

Lordship Lane

Outline Demolition & Construction Method Statement

February 2023

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1 Introduction

1.1 General

This Construction Method Plan (CMP) has been prepared to support the planning condition for the proposed development on behalf of Fusion Students and Tri7 in support a full planning application for the proposed redevelopment of 707-725 Lordship Lane site in Wood Green.

The proposed scheme is a mixed use development comprising of four buildings consisting of ground floor Town Centre use, 623 student bedrooms with associated internal and external amenity spaces and 77 affordable residential homes of Shared Ownership and Social Rent tenures.

1.2 Site Context

The site is located on the southern side of Lordship Lane, within the eastern part of the Wood Green Town Centre and a short walk from Wood Green Underground Station



The Site fronts Lordship Lane (A109) to the North. The site currently comprises a Mecca Bingo and associated car park of circa 120 number of parking spaces.

Buildings surrounding the site are predominantly residential to the North, East and South. Towards the West is the main center of Wood Green and High Road consisting of a mix of shopping, restaurants/cafes and other retail and services.

Towards the north of the High Road, there are mostly offices. It also has the Wood Green underground station and the Arriva bus garage, allowing for good transport links.

There are also multiple places of worship and educational spaces within the area. To the northeast of the site, along Lordship Lane, there is the Wood Green Crown Court built in 1865.

1.3 Purpose & Scope of CMP

This CMP provides the procedures to be followed by the management, contractors and subcontractors and set out the proposed approach to managing construction related impacts arising from the proposed development

This document is intended to complement the contractor associated documentation, including

- Construction Phase Health & Safety Plan;
- Construction Logistics Plan
- Environmental management Plan
- Site Waste Management Plan.

This document aims to set out the proposed approach to managing construction related impacts arising from the proposed development at Lordship Lane

The document will demonstrate how construction materials can be delivered, and waste removed in a safe, efficient, and environmentally-friendly way.

In addition, it will consider where deliveries could be reduced, re-timed or consolidated during busy periods. This will include considering the construction operations at other local construction sites in the area.

The document will assess the impact of the construction upon the surrounding location, including public roads, and explain the arrangements for ensuring that the workforce and public remain safe throughout the project.

The document also presents the environmental and transport issues associated with the construction works.

2 Site Development and description

2.1 Construction Description

The proposed development would comprise the demolition of existing buildings and redevelopment of the site for the proposed scheme is a mixed use development comprising of four buildings consisting of ground floor Town Centre use, 623 student bedrooms with associated internal and external amenity spaces and 77 affordable residential homes of Shared Ownership and Social Rent tenures.

2.2 Constraints

There're some established constraints to accessing the Site, notably the following

The surrounding land uses will continue to operate during the planned construction period, and we are committed to carrying out the works in the most practicably sustainable manner.

Much of the site is overlooked by the surrounding buildings as well as being backed onto.

The northern main entrance into the site is off the main road, Lordship Lane.

On the southern edge of the site is the Noel Park conservation area and a culverted water course which restricts what may be permitted on this part of the site.

The site sits at the fringe of Wood Green's Town Centre.

Buildings surrounding the site are predominantly residential to the North, East and South. Towards the West is the main centre of Wood Green and High Road consisting of a mix of shopping, restaurants/cafes and other retail and services.

Towards the north of the High Road, there are mostly offices. It also has the Wood Green underground station and the Arriva bus garage, allowing for good transport links.

There are also multiple places of worship and educational spaces within the area. To the north east of the site, along Lordship Lane, there is the Wood Green Crown Court built in 1865.

- Access to site is along Lordship Lane (A109) is a classified 'A' road that is subject to a 30mph speed limit and allows for two lanes of traffic in both directions.
- Along the A109 two existing bus stop are located across from the site frontage. These stops currently operates two services and one night service.
- The site is fronted by an existing footway, a section of the footway across the north site frontage is proposed to be closed/restricted for general use during the construction phase. Pedestrians will be guided the opposite footpath via the crossings
- There are institutions in the vicinity that are sensitive to construction activity however, it is not anticipated that the proposals would impact on the operation of these facilities.
- Additional construction activity is occurring in the area from our proposed site. Through collaborative working relationship it is not anticipated that the proposals would impact on the operation either site.

The surrounding land uses will continue to operate during the planned construction period, and we area committed to carrying out the works in the most practicably sustainable manner.

2.3 Local Highway Network

Access to the site will be via Lordship Lane from the A406 to the north. The A406 is a principal route that extends west to connect with the M1 and east to the M11.

The nearest A road to the Project is the A109 (Lordship Lane) which runs along the Northern project boundary. This consists of a two-way road.

The existing traffic restrictions will be obeyed during the construction phase as far as practicable. In the event of temporary suspensions, lane closures or road closures being required, the contractor will liaise fully with the Council/TFL to obtain the necessary permits/agreements.

2.4 Construction Programme

The overall construction programme is anticipated to last for just over 34 months with a

Provisional Start Date: March 25
Anticipated End Date: April 2028

The Construction Management Plan has been planned around the need to minimise impact on local residents and also to keep existing businesses operational. The contractor fully notes the sensitivities of the residential areas adjacent to the Site, and the potential concerns arising due to the excavation and construction of the development.

2.5 Construction Sequence

2.5.1 Programme Overview

The Contractor has prepared a robust and detailed set of Programmes, Schedules, Site set-up and Traffic Management Drawings for the Lordship Lane Project as follows.

Along with our Programme, this document provides a detailed explanation of our Approach and Methodology to demonstrate the phasing of the works from pre-Commencement activities, Construction, Testing, Commissioning and handover of the completed project.

Furthermore, the following narrative demonstrates that our tender programme is very specific and fully integrates the management of Preconstruction, Design Development, Procurement and Construction delivery.

The detailed and specific programme outlines all activities and milestones and are broken down as per the key specialists / trades.

The programme also identifies key links between the separate specialists / trades on the project. In addition, the programme also demonstrates that the contractor fully understands the key issues associated with the project and identifies those materials which are long lead items and the estimated duration from ordering to delivery.

2.5.2 Pre Construction Enabling Works

The principal purpose of the enabling works will be to prepare the site area to allow construction to start whilst maintaining existing facilities and amenities. The area is accessed directly from the existing entrance to from Lordship lane.

Early enabling works will include hoardings and barriers to separate the site area from public spaces and estate roads.

Surveys and investigations will need to be undertaken prior to the commencement of works on site, as identified below, although it is likely that some of the surveys and investigations will need to be undertaken once the construction site is fully established to facilitate ease of access to the site for exploratory purposes.

The following surveys and investigations are envisaged:

- Condition survey of the existing structure;
- Condition survey of boundary walls and fences;
- Condition survey of neighboring properties;
- Condition surveys of existing highways; and
- Existing statutory services.

All statutory LB Haringey consents and licences required to commence any on site activity will also be

obtained ahead of the works commencing and give the appropriate notice period.

The Revised Planning Application will include but not necessarily be limited to:

- Notices for works on the highway in accordance with the Highways Act 1980 and Road Traffic Act 1998;
- Hoarding and scaffold licenses for works on the perimeter boundary;
- Agreements with TFL regarding working methods and possessions for temporary works;
- Temporary Traffic Order (TTO) for any alterations to road junctions, if found necessary;
- Construction notices;
- Section 80 Demolition Notice;
- Section 61 (noise) prior agreement application;
- Connections to existing statutory services and main sewers;
- Licence for discharge of water from the site into the public sewer; and
- Approval of the final Construction Environmental Management Plan (CEMP), CMS, DMS, Site Waste Management Plan (SWMP) and any other supporting documents and plans.

2.5.3 Site Establishment

One of the first activities will be to establish the area as a construction site. The working areas will be secured, and the general public will be separated from the works, prior to works commencement, with the use of solid and well maintained, 2.4m high hoardings and screening where required. Secure access points with wheel cleaning facilities will be established at all site access and egress locations. Pedestrian access points will generally be located close to the main vehicular access gates with separate pedestrian gates and footpaths provided.

Hoardings will be erected to segregate vehicles using the estate roads from the working areas as part of the site establishment works. Works to safely segregate this access and signposting will be installed early in the programme.

The construction project offices and associated welfare facilities for the demolition and construction workforce will initially be located in cabins at the southern edge of the site. As works proceed site accommodation will be relocated suit. The locations will be identified in advance and agreed with LB Harringay as part of the detailed construction and demolition logistics programming.

A suitable luffing crane is proposed it will be erected after the reduced level excavation is completed following demolition. The oversailing limiters, designed, and erected in accordance current guidelines

2.5.4 Demolition

Demolition will also be undertaken in period in a controlled and methodical method.

The existing space is mostly requiring a “soft strip” to be undertaken to clear the area. Soft strip is the removal of all non-structural elements so far as is reasonably practicable, e.g. furniture, floor coverings, fixtures, fittings, non-masonry walls, partitions, suspended ceilings, windows etc. and would normally include the safe removal of hazardous materials within the existing building by a specialist contractor.

Asbestos is not expected to be present however this will be resolved by undertaking surveys prior to the works. Site investigations will check for other hazardous materials following a desktop study of previous uses of the space.

Once any hazardous materials have been removed and any live services terminated and confirmed as such, the soft strip of all fixtures and fittings within the existing space will be carried out. Stripping will be carried out by trained operatives using hand-held tools and small machines in a continuous stripping exercise. The works will be accessed from the existing floor level, Mechanical Elevated Working Platforms (MEWPs), or from aluminium towers.

Combustible materials will be removed first, before ceiling hangers, trunking, conduit, pipework and other non-structural metalwork are cut out using oxygen/propane burning equipment, angle grinders or mechanical dismantling. A 'Hot-Works' permit to work system will be enforced when any works of this nature are undertaken, and fire extinguishers will be prominent. Hot works will cease two hours before the end of a working shift and the area thoroughly checked prior to breaks or to leaving site. Oxygen and Propane bottles will be stored upright in a lockable cage.

By regularly removing the accumulated debris, the potential fire risk that loose combustible material creates is minimised / removed. Rubbish arising from the soft strip will be segregated into recyclable streams and deposited into skips / container lorries within the basement loading areas for removal.

Once fixtures and fittings have been removed, using 360 degree excavators fitted with crusher jaws will begin demolishing the building in a controlled manner from the top down using dust suppression equipment. Steel members will then be cut into manageable sections for dismantling by excavator and small mobile crane.

Waste will be segregated into recyclable streams on site and removed by skip or tipper lorry. Fine water spray will be employed to limit dust emissions.

As the slab is removed pile probing will be undertaken to remove below ground obstructions in readiness for new piling. Consideration will be given to crushing concrete debris on site to provide material for construction of a temporary piling platform, subject to the quantity and quality of material produced.

2.5.5 Groundworks

On completion of the above phase construction shall swiftly move onto The Piling and Basement works followed in turn basement floor slab. The below ground drainage shall also be incorporated within this time line along with the approved waterproofing strategy.

