

Construction Management Plan

Final: 21 June 2022

Belgrove House



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Appendices

1. Logistics Plan
2. Cumulative Impact Area – Central London: Statement & Checklist
3. Example Newsletter
4. Construction Working Group Minutes
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Revisions & additional material

Please list all iterations here:

Date	Version	Produced by
08 March 2022	First Draft	Nathan Bryant - Real PM Limited
25 March 2022	Second Draft	Nathan Bryant - Real PM Limited
05 April 2022	Final Draft	Nathan Bryant - Real PM Limited
11 April 2022	Final Draft - Update	Nathan Bryant - Real PM Limited
26 April 2022	Final Update	Nathan Bryant - Real PM Limited
29 April 2022	Final Update	Nathan Bryant - Real PM Limited
17 June 2022	Final	Nathan Bryant - Real PM Limited
21 June 2022	Final	Nathan Bryant - Real PM Limited

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 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](#)."

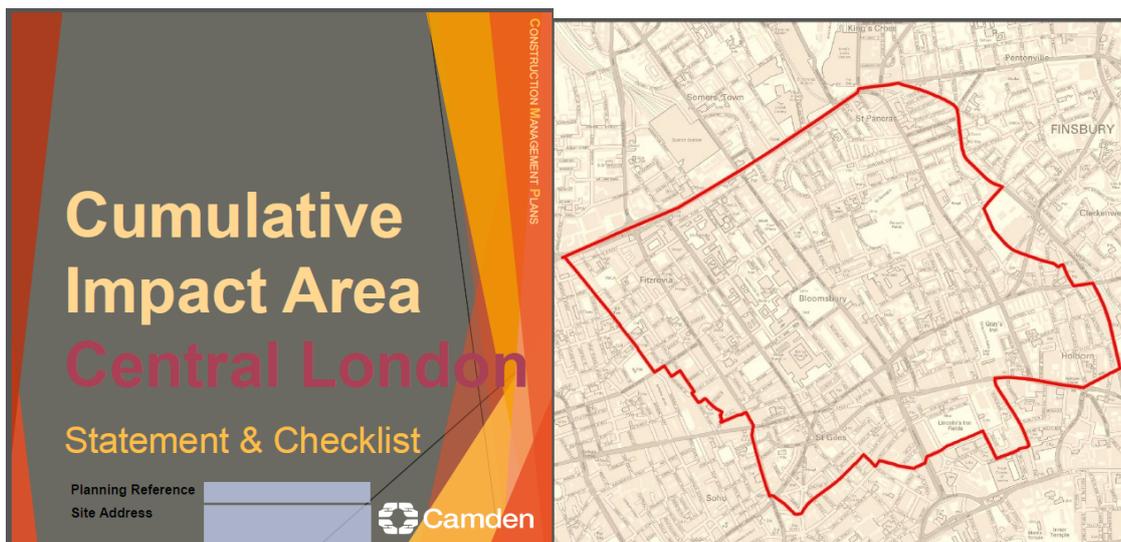
Please complete the questions below with additional sheets, drawings and plans as required. The boxes will expand to accommodate the information provided, so please provide as much information as is necessary. It is preferable if this document, and all additional documents, are completed electronically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

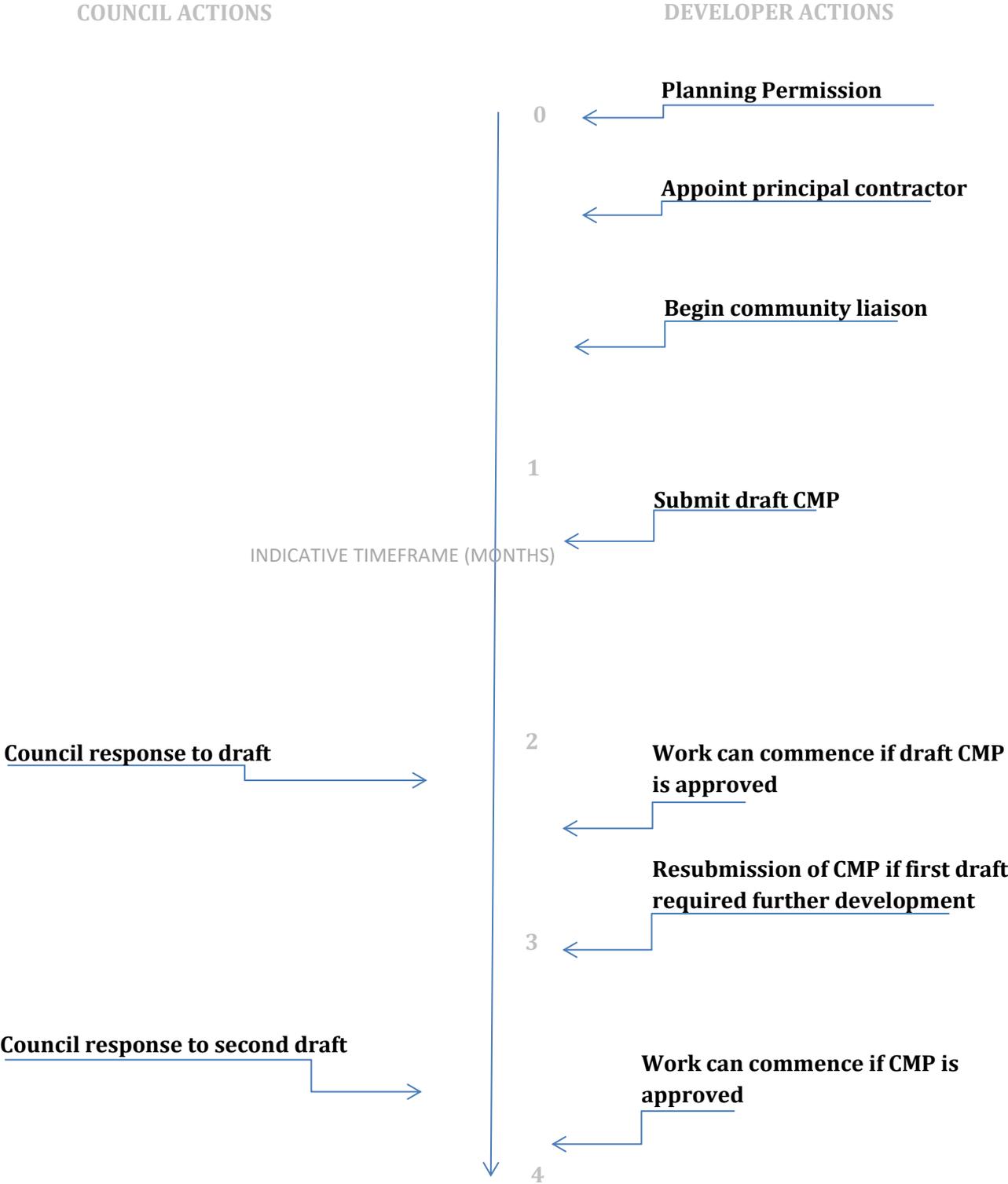
Revisions to this document may take place periodically.

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>



Timeframe



Contact

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

Address: Belgrove House
Belgrove Street,
London.
WC1H 8AA.

Planning reference number to which the CMP applies:
2020/3881/P.

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

Name: Real PM Limited - Nathan Bryant
Address: Derbyshire House, St Chad's Street, London. WC1H 8AG.
Email: nbryant@realpm.co.uk
Phone: Office - 020 7036 0800
Mobile - 07920 598 006

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.

NOTE - Applicant contact details provided at this stage – details of Contractors responsible person will be provided upon their appointment.

Name: Precis Advisory Limited – Peter Sockett
Address: 93 Park Lane, Mayfair, London, W1K 7TB
Email: psockett@precisadvisory.com
Phone: 07921 624 788

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.

NOTE - Applicant contact details provided at this stage – details of Contractors responsible person will be provided upon their appointment.

Name: Precis Advisory Limited – Peter Sockett
Address: 93 Park Lane, Mayfair, London, W1K 7TB
Email: psockett@precisadvisory.com
Phone: 07921 624 788

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.

NOTE - Applicant contact details provided at this stage – details of Contractors responsible person will be provided upon their appointment.

Name: Precis Advisory Limited – Peter Sockett
Address: 93 Park Lane, Mayfair, London, W1K 7TB
Email: psockett@precisadvisory.com
Phone: 07921 624 788

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 existing building known as Belgrove House is located Kings Cross, within the London Borough of Camden, located between Euston Road to the north and Argyle Square to the south.

The site itself is located in an area of mainly mixed residential and commercial properties and has a rich history. Argyle Square immediately to the south of the site is the Bloomsbury Square closest to King's Cross. Today the Square has a small central park, surrounded by a pedestrian path and planted borders. The buildings surrounding the Square are formal Georgian terraced properties, echoing the grander architectural designs of some of Bloomsbury's larger squares. The majority of the terraces are now occupied by small hotels.

The site is located within the King's Cross St Pancras Conservation Area, but the building is not listed.

Belgrove House occupies the entire urban block defined by Euston Road to the north, St Chad's Street and Argyle Square to the south, Belgrove Street to the west and Crestfield Street to the east. It is an unremarkable 3 storey high brick faced building with a flat roof and a basement. The building is in use as a storage facility (and has been for many years), and there are three low quality retail units at the northern end facing Euston Road



Figure 01 – Local Site Location Plan

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

This Construction Management Plan (CMP) has been prepared by Real PM Limited on behalf of Precis Advisory / Access Self Storage ('the Applicant') in support of an application for full planning permission for the comprehensive redevelopment of the existing building at Belgrove House, Belgrove Street, London, WC1H 8AA ('the Site') within the jurisdiction of London Borough of Camden Council ('LBC').

The development proposals, designed by Allford Hall Monaghan Morris ('AHMM') Architects, (herein referred to as 'the Proposed Development') consist of the following:

'Redevelopment of Belgrove House as a part 5 part 10 storey building with an innovative double skin facade for use as office and research and laboratory floorspace for the life sciences sector incorporating public access at ground floor level, café and retail floorspace an auditorium and a new step free entrance to Kings Cross LUL station in place of the two tube boxes on Euston Road together with a terrace at sixth floor level for use by tenants, public realm enhancements to Belgrove Street, Crestfield Street and St Chad's Street, cycle storage and facilities, refuse storage and other ancillary and associated works.'

This report sets out details of the works required to carry out the demolition/enabling and construction activities involved whilst outlining their anticipated timescales and identifying the environmental impact of the works and where practicable, proposals for how these are to be mitigated.

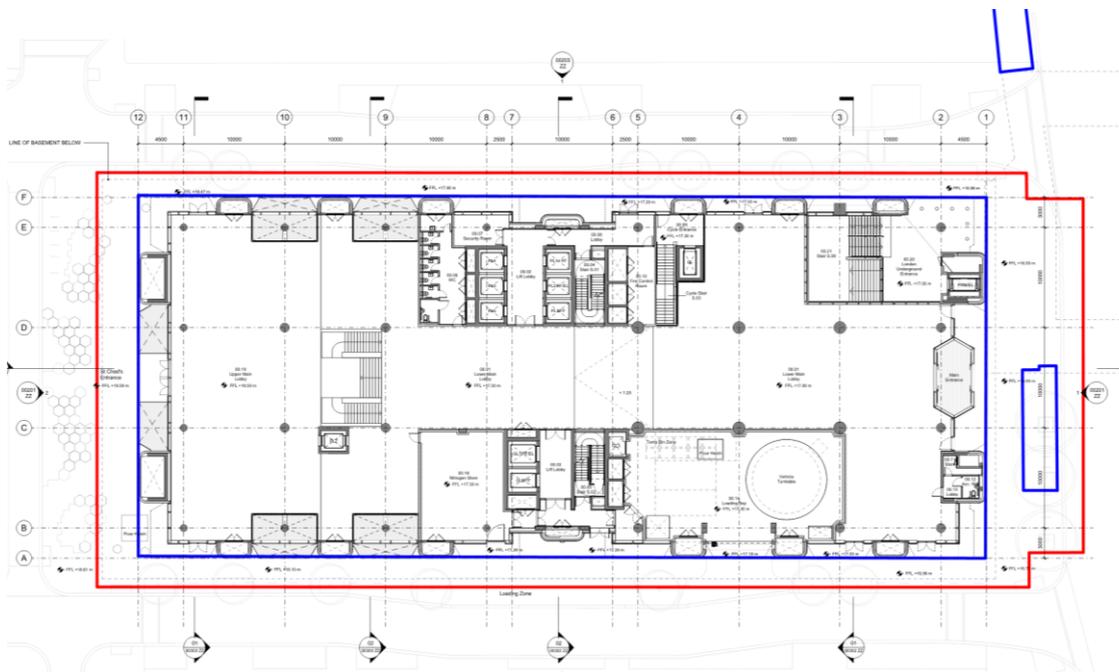


Figure 02 – Site Boundary

Main Issues and Challenges

General Location

The location of the site presents a number of logistical challenges in terms of vehicle access and egress, the site is positioned to the south of Euston Road on an island site and the local road network dictates primary access can only be achieved from Euston Road therefore vehicle routes have been identified to direct vehicles from Euston Road so they make a left turn to either Crestfield or Belgrove Street and exit the site back onto Euston Road also making a left turn.

Being located to the north of Argyle Square, a Georgian square with a central park and sports amenities several the adjoining streets are narrow and not suitable for access from the south of the site, as noted above and elsewhere in this document the vehicle routes identified direct vehicles from the TfL TLRN to avoid wherever possible the use of these streets and possible impact on the neighbours.

The surrounding area is comprised a mix of private and commercial residential properties including several hotels and commercial business premises so the approach to demolition and construction has been tailored to acknowledge this and demolition and construction techniques employed to mitigate the impact of noise, vibration and dust on the local area.

LUL Interface

The proposals involve the integration of a new pedestrian entrance steps and lift facilities to Kings Cross Underground station which requires a methodological approach to the demolition and new basement formation to ensure the works are not detrimental to the operation of the LUL asset, the works have been sequenced to maintain access to the station during the development and to avoid potential ground surcharge to the LUL tunnels that may be caused during the demolition and sub-structure works a sequence and methodology has been prepared that outlines this which will be further developed through agreement with LUL.

Vacant Possession

Vacant Possession of the site will be available in July 2022.

Site Set up and Enabling Works

The building will be secured with a minimum 2.4m high perimeter hoarding to the Euston Road, Belgrove Street, Argyle Street and St Chad Street elevations, and will be set an approximate dimension of 2.5m from the existing building facade to allow sufficient space for a perimeter demolition scaffold to be erected; any street furniture that the scaffold cannot accommodate will also be relocated at this time through prior approval with LBC Highways team and TfL.

As the external enabling works progress an internal asbestos refurbishment and demolition (R&D) survey will be undertaken and the results of which will determine the existence of asbestos containing materials (ACM's). Due to the age and type of construction of the building we have assumed there are ACMs within the building that will need to be removed prior to the soft strip commencing.

On completion of the asbestos removal works by a licensed carrier and issue of appropriate clearance certificate, the soft strip works can commence to strip the building back to its structure prior to demolition.

These works will be carried out using the existing lift shaft as vertical distribution and material cleared from the existing basement car park area.

Demolition (WORKS TO DEMOLISH SUPERSTRUCTURE TO GF SLAB LEVEL)

Prior to demolition the incoming services will be capped off to allow the safe demolition to take place.

The existing sub-station located at basement level will remain in its current location during the demolition works and will be suitably protected in line with UKPN guidelines prior to demolition works commencing.

Demolition will be carried out from top down using plant lifted onto the roof slab and will progressively be undertaken down to ground floor level. Roof mounted plant will be removed during the initial crane lift where possible.

The building will have a full scaffold installed on all perimeter faces to allow access and protection to all levels of the building. The scaffold will be fully sheeted to mitigate the escape of dust and noise to the surrounding areas.

At this stage, an electronic real time structural movement monitoring regime which incorporating trigger and action levels agreed with LUL and other 3rd parties will be installed to the existing basement structure. These will be remotely monitored through the demolition and sub-structure phases to ensure agreed trigger and action levels are not exceeded and appropriate hold points identified.

Demolition (cont'd)

The structural demolition will be carried out progressively top down using a number of machines including large excavators with hydraulic muncher attachments. The demolished structure will be crushed on site and retained to infill the basement areas above the LUL tunnels, where material is not suitable for crushing, this will be progressively removed from site in bulk skips with vehicles initially accessing site via the car park off Belgrove Street.

In advance of the ground floor slab removal the temporary sub-station will need to be commissioned and the changeover from the existing carried out to allow for its removal and the temporary sub-station installed; timings of which will be arranged with UKPN to ensure a changeover across a weekend.

Construction (INCLUDING DEMOLITION OF GROUND FLOOR SLAB AND BASEMENT LEVELS)

Once the demolition has been completed to the ground level slab, some temporary structural supports will need to be installed to allow the ground floor slab to be demolished while ensuring that the existing retaining walls do not collapse. The remaining ground floor and fit out slabs can then be removed. (Works will be carried out in Main works contract)

Following completion of the demolition and clearance of arising, the basement box (lining walls and basement slabs) will commence.

Once the basement box is complete, the horizontal loads are transferred to the basement slabs/walls and the temporary props can be removed.

During the basement excavation works the interface with the Kings Cross Underground entrance will be progressing and the link between the new basement and existing pedestrian tunnels made. The precise methodology of these activities is subject to ongoing discussions with Transport for London (TfL) and London Underground (LUL).

It is proposed (subject to final agreement with TfL/LUL) that the basement box will be fully formed and super structure underway before the break through is created to the TfL demise.

Superstructure

This is based on a high quality precast concrete frame with two reinforced concrete cores located to the east and west of the floor plates. Construction programme and methodology currently assumes a slip formed core.

The following sequence is proposed for the construction of the main frame:

Each floor is split into two halves that run in parallel. The overlapping starts when the first activity of Precast columns installation is complete in the first half, and we start with this activity in the second half. This construction sequence is driven by the hook time with a maximum of 2 "craned activities" running at the same time. The starting point of the following level is driven by the completion of the first half of the floor below.

