



NEW VICTORIA PHASE 2: OFFICE DEVELOPMENT

Construction Management Plan

Revision: 4

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1.0 Site Establishment and Logistics

1.1 Project Description

The proposed scheme intends to replace the consented office block with a contemporary ground plus mezzanine plus 9 storey-office building that seeks to deliver a total of 18,101sqm (GEA) Class E floorspace.

The scheme has been designed in accordance with national, regional and local planning guidance as well as Building Regulations. It will be delivered to new environmental standards, targeting a BREEAM 'Outstanding' rating through exceptional design and quality, promoting the health and well-being of the occupants.

1.2 Location

The works are located on the New Victoria site on Corporation Street adjacent Manchester Victoria station.

Corporation Street

Manchester

M3 1NX

1.3 Site constraints

Noted below are a number of site constraints identified as part of the ongoing design development process:

- The site is bordered to the south-west by Metrolink Tram tracks, and Victoria Station's PTFE roof to the north-west.
- There is the River Irk culvert that runs to the north of the site, where an 8m wide notifiable zone has been stipulated by Network Rail.
- There is a cycle route to the South-West of the site, running along Long Millgate towards the proposed TFGM cycle hub at the back of the site. The office development facilitates this route.

1.4 Programme

The proposed draft outline construction programme for the development is as follows:

- Pre-enabling works – 3months prior to start on site
- Enabling works – 05/09/22 – 23/12/22 (16 calendar week).
- Main contract – 09/01/23 – 02/08/24 (84 calendar weeks).

1.5 Operating Hours:

The works will be programmed based on a Monday to Friday and a Saturday morning working week. Official site working hours would be:

- Mon – Fri: 7:30am – 6:00 pm,
- Sat: 8:00am – 2:00pm
- Sunday/Bank Holidays: No Work

If required to work outside the above hours, local authority and local residents will be informed where necessary prior to any works commencing.

1.6 Site Logistics Plan

The site is located off the city centre ring road (A556). Deliveries will either turn right into site from Corporation Street or follow the ring road to Shudehill and approach the site on the north bound carriage of Corporation Street. This secondary routing allows a left turn into the high level laydown area (in pink in fig 1 below).