2.5.6 RC Frame

Upon completion of the relevant floor plate the RC Frame shall commence. The RC frame will be undertaken in sequential manner floor by floor until the roof is topped out. Scaffold and Goods hoists shall be erected around each building once the RC Frame has had the back props removed.

RC Frame is sequenced to start 8 weeks after piling commencement on the WPH early works will have 3 weeks to get to Level 1 followed by 2-week cycles thereafter.

2.5.7 Structural Framing System/ Pods

The SFS framing will start on the 1st floor once the RC Frame is poured on level 4 and will work up the building floor by floor until works are complete. Bathroom pods shall be delivered at this time also. As the SFS is working off a 2-week cycle per floor so too the RC Frame these works should flow up the building allowing sufficient space between trades

2.5.8 Windows

Windows will be installed following the installation of the SFS. Once the 1st Floor framing is complete the windows will follow. This sequence will follow up the façade.

2.5.9 Façade

Once the windows have cleared the 3rd floor the Brick façade install will begin behind them. This will give a clear rounded path of installation going up the building in the correct sequence.

2.5.10 Internal works

The internal finishes will commence as soon as the windows have been installed and the building is adequately watertight on each floor.

Th internal works are broken down into difference phases as such upon completion of SFS to the building floor the tray and riser distribution will commence along with SVP vertical pipes.

At this point windows will also have begun to be installed.

Upon completion of windows the Party wall studwork and BCW and flat duct work will commence. It is at this point the pods will pushed into location and connected to the SVPs.

Following completion of this the Floor will be released to the follow-on trades to commence fit out.

This will involve completing M+E 1st Fix, Close up of wall and Skim. Allowing 1 week to dry the mist coat will be applied. Kitchen Fit out will follow with works tops templated. The flooring will be installed following commissioning of UFH. Decorations shall then commence with handover sequence.

The above-mentioned sequence follows throughout on both buildings.

2.5.11 Landscaping works

The Landscaping works will be undertaking following the completion of the façade and subsequent striking of the scaffold. The landscaping works will be in progress whilst the internal fit out is ongoing.

2.5.12 Commissioning Programme

A detailed Commissioning Programme will be developed in line with our M&E design and works schedule.

2.5.13 Labour/Resource Programme

Furthermore, during pre-commencement stage, will compile a detailed labour and resource programme which is in line in the main programme where resources are uploaded to each task bar in the programme. Labour Histograms for the project have been can then extracted from the Resource Programme.

2.5.14 Quality Control

The Contractor has a Quality Management System in place fully compliant to ISO 9001:2015. This ensures that our quality system, checking, documentation control and record keeping are in line with the highest standards within the industry. We are also registered with the International Certification Network. Measures for ensuring quality are met through our Quality and Procedures Manual which detail all our organisation systems, responsibilities, inspection and test plan procedures, which are fully described to ensure that all essential inspection requirements are determined and satisfied throughout all phases of the works.

We will use priority software to track all quality checks and inspections. The software used will be BIM 360 Docs which is linked to the Revit model of the project.

2.5.15 Check Sheets, Witnessing Sign Off

The Contractor has a full suite of check sheets to ensure that each element of the works is checked, signed off and is fully compliant with the Works Requirements, Specifications Drawings and all contract documents. For each and every activity there is a proforma quality control sheet that will be signed off by both our own personnel and those of the Subcontractors / Specialists. Each element of the works will be signed off and witnessed every step of the way by all relevant parties. This will safeguard and ensure that all works is fully compliant and fit for its intended purpose.

In terms of MEP, the Services Coordinator and Commissioning Manager will be responsible for inspecting, witnessing, testing and signing off all stages of the Building Services installation prior to following trades closing up or advancing their works. They will ensure that all installations are in accordance with the design and governing standards and regulations. The Contractor will keep and maintain a copy of all relevant check certificates for inspection on a web-based portal with full access provided to the Client Design Team. The Client Design Team will be provided with no less than 5 working days' notice prior to the performance of a test to allow them to witness the testing.

2.5.16 Samples Mock-Ups

The Contractor will provide a range of Samples and Mock-Ups that have been identified in order to allow the Client Design Team to review the design, quality of proposals and establish compliance and quality control criteria and benchmarks for elements of the works. We will produce these items in good time for proper review and comments to be returned prior to manufacture / order / installation dates. All approved samples / mock-ups will be retained on site in a controlled environment for comparison with the products and materials used in the work throughout the entire contract.

2.5.17 Wheel Washing and Damping Down Facilities

A fine mist water spray shall be used local to the operation for damping down high-risk activities to minimize dust creation. High-risk activities are described later in this plan and include the demolition phase and any period where loose material such as subsoil and concrete debris is stockpiled on site. The spray will be designed to drain back into the site, not onto roads or footpaths.

The damping down shall be carried out in such a way that a minimal amount of water is utilised, both to avoid waste and minimise the risk of overloading the site enclosed drainage system.

During the demolition, groundwork, earthwork, and construction phases of the project a wheel washing facility shall be provided adjacent to the exit gate. Muck-away lorries will enter the site to be loaded by excavators. The wheels and bodies of these vehicles will be wheel washed using jet washes that drain back into the site, not onto roads or footpaths.

During the demolition, groundwork, earthwork, and construction phases the surrounding roads shall be cleaned by sweeper lorries as required.

A temporary builder's water supply shall be established on site to facilitate damping and wheel washing needs.

Pouring of concrete shall be closely controlled, with hoses regularly inspected for wear and damage to prevent spillage during pours.

On-site, there shall be designated areas to wash of the discharge chute. The washout shall not be allowed to flow into any drain or watercourse.

Any residue shall be removed from site and either recycled or disposed of at suitably licensed waste management facility.

2.6 Proposed Working Hours

In general, our proposals are based on working hours between

- 08.00 to 18.00 hours Monday to Friday and
- 08.00 to 13.00 on Saturdays, in accordance with the planning condition working hours' restrictions.

We do not envisage working outside these hours except for special circumstances which may include weekend erection and dismantle of tower crane, protection scaffolds and services diversions.

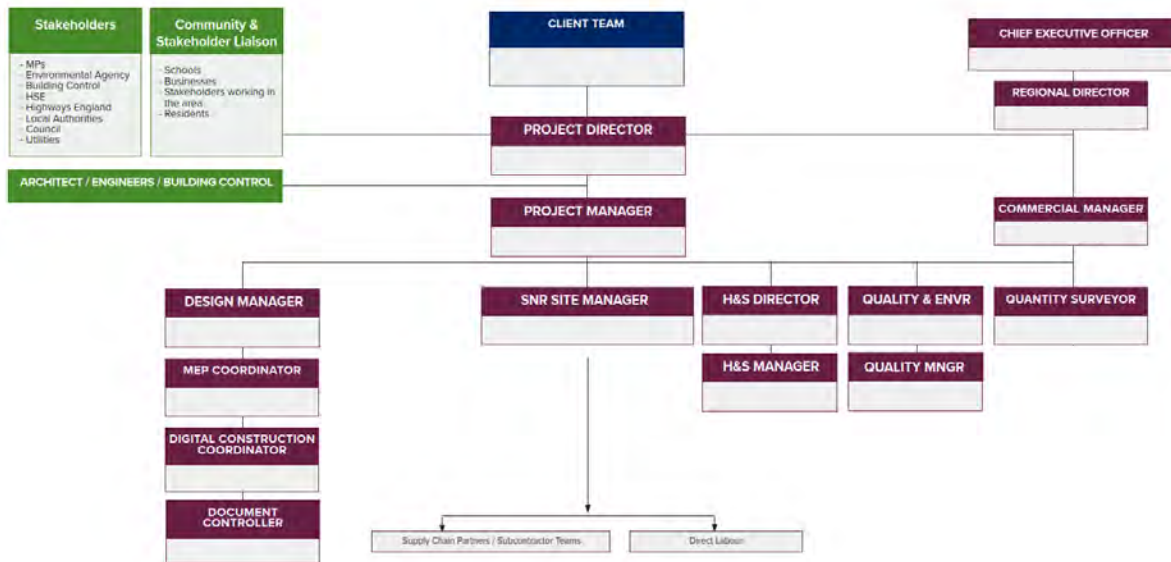
Site operations including deliveries will not take place outside of these hours without the prior agreement of the Council and will be conditional on the Principal Contractor informing local residents in advance of the proposed activity.

2.7 Management Structure

The Contractor will employ a full-time site team for the duration of the project in line with our Organogram

Each member of the team carries with the skills required to assist the safe and timely running of the scheme as a whole.

Organogram



The Management Responsibilities of key staff are defined at project level. Each member of staff involved in the project is responsible for:

- Reading and understanding the requirements of the integrated management system and integrating these requirements into their regular working methods.
- Ensuring that employees under their control are familiar with relevant procedures and instructions and have ready access to them.
- Checking that all employees under their control are adequately qualified, trained and experienced in their relevant discipline to perform their delegated duties in a satisfactory manner.
- Providing clear and unambiguous instructions to employees under their control
Health and safety

2.7.1 Method Statements

The Contractor will ensure all subcontractors undertake a Site-specific method statement. It is the contractors Policy that it must be provided by the individual subcontractor for the execution of their works.

These will be signed off by the contractor prior to the work starting and must include all cash and risk assessments as required for the safe execution of the work.

These must be reviewed by the subcontractor every month and where amendments are made, they must be issued by the subcontractor to the contractor suitably titled as such stating the exact amendment to the document. If at any point the subcontractor is deemed to be working outside of the controlling document his work will be stopped until the amendment is made and agreed by the contractor.

2.7.2 Temporary Works

The Contractor will ensure All temporary works required for the Works are to be timely approved by a qualified Structural Engineer who holds appropriate Professional Indemnity Insurance cover and appointed by the Sub Contractor. Approval by the Sub Contractors Engineer must be made / received prior to the Subcontract Works or phase of the Subcontract Works commencing on site.

The Subcontractor must ensure that all risks of job specific PPE have been undertaken & provided for. For example, hard hats, safety boots, hi – viz clothing. The list is not exhaustive & it is the Subcontractors responsibility to carry out a full risk assessment and COSHH assessment of the exposure to the employee / visitors & what PPE is required.

2.7.3 Site Operatives

The Contractor will ensure All personnel will be competent and hold relevant CPCS / CSCS accreditations. The supervisor must as a minimum have obtained a Construction Skills Site Supervisors Safety Training Scheme Certificate (SSSTS) operatives that can understand English and simple instruction if not he must provide an interpreter at the induction and the non -English speaking operatives must be accompanied by an English-speaking operative whilst on site.

The site will operate an 'attitude towards Health and Safety' scheme through the issuing of Green Amber and Red safety cards, Green being complimentary, Amber card issued means that the operative has to leave site for the day, return the next day to be re-inducted, the red card meaning that the operative has to leave site on a permanent basis and will not be allowed to return to any other of the contractors sites. These will be issued by a site manager.