Envelope

The pre-cast façade is proposed to be installed using two luffing jib cranes proposed with lifting from Crestfield Street and Belgrove Street.

The installation of the envelope initially comprising the precast elements is planned to start level by level once the superstructure has been completed up to Level 04 slab.

Once the precast elements of the envelope have been installed up to level 9, this will allow the installation of the internal layers of the façade to commence incorporating unitized and stick curtain walling elements together with the glazed louvred elements accessed in part from the floor slabs together with external scaffold/cherry picker access.

Fit Out – Risers, Lifts & Core Areas

The fit out works on the core are planned to start once the core is waterproofed.

Risers and lift shafts form part of the core construction. Once the cores are watertight, the risers and lifts installation can start.

Plant Rooms / Areas

There are two plant room areas in the building. One is located on the basement levels and the other at roof level. The installation works on the basement's plant room area will require to the core being completed to Level 05. The works to the upper-level plant commence once Level 10 roof slab and associated upstands are complete and waterproofed.

Final Clear Commissioning Period and Practical Completion

Final commissioning of the Shell and Core works will commence following electrical infrastructure Power On availability and will be completed during the final 4 months of the main construction works.

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).

Refer to Summary time slice Programme in Appendix A and accompanying logistics/phasing plans for further details.

High level summary of the main programme phases:

- Site Set Up Aug 2022 - Sept 2022
- Demolition Sept 2022 - Apr 2023
- Shell and Core works complete Dec 2025

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

The standard working hours for the site will comply with the Planning Conditions and are consistent with the requirements of 'Guide for Contractors in Camden' which for clarity are as follows;

- 8.00am to 6.00pm on Monday to Friday
- 8.00am to 1.00pm on Saturdays
- No working on Sundays or Public Holidays

Any requirement for work outside these hours will be by strict exception and subject to prior communication with sufficient notice and suitable application for extension Typical activities which may require this approach are:

- Tower crane erection/dismantling works,
- Mechanical Plant delivery,
- Utilities / Statutory Connections,
- Services shut down and emergency repairs.

These activities may require working outside the standard working hours and should the need arise, of working hours will be provided to local stakeholders / LB Camden.

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 necessary¹⁰. 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.).

Following a review of the local area a number of key receptors and potential constraints have been identified with respect to neighbours, businesses and other physical constraints surrounding the site.

These have been located on the local receptors plan below and where appropriate this section further details the approach regarding the constraints and the approach. In general terms the local residents, businesses and public interfaces are dealt with elsewhere in this document, the following sub-sections highlight the key receptors related directly to the existing building.

The site is located with the Cumulative Impact Area for Central London and an appropriate assessment has been completed and can be found in Appendix 1 pf this document.

Figure 03 below identifies potential receptors that are likely to be affected by the demolition and construction works proposed.

These are also tabulated to provide a summary of the receptor and the likely impacts.



Figure 03 – Potential Key Receptor Plan

Receptor Type	Receptor – see plan for [number/letter]	Potential Impacts from Construction Works
Offices		
	[6] Derbyshire House	15m from the nearest potential noise/dust source at the southwest boundary. There is the potential for impact from construction noise, dust and vibration and for occupants/visitors to be impacted by construction traffic
Residential		
	[8, B] St Chad's Street properties	20m from the nearest potential noise/dust source at the southwest boundary. There is the potential for impact from construction noise, dust and vibration and for residents to be impacted by construction traffic.
	[C, 6, 2] Belgrove Street properties incl Megaro Hotel, California Hotel and The Belgrove Hotel	15m from the nearest potential noise/dust source at the southwest boundary. There is the potential for impact from construction noise, dust and vibration and for occupants/visitors to be impacted by construction traffic
Restaurants, hotels		
	[4, 9, A] Crestfield Street properties	15m from the nearest potential noise/dust source on the eastern boundary. There is the potential for impact from construction noise, dust and vibration and for staff and users to be impacted by construction traffic.

Table 01 – Potential Key Receptors

McDonalds Restaurant Retail unit

There is an existing McDonalds Restaurant situated on the ground floor at the junction with Euston Road and Crestfield Street which will be relocated prior to works commencing.

UKPN Sub-Station

The existing site is served by a UKPN sub-station which located in the basement level, accessed via Belgrove Street.

A new supply will be provided from a local existing Primary Network Sub-station for the new development.

The existing sub-station will be retained and protected during the demolition and initial construction phases prior to being decommissioned following the provision of the new permanent supply.

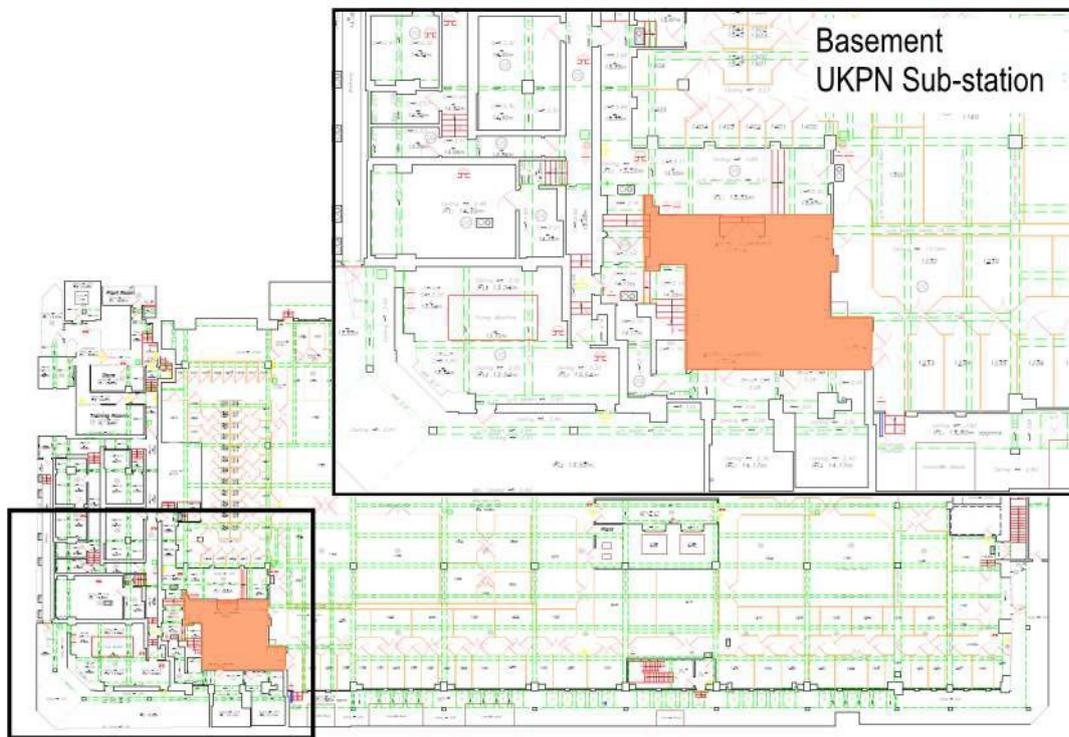


Figure 04 – Extract of UKPN plan denoting existing sub-station

There are currently a 21-unit and a 27-unit Santander cycle hire stations located on the western and eastern pavements of Belgrove Street and electric vehicle charging point that both need to be considered as part of the logistics approach prior to demolition and construction.

Through approval with Transport for London (TfL) and Camden Council Highways we are proposing that both the existing arrangements are temporarily relocated to Argyle Street, in order to facilitate safe vehicle access around the site during the significant demolition and construction activities taking place at the site perimeter and the location of the temporary welfare and accommodation arrangements.

The working assumption at this stage is that at the appropriate stage in the construction process the cycle hire stations will be relocated back to their original position on Belgrove Street.

The electric vehicle charging bay will need to be relocated to its permanent location, which at this stage is likely to be Argyle Square.



Figure 05 – Extract of UKPN plan denoting existing sub-station

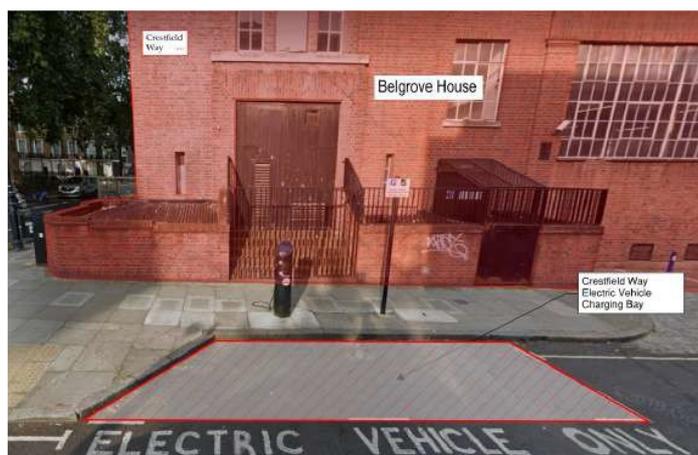


Figure 06 – Electric charging bay to Crestfield Street

As part of the redevelopment of Belgrove House the entrances on the southern side of Euston Road are to be combined into a single step free entrance that is proposed to be located on the northwest corner of the development at ground floor level.

There are currently two separate pedestrian entrance stairs which are accessed from the southern pavement of Euston Road to the east and west of Belgrove Street. As indicated in the Figure below they provide pedestrian link (highlighted in blue) to the underpass running below the Euston Road.

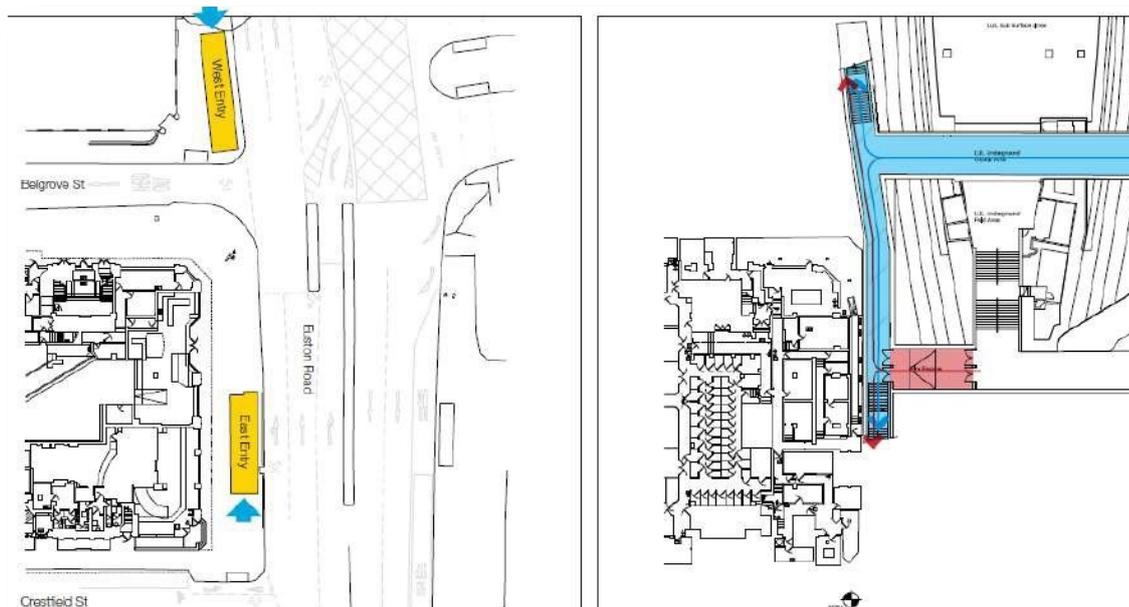


Figure 07 – Existing London Underground - Ground Floor and Basement plans

Negotiations are underway with London Underground Limited (LUL) and Transport for London (TfL) to agree the details of the pedestrian and associated fire escape link and this document includes programme details for the construction of the link that have been presented to date.



Figure 08 – Proposed London Underground link

The plan above illustrates the proposed step free access to the southern underground ticket hall.

London Underground Tunnel Interfaces and Approvals

The west and eastbound Piccadilly line and Kings Cross Underground entrance tunnels are located to the north of the development, with the Piccadilly Line tunnel running directly beneath the northwest corner of the site and the Sub Surface Lines also running in close proximity to the site.

To ensure the location of these London Underground assets are protected throughout the demolition and construction activities, design works are currently ongoing to develop options for a structural solution and installation methodology that respects the line, level and condition of the existing LUL tunnels and associated exclusion zones which will be reviewed with LUL and TfL to ensure the necessary approvals are in place prior to works commencing.

As part of the design, a review of the potential movement impacts will be assessed through a ground movement assessment and approval sought from London Underground Limited (LUL) to implement an electronic real time movement and vibration monitoring and reporting regime for the duration of the demolition works that would be extended through the construction period into post completion monitoring.



Figure 09 – Extract of site constraint plan indicating location of Piccadilly Line tunnels and Kings Cross station entrance tunnels

Typical scope of works / services of the Monitoring Contractor will comprise:

- *Design, supply, installation, commissioning, calibration, testing, operation, cleaning,*
- *Maintenance, decommissioning, and removal of monitoring infrastructure (in its entirety).*
- *Real time monitoring is required within the Crossrail tunnels.*
- *The analysis, interpretation, and factual reporting of the results.*
- *All the monitoring data is to be held in a single web access database.*
- *Liaison with LUL, the Client, the Contractor and other interested parties will be required as necessary.*
- *Submission of documentation.*
- *Full equipment maintenance.*
- *Liaison with LUL as required to gain agreement for installation of the monitoring equipment (method statements, risk assessment, fixing details etc.).*
- *Attend monitoring meetings.*
- *Produce Factual Background Monitoring Reports, Factual Monitoring Reports and*
- *Final Monitoring Reports.*
- *Comply with the LUL standard G0023 Infrastructure protection – special conditions for outside parties working on or near the railway and associated standards.*

The monitoring regime incorporate a system of trigger levels; green, amber, red and black as follows;

- *The ‘Green’ trigger level would represent an acceptable amount of movement which would usually exceed the anticipated movement but provide a warning of movement progression. The green trigger level will be established using the anticipated ground movements from the development as well as the realistic thermal/seasonal variant.*
- *The ‘Amber’ levels would require a review of the construction activities and proposals necessary to prevent further movement. This would entail activating the Monitoring Action Plan (MAP).*
- *The ‘red’ trigger level would require construction activities to be stopped in the vicinity of the asset and measures undertaken to stop any movement causing possible damage to the asset. This would entail activating the Monitoring Action Plan (MAP)*
- *The ‘black’ trigger level would be associated with continual and increasing movements after a ‘red’ trigger level is breached and requires all construction activities to be stopped until the cause of the trigger breach has been satisfactorily resolved. It may also be necessary to stop LUL trains.*

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.

As part of the consultation on the draft CMP for Belgrove House, the team emailed key stakeholders and neighbours who engaged in the pre-application consultation directly, notifying them of the consultation and inviting them to join a Construction Working Group. Those invited to take part in the Construction Working Group included:

- King's Cross ward councillors
- Director of G&A Gorrara Ltd and owner of the three buildings on Crestfield St facing the development
- Bloomsbury Residents Action Group
- Friends of Argyle Square
- King's Cross Mosque
- Camden Age UK
- Megaro Hotel Group
- King's Cross Brunswick Neighbourhood Association
- Bloomsbury Conservation Area Advisory Committee
- King's Cross Conservation Area Advisory Committee
- Bloomsbury Association
- Argyle Primary School
- The Standard Hotel

A community newsletter providing an update on the project, timescales for works to start on site, and an overview of the draft Construction Management Plan (CMP) was distributed to 7,486 local residents and businesses on Saturday 21 May. A copy of the newsletter has been included within the appendices.

A copy of the full draft CMP was available on the project website Belgroveacorn.co.uk – with a link promoted to local residents and businesses within the distribution area via the community newsletter and shared with Construction Working Group members via an email sent on Tuesday 24 May. Local residents, businesses and representatives were encouraged to provide feedback through a variety of means, including via freephone, email and our online form.

A Construction Working Group meeting took place on Tuesday 31 May – this was attended by the following local representatives:

- Cllr Jonathan Simpson, King's Cross ward
- Debbie Radcliffe, BRAG & BCAAC
- Tony Megaro, local business & hotel owner
- The Standard Hotel
- Shofi Muhammod, KCBNA

Minutes of this meeting were shared with members and uploaded to the project website Belgroveacorn.co.uk along with a copy of the presentation – these are included in the appendices.

Feedback received from the consultation included:

- Upkeep of tight standards on air pollution both (air and noise)
- Avoid jamming up of traffic which then has the net result of pumping more pollution alongside roads like Acton and Swinton Street, Pentonville Rise and Gray's Inn Road
- Proper consultation with TFL on how traffic can be diverted and kept out of affected streets
- Junctions around the building such as the zebra crossing at Acton Street should be absolutely safe for pedestrians but also cyclists

Feedback was incorporated into an amended draft CMP, and it was reshared with the Construction Working Group members via email for further comments and uploaded to the project website Belgroveacorn.co.uk for further comments ahead of submission to the London Borough of Camden.

An online survey on the consultation website – Belgroveacorn.co.uk; Freephone number – 0800 307 7614 and a dedicated email address belgroveacorn@londoncommunications.co.uk

Details of the proposed ongoing consultation and CWG can be found in the response to Q.12.

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.

Community Liaison and ongoing consultation on this document will take the form of a monthly newsletters, a draft of which is provided in Appendix 3 of this document, regular community meetings, a dedicated website, telephone number 0800 307 7614 and email address belgrovehouse@londoncommunications.co.uk for the project.