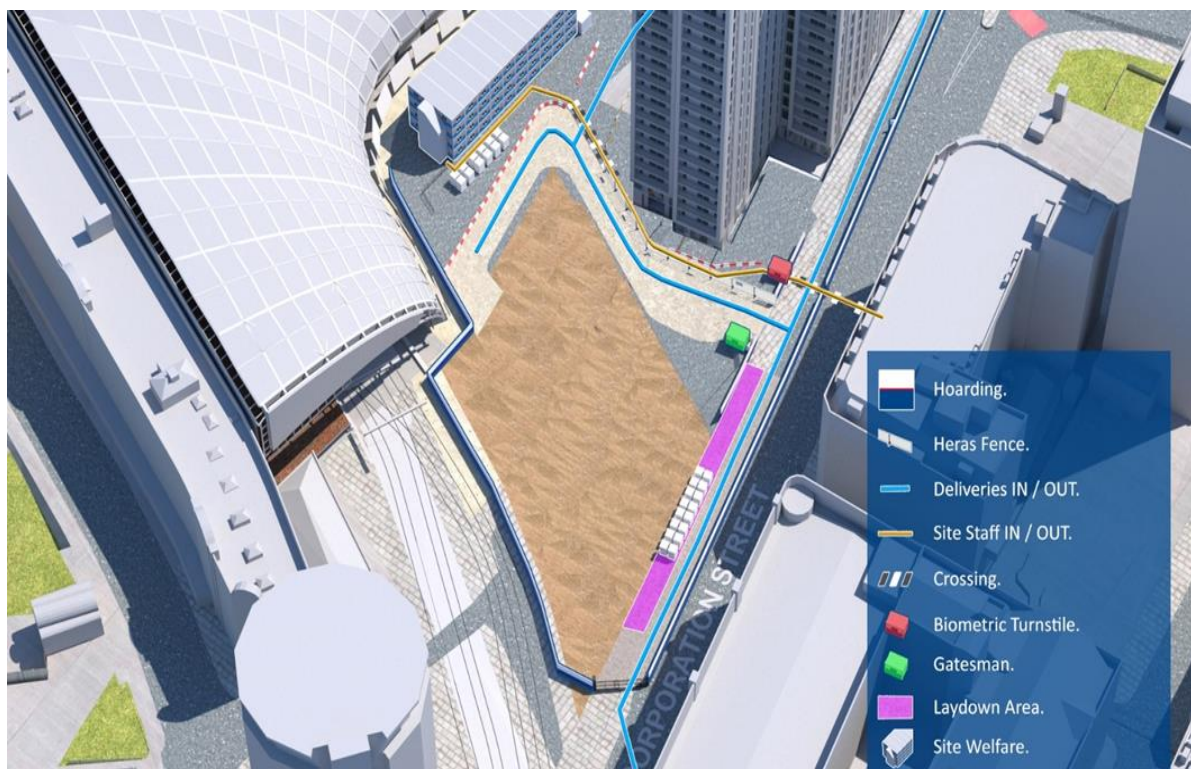


Fig. 1

1.7 Cranes

Two tower cranes will be required for the works. The second crane will be installed using the first crane. Indicative proposal outlined in Fig 2.

Please refer to section 1.16 TfGM Interface, for details regarding crane activities.



Fig 2.

1.8 Hoarding

The hoarding will be constructed using the Hoard-It System which negates the need for penetrating the ground and uses a ballast system. Entry onto site will be via a turnstile with face recognition software. A Site Boundary Check Sheet will be used to check the Site Boundary on a daily basis.

1.9 Car Parking

There will be no provision for parking on site. Staff and visitors must use one of the many car parks in the area or use public transport.

1.10 Deliveries, Timings and Access

All deliveries will be required to be booked in on the Contractors delivery management system. Access onto the site will be via Corporation Street.

Vehicles delivering to site will be monitored for compliance with the Contractors site rules. The Contractor will work with any non-complying supplier to help them identify the noncompliance and rectify.

1.11 Storage of materials

Where possible, material deliveries will be made on a just in time basis to minimise the amount of material stored on site.

1.12 Traffic Management and Road Closures

A full road closure of Corporation Street will be required for the installation and removal of TC1. Engagement with MCC will be made 12 weeks minimum to obtain the relevant permissions and permits.

1.13 Temporary Lighting

It is anticipated that low level bulkhead type lighting will be provide to the perimeter of the hoarding line to reduce the effects of any dark spots caused by the erection of the hoarding.

Task lighting required during the construction phase, will where possible, be designed to minimise effects beyond the site boundary.

1.14 Security

The boundary of the site will be secured with a mix of security hoarding and heras fencing with access gates. The main access to the site will be off Corporation Street. The security gates will be locked out of hours, no personnel will be allowed on site without authorisation from the Contractor.

The boundary fence will be erected by a specialist contractor, who will design and install the boundary security hoarding and heras fencing. All security hoarding will be controlled through the temporary works register.

The Contractor will engage with MCC to obtain the relevant permits associated to the installation of the hoarding.

1.15 TfGM Interface

Reference is made to the Metrolink document, Working Safely near Metrolink, with particular refence being made to the Metrolink Hazard Zone, as shown in Fig 3.

Authorisation is needed for any of the following activities before starting work near Metrolink:

- Any work where part of the site, tools, materials, machines, suspended loads or persons could enter the Metrolink Hazard Zone.
- Any work which could force pedestrians to be diverted into the Metrolink Hazard Zone.

