

# University College School CONSTRUCTION MANAGEMENT PLAN (CMP) for

# **UCS Project 200**

December 2023



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#### **Overview**

This Construction Management Plan (CMP) has been prepared by Blue Sky Building in response to a request from Ed Toovey of Ed Toovey Architects, for Blue Sky Building to produce a Construction Management Plan for UCS Project 200 at University College School, Hampstead, in support of a planning application, for the redevelopment in-part of the Unversity School site.

It has been prepared in accordance with best practice principles and London Borough of Camden (LBC) guidelines. These procedures will ensure that the interests of local residents, businesses and the public are given special attention by the Contractors when appointed.

This report identifies how the critical construction activities will be undertaken, and covers the environmental, public health and safety aspects of the proposed development. When appointed, contractors will be required to follow the procedures set out in this document, to inform their own detailed Method Statements for the project.

# **Key Reference Documents**

There is a large body of environmental and safety requirements relevant to construction projects, in the form of primary legislation (Acts of Parliament), secondary legislation (Statutory Instruments, including Regulations and Orders) and statutory guidance and Codes of Practice. The Contractor will be responsible for identifying new legislation and regulation and complying with all prevailing legislation at the time of construction including any requirements under Health and Safety regulations.

In addition to the environmental requirements described, the Contractor will be responsible for obtaining licences from LBC before erecting any scaffolding, hoardings, gantries, temporary crossings or fences or depositing a skip on the highway. Whilst with this project, the majority of the actual works are contained within the school grounds, it would be strongly recommended that dialogue is opened with LBC on this matter at the earliest opportunity, to ascertain their requirements for these works in respect of licences.

Camden Councils Contact information in this respect is as follows:

London WCIH 8EQ Phone: 020 7974 6956 Fax: 020 7974 5585 E-mail: highwaysmanagement@camden.gov.uk Website: www.camden.gov.uk/buildinglicences

#### Scope of works

#### The proposed works include, but are not limited to:

The partial deconstruction of the existing Giles Slaughter building [known as the "GS Wing"] at the south end of the site, aswell as full demolition of the Fives courts building and maintenance hut. Three existing outdoor tenniscourts,2built on raised ground and1on the roof of the GS Wing, will be replaced with new. The new development will extend along the eastern side of the school rear amenity, play and car parking area, connecting the Modern languages building to the north with the Kents building to the south, and completing the enclosure of the main rear courtyard. The proposed building will comprise outstanding first-class educational facilities for:

- New Music School including specialist Music Recital Room
- Cafeteria catering space
- Drama Studios
- Hub for Lower School class rooms including shared Common Room
- LectureTheatre
- Well-being Centre with space for contemplation
- Medical facilities
- Ancillary accommodation.

#### **Site Location**

The Site is Located at University College School Senior School, Frognal, Hampstead, London. NW3 6XH, the image below indicates the location of the University College School, within the context of the local area.



This section outlines the requirements relating to site management practices, ranging from the location of accommodation and equipment to the operation of equipment on site. It outlines a number of procedures that should be implemented during site operations. These relate to working hours, site layout & appearance, and good housekeeping. The Contractor is to liaise fully with the school in respect of all matters appertaining to the construction site which impact or have potential for an impact on the school's day to day activities.

Representatives from the Contractor and LBC should regularly inspect the construction site to ensure that these procedures are followed. The Contractor must follow a 'good housekeeping' policy at all times.

The specific measures to be implemented by the Contractor will include but not be limited to:

#### **Working hours**

Working Hours will be as directed by LBC and the school and are expected to be:

08.00 to 18.00 Monday to Friday

08.00 to 13.00 Saturday

No works will be undertaken on Sundays or Bank Holidays.

# Good housekeeping

The Contractor will follow a 'good housekeeping' policy at all times. This will include, but not necessarily be limited to the following. The Contractor will:

- ensure considerate site behaviour of the Contractor's staff;
- ensure the noise from lorry reversing alarms and the like are kept to minimum levels;
- prohibit open fires;
- ensure that appropriate provisions for dust control and road cleanliness are implemented;
- remove rubbish at frequent intervals, leaving the site clean and tidy;
- frequently inspect, repair and re-paint as necessary all site hoardings to comply with the conditions of the LBC Licence all flyposting and graffiti is to be removed as soon as reasonably practicable and within 24 hours of notice from LBC;
- maintain toilet facilities and other welfare facilities for its staff;
- remove food waste;
- prevent vermin and other infestations; and
- undertake all loading and unloading of vehicles in a safe manner, ensuring the safety of pedestrians, cyclists and road users as identified on the logistics drawings.

# Hoardings, site layout and facilities

The site will be completely secure to deter public access and to ensure the safety of both the staff and students attending the school. The proposed hoarding line and gates are shown on the enclosed plans in the logistics section of this document. It is intended to provide protection from noise and dust at all times through the erection of encapsulating scaffolds and physical barriers as appropriate to the task.

Site welfare and office arrangements will be established inside the site boundary.

#### **Public information**

The site entrance notice board will display all necessary health & safety material. Contractor's emergency contact details will be posted on the site hoarding.

#### **Site Access and Egress**

The site will be fully bounded by a 2.4m high timber panel hoarding. This will be painted and branded in accordance with the client's and local authority requirements.

The hoarding vehicle gates will normally be kept closed, opening only to allow the entry and egress, the gates will be manned and controlled by banksmen/gatemen/ traffic marshals provided by the Logistics Contractor.

An access control system for all site personnel and visitors will be implemented by and under the control of the Logistics Contractor. All site personnel will be required to undertake a site-specific induction and will have their swipe card/ biometric details logged to use as site access.

Turnstile access gates will be established at entry to the site and site facilities and only those in possession of a valid pass will be able to enter the site and facilities. Full PPE will be required to access the site.

An appropriate valid CSCS card will be required before an induction can be undertaken and a pass issued. Personnel will not be permitted access to the site until they have been given the site induction and also given a copy of the relevant RAMS by their employer which they have read and signed to say they understand their RAMS.

Visitors will be required to be accompanied by a passholder at all times and before going on site receive a visitors' induction and given the requisite PPE.

The use of CCTV cameras will be investigated for feasibility for use within the site boundary to monitor the project including the entry gates and loading/unloading areas.

# Information for Contactors and Visitors

All subcontractors and visitors to the site will be made aware of the CMP and all other critical plans and the controls applicable to their presence and activities on site including but not limited to:

- Method statements
- Site induction
- Environment briefings
- Toolbox talks

The Contractors Site Management team will be responsible for monitoring communications between all relevant parties involved in the project. This will ensure that all environmental and safety matters relating to the development are discussed and managed with all observations and communications documented in regular meetings and, if necessary, issued via email. All applicable records and correspondence will be retained on site by the Contractor.

Relevant site layout and location plans/development drawings detailing the location and construction of the site compound, storage locations and car parking (where applicable), are to be displayed on an information board at both the main site entrance and site office.

### Security

The Contractor will ensure that the site is secure and will prevent unauthorised entry to or exit from the site. Site gates will be closed and locked when there is no site presence.

Alarms will incorporate an appropriate cut-out period. Access and egress will be via controlled security gates.

## **Site Security Duties**

Security is the responsibility of the Contractor.

Security duties should be provided by the Logistics Contractor and should include:

- A security guard/traffic marshal will be provided.
- Opening and securing the site during site hours. 8:00 am 6.00pm
- Ensuring that the site and gates are always controlled and secure.
- Carrying out regular site inspections.
- Responsibility for ensuring all access ways are kept clear.
- The logging in and checking of site operatives and visitors.
- Informing Contractor and recording of security breaches, including alcohol and drugs use
- Control of site lockers.
- Retaining an updated fire plan and full knowledge of the fire safety plan.
- Completion and issuing of daily visitor's register, weekly reports and delivery vehicle log.

It will be the responsibility of security personnel and trade contractors to ensure that all the emergency exits and loading areas are always closed and clear of debris and materials.

Deliveries will be made into the site compound or off loaded straight to the work face, (see logistics section).

Each trade contractor will need to book in their own deliveries in the logistic management system as controlled by the logistics contractor. A security guard/traffic marshal will be provided to manage the deliveries with the logistic manager.

Material will be stored in allocated areas as defined by the manager.

