a daily basis and maintained at all times. A record of the signage inspections will be kept in the site diary.

All access and egress points will be provided with the appropriate lighting to sufficiently light these areas

during operational hours and not cause a nuisance to neighbouring properties or distract traffic on Greville Street.

VRU and pedestrian diversions, scaffolding and hoarding

Oakdean Construction will ensure pedestrians and/or cyclist safety is maintained should diversions be put in place. The appropriate ramping will be put in place where cables, hoses, etc. are run across the footpath. Specific consideration is to given to vulnerable users of the footpath which include wheelchair users, the elderly, those with walking difficulties, young children, those with prams, the blind and partially sighted.

The appointed logistics manager and traffic marshal/banksman will oversee all associated site traffic and deliveries. Suitable and adequate signage is to be displayed along with early notification of proposed alterations and closures to the footpath. Suitable fencing and hoardings, together with signage and lighting will be provided to all footpaths affected by the proposed alterations and closures to safely segregate the public from the site works. As required no cycleway will be restricted.

Pedestrians will also be segregating from site traffic. All traffic movements accessing and/or egressing the site will be marshalled, which will minimise potential health and safety issues.

Pedestrian access will need to be changed to allow construction works to progress safely; however, all safety and security systems will be maintained at pedestrian entries. We will undertake the appropriate and sympathetic alterations to the footpath where required have taken into consideration the required needs for wheelchair users; individuals with walking impairment, young children, prams, blind and partially sighted people. Please also see Appendix C for all demolition and new build scaffold drawings.



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.

Refer to Question 23

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.

We have carried out service demand calculations for the new development and can confirm that all existing services including drainage will be utilised for the new development. As such we do not envisage any requirement for new service trenches to be excavated.



Environment

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

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

Guidance on the control of noise and vibration emissions from construction works is given in BS5228:2009+A1:2014 – "Code of practice for noise and vibration control on construction and open sites" (Parts 1 and 2). BS5228 provides noise and vibration data for various construction activities and outlines available mitigation measures to reduce noise and vibration emissions

Details of proposed construction equipment, together with their sound power levels, estimated on time (over a typical working day) and number of items have been provided by the project team and is summarised in Table E1 below.

There will be four construction work stages throughout the build programme: site preparation, piling, concreting operations and general construction.

The equipment could operate at any time within the permitted construction hours (0800-1800 hrs weekdays and 0800-1300 hrs on Saturdays). The contractor will advise surrounding residents of ongoing construction works via monthly newsletters in order to minimise the risk of potential complaints and Best Practical Means will be employed onsite at all times.



	Number of Items at each stage							
Plant Item	1.Demolition	2.Site Preparations	3.Plling	4.Concreting Operations	5.General site activites	SWL dbA	Data Source e.g. BS5228 reference	Estimated On-time (% of typical working day)*
Air hammer pile driver			1			131	D.4:54	10%
Club hammer		4	4	4	4	107	D.7: 100	10%
Compressor	1	2	2	2	2	100	D.3: 101	25%
Concrete pump, lorry mounted				1		109	D.6: 95	10%
Crane, lorry mounted	1				1	116	D.6: 39	10%
Dumper		1	1			96	D.7: 100	5%
Electric breakers	4					107	F.1: 125	10%
Electric face shovel		5	5		5	109	D.10:107	15%
Electric reciprocating saw	4					114	D.2: 77	10%
Generator (power)		5	5	5	5	89	C.4: 76	75%
Hand-held electric circular saw	1	1		6	6	109	D.7: 99	5%
Hand-held hammer		20	20	20	20	107	D.7: 80	5%
Hydraulic pile driver			1			111	D.4:79	80%
Lorry		10	10	10	10	105	D.3: 59	5%
Petrol driven disc cutter, hand-held	1	4	4	4	4	112	D.6: 53	15%
Pneumatic breaker		1	1	1	1	109	D.2: 77	10%
Poker vibrator		2		3		112	D.6: 95	10%
Power float				1		100	D.6: 96	10%
Road roller		1				108	D.3: 114	10%
Scaffold frames and clips		5			5	108	D7.97	10%
Scaffold poles and clips		5			5	108	D.7: 97	10%
Tipper lorry		1		1		113	D.3: 81	20%
Tracked excavator	2	2	2	2	2	108	D.3: 40	50%
Tracked excavator fitted with breaker	2	1	2		1	119	D.2: 77	20%
Vibratory roller		1				108	C.2: 41	10%
Water bowser		1	1	1	1	109	C.6: 58	75%
Water pump		2	2		2	100	D.3: 81	25%
Wheeled excavator/loader	2					75	D.3: 80	104%



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.

