London Road Fire Station

Outline Construction Management & Phasing Statement

Property: London Road Fire Station, Manchester

Date: November 2019



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Introduction

London Road Fire Station is a Grade ll* listed building positioned at the gateway to Manchester, opposite Piccadilly Station.

The London Road Fire Station proposals represent an opportunity to deliver a landmark scheme at a prominent city centre location.

The building is to comprise a mix of uses and will include a hotel, workspace (live/work units), event space, leisure facilities and food & beverage units. The scheme involves the extensive refurbishment of the existing building as well as the construction of an extension to the hotel.

The Construction Management & Phasing Statement provides outline information on the proposed construction phase strategy and the key activities that will be undertaken. Consideration of potential impacts during the construction and any necessary mitigation measures are provided in each chapter of this document.

The following narrative explains the proposed methodology at the time of the planning application prior to developing more definitive proposals alongside a selected phase 2 contractor. This will include preparation of detailed plans to incorporate: The Construction Phase Health and Safety Plan, Environmental Management, Traffic and Pedestrian Management Plan. The selected contractor will be required to have sufficient experience in working with listed buildings.

Construction Phases

The construction for London Road Fire Station will be phased, with three key construction phases.

Construction Phase	Description of Activity
1	Essential Fabric Repair Works & Asbestos Removal: This phase of work will involve restoration and repair works comprising: masonry & terracotta cleaning and repair; repairs and renewals to windows and external doors; repair and replacement to rainwater goods and miscellaneous metalwork; repairs to roof structure and coverings; and repairs to structural metal frame; together with provision of scaffolding to facilitate access, sampling and investigation works. This phase of work will also involve the removal of asbestos containing materials (ACM's) from the site. This work is to be completed by a licensed asbestos removal contractor.
2	Soft Strip and Site Construction Work: This phase of work will involve the soft strip of non-original features of the building that hold no historic significance prior to commencement of the refurbishment works to the existing building as well as the construction of the new build hotel extension.
3	Tenant Fitout and Public Realm Works: This phase of work will involve the fit-out of tenant hotel, workspace, leisure and food & beverage units within the building. Public realm works to the courtyard surface and surrounding pavements shall also be undertaken.

Note:

- Working hours are anticipated to be 8am to 6pm Monday to Friday (subject to planning conditions) with all deliveries within the same period. Occasional weekend working is anticipated such as moving materials within the site to create space to ease deliveries and traffic congestion for the following weeks work (subject to agreement with MCC). Any further out of hours working will be generally limited to internal fit out operations.
- The proximity of residents / offices on Fairfield Street, Minshull Street and Whitworth Street is a consideration. The methodology contained in this document is to be followed by the appointed contractor in protecting the residential amenity.
- To reduce the impact on the local community most deliveries to and from the project will be into the courtyard via London Road.

Construction Methodology

The following is a brief overview of the methodology to be adopted for the refurbishment of the building and retained spaces and the construction of the hotel extension.

General Site Logistics

- The soft strip activities will be undertaken from within the building. This will not affect the public or adjacent highways.
- Scaffolding shall be erected around the entire building during the essential fabric repair works.
- All debris, to be removed, will be safely loaded into vehicles that will leave the site via Minshull Street South or out of the courtyard onto London Road.
- There will be security personnel located at the site entrance locations to manage access / egress from the site.
- The dedicated site office and welfare facility will be located in the engine room with a turnstile access point positioned off Fairfield Street.
- The courtyard will be utilised as a laydown area for all new material brought to the site.
- The use of cranes is likely to be required. The positioning, heights and oversail will be determined after engagement with a contractor and the appropriate consent is sort.
- Any temporary road closures / lane closures / parking bay closures will be agreed with Manchester City Council operational services department together with any special logistical requirements.
- Appropriate wheel wash and banksman facilities are to be provided by the contractor.
- Unloading and storage will be contained within both the courtyard and the Minshull Street South site compound.
- Waste material will be screened and sorted, prior to removal via skips. A site waste management plan will be put into place by the contractor.
- The site will be fully secured based on an access permit system with security staff at vehicular entrances.
- The appointed contractor will install the appropriate air quality monitoring equipment.

Road Closures and Site Deliveries

- A road closure will be required on Minshull Street South for the entire construction period (subject to agreement with MCC).
- The car parking bays on Whitworth Street will need to be suspended for certain construction periods (subject to agreement with MCC).
- Deliveries of materials and the removal of waste from the site will generally take place from within the courtyard.

