

# **MANOR ROAD RICHMOND**

Construction Environmental and Management Plan

February 2023 By: Paul Robinson Gardiner & Theobald



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#### 1. INTRODUCTIONS

This Construction Environmental Management Plan has been prepared by [Gardiner & Theobald on behalf of Avanton Richmond Development Ltd ('the Applicant') following further amendments to the proposed scheme for the redevelopment of the Homebase store at 84 Manor Road, North Sheen ('the Site'). A planning application for the redevelopment of the Site was submitted to London Borough of Richmond Upon Thames (LBRuT) in February 2019 (ref. 19/0510/FUL) (the 'Original Proposed Development'), and was considered at LBRuT Planning Committee on 3 July 2019. The Planning Committee resolved that they were minded to refuse the Application, however on 29 July 2019 it was confirmed that the Mayor of London would act as the local planning authority for the purposes of determining the application.

#### **Proposed Amendments**

Following review of LBRuT's reasons for refusal and discussions with Officers at the Greater London Authority (GLA) and Transport for London (TfL), the Applicant sought to review the scheme, with the principle aim of increasing the delivery of affordable housing through additional density and enhancing the overall design whilst addressing other issues raised in the Mayor's Stage 2 Report. An amended submission was made in July 2020, which increased the number of residential units from 385 within the Original Proposed Development to 453. This increased the total number of affordable units by 38 to a total of 173 affordable homes (40% by habitable room taking account of grant funding, increased from 35% as originally submitted). This increase in units and the higher affordable housing provision was principally achieved through amendments to the height and internal layout in appropriate locations across the Site.

The amended scheme was considered at a Mayoral Hearing on 1 October 2020 whereby the Mayor of London resolved to grant planning permission subject to the completion of a S106 Agreement.

Whilst discussions were ongoing regarding the S106 Agreement, the new London Plan was adopted on 2 March 2021. As a result of this change to the Development Plan, and the July 2021 revisions to the NPPF, the November 2021 update sought to assess the scheme against new policies. This included changes to the affordable housing tenure, realignment of the application site boundary and associated landscape changes. In June 2022, the GLA maintained their resolution to grant planning permission subject to the completion of a S106 Agreement.

Since the Mayoral Hearing in October 2020, there have been a number of policy changes, including LBRuT's Strategic Flood Risk Assessment and the National Planning Policy Guidance. The TfL have also advised of their intention to commence road improvement works to the Manor Circus Roundabout in proximity of the site. A thorough review of the proposal has been carried out in relation to new policy guidance. The reviews have resulted in additional flood modelling, and subsequent minor changes to drainage and design. In addition, the construction timeframe has now moved back relative to the time period noted during the Mayoral Hearing.

As a result of the proposed changes, this Construction Environmental Management Plan has been updated accordingly.



# 1.1. Objectives

Although a main contractor has not yet been appointed, this document has been produced to demonstrate that the project will be constructed in accordance with generally accepted good practice and the requirements of the London Borough of Richmond upon Thames (LBRuT) Supplementary Planning Document "Sustainable Construction Checklist – Guidance Document".

This document is designed to set out the standards of construction considered necessary that will minimise the effects of the project upon the local environment and local community surrounding the Site. The Client and the Project Team are committed to undertaking the construction works on the Site in a responsible manner in order to keep disruption to a minimum to the surrounding area.

The Contractor will be appointed to undertake the construction works on Site to comply with any arrangements proposed within this document and will be required to expand and develop further detail to reflect his proposed working methods. The Contractor will have overall responsibility for the works at the Site. The CEMP will therefore also be subject to refinement as the project evolves, and any significant changes would be agreed with LBRuT in advance.

The aim of the CEMP is to ensure that potential effects to the environment and sensitive local receptors resulting from the works are kept to a minimum, as far as reasonably practicable.

The CEMP has been prepared to anticipate the Conditions that will accompany any Planning Permission Consent. We have set out within this CEMP the site management principles that will address the following:

- Construction Management including site logistics
- Neighbourhood & Community Liaison
- Environmental Management
- Waste & Materials Management
- Transport Management
- Water Management
- Materials Storage
- Noise Control (see Section 5).
- Construction Waste Management

This CEMP identifies and summarises the proposed phasing and construction methodology based on the information available, highlighting and addressing any potential challenges that will be faced during the works. In due course this CMP will be updated as the contractors are appointed. The contractors will then produce their own specific Construction Management Plan (CEMP) to demonstrate how they will comply with the relevant codes, practices and principles submitted within this CEMP.

The current process is to break the works into 2 phases:-

- Phase 1 demolition of the existing building
- Phase 2 construction of the new building



The outline CEMP describes in high-level how the Construction Contractor will manage the following activities related to their Site:

- Site Setup
- The Environment
- Works Methodology
- Existing surrounding communities
- Local residents and businesses

The proposals are also intended to assist & enable third parties to clearly understand the nature of the works related to the Site, specifically the construction and the management of the interface between the Site and the public.

The Outline CMP and its continual development will assist in creating a good working relationship with the LBRuT, local communities, visitors & occupants of nearby residential & commercial properties to make sure they are kept fully informed of current progress and of contractor key activities. It will also encourage third party feedback to allow activity dates or nature be honed to minimise the risks, and disturbances to the locality as far as is safe, reasonable, and practicable.

As the design develops and contractors are procured, this report will be assessed and altered accordingly. The baseline for the analysis is the LBRuT Technical Guidance and Code of Construction Practice, CoL's Code of Construction Practice, Publication London Plan Policy SI 1 for air quality and the TfL construction logistics planning guidance. These have been viewed as the minimum standards to be achieved.

From the outset, there has been an inherent focus on sustainability. The Design Team have given strong consideration to whole life carbon, cradle to cradle.

The construction phase will be a fundamental contributor to delivering low embodied carbon. Therefore, it is important that the stringent embodied carbon targets are embedded into the Demolition and Main Building Contract, which will place responsibility onto the Contractors to adopt sustainable construction methods in order to minimise embodied carbon emissions through construction.

To date the Project Team have pushed the boundaries of the energy hierarchy, designing the building to minimise energy consumption as far as practically possible. The Operational Carbon targets will be included within the Building Contract, to prevent the sustainable design being compromised on appointment of the Principal Contractor.

#### 1.2. Personnel

This report has been prepared by Paul Robinson, a Partner at Gardiner & Theobald LLP. Paul has over 25 years' construction experience having worked both Applicant side and Contractor side on several large scale developments across London.



#### 2. SCHEME OVERVIEW

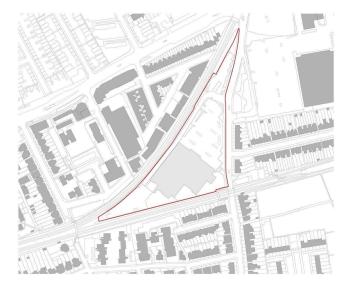
### 2.1. Existing site

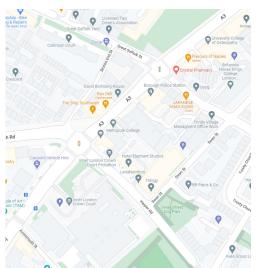
The existing site is triangular in shape. It is bounded by Manor Road to the East, LUL District and London Overground tracks to the west and Network Rail track to the south which is the main line from Richmond to Waterloo. It is effectively an island site.

The majority of the site is currently in use as a retail unit with a Homebase and a Pets at Home store sited within a single shared steel framed, brick clad structure plus car parking, with the main building at the southern end of the site.

To the northern end of the site is an area used by London Buses as a parking and layover area. There is also an existing external UKPN substation on the site.

The site has a single vehicular entry/exit from Manor Road which is shared between the retail units and buses.





# 2.2. Proposed Development

The project involves the demolition of the existing retail stores and redevelopment of the site to form 4 new residential blocks providing residential units plus associated public realm and ground floor flexible non-residential uses. There is a range of building heights with the highest building being GF + 10 storeys.

The new development will also include the provision of two drainage infiltration tanks that will be used to attenuate surface water drainage from the site, and to the western side of the site a reformed trackside road will be built that will provide access to the buildings as well as providing emergency access for railway maintenance.



The current 'Red Line' for the site takes in the full extent of the site which would include the bus layover space.

The site is quite heavily constrained, and will require close management processes to reduce and mitigate any potential adverse impacts on the local environment.

The layout on the following page shows principle constraints on the site and the receptors that have potential to be affected by the works and which are to be considered in developing detailed plans for the works. They are:

- The adjacency of two railway operators Network rail and TfL and the need to obtain all necessary consents to protect their assets.
- The operational constraints of the rail operators in terms of working methods, and use of cranes and other construction plant, and their potential requirements for the site to maintain access to trackside. This will be in line with the BAPA agreement
- Sainsbury's car parking access to be maintained
- Traffic congestion (which already exists) as a result of traffic queuing for the level crossing where Manor Road crosses the Network Rail tracks
- Protecting and maintain access to the Network Rail footbridge adjacent to the level crossing.
   This will require monitoring during the duration of the construction activities
- Residential properties in Manor Road opposite the site
- Residential properties to the South and West on the other side of the rail tracks
- Site traffic restrictions that will be put in place to avoid traffic arriving at the site or leaving the site via Manor Road from the South
- Protection of cable routes to/from the existing site substation
- Avoid impacts on the existing pedestrian route to/from North Sheen Station
- Retain and protect the pedestrian footway on the west side of Manor Road
- Maintaining access to and from the bus layover during construction of the temporary bus layover and bus driver facilities
- Maintaining access to and from the temporary bus layover and bus driver facilities during construction of the new bus layover and bus driver facilities
- Take into account the Manor Circus TFL improvement works taking place from April to December 2023

Maintaining access to and from the newly constructed bus layover and bus driver facilities during construction of the remaining parts of the development.





### 3. KEY PROJECT CONTACTS

The Key Contacts are those known at the issue date of the CMP. On contracting of a suitably qualified Construction company, the CMP will be updated and reissued for Information and be maintained live until such time that the Construction Contractor has formed and agreed the final CMP with the LPA.

