

Draft Construction Management Plan

15-27 Britannia Street London WC1X 9JP

Introduction

The Construction Management Plan provided a brief overview of the system and procedures to utilise the construction operations on site, ensuring all Watkin Jones standards and protocols are adhered to in order to progress the project in the most safe and efficient manner possible.

Site location

The site is situated at the junction of Wicklow Street and Britannia Street, London, WC1X

Outline of Redevelopment Scheme

The site covers approximately 0.23 hectares. The scheme will involve the partial demolition, partial refurbishment and partial rebuilding of the premises to create:

- Student accommodation totalling 263 bed spaces, together with a common room, laundrette and other ancillary areas;
- Two two-bedroom apartments and two one-bedroom apartments;
- · A self contained office suite; and
- A performance space/gallery.

No car parking has been designed into the project.

Existing Boundaries

The site is an island site so no party wall issues should be present, however the north east elevation abuts The London Underground lines and therefore careful consideration is required to this area. Not all existing buildings are to be demolished with the buildings to the east (i.e. adjacent to the railway lines) being retained and refurbished.

Also the facades to Britannia Street are to be retained.

Traffic Systems and Restrictions

Britannia Street and Wicklow Street are both two way traffic roads with parking restrictions and metered parking.

Construction vehicles travelling from the north or east are to follow the City Road, Penton Rise, Kings Cross Road, Acton Street, and Grays Inn Road into Britannia Street route. Construction vehicles travelling from the south are to follow the Grays Inn Road into Britannia Street route.

Construction vehicles travelling from the west are to follow the Euston Road, Penton Ville Road, Kings Cross Road, Acton Street, and Grays Inn Road into Britannia Street route.

When leaving site, construction vehicles are to access the 'Transport for London Road network' as soon as possible as all the above routes fall into this category.

A full time 24/7 security guard and traffic marshal will direct and control traffic on a daily basis, the traffic marshal will ensure all deliveries are removed from the public highway and onto site upon their arrival minimising any impact on the neighbouring environment.

The public footpath along Britannia Street and Wicklow Street will be maintained throughout the construction period with protection tunnels and our fan guards being constructed as required.

Construction vehicles that are required to access and exit the site will be subject to a visual wheel inspection and wheel wash to ensure all vehicles leave site in a clean and safe condition.

Operative and visitors cars will not be permitted on site.

Site accommodation will be within the site boundary.

All pedestrian access to the site will be from Britannia Street, segregation between pedestrian and site vehicles will be provided.

Strict material delivery scheduling and booking system will be imposed on the project to ensure congestion is avoided and ensure the availability of the tower crane for timely material unloading.

<u>Highways</u>

We will work closely with the local authority to ensure safe working practice.

Emergency Services Routes and Access by Third Parties

Access for emergency services on site will be via the site access routes and emergency escape routes. Local Emergency Services will be notified of the access points before work starts on site. A traffic marshal permanently located at the main site entrance will ensure that safe access routes are always maintained for emergency services.

Police Requirements

No specific Police requirements are envisaged. We will however maintain regular contact with the Police on such matters as abnormal load licences and be fully cooperative with any unforeseeable matters.

Local Environmental considerations

As the site is located within a commercial and residential area it is our intention to minimise the impact that the construction process could cause to the local environment and the neighbouring community.

All care will be taken not to cause the primary environmental nuisances, noise and dust pollution. Below are some actions that will be carried out to abate these problems should they be required.

Reduction in noise disruption will be achieved by: -

- Coordinated delivery times and efficient traffic management to prevent queues of traffic accessing the site;
- Ensuring all plant has sound reduction measures (mufflers, baffles or silencers);
- Utilising construction techniques that minimise the production of noise;
- Utilisation, where possible of pre-fabricated components;
- Utilisation of baffle system during the demolition process;
- Strict adherence to the site working hours; and

• Using acoustic hoarding where necessary.