- Piling, using a crane, excavating more than two metres or erecting and dismantling scaffolding within four metres of the Metrolink Hazard Zone.
- Any excavation within three metres of any pole supporting overhead lines.
- Any work on sites near Metrolink where vehicles fitted with cranes, tipping bodies or skip loaders could come within the Metrolink Hazard Zone when the equipment is in use.
- Any work on sites above Metrolink tunnels or underneath structures carrying Metrolink.

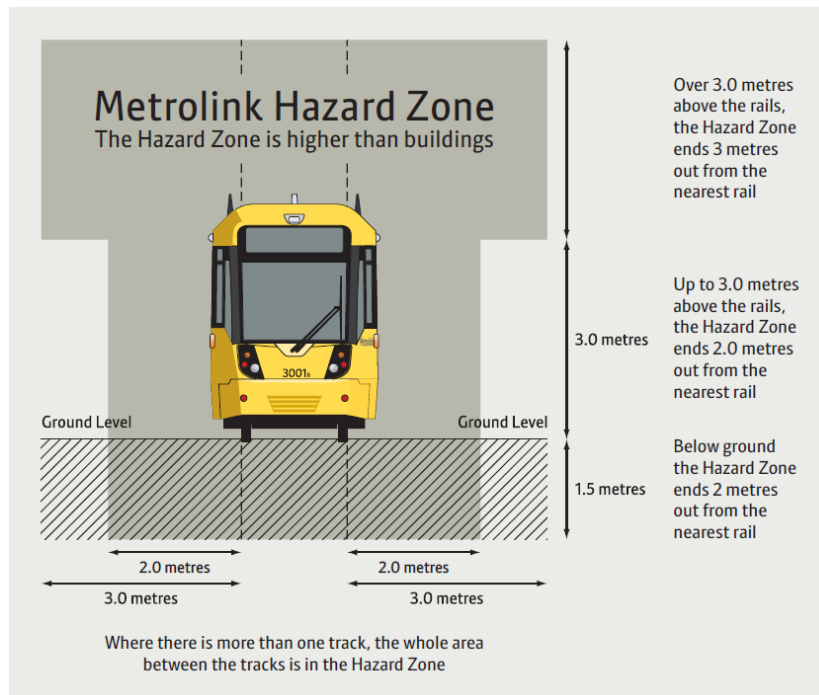


Fig 3.

No crane oversailing of the tracks is permitted and track vibration monitoring will be deployed all in accordance with Metrolink / TFGM requirements.

Additionally, it is noted that:

- There is a potential for isolations.
- The de-rating of cranes is likely to be a consideration.
- A crane erection/dismantling methodology is to be agreed with Metrolink.

2.0 Environmental Considerations

2.1 Site Waste Management Plan

Our project teams will collaborate to minimise, reuse or recycle waste emanating from the project through improved specification, efficient trade interfaces and use of standardised and

pre-fabrication products. Our site waste management strategy will be recorded in the Site Waste Management Plan with delivery managed by our on-site waste management team.

2.2 Air Quality

The most significant risk to air quality from the construction works is during the ground works period of the development from the process and the equipment used to carry out the works. Dust generated through all work activities will be controlled at source, so far as is reasonably practicable, by a recognised method and in line with legislative duties.

2.3 Dust and Dirt Control

Dust and dirt protection will be incorporated and controlled at source, so far as is reasonably practicable, by a recognised method and in line with legislative duties. It is expected that such measure will remain in place for the duration of the demolition and construction works. Anticipated measures are expected to include specialist dust suppression plant, static misting systems.

In general site generated dust will be controlled by eliminating or reducing the potential for release at all times. This will be achieved by a series of measures to be employed at the different stages of the works.