2.8 Site Compound

2.8.1 Pedestrian Access Control

A security restricted turnstile access will be provided as the sole means of pedestrian entry to site. Before being permitted to work on site, all staff and operatives will attend a site-specific induction where they will be made aware of site facilities, site procedures and site rules.

2.8.2 Parking

There will be no on-site parking, apart from short duration site deliveries which will be coordinated with the site team to ensure minimum disruption to the surrounding area.

All personnel will be encouraged to use public transport where at all possible. The closest train stations are Wood Green with an extensive bus network also in existence.

2.8.3 Security

We will adequately safeguard the site, the works, products, materials, plant, and any existing buildings affected by the Works from damage and theft. Issues such as noise, pollution and nuisance will be kept to an absolute minimum so as not to infringe on the rights of existing neighbouring owners/tenants.

Site entry will be restricted to personnel solely involved in the construction process during working hours and also to prevent unauthorised access out of hours. Site access for all personnel and visitors will be strictly controlled and all visitors will report to the site offices prior to entering the construction area.

CCTV cameras covering the entrance and boundaries will be installed, linking back to the security office. The site will be monitored through 24- hrs CCTV security. All personnel and visitors entering the site will be required to sign-in and made aware of safety issues

associated with the construction process and emergency procedures to evacuate the site as part of the site-specific induction.

All visitors will be issued with safety helmets and any other appropriate protective clothing will be escorted by a responsible member of the site team.

2.8.4 Welfare facilities

We will provide fully functional and compliant temporary site accommodation arrangements as part of our site set-up.

Welfare will be in staged parts in line with our construction activity as required.

We will provide sufficient facilities for all parties including all Employer's staff as required. These will include separate male/female and disabled toilets, drying rooms including lockers, fully resourced changing facilities and canteen etc., in accordance with current regulations.

2.8.5 Compound

We will provide necessary hoardings/netting/screens around all work areas and maintain these to the highest standards for the duration of our work.

This will ensure that construction works are always secure from unauthorised access and segregated from the public. We will agree the type, finish, extent, layout and decoration of all hoardings, nettings screens, with the Client prior to commencement on site.

Hoardings will be 2.4m high and comply with the HSE booklet HS (G) 151 "Protecting the Public" to the satisfaction of the Employer and the Local Authority. The hoarding design and erecting works will be carried out by a qualified hoarding contractor.

Weekly inspections of the hoarding will be carried out by our Site Managers as part of the checks to all on site temporary works.

2.8.6 COSHH, Fuel and Flammables Storage

The Contractor will ensure a defined and designated storage area will be provided for the storage of COSHH, fuel and flammables storage.

The Contractor will ensure this will be away from areas of ignition, and where possible, segregated to locations away from third parties, public hoarding and perimeter boundaries

The Contractor will ensure that our sub-contractors will avoid ignition of flammable substances, mixing of substances and environmental damage, as a result of the inadequate storage, dispensing practices or misuse of any substance hazardous to health, through strict adherence to the company COSHH procedures and the measures identified in project specific risk assessments.

Substances to be used on Project that fall under COSHH will be recorded as they substances arrive on site on COSHH Materials Register. This Register will be maintained and available at all times in case of emergency.

Diesel fuel will be stored in a bunded / self-bunded tank. Locks will be fitted to all fuel storage tanks.

2.8.7 Fire Escapes

During the proposed works clear access will be maintained around the site to ensure access for any emergency personal.

Throughout the works the Project manager will ensure that the local Fire Brigade is kept up to date with the progress of the works and ensure that they are fully aware of site access arrangements.

The site will maintain a current Fire Risk assessment and Fire Plan and routine evacuation exercises will be carried out.

The Contractor will also invite the Emergency Services to carry out training exercises during the works (such as Crane Rescue). The site is self-contained and as such it is not anticipated that the construction activities will impact upon the access for emergency services to the site and surrounding properties.

We will at all time maintain 2 means of access from any floor within the building as per current regulations.

2.8.8 Emergency Procedure

As part of the contractors standard documentation a site-specific Emergency Plan will be drafted.

In the event of an emergency anyone can report an emergency, including workers, an outside agency, or a member of the public.

All reports of emergency will be treated as serious and genuine , until confirmed otherwise.

All the contractor management are responsible for ensuring the basic step-by-step procedures are followed in sequence, regardless if the emergency does not appear visible.

When an emergency occurs, the priority is to always maintain life safety. The second priority is the stabilisation of the incident.

The following steps must be applied to any known or suspected emergency incident on site:

1. **Stay calm** – in order to sufficiently execute the emergency plan. Your example can influence others and thereby aid the emergency response.
2. **Sound the alarm** – activate the nearest fire alarm where appropriate and begin to direct others to Emergency Assembly Point. Delegate someone proceed with the remaining steps.
3. **Press the emergency release on the biometric turnstile** – and open any exits i.e., vehicle gates, etc. to allow quicker escape to the Emergency Assembly Point
Personnel will be briefed of their individual roles in advance, in order to execute the plan, including what is already noted.
4. **Call emergency services** – call, or delegate someone to call, emergency services (999) explain the situation.
5. **Secure the area if it is safe to do so** – eliminate further losses and safeguard the area. Protect victims, equipment, materials, environment, and accident scene from continuing damage or further hazards. I.e., divert traffic, suppress fire, prevent objects from falling, shut down equipment or utilities, and take other necessary measures. Preserve the accident scene; only disturb what is essential to maintain life or relieve human suffering and prevent immediate or further losses.
6. **Aid and manage** – collect Daily Sign-In Sheet records and organise a headcount. This makes it easier to identify the missing, control panic, and assign people to emergency duties, including: providing first aid where necessary, alert the The contractorManaging Director/s and keep them informed.
7. **Maintain contact** – keep emergency services informed of updates. Missing personnel reported, where they were last reported seen, etc.
8. **Guide emergency services** – meet the emergency services on site. If it is safe to do so, lead them to emergency scene. Explain ongoing and potential hazards and cause(s), if known Instructions provided by the emergency services will be followed by ensuring only fluent English speakers from the contractors site personnel will be

the first point of contact with them. Personnel will be briefed of their individual roles in advance, in order to execute the plan, including what is already noted.

2.8.9 Emergency Contact Numbers

<i>Life-Threatening Emergencies</i>	<i>Service</i>	<i>Contact Number</i>
Where urgent attendance by the emergency services is required. For example, someone is seriously ill or injured, a crime is in progress, or a fire occurs.	Fire	999
	Police	999
	Ambulance	999
If you cannot call 999 due to hearing loss or speech impairment, the textphone number allows two-way conversation through text.	999 Emergencies	18000 (text only)
Life-Threatening Emergencies	Service	Contact Number
To report a gas or carbon monoxide emergency, or if a pipeline is struck (even if no gas leak has occurred)	Gas Emergencies	0800 111 999
To report a hazard or emergency involving overhead power lines, pylons or underground services.	Electrical Emergencies	0800 40 40 90

<i>Non-Life-Threatening Emergencies</i>	<i>Service</i>	<i>Contact Number</i>
Where medical attention is required, but is not a matter of life or death.	Local Hospital St Mary's Hospital Emergency Department W2 1NY	+4420 3312 6666
	Medical Advice	111 https://www.nhs.uk/
To report possible terrorist activity e.g., suspicious behaviour, vehicles, packages.	Anti-Terrorist Hotline	0800 789 321
24-hour emergency contact	24-hour contact	077 15102077

2.9 Site Logistics

Due to the nature of the works the site logistics will be undertaken in various stages. The following points will be adhered to throughout each of the phases.

- The Contractor and its subcontractors will organise the site in such a way that pedestrians and vehicles can move safely and without risk to their health and safety. These routes will be maintained at all times while the work is being undertaken at that location
- Once on the site, all personnel, delivery drivers and visitors must comply with the designated vehicle and pedestrian routes as marked on site.
- All visitors must sign in before they enter site, they will only be allowed on to site if they have read, understood and signed to confirm their understanding of the Project Rules and are accompanied by a fully inducted person, and otherwise they must attend the Project induction and hold an appropriate approved competency card.

2.10 Neighbourly Liaison

We acknowledge that many parties will have an interest in this project throughout the duration of the contract. Our presence during the construction phase will have a direct impact on the local environment, particularly the following:

- Planning Authority
- Building Control
- Environmental Health
- Utilities providers
- Adjacent properties
- Residents committee
- Local law enforcement
- Fire service

Our Project Director will be responsible for project strategic liaison whilst the site Managers will be responsible for day-to-day liaison and logistics for all of the construction related activities. Both will be permanently based on site with the site Managers as the first point of contact for all concerns, issues, and complaints.

An induction specific to the development site will be provided to all personnel before construction commences. This will incorporate health and safety; on-site construction works and issues and sensitivities in the context of the surrounding community.

All Operatives will be advised on how to behave on site and whilst interacting with the local area, businesses, residents, students, and staff.

Nuisance Control Activities associated with construction at the site will be restricted to between the hours of 08:00 and 18:00 Monday to Friday, and 08:00 and 13:00 on Saturdays.

No work is permitted on Sundays or bank holidays.

Any work that is anticipated to occur outside core working hours will be discussed and agreed with LB Harringay prior to commencement.

As with all our construction projects, there is potential for extenuating circumstances to occur that may require work to extend beyond core working hours (for example the break-down of plant equipment). Such instances are beyond usual control of the contractor. Should this

situation occur, The contractor will speak to the local Environmental Health Officer in order to obtain their guidance on how best to approach out of hours working in extenuating circumstances.

In line with best practice guidance, the contractor will notify local businesses, and residents that will be directly affected or potentially inconvenienced by construction works. This will help to minimise the impact construction may have on the surrounding community and ensure that residents and businesses are fully always informed.

Prior to any works being started, the contractor will ensure that all utility companies have been informed where the proposed works have the potential to affect their services.

Contact details of a member of the contractors team will be publicised on hoardings at the site, as well as provided to adjacent businesses and residents, to allow any questions or queries to be appropriately dealt with.

Any complaints received will be logged, assessed and appropriate action taken as soon as is practical. We will actively seek liaison with all parties throughout the pre-construction and construction periods. It will be critical to the success of the project that key issues are properly addressed from the outset to create a good working relationship and an integrated team approach to resolving potential issues before they arise.

Workshops and forums will be held on a regular basis to maintain open relationships and keep stakeholders up to date on construction progress and its impact on all third parties.

Newsletters, liaison meetings, progress photos, organised site visits are all methods we will use to communicate how we intend to carry out the works and keep people informed. This process is part of the Considerate Constructors scheme that we automatically register with, and by which we are independently monitored and assessed.