Ambient pre-construction airborne noise levels at the site have been measured as part of an unattended site noise survey carried out by Walker Beak Mason Partnership (hereafter WBM) over an 8 day period between 28th October 2014 and 4th November 2014.

Full details of that survey can be found by following the hyperlink below: http://camdocs.camden.gov.uk/HPRMWebDrawer/Record/5546109/file/document?inline

During weekday construction hours (0800-1800 hrs) ambient noise levels at the front of the site (closest to Greville Streete, representative of noise levels at surrounding noise sensitive receptors) range between 62-68 dBA. During weekend daytime construction hours (0800-1300 hrs) ambient noise levels at the site were 61-64 dBA.

BS5228-1 advises that a pragmatic approach needs to be taken when assessing the noise effects of any construction project. In the lieu of any specified construction noise limits in the development consent, the project acoustician has assessed methods E.3.2 (The ABC method) and E3.3 (the 5 dBA change) given in BS5228-1 against the measured ambient noise levels for the permitted construction hours. The results of the assessment are summarised in Table E2 below.

Table E2

Day and Time Period	Existing Ambient Noise Level	Permitted Construction Noise Level Based on ABC Method	Permitted Construction Noise Level Based on '5 <u>dBA</u> Change'
Mon-Fri 0800-1800 hours	62-68 <u>dBA</u>	65-75 <u>dBA</u>	67-73 <u>dBA</u>
Saturday 0800-1300 hours	61-64 <u>dBA</u>	65-70 <u>dBA</u>	66-69 <u>dBA</u>

It can be seen from the results given above that construction noise levels of up to 73-75 dBA during weekday construction hours and up to 69-70 dBA during weekend construction hours would be permitted using the ABC and +5dBA change methodologies based on the prevailing pre- construction ambient noise levels.

It is common for some construction work stages (i.e. site preparation, groundworks and piling activities) to generate high noise levels which are unavoidable due to the nature of the works. Given the proximity of sensitive receptors to the site in this instance, it is likely that the nominated construction noise limits will be exceeded regularly. Consequently, it may be appropriate to adopt higher noise limits for these activities. A proposed construction monitoring strategy is provided in question 35 of this document.



30. Please provide predictions for <u>noise</u> and vibration levels throughout the proposed works.

Airborne noise

Based on information provided by the project team for each item of plant (refer to Table E1 above), a 3D computer generated noise model was constructed using Cadna v2019 to calculate the noise levels that would exist at the positions of the surrounding noise sensitive receptors (NSRs) during the construction activities associated with each work stage. The results are summarised in Table E3 below.

Table E3

Receptor and Use	Calculated Noise Level (dB LAeq,T)				
	Demolition	Site Preparation	Piling	Concreting Operations	General Site Activities
11 Greville Street (Residential)	73 -89	73 -89	78-94	71 -87	73 -89
15 Greville Street (Commercial)	68 -90	68 -90	73 -95	66- 88	68 -90
30 Greville Street (Residential)	65-74	65-74	70- 79	63-72	65-74
35 Greville Street (Residential)	82-85	82-85	87-90	80-83	82-85
2 Bleeding Heart Yard (Commercial)	90	90	95	88	90
24 Hatton Garden (Residential)	54-62	54-62	59-67	52-60	54-62
Audrey House (Commercial)	68 -91	68 -91	73 -96	66- 89	68 -91

NOTE: Cells shown in bold indicate exceedances above the nominated construction noise limit

The results of the calculations indicate that the nominated construction noise limit of 73-75 dB LAeq,T could be exceeded at the majority of the nearest sensitive receptors (NSRs) for all construction work stages. This is not surprising given the proximity of the NSRs to the site.

It is worth noting that the calculated noise levels at the nearest NSRs given in the paragraph above does not take into account the noise management and mitigation measures outlined below. These will be implemented throughout the construction process to ensure that the nominated project noise criteria are achieved, wherever practicable.