Site Compounds (Courtyard & Minshull Street South)

- The courtyard and Minshull Street South will be utilised as the main site compounds for the duration of the construction works.
- Staff personnel will access the site and compounds via controlled site access gates.
- The site compounds will act as delivery drop off zones, waste collection points and lay down areas for construction materials.

Main Site Access Routes

- The main entrance gateway off Fairfield Street will operate as an entrance route for staff and the gateway off London Road will allow access/egress for vehicles.
- The site access routes will be monitored throughout the day by a gateman. It will be the responsibility of the gateman to ensure that the access route gates remain closed throughout the day when not in use.
- The staff entrance off Fairfield street will be a turnstile entrance with fingerprint scanning system to control entry and exit from site. The turnstile site entrance will be positioned adjacent to the site security hub.
- The site access route gates will be locked each evening by the contractor's staff and security using an appropriate locking mechanism.

Material Storage

- Storage of materials shall generally take place within the internal courtyard. The selected contractors will adopt a "just in time" delivery procedure. This will help to limit the amount of materials stored on site.

Operational Efficiency

- The anticipated core hours of working will be 08:00 – 18:00, Monday to Friday. In order to maintain the above working hours, the Principal Contractor may require at certain times a period of up to one hour before and after normal working hours to start and close down activities. Specialist construction operations and deliveries may also be required to be carried out outside of these core hours in agreement with MCC and other relevant parties.
- Certain operations may need to be undertaken during engineering hours, weekends or blockage periods (including night time working).

Pedestrian Routing

- Pedestrians, the general public and local residents will be kept separate from the construction activities at all times.
- It is envisaged that pedestrian routes will be maintained following scaffold erection.
- Pedestrian routes may need to be temporarily closed during pavement improvement works and scaffold take down periods.

Monitoring, Review & Complaints

- A programme of monitoring and review will be implemented to generate information by which the success of the construction process can be evaluated.
- Monitoring and review of construction activity to the site will be the responsibility of the principal contractor.
- This process will provide the opportunity for construction operations and procedures on the site to be reviewed and new management measures to be implemented (if necessary).
- As part of the ongoing process for ensuring that impacts due to construction traffic are minimised, a forum will be established between the appointed Contractor, MCC and Transport for Greater Manchester.
- In addition to the forum, a public contact address will be made available to members of the public. The contract address will be published so that the Contractor can hear any queries or complaints from members of the public.

Construction Phases

Phase One

The existing façade of the building is to be retained. Minimal repairs and replacement to some areas of the existing façade will be made where necessary. All repairs will be in line with the fabric & repair strategy.

The essential fabric repair works to the building will be monitored by the principal contractor of the phase 1 works. The principal contractor will coordinate the trade package construction works to ensure that the works are phased adequately, and good working practices and safe access routes/scaffold access are maintained on-site to enable repair works to complete.

All asbestos removal works must be undertaken with reference to the Refurbishment & Demolition Survey which locates and describes as far as reasonably practical the Asbestos Containing Material (ACM's) within the structure. Asbestos works must also be undertaken alongside an asbestos analyst.

Phase Two

The strip out of non-original features that hold no historic significance will form the second phase of works alongside the main construction and refurbishment building works. The new build hotel extension and works to the courtyard balconies will also be undertaken within phase two.

The following control measures will be considered for the soft strip & main construction works phase:

- Erection of a boarded timber hoarding around sections of the site perimeter.
- Regular cleaning down/maintenance of the site perimeter.
- Damp down to control any strip-out material arising's.
- Maintain a solid, cleanable surface for vehicles.
- Daily visual inspections of roadways to the perimeter.
- Access to a road sweeper for the possibility of an emergency response being needed.
- Sub-Contract orders to include the requirement for any muck away vehicles to be fully sheeted.
- All materials to be sheeted and damped down as required if stored externally but incoming materials will be moved internally as soon as is reasonably practicable.
- Installation of appropriate air quality monitoring equipment.
- Demarcated areas for the laydown of materials.

Phase Three

The phase three works shall comprise the fit-out of the building together with public realm works to the courtyard surface and surrounding pavements. The above control measures will also be implemented for the phase three works alongside a coordinated plan for pavement closures as the public realm refurbishment works progress.