# NO PERSON TO BE ALLOWED ON SITE WITHOUT A PASS OR PRIOR AUTHORITY OF MANAGEMENT AND APPROVAL.

#### **Management of Contractors**

Contractors will be required to provide method statement(s) and risk assessments covering all their activities and state the environmental aspects and impacts of their activities along with the associated control and mitigation measures. This information must be issued to the Contractor prior to their commencement to allow for suitable review and scrutiny.

Contractors will be instructed that their method statement(s) should include as a minimum:

- A description of the works being undertaken.
- Descriptions of the impacts to the environment caused by their works based on a review of surveys and information available for the development. The impacts should consider areas such as hazardous substances, waste, noise, dust, and vibration etc.
- Details of the activities to be undertaken, equipment to be used, hours of operation, site access arrangements, vehicle movements and details of waste and emissions expected to be generated.
- Management and mitigation measures.
- Monitoring and measurement processes.
- Emergency preparedness and response procedures.

The method statement(s) must also confirm that the following specific control measures are incorporated into their work activities:

- All waste to be segregated (where applicable) and placed in a suitable waste container.
- All fuel to be stored in suitable double skinned bowsers, tanks or within a bunded area.
- Drip trays or absorbent blankets to be placed under all static plant.
- All hazardous chemicals to have an up-to-date COSHH assessment, be appropriately labelled and be stored in a locked container.
- Emergency arrangements for spill response.
- Spillages to be reported immediately.
- Vehicle and plant engines to be turned off when not in use.
- All excavations work to cease immediately if unknown contamination and waste hotspots are identified.

#### **Training & Competency**

Site operatives, either working directly for the main Contractor or for Sub- Contractors, will be competent to perform their respective roles especially those which have the potential to cause significant environmental impacts. Competence is defined in terms of appropriate qualifications, training, and work experience.

Assessment of Contractor competency will form part of the Contractors safety and environmental pre-qualification process. All site operatives will receive an environmental induction prior to the commencement of any site works and this induction will include:

- Summary of the CMP and its contents.
- Project duty holders & management structure.
- Key roles & responsibilities.
- Details of the applicable environmental aspects and impacts of the development.
- Air Quality (dust and odour emissions).
- Noise & vibration.
- Traffic & transport management.
- Waste management.
- Hazardous substances.
- Pollution prevention & control measures.
- Emergency preparedness & response (use of spill kits, reporting of incidents, incident investigation, non- conformance/corrective actions).
- General environmental awareness.
- All Health & Safety information applicable to this project.

#### **Additional Site Induction Information**

Anyone working on site will be required to attend the Contractors site induction, completing the necessary induction forms and producing an up-to-date CSCS card, or equivalent evidence of CSCS certification. All Supervisors will be required to produce an up-to-date copy of their SMSTS or SSSTS certification. Once the induction has been undertaken and proof of certification validated, a site security pass will be issued/site access will be activated.



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## **Induction Roles and Responsibilities**

- It is the responsibility of trade contractors' supervisors to ensure site security are aware of any new starter or visitors 24hrs in advance.
- All operatives must have attended their own company induction before attending Contractors induction.
- It is the responsibility of trade contractors' supervisors to ensure they have checked that new operatives have proof of the required certification. The supervisors must have signed the Contractors induction form before the operative attends that induction.
- The Contractor is responsible for developing and updating their site induction which should include a virtual tour of the project.
- Site security will be responsible for processing the induction forms and issue of site access passes/biometric site access.
- It's the responsibility of site security to ensure all personnel data is kept in each trade contractor's folders within a lockable cabinet

A record of all the inductions undertaken will be kept by management, this will include the names and signatures of each delegate and their respective organisation, along with the date the induction was completed. This will form part of all the records generated as a result of the implementation of this CMP.

## PPE

In respect of Personal Protective Equipment (PPE), we would expect the following to be a minimum provision.

The Contractor should implement a 5-point PPE policy. This will include hard hat, Hi-Vis vests, gloves, safety footwear (trainers are not permitted) and safety glasses. All trade contractors must have the correct company name on Hi-Vis vests before entering site.

PPE must be kept in good condition, and replaced when needed. Supervisors shall be required to wear black hats and fire marshals red.

Hard Hat & Lanyards must be used while working at height.



# **The Construction Site**

#### **Considerate Contractor's Scheme**

The site will be registered with the 'Considerate Constructors Scheme', this can be done via their web site at <a href="https://www.ccscheme.org.uk/">https://www.ccscheme.org.uk/</a>

This scheme ensures that contractors carry out their operations in a safe and considerate manner with due regard to neighbours, passing pedestrians and road users. It is the Contractors responsibility to ensure that the registration process is executed and put in place.

The relevant requirements of LBC under the scheme can be found within section 1.3 of their Codes for Construction Practices, accessible via <u>https://www.camden.gov.uk/about-construction-management-plans</u>



#### Site Location and Access to Public Transport

The site lies within the Frognal /Redington Conservation Area, and is bounded by Frognal to the west, Arkwright Road to the south, Ellerdale Road to the east, and Frognal Way to the north. The west side is open to the public street, while the other three sides have residential properties to the north, east and south.

The site is also in close proximity to Finchley Road, which is part of TfL's Transport for London Road Network (TLRN).

The access to, and the frontage of the site on Frognal have a PTAL score of 5, with accessibility by public transport considered to be very good. Some of the site is also in an area of PTAL 2, which reflects poor accessibility.

The nearest London Underground stations at Finchley Road, Hampstead, West Hampstead and Belsize Park, are located approximately 700m south, 800m north, 1.2km south-west and 1.7km east of the site respectively. West Hampstead also provides access to national rail and London Overground services.

Finchley Road & Frognal and Hampstead Heath London Overground Stations are located approximately 450m south and 1.6km north-east of the site respectively.

The nearest bus stops on Finchley Road and Fitzjohn's Avenue are located approximately 500m from the site.

## **Camden Transport Officers Initial Observations**

In addition to all other requirement's, the Contractor is to take note of and formulate their strategies taking account of the following input from The Camden Transport Officer

"The site is located in close proximity of Fitzjohn's Avenue and Finchley Road, which forma part of the TLRN. Traffic congestion is a significant problem in this part of the borough, particularly during peak periods but often throughout the day on Monday to Friday. Our primary concern is public safety, but we also need to ensure that construction traffic does not create (or add to existing) traffic congestion in the local area. The proposal is also likely to lead to a variety of amenity issues for local people (e.g., noise, vibration, air quality, temporary loss of parking, etc.). The Council needs to ensure that the development can be implemented without being detrimental to amenity or the safe and efficient operation of the highway network in the local area. More detailed Demolition Management Plan (DMP) and Construction Management Plan (CMP) documents will therefore be secured by legal agreement in accordance with Local Plan Policy A1 if planning permission is granted.

The Council will expect construction vehicle movements to and from the site to be scheduled to avoid peak school periods to minimise the impacts of construction on the pupils' safety. It will be necessary restrict construction traffic to the hours of 9.30am to 3.00pm on weekdays.

The contractor will need to register the works with the Considerate Constructors' Scheme. The contractor will also need to adhere to the CLOCS standard for Construction Logistics and Community Safety.

The development will require significant input from officers at construction stage. This will relate to the development and assessment of the CMP as well as ongoing monitoring and enforcement CMP during demolition and construction.

A further requirement to form a construction working group consisting of representatives from the local community prior to commencement of demolition or construction will also be secured by legal agreement if planning permission is granted".

#### **Operatives Parking**

No parking will be allowed on site or within the school grounds, parking in the local area is limited, therefore it is recommended that operatives travel by public transport and or their invidual companies arrange for work transport, which will drop operatives off, then locate to a public commercial car park.

We would also recommend a cycle to work scheme be encouraged with storage/changing and shower facilities being provided on site as part of the site set up.

This section of the document will identify a high-level strategic programme and the specific methodology of the project, which may be subject to change as the design is further developed and once a contractor has been appointed and they develop their own methodologies and programmes. Note the methodology contained within is not a detailed methodology, more an overview, which will be developed by the contractor when appointed and sufficient design detail has been agreed.

# Programme

The programme overleaf indicates a high-level strategic view, based on the information received to date, including the start and completion dates within the planning statement.

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#### Proposed Demolition and Construction Methodology

#### **Pre-Commencement**

Prior to commencement of works on site a period of pre- construction planning and activities are required to ensure works can commence.