2.11 Considerate Constructors Approach

We are a Member of the Considerate Constructors scheme and have established a good reputation as a considerate constructor working on hotel developments in congested sites. We recognise the importance of interface between our construction sites and the public, and take into account safety, cleanliness, considerate behaviour, cooperation and care. This approach is applied to all our projects, which are registered with the Considerate Constructors scheme.

We confirm that the works shall comply with statutory and regulatory standards current at the time of financial close, unless specifically derogated. The applicable standards and regulations that shall apply include: relevant sections of the Building Regulations, relevant sections of the applicable British and/or European Standards, DDA, relevant requirements of the Water Supply (Water Fittings) regulations 1999, relevant Institute of Electrical Engineers (IEE) guidelines, relevant Institute of Plumbing, relevant HSE guidance, Gas Safety (Installation and Use) Regulations 1994.

Method statements, risk assessments, and similar guidelines will be produced and developed in accordance with our environmental and health and safety procedures. Prior to commencement of any works, an on-site survey will be carried out to establish and confirm the position and depth of all buried services and utilities.

We are aware of the impact of the construction works, restricted access and the combined potential nuisance factors of noise, dust and vibration may have on the surrounding environment. As such, we will actively seek to minimise this impact through the selection of sympathetic plant and methods. We will maintain a clean environment and keep public roads free from mud and debris, etc.

All site personnel, including delivery drivers, will be briefed to ensure that they respect the local environment and maintain a high level of conduct throughout all the construction works. This will include wearing acceptable clothing and courteous behaviour to the general public.

They will be encouraged to use the welfare facilities provided by us for meals and to use public transport to minimise the use of private vehicles.

This plan will be reviewed through the on-going monitoring strategy, to ensure that it remains relevant to the identified matters as the project progresses. This will be in conjunction with the Council, local parties (businesses, schools, etc.) and local residents.

3 Transport Strategy

3.1 General

A traffic management plan will be implemented on the site. The plan will outline timings of deliveries and routes to be taken by hauliers to minimise disruption to local residents and businesses. This includes the potential risk for noise disturbance as well as minimising additional traffic during peak periods.

In an attempt to reduce vehicles attending site the Principal Contractor will target the following items:

- Procurement of local sub-contractors and Labour.
- Procurement of local suppliers.
- Combined deliveries.
- Cycle parking on-site for staff.
- Encourage and reward car sharing.
- Encourage the use of public transport, time tables and routes available in the site off notice boards.
- Any site meetings to commence outside peak hours.
- Any meeting that does not have to be on site will not.
- Adopt any learning from the other local surrounding projects, including the Imperial College London project.
- Where practicable coordinate major construction operations so as not to conflict with those on nearby Projects.

3.2 Vulnerable Road Users

3.2.1 Construction Logistics and Cyclist Safety (CLOCS)

The operation of the construction site will comply with the CLOCS initiative.

This will extend beyond the Site boundary to include, where possible, supply chain vehicles etc.

The contractors will ensure all deliveries made through our supply chain for the Lordship Lane project are

Fleet Operator Recognition Scheme (FORs) accredited.

Through our ISO14001:2015 management system monitors CO2 throughout our supply chain and material supplies from cradle to grave. The contractor has specific ISO procedures for supply chain procurement that have been accepted by FORs and by extension the contractor is a FORs Champions.

3.2.2 Cyclists

Cyclist activity on the surrounding highway network and private access roads will be unhindered, but traffic management measures will need to be adhered to as with any other highway user. During normal deliveries Banksman will be able to ensure cyclist safety in conjunction with other vehicles.

It is not anticipated that cycle movements will be disrupted as all necessary storage and works are expected to take place within the Site boundary.

3.2.3 Pedestrians

At this stage it is proposed that a hoarding would be provided at the Site boundary to the rear of the kerb there rendering footways closed during the stages of construction.

This will require the contractor to carry out a footpath closure during the construction for pedestrian safety.

The Contractor will arrange the necessary footpath and scaffold licences required throughout the process with the local authorities and will ensure all pedestrians will be directed to alternative routes using a signage layout compliant with Chapter 8 of the Traffic Signs Manual.

Deliveries will be restricted to the period between 08:00 and 18:00.

Site management will conduct routine daily and weekly checks to ensure the safety and security of pedestrians around the Site are maintained. This will form part of the overall monitoring strategy, reporting to the Council and local parties as necessary.

The contractor's procedure for governing the interaction of pedestrians and deliveries will be presented in more detail in this section.

3.3 Traffic Routing

3.3.1 Access Location

Access to the site will be via Lordship Lane from the A406 to the north. The A406 is a principal route that extends west to connect with the M1 and east to the M11.

These roads accommodate regular bus and delivery vehicle movements and are therefore suitable to accommodate demolition and construction vehicle associated with the site.

The site being located close to the A406 however ensures that good access for key routes in the wider area is possible.



3.3.2 Deliveries

It should be noted that shared access roads along the site boundaries will remain open to general traffic in order to maintain access to existing commercial premises adjoining the site during the works.

Heavy goods vehicle deliveries and collections must follow the vehicle routing identified above. If deliveries etc. arrive without a pre-booked slot, they will be refused and will exit the area via the agreed lorry routes back to the TLRN.

The use of any other residential streets in the area by construction lorries will not be permitted.

All movements will accord with the Council's guidance and will ensure the carriageway remains open at all times (unless subject to a Temporary Road Closure). Notifications and applications to the Council, if additional traffic management measures are required, will take place in good time.

All deliveries to site will be carefully controlled and managed by the Site Manager, and the procurement team. Use of online booking coordination systems will be considered to improve reliability. Operations will also consider other construction activities in the area, notably those associated with the Thamesmead Regeneration project.

Deliveries will be coordinated to avoid multiple vehicle arrivals at any one time. In the event of delivery vehicles arriving to Site simultaneously, the unscheduled vehicle will be asked to leave, park up in permissible areas, and return to Site after an agreed period.

All traffic management proposals will be regularly reviewed with the Council's highway engineers and the appropriate orders, licenses sought in good time.

Vehicles being offloaded shall switch off their engines to avoid nuisance from idling. Delivery vehicles will be offloaded within the Site curtilage, although there is potential for roadside unloading in certain circumstances. This is required to allow safe offloading, in accordance with health and safety requirements.

3.3.3 Construction Staff Access

Car parking for site workers will not be provided on site and all site staff will be encouraged to travel using sustainable transport means. Limited short-stay waiting capacity will be available for those construction staff with site-specific needs (e.g., transporting significant apparatus etc.). The available area will be reviewed throughout the construction periods to ensure the potential overspill to surrounding streets is adequately controlled.

All construction staff will be kept informed about acceptable travel and parking arrangements during the works.

3.4 Control of Site Traffic

In the interests of public safety, and avoiding disruption to the local area, the method and route of deliveries to the site will be controlled in agreement with the relevant authorities.

The plan will outline timings of deliveries and routes to be taken by hauliers to ensure minimal disruption to local residents and businesses. This will include potential risk for noise disturbance as well as minimising additional traffic during peak periods.

The CMP will be reviewed and the formal monitoring regime established to ensure all appropriate measures are put in place. Risks will be identified, scheduled, assessed, and managed. The complaints procedure will be formalised and circulated to local parties and the Council, reinforced (if required) through a local working group.

Consideration will be given to other developments, including the Imperial College London project, regarding potential coordination of deliveries and sustainable travel arrangements for staff.

This will be regularly reviewed as part of the Site Manager's responsibility. Details will be made available to the Council and local parties as required. Wherever possible, and especially for vehicles over 3.5 tonnes, drivers will be required to be accredited with the Fleet Operator Recognition Scheme (FORS).

Drivers will have undertaken cycle awareness training and vehicles associated with the development will:

- Need to have sideguards fitted (unless demonstrably unable to do so);
- Have close proximity warning systems fitted, external warning devices, rear facing CCTV camera (or Fresnel Lens); o Have a Class VI mirror; and
- Have prominent signage warning cyclists of the dangers of 'undertaking' on the inside of such vehicles.

3.5 Vehicle Sizes, Frequency, Dwell Times, Holding Areas

The specific proportion of vehicles will vary over the construction period but will include the following:

- Piling rigs;
- Excavators;
- Tipper trucks;
- Concrete lorries;
- Waste vehicles and skip lorries;

- Rigid and articulated delivery vehicles
- Light goods vehicles, vans etc.

3.6 Site Access & Egress

Access/egress to the site will be an entrance constructed off Lordship Lane. A secondary gate will also be installed to enable required vehicles to reverse into site for waste collections.

All entrances and the pit lane will be controlled by Gate Operatives at the main gates. A pedestrian gate with turnstile will be included in the hoarding for operatives/visitors arriving by foot.

All visitors including site operatives will require a pass to enter the site.

All roads and footpaths in the vicinity of the Site will be meticulously maintained and on completion of the works they will all be reinstated to the condition they were found in at the start of the works.

All vehicles leaving the site will have the tyres and under carriage power hosed by the gateman to ensure no debris or dirt are brought outside of site and sully the surrounding area. Road sweeps will be used on a regular basis to aid in the cleaning of the area around the site as required.

The Site will at all-time be adequately protected by barriers to prevent unauthorised access (either accidental or deliberate). The contractor intends to install a 2.4meter high solid hoarding to the entire site boundary. When the work has stopped for the day, the Site must be secured, all ladders and access must be removed, the plant must be immobilised, and all hazardous materials must be safely stored.

3.7 Vehicle Loading & Unloading

There is a risk to both the workers and general public/pedestrians associated with loading and unloading goods. Generally, all loading and unloading will take place within the secured Site boundary/ Pit Lane.

Where this is not possible, a temporary exclusion zone must be set-up and a method of loading/unloading must be prepared. Adequate personal protection equipment and clothing must be utilised.

Various operations including sheet piling, concrete pours and construction of the upper floors will require the use of a crane to offload, lift and distribute materials for use.

Crane lifts will generally be contained within the secured Site boundary and governed by the approved Lift Plan.

A Crane lift plan by an accredited Appointed Person will be in force throughout the construction process.

It is expected that wheel-washing facilities will be provided for vehicles required to enter and leave the site during demolition and groundworks phases at the gate exit from site.

Figure 2 Proposed Site Set up.

It should be noted that these facilities may need to be relocated to other parts of the site as the project progresses to facilitate construction operations. Once groundworks are complete, all access will be from the tarmac-surfaced access road and the use of wheel-washing will be minimal.

3.8 Highway Interventions

Highway interventions are expected during normal site operations. In order to ensure the safety of all public and site staff during deliveries to site it is necessary to consider temporary, short-term footway or lane closures or traffic management measures to facilitate abnormal deliveries or construction operations. The contractor will liaise with the highways on these requirements from the outset.

It will be the responsibility of the Site Manager to submit the necessary traffic management and lane closure applications to Highways and arrange the necessary permits. Liaison with nearby businesses, residents and other parties will be maintained in order to minimise the potential for impacts to their operations.