Reduction in dust pollution and other airborne debris will be achieved by: -

- We will be establishing air quality procedures to minimise dust generation and control plant and vehicle exhaust emissions;
- Ensure that all materials transported to and from site are in enclosed containers or fully sheeted;
- Ensuring stock piles of topsoil etc are kept below hoarding heights and kept damp in dry windy conditions;
- During dry periods the works are to be damped down to control the generation of dust;
- Ensuring materials have a minimum of packaging;
- Ensuring all polystyrene and similar light weight materials are weighted down;
- Making sure all dust generating materials are adequately packaged;
- Ensuring all vehicles leaving the site have been through the wheel wash and that loads are covered where spoil or demolition material is being removed;
- Provide regular road cleaning using road sweepers or brushes to control dust and mud;
- Keeping the loading drop heights of spoil into lorries as low as possible; and
- Implementing an effective procedure to deal with complaints from third parties to ensure issues are dealt with efficiently and quickly, via an advised and dedicated telephone number.

In addition to the above provisions the following measures will be taken to reduce any further negative effects on the environment: -

- Ensuring all contaminants kept on site are safely stored with the necessary procedures put in place for leaks and spillages etc; and
- A waste management system will be implemented on site.

We treat environmental issues seriously and will carry out good management practises to minimise the effects of noise and dust on the environment and local community. We will also liaise with the local neighbours regarding any other sensitive environmental issues that need to be addressed.

Tree Protection

There are no trees on the site or adjacent access requiring protection.

SITE SETUP

Site Access

The site will be accessible via the entrance arch on Britannia Street.

The entrance will have gates/shutters and be staffed by a traffic marshal at all times.

A separate pedestrian access point will be provided at the main entrance on Britannia Street and this will lead directly to the site compound.

Welfare facilities and site offices for the principal contractor and all subcontractors will be located here within the secure compound.

Operatives can only access the site working areas after receiving induction training and passing through the security gate.

Site notice boards will be displayed at the site entrance and will display the project particulars, contact details, access and egress procedure, site rules and all necessary health and safety information.

During the demolition stage the controlled access point will be in Britannia Street.

Site Security

Security during site working hours will be maintained by the use of a secure gate system with 24/7 security, all vehicular gates will be locked at all times and controlled by our traffic marshal for vehicle movements.

Fire escape routes, fire fighting stations, alarm points, muster points and practice drills within the works will all be as Watkin Jones Standard Health and Safety Procedures and agreed with local fire officer.

Site management will be responsible for seeing that all plant and materials are stored safely and securely after the workday ends.

Control of Construction Traffic

All site traffic will be directed to the Britannia Street entrance by use of directional signage.

We have not yet finalised the ground works specification and methodology but anticipate all demolition material being removed from site.

Suppliers and subcontractors will be notified in advance of the desired location for delivery. Direction and access point maps with site delivery rules and times will be sent out with each order.

Any abnormal loads to be delivered will be notified in advance to the Local Authorities/Police.

All deliveries to site will be scheduled by our site Logistics co-ordinator. All unscheduled or non-agreed deliveries will be turned away. A schedule of deliveries will be issued to the Highways Implementation Team by the logistics team when on site.

All gates on site open inwards and will not impede the public highway of footpaths at any time.

Emergency Services

Emergency services will be informed of access arrangements to site areas. Calling the services will be actioned in accordance with our site emergency procedures.

Site Offices and Welfare Accommodation

The site compound will be located as within the site boundary.

WC facilities will be provided within the main office for staff along with independent units within the welfare block for general use. Suitable drying rooms, canteen facilities and toilets will be provided within the welfare cabins which will be in close proximity of the site offices.

Sub contractors will have a designated area for their offices and small stores within the site. Electricity and communications links will be provided to the area for quick and easy connections. Subcontractors will share the main contractor's welfare facilities.

Liaison and Good Neighbour Policy

We pride ourselves on the good rapport we have established with a variety of different neighbouring parties on all of our construction schemes and aim to continue this.

Information will be distributed to the neighbours on a regular basis to advise them of our planned operations and any impact they will have upon them.

The members of the public will be able to communicate with us via our contact.

The number that will be posted on our hoarding and distributed to the neighbours in all of our regular news letters.

Considerate Constructors Scheme

We are a Member of the Considerate Constructors Scheme.

We have experience of working within Local Authority Considerate Constructors Schemes. We will register this development for participation in the scheme, embracing all the good practices outlined.