2.3.1 Site Enabling (incl site clearance, removal of obstructions, working platform installation)

During this time, it is expected that the existing hard standing external to the building footprint will be retained for as long possible to reduce the source of dust and to help maintain a clean and tidy site. Dust suppression in the form of damping down haul routes will be utilised during earthworks activities (bulk excavation and import of engineered fill). Vehicles carrying loose aggregate and workings, will be sheeted when required. Stockpiles of soils and materials will be located away from Corporation Street and the tram lines, taking account of prevailing winds. Air quality monitoring will be undertaken using monitors around the perimeter of the site. These will also be checked for asbestos.

2.3.2 Piling, Bulk Excavation and Substructure works

The piling operation will generate smaller amounts of arisings. During dry periods the working platform will be damped down to prevent wind borne dust. Dust suppression in the form of damping down haul routes will be utilised during earthworks activities (bulk excavation and import of engineered fill). Vehicles carrying loose aggregate and workings, will be sheeted when required. Stockpiles of soils and materials will be located away from Corporation Street and the tram lines, taking account of prevailing winds. Air quality monitoring will be undertaken using monitors around the perimeter of the site. These will be checked for the presence of asbestos. During deep excavation the bedrock anticipated hardness will allow removal by toothed excavator thereby minimising dust generation. The surface areas of stockpiles will be minimised (subject to health and safety and visual constraints regarding slope gradients and visual intrusion) to reduce the area of surfaces exposed to wind pick-up. All hardstanding areas and vehicle routes will be cleaned using a road sweeper to minimise dust and dirt leaving site.

2.3.3 Main works (frame construction, envelope etc)

All hardstanding areas and vehicle routes will be cleaned using a road sweeper to minimise dust and dirt leaving site. Working lifts will be kept clean and dust free by damping down prior to sweeping.

Additionally, the Miller Goodall Air Quality Assessment report dated 5th April 2022 outlined recommended mitigation measures that will be taken cognisance of during the works. Please refer to the Appendices of this report for details of the recommended measures.

2.4 Noise and Vibration

The appointed Contractors will be requested to produce a Noise and Vibration Management Plan that will consider the effects of its operations upon surrounding neighbours/owners/occupiers. As part of the Plan that is to be produced, cognisance of the following items will be required:

- All noisy activities will be assessed, including regular monitoring of noise levels both at the site boundary and localised high noise producing works. Modern and well-maintained plant and equipment will be used with checks being overseen by the Contractors Management team.
- Site rules in place gives indication to switch off plant when not in use.
- Vibration will be kept to a minimum. Boundary site vibration monitoring will be deployed if deemed necessary dependent on works being carried out.

2.4.1 Noise monitoring

To ensure compliance of the agreed noise levels within the Section 61 agreement with MCC, it is anticipated that ambient noise levels will be monitored either by remote or handheld noise monitoring systems to monitor dB (LAeq, LA10, LA90 and LAm_{ax}).

Environmental compliance checks will be completed at regular intervals, typically every two weeks, that will include equipment inspections and operating procedures to ensure disturbance from dust, vibration and noise is minimised on and off site.

In general, given the anticipated methods of construction, the noise levels generated are considered to be relatively low. For instance, bulk excavation will be carried out using toothed excavators based on the anticipated rock hardness. Piling is expected to be carried out by CFA piling methods, which is a low vibration method and does not generate significant noise levels (approx. 72dB). Frame construction utilises traditional RC frame construction methods which do not generate high levels of noise. The envelope is proposed to be a unitised system which is a pre-fabricated unit manufactured off site and hung off the frame which will not generate significant noise levels

The key receptors around the site are:

- The Indigo Hotel
- Victoria Station (Metrolink and Network Rail)
- Offices located opposite the site on Corporation Street

2.5 Considerate Construction

The site will be registered with the Considerate Constructors Scheme. The intention is to communicate to local stakeholders through letter drops and communication boards with the primary personnel contact details on the perimeter of the site and details of how to raise any concerns the local community may have during construction. All site staff and contractors will receive a site induction which will include a section on reducing the impact on the local community.