Structure-borne noise

The propagation of SBN is a matter of significant technical complexity. In our view it would be meaningless to carry out structure-borne noise predictions prior to construction works commencing as there is simply not sufficient empirical data available to provide any useful or accurate analysis.

Instead, the recommended approach is for the contractor to appoint a suitably qualified independent acoustics consultant to carry out an assessment of SBN by taking actual onsite measurements during the onset of particularly noisy construction works (i.e. demolition, site preparation, piling etc) and/or in the event of validated complaints from occupants of the adjacent premises'.

The location(s) and duration(s) of any SBN monitoring would be discussed and agreed with the Local Planning Authority and results of any SBN surveys and any subsequent recommendations would be submitted to the Local Planning Authority for review, upon request.



Ground-borne vibration

Guidance on the control of vibration emissions from construction works is given in BS5228-2. Table B.1 gives guidance on human perception and tolerance of vibration levels in terms of peak particle velocity (PPV), reproduced as Table E4 below:

Table E4

Vibration level, PPV	Effect
0.14 mm/s	Vibration might be just perceptible in the most sensitive situations for most vibration frequencies associated with construction. At lower frequencies, people are less sensitive to vibration.
0.3 mm/s	Vibration might be just perceptible in residential environments.
1 mm/s	It is likely that vibration of this level in residential environments will cause complaint, but can be tolerated if prior warning and explanation has been given to residents.
10 mm/s	Vibration is likely to be intolerable for any more than a very brief exposure to this level.

It is understood that Camden Council consider 1.0 mm/s and 2 mm/s to be appropriate design targets for construction vibration affecting residential dwellings and commercial premises respectively (as given in 'Camden's Minimum Requirements for Building / Construction / Demolition Sites' Document). These limits will be adopted as trigger levels for the project.

Ground-borne vibration emissions have been assessed for the proposed driven temporary sheet steel piling that will be implemented at the site during the underpinning works, using empirical data obtained from BS5228-2, reproduced as Table E5 below.

Table E5

Type of Soil	Distance	Measured Peak Particle Velocity (mms ⁻¹)	Comments
Sandy gravel over London Clay	12m	0.05	Air hammer driving sheets
Soft saturated sand over soft to firm clay	6m	1.1	
Overburden/ London Clay	1m	10	_

It can be seen from Table E5 above that ground-borne vibration levels from driven sheet piling vary significantly depending on the type of ground and proximity of the works to the receptor.

Given the proximity of the site to surrounding NSRs, it is likely that vibration levels during piling works and the use of heavy machinery near to the site boundaries will be perceptible at the NSRs and therefore it will be important to ensure that these activities are carried out carefully with effective site management.

The key consideration for the contractor in this instance will be to manage the expectations of surrounding NSRs regarding the construction works via effective communication to minimise the risk of complaints.



Additional guidance is provided within BS5228-2 Table B.2 regarding the structural response of a building to vibration. The guidance relates to cosmetic damage, which is described within BS5228 as "initiation or extension of cracks in plasterwork etc. rather than the onset of structural distress". These guideline values are reproduced as Table E6 below.

Table E6

Table B 2	Transient vibration	quide values for	cosmetic damage
	indificient vibration	galac values for	coome de damage

Line (see Figure B.1)	e Type of building .1)	Peak component particle velocity in frequency range of predominant pulse		
		4 Hz to 15 Hz	15 Hz and above	
1	Reinforced or framed structures	50 mm/s at 4 Hz and	50 mm/s at 4 Hz and	
	Industrial and heavy commercial buildings	above	above	
2	Unreinforced or light framed structures	amed 15 mm/s at 4 Hz 20 mm/s a increasing to 20 mm/s increasing	20 mm/s at 15 Hz increasing to 50 mm/s	
	Residential or light commercial buildings	at 15 Hz	at 40 Hz and above	
NOTE 1 Valu	Values referred to are at the base of the building.			

NOTE 2 For line 2, at frequencies below 4 Hz, a maximum displacement of 0.6 mm (zero to peak) is not to be exceeded.

Given that there are also structural works proposed that may affect the party walls and occupants within 11 and 15 Grenville Street respectively during the demolition and construction works. It is possible that structure-borne noise and vibration will be generated during the demolition and site preparation work stages, particularly during the use of tracked excavators fitted with breakers, poker vibrators and petrol driven hand-held disc cutters.