- Production of a detailed task specific Method Statements;
- Neighbour liaison before the commencement on site to explain the nature of works;
- Formulation of project Construction Phase Plan and risk assessments under Construction Design and Management Regulations 2015 (CDM);
- Undertaking of a full Refurbishment and Demolition Asbestos survey and submission of Safe system of work and licence applications for removal of Asbestos Containing Materials (ACMs);
- Production of detailed works programmes and sequencing;
- Highways condition surveys to be carried out prior to commencement on site;
- Surveys and approvals for local diversions of pavement services if necessary;
- Surveys, design and agreement of HV substation strategy including temporary provision if required;
- Liaison with LBC, TfL and neighbours regarding vehicle movements and any proposed parking bay suspensions;
- CCTV surveys of existing drainage;
- LBC licence applications and approvals for hoardings and scaffolds;
- Baseline environmental monitoring; and
- Mobilisation of selected plant and operators.

# Site Establishment

Site establishment works will comprise the creation of the site compound and securing the demolition and construction site. Specific Site Establishment activities will include:

- Install temporary accomodations for school use during the construction works, see Appendix A for location
- Establish construction site office and welfare facilities for the workforce within the site boundary. Facilities will initially be established inside existing buildings pending demolition and provision of cabins;
- Erect hoardings to the site perimeter. Hoardings will be 2.4m high, solid timber, with clear warning signs. Hoardings and gates will be in accordance with LBC licencing rules;
- Make safe/ isolate existing services and utilities in the buildings;
- Contractor's contact details to be provided on the site hoarding;
- Vehicle and pedestrian access to the works will be controlled by fully trained gatemen and traffic marshals;
- Installation of site temporary electrics, lighting, water and fire alarms. Where possible the site and compound will operate from connections to permanent utility supplies rather than generators;
- Establishment of site security provisions to ensure that the site is protected against unauthorised or unlawful entry and potential theft from site;
- Wheel cleaning facilities will be established at all site exits.

## Demolition

Once the site is secure and made safe the demolition phase can commence, this will include the use of temporary propping ahead of and during demolition and also subsequent sheet pilng required for the excavation works.

Perimeter scaffolds with Monarflex (or similar) sheeting will initially be erected for demolition access and to mitigate dust and noise escape. All vehicles will be loaded within the site perimeter.

#### **Soft Strip Works**

A full R&D survey will have been carried out to identify any asbestos contaminated materials present within the existing buildings prior to commencement. A safe method of working for removal of any Asbestos Containing Materials (ACMs) will be submitted to the HSE (ASB5 notification) prior to commencement. ACMs will be removed by licenced contractors in accordance with current legislation, following approval of the safe system of work.

"Soft Strip" includes the removal of all internal fixtures, fittings and components to take the buildings back to bare structure. This includes roof finishes, windows, doors and timber floors. Stripping out will be carried out using mainly hand-held tools.

The works will be accessed from the existing floors or from aluminium towers. Competent, trained persons will be used to erect the aluminium mobile towers.

Heritage or architecturally interesting components will be identified and reserved for potential reuse in the new development or elsewhere. When the building has been cleared of asbestos and other contaminants these will be carefully removed and taken from site for further assessment and storage.

As general materials are stripped, they will be loaded away to skips or lorries via the loading gantries. Ceiling hangers, trunking, conduit, pipework and other non-structural metalwork will be cut out using oxygen/ propane burning equipment, angle grinders or mechanical dismantling.

A 'Hot-Works' permit to work system will be enforced when any works of this nature are undertaken, and fire extinguishers will be prominent. Hot works will cease two hours before the end of a working shift and the area thoroughly checked prior to breaks or to leaving site.

Windows will be opened for the purpose of ventilation. Oxygen and propane bottles will be stored upright in a lockable cage.

By regularly removing the accumulated debris, the potential fire risk, that loose combustible material imposes, is minimised/ removed.

Externally, trees and planting will be removed, and perimeter walls, fences and hard landscape features demolished, paving lifted, and hardstandings broken up.

#### **Hard Demolition**

Hard demolition will follow the soft stripping of the buildings.

Demolition of the existing buildings will be a carefully managed process that can be considered deconstruction. Perimeter scaffolds will be designed to be free standing to avoid collapse and will remain in place as a screen until the ground slab has been broken up. On completion of the soft strip scaffolds will be adapted to allow access by demolition plant from the centre of the site.

There will be a series of permanent and temporary works activities to the "cutline" to ensure the support of the retained sections of buildings. These works remain subject to further investigation and design once buildings are empty.

High Reach Demolition will be employed whereby the buildings are demolished in a step like manner working through the structural bays on each floor using excavators fitted with long reach arms. Arisings on the floors will be scraped off periodically to keep the weight on the slabs to a minimum.

Independent scaffolding and Monarflex will be in place to perimeter elevations and water hoses fed through the machine arm assists dust suppression. Arisings on the ground are processed for crushing using standard height machines.

The buildings will primarily be dismantled using a combination of machine mounted pulverisers, crushers and shears. A crawler or mobile crane will be employed to remove roof trusses and long steel members as and when required.

Once the superstructure has been demolished, ground slabs will be broken out using 360° excavators, fitted with hydraulic breaker attachments, followed by grubbing out of the foundations and below ground drainage.

Water dousing will be carried out using recycled water where possible, to control dust. Noise levels will be controlled using best practice controls and management including the provision of screening where required. It is anticipated that the concrete materials recovered from the demolition process will be crushed, graded and stockpiled on site, and then ultimately reused on site for construction of a piling platform. In the event of contaminated material being identified, it will be segregated and removed from site by a licenced waste carrier to a suitable landfill.

Scaffolding will be designed to free stand one floor level above demolition to prevent collapse and will be progressively dismantled as the buildings are lowered.

Perimeter demolition will be undertaken early to allow vehicles to enter site as soon as possible in the sequence to reduce the impact of loading near to the site boundary.

To ensure that the impact of the construction is kept to a minimum we propose that all demolition would be controlled under a section 61 prior consent application.

#### Piling

The new development will be supported in certain areas on piled foundations, the specific details of which are still to be issued. The piling works will be carried out in sequence with the demolition and excavation works once detailed plans are developed.

When demolition and site clearance and probing is complete the site will be graded to predetermined levels for piling. A piling platform will be constructed using compacted crushed demolition arisings that have been stockpiled for this purpose, augmented with imported recycled material if necessary.

Piling will be undertaken from the piling platform at approximately existing ground level before excavating the basements and retaining walls.

A single piling rig is likely to be on site working sequentially from south to north, although additional rigs may operate to shorten the substructure programme, if required. Piling will be serviced by crawler cranes and 3600 excavators. Concrete will be delivered by ready mix trucks and placed directly from the vehicle's placement chute where possible.

The final choice of method will depend on a number of factors including the final pile design and size of rig(s) needed.

#### Site Clearence/Excavation

In conjunction with demolition and piling operations, site clearance and excavation works will take place over the whole of the site footprint, in preparation for the commencement of superstructure works. The exact methodology and sequencing of these works, will be determined as the design is further developed in detail. Note, sheet piling is to be installed in conjunction with the demolition, excavation and piling works.

#### Substructure

Formation of the foundation, basement areas and structural beams below ground will be integrated with the above operations and sequencing.

#### Superstructure

Structural details are limited, it is assumed in line with the DAS, new building forms, will have a reinforced concrete structure, this will commence integrated in with the methodology for substructure works.

Consideration will be given in the detailed construction planning to utilise prefabricated elements, such as columns and staircases.

Component delivery trucks and concrete wagons will continue to offload within the hoarded boundary using the fork lifts, mobile cranes and a mobile concrete pump and placing boom.

#### Envelope

Brickwork/Blockwork/Glazing and Cladding systems are at an early stage of design. As the detail design is developed and agreed, the most optimum sequencing and methodology should be adopted, to ensure fit out and external works can be started and progressed. That sequence will be integrated with the superstructure sequence.

Where practical the SFS inner skin will be constructed as the frame elements complete to ensure the earliest watertight date. As the vertical cladding reaches roof level then high- performance roof membranes will be applied, followed by roof finishes at the appropriate time. Which in this instance will include the new tennis courts, see external works section.

#### **Fit-Out and External Works**

Finishes and services fit out will commence once a level of temporary or permanent water tightness has been achieved. Core services and distribution will be progressed first.

This is expected to be carried out once the main structure nears completion.

In addition, as the main superstructure works draw to a conclusion, works to the new tennis courts can progress.

As the new works reach conclusion the temporary site accommodation and hoardings will be cleared from the site. Pavements and roads will be reinspected and reinstated, and all necessary remedial work carried out.