# 3.1. Initial Key Contacts

	COMPANY	CONTACT NAME	CONTACT NO.
Applicant / Developer	Avanton	Chris Cobham	+44 (20) 7052 5117
Project Manager	Gardiner & Theobald	Chris Gearey	+44 (20) 7209 3000
Quantity Surveyor	Quantem Consulting LLP	Mick Rogan	+44 (20) 7240 5800
Planning Consultant	Avison Young	Rachel Crick	+44 (75) 5701 5631



	COMPANY	CONTACT NAME	CONTACT NO.
Planning Legal Advisor	Eversheds Sutherland	Matthew Nixon	+ 44 (73) 4150 6221
PR & Community Engagement	Eversleigh	Christian Klapp	+44 (20) 3488 4613
Architect (pre-planning)	Assael Architecture	Katie Cairns	+44 (20) 7736 7744
Principal Designer	Assael	Kerry Parr	+44 (20) 7736 7744
Sustainability	Chapman BDSP	Paul Hussey	+44 (77) 9325 6687
Structural Engineers	Fairhurst	Jim Fleming	+44 (20) 7828 8205
Mechanical & Electrical Engineers	Hoare Lea	Adrian Peacock Mark Harber	+44 (20) 3668 7250
Acoustic Consultant	Hoare Lea	Barry Jobling	+44 (20) 3668 7213
Landscape Architect	Gillespies	Patrick Conn	+44 (20) 7253 2929
Fire Officer	Hydrock	Taj Shuriquie	+44 (77) 6716 0357
Air Quality Engineer	Hoare Lea	Andy Day	+44 (20) 3668 7289
Lighting	Hoare Lea	Jonathan Rush	+44 (20) 3668 7259
Façade access	Hoare Lea	Phil Krausbauer	+44 (20) 3668 7220
Vertical transportation	Hoare Lea	Matt Grantham-Hill	+44 (20) 3668 7258
<b>Building Control</b>	TBC	TBC	TBC



	COMPANY	CONTACT NAME	CONTACT NO.
Employers Agent (EA)	Gardiner & Theobald LLP	ТВС	ТВС
Local Planning Authority (LPA)	London Borough of Richmond upon Thames	Lucy Thatcher	+44 (20) 8891 7691
Principal Contractor (CONTRACTOR)	TBA	ТВС	TBC
CONTRACTOR Emergency Contact	ТВА	ТВС	ТВС

# 3.2. Health & Safety

The following table contains the address of the pertinent H & S bodies including the local hospital.

BODY	ADDRESS	POSTCODE	TELEPHONE NO.
HSE	151 Buckingham Palace Road London	SW1W 9SZ	
Local Hospital	Kingston Hospital NHS Foundation Trust Galsworthy Road, Kingston upon Thames, Surrey	KT2 7QB	020 8546 7711
Local Hospital	West Middlesex University Hospital Twickenham Road Isleworth Middlesex	TW7 6AF	020 3315 8080



#### 4. CONSIDERATE CONTRACTORS

The scheme requires contractors to adhere to a code of practice that includes the following principles:

- Be environmentally aware when selecting resources, paying particular attention to pollution avoidance and waste management. Use local resources wherever possible and keep noise to a minimum at all times
- Be considerate to the needs of all those affected by the construction process and its impact on the environment. Special attention to be given to the needs of those with sight, hearing or mobility difficulties



- Keep the Site and surrounding areas clean and in good order and ensure that all access routes are unhindered at all times
- Be a good neighbour by undertaking full and regular consultation with neighbours regarding the Site activity from pre-start to final completion and handover. Provide the Site information and viewing facilities where practicable
- Promote safe standards of behaviour and dress code. Derogatory behaviour will be dealt with under threat of the strongest possible disciplinary action
- Be safe. All construction operations and vehicle movements to be carried out with care for the safety of passers-by, neighbours and Site personnel
- Be accountable to the public by providing Site contact details and be available to deal with their concerns and develop good local relations

The contractor undertaking the works must gain a score of 35 or above and this is to be displayed to the public on a Site notice board.

### 5. WORKING HOURS

### **5.1. General Site Working Hours**

The General Site working hours will be in line with the requirements of the control of pollution act 1974, section 61, and will obtain a consent, which will include noise limits and vibration limits where relevant for noisy out of hours work.

Noisy works associated with a development (e.g. demolition, piling and earthworks) will generally be limited to weekdays from 08:00 to 18:00 hours, unless otherwise agreed.

The Applicant will ensure that the contractor adheres to these working hours unless otherwise agreed with the Council. As far as reasonably practicable and where feasible, operations anticipated to cause disturbance would be limited to these hours, except in the case of an emergency.

The Applicant or Main Contractor will apply for consents from the Council under the Control of Pollution Act 1974, Section 61, and will obtain a consent (which will include noise limits and vibration limits where relevant) and noisy out of hours work. The applications for consent will include details of the work to be undertaken, including proposed hours of work.



All construction related traffic will abide by the agreed hours of working for each Site unless otherwise agreed with the Council.

#### 5.2. Hours of Work

- Monday to Friday 8.00 am to 18.00 pm
- Saturday 8.00 am to 14.00pm
- Sunday and Bank Holidays (normally) No working

### 5.3. Out of Hour Works

Out of hours work applications will include details of the work to be undertaken, including proposed hours of work.

Where working is required outside of the above hours, due to unforeseen circumstances or planned work that can only occur outside of the core hours e.g. road closure requirements, mobile crane lifts, then these will be undertaken following communication with the LPA and residents /businesses advising the reasons for the work, likely impact, if any, and estimated time to start and complete the work.

#### 6. HEALTH & SAFETY

#### 6.1. Site Induction

All persons employed on or visiting Site will be subject to a health and safety induction so that they are aware of the hazards present on the Site and the restrictions imposed under the Principal Contractor's health and safety management procedures. These will be conducted by the Contractor in control of the Site. These inductions will differ in respect of the reason for visiting, being employed on Site.

All visitors will be accompanied around the Site by a representative of the employer (generally the contractor) unless previously agreed otherwise. All health and safety inductions will be recorded on a Site-specific register that will be available for the Council to review by appointment.

### 6.2. Covid-19

Due to the current Government restrictions and the rapid changes related to the present pandemic, the Principal Contractor will ensure that they remain up to date with all legislation and regional variations to that on a timely basis and appoint a senior representative to manage all separation and shielding issues.

The Principal Contractors Representative will ensure that all relevant updates are passed to the contractors and sub-contractors by appropriate means and toolbox talks, and any changes that may affect the general public will only be instigated in full knowledge of the Council.

The Principal Contractor will abide by all the Council's requirements related to the pandemic without exception unless previously agreed.



# 6.3. Health & Safety: General

All Site work must be carried out in accordance with the provisions of the Health and Safety at Work Act 1974 to the satisfaction of the HSE or its local officer.

The Principal Contractor will implement mechanisms to ensure that the employers, employees and the self - employed, are not exposed to risks to their health and safety. And that every employee, while at work, will take reasonable care of the health and safety of themselves and of other persons, and to cooperate with their employer or any other person about any duty or other statutory requirement.

The Principal Contractor will ensure that all statutory regulations made under the 1974 Act e.g. provision of personal protective equipment, ladders, lighting, signs, electrical equipment, manual handling are complied with during all construction works.

The Applicant's nominated representative will ensure that appropriate industry standards for health and safety are applied, and that continuous improvement in safety performance is sought, in accordance with the principles of HSG65 "Successful health and safety management", published by the Health & Safety Executive.

The Principal Contractor will abide with the below Summary of Duties under the Construction Design Management Regulations 2015 (CDM 2015).

**Principal contractor** – A contractor appointed by the Applicant to coordinate the construction phase of a project where it involves one or, more than one contractor.

Plan, manage, monitor, and coordinate health and safety in the construction phase of a project. This includes:

- Liaising with the Applicant and principal designer;
- Preparation of the construction phase plan; and
- Organising cooperation between Contractors and coordinating their work.

#### Make sure:

- Suitable Site inductions are provided;
- Reasonable steps are taken to prevent unauthorised access;
- Workers are consulted and engaged in securing their health and safety; and Welfare facilities are provided.

(**Definition**) Contractors – Those who carry out Plan, manage and monitor construction work under their control, so it is carried out without risks to health and safety.

For projects involving more than one Contractor, coordinate their activities with others in the project team – in particular, comply with directions given to them by the Principal Designer or Principal Contractor.

For single contractor projects, prepare a construction phase plan.



**Workers** – Those working for or under the control of contractors on a construction Site. Workers must:

- Be consulted about matters which affect their health, safety and welfare
- Take care of their own health and safety, and of others who might be affected by their actions
- Report anything, they see which is likely to endanger either their own or others' health and safety
- Cooperate with their employer, fellow workers, contractors, and other duty-holders

Note this section is directly related to the HSE web Site, source: <a href="http://www.hse.gov.uk/cdm/2015/summary.htm">http://www.hse.gov.uk/cdm/2015/summary.htm</a>

# 6.4. Health & Safety Management System

The contractor will produce a health and safety management system in accordance with the principles of the Occupational Health and Safety Advisory Service's 18001 "Occupational health and safety management systems". This system will include documentation defining the nominated undertaker's internal arrangements for managing health and safety on the project and the specific requirements for health and safety applying to all designers, contractors and sub-contractors appointed to work on the project.

The arrangements for health and safety will include a system for management of risks which will include:

- Hazards being identified
- Suitable and sufficient assessments made of the risk
- Adoption of appropriate measures to eliminate the risk or to control the risk, so far as is reasonably practicable.

Where risks to the public are involved, these will be reduced to as low as reasonably practicable and will be managed in accordance with the guidance in HSG151 "Protecting the Public" published by the Health and Safety Executive.

The Applicant's nominated representative will continuously monitor the work of contractors and sub-contractors and will conduct a programme of audits and inspections to ensure compliance with the requirements of this Code and other project health and safety requirements.

# 6.5. Safety Objectives for the Project

This project involves demolition & construction works adjacent to a number of public interfaces and third party assets. It is the aim of the Project Team to eliminate or minimise risk and to prevent ill health and injury to all the Site employees, subcontractors, Site visitors, Site neighbours and the general public.

To meet these objectives the contractors will work diligently towards:

- Maintain zero notifiable accidents and incidents
- Maintain and improve lost time accident record



- Move away from safety legislation governance to a safety behavioral culture promoted via communication, coordination and training.
- Comply with the procedures detailed within this document to achieve and maintain a safe working environment for everyone on Site
- Evaluate & measure performance against this plan through regular safety and environmental inspections and audits
- Eliminate or minimise risk and control the residual risks.
- Prevent ill health to all those on Site through health surveillance.
- Promote proactive safety management and reduce reliance on reactive safety management.