These will provide a forum for the community and project to communicate around upcoming activities, concerns and how they may be addressed. These forums will be led by the Construction Working Group (CWG) who it is proposed will consist of the following;

- Ward councillors.
- Professor Michael Carley, close neighbour.
- Robert Gorrara, Director of G&A Gorrara Ltd and owner of the three buildings on Crestfield St facing the development.
- Bloomsbury Residents Action Group.
- Friends of Argyle Square.
- King's Cross Mosque.
- Camden Age UK.
- Megaro Hotel Group.
- King's Cross Brunswick Neighbourhood Association.
- King's Cross Conservation and Bloomsbury Conservation Area Advisory Committees
- Area Advisory Committee.
- Bloomsbury Association.
- Argyle Primary School.
- The Standard Hotel; St Pancras Chambers.
- King's Cross & St Pancras Railway Stations / TfL.

The frequency of CWG meetings will be at least monthly and be reflective of the sensitivity of the works at key stages through the programme, with the first meeting held online as requested by CWG members.

A member of the Principal Contractor's Project Staff will be appointed as Liaison Officer; they will work with the Client's Development team, local residents, the business community, London Borough of Camden. They will always be available and be a dedicated point of contact. Posters will be displayed on the site boundary advising the following contractors' names, the name of your liaison officer, and a contact number and address for complaints, details of the Considerate Constructors Scheme registration, a 24hr contact number and confirmation that the site is working to the standards set out in the London Borough of Camden's Minimum Requirements for Building/Construction/Demolition Sites. The Liaison Officer will be responsible for the logging of complaints and ensuring appropriate action is taken and recorded along with steps to avoid recurrence.

The specific liaison measures to be implemented by the Principal Contractor will include:

- Plan & inform on the nature and timing of all main site activities relating to the CoCP, particularly the demolition, new structure and external envelope.
- All site construction staff will be made aware of the requirements of the code and will be made responsible for its implementation.
- Sufficiently in advance of works, the Principal Contractor will prepare a full programme of works, which will be maintained in a current format for the duration of the works and will be available for inspection when required. This will include an outline method statement for works and any activities affecting the highway.
- Detailed method statements for specific/special activities affecting the environs of the site in line with the principle identified in this report. Temporary works, removal of demolition & excavation material, concrete pours, deliveries of plant.
- Details of site traffic movements showing the projected number of vehicles, what is being delivered, when peaks in activities occur, traffic marshalling arrangements, holding areas, etc.
- Routes to site for deliveries.
- A Health and Safety Plan.

The Principal Contractor will provide an information and reporting telephone 'Hot Line', staffed during working hours. Information on this facility shall be prominently displayed on site hoardings. The Contractor's nominated person will attend monthly reviews with Camden Council's Environmental Inspectorate, or otherwise as requested.

At least 2 weeks before any work commences, leaflets will be sent to the local residential and commercial community advising the start and likely completion dates for the works and providing the name and contact details for the liaison officer. During the progress of the works regular updates will be sent out, particularly should there be any change in Liaison Officer or if works have been agreed by Camden to be undertaken outside normal hours.

In the case of work required in response to an emergency, Camden Council, and all neighbours, will be advised as soon as reasonably practicable that emergency work is taking place. Potentially affected occupiers will also be notified of the 'hotline' number, which will operate during working hours.

Should there be the need to undertake works outside of normal hours that may disturb residents this will be notified to Camden Council Public Protection Division a minimum of 7 days in advance for approval.

13. Considerate Constructors Scheme (CCS) registration

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.

At this stage it is not possible to provide Considerate Constructors Scheme (CCS) registration, but this will be provided on appointment of the Principal Contractors for Demolition and Main Construction Works.

It will be a requirement that the appointed Contractor enrolls the project in the "Considerate Constructors Scheme" (CCS) and that the project will be managed in a manner to achieve a high score of 41/50 or higher equivalent to attaining 'Exceptional'.

The name and contact details of the Principal Contractors Project Manager will be provided on appointment and always be displayed on the CCS poster located at the entrance of the site.

We can confirm the documents 'Guide for Contractors Working in Camden' has been read and understood and that the appointed Contractor/s will be required to abide by its requirements.

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.

The project is located within the Central London Cumulative Impact Area and as such a Cumulative Impact Assessment has been prepared and can be found in Appendix 3.

Following a review of the Planning Portal we are not aware of any existing or anticipated construction sites in the local area that will impact or be impacted by the proposed works.

Should any potential site be identified appropriate mitigation measures will be identified and implemented with this document.

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:

The Principal Contractors details will be confirmed when appointed.

16. Please submit the proposed method for checking operational, vehicle and driver compliance with the CLOCS Standard throughout the duration of the contract.

The appointed Principal Contractor and all Trade Contractors will have the requirement to abide by, comply and adhere to the CLOCS Standards for construction logistics throughout the duration of the contract. This sets out a set of standards for items such as traffic routing; warning signage; side underrun protection; blind-spot minimisation; vehicle maneuvering warnings; driver training, development and licensing; collision reporting; control of site access and egress; vehicle loading and unloading on site.

Each requirement has been developed to reduce the risk of a collision between heavy goods vehicles in the construction sector and vulnerable road users such as cyclists and pedestrians. The Standard sets the detailed minimum requirements to create a consistent baseline but is written in a way that encourages road safety to be managed ever more rigorously as new best practice emerges. The CLOCS Standard is a key step to demonstrate the commitment of construction logistics industry organisations to improve road safety throughout the supply chain.

The Principal Contractor will have arranged for vehicles to be checked on entering the site and to take the appropriate action under the contract.

The Principal Contractor will produce a plan and / or process for complying with the contract. CLOCS key checks will be carried out randomly onto incoming vehicles, as per the CLOCS Compliance checklist.

It will also be envisaged to work with the Considerate Constructors Scheme (CCS) in order to ensure compliance to the CLOCS standards.

All drivers of vehicles over 3.5t will have undertaken Safe Urban Driver training, and that all vehicles over 3.5t will be fitted with blind spot minimisation equipment (Fresnel lens/CCTV) and audible left turn alerts.

Operators must be FORS accredited. Where accredited to FORS Bronze level, written assurances must be sought that ensure that the above requirements are met.

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:

On behalf of the Client/Development Team we confirm that **ALL** Contractors and suppliers engaged on this Development will abide by the specific requirements of the latest CLOCS Standard.

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 primary construction access and egress route to the site for demolition and construction HGVs has been considered carefully to reduce the impact of vehicle movements on the local community and road network alike.

Following review of the physical location of access nodes to the site, potential routes during the demolition and construction stage have been identified.

Following this assessment and review of the local traffic movements and associated survey data, we have identified vehicle access and egress routes from the north and south to ensure efficient links back to the Transport for London Road Network (TLRN).

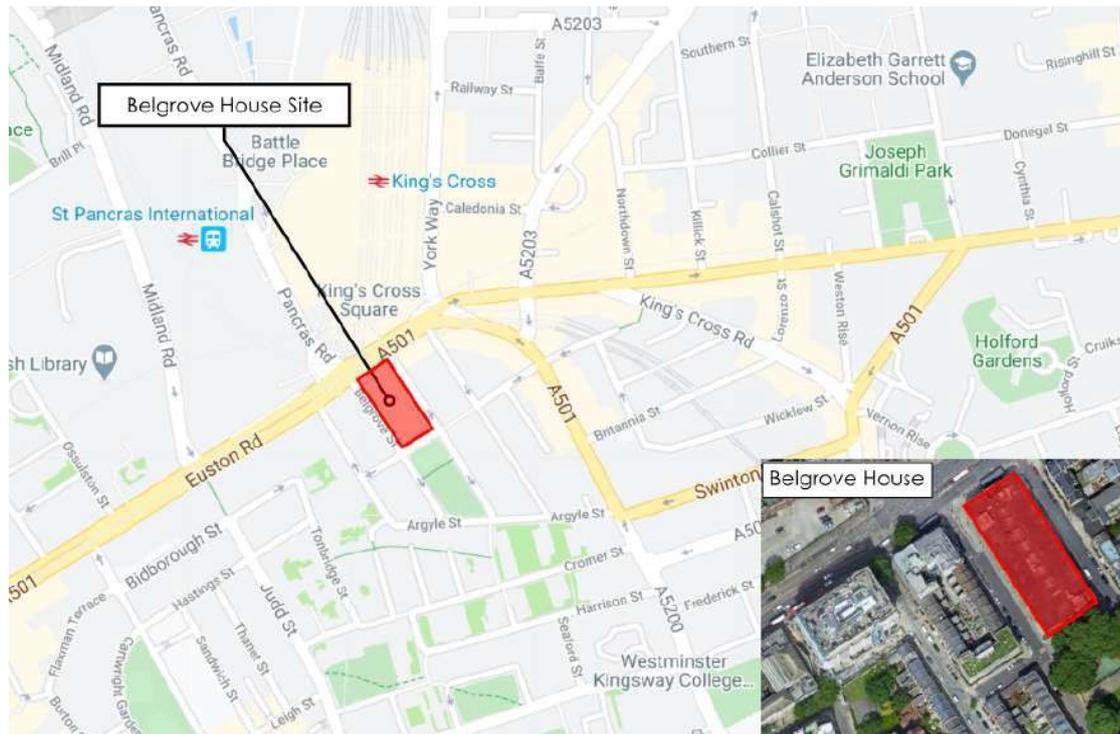


Figure 10 – Wider site location plan

Due to the restricted urban nature of the site and local road arrangements access from the Euston Road to the west avoiding a right turn, is not proposed however vehicles are directed to arrive from the east making a left turn into either Crestfield Street or Belgrove Street, with the development occupying an island there is good access available from the 3 streets bounding the site and these are the focus for the routing to be used for construction vehicle access and egress.

The primary access and egress routes detailed below identify the optimum route for not only HGVs, but all other vehicle types arriving and leaving the site.

Access for HGV traffic (shown green dotted below).

This route directs all HGV traffic approaching from the west bound carriageway of Pentonville Road A501 which forms part of the TfL TLRN.

- From Pentonville Road A501 progress west
- Bear left then right into Swinton Street
- Join Gray's Inn Road with right turn and merge into Euston Road west
- Left into Crestfield Street or Belgrave Street (*Marshalled entry from Euston Road*)
- Progress along Crestfield Street and arrive at vehicle pit lane

(Arriving traffic will be marshal controlled by Main Contractor under a Temporary Traffic Order or similar highways access licence).

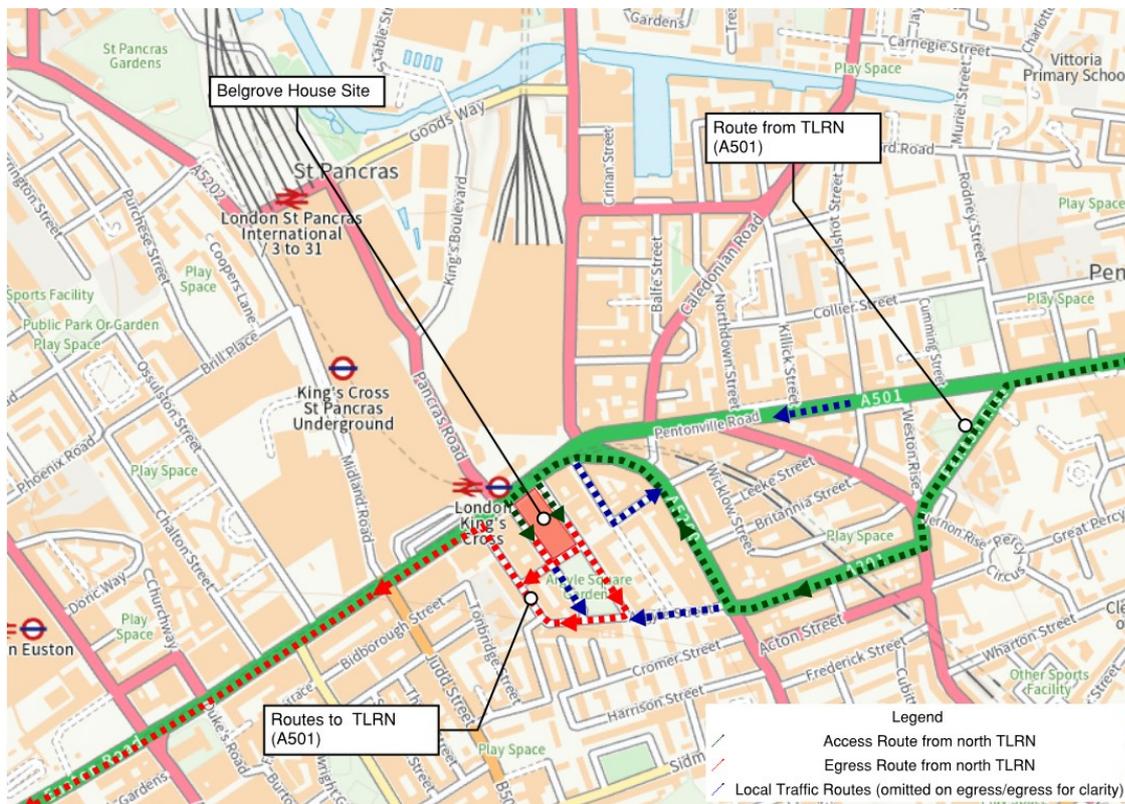


Figure 11 – HGV Construction access and egress routes

Egress for HGV traffic (shown red dotted above).

This route directs all HGV traffic leaving the site to the west bound carriageway of A501 Euston Road, which forms part of the TfL TLRN.

- Leave pit lane on Crestfield Street or Belgrave Street;
- Continue south into Argyle Square
- Right into Argyle Street
- Left onto Euston Road (*Marshalled entry onto Euston Rd*)

As indicated in the following sections vehicles accessing the site will be processed on both Belgrave and Crestfield Street, the above routing focusses on the route to and from Crestfield Street with the route from Belgrave covering the same route.

Congestion Charging and Ultra Low Emission Zones

The development lies within both the London Congestion Charging and Ultra Low Emission Zones, situated to the northern boundary of the zones at its interface with Euston Road therefore construction vehicles delivering to and from the site will require to comply with their requirements.

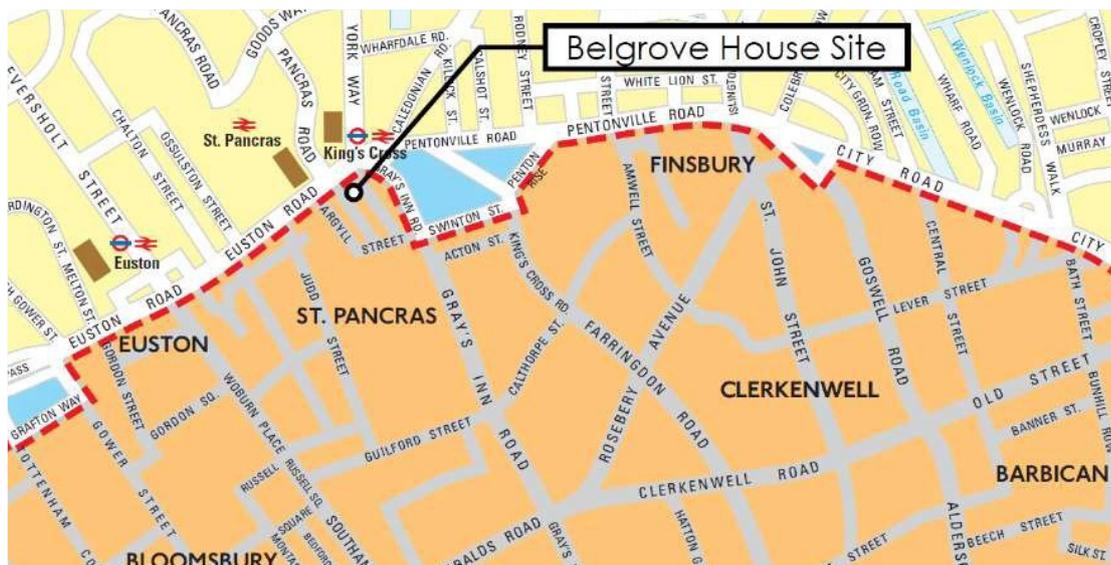


Figure 12 – Site location in relation to the Tfl Congestion Charging Zone

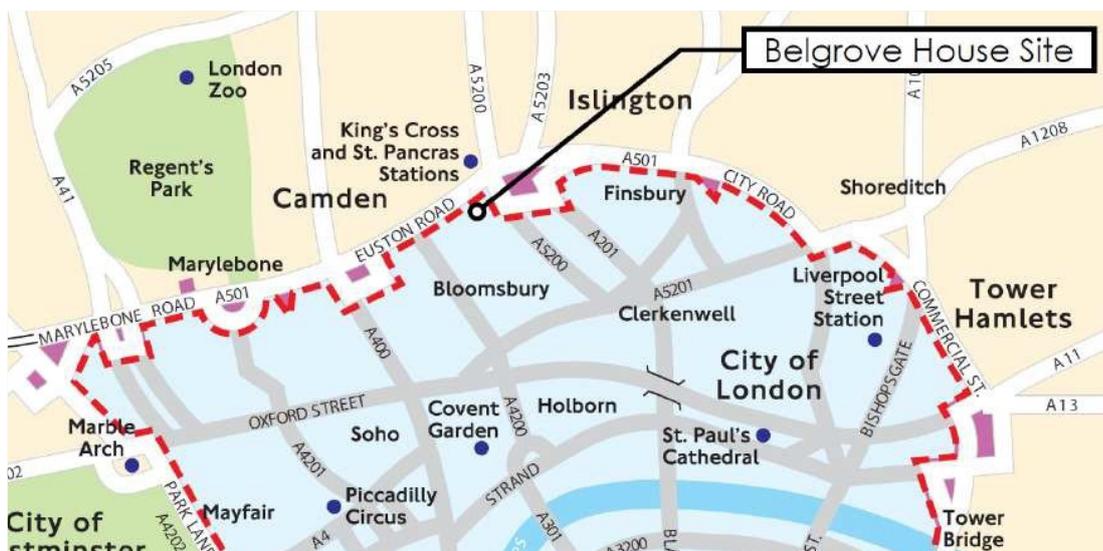


Figure 13 – Site location in relation to the Ultra-Low Emission Zone

General Access

The extract below from the logistics plan within Section 5.0 indicates the overall location of the site, existing buildings together with construction vehicle access provided from Crestfield to the east, Belgrove Street to the west and St Chad's Street to the south. Sections 3.0 and 5.0 develop these details further and provide an overview of the proposed logistics.