A Community Engagement Plan will be developed at pre-construction stage and will be fully implemented through the construction phase and beyond, with a strong proactive attitude being encouraged.

All stakeholders and neighbours will be informed of works both prior to start and they will also be updated as works progress. This will be via letter drop, regular meetings (typically every 2 weeks) will be held with key stakeholders (NR, TfGM/KAMetrolink etc) to ensure that they understand what works are coming up and to give them opportunity to inform the project of any events or planned works that may impact our project as well as to raise any concerns, complaints, or comments.

A complaints and comments book will be held in the site gatehouse and it is anticipated that an electronic version of the complaints and comments book will be held online, accessible via a QR code displayed on the site noticeboard to allow access to members of the public to the website and online comments register.

Network Rail Engineering Assurance procedures require the project to appoint key personnel as the responsible engineers (CRE) for specific disciplines of work and someone to undertake the role of Contractors Engineering Manager (CEM) to manage and oversee this process. As such the appointed Contractor will be requested to nominate a 3rd Parties interface manager. Further appointments for the construction phase (civil and structural), temporary works (design) and permanent works (design) will be made where required as identified in collaboration with Network Rail's Asset Protection team.

APPENDICIES

3.1 IAQM Dust Assessment Mitigation

xx Highly Recommended

x Desirable

Measures relevant for demolition, earthworks, construction and trackout

Mitigation Measure	Low Risk
Communications	
Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary. This may be the environment manager/engineer or the site manager.	xx
Display the head or regional office contact information.	xx
Develop and implement a Dust Management Plan (DMP)	x
Site management	
Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken.	xx
Make the complaints log available to the local authority when asked.	xx
Record any exceptional incidents that cause dust and/or air emissions, either on- or offsite, and the action taken to resolve the situation in the log book.	xx
Monitoring	
Undertake daily on-site and off-site inspection, where receptors (including roads) are nearby, to monitor dust, record inspection results, and make the log available to the local authority when asked. This should include regular dust soiling checks of surfaces such as street furniture, cars and window sills within 100 m of site boundary, with cleaning to be provided if necessary.	x
Carry out regular site inspections to monitor compliance with the DMP, record inspection results, and make an inspection log available to the local authority when asked.	xx
Increase the frequency of site inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.	xx
Preparing and maintaining the site	
Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible.	xx
Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site.	xx
Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period.	x

Avoid site runoff of water or mud.	xx
Keep site fencing, barriers and scaffolding clean using wet methods.	x
Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-used on-site cover as described below.	x
Cover, seed or fence stockpiles to prevent wind whipping.	x
Operating vehicle/machinery and sustainable travel	
Ensure all on-road vehicles comply with the requirements of the London Low Emission Zone and the London NRMM standards, where applicable.	xx
Ensure all vehicles switch off engines when stationary - no idling vehicles.	xx
Avoid the use of diesel or petrol-powered generators and use mains electricity or battery powered equipment where practicable.	xx
Impose and signpost a maximum-speed-limit of 15 mph on surfaced and 10 mph on unsurfaced haul roads and work areas (if long haul routes are required these speeds may be increased with suitable additional control measures provided, subject to the approval of the nominated undertaker and with the agreement of the local authority, where appropriate).	x
Operations	
Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems.	xx
Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using nonpotable water where possible and appropriate.	xx
Use enclosed chutes and conveyors and covered skips.	xx
Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.	xx
Ensure equipment is readily available on site to clean any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.	x
Waste management	
Avoid bonfires and burning of waste materials	xx

Measures specific to construction.

Mitigation Measure	Low Risk
Avoid scabbling (roughening of concrete surfaces) if possible.	x
Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place.	x

Measures specific to trackout.

Mitigation Measure	Low Risk
Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out of the site. This may require the sweeper being continuously in use	x
Avoid dry sweeping of large areas.	x
Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport.	x
Record all inspections of haul routes and any subsequent action in a site log book	x
Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable).	x