The Principal Contractor will regard the above as principal objectives and these objectives can only be achieved by the cooperation of the company employees, subcontractors, the Applicant and his representatives. Cooperation shall be at all levels within these organisations through the structures established under the Construction (Design and Management) Regulations. The Principal Contractor will collaborate with all parties to provide the organisation, advice and resources to meet this commitment as far as is reasonably practicable.

# **6.6. Principles of Prevention**

The general principles of prevention as per the Management of Health and Safety at Work Regulations 1999 shall be adopted in addition to the above that will be to:

- Avoid risks
- Evaluate the risks which cannot be avoided
- Combat the risks at source
- Adapt the work to the individual especially regarding the design of workplaces, the choice of work equipment and the choice of working and production methods, with a view, in particular, to alleviating monotonous work, work at a predetermined work rate and to reducing their effect on health
- Adapt to technical progress
- Develop a coherent overall prevention policy which covers technology, organisation of work, working conditions, social relationships and the influence of factors relating to the working environment
- Give collective protective measures priority over individual protective measures; and give appropriate instructions to employees.

### 6.7. Management Procedure

The Safety Advisor will visit Site on a weekly basis, or more frequently if deemed necessary, to carry out Site inspections and produce the safety audit.



In addition to the safety audits, the following techniques will be used for monitoring compliance with:

- Legal requirements Inspection and reporting arrangements as laid down in Principal Contractors Site Management Systems (SMS)
- The health and safety requirements contained within this plan
- The health and safety Site rules
- Regular safety advisors' inspection / directors' safety tours / quarterly safety reviews / subcontractors meeting
- Special requirements for public interfaces
- Principal Contractor's Engineering Safety Management System

# 6.8. Work-Place Inspections

Workplace inspections will be carried out by the Principal Contractor's supervisor in control of the specific workplace, or subcontractor supervisor. Inspections will be recorded on the standard SMS Inspection Form provided within the Safety Management System and filed in the Site office.

Where subcontractors are required to carry out such inspections, the responsible Principal Contractor's manager will have a system in place to ensure the adequacy of the inspection process involving random inspection checks.

Inspections of temporary works will be carried out and recorded within a temporary works register. This register will be provided the Council at their behest in a timely manner:

- Welfare Facilities
- Site Perimeter/Public interface areas for trip hazards, rubbish and clear routes
- Site hoardings and lighting
- Scaffolding and alarm systems
- UKPN Substation Protection
- Exclusion and Restriction zones
- Site Temporary Services i.e. water and electricity and any relevant meter readings
- Floor loadings and back-propping
- Temporary works structural retention systems. Please note, this list is not exhaustive

The Temporary Works Co-ordinator (TWC) will maintain a list of personnel involved in the Temporary Works Process within the Temporary Works Register.

The Principal Contractor's supervisor will record, and file inspections carried out by the Temporary Works Team.



# 6.9. Compliance Monitoring

Compliance monitoring will be carried out to verify that agreed procedures and methods are being implemented and are producing the required results.

Compliance monitoring will be carried out by:

- The Principal Contractor's Project Manager
- The Principal Contractor's Manager/Supervisor controlling the area in which work takes place.
- Visiting personnel, including the allocated Safety Manager, Operations Manager and Directors.

Observations and actions arising from monitoring will be tabled at the weekly planning meetings, minutes written and filed, and actions allocated and completed by the responsible persons.

# 6.10. Ensuring Safe Places and Systems of Work

The CMP will ensure that the project achieves and maintains Safe Places of Work and Safe Systems of Work through following the below guidance:

- 45001: 2018 Occupational Health & Safety Management Standard;
- ISO 14001:2015 Environmental Management Standard;
- ISO 9001:20015 Quality Assurance Management Standard;

This CMP details the perceived safety risks and relevant control measures particular to this project and is also intended to meet or exceed the requirements of the CDM Regulations 2015, local authority standards and Applicants expectations.

The project will adhere to the following published guidance and British Standards:

- BS 6187:2011 Code of practice for full and partial demolition
- Mayor of London's 'The Control of Dust and Emissions during Construction and Demolition SPG July 2014
- The GLA's 'The Control of Dust and Emissions from Construction and Demolition: Best Practice Guidance
- In accordance with Policies 5.18, 6.3 and 7.14 of the London Plan 2011 and Policies DM J1, J6, H5, H8, H9, H10 and H11 of the Development Management Local Plan 2013.

#### 7. SITE RULES

#### 7.1. General Rules

The Site rules may vary from Contractor to Contractor, which is reasonable, however a base line set of rules will be agreed as below:



- All personnel shall undergo safety induction training
- Appropriate Personal Protection Equipment shall be worn at all times
- Every accident and near miss event must be reported to the Site Manager immediately
- Any person found to be interfering with or misusing fixtures, fittings or equipment provided in the interest of health, safety and welfare shall be excluded from Site
- Smoking will only be permitted in designated areas
- Visitors must report to Security and will be allowed entry at Site Manager's entrance. Whilst on Site, visitors must wear the appropriate PPE
- Vehicle drivers must wear the appropriate PPE (when outside vehicle). Vehicles are not to be reversed on Site unless under the control of an authorized banksman
- Vehicle drivers must remain with their vehicle during loading / unloading
- Safety signs and notices must be followed
- The public must be protected from hazards associated with this work
- No alcohol or illegal drugs are to be brought onto the Site
- No person who is under the influence of alcohol or drugs is allowed on Site
- Offensive or inappropriate language and provocative gestures are not allowed
- No gambling, threatening or violent behaviour;
- No personnel shall indulge in fighting, horseplay or practical jokes within the Site or its perimeter
- Toilets and washrooms must be kept in a clean and hygienic state after use
- Refuse must not be allowed to accumulate; work areas are to be kept tidy
- Combustible materials are to be removed on a regular basis and disposed of in an appropriate manner
- Transistor radios or personal audio devices are not to be used
- Permission must be obtained from the Site Manager prior to any work on Site on Site
- All Site personnel, for their own safety and for the safety of others, are required to fully comply with their employer's statement of safe working method
- Site fire and emergency alarms, equipment and instructions are designed to protect life.

### 7.2. Mobile Phone Usage

Mobile phone usage is generally banned on Site, except for designated areas that will be protected to allow safe usage.



# 7.3. Smoking and Vaping

Smoking and vaping are generally banned on Site, except for designated areas that will be separate and protected to allow the relevant activities. The smoking area will have a fire point located adjacent to the area, and suitable cigarette bins for stubs and discarded cigarettes.

# 7.4. On Site Fuel Management

All fuel will be stored in bunded tanks away from any surface water drains or gullies. Emergency spill kits will also be available on Site. The Council will be notified of any dangerous materials that may be necessary on Site to complete the works, and correct signage will be employed on all storage areas. The London Fire Brigade (LFB) will be advised of all emergency plans and temporary works relating to combustible materials and potentially explosive canister periodically as best suits the changing anatomy of the Site.

# 7.5. Flammable or Explosive materials

Flammable and explosive materials will be managed off Site generally and only brought to Site on a required basis. Where storage is necessary all materials will be held in suitable containers and stored in designated areas with the correct identifying markings to ensure the safety of all. A schedule of materials and storage locations will be held by the contractor and identified to the London Fire Brigade either in advance or in attendance depending on the LFB requirements for each item.

#### 8. PRE-START WORKS

Prior to commencement on Site, the Applicant will ensure that the F10 Notification for the project is submitted to London Borough of Richmond Upon Thames and received by the contractor who will post the F10 on the Site Board. Prior to commencement of any works on Site, the Contractor will undertake the development and issue and receive acceptance as necessary for all documentation required for the commencement of the works. These will include:

- Preparation of all Safety & Environmental documentation including the DMP, CMP and all work package method statements and risk assessments.
- Contractor' Engagement Meeting (Community Days) to agree Works Charter and practicalities such as lighting, security, provision of pathways and protected routes and nuisance issues.
   And then follow on liaison meetings, consultations and newsletters as required.
- Organisation of sub-contract and consultant work packages, including hoarding, scaffolding and service
- Installation/Isolation Contractors. Drafting of RAMS for approval once scope is agreed.
- Detailed Temporary Works designs for Hoarding, Scaffolding and back-propping, specifically for the Network Rail and Local authority approvals.
- Production of drawings, survey reports, licenses, agreements etc.
- R&D Surveys, Haz Mat Surveys and Utility Services Surveys. Please see Section 8.1 'Information, Surveys and Reports
- Asbestos Notifications (if required) to the HSE.

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- Establishment of all emergency procedures and the requirements of the Fire / Emergency
   Plan on Site
- Development of the Site Traffic & Pedestrian Management Plan
- Organisation and delivery of initial Site plant, and equipment
- Establishment & commissioning of all environmental monitoring equipment in line with the approved Demolition & Environmental Management Plan (DEMP).
- Application for Fire Hydrant License.
- TFL, and LBS Approvals and licenses to facilitate the Works.
- Provide information to the Employer to discharge the applicable Pre-Commencement Conditions.

# 8.1. Information, Surveys and Reports

The following surveys will be required prior to the commencement of works on Site:

SURVEY	DESCRIPTION	SURVEY OWNER	NOTES
Demolition Asbestos Survey	Site Hazardous Waste Survey	Contractor	Required
Below Ground Services Survey	Radar Surveys / slit trenches of existing below ground services	Contractor / Applicant (Design Team)	Required
Above Ground Services Survey	Trace existing services within the building back to the meters / heads.	Contractor	Required
Pre-demolition materials audit	Pre and Post Demolition Materials Audit (ICE Demolition Protocol).	Contractor	Required
Site Structural investigations to inform demolition methodology	Structural investigations into the form and condition of the existing structure.	Contractor	Required



SURVEY	DESCRIPTION	SURVEY OWNER	NOTES
CCTV Drainage Survey	Pre and Post Demolition Materials Audit (ICE Demolition Protocol).	Contractor	Required
Condition Survey	Pre-start condition photographic survey of the Site, adjacent buildings, roads, pavements, and street furniture.	Contractor	Required
Geotechnical Report / SI	Investigations into existing ground conditions and contamination.	Applicant / Design Team	Required
Ecological Reports	Reports and recommendations of environmental constraints and required mitigation / protection measures required.	Applicant / Design Team	Required
Ordinance Survey (UXO)	Investigations into the probability of unexploded ordinance within the construction area.	Contractor	May not be required

# 8.2. Temporary Works Design Management

### 8.2.1. Design Requirements

The design and detailing for all temporary works and other required designs to facilitate the works will be carried out by qualified and experienced temporary works engineers.

All design management will be undertaken in accordance with BS5975 and established company procedures using QA systems SMS020 for Temporary Works.