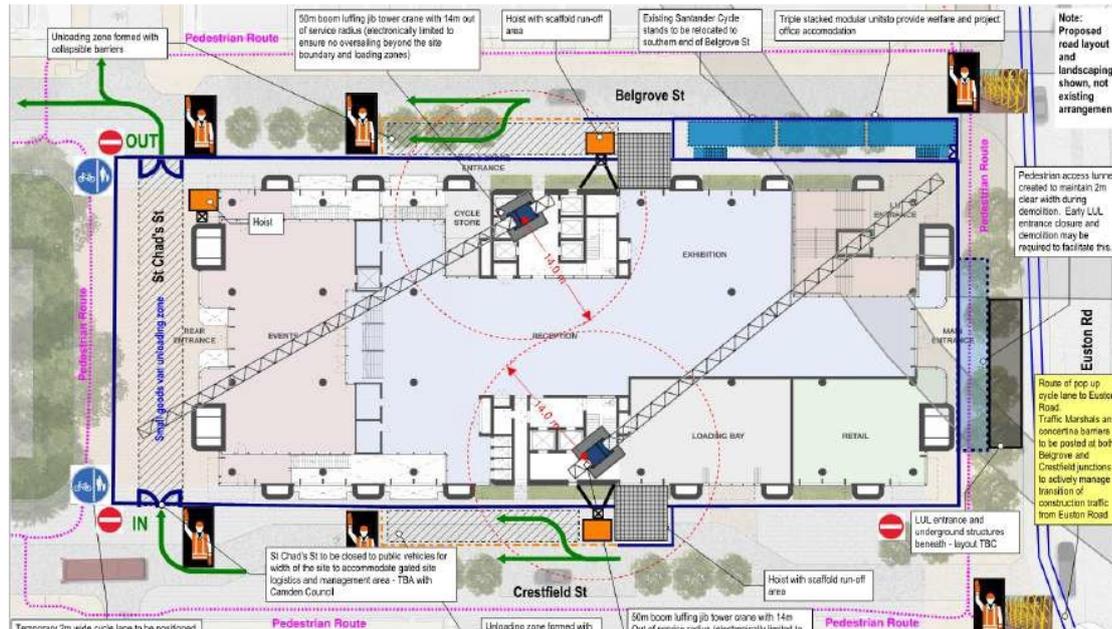


Figure 14 – Logistics Plan Extract

Pedestrian and Cyclist Access

It is acknowledged that construction traffic poses particular risks with respect to pedestrian and cyclist safety and therefore their access routes around the site will be maintained and managed throughout the project.

With the perimeter hoardings being located broadly at the proposed kerb edge to the pavements to Belgrove Street and Crestfield Place it is proposed, through consultation with LBC Highways Department, to close the pavements in these locations for the majority of the programme.

Space Syntax have carried out pedestrian and cyclist surveys to the surrounding highway and specifically those on the curtilage of the site, which suggest that the majority of the pedestrians use the opposite footpaths of Belgrove and Crestfield Street to access Argyle Square to the north.

To facilitate safe pedestrian access during the works it is proposed that temporary signage will be installed to Belgrove Street and Crestfield Street to facilitate the closure of the west and east perimeters of the site to ensure safe passage of pedestrians and cyclists. As detailed elsewhere in the document, the junction of Euston Road with Crestfield and Belgrove Street requires careful attention, therefore special vehicle access measures will be implemented.

Logistics Principles

The logistics plans within this document have been developed using the constraints as guiding principles and are intended to illustrate access to and from the site during the sub/super-structure and envelope and fit out phases of the project.

The logistic plan included within the document details the vehicle access and egress locations during the various phases of the build and identify the tower crane locations and illustrate the pick-up locations necessary for the construction of the basement and super-structures.

Logistics outline proposals

Details of the logistics arrangements are illustrated within Section 5.0 of this document with the following indicating the proposed outline of how the project will be established.

The following sections cover the specifics around safe construction vehicle access to Crestfield Street, Belgrove Street and St Chad's Street from Euston Road.

Euston Road

The Euston Road pedestrian walkway to the north the of the development will remain open to the public in both directions, at the interface with the underground entrance this will be facilitated through the use of pedestrian walkway that spans the current footway and scaffold installed above. During the enabling phase of the project a solid 2.4m high hoarding will be erected to secure the site and installation of the external demolition scaffold which will reduce the existing pavement width to approximately 2m on this elevation where it interfaces with the existing underground entrance box.

As noted in Section 2.0 the junctions of Crestfield Street and Belgrove Street will be used as the main access from Euston Road to the site have been identified as high risk and as such require special consideration.

All heavy goods vehicles undertaking trips to and from the site will be physically marshalled off Euston Road with concertina barriers deployed either side of the junction and extended to temporarily hold pedestrians and cyclists using the west bound lane of the temporary cycle lane. To ensure a smooth transition to the site, notification of arriving vehicles will be achieved using the vehicle logging and booking system with Site Access Marshals deployed at the junctions with Crestfield Street and Belgrove for vehicles arriving at the respective streets and Argyle Street for vehicles leaving the site and re-joining Euston Road north.

As noted elsewhere in this document, compliance with the highest levels of training and compliance with the latest road safety schemes and initiatives will be implemented by the successful contractor.

The approach proposed to Euston Road will also enable the interface with temporary cycle lane to Euston Road to be effectively managed, particularly at morning and evening peak times.

Crestfield Street

This will be the location for the first of the two vehicle delivery zones for the project and provide pick up location for the proposed tower cranes.

Vehicle access to the building will take place using a temporary pit lane located to the west kerb line adjacent to the existing building. The pit lane will be sized to allow two parked HGV's to be unloaded using the tower crane positioned within the site.

As noted previously this will require the relocation of the existing electric vehicle charging point to the north and vehicle loading bays at the junction with Euston Road which will need to be temporarily relocated to the opposite side of the street.

Belgrove Street

This will be the location for the second of the two primary vehicle delivery zones for the project and provide pick up location for the proposed tower cranes.

Vehicle access to the building will take place using a temporary pit lane located to the east kerb line adjacent to the existing building. The pit lane will be sized to allow two parked HGV's to be unloaded using the tower crane positioned within the site.

As noted previously this will require the temporary relocation of the existing cycle hire station, which at this stage we understand is subject to agreement with TfL but likely to its permanent location to the south of the street.

The space provided by the removal of the cycle stands will be used to locate triple stacked modular cabins which will house the main and sub-contractor's offices, toilet and canteen facilities accessed

As part of the proposals, the section of St. Chad's Street between Crestfield and Belgrove Street will be closed to public motor vehicles, road users other than pedestrians and cyclists wishing to travel from east to west will be directed to use Argyle Square and Argyle Street to gain access back to Euston Road. The space provided by the closure of this section of the street will be used to locate off street vehicle unloading location smaller 'white van type deliveries' that will be required through the project.

Due to the extent of the canopies to the trees located within Argyle Square it is not envisaged that the tower crane will pick up from this location, instead materials will be distributed from this location via the hoist positioned on the southwest corner.

To ensure pedestrian and cycle route along St Chad's Street is maintained, the east-west hoarding adjacent to Argyle Square will be located to maintain the existing footpath and provide a 2m cycle lane.

It should be noted that, through prior approval from Camden Council, the existing motorcycle parking bay and 2 vehicle parking bays would need to be temporarily suspended to achieve this.

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.

The vehicle routes defined within this document will be discussed and agreed with suppliers and Contractors in advance at the pre-start meeting, and the agreed traffic routing included in all Trade Contracts and material supply orders.

Any changes to the plan will be communicated through further meetings to ensure that the use of residential and minor roads is prevented.

General Vehicle Movements

In order to minimise the impact, the increase on local construction traffic will have on the local area; all vehicle movements both in and out of the site will be managed and monitored by the Logistics Manager who will ensure vehicles do not, other than in the defined pit lanes, wait on Belgrove Street, Crestfield Street, St Chad's Street, Argyle Street or other local highways, at any time.

All vehicle movements to and from the site will be subject to a delivery booking system managed by the contractor's Logistics and Neighbour Liaison Manager and this system will incorporate any special events for the neighbours. The system will also ensure that material deliveries are rationalised to reduce vehicle movements to the site generally. To ensure bottle necks and waiting vehicles are avoided a system will be implemented to ensure that each delivery calls into the site.

The appointed Contractor will have a proven track record for developments for this nature and operate an online booking in system for ALL deliveries and material removal from the site.

A detailed heavy goods vehicle analysis has been undertaken and details can be found within the programme section of this report. Based upon the resource loading of the programme, we estimate daily peak vehicle numbers to reach approximately 75 for a limited period of time during the main contract basement excavation and formation works, with this dropping to an average of 25 per day across the remaining programme period.

One vehicle movement relating to a single vehicle entering and existing the site via the previously noted primary HGV routes.

To ensure that all vehicles leaving the site are suitably cleaned at the key demolition and sub-structure stages of the programme, a dedicated logistics team will be in place to wash down vehicles prior to re-entry to the highway. This team will use jet-wash lances at a specific 'wash down area' to prepare the vehicles before they enter the highway together with regular road sweeper visits to sweep and wash the primary egress route local to the site.

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

In line with LBC requirements construction vehicle movements that cannot be accommodated on site will be restricted to the hours of 9.30am to 4.30pm on weekdays and between 8.00am and 1.00pm on Saturdays.

Deliveries to site will occur within the standard working hours (8am until 6pm).

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

Vehicle access gates will be fully manned by competent traffic marshals at all times. Traffic will be stopped by the use of expanding concertina barriers and all areas in front of site gates kept safe when pedestrian traffic and cyclists are passing.

An analysis of the likely construction vehicles has been undertaken and details of the peak vehicles expected throughout the programme, classified by the following weight categories can be found within the Appendices;

> 7.5te

> 3.5-7.5te

< 3.5te

The table over highlights the potential frequency of vehicles by type;

Table 02 – Estimated Construction Vehicle Frequencies

Construction Vehicle Type	Frequency	Comment
Tipper Lorry	Up to 75 daily	Peak for limited periods during demolition, excavation and sub-structure works.
Van	Up to 15 daily	Delivery of small materials, plant, etc.
Low Loader	Occasional	Visits for delivery and collection of larger items of plant.
Mobile Crane	Occasional	Visits for erection and dismantle of tower cranes. Will be site based for some periods of heavy lifting for structural steel and pre-cast concrete elements beyond the tower crane capacities.
Articulated Lorry	Infrequent - 1 to 5 per week	Will be used for delivery of some materials including curtain walling and prefab/precast elements
Flat Bed Lorry	Frequent 1 to 3 per day	Will be used for delivery and removal of initial plant and materials
Grab Lorry	Occasional	Collection of arisings from excavations where not applicable by standard tipper lorry
Concrete Pump	Infrequent 1 to 5 per week	Will be used for concrete placement where static pumps are not practicable
Concrete Truck	15 to 20 per day but not every day	During sub and super structure concrete works
Skip Lorry	Frequent 6yds up to 5 per week, 40 yards up to 2 per week	General segregated waste removal

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.

We are not aware of any other proposed developments in the local area and timescales that would require consideration at this stage.

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

At this stage detailed swept paths have not been commissioned as we believe the primary routes proposed that direct left turns from Euston Road onto Crestfield and Belgrove Street therefore avoid a right turn from Euston Road, are suitable for heavy goods vehicle use however plans for the key junctions at St Chad's Street and Argyle Square will be provided.

Going forward swept paths of the proposed routes from Euston Road to site and back onto Euston Road will also be provided for the proposed construction vehicle routing detailed within this document.

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 site's location and routing proposed, we have not proposed any off-site vehicle holding areas at this stage, but this will be reviewed, and locations proposed for agreement with LBC by the successful contractor should this be deemed necessary.

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.

Due to the location of the site, it is not possible to undertake deliveries by rail or water.

The use of a consolidation centre will be considered once the design has been developed further. It is likely there will be pre-cast and prefabricated elements comprising façade and structural elements together with internal services and fit-out components so it would be prudent to consider and review.

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).

As noted elsewhere in this document, the GLA 'The Control of Dust and Emissions during Construction and Demolition SPG 8'-recommended mitigation measures will be implemented and delivered on this site.

All delivery vehicles will be directed to switch off their engines whilst unloading at the site.

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 logistics plan within Appendix 1 for detail of proposed access/egress to/from the site.

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 following measures will be adopted around the perimeter of the project for security and protection purposes:

- All site access will be well lit, clean, robust level hard standings, well signed and controlled by experienced gatemen. Doors and gates will always be closed when not providing access.
- Vehicle movement on entry and exit from the site will be controlled by traffic marshals at footpath crossings to safely manage the interface with pedestrians.
- Barrier systems across the footpaths will be used while vehicles are delivering to, or leaving from, the site, providing a definitive demarcation between site traffic and the public.
- The traffic management team will always be readily identifiable, clean and well presented.
- A logistics plan will be provided by the Principal Contractor in conjunction with the selected logistics provider and included within the CEMP.
- Wherever vehicles and pedestrians utilise adjacent access during construction around the project, suitable physical segregation with signage shall be installed to demarcate safe pedestrian routes. The entrance gate points will be isolated from site pedestrians by use of designated pedestrian routes and physical barriers. This arrangement will be reviewed as the project proceeds to ensure that any construction activities do not present any additional risks. Should any additional risk be subsequently identified then appropriate action will be taken to eliminate or minimise such risk.
- Appropriate signage will be fixed to the gates and all areas where it is possible for vehicles to encounter pedestrians and to denote vehicle and pedestrian crossover areas. If they cannot reasonably be avoided traffic marshals will be in attendance.
- Site radios will be used to keep all banksmen, traffic marshals and gatemen in constant communication
- Traffic marshals will assist all vehicles entering or leaving site by stopping traffic and ensuring a safe and smooth activity

An important part of safely segregating the public from construction traffic will be through the site induction process where the workforce will be briefed and during subcontractor meetings when the Supply Chain will be briefed. Regular updates will be carried out with the workforce through daily briefing sessions before starting work where any changes to the traffic system will be picked up. All construction vehicles and plant will be required to have white noise type sounders in conjunction with banksmen.

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.

Swept path drawings for key junctions on proposed traffic routes at St Chad's Street and Argyle Square will be provided and as noted above these will be complimented with further drawings for the wider routing around Argyle Square and Argyle Street.

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.

We are not proposing the use of fixed wheel wash facility at the site exits; however, it is a minimum requirement of the contractor to manage vehicle access through site by use of hard standing/haul roads to provide vehicle cleaning that prevent transfer of mud, debris etc. to the highway.

ALL vehicles leaving the site will require wheel washing throughout the duration of 'dirty works' below ground and as necessary.

A bunded vehicle jet wash area with any settlement tanks, will be provided to ensure that all vehicles are processed prior to re-entering the public highway. It is further proposed that lorry road sweepers will be employed to sweep the local access and egress roads including, Crestfield Street, St Chad's Street, Belgrove Street and Argyle Square.

The jet wash wheel cleaning area will be actively monitored by the traffic marshals to ensure that all vehicles are visually inspected prior to the vehicle leaving the construction site.

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.

Refer to the logistics plan within Appendix 1 for details of the proposed vehicle access and delivery locations on Crestfield Street and Belgrove Street.

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.

Refer to Q20b.

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.

Refer to logistics plan in Appendix 1 for further details.

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](#).

The suspension of the electric charging point and suspension of the parking/loading bays on Crestfield Street are detailed within responses to Q's 10 and 18.

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.

Due to the constrained nature of the existing and propose site footprint, Crestfield Street and Belgrove are the only available locations for material delivery gantries and the location of associated project welfare facilities.

Welfare will initially be located within the site footprint whilst demolition can safely allow this but once the works progress facilities will be provided on the scaffold gantry noted.

The footpath to both streets will remain open to the public with a fully hoarded and illuminated hoarding tunnel in accordance with LBC Highways standards.

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.

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.

Refer to logistics plan in Appendix 1 which illustrates the temporary closure of the footways to Crestfield Street, Belgrove Street and St Chad's Street.

The footway to Euston Road will remain open during the works with some adaptations and diversion required to facilitate the removal of the underground entrances being incorporated into the scheme.

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.

Refer to logistics plans for details of hoardings, vehicle gates and tower cranes.

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 Appendix 1 for details of the proposed scaffold and gantries.

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.

Refer to response to question 10 which details the UKPN sub-station strategy.

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.

Summary of Construction Activities and Sound Power Levels

Plant Item	Number of items at each workstage				SWL dBA	SWL Data Source Within BS5228	Estimated On-time (% of typical working day)
	1.Site Preparations/ Groundworks	2.Piling	3.Concreting Operations	4.General site activities			
Circular saw, bench mounted			3	3	112	C.4 71	10%
Compressor		2			103	C.3 19	20%
Compressor			2		100	D.6 19	20%
Compressor				2	102	D.7 9	20%
Concrete mixer		2	2		108	C.4 20	30%
Concrete pump, lorry mounted			2		109	D.5 16	30%
Diesel combined rig (rotary)		2			113	D.10 6	75%
Dumper	2	2	2		104	C.4 3	75%
Generator (power)	4	4	4	4	95	C.4 78	100%
Hand-held electric circular saw			2		112	C.4 73	10%
Hand-held electric circular saw				2	109	D.7 76	10%
Hand-held hammer		2	2	2	97	C.1 19	10%
Lorry	2	2	2	2	108	C.2 34	50%
Poker vibrator			2		106	C.4 34	20%
Power float			2		100	D.6 44	10%
Scaffold poles and clips				1	108	D.7 1	20%
Site fork lift truck			2	2	104	D.7 93	75%
Tipper lorry	2	2			113	D.3 112	75%
Tracked excavator	4				104	C.2 5	75%
Water bowser		2	2		109	C.6 37	10%
Water pump	2	2	2		106	C.6 41	10%
Wheeled crane			1	1	110	D.7 103	10%
Wheeled excavator/loader fitted with hydraulic rock breaker			1		106	D.8 12	10%

The equipment could operate at any time within the permitted construction hours (0800-1800 hrs weekdays and 0800-1300 hrs on Saturdays).