Consequently, onsite monitoring will be carried out throughout the construction works in line with the proposed methodology given in Appendix D of this document. Should this monitoring reveal that levels of vibration significantly exceed the criterion (as given in Table E4 and Table E6 above), then the quietest alternative practicable demolition methodology (i.e. chemical cutting, water cutting, increasing the number of breakers to reduce the total demolition phase time etc.) will be investigated further, if deemed necessary.

In our view, it is not necessary to alter the proposed demolition methodology prior to the commencement of works, due to relatively unpredictable nature of the structure-borne noise and vibration.



31. Please provide details describing mitigation measures to be incorporated during the construction/<u>demolition</u> 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.

To ensure that the above project noise and vibration limits are achieved wherever possible, the following noise and vibration management and mitigation measures will be adopted for the project. These measures have been developed in line with the guidance given in BS5228:2009+A1:2014 and 'Camden's Minimum Requirements for Building / Construction / Demolition Sites' Document and are considered to represent the Best Practical Means (as defined in Section 72 of the Control of Pollution Act 1974 and BS5228):

- Site clearance, demolition and excavation will be done by hand wherever feasible.
- Continuous real-time noise and vibration monitoring will be undertaken at the onset of significant works at the site/along Party Wall boundaries or in the event of validated complaints.
- In the event of complaints, the cause of the complaint will be investigated immediately, including a review of the noise/vibration monitoring results (if monitoring is being undertaken at the time) and the site activities that were being undertaken at the time. The results of the investigation can be sent to the Local Authority for review upon request.
- Any concrete slabs located near to Party Walls will need to be cut and separated around their perimeter to isolate the slab from the rest of the structure, wherever feasible. This will minimise the SBN and ground-borne vibration transmitted to the adjacent premises during high impact activities.

The following general noise and vibration mitigation measures will also be adopted for the works:

- Nearby residents will be contacted and informed of the works. They will also be provided with contact details for an appropriate member (or members) of site management who can be contacted in the event of noise or vibration related concerns. Proactive and regular community liaison is a powerful tool for preventing construction noise or vibration related issues.
- Site personnel will be informed of the sensitivity of the site to noise due to the proximity of the surrounding sensitive receptors and carefully managed to ensure that noise is kept to a minimum.
- Demolition works will only utilise non-percussive techniques (e.g. electric and hydraulic pulverisers) where practicable. Where this isn't possible, the use of pneumatic tools will be fitted with silencers or mufflers.
- Where practicable, building elements will be detached from a structure and lowered to ground level.
- As with demolition works, the breaking-up of concrete and the removal of floor slabs will be carried out using non-percussive techniques where practicable.
- Where practicable, slabs will be levered from their position/location, removed from site and broken-up/crushed off-site. Where this is not practicable and where the structural transmission of noise and vibration generated by percussive breaking into adjoining premises is likely, concrete slabs will be cut and separated around their perimeter to isolate the slab from the rest of the structure.
- In order for concrete deliveries and concrete pours to be completed within the permitted hours contractors will have in place a protocol with the concrete supplier and/or concreting



subcontractor to ensure that sufficient contingency is allowed, to consider pour size, delivery times and concrete placement, and mix workability so that works do not overrun the permitted hours.