To deliver the construction works successfully with the highest level of safety considered, early Site investigations are critical to verify the existing Site conditions under the guidance of our in-house structural engineering department. Proceeding on Site findings, calculations, calculation checks and drawings will be prepared to substantiate the conclusions provided ahead of works commencing.

In line with our procedures, when designing due cognisance is given to:

- The proximity of third-party assets, public footways and roads;
- The protection of adjacent third-party assets and structures;
- Obtaining agreements for oversailing scaffold;
- Management of traffic on external and internal roads;
- Services and utilities that are to remain in place.



The temporary works requirements for the Site will include designs for:

- Construction of hoardings;
- Construction of protective decks / screens & debris fans etc.
- Pedestrian walkway scaffold if required both on and off Site;
- Mobile crane out-rigger pads to facilitate lifting demolition plant and other materials and equipment;
- Suitable temporary welfare structure for the project.
- Manhole and access chamber's steel plate covers to enable the movement of heavier vehicles for the project.

The list is not exhaustive but representative of the typical temporary works required for the Site.

### 8.2.2. Design Risk management

All designers' risks will be rated and recorded on a standard risk matrix proforma using a scale of impact and severity.

Remaining risks that cannot be eliminated through design shall be clearly marked on drawings.

Method statements with risk assessments and designs for the installation of the temporary works will be produced and issued for Applicant Design Team comment and approval prior to commencement of the works. To ensure the latest design information is in use, all issued design information will be controlled by recorded of the Site drawing register.

### 8.2.3. Design Installation Management

All design management will be undertaken in accordance with the contractors Safety Management System procedures and best practice for Temporary Works and all associated design documentation.

An appointed Temporary Works Coordinator (TWC) will have overall responsibility for managing the installation of temporary works and this will be managed on Site by an appointed Temporary Works Supervisor (TWS). The role of the TWC and the TWS may be combined depending on works.

Works progress will be checked regularly by the structural engineer against the Temporary Works Register.

### 8.2.4. Exchange of Design Information

The names and contact details of all participants in the design process will be placed on a Temporary Works (TW) Directory so that all of the relevant parties are invited and included in all TW communications or at least receive the minutes of each meeting.



The exchange of design information will be accomplished by holding regular design information exchange and approval meetings. These meetings will be scheduled at predetermined times with the Applicant Design Team and other interested parties such as the Temporary Works Coordinator, Temporary Works Supervisor and the Temporary Works Designer. The outcome of the meetings will be recorded and shared all relevant parties, through email or other electronic data transfer systems as agreed (such as "Drop Box", "One Note" etc.).

### 8.3. Hoarding

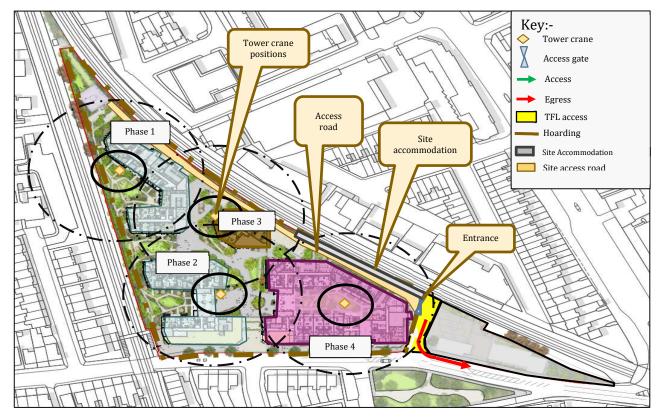
### 8.3.1. Standard Hoarding

All work Sites will be completely fenced to prevent public access with lockable gates, using LFB accepted locking systems.

All hoarding will comply or better BS476 part 6 and 7 with class 0 certification for fire rating. The standard hoarding will be 2.44m minimum height, plywood faced, timber framed boundary hoarding, of a surface density of not less than 7kg/m² for normal security and noise limitation requirements.

Non-standard height hoarding may be required for the surrounding of stockpiles as well as high-level construction works that are difficult to scaffold, or where there is high risk of dust. Where hoarding is to raise above the 2.44m height, prior agreement will be sought with the Council to ensure compliance with guidance on over height hoarding is maintained.

Through discussion with the LPA, the contractor may at the behest of the authority move to recycled (and recyclable) PVC hoarding in a 2.44m height, fire rated to BS476 part 6 and 7 with class 0 certification. Where local terrain or structures would allow the fence to be scaled by potential intruders, the height will be increased reasonably to protect the Site.





All hoarding will be designed to minimise opportunities for anti-social behaviour and rough sleeping. The Contractor will ensure that all hoardings are painted in a plain uniform manner but will have contrasting markings at projecting angles (to assist the visually impaired) to the satisfaction of the Council. Where the Contractor / Applicant requires specially designed exterior decorations, they will request the Council's approval and, where necessary seek consent under the Control of Advertisements Regulations.

Signage will be displayed on the hoarding for health and safety purposes, Considerate Contractors and general Site signage. All signage will be agreed with the Council in advance of installation. The Applicant will design a commercial brand signage for use on the hoarding and agree the signage with the Council prior to instigating its installation.

All solid-state hoarding, Site fencing and barriers will be maintained using controlled wet methods for cleansing and avoiding water runoff from the activity.

During the pre-construction phase, liaison meetings will be held with the local community, to establish how the hoardings are to be finished for the duration of the works. This will include the following points.

- Incorporation of artwork visualising the Proposed Development or photographic views of the local area or incorporating artwork, mounted onto standard well-maintained hoardings.
- Incorporation of viewing windows into standard well-maintained hoardings to preserve important views and provide opportunities to observe construction activity.
- Incorporation of a full cover of climbing plants, with the plants trimmed back only to allow for essential lighting and health and safety signage.

# **8.3.2.** Hoarding Gates

Gates in the fencing or hoarding should, will be, as far as is practicable positioned and constructed to minimise the noise transmitted to nearby noise-sensitive buildings. This will take account of noise emerging directly from the construction Site direct and noise from plant entering or leaving the Site.

All gates will be designed such that they open inwards onto the Site or slide within the Site lines.

All access gates are to be located at least 10 m from receptors where possible.

All gates will be of a suitable standard and size for vehicles accessing and egressing the Site and will be fully controlled by qualified banksmen.

### 8.3.3. Hoarding Lighting

All hoarding will be reviewed for lighting requirements at onset and throughout the seasons, with the Council (at their behest). Where and when it is reasonably deemed that additional lighting is required, this will be provided by the contractor.



At a minimum, all hoarding on all roadside areas will be lit with an unobtrusive red/ orange marker light.

Generally lighting to site boundaries will be provided as standard. The Contractor will consult with Transport for London on The Transport for London Route Network, Illumination will be designed to meet the minimum sufficient to ensure the safety of the passing public, including disabled people, and security, when on surrounding footpaths, roads and amenity areas.

### 8.3.4. Scaffolding

During the demolition and construction period, a scaffold may be required to provide access to the works place. A full height scaffold may be erected to encapsulate the works. Where the height of the walls of the building (or structure) to be removed rises above Ground Floor level, this is covered fully in the demolition contractors DEMP.

Typical hoarding with sheeting and fall arrest fans.

Where full height sheeted scaffolding is required this will be suitably designed to include ventilation and dust extraction to capture dust as far as practicable.

# 8.3.5. Hoists / Lifts

External hoisting positions will be required for use during the construction. It is envisaged that hoists will be situated within the hoarding line and positioned as to not hinder progress on site. The passenger/goods hoist will serve all floors. The contractor will leave out section of the external envelope, which will be infilled once the hoist is removed.

Consideration will be given to early beneficial use of the new lifts enabling timely removal of access hoists.

#### 9. SITE ACCOMMODATION AND WELFARE

The Contractor will endeavour to maintain all accommodation within the curtilage of the Site. The location of this facility is still to be finalised and will be sited for the reserved matters planning application.

It is generally anticipated that the Site accommodation for the project will be located on Site. This will be a relatively limited area and therefore the accommodation will be double or treble stacked. This will provide, in line with the general guidelines and best practice:

- Contractor management offices
- Meeting rooms
- Applicant and design team office space, if required.
- Welfare facilities including canteen and kitchen, changing and drying rooms, toilets and showers.
- Induction room.



- Security office
- Sub-contractor offices (these may be located elsewhere within the building during construction)

# 9.1. Living Accommodation

No living accommodation will be permitted on Site during the works.

# 9.2. Site Lighting

Site lighting will be positioned and directed so as not to unnecessarily intrude on adjacent buildings, and other land uses, or cause distraction / confusion to passing traffic on adjoining public highways.

The design will ensure that any artificial light emitted from premises will not be prejudicial to health or be a nuisance as required by the Environmental Protection Act 1990.

The lighting will be designed to comply with the provisions of BS5489, Code of Practice for the Design of Road Lighting, and Guidance Notes for the Reduction of Light Pollution, GN01, 2005, or later revisions published by the Institute of Lighting Engineers.

The Contractor will discuss any lighting issues or concerns with the Council's Lighting Compliance Officer, including where a hoarding, scaffold or temporary structure is to be installed upon the highway in close proximity to a lighting column or illuminated street signage (less than 2m).

# 9.3. Good House Keeping

The Contractor will ensure that all those working on Site follow a `good housekeeping' policy at all times. This will include, but not necessarily be limited to the following:

- Ensuring considerate site behaviour of all those working on a Site
- Ensuring that all operatives are in a medically fit state to conduct their works, and maintain an auditable alcohol and drugs policy
- Prohibiting open fires
- Ensuring that appropriate provisions for dust control and road cleanliness are implemented
- Removal of rubbish at frequent intervals
- Maintaining a clean and tidy Site
- Frequent inspection, repair and maintenance of Site hoardings;
- Removal of illegal all flyposting
- Removal of graffiti to the Site
- Maintenance of Site facilities and cabin areas
- Removal of food waste from Site
- Frequent cleansing of wheel washing facilities
- Prevention of vermin and other infestations (and prompt and effective action to deal with any that do arise)



- Undertaking all loading and unloading of vehicles off the highway wherever this is practicable
- Ensuring that tunnels beneath gantries are always well lit

#### **10. WASTE & SITE CLEANLINESS**

### 10.1. Waste General Principals

The Contractor will be encouraged to propose solutions that reduce waste e.g. to have materials delivered with reduced packaging and/or delivery companies take their packaging away with them. Due to the risk of dust and debris being drawn on to the public highway, wheel wash facilities will be included at all exits from the Site. All wagons will be netted and screened to avoid building detritus falling from the wagon on to the highway.