4 Noise and Dust

LBH+F has specifically requested that likely noise and dust related activities are dealt with within the construction method statement. As such this section aims to deal with these. Attention has also been paid to the council's construction noise site noise code of practice

4.1 Noise Generating Activities

Measures will be required to protect the workers on Site and suppress noise generated on the Site during the construction phase.

Consequently, all sources of noise arising from the construction should be identified and assessed. Mitigation measures will include the following, where possible:

- Good public relations with the adjacent residents/workers, including timely warning/notice of likely periods of noisy activities;
- Where possible, 'silenced' plant and equipment to be used;
- Workers using 'noisy' plant will be trained and provided with ear protection;
- Where vehicles are standing for a significant period, their engines are to be switched off
- Screening around those parts of the Site where activities are likely to generate noise;
- Location of noise generating plant at a low level and as distant as possible from sensitive receptors
- Acoustic enclosures to be fitted where possible to suppress noisy equipment
- Plant to operate at low speeds, where possible, and incorporate automatic low speed idling;
- Location of site entrances and exits to prevent the need for vehicles to reverse and also minimize impacts upon sensitive receptors
- All plant to be properly maintained;
- Consideration to be given to temporary screening or enclosures for static noisy plant to reduce noise emissions and plant should be certified to meet any relevant EC Directive standards; and
- All contractors to be made familiar with the guidance in BS 5228 (Parts 1 and 2) "Code of practice for noise and vibration control on construction and open sites — Noise" which should form a pre-requisite of their appointment.

4.2 Noise & Vibration Levels

4.2.1 Noise Monitoring

It is the contractors intention to monitor noise at various interval during the construction at both front and rear of the site. Real time data will be issued to the contractors site team via an online portal and email link.

If a complaint or concern is raised by a local resident, business or Council, an immediate review will be carried out to establish the degree of noise created and to establish how to best develop a solution.

Results will be recorded in terms of 5minute 2 “A” weighted leq. Results will be recorded and saved on a database for future reference.

Were noise levels are exceeded, it will be noted in the records and works will be stopped temporally, to assess if further mitigation measures can be implemented to reduce the noise.

Once work recommences the area will be monitored further with checks to take across site to assess the impact directly affected by Residents.

4.2.2 Mitigation Measures

Noise attenuation screening is to be used — if deemed appropriate — and noise monitoring is to be carried out at the start and at regular intervals during each task period.

Any mobile screens shall have sufficient mass to be able to resist the passage of sound across the barrier and to be free of significant holes or gaps between or under any acoustic panels or board materials as far as reasonably practical.

Barriers would be:

- Fairly uniform panels, free from holes with no gaps or openings at joints (uneven ground may leave gaps to be filled);
- Stable and robust enough to stand up to site conditions and;
- Of a height and width sufficient to completely cut off sight of the source from the receiver.

To reinforce a previous point any exceedance of noise trigger limits shall initiate a review of works, to enforce changes of methodology or equipment, in order to keep within reasonable noise levels.

4.3 Potential Impacts on Air Quality

Impacts on air quality from the proposed development can occur during construction. During construction there is the potential for emissions of dust to cause annoyance.

The development is in a mixed-use area with several residential properties that border the Site

The Institute of Air Quality Management (IAQM) published guidance on how to assess impacts of emissions of dust from demolition and construction sites.

This guidance has been followed and is outlined below

4.3.1 Evaluation of project Emission Magnitudes

The risk classifications detailed in this section comply with the requirements of: “*The Control of Dust and Emissions during Construction and Demolition SPG – London Planning Framework*”. The potential for the generation of dust pollution and annoyance divided into the following construction phases:

- A. Demolition
- B. Earthworks
- C. Construction
- D. Trackout

A. POTENTIAL DUST EMISSION MAGNITUDE M3 DEMOLITION Medium

Large	Medium	Small
Total volume of building to be demolished >50,000m ³ or	Total volume of building to be demolished 20,000m ³ – 50,000m ³ , or	Total volume of building to be <u>demolished</u> <20,000m ³ , or
Potentially dusty construction material (e.g., concrete), or	Potentially dusty construction material, or	Construction material with low potential for dust release (e.g., metal cladding or timber), or
On-site crushing and screening, or Demolition activities >20m above ground level;	Demolition activities 10-20m above ground level;	Demolition activities <10m above ground demolition during wetter months.

B. POTENTIAL DUST EMISSION MAGNITUDE M2 EARTHWORKS (2,200m² site area) **Small**

LARGE

Large	Medium	Small
Total site area >10,000m ² ,	Total site area 2,500m ² – 10,000m ² ,	Total site area <2,500m ² , or
Potentially dusty soil type (e.g., clay, which will be prone to suspension when dry to due small particle size), or	Moderately dusty soil type (e.g., silt), or	Soil type with large grain size (e.g., sand), or
>10 heavy earth moving vehicles active at any one time on site, or	5-10 heavy earth moving vehicles active at any one time, or	<5 heavy earth moving vehicles active at any one time, formation of stockpile enclosures <4m in height, or
Formation of stockpile enclosures	Formation of stockpile enclosures 4m – 8m in height, or	Total material moved <10,000 tonnes (where known), or earthworks during wetter months.
>8m in height;	Total material moved 20,000 tonnes – 100,000 tonnes (where known).	
Total material moved >100,000 tonne (where known).		

C. POTENTIAL DUST EMISSION MAGNITUDE M3 CONSTRUCTION **Small**

Large	Medium	Small
Total site area >10,000m ² ,	Total site area 2,500m ² – 10,000m ² ,	Total site area <2,500m ² , or
Potentially dusty soil type (e.g., clay, which will be prone to suspension when dry to due small particle size), or	Moderately dusty soil type (e.g., silt), or	Soil type with large grain size (e.g., sand), or
>10 heavy earth moving vehicles active at any one time on site, or	5-10 heavy earth moving vehicles active at any one time, or	<5 heavy earth moving vehicles active at any one time, formation of stockpile enclosures <4m in height, or
Formation of stockpile enclosures	Formation of stockpile enclosures 4m – 8m in height, or	Total material moved <10,000 tonnes (where known), or earthworks during wetter months.
>8m in height;	Total material moved 20,000 tonnes – 100,000 tonnes (where known).	
Total material moved >100,000 tonne (where known).		

D. POTENTIAL DUST EMISSION MAGNITUDE Tonnage/ADT TRACKOUT **Medium**

Large	Medium	Small
>50 HDV (>3.5t) outward movements in any one day,	10-50 HDV (>3.5t) outward movements in any one day,	3.5t) trips in any one day,
Potentially dusty surface material (e.g., high clay/silt content),	Moderately dusty surface material (e.g., high clay content),	Surface material with low potential for dust release,
Unpaved road length >100 m;	Unpaved road length 50 m – 100 m (high clay content);	Unpaved road length

Given the proximity of sensitive receptors, the risk of dust annoyance occurring during the overall construction is considered to be medium-low, although with the implementation of appropriate mitigation measures the significance of the impacts is 'not significant'

This has further been substantiated by Ardent Consulting Engineers at planning stage.

Potentially significant air quality impacts during the construction phase are associated with dust generating activities near potentially sensitive receptors.

Appropriate site management practices will manage the possible impacts including the potential for localised air quality impact from dust, site plant and vehicle emissions during the works.

Guidance within the London Councils 'The Control of Dust and Emissions from Construction and Demolition' has been, and shall be followed in order to reduce the impact of construction activities on air quality.

There are several mitigation measures that can be employed to lessen the nuisance and human-health impacts of the dust and particulates generated during construction activities and in this case, sheeting of lorries and damping down would be employed as appropriate.

Construction dust usually responds well to these measures if a co-ordinated Management Plan is implemented. A comprehensive list of measures is as follows:

- Use of water spraying, especially on access roads, in order to reduce dust generation, as and when conditions dictate;
- Effective wheel/body washing facilities to be provided and used as necessary;
- A road sweeper to be readily available whenever the need for road cleaning arises; Dampening of exposed soil and material stockpiles, where necessary;
- Consideration will be given to wind speed and direction prior to conducting dust generating activities to determine the potential for dust nuisance to occur and avoid such activities during periods of high or gusty winds;
- Stockpiles of soil and materials should be located as far as possible from sensitive receptors, taking account of prevailing wind directions;
- Windbreak netting should be positioned, where possible, around material stockpiles and vehicle loading /unloading areas;
- Completed earthworks should be covered or vegetated as soon as possible
- Ensuring that all construction plant and equipment is regularly maintained in good working order;
- Vehicles carrying waste material off-site to be sheeted;
- Under no circumstances should fires be allowed on site; and

Where activities are likely to cause disturbance to local sensitive receptors, dust monitoring should take place at most affected facades.

All sub-contractors will also be required to go beyond best practice site management as defined by the Considerate Constructors Scheme).

4.4 Dust Generating Activities

Mechanical disturbance of granular material exposed to air creates atmospheric dust. This is termed 'fugitive' as it is not discharged in to the atmosphere in a confined stream. The potential sources of these fugitive emissions are summarised below:

Demolition, Site clearance and excavation

- Demolition
- On-site earth moving operations, site levelling, cut and fill etc.
- Vehicle movements over haul roads;
- Vehicle movements on-site during dry periods;
- Wind blowing across the Site during dry periods;
- Stockpiling of excavated materials;
- Cutting and grinding
- Accidental spillage and loss of load from vehicles carrying loose material
- Deep excavations.

Other factors that need to be taken into consideration with regard to fugitive emissions include:

- Prevailing wind (speed, direction etc.);
- Prevailing climate, including rainfall;
- Location of sensitive receptors (including residential and commercial premises, habitats and watercourses).

4.4.1 Control of Dirt and Dust on the Public Highway

The contractor will ensure that debris deposits onto the public road are minimised as much as possible, and cleared away if they occur. In addition, no concrete will be washed in to highway gullies.

Mud and debris on the road are one of the main environmental nuisance and safety problems arising from construction sites. The contractor will make provision to minimise this problem. In the early stages of the project, when enabling and associated works are being carried out, staff will be on hand to ensure all vehicles that enter/leave the construction site in a tidy manner.

Muck-away lorries will be fully sheeted to minimise the risk of debris over-spilling onto the highway. Shows further dust mitigation methods to be employed.

4.4.2 Mitigation Measures During Specific Activities

Demolition Site Preparation and Earthworks:

- Works comprise the removal of existing buildings and hard-standings, trimming of existing ground to design levels, some imported granular material and compaction
- It is anticipated that daily vehicle movements on and off site during this phase of work will be restricted to the disposal of surplus material, and for imported granular material delivered in covered tippers.
- Wheel wash facilities will be established and kept in place during the initial Site clearance activities.
- Dust control is paramount and kept to as low a level as reasonably practicable with the use of hoses, a jet wash or dust boss machines.
- Visual dust monitoring is to be adopted throughout the day during dust producing works to ascertain whether the current control measures are sufficient to control the works.
- Where dust could arise from stockpiles of materials, water shall be applied to the stockpile, or the stockpiles will be sheeted.
- Any drainage or run off will be protected before works commence and filters installed to prevent drain contamination.