The efficient management of the site logistics will be vital to the success of the project. A key strategy of logistics for a construction project is to ensure that the products and materials arrive on site at the time and in the quantities that are required.

The Contractor will ensure that the necessary pre-planning is undertaken and that the quality of the communication between those planning the project and those supplying the products and materials is maintained throughout the duration of the project.

The drawing within this section illustrates the proposed overall logistics plan for the site that incorporates the following key features:

- The site will be fully secured in a close boarded timber hoarding
- Wheel washing will be by handheld jet wash inside the site boundary. A temporary sump will be formed to prevent spoil build up in main drainage.
- Traffic Marshal locations.
- Traditional scaffolds with Monarflex sheeting will be erected for demolition.
- Concrete will be delivered as ready mix and pumped via a mobile pump and boom.
- Mobile cranage will be used for lifting.
- Adjacent roads and the site entrance will be cleaned using wet sweeping methods throughout delivery operations.
- Contractor accommodation will initially be inside retained buildings and will move to cabins located in the site compound as works proceed.
- See Appendix A for location of temporary accommodation

The following Logistics drawing appears overleaf: BSB-UCS-001 - Construction Phase Logistics



This section highlights the measures by which the Contractor will avoid nuisance to the public that may arise from increases in traffic flows and temporary rearrangements of the road network associated with the construction works. Measures have been considered in relation to access routes, site access, timing of movements, environmental standards and parking.

The site being housed within the UCS complex, is by its very location, also housed within a suburban residential area, where the road access is not conducive with large amounts of traffic, not least large construction vehicles. This route of approach therefore limits the number of and size of vehicles reaching site through the residential streets.

Timing of deliveries will be strictly controlled to avoid peak traffic periods. Deliveries and collections for the site will be restricted to 09.30 to 16.00 where possible.

# **Access Routes**

The Contractor will use designated construction traffic routes for deliveries to the site and removal of waste. Access routes to and from the site to be used by heavy goods vehicles (HGVs) will be agreed with LBC and TfL prior to initiation of the construction programme, to minimise disruption to the road and pedestrian network. The Transport for London Road Network (TLRN) will be used as far as possible to reach the site.

At this stage we don't know which wider direction specific traffic will approach from but that will become clearer when a contractor is appointed and is able to place supply orders.

The contractor will provide further detail when appointed, and when the source of specific materials is better known. The routing is therefore subject to Contractor confirmation.

We would suggest vehicles approach site from Finchley Road, via Arkwright Road and exit site via Frognal and Frognal Lane, back onto Finchley Road, see proposed traffic routing below in this section.

#### **Strategic Access Routes**

The contractor will use designated construction traffic routes for deliveries to the site and removal of waste etc. in accordance with their overall Traffic Management Plan. Access routes to and from the site to be used by heavy goods vehicles (HGVs) will be agreed with TFL and LBC prior to initiation of the demolition and construction programme, to minimise disruption to the road, cycle, and pedestrian network. It is anticipated that the strategic road network will be used as far as possible for this purpose, when vehicles are traveling from outside of London.

The following images indicate the regional, central and local, strategic network routes. When traveling into London, and navigating central London, the contractor is expected to follow the TFL strategic network, to reach this development.



Transport For London Strategic Road Network Red Routes

# **Strategic Access Routes (continued)**



Transport For London Strategic Road Network - Central - Red Routes



Local Traffic Context Plan

#### **Construction Traffic Forecasting**

The number of lorry movements, hours of operation and any lorry holding areas will be agreed in advance with LBC and TfL. The Contractor will maintain an up-to-date log of all drivers that will include a written undertaking from them to adhere to LBCs approved routes for construction traffic.

There will be no daytime or overnight parking of lorries within the vicinity of the construction site.

Based on the High-Level Strategic Programme included within section four of this document, indicative traffic forecasts are indicated in the following image:



# **Use of Consolidation Centres**

As part of the overall logistics strategy, linked to the Traffic Management Plan, the use of consolidation Centre's, for the storage of materials prior to delivery, should be encouraged. This allows for more concise management of deliveries and as a result is more effective in respect of managing the Environmental impact of construction activities. The numbers of vehicles will also be able to be controlled more affectively.

# Vehicle Management/ CLOCS

The project will adopt Construction Logistics and Community Safety (CLOCS) standards for all delivery vehicles. (CLOCS Standard for construction logistics, V1.2 2014) Fleet Operator Recognition Scheme (FORS) Silver accreditation as a minimum will be a contractual requirement, FORS Gold operators will be appointed where possible. Where FORS Silver operators are appointed, written assurance will be sought from subcontractors and suppliers that all vehicles over 3.5t are equipped with additional safety equipment (as per CLOCS Standard P13), and that all drivers servicing the site will have undertaken approved additional training (e.g., Safe Urban Driving + 1 x e-learning module or Work Related Road Risk Vulnerable Road User training + on-cycle hazard awareness course + 1 x e-learning module etc.). CLOCS Compliance will be included as a contractual requirement.

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

Checks of FORS ID numbers will form part of the periodic checks and will be carried out as per an appropriate risk scale. Random spot checks will be carried out by site staff on vehicles and drivers servicing the site at a frequency based on the aforementioned risk scale. These will include evidence of further training, license checks, evidence of routing information, and checks of vehicle safety equipment. Results from these checks will be logged and retained and enforced upon accordingly.

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

# **Delivery Management**

Timing of deliveries will be strictly controlled. Deliveries and collections for the site will be restricted to 09.30 to 16.30 where possible.

To minimise the likelihood of congestion during the construction period, strict monitoring and control of vehicles delivering to site will be implemented. Construction deliveries will be carefully planned with delivery times agreed with each subcontractor and supplier using a booking system. Delivery schedules will be produced in order to look at the profiles of pending deliveries, and to regulate deliveries and eliminate bottle necks.

Wheel cleaning facilities will be established inside the site boundary when ground works are underway.

Note, the contractor is to review vehicle sizes needed for deliveries as the approach to the site is not conducive with large loads. Any such loads we would suggest, are to be agreed in advance with LBC, Tfl and the School authority.

# **Operatives Journeys to Work**

No parking for private vehicles will be available on the site. Subcontractors may opt to bring operatives to site by minibus for which commercial parking off site will be arranged. Cycling to site will be encouraged with bicycle storage and shower facilities available on site.

#### Site Waste Management

The Contractor will use working methods that minimise waste. Any waste arising from the site must be properly categorised and dealt with in accordance with appropriate legislation.

Opportunities for re-using or recycling whether from reusing on site or resale of construction waste will be explored and implemented.

The Contractor will carry out the works in such a way that as far as is reasonably practicable the amount of spoil and waste (including groundwater, production water and run-off) to be disposed of is minimised, and that any waste arising from the site is properly categorised and dealt with in accordance with the appropriate legislation and guidance.

The disposal of all waste or other materials removed from the Site will be in accordance with the requirements of the Environment Agency, Control of Pollution Act (COPA), 1974, Environment Act 1995, Special Waste Regulations 1996, Duty of Care Regulations 1991 and the Waste Management Regulations 2006.

In addition, it is now normal through the planning process, to commit to following GLA Guidelines on the circular economy concept which provides an alternative to a traditional linear economy (make, use, dispose).

In general, and in accordance with the principles of the UK Government's 'Waste Strategy 2010', a principal aim during construction will be to reduce the amount of waste generated and exported from the Development site.

This approach complies with recognised waste hierarchy whereby the intention is first to minimise, then to treat at source or compact and, finally, to dispose of off-site as necessary. All relevant subcontractors will be required to investigate opportunities to minimise and reduce waste generation, such as:

- Agreements with material suppliers to reduce the amount of packaging or to participate in a packaging take-back scheme.
- Implementation of a 'just-in-time' material delivery system to avoid materials being stockpiled, which increases the risk of their damage and disposal as waste.
- Attention to material quantity requirements to avoid over- ordering and generation of waste materials.
- The Government has set broad targets of the use of reclaimed aggregate, and in keeping with best practice, subcontractors will be required to maximise the proportion of materials recycled.
- Segregation of waste at source.
- Re-use and recycling of materials off-site where re-use on-site is not practical (e.g., through use of an off-site waste segregation facility and re-sale for direct re-use or re- processing). Our expectations in this regard are shown in the table overleaf.