The Contractor will be required to provide a Waste Management Control Plan for the works and submit to all relevant parties for comment and information.

The efficient clearance of Site waste will be key to a successful construction project and to portray the image to the surrounding neighbours and passing public of a well-controlled Site especially in this high-profile location.

The use of skips will be the primary way of removing waste from the Site.

Regularly rotating skips will be important to ensure no overspill. The Site has limited areas provide a consistent skip location, however the creation of a planned skip strategy is yet to be formulated and will be covered in the temporary works strategy.

#### 10.2. Food Waste

All Site food waste and consumables will be deposited in closed bins and removed from Site at regular intervals of no more than a week to minimise rodent and insect infestation on Site. Generally, food is prohibited on Site except within designated areas.

### 10.3. Battery Waste

All batteries will be gathered to a central area and removed from Site for disposal / recycling at a suitable facility. Batteries will not be mixed with general waste. In accordance with UK Government guidance all batteries will be separated into appropriate type and disposed of in accordance with the suitable Approved Battery Treatment Operator (ABTO):

- Automotive (ignition battery)
- Industrial (specifically designed power bank over 4kg)
- Portable (Traditional sealed power pack under 4kg / Domestic)

### 10.4. Contaminated Waste



Waste is generally considered hazardous if it (or the material or substances it contains) are harmful to humans or the environment. Examples of hazardous waste include:

- Asbestos
- Chemicals, such as brake fluid or print toner
- Batteries
- Solvents
- Pesticides
- Oils (except edible ones), such as car oil
- Equipment containing ozone depleting substances, like fridges
- Hazardous waste containers

Contaminated waste will be removed by specialist contractors and disposed of off-Site by them to a licensed location in suitably designed and managed vehicles.

In accordance with UK Environment Agency Guidance note (4 April 2014), hazardous waste must be treated separately from all other waste including other contaminated materials.

#### 10.5. Construction Waste

Construction arisings will be drawn to a central removal point and where possible sorted into material types, with timbers and metals being stowed in skips, with spoil being stock piled for direct removal. Due to the proximity of the Site to occupied buildings, crushing may not be considered feasible. As such all spoil will be managed in line with the Dust Management Plan and removed from Site on suitably sized muck away wagons on a daily basis.

Where spoil can be reused as fill, or piling mat these materials will be maintained on Site to minimise material road journeys.

#### 10.6. Biological Waste

Biological waste will be damped down where appropriate and bagged for specialist or suitable removal as required. Sharps will be removed by specialist contractors and removed in approved containers. A specialist Sharps policy will de agreed with the Council in advance of construction works.

#### 10.7. Prohibition of Incineration

The Applicant will prohibit the use of bonfires or other methods of incineration of waste on Site.

### 10.8. Stockpiles

Stockpiles may be utilised to manage either waste or imported construction materials.

Stockpiles will be maintained only as necessary and will not be encouraged for long durations due to the size and shape of the phases.



### 10.9. Dust Management

The Contractor will develop and implement a Dust Management Plan (DuMP), which will include measures to control other emissions, this DuMP will be approved by the Local Authority. The level of detail will depend on the risk and should include as a minimum the highly recommended measures in this document. The desirable measures should be included as appropriate for the Site. In London, additional measures may be required to ensure compliance with the Mayor of London's guidance. The DuMP will include monitoring of dust deposition, dust flux, real-time PM10 continuous monitoring and/or visual inspections – assume this is not separate plan and contents covered in CMP.

# 10.10. Site Monitoring (in relation to Dust)

Undertake daily on-Site and off-Site inspection, where receptors (including roads) are nearby, to monitor dust, record inspection results, and make the log available to the Local Authority when asked. This should include regular dust soiling checks of surfaces such as street furniture, cars and windowsills within 100m of Site boundary, with cleaning to be provided if necessary.

Carry out regular Site inspections to monitor compliance with the DuMP, record inspection results, and make an "inspection log" available to the Local Authority upon request.

Increase the frequency of Site inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out, and / or during prolonged dry or windy conditions.

Agree dust deposition, dust flux, or real-time PM10 continuous monitoring locations with the Local Authority. baseline monitoring will take place prior to commencing works on site where possible.

Further guidance is provided by IAQM on monitoring during demolition, earthworks and construction and the Dust management Plan and monitoring methodology will be developed in line with the design development.

### 10.11. General Basics of Site and Surrounding area Dust and air Management

Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken in an agreed format within a formal Complaints and Issues Log for provision to the Council in a timely basis, and on demand within 48 hours of instigation of request.

Record any exceptional incidents that cause dust and/or air emissions, either on- or off-Site, and the action taken to resolve the situation in the logbook.

Hold regular liaison meetings with other high-risk construction Sites within 500m of the Site boundary, to ensure plans are co-ordinated and dust and particulate matter emissions are minimised. It is important to understand the interactions of the off-Site transport/ deliveries which might be using the same strategic road network routes.

#### 10.12. Rodents and Vermin

The Contractor will ensure that the risk of infestation by pests or vermin is minimised. Adequate arrangements for disposing of food waste or other material attractive to pests will be implemented.



If infestation occurs, the Contractor will ensure that such action to deal with it as required by the City Council's Environmental Health Officer is taken.

To minimise the potential of infestation, the existing buildings will be assessed for the presence of rodents and vermin prior to construction. Should any rodent or vermin issues be present, an external Contractor will be appointed to eradicate these.

The contractor will ensure that periodic reviews of the Site are undertaken by a specialist contractor to ensure that rodent infestations are minimised and can be removed quickly to avoid the associated health issues affecting the workforce, the neighbouring properties and occupants.

To minimise the adverse impacts from pests and rodents the following control measures will be implemented on Site in the following order.

- All drainage systems and access points will be kept secure to prevent rodent access
- All generated rubbish particularly food waste will be cleared as it is generated and placed into secure containers and removed off Site for disposal on a continuous basis
- A high level of good housekeeping will be maintained on Site and in all facilities
- Site rules will be implemented to prevent the feeding of such pests as pigeons and seagulls
- All food stuffs brought on Site will be within storage containers
- Where all other control measures have been actioned then pest control management will be implemented on Site by a reputable pest control company

### 10.13. Pigeon Waste

It is anticipated that certain areas of the Site will require prior cleansing and decontamination of pigeon waste. This area of concern is covered within the CMP.

### 10.14. Road Cleansing

A water assisted road-sweeping machine will be periodically employed as required to either brush clean the roads around the Site or in periods of dry weather wet down the highway to control the dust. The frequency and nature will be agreed in advance with the Council and if necessary, 3<sup>rd</sup> party stakeholders. The timing of the cleansing will be managed to avoid peak times except by exception, such as a spill or on request of the Council.

Dry sweeping will be avoided in sensitive and or large areas where dust and particulate pollution could cause an issue both on and off Site.

Road cleansing may also require water-assisted cleansing plant on the access and local roads, to remove, as necessary, any material tracked out of the Site. Where this is required, the Applicant will ensure that surplus water is collected and contained for removal from Site by appropriate measures.



### 10.15. Wheel Wash Management

The Site will have designated hard standing loading areas. These areas will also serve as wheel wash areas for vehicles leaving the Site. All access and egress points will be monitored and cleaned as required to prevent Site materials tracking on to the road.

Where possible the Contractor will ensure there is an adequate area of hard surfaced road between the wheel wash facility and the Site exit, wherever Site size and layout permits.

The Contractor may implement a wheel washing system with rumble grids to dislodge accumulated dust and mud prior to leaving the Site where reasonably practicable. To improve cleansing, the exact methodology will be agreed with the Council on allocation by location basis.

All ground or surface water run-off will be strictly controlled in line with environmental legislation and best practice to prevent pollution of drains and watercourses.

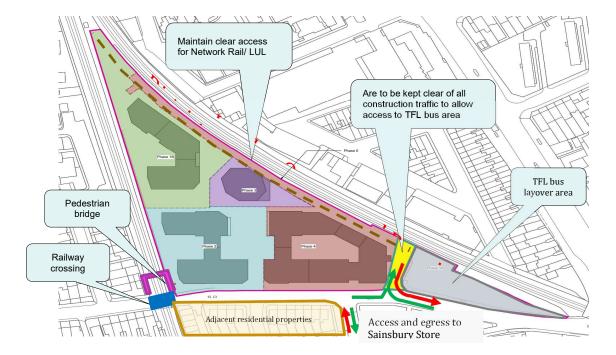
All vehicles will be inspected before leaving Site for cleanliness.

#### 11. TRANSPORT STRATEGY

The Transport Strategy to be instigated on Site will be continually developed up to commencement of works on Site. The Main Contractor, once procured, will finalise all Site logistics, ensuring all relevant approvals and consent have been achieved.

#### 11.1. Site Access

All access and egress to and from site will be via Manor Road to the east of the site.





For all vehicle movements, a traffic banksman would be employed to ensure correct procedures are followed and safety movement at all times.

# 11.2. Ingress and Egress from Site

The Site will, at all stages, have vehicle segregation to maintain a safe distance between people and vehicles on Site.

A pedestrian gate will be installed on Manor Road, which will be controlled by a access controlled system to segregate personnel access, protected from vehicles by a suitable barrier.



# 11.3. Management of the Site gate(s)

The Site gate will be managed by both traffic marshals and Site security. The Site gate will only be opened just prior to deliveries, and then remain open until such time that it is safe to close the gate after the delivery. The standard position of the Site vehicular gate is closed.

### 11.4. Management of Deliveries / Pick ups

Deliveries & collections (mainly of refuse) to Site will be required on a regular basis and sizes of vehicles will vary.

Due to the constrained access into and on the Site, as well as the close proximity of the public, careful and close management of deliveries to site will be required.

The cross over from the pavement to the property will be managed / marshalled to prevent any major disruption to pedestrians passing by.

The Principal Contractor will be required to implement a managed system of material movements to and from the Site to ensure that there is no congestion of vehicles on the highways.

It is considered that generally loading and offloading will be conducted on Site and within the confines of the hoarding line.



Where offloading is to occur on the roadside, permissions will be sought on a need-by-need basis and a full Method Statement detailing delivery details, size, timing, durations, special lifting requirements etc. and request their approval to proceed.

# 11.5. Electronic Booking System

All deliveries to Site should be undertaken through an electronic "booking-in" system, managed by the security organisation, and with all deliveries allocated a specific time slot. Typically, failure to adhere to their time slot may result in a sub-contractor's delivery being denied access to the Site. There will be no waiting on street for access to the Site.