Table 04 Schedule of Expected Construction Plant by Construction Phase

Construction Phase	Stripping out	Demolition / Enabling Works	Substructure Works construct basement	Superstructure, core and frame	Building envelope, cladding and roofing	MEP installation	Lift installation	Fit out	Landscaping	Commissioning
Tracked / wheeled 360 degree Excavators		✓	✓						✓	
Excavator mounted hydraulic breakers		✓	✓						✓	
Bulldozer		✓	✓						✓	✓
Water pump	✓	✓	✓	✓	✓	✓			✓	
Dump Truck	✓	✓	✓						✓	
Vibratory Roller		✓	✓						✓	
Trucks (e.g., to remove soil)	✓	✓	✓						✓	
Wheel washing plant		✓	✓							
Articulated HGVs	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Piling rigs			✓							
Air compressors	✓	✓	✓	✓					✓	
Mobile craneage		✓	✓	✓	✓					
Tower cranes		✓	✓	✓	✓	✓				
Formwork			✓	✓					✓	
Scaffold	✓	✓	✓	✓	✓	✓	✓	✓		
Diamond cutting tools / saws	✓	✓	✓	✓		✓	✓	✓	✓	
Hand/power tools	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Hoist		✓		✓	✓	✓	✓	✓		
Forklift	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Mobile Access Platform (Cherry picker)	✓	✓		✓	✓	✓		✓		
Skips and skip trucks	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Mini Cranes / Manipulators	✓				✓		✓			
Crushers		✓								
Floodlights	✓	✓	✓	✓			✓		✓	
Generators		✓								
Hydraulic benders and cutters	✓	✓	✓	✓					✓	
Ready Mix Concrete trucks		✓	✓	✓					✓	
Concrete pumps and booms			✓	✓						
Temporary supports		✓	✓	✓						

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.

The most recent noise survey was undertaken in August 2020, to inform the noise assessment for the Environmental Impact Assessment.

The methodology of the noise survey and the findings were provided as part of the planning submission.

Representative background sound levels measured during the survey were:

- LA90,15min 56 dB during the daytime, and LA90,15min 53 dB during the night-time along Belgrove/Crestfield Street.
- LA90,15min 50 dB during the daytime, and LA90,15min 48 dB during the night-time along South of Chad's Street.

Based on the requirements of the Camden Council and on the results of the noise survey, all normally operating plant must be designed such that the cumulative noise level at 1 m from the worst affected windows of the nearby noise sensitive premises does not exceed:

- LAeq 49 dB during the daytime, and LAeq 46 dB during the night-time along Belgrove/Crestfield Street.
- LAeq 45 dB during the daytime, and LAeq 41 dB during the night-time along South of Chad's Street.

Based on the requirements of the Camden Council, the emergency plant noise limits at the worst affected existing noise sensitive premises are:

- LAeq 66 dB during the day, and LAeq 63 dB during the night along Belgrove/Crestfield Street. L
- LAeq 60 dB during the day, and LAeq 58 dB during the night along South of St Chad's Street.

The average ambient noise levels measured during the survey were:

- LAeq,16h 63 dB during the daytime, and LAeq,8h 60 dB during the night-time along Belgrove/Crestfield Street.
- LAeq,16h 56 dB during the daytime, and LAeq,8h 52 dB during the night-time along South of St Chad's Street.

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

To follow as noted in response to Q. 29.

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.

All available measures will be implemented to reduce noise, vibration and dust emissions from construction activities wherever reasonably achievable. These measures have been developed in line with the guidance given in BS5228:2009 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):

- Noise, vibration and dust emissions onsite will be carefully managed via real-time continuous monitoring systems throughout the works until otherwise agreed with the Local Planning Authority
- It is possible some continuous flight auger (CFA) piles will be used onsite. This technique will reduce noise and vibration emissions as far as practicable.
- In the event of complaints, the cause of the complaint(s) will be investigated immediately, including a review of the noise/vibration/dust 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 will be sent to the Local Authority for review upon request.
- Site hoarding will be installed around all relevant parts of the site boundaries. This should provide around 5-10 dB of additional screening to ground floor rooms of nearby NSRs.

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

- NSRs will be informed of the construction works. They will also be provided with contact details for an appropriate member of the site management team who can be contacted in the event of noise, vibration or dust related concerns. Proactive and regular community liaison is a powerful tool for preventing construction noise, vibration and dust related issues. It is our experience that NSRs are less likely to complain about perceived noise, vibration and dust levels if informed of the works that will be carried out and the mitigation measures that are in place;
- Site personnel will be informed of the sensitivity of the site to noise due to the proximity of the surrounding noise-sensitive receptors and
- Hoarding and fencing will be inspected regularly and repaired as necessary, access gates will be well maintained to minimise noise

- Site personnel will be informed of the sensitivity of the site to noise due to the proximity of the surrounding noise-sensitive receptors and carefully managed to ensure that noise is kept to a minimum;
- Hoarding and fencing will be inspected regularly and repaired as necessary, access gates will be well maintained to minimise noise
- All hand-held and portable equipment will be electrically-powered where practicable;
- All plant and equipment will be maintained in good working order and operated in accordance with manufacturers recommendations;
- As far as reasonably practicable, sources of significant noise will be enclosed. The extent to which this can be done depends on the nature of the machine or process to be enclosed and their ventilation requirements;
- Excavator, dumper and 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 excavators and dumper trucks will be carried out slowly and carefully to limit impact noise. Material will be placed rather than dropped wherever feasible;
- Vehicles will not be permitted to queue on the road or pavement outside the site access;
- 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 reversing operations where possible;
- Where practicable, activities which can produce significant levels of noise and or vibration will be arranged for times which are less likely to cause disturbance.
- Wherever feasible, noisy site activities will be carried out as far from NSRs as possible;
- Any compressors brought on to site will be silenced or sound reduced models, fitted with acoustic enclosures, where feasible;
-

- Excavator, dumper and 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 excavators and dumper trucks will be carried out slowly and carefully to limit impact noise. Material will be placed rather than dropped wherever feasible;
- Vehicles will not be permitted to queue on the road or pavement outside the site access;
- 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 reversing operations where possible;
- Where practicable, activities which can produce significant levels of noise and or vibration will be arranged for times which are less likely to cause disturbance.
- Wherever feasible, noisy site activities will be carried out as far from NSRs as possible;
- Any compressors brought on to site will be silenced or sound reduced models, fitted with acoustic enclosures, where feasible;
- Pneumatic tools will be fitted with silencers or mufflers and will only be used when hydraulic equipment cannot be used;
- There will be no site noisy working during any anti-social hours, unless otherwise agreed by the relevant authorities;
- Vehicle reversing alarms (if used) should be set to the minimum required for safe and efficient operations;
- Modern, silenced and well-maintained plant will be used at all times, conforming to standards set out in the EU Directives;
- 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;
- Hydraulic construction to be used in preference to percussive techniques where practical;

- Hydraulic construction to be used in preference to percussive techniques where practical;
- Off-site pre-fabrication to 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 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;
- All sub-contractors onsite will be made fully aware of the above requirements.

BS 5228 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.

Real-time continuous noise, vibration and dust monitoring will be carried out during the construction phase of the development. It is understood that monitoring will be undertaken at up to four locations as identified in Section 35.

In terms of appropriate noise, vibration and dust triggers and action levels for the monitoring locations, it is recommended that the following limits are adopted as onsite levels at the monitoring positions for the Phase 1 and Phase 2 works, respectively.

Monitoring Equipment	Limit	Reference Periods
Dust	150 $\mu\text{g m}^{-3}$ 15-minute mean for PM10 concentrations (trigger level) 250 $\mu\text{g m}^{-3}$ 15-minute mean for PM10 concentrations for any consecutive periods (action level) ¹	0800-1800hrs Monday through Friday 0800-1300hrs on Saturdays
Noise	82 dBA LAeq,1hour (trigger level) 85 dBA LAeq,15minute for any consecutive periods (action level) ¹	0800-1800hrs Monday through Friday 0800-1300hrs on Saturdays
Vibration	2 mms^{-1} PPV (trigger level) 5 mms^{-1} PPV for any consecutive periods (action level) ¹	0800-1800hrs Monday through Friday 0800-1300hrs on Saturdays

¹NOTE – Action levels have been nominated for consecutive periods as this would distinguish between isolated events which will occur from time to time on construction sites (i.e. site personnel working close to or knocking equipment or accidentally dropping material etc.) from activities which are prolonged and require site management to act upon to reduce construction emissions as far as reasonably practicable

The dust trigger and action levels above are based on the guidance given in Paragraph 6.4 of the Mayor of London Supplementary Planning Guidance document 'The Control of Dust and Emissions during Construction and Demolition'.

The noise trigger and action levels above are based on the guidance given Camden Minimum Requirements for Building / Construction / Demolition Sites document. The trigger level is equal to the highest predicted noise level at the worst affected receptor during the construction works, whereas the action level is +3dB higher than the trigger level.

The vibration limits are based on guidance given Camden Minimum Requirements for Building / Construction / Demolition Sites document and BS5228-2 guidance.

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

Evidence to be provided by Principal Contractor when appointed.

It will be a requirement of the project that the Contractor will be responsible to train all the relevant employees. All training records will be kept in an overall matrix of site personnel.

33. Please provide specific details on how air pollution and dust nuisance arising from dusty activities on site will be prevented. This should be relevant and proportionate to activities due to take place, with focus on both preventative and reactive mitigation measures.

The major influences on air quality throughout the demolition and construction works associated with each phase are likely to be dust-generating activities and vehicles emissions, from plant and vehicles both on and around the site. The emphasis of the construction works would be to minimise the potential effects at source, through appropriate site management and control practices, including controls on vehicle movements.

Potentially, nuisance can be caused by the deposition of construction dust. Construction-derived dust effects cannot be easily quantified and therefore a more qualitative approach is employed to predict potential effects from these works. The emphasis of this approach lies in the minimisation of potential dust effects at source through appropriate environmental management controls relating to, at least, 'good practice' site management practices. This includes identification of good working practices and suitable mitigation measures to minimise the potential for dust emissions, and nuisance risk; and; the likely generation of construction vehicle movements.

Premises and occupants within 100m of a construction site are generally considered to experience the most significant effects from construction dust. Examples of dust-sensitive receptors are listed in the table below:

Dust Sensitive Receptors

<i>High Sensitivity</i>	<i>Medium Sensitivity</i>	<i>Low Sensitivity</i>
Hospitals and Clinics	Schools	Farms
Retirement Homes	Residential Areas	Light and Heavy
Hi-Tech Industries	Food Retailers	Outdoor Storage
Food Processing	Offices	

The proximity of sensitive receptors and their orientation in relation to the prevailing wind, in addition to the scale and duration of demolition and construction activities, will have a bearing on potential dust nuisance effects.

The works due to its size and construction duration may be classified as a Major Development and as a "High Risk" by the GLA "Control of Dust and Emissions from Construction and Demolition, Best Practice Guidance".

The construction works have the potential to effect local air quality conditions, as follows:

- Dust generated from construction activities;
- Emissions from construction plant e.g., piling rigs, compressors, excavators, concrete mixers and generators; and
- Emissions from vehicles (e.g., lorries, cars and vans) associated with the construction of the entire development, import of building materials and removal of waste materials, accessing and leaving the Site on the local road network.

The area surrounding the site is predominantly occupied by residential and commercial uses. Given the proximity of the residential properties to the site, it is likely that without mitigation, there would be the potential for at worst: local, temporary substantial adverse effects from construction activities at the closest properties within 10m of the Site; local, temporary moderate adverse effects at properties between 10m and 100m from the Site; and local, temporary minor adverse effects at receptors between 100m and 200m from the Site. As such, specific management controls would be required to reduce the potential for dust effects on these properties.

A range of environmental management controls will be developed, including the BRE guidance 'Controlling Particles, Vapour and Noise from Construction Sites 26', the LB Camden Codes of Construction, the GLA 'The Control of Dust and Emissions during Construction and Demolition SPG 8', relating to 'High' risk sites for the Works and the Institute of Air Quality Management (2016). Guidance on the Assessment of Dust from Demolition and Construction (Version 1.1). These measures will prevent and mitigate the release of dust entering the atmosphere and/or being deposited on nearby receptors and will include:

- Routine dust monitoring at sensitive residential locations with the results and effectiveness of controls reviewed at regular meetings. A safety method statement will outline the control measures necessary to minimise the risks to an acceptable level, and all statutory notices will be placed with the Health and Safety Executive (HSE);
- Damping down surfaces during dry weather (use of rain guns and mist system);
- Erection of appropriate hoarding and/or fencing to reduce dust dispersion & restrict public access.
- Sheeting of buildings, chutes, skips and vehicles removing demolition wastes;
- Building elevations which front public boundaries or are immediately adjacent to adjoining properties would be fully scaffolded and completely enclosed by sheeting to provide a dust and safety shield during the demolition process;
- Appropriate handling and storage of materials, especially stockpiled materials;

- Restriction of drop heights onto lorries and other equipment;
- Keeping vehicle wheels clean by use of hard-standings and local use of jet washers, limiting of vehicle speeds to 5 mph, avoidance of unnecessary idling of engines and routing of site traffic as far from residential and commercial properties as possible;
- Fitting all equipment (e.g., for cutting, grinding, crushing) with dust control measures such as water sprays wherever possible;
- Main's power is to be used on all small power applications such as hand tools, welders, etc. unless is not feasible to extend power the work location.
- Use of alternatives fuel source generators (solar/gas/hybrid) will be considered in the first instance with gas powered generators as a second choice. Diesel generators will be avoided if possible. The responsible parties will ensure that all plant and vehicles are well maintained so that exhaust emissions do not breach statutory emission limits;
- Switching off all plant when not in use;
- Ensuring that a road sweeper is available to clean mud and other debris from hard standing roads and footpaths.

Attention will be paid to operations which would inevitably have to take place close to the most sensitive surrounding properties (due to their proximity and orientation in relation to the Site) at the boundary of the Site.

Measures to control dust are routinely and successfully applied to construction projects throughout the UK and are proven to significantly reduce the potential for adverse nuisance dust effects associated with the various stages of construction work.

Following the employment of appropriate environmental management controls which are routinely and successfully applied throughout the UK, negligible to moderate adverse residual effects would likely arise from construction-related dust emissions from the enabling works.

Detailed mitigation measures to control construction traffic in relation to the Enabling Works will be discussed and agreed with London Borough of Camden to agree the most suitable access and haul routes for site traffic. The most effective mitigation will be achieved by ensuring that construction traffic does not pass along sensitive roads (residential roads, congested roads, via unsuitable junctions, etc.) where possible. The timing of large-scale vehicle movements to avoid peak hours on the local road network will also be beneficial.

It is anticipated that the effect of construction vehicles entering and leaving the site would be negligible, during peak construction periods, in the context of local background pollutant concentrations and existing local road traffic emissions.

For the source of water, to minimise dust the site's main will be utilised and extended as close as reason to the work face. In certain situations, it may be necessary to use bowsers to transport water around site.

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.

Vehicles whilst on the site will predominately be restricted to concrete hardstanding and surfaced site roads. Vehicles that are required to move off these areas will be cleaned before exiting the work area so that mud and dust is not tracked onto the main roads. Therefore, the potential for distribution of dirt onto the highway is limited and no wheel washing facilities are therefore envisaged.

Should any spoil spill onto the highway during loading or offloading it will be manually picked up immediately, and road sweepers will be deployed as necessary to deal with any local issues.

35. Please provide details describing arrangements for monitoring of [noise](#), vibration and dust levels, including instrumentation, locations of monitors and trigger levels where appropriate.

Noise, dust and vibrations monitoring will be undertaken prior to and during all the demolition and construction phases. A safety method statement will outline the control measures necessary to minimise the risks to acceptable agreed levels, and all statutory notices will be placed with the Health and Safety Executive (HSE).

The location of monitoring stations has not yet been defined but it is high likely that a series of monitoring stations will be stationed around the perimeter of the site to the each of the sensitive receptor boundaries.

The number of monitoring stations may vary once a technical assessment of the performance of the stations has been undertaken. High capacity sensor stations might provide extended coverage and the number of monitoring stations might then reduce, with the same level and accuracy of monitoring but this level of detail will be provided going forward.

36. Please confirm that an Air Quality Assessment and/or Dust 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 2014 \(SPG\)](#) (document access at bottom of webpage), and that the summary dust impact risk level (without mitigation) has been identified. The risk assessment must take account of proximity to all human receptors and sensitive receptors (e.g. schools, care homes etc.), as detailed in the [SPG](#). **Please attach the risk assessment and mitigation checklist as an appendix.**

An air quality assessment was undertaken for the Proposed Development and is reported in the Environmental Statement.

For construction dust, it is anticipated the work associated with the Proposed Development would be high-risk based on the IAQM's Guidance on the Assessment from Demolition and Construction[1] and Greater London Authority (GLA) guidance[2].

As such, mitigation measures for high risk sites have been recommended. Specifically the GLA 'The Control of Dust and Emissions during Construction and Demolition SPG'

The GLA 'The Control of Dust and Emissions during Construction and Demolition SPG 8' recommended mitigation measures will be implemented and delivered on this site as described above. 60% of construction vehicles will be at least Euro compliant and where applicable LEV will be implemented.

37. Please confirm that all of the GLA's 'highly recommended' measures from the SPG document relative to the level of dust impact risk identified in question 36 have been addressed by completing the GLA mitigation measures checklist. (See Appendix 7 of the SPG document.)