Material	Target	Probable Location
Architectural salvage	100% re-used	Heritage items with potential for inclusion in the proposed scheme will be carefully removed from site for testing and assessment. Suitable items will be safeguarded for reuse within the scheme or distributed elsewhere via architectural salvage companies.
Metals	100% recycled	Every effort will be made to recycle these materials on site with any surplus being taken to waste transfer station.
Hard-core (brick/block/ concrete etc.)	100% recycled	Crushed on site for reuse in construction of the piling plat- form and hardstanding subbase.
Excavated material/ clay etc.	100% recycled	Processed for re-use as inert fill off site (subject to analysis).
Timber	Up to 80% re-used	Attempts will be made to salvage any re-useable timber for hoardings, battening, shuttering etc. for possible use on site with the balance being reused elsewhere or processed by chipping for use in construction board manufacture or pelleting for biofuel.
Glass	The amount re-used will depend on the material	Numerous processing facilities.
Mixed waste	The amount recycled will depend on the material	An absolute minimum will remain for transport to landfill.
Asbestos	100% landfill	Taken to a licensed site.

# **Demolition Waste Specifically**

The construction and demolition industries can reduce their environmental impact at the same time as realising cost savings through resource efficiency. This can be addressed by taking a reclamation-led approach that:

- Not only diverts waste materials from landfill but also retains greater value by reclaiming them intact at the demolition stage;
- Re-uses materials either on the project where they arise or elsewhere;
- Replaces the need for new materials; and
- Reduces the embodied impact of the new construction works; and that maximises resource efficiency.

This approach is recognised by both the NFDC and construction industry and reflected in the Demolition Protocol produced by the Institution of Civil Engineers and endorsed by the government funded Waste and Resources Action Programme (WRAP) and is in line with both GLAs, Circular Economy Statements, section 4.6 as well as BREEAM Wst 01.

For the construction & demolition sectors, tailored guidance within (WRAP) is available at: <u>http://www.crwplatform.co.uk/conwaste and or http://www.wrap.org.uk/construction</u>,

GLAs Circular Economy Statements are available at: <u>htps://www.london.gov.uk/sites/default/files/circular\_economy\_statements\_lpg.pdf</u>

and Breeam Wst 01 can be viewed within their technical manual available at: <a href="https://bregroup.com/products/breeam/breeam-technical-standards/">https://bregroup.com/products/breeam/breeam-technical-standards/</a>

We have for reference, highlighted some potential sources for the recycling of and the reselling of materials born out of the demolition processes on the project, in the table overleaf.

Material	Comments	Links	
All	Reuse Marketplace	www.globechain.com	
Flooring	Carpet floor tiles and vinyl flooring within the building hold reuse potential depending on their condition. Tarkett and other flooring manufacturers can reprocess tiles into new product. Carpet tiles are widely reused.	www.professionals.tarkett.com www.recofloor.org www.salvoweb.com www.reuse-network.org.uk www.garysgotit.co.uk www.envirocyclelondon.co.uk	
Ceiling Tiles	A small quantity of ceiling tiles is expected which hold high reuse potential subject to quality checks. There are several recycling schemes that will collect ceiling tiles and ensure that no waste is sent to landfill.	www.lcrn.org.uk www.garysgotit.com www.armstrongceilingsolutions.co.uk	
Face Bricks	Facing bricks have potential to be reused subject to condition.	www.salvoweb.com	
Timber	Sold directly to contractors/ manufacturers for reuse or through a reuse merchant.	www.stalbanswoodrecycling.org.uk	
Concrete	To be crushed and reused on site as piling mat or sub-base	www.odonovan.co.uk	
Glazing	Window and partition glass has high potential to be reused. It could be removed and reused as glass or recycled into new product.	www.salvoweb.com www.powerday.co.uk www.viridor.co.uk www.axisglass.co.uk	
Structural Steel	Structural steel could be used in contractor's temporary works schemes or in permanent works subject to warranty. Other steel fittings such as handrails can also be reused and shared amongst the reuse network. Recycling widely available.	www.portal-power.co.uk www.powerday.co.uk www.uk.emrlocal.com	
Insulation	Depending on the type of material used, rock- wool can be diverted from landfill and be 100% reused or recycled.	www.rockwool.co.uk	
Plant – Chillers, Lifts, AHUs, FCUs & Pumps	Plant components may hold high reuse potential depending on their condition and age.	www.salvoweb.com www.reuse-network.org.uk www.envirocyclelondon.com www.xmachines.com	
Mixed Metals	Numerous waste processors available	www.portal-power.co.uk www.powerday.co.uk www.uk.emrlocal.com www.londoncitymetals.com	
Cables	Numerous waste processors available	www.londoncitymetals.com/cable- recycling	
Plasterboard	Numerous processors, including British Gypsum	www.british-gypsum.com www.viridor.co.uk www.powerday.co.uk www.suez.com	
Asphalt	National tarmac and aggregate businesses	www.fmconway.co.uk www.agg-net.com	

#### **Contaminated Waste**

Identifying contaminated waste remains subject to further investigation and testing. Asbestos containing materials may to be present, although there is no evidence of this, a full analysis should be carried out to eliminate this possibility. All contaminated material will be identified, removed in according with legislation, and taken to the appropriate licenced landfill site.

### **Waste Treatment Locations**

GLA waste treatment locations are shown on the map image below, for a live up to date version of the map, which can be filtered to suit exacting requirement's, please use the following link: https://apps.london.gov.uk/waste/



The Contractor will monitor and control levels of noise and vibration from the site. This will be particularly important on this project, given it is on the school grounds and measures may have to be considered specifically during exam periods, these are to be confirmed. The contractor is to fully liaise with the school on this matter and any specific measures required are to be included within the Contractors critical management plans, specifically, their Environmental Plan and Noise & Vibration Management Plan.

Measures for reducing noise & vibration levels are set out of this section.

As already stated in several sections of the document, the Contractor is to fully liaise with LBC on matters such as noise and vibration, for clarity, their contact details are below:

Environmental Health Team Culture and Environment Directorate Town Hall Argyle Street London WC1H 8EQ Phone: 020 7974 2090 Fax: 020 7974 6955 E-mail: env.health@camden.gov.uk

#### **Best Practicable Means**

Best Practicable Means (BPM) of noise control will be applied during demolition and construction works to minimise noise (including vibration) at neighbouring properties and other sensitive receptors arising from construction activities.

The general principles of noise management are given below: Control at source:

- Equipment noise emissions limits for equipment brought to site.
- Equipment method of directly controlling noise e.g., by retrofitting controls to plant and machinery.
- Equipment indirect method of controlling noise e.g., acoustic screens.
- Equipment indirect method of controlling noise e.g., benefits and practicality of using alternative construction methodology to achieve the objective as opposed to more conventional but noisier techniques; selection of quieter tools/machines; application of quieter processes.

Control across site by:

- Administrative and legislative control,
- Control of working hours,
- Control of delivery areas and times,
- Physically screening site,
- Control of noise via Contract specification of limits.

Many of the activities which generate noise can be mitigated to some degree by careful operation of machinery and use of tools. This may best be addressed by toolbox talks and site inductions.

## **Noise Control Measures**

The Contractor shall comply with the recommendations set out in BS 5228-2:2009+A1:2014 and in particular with the following requirements:

- Delivery vehicles and mechanical plant will be maintained in a good and effective working order and operated in a manner to minimise noise emissions. The contractor will ensure that all plant complies with the relevant statutory requirements;
- HGVs will be equipped with broadband, non-tonal reversing alarms;
- Compressor, generator and engine compartment doors will be kept closed and plant turned off when not in use;
- All pneumatic tools will be fitted with silencers/mufflers;
- Care would be taken when unloading vehicles to avoid un- necessary noise;
- The use of particularly noisy plant will be limited, e.g., avoiding use early in the morning;
- Restrict the number of plant items in use at any one time;
- Plant maintenance operations will be undertaken at distance from noise-sensitive receptors;
- Ensure that operations are designed to be undertaken with any directional noise emissions pointing away from noise- sensitive receptors;
- When replacing older plant, ensure that the quietest plant available is considered;
- Drop heights will be minimised when loading vehicles with rubble;
- Vehicles should be prohibited from waiting at the site with their engines running;
- Local hoarding, screens or barriers should be erected to shield particularly noisy activities, see below;
- Temporary noise screens will be used to reduce noise from particularly noisy activities and the height of perimeter hoarding will be extended where this would assist in reducing noise disturbance at sensitive receptors; and
- Hours of operation should be strictly enforced and any deviations other than those previously identified will be with the consent of the local authority;
- Limiting of high impact activities (including piling and excavation works) to specific times of the day. For example, this may include 1 hour on 1 hour off, or the restriction of such activities to between 09:00-12:00 and 14:00-17:00;
- Vehicles, plant and equipment will undergo regular servicing and maintenance to prevent irregular noise levels;
- Static plant, when in operation, is to be sound attenuated using methods based on the guidance and advice in the BS 5228, where practical;
- Implementation of Best Practice Means (as defined in Section 72 of the COPA) by subcontractors at all times, and are to carry out all work in such a manner as to reduce disturbances from noise and vibration;
- Preference for electrically powered plant, to mechanically powered alternatives, where practical.