- For excavations taking place in restricted space with limited headroom, removal of spoil by hand is common. Soil conditions may necessitate the use of pneumatic breakers or high pressure air 'spades' to break-up well consolidated soil for removal, which require the use of compressor plant. When selecting compressor equipment and planning its location, care will be taken to ensure that noise exposure for residents will be minimised; the use of purposebuilt acoustic enclosures and barriers will also be considered
- The project team have confirmed that activities which can produce significant levels of noise and/or vibration (i.e. such as the petrol disc cutter, breaker and poker vibrator) will be restricted to the following hours to minimise the disruption caused to NSRs:
 - Use of petrol disc cutters, breakers and poker vibrators between 1000 and 1200 hours and 1400 and 1600 hours only.
- All hand held and portable equipment where practicable will be electrically powered.
- All plant and equipment will be maintained in good working order and operated in accordance with manufacturers recommendations.
- Lorry operators will avoid unnecessary revving of engines and all machinery will be switched off when not required.
- Stationary equipment and plant will be placed so as to provide a screening to other items of
 plant and located to provide minimum noise emissions in the direction of noise sensitive
 areas.
- Care will be taken when loading and unloading materials to limit impact noise. The movement of material with the conveyor will be carried out slowly and carefully. Material will be placed rather than dropped.
- Vehicles will not be permitted to queue on the road or pavement outside the site access.
- Deliveries will be programmed to arrive during daytime hours only.
- Vehicles parked within the site, outside working hours will have their engines switched off.
- Vehicle routes and traffic management plans will be arranged to avoid any reversing operations where possible.
- Any compressors brought on to site will be silenced or sound reduced models, fitted with acoustic enclosures.
- No site noisy working during any anti-social hours unless otherwise agreed by the relevant authorities.
- Vehicle reversing alarms (if used) will be set to the minimum required for safe and efficient operations.
- Routes and programming for the transport of construction materials, fill, personnel etc will be carefully considered in order to minimise the overall noise impact generated by these movements.
- Off-site pre-fabrication will be used, where practical.
- Loading and unloading of vehicles, dismantling of site equipment such as scaffolding or moving equipment or materials around site will be conducted in such a manner as to minimise noise generation. Where practical these will be conducted away from noise sensitive areas
- Deviation from approved method statements are to be permitted only with prior approval from the Principal Contractor and other relevant parties. This will be facilitated by formal review before any deviation is undertaken.



BS5228 states that:

All reasonably practicable means should be employed to ensure the protection of local communities and of people on construction sites, from detrimental effects of the noise generated by construction operations.

With the mitigation measures listed above, it is our view that noise and vibration emissions from the construction works will have been reduced as far as practicable and the proposed construction methods are therefore appropriate

Noisy operations are to be restricted in accordance with the procedures and guidance notes under the Section 60 "Prior Consent" Notice as previously detailed.

The noise levels are to be monitored by Oakdean site team throughout the demolition process to maintain the correct noise levels.

Oakdean Construction will ensure prior to placing specific subcontract orders, pre-qualification assessments are undertaken to ensure compliance in maintaining restricted noise levels and mitigating measures. The Method statements provided by the successful sub-contractor will be reviewed by Oakdean Construction to ensure the planned works have fully considered the noise levels generated from works and provide details of mitigation measures to be implemented in the event of a breach of the predicted levels.

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

Oakdean Construction through the pre-qualification assessments will ensure that the appointed demolition subcontractor complies will all relevant statutory requirements, and is fully competent to carry out these types of work.

Records are to be provided to demonstrate operatives are sufficiently trained to the required standards of BS 5228:2009.



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

The following processes have been identified as potential dust creating operations:

- Demolition
- Excavation
- Cutting
- Grinding
- Drilling
- Sawing
- Cleaning

Oakdean Construction will ensure where practicably possible the mind-set is for the prevention of dust in the first instance rather than containment or suppression of dust after it has been created.

The following actions must be taken to minimise the amount of dust created and the adverse impacts of the dust created during the construction works:

- Carry out a risk assessment in line with the Greater London Authority's control of Dust and Emissions Supplementary Planning Guidance.
- Notify and liaise with the local community with regard to planned dusty works and set up a formal complaints procedure. This notification shall take place within 2 weeks but at least one week prior to works commencing.
- Schedule potentially dusty works in accordance with liaison with the local community to minimise the risk of complaints.
- Should a complaint be received in regard to the level of dust being created by the works, the operation in question will be suspended immediately. The operation will not resume until the concerns raised have been fully remedied or a satisfactory alternative method has been approved that creates less dust.
- Ensure that all site operatives have been trained on BS 5228: 2009 and that evidence to this effect is maintained on site for inspection by the Local Authority.
- Prior to commencement of construction activity on site, Oakdean Construction will put in place adequate water facilities on site to ensure that damping down of the whole site is practicable.
- Utilise a system of dust suppression to damp down the site.
- Ensure any plant used on site is, where possible, be fitted with dust suppressant attachments. For example, any cutting equipment on site should be fitted with either a vacuum device or a constant water feed to suppress any dust created.