The GLA 'The Control of Dust and Emissions during Construction and Demolition SPG 8' recommended mitigation measures will be implemented and delivered on this site.

- 38. Please confirm the number of real-time dust monitors to be used on-site.

Note: **real-time dust (PM₁₀) monitoring with MCERTS 'Indicative' monitoring equipment will be required for all sites with a high OR medium dust impact risk level.** If the site is a 'high impact' site, 4 real time dust monitors will be required. If the site is a 'medium impact' site', 2 real time dust monitors will be required.

The dust monitoring must be in accordance with the SPG and IAQM guidance, and **the proposed dust monitoring regime (including number of monitors, locations, equipment specification, and trigger levels) must be submitted to the Council for approval.** Dust monitoring is required for the entire duration of the development and must be in place and operational **at least three months prior to the commencement of works on-site.** Monthly dust monitoring reports must be provided to the Council detailing activities during each monthly period, dust mitigation measures in place, monitoring data coverage, graphs of measured dust (PM₁₀) concentrations, any exceedances of the trigger levels, and explanation on the causes of any and all exceedances in addition to additional mitigation measures implemented to rectify these.

In accordance with Camden's Clean Air Action Plan, the monthly dust monitoring reports must also be made readily available and accessible online to members of the public soon after publication. Information on how to access the monthly dust monitoring reports should be advertised to the local community (e.g. presented on the site boundaries in full public view).

Inadequate dust monitoring or reporting, or failure to limit trigger level exceedances, will be indicative of poor air quality and dust management and will lead to enforcement action.

It is also understood the monitoring period will be minimum of three months and this will be confirmed with Camden before implementation. In addition, the number of dust monitors will also be agreed with Camden in advance; with the site likely to be classified as high risk a minimum number of 4 monitors will be required, with the locations of these to be consistent before and during construction.

The site action level used will follow the criteria detailed in the IAQM (2018) Guidance on monitoring in the vicinity of demolition and construction sites.

Real time noise, dust and vibration monitoring will be undertaken during all the construction phases.

A safety method statement will outline the control measures necessary to minimise the risks to an acceptable level, and all statutory notices will be placed with the HSE.

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).

The control of pests in and around the site is a key responsibility when planning works and caring for the workforce and neighbours. A crucial factor in pest management is the investment in prevention and restriction of the opportunity for pests such as rats and mice to thrive.

This will be achieved by eliminating food sources and nesting sites which can be achieved through good housekeeping and management generally.

A canteen area will be provided, and no food will be allowed to be consumed outside of this area, all rubbish will be collected regularly throughout the working day and disposed to prevent the attraction of rodents.

Prior to occupation of the site, it is proposed that a rodent/pest survey is carried out to establish the presence of any rodents such that appropriate action can be implemented.

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

It is likely that due to the age of construction the structure, fabric and services installation could have involved the use of asbestos containing materials (ACMs), a Refurbishment and Demolition (R&D) asbestos survey will be carried out prior to strip out works commencing; the survey will be based upon building management plan which would identify any ACMs within building services etc.

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.

Smoking and/or vaping will not be permitted on the work site or within the welfare facilities.

A suitable area/shelter will therefore be set up in the open adjacent the site boundary for smokers. This will be screened from neighbours and regularly cleaned.

Given the location of the site and surrounding residential and commercial neighbours, the site induction will cover behavioural issues such as bad language, shouting etc. and these will not be tolerated on site. For such behaviour, a penalty system will be in operation Verbal Warning, Yellow card and Red Card which will result in removal of the offender from site permanently.

Where appropriate any issues will be directed to the Community Liaison Representative appointed by the Contractor.

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. 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: [month] [year] – [month] [year]
August 2022 – December 2025 (Excl. fit-out).

b) Is the development within the CAZ? (Y/N):

Yes. The development (shaded red) is located within the Central Activities Zone (shown shaded in orange), and the development is located within the Greater London Zone (shown shaded in blue) and therefore NRMM (Non Road Mobile Machinery) will be required to meet at least Stage IV of EU Directive 97/68/EC.

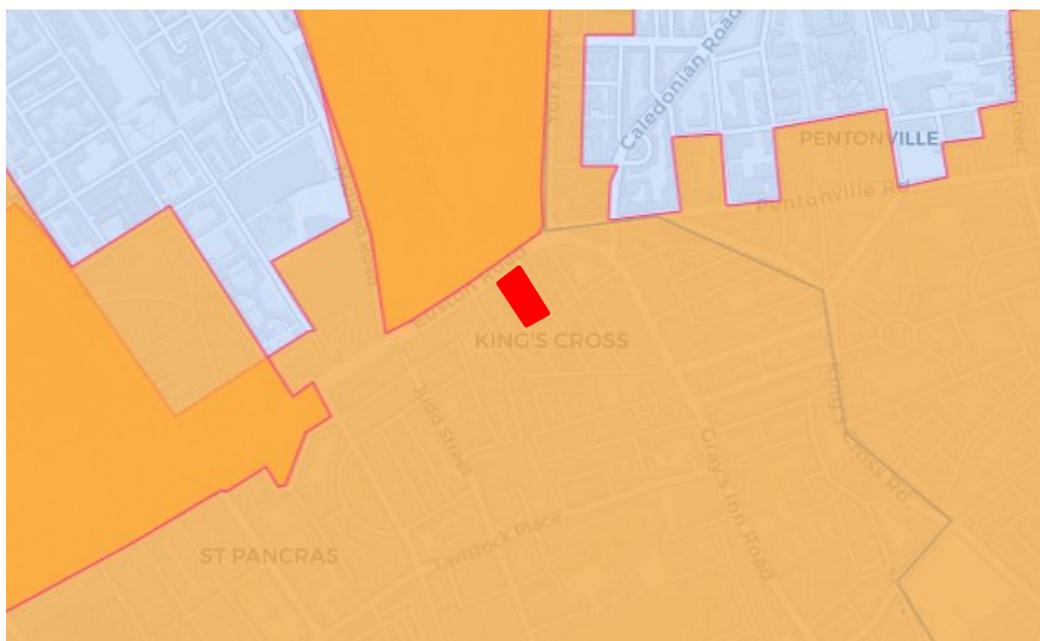


Figure 15 – Extract of NRMM Development Zone Map

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

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

We can confirm that the Contractor will ensure that all relevant machinery will be registered on the online NRMM register.

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 confirm that the Contractor will ensure that all NRMM will be kept on site and that all machinery will be regularly serviced, and service logs kept on site 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:

In accordance with requirements of NRMM we confirm that the Contractor will keep the records required.

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.

The appointed Contractor will commit to the #EnginesOff campaign detailed as part of the Idling Action Project is supported by the project, which will involve;

- Driver education workshop for fleet and business drivers so they do not understand why they should not contribute to unnecessary air pollution by idling.
- Ask your drivers to take the #EnginesOff pledge.
- Implement supporting policies by using our template engine idling and template green vehicle procurement and management policies.
- Promote the campaign by using our car stickers in your vehicles; using our logo on the corporate social responsibility section of your website; display our posters; share our @idlingaction tweets and tell your customers that you support the campaign.
- Take part in an Idling Action event – we can help you arrange a day of direct action utilising volunteers to head out and speak directly to idling vehicles around your site.

Details of the numbers of contractors actively engaged in the campaign will be provided once the Principal Contractor has been appointed.

In addition to these initiatives;

- It will be a requirement that any vehicles either waiting to enter the site or within the site are directed to switch off their engines when not in operation.
- 60% of construction vehicles will be at least Euro compliant and where applicable (local exhaust ventilation) LEV will be implemented.

The construction traffic routes have, as far as possible been developed to avoid high density residential and commercial areas.

● 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:

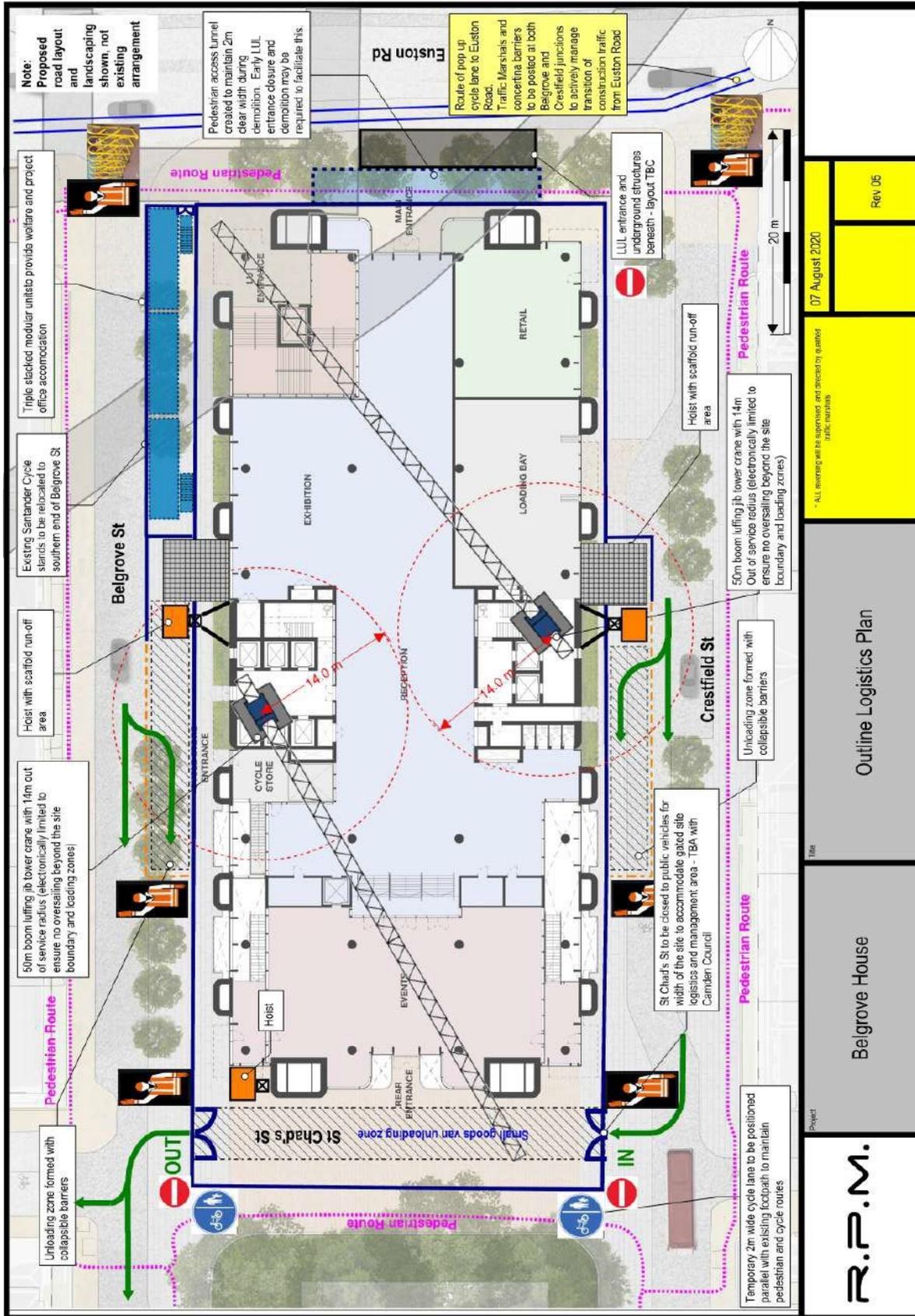
Please submit to: planningobligations@camden.gov.uk

End of form.

V2.7

Appendices

1.0 Logistics Plan



07 August 2020

Rev 05

ALL drawings will be supervised and checked in quarter sheets.

Outline Logistics Plan

Belgrove House

R.P.M.

Project

2.0 Cumulative Impact Area – Central London: Statement & Checklist

Cumulative Impact Area Central London

Statement & Checklist

Planning Reference 2020/3881/P

Site Address Belgrove House, Belgrove
Street
London. WC1H 8AA

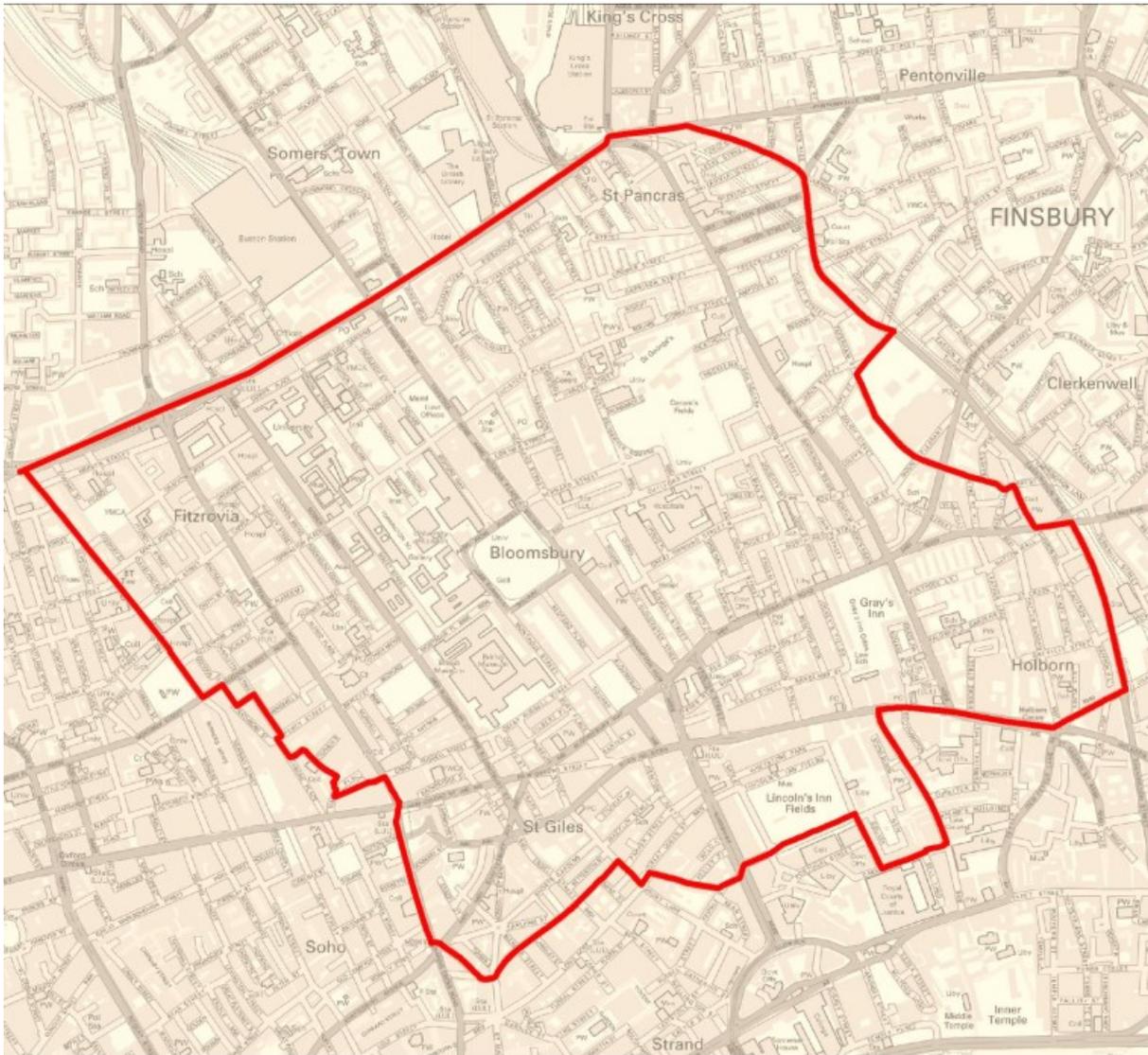


Statement

The Central London area represents just under a quarter of the total planned development activity in the borough despite only representing 13% of the geographical area. In addition to activity related to the redevelopment of sites, there is a significant amount of commercial buildings that undertake refurbishment works that have similar impacts but are not controlled by planning consents. The interaction of high levels of construction and construction traffic with established business/residential travel patterns is giving rise to heightened community concerns and mean that there is an increased need for careful management of construction activities and their potential impacts

The area is characterised by historic buildings with narrow streets alongside high density modern developments, with residential and commercial operations sitting side by side - the area also attract a lot of tourism, and as such the movement of people is much greater than just residents and employees. The busy nature of this area means that even the smallest redevelopment may give rise to complications with traffic and reports of public nuisance.

Noise and vibration from construction sites has the potential to give rise to significant adverse effects on health and quality of life. Based on our experience we know that some of these impacts can be effectively managed. However, this potential is affected by the challenges posed by Cumulative Impacts where the impacts of various construction sites create effects of greater significance than or different to that of each individual construction site. Managing the impacts of various sites in one area and ensuring a consistent approach to noise and vibration mitigation can be a major challenge in its own right.



3 -

Redevelopment proposals need think carefully how a site will be delivered, considering issues well beyond the site boundary, in particular:

- The proximity of properties, in particular the potential for structure borne noise and dust control
- Co-ordination with neighbouring sites, considering both construction traffic and business that require deliveries
- Communication and availability of data to a wider audience who may not be in close proximity to the development but nonetheless will be impacted, such as those who work in the area.
- The area is a designated Air Quality Management Area (AQMA) and the Council has made a commitment to reduce particulate air pollution to levels recommended by the World Health Organisation. In response, all sites in the Central London area will be required to undertake the following additional obligations as part of their Construction Management Plan. Developers/ Contractors will be required to justify (and for such justification to be made public) why any of the following elements cannot be achieved:-

WORKS

- Assumption of no working at weekends – any proposals for weekend working will be considered on a case by case basis and communicated to local residents 14 days in advance of works
- Prior to proposing any road closures, weekend working or oversize deliveries (to which all require express approval from the Council) the contractor must provide evidence that they have approached neighbouring sites and attempted to coordinate any proposals with those of the neighbouring site.
- Prior to connecting a site to utilities (Gas, Water, Electric, Telecoms) the contractor must provide evidence that they have approached neighbouring sites (and the utilities providers) and attempted to coordinate connection between neighbouring sites and the various utilities.