# **Delivery Traffic**

The Contractor will incorporate the following measures into the scheme to avoid noise related impacts from construction traffic:

- Vehicles will not wait or queue up with engines running on the public highway;
- Vehicles will be properly maintained to comply with noise emissions standards;
- Deliveries will be restricted to be within working hours of the site; and
- Design and routing of access routes will minimise vehicle noise and the need to perform reversing manoeuvres.
- The projects location, should also be considered when scheduling the type and size of delivery vehicle.

#### **Noise Control Provisions – Screens and Scaffolds**

Throughout the critical demolition, below ground and structural construction, works will take place behind the close boarded hoarding and sheeted scaffolds where practical. The hoarding and sheeted scaffold provides the following benefits during the construction stages of the works:

- It acts as a visual screen hiding the on-going works.
- With the use of the hoarding and solid acoustic barriers, noise is contained.

Scaffolding will be erected where required for walls and roof access. Scaffolds will be clad in Monarflex or similar sheeting to minimise noise and dust escape.

Solid timber barriers will be erected at ground level to further screen the below ground level works and prevent noise break out.

As already stated in this document, the contractor must also comply with LBCs Codes for Construction Practices, not just on the issue of noise and vibration, but all matters appertaining to working on construction sites within the Camden area. The images below are extracts from their codes on typical examples of localised screen enclosures that they will expect to see being used.

# **Noise & Vibration**

# **Noise Control Provisions – Screens and Scaffolds**





# **Noise Levels**

Given the project is situated on the school grounds, the Contractor must plan any noisy works, in full liaison and coordination with the schools Management Team. As sted at the head of this section, specific measures may need to be put in place during exam periods.

The Contractor is required to make provision for the limitation of high impact activities (including piling and excavation works) to specific times of the day. For example, this may include 1 hour on – 1 hour off, or the restriction of such activities to between 09:00-12:00 and 14:00-17:00.

A typical example of the general noise levels the contractor is expected to commit to working to on this project, all to be agreed in advance of works commencing with LBC and the school, would be:

Assessment category and threshold value period (Laeg)	Threshold value, in decibles (dB)		
	Category A	Category B	Category C
Daytime (08:00 - 19:00)	65	70	75
Evening - Night Time (19:00 - 08:00)	45	50	55

# **On Site Training**

Training - General induction training and toolbox talks will be undertaken by the Contractor for site operatives who have responsibility for aspects of controlling noise and vibration at the site. All contractors to be made familiar with the guidance in BS5228 (Parts 1 and 3) 'Code of Practice for Noise & Vibration Control on Construction and Open Site – Noise' which should form a pre-requisite of their appointment.

# **Vibration Control**

Vibration is a particular risk during the piling and excavation stages.

The measures taken to reduce the acoustics of these two operations will also assist in mitigating the effects of vibration on neighbours and their property. Specific measures required include but are not limited to:

- A digital seismograph measuring device will be used to measure the amount of vibration produced during the works. Where elevated levels are recorded the source will be investigated and, where possible, alternative techniques employed to reduce the levels.
- The Contractor will comply with the vibration levels established by agreement with THC, which will consider BS 5228-2.
- The potential requirement for vibration monitoring will be assessed in line with BS 5228-1:2009+A1:2014 'Code of Practice for Noise and Vibration Control on Construction and Open Sites'.

Were vibration monitoring is required measured vibration levels shall be compared with the criteria in BS 5228:2009 Part 2 (i.e.,1mms-1 PPV for potential disturbance in residential area and using a suggested trigger criteria of 2mms-1 for commercial areas). Lower limits will be confirmed with Camden Council if there is a risk the vibration levels may interfere with vibration sensitive equipment or other vibration sensitive objects.

- The location of vibration monitors (accelerometers) will be located on or adjacent to partition walls and shall be (subject to agreement) identified on a suitable OS plan with a copy issued to the LBC Environmental Health Department.
- Any exceedance of vibration trigger limits shall initiate a review of the applicable activities/works to enforce changes of the methodology or equipment in order to mitigate the situation and to return to suitable vibration levels.

# **Noise & Vibration Monitoring Equipment**

The exact location of monitoring equipment will be agreed with Camden Council and the school, subject to confirmation of the school's requirements and any recommendations from any baseline noise survey, yet to be provided.

The Contractor will, as far as reasonably practical, seek to control and limit emissions to the atmosphere in terms of gaseous and particulate pollutants from tools and equipment used on site and dust from construction activities. Special precautions must be taken when materials containing asbestos are encountered.

The Contractors approach on this Project to air quality management is particularly important, given the project is in a live school, the contractor must liaise with the school Management Team on a regular basis and must include their views and concerns in any proposed strategies and in any reports and issues that have the potential to affect the local environment.

As already stated in several sections of the document, the Contractor is to fully liaise with LBC on matters such as air quality, for clarity, their contact details are below:

Environmental Health Team Culture and Environment Directorate Town Hall Argyle Street London WC1H 8EQ Phone: 020 7974 2090 Fax: 020 7974 6955 E-mail: env.health@camden.gov.uk

The site activities will be assessed in accordance with Camden Councils guidance and requirements, under their air quality management for the area, in addition to being in accordance with any supplementary planning conditions and guidance. The Contractor must take account the following:

- Camden Councils Construction Environmental Management Plan & Local Planning Application Requirements:
- Greater London Authority Supplementary Planning Guidance 'The Control of Dust and Emissions During Construction and Demolition'.
- Greater London Authority: London Plan Guidance Air Quality Neutral Report dated February 2023: Air Quality Neutral (AQN) guidance | London City Hall
- The contractors must submit a statement to the Local Authority for approval identifying proposed dust control measures before work starts.

In addition, throughout the project, the Contractor will ensure the following:

- Where potential dust producing activities are taking place, screens remain in position. This will include all demolition, excavation and structural works.
- There is no burning of waste materials on site.
- There is an adequate water supply on the site.
- Disposal of run-off water from dust suppression activities and cleaning is in accordance with the appropriate legal requirements.
- All dust control equipment is maintained in good condition and record maintenance activities.
- Site hoarding, barriers and scaffolding are kept clean.
- If necessary, clean public road and pavement using wet sweeping methods.
- All vehicles carrying loose or potentially dusty material to or from the site are fully sheeted.
- Plant working on site to have exhausts positioned such that the risk of re-suspension of ground dust is minimised (exhausts should preferably point upwards), where reasonably practicable.
- Materials with the potential to produce dust are stored away from site boundaries where reasonably practicable.
- Minimise the amount of excavated material held on site.
- Sheet, seal or damp down unavoidable stockpiles and skips of material held at site, where required.

- Avoid double handling of material wherever reasonably practicable.
- Sheet or otherwise enclose loaded bins and skips.
- Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.
- Use prefabrication of goods and materials to reduce the need for grinding, sawing and cutting on site wherever reasonably practicable.
- Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction.
- The engines of all vehicles delivering to site are not left running unnecessarily to prevent exhaust.
- That conveyor equipment will be well maintained, with regular servicing and maintenance carried out.
- Use low emission plant fitted with catalysts, diesel particulate filters or similar devices.
- Use ultra-low sulphur fuels in plant.
- Preference for electrically powered plant, to mechanically powered alternatives, where practical.
- That plant will be well maintained, with routine servicing of plant and vehicles. On site servicing and maintenance to be carried out where possible.
- Carry out site inspections regularly to monitor compliance with dust control procedures set out above and record the results of the inspections, including nil returns, in the logbook detailed.
- Increase the frequency of site inspections when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.
- Record any exceptional incidents causing dust episodes on or off the site and the action taken to resolve the situation in the logbook detailed in above.
- Liaise fully with the School Management Team on all matters arising.
- As stated above in this document, comply fully and without exception, with all the requirements of LBC Codes for Construction Practices.