General Construction Management Principles

Traffic Management Plan

A traffic management plan will be prepared to address the following issues:

- Site management procedures.
- Integration of traffic management plan co-ordinated with other projects going on in the area.
- Access / egress turning points.
- Temporary or permanent alterations to local traffic routes (vehicle and cycle).
- Additions or alterations to signage and road markings (incl. pedestrian crossings).
- Temporary suspension of existing parking bays.
- Safe maintenance of existing cycle lanes.
- Traffic / pedestrian segregation on the site.
- Car parking.
- Loading bays.
- Strategy to keep the roads and pavements around the site clean at all times.
- On-going liaison with the local highway authority.

In preparing the Traffic Management plan the contractor will be required to consider:

- A site delivery and booking in system.
- Pre-fabrication to reduce deliveries.
- A materials transport plan to include methodology for deliveries, unloading and distribution of materials.

Deliveries

Delivery routes for the delivery of large items of construction plant: crane sections, mobile cranes etc. and building components: steelwork, M&E plant etc. will be discussed and agreed with Manchester City Council Highways Department, with operations undertaken during agreed periods, to minimise disruption to local traffic and the normal workings of the surrounding properties.

- Extra-large loads will only be allowed passage into / out of the city centre outside of peak hours (times to be determined by GMP).
- Delivery / vehicle drop off will initially be via the courtyard or Minshull Street South.
- Deliveries must be completed within site working hours (unless under a special movement order).

Parking

There will be no on-site parking. Metered parking spaces are available on Fairfield Street adjacent to the site. Site personnel will be encouraged to utilise local public transport when travelling to the site.

Health and Safety

The London Road Fire Station project will be carried out in accordance with the Construction (Design and Management) Regulations 2015 and all other relevant legislation.

The applicant will provide a principal contractor who can demonstrate adequate competency in the management of health and safety and also has the correct management procedures in place to control the activities of a complex construction project. Principal contractors will be appointed early in the construction process so that they will be involved in the planning of the project and have the ability to influence the detailed design to remove the residual safety risks.

Principal contractors will be required to produce a Construction Phase "Health and Safety Plan" prior to work commencing on the site. This document will form the basis of the procedure for managing health and safety during the construction phase and will be periodically reviewed as works progress.

Construction Materials

There have been no materials identified at this stage of the design process which are considered to generate a risk to construction personnel which will be unfamiliar to an experienced contractor. The hazards arising from the use of wet concrete, lead, epoxy resins, solvent based paints can be expected and the appropriate measures to minimise risk under COSHH will be required by the main contractor.

Site Security and Safety

Protecting the members of the public from the risk to their health and safety arising from the construction work is a high priority. Every care will be exercised to prevent risk to members of the public and appropriate action, including the erection of a suitable hoarding / sheeting / covers to scaffolding - will be taken.

Vandalism to plant, equipment, materials and the works is possible. The principal contractor will be required to take appropriate action to ensure that the site is secure from unauthorised access at all times. The site will be fully secured on an access permit system and securely staffed at vehicular entrances. The site will require a CCTV / alarm system. Proposals for site safety and security will form part of the Principal Contractors initial development of the Health and Safety Plan.

Pollution

The principal contractor will need to establish procedures to ensure the prevention of pollution relating to the following activities:

- Soft strip.
- Earth works (Inc. stockpiling of spoil, and the management/storage of contaminated soils).
- Dewatering of small excavations.
- Concrete works (Inc. washing out of concrete delivery vehicles).
- Storage and movement of fuels, oils and chemicals.
- Cleaning (Inc. plant/machinery, and wheel wash).

Nuisance

The principal concerns relating to nuisance of noise, vibration and dust come from strip-out, ground excavation and construction activities.

Mitigation measures that will need to be considered include; low noise plant options, noise attenuation techniques, damping down, screening and carrying out certain activities during agreed hours of the day.

The principal concerns relating to air quality are emissions from construction activities in the form of dust and fumes. The degree of dust deposition is usually dependent on the nature of the works. Increased levels of dust are most commonly likely to occur during site activities related to strip-out, piling, moving construction traffic and ground works.

In order to minimise dust and fumes the Principal Contractor will be required to consider the following:

- Provide hard standing where vehicle movements mostly occur.
- Control measures / dust suppression screens.
- Damping down / mist technology to dampen dust down.
- Planning and controlling the orientation, shape and locations of stockpiles, to minimise the risk of dust rise through wind action.
- Measures such as screening and covering.
- Installing the appropriate wheel-wash facilities at the site exit to minimise the risk of dust emissions and deposition on the highway.
- Keeping adjacent roads and hard-standings clean.
- Turning off plant when not in use.
- Ensuring the appropriate selection and maintenance of construction vehicles, plant and equipment to minimise emissions.
- Investigating the use of electric powered plant.
- Waste material cannot be burnt on the site.