### 11.6. Traffic Marshals

All deliveries will be met by a suitably sized team of traffic marshals to ensure safe passage into Site, and safe manoeuvring on Site.

### 11.7. Schedule of Deliveries

A schedule of predicted size and frequency of vehicles will be finalised by the Contractors.

Vehicle movements/deliveries will be reduced during weekday highway peak hours.

Morning Peak Hours: 0800hrs-0930hrs

Lunch Peak Hours: 1200hrs – 1400hrs

School Hours: 1500hrs -1600hrs

• Note other hours may be requested by the Council and will be adhered to.

Vehicular movement for Site deliveries outside of the normal working hours will need to be agreed.

#### 11.8. Out of Hour Deliveries

Consideration should be given to early and late deliveries and collections to reduce any traffic congestion during the peak periods, subject to agreement with TfL and / or the LPA. Where out of hour deliveries are considered, the Contractor will ensure that the correct number of traffic marshals are available.

### 11.9. Vehicle Manoeuvring on Site

The Contractor will endeavour to:

- Maintain safe maneuvering on Site all vehicle paths will be detailed out to provide best practice segregation from the Site operatives
- Ensure all on-road vehicles comply with the requirements of the London Low Emission Zone and the London NRMM standards, where applicable
- Reversing operations will be minimised as far as is practicable
- Traffic marshals will be used on Site to assist maneuvering



- All vehicles will be maintained correctly within the cab to ensure that no objects or personal effects can obscure the driver's vision
- All vehicular windows and mirrors will be maintained correctly and in a clean state and window wash will be made available on Site to ensure compliance
- For vehicles with generically poor visibility such as straddle carriers and large shovel loaders, either mitigation measures such as extra mirrors, radar and CCTV will be installed in the cab, or the vehicle will be accompanied by a suitably trained traffic marshal.
- Where vehicle maneuvering cameras are used, these will be inspected for cleanliness and drivers will be trained in their usage as to ensure that changes in lighting areas etc. do not confuse the driver.
- Impose and signpost a maximum-speed-limit of 10 mph on surfaced haul roads and work areas
- Install hard surfaced haul routes, which are regularly damped down with fixed or mobile sprinkler systems, or mobile water bowsers and regularly cleaned.

#### 11.10. Vehicle Numbers

It has been estimated that during the construction sequence approximately 20 construction vehicles movements anticipated per day. No vehicular access will be permitted to site on Sundays and Bank Holidays, and no work will be undertaken out of hours without prior agreement with LBRUT but likely to be limited to one off activities such as out of hours crane operations.

### 12. CONSTRUCTION LOGISTICS AND CYCLIST SAFETY

The contractor will be required to operate both the:

- Fleet Operator Recognition Scheme (FORS); and
- Construction Logistics and Cyclist Safety (CLOCS) safety.

#### 12.1. Macro and Micro Traffic Routes

The sketches provided below, show anecdotal routes to the key roads and motorways that should be considered for vehicle movements, as well as local routes through the project area and surrounds. This is not an exhaustive list. These roads include:

- A316 from north
- A305 from the south





# 12.2. Access Management Staff

A team of traffic marshals will be utilised to assist vehicular movements on and off Site. The marshals are specifically trained in vehicular safety management.

The marshals will also be trained in the use of safety equipment that can be used from time to time, such as concertina crown barrier etc. to stop any interaction between vehicles and pedestrians.

All traffic marshals will be qualified for their role and their qualifications registered for periodic inspection by the Local Authority.

All traffic marshals will wear full PPE including:

- Helmets
- Safety Glasses
- Hi Visibility coats or Vests
- Hi Visibility trousers
- Gloves
- Protective footwear

# 12.3. Car Parking on Site



Due to the tightness of the Site in relation to its build / deconstruction complexity and the local environment, car parking is to be prohibited except for pick up and drop off. This should not affect transportation to Site, with most workers considered to use the local public transport infrastructure.

## 12.4. Transport General Introduction

The Applicant (through the Design Team) will ensure that the works are designed and carried out in such a way as to minimise disruptions to traffic flows causing inconvenience to the public or undermining the safety of road users. Disruptive effects of construction traffic on designated routes are to be minimised by consideration of a number of mitigations in advance of construction, to be agreed with the Council.

Unless an exception is made, all existing public access routes and rights-of-way during construction will be maintained or protected in agreement with the Council and other associated bodies. Where this cannot be achieved the Applicant will agree mitigations, including alternative routes and signage solutions.

Through the creation of a "Construction Liaison Group", where construction activities are planned on a number of Sites in proximity to one another, Contractors will, where possible coordinate their requests for road / lane closures, access routes, lorry movements, etc. in order to reduce the impacts on the surrounding area for residents, businesses and other development projects and contractors.

### 13. TRANSPORT LEGISLATIVE COMPLIANCE

The Applicant (through the Design Team) and the Contractor will ensure that their Planning Advisors and Design Engineers are familiar with the Highways Act 1980 (particularly Part IX also ss.79-82 regarding nuisance148-151 highway spoil) and the New Roads and Street Works Act 1991 (particularly S.50) where project works are on, intrusive or adjacent to the public highway.

### 13.1. Staff Journeys to Site

The Applicant will implement a Travel Plan that supports and encourages sustainable travel (public transport, cycling, walking, and car-sharing).

In order to support efforts to minimise the effects of construction traffic on the surrounding highway network, there will be no formal car parking provision on Site for construction workers. Construction personnel would therefore be encouraged to use other forms of transport to travel to the Site. Given the Site's proximity to excellent public transport services, it is envisaged that most construction personnel would travel to the Site by public transport including:

- Train
- Overground South Western Railway
- Bus

A small number of trades may require short-term parking for vehicles due to the transportation of specialist equipment/ plant requirements. Limited drop off / pick up parking will be provided on Site, but only for this purpose. This will only be allowed by prior arrangement.



Cycle parking will be available on site for the duration of the project.

#### 14. CONSTRUCTION CONSTRAINTS

The building is to be constructed within a busy area of the Borough and the Applicant should be aware that high levels of vehicle traffic may be generated periodically by the:

- Local shops offices, hotels and local eateries within the area
- Traffic management related to the works and maneuvering
- Large Spoil Removal during demolition
- Maintaining "Business as Usual" for adjacent properties

For further constraints, a full review will be required to be carried out in direct relation to each phase.

#### 15. SITE SECURITY & EMERGENCY PLANNING

### 15.1. Security General

The Sites security for the project will be in operation from the outset. Initially they will be manned during the working hours and extend either side of the working-day by approximately 1 hour (aligned with the fire inspection policy).

It is anticipated that during the development works, the Sites will need to be provided with 24-hour 7 day a week security by either a mix of static or mobile security personnel with CCTV backup covering all aspects of the Site hoarding as a minimum.

Site security cameras, where used, will be sited in locations which will not cause nuisance or offence to local residents.

Hoardings and temporary structures will be designed to minimise opportunities for rough sleeping and the behaviours associated with this, as well as anti-social behaviour. Where such issues do arise, the PC aligned with LBS guidance will review and revise the hoarding alignment in a timely manner.

### 15.2. Rough Sleepers

Where rough sleepers are encountered, the Applicant's, Nominated Representative will refer the rough sleeper (s) to **Streetlink** on <a href="www.streetlink.org.uk">www.streetlink.org.uk</a>. The PC will ensure that the nominated representative is suitably trained (in line with LA guidance) to work with **Streetlink** to enhance the contractor to work proactively with the local teams to address any issues.

### 15.3. Emergency Planning and Response

The Contractor's Nominated Representative will ensure that emergency procedures are developed, implemented and updated where necessary. The emergency procedure will include emergency pollution control measures that will take into account current relevant Environment Agency and government



guidance relating to pollution. The emergency procedures will be produced in consultation with the emergency services.

The emergency procedure will contain emergency phone numbers and the method of notifying the LBS and other statutory authorities. Copies of the procedures will be issued to the LBS, London Fire Brigade (LFB), the Police, the Ambulance Service and other relevant authorities etc. Emergency telephone numbers for Applicant's/contractors key personnel will also be included.

### 15.4. Emergency Access

The Contractor will ensure that the requirements of the London Fire Brigade and Emergency Planning Authority (LFEPA) will be followed for the provision of Site access. Note 'Access for Fire Appliances' which addresses the road widths required for fire apparatus. The accesses may vary over time and will also be suitable for ambulances.

#### 16. FIRE PREVENTION & CONTROL

The Contractor will ensure that all construction Sites and associated accommodation or welfare facilities will have in place appropriate plans and management controls to prevent fires. The Site fire plans will be prepared and will have due regard to the following documents:

- Fire Safety in Construction (HSG 168);
- Fire Prevention on Construction Sites (CFPA Europe).

#### 16.1. Fire Precautions

All fire precautions will be taken, and fire checks made at the end of each working day before personnel leave the Site. Fire points will be set up within easy reach of the work areas, storage points and hot works locations. Throughout the works, "hot works permits" will be required as standard for all hot works. The process will be managed by the Main Contractor.

#### 16.2. Fire Alarm

Each building will be temporarily fire alarmed, this will connect back to separate security monitoring areas on Site. The Contractors on all phases will co-operate to agree fire communication, evacuation strategies, drills for both themselves and relevant third parties.

#### 16.3. Fire Assembly Points

Due to the number of phases and the changing anatomy of the Site, a fire assembly strategy will be drawn up to reflect the special dynamics of the Site and may need to look to off Site locating. If the area allocated assembly is off Site, the contractor (s) will initiate discussions prior to the phase of works commencing with the Local Authority.



#### 17. CONSTRUCTION WORKS

## 17.1. Highway Works in Principle

#### 17.1.1. Road & Lane Closures

It is not envisaged that there is a need to close any roads on a permanent basis during the duration of the works. It may be required to close a road on a temporary basis for the installation removal of the tower crane. This will only occur under prior agreement with the Local Authority.

## 17.1.2. Temporary Structures on the Highway

It is not envisaged that there will be a need for temporary structures on the highway. However, in accordance with best practice and if the need arises, the Applicant will agree the extent with the LPA.

Where fenced storage areas, scaffolding gantries, loading/unloading bays, skips and other temporary structures on the highway are required, established and maintained, this will be in accordance with all appropriate licences and conditions issued by the London Borough of Richmond Upon Thames or TfL to the Contractor. Due to the nature of temporary works and associated risks, the Contractor will ensure that the designers are suitably qualified and aware of temporary works as defined in BS5975:2008.