COMMUNICATION

- CMPs will be made available online (both prior to approval and post approval) such as on a dedicated webpage
- All logs (accident, complaint) will be made available online and a physical copy made available for residents to use and view
- Where there are neighbouring site or sites in close proximity that effect the local highway network, joint communication (i.e. Newsletters) will be required.
- Construction Working Groups will be conducted jointly with neighbouring sites
- All environmental monitoring data to be made available on-line and on site boards

DELIVERIES

- A delivery log, specifying the type of vehicle, its purpose, registration number and time on site must be maintained online and updated at least on a weekly basis.
- Contractors will be required to provide evidence that they have communicated their proposed deliveries with neighbouring construction sites and any other business, and have coordinated the deliveries where possible.
- No deliveries shall be scheduled that will require the driver to wait outside the site before 8.00am (and vehicles will not be permitted to circulate the highway to avoid this requirement)
- A pre-booking system for managing deliveries must be operated. All deliveries must contact site at least 20min before arrival to allow the necessary checks to be undertaken

MITIGATION AND RESPITE

- Adoption of localised mitigation measures such as washing the windows of neighbouring properties.
- Developments will be required to pay a Construction Impacts Bond to the Council to support the cost of Council officers addressing matters that should have been addressed by the contractor
- Dedicated wheel washing with rumble grids must be utilised unless agreed otherwise by the Council
- Green infrastructure, such as green screens/hoarding, should be utilised. Installation of filtration units, particularly where the site is near (within 250m) vulnerable receptor facilities (such as schools, nursing homes and hospitals)

SITE CONDUCT

- A firm disciplinary policy, such as a two strike warning before removal from site must be operated
- Contractors must attain the Considerate Contractors Scheme 'Exceptional' score

- Contractor must employ an enforcement process to ensure that contractors vehicles do not idle
- A plan and process to encourage site operatives to arrive at the site by sustainable methods (including car sharing / pooling) must be presented and communicated
- CLOCS compliance monitoring results need to be reported to council
- All sites must ensure that Traffic Marshalls /Banksmen are appropriately trained, and that there is at least one operative on duty at any given time that has at least has 1+ year of experience in that role.
- The site must be kept damp at all times, proposed equipment for this purpose must first be agreed to by the local authority.
- Weekly 'toolbox talks' should be conducted with all site operatives to advise of the requirements expected by the Council.
- Site operatives should be identifiable by the public to the site, such as using a uniformed colour of work jackets or branding.

MACHINERY AND EQUIPMENT

- All heavy goods vehicles (HGVs) are required to be Euro VI standard or better, and light duty vehicles (LDVs) are required to be Euro 4 petrol or Euro 6 for diesel, or better. Preference should be for zero to low emission equipment
- NRMM should be to stage IV of EU Directive 97/68/EC as a minimum, and an up-to-date NRMM log must be kept on-site and shared with Camden officers
- The site must connect to mains prior to works commencing to remove the need for diesel generators
- At least four real-time PM10 monitors (certified to MCERTS standard) must be used on site in continuous operation for the duration of the build (from three months prior to implementation of planning permission through to completion on site), at locations and to thresholds approved by the Council. Camden officers must be provided access to the raw data via an online platform, and automated exceedance alerts should be sent to AirQuality@camden.gov.uk in addition to the contractor/developer on-site representatives
- Web-enabled monitoring equipment, allowing real time information accessible by the public should be deployed – including the use of emerging technologies.
- Environmental monitoring summary reports should be sent to Camden officers on a monthly basis

7 -



CHECKLIST

All development sites in the Cumulative Impact Area which are required to submit a Construction Management Plan (CMP) or Demolition Management Plan (DMP) are required to complete this checklist.

The checklist will need to be presented for comment to the local community as part of the pre-submission CMP/DMP. The Council will not accept the submission of the CMP/DMP unless it receives both the completed CIA checklist . If a particular requirement cannot be met, stipulate the reason why and propose an alternative solution to achieve the objective

	Requirement	Response
WORKS	No noisy working at weekends – any proposals for weekend working will be considered on a case by case basis and communicated to local residents 14 days in advance of works	Confirmed.
	Prior to proposing any road closures, weekend working or oversize deliveries (to which all require express approval from the Council) the contractor must provide evidence that they have approached neighbouring sites and attempted to coordinate any proposals with those of the neighbouring site	Agreed and noted.
	Prior to connecting a site to utilities (Gas, Water, Electric, Telecoms) the contractor must provide evidence that they have approached neighbouring sites (and the utilities providers) and attempted to coordinate connection between neighbouring sites and the various utilities	Contractor to confirm following appointment.
COMMUNICATION	CMPs will be made available online (both prior to approval and post approval) such as on a dedicated webpage	Confirmed.
	All logs (accident, complaint) will be made available online and a physical copy made available for residents to use and view	Confirmed.
	Where there are neighbouring site or sites in close proximity that effect the local highway network, joint communication (i.e. Newsletters) will be required	Confirmed, the appointed Contractor will engage and co-ordinate works with any nearby sites through regular communication and structured Construction Work Group that will be arranged.
	Construction Working Groups will be conducted jointly with neighbouring sites	Confirmed.
	All environmental monitoring data to be made available on-line and on site boards	Confirmed.

	Requirement	Response
DELIVERIES	A delivery log, specifying the type of vehicle, its purpose, registration number and time on site must be maintained online and updated at least on a weekly basis	Confirmed, the Contractor will manage an online vehicle delivery booking system for the duration of the demolition and construction.
	Contractors will be required to provide evidence that they have communicated their proposed deliveries with neighbouring construction sites and any other business, and have coordinated the deliveries where possible	Confirmed - as noted above nearby sites who share vehicle routes will be coordinated where necessary.
	No deliveries shall be scheduled that will require the driver to wait outside the site before 8.00am (and Vehicles will not be permitted to circulate the highway to avoid this requirement)	Confirmed - as detailed with body of the CMP.
	A pre-booking system for managing deliveries must be operated. All deliveries must contact site at least 20min before arrival to allow the necessary checks to be undertaken	Confirmed within CMP.
MITIGATION AND RESPITE	Adoption of localised mitigation measures such as washing the windows of neighbouring properties	Confirmed - specific details to be agreed with appropriate neighbouring properties.
	Developments will be required to pay a Construction Impacts Bond to the Council to support the cost of Council officers addressing matters that should have been addressed by the contractor	Confirmed and understood.
	Dedicated wheel washing with rumble grids must be utilised unless agreed otherwise by the Council	Appropriate dedicated wheel washing incorporating rumble grids will be provided as necessary.
	Green infrastructure, such as green screens/hoarding, should be utilised. Installation of filtration units, particularly where the site is near (within 250m) vulnerable receptor facilities (such as schools, nursing homes and hospitals)	Noted.

	Requirement	Response
SITE CONDUCT	A firm disciplinary policy, such as a two strike warning before removal from site must be operated	Confirmed.
	Contractors must attain the Considerate Contractors Scheme 'Exceptional' score	Confirmed within CMP.
	Contractor must employ an enforcement process to ensure that contractors vehicles do not idle	Confirmed within CMP.
	A plan and process to encourage site operatives to arrive at the site by sustainable methods (including car sharing / pooling) must be presented and communicated	The contractor will produce a travel plan that encourages sustainable travel methods.
	CLOCS compliance monitoring results need to be reported to council	Confirmed.
	All sites must ensure that Traffic Marshalls / Banksmen are appropriately trained, and that there is at least one operative on duty at any given time that has at least has 1+ year of experience in that role.	Confirmed. Contractor to evidence this.
	The site must be kept damp at all times, proposed equipment for this purpose must first be agreed to by the local authority.	Appropriate damping down will take place during demolition and construction works.
	Weekly 'toolbox talks' should be conducted with all site operatives to advise of the requirements expected by the Council.	Confirmed - to be undertaken by the Contractor and key sub/trade contractors.
Site operatives should be identifiable by the public to the site, such as using a uniformed colour of work jackets or branding.	Confirmed - project branded hi-vis proposed.	

	Requirement	Response
MACHINERY AND EQUIPMENT	All heavy goods vehicles (HGVs) are required to be Euro VI standard or better, and light duty vehicles (LDVs) are required to be Euro 4 petrol or Euro 6 for diesel, or better. Preference should be for zero to low emission equipment	Confirmed.
	NRMM should be to stage IV of EU Directive 97/68/EC as a minimum, and an up-to-date NRMM log must be kept on-site and shared with Camden officers	Confirmed.
	The site must connect to mains prior to works commencing to remove the need for diesel generators	Confirmed - temporary electricity supply will be provided.
	At least four real-time PM10 monitors (certified to MCERTS standard) must be used on site in continuous operation for the duration of the build (from three months prior to implementation of planning permission through to completion on site), at locations and to thresholds approved by the Council. Camden officers must be provided access to the raw data via an online platform, and automated exceedance alerts should be sent to AirQuality@camden.gov.uk in addition to the contractor/developer on-site representatives	Confirmed - details to be finalised.
	Web-enabled monitoring equipment, allowing real time information accessible by the public should be deployed – including the use of emerging technologies	Confirmed where appropriate to the works being undertaken.
	Environmental monitoring summary reports should be sent to Camden officers on a monthly basis	Confirmed - Contractor to provide.
	The use of powered, percussive breaking equipment should be avoided. Where this is considered not possible early discussions with the Council.	

3.0 Example Newsletter



May 2022

Belgrove House Community newsletter

In November 2021 Camden Council approved plans for a new UK headquarters and Discovery Centre for global healthcare company MSD at Belgrove House on Euston Road, directly opposite King's Cross Station, with high quality affordable housing delivered at the nearby Acorn House on Gray's Inn Road.

This community newsletter provides you with an update on the project, timescales for works to start on site, and an overview of the draft Construction Management Plan (CMP) which the team is currently preparing and consulting on. This is the first of a series of newsletters to keep you updated on progress.

In this newsletter, you will find:

-  A reminder of **our plans for Belgrove House**.
-  Details on how you can **comment on our draft Construction Management Plan (CMP)** during the consultation period.
-  Our **outline construction programme and overview of preparatory works** which will start in August.
-  Information on **how we will keep you informed** and ways of getting in touch with us.

You can also find further information on our website: belgroveacorn.co.uk



These plans will see the delivery of a specialised life-sciences, laboratory-enabled building in the heart of the Knowledge Quarter at Belgrove House.

The building will be the new UK Headquarters and Discovery Centre for MSD and home to a new community classroom aimed at making research and science knowledge accessible to the community. At lower ground level, an auditorium will be able to accommodate approx. 200 people and will be available for local groups to hire below a ground floor café facing onto Argyle Square.

Outline construction programme



You can also find further information on our website: belgroveacorn.co.uk

Construction management plan

Construction traffic

- The primary access for HGV vehicles accessing the site will be from Crestfield Street, with arriving traffic being directed left into the street from Euston Road by a marshal having travelled west down Pentonville Road, turning right into Swinton Street and then turning right along Gray's Inn Road/Euston Road.
- Leaving the site from the access road on Crestfield Street, vehicles will travel south into Argyle Square and turn right into Argyle Street before being directed left onto Euston Road by a marshal.
- A second vehicle access is proposed on Belgrove Street and will include a temporary vehicle zone and the construction services including portacabins housing the contractor's office and worker's facilities adjacent to the site.
- All vehicle movements both in and out of the site will be managed by the Logistics Manager and within standard working hours.
- All drivers of large construction vehicles (over 3.5t) will have undertaken Safe Urban Driver training, and the vehicles themselves will be fitted with blind spot minimisation equipment and audible left turn alerts.

Noise and dust

- Noise, dust and vibration monitors will be installed, providing real time monitoring with alerts sent to the project team if agreed levels have been breached. When an alert is received the works will cease and the situation/methods reviewed and adapted before continuing.
- Modern well-maintained machinery and tools will be used for all demolition works to minimise noise and vibration.
- Air Quality Monitors are being installed in advance of demolition and will be in place throughout the construction stages.

Working hours

We are proposing that construction works will only take place during the following days and times. These will need to be agreed by Camden Council following this consultation of the CMP but reflect the Council's guidelines for construction working hours:

- **Monday to Friday** 8am – 6pm
- **Saturday** 8am – 1pm

There will be no works taking place on Sundays or public holidays.

There may be a requirement for work outside these hours for activities such as:

- Tower crane erection/dismantling works,
- Mechanical Plant delivery,
- Utilities / Statutory Connections,
- Services shut down and emergency repairs.

Should the need for these works arise, we will ensure that we get in touch to let you know in advance.

Being a considerate neighbour

We are currently consulting with the local community on our draft Construction Management Plan (CMP).

The CMP outlines how we will ensure that the construction works will be managed safely and to the highest standards, minimising noise and disruption to neighbours.

You can download a full copy of our draft CMP by visiting our website: belgrovehouse.co.uk



Preparatory works: Autumn 2022

Following approval of the CMP, preparatory works will begin in August 2022 and will include:

- Establishing the **site welfare for workers** on Belgrove Street, including toilet and canteen facilities
- Putting up **hoardings** around the site
- Installing **lighting** throughout the site
- **Soft strip works**
- Installation of **noise, dust and vibration monitoring**.

How to comment

If you would like to share your views on our draft CMP, you can get in touch with us via:

- ✉ belgrovehouse@londoncommunications.co.uk
- ☎ 0800 307 7614
- 🌐 belgrovehouse.co.uk

Please send your comments by XX May 2022. We will then consider any feedback before sharing the draft CMP and your comments (which will remain anonymous) with Camden Council for their approval before demolition and the main construction works begin.



During the construction programme, we will provide regular updates through newsletters and our dedicated website belgroveacorn.co.uk

Contacts on site

At the moment we are in the process of appointing our main contractors for this site. Once the final appointment has been made, we will share contact details with you to the relevant teams operating on the site, so that you can reach out to them directly with any urgent queries or comments.

In the meantime, please direct all your queries to our consultation team, using the contact details above.

You can also find further information on our website: belgroveacorn.co.uk

4.0 CWG Minutes

**BELGROVE HOUSE, CONSTRUCTION WORKING GROUP
MEETING NOTE
6PM - TUESDAY 31 MAY 2022, DRAFT 1**

Attendees

Cllr Jonathan Simpson, King's Cross ward (JS)
Debbie Radcliffe, BRAG & BCAAC (DR)
Tony Megaro, local business & hotel owner (TM)
Andrew, The Standard Hotel (A)
Shofi Muhammod, KCBNA (SM)
Joe Ashton, Precis Advisory (JA)
Paul Turton, CPC Project Services (PT)
Tom White, CPC Project Services (TW)
Katie Hughes, Gerald Eve (KH)
Ellie Tucker, LCA (ET)

Meeting notes

Purpose and format of the CWG

ET ran through the format and purpose the CWG along with a list of those local stakeholders and neighbours who had been invited to take part, noting that there were several who sent their apologies for tonight but indicated they would like to be kept up to date. **ET** explained that a link to the full draft CMP had been emailed ahead of the meeting and that there would always be two weeks' notice for CWG meetings.

JS suggested a couple of additional stakeholders to invite to the CWG including the Swinton Street Residents Association, the Standard Hotel, TFL and to consider the membership of the Eastman Dental Hospital CWG.

DR suggested that the minutes from each CWG meeting are shared on the website so that there is record for the public or those who do not necessarily have time to attend meetings. **ET** agreed that this was a good idea.

DR said that a local resident may like to act as an independent chair for the meeting and that she would propose a list of potential candidates for agreement.

Construction traffic, delivery routes and hours

TW spoke to a slide showing the proposed routes for construction traffic – both arriving and exiting site. He pointed out the pit stops and explained that a marshal and organised booking system would help stop dawdling construction traffic waiting. *[Copy of the draft CMP logistics plan attached to illustrate]*

JS said that he would like to get into the detail of the CMP, such as the timings of the deliveries and the group discussed what would happen with construction vehicles outside of usual hours and differing routes. *[Extract from draft CMP attached confirming delivery timings in line with LBC guidelines on "Control of Site Traffic"]*

PT responded that there was a lot more detail in the full draft CMP circulated ahead of the meeting on delivery routes and deliveries outside of usual hours but would be more once the demolition contractor comes on board in the next couple of weeks. **PT** suggested that the contractor could come along to the next meeting and explain the CMP and how it would be actioned in more detail.

DR suggested that the Camden Cyclists should be included in the discussions on construction delivery routes as Judd Street and the surrounding roads were key cycling routes. **DR** noted that there were a lot of Georgian Grade II listed buildings in the surrounding streets and that the construction traffic should try and avoid the residential roads. *[Provisions for cyclists incorporated into CMP Proposals and indicated on Logistics Plan.]*

TM said that turning from Euston Road into Belgrove Road has been narrowed by TFL and suggested that the team should consider cutting back the entrance to widen it.

DR reiterated **JS's** comment that they would like to see more detail on deliveries and the timing, otherwise it was hard to judge and comment on how this was likely to impact local residents.

JS added that it was also a through route for parents dropping children off at Argyle Primary School so it was also important for the school to be engaged and included. **ET** responded that Argyle Primary School had been invited to the CWG and would be kept up to date.

Dust, noise and lighting

TW spoke to a slide, explaining that dust and noise would be kept to a minimum with hoardings and monitors installed to ensure that neither became disruptive.

DR said it was hard to comment on the impact of noise yet and whether the CWG needed to ask the contractors to consider two hours on, two hours off – something which had been adopted on some local sites.

JS commented that some construction sites in the local area still make noise even when they're not technically working. He said that the CMP needed more clarity and detail on the wording 'may be a requirement for work outside these hours for activities' and lighting. *[In line with LBC requirements the draft CMP states that construction vehicle movements that cannot be accommodated on site will be restricted to the hours of 9.30am to 4.30pm on weekdays and between 8.00am and 1.00pm on Saturdays.]*

DR said that the Friends of Argyle Square should be included in these discussions. **ET** responded that the team had been in touch with Bill Reed from the Friends of Argyle Square – he had sent his apologies for tonight's meeting but that they had met with him relatively recently.