# Mayor of London's SPG "The Control of Dust & Emissions During Construction & Demolition

Throughout the demolition and construction activities, all works will take place behind an encapsulation scaffold. This encapsulation together with the nature of the existing construction, results in a low risk of emissions to the air; the project will be a site with a low risk of Emissions (Tier 1).

The contractor will comply with the latest edition of the Mayor of London's SPG "The Control of Dust & emissions during Construction & Demolition, specifically sections 6.4 and 6.5:

#### Site threshold for the concentration of PM10

(6.4) It is recommended a trigger level of 250 ug m-3 is set as a 15-minute mean for concentrations of PM10 close to construction sites. This trigger level was devised from measurement near a construction site in London using TEOM18 measurements with a multiplier of 1.3 (Fuller and Green, 2004). The multiplier of 1.3 was designed to allow for the loss of volatile PM from the TEOM which would not be an issue with construction dust. An updated correction method is now available (www.volatile-correction-model. info). The trigger level of 250 ug m-3 would approximate to 200 ug m-3 as a 15-minute mean without the multiplier. However, some PM10 reference instruments cannot measure a 15-minute mean. As an alternative 50 ug m-3 is suggested as a 1- hour mean having subtracted background concentrations (to account for regional pollution episodes etc). A 1-hour mean of 50 ugm-3 from local sources is equivalent to a 15 min mean of 200 ug m-3 and would be a compromise, taking into account the longer averaging period. The one- hour limit is designed to prevent any complaints from people living or working close to the site.

(6.5) Where the site threshold for PM10 is being significantly breached developers should stop work immediately and ensure best practice measures are in place before restarting. Where there are breaches of the PM10 threshold local authorities can use their powers to prevent the statutory nuisance.

# London's 'Low Emission Zone' for Non-Road Mobile Machinery

Attention is also drawn to the requirement to follow, The London Mayors strategy for managing non-Road Mobile machinery within designated zones including Canary Wharf. An extract from that policy is noted below, the full policy and strategy is also available via the link below.

#### https://www.london.gov.uk/programmes-and-strategies/environment-and-climate-change/ pollution-and-air- quality/nrmm

"Non-Road Mobile Machinery (NRMM) is a broad category which includes mobile machines, and transportable industrial equipment or vehicles which are fitted with an internal combustion engine and not intended for transporting goods or passengers on roads. NRMM, particularly from the construction sector, is a significant contributor to London's air pollution. The NRMM Low Emission Zone uses the Mayor and London Borough's planning powers to control emissions from NRMM used on construction sites. In a similar way to the Ultra Low Emission Zone the NRMM Low Emission Zone requires that all engines with a power rating between 37 kW and 560 kW meet an emission standard based on the engine emission "stage".

The standards that need to be met depend on where the construction site is: The current standards are stage IV for construction machinery operating in the Central Activities Zone and Opportunity Areas (including Canary Wharf) and stage IIIB in the rest of London".

## **ULEZ Zone**

In addition, all vehicle's attending site, will have to comply with the requirements of the ULEZ Zone.

The map contained within this section shows the new ULEZ boundary and the area it will cover, University College School is within all chargeable areas, as confirmed by the following extract from TFLs ULEZ web site:

The address you specified is: University College School Senior School Frognal, Hampstead London NW3 6XH.

- Inside the Congestion Charge zone
- Inside current ULEZ
- Inside expanding ULEZ

All information appertaining to ULEZ and any other vehicle use charges, can be found @ https:// tfl.gov.uk/modes/driving/ultra-low-emission-zone/ulez-expansion-2023



In addition, all vehicle's attending site, will have to comply with the requirements of the ULEZ This section sets out the requirements on the Contractor for managing the environmental impacts of constructing the development. The Contractor must demonstrate in detail how the requirements of this CMP and specific Planning Conditions will be met.

The Contractor must demonstrate the management, monitoring, auditing and training procedures that are in place to ensure compliance with LBC Environmental requirements and the CMP. The contractor will set out the specific roles and responsibilities of their personnel in managing and monitoring all of the works, including any subcontractors.

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

- The Contractor will liaise with LBC's Environmental Inspectorate on a regular basis, agreeing routine arrangements for each construction activity and ensuring compliance with the CMP.
- The Contractor will be responsible for establishing and maintaining contact with LBC, The School Management Team and local residents and businesses; keeping them informed of construction matters likely to affect them.
- This liaison will include the regular and frequent distribution of Newsletters and attendance at meetings at the request of LBC and or the school with themselves and or representatives of local residents' groups.
- The Contractor will advise the local authority within 24 hours of any incidents of non-compliance with environmental controls or health and safety issues. The Contractor will respond to any reports referred by LBC, Police, or other agencies within 24 hours, or as soon as reasonably practicable.
- The Contractor will advise the school authority immediately of any incidents of non-compliance with environmental controls or health and safety issues. To enable them to manage the school environment appropriately, to protect their staff and students.
- The Contractor will maintain on site, a system for recording any incidents and any corrective action taken for inspection by the Council's representatives. This will be forwarded to the Council on a regular basis.
- The Contractor will ensure as far as is reasonably practical, that necessary action has been taken and steps to avoid recurrence have been implemented.
- The Contractor will provide an information and reporting telephone 'Hot Line' staffed at all times during working hours. Information on this facility shall be prominently displayed on site hoardings.
- The Contractor's nominated persons will attend monthly reviews with LBC's Environmental Inspectorate, or otherwise as requested.
- The Contractor will maintain environmental management procedures and temporary works designs taking due cognisance of ground conditions, ensuring groundwater, production water and run-off to be disposed of is minimised.
- The Contractor will facilitate LBC's Environmental Inspectors to undertake regular planned inspections of the site to check compliance and associated records.

This section sets out the processes involved in liaising with local authorities and the public prior to the commencement of development activities.

Contractor should provide LBC's Environmental Inspectors and the school with a full programme of activity for the works before commencement. Specific information and details for the site have been outlined within this section.

Given the project is within the school grounds and the contractor will be required to have specific control measures in place, particularly during school operational hours, it is important the contractor is in full liaison with the school, whose contact details and school opening times, noted from their web site are indicated below:

#### https://www.ucs.org.uk/

Address: University College SCHOOL, Frognal, Hamstead, London NW36XH Telephone: 020 7435 2215

#### **School Hours of Opening:**

Friday 8:00 am – 4:00 pm Saturday Closed Sunday Closed Monday 8:00 am – 4:00 pm Tuesday 8:00 am – 4:00 pm Wednesday 8:00 am – 4:00 pm Thursday 8:00 am – 4:00 pm

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

- Inform LBC, the school and the public on the nature and timing of all main site activities relating to the CMP.
- All site construction staff are to be made aware of the requirements of the CMP and will be made responsible for its implementation.
- Sufficiently in advance of works, the Contractor will provide the LBC Environmental Inspectors and the school with a full programme of works. This will include:
  - Detailed method statements for demolition and construction activities at the project in line with the principles identified in this report
  - Details of site traffic movements showing the projected number of vehicles; what is being delivered, when peaks in activities occur, traffic marshalling arrangements.
  - Routes to site for deliveries.
  - A health and safety plan.

# **Community Relations**

Contact with the school, neighbours and the general public throughout the construction programme will be pro-actively maintained, with regular update meetings on no less than a quarterly basis and the issuing of a brief news sheet on progress. Note, given the project is on school grounds, the contractor is to agree the cycle of regular meetings with the school, as separate concern but in conjunction with, maintaining contact with the wider local area. Update sheets will be maintained on the site hoarding.

The Contractor will nominate community relations personnel, who will be focussed on engaging with the local community, particularly the school, but also local residents and businesses. The Contractor will ensure that occupiers of nearby properties and residents are informed in advance of works taking place, including the estimated duration. The Contractor will inform the school, local residents and businesses likely to be affected by such activities at least 14 days prior to undertaking the works, as well as applying for the appropriate permits and licences.

In the case of work required in response to an emergency, LBC, and all neighbours will be advised as soon as reasonably practicable that emergency work is taking place. The school is to be advised immediately, so as to allow them to manage the school environment in a safe and practical manner. Potentially affected occupiers will also be notified of the 'hotline' number, which will operate during working hours.