Materials handling and storage:

Dust generating materials will generally be delivered in sealed packaging or containers; any bulk deliveries will be handled with care and kept covered where possible during delivery and storage. Concrete for basement and sub-structure works will be delivered pre-mixed to prevent dust from dry stockpiled material.

- The superstructure envelope is constructed of a mixture of concrete, pre-fabricated windows, pre-fabricated walling units and brick cladding. There is limited space for site storage and deliveries will be scheduled to suit immediate use.
- Materials for construction will be off loaded by the hauler onto the site for transportation to an area of hard standing within the site by forklift or crane; then distributed to the work face.
- Handling, erection, and installation of above ground components will not generate significant quantities of dust due to mitigation measures of sealed packaging and use of pre-fabricated products.
- Haul routes, vehicles, and plant. There are no significant haul routes through the site which can generate dust. There is limited site traffic due to the site's size restrictions.

Construction and Fabrication:

Dust generating construction is limited to low level substructure, and superstructure erection, cladding and masonry. Dust will be controlled by suppression kits being used during on site cutting and drilling.

- Below ground construction will be with pre-mixed in-situ concrete reinforced piled foundations.
- Above ground construction comprises reinforced concrete frame and floors, lightweight wall panels, and brick cladding, with lightweight internal walls. Internal works will be kept clean and clear to prevent dust arising, with adequate resources and supervision.

The method of construction and fabrication does not give rise to a risk of nuisance by dust.

4.4.3 Waste

Quantities of waste will be detailed in the contractors Site Waste Management Plan.

- Excavation waste will be disposed of via covered tippers and/or skips, and waste generated by the construction activities will be segregated at the point of disposal (waste transfer station) and will be stored and removed in skips.

The method of storing and disposing of waste does not give rise to a risk of nuisance by dust.

4.4.4 Risk Assessment

The risk assessment must take account of proximity to sensitive receptors (e.g., schools, care homes etc.). In line with GLA's Control of Dust and Emissions Supplementary Planning Guidance a dust risk assessment will be undertaken following the steps detailed within the guidance:

- Screen the Need for Detailed Assessment;
- Assess the Risk of Dust Impacts;
- Define the Sensitivity of the Area;
- Define the Risk of Impacts.

4.4.5 Monitoring

Additional to all of the above it is the contractors intention to install 2 number dust monitoring stations with real time telemetry. Results will be recorded and displayed on our notice board monthly.

5 Environmental Plan

This plan is prepared in accordance with the requirements of BS EN ISO14001:2015

This Construction Phase Environmental Management Plan has been prepared to detail and outline how the contractor will manage and control the environmental aspects of this project.

The contractor seeks to achieve the highest standard of environmental performance for this project. The application of this plan is fundamental to achieving this aim.

The Objectives of the Construction Phase Environmental Management Plan are:

- To set out the responsibilities, roles and key actions required for the successful implementation of best practice environmental management on the project
- To maximise potential benefits of the proposed works
- To identify potential negative impacts
- To set out specific mitigation measures for these impacts
- To provide guidance on compliance with accepted best practice standards
- To inform all parties of environmental sensitivities of the site
- To guide works toward best environmental practice at all times
- To provide protection of the site and environs during and after works
- To ensure compliance with accepted best practice standards

5.1 Summary of the Environmental Management Process

The Contractors Environmental Management System (EMS) (forms part of the Integrated Management System IMS), encompasses various documents, procedures, forms and policies. These elements form the overall Management Systems for project environmental management: These main project control documents include:

1. Construction Phase Environmental Management Plan
2. Construction Phase Waste Management Plan (In conjunction with Smart Waste)
3. Construction Phase Quality Plan

5.2 Environmental Records

In order to demonstrate compliance with legal, other stakeholder requirements and this management plan, site records will be controlled, maintained and archived appropriately to facilitate retrieval at a later date, if required. All records demonstrating environmental compliance shall be retained until all legal requirements have subsided

The contractors Environmental Policy statement is relevant to the works and project undertaken by The contractor and is fully endorsed by the Directors and Senior Management Team. This policy, together with the application of the Environmental Management System is the means in which The contractor seeks to achieve the highest standard of environmental performance. The contractor expects both the personnel and subcontractors representing the contractor do so in-line with the ethos of this policy.

The contractor operate a policy of Sustainable Urban Transport. This policy requires all personnel to utilise public transport as a priority. The contractor does not provide company vehicles and encourage personnel commute via public transport where possible.

5.3 Project Specific Environmental Aspects & Issues

The contractor recognises the importance of the earliest identification of site characteristics, stakeholder receptors and construction process & method related environmental risk(s) "aspects". Our Quality & Environmental Manager in conjunction with

the Health & Safety Manager and Project Manager will identify project aspects and detail their impacts on the project Aspects & Impacts Register,

The Aspects & Impacts Register shall be populated and maintained by the Project Manager, detailing the mitigation measures required to minimise the impact to the environment. The register should highlight the risk indicators and assign responsibilities for their monitoring.

Risk indicators are events that “may” provide indication that an identified risk is about to mature in to an issue. A typical example would be uncontrolled concrete run off “may” cause pollution of a watercourse.

5.4 Project Specific Environmental Controls

5.4.1 Prevention of Pollution

Good planning of site welfare facilities will be an essential part of the works to ensure mitigation of both dust and odour emissions. Temporary portable toilets will be regularly cleaned and maintained, and the location of site skips or waste bins will be located away from areas close to public interface. Skips should be sealed and regularly exchanged to ensure that excessive odour is not realised. Similarly, regular checking of portable toilet facilities will be affected so as to ensure prompt cleaning and removal by licenced tanker from the portable units, thus prevents the generation of unacceptable odour.

The contractor will adopt a best practice approach to the management of site operations so as to ensure the best possible pollution prevention and control mechanisms on the project.

5.4.2 Avoiding Public Nuisance

Measures shall be taken to prevent the occurrence of any nuisance arising as a result of any activities on the Project. The ISO9001 complaints procedure shall be utilised on the project and contact numbers communicated to all personnel and displayed on office notice boards. In the event of an environmental nuisance complaint being received, these must be logged on QFM34.01 Emergency Incident Report

The contractor will endeavour to minimise nuisance, however when construction operations require out of hours working, we will carry out the following procedures:

- Consult and gain agreement from the relevant planning authority prior to any operation likely to cause out of hours noise or light nuisance
- Carry out letter drops to local residents and businesses at least 48 hours prior to any operations where we may cause a nuisance
- Inform the emergency services and local press

5.4.3 Lighting Management

All lighting will be directional and will be directed towards the activity or secured area

- All task lighting will be sufficient for the job, not over lit
- Whilst working adjacent to live traffic, task lighting will be positioned to avoid any glare to road users
- If complaints are received, we will stop the operation (if possible) and investigate the working method and endeavor to stop the light nuisance
- Lights will never be left on if no work is being carried out
- Existing street lighting will be utilised where possible
- If existing street lights are removed temporarily for construction, these will always be replaced with a similar standard of lighting coverage where required.

5.4.4 Road Sweeping

Road sweepers will be directed by the construction programme to target high volume traffic movements. Wherever possible, road sweeping will be utilised outside peak traffic flows to minimise traffic disruption.

5.4.5 Access Locations

Agreed access locations will be defined in consultation with the Employers Representative. These will be clearly marked and signed.

5.4.6 Parking

Car usage and parking is actively discouraged at The contractor projects, and not permitted on this developemnt. Operatives and staff, parking cars elsewhere, will be informed at induction to follow these procedures:

- Where possible always park in recognised parking places
- Never Park in private property
- Never obstruct private accesses
- Never leave mud on the road
- Never Park on pavements
- Act in a courteous manner to all other public road users.

5.4.7 Signage

All temporary traffic signage will be placed as per Chapter 8 guidelines and placed with Local Authority traffic and police approval. Temporary traffic signage will be inspected daily and after inclement weather and a Traffic Management Team will be on site during all major traffic management set ups to ensure compliance. Businesses that may be obscured or indirectly impacted by the construction works will be clearly signed.

5.4.8 Vehicles and Traffic Management

As well as the provision of a Traffic Management Designer as detailed elsewhere, we will employ a TSCO (Traffic Safety Control Officer) for the implementation of Traffic Management. The TSCO shall ensure all TM is approved and placed in accordance with the required legislation. The Highways Agency and Police must agree all traffic diversions and closures prior to installation.

Emergency services and bus companies will always be consulted prior to any formal approaches for traffic closures and diversions. All traffic management systems will be placed by trained, experience and authorised operatives. It is an offence for untrained staff or operatives to change or adapt traffic management. Anybody caught doing so, will be disciplined.

5.4.9 Delivery Management

We will be implementing the following material/plant delivery procedures:

- All deliveries will be instructed to enter site at an approved site entrance All material deliveries will be planned to make full utilisation of site space and security, we will wherever possible minimise storage on site by running a delivery just in time policy.
- Where site entrances are restricted, we will instruct delivery companies to use shorter based vehicles
- No deliveries will be allowed outside site working hours, without the required approvals All deliveries to The contractor projects shall be in compliance with **FORs** and **CLOCs**
- No deliveries will be allowed to wait on public highways outside of the approved pitlane.

- Any large, special deliveries, which require a TM escort will be planned for in advance with advice from the police, the relevant planning authority, local resident groups, the local authorities' roads department and the delivery company's haulage company
- All gate monitors and staff will be instructed to take details of any delivery vehicles not following these procedures.

5.5 Flora, Fauna & Invasive Species

5.5.1 Flora

The key deliverable is to minimise any impact on native trees and shrubs. All trees, hedges and shrubs within or adjacent to the site, except those that have been approved for removal shall be protected from damage during construction work by the erection of 'Heras' Fencing. Wherever possible the removal of any flora will be limited and removal will only be carried out with the prior approval of the Client and Quality & Environmental Manager. Removal of tress and saplings will only be carried out where absolutely required, and replacement of trees, post works, will be carried out wherever possible.

5.5.2 Fauna

Wherever possible the project will avoid disturbing any fauna within/near to the project works. Any fauna observed will be monitored and avoidance techniques utilised.

To minimise marine habitat species loss or disturbance, efforts will be made to keep the area of shore disturbed by any pipeline trenches to a minimum. To protect the aquatic environment, chemicals and oils used shall be those approved for use in, or with the least potential for causing damage to, the marine environment.