JA said that the team had discussed with Bill how the new development can help to combat antisocial behaviour in Argyle Square. During construction consideration will be given to lighting around the perimeter of the site hoarding whilst getting the balance right on light pollution concerns.

DR said that the team should look at the way in which the London School of Hygiene & Tropical Medicine handled their construction project – that they'd been very good at communicating throughout, particularly when there was any necessary construction traffic movement out of usual hours.

TM highlighted that a lot of the properties along Belgrove Street are his businesses and include a hotel, B&B and offices. He said that the current Belgrove House is an eye sore and encourages anti-social behaviour and though he thought the project was positive, he had concerns about the impact of the construction site. **TM** said that starting work at 8AM might be problematic and that he would like further detail on how the team proposed to contain noise and dust.

PT said that a lot of the answers to these questions were in the draft CMP. He explained that the area around the site would be protected with a standard 2+ meter hoarding with scaffolding with full monaflex sheeting to control noise and dust pollution. Further detailed noise and dust control measures are set out in the draft CMP including rain guns, mist system and dampening down measures.

JS said that 100 pages is a lot to read in advance and that the group would benefit from the draft CMP being broken down into manageable chunks.

Site servicing and pit road

TM asked what the draft CMP meant by "site services" saying his primary concern is "visual and anti-social behaviour." He asked for the hoardings to be nicely designed and to hide unsightly portacabins.

PT responded that the team were already in discussions with MSD, the end tenant, on the hoardings design and would like to involve local schools close to the time.

DR highlighted that as the site was within a conservation area the BCAAC would need to be consulted and would likely comment on the designs.

Timings and next steps

ET ran through a slide showing key next steps including consultation on the draft CMP and submission to LBC ahead of preparatory works starting on site in late summer 2022.

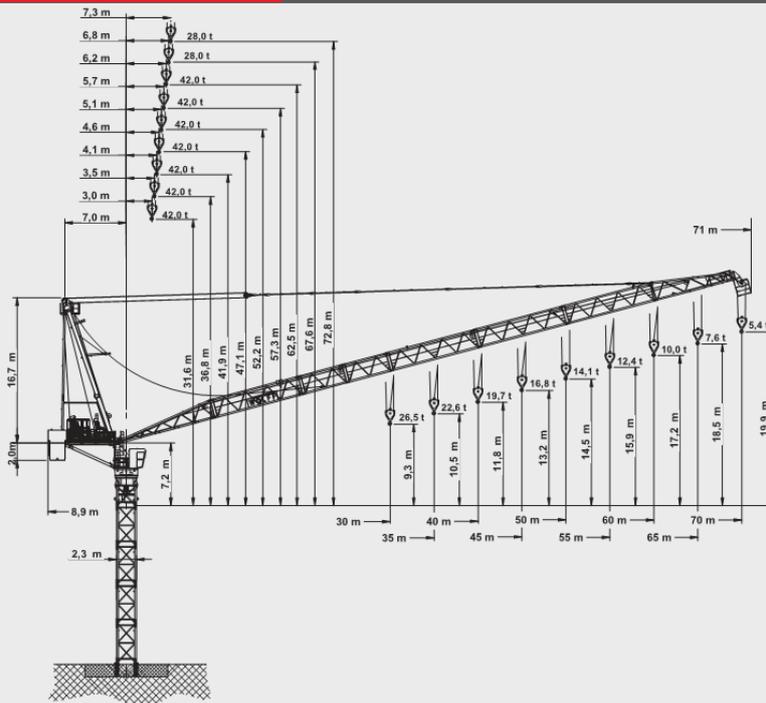
PT agreed and said that we would be in touch to organise the next session, with the demolition contractor to present the draft CMP in more detail.

Actions

- LCA to circulate meeting minutes along with an invitation to the next CWG meeting
- LCA to invite additional suggested stakeholders to the CWG
- DR to suggest a chair for future CWG meetings
- CPC Project Services to liaise with appointed contractor and provide the further detail required, ahead of next CWG meeting

5.0 Example of Typical Proposed Tower Crane

WOLFFKRAN



WOLFF 630 B

CE EN 14439 (C25) Nutzlastmoment/load moment/
BGL C.0.11.0630 Couple de charge: max. 8000 kNm
Traglast/lifting capacity/
Capacité de levage: max. 42,0 t
Ausladung/jib radius/
Portée: max. 70,0 m



WOLFF 630 B Kolli Liste - Colli List - Liste de colisage

Pos. Pos. Pos.	Stck. Pce. Pcs.	Beschreibung / Description / Description	Kolli / Colli / Colis	L (m) Length Longueur	B (m) Width Largeur	H (m) Height Hauteur	Gewicht (kg) Weight Poids	Volumen (m³) Volume Volume
1	1	Turmspitzenoberenteil / Tower top upper part / Porte-flèche		11,95	2,50	2,57	9500	76,78
2	1	Turmspitzenabspannung / Tower top bracing / Tirants pointe		10,18	0,72	0,43	1600	3,15
3	1	Turmspitzenunterteil / Tower top lower part / Pivot tournant		8,52	3,05	2,66	20400	69,12
1	1	Verbindungsbock / Connection frame / Cadre de raccord		4,27	2,35	2,30	4500	23,08
1	1	Drehrahmen / Slewing frame / Pivot tournant		2,32	2,57	2,97	13300	17,71
1	1	Spitzenunterteildapter / Adapter lower tower top / Adapter pivot tournant		2,32	2,80	2,52	2600	14,73
4	1	Führerhausaufhängung / Cabin attachment / Fixation cabine		2,72	2,00	0,57	400	3,10
1	1	Führerhaus / Operator's cabin / Cabine		2,26	1,45	2,30	940	7,54
5	1	Gegenausleger / Counterjib / Contre-flèche		8,05	2,50	1,09	5900	21,94
6	1	Lw 12110 FÜ Maschinenplattform / Machinery platform / Plateforme avec mécanisme de levage		1,82	2,23	2,60	4700	10,55
7	1	Maschinenplattform / Machinery platform / Plateforme avec mécanisme de levage Hw 28110 FÜ (mit Hubseil/with hoist rope / avec le câble de levage ø 26 mm x 920 m = 3000 kg) Hw 28132 FÜ (In Vorbereitung / In preparation / En préparation)		2,60	4,26	2,24	11900	24,81
8	1	Kiste (Kleinteile) / Box (small parts) / Caisse à outils		0,63	0,50	0,38	100	1,12
9	1	Normgeländer / Standard railings / Garde-corps		2,60	1,10	0,65	300	1,86
10	1	Auslegerteil 1 / Jib part 1 / Élément de flèche 1		11,88	2,53	2,25	4100	67,63
11	1	Auslegerteil 2 / Jib part 2 / Élément de flèche 2		10,60	1,98	2,20	3000	46,17
12	1	Auslegerteil 3 / Jib part 3 / Élément de flèche 3		5,43	1,98	2,20	1600	23,65
13	1	Auslegerteil 4 / Jib part 4 / Élément de flèche 4		5,43	1,98	2,20	1400	23,65
14	1	Auslegerteil 5 / Jib part 5 / Élément de flèche 5		10,60	1,98	2,20	2400	46,17
15	2	Auslegerteil 6 / Jib part 6 / Élément de flèche 6		10,60	1,98	2,20	2100	46,17
16	1	Auslegerteil 7 / Jib part 7 / Élément de flèche 7		10,75	1,98	2,23	3500	47,47
17	1	Montagepodest (zu Pos.16) / Assembly platform (to item 16) / Passerelle de montage (à Pos.16)		3,10	0,50	1,50	500	2,33
18		Unterflasche / Hook block / Crochet		1,08	0,34	1,99	600	0,73
				1,20	0,40	1,99	1000	0,96
				1,20	0,50	1,99	1500	1,20
19	1	Abspannstäbe / Braces / Tirants		10,53	0,60	0,19	2200	1,20
20	1	Ausbaukran / Service crane / Grue de service		3,37	0,40	3,43	300	4,62

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Der Leitwolf.
The leader of the pack.

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WOLFF 630 B

Hauptkomponenten

Grundausleger 30 m. Verlängerung bis 70 m Ausladung in 5 m Schritten, Turmspitze mit Aufstieg, Drehrahmen mit Krankabine, zwei Drehwerken, Rollendrehverbindung mit Zentralschmierung und Schließsystem. Gegenausleger mit Hub- u. Einziehwinde, Schaltschrank und Gegengewichten.

Antriebsstechnik

Alle Antriebe mit frequenzgeregelten Kurzschlussläufermotoren und Motorvollschutz (Thermofühler). Hubwinden Hw 28110 FU oder Hw 28132 FU. Zwei Drehwerke mit elektrisch betätigter Windfreistellung. Automatische Windanfahrtschaltung. Einziehwinde Ew 12110 FU.

Elektrische Ausrüstung

Mehrspannungsausführung für Netze 380 V - 460 V (50/60 Hz). Elektronische Sicherheits-Kransteuerung mit Bustechnik. Inkrementale Absolutweggeber für alle Arbeitsbewegungen. Elektronische Lastmessung, Grafik-Terminal als Touchscreen für Bedienerinformation mit mehrsprachigen Diagnosemeldungen.

Sicherheitseinrichtung

Elektronische Überlastsicherung. Erhöhung der Lastmomentgrenze durch automatische Reduzierung der Hubgeschwindigkeit. Menügeführte Einstellungen der Überlastsicherung und aller Endschalter vom Führerhaus aus. Dreh- und Ausladungsbegrenzung. Antikollisionsschnittstelle. Elektronisch geregelter horizontaler Lastweg.

Serienmäßig mit

Teleservice modul und Windmesser.

Turmelemente, Klettereinrichtung

Turmkombination mit WOLFF Turmelementen. WOLFF Schlagbolzen-Verbindung. Abnehmbares hydraulisches WOLFF Kletterwerk KWH 23.

Unterwagen, Kreuzrahmen

Aufstellung fahrbar auf KRF mit Spurweite 8,0 m oder stationär auf Kreuzrahmen der KR Reihe, alternativ auf Fundamentankern.

Anschlussleistung und Hakenwege (Drahtseil)

214 kVA (Hw 28110 FU), 235 kVA (Hw 28132 FU). Hakenweg siehe Tabelle Antriebe.

Main Components

30 m basic jib, extensions up to 70 m in 5 m steps, tower top with access, slewing frame with cabin, two slewing gears, ball race bearing with central lubrication unit and slip ring system. Counter jib with hoist and luffing winch, switch cabinet and counterweights.

Drive Technique

All drives frequency controlled squirrel cage motors, fully thermal protected. Hoisting winches Hw 28110 FU or Hw 28132 FU. Two slewing gears with electrically operated weathervaning device. Automatic windforce compensation controls. Luffing winch Ew 12110 FU.

Electrical Equipment

Multivoltage equipment for supplies from 380 V to 460 V at 50/60 cycles. Electronic safety crane controls with bus technology. Incremental absolute encoders for all operating movements. Electronic load measuring device. Multilingual graphic display showing information to operator, both operational and diagnostics.

Safety Devices

Crane is complete with electronic overload protection system. Increased load moment limitation due to automatic hoist speed reduction. Menu guided setting of overload protection system and of all limiters from operator's cabin. Working space limiter, anti-collision interface. Electronic controlled level luffing.

In series with

Teleservice module and wind indicator.

Tower Elements, Climbing Device

Tower configuration of WOLFF system tower elements. WOLFF slug bolt connection. Detachable hydraulic WOLFF system climbing device KWH 23.

Undercarriage, Crossframe

As travelling version on WOLFF system KRF with gauge of 8.0 m. For stationary installations on KR series. Alternative on foundation anchors.

Power Requirements and hook paths (Slewing part)

214 kVA (Hw 28110 FU), 235 kVA (Hw 28132 FU). Hook path - see table of mechanisms.

Éléments principaux

Flèche de base 30 m. Prolongements jusqu'à 70 m de portée, en tronçon de 5 m. Pointe avec montée, partie tournante avec cabine, deux entraînements de rotation, couronne à billes avec pompe à graissage centralisée et bague collectrice. Contre-flèche avec mécanisme de levage et relevage, armoire électrique et contrepoids.

Technique d'entraînement

Tous les entraînements sont équipés de moteurs à rotor en court-circuit réglés par des convertisseurs de fréquences et protections thermiques. Mécanisme de levages Hw 28110 FU ou Hw 28132 FU. Deux entraînements de rotation avec mise en groutte électrique. Compensation automatique en cas de vent. Mécanisme de relevage de la flèche Ew 12110 FU.

Équipement électrique

Équipement multi voltages pour des tensions de 380 V à 460 V (50/60 Hz). Réglage électronique de sécurité avec technique Bus. Codeurs angulaires incrémentsaux pour tous les mouvements de travail. Mesurage électronique de la charge. Display graphique touchscreen multi langages avec des informations d'opération et diagnostique.

Dispositif de sécurité

Le contrôle électronique de surcharge. Augmentation de la couple levage par réduction automatique de la vitesse levage. Réglage de la sécurité surcharge et des fins de courses depuis le display de la cabine. Limitation de rotation et de relevage. Jonction interface de anticollision. Parallélogramme électronique d'élévation.

Équipage de série

Module téleservice et anémomètre.

Éléments de tour, cage pour télescopage

Combinaison de mât avec des éléments de tour système WOLFF. Assemblage des éléments par axes. Cage pour télescopage hydraulique amovible WOLFF KWH 23.

Châssis translation, Éléments croix de base

Roulant sur KRF avec écartement de 8,0 m. Pour montage stationnaire sur croix de base KR série ou ancrés de fondation.

Puissance absorbée et course du crochet

214 kVA (Hw 28110 FU), 235 kVA (Hw 28132 FU). Course de Crochet - voir table des mécanismes d'entraînement.

Antriebe - WOLFF 630 B (Hw 28110 FU)		Mechanisms					
Mécánismes							
Motor (kW) Moteur	110	110	110	110	2 x 7,5	6 x 5,5	
Geschwindigkeit speed Vitesse	0 - 2,1 t 0...200 m/min stufenlos/ stepless/ en continue	0 - 4,5 t 0...100 m/min stufenlos/ stepless/ en continue	0 - 7,0 t 0...66 m/min stufenlos/ stepless/ en continue	1,8 - 2,8 min	0,7 min ⁻¹	25,0 m/min	
Hakenweg (m) hook path course du crochet	920	460	306				

Antriebe - WOLFF 630 B (Hw 28132 FU)		Mechanisms					
Mécánismes							
Motor (kW) Moteur	132	132	132	110	2 x 7,5	6 x 5,5	
Geschwindigkeit speed Vitesse	0 - 1,5 t 0...304 m/min stufenlos/ stepless/ en continue	0 - 3,4 t 0...152 m/min stufenlos/ stepless/ en continue	0 - 5,2 t 0...101 m/min stufenlos/ stepless/ en continue	1,8 - 2,8 min	0,7 min ⁻¹	25,0 m/min	
Hakenweg (m) hook path course du crochet	920	460	306				

Traglasten (t) - WOLFF 630 B		Load Data											
Charges													
Ausladung (m) / jib radius (m) / Portée (m)		20	25	30	35	40	45	50	55	60	65	70	
Auslegerlänge (m) jib length (m) Longueur de flèche (m)	70	7,3 - 37,0	14,0	14,0	14,0	14,0	12,6	10,8	9,3	8,0	7,0	6,1	5,4
	65	6,8 - 42,0	14,0	14,0	14,0	14,0	12,8	11,1	9,7	8,6	7,6		
	60	6,2 - 46,0	14,0	14,0	14,0	14,0	14,0	12,6	11,2	10,0			
	55	5,7 - 49,0	14,0	14,0	14,0	14,0	14,0	13,7	12,4				
	50	5,1 - 50,0	14,0	14,0	14,0	14,0	14,0	14,0					
	45	4,6 - 45,0	14,0	14,0	14,0	14,0	14,0						
	40	4,1 - 40,0	14,0	14,0	14,0	14,0							
35	3,5 - 35,0	14,0	14,0	14,0									
30	3,0 - 30,0	14,0	14,0										
Ausladung (m) / jib radius (m) / Portée (m)		20	25	30	35	40	45	50	55	60	65	70	
70	7,3 - 20,0	28,0	21,4	17,0	13,9	11,6	9,7	8,3	7,1	6,1	5,2	4,5	
65	6,8 - 22,5	28,0	24,7	19,9	16,4	13,8	11,7	10,1	8,8	7,6	6,7		
60	6,2 - 24,0	28,0	26,7	21,7	18,1	15,4	13,3	11,6	10,3	9,1			
55	5,7 - 25,0	28,0	28,0	23,0	19,4	16,7	14,6	12,9	11,5				
50	5,1 - 26,0	28,0	28,0	24,1	20,6	17,9	15,8	14,1					
45	4,6 - 27,0	28,0	28,0	25,2	21,6	18,9	16,8						
40	4,1 - 28,0	28,0	28,0	26,2	22,5	19,7							
35	3,5 - 28,5	28,0	28,0	26,6	22,6								
30	3,0 - 28,5	28,0	28,0	26,5									
Ausladung (m) / jib radius (m) / Portée (m)		20	25	30	35	40	45	50	55	60	65	70	
60	6,2 - 16,0	32,8	25,4	20,4	16,9	14,3	12,2	10,6	9,2	8,1			
55	5,7 - 16,5	34,1	26,7	21,8	18,2	15,6	13,5	11,9	10,5				
50	5,1 - 17,0	35,4	28,0	23,0	19,5	16,8	14,8	13,1					
45	4,6 - 17,5	36,6	29,1	24,1	20,6	17,9	15,8						
40	4,1 - 18,0	37,8	30,1	25,1	21,4	18,7							
35	3,5 - 18,5	38,8	30,8	25,4	21,6								
30	3,0 - 18,5	38,8	30,8	25,5									