Protection of Third Parties

All site activities are to be contained within the hoarding line and a comprehensive traffic management plan will be implemented to ensure no disruption is caused to traffic or pedestrians on the adjoining roads or walkways. Specific loading and unloading areas will be designated inside the site boundary where construction or demolition works are to be carried out above any adjoining buildings, roads or pedestrian walkways and there is a risk of falling materials, monaflex sheeting or debris netting will be installed as a safety precaution.

Sign Boards

The project signboard will be erected in accordance with the Client's wishes. The design of the board will be agreed with all parties before being erected.

Hoardings

The hoarding line will be shown on the site layout plan.

All boundaries of the project will be closed off using timber hoarding. All hoarding will be maintained and kept in good repair at all times and painted in Watkin Jones company colours. Temporary hoarding will be erected at demolition stage until a permanent hoarding license has been awarded. Internal access routes and storage compounds will be segregated utilising 'herras' type fencing panels.

Pedestrian Access

All footpaths and walkways surrounding the perimeter of the site boundary will remain unimpeded from construction activities at all times, except for any such emergency requiring the full evacuation from site and further such planned works for connections to utilities and forming new or closing off existing crossovers. In these instances we will provide alternative pedestrian access in accordance with the Street Works Act.

Working Hours

Our proposed normal site working hours in keeping with the restrictions imposed by the local Environmental Health Officer will be as follows:

- Monday Friday 08.00 18.00
- Saturday 08.00 13.00
- Sundays and Bank Holidays Site closed

Notwithstanding this there may be certain occasions when work outside these hours may be necessary. In the event of this, work would only be carried out following consultation and agreement with the Environmental Health Officer.

Notifications

During the Contractor mobilisation period, following award of contract and possession of the site, communication will be set up with the following authorities:-

- Notice will be served to the Health and Safety Executive;
- Meeting with Building Control and Planning Authorities;
- Meeting with local Environmental Health Officer;
- Meeting with local Police and Fire Brigade;
- Liaison with local residents and retail operators;
- Notification to the emergency services giving full details of the construction works;
- Considerate Contractor Scheme enrolment;
- Highways Authority; and
- Meeting with London Underground/Network Rail.

Site surveys

Before work starts, we will produce:-

- A dilapidation survey of adjoining properties, adjoining public roads and paths, illustrating their current state;
- · A plan and level survey of the construction area;
- A survey of the existing surface and foul water system;
- An underground service survey (after demolition); and
- An Environmental and Noise Survey.

Materials Control and Storage

Delivery vehicles will be controlled to ensure that unloading only takes place within designated times and in the correct location. All subcontractors will be required to produce a procurement schedule for their materials which will be monitored at their weekly or fortnightly meetings and must book delivery slots with our traffic controller.

"Just in Time" scheduling of deliveries where possible will minimise storage capacity required, double handling and congestion around the site. Where "Just in Time" deliveries are not economic or practical, site storage of materials and plant will be very carefully controlled by restricted allocation of zones to particular

trades. Detailed plans of the site will be drawn up outlining areas available for moving and storing materials during the various stages of the contract.

Wherever possible materials will be delivered shrink-wrapped and palletised to be unloaded and distributed safely by crane or hoist.

Diesel fuel for site plant will be stored in sealed tanks inside bunded walls in accordance with Watkin Jones Environment Policy. The use of diesel driven plant and equipment will be kept to an absolute minimum. Wherever possible equipment and plant will be electrically powered to reduce noise and prevent emissions.

Secure Storage of Materials, Plant, Tools, Chemicals and Gases

Secure storage of materials, plant, chemicals and gasses will be controlled in accordance with our Health & Safety Procedures and Environmental Policy.

Craneage & Hoists

The majority of unloading and distribution will be by tower crane. This will be located as shown on our site layout plan.

The 'crane supervisor' will be the appointed person for the project. His responsibility will be to ensure that each lift is planned from the point of delivery to the point of placement.

An anti collision devise will be in installed on the crane to automatically limit. The crane to a particular zone to reduce any risk of crane collision. Cranes will at no time oversail the public highway, footpaths or neighbouring properties and will be automatically controlled.

The crane will have a designated unloading zone and be guided by a competent banksman.