5.5.3 Invasive Species

Invasive non-native plant and animal species are the second greatest threat to biodiversity worldwide after habitat destruction. They can negatively impact on native species, can transform habitats and threaten whole ecosystems causing serious problems to the environment and the economy. The transport or introduction of Invasive species can result in deterioration in water quality and significant fish mortality, dramatically alter the ecology of receiving watercourses and render them unavailable for recreational and other water-based pursuits.

On commencement of the project, the Quality & Environmental Manager will prepare a risk assessment on invasive species. This risk assessment will be informed by discussions with the client team, the project ecologist, Local Authority and other stakeholders and will form the basis of actions taken during the construction period. This EMP will be updated to reflect these actions.

5.6 Emergency Response & Incident Report

QOP34 EMERGENCY RESPONSES is the Environmental Managements systems mechanism to bring under control incidents and events that have already happened and have had a harmful effect on the environment or receptors such as stakeholders. QOP34 EMERGENCY RESPONSES seeks to stop further damage to the environment and bring under control events that can or may escalate to higher categories of damage.

It is imperative that this procedure is fully understood and followed entirely. Environmental damage can and may lead to prosecutions or sanctions issued by the Environment Agency or other Government Agency or Local Authority and the effects of the damage can and may cause serious harm to which The contractor seek to eliminate. **This procedure is deemed the highest priority** within the Management System and all personnel will be fully training to support its successful management and application.

5.7 Training (Toolbox Talks)

5.7.1 Training

The contractor will provide training at various levels and to varying degrees to ensure adequate understanding and competence when managing environmental issues. Senior and Project Management shall be trained to competently manage day-to-day environmental issues under HSQE guidance. All contractor personnel will be trained to understand environmental issues, the policies encompassed in the contractors Environmental Management System and its objectives. Supply chain subcontractors and suppliers shall be inducted into the approach to environmental management and where relevant the objectives of the Construction Phase Environmental Management Plan and the Company Environmental Management System policies and objectives.

5.7.2 Toolbox Talks

Toolbox talks are the means to which the contractor shall communicate specific environmental issues, management and control measures to personnel and supply chain subcontractors. The content of environmental toolbox talks necessary to ensure adequate management shall be detailed in all RAMS documentation and derived from the [QFM32.01 Environmental Aspects & Impacts Register](#) specific to the project. The Project Manager is responsible for ensuring RAMS are suitable and thorough, communicated and understood by any and all personnel whose actions may lead to environmental damage. The Project Manager will ensure environmental risks identified on [QFM32.01 Environmental Aspects & Impacts Register](#) are communicated to all supply chain subcontractors prior to their submission of RAMS for approval.

5.7.3 Auditing

All the contractors projects are subject to regular audit by the HSQE Department. Audits are conducted by either the Health & Safety Manager for OHSAS18001 and by the Quality & Environmental Manager for ISO9001 & ISO14001 issues. The Directors of the contractor also undertake audits and inspections.

The requirements of this plan shall be evaluated by the Project Manager and Quality & Environmental Manager. The audit regime to be adopted shall be based on the complexity of the project and the number of environmental risks. The audit schedule shall be encompassed on the Company Audit Programme.

5.7.4 Evaluation

The environmental performance of the contractors Project Teams and the degree of success of project objectives shall be reviewed on a project level and against other projects during Management Review. Environmental performance forms part of the contractors Management Review agenda. Projects shall be continuously reviewed and adjusted in-line with the finding of the Quality & Environmental Manager during site visits and audits. Supply chain compliance and performance shall be reviewed at weekly team meetings and shall be encompassed in the agenda for [QOP21 POST CONTRACT REVIEW](#).

5.8 Breeam and Considerate Constructors Scheme

The contractor, in an attempt to reduce workflows, utilise the bre Green Guide to Specifications. To demonstrate our commitment to the reduction of CO2e and the objective to provide sustainable & responsible procurement, our design & procurement departments endeavour to attain A+ ratings for all construction materials where possible.

The contractor is committed to lowering the impact of construction materials on the environment across the total lifecycle of the material from cradle to grave. Materials listed in the bre Green Guide to Specifications rated at A+ offer the lowest embodied C02 (CO2e) options. The contractor seeks to deliver to our clients and by extension satisfy planning objectives of local authorities and stakeholders the highest BREEAM rating the project is capable of obtaining.

The aims of the Considerate Constructors Scheme shall be adopted for this project with the ultimate objective of being considerate to local communities and stakeholders. To achieve this aim the contractors Senior Management Team, engage at project level to provide authority to the Project Delivery Team to plan best practice actions.

The Projects Director (Senior Management) shall liaise directly with the Project Manager and Quality & Environmental Manager to ensure authority for indirect project procurements and actions.

6 Waste Management

6.1 This waste management plan (WMP)

Details the actions that the contractor will carry out to minimise waste on construction projects. This WMP is a live document and will be periodically reviewed for its continual suitability and effectiveness.

This plan complies with the requirements of:

- Control of Pollution Act 1974
- Environmental Protection Act 1990
- The Site Waste Management Plans Regulations 2008
- Control of Waste (England & Wales) Regulations 2012
- Waste Management Framework Directive - 2008/98/EC
- EWC – Decision 200/532/EC

This Waste Management Plan is an important tool that allows the contractor to monitor and improve environmental performance, meet regulatory commitments and help to reduce waste disposal costs. Hence, the aim of this WMP is to determine the waste types and amounts to be produced during design and construction and to identify appropriate waste management controls and solutions.

The role of Waste Manager will be assumed by the Quality & Environmental Manager who acts as the overall Environmental Co-ordinator.

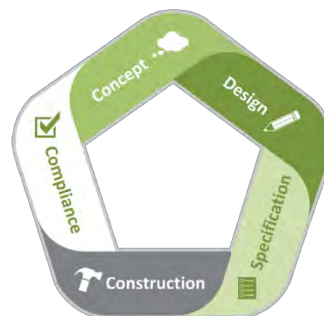
The Waste Manager will:

- advise and instruct construction teams on how to meet legal and contractual requirements
- develop and implement the Site Waste Management Plan as part of the Environmental Management Plan for the Project
- identify and implement ways to reduce, reuse and recycle waste with a preference given to reusing and recycling of waste within the Project
- classify waste categories and characterisation prior to removal from site
- work with the Health & Safety Manager to provide training and information on waste
- provide reports on progress and any problems with waste issues
- work closely with construction teams
- liaise with external parties as necessary
- Ensure all Waste Management Licensing / Environmental Permits and Exemptions are current and sufficient for the Project requirements
- Demonstrate a good knowledge and practical experience of developing and implementing Site Waste Management Plans.

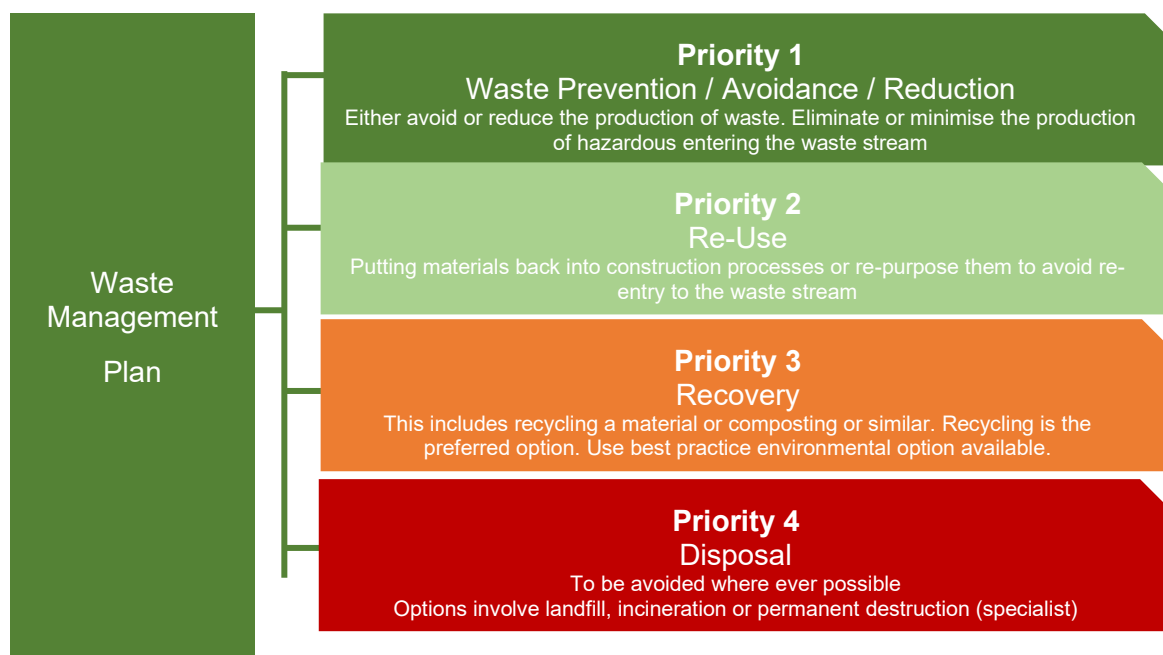
The Waste Manager will be assisted by the Project Manager, who will:

- support the development and implementation of the Site Waste Management Plans
- identifying ways to reduce, reuse and recycle waste with a preference given to reusing and recycling of waste within the Project
- ensuring waste categories and segregation has been carried out prior to the waste being removed from site
- Work with the project team to provide information on waste; and
- Provide reports on progress and any problems with waste issues

The contractors Waste Management Plan centres around the fundamental waste management prioritisation principles of prevent/reduce, reuse, recycle & dispose.



WASTE MANAGEMENT HIERARCHY DIAGRAM



The Project Delivery Team will ensure that each WMP component, where applicable, is adequately addressed. To ensure all aspects of this WMP are complied with, regular audits will be made by the Waste Manager during bi/weekly site waste inspections. The Project Delivery Team will also ensure that all contractors employees and subcontractors' staff are provided with appropriate training (e.g., tool box talks) so that everyone understands the requirements of this WMP and the site Waste Management approach. The site team will apply the above principles throughout the project process. This will mean that rather than just dealing with waste management at site level "on the ground", waste management will be part of the whole project process – during design, procurement and construction.

Materials of specific environmental and hazardous natures such as asbestos or heavy metals that are encountered during the construction phase will be handled, removed and disposed of by a specialist licensed environmental carrier.