Air Quality Monitoring

Air pollutants at high concentrations can give rise to adverse impacts on the health of humans and ecosystems. European Union (EU) legislation on air quality forms the basis for national UK legislation and policy on air quality.

The European Union Framework Directive 2008/50/EC on ambient air quality assessment and management came into force in May 2008 and was implemented by Member States, including the UK, by June 2010. The Directive aims to protect human health and the environment by avoiding, reducing or preventing harmful concentrations of air pollutants.

The Air Quality standards Regulations 2010 implement Limit Values prescribed by the Directive 2008/50/EC. The Limit Values are legally binding and the Secretary of State, on behalf of the UK Government, is responsible for their implementation.

The current UK AQS (Air Quality Strategy) was published in 2007 and updates the original strategy to set out new objectives (referred to hereafter as the 'AQS Objectives') for local authorities in undertaking their local air quality management duties. The 2007 UK AQS introduces a national level policy framework for exposure reduction for fine particulate matter.

Objectives in the current UK AQS are in some cases more onerous than the Limit Values set out within the relevant EU Directives and the Air Quality Standards Regulations 2010. In addition, the AQS objectives were established for a wider range of pollutants.

There are currently no statutory UK standards in relation to deposited dust and its propensity to cause nuisance, although an annual deposition rate of 200mg/m2/day is often used as a threshold value, over which significant nuisance effects are likely.

Throughout the construction phases the contractor is to undertake air quality monitoring via one of the contractors approved specialists.

A typical arrangement will be adopted, such as:

The monitors will record data via GSM/GPRS modem with a trigger level of 200ug/m3 (weighted over a 15 minute average) activating an email alert to the contractor who will then investigate the cause of emission and stop the works as required until an alternative system of work can be demonstrated that will produce the required reduced emissions. Any such alert (including the response actions) will be entered into the site environmental incidents log book and an alert will be sent to Manchester City Council.

There will be a 24hr contact telephone number posted on the site entrance for any issues to be reported at any time day or night. Any such reports will be entered into the site environmental incidents log book. The specialist will also prepare regular reports which the contractor can issue to Manchester City Council.

Site Infrastructure

- Drainage connections exist on the site.
- Water supply exists on the site.
- Site gas supply is to be replaced.
- Multiple electricity mains currently service the site.
- Site telecommunications infrastructure is to be upgraded.
- A district heating system is not currently utilised across the site.

Public Relations

The project contractors will make regular progress updates to the local community via Newsletters and Social Media.

Under the Considerate Constructers scheme the contractor will be required to maintain regular dialogue with neighbours and provide regular updates on site progress and logistics.

Risks of noise, dust and air pollution will be considered for each proposed activity and associated migration measures will be implemented.

Waste Management Strategy

In line with good practice, a strategy for minimising site waste will be developed once the principal contractor has been appointed.

The following tables the waste issues and actions that will be considered at the planning, design and procurement stages of the project.

Issue	Action
Number of Materials	Reducing the number of different materials used during construction.
Recyclability of materials	Selecting materials that can be segregated for re-use / recycling if / when they become waste
Durability of materials	Designing with materials which are durable and able to withstand storage, handling and installation.
Dimensions	Repetition of design and element dimensions, designing to meet standard manufactured material dimensions, to reduce variables and off-cuts.
Prefabrication / offsite construction	Specifying off-site prefabrication / modular construction to reduce waste arisings on site.

Operational Waste Removal

Waste produced during the construction process is to be cleared on a regular basis. On each floor of the building, a series of paladin bins will be deposited within easy reach of the workstations. Operatives are to deposit waste into these bins during the day. The bins are to then be transported to waste skips.

To reduce the amount of waste from landfill, the waste is to be segregated at the waste transfer station into the following categories:

CAT A: Hazardous waste e.g. paint tins, mastic tubes etc.
CAT B: Metal
CAT C: General waste / build debris

Soft Strip

Waste arising from the soft strip will be removed from the site under the following categories:

CAT A: Hazardous waste and items left by the previous occupiers.
CAT B: Metal
CAT C: Glass
CAT D: Crushed hardcore

This waste is to be removed from site by tipper wagons by the appointed contractor.