When locating storage areas, temporary structures, etc. the Contractor's Nominated Representative will consider the particular needs and vulnerability of pedestrians in order to provide a safe and direct route for them. In particular, this will ensure adequate highway is available throughout the period of the works, particularly where there are high volumes of pedestrians. All barriers, clutter, and storage of materials and equipment within the footway will be minimised to ensure safe pedestrian movement.

In view of the potential impacts faced by both traffic and pedestrians, temporary structures etc. will only be applied for in exceptional circumstances. Where they are permitted, the Contractor will pay particular attention to the safety of pedestrians as well as ensuring that any revision to traffic cyclist or pedestrian flows are properly controlled by signs, lights, banksmen etc. as necessary.

### 17.1.3. Clearance of Off-Site Temporary Works

On completion of works in or on third party areas, the Principal Contractor will clear away and remove from the highway all plant, surplus materials, rubbish and temporary works and structures.

The Site will be left clean and in a condition to the satisfaction of the LBS, TfL, the Highways Authority and other third parties with an implicit interest to the area.

Any potentially hazardous defects to the highway will be made good, prior to permanent reinstatement by the LBS. It is accepted that the provisions of S278 Highways Act 1980, which may require landowners to make financial contributions towards the carrying out of highway works, may also be applicable. This would require agreement of the process and the need for prior inspection to be agreed before works commence.



# 17.2. Construction Method Statement (outline scope of works)

### **17.2.1.** Demolition

The existing building is to be soft stripped of all internal finishes, and anywhere these materials can be re-cycled, then this will be done. During this duration, an external scaffold will be erected, complete with sheeting, to ensure dust is kept within the site during hard demolition.

#### 17.2.2. Removal of subsurface structures

Once the building has been demolished, the ground floor slab is to be removed and any areas of soft substrata will be removed and replaced with 6F2 stone. Across the whole are of new build, a layer of 6F2 will be laid as a working platform.

### 17.2.3. Substructure

All substructure works are to be formed in reinforced in-situ concrete. All concrete is likely to be placed using a static line concrete pump, direct from the concrete wagon, or via dump truck.

## 17.2.4. Superstructure

The superstructure is to be formed by using a suitable methodology. This could incorporate some elements of pre-fabricated materials.

A number of tower cranes will be erected within the site and will be utilised for distribution of materials around the site. This will include reinforcement, shutters, pre-fabricated materials and any temporary works required.

### 17.2.5. Building Envelope / Cladding

The external walls will be formed using a suitable materials to prevent the ingress of water to allow the fit out to commence. The walls will consist of two skins with inset windows.

Flat roofing works to roof and terrace levels will commence once the structure concrete slab is complete and has had sufficient curing period.

#### 17.2.6. Internal fit out

It is envisaged that all elements of the building will be fitted out completely.

Dry lining works to form the internal risers commence on completion of the superstructure frame and temporary waterproofing to level 6. This allows for the formwork and back propping to be removed. The mechanical, electrical and public health services work to the risers will then commence on completion of the dry lining to level 4. We foresee the core and riser works progressing in a south to north direction and on a floor by floor basis, commencing at lower ground floor and completing at level 2.

The installation of a good temporary waterproofing strategy is essential to allow early services installation and first stage fit-out works to commence, in addition to maintaining programme



momentum. This is to consist of one level of protection (such as bunding) at level 2 to prevent water ingress to risers from floor plates.

Lift Installation will commence once the RC frame is complete to roof allowing for the formwork and back propping to be removed. We have assumed that the lift shafts are formed reinforced concrete.

Fit-out to the residential will commence once the external façade is sufficiently installed to provide a water-tight environment. It is envisaged that the works will commence at level 1 is each block and continue up following the façade installation.

## 17.2.7. Testing & Commissioning

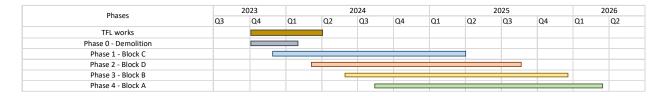
Testing and commissioning will commence with all required plant and machinery being tested in the factory by way of a Factory Acceptance Test (FAT). From there the "equipment" will be tested in isolation on installation, and then a build-up of system testing by loop or circuit. On completion of all circuits and loops and power on, the whole system will be tested in part, and then in whole under full load to ensure that the systems comply with the building requirements.

Both red (building taken down with power intact) and black (building taken down with power taken off) tests will be performed throughout the final phase of testing and planned to ensure life safety systems are live and compliant.

## 17.3. Construction Programme

The construction programme is to commence once the contractor is on board and all planning precommencement conditions have been discharged. The indicative programme of works is shown to commence with demolition works Q4 2023 and the new building works commencing Q4 2023 with practical completion being Q1 2026.

An indicative construction programme is provided below:



The programme shown will be subject to review once planning is achieved.

#### 17.4. Number of Staff

The number of construction workers on-Site at any one time will vary and correlate to the different phases of the development. The current assumption is that the Site could reasonably manage up to 250 resources at peak through the construction period, but that will fluctuate depending on phasing, operations and the nature of construction activities.



## 17.5. Plant & Equipment

The Contractor will take all reasonable precautions to ensure that equipment is operated in a manner so as not to cause nuisance to surrounding residents and occupiers.

Permission will be obtained from the Highway Authority by the Contractor before any plant, compressor, cement mixer, tar pot or other machinery can be stored or operated on the Public Highway.

The Contractor will ensure all large plant delivery, such as tower cranes, will be planned in accordance with best practice and routes and timings agreed with the LBS and TfL prior to transportation to Site.

In the early stages of the project, there will be a variety of vehicles and plant and equipment requiring access to the Site. Some of the vehicles will be coming through the Site on a regular turnover basis and some on a "one off" or infrequent basis.

VEHICLE TYPE	TYPICAL SIZE	USE	DISTRIBUTION
Rigid Heavy Goods Vehicle	10m (l) x 2.5m (w) x 3.64m (h)	Demolition Excavation material removal	Strategic road network to motorway
Small Articulated Vehicle	15.4m (l) x 2.5m(w) x3.7m (h)	Plant, steelwork, bricks, cladding panels, Mechanical and electrical plant, roofing materials	Strategic road network to motorway
Rigid Heavy Goods Vehicle	9.4m (I) x 2.5m (w) x 3.71m (h)	Concrete deliveries	Strategic road network to motorway
Specialised articulated HGV	16.5m (I) x 2.5m (w) x3.7m (h)	Tower crane erection and dismantle	Strategic road network to motorway
Specialist equipment low loader	16.63m (l) x 2.5m (w) x 3.4m (h)	Occasional delivery of plant	Strategic road network to motorway
Vans	5.7m (l) x 2.4m (w) x 2.7m (h)	Plant service, materials and other suppliers	Distributed to local and strategic road network
Cars	4.94m (I) x 1.9m(w) x 1.85m (h)	Occasional deliveries, couriers etc.	Distributed to local and strategic road network

The above table is not exhaustive but to assist in clarifying the key delivery vehicles.

On Site plant, termed as "non-road mechanical machinery", will comply with the NRMM practical guide v.4. All plant will conform to emission Stage IV as a minimum. The NRMM LEZ only applies to machines on construction/demolition Sites, with rated power outputs between 37-560kW. All this plant must be registered on the GLA NRMM website (section 3.2). If, at any point, machinery is required that does not comply with guide, the contractor will need to apply for exemption.



PLANT	DEMOLITION AND ENABLING	SUBSTRUCTURE AND SUPERSTRUCTURE	ENVELOP E	MEP INSTALLA TION	INTERNAL FIT OUT	EXTERNAL WORKS	TESTING AND COMMISSIONING
Bulldozers	✓	✓					
Dumper trucks	✓	✓				✓	
Compaction plant	✓	✓				✓	
Tower cranes		✓	✓				
Mini cranes/ Manipulators		✓					
Platform hoists		✓	✓	✓	✓		
Cutters, drills and small tools	✓	✓		✓	✓	✓	
Crushers	✓						
360° excavators fitted with	✓					✓	
demolition tools e.g. pulveriser, hydraulic hammer							
Floodlights	✓	✓	✓	✓	✓	✓	
Fort lift truck		✓	✓	✓	✓	✓	
Generator	✓						
Hydraulic benders and cutters		✓		✓	✓	✓	
HGV's, lorries, vans	✓	✓	✓	✓	✓	✓	✓
Scaffolding and mobile	✓	✓	✓	✓	✓		✓
hydraulic access plant							
Ready Mix concrete lorry		✓				✓	
Concrete pump and boom		✓				✓	
Water pump	✓	✓					
Temporary supports	✓	✓	✓			✓	

The NMRR will be subject to Publication London Plan Policy SI1 Part D, to reduce the impact on air quality during the construction and demolition phase development proposals must demonstrate how they plan to comply with the Non-Road Mobile Machinery Low Emission Zone and reduce emissions from the demolition and construction of buildings following best practice guidance.

### 18. POTENTIAL IMPACTS DURING CONSTRUCTION

A review has been undertaken of the potential source of adverse impacts, which can be associated with carrying out de-construction and construction works. The results of this are presented in the table below:

ISSUE	POTENTIAL IMPACTS	MITIGATION
Noise Increased road noise levels from vehicles. Increased noise levels from plant during excavation, and general de-construction	Defined working hours, baffles to certain plant, local acoustic screening	
	excavation, and general de-construction	Vehicle routing



ISSUE	POTENTIAL IMPACTS	MITIGATION	
	works (e.g. from the use of air compressors and diamond cutters).	Beepers, radios etc. to be silenced. Engines turned off and all measures outlined in the considerate constructor's scheme	
Vibration	Increased vibration levels from vehicles.	Defined working hours. Selection of appropriate plant and work procedures	
		Phased deliveries to minimize numbers of vehicles attending Site	
	Increased vibration levels from plant during de-construction,	Vehicle routing	
		Engines to be switched off when vehicles are idle or on Site	
Dust / Air	Windblown dust from ground surfaces,	Cover all open backed vehicles;	
Quality	stockpiles, vehicles, work faces and cutting and grinding of materials.	'Water down' de-construction activities	
	Exhaust emissions from lorries and plant delivering and removing materials including dust and particulates.	Regular and controlled monitoring of air quality, including agreement; Implementation of trigger and action levels Switch off vehicle engines when parked	
Waste	Waste generation and its disposal.	Instigate Site Waste Management Plan and re-cycling programme	
		Waste will be separated on site as is reasonably practical, and if this cannot be undertaken, separation will be undertaken off site and demolition depot  Minimise packaging to Site	
		Engage predominantly with suppliers who utilize recyclable packaging	
		Ensure deliveries to Site are required at the time of issue to minimise damage to stored goods	
Water	Increased sediment loadings to storm water system.	Do not allow direct discharge of water into sewerage collection system.	
	Potentially contaminated storm-water runoff.	Ensure Site water is pumped into vessels for removal from Site in a safe manner	
Traffic	Traffic congestion caused by Site traffic.	Phased deliveries to minimise numbers of	
	Local traffic diversions will be required for tower crane erection and dismantle and mobile crane lifts.	vehicles attending Site, switch off vehicle engines when parked, minimise abnormal loads.	