6.2 Procurement

Throughout the construction phase the Project Delivery Team should ensure that:

- Only the correct amount of materials required are ordered
- 'Just in time' deliveries are arranged to reduce storage and material losses
- The amount of packaging used for materials delivered to the site is reduced or recycled as much as possible
- Deliveries are rejected if materials are damaged

6.3 Monitoring

The contractor will monitor and measure the waste involved on the project. The Project Delivery Team will record the quantity of waste categorised into the following criteria:

Quantity (m ³)							
Material	Re-used on-site	Re-used off-site	Recycled for use on-site	Recycled for use off-site	Sent to recycling facility	Specialist hazardous removal	Disposal to land-fill
Inert							
Active							
Hazardous							
Totals							

6.4 Reduction & Prevention of Waste

In line with good modern industry practice, all efforts will be made by the Project Delivery Team to minimize the creation of waste throughout the job. There are several key ways in which this can be dealt with. In order of preference, these are:

- *Re-use of a material on site*
- *Re-use of a material off site*
- *Recycling of a material for use on-site*
- *Recycling of a material for use off-site*
- Sending of material to a recycling facility
- Sending of a material to WML facility as 'exempt' under terms of EWC
- Disposal of material to landfill or other processing facility under terms of EWC

Some practical applications of the above are:

- Cutting back on the amount of wastage for trimming of material etc. for example cutting of plywood, built into the amount ordered.
- Educating foremen and others to cut/use materials such as ply wisely for shutters etc.
- To re-use shutters, formwork and temporary works materials as much as possible by careful planning throughout the job.
- Recycling of paper generated on site.
- Increasing the use of electronic transmittal of documents and drawings, as opposed to paper.
- Sending an item of formwork to another of the contractors sites, where that item could be used (assuming no further use is possible without generating costly waste at this site)



In addition, there are a number of steps that can be taken in order to prevent the creation of waste in the first instance, thus negating the need to deal with the waste product. These are as follows:

Reason for waste generation	Some controls to prevent occurrence
Damage due to work methods	<i>Ensure method statement adhered to. Ensure operatives are equipped properly and trained.</i>
Unused off cuts	<i>Correct sizing of materials prior to order. Liaise with design team to review sizes of key materials.</i>
Site office waste	<i>Use e-mail as much as possible over paper. Draft documents to be issued electronically prior to review.</i>
Excess materials	<i>Correctly review drawings & specifications. Checks by senior engineers on take-offs.</i>
Inappropriate storage	<i>Good housekeeping. Materials sensitive to rain kept covered or in containers.</i>
Materials gone off	<i>Order materials just-in-time. Refer to programmes and plans when ordering.</i>
Materials damaged on arrival	<i>Use of partnering with suppliers to achieve quality. Thorough inspection of delivery prior to unload & distribute.</i>

Vandalism	<i>Site security to patrol all storage areas. Secure fencing and lighting around store areas.</i>
Re-work due to errors	<i>Selection of appropriately trained & experienced operatives. Supervision of construction activities.</i>
Design problems	<i>Liaison with designers as early as possible. Raising of RFIs at an early stage to identify problems.</i>
Inappropriate equipment	<i>Selection of equipment by experienced & trained staff. Matching equipment to tasks on a case-by-case basis.</i>
Adverse weather	<i>Planning of works with cognisance taken of weather forecasts. Consideration given to alternative materials.</i>

6.5 Material Recycling Options

6.5.1 Recycling

Wherever possible, materials shall be recycled. There will be a skip located in the site compound for the recovery of paper/cardboard and plastic containers. It is the responsibility of the contractors Safety & Health Manager to ensure safe egress and control access to these skips at all times.

Once full a recycling company will collect the contents of this bin. Modern recycling techniques mean that many construction materials can be recycled. Taking cognisance of this, the contractor will ensure that, where reasonably practicable and economically acceptable, recycling will be carried out with as many materials as possible. The following is a guide:

6.5.2 Timber:

The recycling of timber is a three-stage process. The process includes shredding, screening and metal segregation to produce a woodchip. The low moisture content from recycled timber provides an advantage over virgin wood stock, reducing utility costs prior to manufacturing wood chip board or as a secondary fuel source in an organic 'waste to energy' process. The use of recycled wood also preserves virgin wood stock. The contractor will actively re-use timber on this or other of the contractors sites, with recycling to be used for large volumes.

6.5.3 Glass:

Glass cullet can be processed at a rate of 10 tonnes per hour, to produce screened fractions of glass to recycle into a variety of industrial uses, (providing colour is not an issue). Markets such as water filtration, shot blasting with abrasive characteristics, paint additives with light reflecting properties and acoustic attenuators and insulation are able to utilise recycled glass.

However, it is not though that sufficiently large volumes of glass will be generated on site to warrant recycling, although this will be constantly reviewed.

6.5.4 Fluorescent tubes:

The mercury powder contained within these is a valuable resource and can be re-cycled where sufficient amounts of tubes are available.

6.5.5 Paper:

Paper will be put into the paper re-cycling bin on site. The full bags are put in the wheelie bin and collected regularly for transportation to the nearest processing facility. The sorted and baled paper is then sent to paper mills for recycling.

6.5.6 Plastics:

The availability of recycling of plastics generated on site will depend on the type and amount of plastics generated. Whilst low-density polyethylene (LDPE) used for plastic film - shrink wrap, stretch wrap etc, can be recycled, as can HDPE, PET and PVC used for bottles and Polystyrene (PS) used for drinks cups and packaging, consideration needs to be given to quality, quantity and the cost of getting it out of waste and to the processor.

With this project, as nearly all plastic would need to be baled for transport and storage and this would generally demand an 'on site' baler, this approach would not be practicable or economically viable given the amount of plastics of the above types likely to be generated.

6.6 Storage of Waste on Site

Waste stored on site, whether from construction activity or general consumer waste from the site facilities etc., shall be stored in a safe manner to minimise the likelihood of cross-contamination, further pollution, vandalism or vermin infestation. This will involve using various storage mechanisms and ensuring the proper segregation of waste.

Segregation of waste shall include provision of appropriately signed and classified storage areas/skips, using various signs to assist the site team and operatives with the process of storing and sorting waste. Typical signs are shown overleaf.

All skips will be stored behind the site hoarding in the rear of the site. All skips will be adequately covered.



6.7 Construction Waste Assessment

The nature of wastes arising from the development and their treatment will vary throughout the different stages of construction, the key stages will include:

6.7.1 Preliminaries Demolition

This stage of development will comprise:

- The establishment of a site compound and installation of security fencing;
- Establishment of vehicle access arrangements;

- Import and storage of materials in preparation for the commencement of development.
- Removal of asbestos in line with R+D survey
- Removal of existing building in a controlled manner.

Waste arisings during this stage will be reused on site as a piling mat where applicable and likely to result in very low numbers of vehicle movements for off-site disposal of surplus waste.

6.7.2 Site Preparation and Earthworks

During this stage the following activities will be undertaken:

- Removal of existing hard-standings and existing buildings;
- Removal of topsoil and regrading of site ground levels to Excavation for basements and foundation construction

Foundation and groundworks construction is likely to generate a significant volume of surplus excavated material to be removed from Site. This will be removed by road using covered tipper trucks or skip lorries. This surplus material will be segregated at the point of disposal (waste transfer station) and re-used as fill for other construction projects where possible.

6.7.3 Construction and Fabrication

During this main construction phase the following operations will take place: Below ground construction including reinforced concrete piled foundations

Reinforced concrete basement floor slabs and walls;

- Below ground drainage and services;
- Erection of steel frame and construction of walls, floors and glazing;
- Installation and commissioning of mechanical & electrical plant
- Installation of building services;
- Roofing;
- Access and parking areas;
- Hard and soft landscaping;
- Fit-out of buildings.

. However, as an initial guide, reference has been drawn from current standards, including BRE's Smart waste benchmarking data (2012). The resulting estimates of construction waste arisings as set out in Table 4.

6.8 Anticipated Demolition Materials

Pre-demolition audit and asbestos audit will be required prior to demolition works being undertaken.

Demolition SIC Codes anticipated during demolition of the proposed include:

Waste Type	Waste Status	Waste Code
Concrete	Non-hazardous	17-01-01

Iron and steel	Non-hazardous	17-04-05
Mixed metals	Non-hazardous	17-04-07
Cables containing oil, coal tar and other hazardous substances	Hazardous	17-04-10
Soil and stones	Non-hazardous	17-05-04

6.9 PROCEDURES/ CONSTRUCTION METHODOLOGY

6.9.1 DEMOLITION

Demolition Methodology will include removal of Asbestos, undertaking of soft strip followed by the systematic demolition by mechanical excavator (approx. 50 tonne). Removal off site by a second similar sized mechanical excavator loading highways complaint (FORS) haulage Lorries for processing off site and reuse.

Plant Machinery

- 2No. 50-ton mechanical excavators
- 1No. Compressor (Diesel)
- 1No. Jack Hammer
- 4No. Haulage Lorries

Pollution Controls

- Dust mitigation by means of dampening down works interfaces with water sprays
- Plant Machinery compliant with Stage V NRMM
- Material Transfer to highways mitigated by 24/7 entry & exit wheel wash
- Covered haulage
-

6.9.2 EARTHWORKS

It is proposed to replace the basement of the existing premises with a larger basement. Furthermore, there are no landscaping requirements, the scope of the earthwork's element will not require the storage of topsoil's or subsoils for re-use and the extent of the earthworks will be confined to excavation to formation level and preparation of the formation level.

Plant Machinery

- 2 No. 30 ton mechanical excavator
- 1No. 9-ton dumper
- 1No. Compaction roller

Pollution Controls

- Dust mitigation by means of dampening down works interfaces with water sprays
- Plant Machinery compliant with Stage V NRMM
- Material Transfer to highways mitigated by 24/7 entry & exit wheel wash

6.9.3 CONSTRUCTION

Phased construction of mixed use residential and commercial retails.

Plant Machinery

- Generator (Diesel)
- Crane
- Compressors (Diesel)
- Teleporter
- Mixers
- Small tools

Pollution Controls

- Dust mitigation by means of dampening down works interfaces with water sprays
- Plant Machinery compliant with Stage V NRMM
- Material Transfer to highways mitigated by 24/7 entry & exit wheel wash

6.9.4 TRACKOUT

Minimal requirement for demobilisation of site resources and removal of construction offices and facilities.

Plant Machinery

- 1No. Crane
- 1No. Low-loader Lorry

Pollution Controls

- Plant Machinery compliant with Stage V NRMM
- Material Transfer to highways mitigated by 24/7 entry & exit wheel wash

6.10 BS ISO9001:2015 QUALITY MANAGEMENT PROCEDURES REQUIRED BY THIS PLAN ENCOMPASS:

- QOP3 PLANNING, PROGRAMMING & REPORTING
- QOP4 SUBCONTRACTOR PROCUREMENT
- QOP6 QUALITY PLANS
- QOP7 TRAINING, COMPETENCY & CPD
- QOP9 RISK MANAGEMENT
- QOP10 STATUTORY & REGULATORY COMPLIANCE
- QOP13 CONTROL OF NONCONFORMING PRODUCT
- QOP14 CAPA
- QOP16 CLIENT & STAKEHOLDER MANAGEMENT
- QOP17 CONSTRUCTION METHODOLOGY
- QOP18 CONTROL OF MONITORING & MEASURING DEVICES
- QOP20 MATERIALS CONTROL
- QOP21 POST CONTRACT REVIEW