There will be hoists provided for the fit out stages of the project, which will be serviced, when necessary, by forklift. Hoists will be located at ground floor level on the exterior of the building.

Rubbish removal, management and recycling

An important part of the site management process involves site cleansing, rubbish removal and recycling.

We will produce a detailed Site Waste Management Plan in accordance with Watkin Jones Environmental Policy.

This will include details of how we intend to reduce and manage site waste:

- The reuse of demolition waste on site as pile materials where suitable;
- Enforcing good housekeeping measures e.g. proper storage of materials to minimise spillage;
- The use of raw materials as per manufacturer's instructions;
- Monitoring the generation of waste in order to identify trends and areas for further investigation;
- Identifying recyclable and salvageable materials and where feasible find secondary or alternative uses;
- Segregate waste types to facilitate recycling activities;

- Working with suppliers / subcontractors to minimise surplus material delivered to site;
- Working with suppliers to ensure only the necessary minimum of packaging is used. Consideration of alternative materials with lower wastage levels;
- Ensuring that all Duty Of Care and other legal requirements are complied with during the disposal of wastes;
- Consulting with suppliers to determine correct / appropriate disposal routes for waste products and containers;
- Assessing the project design to identify ways in which waste generation through raw material wastage and from temporary and permanent works activities can be avoided and minimised;
- Setting waste reduction targets as well as educating and informing site staff;
 and
- Reducing usage of diesel, electricity and water on site by adopting good practices and management procedures.

General construction waste management will be provided by a package contractor who will be managed by our site logistics co-ordinator. Where gypsum plaster products are used the specialist contractors will be required to arrange recycling directly with the manufacturer.

Data will be provided by the waste management contractor on the level of waste produced and the level to which this material has been recycled. It will be the responsibility of each section manager to keep the site area under his control safe from build up of rubbish.

Induction / Site Rules / Consultation

Every person who enters the project will receive a specific project induction before they are allowed to leave the compound and commence work on site.

Inductions will provide an introduction to the project, a description of the project risks and a review of the individual's competency. Site Access will only be permitted following site induction from Watkin Jones management personnel. All site operatives and visitors will be inducted prior to commencement on site in a clearly defined facility without exception.

Our induction talks for operatives new to the site will include site rules which cover among other things:

- Behaviour toward others on site and nearby;
- Drugs and alcohol;
- Smoking areas;
- PPE and safety issues;
- · Welfare facilities and use of;
- Security issues;
- Emergency procedures; and
- Good and bad practice.

We will ensure that all inducted operatives understand English.

We will hold regular consultation meetings with the workforce to assess safety performance on site and review were can be improved, these will be open to all on site, in addition to this we will actively encourage the use of a 'comment box' so that site observations can be forwarded and actioned in a confidential manner.

We require regular 'tool box talks' to be undertaken by the Principal Contractor and also all subcontractors to site operatives outlining a variety of relevant Health and Safety issues.

Health and Safety

To minimise risk and control exposure, our Health, Safety and Environmental Department will give advice at planning stages on all activities and all H&S requirements. H&S is diligently monitored throughout our projects and reported to the main board.

Watkin Jones treats safety as a high priority and has developed a successful programme of initiatives in order to improve Health and Safety awareness and performance on all of our projects. These work by actively encouraging site operatives to think in a manner that assesses personal safety and the safety of others, not only on site but also throughout their lives.

The layout of the site accommodation ensures that all staff, visitors and operatives will have the ability to store and retrieve the correct PPE before entering the construction area.

First Aid

The majority of Watkin Jones site management are qualified First Aiders and as a company, we strive to increase the percentage of competently trained site staff. The site will have First Aid attendance at all times.

Noise and Hearing Protection Zones

A sound / noise meter will be kept on site at all times to check noise levels at the site boundaries during certain operations. Inside the site, and closer to noise sources, hearing protection zones, where hearing protection must be provided and worn if noise levels reach 80 - 85 Db, will be set up.

Careful planning and use of appropriate plant and equipment normally keeps these requirements to few and very short periods.

Construction Activities

The demolition and construction of the development will be carried out in accordance with detailed method statements and risk assessments approved by Watkin Jones management and in accordance with this construction management plan and Watkin Jones Health, Safety and Environmental Procedures.