ISSUE	POTENTIAL IMPACTS	MITIGATION
	Increased vehicle movements mainly consisting of Heavy Goods Vehicles (HGVs).	Vehicle routing.
	Nominal levels of transfer of mud and material from vehicles onto the public highway.	
	Disruption from abnormal or hazardous loads.	Regular cleaning of surrounding roads
	Exhaust emissions.	Jet washing of Site pit lanes and cleaning of road gullies
Storage of fuels and	Accidental spills, discharges to drains/stormwater systems.	All fuel tanks etc. to be bunded, no discharge allowed into the sewerage
construction materials	Contamination to ground.	collection system.
Pedestrian access	Restrictions on pedestrian access to walkways, footpaths and roads.	Closed footpaths
		Erect protective gantries
Hazardous and contaminat ed materials	Exposure of the workforce to deleterious / hazardous materials and contaminated land, mobilization of any source contaminants and creation of pathway from source to groundwater receptor.	Site investigation reports to indicate if any contaminated fill is present.
		COSHH assessments and careful implementation of associated working method statements to ensure that no hazardous materials find a path to groundwater source.
Ecology	Water / mud run off into the drains.	Do not allow direct discharge of water into sewerage collection system, utilize interceptors where necessary.
Energy usage	Indirect impacts associated with energy consumption such as CO2 emissions, depletion of natural resources, air pollution etc.	Site environmental plan to implement.
Views	Views impacted and/ or impeded from construction equipment, particularly cranes	Tower crane to be positioned to have minimal impact upon adjacent views

The below sections elaborate further on the details captured within the table and will be reviewed and updated throughout design development. This will be done in accordance with the Contractor to ensure that the best mitigations can be in place prior to commencement on Site to look to exceed the standards set by the Council.

# **18.1.** Mitigation Measures

Industry accepted practical means of preventing, reducing and minimising noise generation will be adopted in agreement with the Council.

Appropriate procedures need to be followed in order to mitigate noise, vibration and air pollution (e.g. through dust and fume generation) impacts.



## 18.2. General Mitigations

No works will be undertaken outside the specified working hours; except in cases of emergency, where safety is an issue, or where conditions of dispensation apply.

### 18.3. Plant Mitigations

The Contractor will comply with the requirements of the COPA 1974, with reference to Part III of the Environmental Protection Act 1990, The Control of Noise at Work Regulations 2005 and the Health and Safety at Work Act 1974.

Ensure all vehicles switch off engines when stationary - no idling vehicles.

Avoid the use of diesel or petrol-powered generators and use mains electricity or battery powered equipment where practicable.

Ensure all on-road vehicles comply with the requirements of the London Low Emission Zone and the London NRMM standards, where applicable.

All plant and equipment to be used for the works will be properly maintained, silenced where appropriate to prevent excessive noise and switched off when not in use and where practical. Hydraulic machinery and plant will be used in preference to percussive techniques where practical. Plant will be certified to meet relevant current legislation and Noise and Vibration Control on Construction and Open Sites (BS 5228). All subcontractors will be made familiar with current noise legislation and the guidance in BS 5228 (Parts 1 and 2), and this CTMP which will form a pre-requisite of their appointment.

## 18.4. Noise Mitigations

As part of the construction work the Contractor will liaise with the Local Authority with regards to a possible Section 61 agreement which will outline noise levels to be adhered to and as a result will dictate the mitigation measures chosen by the Contractor.

To control noise at the source, the Contractor will consider the use of temporary acoustic fencing or enclosures in the form of Echo Barriers, which will be employed to reduce noise transmission from the Site to adjacent buildings. The Contractor will employ a number of other noise mitigation applications so that noise will be kept to a minimum; this will be via the use of attenuators / mufflers fitted to plant and equipment. Also, the positioning of plant and equipment will be carefully considered to reduce the impact on surrounding buildings. Noise monitoring will be carried out if required following discussions with the Local Authority.

# 18.5. Dust (and other particulate) Mitigations

Specific Dust measures should be considered as:

Dust levels be controlled by the constant monitoring of air quality levels



- Positioning of monitoring equipment will be agreed with the Council prior to installation
- All vehicles entering and leaving Site will be covered to prevent escape of materials during transport
- Agreed trigger levels for Dust and other particulates will be agreed with the Council in advance of construction
- Plan Site layout so that machinery and dust causing activities are located away from receptors, as far as is possible
- The Contractor will erect and maintain, throughout the construction period, temporary hoarding around all working areas to assist in the screening of noise and dust generation from low-level sources
- Vehicles transporting materials capable of generating dust to and from Site will be suitably sheeted on each journey. This will prevent the release of materials and particulate matter
- All solid-state hoarding and Site fencing and barriers will be maintained using controlled wet methods for cleansing and avoiding water runoff from the activity
- Fully enclose Site or specific operations where there is a high potential for dust production and the Site is actives for an extensive period
- Remove materials that have a potential to produce dust from Site as soon as possible, unless being re-used on Site;
- Where materials are being re-used on-Site, they should be covered and protected according to best practice in a manner agreed previously with the Council
- Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems.
- The Contractor will avoid scabbling (roughening of concrete surfaces) if possible, to minimise dust
- Ensure an adequate water supply on the Site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate.
- Use enclosed chutes and conveyors and covered 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.
- Install hard surfaced haul routes, which are regularly damped down with fixed or mobile sprinkler systems, or mobile water bowsers and regularly cleaned.
- Ensure equipment is readily available on Site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.
- Dust Mitigation is a key factor as the area, with the publication of the London Policy, the demolition contractor and the Main Contractor will insure that:
- All skips and muck away lorries will be covered prior to leaving Site to ensure dust spread is kept to a minimum



- Skips to be securely covered and drop heights to be minimised for redundant materials to reduce dust arising when loading
- All cutting equipment to use water as suppressant or suitable local exhaust ventilation systems where applicable
- When demolition is taking place areas to be dampened down to reduce dust arising
- All vehicles will be washed down before leaving
- All vehicles will switch off engines no idling vehicles
- Spill kits are available and will be used where required

#### 19. THIRD PARTY LIAISON

#### 19.1. Public Information

The Site hoarding will display Up-To-Date information on the construction schedule (as a minimum, these will include start and estimated time periods such as "summer and year"). The signage will also display telephone contacts for within and out of hour's usage for the Applicants nominated representative (s) and other key personnel for reporting of issues and incidents.

The Contractor will also affix a sign board to hold all necessary certification, statutory notices, safety information and HSE details.

# 19.2. Community Liaison Group (CLG)

To assist in communication, and a more formal approach, the Contractor's Liaison Officer (this is appointed on Site and may be the Site Assistant Manager) will set up a Community Liaison Group (CLG) with a set agenda to work with the local community to be agreed.

### 19.3. Construction Forum

To assist in communication, and a more formal approach, the Contractor's Liaison Officer will set up a Construction Forum Group (CFG) with a set agenda to work with the adjacent and regional construction Sites that are affected or affect the Project works.

Key Items on the agenda will include:

- Environmental issues
- Dust
- Noise
- Vibration
- Transport Logistics:
  - Outsized deliveries
  - Crane deliveries
  - Cycle safety initiatives



- Vehicle educational measures (including school visits)
- Vehicle delivery no's actual and envisaged
- Site worker transport preferences
- Security:
  - Fire management / Site evacuation policy
  - Fire escape areas
  - High Cost items / security risks as appropriate

## 19.4. Monthly News Letter

A monthly news letter will be provided by the Contractor and distributed to the local residents to advise on progress of the works.

### 19.5. Access by Neighbours to their Buildings

In line with good neighbour relations, the Contractor will conduct full negotiations with the adjacent landlords and tenants to ensure that there is a shared philosophy to deliveries, pickups, and access. An agreed route for good communication with all parties will be agreed and be bespoke where necessary for individual needs.

### 20. ECOLOGY

#### 20.1. Tree Protection

Prior to commencement of works, the Contractor shall agree with the LPA, a strategy for delivering the landscape strategy on site.

#### **20.2.** Bats

To minimise disruption to Bats there will be no night-time working during demolition and construction.

A bat policy will be agreed with the Contractor prior to commencement of construction (including demolition activities) in consultation with the Council's ecological officers.

To minimise visual disruption to the bats, Lighting of buildings will adhere to good practice guidance: Bat Conservation Trust and the Institution of Lighting Professionals, (2018); 'Bat Guidance Note 08/18 Bats and artificial lighting in the UK. Bats and the Built Environment series'.

The key guidance for the protection of bats directs that:

 All luminaires should lack UV elements when manufactured. Metal halide, fluorescent sources should not be used



- LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability
- A warm white spectrum (ideally <2700 Kelvin) should be adopted to reduce blue light component
- Luminaires should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats
- The use of low-level downward directional luminaires to retain darkness above can be considered
- Column heights should be carefully considered to minimise light spill
- Only luminaires with an upward light ratio of 0% and with good optical control should be used
- Luminaires should always be mounted on the horizontal, i.e. no upward tilt
- Any external security lighting should be set on motion-sensors and short (1min) timers
- As a last resort, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed.

### **21. UNEXPLODED ORDNANCE**

The Applicant (through the design team) will undertake all necessary due diligence surveys to ensure that there are no unexploded bombs, shells and incendiary devices buried in Sites.

The Applicants nominated representative will ensure that all Operatives are warned of this possibility on handover of the Site, with issue of all survey information. Should any such item be uncovered during the works, the Contractor will ensure that there is a set procedure to take emergency evacuation of the Site, which will be included within the Site induction, and contact the Metropolitan Police immediately.

On contact with the Police the principal contractor will undertake all and action as directed by them make the Site safe.

### 22. ARCHAEOLOGY

The application is accompanied by a desk-based archaeological assessment