- All site operatives will be trained to carryout operations on site in accordance with the Best Practice Guidance Note "Control of dust and emissions from construction and demolition". These guidelines are to be incorporated within the demolition contractors method statements for operatives to read and understand. The actions of the operatives on site will be monitored by the site team to ensure compliance with Best Practice Guidance Note and their companies Method statements.
- Covering of bulk materials and ensuring that any stockpiles are kept below the height of the site hoarding and positioned with regard for the prevailing wind and proximity to the site boundary and neighbours.
- Use of bagged materials where practicable.
- Erection of Monarflex dust protection to site hoarding and scaffolding to the building for the duration of the demolition and construction operation to contain any dust created on site, keeping dust away from sensitive equipment.
- Monitor and record dust levels on site through the permanent monitoring stations. Should the amount of dust in the air recorded by monitoring stations exceed safe levels an alarm will be triggered and the operation causing the dust must be suspended immediately. That operation shall not resume until an alternative solution that will create less dust has been agreed.
- Ensure plant and machinery used on site is well maintained to reduce exhaust emissions.
- Oakdean Construction will communicate the environmental aspects and emergencies controls. They will be required to hold environmental tool box talks, produce an environmental plan and review subcontractors impacts and produce full assessments of each activity which involve noise levels which are above normal. They will also ensure that the demolition works will only be carried out within normal working hours.

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.

- Erection of Monarflex dust protection to site hoarding and scaffolding to the building for the duration of the demolition and construction operation to contain any dust created on site, keeping dust away from sensitive equipment.
- Regularly use a water-assisted dust sweeper on the access and local roads, as necessary, to remove any material tracked out of the site.
- Avoid dry sweeping of large areas.
- Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport.



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

Real-time continuous noise, vibration and dust monitoring will be carried out during the construction phase of the development. A minimum of two dust, noise and vibration monitoring systems are proposed to be installed onsite (either directly fixed to site hoarding or party walls or located on hardstanding). Further monitoring devices could be added, if deemed necessary however the proposed strategy is considered acceptable for the size and scale of development proposed.

Figure D1 shows the proposed locations of the monitoring devices. These locations are considered to be representative of the construction noise, vibration and dust emissions that will prevail at NSRs.

The <u>dust monitoring systems</u> will comprise MCERTS (PM10) certified airborne particle monitors, or similar approved). The <u>noise monitoring systems</u> will comprise Class 1 (EC 61672 compliant) noise loggers, or similar approved. The <u>vibration monitoring systems</u> comprise Class 1 (DIN 45669 compliant) vibration meters, or similar approved. All of the systems will be configured to send email and/or text alerts to appropriate recipients (which should include the Contractor, Project Manager, Party Wall surveyors and acoustics consultant) in the event of any exceedances of the nominated dust, noise and vibration project limits, which are summarised in Table D1 below.

Monitoring Equipment	Limit	Reference Periods
Dust	250 μg m ⁻³ 15-minute mean for PM10 concentrations (trigger level) 350 μg m ⁻³ 15-minute mean for PM10 concentrations (action level)	0800-1800hrs Monday through Friday 0800-1300hrs on Saturdays
Noise	75 dBA LAeq,1hour (trigger level) 85 dBA LAeq,1hour (action level)	0800-1800hrs Monday through Friday 0800-1300hrs on Saturdays
Vibration	 1 mms⁻¹ PPV (trigger level for residential) 2 mms⁻¹ PPV (trigger level for commercial) 5 mms⁻¹ PPV (action level for residential) 10 mms⁻¹ PPV (action level for commercial) 	0800-1800hrs Monday through Friday 0800-1300hrs on Saturdays

Table D1 Nominated Construction Monitoring Limits







36. Please confirm that a Risk Assessment has been undertaken at planning application stage in line with the GLA policy. <u>The Control of Dust and Emissions During Demolition and Construction 2104 (SPG)</u>, 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.

Works are not due to commence until July/August 2019. Prior to commencing any works, the risk assessment will be undertaken in line with the GLA's control of dust and the emissions supplementary planning guidance.



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

The mitigation measures, stemming from the risk assessment and in particular the 'highly recommended' measures from the SPG will be delivered on site. This will be achieved by clear communication, a dust management plan, site management and monitoring and measures specific to demolition, earthworks, construction.