The Contractor is to successfully develop and implement a 'Neighbour and Public Relations Strategy,' therefore the following actions will be undertaken:

- Initial Contact: Once contractors have been appointed, formal contact will be established with the school, the nearest neighbours and those who could potentially be affected by the demolition and construction works; and
- Contact during Works Period: A single point of contact for neighbour and public relations will be established, with a senior member of the project staff nominated for the role. Contact details for this single point of contact will be displayed on the site hoarding. Outside normal working hours, site security will act as the main point of contact via a dedicated phone number. Security will alert the staff contact if necessary (available 24 hours). Should there be any complaints, these will be logged, fully investigated and reported to the relevant department within the LBC as soon as possible. The complainant will be informed as to what action has been taken.

# **Complaints Procedure**

Complaints received by the site will be dealt with as follows:

- A site representative will telephone or visit the complainant to establish the exact details and nature of the complaint;
- Where the nuisance is or was temporary and has such ceased, the complainant will be informed, and appropriate remedial action taken and recorded;
- Where the nuisance is sporadic a visit will be arranged accordingly to ensure the complaint is verified subjectively;
- A noise/ vibration / dust measurement regime shall be established and measured against project standards. Where the measurement exceeds the project specifications further mitigations and measures will be established to bring evidence in line with the project standards.
- The Contractor will notify LBC of all complaints received and exceedances of trigger levels within 2 days of the event.

# References

The contractor shall comply with all relevant legislation, standards, codes of practice, and guidance for the works being carried out including (but not exclusive

to) those listed in this section. It is the principal contractors responsibility to check for any updated legislation, standards and codes at the time of their appointment.

#### Legislation

- The Explosives Regulations 2014
- Clean Air Act 1993
- Public Health Act 1961
- Health and Safety at Work, etc. Act 1974
- Control of Pollution Act 1974
- Control of Pollution (Amendment) Act 1989
- Environmental Protection Act 1990
- New Roads and Street Works Act 1991
- Lifting Operations and Lifting Equipment Regulations 1998
- Special Waste Regulations 1996
- Control of Lead at Work Regulations 2002
- Control of Asbestos Regulations 2012
- Ionising Radiations Regulations 2017
- Electricity at Work Regulations 1989
- Control of Noise at Work Regulations 2005
- Controlled Waste (Registration of Carriers & Seizure of Vehicles) Regulations 1991
- Environmental Protection (Duty of Care) Regulations 1991
- Management of Health & Safety at Work Regulations 1999
- Provision & Use of Work Equipment Regulations 1998
- Personal Protective Equipment at Work Regulations 1992
- Construction (Design & Management) Regulations 2015
- Control of Substances Hazardous to Health Regulations 2002
- Work at Height Regulations 2005
- Dangerous Substances and Explosive Atmosphere Regulations 2002
- Manufacture and Storage of Explosives Regulations 2005

#### **British Standards**

- BS 5228 Code of Practice for noise control on construction and open sites
- BS 5607 Code of Practice for safe use of explosives in the construction industry
- BS 6187 Code of Practice for demolition
- BS 7121 Safe use of cranes

# Guidance

- HSE Guidance booklets:
- HSG 47 Avoiding danger from underground services
- L21 Management of health and safety at work
- L101 Safe work in confined spaces

#### **HSE Guidance Notes**

- GS 6 Avoidance of danger from overhead electric lines
- CS 15 The cleaning and gas freeing of tanks containing flammable residues
- EH 40 Occupational exposure limits (revised annually)

# **HSE** Construction Information Sheet

• No.45 Establishing exclusion zones when using explosives in demolition.

#### Asbestos Removal Legislation

- The Health and Safety at Work etc. Act 1974
- The Control of Pollution Act 1974
- The Special Waste Regulations 1996
- The Personal Protective Equipment at Work Regulations 1992 (as amended)
- The Control of Asbestos Regulations 2012
- Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009
- The Construction (Design and Management) Regulations 2015

# Approved Codes of Practice

- L21 Management of health and safety at work: Management of Health and Safety at Work Regulations 1999 (second edition)
- L24 Workplace health, safety and welfare. Workplace (Health, Safety and Welfare) Regulations 1992
- L25 Personal protective equipment at work (Second edition). Personal Protective Equipment at Work Regulations 1992 (as amended). Guidance on Regulations
- L64 Safety signs and signals. The Health and Safety (Safety Signs and Signals) Regulations 1996
- L87 Safety representatives and safety committees (third edition)
- L95 A guide to the Health and Safety (Consultation with Employees) Regulations 1996
- L127 The management of asbestos in non- domestic premises (second edition)
- L143 Work with materials containing asbestos. Control of Asbestos Regulations 2012
- L144 Managing health and safety in construction: Construction (Design and Management) Regulations 2015

# **British Standards**

- BS 8520-1:2009 Equipment used in the controlled removal of asbestos-containing materials. Controlled wetting equipment. Specification
- BS 8520-2:2009 Equipment used in the controlled removal of asbestos-containing materials. Negative Pressure Units
- BS 8520-3:2009 Equipment used in the controlled removal of asbestos-containing materials. Operation, cleaning and maintenance of class H vacuum cleaners
- BS EN ISO 13982-1:2004+A1:2010 Protective clothing for use against solid particulates. Performance requirements for chemical protective clothing providing protection to the full body against airborne solid particulates (type 5 clothing)
- BS EN ISO/IEC 17020:2012 General criteria for the operation of various types of bodies performing inspection
- BS EN ISO/IEC 17024:2012 Conformity assessment. General requirements for bodies operating certification of persons
- BS EN ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories

# HSE Guidance Booklets & Leaflets

- HSG189/2 Working with asbestos cement
- HSG210 Asbestos essentials task manual. Task guidance sheets for the building, maintenance and allied trades
- HSG213 Introduction to asbestos essentials. Comprehensive guidance on working with asbestos for the building, maintenance and allied trades
- HSG227 A comprehensive guide to Managing Asbestos in Premises
- HSG247 Asbestos: The licensed contractor's guide
- HSG248 Asbestos: The analyst's guide for sampling, analysis and clearance procedures
- HSG264 Asbestos: The survey guide
- INDG188 Asbestos alert (pocket card) for building maintenance, repair and refurbishment workers
- INDG223 A short guide to managing asbestos in premises. (Rev 3)
- INDG255 Asbestos dust kills keep your mask on (Rev 1)
- INDG289 Working with Asbestos in Buildings
- OC 282/28 Fit testing of respiratory protective equipment face pieces.

Appendix A: Temporary Accomodation - General Arrangement, Elevations & Sections













# Introducing Blue Sky Building Founded On Excellence

## WHO WE ARE

In 2012, Julian Daniel, our Founder and Managing Director spotted the opportunity to create a company of his own, Blue Sky Building, which would embody the enthusiasm and passion he feels for the industry.

Blue Sky Building is an innovative construction management company which delivers unique solutions. Our founding directors boast a combined experience of over eight decades, uniting their background in the delivery of bespoke construction with the expertise and skills needed to manage complex engineering and construction projects, particularly in the midst of the kind of city centre environment prevalent in London and the South East.

We act as a trusted collaborator, setting the kind of standards other constructors aspire to, by offering our clients quality, professionalism and innovation. We've built our reputation upon offering a bespoke service each time, tailored to meet the individual needs of each client.

We know our industry and understand how the construction process works. We study our clients' business and we understand the wider business climate, bringing all three together in a pursuit of excellence which is as relentless as it is refreshing.

At Blue Sky Building, no resource is more valuable than the people charged with delivering our vision. The principles we work around are excellence, quality and safety and the values underpinning our work are intelligence, honesty, integrity and trust.

"...We have been responsible for Some of the most complex and challenging projects in the UK, carried out for a number of prestigious clients in conjunction with their professional consultants."

# **OUR PROMISE**

- A focus on the client;
- Clarity of leadership and direction;
- Accessible and practical advice;
- Input and ownership up to Director level;
- Appropriate and timely communication;
- Simple solutions to complex issues;
- Advice which is independent and maintains the integrity of the clients' procurement process;
- In depth knowledge of the market and links to key trade contractors; and
- Value added throughout from design, through procurement and on to construction

# **OUR CLIENTS**

STANHOPE GREAT PORTLAND ESTATES GROSVENOR SELFRIDGES LONDON & REGIONAL PROPERTIES BRUCE SHAW CLIVEDALE PROPERTIES LIMITED CORE DELOITTE DULWICH COLLEGE KAMKO LIMITED QUINTAIN GARDINER & THEOBALD



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