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 <u>SPG</u>. 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 number and location of monitors has been set out in to answer Question 35

39. Please provide details about how rodents, including <u>rats</u>, 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).

28 days prior to any development being carried out Oakdean Construction will submit a method statement on how the dispersal of rodents will be controlled during demolition works, in accordance with the Pest Minimisation Best Practices document. Prior to demolition all site drains will be sealed. Following demolition a specialist contractor will be appointed to survey the site and advise on rodent control should it be required. Periodic checks will be carried out and immediate action taken should it become necessary.

The site will be maintained in a clean, litter-free condition throughout the works.

Measures will be put in place to control pests or scavengers should they be noted during either site inspections or during the regular progress and works on site.

Other initiatives we to be implemented are as follows:

- No food waste left on site
- No eating or drinking on site other than in the canteen
- Traps to be installed



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

A full pre-demolition survey has not been carried out as the building is still occupied.

The relevant survey will be carried out when the building becomes vacant (approx.. July 2019) If notifiable asbestos is observed appropriate notices will be issued to the Local Authority and HSE prior to removal.

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.

Site specific Site Induction will be provided for operatives new to the site, which include site rules which cover among other things:

- Behaviour toward others on site and nearby including members of the public and neighbours
- Practical jokes including wolf whistling etc.
- Non use of Drugs and alcohol
- Designated Smoking areas
- PPE and safety issues
- Welfare facilities and use of
- Security issues
- Emergency procedures
- Good and bad practice

Oakdean Construction operate a 'Red Card' system. Any operatives found to be acting within a manner deemed unacceptable will be removed from site.

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

From 1st September 2015

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

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



From 1st September 2020

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

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

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

- a) Construction time period Anticipated July 2019 July 2021
- b) Is the development within the CAZ? (Y/N): Yes
- **c)** Will the NRMM with net power between 37kW and 560kW meet the standards outlined above? (Y/N): **Yes**
- d) Please provide evidence to demonstrate that all relevant machinery will be registered on the NRMM Register, including the site name under which it has been registered: Register has been set up as 12-14 Greville Street
- 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: We can confirm that log will be kept on site and will be available for inspection.
- f) Please confirm that records will be kept on site which details proof of emission limits, including legible photographs of individual engine plates for all equipment, and that this documentation will be made available to local authority officers as required:
 Confirmed

SYMBOL IS FOR INTERNAL USE



Agreement

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

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

Signed:

Date:

Print Name:

Position:

Please submit to: planningobligations@camden.gov.uk

End of form.



Appendix A

Site Logistics Plans

Construction Management Plan for: 12-14 Greville Street London EC1N 8SB Planning Ref: 2018/6367/P

Logistics Plan – Enabling Works – 4 weeks before start OAKDEAN 12-14 Greville Street EC1N 8SB



Logistics Plan – Demolition Phase Wks 1 to 25 OAKDEAN



Site Accommodation & Facade Retention.

12-14 Greville Street London EC1N 8SB



OAKDEAN CONSTRUCTION LIMITED

Logistics Plan – New Build Phase Wks 26 to 61 OAKDEAN 12-14 Greville Street EC1N 8SB



Logistics Plan – New Build Phase Wks 62 to 91 OAKDEAN 12-14 Greville Street EC1N 8SB



Logistics Plan – New Build Phase Wks 92 to end 12-14 Greville Street EC1N 8SB



Logistics Plan – Completion

12-14 Greville Street EC1N 8SB





Appendix B

Proposed Program of Works

Construction Management Plan for: 12-14 Greville Street London EC1N 8SB Planning Ref: 2018/6367/P



F:IP3100 Jobs\P3168 - Oakdean - Greville Street\1 Programmes\1.1 Master\08 - 190219\12-14 Greville St - Tender Programme - R8 - 190219.pp View - Bar Chart View Filter - None Sort - None
























Appendix C

Scaffold Drawings

Construction Management Plan for: 12-14 Greville Street London EC1N 8SB Planning Ref: 2018/6367/P

Demolition Scaffold Drawings

Construction Management Plan for: 12-14 Greville Street London EC1N 8SB Planning Ref: 2018/6367/P











New Build Scaffold Drawings

Construction Management Plan for: 12-14 Greville Street London EC1N 8SB Planning Ref: 2018/6367/P







